

# SUMMARY

---

## S.1 Project Summary

### S.1.1 Introduction

This summary chapter provides an overview of the Sargent Ranch Quarry Project (Project), which is described in detail in Chapter 2, *Project Description*, and the conclusions of the environmental analysis, provided in detail in Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures*. This chapter also summarizes the alternatives to the Project that are discussed in Chapter 4, *Alternatives*, and identifies the Environmentally Superior Alternative. Table S-1, Summary of Impacts and Mitigation Measures, at the end of this Summary, provides a summary of the environmental effects of the Project identified in each technical issue section of Chapter 3. The table consists of the environmental impacts, the significance of the impact, proposed mitigation, if any, and the significance of the impact after the mitigation measure is implemented. Table S-2, Summary Comparison of Alternatives to the Project, provides a summary of the relative severity of the impacts of the alternatives.

### S.1.2 Project Location

The 5,154-acre Sargent Ranch property is located within an unincorporated area of southern Santa Clara County, approximately four miles south of the City of Gilroy, California. The approximately 403-acre area where mining and related activities are proposed is located on the eastern portion of Sargent Ranch (see Figures 2-1 through 2-3 in Chapter 2, *Project Description*).

### S.1.3 Summary of Project Description

#### Introduction

Sargent Ranch Partners, LLC (Applicant) proposes to develop a sand and gravel surface mining operation called the Sargent Ranch Quarry Project (Project) on an approximately 403-acre site located in Santa Clara County (Project site). The Project consists of the development of a sand and gravel mining operation on approximately 298 acres within the Sargent Ranch property, which currently is used for cattle ranching. The remaining 105 acres of the 403-acre Project site would be designated as a “geotechnical setback area” that would buffer excavation areas from surrounding uses and that could be used if needed to allow more slope layback<sup>1</sup> to increase slope stability or provide a buffer area in the case of unforeseen slope failure. Mining operations would be conducted for 30 years, in four phases as described below. Over the 30-year period, portions of the

---

<sup>1</sup> “Slope layback” is a term for grading the final slope at a less steep angle. For example, a 4:1 (horizontal to vertical) slope rather than a 3:1 slope.

site would be reclaimed upon completion of each phase of the quarry operation. At the end of the Project's life, final reclamation of the last surface mining phase would occur, and the aggregate processing facility site would also be reclaimed.

The Santa Clara County Zoning Code requires the issuance of a Use Permit for surface mining projects and approval of a site-specific Reclamation Plan and Financial Assurance Cost Estimate (Section 4.10.370 – Surface Mining, subsections (E), (F), and (K)) in accordance with the State of California Surface Mining and Reclamation Act (SMARA) (Public Resources Code Section 2710 et seq.; 14 Cal. Code Regs. Section 3500 et seq.). SMARA was enacted to help mitigate environmental impacts from mining by ensuring that mined lands are reclaimed to a usable condition.

Surface mining activities and implementation of the Reclamation Plan for the Project would be needed to satisfy requirements of both SMARA and the County of Santa Clara's (County's) Surface Mining requirements (County Zoning Code Section 4.10.370). The surface mining operation would process sand and gravel Monday through Saturday from 6:00 a.m. to 5:00 p.m., and sales (including transport off-site) would occur from 4:30 a.m. to 4:00 p.m. Because these proposed hours of operation would extend beyond the standards for Surface Mining operation allowed by the County Zoning Ordinance (4.10.370 Part II, A (1)), Planning Commission approval of a deviation from the standard hours of operation would be required.

## **Project Objectives**

The fundamental underlying purpose of the Project is to develop a feasible source of aggregate in close proximity to the Bay Area to meet regional demand for construction sand. The Project objectives are as follows:

1. Develop a long-term source of high-quality aggregate needed for various uses in the County and other local markets, in furtherance of General Plan Policy R-RC 68.
2. Ensure that mining occurs in an environmentally responsible and sensitive manner that is consistent with the California Surface Mining and Reclamation Act and County requirements.
3. Locate the source of aggregate in proximity to one or more major transportation corridors and in proximity to local construction contractors and others in need of such materials, who otherwise might have to seek and transport such materials from more distant sources.
4. In furtherance of General Plan Policy R-RC 78, provide an alternative to truck transport of construction aggregates by using the Union Pacific Railroad rail spur adjacent to Sargent Ranch to replace haul trucks to the extent feasible.
5. Develop the aggregate resource in a manner that is economically feasible.
6. Minimize impacts on sensitive natural and cultural resources on the Project site.
7. Minimize aesthetic impacts through site design, phasing, and concurrent reclamation.
8. Implement a reclamation plan that provides for long-term slope stability, prevents wind and water erosion, and establishes self-sustaining native and naturalized vegetation cover.

## Project Components

Open-pit mining would occur in four areas (Phases 1 through 4) within the Project site (see Figure 2-4, *Mining Site Plan*, in Chapter 2). Construction of the structures, conveyor belt and roads to access Phases 1 and 2, acceleration lane improvements, and related facilities would occur over nine months (157 construction days) prior to the start of surface mining activities. All of the facilities within the processing area, including the aggregate processing plant, office/scale house, process water pond, and stormwater basins, would be constructed during this period. Initially, a temporary processing plant would be constructed. Additional improvements would include the access/maintenance roads, a free-span bridge over Tar Creek, and a new groundwater well. After completion of Phase 2 mining, a conveyor belt connecting Phases 3 and 4 to the processing area and a parallel maintenance road, including a crossing at Sargent Creek, would be constructed. These facilities and related construction activities are described in more detail in Chapter 2, Project Description.

After the Project facilities are in place, mining would commence at the Phase 1 quarry. At the commencement of mining within each phase, the topsoil and overburden would be removed and stored separately in the processing area. Temporary stockpiles would be located within the individual quarry areas. A permanent overburden stockpile area would be placed between the processing plant and Phase 1 and Phase 2 mining areas. This area would receive materials during Phases 1, 2, and 3.

In general, excavation to remove topsoil and overburden would be conducted during the dry season (April 16 through October 14). If excavation occurs in the wet season, appropriate best management practices (BMPs) would be used to control erosion.

Hill slopes within the designated quarry pits would be cut back to expose sand and gravel deposits. This product would be excavated and transported from the quarry pits to the processing plant via conveyor belt. In general, an open pit would be developed with 2:1 (i.e., 2 feet horizontal for every vertical foot) or flatter side walls with 10-foot-wide benches every 40 vertical feet. Each bench would have a longitudinal grade of four to 12 percent. All materials would be processed at the aggregate plant on-site. After processing, finished products would be sold and transported off-site via truck or rail. As slopes within each quarry pit are finished, they would be reclaimed while mining would continue on other slopes within the pit. Each phase would be fully reclaimed upon completion of mining activities within that phase (see reclamation description in Section 2.6). The final reclaimed fill slopes would have varying gradients of 3:1 or flatter.

Approximately 35 million cubic yards (cy) of material would be excavated over the 30-year life of the Project. Of this, it is estimated that a total volume of approximately 25.3 million cy would be saleable sand and gravel aggregate (product). This would equate to a total weight of approximately 38 million tons of product (assuming 1.5 tons per cy). Product consisting of mined sand and gravel aggregate would be sold to the local market for a variety of construction-related uses. Overburden and/or mined material that is not salable as concrete-grade aggregate would be stockpiled on-site. Up to 20 percent of overburden could be sold as engineered fill for construction projects throughout the life of the Project; the portion not sold would be used in the final reclamation of quarry slopes at the conclusion of each mining phase, as described further below.

“Geotechnical setback” areas have been identified surrounding each mining area. These setback areas would be used as a buffer area if needed to allow more slope layback to increase slope stability and/or allow a buffer area in the case of slope failure.

An earthen berm would be constructed between U.S. 101 and the processing plant to screen views of the facilities from the highway. The berm would be approximately 40 feet tall and constructed from overburden taken from Phase 1. Other facilities to be constructed include a vehicular bridge across Tar Creek to provide access to the Project site, drainage facilities, and roads.

The maximum area of potential disturbance would be approximately 403 acres. Ground disturbance includes grading, excavation, and other earthwork, and does not include areas that would only have vegetation mowed (e.g., fuel modification zones around access roads). This includes the 105 acres of geotechnical setback areas (described in more detail below), which may not all be disturbed (i.e., would be used as needed). Disturbance areas for each phase and associated facilities are summarized in Table 2-1 in Chapter 2.

Estimated total mining and excavation quantities for each phase of the Project are shown in Table 2-2 in Chapter 2. Approximately 35 million cy of native materials would be excavated over the life of the Project, including 25,305,000 cy or 38 million tons of product (assuming 1.5 tons per cy). Over the life of the Project, approximately 846,000 cy of topsoil and 8,865,000 cy of overburden would be excavated. The aggregate would be composed of 60 percent sand, 20 percent gravel, and 20 percent clay. The rate of surface mining and mineral extraction would vary from day to day and year to year depending on demand, site conditions and other factors, such as weather. In the initial five years of operation, the maximum amount of product that would be produced in a single day would be 2,500 tons. At full operational capacity, the mining operation could produce a maximum of 6,000 tons of product in a single 10-hour day. Actual amounts would be less on some days, but would not exceed 6,000 tons per day on any day. The maximum amount of product that would be produced in a single year is 1,860,000 tons.

The duration of each phase would depend on market demand for sand and gravel materials. A tentative schedule for construction, mining, and reclamation is shown in Table 2-3 in Chapter 2. Surface mining at the Phase 1 and Phase 2 pit areas would be complete in approximately 10 to 13 years, respectively. At maximum production levels, Phase 3 would be completed in approximately 4 years, and Phase 4 would require two years to complete. As noted above, the actual timelines could vary, although the total amount of material to be mined would not exceed the maximum identified amounts in any single year.

Project product would be transported to customers using both haul trucks and rail. Vehicle and truck access, including emergency access, to and from the Sargent Ranch Quarry would occur via U.S. 101, as shown on Figure 2-11 in Chapter 2. Access to the Project site from the north would occur via southbound U.S. 101 and Old Monterey Road through a gated entrance to an existing private access road. Trucks leaving the site traveling to destinations south of the quarry would exit onto Old Monterey Road and then onto southbound U.S. 101 via an existing acceleration lane. Trucks traveling to destinations north of the quarry would use the Sargent Ranch undercrossing of U.S. 101.

To facilitate truck access, an existing U.S. 101 on-ramp east of the Project site would be improved prior to the start of mining to include a 12-foot-wide, 0.25-mile-long acceleration lane for trucks accessing northbound U.S. 101. This on-ramp would require an encroachment permit from Caltrans and would be built according to Caltrans specifications. Other access improvements would include a free-span bridge over Tar Creek and new pavement overlaid on Old Monterey Road.

Rail tracks are located to the east of Sargent Ranch along U.S. 101. As part of the Project, a rail spur would be constructed within the processing plant area. The spur would accommodate up to 16 rail cars. Rail cars would be picked up by Union Pacific Railroad trains up to three times per week.

After mining is complete, the Project site would be reclaimed as described in the Reclamation Plan (Appendix B). The proposed reclamation generally involves equipment and building removal, regrading, re-soiling, drainage and erosion control, and revegetation. Some of these activities may occur simultaneously. Reclamation would include the use of overburden to fill quarry pits to elevations to levels at or below the immediately surrounding grades, recontouring of the surface of mined and processing plant areas, installation of erosion and stormwater control features, redistribution of topsoil, and revegetation. The site topography would ultimately be contoured to create a safe condition for cattle grazing. Upon completion of all reclamation activities, the Project site would be returned to cattle grazing and/or be retained as open space.

## **S.2 Overview of Project Impacts**

### **S.2.1 No Impact**

There are several issue areas raised in Chapter 3 that would not have any impacts under the Project. For example, there are no known forestry resources within the Project Site, so construction and operation of the Project would not affect the availability of forests or forestry resources. The Project would have no impacts within any of the following resource areas:

- Agriculture and Forestry Resources
- Land Use and Planning
- Population and Housing
- Public Services
- Recreation

### **S.2.2 Less-than-Significant Impacts**

Some impacts that would occur under the Project would be adverse, but not severe enough to warrant mitigation. The Project would have a less-than-significant impacts in the following areas:

- Aesthetics (light and glare)
- Biological Resources (habitat for the Bay checkerspot butterfly and rare serpentine-associated plants located off-site)
- Air Quality (toxic air contaminants; odors)

- Energy
- Geology, Soils, and Paleontology (seismic events; erosion and loss of topsoil; onsite wastewater treatment)
- Hazards and Hazardous Materials (routine transportation, use and disposal of hazardous materials)
- Hydrology and Water Quality (degradation of surface water quality; groundwater supply, production, quality and management; stormwater drainage and flooding)
- Mineral Resources
- Noise (construction, operational and transportation noise)
- Transportation (conflict with policies related to transit, roadway, bicycle, and pedestrian facilities)
- Utilities and Service Systems (water supply and solid waste)
- Wildfire

### S.2.3 Less-than-Significant Impacts with Mitigation Incorporated

Under CEQA, a significant effect on the environment is defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance (CEQA Guidelines Section 15382). Based on the analysis contained in this EIR, implementation of the Project could result in significant impacts in the following areas:

- **Biological Resources:** Impacts on the following special-status species and/or their habitat: special-status plant species, special-status fish, California red-legged frogs (CRLF), California tiger salamanders (CTS), western pond turtles, burrowing owls, tricolored blackbirds, raptors and other protected birds, special-status bats, mountain lions, San Francisco dusky-footed woodrats, American badgers; adverse effects on jurisdictional wetlands and other waters; and conflicts with County ordinances and policies intended to protect biological resources, including oak woodlands.
- **Cultural and Tribal Cultural Resources:** Adverse impacts on known historical or archaeological resources; damage to unrecorded subsurface prehistoric and historic archaeological resources; disturbance of human remains.
- **Geology, Soils, and Paleontology:** Increased potential for slope instability and slope failure.
- **Greenhouse Gas Emissions:** Generate greenhouse gas emissions (GHG); conflict with applicable GHG plans, policies, or regulations.
- **Hazards and Hazardous Materials:** Accidental release of existing soil contaminants, such as historic pesticide residues.
- **Hydrology and Water Quality:** Substantially degrade surface or groundwater quality.
- **Transportation:** Roadway hazards due to the presence of large construction trucks, temporary lane closures and detours; inadequate emergency access.

If an impact is determined to be significant, applicable mitigation measures are identified as appropriate. These mitigation measures are also summarized in Table S-1. The mitigation measures presented in the EIR will form the basis of the Mitigation Monitoring Program. Except for the impacts listed below under S.2.4, all of the potentially significant impacts could be reduced to a less-than-significant level through mitigation measures identified in this EIR. An impact that remains significant after mitigation is considered an unavoidable adverse impact of the Project.

## S.2.4 Significant and Unavoidable Impacts

Section 15126.2(a) of the CEQA Guidelines requires that the EIR describe any significant impacts, including those that can be mitigated but not reduced to less-than-significant levels. The following significant and unavoidable impacts would result from the Project.

1. **Aesthetics:** The Project would have a significant and unavoidable impact, both at the Project-specific level and cumulatively, with regard to its effect on existing visual character or quality of public views of the site and its surroundings from U.S. 101, a County-designated scenic highway (Impact 3.2-1). Mitigation Measure 3.2-1 would lessen the severity of these impacts but not below the level of significance. ). This significant unavoidable impact would also be cumulatively significant and unavoidable (Impact 3.2-3).
2. **Air Quality:** The Project would have a significant and unavoidable impact with regard to its effect on BAAQMD NO<sub>x</sub> thresholds and emissions of NO<sub>x</sub>, ROG, PM<sub>2.5</sub>, and PM<sub>10</sub> for which the region is in nonattainment status. Mitigation Measures 3.3-2a and 3.3-2b would reduce NO<sub>x</sub> thresholds but emissions of NO<sub>x</sub> would not be reduced below significance thresholds for project-specific or cumulative impacts (Impacts 3.3-1, 3.3-2 and 3.3-5). This significant unavoidable impact would also be cumulatively significant and unavoidable (Impact 3.3-5).
3. **Biological Resources:** The Project would have a significant and unavoidable impact with regard to the Project's interference with wildlife movement (Impact 3.4-15). Mitigation Measure 3.4-15 would reduce this impact but not below the thresholds of significance. This significant unavoidable impact would also be cumulatively significant and unavoidable (Impact 3.4-22).
4. **Cultural and Tribal Cultural Resources:** The Project would have a significant and unavoidable impact both at the Project-specific level and cumulatively with regard to changes in the significance of tribal cultural resources within the proposed area of development, and the Juristac Tribal Cultural Landscape (Impacts 3.5-4, 3.5-5, and 3.5-9). Mitigation Measures 3.5-1, 3.5-3b, 3.5-4b and 3.5-5b would reduce the severity of these impacts, but not to a less-than-significant level.
5. **Geology, Soils, and Paleontology:** The Project would have a significant and unavoidable impact with regard to the Project's potential to destroy paleontological resources important to Santa Clara County (Impact 3.7-5). Mitigation Measure 3.7-5 would not reduce impacts to a level of insignificance. This impact would also be considered cumulatively significant and unavoidable (Impact 3.7-6).
6. **Transportation:** The Project would have a significant and unavoidable impact with regard to the Project's generation of additional Vehicle Miles Traveled (VMT), and no feasible mitigation is identified to reduce the impact (Impact 3.13-2). This impact would also be cumulatively significant and unavoidable (Impact 3.13-5).

## S.2.5 Irreversible Impacts

Section 15126.2(c) of the CEQA Guidelines defines an irreversible impact as an impact that uses nonrenewable resources during the initial and continuing phases of the project. Irreversible impacts also can result from damage caused by environmental accidents associated with a project. Irretrievable commitments of resources are evaluated to ensure that such consumption is justified.

Buildout of the Project would commit nonrenewable resources during Project construction and ongoing utility services during Project operations. During operations, some oil, gas, and other fossil fuels and nonrenewable resources would be consumed and irreversible commitments of small quantities of nonrenewable resources would occur as a result of long-term Project operations. Operation of the Project would also result in the irreversible extraction and consumption of aggregate material that is mined from the Project site and ultimately sold.

