MISSION VALLEY ROCK SURFACE MINING PERMIT AND RECLAMATION PLAN, SMP-32

ADDENDUM ENVIRONMENTAL IMPACT REPORT

NOVEMBER | 2020

Lead Agency:
Alameda County, Neighborhood Preservation and Sustainability Department

Preparers:
Benchmark Resources

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1. INTRODUCTION

This addendum was prepared in accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines. This document serves as an addendum to the *Environmental Impact Report, Mission Valley Rock Surface Mining Permit and Reclamation Plan, SMP-32* (State Clearinghouse #1993033040), which consists of the draft environmental impact report (EIR) and the final EIR (collectively, the EIR). The County of Alameda (County) Board of Supervisors certified the Surface Mining Permit 32 (SMP-32) EIR on December 8, 1994 (Resolution R-94-461), adopted findings and a statement of overriding considerations, and approved SMP-32. It also adopted a mitigation monitoring and reporting program (MMRP) and conditions of approval (COAs) for SMP-32.

The "proposed project" consists of:

- the SMP-32 boundary modification,
- incorporation of a focused landscape plan into the landscaping requirements; and
- revisions to conditions of approval.

The County is the lead agency for the environmental review. The Sunol CAC conducted a hearing on November 18, 2020 and provided its comment to Neighborhood Preservation and Sustainability Department (NPS) staff to incorporate into its staff report. The County Planning Commission will review the focused landscape plan, boundary modification, and revisions to conditions on December 7, 2020. All three modifications are evaluated in this addendum to ensure that the County reviews the cumulative impacts of all three modifications.

Section 2, "Project Description," describes changes in the conditions of approval and reclamation plan in detail. Section 3, "Environmental Analysis," provides the evaluation of the project regarding each environmental resource topic that CEQA requires to be analyzed.

1.1 Site Background

Lehigh Hanson, doing business as Mission Valley Rock Company (Permittee), operates an aggregate mining operation under SMP-32 and reclamation plan for SMP-32 (Mission Valley Rock, CA, Mine ID #91-01-0011). The SMP-32 termination date is January 1, 2045, or upon completion of reclamation, whichever occurs first. The approved reclaimed condition of SMP-32 is a combination of a water storage reservoir, agriculture, and other uses as allowed under the County's zoning ordinance.

Excavators or loaders place material into a hopper where it is transported via a conveyor under the Interstate 680 (I-680) freeway bridge, along the east side of Alameda Creek, over the conveyor bridge that crosses Alameda Creek, and to the existing processing plant located at SMP-24. No structures or processing equipment are at SMP-32 other than the conveyor itself.

Aggregate mining began at SMP-32 in July 2006 after completion of numerous preparations, including screen planting, slurry wall construction, waterline relocation, grading, and landscaping. Excavators or loaders place material into a hopper where the material is transported via a conveyor under the I-680 freeway bridge, along the east side of Alameda Creek, over the conveyor bridge that crosses Alameda Creek, and to the existing processing plant located at SMP-24. No structures or processing equipment are located at SMP-32 other than the conveyor itself. At this time, approximately half the overburden has been stripped from the site. Portions of the site not being mined are used for agriculture, including a small vineyard abutting I-680.

The approved after reclamation use of SMP-32 is a combination of a water storage reservoir and agriculture and other related uses. Completed reclamation activities include perimeter grading and many components of an approved landscaping plan. Finish slopes in the pit will be cut to final grade as mining continues. The final mining phase calls for backfill to occur near the Sunol Water Temple to create a passive recreation area for walking. The approved reclamation plan for SMP-32 accommodates a vineyard both during mining operations and at the completion of mining. This non-mining, agricultural use is permitted by the underlying A (Agricultural) zoning and was authorized in conformance with Alameda County Surface Mining Ordinance (ACSMO) Section 6.80.060, via County Board of Supervisors Resolution No. R 94 461.

1.2 Background of Proposed Reclamation Plan Boundary Modification and Revisions to Conditions of Approval

The Alameda County Transportation Commission (ACTC), in cooperation with the California Department of Transportation (Caltrans), is proposing to widen Interstate 680 (I-680) in the southbound direction along the eastern border of SMP-32. This freeway widening will require the Permittee, Lehigh Hanson, to remove 5.51 acres from SMP-32, along the eastern boundary, adjacent to the I-680 Right-of Way. The purpose of this application is to modify the boundary of SMP-32 to remove the acreage that will be used for the freeway widening.

The freeway improvements include widening I-680 in the southbound direction along the eastern border of SMP-32, installation of a concrete safety barrier to contain errant vehicles within paved areas of the freeway, and relocating three San Francisco Public Utilities Commission (SFPUC) waterlines that cross I-680 between SMP 24 and SMP-32. The waterlines relocation aspect of the project impacts the SMP-24 reclamation plan map and was provided to DMR under separate cover on October 5, 2020. To accommodate the freeway improvements, the proposed project requires acquisition of Right of Way along a portion on the eastern boundary of SMP-32, in addition to relocation of PG&E/AT&T utility poles, realignment of a private access road, and replacement of a landscape tree screen that is required by SMP-32's conditions of approval. ACTC's road widening project requires a reclamation plan amendment that requires three elements: boundary modification, a focused landscape plan update for the landscape tree screen, and revisions to conditions of approval pertaining to landscaping requirements.

The Applicant submitted an application to modify the reclamation boundary and proposed a focused landscaping plan that necessitated revisions to conditions of approval on June 30, 2020. On July 23, 2020, County staff provided input and requested clarification of the proposed modification, to which the Applicant responded with a response and revisions to the application materials on August 20, 2020. County staff reviewed the revised application and requested minor revisions in a September 1, 2020 letter. On October 19, 2020, the Applicant adequately responded to the requests outlined in the County's September 1, 2020. On October 20, 2020, the County provided the reclamation plan amendment and proposed conditions of approval to the Division of Mine Reclamation (DMR) for its 30-day completeness review and requested that DMR waive its 30 day review that typically follows its 30-day completeness review period. The contents of the application are provided below in Section 2.

1.3 Purpose of the EIR Addendum

County staff determined that the proposed modifications are considered a "project," as defined under CEQA Guidelines Section 15378, and therefore are subject to environmental review. In determining whether an addendum is the appropriate document to analyze the project and its approval, CEQA

Guidelines Section 15164 ("Addendum to an EIR or Negative Declaration") states (subsection b is not relevant to EIRs and is not quoted):

(a) The lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.

(c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.

(d) The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.

(e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's required findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

Although item (c), above, notes that circulation for public review is not required for this document, this EIR addendum will be posted as an attachment to the staff report, and related document on the NPS website.

1.4 Basis for Decision to Prepare Addendum

When a final EIR has been previously certified for a project, Public Resources Code Section 21166 and CEQA Guidelines Sections 15162 and 15163 set forth the criteria for determining whether a subsequent or supplemental EIR should be prepared in support of further agency action on the project. Under these guidelines, a subsequent or supplemental EIR shall be prepared if any of the following criteria are met.

(a) When an EIR has been certified or negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the

environment, but the project proponents decline to adopt the mitigation measure or alternative.

(b) If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise the lead agency shall determine whether to prepare a subsequent negative declaration, and addendum, or no further documentation.

As demonstrated in Section 3, "Environmental Analysis," of this document, the proposed changes do not meet the criteria for preparing a subsequent or supplemental EIR. An addendum is appropriate because, as addressed in Section 3, none of the conditions calling for preparation of a subsequent or supplemental EIR have occurred.

2. PROJECT DESCRIPTION

This section provides a description of the proposed project. Refer to Section 3 of this document for an analysis of the environmental effects of this project in relation to the previous analysis in the SMP-32 EIR.

2.1 Project Location

SMP-32 consists of approximately 247 acres (of which 139 acres are permitted to be mined) located northwest of SMP-24 and bordered by I-680 to the south, Paloma Way to the north, Alameda Creek to the east, and the San Francisco Water Department Maintenance Yard, and Sunol Water Temple to the west. See Figure 1, "Regional Location," and Figure 2, "Site Location."

2.2 Key Elements of Project

2.2.1 Reclamation Boundary Modification

The following components will be implemented within the modified SMP-32 boundary (Project):

- Realign approximately 2,900 feet of private access road serving the SMP-32 site with controlled ingress/egress from a padlocked gate on Paloma Way;
- Relocate ten utility poles and approximately 3,000 feet PG&E overhead electrical and AT&T aerial telephone lines;
- Relocate three SFPUC waterlines; and
- Remove approximately 96 trees from 2.23 acres of the existing SMP-32 tree screen and replace with 270 trees planted in a 2.47 acres area west of the private access road.

The private access road to SMP-32 will be maintained during construction activities. Any Project-related worker entering areas designated as part of the active mine will be required to complete MSHA mandated site-specific safety training and follow check-in/check-out procedures. The updated site boundary reclamation plan figure that reflects the boundary modification is attached hereto as Figure 3, "SMP-32 Boundary Modification."

2.2.2 Focused Landscaping Plan

As noted above, a portion of the private access road will be realigned and the PG&E/AT&T utility pole line that is along the eastern property line of the SMP-32 area will be relocated westerly as part of this proposed Project. Removal of approximately 96 trees (of mixed species and variable sizes) from the existing tree screen located west of the access road is required. The 96 trees to be removed vary in height and canopy size. They were planted approximately 14 years ago from 15-gallon plantings. The Permittee

will plant 270 new trees west of the realigned private access road to replace trees removed as part of the proposed Project. SFPUC will not allow mature nursery trees to be planted on their property due to the risk of potential contagions. They require all trees to be grown from seed, selected from their approved list of tree species, and propagated in their own nursery.

The new trees to be included in the new screen will be nursery grown coast live oak (*quercus agrifolia*) and seven coast live oak trees, which will be removed by the freeway improvements and relocated from the existing tree screen. The coast live oak (*quercus agrifolia*) is an evergreen tree and matches one of the tree species listed in SMP-32's approved landscape screening plan (Gates & Associates). The coast live oak is also included in SFPUC's allowable watershed species list. All new trees will be grown in the SFPUC nursery from acorns. Other species growing in the existing SMP-32 tree screen that would be removed, but also not included in SFPUC's allowable tree species list, will not be relocated or grown in the SFPUC nursery. The area of the replacement planting is approximately 2.47 acres. New trees from the nursery would be planted in the fall of 2021, when they have grown to a 15-gallon size (approximately one-year of growth and 4 feet tall). Tree removal and replacement planting plans are included as Appendix A, "Focused Landscape Plan."

2.2.3 Revisions to Conditions of Approval

The existing conditions of approval require landscape screen planting to be in substantial conformance with plans prepared by Gates & Associates. As the focused landscaping plan for the modification area is in variance with the approved landscape plan requirements, NPS staff prepared revisions to applicable conditions of approval that will authorize the implementation of the focused landscaping in the boundary modification area. The proposed conditions of approval are attached hereto as Appendix B, "Proposed Revised Conditions of Approval."

3. ENVIRONMENTAL ANALYSIS

This section provides analysis and cites substantial evidence to support the County's determination that the proposed project does not meet the criteria for preparing a subsequent or supplemental EIR under CEQA Guidelines Section 15162. As noted in CEQA Guidelines Section 15164, if a proposed project does not meet the criteria for preparing a subsequent or supplemental EIR under CEQA Guidelines Section 15162, an addendum shall be prepared. The following subsections evaluate the potential for the project to affect environmental resources.

3.1 Aesthetics

The following description of existing views of the site and visual quality, which includes an analysis of potential effects of the proposed changes on the visual environment are presented in this section based photosimulations prepared by EnviroMine (see Appendix C, "Photosimulations") and a review of the Re-Validation Form for SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project prepared by Caltrans (Appendix D, "NEPA/CEQA Re-Validate Form SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project")

The visual character of the project area is characterized by open space, small-scale agriculture, a plant nursery, rural residential development, and existing mining operations. The surrounding ridgelines are generally undeveloped and provide a high-quality scenic background for viewers in the project area. Visually prominent natural habitats in the area include oak woodlands, grasslands, and riparian areas. The majority of the rural residential development in the project area is located in the Sunol town center and in the canyons north of the town center. The surrounding topography, including interspersed

canyons and ridges, somewhat limits public vistas in the northern Sunol Valley near the project site and in the general project area. Many of the smaller public roadways are located in canyons, and the steep canyon walls restrict motorists' views to the nearby hillsides and ridgelines. However, more expansive views of the valley floor and surrounding ridgelines are available from State Route 84 and from I-680, as described below. Neither the *Scenic Route Element of the General Plan* (Alameda County 1994) *and East County Area Plan* (Alameda County 2000) nor any applicable local plan identifies a specific public scenic vista in the project area.

The entire length of I-680 in the general project area is designated as a state scenic highway by the Caltrans Scenic Highway Program. This stretch of I-680 provides views of wooded hillsides and valleys as well as views of the rural Sunol Valley for both northbound and southbound motorists. With the exception of existing mining operations, commercial and industrial development along this stretch of highway is limited, and the surrounding landscape is characterized as rural. A photosimulation was prepared to identify potential views of the project site from nearby public roadways (including I-680). The locations of key viewpoints are shown in Appendix C.

As shown in Appendix C, View 1, "Existing View," public views of the project site are effectively screened by the existing landscaped berm at SMP-32. No views of the project site's interior (beyond the landscaped berm) are available from adjacent or nearby roadways, including I-680. Some isolated views of the project site's interior may be available to a limited number of residential locations at higher elevations and may be available to residents on Foothill Road north of the project site, but these views would not be considered public vistas. Some public views of the project site's interior may be available from off-road vehicle trails and hiking trails along Sunol Ridge and Pleasanton Ridge, but the project site would be in the background from those viewing locations and would be seen in context with existing mining operations in the Sunol Valley.

The following subsections include an analysis of whether each proposed modification would have an impact to aesthetics.

3.1.1 Proposed Reclamation Boundary Modification

The modification of the boundary would remove undisturbed areas of land from the SMP-32 boundary. This boundary change would alter the existing landscaped berm and therefore may alter the visual character and quality of the project area and the scenic corridor surrounding I-680. However, the boundary modification itself would not result in new significant aesthetic impacts or a substantial increase in the severity of aesthetic impacts identified in the certified EIR. The alterations to the existing landscape berm and associated landscaping revisions are evaluated in Section 3.1.2, below.

Scenic vistas, including views from the scenic corridor associated with I-680, would not be substantially adversely affected by the proposed boundary modification. Mining activities inside the landscaped berm would remain invisible to motorists on I-680. The proposed modification would not alter the existing landscaped berm and therefore would not alter the visual characters or qualities of the project area or the scenic corridor surrounding I-680. No additional lighting or changes in lighting beyond that which already exist at the site are proposed. The boundary modification itself will not result in changes to the physical environment. However, the changes to the landscape berm that result from the implementation of the Focused Landscape Plan are discussed below in Section 3.1.2.

The boundary modification would not result in new significant aesthetic impacts or a substantial increase in the severity of aesthetic impacts identified in the certified EIR. In addition, SMP-32 would also still be

required to comply with visual quality COAs 66–71, which have been slightly modified as described in Section 3.1.3, below.

As noted in Section 3.2, below, a fugitive dust control plan was recently developed for SMP-32 that incorporates SMP-32 dust control COAs and nuisance dust provisions of the SMP, Alameda County Surface Mining Ordinance (ACSMO), and Bay Area Air Quality Management District (BAAQMD). The plan addresses visual impacts from dust emissions.

3.1.2 Proposed Focused Landscaping Plan

SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project

Although not part of the proposed project and not required to be evaluated separately in this EIR addendum, understanding the SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project (Road Widening Project) is necessary for considering the aesthetic and visual impacts resulting from the proposed Focused Landscaping Plan.

The Road Widening Project will shift an existing SPFUC access road that is parallel to and west of I-680 and south of Paloma Way. It will also remove approximately 96 trees and create a new replanting area that will include a combination of existing trees to remain, seven healthy coast live oak trees to be relocated from the former tree screen, and 270 new coast live oak trees. The section of SMP-32 where trees will be removed and replanted under the proposed actions is not being used for mining activities; instead, the area is being used for agriculture as shown on page 16 of Appendix D.

In addition to the tree removals along the access road, trees would be removed between southbound I-680 and the existing access road to accommodate roadside stormwater treatment areas (bioswales). The areas where trees will be removed to accommodate stormwater treatment facilities will be hydroseeded with native grasses and legumes.

Tree removals along southbound I-680 could result in noticeable changes for motorists on I-680, an Officially Designated State Scenic Highway, and short intermittent sections of Paloma Way where views of the tree removal area are not blocked by existing trees that will remain. Paloma Way, which is signed as SR 84 in that area, is not recognized as a scenic highway by either the state or the county; however, the City of Livermore General Plan, Community Character Element, identifies SR 84 as a scenic route. No residential properties are near this area, so resident views will not be affected.

The mature trees along southbound I-680 to be removed from foreground views would provide I-680 motorists greater exposure to views of agricultural fields with hay/grain crops beyond the trees to the west. The proposed safety barrier would also be visible from this perspective, however. The fields are flat and typically green in the winter and spring and golden in the summer and fall. Although the 270 new coast live oak trees will take several years to reach the height of the existing trees to be removed, views of the agricultural fields provide a pleasing contrast to the tree-studded hills that surround the valley in each direction. In addition, these native oak trees will replace many non-native ornamentals, some of which are considered invasive species. For eastbound travelers on Paloma Way, the I-680 corridor would be somewhat more visible in mid-range views toward the east-southeast. However, the thin, gray line of the freeway would not be prominent compared to mature trees in the foreground along Paloma Way, the agricultural fields beyond them, and the tree-studded hills in each direction of longer-range views.

In summary, tree removal along southbound I-680 would change views for motorists on I-680 and Paloma Way, but the change would not adversely affect the quality of the views. When the trees in the

replanted area mature, they will form a native oak woodland, and views will be similar to existing conditions. As stated in EIR/FONSI Section 2.1.10.3, "The project … would not degrade the vividness of existing views [on I-680] because the height and magnitude of the mountains and peaks in the distance would still be visible and appreciated in much the same way as in the existing view." Visual impacts from the perspective of northbound and southbound I-680 motorists would remain from moderate-low to low.

The Roadway Widening project design includes three concrete median barrier types, which would be 36 inches, 42 inches, and 56 inches in height. The Roadway Widening project includes a standard 42-inch tall concrete safety barrier placed at the outer edge of pavement on southbound I-680 from the Calaveras Road Undercrossing to the westbound SR 84 on-ramp. Caltrans Highway Design Manual Index 309.1 (2) states "that a Clear Recovery Zone (CRZ) is an unobstructed, relatively flat (4:1 or flatter) or gently sloping area beyond the edge of the traveled way which affords the drivers of errant vehicles the opportunity to regain control. For embankment slopes, a CRZ of 4:1 or flatter should apply on all freeways for a distance of 30 feet from the edge of traveled way, except if guardrail or barrier is provided."

To accommodate the widening of southbound I-680, a 4:1 slope is not feasible at this location due to the close proximity of the westbound SR 84 on-ramp to the west. Instead, a 2:1 or flatter slope is provided for this area of I-680. Since the CRZ cannot be attained at this location, a concrete safety barrier is required to prevent errant vehicles on southbound I-680 from leaving the highway.

A 42-inch tall concrete safety barrier is the minimum height allowed by Caltrans. A 31-inch metal beam guard railing was considered, but was determined to not be a safe refuge for Caltrans maintenance workers since the railing can deflect in the event of a vehicular impact. Cable railing is another option but is no longer permitted as a crash attenuation device on State highways. Relocating the westbound SR 84 on-ramp to provide a 4:1 embankment and standard CRZ would result in a significant increase in property acquisition from the SMP 32 site. The exterior safety barrier would be 42 inches tall and would be located in the existing State Right of Way. The barrier would be placed outside of the legal boundary of SMP-32.

Visual Impact Analysis

Scenic resources in the area include Mount Hamilton, Mission Peak, and the Maguire Peaks to the south, with hilly terrain surrounded on all sides by mountains and ridges. In addition to southbound motorists on I-680, viewers in the vicinity of SMP-32 generally include those at recreation areas. Park visitors at the Sunol Water Temple would experience moderate exposure to views toward the landscape buffer under the Focused Landscaping Plan, but would be in for background of their immediate viewshed.

Under the proposed Project, a portion of the private access road will be realigned, and the PG&E/AT&T utility pole line that is along the eastern property line of the SMP 32 area will be relocated westerly. As required by the COAs, landscape screen planting shall be in substantial conformance with plans prepared by Gates & Associates. These conditions also required the preparation of a detailed landscape and phasing plan, as well as a landscape maintenance program. Removal of approximately 96 trees (of mixed species and variable sizes) from the existing tree screen located west of the access road is required. As noted below, these conditions have been revised to allow for the implementation of the Focused Landscape Plan in the 2.47-acre area of the boundary modification (see Appendix A).

As noted above, the Road Widening project will necessitate the movement of the berm and removal of 96 mature trees. The 96 trees to be removed vary in height and canopy size. They were planted approximately 14 years ago from 15-gallon plantings. MVR seeks to plant 270 new trees west of the realigned private access road to replace trees removed as part of the proposed Project. SFPUC will not allow mature nursery trees to be planted on their property due to the risk of potential contagions. They require all trees to be grown from seed, selected from their approved list of tree species, and propagated in their own nursery.

New trees are expected to be planted in the Fall of 2021 when they have grown to a 15-gallon size (approximately one-year growth and 4 feet tall). Tree removal and replacement planting plans are included in Appendix A. While the 270 trees will be relocated and or planted, there will be several years where the landscape berm will not as effectively screen the mine site from travelers along southbound I-680 as does the existing berm.

The removal of 96 trees and the planting of 270 new nursery trees (15 gallon) will result in a temporary reduction in height of the tree screen until the new trees reach maturity. Since SFPUC will not allow mature nursery trees to be planted, this temporary impact is unavoidable. The existing tree screen was planted approximately 14 years ago. The new trees are expected to grow up to 2 feet each year and reach a height of approximately 10 feet after 5 years of growth, and 18 feet (the existing maximum height) within approximately 14 years of growth. When the new trees reach maturity, a denser tree screen will form which will be an improvement over the existing tree screen. Photosimulations showing 'Before,' and 'After' views looking from southbound I-680 toward the tree screen are provided in the Appendix C.

Absent the exterior safety berm discussed above, this temporary impact of 8 to 10 years could have been a potentially significant aesthetic impact. However, as noted above, and depicted in Appendix C, View 2, "After View-Full growth," the exterior safety berm will likely screen foreground views of mining operations (if any are taking place) in the period before the replanted tree screen reaches full height. The tree removal along southbound I-680 could change views for motorists on I-680, but the change would not adversely affect the quality of the views. When the trees in the replanted area mature, they will form a native oak woodland, and views will be similar to that under existing conditions. Before they reach maturity, they will likely be screened by the exterior safety barrier. Therefore, the implementation of the Focused Landscape Plan would not result in new significant aesthetic impacts or a substantial increase in the severity of aesthetic impacts identified in the certified EIR.

This Focused Landscape Plan would not have an adverse effect on the Officially Designated State Scenic Highway designation in this area because it would not increase the intensity of development, introduce outdoor advertising, or add structures or highly visible equipment. The Focused Landscape Plan incorporates detailed site planning, consistent with SFPUC's objectives for the property. Furthermore, the adjacent section of I-680 is not a Classified Landscaped Freeway; therefore, no landscaped freeway designation would be affected nor will it result in new significant aesthetic impacts or a substantial increase in the severity of aesthetic impacts identified in the certified EIR.

3.1.3 Proposed Revisions to Conditions of Approval

The proposed project also includes revisions to conditions of approval 2, 48, 66, 67, and 69, which focus on landscaping and visual quality. The revisions to these conditions will not result in any impacts to the environment. Instead, they have been revised to incorporate the boundary modification and Focused Landscaping Plan into the overall landscaping and screening requirements for the entire site. Thus, this

proposed COA revisions would not result in new significant aesthetic impacts or a substantial increase in the severity of aesthetic impacts identified in the certified EIR.

3.2 Agricultural Resources

The approved reclaimed condition of SMP-32 is a combination of a water storage reservoir, agriculture, and other uses as allowed under the County's zoning ordinance. Reclamation activities completed to date include perimeter grading and many components of an approved landscaping plan. The approved reclamation plan for SMP-32 accommodates a vineyard both during mining operations and at the completion of mining. This nonmining, agricultural use is permitted by the underlying A (Agricultural) zoning and was authorized in conformance with ACSMO Section 6.80.060, via Board of Supervisors Resolution No. R-94-461.

The following subsections include an analysis of whether each proposed modification or revision would have an impact to agricultural resources.

3.2.1 Proposed Reclamation Boundary Modification

The proposed modification of the boundary would remove 5.51 acres of disturbed and undisturbed land from the SMP-32 permit along the eastern boundary, adjacent to the I-680 Right-of Way. Removal of this land from SMP-32 would not affect the mine operator's ability to achieve the final reclamation of the site to support the approved reclaimed condition for agriculture. Furthermore, the modified boundary would include 2,900 feet of realigned access road, ten utility poles, three SFPUC waterlines, and 2.47 acres of relocated tree scree. This modification would include no impacts on agricultural resources. Therefore, this proposed modification would not result in new agricultural resources impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.2.2 Proposed Focused Landscape Plan

The proposed Focused Landscape Plan proposes the removal of 96 trees from the existing tree screen west of the access road and an expanded tree screen of 270 trees west of the realigned access road on a 2.47-acre narrow strip of land. The modification would not affect the mine operator's ability to achieve the final reclamation of the site to support the approved reclaimed condition for agriculture. Therefore, the proposed Focused Landscape Plan would not result in any new agricultural resources impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.2.3 Proposed Revisions to Conditions of Approval

The proposed revisions to Conditions of Approval are ministerial in nature and would not physically impact the site. They would therefore not affect the mine operator's ability to achieve the final reclamation of the site to support the approved reclaimed condition for agriculture. This modification would include no impacts on agricultural resources. Therefore, this proposed modification would not result in new agricultural resources impacts or an increase in the severity of a significant impact identified in the certified EIR. SMP-32 would also still be required to comply with agricultural resource COAs 66–71.

3.3 Air Quality

Federal and state standards have been established for fine particulates (PM_{10} and $PM_{2.5}$). California standards are more restrictive than federal standards for these pollutants. Local air districts and the California Air Resources Board (ARB) monitor ambient air quality to ensure that air quality standards are

met. If these standards are not met, local air districts and ARB develop strategies to meet the standards. Air quality monitoring stations measure pollutant ground-level concentrations (typically 10 feet above ground level). Depending on whether the standards are met or exceeded, the local air basin is classified as in attainment or nonattainment. SMP-32 is in the San Francisco Bay Area Air Basin (SFBAAB), and the BAAQMD is responsible for ensuring federal and state ambient air quality standards are attained and maintained in the Bay Area. The SFBAAB is nonattainment for PM_{10} and $PM_{2.5}$ under California standards, and is nonattainment for $PM_{2.5}$ under federal standards. ARB operates numerous air quality monitoring stations throughout the Bay Area. Based on measurements recorded at the nearest ARB monitoring station, located in Livermore, no data was available to determine the number of exceedances for the national and state standards for particulate matter (PM_{10}) associated with fugitive dust between 2014 to 2020.

The following subsections include an analysis of whether each proposed modification would have an impact to air quality.

3.3.1 Proposed Reclamation Boundary Modification

Air quality concerns regarding the proposed actions relating to the reclamation boundary modification are primarily focused on suspended particulates. PM_{10} is small particulate matter measuring no more than 10 microns in diameter, and $PM_{2.5}$ is fine particulate matter measuring no more than 2.5 microns in diameter. Suspended particulates are mostly dust particles, nitrates, and sulfates. They are a byproduct of fuel combustion and wind erosion of soil and unpaved roads and are directly emitted into the atmosphere through these processes. The small particulates generally come from windblown dust and dust kicked up from mobile sources. The fine particulates are generally associated with combustion processes as well as being formed in the atmosphere as a secondary pollutant through chemical reactions.

No visible haze, dust, or noticeable plume of pollutants was observed on or near the project site during site inspection in May 26, 2020. Criteria air pollutant emissions (e.g., ozone precursors) would not increase because the modification would not result in the need to increase heavy equipment use or vehicle trips.

The COAs for SMP-32 contain several requirements relating to dust control, which currently apply and would continue to apply to the proposed construction activities. These COAs include COA 59 through COA 65, which specify procedures that must be followed to control dust emissions. An increase may be required in the frequency or amount, or both, of dust suppressant application in order to prevent the emission of a significant amount of fugitive dust or visibility reducing particles.

Compliance with the BAAQMD and COA requirements would ensure that appropriate management practices would be implemented to minimize the emission of fugitive dust or visibility reducing particles associated with temporary construction activity. These management practices include the use of water or other dust suppressants to reduce dust to an insignificant level, as determined by the Planning Community Development Agency Director and the BAAQMD. The watering of exposed ground before high winds has been shown to be 90 percent efficient in controlling fugitive PM_{10} emissions. Under COA 65, as with the existing operation, if the construction activities were to result in complaints to the County about off-site dust, an investigation would be conducted to determine whether a reasonable nuisance or hazard exists, whether SMP-32 is the cause of the dust, and if so, what corrective actions would be required to correct the problem. The above COAs would continue to be implemented and enforced through the SMP-32 fugitive dust control plan. Therefore, the proposed reclamation boundary

modification would not result in new significant air quality impacts or a substantial increase in the severity of air quality impacts identified in the certified EIR.

3.3.2 Proposed Focused Landscaping Plan

The proposed Focused Landscaping Plan would involve removal of 96 existing trees and planting 270 new trees in a previously undisturbed 2.47-acre area. Therefore, as described in Section 3.3.1, above, the construction activity relating to the Focused Landscaping Plan would be required to comply with COAs to control dust emissions. Furthermore, compliance with the BAAQMD and COA requirements would ensure that appropriate management practices would be implemented to minimize the emission of fugitive dust or visibility reducing particles associated with temporary construction activity. Therefore, the proposed Focused Landscaping Plan would not result in new significant air quality impacts or a substantial increase in the severity of air quality impacts identified in the certified EIR.

3.3.3 Proposed Revisions to Conditions of Approval

The proposed revisions to Conditions of Approval are ministerial in nature and would not physically impact the site. Therefore, the revisions would not impact PM_{10} and $PM_{2.5}$ emissions. In addition, compliance with the BAAQMD and existing COA requirements would continue to ensure that appropriate management practices would be implemented to minimize the emission of fugitive dust or visibility reducing particles associated with mining and reclamation. Therefore, no new significant air quality impacts would result from this action.

3.4 Biological Resources

Biological resources management at the site is directed to protection of on-site special-status plants and wildlife (tiger salamander and burrowing owl), preservation of walnut trees along the southwestern boundary of the quarry near the terminus of Temple Road, and protection of red-legged frogs along Alameda Creek. The following subsections include an analysis of whether each proposed modification would have an impact to biological resources.

3.4.1 Proposed Reclamation Boundary Modification

The proposed boundary modification would involve removal of 96 existing trees and disturbance of previously 2.47 acres of previously undisturbed areas. However, the trees to be removed will be replaced with a nearly 3:1 ratio of the same species. The COAs for SMP-32 contain several requirements relating to biological resources, which currently apply and would continue to apply to the proposed construction activities. These COAs include COA 24 and COA 47 through COA 51, which specify procedures that must be followed to protect biological resources. Compliance with the above COAs would mean the proposed reclamation boundary modification would not result in any new biological resources impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.4.2 Proposed Focused Landscaping Plan

The proposed Focused Landscaping Plan includes the addition of 270 trees, to replace the 96 removed in the boundary modification area. Although the planting would involve new surface disturbance, the COAs for SMP-32 contain several requirements relating to biological resources, which currently apply and would continue to apply to the proposed landscaping and berm construction. These COAs include COA 24 and COA 47 through COA 51, which specify procedures that must be followed to protect biological resources. Compliance with the above COAs would mean the proposed reclamation boundary

modification would not result in any new biological resources impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.4.3 Proposed Revisions to Conditions of Approval

The proposed revisions to Conditions of Approval are ministerial in nature and would not physically impact the site. Therefore, the proposed revisions would not result in new biological resources impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.5 Cultural Resources

Existing and unknown cultural resources are protected through implementation of COAs 74–77. The following subsections include an analysis of whether each proposed modification would have an impact to cultural resources.

3.5.1 Proposed Reclamation Boundary Modification

The proposed boundary modification and associated actions would result in new surface disturbance; however, disturbance would not occur on previously-identified archaeologic resource area. Furthermore, the proposed construction would be temporary in nature and would be required to comply with COAs that protect cultural resources in the event they are encountered at the site. These COAs include COA 74 through COA 77. Compliance with the above COAs would mean the proposed boundary modification and associated activities would not result in new cultural resources impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.5.2 Proposed Focused Landscaping Plan

The proposed Focused Landscaping Plan would result in new surface disturbance; however, disturbance would not occur on previously-identified archaeologic resource area. Furthermore, the proposed construction would be temporary in nature and would be required to comply with COAs that protect cultural resources in the event they are encountered at the site. These COAs include COA 74 through COA 77. Compliance with the above COAs would mean the proposed Focused Landscaping Plan would not result in new cultural resources impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.5.3 Proposed Revisions to Conditions of Approval

The proposed revisions to Conditions of Approval are ministerial in nature and would not physically impact the site. Therefore, the proposed revisions would not result in new cultural resources impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.6 Energy

The State of California has taken steps to increase the efficiency of vehicles and appliances and to provide more renewable energy. Legislation is routinely passed and codified to address climate change and clean energy production. Based on the location and small scale of the project, there is no part of the proposed boundary modification, Focused Landscaping Plan, and revisions to COAs that suggest they will impede any State or Local initiatives that aimed at increasing renewable energy or efficiency.

