

8.12 Traffic and Transportation

This section assesses transportation impacts associated with the WCEP. The analysis primarily quantifies impacts on intersection levels of service expected during construction of the proposed project. Additional transportation factors examined in this section include safety, goods movement, and any potential impacts to air, rail, and waterborne transportation networks. Section 8.12.1 discusses the existing environmental setting; Section 8.12.2 discusses the environmental effects of project construction and operation; Section 8.12.3 evaluates potential cumulative impacts to traffic and transportation due to other simultaneous projects; Section 8.12.4 includes proposed mitigation measures during construction and operation; Section 8.12.5 presents applicable LORS; Section 8.12.6 provides agency contacts; Section 8.12.7 discusses permits and permit schedules, and Section 8.12.8 contains references.

8.12.1 Affected Environment

8.12.1.1 Project Location and Description

The project site is located in an industrial area and is surrounded to the south, east, and west, by warehousing and other industrial uses. To the north is a Southern California Edison (SCE) transmission corridor. Beyond the corridor is the San Jose Creek Flood Control Channel, and beyond that to the north, an intermodal rail/truck terminal. Residential areas are located in unincorporated areas of the Los Angeles County to the south and north, beyond the industrial areas that are adjacent to the project site.

The proposed facility would result in additional traffic that includes both passenger vehicles related to construction workers and permanent employees, and delivery vehicles transporting commercial equipment. Figure 8.12-1 shows the regional transportation systems.

8.12.1.2 Existing Transportation Facilities

8.12.1.2.1 Regional Roadway Facilities

The proposed project lies near primary transportation corridors (Figure 8.12-1) Major freeways in proximity to the proposed project site include State Route 60 (SR-60, also known as the Pomona Freeway), Interstate 605 (I-605, also known as the San Gabriel River Freeway), State Route 57 (SR-57, also known as the Orange Freeway), and Interstate 10 (I-10, also known as the San Bernardino Freeway). There are no vehicle weight and load restrictions on the regional roadways in the project vicinity.

State Route 60

State Route 60 connects SR-10 to the east and SR-215 to the west. The project site is located north of SR-60. Access to the site is provided via the South Azusa Avenue exit. In the vicinity of the proposed project, SR-60 has four lanes in each direction. According to traffic counts conducted by Caltrans in 2004, SR-60 carries approximately 225,000 average daily vehicle trips. Truck traffic accounts for approximately 8 percent of all trips.

Interstate 605

Interstate 605 connects I-210 to the north and I-405 to the south. The project site is located east of I-605. Access to the site from I-605 is provided via SR-60 or the East Valley Boulevard

interchange. In the vicinity of the proposed project, I-605 has four lanes, including a carpool lane, in each direction. According to traffic counts conducted by Caltrans in 2004, I-605 carries approximately 254,000 average daily vehicle trips. Truck traffic accounts for approximately 15 percent of all trips.

State Route 57

State Route 57 connects I-210 to the north and I-5 to the south. The project site is located west of SR-57. Access to the site from SR-57 is provided via SR-60 or the West Temple Avenue interchange. In the vicinity of the proposed project, SR-57 has four lanes, including a carpool lane, in each direction. According to traffic counts conducted by Caltrans in 2004, SR-57 carries approximately 199,000 average daily vehicle trips. Truck traffic accounts for approximately 8 percent of all trips.

Interstate 10

Interstate 10 connects the East Los Angeles Interchange to the west and the City of San Bernardino to the east. I-10 also connects I-605 and SR-57 north of the project site. This segment of I-10 has four lanes in each direction. According to traffic counts conducted by Caltrans in 2004, I-10 carries approximately 240,000 average daily vehicle trips. Truck traffic accounts for approximately 7 percent of all trips.

8.12.1.2.2 Local Roadway Facilities

The project site is connected to the major regional roadways listed above via South Azusa Avenue, South Hacienda Boulevard, East Gale Avenue, East Valley Boulevard, East Chestnut Street, and South Bixby Drive. These arterials and local roadways are briefly described below, and Figure 8.12-2 shows the arrangement of the local roadway network in the vicinity of the project site. Table 8.12-1 provides classification and traffic volume data for the local and regional roadways. There are no vehicle weight and load restrictions on the local roadways in the project vicinity.

