

As required by CEQA (Section 15130 *et seq.* of the CEQA Guidelines), this Draft EIR includes an analysis of "cumulative impacts." CEQA defines cumulative impacts as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The analysis of cumulative impacts is intended to describe the "incremental impact of the project when added to other, closely related past, present, or reasonably foreseeable probable future projects" and can result from "individually minor but collectively significant impacts taking place over a period of time" (CEQA Guidelines, §15355).

A cumulative project scenario has been developed to identify projects that are reasonably foreseeable and that would be constructed or operated during the life of the proposed project or project alternatives. Existing projects are included as part of the environmental setting for individual issue areas, and are analyzed with respect to each resource issue area in Section 4: Evaluation of Environmental Impacts.

This section analyzes the potential for the proposed project or alternatives to cause or contribute to significant cumulative effects when the impacts of project listed in Table 5.1-1 are considered together with the impacts of the proposed project or alternatives.

### 5.1 CUMULATIVE SCENARIO PROJECTS

Table 5.1-1 presents the projects considered as part of the cumulative scenario. The list was compiled through review of websites and by contacting the surrounding local and state agencies (Caltrans, City of Chula Vista, SANDAG, SDCWA, and Otay Water District) to inquire whether any projects are being constructed, were recently constructed, or are currently planned near the project area and the area of the project alternatives. Figure 5.1-1 shows the locations of identified projects in relation to the project area and project alternatives. The geographic area considered for cumulative effects varies by resource and is discussed under each resource topic.

Projects considered in the cumulative scenario include a range of project types, from housing developments and road improvements to habitat restoration projects that are in the vicinity of the proposed project and alternatives. Projects were reviewed to identify whether the proposed project or alternatives could contribute to cumulatively significant impacts when evaluated in combination with these other projects and, if there could be a potentially significant cumulative impact, whether the proposed project's or project alternative's contribution to a significant cumulative effect would be cumulatively considerable.

Table 5.1-1 Cumulative Project List

No.	Project Name	Project Components	Location	Status	
1	South Bay Bus Rapid Transit (BRT)	South Bay BRT includes 11 bus stations along a 21-mile route utilizing dedicated transit only lanes. Service will provide a rapid and reliable transportation alternative from the Otay Mesa Port of Entry to Downtown San Diego via eastern Chula Vista	Bus station at Eastlake Parkway and Olympic Parkway	Construction begins between Magdalena Ave. and SR 125 in Chula Vista in fall 2015	
2	Freeway Commercial	Approximately 550 multi-family residential units, two hotels	South of Olympic Parkway, east of SR-125, north of Birch Road, west of Eastlake Parkway	Final stages of permitting process as of early 2015 with estimated construction completion in 2019	
3	Millenia (East Urban Center)	Approximately 3,000 residential units, 3.8 million square feet of commercial use	South of Birch Road, east of Eastlake Parkway, north of Hunte Parkway, east of SR-125	Construction began October 2014 and is ongoing through 2016	
4	Village 8 East	Approximately 943 single-family and 2,177 multi-family residential units and 20,000 square feet of commercial use	Directly west of SR-125, south of Hunte Parkway	Final EIR published November 2014; construction anticipated to begin in early 2016 2017 and be completed in 2024 2021	
5	Village 8 West	Approximately 2,050 residential units, 300,000 square feet of commercial use	South of Hunte Parkway, west of SR-125 and Village 8 East, north of Otay Valley Road	Approved December 2013; permitting process ongoing as of March 2015; Final EIR published November 2014	
6	Village 9	Approximately 4,000 residential units, 1.7 million square feet of commercial use	Directly east of SR-125, south of Hunte Parkway	Permitting process ongoing as of March 2015; Final EIR approved at June 2014 public hearing	
7	Village 10	Approximately 695 single-family and 1,045 multi-family residential units	Southeast of Eastlake Parkway and Otay Valley Road intersection alignment	Permitting process ongoing as of March 2015: construction anticipated to be completed by 2021	

No.	Project Name	Project Components Location		Status	
8	Village 11 Winding Walk	Approximately 2,300 residential units, commercial development; includes middle school and high school to be constructed on proposed Hunte Parkway staging yard	South of Olympic Parkway and northeast of Hunte Parkway	Construction of residential and commercial development is mostly complete as of October 2014. Construction of middle and high schools would occur at the proposed Hunte Parkway staging yard. If the school starts construction before the project then the proposed project would use the alternative OTC staging yards instead of Hunte Parkway.	
9	University Park and Innovation Center	Approximately 345-acre site that will include about 20,000 square feet of university campus (including housing for university students) and 2 million square feet of innovation uses	South of Hunte Parkway, west of proposed Salt Creek Substation site	Implementation documents in preparation: Specific Plan and EIR; document completion estimated mid-2015	
10	Sweetwater to Lake Murray Pipeline Relining	Relining of approximately 4.4 miles of underground water supply pipeline (SDCWA Pipeline No. 3) in La Mesa, Spring Valley, and Chula Vista	Between Cabernet Drive and County Vistas Lane, south of Proctor Valley Road and west of SR-125 and Lake Murray	Construction to begin mid-2017	
11	Floit Property	Land swap with SDG&E to construct a residential development	South of Eastlake Drive and west of SR-125	Plans submitted to City of Chula Vista	
12	RV and Boat Storage	Commercial development within SDG&E easement	West of SR-125 and south of Eastlake High School	Application not yet submitted as of March 2015. Not considered reasonably foreseeable. This project is considered speculative and therefore the impacts of the project are not included in the analysis.	
13	TL 649 Upgrading	Upgrading of power line to improve reliability	Between Otay Mesa and San Ysidro Substations	Construction estimated to begin in October 2016 and to end in May 2017	
14	TL 6910 Fiber Optic Cable Installation	Installation of fiber optic cable	From Miguel Substation to Border Substation and Otay Mesa Substation	Construction estimated to begin December 2015 and to end April 2016	