3.7 Geology and Soils

The reclamation plan and COA 32 require that the design of all finished slopes meet the specifications of the SFPUC for ultimate use as a water storage lake. This requires that the mining and reclamation

activities implement the recommendations of the project's geotechnical engineer to ensure erosion is properly controlled and that slopes are stable. SMP-32 would also still be required to comply with geologic COAs 26–32.

The following subsections include an analysis of whether each proposed modification would have an impact to geology and soils.

3.7.1 Proposed Reclamation Boundary Modification

The proposed boundary modification includes surface disturbance along a narrow strip on the edge of the project site. Therefore, the disturbance would not constitute a significant effect on final reclamation standards to achieve final slope configuration or stability. The site would continue to be subject to seismic hazards, and no aspects of the proposed modification would be affected by or would increase the seismic hazard potential at the site. Furthermore, the proposed construction activities would be required to comply with COAs that address grading and seismic safety. These COAs include COA 26 through COA 32. Compliance with the above COAs would mean the proposed boundary modification would not result in any new geology or soils impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.7.2 Proposed Focused Landscaping Plan

The proposed Focused Landscaping Plan includes surface disturbance and berm construction along a narrow, 2.47-acre strip on the edge of the project site. The site would continue to be subject to seismic hazards, and no aspects of the proposed modification would be affected by or would increase the seismic hazard potential at the site. Furthermore, the proposed landscaping activities would be required to comply with COAs that address grading and seismic safety. These COAs include COA 26 through COA 32. Compliance with the above COAs would mean the proposed Focused Landscaping Plan would not result in any new geology or soils impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.7.3 Proposed Revisions to Conditions of Approval

The proposed revisions to Conditions of Approval are ministerial in nature and would not physically impact the site. Therefore, the proposed revisions would not result in any new geology or soils impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.8 Greenhouse Gases

The following subsections include an analysis of whether each proposed modification would have an impact related to greenhouse gases.

3.8.1 Proposed Reclamation Boundary Modification

The proposed reclamation boundary modification would not alter any of the existing operations at SMP-32 that would result in the increased greenhouse gas emissions beyond current conditions. Therefore, no new significant greenhouse gas impacts would result from this action or result in an increase in the severity of a significant impact identified in the certified EIR.

3 8.2 Proposed Modification of SMP-32 Boundary

The proposed modification of the SMP-32 boundary would not alter any of the existing operations at SMP-32 that would result in the increased greenhouse gas emissions beyond current conditions.

Therefore, no new significant greenhouse gas impacts would result from this action or result in an increase in the severity of a significant impact identified in the certified EIR.

3.8.3 Proposed Revisions to Conditions of Approval

The proposed revisions to Conditions of Approval are ministerial in nature and would not physically impact the site. Therefore, no new significant greenhouse gas impacts would result from this action or result in an increase in the severity of a significant impact identified in the certified EIR.

3.9 Hazards and Hazardous Materials

SMP-32 would continue to be required to comply with the public health and safety COAs 78–80. The following subsections include an analysis of whether each proposed modification would have an impact related to hazards and hazardous materials.

3.9.1 Proposed Reclamation Boundary Modification

Heavy equipment containing fuel and other products would be used at the site to carry out boundary modification construction activities, as needed. However, the site's spill containment/cleanup plan would continue to be implemented, and no elements of the proposed modification would impair implementation of the plan. Construction activities would be limited to the portion of the site that adjoins the I-680 right of way; therefore, no physical changes to the site's perimeter where it adjoins undeveloped land would increase wildland fire risk. Therefore, the proposed boundary modification would not result in new hazards impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.9.2 Proposed Focused Landscaping Plan

Heavy equipment containing fuel and other products would be used at the site remove existing trees and plant 270 new trees, as needed. However, the site's spill containment/cleanup plan would continue to be implemented, and no elements of the proposed modification would impair implementation of the plan. Landscaping activities would be limited to the portion of the site that adjoins the I-680 right of way; therefore, no physical changes to the site's perimeter where it adjoins undeveloped land would increase wildland fire risk. Therefore, the proposed Focused Landscaping Plan would not result in new hazards impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.9.3 Proposed Revisions to Conditions of Approval

The proposed revisions to Conditions of Approval are ministerial in nature and would not physically impact the site. Therefore, the proposed revisions would not result in new hazards impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.10 Hydrology and Water Quality

Water on-site is controlled using drainage, erosion, and sediment control facilities such as sediment basins, detention ponds, and water storage. The following subsections include an analysis of whether each proposed modification would have an impact to hydrology and water quality.

3.10.1 Proposed Reclamation Boundary Modification

The proposed reclamation boundary modifications include relocating three San Francisco Public Utilities Commission (SFPUC) waterlines that cross I-680 between SMP 24 and SMP 32. The waterlines relocation aspect of the project was provided to DMR under separate cover on October 5, 2020. The waterline relocation would not result in additional water use compared to existing conditions or those considered

in the certified EIR. No change in operations would result in previously undisturbed areas being mined, and therefore no change in site hydrology would occur. The operator would establish erosion and drainage controls to ensure no negative impacts to erosion, site drainage, and off-site drainage, as required by the approved reclamation plan. SMP-32 would also still be required to comply with the hydrology and water quality protection measures in COAs 33–46. Runoff would continue to be directed to the on-site system. There would be no changes in off-site discharges that would affect Alameda Creek hydrology (e.g., flood hazard) or water quality, nor would the boundary modification activities affect the operator's ability to comply with the existing regional water quality control board (RWQCB) permit. No groundwater would be used, and boundary modifications would not result in discharges to the surface, other than those already permitted, that could adversely affect water quality. There would be no impacts. Therefore, the proposed reclamation boundary modification would not result in any new hydrology or water quality impacts or an increase in the severity of a significant impact identified in the certified EIR. SMP-32 would also still be required to comply with the hydrology and water quality protection measures in COAs 33–46.

3.10.2 Proposed Focused Landscaping Plan

The proposed reclamation Focused Landscaping Plan would not physically alter the water-control facilities existing on-site. No change in operations would result in previously undisturbed areas being mined, and therefore no change in site hydrology would occur. The operator would establish erosion and drainage controls to ensure no negative impacts to erosion, site drainage, and off-site drainage, as required by the approved reclamation plan. SMP-32 would also still be required to comply with the hydrology and water quality protection measures in COAs 33–46. Runoff would continue to be directed to the on-site system. There would be no changes in off-site discharges that would affect Alameda Creek hydrology (e.g., flood hazard) or water quality, nor would the boundary modification activities affect the operator's ability to comply with the existing regional water quality control board (RWQCB) permit. No groundwater would be used, and boundary modifications would not result in discharges to the surface, other than those already permitted, that could adversely affect water quality. There would be no impacts. Therefore, the proposed Focused Landscaping Plan would not result in any new hydrology or water quality impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.10.3 Proposed Revisions to Conditions of Approval

The proposed revisions to Conditions of Approval are ministerial in nature and would not physically impact the site. Therefore, the proposed revisions would not result in new hydrology or water quality impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.11 Land Use

Existing zoning is agricultural (A), and the *East County Area Plan* designation is Water Management. The following subsections include an analysis of whether each proposed modification would have an impact to land uses.

3.11.1 Proposed Reclamation Boundary Modification

The reclamation boundary modification would include the alteration of some utilities on the site. However, these physical changes would not affect the approved land uses or the end land use as a combination of a water storage reservoir and agriculture, and other uses, nor would it require any change in land use designation. No land use impact would occur or an increase in the severity of a significant impact identified in the certified EIR.

3.11.2 Proposed Focused Landscaping Plan

The proposed Focused Landscaping Plan would include the alteration of the existing tree screen and landscaping around a portion of the site's perimeter. However, these physical changes would not affect the approved land uses or the end land use as a combination of a water storage reservoir and agriculture, and other uses, nor would it require any change in land use designation. No land use impact would occur or an increase in the severity of a significant impact identified in the certified EIR.

3.11.3 Proposed Revisions to Conditions of Approval

The proposed revisions to Conditions of Approval are ministerial in nature and would not physically impact the site or its land use designations. Therefore, no land use impact would occur or an increase in the severity of a significant impact identified in the certified EIR.

3.12 Mineral Resources

The following subsections include an analysis of whether each proposed modification would have an impact to mineral resources.

The project site is designated by the State Mining and Geology Board as a Regionally Significant Construction Aggregate Resource Area and is classified MRZ-2. Mining occurs under a permit issued by the County. There would be no reduction in the availability of aggregate resources other than that expected to occur under the current permit. The modifications to the reclamation boundary, revisions to COAs and implementation of the Focused Landscaping Plan would not result in changes in off-site land uses that could pose incompatibility concerns which would limit mining. There would be no mineral resources impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.13 Noise

The following subsections include an analysis of whether each proposed modification would have an impact to noise.

3.13.1 Proposed Reclamation Boundary Modification

Noise is generated by heavy equipment and vehicle use on the site for current and future mining and reclamation activities. The proposed construction activities associated with the reclamation boundary modification would not be expected to increase the types and number of equipment and vehicles. All noise-producing equipment would remain on-site and existing COA 56 and 57, which specify requirements for the use of noise-reducing mufflers and compliance with the 2001 phasing plan, would continue to be implemented. The project would not result in changes in noise levels related to extractive operations in the northwest portion of the site where there are adjacent off-site noise-sensitive receptors. Therefore, the proposed reclamation boundary modification would not result in any new impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.13.2 Proposed Focused Landscaping Plan

Noise is generated by heavy equipment and vehicle use on the site for current and future mining and reclamation activities. The proposed construction activities associated with the Focused Landscaping Plan would not be expected to increase the types and number of equipment and vehicles. All noise-producing equipment would remain on-site and existing COA 56 and 57, which specify requirements for the use of noise-reducing mufflers and compliance with the 2001 phasing plan, would continue to be implemented. The project would not result in changes in noise levels related to extractive operations in

the northwest portion of the site where there are adjacent off-site noise-sensitive receptors. Therefore, implementation of the proposed Focused Landscaping Plan would not result in any new impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.13.3 Proposed Revisions to Conditions of Approval

The proposed revisions to Conditions of Approval are ministerial in nature and would not involve implementing physical changes or activity at the site. Therefore, the proposed revisions would not result in in any new noise impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.14 Population and Housing

The proposed modifications would only involve changes to landscaping, the size of the project site (approximately 5.51 acres smaller), and the relocation of certain utilities and an access road. These modifications would not result in an increase in population or employees, nor would it require housing or the extension of infrastructure or changes in land use that could be growth inducing. No impact would result or an increase in the severity of a significant impact identified in the certified EIR.

3.15 Public Services

The proposed modifications would only involve changes to landscaping, the size of the project site (approximately 5.51 acres smaller), and the relocation of certain utilities and an access road. This would not result in an increased demand for public services such as fire protection, law enforcement, schools, parks, or other public services that would require new or expanded facilities, the construction of which could result in significant environmental impacts. No impact would result or an increase in the severity of a significant impact identified in the certified EIR.

3.16 Recreation

The proposed modifications would only involve changes to landscaping, the size of the project site (approximately 5.51 acres smaller), and the relocation of certain utilities and an access road. This would not result in the demand for new recreation facilities, the construction of which could result in significant environmental impacts, or increase the use of existing facilities such that deterioration would occur. No impact would result or an increase in the severity of a significant impact identified in the certified EIR.

3.17 Traffic/Transportation

The proposed modifications would only involve changes to landscaping, the size of the project site (approximately 5.51 acres smaller), and the relocation of certain utilities and an access road. The access road is a 2,900-foot realignment of an existing private road. There would be no changes to materials processing at SMP-24 that would result in additional project-related trips on roadways (either haul trucks or workers) already used during operations. There would be no impact on operational vehicle miles travelled on roadways and freeways or alternative transportation modes. The modification would not require new or changed access points or physical improvements to any off-site roadways that could result in design hazards. There would be no traffic/transportation impacts. In addition, SMP-32 would also still be required to comply with the traffic COAs 52–55. Therefore, the proposed modifications would not result in new impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.18 Tribal Cultural Resources

3.18.1 Proposed Reclamation Boundary Modification

The proposed reclamation boundary modification would result in new surface disturbance; however, disturbance would not occur on previously-identified archaeologic resource area. Furthermore, the proposed construction would be temporary in nature and would be required to comply with COAs that protect tribal cultural resources in the event they are encountered at the site. These COAs include COA 74 through COA 77. Compliance with the above COAs would mean the proposed reclamation boundary modification would not result in new tribal cultural resources impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.18.2 Proposed Focused Landscaping Plan

The proposed Focused Landscaping Plan would result in new surface disturbance; however, disturbance would not occur on previously-identified archaeologic resource area. Furthermore, the proposed construction would be temporary in nature and would be required to comply with COAs that protect tribal cultural resources in the event they are encountered at the site. These COAs include COA 74 through COA 77. Compliance with the above COAs would mean the proposed Focused Landscaping Plan would not result in new tribal cultural resources impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.18.3 Proposed Revisions to Conditions of Approval

The proposed revisions to Conditions of Approval are ministerial in nature and would not physically impact the site. Therefore, the proposed revisions would not result in new tribal cultural resources impacts or an increase in the severity of a significant impact identified in the certified EIR.

3.19 Utilities and Service Systems

The proposed boundary modifications include relocating three San Francisco Public Utilities Commission (SFPUC) waterlines that cross I-680 between SMP 24 and SMP 32. The waterlines relocation aspect of the project was provided to DMR under separate cover on October 5, 2020. However, the waterline relocation would not result in additional water use compared to existing conditions.

The Focused Landscaping Plan and COA revisions would have no impact to water supply, wastewater, or storm drainage systems. Current stormwater runoff controls are interior to the site and would continue to apply. No impact on off-site wastewater or drainage facilities would result. No additional solid waste other than what is currently generated at the site would occur under the proposed modification. No utilities and service systems impacts would occur or an increase in the severity of a significant impact identified in the certified EIR...

3.20 Wildfire

The project site is not located within an area of state responsibility or classified as very high fire hazard severity zone. All major roadways are well established and will not be impeded by any design element of the project. The proposed private access road realignment, focused landscaping plan, and other boundary modification activities will be required to comply with applicable requirements regarding fire suppression that would reduce the likelihood of the project activities starting a fire on site. Therefore, the project will not impair an adopted emergency plan, or expose people or structures to wildfire pollutants, flooding, or post-fire slope instability.

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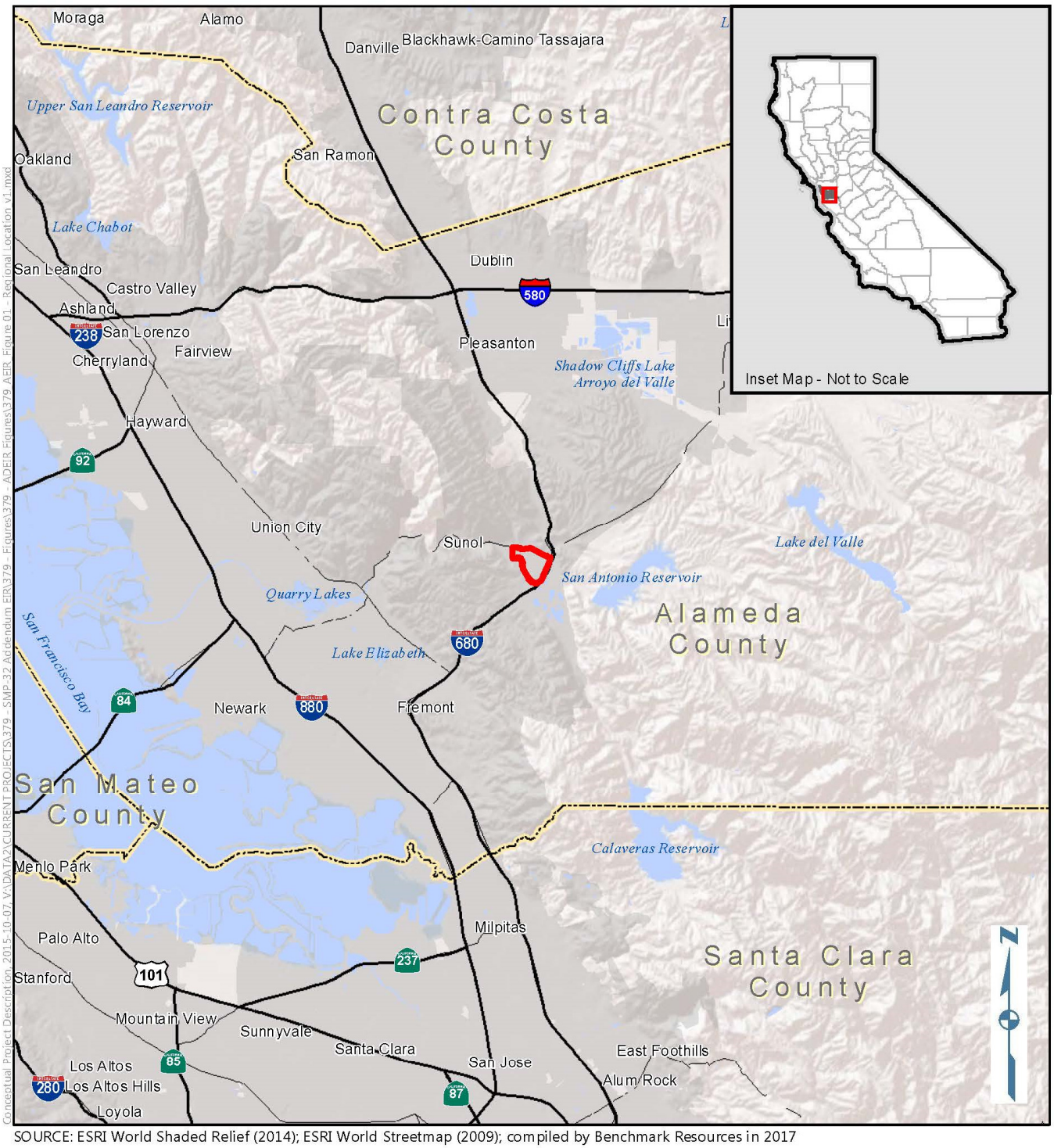
FIGURES

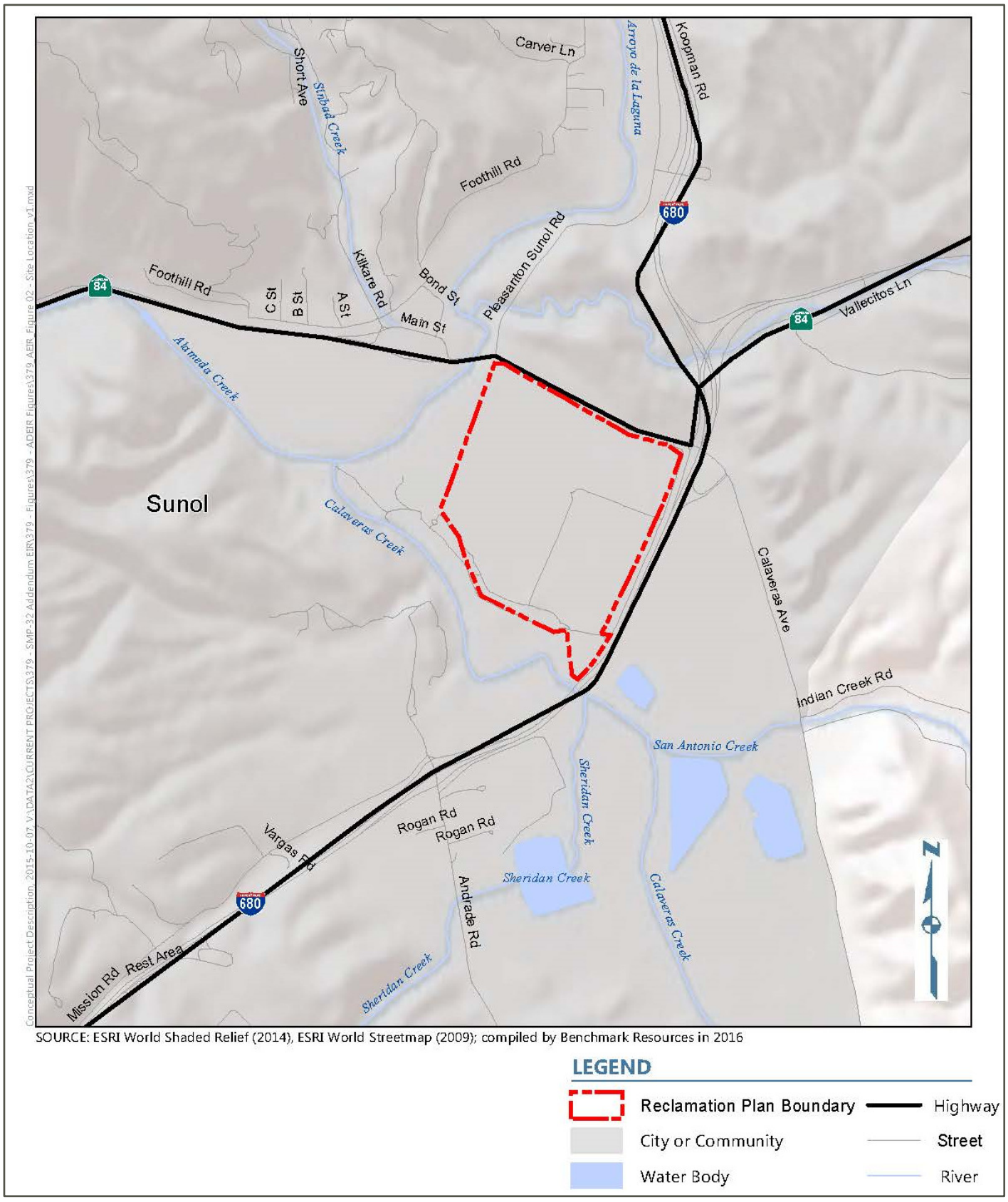


Regional Location

Addendum Environmental Impact Report, Mission Valley Rock Surface Mining Permit and Reclamation Plan, SMP-32

Figure 1

BENCHMARK RESOURCES



SOURCE: ESRI World Shaded Relief (2014), ESRI World Streetmap (2009); compiled by Benchmark Resources in 2016

LEGEND

- Reclamation Plan Boundary
- City or Community
- Water Body
- Highway
- Street
- River

Site Location

Addendum Environmental Impact Report, Mission Valley Rock
Surface Mining Permit and Reclamation Plan, SMP-32

Figure 2

BENCHMARK RESOURCES

SMP-32
Boundary Modification

LEGEND

- EXISTING SMP BOUNDARY (2016)
- EXISTING SETBACK LINE
- MODIFIED SMP BOUNDARY (2020)
- PROPOSED ACCESS EASEMENT (3053' LONG, 22' WIDE)
- PROPOSED PG&E EASEMENT (4066' LONG, 10' WIDE)
- MATERIAL TRANSPORT CORRIDOR

N

0 250 500 1000
FEET

BRIAN M. COLESON
10-5-2020
DATE

LICENSED LAND SURVEYOR
BRIAN M. COLESON
LS 8367
STATE OF CALIFORNIA

Date: 9/30/2020
Aerial: Google Earth 2018
2001 SMP Bdry: April 2005
Kier and Wright ALTA Survey
Modified SMP 32 Bdry
and Access and PG&E
easements

Note: This Figure replaces and supersedes Figure 3 from the May 15, 2017 Boundary Modification approval.

REFERENCES AND RESOURCES

REFERENCES AND RESOURCES

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APPENDICES

APPENDIX B
ALAMEDA COUNTY PLANNING COMMISSION RESOLUTION NO. XX-XX
CONDITIONS OF APPROVAL
SURFACE MINING PERMIT AND RECLAMATION PLAN
SMP-32

GENERAL

1. This permit shall supersede SMP-29, and all amendments thereto, which was granted for a 69-acre portion of the SMP-32 site by the Alameda County Board of Supervisors on February 26, 1991, pursuant to Resolution R-91-165.

2. Surface mining operations and reclamation shall be in substantial conformance with the various maps, information, and recommendations, as amended herein, contained in the binder known as "Permit Application for Expansion of Surface Mining Permit-29 (SMP-29), Mission Valley Rock Company, December 11, 1992," prepared by Spinardi Associates, which contains sections entitled: "Application, Drawings, Geotechnical, Geotechnical Addendum, Historical/Cultural, Archaeological, Traffic, and Biological." These plans have been amended by drawings by Gates & Associates, revised October 1994, that illustrate the refined berm design, landscaping and setback uses. Amendments are also incorporated from Spinardi Associates' "Site Preparation and Mining/Reclamation Plan," dated November 21, 1994, that further refines the phasing for landscaping and project implementation. On December 7, 2020, the Planning Commission adopted a Focused Landscaping Plan entitled "Focused Landscaping" that applies to a 2.47-acre portion of the site as reflected in the Reclamation Plan Amendment, Appendix A, "Focused Landscape Plan," of the CEQA EIR Addendum for SMP-32 (Attachment B of the December 7, 2020 Planning Commission Staff Report), which was approved by the Planning Commission on December 7, 2020. The project plans may be further amended as necessary by the ~~Planning Director~~ Community Development Agency Director or Designee, based on input from the San Francisco Water Department and other interested parties, within the limits of the overall performance standards established by these conditions.

3. Surface mining operations and reclamation shall conform to the Alameda County Surface Mining Ordinance, as amended, except as more specifically provided elsewhere in these conditions of approval.

4. The Permittee shall maintain a lease approved by the San Francisco Water Department that incorporates this Surface Mining Permit and Reclamation Plan. Said lease shall include no provision in conflict with or which supersedes the provisions of SMP-32. The Permittee shall notify Alameda County as soon as possible regarding any substantial modifications to the permitted mining area, design parameters, and/or reclamation plan that may occur as a result of lease negotiations with SFWD or agreements with other parties, and these changes shall be incorporated into the SMP-32 permit at the time of each annual inspection and report.

5. No structures shall be permitted on the site, with the exception of the conveyor belt (and accessory structures associated with the conveyor) necessary to link the site to SMP-24 on the opposite side of I-680. Structures other than the conveyor shall require an amendment to this permit, subject to provisions of the Alameda County Surface Mining Ordinance.

6. Upon complete reclamation, the end use of the site is hereby water management and agriculture. Any other end use of the site shall: (a) be considered through an application to amend the approved reclamation plan; (b) may be subject to additional environmental review, as required by the California Environmental Quality Act; and (c) include a review of consistency between proposed uses and requirements of the East County Area Plan, Alameda County Zoning Ordinance, Alameda County Surface Mining Ordinance, California Surface Mining and Reclamation Act, San Francisco Public Utility Commission's water management objectives, and existing and planned land uses in the area. Uses permitted shall be compatible with San Francisco Public Utility Commission's watershed management plan for the site and vicinity.

7. Prior to the lateral expansion of the pit, the permittee shall demonstrate~~s~~ compliance with Condition No. 49. The Community Development Agency Director may then give approval to start activity.

8. Permittee shall furnish the Community Development Agency Director with an Annual Report describing compliance with these conditions by July 1 of each year, following commencement of site preparation, including but not limited to topsoil and overburden removal, pipeline relocation, conveyor belt construction, fence installation, well abandonment, berm construction, and other activities. After aggregate mining commences, a monthly breakdown of product tonnage sold from the site during the preceding reporting period shall be included in the report. With each report, the permittee shall provide a map at the same scale as the approved mining and reclamation plans showing annual progress of site preparation (including topsoil stockpiling and relocation, berm construction, landscaping, utility line relocation, vineyard replacement, etc.); overburden removal and disposal; mining and reclamation; drainage, erosion and sedimentation control facilities to be provided and those in place; and as-built landscaping including the success of previously installed landscaping (including health, height, visual appearance, and effectiveness). An erosion and sedimentation control plan shall be submitted to the ~~Planning Director~~ Community Development Agency Director or Designee as part of the Annual Report.

9. The Community Development Agency Director shall review the applicant's Annual Report and inspect the mining operations and concurrent reclamation to determine and assure continuing compliance with the regulations of the Alameda County Surface Mining Ordinance and this permit. Permittee shall provide or make available to the Community Development Agency Director such information as necessary for determination of compliance. The Community Development Agency Director shall state the findings of the inspection in a final report which shall be made available to the public. One copy of said report shall be sent to the Permittee, one copy shall be sent to the San Francisco Water Department, and two copies shall be furnished to the Planning

Commission within 45 days after the inspection. Should the fees collected under Section 6.80.24 of the Alameda County General Ordinance Code be insufficient to cover all County costs relating to the County's administration of SMARA and the SMO as established under Section 6.80.100, including annual inspection, Permittee shall be required to compensate the County for all extra costs incurred.

10. Permittee shall maintain a cash deposit in the amount of $10,000 with the Community Development Agency Director, which funds may be used to cover the cost of implementation of other conditions of approval and/or investigation of complaints. At such time as this account diminishes to $4,000, it shall be replenished by the Permittee to its full amount of $10,000.

11–13. [Removed]

14. Permittee has offered to and shall pay a sum of $5,000 per year to the Sunol Glen Unified School District, for the entire term of this permit starting with the commencement of mining of aggregate. A sum of $40,000 shall be provided within 30 days of the effective date of this permit as an advance on the annual fee for future years, subtracted from the first eight years of fees. Other advances may also be provided, upon mutual agreement of the School District and permittee.

15. The Permittee shall pay an administrative fee, as required by and for the purposes described in Section 6.80.242 of the Alameda County Health and Safety Code, Surface Mining Ordinance Code and as may be required under Section 6.80.100 if fees under Section 6.80.242 are insufficient in covering all County costs in the administration of SMARA and the SMO.

16. Permittee shall use its best efforts to maximize sales which produce sales tax revenues to Alameda County.

17–18. [Removed]

19. All site preparation shall be successfully completed as mining activities progress based upon the "Site Preparation Phasing Plans" on file with the Community Development Agency, including Sheets 1 through 5, dated January 2001, and approved by the Community Development Agency Director on October 11, 2001. This includes but is not limited to the topsoil redistribution and setback zone construction, slurry wall construction, berm construction, hillock construction, landscape planting on berms and hillocks, vineyard replanting, other permanent planting and crop cultivation, hydroseeding of exposed overburden and slopes, and other measures necessary to prepare the site for mining and minimize visual, biologic, water quality, public safety and other effects. Permittee shall provide financial assurances that all remaining site preparation measures (according to the approved phasing plan) necessary to leave the site in a safe, attractive, and productive condition are implemented in the event of Permittee default.

20. The SMP-32 mining operations shall occur only between the hours of 6 AM and 10 PM, Monday through Saturday. Other limitations on hours of operations may apply, as

specified elsewhere in these conditions of approval. This limitation does not apply to the SMP-24 processing plant operation, which is governed under separate permit. This condition also does not apply to emergency operations to undertake preventive or corrective actions related to the public health and safety, in which case the Community Development Agency Director shall be notified within 48 hours of the need and for extended hours and the actions taken. The Community Development Agency Director may authorize exceptions to this restriction.

AGRICULTURAL LAND USE

21. The reclamation plan shall include provisions for redistributing topsoil from areas to be disturbed by mining for use on berms for screen landscaping and on adjacent lands that could support in-ground crops.

22. As shown in the Site Preparation and Mining/Reclamation Plan, prepared by Spinardi Associates dated November 21, 1994, and Gates & Associates revised October 1994, Permittee shall install permanent agricultural plantings (trees and/or vines) along the entire I-680 corridor and a portion of the Paloma Road frontage at the I-680 interchange, including an area of fifteen acres or more of replacement vineyard. On December 7, 2020, the Planning Commission incorporated the Sunol Citizens' Advisory Committee's recommendations in the adopted a Focused Landscaping Plan entitled "Focused Landscaping" that applies to a 2.47-acre portion of the site as reflected in the Reclamation Plan Amendment, Appendix A, "Focused Landscape Plan," of the CEQA EIR Addendum for SMP-32 (Attachment B of the December 7, 2020 Planning Commission Staff Report), which was approved by the Planning Commission on December 7, 2020.

23. The fifteen acres of replacement vineyard areas shall be planted at least four years prior to removing vineyards from the mining site. Prior to removing existing vines, Permittee shall provide verification in a form acceptable to the Community Development Agency Director that new vines were planted at least four years earlier.

24. Along the Alameda Creek frontage and along the Water Temple Road frontage within 1,500 feet of the filter gallery, buffer areas shall be planted in riparian vegetation and hay/grain crops for the purpose of retaining the site's character and the habitat value as foraging territory for raptors and possible use by special status species such as the California tiger salamander and burrowing owl.

25. Along the remainder of the Water Temple Road frontage and Paloma Road frontage, plantings shall include hay/grain crops, permanent plantings, and/or container nurseries, as appropriate to meet the various needs for habitat mitigation, visual amenity, and public access in these areas.