## S.3 Summary of Alternatives

The following alternatives to the Project are evaluated in this Draft EIR:

1. **No Project Alternative:** Assumes that no mining or aggregate processing occurs on the Project site, and that the current uses continue.
2. **Alternative 2 - Phases 1 and 2 Only and Processing Plant Relocation:** Phases 1 and 2 would be mined at the same level as the Project, but the Phases 3 and 4 sites would not be mined. The crossing over Sargent Creek and the conveyor belt/access road would not be constructed because access to the Phases 3 and 4 sites would not be needed. The amount of aggregate product produced under this alternative would be 21.5 million cubic yards (cy), an approximate 15 percent reduction compared to the Project as proposed.

The processing plant would be moved approximately 0.85 miles north of Tar Creek. In addition, Old Monterey Road would be realigned, and the Tar Creek bridge would be located upstream of the location proposed for the Project.

Other aspects of this alternative would be the same as the proposed Project.

3. **Alternative 3 – Reduced Phases 1 and 2 Only, Processing Plant Relocation, and Addition of Screening Berm:** This alternative would be similar to Alternative 2, except that a screening berm would be constructed along the Phase 1 mining pit and the mining activities would not occur above 500 feet mean sea level (msl). In addition, there would be a 15 percent reduction in the amount of aggregate mined in Phases 1 and 2, for a total reduction in mining of 28 percent.

For a complete description of Project alternatives, please see Chapter 4, Alternatives. The relative impacts of the alternatives are summarized in Table S-2.

### S.3.1 Environmentally Superior Alternative

In addition to the discussion and comparison of impacts of the alternatives to the proposed Community Plan, CEQA requires that an “environmentally superior” alternative be identified and the reasons for such selection disclosed (CEQA Guidelines Section 15126.6(e)(2)). In general, the

environmentally superior alternative is the alternative that would be expected to generate the least adverse impacts.

The No Project alternative would not have any environmental impacts, so it would be considered the environmentally superior alternative. Alternative 3 would be environmentally superior to the Project and to Alternative 2 because it would avoid and/or reduce most significant impacts of the Project. This includes the significant and unavoidable impacts to the Betewel Bluff Tribal Cultural Resource and the Juristac Landscape Tribal Cultural Resource, as well as impacts on air quality, biological resources, paleontological resources, greenhouse gas emissions, water quality and vehicle miles traveled.

## S.4 Areas of Controversy

Any of the environmental issues considered during scoping or in this Draft EIR could become an issue of controversy. Preliminarily, the County has identified areas of controversy as including the issues and questions raised in agency and public comments received during scoping; all comments received during the scoping period are included in **Appendix A** to this Draft EIR.

Primary areas of concern include the loss of biological habitat and compensatory mitigation, and the loss of cultural and tribal cultural resources, particularly those of importance to the Amah Mutsun Tribal Band of Costanoan/Ohlone Indians. Other potential areas of concern include the effects of the Project on surface and groundwater quality and Project construction traffic and vehicle miles traveled. These issues are addressed in sections 3.4, *Biological Resources*, 3.5, *Cultural and Tribal Cultural Resources*, 3.10, *Hydrology and Water Quality*, and 3.13, *Transportation*.

## S.5 Unresolved Issues

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain issues to be resolved, which include the choice among alternatives and whether or how to mitigate significant impacts. The following major issues are to be resolved:

- Choose among alternatives;
- Determine whether the recommended mitigation measures should be adopted or modified; and
- Determine whether additional mitigation measures need to be applied to the Project.

## S.6 Summary of Project Impacts and Mitigation Measures

**Table S-1** summarizes the environmental impacts of the Project and recommended mitigation measures that, if adopted, would avoid or substantially reduce potential significant impacts of the Project. The analysis of each impact is provided on a resource-by-resource basis in Chapter 3.

**TABLE S-1  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
<b>Aesthetics</b>		
<b>Impact 3.2-1:</b> The Project would alter the visual character of the Project site or scenic resources visible from U.S. 101, a County-designated scenic highway.	<b>Mitigation Measure 3.2-1:</b> Once constructed, the Applicant shall contour the screening berm to resemble surrounding land features, to the extent possible, and shall plant fast-growing native vegetation. The screening berm shall either be extended around the northern portion of the processing plant, or fencing and vegetation shall be used to further screen views of the processing plant from southbound traffic on U.S. 101. Native vegetation and/or trees shall be planted around the northern portion of the processing plant to further screen views of the processing plant from viewpoints on southbound U.S. 101 that would not be blocked by the screening berm. The proposed final design for screening shall be reviewed by the County prior to construction in order to ensure that views of the processing plant are screened to the extent possible by a combination of the screening berm, fencing, and vegetation in order to achieve a natural appearance, to the extent possible.	Significant and Unavoidable
<b>Impact 3.2-2:</b> The Project could introduce a new source of substantial light or glare.	None required.	Less than Significant
<b>Impact 3.2-3:</b> The Project would contribute to cumulative changes in visual character of public views from U.S. 101, a County-designated scenic highway.	<b>Mitigation Measure 3.2-3:</b> Implement Mitigation Measure 3.2-1.	Significant and Unavoidable
<b>Impact 3.2-4:</b> The Project could contribute to cumulative increases in light and glare.	None required.	Less than Significant
<b>Air Quality</b>		
<b>Impact 3.3-1:</b> The Project would affect implementation of the applicable air quality plans.	<b>Mitigation Measure 3.3-1:</b> Implement Mitigation Measures 3.3-2a and 3.3-2b, discussed in greater detail below under Impact 3.3-2.	Significant and Unavoidable
<b>Impact 3.3-2:</b> The Project would emit criteria air pollutants ozone precursors (NO <sub>x</sub> and ROG), PM <sub>2.5</sub> , and PM <sub>10</sub> , for which the region is in nonattainment status.	<p><b>Mitigation Measure 3.3-2a:</b> The Project Applicant shall require that all off-road mobile equipment and Applicant-owned trucks powered by diesel used during the construction and operation phases of the Project meet USEPA Tier 4 engine standards for NO<sub>x</sub> (i.e., Tier 4 final). If implementation of this requirement is determined to not be feasible for given piece(s) or model(s) of off-road equipment, the Project Applicant shall substantiate the reason(s) for infeasibility and shall propose equipment with the next most restrictive tier status (e.g., Tier 3, Tier 2) and shall submit the documentation to the County of Santa Clara for review and approval at least 7 days prior to the planned use of the non-Tier 4 equipment.</p> <p><b>Mitigation Measure 3.3-2b:</b> The Project Applicant shall develop and implement a comprehensive dust control plan for Project construction and operation and shall submit the plan to the County Department of Planning and Development at least 90 days prior to the start of construction for review and approval. Designate a person to implement and modify the Dust Control Plan as appropriate. The plan shall include but not be limited to the following elements based on BAAQMD recommended construction mitigation measures, most of which also apply to Project operations:</p> <ol style="list-style-type: none"> <li>1. Water all active unpaved vehicle roadways at least twice a day during dry conditions to ensure that roadways are damp enough to suppress dust generation;</li> </ol>	Significant and Unavoidable

**TABLE S-1 (CONTINUED)**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<ol style="list-style-type: none"> <li>2. All haul trucks transporting soil or sand off-site shall be covered;</li> <li>3. Limit vehicle speeds to 15 miles per hour on all unpaved roadways and off-road areas (e.g., mining pits);</li> <li>4. Prevent dirt track out on to public roadways by using wheel washers or other washing methods to ensure that tires or tracks on all trucks and equipment leaving the site are cleaned of dirt. The use of dry power sweeping is prohibited;</li> <li>5. Remove any visible mud or dirt tracked-out onto Old Monterey Road using wet power vacuum street sweepers at least once per day;</li> <li>6. Water, cover, or treat (with non-toxic soil stabilizers) exposed stockpiles of fine materials;</li> <li>7. Water and/or treat inactive exposed soil areas including areas exposed within mining pits, to minimize dust generation from wind or other ground disturbances;</li> <li>8. Apply water misting or spraying to all material transfer points, including export truck loading activities;</li> <li>9. Post a publicly visible sign with the telephone number and person to contact at the County of Santa Clara regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations;</li> <li>10. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph;</li> <li>11. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established;</li> <li>12. All trucks and equipment, including their tires, shall be washed off prior to leaving the site;</li> <li>13. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6-to 12-inch compacted layer of wood chips, mulch, or gravel;</li> <li>14. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than 1 percent; and</li> <li>15. In the processing areas where vehicles and equipment travel, apply dust suppressant at least once per year in addition to watering and limiting travel speeds to 15 mph. Dust suppressants or gravel would be applied more often if visible dust clouds extending beyond the roadway are noted, or apply gravel to the areas.</li> </ol>	
<p><b>Impact 3.3-3:</b> The Project could expose sensitive receptors to substantial pollutant concentrations.</p>	<p>None required.</p>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES**

<b>Environmental Impact</b>	<b>Mitigation Measures</b>	<b>Level of Significance after Mitigation</b>
<b>Impact 3.3-4:</b> The Project would not result in odorous emissions adversely affecting a substantial number of people.	None required.	Less than Significant
<b>Impact 3.3-5:</b> The Project would contribute nonattainment pollutants (ozone precursors, PM <sub>2.5</sub> , and PM <sub>10</sub> ) to cumulative increases in air pollutants.	<b>Mitigation Measure 3.3-5:</b> Implement Mitigation Measures 3.3-2a and 3.3-2b.	Significant and Unavoidable
<b>Impact 3.3-6:</b> The Project could contribute to cumulative TAC concentrations.	None required.	Less than Significant
<b>Impact 3.3-7:</b> The Project would not combine with other, cumulative sources of odors in the Project vicinity adversely affecting a substantial number of people.	None required.	Less than Significant
<b>Biological Resources</b>		
<b>Impact 3.4-1:</b> Project activities would result in adverse effects on special-status plant species.	<p><b>Mitigation Measure 3.4-1a:</b> The Applicant shall implement the following measures prior to any ground disturbance, vegetation removal, or other activities in natural (i.e., undeveloped) habitat for construction or for the start of mining activities associated with each new mining phase to ensure that impacts to special-status plants as a result of Project activities are avoided or minimized.</p> <ol style="list-style-type: none"> <li>1. Preconstruction surveys for special-status plants shall be conducted by a qualified plant ecologist prior to all phases of ground disturbance or construction activity throughout the Project life. A focused survey during the appropriate bloom season for the 10 special-status plant species that could occur shall be conducted in any area of proposed ground disturbance and a surrounding 50-foot buffer area. Surveys must take place no more than four years before ground disturbance in any given area commences. Surveys shall be conducted in a year with near-average or above-average precipitation (i.e., precipitation that is at least 70% of the long-term average for the site, as determined using the 30-year climate normals from the PRISM Climate and Weather System [<a href="https://prism.oregonstate.edu">https://prism.oregonstate.edu</a>] or a similar source). Alternatively, these surveys may be conducted in a year of below-average precipitation if the target species are documented to be flowering/detectable at nearby reference populations despite the below-average rainfall. If surveys are conducted in a below-average rainfall year and detectability of a species at a reference population cannot be confirmed, then no impacts should occur in suitable habitat for that species until a survey can be conducted in an appropriate year (with adequate rainfall or detectability at a reference population). The purpose of the surveys shall be to assess the presence or absence of the potentially occurring species. If none of the target species are found in the impact area or surrounding 50-foot buffer, then no further mitigation measures shall apply. If any individual special-status plants are found in the impact area or 50-foot buffer, then the Applicant shall implement all of the following additional mitigation measures. <ul style="list-style-type: none"> <li>• In consultation with a qualified plant ecologist, the Applicant shall redesign the Project to avoid direct and indirect impacts to the species to the extent feasible (e.g., via the establishment of an appropriately sized buffer of at least 50 feet or larger, as determined by a</li> </ul> </li> </ol>	Less than Significant

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>qualified plant ecologist based on the avoided species and the type of nearby impacts). If all special-status plant occurrences can be avoided via an adequate buffer (as determined by a qualified plant ecologist), then no further mitigation is necessary.</p> <ul style="list-style-type: none"> <li>• If a qualified plant ecologist determines that avoidance is not feasible (including determining that the buffers around an occurrence are inadequate to avoid impacts), then the Applicant shall implement the following mitigation measures.               <ul style="list-style-type: none"> <li>- Prior to initiation of impacts, a qualified plant ecologist will determine the extent of impacts based on the number of individuals impacted and the acreage of habitat occupied by each special-status plant species, based on the results of the preconstruction survey described above and the impact areas.</li> <li>- The Applicant shall provide compensatory mitigation through preservation and management of another, existing on-site or off-site population within Santa Clara County, or in neighboring portions of Santa Cruz, San Benito, or Monterey Counties within 30 miles of the Project area. First priority shall be areas located on Sargent Ranch, if other on-site populations are present. Off-site mitigation shall only be used if on-site mitigation cannot fully compensate for species losses. Habitat occupied by the affected species shall be preserved and managed in perpetuity at a minimum 2:1 mitigation ratio (at least two plants preserved for each plant affected, and also at least two occupied acres preserved for each occupied acre affected), for any impact to Congdon's tarplant. This 2:1 mitigation ratio is not lower because Congdon's tarplant is ranked 1B by the CNPS, and such species have declined significantly over the last century and are considered "rare, threatened, or endangered". However, because no particularly high-quality habitat for Congdon's tarplant is present in the Project area, a 2:1 mitigation ratio is sufficient to offset Project impacts. For the other nine special-status plant species that may be impacted by the Project, habitat occupied by the affected species shall be preserved and managed in perpetuity at a minimum 1:1 mitigation ratio (at least one plant preserved for each plant affected, and also at least one occupied acre preserved for each occupied acre affected). This mitigation ratio is not higher than 1:1 because these other nine species have a CRPR of 4; such species are on the CNPS "watch list" because they are of limited distribution, but they are not as scarce or imperiled as CRPR 1B species, and therefore compensatory mitigation at a 1:1 ratio would adequately offset Project impacts to these species.</li> <li>- Alternatively, a contribution to the Santa Clara Valley Habitat Agency, in an amount determined in coordination with the agency, for maintenance of special-status plant species populations within the VHP Covered Area may be considered appropriate mitigation for impacts, if approved by the County Department of Planning and Development. This contribution shall be made prior to the initiation of impacts to special-status plants.</li> <li>- Areas proposed to be preserved as compensatory mitigation for special-status plant impacts must contain verified extant populations of the CRPR-ranked plants that would be impacted. Mitigation areas shall be managed in perpetuity to encourage persistence</li> </ul> </li> </ul>	

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>and even expansion of the preserved target species. Mitigation lands shall not be located on land that is currently publicly owned for resource protection unless substantial enhancement of habitat quality (e.g., removal of invasive plants, correction of over-grazing, introduction of appropriate grazing management) shall be achieved by the mitigation activities. The mitigation habitat shall be of equal or greater habitat quality compared to the impacted areas, as determined by a qualified plant ecologist, in terms of soil features, extent of disturbance, vegetation structure, and dominant species composition, and shall contain at least as many individuals of the species as are impacted by Project activities. The permanent protection and management of mitigation lands shall be ensured by the Applicant through an appropriate mechanism, such as a conservation easement to the County or other qualified entity approved by the County, which could be included in the conservation easement referenced in Mitigation Measure M 3.5-4b.</p> <ul style="list-style-type: none"> <li>- If Project-specific compensatory mitigation occurs (instead of a contribution to the Santa Clara Valley Habitat Agency), a Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared by a qualified ecologist and implemented by the Applicant for the mitigation lands. The HMMP shall be prepared by a qualified plant or restoration ecologist. The HMMP shall be approved by the County Department of Planning and Development prior to the start of ground-disturbing activities that would impact special-status plants. The HMMP shall include, at a minimum, all of the following information:               <ul style="list-style-type: none"> <li>o Summary of impacts on special-status plant species (including individuals and habitat) and the proposed mitigation;</li> <li>o Description of the location and boundaries of the mitigation site and description of existing site conditions, including documentation of the occurrence of the special-status plant species for which mitigation is being provided;</li> <li>o Description of measures to be undertaken to enhance (e.g., through focused management that may include removal of invasive species in adjacent suitable but currently unoccupied habitat) the mitigation site for the focal special-status species;</li> <li>o Description of measures to transplant individual plants or seeds from the impact area to the mitigation site, if appropriate (which shall be determined by a qualified plant or restoration ecologist depending on the species and circumstances);</li> <li>o Proposed management activities to maintain high-quality habitat conditions for the focal species;</li> <li>o Description of habitat and species monitoring measures on the mitigation site, including specific, objective final criteria and performance criteria, monitoring methods, data analysis, reporting requirements, monitoring schedule, etc. At a minimum, performance criteria shall include demonstration that any plant population fluctuations over the monitoring period do not indicate a downward trajectory in terms of reduction in numbers and/or occupied area for the preserved</li> </ul> </li> </ul>	

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>mitigation population that can be attributed to management (e.g., that are not the result of local weather patterns, as determined by monitoring of a nearby reference population, or other factors unrelated to management);</p> <ul style="list-style-type: none"> <li>o Contingency measures for mitigation elements that do not meet performance criteria; and</li> <li>o Description of adaptive management , indicating how management may be adapted depending on climate change or other changes in site conditions and the process by which adaptive management decisions will be made and implemented,</li> </ul> <p><b>Mitigation Measure 3.4-1b:</b> To minimize the potential for Project activities to result in the introduction and/or spread of invasive plants and Phytophthora (a plant-damaging water mold), the Applicant shall prepare and implement an Invasive Species and Phytophthora Management Plan (ISPMP). The ISPMP shall be approved by the County Department of Planning and Development prior to issuance of a grading permit by the County. The ISPMP shall detail the measures to be implemented to minimize the potential for the introduction and spread of invasive plants and Phytophthora during Project implementation, including during Project construction, operations, and reclamation. At a minimum, the ISPMP shall include a description of the following information:</p> <ol style="list-style-type: none"> <li>1. How materials (including vegetation, soil, and construction materials) and construction personnel, vehicles, and equipment will move around the site and between on-site and off-site areas.</li> <li>2. Measures that will be implemented to minimize the potential for introduction or spread of invasive plants and Phytophthora on equipment, tools, vehicles, and personnel, including (but not limited to) the following: <ul style="list-style-type: none"> <li>• Before arrival at the site, equipment, vehicles, and tools will be free of soil including debris on tires, wheel wells, vehicle undercarriages, and other surfaces. A high-pressure washer and/or compressed air may be used to ensure that soil and debris are completely removed.</li> <li>• Vehicles may be cleaned at a commercial vehicle or appropriate truck washing facility. Vehicles that only travel and park on paved public roads do not require external cleaning. The interior of vehicles and equipment (cabs, etc.) must be free of mud, soil, gravel, and other debris (vacuumed, swept or washed).</li> <li>• Vehicle wash stations may be installed at entrances and exits to the site. All wastewater from those stations should be detained so that it does not enter natural waterbodies or areas of unimpacted vegetation.</li> <li>• Small tools and equipment must be washed to be free of soil or other contamination and sanitized. Wood handles on tools should be sealed with a waterproof coating to make them easier to sanitize. Before sanitizing, remove all soil and organic material (roots, sap, etc.) from the surface. If necessary, use a detergent solution and brush to scrub off surface contaminants. The sanitizing agent may also be used as a cleaning fluid. Screwdrivers or similar implements may be needed to clean soil out of crevices or shoe treads. Brushes and other implements used to help remove soil need to be cleaned and sanitized after use.</li> </ul> </li> </ol>	

