

**ADDENDUM TO
ORCHARD AT PENRYN
CERTIFIED ENVIRONMENTAL IMPACT REPORT
(SCH #2010032070)**

Project Name: Orchard at Penryn

Introduction

This Addendum to the certified Orchard at Penryn Project Environmental Impact Report (SCH #2010032070) has been prepared pursuant to CEQA Guidelines Section 15164(a) and Placer County Environmental Review Ordinance Section 18.20.110.

Project Location

The project site is within the Horseshoe Bar/Penryn Community Plan area, which encompasses an approximately 25-square-mile area located south of the unincorporated community of Newcastle and the City of Auburn, north of the community of Granite Bay, west of Folsom Lake, and east of the Town of Loomis and the cities of Rocklin and Roseville. Specifically, the project site consists of two parcels (APN 043-060-052 and 043-060-053) located in the community of Penryn and situated in Section 2 of Township 11 North and Range 7 East on the 7.5 minute Rocklin USGS topographic quadrangle. The ±15.1-acre project site is located on the west side of Penryn Road, approximately one-half mile north of Interstate 80 (I-80). Further, the site has approximately 495 feet of frontage along Penryn Road and 60 feet of frontage along Taylor Road.

Project History

In 2007, Penryn Development LLC filed an application for the Orchard at Penryn project, which would develop 150 multi-family residential dwelling units. Placer County prepared a Draft and Final EIR, and certified the Final EIR and posted the Notice of Determination on December 11th, 2012. Placer County has not issued any grading or building permits for the project and the land owner has not commenced any site preparation activities at the project site.

Penryn Development LLC has submitted an application to Placer County seeking discretionary planning approvals to allow 54 single-family residential lots on approximately 15 acres in the unincorporated community of Penryn. The submitted application would modify the planning approvals previously granted by Placer County allowing for development of 150 multi-family residential units at the project site. As Lead Agency under CEQA, Placer County has evaluated whether the currently proposed single-family residential development would result in new or more severe environmental effects than those evaluated in the prior EIR.

Current Request

Penryn Development LLC is seeking discretionary planning approvals to allow 54 single-family residential lots on approximately 15 acres in the unincorporated community of Penryn. The submitted application would modify the planning approvals previously granted by Placer County allowing for development of 150 multi-family residential units at the project site.

CEQA Guidelines Section 15162 Determination

Consistent with the requirements of CEQA Guidelines Section 15162, the County must determine whether the proposed changes to the proposed project trigger the need for a subsequent EIR. Under Section 15162, when an EIR has been certified for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

If any of the triggers set forth above occurs, the County would be required to prepare a subsequent EIR, unless “only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation,” in which case a “supplement to an EIR” would suffice (see CEQA Guidelines, § 15163). If there are no grounds

for either a subsequent EIR or a supplement to an EIR, then the County would be required to prepare an addendum pursuant to CEQA Guidelines Section 15164, explaining why “some changes or additions” to the 2008 certified EIR “are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.”

Based on the conclusions provided in the Supplemental Checklist for the Orchard at Penryn project, Placer County has concluded that an addendum to the previously certified EIR for the Orchard at Penryn project is the appropriate document under CEQA for the request to modify the project for the following reasons:

- a. The proposed revisions to the Orchard at Penryn project would not alter any of the conclusions of the certified EIR regarding the significance of environmental impacts. Because the proposed revisions would not alter the site boundaries, and would likely reduce the impact of the development by reducing the number of proposed dwelling units, these modifications would not result in an increased impact on the physical environment.
- b. The inclusion of Additional Mitigation Measure 1 will adequately address impacts to forestry resources; this measure restates the requirements expressed in Mitigation Measure 5.1c, which was included in the certified EIR.
- c. The inclusion of Additional Mitigation Measure 2 will adequately address impacts related to noise levels; this measure identifies parameters necessary for provision of sound barriers for residential lots adjacent to the onsite landscape easement along Penryn Road.

Exhibit A: Supplemental Checklist

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Placer County
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SUPPLEMENTAL CHECKLIST FOR
INITIAL STUDY OF ENVIRONMENTAL SIGNIFICANCE

PROJECT NAME:	The Orchard at Penryn	FILE NUMBER: PLN14-00052
SITE ADDRESS:	West side of Penryn Road, approximately .3 mile north of Interstate 80, Penryn, Placer County	APNs: 043-060-052 and 043-060-053
APPLICANT and PROPERTY OWNER:	Penryn Development LLC	PHONE: 858-614-7200
		Prev. Cert. EIR: SCH #: 2010032070
<p>PROJECT DESCRIPTION: The project applicant proposes to modify the land uses planned for the ±15.1-acre Orchard at Penryn project site, which was previously approved for development of 150 multi-family dwelling units (the Original Project). The currently proposed project would develop 54 single-family residential units with lot sizes ranging from 4,000 to 12,000 square feet (the Proposed Project). There would be six lots in common ownership containing open space in the central portion of the project site (Lots A and B), the private onsite roadway and guest parking (Lot C), a 0.12-acre recreational lot in the western portion of the site (Lot D), and two landscape corridor lots along the site’s frontage on Penryn Road (Lots E and F). The primary vehicular access to the site would be off of Penryn Road. An exit-only driveway onto Taylor Road would also be provided. Both the driveways would be gated. Onsite circulation would be provided with two looped roads connected with a single roadway crossing over the central drainage swale. The proposed project would also include a 30-foot wide landscape easement along Penryn Road, onsite landscaping, and placement of utilities. All utilities would be provided to the site through connections to existing utilities infrastructure within and adjacent to the project site.</p> <p>The site soils contain hazardous materials associated with pesticide use at the orchard formerly supported onsite. Therefore, site remediation is proposed as part of the project. The Removal Action Workplan (RAW) for the site has been approved by the California Department of Toxic Substances Control (DTSC). The RAW describes the excavation and off-haul of affected soil that would be completed to reduce the site-related soil contaminants to levels that do not pose a threat to human health and to reduce the potential for adverse ecological effects from the site contaminants and offsite migration of site contaminants. Grading would begin upon issuance of a tentative “No Further Action” letter from DTSC. Post-excavation soil testing would be completed to demonstrate that the site remediation has been completed successfully, and DTSC would provide final certification for unrestricted land use at the project site.</p> <p>As discussed below, the Orchard at Penryn project approved for the project site in 2012 provides for development of 150 multi-family dwelling units at the project site, in generally the same development footprint as the currently proposed project.</p>		

ENVIRONMENTAL SETTING: The project site is within the *Horseshoe Bar/Penryn Community Plan* area, which encompasses an approximately 25-square-mile area located south of the unincorporated community of Newcastle and the City of Auburn, north of the community of Granite Bay, west of Folsom Lake, and east of the Town of Loomis and the cities of Rocklin and Roseville. Specifically, the project site consists of two parcels (APN 043-060-052 and 043-060-053) located in the community of Penryn and situated in Section 2 of Township 11 North and Range 7 East on the 7.5 minute Rocklin USGS topographic quadrangle. The ±15.1-acre project site is located on the west side of Penryn Road, approximately one-half mile north of Interstate 80 (I-80). The site has approximately 495 feet of frontage along Penryn Road and 60 feet of frontage along Taylor Road. The project site supports oak woodland, riparian, and non-native grassland habitats.

Land uses in the vicinity include rural residential properties to the west and north, and the Hope Lutheran Church property, which contains a church and accessory structures, to the south. Parcels east of the project site, across Penryn Road, support rural residential and/or commercial uses or are vacant.

DETERMINATION: A Supplemental Checklist has been prepared to evaluate whether the impacts of the Orchard at Penryn project as evaluated in the EIR prepared for the original project would be changed under the proposed project modifications. Specifically, the Checklist considers whether the project modifications would result in new or more severe environmental effects than those evaluated in the prior EIR.

LEAD AGENCY:

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All referenced documentation is available for Public Review at the Placer County Placer County Community Development Resources Agency public counter at 3091 County Center Drive, Auburn.

Date: March 18, 2015

INTRODUCTION

Penryn Development LLC has submitted an application to Placer County seeking discretionary planning approvals to allow 54 single-family residential lots on approximately 15 acres in the unincorporated community of Penryn (the Proposed Project). The land use entitlements requested from Placer County to support the Proposed Project include rezoning the project site and approving the proposed tentative subdivision map. Other permits and approvals necessary to support the project are identified in Table 2 below.

This application constitutes a project under the California Environmental Quality Act (CEQA) and requires environmental review. As described below, the submitted application would modify the planning approvals previously granted by Placer County. The Original Project, which was approved in 2012, allows for development of 150 multi-family residential units at the project site. Those approvals were granted following the County's certification of an Environmental Impact Report (EIR) that evaluated and provided mitigation for the project's environmental effects. As Lead Agency under CEQA, Placer County must evaluate whether the Proposed Project - the proposed single-family residential development - would result in new or more severe environmental effects than those evaluated in the prior EIR. In accordance with CEQA Guidelines Section 15162, this Supplemental Checklist presents analysis of whether new or more severe environmental effects than those evaluated in the prior EIR would occur as a result of:

- substantial changes proposed in the project,
- substantial changes in the circumstances under which the project is undertaken, or
- the availability of new information of substantial importance, including new feasible mitigation measures or alternatives.

HISTORY OF ENVIRONMENTAL REVIEW AND PROJECT APPROVAL

In 2007, Penryn Development LLC filed an application for the Orchard at Penryn project, which would develop 150 multi-family residential dwelling units. Placer County prepared a Draft and Final EIR, and certified the Final EIR on December 11th, 2012. Key steps in the Orchard at Penryn EIR process include the following:

- The Notice of Preparation (NOP) for the Orchard at Penryn project, which includes a description of the project and its probable environmental effects, was circulated to the public and agencies that may have jurisdiction over some aspect of the project for a 30-day period between March 22, 2010 and April 20, 2010.
- Comments on the NOP were considered in preparation of the Draft EIR. The potentially significant impacts of the project and alternatives to the project were evaluated in a Draft EIR (State Clearinghouse No. 20070521), which was circulated for a 45-day public review period between May 4, 2011 and June 20, 2011. A public hearing at the Placer County Planning Commission was held on August 11, 2011 to receive public comments on the Draft EIR.
- Upon completion of the Draft EIR, Placer County, as lead agency, consulted with and solicited comments from public agencies with jurisdiction over the proposed project and provided the public with an opportunity to comment on the Draft EIR. As required by CEQA Guidelines Section 15132, the Lead Agency's responses to all written and verbal comments were presented in the Final EIR.

- The Final EIR was certified on December 11, 2012. Placer County also adopted a Mitigation Monitoring and Reporting Program on December 11, 2012.
- Also on December 11, 2012, Placer County approved the Original Project by approving the tentative subdivision map and approving issuance of a use permit for the project.
- Placer County posted the Notice of Determination for the Original Project on December 11, 2012.

STATUS OF APPROVED PROJECT

Placer County has not issued any grading or building permits for the project and the land owner has not commenced any site preparation activities at the project site.

PROJECT SETTING

Project Location

The project site is within the *Horseshoe Bar/Penryn Community Plan* area, which encompasses an approximately 25-square-mile area located south of the unincorporated community of Newcastle and the City of Auburn, north of the community of Granite Bay, west of Folsom Lake, and east of the Town of Loomis and the cities of Rocklin and Roseville. Specifically, the project site consists of two parcels (APN 043-060-052 and 043-060-053) located in the community of Penryn and situated in Section 2 of Township 11 North and Range 7 East on the 7.5 minute Rocklin USGS topographic quadrangle. As shown in *Figure 1 Site and Vicinity Map*, the ±15.1-acre project site is located on the west side of Penryn Road, approximately one-half mile north of Interstate 80 (I-80). (All figures are presented at the end of this Supplemental Checklist.) Further, the site has approximately 495 feet of frontage along Penryn Road and 60 feet of frontage along Taylor Road.

Land Use and Zoning

Project Site Designations

Community Plan: The land use designation for the project site, as established by the *Horseshoe Bar/Penryn Community Plan*, is Penryn Parkway (PP). This land use designation identifies a mixed-use area that could include residential, professional office, and commercial uses. The Community Plan applies the PP designation to approximately 166 acres around Penryn Road. No changes to the Community Plan land use designation for the project site are proposed.

Zoning: The Placer County Zoning Ordinance designates the western project site parcel as Residential Multi-Family, Combining Density Limitation of 10, Planned Development (RM-DL 10 PD) and designates the eastern parcel as Neighborhood Commercial, Combining Use Permit Required, Combining Design Corridor (C1-UP-Dc). The RM-DL 10 PD zoning designation allows for 10 multi-family units per acre, while the C1-UP-Dc designation allows for commercial and multi-family residential development, with an allowable density of one multi-family unit per 2,000 square feet, or approximately 21 units per acre.

The –Dc designation indicates that the project is subject to review and approval by the Placer County Design/Site Review Committee (D/SRC). Design Review shall include consideration of: architectural colors, materials and textures; landscaping and irrigation; entry features and signs; exterior lighting; pedestrian and vehicular circulation; vehicle entry gates; recreation facilities; fences, and walls; all open space amenities; tree removal and placement; and removal of riparian vegetation. Such a review shall be

conducted prior to the submittal of Improvement Plans and approval is subject to execution of the Agreement by County staff and the applicant.

The project proposes to change the zoning designation for both parcels to Residential Single-Family – Building Site 4 (RS-B-4), which requires a minimum lot size of 4,000 square feet. Under the RS-B-4 zone district, the project proposes to develop 54 single-family residential lots on the project site. No use permit is required in this zone district.

Designations and Land Uses of Adjacent Parcels

The project site and adjacent parcels are shown in *Figure 2 Aerial Photograph*. Land uses in the vicinity include rural residential properties to the west and north, and the Hope Lutheran Church property, which contains a church and accessory structures, to the south. Parcels east of the project site, across Penryn Road, support rural residential and/or commercial uses or are vacant.

Table 1 identifies the land use and zoning designations as well as the existing land uses for the project site and adjacent parcels. Refer to *Checklist Section 10 Land Use and Planning* for additional discussion of land uses and to *Figure 4 Existing Community Plan and Zoning Designations* showing the existing land use and zoning designations.

**Table 1
Land Use and Zoning Designations**

Location	Placer County Zoning Designation	Horseshoe Bar/Penryn Community Plan Designation	Existing Land Use
Project Site	RM-DL 10 PD=10 (Residential Multi-Family, Combining Density Limitation of 10, Planned Development = 10 dwelling units per acre)	Penryn Parkway	Vacant
	C1-UP-Dc (Neighborhood Commercial, Combining Use Permit Required, Combining Design Corridor)	Penryn Parkway	Vacant
North	RA-B-X DR 2.3 acre minimum (Residential Agriculture, Combining Development Reserve, 2.3 acre minimum parcel size)	Penryn Parkway	Rural Residential
South	RS-B-20 PD=4 (Residential Agriculture, Combining Building Site Size of 20,000 square feet minimum, Planned Development = 4 units per acre)	Medium Density Residential 2-4 Dwelling Units per acre	Vacant
	RA-B-100 (Residential Agriculture, Combining Building Site Size of 2.3 acres minimum)	Rural Residential 2.3 to 4.6 Acre Minimum	Church
	C1-UP-DC (Neighborhood Commercial, Combining Use Permit Required, Combining Design Corridor)	Penryn Parkway	Vacant
East	C1-UP-DC (Neighborhood Commercial, Combining Use Permit Required, Combining Design Corridor)	Penryn Parkway	Commercial/Retail
West	RA-B-100 (Residential Agriculture, Combining Building Site Size of 2.3 acres minimum)	Rural Residential 2.3-2.6 Acre Minimum	Rural Residential

PROPOSED PROJECT

Project Objectives

The project applicant has identified the following objectives for the proposed development:

- Remediate and reuse contaminated land by developing a use that is consistent with the community plan land use designation for the site.
- Create a safe living environment for residents by remediating soil contaminated with toxins associated with the previous agricultural uses of the site while also being sensitive to wetland and riparian areas, rock outcroppings, and natural land forms.
- Provide a site design that is sensitive to natural habitat while improving water quality downstream in Secret Ravine and ultimately the Sacramento River.
- Provide additional for-sale housing types in the Loomis/Penryn area, thereby potentially reducing area worker commutes to nearby employment centers.
- Avoid onsite environmental effects where feasible and incorporate mitigation for environmental effects into the project design.
- Provide approximately 50 to 60 single-family residential units and supporting infrastructure, in a development that is sized to support the required public improvements, site remediation, and mitigation.

Project Description

The project proposes to develop 54 single-family residential units on the ±15.1-acre property. As shown in *Figure 3 Site Plan*, minimum lot sizes for the proposed residential lots would be in the 4,000 to 6,000 square feet range, maximum lot sizes would be in the 10,000 to 12,000 square feet range and the average lot size would be nearly 8,200 square feet. The tentative subdivision map also proposes 6 lettered lots which would become commonly held, located throughout the project site. Several prominent rock outcroppings and the land surrounding the central drainage would be preserved. The primary site entrance is proposed as a gated entrance from Penryn Road. A secondary exit-only gated access point is proposed for Taylor Road. Circulation through the project site would be provided by a single road extending west from the entrance, which would terminate in an exit-only driveway to Taylor Road. The proposed project also includes a 30-foot wide landscape easement along Penryn Road, onsite landscaping, an onsite circulation system, and placement of utilities. All utilities would be provided to the site through connections to existing utility infrastructure within and adjacent to the project site, as discussed below. A small portion of fencing and landscaping associated with the property to the south encroach on the project site. These features would be removed with development of the proposed project.

Site Remediation

Due to the presence of hazardous materials in the site soils, site remediation would be necessary, including removal of 11,600 cubic yards of contaminated soil from approximately 7.11 acres in the eastern and central portions of the project site. Removal of contaminated soil would occur in accordance with the Removal Action Workplan (RAW) for the project site. The Final RAW has been approved by the California Department of Toxic Substances Control. The RAW achieves the following Removal Action Objectives:

- Reduction of site-related contaminants (e.g., arsenic, lead and organic pesticides) in site soil to levels consistent with naturally-occurring, background conditions and/or concentration levels that do not pose a human health risk;
- Reduction or mitigation, to the extent practicable, of existing and potential adverse ecological effects of site contaminants;
- Prevention, or reduction to the extent practicable, of the offsite migration of site contaminants, or migration of site contaminants from soil to other media (i.e., air and surface water); and
- Obtaining certification from the DTSC for unrestricted land use.

No changes to the approved RAW are proposed or would be necessary to support the change in the proposed development at the project site.

Grading

Development of the Proposed Project would require grading for building pads, roadways, and utilities. In addition, substantial earthwork would be required to implement the RAW to remove contaminated soil from the project site. As a result, the majority of the project site would be graded. Areas that would remain ungraded include the northern portion of the central intermittent stream and oak woodland habitat associated with this wetland feature, areas around the preserved rock outcroppings, and other limited areas around the site perimeter.

As discussed above, implementation of the RAW would require excavation and removal of 11,600 cubic yards of soil. This soil would be replaced with 11,600 cubic yards of clean soil imported to the site. In addition, grading the site to support development of the residential lots would require further cuts and fills. The Preliminary Grading Plan provides for grading cuts that total 25,700 cubic yards of soil and 42,900 cubic yards of fill, requiring import of an additional 17,200 cubic yards to balance cuts and fills on the site. Considering both the RAW and the proposed site grading, a total of 28,800 cubic yards of soil would be imported to the site.

Drainage and Biological Resources

Two drainage swales carry water from north to south through the project site. One swale is located near the center of the project site (western swale) while the other (eastern swale) is located at the site's eastern boundary, adjacent to Penryn Road. The swales are tributary to Secret Ravine, which is located approximately one mile south of the project site, on the south side of I-80. Secret Ravine flows southwesterly and drains to the Sacramento River. The eastern swale supports riparian scrub habitat along its entire length through the project site. A small pocket of riparian vegetation is supported by the seasonal wetland adjacent to the western swale.

Implementation of the RAW and development of the proposed project would result in direct and indirect impacts to the full length of the eastern swale and to portions of the seasonal wetland and western swale, requiring issuance of permits under Sections 401 and 404 of the Clean Water Act (refer to *Checklist Section 4 Biological Resources* for additional discussion of these effects).

The existing 100-year floodplain associated with the eastern swale is generally 40 to 60 feet wide through the project site. A 60-inch pipe is proposed to replace the eastern swale. The post 100-year floodplain would widen by 10 feet at the inlet to the 60-inch pipe and would gradually conform to the existing floodplain approximately 55 feet north of the pipe inlet, near the northern project site boundary.

The existing 100-year floodplain associated with the western swale varies in width from 10 to 100 feet wide. The project proposes to construct a road crossing this swale, using a culvert to convey flows under

the road. The culvert will be sized to create onsite detention upstream and meter the outflow so as not to increase the floodplain for properties downstream of the project site. This would widen the post 100-year floodplain north of proposed culvert crossing by 70 feet, and the floodplain would conform to its existing width approximately 220 feet north of the culvert. The post development floodplain increases for each swale would be contained within the project site boundaries.

Circulation

The project applicant would be required to construct improvements along the project site's frontage on Penryn Road consistent with the road cross-sections for Penryn Parkway provided in the Community Plan. The project would be required to provide 44 feet of right-of-way, which is one-half of the full roadway width. This would include widening the road to provide two southbound 12-foot travel lanes, a Class II bike lane, and curb, gutter, and sidewalk. The project would also be required to provide one-half of a center two-way left turn lane.

The main road providing access through the site is proposed as a 34-foot wide road standard, with one travel lane in each direction and on-street parking on the south side of the road. Looped streets would intersect the main road to provide access to the proposed homes. These roads would be constructed to a 28-foot wide road standard and would not accommodate on-street parking. Two parking spaces would be provided on each proposed residential lot, and 28 on-street parking spaces would be located throughout the project site. Where on-street parking is not provided, Section 17.54.060(B)(5) of the Placer County Zoning Ordinance requires that single family dwellings provide for four parking spaces. This would require a total of 158 parking spaces for the Proposed Project. The project plans accommodate a total of 136 spaces, and thus requires approval of a variance from the parking standards.

Utilities

The proposed project would require placement of infrastructure to provide water, electricity, telephone, natural gas, and cable television services to the site. Other than connecting to existing water lines located adjacent to the project site, no offsite improvements would be necessary to provide for public services and utilities at the project site. Underground utilities would run in easements along roadways within the development. Domestic water would be supplied from Placer County Water Agency (PCWA). The project would connect to an existing 10-inch water line located in Penryn Road and an existing 24-inch water line located in Taylor Road. Wastewater conveyance would be provided by South Placer Municipal Utility District (SPMUD). Wastewater treatment would be provided at the Dry Creek Regional Wastewater Treatment Plant, which is owned and operated by the City of Roseville on behalf of the South Placer Wastewater Authority. Sanitary sewer pipelines would be installed within the project site, connecting to an existing sewer mainline that runs from north to south across the center of the project site. Solid waste would be collected by Recology Auburn Placer and disposed of at the Western Placer Sanitary Landfill and Materials Recovery Facility.

COMPARISON WITH APPROVED PROJECT

The key changes between the Orchard at Penryn project approved in 2012 and the currently proposed project are as follows:

- The number of dwelling units is proposed to be reduced from 150 to 54.
- The type of dwelling unit is proposed to be changed from multi-family to single-family.

- While the total volume of soil cuts and fills would be reduced (cut volume reduced from 43,147 to 37,300 cubic yards and total fill volume reduced from 55,177 to 54,500 cubic yards), the amount of soil imported to the site would increase from 23,630 to 28,800 cubic yards.

PERMITS AND APPROVALS REQUIRED

Table 2 lists the approvals from Placer County and other responsible agencies that would be required to authorize the proposed project.

Table 2
Required Permits and Approvals

Permit/Approval	Responsible Agency
Rezone	Placer County
Tentative Subdivision Map	Placer County
Design/Site Review	Placer County
Variance (parking standards)	Placer County
Grading Permit	Placer County
Improvement Plan Approval	Placer County
Building Permit	Placer County
Certification of site for “unrestricted land use”	California Department of Toxic Substances Control
Section 404 Nationwide Permit	U.S. Army Corps of Engineers
Section 401 Certification	Regional Water Quality Control Board-Central Valley Region
Section 402 National Pollutant Discharge Elimination System Permit Compliance	Regional Water Quality Control Board-Central Valley Region
Streambed Alteration Agreement	California Department of Fish and Game

MITIGATION MONITORING AND REPORTING PROGRAM

At the time that the Orchard at Penryn EIR was certified and the project approved, Placer County also adopted a Mitigation Monitoring and Reporting Program (MMRP) to document the specific timing and reporting requirements for implementation of the mitigation measures adopted in the EIR. Minor revisions to the MMRP are required to reflect the omission of Mitigation Measure 14.4a (as discussed in section 3 of the Supplemental Checklist) and addition of Additional Mitigation Measures 1 and 2 (as discussed in Sections 2 and 12 of the Supplemental Checklist). Should the currently proposed Orchard at Penryn project modifications be approved, an amended MMRP would be adopted and all mitigation would be implemented as described in the amended MMRP. It is noted that minor changes were made to several mitigation measures to reflect the change in name of the California Department of Fish and Wildlife (CDFW). The department was named the California Department of Fish and Game at the time that the Orchard at Penryn EIR was prepared.

ATTACHMENTS FOLLOWING CHECKLIST

The following documents referenced in this Supplemental Checklist are provided as attachments to this checklist. Other referenced documents and correspondence are available for review at the Placer County Community Development Resources Agency public counter.

Attachment A Air Quality and GHG Emissions Memo, Dudek 2014

Attachment B Biological Resources Evaluation, Helix 2014

Attachment C Trip Generation Memo, Kimley Horn and Associates, 2014

ENVIRONMENTAL CHECKLIST

COMPARING CHANGES AND/OR NEW INFORMATION TO PREVIOUS ENVIRONMENTAL DOCUMENTS

The purpose of the checklist is to evaluate the categories in terms of any “**changes**” or “**new information**” that may result in a changed environmental impact evaluation. A “no” answer does not necessarily mean that there are no potential impacts relative to the environmental category, but that there is no relevant change in the condition or status of the impact due to its insignificance or its treatment in a previous environmental document.

Overriding considerations were adopted with the certification of an EIR that accepted the possibility of certain impacts regardless of whether mitigations could reduce them to a less-than-significant level. Thus, certain environmental categories might be answered with a “no” in the checklist because the proposed project does not introduce changes that would result in a modification to the conclusion of the EIR Findings Document.

EXPLANATION OF CHECKLIST EVALUATION CATEGORIES:

Where Impact was Analyzed in Prior Environmental Documents

This column references the pages of the other environmental documents where information and analysis may be found relative to the environmental issue listed under each topic.

Do Proposed Changes Involve New or More Severe Impacts?

Pursuant to Section 15162(a)(1) of the CEQA Guidelines, this column indicates whether the changes represented by the proposed project will result in new significant impacts not disclosed in the prior EIR or that the proposed project will result in substantial increases the severity of a previously identified significant impact. A yes answer is only required if such new or worsened significant impacts will require “major revisions of the previous EIR.” If a “yes” answer is given, additional mitigation measures or alternatives may be needed.

Any New Circumstances Involving New or More Severe Impacts?

Pursuant to Section 15162(a)(2) of the CEQA Guidelines, this column indicates whether changed circumstances affecting the proposed project will result in new significant impacts not disclosed in the prior EIR or will result in substantial increases the severity of a previously identified significant impact. A yes answer is only required if such new or worsened significant impacts will require “major revisions of the previous EIR.” If a “yes” answer is given, additional mitigation measures or alternatives may be needed.

Any New Information of Substantial Importance Requiring New Analysis of Verification?

Pursuant to Section 15162(a)(3) of the CEQA Guidelines, this column indicates whether new information “of substantial importance” is available requiring an update to the analysis of the previous EIR to verify that the environmental conclusions and mitigations remain valid. Any such information is only relevant if it “was not known and could not have been known with reasonable diligence at the time of the previous EIR.” To be relevant in this context, such new information must show one or more of the following:

- (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
- (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
- (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
- (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

This category of new information may apply to any new regulations that were enacted after certification of the prior EIR that might change the nature of the impacts analysis or the specifications of a mitigation measure. If the new information shows the existence of new significant effects or significant effects that are substantially more severe than were previously disclosed, then new mitigation measures should be considered. If the new information shows that previously rejected mitigation measures or alternatives are now feasible, such measures or alternatives should be considered anew. If the new information shows the existence of mitigation measures or alternatives that are (i) considerably different from those included in the prior EIR, (ii) able to substantially reduce one or more significant effects, and (iii) unacceptable to the project proponents, then such mitigation measures or alternatives should also be considered.

Prior Environmental Document Mitigation Measures.

Pursuant to Section 15162(a)(3) of the CEQA Guidelines, this column indicates whether other environmental documents provide mitigation measures to address effects in the related impact category. If N/A is indicated, the previous environmental documents and this Supplemental Checklist/Initial Study concludes that the impact would not occur with this project, and therefore no mitigation is needed.

DISCUSSION AND MITIGATION SECTIONS

Discussion

A discussion of the elements of the checklist is provided under each environmental category in order to clarify the checklist responses. The discussion provides information about the particular environmental issue, how the proposed project modifications relate to the issue, and, where significant impacts may occur, how any applicable mitigation measures would reduce or avoid the impact.

Adopted Mitigation Measures

Mitigation measures from the previous environmental documents that apply to the impacts of the currently proposed project and/or that apply to any impacts that have been identified based on substantial new information.

Additional Mitigation Measures

Any additional mitigation measures identified as feasible to address any new or more severe impacts that would result from the proposed project modifications or are identified based on substantial new information.

ENVIRONMENTAL CHECKLIST

<i>Environmental Issue Area</i>	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures
1. Aesthetics. Would the project:					
a. Have a substantial adverse effect on a scenic vista?	Initial Study (IS), p. 4	No	No	No	N/A
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	IS, p. 4	No	No	No	N/A
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	IS, p. 4 Draft EIR, pp. 6-7 through 6-14	No	No	No	Mitigation Measures 6.1a, 6.1b, 6.1c, 6.1d
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	IS, p. 4	No	No	No	Mitigation Measure I.1
e. Contribute to cumulative degradation of existing visual character or quality?	Draft EIR, p. 14-4	No	No	No	Mitigation Measures 14.1a, 14.1b, and 14.1c

Discussion:

- a. The project site is not visible from any identified scenic vistas.
- b. The project site is not visible from any identified scenic roadways. The project would preserve several onsite rock outcroppings in the central open space area and along the northern property boundary.
- c. The Orchard at Penryn EIR found that the Original Project would remove a considerable amount of oak woodland and riparian area in order to complete site remediation and site development. The removal of these features would adversely impact the visual character of the site when viewed from Penryn Road and neighboring properties. The Original Project and the Proposed Project would involve the same site remediation activities and generally the same site development footprint, removing vegetation from the same oak woodland and riparian areas of the project site. The Original Project and Proposed Project would have generally the same impact on the visual character of the site. Mitigation measures incorporated to minimize this impact include establishing lighting standards (Mitigation Measure I.1), limits on height (Mitigation Measure 6.1a), and requirements for setbacks and landscaping to screen the project from surrounding residential development (Mitigation Measure 6.1b). Mitigation of this impact also includes the completion of the Design Review process as required under the project site zoning designation (Mitigation Measure 6.1c) and the placement of stockpiles and vehicle staging areas as far from existing dwellings and protected resources as practical (Mitigation Measure 6.1d). As disclosed in the Orchard at Penryn EIR and as stated in the Findings of Fact and Statement of Overriding Considerations adopted by Placer County, the Proposed Project's impacts on the visual character of the project site would be significant and unavoidable.
- d. The EIR found that the Original Project would introduce new lighting sources to the area, including street lighting and outdoor lighting. The Proposed Project's impacts to light and glare would not increase relative to the Original Project, as the Proposed Project proposes fewer dwelling units and a reduced area for visitor parking. This would decrease lighting needs compared to the multi-family development approved for the site. The mitigation adopted for the Original Project, which requires the applicant to submit lighting development standards to the Design/Site Review Committee (Mitigation Measure I.1), would be applicable to the Proposed Project.
- e. The EIR found that the Original Project would have a significant and unavoidable contribution to cumulative degradation of visual character and quality in the project vicinity due to the highly-noticeable change in visual characteristics of the site as viewed from Penryn Road, which is a primary point of access for the Horseshoe Bar/Penryn Community Plan area. The single-family homes developed under the Proposed Project would have a smaller building scale and mass than the 6- and 8-unit multi-family dwelling units approved under the Original Project. As required under Mitigation Measure 6.1a, the maximum building height onsite would be 30 feet. The reduction in building scale and mass and overall development intensity under the Proposed Project would slightly reduce impacts to aesthetic resources from site development and improve the development's consistency with surrounding land uses compared to the Original Project. However, substantial changes to the visual characteristics of the site and the general vicinity would remain under the Proposed Project, as the footprint of the project and associated changes to the natural landscape would not change between the Original and Proposed Projects. Implementation of the mitigation measures describing the required setback (Mitigation Measure 14.1a), landscaping (Mitigation Measure 14.1b), and completion of the Design Review process (Mitigation Measure 14.1c) would minimize the project's contribution to cumulative aesthetic impacts, but they would remain significant and unavoidable as disclosed in the Orchard at Penryn EIR and as stated in the Findings of Fact and Statement of Overriding Considerations adopted by Placer County.

Adopted Mitigation Measures:

- 1.1:** The applicant shall submit lighting development standards for inclusion in the C.C.&R's. The standards shall be reviewed and approved by the DRC and shall include General Lighting Standards, Street Lighting Standards, Residential Standards, Prohibited Lighting and Exemptions and shall insure that individual fixtures and lighting systems in the development will be designed, constructed and installed in a manner that controls glare and light trespass, minimizes obtrusive light and conserves energy and resources.
- 6.1a:** All buildings constructed onsite shall have a maximum height of 30 feet. Architectural features shall have a maximum height of 34.5 feet. As required by the *Horseshoe Bar/Penryn Community Plan*, the project shall maintain a 30-foot wide landscape corridor along the site's Penryn Road frontage. All buildings shall be set back from the northern and southern property lines by a minimum of 15 feet. All buildings shall be set back from the edge of the highway easement along Penryn Road by a minimum of 40 feet.
- 6.1b:** The project shall implement the proposed Landscaping Plan to provide visual screening of the project site and project structures from surrounding residential development. As required by the *Horseshoe Bar/Penryn Community Plan*, the project would maintain a 30-foot wide landscape corridor along the site's Penryn Road frontage. Rather than complete screening of the proposed project, the objective of vegetative screening is to reduce the visual contrast from open space and rural residential development on adjacent properties to the developed condition of the proposed project. Screening shall be provided through a combination of fencing, shrubs, and trees. Fencing shall be consistent with adopted Design Guidelines. Vegetation shall be selected with an emphasis on native species, as feasible, that will provide appropriate screening of the project site.
- 6.1c:** Prior to submittal of the Improvement Plans for the project, the applicant shall submit to the Planning Services Division a Design/Site Agreement Application to be reviewed and approved by the Design/Site Committee for the project. The review shall be conducted consistent with and in consideration of the design criteria for multi-family residential development contained in the *Placer County Design Guidelines*. Design Review shall include consideration of: architectural colors, materials, and textures; landscaping and irrigation; entry features and signs; exterior lighting; pedestrian and vehicular circulation; recreational facilities, fences and walls; all open space amenities; tree removal and replacement; and removal of riparian vegetation. The review shall ensure that the project is consistent with development policies contained in the Community Design Element of the *Horseshoe Bar/Penryn Community Plan*, including those specific to the Penryn Parkway land use designation.
- 6.1d:** Stockpiling and/or vehicle staging areas shall be identified on the Improvement Plans and located as far as practical from existing dwellings and protected resources in the area.
- 14.1a:** The project applicant shall implement *Mitigation Measure 6.1a*, which requires minimum 15-foot building setbacks from the northern and southern property lines and minimum 40-foot building setbacks from the edge of the highway easement along Penryn Road.
- 14.1b:** The project applicant shall implement *Mitigation Measure 6.1b*, which requires implementation of the Landscaping Plan to provide visual screening of the project site and project structures
- 14.1c:** The project applicant shall implement *Mitigation Measure 6.1c*, which describes the requirement approval of a Design/Site Agreement for this project.

Additional Mitigation Measures: None required.

<i>Environmental Issue Area</i>	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures.
<p>2. Agriculture and Forestry Resources. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</p>					
<p>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?</p>	IS, p. 4	No	No	No	N/A
<p>b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?</p>	IS, p. 5	No	No	No	N/A

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	Not analyzed	No	No	No	N/A
d. Result in the loss of forest land or conversion of forest land to non-forest use?	Not analyzed	No	No	No	N/A
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	IS, p. 5 for agricultural land, not analyzed for forest land	No	No	No	N/A

Discussion:

- a. The Original Project would develop 150 multi-family dwelling units at the project site while the Proposed Project would develop 54 single-family dwelling units. The project site is not considered prime farmland, unique farmland, or farmland of statewide or local importance.
- b. The project site is zoned for multi-family residential and commercial land uses and is not subject to a Williamson Act contract.
- c. The project site is zoned for multi-family residential and commercial land uses and does not support substantial timber resources.
- d. At the time that the Orchard at Penryn EIR was prepared, the CEQA Guidelines did not require analysis of potential forestry impacts. Therefore, this question was not addressed in the EIR or Initial Study. The project site supports oak woodland habitat, which meets the definition of forest land under Public Resources Code section 12220(g). The loss of oak woodland would be mitigated through Additional Mitigation Measure 1, which stipulates that Mitigation Measure 5.1c identified in the EIR would also apply to this impact. It requires the project applicant provide for compensation for the loss of oak woodland habitat consistent with the requirements of the County's Oak Woodland Preservation Ordinance. This compensation would serve to reduce potential impacts to forest resources by ensuring that forest resources affected by the proposed project are replaced or the County conserves twice as much oak woodland habitat in another location.
- e. Neither the Original Project nor the Proposed Project would involve any changes in the existing environment that could affect agricultural and timber resources or operations.

Adopted Mitigation Measures: None required.

Additional Mitigation Measures:

Additional Mitigation Measure 1: The project applicant shall implement Mitigation Measure 5.1c which requires compensation for impacts to 5.65 acres of oak woodland habitat at a 2:1 ratio. Compensation may be through payment of fees, purchase of offsite conservation easements, or recreation of oak woodland habitat.

Environmental Issue Area	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures
3. Air Quality. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:					
a. Conflict with or obstruct implementation of the applicable air quality plan?	IS, p. 5	No	No	No	N/A
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	IS, p. 5 Draft EIR, pp. 8-11 through 8-13	No	No	No	Mitigation Measures 8.1a, 8.1b, 8.1c, 8.1d, 8.1e, and 8.1f
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	IS, p. 5 Draft EIR, pp. 14-10 through 14-11	No	No	No	None required
d. Expose sensitive receptors to substantial pollutant concentrations?	IS, p. 5	No	No	No	N/A
e. Create objectionable odors affecting a substantial number of people?	IS, p. 5	No	No	No	N/A
Discussion:					
<p>a. The Original Project would develop 150 multi-family dwelling units at the project site while the Proposed Project would develop 54 single-family dwelling units. The site is designated for residential and commercial land uses and development of the site with residential uses would be consistent with the air quality attainment plan for the region, as discussed further below.</p> <p>b. The project is located in the Sacramento Valley Air Basin (SVAB) portion of Placer County. The SVAB is designated non-attainment for the federal and state ozone standard and non-attainment for the state particulate matter (PM) standard. Reactive organic gas (ROG), oxides of</p>					

nitrogen (NO_x), and PM emissions generated during project construction and operation could contribute to violation of the applicable air quality standards.