GRADING AND SEISMIC SAFETY

26. Grading and erosion control shall conform to design standards and geotechnical requirements of the Alameda County Grading Ordinance, Alameda County Surface Mining Ordinance, and the California State Surface Mining and Reclamation Act, as

amended, and shall be subject to review by the San Francisco Water Department. The plans shall incorporate plantings and protection to temporary stockpiles.

27. No explosives shall be used.

28. Recommendations contained in the project Geotechnical and Geologic Investigation, prepared by Treadwell & Rollo, August 1991, including all amendments provided by the Permittee, or requested by the County of Alameda or the State of California, and approved by Alameda County shall be followed.

29. The site shall be inspected within one working day by a qualified professional after any earthquake over Richter magnitude 5.0 on the earthquake faults within the Bay Area to ensure the continued safety of excavation activity and in the vicinity of power and water utility lines. A report on the investigation and any corrective actions recommended and taken shall be provided to the Community Development Agency Director.

30. Should any problems develop regarding slope stability, erosion control, or related matters, permittee shall immediately have an investigation prepared by a qualified professional detailing the problem and possible solutions to be approved by the Community Development Agency Director. Permittee shall implement approved solutions on a timetable approved by the Community Development Agency Director.

31. The specific design of all finished slopes shall meet the specifications of San Francisco Water Department for ultimate use as a water storage lake, and shall be approved by the Community Development Agency Director prior to completion of construction of the finished slopes.

32. The construction of all finished slopes shall be monitored by a qualified professional to ensure that design criteria are met and adverse conditions are identified and corrected. Periodic inspection of the slopes shall be performed by a qualified professional after construction to identify slope stability or erosion problems. Identified problems shall be repaired by the Permittee.

DRAINAGE, FLOODING, AND WATER QUALITY

33. Work within or adjacent to a watercourse, such as construction of the conveyor belt, is subject to the conditions of Alameda County Ordinance 82-18 and shall require a permit from Alameda County Flood Control and Water Conservation District, and is subject to review by the California Department of Fish and ~~Game~~Wildlife under Section 1603 of the Fish and Game Code for a Streambed Alteration Agreement, and by the US Army Corps of Engineers in the event that Section 404 of the Clean Water Act applies.

34. Prior to any site preparation activity, Permittee shall obtain approval by the Community Development Agency Director of a plan including details and calculations related to all drainage, erosion and sediment control facilities. Included shall be surface area, storage for runoff, and capacity of ponds that will serve as sediment basins, detention ponds, or water storage. An up to date hydrology map must be submitted showing all on site drainage and all intercepted areas.

35. Prior to any site preparation activity, and as part of each module of activity, Permittee shall test surface soils and overburden material for possible contamination that could affect groundwater or surface water quality. If it is found to contain unacceptable levels of nitrates or other pollutants, this material shall be isolated within berms or other fill to avoid polluting surface or ground waters, or be disposed of off-site. Concurrence of the San Francisco Water Department with the testing program and proposed mitigation measures shall be demonstrated by the Permittee.

36. Runoff shall be directed along existing routes and channels to preserve the current surface characteristics in these areas and prevent damage to other areas. If necessary, a runoff collection system of dikes, streams and culverts, a siltation basin, and an energy dissipator shall be constructed and maintained to avoid point source runoff, erosion, runoff to the San Francisco filter gallery, modifications to the Alameda Creek bank or channel, and/or downstream siltation. An approved energy dissipator is required if any direct runoff is discharged into Alameda Creek.

37. All drainage facilities shall consider the effect on mosquito breeding and be approved by the Alameda County Mosquito Abatement District.

38. Changes in drainage and/or sedimentation control facilities shall be submitted in advance to the Community Development Agency Director for approval, after consultation with the San Francisco Water Department.

39. Any new structure (including the conveyor belt system) to be located within the Federal Insurance Administration's A 2 flood zone shall be subject to special building requirements.

40. The project site is within the Alameda County Flood Control and Water Conservation District's (Zone 7) Special Drainage Area 7 and is subject to conditions imposed at the time of issuance of building permits, such as for the conveyor belt structure. Permittee shall demonstrate to Zone 7 that the proposed structure would not adversely increase the water surface elevation of the upstream channel.

41. The project is subject to permit from the San Francisco Bay Area Regional Water Quality Control Board for discharges to Alameda Creek. No regularly occurring discharge shall occur from the site. Any emergency discharge shall be in accordance with permits and conditions from the Regional Water Quality Control Board. Water shall normally be recycled on-site for dust control, pumped to the existing processing plant for use as wash water, and/or pumped to storage ponds for later use.

42. Existing groundwater wells that are in the path of mining shall be destroyed according to the regulations and standards of Zone 7. A permit shall be obtained from Zone 7 for any well to be installed or reused in the site perimeter, whether for irrigation, potable water supply, groundwater monitoring, or other use.

43. A detailed spill containment/cleanup contingency plan shall be approved by the San Francisco Water Department, ~~Planning Director~~ Community Development Agency

Director or Designee, Public Works Agency, Alameda County Health Care Services Agency, Alameda County Fire Department, California Department of Forestry, and Regional Water Quality Control Board prior to site disturbance. Permittee shall follow stringent spill containment and clean up procedures to: (a) isolate any oil, diesel or other spill; (b) dig up all contaminated or potentially contaminated soil; (c) stockpile affected material; and (d) treat affected material and replace, if appropriate, or dispose contaminated soil off site at an approved disposal site, if warranted.

44. Permittee shall develop a water quality and groundwater migration testing program prior to site preparation and implement the plan during site preparation and mining activity to ensure continued quality of groundwater. The program shall be approved by the San Francisco Water Department and Community Development Agency Director, and shall include, but not be limited to: the timing of samples, criteria to assess quality, and procedures to follow if water quality or groundwater migration is found to have decreased below a standard defined by the San Francisco Water Department.

45. Water runoff shall be directed away from lands owned by the State of California (CalTrans right-of- way for Interstate 680).

46. If any problems develop regarding surface water runoff, groundwater quality or migration, flooding or related matters, Permittee shall immediately have an investigation conducted and a report prepared by a qualified professional detailing the problem and possible solutions to be approved by the Community Development Agency Director. Appropriate solutions shall then be implemented by the Permittee.

BIOLOGICAL RESOURCES

47. The remaining walnut trees along the southwestern boundary of the quarry site shall be preserved to the maximum extent possible. Any removal of trees shall first be approved by the Community Development Agency Director and San Francisco Water Department.

48. Landscape screen planting shall be in substantial conformance with plans prepared by Gates & Associates, revised October 1994, and shall include a variety of trees, shrubs and groundcovers, with a preference for native plants and species suitable for wildlife and bird use, to be determined in consultation with the California Native Plant Society, California Department of Fish and ~~Game~~Wildlife, and US Fish and Wildlife Service. These plant species shall be suitable for public access around the lake, if San Francisco Water Department determines that future access as part of reclamation is appropriate. The landscape plan for the site shall include identification of these resource values to aid review for compliance by the Community Development Agency Director. On December 7, 2020, the Planning Commission adopted a Focused Landscaping Plan entitled "Focused Landscaping" that applies to a 2.47-acre portion of the site as reflected in the Reclamation Plan Amendment, Appendix A, "Focused Landscape Plan," of the CEQA EIR Addendum for SMP-32 (Attachment B of the December 7, 2020 Planning Commission Staff Report), which was approved by the Planning Commission on December 7, 2020.

49. Permittee shall conduct pre-construction surveys of the project site and buffer area along Alameda Creek prior to site disturbance as shown in the plans prepared by Spinardi Associates, dated November 21, 1994) to determine the presence or absence of the California tiger salamander and/or burrowing owl. The surveys shall be conducted in accordance with established protocol of the California Department of Fish and ~~Game~~Wildlife. If either of the species is found, prior to undertaking any further work on the phase in question, Permittee shall prepare a plan for the protection of either or both species, as the case may be. The goal of such a plan shall be to prevent any reduction in the number of, or any restriction in the range of either or both species, as the case may be. The plan shall be prepared in consultation with CDF~~G~~W and USFWS, and shall be subject to approval of the Community Development Agency Director. If the tiger salamander is found, the plan shall provide for maintenance of project buffer areas, with the exception of the area fronting on I-680 proposed to be put into use as vineyards, in a state that is suitable for habitat during the entire permit term. Minimum replacement ratios shall be 1:1. Offsite habitat, if required in addition to on-site habitat preservation, shall be preserved and/or enhanced in cooperation with the San Francisco Water Department and other landowners, as necessary, through the recording of easements or other mechanisms to permanently set aside areas with high biologic value. If the burrowing owl is found, the plan shall provide for preservation of 6.5 acres of foraging habitat for every owl pair or unpaired resident bird observed. If necessary, the plan shall further provide for passive relocation of resident owls from the disturbance area and burrow enhancement or creation pursuant to existing, approved CDF~~G~~W procedures. The approved plan shall be implemented by the Permittee.

50. Permittee shall conduct surveys for red-legged frog along Alameda Creek in the vicinity of the project site during the appropriate season. If the species is found to use the area, Permittee shall prepare and implement a bullfrog control plan to ensure that the project does not result in new bodies of water during mining or as a result of reclamation that could serve as breeding areas for the predatory bullfrogs. The final reclamation as a water storage lake shall include the implementation of a long-term bullfrog control plan, if the red-legged frog is found to be present in the vicinity at that time.

51. Permittee shall consult with the California Department of Fish and ~~Game~~Wildlife and US Fish and Wildlife Service in preparation of final mitigation plans for habitat preservation and enhancement. The methods, results, and recommendations of the field surveys shall be approved by the Community Development Agency Director, and successful implementation shall be completed by the Permittee prior to site disturbance, or prior to final reclamation, as the case may be. Monitoring shall be performed by a qualified third party professional, who shall submit a report as part of the Permittee's Annual Report.

TRAFFIC

52. No new access points to the quarry site shall be established on Paloma Road. Regular small vehicle trips shall occur along the existing access road on the upper Alameda Creek bank under I- 680. Only equipment that cannot be brought to the site via the existing access road due to size or weight may be transported on County roadways. All excavated

material shall be transported from the SMP-32 site to the existing processing plant at SMP-24 via conveyor belt for storage, processing, transportation, or disposal.

53. No vehicles except necessary quarry equipment in regular use shall be stored on the site.

54. Permittee shall continuously maintain Athenour Way to standards of the County of Alameda. Damage to Athenour Way resulting from a natural adversity or a cause not related to either the quarry or the processing plant will not be the responsibility of the permittee. As part of the annual inspection of the quarry, or at other times as determined necessary by the Community Development Agency Director, the County will inspect the condition of Athenour Way. Required repairs will be identified by the County and shall be completed by Permittee. Permittee shall use contractors approved by the County, and all work shall be inspected by the County or a private company mutually acceptable to the County and permittee.

    a. To guarantee roadway maintenance, permittee shall post a guarantee of $100,000 (either a cash deposit into an interest-bearing account or a letter of credit) to ensure the availability of funds in the event that the County must complete required maintenance or repairs.

    b. If Permittee fails to maintain the roadway in a condition acceptable to the County, the County may withdraw from the account such funds as are necessary to commence or complete the required maintenance and repairs, following notification to the Permittee as described below. If the cost of maintenance and repairs exceeds the $100,000 plus interest accrued to the account, then the total cost to complete the work shall be due and payable by Permittee upon receipt of notification from the County. With the exception of emergency repairs, Permittee shall be given sixty days notification to complete the repairs or propose an alternative acceptable to the Community Development Agency Director. In the case of emergency repairs, as determined by the Community Development Agency Director, the County may withdraw such funds as are necessary to complete the work. If the cost of maintenance and repairs exceeds the $100,000 plus interest accrued to the account, then the total cost to complete the work shall be due and payable by Permittee upon receipt of notification from the County. If funds are ever withdrawn from the account, the corpus shall be replenished to the full $100,000 within five working days.

    c. Interest accruing in the account shall remain on deposit, unless withdrawn for work on the road. At the end of the permit term or any earlier closure of the operation, or upon abandonment of the roadway by Alameda County, funds in the account will be returned to Permittee following inspection and determination by the Community Development Agency Director that the roadway is in good condition to standards of the County of Alameda.

    d. If at the end of the permit term or any earlier closure of the operation the Community Development Agency Director determines that the roadway is not in good condition to standards of the County of Alameda, then the procedure as

provided in (b) above shall be followed. If there are insufficient funds in the road maintenance account or reclamation account to accomplish all necessary work on the roadway, then the County may perform the required work and recover all costs by any and all means provided by California law. The County shall give notice to the permittee and/or owner of the amount of the deficiency. Payment to the County by the permittee and/or owner shall be due immediately and shall be delinquent if not paid within 15 days of the date of the notice. The County may pursue any and all rights of collection against the permittee and/or owner for recovery of the delinquent sums. Such delinquency shall constitute a lien against the property and the County may, at its option, exercise its right as a lienholder to enforce the lien in any manner permitted by the law, including, without limitation, through a foreclosure sale.

e. As part of the Periodic Review, a schedule for necessary roadway repairs and alternatives for funding repairs will be considered by the Planning Commission. If warranted, the deposit may be increased to reflect current and projected future roadway maintenance needs.

55. Permittee may petition the State of California and Alameda County Board of Supervisors to abandon Athenour Way as a State and County controlled roadway. If a petition is filed for abandonment, Permittee shall supply information as necessary to the Public Works Agency and Planning Department to analyze the petition, including information regarding the interest of Caltrans. If the roadway is abandoned by the State of California and Alameda County, funds in the roadway maintenance account will be refunded to the Permittee, and all ownership and maintenance of the roadway will be transferred to the Permittee.

NOISE

56. Engines on all equipment used for surface mining operations shall be equipped with manufacturer-recommended mufflers, and no muffler or exhaust system shall be equipped with a cutout, bypass, or similar device intended to thwart quieting.

57. Site preparation and mining shall be conducted in substantial conformance with the proposed phasing plan prepared by Spinardi Associates, dated November 21, 1994, as amended by this permit and subsequent revisions. The plan provides for the construction of berms and landscape buffers prior to aggregate mining in a manner that will effectively shield the surrounding areas from visual and noise impacts. Topsoil removal, overburden stripping, and berm construction, once begun in the northwest portion of the site within 1,600 feet of the sensitive noise receptors, shall proceed as quickly as possible to further minimize noise. Activity in this area shall be conducted during the summer months to minimize noise received at the school-related areas. These operations shall begin no earlier than 7 AM.

58. Permittee shall be responsible for installing double-paned windows and a mechanical ventilation system at the request of the San Francisco Water Department and/or the Sunol Glen School, if after operations commence, the County determines it to be necessary to

further minimize noise levels caused by the SMP-32 operations at all or a portion of these facilities. The determination shall be based on a comparison of site-specific noise measurements made by qualified personnel against County standards for exterior and interior noise exposure, and the reported experience of persons who regularly use the facilities.

AIR QUALITY

59. Measures shall be taken to reduce dust emissions to the maximum extent possible. In addition to using water as a dust suppressant, other measures shall be used if practicable such as commercially available dust suppressants, and temporarily halting stripping activities during high wind periods that create a visible dust plume. Permittee shall describe measures undertaken in each Annual Report furnished to the Community Development Agency Director.

60. Adequate soil moisture shall be maintained in all activity areas within the site or watered to reduce dust to an insignificant level, as determined by the Community Development Agency Director and Bay Area Air Quality Management District.

61. All surface mining operations emitting smoke, vapors, dust and other airborne contaminants shall be provided with all necessary control measures and devices, including the Fugitive Dust Control Plan, as required by the Community Development Agency Director, Alameda County Health Care Services Agency and the Bay Area Air Quality Management District to prevent the occurrence of nuisance and undue pollution of the air.

62. If, at any time, high wind or dry weather create potentially hazardous conditions on surrounding roads and highways or in the town of Sunol as a result of windblown dust from the site, the causative activity must cease and corrective measures must be taken. Adequate water and equipment shall be maintained on-site for this purpose. The event must also be reported to the California Highway Patrol, and the County Planning Department Community Development Agency, and Public Works Agency within 48 hours.

63. Permittee shall maintain all quarry-operated equipment in accordance with manufacturers' recommendations to reduce exhaust emissions from heavy equipment and haul trucks.

64. Permittee shall ensure that the quarry conforms to all requirements of the Bay Area Air Quality Management District, and shall document compliance as part of the Annual Report.

65. If complaints about off-site dust are received by the County, complaints are referred to the Bay Area Air Quality Management District, the legal entity in the County for air pollution. BAAQMD shall conduct inquiries and an investigation shall be conducted to determine whether a reasonable nuisance or hazard exists, if a violation is warranted, if the SMP-32 quarry and/or surrounding buffer lands on the project site is the cause of the dust, and, if so, what corrective actions are required to correct the problem. Permittee

shall comply with the BAAQMD findings and other actions under the SMO and these COAs that may be required by the Community Development Agency Director or Designee regarding the appropriate corrective action, which may include but is not limited to changes in the method of operation, hours of operation, or other elements of the project.

VISUAL QUALITY

66. A detailed landscape and phasing plan shall be prepared and approved prior to site disturbance based on the conceptual plans approved as part of this permit, prepared by Gates & Associates, revised October 1994, that takes into account the preference for native species and biologic habitat value; speed of growth of selected plants; ability of plants to provide an effective visual screen; and suitability of plants to the soil, climate, natural setting and other physical characteristics of the site. The landscape plan shall include both an irrigation plan, specifying use of a water-conserving system, and a landscape maintenance program. The landscape plan shall be prepared by a licensed landscape architect in consultation with the San Francisco Water Department, the California Native Plant Society, the U.S.D.A. ~~Soil Conservation Service~~ Natural Resources Conservation Service, and the California Department of Fish and ~~Game~~ Wildlife. The landscape plan shall include timing, responsibilities, and guarantees, and shall be approved by the ~~Planning Director~~ Community Development Agency Director or Designee prior to commencement of soil disturbance and planting. The ~~Planning Director~~ Community Development Agency Director or Designee shall forward the plan to the Sunol Citizens' Advisory Committee for comments prior to approval of the plan. Permittee shall guarantee maintenance of the landscaping in accordance with the plan. On-going maintenance of the landscaping shall be monitored by an independent landscape architect/contractor under the supervision of the Alameda County ~~Planning Department~~ Neighborhood Preservation and Sustainability Department and contract to the permittee, with reports supplied as part of the Annual Report. The success of the plantings shall be reviewed by the Sunol Citizens' Advisory Committee. On November 18, 2020, the Sunol Citizens' Advisory Committee reviewed the Focused Landscaping Plan, the Reclamation Plan Amendment, and Staff Report. On December 7, 2020, the Planning Commission incorporated the Sunol Citizens' Advisory Committee's comments, as deemed appropriate, in the adopted a Focused Landscaping Plan entitled "Focused Landscaping Plan" that applies to a 2.47-acre portion of the site as reflected in the Reclamation Plan Amendment, Appendix A, "Focused Landscape Plan," of the CEQA EIR Addendum for SMP-32 (Attachment B of the December 7, 2020 Planning Commission Staff Report), which was approved by the Planning Commission on December 7, 2020.

67. Permittee shall construct a continuous berm around the perimeter of the quarry pit as shown in the revised plans prepared by Gates & Associates, revised October 1994, subject to amendment under these conditions of approval, to provide a visual barrier to sensitive areas including but not limited to I 680, Paloma Road, and the San Francisco Water Department water temple and access road. On December 7, 2020, the Planning Commission incorporated the Sunol Citizens' Advisory Committee's recommendations in the adopted a Focused Landscaping Plan entitled "Focused Landscaping" that applies

to a 2.47-acre portion of the site as reflected in the Reclamation Plan Amendment, Appendix A, "Focused Landscape Plan," of the CEQA EIR Addendum for SMP-32 (Attachment B of the December 7, 2020 Planning Commission Staff Report), which was approved by the Planning Commission on December 7, 2020. The engineered appearance of the final use of the site (water storage for the San Francisco Water Department) shall be minimized through the use of a meandering berm with varying dimensions and through suitable landscape planting design, including the use of native, drought tolerant plants, as outlined below.

68. Permittee shall coordinate quarry operations, buffering land uses, conveyor belt location and design, fencing, and landscape berms with the San Francisco Water Department as necessary to facilitate the implementation of public access to the watershed lands, if such access and trails are found to be desirable by the San Francisco Water Department. Modifications to the conveyor belt, landscaping, or other operational concerns, would be subject to approval by the Community Development Agency Director or Designee. In the event the San Francisco Water Department opens its lands for public access, Permittee shall cooperate with the eventual operator of the recreation and trail facilities.

69. Landscaping shall be reviewed periodically to ensure the adequacy of the plan and plantings. Permittee shall survey and stake the location of the pit perimeter, berms, hillocks, and other major features of the plan for an initial inspection by the Alameda County Planning Department Community Development Agency and the Sunol Citizens' Advisory Committee, prior to any site disturbance. In consultation with the Permittee, Department of Public Works, Sunol Citizens' Advisory Committee, and other responsible parties, the Community Development Agency Director or Designee shall approve a program for interim inspections as the buffer areas are constructed, berms are constructed, and other features and landscaping are installed, in order to ensure that the features are achieving the intended goal of screening views and providing a pleasing setting. The Community Development Agency Director or Designee may approve modifications to the plans to improve factors such as tree species, spacing, timing of installation, and other elements. Screen landscaping shall be permanently installed at least four years in advance of activity in areas of active mining to ensure adequate growth, and shall have a minimum success of 75 percent. On December 7, 2020, the Planning Commission incorporated the Sunol Citizens' Advisory Committee's recommendations in the adopted a Focused Landscaping Plan entitled "Focused Landscaping" that applies to a 2.47-acre portion of the site as reflected in the Reclamation Plan Amendment, Appendix A, "Focused Landscape Plan," of the CEQA EIR Addendum for SMP-32 (Attachment B of the December 7, 2020 Planning Commission Staff Report), which was approved by the Planning Commission on December 7, 2020.

70. Stockpiles of salable aggregate materials, topsoil, fines, and overburden materials, from on-site mining activity shall be allowed within previously disturbed areas of the site within the perimeter of the landscape berm intended to visually buffer mining operations. In no event shall any stockpile exceed the elevation of the existing landscaped berm.

71. Permittee shall restrict and minimize lighting for night operations. Where lighting is necessary, Permittee shall utilize light shades, directional lighting, and other measures so as to minimize visibility off site.

PUBLIC FACILITIES AND SERVICES

72. Prior to issuance of Building Permits, the ~~Planning Director~~ Community Development Agency Director or Designee shall approve the precise location and any relocations, access, and design of the conveyor belt linking the expansion area to the existing plant on the opposite side of I 680. The conveyor belt shall not adversely affect the Alameda Creek channel or bridge in any manner, as determined by the ~~Planning Director~~ Community Development Agency Director or Designee.

73. An encroachment permit from Caltrans shall be obtained for any work conducted within the State right-of-way, as necessary.

ARCHAEOLOGIC AND HISTORIC RESOURCES

74. Permittee shall alert all personnel involved in activities at the site to the possibility of finding archaeologic or historic materials (materials shall be described in sufficient detail that they would be recognizable if found). If any of these materials are encountered, work shall be halted in the immediate area of the discovery or suspected source area. Work shall not recommence until a qualified archaeologist has inspected the find, made an evaluation of the character and potential significance of the resource, collected appropriate data and samples, and implemented a mitigation program, if necessary. Reports and recommendations shall be forwarded to the County in a timely manner. Permittee shall comply with the recommendations of the archaeologist regarding preservation, relocation or recording, if necessary.

75. Permittee shall propose and implement a schedule of site visits for archaeologic evaluation during topsoil and overburden removal, subject to the approval of the Community Development Agency Director or Designee. Particular attention shall be paid to the southwestern quadrant of the site and the area opposite the San Francisco Water Department maintenance area. Reports, recommendations and activities shall be presented as part of the Annual Report and filed with the California Archaeological Inventory, as appropriate.

76. In the event that any human remains are uncovered, the County Coroner and the Native American Heritage Commission must be notified. If the remains are determined to be of Native American origin, arrangements must be made between the Permittee and the designated Most Likely Descendent regarding the exposure, removal, and eventual reburial of human remains and associated grave goods.

77. Permittee shall not operate in or disturb the ground within the previously identified archaeologic resource area and any possible additional cultural resource finds. This prohibition shall exclude foot or vehicular traffic, and incorporate provisions of an erosion control plan for the area.

PUBLIC HEALTH AND SAFETY

78. A potable water supply and adequate toilet facilities shall be provided for employees according to requirements of the Alameda County Health Care Services Agency.

79. An annual fire protection plan shall be filed with the Alameda County Fire Department and State Department of Forestry and implemented by the Permittee, as approved or amended by these agencies.

80. The perimeter of the mining area shall be fenced prior to commencement of mining activities. Fencing shall conform to specifications of the Alameda County Surface Mining Ordinance. An alternative design may be approved by the Community Development Agency Director or Designee if the design is found to achieve the same degree of security as standards in the Alameda County Surface Mining Ordinance. New and existing fences shall be repaired as necessary and maintained in good condition.

RECLAMATION

81. The Permittee shall guarantee timely performance of reclamation requirements of the Alameda County Surface Mining Ordinance and these conditions of approval by providing a mechanism for financial assurance of reclamation as described in, and in accordance with, Surface Mining and Reclamation Act and the Alameda County Surface Mining Ordinance. The mechanism shall be of sufficient value to cover the full costs of reclamation in any specific year for which it is calculated, and may take any form acceptable within the requirements of SMARA, including but not limited to escrow accounts, trust accounts, performance / surety bonds and/or Irrevocable Letters of Credit.

82. Final reclamation shall occur within the stated permit term, but in no case later than two years after the cessation and termination of surface mining. Prior to release of funds from impound accounts for monitoring and reclamation, all conditions shall be accomplished and accepted by the Community Development Agency Director or Designee. All stockpiles and equipment shall be removed from the site upon completion of reclamation. An "as built" plan of the final reclamation shall be prepared and submitted to the Community Development Agency Director or Designee.

MONITORING AND RESPONSIBILITIES

83. In accordance with ACSMO Section 6.80.190, the Planning Commission shall review compliance with the Surface Mining Permit and Reclamation Plan and with the Alameda County Surface Mining Ordinance no less than every five years. New or changed circumstances within the general area of the mining operations which should be accommodated by the permit or plans will be considered. The review shall include a public hearing. The Permittee shall pay the actual cost of reviews unless otherwise approved for extraordinary circumstances by the Community Development Agency Director or Designee. As a result of this process, the Planning Commission may modify the mining or reclamation plan or guarantees thereof to conform with the Alameda County Surface Mining Ordinance or changed circumstances, and such modified permit or plan shall be binding upon the operation.

84. If problems develop regarding mining or reclamation as may be determined by the Community Development Agency Director or Designee, Permittee shall take corrective action with all due haste, in good faith. Permittee shall implement solutions as approved by the Community Development Agency Director or Designee.

PERMIT EXPIRATION / REVOCATION

85. This Surface Mining Permit and Reclamation Plan shall terminate January 1, 2045 or upon completion of reclamation, whichever occurs first.

86. A processing plant shall not be allowed on the SMP-32 site.

87. This permit shall be subject to revocation or suspension as specified in Section 6.80.270 of the Alameda County Surface Mining Ordinance.

LEGAL RESPONSIBILITIES

88. Permittee shall defend, indemnify, and hold harmless the County of Alameda and its agents, officers, or employees (collectively, the "County") from any claim, action or proceeding against the County, or its agents, officers, or employees, to attack, set aside, void, or annul this Surface Mining Permit and Reclamation Plan, including any amendments thereto, or underlying environmental documents and actions taken pursuant to the California Environmental Quality Act, Alameda County Surface Mining Ordinance, other State and County code and ordinance requirements, and any combination thereof. Such indemnification shall include but not be limited to any such proceeding. If Permittee shall fail to adequately defend the County of Alameda, the County may provide its own legal defense and Permittee shall be responsible for the County's reasonable attorneys' fees.

89. Should a judicial proceeding be instituted to enforce or interpret these conditions and provisions, the prevailing party shall be entitled to reasonable attorneys' fees and costs, in addition to any other relief awarded. Permittee shall reimburse the County, its agents, officers, or employees for any court costs and/or attorneys' fees which the County, its agents, officers, or employees expend in defense of a legal challenge to this action or portions thereof.

90. A Notice of Limitation incorporating all permit provisions shall be recorded against all properties owned or leased by the Permittee which are subject to this Surface Mining Permit and Reclamation Plan.

91. Permittee, property owner and their authorized agents, and any other person in control of the property, individually or collectively, are responsible for the observation and compliance with all the provisions of this permit and the Alameda County Surface Mining Ordinance. Each party shall provide a written statement that they accept responsibility for reclaiming the site as indicated on the mining and reclamation plan, and shall guarantee (a) compliance with all conditions of approval and (b) reclamation in accordance with said plan. Said responsibility shall run with the land under permit as a covenant thereupon until release of the covenant is recorded by Alameda County.

92. Prior to the initiation of non-mining uses or uses accessory to mining operations, the Permittee shall receive prior approval demonstrating conformance with ACSMO §6.80.060. The Community Development Agency Director or Designee shall act upon and retain a record of all non-mining uses authorized in accordance with ACSMO §6.80.060(A). The Planning Commission shall review and act upon all accessory uses proposed in accordance with ACSMO §6.80.060 (C) and (D).

93. In accordance with ACSMO §6.80.120, the Permittee shall obtain approval from the County for any proposed amendments to Surface Mining Permit and Reclamation Plan No. 32 ("SMP-32 ") resulting from the San Francisco Public Utilities Commission's Alameda Creek Watershed Center Project, including, but not limited to, changes to the reclamation plan boundary, vehicular access points, setbacks required by ACSMO §6.80.210(C), haul routes, or access or routes required for future operations, maintenance, and inspections. The Permittee shall seek approval from the County of any proposed amendments to SMP-32 before commencement of construction of any Watershed Center Project improvements that are located within the current reclamation plan boundary. Prior to County approval of any amendment to SMP-32 that has a potential to impact the Watershed Center Project, the Community Development Agency Director or Designee shall consult with the San Francisco Public Utilities Commission.

94. The Permittee will submit a complete application and deposit for administrative approval of revisions and clarification of the Permittee's 2001 Phasing Plan. This submittal must include the following; 1) a current topographic survey, 2) an updated FACE and FAM and; 3) a narrative describing the incremental reclamation of the site. These items must be received by County staff no later than September 17, 2015 which is 60 days from Planning Commission approval of the Periodic Review and its associated Conditions of Approval which was approved on July 20, 2015.

ADOPTED BY THE FOLLOWING VOTE:

AYES:

NOE:

EXCUSED:

ABSENT:

ABSTAINED:

ALBERT LOPEZ—PLANNING DIRECTOR & SECRETARY

ALAMEDA COUNTY PLANNING COMMISSION

APPENDIX A
FOCUSED LANDSCAPE PLAN

I-680/SR 84 INTERCHANGE IMPROVEMENTS AND SR 84 WIDENING PROJECT
SMP 32 PLANT REPLACEMENT PLANS

LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT · LEAH HAYGOOD · Signature · 8-31-21 · Renewal Date · Date · STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

HAYGOOD AND ASSOCIATES
1496-B Solano Avenue
Albany, CA 94706

ALAMEDA CTC
1111 Broadway
Suite 800
Oakland, CA 94607

PLANT LEGEND

PLANT GROUP (SIZE)	PLANT No.	SYMBOL	BOTANICAL NAME	COMMON NAME	HOLE SIZE DIAMETER (INCH)	HOLE SIZE DEPTH (INCH)	BASIN TYPE	PLANT AREA GROUP F/H/M (SQFT)	WOOD MULCH BASIN (CF)	APPLICATION RATES ① SOIL AMENDMENT (CF)	APPLICATION RATES ① ORGANIC FERTILIZER PLT ESTB (oz)	APPLICATION RATES ① PACKET FERTILIZER (EA)	ON CENTER SPACING (ft)	MINIMUM PLANTING DISTANCE FROM: ETW (ft)	EP (ft)	FENCE (ft)	WALL (ft)	PAVED DITCH (ft)	EARTH DITCH (ft)	REMARKS
B (No. 5)	1		NERIUM OLEANDER 'SISTER AGNES'	SISTER AGNES OLEANDER	24"	24"	II		1	2	1	1	15	15	15	15	15	15	17	SHRUB
	2		NERIUM OLEANDER 'LITTLE RED'	LITTLE RED OLEANDER	24"	24"	II		1	2	1	1	6	10	10	10	10	10	12	SHRUB
	3		MONARD JUNIPERUS SABINA	MOOR-DENSE JUNIPER	24"	24"	II		1	2	1	1	5	6	6	8	8	8	8	SHRUB
	4		TAGETES LEMMONII	MEXICAN MARIGOLD	24"	24"	II		1	2	1	1	4	4	4	4	4	4	4	SHRUB
T (SOD)	5		AGROSTIS PALLENS	NATIVE BENT GRASS TURF				2670		6 CY/ 1000 SQFT	6 LB/ 1000 SQFT									SOD ③
U (No. 15)	6		CUPRESSUS SEMPERVIRENS 'FASTIGIATA'	ITALIAN CYPRESS	36"	36"	II		2	3	2	2	6	6	6	6	6	6	6	TREE ② ④ ⑤
	7		PISTACHIA CHINENSIS 'KEITH DAVEY'	KEITH DAVEY CHINESE PISTACHE	36"	36"	II		2	3	2	2	25	40	40	20	20	20	22	TREE ② ④ ⑤
	8		SEQUOIA SEMPERVIRENS 'APTOS BLUE'	APTOS BLUE REDWOOD	36"	36"	II		2	3	2	2	20	30	30	20	20	20	22	TREE ② ④ ⑤
	9		QUERCUS AGRIFOLIA	COAST LIVE OAK	36"	36"	II		0	0	0	0	20	25	25	20	15	15	17	TREE ② ④ ⑤ ⑥

NOTES: APPLICABLE WHERE CIRCLED

① QUANTITIES SHOWN ARE "PER PLANT" UNLESS SHOWN AS SQFT OR SQYD APPLICATION RATES

② TREE STAKING REQUIRED

③ AREA TO BE CULTIVATED PRIOR TO PLANTING

④ FOLIAGE PROTECTOR REQUIRED

⑤ ROOT PROTECTOR REQUIRED

⑥ SEE SHEET PP-2 FOR NOTES ON BARK MULCH, PLANTING WITHIN SMP-32 AREA AND TREES TO BE TRANSPLANTED.