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<ul style="list-style-type: none"> <li>• After surface soil and contamination are removed, treat the surface with a sanitizing agent, allowing the appropriate contact time before use or rinsing. If surfaces are clean and dry, wet surfaces thoroughly and allow for the appropriate contact time. If the sanitizer has been used to help clean the surface, use fresh sanitizer to rinse off any dirty solution and again allow the required contact time. If treated surfaces are wetted with water, the sanitizing solution will become diluted. Apply enough sanitizer to completely displace the water film and then allow the required contact time. Sanitizing agents may be applied by using spray bottles and applied to thoroughly wet the surface. Observe all appropriate safety precautions to prevent contact with eyes or skin when using these agents.</li> <li>• Sanitizing agents may include 70-90% ethyl or isopropyl alcohol (spray to thoroughly wet the surface and allow to air dry before use); freshly diluted bleach solution (0.525% sodium hypochlorite) for a minimum of 1 minute (due to corrosivity, not advised for steel or other materials damaged by bleach); 2000 ppm quaternary ammonium disinfectant for 1 min (or according to manufacturer recommendations), freshly made or tested to ensure target concentrations.</li> <li>• Soles and uppers of footwear must be free of debris and soil before arriving at the site. Clean and sanitize footwear as described above.</li> <li>• Before entering the job site, field workers will receive training that includes information on <i>Phytophthora</i> diseases and how to prevent the spread of these and other soil-borne pathogens by following approved phytosanitary procedures.</li> <li>• Do not bring more vehicles into work sites than absolutely necessary. Within the site, keep vehicles on surfaced or graveled roads whenever possible to minimize soil movement.</li> </ul> <ol style="list-style-type: none"> <li>3. measures to revegetate temporarily impacted areas using appropriate seed mixes that do not contain invasive species and that are free from <i>Phytophthora</i>, shortly following completion of those impacts</li> <li>4. measures for disposing of cleared vegetation so that <i>Phytophthora</i> on plant roots or invasive plant propagules are not spread to uncontaminated areas</li> <li>5. measures for transporting and stockpiling soil so that <i>Phytophthora</i> or invasive plant propagules are not spread from contaminated soil (e.g., in runoff)</li> <li>6. monitoring to ensure that the ISPMP is properly implemented and that infestations of invasive species or <i>Phytophthora</i> are detected before they become widespread or severe</li> <li>7. methods of addressing any infestations of invasive species, or preventing infestations of <i>Phytophthora</i> from spreading</li> <li>8. the means by which plant materials used in site restoration, during site reclamation, will be ensured to be free of invasive species and <i>Phytophthora</i> infestation</li> </ol> <p><b>Mitigation Measure 3.4-1c:</b> To minimize impacts on special-status plants and animals, and sensitive habitats, the Applicant shall retain a qualified biologist to conduct an employee education training</p>	

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>session for employees working on all construction, operations, and reclamation activities, prior to those employees' work on the Project. This training session can consist of in-person training or preparation of a video or similar presentation. Personnel shall be required to attend the presentation, which shall describe any special-status or sensitive species, and sensitive/regulated habitats, that may be present; avoidance, minimization, and conservation measures; legal protection of these animals; the boundaries of Project work areas; and other related issues, including any relevant conditions from resource agency permits obtained for Project implementation. A fact sheet or other supporting materials containing this information shall be prepared and distributed. Upon completion of training, employees will sign a form stating that they attended the training and understand all the conservation and protection measures.</p>	
<b>Biological Resources (cont.)</b>		
<p><b>Impact 3.4-2:</b> Project nitrogen emissions would not result in adverse effects on habitat for the Bay checkerspot butterfly and rare serpentine-associated plants located off-site.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Impact 3.4-3:</b> Project activities would result in adverse effects on special-status fish and their habitat.</p>	<p><b>Mitigation Measure 3.4-3:</b> The Applicant shall implement the following measures and the "Aquatic Avoidance and Minimization Measures" contained in Table 6-2 of the VHP, during any Project construction activity, and during operational and reclamation activities as appropriate (e.g., equipment storage or refueling, or other activities that could result in spills) to minimize increases of peak discharge of stormwater and to reduce runoff of sediment and pollutants to protect water quality. The following measures to be implemented by the Applicant shall be monitored by the qualified biologist retained by the Applicant as described in Mitigation Measure 3.4-5, who shall be present to monitor construction activities during initial ground disturbance or vegetation clearing in any given area or Project phase.</p> <ol style="list-style-type: none"> <li>a. No construction within creeks or riparian habitats shall occur during the wet season (October 15 to April 15, or as otherwise indicated by the conditions of resource agency permits).</li> <li>b. Ground disturbance shall be minimized so that only those phases of the Project and ancillary supporting facilities, including but not limited to road construction, conveyor installation and operation, and plant and rail construction, which are actively being constructed or being mined would be cleared/prepared.</li> <li>c. The removal of riparian vegetation shall be minimized to the amount necessary to accomplish the required activity and comply with public health and safety directives. Any riparian vegetation to be removed shall be clearly identified on plans submitted to and approved by the County Department of Planning and Development prior to any riparian vegetation removal, along with evidence establishing why removal of such vegetation is necessary.</li> <li>d. Erosion control plans shall be submitted to and approved by the County Department of Planning and Development prior to initiation of ground disturbance and shall include the following:               <ul style="list-style-type: none"> <li>• Control exposed soil by stabilizing slopes (e.g., with erosion control blankets) and protecting channels (e.g., using silt fences or straw wattles). Appropriate erosion control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) shall be used on-site adjacent to creeks</li> </ul> </li> </ol>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>or riparian vegetation. Fiber rolls used for erosion control shall be certified as free of noxious weed seed.</p> <ul style="list-style-type: none"> <li>• Stockpiled soil shall be stabilized with geotextile or plastic covers. Sediments shall be stored and transported in a manner that minimizes water quality impacts. If soil is stockpiled, no runoff shall be allowed to flow back to the channel.</li> </ul> <p>e. If high levels of groundwater in a work area are encountered and dewatering must occur, the water shall be directed into infiltration basins, holding ponds, or areas with vegetation to remove sediment prior to the water re-entering a creek.</p> <p>f. Construction and mining waste shall be disposed of in designated areas and stormwater shall be prevented from flowing onto or off of these areas.</p> <p>g. Personnel shall use the appropriate equipment for the job that minimizes disturbance to the stream bottom. Appropriately tired vehicles, either tracked or wheeled, shall be used depending on the situation.</p>	
<p><b>Impact 3.4-4:</b> Project activities would result in adverse effects on California red-legged frogs and their habitat.</p>	<p><b>Mitigation Measure 3.4-4a:</b> The Applicant shall implement the following avoidance and minimization measures for all ground-disturbing activities throughout the life of the Project, including construction, operations, and reclamation, at access roads, bridges over Tar Creek and Sargent Creek, mining areas, and processing facilities, to minimize impacts on CRLF:</p> <ol style="list-style-type: none"> <li>1. A biologist approved by the County and USFWS (hereafter "approved biologist") shall be onsite during all activities that, in the opinion of the approved biologist and after consultation with USFWS, may result in impacts to individual CRLF. For example, once a work area is surrounded by exclusion fencing (as described below), any CRLF within that exclusion fencing have been relocated (as described below), and the qualified biologist has surveyed the area within the exclusion fencing well enough to determine that no CRLF are present, activities within the exclusion fencing and on other "developed" areas (e.g., roads and the processing plant) may proceed without the need for a biological monitor. The qualifications of the biologist(s) shall be submitted to the County and USFWS for review and written approval at least 15 calendar days prior to the date earthmoving is initiated at the Project site.</li> <li>2. Prior to the initiation of any other protective measures, an approved biologist shall determine, in consultation with the USFWS, appropriate relocation sites for any adult, juvenile, or larval CRLF that may be observed during preconstruction surveys and monitoring and that need to be relocated. The approved biologist shall also determine, in consultation with the USFWS, how any CRLF showing evidence of poor health (which might indicate disease such as chytrid) should be handled or disposed of, to avoid translocating diseased individuals into habitat supporting healthy amphibians.</li> <li>3. The Applicant shall install and maintain exclusion fencing around construction and mining zones, to prevent CRLF from moving into these areas. Exclusion fencing shall be at least 3 ft high, and the lower 6 inches of the fence shall be buried in the ground to prevent animals from crawling under. The remaining 2.5 ft shall be left above ground to serve as a barrier for animals moving on the ground surface. The fence shall be pulled taut at each support to prevent folds or snags. The</li> </ol>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>Applicant shall inspect such fencing regularly (at least weekly) and maintain it in good condition throughout the construction and mining period.</p> <p>4. The Applicant shall flag or fence construction and mining areas to identify areas where work is permitted to occur, and work activities shall be confined to these areas.</p> <p>5. An approved biologist shall delineate sensitive habitat areas such as streams, wetlands, and riparian habitats outside the permitted work area with high-visibility flagging or fencing to prevent encroachment of construction and mining personnel and equipment into any sensitive areas during Project work activities. At no time shall equipment or personnel be allowed to enter, disturb, or otherwise adversely affect these sensitive habitat areas without prior written authorization from the County and USFWS.</p> <p>6. No more than 24 hours prior to initial ground disturbance for each phase of construction or mining activity, an approved biologist shall conduct a preconstruction survey for the CRLF at the Project site.</p> <ul style="list-style-type: none"> <li>• The survey shall consist of walking the Project limits and within the Project site to ascertain the possible presence of the species. The approved biologist shall investigate all areas that could be used by the CRLF for feeding, breeding, sheltering, movement, and other essential behaviors. This includes an adequate examination of mammal burrows, such as California ground squirrels or gophers.</li> <li>• Each encounter with the CRLF shall be treated on a case-by-case basis in coordination with the USFWS, but the general procedure is as follows: (1) the animal shall not be disturbed if it is not in danger; or (2) the animal shall be moved to a secure location if it is in any danger. These procedures are further described below:</li> </ul> <p>7. When a CRLF is encountered, all activities which could result in the harassment, injury, or death of the individual shall be immediately halted. The approved biologist shall then assess the situation in order to select a course of action that would avoid or minimize adverse effects to the animal. To the maximum extent possible, contact with the frog shall be avoided and the Applicant shall allow it to move out of the hazardous situation to a secure location on its own volition. This procedure applies to situations where a CRLF is encountered while it is moving to another location. It does not apply to animals that are uncovered or otherwise exposed or in areas where there is not sufficient adjacent habitat to support the species should the individual move away from the hazardous location.</p> <p>8. CRLF that are in danger shall be relocated and released by the approved biologist outside the construction or mining area within the same riparian area or watershed. If relocation of the frog outside the fence is not feasible (i.e., there are too many individuals observed per day), the approved biologist shall relocate the animals to a USFWS preapproved location. Prior to the initial ground disturbance, the Applicant shall obtain approval of the relocation protocol from the Service in the event that a CRLF is encountered and needs to be moved away from the Project site.</p> <p>9. The approved biologist shall limit the duration of the handling and captivity of the CRLF to the minimum amount of time necessary to complete the task. If the animal must be held in captivity, it</p>	

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>shall be kept in a cool, dark, moist, aerated environment, such as a clean and disinfected bucket or plastic container with a damp sponge. The container used for holding or transporting the individual shall not contain any standing water.</p> <p>10. No construction within creeks or riparian habitats shall occur during the wet season (October 15 to April 15, or as otherwise indicated by the conditions of resource agency permits). Outside of creeks and riparian habitats, when ground-disturbing activities in any given location commence between October 15 and April 15, daily monitoring by an approved biologist shall occur for the CRLF until April 16 or until all clearing and grubbing have been completed and the work area is completely surrounded by wildlife exclusion fencing, at which time CRLF would no longer be able to enter the work area.</p> <p>11. To minimize harassment, injury death, and harm in the form of temporary habitat disturbances, all Project-related vehicle traffic shall be restricted to established roads, construction and mining areas, equipment staging, storage, parking, and stockpile areas. These areas shall be delineated by the Applicant in preconstruction surveys and shall be established in locations disturbed by previous activities whenever feasible unless otherwise approved by the County Planning Department.</p> <p>12. Project-related vehicles shall observe a 15 mile per hour speed limit within construction and mining areas, except on County roads, and State and Federal highways. Off-road traffic outside of designated and fenced Project work areas shall be prohibited.</p> <p>13. The Applicant shall ensure bio-swales and bio-filtration are installed at the Project site adjacent to roadways to avoid and minimize sediment loading and point source pollutants.</p> <p>14. If a work site is to be temporarily dewatered by pumping, intakes shall be completely screened with wire mesh not larger than 5 millimeters to prevent CRLF from entering the pump system. Water shall be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any barriers to flow shall be removed in a manner that would allow flow to resume with the least disturbance to the substrate.</p> <p>15. Uneaten human food and trash attracts crows, ravens, coyotes, and other predators of the CRLF. A litter control program shall be instituted by the Applicant for construction, operations, and reclamation work. All workers shall ensure their food scraps, paper wrappers, food containers, cans, bottles, and other trash are deposited in covered or closed trash containers. The trash containers shall be removed from the Project area at the end of each working day.</p> <p>16. No insecticides or herbicides shall be used during construction or operations where there is the potential for these chemical agents to enter creeks, streams, waterbodies, or uplands that contain suitable habitat for the CRLF.</p> <p>17. No canine or feline pets or firearms (except for federal, state, or local law enforcement officers and security personnel) shall be permitted at the Project site to avoid and minimize harassment, injury, and death of the CRLF.</p> <p>18. For onsite storage of pipes, conduits and other materials that could provide shelter for CRLF, the Applicant shall use an open-top trailer or some other means to elevate the materials above</p>	

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>ground. This is intended to reduce the potential for animals to climb into the conduits and other materials.</p> <p>19. To the maximum extent practicable, no construction activities shall occur during rain events (i.e., when rain hits the ground) or within 24-hours following a rain event. Prior to construction activities resuming after a rain event, an approved biologist shall inspect the action area and all equipment/materials for the presence of CRLF.</p> <p>20. To the maximum extent practicable, night-time construction shall be minimized or avoided by the Applicant because dusk and dawn are often the times when the CRLF is most actively moving and foraging. Because dusk and dawn are often the times when the CRLF is most actively moving and foraging, to the maximum extent practicable, earthmoving and construction activities will cease no less than 30 minutes before sunset and will not begin again prior to no less than 30 minutes after sunrise.</p> <p>21. Plastic monofilament netting (erosion control matting), loosely woven netting, or similar material in any form shall not be used at the Project site because CRLF can become entangled and trapped in them. Any such material found on site shall be immediately removed by the approved biologist, construction or mining personnel, or the Applicant. Materials utilizing fixed weaves (strands cannot move), polypropylene, polymer or other synthetic materials shall not be used.</p> <p>22. Trenches or pits one (1) foot deep or more that are going to be left unfilled for more than forty-eight (48) hours shall be securely covered by the Applicant with boards or other material to prevent the CRLF from falling into them, unless slopes leading out of the pits are suitable to allow CRLF to leave on their own. If this is not possible, the Applicant shall ensure wooden ramps or other structures of suitable surface that provide adequate footing for the CRLF are placed in the trench or pit to allow for their unaided escape. The trench, pit, or hole also shall be examined by the approved biologist each workday morning during construction at least one hour prior to initiation of work and in the late afternoon no more than one hour after work has ceased to ascertain whether any individuals have become trapped. If the escape ramps fail to allow the animal to escape, the approved biologist shall remove and transport it to a safe location or contact the USFWS for guidance.</p> <p>23. The approved biologist(s) shall permanently remove any aquatic non-native wildlife species, such as bullfrogs and crayfish from the Project site, to the maximum extent possible.</p> <p><b>Mitigation Measure 3.4-4b:</b> The Applicant shall implement the following avoidance and minimization measures for certain operational activities:</p> <ol style="list-style-type: none"> <li>1. Impacts on the known CRLF breeding pond in the Phase 2 geotechnical setback shall be avoided, if feasible, so that this pond is not lost (i.e., so that the pond is not removed, filled, or drained so that it no longer provides suitable amphibian breeding habitat). If loss of this pond is unavoidable, compensatory mitigation will be provided as described in Mitigation Measure 3.4-4c(3).</li> <li>2. If mining activity that directly disturbs any pools or ponds within a mining pit, including retention basins, experiences a lull of at least 7 days, an approved biologist shall conduct a survey of the pool, pond, or basin for all life stages of the CRLF before mining in that</li> </ol>	