No.	Project Name	Project Components	Location	Status	
15	TL 23041 and TL 23042	Power line rearrangement at Miguel Substation	Miguel Substation	Construction began March 2015 and estimated to end July 2015	
16	ANSI 600 and ANSI 300 Regulation Station Installation	Gas line tapping involving installation of ANSI 600 and ANSI 300 3-inch dual-run gas regulation stations; tapping 36" Transmission Line south of Hunte Parkway and installing a regulation station perpendicular to the tap	Hunte Parkway between L-3600 and Eastlake Parkway	Construction started late 2014	
17	Middle School	Construction of a middle school	Hunte Parkway and Eastlake Parkway	Construction estimated to begin as early as June 2015	
18	Otay Ranch University Villages Project	Residential development and associated village land uses; proposes 6,897 homes and associated village land uses on approximately 755 acres; includes approximately 620 acres of open space preserve for total project area of 1,375 acres	Within Otay Ranch	Permitting process ongoing as of March 2015; Final EIR published November 2014; construction of Village 3 North anticipated to be complete in 2018/2017; construction of Village 8 East and Village 10 anticipated to begin in mid 2023 and be complete in 2029/2021	
19	Otay Ranch Village 1 Maintenance	Continued as-needed maintenance of major public streets within Otay Ranch Village 1 including, but not limited to, sidewalks, curbs, gutters, drainage, paths, medians, street lighting, sewers, and landscaping	Heritage Road between Telegraph Canyon Road and East Palomar Street; East Palomar Street between Heritage Road and Santa Delphina Avenue	Project presented to City Council for funds appropriation during Fiscal Year 2013 Capital Improvement Project budget process	
20	624-4 Reservoir Project	A new 30 million gallon 624-4 emergency storage reservoir for the Otay Water District's 624 pressure zone.	West of I-125 and north of Parker Mountain Road	Phase III storage project planned for 2017	

Sources: Caltrans 2014, City of Chula Vista 2014, Otay Water District 2014, SANDAG 2014a, SANDAG 2014b, SDCWA 2014, SDG&E 2013, and SDG&E 2014

**Alternatives Existing Substation** Cumulative Project Legend **Existing Miguel** Staging Yard 11 Floit Property 1 South Bay Bus Rapid Transit RV / Boat Storage Freeway Commercial 13 TL 649 Upgrading Millenia (East Urban Center) TL 6910 Fiber Optic Cable Installation Village 8 East TL 23041 and TL 23042 Village 8 West ANSI 600 and ANSI 300 Regulation Station Village 9 Middle School Village 10 Otay Ranch University Villages Project EIR Village 11 Winding Walk University Park and Innovation Center Otay Ranch Village 1 Maintenance Sweetwater to Lake Murray Pipeline Relining 624-4 Reservoir Upper Otay Reservoir Eastlake Parkway Staging Yard **OTC Staging Yards** (Alternate) Lower Otay Hunte Parkway Staging Yard Alternative 230/12 kV Substation Proposed 69/12 kV Salt Creek Substation 0.25 SOURCE: ESRI 2014 and Panorama Environmental, Inc. 2014 Scale: 1:50,000 SDG&E-Owned LEGEND Proposed 69-kV Power Line --- City Boundary within SDG&E 120-foot-wide Parcels Right-of-Way Staging Yard / PAN®RAMA Helicopter Fly Yard

Figure 5.1-1 Cumulative Projects in the Vicinity of the Proposed Project and

Proposed Salt Creek

ENVIRONMENTAL, INC.

Alternative Transmission Route

Public Roads Underground

## 5.2 ANALYSIS OF CUMULATIVE IMPACTS

The following analysis describes the potential for the proposed project, in combination with other projects, to result in cumulatively significant environmental impacts. In each instance, the evaluation identifies whether the cumulative impact would be significant, and whether the proposed project's contribution would be considerable.

## Significant Effects of Proposed Project

The proposed project would result in significant and unavoidable impacts to:

- Aesthetics (temporary and permanent)
- Noise (temporary)
- Recreation (temporary and permanent)

Most proposed project impacts would be less than significant after mitigation. Even without mitigation there would be less than significant or no impact to agriculture and forestry, land use, minerals, and population and housing.

## **Project Alternatives**

Each of the project alternatives would construct a substation within the same parcel as the proposed project substation (Figure 5.1-1). Alternatives 1 and 2 would result in comparable cumulative impacts to the proposed project substation; however, Alternatives 1 and 2 would not require construction of a power line within the transmission corridor and would therefore avoid cumulative impacts from construction within the transmission corridor.

Alternative 3 would have comparable cumulative impacts to the proposed project substation; however, Alternative 3 would require underground construction within existing roadways. The Alternative 3 underground route in Hunte Parkway is located near the Village 11 Winding Walk Park commercial and residential development (Cumulative Project 8). The temporary noise impacts from underground construction of Alternative 3 would not combine with the noise impacts from construction of Village 11 Winding Walk Park because construction of that cumulative project is nearing completion and the noise impacts from the project would occur after the noise impacts from Village 11 are complete. The cumulative cultural resource and traffic impacts from construction and operation of Alternative 3 when combined with Village 11 are analyzed below in the Cultural Resource and Transportation and Traffic Sections, respectively.

### **Resources with No Impacts**

The proposed project would have no impacts on land use and planning, mineral resources, and population and housing and therefore would not contribute to cumulatively significant impacts to these resource areas.

#### **Aesthetics**

The geographic scope of the cumulative impacts to aesthetic resources consists of the viewsheds from public roadways, trails, and open space areas that could be affected by the proposed project. Visual impacts from implementation of the proposed project would include the

construction of the proposed substation and the installation of new power poles and conductors for the TL 6965 power line.

The proposed project is located in an area of Chula Vista characterized by hills and canyons. The topography limits the viewing range of the project and scope of cumulative projects. Viewsheds were delineated based on topography. Cumulative projects that are located in areas that are visible from the proposed project area were considered to be in the same viewsheds as the proposed project. Five of the cumulative projects identified in Table 5.1-1 would be located within the same viewsheds as the proposed project:

- #9 University Park and Innovation Center
- #10 Sweetwater to Lake Murray Pipeline Relining
- #11 Floit Property
- #13 TL 649 Upgrading
- #14 TL 6910 Fiber Optic Cable Installation
- #15 TL 23041 and TL 23042

Existing utility infrastructure, including transmission lines and urban development, have compromised the existing visual setting in the project vicinity. Four of the cumulative projects are utility projects that would have minimal visual impacts (#10, 13, 14, and 15). Sweetwater to Sweetwater to Lake Murray Pipeline Relining is an underground pipeline. The pipeline relining is currently being constructed within the utility corridor, and construction is scheduled to be completed prior to construction of the proposed project. Because the pipeline is underground within an existing disturbed utility corridor, there would be no permanent and no cumulative impact to viewsheds from TL 6965 or the substation and the pipeline relining project. TL 6910 Fiber Optic Cable Installation involves installation of a fiber optic cable on existing TL 6910. The additional fiber optic cable will have minimal visibility and would be visually consistent with the existing wires on TL 6910. TL 649 Upgrading and TL 23041 and TL 23042 would be constructed within Miguel Substation and would not change the visual character of the Miguel Substation. The proposed project and the proposed utility projects would result in minor visual changes to the utility corridor, and the cumulative visual impact would be less than significant.

### **Proposed Substation**

University Park and Innovation Center would expand the suburban interface closer to the proposed substation and the open space south of Hunte Parkway. The combined development of the University Park and Innovation Center and the proposed project would extend the urban/rural interface by 3,000 feet. The University Park and Innovation Center would be consistent with the existing scenery of development to the north. The University Park and Innovation Center project and the proposed project would not combine to create a significant cumulative impact because the change caused by the University Park and Innovation Center project would not significantly alter the character of the existing aesthetic environment. Cumulative impact would be less than significant.