Construction Emissions: Construction activities would generate air pollutant emissions. The site remediation and grading will remain generally the same between the Original and Proposed Projects however construction emissions would be reduced under the Proposed Project. The mitigation measures incorporated in the Original Project include use of low-VOC paints (Mitigation Measure 8.1a), preparing construction work plans to minimize air quality impacts (Mitigation Measures 8.1b, 8.1c, and 8.1f), and using more efficient construction equipment (Mitigation Measures 8.1c and 8.1d). With implementation of the mitigation measures, the EIR found that the Original Project's PM emissions would be reduced to less than significant levels but that ROG and NO_x emissions would exceed the Air Pollution Control District's (APCD) thresholds. This significant and unavoidable impact was disclosed in the Orchard at Penryn EIR and addressed in the Findings of Fact and Statement of Overriding Considerations adopted by Placer County.

An updated air quality emissions analysis using CalEEMod was conducted by Dudek to determine the air quality impacts of the Proposed Project. The memo reporting on the CalEEMod findings and the CalEEMod outputs is provided as Attachment A to this Supplemental Checklist. The results of the modeling determined that with the exception of ROG emissions during the architectural coating phase, all of the construction emissions from the Proposed Project would remain below the APCD's thresholds. ROG emissions from construction of the Proposed Project are estimated to be about half of the estimate for ROG emissions from construction of the Original Project. The mitigation measures incorporated in the Original Project would apply to the Proposed Project to ensure that air pollutant emissions are minimized to the extent feasible. These measures include use of low-VOC paints (Mitigation Measure 8.1a), preparing construction work plans to minimize air quality impacts (Mitigation Measures 8.1b, 8.1c, and 8.1f), and using more efficient construction equipment (Mitigation Measures 8.1c and 8.1d). However, ROG emissions during construction would remain significant and unavoidable under the Proposed Project because the ROG thresholds would be exceeded during the architectural coatings phase.

Operational Emissions: The Orchard at Penryn EIR found that the Original Project would have a less than significant impact related to air pollutant emissions during project operation contributing to violations of air quality standards. As demonstrated in the CalEEMod modeling, all operational emissions of the Proposed Project would also remain below the APCD thresholds, and this impact would remain less than significant.

- c. Ongoing regional development in the cumulative scenario would contribute to emissions of ROG and NO_x. The EIR determined that the Original Project would exceed the APCD threshold of 10 pounds per day of each pollutant and would therefore contribute to a significant cumulative impact. Mitigation Measure 14.4a was adopted to effectively offset emissions from one year of the project by requiring the project applicant to pay into the County's air quality mitigation fund or provide other mechanisms by which regional air pollutant emissions would be reduced. As shown in the modeling results in Attachment A, under the Proposed Project, ROG and NO_x emissions would remain below the APCD's recommended cumulative threshold of 10 pounds per day, and mitigation would not be required. Therefore, Mitigation Measure 14.4a that was included in the certified Orchard at Penryn EIR, the adopted Findings of Fact, and the adopted MMRP would not be required of the currently proposed project and would be removed from the MMRP. It is shown below in strikethrough format to indicate the removal of this measure from the MMRP.
- d. Neither the Original Project nor the Proposed Project would expose sensitive receptors to substantial pollutant concentrations.
- e. Neither the Original Project nor the Proposed Project would expose sensitive receptors to objectionable odors.

Adopted Mitigation Measures:

- 8.1a:** The project applicant shall use low-VOC or no-VOC paints, finishes, and adhesives in all building construction.
- 8.1b:** During implementation of the RAW, the project applicant shall implement the Erosion Prevention and Sediment Control Plan included as Appendix H of the RAW and any other measures included in the grading permit. Upon completion of site remediation, the applicant shall obtain a tentative “No Further Action” letter from DTSC, and shall begin site work and grading to support project construction in accordance with the approved Improvement Plans. If areas disturbed by RAW implementation are not subject to site work and grading to support project construction within 90 days of completion of site remediation activities, the project applicant shall revegetate those areas.
- 8.1c:** Prior to the approval of Improvement Plans, the project applicant shall submit a Construction Emission/Dust Control Plan to the Placer County APCD. This plan must address the minimum Administrative Requirements found in sections 300 and 400 of APCD Rule 228, Fugitive Dust, and shall include the following requirements:
- A. Apply soil stabilizers to inactive areas;
 - B. Replace ground cover in disturbed areas quickly;
 - C. Water exposed surfaces three times daily;
 - D. Reduce speed on unpaved roads to less than 15 miles per hour; and
 - E. Manage haul road dust by watering twice daily.
- 8.1d:** Prior to the approval of Improvement Plans, the project applicant and/or prime contractor shall provide a plan to the Placer County APCD for approval by the APCD demonstrating that the heavy-duty (50 horsepower or greater) off-road vehicles to be used in site remediation and project construction, including owned, leased and subcontractor vehicles, will achieve a project-wide fleet average 20 percent NO_x reduction and 45 percent particulate reduction compared to the most recent CARB fleet average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.
- 8.1e:** Prior to the approval of Improvement Plans, the project applicant shall submit an enforcement plan to the APCD for review. The enforcement plan shall provide for weekly evaluation of project-related on-and-off- road heavy-duty vehicle engine emission opacities, using standards as defined in California Code of Regulations, Title 13, Sections 2180 – 2194 and APCD Rule 202. An Environmental Coordinator who is CARB-certified to perform Visible Emissions Evaluations shall be hired by the prime contractor or property owner. The Environmental Coordinator shall routinely evaluate project related off-road and heavy duty on-road equipment emissions for compliance with this requirement. Operators of vehicles and equipment found to exceed opacity limits will be notified by APCD. Use of any such vehicle and/or equipment must cease immediately, and the equipment must be repaired within 72 hours.
- 8.1f:** The applicant shall include the following standard notes on the Improvement Plans and Grading Plan and shall comply with each note throughout site remediation and project construction:
- 1. The prime contractor shall submit to the District a comprehensive inventory (i.e. make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower or greater) that will be used an aggregate of 40 or more hours for site

remediation and project construction. The inventory shall be updated, beginning 30 days after any initial work on site has begun, and shall be submitted on a monthly basis throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least three business days prior to the use of subject heavy-duty off-road equipment, the project representative shall provide the District with the anticipated construction timeline including start date, and name and phone number of the property owner, project manager, and onsite foreman.

2. Construction equipment exhaust emissions shall not exceed District Rule 202 Visible Emission limitations. Operators of vehicles and equipment found to exceed opacity limits will be notified by APCD. Use of any such vehicle and/or equipment must cease immediately, and the vehicle and/or equipment must be repaired within 72 hours.
3. The contractor shall suspend all grading operations when fugitive dust exceeds Placer County APCD Rule 228 Fugitive Dust limitations. The prime contractor shall be responsible for having an individual who is CARB-certified to perform Visible Emissions Evaluations verify compliance with Rule 228 on a weekly basis. Fugitive dust must not exceed 40 percent opacity and must not go beyond the property boundary at any time. If lime or other drying agents are utilized to dry out wet grading areas they shall be controlled as to not to exceed Placer County APCD Rule 228 Fugitive Dust limitations.
4. The prime contractor shall suspend all grading operations when wind speeds (including instantaneous gusts) exceed 25 miles per hour and dust is impacting adjacent properties.
5. The contractor shall apply water to control dust a minimum of three times per day, as required by Rule 228 Fugitive Dust limitations, to prevent dust impacts offsite. Operational water truck(s) shall be onsite at all times to control fugitive dust. Construction vehicles leaving the site shall be cleaned to prevent dust, silt, mud, and dirt from being released or tracked offsite.
6. The prime contractor shall be responsible for keeping adjacent public thoroughfares clean of silt, dirt, mud, and debris, and shall “wet broom” the streets if silt, dirt, mud or debris is carried over to adjacent public thoroughfares. Dry mechanical sweeping is prohibited.
7. During construction, no open burning of removed vegetation shall be allowed. All removed vegetative material shall be either chipped onsite or taken to an appropriate disposal site.
8. During construction, traffic speeds on all unpaved surfaces shall be limited to 15 miles per hour or less.
9. During construction, the contractor shall minimize idling time to a maximum of 5 minutes for all diesel powered equipment.
10. The contractor shall use CARB ultra-low diesel fuel for all diesel-powered equipment. In addition, low sulfur fuel shall be utilized for all stationary equipment.
11. The contractor shall utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary diesel power generators.
12. All onsite stationary equipment which is classified as 50 horsepower or greater shall either obtain a state-issued portable equipment permit or a Placer County APCD-issued portable equipment permit.

~~14.4a: Prior to Improvement Plan approval, the project applicant shall implement one or more of the following mitigation strategies. The mitigation shall be sufficient to offset the amount of summertime project operation emissions of ROG and NO_x that exceed 10~~

pounds per day. The estimated amount that the mitigation must be sufficient to offset is 0.67 pounds per day of ROG and 0.17 pounds per day of NO_x, a total of 0.84 pounds per day for a 182 day period (summer days).

a. ~~Establish mitigation onsite by incorporating design features within the project. This may include, but not be limited to: “green” building features such solar panels, energy efficient heating and cooling, exceeding Title 24 standards, bike lanes, bus shelters, etc. NOTE: The specific amounts of “credits” received shall be established and coordinated through the Placer County Air Pollution Control District.~~

b. ~~Establish mitigation offsite within west Placer County by participating in an offsite mitigation program, coordinated through the Placer County Air Pollution Control District. Examples include, but are not limited to participation in a “Biomass” program that provides emissions benefits; retrofitting, repowering, or replacing heavy duty engines from mobile sources (i.e. busses, construction equipment, road haulers); or other program that the project proponent may propose to reduce emissions.~~

c. ~~Participate in the Placer County Air Pollution District Offsite Mitigation Program by paying the equivalent amount of money, which is equal to the project’s contribution of pollutants (ROG and NO_x) in excess of the cumulative threshold of 10 pounds per day during summertime. The estimated payment for the proposed project is \$12,012 based on \$14,300 per ton for a 182 day period. The actual amount to be paid shall be determined, and satisfied per current California Air Resource Board guidelines, at the time of Improvement Plan approval.~~

Additional Mitigation Measures: None required.

<i>Environmental Issue Area</i>	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures.
4. Biological Resources. Would the project:					
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	IS, p. 6 Draft EIR, p. 5-19	No	No	No	Mitigation Measure 5.4a

b. Substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number of restrict the range of an endangered, rare, or threatened species?	IS, p. 6 Draft EIR, p. 5-19	No	No	No	Mitigation Measure 5.4a
c. Have a substantial adverse effect on the environment by converting oak woodlands.	IS, p. 6 Draft EIR, pp. 5-16 through 5-18	No	No	No	Mitigation Measures 5.1a, 5.1b, and 5.2a
d. Have a substantial adverse effect on any riparian habitat or other sensitive natural community, including oak woodlands, identified in local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife U.S. Fish & Wildlife Service, U.S. Army Corps of Engineers or National Oceanic and Atmospheric Administration Fisheries?	IS, p. 6 Draft EIR, pp. 5-16 through 5-18	No	No	No	Mitigation Measures 5.1a, 5.1b, and 5.2a
e. Have a substantial adverse effect on federal or state protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) or as defined by state statute, through direct removal, filling, hydrological interruption, or other means?	IS, p. 6 Draft EIR, p. 5-18	No	No	No	Mitigation Measures 5.3a, 5.3b, 5.3c, 5.3d, and 5.3e
f. Interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nesting or breeding sites?	IS, p. 6	No	No	No	N/A
g. Conflict with any local policies or ordinances that protect biological resources, including oak woodland resources?	IS, p. 6 Draft EIR, pp. 5-19 and 5-20	No	No	No	Mitigation Measures 5.5a, 5.5b, 5.5c, 5.5d, 5.5e, and 5.5f

h. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	IS, p. 6	No	No	No	N/A
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Discussion:

a. and b. The Orchard at Penryn EIR found that project site has the potential to support three special-species plants (big-scale balsam-root, Brandegees’ clarkia, and oval-leaved viburnum) and nesting raptors. The Biological Resources Assessment prepared for the site (North Fork Associates 2006, provided in Appendix D to the Draft EIR) found that the project site does not support any special-status plants. The EIR included Mitigation Measure 5.4a to ensure that impacts to nesting raptors are avoided through surveying the area prior to site remediation and construction and requiring a buffer area around any active nest if construction and remediation activities occur during the nesting season. The Proposed Project would not alter the development footprint compared to the Original Project and would have the same potential to adversely affect nesting raptors. Implementation of Mitigation Measure 5.4a would ensure that these potential impacts would be reduced to a less than significant level.

A new Biological Resources Evaluation (BRE) was prepared for the project site by Helix Environmental Planning (2014, included as Attachment B to this Supplemental Checklist). The BRE found that in addition to the three special-status plants identified in the EIR as having potential to occur onsite, a fourth special-status plant, Sanford’s arrowhead, also has potential to occur onsite. However, the BRE concluded that based on field surveys and research through the California Natural Diversity Database, none of these four special-status plants occur onsite and the Proposed Project would have no impact on special-status plant species.

In addition, the BRE found that there is potential for a special-status invertebrate species, the valley elderberry longhorn beetle (VELB), to occur onsite due to the presence of one elderberry shrub in the southeast corner of the project site. Elderberry shrubs are the exclusive host plant for the VELB, which is designated as a threatened species under the federal Endangered Species Act. The BRE notes that the VELB is proposed for delisting but a final rule regarding delisting has not yet been promulgated.

The elderberry shrub was not identified onsite in the Biological Resources Assessment (North Fork Associates, 2006) or the EIR. The BRE reports that “one relatively small solitary elderberry shrub is present along the southern edge of the project site. Although the shrub is located within riparian habitat, there are no other elderberry shrubs in the vicinity on or off the project site. Therefore, the lone elderberry shrub is considered poor habitat for the VELB. No VELB or species indicators (e.g., exit holes or frass) were observed on the shrub.”

The BRE concludes that the Proposed Project would not adversely affect VELB and that “avoidance and minimization measures are not warranted. However, concurrence should be sought from the USFWS that the lone elderberry shrub on the project site does not represent potential habitat for the VELB prior to commencement of any construction activities within 100 feet of the shrub or activities that could otherwise indirectly impact the shrub such as hydrologic alteration or removal of riparian habitat in the vicinity of the shrub.” This concurrence would be obtained through consultation with the USFWS which is required to be conducted by the U.S. Army Corps of Engineers under Section 7 of the Endangered Species Act as part of the Clean Water Act Section 404 permit process required to authorize the Proposed Project’s impacts to waters of the US, as discussed in item (e) below. With compliance with the Clean Water Act and Endangered Species Act, which is required as a matter of law, the Proposed Project would have no impacts on VELB.

c. and d. The EIR found that the Original Project would destroy most of the riparian habitat onsite as a result of the proposed site remediation

and construction. The impacts to the riparian habitat would be generally the same under the Proposed Project as compared to the Original Project because the Proposed Project would not alter the project's development footprint. However, the BRE prepared for the project site (Helix, 2014) updated the amount of riparian habitat supported onsite. The EIR found that the site supported 1.3 acres of riparian habitat and would result in direct impacts to 1.03 acres of this habitat. The BRE found that the site supports 2.34 acres of riparian habitat and would result in direct impacts to 2.04 acres of this habitat. Conservation of a portion of the riparian habitat onsite would be required under Mitigation Measure 5.1a, which has been updated to reflect the updated BRE which indicates that the Proposed Project would preserve 0.3 acres of riparian habitat onsite. In addition, Mitigation Measure 5.1b requires that the project obtain a Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW), which would typically include requirements related to construction techniques and compensation for adverse impacts to riparian habitat. Implementation of these measures would ensure that the Proposed Project's impacts to riparian habitat would be less than significant.

The EIR also found that site remediation and construction activities under the Original Project would impact the oak woodland present onsite. The impacts to oak woodland habitat would be generally the same under the Proposed Project as compared to the Original Project as the Proposed Project would not alter the project's development footprint. The project applicant would be required to compensate for the loss of oak woodland habitat in accordance with Placer County requirements (Mitigation Measure 5.1c). The BRE found that the extent of oak woodland has slightly decreased in the time since the original Biological Resources Assessment was prepared. The BRE found that there is a total of 6.59 acres of oak woodland habitat at the project site (compared to the 7.5 acres of oak woodland previously identified) and the Proposed Project would result in removal of 5.65 acres of this habitat (compared to the 6.41 acres of oak woodland that the Original Project would impact). Mitigation Measure 5.1c has been updated to reflect this revised acreage. Implementation of this measure would ensure that the Proposed Project's impacts to oak woodland habitat would be less than significant.

- e. The Orchard at Penryn EIR found that the project site supported a total of 0.499 acres of waters of the U.S. and that the Original Project would result in direct impacts to 0.42 acres of this resource and indirect impacts to all of the remaining extent of waters of the U.S. on the project site. As updated in the BRE, the project site is now known to support 0.531 acres of waters of the U.S., comprised of two swales, an intermittent stream, and a seasonal wetland. The Proposed Project would have generally the same impacts to the onsite wetlands as the Original Project by directly and indirectly affecting all of the 0.531 acres. Mitigation of these impacts includes conservation of a portion of the wetland onsite (Mitigation Measure 5.3a which has been updated with the revised acreages provided in the BRE), compliance with the policies of relevant agencies overseeing habitat conservation and compensation (Mitigation Measure 5.3b, 5.3c, and 5.3d), and implementation of Best Management Practices (BMPs) to control erosion and maintain water quality (Mitigation Measure 5.3e).
- f. There are no known native resident or migratory wildlife corridors within the project area or vicinity. Because of the proximity of the project site to previously developed uses, it is not well suited to serve as a wildlife corridor.
- g. The Orchard at Penryn EIR found that the Original Project would result in impacts related to conflicts with Placer County's requirements for stream setbacks, the County and US Army Corps of Engineers' no net loss wetland policy, and the County's Tree Preservation Ordinance. The EIR identified Mitigation Measures 5.5a through 5.5f to ensure that adverse environmental effects associated with potential conflicts with these policies would be reduced to less than significant levels. The Proposed Project would not substantially change the development footprint and would result in the same potential policy conflicts, requiring implementation of the same mitigation measures to reduce impacts to a less than significant level. Minor revisions have been made to Mitigation Measures 5.5d and 5.5e to correct the references to other mitigation measure numbers.

h. While Placer County is in the process of developing the Placer County Conservation Program (PCCP), which would oversee the environmental permitting of development projects, proposed project activities may commence prior to the adoption of the PCCP. Further, the project site is not in an area identified in the wildlife maps prepared for the PCCP as having high long-term conservation value. Therefore, mitigation measures presented as part of the currently proposed project are designed to be implemented absent the approved conservation plan.

Adopted Mitigation Measures:

- 5.1a:** As reflected in the proposed site plan, the project shall retain 0.08 acres of riparian habitat located in the central portion of the project site.
- 5.1b:** The project applicant shall obtain a Streambed Alteration Agreement from the California Department of Fish and Game (CDFG) to authorize impacts to the drainage swales and associated riparian habitat on the project site. The project applicant shall adhere to all conditions and requirements of the Streambed Alteration Agreement. Once acquired, the Streambed Alteration Agreement shall be submitted to the Placer County DRC prior to approval of Improvement Plans, issuance of grading permits, and/or any clearing, grading, or excavation work on the project site.
- 5.1c:** The project applicant shall implement one or a combination of the following measures to compensate for impacts to oak woodland habitat. Based on the proposed site plan the project would impact 6.41 acres of oak woodland habitat; however the final determination regarding the amount of oak woodland to be impacted and therefore mitigated will be based on impacts shown on the Improvement Plans. Prior to approval of Improvement Plans the applicant shall:
- A. Submit payment of fees for oak woodland conservation at a 2:1 ratio, consistent with Section 12.16.080(C) of the Placer County Code. These fees shall be calculated based upon the current market value for similar oak woodland acreage preservation and an endowment to maintain the land in perpetuity; and/or
 - B. Purchase offsite conservation easements at a location approved by Placer County to mitigate the loss of oak woodlands at a 2:1 ratio; and/or
 - C. Provide for a combination of payment to the Tree Preservation Fund and creation of an offsite Oak Preservation Easement; and/or
 - D. Plant and maintain an appropriate number of trees in restoration of a former oak woodland (tree planting is limited to half the mitigation requirement and the location of any tree planting must be approved by Placer County).
- 5.2a:** The project applicant shall implement Mitigation Measure 5.1c which requires compensation for impacts to 6.41 acres of oak woodland habitat at a 2:1 ratio. Compensation may be through payment of fees, purchase of offsite conservation easements, or recreation of oak woodland habitat.
- 5.3a:** As reflected in the proposed site plan, the project shall retain 0.07 acres of wetland swale located in the central portion of the project site.
- 5.3b:** The project applicant shall obtain the appropriate permits from the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, and the California Department of Fish and Wildlife to authorize fill of onsite waters of the U.S. These impacts would require an Individual Permit from the Corps, a 401 Water Quality Certification from the Regional Water Quality Control Board, and Streambed Alteration Agreement from the California Department of Fish and Wildlife. Once acquired, these permits shall be submitted to the Placer County DRC prior to approval of Improvement Plans, issuance of grading permits, and/or any clearing, grading, or excavation work on the project site.
- 5.3c:** The project applicant shall carry out onsite replacement or offsite banking to mitigate for impacts to wetlands. Minimum replacement

ratios shall be 1:1 for wetland habitat. The project applicant shall comply with the U.S. Army Corps of Engineers and County policies requiring “no net loss” of wetlands. The creation/restoration requirements shall be in compliance with the County’s Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP) and the Programmatic Formal Endangered Species Act Consultation issued by the USFWS. If offsite mitigation is chosen, the project applicant shall provide written evidence that compensatory habitat has been established through the purchase of mitigation credits at a County-qualified wetlands mitigation bank. The amount of money required to purchase these credits shall be equal to the amount necessary to replace wetland or habitat acreage and value, including compensation for temporal loss. Evidence of payment, which describes the amount and type of habitat purchased at the bank site, shall be provided to the County prior to the issuance of grading permits.

5.3d: In the event that the Placer County Conservation Program is adopted prior to commencement of ground disturbing activities associated with the proposed project, the project shall be developed in compliance with the County’s Natural Communities Conservation Plan/Habitat Conservation Plan and the Programmatic Endangered Species Act Consultation issued by the U.S. Fish and Wildlife Service.

5.3e: The project Improvement Plans shall incorporate Best Management Practices (BMPs) to protect water quality and control erosion and sedimentation of the preserved drainage swale and seasonal wetland onsite as well as drainageways adjacent to the site. BMPs shall be shown on Improvement Plans and subject to approval by the Placer County Planning Services Division and Engineering and Surveying Department (ESD). All BMPs shall be maintained as required to insure effectiveness. BMPs to minimize indirect impacts to federally-protected wetlands shall include the following measures:

- A. Implementation of Mitigation Measure 10.2e, which requires the Improvement Plans to show all grading, drainage improvements, vegetation and tree removal, and revegetation of disturbed areas and requires that all work conform to provisions of the Placer County Grading Ordinance.
- B. Implementation of Mitigation Measure 10.5d, which requires preparation and Air Pollution Control District approval of a dust and erosion control plan.
- C. Implementation of Mitigation Measure 10.5e, which requires Improvement Plans to show appropriate design of water quality treatment facilities/Best Management Practices (BMPs) for project construction.
- D. Implementation of Mitigation Measure 11.2a, which requires Improvement Plans to show appropriate design of water quality treatment facilities/Best Management Practices (BMPs) for project operation.
- E. Implementation of Mitigation Measure 11.2c, which requires storm drain inlets and catch basins within the project area to be marked with language prohibiting dumping.

5.4a: If site remediation, grading, or construction is to commence during the raptor nesting period (generally March 1 through August 31), the project applicant shall retain a qualified biologist to conduct pre-construction nesting raptor surveys within 30 days prior to the commencement of site preparation activities. The surveys shall confirm the presence or absence of nesting raptors. If an active nest(s) is located, a qualified biologist in consultation with the California Department of Fish and Game shall recommend a buffer area around the nest(s). The buffer area shall be delineated with orange construction fencing and no site remediation, grading, or construction shall take place within the buffer zone until the biologist has determined that all young have fledged and are capable of foraging independently.

5.5a: The project applicant shall submit a tree removal exhibit to the Placer County Planning Services Division for review and approval prior to issuance of a grading permit, approval of the Improvement Plans, and/or any development activity onsite, including preliminary clearing or grading (in accordance with Section 36.400(B) of the County’s mitigation program).

5.5b: The project applicant shall implement Mitigation Measure 5.1c, which requires that impacts to oak woodland habitat be mitigated at a

2:1 ratio.

- 5.5c:** The project applicant shall mitigate impacts to large oak trees on an inch-per-inch basis. The project applicant shall plant replacement trees onsite or in an offsite location providing restoration of an approved former oak woodland, and/or shall contribute \$100 for each diameter inch at breast height removed or impacted to the Placer County Tree Preservation Fund. The project must mitigate for a total of 124.2 tree diameter inches. Tree replacement and conservation mitigation fees shall be paid prior to the issuance of grading permits by Placer County. Any onsite replacement tree planting shall be included on the Improvement Plans for the proposed project. County approval of any offsite replacement tree planting shall also be obtained prior to issuance of grading permits by Placer County.
- 5.5d:** The project applicant shall implement Mitigation Measure ~~5.3a~~ 5.3b, which requires the applicant to obtain the appropriate permits from the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, and the California Department of Fish and Game prior to issuance of grading permits, approval of Improvement Plans, and/or any clearing, grading, or excavation work on the project site.
- 5.5e:** The project applicant shall implement Mitigation Measure ~~5.3b~~ 5.3c, which requires the applicant to carry out onsite replacement or offsite banking to mitigate impacts to wetlands with a minimum replacement ratio of 1:1. This mitigation measure shall be implemented prior to issuance of grading permits.
- 5.5f:** The project applicant shall implement Mitigation Measure 5.4a, which requires pre-construction nesting raptor surveys within 30 days prior to the commencement of site preparation activities to confirm the presence or absence of nesting raptors if construction is to occur during the raptor nesting period (generally March 1 through August 31).

Additional Mitigation Measures: None required.

<i>Environmental Issue Area</i>	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures
5. Cultural Resources. Would the project:					
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	IS, p. 7	No	No	No	N/A
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	IS, p. 8	No	No	No	N/A
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	IS, p. 8	No	No	No	N/A

d. Disturb any human remains, including those interred outside the formal cemeteries?	IS, p. 8	No	No	No	N/A
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Discussion

- a and b. A report by Peak and Associates, Inc. dated November 13, 2006 and updated May 19, 2014 indicated that there are no identified significant resources in the project area and no further pre-construction consideration of cultural resources is warranted. The report also indicates there is a slight possibility that a minor prehistoric site could exist on the property and be buried/obscured in a narrow strip of heavy vegetation on the property. The EIR found that the Original Project would have less than significant impacts related to cultural resources. The EIR noted standard construction conditions will apply to the project requiring that “If any archaeological artifacts, exotic rock (non-native), or unusual amounts of shell or bone are uncovered during any on-site construction activities, all work must stop immediately in the area and a SOPA-certified (Society of Professional Archaeologists) archaeologist retained to evaluate the deposit. The Placer County Planning Department and Department of Museums must also be contacted for review of the archaeological find(s). If the discovery consists of human remains, the Placer County Coroner and Native American Heritage Commission must also be contacted. Work in the area may only proceed after authorization is granted by the Placer County Planning Department. A note to this effect shall be provided on the Improvement Plans for the project. Following a review of the new find and consultation with appropriate experts, if necessary, the authority to proceed may be accompanied by the addition of development requirements to provide protection of the site and/or additional mitigation measures necessary to address the unique or sensitive nature of the site.” As the Proposed Project would not alter the project’s development footprint, the Proposed Project would not alter the potential to uncover archeological resources. Impacts would remain less than significant.
- c. The project site is not located in an area of high sensitivity for paleontological resources. Standard construction conditions will apply to this project requiring: “a note shall be placed on the improvement plans that if paleontological resources are discovered on-site, the applicant shall retain a qualified paleontologist to observe grading activities and salvage fossils as necessary. The paleontologist shall establish procedures for paleontological resource surveillance and shall establish, in cooperation with the project developer, procedures for temporarily halting or redirecting of grading, the paleontologist shall report such findings to the project developer, and to the Placer County Department of Museums and Planning Department. The paleontologist shall determine appropriate actions, in cooperation with the project developer, which ensure proper exploration and/or salvage. Excavated finds shall be offered to a State-designated repository such as Museum of Paleontology, U.C. Berkeley, the California Academy of Sciences, or any other State-designated repository. Otherwise, the finds shall be offered to the Placer County Department of Museums for purposes of public education and interpretive displays. These actions, as well as final mitigation and disposition of the resources shall be subject to approval by the Department of Museums. The paleontologist shall submit a follow-up report to the Department of Museums and Planning Department which shall include the period of inspection, an analysis of the fossils found, and present repository of fossils.” As the Proposed Project would not alter the project’s development footprint, the Proposed Project would not alter the potential to uncover paleontological resources. Impacts would remain less than significant.
- d. There are no known human remains within the project site.

Adopted Mitigation Measures: None required.

Additional Mitigation Measures: None required.

<i>Environmental Issue Area</i>	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures.
6. Geology and Soils. Would the project:					
a. Expose people or structures to unstable earth conditions or changes in geologic substructures?	IS, p. 9 Draft EIR, pp. 10-8 and 10-9	No	No	No	N/A
b. Result in significant disruptions, displacements, compaction or overcrowding of the soil?	IS, p. 9 Draft EIR pp. 10-9 and 10-10	No	No	No	Mitigation Measures 10.2a, 10.2b, 10.2c, 10.2d, and 10.2e
c. Result in substantial changes in topography or ground surface relief features?	IS, p. 9 Draft EIR p. 10-11	No	No	No	N/A
d. Result in the destruction, covering or modification of any unique geologic or physical features?	IS, p. 9 Draft EIR p. 10-11	No	No	No	N/A
e. Result in any significant increase in wind or water erosion of soils, either on or off the site?	IS, p. 9 Draft EIR, pp. 10-9 and 10-10, 10-12 through 10-14	No	No	No	Mitigation Measures 10.2a, 10.2b, 10.2c, 10.2d, 10.2e, 10.5a, 10.5b, 10.5c, 10.5d, 10.5e, 10.5f, and 10.5g

f. Result in changes in deposition or erosion or changes in siltation which may modify the channel of a river, stream, or lake?	IS, p. 9 Draft EIR, pp. 10-9 and 10-10, 10-12 through 10-14	No	No	No	Mitigation Measures 10.2a, 10.2b, 10.2c, 10.2d, 10.2e, 10.5a, 10.5b, 10.5c, 10.5d, 10.5e, 10.5f, and 10.5g
g. Result in exposure of people or property to geologic and geomorphological (i.e. Avalanches) hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?	IS, p. 9	No	No	No	N/A
h. Be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	IS, p. 9 Draft EIR, p. 10-8 and 10-9	No	No	No	N/A
i. Be located on expansive soils, as defined in Chapter 18 of the California Building Code, creating substantial risks to life or property?	IS, p. 9	No	No	No	N/A

Discussion:

- a. The Preliminary Geotechnical Engineering Reports did not identify any specific safety or construction feasibility concerns related to existing geologic features at the site.
- b. The Orchard at Penryn EIR recognizes that disruption of site soils and topography is an unavoidable result of both the remediation plan as well as development of the site and that site grading and excavations would result in significant changes to the site's current condition. As the Proposed Project would not alter the project's development footprint and would not substantially alter the grading necessary to construct the project, the Proposed Project would result in the same impacts to site soils and topography as the Original Project. To reduce these effects, the proposed grading plan minimizes changes in site topography and provides transition between graded areas and adjacent properties. The Removal Action Workplan (RAW) for site remediation, included as Appendix C to the Draft EIR, includes an Erosion Prevention and Sediment Control plan to minimize effects associated with soil disturbance during site remediation and Mitigation Measures 10.2a and 10.2d stipulate that this plan must be approved by DTSC and be implemented during site remediation to minimize impacts related to disruption of site soils and topography. Further mitigation would include implementation of BMPs and adherence to the Placer County Grading Ordinance to minimize the potential for erosion (Mitigation Measures 10.2b, 10.2d, and 10.2e). There would be no substantive change in impacts to soil under the Proposed Project compared to the Original Project. It is noted that a minor revision was made to Mitigation Measure 10.2b to change the term "Codes, Covenants, and Restrictions" to "Covenants, Conditions and Restrictions" as shown

below.

- c. and d. The project site supports gently rolling topography and several rock outcroppings. The Orchard at Penryn EIR found that the Original Project grading plan reflected minimal changes to the site topography and preservation of several of the rock outcroppings and that adherence to the Placer County Grading Ordinance would ensure smooth transitions to neighboring properties. The Orchard at Penryn EIR found that this impact would be less than significant. The Proposed Project involves similar amounts of grading as the Original Project and would result in no substantive change in impacts to topography compared to the Original Project. No mitigation measures are required.
- e. and f. The Orchard at Penryn EIR found that site remediation would disrupt and displace substantial amounts of soil, as would grading to support project construction and construction of the dwelling units and associated infrastructure. The EIR found that implementation of the Erosion Prevention and Sediment Control plan in the RAW (Mitigation Measure 10.5a) and BMPs (Mitigation Measures 10.5b, 10.5c, 10.5d, 10.5e, 10.5f, and 10.5g) as well as adherence to the Placer County Grading Ordinance to minimize the potential for erosion. The Proposed Project would not alter the project's development footprint, would implement the RAW as approved for the Original Project, and would not substantially change the extent of proposed grading. Therefore there would be no substantive change in impacts to soil under the Proposed Project compared to the Original Project. With implementation of the identified mitigation measures, this impact would be reduced to a less than significant level.
- g. The Preliminary Geotechnical Engineering Reports, included as Appendix H to the Draft EIR, did not identify any unstable geologic unit, soil type, or soil condition on the project site, and the project is located in a low severity earthquake area without any known active faults. This impact would be less than significant under both the Original Project and the Proposed Project. No mitigation is required.
- h. The Preliminary Geotechnical Engineering Reports did not identify any specific safety or construction feasibility concerns related to existing geologic features at the site. This impact would be less than significant under both the Original Project and the Proposed Project. No mitigation is required.
- i. The Preliminary Geotechnical Engineering Reports concluded that the project site is not located on expansive soils. This impact would be less than significant under both the Original Project and the Proposed Project. No mitigation is required.

Adopted Mitigation Measures:

- 10.2a:** The project applicant shall implement *Mitigation Measure 8.1b*, which requires implementation of the Erosion Prevention and Sediment Control Plan included as Appendix H of the Removal Action Workplan and any other measures included in the grading permit during site remediation.
- 10.2b:** The Improvement Plan submittal shall include a final geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer. The report shall address and make recommendations on the following:
 - a. Road, pavement, and parking area design
 - b. Structural foundations, including retaining wall design
 - c. Grading practices
 - d. Erosion/winterization
 - e. Special problems discovered onsite, (i.e., groundwater, expansive/unstable soils)

f. Slope stability

Once approved by the Engineering and Surveying Department (ESD), two copies of the final report shall be provided to the ESD and one copy to the Building Department for their use. If the soils report indicates the presence of critically expansive or other soils problems which, if not corrected, could lead to structural defects, a certification of completion of the requirements of the soils report will be required prior to issuance of Building Permits. This shall be so noted on any Codes, Covenants, Conditions and Restrictions and on the Informational Sheet filed with the Final Map. It is the responsibility of the developer to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report.

10.2c: Prior to Improvement Plan approval and/or issuance of a grading permit, Placer County shall verify that the applicant has obtained Department of Toxic Substances Control approval of the final Removal Action Workplan (RAW). The applicant shall submit the final RAW to Placer County.

10.2d: The applicant shall prepare and submit Improvement Plans, specifications and cost estimates (per the requirements of Section II of the Land Development Manual (LDM) that are in effect at the time of submittal) to the Engineering and Surveying Department for review and approval. All existing and proposed utilities and easements, onsite and adjacent to the project, which may be affected by planned construction, shall be shown on the plans. All landscaping and irrigation facilities within the public right-of-way (or public easements), or landscaping within sight distance areas at intersections, shall be included in the Improvement Plans. The applicant shall pay plan check and inspection fees and Placer County Fire Department Improvement Plan review and inspection fees. (NOTE: Prior to plan approval, all applicable recording and reproduction cost shall be paid). The cost of the above-noted landscape and irrigation facilities shall be included in the estimates used to determine these fees. It is the applicant's responsibility to obtain all required agency signatures on the plans and to secure department approvals. Design Review shall be completed prior to submittal of Improvement Plans. Record drawings shall be prepared and signed by a California Registered Civil Engineer at the applicant's expense and shall be submitted to the Engineering and Surveying Department prior to acceptance by the County of site improvements.

10.2e: All proposed grading, drainage improvements, vegetation and tree removal shall be shown on the Improvement Plans and all work shall conform to provisions of the Placer County Grading Ordinance (Ref. Article 15.48, formerly Chapter 29, Placer County Code) that are in effect at the time of submittal. No grading, clearing, or tree disturbance shall occur until the Improvement Plans are approved and all temporary construction fencing has been installed and inspected by a member of the Development Review Committee (DRC). All cut/fill slopes shall be at 2:1 (horizontal:vertical) unless a soils report supports a steeper slope and the Engineering and Surveying Department (ESD) concurs with said recommendation.

The applicant shall revegetate all disturbed areas in accordance with the Improvement Plans. Revegetation undertaken from April 1 to October 1 shall include regular watering to ensure adequate growth. A winterization plan shall be provided with project Improvement Plans. It is the applicant's responsibility to assure proper installation and maintenance of erosion control/winterization during project construction. Where soil stockpiling or borrow areas are to remain for more than one construction season, proper erosion control measures shall be applied as specified in the Improvement Plans/Grading Plans. Provide for erosion control where roadside drainage is off of the pavement, to the satisfaction of the ESD.

The applicant shall submit to the ESD a letter of credit or cash deposit in the amount of 110% of an approved engineer's estimate for winterization and permanent erosion control work prior to Improvement Plan approval to guarantee protection against erosion and improper grading practices. Upon the County's acceptance of improvements, and satisfactory completion of a one-year maintenance

period, unused portions of said deposit shall be refunded to the project applicant or authorized agent.

If, at any time during construction, a field review by County personnel indicates a significant deviation from the proposed grading shown on the Improvement Plans, specifically with regard to slope heights, slope ratios, erosion control, winterization, tree disturbance, and/or pad elevations and configurations, the plans shall be reviewed by the DRC/ESD for a determination of substantial conformance to the project approvals prior to any further work proceeding. Failure of the DRC/ESD to make a determination of substantial conformance may serve as grounds for the revocation/modification of the project approval by the appropriate hearing body.

