

3.4 UTILITY/EMERGENCY SERVICES

The information in this section is based on the *Utility Impacts Report* (November 2011) and the CIA (March 2012).

3.4.1 AFFECTED ENVIRONMENT

The physical impacts of the build alternatives related to emergency services and utilities would be largely limited to the proposed right-of-way for the I-710 Build Alternatives, the areas adjacent to the proposed improvements, and areas outside the right-of-way to where utilities may be relocated. As a result, discussion of the affected environment focuses on services within 0.5 mile of the proposed improvements and for utilities within the right-of-way or close enough to the right-of-way to be impacted by the build alternatives. The specific locations of public services and utilities were identified based on information provided by the respective providers. Because services and utilities are generally provided in fairly large geographic areas (a city or service area, for example), this section includes discussion of the larger service areas, as appropriate, to provide an appropriate context for the service providers or utilities, their facilities, and their services.

3.4.1.1 EMERGENCY SERVICES

FIRE PROTECTION. The following fire departments provide fire protection services in the Study Area.

LOS ANGELES COUNTY FIRE DEPARTMENT. The Los Angeles County Fire Department (LACFD) provides fire protection and suppression service for several cities within the Study Area. These cities are part of LACFD's Consolidated Fire Protection District (CFPD), Battalions 3, 7, 9, 13, and 19.

The CFPD has the primary responsibility for emergency medical service and fire service in a total of 20 cities and the unincorporated areas of the County. Specialized services, such as hazardous materials, air rescue helicopter, air ambulance helicopter, and fire suppression helicopter are provided centrally by the CFPD. The following is a list of LACFD stations within 0.5 mile of the I-710 Corridor Project improvements.

- Fire Station 3, located at 930 S. Eastern Ave., Los Angeles
- Fire Station 54, located at 4867 Southern Ave., South Gate

CITY OF COMPTON FIRE DEPARTMENT. The City of Compton Fire Department provides fire protection and emergency response services to residents and business within the limits of the city of Compton. The fire department ranks among the five busiest fire departments in

California, responding to an average of 10,000 emergency calls per year. Within the city of Compton, there are four fire stations. None of these fire stations are located within 0.5 mile of the I-710 Corridor Project improvements.

CITY OF DOWNEY FIRE DEPARTMENT. The City of Downey Fire Department is responsible for fire suppression services, emergency medical service response and basic life support, joint fire communications, fire prevention/arson, and emergency preparedness for the City of Downey. There are four fire stations located within the city of Downey, with approximately 90 staff members. None of these fire stations are located within 0.5 mile of the I-710 Corridor Project improvements.

CITY OF LONG BEACH FIRE DEPARTMENT. The Long Beach Fire Department (LBFD) provides fire and emergency medical response, marine safety and lifeguards, fire prevention, hazardous materials spill response, and hazardous materials regulatory enforcement services to the project area. The average citywide emergency response time from dispatch to arrival is less than five minutes. The LBFD's goal for emergency response times is to have the first engine arrive within four minutes of dispatch and the first paramedic rescue team arrive within eight minutes. The following fire stations are located within 0.5 mile of the I-710 Corridor Project improvements:

- **Station 1:** Located at 100 Magnolia Ave.
- **Station 3:** Located at 1222 Daisy Ave.
- **Station 11:** Located at 160 E. Market St.
- **Station 12:** Located at 6509 Gundry Ave.
- **Station 13:** Located at 2475 Adriatic Ave.

CITY OF LOS ANGELES FIRE DEPARTMENT. The Los Angeles Fire Department (LAFD) has a total of 106 fire stations citywide. Services include fire prevention, firefighting, emergency medical care, technical rescue, hazardous materials mitigation, disaster response, public education, and community service. Within the Study Area, the LAFD provides services to the communities of Boyle Heights, Wilmington, and San Pedro; there are no are stations located within 0.5 mile of the I-710 Corridor Project improvements.

CITY OF VERNON FIRE DEPARTMENT. The City of Vernon has a Class I Fire Department that provides fire protection and suppression services in the city of Vernon, as well as emergency response. The Vernon Fire Department also has two specialty programs: Urban Search and Rescue and Hazardous Materials Teams. The Vernon Fire Department maintains four fire stations in the city (Fire Station Nos. 1–4). Fire Station No. 4, located at

4530 Bandini Blvd., is the only station located within 0.5 mile of the I-710 Corridor Project improvements.

LAW ENFORCEMENT. The following police departments provide law enforcement and patrol services in the Study Area.

LOS ANGELES COUNTY SHERIFF'S DEPARTMENT. The Los Angeles County Sheriff's Department is the largest sheriff's department in the world. Within the Study Area, the Los Angeles County Sheriff Department serves the cities of Carson, Commerce, Compton, East Los Angeles, Lakewood, Lynwood, Maywood, Cudahy, and Paramount. There are no stations located within 0.5 mile of the I-710 Corridor Project improvements.

CITY OF BELL POLICE DEPARTMENT. The City of Bell provides its own law enforcement and patrol services through the Bell Police Department. The police station is located at 6326 Pine Ave. and is not within 0.5 mile of the proposed I-710 Corridor Project improvements.

CITY OF BELL GARDENS POLICE DEPARTMENT. The City of Bell Gardens Police Department provides law enforcement services for the City. The station is located at 7100 S. Garfield Ave. and is not within 0.5 mile of the I-710 Corridor Project improvements.

CITY OF LOS ANGELES POLICE DEPARTMENT. The City of Los Angeles Police Department provides law enforcements services in the communities of Boyle Heights, Wilmington, and San Pedro within the Study Area. There is one station in Boyle Heights and eight stations in Wilmington and San Pedro; none of these stations are located within 0.5 mile of the I-710 Corridor Project improvements.

CITY OF DOWNEY POLICE DEPARTMENT. The Downey Police Department provides law enforcement services in the city of Downey. The Police Department is located at 11111 Brookshire Ave. and is not located within 0.5 mile of the I-710 Corridor Project improvements.

CITY OF HUNTINGTON PARK POLICE DEPARTMENT. The Huntington Park Police Department provides law enforcement services for the City of Huntington Park. The station is located at 6550 Miles Ave. and is not located within 0.5 mile of the I-710 Corridor Project improvements.

CITY OF LONG BEACH POLICE DEPARTMENT. The City of Long Beach is served by the Long Beach Police Department (LBPD), which is made up of four bureaus: the Investigations Bureau, the Support Bureau, the Patrol Bureau, and the Administration Bureau. There are four stations within the city; and the LBPD South Division Station, located at 400 W. Broadway St., and the LBPD West Division, located at 1835 Santa Fe Ave., are located

within 0.5 mile of the I-710 Corridor Project improvements. The LBPD North Patrol Station is located near the proposed arterial intersection improvement at the intersection of Del Amo Blvd. and Atlantic Ave.

CITY OF SIGNAL HILL POLICE DEPARTMENT. The Signal Hill Police Department provides law enforcement for the City of Signal Hill. There is one station located at 1800 E. Hill St., and it is not located within 0.5 mile of the I-710 Corridor Project improvements.

CITY OF SOUTH GATE POLICE DEPARTMENT. The City of South Gate has its own police department that provides law enforcement services to the City. The City of South Gate Police Station is located at 8620 California Ave., and is located near the proposed arterial intersection improvement at the intersection of Firestone Blvd. and California Ave.

CITY OF VERNON POLICE DEPARTMENT. The Vernon Police Department provides law enforcement services to the City. The Vernon Police Department is located at 4305 Santa Fe Ave. and is not located within 0.5 mile of the I-710 Corridor Project improvements.

3.4.1.2 UTILITIES COMPANIES AND TYPES OF FACILITIES

Within the Study Area, local utility facilities are critical to municipalities and include power distribution systems, gas distribution pipelines, telephone systems, cable television (CATV) systems, water distribution mains, sanitary sewer mains, and city telecommunication systems. Regional facilities are critical to national and regional interests and include power transmission systems, gas transmission pipelines, petroleum pipelines, water aqueducts, and sewer interceptors.

