

B. ALTERNATIVES ANALYSIS AND CONCLUSIONS OF FINAL EIR

This section discusses 230 kV transmission line route alternatives and presents modifications to those alternatives. These discussions result from comments received on the Supplemental Draft EIR (see Appendix 3 for copies of all comment letters and Section E.2 for responses to those comments). Sections B.1 and B.2 evaluate issues related to the 230 kV transmission line alternatives and Section B.3 presents the conclusion of these analyses.

B.1 NORTHERN AND CENTRAL AREA ALTERNATIVES

The proposed project and alternatives evaluated in the Draft EIR and Supplemental Draft EIR in the Northern and Central areas of the project area are illustrated on Figure B-1. These transmission line routes include:

- **Proposed route**
- **I-880-A Alternative and Modified I-880-A Alternative** (only the I-880-A Alternative is shown on Figure B-1)
- **I-880-B Alternative and Modified I-880-B Alternative** (only the Modified I-880-B Alternative is shown on Figure B-1)
- **Underground Through Business Park Alternative**
- **Northern Underground Alternative**

The conclusion of the Supplemental Draft EIR was that either of the following two combinations would be the environmentally superior routes:

- **Modified I-880-B Alternative** (which includes the I-880-A route in the northern section)
- **I-880-A plus Underground Through Business Park**

The following sections consider two issues:

- Section B.1.1 discusses a new combination of alternatives that could further reduce biological, visual, and recreation impacts.
- Section B.1.2 presents the visual resources analysis of PG&E's proposed EMF mitigation.

B.1.1 NEW COMBINATIONS OF ALTERNATIVES IN THE NORTHERN AND CENTRAL AREAS

Based on comments received on the Supplemental Draft EIR concerning the environmentally superior routes identified in that document, a new combination of previously analyzed alternatives has been considered for the northern and central project areas as part of this Final EIR. This route is illustrated in Figure B-2 and is considered for the following reasons:

- Although the Modified I-880-B Alternative reduces bird collision, visual, and recreation impacts to less than significant levels by placing the transmission line route as far as possible to the east, near the I-880 Freeway, concerns remain about the visual impacts of this alternative (despite its impact classification as less than significant, Class III).

- Although the Underground Through Business Park Alternative could also eliminate the visual, bird collision, and recreation impacts associated with the proposed route, its first mile would pass through the salt ponds¹ and create significant impacts (Class I).

As shown in Figure B-2, it would be possible to further reduce visual impacts and eliminate the crossing of the salt ponds by combining segments of previously analyzed alternatives as follows:

- Follow the I-880-A Alternative from its northern point (at the tap to the Newark Metcalf 230 kV line) to Cushing Parkway
- Transition to underground at the northwest corner of Northport Loop West and Cushing Parkway (where two large transition structures would be required), then follow a portion of the Northern Underground Alternative route east along Cushing Parkway and south along Fremont Boulevard.
- Join the Underground Through Business Park Alternative route at the point where it crosses Fremont Boulevard, turning southeast into the 115 kV power line corridor.

This combined alternative would have a slightly higher risk of damage from potential liquefaction than would the modified I-880-B Alternative because it includes more underground segments. However, the risk would be lower than for the entire Northern Underground Alternative because there would be no undergrounding in the areas surrounding the Pacific Commons Preserve where there are areas with very high groundwater levels.

The remaining area of the Northern Underground Alternative route used in this new combined alternative exhibiting the greatest potential for lateral spreading would be where the route crosses the flood control channel along Cushing Parkway. This crossing is likely to be a bored crossing. Geotechnical investigation and the use of engineering measures identified in Mitigation Measure G-3 (e.g., the installation of piles or piers to support the weight of the underground transmission line and its concrete duct) should be sufficient to reduce the potential for liquefaction to damage the line to a less than significant level in this area (**Class II**).

This new combination of alternatives would reduce visual impacts and eliminate the installation of a new transmission line in the salt ponds, which are significant Bay margin resources due to their preservation of open space and bay margin views. In addition, it should be noted that according to newspaper reports, the salt ponds may in the future become part of the San Francisco Bay National Wildlife Refuge. Minimizing the presence of new structures in this area is therefore an important consideration (San Francisco Chronicle, 2000).

¹ The proposed project and the I-880-A Alternative would cross salt ponds on the eastern margin of the San Francisco Bay. These ponds are separated from the Bay by levees. Water flow between the ponds is managed to maximize evaporation and to allow harvesting of salt. Due to their location at the Bay margin, these ponds are considered valuable resources because they provide open space for wildlife habitat and for recreational experiences.

Figure B-1

Alternatives in Northern and Central Area (color 8.5 x 11)

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Figure B-2, New Combination of Alternatives in Northern and Central Areas

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Figure B-2, page 2 of 2

B.1.2 VISUAL RESOURCES ANALYSIS OF EMF IMPACTS

The CPUC's "no-cost and low-cost" mitigation decision (D.93-11-013) requires that PG&E Co. implement measures to reduce electric and magnetic field (EMF) impacts of electric transmission lines. PG&E Co. submitted its Interim Proposed EMF Plan describing the mitigation it would implement along the proposed project and alternative routes. For the proposed transmission line route, PG&E Co. proposes to increase the height of each tower by 20 feet (see Table C-1 in the Supplemental Draft EIR) in the areas adjacent to the business parks, since that was the land use with most potential for EMF impact. In the Supplemental Draft EIR, the additional tower height along the proposed route was determined to create a less than significant impact to visual resources.

For the I-880-A and I-880-B Alternatives, PG&E Co. stated that the height of each tower would be raised by 30 feet. As a result of the analysis of the visual impacts of this tower height increase, the Supplemental Draft EIR recommended implementation of Mitigation Measure V-4 to evaluate more specifically (on a tower by tower basis) whether the additional 30 feet would create a significant visual impact along the I-880-A and I-880-B Alternatives, and if so, to attempt to reduce the impact by moving towers or lowering the height of specific towers. In order not to defer the visual impact determination along the I-880-A and I-880-B Alternative routes, the visual resource analysis has been completed. Discussion of the findings of the tower-by-tower visual resources analysis is presented in this section.

Methodology. A field survey was conducted to evaluate the potential visual impacts of raising each of the I-880-A and I-880-B transmission line tower heights by 30 feet for EMF mitigation. Each of the towers was viewed from a variety of public viewing points including local roads, Interstate 880 (I-880), and adjacent buildings. The analysis focused on the extent to which the tower viewsheds would be increased or their presently proposed impact characteristics would be changed (including visual contrast, project dominance, and view impairment). As a result of the field study, it has been concluded that the incremental 30-foot increase in tower heights would not result in additional or substantially different visual impacts from those identified for the tower designs without EMF mitigation. The visual impact would be adverse, but less than significant (**Class III**), as determined for the I-880-A and I-880-B Alternatives in the Draft EIR and Supplemental Draft EIR.

The following paragraphs briefly describe the findings for each tower or group of towers for both the I-880-A and I-880-B Alternatives. The tower heights without EMF mitigation are identified in parentheses for each tower or group of towers; the tower height with EMF mitigation would be 30 feet taller (unless otherwise stated). Tower numbers are shown on Figure B-1.

