

6.0 ALTERNATIVES TO THE PROJECT

6.1 OVERVIEW

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) describe a range of reasonable alternatives to the project, or to the location of the project that could feasibly avoid or lessen any significant environmental impacts while substantially attaining the basic objectives of the project. An EIR should also evaluate the comparative merits of the alternatives. This section includes potential alternatives to the proposed project and evaluates them, as required by CEQA.

Key provisions of the CEQA Guidelines¹ pertaining to the alternatives analysis are summarized below:

- The discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.
- The No Project alternative shall be evaluated along with its impact. The no project analysis shall discuss the existing conditions at the time the Notice of Preparation is published. Additionally, the analysis shall discuss what reasonably would be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.
- The range of alternatives required in an EIR is governed by a “rule of reason;” therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.
- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
- An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.

The range of feasible alternatives is selected and discussed in a manner to foster meaningful public participation and informed decision making. Among the factors that may be taken into account when addressing the feasibility of alternatives are environmental impacts, site suitability, economic viability, availability of infrastructure, general plan consistency, regulatory limitations, jurisdictional boundaries, and whether the applicant could reasonably acquire, control, or otherwise have access to the alternative site.²

6.2 PROJECT OBJECTIVES

Project objectives for the proposed project include the following:

- Close a critical 2-mile gap between Gypsum Canyon Road and the Orange County border in the Santa Ana River (SAR) Riding and Hiking Trail for the purpose of extending and completing the Orange County portion of the SAR Parkway system and facilitating connection with planned improvements in Riverside and San Bernardino counties.

¹ California Code of Regulations, Title 14, Division 6, Chapter 3, CEQA Guidelines, §15126.6.

² *Ibid.*, §15126.6(f)(1).

- Provide staging, trailheads, crossroads/intersections, and other amenities that enhance the Orange County SAR Parkway and facilitate connection to adjacent existing and future recreational trails.
- Provide an enjoyable bikeway, riding and hiking experience.
- Enhance the SAR Parkway as a passive recreational destination.
- Minimize Green River Golf Club (GRGC) intrusion.
- Minimize Featherly Regional Park/Canyon RV Park intrusion.
- Minimize intrusion and conform to the Chino Hills State Park (CHSP) General Plan.
- Establish a maintainable bikeway and trail system.
- Maximize bikeway and trail user safety.

6.3 ALTERNATIVES CONSIDERED

An EIR must briefly describe the rationale for selection and rejection of alternatives. The lead agency may make an initial determination as to which alternatives are feasible, and therefore merit in-depth consideration, and which are infeasible. Alternatives considered include a range of potential projects to meet the project's objectives while eliminating or reducing significant environmental impacts identified in Section 5.0 of this Draft EIR.

As part of the development process for the proposed project, the County initiated a comprehensive site assessment and public outreach process for the purpose of facilitating the development and evaluation of potential alternative trail and bikeway alignments. The site assessment included an opportunities and constraints study, preliminary environmental analysis, and a review of ongoing and future projects in the vicinity of the study area. The public outreach component consisted of community workshops and meetings, stakeholder working group meetings, "roadshow" presentation meetings, and a community open house meeting. Four alternative alignment concepts were ultimately developed, with each subsequent alternative building upon and expanding what was proposed in the prior alternative. The overall consensus of the project team and from community/stakeholder input was that the best alternative was a hybrid of two of the alternative alignment concepts, which is the proposed project analyzed in this Draft EIR. It should be noted that because these initial alternative trail and bikeway alignment concepts were utilized to inform the ultimate design of the proposed project, they are not, on an individual basis, alternatives to the proposed project and therefore are not considered in this alternatives analysis. For detailed information regarding the four alternative alignment concepts, refer to Section 6.8 (Alternatives Considered and Withdrawn from Further Consideration), at the end of this section. Alternatives considered in this analysis include the following:

- Alternative 1: No Project (No Build)
- Alternative 2: South of Green River Golf Club

With the exception of the mandatory No Project (No Build) Alternative, Alternative 2, described in detail in Section 6.5.1, below, was selected due to its potential to attain basic project objectives and lessen or avoid significant environmental effects resulting from implementation of the proposed project.

6.4 ALTERNATIVE 1 – NO PROJECT (NO BUILD)

6.4.1 DESCRIPTION OF ALTERNATIVE 1

For Alternative 1, no new development would occur and the existing SAR Parkway would remain as it currently exists. The SAR Parkway would continue to provide a recreational and commuter link for walkers, joggers, runners, hikers, and bicyclists. The project area would remain as is, with a 2-mile gap of the Riding and Hiking Trail between Gypsum Canyon Road and the Orange County border.