Construction of the proposed substation would have an individually significant and unavoidable impact on scenic quality and aesthetics. With the exception of the University Park

and Innovation Center, the cumulative projects would not contribute to the degradation of visual resources and scenic quality within the same viewshed as the proposed substation. The substation would be located on the edge of the existing urban development and infrastructure. The cumulative projects, including the utilities within the transmission corridor, would not contribute to the proposed project's significant and unavoidable impacts to aesthetic resources because the cumulative projects would not contribute to scenic degradation in the same viewshed as the proposed substation and the University Park and Innovation Center involves development that is similar to the existing visual character of the area. The cumulative impact to aesthetics would therefore not be considerable and would be less than significant.

### TL 6965

Floit Property is a residential subdivision. The proposed subdivision would be located in proximity to the TL 6965 power line and would be visible from area roadways and surrounding residential neighborhoods. Floit Property is a planned residential development between Otay Lakes Road and H Street. The proposed addition of TL 6965 would be visually consistent with the existing power lines in the transmission corridor. The proposed addition of TL 6965 will not change the visual quality or intactness of the area and would not contribute considerably to the aesthetic impact from the residential development. TL 6965 would blend in with the existing transmission line architectural elements and would not be dramatically different in appearance from existing infrastructure.

### **Miguel Substation Modifications**

The Miguel Substation improvements would have no impact on viewsheds and would not contribute to cumulative impacts because the visual changes from substation modifications would be imperceptible.

### Agricultural and Forestry Resources

Prime Farmland, Unique Farmland, Farmland of Statewide Importance, and Williamson Act land do not occur in the project area and would not be impacted by the proposed project. The project would result in permanent conversion of 0.68 acres of Farmland of Local Importance mapped by the Farmland Mapping and Monitoring Program. Areas mapped as farmland that would be impacted by the project have either been previously developed or are not being used for agricultural purposes. There is no forest land in the project vicinity.

A cumulative impact to agricultural resources would occur if the project and cumulative projects impacted Farmland of Local Importance. The boundaries for Farmlands of Local Importance are mapped in Figure 5.2-1. The following cumulative projects would impact Farmland of Local Importance:

- #3 Millenia
- #9 University Park and Innovation Center
- #11 Floit Property
- #16 ANSI 600 and ANSI 300 Regulation Station
- #17 Middle School
- #20 624-4 Reservoir

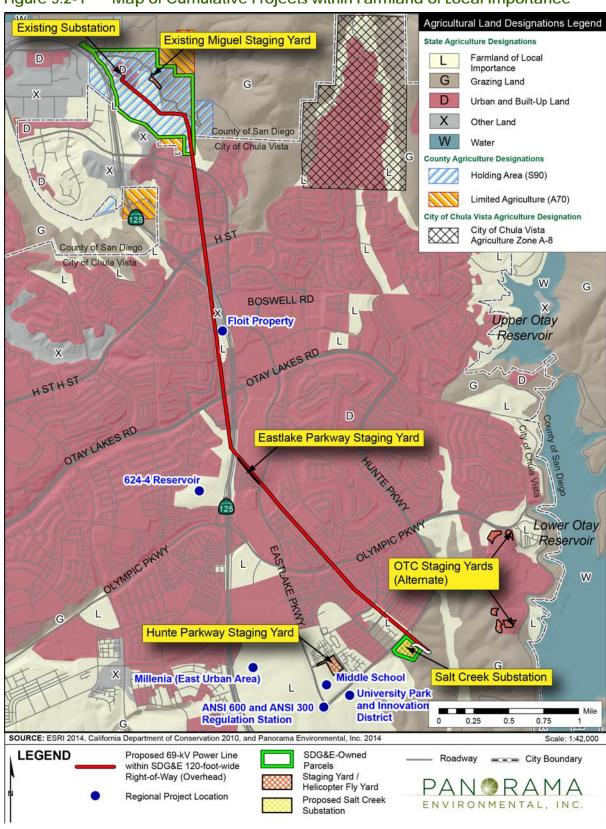


Figure 5.2-1 Map of Cumulative Projects within Farmland of Local Importance

These cumulative projects will result in the loss of over 200 acres of Famland of Local Importance. The Millenia project and the Middle School project alone would impact approximately 231 acres of Famland of Local Importance. The cumulative loss of Farmland from the cumulative projects would be considerable. The proposed project conversion of 0.68 acres of Farmland of Local Importance would not contribute considerably to the cumulative impact to Farmland of Local Importance. The project's contribution to cumulative impacts to Farmland would be less than significant and no mitigation is required.

### Air Quality

Air quality is a regional resource and is neither defined nor limited by jurisdictional boundaries, political boundaries, or project boundaries. The cumulative study area for air quality primarily focuses on the SDAB, which includes most of San Diego County, as detailed in Section 4.3: Air Quality. Some specific pollutants can result in localized impacts, such as carbon monoxide hotspots or fugitive dust conditions.

The SDAPCD has developed an Eight-Hour Ozone Attainment Plan. The Eight-Hour Ozone Attainment Plan utilizes emissions inventories and projections compiled by CARB in order to define action criteria and emissions thresholds that will allow the SDAPCD to achieve ozone attainment as expeditiously as possible (SDAPCD 2007b). The emissions inventories and projections consider current and future emissions from all sources in the SDAB, including household uses, transportation, public services, and utilities; therefore, the emissions thresholds consider impacts from all cumulative projects in the air basin. This Draft EIR uses the emissions thresholds from SCAB for VOC (ozone precursor) and PM2.5, which hold individual projects to a tougher standard because they were designed with consideration of worse existing air quality conditions than the proposed project region. If the proposed project does not exceed the SCAB standard, the project would not cause cumulative impacts in the project region because emissions would be below thresholds that are more stringent than those necessary to achieve attainment in the SDAB.

As discussed in Section 4.3: Air Quality, uncontrolled emissions of PM<sub>10</sub> would exceed the emissions threshold prior to implementation of APM AIR-1, which would be a significant individual and cumulative impact. APM AIR-1 would require SDG&E to water disturbed soils, which would reduce emissions of PM<sub>10</sub> and PM<sub>2.5</sub> to a level well below the thresholds of significance. Implementation of Mitigation Measure Air-1 would reduce emissions and the cumulative impact from emissions of PM<sub>10</sub> and PM<sub>2.5</sub> would therefore be less than significant.

Emissions of CO, VOC, and NOx would be below the emissions thresholds set by SDAB and SCAB. The proposed project would not exceed the emission-based significance thresholds for O<sub>3</sub> precursors and would therefore not contribute considerably to a significant cumulative impact to O<sub>3</sub>. The cumulative impact from project emissions of CO, VOC, and NOx would be less than significant.

