

3.1.7 Transportation/Traffic

The following summary of transportation and circulation impacts is based upon the *Transportation Impact Analysis (TIA)* and *Local Mobility Analysis (LMA)* prepared for the Project by Linscott, Law & Greenspan, Engineers (LLG; 2021a and 2021b). The TIA and LMA can be found in their entirety in Appendix V and Appendix W, respectively, along with all supporting tables, figures, and traffic modeling results. The sight distance analysis prepared for the project egress driveway is contained in Appendix X. The following discussion has been prepared in compliance with the current CEQA requirements as a result of the implementation of SB 743 and is consistent with and fulfills the intent of the CEQA Guidelines.

3.1.7.1 Existing Conditions

Existing Roadway Network

The following is a description of the major roadways located within the immediate vicinity of the Project site. Figure 3.1.7-1, *Existing Roadway Network*, depicts the existing traffic conditions and intersections within the Project vicinity.

Campo Road (SR 94) is classified as a Freeway/6.1 Expressway from La Mesa City limits to Jamacha Road in the County of San Diego General Plan, Valle de Oro Mobility Element Network. Campo Road is currently constructed as a five-lane divided roadway, west of Jamacha Boulevard, as a six-lane divided roadway between Jamacha Boulevard and Jamacha Road. Bike lanes and bus stops are provided on Campo Road in the Project vicinity. On-street parking is not permitted.

Jamacha Road is classified as a 6.2 Prime Arterial from SR 94/Campo Road to Chase Avenue in the County of San Diego General Plan, Valle de Oro Mobility Element Network. Jamacha Road is currently constructed as a six-lane divided roadway in the Project vicinity. Bike lanes and bus stops are provided on Jamacha Road. On-street parking is not permitted.

Jamacha Boulevard is classified as a 4.1A Major Road from Spring Valley to SR 94/Campo Road in the County of San Diego General Plan, Valle de Oro Mobility Element Network. Jamacha Boulevard is currently constructed as a four-lane undivided roadway in the Project vicinity. Bike lanes and bus stops are provided on Jamacha Boulevard. On-street parking is not permitted.

Willow Glen Drive is classified as a 4.1B Major Road in the County of San Diego General Plan, Valle de Oro Mobility Element Network. Willow Glen Drive is currently constructed as a four-lane undivided roadway between Jamacha Road and Steele Canyon Road and as a three-lane roadway with a two-way left-turn lane between Steele Canyon Road and the eastern project boundary. Bus stops are not provided and on-street parking is not permitted.

Existing Bicycle Network

Currently, Class II bike lanes are provided on both sides of Willow Glen Drive within the vicinity of the Project.

Existing Pedestrian Conditions

Pedestrian sidewalks are provided along the northern side of Willow Glen Drive from Jamacha Road to approximately 150 feet west of the existing golf course entrance where the concrete sidewalk ends. There is no sidewalk present on the south side of Willow Glen Drive along the Project frontage.

Regulatory Setting

State

Senate Bill 743

In September 2013, the Governor's Office signed SB 743 into law, starting a process that fundamentally changed the way transportation impact analysis is conducted under CEQA. In response to the passage of SB 743, the Governor's Office of Planning and Research (OPR) was required to amend the CEQA Guidelines to provide a new approach to evaluating traffic impacts. These changes include the elimination of auto delay, level of service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts. The mandate of SB 743 was to devise an alternative traffic impact evaluation criterion that would promote the reduction of GHG emissions as well as foster the development of multi-modal transportation networks and a diversity of land uses.

SB 743 further suggested that a measurement such as vehicle miles traveled (VMT) would be appropriate method to evaluate traffic impacts. VMT is defined as a measurement of miles traveled by vehicles within a specified region and for a specified time period. VMTs are calculated based on individual vehicle trips generated and their associated trip lengths.

In January 2016, the OPR issued the *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*, which provided recommendations for updating the CEQA Guidelines and in December 2018 OPR issued the accompanying *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory). Subsequently OPR and the Office of the Secretary of Natural Resources finalized the CEQA Guidelines for implementing SB 743 and as of July 1, 2020, the VMT guidelines apply statewide.