6.4.2 IMPACTS OF ALTERNATIVE 1

6.4.2.1 Agriculture Resources

Under Alternative 1, there would be no change to existing on-site conditions related to agriculture resources. There would be no impact to the 18.75 acres of important farmland within the project area as mapped per the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) and no impact to the 4.27 acres of other active farmland (not mapped by the FMMP). Therefore, agriculture resources impacts associated with Alternative 1 would be less than the proposed project.

6.4.2.2 Air Quality

Alternative 1 would not result in any construction-related air pollutant emissions or odors, and would not result in any new sources of operational air emissions (e.g., mobile source emissions from maintenance trips) or odors. Therefore, air quality impacts associated with Alternative 1 would be less than the proposed project.

6.4.2.3 Biological Resources

Under Alternative 1, there would be no change to existing on-site conditions related to biological resources. There would be no impacts to jurisdictional waters, wetlands, and riparian areas; special-status wildlife species; vegetation communities; special-status plants; or wildlife movement corridors. Therefore, biological resources impacts associated with Alternative 1 would be less than the proposed project.

6.4.2.4 Cultural Resources

Alternative 1 would not result in any ground disturbance and therefore would not result in the disruption of any soils that could potentially contain a unique paleontological resource or site, unique geologic feature, archaeological resource, or human remains. There would be no impact related to cultural resources. Therefore, cultural resources impacts associated with Alternative 1 would be less than the proposed project.

6.4.2.5 Geology and Soils

Alternative 1 would not result in any impacts associated with geology and soils because no new development would occur. The project site would remain in its current condition and no ground disturbance would occur. Therefore, geology and soils impacts associated with Alternative 1 would be less than the proposed project.

6.4.2.6 Greenhouse Gas Emissions

Alternative 1 would not result in any construction-related greenhouse gas (GHG) emissions or new sources of operational GHG emissions (e.g., mobile source emissions from maintenance trips). Therefore, GHG emissions impacts associated with Alternative 1 would be less than the proposed project.

6.4.2.7 Hazards and Hazardous Materials

Under Alternative 1, no construction activity would occur and conditions at the project site would remain the same as existing conditions. Although the regulatory database search identified hazardous material sites within 1 mile of the project area, these identified sites have either been granted closure from regulatory agencies, are known active underground storage tanks that are not identified as leaking underground storage tanks, are hydraulically downgradient, or otherwise are listings having no indication of releasing hazardous materials. As such, there would be no significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of existing on site hazardous materials into the environment and no impacts related to areas of the site being included on a list of hazardous materials sites would occur. Therefore, hazards and hazardous materials impacts associated with Alternative 1 would be slightly less than the proposed project.

6.4.2.8 Hydrology and Water Quality

Under Alternative 1, no construction activity would occur and conditions at the project site would remain the same as existing conditions. Alternative 1 would not result in the generation of polluted storm water runoff or waste discharge, and also would not result in any change to the drainage pattern or amount of impervious surface at the project site. In addition, Alternative 1 would not place any new structures within a 100-year flood hazard area. There would be no impacts related to hydrology and water quality. Therefore, hydrology and water quality impacts associated with Alternative 1 would be less than the proposed project.

6.4.2.9 Noise and Vibration

Alternative 1 would not result in any significant adverse short- or long-term impacts related to noise and vibration because no changes in existing conditions related to the project area would occur. There would be no impacts related to noise. Therefore, noise impacts associated with Alternative 1 would be less than the proposed project.

6.4.2.10 Recreation

Under Alternative 1, no construction activity would occur and, therefore, no temporary delays/interruptions to the existing Class I Bikeway, and no temporary increase in the use of nearby parks and recreational facilities in the vicinity of the project area would occur. However, Alternative 1 would not result in any new or expanded recreation uses (e.g., Class I Bikeway, Riding and Hiking Trail). The existing park and recreational facilities (e.g., Canyon RV Park and GRGC) would remain as they currently exist. Therefore, recreation impacts associated with Alternative 1 would be less than the proposed project.

6.4.2.11 Transportation and Traffic

Under Alternative 1, no new construction- or operation-related trips would be generated beyond existing levels. As such, there would be no temporary or permanent increase in traffic. Also, Alternative 1 would not conflict with an applicable congestion management plan, nor would it conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Therefore, transportation and traffic impacts associated with Alternative 1 would be less than the proposed project.

6.4.3 SUMMARY OF ALTERNATIVE 1

Alternative 1 would not result in any significant impacts related to agriculture resources, air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazards and hazardous materials,

hydrology and water quality, noise, recreation, or transportation and traffic.

