

4. Environmental Impact Assessment

4.16 Transportation and Traffic

This section describes traffic and transportation in the area of the Proposed Project. The potential impacts and alternatives are also discussed.

4.16.1 Environmental Setting

The proposed Downs Substation expansion and the proposed looped 115 kV subtransmission lines are located at the intersection of Ridgecrest Boulevard and Downs Street in the City of Ridgecrest. Ridgecrest Boulevard is a 110-foot wide divided arterial street running east-west, and Downs Street is a 90-foot wide secondary arterial street running north-south. State Route 14 and U.S. Highway 395 are the key north-south highways through the City of Ridgecrest and the surrounding cities. State Route 178 provides east-west service through this area ([Figure 4.16-1](#)). The proposed fiber optic telecommunication cable would be installed on existing 115 kV subtransmission line poles that are located adjacent to West Inyokern Road, Jacks Ranch Road, Church Street, East Ridgecrest Boulevard, San Bernardino Boulevard, and Springer Avenue in the City of Ridgecrest. Outside of the City of Ridgecrest, the fiber optic telecommunication cable would be installed adjacent to California State Route 178 in San Bernardino County and along or across Acacia Street, 4th through 7th Streets, and A through H Streets in the Argus/Trona area. The majority of the road segments along the Inyokern-McGen-Searles No. 1 and No. 2 115 kV subtransmission lines in San Bernardino County are under state jurisdiction.

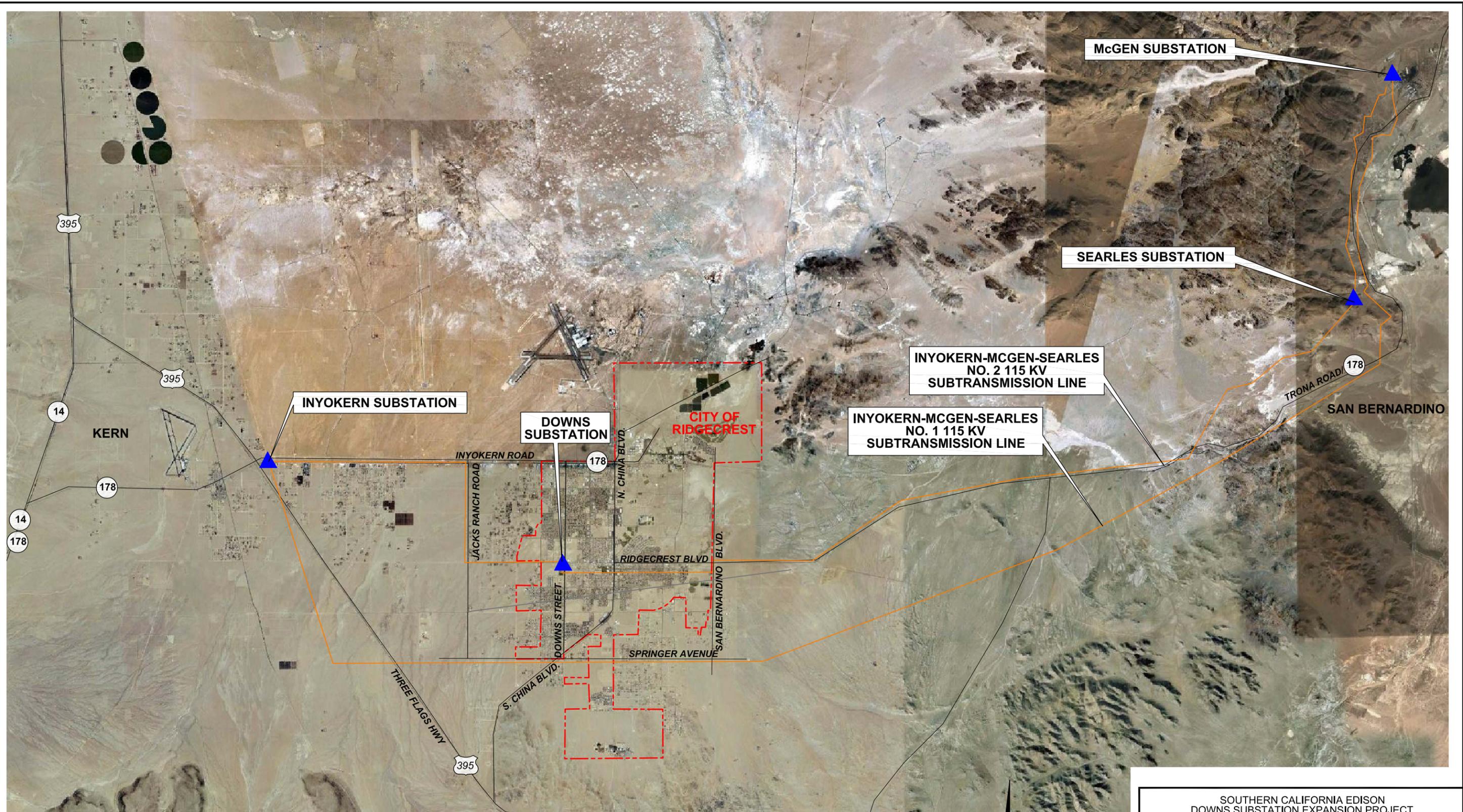
Personal transportation in the vicinity of the Proposed Project is dominated by automobile travel. Due to the geographically dispersed population in the region, public transportation is rudimentary: the City of Barstow administers the operation of a San Bernardino County-supported specialized transportation service for seniors and persons with disabilities in Trona; Kern Regional Transit operates the Mojave—Ridgecrest bus route, which provides twice daily service between the communities of Ridgecrest, Inyokern, California City and Mojave on Mondays, Wednesdays and Fridays; and the City of Ridgecrest operates a dial-a-ride service for seniors and persons with disabilities.

