CHAPTER 4.0 – PROJECT ALTERNATIVES

This chapter of the EIR addresses alternatives to the Proposed Project, describes the rationale for their selection, evaluates the potential environmental impacts associated with each alternative, and compares the relative impacts of each alternative to those of the Proposed Project. In addition, this chapter analyzes the extent to which each alternative meets the Project objectives identified in Chapter 1.0, *Project Description*.

4.1 Rationale for Alternatives Selection

Section 15126.6(a) of the CEQA Guidelines requires that EIRs describe "...a reasonable range of alternatives to a project, or the location of a project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Section 15126.6(f) of the CEQA Guidelines further states that "the range of alternatives in an EIR is governed by the 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." The CEQA Guidelines provide several factors that should be considered with regard to the feasibility of an alternative. Those factors include: (1) site suitability; (2) economic viability; (3) availability of infrastructure; (4) general plan consistency; (5) other plans or regulatory limitations; (6) jurisdictional boundaries; and (7) whether the project applicant can reasonably acquire, control, or otherwise have access to the alternative site (if an off-site alternative is evaluated).

In accordance with CEQA Guidelines Section 15126.6(a), the Project alternatives are assessed relative to their ability to (1) meet the basic objectives of the Project and (2) avoid or substantially lessen the significant effects of the Project.

As described in Section 1.1, *Project Objectives*, the purpose of the Project is to extract construction aggregate resources and reclaim the site to a usable condition for beneficial end uses consistent with those allowed under the current General Plan and zoning designations for the site. The objectives of the Project are as follows:

- 1. Recover and process construction aggregates in a financially sound and efficient manner while meeting all local, state, and federal safety requirements.
- 2. Provide an open space resource within the County, that ultimately protects and enhances the Sweetwater River channel.
- 3. Provide reliable, high-quality, aggregate product in the amount of 570,000 tons per year (approximately one-quarter of San Diego County's annual sand demand).
- 4. Maintain the existing low-flow channel of the Sweetwater River to accommodate water transfers from Loveland Reservoir to Sweetwater Reservoir.
- 5. Widen the existing flood channel of the Sweetwater River to more closely mimic conditions prior to golf course construction.

6. Reclaim areas of extraction to uses consistent with the County General Plan and Zoning Ordinance.

The Proposed Project would result in significant and unmitigable adverse impacts for which feasible mitigation measures would not reduce the impacts to below a level of significance for Aesthetics (Section 2.1). Implementation of feasible mitigation measures would reduce potentially significant impacts to the following issue areas to a less-than-significant level: Biological Resources (Section 2.2), Cultural Resources (Section 2.3), Noise (Section 2.4), Paleontological Resources (Section 2.5), and Tribal Cultural Resources (Section 2.6).

Potential impacts to the following issue areas were determined not to be significant upon evaluation in the EIR: Air Quality (Section 3.1.1), Energy (Section 3.1.2), GHG Emissions (Section 3.1.3), Hazards and Hazardous Materials (Section 3.1.4), Hydrology and Water Quality (Section 3.1.5), Land Use and Planning (Section 3.1.6), and Transportation/Traffic (Section 3.1.7). Eight issue areas, Agriculture and Forestry Resources (Section 3.2.1), Geology and Soils (Section 3.2.2), Mineral Resources (Section 3.2.3), Population and Housing (Section 3.2.4), Public Services (Section 3.2.5), Recreation (Section 3.2.6), Utilities and Service Systems (Section 3.2.7), and Wildfire (Section 3.2.8), were determined to not have significant impacts during the Initial Study process.

Based on initial review and consideration by the Applicant and County, it was determined that some of the preliminary alternatives did not accomplish most of the Project objectives or would result in greater impacts than the Proposed Project. Thus, these alternatives, discussed below in Section 4.1.1, were rejected and were not fully analyzed in this EIR.

Two alternatives would meet most of the Project objectives, are potentially feasible, and would avoid or lessen impacts as compared to the Proposed Project. These include the Biological Resources Avoidance Alternative and the Noise Receptor Setback Alternative. Additionally, a No Project Alternative is required to be included in the range of alternatives. These three, as listed below, are fully analyzed in this EIR. For each of these alternatives, the analysis includes a description of the alternative and a comparison of the environmental effects relative to the Proposed Project. These Project alternatives are addressed below in Sections 4.2 through 4.4 as follows:

- Alternative 1: No Project Alternative
- Alternative 2: Biological Resources Avoidance Alternative
- Alternative 3: Noise Receptor Setback Alternative

CEQA does not require a particular number of alternatives, only that a reasonable range be considered. The alternatives studied constitute a reasonable range because they contain enough variation to facilitate informed decision making and public participation that leads to a reasoned choice (Sections 15126.6(a)-(f) of the CEQA Guidelines). Also, according to Section 15126.6(d) of the CEQA Guidelines, discussion of each alternative should be sufficient "to allow meaningful evaluation, analysis, and comparison with the Proposed Project." Therefore, the significant effects of each alternative are discussed in less detail than those of the Proposed Project, but in enough detail to provide decision makers with perspective and a reasoned choice among alternatives to the Proposed Project.