LEGEND:

- SOD AREA. NATIVE BENT GRASS (AGROSTIS PALLENS) CULTIVATE AREA PRIOR TO INSTALLING SOD
- DRY SEED AGROSTIS PALLENS. SEED BY HAND AT 50 LBS PER ACRE. CULTIVATE AREA PRIOR TO SEEDING.
- EXISTING REDWOOD TREE TO REMAIN. PROTECT IN PLACE DURING CONSTRUCTION. DELINEATE REDWOODS SHOWN ON PLANTING PLANS WITH HIGH VISIBILITY TEMPORARY FENCING. DO NOT ENTER DELINEATED AREA. DO NOT ALLOW DISCHARGE OR SPILLAGE OF ANY PRODUCT THAT WILL EFFECT THE VIGOR OF THE EXISTING REDWOODS.
- ROADSIDE CLEARING WORK LIMITS AND PLANT ESTABLISHMENT WORK LIMITS
- WOOD CHIP MULCH
- EDGING
- TREE TO BE TRANSPLANTED.

PLANT LEGEND

PL-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	84,680	17.9/R22.9 R10.3/R15.3	955	

LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

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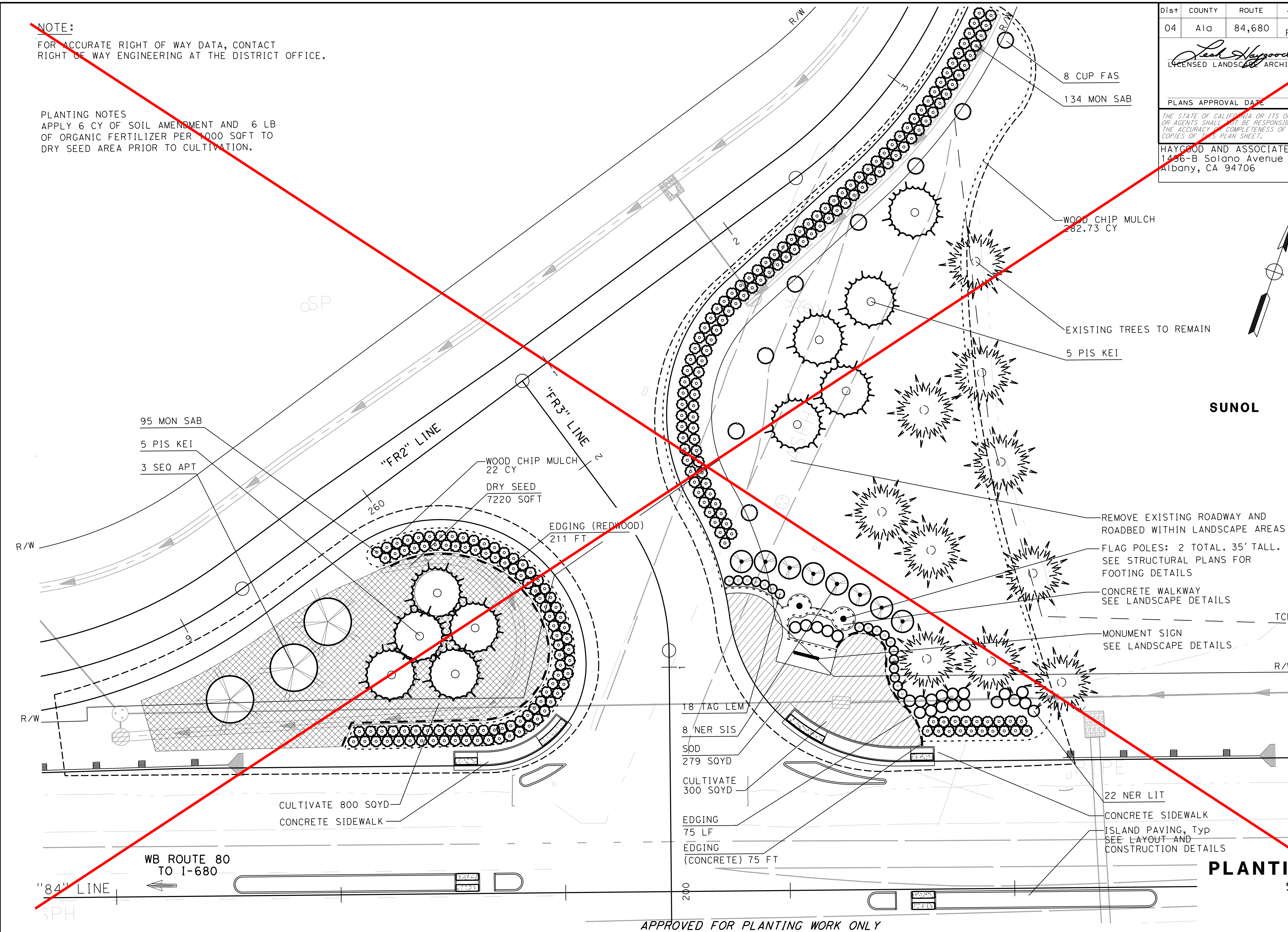
LICENSED LANDSCAPE ARCHITECT — LEAH HAYGOOD — 8-31-21 — STATE OF CALIFORNIA

HAYGOOD AND ASSOCIATES
1496-B Solano Avenue
Albany, CA 94706

ALAMEDA CTC
1111 Broadway
Suite 800
Oakland, CA 94607

NOTE:
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

PLANTING NOTES
APPLY 6 CY OF SOIL AMENDMENT AND 6 LB OF ORGANIC FERTILIZER PER 1000 SQFT TO DRY SEED AREA PRIOR TO CULTIVATION.



PLANTING PLAN

SCALE: 1" = 20'

PP-1

APPROVED FOR PLANTING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: BEN RAZEGHI

CALCULATED-DESIGNED BY: SIMON KENNEY — CHECKED BY: LEAH HAYGOOD

REVISED BY — DATE REVISED

LAST REVISION 07-20-16 — DATE PLOTTED => 5/13/2020 — TIME PLOTTED => 10:38:54 AM

BORDER LAST REVISED 7/2/2010 — USERNAME => Simon — DGN FILE => 0415000040su001.dgn — RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 — UNIT 0736 — PROJECT NUMBER & PHASE 04150000401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	84,680	17.9/R22.9 R10.3/R15.3	956	

LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT LEAH HAYGOOD Signature 8-31-21 Renewal Date Date STATE OF CALIFORNIA

HAYGOOD AND ASSOCIATES
1496-B Solano Avenue
Albany, CA 94706

ALAMEDA CTC
1111 Broadway
Suite 800
Oakland, CA 94607

NOTES

1 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

2 BARK MULCH;
2.1 TREES TO BE REMOVED, EXCEPT PERUVIAN PEPPER, THAT ARE HEALTHY ARE TO BE CHIPPED ON SITE. STOCKPILE CHIPPED MATERIAL ADJACENT TO NEW PLANTING AREA FOR REUSE. REMOVED PERUVIAN PEPPERS ARE TO BE REMOVED FROM SITE.
2.2 TREES TO BE REMOVED THAT ARE NOT HEALTHY, SHOULD NOT BE CHIPPED. REMOVE UNHEALTHY TREES FROM SITE.
2.3 DO NOT BREAK DOWN UNHEALTHY TREES BY CHIPPING THEM IN THE SAME CHIPPER USED FOR HEALTHY TREES THAT ARE TO BE CHIPPED.

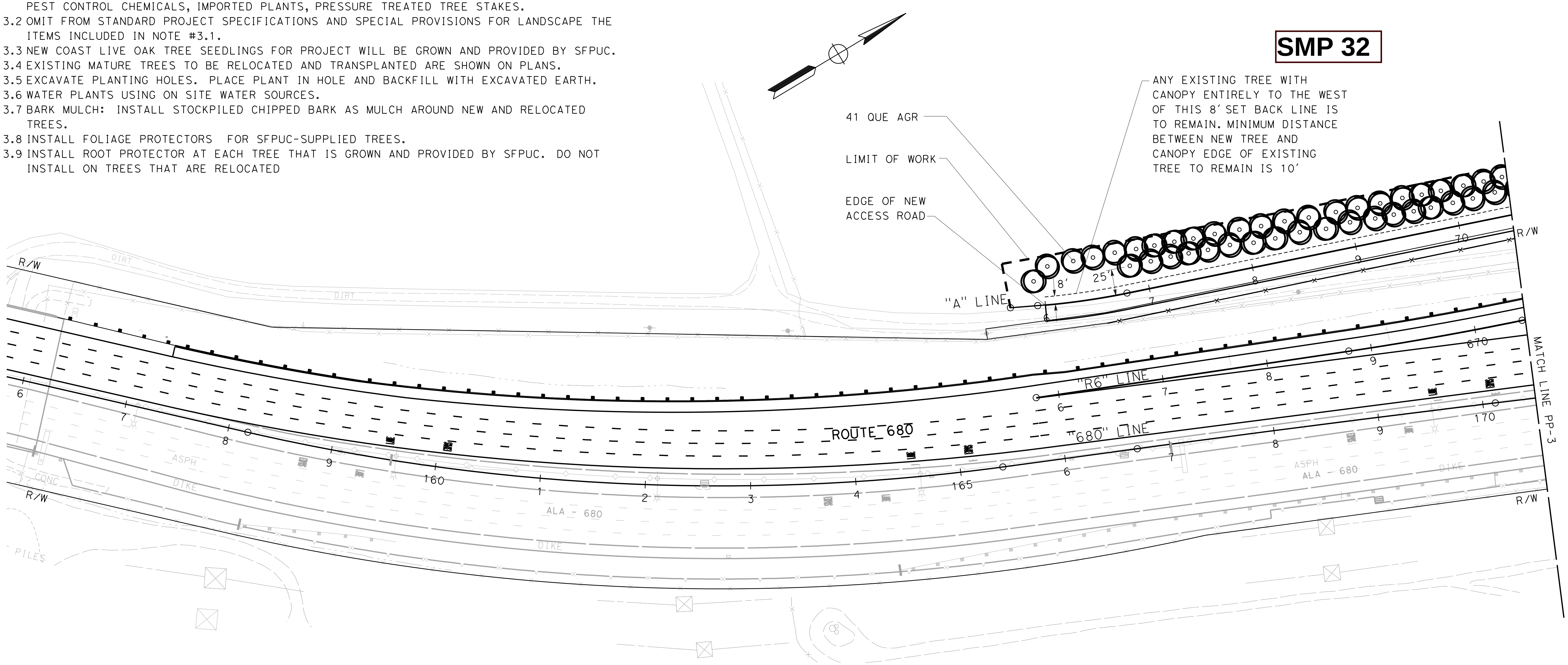
3 PLANTING WORK WITHIN SMP-32 AREA OF WORK ONLY;
3.1 NOT ALLOWED ON SITE: IMPORTED SOIL, SOIL AMENDMENTS, COMPOST, FERTILIZERS, WEED AND PEST CONTROL CHEMICALS, IMPORTED PLANTS, PRESSURE TREATED TREE STAKES.
3.2 OMIT FROM STANDARD PROJECT SPECIFICATIONS AND SPECIAL PROVISIONS FOR LANDSCAPE THE ITEMS INCLUDED IN NOTE #3.1.
3.3 NEW COAST LIVE OAK TREE SEEDLINGS FOR PROJECT WILL BE GROWN AND PROVIDED BY SFPUC.
3.4 EXISTING MATURE TREES TO BE RELOCATED AND TRANSPLANTED ARE SHOWN ON PLANS.
3.5 EXCAVATE PLANTING HOLES. PLACE PLANT IN HOLE AND BACKFILL WITH EXCAVATED EARTH.
3.6 WATER PLANTS USING ON SITE WATER SOURCES.
3.7 BARK MULCH: INSTALL STOCKPILED CHIPPED BARK AS MULCH AROUND NEW AND RELOCATED TREES.
3.8 INSTALL FOLIAGE PROTECTORS FOR SFPUC-SUPPLIED TREES.
3.9 INSTALL ROOT PROTECTOR AT EACH TREE THAT IS GROWN AND PROVIDED BY SFPUC. DO NOT INSTALL ON TREES THAT ARE RELOCATED

4 TREES TO BE RELOCATED AND TRANSPLANTED
4.1 ALL TREES TO BE RELOCATED AND TRANSPLANTED ARE QUERCUS AGRIFOLIA
4.2 ARBORIST TO MARK TREES TO BE RELOCATED AND TRANSPLANTED
4.3 FOR TREE IDENTIFICATION NUMBERS REFER TO TREE REMOVAL PLANS

LEGEND

(symbol) QUERCUS AGRIFOLIA COAST LIVE OAK 15 GAL SUPPLIED BY SFPUC

SMP 32



APPROVED FOR PLANTING WORK ONLY

PLANTING PLAN
SCALE: 1" = 50'
PP-2

REVISED BY: SIMON KENNEY
DATE REVISED

CALCULATED-DESIGNED BY: LEAH HAYGOOD
CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: BEN RAZEGHI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

$FREQUEST

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	84,680	17.9/R22.9 R10.3/R15.3	957	

LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT — LEAH HAYGOOD — Signature — 8-31-21 Renewal Date — Date — STATE OF CALIFORNIA

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HAYGOOD AND ASSOCIATES
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ALAMEDA CTC
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Oakland, CA 94607

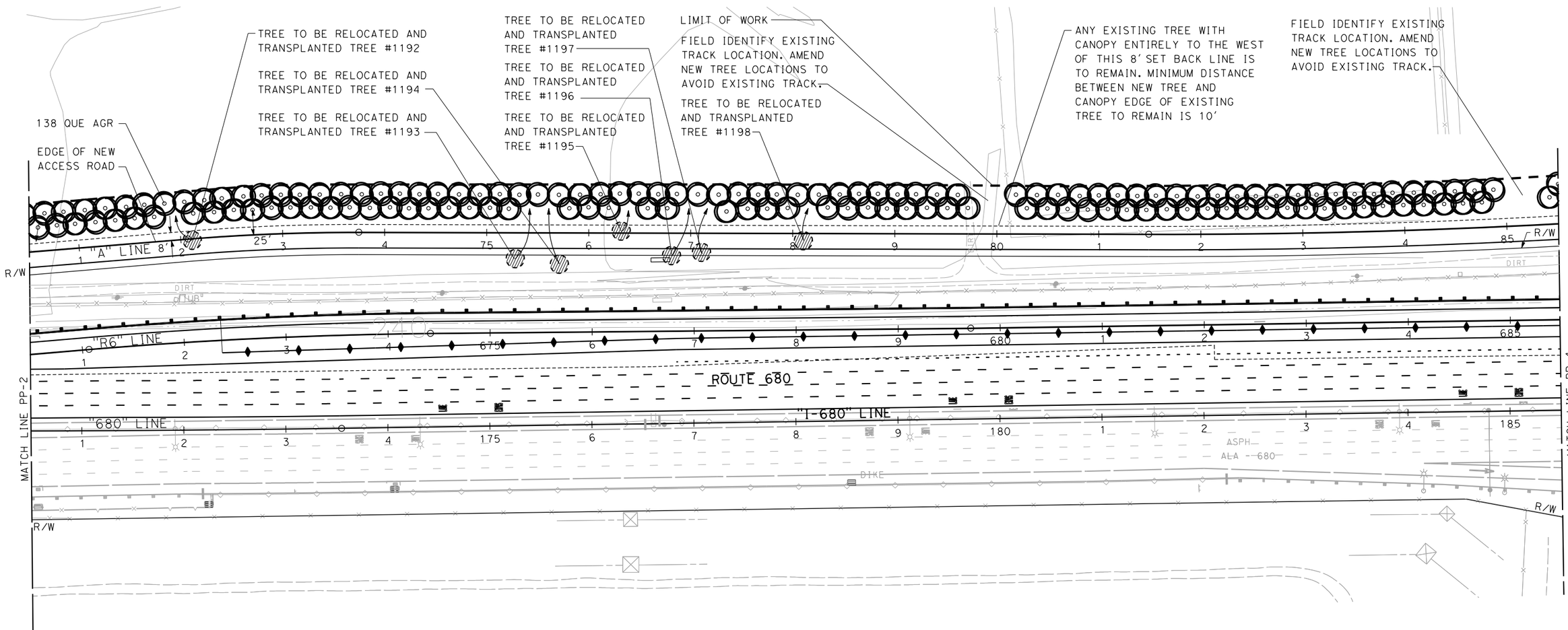
NOTES

1. RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. SEE SHEET PP-2 FOR NOTES ON BARK MULCH, PLANTING WITHIN SMP-32 AREA AND TREES TO BE RELOCATED AND TRANSPLANTED.

LEGEND

⊙	QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL SUPPLIED BY SFPUC

SMP 32



PLANTING PLAN

SCALE: 1" = 50'

PP-3

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REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: SIMON KENNEY
CHECKED BY: LEAH HAYGOOD
CONSULTANT FUNCTIONAL SUPERVISOR: BEN RAZEGHI
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
FREQUEST

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DATE PLOTTED => 4/17/2020
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	84,680	17.9/R22.9 R10.3/R15.3	958	

Leah Haygood
LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT — LEAH HAYGOOD No. 6539 — LEAH HAYGOOD — Signature — 8-31-21 — Renewal Date — Date — STATE OF CALIFORNIA

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Oakland, CA 94607

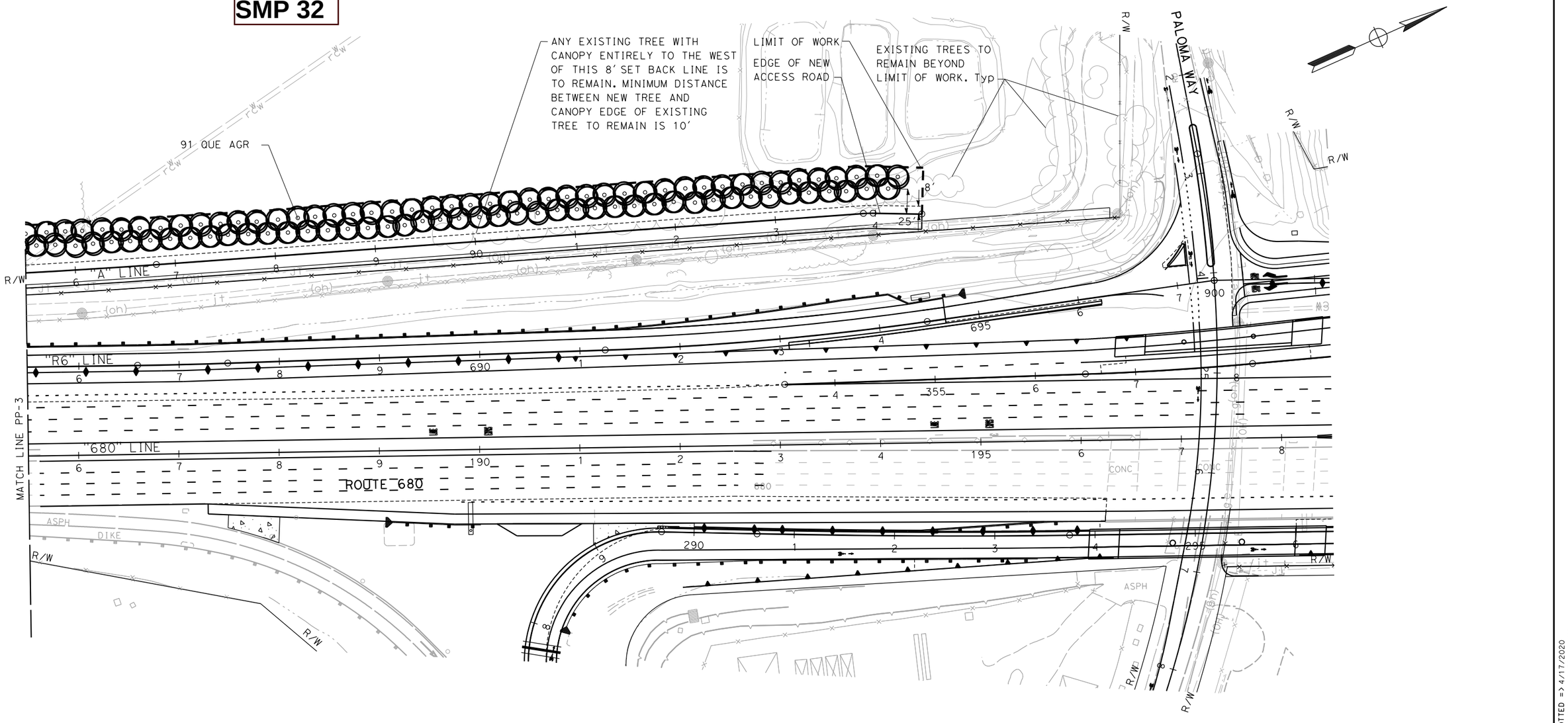
NOTES

1. RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. SEE SHEET PP-2 FOR NOTES ON BARK MULCH, PLANTING WITHIN SMP-32 AREA AND TREES TO BE RELOCATED AND TRANSPLANTED.

LEGEND

⊙	QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL SUPPLIED BY SFPUC

SMP 32



PLANTING PLAN
SCALE: 1" = 50'
PP-4

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REVISED BY | DATE REVISED
SIMON KENNEY | LEAH HAYGOOD
CALCULATED-DESIGNED BY | CHECKED BY
CONSULTANT FUNCTIONAL SUPERVISOR: BEN RAZEGHI
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
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LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT
LEAH HAYGOOD
Signature
8-31-21
Renewal Date
Date
STATE OF CALIFORNIA

HAYGOOD AND ASSOCIATES
1496-B Solano Avenue
Albany, CA 94706

ALAMEDA CTC
1111 Broadway
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Oakland, CA 94607

PLANT QUANTITIES

BOTANICAL NAME	COMMON NAME	PLANT GROUP B (N)	PLANT GROUP U (N)	PLANT GROUP SOD (N)	PACKET FERTILIZER (N)	PLANT BASIN WOOD CHIP MULCH (N)	PLANT BASIN SOIL AMENDMENT (N)	PLANT BASIN ORGANIC FERTILIZER (N)	ROOT PROTECTOR (N)	FOLIAGE PROTECTOR (N)
		EA	EA	SQYD	EA	CY	CY	LB	EA	EA
NERIUM OLEANDER 'SISTER AGNES'	SISTER AGNES OLEANDER	8			8	0.30	0.59	0.50		
NERIUM OLEANDER 'LITTLE RED'	LITTLE RED OLEANDER	22			22	0.81	1.63	1.38		
MONARD JUNIPERUS SABINA	MOOR-DENSE JUNIPER	229			229	8.48	16.96	14.31		
TAGETES LEMMONII	MEXICAN MARIGOLD	18			18	0.67	1.33	1.13		
TURF	TURF			279						
CUPRESSUS SEMPERVIRENS 'FASTIGIATA'	ITALIAN CYPRESS		8		16	0.59	0.89	1.00	8	8
PISTACHIA CHINENSIS 'KEITH DAVEY'	KEITH DAVEY CHINESE PISTACHE		10		20	0.74	1.11	1.25	10	10
QUERCUS AGRIFOLIA	COAST LIVE OAK		270**		0	0	0	0	0	0
SEQUOIA SEMPERVIRENS 'APTOS BLUE'	APTOS BLUE REDWOOD		3		6	0.22	0.33	0.38	3	3
	SUBTOTAL					11.81	22.85	19.94		
	TOTAL	277	291	279	319				21	21

(N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY

(**) - PLANTS TO BE SUPPLIED BY SFPUC NURSERY

PLANTING AREA QUANTITIES

SHEET No.	CULTIVATION (N)	CULTIVATION AREA SOIL AMENDMENT (N)	CULTIVATION AREA ORGANIC FERTILIZER (N)	WOOD CHIP MULCH (N)	EDGING (REDWOOD) (N)	EDGING (CONCRETE) (N)	DRY SEED (N)	CLASS 2 AGGREGATE BASE	MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION)
	SQYD	CY	LB	CY	LF	LF	SQFT	CY	CY
PP-1	1100	6.6	6.60	304.11	211	75	7220	12	8
PLANT BASIN SUBTOTAL		22.85	19.94	11.81					
TOTAL	1100	29.45	26.54	315.92	211	75	7220	12*	8*

(N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY

(*) - QUANTITY INCLUDED IN ROADWAY SUMMARY TABLE.

PLANTING QUANTITIES

PQ-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: BEN RAZEGHI
CALCULATED-DESIGNED BY: SIMON KENNEY
CHECKED BY: LEAH HAYGOOD
REVISED BY
DATE REVISED

$FREQUEST

LAST REVISION 07-20-16
DATE PLOTTED => 4/17/2020
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I-680/SR 84 INTERCHANGE IMPROVEMENTS AND SR 84 WIDENING PROJECT
SMP 32 PLANT REPLACEMENT PLANS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	84,680	17.9/R22.9 R10.3/R15.3	945	

LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT LEAH HAYGOOD 8-31-21 Renewal Date STATE OF CALIFORNIA

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HAYGOOD AND ASSOCIATES
1496-B Solano Avenue
Albany, CA 94706

ALAMEDA CTC
1111 Broadway
Suite 800
Oakland, CA 94607

IRRIGATION SPRINKLER SCHEDULE

SYMBOL	ITEM DESCRIPTION	SPRAY PATTERN	RADIUS	OPERATING PRESSURE	DISCHARGE RATE (+/- 5%)		PRECIPITATION RATE (+/- 5%)	INLET CONNECTION DIAMETER	SWING JOINT TYPE	RISER SPRINKLER ASSEMBLY			POP-UP SPRINKLER ASSEMBLY	REMARKS
			ft	psi	GPM	GPH	INCH/hr	INCH		TYPE	HEIGHT/LENGTH INCH	MATERIAL	HEIGHT INCH	
●	RISER SPRINKLER ASSEMBLY			30	0.25			1/2		V	(7)	PL		(8)
■	RISER SPRINKLER ASSEMBLY			30	0.5			1/2		V	(7)	PL		(8) (9)
⊞	RISER SPRINKLER ASSEMBLY			30	0.5			1/2		V	(7)	PL		(8) (10)
▼	POP-UP SPRINKLER ASSEMBLY	Q	8-10	30	0.23		1.2	3/4	II			PL	12	
▼	POP-UP SPRINKLER ASSEMBLY	H	8-10	30	0.51		1.1	3/4	II			PL	12	
(5)	GEAR DRIVEN POP-UP	Q	25-30	45	1.6		0.30	3/4	II			PL	12	
(5)	GEAR DRIVEN POP-UP	H	25-30	45	3.0		0.51	3/4	II			PL	12	
[5]	GEAR DRIVEN POP-UP	F	25-30	45	3.0		0.51	3/4	II			PL	12	
●	POP-UP SPRINKLER ASSEMBLY	F	10-12	30	1.5		1.1	3/4	II			PL	6	
⊕	POP-UP SPRINKLER ASSEMBLY	Q	12-15	30	0.6		1.1	3/4	II			PL	6	
⊖	POP-UP SPRINKLER ASSEMBLY	H	12-15	30	1.2		1.1	3/4	II			PL	6	
○	POP-UP SPRINKLER ASSEMBLY	F	12-15	30	2.3		1.1	3/4	II			PL	6	
◌	PLASTIC PIPE IRRIGATION LINE			30		0.5				PPIL		PL		INSTALL AROUND EXIST TREES (7)

PIPE SIZING CHART RISER SPRINKLER ASSEMBLY (TYPE V)

SPRINKLER (0.25 GPM)	
No. BUBBLERS	PIPE SIZE
1-24	3/4"
25-48	1"
49-120	1 1/2"
SPRINKLER (0.5 GPM)	
No. BUBBLERS	PIPE SIZE
1-6	3/4"
7-12	1"
13-32	1 1/2"

NOTES: APPLICABLE WHERE CIRCLED

1 - SEE SPECIAL PROVISIONS.
2 - IF A PRESSURE COMPENSATING DEVICE IS SPECIFIED, THE DISCHARGE AND RADII SHOWN REFLECT ITS USE.
3 - ARC STOP SHALL BE FITTED WITH A NUT AND BOLT.
4 - VINYL-COATED CAST IRON HOUSING.
5 - SWING JOINTS REQUIRED ADJACENT TO SHOULDERS, CURBS, SIDEWALKS, AND DIKES.
6 - UNLESS OTHERWISE SHOWN ON PLANS.
(7) - SEE DETAIL
(8) - SEE IRRIGATION NOTE 1
(9) - SEE IRRIGATION NOTE 4
(10) - SEE IRRIGATION NOTE 5

IRRIGATION SYMBOLS:

(FV) FLUSHING VALVE

NOTES:

1. INSTALL RISER SPRINKLER ASSEMBLY (TYPE V) ON UPHILL SIDE OF PLANT BASIN.
2. PLASTIC PIPE SUPPLY LINE FOR SPRINKLER ASSEMBLY (TYPE V) MUST BE SIZED IN ACCORDANCE WITH PIPE SIZING CHART, UNLESS OTHERWISE NOTED.
3. INSTALL IRRIGATION SYSTEM DOWNSTREAM FROM CONTROL (BV) VALVE ON GRADE.
4. INSTALL TWO BUBBLERS FOR EACH TREE (NO. 15 AND 24" BOX SIZES). ONE BUBBLER IS SHOWN FOR GRAPHIC CLARITY.
5. INSTALL FOUR BUBBLERS FOR EACH TRANSPLANTED TREE. ONE BUBBLER IS SHOWN FOR GRAPHIC CLARITY.