- 10.5a:** The project applicant shall implement *Mitigation Measure 8.1b*, which requires implementation of the RAW Erosion Prevention and Sediment Control Plan and any other measures included in the grading permit during site remediation.
- 10.5b:** The project applicant shall implement *Mitigation Measure 10.2d*, which requires that Improvement Plans be submitted to and approved by the County prior to commencement of site preparation and construction activities.
- 10.5c:** The project applicant shall implement *Mitigation Measure 10.2e*, which requires all site work to meet the Placer County Grading Ordinance requirements and identifies requirements for erosion control measures to be included in the project Improvement Plans.
- 10.5d:** A dust and erosion control plan shall be prepared and submitted to the Placer County Air Pollution Control District (APCD) for review and approval prior to approval of Improvement Plans and commencement of construction activities (including grading to support project construction but excluding implementation of the Removal Action Workplan). The dust control plan shall be submitted to the APCD no later than 45 days prior to groundbreaking. The applicant shall not break ground prior to receiving APCD approval of the dust control plan. The plan shall comply with Placer County's Erosion Control standards and the Placer County Grading Ordinance. The plan shall incorporate Best Management Practices (BMPs) for dust and erosion control during construction of site roadways and driveways, and during building pad grading. BMPs to minimize wind and water erosion shall include:
- ❖ Timing grading activities to minimize the amount of exposed areas during the wet season, to the extent feasible.
 - ❖ Revegetating all areas that have been graded and will remain undeveloped during the rainy season by mid-October. Revegetation shall use native vegetation. Revegetated areas shall be secured from the possibility of erosion.
 - ❖ Preventing eroded soil from entering site drainageways through measures such as placement of hay bales or other acceptable materials such as sediment barriers, installation of temporary earth berms, use of fabric silt fences, spreading hay or straw on exposed areas, and/or development of temporary settling areas. Sediment collected at the erosion control sites shall be collected and disposed of once vegetation has become established.
 - ❖ Preventing dust emissions through measures such as maintaining an operational water truck onsite at all times and applying water to areas prior to and after disturbance to maintain adequate moisture in the soil to avoid dust emissions; suspending construction activities during periods of high winds; installing wind barriers to prevent dust emissions from leaving the project site; restricting vehicle and equipment speed to 15 miles per hour in construction areas; and controlling storage piles by keeping them wet, establishing and maintaining surface crusting, covering with tarp or vegetative cover, or installing wind barriers of fifty percent porosity around three sides of the pile.
- 10.5e:** The Improvement Plans shall show that water quality treatment facilities/Best Management Practices (BMPs) shall be designed according to the guidance of the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction, for New Development/Redevelopment, and for Industrial and Commercial (or other similar source as approved by the Engineering and

Surveying Department). The Stormwater Quality Design Manual for the Sacramento and South Placer Regions is an additional guidance document that may be used as a reference for post construction BMPs.

Construction (temporary) BMPs for the project include, but are not limited to: Fiber Rolls (SE-5), Hydroseeding (EC-4), Stabilized Construction Entrance (LDM Place C-4), Straw Bale Barriers (SE-9), Storm Drain Inlet Protection (SE-10), Silt Fence (SE-1), revegetation techniques, dust control measures, and concrete washout areas.

10.5f: Prior to Improvement Plan approval, the applicant shall obtain a State Regional Water Quality Control Board National Pollutant Discharge Elimination System construction stormwater quality permit and shall provide to the Engineering and Surveying Department evidence of a state-issued Waste Discharge Identification number or filing a Notice of Intent and fees.

10.5g: The project applicant shall implement *Mitigation Measure 6.1d*, which requires that stockpiling areas be identified on the Improvement Plans and be located as far as practical from existing dwellings and protected resources.

10.6a: The project applicant shall implement *Mitigation Measure 10.2d* and *Mitigation Measure 10.2e* which require that all grading and construction shall be in accordance with the Placer County Grading Ordinance and shown on the Improvement Plans, which must be approved by the County prior to commencement of construction activities (including grading to support project construction but excluding implementation of the RAW).

Additional Mitigation Measures: None required.

<i>Environmental Issue Area</i>	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures.
7. Greenhouse Gas Emissions. Would the project:					
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Draft EIR, pp. 14-16 through 14-19	No	No	No	N/A
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?	Draft EIR, pp. 14-15 through 14-19	No	No	No	N/A

Discussion

a. The Orchard at Penryn EIR found that the project would generate greenhouse gas (GHG) emissions from site remediation, construction, and operation.

At the time the Orchard at Penryn EIR was prepared, the Placer County APCD recommended using a GHG threshold recommended or adopted by other air districts or agencies. The Orchard at Penryn EIR used a threshold of 4.6 tons of GHG emissions per service population and found that the project would result in less than significant impacts associated with GHG emissions during construction and operation.

Recently the Placer County APCD and other APCDs in the Sacramento region developed a recommended GHG threshold of 1,100 metric tons per year. Under the currently recommended threshold the Original Project would have had less than significant construction emissions of 348.79 metric tons of GHG emissions, as noted on page 14-16 of the EIR, but the Original Project would have resulted in a significant impact related to greenhouse gas emissions during project operation, with GHG emissions of 1,800.51 metric tons per year, as shown in Table 14.7 in the EIR.

Dudek prepared an analysis of GHG emissions for the Proposed Project using CalEEMod; the analysis and modeling output files are provided in Attachment A to this Supplemental Checklist. The Proposed Project would generate approximately 387 tons per year of GHGs during project construction and 909 tons per year of GHGs during project operation. In comparison, the original project proposal was estimated to generate fewer GHG emissions during construction but more GHG emissions during project operation.

As the Proposed Project would generate fewer than 1,100 tons per year of GHG emissions during both construction and operation and the Proposed Project would generate fewer GHG emissions during operation than the Original Project, the current proposal would not result in a new or more severe impact related to GHG emissions compared to the Original Project. The impact would remain less than significant and no mitigation measures are required.

- b. There are no federal, regional, or local regulations that govern GHG emissions, although there are programs and plans that require or encourage increased energy efficiency in automobiles and buildings, reduced vehicle travel, and increased energy production from renewable sources. The State of California has adopted several rules and regulations that intend to address and reduce GHG emissions. The Proposed Project would adhere to these regulations as discussed above and in the project description.

Adopted Mitigation Measures: None required.

Additional Mitigation Measures: None required.

<i>Environmental Issue Area</i>	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures.
8. Hazards and Hazardous Materials. Would the project:					
a. Create a significant hazard to the public or the environment through the handling, transport, use, or disposal of hazardous or acutely hazardous materials?	IS, p. 9 Draft EIR, pp. 13-8 and 13-9	No	No	No	Mitigation Measure 13.2a
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?	IS, p. 10 Draft EIR, pp. 13-7 through 13-9	No	No	No	Mitigation Measure 13.2b
c. Emit hazardous emissions, substances, or waste within one-quarter mile of an existing or proposed school?	IS, p. 10	No	No	No	N/A
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?	IS, p. 10 Draft EIR, pp. 13-7 and 13-8	No	No	No	Mitigation Measure 13.1a
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?	IS, p. 10	No	No	No	N/A
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working on the project area?	IS, p. 10	No	No	No	N/A

g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	IS, p. 11	No	No	No	N/A
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?	IS, p. 10	No	No	No	N/A
i. Create any health hazard or potential health hazard?	IS, p. 10 Draft EIR, p. 13-10	No	No	No	Mitigation Measures 13.3b, 13.3c, and 13.3d
j. Expose people to existing sources of potential health hazards?	IS, p. 10 Draft EIR, pp. 13-7 and 13-8	No	No	No	Mitigation Measure 13.1a

Discussion:

a. The concentrations of contaminants in the soil due to former pesticide use at the project site exceed human health screening levels but do not meet the definition of hazardous materials or waste. A Removal Action Workplan (RAW), which is provided as Appendix C to the Draft EIR, would be implemented under both the Original Project and the Proposed Project to ensure best practices and high levels of safety for both workers and future residents of the site. During implementation of the RAW, the contaminated soil from the project site would be transported to a waste disposal site. The disposal site would be identified and approval for disposal at that site would be received before excavation activities would begin. The Proposed Project would necessitate implementation of the RAW under the same conditions as the Original Project, as stipulated in Mitigation Measure 13.2a.

Both the Original Project and the Proposed Project would introduce a residential land use to the project site. It is likely that residents of the proposed project would store and use hazardous chemicals such as cleaning solutions and paints in their homes. Household hazardous materials are accepted at the Household Hazardous Waste Facility located at the Western Regional Sanitary Landfill Materials Recovery Facility, approximately 15 miles driving distance from the project site. The risk related to use and storage of these materials is typical of any residential development and considered a less than significant impact of both the Original Project and the Proposed Project.

b. The Orchard at Penryn EIR found that the Original Project could create a hazard associated with the potential release of hazardous materials during construction. The Proposed Project would not alter the development footprint and would not substantially increase the extent of construction activities onsite. This impact would remain the same under the Proposed Project as compared to the Original Project. In addition to implementation of the RAW as required under Mitigation Measure 13.2a to ensure close supervision of the storage and transport of the contaminated soil, Mitigation Measure 13.2b requires use of safe practices meeting state and local requirements for handling, storage, and disposal of hazardous materials to ensure that this impact remains less than significant. This mitigation would apply to the Proposed Project.

- c. The project site is not within one-quarter mile of an existing or proposed school. Neither the Original Project nor the Proposed Project would emit hazardous emissions, substances or waste in a one-quarter mile radius of an existing or proposed school. This impact is less than significant and no mitigation is required.
- d. and j. The DTSC determined that the project site soils contain residual pesticide concentrations in excess of levels set to protect human health. Such pesticides were likely used in association with fruit tree orchards historically cultivated on the site. The Orchard at Penryn EIR evaluated implementation of the RAW, which had not been approved by DTSC at the time the EIR was prepared, to ensure that contaminated soil would be removed from the site to avoid creating a health and safety hazard for future residents of the site. Since the time that the EIR was prepared, DTSC has approved the RAW and the project applicant has entered into an agreement with DTSC to implement the RAW as a voluntary cleanup action, consistent with the requirements of Mitigation Measure 13.1a. This agreement and the RAW would be implemented as part of the Proposed Project. The RAW establishes cleanup standards to reduce site contaminants to levels that do not pose a human health risk, thus reducing this impact to less than significant.
- e. The project site is not located within an airport land use plan or within two miles of a public airport. Both the Original Project and the Proposed Project would have no impacts related to airport hazards.
- f. The project site is not located within the vicinity of a private airstrip. Both the Original Project and the Proposed Project would have no impacts related to hazards associated with private airstrips.
- g. The Initial Study prepared for the Orchard at Penryn EIR found that the Original Project would not impair the implementation of or physically interfere with an adopted emergency response or evacuation plan. The Proposed Project would not alter the development footprint or substantially change provisions for site access and circulation. As discussed in Section 16 of this Supplemental Checklist, the Proposed Project would not increase traffic congestion compared to the Original Project. Therefore, the Proposed Project would not alter the Original Project in a way that would result in impairment or physical interference with an adopted emergency response or evacuation plan. The project would have no impact on emergency response or evacuation and no mitigation measures are required.
- h. While there is some risk of wildfire throughout Placer County, the immediate project vicinity would have a lower risk of hazards due to wildland fires due to its proximity to developed areas with generally less dense vegetation than areas farther from Interstate 80. Both the Original Project and the Proposed Project would comply with the fire safety measures set forth in the California Building Code and the Placer County Community Wildfire Protection Plan to ensure that risk of exposure to wildfire-associated hazards would remain minimal.
- i. The Original Project proposed a detention basin and other water quality devices, which could provide mosquito breeding habitat and expose residents to various human diseases mosquitoes carry, including West Nile Virus. While the Proposed Project does not propose a detention basin, it proposes to install a culvert under the road crossing of the central drainage swale that would be sized to attenuate stormwater on the northern side of the culvert. This would increase water ponding in the central portion of the project site in response to storm events. This increased ponding could increase habitat for mosquito breeding and would require the same mitigation as was adopted with the Original Project. Mitigation Measures 13.3b, 13.3c, and 13.3d would ensure that the project applicant and future homeowners are aware of the risk of mosquito-borne illness and follow Best Management Practices to minimize mosquito breeding habitat. In addition, implementation of Mitigation Measure 13.3a requiring implementation of the RAW would ensure that neither the Original Project nor the Proposed Project would result in exposure of future residents of the site to health hazards associated with the contaminated soil onsite.

Adopted Mitigation Measures:

- 13.1a:** The project applicant shall obtain California Department of Toxic Substances Control (DTSC) approval of the final Removal Action Workplan (RAW) prior to Placer County's issuance of a grading permit authorizing commencement of site remediation activities. The project applicant shall implement the RAW and obtain certification from DTSC for unrestricted land use prior to Placer County's approval of Improvement Plans. The certification from DTSC may be in the form of a tentative No Further Action letter.
- 13.2a:** The project applicant shall obtain California Department of Toxic Substances Control approval of the final Removal Action Workplan (RAW) prior to issuance of a grading permit from Placer County. The project applicant shall implement the Transportation Plan included in Appendix G of the RAW.
- 13.2b:** Except during implementation of the Removal Action Workplan, the following Best Management Practices shall be implemented during all site preparation and construction activity within the project site to control pollutant sources associated with the handling and storage of construction materials and equipment, as well as with waste management and disposal.
- A. Store construction raw materials (e.g., dry materials such as plaster and cement, pesticides and herbicides, paints, petroleum products, treated lumber) in designated areas that are located away from storm drain inlets, drainageways, and canals and are surrounded by earthen berms. Train the construction employees working on the site in proper materials handling practices to ensure that, to the maximum extent practicable, those materials that are spread throughout the site are covered with impervious tarps or stored inside buildings.
 - B. Whenever possible, wash out concrete trucks offsite in County designated areas. When the trucks are washed onsite, contain the wash water in a temporary pit adjacent to the construction activity where waste concrete can harden for later removal. Avoid washing fresh concrete from the trucks, unless the runoff is drained to a berm or level area, away from site waterways and storm drain inlets.
 - C. Collect non-hazardous waste construction materials (e.g., wood, paper, plastic, cleared trees and shrubs, building rubble, scrap metal, rubber, glass) and deposit in covered dumpsters at a designated waste storage area on the site. Store recyclable construction materials separately for recycling. Transport all solid waste and recyclable material to the Western Regional Sanitary Landfill and Materials Recovery Facility.
 - D. Store hazardous materials in portable metal sheds with secondary containment. The quantities of these materials stored on site shall reflect the quantities needed for site construction. Avoid over-application of fertilizers, herbicides, and pesticides. Do not mix hazardous waste with other waste produced onsite. Contract with a Certified Waste Collection contractor to collect hazardous wastes for disposal at an approved hazardous waste facility.
 - E. Dispose of waste oil and other equipment maintenance waste in compliance with federal, State and local laws, regulations and ordinances.
- 13.3b:** In constructing the stormwater detention basin and installing stormwater conveyance infrastructure, the project applicant shall implement the following Best Management Practices or other similar and equally effective practices in accordance with the recommendations of the *Best Management Practices for Mosquito Control in California* handbook (California Department of Public Health and Mosquito and Vector Control Association of California 2010).

- A. Consider mosquito production during the design, construction, and maintenance of stormwater infrastructure.
- B. All underground drain pipes should be laid to grade to avoid low areas that may hold water for longer than 96 hours.
- C. Provide proper grades along conveyance structures to ensure that water flows freely.
- D. Design and maintain systems to fully discharge captured water in 96 hours or less.
- E. Avoid the use of loose rock rip-rap that may hold standing water; use concrete or liners in shallow areas to discourage plant growth where vegetation is not necessary.
- F. Design containment basins with adequate slopes to drain fully. The design slope should take into consideration buildup of sediment between maintenance periods
- G. Design accessible shorelines to allow for periodic maintenance and/or control of emergent and shoreline vegetation, and routine monitoring and control of mosquitoes.
- H. Whenever possible, design deep zones in excess of four feet to limit the spread of invasive emergent vegetation such as cattails. The edges below the water surface should be as steep as practicable and uniform to discourage dense plant growth that may provide immature mosquitoes with refuge from predators and increased nutrient availability.
- I. Whenever possible, provide a means for easy dewatering if needed.

13.3c: The applicant shall prepare a Mosquito Control Plan for administration by the Homeowners Association and/or Property Manager/Owner. This plan will describe various methods of managing the stormwater detention basin, stormwater conveyance infrastructure, and landscape irrigation system to reduce mosquito breeding. The management plan shall be reviewed and approved by the Placer Mosquito and Vector Control District prior to Improvement Plan approval. The management plan shall include the following Best Management Practices or other similar and equally effective practices in accordance with the recommendations of the *Best Management Practices for Mosquito Control in California* handbook (California Department of Public Health and Mosquito and Vector Control Association of California 2010).

- A. Avoid over-irrigating to prevent excess pooling and runoff.
- B. Routinely inspect, maintain, and repair irrigation system components; check and repair leaky outdoor faucets.
- C. Manage sprinkler and irrigation systems to minimize runoff entering stormwater infrastructure.
- D. Avoid intentionally running water into stormwater systems by not washing sidewalks and driveways; prohibit washing cars on streets or driveways.
- E. Inspect facilities weekly during warm weather for the presence of standing water or immature mosquitoes.
- F. Remove emergent vegetation and debris from gutters and channels that accumulate water.
- G. Keep inlets free of accumulations of sediment, trash, and debris to prevent standing water from backing up on roadways and gutters.
- H. Maintain accessible shorelines to allow for periodic maintenance and/or control of emergent and shoreline vegetation, and routine monitoring and control of mosquitoes. Emergent plant density should be routinely managed so mosquito predators can move throughout the vegetated areas and are not excluded from pond edges.

- I. If applicable, maintain deep zones in excess of four feet to limit the spread of invasive emergent vegetation such as cattails.
 - J. Manage the spread and density of floating and submerged vegetation that encourages mosquito production (i.e., water hyacinth, water primrose, parrot's feather, duckweed, and filamentous algal mats)
- 13.3d:** If siltation devices are installed with catch basins and other road drainage features, the developer and/or Homeowners Association and/or Property Manager/Owner shall provide periodic treatment, inspection, and vegetation removal when proscribed by the Placer Mosquito and Vector Control District to prevent development of mosquito habitat. Evidence of treatment shall be provided to the Placer Mosquito and Vector Control District upon request.

Additional Mitigation Measures: None required.

Environmental Issue Area	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures.
9. Hydrology and Water Quality. Would the Project:					
a. Violate any federal, state or county potable water quality standards?	IS, p. 11 Draft EIR, pp. 11-12 through 11-16	No	No	No	Mitigation Measures 11.1a, 11.1b, and 11.1c
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lessening of local groundwater supplies (i.e. 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)?	IS, p. 11 Draft EIR, p. 11-16	No	No	No	N/A

c. Substantially alter the existing drainage pattern of the site or area?	IS, p. 11 Draft EIR, pp. 11-16 through 11-18	No	No	No	Mitigation Measures 11.4a and 11.4b
d. Increase the rate or amount of surface runoff?	IS, p. 11 Draft EIR, pp. 11-16 through 11-18	No	No	No	Mitigation Measures 11.4a and 11.4b
e. Create or contribute runoff water which include substantial additional sources of polluted runoff?	IS, p. 11 Draft EIR, pp. 11-12 through 11-18	No	No	No	Mitigation Measures 11.1c, 11.2a, 11.2b, 11.2c, 11.2d, 11.4a, and 11.4b
f. Otherwise substantially degrade surface water or groundwater quality?	IS, p. 12 Draft EIR, p. 11-14	No	No	No	Mitigation Measures 11.6a, 11.6b, and 11.6c
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?	IS, p. 12 Draft EIR, p. 11-18	No	No	No	N/A
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	IS, p. 12 Draft EIR, p. 11-18	No	No	No	Mitigation Measures 11.5a, 11.5b, and 11.5c
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?	IS, p. 12	No	No	No	N/A
j. Alter the direction or rate of flow of groundwater?	Draft EIR p. 11-15	No	No	No	N/A

k. Impact the watershed of important surface water resources, including but not limited to Lake Tahoe, Folsom Lake, Hell Hole Reservoir, Rock Creek Reservoir, Sugar Pine Reservoir, French Meadows Reservoir, Combie Lake, and Rollins Lake?	Draft EIR p. 11-19	No	No	No	Mitigation Measures 11.6a, 11.6b, and 11.6c
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Discussion:

a. Site remediation and construction would increase the potential for soil erosion and sediment transport, as discussed under Geology and Soils. Site remediation for the Proposed Project, as with the Original Project, would require the excavation of all soil within and adjacent to the eastern drainage swale. The Proposed Project would reduce the amount of grading within and adjacent to the southern portion of the central drainage swale compared to the Original Project. As site remediation and construction activities would impact the majority of the project site under both the previous and currently proposed project, the currently proposed project would have similar impacts to water quality as the Original Project.

Project operation would also have the potential to violate water quality standards related to stormwater pollution by introducing sources of water contaminants to the project site. As both the Proposed Project and the Original Project would develop the project site for residential uses, the potential effects on stormwater quality would be similar.

Improvement Plans and a Final Drainage Report would be required as mitigation for the project’s impacts on water quality, as required in the Orchard at Penryn EIR (Mitigation Measures 11.1a and 11.1b). Under Mitigation Measure 11.1c, the Proposed Project would also be required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) as part of National Pollutant Discharge Elimination System (NPDES) compliance, which would include BMPs to control sources of stormwater pollution both during construction and during project operation. With implementation of these measures, the Proposed Project would have less than significant impacts related to violating water quality standards.

b. Because Placer County Water Agency (PCWA) would provide domestic water supply service to the currently proposed project, the project would not rely on groundwater. The project site is not a substantial source of groundwater recharge in the area, and there are no significant sources of groundwater at the project site or in offsite areas that could be affected by project activities. This impact would be less than significant under both the Original Project and the Proposed Project and no mitigation measures are required.

c. The Orchard at Penryn EIR found that the Original Project would alter the drainage patterns across the project site by grading the onsite drainage swales, installing underground piping to convey flows originating offsite through the project site and modifying the onsite drainage sheds. Alterations to the drainage patterns could increase erosion and flooding onsite or offsite without implementation of the mitigation measures included in the Orchard at Penryn EIR. The Proposed Project would not alter the development footprint and would not substantially change proposed plans for grading and drainage improvements. Mitigation would include the construction of onsite infrastructure to retain stormwater onsite and regulate drainage through the project site (Mitigation Measures 11.4a and 11.4b). With implementation of these measures, both the Original Project and the Proposed Project would result in less than significant impacts related to changes in drainage patterns of the site.

d. The Orchard at Penryn EIR found that the Original Project could increase the rate and volume of stormwater runoff by removing existing

vegetation and introducing impervious surfaces to the project site. The Proposed Project would reduce the potential impact by reducing the amount of impervious surfaces introduced to the site, but the impact would remain potentially significant. As required by mitigation measures included in the EIR, the project must provide for onsite detention of runoff to ensure that the post-project peak runoff flows are reduced to 90% or less of the pre-development flow rate (Mitigation Measure 11.4a and 11.4b). This would ensure that impacts related to stormwater runoff would be reduced to a less than significant level under either the Original Project or the Proposed Project.

- e. The Orchard at Penryn EIR found that the Original Project had the potential to adversely affect the quality of stormwater runoff due to the potential for increased stormwater runoff volumes and rates that may contain pollution. The Proposed Project would not alter the development footprint compared to the Original Project but would introduce slightly fewer sources of water pollution to the project site compared to the Original Project as a result of proposing fewer residential units, and therefore introducing fewer vehicles to the site. The potential for creating new sources of polluted runoff would be generally the same under the Proposed Project and the Original Project. The Proposed Project would be required to prepare and implement a SWPPP in the same terms as the Original Project, as required in Mitigation Measure 11.1c. The SWPPP would stipulate BMPs for construction activities to prevent, monitor, and control impacts to runoff quality. The Proposed Project would also require implementation of a post-construction BMP plan to ensure stormwater quality management during project operation, as required in Mitigation Measure 11.2a. These mitigation measures would ensure that this impact remains less than significant.
- f. As discussed under items (a) and (e), the proposed project could contribute to an increased pollutant load in the Dry Creek Watershed during site remediation, construction, and operation. However, regulation and implementation of BMPs during the design and operation of stormwater and other drainage infrastructure would ensure that the impact of the proposed project on the water quality and capacity of the Dry Creek Watershed would remain less than significant. Additionally, the Orchard at Penryn EIR concluded that as a residential development, the project “would not result in the use or transport of substantial quantities of hazardous materials with potential to result in groundwater contamination.” The Proposed Project would also develop residential land uses that would similarly be expected not to result in groundwater contamination. Impacts to surface water and groundwater quality would remain less than significant under either the Original Project or the Proposed Project with implementation of Mitigation Measures 11.2a, 11.2b, 11.2c, and 11.2d.
- g. No federally-mapped floodplains occur on the project site. However, impacts associated with the 100-year floodplains of the two onsite drainages are analyzed under item (h).
- h. Both the Original Project and the Proposed Project would modify the 100-year floodplain of both the eastern and central swales. As discussed on page 11-18 of the Orchard at Penryn EIR, implementation of the RAW would modify the entire floodplain associated with the eastern drainage swale and the southern portion of the central drainage swale because contaminated soils are present in these areas. Both the Original Project and the Proposed Project include implementation of the RAW and capturing stormwater flows from offsite areas and piping those flows through the site through an underground drainage system. The Original Project proposed to create a detention basin in the area of the southern portion of the central drainage swale. In comparison the Proposed Project would include the construction of a road crossing the central swale and installation of a culvert to convey flows under the road. The culvert would be designed to create onsite detention upstream of the culvert and to meter the outflow so that the floodplain on the properties downstream of the project site would not increase. All of the floodplain increases for each swale would be contained within the project site boundaries. The currently proposed project would implement the same mitigation measures to reduce impacts associated with floodplain alterations as were identified for the Original Project, including designing the stormdrain pipe system to accommodate the expected flow rates resulting from a 100-year storm event (Mitigation Measure 11.5a), preparation of a final drainage report (Mitigation Measure

11.5b), and indication of the post-development 100-year floodplain limits on the project Improvement Plans (Mitigation Measure 11.5c). With implementation of these mitigation measures, the impacts of the Proposed Project related to alteration of the 100-year floodplain would be reduced to a less than significant level.

- i. As discussed above, the project would not cause or increase downstream flooding, and the project site is not located within any levee or dam failure inundation area. Neither the Proposed Project nor the Original Project would expose people or structures to other substantial flood risks.
- j. The Orchard at Penryn EIR found that there are no significant sources of groundwater at the project site or in offsite areas that would be affected by the proposed site remediation or improvements and impacts associated with changes in groundwater supply, recharge, or flow direction would be less than significant. The Proposed Project would not alter the development footprint or the proposed site remediation activities and would have the same impacts on groundwater supply, recharge, and flow direction as the Original Project. The impacts would remain less than significant and no mitigation is required.
- k. The project's potential impacts to water quality are addressed above in items (a) and (e). As stated on page 11-19 of the Orchard at Penryn EIR, the project's potential to violate water quality standards associated with erosion and introduction of potential pollutant sources to the project site could increase the pollutant load carried in the Dry Creek Watershed. The Proposed Project would not alter the development footprint and would involve generally the same site remediation and construction activities as the Original Project. With implementation of the same mitigation measures required for the Original Project, including implementation of the post-construction BMP plan (Mitigation Measure 11.6a) and additional BMPs as required in Mitigation Measures 11.6b and 11.6c, the Proposed Project would have a less than significant impact on the Dry Creek Watershed.

Adopted Mitigation Measures:

- 11.1a: The project applicant shall implement Mitigation Measures 10.2d and 10.e which require that all proposed drainage improvements and vegetation removal be shown on Improvement Plans; that the applicant revegetate all disturbed areas and provide financial assurance for implementation of the erosion control plan; and that all site grading and construction activities conform to the approved Improvement Plans.
- 11.1b: The Improvement Plan submittal shall include the submittal of a final drainage report in conformance with the requirements of Section 5 of the Land Development Manual and the Placer County Storm Water Management Manual that are in effect at the time of submittal, to Placer County Engineering and Surveying Department for review and approval. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: A written text addressing existing conditions, the effects of the improvements, all appropriate calculations, a watershed map, increases in downstream flows, proposed on- and off-site improvements and drainage easements to accommodate flows from this project. The report shall identify water quality protection features and methods to be used both during construction and for long-term post-construction water quality protection. Best Management Practices measures shall be provided to reduce erosion, water quality degradation, and prevent the discharge of pollutants to stormwater to the maximum extent practicable.
- 11.1c: The project applicant shall implement Mitigation Measure 10.5f, which requires the applicant to obtain a State Regional Water Quality Control Board National Pollutant Discharge Elimination System construction stormwater quality permit and provide appropriate documentation to the Placer County Engineering and Surveying Department.

11.2a: The Improvement Plans shall show that water quality treatment facilities/Best Management Practices (BMPs) shall be designed according to the guidance of the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for New Development/Redevelopment, and for Industrial and Commercial (or other similar source as approved by the Engineering and Surveying Department (ESD)). The Stormwater Quality Design Manual for the Sacramento and South Placer Regions is an additional guidance document that may be used as a reference for post construction BMPs.

Storm drainage from on-site impervious surfaces shall be collected and routed through specially designed catch basins, vegetated swales, vaults, infiltration basins, water quality basins, filters, etc. for entrapment of sediment, debris and oils/greases or other identified pollutants, as approved by the ESD. BMPs shall be designed at a minimum in accordance with the Placer County Guidance Document for Volume and Flow-Based Sizing of Permanent Post-Construction Best Management Practices for Stormwater Quality Protection. Post-development (permanent) BMPs for the project include, but are not limited to: Vegetated Swales (TC-30), Detention Basins (TC-22), and Water Quality Inlets (TC-50). No water quality facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by project approvals.

All BMPs shall be maintained as required to insure effectiveness. The applicant shall provide for the establishment of vegetation, where specified, by means of proper irrigation. Proof of on-going maintenance, such as contractual evidence, shall be provided to ESD upon request. Maintenance of these facilities shall be provided by the project owners/permittees unless, and until, a County Service Area is created and said facilities are accepted by the County for maintenance. Prior to Improvement Plan or Final Map approval, easements shall be created and offered for dedication to the County for maintenance and access to these facilities in anticipation of possible County maintenance.

11.2b: This project is located within the area covered by Placer County's municipal stormwater quality permit, pursuant to the National Pollutant Discharge Elimination System (NPDES) Phase II program. Project-related stormwater discharges are subject to all applicable requirements of said permit. Best Management Practices shall be designed to mitigate (minimize, infiltrate, filter, or treat) stormwater runoff in accordance with "Attachment 4" of Placer County's NPDES Municipal Stormwater Permit (State Water Resources Control Board NPDES General Permit No. CAS000004).

11.2c: All storm drain inlets and catch basins within the project area shall be permanently marked/embossed with prohibitive language such as "No Dumping! Flows to Creek" or other language as approved by Placer County Engineering and Surveying Department (ESD) and/or graphical icons to discourage illegal dumping. Message details, placement, and locations shall be included on the Improvement Plans. Placer County ESD-approved signs and prohibitive language and/or graphical icons, which prohibit illegal dumping, shall be posted at public access points along channels and creeks within the project area. The property owner and/or Homeowners' Association shall be responsible for maintaining the legibility of stamped messages and signs.

11.2d: All stormwater runoff shall be diverted around trash storage areas to minimize contact with pollutants. Trash container areas shall be screened or walled to prevent off-site transport of trash by the forces of water or wind. Trash containers shall not be allowed to leak and must remain covered when not in use.

11.4a: Storm water run-off (including offsite pass through flow) shall be reduced to pre-project conditions through the installation of retention/detention facilities. Retention/detention facilities shall be designed in accordance with the requirements of the Placer County Storm Water Management Manual that are in effect at the time of submittal, and to the satisfaction of Placer County Engineering and Surveying Department. Maintenance of these facilities shall be provided by the project owners/permittees unless, and

until, a County Service Area is created and said facilities are accepted by the County for maintenance. No detention facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by project approvals.

- 11.4b: The project applicant shall implement Mitigation Measure 11.1b, which requires preparation and submittal of a final drainage report in conformance with the requirements of Section 5 of the Land Development Manual and the Placer County Storm Water Management Manual.
- 11.5a: The project applicant shall design and construct the onsite drainage facilities (proposed underground stormdrain pipes) that are conveying the offsite, pass through, stormwater flows to accommodate the future, fully developed, unmitigated 100-year stormwater peak flows per the Placer County Stormwater Management Manual and to the satisfaction of the Engineering and Surveying Department and Placer County Flood Control District.
- 11.5b: The project applicant shall prepare a final drainage report, which shall demonstrate that the proposed project will not increase the limits or water surface elevation of both offsite 100-year floodplains upstream and downstream of the project site to the satisfaction of the Engineering and Surveying Department and Placer County Flood Control District.
- 11.5c: The project applicant shall show the limits of the future, unmitigated, fully developed 100-year floodplains onsite (after grading and installation of drainage improvements) and any identified 100-year overland release area for both the central and eastern floodplain on the Improvement Plans and Informational Sheet(s) filed with the Final Map and designate same as a building setback line unless greater setbacks are required. No housing or other improvements shall be constructed within these limits except as otherwise authorized by project approvals.
- 11.6a: The project applicant shall implement Mitigation Measure 11.2a, which requires the Improvement Plans to include water quality treatment facilities and BMPs.
- 11.6b: The project applicant shall implement Mitigation Measures 11.1a through 11.1c, which stipulate compliance with the County's requirements related to Improvement Plans, provision of a final drainage report, and obtaining coverage under the NPDES program for site remediation and project construction activities.
- 11.6c: The project applicant shall implement Mitigation Measures 11.2a through 11.2d, which identify requirements related to BMP design and maintenance, stormdrain inlet markings, and design of trash storage areas.

Additional Mitigation Measures: None required.

<i>Environmental Issue Area</i>	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures.
10. Land Use and Planning. Would the project:					
a. Physically divide an established community?	IS, p. 12	No	No	No	N/A
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?	IS, p. 12 Draft EIR, pp. 4-12 through 4-15	No	No	No	Mitigations implemented in other sections to ensure compliance with County ordinances and the Horseshoe Bar/Penryn Community Plan
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	IS, p. 12	No	No	No	N/A
<u>Discussion:</u>					
<p>a. Both the Original Project and the Proposed Project would develop vacant land that is adjacent to a church on the south and single-family residential land uses on the north. Neither the Original Project nor the Proposed Project would physically divide an established community.</p> <p>b. The Original Project's primary land use impacts were identified as increases to local population and the development of previously undeveloped land. The EIR determined that these impacts were consistent with the growth planned for in the Horseshoe Bar/Penryn Community Plan EIR and as such the project would not conflict with the land use and planning goals and policies of the Community Plan. However, the Original Project was found to have potential conflicts with other portions of the Community Plan, such as policies requiring protection of sensitive environmental resources, compliance with design guidelines, maintenance of "smooth-flowing" traffic conditions, mitigation of air quality impacts, minimizing the extent of grading and impacts related to erosion, preservation of existing drainage patterns and floodplains, water conservation, and efforts to control the spread of disease (associated with mosquitoes). Table 4.2 of the Orchard at Penryn EIR lists the mitigation measures identified throughout the EIR to ensure that the Original Project would be consistent with the Community Plan.</p> <p>While the Proposed Project would require a zoning change for both parcels to Residential Single-Family – Building Site 4, development of the site with residential land uses would be consistent with the Community Plan land use designations for the site. The Proposed Project</p>					

would decrease the number of dwelling units and thus decrease the impacts associated with local population growth. The population growth supported by the Proposed Project would remain consistent with the Community Plan’s development projections. As discussed throughout this Supplemental Checklist, the Proposed Project would have similar or reduced impacts compared to the Original Project with respect to protection of sensitive environmental resources, compliance with design guidelines, maintenance of “smooth-flowing” traffic conditions, mitigation of air quality impacts, minimizing the extent of grading and impacts related to erosion, preservation of existing drainage patterns and floodplains, water conservation, and efforts to control the spread of disease (associated with mosquitoes). The Proposed Project would be required to implement most of the mitigation measures listed in Table 4.2 of the Orchard at Penryn EIR to ensure that the Proposed Project would be consistent with the Community Plan. (As discussed in Section 3 of this Supplemental Checklist, Mitigation Measure 14.4a, which is listed in EIR Table 4.2 as a mitigation measure necessary to ensure consistency with applicable General Plan and Community Plan policies related to air quality, would not be required of the Proposed Project because the project’s contribution to cumulative air quality impacts would be less than significant.) With implementation of the other previously adopted mitigation measures identified in this Supplemental Checklist, the Proposed Project would not conflict with applicable General Plan and Community Plan policies.

- c. The Orchard at Penryn EIR found that while Placer County is in the process of developing the Placer County Conservation Program (PCCP), which would oversee the environmental permitting of development projects, project activities may commence prior to the adoption of the PCCP. The EIR noted that mitigation measures presented as part of the Original Project were designed to be implemented absent the approved conservation plan (EIR p. 5-15). Placer County continues to develop and work towards adoption of the PCCP. The proposed change in the Orchard at Penryn project to develop 54 single-family dwelling units rather than 150 multi-family units would not alter the project’s development footprint and would not substantially change the project’s impacts on biological resources or require substantial changes to the biological resource mitigation measures, as discussed in Section 4 of this Supplemental Checklist. The Proposed Project would not alter the Original Project’s impacts relative to the County’s continued work to develop the PCCP or to implement the PCCP upon its adoption.

Adopted Mitigation Measures: As identified throughout this Supplemental Checklist.

Additional Mitigation Measures: None required.

<i>Environmental Issue Area</i>	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures.
11. Mineral Resources. Would the Project:					
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	IS, p. 13	No	No	No	N/A

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?	IS, pp. 13-14	No	No	No	N/A
<p>Discussion:</p> <p>a. No minerals resources that would be of value to the region are known to occur on this site, or in the immediate vicinity.</p> <p>b. The proposed project would not result in the loss of availability of a locally-important mineral resource recovery site.</p> <p>Adopted Mitigation Measures: None required.</p> <p>Additional Mitigation Measures: None required.</p>					

Environmental Issue Area	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures.
12. Noise. Would the project result in:					
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan, community plan, noise ordinance, or applicable standards of other agencies?	IS, p. 14 Draft EIR, pp. 9-8 and 9-9	No, with implementation of Additional Mitigation Measure 2	No	No	N/A
b. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	IS, p. 14 Draft EIR, p. 9-9	No	No	No	N/A
c. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	IS, p. 14 Draft EIR, p. 9-10	No	No	No	Mitigation Measures 9.3a, 9.3b, 9.3c, and 9.3d

d. 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?	IS, p. 14	No	No	No	N/A
e. 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?	IS, p. 14	No	No	No	N/A

Discussion:

- a. Residents of the proposed project would not be exposed to noise levels in excess of standards set forth in the Placer County General Plan and the Horseshoe Bar/Penryn Community Plan. As stated in the Orchard at Penryn EIR, existing noise levels due to surrounding uses have an average value of 45 dB in the daytime and 46 dB in the nighttime while noise levels within 100 feet of the centerline of Penryn Road range between 63 and 66 dB. The EIR also stated that the predicted future traffic noises within 100 feet of the centerline of Penryn Road were estimated to range between 65 and 68 dB. Because the Proposed Project would generate fewer vehicle trips than the Original Project, the future noise levels would be the same or slightly less than those predicted under the Original Project.

The Proposed Project would locate single-family residential lots along the eastern project boundary, with the 30-foot wide landscaping easement placed between the rear lot lines and Penryn Road. As noted on page 7-6 of the Draft EIR, the project would be required to improve the western half of Penryn Road to meet the standard 88-foot road section, which would provide 44 feet of width measured from the centerline. With this road width and the 30-foot landscape easement, rear lot lines of the easternmost residential units would be approximately 74 feet from the Penryn Road centerline. Based on the existing and predicted future traffic noise levels along Penryn Road, it is likely that the rear yards of residential lots adjacent to Penryn Road would experience noise levels in excess of the County's 60 dB standard for exposure to transportation-generated noise within outdoor activity areas associated with residential land uses.