4.1.1 Alternatives Considered but Rejected

Section 15126.6(c) of the CEQA Guidelines requires that an EIR identify alternatives that were considered and rejected because they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce significant environmental effects, and briefly explain the reasons for their rejection. Alternatives considered but rejected from further study for the Project include the Visual Screening Alternative, Reduced Footprint/Deeper Excavation Alternative, and Reduced Annual Mining Production/Increased Mining Duration Alternative.

Under the Visual Screening Alternative, visual screening barriers would be provided along Project site property lines from which public views to the Project site are afforded, including along the entirety of the Project site's frontage along Willow Glen Drive and along the portion of Steele Canyon Road that runs through the Project site. The purpose of the barriers would be to block public views to on-site mining activities. Under this alternative, mining and reclamation activities would be identical to the Proposed Project. This alternative was rejected from further consideration because the barriers themselves would represent a significant aesthetic impact and would thus not avoid the significant and unmitigable aesthetic impact that would occur under the Proposed Project. This alternative would also not reduce or avoid other impacts that would occur under the Proposed Project, as mining activities would be the same.

Under the Reduced Footprint/Deeper Excavation Alternative, 4.3 million cubic yards (cy) of material would be extracted over a 10-year period within a reduced area of the Project site. This is the same extraction quantity as the approximately 4.3 million cy of material proposed to be extracted (approximately 3.8 million cy produced for market use) with the Proposed Project. Extraction operations would be limited to a maximum production of 380,000 cy (570,000 tons) of construction grade aggregate per calendar year. To extract 4.3 million cy of material within a reduced area, the depth of mining would be increased. Backfill material would be imported to achieve the final landform for reclamation of the site to an end use of open space, multi-use trails, and land suitable for uses allowed by the General Plan and existing zoning classifications. This alternative was rejected from further consideration because the import of backfill material would result in increased air pollutant and GHG emissions, noise, and VMT associated with haul truck operations. The increased depth of mining would also have greater impacts on the hydrologic system of the site as related to the Sweetwater River floodplain. Further, mining activities under this alternative would result in the exposure of more groundwater than the Proposed Project, which would result in higher levels of evaporation and water loss.

Under the Reduced Annual Mining Production/Increased Mining Duration Alternative, 4.3 million cy of material would be extracted over a 15-year period at the Project site, for an average of approximately 313,333 cy of aggregate extraction per year. The total amount of extraction under this alternative would be the same as the Proposed Project but would occur over a longer period of time (15 years instead of 10 years). The area proposed for mining and reclamation would be identical to the Proposed Project. As mining is completed in phases, the site would be reclaimed to an end use of open space, multi-use trails, and land suitable for uses allowed by the General Plan and existing zoning classifications. Reclamation activities would be the same as the Proposed Project and would extend the total project duration by two additional years. This alternative was rejected from further consideration because it would not avoid or substantially reduce one or more

impacts of the Proposed Project, and therefore would not meet CEQA requirements for an alternative.

4.2 Analysis of Alternative 1: No Project/No Development Alternative

Section 15126.6(e)(1)(2) of the CEQA Guidelines requires EIRs to evaluate a No Project Alternative to provide a comparison of the environmental impacts that would result if the proposed project were approved versus if it were not approved. The No Project Alternative should discuss the existing conditions at the time the NOP is published, and the circumstance under which the Project does not proceed, considering what would reasonably be expected to occur in the foreseeable future by others.

4.2.1 Description and Setting

The No Project Alternative assumes the Proposed Project would not occur. Under the No Project Alternative, a Major Use Permit (MUP) would not be issued, mining activities would not occur at the site, and a Reclamation Plan would not be implemented. The site would not be restored to an end use of open space, multi-use trails, and land suitable for uses allowed by the General Plan and existing zoning classifications, including residential, essential services, fire protection services, or agriculture. The property would continue to be occupied by the Cottonwood Golf Club, with the Ivanhoe Course remaining as an operational golf course and the Lakes Course remaining as a decommissioned golf course.

4.2.2 Comparison of Effects to the Proposed Project

The No Project Alternative would avoid all the significant and less than significant impacts associated with implementation of the Proposed Project. However, under the No Project Alternative, 570,000 tons of sand per year would not be produced at the Project site and this amount of sand would continue to be imported from sources north and south of the County, and VMT reductions would not be achieved. Although the No Project Alternative would not increase VMT and GHG emissions from current conditions, it would not achieve the reductions the Proposed Project may achieve. As discussed in Section 3.1.3 of the EIR, under existing conditions with a total County sand demand of 2.5 million tons per year, the total daily VMT associated with transporting 570,000 tons of sand (the anticipated annual Project sand production) into and within San Diego County without the Proposed Project is 13,499 miles¹. The daily truck VMT associated with obtaining 570,000 tons of sand from the Project site rather than being imported from the north and south sources would be 2,806 miles, which is a reduction of 10,693 miles from the No Project Alternative. This corresponds to an approximately 79.2 percent reduction in Project-specific truck VMT compared to the County-wide average sand hauling VMT from combined existing in-County and imported sand sources. In the near-term scenario, with a total County sand demand of 3.5 million tons per year and anticipated possible production of 650,000 tons of sand from the El Monte Sand Mine, obtaining 570,000 tons of sand from the Project site would result in an approximately 75.8 percent reduction in Project-specific truck VMT, compared to the county-wide

The existing conditions VMT assumes that 60 percent of the sand used in San Diego is imported from sources north of the county, 35 percent is imported from Mexico, and 5 percent is transported from the East County Sand Mine in the unincorporated community of Lakeside, California. The hauling distances used in the VMT calculation are the average distance from the sand sources to the midpoint of existing concrete ready-mix batch plants in the county.

average sand hauling VMT from combined anticipated in-County and imported sand sources. Under the No Project Alternative, 570,000 tons of sand per year would not be produced at the Project site, this amount of sand would continue to be imported to the County, and these VMT reductions would not be achieved.