Commercial transportation of goods and materials is largely accomplished by truck. In Kern County, California State Route 178 (Highway 178) is designated as a National Truck Network Route. In San Bernardino County, Highway 178 is designated as part of the California Legal Network for trucks. Accordingly, Ridgecrest Boulevard in the City of Ridgecrest is designated as a truck route. Trona is served by commercial rail service to move mining products to market.

The flow of traffic is frequently described using the Level of Service scale, which is a qualitative measurement of operational characteristics of traffic flow on a roadway or at the intersection of

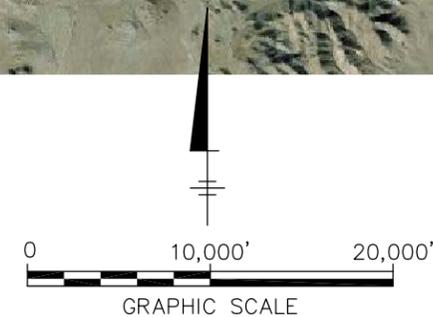
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roadways, based on traffic volumes and facility type. Traffic operations are described in a qualitative manner using levels ranging from “A” to “F”, with “A” representing the highest level of service. In determining the qualitative measure assigned to a facility or intersection, the following characteristics are considered: speed, delay, maneuverability, driver comfort, and convenience. LOS can be used in transportation planning to determine appropriate sizes for facilities and identify impacts of proposed projects. In general, the following descriptions apply to the qualitative levels described above: “A” – free flow; “B” – reasonably free flow; “C” – stable flow; “D” – approaching unstable flow; “E” – unstable flow; and “F” – forced or breakdown flow (gridlock).