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>waterbody resumes. Any individuals detected shall be captured (e.g., via dipnet, seine, or other means suitable for the life stage in question) and relocated to the nearest habitat suitable for the life stage in question (e.g., egg masses and larvae shall be moved to other ponds or pools with suitable hydroperiod for successful metamorphosis) by the approved biologist.</p> <ol style="list-style-type: none"> <li>3. The Applicant shall install wildlife exclusion fencing around the storage pond within the processing plant to prevent special-status species such as CRLF from entering the pond. Exclusion fencing shall be at least 3 ft high, and the lower 6 inches of the fence shall be buried in the ground to prevent animals from crawling under. The remaining 2.5 ft shall be left above ground to serve as a barrier for animals moving on the ground surface. The fence shall be pulled taut at each support to prevent folds or snags. Such fencing shall be inspected regularly (at least weekly) and maintained in good condition throughout the period of the plant's operation.</li> <li>4. All lighting on the site, including security lighting (remain on throughout the night but shall be turned off if feasible) and lighting used during the plant's hours of operation, shall be minimized in terms of intensity, height of lights, extent (i.e., dispersion around the processing plant), and spillover into adjacent areas. A detailed lighting plan shall be provided to the County Department of Planning and Development for review and approval as part of the processing plant building permit or any grading permit submittal, whichever occurs first. The lighting plan shall show the fixture locations and specifications. All lighting shall be pointed downward and shielded. A photometric plan shall be included showing the lumens (or other similar measurement) for each fixture at the site. Light spillover outside of the processing plant shall be limited, and no fixtures shall be installed on the east side of the processing plant.</li> <li>5. Fencing with screening shall be installed around as much of the main plant as possible, as described in Mitigation Measure 3.4-15.2.</li> </ol> <p><b>Mitigation Measure 3.4-4c:</b> The Applicant shall provide compensatory mitigation for impacts to CRLF habitat as follows:</p> <ol style="list-style-type: none"> <li>1. Prior to initiation of impacts, a qualified biologist will determine the extent of impacts on CRLF habitat based on the acreage of all non-developed habitat to be impacted. The pond in the Phase 2 geotechnical setback area and the pond immediately south of Phase 4 that will be altered hydrologically by mining will be considered breeding habitat, and all other non-developed habitat to be impacted will be considered nonbreeding habitat.</li> <li>2. The Applicant shall provide mitigation to compensate for unavoidable impacts on CRLF nonbreeding habitat (e.g., upland habitat and nonbreeding aquatic habitat) through the preservation, management, and enhancement (e.g., through long-term management targeted toward this species) of high-quality habitat that is already occupied by the CRLF at a ratio of at least 2:1 (mitigation:impact), on an acreage basis, or as determined through the consultation and/or permitting process with USFWS. This 2:1 mitigation ratio is not lower because CRLF appear to regularly use the Project site and breed in or near impact areas, so that a 2:1 mitigation ratio is deemed necessary to offset Project impacts, but it is not higher because Project areas will</li> </ol>	

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>be restored to conditions suitable for CRLF following completion of mining. First priority for compensatory mitigation sites shall be areas located on Sargent Ranch. Off-site mitigation shall only be used if on-site mitigation cannot fully compensate for habitat losses.</p> <p>3. The Applicant shall provide mitigation to compensate for unavoidable impacts on CRLF breeding habitat, including the pond in the Phase 2 geotechnical setback area (if it will be lost or permanently drained) and the pond immediately south of Phase 4 that will be altered hydrologically by mining, through one or both of the following methods, or equivalent or more effective methods as determined through the consultation and/or permitting process with USFWS:</p> <ul style="list-style-type: none"> <li>• the creation of aquatic habitat suitable for CRLF breeding that could support the species at a 2:1 (mitigation:impact) ratio, on an acreage basis.</li> <li>• the enhancement of degraded aquatic habitat that is unsuitable for use by CRLF, but that is in close proximity to areas of known occurrence and can be made more suitable for use via the eradication of aquatic predators (e.g., bullfrogs and predatory fish) at a 3:1 mitigation ratio, on an acreage basis.</li> </ul> <p>First priority for compensatory mitigation sites shall be areas located on Sargent Ranch. Off-site mitigation shall only be used if on-site mitigation cannot fully compensate for habitat losses.</p> <p>4. A qualified biologist shall develop an HMMP describing the measures that shall be taken to manage the created/enhanced breeding and upland habitat described above and to monitor the effects of management on the CRLF. The HMMP shall be submitted to the County Department of Planning and Development for review and approval prior to the start of any ground-disturbing activities. The County may retain a qualified biologist at the Applicant's expense to peer-review the HMMP. The HMMP shall include the following:</p> <ul style="list-style-type: none"> <li>• a summary of impacts on CRLF habitat and populations, and the proposed mitigation;</li> <li>• a description of the location and boundaries of the mitigation site and description of existing site conditions;</li> <li>• a description of measures to be undertaken if necessary, to enhance (e.g., through focused management) the mitigation site for CRLF;</li> <li>• proposed management activities, such as managed grazing, management of invasive plants, measures targeted at sustaining populations of burrowing mammals, or other measures to maintain high-quality habitat for CRLF;</li> <li>• a description of species monitoring measures on the mitigation site, including specific, goals and objectives (such as maintaining or increasing abundance of CRLF or maintaining or improving habitat suitability), performance indicators and success criteria (such as presence or abundance of upland refugia or hydroperiod of breeding habitat), monitoring methods (such as sampling of upland refugia or monitoring of the hydroperiod of breeding habitat),</li> </ul>	

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>data analysis, reporting requirements, and monitoring schedule. At a minimum, performance criteria shall include occupation by the CRLF of created aquatic habitat;</p> <ul style="list-style-type: none"> <li>• a description of the management plan's adaptive management component, including a description of how management may be adapted depending on climate change or other changes in site conditions and the process by which adaptive management decisions will be made and implemented, as well as contingency measures for mitigation elements that do not meet performance criteria; and</li> <li>• a description of the funding mechanism for the long-term maintenance and monitoring of the mitigation lands.</li> </ul>	
<p><b>Impact 3.4-5:</b> Project activities would result in adverse effects on California tiger salamanders (CTS) and their habitat.</p>	<p><b>Mitigation Measure 3.4-5a:</b> The Applicant shall implement all impact avoidance and minimization measures described in Mitigation Measures 3.4-4a and 3.4-4b for the CRLF to reduce impacts on CTS, and shall consult with CDFW (e.g., for approval of biologists and relocation areas, and for approval conditions in which no take of individual CTS is anticipated to occur within an area and site monitoring by the qualified biologist is no longer necessary) in addition to the County and USFWS for all measures involving CTS.</p> <p><b>Mitigation Measure 3.4-5b:</b></p> <ol style="list-style-type: none"> <li>1. Prior to initiation of impacts, a qualified biologist will determine the extent of impacts on CTS habitat based on the acreage of all non-developed habitat to be impacted.</li> <li>2. The Applicant shall provide mitigation to compensate for unavoidable impacts on CTS nonbreeding habitat (e.g., upland habitat and nonbreeding aquatic habitat) through the preservation, management, and enhancement (e.g., through long-term management targeted toward this species) of high-quality habitat that is already occupied by the CTS at a ratio of at least 1:1 (mitigation:impact), on an acreage basis, or as determined through the consultation and/or permitting process with USFWS and CDFW. This 1:1 mitigation ratio is not lower because CTS are expected to be present on the Project site at least in low numbers, so that a 1:1 mitigation ratio is deemed necessary to offset Project impacts, but it is not higher because surveys have documented that the species is scarce in the Project area (so that effects of the Project on this species' populations would be low), and Project areas would be restored to conditions suitable for CTS following completion of mining. If CTS are recorded breeding successfully in the stock pond in the Phase 2 geotechnical setback area and that pond is subsequently impacted, or in the pond adjacent to the Phase 4 mining area that will be impacted indirectly as a result of reduction in the pond's watershed, the Applicant shall provide mitigation for impacts to those breeding habitats at a ratio of at least 1:1, on an acreage basis, or as determined through the consultation and/or permitting process with USFWS and CDFW; mitigation for lost breeding habitat shall consist of creation, preservation, and management of CTS breeding habitat. The same mitigation areas established for CRLF can be used for CTS if both species are documented to be present.</li> </ol> <p>First priority for compensatory mitigation sites shall be areas located on Sargent Ranch. Off-site mitigation shall only be used if on-site mitigation cannot fully compensate for habitat losses.</p>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>3. The HMMP described for CRLF in Mitigation Measure 3.4-6 will also describe the measures that shall be taken to manage the created/enhanced habitat and to monitor the effects of management on CTS. The HMMP shall be submitted to the County Department of Planning and Development for review and approval prior to the start of ground-disturbing activities. The County may retain a qualified biologist at the Applicant's expense to peer-review the HMMP. The HMMP shall include the following:</p> <ul style="list-style-type: none"> <li>• a summary of impacts on CTS habitat and populations, and the proposed mitigation;</li> <li>• a description of the location and boundaries of the mitigation site and description of existing site conditions;</li> <li>• a description of measures to be undertaken if necessary to enhance (e.g., through focused management) the mitigation site for CTS, including creation of new breeding habitat (if the Project impacts areas known to have been used for successful breeding by CTS);</li> <li>• proposed management activities, such as managed grazing, management of invasive plants, measures targeted at sustaining populations of burrowing mammals, and other measures to maintain high-quality habitat for CTS;</li> <li>• a description of species monitoring measures on the mitigation site, including specific, objective goals and objectives (such as maintaining or increasing abundance of CTS or maintaining or improving habitat suitability), performance indicators and success criteria (such as presence or abundance of upland refugia), monitoring methods (such as sampling of upland refugia), data analysis, reporting requirements, and monitoring schedule. At a minimum, performance criteria shall include demonstrated occurrence of CTS on the mitigation site;</li> <li>• a description of the management plan's adaptive management component, including a description of how management may be adapted depending on climate change or other changes in site conditions and the process by which adaptive management decisions will be made and implemented, as well as contingency measures for mitigation elements that do not meet performance criteria; and</li> <li>• a description of the funding mechanism for the long-term maintenance and monitoring of the mitigation lands.</li> </ul>	
<p><b>Impact 3.4-6:</b> Project activities would result in adverse effects on western pond turtles and their habitat.</p>	<p><b>Mitigation Measure 3.4-6:</b> The Applicant shall implement all impact avoidance and minimization measures described in Mitigation Measures 3.4-3 for water quality and 3.4-4a and 3.4-4b for the CRLF for the western pond turtle, and CDFW will be consulted (e.g., for approval of biologists and relocation areas) in addition to the County for all measures involving this species.</p>	<p>Less than Significant</p>
<p><b>Impact 3.4-7:</b> Project activities would result in adverse effects on burrowing owls and their habitat.</p>	<p><b>Mitigation Measure 3.4-7:</b> The Applicant shall implement the following measures (based on those contained within Condition 15 of the VHP) prior to groundbreaking activities for each phase of the Project (construction, operations, and reclamation) to ensure that individual burrowing owls are not injured or killed as a result of Project activities.</p>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>Prior to any ground disturbance associated with the Project (including vegetation removal; construction of individual Project components, such as roads, conveyor belts, and mining infrastructure; and ground disturbance associated with the start of mining activities associated with each new mining phase), a qualified biologist retained by the Applicant shall conduct preconstruction surveys in all suitable burrowing owl habitat areas on and within 250 feet of the area in which ground disturbance is proposed. To maximize the likelihood of detecting owls, the preconstruction survey shall last a minimum of three hours. The survey shall begin one hour before sunrise and continue until two hours after sunrise (three hours total) or begin two hours before sunset and continue until one hour after sunset. A minimum of two surveys shall be conducted (if owls are detected on the first survey, a second survey is not needed). Owls observed shall be counted and their location shall be mapped. Surveys shall conclude no more than two calendar days prior to construction; thus, surveys must begin no less than four days prior to the start of construction, operations, or reclamation activities (two days of surveying plus up to two days between surveys and construction).</p> <p>To avoid last-minute changes in schedule that may occur if burrowing owls are found, a preliminary survey may be conducted up to 14 days before construction. This preliminary survey may count as the first of the two required surveys, as long as the second survey concludes no more than two calendar days in advance of construction. Should the preconstruction survey determine the presence of burrowing owls on or within 250 feet the site, then the Applicant shall implement the following avoidance measures.</p> <p>a. Avoidance during the Breeding Season. If evidence of burrowing owls is found during the breeding season (February 1 to August 31), all nesting or roosting sites that could be disturbed by Project construction shall be avoided during the remainder of the breeding season (if owls remain throughout the breeding season) or while the nest (i.e., a burrow occupied during the period February 1 to August 31) is occupied by adults or young (occupation includes individuals or family groups foraging on or near the site following fledging). Although burrowing owls are unlikely to nest on the Project site, there is a remote possibility that nesting may occur. Wintering owls in Santa Clara County often remain past February 1, at which time they cannot be distinguished from breeding birds. As a result, any owl present between February 1 and August 31 will be considered a potential breeder unless and until it leaves the site.</p> <p>Avoidance shall include establishment of a 250-foot non-disturbance buffer zone around nests. Construction may occur outside of the 250-foot non-disturbance buffer zone. Construction may occur inside of the 250-foot non-disturbance buffer during the breeding season only if the nest is not disturbed, and a qualified biologist retained by the Project Applicant develops an avoidance, minimization, and monitoring plan that is reviewed and approved by the CDFW prior to Project construction and meets all of the following criteria:</p> <ul style="list-style-type: none"> <li>• A qualified biologist monitors the owls for at least 3 days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).</li> <li>• The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.</li> </ul>	

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<ul style="list-style-type: none"> <li>• If there is any change in owl nesting and foraging behavior as a result of construction activities, all disturbance activities shall cease within the 250-foot buffer. Construction shall not resume within the 250-foot buffer until the adults and juveniles from the occupied burrows have moved out of the Project area and 250-foot buffer.</li> <li>• If monitoring indicates that the nest is abandoned prior to the end of the nesting season (as would occur if a wintering owl lingered past February 1 and then eventually migrated to its breeding areas outside the region), and the burrow is no longer in use by owls, the non-disturbance buffer zone may be removed. The qualified biologist will excavate the burrow to ensure that no owls are present and to prevent reoccupation after receiving approval from CDFW.</li> </ul> <p>b. Avoidance during the Non-Breeding Season. During the non-breeding season (September 1 through January 31), a 250-foot non-disturbance buffer shall be established around occupied burrows as determined by a qualified biologist. Construction activities outside of this 250-foot buffer are allowed. Construction activities within the 250-foot buffer are allowed if all of the following criteria are met in order to prevent owls from abandoning important overwintering sites:</p> <ul style="list-style-type: none"> <li>• A qualified biologist monitors the owls for at least three days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).</li> <li>• The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.</li> <li>• If there is any change in owl nesting and foraging behavior as a result of construction activities, all disturbance activities shall cease within the 250-foot buffer.</li> <li>• If the owls are gone for at least one week, the Project Applicant may request approval from the CDFW that a qualified biologist excavate usable burrows to prevent owls from re-occupying the site. After all usable burrows are excavated, the buffer zone will be removed and construction may continue. Monitoring must continue as described above for the non-breeding season as long as the burrow remains active.</li> </ul> <p>c. Construction Monitoring. Based on the avoidance, minimization, and monitoring plan developed during construction, all non-disturbance buffer zones shall be established and maintained. A qualified biologist shall monitor the site consistent with the requirements described above to ensure that buffers are enforced and owls are not disturbed. The biological monitor shall also conduct training of construction personnel on the avoidance procedures, buffer zones, and protocols in the event that a burrowing owl flies into an active construction zone or within 250 feet of such zone.</p> <p>d. Passive Relocation. Passive relocation shall only be allowed, with the approval of CDFW, during the non-breeding season (September 1 through January 31), and may only occur if the burrow needs to be removed or could collapse from construction activities. If passive relocation is allowed by CDFW, a qualified biologist shall passively exclude birds from their burrows during non-breeding season only by installing one-way doors in burrow entrances. These doors shall be in</p>	

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>place for at least 48 hours to ensure owls have left the burrow, and then the qualified biologist shall excavate the burrow to prevent reoccupation. Burrows shall be excavated using hand tools. During excavation an escape route shall be maintained at all times. This may include inserting an artificial structure into the burrow to avoid having the overburden collapse into the burrow and trap owls inside.</p>	
<p><b>Impact 3.4-8:</b> Project activities would result in adverse effects on tricolored blackbirds and their habitat.</p>	<p><b>Mitigation Measure 3.4-8a:</b> The Applicant shall implement the following measures (based on those contained within Condition 17 of the VHP) prior to groundbreaking activities for each phase of the Project (construction, operations, and reclamation), to ensure that active tricolored blackbird colonies, including active nests, eggs, and young, are not lost as a result of Project activities.</p> <ol style="list-style-type: none"> <li>1. Prior to the initiation of any ground disturbance, vegetation removal, or other activities involving habitat impacts or movement of Project personnel, vehicles, or heavy equipment for construction or for the start of mining activities associated with each new mining phase that occur between March 15 and July 31, a qualified biologist retained by the Applicant shall conduct preconstruction surveys in all suitable tricolored blackbird habitat areas on and within 250 feet of the area in which construction or operational activities are proposed. The survey will be conducted no more than two calendar days prior to the start of the construction or operational activity. To avoid last minute changes in schedule that may occur if an active nest (i.e., a nest that is under construction or contains eggs or young) is found, the Project Applicant may also conduct a preliminary survey more than two calendar days before the start of construction, operations, and reclamation activities.</li> <li>2. If any emergent vegetation develops in the bottom of an active mining pit (i.e., one that has not yet undergone complete reclamation), and more than one week of inactivity within 250 feet of that emergent vegetation occurs during the breeding season (March 15-July 31), a qualified biologist shall perform a survey for nesting tricolored blackbirds prior to the initiation of any subsequent Project activity within 250 feet of the emergent vegetation.</li> <li>3. If a tricolored blackbird nesting colony is present, the qualified biologist will map the extent of suitable nesting habitat in which nesting is taking place (this suitable habitat may extend beyond the locations of actual nests). A 250-foot buffer will be applied between the edge of that nesting habitat and Project activities. This buffer may be reduced in areas with dense forest or other habitat features between the construction activities and the active nest colony, or where there is sufficient topographic relief to protect the colony from excessive noise or visual disturbance. Depending on site characteristics, the sensitivity of the colony, and surrounding land uses, the buffer zone may also be increased beyond 250 feet.</li> <li>4. If construction or operational activities take place during the breeding season when an active colony is present, a qualified biologist will monitor these activities to ensure that the 250-foot buffer zone is enforced. If monitoring indicates that Project activities outside of the buffer are affecting a breeding colony, the buffer will be increased if space allows (e.g., moving work areas farther away). If space does not allow, the Project activities causing disturbance of the colony will cease until the young have fledged or until the end of the breeding season, whichever occurs first. The biological monitor will also conduct training of construction personnel on the avoidance</li> </ol>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>procedures, buffer zones, and protocols in the event that tricolored blackbirds fly into an active construction zone (i.e., outside the buffer zone).</p> <p><b>Mitigation Measure 3.4-8b:</b> If Project construction or operational activities will result in direct impacts (outside the breeding season) on nesting habitat known to have supported nesting tricolored blackbirds within the last five years (as identified in the CNDDDB, through contact with local experts, and Project pre-activity surveys in Mitigation Measure 3.4-8a), compensatory mitigation for the loss of nesting habitat shall be provided. Prior to initiation of impacts on that nesting habitat, a qualified biologist will determine the acreage of nesting habitat (habitat used by nesting blackbirds in the previous five years) that will be impacted. Compensatory mitigation will be provided in the form of habitat preservation or creation at a ratio of 1:1 (on an acreage basis) and shall be described within the Project's HMMP prepared for the CRLF and CTS as described in Mitigation Measures 3.4-4c and 3.4-5b. First priority for compensatory mitigation sites shall be areas located on Sargent Ranch. Off-site mitigation shall only be used if on-site mitigation cannot fully compensate for habitat losses.</p> <p>Habitat to be preserved or created shall contain at least the same acreage of suitable nesting habitat for the tricolored blackbird as the amount of nesting habitat acreage lost, and the suitability of that habitat for nesting must be verified by a qualified biologist and reviewed and approved by the County Department of Planning and Development. A habitat protection easement ensuring that the use and development of the compensatory mitigation area shall be consistent with this purpose in perpetuity shall be granted by the Applicant to the County or other qualified entity approved by the County.</p>	
<p><b>Impact 3.4-9:</b> Project activities would result in adverse effects on other special-status and protected birds and their habitat.</p>	<p><b>Mitigation Measure 3.4-9:</b> The Applicant shall implement the following measures prior to any ground disturbance, vegetation removal, or other activities involving habitat impacts or movement of Project personnel, vehicles, or heavy equipment for construction, for the start of mining activities associated with each new mining phase, and for the start of reclamation activities to ensure that active nests, eggs, and young of protected birds are not lost as a result of Project activities.</p> <p>a. To the extent feasible, construction, operational, and reclamation activities that involve vegetation removal or ground-breaking, or that occur near wooded or forested habitats likely to support large numbers of nesting birds, shall be initiated during the nonbreeding season for birds (generally September 1 through January 31). If these activities are scheduled to take place outside the nesting season, impacts on active nests of birds protected under the MBTA and California Fish and Game Code will be avoided.</p> <p>b. Prior to the initiation of any ground disturbance, vegetation removal, or other activities involving habitat impacts or movement of Project personnel, vehicles, or heavy equipment for Project activities that occur between February 1 and August 31, a qualified biologist retained by the Applicant shall conduct preconstruction surveys for nesting birds. The survey will cover the portions of the Project site where construction/operations activities will be initiated as well as a 1-mile buffer for nesting eagles (in the event that eagles may nest in the vicinity during the Project's lifetime), a 250-foot buffer for other raptors, and a 100-foot buffer for non-raptors (other than tricolored blackbirds, which are addressed in Mitigation Measures 3.4-8a and 8b). During each survey, the qualified biologist will inspect all potential nesting habitats (e.g., trees, shrubs, grasslands, wetlands, and other nesting substrate) within direct impact areas and the aforementioned buffers for active nests (i.e., nests with eggs or young). The survey will be conducted no more than two calendar days prior to the start of the construction or operational</p>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

