

E. Comparison of Alternatives

This chapter provides a comparison of the environmental impacts of the alternatives to the Project. California Environmental Quality Act (CEQA) Guidelines (Section 15126.6 (d)) require that an EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Project.

Chapter C introduces and describes the alternatives considered. This chapter summarizes and compares the environmental advantages and disadvantages of the Project and alternatives. The comparison is based on the assessment of environmental impacts of the Project and each alternative as identified in the Environmental Analysis Sections D.2 through D.15.

The following alternatives have been considered and are discussed in the following sections:

- **Alternative 1:** No Project
- **Alternative 2:** Construct a new 115 kV subtransmission line that traverses between the Valley 500/115 kV and Ivyglen 115/12 kV Substations. The line would pass along the existing Valley-Serrano 500 kV right-of-way (ROW) to an area north of the Ivyglen Substation and eventually connect to the Ivyglen Substation by one of various routes (Figure C.2-1, Middle Corridor).
- **Alternative 3:** Construct a new 115 kV subtransmission line along segments C-2, C-4, and C-6. (Figure E-1)
- **Alternative 4:** Construct a 115/12 kV substation on a 5.7-acre parcel of land directly west of Terra Cotta Road, south of future Kings Highway, and north of future Hoff Avenue (Figure A.1-2).
- **Alternative 5 (Warm Springs-Pacific Clay Alternative):** Construct a new 115 kV subtransmission line along existing infrastructure on segments C-8A, C-8B, C-8E and C-9A, C-9B, C-9C, and C-9E (Figure C.2-6). Portions of the existing Valley-Elsinore-Ivyglen 115 kV line would be relocated southward and placed on existing distribution lines (segment C-8D and portions of C-8C and C-9D). Portions of the existing Valley-Elsinore-Ivyglen 115 kV line would be relocated southward and placed on new infrastructure (C-8C and C-9D). The westernmost portion of the existing Valley-Elsinore-Ivyglen 115 kV line segment, W-1A, would be relocated northeastward to accommodate the new Valley-Ivyglen 115 kV line, W-4, using line segments W-14A and W-14B and W-3B (Figures C.2-7 and C.2-8).

Figure E-1 shows the Project and Alternatives 3 and 5 in their entirety. Alternative 5 is the Environmentally Superior Alternative and is identified on this figure.

E.1 Comparison Methodology

CEQA does not provide specific direction regarding the methodology of alternatives comparison. Each project must be evaluated for the issues and impacts that are most important; this will vary depending on the project type and the environmental setting. Issue areas that are generally given more weight in comparing alternatives are those with long-term impacts (e.g., visual impacts and permanent loss of habitat or loss of use of recreational facilities). Impacts associated with construction (i.e., temporary or short-term) or those that can be easily mitigated to less than significant levels are considered to be less important.

If the environmentally superior alternative is the No Project Alternative, CEQA requires identification of an environmentally superior alternative among the other alternatives [CEQA Guidelines Section 15126.6(e)(2)].

The following methodology was used to compare alternatives in this EIR:

- **Step 1: Identification of Alternatives.** A screening process was used to identify a number of alternatives to the Project. That screening process identified an alternative corridor for the subtransmission line north of the Project, an alternative Fogarty Substation site, and an alternative central subtransmission line route. A No Project Alternative was also identified. No other feasible alternatives meeting most of the project objectives were identified that would lessen or alleviate the significant and unavoidable (Class I) impacts to air quality, land use, mineral resources, and visual resources.
- **Step 2: Determination of Environmental Impacts.** The environmental impacts of construction and operation of the Project were identified in the Environmental Analysis Sections D.2 through D.15. Chapter C summarizes the significant and unavoidable (Class I) impacts that could occur with the Project.
- **Step 3: Comparison of Proposed Project with Alternatives.** The environmental impacts of the Project were compared to the environmental impacts of each alternative to determine the environmentally superior alternative. The environmentally superior alternative was then compared to the No Project Alternative.

Although this comparison focuses on the most important issue areas (e.g., air quality, land use, mineral resources, and visual resources), determining an environmentally superior alternative is difficult because of the many factors that must be balanced. In order to identify the environmentally superior alternative, the most important impacts from each issue area were identified and compared in Table E.2-1. Although this EIR identifies an environmentally superior alternative, it is possible that the ultimate decision-makers could balance the importance of each impact area differently and reach a different conclusion. The following comparison highlights situations where an alternative would create impacts in an issue area as an unintended consequence of avoiding impacts to another area.

E.2 Analysis of Alternatives

The comparison begins with a summary of the significant impacts that cannot be mitigated. Highlighting these areas of significant impacts identifies which alternatives would be capable of eliminating significant adverse environmental effects of the Project. This simplifies identification of the environmentally superior alternatives while considering all issue areas equally. Table E.2-1 shows a summary of significant and unavoidable (Class I) impacts for the Project and alternatives considered in this EIR.

The following sections discuss the advantages and disadvantages of each alternative and provide a determination about whether the Project or alternative is considered to be environmentally superior with regard to each issue area. In each of the following sections, an alternative shown as “preferred” may still have environmental effects but, compared to the other alternatives, would have the least environmental impact.

Insert 1 of 2

Figure E-1 Proposed Route and Alternatives 3 and 5

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VIEW FIGURE**

Insert 2 of 2

Figure E-1 Proposed Route and Alternatives 3 and 5

Table E.2-1 Comparison of Alternatives Selected for Consideration to the Proposed Project

Environmental Issue Area	Alt. 1: No Project	Alt. 2: Construct the subtransmission line along the Valley-Serrano 500 kV ROW	Alt. 3: Construct the central portion of the subtransmission line along segments C-2, C-4, and C-6	Alt. 4: Construct the Fogarty Substation west of Terra Cotta Rd	Alt. 5: Construct the subtransmission line along segments C-8, C-9, W-3, W-13, and W-14
Air Quality	-1a	0	0	0	0
Land Use	-1a	+1	-1b	0	0
Mineral Resource	-1a	-1a	0	0	-1a
Visual Resources	-1a	0	-1b	+1	0

Notes:

^a Impacts reduced from significant and unavoidable (Class I) to less than significant (Class II).