IRRIGATION SPRINKLER SCHEDULE
ISS-1

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CONSULTANT FUNCTIONAL SUPERVISOR BEN RAZEGHI
CALCULATED-DESIGNED BY LANCE BLANCHARD
CHECKED BY CHRIS MITCHELL
REVISED BY
DATE REVISED

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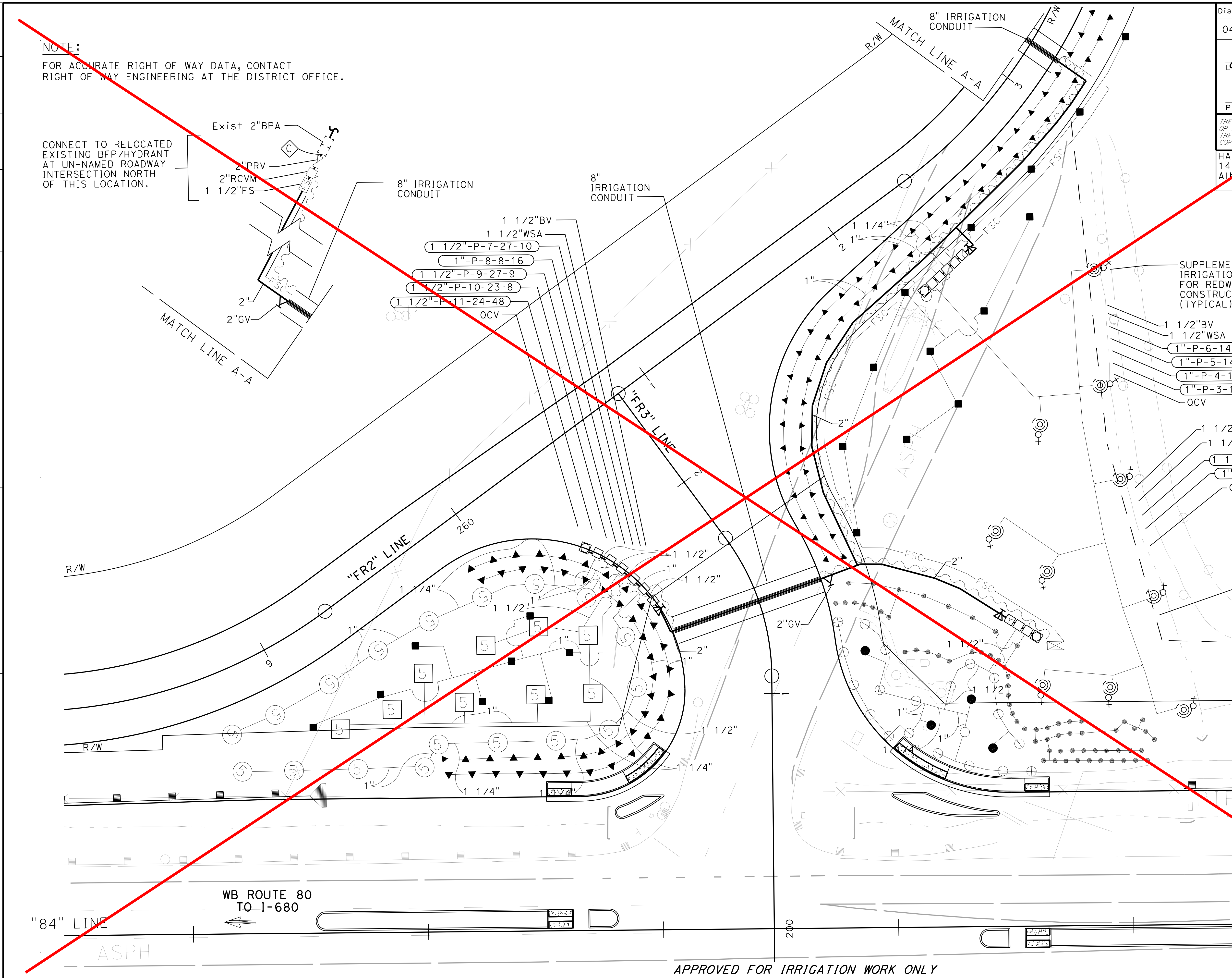

NOTE:
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
Exist 2"BPA
CONNECT TO RELOCATED EXISTING BFP/HYDRANT AT UN-NAMED ROADWAY INTERSECTION NORTH OF THIS LOCATION.
2"PRV
2"RCVM
1 1/2"FS
2"
2"GV
MATCH LINE A-A
8" IRRIGATION CONDUIT
8" IRRIGATION CONDUIT
1 1/2"BV
1 1/2"WSA
1 1/2"-P-7-27-10
1"-P-8-8-16
1 1/2"-P-9-27-9
1 1/2"-P-10-23-8
1 1/2"-P-11-24-48
QCV
"FR3" LINE
"FR2" LINE
260
9
R/W
1 1/4"
1"
2"GV
SUPPLEMENTAL IRRIGATION REQUIRED FOR REDWOODS DURING CONSTRUCTION. (TYPICAL)
1 1/2"BV
1 1/2"WSA
1"-P-6-14-29
1"-P-5-14-29
1"-P-4-13-26
1"-P-3-10-950
QCV
1 1/2"BV
1 1/2"WSA
1 1/2"-P-2-29-24
1"-P-1-17-67
QCV
SUNOL
ICC "P"
18 STATIONS
11 STATIONS USED
TCE
R/W
WB ROUTE 80
TO I-680
"84" LINE
ASPH
200

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	84,680	17.9/R22.9 R10.3/R15.3	947	

LICENSED LANDSCAPE ARCHITECT

LICENSED LANDSCAPE ARCHITECT — LEAH HAYGOOD — 8-31-21 — STATE OF CALIFORNIA

PLANS APPROVAL DATE

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Albany, CA 94706

ALAMEDA CTC
1111 Broadway
Suite 800
Oakland, CA 94607

IRRIGATION PLAN

SCALE: 1" = 20'

IP-1

APPROVED FOR IRRIGATION WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: BEN RAZEGHI

CALCULATED-DESIGNED BY: LANCE BLANCHARD

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04	Ala	84,680	17.9/R22.9 R10.3/R15.3	948	

Leah Haygood
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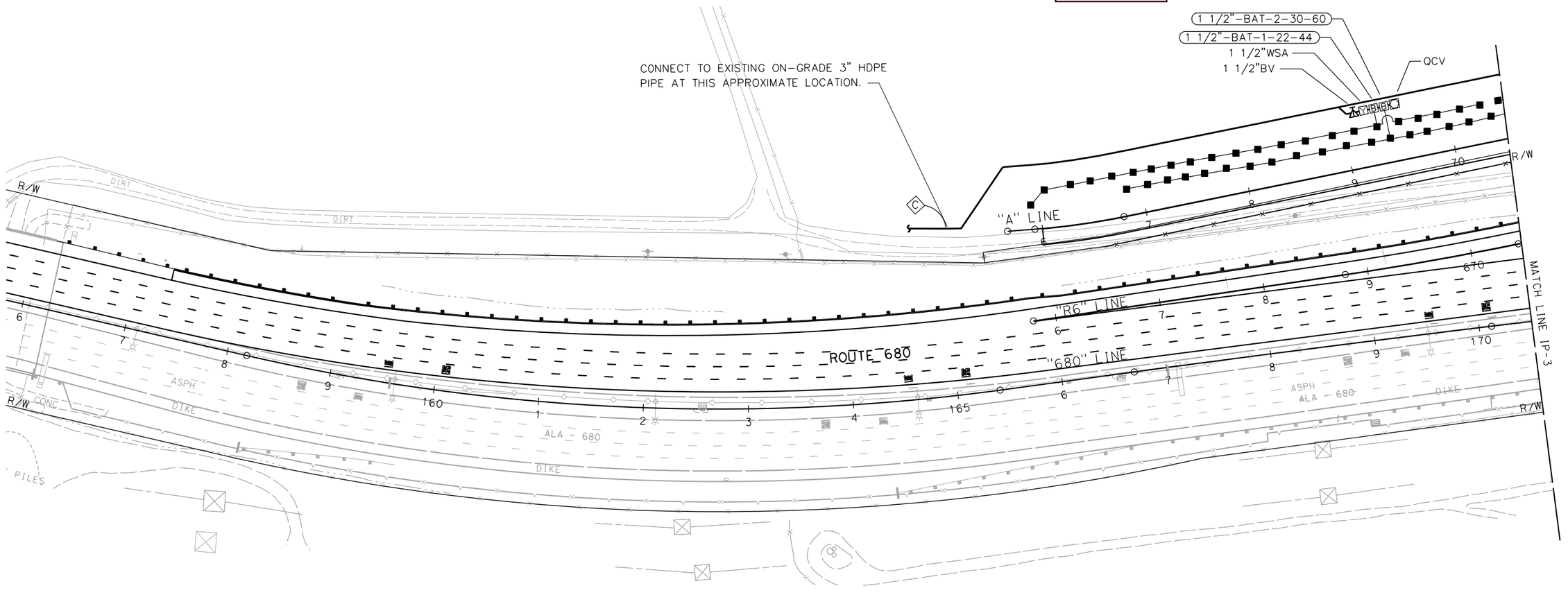
NOTES

RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

SMP 32



IRRIGATION PLAN

SCALE: 1" = 50'

IP-2

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CALCULATED-DESIGNED BY
CHECKED BY

REVISED BY
DATE REVISED

SIMON KENNEY
LEAH HAYGOOD

CONSULTANT FUNCTIONAL SUPERVISOR
BEN RAZEGHI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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07-20-16

BORDER LAST REVISED 7/2/2010

USERNAME => Simon
DGN FILE => 0415000040sp002.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0736

PROJECT NUMBER & PHASE 04150000401

NOTES

RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	84,680	17.9/R22.9 R10.3/R15.3	949	

Leah Haygood
LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

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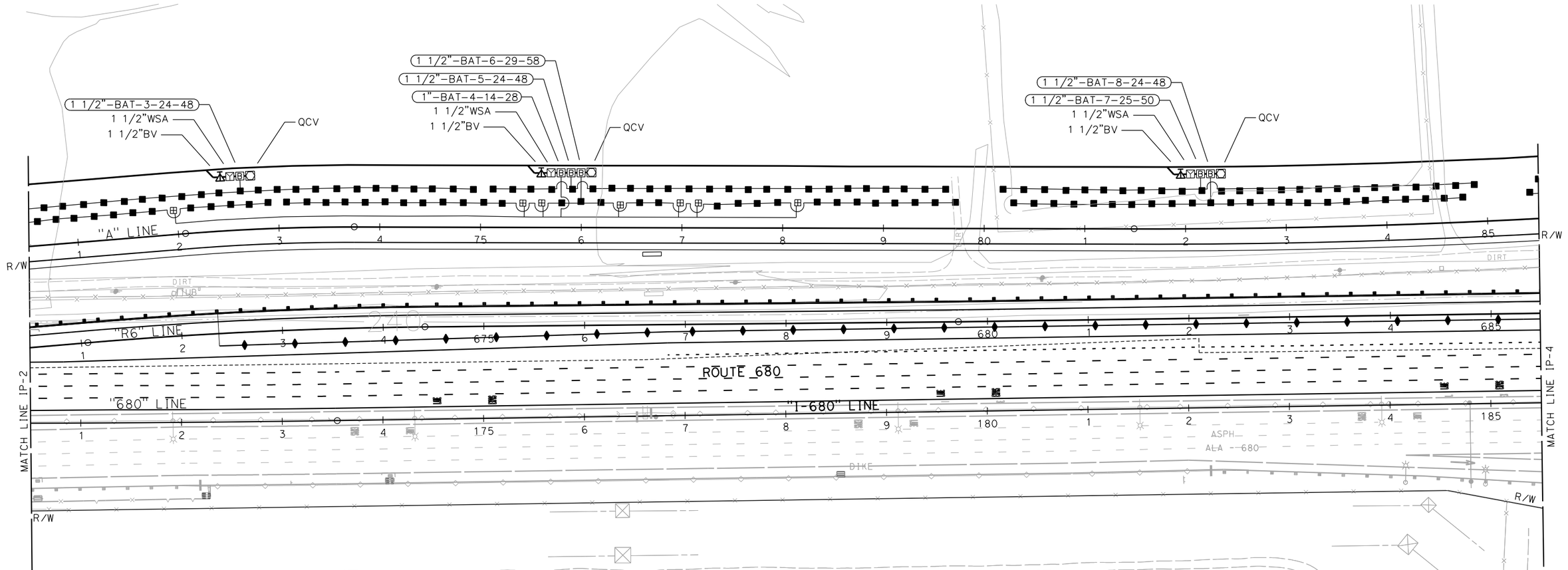

IRRIGATION PLAN

SCALE: 1" = 50'

IP-3

APPROVED FOR IRRIGATION WORK ONLY

SIMON KENNEY — LEAH HAYGOOD — BEN RAZEGHI

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	84,680	17.9/R22.9 R10.3/R15.3	950	

Leah Haygood
LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

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NOTES

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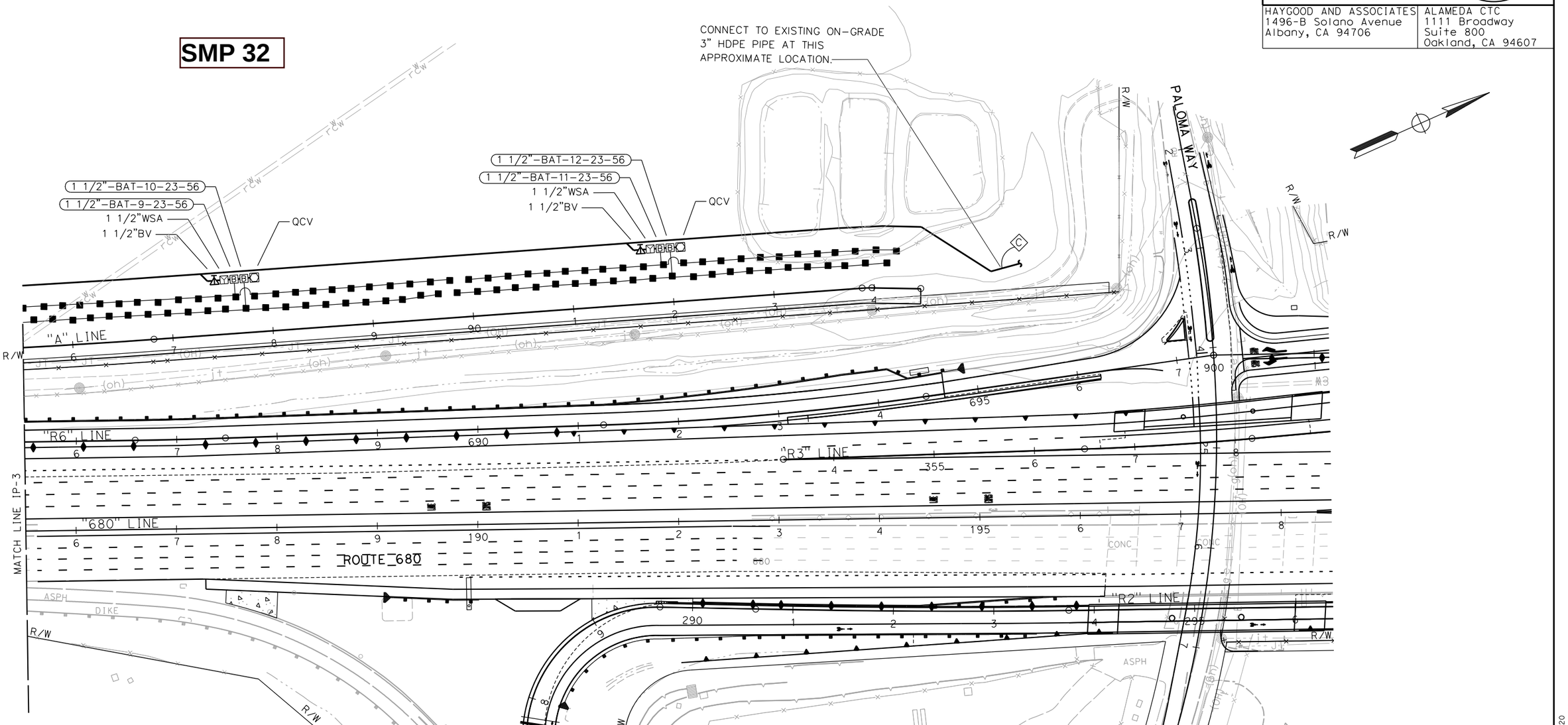

IRRIGATION PLAN

SCALE: 1" = 50'

IP-4

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CHECKED BY: LEAH HAYGOOD
CONSULTANT FUNCTIONAL SUPERVISOR: BEN RAZEGHI
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	84,680	17.9/R22.9 R10.3/R15.3	951	

Leah Haygood
LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

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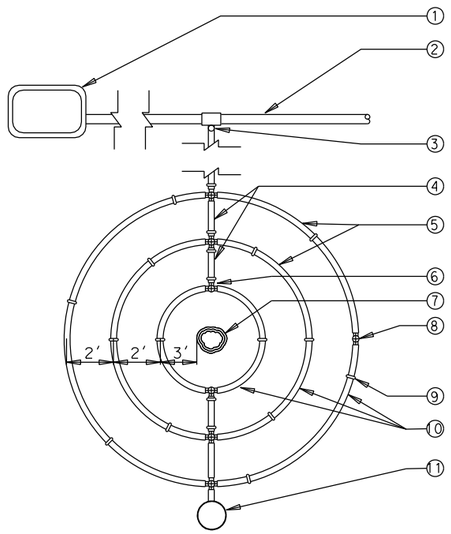
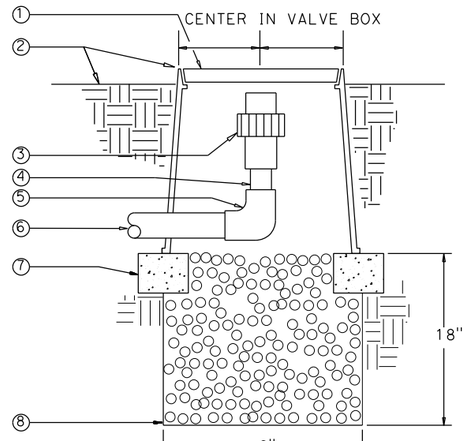
NOTES:
1. INSTALL DIT ON GRADE AND STAKE DOWN EVERY 4' OR AS REQUIRED.
2. SCHEDULE 40 PVC LATERAL LINE-STUB INTO EACH PLANTING AREA.
3. CONVERT SCH 40 PVC LATERAL LINE TO DIT WITH A FEMALE T ADAPTER.



① DRIP VALVE ASSEMBLY
② PVC SUPPLY LINE, CONTINUE TO NEXT TREE
③ PVC SUPPLY LINE HEADER
④ BLANK TUBING
⑤ DIT WITH 0.5 GPH EMITTER AT 12" O/C
⑥ DIT TEE (TYP)
⑦ EXISTING TREE TRUNK
⑧ ADAPTER TEE FROM PVC TO DRIPLINE.
⑨ 6-INCH SOIL STAPLE (TYP).
⑩ LOCATE FIRST DRIPLINE RING 3' FROM TREE TRUNK. LOCATE THE SECOND DRIPLINE RING 2' OUTSIDE THE FIRST RING. LOCATE THE THIRD RING 2' OUTSIDE THE THIRD RING.
⑪ FLUSH VALVE WITH GRAVEL

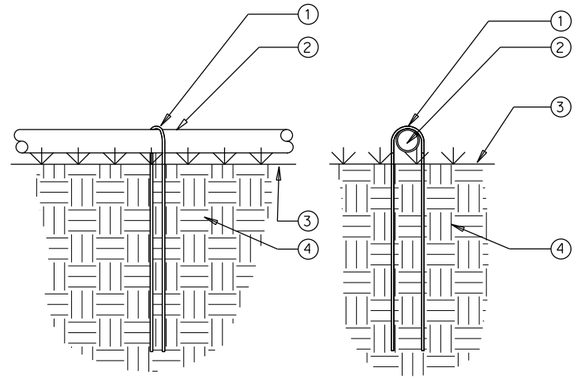
DRIP IRRIGATION TUBING WITH IN-LINE DRIP EMITTERS AROUND EXISTING TREES



① 6" ROUND PLASTIC VALVE BOX WITH BOLT DOWN LID
② VALVE BOX TO BE 2" ABOVE FINISH GRADE
③ 1/2" FLUSH VALVE
④ PVC SCH 80 NIPPLE
⑤ SCH 80 PVC ELL
⑥ PVC PIPE
⑦ BRICK SUPPORTS (TWO)
⑧ PEA GRAVEL SUMP

FLUSH VALVE

NOTE: LOCATE STAPLES ALONG TUBING AT 4' ON CENTER AND AT ALL FITTINGS (TEES, ELLS, ETC.)



ELEVATION
NOT TO SCALE

SECTION
NOT TO SCALE

① STEEL SOIL STAPLE
② DRIP IRRIGATION TUBING
③ FINISH GRADE
④ NATIVE SOIL

SOIL STAPLE

IRRIGATION DETAILS

NO SCALE

ID-1

REVISED BY | DATE REVISED
SIMON KENNEY | LEAH HAYGOOD
CALCULATED-DESIGNED BY | CHECKED BY
CONSULTANT FUNCTIONAL SUPERVISOR: BEN RAZEGHI
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	84,680	17.9/R22.9 R10.3/R15.3		

Leah Haygood
LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT
LEAH HAYGOOD No. 6539
LEAH HAYGOOD
Signature
8-31-21
Renewal Date
Date
STATE OF CALIFORNIA

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IRRIGATION QUANTITY
(LATERAL SUPPLY SIDE OF CONTROL VALVE)

LOCATION	CONTOLLER LETTER	VALVE NUMBER	PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE)				DRIP IRRIGATION TUBING	FLUSH VALVE	SPRINKLER ASSEMBLY		
			3/4"	1"	1 1/4"	1 1/2"	5/8"		POP-UP (GEAR DRIVEN)	RISER (TYPE V)	POP-UP
			LF	LF	LF	LF	LF	EA	EA	EA	EA
IP-1	P	1	330	50	25					67	
		2	250	35	10	60					24
		3	310	125			950	10			
		4	390	20	10					26	
		5	250	45	30						29
		6	245	45	25						29
		7	50	40	80	75			10		
		8	190	70						16	
		9	130	50	65	35			9		
		10	50	55	75	20			8		
		11	330	120	10	10					48
IP-2 TO IP-4	BAT	1	220	140	140	40				44	
		2	240	280	160	40				60	
		3	220	260	40	40				48	
		4	600	160	60					28	
		5	200	140	180	40				48	
		6	220	280	240	40				58	
		7	220	240	80	40				50	
		8	220	240	60	40				48	
		9	220	240	40	40				56	
		10	200	240	40	40				56	
		11	220	240	40	40				56	
		12	220	260	40	40				56	
TOTAL			5525	3375	1450	640	950	10	27	717	130

IRRIGATION QUANTITIES

IQ-1

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: LANCE BLANCHARD
CHECKED BY: CHRIS MITCHELL

CONSULTANT FUNCTIONAL SUPERVISOR: BEN RAZEGHI

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DGN FILE => 0415000040sr001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0736
PROJECT NUMBER & PHASE 04150000401

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	84,680	17.9/R22.9 R10.3/R15.3		

Leah Haygood
LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT — LEAH C. HAYGOOD No. 3539 — LEAH HAYGOOD — Signature — 8-31-21 — Renewal Date — Date — STATE OF CALIFORNIA

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IRRIGATION QUANTITY (MAIN SUPPLY SIDE OF CONTROL VALVE)

SHEET No.	IRRIGATION CONTROLLER		FLOW SENSOR	WYE STRAINER ASSEMBLY	VALVES AND ASSEMBLIES								PLASTIC PIPE (SUPPLY LINE) (SCH 40)	HIGH DENSITY POLY ETHELYENE (DR11)	FLOW SENSOR CABLE/CONDUIT	CONTROL AND NEUTRAL CONDUCTORS (ARMOR-CLAD)
	18 STATION (WALL MOUNTED IN ENCLOSURE)	BATTERY POWERED IRRIGATION CONTROLLER			REMOTE CONTROL VALVE			BALL	GATE	PRESSURE REGULATING VALVE	DRIP VALVE ASSEMBLY	QUICK COUPLING				
			1 1/2"	1 1/2"	1"	1 1/2"	2"	1 1/2"	2"	2"	1"	3/4"	2"	3"		14 GAUGE
	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	LF	LF	LF	LF
IP-1	1		1	3	5	5	1	3	2	1	1	3	520		400	1,800
IP-2		2		1		2		1				1		680		
IP-3		6		3	1	5		3				3		1700		
IP-4		4		2		4		2				2		1140		
TOTAL	1	12	1	9	6	16	1	9	2	1	1	9	520	3520	400	1,800

IRRIGATION QUANTITIES

IQ-2

| | | | | | | | |

APPENDIX B
PROPOSED REVISED CONDITIONS OF APPROVAL

APPENDIX C
PHOTOSIMULATIONS


SR 84 Widening and I-680/SR 84 Interchange Project
SMP-32 Tree Screen Visual Simulation Location Map
SMP-32
Visual Simulation
View 1 Location
Visual Simulation
View 2 Location
Paloma Way
INTERSTATE
680
Google Earth
© 2020 Google
600 ft

'BEFORE' VIEW

VIEW 1

'AFTER' VIEW - 1 YEAR GROWTH

VIEW 1

'AFTER' VIEW - 3 YEAR GROWTH

VIEW 1

'AFTER' VIEW - FULL GROWTH

VIEW 1

'BEFORE VIEW'

VIEW 2

'AFTER' VIEW - FULL GROWTH

VIEW 2

APPENDIX D

NEPA/CEQA RE-VALIDATE FORM SR 84 EXPRESSWAY WIDENING AND SR 84/I-680 INTERCHANGE IMPROVEMENTS PROJECT

NEPA/CEQA RE-VALIDATION FORM

DIST-CO-RTE: 4-ALA-84, 4-ALA-680
PM/PM: ALA-84 17.9/22.9, ALA-680 10.3/15.3
EA or Fed-Aid Project No.: 04-297631
Other Project No. (specify): 0415000040
Project Title: SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project
Environmental Approval Type: Environmental Impact Report/Environmental Assessment with Finding of No Significant Impact
Date Approved: May 30, 2018
Reason for Consultation (23 CFR 771.129), check one: ☐ Project proceeding to next major federal approval ☒ Change in scope, setting, effects, mitigation measures, requirements ☐ 3-year timeline (EIS only) ☐ **N/A** (Re-Validation for CEQA only)
Description of Changed Conditions: The SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project has been modified from the original design. A detailed description of changed conditions is included in the continuation sheets and a revised ECR is attached.

NEPA CONCLUSION - VALIDITY

Based on an examination of the changed conditions and supporting information:

☐ **The original environmental document or CE remains valid. No further documentation will be prepared.**

☒ **The original environmental document or CE is in need of updating; further documentation has been prepared and ☐ is included on the continuation sheet(s) or ☒ is attached. With this additional documentation, the original ED or CE remains valid.**

Additional public review is warranted (23 CFR 771.111(h)(3)) ☐ Yes ☐ No

☐ **The original document or CE is no longer valid.**

Additional public review is warranted (23 CFR 771.111(h)(3)) ☐ Yes ☐ No

Supplemental environmental document is needed. ☐ Yes ☐ No

New environmental document is needed. ☐ Yes ☐ No (If "Yes," specify type:)

CONCURRENCE WITH NEPA CONCLUSION

I concur with the NEPA conclusion above.

Signature: Environmental Branch Chief	7/13/2020 Date
Signature: Project Manager/DLAE	7/13/2020 Date

NEPA/CEQA RE-VALIDATION FORM

CEQA CONCLUSION (Only mandated for projects on the State Highway System.)

Based on an examination of the changed conditions and supporting information, the following conclusion has been reached regarding appropriate CEQA documentation: (*Check ONE of the five statements below, indicating whether any additional documentation will be prepared, and if so, what kind. If additional documentation is prepared, attach a copy of this signed form and any continuation sheets.*)

☐ **Original document remains valid. No further documentation is necessary.**

☒ **Only minor technical changes or additions to the previous document are necessary.**

☒ **An addendum has been or will be prepared and is ☒ included on the continuation sheets or ☐ will be attached. It need not be circulated for public review. (CEQA Guidelines, §15164)**

☐ **Changes are substantial, but only minor additions or changes are necessary to make the previous document adequate. A Supplemental environmental document will be prepared, and it will be circulated for public review. (CEQA Guidelines, §15163)**

☐ **Changes are substantial, and major revisions to the current document are necessary. A Subsequent environmental document will be prepared, and it will be circulated for public review. (CEQA Guidelines, §15162)**

(Specify type of subsequent document, e.g., Subsequent FEIR):

☐ **The CE is no longer valid. New CE is needed. ☐ Yes ☐ No**

CONCURRENCE WITH CEQA CONCLUSION

I concur with the CEQA conclusion above.

Signature: Environmental Branch Chief	7/13/2020 Date
Signature: Project Manager/DLAE	7/13/2020 Date

CONTINUATION SHEET(S)

Address only changes or new information since approval of the original document and only those areas that are applicable. Use the list below as section headings as they apply to the project change(s). Use as much or as little space as needed to adequately address the project change(s) and the associated impacts, minimization, avoidance and/or mitigation measures, if any.

Changes in project design, e.g., scope change; a new alternative; change in project alignment.

The following are changes in the project design and project description since the Environmental Impact Report/Environmental Assessment with Finding of No Significant Impact (EIR/FONSI) was issued. None of these changes represent a substantial scope change, new alternative, or change in the project alignment; however, they are included because they either fall outside of the area studied for the EIR/FONSI or affect the assumptions used to identify impacts or avoidance, minimization, and/or mitigation discussed in the EIR/FONSI.

The following project changes are described in the same order as the discussion of project elements in EIR/FONSI Section 1.4. New project elements are discussed at the end of this section.

I-680

As described in EIR/FONSI Section 1.4.2, the project will construct an approximately 1,000-foot-long auxiliary lane on southbound Interstate 680 (I-680), to the south of Calaveras Road/Paloma Way. The project will require acquisition along the frontage of a San Francisco Public Utilities Commission (SFPUC) property, located west of I-680 between Alameda Creek and Paloma Way, to accommodate widening along southbound I-680. The property is under a long-term mining lease (Surface Mining Permit No. 32 [SMP-32]) and currently used for agriculture. To accommodate the project, an existing dirt private access road will be realigned approximately 30 feet to the west of its current location. The realigned private access road will be constructed with aggregate base material placed on compacted native soil. The realigned private access road and all project modifications to the west of the road will remain on SFPUC property; project right-of-way (R/W) acquisition is limited to the area between the current R/W and a narrow buffer area parallel to, and to the east of, the new access road.

The pavement widening and relocated access road were shown in EIR/FONSI Figure 1.4-1 (pages 1 and 2, “Proposed access road”). The associated property acquisition and mineral resources ramifications were addressed in EIR/FONSI Sections 2.1.7.3 and 2.2.3.3, respectively.

As required by SMP-32 conditions of approval, trees were planted to the west of the existing private access road in the mid-1990s to screen views of SMP-32 mining activities from the highway. Approximately 100 non-native (ornamental) and native trees adjacent to the existing private access road will be removed and nine native coast live oak trees will be relocated to accommodate the realigned private access road, water lines, and utility poles. The project has been modified to include creation of a tree replanting area parallel to, and a minimum of 10

feet west of, the realigned private access road. This area is outside of the original project study area. Sheets PP-2 through PP-4 of the roadway plans show the proposed modifications.

The replanting area of approximately 2.47 acres (which is currently disked) will have a combination of existing trees to remain, healthy coast live oaks that will be relocated, and 290 new coast live oak trees in 15-gallon containers that will be grown at SFPUC's nursery from acorns. Other trees to be removed will either be chipped as mulch for on-site use or disposed off-site. Surface irrigation will be provided using the water supply installed to serve the existing tree screen. Tree removal and relocation will be done as part of an advance contract between October 2020 and February 2021. New trees will be planted by the highway contract in Fall 2021 when they have grown in the SFPUC nursery to a sufficient size for planting.

Project Construction

Construction Closures and Detours

A 30-day closure of the westbound SR 84 to northbound I-680 connector ramp is required to construct a new retaining wall. The ramp has a weekday peak hour volume of 34 vehicles per hour. Traffic will be detoured from westbound SR 84 to Paloma Way/Pleasanton-Sunol Road/Koopman Road to enter northbound I-680. The detour is expected to add less than 15 minutes to vehicle travel time. This project change would not present any economic impact to the community or local businesses. This project change would not change the findings of the EIR/FONSI.

Right-of-Way Requirements

EIR/FONSI Section 1.4.4 identified the need for partial property acquisitions, temporary construction easements (TCEs), and utility and maintenance easement locations. Changes in right-of-way needs since EIR/FONSI approval are described further below in "Changes to Environmental Impacts of the Project."

Structures

As described in EIR/FONSI Section 1.4.4, structure work would include 12 feet of southbound widening along the western edge of the Scott's Corner Separation (Bridge No. 33-0352L) and approximately 13 feet of southbound widening along the eastern edge of the Koopman Road Undercrossing (Bridge No. 33-0386L). To accommodate the future I-680 Express Lanes from SR 84 to Alcosta Boulevard Project (EA 04-0Q300), the design has been modified to include additional widening of the same structures:

- Scott's Corner Separation bridge to the outside in the northbound direction (approximately 13.5 feet); and

- Koopman Road Undercrossing bridge on the inside in the northbound direction (between approximately 12 and 15 feet).

The appearance, foundations, and construction methods assumed for the southbound widening of these structures would be generally the same as for the northbound widening. The additional bridge widening is within the project footprint described in the EIR/FONSI.

As described in EIR/FONSI Section 1.4.2, the project would also reconstruct the existing two-lane connector ramp from northbound I-680 to northbound SR 84. A retaining wall was included to support the ramp, as shown in EIR/FONSI Figure 1.4-1 (page 2). During PS&E, a short single-span bridge structure (Vallecitos Creek Bridge [N680-E84], Bridge No. 33-0765G) was added to the ramp to avoid excess structural loading to the double 8-foot by 7-foot reinforced concrete box culvert that conveys Vallecitos Creek under I-680. The bridge structure is within the project footprint described in the EIR/FONSI and will replace a section of the previously proposed retaining wall. The bridge location is shown in Attachment A.

The bridge will be 150 feet long and 38 feet wide and have a cast-in-place prestressed concrete box girder deck. Bridge abutments will be supported on spread footing foundations with driven steel piles (Class 90 and 200, Alt “W”). Construction access will be from the south along an existing SFPUC dirt access road to the south of Vallecitos Creek, or directly from the existing northbound I-680 to northbound SR 84 connector ramp. During construction, all equipment and materials will be stored at temporary staging areas within the project footprint.

Retaining Walls and Barriers

EIR/FONSI Table 1.4.4-2 in Section 1.4.4 listed proposed 18 retaining walls. During PS&E, two additional retaining walls were added:

- Retaining Wall 19 is a 650-foot-long soil nail wall on the east side of the Calaveras Road on-ramp to eastbound SR 84. The wall will be on cut along the R2 line and have a maximum height of 15 feet. Retaining Wall 19 is directly across from Retaining Wall 5, which will be on the west side of the same ramp.

- Retaining Wall 20 is a 675-foot-long mechanically stabilized embankment (MSE wall) with precast panels along the north side of the northbound I-680 on-ramp to eastbound SR 84. The wall will be on fill along the R4 line and have a maximum height of approximately 12.5 feet. Retaining Wall 20 follows approximately the same arc in the same locations as Retaining Walls 6 and 15.

The new retaining wall locations are shown in Attachment A.