South Azusa Avenue

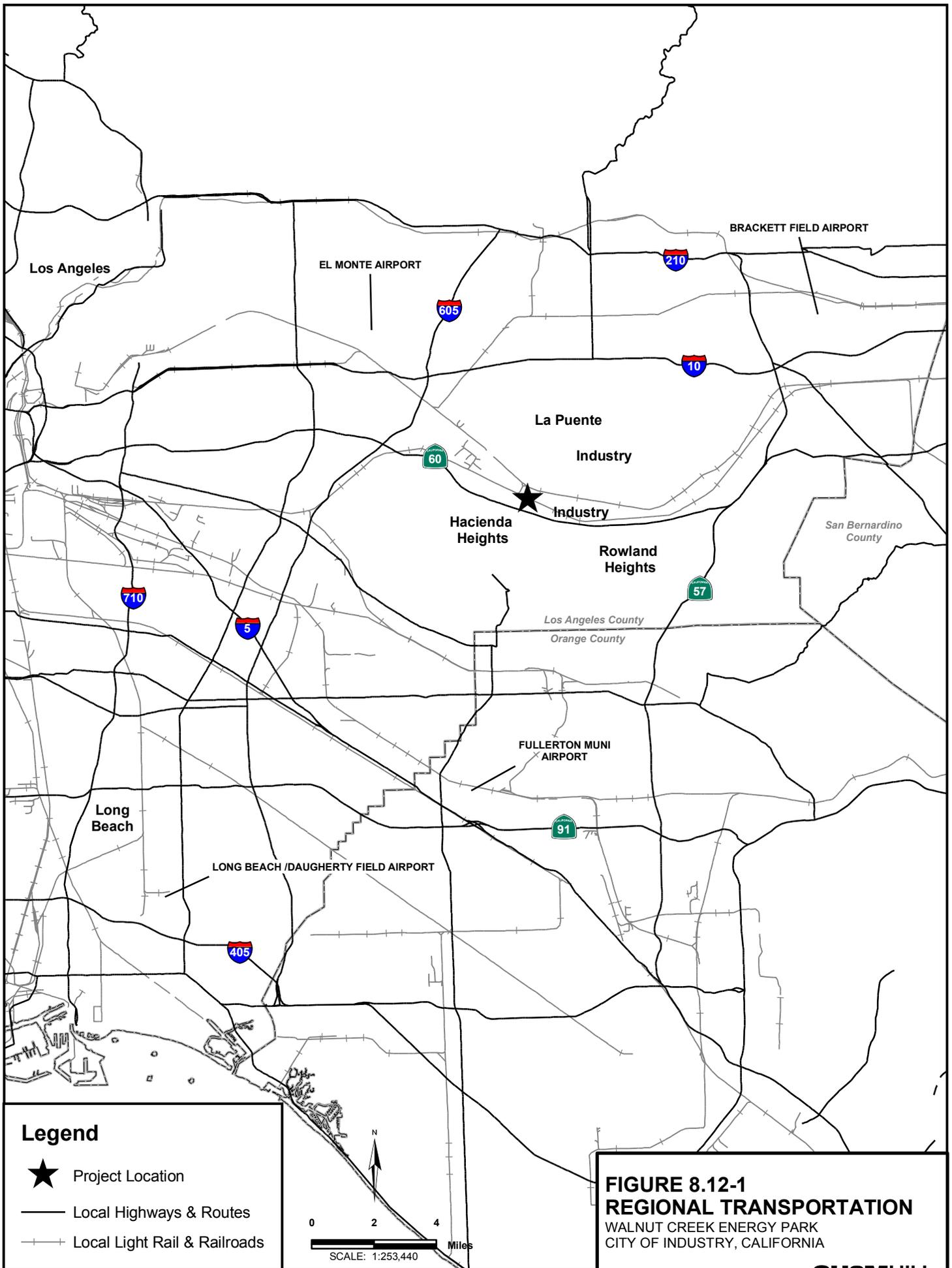
South Azusa Avenue is located east of the project site and functions as a north-south highway within the study area. It extends north from its interchange with I-10 to its interchange with SR-60 and intersection with Colima Road. It will serve as a primary access route to the project site. This segment of South Azusa Avenue is generally comprised of three lanes in each direction and currently carries approximately 55,600 vehicles per day.

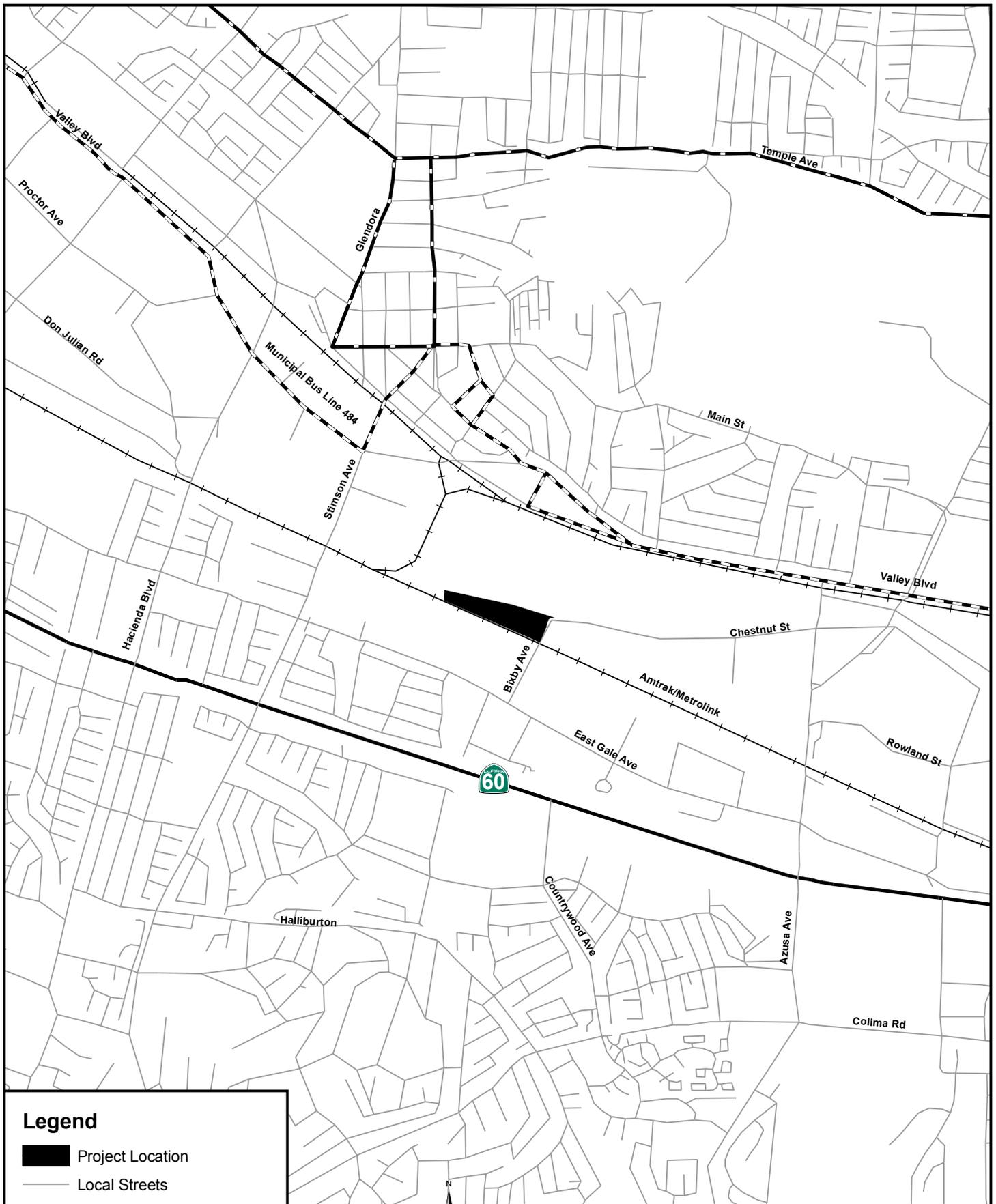
South Hacienda Boulevard

South Hacienda Boulevard is located west of the project site and functions as a north-south highway within the study area. It connects the project site to SR-60 via East Gale Avenue and South Bixby Road. This segment of South Hacienda Boulevard is generally comprised of three lanes in each direction and currently carries approximately 44,700 vehicles per day.