^b Impacts reduced compared with the Project but remain significant and unavoidable (Class I).

Alternatives eliminated from further consideration are not included.

Key:

-1 = Impact considered less when compared with the Project.

0 = Impact considered equal to the Project.

+1 = Impact considered greater when compared with the Project.

E.2.1 Alternative 1: No Project

Under Alternative 1, the Project would not be constructed and existing conditions in the Project area would remain unchanged. Significant air quality, land use, mineral resource, and visual resource impacts from the Project would be avoided. However, Alternative 1 would not achieve Project objectives, such as providing safe and reliable service to the customers in the Fogarty and Valley-Ivyglen Electrical Needs Areas and complying with voltage levels mandated by the California Public Utilities Commission (CPUC).

Air Quality

Alternative 1 would not generate any additional emissions of NO_x, PM₁₀, or greenhouse gases. As a result, impacts on air quality would be less than from the Project.

Land Use

Alternative 1 would not transform any areas that would be visible from Eligible Scenic Highways SR-74 and I-15 and would therefore pose no changes in existing land use in the project area. As a result, impacts to land use would be less than from the Project.

Mineral Resources

Alternative 1 would not result in the loss of availability of a known mineral resource that would be of value to the region. Specifically, the clay production from the Pacific Clay mining facility would not be impacted by Alternative 1. The region's mineral resource recovery sites would not be affected. As a result, impacts to mineral resources would be less than from the Project.

Visual Resources

Alternative 1 would not introduce new structures into the viewshed along Eligible Scenic Highways I-15 and SR-74 and would therefore pose no changes in existing conditions with respect to visual resources. As a result, impacts to visual resources would be less than from the Project.

Conclusion and Relationship to Project Objectives

Alternative 1 would reduce all significant and unavoidable (Class I) impacts associated with the Project. However, this alternative would not achieve any of the project objectives.

E.2.2 Alternative 2: Construct the subtransmission line along the existing Valley-Serrano 500 kV ROW

Under Alternative 2, a new 115 kV subtransmission line would be constructed that traverses between the Valley 500/115 kV and Ivyglen 115/12 kV Substations along the existing Valley-Serrano 500 kV ROW to an area north of the Ivyglen Substation to eventually be connected to the Ivyglen Substation by one of various routes. This corridor would begin at the Valley Substation and run west toward Eligible Scenic Highway SR-74 (Figure C.2-1, Middle Corridor). The corridor would then proceed west from SR-74 along the existing Valley-Serrano 500 kV ROW to an area north of the Ivyglen Substation. From this 500 kV ROW, several alternative routes were considered to connect the proposed line to the Ivyglen Substation.

A network of new access roads would be needed to construct Alternative 2 through mountainous terrain along the existing 500 kV ROW as this ROW is not regularly maintained. Road construction would require extensive earthmoving activities, including rock blasting, grading on steep slopes, and filling of natural drainages. These construction activities would present potential adverse environmental impacts to biological resources, air quality, water quality, erosion, and noise. Due to its geographical remoteness, Alternative 2 would not serve the project objective of being able to be utilized for connections to potential future electrical facilities in the Valley South System; however, it would meet the project objective of using the Applicant's existing property to connect the Applicant's Valley 500/115 kV and Ivyglen 115/12 kV Substations.

Air Quality

Construction of the project along Alternative 2 would have virtually identical air quality impacts as the Project. The alternative corridor would require similar construction equipment and protocol with the exception of sections that may require varying amounts of road grading. This would not significantly change the daily worst-case emissions factors.

Land Use

Alternative 2 would have fewer impacts to land use than the Project as the subtransmission line would traverse through remote areas away from the Eligible Scenic Highways SR-74 and I-15; however, impacts would remain significant and unavoidable (Class I). Despite following along an existing ROW, Alternative 2 would pass through areas with a generalized land use designation of Open Space Conservation. The construction of access roads would have a significant and unavoidable (Class I) impact on these land use areas.

Mineral Resources

Alternative 2 would not result in the loss of availability of a known mineral resource that would be of value to the region. Specifically, the clay production from the Pacific Clay mining facility would not be

impacted by Alternative 1. The region's mineral resource recovery sites would not be affected. As a result, impacts to mineral resources would be less than from the Project.

Visual Resources

Alternative 2 would have fewer impacts to visual resources than the Project as the subtransmission line would traverse through remote areas away from the Eligible Scenic Highways SR-74 and I-15; however, impacts would remain significant and unavoidable (Class I). Multiple new access roads traversing across the steep hillsides would contrast dramatically with the existing relatively undisturbed steep terrain. In addition, modifications to the existing 500 kV subtransmission line would potentially worsen the viewshed resulting in significant and unavoidable (Class I) impacts to visual resources.

Conclusion and Relationship to Project Objectives

This alternative would not reduce any significant and unavoidable (Class I) impacts associated with the project to less than significant levels. Moreover, this alternative would not meet the project objectives, including:

- Serve projected electrical demand requirements in the Electrical Needs Area beginning in 2009
- Increase system reliability by locating a second 115 kV subtransmission line within the Electrical Needs Area
- Improve operational and maintenance flexibility on subtransmission lines without interruption of service
- Maintain system reliability within the Electrical Needs Area
- Improve operational flexibility by providing the ability to transfer load between distribution lines and substations within the Electrical Needs Area

E.2.3 Alternative 3: Construct the central portion of the subtransmission line along segments C-2, C-4, and C-6

Alternative 3 would connect Segments C-2, C-4, and C-6 to segment E-1 in the east and W-1 in the west. Combined, these segments would make up a complete route between the Applicant's Valley 500/115 kV and Ivyglen 115/12 kV Substations and still maintain a route that would serve the Valley-Ivyglen and Fogarty Electrical Needs Areas. Alternative 3 would have comparable environmental impacts to the region, however, would present more access and maintenance challenges for the Applicant.