OPR has made clear that a lead agency shall have discretion in choosing both the most appropriate methodology and the most appropriate threshold for projects. Lead agencies may even go so far as to choose whether a project-specific threshold involving quantification of VMT or a qualitative analysis is more appropriate for the specific project.

Local

San Diego County General Plan

The General Plan Mobility Element provides a framework for a balanced, multi-modal transportation system within the unincorporated areas of the County of San Diego (County 2011b). The Mobility Element includes a description of the County's transportation network and the goals and policies that address safety, efficiency, maintenance, and management of the transportation

network. The Land Use element includes policies that address the maintenance of adequate service on Mobility Element roads; although auto delay, LOS, and similar measurements of vehicular roadway capacity and traffic congestion have been eliminated as the basis for determining significant transportation impacts, projects are still required to comply with the applicable goals and policies of the General Plan related to transportation and traffic. The reader is referred to Section 3.1.6 of this EIR for a detailed evaluation of Project consistency with the applicable General Plan goals and policies.

San Diego County Public Road Standards

These standards provide minimum design and construction requirements for public road improvement projects located within the unincorporated areas of the County. These standards apply to County-initiated public road improvement projects as well as privately initiated public road improvement projects.

3.1.7.2 Analysis of Project Effects and Determination as to Significance

Direct, indirect, and cumulative impacts pertaining to transportation are evaluated based on specified thresholds identified in the CEQA Guidelines, Appendix G, and in the County Guidelines for Determining Significance, including the following:

- Governor's Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA, December 2018
- County Guidelines for Determining Significance, Transportation and Traffic, 2011
- Guidelines for Determining Significance and Report Format and Content Requirements for Transportation and Traffic, 2011

The County's Guidelines for Determining Significance are generally intended to address the questions posed in Appendix G of the CEQA Guidelines. In 2018, the CEQA Guidelines were updated and several of the questions listed in Appendix G were revised, deleted, or modified. Accordingly, this EIR analyzes the impacts from the Project using questions posed in Appendix G Section XVII, Transportation; and, to the extent that they remain consistent with SB 743, the County Guidelines for Determining Significance, Transportation and Traffic (County 2011e).

Program, Plan, Ordinance, or Policy Consistency

Guidelines for the Determination of Significance

Pursuant to Appendix G of the CEQA Guidelines, a project would have a significant impact on the environment if it would:

1. Conflict with a program, plan ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Analysis

The Project is subject to compliance with County plans, standards, and guidelines addressing transportation, including the General Plan and Public Road Standards. Project consistency with applicable land use plans and policies is discussed in Section 3.1.6, *Land Use and Planning*, of this EIR and further evaluated in the Land Use Consistency Analysis presented in Appendix B.

The County adopted an Active Transportation Plan in October 2018 that updated the County's standards for bicycle facilities and classifications. This plan also included a Pedestrian Gap Analysis appendix that identifies potential sidewalk and pathway improvements in planning group areas throughout the County; the Project site is identified on Map 12 under Valle De Oro in the Pedestrian Gap Analysis. As noted above, Class II bike lanes are provided on both sides of Willow Glen Drive within the vicinity of the Project; these will be maintained as part of the proposed improvements to Willow Glen Drive. Pedestrian sidewalks are provided along the northern side of Willow Glen Drive from Jamacha Road to approximately 150 feet west of the existing golf course entrance where the concrete sidewalk ends. As part of the Project, a pedestrian pathway would be provided along the northern Project frontage east of Steele Canyon Road to provide pedestrian access within the Project vicinity (refer to Figure 1-5b).

A typical mining day would include a maximum of 88 heavy vehicles accessing the Project site, spread throughout the hours of 9:00 a.m. to 3:30 p.m. In addition to the heavy vehicle trips, 14 employee and visitor light vehicles and four vendors (e.g., fuel, supplies, service companies, etc.) were assumed to access the Project site on a typical day. This represents a conservative assumption as only nine employees are expected. Light vehicle traffic includes cars, pick-up trucks, and small service vehicles.