The RAQS and Eight-Hour Ozone Attainment Plan for San Diego County are designed to reach attainment status for state and federal O<sub>3</sub> standards given all projected activities in the SDAB. The RAQS outline how SDAPCD will reach attainment of California O<sub>3</sub> standards. The Eight-

Hour Ozone Attainment Plan for San Diego County outlines how the SDAPCD will reach attainment for federal O<sub>3</sub> standards. As discussed for Impact Air-1, the project would be consistent with the plans to reach attainment in the basin. The project would not cause a cumulatively considerable contribution to O<sub>3</sub> attainment status. Impacts would be less than significant, and no mitigation is required.

Long-term operation of the proposed project or project alternatives would not include any permanent, stationary sources of pollution, and would not induce population growth or area employment. Therefore, the proposed project would not contribute to a cumulatively considerable air quality impact associated with operation, power generation, or population growth.

### **Biological Resources**

The geographic scope of cumulative impacts to wildlife is considered to be within 2 miles from the project corridor. The 2-mile buffer is chosen because the habitat range for species that would be affected by the proposed project is approximately 2 miles. Species with larger habitat ranges would not be affected by habitat loss from the proposed project because the proposed project would affect a small amount of habitat, which would be insignificant to species that use a large range of habitat. The projects identified in Table 5.1-1 and Figure 5.1-1 are all located within 2 miles of the project corridor.

Of the projects within 2 miles of the project corridor, fifteen projects will involve permanent impacts to vegetation and wildlife habitats:

- #1 South Bay BRT
- #2 Freeway Commercial
- #3 Millenia
- #4 Village 8 East
- #5 Village 8 West
- #6 Village 9
- #7 Village 10
- #8 Village 11 Winding Walk
- #9 University Park and Innovation Center

- #11 Floit Property
- #13 TL 649 Upgrading
- #16 ANSI 600 and ANSI 300 Regulation Station Installation
- #17 Middle School
- #18 Otay Ranch University Villages Project
- #20 624-4 Reservoir Project

These cumulative projects will result in the conversion of thousands of acres of undeveloped open space land to residential and commercial uses. These projects, together with the proposed project, have a cumulatively considerable impact to biological resources. The City has developed a MSCP to address the cumulative impacts to special-status species resulting from development in the City of Chula Vista. Some of the cumulative projects within Otay Ranch and the University Project are covered projects under the City's MSCP (City of Chula Vista 2003). The cumulative projects covered under the City's MSCP include the following:

- #3 Millenia
- #4 Village 8 East
- #5 Village 8 West

- #6 Village 9
- #7 Village 10
- #8 Village 11 Winding Walk
- #9 University Park and Innovation Center
- #17 Middle School
- #18 Otay Ranch University Villages Project

The cumulative land development projects covered by the City's MSCP (listed above) would need to mitigate for their contribution to cumulative habitat loss in accordance with the City's MSCP.

Implementation of the City's MSCP would also mitigate the cumulative impacts from the surrounding land development projects. The City of Chula Vista will also require compensatory mitigation for cumulative projects #1 South Bay BRT, #2 Freeway Commercial, and cumulative project #11 Floit Properties at their MSCP Preserve. These projects are located within the MSCP Planning Area. The City's MSCP requires mitigation for impacts to sensitive habitat for all projects located within the MSCP Planning Area that are 1 acre or larger (City of Chula Vista 2003).

Cumulative projects #13 and #16 would be completed by SDG&E and the compensatory habitat mitigation required in SDG&E's NCCP would apply to both of those projects. The 624-4 Reservoir Project (#20) would be constructed in an area that was previously disturbed and cleared of vegetation and there would be no additional habitat loss from the reservoir construction. Because the habitat impacts from the cumulative development projects would be mitigated under the MSCP and the proposed project would mitigate impacts to habitat as required in the NCCP and Mitigation Measures Biology-1 and Biology-2, cumulative impacts to habitat and special-status species would be less than significant with mitigation.

No impacts to wetlands or other waters under federal or state jurisdiction are anticipated from the proposed project because no project features would be constructed in wetlands, other waters, or riparian areas. The project would not contribute to cumulative wetland or riparian impacts. None of the project component locations function as a wildlife movement corridor. Construction and operation of the project would not contribute to a cumulative impact to wildlife movement and corridors.

Cultural and Paleontological Resources

### **Cultural Resources**

The geographic scope for cultural resources includes the boundaries of cultural resources that would be impacted by the proposed project or alternatives. There are four cumulative projects that are located within the area that was surveyed for cultural resources (#11 Floit Property, #13 TL 649 Upgrading, #14 TL 6910 Fiber Optic Cable Installation, #15 TL 23041 and TL 23042); however, of these four projects, only three projects (#13, #14, and #15) are located within the boundaries of cultural resources that were recorded within the proposed project.

*Proposed Substation.* The impacts to cultural resources from substation construction would not combine with impacts to cultural resources from cumulative projects because there are no known, eligible archeological resources, eligible historical resources, or human remains within the proposed substation site. While the proposed project could encounter cultural resources during grading and excavation, there are no ground disturbing projects near the proposed substation that could impact the same resources. TL 6910 fiber optic cable is located in proximity to the substation and there is no new ground disturbance proposed for TL 6910 fiber optic cable because the fiber optic cable will be hung on existing power poles with no impacts to cultural resources. The proposed substation would not contribute to any cumulative impacts to cultural resources.

*TL 6965.* Previous utility and residential development projects in the project vicinity have resulted in impacts to cultural resources located in the transmission corridor and the Alternative 3 underground power line route. TL 6965 construction could contribute to cumulative impacts to cultural resources if there were other projects impacting the same cultural resources located within the TL 6965 work areas. The TL 6910 Fiber Optic Cable Project is located in proximity to TL 6965 but it would not impact any cultural resources because all work would occur aboveground. There would therefore be no cumulative impact to cultural resources from the proposed project and TL 6910 fiber optic cable.

The Floit property project is located close to TL 6965 but would not impact any of the same cultural resources impacted by TL 6965. The cultural resources that TL 6965 construction could potentially impact are not located near the Floit property project. There would be no cumulative impact to cultural resources from the proposed project and Floit property project.

The proposed project and TL 649 Upgrading project and the TL 23041 and TL 23042 projects are located in proximity to recorded resources. The TL 649 Upgrading project and TL 23041 and TL 23042 projects do not involve activities that would impact cultural resources because the above ground line upgrades and rearrangement would not impact surface resources. Therefore, there would be no cumulative impact to cultural resources from the proposed project, TL 649 Upgrading, and TL 23041 and TL 23042 projects.

