4.13 TRANSPORTATION AND TRAFFIC

This Section describes existing conditions, potential Project-related impacts, and proposed mitigation measures for transportation and circulation issues in the Project area. Included are descriptions of the environmental setting in terms of transportation and traffic that could be affected by the proposed Project. Federal, State, and local regulations that could affect the Project construction and operation are discussed followed by discussions of impacts and mitigation measures, organized by each of the significance criteria identified.

4.13.1 Environmental Setting

The roadway network affected by the Project is in Yolo, Sutter, Sacramento, and Placer counties. The transportation system is composed of State, city, and county roads. Table 4.13-1 summarizes the characteristics of the roadways in the vicinity of the Project area. Figure 4.13-1 shows the roadways in the Project area.

As described in Section 1.0, Introduction, one of the Project objectives is to locate the pipeline to minimize the risk of damage to the pipeline from outside sources. In keeping with that objective, the pipeline is not located within the roadways right-of-way (ROW). Instead the pipeline would parallel roadways at a location outside of the ROW, and in many areas would extend across agricultural fields. Only in areas where the pipeline crosses a roadway (transverse crossing) would the roadway and roadway traffic be directly affected by construction.

For major freeways and state highways and the Western Pacific Railroad Line, the pipeline would be installed using horizontal directional drilling (HDD) in order to cross beneath the freeways/highways and railroad line with no effect on traffic.

Table 4.13-2 shows traffic counts for various roadways in the Project area. The pipeline alignment is primarily traversed and paralleled by county roads that are not heavily traveled. County Road (CR) 16 and CR-17 are representative of traffic volumes on county roads in the Project vicinity.

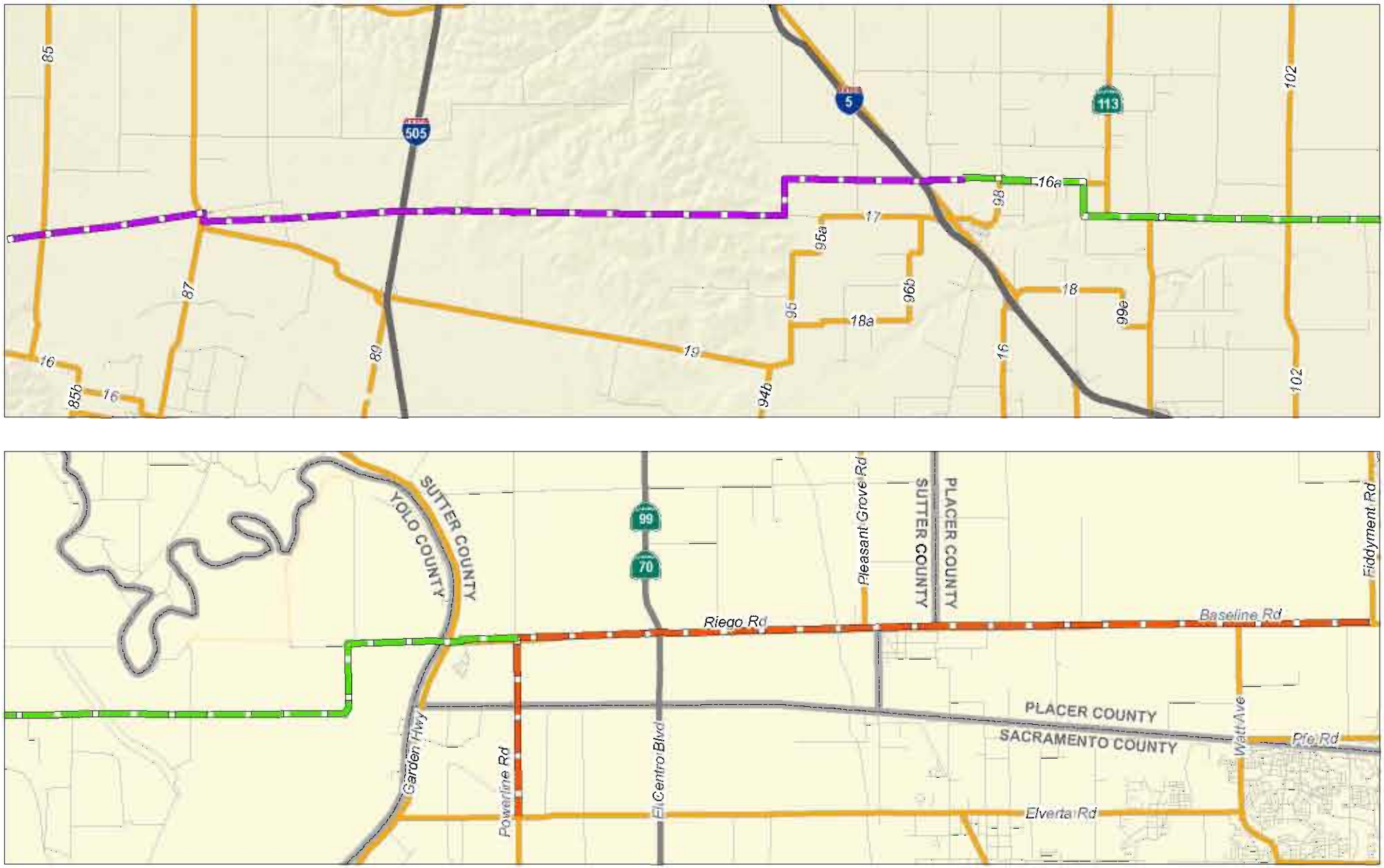
Table 4.13-1: Summary of Study Area Roadway Characteristics

Roadway	Jurisdiction	Classification	Lanes	Traffic Volumes		Location of Pipeline in Relation to Roadway
				Average Daily	Peak Hour	
State Facilities (Line 406)						
Interstate 5	Caltrans	Freeway	4	29,000	2,850	HDD under freeway
Interstate 505	Caltrans	Freeway	4	10,900 to 11,600	1,450 to 1,800	HDD under freeway
Other Roadways (Line 406)						
County Road 16-A	Yolo County	Rural local	2	N/A	N/A	Parallels road outside ROW
County Road 17	Yolo County	Rural local	2	N/A	N/A	Parallels road outside ROW
County Road 85	Yolo County	Rural local	2	N/A	N/A	Crosses road
County Road 87	Yolo County	Rural local	2	N/A	N/A	Crosses road
County Road 88A	Yolo County	Rural local	2	N/A	N/A	Crosses road
County Road 90A	Yolo County	Rural local	2	N/A	N/A	Crosses road
County Road 96	Yolo County	Rural local	2	N/A	N/A	Crosses road
County Road 97	Yolo County	Rural local	2	N/A	N/A	Crosses road
State Facilities (Line 407)						
State Route 70/99 (El Centro Boulevard)	Yolo County	Arterial / Freeway	2 to 4	15,800	1,650	HDD under roadway