LEGEND

- - - CITY OF RIDGECREST
- SUBTRANSMISSION/TELECOM LINE LOOP
- ▲ SUBSTATION



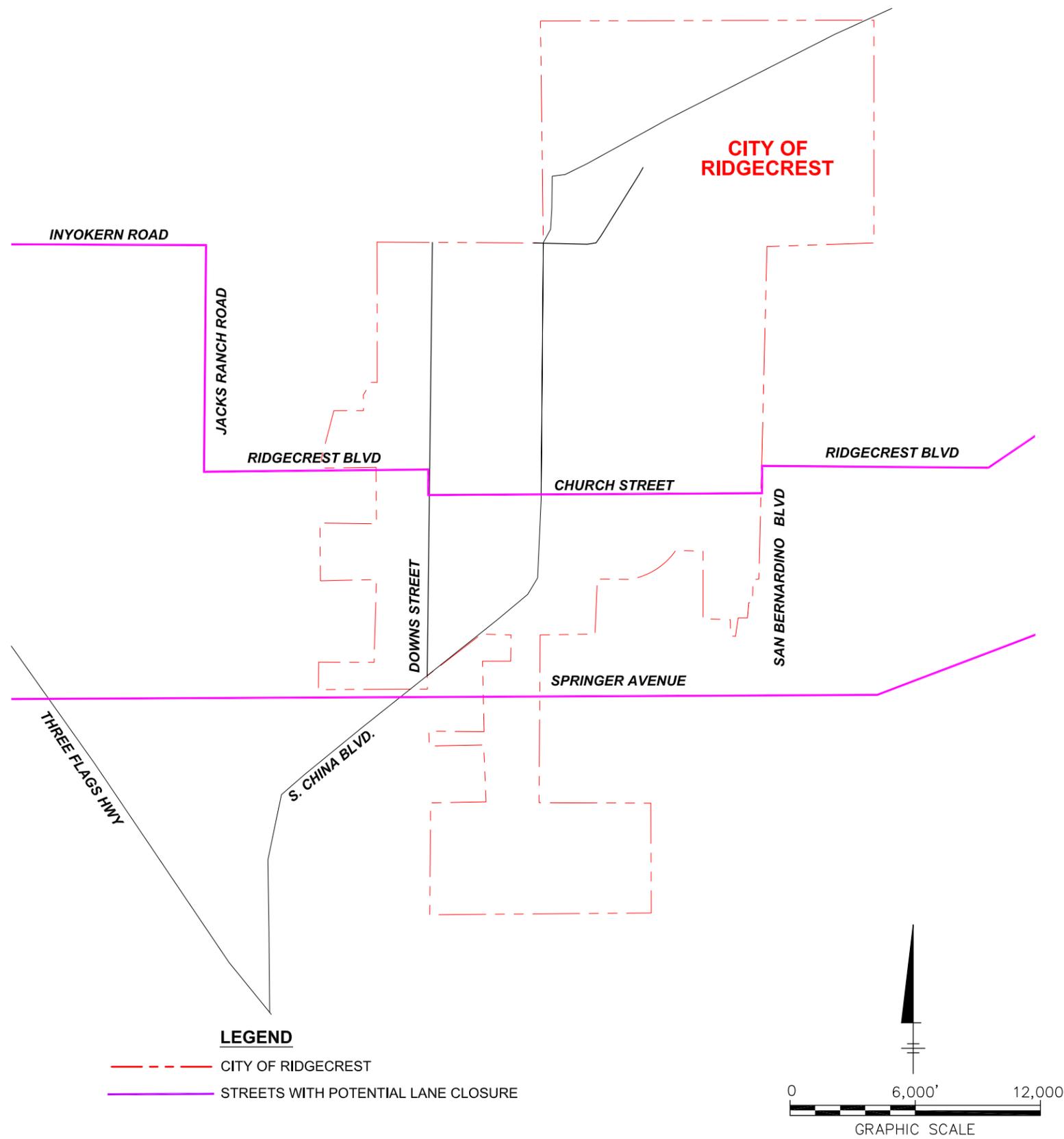
SOUTHERN CALIFORNIA EDISON
 DOWNS SUBSTATION EXPANSION PROJECT
 KERN AND SAN BERNARDINO COUNTIES, CALIFORNIA
 PROPONENT'S ENVIRONMENTAL ASSESSMENT

