

13 TRAFFIC AND CIRCULATION

INTRODUCTION

This chapter evaluates potential impacts resulting from the additional vehicles added to the roadway system during the construction and operation of the proposed project, and associated effects related to emergency access and traffic hazards. This chapter also addresses the potential for the project to conflict with a transportation program, plan, or ordinance and CEQA Guidelines Section 15064.3(b).

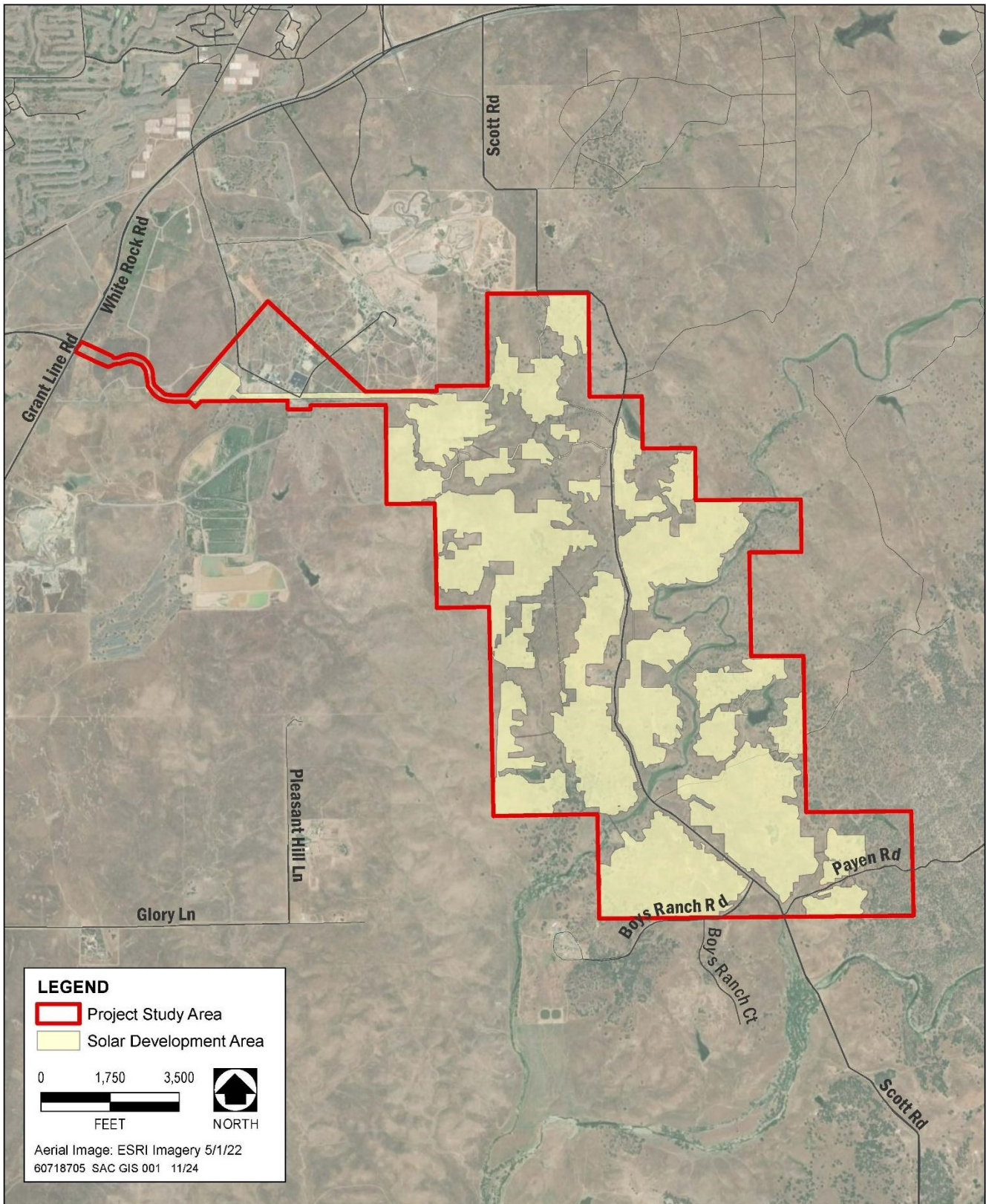
ENVIRONMENTAL SETTING

Local access to the project site would be from Scott Road. Access to components of the photovoltaic (PV) solar energy generating facility would be controlled through security gates at several entrances. Multiple gate-restricted access points would be used during construction and operation. Roadways within 1 mile of the project site are shown on Plate TC-1 and include:

- **Scott Road** is a two-lane roadway (one lane in each direction) between White Rock Road and Latrobe Road. Scott Road runs generally north-south through the middle of the project site parcels. It travels through rural lands. Measured 24-hour traffic volumes on Scott Road at White Rock Road ranged from 2,395 to 2,767 daily vehicles during measurements taken from 2018 through 2019 by Sacramento County (Sacramento County 2021). Peak-hour traffic is estimated to represent 10 percent of daily traffic, or 277 vehicles per hour. There has been no material change to traffic volumes on Scott Road within the project area since the 2018-2019 traffic measurements.
- The following roadway segments provide access to private property in the project vicinity: **Boys Ranch Road** is a two-lane roadway (one lane in each direction) west of Scott Road and runs generally east-west along the southern boundary of the project site parcels. It travels through rural lands.
- **Boys Ranch Court** is Boys Ranch Court is not an improved public roadway but appears to be an approximately 43-foot-wide private road easement, accompanied by public utility easements. The road runs south of Boys Ranch Road and travels through rural lands, generally along the southern boundary of the project site parcels. This easement may provide access to adjacent properties but does not constitute a formal two-lane roadway.
- **Payen Road** does not appear to be an improved public roadway but rather a private road easement running generally east-west along the southern boundary of the project site parcels. The easement may include provisions for access and public utility easements and traverses through rural lands east of Scott Road.

No bus stops, pedestrian, or bicycle facilities are located near the project site (Sacramento County 2022). The 2022 Sacramento County Active Transportation Plan shows an existing Class II bicycle lane on White Rock Road, northwest of the Prairie City State Vehicular Recreation Area.

Plate TC-1: Roadways in the Project Vicinity



Source: Dudek 2024, Adapted by AECOM 2024

REGULATORY SETTING

The following provides a summary of pertinent transportation plans, programs, policies and ordinances.

FEDERAL

There are no federal laws or regulations that are relevant to potential transportation impacts of the project.

STATE

There are no state laws or regulations that are relevant to potential transportation impacts of the project. The CEQA Guidelines provide that for land use projects, “a project’s effects on traffic delay shall not constitute a significant impact.” (CEQA Guidelines, Section 15064.3, subd. (a).) vehicle “Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact.” (CEQA Guidelines, Section 15064.3, subd. (b)(1).) A lead agency has discretion to determine the appropriate methodology to measure vehicle miles traveled (VMT). (See discussion below regarding methodology adopted by the County of Sacramento.)

LOCAL

COUNTY OF SACRAMENTO GENERAL PLAN

The main theme of the Sacramento County General Plan Circulation Element is to provide a range of transportation choices (Sacramento County 2020, amended 2022) The General Plan directs integrated and balanced investment in the transportation system: roadway, public transit system, bicycling and pedestrian infrastructure. The General Plan’s Circulation Element consists of the Transportation Plan and Transportation Policy Plan.

The following General Plan policies related to transportation and circulation may pertain to the proposed project. Additional General Plan policies related to scenic corridors and scenic highways listed in the Circulation Element that may pertain to the proposed project are described in more detail in Chapter 3, “Aesthetics”. The associated environmental impacts related to these policies are addressed in the Impacts and Analysis section further below.

Policy CI-10. Land development projects shall be responsible to mitigate the project’s adverse impacts to local and regional roadways.