Under Alternative 1, no change from existing conditions would occur. Alternative 1 would result in less impacts than the proposed project related to agriculture resources, air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, noise, recreation, and transportation and traffic. Although no new significant impacts would occur under Alternative 1, it would not meet all of the project objectives. The 2-mile gap between Gypsum Canyon Road and the Orange County border in the SAR Riding and Hiking Trail would still remain. Also, staging, trailheads, crossroads/intersections, and other amenities that would enhance the Orange County SAR Parkway and facilitate connection to adjacent existing and future recreational trails would not be provided.

6.5 ALTERNATIVE 2 – SOUTH OF GREEN RIVER GOLF CLUB

6.5.1 DESCRIPTION OF ALTERNATIVE 2

Alternative 2 would include similar elements as the proposed project; however Alternative 2 offers an alternate alignment of Segment #1 near the proposed Bridge #2. The alternate segment would begin on the northern bank of the SAR at the proposed location of Bridge #2, would extend eastward (directly south of GRGC and parallel to the SAR) for approximately 0.66 mile, terminating in Riverside County (just east of the Orange County border) at the existing vehicular bridge that leads to the GRGC clubhouse. Figure 6-1 (Alternative 2 - South Green River Golf Club) shows the alignment of this alternative. Except for this alternate alignment of Segment #1, Alternative 2 includes the same elements as the proposed project (see Section 3.5 of this Draft EIR).