*Miguel Substation Modifications*. Modifications for the Miguel substation would occur in previously disturbed areas where no archaeological resources are recorded. Miguel substation modifications would therefore not impact cultural resources and would not contribute to cumulative impacts to cultural resources.

Alternative 3. Alternative 3 could result in impacts to potentially eligible resources that are known to be buried under City roadways, as discussed in Section 4.5: Cultural Resources. A cumulative impact to cultural resources would occur if a cumulative project impacts the same cultural resource that Alternative 3 impacts. There is one cumulative project located adjacent to where excavation would occur for Alternative 3. Alternative 3 would be located along a portion of Hunte Parkway that borders the Village 11 Winding Walk project. The Village 11 Winding Walk project would require excavation and grading for the construction of approximately 2,300 residential units. There is some potential that the two projects would impact the same cultural

resource, if an unknown cultural resource was discovered during construction of the two projects. This would result in a cumulative impact.

Alternative 3 would use mitigation to address impacts to cultural resources. Mitigation Measure Cultural Resources-1, Cultural Resources-2, Cultural Resources-3 and Cultural Resources-4 would require evaluation and treatment of inadvertent discoveries of archaeological and historical resources and Native American monitoring. The project-level impacts would be less than significant with the proposed mitigation. This Alternative's contribution to cumulative cultural resources impacts would not be considerable after the implementation of mitigation.

### **Paleontological Resources**

The proposed project and alternatives would be located in areas of moderate to high sensitivity for paleontological resources. The record search revealed the presence of 20 localities recorded within the vicinity of the proposed project. Anticipated grading and earthmoving activities at the proposed substation would likely result in the removal of previously undisturbed Otay Formation strata.

A cumulative impact to paleontological resources would occur if a cumulative project impacts the same paleontological resources that the proposed project would impact. The proposed project would potentially impact the highly sensitive Otay formation. A cumulative impact would, therefore, take place if another project were to also impact the Otay formation. 16 of the projects listed in Table 5.1-1 are located within the Otay formation.

- #1 South Bay BRT
- #2 Freeway Commercial
- #3 Millenia
- #4 Village 8 East
- #5 Village 8 West
- #6 Village 9
- #7 Village 10
- #8 Village 11 Winding Walk
- #9 University Park and Innovation Center

- #10 Sweetwater to Lake Murray Pipeline Relining
- #11 Floit Property
- #16 ANSI 600 and ANSI 300 Regulation Station Installation
- #17 Middle School
- #18 Otay Ranch University Villages Project
- #20 624-4 Reservoir Project

Some projects would not have cumulative impacts to the Otay formation because they would involve construction activities along previously disturbed areas or only involve above ground construction. The Streetwater to Lake Murray Pipeline Relining Project (#10) would involve the installation of liners on existing, underground water pipelines. Because the area has already been excavated for the installation of the pipeline, there would be no new impacts to the Otay formation. The ANSI 600 and ANSI 300 Regulation Station Installation (#16) would involve the installation of regulation stations along a gas pipeline. Because the construction is occurring in a place that has already been disturbed by a gas pipeline, there is no potential to impact the Otay formation.

Most of the cumulative projects within the Otay formation are housing development projects (#2-8, #11, #18), some are school development projects (#9 and #17), one is a transportation project (#1), and one is a water storage reservoir project (#20). It is presumed that these projects will impact the Otay formation, since they would involve excavation and grading. These projects combined with the proposed project could result in a significant cumulative impact to the integrity of the paleontological resources found within the Otay formation.

SDG&E has proposed APMs CUL-4 through CUL-7 to provide paleontological monitoring during ground-disturbing activities. Mitigation Measure Paleontology-1 specifies the methods to treat paleontological resources to protect the resources. The cumulative projects that would have a cumulative impact to paleontological resources would have mitigation to minimize and avoid impacts to the Otay formation, as required by Policy COS-9.1 in the County of San Diego General Plan, which "[r]equire[s] the salvage and preservation of unique paleontological resources when exposed to the elements during excavation or grading activities or other development processes" (County of San Diego 2011). The cumulative impacts to the Otay formation would, therefore, not be significant after the implementation of APMs and mitigation measures that would ensure the integrity of the Otay formation. The proposed project's contribution to impacts to paleontological resources would not be cumulatively considerable after the implementation of APMs and mitigation.

### Geology and Soils

Impacts on geology and soils are generally localized and do not result in regionally cumulative impacts. The geographical context for cumulative impacts to geology and soils includes areas in and adjacent to the project area because erosion and soil stability impacts from the proposed project would be confined to these areas. The projects listed in Table 5.1-1 that are immediately adjacent to, or in the project corridor are:

- #11 Floit Property
- #10 Sweetwater to Lake Murray Pipeline Relining
- #13 TL 649 Upgrading

- #14 TL 6910 Fiber Optic Cable Installation
- #15 TL 23041 and TL 23042

### **Proposed Substation**

The TL 6910 Fiber Optic Cable Installation project is located close to the proposed substation. The TL 6910 Fiber Optic Cable Installation project involves aboveground installation of a new cable on existing power lines and does not involve impacts to geology, soils or seismicity. The proposed substation impacts on geology, soils, and seismicity would be localized (i.e., would not affect the immediate vicinity surrounding the project area) and there would be no cumulative impacts to geology from the proposed substation because none of the cumulative projects would involve new structures or ground disturbing activities in the vicinity of the substation.

### TL 6965

The Floit property project and Sweetwater to Lake Murray Pipeline Relining project are located close to TL 6965. The Floit Property project and Sweetwater to Lake Murray Pipeline Relining

project would require grading or surface disturbance from trenching, which could cause erosion. These projects are required to obtain coverage under the SWRCB Construction General Permit and comply with best management practices included in the project-specific SWPPPs. Implementation of the SWPPPs would reduce the amount of erosion and soil loss that would occur as a result of earth-disturbing activities.

The amount of erosion that could occur from the proposed project near the Floit Property project and Sweetwater to Lake Murray Pipeline Relining project from grading at pole work areas would be minimal and would not be cumulatively considerable. The proposed project would also adhere to a project-specific SWPPP as required to obtain coverage under the SWRCB Construction General Permit. The cumulative impact of the proposed project on geology, soils, and seismicity would be localized (i.e., would not affect the immediate vicinity surrounding the project area) and less than significant.

## **Miguel Substation Modifications**

The TL 649 Upgrading and TL 23041 and TL 23042 projects are located close to Miguel substation. The amount of erosion that could occur in the area of Miguel Substation from the TL 649 Upgrading and TL 23041 and TL 23042 projects would be minor because the projects would involve aboveground improvements to power lines.

The amount of erosion that could occur from the proposed project near the TL 649 Upgrading and TL 23041 and TL 23042 projects from excavation would be minimal and would not be cumulatively considerable. The proposed project would also adhere to a project-specific SWPPP as required to obtain coverage under the SWRCB Construction General Permit. The cumulative impact of the proposed project on geology, soils, and seismicity would be localized (i.e., would not affect the immediate vicinity surrounding the project area) and less than significant.