Roadway	Jurisdiction	Classification	Lanes	Traffic Volumes		Location of Pipeline in Relation to Roadway
				Average Daily	Peak Hour	
State Route 113	Caltrans	Arterial / Freeway	2	3,150	290	Under roadway
Other Roadways (Line 407)						
County Road 16A	Yolo County	Rural local	2	N/A	N/A	Parallels road outside ROW
County Road 17	Yolo County	Rural local	2	N/A	N/A	Crosses, then parallels road outside ROW
County Road 98	Yolo County	Rural local	2	N/A	N/A	Crosses road
County Road 99B	Yolo County	Rural local	2	N/A	N/A	Crosses road
County Road 100	Yolo County	Rural local	2	N/A	N/A	Crosses road
County Road 101	Yolo County	Rural local	2	N/A	N/A	Crosses road
County Road 102	Yolo County	Rural local	2	N/A	N/A	Crosses road
Pacific Avenue	Sutter County	Rural local	2	N/A	N/A	Crosses road
Garden Highway	Sutter County	Arterial	2	N/A	N/A	HDD under roadway
Powerline Road	Sutter County	Collector	2	N/A	N/A	Crosses road
Riego Road / Baseline Road	Sutter / Placer counties	Collector	2	N/A	N/A	Parallels road outside ROW
East Levee Road / Western Pacific Railroad	Placer County	Collector	2	N/A	N/A	HDD under roadway
Locust Road	Placer County	Collector	2	N/A	N/A	Crosses road
Pleasant Grove Road	Placer County	Collector	2	N/A	N/A	Crosses road

Roadway	Jurisdiction	Classification	Lanes	Traffic Volumes		Location of Pipeline in Relation to Roadway
				Average Daily	Peak Hour	
Distribution Feeder Main (DFM)						
Powerline Road	Sutter / Sacramento Counties	Collector	2	N/A	N/A	Parallels road outside ROW
West Elverta Road	Sacramento County	Collector	2	N/A	N/A	Crosses road
Source: PG&E Line 406 and Line 407 Pipeline Project Supplemental CSLC Filing. October 2007.						

1



Source: ESRI Street Map USA and PG&E 2008.

Legend

- Line 406
- Line 407 East and Powerline Rd DFM
- Line 407 West

NORTH

10,000 5,000 0 10,000 Feet

Michael Brandman Associates

Figure 4.13-1
Project Roadways

Table 4.13-2: Existing Traffic Volumes

Roadway	County	Description	Average Daily Traffic
Interstate 5	Sacramento	Sacramento, Junction Route 99 North	81,000
Interstate 5	Yolo	Yolo Interchange, County Road 17	25,000
State Route 113	Yolo	Junction Route 5	6,800
Interstate 505	Yolo	Junction Route 16	12,600
Interstate 505	Yolo	County Road 19 Interchange	11,800
State Route 70/99 (El Centro Boulevard)	Sacramento	Elverta Road	39,500
State Route 70/99 (El Centro Boulevard)	Sutter	Riego Road	34,000
Powerline Road	Sacramento	North of Elkhorn Boulevard	519
Elverta Road	Sacramento	East of El Centro Road	6,042
County Road 16AB[1]	Yolo	Between State Route 113 and County Road 98	361
County Road 17AB	Yolo	Between State Route 113 and County Road 99A	110
County Road 17E	Yolo	Between County Road 101and County Road 102	978
County Road 102F	Yolo	North of County Road 18C	6,823
Baseline Road	Placer	East of Walerga Road	15,500
Baseline Road	Placer	Locust Road	9,600

Notes:
Yolo County Road Traffic Counts are from 2002 2003, and 2004. All other counts are from 2006.
Source: Caltrans 2008, Sacramento County 2008, Yolo County 2008, Placer County 2008.

Freeways and State Highways

California Department of Transportation (Caltrans) maintains the facilities described in this subsection. At these locations, the pipeline would be installed using horizontal directional drilling (HDD) in order to cross beneath the freeways and state highways, as well as the Western Pacific Railroad line.

Line 406

Interstate 5

Interstate (I) 5 is a freeway that extends from San Diego, California at the Mexican border to Blaine, Washington at the Canadian border and passes through major cities along the west coast of the United States, including Los Angeles, Sacramento, Portland, and Seattle. Caltrans District 3 in Sacramento County maintains I-5 near the Project area. The freeway runs perpendicular (north-south) to the Line 406 alignment. I-5 is four lanes in width near the Project area. The pipeline would cross under the freeway near CR-17. In the Project area I-5 operates at a level of service (LOS) A.

Interstate 505

I-505 is a freeway that connects I-80 in Vacaville with I-5 near Dunnigan. I-505 provides southbound travelers on I-5 a fast connection to the San Francisco Bay Area. Similarly, drivers heading northeast out of the Bay Area may also use this highway to go to the Pacific Northwest via I-5. Caltrans District 3 in Sacramento County maintains I-505 near the Project area. The freeway runs perpendicular (north-south) to the Line 406 alignment. I-505 is four lanes in width near the Project area. The pipeline would cross under the freeway near CR-17. In the Project area I-505 operates at an LOS A.

Line 407

State Route 99

State Route (SR) 99 is a north-south highway that traverses California's Central Valley from the north near Red Bluff (at SR-36) to the south near Bakersfield (at I-5). SR-99 near the Project area is maintained by the Caltrans District 3 in Sacramento County, and is identified as SR-70 (El Centro Boulevard). SR-99 runs perpendicular (north-south) to the Line 407 alignment. SR-99 is four lanes in width near the Project area. The pipeline would be cross under the freeway near CR-17. In the Project area SR-99/70 operates at an LOS A.