SACRAMENTO COUNTY ACTIVE TRANSPORTATION PLAN

The 2022 Sacramento County Active Transportation Plan shows a recommended Class II bicycle lane on White Rock Road between the El Dorado County line and the intersection with Grant Line Road, a new Class II bicycle lane on the entire stretch of Scott Road, and a new Class I facility approximately 1 to 1.5 miles east of, and parallel to Scott Road.

TRANSPORTATION IMPROVEMENT AND PROGRAM GUIDE (TIPG) AND CAPITAL IMPROVEMENT PLAN

The Sacramento County Transportation Improvement Program Guide (TIPG) presents the capital improvement plan and the maintenance and operations programs for unincorporated area roadway, bikeway, and pedestrian systems for implementation in the next 5 years (Sacramento County 2019). The County updates the Capital Improvement Plan, which includes transportation improvements, annually and the most recent Capital Improvement Plan includes improvements implemented between 2024 and 2029.

TRANSPORTATION ANALYSIS GUIDELINES

For certain projects, the Department of Transportation requires Local Transportation Analyses (LTA), which are traffic studies. Projects subject to an LTA would 1) generate 100 or more new a.m. or p.m. peak hour vehicle trip-ends, 2) generate 1,000 or more daily vehicle trip-ends, or 3) are likely to cause or substantially contribute to traffic congestion or safety issues. The purpose of the LTA is to ensure compliance with the multimodal policies in the General Plan; these include level of service (LOS)¹, safety, transit service, and a comprehensive, safe, convenient, and accessible bicycle and pedestrian system. The project analysis includes conditions to provide any recommended improvements necessary to comply with General Plan policies. Depending on the project, the Department of Transportation may require additional analysis of other roadway elements such as turn pocket queuing, drive-thru queuing, traffic signal warrants, traffic safety, neighborhood cut-through traffic, truck impacts, access control, and phasing analysis. The County's *Transportation Analysis Guidelines* (Sacramento County 2020) provide the requirements and guidance for preparing an LTA.

The *Transportation Analysis Guidelines* have been updated to reflect SB 743 and reflected in the CEQA Guidelines Section 15064.3. As noted in the County's guidelines, the intent of SB 743 is to bring CEQA transportation analyses into closer alignment with other statewide policies regarding greenhouse gases, complete streets, and smart growth. Using VMT as a performance measure instead of LOS is intended to discourage suburban sprawl, reduce greenhouse gas emissions, and encourage the development of smart growth, complete streets, and multimodal transportation networks. The current County guidelines provide methodologies for transportation engineers and planners to conduct CEQA transportation analyses for land development and transportation projects in compliance with SB 743. Notably, the County guidelines include the following screening criteria for projects that are expected to result in less-than-significant VMT impacts:

- Projects generating less than 237 average daily traffic (ADT)

¹ Level of service (LOS) is a qualitative measure used to relate the quality of motor vehicle traffic service. LOS is used to analyze roadways and intersections by categorizing traffic flow and assigning quality levels of traffic based on performance measure like vehicle speed, density, congestion, etc.

- Local-serving public facilities/services, including utility facilities²

IMPACTS AND ANALYSIS

During the approximately 18-month construction period, the proposed project will require daily trips for commuting of the construction workforce, for movement of construction equipment, and for hauling. The number of workers expected on-site during construction of the project would vary over the construction period and would average approximately 16 to 476 workers per day. Deliveries of equipment and supplies to the site would also vary over the construction period but have the potential to range from two to 40 one-way trips, averaging approximately 11 daily one-way trips across the construction phases. Haul truck trips would also vary with different construction phases but would range from seven daily one-way trips across the construction phases, and would peak with 57 daily one-way haul truck trips during the testing, commissioning, site cleanup phase. Parking for project-related vehicles would be provided on-site during construction. As construction progresses, the parking area would be relocated adjacent to new project phases. During decommissioning, average daily worker one-way trips would be approximately 82 with a peak of 200, average equipment and supply trips would be 18 with a peak of 32, and average haul truck trips would be 50 with a peak of 52.

SIGNIFICANCE CRITERIA

Based on Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to traffic and circulation if it would:

- Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access.