The exact path of Alternative 3 would start at the end of segment E-1 and proceed southwest along the existing 33 kV and 12 kV lines that are located northwest of Eligible Scenic Highway SR-74 for approximately 5.8 miles, turning west until reaching El Toro Road. Alternative 3 would then follow the same route as the Project along segments C-4 and C-6 along El Toro Road, across Eligible Scenic Highway I-15, and along Nichols Road to connect with segment W-1. As discussed below, Alternative 3 would have similar impacts to air quality as the Project; however, as Segment C-2 does not travel as closely to Eligible Scenic Highway SR-74, significant impacts to land use and visual resources would be reduced when compared with the Project but remain significant and unavoidable (Class I).

Air Quality

Construction of Alternative 3 would have virtually identical air quality impacts as the Project. Construction of Segment C-2 would require the same construction equipment and protocol with the

exception of individual areas that may require varying amounts of road grading. This would not change the daily worst-case emissions factors.

Land Use

Construction of Alternative 3 would have less impact to land use in the project area than the Project. Segment C-2 would be located slightly north of the proposed subtransmission line route and travel through predominantly rural county lands. This segment has fewer visual impacts as it is located farther from Eligible Scenic Highway SR-74. A portion of segment C-2 would parallel SR-74 and then be combined with an existing distribution line. Alternative 3 would decrease vividness and increase overall unity of the area; however, it would still have significant and unavoidable (Class I) impacts to land use.

Mineral Resources

Impacts to mineral resources would be the same as those from the Project because Alternative 3 would follow the proposed route through the Pacific Clay mining facility. As a result, impacts to mineral resources would be the same as those from the Project (Class I).

Visual Resources

Under Alternative 3, visual impacts would be reduced from those of the Project. Segment C-2 would be located slightly north of the proposed subtransmission line route, travel through predominantly rural county lands, and be located farther from Eligible Scenic Highway SR-74. Alternative 3 would decrease vividness and increase overall unity of the area; however, it would still have significant and unavoidable (Class I) impacts to visual resources.

Other Environmental Topics

Although not a CEQA consideration, nuisances resulting from construction of the Project may also be of concern with regard to Alternative 3.

Conclusion and Relationship to Project Objectives

Alternative 3 would lessen significant and unavoidable (Class I) impacts to land use and visual resources associated with the Project; however, these impacts would remain significant and unavoidable (Class I). Impacts to mineral resources would be the same as those from the Project (Class I). Alternative 3 would, however, meet all of the Project's objectives.

E.2.4 Alternative 4: Construct the Fogarty Substation west of Terra Cotta Rd

Alternative 4 occupies a 5.7-acre site located directly west of Terra Cotta Road on the side of the street opposite from the proposed Fogarty Substation Site (Figure A.1-2). Site Alternative 4 is roughly rectangular in shape and the narrow end of the parcel that fronts along Terra Cotta Road contains terrain that slopes gently toward the street at a gradient of approximately 6.6%.

The northeastern corner area of the Alternative 4 site contains the temporary Dryden Substation and a gravel-surfaced parking area buffer that abuts southern and western sides of the substation. Terra Cotta Road south of the substation and graveled parking area formerly contained a single family residence of which only concrete foundation remnants and front-door stairs remain. Access to site Alternative 4 is the same as the Project.

Air Quality

As Alternative 4 would construct a substation identical to, and in a location immediately west of the project site, its impacts upon air quality would be similar in all respects. Alternative 4 would result in similar impacts to air quality that would be significant and unavoidable (Class I).

Land Use

Alternative 4 would consist of a development parcel of essentially the same size and configuration fronting the western side of Terra Cotta Road immediately opposite the proposed project site. The R-1 zoning of Alternative 4, its location with respect to future Specific Plan J for Country Club Heights, and the similarity of the existing adjacent and proximal land uses to those of the Project indicate that the potential land use impacts with Alternative 4 would be nearly identical to those of the Project. The primary difference between the two sites is that Alternative 4 is located in terrain that would have a greater range in local relief requiring the creation of cut slopes during grading to provide a level substation site. Impacts to land use and planning are expected to have the same significant and unavoidable (Class I) impacts as the Project.

Mineral Resources

Impacts to mineral resources would be the same as those from the Project because Alternative 4 pertains only to the Fogarty Substation location and would follow the proposed subtransmission route. As a result, impacts to mineral resources would be the same as those from the Project (Class I).

Visual Resources

Like the Project, the majority of the Alternative 4 site is vacant and is situated in a rural area of the northwestern part of the City of Lake Elsinore that contains dispersed single family residences and associated unoccupied non-residential structures. However, the Alternative 4 site is visually distinguishable adjacent to Terra Cotta Road by the Dryden Substation and the remaining ornamental landscaping shrubs and trees that surrounded a former single family residential structure and outbuilding. Where the site's surfaces transition to hillside slopes to the west they are characterized by both disturbed and undisturbed stands of coastal sage scrub. The site's highest elevations are higher than the Project and reach 1,480 feet near its southwest corner, and locally adjacent slopes approach gradients of 40%.

As with the Project, Alternative 4 is located approximately one mile southwest of the Nichols Road on- and off-ramps from an overpass on Eligible Scenic Highway I-15 and would violate regional regulations protecting scenic vistas within view of an Eligible Scenic Highway. In addition, Alternative 4 would allow brief foreground views of the facility from distances as close as 25 feet to the future substation when bypassing it in either north or south directions on Terra Cotta Road. The completion of the site would replace the temporary substation with a larger one that would be surrounded by an 8 foot high masonry wall and perimeter tree and shrub landscaping planted within the setback strip from Terra Cotta Road.