EIR/FONSI Section 1.4.4 stated that concrete safety barriers would be constructed in the median of SR 84 throughout most of the project limits except at the proposed Little Valley Road/Vallecitos Atomic Laboratory Road intersection. The height of median barriers was not identified; however, descriptions of median barriers in Section 2.1.10 (Visual/Aesthetics) stated the heights would be 36 inches. The current project design includes a number of concrete median barrier types, which would be 36 inches, 42 inches, and 56 inches in height. All concrete barriers are within project footprint described in the EIR/FONSI.

Utilities and Drainage

EIR/FONSI Section 1.4.4 stated that the project would require relocating some utilities to outside of the right-of-way, and within the project footprint. During PS&E, coordination with SPFUC and PG&E required adjustment to the project footprint analyzed in the EIR/FONSI to account for proposed water line and gas line relocations.

EIR/FONSI Section 2.1.8.2 stated that the project would require relocation of several wooden utility poles for overhead electric and telephone lines. Approximately 24 of the new pole locations are outside of the original project footprint, parallel to and south of the alignment assumed during the Project Approval and Environmental Document phase.

The project will relocate approximately 1,280 feet of a 24-inch PG&E gas transmission line along the south side of SR 84, utilizing the cut and cover method in trenches of up to 6 to 8 feet in depth. All but approximately 10 feet of the gas line relocation is within the original project footprint.

The project will relocate two existing 12-inch SFPUC water lines (approximately 2,320 feet of a 12-inch raw water line, and approximately 1,215 feet of a 12-inch potable water line) that cross I-680 to the south of Calaveras Road. The existing water lines will be abandoned in place by backfilling with sand or slurry cement. Ground disturbance will be needed in several locations to cut into the pipe and remove any valves connected to the abandoned line. The new pipes will be encased within the State right-of-way. The relocated water lines will be installed using jack-and-bore construction, with jacking pits to extend lines across I-680. Both the locations of the pipelines to be abandoned and the new pipeline location are outside of the original project footprint.

The project will also relocate the following utilities that are within the original project footprint:

- Approximately 170 feet of a 4-inch PG&E gas distribution line across SR 84 that serves the General Electric/Hitachi Vallecitos Nuclear Center property, utilizing the cut and cover method in trenches of up to 6 to 8 feet in depth.

- Approximately 1,500 feet of a 4-inch SFPUC water line on the SMP 32 site, utilizing the cut and cover method in trenches of up to 6 feet in depth.

- Approximately 205 feet of a 14-inch water line across SR 84 that serves the General Electric/Hitachi Vallecitos Nuclear Center property, utilizing the cut and cover method in trenches of up to 6 to 8 feet in depth.

<u>Temporary Diversion Systems [New]</u>

As described in EIR/FONSI Section 1.4.4, the project would widen SR 84 and construct a concrete barrier along the southern roadway shoulder directly adjacent to the open section of Vallecitos Creek. Erosion control measures such as soldier piles were anticipated to be implemented to prevent creek scour from undermining the concrete barrier foundation. During PS&E, scour analyses indicated that proposed retaining wall and concrete barrier footings at three locations along Vallecitos Creek would be subject to scour from the creek. Geotechnical conditions do not allow for the use of footing types (e.g., soldier piles or sheet piles) that provide adequate scour protection. Rock slope protection (RSP) will be needed along the south (creek) side of these retaining walls and concrete barrier. Temporary cofferdams will be needed in three sections of Vallecitos Creek to allow for placement of RSP.

The diversions will be installed prior to the start of construction at each location. Dewatering for all three locations will occur between April 15 and October 15. The diversions will be constructed from the upstream end first, moving downstream and in such a way as to direct flow to the downstream end of the channel. All temporary creek diversion systems will be

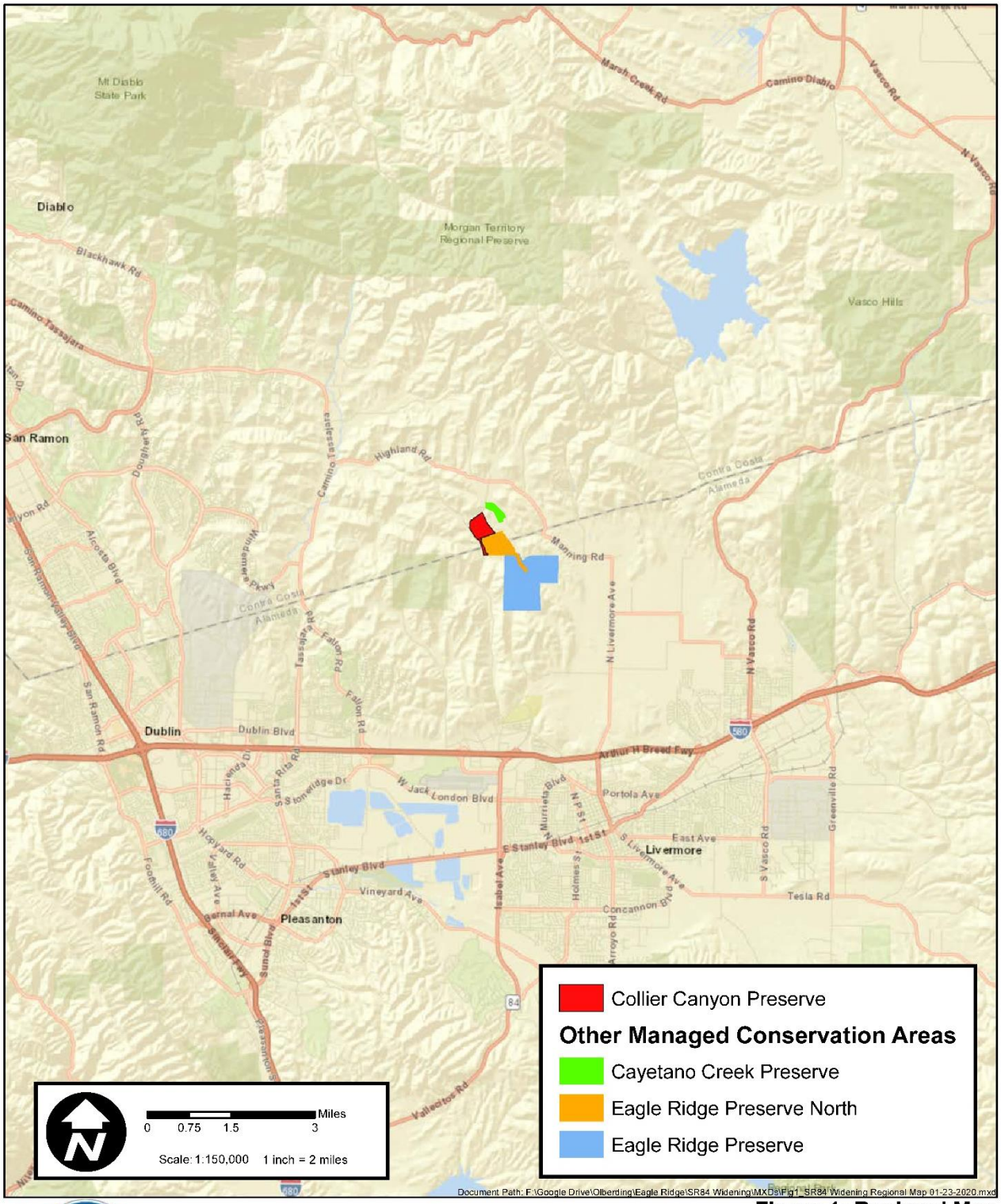
removed, and creek flows will be restored at the end of the seasonal work window. Dewatering infrastructure removal will occur within 48 hours after construction work ends for the season and no later than October 15. One construction season is anticipated to complete the channel work at each location.

Cofferdams will be constructed using an impermeable membrane (e.g., visqueen) and clean gravel-filled bags or an inflatable bladder dam. Cofferdams will vary in length from 50 to 150 feet. Prior to placement of each cofferdam, vegetation, sharp objects, boulders, and cobbles will be removed to create a smooth streambed and prevent water passing beneath the dam after it is built. Any water encountered within the cofferdam will be pumped to a baker tank or water tender. All pumps will be screened with ¼-inch mesh to prevent wildlife entering the pump. Cofferdams along SR 84 will be installed from existing paved or unpaved access roads.

Mitigation Project [New]

The EIR/FONSI stated that compensatory mitigation for impacts to biological resources would be provided through purchase of credits at Collier Canyon Mitigation and Conservation Bank (which was still in review), or arrangements would be made to purchase credits at a nearby facility such as Oursan Ridge Conservation Bank. This approach was proposed in EIR/FONSI Sections 2.3.1.3 (Vegetation Communities: Measure BIO-2), 2.3.2.5 (Measure BIO-7), and 2.3.5.4 (California Tiger Salamander: Measure BIO-17 and Alameda Whipsnake: Measure BIO-18).

Approval of Collier Canyon Mitigation and Conservation Bank is still pending; as a result, the project team coordinated with the facility owners to develop a permittee-responsible mitigation project (Mitigation Project) at a subset of the bank property, which has since been removed from the bank boundary. The Mitigation Project consists of the same activities in the same areas as originally proposed for the mitigation bank. Figures 1 and 2 show the Mitigation Project area and proposed enhancement activities.



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193 Blue Ravine Road, Ste. 165
Folsom, CA 95630
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Figure 1: Regional Map
Collier Canyon Preserve
SR-84 Widening and SR-84/I-680 Interchange Improvements Project
Contra Costa & Alameda Counties, California
Map Revision Date: 1/23/2020

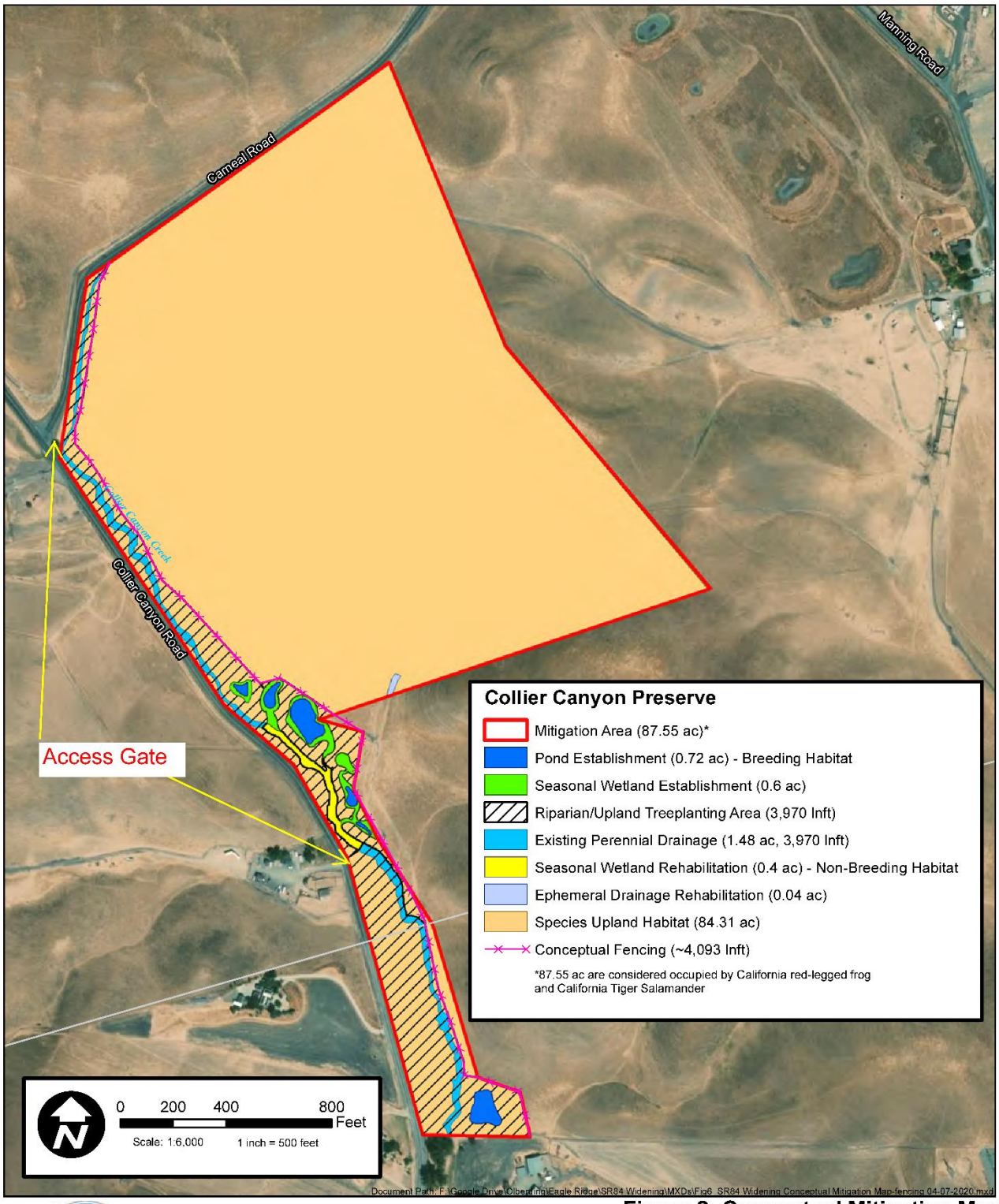

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Figure 2: Conceptual Mitigation Map
Collier Canyon Preserve
SR-84 Widening and SR-84 / I-680 Interchange Improvements Project
Contra Costa & Alameda Counties, California
Map Revision Date: 4/9/2020

Caltrans proposes to complete the following habitat enhancement activities within the 87.55-acre habitat compensation area:

- Grading to create seasonal wetland and pond habitat as potential breeding, foraging, and cover for California tiger salamander and California red-legged frog;
- Increasing hydrologic function and habitat management to rehabilitate seasonal wetland and ephemeral drainage areas;
- Planting of riparian trees; and
- Habitat management to rehabilitate annual grassland to improve ecological functions for California tiger salamander and California red-legged frog.

Construction of the mitigation habitat is planned for late Summer/Fall 2020. If it is necessary to complete construction activities outside this work window, activity will be limited to dry weather based on forecasts and ground conditions. Plant installation will likely be completed within 1 week and is planned for late fall/winter following the wetland and pond creation. There will be no nighttime ground disturbance activities.

The following describes the proposed actions for the Mitigation Project.

Access and Staging

All construction access will be from Carneal Road, near its intersection with Collier Canyon Road. A stabilized construction entrance/exit pad will be installed and will include a 20-foot-length minimum asphalt area per Contra Costa County specifications. The construction access point has been sited to avoid adversely impacting existing wetland habitat. Primary and secondary access routes will be located along the existing ranch roads.

Construction staging will be in an upland grassland area to the east of the wetland grading limits and will be bordered on three sides and at the base of slopes by straw wattles. Following construction, the staging area will be reseeded.

All access and staging areas will be staked and contained within the temporary work footprint.

Seasonal Wetland and Pond Creation

Site preparation will involve the use of excavation equipment and front-end loaders to excavate upland areas down to the elevation required for wetland habitat development. The wetland establishment sites will first be mowed close to the ground or disked and the upper 4 to 6 inches of soil will be excavated and stockpiled at designated upland locations. This soil will subsequently be spread on the new wetlands to provide organic matter and potentially wetland plant seed material and/or be used for upland mound development.

The seasonal wetlands will be mass-graded/excavated using a rubber-tired backhoe, front-end loader, and/or earth mover to form bottom microtopography and side slopes. Excavated material will be temporarily stockpiled onsite and either re-applied as mounds or off-loaded to an appropriate off-site location.

Finish grading will involve grading along the edges of an excavated area to tie into existing topography and grading the bottom of the created wetland area to provide the appropriate flat topographic relief (<1-2 percent slope) for wetland hydrology, soil, and plant development and the deeper ponds. Inlet and outlet elevations will be checked and precisely graded. Grading activities will be monitored by a grade checker using a hand level to ensure that the constructed wetlands meet the design criteria.

The wetland complex to be constructed for creation/establishment will outlet water to existing drainage channels at three primary points within the Preserve. These inlet/outlet locations, where water enters and exits a created seasonal wetland depression, will be stabilized with construction techniques and erosion control fabric installation. The following key components will achieve stable inlets/outlets as follows:

- Grading will maintain a buffer of at least 2 feet from the edge of any jurisdictional wetlands/waters.

- Biodegradable erosion control blanket (e.g. jute netting) will be placed on the ground surface immediately following seeding but immediately prior to hydromulch application so that seed has good soil contact but is also protected by the fabric and hydromulch top dressing.

- Erosion control blanket will be keyed in on all sides as shown on the design typical.

- Biodegradable silt fence and/or straw wattles will be placed between the constructed wetland and the adjacent jurisdictional wetland feature to protect the wetland/water from un-permitted fill and or sedimentation during construction. The silt fence will be removed at the end of construction; however, straw wattle may remain post-construction to degrade in-situ.

Each created wetland will be seeded with a native seed mix to enhance wetland vegetation growth. During finish grading, the previously stockpiled grubbed material will be hauled to wetland creation locations and applied to the graded areas to a depth of 3 to 4 inches. This seedbearing material should also facilitate wetland vegetation growth. Following placement of approximately 3 inches of organic-rich topsoil removed prior to mass grading, the established seasonal wetlands will be seeded with a native seed mix to enhance wetland vegetation growth as specified in the Preserve Mitigation and Monitoring Plan.

<u>Upland Annual Grassland and Ephemeral Drainage Rehabilitation</u>

Thatch (excessive dead plant material) levels will be primarily managed with planned and scheduled livestock grazing to attain the best thatch levels and soil conditions for grass and wildflower plant community development. In areas where grazing is not feasible, alternative methods such as mowing, string trimming, or hand grubbing will be deployed. Burning is not proposed.

The majority of upland grassland is undisturbed and not currently dominated by nuisance plant species. If nuisance plants are found in the course of regular monitoring included in the Preserve mitigation and monitoring plan, immediate action will be taken to control the particular pest species. Nuisance plant control options include manual methods (e.g., hand pull),

mechanical methods (e.g., mow, string-trim), and chemical application (e.g., herbicides); however, herbicide use will be limited as described in the mitigation and monitoring plan.

Passive strategies such as maintaining open water, providing adequate cover opportunities, and fencing may be used to control native wildlife pest species. All ponds will be visually inspected for signs of aquatic pest activity. Any ponds with aquatic pests that do not drain normally during the summer will be subject to draining with a pump during the appropriate time of year to avoid impacts to special-status or other desirable species.

Restoration

All temporary ground disturbances and excavated materials storage areas will be revegetated with an appropriate assemblage of native riparian wetland and upland vegetation to promote restoration of the area to pre-project conditions.

Upon completion of habitat construction, access routes will be restored to original grade by filling in ruts and disking the route to loosen surface soils. Appropriate erosion control measures will be employed where exposed soil occurs. If erosion subsequently occurs, the area affected will be re-contoured and protected from further erosion until the area becomes revegetated.

Changes in environmental setting, e.g., new development affecting traffic or air quality.

None

Changes in environmental circumstances, e.g., a new law or regulation; change in the status of a listed species.

Since EIR/FONSI approval, the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) began requiring analysis of project lighting. A lighting analysis was conducted as part of project permitting. The impacts are described below in "Changes to Environmental Impacts of the Project."

Changes to environmental impacts of the project, e.g., a new type of impact, or a change in the magnitude of an existing impact.

Farmlands

Minor changes to the project design along SR 84 have resulted in modifications to the acquisition and easement acreages from the six parcels under Williamson Act contracts described in EIR/FONSI Section 2.1.5.3 and shown in Table 2.1.5-1. All parcels are considered nonprime agricultural land under California Government Code Section 51201(c). No additional parcels would be affected. Revisions to Table 2.1.5-1 are shown below, with deletions in strikeout and additions in bold text.

Table 2.1.5-1 [Revised]: Williamson Act Property Acquisition

Assessor's Parcel Number[1]	Total Parcel Size	Partial Acquisition (Acres)	Temporary Construction Easement (Acres)	Utility Easement (Acres)
096-0365-002-05	~~100.77~~ **98**	~~1.37~~ **2.7**	-	~~<0.01~~ **0.2**
096-0365-007-01	~~399.99~~ **393**	~~0.14~~ **0.02**	-	-
096-0365-004-02	~~99.84~~ **100**	~~3.55~~ **4.6**	-	~~0.05~~
096-0360-001-~~06~~ **08**	~~552.78~~ **549**	~~2.19~~ **3.4**	-	~~1.18~~ **1.1**
096-0350-001-02	~~602.84~~ **395**	~~0.04~~ **0.01**	-	-
096-0350-003-~~04~~ **06**	~~260.89~~ **250**	~~0.23~~ **0.2**	~~0.03~~	-
Total		~~7.52~~ **10.93**	~~0.03~~ **0.0**	~~1.23~~ **1.3**

The project would not nullify or require changes to the Williamson Act contracts on the remaining portions of the properties listed in Table 2.1.5-1. Notification of the proposed conversion of lands under Williamson Act contracts was sent on April 13, 2020, to the Department of Conservation in accordance with California Government Code Section 51291. The Department of Conservation acknowledged receipt of the notification on May 28, 2020, and had no comments.

Relocations and Real Property Acquisition

EIR/FONSI Section 2.1.7 identified potentially affected properties in Table 2.1.7-1 and Figure 2.1.7-1, and noted that the actual impacts to properties will be determined during detailed project design. During PS&E, the amounts and precise locations of partial property acquisitions, temporary construction easements (TCEs), maintenance easements, and utility easements have been adjusted based on project design needs and coordination with property owners. In addition, the western and eastern ends of the new frontage road to the south of SR 84 have been modified to accommodate turning of emergency service vehicles, based on coordination with Alameda County (sheets L-9 and L-13 of the roadway plans). Revisions to Table 2.1.7-1 are shown below, with deletions in strikeout and additions in bold text.

Table 2.1.7-1 [Revised]: Identification of Proposed Property Acquisitions and Easements

Parcel (see Figure 2.1.7-1)	**Page** (see Figure 2.1.7-1)	**Assessor's Parcel Number**	**Partial Acquisition (Acres)**	**TCE (Acres)**	**Permanent Maintenance Easement (Acres or Linear Feet)[1]**	**Permanent Utility Easement (Acres)[2]**
1	1, 2	096-0375-012-02	~~0.78~~ **1.66**	~~2.57~~ **2.33**	**1.42 acres**	**0.63**
2	2	096-0335-002-08	~~0.02~~ **0.03**	-	-	~~0.06~~ **0.03**
3	2	096-0335-002-09	~~0.22~~ **0.28**	-	-	~~0.27~~ **0.11**
4	2, 3	096-0375-007-03	~~0.19~~ **0.25**	-	**609.78 linear feet (LF) (access)**	~~0.73~~ **1.21**
~~5~~	~~2~~	~~096-0375-XXX-XX~~ **See #6**	~~0.05~~	**-**	**-**	~~0.31~~
6	2, 3	096-0375-006-08	~~0.30~~ **0.31**	-	-	-
7	2, 3, 6	096-0375-006-11	~~3.85~~ **3.81**	~~3.21~~ **2.30**	**1.58 acres 274.75 LF (access)**	-
8	3	096-0365-001-04	~~0.82~~ **1.04**	-	0.03	~~0.25~~ **0.34**
9	3	096-0365-002-05	~~1.37~~ **2.68**	-	-	~~<0.01~~ **0.26**
10	3	096-0365-003-02	~~2.94~~ **4.20**	-	-	~~0.07~~
11	3, 4	096-0350-001-07	~~6.57~~ **9.12**	~~0.64~~ **0.61**	**325.64 LF (access)**	~~0.01~~ **0.39**
12	3	096-0365-007-01	~~0.14~~ **0.22**	-	-	-
13	3, 4	096-0365-004-02	~~3.55~~ **4.58**	-	-	~~0.05~~
14	3, 4	096-0360-001-06	~~2.19~~ **3.39**	-	**363.06 LF (access)**	~~1.18~~ **1.09**
~~15~~	~~4~~	~~096-0350-001-02~~ **See #11**	~~0.04~~	**-**	**-**	**-**
16	4, 5	096-0350-003-04	~~0.23~~ **0.25**	0.03	-	-
17	6	096-0320-002-04	-	0.02	-	-
18	7	946-3102-003-02	-	0.01	-	**<0.01**
~~19~~	~~3~~	~~N/A-8, N/A-9~~ **See #11**	~~0.23~~	-	-	-
~~20~~	~~2~~	~~N/A-14~~ **See #1**	-	~~0.03~~	-	-
~~21~~	~~4, 5~~	~~096-360-003-02~~ **See #14**	~~0.37~~	-	-	-
~~22~~	~~5~~	~~950-0007-005-11~~ **See #14**	~~0.07~~	-	-	-
Total			~~23.93~~ **31.82**	~~6.51~~ **5.30**	~~0.05~~ **3.00 acres; 1,573.23 LF**	~~2.93~~ **4.07**

1. Includes access, retaining wall, and drainage easements. Access easements are reported in linear feet.
2. Includes utility, electric, and gas line easements.

The description of impacts in EIR/FONSI Section 2.1.7.3—including that the Build Alternative would not require any full property acquisitions, relocate any residences or businesses, result in the conversion of any parcels to a new land use, or otherwise interfere with the continued use of parcels for their existing purpose—remains applicable. No additional property impacts will occur.

Utilities/Emergency Services

EIR/FONSI Section 2.1.8.2 discussed utility relocation impacts and potential effects of road closures during construction on emergency service providers, and Section 2.1.8.3 stated that Measure TR-1 in Section 2.1.6.4 (Transportation Management Plan [TMP]) would minimize temporary, short-term effects to emergency service providers. The refined utility relocations and detour information described under "Changes in Project Design" above, including the 30-day closure of the westbound SR 84 to northbound I-680 ramp, would not result in substantial additional impacts to utility services and emergency access. Measure TR-1 remains sufficient to address short-term, temporary impacts during project construction.

Visual/Aesthetics

I-680

As noted in "Changes in Project Design" for I-680 above, the project will shift an existing SPFUC access road that is parallel to and west of I-680 and south of Paloma Way, remove approximately 100 trees, and create a new replanting area that will have a combination of existing trees to remain, nine healthy coast live oak trees that will be relocated, and 290 new coast live oak trees.

This work was not explicitly addressed in the EIR/FONSI, although Section 2.1.10.3 ("Other Visual Impacts") stated that the Build Alternative would result in tree removal as well as earthmoving and landscaping activities. The section of SMP-32 where trees will be removed and replanted is not being used for mining activities; instead, the area is being used for agriculture, as shown in the image below.

Source: Google Street View from I-680 mainline just south of Paloma Way overcrossing, imagery date 8/2019

In addition to the tree removals along the access road, trees would be removed between southbound I-680 and the existing access road to accommodate roadside stormwater

treatment areas (bioswales). Tree removals in this area are shown in sheets PR-1 through PR-3 of the PS&E plans. The areas where trees will be removed to accommodate stormwater treatment facilities will be hydroseeded with native grasses and legumes.

Tree removals along southbound I-680 will result in noticeable changes for motorists on I-680, an Officially Designated State Scenic Highway, and short intermittent sections of Paloma Way where views of the tree removal area are not blocked by existing trees that will remain. Paloma Way, which is signed as SR 84 in that area, is not recognized as a scenic highway by either the state or the county; however, the City of Livermore General Plan, Community Character Element, identifies SR 84 as a scenic route. No residential properties are near this area, so resident views will not be affected.

From the perspective of motorists on I-680, the mature trees along southbound I-680 would be removed from foreground views, providing greater exposure to views of agricultural fields with hay/grain crops beyond the trees to the west. The fields are flat and typically green in the winter and spring and golden in the summer and fall. Although the 290 new coast live oak trees that will be planted to provide replacement shielding will take several years to reach the height of the existing trees to be removed, views of the agricultural fields provide a pleasing contrast to the tree-studded hills that surround this valley in each direction. In addition, these native oak trees will replace many non-native ornamentals, some of which are considered invasive species. For eastbound travelers on Paloma Way, the I-680 corridor would be somewhat more visible in mid-range views toward the east-southeast, but the thin gray line of the freeway would not be prominent in comparison to mature trees in the foreground along Paloma Way, the agricultural fields beyond them, and the tree-studded hills in each direction of longer-range views.

In summary, tree removal along southbound I-680 would change views for motorists on I-680 and Paloma Way, but the change would not adversely affect the quality of the views. When the trees in the replanted area mature, they will form a native oak woodland, and views will be similar to existing conditions. As stated in EIR/FONSI Section 2.1.10.3, “The project … would not degrade the vividness of existing views [on I-680] because the height and magnitude of the mountains and peaks in the distance would still be visible and appreciated in much the same way as in the existing view.” Visual impacts from the perspective of northbound and southbound I-680 motorists would remain from moderate-low to low.

This project change would not have an adverse effect on the Officially Designated State Scenic Highway designation in this area because it would not increase the intensity of development, introduce outdoor advertising, or add structures or highly visible equipment. The project change reflects detailed site planning (consistent with SFPUC’s objectives for the property) and careful attention to landscaping.

This section of I-680 is not a Classified Landscaped Freeway; therefore, no landscaped freeway designation would be affected.

Barriers

Impacts on Key Views. The PS&E project design includes a number of concrete median barrier types, which would be 36 inches, 42 inches, and 56 inches in height. The EIR/FONSI addressed the addition of concrete median barriers on SR 84 but only identified the barrier heights in two places, in EIR/FONSI Section 2.1.10. As shown in Figure 2.1.10-3 (Key View 1,

Proposed Condition, SR 84 [PM 21.92], Looking West), the project would add a 36-inch-tall concrete barrier in the median that would block views of ground-level terrain from the vantage point of motorists in the westbound outside lane. Motorists in the inside lane next to the barrier would be able to see over it, assuming an average window height of 36 inches in midsized sedan-style cars. A 36-inch concrete median barrier was also identified in the description of Figure 2.1.10-7 (Key View 3, Proposed Condition, SR 84 West of Little Valley Road [PM 19.79], Looking West). Figures 2.1.10-3 and 2.1.10-7 are included below for reference.

	
EIR/FONSI Figure 2.1.10-3: Key View 1, Simulated View of Project Features, SR 84 (PM 21.92), Looking West	**EIR/FONSI Figure 2.1.10-7:** Key View 3, Simulated View of Project Features, SR 84 West of Little Valley Road (PM 19.79), Looking West

In the areas of Key Views 1 and 3, along with the majority of SR 84, the median barrier height would be increased from 36 to 42 inches (barrier types 60M and MS). A median barrier height increase of 6 inches in this area would result in minimal change to the simulated views shown in Figures 2.1.10-3 and 2.1.10-7 and the descriptions of impacts. The majority of motorists in the inside lane next to the barrier would still be able to see over it, assuming an average window height of 36 inches in midsized sedan-style cars. The constructed features within SR 84 would still be balanced with the natural features that are beyond the highway.

For Key View 1, the taller median barrier height would not change the EIR/FONSI conclusions that the project would maintain a moderate-high level of visual quality, the addition of constructed features would reduce the intactness of the view from moderate to moderate-low, unity would remain moderate-low, overall visual quality would remain moderate, and visual impacts would be low.

For Key View 3, the taller median barrier height would not change the EIR/FONSI conclusions that the memorability of the view would remain moderate-high, intactness would diminish from moderate to moderate-low, balance would remain moderate, overall visual quality would remain moderate, and visual impacts would be moderate.

Other impacts. A 0.54-mile section of SR 84 farther to the eastern limits of the project (Layout sheets L-21 through L-24; “SR84” Sta 285+33 to 314+88) would have a 56-inch-tall Type 60MG concrete median barrier. The need for the taller median barrier is required by Caltrans design standards due to limited shoulder width (less than 10 feet) and the need to reduce headlight glare from the opposite direction of traffic. This section is to the east of the area depicted in Key View 1.

This part of SR 84 winds through hills that rise steeply on both sides of the roadway, blocking long-range views to the east and west of the Pigeon Pass area. In this area, the primary views are of the hills on either side of the roadway, with periodic utility towers and poles and a single residential property high on a hill to the south of SR 84. Due to bends in the alignment, views of the area ahead are limited to a maximum of 0.25 to 0.30 mile in length.

EIR/FONSI Section 2.1.10.3 stated that a concrete median barrier would be added to SR 84. Assuming a median barrier height of 36 inches along SR 84 (which was not stated except for Key Views 1 and 3), a 56-inch barrier would result in a moderate visual change for travelers on SR 84 in this area. The taller barrier would obstruct ground-level views and views of most vehicles on the other side of the barrier. Views from taller vehicles such as buses and large trucks will not be affected by the increased median barrier height. Views of the hills surrounding SR 84—which are at a much higher elevation than the median barrier—would continue to dominate the viewshed. In addition, the bends in the roadway alignment that block long-range views and the short duration of travel through this section of SR 84 would prevent prolonged exposure to the higher median barrier.

Highway travelers with impacted views are anticipated to have moderate sensitivity to this visual change, resulting in a moderate visual impact. In accordance with EIR/FONSI Measure VIS-5, aesthetic treatment (in the form of integral color concrete) will be incorporated into the taller barrier, which would reduce this impact to moderate-low.