GHG emissions are directly related to VMT. As assessed in Section 3.1.3 of the EIR, more than 95 percent of mobile GHG emissions for the Project would be from aggregate delivery trucks transporting material to concrete batch plants where it would be used. The EIR includes a conservative analysis wherein all Project GHG emissions are included in the Project GHG inventory. However, when factoring in the regional VMT reductions mentioned above, the Project would result in an overall net reduction in mobile source GHG emissions. Under the No Project Alternative, this mobile-source GHG reduction would not be achieved.

As such, under the No Project Alternative, regional VMT and GHG emissions would be greater than under the Proposed Project (GHG emissions would remain at current levels and then increase as anticipated demand increases). GHG emissions would not increase as a result of the No Project Alternative.

4.3 Analysis of Alternative 2: Biological Resources Avoidance Alternative

4.3.1 Description and Setting

Under Alternative 2, or the Biological Resources Avoidance Alternative, the proposed mining footprint would be set back 50 feet from the Sweetwater River channel and 500 feet from the riparian habitat to the south and west of the Project site (see Figure 4-1, *Biological Resources Avoidance Alternative*). The total area mined under this alternative would be 117.6 acres and the total extraction volume would be approximately 2.9 million cy, an approximately 33-percent reduction compared to the Proposed Project. This alternative would involve the same overall annual extraction and marketable product of 380,000 cy (570,000 tons) as the Proposed Project but mining activities would occur over a period of approximately six years rather than 10 years. As with the Proposed Project, Alternative 2 would include the reclamation of the site to an end use of open space, including the Sweetwater River and its floodplain, multi-use trails, and land suitable for uses allowed by the General Plan and existing zoning classifications following mining activities.

4.3.2 Comparison of Effects to the Proposed Project

4.3.2.1 *Aesthetics*

The Proposed Project would result in substantial changes to existing landforms, vegetation, and visibility that would result in contrast with existing visual character, removal of valued visual elements, and impacts to scenic vistas. Impacts would be significant and unmitigable during mining operations.

Alternative 2 would involve similar mining activities that would impact the existing visual character of the site, but within a reduced footprint. Mining would occur further from private views afforded from residences to the south of the site near Steele Canyon Road and further from public views afforded from Steele Canyon Road. Mining would still occur adjacent to Willow Glen Drive

and would be visible from the roadway and residences north of the roadway. Aesthetics impacts would be lessened compared to the Proposed Project; however, impacts would remain significant and unmitigable.

4.3.2.2 Biological Resources

The Proposed Project would result in potentially significant direct and/or indirect impacts to special-status species, riparian habitat and sensitive natural communities, and jurisdictional wetlands. With implementation of proposed mitigation measures, impacts would be less than significant.

Under Alternative 2, the proposed mining footprint would be set back 50 feet from the Sweetwater River channel and 500 feet from the riparian habitat to the south and west of the Project site, which contains suitable habitat for least Bell's vireo. A 500-foot setback was selected as the appropriate distance to avoid potential indirect noise impacts to least Bell's vireo that were identified for Project mining and reclamation activities occurring within 500 feet of suitable vireo habitat during the breeding season (March 15 to September 15). These setbacks would avoid direct impacts to 0.32 acre of southern cottonwood-willow riparian forest, 0.01 acre of arundo-dominated riparian, and 0.63 acre of Diegan coastal sage scrub (disturbed) sensitive vegetation communities resulting from the Proposed Project. Impacts to jurisdictional wetlands and riparian habitats as defined by the U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and County would be reduced compared to those that would occur under the Proposed Project. Approximately 0.03 acre of disturbed Diegan coastal sage scrub would still be impacted. The setbacks under this alternative would also reduce the potential for errant impacts to sensitive vegetation communities and jurisdictional features. Further, through avoiding impacts to southern cottonwood-willow riparian forest, this alternative would avoid direct impacts to potentially occupied least Bell's vireo habitat. As noted above, indirect noise impacts to nesting least Bell's vireo in suitable riparian habitat located to the south and west of the Project site would also be avoided under this alternative with the 500-foot setback from this habitat. The potential for significant indirect noise impacts to coastal California gnatcatcher would still exist under this alternative, and mitigation would still be required, as mining activities would take place within 500 feet of suitable Diegan coastal sage scrub habitat located near the southeastern portion of the Project site. Potentially significant direct and indirect impacts to potential breeding, wintering, and foraging habitat for nesting Cooper's hawk, loggerhead shrike, peregrine falcon, red-shouldered hawk, sharp-shinned hawk, turkey vulture, vermilion flycatcher, white-tailed kite, yellow-breasted chat, yellow warbler, and/or nesting raptors may also still occur from grubbing or clearing of vegetation during the general avian breeding season or raptor breeding season, and mitigation would be required.