State Route 113

SR-113 runs from Yuba City to approximately 10 miles from Rio Vista (at SR-12). It is an important connecting route between I-80 and I-5. SR-113 near the Project area is maintained by the Caltrans District 3 in Sacramento County. SR-113 runs perpendicular (north-south) to the Line 407 alignment. SR-113 is two lanes in width

near the Project area. The Project would cross under SR-113 near CR-17. In the Project area SR-113 operates at an LOS D.

Other Roadways

The following roadways that would be affected by the Project, organized by Line 406, Line 407, and the DFM are described below and are maintained by Yolo, Sutter, Sacramento, and Placer counties. As described above, for the most part, in keeping with Project objectives, the pipeline does not run within roadway ROW but instead parallels the roadways outside the ROW. Only in areas where the pipeline alignment crosses a roadway (transverse crossing) would the roadway and roadway traffic be directly affected by construction.

The other roadways that are crossed by the Project would involve a combination of conventional trenching, and conventional boring techniques such as jack-and-boring. Table 2-5 in Section 2.0, Project Description, provides the approximate crossing width and type of crossing.

Line 406

County Road 17

The pipeline would run parallel to CR-17 through the Dunnigan Hills from I-505 to approximately 2.0 miles west of I-5. CR-17 in the vicinity of the Project is under Yolo County's jurisdiction and is an east-west rural connector. The land uses adjacent to CR-17 are agricultural. This section of CR-17 is a two-lane roadway, with low average daily traffic (ADT) volumes in the Project area.

County Road 85

The pipeline would cross CR-85 approximately 4,500 feet south of CR-16. CR-85 in the vicinity of the Project is under Yolo County's jurisdiction and is a north-south rural connector. The land uses adjacent to CR-85 are agricultural. This section of CR-85 is a two-lane roadway, with low ADT volumes.

County Road 87

The pipeline would cross CR-87 just north of the intersection with CR-19. CR-87 in the vicinity of the Project is under Yolo County's jurisdiction and is a north-south rural connector. The land uses adjacent to CR-87 are agricultural. This section of CR-87 is a two-lane roadway, with low ADT volumes.

County Road 88A

The pipeline would cross CR-88A approximately 1,350 feet south of CR-17. CR-88A in the vicinity of the Project is under Yolo County's jurisdiction and is a north-south rural connector. The land uses adjacent to CR-88A are mainly agricultural. This section of CR-88A is a two-lane roadway, with low ADT volumes.

County Road 96

The pipeline would extend beneath CR-96 and an irrigation canal for approximately 150 feet and continue east to a location approximately 3,000 feet east of CR-96. CR-96 is a two-lane roadway, with low ADT volumes.

County Road 97

The pipeline HDD beneath I-5 and CR-99W would end approximately 200 feet west of CR-97. The pipeline would extend along CR-16A and across CR-97, a two-lane road, with low average daily traffic (ADT) volumes.

Line 407

County Road 98

The pipeline would cross CR-98, adjacent to and north of CR-16A. CR-98 in the vicinity of the Project is under Yolo County's jurisdiction and is a north-south rural connector. The land uses adjacent to CR-98 are agricultural. This section of CR-98 is a two-lane roadway, with low ADT volumes.

County Road 16A

The pipeline would run parallel to CR-16A from CR-98 to 99B. CR-16A in the vicinity of the Project is under Yolo County's jurisdiction and is an east-west rural connector. The land uses adjacent to CR-16A are agricultural. This section of CR-16A is a two-lane roadway, with low ADT volumes.

County Road 99B

The pipeline would run parallel to CR-99B from CR-16A to CR-17. CR-99B in the vicinity of the Project is under Yolo County's jurisdiction and is a north-south rural connector. The land uses adjacent to CR-99B are agricultural. This section of CR-99B is a two-lane roadway, with low ADT volumes.

County Road 17

The pipeline would cross, and then would run parallel, to CR-17 from CR-99B to the Yolo Bypass. CR-17 in the vicinity of the Project is under Yolo County's jurisdiction and is an east-west rural connector. The land uses adjacent to CR-17 are agricultural. This section of CR-17 is a two-lane roadway, with low ADT volumes.

County Road 100

The pipeline would cross CR-100, adjacent to and north of CR-17. CR-100 in the vicinity of the Project is under Yolo County's jurisdiction and is a north-south rural connector. The land uses adjacent to CR-100 are agricultural. This section of CR-100 is a two-lane roadway, with low ADT volumes.

County Road 101

The pipeline would cross CR-101, adjacent to and north of CR-17. CR-101 in the vicinity of the Project is under Yolo County's jurisdiction and is a north-south rural connector. The land uses adjacent to CR-101 are agricultural. This section of CR-101 is a two-lane roadway, with low ADT volumes.

County Road 102

The pipeline would cross CR-102, adjacent to and north of CR-17. CR-102 in the vicinity of the Project is under Yolo County's jurisdiction and is a north-south rural connector. The land uses adjacent to CR-102 are agricultural. This section of CR-102 is a two-lane roadway, with low ADT volumes.

Garden Highway

The pipeline cross beneath Garden Highway at the intersection of Riego Road. Garden Highway in the vicinity of the Project is under Sutter County's jurisdiction and is a north-south major arterial. The land uses adjacent to Garden Highway are agricultural, with some residential. In the vicinity of the Project, Garden Highway is a two-lane arterial, with low ADT volumes.

Riego Road/Baseline Road

The pipeline would run parallel to Riego Road from the Garden Highway to Fiddyment Road. Riego Road in the vicinity of the Project is under the jurisdiction of Sutter and Placer counties. Riego Road is an east-west rural connector. Riego Road is known as Baseline Road when it stretches into Placer County. The land uses adjacent to Riego Road are mainly agricultural (rice fields). East of SR-70/99

(El Centro Boulevard), Riego Road serves as a connector for several residential pockets in the eastern edges of Sutter County and the western edges of Placer County. In the vicinity of the Project, Riego Road is a two-lane collector, with an ADT of approximately 12,600 vehicles.