For the single-family residences that would be developed under the Proposed Project, the front, rear, and side yards are considered the outdoor activity areas. In comparison, the outdoor activity areas for the multi-family residences approved for development under the Original Project are the designated recreational areas within the complex. Exposure to noise levels over 60 dB in the affected single-family residences' outdoor activity areas would result in a significant impact that was not identified in the EIR for the Original Project. Construction of noise barriers, such as berms or fences, along the eastern boundary of the proposed residential lots adjacent to Penryn Road, as required by Additional Mitigation Measure 2, would ensure that noise levels in the outdoor activity areas of parcels adjacent to Penryn Road would comply with the County's General Plan and ensure that the impact would remain less than significant. Additional Mitigation Measure 2 was not required of the Original Project because that project proposed to develop multi-family units and did not include any outdoor activity areas near Penryn Road. The noise barriers required under Additional Mitigation Measure 2 can be incorporated into the 30-foot landscape easement, plans for which would be reviewed during the Design Review process to ensure consistency with the County's design guidelines and to ensure the effectiveness of the landscaping at minimizing the visual impacts of the Proposed Project. Implementation of Additional Mitigation Measure 2 would not result in any new or more severe environmental impacts

than were evaluated in the Orchard at Penryn EIR.

New residential construction has a typical interior noise level reduction of 25 to 30 dB compared to exterior noise levels. This noise reduction would ensure that interior noise levels would remain below the County's standard of 45 dB. The impacts to noise levels due to the proposed project are discussed under items (c) and (d).

- b. The EIR determined that the Original Project would generate less than significant changes to ambient noise levels, with the project's primary noise source being the community pool and recreation area. Because the Proposed Project eliminates the community pool and recreation area, the increase in ambient noise levels due to the Proposed Project would decrease from the levels associated with the Original Project. As discussed under item (a), the currently proposed project would also reduce the project's increase in transportation-related noise levels. This impact would remain less than significant.
- c. The Original Project would develop 150 multi-family residential units at the project site while the Proposed Project would develop 54 single-family units within the same development footprint. Both projects would implement the RAW to remediate contaminated soils onsite. Both projects would involve generally the same amount of construction activity, and construction of the Proposed Project would generate generally the same noise levels as construction of the Original Project. As evaluated in the Orchard at Penryn EIR, construction activities would generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet. Truck traffic would also generate significant noise levels. Mitigation includes compliance with the County's Standard Construction Noise Conditions of Approval expressed in Placer County Minute Order 90-08 (Mitigation Measure 9.3a), maintenance of construction vehicles in good working order (Mitigation Measure 9.3b), compliance with *Placer County General Plan* policy regarding blasting (Mitigation Measure 9.3c), and requiring all construction truck traffic to access the project site from Interstate 80 and Penryn Road (avoiding use of Taylor Road and other local roadways in the vicinity) (Mitigation Measure 9.3d). These measures would minimize the noise generated during project construction and ensure that construction traffic routes minimize exposure of existing residential land uses to noise. With implementation of these measures, this impact would be reduced to a less than significant level.
- d. and e. The project is not located within two miles of a public airport, public use airport, or private airstrip and would not result in exposure of site residents to substantial aircraft noise.

Adopted Mitigation Measures:

9.3a: Construction noise emanating from any construction activities for which a grading or building permit is required is prohibited on Sundays and federal Holidays, and shall occur only as follows:

- a. Monday through Friday, 6:00 a.m. to 8:00 p.m. (during daylight savings)
- b. Monday through Friday, 7:00 a.m. to 8:00 p.m. (during standard time)
- c. Saturdays, 8:00 a.m. to 6:00 p.m.

Placer County Department of Environmental Health shall verify that these restrictions are indicated on the grading plans and Improvement Plans prior to approval of the Improvement Plans or issuance of a grading permit.

9.3b: All construction equipment shall be fitted with factory installed muffling devices and all construction equipment shall be maintained in good working condition to lower the likelihood of any piece of equipment emitting noise beyond the standard dB level for that equipment.

9.3c: Any blasting associated with the project shall be conducted in accordance with *Placer County General Plan* Policy 9.A.4.

9.3d: Construction contracts, grading plans, and Improvement Plans shall stipulate that all site remediation and construction truck and equipment traffic (including soil hauling trucks) must access the project site from Interstate 80 and Penryn Road and shall not use Taylor Road or other local roadways.

Additional Mitigation Measures:

Additional Mitigation Measure 2: The project applicant shall construct a noise barrier along the eastern property boundary to reduce exterior noise levels for all rear yards of proposed residential lots to a maximum of 60 dB under existing and future conditions, as determined by an acoustical analysis. The acoustical analysis must identify existing and future noise levels along Penryn Road and provide specifications for construction of the noise barrier to ensure the barrier is effective at providing the necessary noise attenuation. A noise barrier can consist of an earthen berm, wood, masonry, or other solid material and can be located at the rear lot line of lots adjacent to the landscape easement or can be located within the landscape easement. The noise barrier must be included on project Improvement Plans and reviewed during the project’s Design Review process for consistency with the County’s design guidelines for the Penryn Parkway planning area. If an earthen berm noise barrier is placed within the landscape easement, it must be located a minimum of 20 feet from the edge of the Penryn Road right-of-way. If a constructed (e.g., wood or masonry) noise barrier is placed within the landscape easement, it must be located a minimum of 24 feet from the edge of the Penryn Road right-of-way.

<i>Environmental Issue Area</i>	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures.
13. Population and Housing. Would the Project:					
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)?	IS, p. 15 Draft EIR, p. 15-3–15-5	No	No	No	N/A
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	IS, p. 15	No	No	No	N/A

Discussion:

- a. The Original Project would directly support population growth by constructing 150 multi-family dwelling units. The Orchard at Penryn EIR found that growth induced by the Original Project would be consistent with the estimates for local population growth in the Horseshoe Bar/Penryn Community Plan. Based on the average population in the Community Plan area of 2.8 persons per household, the EIR estimated that the Original Project would support a population of 420 people. The Proposed Project would develop 54 dwelling units, which would support a population of 152 people. The population growth supported by Proposed Project would be less than that of the Original Project and would remain consistent with the Community Plan’s projected growth in the area.
- b. The site is designated for multi-family residential and commercial land uses and is currently undeveloped. Both the Original Project and the Proposed Project would provide new housing and would not displace any existing housing.

Adopted Mitigation Measures: None required.

Additional Mitigation Measures: None required.

<i>Environmental Issue Area</i>	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures.
14. Public Services.					
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
Fire protection?	IS, p. 15	No	No	No	Mitigation Measure XIII.1
Police protection?	IS, p. 15	No	No	No	Mitigation Measure XIII.1

Schools?	IS, p. 15	No	No	No	Mitigation Measure XIII.1
Parks?	IS, p. 15	No	No	No	Mitigation Measure XIII.1
Other public facilities?	IS, p. 15	No	No	No	Mitigation Measure XIII.1

Discussion: The Original Project would develop 150 multi-family dwelling units and support a population of 420 people. The Proposed project would develop 54 single-family dwelling units and support a population of 152 people. The reduced population would result in a decreased demand for public services compared to the Original Project; however the Proposed Project would still impose increased demands upon the public services providers in the area. These service providers include: the Penryn Fire Protection District, the Placer County Sheriff’s Department, the Loomis Union School District, and the Department of Public Works (for road maintenance). Mitigation would require the project applicant to obtain “Will serve” letters for the project from each service provider (Mitigation Measure XIII.1).

Adopted Mitigation Measures:

XIII.1: “Will serve” letters shall be provided from the appropriate service providers.

Additional Mitigation Measures: None required.

<i>Environmental Issue Area</i>	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures.
15. Recreation.					
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	IS, p. 16	No	No	No	N/A
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	IS, p. 16	No	No	No	N/A

Discussion:

- a. The Original Project would develop 150 multi-family dwelling units and support a population of 420 people. The Proposed project would develop 54 single-family dwelling units and support a population of 152 people. Impacts to existing regional parks would decrease under the Proposed Project relative to the Original Project due to the decreased number of residents the project would support.
- b. The Original Project included a community clubhouse and pool area, one tot lot, and three turf areas. The Proposed Project eliminates the community clubhouse, pool, and tot lot but would include a 0.12-acre recreation lot to be held in common ownership. This lot would be located in the western portion of the project site and the impacts of development of the recreation lot are evaluated throughout this Supplemental Checklist as a part of the proposed development.

Adopted Mitigation Measures: None required.

Additional Mitigation Measures: None required.

<i>Environmental Issue Area</i>	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures.
16. Transportation/Traffic. Would the project:					
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?	IS, p. 16 Draft EIR, pp. 7-13 and 14-9	No	No	No	Mitigation Measures 7.2a and 14.3a
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	IS, p. 16 Draft EIR, pp. 7-9 through 7-13 and 14-6 through 14-8	No	No	No	Mitigation Measures 7.1a, 14.2a, and 14.2b

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?	IS, p. 16 Draft EIR, p. 7-15	No	No	No	N/A
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	IS, p. 16 Draft EIR, p. 7-14	No	No	No	N/A
e. Result in inadequate emergency access?	IS, p. 16 Draft EIR, p. 7-14	No	No	No	N/A
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?	IS, p. 16 Draft EIR, p. 7-15	No	No	No	N/A

Discussion:

a. and b. In order to be consistent with the Placer County General Plan and the Horseshoe Bar/Penryn Community Plan, the Proposed Project must ensure that impacts to local intersections remain less than significant under both project and cumulative conditions and that sidewalks and a Class II bike lane are constructed on Penryn Road.

Original Project Impacts and Mitigation

The Orchard at Penryn EIR Traffic Impact Analysis estimated that the Original Project would generate a total of 989 daily trips, with 69 A.M. peak hour trips and 87 P.M. peak hour trips. The Traffic Impact Analysis determined that the Original Project would not have a significant impact on roadway segment levels of service (LOS) or the LOS at seven of the eight intersections associated with the project (Kimley-Horn and Associates, 2011). The Original Project was determined to have a potential impact on the Penryn Road at Taylor Road intersection, which operated under unacceptable LOS D for the worst minor movement under the existing and existing plus project conditions. However, the EIR incorporated mitigation to pay for planned roadway improvements in the area. With these roadway improvements, the Penryn Road at Taylor Road intersection would operate with an acceptable LOS B.

As discussed in the EIR, addition of project-generated traffic in the cumulative condition would not result in reduced LOS at any study intersection or roadway segment. However, the EIR identified that the Original Project would add traffic to intersections and roadway segments that are projected to operate at unacceptable LOS in the cumulative condition. The EIR states that addition of any traffic to intersections or road segments operating at unacceptable LOS is considered a significant impact, and a considerable contribution to cumulative impacts (EIR p. 14-6). Mitigation for these cumulative impacts requires the applicant for the Original Project to contribute fair-share payments towards improvements that would provide acceptable LOS at most of the impacted facilities. This payment is required under Mitigation Measures 7.1a, 14.2a, and 14.2b. Roadway and intersection improvements identified in the County's Capital Improvement Program (CIP) would ensure that acceptable LOS is attained at most applicable intersections. The intersection of Taylor Road and Horseshoe

Bar Road does not provide sufficient right-of-way to construct the physical improvements necessary for an acceptable LOS. The Orchard at Penryn EIR identified this as a significant and unavoidable impact.

Two of the impacted intersections are in the Town of Loomis. At the time the Orchard at Penryn EIR was prepared, there was no fee-payment agreement between the Town and Placer County, and therefore no mechanism by which the project applicant could make a fair-share payment to the Town of Loomis. The EIR stated that while Placer County would require the applicant to make the fair share payment or demonstrate a good-faith effort at negotiating this payment with the Town of Loomis, Placer County could not guarantee that the applicant and Town would reach agreement on this payment. Due to the uncertainty regarding the fair share payment to the Town of Loomis, this impact was also identified as significant and unavoidable in the Orchard at Penryn EIR.

Proposed Project Impacts and Mitigation

The Proposed Project would generate fewer vehicle trips than the Original Project, but would have generally the same trip distribution as the Original Project. Kimley-Horn and Associates prepared a memorandum to analyze the impacts of the currently proposed project to transportation and circulation in the project vicinity. The memorandum is provided as Attachment C to this Supplemental Checklist. The number of trips anticipated to be generated by both the Original Project and the Proposed Project were derived using data included in *Trip Generation Manual, 9th Edition*, published by the Institute of Transportation Engineers. The Proposed Project would generate a total of approximately 516 daily trips, with 41 A.M. peak hour trips and 54 P.M. peak hour trips, reducing the number of project-generated trips to about half of the trips generated by the Original Project. As the Proposed Project would also incorporate mitigation to sponsor roadway improvements to Penryn Road as listed below (Mitigation Measures 7.1a and 14.2b), the impacts of the Proposed Project on level of service and travel demand would be less severe than the impacts of the Original Project.

Additionally, since certification of the Orchard at Penryn EIR, Placer County and the Town of Loomis have adopted a Memorandum of Agreement (MOA) establishing a fair share fee-payment agreement for mitigating the impacts of development projects. Mitigation Measure 14.2a has been revised to reflect the adoption of this MOA. With the establishment of this fee-payment agreement and implementation of Mitigation Measure 14.2a, the impacts to intersections within the Town of Loomis would be mitigated to a less than significant level. Mitigation Measure 14.2a has been modified to reflect adoption of the MOA.

- c. The project site is not located within two miles of any public or private airport or airstrip and neither the Original Project nor the Proposed Project would have an impact on air traffic patterns.
- d. The project would not introduce any incompatible uses into the project area. The proposed site access driveways on Penryn Road and Taylor Road are generally the same under both the Original and Proposed Projects. As under the Original Project, the Proposed Project would not substantially increase hazards due to any design features. The corner sight distance at both the Penryn Road driveway and Taylor Road driveway is adequate to provide appropriate safety for vehicles accessing the public roads from the project site, consistent with Plate R-17 of the Placer County Department of Public Works roadway standards. The mitigation described under items (a) and (b) above would also ensure the currently proposed project does not have any impacts on traffic-related safety.
- e. The Penryn Fire Protection District identified minimum physical requirements to ensure adequate emergency access to the project, including minimum driveway widths of 20 feet on each side of the median, minimum 25-foot width for all interior roadways, and provision of emergency access with a minimum 20-foot width. Neither the Original Project nor the Proposed Project would create any physical impairment to implementation of emergency response plans in the project area and neither would create congestion that would interfere with emergency response. The site plan for the Proposed Project, provided in Figure 3, meets the minimum physical requirements for emergency

access.

- f. Based on the project size and location, both the Original Project and the Proposed Project are expected to generate minimal demands for public transit, bicycle, and pedestrian facilities. The Proposed Project is not anticipated to have a noticeable effect on transit service.

Adopted Mitigation Measures:

7.1a: This project will be subject to the payment of traffic impact fees that are in effect in this area (Newcastle/Horseshoe Bar/Penryn), pursuant to applicable Ordinances and Resolutions. The applicant is notified that the following traffic mitigation fee(s) will be required and shall be paid to Placer County Department of Public Works prior to issuance of Building Permits for the project:

- A) County Wide Traffic Limitation Zone: Article 15.28.010, Placer County Code
- B) South Placer Regional Transportation Authority (SPRTA)
- C) Placer County/City of Roseville JPA (PC/CR)

The current total combined estimated fee is \$ 335,016.00. The fees were calculated using the information supplied. If either the use or the square footage changes, then the fees will change. The actual fees paid will be those in effect at the time payment occurs.

7.2a: The project applicant shall implement Mitigation Measure 7.1a, which requires payment of traffic impact fees.

14.2a: Prior to Improvement Plan approval, the applicant shall pay Placer County the fair share cost for constructing modified intersection geometries and signal phasing at the intersection of Taylor Road/King Road and Taylor Road/Horseshoe Bar Road located within the Town of Loomis. The payment shall be made in accordance with the Memorandum of Understanding between Placer County and the Town of Loomis. The fair share percentages are identified as 0.18% and 0.19%, respectively and the total fair share cost for the Original Project is calculated at \$380.00.

14.2b: The project shall implement Mitigation Measure 7.1a, which requires the project to pay traffic impact fees that are in effect in this area (Newcastle/Horseshoe Bar/Penryn), pursuant to applicable Ordinances and Resolutions.

14.3a: The project applicant shall implement Mitigation Measure 14.2a and Mitigation Measure 7.1a, which require payment of a proportionate share of the total cost for roadway facility improvements.

Additional Mitigation Measures: None required.

<i>Environmental Issue Area</i>	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures.
17. Utilities and Service Systems. Would the project:					
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	IS, p. 17	No	No	No	N/A
b. Require or result in the construction of new water or wastewater delivery, collection, or treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	IS, p. 17 Draft EIR, p. 12-10–12-12	No	No	No	N/A
c. Require or result in the construction of new on-site sewage systems?	IS, p. 17	No	No	No	N/A
d. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	IS, p. 17 Draft EIR, p. 11-12–11-18	No	No	No	Mitigation Measures 11.1c, 11.2a, 11.2b, 11.2c, 11.2d, 11.4a, and 11.4b
e. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	IS, p. 17 Draft EIR, p. 12-12				
f. Require sewer service that may not be available by the area's waste water treatment provider?	IS, p. 15 Draft EIR, p. 12-10–12-11	No	No	No	N/A
g. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs in compliance with all applicable laws?	IS, p. 17 Draft EIR, p. 12-13	No	No	No	N/A

Discussion:

- a. b. and f. The Original Project would develop 150 multi-family dwelling units at the project site while the Proposed Project would develop 54 single-family dwelling units. As evaluated in the Orchard at Penryn EIR, wastewater that would be generated at the site would be collected by the South Placer Municipal Utility District (SPMUD) and conveyed to the South Placer Wastewater Authority's (SPWA) Dry Creek Regional Wastewater Treatment Plant (WWTP). The total amount of wastewater generated at the project site would be reduced under the currently proposed project as a result of developing fewer residential units.

The Dry Creek WWTP provides tertiary-level treatment and produces recycled water that meets requirements for Title 22 regulations for full, unrestricted use (excluding use as potable water). Treatment at the Dry Creek Wastewater Treatment Plant consists of screening, primary clarification, aeration, secondary clarification, filtering and disinfection. The project site is included in the SPWA service area and the Systems Evaluation for the SPWA facilities assumed development of the site in accordance with the Placer County General Plan. The Dry Creek WWTP has sufficient capacity to treat wastewater generated at the project site. With fewer dwelling units, the Proposed Project would generate less wastewater than the Original Project and therefore impacts related to wastewater treatment would not be less than those evaluated in the EIR.

In the time since the Orchard at Penryn EIR was certified, SPMUD has added new customers and reevaluated the capacity of existing infrastructure to collect and convey wastewater flows to the SPWA treatment facilities, finding that the Lower Loomis Trunk line is currently operating at its maximum capacity. This would preclude any new wastewater collection hook-ups.

SPMUD and the Town of Loomis have initiated planning efforts for construction of a sewer transmission line known as the Loomis Diversion Line. This trunk line is part of SPMUD's adopted master plan to serve all areas that are within SPMUD's boundaries. The Loomis Diversion Line would be a 15-inch transmission line that begins at a manhole near the Raley's Shopping Center in Loomis along I-80, crosses under I-80, and then turns southwesterly to connect into an 18-inch transmission line that would be constructed in the southern end of Dias Lane in Loomis. This is a separate project that SPMUD would design and construct subject to a separate CEQA compliance process. At this time, SPMUD is continuing to evaluate the design and alignment of the diversion line and has not identified a construction schedule or funding source.

In the interim, SPMUD is pursuing a project to reline the Lower Loomis Trunk Line. This would entail inserting a new liner within an approximately 10,500-foot-long section of the existing 10-inch sewer line. The new liner would be constructed of material that provides for faster flows through the line compared to the existing line. By increasing the speed of flow, the new liner would increase overall conveyance capacity in the Lower Loomis Trunk Line and is anticipated to provide capacity for approximately 200 to 300 new sewer connections within the SPMUD service area.

As with the Original Project, the project applicant would be required to obtain a will-serve letter prior to recordation of the Final Subdivision Map to demonstrate that SPMUD has confirmed there is adequate capacity to serve the proposed project. This would ensure that no construction could occur prior to the time that wastewater collection and conveyance service is available to the project site. Therefore impacts would remain less than significant.

- c. No on-site sewage systems are proposed
- d. Please refer to Section 9, Hydrology and Water Quality, for more information on stormdrain facilities.
- e. Domestic water would be supplied from Placer County Water Agency (PCWA). The project would connect to an existing 10-inch water line located in Penryn Road and an existing 24-inch water line located in Taylor Road. PCWA makes commitments for connection to PCWA water lines and provision of domestic water service upon execution of a Facilities Agreement and payment of PCWA fees and charges,

including a Water Connection Charge. Prior to issuance of building permits, the County would require verification from PCWA of available water supply and the ability to serve the proposed project with domestic water.

The Orchard at Penryn EIR estimated the Original Project's water use using standard water use rates for multi-family residential units, which is approximately 400 cubic feet, or about 3,000 gallons, per month. The 150 dwelling units included in the Original Project would have used approximately 720,000 cubic feet of water per year.

The water demands have been updated using data from the 2011 PCWA Urban Water Management Plan (UWMP). The water demand rate for multi-family housing at 10 units per acre (the Original Project) is 0.4 acre-feet per year per dwelling unit while the water demand rate for single-family housing at 3.6 units per acre (the Proposed Project) is 0.55 acre-feet per year per unit. Based on these figures, the Original Project would generate a demand for 60 acre-feet of water annually while the currently proposed project would generate an annual demand of 29.3 acre-feet. The total water demand for the project site would decrease compared to the Original Project. Development of the project site with residential land uses is consistent with the PCWA UWMP projections for the region. As evaluated in the EIR, PCWA has sufficient water supply to serve the site in wet/normal years, single-dry years, and multiple-dry years.

- g. Solid waste would be collected by Recology Auburn Placer and disposed of at the Western Placer Sanitary Landfill (WRSL) and Materials Recovery Facility (MRF). The Orchard at Penryn EIR found that the Original Project would generate approximately 378 pounds of solid waste per day, which would be accommodated at the WRSL and MRF without adversely affecting the overall capacity or lifespan of the WRSL. According to data collected by the California Integrated Waste Management Board, Placer County's per capita solid waste disposal rate is approximately 0.36 tons/dwelling unit/year. Using these figures, the Proposed Project would generate approximately 55 tons per year, or 301 pounds per day, in solid waste. The Proposed Project would generate less solid waste than the Original Project and the disposal of 301 pounds per day of solid waste would not affect the overall capacity or lifespan of the WRSL. To ensure that solid waste collection services are provided at the project site, the proposed project will be required to obtain a will serve letter from Recology Auburn Placer. Collection fees must be paid by the property owner/manager to offset the costs of providing these services.

Adopted Mitigation Measures:

XIII.1: "Will serve" letters shall be provided from the appropriate service providers.

11.1c: The project applicant shall implement *Mitigation Measure 10.5f*, which requires the applicant to obtain a State Regional Water Quality Control Board National Pollutant Discharge Elimination System construction stormwater quality permit and provide appropriate documentation to the Placer County Engineering and Surveying Department.

11.2a: The Improvement Plans shall show that water quality treatment facilities/Best Management Practices (BMPs) shall be designed according to the guidance of the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for New Development/Redevelopment, and for Industrial and Commercial (or other similar source as approved by the Engineering and Surveying Department (ESD). The Stormwater Quality Design Manual for the Sacramento and South Placer Regions is an additional guidance document that may be used as a reference for post construction BMPs.

Storm drainage from on-site impervious surfaces shall be collected and routed through specially designed catch basins, vegetated swales, vaults, infiltration basins, water quality basins, filters, etc. for entrapment of sediment, debris and oils/greases or other identified pollutants, as approved by the ESD. BMPs shall be designed at a minimum in accordance with the Placer County Guidance Document for Volume and Flow-Based Sizing of Permanent Post-Construction Best Management Practices for Stormwater Quality Protection. Post-development (permanent) BMPs for the project include, but are not limited to: Vegetated Swales (TC-30), Detention Basins (TC-22), and

Water Quality Inlets (TC-50). No water quality facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by project approvals.

All BMPs shall be maintained as required to insure effectiveness. The applicant shall provide for the establishment of vegetation, where specified, by means of proper irrigation. Proof of on-going maintenance, such as contractual evidence, shall be provided to ESD upon request. Maintenance of these facilities shall be provided by the project owners/permittees unless, and until, a County Service Area is created and said facilities are accepted by the County for maintenance. Prior to Improvement Plan or Final Map approval, easements shall be created and offered for dedication to the County for maintenance and access to these facilities in anticipation of possible County maintenance.

- 11.2b:** This project is located within the area covered by Placer County’s municipal stormwater quality permit, pursuant to the National Pollutant Discharge Elimination System (NPDES) Phase II program. Project-related stormwater discharges are subject to all applicable requirements of said permit. Best Management Practices shall be designed to mitigate (minimize, infiltrate, filter, or treat) stormwater runoff in accordance with “Attachment 4” of Placer County’s NPDES Municipal Stormwater Permit (State Water Resources Control Board NPDES General Permit No. CAS000004).
- 11.2c:** All storm drain inlets and catch basins within the project area shall be permanently marked/embossed with prohibitive language such as “No Dumping! Flows to Creek” or other language as approved by Placer County Engineering and Surveying Department (ESD) and/or graphical icons to discourage illegal dumping. Message details, placement, and locations shall be included on the Improvement Plans. Placer County ESD-approved signs and prohibitive language and/or graphical icons, which prohibit illegal dumping, shall be posted at public access points along channels and creeks within the project area. The property owner and/or Homeowners’ Association shall be responsible for maintaining the legibility of stamped messages and signs.
- 11.2d:** All stormwater runoff shall be diverted around trash storage areas to minimize contact with pollutants. Trash container areas shall be screened or walled to prevent off-site transport of trash by the forces of water or wind. Trash containers shall not be allowed to leak and must remain covered when not in use.
- 11.4a:** Storm water run-off (including offsite pass through flow) shall be reduced to pre-project conditions through the installation of retention/detention facilities. Retention/detention facilities shall be designed in accordance with the requirements of the Placer County Storm Water Management Manual that are in effect at the time of submittal, and to the satisfaction of Placer County Engineering and Surveying Department. Maintenance of these facilities shall be provided by the project owners/permittees unless, and until, a County Service Area is created and said facilities are accepted by the County for maintenance. No detention facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by project approvals.
- 11.4b:** The project applicant shall implement *Mitigation Measure 11.1b*, which requires preparation and submittal of a final drainage report in conformance with the requirements of Section 5 of the Land Development Manual and the Placer County Storm Water Management Manual.
- 13.2b:** Except during implementation of the Removal Action Workplan, the following Best Management Practices shall be implemented during all site preparation and construction activity within the project site to control pollutant sources associated with the handling and storage of construction materials and equipment, as well as with waste management and disposal.
- A. Store construction raw materials (e.g., dry materials such as plaster and cement, pesticides and herbicides, paints, petroleum products, treated lumber) in designated areas that are located away from storm drain inlets, drainageways, and canals and are surrounded by earthen berms. Train the construction employees working on the site in proper materials handling practices to

ensure that, to the maximum extent practicable, those materials that are spread throughout the site are covered with impervious tarps or stored inside buildings.

- B. Whenever possible, wash out concrete trucks offsite in County designated areas. When the trucks are washed onsite, contain the wash water in a temporary pit adjacent to the construction activity where waste concrete can harden for later removal. Avoid washing fresh concrete from the trucks, unless the runoff is drained to a berm or level area, away from site waterways and storm drain inlets.
- C. Collect non-hazardous waste construction materials (e.g., wood, paper, plastic, cleared trees and shrubs, building rubble, scrap metal, rubber, glass) and deposit in covered dumpsters at a designated waste storage area on the site. Store recyclable construction materials separately for recycling. Transport all solid waste and recyclable material to the Western Regional Sanitary Landfill and Materials Recovery Facility.
- D. Store hazardous materials in portable metal sheds with secondary containment. The quantities of these materials stored on site shall reflect the quantities needed for site construction. Avoid over-application of fertilizers, herbicides, and pesticides. Do not mix hazardous waste with other waste produced onsite. Contract with a Certified Waste Collection contractor to collect hazardous wastes for disposal at an approved hazardous waste facility.
- E. Dispose of waste oil and other equipment maintenance waste in compliance with federal, State and local laws, regulations and ordinances.

Additional Mitigation Measures: None required.

<i>Environmental Issue Area</i>	Where Impact Was Analyzed in Prior Environmental Documents.	Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information of Substantial Importance Requiring New Analysis or Verification?	Prior Environmental Document Mitigation Measures.
18. Mandatory Findings of Significance.					
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory?	IS, p. 18	No	No	No	Mitigation Measures 5.1a, 5.1b, 5.2a, 5.3a, 5.3b, 5.3c, 5.3d, 5.3e, 5.4a, 5.5a, 5.5b, 5.5c, 5.5d, 5.5e, and 5.5f

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)?	IS, p. 18	No	No		Mitigation Measures 14.1a, 14.1b, 14.1c, 14.2a, 14.2b, 14.3a
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	IS, p. 18	No	No	No	N/A

Discussion:

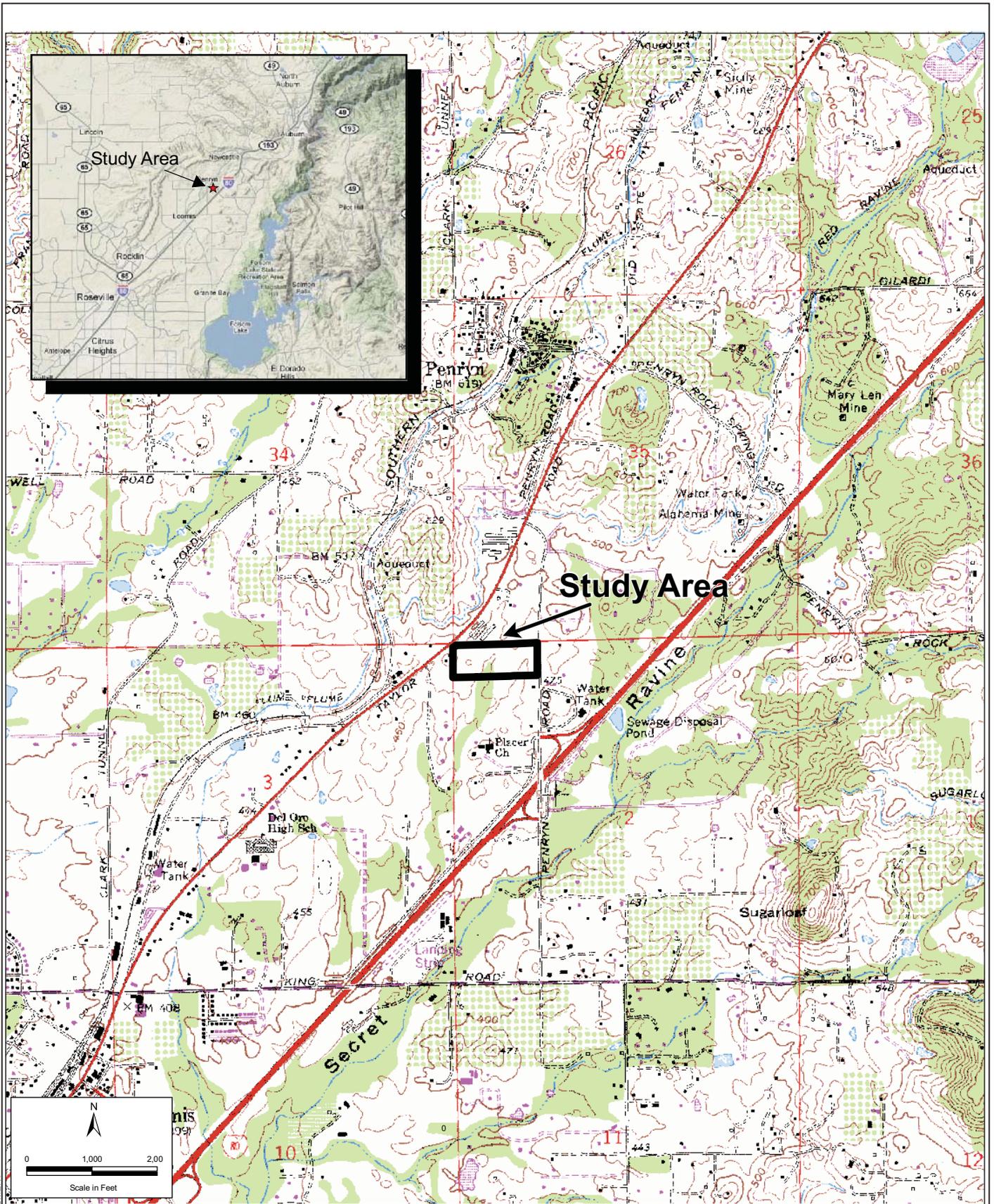
- a. The currently proposed project’s impact on biological and cultural resources would not differ substantially from the Original Project. The project would implement mitigation measures to ensure that impacts to biological resources are reduced to a less than significant level and there are no known cultural resources within the project site. Please refer to sections 4. Biological Resources and 5. Cultural Resources of this Supplemental Checklist for more details.
- b. The Original Project was found to have a cumulatively considerable contribution to the following significant cumulative impacts:
 Impact 14.1: Contribute to Cumulative Degradation of Existing Visual Character or Quality
 Impact 14.2: Substantially Increase Traffic or Conflict with Level of Service Standards in the Cumulative Plus Project Condition
 Impact 14.3: Conflict with Transportation and Circulation Plans and Policies in the Cumulative Plus Project Condition
 Impact 14.4: Increase Cumulative Concentrations of ROG or NO_x
 The Proposed Project would also contribute to impacts 14.1, 14.2, and 14.3. As discussed in section 3 Air Quality, the Proposed Project would generate emissions of ROG and NO_x that are less than the Placer County APCD’s thresholds for cumulative impacts of 10 pounds per day. Therefore the Proposed Project would not make a cumulatively considerable contribution to Impact 14.4 and implementation of Mitigation Measure 14.4a would not be required. The Proposed Project’s contribution to impacts 14.1, 14.2 and 14.3 would be somewhat reduced compared to the Original Project but would remain significant and would require mitigation as discussed in detail in Section 1 Aesthetics and Section 11 Transportation/Traffic of this Supplemental Checklist.
- c. As discussed in this Supplemental Checklist, the currently proposed project would not have substantial adverse effects on human beings with implementation of the mitigation measures identified in this Supplemental Checklist.

Adopted Mitigation Measures:

Please refer to Sections 1, 3, 4, 6, 8, 9, 10, 12, 14, 16, and 17 of this Supplemental Checklist for descriptions of mitigation measures that would be incorporated into the project.

Additional Mitigation Measures: Additional Mitigation Measures 1 and 2 as identified in Sections 2 and 12 of this Supplemental Checklist.

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DUDEK

SOURCE: USGS 7.5-Mintue Series Rocklin Quadrangle, Section 2, Township 11N, Range 07E

FIGURE 1
Site and Vicinity Map

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ORCHARD AT PENRYN

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Project Boundary

DUDEK

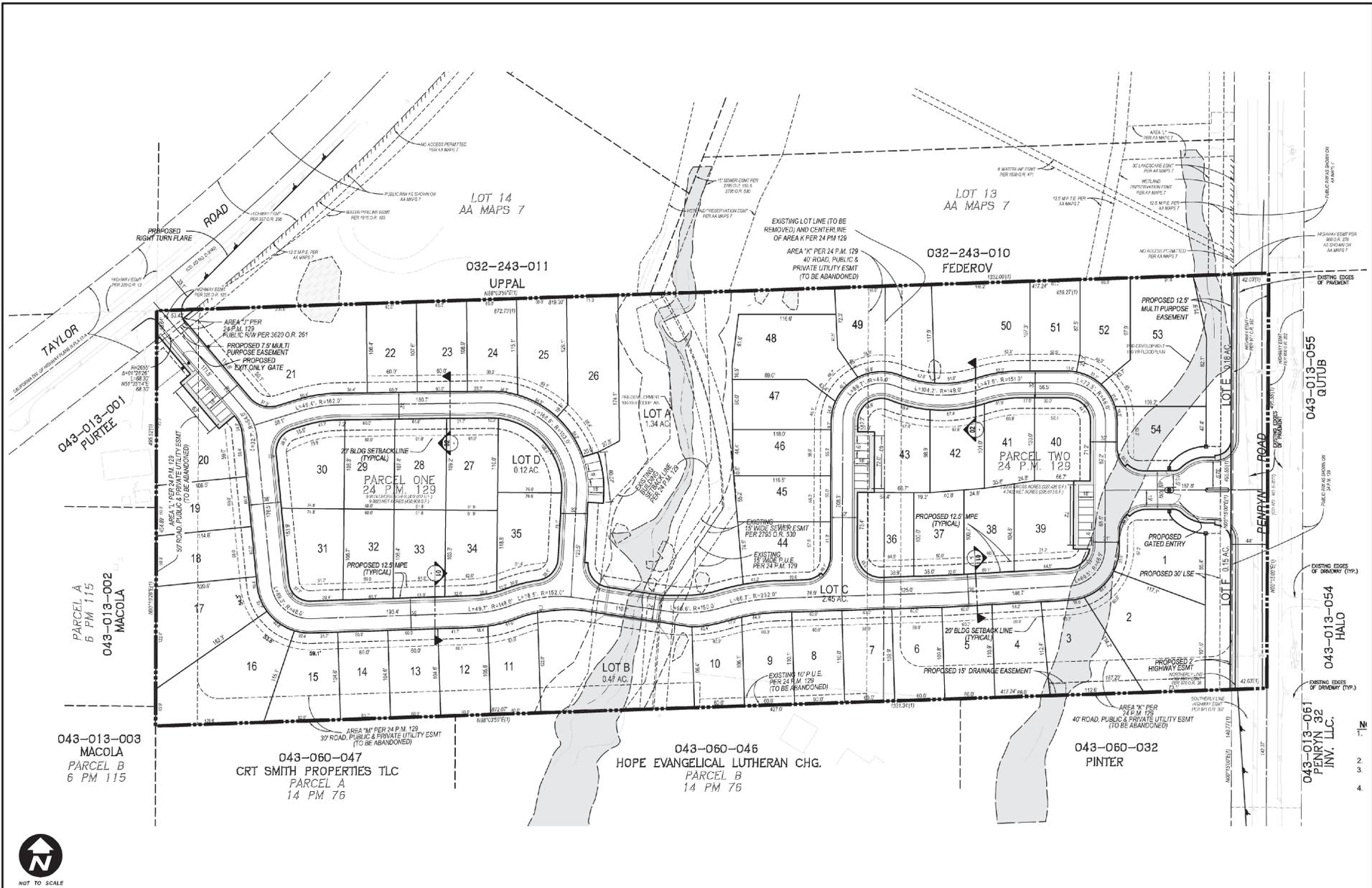
SOURCE: BING 2015

8676

ORCHARD AT PENRYN

FIGURE 2
Aerial Photograph

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DUDEK

SOURCE: Site Plan - Morton & Pitalo, Inc. 2014

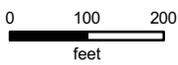
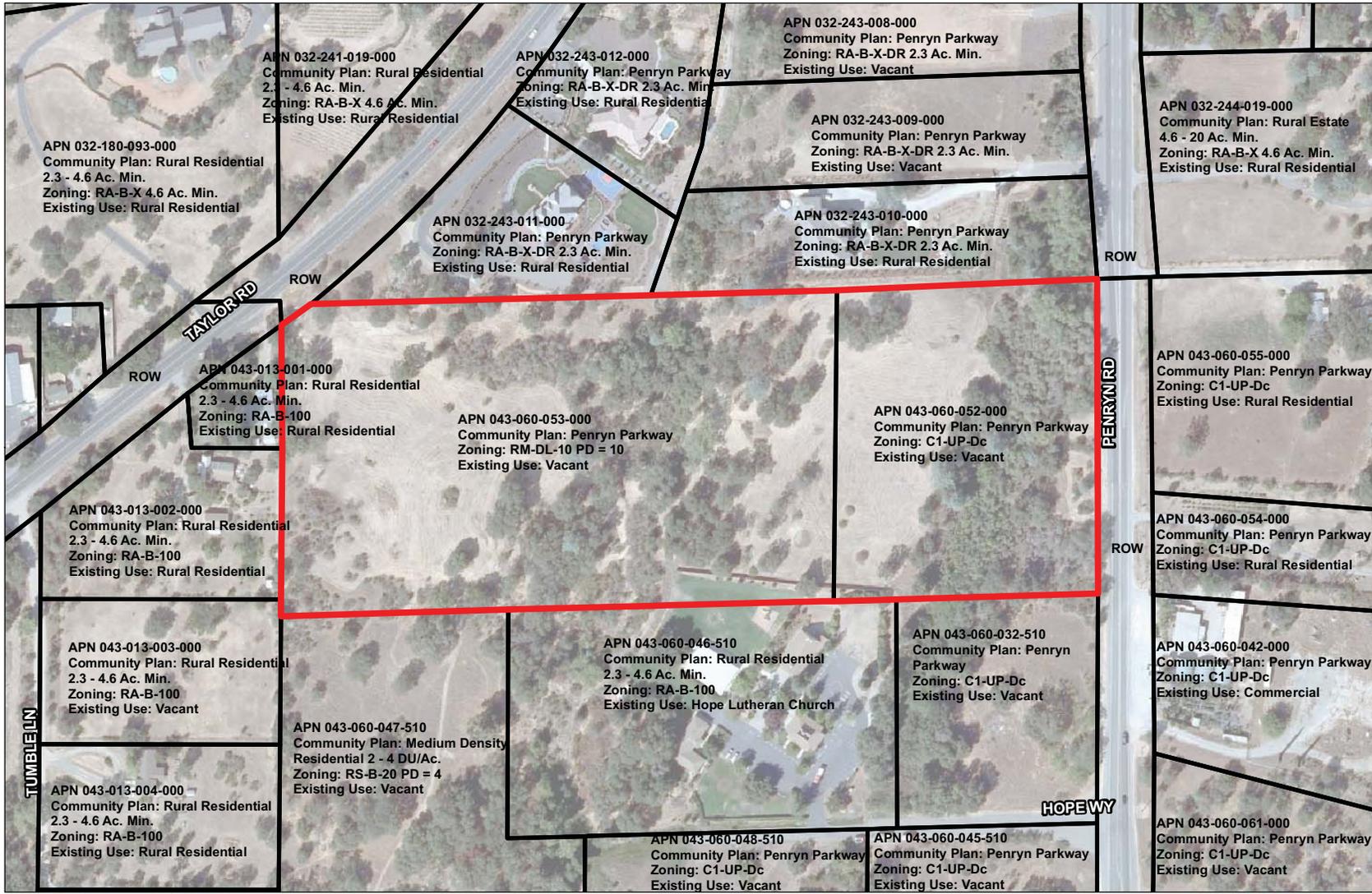
FIGURE 3

8676

ORCHARD AT PENRYN

Proposed Site Plan

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DUDEK

8676

SOURCE: Placer County 2008

ORCHARD AT PENRYN

FIGURE 4
Existing Community Plan and Zoning Designations
Existing Land Uses

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Attachment A

Air Quality and GHG Emissions Memo

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MEMORANDUM

To: Maywan Krach, Placer County Environmental Coordination Services
From: Katherine Waugh
Subject: Orchard at Penryn Modification Air Quality Modeling
Date: December 23, 2014

Attachment(s): CalEEMod Summer Emissions, CalEEMod Annual Emissions

Ms. Krach,

The memorandum documents the CalEEMod modeling of air pollutant and greenhouse gas emissions Dudek has prepared for the proposed modifications to the Orchard at Penryn project. The originally proposed project anticipated development of 150 multi-family dwelling units while the current project proposal is to develop 54 single-family dwelling units. This memo reports on the results of Dudek's CalEEMod modeling analysis of the current project proposal and compares those results to the URBEMIS modeling results which were relied upon in the EIR for the originally proposed project. The EIR for the originally proposed project modeled the emissions associated with site remediation (to remove contaminated soils) separately from the emissions associated with project construction and operation. As no changes to the site remediation as described in the Removal Action Workplan are proposed, the modeling for the site remediation has not been updated. The CalEEMod modeling is limited to project construction and operation.