4.3.2.3 *Cultural Resources*

The Proposed Project would have the potential for significant direct impacts related to undiscovered buried archaeological resources and human remains during ground-disturbing mining activities. With implementation of proposed mitigation measures, impacts would be less than significant.

Alternative 2 would involve similar ground-disturbing mining activities that would have the potential to impact undiscovered buried archaeological resources and human remains, but within a reduced footprint. The reduced footprint would reduce the chance to encounter undiscovered resources; however, the potential to disturb resources would remain in the areas that would be mined under this alternative. As such, impacts would be potentially significant, and the mitigation measures required for the Proposed Project would still be required for this alternative.

4.3.2.4 Mineral Resources

The Proposed Project would extract all economically available resources from the Project site and would not result in the loss of availability of a known mineral resource or a recognized locally important mineral resource recovery site. Impacts would be less than significant.

Alternative 2 would result in the extraction of approximately 2.9 million cy of material over 117.6 acres of the Project site. Under this alternative, not all economically available resources would be extracted from the Project site. The site was reclassified by the California Geological Survey in 2017 as MRZ-2, which indicates that the area is underlain by mineral deposits where geologic data show that significant measured or indicated resources are present. Upon reclamation of the site under this alternative, end uses would include areas of some open space, vacant land including the Sweetwater River and its floodplain, multi-use trails, and land suitable for uses allowed by the General Plan and existing zoning classifications. Potential impacts would remain less than significant.

4.3.2.5 *Noise*

The Proposed Project would result in elevated noise levels from mining activities at nearby noise sensitive land uses. With implementation of proposed mitigation measures, impacts would be less than significant.

Alternative 2 would involve similar mining activities that would include the same noise sources as the Proposed Project (e.g., off-road mining equipment, processing plant equipment, on-road haul trucks), but within a reduced area. Noise-generating mining activities would occur further from Adeona Healthcare Facility and some residences to the south of the site, as well as slightly further from the residences north of Willow Glen Drive near the Project site's eastern property line. Noise levels would be reduced to less-than-significant levels for some noise-sensitive receptors when compared to the Proposed Project, but significant impacts would remain at other noise-sensitive receptors and the noise mitigation measures required for the Proposed Project would still be required under this alternative.

4.3.2.6 Paleontological Resources

The Proposed Project could result in significant impacts to paleontological resources from the excavation of previously undisturbed deposits exhibiting low resource potential. With implementation of proposed mitigation measures (excavation monitoring), impacts would be less than significant.

Alternative 2 would involve similar ground-disturbing mining activities that would have the potential to impact undiscovered buried paleontological resources, but within a reduced footprint.

The reduced footprint would reduce the chance to encounter undiscovered paleontological resources; however, the potential to disturb resources would remain in the areas that would be mined under this alternative. As such, impacts would be potentially significant, and the mitigation measures required for the Proposed Project would still be required for this alternative.

4.3.2.7 Tribal Cultural Resources

The Proposed Project would have the potential for significant direct impacts related to undiscovered buried tribal cultural resources during ground-disturbing mining activities. With implementation of proposed mitigation measures (Cultural Resources Treatment Agreement and Preservation Plan, Pre-Grade Survey and Data Recovery Program, and Excavation Monitoring), impacts would be less than significant.

Alternative 2 would involve similar ground-disturbing mining activities that would have the potential to impact undiscovered buried tribal cultural resources, but within a reduced footprint. The reduced footprint would reduce the chance to encounter undiscovered tribal cultural resources; however, the potential to disturb resources would remain in the areas that would be mined under this alternative. As such, impacts would be considered potentially significant, and the mitigation measures required for the Proposed Project would still be required for this alternative.

4.3.2.8 *Air Quality*

The Proposed Project would generate criteria pollutant, ozone precursor, and toxic air contaminant emissions during construction and operations from off-road heavy equipment exhaust, fugitive dust from equipment movement on unpaved roads, fugitive dust from earth-moving activities, fugitive dust from material conveyance and processing, and on-road vehicle exhaust. With implementation of dust control measures as described and required by the project's Fugitive Dust Control Plan and Best Available Control Technology and Best Management Practices, daily emissions would not exceed thresholds, and impacts would be less than significant.

Alternative 2 would involve similar mining activities to the Proposed Project, but within a narrower footprint, resulting in less material extraction. The total mining duration under this alternative would be less than the Proposed Project but the annual extraction amount would remain the same. This would result in the same daily mining intensity as the Proposed Project and therefore the same daily air pollutant emission levels as the Proposed Project. Through implementation of the same measures as the Proposed Project, daily emissions would not exceed thresholds, and impacts would be less than significant.

4.3.2.9 *Energy*

The Proposed Project would use energy during construction and operations for on-road vehicles, off-road mobile equipment, and stationary mining equipment. The Project would not use energy in a wasteful, inefficient, or unnecessary manner, and energy use would be less than significant.

Alternative 2 would involve similar mining activities to the Proposed Project, but within a smaller footprint. Less material would be extracted overall, resulting in less mining operations and therefore lower overall energy usage. Energy would not be used in a wasteful, inefficient, or

unnecessary manner under this alternative and energy use would remain less than significant, as with the Proposed Project.

4.3.2.10 Greenhouse Gas Emissions

The Proposed Project would generate GHG emissions during construction and operations associated with on-road vehicles, off-road heavy equipment, electricity use for stationary mining equipment, and solid waste. Emissions would not exceed thresholds, and impacts would be less than significant. Further, through the local production of sand, the Proposed Project would reduce the County's reliance on imported sand, thus reducing regional VMT and resulting in an overall decrease in GHG emissions.