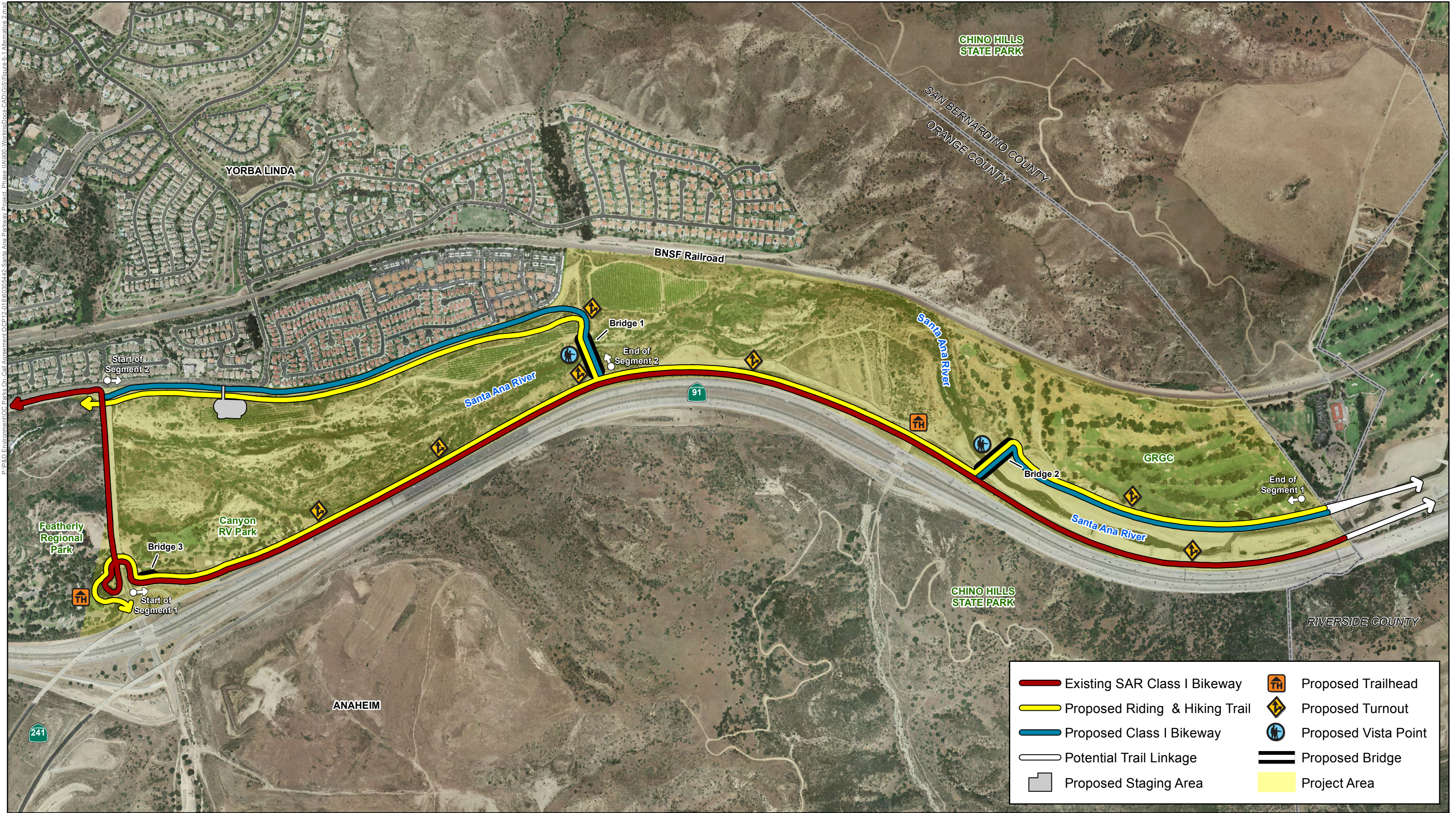
6.5.2 IMPACTS OF ALTERNATIVE 2

6.5.2.1 Agriculture Resources

Implementation of Alternative 2 would result in similar impacts related to agriculture resources as the proposed project because similar project elements would be implemented. Similar to the proposed project, Alternative 2 would result in approximately 0.22 acre of temporary impacts (i.e., disturbance associated with construction of staging/laydown, access, and work area) and 0.13 acre of permanent impacts (i.e., permanent loss associated with the installation of Bridge #1) to land designated as Prime Farmland pursuant to the FMMP. Additionally, Alternative 2 would similarly result in approximately 0.76 acre of temporary impacts and 0.57 acre of permanent impacts to other active farmland (not mapped by the FMMP), associated with the permanent staging area component. Like the proposed project, it is anticipated the farmland that is temporarily affected or removed during construction would continue to be available for agricultural use following construction of Alternative 2. Nevertheless, similar to the proposed project, implementation of Alternative 2 would result in the permanent conversion of 0.70 acre of farmland (0.13 acre of land designated as Prime Farmland and 0.57 acre of other active farmland) to non-agricultural use. The California LESA Model prepared for the proposed project found these impacts to farmland to be less than significant. Therefore, agriculture resources impacts associated with Alternative 2 would be similar to the proposed project.

6.5.2.2 Air Quality

Similar to the proposed project, construction and operation of Alternative 2 would not result in any significant impacts related to odors or conflicts with an applicable air quality plan. However, similar to the proposed project, construction of Alternative 2 would result in the generation of nitrogen oxide (NO_x) emissions that would exceed the South Coast Air Quality Management District (SCAQMD)'s mass emission thresholds, and



Eagle Aerial Imaging (2014), OC Public Works (2014), and AECOM (2014).



Note: Project Elements Not Drawn to Scale

Figure 6-1
Alternative 2 - South Green River Golf Club

the generation of respirable particulate matter with a diameter of 10 micrometers or less (PM₁₀) and fine particulate matter with a diameter of 2.5 micrometers or less (PM_{2.5}) that would exceed the SCAQMD's localized significance thresholds (LSTs). Similar to the proposed project, Alternative 2 would reduce significant impacts of NO_x to a less than significant level with implementation of Mitigation Measure AQ-1. In addition, compliance with SCAQMD Rule 403 for fugitive dust would reduce the localized PM₁₀ and PM_{2.5} impacts. However, compliance with Rule 403 will not ensure that localized PM₁₀ and PM_{2.5} impacts would be reduced to a less than significant level. There are no additional feasible mitigation measures to reduce localized PM₁₀ and PM_{2.5} emissions. Therefore, similar to the proposed project, construction of Alternative 1 would violate an ambient air quality standard or contribute substantially to an existing violation, result in a cumulatively considerable net increase of criteria pollutants, and expose sensitive receptors to substantial construction pollutant concentrations. These impacts would be significant and unavoidable. Therefore, air quality impacts associated with Alternative 2 would be similar to the proposed project.

6.5.2.3 Biological Resources

Implementation of Alternative 2 would result in impacts related to biological resources similar to the proposed project because similar project elements would be implemented. Similar to the proposed project, Alternative 2 would impact a variety of native and nonnative upland plant communities, native riparian and wetland plant communities, several special-status species, and wildlife movement corridors. Potential impacts to wetlands and riparian area under Alternative 2 would also be similar to the proposed project. Alternative 2 would impact one less drainage (jurisdictional water) than the proposed project since the alternate alignment of Segment #1 would extend east, not north, through the GRGC. Biological resources impacts under Alternative 2 would be less than significant after mitigation, similar to the proposed project. Therefore, biological resources impacts associated with Alternative 2 would be slightly less than the proposed project.

6.5.2.4 Cultural Resources

Similar to the proposed project, Alternative 2 would include excavation/filling activities within the existing project area that could result in the disruption of soils that could contain a unique paleontological resource or site, unique geologic feature, archaeological resource, or human remains. As such, cultural resources mitigation measures would be implemented for Alternative 2 that are similar to the measures for the proposed project. Cultural resources impacts associated with Alternative 2 would be less than significant after mitigation, similar to the proposed project. Therefore, cultural resources impacts associated with Alternative 2 would be similar to the proposed project.