SUMMARY

Criteria Air Pollutants: The results of the CalEEMod modeling indicate that air pollutant emissions from construction and operation of the proposed project would remain below the thresholds typically used by Placer County and the Placer County Air Pollution Control District, with the exception of ROG emissions during the building painting phase.

Greenhouse Gas Emissions: The results of the CalEEMod modeling indicate that greenhouse gas emissions from construction and operation of the proposed project would remain below the thresholds typically used by Placer County and the Placer County Air Pollution Control District.

MODELING INPUTS

Land Use

The project includes 54 single-family residences on a 15.1-acre site. Grading for the project would require import of 17,200 cubic yards of soil. Paving onsite would be limited to onsite roads; no parking lots are proposed.

Construction

The CalEEMod default construction schedule was modified to more closely reflect the construction schedule used in the EIR. This includes:

- Site Preparation – 10 days
- Grading – 42 days
- Building construction – 133 days
- Paving – 20 days
- Architectural coatings – 20 days

Operations

Changes to the operational defaults include:

- No woodburning appliances or fireplaces would be installed.
- VOC content for architectural coatings was reduced to 150 g/ml consistent with Placer County Air Pollution Control District Rule 218.
- All wastewater was assumed to be treated at the regional wastewater treatment plant, thus no portion of the project-generated wastewater was assumed to be treated through septic systems or in facultative lagoons.

The default trip generation rate of 9.57 trips per dwelling unit per day was not changed.

RESULTS

Criteria Air Pollutants: The detailed CalEEMod results summary for summer emissions is attached. The tables below summarize the estimated pollutant emissions (maximum daily emissions) associated with project construction and operation for the current project proposal as well as the estimated pollutant emissions reported in the EIR for the originally proposed project. The tables reflect the total onsite and offsite emissions for each construction phase. Table 1 presents the construction emissions estimates for both the current project proposal as well as the original project while Table 2 presents the operational emissions estimates for each version of the project.

Table 1
Unmitigated Construction Air Pollutant Emissions (pounds per day)

Project	Construction Phase	Air Contaminant					
		ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
<i>Current Proposal, 54 single-family units</i>	<i>Site Preparation</i>	5.34	56.96	43.58	0.04	21.30	12.81
	<i>Grading</i>	6.45	74.27	49.80	0.08	10.56	6.48
	<i>Building Construction</i>	3.82	30.75	20.51	0.03	2.33	2.06
	<i>Paving</i>	2.38	25.24	15.76	0.024	1.54	1.34
	<i>Architectural Coating</i>	91.65	2.59	2.11	0.003	0.25	0.23
<i>Original Proposal, 150 multi-family units</i>	<i>Mass Grading</i>	3.87	38.93	17.95	0.02	561.33	118.48
	<i>Fine Grading</i>	2.85	23.48	12.82	0.00	97.68	21.24
	<i>Building Construction</i>	4.16	20.34	13.13	0.01	1.65	1.5
	<i>Paving</i>	3.87	18.72	21.96	0.02	1.33	1.18
	<i>Architectural Coating</i>	184.42	0.10	1.85	0.00	0.02	0.01
<i>APCD Thresholds</i>		82	82	550		82	

With the exception of the ROG emissions during the architectural coating phase, all of the construction emissions from the currently proposed project would remain below the APCD Thresholds, indicating that most impacts from construction of the proposed project would remain less than significant. During the architectural coatings phase, the only phase in which emissions from the current project proposal would be significant, the estimate for ROG emissions for the current project is approximately half as large as the estimate for ROG emissions from the original proposal (91.65 pounds per day compared to 184.42 pounds per day).

In comparison to the original project proposal, emissions during construction of the currently proposed project would be reduced or slightly increased. For example, during the building construction phase, the emissions estimates for the current proposal show that there would be 0.34 fewer pounds per day of ROG emissions but 10.41 more pounds per day of NOX emissions. It is noted that the modeling completed for the Orchard at Penryn EIR was performed using the URBEMIS 2007 Version 9.2.4 modeling program, which was a predecessor to the CalEEMod program. Many of the default assumptions and emissions data used in the URBEMIS program has been updated or revised in the CalEEMod program. This may account for some of the minor differences in emissions estimates between the two programs.

The Orchard at Penryn EIR found that emissions during project construction would result in a significant and unavoidable impact as a result of the ROG emissions during the architectural coatings phase. Although the ROG emissions during architectural coating for the current proposal would be less than previously estimated, these emissions would remain significant and unavoidable.

Table 2
Unmitigated Operational Air Pollutant Emissions (pounds per day)

Project	Source	Air Contaminant					
		ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
<i>Current Proposal, 54 single-family units</i>	<i>Area Sources</i>	3.11	0.05	4.52	0.00024	0.06	0.06
	<i>Energy Use</i>	0.05	0.44	0.19	0.0028	0.04	0.04
	<i>Vehicle Use</i>	2.42	6.16	24.24	0.05	3.39	0.96
	Combined	5.59	6.65	28.94	0.05	3.49	1.06
<i>Original Proposal, 150 multi-family units</i>	<i>Area Sources</i>	8.56	1.15	2.03	0.00	0.01	0.01
	<i>Energy Use</i>	(not reported in URBEMIS)					
	<i>Vehicle Use</i>	8.88	10.79	97.56	0.10	16.91	3.27
	Combined	17.44	11.94	99.59	0.10	16.92	3.28
APCD Thresholds		82	82	550		82	

As shown in Table 2, all operational emissions of the currently proposed project would remain well-below the APCD Thresholds. This is also true of the original project proposal.

The APCD also recommends that cumulative impacts be evaluated based on a threshold of significance of 10 pounds per day of ROG and NOX emissions. Under the currently proposed project, ROG and NOX emissions would remain below the APCD’s recommended cumulative threshold. The originally proposed project would have exceeded those thresholds. The Orchard at Penryn EIR required implementation of Mitigation Measure 14.4a, which required that the project participate in the Placer County Air Pollution District Offsite Mitigation Program by paying a fee based on the amount by which the project’s emissions would exceed the cumulative threshold (and/or implement other measures to reduce or offset the project’s emissions). This measure would not be required under the currently proposed project. Impacts would remain less than significant at both the project level and in the cumulative scenario without mitigation.

Greenhouse Gas Emissions: The detailed CalEEMod results summary for annual emissions is attached to this memo. Table 3 below summarizes the estimated greenhouse gas emissions (tons/year) associated with project construction and operation for the current project proposal as well as the estimated greenhouse gas emissions reported in the EIR for the originally proposed project. As shown in Table 3, the currently proposed project would generate approximately 387 tons per year of greenhouse gases during project construction and 909 tons per year of

greenhouse gases during project operation. In comparison, the original project proposal was estimated to generate fewer greenhouse gas emissions during construction but more greenhouse gas emissions during project operation. Placer County and the Placer County Air Pollution Control District recommend a greenhouse gas emissions threshold of 1,100 tons per year. A project that emits less than this amount is considered to have a less than significant impact with respect to greenhouse gas emissions. Based on this threshold, the original project proposal would have resulted in a significant impact related to greenhouse gas emissions during project operation. However, it is noted that a different threshold of significance was used in the EIR for the original project proposal, which supported a finding of a less than significant impact. As the currently proposed project would generate less than 1,100 tons per year of greenhouse gas emissions and would generate fewer greenhouse gas emissions than the original project proposal, the current proposal would not result in a new or more severe impact related to greenhouse gas emissions compared to the original project proposal.

Table 3
Mitigated Greenhouse Gas Emissions (tons per year)

Project	Source	Greenhouse Gas Emissions
<i>Current Proposal, 54 single-family units</i>	<i>Construction</i>	387
	<i>Area Sources</i>	24.20
	<i>Mobile Sources</i>	661.62
	<i>Energy Demand</i>	210.50
	<i>Water Consumption</i>	10.00
	<i>Wastewater Treatment</i>	n/a
	<i>Solid Waste Disposal</i>	25.22
	Total Operational	909.66
<i>Original Proposal, 150 multi-family units</i>	<i>Construction</i>	214.70
	<i>Area Sources</i>	239.76
	<i>Mobile Sources</i>	1,316.64
	<i>Energy Demand</i>	231
	<i>Water Consumption</i>	1.93
	<i>Wastewater Treatment</i>	6.18
	<i>Solid Waste Disposal</i>	5
	Total Operational	1,800.51
APCD Thresholds		1,100

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Attachment B

Biological Resources Evaluation

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Orchard at Penryn Project

Biological Resources Evaluation

June 2014



Stephen Stringer

Senior Scientist

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Orchard at Penryn Project Biological Resources Evaluation

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1.0 INTRODUCTION

On behalf of Penryn Development, LLC, HELIX Environmental Planning, Inc. (HELIX) prepared this Biological Resources Evaluation (BRE) to document sensitive biological resources such as natural communities, protected trees, wetlands and other waters, and special-status species with the potential to occur on or be impacted by project related activities on the Orchard at Penryn Project site (project site).

A Draft Environmental Impact Report (DEIR) was prepared in 2011 (North Fork Associates 2011) and a Final Environmental Impact Report (FEIR) was prepared in 2012 (North Fork Associates 2012) for a multi-family residential development proposed on the project site. Subsequent to the certification of the FEIR by Placer County in 2012, Penryn Development, LLC submitted a development application for a single-family residential development rather than multi-family residential development. Due to the time that has occurred since biological studies had been prepared for the previously certified FEIR and modifications to the previously approved project, Placer County required preparation of a new biological study in a pre-development meeting checklist memo provided to Penryn Development, LLC dated February 25, 2014.

This BRE was prepared in response to the pre-development meeting checklist memo and describes potential impacts to biological resources that could occur as a result of development on the project site as well as provides recommendations for avoidance and/or mitigation measures to reduce or eliminate any potential biological resource impacts.

1.1 PROJECT LOCATION

The ±15.1-acre project site consists of two parcels located in the community of Penryn, in Placer County, California. The project site is bounded by Penryn Road to the east, and rural residential land uses to the north and west. Taylor Road is adjacent to the northwest corner of the project site and a church facility is located south of the site. Interstate 80 is located approximately 0.3 mile south of the study area. The project site is located in Township 11 North, Range 7 East, Section 2 on the “Rocklin, California” 7.5 minute USGS topographic quadrangle. The approximate longitude and latitude for the center of the site are 38° 50.306’ north and 121° 10.178’ west. Figure 1 is a project location map. Figure 2 is an aerial photograph of the project site and surrounding areas.

1.2 PROJECT DESCRIPTION

The project proposes to develop 54 single-family residential units on the ±15.1-acre property. As shown in Figure 3, the project would consist of fifty-four single-family residential lots, with minimum lot sizes in the 4,000 to 6,000 square foot range and an average lot size of nearly 8,200 square feet. A tentative subdivision map is proposed with 54 single-family residential lots shown, as well as 6 lettered lots. The project applicant also proposes to create commonly held open space in the central portion of the project site. The primary site entrance is proposed as a gated entrance from Penryn Road. A secondary exit-only gated access point is proposed for Taylor Road. The proposed project also includes a 30-foot wide landscape easement along

Penryn Road, onsite landscaping, an onsite circulation system, and placement of utilities. A small portion of fencing and landscaping associated with the property to the south encroach on the project site. These features would be removed with development of the proposed project.

1.2.1 Site Remediation

Site investigations were conducted to identify contaminants in the site soils. Through these investigations, arsenic, lead, DDT, DDE, endrin and methoxychlor were identified as chemicals of potential concern. These contaminants present a potential hazard to future site occupants. Site remediation to remove or provide onsite containment of hazardous materials is necessary prior to construction of the proposed single-family residences. The actions necessary to complete site remediation are documented in the project's Final Removal Action Workplan (RAW; Wallace-Kuhl & Associates July 12, 2013).

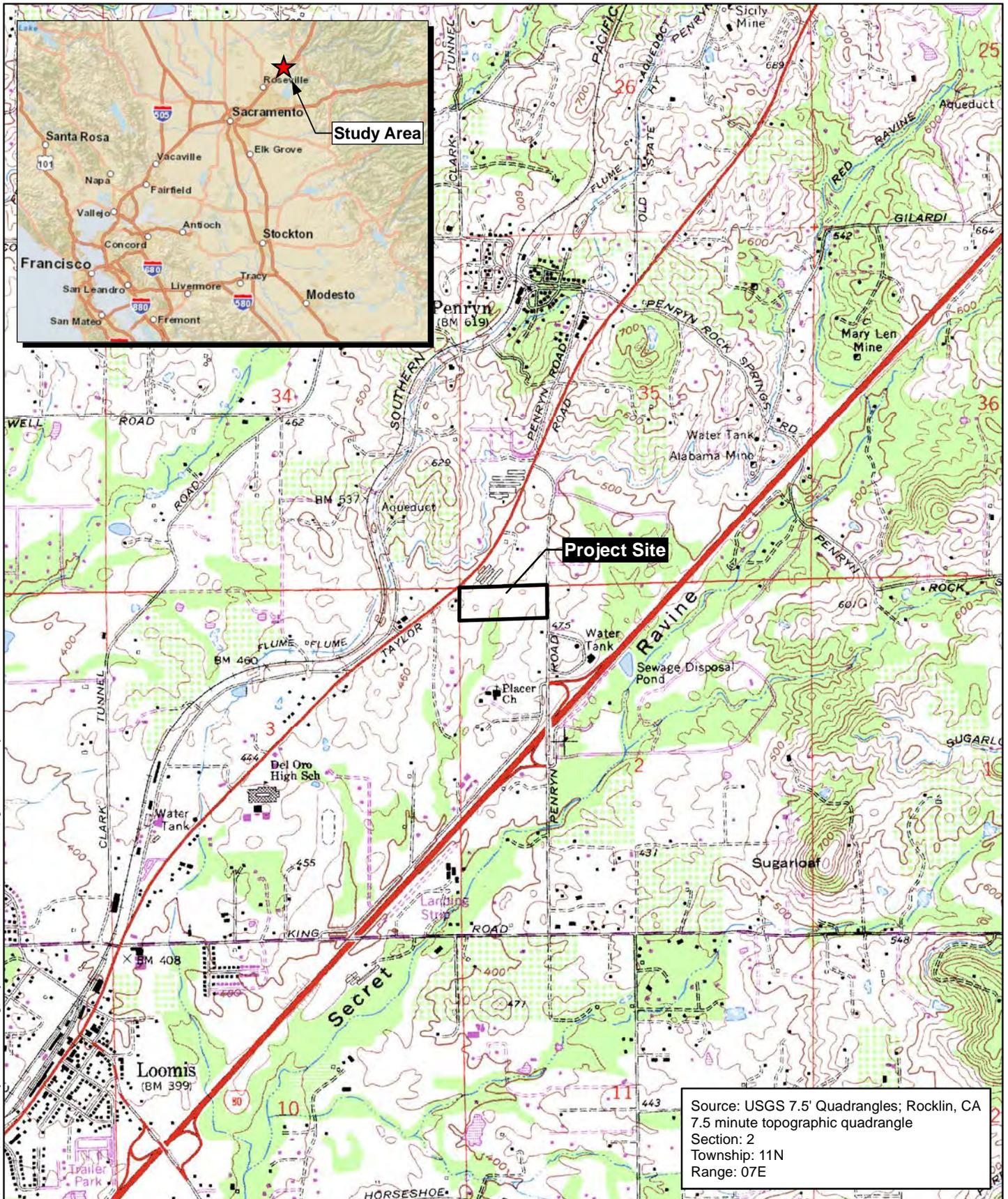
The Final RAW achieves the following Removal Action Objectives:

- Reduction of site-related contaminants (e.g., arsenic, lead and organic pesticides) in site soil to levels consistent with naturally-occurring, background conditions and/or concentration levels that do not pose a human health risk;
- Reduction or mitigation, to the extent practicable, of existing and potential adverse ecological effects of site contaminants;
- Prevention, or reduction to the extent practicable, of the offsite migration of site contaminants, or migration of site contaminants from soil to other media (i.e., air and surface water); and
- Obtaining certification from the California Department of Toxic Substances Control (DTSC) for unrestricted land use.

The Final RAW approves the removal of 11,600 cubic yards of contaminated soil from ±7.11 acres of the project site. The areas that would be affected by this excavation are shown in Figure 4 in the *Biological Communities* section. Soil excavations would generally be between 12 and 18 inches deep, although in three locations excavations may reach 24 inches in depth. The soil within and surrounding the wetland swale in the eastern portion of the property as well as in the southern portion of the intermittent stream is contaminated and would be excavated. This would destroy the affected portions of the wetland swale and intermittent stream and remove the associated riparian and woodland vegetation.

Excavated soil would be transported to a Class II solid waste disposal site. Transportation would be performed by an approved and licensed contractor and using Department of Transportation-approved shipping containers. Site excavation would include implementation of best practices for decontamination of equipment and to control erosion, storm drainage, and air pollutant and dust emissions, as described in the RAW.

At the completion of site excavation, new soil samples would be collected and assessed to confirm that residual contaminant concentrations meet the established cleanup goal. If the soil samples meet the established cleanup goal, DTSC would issue a tentative "No Further Action"



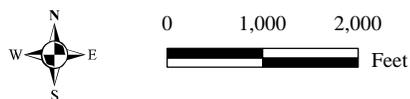
I:\PROJECTS\TSP\PEP-01_Penryn Parcels Permitting\PenrynParcels_GIS\2014\MXD\BRE June 2014\Figure 1_BRE_vicinity.mxd

Map Date: June 2014

Figure 1 - Site & Vicinity

ORCHARD AT PENRYN
BIOLOGICAL RESOURCES EVALUATION

Placer County, CA





I:\PROJECTS\PP\PEB-01_Penryn Parcels Permitting\PenrynParcels_GIS\2014\MXD\BRE June 2014\Figure 2_BRE_aerial.mxd

Aerial Source: Placer County (2011)
Map Date: June 2014

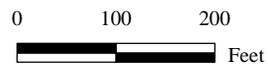
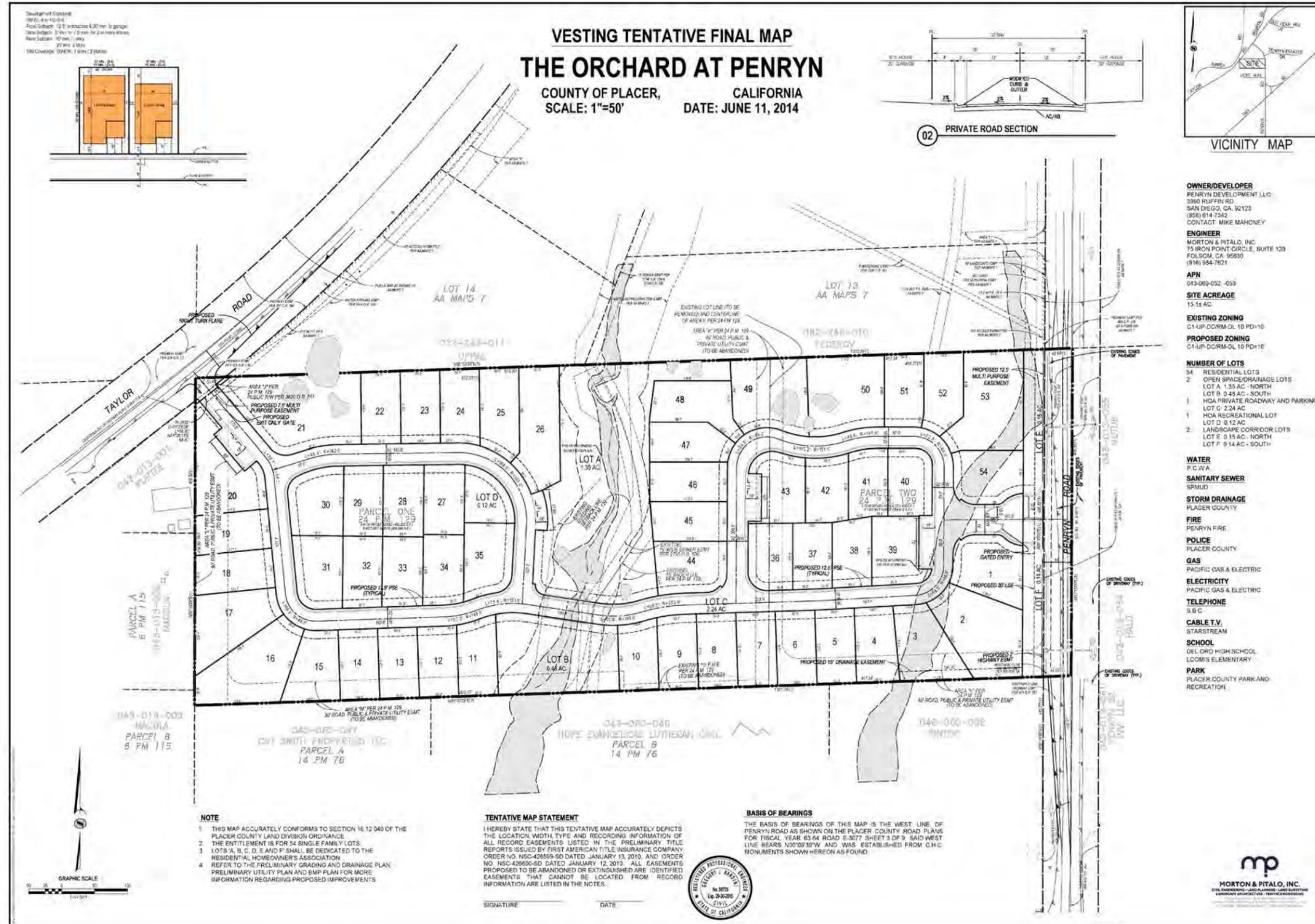


Figure 2 - Aerial

ORCHARD AT PENRYN
BIOLOGICAL RESOURCES EVALUATION
Placer County, CA

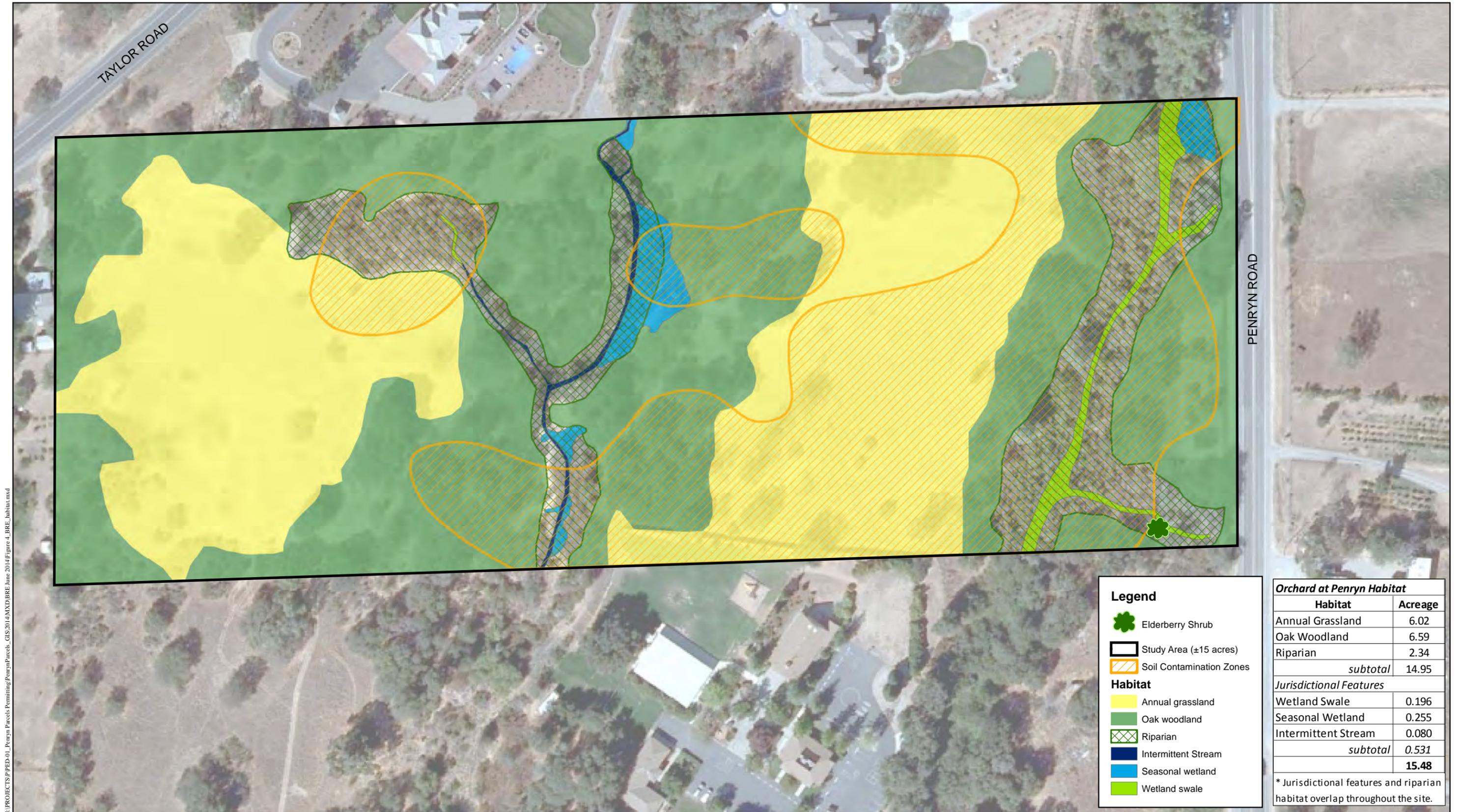


Source: Morton & Pitalo, Inc.
 Map Date: June 2014

Figure 3 - Site Plan
 ORCHARD AT PENRYN
 BIOLOGICAL RESOURCES EVALUATION
 Placer County, CA



I:\PROJECTS\PED-01_Penryn Parcels\Permitting\Penryn\Parcels_GIS\2014\MXD\BRE June 2014\Figure 3_BRE_site plan.mxd



I:\PROJECTS\PED-01_Penryn Parcels Permitting\Penryn\Parcels_GIS\2014\MXD\BRE June 2014\Figure 4_BRE_habitat.mxd

Legend

-  Elderberry Shrub
-  Study Area (±15 acres)
-  Soil Contamination Zones

Habitat

-  Annual grassland
-  Oak woodland
-  Riparian
-  Intermittent Stream
-  Seasonal wetland
-  Wetland swale

Orchard at Penryn Habitat	
Habitat	Acreage
Annual Grassland	6.02
Oak Woodland	6.59
Riparian	2.34
<i>subtotal</i>	14.95
Jurisdictional Features	
Wetland Swale	0.196
Seasonal Wetland	0.255
Intermittent Stream	0.080
<i>subtotal</i>	0.531
	15.48

* Jurisdictional features and riparian habitat overlap throughout the site.

Map Date: June 2014



Figure 4 - Habitat
 ORCHARD AT PENRYN
 BIOLOGICAL RESOURCES EVALUATION
 Placer County, CA

letter, and project grading and construction would commence upon Placer County's approval of Improvement Plans.

1.2.2 Land Use

The project proposes to develop 54 single-family residential lots, plus 6 lettered lots. An area of open space would be maintained in the center of the project, and several prominent rock outcroppings would be preserved. As required by the *Horseshoe Bar/Penryn Community Plan*, the project would establish a 30-foot wide landscape easement along Penryn Road.

1.2.3 Circulation

The project proposes a gated entrance off of Penryn Road on the eastern side of the project site. Circulation through the project site would be provided by a single road extending west from the entrance. Two looped secondary roads would intersect the main road to provide access to home sites along those roads. The main road would terminate in an exit-only driveway to Taylor Road. The project proposes to provide 28 guest parking stalls located along the roadway traversing the project site, in addition to the parking provided for on driveways of individual lots in the subdivision. On-street parking is otherwise not allowed in the proposed project.

If the project is approved, Placer County would require the project applicant to construct improvements along the project site's frontage on Penryn Road consistent with the road cross-sections for Penryn Parkway provided in the Community Plan. The project would be required to provide 44 feet of right-of-way, which is one-half of the full roadway width. This would include widening the road to provide two southbound 12-foot travel lanes, a Class II bike lane, and curb, gutter, and sidewalk. The project would also be required to provide one-half of a center two-way left turn lane.

1.2.4 Utilities

The proposed project would require placement of infrastructure to provide water, electricity, telephone, natural gas, and cable television services to the site. Underground utilities would run in easements along roadways and alleys within the development. Domestic water would be supplied from Placer County Water Agency (PCWA). The project would connect to an existing 12-inch water line located in Penryn Road and an existing 24-inch water line located in Taylor Road. Wastewater conveyance would be provided by South Placer Municipal Utility District (SPMUD). Wastewater treatment would be provided at the Dry Creek Regional Wastewater Treatment Plant, which is owned and operated by the City of Roseville on behalf of the South Placer Wastewater Authority. Sanitary sewer pipelines would be installed within the project site, connecting to an existing sewer mainline that runs from north to south across the center of the project site. Solid waste would be collected by Recology Auburn Placer and disposed of at the Western Placer Sanitary Landfill and Materials Recovery Facility.

1.2.5 Grading and Drainage

Development of the proposed project would require grading for building pads, roadways, and utilities. In addition, substantial earthwork would be required to implement the RAW to remove contaminated soil from the project site. As a result, the majority of the project site would be graded. Areas that would remain ungraded include the northern portion of the central intermittent stream and oak woodland habitat associated with this stream, areas around the preserved rock outcroppings, and other limited areas around the site perimeter. As discussed above, implementation of the RAW would require excavation and removal of 11,600 cubic yards of soil; to complete site remediation, 11,600 cubic yards of clean soil would be imported to the site and used as fill.

In addition, the Preliminary Grading Plan provides for grading cuts that total 25,700 cubic yards of soil and 42,900 cubic yards of fill. Combined, the RAW and the Preliminary Grading Plan would result in total cut volume of 37,300 cubic yards and a total fill volume of 54,500 cubic yards. To accomplish the site grading, a total of 28,800 cubic yards of soil would be imported to the site – this includes 11,600 yards to replace the excavated soil as well as 17,200 yards needed to balance cuts and fills on the site. The greatest amount of earthwork would occur in the eastern portion of the site where hazardous materials are most prevalent. In addition, areas with the greatest depth of cut and fill slopes would be located near the preserved rock outcropping in the northern portion of the site, adjacent to the open space area in the center of the site, and along the western property boundary.

Drainage originating from off-site properties that currently flows through the onsite intermittent stream and wetland swales would be conveyed across the project site in storm drains. A 60-inch pipe is proposed to replace the wetland swale closest to Penryn Road. Drainage that originates within the project site would be conveyed through storm drain pipes and onsite vegetative swales to the center of the project site. The vegetative swales would provide water quality treatment for stormwater runoff.

In addition, there are two existing 18-inch corrugated metal pipe culverts carrying water from the east side of Penryn Road to the west side and onto the project site. The improvements to Penryn Road necessary to support the proposed Orchard at Penryn project include replacing the northern culvert with a 24-inch drainage pipe. This pipe would cross under Penryn Road, and then travel southerly within the 30-foot landscape easement along the project site's frontage on Penryn Road. The southern existing 18-inch culvert would tie into this new 24-inch line near the southeast corner of the project site, and the new 24-inch line would tie into the proposed 60-inch line further south. The 60-inch line would then head westerly and discharge into an outlet structure at the southern property boundary in the location of the existing wetland swale on the eastern portion of the property.

2.0 REGULATORY SETTING

Regulations pertaining to the protection of biological resources in the Orchard at Penryn Project site and vicinity are summarized in the following sections.

2.1 FEDERAL REQUIREMENTS

2.1.1 Federal Endangered Species Act (FESA)

The USFWS enforces the provisions stipulated within the Federal Endangered Species Act of 1973 (FESA, 16 USC Section 1531 et seq.). Species identified as federally threatened or endangered (50 CFR Section 17.11, and 17.12) are protected from take, defined as direct or indirect harm, unless a Section 10 permit is granted to an entity other than a federal agency or a Biological Opinion with incidental take provisions is rendered to a federal lead agency via a Section 7 consultation. Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally-listed species may be present in the study area and determine whether the proposed project will have a potentially significant impact upon such species. Under FESA, habitat loss is considered to be an impact to a species. In addition, the USFWS is required to determine whether the project is likely to jeopardize the continued existence of any species that is proposed for listing under FESA or to result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536[3], [4]). Therefore, project related impacts to these species or their habitats would be considered significant and would require mitigation. Other federal agencies designate species of concern (species that have the potential to become listed), which are evaluated during environmental review although they are not otherwise protected under FESA. Project related impacts to such species would also be considered a significant impact and may require mitigation.

2.1.2 Executive Order 13186: Migratory Bird Treaty Act

Under the Migratory Bird Treaty Act of 1918 (16 USC Subsection 703-712), migratory bird species and their nests and eggs are protected from injury or death; these species are listed on the federal list (50 CFR Section 10.13). Project related disturbances must be reduced or eliminated during the nesting cycle.

2.2 STATE REQUIREMENTS

2.2.1 California Endangered Species Act (CESA)

The California Endangered Species Act (CESA) (California Fish and Game Code Sections 2050 to 2097) is similar to the FESA. The California Fish and Game Commission is responsible for maintaining lists of threatened and endangered species under the CESA. CESA prohibits the take of listed and candidate (petitioned to be listed) species. “Take” under California law means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch capture, or kill (California Fish and Game Code, Section 86). The California Department of Fish and Wildlife (CDFW) can authorize take of a state-listed species under Section 2081 of the California Fish and Game Code

if the take is incidental to an otherwise lawful activity, the impacts are minimized and fully mitigated, funding is ensured to implement and monitor mitigation measures, and CDFW determines that issuance would not jeopardize the continued existence of the species. A CESA permit must be obtained if a project will result in the take of listed species, either during construction or over the life of the project. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of the FESA, CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

2.2.2 California Code of Regulations Title 14 and California Fish and Game Code

The official listing of endangered and threatened animals and plants is contained in the California Code of Regulations Title 14 § 670.5. A state candidate species is one that the California Fish and Game Code has formally noticed as being under review by CDFW to include in the state list pursuant to Sections 2074.2 and 2075.5 of the California Fish and Game Code.

Legal protection is also provided for wildlife species in California that are identified as "fully protected animals." These species are protected under Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species at any time. CDFW is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by these species. CDFW has informed non-federal agencies and private parties that they must avoid take of any fully protected species in carrying out projects. However, Senate Bill 618 (2011) allows the CDFW to issue permits authorizing the incidental take of fully protected species under the CESA, so long as any such take authorization is issued in conjunction with the approval of a Natural Community Conservation Plan that covers the fully protected species (California Fish and Game Code Section 2835).