There are a total of 40 service providers in the Study Area, and these are listed below.

- American Telephone and Telegraph Company (AT&T) – Telephone
- Chemoil Corporation – Oil
- City of Bell – Sewer
- City of Commerce – Sewer
- City of Long Beach – Water, Sewer
- City of South Gate – Sewer
- Crimson Pipeline – Oil
- BP Pipelines, Inc. – Oil
- Chevron Pipeline Co. – Oil
- City of Carson – Water
- City of Compton – Sewer
- City of Lynwood – Sewer
- Conoco Phillips – Oil
- Defense Energy – Jet Fuel

- Exxon Mobile – Oil
- Kinder Morgan – Oil
- Los Angeles Department of Water and Power (DWP) – Power
- Metropolitan Water District of Southern California (MWDSC) – Water
- Pacific Energy – Oil
- Pacific Terminals – Oil
- Petro Diamond – Oil
- Praxair – Oil
- Shell Pipeline – Oil
- Southern California Gas Company (SCG) – Gas
- Texaco, Humble, Unocal, Mobile, Shell (THUMS) – Oil
- Time Warner – CATV
- Valero – Oil
- Equilon Enterprises – Oil
- Los Angeles County Sanitation District (LACSD) – Sewer
- Long Beach Gas & Oil – Gas, Oil
- Mobile Pacific Pipeline – Oil
- Pacific Pipeline System – Oil
- Paramount Petroleum – Oil
- Plains Pipeline – Oil
- Qwest – Telecom
- Southern California Edison (SCE) – Power
- Texaco – Oil
- Tidelands – Oil
- Ultramar – Oil
- Verizon – Telecom

Of these 40 service providers, there are five that have been the focus of early advancement of relocation strategies, which are discussed below.

DWP TRANSMISSION. The DWP transmits power from its Haynes generating station, located in Seal Beach, to its Atwater substation located in Glendale. Power is transmitted utilizing five circuits of 230 kilovolts (kV) carried by overhead lines, mounted on 150-foot-high lattice towers. The transmission corridor enters the Study Area and crosses I-710 north of Imperial Hwy. in the city of South Gate. The transmission corridor continues northerly along the east bank of the Los Angeles River, crossing several arterials in the cities of Bell Gardens, Bell, Cudahy, Maywood, and Vernon. The DWP owns the underlying property, a nominally 100-foot-wide strip in between

the Los Angeles River and I-710. The transmission corridor exits the Study Area south of Atlantic Blvd. in the city of Vernon. In total, the transmission corridor overlaps the Study Area for approximately 4.5 miles.

SCE TRANSMISSION. SCE transmits power through the Study Area from its coastal generating stations to inland substations. Power is transmitted using a combination of 220-kilovolt (kV) and 66 kV circuits carried overhead on multiple tower lines. The main transmission corridor enters the Study Area south of I-405 and crosses the I-710/I-405 interchange in the city of Long Beach. The transmission corridor continues northerly adjacent to the west bank of the Los Angeles River, crossing several arterials in the city of Long Beach. SCE owns much of the underlying property. The SCE right-of-way, located in between the Los Angeles River and I-710, is not continuous longitudinally. Generally, SCE's right-of-way width is 275 feet in between the I-710/I-405 and the I-710/SR-91 interchanges. The transmission corridor exits the Study Area north of SR-91 in the north Long Beach area. North of SR-91, the transmission corridor turns east and west, crossing the I-710 freeway. In total, the transmission corridor overlaps the Study Area for approximately 4.5 miles.

South of I-405, SCE transmits power using a 66 kV overhead line, located in between I-710 and the west bank of the Los Angeles River, from Ocean Blvd. to Willow St. in the city of Long Beach.

OXY OIL. Oxy Oil operates oil extraction wells, injection wells, and storage facilities, under long-term leases with the city of Long Beach on property located along the Los Angeles River. Access to the facilities for Oxy Oil, located between Ocean Blvd. and Anaheim St. in between the Los Angeles River and I-710, is via Pico Ave. Oxy Oil utilizes several pipelines, connecting pumps, wells, and tanks to off-site storage facilities. Oxy Oil plans to modernize its operations by consolidating facilities in an approximate five-acre area located at the south end of the existing operating facility.

LONG BEACH GAS & OIL. Long Beach Gas & Oil operates oil extraction wells and injection wells under long-term leases with the City of Long Beach on property located along the Los Angeles River. The operation is located north of Anaheim St., on a one-acre area located between the Los Angeles River and I-710. The facility can be accessed from Anaheim St. along the river levee. Long Beach Gas & Oil utilizes several pipelines, connecting pumps, and wells to off-site facilities.

SOUTHERN CALIFORNIA GAS COMPANY. SCG operates various gas lines throughout the Study Area. Two 26-inch gas mains are longitudinal to I-710. One is an active high-pressured transmission line, and the other is an inactive abandoned main. The lines cross Wardlow Rd., the Metro right-of-way, Del Amo Blvd., Long Beach Blvd., Artesia Blvd., and the I-710/SR-91 interchange.

3.4.2 ENVIRONMENTAL CONSEQUENCES

3.4.2.1 EMERGENCY SERVICES

PERMANENT IMPACTS.

ALTERNATIVE 5A. Both beneficial and adverse effects on fire protection and law enforcement protection service providers within the Study Area would occur under Alternative 5A. Beneficial effects include improved emergency response times, as the ability to move fire protection, law enforcement, and emergency service resources from one area to another would be enhanced by the improved transportation network. There are no hospitals or law enforcement facilities located within 0.5 mile of the I-710 Corridor Project improvements under Alternative 5A that would be directly or indirectly impacted as a result of the build alternatives. However, Alternative 5A would result in a direct impact to the Vernon Fire Station No. 4, located along Bandini Blvd. The proposed improvements for the on- and off-ramps at the Atlantic Blvd./Bandini Blvd. local interchange would require additional right-of-way, including the parcel occupied by the fire station. In addition, the following changes in access would reduce access options and could increase response times on emergency calls that would otherwise have used these ramps as part of the response route.

- Under all build alternatives, the two ramps and collector distributor roads at the I-710/Wardlow Rd. partial interchange would be removed. Traffic would be redirected one mile east to the Long Beach Blvd. interchange, which provides the closest circulation between Wardlow Rd. and I-710.
- The Pacific Pl. interchange is a partial interchange providing connectivity to both I-405 and I-710. Under all build alternatives, direct circulation between I-710 and Pacific Pl. will be eliminated. Traffic will be diverted to adjacent interchanges. Located 0.5 mile south of Pacific Pl., the Long Beach Blvd. interchange provides the closest circulation between Pacific Pl. and I-710.
- Under all build alternatives, access from 9th St. and 10th St. to I-710 in the city of Long Beach will be removed. Traffic would be redirected approximately 1,000 feet north to Anaheim St, which provides the closest circulation.

ALTERNATIVES 6A/B/C. The same impacts to emergency services that would occur under Alternative 5A would occur under Alternatives 6A/B/C. Alternatives 6A/B/C include three different design options at the I-710/Washington Blvd. interchange; alternative access for emergency providers would be provided as follows:

- **Option 1:** Under this option, the northbound off-ramp for Washington Blvd. is combined with the Atlantic Blvd./Bandini Blvd. interchange, but will still provide

access to Washington Blvd. Because of the braided northbound on- and off-ramps, emergency vehicles will not be able to travel between Washington Blvd. and Bandini Ave. via I-710. Also, while access has been maintained to Washington Blvd. from southbound I-5, access will no longer be available from Washington Blvd. to northbound I-5.

- **Option 2:** Northbound emergency vehicle access is the same as described above for Option 1. The southbound on-ramp traffic will utilize the freight corridor entrance located south of the existing southbound on-ramp, will merge with southbound off-ramp traffic for the Atlantic Blvd./Bandini Blvd. interchange before merging onto the I-710. Also while access has been maintained to Washington Blvd. from southbound I-5; access will no longer be available from Washington Blvd. to northbound I-5.
- **Option 3:** The Washington Blvd. northbound and southbound ramps will be removed to accommodate the freight corridor/mixed-flow ramps connecting I-710 to Indiana St. The southbound on-ramp and northbound off-ramp traffic that previously used the Washington Blvd. interchange would be required to redirect and access the Atlantic Blvd./Bandini Blvd. interchange, located south of the existing Washington Blvd. interchange, to ultimately reach Washington Blvd.