6.5.2.5 Geology and Soils

Alternative 2 would result in similar impacts related to geology and soils (i.e., potential impacts related to seismic shaking, seismic-related ground failure, seismically-induced settlement, liquefaction, lateral spreading, and expansive soils) as the proposed project because similar project elements would be implemented. As such, a geology and soils mitigation measure would be implemented for Alternative 2 that would be similar to the measure for the proposed project. Geology and soils impacts under Alternative 2 would be less than significant after mitigation, similar to the proposed project. Therefore, geology and soils impacts associated with Alternative 2 would be similar to the proposed project.

6.5.2.6 Greenhouse Gas Emissions

Similar to the proposed project, Alternative 2 would result in the generation of GHG emissions. These emissions would primarily be associated with construction activities (e.g., heavy-duty off-road construction equipment, material transport, and worker commutes) as operation of the proposed project is not anticipated

to generate substantial new vehicle trips and would generate only negligible additional activities related to maintenance or operations. Similar to the proposed project, impacts related to GHG emissions (i.e., the total construction period emissions amortized over the 30-year life of the project) would also be substantially below the SCAQMD's 3,000 metric tons of carbon dioxide equivalent draft significance threshold. Therefore, GHG impacts associated with Alternative 2 would be similar to the proposed project.

6.5.2.7 Hazards and Hazardous Materials

Alternative 2 would result in impacts related to hazards and hazardous materials similar to the proposed project. Similar to the proposed project, Alternative 2 would be subject to compliance with a number of spill prevention, containment, and cleanup measures identified within permits issued by the Regional Water Quality Control Board (RWQCB). All construction activity that requires a grading permit must be undertaken in accordance with any conditions and requirements (including Best Management Practices or BMPs) established by a NPDES permit. BMPs specified in the National Pollutant Discharge Elimination System (NPDES) permit include storm water prevention measures included in a Storm Water Pollution Prevention Plan (SWPPP), and protocols for the procedures for the storage, usage, and disposal of hazardous materials. Adherence to the BMPs would be required for all phases of construction. Compliance with the SWPPP and the implementation of standard BMPs during construction would reduce the potential for hazardous materials spills. Alternative 2 would thus not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Like the proposed project, operation of Alternative 2 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of existing on-site hazardous materials into the environment. In addition, although the regulatory database search identified hazardous material sites within 1 mile of the project area, these identified sites have either been granted closure from regulatory agencies, are known active underground storage tanks that are not identified as leaking underground storage tanks, are hydraulically downgradient, or otherwise are listings having no indication of releasing hazardous materials. Furthermore, no disturbance of these sites would occur as a result of implementation of Alternative 2, similar to the proposed project. Hazards and hazardous materials impacts under Alternative 2 would be less than significant, similar to the proposed project. Therefore, hazards and hazardous materials impacts associated with Alternative 2 would be similar to the proposed project.

6.5.2.8 Hydrology and Water Quality

Implementation of Alternative 2 would result in impacts related to hydrology and water quality similar to the proposed project because similar project elements would be implemented. As with the proposed project, under Alternative 2, grading activities could potentially result in sediment runoff into river and ultimately, downstream receiving waters during runoff events, as well as sediment tracking from construction truck trips leaving the project. Additionally, construction of the trail and bridge amenities would involve use of concrete, asphalt, and other building materials that could contaminate stormwater if not properly managed. Alternative 2 would also disturb more than 1 acre of soil. Therefore, similar to the proposed project, adherence to the provisions of the Orange County Municipal Separate Storm Sewer System (MS4) Permit, the De Minimis Surface Water Discharge Permit, and the SWPPP as part of compliance with General Permit 2009-0009-DWQ would reduce impacts related to water quality to a level that is less than significant. However, similar to the proposed project, implementation of Alternative 2 would extend the Riding and Hiking Trail through the project area, which could introduce additional horse manure into the project area. Additional horse manure would result in an increase in nitrates and bacteria which could potentially result in negative impacts to the quality of surface water runoff. Therefore, a potentially significant impact related to water quality could occur during operation of Alternative 2. Under Alternative 2, the same mitigation measure related to the introduction of additional horse manure into the project area would be implemented as for the proposed project, and similarly, impacts would be reduced to below a level of significance.

Similar to the proposed project, Alternative 2 construction would adhere to the NPDES-related provisions to ensure impacts associated with alteration of the existing drainage pattern during construction would be less than significant. Similar to the proposed project, all hydraulic impacts from the placement of bridges associated with Alternative 2 would generally be a small reduction in velocity and a corresponding small increase in flow depth within the area of impact. Therefore, it would be considered less than significant. Additionally, adherence to the provisions of the Orange County MS4 Permit and the Water Quality Management Plan (WQMP) and BMPs would reduce Alternative 2 operation related impacts associated with erosion and siltation to a level that would be less than significant, similar to the proposed project.