During the pre-mining construction phase of the Project, there may be some construction work or construction-related traffic occurring that could temporarily impede movement of vehicles, bicyclists, and/or pedestrians along Willow Glen Drive, including during construction of the proposed roadway improvements. The Project proposes to restripe Willow Glen Drive between Steele Canyon Road and the Project ingress driveway to provide Class II buffered bicycle lanes on both sides of the roadway. A dedicated right-turn lane would be constructed to facilitate deceleration of right-turning vehicles into the Project ingress driveway. Additionally, a public pathway is proposed along the northern property boundary east of Steele Canyon Road to provide continuous pedestrian access along Willow Glen Drive; the pathway would be internal to the site and designed in compliance with applicable County standards. In order to maintain access during construction, a Traffic Control Plan would be prepared to ensure the safe and efficient movement of traffic through the Project area and that local residents/motorists are properly notified of construction activities that could affect daily travel through the area. The Traffic Control Plan would outline appropriate measures during construction, including work zones, staging areas, flagging, etc. and would require approval by the County Engineer prior to the issuance of grading permits. Implementation of the Traffic Control Plan would reduce the impacts of construction of required road improvements below a level of significance. Trips generated during mining operations would be nominal compared to the existing roadway operations and capacity and would not have the potential to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, as demonstrated

in the Land Use Consistency Analysis presented in Appendix B to this EIR. Therefore, the impact would be **less than significant**.

Vehicle Miles Traveled

Guideline for the Determination of Significance

Pursuant to Appendix G of the CEQA Guidelines, a project would have a significant impact on the environment if it would:

2. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)(1).

CEQA Guidelines Section 15064.3(b) focuses on VMT for determining the significance of transportation impacts. Section 15064.3(b) is further divided into four subdivisions: (1) land use projects, (2) transportation projects, (3) qualitative analysis, and (4) methodology. In December 2018, the Governor's OPR issued a Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) to assist lead agencies by providing technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures.

The guidance from County of San Diego does not require a VMT analysis for construction traffic. Neither OPR nor the County has specified models or methods to estimate VMT or VMT thresholds of significance for construction traffic.

For operational traffic, based on the OPR Technical Advisory De-Minimis screening significance thresholds, a project can be considered to have a less than significant impact for transportation if it generates less than 110 average daily trips. One basis for concluding a project's VMT impact is below a level of significance without a detailed study is projects that are small in size. Based on the traffic generated by projects that fall within the Class 1 existing facilities categorical exemption¹ for additions to facilities of up to 10,000 SF (CEQA Guidelines Section 15304) and the fact that non-residential uses typically generate approximately 110 to 114 trips per 10,000 SF, OPR notes that "absent substantial evidence indicating that a project would generate a potentially significant level of VMT, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact." Accordingly, projects in the San Diego region that generate fewer than 110 daily trips may be assumed to cause a less than significant transportation impact based on this de minimis screening threshold.

OPR in its Technical Advisory states that VMT refers to the amount and distance of automobile travel attributed to a project and "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. Heavy duty trucks associated with operations and constructions are not intended to be factored in the VMT analysis for transportation. Although the de minimis screening threshold alone is adequate to support an independent determination of whether a project's VMT impact is below a level of significance or needs more in-depth study, out of an abundance of caution, an atypical project's transportation impact that combines the project's car and light truck

¹ Like all categorical exemptions, the 10,000-SF categorical exemption was established only after the Secretary of Resources found that it would not have a significant effect on the environment (CEQA Guidelines Section 15300).

VMT with the project's operational heavy truck trip VMT can be analyzed under a project-specific VMT threshold and thereby included as a supplemental analysis.

OPR has made it clear that a lead agency shall have discretion in choosing both the most appropriate methodology and the most appropriate threshold for projects. Lead agencies may even go so far as to choose whether a project-specific threshold involving quantification of VMT or a qualitative analysis is more appropriate for the specific project. This need for tailoring the threshold to the individual project is especially strong for projects, such as the proposed industrial Project at a location that is dependent upon the existing location of the sand resource, which do not fall within the 15-percent average regional/sub-regional VMT reduction threshold for residential, office, and retail projects recommended in OPR's Technical Advisory. The proposed industrial Project is not residential, office, or retail, and its location is dependent upon the existing location of the sand resource off Willow Glen Drive in the community of Valle de Oro.