Like the Project, the location of a Alternative 4 would have a substantial adverse effect on scenic vistas, would substantially damage a scenic resource, and would substantially degrade the existing visual character or quality of the site or its surroundings. As a result, Alternative 4 would still result in significant and unavoidable (Class I) impacts to visual resources.

Conclusion and Relationship to Project Objectives

This alternative would not reduce any significant and unavoidable (Class I) impacts associated with the Project to less than significant levels. Alternative 4 would, however, meet all of the Project's objectives.

E.2.5 Alternative 5: Construct the subtransmission line along segments C-8, C-9, W-3, W-13 and W-14 (Warm Springs-Pacific Clay Alternative)

Alternative 5 consists of two geographically separated portions of the subtransmission route—the Warm Springs and Pacific Clay portions. The Warm Springs portion of Alternative 5 would connect Segments C-1 in the Central Region to segment W-1A in the Western Region. This comprises segments C-8A, C-8B, C-8C, C-8D, C-8E and C-9A, C-9B, C-9C, C-9D, C-9E (Figure C.2-6). The Pacific Clay portion of Alternative 5 would connect W-1A to W-4 in the Western Region and comprises segments W-13A, W-13B, W-13C, W-13D, W-14A, W-14B, and W-3B (Figure C.2-7). Combined, these segments make up a complete route between the Applicant's Valley 500/115 kV and Ivyglen 115/12 kV Substations and still maintain a route that would serve the Valley-Ivyglen and Fogarty Electrical Needs Areas. Alternative 5 would have comparable environmental impacts to the region, however, additional segments would cross over or extend along Highway I-15 and SR-74, both of which are Eligible Scenic Highways, although they are not officially designated at this time. Class I Land Use and Visual impacts would remain with Alternative 5, however Class I impacts to mineral resources would be avoided.

The Warm Springs portion of Alternative 5 would continue in a southwest direction from C-1 and cross Highway I-15 where it would proceed northwest to W-1A. The following text describes the individual segments that comprise the Warm Springs portion of Alternative 5.

Segment C-8A extends southwest underground along SR-74 from Conard Avenue and turns northeast and traverses along Dexter Avenue. This segment crosses I-15 overhead and continues along Riverside Drive to Collier Avenue. Segment C-8B extends northwest along Collier Avenue on the existing Valley-Ivyglen 115kv line for 1.2 miles and then turns southwest to Baker Street. The 1.2-mile segment along Collier Avenue would be rebuilt on new LDS carrying the new Valley-Ivyglen circuit. C-8C and C-8D segments require the relocation of the existing Valley-Elsinore-Ivyglen line from Collier Avenue to Baker Street. The C-8D segment proceeds southwest on Riverside Drive from Collier Avenue then turns northwest onto Baker Street. Segment C-8C proceeds northwest along Baker Street for approximately 1.2 miles, until intersecting the existing Valley-Elsinore-Ivyglen line near Nichols Road. Segment C-8E proceeds underground along SR-74 from Conard Avenue to Collier Avenue. The underground segment then turns northeast and follows Collier Avenue, parallel to the existing Valley-Elsinore-Ivyglen 115 kV line, extending to Riverside Drive. It then rises up to overhead and connects to segment C-8B.

Segment C-9A proceeds southeast along Conard Avenue, from SR-74 to 3rd Street, then turns southwest and extends along 3rd Street to Cambern Avenue. Segment C-9B proceeds along SR-74 from Conard to Cambern Avenue, then turns at Cambern Avenue and extends to 3rd Street. Segment C-9C proceeds along 3rd Street, from Cambern Avenue, crosses over I-15 and extends to Collier Street. Segment C-9D requires the relocation of the existing Valley-Elsinore-Ivyglen line from Collier Avenue to Pasadena Street. This segment would be built along existing lines which proceed along 3rd Street, from Collier Avenue to Pasadena Street, and then a new line would turn northwest, extending along Pasadena Street to Riverside Drive. Segment C-9E proceeds along Collier Avenue, replacing the existing Valley-Elsinore-Ivyglen 115 kV line from 3rd Street to the intersection of Collier Avenue and Riverside Drive.

The Pacific Clay portion of Alternative 5, would utilize the Castle and Cooke proposed trail system and utility corridor and replace the westernmost portion of the proposed segment W-1. This portion of W-1 is redesignated as W-1B. The new alternative route segment W-14 (sub-segments A and B) would replace segment W-1B. The eastern portion of W-1 (now known as W-1A) would remain as previously defined in the proposed project. As part of this alternative, a portion of the existing Valley-Elsinore-Ivyglen 115 kV

line (route segment W-13A) would be relocated eastward to accommodate the new Valley-Ivyglen 115 kV line (route segment W-14A) within the corridor.

A second portion of the existing Valley-Elsinore-Ivyglen 115 kV line (route segment W-13B) would be relocated northward along Lake Street into the new Castle and Cooke trail and utility corridor on the south side of I-15. A portion of alternative route segment W-14A would be co-located within this portion of the trail system and utility corridor. The Pacific Clay Portion Alternative would largely be co-located on existing distribution lines, and not through an undeveloped area. As such, fewer impacts to agricultural, biological or cultural resources; geology and soils; hazards and hazardous materials; mineral resources; population and housing; recreation; transportation and traffic; and public utilities and services would occur than with the proposed Project. Potential air quality and noise impacts would be similar to the route segment proposed in the Project. Impacts to visual resources would be greater for this alternative than for the route segment proposed in the Project as segment W-14B would extend along a longer portion of Highway I-15, an Eligible Scenic Highway. As with the proposed project, these impacts would be significant and unavoidable. It should also be noted that segments W-14A, W-14B, and W-3B would be placed in a designated floodway.