Similar to the proposed project, the temporary nature of construction activities and adherence to NPDES-related provisions would ensure construction-related activities within a 100-year flood hazard area would be less than significant. Implementation of Alternative 2 would introduce new impervious surfaces to the project area, which would result in minor increase in stormwater runoff, similar to the proposed project. This minor increase in storm water runoff would be a relatively small increase compared to the design storm for the SAR. Implementation of Alternative 2 would thus not reduce the capacity of the SAR and impacts would be considered less than significant, similar to the proposed project. Therefore, hydrology and water quality impacts associated with Alternative 2 would be similar to the proposed project.

6.5.2.9 Noise and Vibration

Implementation of Alternative 2 would result in similar impacts related to noise and vibration as the proposed project because similar project elements would be implemented. As with the proposed project, Alternative 2 would be compliant with the City of Yorba Linda Municipal Code Noise Ordinance and the County of Orange Noise Ordinance, which limits construction activities to the least noise-sensitive parts of the day and provide code exemptions to construction-related noise. It should be noted that Alternative 2 would extend into the jurisdiction of the City of Corona, where the City of Corona Noise Ordinance would apply. The City of Corona Noise Ordinance similarly limits construction activities to the least noise-sensitive parts of the day and provides code exemptions to construction-related noise. Noise and vibration mitigation measures similar to the measures for the proposed project would also be implemented to further reduce construction noise and vibration impacts resulting from Alternative 2. In addition, similar to the proposed project, operation of Alternative 2 would not result in a substantial change to the existing noise levels within the project area. Although Alternative 2 is anticipated to result in an increased number of parkway users and additional maintenance activities similar to the proposed project, the associated noise levels will be similar to existing conditions and the impact would be less than significant. Also, similar to the proposed project, Alternative 2 would not introduce any permanent sources of vibration and the impact would be less than significant. Therefore, noise and vibration impacts associated with Alternative 2 would be similar to the proposed project.

6.5.2.10 Recreation

Similar to the proposed project, construction of Alternative 2 would result in the temporary deterioration of portions of the Canyon RV Park (within Featherly Regional Park) and GRGC. During construction that would last 18 months, a temporary increase in the use of nearby parks and recreational facilities in the vicinity of the project area could occur. However, as with the proposed project, it is anticipated that this temporary increase would not result in substantial or accelerated physical deterioration due to the large number of facilities located within the vicinity of the project area. As with the proposed project, impacts related to deterioration of other recreational facilities would be less than significant.

Similar to the proposed project, operation of Alternative 2 would result in an increased use of the SAR Parkway and also a potential increased use of the Canyon RV Park and CHSP (immediately adjacent to the proposed project). However, as with the proposed project, this new portion of the Class I Bikeway, Riding

and Hiking Trail, and associated amenities located within Orange County would be regularly maintained by the County of Orange. Similar to the proposed project, a maintenance plan would be adopted as part of Alternative 2. Also, CHSP would continue to be maintained by the State of California Department of Parks and Recreation. Such maintenance would prevent substantial deterioration or substantially accelerated deterioration of the new and existing recreation and park facilities. As with the proposed project, operational impacts related to deterioration of recreation and park facilities would be less than significant.

Similar to the proposed project, Alternative 2 is a recreation-related project involving the implementation of a Class I Bikeway, Riding and Hiking Trail, and associated amenities. Construction or expansion of these recreational facilities may have an adverse physical effect on the environment. Potentially significant physical impacts related to the construction and operation of Alternative 2 recreational facilities are analyzed in the various subsections of Section 6.5.2 of this Draft EIR.

6.5.2.11 Transportation and Traffic

Alternative 2 would result in similar traffic-related construction and operation activities as the proposed project. The amount of construction activity and duration of construction is not expected to differ substantially from that of the proposed project and therefore would result in the generation of a similar amount daily worker trips. Similar to the proposed project, impacts related to construction transportation and traffic would be less than significant. Like the proposed project, operational activities under Alternative 2 would generate less traffic than the construction activities and would have minimal influence on the project study area roadways. In addition, similar to the proposed project, Alternative 2 would not conflict with an applicable congestion management plan, nor would it conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Therefore, transportation and traffic impacts associated with Alternative 2 would be similar to the proposed project.