The Project-specific VMT threshold that is used to provide a supplemental analysis is total change in annual VMT accounting for the full area over which the Project affects travel behavior (i.e., indirect VMT). The total change in annual VMT is calculated by analyzing the annual total VMT without the Project minus the annual total VMT with the Project in the existing and near-term scenarios. If the annual total change in VMT is at least a 15-percent reduction, then the impact is below a level of significance. If the annual total change in VMT is a net increase in VMT or less than a 15-percent reduction, then the impact is above a level of significance.

This Project-specific threshold of a 15-percent reduction is particularly conservative because the CEQA Guidelines advise that any net reduction in VMT creates a presumption that the project does not have a significant traffic impact (CEQA Guidelines 15064.3(b)(1)). By setting the threshold to require at least a 15-percent net reduction, the County has extra assurance the Project would contribute positively toward the legislative goals of SB 743.

Analysis

De minimis Screening Threshold

Site-specific trip generation was calculated for the Project, which includes a total of 14 employee and visitor light vehicles and 4 vendors. Based on this calculation, the Project's total car and light truck trips generate 36 average daily trips, which is far below the 110 daily trip screening threshold of significance. Therefore, impacts are considered **less than significant**.

Project-Specific VMT Threshold – Supplemental Analysis

The Proposed Project is unique in that since the land use is directly correlated to the physical properties of the land (available aggregate) it can only occur in particular locations. Further considerations are that San Diego County presently imports large amounts of sand to be delivered to concrete batch and ready-mix plants prior to being distributed to end users. Thus, in relation to VMT and VMT goals (reduction of GHGs), the Project would locally generate additional vehicle trips but would have an overall reduction in regional VMT since it would provide a local supply of sand, reducing the need for imported sand from more distant sources.

The Project-specific analysis evaluates the total change in annual VMT accounting for the entire area within which the Proposed Project affects travel behavior. When assessing total change in VMT, the lead agency must estimate the net change in total VMT with and without the project. This is done by calculating the miles traveled to and from the project site in the context of how the project is likely to divert existing trips, and what the impact of those diversions would be on total VMT. The total change in annual VMT was evaluated by analyzing the annual total VMT with the Project in the existing and near-term scenarios.

Based on the San Diego County Construction Material Aggregate Study (EnviroMINE 2020b), the total sand demand for San Diego County is 2,500,000 tons per year. This demand is met primarily by suppliers in Riverside County and Mexico, with approximately five percent of the County's demand currently met by a single source within San Diego County, the East County Sand Mine.

To undertake the analysis of change in VMT, LLG conducted a multi-step Project-specific approach summarized herein and described in detail in Section 6.2 of the LMA. Calculation of existing VMT considered the locations of each consistent importer of sand and permitted sources within the County and locations of existing concrete batch plants within the San Diego County to which sand is being delivered/supplied, from which a midpoint batch point location was determined. The trip length of a round trip from the existing major sand import mine locations to the midpoint batch point location was determined, and trips were distributed based on population (which correlates to aggregate demand) north and south of the midpoint. The total existing VMT was calculated based on the trip distribution, the County's total sand demand, the number of trucks used to transport the material (based on haul truck capacity), the number of working days per year, and trip lengths from each major importer.

Utilizing the steps outlined above, an existing daily VMT associated with the transport of sand to meet the County's annual demand of 2,500,000 tons is 59,205.11 (see Table 3.1.7-1, *Existing Plus Project VMT Calculations*). The LMA used the Project's maximum production of 570,000 tons of construction grade aggregate annually to establish the Project's proportion of VMT. Using a total demand of 2,500,000 annual tons of sand, the Project's production of 570,000 annual tons equates to 22.8 percent of the demand. The Project's production would reduce demand for imported sand from suppliers in Riverside County and Mexico, with demand for sand from the East County Sand Mine remaining constant. As such, the Project's contribution of 570,000 tons of aggregate annually to the local market would lessen the demand for imported sand by 22.8 percent.