Alternative 2 would involve similar mining activities to the Proposed Project, but within a smaller footprint. Less material would be extracted overall, resulting in less mining operations and therefore lower GHG emissions. Project-specific GHG emissions impacts under this alternative would be reduced and would remain less than significant, as with the Proposed Project. Because this alternative would produce less sand than the Proposed Project, a greater amount of imported sand would be needed under this alternative, and the overall reduction in regional GHG emissions would not be as high as under the Proposed Project.

4.3.2.11 Hazards and Hazardous Materials

The Proposed Project would result in less than significant impacts related to hazardous materials, airport hazards, dam inundation and oversized structures, and vectors.

Alternative 2 would result in similar concerns related to hazardous materials, airport hazards, dam inundation and oversized structures, and vectors. Mining activities under this alternative would occur further from sensitive receptors including nearby residents and Jamacha Elementary School. Potential impacts would remain less than significant, as with the Proposed Project.

4.3.2.12 Hydrology and Water Quality

The Proposed Project would have less than significant impacts related to water quality, groundwater storage, drainage, discharge rates, and flooding.

Alternative 2 would involve similar mining activities to the Proposed Project, but within a reduced footprint. The reduced footprint and disturbance area would reduce potential effects on water quality and would result in less drainage alteration. Alternative 2 would require coverage under the Industrial General Permit, which would involve preparation of a Stormwater Pollution Prevention Plan (SWPPP) that includes erosion and sedimentation control BMPs, as with the Proposed Project. Reduced mining activities under this alternative would also reduce water consumption during mining. Impacts related to discharge and flooding would be similar to the Proposed Project under this alternative. Overall, while some hydrology and water quality effects would be reduced, impacts would remain less than significant.

4.3.2.13 Land Use and Planning

The Proposed Project would have less than significant impacts related to land use and planning as it would not divide an established community or result in long-term conflicts with the County General Plan, Valle de Oro Community Plan, Rancho San Diego Specific Plan, or Zoning Ordinance.

Alternative 2 would involve similar mining activities at the same site as the Proposed Project, just within a smaller footprint, and would not divide an established community or conflict with the County General Plan, Valle de Oro Community Plan, Rancho San Diego Specific Plan, or Zoning Ordinance. Impacts would be less than significant, as with the Proposed Project.

4.3.2.14 Transportation/Traffic

The Proposed Project would have less than significant impacts related to transportation and traffic as it would result in a VMT reduction greater than the 15-percent VMT reduction threshold, based on reducing reliance on imported sand and the associated VMT. The Proposed Project would not create substantial traffic hazards.

Alternative 2 would involve similar mining activities to the Proposed Project, but within a smaller footprint. Because the daily amount of production would be the same as the Proposed Project, daily VMT would be the same. However, due to the reduced duration of mining (four years less) overall Project-specific VMT would be reduced. However, because this alternative would produce less sand overall than the Proposed Project, a greater amount of imported sand would be needed under this alternative, and the overall reduction in regional VMT would not be as high as if the Proposed Project were implemented. Impacts would remain less than significant.

4.4 Analysis of Alternative 3: Noise Receptor Setback Alternative

4.4.1 Description and Setting

Under Alternative 3, or the Noise Receptor Setback Alternative, the proposed mining footprint would be set back 400 feet from residential properties surrounding the Project site, as well as from the Adeona Healthcare facility (see Figure 4-2, *Noise Receptor Setback Alternative*). The total area mined under this alternative would be 119.1 acres (approximately 95 acres less than the Proposed Project) and the total overall extraction volume would be approximately 3.5 million cy, an approximately 26-percent reduction compared to the Proposed Project. This alternative would involve the same overall annual extraction of 380,000 cy (570,000 tons) of marketable product as the Proposed Project, but mining activities would occur over a period of approximately seven years rather than 10. As with the Proposed Project, Alternative 3 would involve the reclamation of the site to an end use of open space, including the Sweetwater River and its floodplain, multi-use trails, and land suitable for uses allowed by the General Plan and existing zoning classifications following mining activities.

4.4.2 Comparison of Effects to the Proposed Project

4.4.2.1 *Aesthetics*

The Proposed Project would result in substantial changes to existing landforms, vegetation, and visibility that would result in contrast with existing visual character, removal of valued visual elements, and impacts to scenic vistas. Impacts would be significant and unmitigable during mining operations.

Alternative 3 would involve similar mining activities that would impact the existing visual character of the site, but within a reduced footprint. Mining would occur further from large portions of the Project site's northern and southern boundaries, which would reduce (but not eliminate) public and private visibility to mining activities. Visual impacts from mining activities to public viewers on the middle portion of the Steele Canyon Road bridge and impacts from the processing plant to public viewers along Willow Glen Drive would remain the same as the Proposed Project. Aesthetics impacts would be lessened compared to the Proposed Project; however, impacts would remain significant and unmitigable.

4.4.2.2 Biological Resources

The Proposed Project would result in potentially significant direct and/or indirect impacts to special-status species, riparian habitat and sensitive natural communities, and jurisdictional wetlands. With implementation of proposed mitigation measures, impacts would be less than significant.