Air Quality

Construction of the project along Alternative 5 would have similar air quality impacts as the Project. This alternative corridor would require similar construction equipment and protocol. While short-term, localized construction-related air quality impacts would occur at the level of the proposed project, fewer sensitive receptors would be exposed to air-borne particulate matter as this alternative is largely routed through a rural agricultural area. This would not significantly change the daily worst-case emissions factors.

Land Use

Alternative 5 would have similar impacts to land use than the Project as the subtransmission line would traverse along a longer stretch of SR-74 and cross over Highway I-15, both of which are Eligible Scenic Highways. As with the proposed project, these land use impacts would be considered significant and unavoidable (Class I). In addition, despite following along an existing ROW, Alternative 5 would pass through areas designated as Farmland of Local Importance and segment C-8B would be placed in a designated floodway, as indicated on the City of Lake Elsinore Land Use Map. With this alternative, a larger portion of Central Region segments would be within a 100-year floodplain. These impacts, however, are considered less than significant with mitigation.

Mineral Resources

Alternative 5 would not result in the loss of availability of a known mineral resource that would be of value to the region. Specifically, the clay production from the Pacific Clay mining facility would not be impacted by Alternative 1. The region's mineral resource recovery sites would not be affected. As a result, impacts to mineral resources would be less than from the Project.

Visual Resources

Alternative 5 would have visual impacts to Eligible Scenic Highways. More specifically, segments C-8A, C-9C, and W-14-B would have significant and unavoidable impacts to visual resources as they would cross over Highway I-15 and extend along SR-74, Eligible Scenic Highways.

While visual impacts to Eligible Scenic Highways would occur with this alternative, segments C-8C and C-8D would travel through less densely populated residential areas, and as such, fewer impacts to visual resources in the localized neighborhoods would occur than with the proposed project. It should also be

noted that these routes would largely be built along existing distribution lines, with the exception of small portions of C-9D and C-8C. Similarly, W-14A and W-14B would largely be built on existing distribution lines.

Biological Resources: Warm Springs Portion of Alternative 5 (Segments C-8 and C-9)

Summary

The biological analysis has been separated due the habitat differences between the Warm Springs and Pacific Clay portions of Alternative 5.

For both the Warm Springs portion of Alternative 5 and the segments of the Project route that this alternative bypasses (C-3, C-4, and C-6), impacts to biological resources would be less than significant with implementation of mitigation measures (D.4.3.2). Based on the impact classifications described under the Significant Criteria Section (D.4.3.1), development of Alternative Route 5 would involve Class III (less than significant without mitigation measures) and potentially Class II (less than significant after mitigation measures are implemented) impacts.

Habitat

Existing habitat along the Warm Springs portion of Alternative 5 route is primarily developed-disturbed land including industrial, commercial, and residential developments with non-native vegetation such as eucalyptus and various weedy forbs. Portions of this alternative pass through non-native grassland and agricultural hayfields. Portions of Section C-8B run adjacent to and across a riparian area associated with Temescal Wash along Collier Avenue. Dominant vegetation in the riparian area includes eucalyptus (*Eucalyptus sp.*), willow (*Salix sp.*), tamarisk (*Tamarisk ramosissima*), Mexican palo verde (*Parkinsonia aculeata*), and cattail (*Typha sp.*). Along the southeastern end of Baker Street, segment C-8C runs adjacent to a small pond with open water and bordering wetland habitat and dense willow-cottonwood riparian forest. Agricultural hayfields are present along the majority of C-8C and the northwestern portion of C-8B.

Riparian Birds

Impacts to sensitive riparian birds for both the Warm Springs portion of Alternative 5 and the segments of the Project route that this alternative bypasses would likely be less than significant with implementation of mitigation measures.

The Warm Springs portion of Alternative 5 and Project route W-1B follow existing roads that run adjacent to riparian habitat along Temescal Wash. Riparian bird surveys for least bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo were conducted by AMEC where patches of suitable wooded riparian habitat occur along Temescal Wash in 2007 (AMEC 2007a). These surveys covered the areas where Temescal Wash is crossed by segments C-6 and C-8B. Surveyors did not detect any sensitive riparian bird species during surveys of these areas. Surveys were not conducted along the 0.12 mile stretch where C-8C crosses riparian forest habitat along Baker Street or where segment C-8B runs adjacent to riparian forest along Collier Avenue. Because surveys were not conducted in these areas, presence must be assumed and seasonal restrictions applied to construction activities to avoid noise and other disturbance-related impacts to potential nesting birds.

Burrowing Owls

Impacts to burrowing owls for both the Warm Springs portion of Alternative 5 and the segments of the Project route that this alternative bypasses would be less than significant. No burrowing owls, burrows, or sign (i.e. scat, feathers, burrows) were detected during general habitat assessment surveys along the

Alternative 5 route or the portion of the Project route that this alternative bypasses (AMEC 2007). Pre-construction surveys would be conducted to detect any burrowing owls that may have translocated into previously unoccupied areas. MM BIO-1b requires that pre-construction surveys be conducted for burrowing-owls using the existing CDFG protocols. If breeding burrowing owls are found during the pre-construction surveys, the burrows would be flagged and an appropriate construction buffer, as determined by a qualified wildlife biologist, would be established to avoid direct and indirect impacts to active nests. If the appropriate buffer cannot be maintained or if non-breeding burrowing owls are found during the pre-construction surveys, the CDFG will be contacted by the Applicant's biologist to determine relocation protocols and additional mitigation requirements.