As shown in Table 3.1.7-1, without the Project, the demand for 570,000 tons of aggregate would be satisfied by the current regional suppliers, resulting in a daily VMT of 13,498.77. Conversely, the daily VMT associated with the Project producing and locally distributing 570,000 tons of sand annually, which would involve approximately 88 trucks per day each traveling an average of 32 miles, is 2,806.15 VMT. Thus, the Project would reduce the regional daily VMT for the importing of 570,000 tons of sand annually, by 10,692.62, which would constitute a 79.2-percent reduction in the area-wide VMT. Therefore, the Project would result in a reduction in VMT of greater than 15 percent.

Traffic Hazards Due to a Transportation Design Feature

Guideline for the Determination of Significance

Pursuant to Appendix G of the CEQA Guidelines, a project would have a significant impact on the environment if it would:

3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

As identified in the Guidelines for Determining Significance and Report Format and Content Requirements for Transportation and Traffic (County 2011e), the determination of significant traffic hazards due to transportation design features would be on a case-by-case basis, considering the following factors:

- Design features/physical configurations of access roads may adversely affect the safe movement of all users along the roadway.
- The percentage or magnitude of increased traffic on the road due to the Proposed Project may affect the safety of the roadway.
- The physical conditions of the Project site and surrounding area, such as curves, slopes, walls, landscaping or other barriers, may result in conflicts with other users or stationary objects.
- Conformance of existing and proposed roads to the requirements of the private or public road standards, as applicable.

The determination of significant hazards to pedestrians or bicyclists would be on a case by-case basis, considering the following factors:

- Design features/physical configurations on a road segment or at an intersection that may adversely affect the visibility of pedestrians or bicyclists to drivers entering and exiting the site, and the visibility of cars to pedestrians and bicyclists.
- The amount of pedestrian activity at the project access points that may adversely affect pedestrian safety.
- The preclusion or substantial hindrance of the provision of a planned bike lane or pedestrian facility on a roadway adjacent to the project site.
- The percentage or magnitude of increased traffic on the road due to the proposed project that may adversely affect pedestrian and bicycle safety.
- The physical conditions of the project site and surrounding area, such as curves, slopes, walls, landscaping, or other barriers that may result in vehicle/pedestrian, vehicle/bicycle conflicts.

- Conformance of existing and proposed roads to the requirements of the private or public road standards, as applicable. The potential for a substantial increase in pedestrian or bicycle activity without the presence of adequate facilities.

Analysis

The Project does not include the introduction of new roads. It would, however, include improvements to a portion of Willow Glen Drive as well as the creation of additional access points to and from the Project site. These improvements would occur prior to the commencement of Phase 1 mining activities.

The Project would restripe Willow Glen Drive between Steele Canyon Road and the Project ingress driveway to provide Class II buffered bicycle lanes on both sides of the roadway. To facilitate deceleration of right-turning vehicles into the Project ingress driveway, a dedicated right-turn lane would be constructed. A two-way left turn lane between the Project's primary ingress and egress driveways would also be provided and would serve as a refuge lane for trucks to complete their outbound maneuvers safely and effectively. Willow Glen Drive between Steele Canyon Road and Hillsdale Road is classified in the Mobility Element as a *4.1B: Major Road with Intermittent Turn Lanes*. The Project frontage along this stretch extends between Steele Canyon Road to approximately 1,000 feet west of Hillsdale Road. In addition to these improvements, the Project proposes to provide an Irrevocable Offer of Dedication along the Project frontage as needed to accommodate the ultimate classification of Willow Glen Drive.

The two existing site entrances along Willow Glen Drive provide access to the upper and lower parking lots. Access to the plant area would be provided via a new ingress driveway, located to the west of the existing western driveway. From there, the Project would include a two-lane, 28-foot wide access road that would pass by the processing plant and extend to a new egress location midway between the existing eastern and western entrances.