The mining activity setbacks under Alternative 3 would result in less impacts predominantly to non-sensitive disturbed and developed vegetation communities within the Project site. Direct impacts to 0.10 acre of southern cottonwood-willow riparian forest and 0.01 acre of arundodominated riparian sensitive vegetation communities, as well as direct impacts to jurisdictional wetlands and riparian habitats as defined by the USACE, CDFW, and County, would still occur under this alternative, and the mitigation included for the Proposed Project would be required. Direct impacts to approximately 0.4 acre of the disturbed Diegan coastal sage scrub sensitive vegetation community located at the northeastern portion of the site would be avoided. The potential for errant impacts to sensitive vegetation communities and jurisdictional features would still exist as with the Proposed Project, based on the proximity of mining activities to these resources. Direct and indirect impacts to potential breeding, wintering, and foraging habitat for the special status least Bell's vireo, coastal California gnatcatcher, Cooper's hawk, loggerhead shrike, peregrine falcon, red-shouldered hawk, sharp-shinned hawk, turkey vulture, vermilion flycatcher, white-tailed kite, yellow-breasted chat. yellow warbler, and/or nesting raptors would still occur, and mitigation would be required, under this alternative. As with the Proposed Project, impacts would be less than significant with mitigation.

4.4.2.3 *Cultural Resources*

The Proposed Project would have the potential for significant direct impacts related to undiscovered buried archaeological resources and human remains during ground-disturbing mining activities. With implementation of proposed mitigation measures, impacts would be less than significant.

Alternative 3 would involve similar ground-disturbing mining activities that would have the potential to impact undiscovered buried archaeological resources and human remains, but within a reduced footprint. The reduced footprint would reduce the chance to encounter undiscovered resources; however, the potential to disturb resources would remain in the areas that would be mined under this alternative. As such, impacts would be considered potentially significant and the mitigation measures required for the Proposed Project would still be required for this alternative.

4.4.2.4 Mineral Resources

The Proposed Project would extract all economically available resources from the Project site and would not result in the loss of availability of a known mineral resource or a recognized locally important mineral resource recovery site. Impacts would be less than significant.

Alternative 3 would result in the extraction of 3.5 million cy of material over 119.1 acres of the Project site. Under this alternative, not all economically available resources would be extracted from the Project site. The site was reclassified by the California Geological Survey in 2017 as MRZ-2, which indicates that the area is underlain by mineral deposits where geologic data show that significant measured or indicated resources are present. Upon reclamation of the site under this alternative, end uses would include some areas of open space, vacant land including the Sweetwater River and its floodplain, multi-use trails, and land suitable for uses allowed by the General Plan and existing zoning classifications. Potential impacts would remain less than significant

4.4.2.5 *Noise*

The Proposed Project would result in elevated noise levels from mining activities at nearby noise sensitive land uses. With implementation of proposed mitigation measures, impacts would be less than significant.

Alternative 3 would involve similar mining activities that would include the same noise sources as the Proposed Project (e.g., off-road mining equipment, processing plant equipment, on-road haul trucks); however, this alternative would include 400-foot setbacks from noise-sensitive land uses (NSLUs) in proximity to the Project site, including residential uses and the Adeona Healthcare facility. With mining activities occurring at least 400 feet from NSLU properties, noise levels from the Project would be below the applicable noise level limit at these properties, and impacts would be less than significant. The mitigation measures for the Proposed Project including noise barriers and excavation down to the lowest feasible elevation when mining is within 400 feet of NSLUs would not be required.

4.4.2.6 Paleontological Resources

The Proposed Project could result in significant impacts to paleontological resources from the excavation of previously undisturbed deposits exhibiting low resource potential. With implementation of proposed mitigation measures (excavation monitoring), impacts would be less than significant.

Alternative 3 would involve similar ground-disturbing mining activities that would have the potential to impact undiscovered buried paleontological resources, but within a reduced footprint.

The reduced footprint would reduce the chance to encounter undiscovered paleontological resources; however, the potential to disturb resources would remain in the areas that would be mined under this alternative. As such, impacts would be considered potentially significant, and the mitigation measures required for the Proposed Project would still be required for this alternative.

4.4.2.7 Tribal Cultural Resources

The Proposed Project would have the potential for significant direct impacts related to undiscovered buried tribal cultural resources during ground-disturbing mining activities. With implementation of proposed mitigation measures (Cultural Resources Treatment Agreement and Preservation Plan, Pre-Grade Survey and Data Recovery Program, and Excavation Monitoring), impacts would be less than significant.

Alternative 3 would involve similar ground-disturbing mining activities that would have the potential to impact undiscovered buried tribal cultural resources, but within a reduced footprint. The reduced footprint would reduce the chance to encounter undiscovered tribal cultural resources; however, the potential to disturb resources would remain in the areas that would be mined under this alternative. As such, impacts would be considered potentially significant, and the mitigation measures required for the Proposed Project would still be required for this alternative.

4.4.2.8 *Air Quality*

The Proposed Project would generate criteria pollutant, ozone precursor, and toxic air contaminant emissions during construction and operations from off-road heavy equipment exhaust, fugitive dust from equipment movement on unpaved roads, fugitive dust from earth-moving activities, fugitive dust from material conveyance and processing, and on-road vehicle exhaust. With implementation of dust control measures as described and required by the project's Fugitive Dust Control Plan, and Best Available Control Technology and Best Management Practices, daily emissions would not exceed thresholds, and impacts would be less than significant.

