

IV. Environmental Impact Analysis

I.2 Public Services—Fire Protection

1. Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts on fire protection and emergency medical services. The analysis is based in part on information provided by the Los Angeles Fire Department (LAFD), included in Appendix H of this Draft EIR; information available on the LAFD website; consultation with the different fire stations serving the Project Site; written correspondence from Ralph M. Terrazas, Fire Chief, and Kristen Crowley, Fire Marshal, from the LAFD Bureau of Fire Prevention and Public Safety (October 17, 2017), included in Appendix H; and the *222 West 2nd Street Project Utilities Technical Memorandum* (Utilities Report), prepared for the Project by Psomas (November 30, 2018), which discusses the Project's ability to meet fire flow and hydrant requirements as set forth in the Los Angeles Municipal Code (LAMC). The Utilities Report is included in Appendix N.2 of this Draft EIR.

2. Environmental Setting

a. Regulatory Framework

(1) Occupational Safety and Health Administration

The federal Occupational Safety and Health Administration (OSHA) and the California Division of Occupational Safety and Health (commonly referred to as Cal/OSHA) enforce the provisions of the federal and state Occupational Safety and Health Acts, respectively, which collectively require safety and health regulations for construction under Part 1926 of Title 29 Code of Federal Regulations. OSHA's fire-related requirements are specifically contained in Subpart F, Fire Protection and Prevention, of Part 1926. Examples of general requirements related to fire protection and prevention include maintaining fire suppression equipment on-site that is specific to construction; providing a temporary or permanent water supply of sufficient volume, duration, and pressure; properly operating the on-site fire-fighting equipment; and keeping storage sites free from accumulation of unnecessary combustible materials.

(2) State

(a) California Building Code and California Fire Code

The California Building Code (California Code of Regulations, Title 24, Part 2) is a compilation of building standards, including fire safety standards for new buildings, which are also provided in the California Fire Code (California Code of Regulations, Title 24, Part 9). California Building Code standards are based on building standards that have been adopted by state agencies without change from a national model code; building standards based on a national model code that have been changed to address particular California conditions; and building standards authorized by the California legislature but not covered by the national model code. The 2016 edition of the California Building Code became effective on January 1, 2017.¹ The building standards in the California Building Code apply to all locations in California, except where more stringent standards have been adopted by state agencies and local governing bodies. The 2016 California Fire Code also went into effect on January 1, 2017.² Typical fire safety requirements of the California Fire Code include: the installation of fire sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures within wildfire hazard areas. Specific California Fire Code fire safety regulations have been incorporated by reference in the LAMC with local amendments, as discussed below.

(b) California Constitution Article XIII, Section 35

Section 35 of Article XIII of the California Constitution at subdivision (a)(2) provides: “The protection of public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services.” Section 35 of Article XIII of the California Constitution was adopted by the voters in 1993 under Proposition 172. Proposition 172 directed the proceeds of a 0.50-percent sales tax to be expended exclusively on local public safety services. California Government Code Sections 30051–30056 provide rules to implement Proposition 172. Public safety services include fire protection. Section 30056 mandates that cities are not allowed to spend less of their own financial resources on their combined public safety services in any given year compared to the 1992-93 fiscal year. Therefore, an agency is required to use Proposition 172 to supplement its local funds used on fire protection services, as well as other public safety services. In *City of Hayward v. Board of Trustees of California State University* (2015) 242 Cal. App. 4th 833, the court found that Section 35 of

¹ *California Building Code (California Code of Regulations, Title 24, Part 2).*

² *California Fire Code (California Code of Regulations, Title 24, Part 9).*

Article XIII of the California Constitution requires local agencies to provide public safety services, including fire protection and emergency medical services, and it is reasonable to conclude that the City will comply with that provision to ensure public safety services are provided.³

(3) City of Los Angeles

(a) City of Los Angeles Charter

Section 520 of the Los Angeles City Charter states that the LAFD's duty is to control and extinguish injurious or dangerous fires and to remove that which is liable to cause those fires. It also requires the LAFD to enforce all ordinances and laws relating to the prevention or spread of fires, fire control, and fire hazards within the City, as well as to conduct fire investigations and protect lives and property in case of disaster or public calamity.