<b>Environmental Impact</b>	<b>Mitigation Measures</b>	<b>Level of Significance after Mitigation</b>
	<p>activity. To avoid last-minute changes in schedule that may occur if an active nest is found, the Project Applicant may also conduct a preliminary survey more than two calendar days before construction.</p> <p>c. If an active nest is found, a qualified biologist will determine the extent of a disturbance-free buffer zone to be established around the nest to ensure that it is not disturbed during Project implementation. The buffer distance is measured as the straight-line distance between an active nest and the activity. No Project-related activities that could physically disturb the nest, or any new Project-related activities (i.e., activities that were not ongoing when the nest was established) near the nest, will be performed within the buffer until the young have fledged or the nest has been determined to be inactive by a qualified biologist. Standard buffers are typically 100 feet for non-raptors and 250 feet for raptors other than eagles (for which the buffer may be up to 1 mile). A qualified biologist may determine that a reduced buffer is acceptable, taking into account dense vegetation, topography, or structures that will block Project activities from view; the life history and behavior of the bird species in question; and the nature (such as amount of noise, ground disturbance, or activity of personnel and equipment) of the proposed activity. If a reduced buffer is implemented, the qualified biologist will monitor bird behavior during work activities to the degree necessary to determine whether the buffer should be increase.</p>	
<p><b>Impact 3.4-10:</b> Project activities would result in adverse effects on special-status bats.</p>	<p><b>Mitigation Measure 3.4-10a:</b> The Applicant shall implement the following measures prior to any ground disturbance, vegetation removal, or other activities involving habitat impacts or movement of Project personnel, vehicles, or heavy equipment for construction or for the start of mining activities associated with each new mining phase to ensure that active pallid bat maternity roosts are not destroyed or disturbed as a result of Project activities.</p> <p>1. A qualified biologist retained by the Applicant shall conduct a habitat assessment of any riparian or oak woodland within the Project area for high-quality pallid bat roost sites prior to the start of any activities that will result in the removal of trees, use of heavy equipment, or night lighting. The habitat assessment shall include all impact areas plus a surrounding 150-foot buffer. If the habitat assessment concludes that any trees proposed for removal, or within 150 feet of areas where heavy equipment will be operated or night lighting will occur, provide high-quality roosting habitat for pallid bats (e.g., large cavities), the qualified biologist shall conduct a focused emergence survey to determine whether the roost is occupied. The survey shall be performed within 15 days prior to the start of construction or operations activities in a given Project phase. The survey shall include monitoring of suitable cavities at dusk, on a warm, dry evening when bats would emerge, to determine whether bats exit the roosts. Surveys may necessitate multiple qualified biologists and the use of acoustic detection devices to ensure that any pallid bats present are detected. If no pallid bats are detected emerging during the survey, no further measures are necessary. If pallid bats are detected during the survey, the qualified biologist will identify an appropriate buffer to be maintained around the roost during the maternity season (April 1 through July 31). The dimensions of the buffer will be determined based on the nature of the construction or operational activities proposed near the roost tree, the presence of dense vegetation or topography between the Project activities and the roost, and any other relevant factors. No new activities (i.e., activities that were not ongoing when the maternity season began) will occur within the buffer around the roost tree during the maternity season.</p>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>2. Pallid bat roost sites will be avoided and buffered, even outside the maternity season, if feasible. If it is infeasible to avoid the removal of a roost tree, whenever feasible the tree shall be removed only outside the maternity roost season and during seasonal periods of bat activity, when bats would be best able to find alternative roost sites. Thus, whenever feasible tree removal would occur only August 1 through October 15 or during March. Removal of these trees shall occur under the supervision of a qualified biologist via a two-phased process over two consecutive days. In the afternoon of the first day, limbs and branches shall be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices, or deep bark fissures shall be avoided, and only branches or limbs without those features shall be removed. This disturbance would cause bats to leave the roost that evening. On the second day, the entire tree shall be removed.</p> <p><b>Mitigation Measure 3.4-10b:</b> If a tree (or any other structure) containing a pallid bat maternity roost must be removed as part of the Project, a qualified biologist shall design and determine an appropriate location, on Sargent Ranch, for an alternative roost structure, based on the location of the original roost and habitat conditions in the vicinity. The roost structure shall be built to specifications as determined by a qualified biologist, or it may be purchased from an appropriate vendor, though the design must be approved by a qualified biologist. The structure shall be placed as close to the impacted roost site as feasible, though it will be located far enough from future Project activities so as to avoid disturbance of bats using the roost. The Applicant shall monitor the roost for three years or until occupancy is determined (whichever occurs first) to determine use by bats and submit annual reports verifying monitoring results to the County Department of Planning and Development Department.</p>	
<p><b>Impact 3.4-11:</b> Project activities would result in adverse effects on mountain lions and their habitat.</p>	<p><b>Mitigation Measure 3.4-11:</b> The Applicant shall implement Mitigation Measures 3.4-4c, 3.4-5b, and 3.4-15.</p>	<p>Less than Significant</p>
<p><b>Impact 3.4-12:</b> Project activities would result in adverse effects on San Francisco dusky-footed woodrats and their habitat.</p>	<p><b>Mitigation Measure 3.4-12a:</b> The Applicant shall implement Mitigation Measure 3.4-4b.</p> <p><b>Mitigation Measure 3.4-12b:</b> The Applicant shall implement the following measures prior to any ground disturbance, vegetation removal, or other activities in riparian or oak woodland for construction or for the start of mining activities associated with each new mining phase to ensure that impacts to active nests of woodrats as a result of Project activities are minimized.</p> <p>No more than 15 days prior to initial vegetation removal or ground disturbance within suitable habitat for the San Francisco dusky-footed woodrat, for each phase of construction and mining, a preconstruction survey for woodrat nests shall be conducted by a qualified biologist retained by the Applicant. The survey shall consist of walking through all areas of suitable habitat within the Project work area looking for woodrat nests, both on the ground and in oak trees.</p> <ol style="list-style-type: none"> <li>1. All woodrat nests detected within the survey area shall be flagged and mapped.</li> <li>2. A minimum 10-foot buffer should be maintained between Project construction activities and each nest to avoid disturbance. A smaller buffer may be allowed if, in the opinion of a qualified biologist, removing the nest would be a greater impact than that due to Project activities.</li> <li>3. If avoidance of active woodrat nests is not feasible (e.g., the nest is in the Project disturbance area) the woodrats shall be evicted from their nests prior to the removal of the nests and onset of ground-disturbing activities to avoid injury or mortality of the woodrats. The eviction of woodrats</li> </ol>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>and dismantling of woodrat nests shall begin no earlier than one hour before sunset to allow woodrats to escape under cover of dusk and avoid predators. A qualified biologist shall disturb the woodrat nest to the degree that all woodrats leave the nest and seek refuge outside of the Project activity area. Subsequently, the nest sticks shall be relocated; these materials will be gathered onto a tarp and then piled at the base of a nearby tree or shrub outside of the activity's impact area. The spacing between relocated nests shall not be less than 20 feet, if feasible, to avoid over-crowding.</p> <p>4. If, during dismantling of a woodrat nest, young woodrats are detected, the nest will be left in place. Qualified biologists will revisit the nest after 3 days to determine whether it is still active, or whether the mother relocated the young to another area. Once the nest is determined to be inactive or the young are large enough to disperse on their own, the nest will be dismantled and the nest materials relocated.</p>	
<p><b>Impact 3.4-13:</b> Project activities would result in adverse effects on American badgers and their habitat.</p>	<p><b>Mitigation Measure 3.4-13:</b> The Applicant shall implement the following measures prior to any ground disturbance, vegetation removal, or other activities in natural (i.e., undeveloped) habitat for construction or for the start of mining and reclamation activities associated with each new mining phase to ensure that injury or mortality of American badgers as a result of Project activities is avoided.</p> <p>a. Preconstruction surveys (occurring prior to all phases of ground disturbance or construction activity throughout the Project life) conducted for burrowing owls shall also be used to determine the presence or absence of badgers within the Project area, as well as within a 300-foot buffer around the Project area. If an active badger den is identified during preconstruction surveys, a construction-free buffer of 300 feet (or an alternate distance determined by a qualified biologist in consultation with CDFW) shall be established around the den if feasible. If a 300-foot buffer is infeasible, then the qualified biologist and CDFW shall determine whether a reduced buffer is preferable to evicting the badger (which would likely be the case for a single badger).</p> <p>b. During the period September 1 through the end of February, when young are unlikely to be present in a burrow, if a badger den is located within the Project footprint, the den shall be excavated by a qualified biologist to cause the badger to leave the area. Because badgers are known to use multiple burrows in a breeding burrow complex, multiple dens may need to be excavated. Ground disturbance can proceed only after all dens within the impact area have been excavated to ensure that no badgers are present below-ground/</p> <p>c. During the period March 1 through August 31, when young could be present within a burrow, a biological monitor shall be present on the site during Project activities that occur within 500 feet of any known or suspected badger den to ensure the buffer is adequate to avoid direct impacts to individuals or den abandonment. Such monitoring shall occur until it is determined that young are of an independent age such that Project development would not result in harm to individual badgers. Once the biological monitor has determined that young badgers are old enough to leave their natal den or have vacated the site, the burrows can be excavated, and ground disturbance can proceed.</p>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
<p><b>Impact 3.4-14:</b> Project activities would result in substantial adverse effects on jurisdictional wetlands, other waters, and riparian habitats.</p>	<p><b>Mitigation Measure 3.4-14a:</b> Prior to issuance of any development permits, the Project Applicant shall compensate for the estimated loss of any jurisdictional wetlands, ponds, creeks, and riparian habitat that would occur over the Project’s permitted term through on-site or off-site restoration, creation, or enhancement of similar or higher-quality habitat, the purchase of mitigation credits, or a combination of these two approaches. A qualified biologist shall determine the extent of impacts based on the acreage of overlap of Project construction and operations/mining areas on wetlands, ponds, and riparian habitat, and the linear footage of creek channel within those Project impact areas. A minimum of a 1:1 (on an acreage basis for wetlands, ponds, and riparian habitat and a linear footage basis for creeks) replacement-to-loss ratio for in-kind habitat (or equivalent or greater as determined in coordination with the USACE, CDFW, and RWQCB during permitting) is required. Enhancement of existing, low-quality habitats (rather than restoration or creation) is acceptable if a substantial increase in ecological functions and values can be achieved, as determined by a qualified biologist in coordination with the USACE, CDFW, and RWQCB.</p> <p>If mitigation is to be satisfied through purchase of mitigation credits in an agency-approved mitigation bank, such as the Pajaro River Mitigation Bank (for wetlands), proof of the purchase of credits shall be provided to the County Department of Planning and Development prior to the start of ground-disturbing activities. If mitigation is to be satisfied through Project-specific habitat restoration, creation, or enhancement, the mitigation shall be described in an HMMP, which shall be prepared by a qualified biologist retained by the Applicant and submitted to the County Department of Planning and Development for review and approval prior to the start of ground-disturbing activities. At a minimum, the HMMP shall include the following:</p> <ul style="list-style-type: none"> <li>• A summary of Project impacts to jurisdictional habitats;</li> <li>• The location of all restoration, creation, or enhancement activities;</li> <li>• Detailed description of all restoration, creation, or enhancement activities;</li> <li>• Evidence of a suitable water budget to support any restored, created, or enhanced aquatic and riparian habitats;</li> <li>• The species, amount, and location of plants to be installed in the created habitats;</li> <li>• The time of year for planting and the method for supplemental watering during the establishment period;</li> <li>• Management and maintenance activities, such as weeding of invasive plants, providing for supplemental water, and repair of water delivery systems;</li> <li>• The monitoring period, which shall not be less than five years.</li> <li>• Criteria for mitigation efforts to be deemed a success; at a minimum, success for vegetated wetlands and riparian habitats would include at least seventy-five percent (75%) cover by native vegetation, or seventy-five percent (75%) survival of planted or seeded native riparian vegetation, within the target mitigation acreage by the end of year five;</li> </ul>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<ul style="list-style-type: none"> <li>• Adaptive management procedures that accommodate the uncertainty that comes with restoration projects. These include, but are not limited to, measures to address colonization by invasive species, unexpected lack of water, excessive foraging of installed plants by native wildlife, and variable climatic conditions. This section will also describe the process by which adaptive management decisions will be made and implemented;</li> <li>• A description of the financial mechanisms for funding of all monitoring activities and ensuring that the created aquatic and riparian habitats shall be preserved and managed in perpetuity.</li> </ul> <p><b>Mitigation Measure 3.4-14b:</b> The Project Applicant shall compensate for any loss of riparian habitat that occurs along Sargent Creek adjacent to or downstream from Phases 3 and 4 as a result of a reduction in streamflow as a result of mining. A baseline survey shall be conducted prior to initiation of any earth-moving in Phases 3 and 4 to document the areal extent of woody riparian vegetation, including mapping of canopy and native understory vegetation separately, within the entire reach of Sargent Creek downstream from Pits 3 and 4. Mapping of these same parameters shall then be conducted in the year following completion of reclamation in Phases 3 and 4 to determine whether any decline in the overall extent of woody riparian canopy or native understory within this reach has occurred and is caused by the Project. If any decline has occurred and is caused by the Project, compensatory mitigation shall be provided via the restoration, creation, or enhancement of riparian habitat, purchase of mitigation credits, or a combination of these two methods as described in Mitigation Measure 3.4-14a (or as otherwise required to provide equivalent or greater mitigation by regulatory agencies as a condition of Project permits), except that compensatory mitigation for temporary changes in hydrology during mining shall be provided at a minimum ratio of 1.5:1 (mitigation:impact), on the basis of the acreage of decline in canopy or native understory, whichever is greater, that has occurred since the baseline survey. This ratio is higher than the 1:1 replacement ratio specified in Mitigation Measure 3.4-14a due to the temporal loss in riparian habitat functions and values that will have occurred over the 20-30 year period and due to the higher-habitat quality along lower Sargent Creek.</p> <p>Unless all mitigation is provided via purchase of credits from a mitigation bank, an HMMP describing Project-specific riparian habitat mitigation shall be prepared when the magnitude of the impact is known (i.e., after completion of Phases 3 and 4 mining) and the mitigation location is known. Aside from the mitigation ratio and the timing of preparation of the HMMP, mitigation shall occur exactly as described in Mitigation Measure 3.4-14a.</p>	
<p><b>Impact 3.4-15:</b> Implementation of the Project would interfere substantially with wildlife movement.</p>	<p><b>Mitigation Measure 3.4-15:</b> The Applicant shall implement the following measures to reduce the impacts of Project construction, operation, and reclamation on wildlife movement.</p> <ol style="list-style-type: none"> <li>1. Fencing in and around the Project site shall be designed and configured to facilitate wildlife movement around areas of intensive Project activity, such as facilitating movement around the processing plant. Areas where fencing shall be designed to facilitate wildlife movement include fencing along the outer edge of the Tar Creek riparian corridor (on both sides of the creek); the eastern site boundary (along the edge of the existing railroad tracks), including the area north of Tar Creek adjacent to the existing residence; the southern boundary of the processing plant area; and areas immediately west and northwest of the processing plant area that would not be occupied by mining activity. Such fencing shall incorporate the following components.</li> </ol>	<p>Significant and Unavoidable</p>