B.1.2.1 Analysis of Towers on the I-880-A Alternative

Towers 1 and 2 (125 feet and 140 feet in height respectively) would be located immediately adjacent to the Metcalf – Newark #1 and #2 transmission lines. In the context of the numerous transmission structures present in the immediate landscape, the increased tower heights would not substantially change the visual impact of the towers as presently proposed without EMF mitigation.

Towers 3 and 4 (both 165 feet tall) are located adjacent to existing buildings, immediately to the west of I-880. Viewed from southbound I-880, the tower structures would be partially backdropped by the existing buildings. Along this stretch of I-880, southbound views are typically drawn to the east (away from the proposed structures) toward the East Bay hills. Northbound views tend to be more confined to the highway corridor and are dominated by the numerous transmission structures of the Metcalf-Newark, Tassajara-Newark, and Castro Valley-Newark transmission lines at their crossings of I-880. An additional 30 feet of structure height (an increase of approximately 18%) at these two tower locations would not substantially change the tower viewsheds or the structure contrast, project dominance, or view impairment characteristics from that of the currently proposed towers. Also, an increase in tower height would not be noticeable to the occupants of either building and would raise the conductors further above the fields of view from those buildings.

Tower 5 (155 feet tall) also would be located immediately adjacent to an existing building, directly across from the entrance to the weigh station on southbound I-880. An additional 30 feet of structure height (an increase of approximately 19%) would not incrementally change the visual impact of the tower as presently proposed for the same reasons cited for Towers 3 and 4. Furthermore, Tower 5 would be more effectively screened from I-880 views (particularly from southbound motorists) by the intervening trees located along the length of the weigh station.

Tower 6 (135 feet tall) is located in open marshland directly across from the exit of the southbound I-880 weigh station. The additional 30 feet of height (a 22% increase) would not substantially change the visual impact of Tower 6 as presently proposed for the same reasons presented for Towers 3 and 4. Tower 6 is also partially screened by the trees located adjacent to the weigh station.

Tower 7 (130 feet tall) would be located at the northeast corner of the Northport Business Park, in the rear parking lot. This location, while visible to I-880 motorists, is located out of the primary north-south fields of view of motorists on I-880. To the extent that it would be noticeable to I-880 motorists, the existing Auto Mall sign would appear more dominant due to its foreground positioning in the field of views from I-880. Tower 7 would also be partially backdropped by the adjacent buildings. Occupants of the adjacent buildings would not be afforded views of the structure due to its location in the rear parking lot. Therefore, an additional 30 feet of height (an increase of approximately 23%) would not change the visual impact of Tower 7 from that as presently proposed.

Towers 8 and 9 (both 125 feet tall) would be located in the rear (eastern) parking lot of the buildings along Northport Loop West. These tower locations would not be substantially noticeable to either pedestrians or motorists in the business park. Therefore, an additional 30 feet of height (an increase of approximately 24%) would not substantially change the tower viewsheds or the structure contrast, project dominance, or view impairment characteristics from that of the currently proposed Towers 8 and 9.

B.1.2.2 Analysis of Towers on the I-880-B Alternative

Towers 10 through 13 (140 feet, 150 feet, 135 feet and 125 feet tall respectively) would be located along Cushing Parkway in the Northport Business Park. The structures would be visible to both pedestrians and motorists on Cushing Parkway and Fremont Boulevard. The additional 30 feet of structure height (an increase of approximately 20% to 24%) would not substantially change the visual contrast, project dominance, or view impairment resulting from structure design and placement as currently proposed. Views from the existing buildings also would not be substantially changed though the conductors would be raised further out of the vertical field of view from building windows.

Tower 14 (125 feet tall) would be located at the intersection of Fremont Boulevard and Landing Parkway. The primary views of the tower are from Fremont Boulevard, Landing Parkway, and nearby commercial buildings including the 11-12 story Marriott Hotel at the northeast corner of the intersection. The additional 30 feet of structure height (an increase of approximately 24%) would not substantially change the visual contrast, project dominance, or view impairment resulting from structure design and placement as currently proposed. In particular, views from the Marriott Hotel would not be substantially changed though the conductors would be raised vertically in the vertical field of view from hotel windows.

Towers 15, 16, and 17 (120 feet, 130 feet, and 120 feet tall respectively) are located along Landing Parkway in the vicinity of existing buildings (Tower 17 is positioned just past the south turn of Landing Parkway). Views of the towers are available from I-880, which is located immediately adjacent, and to the east of Landing Parkway as well as commercial/industrial buildings and hotels/motels along Landing Parkway. When viewed from I-880, the lower portions of the towers would be backdropped by existing buildings or existing trees. Pedestrian and motorist views along Landing Parkway are dominated by the immediate foreground presence of I-880. Although views along this portion of I-880 are generally drawn to the East Bay hills to the east (away from the transmission line route), the transmission towers as presently proposed would be prominent in views from both I-880 and Landing Parkway. However, the additional 30 feet of structure height (an increase of approximately 23% to 25%) would not extend tower viewsheds to areas that would otherwise not be able to see the towers as currently proposed. Also, the increase in height would not substantially change the visual contrast, project dominance, or view impairment resulting from structure design and placement as currently proposed. From Tower 17, the transmission line would diverge away from I-880 to Lakeview Boulevard.

Towers 18 through 22 (110 feet to 125 feet in height) would be located along Lakeview Boulevard. Views of the towers would be limited primarily to pedestrians and motorists along Lakeview Boulevard. Building occupants would also have views of the towers from windows though such views are often partially screened by landscaping. Views from I-880 would be mostly screened by structures and vegetation between I-880 and Lakeview Boulevard. Tower 18 in the north and Towers 21 and 21 to the south would be briefly visible from I-880 through gaps between buildings, though at indirect angles of views. Also, views from I-880 are typically focused north-south along the immediate freeway corridor and to a lesser extent to the east toward the East Bay hills. The additional 30 feet of structure

height (an increase of approximately 24% to 27%) would not substantially change the tower viewsheds or the structure contrast, project dominance, or view impairment characteristics from that currently proposed. From Tower 22, the transmission line again converges on I-880 as it continues to parallel Lakeview Boulevard immediately adjacent to I-880.

Towers 23 through 26 (110 feet, 125 feet, 125 feet, and 145 feet tall respectively) are located along the west side of Lakeview Boulevard immediately adjacent to existing buildings in the business park. The towers are visible from Lakeview Boulevard and I-880. Views from the existing buildings are partially screened by existing vegetation. The conductors would typically be located above any direct views from the two to three story buildings. To a large degree, views from Lakeview Boulevard are dominated by the I-880 corridor, which is located immediately adjacent, and to the east of Lakeview Boulevard. From I-880, the towers as presently proposed would be co-dominant features in the I-880 corridor. The lower portion of the towers would be partially screened by intervening trees and backdropped by existing buildings. Views from I-880 are drawn primarily in the north-south directions of travel and also to the east toward the East Bay hills. Approaching the southern portion of this route segment along northbound I-880, the existing Newark-Dixon Landing and Newark-Milpitas 115 kV power line structures establish very prominent vertical visual elements as the two transmission lines span the freeway just south of Tower 26. From north to south along this route segment the towers gradually increase in height in preparation for crossing over the two existing 115 kV power lines (Tower 27 would be 190 feet tall). The additional 30-foot increase in height of these four towers (representing a 20% to 27% increase) would not substantially change the tower viewsheds or the structure contrast, project dominance, or view impairment characteristics from that currently proposed.