(b) City of Los Angeles General Plan Framework Element

The City of Los Angeles General Plan Framework Element (Framework Element), adopted in December 1996 and readopted in August 2001, sets forth general guidance regarding land use issues for the entire City of Los Angeles and defines citywide policies regarding land use, including infrastructure and public services. Goal 9J of the Framework Element's Infrastructure and Public Services Chapter specifies that every neighborhood have the necessary level of fire protection service, emergency medical service, and infrastructure. Objective 9.16 requires that the demand for existing and projected fire facilities and service be monitored and forecasted. Objective 9.17 requires that all areas of the City have the highest level of fire protection and emergency medical service, at the lowest possible cost, to meet existing and future demand. Objective 9.18 requires that the development of new fire facilities be phased with growth. Further, Objective 9.19 requires the maintenance of the LAFD's ability to assure public safety in emergency situations. In addition, the City's General Plan Safety Element, discussed below, recognizes that most jurisdictions rely on emergency personnel (police, fire, gas, and water) to respond to and handle emergencies. Under the Framework Element, the City standard for response distance from a fire station with an engine company is 1.5 miles for neighborhood land uses. This is consistent with the specifications for response distances within the LAMC, discussed below.⁴

³ *City of Hayward v. Board Trustee of California State University* (2015) 242 Cal. App. 4th 833, 847.

⁴ *City of Los Angeles General Plan Framework Element, Chapter 9: Infrastructure and Public Services*, <http://cityplanning.lacity.org/Cwd/Framwk/chapters/09/09.htm>, accessed April 5, 2018.

(c) City of Los Angeles General Plan Safety Element

The City's General Plan Safety Element (Safety Element), adopted on November 26, 1996, includes policies related to the City's response to hazards and natural disasters, including fires. In particular, the Safety Element sets forth requirements, procedures, and standards to facilitate effective fire suppression and emergency response capabilities. For example, Policy 2.1.6 requires the LAFD to revise regulations and procedures to include the establishment of minimum standards for the location and expansion of fire facilities based on fire flow, intensity and type of land use, life hazard, occupancy, and degree of hazard so as to provide adequate fire and emergency medical service response. In addition, the Safety Element designates disaster routes. The nearest disaster routes include 1st Street approximately 0.12 mile northeast of the Project Site, Figueroa Street approximately 0.47 mile northwest of the Project Site, and San Pedro Street approximately 0.30 mile southeast of the Project Site.⁵

(d) Central City Community Plan

As discussed in Section IV.F, Land Use, of this Draft EIR, the Project Site is located within the planning boundary of the Central City Community Plan (Community Plan), which was last updated in January 2003. The adopted Community Plan includes the following objective and policy related to fire protection:

- Objective 6.1: To ensure that fire facilities and protective services are sufficient for the existing and future population and land uses of Central City.
- Policy 6.1.1: Coordinate with the Fire Department as part of the review of significant development projects and General Plan Amendments affecting land use to determine the impact on service demands.

(e) Los Angeles Municipal Code

The LAMC includes provisions for new construction projects within the City. It contains, by reference, the California Building Code building construction standards, including the California Fire Code, and reflects the policies of the City's General Plan Safety Element. The Fire Prevention and Protection Chapter (Chapter V, Article 7) of the LAMC, known as the Los Angeles Fire Code, sets forth regulatory requirements pertaining to the prevention of fires, the investigation of fires and life safety hazards, the elimination of fire and life safety hazards in any building or structure (including buildings under

⁵ *City of Los Angeles General Plan Safety Element, Exhibit H, adopted by the City Council November 26, 1996.*

construction), the maintenance of fire protection equipment and systems, and the storage, use, and handling of hazardous materials.⁶