## **Greenhouse Gas Emissions**

GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. GHGs have long atmospheric lifetimes of one year to several thousand years, which allow GHG dispersal across Earth. Similarly, GHG impacts are global, as opposed to the localized air quality effects of criteria air pollutants and TACs. The quantity of GHGs required to ultimately result in climate change is not precisely known. However, a single project is very unlikely to measurably contribute to a noticeable incremental change in the global average temperature, or to the global, local, or micro climate.

Construction impacts of greenhouse gases would combine with greenhouse gas emissions from projects worldwide to create significant cumulative impacts, such as sea level rise and other climate change related impacts. The project's contribution would be approximately 80.5 MT CO<sub>2</sub>e. This contribution would not be cumulatively considerable, since the total greenhouse gas emissions in the state were 458.68 million metric tons of CO<sub>2</sub>e in 2012. The contribution of the proposed project to greenhouse gas emissions is not cumulatively considerable.

#### Hazards and Hazardous Materials

There would be limited use of hazardous materials during the construction and operation of the project or project alternatives. Hazards or hazardous materials used for the proposed project or alternatives would be contained and managed, and impacts would be mitigated before impacts could potentially combine with those of other projects to create a significant cumulative impact. Nearby projects constructed during the same timeframe as the proposed project or alternatives would also be required to comply with federal, state, and local safety regulations to minimize risk to the public and workers. Cumulative impacts from hazards and hazardous materials would be less than significant because all projects would follow federal, state and local laws regarding the disposal and clean-up of any accidental spills or releases of hazardous materials. In addition, neither the proposed project nor the cumulative projects are projects that by their nature would require the routine transport, use, or disposal of large quantities of hazardous materials (e.g., gas pipeline, refinery, landfill). The cumulative impact from hazards and hazardous materials would not be significant. Implementation of the APMs discussed in Section 4.8: Hazards and Hazardous Materials would further reduce impacts from hazards or hazardous materials.

The cumulative electrical interference between the existing power lines in the project corridor and the proposed power line is addressed in Section 4.8: Hazards and Hazardous Materials. The electrical interference from the existing power lines is considered part of the environmental setting for the proposed project. No other projects are proposed that would contribute to cumulative hazards from electrical interference.

### **Hydrology and Water Quality**

The geographic context for the cumulative impacts associated with hydrology and water quality is the sub-watersheds that would be impacted by the project or alternatives. The project and alternatives would result in potential impacts to the Telegraph Canyon Creek, Poggi Canyon Creek, and Salt Creek sub-watersheds. The following projects are proposed within these sub-watersheds:

- #1 South Bay BRT
- #2 Freeway Commercial
- #10 Sweetwater to Lake Murray Pipeline Relining
- #11 Floit Property

- #13 TL 649 Upgrading
- #14 TL 6910 Fiber Optic Cable Installation
- #15 TL 23041 and TL 23042
- #20 624-4 Reservoir Project

All of these cumulative projects will involve ground disturbance and could impact water quality as a result of erosion and sedimentation. The proposed project or project alternatives, along with the projects identified in Table 5.1-1, are required to comply with applicable federal, state, and local water quality regulations. Any projects resulting in greater than 1 acre of land disturbance are required to obtain coverage under a SWRCB Construction General Permit. This permit requires identification and implementation of stormwater management measures to control erosion and sedimentation and other construction-related pollutants. The proposed project would therefore not result in a significant cumulative impact to water quality discharge of sediment.

### **Proposed Substation**

The proposed substation involves grading and surface modifications that could change the volume and intensity of stormwater runoff, or increase erosion downstream of the substation. The proposed substation drains to the Salt Creek watershed, and there are no reasonably foreseeable projects in this sub-watershed. The hydrology and water quality impacts of the proposed substation would not combine with other reasonably foreseeable projects. The proposed substation would not contribute to cumulative impacts to hydrology or water quality.

### TL 6965 Miguel Substation Modifications

The Freeway Commercial and Floit Property projects involve grading and ground surface modifications that would reduce infiltration and potentially increase runoff or change the drainage patterns of the area. These cumulative projects are located in the same sub-watersheds as TL 6965 and the Miguel Substation modifications. TL 6965 and the Miguel Substation modifications would not result in changes to the area drainage patterns or substantially contribute to impacts to runoff due to the isolated nature and minimal disturbance area of each pole and work within existing disturbed areas at Miguel Substation, as discussed in Section 4.9: Hydrology and Water Quality. Construction of TL 6965 and the modifications of Miguel substation would, therefore, not contribute to a cumulative impact to hydrology or water quality.

### **Noise**

Noise from different sources within approximately 0.25 miles of each other could combine to cumulatively create elevated noise levels that may be a temporary significant impact to receptors at any point between the projects. The following cumulative projects are located within 0.25 miles of the project area or Alternative 3 project area:

- #8 Village 11 Winding Walk
- #9 University Park and Innovation Center
- #11 Floit Property
- #13 TL 649 Upgrading

- #14 TL 6910 Fiber Optic Cable
- #15 TL 23041 and TL 23042
- #16 ANSI 600 and ANSI 300 Regulation Station
- #17 Middle School

### **Proposed Substation**

The proposed substation is located within 0.25 miles of the Fiber Optic Cable Installation project. The project construction schedule overlaps with the construction schedule for the TL 6910 Fiber Optic Cable project. Operation of the substation will not produce substantial noise and will not contribute to cumulative impacts.

The fiber optic cable installation would be conducted on TL 6910 in proximity to the proposed substation. TL 6910 Fiber Optic Cable and construction noise could potentially combine with noise generated during construction of the proposed substation. A portion of TL 6965 is located adjacent to the proposed substation; therefore, noise from the construction of the proposed substation would also combine with the noise of the construction of TL 6965. The Fiber Optic Cable installation consists of installing a new cable on existing poles. The work will proceed quickly along TL 6910 and the work in the vicinity of the substation would last for a few days to

a week. The noise levels form TL 6910 Fiber Optic cable installation would be similar or less than noise levels from the proposed substation construction. The cumulative noise impact could result in up to a 3 dBA increase in noise levels for a short period of time (1 to 2 weeks) while Fiber Optic cable installation occurs near the substation. This cumulative impact to noise would not be substantial and is less than significant.

#### TL 6965

TL 6965 is located within 0.25 miles of and could be constructed at the same time as the TL 649 Upgrading project, and the TL 6910 Fiber Optic Cable Installation project. The project construction schedule overlaps with the construction schedule for these two cumulative projects. These projects are all proposed within the transmission corridor and adjacent utility corridor.