East Levee Road/Western Pacific Railroad

East Levee Road and the Western Pacific Railroad line would be crossed at the intersection with Riego Road. The south segment of East Levee Road from Riego Road is known as Natomas Road. East Levee Road in the vicinity of the Project is under Sutter County's jurisdiction and is a north-south roadway. The land uses adjacent to East Levee Road are agricultural. In the vicinity of the Project, East Levee Road/Natomas Road is a two-lane collector, with low ADT volumes.

Pleasant Grove Road

Pleasant Grove Road would be crossed at the intersection with Baseline Road. Pleasant Grove Road in the vicinity of the Project is under Sutter County's jurisdiction and is a north-south roadway. The land uses adjacent to Pleasant Grove Road are agricultural with some residential. In the vicinity of the Project, Pleasant Grove Road is a two-lane collector, with an ADT of approximately 1,600 vehicles.

Locust Road

The pipeline would cross Locust Road at the intersection with Baseline Road. Locust Road in the vicinity of the Project is under Sutter County's jurisdiction and is a north-south roadway. The land uses adjacent to Locust Road are agricultural, with some residential. In the vicinity of the Project, Locust Road is a two-lane collector, with low ADT volumes.

Watt Avenue

Watt Avenue extends south off of Baseline Road. Watt Avenue in the vicinity of the Project is under Placer County jurisdiction and is a north-south roadway. The land uses adjacent to Watt Avenue are agricultural and open space. In the vicinity of the Project, Watt Avenue is a two-lane collector with low ADT volumes.

Walerga Road

Walerga Road connects to Fiddyment Road at Baseline Road and travels south from Baseline Road. Walerga Road in the vicinity of the Project is under City of Roseville jurisdiction and is a north-south roadway. The land uses adjacent to Walerga Road

are primarily residential with some open space. In the vicinity of the Project, Fiddyment Road is a four-lane arterial road.

Fiddyment Road

The pipeline would end at Fiddyment Road within the City of Roseville's Sphere of Influence. Fiddyment Road in the vicinity of the Project is under City of Roseville jurisdiction and is a north-south roadway. The land uses adjacent to Fiddyment Road are residential to the east, and open space and agricultural to the west. In the vicinity of the Project, Fiddyment Road is two-lane collector.

Powerline Road Distribution Feeder Main

Powerline Road

The pipeline would cross Powerline Road at the intersection of Riego Road, and the DFM would run parallel to Powerline Road from Riego Road south to Elverta Road. The south segment of Powerline Road is under the jurisdiction of Sacramento County and the north segment is under Sutter County's jurisdiction. The land uses adjacent to Powerline Road are agricultural. In the vicinity of the Project, Powerline Road is a two-lane collector, with low ADT volumes.

West Elverta Road

The DFM would cross West Elverta Road and end at the Powerline Road Pressure Regulating Station. West Elverta Road in the vicinity of the Project is under Sacramento County's jurisdiction and is an east-west roadway. The land uses adjacent to West Elverta Road are agricultural with some residential. In the vicinity of the Project, West Elverta Road is a two-lane collector, with low ADT volumes.

4.13.2 Regulatory Setting

Federal

There are no Federal regulations pertaining to traffic or transportation in the Project area.

State

California Vehicle Code

Chapter 2, Article 3 of the California Vehicle Code defines the powers and duties of the California Highway Patrol, which has enforcement responsibilities for the operation of vehicles and highway use within the state.

California Department of Transportation (Caltrans)

Caltrans is responsible for the design, construction, maintenance, and operation of the California State Highway System, as well as portions of the Interstate Highway System within the State's boundaries.

Local

Because the California Public Utilities Commission has exclusive jurisdiction over the design, location, construction, and operation of gas transmission facilities owned and operated by investor-owned public utilities, PG&E is not subject to local ordinances and regulations. Nonetheless, as part of its environmental review under the California Environmental Quality Act (CEQA), the following local regulations and policies were considered in the assessment of traffic and transportation impacts.

Yolo County General Plan

The following policies relating to transportation from the Yolo County General Plan were considered in this analysis:

> **CIR 7:** Yolo County shall require a service level of C for all county roads.
>
> **CIR 17:** Residential Truck Routes: Yolo County shall discourage truck traffic on residential streets and shall apply traffic controls, speed limits, and load limits on residential street truck routes where assignment to truck traffic is unavoidable.

Sutter County General Plan

The following policies relating to transportation from the Sutter County General Plan were considered in this analysis:

> **2b:** Sutter County has identified Level of Service (LOS) D as the minimum acceptable standard. There are no roadways within Sutter County that are

operating beyond capacity. Numerous segments of State Route 99 have been identified as operating at or near capacity.

Sacramento County General Plan

The following policies relating to transportation from the Circulation Element of the Sacramento County General Plan were considered in this analysis:

> **CI-22:** Sacramento County shall apply the following LOS standards for planning roads in the unincorporated area:
>
> - Rural collectors: LOS D
> - Urban area roads: LOS E
>
> and may proceed with additional capacity projects within the scope of the adopted Transportation Plan when the Board of Supervisors has determined that the implementation of all feasible measures which would reduce travel demand in the affected corridor would not provide the target level of service.

Placer County General Plan

The following policies relating to transportation from the Placer County General Plan were considered in this analysis:

> **3-A5:** Through-traffic shall be accommodated in a manner that discourages the use of neighborhood roadways, particularly local streets. This through traffic, including through truck traffic, shall be directed to appropriate routes in order to maintain public safety and local quality of life.
>
> **3-A7:** The County shall develop and manage its roadway system to maintain the following LOS:
>
> - LOS C on rural roadways, except within 0.5 mile of State highways where the standards shall be LOS D.
> - LOS C on urban/suburban roadways, except within 0.5 mile of State highways where the standards shall be LOS D.

The County may allow exceptions to these levels of service standards where it finds that the improvements or other measures required to achieve the LOS standards are

unacceptable based on established criteria. In allowing any exception to the standards, the County shall consider the following factors:

- The number of hours per day that the intersection or roadway segment would operate at conditions worse than the standard;
- The ability of the required improvement to significantly reduce peak hour delay and improve traffic operations;
- The ROW needs and the physical impacts on surrounding properties;
- The visual aesthetics of the required improvement and its impact on community identity and character;
- Environmental impacts, including air quality and noise impacts;
- Construction and ROW acquisition costs;
- The impacts on general safety;
- The impacts of the required construction phasing and traffic maintenance;
- The impacts on quality of life as perceived by the residents; and
- Consideration of other environmental, social, or economic factors on which the County may base findings to allow an exceedance of the standards.