Towers 27 and 28 would not be subject to a height increase for EMF mitigation because these towers would be 190 feet tall even without mitigation. The height of these towers would be unusually high because they are the towers on either side of the crossing of the 115 kV power line corridor.

B.1.2.3 Conclusion

Based on the analysis presented in Sections B.1.2.1 and B.1.2.2, the additional tower height resulting from PG&E Co.'s implementation of EMF mitigation would not create a significant visual impact at any point along the I-880-A and I-880-B Alternatives.

B.2 SOUTHERN AREA ALTERNATIVES

In the Southern Area of the project (starting at proposed project Milepost 4.1, at the south end of the business park and the north end of the Fremont Airport property), the following routes were evaluated in the Draft EIR and Supplemental Draft EIR (see Figure B-3):

- **Proposed route** (overhead through the Fremont Airport property and along the eastern edge of the Water Pollution Control Plant [WPCP])

Figure B-3, Proposed and Alternative Routes in the Southern Area

color on photo base page 1 of 2

Figure B-3, page 2 of 2

- **McCarthy Boulevard Alternative Segment** (an overhead route of approximately one mile that would diverge from the proposed route at Milepost 4.7 and re-join it at MP 5.6)
- **Southern Underground Alternative** (an underground route that would follow the proposed route from MP 4.1 to MP 4.9, with overhead crossings of Coyote Creek and underground along McCarthy Boulevard in Milpitas).

The conclusion of the Supplemental Draft EIR was that the environmentally superior route in the Southern Area would be the proposed route with the McCarthy Boulevard Alternative segment. Comments received on the Supplemental Draft EIR raised several concerns regarding that conclusion, so the following three issues related to the Southern Area are evaluated in this Final:

- Section B.2.1, Overhead Variation of Southern Underground Alternative
- Section B.2.2, Potential Overhead Crossings of Coyote Creek
- Section B.2.3, Geologic Issues Related to the Southern Area.

After further analysis of the above issues, the conclusion of the Supplemental Draft EIR is reaffirmed in this Final EIR. This conclusion is described in more detail in Section B.3.

B.2.1 OVERHEAD VARIATION OF SOUTHERN UNDERGROUND ALTERNATIVE

Several comment letters submitted on the Supplemental Draft EIR requested analysis of a variation to the Southern Underground Alternative (which was evaluated in Supplemental Draft EIR Section C.7). This variation would follow a similar route as that used for the Southern Underground Alternative, but the transmission line would be overhead, not underground. This overhead variation was suggested as a means to reduce the risk associated with liquefaction and lateral spreading along the underground transmission line route. As for the Southern Underground Alternative, this variation would be located east of Coyote Creek, farther from the bird populations that occupy the WPCP ponds west of Coyote Creek and adjacent to the proposed route.

Following is a discussion of the impacts that would be associated with this overhead route variation. Note that all of the significant or potentially significant impacts addressed in the following sections have previously been identified in the Supplemental Draft EIR for the McCarthy Boulevard Alternative (Section C.6) and the Southern Underground Alternative (Section C.7). This information is consolidated here to allow evaluation of an overhead route following McCarthy Boulevard in Milpitas.

B.2.1.1 Construction Impacts (Air Quality, Noise, Traffic and Transportation)

Air Quality. Air quality impacts occur only in conjunction with construction. Draft EIR Section C.2.2.4 identifies overhead transmission line construction activities that result in air quality impacts. Impacts from dust are potentially significant (**Class II**), but can be reduced to less than significant levels with implementation of Mitigation Measures A-1 to A-3. Impacts would be comparable to those of the proposed project in this area, but there are more land uses that could be affected by dust on the east side of Coyote Creek.

Noise. As discussed in Draft EIR Section C.8.2 (noise impacts of the proposed project), the noise impacts of transmission line construction are short-term at any single location (taking several days for different construction activities) and would therefore be less than significant (**Class III**). As for the proposed project, the construction impacts associated with this Overhead Variation of the Southern Underground Alternative would be less than significant (**Class III**) and less severe than for an underground line because construction disturbance would occur only at tower locations. Towers would be spaced an average of 1,000 feet apart, and there are few sensitive noise receptors in the vicinity of the project. As stated in Supplemental Draft EIR Section C.7.4, one residence is located adjacent to the Coyote Creek levee near Crossing C (the point proposed for the Southern Underground Alternative). Mitigation Measures L-1 and L-2 (requiring notification for nearby residents and business occupants and identification of a public liaison) would help ensure that disturbance would be minimized.

Traffic and Transportation. Construction of the overhead line would occur west of McCarthy Boulevard, however one lane may be blocked for short periods of time for construction equipment. At least one southbound lane would always be open and traffic impacts would be less than significant (**Class III**).

B.2.1.2 Biological Resources

The Overhead Variation of the Southern Underground Alternative would have less potential for bird collision than the proposed route, but greater collision potential than the Southern Underground Alternative itself. Because the Overhead Variation would be sited primarily on the east side of Coyote Creek, it would not affect bird movement between Coyote Creek and the water pollution control plant (WPCP) west of the creek, both of which are high bird use areas. Bird strikes are likely to be less frequent along this route than with the proposed route because this variation would not require shorebirds and waterfowl to fly over or through the transmission lines when moving to or from the Coyote Creek riparian area west to the wetlands areas of the Bay and National Wildlife Refuge. However, given the location of the northern Coyote Creek crossing required by the Overhead Variation and the proximity of the northern portion of this alternative (the portion that would be comparable to the McCarthy Boulevard Alternative) to the waterbird mitigation ponds, the bird collision risk still exists and is considered to be potentially significant (**Class I**). Mitigation Measure B-9 (requiring conductor line marking and collision studies) is therefore recommended to be implemented for the portion of this alternative north of the Milpitas sewer facility and for both Coyote Creek crossings.

B.2.1.3 Geology and Hydrology

Geologic and hydrologic impacts of constructing an overhead line east of Coyote Creek would be essentially the same as the impacts of constructing the proposed project on the west side of the creek. These impacts are addressed in Draft EIR Sections C.5.2 (Geology) and C.6.2 (Hydrology), and were all found to be mitigable to less than significant levels (**Class II**). The high liquefaction risk in this area (addressed in Supplemental Draft EIR Section C.7.2) would not affect overhead lines as severely

compared to underground lines, and implementation of Mitigation Measure G-3 would reduce impacts overall to less than significant levels.

B.2.1.4 Land Use and Recreation

The impacts of an overhead variation to the Southern Underground Alternative would be the same as those described in Supplemental Draft EIR Sections C.6.2 (McCarthy Boulevard Alternative) and Sections C.7.4 (Southern Underground Alternative).