East Gale Avenue

East Gale Avenue functions as an east-west collector road between South Azusa Avenue, South Hacienda Boulevard and 7th Street. East Gale Avenue provides access to the project site via South Bixby Drive. This segment of East Gale Avenue is mostly comprised of two to three lanes in each direction and carries approximately 27,300 vehicles per day.





Legend

- Project Location
- Local Streets
- Local Highways & Routes
- Local Light Rail & Railroads
- Class III Bike Path
- Municipal Bus Line 484

FIGURE 8.12-2
LOCAL TRANSPORTATION FACILITIES
 WALNUT CREEK ENERGY PARK
 CITY OF INDUSTRY, CALIFORNIA

TABLE 8.12-1
Characteristics of Roadways in Project Study Area

Name	Classification	Hourly Design Capacity ^a	Average Daily Traffic Volume ^{b, c, d}	Truck Traffic ^b	Peak Hour Volume ^{b, c}
Regional Roadways					
SR-60 (post mile 17.97)	Freeway	17,800	225,000	8%	14,800
I-605 (post mile 17.41)	Freeway	17,000	254,000	15%	16,200
SR-57 (post mile 4.52)	Freeway	17,800	199,000	8%	13,800
I-10 (post mile 36.5)	Freeway	17,900	240,000	7%	15,800
Local Roadways					
South Azusa Avenue	Arterial	5,100	55,600	-	3,750
South Hacienda Boulevard	Arterial	5,100	44,700	-	2,980
East Gale Avenue	Collector Road	3,400	27,300	-	2,260
East Chestnut Street	Local Road	1,700	3,260	-	169
South Bixby Drive	Local Road	1,700	1,440	-	160

^a Vehicles/hour (both directions). Source: Highway Capacity Manual, Transportation Research Board (TRB), 2000

^b Source: State of California, Department of Transportation, 2004

^c Source: Los Angeles County Department of Public Works, Traffic Volumes

^d City of Industry, Planning Department, 1997, Traffic Counts

East Chestnut Street

East Chestnut Street is a local two-lane road which provides direct access to the project site. It connects South Azusa Avenue to East Bixby Drive. In the project vicinity, East Chestnut Street carries approximately 3,260 average daily vehicles. Land uses along this section of roadway are primarily warehousing and other industrial uses.

South Bixby Drive

South Bixby Drive is a local two-lane road which provides direct access to the project site. It connects East Gale Avenue to East Chestnut Street. In the project vicinity, South Bixby Drive carries approximately 1,440 average daily vehicles. Land uses along this section of roadway are primarily warehousing and other industrial uses.

8.12.1.3 Intersection Level of Service Criteria

The City of Industry and the Los Angeles Department of Public Works use the LOS criteria, as defined by the *Highway Capacity Manual*, to qualitatively measure operational characteristics of local roadways. Traffic impacts are analyzed by peak hour intersection capacity and operations, rather than daily roadway capacity. Intersection LOS is identified through a letter designation, varying from LOS A (up to 10 seconds of delay) to LOS F (greater than 80 seconds of delay) as described in Table 8.12-2. For urban settings, LOS E (delays of 55 to 80 seconds) is considered to be the limit of acceptable delay.

Traffic conditions were evaluated using the Synchro software (Trafficware, Version 6). Synchro is a traffic operations analysis tool that incorporates the methodology of Transportation Research Board's 2000 *Highway Capacity Manual* (TRB, 2000). This program assigns a LOS designation based upon average vehicle delay.

TABLE 8.12-2
Level of Service Criteria for Signalized Intersections

Level of Service	Average Delay (seconds per vehicle)	Traffic Flow Characteristics
A	≤ 10	Most vehicles arrive during the green phase and do not stop at all.
B	> 10 to ≤ 20	More vehicles stop, causing higher delay.
C	> 20 to ≤ 35	Vehicle stopping is significant, but many still pass through the intersection without stopping.
D	> 35 to ≤ 55	Many vehicles stop, and the influence of congestion becomes more noticeable.
E	> 55 to ≤ 80	Very few vehicles pass through without stopping.
F	> 80	Considered unacceptable to most drivers; intersection is not necessarily over capacity even though arrivals exceed capacity of lane groups.

Source: Highway Capacity Manual; Transportation Research Board, 2000

This analysis focuses on the following study area intersections during a typical weekday peak hour between 7:00 a.m. to 9:00 a.m. (morning peak), and 4:00 p.m. to 6:00 p.m. (evening peak).

- SR-60 Eastbound off ramp/South Azusa Avenue
- SR-60 Westbound off ramp/South Azusa Avenue
- South Azusa Avenue/East Gale Avenue
- East Gale Avenue/South Bixby Drive
- East Gale Avenue /South Hacienda Boulevard

Intersection conditions were evaluated for the following scenarios:

- Existing (2005) conditions
- Construction phase (2008) conditions

Historical traffic data (from 1990 to 2000) were compared to more recent data. The comparison indicated that the peak hour volumes and daily volumes on roads in the vicinity of the project site have slightly decreased or stayed constant over the last few years. Based on this, it was assumed that the traffic conditions in 2007 (beginning of construction) and 2008 (beginning of commercial operation) will remain comparable to the 2005 (existing) conditions. Given steady traffic volumes in the area, updated traffic forecasts for 2007 and 2008 were unnecessary. Additionally, facility operation conditions were not evaluated since traffic generated by permanent employees and deliveries during facility operation will be minimal.

8.12.1.3.1 Existing Conditions

Table 8.12-3 shows the results of the existing conditions traffic analysis. Under existing conditions, the studied intersections operate at LOS E or better for both the morning and evening peak periods. The intersections that are near the project, South Azusa Avenue/East

Gale Avenue and East Gale Avenue/South Bixby Drive, currently operate at LOS D and LOS A, respectively.

In addition, a freeway mainline LOS analysis was prepared for SR-60 between Hacienda Boulevard and Azusa Avenue for 1992, 1998 and 2004. The analysis indicated that the peak operation LOS on SR-60 has consistently been between LOS E and LOS F. The California Department of Transportation considers LOS D to be the limit of acceptable delay.