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<ul style="list-style-type: none"> <li>a. Barbed-wire fencing shall consist of no more than five strands.</li> <li>b. To facilitate wildlife crossing over and under fencing (except for fencing around the main plant, which should not be designed for wildlife entry), a gap of at least 20 inches shall be provided between the ground and the bottom wire, board, or rung to allow fawns to pass under the fencing, and the top wire shall be no more than 40 inches high to allow more mature deer to jump over.</li> <li>c. Where fencing is not necessary for livestock management, a smooth (instead of barbed) wire shall be used for the top and/or bottom strands.</li> <li>d. At intervals of no more than every 200 feet, a segment of fencing at least 8 feet long with wooden poles instead of a top strand of wire shall be provided to allow animals such as gray foxes, mountain lions, and bobcats to more easily cross over the fencing.</li> <li>e. No new fencing shall be installed along the entrance road or around the bridge over Tar Creek, with the exception of a gate to allow control of vehicle access to the site.</li> </ul> <p>2. Fencing at least 10 feet in height shall be installed around as much of the processing plant as possible (on the north side adjacent to Tar Creek and as much of the east side as is feasible with construction of the rail spur), and screening fabric shall be installed on that fencing to prevent light spillover and block visible signs of physical activity (movement of people and equipment) from view of wildlife outside the processing plant. The fencing details and specifications shall be included in the Wildlife-Compatible Fencing Plan (described above) and reviewed and approved by the County Department of Planning and Development.</p> <p>3. The bridge over Tar Creek shall be designed to maximize open space where wildlife can cross under the bridge (e.g., spaces between the abutments and top of bank shall be left as open as possible). No new fencing shall be added at or around the bridge. Engineering plans for the Tar Creek bridge shall be provided to the County Department of Planning and Development as part of the processing plant building per or any grading permit submittal, whichever comes first.</p> <p>4. Along Old Monterey Road between its junction with U.S. 101 and the entrance to the Project site, the Applicant shall install signs shall be placed every ½-mile warning drivers to watch for animals and to observe the speed limit, which shall be no more than 25 miles per hour to minimize vehicle collisions and reduce vehicular noise. Such signage shall also be placed along the conveyor belt access/maintenance road, indicating a speed limit of no more than 15 miles per hour.</p> <p>5. At intervals of no less than every 1,000 feet, the conveyor shall be elevated so that the bottom of the conveyor belt structure is at least 8 feet clear above the ground to facilitate movement of larger animals under the belt.</p>	
<p><b>Impact 3.4-16:</b> Project activities would conflict with County ordinances and policies intended to protect biological resources.</p>	<p><b>Mitigation Measure 3.4-16a:</b></p> <ul style="list-style-type: none"> <li>1. Prior to removal of any oaks, or any other trees protected under Section Sec. C16-3 of the County's Tree Preservation and Removal Ordinance, from the Project area, a tree removal plan and arborist report shall be submitted identifying the species type, acreage, diameter, and amount of canopy of oak trees or other protected trees proposed for removal. The report shall also</li> </ul>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>designate oak woodland as high-quality or medium-quality for the purposes of establishing the mitigation ratio. The arborist report shall be prepared by an I.S.A. Certified Arborist, Registered Professional Forester, or another professional approved by the County Department of Planning and Development. Reports may be submitted separately for the construction phase and by Project mining phase, prior to the start of tree removal within each phase.</p> <p>2. The Applicant shall implement both of the following two measures to compensate for the loss of any oak woodland habitat to ensure that it complies with the County of Santa Clara Planning Office Guide to Evaluating Oak Woodlands Impacts.</p> <ul style="list-style-type: none"> <li>• Planting Replacement of Oak Trees. New oak trees shall be planted on the Project site to compensate for lost oaks, though the planting of new oak trees shall not fulfill more than fifty percent (50%) of the mitigation requirement for the Project. The objective of tree planting shall be to establish new oak woodland at a ratio of 2:1 or 3:1 based on the condition of the oak woodland habitat: 2:1 replacement is required for medium-quality oak woodland habitat; and 3:1 replacement is required for high-quality oak woodland habitat. The following standard mitigation ratios shall be used, unless a different ratio is approved by the County Department of Planning and Development based on site-specific characteristics associated with the mining phases: <ul style="list-style-type: none"> <li>○ For the removal of one small tree (5 to 18 inches): two 24-inch boxed trees or three 15-gallon trees.</li> <li>○ For the removal of 1 medium tree (18 to 24 inches): three 24-inch boxed trees or four 15-gallon trees.</li> <li>○ For the removal of a tree larger than 24 inches: four 24-inch boxed trees or five 15-gallon trees.</li> </ul> </li> </ul> <p>Tree replacement shall be with like species unless alternate species are approved by the County. A Tree Planting and Maintenance Plan shall be submitted for County review and approval showing species, size, spacing and location of plantings and the location and species of established vegetation. Tree plantings shall be monitored for five years following planting, and a survival rate of seventy-five percent (75%) shall be required. Should the planted trees fail to meet the established performance and survival criteria, the Project Applicant shall be responsible for additional plantings and management activities necessary to ensure the long-term success of planted mitigation trees.</p> <ul style="list-style-type: none"> <li>• Conservation Easement. For mitigation of the remaining oak woodlands impacts not mitigated by planting replacement oak trees, existing native oak trees on or off the Project area shall be protected from future development through a conservation easement in perpetuity or fee title dedication to the County or other qualified entity approved by the County, through inclusion in the conservation easement referenced in Mitigation Measure 3.5-4b Oak woodland offered as mitigation must be configured in such a manner as to best preserve the integrity of the oak ecosystem and minimize the</li> </ul>	

**TABLE S-1 (CONTINUED)**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>ratio of edge to area. Priority should be given to conserving oak habitat adjacent to existing woodlands under conservation easements, public lands, or open space lands. The protection of existing oak woodlands through conservation easements shall mitigate for the loss of oaks at a ratio equal to 2:1 (for medium quality oak woodland habitat) or 3:1 (for high quality oak woodland habitat) as determined by the County of Santa Clara Department of Planning and Development. Land proposed as mitigation, when viewed with adjacent protected conservation land, should not result in conserved parcels of less than one acre.</p> <p><b>Mitigation Measure 3.4-16b:</b> The Applicant shall provide mitigation to compensate for impacts to ordinance trees in compliance with Section Sec. C16-7 of the County's Tree Preservation and Removal Ordinance. Mitigation provided per Mitigation Measure 3.4-16(2) for oak tree replacement will satisfy mitigation requirements for impacts to ordinance-sized oak trees. For other tree species, the Applicant will prepare a replanting and/or re-vegetation plan for all ordinance-sized trees to be removed. Replacement trees shall be of a like kind and species of tree removed, if native and feasible, or of a kind and species to be determined by the Planning Department. The replacement tree(s) need not be in the same location of the tree removed, but the replacement trees will be planted somewhere on Sargent Ranch. Replacement tree size and ratio shall be as follows:</p> <ul style="list-style-type: none"> <li>○ For the removal of one small tree (5 to 18 inches): two 24-inch boxed trees or three 15-gallon trees.</li> <li>○ For the removal of 1 medium tree (18 to 24 inches): three 24-inch boxed trees or four 15-gallon trees.</li> <li>○ For the removal of a tree larger than 24 inches: four 24-inch boxed trees or five 15-gallon trees.</li> </ul>	
<p><b>Impact 3.4-17:</b> The Project activities could contribute to the cumulative loss of special-status plant species.</p>	<p><b>Mitigation Measure 3.4-17:</b> The Applicant shall implement Mitigation Measures 3.4-1a, b, and c.</p>	<p>Less than Significant</p>
<p><b>Impact 3.4-18:</b> The proposed Project could contribute to cumulative increases in nitrogen emissions that could result in adverse effects on habitat for the Bay checkerspot butterfly and rare serpentine-associated plants located off-site.</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Impact 3.4-19:</b> Project activities could contribute to a cumulative degradation of habitat for special-status fish.</p>	<p><b>Mitigation Measure 3.4-19:</b> The Applicant shall implement Mitigation Measure 3.4-3.</p>	<p>Less than Significant</p>
<p><b>Impact 3.4-20:</b> Project activities could contribute to cumulative harm to protected terrestrial species and loss of their habitats.</p>	<p><b>Mitigation Measures 3.4-20:</b> The Applicant shall implement Mitigation Measures 3.4-1c, 3.4-4a through 3.4-4c, 3.4-5a and 3.4-5b, 3.4-6, 3.4-7, 3.4-8a and 3.4-8b, 3.4-9, 3.4-10a and 3.4-10b, 3.4-11, 3.4-12a and 3.4-12b, and 3.4-13.</p>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
<b>Impact 3.4-21:</b> The Project activities could contribute to the cumulative loss of jurisdictional wetlands, other waters, and riparian habitats.	<b>Mitigation Measures 3.4-21:</b> The Applicant shall implement Mitigation Measures 3.4-1c, 3.4-14a and 3.4-14b.	Less than Significant
<b>Impact 3.4-22:</b> The Project activities could contribute to the cumulative impairment of wildlife crossings.	<b>Mitigation Measure 3.4-22:</b> The Applicant shall implement Mitigation Measure 3.4-15.	Significant and Unavoidable
<b>Impact 3.4-23:</b> The Project activities could contribute to the cumulative loss of oaks and oak woodlands.	<b>Mitigation Measures 3.4-23:</b> The Applicant shall implement Mitigation Measures 3.4-1b, 3.4-1c, 3.4-16a, and 3.4-16b.	Less than significant
<b>Cultural and Tribal Resources</b>		
<b>Impact 3.5-1:</b> The project would cause a substantial adverse change in the significance of known historical or archaeological resources.	<p><b>Mitigation Measure 3.5-1</b></p> <p>a. <b>Resource Avoidance/Protection.</b> Roads used by the Project, such as existing roads that cross identified resources (CA-SCL-577/H and CA-SCL-578/H) during construction, operations, and reclamation. If resources cannot be avoided, but grading shall be capped through use of durable materials to ensure that wear and tear by vehicles of the road surface does not disturb the road bed and damage archaeological deposits, or burials located underneath. No ground disturbance below the existing grade shall occur. In addition, fencing shall be used to prevent vehicles from leaving the access roads where they are adjacent to identified resource sites. The Applicant shall submit archaeological and historic resource protection plans to the County Department of Planning and Development for review and approval prior to any project construction.</p> <p>b. <b>Archaeological Testing Program for Known and Unrecorded Resources.</b> For areas where ground disturbance would occur, the Applicant shall retain a qualified archaeological consultant to prepare an Archaeological Testing Program (ATP) that covers each of the three project phases: construction, mining, and reclamation. The ATP shall identify the type of archaeological resources that could potentially be disturbed by the proposed Project, the testing method to be used, and the locations recommended for testing based on sensitivity mapping for areas identified as having high to highest sensitivity, as well as the location of known resources. The purpose of the ATP will be to determine whether archaeological materials are present and evaluate whether the materials constitute an historical resource. The ATP shall focus on areas that are of high to highest sensitivity, as well as those that are in the vicinity of CA-SCL-578/H, and would apply during all phases of the project. Disturbance shall not occur in areas where newly-discovered significant cultural resources are identified; newly-discovered significant cultural resources shall be avoided if feasible, with data recovery only if avoidance is not feasible, consistent with CEQA Guidelines § 15126.4(b).</p> <p>The Applicant shall submit the draft ATP to the County Department of Planning and Development and to a designated representative of the Amah Mutsun Tribal Band for review. The County and Tribal representative shall have 45 days to review and comment on the draft ATP. The qualified</p>	Less than Significant

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>archaeological consultant shall then update the draft ATP to incorporate relevant comments and resubmit a final ATP to the County and Tribal representative. Testing shall not begin until the County Department of Planning and Development has approved the final ATP.</p> <p>Testing shall be conducted by the archaeological consultant and observed by a monitor designated by the Amah Mutsun Tribal Band in accordance with the approved Archaeological Monitoring Program (AMP), as described further in Mitigation Measure 3.4-1c.</p> <p>At the completion of activities associated with the ATP, the archaeological consultant shall submit a written report of findings to the County of Santa Clara Department of Planning and Development and Tribal representative for review. If, based on the ATP, the archaeological consultant finds that potentially eligible archaeological resources are present, the archaeological consultant shall consult (as part of one in-person meeting or conference call) with the County Department of Planning Development and the Tribal representative to determine if additional measures are warranted during testing. Additional measures that may be undertaken include specialized archaeological testing methods and/or an archaeological data recovery program.</p> <p>c. <b>Archaeological Monitoring Program for Known and Unrecorded Resources.</b> Following completion of the ATP, the Applicant shall prepare and the County Department of Planning and Development shall implement an Archaeological Monitoring Program (AMP) in consultation with the archaeological consultant and the Tribal representative. The AMP shall include the following:</p> <ul style="list-style-type: none"> <li>• Prior to any ground-disturbing activities related to the development of the Project throughout the Project life, including access roads, the free-span bridge over Tar Creek, mining areas, and processing facilities, the following shall occur: <ul style="list-style-type: none"> <li>i. The County, in consultation with the archaeological consultant and Tribal representative, shall determine what Project activities shall be monitored.</li> <li>ii. All ground-disturbing activities (outside of the low sensitivity areas of Phases 1 and 2), such as demolition, excavation, grading, utilities installation, etc., shall require archaeological and Native American monitoring because of the risk these activities pose to potential buried archaeological resources and to their depositional context.</li> </ul> </li> <li>• The Native American monitor shall be designated/approved by the Amah Mutsun Tribal Band to monitor ground-disturbing activities at the Project proponent's expense. The terms of Native American monitoring shall be determined prior to the onset of monitoring activities, including requirements for prior notice of areas to be disturbed and provisions if a designated monitor is unavailable. The Native American monitor shall be notified at least 30 days prior to onset of construction, and at least 14 days in advance of when and where new ground disturbance will occur. The Native American monitor shall be present at all times that the archaeological monitor is present, unless the Native American monitor determines that his/her presence is not required at a particular location. If the Native American monitor does not arrive or is not present as scheduled, Project work may continue in the monitor's absence..</li> </ul>	

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<ul style="list-style-type: none"> <li>• The archaeological monitor and Native American monitor shall advise Project contractors to be alert for evidence of archaeological resources, how to identify archaeological resources, and of appropriate protocol in the event of discovery of an archaeological resource.</li> <li>• The archaeological monitor and Native American monitor shall be present on the Project area according to a schedule agreed upon by the archaeological consultant and County (generally during ground-disturbing activities) until the County has, in consultation with the Project archaeological consultant and Tribal representative, determined that Project construction activities in the particular disturbance area could have no effects on significant archaeological deposits.</li> <li>• The archaeological monitor shall record and be authorized to collect soil samples and material of archaeological or historical interest as warranted for analysis.</li> <li>• If an intact archaeological deposit is encountered, ground-disturbing activities in the vicinity of the deposit shall cease. The archaeological monitor shall temporarily redirect ground-disturbing activities until the deposit is evaluated. The archaeological consultant shall immediately notify the County Department of Planning and Development of the encountered archaeological deposit. The archaeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological deposit, and present the findings of this assessment in a report submitted to the County and Tribal representative. Should archaeological resources with ties to Native Americans be discovered, the archaeological monitor shall immediately notify the County Coordinator of Indian Affairs.</li> </ul> <p>The draft AMP shall be submitted to the County Department of Planning and Development and to a designated representative of the Amah Mutsun Tribal Band for review. The County and Tribal representative shall have two weeks to review and comment on the draft AMP. The qualified archaeological consultant shall then update the draft AMP to incorporate relevant comments and resubmit a final AMP to the County and Tribal representative. Testing shall not begin until the County has approved the final AMP.</p> <p>d. <b>Archaeological Data Recovery Program for Known and Unrecorded Resources</b> If an eligible archaeological resource is determined to be present as part of the ATP or AMP, then the Applicant shall implement an archaeological data recovery plan (ADRP) to be prepared by the Applicant. The archaeological consultant, County Department of Planning and Development staff, and Amah Mutsun Tribal Band representative shall consult (as part of one conference call or in-person meeting) on the scope of the ADRP prior to preparation of a draft ADRP.</p> <p>The ADRP shall be consistent with the requirements of CEQA Guidelines Section 15126.4(b)(3). It shall identify how the proposed data recovery program will preserve the relevant information the archaeological resource contains, identify what scientific/historical research questions are applicable to the resource, what data classes the resource possesses, and how the data classes would address applicable research questions. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical. The scope of the ADRP shall also include the following elements:</p>	

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<ul style="list-style-type: none"> <li>• Descriptions of proposed field strategies, procedures, and operations;</li> <li>• Additional measures that should be undertaken if Native American resources are unearthed;</li> <li>• Description of selected cataloguing system and artifact analysis procedures;</li> <li>• Description of and rationale for field and post-field discard and deaccession policies;</li> <li>• Consideration of an off-site public interpretive program during the course of the ADRP;</li> <li>• Recommended security measures to protect the archaeological resource from vandalism, looting, and non-intentionally damaging activities;</li> <li>• Description of proposed final report format and distribution of results; and</li> <li>• Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.</li> </ul> <p>The draft ADRP shall be submitted to a designated representative of the Amah Mutsun Tribal Band and to the County Department of Planning and Development for review. The Tribal representative and County shall have two weeks to review and comment on the draft ADRP. The qualified archaeological consultant shall then update the draft ADRP to incorporate relevant comments and resubmit a final ADRP to the County and Tribal representative. Data recovery shall not begin until the County has approved the final ADRP.</p> <p>e. <b>Final Archaeological Resources Report for Known and Unrecorded Resources.</b> The Applicant shall retain the services of the archaeological consultant, who shall submit a Draft Final Archaeological Resources Report (FARR) to the County Department of Planning and Development describing the historical significance of discovered archaeological resources and describing the archaeological and historical research methods employed in the archaeological testing/monitoring/data recovery programs undertaken. Information that may put at risk (such as resource locations) any archaeological resource shall be provided in a separate removable insert within the final report. Once approved by the County, copies of the FARR (including any formal site recordation forms and/or documentation for nomination to the National Register of Historic Places and California Register of Historic Resources) shall be distributed to the California Archaeological Site Survey Northwest Information Center, County of Santa Clara Department of Planning and Development, and Tribal representative.</p>	
<p><b>Impact 3.5-2:</b> Implementation of the proposed Project could damage unrecorded subsurface prehistoric and historic archaeological resources.</p>	<p><b>Mitigation Measure 3.5-2:</b> Implement Mitigation Measure 3.5-1.</p>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES**