Exceptions to the standards would only be allowed after all feasible measures and options are explored, including alternative forms of transportation.

4.13.3 Significance Criteria

A traffic or transportation impact from Project construction or operation is considered significant and would require mitigation if:

1. Project related traffic or other activities must use an access road that is already at or below Level of Service (LOS) E, or is such that it would bring a roadway down to LOS E. (E level traffic flow is 75 percent to 100 percent of capacity);
2. Project related traffic or other activities would result in a substantial safety hazard to motorists, bicyclists, or pedestrians;

3. Project related traffic or other activities would restrict one or more travel lanes of a primary or secondary arterial during peak-hour traffic with no suitable detour available, thereby reducing the roadway's capacity and creating congestion. An increase in vehicle trips associated with construction workers or equipment would result in a substantial disruption to traffic flow and/or a substantial increase in traffic congestion on the roadways in the Project vicinity;

4. Project implementation could or does result in insufficient parking;

5. The installation of a transmission line within, adjacent to, or across a roadway would reduce the number of, or the available width of, one or more lanes during the peak traffic periods, resulting in a substantial disruption to traffic flow and/or a substantial increase in traffic congestion;

6. Construction activities would restrict access to or from adjacent land uses and there would be no suitable alternative access;

7. A major roadway (arterial or collector classification) would be closed to through traffic as a result of construction activities and there would be no suitable alternative route available;

8. Construction activities or the operation of the Project would interfere with or extend into navigable airspace and could potentially have an impact on aviation activities within the restricted area of a designated airport or helipad;

9. Construction activities or the operation of the Project would result in safety problems for vehicular traffic, pedestrians, transit operations, or trains;

10. Construction activities of the Project would restrict the movement of emergency vehicles, and there would be no reasonable alternative access routes available;

11. Construction activities or staging activities would increase the demand for and/or reduce the supply of parking spaces, and there would be no provisions for accommodating the resulting parking deficiencies;

12. Construction activities would disrupt bus or rail service and there would be no suitable alternatives routes or stops;

13. Construction activities within, adjacent to, or across from a railroad right-of-way would result in temporary disruption of rail traffic; or

14. Construction activities would impede pedestrian movements or bike trails in the construction area and there would be no suitable alternative pedestrian/bicycle access routes.

4.13.4 Applicant Proposed Measures

Applicant Proposed Measures (APMs) have been identified by PG&E in its Environmental Analysis prepared for the CSLC. APMs that are relevant to this Section are presented below. This impact analysis assumes that all APMs would be implemented as defined below. Additional mitigation measures are recommended in this Section if it is determined that APMs do not fully mitigate the impacts for which they are presented.

APM TRANS-1. PG&E will maintain the maximum possible amount of travel-lane capacity on roads during non-construction periods and will provide traffic control (flagging) at all construction sites across roadways.

APM TRANS-2. During construction, PG&E will limit the work zone to a width that, at a minimum, will maintain alternate one-way traffic flow past the construction zone. Alternatively, PG&E will post detour signs on alternate access streets, where available, in the event that complete temporary street closures are required. Detour plans would be submitted to the counties or cities and Caltrans as part of the permit requirements.

APM TRANS-3. Required permits for temporary lane closures will be obtained from Yolo County, Sutter County, Sacramento County, Placer County, and Caltrans. Before obtaining roadway encroachment permits from the counties, PG&E will submit a Transportation Management Plan (TMP), subject to the local jurisdiction's review and approval. As part of the TMP, traffic control measures and construction vehicle access routes will be identified. The TMP will also include discussion of haul routes, limits on the length of open cuts, and resurfacing requirements. The TMP will address work zone hours. Construction of the pipeline will occur for 10 hours a day, 6 days a week, unless otherwise permitted by the local jurisdiction. Property owners and residents on streets where construction will occur will

be notified prior to the start of construction. Advance public notification will include postings of notices and appropriate signs.

APM TRANS-4. PG&E will coordinate all construction activities with local law enforcement and fire protection agencies. Emergency service providers will be notified of the timing, location, and duration of construction activities.

APM TRANS-5. PG&E will consult with the Placer County Unified School District at least one month prior to construction to coordinate construction activities adjacent to school bus stops. If necessary, school bus stops will be temporarily relocated or buses will be rerouted until construction in the vicinity is complete. PG&E will also consult with Yuba-Sutter Transit at least one month prior to construction to reduce potential interruption of transit services.

APM TRANS-6. As part of a TMP for the Project, PG&E will identify all access restrictions expected to occur during construction. PG&E will develop a plan for notifying the affected businesses, homes, and other facilities, and prepare a plan to ensure adequate access at all times. This plan may involve alternate access, detours, or other temporary mitigations.

APM TRANS-7. As part of the TMP, PG&E will develop for residential areas a notification process for temporary parking impacts and appropriate sign postings. PG&E will minimize the length of any temporary parking restrictions, develop appropriate sign postings, and specify the process for communicating with affected residents.

APM TRANS-8. Where construction will result in temporary closures of sidewalks and other pedestrian facilities, PG&E will provide temporary pedestrian access, through detours or safe areas along the construction zone. Any affected pedestrian facilities and the alternative facilities or detours that will be provided will be identified in the TMP. Where construction activity will result in bike lane closures, appropriate detours and signs will be provided. Where trenching will affect bicycle travel on streets without bicycle facilities, requirements for plates to cover trenches will be in accordance with the permit requirements of the local jurisdiction.

4.13.5 Impact Analysis and Mitigation

Impact Discussion

Line 406, Line 407, and the DFM include installation of an underground natural gas transmission line with several crossings of local roads, freeways/highways, and a railroad line.

Using horizontal directional drilling (HDD) beneath freeways/highways (I-505, I-5, SR-99, Garden Highway, and the Western Pacific Railroad to passing completely under the roadways and railroad line would have no impact on traffic.