TABLE 8.12-3
Level of Service Summary for Existing Conditions

Intersection	Peak Hour	Existing	
		LOS	Delay*
SR-60 Eastbound off ramp/South Azusa Avenue	Morning	D	35
	Evening	E	56
SR-60 Westbound off ramp/South Azusa Avenue	Morning	B	13
	Evening	A	9
South Azusa Avenue/East Gale Avenue	Morning	D	51
	Evening	D	36
East Gale Avenue/South Bixby Drive	Morning	A	9
	Evening	A	6
East Gale Avenue /South Hacienda Boulevard	Morning	C	31
	Evening	D	37

* Delay in seconds per vehicle.

8.12.1.4 Public Transportation

The Metrolink Riverside rail line connects the City of Industry with Riverside County and downtown Los Angeles. Metro Bus Line 484 provides express bus service between the City of Industry Metrolink station, downtown Los Angeles, and California State Polytechnic University, Pomona. Foothill Transit also provides service in the vicinity of the project site. This includes Route 280 along South Azusa Avenue, Route 281 and Route 285 along East Gale Avenue, and Route 493 and Route 497 along SR-60 (Foothill Transit 2005).

8.12.1.5 Bicycle and Pedestrian Circulation

There are no bicycle lanes or paths within the vicinity of the WCEP, although many buildings in the area provide on-street bicycle racks. The nearest bicycle facilities are Class III bicycle paths in the City of La Puente (City of La Puente 2004), shown on Figure 8.12-2.

8.12.1.6 Airports

Ontario International Airport is approximately 25 miles east of the proposed project site. It is accessible via SR-60 and I-10. Los Angeles International Airport is approximately 35 miles west of the project. It is accessible via SR-60, I-605 and I-105. John Wayne Airport is located approximately 33 miles south of the project site. It is accessible via SR-60 and SR-57.

8.12.1.7 Goods Movement

8.12.1.7.1 Freight Rail Service

Active freight rail service is provided in the immediate vicinity of the proposed project. Intermodal rail yard is located just to the north of the project site. A railroad track is operated by the Union Pacific transcontinental railroads, running westerly to Los Angeles and easterly toward Riverside. In addition, a 41-mile-long rail bypass provides direct access to both of the West Coast's two largest seaports: Los Angeles Harbor and the Port of Long Beach.

8.12.1.7.2 Truck Access

The largely industrial land uses near the project site generate truck traffic. A designated truck route between SR-60 and the project site exists along South Azusa Avenue, East Gale Avenue and South Bixby Drive. There are no vehicle weight and load restrictions along the route.

8.12.1.8 Planned Transportation Improvements

Discussions with the City of Industry indicate that there are presently no plans for significant transportation improvements near the WCEP site (personal conversation with John Ballas and Troy Helling, City of Industry).

8.12.2 Environmental Consequences

This section discusses potential environmental impacts of the proposed project. Potential traffic impacts during construction of the plant, as well as plant operation after construction, have been considered and analyzed. Significance criteria were developed based upon Appendix G of the California Environmental Quality Act (CEQA) *Guidelines*, which identifies significant impacts to be caused by a project if it results in an increase in traffic that is substantial relative to the amount of existing traffic and the capacity of the surrounding roadway network. In addition, impacts are assessed in accordance with the criteria used by the City of Industry, Los Angeles County and the Southern California Association of Governments. The most stringent criteria were used to determine project-related impacts.

During the peak construction phase, the project is expected to generate approximately 122 average daily construction worker trips. When completed, the operational phase of the proposed project would generate approximately 3 additional employee commutes or 6 daily trips. To analyze the "worst-case" scenario, traffic impacts associated with construction traffic were analyzed. Consequently, a quantitative traffic analysis was not conducted for the long-term operations phase since it would generate a very low number of peak hour trips (3 morning and 3 evening peak hour employee trips). This would not have a measurable impact on the study area intersections.

8.12.2.1 Thresholds of Significance

The significance criteria have been developed using guidance provided in CEQA, Appendix G (Title 14 California Code of Regulations 15000 et seq.) and relevant local policies. Impacts of the proposed project to transportation and circulation will be considered significant if the following criteria are met:

- Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system

- Exceed, either individually or cumulatively, a LOS standard established by the county congestion management agency for designated roads or highways
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks
- Substantially increase hazards due to a design feature or incompatible uses
- Result in inadequate emergency access
- Result in inadequate parking capacity
- Conflict with adopted policies, plans, or programs supporting alternative transportation

8.12.2.2 Intersection Levels of Service

8.12.2.2.1 Construction Impacts

Average and peak hour traffic operations were evaluated for the weekday morning and evening peak periods (7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.) for the local roadway network adjacent to the project site during construction. The average peak hour analysis examined the impact of 122 daily workers during construction of the project. The peak hour analysis examined the worst-case scenario, the impact of 228 daily workers during construction of the project.

Trip Generation

Construction of the proposed project is anticipated to begin in the spring of 2007 and end in the summer of 2008. The maximum number of construction workers present on site at a given time (peak workforce) would be approximately 408 workers.

Construction for the plant would generally be scheduled to occur between 7:00 a.m. and 7:00 p.m., Monday through Saturday, although additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities. During some construction periods and during the startup phase of the project, some activities will continue 24 hours per day, 7 days per week. Based on the regular schedule, most worker trips to the project site would occur during the morning (inbound to site) and evening (outbound from site) peak commute hours. The delivery of construction materials and the hauling of materials from the project site would also occur during the day, but not during the peak hours. Table 8.12-4 summarizes the total daily and peak-hour construction vehicle trip generation for the construction period.

Based on a worst-case scenario, it is assumed that each worker will drive a separate vehicle to the project site, making two trips per day (one round trip to the site and back). Thus, construction workers would generate an estimated 220 daily round trips on average. During this period, approximately 10 truck and heavy vehicle trips would occur with no truck trips occurring during the a.m. and p.m. peak commute periods. Also, approximately 10 construction personnel trips (5 inbound and 5 outbound) associated with lunch and/or business-related trips would occur outside of the peak hours. Construction workers would generate an estimated 408 round trips during the peak construction period. Delivery trucks and heavy vehicles would generate additional 18 trips during this period.