<b>Environmental Impact</b>	<b>Mitigation Measures</b>	<b>Level of Significance after Mitigation</b>
<p><b>Impact 3.5-3:</b> The Project could disturb any human remains, including those interred outside of dedicated cemeteries.</p>	<p><b>Mitigation Measure 3.5-3a:</b> Implement Mitigation Measures 3.5-1.</p> <p><b>Mitigation Measure 3.5-3b:</b> In the event that human remains are discovered during ground-disturbing activities and/or grading at the site, the Applicant shall stop all activity within a 50-foot radius of the find. The County Coroner shall be notified immediately and shall make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is necessary (as required by Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, Title 14 California Code of Regulations Section 15064.5(e), and County Ordinance Number B6-18). If the remains are determined to be Native American, the Coroner shall notify the NAHC within 24 hours of this determination. Once the NAHC identifies the most likely descendants, the descendants shall make recommendations regarding proper burial (including the treatment of grave goods). No further disturbance of the site shall be made except as authorized by the County Coordinator of Indian Affairs and NAHC in accordance with the provisions of state law and the County Ordinance.</p>	<p>Less than Significant</p>
<p><b>Impact 3.5-4:</b> The Project would cause a substantial adverse change in the significance of tribal cultural resources.</p>	<p><b>Mitigation Measure 3.5-4a:</b> Implement Mitigation Measures 3.5-1 and 3.5-3b.</p> <p><b>Mitigation Measure 3.5-4b:</b> To partially offset and compensate for impacts to the three specific TCRs, and to compensate for the loss and disturbance of those portions of the physical landscape of the JTCL that are within the Project site, the property owner/applicant shall record a conservation easement in accordance with Civil Code section 815 et seq. The conservation easement shall be conveyed by the property owner/applicant to any entity identified in Civil Code section 815.3, and verified by the County prior to any ground disturbance. The conservation easement shall include a minimum two acres for every one acre disturbed by the Project (total disturbed acreage of the Project is 403.3 acres), and shall include the Project site itself upon completion of reclamation. In addition, the conservation easement shall include an area outside the Project site of comparable size to the acreage disturbed by the Project. The boundaries of the offsite easement shall be determined by the County in consultation with the Amah Mutsun Tribal Band, and shall include areas and/or resources that are of particular important in their contribution to the JTCL, such as identified tribal cultural resources, riparian areas and /or specific oak trees.</p> <p>The conservation easement shall prohibit all uses and development that are not already legally occurring prior to Project approval, except for environmental restoration activities, including biological resource compensatory mitigation measures identified in this EIR and restoration of the JTCL, which may be allowed with the appropriate governmental approval and permits. Consistent with Public Resources Code section 21084.3(b)(3), this mitigation measure will ensure the land within the conservation easement is substantially preserved and/or restored in its current natural state, thereby preventing development or disturbance from new uses that could adversely affect the JTCL.</p>	<p>Significant and Unavoidable</p>
<p><b>Impact 3.5-5:</b> The Project would cause a substantial adverse change in the significance of the Juristac Tribal Cultural Landscape.</p>	<p><b>Mitigation Measure 3.5-5a:</b> Implement Mitigation Measures 3.5-1, 3.5-3b and 3.5-4b.</p>	<p>Significant and Unavoidable</p>

**TABLE S-1 (CONTINUED)**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p><b>Mitigation Measure 3.5-5b:</b> Prior to commencement of any vegetation removal or ground disturbance, the Project Applicant shall prepare and submit, to the satisfaction of the Director of Planning, or Director's designee, evidence that the following actions have been satisfied:</p> <ul style="list-style-type: none"> <li>i. After seeking consultation with the Amah Mutsun Tribal Band (AMTB), refine the plant list provided in Appendix F of Gathering Voices Past and Present (2021) to identify those plants that contribute to the significance of the JTCL as a Tribal Cultural Resource, and that could be present within the Project site.</li> <li>ii. Prepare a survey of the Project site to identify the plant species identified in the plant list.</li> <li>iii. Determine the extent of Project impacts based on the number of individuals impacted and the acreage of habitat occupied by each plant species on the plant list. The survey shall be conducted by a qualified plant biologist.</li> <li>iv. Plant species: <ul style="list-style-type: none"> <li>(a) For species on the plant species that are also federal or state-listed special-status plant species, implement Mitigation Measure 3.4-1, which requires compensatory mitigation for the loss of special-status plants.</li> <li>(b) For species on the plant list that are not federal or state-listed special-status, compensatory mitigation shall be provided by preservation and management of another, existing on-site or off-site population within the JTCL boundary. Habitat occupied by the affected species shall be preserved and managed in perpetuity at a minimum 1:1 mitigation ratio (at least one plant preserved for each plant affected, and also at least one occupied acre preserved for each occupied acre affected for the affected plant species).</li> </ul> </li> <li>v. In addition to 1:1 preservation as described in 3.5-5b.iv, the restoration area shall be enhanced by transplanting individual plants or seeds from the Project site as appropriate.</li> <li>vi. Plant species in the preservation areas shall be monitored using specific, objective final criteria and performance criteria, monitoring methods, data analysis, reporting requirements, and monitoring schedule. At a minimum, performance criteria shall include demonstration that any plant population fluctuations over the monitoring period do not indicate a downward trajectory in terms of reduction in numbers and/or occupied area for the preserved mitigation population that can be attributed to management (i.e., that are not the result of local weather patterns, as determined by monitoring of a nearby reference population, or other factors unrelated to management).</li> </ul>	
<p><b>Impact 3.5-6:</b> The Project could contribute to cumulative adverse changes in known historical or archaeological resources.</p>	<p><b>Mitigation Measure 3.5-6:</b> Implement Mitigation Measure 3.5-1.</p>	<p>Less than Significant</p>
<p><b>Impact 3.5-7:</b> The Project could contribute to cumulative adverse changes in unrecorded subsurface prehistoric and historic archaeological resources</p>	<p><b>Mitigation Measure 3.5-7:</b> Implement Mitigation Measure 3.5-1.</p>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES**

<b>Environmental Impact</b>	<b>Mitigation Measures</b>	<b>Level of Significance after Mitigation</b>
<b>Impact 3.5-8:</b> The Project could contribute to cumulative disturbance of human remains, including those interred outside of dedicated cemeteries.	<b>Mitigation Measure 3.5-8:</b> Implement Mitigation Measures 3.5-1 and 3.5-3b.	Less than Significant
<b>Impact 3.5-9:</b> The Project could contribute to cumulative adverse changes in the significance of tribal cultural resources.	<b>Mitigation Measure 3.5-9:</b> Implement Mitigation Measures 3.5-1 and 3.5-3b, 3.5-4b and 3.5-5b.	Significant and Unavoidable
<b>Energy</b>		
<b>Impact 3.6-1:</b> Construction, operation and maintenance, and reclamation of the Project would increase the use of energy resources, but would not result in significant wasteful, inefficient, or unnecessary consumption of energy.	None required.	Less than Significant
<b>Impact 3.6-2:</b> Construction, operation and maintenance, and reclamation of the Project could conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	None required.	Less than Significant
<b>Impact 3.6-3:</b> The Project could contribute to cumulative increases in the energy use.	None required.	Less than Significant
<b>Geology, Soils, and Paleontological Resources</b>		
<b>Impact 3.7-1:</b> Seismic hazards could cause adverse effects including the risk of loss, injury, or death during a seismic event.	None required.	Less than Significant
<b>Impact 3.7-2:</b> Excavation of quarry pits and reclamation would increase the potential for slope instability and slope failure.	<b>Mitigation Measure 3.7-2a:</b> This mitigation measure applies to the mining pits during mining and reclamation. Throughout the mining operation and reclamation slope grading, the Applicant shall retain a licensed geotechnical engineer to inspect the mining area and monitor construction of the quarry cut slopes twice annually and each time a new 30-foot bench has been excavated. Upon completion of each inspection, the geotechnical engineer shall submit a report to the County and Applicant detailing observations of subsurface conditions, descriptions of potential in-slope failure mechanism (i.e., failure planes, faults, jointing, existing failure planes, and groundwater seepage) or any other concerns regarding the stability of the cut slopes. The geotechnical engineer shall prescribe remedial actions that shall be implemented by the Applicant. Remedial actions could include adjustments to proposed slope configurations (i.e., decreasing slope angle or attitude), additional groundwater seepage management, removal of failure-prone materials, and/or performing additional data collection and slope stability monitoring. After the report has been reviewed and approved by the County Department of Planning and Development, the Applicant shall implement the remedial actions in compliance with a timeline established by the County.	Less than Significant

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p><b>Mitigation Measure 3.7-2b:</b> This mitigation measure applies to the mining pits during mining. During quarry operation, the Applicant shall implement a combination of the following measures to ensure slope stability:</p> <ul style="list-style-type: none"> <li>• Localized layback, earth buttresses, and/or stabilization fills of individual slopes to accommodate for unfavorable bedding. This measure would be required when bedding is observed to be oriented and inclined and/or daylight toward the mining pit. This condition could indicate inherent instability in the slope.</li> <li>• Remedial grading to remove in-place clayey topsoil/colluvium below the proposed stockpiles. This measure would remove potentially unstable or weak topsoil and loose colluvium from the base of the stockpile to ensure the stockpile is founded on competent material, reducing the likelihood of failure.</li> <li>• Waste pile buttress fills or backfill to contain or mitigate surficial and/or minor translational failures. This measure would be implemented when beds are observed to be oriented and inclined and/or daylight toward the mining pit and appear to have the potential to fail.</li> <li>• For groundwater seepage, dewatering by horizontal drains, deep cutoff trenches, or gabion buttresses. Removal of groundwater would be necessary to reduce failure potential in a slope. Groundwater increases the potential of failure by adding weight to the slope and reducing the friction forces in soils and rock.</li> </ul> <p>Observation and inspection during excavation of the quarry pits by a California Certified Engineering Geologist retained by the Applicant shall occur at a minimum of twice per year or any time that mining operations encounter conditions that vary significantly from conditions described in the Project's geotechnical slope stability report, for the term that the quarry is operational. The Engineering Geologist shall submit a report for review and approval to the County of Santa Clara Department of Planning and Development recommending any additional operational measures deemed necessary to ensure slope stability.</p> <p><b>Mitigation Measure 3.7-2c:</b> This mitigation measure applies to the mining pits during reclamation. Prior to reclamation slope grading, the Applicant shall develop proposed final slope configurations that address and improve the factors of safety (FS) that are less than 1.0 under seismic loading conditions. The Applicant shall demonstrate in its analysis, that a pseudo static FS of 1.0 or greater will be achieved by mitigation strategies such as placement of soil buttresses at the toe of slopes vulnerable to failure under seismic loading. In conjunction with Mitigation Measures 3.7-2a and 3.7 2b, the analysis and mitigation strategies prescribed by the measure would provide the supplemental information needed to demonstrate compliance with SMARA at reclamation.</p>	
<p><b>Impact 3.7-3:</b> Activities associated with construction, mining and reclamation could result in accelerated erosion and loss of topsoil.</p>	<p>None required.</p>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
<p><b>Impact 3.7-4:</b> The site soils would not be incompatible with the proposed On-Site Wastewater Treatment System (OWTS).</p>	<p>None required.</p>	<p>Less than Significant</p>
<p><b>Impact 3.7-5:</b> Project excavation and grading could adversely affect paleontological resources.</p>	<p><b>Mitigation Measure 3.7-5:</b> This measure applies to construction of the Phase 3 and 4 conveyor belt and access road within areas mapped as Etchegoin Formation (Te) with a PFYC of 4 (high), as well as to all ground-disturbing activities (whether considered construction or operation) within the mining pits (Phases 1 through 4) and geotechnical setback areas.</p> <p>The Applicant shall retain a qualified paleontologist meeting Society of Vertebrate Paleontology (SVP) standards to oversee the preparation of a paleontological resources monitoring plan (PRMP). The PRMP shall be prepared prior to the start of construction and mining activities, reviewed and approved by the County Department of Planning and Development, and implemented by a qualified paleontologist. The PRMP shall provide guidance for paleontological field surveys, fossil sampling, spot checking/monitoring, reporting, curation, and on-call response to fossil discoveries that occur for the duration of the Project construction and operation. The PRMP shall detail the following components:</p> <p>a) <b>Worker Training.</b> The qualified paleontologist shall prepare and implement a worker training program to inform construction and mining personnel of the possibility for fossil discoveries. The training program shall provide an overview of the paleontological sensitivity of the site and the potential to uncover fossil remains. The training program shall instruct personnel to immediately inform their supervisor if any bones, teeth, or other substantial fossil remains are unearthed. In such a case, workers shall immediately cease activity within a 50-foot radius of the discovery site until a qualified paleontologist can examine and evaluate the find per item (b) below. Work may not resume in the discovery area until it has been authorized by the County. The training shall be provided to new personnel prior to beginning work on the site and such trainings should be coordinated with the site manager and should coincide with spot checking/sampling visits. Verification of training will be provided as an appendix to the annual report submitted to the County Department of Planning and Development described in item (f).</p> <p>b) <b>Evaluation and Salvage of Fossils.</b> If any bones, teeth, or other fossil remains are unearthed in the course of ground disturbance, work will cease as directed in item (a) and a qualified paleontologist will examine and evaluate the find. In the event that the qualified paleontologist deems the fossil significant according to SVP Guidelines (2010) and recommends it for curation, the qualified paleontologist shall propose salvage measures in consultation with the Applicant, and the salvage measures shall be reviewed and approved by the County Department of Planning and Development and shall be carried out by or under the direct supervision of the qualified paleontologist. Curation shall follow the process directed in item (e).</p> <p>c) <b>Paleontological Survey.</b> At least 30 days prior to the start of surface disturbance in any new portion of the Project site that is not low potential (e.g., at the beginning of the Project construction period, when construction on the Phase 3 and 4 access road and conveyor belt begins, or when excavation of a new mining phase begins), a paleontological survey shall be conducted by a qualified paleontologist for the area to be disturbed to allow for in situ documentation and collection of surficial fossils. Following each survey, a paleontological survey memorandum shall</p>	<p>Less than significant for construction; significant and unavoidable for operation.</p>

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	<p>be prepared. The first survey memorandum prior to the start of construction shall be submitted immediately upon completion to the County Department of Planning and Development. Subsequent surveys during the life of the Project can be compiled and submitted as part of the annual paleontological mitigation report described in item (f).</p> <p>d) <b>Spot Checks During Mining.</b> A qualified paleontologist shall conduct periodic spot checks (at least six times per year) for the duration of mining activities that impact native Etchegoin Formation (Te), unnamed claystone (Tn), and Pleistocene older alluvium (Qoa). This includes all of Phases 1 through 4. The qualified paleontologist shall check for the presence of any recently uncovered macrofossils or layers that should be sampled for microfossils. The need for, frequency, and timing of the spot checks shall be outlined in the PRMP, and during implementation the actual need, frequency, and timing shall be based on the PRMP and coordinated with the Applicant based on real-time excavation activities and locations. The frequency of spot-checking efforts in a given portion of the quarry area may be reduced at the recommendation of the qualified paleontologist with approval from the County Department of Planning and Development if it is determined that only previously disturbed, imported, or Holocene-age alluvial sediments are being impacted, or if sediments are deemed to be non-conducive to fossil preservation. Dates and results of spot checks shall be recorded and reported as described in item (f).</p> <p>e) <b>Sample Identification and Curation.</b> The qualified paleontologist shall ensure that all fossils and bulk matrix samples collected at the Project site during work stoppages (if resources are found during ground disturbance), paleontological surveys, or spot checks are removed to a secure paleontological laboratory within 30 days of collection from the field for preparation to the point of identification and curation in accordance with SVP Guidelines (2010). All data, including the results of the analysis and research on the fossil collection, shall be compiled along with the fossil specimen inventory and detailed paleontological locality forms, maps, and photos for inclusion in the annual paleontological mitigation report described in item (f).</p> <p>f) <b>Annual Reporting.</b> The annual paleontological mitigation report shall be submitted to the County Department of Planning and Development and, if fossils are discovered, to the University of California Museum of Paleontology (or other equivalent fossil repository). The annual paleontological mitigation report shall also include dates of field work, results of spot checking, survey and sampling, fossil analyses, significance evaluation, conclusions and future recommendations, locality forms, and an itemized list of specimens. Detailed survey reports and verification of new mining personnel paleontology trainings shall be included as appendices. The PRMP shall identify an annual due date for the report.</p>	
<p><b>Impact 3.7-6:</b> The Project would contribute to the cumulative loss of paleontological resources.</p>	<p><b>Mitigation Measure 3.7-6:</b> Implement Mitigation Measure 3.7-5 (requiring worker training, surveys, spot checks, curation, and annual reporting).</p>	<p>Significant and Unavoidable</p>