The other roadways impacted by construction of the proposed Project include: CR-16A, CR-17, CR-85, CR-87, CR-88A, CR-90A, CR-96, CR-97, CR-98, CR-99B, CR-100, CR-101, CR-102, SR-113, Powerline Road, Riego Road/Baseline Road, West Elverta Road, Locust Road, Pleasant Grove Road, and Pacific Avenue.

The installation of the underground natural gas transmission line beneath the other roadways using trenching and conventional boring techniques such as jack-and-boring would cause temporary impacts to Project area roadways. The discussions below outline the potential impacts for underground pipeline installation on roadways.

Effect on LOS on Project Access Roads

Project related traffic or other activities would not use any access roads where level of service (LOS) is E, or result in a reduction of LOS to E. Project construction would temporarily add on the average 80 vehicle trips per day. These trips would include all construction-related commuting and hauling of equipment; construction supplies, and fill to the Project area. The average of 80 vehicle trips per day would occur over a variety of roadways, some of which would parallel the proposed alignment. Therefore, trip distribution would not be concentrated on one or two roadways. As a result, Project construction would not affect traffic or circulation on Project roadways, such that LOS would be reduced to E. Operation of the aboveground facilities would not impact LOS because the facilities would be unmanned facilities. While there would be occasional operation and maintenance activities, the Project would not increase the number of trips on roadways on a regular basis, and would not result in a reduction of LOS to E. Impacts would be less than significant (Class III).

Safety Hazards

Project related traffic or other activities would not result in a safety hazard to motorists, bicyclists, or pedestrians. By their nature, construction activities have the potential to cause safety problems for motorists, bicyclists, or pedestrians. For underground installation, there would be open trenches temporarily in travel paths in a few locations, presenting hazards for vehicles and pedestrians. However, PG&E would follow its standard safety practices, including installing appropriate barriers between work zones and transportation facilities, posting adequate signs, and using proper construction techniques. PG&E is a member of the California Joint Utility Traffic Control Committee, which in 1996 published the Work Area Protection and Traffic Control Manual. The traffic control plans and associated text in this manual conform to the guidelines established by the Federal Department of Transportation and Caltrans. PG&E would follow the recommendations in this manual regarding basic standards for the safe movement of traffic on highways and streets in accordance with section 21400 of the California Vehicle Code. With these practices (e.g., work zone barriers and signing) and the implementation of APMs TRANS-1 through TRANS-8, safety impacts would be less than significant (Class III).

Project Related Traffic Restricts Travel Lanes

Project related traffic or other activities could restrict one or more travel lanes of a primary or secondary arterial during peak-hour traffic, thereby reducing the roadway's capacity and creating congestion. Most of the affected roadways are rural connectors with minor traffic volumes. Riego Road and Powerline Road are likely access roads for construction work at the HDD crossings at the Garden Highway and SR-99. Lane closures and road-crossing disruptions would last only one or two days per location. The underground crossings at I-5, I-505, and East Levee Road/Western Pacific Railroad would be achieved by HDD with no anticipated disruption of traffic. To avoid creating congestion, PG&E would follow the traffic diversion plans as prescribed by the encroachment permits that would be obtained from Yolo County, Sutter County, Sacramento County, Placer County, and Caltrans. With these practices and the implementation of APMs TRANS-1 through TRANS-4, this impact would be less than significant (Class III).

Insufficient Parking

At roadway crossings, the construction zone would only cover a small area, so a minimal number of parking spaces would be affected. In addition, the pipeline would be primarily located on agricultural land, where there are no existing identified

parking areas that would be impacted in the rural portions of the Project area. The primary staging areas for vehicles, equipment, materials, and other supplies required for the construction of the pipeline and aboveground facilities would be within the Project temporary construction easement area and in existing industrial and commercial yards where accessible. Staging areas would be approximately 300 feet by 200 feet. In addition, implementation of APM TRANS-8 would ensure any impacts to parking would be less than significant (Class III).

Installation of Transmission Line Restricts Travel Lanes

Installing transmission lines would not restrict travel lanes for more than 48 hours for a particular segment. Since work crews would only work on a particular segment of the pipeline for two days, any lane restrictions would be temporary. The underground crossings at I-5, I-505, Garden Highway, SR-99, and East Levee Road/Western Pacific Railroad would be achieved by HDD with no anticipated disruption of traffic. Short-term, temporary lane restrictions may be unavoidable during construction for some segments of the proposed pipeline alignment that parallel roads in the Project area. To avoid creating congestion, PG&E would follow the traffic diversion plans as prescribed by the encroachment permits that would be obtained from Yolo County, Sutter County, Sacramento County, Placer County, and Caltrans. With these practices and the implementation of APMs TRANS-1 through TRANS-4, this impact would be less than significant (Class III).

Restrict Access to or from Adjacent Land Uses

Construction activities could restrict access to or from adjacent land uses. However, private driveways would not be used for staging areas. The primary staging areas for vehicles, equipment, materials, and other supplies required for the construction of the pipeline and aboveground facilities would be within the Project temporary construction easement area and in existing industrial and commercial yards where accessible. Staging areas would be approximately 300 feet by 200 feet. Impacts to adjacent land uses would be less than significant (Class III). In addition, implementation of APM TRANS-5 through TRANS-8 would ensure impacts to adjacent land uses would be less than significant (Class III).

Major Roadway Closed

The Project would not result in the complete closure of any roadways. For some activities lanes of travel may be restricted to one lane only for up to 48 hours. For all

affected roads in the Project area, implementation of APM TRANS-1 through APM TRANS-4 would ensure impacts would be less than significant (Class III).

Interfere with Navigable Airspace

There would not be any interference with navigable airspace since the proposed Project does not cross lands covered by an airport land use plan. The nearest airport to the proposed Project is Sacramento International Airport, approximately 1.5 miles south of the Powerline Road DFM. There are no airports within one mile of proposed alignment, nor are any of lands crossed by the proposed alignment covered by an airport land use plan. Therefore, impacts would be less than significant (Class III).

Restrict Movement of Emergency Vehicles

Routes for emergency vehicles would be maintained throughout Project construction, since at least one travel lane would be kept open during pipeline road-crossing procedures. PG&E would coordinate any lane closures with emergency service providers as directed by the Transportation Management Plan (TMP) to be prepared by PG&E for the Project. Underground construction activities may occasionally cause minor delays for emergency vehicles on roadways in the Project area. However, most construction would occur along county roads with relatively low levels of traffic. APM TRANS-3 and TRANS-4 would be implemented, requiring PG&E to prepare a TMP and to notify emergency service providers of the timing, location, and duration of construction activities. Therefore, impacts would be less than significant (Class III).