² Appendix A to the County's Transportation Analysis Guidelines classify both Major Utility and Solar Energy Facility land uses as local-serving public facilities/service (LPFS), and thus meet the screening criteria to not require preparation of a VMT analysis.

IMPACT TC-1: CONFLICT WITH A PROGRAM, PLAN, ORDINANCE OR POLICY ADDRESSING THE CIRCULATION SYSTEM, INCLUDING TRANSIT, ROADWAY, BICYCLE, AND PEDESTRIAN FACILITIES

CONSTRUCTION AND DECOMMISSIONING

Regionally, access to the project site would be provided primarily by U.S. Highway 50. Local access to the project site would be from Prairie City Road and Scott Road. The project does not include any permanent changes to the public roadway network. Temporary construction activities would be geographically limited to the internal project site. As a result, the direct impacts of construction would not substantially impact the area's public roadways.

Up to 57 daily construction-related truck trips for delivery of materials and hauling would be spread over an 8-hour workday during the peak period of construction in terms of trip generation, which is during site preparation. In addition, a maximum of 476 worker trips would occur during the a.m. and p.m. hours before and after each workday during the peak construction phase, resulting in a total of up to 1,009 daily vehicle and truck trips added each day to local roadways during the peak trip-generating phase of construction. If the equipment and materials delivery and haul trips are spread evenly across an eight-hour workday, and the worker commute trips occur during the first and last hour of the eight-hour workday, the peak hourly trip generation would be approximately 483.

Existing traffic volumes along Scott Road at White Rock Road range from 2,395 to 2,767 total trips per day (Sacramento County 2018). Project construction trips represent a short-term increase in daily traffic of about 36 to 42 percent on Scott Road. The effect on daily and peak-hour traffic volumes would be temporary, limited to the estimated 18-month construction period, and the additional vehicles would not substantially alter existing roadway capacity. Given the limited duration of construction activity, project construction is not anticipated to conflict with any applicable plan, policy, or ordinance related to the transportation system that could result in a substantial adverse environmental effect. According to County's *Transportation Analysis Guidelines*, the LOS C or D capacity for a two-lane, rural roadway with access and characteristics similar to Scott Road typically ranges from 3,400 to 6,000 vehicles per day (Sacramento County 2020). Even with the temporary increase in construction traffic, total daily volumes on Scott Road would remain well below this capacity range, suggesting that the roadway would continue to operate at an acceptable service level during construction. Furthermore, in accordance with the County's *Transportation Analysis Guidelines*, to the extent that LOS is temporarily degraded by short-term construction activities consistent with CEQA Guidelines section 15064.3, the County would address the issue in terms of General Plan consistency rather than as an environmental impact subject to CEQA analysis and mitigation.

During the 12-month decommissioning phase, up to 52 daily truck trips would be required for the removal of materials and equipment. Additionally, a maximum of 200 worker trips would occur during the a.m. and p.m. hours before and after each workday. This results in a total of up to 452 daily vehicle and truck trips added each day to local roadways during the peak trip-generating phase of decommissioning. Assuming that the truck trips are spread evenly over an 8-hour workday and the worker commute trips occur during the first and last hour of the workday, the peak hourly trip generation would be approximately 206 trips.

No bus stops, pedestrian and bicycle facilities are located near the project site, and as a result there would be no impact from project construction on existing facilities (Sacramento County 2022). Scott Road, located in Sacramento County, is a rural roadway that does not have designated bike lanes. Cyclists often use this road for recreational purposes, especially during events like the annual “Great Scott Road Ride,” where sections of Scott and White Rock roads are temporarily closed to motor vehicles to promote cycling. However, under normal conditions, cyclists share the road with vehicular traffic. Given the lack of dedicated bike lanes and the rural nature of Scott Road, Mitigation Measure TC-3 below requires the applicant to submit to the County a traffic control plan including standard construction traffic management signage to notify drivers and cyclists to exercise caution and be prepared for varying road conditions. Thus, construction of the proposed project would not have a substantial adverse effect on the area’s roadways or other existing or planned transportation facilities. Therefore, the impact of project construction on traffic circulation, or transit, bicycle and pedestrian facilities would be **less than significant**.