This route would follow the west side of McCarthy Boulevard, which currently is in agricultural land use with the exception of the Milpitas sewer lift station (a public service use). However, the land between McCarthy Boulevard and the eastern Coyote Creek levee to the west of McCarthy Boulevard will soon be developed for commercial and industrial properties (see *Ongoing and Future Development*, below). There are also two residential complexes within the agricultural property that appear to house agricultural workers.

Ongoing and Future Development in McCarthy Ranch

The McCarthy Ranch industrial park, through which this variation would pass, has been rezoned to "Industrial Park," and includes the land area located between Coyote Creek and I-880, and between Dixon Landing Road & SR 237 (exclusive of the existing McCarthy Ranch Marketplace shopping center). Based on this zoning, development will likely consist of professional office and Research & Development land uses. Current construction of the 68-acre "McCarthy Center" (immediately west of I-880 and on the opposite side of McCarthy Boulevard from the transmission line route) is for Research and Development office buildings. The total developed square footage allowed for the entire 226-acre McCarthy Ranch Industrial Park area is about 3.5 million square feet (City of Milpitas, 2001).

The only other site approval for the McCarthy Ranch area is for the "Veritas" campus (also for Research and Development), located at the southerly end of the Ranch. This development will be 990,000 sq. ft. on 65 acres, to be built in 2 phases. Grading for Phase 1 will begin very soon (early 2001). Phase 2 is anticipated to be constructed in another year (2002).

Land Use Impacts

Construction of an overhead route along the west side of McCarthy Boulevard would result in far fewer construction impacts than an underground route; however the visual impact of the line, viewed by the future occupants of the business parks and by drivers in the area, would be permanent (see Section B.2.1.6 for visual resources analysis). The towers would use lands that are zoned for commercial/industrial uses.

Although development will probably displace the few existing residents within the next couple of years, the residences are currently occupied and therefore are considered to be sensitive land uses. These residents would be affected by construction disturbances including noise, dust, and limited access during construction in or adjacent to the street. Construction disturbance associated with an overhead

line is a less than significant impact (**Class III**) that could be further reduced by implementation of Mitigation Measures L-1 and L-2, which would ensure provision of appropriate construction notice and a construction liaison.

Recreation Impacts

The Overhead Variation would have potentially significant recreation impacts due to its location just east of the Bay Trail alignment on the east levee of Coyote Creek. Construction of this overhead route along the west side of McCarthy Boulevard would also present minor temporary access restrictions and cause noise and dust disturbance to hikers on the Bay Trail. The overhead crossing of the creek would require the presence of towers on either side of the creek, adjacent to the trail, and overhead lines that may require removal of some existing riparian vegetation.

As described in the Supplemental Draft EIR, immediately west of this route, including the levee east of Coyote Creek and the creek itself, the land is designated Parks/Recreation on the Milpitas General Plan land use map and is zoned Park and Public Open Space (POS). Two General Plan policies are relevant to the portions of the alignment that cross open space within the City of Milpitas: Open Space/Conservation Policy 4.a-I-5 and 4.a-I-6. These policies encourage development of parks, paths, and trails along Coyote Creek, and an overhead transmission line would detract from the potential enjoyment of such trails. This transmission line alignment would be adjacent to a planned segment of the San Francisco Bay Trail on the east side of Coyote Creek. As stated in the Draft EIR and Supplemental Draft EIR, overhead lines along the trail would create a significant impact (**Class I**) on recreational trail users, including Bay Trail users, due to the visual intrusion of the overhead transmission lines and support towers and the resulting reduction in the quality of the trail experience. For that reason, it could be argued that the alignment would also be inconsistent with the system of trails described in Policy 4.a-I-5.

The City of Milpitas' Open Space/Conservation Policy 4.g-I-8 encourages a program (in cooperation with PG&E) to underground, relocate or screen utility lines and transmission towers within or easily visible from Scenic Routes. Interstate 880 is designated a Scenic Corridor by the City of Milpitas, and the McCarthy Boulevard Alternative segment's transmission lines and towers would be easily visible from the freeway (although it is noted that with upcoming development, these lines would be partially screened from highway view by the industrial buildings to be constructed in the McCarthy Ranch area). Therefore, as identified for the McCarthy Boulevard Alternative in the Supplemental Draft EIR, this alternative would be inconsistent with Open Space/Conservation Policy 4.g-I-8, and result in a significant, unavoidable impact (**Class I**).

For the land use and recreation issue area, the proposed route is preferred to both the Southern Underground Alternative and the Overhead Variation because the proposed route in its location west of Coyote Creek would have fewer land use and recreational impacts.

B.2.1.5 Socioeconomics and Public Services

Public services impacts of the Overhead Variation along McCarthy Boulevard would be limited to potential impacts on the Milpitas Sewage Pump Station. One or two towers would be located immediately east and adjacent to the Milpitas Sewage Pump Station. Potential disruption of the Sewer Pump Station during construction and operations would be a potentially significant impact (**Class II**). However, as addressed in the Supplemental Draft EIR (Section C.6.3), the location of the towers adjacent to this facility would be defined in coordination with the City of Milpitas Public Works Department based on Mitigation Measure S-1a, so impacts could be avoided.

Section C.10.2.4.3 of the Draft EIR addresses property values and economic impacts of the proposed transmission line, especially in the business park setting (similar to the McCarthy Ranch area). As explained in that section, the most likely causes of potential impacts on property values would be visual impacts or electric and magnetic field impacts. Since both of these impacts have been determined to be less than significant (**Class III**), property values should not be affected. Additionally, it should be reiterated that (as stated in Section C.10.2.4.3), it has been established that CEQA was not designed to protect against the possible decline in the commercial value of property adjacent to a project. For this reason, and because the environmental effects have been determined to be less than significant, the possible reduction of property values does not constitute a significant impact and no mitigation measures are recommended.

B.2.1.6 Visual Resources

The Overhead Variation of the southern route would parallel McCarthy Boulevard on the west side. As described in Section B.2.1.4, existing and proposed development will occupy both the east and west sides of McCarthy Boulevard. Views from the Bay Trail along the levee on the east side of Coyote Creek are primarily focused to the west, on the Coyote Creek riparian corridor, and to a lesser extent the East Bay hills to the east of the I-880 corridor. The views of the riparian corridor are generally unobstructed. Views to the East Bay hills are partially obstructed by existing power poles, light standards, and existing development in the I-880 corridor. New development along McCarthy Boulevard will further impair views of the hills from the Bay Trail. Also, an existing pole line (electricity distribution line) crosses the Bay Trail south of the point where this route would cross the Bay Trail and then parallels the immediate east side of the Bay Trail up to a point just south of the McCarthy Ranch Pump Station. At that location, the existing line crosses over to McCarthy Boulevard.