Currently, a small driveway that extends from Willow Glen Drive (west of Steele Canyon Road) provides access to the westernmost portion of the Project site. During the initial stages of the Project, this access point may be used briefly for equipment delivery. Since the clearance height of the bridge that crosses the Sweetwater River on Steele Canyon Road would not allow most large trucks used by service vendors (e.g., to provide fuel and maintenance to the heavy equipment utilized during mining) to pass beneath the bridge, a new access point would be constructed at the intersection of Willow Glen Drive and Muirfield Drive as part of pre-mining improvements, prior to the initiation of Phase 1 activities. This Project driveway would be restricted to right-in/right-out movements only. This would reduce conflict points by prohibiting left-turn outbound movements from the driveway. The southbound left-turn movements from Muirfield Drive would still be allowed.

Additional access to the southern portion of the Project site is provided from Ivanhoe Ranch Road, south of the river. This access is currently used for golf course maintenance. This access point may be used for heavy equipment delivery within Phase 2 and 3 areas south of the Sweetwater River channel, but would not otherwise be used for mining purposes. The existing maintenance gate may also be used for reclamation maintenance and monitoring after mining in Phases 2 and 3 has ended.

The County has established design standards for new development projects to ensure that new points of access to public roads are safely placed and oriented to provide sufficient sight distance and space for turning movements. Based on the posted speed limit on Willow Glen Drive adjacent to the Project site of 45 miles per hour, the minimum associated sight distance is 450 feet. The sight distance performed for the proposed new egress driveway meets the applicable sight distance requirements for visibility of roadway users entering and existing the site or visibility of cars to pedestrians and bicyclists (Chang 2020b).

All roadway improvements would be in accordance with the *County of San Diego Public Road Standards* (County 2012c) and designed to the satisfaction of the County Engineer prior to the issuance of grading permits. Additionally, a Traffic Control Plan would be required to be prepared and approved by the County Engineer and would require approval prior to the issuance of grading permits.

A public pathway is proposed along the northern property boundary east of Steele Canyon Road; the pathway would be internal to the site and designed in compliance with applicable County standards (refer to Figures 1-5b). While pedestrian activity in the Project area is generally low and is not expected to increase as a result of Project implementation, the pathway would provide continuous safe access along Willow Glen Drive where no pedestrian facilities are currently present. Wayfinding/directional signage would be provided, including near the Project ingress/egress driveways, to notify pathway users of the potential for cross traffic; signage would be provided notifying vehicles and trucks entering and existing the Project site of the potential for pedestrians crossing.

The Project would meet the County's standards set forth for roadway design and avoidance of traffic hazards. No adverse design features/physical configurations or other conflicting features such as curves, slopes, walls, landscaping, or other barriers that may adversely affect the safe movement of roadway users are proposed or present in the Project vicinity. The Project would have a **less than significant** impact in relation to traffic hazards and transportation design features.

Emergency Access

Guidelines for the Determination of Significance

Pursuant to Appendix G of the CEQA Guidelines, a project would have a significant impact on the environment if it would:

4. Result in inadequate emergency access.

Analysis

As noted above in the "Program, Plan, Ordinance, or Policy" consistency discussion, a Traffic Control Plan would be implemented during the pre-mining construction phase of the Project. The plan would establish procedures for coordinating with local emergency service providers in order to maintain adequate emergency access and would require approval by the County Engineer prior to the issuance of grading permits. Therefore, the Proposed Project would not result in inadequate emergency access during construction.

Operation of the Project would occur within the Project site boundaries and would not involve road closures. Steele Canyon Road, which traverses the Project site, would remain fully open during Project operations. Although the Project would generate an increase in on-road traffic in the form of haul trucks (a maximum of 88 trucks per day totaling an estimated 440 average daily trips²) and worker commute vehicles (14 mining employees and visitors and 4 vendors totaling an estimated 36 average daily trips), the increase is not expected to substantially disrupt travel along roadways in the Project area compared to existing conditions. As discussed in the Project LMA, project-related traffic would cause no deficiencies within the study area (LLG 2021b). A dedicated right-turn lane would be constructed to facilitate deceleration of right-turning vehicles into the Project ingress driveway and allow traffic to continue to flow within the eastbound lane of Willow Glen Drive. Trucking operations during the week would operate from 9:00 am to 3:30 pm to avoid peak traffic periods in the area. In addition, the proposed driveways near the existing clubhouse and at the intersection of Willow Glen Drive and Muirfield Drive would allow for sufficient emergency access. Based on these considerations, implementation of the Project would not result in inadequate emergency access and any potential impacts would be **less than significant**.