**MAJOR HIGHWAYS
 NEAR PROPOSED PROJECT**

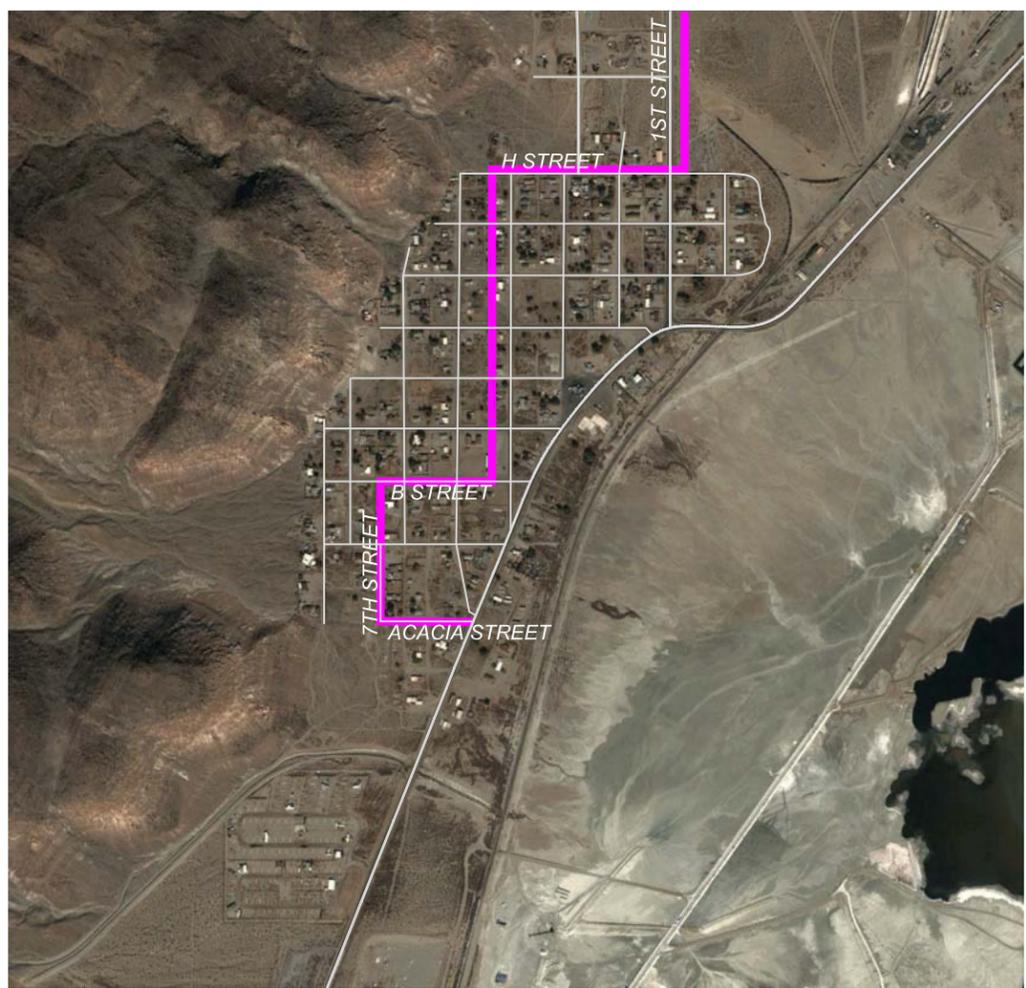
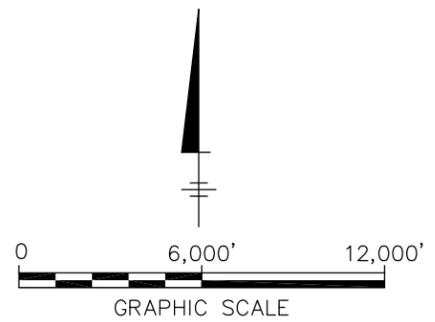


FIGURE
4.16-1

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LEGEND
- - - - - CITY OF RIDGECREST
————— STREETS WITH POTENTIAL LANE CLOSURE



ARGUS/TRONA AREA

SOUTHERN CALIFORNIA EDISON
DOWNS SUBSTATION EXPANSION PROJECT
KERN AND SAN BERNARDINO COUNTIES, CALIFORNIA
PROPONENT'S ENVIRONMENTAL ASSESSMENT

STREETS WITH POTENTIAL LANE CLOSURE DUE TO PROPOSED PROJECT

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FIGURE 4.16-2

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The State Route 178 Transportation Concept Report (TCR; CalTrans, 2006) dated May 2006 stated that the “concept” LOS for State Route 178 is “C” except for the urbanizing segment in the City of Ridgecrest. The 2011 Kern Draft Regional Transportation Plan (RTP) identified that the “minimum” Level of Service (LOS) within Kern County shall be no lower than LOS “E” as part of the Kern County Congestion Management Plan. The 2007 San Bernardino County Congestion Management Plan (CMP) established by San Bernardino Associated Governments (SANBAG, 2007) states that the LOS standard for the CMP roadway system shall be “E” for all segments and intersections except for those designated LOS “F”. The City of Ridgecrest’s General Plan 2010 Circulation Element Goal C-2.4, Level of Service for Local Streets and Intersections, notes that the City shall strive to maintain LOS “C” or better for both daily and peak hour conditions.