Given the presence of the existing pole line and the new two-story construction that has occurred (and will occur) along McCarthy Boulevard, the Overhead Variation of the southern route would result in adverse, but less than significant (**Class III**) visual impacts to the Bay Trail at the southern crossover location and north of the McCarthy Ranch Pump Station. Between those locations, visual impacts of

the overhead route on the Bay Trail would be less than significant due to the screening provided by the existing and future industrial facilities of the McCarthy Ranch Development².

As viewed from McCarthy Boulevard looking to the west, the overhead route would be partially screened by trees that have recently been planted as part of the McCarthy Boulevard landscaping. These trees would be located between the street and the transmission line corridor. The transmission line would also be viewed within the context of new commercial and office park development along the length of McCarthy Ranch Boulevard. Therefore, the visual impact to motorists and pedestrians along McCarthy Ranch Boulevard would be adverse, but less than significant (**Class III**).

As viewed from southbound I-880, the overhead route would be noticeable as a foreground visual element to motorists for only a brief period of time (approximately 20 seconds over a 0.3 mile distance) before diverging from I-880 along McCarthy Boulevard and out of I-880 southbound sight lines. At that point, the transmission line would become partially to fully screened by new development (partially completed, partially under construction at this time) along the east side of McCarthy Ranch Boulevard. From northbound I-880, the overhead line would be visible for a somewhat longer period of time, though once the route diverges from I-880 along McCarthy Boulevard, it becomes partially screened by existing and new two-story structures. Also, sight lines along I-880 are somewhat confined to the immediate I-880 corridor by existing development to the immediate east and west of I-880. The existing and new industrial and retail development along this portion of I-880 provides the visual context for new facilities. Therefore, the visual impact to motorists along I-880 would be adverse but less than significant (**Class III**).

B.2.2 POTENTIAL OVERHEAD CROSSINGS OF COYOTE CREEK

This section considers three issues:

- Section B.2.2.1: How impacts of an overhead crossing of Coyote Creek on riparian vegetation could be minimized;
- Section B.2.2.2: Analysis of the potential impacts of four different overhead crossings of Coyote Creek;
- Section B.2.2.3: Further discussion of the geologic hazards impacts in the Southern Area.

B.2.2.1 Impact of Coyote Creek Crossing on Riparian Vegetation

The Supplemental Draft EIR (Section C.7.1) stated that a 100-foot wide strip of vegetation would have to be cleared for an overhead crossing of the creek. This figure was approximate, based on information provided by PG&E given the potential size and height of the towers and conductors. Figure B-4 illustrates a more exact cross-section of the vegetation clearing requirements; the figure is a cross-section of the path across the creek looking in the direction of the path of the transmission line

² The discussion of recreation impacts in Section B.2.1.4 concludes that the overhead lines would cause a significant (Class I) impact; however, that impact is based on inconsistency of the overhead lines with General Plan policies and not strictly on a visual impact analysis, which is presented in this section.

Figure B-4, Cross-Section of Coyote Creek Crossing

b/w 8.5 x 11

Figure B-4, page 2

conductors. The clearances shown in this figure are based on regulatory requirements (CPUC's General Order 95 and California Department of Forestry requirements).

As illustrated in Figure B-4, the width of the riparian clearing would depend on (1) the height of existing vegetation and (2) the height of the lowest conductors. To a certain extent, these factors can be controlled. If a crossing is selected where existing vegetation height is low and there are no tall trees adjacent to the line on the north or south, there may be no clearing required. Also, if the towers and conductors are raised to be above the height of the tallest vegetation, clearing can also be minimized.

The level of impact would depend on the location of the creek crossing (see Section B.2.2.2 for discussion of each site) and would range from less than significant (**Class III**, if existing vegetation would not need to be removed) to potentially significant (**Class II**) if vegetation removal was required for construction or maintenance during operation. Therefore, for any overhead crossing of Coyote Creek that would be required as part of the route ultimately selected by the CPUC, Mitigation Measure B-10 is recommended.

B-10 If a transmission line route is selected that includes an overhead crossing of Coyote Creek south of Dixon Landing Road, PG&E Co. shall work with the Santa Clara Valley Water District (SCVWD) and a biologist approved by the CPUC to complete the following:

- Identify the specific crossing point and angle of crossing that would minimize impacts on riparian vegetation.
- Evaluate the potential for taller towers on either side of the Creek to allow clearance over existing vegetation.
- Develop and submit to the CPUC and SCVWD for review and approval a plan for vegetation management during project operation that minimizes removal of riparian vegetation while still complying with the safety regulations. This plan shall be in effect during the life of the project and documentation of compliance shall be submitted annually to the SCVWD.

PG&E shall submit to the CPUC documentation of completion of the first two items prior to start of construction of the line.

B.2.2.2 Evaluation of Four Coyote Creek Crossing Points

Figure B-5 illustrates the locations of four potential Coyote Creek crossings that could be used with the McCarthy Boulevard Alternative Segment or with the Southern Alternative (overhead or underground, either variation would require an overhead crossing of the creek). Crossing A is the place where the McCarthy Boulevard Alternative would cross and Crossing C is the location of the Southern Alternative crossing. Crossings B and D, which could be used in the Southern Alternative routes were identified by the Santa Clara Valley Water District as being crossover locations where riparian vegetation is minimal. These four crossings are evaluated for their potential impacts in the following discussions.

Crossing A

Biological Resources. This crossing is the one suggested for use with the McCarthy Boulevard Alternative and is the northernmost of the four crossings evaluated. As stated in Supplemental Draft EIR Section C.7.1, although relatively short in length (about 400 feet), this crossing could result in a potentially significant bird strike impact due to its close proximity to the waterbird ponds west of the Creek. This crossing is preferable to the equivalent section of the proposed overhead transmission line west of Coyote Creek because the proposed route segment (between Mileposts 4.7 and 5.6) would be located between two areas of high bird use. Crossing A would avoid crossing directly west of these areas (a crossing to the west, as in the proposed route, would be directly in the most common flight path for these birds). However, this crossing is still located near the areas of high bird use and therefore is the least preferred of the four crossings evaluated here.

Land Use and Recreation. The transmission line would cross the future Bay Trail that runs along the eastern levee of Coyote Creek. Land uses on the east side of the creek are currently agricultural in this area, with the Milpitas Sewer Lift Station located just to the north. On the west side of the creek, the only land use is the WPCP, whose sludge ponds would be bordered by the transmission line. These impacts are described in Supplemental Draft EIR Sections C.6.2 and C.7.4.

Crossing B

Biological Resources. This crossing is located at a Santa Clara Valley Water District crossover location (SCVWD, 2000), and is between the crossings suggested for the McCarthy Boulevard Alternative and the Southern Alternative. This crossing could be used to create a modified Southern Alternatives by reducing the length of the overhead line along McCarthy Boulevard. Crossing B would be a long crossing (about 700 feet) that would pass through a narrow opening in the riparian woodland. Combined with the proposed route on the west side of the creek (which would be used south of this crossing point in order to connect to the substation), this crossing would still require about 0.4 miles of overhead transmission line along the east side of the WPCP and west side of Coyote Creek. Waterfowl flying at night and avoiding the riparian canopy along the creek would be susceptible to striking the transmission lines at this crossing point. This crossing would eliminate the proposed route adjacent to high bird use areas from Mileposts 4.7 to 6.3, and is therefore preferred over the proposed route.