Alternative 3 would involve similar mining activities to the Proposed Project, but within a narrower footprint, resulting in less material extraction. The total mining duration under this alternative would be less than the Proposed Project but the annual extraction amount would remain the same. This would result in the same daily mining intensity as the Proposed Project and therefore the same daily air pollutant emission levels as the Proposed Project. As with the Proposed Project, daily emissions would not exceed thresholds with implementation of the same dust control measures and Best Available Control Technology and Best Management Practices, and impacts would be less than significant.

4.4.2.9 *Energy*

The Proposed Project would use energy during construction and operations for on-road vehicles, off-road mobile equipment, and stationary mining equipment. The Project would not use energy is a wasteful, inefficient, or unnecessary manner, and energy use would be less than significant.

Alternative 3 would involve similar mining activities to the Proposed Project, but within a smaller footprint. Less material would be extracted overall, resulting in less mining operations and therefore lower overall energy usage. Energy use under this alternative would be reduced and not

be used in a wasteful, inefficient, or unnecessary manner and would remain less than significant, as with the Proposed Project.

4.4.2.10 Greenhouse Gas Emissions

The Proposed Project would generate GHG emissions during construction and operations associated with on-road vehicles, off-road heavy equipment, electricity use for stationary mining equipment, and solid waste. Emissions would not exceed thresholds, and impacts would be less than significant. Further, through the local production of sand, the Proposed Project would reduce the County's reliance on imported sand, thus reducing regional VMT and resulting in an overall decrease in GHG emissions.

Alternative 3 would involve similar mining activities to the Proposed Project, but within a smaller footprint. Less material would be extracted overall, resulting in a shorter mining duration and therefore lower overall GHG emissions. Project-specific GHG emissions impacts under this alternative would be reduced and would remain less than significant, as with the Proposed Project. Because this alternative would produce less sand than the Proposed Project, a greater amount of imported sand would be needed under this alternative, and the overall reduction in regional GHG emissions would not be as high as under the Proposed Project.

4.4.2.11 Hazards and Hazardous Materials

The Proposed Project would result in less than significant impacts related to hazardous materials, airport hazards, dam inundation and oversized structures, and vectors.

Alternative 3 would result in similar concerns related to hazardous materials, airport hazards, dam inundation and oversized structures, and vectors. Mining activities under this alternative would occur further from sensitive receptors including nearby residents and Jamacha Elementary School, potential impacts would remain less than significant, as with the Proposed Project.

4.4.2.12 Hydrology and Water Quality

The Proposed Project would have less than significant impacts related to water quality, groundwater storage, drainage, discharge rates, and flooding.

Alternative 3 would involve similar mining activities to the Proposed Project, but within a reduced footprint. The reduced footprint and disturbance area would reduce potential effects on water quality and would result in less alteration of drainage patterns. As with the Proposed Project, Alternative 3 would require coverage under the Industrial General Permit, which would involve preparation of a SWPPP that includes erosion and sedimentation control BMPs. Reduced mining activities under this alternative would also reduce water consumption during mining. Impacts related to discharge and flooding would be similar to the Proposed Project under this alternative. Overall, while some hydrology and water quality effects would be reduced, impacts would remain less than significant.

4.4.2.13 Land Use and Planning

The Proposed Project would have less than significant impacts related to land use and planning as it would not divide an established community or result in long-term conflicts with the County General Plan, Valle de Oro Community Plan, Rancho San Diego Specific Plan, or Zoning Ordinance.

Alternative 3 would involve similar mining activities at the same site as the Proposed Project, just within a smaller footprint, and would not divide an established community or conflict with the County General Plan, Valle de Oro Community Plan, Rancho San Diego Specific Plan, or Zoning Ordinance. Impacts would be less than significant, as with the Proposed Project.

4.4.2.14 Transportation/Traffic

The Proposed Project would have less than significant impacts related to transportation and traffic as it would result in a VMT reduction greater than the 15-percent VMT reduction threshold, based on reducing reliance on imported sand and its associated VMT. The Proposed Project would not create substantial traffic hazards.

Alternative 3 would involve similar mining activities as the Proposed Project, but within a smaller footprint. Because the daily amount of production would be the same as the Proposed Project, daily VMT would be the same. However, due to the reduced duration of mining (three years less) overall Project-specific VMT would be reduced. However, because this alternative would produce less sand overall than the Proposed Project, a greater amount of imported sand would be needed under this alternative, and the overall reduction in regional VMT would not be as high as if the Proposed Project were implemented. Impacts would remain less than significant.

4.5 Analysis of Alternative Location Alternative

In accordance with Section 15126.6(f)(2), an alternative location should be considered if development of another site is feasible and if development of another site would substantially lessen one or more significant impacts of the Proposed Project. Factors that may be considered when identifying an alternative site include the size of the site, its location, the General Plan (or Community Plan) land use designations, and availability of infrastructure. Section 15126.6(f)(2)(A) states that a key question in looking at an offsite alternative is "whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location."