Rare and Narrow Endemic Plants

Impacts to rare and narrow endemic plants for both the Warm Springs portion of Alternative 5 and the segments of the Project route that this alternative bypasses would be less than significant with pre-construction surveys and mitigation. During surveys conducted by AMEC in 2006 and 2007, no rare or narrow endemic plants were detected along these portions of the route (AMEC 2008 and 2006). The California Natural Diversity Database has mapped historic occurrences of San Jacinto Valley crowscale and Coulter's goldfields within the buffer of segment C-8B along Temescal wash and an occurrence of San Diego ambrosia along the northwest portion of Project route C-6 (record dates not provided; AMEC 2008). These three plant species are considered by the California Native Plant Society to be "Rare, Threatened, or Endangered in California and Elsewhere". No rare or narrow endemic plant surveys were conducted along C-9 route segments. These areas consist of disturbed or developed habitat and are outside of MSHCP criteria and narrow endemic plant survey areas; therefore, rare and endemic plants are unlikely to occur along these segments (AMEC 2008).

The Warm Springs portion of Alternative 5 is partially within MSHCP criteria area 1 and a narrow endemic plant survey area. It contains several MSHCP-mapped sensitive soils including willows silty clay, altamont cobbly clay, traver fine sandy loam, traver fine sand, and altamont clay (AMEC 2008). The Project route (C-3, C-4, and C-6) does not cross any mapped sensitive soils. The segments of the Project route that this alternative bypasses are outside of these MSHCP designated areas. Based on the MSHCP-mapped sensitive plant and soils areas, Alternative 5 may occupy more potential habit for rare plants than the Project route. However, the segments along Alternative 5 and the Project route (C-3, 4, and 6) have a low probability of rare plant occurrence because habitat is disturbed and/or dominated by non-native, invasive species. Despite predominantly unsuitable habitat conditions, pre-construction surveys may be warranted in certain locations such as the portion of C-8B where rare plants have previously occurred. The survey reports indicate that rare plant surveys were conducted during low rainfall years and recommend pre-construction surveys to confirm presence or absence in areas where suitable habitat is present (AMEC 2008 and 2006). Figure E.2-1 shows the MSHCP area for the Warm Springs portion of Alternative 5.

If rare or narrow endemic plants are identified during pre-construction surveys, implementation of mitigation measure MM BIO-1a would reduce or avoid impacts. At the pre-construction survey stage, project micro-siting and engineering changes would no longer likely be feasible impact avoidance measures; however, the following measures would be used to minimize the possibility of inadvertent encroachment:

- a. Flagging or otherwise marking sensitive plant species will be done by a trained local botanist. Construction crews will avoid direct or indirect impacts to these flagged areas. Construction personnel shall be instructed to avoid intrusion beyond these marked areas.
- b. Monitoring the known locations of special status plant populations that might be found prior to or during the construction period, using a trained professional botanist. Monitoring while

construction is taking place in the vicinity of the special status plant populations and for one year following construction to assess the effectiveness of protection measures.

Other Special Status Wildlife

Impacts to other special status wildlife species for the Warm Springs portion of Alternative 5 would be less than significant while impacts for the Project route (C-3, 4, and 6) would likely be less than significant with mitigation. No special status wildlife species were found during surveys along the Warm Springs portion of Alternative 5 during surveys conducted by AMEC in 2006 (AMEC 2006). According to the California Natural Diversity Database, there was a historic occurrence of the orange-throated whiptail along the buffer of C-8B (record date not provided; AMEC 2006). Orange-throated whiptails no longer would occur in this location because it is now developed as a shopping center; however, there may be the potential for occurrence in undeveloped areas adjacent to this site. The orange-throated whiptail is a California species of special concern and an MSHCP covered species. The Warm Springs portion of Alternative 5 bypasses a segment of the Project route (C-6) where the California Natural Diversity Database has a record of a Stephen's kangaroo rat occurrence. Stephen's kangaroo rats are state threatened and federally endangered. Kangaroo rat sign was found along C-6 during surveys (record date not provided; AMEC 2006).

Wetland and Riparian Habitat

Both the Warm Springs portion of Alternative 5 and the Project routes that Alternative 5 bypasses (C-3, C-4, and C-6) would have no significant impact on wetlands or riparian areas with mitigation. Both the Warm Springs portion of Alternative 5 and the Project (C-3, C-4, and C-6) would cross Temescal Wash once. Wash crossing areas could be easily spanned by the transmission line to avoid impacts related to soil disturbance. Impacts along route C-8C may be more significant where the route passes a pond along Baker Street. At this location, the route follows a dirt road that passes through wetlands associated with the pond on Baker Street and connected to Temescal Wash. Direct impacts to these wetlands would likely be unavoidable, but could potentially be reduced to a level of less than significant with implementation of mitigation measures (BIO-APMS 2, 4, and 7 and MM BIO-2).

Biological Resources: Pacific Clay Portion of Alternative 5 (Segments W-3, W-13, and W-14)

Summary

The biological analysis has been separated due the habitat differences between the Warm Springs and Pacific Clay portions of Alternative 5. For both the Pacific Clay portion of Alternative 5 and the segment of the Project route that this alternative bypasses (W-1B), impacts to biological resources would be less than significant with implementation of mitigation measures (D.4.3.2). Based on the impact classifications described under the Significant Criteria Section (D.4.3.1), development of the Pacific Clay portion of Alternative 5 would involve Class III (less than significant impact without mitigation measures) and potentially Class II (less than significant impact after mitigation measures are implemented) impacts.