Land Use and Recreation. These issues would be the same as for Crossing A.

Crossing C

Biological Resources. Crossing C is the crossing location that was evaluated for both the Southern Underground Alternative in the Supplemental Draft EIR. This crossing point could also be used for the Overhead Variation of the Southern Underground Alternative. This levee-to-levee crossing is short (about 400 feet) and would pass over dense riparian woodland. However, since less dense woodland exists just to the north, implementation of Mitigation Measure B-10 (see Section B.2.2.1) could reduce the impact of this crossing. Unlike Crossings A and B, on the west side of Coyote Creek, this route

Figure B-5

Overhead Coyote Creek crossing locations

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Figure B-5, page 2 of 2

would not divide the WPCP ponds and the creek because the remaining line to the substation would begin south of the WPCP ponds (running east-west). This crossing would be preferable to Crossings A and B, as well as to the proposed route west of Coyote Creek because it would have a much shorter section of line presenting a risk for bird collision.

Land Use and Recreation. These issues would be similar to those for Crossing A.

Crossing D

Biological Resources. This southernmost crossing is within an area of likely lower bird use compared to the other crossing points. With respect to the crossing location alone, this would be the preferred location. However, as illustrated on Figure B-5, because this crossing would enter the south end of the proposed substation site rather than the north side as with the proposed route and Crossings A, B, and C, this crossing would require an overall longer transmission line on the east side of Coyote Creek. If this crossing were used with the US DataPort Substation Alternative site, the crossing point would be even further south (at least 1,000 feet south of the US DataPort Substation site) since that substation alternative site is further north than the proposed substation site.

Land Use Impacts. This crossing's southerly location would require crossing of the currently agricultural land between the proposed substation site and the western bank of Coyote Creek. This land is proposed to be developed for the US DataPort facility itself. Because this route would be as much as 0.5 miles longer than the proposed route or the other crossings addressed above, it would create additional impacts, primarily on the east side of Coyote Creek in Milpitas, to visual resources, land uses, recreational opportunities, and additional construction impacts. These impacts would be less than significant (**Class III**), but greater in magnitude compared to the crossing points further north.

Conclusion Regarding Crossing Locations

Impacts related to bird strikes would be reduced as the crossing location is moved to the south (south of the higher bird use areas of the WPCP on the west side of the creek). The potential for bird collision is considered to be significant (**Class I**) for all four crossing locations and Mitigation Measure B-9 (line marking) should be implemented if any overhead crossing of Coyote Creek is constructed.

The furthest south crossing (Crossing D) poses the lowest risk for birds, but creates other environmental impacts (e.g., a longer line in Milpitas adjacent to the future Bay Trail, and to existing and future development, impaired visibility along the Bay Trail, and greater construction impacts due to the overall longer line). Therefore, Crossing C is preferred, along with implementation of Mitigation Measures B-9 (line marking to reduce collision potential) and B-10 (to identify the areas of least riparian vegetation within this crossing zone and to minimize impacts).

B.2.2.3 Geologic Hazard Risk in the Southern Area

Comments on the Supplemental Draft EIR suggested that because pipelines have been successfully placed below and in the vicinity of Coyote Creek, an underground transmission line could be safely

installed beneath the creek. The following paragraphs address the liquefaction risk associated with construction and operation of an underground transmission line in the Coyote Creek area between Dixon Landing Road and Highway 237.

Three examples of existing Coyote Creek pipeline crossings in the area are:

- As reported in a comment letter from the Santa Clara Valley Water District, in 1993, PG&E Co. installed a natural gas pipeline beneath Coyote Creek upstream (to the south) of the Highway 237 crossing and the Northeast San Jose Transmission Reinforcement project area. It is important to note, however, that this area is situated further from the Bay and therefore has more stable soils than the area to the north where the transmission project is proposed. The geologic report for the pipeline project reports that:

Extensive lateral spreads, ground cracking, sand boils, water seeps, and similar liquefaction effects were observed north of the Milpitas-Alviso (Highway 237) bridge along Coyote Creek after the 1906 San Francisco earthquake (Lawson, 1908). However, no similar observations exist for the area south of the bridge in the vicinity of this project. Power, et al (1992), in a report prepared for the City of San Jose, contrasted borings drilled 1300 feet north of the bridge with borings drilled one mile south. Those drilled north of the bridge encountered predominantly liquefiable deposits, while those drilled south encountered predominately nonliquefiable deposits. This suggests that the boundary between extensive and minor liquefaction effects during the 1906 earthquake lay somewhere just south of the bridge, possibly near the vicinity of the project.
- PG&E Co. is currently attempting to bore beneath Coyote Creek in the area of Dixon Landing Road in order to relocate its gas pipelines for upcoming development in that area. This boring operation began in mid-2000, continued for six months, and is still not complete. Operations have been suspended during the winter due to high groundwater in the area and the contractor's inability to successfully complete the bore under those conditions. According to PG&E Co., the operation has been difficult, time-consuming, and expensive due to the presence of unconsolidated soils and the requirement to continually remove water from the bore pits, which are each 45 feet deep (Stielstra, 2001).
- The City of Milpitas successfully bored a 36-inch sewer line beneath Coyote Creek during the second half of 2000 from the City's Sewer Lift Plant to the WPCP. This was completed using a microtunneling operation (similar to a boring operation, but using a drilling fluid to carry the soils cut from beneath the creek back to the bore pit. The City installed both 48-inch and 36-inch pipes about 15 feet beneath the creek bottom. Preparation for the boring operation required extensive geotechnical testing (six bore holes were drilled to provide information on soils and the ideal crossing location) and permitting issues were time-consuming (primarily related to endangered species consultations and water disposal). However, once construction began, both bores were successfully completed in less than a month. In order to minimize the likelihood that liquefaction (during an earthquake) would pose a significant risk to the pipes, a flexible pipe was used (Kennedy-Jenks, 2001).

As illustrated in the examples above, the extent of the difficulty in constructing an underground pipeline or transmission line along Coyote Creek and crossing the creek would vary from location to location. The PG&E boring operation at Dixon Landing Road is less than one-half mile north of the City of Milpitas sewer facility. The subsurface conditions and potential risk would need to be evaluated by geotechnical borings in order to assess the site-specific risk at each possible location.

The issue of construction difficulty is separate from liquefaction risk posed during project operation: successful past installation of pipelines beneath Coyote Creek by means of horizontal borings does not mean that the underlying soils are not liquefiable. The liquefaction risk remains very high in this area, and while geotechnical measures could reduce the risk to the line during project operation, the risk is still considered to be significant (**Class I**) because of the potential for the boring to be unsuccessful due

to the presence of unconsolidated sediments. Therefore, the conclusion presented in the Supplemental Draft EIR has not been changed.