2.2.3 California Environmental Quality Act (CEQA)

Under the California Environmental Quality Act (CEQA) of 1970 (Public Resources Code Section 21000 et seq.), lead agencies analyze whether projects would have a substantial adverse effect on a candidate, sensitive, or special-status species (Public Resources Code Section 21001(c)). These "special-status" species generally include those listed under FESA and CESA, and species that are not currently protected by statute or regulation, but would be considered rare, threatened, or endangered under the criteria included in the State CEQA Guidelines Section 15380. Therefore, species that are considered rare are addressed in this study regardless of whether they are afforded special protection through any other statute or regulation. The California Native Plant Society (CNPS) inventories the native flora of California and ranks species according to rarity; plants ranked by the CNPS as 1A, 1B, and 2 are generally considered special-status species under CEQA.¹

Although threatened and endangered species are protected by specific federal and state statutes, State CEQA Guidelines Section 15380(d) provides that a species not listed on the federal or state

¹ The CNPS rare plant ranking system can be found online at < <http://www.cnps.org/cnps/rareplants/ranking.php>>

list of protected species may be considered rare if it can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. Section 15380(d) allows a public agency to undertake a review to determine if a significant effect on species that have not yet been listed by either the USFWS or CDFW (i.e., candidate species) would occur. Thus CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agency has an opportunity to designate the species as protected, if warranted.

2.2.4 California Native Plant Protection Act

The California Native Plant Protection Act of 1977 (California Fish and Game Code Sections 1900-1913) requires all state agencies to use their authority to carry out programs to conserve endangered and otherwise rare species of native plants. Provisions of the act prohibit the taking of listed plants from the wild and require notification of CDFW at least 10 days in advance of any change in land use other than changing from one agricultural use to another, which allows CDFW to salvage listed plants that would otherwise be destroyed.

2.2.5 Nesting Birds

California Fish and Game Code Subsections 3503 and 3800 prohibit the possession, incidental take, or needless destruction of birds, their nests, and eggs. California Fish and Game Code Subsection 3503.5 protects all birds in the orders Falconiformes and Strigiformes (birds of prey). California Fish and Game Code Section 3511 lists birds that are “fully protected”, those that may not be taken or possessed except under specific permit.

2.2.6 Sensitive Vegetation Communities

Fish and Game Code §§1385-1391, the California Riparian Habitat Conservation Act, identifies valley and foothill riparian habitat as a sensitive resource because it provides important habitat value for wildlife. Riparian habitat occurs on the project site and is the only sensitive plant community on the project site.

2.2.6.1 Oak Woodlands Conservation

In 2004, the California legislature enacted Senate Bill (SB) 1334, which added oak woodland conservation regulations to Public Resources Code §21083.4. This act requires that any county with oak woodlands develop an oak woodlands management plan pursuant to the Oak Woodlands Conservation Act (Article 3.5, commencing with §1360, of Chapter 4 of Division 2 of the California Fish and Game Code).

SB 1334 also requires each county to determine whether a project within its jurisdiction may result in a conversion of oak woodlands that will have a significant effect on the environment. If a county determines that there may be a significant effect to oak woodlands, the county must require mitigation to reduce or compensate for the significant impacts to oak woodlands. Such mitigation may include conservation through the use of conservation easements; planting and

maintaining an appropriate number of replacement trees; contribution of funds to an established Oak Woodlands Conservation Fund for the purpose of purchasing oak woodlands conservation easements; and/or other mitigation measures developed by the county. No more than 20 percent of a project's impacts may be mitigated by planting seedlings. In compliance with SB 1334, Placer County has adopted guidelines for the evaluation and mitigation of impacts to oak woodlands, as discussed below.

2.2.6.2 Oak Woodland Management Plan

Placer County has prepared a draft Oak Woodland Management Plan which establishes policy for oak woodland habitats throughout the County. The plan identifies the extent and types of oak woodland habitats in the County, the importance of oak woodland habitats to wildlife, and the economic importance of woodlands. Placer County is currently developing an implementation program for the Oak Woodland Management Plan. This document will establish goals and policies for oak woodland resource conservation. Ultimately the Oak Woodland Management Plan will guide oak woodland conservation and mitigation of impacts to oak woodland communities.

In order to assess and mitigate impacts to oak woodlands for projects considered before the Oak Woodland Management Plan implementation program is adopted, the County has issued Draft Guidelines for Evaluating Development Impacts on Oak Woodlands. These guidelines define the oak woodlands and significant trees to which the guidelines apply. The guidelines also establish methodologies for inventorying oak woodlands and assessing impacts to them, and identify mitigation measures required to offset impacts to oak woodlands.

2.3 LOCAL REQUIREMENTS

2.3.1 Placer County General Plan

The Natural Resources Element of the Placer County General Plan establishes goals, objectives and policies regarding water resources (including wetlands and riparian areas), fish and wildlife habitat, and vegetation. The goals listed below are applicable to the biological resources found at the project site. Placer County General Plan policies require the County to identify and protect significant ecological resources and habitat, including wetland areas, stream environment zones, habitat for special-status plants and animals, and large areas of natural habitat.

- Goal 6.A To protect and enhance the natural qualities of Placer County's streams, creeks and groundwater.
- Goal 6.B To protect wetland communities and related riparian areas throughout Placer County as valuable resources.
- Goal 6.C To protect, restore, and enhance habitats that support fish and wildlife species so as to maintain populations at viable levels.
- Goal 6.D To preserve and protect the valuable vegetation resources of Placer County.
- Goal 6.E To preserve and enhance open space lands to maintain the natural resources of the County.

2.3.2 Horseshoe Bar/Penryn Community Plan

The Horseshoe Bar/Penryn Community Plan provides 19 General Community Goals which are applicable to the entire Plan area. The General Community Goals relevant to the analysis of impacts to biological resources include:

- Ensure a balanced environment where physical development can occur with minimal adverse effect on the natural resources of the area.
- Conserve and protect, as valuable assets of the community and the county, the natural and cultural resources, the natural environment, and open space of the area.
- Protect the community against excessive storm-water runoff, flooding, air and water pollution, erosion and wildland fires, while protecting the natural environment including the Folsom Lake watershed and sensitive riparian zones along Miners Ravine, Secret Ravine, Mormon Ravine, Antelope Creek and related tributaries.

In addition, the following goals of the Horseshoe Bar/Penryn Community Plan Natural Resources Management element pertain to biological resources that are found at the project site and this chapter's analysis of the potential impacts to those resources:

- Goal V.B.4.a.1: Preserve outstanding areas of native vegetation and trees, natural topographic features, wildlife habitats and corridors, and riparian corridors.
- Goal V.B.4.a.2: Conserve significant grassland and wooded areas as essential economic, natural, and aesthetic resources.
- Goal V.B.4.a.3: Protect, restore, and enhance threatened and endangered species and the habitat which supports those species.
- Goal V.B.5.a.1: Conserve the quality of habitats which support fish and wildlife species so as to maintain populations at sustainable levels.
- Goal V.B.5.a.2: Protect, restore, and enhance habitats for native animals, and protect threatened, endangered, and special-status species.

2.3.3 Placer County Tree Preservation Ordinance

Placer County has enacted a Tree Preservation Ordinance (Chapter 12.16 of the Placer County Code) that requires County approval and mitigation for removal of landmark or preserved trees, groves of native trees, native tree corridors, and significant stands of native tree habitats, including trees within riparian areas. The ordinance defines an impacted tree as one that is identified for removal, and/or any tree for which ground disturbance would occur within its dripline. As specified in County Code Section 12.16.080, subsections A, B, and C, mitigation for impacts may be provided by planting replacement trees, implementing a revegetation plan including propagation of native trees from seed, or payment into the County's Tree Preservation Fund (if it is determined that the site is incapable of supporting adequate onsite replacement or propagation of trees). The Tree Preservation Ordinance requires that mitigation for loss of oak trees be achieved through one or a combination of the following measures:

- Submit payment of fees for oak woodland conservation at a 2:1 ratio, consistent with Section 12.16.080(C) of the Placer County Code. These fees shall be calculated based upon the current market value for similar oak woodland acreage preservation and an endowment to maintain the land in perpetuity.
- Purchase offsite conservation easements at a location approved by Placer County to mitigate the loss of oak woodlands at a 2:1 ratio.
- Provide for a combination of payment to the Tree Preservation Fund and creation of an offsite Oak Preservation Easement.
- Plant and maintain an appropriate number of trees in restoration of an approved former oak woodland (tree planting is limited to half the mitigation requirement).

2.4 JURISDICTIONAL WATERS

2.4.1 Federal Requirements

Any person, firm, or agency planning to alter or work in “waters of the U.S.,” including the discharge of dredged or fill material, must first obtain authorization from the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA; 33 USC 1344). Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act of 1899 prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from USACE (33 USC 403).

Waters of the U.S. are defined as: all waters used in interstate or foreign commerce; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, streams, mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, where the use, degradation, or destruction of which could affect interstate commerce; impoundments of these waters; tributaries of these waters; or wetlands adjacent to these waters (33 CFR Part 328). With non-tidal waters, in the absence of adjacent wetlands, the extent of USACE jurisdiction extends to the OHWM – the line on the shore established by fluctuations of water and indicated by a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, or the presence of litter and debris. Wetlands are defined in 33 CFR Part 328 as:

those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Federal and State regulations pertaining to waters of the U.S., including wetlands, are discussed below.

Clean Water Act (33 U.S.C. 1251-1376). The CWA provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the U.S. must obtain a state certification that the discharge

complies with other provisions of CWA. The Regional Water Quality Control Board (RWQCB) administers the certification program in California, and may require State Water Quality Certification before other permits are issued.

Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the U.S.

Section 404 establishes a permit program administered by USACE regulating the discharge of dredged or fill material into waters of the U.S. (including wetlands). Implementing regulations by USACE are found at 33 CFR Parts 320-332. The Section 404 (b)(1) Guidelines were developed by the USEPA in conjunction with USACE (40 CFR Part 230), allowing the discharge of dredged or fill material for non-water dependent uses into special aquatic sites only if there is no practicable alternative that would have less adverse impacts.

2.4.2 State Requirements

2.4.2.1 Porter-Cologne Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 et seq.) is California's statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the State Water Resources Control Board (SWRCB) and RWQCBs under the CWA to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, NPDES permits, Section 401 water quality certifications, or other approvals.

2.4.2.2 California Fish and Game Code Section 1602 – Lake and Streambed Alteration Program

Diversions or obstructions of the natural flow of, or substantial changes or use of material from the bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by CDFW, pursuant to Section 1602 of the California Fish and Game Code. The CDFW requires notification prior to commencement of any such activities, and a Streambed Alteration Agreement (SAA) pursuant to Fish and Game Code Sections 1601-1603, if the activity may substantially adversely affect an existing fish and wildlife resource.

3.0 METHODS

Sensitive biological resources are defined as those biological resources protected by the regulations summarized in Chapter 2.0. The methods used in preparation of this BRE to evaluate potential impacts to sensitive biological resources are presented in the following sections. The

evaluations involved database searches, a review of published literature and existing documentation regarding biological resources on the project site, and biological surveys.

North Fork Associates prepared a BRE dated September 15, 2006 (North Fork Associates 2006) for the previously proposed multi-family residential development in support of the Draft and Final EIR (North Fork Associates 2011, 2012). Due to the time lapse and site changes that have occurred since 2006, current biological surveys as well as preparation of an updated BRE was warranted. HELIX incorporated information from the North Fork Associates report into this BRE where relevant.

3.1 SPECIAL-STATUS SPECIES EVALUATION

For the purposes of this report, special-status species are those that fall into one or more of the following categories:

- Listed as endangered or threatened under the Federal Endangered Species Act (including candidate species and species proposed for listing),
- Listed as endangered or threatened under the California Endangered Species Act (including candidate species and species proposed for listing),
- Designated a Species of Special Concern by the California Department of Fish and Wildlife;
- Designated as California Rare Plant Rank 1, 2, 3, or 4.

Current lists of special-status species known to occur and/or having the potential to occur in the project region were reviewed to determine the potential for these species to occupy the project site or otherwise be affected by site development. In addition, special-status species identified in the Draft EIR for the Orchard at Penryn Project (North Fork Associates 2011) as having the potential to occur in the project site were also evaluated. The following lists were reviewed for special-status species known to occur or having the potential to occur in the “Rocklin, California” U.S. Geological Survey 7.5-minute quadrangle and are included in Appendix A:

- USFWS list of federally protected species (USFWS 2014)
- CNPS online inventory of rare and endangered plants (CNPS 2014)
- California Natural Diversity Database (CNDDDB) list of special-status species (CDFW 2014)

Appendix B presents the general habitat requirements, status, the presence or absence of suitable habitat; and rationale for each species evaluated. Species for which no suitable habitat is present on the project site were excluded from further evaluation. Species for which suitable habitat is present in the project site are evaluated in detail in Chapter 5.

Stephen Stringer, M.S., HELIX Senior Biologist/Botanist, conducted a biological reconnaissance survey of the project site to determine the existing conditions, characterize the habitat types on the project site, and determine the presence of habitats with the potential to support special-status species on April 3, 2014. Plant communities/habitats were determined by pedestrian reconnaissance while noting changes in plant communities based on the composition of dominant plant species.

3.2 RARE PLANT SURVEYS

Focused rare plant surveys were conducted by Mr. Stringer on April 28, 2014 and by Mr. Stringer and Catherine Silvester, HELIX botanist, on June 11, 2014. Transects were walked within the project site to obtain 100 percent visual coverage. All plant species encountered during the surveys were identified to the taxonomic level necessary to determine whether or not they were special-status species. A list of plant species observed is included in Appendix C. The *Rare Plant Survey Letter Report* prepared by HELIX in June 2014 to document the methods and results of the rare plant surveys is included as Appendix D. The results of the rare plant surveys are also incorporated into this BRE.

3.3 JURISDICTIONAL WATERS

HELIX biologists/wetlands scientists prepared a map of potential waters of the U.S. on the Orchard at Penryn Project Site and submitted it to the USACE in May 2013 along with a request for a Preliminary Jurisdictional Determination (PJD). The USACE issued a PJD for the Orchard at Penryn Project on July 12, 2013. The results of the PJD are summarized in Section 5.3.4, *Jurisdictional Waters*, and the map of potential waters of the U.S. is included as Appendix E.

4.0 RESULTS: ENVIRONMENTAL SETTING

4.1 EXISTING LAND USE

The project site is located in a rural residential setting in the western portion of the Horseshoe Bar/Penryn Community Plan area, which covers approximately 25 square miles (16,620 acres) in the Sierra Nevada foothills. The area is comprised of a mixture of natural habitats and disturbed areas, at elevations ranging between 200 and 1,200 feet above mean sea level (North Fork Associates 2011). The Community Plan notes that through the 1980s and 1990s, the predominant land use pattern in the Community Plan area changed from rural-agricultural to residential developments on small acreages. Ongoing development has decreased the extent of natural habitats throughout the Plan area and the region (North Fork Associates 2011).

Adjacent land uses include rural residential, roads, an undeveloped parcel, and a church with a private school. The project site itself is undeveloped and is comprised primarily of oak woodland and annual grassland communities with smaller amounts of riparian woodland. The site exhibited evidence of occasional pedestrian use at the time of the biological reconnaissance survey conducted by HELIX. At the time of the survey conducted by HELIX the vegetation was maintained along the northern boundary of the site where the project site abuts residences. Otherwise the project site appeared relatively undisturbed.

4.2 TOPOGRAPHY

The site is situated in the Sierra Nevada foothills. The elevation of the project site ranges between 460 and 500 feet above mean sea level. The topography of the site can be described as mainly flat with a gentle slope from north to south.

4.3 GEOLOGY AND SOILS

The geology map for the area shows that soils are derived from the following Mesozoic granitic rocks: tonalite and diorite.

Three soil units have been mapped on the project site:

- Andregg coarse sandy loam, 2 to 9 percent slopes,
- Andregg coarse sandy loam, rocky, 2 to 15 percent slopes, and
- Xerorthents, placer areas.

Andregg soils are coarse-loamy Ultic Haploxerolls, which are Mollisols formed in a Mediterranean climate and characterized by little subsoil development. Andregg soils are derived from weathered granodiorite and bedrock is typically located 20 to 40 inches below the surface. The A horizon extends to about 15 inches, and the BA horizon to about 24 inches. Hues range from 10YR to 2.5YR; values between 5 and 2; and chromas between 3 and 2, moist. Andregg soils are well drained and have moderately rapid permeability.

Xerorthents consist of stony, cobbly, and gravelly material commonly adjacent to streams that have been placer mined. Although the soils are usually coarse, depressions and swales where fine soil may accumulate often support wetlands.

4.4 HYDROLOGY

The project site is located within the Secret Ravine watershed unit. The project site contains two drainages that carry water from the north end of the site toward the south and offsite into Secret Ravine, which is located approximately 0.8 miles to the south. The project site's runoff eventually ends up in the Sacramento River.

4.5 BIOLOGICAL COMMUNITIES

Biological communities in the project site include oak woodland, annual grassland, riparian, seasonal wetland, wetland swale, and intermittent stream. Two drainage systems comprised of one intermittent stream and one wetland swale flow north to south through the project site. The intermittent stream occurs in the central portion of the project site and the wetland swale occurs along the site's eastern edge. Seasonal wetlands and riparian habitat occur along both drainage systems. Oak woodland typically borders the riparian habitat at slightly higher elevations and transitions to annual grassland in the driest areas of the site. Figure 4 is a map of the biological habitats in the project site and Appendix F contains photographs of the project site.

4.5.1 Terrestrial Habitats

Oak Woodland

A total of 6.59 acres of oak woodland habitat occurs within the project site. Dominant tree species within the oak woodland include interior live oak (*Quercus wislizenii*), valley oak

(*Quercus lobata*), blue oak (*Quercus douglasii*), and foothill pine (*Pinus sabiniana*). Native shrubs and vines are present within the understory including poison oak (*Toxicodendron diversilobum*), coyote bush (*Baccharis pilularis*), and Dutchman's pipe (*Aristolochia californica*). Herbaceous species are relatively sparse in areas where the canopy is dense but are more abundant along the edges of the oak woodland where it intergrades with annual grassland. Herbaceous species within the oak woodland are similar to the herbaceous species found in the annual grassland areas.

The oak woodland habitat within the project site is expected to support a wide diversity of wildlife due to the availability of important habitat features such as nesting sites, escape and thermal cover, and food. Oak woodland communities, such as those located on site, are important for animal cover, providing roosting and nesting sites for birds, as well as shelter for numerous mammals. Woodlands also support numerous insects and small mammals that are important food sources for other animals in the area. Animal species that have been observed on the project site primarily in and around woodland areas include: California quail (*Callipepla californica*), western scrub jay (*Aphelocoma californica*), northern flicker (*Colaptes auratus*), lesser goldfinch (*Carduelis psaltria*), oak titmouse (*Baeolophus inornatus*), acorn woodpecker (*Melanerpes formicivorus*), California towhee (*Melospiza crissalis*), ash-throated flycatcher (*Myiarchus cinerascens*), spotted towhee (*Pipilo maculatus*), and western gray squirrel (*Sciurus griseus*). Two juvenile great horned owls (*Bubo virginianus*) were observed in the project site during surveys conducted by North Fork Associates in 2005. No active owl nests have been observed on the project site and the owls were not observed again on the project site. Therefore, it is expected that the owls may have been fledged from nests located on or adjacent to the project site. A list of species observed in the project site by North Fork Associates and HELIX is provided in Appendix C.

Annual Grassland

A total of 6.02 acres of annual grassland habitat is present in the project site, primarily in the driest portions of the site furthest from the intermittent stream and wetland swale. The annual grassland is comprised largely of non-native weedy species such as ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), medusa head (*Taeniatherum caput-medusae*), wild oat (*Avena fatua*), yellow star-thistle (*Centaurea solstitialis*), rose clover (*Trifolium hirtum*), and filaree (*Erodium* spp.). The annual grassland provides foraging habitat for bird and mammal species occupying the oak woodland and riparian areas on the site.

Riparian

A total of 2.34 acres of riparian habitat is present on the project site, located primarily along the edges of the intermittent stream and wetland swale. The riparian areas serve a variety of important biological functions relative to the intermittent stream and wetland swale including providing important cover and refugia habitat for aquatic vertebrate and invertebrate species occupying the aquatic habitats, providing cover in the form of overhanging vegetation to reduce summertime water temperatures, and providing input of organic matter into the aquatic habitats in the form of detritus. The dominant trees within the riparian habitat include valley oak,

Fremont's cottonwood (*Populus fremontii*), and willow (*Salix* spp.). Himalayan blackberry (*Rubus armeniacus*) is also prevalent within this habitat.

4.5.2 Aquatic Habitats

Seasonal Wetland

A total of 0.255 acre of seasonal wetland occurs on the project site. The seasonal wetland occurs in four separate locations adjacent to the intermittent stream in the central portion of the project site as well as in one location in the northeast corner of the project site adjacent to the wetland swale. The seasonal wetland along the intermittent stream occurs in areas outside of the stream channel that are saturated or shallowly inundated (>6 inches in depth) during the growing season. In these areas the seasonal wetland is primarily vegetated with sedges (*Cyperus* spp.) and rushes (*Juncus* spp.). Along the wetland swale, the seasonal wetland ponds water to a depth of approximately 12 to 18 inches and is vegetated with cattail (*Typha* sp.). The seasonal wetland provides breeding habitat for common amphibian species such as Pacific chorus frog (*Pseudacris regilla*) and habitat for aquatic invertebrates.

Wetland Swale

A total of 0.196 acre of wetland swale occurs on the project site, primarily along the eastern side. Wetland swale also occurs at the headwaters of the intermittent stream in the central portion of the project site. The wetland swale is differentiated from the intermittent stream by a lack of a defined bed and bank. The wetland swales in the project site occur in low points in the topography that carry stormwater and remain saturated for a significant portion of the growing season but likely do not hold water for very long after storm events. Much of the wetland swale is sparsely vegetated due to the dense canopy cover. Vegetation within the wetland swale consists primarily of herbaceous species typical of disturbed areas.

Intermittent Stream

Approximately 800 linear feet of intermittent stream totaling 0.08 acre occurs in the central portion of the project site consisting of a main channel and a small tributary. The main channel of the intermittent stream ranges from 2 to 6 feet in width and 2 to 12 inches in depth with an average width of approximately 4 feet and an average depth of approximately 6 inches. The main channel of the intermittent stream appears to carry water nearly year-around, likely enhanced through much of the summer by urban runoff (irrigation runoff from upstream residences etc.). The tributary ranges from 1 to 4 feet in width with an average width of approximately 2 feet and an average depth of approximately 6 inches. The tributary does not receive urban runoff and appears to carry water only during the winter and early spring. The bed of the main channel of the stream and its tributary are comprised primarily of sand and silts. In-stream aquatic vegetation such as water-plantain (*Alisma* sp.) and water cress (*Rorripa nasturtium aquaticum*) are present in the main channel and in the lower portions of the tributary at the confluence with the main channel. The upper portions of the tributary largely lack in-stream aquatic vegetation due to their shorter and lower frequency of inundation. The banks of the intermittent stream as well as its tributary are mostly vegetated with Himalayan blackberry and herbaceous species

typical of the annual grassland habitat. Mosquito fish (*Gambusia affinis*) and aquatic invertebrates were observed in the main channel of the intermittent stream and Pacific chorus frog juveniles were observed along the banks of the main stream channel.

5.0 RESULTS: BIOLOGICAL RESOURCES, DISCUSSION OF IMPACTS AND MITIGATION

5.1 PLACER COUNTY GENERAL PLAN POLICIES

An analysis of the project's consistency with General Plan policies related to biological resource protection was conducted in support of the DEIR (North Fork Associates 2011) prepared for the previously proposed multi-family residential development on the project site. The DEIR found that the project would conflict with Placer County's requirements for stream setbacks, the County and Corps' no net loss wetland policy, and the County's Tree Preservation Ordinance without implementation of mitigation measures. However, the DEIR included mitigation measures that would ensure that the proposed project would be in compliance with the General Plan policies and those mitigation measures are also included in this BRE. Therefore, it is assumed that the current single-family residential project, which has a similar footprint to the previously proposed multi-family residential project, would also be in compliance with the General Plan policies with implementation of the proposed mitigation measures for wetlands, waters of the U.S. and tree resources.

5.2 TERRESTRIAL BIOLOGICAL COMMUNITIES

Based on current design, project activities on the Orchard at Penryn Project site will result in impacts to all three terrestrial biological communities present: oak woodland, annual grassland, and riparian. Oak woodland and riparian habitats are considered sensitive habitats protected by state and/or local ordinance and are discussed below. The annual grassland on-site is dominated by non-native species and is not considered a sensitive habitat. The annual grassland habitat in the project site is not afforded specific protection by any federal, state, or local laws or ordinances and mitigation is not required for impacts to this habitat. Therefore, potential impacts to annual grassland are not discussed further in this document.

5.2.1 Oak Woodland

5.2.1.1 Potential Project Impacts

As discussed above, the project site supports 6.59 acres of oak woodland, of which 5.65 acres would be directly impacted by the proposed project. Site remediation to remove contaminated soil would occur in approximately one-third of the oak woodland habitat while grading and project construction would affect approximately half of the oak woodland. The project would avoid direct impacts to 0.94 acre of woodland habitat onsite. The retained oak woodland habitat would be surrounded by medium- and low-density development and would have substantially decreased habitat value, which represents an indirect impact to this habitat.

5.2.1.2 Avoidance and Minimization Measures

The project applicant shall implement one or a combination of the following measures to compensate for impacts to oak woodland habitat. Based on the proposed site plan the project would impact 5.65 acres of oak woodland habitat; however the final determination regarding the amount of oak woodland to be impacted and therefore mitigated will be based on impacts shown on the Improvement Plans. Prior to approval of Improvement Plans the applicant shall:

- A. Submit payment of fees for oak woodland conservation at a 2:1 ratio, consistent with Section 12.16.080(C) of the Placer County Code. These fees shall be calculated based upon the current market value for similar oak woodland acreage preservation and an endowment to maintain the land in perpetuity; and/or
- B. Purchase offsite conservation easements at a location approved by Placer County to mitigate the loss of oak woodlands at a 2:1 ratio; and/or
- C. Provide for a combination of payment to the Tree Preservation Fund and creation of an offsite Oak Preservation Easement; and/or
- D. Plant and maintain an appropriate number of trees in restoration of a former oak woodland (tree planting is limited to half the mitigation requirement and the location of any tree planting must be approved by Placer County).

5.2.2 Riparian

5.2.2.1 Potential Project Impacts

Soil excavation activities associated with remediation of contaminated soils would impact 2.04 acres of the 2.34 acres of riparian habitat onsite. Remediation is necessary along the entire length of the eastern drainage swale. Grading and construction in the riparian habitat would impact a variety of common wildlife species that use this habitat for cover, foraging and nesting opportunities. Wildlife that may be affected by the loss of riparian habitat includes songbirds, rodents, reptiles, and amphibians. The riparian habitat onsite is not known to support any special-status species. Himalayan blackberry, a non-native invasive species, is a common species in the onsite riparian habitat.

The Community Plan and General Plan prioritize protection of areas of native vegetation that have significant value as wildlife habitat. The value of the riparian habitat onsite is decreased by the presence of non-native species, its proximity to Penryn Road, the disturbed nature of parcels adjacent to the project site, and the presence of contaminated soil onsite.

Direct impacts to approximately 0.30 acre of riparian habitat associated with the drainage swale near the middle of the site would be avoided. However the habitat characteristics could change over time as an indirect effect of the project. The proposed project includes alteration of the onsite drainage pattern, which would reduce the amount of water this habitat area receives. Thus, the project would result in both direct and indirect impacts to all 2.34 acres of riparian habitat onsite.

5.2.2.2 Avoidance and Minimization Measures

The project applicant shall retain 0.30 acre of riparian habitat on the project site. The project applicant shall obtain a Streambed Alteration Agreement from CDFW to authorize impacts to the intermittent stream, wetland swale, and associated riparian habitat on the project site. The project applicant shall adhere to all conditions and requirements of the Streambed Alteration Agreement. Once acquired, the Streambed Alteration Agreement shall be submitted to the Placer County DRC prior to approval of Improvement Plans, issuance of grading permits, and/or any clearing, grading, or excavation work on the project site. Avoidance and minimization measures in the Streambed Alteration Agreement may include, but are not limited to, replacement of impacted waters and riparian habitat at a minimum 1:1 ratio and adherence to best management practices to reduce water quality impacts as well as impacts to sensitive habitats to be retained on-site.

5.2.3 Tree Resources

5.2.3.1 Potential Project Impacts

Based on a tree resources assessment prepared by North Fork Associates (North Fork Associates 2006), the project site supports 316 native trees. The Tree Preservation Ordinance requires mitigation for impacts to large oak trees, which are defined as single-trunk trees greater than 24 inches diameter-at-breast-height (dbh) and multi-trunk trees with an aggregate total greater than 72 inches dbh. Table 1 identifies the two large oak trees present onsite. Each of these trees would be impacted by the proposed development. The Tree Preservation Ordinance requires mitigation for large trees on an inch-for-inch basis.

Table 1 LARGE OAK TREES ON THE PROJECT SITE		
TREE TAG NUMBER	DIAMETER-AT-BREAST-HEIGHT (inches)	TRUNK TYPE
20	32.5	Single
259	91.7	Multi (11 individual trunks)
TOTAL INCHES	124.2	

5.2.3.2 Avoidance and Minimization Measures

In addition to mitigation measures for loss of oak woodland identified in Chapter 5.2.1.2, the project applicant shall submit a tree removal exhibit to the Placer County Planning Services Division for review and approval prior to issuance of a grading permit, approval of the Improvement Plans, and/or any development activity onsite, including preliminary clearing or grading (in accordance with Section 36.400(B) of the County's mitigation program). The project applicant shall mitigate impacts to large oak trees on an inch-per-inch basis (1:1 ratio). The project applicant shall plant replacement trees onsite or in an offsite location providing

restoration of an approved former oak woodland, and/or shall contribute \$100 for each diameter inch at breast height removed or impacted to the Placer County Tree Preservation Fund. The project must mitigate for a total of 124.2 tree diameter inches. Tree replacement and conservation mitigation fees shall be paid prior to the issuance of grading permits by Placer County. Any onsite replacement tree planting shall be included on the Improvement Plans for the proposed project. County approval of any offsite replacement tree planting shall also be obtained prior to issuance of grading permits by Placer County.

5.3 SPECIAL-STATUS SPECIES

Seven special-status species have the potential to occur in the project site or otherwise be impacted. Those species are presented in **Table 2** and discussed in detail in the following sections.

Table 2 POTENTIALLY OCCURRING SPECIAL-STATUS SPECIES				
SCIENTIFIC NAME COMMON NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT NOTES
INVERTEBRATES				
<i>Desmocerus californicus dimorphus</i>	Valley elderberry longhorn beetle	Threatened	None	The elderberry shrub (<i>Sambucus</i> sp.) in the project site provides low quality habitat.
BIRDS				
<i>Accipiter cooperii</i>	Cooper's hawk	None	Species of special concern	Potential nesting habitat occurs in the oak woodland in the project site.
<i>Elanus leucurus</i>	White-tailed kite	None	Fully Protected	Potential nesting habitat occurs in the oak woodland in the project site.
PLANTS				
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	Big-scale Balsamroot	None	None; 1B.2	Potential habitat occurs in the oak woodland and annual grassland
<i>Clarkia biloba</i> ssp. <i>brandegeae</i>	Brandegee's clarkia	None	None; 4.2	Potential habitat occurs in the oak woodland and annual grassland

**Table 2 (cont.)
POTENTIALLY OCCURRING SPECIAL-STATUS SPECIES**

SCIENTIFIC NAME COMMON NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	HABITAT NOTES
PLANTS (cont.)				
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	None	None; 1B.2	Potential habitat occurs in the intermittent stream and seasonal wetlands
<i>Viburnum ellipticum</i>	Oval-leaved viburnum	None	None; 2B.3	Marginal habitat occurs in the oak woodland

California Rare Plant Rank (accessible online at <<http://cnps.org/cnps/rareplants/ranking.php>>)

1B = Plants Rare, Threatened, or Endangered in California and Elsewhere

2B = Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

4 = Plants of Limited Distribution - A Watch List.

0.2-Moderately threatened in California (20-80 percent occurrences threatened / moderate degree and immediacy of threat)

0.3-Not very threatened in California (<20 percent of occurrences threatened / low degree and immediacy of threat or no current threats known)

5.3.1 Special-Status Invertebrates

5.3.1.1 Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*)

Federal status – threatened, proposed for delisting

State status – none

Other – none

Valley elderberry longhorn beetle (VELB) was federally listed as threatened and Critical Habitat was designated on August 8, 1980 (45 FR 52803). The USFWS published a 90-day finding on a petition to delist the beetle on August 9, 2011 (76 FR 51929), and the proposed rule was published on October 2, 2012 (77 FR 60237). The 60 day comment period initially ended on December 3, 2012, but was reopened for additional comments until February 22, 2013 (78 FR 4812). The proposed rule, if made final, would remove the beetle from the List of Endangered and Threatened Wildlife. As of the time of preparation of this BRE in May 2014, a final rule had not yet been promulgated.

VELB is one of two subspecies of *Desmocerus californicus*. The other subspecies, the California elderberry longhorn beetle (*Desmocerus californicus californicus*), is found primarily in coastal areas from Mendocino County to San Diego County and in the southern Sierra Nevada range. The range of the VELB extends throughout the Central Valley and associated foothills from about the 3,000-foot elevation contour on the east and the watershed of the Central Valley on the west. All or portions of 31 counties are included: Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Madera, Mariposa, Merced, Napa,

Nevada, Placer, Sacramento, San Benito, San Joaquin, San Luis Obispo, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, and Yuba.

The VELB is dependent on its host plant, elderberry (*Sambucus* sp.), for all stages of its life. Adults feed on the elderberry leaves and mate within the elderberry canopy. Females deposit eggs on or adjacent to the host elderberry. The larvae bore into the wood of the host plant where they feed on the pith of the plant for one to two years. When a larva is ready to pupate, it chews an exit hole to the outside of the stem and then plugs it with frass. The larva then retreats into stem and constructs a pupal chamber from wood and frass. The larvae metamorphose between December and April; the pupal stage lasts about a month. The adult remains in the chamber for several weeks after metamorphosis, and then emerges from the chamber through the exit hole. Most records for adults occur from late April to mid-May (USFWS 2007), although April 15 to June 15 is considered to be the “flight season” for the species. This is when VELB is in the adult stage and present within the elderberry shrub canopy. The active beetles may be found in the immediate vicinity of the shrubs.

Studies conducted in the American River basin demonstrate that VELB occurs most frequently and is most abundant in significant riparian zones that are well developed. Within significant riparian zones, VELB primarily occurs within the riparian corridor but can occur infrequently in non-riparian scrub habitats adjacent to the riparian corridor. Along the American River, the beetle tends to occupy woodlands dominated by exotic trees (black locust; *Robinia pseudoacacia*) and black walnut (*Juglans californica*), and in mixed riparian forests. The beetle less commonly occupies annual grasslands and live oak woodlands. The study also showed that the beetle preferentially occupies elderberry shrubs in wooded areas with a relatively dense canopy cover over elderberry shrubs located in open and sparsely wooded areas. Of the occupied shrubs found in wooded areas, approximately 50 percent were under a canopy cover of 25 to 50 percent, while 25 percent were under canopies with 50 to 75 percent cover and 25 percent were under canopies with 75 to 100 percent cover. The study also demonstrated that the VELB appears to be capable of limited dispersal and prefers to remain within contiguous patches of high quality riparian habitat. Clusters of local aggregations of VELB along the American River Parkway were approximately 600 to 800 meters in diameter (Talley 2005 in Talley et al. 2006).

VELB exit holes are usually found on stems or branches of 1 inch in diameter or greater (Barr 1991, Collinge et al. 2001 in Talley et al. 2006) and are found infrequently in smaller stems (1.3-2 cm) (Halstead and Oldham 1990, Talley 2005 in Talley et al. 2006). In the northern portion of the VELB’s range, exit holes are most frequently observed in stems and branches 5 to 10 cm in diameter (Barr 1991, Collinge et al. 2001 in Talley et al. 2006). In studies conducted in the American River basin, VELB exit holes occurred most frequently in stem or branch diameter classes of 2 to 7 cm (47 percent) and 7 to 12 cm (36 percent) (Talley et al. 2006). Elderberry stems and branches 12 to 20 cm in diameter and greater than 20 cm in diameter hosted fewer holes (13 and 4 percent, respectively), which may be due to less availability than smaller branches (Talley et al. 2006) or to the drying and loss of pith, which is common in older stems (Talley et al. 2006). No VELB exit holes were detected in any elderberry stems greater than or equal to 20 cm in diameter (N=9) in non-riparian habitat (Talley et al. 2006).

Survey History

HELIX senior biologist, Stephen Stringer M.S., conducted presence/absence surveys for VELB and/or its host plant (elderberry shrub) on the project site on April 3, 2014, consistent with the *Conservation Guidelines for the Valley Elderberry Longhorn Beetle* (USFWS 1999). One elderberry shrub with one or more stems measuring one inch or greater in diameter at ground level was documented within the project site, located near the southern boundary of the site (see Figure 4). Stems one inch or greater in diameter at ground level were tallied by diameter size class and thoroughly searched for beetle exit holes (external evidence of beetle presence). The shrub contained 2 stems greater than or equal to one inch in diameter and less than or equal to three inches in diameter. No larger stems were present on the shrub. No beetles or exit holes were observed in the shrub.

The CNDDDB contains three reported occurrences of VELB on the Rocklin quad. Evidence of VELB was observed within clumps of elderberry shrubs in three separate locations along Secret Ravine and Miners Ravine in 1991. Two of the reported occurrences are approximately 3.5 miles south of the project site and the other reported occurrence is approximately 5 miles south of the project site.

Habitat Suitability

One relatively small solitary elderberry shrub is present along the southern edge of the project site. Although the shrub is located within riparian habitat, there are no other elderberry shrubs in the vicinity on or off the project site. Therefore, the lone elderberry shrub is considered poor habitat for the VELB. No VELB or species indicators (e.g., exit holes or frass) were observed on the shrub.

Potential Project Impacts

The lone elderberry shrub on the project site is not believed to be occupied by VELB and represents poor habitat for the species due to its small size and a lack of other elderberry shrubs or reported occurrences of VELB in the immediate vicinity. No impacts to VELB are anticipated to occur as a result of the proposed project.

Avoidance and Minimization Measures

Avoidance and minimization measures are not warranted. However, concurrence should be sought from the USFWS that the lone elderberry shrub on the project site does not represent potential habitat for the VELB prior to commencement of any construction activities within 100 feet of the shrub or activities that could otherwise indirectly impact the shrub such as hydrologic alteration or removal of riparian habitat in the vicinity of the shrub.

5.3.2 Special-Status Birds

5.3.2.1 White-tailed kite (*Elanus leucurus*)

Federal status – none

State status – fully protected

Other – none

White-tailed kite is a common to uncommon, yearlong resident in coastal and valley lowlands and is rarely found away from agricultural areas. However, it does inhabit herbaceous and open stages of most habitats, mostly in cismontane California. The main prey of white-tailed kite is voles and other small, diurnal mammals, but it occasionally preys on birds, insects, reptiles, and amphibians. White-tailed kite forages in undisturbed, open grasslands, meadows, farmlands and emergent wetlands. Nests are made of loosely piled sticks and twigs and lined with grass, straw, or rootlets and placed near the top of a dense oak, willow, or other tree stand; usually 6 to 20 meters (20 to 100 feet) above ground. Nests are located near open foraging areas in lowland grasslands, agricultural areas, wetlands, oak-woodland and savannah habitats, and riparian areas associated with open areas.

Survey History

White-tailed kite have not been observed on the project site and no raptor nests have been observed on the site. There is one reported occurrence of white-tailed kite on the Rocklin, California USGS quadrangle in the CNDDDB. Nesting white-tailed kite were documented within oak woodland habitat approximately 2 miles northwest of the project site in 2003.

Habitat Suitability

The oak woodland habitat in the project site provides potential nesting habitat for white-tailed kite and the annual grassland provides potential foraging habitat.