3.1.7.3 Cumulative Impact Analysis

Program, Plan, Ordinance, or Policy Consistency

As discussed in Section 3.1.7.2, the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Each of the projects within the cumulative study area for the Project identified in Table 1-14 and Figure 1-11 must be found consistent with the goals and policies of the applicable transportation programs and plans in order to be approved. Therefore, the Project **would not result in a cumulatively considerable impact** relative to program, plan, ordinance, or policy consistency.

Vehicle Miles Traveled

De Minimis Screening Threshold

The Project site would receive a total of 14 employee and visitor light vehicles and 4 vendor vehicles per day. Based on these assumptions, the Project's total car and light truck trips would generate 36 average daily trips, which is far below the 110 daily trip screening threshold for VMT. Therefore, cumulative impacts are considered **less than significant**.

Project-Specific VMT Threshold – Supplemental Analysis

The Project-specific supplemental analysis for cumulative VMT conditions was conducted using projected sand demand in 2021 and adding additional major consistent sand mines in San Diego County that would foreseeably be in production in the near term. Based on the Market Study, the

² It is acknowledged that heavy vehicles have a greater traffic impact than passenger cars since they are larger than passenger cars, and therefore, occupy more roadway space; and their performance characteristics are generally inferior to passenger cars, leading to the formation of downstream gaps in the traffic stream, which cannot always be effectively filled by normal passing maneuvers. Therefore, a "Passenger Car Equivalent" of 2.5 (i.e., the number of passenger cars that are displaced by a single heavy-duty vehicle under prevailing traffic conditions) was used to estimate the average daily truck trips.

near-term sand demand for San Diego County is 3,500,000 tons. The El Monte Sand Mine in San Diego County is a potential additional major consistent sand mine that could be in production in the near term and, therefore, was included in the near-term analysis as an additional supplier. The inclusion of the proposed El Monte Sand Mine in the VMT calculations represents a conservative analysis, since it would reduce the proportion of sand demand that would need to be met by sources outside of the County and, therefore, lower the baseline VMT used to evaluate Project impacts.

As seen in Table 3.1.7-2, *Near-Term Plus Project VMT Calculations*, the total daily VMT associated with the demand for 3,500,000 tons of sand in the near-term without the Project is approximately 71,231.41. The share associated with 570,000 tons of sand (the amount that would be produced by the Project) is 11,600.54 daily VMT. The daily VMT associated with obtaining 570,000 tons of sand from the Project site rather than being imported in from the north and south sources is 2,806.15, which is a reduction of 8,794.39 from the without project scenario. This corresponds to a 75.8-percent reduction, which is greater than the 15-percent VMT reduction threshold. Therefore, the project **would not result in a cumulatively considerable impact** relative to VMT.

Traffic Hazards Due to a Transportation Design Feature

As discussed in Section 3.1.7.2, the Project would meet the County's standards set forth for roadway design and avoidance of traffic hazards during pre-mining construction and operational phases. The reasonably foreseeable cumulative projects depicted on Figure 1-16 in Chapter 1.0 of this EIR would be required to comply with requirements for grading and building permits issued by the County, provide for traffic control and safety, and address design hazards for road construction. Given the distance of the cumulative projects from the Proposed Project, other roadways would be utilized for access to these projects. Therefore, potential cumulative impacts related to traffic hazards due to design features would not occur, and the Proposed Project **would not result in a cumulatively considerable impact** related to hazards.