Specifically, LAMC Section 57.106.5.2 provides that the Fire Chief shall have the authority to require drawings, plans, or sketches as may be necessary to identify: (1) occupancy access points; (2) devices and systems; (3) utility controls; (4) stairwells; and (5) hazardous materials/waste. In addition, Section 57.107.7 requires that the installation, alteration, and major repair of the following be performed under permit of the Department of Building and Safety: Fire Department communication systems, building communication systems, automatic elevators, heliports, emergency power systems, fire escapes, private fire hydrants, fire assemblies, fire protective signaling systems, pilot lights and warning lights for heat-producing equipment, refrigerant discharge systems, smoke detectors, emergency smoke control systems, automatic sprinkler systems, standpipe systems, and gas detection systems. Furthermore, Section 57.118 establishes LAFD's fire/life safety plan review and LAFD's fire/life safety inspection for new construction projects.

The LAMC also addresses access, fire water flow requirements, and hydrants. Specifically, LAMC Section 57.503.1.4 requires the provision of an approved, posted fire lane whenever any portion of an exterior wall is more than 150 feet from the edge of a roadway, while Section 57.507.3.1 establishes fire water flow standards. Fire water flow requirements, as determined by the LAFD, vary by project site as they are dependent on land use (e.g., higher intensity land uses require higher flow from a greater number of hydrants), life hazard, occupancy, and fire hazard level. As set forth in LAMC Section 57.507.3.1, fire water flow requirements vary from 2,000 gallons per minute (gpm) in the Low Density Residential land use category to 12,000 gpm in the High Density Industrial and Commercial land use category, as shown in Table IV.1.2-1 on page IV.1.2-6. A minimum residual water pressure of 20 pounds per square inch (psi) is to remain in the water system with the required gpm flowing. According to the LAFD, the Project requires fire water flows of 6,000 to 9,000 gpm from four to six adjacent hydrants flowing simultaneously with a residual pressure of 20 psi, which corresponds to the Industrial and Commercial land use category.⁷

⁶ Ordinance Number 184,913, effective May 19, 2017, updated the Los Angeles Fire Code to incorporate by reference portions of the 2016 edition of the California Fire Code and the 2015 edition of the International Fire Code.

⁷ Written correspondence from Ralph M. Terrazas, Fire Chief, and Kristen Crowley, Fire Marshal, Bureau of Fire Prevention and Public Safety, Los Angeles Fire Department, October 17, 2017. See Appendix H of this Draft EIR.

**Table IV.I.2-1
LAMC Table 57.507.3.3 Response Distances and Fire Flow**

Land Use ^a	Required Fire Flow	Maximum Response Distance ^b	
		Engine Co.	Truck Co.
Low Density Residential	2,000 gpm from three adjacent hydrants flowing simultaneously	1.5 miles	2 miles
High Density Residential and Commercial Neighborhood	4,000 gpm from four adjacent hydrants flowing simultaneously	1.5 miles	2 miles
Industrial and Commercial	6,000 to 9,000 gpm from four to six hydrants flowing simultaneously	1 mile	1.5 miles
High Density Industrial and Commercial or Industrial (Principal Business Districts or Centers)	12,000 gpm available to any block (where local conditions indicate that consideration must be given to simultaneous fires, an additional 2,000 to 8,000 gpm will be required)	0.75 mile	1 mile
<p>^a Land use designations are contained in the Community Plans of the City of Los Angeles General Plan.</p> <p>^b The maximum response distances for both LAFD fire suppression companies (engine and truck) must be satisfied.</p> <p>Source: Los Angeles Municipal Code, Table 57.507.3.1 and Table 57.507.3.3.</p>			