OPERATION

The project would be operated remotely through a local solar operations and maintenance company once constructed. The up to 10 daily trips generated during operations for the commutes and performance of regular inspection and maintenance activities would not be considered substantial. An additional 32 daily trips are assumed for water for panel washing and grazing activity for a total of approximately 42 trips per day. The additional daily trips during operations represents less than one percent of the existing daily trips on White Rock Road at Scott Road and approximately two percent of the existing daily trips on Scott Road at White Rock Road. This change does not have the potential to substantially increase traffic volumes and adversely impact the local or regional circulation system.

The County’s policies to encourage bicycle, pedestrian, and transit use are related to other types of development – residential, office, commercial, and civic uses where patrons, residents, and employees can be encouraged to use alternatives to a private vehicle to reach daily destinations. Such policies are not relevant to the project, particularly considering the anticipated extremely low level of operational trips.

As noted previously, the 2022 Sacramento County Active Transportation Plan shows a recommended Class II bicycle lane on White Rock Road between the El Dorado County line and the intersection with Grant Line Road, a new Class II bicycle lane on the entire stretch of Scott Road. The additional 42 daily trips resulting from the proposed project would not interfere with the use of these new facilities.

Due to the limited changes resulting from project operations, the impact on traffic circulation, transit, bicycle, and pedestrian facilities would be **less than significant**.

IMPACT TC-2: CONFLICT OR BE INCONSISTENT WITH CEQA GUIDELINES SECTION 15064.3, SUBDIVISION (B)

CONSTRUCTION, OPERATION, AND DECOMMISSIONING

The Sacramento County *Transportation Analysis Guidelines* (Sacramento County 2020) provide that if a project meets the County’s screening criteria, a detailed CEQA transportation analysis

of VMT would not be required. The screening criteria for projects that are expected to result in less than significant VMT impacts are presented in Table 3-1 of the County's *Transportation Analysis Guidelines*; the applicable criteria from the guidelines as they relate to the proposed project include:

- Small projects that generate less than 237 ADT – The project is consistent with a “small project” based on trip generation. Daily trip generation during operation of the project would average 4 to 10 trips per day and 32 vehicle trips. This is well below the threshold of 237 average daily trips provided in the County guidelines. Operational impacts would generate less than the daily trips threshold.
- Local-Serving Public Facilities/Services including utilities – The power generated by the proposed solar facilities would connect with the Sacramento Municipal Utility District's (SMUD's) 230 kV powerlines. The project meets the screening criteria as a local-serving public utility and solar energy facility.

Because VMT analysis is intended to capture the long-term impacts of a proposed project, construction activities are not typically subject to VMT analysis. As a result, no analysis of construction (or decommissioning) VMT is warranted (Sacramento County 2020, page 10). Moreover, the project's operational characteristics meet the above screening criteria as both a small project and a local-serving utility, and thus detailed CEQA transportation analysis of operational VMT is not required. Chapter 5, “Air Quality” includes an evaluation of the air quality and greenhouse gas effects of the project, including emissions associated with vehicle trips during construction and operation. Therefore, consistent with the County *Transportation Analysis Guidelines*, there is no conflict with CEQA Guidelines Section 15064.3 and the VMT impact associated with the project would be **less than significant**.

While VMT is now the approved methodology for assessing transportation impacts under CEQA, other programs, plans, ordinances and policies related to LOS are considered during a project's approval phase to the extent that such standards are present in applicable local plans (e.g., General Plan) and guidelines. As documented above, because of the limited number of trips generated by project construction and operations, no further analysis is warranted for purposes of this document as relates to County plans, policies, and guidelines that relate to LOS.