NO BUILD ALTERNATIVE. Alternative 1 would not result in the permanent impacts to emergency services described above as a result of the I-710 Corridor Project. Under Alternative 1, emergency services (police, fire and emergency vehicle services) may be delayed as traffic congestion worsens and the LOS in the Study Area declines, resulting in adverse impacts to emergency services.

3.4.2.2 UTILITIES

Utilities in conflict with the build alternatives will either be relocated or protected in place. Further coordination is required with each owner to confirm the conflict and disposition strategy (i.e., whether they can be protected in place or relocated). With exception of the major transmission facilities affected by the I-710 Corridor Project, all utility dispositions are expected to occupy new or existing fee owned or easement rights-of-way or public rights-of-way. Relocations are classified as follows in the *Utility Impact Report*.

- **No Impact:** All utilities outside the footprint of the project or within project limits but have no impact whatsoever are given this designation. There will be no impact upon the utility, and thus, no further action is required.

- **Minimal:** This utility is relatively minor and serves local streets. These relocations are the easiest and can typically be done by placing a new facility parallel to the existing facility in order to avoid conflict.
- **Moderate:** This utility is relatively major and supports a local community of sizeable populations, or is a facility that cannot be shut down by the owner for extended periods of time. Relocation schemes, therefore, could be difficult based upon the proposed improvements. For example, some of these facilities are on or within bridges or upon separate utility bridges. Also, if these utilities are pressurized and are part of the existing pressure loop, then facilities must be replaced prior to the abandonment of the existing facilities. All oil facilities, even pipelines as small as 4 inches, are considered moderate facilities. New bridges that span the I-710 improvements could be the least expensive, the fastest, and the least disruptive means of relocation.
- **Regional:** This is a major utility that serves several communities or cities, and thus, any disruption of service would not be feasible. Major utilities include SCE transmission lines and subtransmission lines, DWP transmission and subtransmission lines, MWDSC and LACSD large sewer lines, and large (26-inch) gas mains. These regional utilities are discussed in more detail below.

As described in Chapter 2.0 of this Draft EIR/EIS, as well as the *Utility Impact Report*, several strategies have been considered for utilities impacted as a result of Alternatives 6A/B/C. These strategies include (1) Protect in Place, (2) Continuous Aboveground Relocation, and (3) Continuous Underground Relocation. Further coordination will be required during final design with each service owner to confirm the impacts and strategy for relocation.

PERMANENT IMPACTS.

ALTERNATIVE 5A. Table 3.4-1 summarizes the total number of affected utilities for Alternative 5A by type. The quantities include distribution, transmission, and subtransmission lines that require relocation or mechanical protection systems.

Table 3.4-1 Alternative 5A Utility Impacts

| | Cable TV | Gas | Oil | Power | Sewer | Telephone | Water | Total |
|--------------|-----------------|------------|------------|--------------|--------------|------------------|--------------|--------------|
| Total | 6 | 68 | 181 | 83 | 57 | 96 | 75 | 566 |

Source: *Utility Impact Report*, 2011.

Impacts to major regional facilities as a result of Alternative 5A are discussed below.

SCE TRANSMISSION. As discussed above, SCE facilities are located in an approximate 4.5-mile area of the Study Area. Alternative 5A would result in multiple impacts to SCE facilities throughout the 4.5-mile area with many of the impacts concentrated at I-710 interchange locations. Existing utility structures, transmission, and subtransmission lines would be impacted as a result of the flyover connectors at the I-710/I-405 and I-710/SR-91 freeway-to-freeway interchanges and local ramp improvements at Del Amo Blvd. and Long Beach Blvd.

Under Alternative 5A, 220 kV SCE transmission lines and 66 kV SCE subtransmission lines would require the construction of new utility structure locations. Because the modifications to the I-405/I-710 interchange limit the transmission corridor to a width of 200 feet, the 66 kV subtransmission relocation is required for Alternative 5A. The existing and proposed relocation of the 220 kV transmission lines is shown in Figure 3.4-3, provided later in this section.

Due to direct conflicts with utility structures, relocation of the 220 kV transmission lines is required at the I-405, Del Amo, Long Beach Blvd., and SR-91 interchanges. However, the extent of these relocation impacts are not considered substantial because the freight corridor is not present within this area and therefore, would require less right-of-way from the County. Some existing sections of the transmission lines could remain in place and would not require additional right-of-way. Ongoing coordination with SCE will be required during final design to confirm the extent of the relocation impacts.

The construction of new 220 kV and 66 kV utility structures may move the existing structures closer to residential areas on location east side of the Los Angeles River and the Los Angeles River Trail. The visual impacts resulting from this relocation (maximum of 200 feet closer) would be minimal, because these towers are part of the existing landscape along this corridor. Please refer to Section 3.6 of this Draft EIR/EIS for additional discussion on visual impacts as a result of the SCE utility structure, transmission line, and subtransmission line relocations.

OXY OIL. Oxy Oil operations will not be impacted under Alternative 5A.

LONG BEACH GAS & OIL. Alternative 5A will impact Long Beach Gas & Oil's existing oil operation. Based on coordination with representatives from Long Beach Gas & Oil and the POLB, acquisition of the existing oil lease is cost-prohibitive compared to the replacement rights and relocation of operations. Therefore, the area currently utilized for operations will be replaced by providing a new and reconfigured space near the current operation. To provide for this additional space, additional right-of-way will be required

adjacent to the proposed project. The additional right-of-way abuts the east side of Fashion Ave. between Cowles St. and 15th St.

SOUTHERN CALIFORNIA GAS COMPANY. One active 26-inch gas main owned and operated by SCG is located within SCE’s right-of-way along I-710 between I-405 and SR-91. Due to the relocation of the 66 kV lines in parts of this area, this gas main will need to be relocated within the relocation area shown in Figure 3.4-4. Environmental impacts resulting from this relocation would include traffic impacts during construction and the potential to encounter soil or groundwater contamination during construction. Following completion of this relocation, Alternative 5A would not result in any permanent impacts to SCG’s 26-inch gas main.

DWP TRANSMISSION. As discussed above, DWP facilities are located in an approximate 4.5-mile area of the Study Area. Improvements as a result of Alternative 5A impact DWP utilities primarily in areas where interchange improvements are proposed. Specifically, up to three existing utility structure locations would be impacted as a result of ramp improvements at Firestone Blvd. Three new utility structures will replace existing utility structures and be located out of conflict with Alternative 5A improvements. The new utility structure locations would occupy existing DWP rights-of-way. Although the new utility structure relocations would potentially move existing utility structures closer to some residents and the Los Angeles River Trail, these visual impacts are considered minor and consistent with the existing viewshed within this corridor.

ALTERNATIVES 6A/B/C. Table 3.4-2 summarizes the total number of affected utilities for Alternatives 6A/B/C by type. The quantities include distribution, transmission, and subtransmission lines that require relocation or mechanical protection systems.

Table 3.4-2 Alternatives 6A/B/C Utility Impacts

| Alternative | Cable TV | Gas | Oil | Power | Sewer | Telephone | Water | Total |
|--------------------|-----------------|------------|------------|--------------|--------------|------------------|--------------|--------------|
| 6A | 6 | 74 | 226 | 93 | 62 | 92 | 77 | 630 |
| 6B | 6 | 77 | 226 | 95 | 63 | 89 | 81 | 637 |
| 6C | 6 | 77 | 226 | 92 | 64 | 92 | 79 | 636 |

Source: *Utility Impact Report*, 2011.

Below is a focused discussion of the impacts to major regional facilities and utilities, including DWP, SCE, Oxy Oil, Long Beach Gas & Oil, and SCG as a result of Alternatives 6A/B/C. Figure 3.4-1 shows the regional facility conflict locations for the SCE, SCG, and DWP utilities discussed below.