Increase Demand for or Reduce Supply of Parking Spaces

The Project would not increase demand for parking spaces. As stated above under Insufficient Parking, at roadway crossings the construction zone would only cover a small area, so a minimal number of parking spaces would be potentially affected. In addition, the pipeline would be primarily located on agricultural land, so there are no identified parking areas that would be impacted in the rural portions of the Project area. Impacts to parking would be less than significant (Class III).

Disrupt Bus or Rail Service

Bus service for Placer County Unified School District may be temporarily disrupted. There are no public transportation rail lines crossed by the proposed alignment. Staging areas would not be located at public transit bus stops. However, bus routes

for the Placer County Unified School District may be affected. As stated in APM TRANS-5, PG&E would consult with the Placer County Unified School District at least one month prior to construction to coordinate construction activities adjacent to school bus stops. If necessary, school bus stops would be temporarily relocated or buses would be rerouted until construction in the vicinity is complete. With implementation of APM, TRANS-5, impacts would be less than significant (Class III).

Temporary Disruption of Railroad Traffic

The Western Pacific Railroad line is located within the Project area and will be crossed using horizontal directional drilling (HDD) technique, with no anticipated disruption of railroad traffic. As a result, impacts to rail traffic would be less than significant (Class III).

Impede Pedestrian Movements or Bike Trails

Pedestrian and bicyclist use of roads in the Project area would be temporarily restricted. Construction activities along roadways with sidewalks and bicycle lanes may result in temporary closures of those facilities. Trenching and plating activities at roadway crossings may make travel temporarily more hazardous for pedestrians and those on bicycles. Implementation of APM TRANS-1 through TRANS-8 would reduce these impacts to a less than significant level (Class III).

4.13.6 Impacts of Alternatives

A No Project Alternative as well as twelve options have been proposed for the alignment in order to minimize or eliminate environmental impacts of the proposed Project and to respond to comments from nearby landowners. The twelve options, labeled A through L, have been analyzed in comparison to the portion of the proposed route that has been avoided as a result of the option. Descriptions of the options can be found in Section 3.0, Alternatives and Cumulative Projects, and are depicted in Figure 3-2A through Figure 3-2K.

No Project Alternative

Under the No Project Alternative Lines 406 and 407 and the DFM would not be constructed. As a result, there would not be any impacts to transportation and traffic.

Option A

Option A alternative would shift potential construction traffic impacts to a location north of the proposed pipeline. Option A would increase transportation and traffic impacts by increasing the length of the pipeline along roadways, as well as the number of roadway crossings. The proposed pipeline would cross seven roadways, while Option A would cross nine roadways. These impacts would be reduced to less than significant with the implementation of APM TRANS-1 through APM TRANS-8. Operation of Option A would be the same as the proposed Project and would not result in additional impacts related to traffic.

However, this option would impact the operations of Durst Organic Growers, a business that has approximately 40 employees year round, and as many as 300 during peak farming periods. By placing the pipeline along roadways in close proximity to Durst, a new impact would be created that would require additional mitigation beyond APM TRANS-1 through APM TRANS-8. If this option is chosen, MM TRANS-1 would be required to reduce impacts to less than significant. Option A would result in greater impacts than the proposed Project.

Impact TRANS-1: Project Related Traffic Restricts Travel Lanes

Project related traffic or other activities could restrict one or more travel lanes of a primary or secondary arterial during peak-hour traffic, thereby reducing the roadway's capacity and creating congestion (Potentially Significant, Class II).

MM TRANS-1 Mitigation for Potential Impacts to Durst Organic Growers. PG&E shall consult with Durst Organic Growers to coordinate construction activities along the roadways that Durst uses for employees, visitors, and transportation of their produce.

Option B

Option B alternative would shift potential construction traffic impacts to a location north of the proposed pipeline. Option B would cross basically the same number of roadways as the proposed Project. Option B would increase transportation and traffic impacts by increasing the length of the pipeline along roadways. These impacts would be reduced to less than significant with the implementation of APM TRANS-1 through APM TRANS-8. Operation of Option B would be the same as the proposed Project and would not result in additional impacts related to traffic.

However, this option would impact the operations of Durst Organic Growers, a business that has approximately 40 employees year round, and as many as 300 during peak farming periods. By placing the pipeline along roadways in close proximity to Durst, a new impact would be created that would require additional mitigation beyond APM TRANS-1 through APM TRANS-8. If this option is chosen, MM TRANS-1 would be required to reduce impacts to less than significant. Option B would result in greater impacts than the proposed Project.

Option C

Option C alternative would not change any impacts in comparison to the proposed Project. With the implementation of APM TRANS-1 through APM TRANS-8, impacts associated with Option C would be reduced to less than significant. Since construction traffic impacts for Option C would be the same as for the proposed Project, the impact would remain less than significant. Operation of Option C would be the same as the proposed Project and would not result in additional impacts related to traffic. Option C would result in impacts similar to the proposed Project.

Option D

Option D alternative would result in more impacts along CR-17 due to the pipeline extending along this roadway rather than through agricultural fields for a portion of the project. With the implementation of APM TRANS-1 through APM TRANS-8, impacts associated with Option D would be reduced to less than significant. Since construction traffic impacts for Option D would similar to the proposed Project, the impact would remain less than significant. Operation of Option D would be the same as the proposed Project and would not result in additional impacts related to traffic. Option D would result in impacts similar to the proposed Project.