LAMC Section 57.507.3.2 addresses land use-based requirements for fire hydrant spacing and type. Land uses in the Industrial and Commercial category require one hydrant per 80,000 square feet of land with 300-foot distances between 2.5-inch by 4-inch or 4-inch by 4-inch double fire hydrants. Regardless of land use, every first story of a residential, commercial, and industrial building must be within 300 feet of an approved hydrant. If required by the LAFD, individual development projects must install additional fire hydrant(s) to meet the hydrant spacing requirements as set forth in LAMC Section 57.507.3.2. The number and location of hydrants are determined as part of LAFD's fire/life safety plan review for each project. As discussed in the Utilities Report, on February 2, 2017, Psomas met with Inspector Conneally of the LAFD Hydrants and Access Section to discuss hydrant coverage for the Project. Upon review of the existing water services, the LAFD inspector concluded that the current hydrant location and coverage is adequate, and no additional public or private fire hydrants would be necessary.⁸

⁸ Psomas, 222 West 2nd Street Project Utilities Technical Memorandum, November 30, 2018. See Appendix N.2 of this Draft EIR.

LAMC Section 57.512.1 provides that response distances, which are based on land use and fire flow requirements, shall comply with Table 57.507.3.3 of the LAMC, as shown in Table IV.1.2-1 on page IV.1.2-6. Based on the requirements for Industrial and Commercial land uses, the maximum response distance from fire stations with an engine company is 1.0 mile, and the maximum response distance from fire stations with a truck company is 1.5 miles. Where a response distance is greater than that allowable, all structures must be constructed with automatic fire sprinkler systems.

LAMC Section 57.409 addresses emergency planning and evacuation requirements for high-rise buildings, including the creation and filing of an emergency plan; LAFD approval of emergency plans, procedures, and evacuation signs; required designated personnel; fire drills; fees; and violations.⁹ All emergency plans, procedures, and evacuation signs must be completed and submitted to the LAFD for inspection and approval prior to implementation in accordance with LAMC Section 57.409.3. Additionally, Section 57.409.8.3 requires emergency evacuation signs to be posted in elevator lobbies and adjacent to the doorway leading to the exit stairs. Section 57.409.9.3 requires residential high-rise buildings to conduct mandatory fire drills at least annually under the direction of a designated Fire Safety Director. In addition, Section 57.4705 addresses specific fire safety requirements for new high-rises, including specific requirements related to an elevator system, vertical exit enclosures, portable fire extinguishers in each residential occupancy unit, and standby power for window washing equipment. In accordance with Section 57.4705.1.6, at least one elevator in each bank of elevators must be available for fire emergency service, and Section 57.4705.1.7 requires that at least one elevator car serving all building levels must be available for emergency use. Any new high-rise building must also include an automatic sprinkler system. Furthermore, LAMC Section 57.4705.4 requires all high-rise buildings to provide a rooftop emergency helicopter landing facility, unless certain life safety features, as specified in LAFD Requirement No. 10, are provided.¹⁰

(f) City of Los Angeles Propositions

Proposition F, the City Fire Facilities Bond, approved by voters in November 2000, allocated \$378.6 million to build 19 new or replacement neighborhood fire/paramedic stations.¹¹ The Proposition F Fire Facilities Bond Team consists of the LAFD, the City

⁹ The LAMC classifies high-rise buildings as buildings where the highest occupied floor level is more than 75 feet above the lowest point of fire access.

¹⁰ Los Angeles Fire Department, Office of the Fire Marshal, Los Angeles Fire Department Requirement No. 10: Emergency Helicopter Landing Facilities (EHLF) Requirements, revised November 17, 2014.

¹¹ City of Los Angeles Department of Public Works, Bureau of Engineering, Proposition F, Facilities Bond, www.eng.lacity.org/fire_bond, accessed October 30, 2018.

Bureau of Engineering, and a contracting firm Bovis Lend Lease. This team oversees allocation of the funds and has identified numerous projects to upgrade fire facilities, including construction of new training centers, replacing and constructing new fire stations, and building a new Air Operations Helicopter Facility and General Services Helicopter Fleet Maintenance Building.¹² Of the stations nearest the Project Site, as discussed below, Fire Station No. 4 located at 800 North Main Street was replaced by a new station located at 450 East Temple Street. The previous Fire Station No. 4 was overcrowded and had antiquated main systems. The new station enhances the fire department's ability to provide adequate emergency response in the service area, which encompasses a two-mile radius around the station. The two-mile service area radius, which is the maximum desired travel distance for LAFD truck company services for neighborhood land uses, encompasses Downtown Los Angeles (generally bounded by Dodger Stadium and Elysian Park to the north, South Union Avenue to the west, East Washington Boulevard to the south, and North Evergreen Avenue to the east).¹³