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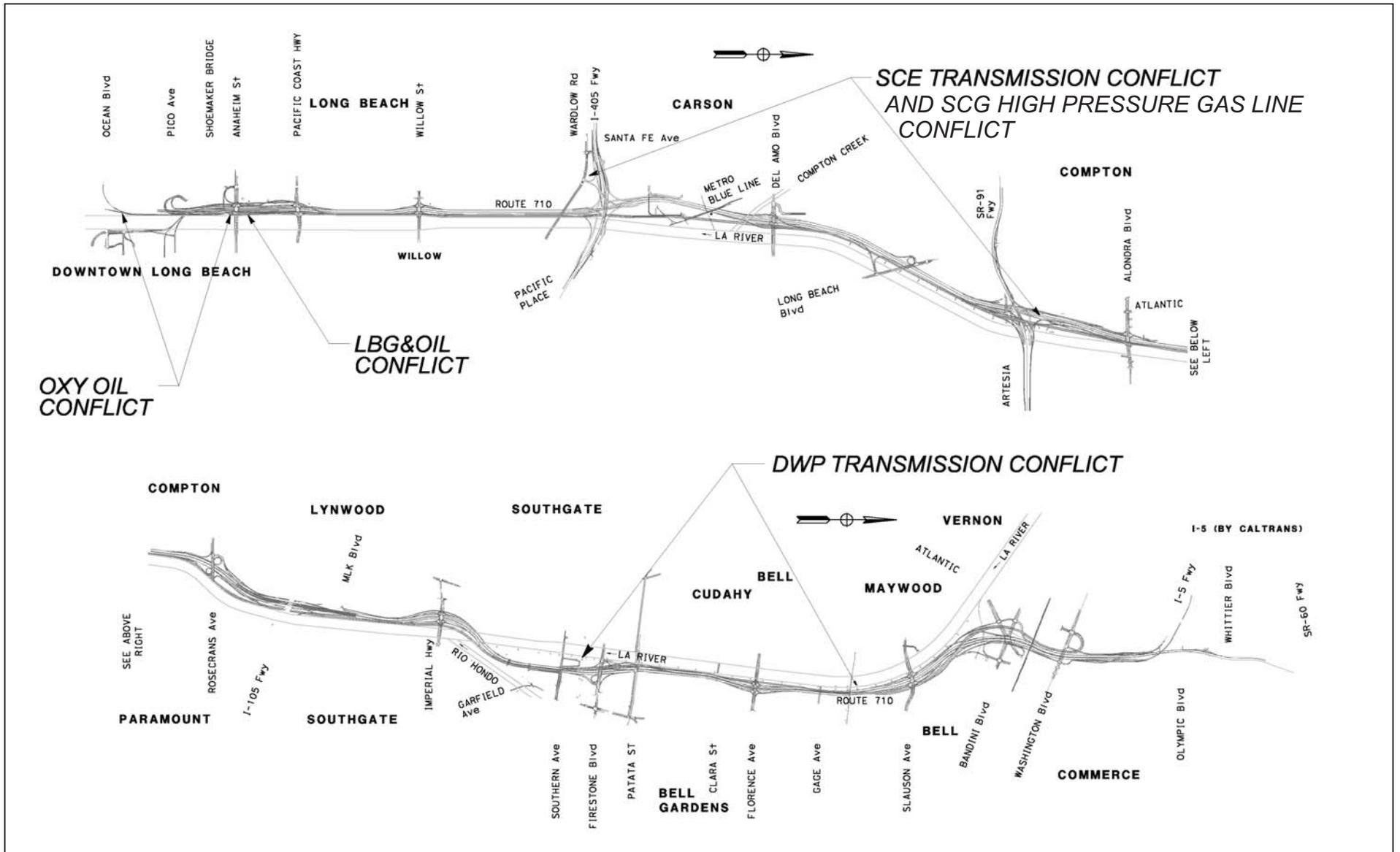


FIGURE 3.4-1
PRE-DELIBERATIVE DRAFT

I-710 Corridor Project
Regional Facility Conflict Locations

07-LA-710-PM 4.9/24.9
EA 249900

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SCE 220 kV TRANSMISSION LINES. In addition to the impacts identified above for Alternative 5A for the SCE 220 kV utility structures and transmission lines, the proposed freight corridor component would result in additional impacts to the utility structures between the interchange improvements. Figure 3.4-2 shows the relocation strategy for the SCE 220 kV transmission line and Figure 3.4-3 shows the existing and proposed relocation of the 220 kV utility structures. Overall, with the exception of the utility structures located in and around the Metro Blue Line Yard, under Alternatives 6A/B/C, all of the 220 kV SCE utility structures in the Study Area would be impacted and require relocation. Figure 3.4-2 shows the existing old style 220 kV aesthetic towers for illustrative purposes to show where the towers would be relocated. These aesthetic towers are no longer being used by SCE. The existing towers will be replaced with either tubular steel poles or lattice steel towers, or a combination of the two.

The SCE corridor near the Long Beach Blvd. area contains four 220 kV transmission lines that are located longitudinally along the east right-of-way of I-710 between the I-710/I-405 and I-710/SR-91 interchanges. New 220 kV right-of-way with no relocation provisions and appropriate access to each right-of-way location is required from the Los Angeles County Flood Control District (with the approval of the USACE), which operates and maintains the Los Angeles River in this section of the Study Area. The right-of-way requirements are described in the I-710 Corridor Project Right of Way Impact Report (2011):

- Relocation of gas pipeline
- Removal of easement reservations
- Acquisition of new property rights around interchanges

As shown in Figure 3.4-3, the existing 220 kV transmission line begins near the intersection of Springdale Drive and Harbor Street and continues north-northeast towards the I-710/I-405 interchange. After crossing the I-710/I-405 interchange, the 220 kV transmission line continues north along the east side of I-710 until shortly after the I-710/SR-91 interchange where the 220 kV transmission line continues west of I-710 and just south of Greenleaf Boulevard until North Long Beach Boulevard, and east of I-710 between 68th and 70th Streets until just east of Orange Avenue.

As recommended by SCE, a new 200-foot-wide corridor for the 220 kV transmission line relocation would be a required modification to accommodate the interchanges and the freight corridor under Alternatives 6A/B/C. Given the constraints of the Los Angeles River and levee, and the 200-foot corridor for SCE, the following relocations of the SCE 220 kV transmission lines would be required:

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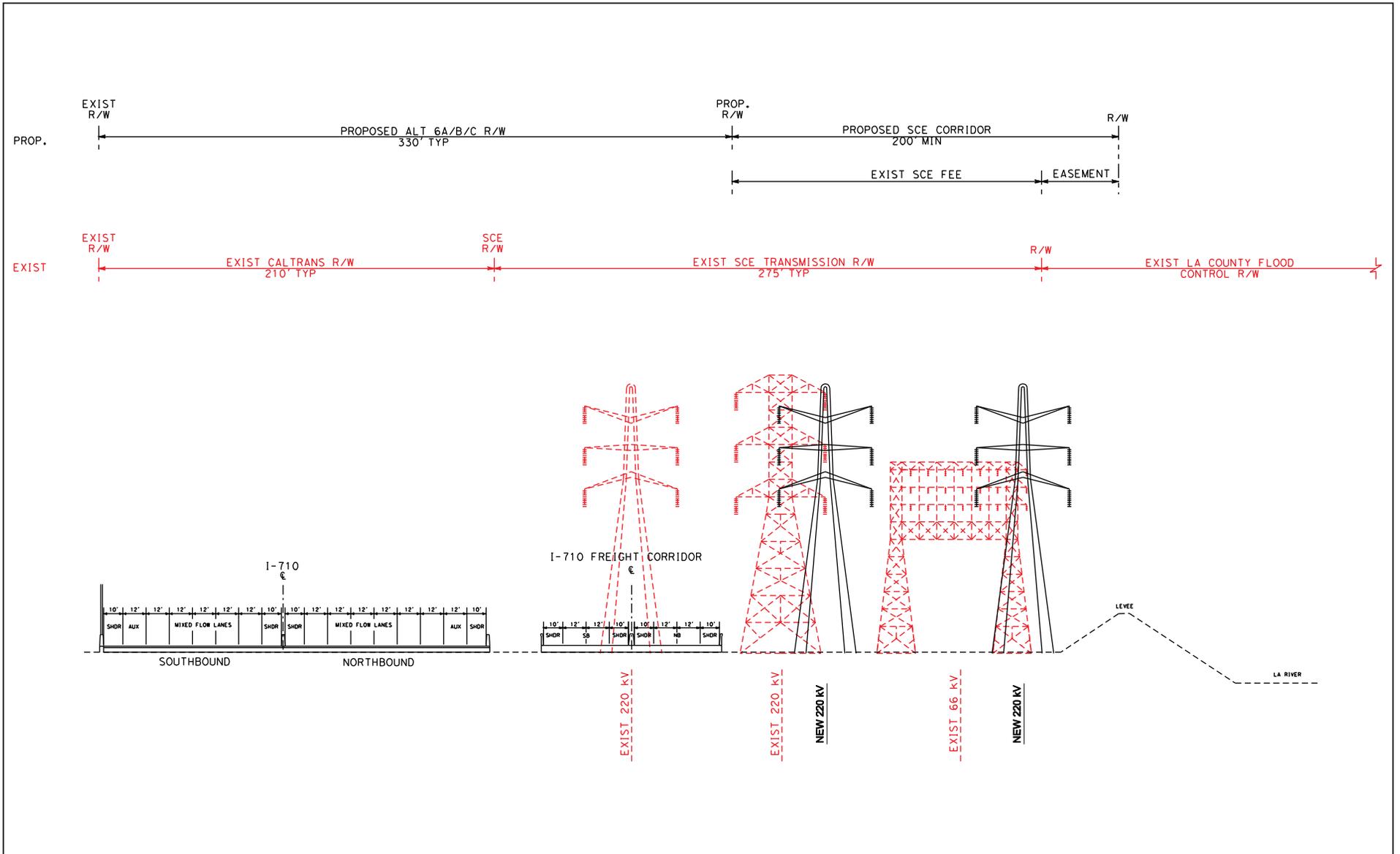


FIGURE 3.4-2
PRE-DELIBERATIVE DRAFT

I-710 Corridor Project
SCE Relocation Strategy
Del Amo Boulevard to SR-91
07-LA-710-PM 4.9/24.9
EA 249900

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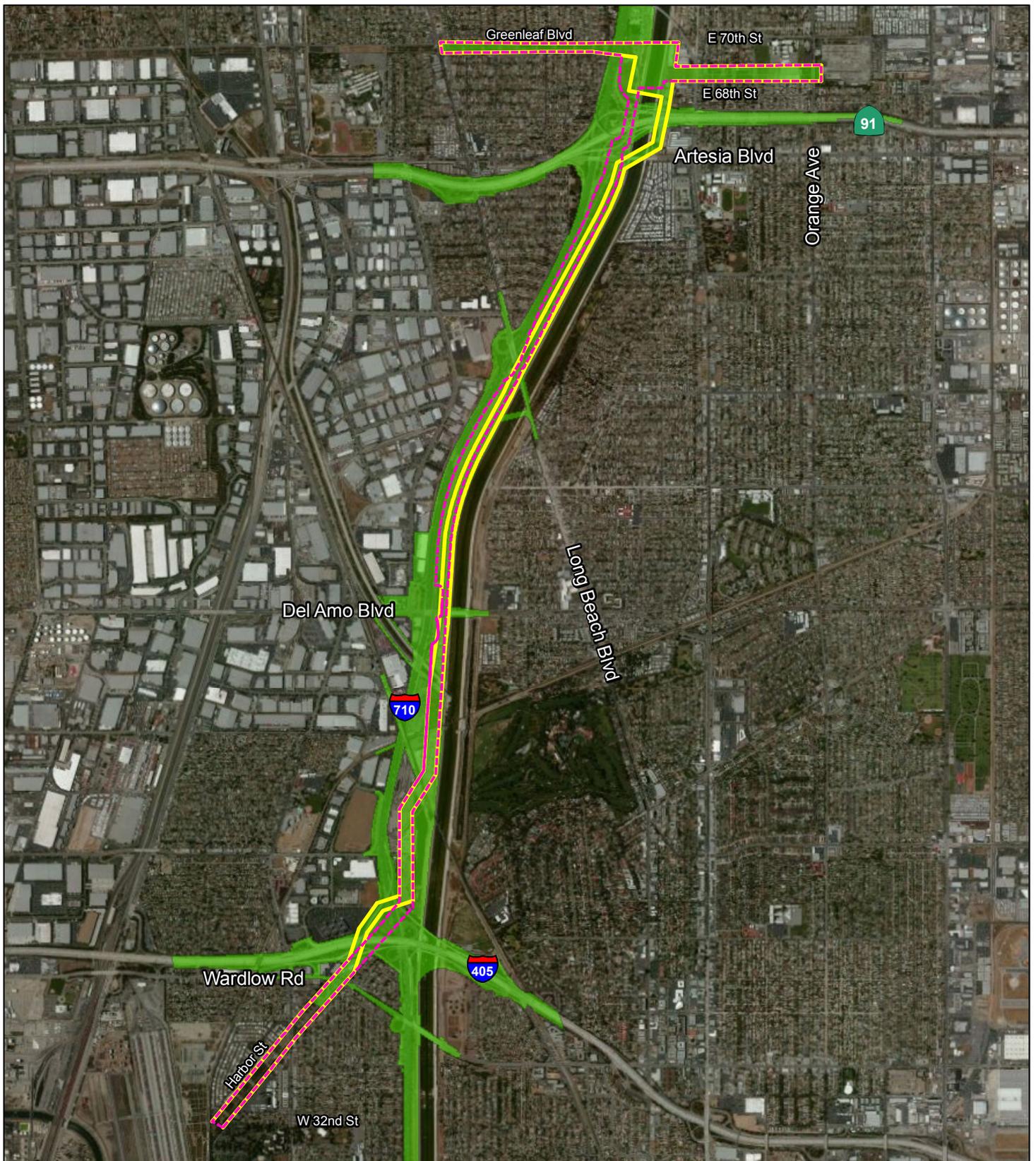


FIGURE 3.4-3

LEGEND

- Existing SCE Right of Way
- Proposed SCE Right of Way
- I-710 Corridor Project Limits



0 1500 3000
FEET

SOURCE: Bing (2009)

F:\URS0801A\GIS\EIR_EIS\SCE_220kv_Relocation.mxd (6/13/12)

I-710 Corridor Project EIR/EIS
Existing and Proposed Right of Way
for SCE 220 kV Transmission Line

07-LA-710- PM 4.9/24.9
EA 249900

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- Shifting the Del Amo Blvd. interchange and freeway alignment to the west resulting in additional commercial right-of-way impacts along Susan Rd.
- Shifting and reconfiguring the Long Beach Blvd. interchange and freeway alignment to the west. The northbound entrance and exit ramps require a new bridge across the Los Angeles River.
- Realigning the northbound I-710 to the westbound SR-91 connector, realigning the freight corridor and its connections to SR-91, and shifting the freeway. The resulting modifications require spot-widening of the SR-91 to accommodate new columns and foundations for the realigned roadways.

New 220 kV transmission line right-of-way with no relocation provisions and appropriate access to each right-of-way location is required from Los Angeles County (with the approval of USACE), which operates and maintains the Los Angeles River in this area. The right-of-way requirements are described in the *Right of Way Impact Report* (November 2011) prepared under a separate cover. These requirements include:

1. Relocation of gas pipeline
2. Removal of easement reservations
3. Acquisition of new property rights around interchanges

As shown in Figure 3.4-3, the 220 kV transmission line will be shifted slightly east along the current transmission line alignment between the I-710/I-405 interchange and the I-710/SR-91 interchange. To meet the minimum vertical clearance, the 220 kV line was relocated further northwest from the existing I-710/I-405 interchange and further west of the I-710/SR-91 interchange. The additional right-of-way that would be required to facilitate this alignment shift would cause a greater land use impact. In addition, the shift of the current 220 kV transmission line alignment would bring the transmission lines slightly closer to the Los Angeles River Trail and residential properties located immediately east of I-710. However, these direct land use and visual impacts are not considered substantial, because the shift in alignment of the 220 kV transmission line would require only a minor amount of additional right-of-way and although the utility structures would shift slightly closer to the residential homes and the Los Angeles River Trail, there would not be a substantial difference in the type of existing view.