TABLE 8.12-4
Construction Trip Generation for the Proposed Project

Vehicle Type	Average Daily Trips	Peak Daily Trips	Morning Peak Hour		Evening Peak Hour	
			In	Out	In	Out
Construction Personnel ^a	220	408	220	0	0	220
Delivery Trucks ^b	5	8	0	0	0	0
Heavy Vehicles and Trucks ^b	5	10	0	0	0	0
Total	230	426	220	0	0	220

^a Approximately 10 construction personnel trips (5 inbound and 5 outbound) associated with lunch and other business-related trips would occur from 9:00 a.m. to 4:00 p.m. (outside of peak hours)

^b Delivery and other truck trips would occur from 9:00 a.m. to 4:00 p.m. (outside of peak hours)

Trip Distribution

The construction worker trip distribution has been based on the assumption that the entire workforce will commute from within the Los Angeles County. To arrive at the project site, construction workers would use SR-60, exit on South Azusa Avenue and proceed to Gale Avenue and Bixby Drive. It was assumed that an equal number of workers will use eastbound and westbound SR-60 and connecting Azusa Avenue on ramps and off ramps.

Construction Phase Project Conditions—Table 8.12-5 shows the results of the peak construction conditions traffic analysis.

TABLE 8.12-5
Level of Service Summary for Peak Construction Conditions

Intersection	Peak Hour	Peak Construction		
		LOS	Delay ^a	Δ Delay ^{b,c}
SR-60 Eastbound off ramp/South Azusa Avenue	Morning	D	47	12
	Evening	E	57	1
SR-60 Westbound off ramp/South Azusa Avenue	Morning	C	30	17
	Evening	B	15	6
South Azusa Avenue/East Gale Avenue	Morning	D	51	0
	Evening	E	56	20
East Gale Avenue/South Bixby Drive	Morning	B	13	4
	Evening	B	15	9
East Gale Avenue /South Hacienda Boulevard	Morning	C	32	-1
	Evening	D	36	-1

^a Delay in seconds per vehicle.

^b Change in delay in seconds per vehicle compared to existing conditions.

^c Some delays decrease because traffic is being added to movements with lower than average delays, which reduces the overall intersection delay.

Based on the traffic analysis, the addition of the peak construction worker traffic volumes would not have a significant impact on traffic operations at the project area intersections. There would be an increase in delay at some intersections, but operations would still be acceptable per the California Department of Transportation (LOS E or better). Project

construction would cause a change in LOS at five intersections during the construction period.

A freeway mainline analysis prepared for SR-60 between Hacienda Boulevard and Azusa Avenue indicates that the delays have been below acceptable levels (LOS D). Project contribution to the LOS E/F segment of SR-60 would be up to 408 peak hour trips, or less than 4percent. This does not violate the CEQA significance criteria, and the impact would last only during the peak construction period.

It is important to note that the peak construction period will take place from Month 6 to Month 9. The construction personnel by month table (Section 8.10, Socioeconomics) was used to further evaluate traffic impacts of the peak construction personnel. Based on this information, it was determined that the traffic impacts between construction months 6 and 9 will be similar to average workforce traffic impacts. In other words, LOS at all intersections during both morning and evening peak hours will continue to operate as they do without the construction, although some intersections will have slightly higher average delays per vehicle. Traffic impacts during Month 7 and Month 8 will have the highest peak construction period traffic analysis characteristics.

8.12.2.2 Operational Impacts

The permanent addition of 9 employees would generate 3 morning peak hour, and 3 evening peak hour trips. Once these trips are distributed on the study area network, they would result in a less-than-significant impact, as their traffic volumes would be immeasurable in terms of intersection LOS. The freeway mainline LOS analysis indicated that SR-60 would continue to operate at LOS E.

The remaining non-peak hour trips would be associated with regular plant deliveries, visitors, and employee business-related trips. Since these trips would be spread throughout the day, and would not occur during the peak commute hours, they would also have a less-than-significant impact on traffic operations.

8.12.2.3 Parking Facilities

Construction parking areas will be located within existing site boundaries and on the SCE easement, north of the plant site. Construction of the proposed project would not impact on-street parking. When completed, the project would contain adequate onsite parking to accommodate the permanent employees. Therefore, no significant impacts to parking are anticipated.

8.12.2.4 Public Transportation

Foothill Transit Routes 281 and 285 run along East Gale Avenue and have stops in the immediate vicinity of the project site. However, it is anticipated that majority of the employees will be driving to and from the project site. Therefore public transit routes within the vicinity of the project location will not be affected during construction or facility operation.

8.12.2.5 Bicycle and Pedestrian Circulation

Neither bicycle nor pedestrian facilities within the vicinity of the project location will be affected during construction or facility operation. Additionally, bicycle facilities and roads

in the City of La Puente will not be affected, since construction related traffic will originate at SR-60 and will not cross City's boundaries.

8.12.2.6 Goods Movement

Construction and operation of the proposed project would not impact adjacent freight rail lines, and air or shipping routes. Therefore, the project would not have a significant impact on goods movement.

8.12.2.7 Safety

There will be no changes to the design of the roadways in the vicinity of the proposed project site. Truck traffic within the area would continue to use designated truck routes to access the proposed project site. Impacts to vehicle, pedestrian, and bicycle safety as a result of construction and operation of the project would be less-than-significant.

8.12.2.8 Air, Rail, and Waterborne Traffic

The proposed project would have no impacts on air, rail, or waterborne traffic. The nearest airport to the WCEP is the El Monte Airport, more than 7 miles away. This is further than the distance that restricted air space extends from the longest runways, which is 20,000 feet.

8.12.2.9 Hazardous Materials Transport

Construction of the proposed project would generate hazardous wastes consisting primarily of batteries, asbestos containing materials, and various liquid wastes (e.g., cleaning solutions, solvents, paint and antifreeze). Contaminated soils could also be generated in the pre-construction or site preparation phase and would be transported as hazardous materials or hazardous waste. Transport route arrangements would be required with Caltrans officials for permitting and escort, as applicable. Generally, only small quantities of hazardous materials will be used during the construction period, as described in Section 8.5, Hazardous Materials Handling. They may include gasoline, diesel fuel, motor oil, hydraulic fluid, solvents, cleaners, sealants, welding flux, various lubricants, paint, and paint thinner. Because of the small quantities of hazardous materials involved, shipments will likely be consolidated. Multiple truck deliveries of hazardous materials during construction are unlikely. During construction, a minimal number of truck trips per month will be required to haul waste for disposal. Because the transport of hazardous wastes will be conducted in accordance with the relevant transportation regulations no significant impact is expected.