Proposition Q, the Citywide Public Safety Bond Measure, was approved by voters in March 2002. This proposition involves the spending of \$600 million to renovate, improve, expand and construct public safety (police, fire, paramedic) facilities.¹⁴ Proposition Q involves 13 overall projects consisting of the construction and/or replacement of five police stations, replacement of one police station and jail, construction of two bomb squad facilities, replacement of one jail, construction of one new Emergency Operations Center/Police Operations Center/Fire Dispatch Center facility, construction of the Valley Traffic Division and Bureau Headquarters, renovation of existing fire facilities, and renovation of police facilities.¹⁵

Measure J, which was approved by voters at the November 7, 2006 election, is a charter amendment and ordinance that involves technical changes to Proposition F. Under Proposition F, the construction of new regional fire stations to provide training and other facilities at or near standard fire stations was required to take place on single sites of at least two acres. Measure J allows new regional fire stations funded by Proposition F and

¹² City of Los Angeles Department of Public Works, Bureau of Engineering, *Proposition F, Facilities Bond*, www.eng.lacity.org/fire_bond, accessed October 30, 2018.

¹³ City of Los Angeles Citywide General Plan Framework EIR, *Fire/Emergency Medical Services, Figure F-3 Fire Department Truck Company Service Areas for Neighborhood Land Uses in the City of Los Angeles*, January 19, 1995.

¹⁴ City Administrative Officer Miguel A. Santana to the Mayor and Council, June 30, 2016, *City of Los Angeles Inter-Departmental Correspondence: SB 165 Annual Report Requirements for Fiscal Year 2013–2014 Proposition Q Program, Attachment B, Citywide Public Safety Bond Program Annual Report 2014*.

¹⁵ City Administrative Officer Miguel A. Santana to the Mayor and Council, June 30, 2016, *City of Los Angeles Inter-Departmental Correspondence: SB 165 Annual Report Requirements for Fiscal Year 2013–2014 Proposition Q Program, Attachment B, Citywide Public Safety Bond Program Annual Report 2014*.

located in densely developed areas to be designed and built on one or more properties equaling less than two acres.

(g) Los Angeles Fire Department Strategic Plan 2018–2020¹⁶

The Los Angeles Fire Department Strategic Plan 2018–2020, A Safer City 2.0, is a collaborative effort between LAFD staff, city leaders, and community members to accomplish the LAFD's organizational vision. The Strategic Plan 2018–2020 builds upon the progress of the first Strategic Plan from 2015–2017, which resulted in the achievement of 70 percent of its goals. As provided in the Strategic Plan 2018–2020, five goals will guide the LAFD for the next three years: (1) provide exceptional public safety and emergency service; (2) embrace a healthy, safe and productive work environment; (3) implement and capitalize on advanced technology; (4) enhance LAFD sustainability and community resiliency; and (5) increase opportunities for personal growth and professional development. With implementation of specific strategies, the Strategic Plan 2018–2020 will also align its progress with City of Los Angeles Mayor Eric Garcetti's four priority outcomes to provide a safe city, a well-run city government, a livable and sustainable city, and a prosperous city.

b. Existing Conditions

(1) Fire Protection Facilities, Services, and Response Times

The LAFD serves as the City's life safety agency with approximately 3,246 uniformed fire personnel, providing fire prevention, firefighting, emergency medical care, technical rescue, hazardous materials mitigation, disaster response, public education, and community services. There are 106 neighborhood fire stations strategically located across the LAFD's 471-square-mile jurisdiction. At any given time, a total of 1,018 firefighters, including 270 paramedics, are on 24-hour duty. In addition, the LAFD is supported by 353 technical and administrative personnel.¹⁷

As shown in Figure IV.I.2-1 on page IV.I.2-10, there are five LAFD fire stations located within the Project Site vicinity. The "first-in" for the Project Site is Fire Station No. 9, which is located at 430 East 7th Street approximately 1.0 mile southwest of the Project Site. Fire Station No. 9 consists of a task force truck and engine company, paramedic

¹⁶ LAFD, *Strategic Plan 2018-2020, A safer City 2.0*, https://issuu.com/lafd/docs/strategic_plan_final_2018.02.09?e=17034503/59029441, accessed April 5, 2018.