Habitat

Habitat along the Pacific Clay portion of Alternative 5 is primarily non-native grassland, developed-disturbed land, and riparian forest-woodland. Non-native eucalyptus trees dominate in the riparian forest-woodland habitat. Eucalyptus occurs along the drainage running along Lake Street where it grows with an understory dominated by invasive grasses, forbs, and shrubs such as ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis*), and tree tobacco (*Nicotiana glauca*). Patches of native vegetation also occur

Insert 1 of 2

**Figure E.2-1 Riverside County Integrated Project Multiple Species Habitat
Conservation Plan (MSHCP) Area Warm Springs Portion of
Alternative 5**

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Figure E.2-1 Riverside County Integrated Project Multiple Species Habitat Conservation Plan (MSHCP) Area Warm Springs Portion of Alternative 5

along the drainage including species such as California buckwheat (*Eriogonum fasciculatum*), fiddleneck (*Amsinkia menziesii*), cattails, and willows. Where Temescal Wash crosses under Temescal Canyon Road, both the canopy and understory of this riparian area are vegetated with dense eucalyptus. Section W-3B along western Temescal Canyon Road and Hostettler Road runs along a patch of southern willow-cottonwood riparian forest associated with Temescal Wash. Section W-13C along Concordia Ranch Road and W-14B pass through non-native grassland and disturbed coastal sage scrub. Several isolated oak trees (*Quercus sp.*) occur along Temescal Canyon Road in the path of an existing transmission line that may be subject to Riverside County Native and Heritage Tree Ordinances (County of Riverside 1993). Impacts to these habitats would be similar or equivalent to those described for the Project (D.4.3.3).

Riparian Birds

Impacts to sensitive riparian birds for both the Pacific Clay portion of Alternative 5 and Project route W-1B would likely be less than significant with inclusion of pre-construction nesting surveys, where appropriate.

The Pacific Clay portion of Alternative 5 and Project route W-1B follow existing roads that run adjacent to riparian habitat along Temescal Wash. Riparian bird surveys for least bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo were conducted by AMEC where patches of suitable wooded riparian habitat occur along Temescal Wash in 2007 (AMEC 2007a). These surveys found no evidence of these species in the riparian habitat along W-14A and W-13B. A single least bell's vireo and four willow flycatchers were recorded in the riparian habitat near the Pacific Clay portion of Alternative 5 routes W-3B and W-14B and Project route W-1B; however, neither the least bell's vireo nor the willow flycatchers were recorded on subsequent visits, therefore, it is unlikely that nesting occurs in this area (AMEC 2007a). Surveyors determined that the willow flycatchers were not the endangered southwestern subspecies based on the timing of the observations (AMEC 2007a). In this area, the applicant should conduct pre-construction nesting surveys if construction will occur during the nesting season.

Burrowing Owls

Impacts to burrowing owls for both the Pacific Clay portion of Alternative 5 and Project route W-1B would likely be less than significant with pre-construction surveys and implementation of mitigation measures.

No burrowing owls or sign (i.e. scat, feather, burrows) were detected along the Pacific Clay portion of Alternative 5 routes W-14A, W-13B, W-3, W-2 encompassing W-13D or along the Project route that this alternative bypasses (W-1B) during burrowing owl surveys conducted by AMEC in 2006 and 2007 (AMEC 2007b and 2006). Surveys were not conducted along W-14B or along an approximately 1,300-foot segment at the intersection of Lake Street and the southbound I-15 exit ramp (W-14B and portions of W-14A and W-13B). W-14B is outside of the MSHCP-designated burrowing owl survey area (AMEC 2007 Figure 4); however, the un-surveyed segment at the intersection of Temescal Canyon Road and Lake Street may overlap or run adjacent to a burrowing owl survey area that is located south of I-15 and east of Lake Street. The potential for burrowing owl occurrence along these segments is low due to a lack of suitable habitat in wooded riparian areas and the close proximity to significant vehicle traffic from I-15 and Temescal Canyon Road.

Burrowing owls may be impacted by the Pacific Clay portion of Alternative 5 if they nest along these unsurveyed segments. If Alternative 5 is implemented, potential impacts to burrowing owls would be mitigated to a level of less than significant by conducting pre-construction surveys and implementing the measures described below. Pre-construction surveys would also be conducted in previously surveyed areas to detect any burrowing owls that may have translocated into previously unoccupied habitat. MM

BIO-1b requires that pre-construction surveys be conducted for burrowing-owls using the existing CDFG protocols. If breeding burrowing owls are found during the pre-construction surveys, the burrows would be flagged and an appropriate construction buffer, as determined by a qualified wildlife biologist, would be established to avoid direct and indirect impacts to active nests. If the appropriate buffer cannot be maintained or if non-breeding burrowing owls are found during the pre-construction surveys, the CDFG will be contacted by the Applicant's biologist to determine relocation protocols and additional mitigation requirements.

Rare and Narrow Endemic Plants

Impacts to rare and endemic plant species for both the Pacific Clay portion of Alternative 5 and Project route W-1B would be less than significant with pre-construction surveys and implementation of mitigation measures.

No rare or narrow endemic plant species were detected along the Pacific Clay portion of Alternative 5 routes W-14A, W-13B, W-3, W-2 encompassing W-13D or along the Project route that this alternative bypasses (W-1B) during rare plant surveys conducted by AMEC in 2006 and 2007 (AMEC 2007b and 2006). Potential habitat for rare plants associated with clay soils occurs along a portion of the Pacific Clay portion of Alternative 5 segment W-14A and along the Project route (W-1B) (AMEC 2007b and 2006). Overall, the Pacific Clay portion of Alternative 5 would result in the disturbance of less clay soil habitat than the Project route W-1B.

Surveys were not conducted along W-14B, a small (approximately 50-foot) portion of W-3B, or along an approximately 1,300-foot segment at the intersection of Lake Street and the southbound I-15 exit ramp (portions of W-14A and W-13B). These areas are within Criteria Area 1 of the MSHCP but are outside of the MSHCP-designated narrow endemic plant species survey area, with the exception of a small portion of the segment along Lake Street where it crosses Temescal Wash (AMEC 2007b and County of Riverside 2003). Surveys should be conducted for Criteria Area 1 species where suitable habitat occurs within these designated areas. These segments have a low probability of rare plant occurrence because habitat is disturbed and dominated by non-native, invasive species; however, to confirm presence or absence of rare plants, pre-construction surveys should be conducted. Additionally, the survey reports indicate that rare plant surveys were conducted during a low rainfall year and recommend pre-construction surveys to confirm presence or absence (AMEC 2008 and 2006). Figure E.2-2 shows the MSHCP area for the Pacific Clay portion of Alternative 5.