Operation of the project would result in the generation of additional wastes including lubricants, water treatment chemicals, herbicides and pesticides, and sludge. In addition, operation of the project will require transportation of aqueous ammonia, a regulated substance. Aqueous ammonia will be delivered to the plant by truck transport using designated truck routes (see discussion below). Small quantities of sulfuric acid and various other hazardous materials will also be used in project operations, as described in Section 8.5. According to Division 13 Section 31303 of the California Vehicle Code (CVC), the transportation of regulated substances and hazardous materials will be on the state or interstate highways that offer the shortest overall transit time possible.

Aqueous ammonia is considered a potential inhalation hazard. Division 14.3 Section 32105 of the CVC specifies that unless there is not an alternative route, every driver of a vehicle

transporting inhalation hazards shall avoid, by prearrangement of routes, driving into or through heavily populated areas, congested thoroughfares, or places where crowds are assembled.

The truck loading area will be located within a bermed area adjacent to the storage tank onsite. The use of 19 percent aqueous ammonia will require approximately 2 deliveries of ammonia per week or 16 truck trips per month (inbound and outbound). These truck trips would generally occur during the non-peak commute hours.

Table 8.12-6 summarizes expected truck trips for the project, including delivery of hazardous materials and removal of wastes. There will be a maximum of 3 truck trips per day, with an average of 2 or less truck trips per day to the project site. For further information on the management of hazardous materials and waste products, see Sections 8.5 and 8.14.

TABLE 8.12-6
Estimated Truck Deliveries at the Facility During Operation

Delivery Type	Number and Occurrence of Trucks
Aqueous ammonia	8 per month
Sulfuric acid	2 per month
Cleaning chemicals	1 per month
Trash pickup	1 per week
Lubricating oil	4 per year
Lubricating oil filters	4 per year
Laboratory analysis waste	4 per year
Oily rags	4 per year
Oil absorbents	4 per year
Water treatment chemicals	Up to 4 per week

Additionally, transporters of inhalation hazardous or explosive materials must contact the CHP and apply for a Hazardous Material Transportation License. Upon receiving this license, the shipper will obtain a handbook that will specify the routes approved to ship inhalation hazardous or explosive materials. The exact route of the inhalation or explosive material shipment will not be determined until the shipper contacts the CHP and applies for a license. Transportation impacts related to hazardous materials associated with power plant operations will not be significant since deliveries of hazardous materials will be limited. Delivery of these materials will occur over prearranged routes and will be in compliance with all LORS governing the safe transportation of hazardous materials.

Standards for the transport of hazardous materials are contained in the Code of Federal Regulations, Title 49 and enforced by the U.S. Department of Transportation. Additionally, the State of California has promulgated rules for hazardous waste transport that can be found in the California Code of Regulations, Title 26. Additional regulations for the transportation of hazardous materials are outlined in the California Vehicle Code (Sections 2500-505, 12804-804.5, 31300, 3400, and 34500-501). The two state agencies with

primary responsibility for enforcing federal and state regulations governing the transportation of hazardous wastes are the California Highway Patrol (CHP) and Caltrans. Transport of hazardous materials to and from the WCEP will comply with all applicable requirements.

For those materials that require offsite removal, a licensed hazardous waste transporter would move these substances to one of three Class I hazardous waste landfills in proximity to the project site. Access by waste haulers to the project site would be via SR-60. Specific outbound truck routes from the project site to SR-60 are as follows:

1. Project site (Bixby Drive) to East Gale Avenue - southbound
2. East Gale Avenue to South Azusa Avenue - eastbound
3. South Azusa Avenue to SR-60 (eastbound or westbound) on ramp - southbound

Specific inbound truck routes to the project site from SR-60 are as follows:

1. SR-60 (eastbound or westbound) to Azusa Avenue off ramp
2. South Azusa Avenue to East Gale Avenue - northbound
3. East Gale Avenue to Bixby Drive - westbound
4. Bixby Drive to project site - northbound

These inbound and outbound truck routes serving the project site to SR-60 would travel through predominantly industrial areas within the City of Industry.

Outbound trucks would proceed west on SR-60 to I-5 or I-10. I-5 and I-10 provide access to California's three Class I hazardous waste facilities including:

- Safety Kleen, Buttonwillow (Kern County)
- Safety Kleen, Westmorland (Imperial County)
- Chemical Waste Management, Kettleman Hills (Kings County)

The major highways and interstates that would be used to carry hazardous wastes from the project site to the appropriate landfills contain adequate capacity to accommodate these vehicle trips. Hauling would be carried out in accordance with local, state, and federal regulations that include the Resource Conservation and Recovery Act (42 U.S. Code 6901et seq.), the California Integrated Waste Management Act (Public Resources Code Sections 40000 et seq.) and Los Angeles County Department of Health Services requirements.

In addition, the federal government prescribes regulations for transporting hazardous materials. These regulations are described in the Code of Federal Regulations, Title 49, Section 171. These laws and ordinances place requirements on various aspects of hazardous waste hauling, from materials handling to vehicle signs, to ensure public safety. Transporting and handling of chemicals and wastes are discussed in Section 8.5, Hazardous Materials Handling, including the transport of ammonia.

8.12.3 Cumulative Impacts

There should not be any significant cumulative impacts resulting from the project in combination with any other proposed projects in the area, since impacts resulting from the WCEP are insignificant and negligible. Currently, there are no other large planned industrial developments in the general project area being considered. Traffic volumes

generated by the WCEP during the operations phase will be low enough so that there should be no significant environmental impact. The proposed WCEP does not generate the threshold level of trips necessary to require a full traffic analysis, as recommended by the Institute of Transportation Engineers (ITE 2001). The existing roadway infrastructure is adequate to accommodate the predicted traffic movements generated by the proposed WCEP during both construction and operation. In addition, the proposed WCEP will not exceed the standards of significance for traffic impacts.