Option E

Option E alternative would result in more impacts along CR-19 due to the pipeline extending along this roadway rather than through agricultural fields for a portion of the project. With the implementation of APM TRANS-1 through APM TRANS-8, impacts associated with Option E would be reduced to less than significant. Since construction traffic impacts for Option E would be similar to the proposed Project, the impact would remain less than significant. Operation of Option E would be the same as the proposed Project and would not result in additional impacts related to traffic. Option E would result in impacts similar to the proposed Project

Option F

Option F alternative would not change any impacts in comparison to the proposed Project. With the implementation of APM TRANS-1 through APM TRANS-8, impacts associated with Option F would be reduced to less than significant. Since construction traffic impacts for Option F would be the same as for the proposed Project, the impact would remain less than significant. Operation of Option F would be the same as the proposed Project and would not result in additional impacts related to traffic. Option F would result in impacts similar to the proposed Project

Option G

Option G alternative would result in impacts that are basically the same as the proposed Project. With the implementation of APM TRANS-1 through APM TRANS-8, impacts associated with Option G would be reduced to less than significant. Since construction traffic impacts for Option G would be similar to the proposed Project, the impact would remain less than significant. Operation of Option G would be the same as the proposed Project and would not result in additional impacts related to traffic. Option G would result in impacts similar to the proposed Project.

Option H

Option H alternative would result in impacts along Elverta Road rather than Riego Road. However, the pipeline alignment length along both roadways would be similar. The pipeline alignment along Powerline Road would not change. All other impacts associated with the proposed Project would be the same with this option as the proposed Project. With the implementation of APM TRANS-1 through APM TRANS-8, impacts associated with Option H would be reduced to less than significant. Since construction traffic impacts for Option H would be the same as for the proposed Project, the impact would remain less than significant. Operation of Option H would be the same as the proposed Project and would not result in additional impacts related to traffic. Option H would result in impacts similar to the proposed Project.

Option I

Option I alternative would result in impacts that are basically the same as the proposed Project. With the implementation of APM TRANS-1 through APM TRANS-8, impacts associated with Option I would be reduced to less than significant. Since construction traffic impacts for Option I would be similar to the proposed Project, the

impact would remain less than significant. Operation of Option I would be the same as the proposed Project and would not result in additional impacts related to traffic. Option I would result in impacts similar to the proposed Project.

Option J

Option J alternative would result in impacts that are basically the same as the proposed Project. With the implementation of APM TRANS-1 through APM TRANS-8, impacts associated with Option J would be reduced to less than significant. Since construction traffic impacts for Option J would be similar to the proposed Project, the impact would remain less than significant. Operation of Option J would be the same as the proposed Project and would not result in additional impacts related to traffic. Option J would result in impacts similar to the proposed Project.

Option K

Option K alternative would result in impacts that are basically the same as the proposed Project. With the implementation of APM TRANS-1 through APM TRANS-8, impacts associated with Option K would be reduced to less than significant. Since construction traffic impacts for Option K would be similar to the proposed Project, the impact would remain less than significant. Operation of Option K would be the same as the proposed Project and would not result in additional impacts related to traffic. Option K would result in impacts similar to the proposed Project.

Option L

Option L alternative would increase the length of a proposed Line 407 HDD for approximately 1,000 feet to the east along Base Line Road. This HDD extension would not significantly increase the impacts associated with transportation and traffic. With the implementation of APM TRANS-1 through APM TRANS-8, impacts associated with Option L would be reduced to less than significant. Since construction traffic impacts for Option L would be similar to the proposed Project, the impact would remain less than significant. Operation of Option L would be the same as the proposed Project and would not result in additional impacts related to traffic. Option L would result in impacts similar to the proposed Project.

Table 4.13-3: Comparison of Alternatives for Transportation and Traffic

Alternative	Comparison with Proposed Project
No Project	No Impacts
Option A	Greater Impacts
Option B	Greater Impacts
Option C	Similar Impacts
Option D	Similar Impacts
Option E	Similar Impacts
Option F	Similar Impacts
Option G	Similar Impacts
Option H	Similar Impacts
Option I	Similar Impacts
Option J	Similar Impacts
Option K	Similar Impacts
Option L	Similar Impacts
Source: Michael Brandman Associates 2009.	

4.13.7 Cumulative Projects Impact Analysis

The construction of other projects in the vicinity of the proposed Project could cumulatively affect transportation and traffic if the construction activities occurred simultaneously. As discussed in Section 3.4, Cumulative Related Future Projects, several projects are planned in the vicinity of the proposed Project, as shown in Table 3.2. The timing of construction for the cumulative projects is unknown, and it is possible that portions of these projects could be constructed at the same time and in the same vicinity as the proposed Project. However, the proposed Project would not result in any long-term impacts on transportation and traffic, and would therefore not be cumulatively considerable. Cumulative impacts would be less than significant (Class III).

When considered with the cumulative related projects, the proposed Project would not result in cumulative impacts in terms of transportation and traffic in the proposed Project area. The cumulative projects would have the potential to result in impacts to transportation and traffic. However, the proposed Project would not result in

cumulative impacts to transportation and traffic because construction impacts would be temporary, and operation of the proposed Project would not result in a long-term increase in traffic on Project area roads that reduces traffic to LOS E. The proposed Project when considered with the cumulative related projects would not result in cumulative impacts to safety, increased congestion, insufficient parking, restricting parking lanes, property access, roadway closures, pedestrians, navigable airspace, transit operations, trains, or movement of emergency vehicles..

4.13.8 Summary of Impacts and Mitigation Measures

Through the implementation of APM TRANS-1 through APM TRANS-8, the proposed Project would not result in a long-term traffic increase that results in an LOS E, create substantial safety hazards to motorists, bicyclists, or pedestrians, restrict travel lanes due to installation of a transmission line, restrict access to and from adjacent land uses, close a major roadway, interfere with navigable airspace, result in safety problems for vehicles, pedestrians, transit operations or trains. Nor would the Project restrict movement of emergency vehicles, increase demand for parking, disrupt rail or bus service, disrupt rail traffic, or impede pedestrian movements or bike trails in the construction area. Therefore, impacts to transportation and traffic would be less than significant (Class III), and no mitigation measures are required.

Implementation of Option A or Option B would result in potentially significant impacts (Class II) to traffic near Durst Organic Growers and, in addition to APM TRANS-1 through APM TRANS-8, would require implementation of MM TRANS-1 in order to reduce impacts to less than significant (Class III).

Table 4.13-4: Summary of Transportation and Traffic Impacts and Mitigation

Impact	Mitigation Measure
TRANS-1. Project Related Traffic Restricts Travel Lanes	**TRANS-1.** Mitigation for Potential Impacts to Durst Organic Growers.
Source: Michael Brandman Associates 2009.	