Indirect impacts as a result of the SCE 220 kV transmission line relocation would include traffic disruption during construction, the need for construction staging areas and temporary construction easements, the reconstruction of city streets from trenching, and

the presence of construction equipment and dump trucks during construction. These impacts would be minimized with the implementation of the TMP discussed in Measure TR-1 in Section 3.5, Traffic and Transportation/Pedestrian and Bicycle Facilities.

SCE 66 kV SUBTRANSMISSION LINE. In addition to the impacts identified above for Alternative 5A for the SCE 66 kV subtransmission lines and utility structures, the proposed freight corridor component of Alternatives 6A/B/C would result in additional impacts to the utility structures within the SCE right-of-way. Figure 3.4-2 shows the relocation strategy for the SCE 66 kV subtransmission line, and Figure 3.4-4 shows the potential relocation area for the SCE 66 kV subtransmission line. Due to the preliminary stage of project design, specific locations of the relocated 66 kV subtransmission lines cannot be determined; however, the likely impacts of these relocations are discussed below. It is anticipated that the 66 kV subtransmission lines and utility structures would be relocated to new or existing SCE rights of way and/or to public street rights-of-way.

Overall, with the exception of the utility structures located in and around the Metro Blue Line Yard, under Alternatives 6A/B/C, all of the 66 kV SCE utility structures in the Study Area would be impacted and require relocation.

The following relocations may be required for the SCE 66 kV subtransmission lines under Alternatives 6A/B/C:

- A 66 kV overhead subtransmission line crosses the I-710 freeway at Carson St., and may require relocation.
- The SCE 66 kV subtransmission and communication lines cross I-710 from Dominguez St. Due to the freight corridor, these subtransmission lines will need to be relocated.
- The SCE 66 kV and 12 kV overhead lines cross over I-710. The 12 kV line connects to a 12 kV riser at Dominguez St. traveling west. Some poles will be relocated under Alternatives 6A/B/C.
- A 16 kV overhead line crosses above I-710 at Del Amo Blvd. Due to the freight corridor, this line will need to be relocated.
- The SCE 220 kV/66 kV corridor near Long Beach Blvd. contains six 66 kV subtransmission circuits and is located longitudinally along the east right-of-way of I-710 between the I-710/I-405 and the I-710/SR-91 interchanges.

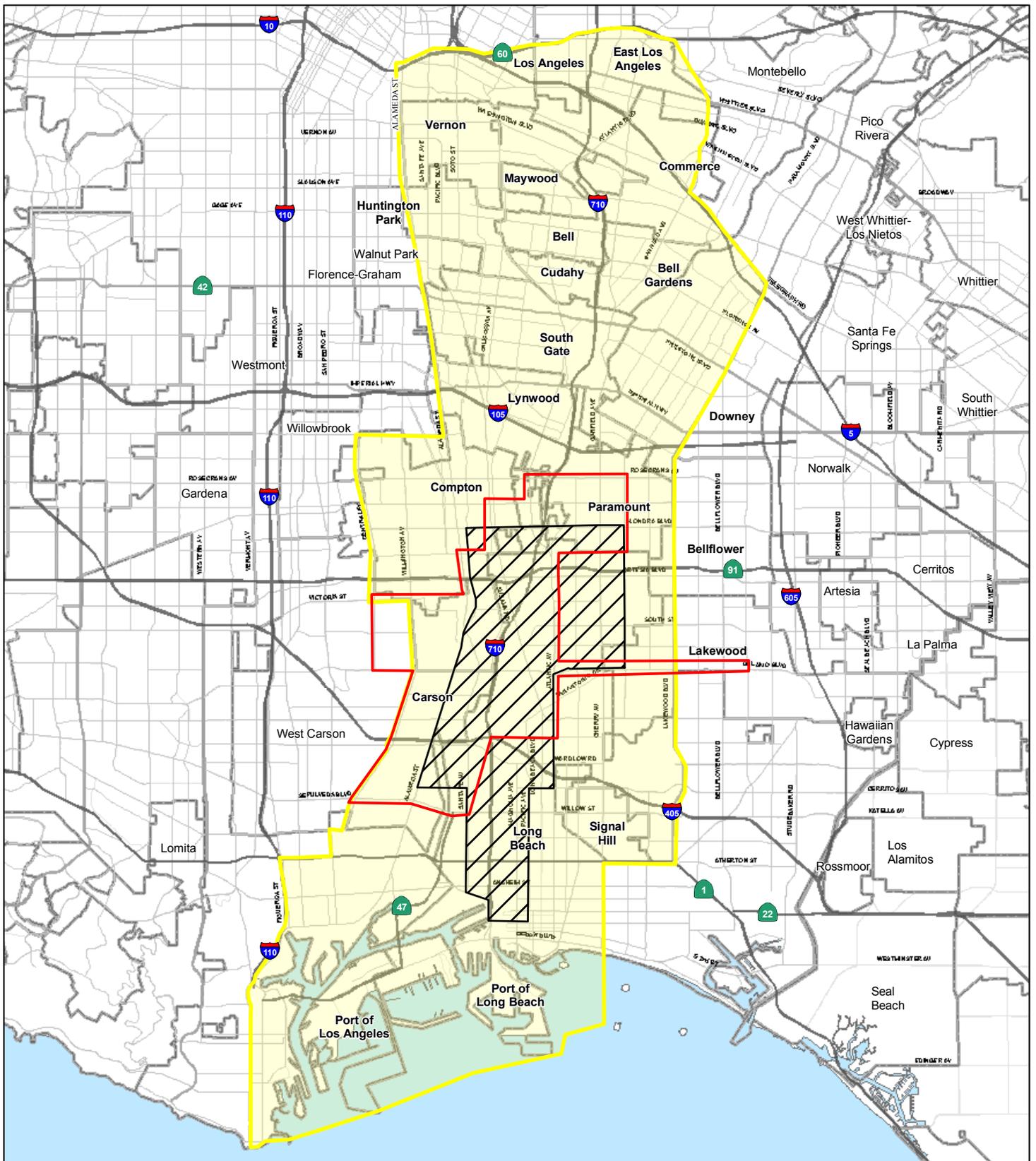


FIGURE 3.4-4

LEGEND

- Study Area
- Southern California Edison (SCE) 66 kV Potential Relocation Area
- Southern California Gas (SCG) High Pressure Gas Line Potential Relocation Area



SOURCE: TBM (2007)

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I-710 Corridor Project EIR/EIS
SCE 66 kV and SCG High Pressure Gas Line Relocation Areas

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- SCE 66 kV subtransmission lines cross Long Beach Blvd. and I-710 on steel poles north of the I-710/Long Beach Blvd. interchange. Alternatives 6A/B/C will require these subtransmission lines to be relocated.
- SCE 66 kV overhead subtransmission lines cross I-710 diagonally near Gordon St. from west to east. Alternatives 6A/B/C require this overhead subtransmission line to be relocated.
- A 66 kV double circuit on steel poles traverses I-710 from Long Beach Blvd. through the I-710/SR-91 interchange. Alternatives 6A/B/C require the relocation of these SCE transmission circuits.
- A 66 kV overhead subtransmission line crosses I-710 and the proposed freight corridor south of Alondra Blvd. and will require relocation under Alternatives 6A/B/C.