Emergency Access

As described in Section 3.1.7.2, a Traffic Control Plan would be implemented during the pre-mining construction phase of the Project to ensure adequate emergency access. The Project would include fire access and circulation throughout the Project site, including emergency access. The addition of Project trips would not impede emergency access within the cumulative project study area, and each project identified in the study area would be individually required to comply with County requirements for emergency access. Therefore, the Project, **would not result in a cumulatively considerable impact** related to emergency access.

3.1.7.4 *Significance of Impacts*

Based on the analysis provided above, the Proposed Project would have less than significant direct and cumulative transportation and traffic impacts.

3.1.7.5 *Conclusion*

Based on the analysis provided above, no significant Project-specific or cumulative impacts related to transportation and traffic would result from implementation of the Project.

**Table 3.1.7-1
EXISTING PLUS PROJECT VMT CALCULATIONS**

Scenario	Existing			Existing + Project			
Total Sand Demand (tons)	2,500,000			2,500,000			
Calculations							
Name	South ¹	North ²	East County Sand Mine	South	North	East County Sand Mine	Cottonwood
Tonnage split	60%	35%	5%	45%	27%	5%	23%
Tonnage #	1,494,990	878,010	102,000	1,135,890	667,110	102,000	570,000
Tonnage per truck	25	25	25	25	25	25	25
Number of working days in a year	260	260	260	260	260	260	260
Number of trucks per day	230	135	16	175	103	16	88
Average Trip Length to midpoint (miles, roundtrip)	190	112	24	190	112	24	32
<i>Subtotal VMT</i>	43,699.71	15,128.79	376.62	33,202.94	11,494.82	376.62	2,806.15
<i>Total VMT</i>	59,205.11			47,880.53			
<i>Project's Proportion</i>	--			22.80%			
<i>Total VMT for 570,000 tons</i>	13,498.77			2,806.15			
<i>VMT Reduction for proposed project production</i>	79.2%						

Source: LLG 2021a

¹ South refers to the major operating mine south of midpoint that exports sand consistently (i.e., Mexico Las Palmas Valley Mine).

² North refers to the major operating mine north of the midpoint that exports sand consistently (i.e., Lake Elsinore).

VMT = vehicle miles traveled

**Table 3.1.7-2
NEAR-TERM + PROJECT VMT CALCULATIONS**

Scenario	Near- Term				Near- Term+ Project				
Total Sand Demand (tons)	3,500,000				3,500,000				
Number of sources	4				5				
<i>Calculations</i>	<i>Source 1</i>	<i>Source 2</i>	<i>Source 3</i>	<i>Source 4</i>	<i>Source 1</i>	<i>Source 2</i>	<i>Source 3</i>	<i>Source 4</i>	<i>Source 5</i>
Name	South ¹	North ²	East County Sand Mine	El Monte Sand Mine	South	North	East County Sand Mine	El Monte Sand Mine	Cottonwood
Tonnage split	51%	29%	3%	17%	41%	24%	3%	17%	15%
Tonnage #	1,950,720	1,097,280	102,000	650,000	1,561,140	916,860	102,000	650,000	570,000
Tonnage per truck	25	25	25	25	25	25	25	25	25
Number of working days in a year	260	260	260	260	260	260	260	260	260
Number of trucks per day	271	152	16	100	211	124	16	100	88
Average Trip Length to midpoint (miles, roundtrip)	190	112	24	24	190	112	24	24	32
<i>Total Baseline VMT</i>	51,408.74	17,046.06	376.62	2,400.00	40,108.71	13,885.59	376.62	2,400.00	2,806.15
<i>Grand Total VMT</i>	71,231.41				59,577.06				
<i>Project portion of Sand Demand</i>	--				16.29%				
<i>Grand Total VMT for 570K tonnage production</i>	11,600.54				2,806.15				
<i>VMT Reduction for proposed project production</i>	75.8%								

Source: LLG 2021a

¹ South refers to the major operating mine south of midpoint that exports sand consistently (i.e., Mexico Las Palmas Valley Mine).

² North refers to the major operating mine north of the midpoint that exports sand consistently (i.e., Lake Elsinore).

VMT = vehicle miles traveled



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Source: Linscott, Law and Greenspan (2020)