Potential Project Impacts

If white-tailed kite were to nest in the project site prior to the commencement of project activities, the project could result in disturbance of nesting individuals (forced fledging or nest abandonment).

Avoidance and Minimization Measures

If site remediation, grading, or construction is to commence during the raptor nesting period (generally March 1 through August 31), the project applicant shall retain a qualified biologist to conduct pre-construction nesting raptor surveys within 30 days prior to the commencement of site preparation activities. The surveys shall confirm the presence or absence of nesting raptors. If an active nest(s) is located, a qualified biologist in consultation with the California Department of Fish and Wildlife shall recommend a buffer area around the nest(s). The buffer area shall be delineated with orange construction fencing and no site remediation, grading, or construction

shall take place within the buffer zone until the biologist has determined that all young have fledged and are capable of foraging independently.

5.3.2.2 Cooper's hawk (*Accipiter cooperi*)

Federal status – none

State status – Species of Special Concern

Other – none

This species typically nests and forages in broken woodland and habitat edges near open water or riparian vegetation. Cooper's hawk is seldom found in areas without dense tree stands or patchy woodland habitat.

Survey History

Cooper's hawk has not been observed on the project site and no raptor nests have been observed on the site. There are no reported occurrences in the CNDDDB of Cooper's hawk nesting on the Rocklin, California USGS quadrangle.

Habitat Suitability

The oak woodland habitat in the project site provides potential nesting habitat for Cooper's hawk and the annual grassland provides potential foraging habitat.

Potential Project Impacts

If Cooper's hawk was to nest in the project site prior to the commencement of project activities, the project could result in disturbance of nesting individuals (forced fledging or nest abandonment).

Avoidance and Minimization Measures

If site remediation, grading, or construction is to commence during the raptor nesting period (generally March 1 through August 31), the project applicant shall retain a qualified biologist to conduct pre-construction nesting raptor surveys within 30 days prior to the commencement of site preparation activities. The surveys shall confirm the presence or absence of nesting raptors. If an active nest(s) is located, a qualified biologist in consultation with the California Department of Fish and Wildlife shall recommend a buffer area around the nest(s). The buffer area shall be delineated with orange construction fencing and no site remediation, grading, or construction shall take place within the buffer zone until the biologist has determined that all young have fledged and are capable of foraging independently.

5.3.3 Special-Status Plants

5.3.3.1 Big-scale Balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*)

Federal status – none

State status – none

Other – CRPR 1B.2

Big-scale balsamroot is a perennial herb found in chaparral, cismontane woodland, and valley and foothill grassland, sometimes in serpentinite soil, from an elevation of 90 to 1,555 meters. This species blooms from March to June (CNPS 2014).

Habitat Suitability

The oak woodland and annual grassland on the project site provide potential habitat for this species.

Survey History

Big-scale balsamroot was not observed on the project site during rare plant surveys conducted by North Fork in 2007 in support of the DEIR (North Fork Associates 2011). Focused rare plant surveys of the project site were re-conducted by HELIX on April 28, 2014 and June 11, 2014 during the blooming season of this species. Big-scale balsamroot was also not observed during surveys conducted by HELIX. There are no reported occurrences of big-scale balsamroot on the Rocklin, California USGS quadrangle in the CNDDDB.

Potential Project Impacts

Big-scale balsamroot is not expected to occur on the project site because it has not been observed on the site during focused botanical surveys conducted in 2007 and again in 2014. Therefore, no impacts to this species are anticipated as a result of the proposed project.

Avoidance and Minimization Measures

No further avoidance and minimization measures are necessary for big-scale balsamroot.

5.3.3.2 Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeae*)

Federal status – none

State status – none

Other – CRPR 4.2

Brandegee's clarkia is an annual herb found in chaparral, cismontane woodland, and lower montane coniferous forest - often in roadcuts – from an elevation of 75 to 915 meters. This species blooms from May to July (CNPS 2014).

Habitat Suitability

The oak woodland on the project site provides potential habitat for this species.

Survey History

Brandegee's clarkia was not observed on the project site during rare plant surveys conducted by North Fork in 2007 in support of the DEIR (North Fork Associates 2011). Focused rare plant surveys of the project site were re-conducted by HELIX on June 11, 2014 during the blooming season of this species. Focused rare plant surveys were also conducted by HELIX on April 28, 2014, during which time this species would have been evident. Brandegee's clarkia was not observed on the project site during rare plant surveys conducted by HELIX.

There is one reported occurrence of Brandegee's clarkia on the Rocklin, California USGS quadrangle in the CNDDDB. The reported occurrence is from 1933 and the exact location is listed as "unknown."

Potential Project Impacts

Brandegee's clarkia is not expected to occur on the project site because it has not been observed on the site during focused botanical surveys conducted in 2007 and again in 2014. Therefore, no impacts to this species are anticipated as a result of the proposed project.

Avoidance and Minimization Measures

No further avoidance and minimization measures are necessary for Brandegee's clarkia.

5.3.3.3 Sanford's Arrowhead (*Sagittaria sanfordii*)

Federal status – none

State status – none

Other – CNPS List 1B.2

Sanford's arrowhead is a rhizomatous emergent (aquatic) herb that is found in shallow water within a variety of freshwater habitats, including standing or slow moving freshwater ponds, marshes, and ditches. The known range is within Butte, Del Norte, Fresno, Merced, Mariposa, Orange, Placer, Sacramento, Shasta, San Joaquin, Tehama, and Ventura counties at elevations ranging from 0 to 1,950 feet amsl. This species blooms from May to October (CNPS 2014).

Habitat Suitability

The seasonal wetlands and intermittent stream in the project site provide potential habitat for this species.

Survey History

Sanford's arrowhead was not observed on the project site during rare plant surveys conducted by North Fork in 2007 in support of the DEIR (North Fork Associates 2011). Focused rare plant surveys of the project site were re-conducted by HELIX on April 28, 2014 and June 11, 2014 during the blooming season of this species. Sanford's arrowhead was also not observed during surveys conducted by HELIX. There are no reported occurrences of Sanford's arrowhead on the Rocklin, California USGS quadrangle in the CNDDDB.

Potential Project Impacts

Sanford's arrowhead is not expected to occur on the project site because it has not been observed on the site during focused botanical surveys conducted in 2007 and again in 2014. Therefore, no impacts to this species are anticipated as a result of the proposed project.

Avoidance and Minimization Measures

No further avoidance and minimization measures are necessary for Sanford's arrowhead.

5.3.3.4 Oval-leaved Viburnum (*Viburnum ellipticum*)

Federal status – none

State status – none

Other – CNPS List 2B.3

Oval-leaved viburnum is a perennial deciduous shrub found in chaparral, cismontane woodland, and lower montane coniferous forest from an elevation of 215 to 1,400 meters. This species blooms from May to June (CNPS 2014).

Habitat Suitability

Marginal habitat for this species is present in the oak woodland in the project site.

Survey History

Oval-leaved viburnum was not observed on the project site during rare plant surveys conducted by North Fork in 2007 in support of the DEIR (North Fork Associates 2011). Focused rare plant surveys of the project site were re-conducted by HELIX on June 11, 2014 during the blooming season of this species. Focused rare plant surveys were also conducted by HELIX on April 28, 2014, during which time this species would have been evident. Oval-leaved viburnum was not observed during rare plant surveys conducted by HELIX.

There are no reported occurrences of oval-leaved viburnum on the Rocklin, California USGS quadrangle in the CNDDDB.

Potential Project Impacts

Oval-leaved viburnum is not expected to occur on the project site because it has not been observed on the site during focused botanical surveys conducted in 2007 and again in 2014. Therefore, no impacts to this species are anticipated as a result of the proposed project.

Avoidance and Minimization Measures

No further avoidance and minimization measures are necessary for oval-leaved viburnum.

5.3.4 Jurisdictional Waters

The proposed project will result in direct permanent impacts to 0.414 acre of Waters of the U.S. and indirect permanent impacts to 0.117 acre of Waters of the U.S. for a total of 0.531 acre of impacts.

Table 3			
IMPACTS TO THE WATERS OF THE U.S.			
	DIRECT PERMANENT IMPACTS (acre)	INDIRECT IMPACTS (acre)	TOTAL
Proposed Project	0.414	0.117	0.531

The direct permanently impacted waters of the U.S. are comprised of 0.036 acre of the intermittent stream that runs through the central portion of the project site, 0.177 acre of seasonal wetland, and 0.201 acre of wetland swale. The indirect impacts consist of 0.039 acre of the intermittent stream and 0.078 acre of the seasonal wetlands mapped on-site.

The project applicant intends to restore 0.117 acre of the central intermittent stream (indirect permanent impact), including 2.34 acres of riparian habitat. A portion of the central intermittent stream and surrounding natural habitat will remain undisturbed and/or restored to native habitat and preserved on site. The property owner intends to manage the area as natural habitat while maintaining to the extent feasible its hydrological functions and values, including water quality enhancement and wildlife utilization. Management activities will include trash removal, weeding, and general maintenance of the native habitats, culverts, detention basin and bio-swales.

Avoidance and Minimization Measures

The project applicant intends to restore 0.117 acre of the central intermittent stream (indirect impact), including 2.34 acres of riparian habitat. A portion of the central intermittent stream and surrounding natural habitat will remain undisturbed and/or restored to native habitat and preserved on site. The property owner intends to manage the area as natural habitat while

maintaining its hydrological functions and values, including water quality enhancement and wildlife utilization. Management activities will include trash removal, weeding, and general maintenance of the native habitats, culverts, detention basin and bio-swales.

In addition, the project applicant shall obtain the appropriate permits from the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, and the California Department of Fish and Wildlife prior to issuance of grading permits, approval of Improvement Plans, and/or any clearing, grading, or excavation work on the project site. The project applicant shall carry out onsite replacement or offsite banking to mitigate impacts to wetlands with a minimum replacement ratio of 1:1. This mitigation measure shall be implemented prior to issuance of grading permits.

In the event that the Placer County Conservation Program is adopted prior to commencement of ground disturbing activities associated with the proposed project, the project shall be developed in compliance with the County's Natural Communities Conservation Plan/Habitat Conservation Plan and the Programmatic Endangered Species Act Consultation issued by the U.S. Fish and Wildlife Service.

The project Improvement Plans shall incorporate Best Management Practices (BMPs) to protect water quality and control erosion and sedimentation of the preserved drainage swale and seasonal wetland onsite as well as drainageways adjacent to the site. BMPs shall be shown on Improvement Plans and subject to approval by the Placer County Planning Services Division and Engineering and Surveying Department (ESD). All BMPs shall be maintained as required to insure effectiveness. BMPs to minimize indirect impacts to federally-protected wetlands shall include the following measures from the DEIR (North Fork Associates 2011):

- A. Implementation of Mitigation Measure 10.2e, which requires the Improvement Plans to show all grading, drainage improvements, vegetation and tree removal, and re-vegetation of disturbed areas and requires that all work conform to provisions of the Placer County Grading Ordinance.
- B. Implementation of Mitigation Measure 10.5d, which requires preparation and Air Pollution Control District approval of a dust and erosion control plan.
- C. Implementation of Mitigation Measure 10.5e, which requires Improvement Plans to show appropriate design of water quality treatment facilities/Best Management Practices (BMPs) for project construction.
- D. Implementation of Mitigation Measure 11.2a, which requires Improvement Plans to show appropriate design of water quality treatment facilities/Best Management Practices (BMPs) for project operation.
- E. Implementation of Mitigation Measure 11.2c, which requires storm drain inlets and catch basins within the project area to be marked with language prohibiting dumping.

6.0 REFERENCES

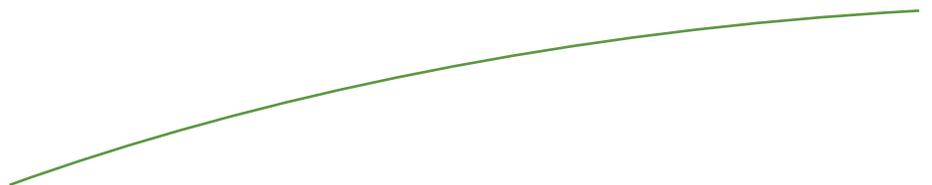
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Appendix A

USFWS, CNDDDB, AND CNPS LISTS OF
REGIONALLY-OCCURRING SPECIAL-STATUS
SPECIES





Plant List

2 matches found. *Click on scientific name for details*

Search Criteria

Found in Quad 38121G2

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
Clarkia biloba ssp. brandegeae	Brandegee's clarkia	Onagraceae	annual herb	4.2	S4	G4G5T4
Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	1B.2	S2	G2

Suggested Citation

CNPS, Rare Plant Program. 2014. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org> [accessed 22 April 2014].

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[The California Lichen Society](#)

California Department of Fish and Game
 Natural Diversity Database
 Orchard at Penryn - Rocklin Quad

Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1 Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	PDSCR0R060		Endangered	G2	S2	1B.2
2 Brandegee's clarkia <i>Clarkia biloba ssp. brandegeeeae</i>	PDONA05053			G4G5T4	S4	4.2
3 California black rail <i>Laterallus jamaicensis coturniculus</i>	ABNME03041		Threatened	G4T1	S1	
4 California linderiella <i>Linderiella occidentalis</i>	ICBRA06010			G3	S2S3	
5 Northern Volcanic Mud Flow Vernal Pool	CTT44132CA			G1	S1.1	
6 osprey <i>Pandion haliaetus</i>	ABNKC01010			G5	S3	
7 purple martin <i>Progne subis</i>	ABPAU01010			G5	S3	SC
8 steelhead - Central Valley DPS <i>Oncorhynchus mykiss irideus</i>	AFCHA0209K	Threatened		G5T2	S2	
9 valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	IICOL48011	Threatened		G3T2	S2	
10 vernal pool fairy shrimp <i>Branchinecta lynchi</i>	ICBRA03030	Threatened		G3	S2S3	
11 white-tailed kite <i>Elanus leucurus</i>	ABNKC06010			G5	S3	

U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Federal Endangered and Threatened Species that Occur in
or may be Affected by Projects in the
ROCKLIN (527C)
U.S.G.S. 7 1/2 Minute Quad

Report Date: April 22, 2014

Listed Species

Invertebrates

Branchinecta lynchi
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Lepidurus packardi
vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)
Critical habitat, Central Valley steelhead (X) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Rana draytonii
California red-legged frog (T)

Reptiles

Thamnophis gigas
giant garter snake (T)

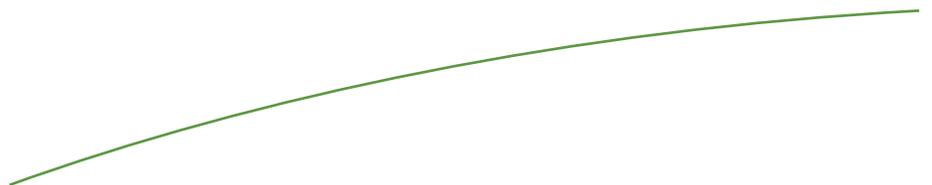
Key:

- (E) Endangered - Listed as being in danger of extinction.
- (T) Threatened - Listed as likely to become endangered within the foreseeable future.
- (P) Proposed - Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the [National Oceanic & Atmospheric Administration Fisheries Service](#). Consult with them directly about these species.
- Critical Habitat - Area essential to the conservation of a species.
- (PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.
- (C) Candidate - Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species



Appendix B

REGIONALLY OCCURRING SPECIAL-STATUS
SPECIES TABLE



Appendix B
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Invertebrates				
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	FT/--/--	Vernal pools ranging from small, clear, sandstone rock pools to large, turbid, alkaline, grassland valley floor pools. It is most frequently found in pools measuring less than 0.05 acre; although has been collected from vernal pools exceeding 25 acres. The known range within California includes the Central Valley and southern California. (USFWS 2005).	Absent	There are no vernal pools or other suitable wetland habitats in the project site.
<i>Desmocerus californicus dimorphus</i> Valley elderberry longhorn beetle	FT/--/--	Endemic to elderberry shrubs (<i>Sambucus</i> spp.) occurring in riparian habitat in the Sacramento and San Joaquin Valleys, riparian habitats in the Sacramento and San Joaquin Valleys, and less common throughout riparian forests of the Central Valley from Redding to Bakersfield (USFWS 1984).	Present	One elderberry shrub is present in the project site. The elderberry shrub is located within riparian habitat but represents low quality habitat for the VELB because it is small and no other elderberry shrubs are present in the vicinity. No evidence of VELB was observed on the shrub.
<i>Lepidurus packardii</i> Vernal pool tadpole shrimp	FE/--/--	Vernal pools from 54 square feet to 89 acres, containing clear- to highly-turbid water. Its known range is within the Central Valley of California and in the San Francisco Bay area (USFWS 2005).	Absent	There are no vernal pools or other suitable wetland habitats in the project site.

**Appendix B (cont.)
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION**

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Fish				
<i>Hypomesus transpacificus</i> Delta smelt	FT/--/--	Delta smelt are tolerant of a wide salinity range. They have been collected from estuarine waters up to 14 ppt (parts per thousand) salinity. For a large part of their one-year life span, delta smelt live along the freshwater edge of the mixing zone (saltwater-freshwater interface), where the salinity is approximately 2 ppt. Shortly before spawning, adults migrate upstream from the brackish-water habitat associated with the mixing zone and disperse into river channels and tidally-influenced backwater sloughs. They spawn in shallow, fresh or slightly brackish water upstream of the mixing zone. Most spawning happens in tidally-influenced backwater sloughs and channel edgewater. Although spawning has not been observed in the wild, the eggs are thought to attach to substrates such as cattails, tules, tree roots and submerged branches. Delta smelt are found only from the Suisun Bay upstream through the Delta in Contra Costa, Sacramento, San Joaquin, Solano and Yolo counties (USFWS 1995).	Absent	There is no suitable habitat for this species in the project site and the project site is outside of this species' known geographic range.

**Appendix B (cont.)
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION**

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Fish (cont.)				
<i>Oncorhynchus mykiss</i> Central Valley Steelhead	FT, CH/--/--	This distinct population segment includes all naturally spawned anadromous <i>O. mykiss</i> (steelhead) populations below natural and manmade impassable barriers in the Sacramento and San Joaquin Rivers and their tributaries, excluding steelhead from San Francisco and San Pablo Bays and their tributaries, as well as two artificial propagation programs: the Coleman NFH, and Feather River Hatchery steelhead hatchery programs (NMFS 2014a). Steelhead spawn in rivers and streams with cool, clear, water and suitable substrate.	Absent	There is no suitable habitat for this species in the project site.
<i>Oncorhynchus tshawytscha</i> Central Valley spring-run Chinook salmon	FT, CH/--/--	Chinook salmon spawn in rivers and streams with cool, clear, water and suitable substrate. The Central Valley spring-run Chinook ESU includes all naturally spawned populations of spring-run Chinook salmon in the Sacramento River and its tributaries in California, including the Feather River (64 FR 50394; September 16, 1999). One artificial propagation program is considered part of the ESU: The Feather River Hatchery spring run Chinook program (NMFS 2014b).	Absent	There is no suitable habitat for this species in the project site.

**Appendix B (cont.)
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION**

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Fish (cont.)				
<i>Oncorhynchus tshawytscha</i> Winter-run Chinook salmon	FE, CH/--/--	Chinook salmon spawn in rivers and streams with cool, clear, water and suitable substrate. The Sacramento winter-run Chinook ESU includes all naturally spawned populations of winter-run Chinook salmon in the Sacramento River and its tributaries in California (59 FR 440; January 1, 1994), as well as two artificial propagation programs: Winter-run Chinook from the Livingston Stone National Fish Hatchery (NFH), and winter run Chinook in a captive broodstock program maintained at Livingston Stone NFH and the University of California Bodega Marine Laboratory (NMFS 2014b).	Absent	There is no suitable habitat for this species in the project site.

**Appendix B (cont.)
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION**

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Amphibians				
<i>Rana aurora draytonii</i> California red-legged frog	FT/SSC/--	The California red-legged frog occupies a fairly distinct habitat, combining both specific aquatic and riparian components. The adults require dense, shrubby or emergent riparian vegetation closely associated with deep (greater than 2 1/3-foot deep) still or slow moving water. The largest densities of California red-legged frogs are associated with deep-water pools with dense stands of overhanging willows (<i>Salix</i> spp.) and an intermixed fringe of cattails (<i>Typha latifolia</i>). Well-vegetated terrestrial areas within the riparian corridor may provide important sheltering habitat during winter. California red-legged frogs aestivate (enter a dormant state during summer or dry weather) in small mammal burrows and moist leaf litter. They have been found up to 100 feet from water in adjacent dense riparian vegetation. Studies have indicated that this species can not inhabit water bodies that exceed 70° F, especially if there are no cool, deep portions (USFWS 2002).	Absent	There is no suitable habitat for this species in the project site. Although the project site contains small patches of emergent riparian vegetation, there is no deep, still or slow moving water in the project site that could provide potential breeding habitat for this species.

**Appendix B (cont.)
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION**

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Reptiles				
<i>Thamnophis gigas</i> Giant garter snake	FT/ST/--	The giant garter snake is endemic to the San Joaquin and Sacramento Valley floors. Counties include Butte, Colusa, Contra Costa, Fresno, Glenn, Kern, Madera, Merced, Sacramento, San Joaquin, Solano, Sutter, Yolo, and Yuba. Inhabits agricultural wetlands and other waterways such as irrigation and drainage canals, sloughs, ponds, small lakes, low gradient streams, and adjacent uplands. Requires adequate water during its active season (early spring through mid-fall) to provide food and cover, emergent, herbaceous wetland vegetation for foraging and cover, grassy banks and openings in waterside vegetation for basking, and higher elevation uplands for cover and refuge from flood waters during its dormant season (winter). Inhabits small mammal burrows and other soil crevices with sunny exposure along south and west facing slopes, above prevailing flood elevations when dormant. Primarily found in marshes and sloughs. May be found in slow-moving creeks but are absent from large rivers. They are generally aquatic but often bask on emergent vegetation such as cattails and tules (USFWS 1999b).	Absent	There is no suitable habitat for this species in the project site.
Birds				
<i>Accipiter cooperii</i> Cooper's hawk	--/SSC/--	This species typically nests and forages in broken woodland and habitat edges near open water or riparian vegetation. Cooper's hawk is seldom found in areas without dense tree stands or patchy woodland habitat.	Present	Potential nesting habitat for this species occurs in the project site.

**Appendix B (cont.)
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION**

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Birds (cont.)				
<i>Elanus leucurus</i> White-tailed kite	--/FP/--	Occurs primarily in rolling foothills and valley margins with scattered oaks as well as river bottomlands or marshes next to deciduous woodland. Uses isolated, dense topped, trees in open areas for nesting and perching and forages in a variety of habitats including grassland, marshes, and agricultural fields (CDFW 2014). Feeds on rodents, snakes, and insects.	Present	Potential nesting habitat for this species occurs in the project site.
<i>Laterallus jamaicensis coturniculus</i> California black rail	--/ST/--	Inhabits freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about one inch that does not fluctuate during the year and dense vegetation for nesting habitat (CDFW 2014).	Absent	There is no suitable habitat for this species in the project site.
<i>Pandion haliaetus</i> Osprey	--/--/--	Breeds from the Cascade Ranges south to Lake Tahoe, and along the North Coast Ranges south to Marin County. Regular breeding sites include Shasta Lake, Eagle Lake, Lake Almanor, other inland lakes and reservoirs, and northwest river systems. Associated strictly with large, fish-bearing waters, primarily in ponderosa pine through mixed conifer habitats. Uses large trees, snags, and dead-topped trees in open forest habitats for cover and nesting. Requires open, clear waters for foraging such as rivers, lakes, reservoirs, bays, estuaries, and surf zones.	Absent	There is no suitable habitat for this species in the project site.

**Appendix B (cont.)
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION**

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Birds (cont.)				
<i>Progne subis</i> Purple martin	--/SSC/--	Inhabits woodlands and low elevation coniferous forests of Douglas fir, Ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly, but also nests in human-made structures. Nests are often located in a tall, isolated tree or dead snag (CDFW 2014). Also documented in “weep holes” in freeway and street overpasses.	Absent	There is no suitable habitat for this species in the project site.
Plants				
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i> Big-scale Balsamroot	--/--/CRPR 1B.2	Perennial herb found in chaparral, cismontane woodland, and valley and foothill grassland, sometimes in serpentinite soil, from an elevation of 90 to 1,555 meters. Blooms March to June (CNPS 2014).	Present	Suitable habitat for this species is present in the openings in the oak woodland and in the annual grassland habitat in the project site.
<i>Clarkia biloba</i> ssp. <i>brandegeae</i> Brandegee’s clarkia	--/--/CRPR 4.2	Annual herb found in chaparral, cismontane woodland, and lower montane coniferous forest - often in roadcuts – from an elevation of 75 to 915 meters. Blooms May to July (CNPS 2014).	Present	Suitable habitat for this species is present in the oak woodland habitat in the project site.
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	--/SE/CRPR 1B.2	Habitat consists of marshes and swamps (lake margins), vernal pools/clay; elevation 10 to 2,375 meters. Blooms April to August (CNPS 2014).	Absent	There is no suitable habitat for this species in the project site.
<i>Sagittaria sanfordii</i> Sanford’s arrowhead	--/--/CRPR 1B.2	Habitat consists of assorted, shallow, freshwater, marshes and swamps from 0 to 650 meters in elevation. Currently known to occur in Butte, Del Norte, Fresno, Merced, Mariposa, Orange, Placer, Sacramento, Shasta, San Joaquin, Tehama, and Ventura counties. Blooms May to October (CNPS 2014).	Present	The seasonal wetlands and intermittent stream in the project site provide suitable habitat for this species.

**Appendix B (cont.)
SPECIAL-STATUS SPECIES AND CRITICAL HABITAT POTENTIALLY
OCCURRING OR KNOWN TO OCCUR IN THE PROJECT REGION**

Scientific name/ common name	Federal/State/ CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale
Plants (cont.)				
<i>Viburnum ellipticum</i> Oval-leaved viburnum	--/--/CRPR 2B.3	Perennial deciduous shrub found in chaparral, cismontane woodland, and lower montane coniferous forest from an elevation of 215 to 1,400 meters. Blooms May to June (CNPS 2014).	Present	Marginal habitat for this species is present in the oak woodland habitat in the project site.

Note: Shading indicates a species with suitable habitat and a potential to occur in the project site. The shaded species are evaluated in detail in the body of the report.

*FE – federally endangered; FT – federally threatened; FC – federally candidate; FD – federally delisted; SE – state endangered; ST – state threatened; SSC – state species of special concern; FP – CDFW fully protected. CRPR – California Rare Plant Rank (formerly California Native Plant Society List)

CRPR categories:

1B = Rare, threatened, or endangered in California and elsewhere

1B.2 = Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

4 = Plants of Limited Distribution - A Watch List.

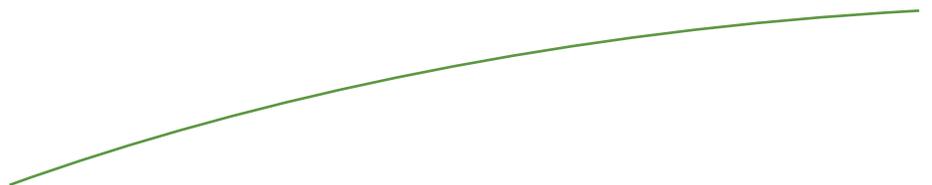
4.2 = Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

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Appendix C

PLANTS AND WILDLIFE OBSERVED



**Appendix C
PLANTS AND WILDLIFE OBSERVED**

PLANT SPECIES OBSERVED		
FAMILY	SCIENTIFIC NAME	COMMON NAME
GYMNOSPERMS		
Pinaceae	<i>Pinus sabiniana</i>	foothill pine
ANGIOSPERMS -DICOTS		
Adoxaceae	<i>Sambucus nigra</i>	black elderberry
Amaranthaceae	<i>Chenopodium album</i>	white pigweed
	<i>Dysphania ambrosioides</i>	Mexican tea
Anacardiaceae	<i>Pistacia chinensis</i>	Chinese pistache
	<i>Toxicodendron diversilobum</i>	poison oak
Apiaceae	<i>Anthriscus caucalis</i>	bur-chervil
	<i>Daucus carota</i>	Queen Anne's lace
	<i>Torilis arvensis</i>	field hedge-parsley
Aristolochiaceae	<i>Aristolochia californica</i>	Dutchman's pipe
Araliaceae	<i>Hedera helix</i>	English ivy
Asteraceae	<i>Ambrosia psilostachya</i>	Western ragweed
	<i>Artemisia douglasiana</i>	California mugwort
	<i>Baccharis pilularis</i>	coyote brush
	<i>Carduus pycnocephalus</i>	Italian thistle
	<i>Centaurea solstitialis</i>	yellow star thistle
	<i>Chondrilla juncea</i>	skeleton weed
	<i>Cirsium vulgare</i>	bull thistle
	<i>Conyza canadensis</i>	horseweed
	<i>Euthamia occidentalis</i>	Western goldenrod
	<i>Helminthotheca echioides</i>	bristly ox-tongue
	<i>Hypochaeris glabra</i>	smooth cat's-ear
	<i>Lactuca serriola</i>	prickly lettuce
	<i>Madia elegans</i>	common madia
	<i>Pseudognaphalium californicum</i>	California everlasting
	<i>Silybum marianum</i>	milk thistle
	<i>Sonchus asper</i>	prickly sow thistle
	<i>Sonchus oleraceus</i>	common sow thistle
<i>Tragopogon dubius</i>	salsify	
<i>Wyethia angustifolia</i>	narrowleaf mules ears	
Boraginaceae	<i>Amsinckia menziesii</i>	fiddleneck
Brassicaceae	<i>Cardamine oligosperma</i>	few-seeded bitter-cress
	<i>Hirschfeldia incana</i>	short-podded mustard
	<i>Raphanus sativus</i>	wild radish
	<i>Sisymbrium officinale</i>	hedge mustard

Appendix C (cont.)
PLANTS AND WILDLIFE OBSERVED

PLANT SPECIES OBSERVED (cont.)		
FAMILY	SCIENTIFIC NAME	COMMON NAME
ANGIOSPERMS –DICOTS (cont.)		
Callitrichaceae	<i>Callitriche marginata</i>	winged water-starwort
Caprifoliaceae	<i>Lonicera interrupta</i>	chaparral honeysuckle
Caryophyllaceae	<i>Spergularia sp.</i>	sand-spurrey
Convolvulaceae	<i>Convolvulus arvensis</i>	field bindweed
Cucurbitaceae	<i>Marah fabacea</i>	California man-root
Crassulaceae	<i>Crassula connata</i>	pygmy-weed
Ebenaceae	<i>Diospyros kaki</i>	persimmon
Euphorbiaceae	<i>Chamaesyce maculata</i>	spotted spurge
	<i>Croton setigerus</i>	turkey mullein
Fabaceae	<i>Lotus purshianus var. purshianus</i>	Spanish-clover
	<i>Lupinus bicolor</i>	lupine
	<i>Medicago polymorpha</i>	bur Clover
	<i>Trifolium dubium</i>	little hop clover
	<i>Trifolium glomeratum</i>	clover
	<i>Trifolium hirtum</i>	rose clover
	<i>Vicia sativa</i>	common vetch
Fagaceae	<i>Quercus douglasii</i>	blue oak
	<i>Quercus lobata</i>	valley oak
	<i>Quercus wislizenii</i>	interior live oak
Gentianaceae	<i>Zeltnera muehlenbergii</i>	June centaury
Geraniaceae	<i>Erodium botrys</i>	filaree
	<i>Erodium cicutarium</i>	filaree
	<i>Geranium dissectum</i>	geranium
	<i>Geranium molle</i>	Crane's-bill geranium
Hypericaceae	<i>Hypericum perforatum</i>	klamathweed
Juglandaceae	<i>Juglans hindsii</i>	Northern California black walnut
Lamiaceae	<i>Lamium amplexicaule</i>	dead nettle
	<i>Stachys stricta</i>	hedge nettle
Montiaceae	<i>Claytonia perfoliata</i>	Miner's lettuce
Moraceae	<i>Ficus carica</i>	edible fig
Myrsinaceae	<i>Anagallis arvensis</i>	scarlet pimpernel
Oleaceae	<i>Fraxinus latifolia</i>	Oregon ash
Onagraceae	<i>Clarkia unguiculata</i>	canyon clarkia
	<i>Epilobium brachycarpum</i>	summer cottonweed
	<i>Epilobium ciliatum</i>	hairy willow-herb

Appendix C (cont.)
PLANTS AND WILDLIFE OBSERVED

PLANT SPECIES OBSERVED (cont.)		
FAMILY	SCIENTIFIC NAME	COMMON NAME
ANGIOSPERMS –DICOTS (cont.)		
Papaveraceae	<i>Eschscholzia californica</i>	California poppy
Phymaceae	<i>Mimulus guttatus</i>	seep spring monkeyflower
Plantaginaceae	<i>Plantago lanceolata</i>	English plantain
Polygonaceae	<i>Polygonum aviculare</i>	knotweed
	<i>Rumex crispus</i>	curly dock
	<i>Rumex pulcher</i>	fiddle dock
Rosaceae	<i>Heteromeles arbutifolia</i>	toyon
	<i>Malus sp</i>	apple tree
	<i>Potentilla sp.</i>	cinquefoil
	<i>Prunus sp.</i>	prunus
	<i>Rubus armeniacus</i>	Himalayan blackberry
	<i>Sanguisorba minor subsp. muricata</i>	garden burnet
Rubiaceae	<i>Galium aparine</i>	rough bedstraw
	<i>Galium parisiense</i>	wall bedstraw
Salicaceae	<i>Populus fremontii</i>	Fremont's cottonwood
	<i>Salix exigua</i>	narrow leaved willow
	<i>Salix gooddingii</i>	Goodding's willow
	<i>Salix laevigata</i>	red willow
	<i>Salix lasiolepis</i>	arroyo willow
Sapindaceae	<i>Aesculus californica</i>	California buckeye
Scrophulariaceae	<i>Collinsia multicolor</i>	San Francisco collinsia
	<i>Verbascum blattaria</i>	moth mullein
	<i>Veronica anagallis-aquatica</i>	water speedwell
Simaroubaceae	<i>Ailanthus altissima</i>	tree of heaven
Zygophyllaceae	<i>Tribulus terrestris</i>	puncture vine
MONOCOTS		
Alismataceae	<i>Alisma plantago-aquatica</i>	water plantain
Cyperaceae	<i>Cyperus eragrostis</i>	tall flatsedge
	<i>Eleocharis macrostachya</i>	creeping spikerush
	<i>Eleocharis pachycarpa</i>	black sand spikerush
Juncaceae	<i>Juncus effusus</i>	soft rush
	<i>Juncus mexicanus</i>	Mexican rush
	<i>Juncus xiphioides</i>	iris-leaved rush
Liliaceae	<i>Chlorogalum pomeridianum var. pomeridianum</i>	soap plant

Appendix C (cont.)
PLANTS AND WILDLIFE OBSERVED

PLANT SPECIES OBSERVED (cont.)		
FAMILY	SCIENTIFIC NAME	COMMON NAME
ANGIOSPERMS –DICOTS (cont.)		
Poaceae	<i>Aegilops triuncialis</i>	barbed goatgrass
	<i>Aira caryophylla</i>	silver European hairgrass
	<i>Andropogon virginicus var. virginicus</i>	broomsedge bluestem
	<i>Avena barbata</i>	slender oats
	<i>Avena fatua</i>	wild oats
	<i>Briza maxima</i>	quaking grass
	<i>Briza minor</i>	small quaking grass
	<i>Bromus diandrus</i>	rip-gut brome
	<i>Bromus hordeaceus</i>	soft chess
	<i>Cynosurus echinatus</i>	hedgehog dogtail
	<i>Elymus caput-medusae</i>	Medusa head
	<i>Festuca perennis</i>	Italian rye grass
	<i>Hordeum marinum ssp. gussoneanum</i>	Mediterranean barley
	<i>Hordeum murinum ssp. leporinum</i>	foxtail barley
	<i>Paspalum dilatatum</i>	dallis grass
	<i>Phalaris aquatica</i>	canary grass
	<i>Poa annua</i>	annual bluegrass
	<i>Polypogon monspeliensis</i>	rabbit's foot grass
<i>Sorghum halpense</i>	Johnson grass	
<i>Vulpia myuros</i>	rattail fescue	
Themidaceae	<i>Brodiaea elegans subsp. elegans</i>	harvest brodiaea
Typhaceae	<i>Typha latifolia</i>	broad-leaved cattail

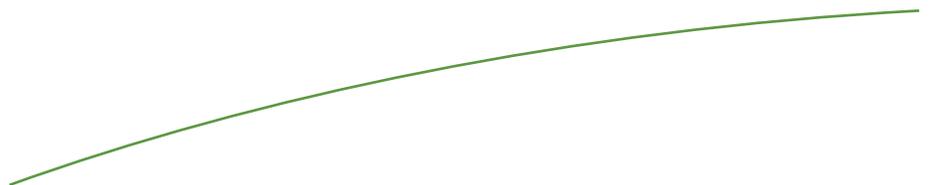
Appendix C (cont.)
PLANTS AND WILDLIFE OBSERVED

ANIMAL SPECIES OBSERVED	
SCIENTIFIC NAME	COMMON NAME
BIRDS	
<i>Aphelocoma californica</i>	Western scrub-jay
<i>Baeolophus inornatus</i>	oak titmouse
<i>Bubo virginianus</i>	great horned owl
<i>Callipepla californica</i>	California quail
<i>Carduelis psaltria</i>	lesser goldfinch
<i>Cathartes aura</i>	turkey vulture
<i>Carpodacus mexicanus</i>	house finch
<i>Colaptes auratus</i>	Northern flicker
<i>Melanerpes formicivorus</i>	acorn woodpecker
<i>Melospiza crissalis</i>	California towhee
<i>Myiarchus cinerascens</i>	ash-throated flycatcher
<i>Pipilo maculatus</i>	spotted towhee
REPTILE	
<i>Sceloporus occidentalis</i>	Western fence lizard
AMPHIBIANS	
<i>Psuedacris regilla</i>	Pacific chorus frog
<i>Rana catesbeiana</i>	bullfrog
MAMMAL	
<i>Sciurus griseus</i>	Western gray squirrel
FISH	
<i>Gambusia affinis</i>	mosquitofish



Appendix D

RARE PLANT SURVEY LETTER REPORT,
JUNE 2014



HELIX Environmental Planning, Inc.
11 Natoma Street
Suite 155
Folsom, CA 95630
916.365.8700 tel
www.helixepi.com



June 24, 2014

Mr. Mike Mahoney
Penryn Development, LLC.
3990 Ruffin Road, Suite 100
San Diego, CA 92123

RE: Rare Plant Survey Letter Report Orchard at Penryn Project, Community of Penryn,
Placer County, California

HELIX Environmental Planning, Inc. (HELIX) has conducted focused rare plant surveys for the approximately 15-acre project site located in the community of Penryn, Placer County (County), CA. This letter report, which documents the results of those surveys, has been prepared in response to the pre-development meeting checklist prepared by Placer County on February 25, 2014 regarding the proposed development project. The rare plant surveys were conducted in compliance with the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFG 2009), and California Native Plant Society's botanical survey guidelines (CNPS 2001).

PROJECT LOCATION AND DESCRIPTION

The approximately 15-acre project site consists of two parcels located in the community of Penryn, in Placer County, California. The project site is bounded by Penryn Road to the east, and rural residential land uses to the north and west. Taylor Road is adjacent to the northwest corner of the project site and a church facility is located south of the site. Interstate 80 is located approximately 0.3 mile south of the project site. The project site is located in Township 11 North, Range 7 East, Section 2 on the "Rocklin, California" 7.5 minute USGS topographic quadrangle. The approximate longitude and latitude for the center of the site are 38° 50.306' north and 121° 10.178' west. Figure 1 is a project location map. Figure 2 is an aerial photograph of the project site and surrounding areas.