The criteria used to determine where to specifically relocate the 66 kV subtransmission lines will consider the following:

- The use of vacant space on existing 66 kV poles
- The overbuild of existing distribution lines
- Placement of new 66 kV subtransmission lines on the public streets taking into account the electrically shortest routes with the least amount of impact
- Undergrounding the 66 kV subtransmission line routes in portions where overhead construction would result in engineering constraints or substantial environmental impacts
- Consideration of environmental impacts to aesthetics (visual quality, local value placed on aesthetic character, and scenic vistas), land uses (existing land uses, school zones, specific plans, and redevelopment areas), and the existing community (development guidelines and planned future development)

Indirect impacts as a result of the SCE 66 kV subtransmission line and utility structure relocation would include traffic disruption during construction, the need for construction staging areas and temporary construction easements, the reconstruction of city streets from trenching, and the presence of construction equipment and dump trucks during construction. These impacts would be minimized with the implementation of the TMP discussed in Measure TR-1 in Section 3.5, Traffic and Transportation/Pedestrian and Bicycle Facilities.

The shift in the 66 kV subtransmission alignment may cause direct land use impacts due to the additional right-of-way that would be required to facilitate the relocation. The shift of the current 66 kV subtransmission line may shift the subtransmission line closer to the Los Angeles River Trail and residential properties in some areas. The specific relocation area is unknown at this time. However, based on the SCE relocation criteria described above, direct land use and visual impacts are not expected to be substantial, because even if the utility structures shift slightly closer to the homes and the Los Angeles River Trail, there would not be a change in land use or a substantial difference in the existing view from the homes or the Trail.

In addition to the visual impacts of relocations described above for Alternative 5A, additional indirect impacts as a result of relocations for Alternatives 6A/B/C would be related to undergrounding utilities. By undergrounding utilities, there would be a potential to encounter hazardous waste during excavation, subsurface cultural and paleontological resources, the need for dewatering, additional stormwater considerations, and the relocation of existing utilities, such as storm drains, sewers or other underground facilities. These indirect impacts would be minimized with the implementation of avoidance, minimization, and mitigation measures described in Section 3.7, Cultural Resources; Section 3.9, Water Quality; and the measures provided later in Section 3.4.3, Avoidance, Minimization, and Mitigation Measures.

Relocations of SCE's 220 kV transmission lines will be subject to approval of the California Public Utilities Commission (CPUC) under the requirements of General Order (GO) 131-D, Section III.A, certificate of public convenience and necessity (CPCN) for Transmission Line Facilities and Substations That Operate at 200 kV or more, which will occur after the certification of the I-710 Corridor Project EIR/EIS but prior to the approval of utility relocation grading plans.

SCE BANDINI SUBSTATION. Option 2 of Alternative 6B and Alternative 6C would require the relocation of the SCE Bandini substation due the configuration of the freeway and freight corridor ramp connections to Washington Blvd. Although the preferred relocation site would be directly adjacent and to the east of the existing Bandini Substation, relocation to other parcels within the general vicinity would also be viable from an engineering and construction standpoint. If Option 2 is selected as part of the preferred alternative for the I-710 Corridor Project, further engineering and environmental studies will be conducted to identify a specific relocation site. Should Option 2 be selected, impacts to SCE operations are expected to be minimal as a result of the relocation, and the relocated substation is expected to operate essentially the same as the existing substation. The relocation of the SCE Bandini substation would require constructing a

new substation, reconnecting all transmission and distribution circuits to the new substation equipment prior to removing the existing substation.

SCG. In addition to the relocation of the SCG 26-inch gas mains described above for Alternative 5A, under Alternatives 6A/B/C, an SCG 8-inch high-pressure pipeline with a 12-inch casing will require relocation within the Imperial Hwy. overcrossing. The relocation of this SCG high-pressure pipeline will move the existing pipeline approximately 1400 feet. Figure 3.4-3 provides the SCG high-pressure gas line relocation areas. Due to the preliminary stage of project design, specific locations of the SCG gas lines cannot be determined; however, the likely impacts of these relocations are discussed below.

Indirect impacts as a result of the SCG high-pressure pipeline relocation would include traffic disruption during construction, the need for construction staging areas and temporary construction easements, the reconstruction of city streets from trenching, and the presence of construction equipment and dump trucks during construction. These impacts would be minimized with the implementation of the TMP discussed in Measure TR-1 in Section 3.5, Traffic and Transportation/Pedestrian and Bicycle Facilities.

Additional indirect impacts include the potential to encounter hazardous waste during excavation, subsurface cultural and paleontological resources, the need for dewatering, additional stormwater considerations, and the relocation of existing utilities, such as storm drains, sewers, or other underground facilities. These indirect impacts would be minimized with the implementation of avoidance, minimization, and mitigation measures described in Section 3.7, Cultural Resources; Section 3.9, Water Quality; and the measures provided later in Section 3.4.3, Avoidance, Minimization, and Mitigation Measures.

A CPCN from the CPUC is required for construction of the relocated gas lines per Public Utilities Code Section 1001.

OXY OIL. Alternatives 6A/B/C will impact existing and planned Oxy Oil operations. The interchange improvements at Anaheim St. also conflict with existing storage tanks. Based on the coordination with representatives from Oxy Oil and the Port of Long Beach, acquisition of the existing oil lease is cost prohibitive compared to replacement rights and relocation of the operations. Therefore, the area currently in operation will be replaced by providing new and reconfigured space within and adjacent to the current operation. To provide this space, the freeway and freight corridor improvements are designed in a manner to provide access to these spaces. Notably, vertical clearance of structures or access roads and sufficient width to accommodate drilling equipment,

pump operations, and maintenance vehicles. No additional right-of-way is required to relocate Long Beach Gas & Oil's operating facilities.

LONG BEACH GAS & OIL. Alternatives 6A/B/C will impact Long Beach Gas & Oil's existing oil operation. The same impacts that would occur under Alternative 5A, would also occur under Alternatives 6A/B/C. Therefore, please refer to the impacts discussion for Long Beach Gas & Oil under Alternative 5A.

DWP TRANSMISSION. In addition to the impacts identified above to DWP facilities for Alternative 5A, the proposed freight corridor component under Alternatives 6A/B/C would result in additional impacts to DWP facilities. Specifically, at two locations, north of Imperial Hwy. and south of Firestone Blvd. where the overhead transmission and subtransmission lines would cross both I-710 and the freight corridor, four additional utility structures would be impacted. In addition, for approximately 1.2 miles at locations from Firestone Blvd. to Slauson Ave., an additional ten utility structures would be impacted as a result of Alternatives 6A/B/C. The DWP relocation strategy at Firestone Blvd. and Florence Ave. is shown in Figure 3.4-5. The relocation of these ten utility structures will require continued coordination between SCE and DWP.

Basic relocation strategies for DWP transmission facilities include avoidance and relocation of circuits aboveground. Relocation of the DWP transmission and subtransmission lines will require right-of-way. Specifically, the DWP maintains a transmission corridor west of I-710 right-of-way throughout the length of the Slauson Ave. overpass area. Five 230 kV overhead transmission circuits contained within the longitudinal transmission corridor are in conflict with the freight corridor.

NO BUILD ALTERNATIVE. Alternative 1 does not require construction; therefore, there will be no permanent impacts to utilities.

3.4.2.3 PUBLIC HEALTH CONSIDERATIONS

Electric and magnetic fields (EMFs) are invisible force fields created by both natural and man-made sources. A natural source is the earth's magnetic field. Manmade sources include household or building wiring, electrical appliances and electric power transmission and distribution facilities.