**TABLE S-1 (CONTINUED)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
<b>Greenhouse Gas Emissions</b>		
<p><b>Impact 3.8-1:</b> The Project would generate greenhouse gas emissions directly and indirectly, contributing to global climate change.</p>	<p><b>Mitigation Measure 3.8-1a:</b> Prior to the commencement of the construction activities, the Applicant shall purchase offset credits in the amount of 7,408 metric tons CO<sub>2</sub>e. This amount represents amortized construction emissions plus estimated first year operational emissions. The Applicant shall provide verification to the County that carbon offset credits have been purchased.</p> <p>The Applicant shall prioritize offsets within Santa Clara County, BAAQMD boundaries, the rest of California, and from other states with offset laws at least as strict as California's, in order of preference. The carbon offset credits shall be real, permanent, quantifiable, verifiable, additional, and enforceable, as defined by 17 CCR 95802. Offset protocols must also be consistent with CARB requirements under 17 CR 95972. Carbon offsets must meet these requirements and be purchased from offset programs verified by a recognized third-party registry such as the American Carbon Registry, Verra, or Climate Action Reserve. For each subsequent year of Project operations, the Applicant shall choose one of the following options.</p> <ol style="list-style-type: none"> <li>1. <b>Option 1:</b> The Applicant shall continue to make the offset payment each subsequent year in the complete amount of 7,408 metric tons CO<sub>2</sub>e.</li> <li>2. <b>Option 2:</b> The Applicant shall purchase offset credits in the amount of 7,408 metric tons CO<sub>2</sub>e minus the difference between 7,408 metric tons and the actual CO<sub>2</sub>e emissions that the project generated in the prior year. Based on actual Project construction and/or subsequent year operational activities that resulted in GHG emissions, the Applicant shall calculate annual GHG emissions, including consideration of any measures that have been taken to reduce project GHG emissions, and provide emissions estimates to the County for review and approval. Within 60 days of County approval of the estimated emissions, the Applicant shall provide verification to the County that carbon offset credits have been purchased for the amount identified by the County-approved emissions estimates.</li> </ol> <p><b>Mitigation Measure 3.8-1b:</b> For construction and operational off-road equipment, the Applicant shall replace diesel and gasoline-powered vehicles with electric or other low or zero-GHG emissions equipment as feasible, based on availability of the technology and whether the cost would be prohibitive. In addition, biodiesel or renewable diesel shall replace traditional petroleum-based diesel to fuel off-road equipment where feasible, based on availability of the technology and whether the cost would be prohibitive. Any resulting changes to the Project fleet or fuel type shall be reflected in the calculations of GHG emissions for Option #2 of Mitigation Measure 3.8-1a. Prior to the commencement of construction activities, and every five years afterward, the Applicant shall provide the County with a report for County review and approval describing the feasibility of using low carbon-emitting equipment and fuels for the Project.</p> <p><b>Mitigation Measure 3.8-1c:</b> If and when electric haul trucks are used for product hauling associated with the Project, the Applicant shall install conduit and EV charging stations at locations where trucks will be parked or idling. The Applicant shall notify the County when installation of conduit and EV charging stations is completed, following which the County shall verify installation. Any resulting changes to the Project fleet shall be reflected in the calculations of GHG emissions for Options #2 in Mitigation Measure 3.8-1a. This mitigation measure will also reduce future NOx emissions from trips to the site.</p>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
<b>Impact 3.8-2:</b> The Project could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	<b>Mitigation Measure 3.8-2:</b> Implement Mitigation Measures 3.8-1a through 3.8-1c.	Less than Significant
<b>Hazards and Hazardous Materials</b>		
<b>Impact 3.9-1:</b> The Project would routinely transport, use, and disposal of hazardous materials, which could pose a risk to human health and/or the environment.	None required.	Less than Significant
<b>Hazards and Hazardous Materials (cont.)</b>		
<b>Impact 3.9-2:</b> The Project could create a hazard to the public or the environment through accidental release of existing soil contaminants, such as historic pesticide residues, into the environment.	<p><b>Mitigation Measure 3.9-2:</b> The Project Applicant shall analyze and remove suspected residual pesticides in corral on-site soils. This measure applies to construction and mining and applies only to the corral area soils identified in the Phase I Environmental Site Assessment. Specifically, the Applicant shall implement the following:</p> <ul style="list-style-type: none"> <li>a) Prior to issuance of a grading permit or any soil-disturbing activities, including placement of overburden material, within the corral area (shown on Figure 3 in Appendix H), the Project Applicant shall have soil samples collected and analyzed by a qualified environmental professional to determine if residual pesticides are present in on-site soils within the corral area. If residual pesticides are detected at levels that exceed regulatory thresholds, the geographical and vertical extent of contamination shall be identified, and recommendations for a Health and Safety Plan and methods for cleanup shall be implemented, as applicable. This work shall be performed under the oversight of the County's Site Cleanup Program (SCP) within the Department of Environmental Health (DEH) Site Mitigation Programs (County of Santa Clara 2021b) with copies of all documentation provided to the County Department of Planning and Development.</li> <li>b) If residual pesticides are present at the corral site, then the Applicant shall have soils containing pesticides removed from the site and characterized and disposed of according to the California Hazardous Waste Regulations. Contaminated soil that exceeds regulatory thresholds shall be handled by trained personnel using appropriate personal protective equipment (PPE) and engineering and dust controls, in accordance with local, state, and federal laws, such as those enforced by Cal/OSHA and the Bay Area Air Quality Management District (BAAQMD). Any contaminated soils that are removed from the site shall be disposed of at a licensed hazardous materials disposal site.</li> </ul>	Less than Significant
<b>Impact 3.9-3:</b> The Project would contribute to the cumulative increases in the risk of exposure to hazardous materials.	<b>Mitigation Measure 3.9-3:</b> Implement Mitigation Measure 3.9-2.	Less than Significant

**TABLE S-1 (CONTINUED)**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
<b>Hydrology and Water Quality</b>		
<b>Impact 3.10-1:</b> Project construction grading and other activities would substantially degrade surface or groundwater quality.	<b>Mitigation Measure 3.10-1:</b> Implement Mitigation Measure 3.4-4 from Section 3.4, Biological Resources.	Less than Significant
<b>Impact 3.10-2:</b> Project operation and subsequent reclamation of the Project site would not substantially degrade surface or groundwater quality.	None required.	Less than Significant
<b>Impact 3.10-3:</b> The Project would not substantially decrease groundwater supplies through affecting groundwater quality such that the Project may impede sustainable groundwater management of the basin.	None required.	Less than Significant
<b>Impact 3.10-4:</b> Project activities would not have an adverse impact on groundwater production in local groundwater wells.	None required.	Less than Significant
<b>Impact 3.10-5:</b> The Project would not substantially increase regional consumptive use of groundwater or reduce recharge, thereby decreasing availability of groundwater.	None required.	Less than Significant
<b>Impact 3.10-6:</b> The Project would not impede sustainable groundwater management of a groundwater basin.	None required.	Less than Significant
<b>Impact 3.10-7:</b> The Project would not substantially alter existing drainage patterns in a manner that would result in substantial erosion or siltation on or off site, increased runoff, or adverse impacts on water quality or related to flood flows.	None required.	Less than Significant
<b>Impact 3.10-8:</b> The Project would not risk release of pollutants due to Project inundation in a flood hazard zone, or due to impeding or redirecting flood flows.	None required.	Less than Significant
<b>Impact 3.10-9:</b> The Project would not conflict with the CCRWQCB Basin Plan or obstruct implementation of a sustainable groundwater management plan.	None required.	Less than Significant

**TABLE S-1 (CONTINUED)**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES**

<b>Environmental Impact</b>	<b>Mitigation Measures</b>	<b>Level of Significance after Mitigation</b>
<b>Impact 3.10-10:</b> The Project would not contribute to significant cumulative degradation of water quality.	<b>Mitigation Measure 3.10-10:</b> Implement Mitigation Measure 3.4-4 from Section 3.4, <i>Biological Resources</i> , during Project construction.	Less than Significant
<b>Impact 3.10-11:</b> The Project would not contribute to significant cumulative increases in the consumption of groundwater supply.	None required.	Less than Significant
<b>Mineral Resources</b>		
<b>Impact 3.11-1:</b> The Project could result in the loss of a valuable mineral resource or loss of a locally important mineral resource recovery site.	None required.	Less than Significant
<b>Impact 3.11-2:</b> The Project could contribute to cumulative loss of availability of a known mineral resource or loss of a locally important mineral resource recovery site.	None required.	Less than Significant
<b>Noise and Acoustics</b>		
<b>Impact 3.12-1:</b> Project construction would result in temporary increases in ambient noise levels in the Project vicinity.	None required.	Less than Significant
<b>Impact 3.12-2:</b> Project operations would permanently increase ambient noise levels in the vicinity of the Project.	None required.	Less than Significant
<b>Impact 3.12-3:</b> Use of conventional earth moving equipment during construction, operation, and reclamation could generate groundborne vibration and groundborne noise levels.	None required.	Less than Significant
<b>Impact 3.12-4:</b> The Project would not result in a cumulatively considerable contribution to a significant noise or vibration impact.	None required.	Less than Significant
<b>Transportation</b>		
<b>Impact 3.13-1:</b> The Project would not conflict with County of Santa Clara policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	None required.	Less than Significant
<b>Impact 3.13-2:</b> The Project would generate substantial additional VMT.	No mitigation available.	Significant and Unavoidable

**TABLE S-1 (CONTINUED)**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
<p><b>Impact 3.13-3:</b> Project construction could increase roadway hazards due to the presence of large construction trucks, temporary lane closures and detours.</p>	<p><b>Mitigation Measure 3.13-3:</b> Construction Traffic Control Plan</p> <p>The Applicant shall require the construction contractor to prepare and submit a Construction Traffic Control Plan to the County of Santa Clara Department of Public Works and Caltrans District 4 for approval prior to the onset of construction. The Construction Traffic Control Plan shall be prepared in accordance with the California Department of Transportation Transportation Management Plan Guidelines (2015) and shall include, at a minimum, the following:</p> <ol style="list-style-type: none"> <li>a. Restricting or limiting heavy vehicle traffic to and from the Project site to occur outside the peak commute hours (7:00-9:00 a.m. and 4:00-6:00 p.m.);</li> <li>b. Timing of deliveries of heavy equipment and building materials to occur outside the peak commute hours;</li> <li>c. Directing construction traffic with a flag person;</li> <li>d. Placing temporary signing, lighting, and traffic control devices if required, including, but not limited to, appropriate signage along access routes to indicate the presence of heavy vehicles and construction traffic;</li> <li>e. Ensuring access for emergency vehicles to the Project site;</li> <li>f. Temporarily closing travel lanes or delaying traffic during materials delivery or the construction of roadway improvements;</li> <li>g. Storing construction equipment on-site during construction;</li> <li>h. Identifying and using truck routes acceptable to Caltrans and the County for construction-related heavy trucks;</li> <li>i. Maintaining access to any adjacent properties; and,</li> <li>j. Specifying both construction-related vehicle travel and oversize load haul routes, minimizing construction traffic during the a.m. and p.m. peak hours.</li> </ol>	<p>Less than Significant</p>
<p><b>Impact 3.13-4:</b> The Project could result in inadequate emergency access.</p>	<p><b>Mitigation Measure 3.13-4:</b> Implement Mitigation Measure 3.13-3, Construction Traffic Control Plan.</p>	<p>Less than Significant</p>
<p><b>Impact 3.13-5:</b> The Project would contribute to cumulative increases in vehicle miles traveled.</p>	<p>No mitigation available.</p>	<p>Significant and Unavoidable</p>
<p><b>Impact 3.13-6:</b> The Project would contribute to significant cumulative increases in roadway hazards and/or interference with emergency access.</p>	<p><b>Mitigation Measure 3.13-6:</b> Implement Mitigation Measure 3.13-3, Construction Traffic Control Plan.</p>	<p>Less than significant</p>
<p><b>Utilities and Service Systems</b></p>		
<p><b>Impact 3.14-1:</b> The Project would increase demand for water supply.</p>	<p>None required.</p>	<p>Less than Significant</p>

**TABLE S-1 (CONTINUED)**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES**

<b>Environmental Impact</b>	<b>Mitigation Measures</b>	<b>Level of Significance after Mitigation</b>
<b>Impact 3.14-2:</b> The Project would generate additional solid waste.	None required.	Less than Significant
<b>Impact 3.14-3:</b> Project construction and operation would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.	None required.	Less than Significant
<b>Impact 3.14-4:</b> The project would contribute to cumulative increases in demand for water supply.	None required.	Less than Significant
<b>Impact 3.14-5:</b> The project would contribute to cumulative increases in generation of solid waste.	None required.	Less than Significant
<b>Wildfire</b>		
<b>Impact 3.15-1:</b> The Project could exacerbate wildfire risks and could thereby expose people to pollutant concentrations from a wildfire or expose people or structures to risk of loss, injury, or death involving wildland fires.	None required.	Less than Significant
<b>Impact 3.15-2:</b> The Project could expose people or structures to risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	None required.	Less than Significant
<b>Impact 3.15-3:</b> The Project could result in a cumulatively considerable contribution to a significant cumulative impact related to wildfire.	None required.	Less than Significant

**TABLE S-2  
COMPARISON OF ALTERNATIVES TO THE PROJECT (SIGNIFICANT IMPACTS)**

Environmental Impact	Project	Alternative 1	Alternative 2	Alternative 3
<b>Aesthetics</b>				
Impact 3.2-1: The Project would alter the visual character of the Project site or scenic resource visible from U.S. 101, a County-designated scenic highway.	SU/M	NI	SU/M>	SU/M<
Impact 3.2-3: The Project would contribute to cumulative changes in visual character of public views from U.S. 101, a County-designated scenic highway.	SU/M	NI	SU/M>	SU/M<
<b>Air Quality</b>				
Impact 3.3-1: The Project would affect implementation of the applicable air quality plans.	SU/M	NI	SU/M<	SU/M<
Impact 3.3-2: The Project would emit criteria air pollutants—ozone precursors (NOx and ROG), PM2.5, and PM10, for which the region is in nonattainment status.	SU/M	NI	SU/M<	SU/M<
Impact 3.3-5: The Project would contribute nonattainment pollutants (ozone precursors, PM2.5 and PM10) to cumulative increases in air pollutants.	SU/M	NI	SU/M<	SU/M<
<b>Biological Resources</b>				
Impact 3.4-1: Project activities would result in adverse effects on special-status plant species.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.4-3: Project activities would result in adverse effects on special-status fish and their habitat.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.4-4: Project activities would result in adverse effects on California red-legged frogs and their habitat.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.4-5: Project activities would result in adverse effects on California tiger salamanders (CTS) and their habitat.	LTS/M	NI	LTS/M>	LTS/M>
Impact 3.4-6: Project activities would result in adverse effects on western pond turtles and their habitat.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.4-7: Project activities would result in adverse effects on burrowing owls and their habitat.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.4-8: Project activities would result in adverse effects on tricolored blackbirds and their habitat.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.4-9: Project activities would result in adverse effects on other special-status and protected birds and their habitat.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.4-10: Project activities would result in adverse effects on special-status bats.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.4-11: Project activities would result in adverse effects on mountain lions and their habitat.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.4-12: Project activities would result in adverse effects on San Francisco dusky-footed woodrats and their habitat.	LTS/M	NI	LTS/M=	LTS/M=
Impact 3.4-13: Project activities would result in adverse effects on American badgers and their habitat.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.4-14: Project activities would result in substantial adverse effects on jurisdictional wetlands, other waters, and riparian habitats.	LTS/M	NI	LTS/M=	LTS/M=
Impact 3.4-15: Implementation of the project would interfere substantially with wildlife movement.	SU/M	NI	SU/M<	SU/M<
Impact 3.4-16 Project activities would conflict with County ordinances and policies intended to protect biological resources.	LTS/M	NI	LTS/M=	LTS/M=

**TABLE S-2 (CONTINUED)**  
**COMPARISON OF ALTERNATIVES TO THE PROJECT (SIGNIFICANT IMPACTS)**

Environmental Impact	Project	Alternative 1	Alternative 2	Alternative 3
<b>Biological Resources (cont.)</b>				
Impact 3.4-17: The Project activities could contribute to the cumulative loss of special-status plant species.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.4-19: Project activities could contribute to a cumulative degradation of habitat for special-status fish.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.4-20: Project activities could contribute to cumulative harm to protected terrestrial species and loss of their habitat.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.4-21: The Project activities could contribute to the cumulative loss of jurisdictional wetlands, other waters, and riparian habitats.	LTS/M	NI	LTS/M=	LTS/M=
Impact 3.4-22: The Project activities could contribute to the cumulative impairment of wildlife crossings.	SU/M	NI	SU/M<	SU/M<
Impact 3.4-23: The Project activities could contribute to the cumulative loss of oaks and oak woodlands.	LTS/MM	NI	LTS/M=	LTS/M=
<b>Cultural and Tribal Resources</b>				
Impact 3.5-1: The Project would cause a substantial adverse change in the significance of known historical or archaeological resources.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.5-2: Implementation of the Project could damage unrecorded subsurface prehistoric and historic archaeological resources.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.5-3: The Project could disturb any human remains, including those interred outside of dedicated cemeteries.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.5-4: The Project would cause a substantial adverse change in the significance of tribal cultural resources within the proposed area of development.	SU/M	NI	LTS/M<	LTS/M<
Impact 3.5-5: The Project would cause a substantial adverse change in the significance of the Juristac Tribal Cultural Landscape	SU/M	NI	SU/M<	SU/M<
Impact 3.5-6: The Project could contribute to cumulative adverse changes in known historical or archaeological resources.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.5-7: The Project could contribute to cumulative adverse changes in unrecorded subsurface prehistoric and historic archaeological resources.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.5-8: The Project could contribute to cumulative disturbance of human remains, including those interred outside of dedicated cemeteries	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.5-9: The Project could contribute to cumulative adverse changes in the significance of tribal cultural resources.	SU/M	NI	SU/M<	SU/M<
<b>Geology, Soils, and Paleontological Resources</b>				
Impact 3.7-2: Excavation of quarry pits and reclamation would increase the potential for slope instability and slope failure.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.7-5: Project excavation and grading would adversely affect paleontological resources.	SU/M	NI	SU/M<	SU/M<
Impact 3.7-6: The Project would contribute to the cumulative loss of paleontological resources.	SU/M	NI	SU/M<	SU/M<
<b>Greenhouse Gas Emissions</b>				
Impact 3.8-1: The Project would create greenhouse gas emissions directly or indirectly contributing to global climate change.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.8-2: The Project would conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.	LTS/M	NI	LTS/M<	LTS/M<

**TABLE S-2 (CONTINUED)**  
**COMPARISON OF ALTERNATIVES TO THE PROJECT (SIGNIFICANT IMPACTS)**

Environmental Impact	Project	Alternative 1	Alternative 2	Alternative 3
<b>Hazards and Hazardous Materials</b>				
Impact 3.9-2: The Project could create a hazard to the public or the environment through accidental release of existing soil contaminants, such as historic pesticide residues, into the environment.	LTS/M	NI	LTS/M=	LTS/M=
Impact 3.9-3: The Project would contribute to the cumulative increases in the risk of exposure to hazardous materials.	LTS/M	NI	LTS/M=	LTS/M=
<b>Hydrology and Water Quality</b>				
Impact 3.10-1: Project construction grading and other activities would substantially degrade surface or groundwater quality.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.10-10: The Project would not contribute to cumulative degradation of water quality.	LTS/M	NI	LTS/M <	LTS/M <
<b>Transportation</b>				
Impact 3.13-2 The Project would generate additional substantial vehicle miles traveled.	SU/M	NI	SU/M<	SU/M<
Impact 3.13-3: Project construction could increase roadway hazards due to the presence of large construction trucks, temporary lane closures and detours.	LTS/M	NI	LTS/M<	LTS/M<
Impact 3.13-4: The Project could result in inadequate emergency access.	LTS/M	NI	LTS<	LTS/M<
Impact 3.13-5: The Project would contribute to cumulative increases in vehicle miles traveled.	SU/M	NI	SU/M<	SU/M<
Impact 3.13-6: The Project would contribute to significant cumulative increases in roadway hazards and/or interference with emergency access.	LTS/M	NI	LTS/M<	LTS/M<

## NOTES:

LTS/MM=Less than Significant with Mitigation

NI=No Impact

SU=Significant and Unavoidable

SU/M=Significant and Unavoidable with Mitigation

= Impact would be the same or similar to the Project impact

&gt; Impact would be more severe than the Project impact

&lt; Impact would be less severe than the Project impact