4.16.2 Regulatory Setting

4.16.2.1 Federal

Hazardous Materials Transportation Act of 1974—The Act directs the United States Department of Transportation (USDOT) to establish criteria and regulations regarding safe storage and transportation of hazardous materials. The USDOT would primarily deal with the transportation of hazardous materials on roadways in the Proposed Project area. The Hazardous Materials Regulations (49 CFR, Subtitle B, Chapter L, Subchapter C) addresses transportation of hazardous materials, types of materials defined as hazardous, and the marking of vehicles transporting hazardous materials. Additionally, the Motor Carrier Safety Regulations (49 CFR Subtitle B, Chapter III, Subchapter B) specifies safety considerations for the transport of hazardous materials over public roadways.

4.16.2.2 State

SCE would secure all necessary permits required by the California Department of Transportation (CalTrans) for construction within the public right-of-way (ROW) of a State highway.

4.16.2.3 Local

SCE would secure all necessary permits required by the City of Ridgecrest and Kern or San Bernardino Counties for construction within the public street ROW. The streets that may require potential lane closures are shown on [Figure 4.16-2](#).

The San Bernardino CMP states that any project meeting the CMP threshold of 250 two-way peak hour trips that expects to add at least 50 peak hour trips to a State highway facility is required to prepare a Traffic Impact Analysis (TIA) report.

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4.16.3 Significance Criteria

The significance criteria for assessing the impacts to utilities and service systems come from the CEQA Environmental Checklist. A project causes a potentially significant impact if it would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access;
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

4.16.4 Impact Assessment

Construction and operation of the Proposed Project would result in no or less than significant impacts for the following CEQA criteria:

Would the Proposed Project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less than Significant Impact. During construction activities of the proposed Downs Substation expansion and the proposed new 115 kV subtransmission line, along the City's public street

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ROWs, SCE would secure the necessary permits required to work in the City's ROW. In addition, appropriate traffic control measures would be implemented through necessary permits issued by the City of Ridgecrest. If lane closures are required, SCE would comply with best management practices established by The California Joint Utility Traffic Control Manual (California Joint Utility Traffic Control Committee 2010).

After the completion of the construction, Downs Substation would be unattended and electrical equipment within the Downs Substation would be remotely monitored and controlled by an automated system from SCE's Lugo Switching Center. SCE personnel would visit Downs Substation and the routes of the fiber optic telecommunication cable for routine or emergency repair or maintenance purposes. The estimated number of vehicle trips expected during normal operation would be less than ten per month; therefore, impacts to the current circulation system would be less than significant.

The stringing of the 115 kV subtransmission lines along the Inyokern-McGen-Searles No. 1 and No. 2 115 kV subtransmission line routes and the replacement of the six subtransmission poles along the Inyokern-McGen-Searles No. 1 115 kV subtransmission line route would generate less than ten daily vehicle trips. In addition, appropriate traffic control would be implemented through necessary permits issued by the City of Ridgecrest, CalTrans, and San Bernardino and Kern Counties. If lane closures are required, SCE would comply with best management practices established by The California Joint Utility Traffic Control Manual (California Joint Utility Traffic Control Committee 2010).

The implementation of Applicant Proposed Measures for traffic control would result in less than significant impacts to the performance of the circulation system. Therefore, less than significant impacts would occur under this criterion as a result of the Proposed Project.

Would the Proposed Project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less than Significant Impact. The Proposed Project would generate approximately 65 truck trips per day during construction. The majority of the truck traffic would use major streets and would be scheduled for off-peak traffic hours. Cement truck deliveries may need to be made during peak hours when footing work is being performed. The minimum level of service on Ridgecrest Boulevard and Downs Street is LOS "E". The latest annual average daily traffic (AADT) count on Downs Street close to the intersection is 9,515 and the latest AADT on Ridgecrest Boulevard close to the intersection is 10,131. Based on the traffic count, an increase

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in the number of truck trips would not cause significant impacts to the existing level of service on Downs Street or Ridgecrest Boulevard.