ENVIRONMENTAL SETTING/EXISTING CONDITIONS

The project site is located in a rural residential setting in the western portion of the Horseshoe Bar/Penryn Community Plan area, which covers approximately 25 square miles (16,620 acres) in the Sierra Nevada foothills. The area is comprised of a mixture of natural habitats and disturbed areas, at elevations ranging between 200 and 1,200 feet above mean sea level (North Fork Associates 2011). The Community Plan notes that through the 1980s and 1990s, the predominant land use pattern in the Community Plan area changed from rural-agricultural to residential developments on small acreages. Ongoing development has decreased the extent of natural habitats throughout the Plan area and the region (North Fork Associates 2011).

The project site is situated in the Sierra Nevada foothills. The elevation of the project site ranges between 460 and 500 feet above mean sea level. The topography of the site can be described as mainly flat with a gentle slope from north to south. Adjacent land uses include rural residential, roads, an undeveloped parcel, and a church with a private school. The project site itself is undeveloped and is comprised primarily of oak woodland and annual grassland communities with smaller amounts of riparian woodland.

As a result of the development that has occurred in the region over the last two to three decades, the project site and immediate vicinity have been subjected to a high level of human disturbance and the biological communities once present on the site are in a highly altered state. The annual grassland as well as the understory of the oak woodland has a higher percent cover of non-native weedy species than would be expected of similar habitats in the region with lesser amounts of on-going human disturbance. Based on the high percent cover of non-native weedy species in the annual grassland (e.g., yellow star thistle [*Centaurea solstitialis*]), it is likely the site has been disced at some time in the past. Site photographs are included as Attachment A.

METHODS

Determination of Regionally-Occurring Special-Status Plants

Current lists of regionally-occurring special-status plant species were obtained from the California Native Plant Society, U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife and reviewed to determine the potential for special-status plants to occur on the project site; these lists are included as Attachment B.

Survey Methods

Focused rare plant surveys were conducted by HELIX botanist/biologist Stephen Stringer M.S. on April 28, 2014 and by Mr. Stringer and Catherine Silvester, HELIX botanist, on June 11, 2014. Transects were walked within the project site to obtain 100 percent visual coverage. All plant species encountered during the surveys were identified to the taxonomic level necessary to determine whether or not they were special-status species. A list of plant species observed is included as Attachment C.

RESULTS

Vegetation Communities

Vegetation communities/habitat types in the project site include oak woodland, annual grassland, riparian, seasonal wetland, wetland swale, and intermittent stream. These habitats are described below. Figure 3 is a habitat map of the project site.

Oak Woodland

A total of 6.59 acres of oak woodland habitat occurs within the project site. Dominant tree species within the oak woodland on the project site include interior live oak (*Quercus wislizenii*), valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), and foothill pine (*Pinus sabiniana*). Native shrubs and vines are present within the understory including poison oak (*Toxicodendron diversilobum*), coyote bush (*Baccharis pilularis*), and Dutchman's pipe (*Aristolochia californica*). Herbaceous species are relatively sparse in areas where the canopy is dense but are more abundant along the edges of the oak woodland where it intergrades with annual grassland. Herbaceous species within the oak woodland are similar to the herbaceous species found in the annual grassland areas.

Annual Grassland

A total of 6.02 acres of annual grassland habitat is present in the project site, primarily in the driest portions of the site furthest from the intermittent stream and wetland swale. The annual grassland is comprised largely of non-native weedy species such as ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), medusa head (*Taeniatherum caput-medusae*), wild oat (*Avena fatua*), yellow star-thistle, rose clover (*Trifolium hirtum*), and filaree (*Erodium* spp.). Yellow star-thistle comprised greater than 75 percent cover within large portions of the annual grassland at the time of the June 11, 2014 survey.

Riparian

A total of 2.34 acres of riparian habitat is present on the project site, located primarily along the edges of the intermittent stream and wetland swale. The dominant trees within the riparian habitat include valley oak, Fremont's cottonwood (*Populus fremontii*), and willow (*Salix* spp.). Himalayan blackberry (*Rubus armeniacus*) is also prevalent within this habitat.

Seasonal Wetland

A total of 0.255 acre of seasonal wetland occurs on the project site. The seasonal wetland occurs in four separate locations adjacent to the intermittent stream in the central portion of the project site as well as in one location in the northeast corner of the project site adjacent to the wetland swale. The seasonal wetland along the intermittent stream occurs in areas outside of the stream channel that are saturated or shallowly inundated (>6 inches in depth) during the growing season. In these areas the seasonal wetland is primarily vegetated with sedges (*Cyperus* spp.) and rushes

(*Juncus* spp.). Along the wetland swale, the seasonal wetland ponds water to a depth of approximately 12 to 18 inches and is vegetated with cattail (*Typha* sp.).

Wetland Swale

A total of 0.196 acre of wetland swale occurs in the project site, primarily along the eastern side. Wetland swale also occurs at the headwaters of the intermittent stream in the central portion of the project site. The wetland swale is differentiated from the intermittent stream by a lack of a defined bed and bank. The wetland swales in the project site occur in low points in the topography that carry stormwater and remain saturated for a significant portion of the growing season but likely do not hold water for very long after storm events. Much of the wetland swale is sparsely vegetated due to the dense canopy cover. Vegetation within the wetland swale consists primarily of herbaceous species typical of disturbed areas.

Intermittent Stream

Approximately 800 linear feet of intermittent stream totaling 0.08 acre occurs in the central portion of the project site consisting of a main channel and a small tributary. The main channel of the intermittent stream ranges from 2 to 6 feet in width and 2 to 12 inches in depth with an average width of approximately 4 feet and an average depth of approximately 6 inches. The main channel of the intermittent stream appears to carry water nearly year-around, likely enhanced through much of the summer by urban runoff (irrigation runoff from upstream residences etc.). The tributary ranges from 1 to 4 feet in width with an average width of approximately 2 feet and an average depth of approximately 6 inches. The tributary does not receive urban runoff and appears to carry water only during the winter and early spring. The bed of the main channel of the stream and its tributary are comprised primarily of sand and silts. In-stream aquatic vegetation such as water-plantain (*Alisma* sp.) and water cress (*Rorripa nasturtium aquaticum*) are present in the main channel and in the lower portions of the tributary at the confluence with the main channel. The upper portions of the tributary largely lack in-stream aquatic vegetation due to the shorter period and lower frequency of inundation. The banks of the intermittent stream as well as its tributary are mostly vegetated with Himalayan blackberry and herbaceous species typical of the annual grassland habitat.

Special Status Plants

Suitable habitat was identified on the project site for four of the regionally-occurring special-status plant species identified by USFWS, CNDDDB, and CNPS. These species are discussed below. However, no special-status plant species were observed in the project site during botanical surveys. Species for which habitat is not present in the project site and/or the project site is outside of their known geographic or elevational range are not discussed in this report.

Big-scale Balsamroot (*Balsamorhiza macrolepis* var. *Macrolepis*)

Big-scale balsamroot is a perennial herb found in chaparral, cismontane woodland, and valley and foothill grassland, sometimes in serpentinite soil, from an elevation of 90 to 1,555 meters. This species blooms from March to June (CNPS 2014). The oak woodland and annual grassland

on the project site provides marginally suitable habitat for this species. There are no reported occurrences of big-scale balsamroot on the Rocklin, California USGS quadrangle.

Brandegee's Clarkia (*Clarkia biloba ssp. Brandegeae*)

Brandegee's clarkia is an annual herb found in chaparral, cismontane woodland, and lower montane coniferous forest - often in roadcuts - from an elevation of 75 to 915 meters. This species blooms from May to July (CNPS 2014). The oak woodland on the project site provides limited suitable habitat for this species. There is one reported occurrence of Brandegee's clarkia on the Rocklin, California USGS quadrangle. The reported occurrence is from 1933 and the exact location is listed as "unknown."

Sanford's Arrowhead (*Sagittaria sanfordii*)

Sanford's arrowhead is a rhizomatous emergent (aquatic) herb that is found in shallow water within a variety of freshwater habitats, including standing or slow moving freshwater ponds, marshes, and ditches. The known range is within Butte, Del Norte, Fresno, Merced, Mariposa, Orange, Placer, Sacramento, Shasta, San Joaquin, Tehama, and Ventura counties at elevations ranging from 0 to 1,950 feet amsl. This species blooms from May to October (CNPS 2014). The seasonal wetlands and intermittent stream in the project site provide suitable habitat for this species. There are no reported occurrences of Sanford's arrowhead on the Rocklin, California USGS quadrangle.

Oval-Leaved Viburnum (*Viburnum ellipticum*)

Oval-leaved viburnum is a perennial deciduous shrub found in chaparral, cismontane woodland, and lower montane coniferous forest from an elevation of 215 to 1,400 meters. This species blooms from May to June (CNPS 2014). Marginally suitable habitat for this species is present in the oak woodland in the project site. There are no reported occurrences of oval-leaved viburnum on the Rocklin, California USGS quadrangle.

SUMMARY/CONCLUSION

No special-status plant species were observed in the project site during focused botanical surveys conducted during the blooming season. Therefore, special-status plants are presumed absent from the site. Rare plant surveys are typically considered valid for a period of two years. Rare plant surveys should be re-conducted if construction does not commence on or before June 2016.

Sincerely,



Stephen Stringer
Senior Scientist

Enclosures:

Figure 1 Project Location Map

Figure 2 Aerial Photograph

Figure 3 Habitat Map

Attachment A Site Photographs

Attachment B USFWS, CNPS, and CNDDDB Lists of Regionally-Occurring Special-Status
Species

Attachment C List of Plant Species Observed

REFERENCES

California Department of Fish and Wildlife. 2009. Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities. State of California, California Natural Resources Agency.

California Native Plant Society (CNPS). 2001. CNPS Botanical Survey Guidelines. Available online < http://www.cnps.org/cnps/rareplants/pdf/cnps_survey_guidelines.pdf>

California Native Plant Society (CNPS). 2014. Inventory of Rare and Endangered Plants (online edition, v7-12apr 4-11-12). California Native Plant Society. Sacramento, CA. Accessed online April 2014.

North Fork Associates. 2011. Draft Environmental Impact Report for the Orchard at Penryn Project. Prepared for Penryn Development LLC.

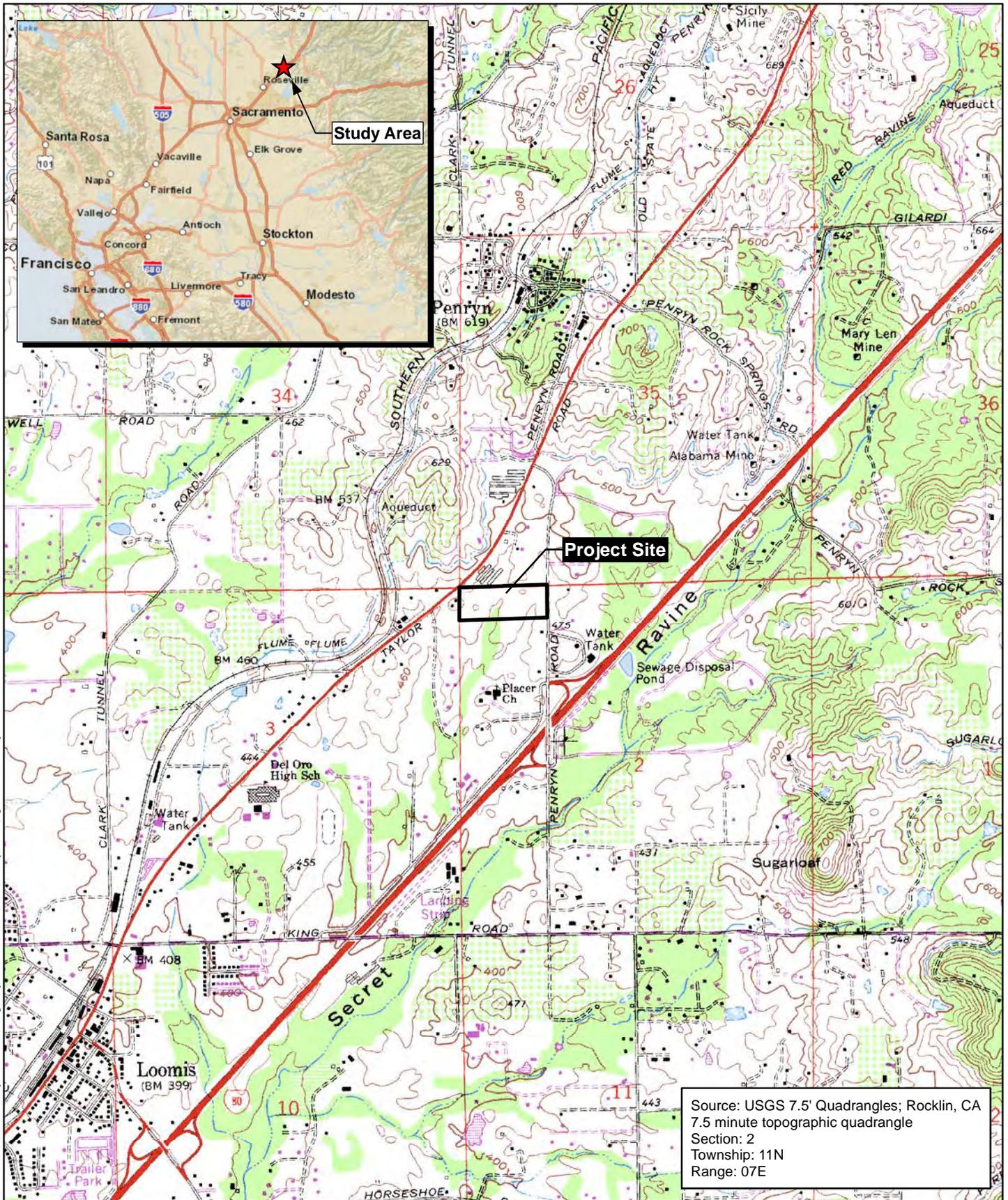


Figure 1 - Site & Vicinity
 ORCHARD AT PENRYN

E:\PROJECTS\PEB-01_Penryn Parcels Permitting\PenrynParcels_GIS\2014\MXD\BRE April 2014\Figure 2_BRE_aerial.mxd

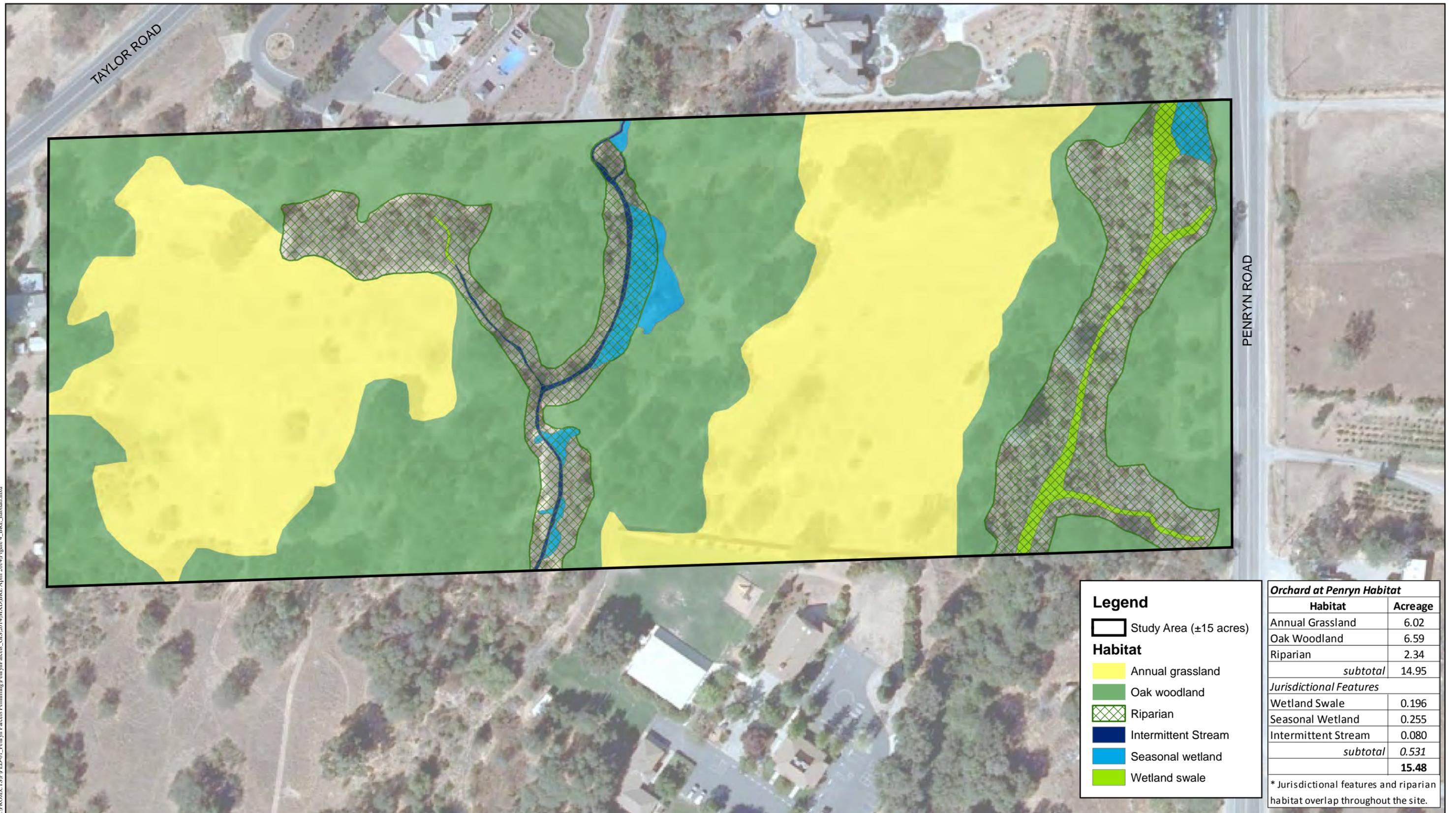


Aerial Source: Placer County (2011)

Figure 2 - Aerial
ORCHARD AT PENRYN



I:\PROJECTS\PP\PED-01_Penryn Parcels Permitting\PenrynParcels_GIS\2014\MXD\BRE_April_2014\Figure 4_BRE_habitat.mxd



Legend

- Study Area (±15 acres)
- Habitat**
- Annual grassland
- Oak woodland
- Riparian
- Intermittent Stream
- Seasonal wetland
- Wetland swale

Orchard at Penryn Habitat	
Habitat	Acreage
Annual Grassland	6.02
Oak Woodland	6.59
Riparian	2.34
<i>subtotal</i>	14.95
Jurisdictional Features	
Wetland Swale	0.196
Seasonal Wetland	0.255
Intermittent Stream	0.080
<i>subtotal</i>	0.531
	15.48

* Jurisdictional features and riparian habitat overlap throughout the site.



Figure 3 - Habitat
ORCHARD AT PENRYN

Attachment A
SITE PHOTOGRAPHS



Photo 1. View of the annual grassland within the central portion of the project site.



Photo 2. View of the riparian habitat along the eastern wetland swale in the project site.



Photo 3. View of riparian habitat along the wetland swale in the central portion of the site.



Photo 4. View of the western fork of the intermittent stream in the project site.



Photo 5. View of the main fork of the intermittent stream in the project site.

CNPS *California Native Plant* Rare and Endangered Plant Inventory

Plant List

2 matches found. *Click on scientific name for details*

Search Criteria

Found in Quad 38121G2

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
Clarkia biloba ssp. brandegeae	Brandegee's clarkia	Onagraceae	annual herb	4.2	S4	G4G5T4
Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	1B.2	S2	G2

Suggested Citation

CNPS, Rare Plant Program. 2014. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org> [accessed 22 April 2014].

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Contributors

[The Calflora Database](#)

[The California Lichen Society](#)

California Department of Fish and Game
 Natural Diversity Database
 Orchard at Penryn - Rocklin Quad

Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1 Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	PDSCR0R060		Endangered	G2	S2	1B.2
2 Brandegee's clarkia <i>Clarkia biloba ssp. brandegeeeae</i>	PDONA05053			G4G5T4	S4	4.2
3 California black rail <i>Laterallus jamaicensis coturniculus</i>	ABNME03041		Threatened	G4T1	S1	
4 California linderiella <i>Linderiella occidentalis</i>	ICBRA06010			G3	S2S3	
5 Northern Volcanic Mud Flow Vernal Pool	CTT44132CA			G1	S1.1	
6 osprey <i>Pandion haliaetus</i>	ABNKC01010			G5	S3	
7 purple martin <i>Progne subis</i>	ABPAU01010			G5	S3	SC
8 steelhead - Central Valley DPS <i>Oncorhynchus mykiss irideus</i>	AFCHA0209K	Threatened		G5T2	S2	
9 valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	IICOL48011	Threatened		G3T2	S2	
10 vernal pool fairy shrimp <i>Branchinecta lynchi</i>	ICBRA03030	Threatened		G3	S2S3	
11 white-tailed kite <i>Elanus leucurus</i>	ABNKC06010			G5	S3	

U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Federal Endangered and Threatened Species that Occur in
or may be Affected by Projects in the
ROCKLIN (527C)
U.S.G.S. 7 1/2 Minute Quad

Report Date: April 22, 2014

Listed Species

Invertebrates

Branchinecta lynchi
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Lepidurus packardi
vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)
Critical habitat, Central Valley steelhead (X) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Rana draytonii
California red-legged frog (T)

Reptiles

Thamnophis gigas
giant garter snake (T)

Key:

- (E) Endangered - Listed as being in danger of extinction.
- (T) Threatened - Listed as likely to become endangered within the foreseeable future.
- (P) Proposed - Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the [National Oceanic & Atmospheric Administration Fisheries Service](#). Consult with them directly about these species.
- Critical Habitat - Area essential to the conservation of a species.
- (PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.
- (C) Candidate - Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species

Attachment C
LIST OF PLANT SPECIES OBSERVED

FAMILY	SCIENTIFIC NAME	COMMON NAME
GYMNOSPERMS		
Pinaceae	<i>Pinus sabiniana</i>	foothill pine
ANGIOSPERMS –DICOTS		
Adoxaceae	<i>Sambucus nigra</i>	black elderberry
Amaranthaceae	<i>Chenopodium album</i>	white pigweed
	<i>Dysphania ambrosioides</i>	Mexican tea
Anacardiaceae	<i>Pistacia chinensis</i>	Chinese pistache
	<i>Toxicodendron diversilobum</i>	poison oak
Apiaceae	<i>Anthriscus caucalis</i>	bur-chervil
	<i>Daucus carota</i>	Queen Anne's lace
	<i>Torilis arvensis</i>	field hedge-parsley
Aristolochiaceae	<i>Aristolochia californica</i>	Dutchman's pipe
Araliaceae	<i>Hedera helix</i>	English ivy
Asteraceae	<i>Ambrosia psilostachya</i>	Western ragweed
	<i>Artemisia douglasiana</i>	California mugwort
	<i>Baccharis pilularis</i>	Coyote brush
	<i>Carduus pycnocephalus</i>	Italian thistle
	<i>Centaurea solstitialis</i>	yellow star thistle
	<i>Chondrilla juncea</i>	skeleton weed
	<i>Cirsium vulgare</i>	bull thistle
	<i>Conyza canadensis</i>	horseweed
	<i>Euthamia occidentalis</i>	Western goldenrod
	<i>Helminthotheca echioides</i>	bristly ox-tongue
	<i>Hypochaeris glabra</i>	smooth cat's-ear
	<i>Lactuca serriola</i>	prickly lettuce
	<i>Madia elegans</i>	common madia
	<i>Pseudognaphalium</i>	California everlasting
	<i>Silybum marianum</i>	milk thistle
	<i>Sonchus asper</i>	prickly sow thistle
	<i>Sonchus oleraceus</i>	common sow thistle
	<i>Tragopogon dubious</i>	salsify
<i>Wyethia angustifolia</i>	narrowleaf mules ears	
Boraginaceae	<i>Amsinckia menziesii</i>	fiddleneck
Brassicaceae	<i>Cardamine oligosperma</i>	few-seeded bitter-cress
	<i>Hirschfeldia incana</i>	short-podded mustard
	<i>Raphanus sativus</i>	wild radish
	<i>Sisymbrium officinale</i>	hedge mustard
Callitrichaceae	<i>Callitriche marginata</i>	winged water-starwort
Caprifoliaceae	<i>Lonicera interrupta</i>	chaparral honeysuckle

Attachment C (cont.)
LIST OF PLANT SPECIES OBSERVED

FAMILY	SCIENTIFIC NAME	COMMON NAME
ANGIOSPERMS –DICOTS (cont.)		
Caryophyllaceae	<i>Spergularia</i> sp.	sand-spurrey
Convolvulaceae	<i>Convolvulus arvensis</i>	field bindweed
Cucurbitaceae	<i>Marah fabacea</i>	California man-root
Crassulaceae	<i>Crassula connata</i>	pygmy-weed
Ebenaceae	<i>Diospyros kaki</i>	persimmon
Euphorbiaceae	<i>Chamaesyce maculata</i>	spotted spurge
	<i>Croton setigerus</i>	turkey mullein
Fabaceae	<i>Lotus purshianus</i> var.	Spanish-clover
	<i>Lupinus bicolor</i>	lupine
	<i>Medicago polymorpha</i>	bur Clover
	<i>Trifolium dubium</i>	little hop clover
	<i>Trifolium glomeratum</i>	clover
	<i>Trifolium hirtum</i>	rose clover
	<i>Vicia sativa</i>	common vetch
	<i>Vicia villosa</i>	hairy vetch
Fagaceae	<i>Quercus douglasii</i>	blue oak
	<i>Quercus lobata</i>	valley oak
	<i>Quercus wislizenii</i>	interior live oak
Gentianaceae	<i>Zeltnera muehlenbergii</i>	June centaury
Geraniaceae	<i>Erodium botrys</i>	filaree
	<i>Erodium cicutarium</i>	filaree
	<i>Geranium dissectum</i>	geranium
	<i>Geranium molle</i>	Crane's-bill geranium
Hypericaceae	<i>Hypericum perforatum</i>	klamathweed
Juglandaceae	<i>Juglans hindsii</i>	Northern California black walnut
Lamiaceae	<i>Lamium amplexicaule</i>	dead nettle
	<i>Stachys stricta</i>	hedge nettle
Montiaceae	<i>Claytonia perfoliata</i>	Miner's lettuce
Moraceae	<i>Ficus carica</i>	edible fig
Myrsinaceae	<i>Anagallis arvensis</i>	scarlet pimpernel
Oleaceae	<i>Fraxinus latifolia</i>	Oregon ash
Onagraceae	<i>Clarkia unguiculata</i>	canyon clarkia
	<i>Epilobium brachycarpum</i>	summer cottonweed
	<i>Epilobium ciliatum</i>	hairy willow-herb
Papaveraceae	<i>Eschscholzia californica</i>	California poppy
Phrymaceae	<i>Mimulus guttatus</i>	seep spring monkeyflower
Plantaginaceae	<i>Plantago lanceolata</i>	English plantain

Attachment C (cont.)
LIST OF PLANT SPECIES OBSERVED

FAMILY	SCIENTIFIC NAME	COMMON NAME
ANGIOSPERMS –DICOTS (cont.)		
Polygonaceae	<i>Polygonum aviculare</i>	knotweed
	<i>Rumex crispus</i>	curly dock
	<i>Rumex pulcher</i>	fiddle dock
Rosaceae	<i>Heteromeles arbutifolia</i>	toyon
	<i>Malus sp</i>	apple tree
	<i>Potentilla sp.</i>	cinquefoil
	<i>Prunus sp.</i>	prunus
	<i>Rubus armeniacus</i>	Himalayan blackberry
	<i>Sanguisorba minor subsp. muricata</i>	garden burnet
Rubiaceae	<i>Galium aparine</i>	rough bedstraw
	<i>Galium parisiense</i>	wall bedstraw
Salicaceae	<i>Populus fremontii</i>	Fremont's cottonwood
	<i>Salix exigua</i>	narrow leaved willow
	<i>Salix gooddingii</i>	Goodding's willow
	<i>Salix laevigata</i>	red willow
	<i>Salix lasiolepis</i>	arroyo willow
Sapindaceae	<i>Aesculus californica</i>	California buckeye
Scrophulariaceae	<i>Collinsia multicolor</i>	San Francisco collinsia
	<i>Verbascum blattaria</i>	moth mullein
	<i>Veronica anagallis-aquatica</i>	water speedwell
Simaroubaceae	<i>Ailanthus altissima</i>	tree of heaven
Zygophyllaceae	<i>Tribulus terrestris</i>	puncture vine
MONOCOTS		
Alismataceae	<i>Alisma plantago-aquatica</i>	water plantain
Cyperaceae	<i>Cyperus eragrostis</i>	tall flatsedge
	<i>Eleocharis macrostachya</i>	creeping spikerush
	<i>Eleocharis pachycarpa</i>	black sand spikerush
Juncaceae	<i>Juncus effusus</i>	soft rush
	<i>Juncus mexicanus</i>	Mexican rush
	<i>Juncus xiphioides</i>	iris-leaved rush
Liliaceae	<i>Chlorogalum pomeridianum</i> <i>var. pomeridianum</i>	soap plant

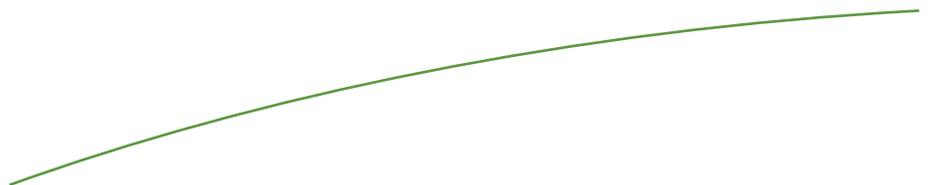
Attachment C (cont.)
LIST OF PLANT SPECIES OBSERVED

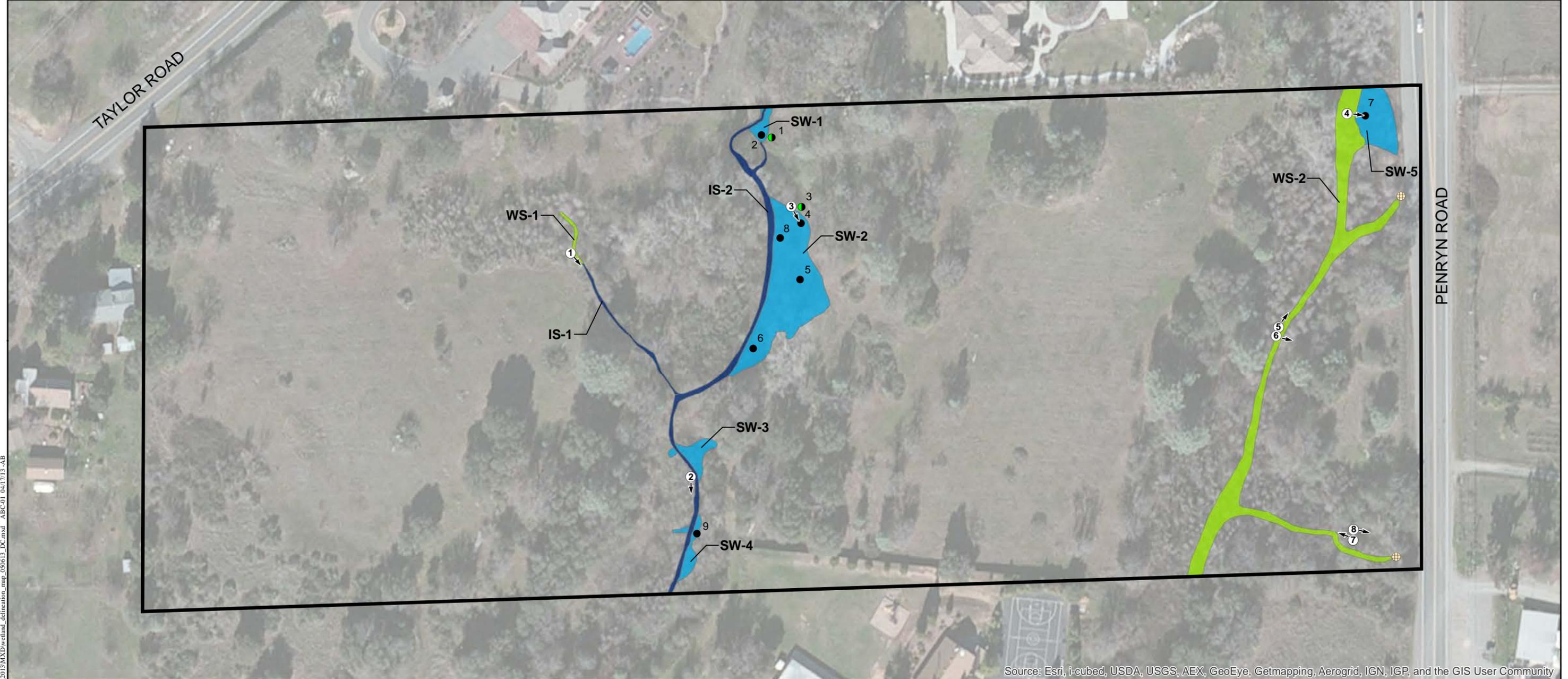
FAMILY	SCIENTIFIC NAME	COMMON NAME
MONOCOTS (cont.)		
Poaceae	<i>Aegilops triuncialis</i>	barbed goatgrass
	<i>Aira caryophylla</i>	silver European hairgrass
	<i>Andropogon virginicus var.</i>	broomsedge bluestem
	<i>Avena barbata</i>	slender oats
	<i>Avena fatua</i>	wild oats
	<i>Briza maxima</i>	quaking grass
	<i>Briza minor</i>	small quaking grass
	<i>Bromus diandrus</i>	rip-gut brome
	<i>Bromus hordeaceus</i>	soft chess
	<i>Cynosurus echinatus</i>	hedgehog dogtail
	<i>Elymus caput-medusae</i>	Medusa head
	<i>Festuca perennis</i>	Italian rye grass
	<i>Hordeum marinum ssp.</i>	Mediterranean barley
	<i>Hordeum murinum ssp.</i>	foxtail barley
	<i>Paspalum dilatatum</i>	dallis grass
	<i>Phalaris aquatica</i>	canary grass
	<i>Poa annua</i>	annual bluegrass
	<i>Polypogon monspeliensis</i>	rabbit's foot grass
	<i>Sorghum halpense</i>	Johnson grass
	<i>Vulpia myuros</i>	rattail fescue
Themidaceae	<i>Brodiaea elegans subsp.</i>	harvest brodiaea
Typhaceae	<i>Typha latifolia</i>	broad-leaved cattail



Appendix E

PRELIMINARY JURISDICTIONAL
DETERMINATION MAP, APRIL 2013





PREPARED BY:
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WATERS OF THE UNITED STATES

Feature	Length (ft)	Ave Width (ft)	*Area (acres)/ Square Feet
Wetlands			
Seasonal Wetland	N/A	N/A	0.255/11,108
Wetland Swale	N/A	N/A	0.196/8,538
Other Waters of the U.S.			
Intermittent Stream	798.81	4.36	0.080/3,485
Total acreage of Potentially Jurisdictional Wetlands and other Waters of the U.S. within the Delineation Boundary			0.531/23,131

WETLAND DELINEATION MAP
Penryn Development
 Placer County, California
 May 2013

DRAWN BY: M. Fremont, D. Caziarc
 DELINEATORS: S. Stringer, C. Silvester
 DATE OF FIELDWORK: April 2013

USACE REGULATORY FILE #: SPK-200100019
 VERIFIED BY: TBD
 DATE OF VERIFICATION: TBD

NOTES: The boundaries and jurisdictional status of all waters shown on this map are preliminary and subject to verification by the U.S. Army Corps of Engineers

REVISIONS		
DATE	DESCRIPTION	BY

- Upland data point
- Wetland data point
- Study Area (±15 acres)
- Photo point
- Culvert

1 inch = 100 feet

0 100 200 Feet

I:\PROJECTS\Penryn Parcels Permitted_PFD\01\PenrynParcels_GIS\2013\MXD\Wetland_delineation_map_050613_DC.mxd ABC-01_04/17/13-AB



Appendix F

GROUND PHOTOGRAPHS

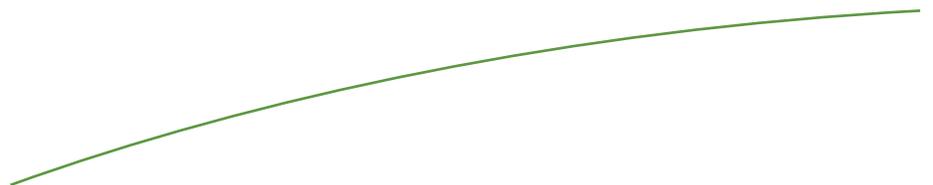




Photo 1. View of annual grassland within the central portion of the project site.



Photo 2. View of the riparian habitat along the eastern wetland swale in the project site.



Photo 3. View of riparian habitat along the wetland swale in the central portion of the site.



Photo 4. View of the western fork of the intermittent stream in the project site.



Photo 5. View of the main fork of the intermittent stream in the project site.



Photo 6. View of the elderberry shrub (red arrow) in riparian habitat along the southern boundary of the project site.

Attachment C

Trip Generation

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Memorandum

To: Katherine Waugh, AICP

From: Matt Weir, P.E., T.E., PTOE

Re: **Trip Generation Evaluation**
The Orchard at Penryn – Placer County, California

Date: December 12, 2014

Per your request we have prepared this trip generation evaluation for the above referenced project. The purpose of this evaluation is to document the anticipated difference in trip generation characteristics between the originally proposed project¹ and a current project concept. The original proposed project included 150 apartment dwelling units while the currently proposed project concept would replace the apartments with 54 single-family dwelling units.

The number of trips anticipated to be generated by the proposed project was derived using data included in *Trip Generation Manual, 9th Edition*, published by the Institute of Transportation Engineers (ITE). **Table 1** presents the trip generation data for both proposed project concepts using the average trip rates for each land use.

Table 1 – Trip Generation Comparison

Land Use (ITE Code)	Size (# units)	Daily Trips	AM Peak-Hour				PM Peak-Hour					
			Total Trips	IN		OUT		Total Trips	IN		OUT	
				%	Trips	%	Trips		%	Trips	%	Trips
Low-Rise Apartment (221)	150	990	69	21%	14	79%	55	87	65%	57	35%	30
Single-Family Detached Housing (210)	54	516	41	25%	10	75%	31	54	63%	34	37%	20
Difference (Current - Original)		(474)	(28)		(4)		(24)	(33)		(23)		(10)

Source: *Trip Generation, 9th Edition*, ITE.

As depicted in **Table 1**, the currently proposed project (54 single-family detached units) would be anticipated to result in 474 fewer daily trips, and approximately 30 fewer peak-hour trips. These reductions equate to approximately 50 percent fewer daily trips and approximately 40 percent fewer peak-hour trips.

As a result of these findings, the currently proposed project’s environmental impacts to transportation facilities would not be anticipated to exceed the previously documented effects of the originally proposed project. In fact, considering the approximate 40 to 50 percent reduction in trips, the transportation impacts previously document may actually be overstated if the smaller, 54-unit single-family project is pursued.

¹ *Traffic Impact Analysis, The Orchard at Penryn*, Kimley-Horn and Associates, Inc., February 7, 2011.

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