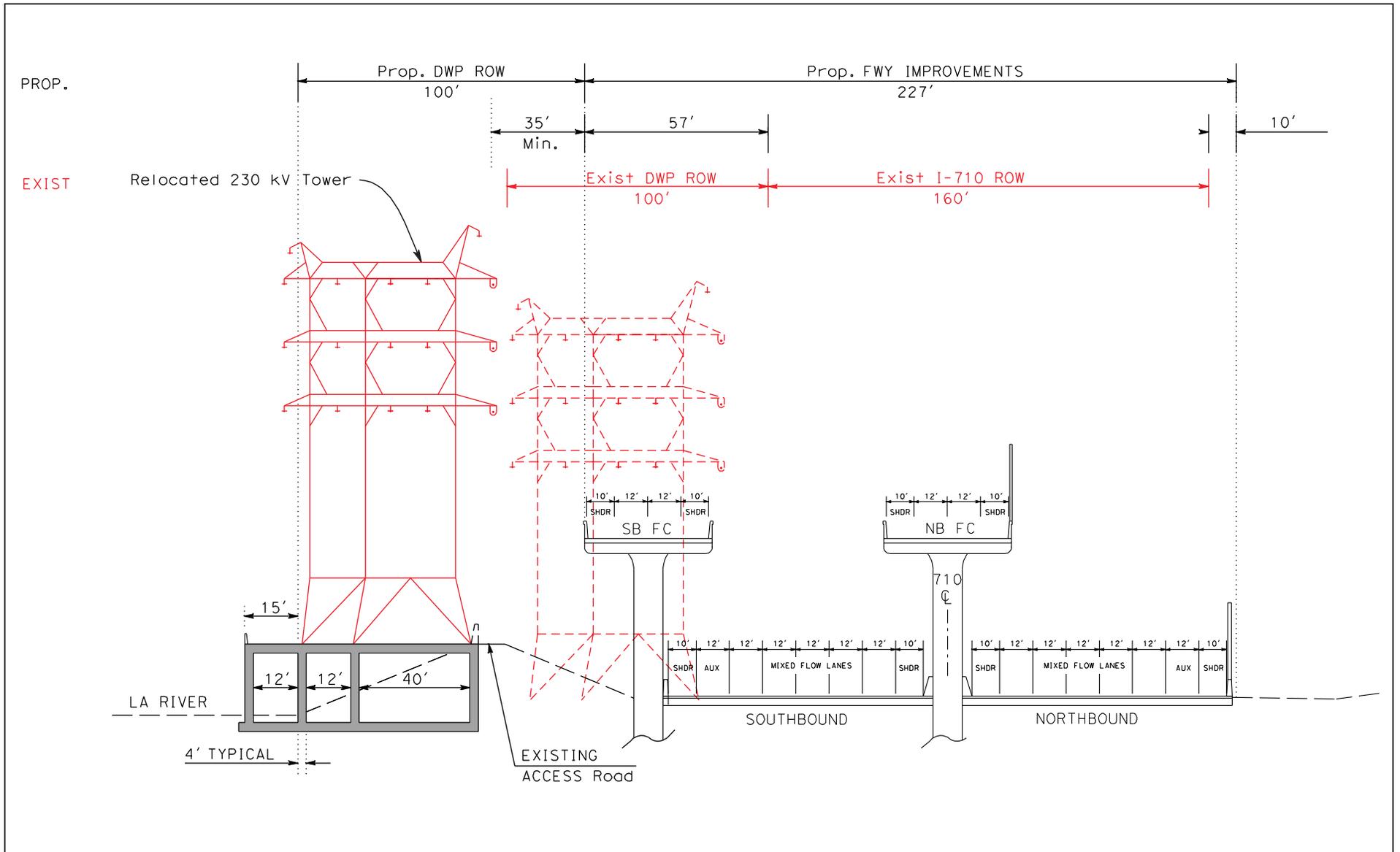


FIGURE 3.4-5

I-710 Corridor Project EIR/EIS
 DWP Relocation Strategy
 Firestone Boulevard to Florence Avenue
 07-LA-710-PM 4.9/24.9
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The following information regarding EMFs is provided on the SCE website.¹

“Three decades of research has not established that a human health hazard exists from long-term EMF exposures. Questions remain about whether EMF exposure at home or work is linked to some diseases such as childhood leukemia. While scientific research is continuing, a quick resolution of the remaining scientific uncertainties is not expected. Coordinated international research has resolved many questions about specific diseases. While some health authorities have identified magnetic field exposure as a possible human carcinogen, they acknowledge that additional research will be necessary before a more definitive conclusion can be made.

In its 1999 Report to Congress, the National Institute of Environmental and Health Sciences (NIEHS) stated: “the conclusion of this report is insufficient to warrant aggressive regulatory concern.” Instead, it recommended that: “The power industry should continue its current practice of siting power lines to reduce exposures and continue emphasis on educating both the public and providers of electricity about ways to reduce exposure.”

Recognizing both public concern and scientific uncertainty over possible health effects from EMF exposure, the CPUC adopted a precautionary approach to reduce EMF exposures in 1993 (updated in 2006). While keeping electrical safety and good engineering practice as first priority, investor-owned electric utilities in California utilize designs to reduce magnetic fields created by new and rebuilt electric facilities.”

The relocation of electrical transmission and distribution lines for the I-710 Corridor Project will utilize designs to reduce EMFs consistent with the CPUC guidance described above.

3.4.3 AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

The build alternatives would result in an adverse impact to Fire Station No. 4 in the city of Vernon, as well as temporary impacts to fire, law enforcement, and emergency service response times as a result of construction. Measure U&ES-1 is provided below to reduce these impacts.

Utilities impacted as a result of the build alternatives would be relocated in accordance with specific Utility Relocation Plans described below in Measure U&ES-2.

¹ <http://www.sce.com/Safety/everyone/electric-magnetic-fields.htm> (accessed January 7, 2012).

U&ES-1 **FIRE SERVICES.** During final design, and consistent with the requirements of the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), Caltrans shall negotiate with the City of Vernon to determine a suitable location for the relocation of Fire Station No. 4. The new location shall be in the general vicinity of the existing fire station location, in order to maintain response times with Fire Station No. 4's service area. The existing Fire Station No. 4 shall not be closed until the new fire station has been constructed and is operational.

U&ES-2 **UTILITIES.** Utility relocations will be subject to preparation of Specific Utility Relocation Plans. The Specific Utility Relocation Plans will include the following:

- Description of existing facilities, including facility type, capacity, height, and function, in addition to existing easements and maintenance access.
- Description of proposed changes/demolition of existing facilities.
- Identification of potential conflicts that need to be resolved with the relocation plan, including crossings of flood control, rail, and roadway/freeway infrastructure, existing access tunnels, potential flooding, existing utilities and load distribution, Federal Aviation Administration requirements, drainage and storm water quality requirements, and temporary roads and staged construction.
- A description of how the potential conflicts were resolved, including how the proposed relocated aboveground facilities are within the disturbance limits established for the project, whether new overhead facilities provide adequate aerial clearances in locations where cranes will be working and near existing and proposed elevated transportation facilities, and whether all aboveground facilities and access points to underground facilities are located outside controlled access lines.
- A description of the proposed facilities, including easements and maintenance access, and a description of vertical and/or horizontal clearance from other utility and public infrastructure.
- A work plan that describes the nature of the construction activity, haul routes, a construction traffic management plan if warranted, hours of construction, construction duration and schedule, planned service interruptions, if any, types of construction activities, and anticipated noise levels.

- A summary of existing and planned Utility Team Coordination Meetings that will include all utility companies affected by the project. The meetings should occur during the final design phase (beginning at the 30 percent design stage) and include final design and construction staging. The meeting participants will discuss and plan a workable sequence of utility alterations so that the utility work can be coordinated and, where possible, completed in advance of highway work. Topics to be addressed include sensitive environmental areas, hazardous material sites, erosion controls during construction, and any community events that will be occurring during construction and need to be accommodated.
- A determination if a community meeting will be held prior to the issuance of demolition and grading permits. Community meetings will be held for major utility relocations that are (1) within 500 feet of residences or schools, and (2) that will require construction duration of 30 days or more. Caltrans shall hold a community preconstruction meeting, in concert with the construction contractor, to provide information regarding the construction schedule and activities. The construction information shall include the location and duration of each construction activity, whether or not and, if applicable, the specific location, days, frequency, and duration of the pile driving that will occur, construction traffic management plans, and any accommodation of community events that will be occurring during the construction period. Notification of this meeting shall be provided to owners and occupants within 500 feet of the utility relocation site.
- The Specific Utility Relocation Plans will also include other applicable mitigation measures described in this Draft EIR/EIS for impacts related to cultural resources, visual resources, hazardous wastes, water quality, and traffic and transportation.

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