TL 649 Upgrading and TL 6965 construction occur in proximity within the Miguel Substation at a distance of over 1,000 feet from sensitive receptors. While the construction schedules for these two projects overlap, there would be no cumulative impact from noise because any cumulative increase in noise levels would not be perceptible at the distance of the nearest sensitive receptor. As discussed above, the TL 6910 Fiber Optic cable installation will proceed along the power line route and requires no installation of new structures. If TL 6965 construction were to occur in the same area as fiber optic cable installation, there is a possibility for a short-term (less than 3 days) cumulative increase in noise levels of up to 3 dBA near the construction of both projects. This increase would be of short duration and would therefore not be significant. There would be no significant cumulative impacts from TL 6965 construction.

Construction on Floit Property is expected to occur after construction of the proposed project; however, the timing for construction is currently unknown. Plans were recently submitted to the City of Chula Vista, and environmental review is still required for the project. To cumulatively combine, construction activities would have to occur in close succession of each other, resulting in increased noise for a long duration. Construction of TL 6965 would be temporary and transient along the power line. In the unlikely event that Floit Property is approved and begins construction at the same time as construction of TL 6965 is occurring in the area, the two projects could contribute to cumulative noise in the vicinity. Construction of TL 6965 and the Floit Property project would not contribute considerably to a cumulative noise impact because TL 6965 construction at each pole would last approximately 1 to 3 days and the construction activity would move to the next pole location.

Operation of TL 6965 would result in a 1dBA increase in noise levels from corona. The 1dBA increase in noise would not contribute considerably to cumulative impacts to noise because there is no noise producing land uses planned in the vicinity of the power line. Cumulative impacts would therefore be less than significant.

### **Miguel Substation Modifications**

The Miguel substation is located within 0.25 miles of the TL 649 Upgrading project and the TL 23041 and TL 23042 projects. The Miguel Substation Modification and cumulative projects within the Miguel Substation are located over 0.25 miles from the nearest sensitive receptors.

Any cumulative increase in noise would not be perceptible at the distance of the nearest receptor and the cumulative impact would therefore not be significant.

### **Staging Yards**

*OTC Staging Yards*. There are no cumulative projects located within 0.25 miles of the OTC staging yards.

*Miguel Substation Staging Yard*. The Miguel staging yard is located within 0.25 miles of the TL 649 Upgrading project and the TL 23041 and TL 23042 projects. Due to the proximity of the Miguel staging yard with the Miguel substation, cumulative impacts to the Miguel staging yard would be the same as the cumulative impacts to the Miguel substation. The proposed project's contribution to the cumulative noise impact would not be cumulatively considerable because sensitive receptors would not be impacted by the cumulative noise impact.

*Hunte Parkway Staging Yard.* The Hunte Parkway staging yard is located within 0.25 miles of the ANSI 600 and ANSI 300 Regulation Station project, the Middle School project, and the University Park and Innovation Center.

The ANSI 600 and ANSI 300 Regulation Station project would not result in a cumulative impact because construction would not overlap with the use of the staging yard. Construction for the proposed project would begin in January 2016 and construction for the proposed project started in late 2014. It is not likely that the construction schedules for these two projects would overlap; therefore, there would not be a cumulative impact as a result of the construction of the ANSI 600 and ANSI 300 Regulation Station project.

The Middle School project would not result in a cumulative impact to noise because construction of the middle school would not occur while the staging yard is in use. In the scenario where the middle school project begins construction before the proposed project starts, the Hunte Parkway staging yard would not be used.

The University Park and Innovation Center project will be constructed in the future, after the proposed project is constructed; therefore, the University Park and Innovation Center project would not contribute to a cumulative noise impact.

### Alternative 3

Alternative 3 would have the same cumulative impacts from the construction of the proposed substation. Alternative 3 does not include TL 6965; therefore, Alternative 3 would not have the cumulative impacts from the construction of TL 6965.

There is the potential, however, that Alternative 3 would have cumulative impacts. A portion of the Alternative 3 underground power line is located within 0.25 miles of the Village 11 Winding Walk project. Construction of the residential units for the Village 11 Winding Walk project has mostly been completed as of October 2014. Construction for Alternative 3 would begin in January 2016, which does not overlap with the construction schedule for the Village 11 Winding Walk Project. There would not be any cumulative noise impacts from the construction of Alternative 3 and the construction of the Village 11 Winding Walk Project.

### **Operation and Maintenance**

Operational noise would be minimal and would not exceed background noise levels. The proposed project would generate corona noise from TL 6965 and noise during peak loads at the substation. The utility projects that are within 0.25 miles of the project would not generate noise and would not change ambient noise level. Floit Property is a residential subdivision that would have low levels of noise associated with residential uses. The proposed project in combination with other reasonably foreseeable projects in the area would have a less than significant cumulative impact on ambient noise levels.

### **Public Services**

Implementing the project will not affect the use or operation of any public services or facilities within the immediate area, including schools, fire or police protection services, emergency services, hospitals, or other services. The project or alternatives would not generate the need for new or additional public services. Table 5.1-1 lists multiple large mixed-use developments planned for the areas surrounding the project within the City of Chula Vista. These projects would increase the cumulative demand for public services, and are likely required to mitigate and provide service facilities or funding for expanded services independent of the proposed project. The project will not contribute to the cumulative public service impact.

#### Recreation

There are numerous recreational opportunities in the project vicinity, including Otay Valley Regional Park, Sweetwater Regional Park, Mount San Miguel Community Park, Sunset View Park, Windingwalk Park, trails, and community centers, as discussed in Section 4.13: Recreation. Residential and mixed-use developments planned for the project vicinity include:

- #3 Millenia
- #4 Village 8 East
- #5 Village 8 West
- #6 Village 9
- #7 Village 10

- #8 Village 11 Winding Walk
- #11 Floit Property
- #18 Otay Ranch University Villages Project

These projects would substantially increase the cumulative demand in the area on recreation facilities. These projects also include trails and recreational components. These projects would cumulatively have a significant impact on recreation independent of the proposed project or project alternatives.

The project and alternatives do not include a recreational component. Temporary trail detours would be provided when trail or access roads are closed to the public. Closures, however, would be short-term and coordinated with the City of Chula Vista, and would not result in significant increased use of other area parks or trails. The proposed project would not cause a substantial increase in the use of or physical deterioration of parks or recreational facilities because there are abundant recreational facilities near the project and the project would not induce population growth that would increase the use of recreational facilities. The project will impact unofficial trails (i.e., access roads) within the transmission corridor. These impacts will be mitigated through implementation of Mitigation Measure Traffic-3, which requires repair of

any damage to roadways. The project impacts on recreational facilities (access roads) would not combine with cumulative projects through implementation of the proposed mitigation. The project's contribution to cumulative impacts would be less than significant with mitigation.