B.3 CONCLUSIONS REGARDING ENVIRONMENTALLY SUPERIOR ALTERNATIVES

In accordance with CEQA Guidelines Section 15126(f), alternatives have been considered which would feasibly attain most of the basic objectives of the proposed project while avoiding or substantially reducing the significant environmental impacts of the proposed project. Table B-1 presents the significant (Class I) impacts of the proposed project and shows how the environmentally superior alternative would eliminate most of these impacts. This table illustrates the success of the alternatives developed in the Draft EIR, Supplemental Draft EIR, and Final EIR in eliminating or reducing the most significant impacts of the proposed project. Additional discussion of these impacts for each project area is presented in the following sections.

Table B-1 Significant Impacts of the Proposed Project Eliminated by the Environmentally Superior Alternative

Significant (Class I) Impacts of the Proposed Project		How Impacts are Eliminated or Reduced by Alternatives
Issue Area	Significant Impact	
Biological Resources Potential bird collision with 230 kV transmission line at the following locations:	MP 1.7 to 2.7 (salt ponds)	Impact Eliminated: I-880-A Alternative in combination with the Northern Underground Alternative or the I-880-B Alternative avoids the salt pond crossing.
	MP 2.7 to 4.1 (adjacent to Bayside Business Park mitigation pond)	Impact Eliminated: I-880-B Alternative or Underground Through Business Park Alternative avoid this impact.
	MP 4.1 to 4.9 (Fremont Airport property)	Impact Remains: Proposed Route poses bird collision risk, but less severe than in other areas due to distance of proposed route from high bird use areas.
	MP 4.9 to 5.6 (SCVWD waterbird mitigation ponds)	Impact Reduced: McCarthy Boulevard Alternative passes east of the waterbird ponds, substantially reducing collision risk.
	MP 5.6 to 7.0 (adjacent to WPCP ponds)	Impact Remains: Proposed Route is between high bird use areas (Coyote Creek and WPCP ponds) but avoids the visual, recreation, and land use impacts of relocating line east of Coyote Creek.
Visual Resources	New structures in the bay margin and salt ponds (MP 2.2 – 2.7)	Impact Eliminated: I-880-A Alternative in combination with the Northern Underground Alternative or the I-880-B Alternative avoids the salt pond crossing.
Land Use and Recreation	Degradation of recreational experience along regional and subregional trails between MP 0.3 and 2.7	Impact Eliminated: I-880-A Alternative or Northern Underground Alternative avoid trails in this area.
	Inconsistent with Bay Plan Appearance, Design, and Scenic Views Policies 4 and 10	Impact Eliminated: I-880-A Alternative or Northern Underground Alternative eliminate policy inconsistency.
Geology and Soils	Conversion of agricultural soils to non-agricultural use	Impact Remains: Both the proposed Los Esteros Substation and the US DataPort Alternative would result in loss of agricultural soils.

This section summarizes the environmentally superior alternatives for each component of the proposed project, as follows:

- Section B.3.1: 230 kV Transmission Line Route
- Section B.3.2: Substation Site
- Section B.3.3: 115 kV Upgrade Component

B.3.1 ENVIRONMENTALLY SUPERIOR ALTERNATIVES FOR THE 230 KV TRANSMISSION LINE

The Draft EIR, Supplemental Draft EIR and Final EIR considered nine alternative routes for the 230 kV transmission line component of the project. Two of these alternatives (the Westerly Route Alternative and the Westerly Upgrade Alternative) were determined to have greater impacts than the proposed route due to their location through the open space/salt pond areas west of the business parks. Of the remaining seven alternatives, four are in the Northern and Central Areas of the project (addressed in Section B.3.1.1) and three are in the Southern Area (addressed in Section B.3.1.2).

B.3.1.1 Environmentally Superior Alternatives in the Northern and Central Area

Of the four 230 kV transmission line alternatives considered in the Northern and Central Area, three were evaluated in the Draft EIR: the I-880-A Alternative, the I-880-B Alternative, and the Underground Through Business Park Alternative. The Supplemental Draft EIR considered modifications to the I-880-A and I-880-B Alternatives as well as a new alternative, the Northern Underground Alternative. All of these alternatives were considered to evaluate different means of reducing the significant impacts of the proposed project in the Northern and Central Areas (i.e., bird collision, visual resources, recreation, and land use policy conflicts).

The conclusion of the Supplemental Draft EIR was that either of the following two combinations would be the environmentally superior routes in the Northern and Central project area:

- **Modified I-880-B Alternative** (which includes the I-880-A route in the northern section)
- **I-880-A plus Underground Through Business Park**

Table B-2 summarizes the overhead, underground, and total mileage of the Northern and Central Area Alternatives.

Based on analysis suggested in comment letters, this Final EIR determines that a different combination of previously analyzed alternatives, encompassing components of both of the routes named above, would be the environmentally superior alternative. This route, described in Section B.1.1, eliminates the salt pond crossing included in the southern end of the I-880-A Alternative where it would connect to either the Underground Through Business Park Alternative or the proposed route. It has a large portion of underground line (about 2.8 miles of the approximately 4.1 miles between its northern end, the point

Table B-2 Approximate Mileage of Northern and Central Area Alternatives

Route/Alternative		Total Miles	Miles Overhead	Miles Underground
Proposed Route (to MP 4.1 only)		4.1	4.1	0
I-880-A Alternative	Connected to proposed route or Underground Through Business Park Alternative	2.3	2.3	0
	Connected to I-880-B Alternative	1.4	1.4	0
I-880-B Alternative (including the northern portion of the I-880-A Alternative)		4.3	4.3	0
Northern Underground Alternative		2.5	0	2.5
Combination of I-880-A, Northern Underground, and Underground Through Business Park Alternatives (as illustrated in Figure B-2)		4.1	1.3	2.8

where it would connect to the Tesla-Newark transmission line, and the south end of the business park at Milepost 4.1), so construction would be much more time consuming and would result in greater short-term impacts compared to the proposed route. The alignment of this new combined route is as follows (see illustration in Figure B-6):

- Start at the I-880-A Alternative from its northern point (at the tap to the Newark Metcalf 230 kV line) to Cushing Parkway;
- Transition to underground at the northwest corner of Northport Loop West and Cushing Parkway (where two large transition structures would be required), then follow the Northern Underground Alternative route east along Cushing Parkway and south along Fremont Boulevard;
- Join the Underground Through Business Park Alternative route at the point where it crosses Fremont Boulevard, turning southeast into the 115 kV power line corridor, and follow the Underground Through Business Park Alternative through the business park area.

This combination of alternatives is the environmentally superior route through the Northern and Central Areas because it would eliminate all of the significant impacts associated with the proposed route (i.e., bird collision, visual impacts, land use, and impacts to recreational trail users along the edge of the Bay).

B.3.1.2 Environmentally Superior Alternative in the Southern Area

The three alternatives to the proposed route in the Southern Area (starting at Milepost 4.1 south of the business parks in Fremont) were developed solely to mitigate the potential bird collision impact of the proposed transmission line on the west side of Coyote Creek. The proposed route would run between two areas of high bird use: the WPCP ponds west of the Creek, and the riparian area along the Creek itself. Two alternatives to this portion of the proposed route were considered in the Supplemental Draft EIR: the McCarthy Boulevard Alternative and the Southern Underground Alternative. This Final EIR considers an additional alternative: the Overhead Variation of the Southern Underground Alternative.