After the completion of the construction, Downs Substation would be unattended and electrical equipment within the Downs Substation would be remotely monitored and controlled by an automated system from SCE's Lugo Switching Center. SCE personnel would visit for electrical switching and routine maintenance purposes. Routine maintenance would include equipment testing, monitoring, and repair. The estimated number of vehicle trips expected during normal operation would be less than ten per month; therefore, impacts would be less than significant.

The stringing of the 115 kV subtransmission lines along the Inyokern-McGen-Searles No. 1 and No. 2 115 kV subtransmission line routes and the replacement of six subtransmission poles along the Inyokern-McGen-Searles No. 1 115 kV subtransmission line would generate less than ten daily vehicle trips; therefore impacts to the current LOS of the roads along the 115 kV subtransmission routes would be less than significant. A TIA report is therefore not necessary for the route segments in San Bernardino County because the estimated truck trips for the Proposed Project is less than 250 two-way trips and the peak hour vehicle trips along a State highway is less than 50.

In addition, appropriate traffic control would be implemented through necessary permits issued by the City of Ridgecrest, CalTrans, and San Bernardino and Kern Counties. If lane closures are required, SCE would comply with best management practices established by The California Joint Utility Traffic Control Manual (California Joint Utility Traffic Control Committee 2010).

The small volume of truck traffic associated with construction of the Proposed Project, and the limited number of vehicle movements required during operations, would result in less than significant impacts to level of service standards. Therefore, less than significant impacts would occur under this criterion as a result of the Proposed Project.

Would the Proposed Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;

No Impact. No Proposed Project components would require an FAA permit for either construction or operation, and therefore the Proposed Project would not impact air traffic patterns. No impacts would occur under this criterion as a result of the Proposed Project.

Would the Proposed Project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

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No Impact. No incompatible uses or street construction are proposed. No impacts would occur under this criterion as a result of the Proposed Project.

Would the Proposed Project result in inadequate emergency access?

No Impact. Construction and operation of the Proposed Project would not affect emergency access. The proposed Downs Substation expansion would be constructed on SCE-owned land, and the telecommunication cable would be suspended above roadways. During construction activities along public street ROWs, appropriate traffic control to maintain emergency access would be implemented through necessary permits issued by the City of Ridgecrest.

Would the Proposed Project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Less than Significant Impact. During construction activities along public street ROWs where bicycle and/or pedestrian paths exist, appropriate traffic control would be implemented through necessary permits issued by the City of Ridgecrest. If lane closures are required, SCE would comply with best management practices established by The California Joint Utility Traffic Control Manual (California Joint Utility Traffic Control Committee 2010). Temporary closure or rerouting of pedestrian sidewalks or bike paths may be necessary during construction to ensure the safety of the public and workers; however, these closures would be temporary, and thus no impacts would occur under this criterion as a result of the Proposed Project.

4.16.5 Applicant Proposed Measures

Because the Proposed Project would result in less than significant impacts to traffic or transportation, no Applicant Proposed Measures are offered.

REFERENCES

California Joint Utility Traffic Control Committee. 2010. The California Joint Utility Traffic Control Manual. April.

CalTrans. 2006. State Route 178 Transportation Concept Report. California Department of Transportation District 9 – Office of System Planning. May.

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City of Ridgecrest. 1994. Final – The City of Ridgecrest General Plan 1991 – 2010. Accessed at: http://ci.ridgecrest.ca.us/uploadedFiles/Departments/Public_Services/Planning_Department/City%20of%20Ridgecrest%20General%20Plan%201991-2010.pdf.

Kern County. 2010. 2011 Draft Regional Transportation Plan, Kern Council of Governments. Accessed at: <http://kerncog.org/cms/transportation/rtp>.

Kern County. Unknown Date. Inyokern Specific Plan. Kern County Department of Planning and Development Services.

SANBAG. 2007. Congestion Management Plan, San Bernardino Associated Governments. Accessed at: http://www.sanbag.ca.gov/planning/subr_congestion.html.