Construction noise and aesthetic impacts from construction of the proposed substation would individually result in a significant impact to the value of recreational resources. The cumulative projects would not contribute to aesthetic and noise impacts of the proposed substation, as discussed above. Cumulative impacts to recreation would not be considerable and would be less than significant.

### **Transportation and Traffic**

The cumulative projects identified in Table 5.1-1 would use the same roads that would be used during construction, operation and maintenance of the proposed project. The residential and commercial traffic generated by the cumulative housing and commercial development projects is expected to be cumulatively substantial. Roads that could be used for construction and operation of the proposed project and multiple cumulative projects include:

- Hunte Parkway
- Olympic Parkway
- Otay Lakes Road
- Telegraph Canyon Road
- Proctor Valley Road
- East H Street

### **Proposed Project**

Construction. Most cumulative projects in Table 5.1-1 are in early planning stages and propose to begin construction after the peak of the proposed Salt Creek Substation Project construction traffic. The cumulative land development projects (#2 through #8, #11, and #18), would primarily generate additional traffic once fully constructed due to increased residential and commercial uses. The traffic from construction of the land development projects would be within the capacity of area roads because all local roads are currently operating well below the threshold for acceptable LOS.

A portion of Millenia, South Bay BRT, and Village 11 Winding Walk are currently under construction and would be developed during construction of the proposed project. The South Bay BRT project would not increase traffic on roadways because it is an alternative transportation project that may reduce vehicles on roadways by providing better access to public transportation. The Millenia project proposes development of 3,000 residential development units near Eastlake Parkway and Birch Road. The Village 11 Winding Walk Project proposes development of 2,300 residences south of Olympic Parkway at Hunte Parkway. Assuming each residence has two vehicles and two trips per day, daily traffic volumes on area roads could increase by 12,000 vehicles from Millenia and 9,600 vehicles from Village 11 development. Table 5.2-1 provides a summary of the daily traffic volume on roads adjacent to the developments and the traffic volume that could be added by the developments and project construction.

Table 5.2-1 Cumulative Traffic Volume

Roadway	Existing Daily Volume	Acceptable LOS Volume	Traffic Generated by Cumulative Projects <sup>1</sup>	Peak Traffic From Proposed Project <sup>1</sup>	Within Acceptable LOS?
Birch Road	11,084	50,000	12,000	352	Yes
Eastlake Parkway	23,528 32,766 9,030	50,000 50,000 40,000	12,000	352	Yes Yes Yes
Hunte Parkway	1,976 12,651	50,000 30,000	9,600	352	Yes Yes
Olympic Parkway	37,182	50,000	9,600	352	Yes

#### Notes:

Sources: City of Chula Vista 2005, Caltrans 2012, City of Chula Vista 2013b, County of San Diego 2011, and Rodrigue 2014

The proposed project would increase traffic volume by up to 352 vehicle trips per day during the peak of construction. The additional traffic from the Millenia project and Village 11 Winding Walk project would not cause the traffic volume to exceed the acceptable LOS. The proposed project and cumulative projects would therefore not result in a significant cumulative impact on traffic.

The Salt Creek Substation Project would require the use of a helicopter for conductor stringing at select locations. None of the other proposed projects involve the use of aircraft for construction or long-term use. The use of helicopters for the project would therefore not contribute to a cumulative impact.

Operation and Maintenance. The housing development projects (#2 through 8, #11, and #18) would construct approximately 23,000 residential units including single-family and multifamily units. Once these development projects are established, residents of these housing units would generate substantial daily traffic. Assuming each home has two vehicles, the cumulative housing development projects could potentially increase transportation by 92,000 daily trips. These cumulative projects could cause a significant cumulative impact on traffic independent of the proposed project; however, the two daily trips generated during operation of the proposed project would not substantially contribute to a cumulative impact on traffic.

### Alternative 3

Construction. Alternative 3 would use the same amount of daily trips as the proposed project but would have a different amount of lane closures and detours for the construction of the underground powerline. Construction for Alternative 3 would have the same cumulative impacts to traffic generation as the proposed project; however, construction of Alternative 3 would have greater impacts to hazards associated with traffic from lane closures and detours.

Traffic volumes from the proposed project and cumulative projects was conservatively estimated assuming all daily vehicle trips travel down a single roadway

The closest cumulative project to Alternative 3 is the Village 11 Winding Walk project, which is located adjacent to a portion of Hunte Parkway, where the underground powerline would be constructed. Most cumulative projects, including the Village 11 Winding Walk project are in the early planning stages and propose to begin construction after the peak of the proposed Alternative 3 traffic. The peak traffic generation for these projects will therefore not overlap with the peak construction traffic because the cumulative projects would not be operational during construction, with the exception of a portion of Millenia and the South Bay BRT, which are currently under construction. These two cumulative projects could potentially require road closures and detours for the construction of their projects. These two cumulative projects could potentially combine with the impacts of the Alternative 3 and create a significant cumulative impact from restricted access during emergencies and delays due to lane and road closures. Alternative 3 includes mitigation measures to mitigate for impacts to emergency access and road closures. Mitigation Measure Traffic-4 would reduce impacts to emergency access from traffic delays. Mitigation Measure Traffic-Alt 3-1 would restrict lane closures to off-peak hours. Mitigation Measure Traffic-3 requires a TMP, including flaggers and implementation of detours for bicyclists and pedestrians. Mitigation Measure Traffic-Alt 3-2 requires SDG&E to notify the school district and SDMTA regarding potential bus stop closures and reroutes. The contribution of Alternative 3 to the cumulative impact is not considerable after the implementation of mitigation.

Operation and Maintenance. The operational impacts to traffic from Alternative 3 are similar to the proposed project. Maintenance of the underground power line could require lane closures to access the buried pipeline within the roadway. These lane closures would typically be short in duration and would not have a significant impact on traffic flow or safety. The cumulative, housing development projects would generate traffic from the approximate 23,000 houses that would be built. Similar to the proposed project, Alternative 3 would contribute approximately two daily trips to area roads. The contribution of approximately two daily trips to area traffic during operation is not considerable; therefore, the proposed project would not contribute significantly to cumulative impacts to traffic and transportation.

## **Utilities and Service Systems**

There are multiple residential, mixed-use, and commercial developments planned for the project vicinity as indicated in Table 5.1-1. These projects would increase the cumulative demand on existing utilities and service systems, and new utilities and service systems or expanded utility and service systems would be required to service the development. These projects would have a considerable cumulative impact on utilities and service systems.

The proposed project would require minimal utility service, including nominal water use, no wastewater generation or demand on treatment facilities, and minimal solid waste generation during construction activities. The project would create little utility demand once constructed, as the unattended facilities would not use or generate high volumes of water, wastewater, or solid waste. Section 4.15: Utilities and Service Systems provides quantification of these effects. The project's incremental contribution to utilities and service systems would not be cumulatively considerable.