8.12.4 Mitigation Measures

8.12.4.1 Construction Impacts

Construction of proposed project would add a moderate amount of traffic to local roadways during the construction period. In most cases, the increase in delay is minimal because traffic will be added to major thoroughfares and intersections. Since there are no significant impacts, no mitigation measures are required for local roads. However, if significant impacts occur during construction (i.e., if the construction worker schedule is greatly expanded), trip reduction strategies could be implemented to stagger shift start and end times. Given that SR-60 is congested throughout the day, it is likely that traffic impacts on this freeway will be unmitigable and would not respond to trip reduction strategies.

To address any potential traffic issues during construction, the construction contractor will be required to prepare a construction traffic control plan and construction management plan, also known as a Traffic Management Plan (TMP). The TMP should address timing of heavy equipment and building material deliveries, potential street and/or lane closures, signing, lighting, and traffic control device placement. Damage to any roadway opened during construction will be restored to or near its preexisting condition. The construction contractor will work with the local agency's engineer to prepare a schedule and mitigation plan for the roadways along the construction routes.

8.12.4.2 Operation Impacts

The operations-related and maintenance-related traffic associated with the project is considered to be minimal; state routes and local roadways have adequate capacity to accommodate operations-related traffic. Consequently, no operations-related mitigation measures are required.

8.12.5 Laws, Ordinances, Regulations and Standards

LORS related to traffic and transportation are summarized in the following sections. All applicable LORS and administering agencies are summarized subsequently. Table 8.12-7 describes how the project will comply with all LORS pertaining to traffic and transportation impacts.

8.12.5.1 Federal

- Title 49, CFR, Sections 171-177 (49 CFR 171-177), governs the transportation of hazardous materials, the types of materials defined as hazardous, and the marking of the transportation vehicles.

- Title 49 CFR 350-399 and Appendices A-G, Federal Motor Carrier Safety Regulations, address safety considerations for the transport of goods, materials, and substances over public highways.
- Title 49 CFR 397.9, the Hazardous Materials Transportation Act of 1974, directs the U.S. Department of Transportation to establish criteria and regulations for the safe transportation of hazardous materials.

8.12.5.2 State

- CVC Sections 13369, 15275 and 15278 addresses the licensing of drivers and classifications of licenses required for operation of particular types of vehicles. In addition, certificates permitting the operation of vehicles transporting hazardous materials are addressed.
- CVC Sections 2500-2505 authorize the issuance of licenses by the Commissioner of the CHP to transport hazardous materials, including explosives.
- CVC Sections 25160 et seq. describe requirements for the safe transport of hazardous materials.
- CVC Sections 31303-31309 regulate the highway transportation of hazardous materials, routes used and restrictions. CVC Section 31303 requires hazardous materials to be transported on state or interstate highways that offer the shortest overall transit time possible.
- CVC Sections 31600-31620 regulate the transportation of explosive materials.
- CVC Sections 32000-32053 regulate the licensing of carriers of hazardous materials and include noticing requirements.
- CVC Sections 32100-32109 establish special requirements for the transportation of substances presenting inhalation hazards and poisonous gases. CVC Section 32105 requires shippers of inhalation or explosive materials to contact the CHP and apply for a Hazardous Material Transportation License. Upon receiving this license, the shipper will obtain a handbook specifying approved routes.
- CVC Sections 34000-34121 establish special requirements for transporting flammable and combustible liquids over public roads and highways.
- CVC Sections 34500, 34501, 34501.2, 34501.3, 34501.4, 34501.10, 34505.5-7, 34506, 34507.5, and 34510-11 regulate the safe operation of vehicles, including those used to transport hazardous materials.
- CVC Section 35780 requires approval for a permit to transport oversized or excessive loads over state highways.
- California Street and Highways Code (S&HC) Sections 660, 670, 1450, 1460 et seq., 1470, and 1480, regulates right-of-way encroachment and granting of permits for encroachments on state and county roads.

TABLE 8.12-7
Compliance with Laws, Ordinances, Regulations, and Standards

Authority	Administering Agency	Requirements	Compliance (Location in AFC where compliance discussed)
49 CFR, Section 171-177	U.S. Department of Transportation and Caltrans	Requires proper handling and storage of hazardous materials during transportation.	Project and transportation will comply with all standards for the transportation of hazardous materials.
49 CFR, Section 350-399 and Appendices A-G	U.S. Department of Transportation and Caltrans	Requires transporters to address safety considerations for the transport of goods, materials, and substances over public highways.	Project and transportation will comply with all standards for the transport of goods, materials, and substances.
49 CFR, Section 397.9	U.S. Department of Transportation and Caltrans	Directs the USDOT to establish criteria and regulations for the safe transportation of hazardous materials.	Project and transportation will comply with criteria established by USDOT under the Hazardous Materials Transportation Act of 1974.
CVC §§13369, 15275 and 15278	Caltrans	Addresses the licensing of drivers and classifications of licenses required for the operation of particular types of vehicles. In addition, certificates permitting the operation of vehicles transporting hazardous materials are required.	The project will conform to these sections in the CVC.
CVC §§2500-2505	Caltrans	Authorizes the issuance of licenses by the Commissioner of the CHP for the transportation of hazardous materials including explosives.	The project will conform to these sections in the CVC.
CVC §§25160 et seq.	Caltrans	Addresses the safe transport of hazardous materials.	The project will conform to these sections in CVC.
CVC §31303-31309	Caltrans	Requires transporters to meet proper storage and handling standards for transporting hazardous materials on public roads.	Transporters will comply with standards for transportation of hazardous materials on state highways during construction and operations. The project will conform to CVC §31303 by requiring that shippers of hazardous materials use the shortest route possible to and from the site.
CVC §§31600-31620	Caltrans	Regulates the transportation of explosive materials.	The project will conform to CVC 31600 - 31620.
CVC §§32000-32053	Caltrans	Regulates the licensing of carriers of hazardous materials and includes noticing requirements.	The project will conform to CVC 32000 - 32053.