For the whole Southern Area, the lengths of the overhead and underground portions of the route are shown in Table B-3.

Table B-3 Approximate Mileage of Southern Area Alternatives

Route/Alternative	Total Miles South of MP 4.1	Miles Overhead	Miles Underground
Proposed Route	3.1	3.1	0
Proposed Route with McCarthy Boulevard Alternative	3.2	3.2	0
Southern Underground Alternative	3.8	0.9	2.9
Overhead Variation of Southern Underground Alternative	3.8	3.8	0

The determination of the Final EIR for the Southern Area is the same as that presented in the Supplemental Draft EIR: the environmentally superior alternative is the McCarthy Boulevard Alternative in combination with the proposed route south of Milepost 5.6. Figure B-7 illustrates the environmentally superior transmission line route for the Southern Area. This route is selected because it provides the best compromise related to Southern Area impacts: it avoids crossing west of the very high bird use areas southwest of Dixon Landing Road, and it minimizes land use impacts on the developing area of Milpitas' McCarthy Ranch by crossing back to the west side of Coyote Creek for the southernmost 1.5 miles of the route. Rationale for selection of this route is presented in the following sections.

Proposed Route Versus the McCarthy Boulevard Alternative

Table B-4 presents a summary of impact determinations for the portion of the Southern Area that includes the McCarthy Boulevard Alternative. The McCarthy Boulevard Alternative would eliminate the overhead transmission line from the proposed route's location west of the waterbird mitigation ponds that are heavily used by birds. As illustrated in the table, the impact classifications are identical in all environmental disciplines except for Land Use and Recreation. For that issue area, the McCarthy Boulevard Alternative creates a significant impact due to a conflict of this alternative with the General Plan policies of the City of Milpitas. The reason that the McCarthy Boulevard Alternative is still preferred over the relevant segment of the proposed route is that the magnitude of the significant biological resources impact in the proposed project area is substantial. The heavily used mitigation ponds are considered to be part of a regionally important biological resource related to the San Francisco Bay National Wildlife Refuge. While the potential for bird collision is still considered to be significant for the McCarthy Boulevard Alternative, it presents a much smaller magnitude of risk compared to the proposed route segment. In comparison to the land use policy conflict in a developed (and developing area) adjacent to a major regional freeway, the value of the natural resource is recognized and guides selection of this alternative.

Table B-4 Impact Summary: Proposed Route Versus McCarthy Boulevard Alternative

Alternative/Route →	Proposed Route	McCarthy Boulevard Alternative
Environmental Issue Area		
Air Quality	Class II	Class II
Biological Resources	Class I	Class I
Cultural Resources	Class II	Class II
Geology and Soils	Class II	Class II
Hydrology	Class II	Class II
Land Use and Recreation	Class II	Class I
Noise	Class III	Class III
Public Health/Safety	Class III	Class III
Socioeconomics; Public Services	Class II	Class II
Transportation and Traffic	Class II	Class II
Visual Resources	Class III	Class III

Proposed Route Versus the Southern Underground Alternative and the Overhead Variation of Southern Underground Alternative

Section B.2 of this Final EIR evaluates the Overhead Variation of the Southern Underground Alternative, as requested in several comment letters. Analysis of this variation was requested in order to evaluate the potential for the action alternative to reduce impacts to birds using the WPCP ponds west of Coyote Creek. The Southern Underground Alternative was analyzed in the Supplemental Draft EIR (Section C.7). Table B-5 summarizes the impact levels for each issue area for the two Southern Area alternatives and the relevant portion of the proposed project.

Table B-5 Impact Summary: Complete Southern Area Alternatives

Alternative/Route →	Proposed Route	Southern Underground Alternative	Overhead Variation of Southern Underground Alternative
Environmental Issue Area			
Air Quality	Class II	Class II	Class II
Biological Resources	Class I	Class III	Class I
Cultural Resources	Class II	Class II	Class II
Geology and Soils	Class II	Class I	Class II
Hydrology	Class II	Class II	Class II
Land Use and Recreation	Class II	Class III	Class I
Noise	Class III	Class III	Class III
Public Health/Safety	Class III	Class III	Class III
Socioeconomics; Public Services	Class II	Class II	Class II
Transportation and Traffic	Class II	Class II	Class II
Visual Resources	Class III	Class III	Class III

The Supplemental Draft EIR concluded that the Southern Underground Alternative poses severe geologic hazards risk. Section B.2.2.3 of this Final EIR affirms that conclusion. The Overhead Variation of the Southern Underground Alternative would have reduced bird collision risk in comparison to the proposed project segment, but the impact would still be significant (Class I). This

alternative would also create significant (Class I) impacts in recreation and land use. The Overhead Variation would have greater impacts than the proposed project in visual resources and all construction-related impacts (e.g., air quality, transportation/traffic, noise) due to its location adjacent to the Bay Trail, two existing residential complexes, McCarthy Boulevard, and the commercial and industrial buildings in this area.

This EIR has consistently acknowledged the importance of waterbird habitat, preservation of the Bay margin, and elimination of new transmission lines in potential preservation areas. These issues have led to the development of many alternatives, and in the Northern and Central Areas, those alternatives are found to be environmentally superior to the proposed route. However, in the Southern Area, the potential bird collision impacts are outweighed by the greater magnitude of impacts in nearly every non-biological environmental discipline. As discussed in Section B.3.2.1, the impact on the highest bird use areas of the proposed route (the heavily used waterbird ponds southwest of Dixon Landing Road) would be eliminated by use of the McCarthy Boulevard Alternative, which results in less than one mile of new line in the developed areas east of the creek. Therefore, the environmentally superior alternative in the Southern Area is the McCarthy Boulevard Alternative, which connects to the proposed route at Milepost 5.6.

B.3.2 ENVIRONMENTALLY SUPERIOR SUBSTATION SITE

The Draft EIR evaluated two substation sites as alternatives to the proposed Los Esteros Substation: the Zanker Road Substation and the Northern Receiving Station Substation Alternatives. The Supplemental Draft EIR considered a third site: the US DataPort Substation Alternative. The analysis of substation impacts has not changed since the Supplemental Draft EIR. The US DataPort Alternative and the proposed Los Esteros Substation sites are considered to be comparable, and are equally environmentally superior alternatives.

B.3.3 ENVIRONMENTALLY SUPERIOR 115 kV COMPONENT OF THE PROJECT (TRIMBLE-MONTAGUE UPGRADE)

The Draft EIR evaluated two alternatives to the proposed Trimble-Montague 115 kV Upgrade: the Barber Lane Alternative and the Underground Trimble-Montague Alternative. The analysis of this component of the project has not changed since the Draft EIR. The proposed Trimble-Montague 115 kV Upgrade is environmentally superior to the two alternatives that were evaluated.

Figure B-6

Northern and Central Area Environmentally Superior Alternative

Figure B-7, Southern Area Environmentally superior alternative

B.4 REFERENCES

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