Other Project Changes

The additional widening of the Scott's Corner Separation and Koopman Road Undercrossing bridges, the new bridge over the Vallecitos Creek box culvert, and new Retaining Walls 19 and 20 would not introduce impacts beyond those described in Section 2.1.10.3 (Other Visual Impacts, Project Roadwork, Earthwork, and Structures, I-680). The remaining changes to the project since EIR/FONSI approval are within the range of activities and impacts described in Section 2.1.10. Retaining Walls 19 and 20 will receive architectural treatments consistent with other retaining walls in this part of the I-680 corridor.

Cultural Resources

Changes to the maximum project footprint were compared to the approved APEs for archaeology and architectural history to identify any proposed activities outside of the APE. Each location outside of the APEs, the mapped archaeological sensitivity, and proposed project work in each area was identified. Project activities that were not previously identified within the approved APEs were also reviewed. The project changes would not result in additional cultural resources impacts or require additional consultation. The Finding of No Adverse Effect without Standard Conditions is still appropriate for this project.

Mitigation Project

In 2018, the USACE initiated Section 106 consultation for development of the Collier Canyon Mitigation Bank. The State Historic Preservation Officer concurred with the USACE's finding of No Historic Properties Affected on June 26, 2018.

The proposed permittee-responsible Mitigation Project area is within the APE evaluated for the Collier Canyon Mitigation Bank, which in 2019 was split into separate areas for the Mitigation

Project and the mitigation bank due to delays in the bank approval process. The Mitigation Project includes the same activities as proposed for the former mitigation bank. No further analysis is required.

Administrative note. EIR/FONSI Section 2.1.11.3 stated that the cultural resources finding for this project is "No Adverse Effect *with Non-Standard* Conditions." The finding should have been identified as "No Adverse Effect *without Standard* Conditions." The substance of the finding is unchanged.

Paleontology

EIR/FONSI Section 2.2.4.3 stated that bridge widening and ground-disturbing activities along the Scott's Corner Separation bridge and the Koopman Road Undercrossing bridge could encounter paleontologically sensitive geologic units. The northbound widening of the Scott's Corner Separation bridge and the Koopman Road Undercrossing bridge, added to the project during PS&E, is anticipated to have the same potential.

The new bridge over the I-680 Vallecitos Creek box culvert is in the same geologic unit as the Scott's Corner Separation bridge (Quaternary alluvium dating to the Holocene-Late Pleistocene); therefore, bridge construction is also expected to have the potential to encounter paleontologically sensitive geologic units.

New Retaining Wall 19, a wall on cut, straddles Quaternary alluvium and the Livermore Gravels. New Retaining Wall 20, which will be on fill, appears to fall entirely within Quaternary alluvium. Both walls are in the same vicinity as the additional bridge widenings and new bridge described above, and therefore are anticipated to have the potential to encounter paleontologically sensitive geologic units.

Caltrans Standard Specification 14-7.03 and Measure PAL-1 would address the potential for impacts from the new project components, and no further avoidance, minimization, or mitigation is needed.

Biological Resources

The current project footprint was compared to the biological study area (BSA) considered in the EIR/FONSI to identify any proposed activities outside of the BSA, changes in impact type (temporary vs. permanent), or change in classification of a biological resource. Most changes are the result of design refinements to a variety of project elements that were developed as part of the detailed design process, including but not limited to work along southbound I-680 to the south of Paloma Way, additional right-of-way requirements, additional structures work including the new bridge, utility relocations, and the need for RSP and temporary diversions in Vallecitos Creek.

The results are detailed by resource below.

<u>Natural Communities</u>

Vegetation Communities

EIR/FONSI Section 2.3.1.2, Table 2.3.1-1 indicated that the project would have 41.49 acres of permanent and 33.08 acres of temporary impacts to vegetation communities. Based on the

100 percent design, the project would have 43.28 acres of permanent and 40.15 acres of temporary impacts to vegetation communities.

The EIR/FONSI did not report a total acreage for temporary/permanent riparian impacts. As part of the permitting process, 2,166 linear feet of impacts to riparian areas and removal of 159 native riparian trees were identified.

Trees

Work on the bridge section of the northbound I-680 to eastbound SR off-ramp; retaining wall, concrete barrier, and RSP construction along the south side of SR 84; and the other project activities discussed above are anticipated to result in different permanent and temporary impacts to trees than identified in Table 2.3.1.2 in EIR/FONSI Section 2.3.1. The current tree impacts are described in the *Vegetation Restoration Plan* (AECOM, March 2020). The table below shows the differences.

As noted above, nine coast live oak trees would be replanted on the SFPUC SMP-32 property; those trees are not included in this table.

Table 2.3.1-2 [Revised]: Potential Permanent and Temporary Impacts to Individual Trees

Species	PA&ED Permanent Impacts[1]	PA&ED Temporary Impacts[2]	PA&ED Total in Project Footprint	PS&E Permanent Impacts[1]	PS&E Temporary or No Impacts[2]	PS&E Total in Project Footprint
Acacia	0	1	1	1	0	1
Aleppo pine (*Pinus halepensis*)	-	-	-	8	6	14
Arroyo willow	2	16	18	12	6	18
Black walnut (Northern California)	38	50	88	58	21	79
Blue oak	-	-	-	7	0	7
California buckeye	0	1	1	0	1	1
California pepper tree (*Schinus mole*)	5	72	77	70	16	86
Canary Island date palm	0	2	2	2	0	2
Coast live oak	141	357	498	296	193	489
Coast redwood	4	7	11	10	10	20
Coulter pine (*Pinus coulteri*)	-	-	-	14	7	21
Elm (non-native)	1	0	1	1	0	1
European olive	0	2	2	1	1	2
Fan palm	0	4	4	4	0	4
Fremont cottonwood	35	14	49	33	10	43
Italian cypress	3	15	18	18	0	18
Maple (non-native)	0	1	1	1	0	1
Pine (non-native)	1	16	17	2	6	8
Red willow	32	63	95	138	82	220
Valley oak	68	148	216	1	0	1
Victorian box	1	0	1	51	44	95
Western sycamore	12	17	29	17	12	29
Total Trees Impacted	**343**	**786**	**1,129**	**745**	**415**	**1,160**

Source: AECOM field surveys 2016, 2019, 2020

Notes:

1. Permanent impacts include removal of trees, compaction of a significant portion of the root zone, or removal of over 30 percent of the canopy.
2. Temporary impacts to trees include pruning of less than 30 percent of the canopy, removal of less than 25 percent of the roots (within the drip line of the tree), or soil compaction to less than 30 percent of the critical root zone. The standard critical root zone of a tree is the area corresponding to the drip line of the tree, or a distance from the tree trunk outwards calculated as 12 times the DBH of the tree, whichever is greater.

Wetlands and Other Waters of the United States

Work on retaining walls, concrete barrier, and RSP construction along Vallecitos Creek; relocation of approximately 1,280 feet of a 24-inch PG&E gas transmission line along the south side of SR 84; and the other project activities discussed in EIR/FONSI Section 1.4 will result in different impacts to wetlands and other waters of the U.S. than identified in Table 2.3.2-1 in Section 2.3.2. The current impacts to wetlands and other waters of the U.S. are described in the *Vegetation Restoration Plan, SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project* (AECOM, March 2020). The differences are shown in the table below.

Table 2.3.2-1 [Revised]: Wetlands and Other Waters of the U.S. in BSA and Impacts

Jurisdictional Water Type	Acres[1]						
	Total in BSA	PA&ED Permanent Impacts[2]	PA&ED Temporary Impacts[3]	PA&ED Total Impact	PS&E Permanent Impacts[2]	PS&E Temporary Impacts[3]	PS&E Total Impacts
Wetlands							
Freshwater marsh wetlands[3]	3.71	0.04	0.09	0.13	0.07	0.30	0.37
Seasonal wetlands[4]	0.92	--	--	--	0.00	0.00	0.00
Forest and shrub wetlands[4]	0.23	0.14	0.09	0.23	0.13	0.05	0.18
Wetlands subtotal	*4.86*	*0.18*	*0.18*	*0.36*	*0.20*	*0.36*	*0.55*
Waters of the U.S.							
Vallecitos Creek (perennial channel)	1.24	--	--	--	0.00	<0.01	<0.01
Ephemeral channels	0.40	0.03	0.02	0.05	0.04	<0.01	0.05
Intermittent channels	0.33	<0.01	<0.01	<0.01	0.00	0.00	0.00
Open water (pond)	0.08	--	--	--	0.00	0.00	0.00
Other Waters of the U.S. subtotal	*2.04*	*0.04*	*0.02*	*0.06*	*0.04*	*<0.01*	*0.05*
Total[2]	**6.90**	**0.22**	**0.20**	**0.41**	**0.24**	**0.36**	**0.60**

Notes:
1. Acreages rounded to the nearest hundredth, so values shown for each wetland type in table may not add up to total acreage shown.
2. Permanent impact areas are associated with conversion of natural communities to a built environment as a result of project features and construction activities. Temporary impact areas involve damage to the natural community, which may be preserved depending on the specific activity occurring near them, such as construction staging or the siting of a construction access road that could disrupt habitat and/or damage natural communities and can be restored to their original natural community type.
3. This total includes wetlands within waters, including freshwater marsh mapped within the Ordinary High Water Mark (OHWM) of Vallecitos Creek.
4. The three seasonal wetlands were classified as pale spike rush marsh vegetation communities based on dominant plant species.

Further changes to impact quantities listed in EIR/FONSI Section 2.3.2 based on the 100 percent design are as follows:

- The project will permanently impact 471 linear feet (0.02 acre) and temporarily impact 15 linear feet (<0.01 acre) of culverted waters of the United States.
- Impacts to riparian habitat (Other Waters of the State, that are not also U.S. jurisdictional waters) are 0.62 acre (temporary) and 0.43 acre (permanent).
- The project will have approximately 6,031 linear feet of temporary impacts and 17,165 linear feet of permanent impacts to unlined drainage ditches along SR 84 and I-680 and at the SR 84/I-680 interchange. Proposed offset unlined ditches equal approximately 28,217 linear feet.

The proposed Mitigation Project will result in permanent impacts to <0.01 acre of other waters of the U.S. (ephemeral drainage) and temporary impacts to 0.43 acre of other waters of the U.S. (0.41 acre of perennial drainage, and 0.02 acre of ephemeral drainage).

Threatened and Endangered Species

Work on retaining walls, concrete barrier, and RSP construction along Vallecitos Creek; relocation of approximately 1,280 feet of a 24-inch PG&E gas transmission line along the south side of SR 84; the Mitigation Project; and the other project activities discussed in EIR/FONSI Section 1.4 will result in different impacts to California tiger salamander, California red-legged frog, and Alameda whipsnake than identified in Section 2.3.5.2. The revised impacts are documented in the USFWS *Reinitiation of Formal Consultation on the State Route 84 Expressway Widening and State Route 84/680 Interchange Improvement Projects, Alameda County, California (Caltrans EA 04-297630),* File 08ESMF00- 2017-F-3304-R001-1, April 22, 2020 (Biological Opinion Amendment) and *State of California Department of Fish and Wildlife Application for Incidental Take of Listed Species, SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project 04-29763* (AECOM, March 2020 [ITP Application])

The following revisions to EIR/FONSI Table 2.3.5-2 show modifications to impacts and proposed mitigation for California tiger salamander and California red-legged frog.

Table 2.3.5-2 [Revised]: Proposed Compensatory Mitigation for Impacts to California Tiger Salamander and California Red-legged Frog Habitat

Habitat Type[1]	Acres[2]									
	Permanent Impact		Temporary Impact		Mitigation for Permanent Impacts (3:1 Ratio)		Mitigation for Temporary Impacts (1:1 Ratio)		Total Mitigation for Project Impacts	
	PA&ED	PS&E	PA&ED	PS&E	PA&ED	PS&E	PA&ED	PS&E	PA&ED	PS&E
Upland Dispersal / Foraging / Refugia Habitat										
Grasslands	22.83	21.20	19.71	23.87	68.49	63.6	19.71	23.87	88.20	87.47
Forests and Woodlands	2.61	3.40	2.67	2.93	7.83	10.2	2.67	2.93	10.50	13.13
Scrubland	0.17	0.14	0.05	0.34	0.51	0.42	0.05	0.34	0.56	0.76
Disturbed Vegetation (ruderal, landscaped, and agriculture/pasture)	12.96	15.35	8.43	10.91	38.88	46.05	8.43	10.91	47.31	56.96
Subtotal	*38.57*	*40.09*	*30.86*	*38.05*	*115.71*	*120.27*	*30.86*	*38.05*	*146.57*	*158.32*
Aquatic Non-Breeding Dispersal / Foraging Habitat										
Baltic and Mexican rush marshes, pale spike rush marshes, ephemeral & intermittent channels	0.03	0.07	0.10	0.16	0.09	0.21	0.10	0.16	0.19	0.37
Potential Aquatic Breeding Habitat										
Hardstem bulrush marsh and wetland in Fremont cottonwood marsh	0.15	0.17	0.08	0.21	0.45	0.51	0.08	0.21	0.53	0.72
Total	**38.75**	**40.33**	**31.04**	**38.42**	**116.25**	**120.99**	**31.04**	**38.42**	**147.29[3]**	**159.41[3]**

Notes:
1. Vegetation communities mapped based on their dominant species. Some seasonal wetlands were identified within woodland communities.
2. Acreages rounded to the nearest hundredth, so values shown for each vegetation type in table may not add up to total acreage shown.
3. Approximately 38.42 acres of the total mitigation will be completed through on-site restoration.

Construction of the proposed Mitigation Project will result in additional impacts to habitat for both species. The mitigation work will permanently impact 1.32 acres of annual grassland that

provides upland dispersal, foraging, and refugia habitat and <0.01 acre of perennial drainage that provides aquatic non-breeding dispersal and foraging habitat. Construction access, staging and storage, and other temporary ground disturbance will result in temporary impacts to 2.63 acres of annual grassland, 0.41 acre of perennial drainage, and 0.02 acre of ephemeral drainage (also aquatic non-breeding dispersal and foraging habitat).

The following revisions to EIR/FONSI Table 2.3.5-3 show modifications to impacts and proposed mitigation for Alameda whipsnake.

Table 2.3.5-3 [Revised]: Proposed Compensatory Mitigation for Impacts to Alameda Whipsnake Habitat

Habitat Type[1]	Acres[2]									
	Permanent Impact		Temporary Impact		Mitigation for Permanent Impacts (3:1 Ratio)		Mitigation for Temporary Impacts (1:1 Ratio)		Total Mitigation for Project Impacts	
	PA&ED	PS&E	PA&ED	PS&E	PA&ED	PS&E	PA&ED	PS&E	PA&ED	PS&E
Grasslands	8.69	6.36	11.52	9.95	26.07	19.08	11.52	9.95	37.59	29.03
Forests and Woodlands	1.82	2.62	2.13	2.32	5.46	7.86	2.13	2.32	7.59	10.18
Scrubland	--	0	--	0.26	--	0	--	0.26	--	0.26
Disturbed Vegetation (ruderal, landscaped, and agriculture/pasture)	6.15	7.38	4.71	7.57	18.45	22.14	4.71	7.57	23.16	29.71
Marsh Vegetation Communities	<0.01	0.02	0.07	0.22	<0.01	0.06	0.07	0.22	0.07	0.28
Total	**16.67**	**16.38**	**18.42**	**20.32**	**50.01**	**49.14**	**18.42**	**20.32**	**68.43[3]**	**69.46**

Notes:
1. Vegetation communities mapped based on their dominant species.
2. Acreages rounded to the nearest hundredth, so values shown for each vegetation type in table may not add up to total acreage shown.
3. Approximately 20.32 acres of the total mitigation will be completed through on-site restoration.

Construction of the proposed Mitigation Project will not impact the Alameda whipsnake, as the facility lacks suitable habitat for the species.

Lighting impacts. EIR/FONSI Section 1.4.4 (Safety Features) stated that additional lighting would be added to improve roadway visibility. Since then, as noted above, USFWS and CDFW began requiring analysis of species habitat impacts from projects that add lighting. The following table summarizes habitat impacts to California tiger salamander and California red-legged frog from new project lighting.

Vegetated Areas with Suitable Habitat for California Tiger Salamander and California Red-Legged Frog Projected to Receive 0.01 Lux or Greater

Habitat type for California tiger salamander and California red-legged frog	Lighting without back-side shielding (acres)	Lighting with back-side shielding (acres)
Aquatic breeding	0.84	0.07
Aquatic non-breeding	0.11	0.07
Upland foraging	33.35	18.19
Total	34.29	18.33

Project lighting is not anticipated to affect Alameda whipsnake.

Administrative note. EIR/FONSI Section 2.3.5.3, Table 2.3.5-1 identified the effect finding for critical habitat for California red-legged frog and Alameda whipsnake as No Adverse Modification, as opposed to No Effect or Not Likely to Adversely Effect. The term 'No Adverse Modification' is consistent with the U.S. Fish and Wildlife Service and National Marine Fisheries Service 1998 *Endangered Species Consultation Handbook* and the project's Biological Opinion, dated December 5, 2017 (No. 08ESMF00-2017-F-3304-1; see EIR/FONSI Appendix C).

Changes to avoidance, minimization, and/or mitigation measures since the environmental document was approved.

Biological Resources

Natural Communities

Vegetation Communities

Measure BIO-2 in EIR/FONSI Section 2.3.1.3 stated that compensatory mitigation for temporary impacts to sensitive vegetation communities or natural communities of concern, including valley oak woodland, red willow thickets, Fremont cottonwood forests, and riparian scrub and forest, would be provided through on-site and off-site replanting, depending on space available.

To compensate for the loss of sensitive vegetation communities (specifically riparian vegetation), the on-site replanting plan includes on-site restoration/establishment of 4,581 linear feet of riparian habitat (1,658 linear feet of trees and 2,055 linear feet of shrubs). Compensatory mitigation for individual riparian trees is described below. This approach is consistent with Measure BIO-2.

Trees

Measure BIO-4 in EIR/FONSI Section 2.3.1.3 stated that tree removal would be mitigated through planting at a 3:1 ratio for all native species within riparian areas, and for coast live oaks and valley oaks in oak woodlands (including uplands); and at a minimum 1:1 ratio for other trees. The performance criteria for replacement tree plantings was stated as 70 percent survival of all plantings at the end of the monitoring period (3 to 10 years).

As described in the *Vegetation Restoration Plan, SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project* (AECOM, March 2020), tree replacement is proposed to be mitigated as follows:

- Native riparian trees as well as coast live oaks, valley oaks, and blue oaks in uplands will be replaced at a 3:1 ratio. This also applies to the tree replanting area on SFPUC property along I-680.

- All other native upland trees will be replaced at a minimum 1:1 ratio.

- To account for mortality, twice as many trees will be initially established for riparian California native trees, and a 3:1 replacement ratio will be applied for all upland trees.

Replacement trees will be provided both on-site and off-site as follows, in accordance with the *Vegetation Restoration Plan, SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project* (AECOM, March 2020):

- On-site replacement planting of 262 native riparian trees along creek corridors (the maximum that space allows).

- Off-site planting (riparian woodland enhancement) of remaining 215 of required 477 replacement trees as part of turn-key project at Collier Canyon Preserve.

- On-site restoration of temporarily impacted areas.

These ratios will provide a greater number overall of replacement trees than those proposed in Measure BIO-4.

Migratory Corridors

Measure BIO-5 in EIR/FONSI Section 2.3.1.3 stated that new project lighting would use bulbs no greater than 235 watt LED with a color temperature no greater than 4,000 Kelvins (K). In accordance with the Biological Opinion Amendment, the bulbs used in new fixtures will be no greater than 150 watt LED with a color temperature no greater than 2,700 K.

<u>Wetlands and Other Waters of the United States</u>

Measure BIO-7 in EIR/FONSI Section 2.3.2.5 stated that permanent impacts to USACE jurisdictional wetlands would be mitigated at a minimum 3:1 ratio, and temporary impacts at a minimum 1:1 ratio; stormwater features that are waters of the State would be replaced on-site at a minimum 1:1 ratio; and impacts to riparian habitat would be mitigated through a combination of on-site enhancement of existing habitat and restoration of land within riparian corridors, through the planting of native riparian tree, shrub, and forb species.

Measure BIO-7 also stated that proposed compensation for wetland impacts included purchase of credits at a local mitigation bank, on-site restoration of existing wetlands and waters within the Caltrans right-of-way, and on-site restoration in temporarily impacted areas. If mitigation credits were not available at the Collier Canyon facility, mitigation would be provided at another mitigation bank facility, or through a combination of on- and off-site mitigation. Due to approval delays Collier Canyon Mitigation and Conservation Bank, off-site compensatory mitigation will be provided by the Mitigation Project (see “Changes in Project Design,” above).

Compensatory mitigation for USACE jurisdictional wetlands will be provided at a 3:1 ratio for permanent impacts (0.6 acre of seasonal wetland establishment by the Mitigation Project) and 1:1 ratio for temporary impacts (on-site restoration). Compensatory mitigation for USACE jurisdictional other waters of the U.S. will be provided at a 1:1 ratio for both permanent (0.04 acre of ephemeral drainage rehabilitation by the Mitigation Project) and temporary impacts (on-site restoration).

For unlined drainage ditches (waters of the State), permanent impacts will be offset by on-site creation at a minimum 1:1 ratio (approximately 28,217 linear feet), and temporary impacts will be restored on-site at a 1:1 ratio (6,170 linear feet). See “Natural Communities” above for mitigation of riparian impacts.

For impacts to other waters of the U.S. from the Mitigation Project, compensation through revegetation with an appropriate assemblage of native riparian wetland and upland vegetation is proposed to promote restoration of the area to pre-project conditions.

Threatened and Endangered Species

Changes in compensatory mitigation acreages for California red-legged frog and California tiger salamander are shown in Table 2.3.5-2 [Revised], above. Changes in compensatory mitigation for Alameda whipsnake are shown in Table 2.3.5-3 [Revised], above.

EIR/FONSI Section 2.3.5.4 stated that compensatory mitigation for impacts to biological resources would be provided through purchase of credits at Collier Canyon Mitigation and Conservation Bank (which was still in review), or arrangements would be made to purchase credits at a nearby facility such as Oursan Ridge Conservation Bank or another off-site mitigation arrangement would be made. This approach was proposed in Measures BIO-17 and BIO-18. Due to approval delays Collier Canyon Mitigation and Conservation Bank, off-site compensatory mitigation will be provided as follows:

- Purchase of 70 acres of multi-species credits for California tiger salamander, California red-legged frog, and Alameda whipsnake upland habitat at Ohlone West Conservation Bank.

- Purchase of mitigation values at Collier Canyon Preserve for 78.86 acres of upland grassland habitat, 0.19 acres of seasonal wetland rehabilitation (aquatic nonbreeding habitat), and 0.53 acres of seasonal pond establishment (aquatic breeding habitat) for California tiger salamander and California red-legged frog (included in the Mitigation Project).

Additional compensatory mitigation for impacts to California tiger salamander and California red-legged frog from the Mitigation Project are not proposed. The Mitigation Project would support population growth through the protection of an existing self-sustaining population and by enhancing and creating breeding and upland habitat that is contiguous to, and accessible from, occupied breeding habitat. The construction of 0.72 acre of seasonal pond for California tiger salamander and California red-legged frog breeding habitat, combined with the other proposed mitigation actions from the Mitigation Project, will provide long-term ecological benefits that offset the associated impacts. With implementation of the proposed conservation measures, no additional compensatory mitigation is proposed.

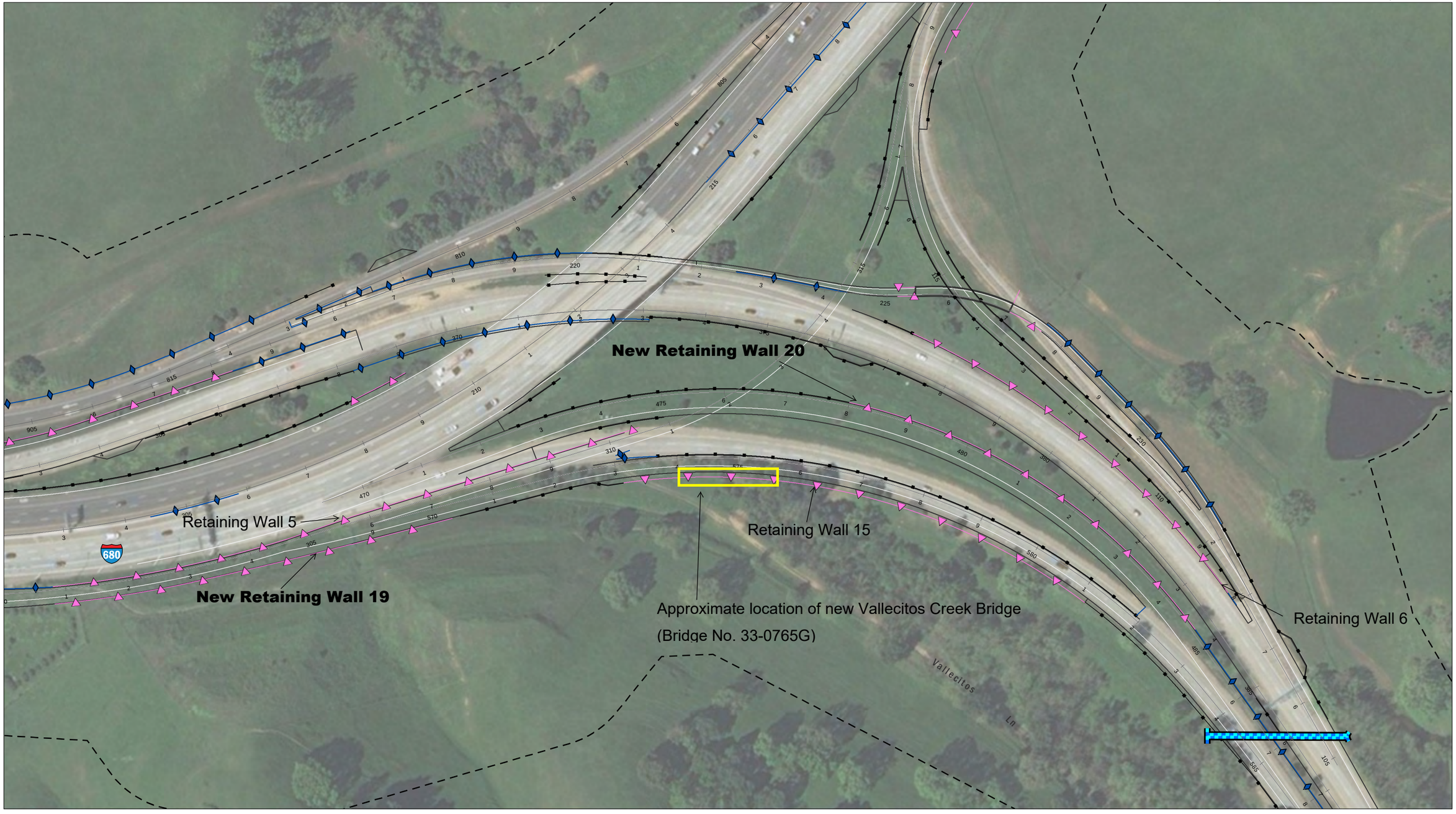
All temporarily disturbed habitats will be restored on-site following guidelines and plans incorporated in the Mitigation Project’s Vegetation Restoration Plan, which includes detailed specifications for restoring all temporarily disturbed areas, such as seed mixes, application methods, plantings, erosion control, and schedule.

Changes to environmental commitments since the environmental document was approved, e.g., the addition of new conditions in permits or approvals. When this applies, append a revised Environmental Commitments Record (ECR) as one of the Continuation Sheets.

The revised ECR is included in Attachment B.

Attachments

A. New Bridge and Retaining Wall Locations
B. Environmental Commitments Record



0 200
Feet

Source: ESRI, 2019; USDA, 2019; WMH, 2019

SR 84 Expressway Widening and
SR 84/I-680 Interchange Improvements Project
Alameda County

Action Area
Construction Feature
Concrete Barrier
Guardrail
Retaining Wall
Pavement Edge
Lane Line
Wildlife Crossing Culverts

ATTACHMENT A
New Bridge and Retaining Wall Locations

SR 84 Expressway Widening and SR 84/I-680 Interchange Improvements Project

ALA-84-17.9/22.9, ALA-680-10.3/15.3

Project Phase: 1

EP: Ellen Doudna 510-847-3804

CL:

RE:

Permits

Permit	Agency	Date Submitted	Date Received	Expiration	Requirements Completed Name	Requirements Completed Date	Comments
401	Regional Water Quality Control Board	10/17/19	6/24/20	--			WDID#: 2 CW435077
404 Nationwide Permit 14	U.S. Army Corps of Engineers	10/1/19	6/10/20	3/18/22			SPN-2017-00226S
1602	California Department of Fish & Wildlife	10/22/19					
Incidental Take Permit	California Department of Fish & Wildlife	11/21/19					
BO	U.S. Fish & Wildlife Service	--	12/5/17				No. 08ESMF00-2017-F-3304-1
BO Amendment	U.S. Fish & Wildlife Service	11/26/19	4/22/20				No. 08ESMF00- 2017-F-3304-R001-1

PS&E/Before RTL

Task and Description	Source	SSP/NSSP	Responsible Party	Task Completed Name	Task Completed Date	Action to Comply	Remarks/ Due Date
Community Character and Cohesion, Utilities/Emergency Services, Traffic and Transportation/Pedestrian and Bicycle Facilities							
Prepare Transportation Management Plan. During the final design phase for the Build Alternative, a Transportation Management Plan (TMP) will be prepared in accordance with Caltrans requirements and guidelines to minimize the construction-related delays and inconvenience for travelers in the project area.	EIR/FONSI Section 2.1.6.4	SSP	Caltrans Design			Completed TMP for 100% PS&E	
Visual/Aesthetics							
Avoid Extraneous Structures. Attach all electronic toll readers to sign gantries, to the extent feasible.	EIR/FONSI Section 2.1.10.4	NA	Caltrans Office of Landscape Architecture			Completed for 100% PS&E	No toll readers on separate gantries