4.5.1 Description and Setting

The potential for alternative locations for the Project within the County is limited. The alternate site would need to have known alluvial sand resources; be of similar acreage to the Proposed Project site to allow for an extraction amount sufficient to provide reliable, high-quality, aggregate product that would be economically feasible and help meet regional demand; and have a zoning designation that allows for mineral extraction. Alluvial sand that could serve as high-quality aggregate product is generally located within the main river drainages of the County. Much of this land has been placed in open space preserves or has been mined out and is now developed or proposed for development (e.g., El Corazon former open-pit sand mine in Oceanside, RCP Block

& Brick former sand mining operations in Santee, H.G. Fenton Material Co. former quarry in Mission Valley, Hanson Aggregates Pacific Southwest former quarry in Mira Mesa). If the alternate project site would not produce the same amount of aggregate as the Proposed Project, the Project could be economically infeasible to implement. Based on the review and analysis of the GIS data, two sites are currently identified as having available and extractable sand resources, which are the Proposed Project site and the El Monte site. The El Monte site is currently undergoing a permit application process with the County and is not considered a potential alternative location for the Proposed Project. There are no other known sites within the County that have available alluvial sand resources or are of similar size as the Proposed Project site that would be suitable for construction aggregate recovery. Therefore, no feasible alternative locations were determined to exist for the Proposed Project.

4.6 Environmentally Superior Alternative

The CEQA Guidelines require the identification of an environmentally superior alternative among the alternatives analyzed in an EIR. The guidelines also require that if the No Project Alternative is identified as the environmentally superior alternative, another environmentally superior alternative must be identified. Table 4-1, *Summary of Analysis for Alternatives to the Project*, compares the impacts of the Proposed Project, No Project Alternative, Alternative 2: Biological Resources Avoidance Alternative, and Alternative 3: Noise Receptor Setback Alternative. The No Project Alterative would avoid all construction and operational impacts associated with the Proposed Project, but would not meet any of the Project objectives, as summarized in Table 4-2, *Ability of Project Alternatives to Meet Project Objectives*. Although it would not achieve the regional GHG emission and VMT reductions that would occur under the Proposed Project as a result of providing a local source of aggregate material, it would not increase GHG emissions or VMT.

Alternatives 2 and 3 would meet most of the Project Objectives and would lessen impacts to several resource areas. Alternative 2 would avoid some of the potentially significant impacts to biological resources; mitigation would still be required for some potentially significant biological resource impacts. Alternative 3 would avoid the potentially significant impact associated with noise from mining activities. With their reduced footprints, Alternatives 2 and 3 would reduce the potential for impacts to cultural resources, paleontological resources, and tribal cultural resources but the potential for significant impacts would still exist and mitigation would still be required. Similarly, aesthetics-related impacts would be reduced under Alternatives 2 and 3 but would remain significant and unmitigable.

While Project-generated GHG emissions and VMT would be reduced under Alternatives 2 and 3 as a result of reduced mining activity and sand production, overall regional GHG emissions and VMT would also be reduced though not to the extent of the Proposed Project because less sand would be produced within the County and greater levels of continued sand import would occur. Based on the consideration of adverse environmental impacts resulting from each alternative, Alternative 3 is considered the environmentally superior alternative.

Table 4-1 SUMMARY OF ANALYSIS OF POTENTIAL IMPACTS FOR ALTERNATIVES TO THE PROJECT

Issue Area	Proposed Project	No Project Alternative	Alternative 2	Alternative 3
Aesthetics	SU	N	SU-	SU-
Biological Resources	SM	N	SM-	SM-
Cultural Resources	SM	N	SM-	SM-
Mineral Resources	N	N	N	N
Noise	SM	N	SM-	LS
Paleontological Resources	SM	N	SM-	SM-
Tribal Cultural Resources	SM	N	SM-	SM-
Air Quality	LS	N	LS	LS
Energy	LS	N	LS-	LS-
Greenhouse Gas Emissions	LS	N	LS	LS
Hazards and Hazardous Materials	LS	N	LS-	LS-
Hydrology and Water Quality	LS	N	LS-	LS-
Land Use and Planning	LS	N	LS	LS
Transportation/Traffic	LS	N	LS	LS

 $SM = significant \ but \ mitigable \ impacts; \ SU = significant \ and \ unmitigated \ impacts; \ N = no \ significant \ impacts \\ - = reduced \ impact \ level(s) \ relative \ to \ the \ Project; \ + = increased \ impact \ level(s) \ relative \ to \ the \ Project$

Table 4-2 ABILITY OF PROJECT ALTERNATIVES TO MEET PROJECT OBJECTIVES

	Project Objective	No Project Alternative	Alternative 2	Alternative 3
1.	Recover and process construction aggregates in a financially sound and efficient manner while meeting all local, state, and federal safety requirements.	No	Yes	Yes
2.	Provide an open space resource within the County, that ultimately protects and enhances the Sweetwater River channel.	No	Yes	Yes
3.	Provide reliable, high-quality, aggregate product in the amount of 570,000 tons per year (approximately one-quarter of San Diego County's annual sand demand).	No	Yes	Yes
4.	Maintain the existing low-flow channel of the Sweetwater River to accommodate water transfers from Loveland Reservoir to Sweetwater Reservoir.	No	Yes	Yes
5.	Widen the existing flood channel of the Sweetwater River to more closely mimic conditions prior to golf course construction.	No	Yes	Yes
6.	Reclaim areas of extraction to uses consistent with the County General Plan and Zoning Ordinance.	No	Yes	Yes