6.5.3 SUMMARY OF ALTERNATIVE 2

As with the proposed project, Alternative 2 would result in less-than-significant impacts related to agricultural resources, GHG emissions, hazards and hazardous materials, noise, recreation, and transportation and traffic. Alternative 2 would result in less-than-significant impacts after mitigation related to biological resources, cultural resources, geology and soils, and hydrology and water. Alternative 2 would result in significant unavoidable impacts related to air quality. Therefore, Alternative 2 would result in similar environmental impacts to those under the proposed project with the exception of impacts related to biological resources. Alternative 2 would impact fewer acres of jurisdictional waters than the proposed project since the alternate alignment of Segment #1 would extend east, not north, through the GRGC. Also, similar to the proposed project, Alternative 2 would meet all project objectives.

6.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table 6-1 shows a comparison of the environmental effects of the proposed project, the project alternatives, and the No Project (No Build) Alternative. Each of the build alternatives would result in environmental impacts greater than would occur under the No Project (No Build) Alternative. Therefore, the No Project (No Build) Alternative is the environmentally superior alternative, although it would not meet all of the project objectives, as discussed in Section 6.7, below. Section 15126.6(e) of the CEQA Guidelines states that if the No Project Alternative is selected as the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. A comparison of the remaining alternatives is provided below.

The proposed project and Alternative 2 would include similar elements and would be constructed and operated in a similar manner. The majority of the disturbance limit would be the same under the proposed project and Alternative 2. However, the only difference between these two alternatives would be the alignment of Segment #1. Under Alternative 2, Segment #1 (near the proposed Bridge #2) would extend east, not north, through the GRGC. Due to the alternative alignment of Segment #1, Alternative 2 would result in slightly less biological impacts than the proposed project since it would impact fewer acres of jurisdictional waters. All other environmental impacts under both alternatives would be similar. Therefore, taking all of these factors into consideration, the environmentally superior alternative is Alternative 2.

**TABLE 6-1
COMPARISON OF THE ENVIRONMENTAL IMPACTS OF ALL PROJECT ALTERNATIVES**

ENVIRONMENTAL PARAMETER	PROPOSED PROJECT	ALTERNATIVE 1	ALTERNATIVE 2
Agriculture Resources	2	1	2 (Similar impact to the proposed project)
Air Quality	4	1	4 (Similar impact to the proposed project)
Biological Resources	3	1	3 (Slightly less impact than the proposed project)
Cultural Resources	3	1	3 (Similar impact to the proposed project)
Geology and Soils	3	1	3 (Similar impact to the proposed project)
Greenhouse Gas Emissions	2	1	2 (Similar impact to the proposed project)
Hazards and Hazardous Materials	2	1	2 (Similar impact to the proposed project)
Hydrology and Water Quality	3	1	3 (Similar impact to the proposed project)
Noise and Vibration	2	1	2 (Similar impact to the proposed project)
Recreation	2	1	2 (Similar impact to the proposed project)
Transportation and traffic	2	1	2 (Similar impact to the proposed project)

Source: AECOM (2014).

Legend

1. No Impact.
2. Less than Significant Impact.
3. Less than Significant Impact After Mitigation.
4. Unavoidable Significant Impact.

6.7 SUMMARY OF THE ALTERNATIVES' ABILITY TO MEET THE PROJECT OBJECTIVES

The proposed project and Alternative 2 meet all project objectives. Alternative 1 would not meet all of the project objectives. For example, Alternative 1 would not complete the SAR Class I Bikeway or the SAR Riding and Hiking Trail; thus, the 2-mile gap between Gypsum Canyon Road and the Orange County border in the SAR Riding and Hiking Trail would still remain. Also, staging, trailheads, crossroads/intersections, and other amenities that would enhance the Orange County SAR Parkway and facilitate connection to adjacent existing and future recreational trails would not be provided by Alternative 1.

6.8 ALTERNATIVES CONSIDERED AND WITHDRAWN FROM FURTHER CONSIDERATION

As discussed previously, four alternative alignment concepts were developed to extend the Riding and Hiking Trail and the Class I Bikeway through the project area. These alternatives were cumulative so that each subsequent alternative builds upon and expands what was proposed in the prior alternative, each adding additional bikeway, riding and hiking trails, and other facilities.

The four developed alternative alignments were evaluated in a multiple step process to identify a recommendation for a preferred alternative alignment (proposed project).