TABLE 8.12-7
Compliance with Laws, Ordinances, Regulations, and Standards

Authority	Administering Agency	Requirements	Compliance (Location in AFC where compliance discussed)
CVC §§32100-32109 and 32105.	Caltrans	Establishes special requirements for the transportation of substances presenting inhalation hazards and poisonous gases. Requires that shippers of inhalation or explosive materials contact the CHP and apply for a Hazardous Material Transportation License.	The project will conform by requiring shippers of inhalation or explosive materials to contact the CHP and obtain a Hazardous Materials Transportation License.
CVC §§34000-34121	Caltrans	Establishes special requirements for the transportation of flammable and combustible liquids over public roads and highways.	The project will conform to CVC §§34000 - 34121.
CVC §§34500, 34501, 34501.2, 34501.3, 34501.4, 34501.10, 34505.5-7, 34506, 34507.5, and 34510-11	Caltrans	Regulates the safe operation of vehicles, including those used to transport hazardous materials.	The project will conform to these sections in the CVC.
CVC §§35550-35559	Caltrans	Regulates weight and load limitations.	The project will conform to these sections in the CVC.
CVC §35780	Caltrans	Requires permits for any load that exceeds Caltrans weight, length, or width standards for public roadways.	Transportation permits will be obtained by transporters for all overloads, as required.
S&HC §§117, 660-711	Caltrans	Requires permits from Caltrans for any roadway encroachment during truck transportation and delivery.	Encroachment permits will be obtained by transporters, as required.
S&HC §§660, 670, 1450, 1460 <i>et seq.</i> , 1470, and 1480	Caltrans	Regulates right-of-way encroachment and the granting of permits for encroachments on state and county roads.	The project will conform to these sections in the CVC.
California State Planning Law, Government Code Section 65302	Caltrans	Project must conform to the General Plan.	Project will comply with General Plan.

CFR Code of Federal Regulations
 CVC California Vehicle Code
 S&HC California Streets and Highways Code

- S&HC Sections 117 and 660-711 require permits for any construction, maintenance, or repair involving encroachment on state highway rights-of-way.
- California State Planning Law, Government Code Section 65302, requires each city and county to adopt a General Plan, consisting of seven mandatory elements, to guide its physical development. Section 65302(b) requires that a circulation element be one of the mandatory elements.
- All construction in the public right-of-way will need to comply with the “Manual on Uniform Traffic Control Devices” (Caltrans and FHWA 2003).
- California Department of Transportation weight and load limitations for state highways apply to all state and local roadways. The weight and load limitations are specified in the CVC Sections 35550 to 35559. The following provisions, from the CVC, apply to all roadways and are therefore applicable to this project.

General Provisions:

- The gross weight imposed upon the highway by the wheels on any axle of a vehicle shall not exceed 20,000 pounds and the gross weight upon any one wheel, or wheels, supporting one end of an axle, and resting upon the roadway, shall not exceed 10,500 pounds.
- The maximum wheel load is the lesser of the following: a) the load limit established by the tire manufacturer, or b) a load of 620 pounds per lateral inch of tire width, as determined by the manufacturer’s rated tire width.

Vehicles with Trailers or Semitrailers:

- The gross weight imposed upon the highway by the wheels on any one axle of a vehicle shall not exceed 18,000 pounds and the gross weight upon any one wheel, or wheels, supporting one end of an axle and resting upon the roadway, shall not exceed 9,500 pounds, except that the gross weight imposed upon the highway by the wheels on any front steering axle of a motor vehicle shall not exceed 12,500 pounds.

8.12.5.3 Local

The transportation elements of local plans that are applicable to the project are summarized below.

- The 2004 Regional Transportation Plan (RTP) establishes regional transportation goals, policies, objectives, and actions for various modes of transportation, including intermodal and multinodal transportation activities. The RTP is implemented through the County Transportation Improvement Program. The administering agency is the Southern California Association of Governments.
- The Traffic Congestion Relief Program establishes guidelines for development of a balanced transportation system, relating population and traffic growth, land use decisions, LOS performance standards, and air quality improvement. The administering agency is the Southern California Association of Governments.

- The Los Angeles County General Plan, “Shaping the Future 2025”, establishes goals and policies, and identifies implementation measures for County traffic and transportation systems. Efficient public and private transportation systems are one of the goals. The administering agency is the Los Angeles County.

The County of Los Angeles requires encroachment permits for pipelines on right-of-ways and for road improvements. The administering agency is the Los Angeles County Department of Public Works.

8.12.6 Involved Agencies and Agency Contacts

The proposed project lies in proximity to roadways operated by the City of Industry, Los Angeles County and California Department of Transportation. The relevant agencies and appropriate contacts are shown in Table 8.12-8.

TABLE 8.12-8
Agency Contacts

Agency	Contact/Title	Telephone
City of Industry Planning Department	Troy Helling Planning Assistant 15651 East Stafford Street City of Industry, CA 91744	(626) 333-2211
City of Industry Engineering Department	John Ballas City Engineer 15651 East Stafford Street City of Industry, CA 91744	(626) 333-2211
Los Angeles County Department of Public Works	Staff Traffic Controls 900 S. Fremont Avenue Alhambra, CA 91803-1331	(626) 300-4708
Southern California Association of Governments	Rich Macias Manager of Transportation Planning & Programs 818 W. Seventh Street, 12th Floor Los Angeles, CA 90017	(213) 236-1805
California Department of Transportation District 7	Staff 100 S. Main Street Los Angeles, CA 90012	(213) 897-3656
California Highway Patrol	Accounting Section HM Licensing Program P.O. Box 942902 Sacramento, CA 94298-2902	(916) 445-1865
Federal Motor Carrier Safety Administration	California Division 1325 J Street, Suite 1540 Sacramento, CA 95814	(916) 930-2760

8.12.7 Permits Required and Permit Schedule

Traffic studies for the proposed project require consultation with the City of Industry Planning and Engineering Department, the County of Los Angeles Public Works Department, CHP, and California Department of Transportation to comply with their requirements. The relevant permits required for work performed within streets in the City of Industry are identified in Table 8.12-9.

TABLE 8.12-9
Required Permits

Responsible Agency	Permit/Approval	Schedule
Los Angeles County Department of Public Works	Road Construction, Excavation and Encroachment Permit	1-14 days
California Highway Patrol	Hazardous Materials Transportation License	-
California Department of Transportation	Transportation Permit for Oversize/Overweight Loads	Approximately 2 weeks prior to delivery

8.12.8 References

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Transportation Research Board. 2000. Highway Capacity Manual

U.S. Environmental Protection Agency. Resource Conservation and Recovery Act. Accessed on September 2, 2005 from <http://www.epa.gov/region5/defs/html/rcra.htm>