Task and Description	Source	SSP/NSSP	Responsible Party	Task Completed		Action to Comply	Remarks/ Due Date
				Name	Date		
Aesthetic Treatments. Incorporate aesthetic treatments to retaining walls, barriers and bridges.	EIR/FONSI Section 2.1.10.4	SSP	Caltrans Office of Landscape Architecture			Completed for 100% PS&E	
Cultural Resources							
Demarcate Archaeological Monitoring Area. Ensure that the Archaeological Monitoring Area (AMA) for site CA-ALA-656 is clearly described and illustrated in the plans, specifications and estimates (PS&E) for the project.	Post-Review Discovery and Monitoring Plan	SSP 14-2.03B	Caltrans Office of Cultural Resource Studies			See 100% PS&E sheets L-8 and L-9	
Confirm mapping of Archaeological Monitoring Area. All responsible parties will review the PS&E package to ensure that it includes the AMA.	Post-Review Discovery and Monitoring Plan	NA	Caltrans Office of Cultural Resource Studies			Completed for 100% PS&E	
Post-Review Discovery and Monitoring Plan. Include Post-Review Discovery and Monitoring Plan (PRD & MP) in ECR.	Post-Review Discovery and Monitoring Plan	NA	Caltrans Office of Cultural Resource Studies			The PRD & MP is incorporated by reference.	
Geology/Soils/Seismic/Topography							
Perform Geotechnical Investigations. The investigations will include site-specific evaluation of subsurface conditions at the location of proposed structure footings and proposed retaining walls as well as investigations for earthquake-induced liquefaction, soil expansion, soil corrosivity, and compaction settlement. An evaluation of construction dewatering will be included as a part of the field investigation program to provide the basis for construction dewatering plans used for final design.	EIR/FONSI Section 2.2.3.4	NA	Caltrans Design and Office of Geotechnical Design West			Completed for 100% PS&E	
Paleontology							
Update Paleontological Mitigation Plan. Update and finalize the Paleontological Mitigation Plan once project design is nearly complete.	EIR/FONSI Section 2.2.4.4	NA	Caltrans Design and Office of Geotechnical Design West				
Hazardous Waste/Materials							
Perform Preliminary Site Investigation.	EIR/FONSI Section 2.2.5.4	SSP	Caltrans Office Of Environmental Engineering			PSI approved February 2019	
ADL and other regulated materials.	EIR/FONSI Section 2.2.5.4	SSP	Caltrans Office Of Environmental Engineering				
Biology							
Environmental Permits. Caltrans will include a copy of the all relevant permits within the construction bid package of the proposed project. The Resident Engineer or their designee will be responsible for implementing the Conservation Measures and Terms and Conditions of the Biological Opinion.	Biological Opinion. Page 12, Item 1	SSP	Caltrans Office of Biological Sciences and Permitting				
Preconstruction							
Cultural Resources							
Construction Alert Handout for Cultural Materials. Consultant archaeologist will prepare construction alert illustrating cultural materials likely to be present. Alameda CTC Project Manager and AECOM Project Engineer will ensure distribution of construction alert sheet to all construction contractors working in AMA.	Post-Review Discovery and Monitoring Plan	NA	Caltrans Office of Cultural Resource Studies				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Completed		Action to Comply	Remarks/ Due Date
				Name	Date		
Preconstruction Cultural Resources Meeting. Consultant archaeologist and Alameda CTC will identify a time and location for a preconstruction meeting and ensure attendance of all construction contractors. At preconstruction meeting, archaeologists and Native American monitors will discuss nature of archaeological resource, legal obligations, provisions of the PRD&MP, and procedures to follow in the event that artifacts are found.	Post-Review Discovery and Monitoring Plan	NA	Caltrans Office of Cultural Resource Studies				
Field review of AMAs at least one week prior to construction.	Post-Review Discovery and Monitoring Plan	NA	Caltrans Office of Cultural Resource Studies				
Water Quality and Storm Water Runoff							
Prepare SWPPP. The General Construction Permit will require the Contractor to submit a storm water pollution prevention plan (SWPPP). This plan must meet the standards and objectives to minimize storm water pollution impacts set forth in Section 13.37 of the Caltrans Standard Specifications. The SWPPP must also comply with the goals and restrictions identified in the RWQCB's Basin Plan. Any additional measures included in the Water Quality Certification will be implemented.	EIR/FONSI Section 2.3.2.4	SSP	Caltrans Design and Office of Stormwater Coordination				
Water Diversion Plan. A Water Diversion Plan will be submitted to the appropriate regulatory agencies for approval at least 30 days prior to construction.	404 application, Section 4.3	SSP	Caltrans Design and Office of Stormwater Coordination				
Paleontology							
Paleontological Monitoring. Include contract requirement stating that paleontological monitoring will occur in accordance with the Paleontological Mitigation Plan.	EIR/FONSI Section 2.2.4.4	NA	Caltrans Design and Office of Geotechnical Design West				
Biology							
Environmentally Sensitive Area (ESA) Fencing. Before the start of construction, ESA fencing will be delineated on site to prevent construction encroachment into the sensitive habitats adjacent to the project footprint. The final project plans will outline how the fencing will be installed. The bid solicitation package special provisions will specify acceptable fencing material and prohibited construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within ESAs.	Biological Opinion. Page 4, Item 1	SSP	Caltrans Office of Biological Sciences and Permitting				
Wildlife Exclusion Fencing. Prior to the start of construction in individual construction areas, wildlife exclusion fencing will be installed along the project footprint in all areas where the Central California tiger salamander, California red-legged frog, or Alameda whipsnake could enter the active site. The fencing will remain in place throughout the duration of the construction activities within the individual work areas and will be regularly inspected and fully maintained. Repairs to the fence will be made within 24 hours of discovery. Upon completion of activities within the given area, the fence will be completely removed; the area cleaned of debris and trash, and returned to natural conditions.	Biological Opinion page 11, item 12	SSP	Caltrans Office of Biological Sciences and Permitting				
Threatened and Endangered Species							
Biological Monitors. At least 15 days prior to the onset of any ground-disturbing activities, including vegetation removal, Caltrans will submit to the Service, for approval, the name(s) and credentials of proposed biological monitors.	Biological Opinion page 9, item 3	SSP	Caltrans Office of Biological Sciences and Permitting				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Completed		Action to Comply	Remarks/ Due Date
				Name	Date		
Responsibilities of Biological Monitors. The approved biologist(s) will be on-site during initial ground-disturbing activities, including vegetation removal, and thereafter as needed to fulfill the role of the approved biologist as specified in project permits. The approved biologist(s) will keep copies of applicable permits in their possession when on-site. Through the Resident Engineer or their designee, the approved biologist(s) will be given the authority to communicate either verbally, by telephone, e-mail or hardcopy with all project personnel to ensure that take of listed species is minimized and permit requirements are fully implemented. Through the Resident Engineer or their designee, the approved biologist(s) will have the authority to stop project activities to minimize take of listed species or if they determine that any permit requirements are not fully implemented. If the approved biologist(s) exercises this authority, the Service will be notified by telephone and e-mail within 24 hours.	Biological Opinion page 10, item 7	NA	Caltrans Office of Biological Sciences and Permitting				
Compensatory Mitigation. Caltrans will provide compensation for Central California tiger salamander, California red-legged frog, and Alameda whipsnake habitat loss at 1:1 for temporary habitat loss and 3:1 for permanent habitat loss. Compensation for temporary habitat loss will be satisfied with successful onsite restoration. Compensation for permanent habitat loss will be satisfied through purchase of credits at a Service-approved conservation bank or through other Service-approved off-site compensation options. Permanent impacts to USACE jurisdictional wetlands will be mitigated at a minimum 3:1 ratio, and temporary impacts at a minimum 1:1 ratio. Stormwater features that are waters of the State will be replaced on-site at a minimum 1:1 ratio. Impacts to riparian habitat will be mitigated through a combination of on-site enhancement of existing habitat and restoration of land within riparian corridors, through the planting of native riparian tree, shrub, and forb species.	Biological Opinion. Page 12, Item 2 EIR/FONSI Section 2.3.1.3	SSP	Caltrans Office of Biological Sciences and Permitting				
Natural Communities							
A Tree Protection Plan will be implemented to minimize damage to native trees during construction.	EIR/FONSI Section 2.3.1.3, Vegetation Restoration Plan	NA					Vegetation Restoration Plan
Wetlands and Other Waters of the United States							
Protection of Vallecitos Creek. ESA fencing will be installed along the length of Vallecitos Creek within the Project footprint. Best management practices (BMPs) will be implemented along the ESA fencing, and will include, but are not limited to, the installation of straw wattles or silt fencing to prevent disturbed soils or construction debris from entering the creek.	ITP application, Section 2.3.3	SSP	Caltrans Office of Biological Sciences and Permitting				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Completed		Action to Comply	Remarks/ Due Date
				Name	Date		
Threatened and Endangered Species							
Nest Protection. All clearing and grubbing of woody vegetation will occur by hand or with hand tools between September 1 and October 15, outside of the bird nesting season and prior to the rainy season. If for any reason this schedule cannot be met, surveys for nesting migratory birds will be conducted before clearing begins. All nest avoidance requirements of the MBTA and California Fish and Game Code will be observed. If active nests are discovered, a buffer will be set up around the immediate vicinity of the nest to keep construction activities from disturbing the nest. Vegetation clearing will resume only when the hatchlings have fledged. An approved biologist(s) will be present during all grubbing and vegetation clearing activities.	Biological Opinion page 5, item 2	SSP	Caltrans Office of Biological Sciences and Permitting, Caltrans Resident Engineer				
Preconstruction Bird Surveys. Preconstruction surveys for migratory birds, raptors, other special-status bird species, and appropriate nesting habitat will be conducted within 50 feet of the construction area no more than three days prior to ground disturbing activities. If preconstruction surveys indicate the presence of any migratory bird nests where activities will directly result in bird injury or death, a buffer zone of 50 feet will be placed around the nest. In the event that an active nest is found after the completion of preconstruction surveys and after construction begins, all construction activities within a 50-foot radius will be stopped until an approved biologist(s) has evaluated the nest and erected the appropriate buffer around it. If an active raptor or special-status species nest is found, CDFW will be consulted to determine the appropriate buffer area to be established around the nesting site and the type of buffer to be used, which typically is ESA fencing. An approved biologist(s) will delineate the buffer using ESA fencing, pin flags, and/or yellow caution tape. The buffer zone will be maintained around all active nest sites until the young have fledged and are foraging independently. If establishment of a buffer is not feasible, CDFW will be contacted for further avoidance and minimization guidelines. A biological monitor will be present during the raptor nesting season.	EIR/FONSI Section 2.3.3.4	SSP	Caltrans Office of Biological Sciences and Permitting				
Preconstruction Surveys for Threatened and Endangered Species. Preconstruction surveys for the Central California tiger salamander, California red-legged frog, and Alameda whipsnake will be conducted by the approved biologist(s) no more than 20 calendar days prior to any initial ground disturbance, including vegetation removal, within habitat identified for the species in the July 2017 BA and the November 26, 2019/April 7, 2020 revision. These efforts will consist of walking surveys of the project limits and, if possible, accessible adjacent areas within at least 50 feet of the project limits. The approved biologist(s)will investigate potential cover sites when it is feasible and safe to do so. This includes thorough investigation of mammal burrows, rocky outcrops, appropriately sized soil cracks, tree cavities, and debris. Native vertebrates found in the cover sites within the project limits will be documented and relocated to an adequate cover site in the vicinity. The approved biologist(s) will also survey and monitor for signs of San Joaquin kit fox. If a kit fox or its sign is observed, the Service will be contacted to determine the available options and if reinitiation is appropriate.	Biological Opinion page 9, item 4 Biological Opinion page 10, item 6	NA	Caltrans Office of Biological Sciences and Permitting				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Completed		Action to Comply	Remarks/ Due Date
				Name	Date		
Preconstruction Surveys for Special-Status Plants. Prior to the commencement of construction activities, a qualified biologist shall conduct appropriately timed surveys for big tarplant, round-leaved filaree, Congdon's tarplant, and California alkali grass. To correspond with these species' blooming period, the surveys shall include botanical inventories during March through May (the blooming period of round-leaved filaree and California alkali grass) and July through September (the blooming period of big tarplant, and Congdon's tarplant). If listed plant species are discovered within the construction area, protective measures will be established. These protective measures will include setting a temporary protective buffer around the plant and conducting appropriate agency coordination, which may result in moving the species to another location within Caltrans ROW and then replanting the species during the restoration phase of the project.	EIR/FONSI Section 2.3.3.4	NA	Caltrans Office of Biological Sciences and Permitting				
Surveys for Threatened and Endangered Species Immediately Prior to Disturbance. The approved biologist(s) will perform a Central California tiger salamander, California red-legged frog, and Alameda whipsnake clearance survey immediately prior to the initial ground disturbance or vegetation removal. Safety permitting, the approved biologist(s) will investigate areas of disturbed soil for signs of the listed species within 30 minutes following the initial disturbance of that given area.	Biological Opinion page 10, item 8	NA	Caltrans Office of Biological Sciences and Permitting				
Preconstruction Surveys for Special-Status and "High Priority" Bats. Focused preconstruction surveys will be conducted for all areas that provide suitable bat roosting habitat, including human-made structures, snags, rotten stumps, mature trees with broken limbs, exfoliating bark, and dense foliage. Sensitive habitat areas and roost sites will be avoided to the maximum extent practicable. To avoid mortality and reproductive loss, Caltrans may limit tree removal between September 1 and April 14, outside the breeding season, so as not to disturb maternal colonies or roosts. If potential roost sites (e.g., trees, snags) are to be removed or trimmed, limbs smaller than 3 inches in diameter will be cut and the tree will be left overnight to allow any bats using the tree/snag for roosting time to leave and find another roost. A biological monitor will be present during the trimming or removal of trees/snags. If occupied sites are observed in the BSA, Caltrans will contact CDFW to report occurrences for the agency's database. Caltrans will provide an appropriate buffer between any occupied roost and construction activities. In addition, nighttime construction will be limited. Bat Day and Night Roost Avoidance. If deemed necessary, specific day and night bat roost avoidance and minimization measure will be developed through technical assistance with CDFW and bat specialists.	EIR/FONSI Section 2.3.3.4	NA	Caltrans Office of Biological Sciences and Permitting				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Completed		Action to Comply	Remarks/ Due Date
				Name	Date		
Western Pond Turtle: Training and Pre-Disturbance Surveys. Before any construction activities begin, an approved biologist(s) shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the western pond turtle and its aquatic and upland nesting habitat, the general measures that are being implemented to conserve the western pond turtle as they relate to the project, and the boundaries within which the project may be accomplished. An approved biologist(s) shall survey the work site no more than 48 hours before the onset of activities for signs of western pond turtles and/or western pond turtle nesting activity (i.e. recently excavated nests, nest plugs) or nest depredation (partially to fully excavated nest chambers, nest plugs, scattered egg shell remains, egg shell fragments). Preconstruction surveys to detect western pond turtles should focus on suitable aerial and aquatic basking habitat such as logs, branches, rootwads, and rip-rap, as well as the shoreline and adjacent warm, shallow waters where pond turtles may be present below the water surface beneath algal mats or other surface vegetation. Preconstruction surveys to detect western pond turtle nesting activity should be concentrated within 402 meters (1,319 feet) of suitable aquatic habitat and should focus on areas along south- or west-facing slopes (Jennings and Hayes 1994; Holland 1991) with bare hard-packed clay, silt soils, or a sparse vegetation of short grasses or forbs. If western pond turtles or their nesting sites are found, the biologist shall contact CDFW to determine whether relocation and/or exclusion buffers and nest enclosures are appropriate. If CDFW approves of moving the animal, the biologist shall be allowed sufficient time to move the western pond turtle(s) from the work site before work activities begin.	EIR/FONSI Section 2.3.3.4	NA	Caltrans Office of Biological Sciences and Permitting				
Preconstruction Surveys for Tule Elk. Focused species surveys will be conducted to determine the presence of tule elk in the project area, prior to the start of construction. If tule elk are observed within or immediately adjacent to the project area during construction, a stop work order may be issued until the individual, or herd, has moved away from the site.	EIR/FONSI Section 2.3.3.4	NA	Caltrans Office of Biological Sciences and Permitting				
Preconstruction Surveys for San Francisco Dusky-Footed Woodrat. Potential Trapping and Relocation. If suitable habitat is not available for relocation of the woodrats in the project vicinity, offsite locations will be identified. Trapping of the woodrats will be conducted by an approved biologist(s) with a current CDFW collection permit to trap and relocate the species. Ideally, the trapping will occur outside of the breeding period, between September and December.	EIR/FONSI Section 2.3.3.4, Woodrat Avoidance and Mitigation Plan	NA	Caltrans Office of Biological Sciences and Permitting				
Preconstruction Surveys for American Badger. Preconstruction surveys will be conducted within the project footprint in areas of suitable habitat to identify dens or signs of American badger. These surveys will be conducted no more than 30 days before the start of ground-disturbing activities and will be phased with project build-out. If an American badger is detected on site at any time during these surveys, CDFW will be contacted to discuss ways to proceed with the project and to avoid take to the maximum extent practicable.	EIR/FONSI Section 2.3.3.4	NA	Caltrans Office of Biological Sciences and Permitting				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Completed		Action to Comply	Remarks/ Due Date
				Name	Date		
Onsite Construction Personnel Education Program. All construction personnel will attend an environmental education program delivered by the approved biologist(s) prior to working on the project site. The program will include a brief summary of the vernal pool fairy shrimp, Central California tiger salamander, California red-legged frog, Alameda whipsnake, and San Joaquin kit fox life histories, identification, and the conservation measures relevant to their tasks. Personnel will be briefed on the animals' legal protection under the Act and the personal penalties and other consequences that could be associated with noncompliance. Attendees names will be logged on a sign-in sheet which will be kept on file and available to the Service upon request.	Biological Opinion page 10, item 10	NA	Caltrans Resident Engineer, Caltrans Office of Biological Sciences and Permitting				
Removal of Aquatic Exotic Wildlife. The approved biologist(s) will kill any aquatic exotic wildlife species, such as bullfrogs and crayfish found in the project footprint, to the extent possible.	Biological Opinion page 11, item 15	NA	Caltrans Office of Biological Sciences and Permitting				
Inspection by Resource Agency Personnel. If requested, before, during, or upon completion of groundbreaking and construction activities, Caltrans will allow access by Service personnel into the project footprint to inspect the project and its activities.	Biological Opinion page 15, item 37	NA	Caltrans Resident Engineer				
Vegetation Communities							
Vegetation Preservation. Native vegetation will be cleared only when necessary and will be cut above soil level except in areas that will be excavated, such as for utility relocation or structure footing installation. This will allow plants that reproduce vegetatively to resprout later.	Biological Opinion page 5, item 2	NA	Caltrans Resident Engineer, Caltrans Office of Biological Sciences and Permitting				
Tree Preservation. Caltrans will make an effort to reduce impacts to trees in temporary impact areas and along the edge of the project footprint to the greatest extent possible during construction by designating trees on plan sheets and marking protected areas (the CRZ) around trees with high visibility polypropylene ESA fencing. Only those trees requiring removal will be cut down. Whenever possible, trees will be trimmed rather than removed. To avoid potential damage to retained trees, trees will be safeguarded during construction through implementation of the following measures as applicable: • No construction equipment, vehicles or materials shall be stored, parked or staged within the CRZ; and • Work will not be performed within the CRZ of remaining trees without consultation with an ISA-certified arborist. If trees are damaged during construction and become unhealthy or die, the damaged tree(s) will be removed and replaced.	EIR/FONSI Section 2.3.1.2	NA	Caltrans Resident Engineer, Caltrans Office of Biological Sciences and Permitting				
Fenced Tree Buffers. Protected trees will be fenced around the drip line to limit construction impacts to the canopy and root zone. The buffer size may be adjusted on a tree-by-tree basis to ensure survival of protected trees.	Biological Opinion, Page 5, Item 1	NA	Caltrans Resident Engineer, Caltrans Office of Biological Sciences and Permitting				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Completed		Action to Comply	Remarks/ Due Date
				Name	Date		
Vallecitos Creek Riparian Corridor. As many trees and as much brush as possible will be retained along the Vallecitos Creek riparian corridor, emphasizing shade-producing and bank-stabilizing vegetation. Prior to construction, equipment access points through Vallecitos Creek riparian corridor will be established to minimize riparian disturbance. Pre-existing access points will be used whenever possible.	1602 Permit Application, Page 13	NA	Caltrans Resident Engineer, Caltrans Office of Biological Sciences and Permitting				
Tree Replanting. Tree removal will be mitigated through planting at a 3:1 ratio on-site, to the maximum extent possible given space available, for all native species within riparian areas, and for coast live oaks and valley oaks in oak woodlands (including uplands). For other tree species removed in upland areas, Caltrans will provide tree replacement on-site at a minimum 1:1 ratio in the space available. A 3:1 ratio is standard for replacement of impacted oak trees on Caltrans projects. The need for some off-site upland and riparian tree planting is anticipated. Replanted areas will be monitored for success for up to 10 years. The performance criteria for replacement of tree plantings is 60 percent survival of all plantings at the end of the monitoring period (3 to 10 years). If survival drops below 60 percent during the monitoring period, the project sponsor will replace plantings to bring survival above this level. Precise planting locations will be identified during the final design phase. Potentially suitable locations have been selected based on soil types, existing drainage patterns, and surrounding habitat types. Riparian habitat removed along Vallecitos Creek will be offset by planting trees in locations where there are currently gaps in the riparian overstory. Planting of trees will occur within the Caltrans ROW. Details for off-site planting and riparian tree planting success criteria will be determined during the project permitting process with CDFW (1602 Streambed Alteration Agreement) and RWQCB (401 Certification).	EIR/FONSI Section 2.3.1.2 Vegetation Restoration Plan	NA	Caltrans Resident Engineer, Office of Landscape Architecture				
Construction							
Visual/Aesthetics							
Avoid Root Damage from Trenching. When trenching for utilities, avoid trenching within drip lines of trees and screening shrubs. Directional drilling that would avoid damaging root systems of established plant material shall be used, when reasonable, as opposed to open trenching to install new conduit in places where work within the drip line would be required. Trees and screening shrubs shall be protected from damage during construction.	EIR/FONSI Section 2.1.10.4	NA	Caltrans Resident Engineer, Design, and Office of Landscape Architecture				
Cultural Resources							
Tribal Monitor for Ground Disturbance in Holocene Soils. A tribal monitor from the Northern Valley Yokuts shall be present for ground-disturbing activities in Holocene-age soils. Monitoring of work in modern fill, soils greater than 12,000 years old, or bedrock is not necessary. Once the tribal monitor determines that there is not danger of encountering archaeological or sacred resources in the project area, you may continue work without a monitor.	404 permit	NA	Caltrans Office of Cultural Resource Studies				
Implement Post-Review Discovery and Monitoring Plan. During project construction, implement the monitoring protocols, discovery procedures, chain of command, and treatment and analysis protocols set forth in the Post-Review Discovery and Monitoring Plan.	EIR/FONSI Section 2.1.11.4	NA	Caltrans Office of Cultural Resource Studies				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Completed		Action to Comply	Remarks/ Due Date
				Name	Date		
If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.	EIR/FONSI Section 2.1.11.4	SSP	Caltrans Resident Engineer, Office of Cultural Resource Studies, and Project Contractor				
If human remains are discovered, California Health and Safety Code Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains. The Caltrans Branch Chief of Archaeology shall be notified, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact the Branch Chief of Archaeology so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.	EIR/FONSI Section 2.1.11.4	SSP	Caltrans Resident Engineer, Office of Cultural Resource Studies, and Project Contractor				
Archaeologists and Native American Monitors will monitor all construction activities within the AMA.	Post-Review Discovery and Monitoring Plan	NA	Caltrans Office of Cultural Resource Studies				
Noise							
Noise minimization and monitoring.	EIR/FONSI Section 2.2.7.4	SSP	Caltrans, Alameda CTC, Construction contractor				
Natural Communities							
Minimize Night Work. To the extent practicable, nighttime construction will be minimized. Light, glare, and construction noise and vibration impacts will be addressed through the following measures: Use lighting in areas only where necessary for safety and signage. Eliminate all lighting in other areas. All lighting should be downcast to minimize lighting of natural areas, particularly in riparian areas and adjacent to drainages. Limit operation of vibration causing equipment such as pile drivers, dozers, large excavators to daylight hours when working in areas adjacent to open space. A biological monitor shall be present to observe activities of wildlife during nighttime construction adjacent to open spaces. If activities are noted to affect wildlife, biological monitor shall stop construction activities as necessary.	EIR/FONSI Section 2.3.1.3 Biological Opinion, Page 8	NA	Caltrans Resident Engineer and Office of Biological Sciences and Permitting				
Maximum Wattage Etc. for New Lighting. To avoid casting of light beyond the outer edge of pavement, all safety lights will be fitted with factory installed house-side shielding to reduce backlighting and glare. The bulbs used in the new fixtures will be no greater than 150 Watt Light Emitting Diodes with a color temperature no greater than 2,000 lumens.	Biological Opinion Amendment	NA	Caltrans Resident Engineer and Office of Biological Sciences and Permitting				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Completed		Action to Comply	Remarks/ Due Date
				Name	Date		
Wetlands and Other Waters of the United States							
Work In and Near Aquatic Areas. The contractor will comply with the following standards/objectives, at times referred to as BMPs, including but not limited to the following: Where work areas encroach on wetlands, RWQCB-approved physical barriers adequate to prevent the flow or discharge of sediment into these systems will be constructed and maintained between working areas and streams, lakes, and wetlands. Discharge of sediment into culverts and storm drains will be held to a minimum during construction of the barriers. Discharge will be contained through the use of RWQCB-approved measures that will keep sediment from entering jurisdictional waters beyond the project limits. All off-road construction equipment should be cleaned of potential noxious weed sources (mud and vegetation) before entering the project footprint and after entering a potentially infested area before moving on to another area. The contractor will employ whatever cleaning methods (typically spraying with a high-pressure water hose) are necessary to ensure that equipment is free of noxious weeds. Equipment should be considered free of soil, seeds, and other such debris when a visual inspection does not disclose such material. Disassembly of equipment components or specialized inspection tools is not required. Equipment washing stations will be placed in areas that afford easy containment and monitoring (preferably outside of the project footprint) and that do not drain into sensitive (riparian, wetland, etc.) areas.	EIR/FONSI Section 2.3.2.4	SSP	Caltrans Resident Engineer and Project Contractor				
Construction Access Housekeeping. Temporary construction entrances and roadways will be used to provide access for construction activities from staging and unpaved areas. Temporary move-in/move-out locations will be used to implement permanent erosion control and revegetation work on completed slopes. Street sweeping will be used to collect sediment or debris tracked onto the roadway. A temporary concrete washout is provided to collect and dispose of concrete waste. Various other waste management, materials handling, and other housekeeping BMPs will be used throughout the duration of the project. Stockpiles of various kinds are anticipated and will be maintained with appropriate BMPs, such as temporary covers.	404 application, Section 4.3	SSP	Caltrans Resident Engineer and Project Contractor				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Completed		Action to Comply	Remarks/ Due Date
				Name	Date		
Dust Reduction. Caltrans Standard Specifications include the requirement to minimize or eliminate dust during project construction through the application of dust palliatives (water, dust suppressant, or dust binder). The following dust control measures will also be considered during development of Plans, Specifications, and Estimates for the project construction contract: Water active construction areas as needed. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard. Stabilize access areas (i.e. temporary access roads or entrances/ exits) with rock material and maintain as needed. Keep dust to a minimum during street sweeping activities. Use a vacuum whenever dust generation is excessive or sediment pickup is ineffective. Apply hydromulch, hydroseed, or soil stabilizers to disturbed areas if inactive for at least 14 days or prior to a forecasted rain event. Minimize stockpiles at jobsite. Cover active and inactive soil stockpiles and surround with a linear sediment barrier if inactive for at least 14 days or prior to a forecasted rain event. Water soil stockpiles as needed. Limit traffic speeds on unpaved roads to 15 mph. Install sandbags or other erosion control measures to prevent silt runoff to public roadways. Replant vegetation in disturbed areas as quickly as possible.	Biological Opinion page 14, item 35	SSP	Caltrans Resident Engineer and Project Contractor				
Construction Discharges. All grindings and asphaltic-concrete waste will be stored within previously disturbed areas absent of habitat and at a minimum of 150 feet from any aquatic habitat, culvert, or drainage feature. No debris, soil, silt, sand, bark, slash, sawdust, cement, concrete, washings, petroleum products or other organic or earthen material shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into waters of the United States or drainages. No discharges of excessively turbid water will be allowed, and all equipment will be well-maintained and free of leaks.	Biological Opinion page 14, item 33 EIR/FONSI Section 2.3.1.3	SSP	Caltrans Resident Engineer and Project Contractor				
Erosion Control. Temporary erosion control and slope stabilization BMPs will be installed before the start of the wet season (October 15 through April 15). Erosion control measures may include silt fencing, straw wattles, straw bales, coir blankets, sediment traps, and other protective measures to minimize the potential for erosion of sediment beyond the work area or degradation of water quality in adjacent aquatic habitats.	EIR/FONSI Section 2.3.1.3	SSP	Caltrans Design and Office of Stormwater Coordination; Caltrans Resident Engineer and Project Contractor				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Completed		Action to Comply	Remarks/ Due Date
				Name	Date		
Rain Events. To mitigate for potential discharges from rain, the project contractor and Caltrans staff will monitor the forecast for qualifying storm events. This is defined as a 50 percent probability of 0.1 inch or greater precipitation. Before a qualifying storm event occurs, a qualified Caltrans stormwater practitioner will conduct a pre-event site inspection of the project erosion control and water quality BMPs to insure that SWPPP measures are installed and adequately maintained. The inspector will provide recommendations for repair/replacement of or additional BMP, which may include: Silt fence, fiber rolls, and gravel bags to capture sediment; Tarps, straw or other cover for disturbed slopes; or Tarps, fiber rolls or gravel bags to stabilize or contain stockpiled soils/ fill materials. Before a qualifying storm event, all materials and equipment will be removed from stream channels or waterways. If practicable, creek or stream diversions will be removed before the event. In addition, runoff will be monitored and sampled for sediment loads to determine if a discharge has occurred.	Biological Opinion page 12, item 21	SSP	Caltrans Office of Stormwater Coordination, Caltrans Resident Engineer				
Creek Diversions. Temporary water diversions will be installed to exclude construction activities from adversely impacting the water quality of Vallecitos Creek while maintaining flow through the project area. The following measures will be implemented to avoid and reduce adverse environmental effects of the temporary diversion systems to jurisdictional waters: 1. A Water Diversion Plan will be submitted to the appropriate regulatory agencies for approval at least 30 days prior to construction. 2. A qualified biologist will be present to monitor all activities involving the placement of fill in the drainage, including any diversion system installation. 3. Discharge from dewatering operations, if needed, and runoff from disturbed areas will be made to conform to the water quality requirements of the waste discharge permit issued by the Regional Water Quality Control Board. 4. A filtering system will be used on pumps to collect the water and return clear water to the creek. All pump intakes shall be fitted with fish exclusion devices. 5. After in-channel work completion, any temporary structures placed in the channel will be removed in a way that minimizes disturbance to drainage flows and water quality. 6. All temporarily impacted channel areas will be restored to pre-project conditions. 7. Existing dense giant bulrush (Schoenoplectus californicus) vegetation will be trimmed while leaving the rhizome structures in place, to allow the bulrush to grow back after diversion removal. For areas where the rhizomes have been disturbed by heavy equipment, replanting may be conducted using donor stock (source plant material) harvested from collection sites within Vallecitos Creek or the same watershed, or nursery-grown stock.	404 application, Section 4.3	SSP	Caltrans Design and Office of Stormwater Coordination				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Completed		Action to Comply	Remarks/ Due Date
				Name	Date		
Threatened and Endangered Wildlife							
Implement Biological Opinion Conditions for Central California tiger salamander, California red-legged frog, and Alameda whipsnake.	Biological Opinion	NA	Caltrans Resident Engineer and Office of Biological Sciences and Permitting				
Discovery of Western Burrowing Owl. Appropriate avoidance, minimization, or protection measures shall be determined in consultation with the CDFW in the event an active burrow is located in an area subject to disturbance, or within the typical setback (i.e., occupied burrows or nests within 150 feet of an area subject to disturbance during the non-breeding season, or within 250 feet of an area subject to disturbance during the breeding season).	EIR/FONSI Section 2.3.3.4	NA	Caltrans Resident Engineer and Office of Biological Sciences and Permitting,				
Invasive Species							
In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or next to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented, should an invasion occur.	EIR/FONSI Section 2.3.6.4	SSP	Caltrans Resident Engineer, Office of Biological Sciences and Permitting				
Post-construction							
Visual/Aesthetics							
Replace vegetation and irrigation. Any roadside vegetation and irrigation systems that are damaged or removed during project construction would be replaced according to Caltrans policy and highway landscaping standards. Highway planting would be installed under a separate contract and within two years following the completion of the highway construction, with a three-year plant establishment period. The highway planting would be funded by Alameda CTC.	EIR/FONSI Section 2.1.10.4	SSP	Caltrans Resident Engineer and Office of Landscape Architecture				
Cultural Resources							
The Resident Engineer will inform the consulting archaeologist and Caltrans Environmental Branch Chief when construction is complete.	Post-Review Discovery and Monitoring Plan	NA	Caltrans Resident Engineer, Caltrans Office of Cultural Resource Studies				
The Consulting Archaeologist will prepare a final Monitoring Report within 30 days after completion of monitoring, and a Technical Report summarizing archaeological data found (if any) within 90 days after completion of monitoring.	Post-Review Discovery and Monitoring Plan	NA	Caltrans Office of Cultural Resource Studies				
Water Quality and Storm Water Runoff							
Permanent erosion control measures will be implemented upon completion of construction. For steep slopes rolled erosion control netting and fiber rolls will be placed after compost placement to provide further slope stabilization. All disturbed areas will be revegetated with appropriate native, non-invasive species or non-persistent hybrids that will serve to stabilize site conditions.	404, Section 4.3	SSP	Caltrans Resident Engineer, Construction Contractor				

Task and Description	Source	SSP/NSSP	Responsible Party	Task Completed		Action to Comply	Remarks/ Due Date
				Name	Date		
Natural Communities							
Restoration/Vegetation. Upon project completion, all temporarily disturbed areas will be restored to pre-construction conditions. Appropriate native species will be used to the maximum extent possible, and trees, shrubs, and groundcover will be selected for drought tolerance and disease resistance. Mulch will be applied to planted areas to reduce weed growth, conserve moisture, and minimize maintenance operations. Revegetation will take place under a separate landscape contract after completion of the roadway construction contract. The landscape contract will be funded by the parent project and will include a 3-year plant establishment period.	ITP application, Section 2.3.3 EIR/FONSI Section 2.3.1.3	NA	Caltrans Resident Engineer, Office of Biological Sciences and Permitting				
Tree Replacement. Post-construction measures will include revegetation of temporarily impacted areas by the planting of trees where appropriate, selecting sites based on existing topography, hydrology, and surrounding habitat. An arborist will work with CDFW to select the most suitable locations for mitigation for trees removed from the riparian corridor of Vallecitos Creek.	EIR/FONSI Section 2.3.1.3	NA	Caltrans Resident Engineer, Office of Biological Sciences and Permitting				
Determination of Need for Additional Mitigation. Compensatory mitigation for temporary impacts to sensitive vegetation communities or natural communities of concern, including valley oak woodland, red willow thickets, Fremont cottonwood forests, and riparian scrub and forest will be provided through the on-site restoration of habitat by planting native species that are typical to that habitat. The restored vegetation communities will be monitored for success. If enough space is not available for on-site mitigation, off-site like-habitat providing these species habitat requirements will be preserved through the purchase of mitigation bank credits.	EIR/FONSI Section 2.3.1.3	NA	Office of Biological Sciences and Permitting				
Post-Construction Compliance Reports. Caltrans shall submit post-construction compliance reports prepared by the Service-approved biologist to the Service within 60 calendar days following completion of each construction season or within 60 calendar days of any break in construction activity lasting more than 60 calendar days. This report shall detail (1) dates that relevant project activities occurred; (2) pertinent information concerning the success of the project in implementing avoidance and minimization measures; (3) an explanation of failure to meet such measures, if any; (4) known project effects on the Central California tiger salamander, California red-legged frog, and Alameda whipsnake; (5) occurrences of incidental take of any listed species; (6) documentation of employee environmental education; and (7) other pertinent information.	Biological Opinion, Page 42, Item 6	NA	Office of Biological Sciences and Permitting				