- The first step included an evaluation of each alternative in relation to the opportunities and constraints, preliminary environmental assessment and on-going projects. The comparison of the four alternatives showed a gradual increase in constraints from the Parallel Trail Alternative through the Multi-Loop Trail Alternative, due to the alternatives adding more trail and loops.
- The second step rated each alternative based on the evaluation criteria. The goals and objectives developed as part of the evaluation criteria provided a policy framework for the ranking of alternatives. A review of the rankings revealed that the total points received for each alternative was relatively similar, and all of the alternatives generally meet the goals and objectives established for the project. A vote by the stakeholders was also held to assist in the identification of a preferred alternative. The vote ranked the Split Trail Alternative the highest, with the Loop Trail Alternative getting the next highest number of votes.
- The third step of the recommendation process was provided by the public and stakeholder meetings. The public and stakeholders were asked to rate each of the alternatives, and their input was used to develop the final recommendation. Based on the rating exercise, the public showed a preference for the Split Trail, Loop Trail, and Multi-Loop Trail Alternatives. The Parallel Trail Alternative was viewed neutrally. The outcome was that the public would like to see more of the loop routes incorporated into the project than the Split Trail Alternative.
- The final step included a comparison of the cost estimates for each alternative. The intent was not to use cost as a key factor in the selection of a preferred alternative, but to use it as a differentiator between similarly ranked alternatives. Based on the preliminary costs, it was decided that a hybrid of the Split Trail Alternative and the Loop Trail Alternative should be pursued to widen the bridge and make a single loop at the west end of the project.

The preferred alternative alignment is therefore a result of several recommendations which the County staff and the project consultant team considered along with preliminary costs. The final result was a recommendation for a hybrid alternative alignment (known as the proposed project) of the Split Trail

Alternative and the Loop Trail Alternative. The benefit of this preferred alternative alignment (proposed project) is that it would create a north bank bikeway that joins the south bank bikeway. This would create a new bikeway loop that is one of the loop elements of the Loop Trail Alternative that does not exist in the Split Trail Alternative.

Below is a brief description of the four alternative alignment concepts that were evaluated.

6.8.1 THE PARALLEL TRAIL ALTERNATIVE

The Parallel Trail Alternative includes a paved bikeway and a parallel unpaved trail largely on the south bank of the SAR. Both routes run parallel with SR-91. The bikeway would use the existing paved surface constructed as part of the SARI Line relocation and SAR Reach 9 Phase 2B projects. The riding and hiking trail would be constructed parallel to the existing paved surface with a minimum separation of 3-feet. This alternative requires a new bridge for the crossing of the Gypsum Canyon drainage. This alternative also includes an unpaved trail on the north side of the river connected to the south bank trail by a new bridge over the SAR. For all of the alternatives, it was determined that a new river crossing is necessary to extend the existing riding and hiking trail from its current terminus on the north side of the river at Gypsum Canyon Road through the project area. A third bridge further east spanning the downstream end of the SAR Reach 9 Phase 2B improvements was also required to move the riding and hiking trail along the south bank of the Reach 9 Phase 2B improvements. This was required due to the lack of space for the riding and hiking trail along the south bank of the Reach 9 Phase 2B improvements. At the Riverside County line, the bikeway and trail would continue to parallel the SAR and could potentially extend upstream along the east side of the river to connect with the future Riverside County and San Bernardino County portions of the SAR Parkway. The Parallel Trail Alternative meets the minimum requirements of the proposed project.

6.8.2 THE SPLIT TRAIL ALTERNATIVE

This alternative is similar to the Parallel Trail Alternative, except that the unpaved trail splits off when it crosses the bridge at the Reach 9 Phase 2B improvements to sweep inland to the north and east around the perimeter of the golf use area of the GRGC. A staging area is also added on the north river bank with a short paved bikeway adjacent to La Palma Avenue. A potential future railroad over/under crossing is proposed in San Bernardino County near the golf course clubhouse to connect to potential trail alignments in Riverside and San Bernardino counties.

6.8.3 THE LOOP TRAIL ALTERNATIVE

Although this alternative is similar to the Split Trail Alternative, it provides two additional paved bikeway loop routes for more relaxed recreational cycling in addition to the paved bikeway paralleling SR-91 along the south bank of the SAR. The first loop would extend the existing bikeway at Gypsum Canyon Road along the north bank of the SAR, and connect to the south bank trail via the same bridge proposed for the riding and hiking trail crossing. The bridge would be widened to accommodate both users. The major of this bikeway would use an existing paved maintenance road adjacent to La Palma Avenue and the Villa Del Rio neighborhood. The second loop is located on the east side of the project area and would provide a paved trail around the perimeter of the golf course use area. This alternative also differs from the Split Trail Alternative in that it shows a future railroad tunnel undercrossing for the paved and unpaved facilities.

6.8.4 THE MULTI-LOOP TRAIL ALTERNATIVE

This alternative continues to build on the Loop Trail Alternative to provide an additional commuter-oriented paved bikeway paralleling a separate more relaxed recreational paved bikeway and a separate unpaved trail

along SR-91. These three separate routes would begin at Gypsum Canyon Road and continue parallel to each other to just east of the CHSP at Coal Canyon. A key element of this alternative would be to enhance the bikeway/trail user safety by separating the commuter cyclists from the recreational users.