IMPACT TC-3: SUBSTANTIALLY INCREASE HAZARDS DUE TO A GEOMETRIC DESIGN FEATURE (E.G., SHARP CURVES OR DANGEROUS INTERSECTIONS) OR INCOMPATIBLE USES (E.G., FARM EQUIPMENT)

CONSTRUCTION AND DECOMMISSIONING

Primary access to the project site would be from Scott Road. As described above, access to components of the solar field would be controlled through security gates at several entrances. Multiple gate-restricted access points would be used during construction and operation. The project does not include any permanent changes to the geometry of the area roadways. As a result, no impact would result from project construction or operations.

Temporary facilities would be developed on-site during construction and decommissioning to facilitate the construction process. These facilities may include construction trailers, temporary septic systems or holding tanks, parking areas, material receiving / storage areas, construction power service, recycling / waste handling areas, and others. However, these facilities and associated construction and decommissioning activities would be limited to the project site and are not expected to directly impact surrounding public roadways.

While project construction and decommissioning would introduce additional traffic movements and oversized haul vehicles to the local road network, construction traffic is common throughout the County and is not considered an “incompatible use.” However, given the scale of the project and rural setting in which the project would be constructed and decommissioned, the temporary addition of oversize vehicles, haul trucks and worker vehicles could increase traffic hazards, and the resulting impact would be **potentially significant**.

To address this potentially significant impact, Mitigation Measure TC-, below, requires a traffic control plan to be prepared in accordance with the California Manual of Traffic Control Devices. Pending final project design, the requirement for a traffic control plan may be triggered by the County encroachment permit process if any portion of Scott Road right-of-way would be temporarily occupied or altered during construction or decommissioning. However, if no encroachment permit is required, the project would still be subject to a traffic control plan to address the potentially significant impact and to provide consistency with the County General Plan Policy CI-10, which requires land development projects to mitigate adverse impacts on local and regional roadways.

MITIGATION MEASURES

TC-3. Prepare and Implement Traffic Control Plan.

To address potential traffic hazards during construction and decommissioning, prior to the commencement of construction or demolition activities, the applicant shall prepare a traffic control plan for review and approval by the County Department of Transportation. The measures to be included in the traffic control plan include signage, traffic cones, and flaggers to help ensure safe and efficient movement of traffic through the affected area, with a focus on safety for cyclists on Scott Road. In addition, the traffic control plan would provide for notification of emergency responders regarding the planned construction activities.

SIGNIFICANCE AFTER MITIGATION

Implementation of the above mitigation measure would limit the potential for traffic hazards to occur during construction and decommissioning by providing sufficient warning to motorists passing by the project site and features such as flaggers and traffic cones that would minimize conflicts with construction vehicles and equipment. As a result, the potential impact related to traffic hazards would be **less than significant with mitigation**.

OPERATION

Project operations would involve limited traffic volumes as the project would be operated remotely. Periodic maintenance and panel washing activities would not generate substantial

traffic or involve conflicts on adjacent roadways that would result in traffic hazards. The impact during project operations would be **less than significant**.

IMPACT TC-4: RESULT IN INADEQUATE EMERGENCY ACCESS

CONSTRUCTION AND DECOMMISSIONING

Temporary facilities would be developed at the project site during construction to facilitate the construction process as described above. Construction impacts would generally be limited to on-site, and not directly impact the area's public roadways or substantially impede access to or from nearby properties. As a result, the impact of the project during construction would be **less than significant**. To the extent that emergency access in the project vicinity could be temporarily impeded during construction, the measures provided in the traffic control plan described above would serve to ensure that sufficient emergency access is available for the duration of the construction period. Additionally, as discussed in Chapter 2, "Project Description," lock boxes would be placed at all gated entrances to always allow access to emergency services during construction, operation, and decommissioning.

OPERATION

Access to the project site would be from Scott Road. The project does not include any permanent changes to the public roadway network. Access to the project site during operations would be controlled at several gates; maintenance and security-related vehicle trips are estimated to not exceed 42 trips per day. As discussed in Chapter 2, "Project Description," lock boxes would be placed at all gated entrances to always allow access to emergency services during construction, operation, and decommissioning. As a result, **no impact** on emergency access would result from project operations.