If rare or narrow endemic plants are identified during pre-construction surveys, implementation of mitigation measure MM BIO-1a would reduce or avoid impacts. At the pre-construction survey stage, project micro-siting and engineering changes would no longer likely be feasible impact avoidance measures; however, the following measures would be used to minimize the possibility of inadvertent encroachment:

- a. Flagging or otherwise marking sensitive plant species will be done by a trained local botanist. Construction crews will avoid direct or indirect impacts to these flagged areas. Construction personnel shall be instructed to avoid intrusion beyond these marked areas.
- b. Monitoring the known locations of special status plant populations that might be found prior to or during the construction period, using a trained professional botanist. Monitoring while construction is taking place in the vicinity of the special status plant populations and for one year following construction to assess the effectiveness of protection measures.

Insert 1 of 2

**Figure E.2-2 Riverside County Integrated Project Multiple Species Habitat
Conservation Plan (MSHCP) Area Pacific Clay Portion of Alternative 5**

**CLICK HERE TO
VIEW FIGURE**

Insert 2 of 2

Figure E.2-2 Riverside County Integrated Project Multiple Species Habitat Conservation Plan (MSHCP) Area Pacific Clay Portion of Alternative 5

Other Special Status Wildlife

Impacts to other special status wildlife species for the Pacific Clay portion of Alternative 5 would be less than significant, and those for Project route W-1B would be mitigated to a level of less than significant. This alternative avoids the portions of W-1B where a red-tailed hawk nest was observed in 2006, and where western spadefoot toads were identified. No other special status species were detected along the Alternative 5 routes W-14A, W-13B, W-3, W-2 encompassing W-13D or along the Project route that this alternative bypasses (W-1B) during surveys conducted by AMEC in 2006 and 2007 (AMEC 2007b and 2006).

Under MM BIO-1f, preconstruction surveys will be conducted by a certified wildlife biologist for all terrestrial special status species as defined by Table D.4-2. The locations of any sensitive species, and their habitats, will be marked and avoided during final project design and construction. A qualified wildlife biologist will be on-site to conduct on-site biological monitoring for sensitive wildlife species including, but not limited to, those found in Table D.4-2.

Wetland and Riparian Habitat

Impacts to wetland and riparian habitat for both the Pacific Clay portion of Alternative 5 and the Project route W-1B would be mitigated to a level of less than significant (BIO-APMs 2, 4, and 7 and MM BIO-2). The W-14A segment of Alternative 5 runs along a drainage adjacent to Lake Street. A delineation of this drainage was conducted in 2008 for a project proposed by Castle and Cooke. The Lake Street Delineation Report (Strozier and Radcliffe-Lane 2008) concluded that impacts to Criteria, Narrow Endemic, and/or other sensitive species potentially present along the portion of the drainage overlapping Alternative 5 route W-14A are not expected to be significant due to one more of the following factors:

- No suitable habitat exists on site for any sensitive plant or animal species occupation;
- The use of the site is limited to occasional foraging or seasonal activity and the site is not a substantial portion of any sensitive species' distributional range; and/or
- No special amphibian, mammalian, or corridors are in this area.

A 2008 spring presence/absence survey in this area concluded the drainage along Lake Street does not support any threatened or endangered species (Strozier and Radcliffe-Lane 2008). The Castle and Cooke Ridge project along the Lake Street drainage will channelize the existing ephemeral drainage and restore the stream course area with native vegetation and year-round hydrology (Strozier and Radcliffe-Lane 2008).

In addition to the un-named drainage along Lake Street, the Pacific Clay portion of Alternative 5 crosses or runs adjacent to other surface waters. Along Temescal Canyon Road, segment W-14A crosses Temescal Wash. Temescal Wash continues to run Segment W-13D crosses an ephemeral wash along Concordia Ranch Road. Temescal Wash crosses the proposed ROW again to the west where segments W-1B and W-3B meet. These wash crossing areas could easily be spanned by the transmission line to avoid impacts related to soil disturbance. In areas where soil disturbance would be necessary near surface waters, such as locations where washes run parallel and adjacent to the Project route, impacts would be mitigated to a level of less than significant with implementation of mitigation measures (BIO-APMS 2, 4, and 7 and MM BIO-2).

Other Environmental Topics

Although not a CEQA consideration, nuisances resulting from construction of the Project may also be of concern with regard to Alternative 5.

Conclusion and Relationship to Project Objectives

This alternative would not reduce any significant and unavoidable (Class I) impacts to air quality, land use, or visual resources associated with the Project to less than significant levels. However, Alternative 5 would avoid a significant and unavoidable (Class I) impact on mineral resources and meet all of the Project's objectives. Alternative 5 is the Environmentally Superior Alternative.

E.3 No Project Alternatives vs. the Environmentally Superior Alternative

An EIR must identify the environmentally superior alternative to the Project. Alternative 1, the No Project Alternative, would be environmentally superior to the Project on the basis of the minimization or avoidance of physical environmental impacts. Section 15126.6(e)(2) of the State CEQA Guidelines states that if the no project alternative is found to be environmentally superior, "the EIR shall also identify an environmentally superior alternative among the other alternatives."

In terms of effects on the environment, the environmentally superior alternative is Alternative 5 as it would avoid a significant and unavoidable (Class I) impact to mineral resources by avoiding the Pacific Clay mining facility and meet all of the Project's objectives.. However, this alternative would still result in significant and unavoidable (Class I) impacts to air quality, land use, and visual.