¹⁷ LAFD, *Our Mission*, www.lafd.org/about/about-lafd/our-mission, accessed March 28, 2017.



Figure IV.I.2-1
Fire Stations in the Vicinity of the Project Site

rescue ambulance, and 13 staff; and is also the Battalion 1 Headquarters.¹⁸ As such, Fire Station No. 9 falls within the 1.0-mile maximum response distance requirement of a fire station with an engine company and within the 1.5-mile maximum response distance requirement of a fire station with a truck company. Therefore, based on the Project's categorization as an Industrial and Commercial land use, the Project Site is located within the required response distance from a fire station with an engine and truck company.

There are three additional stations located within 2 miles of the Project Site. Fire Station No. 4 is located at 450 East Temple Street, approximately 1.1 miles northeast of the Project Site. As shown in Table IV.I.2-2 on page IV.I.2-12, Fire Station No. 4 consists of an assessment engine, Basic Life Support (BLS) rescue ambulance, paramedic rescue ambulance, Emergency Medical Services (EMS) Battalion Captain, and 14 staff.¹⁹ Fire Station No. 10 is located at 1335 South Olive Street approximately 1.7 miles southwest of the Project Site. It consists of a task force truck and engine company, paramedic rescue ambulance, Emergency Medical Technician (EMT) rescue ambulance, and 14 staff.²⁰ Fire Station No. 3 is located at 108 North Fremont Avenue approximately 2.0 miles northwest of the Project Site. It consists of a task force truck and engine company, paramedic rescue ambulance, EMT rescue ambulance, and 16 staff; and is also the Division Headquarters.²¹

Fire Station No. 11 is located beyond the 2-mile radius. Located at 1819 West 7th Street, Fire Station No. 11 is approximately 2.3 miles northwest of the Project Site. It consists of a task force truck and engine company, paramedic rescue ambulance, and 14 staff.²²

As such, as shown in Table IV.I.2-2, Fire Station Nos. 4, 10, 3, and 11 are all located beyond the 1.0-mile response distance requirement of a fire station with an engine

¹⁸ Written correspondence from Ralph M. Terrazas, Fire Chief, and Kristen Crowley, Fire Marshal, Bureau of Fire Prevention and Public Safety, Los Angeles Fire Department, October 17, 2017. See Appendix H of this Draft EIR.

¹⁹ Email communication from LAFD via Kathleen King, City Planning Associate, City of L.A. Department of City Planning, Major Projects Section, October 31, 2017.

²⁰ Written correspondence from Ralph M. Terrazas, Fire Chief, and Kristen Crowley, Fire Marshal, Bureau of Fire Prevention and Public Safety, Los Angeles Fire Department, October 17, 2017. See Appendix H of this Draft EIR.

²¹ Written correspondence from Ralph M. Terrazas, Fire Chief, and Kristen Crowley, Fire Marshal, Bureau of Fire Prevention and Public Safety, Los Angeles Fire Department, October 17, 2017. See Appendix H of this Draft EIR.

²² Written correspondence from Ralph M. Terrazas, Fire Chief, and Kristen Crowley, Fire Marshal, Bureau of Fire Prevention and Public Safety, Los Angeles Fire Department, October 17, 2017. See Appendix H of this Draft EIR.

**Table IV.1.2-2
Los Angeles Fire Department Fire Stations Located in the Project Vicinity**

Station and Location within the Central City Plan Area	Distance from Project Site	Equipment	Staffing
Fire Station No. 9 430 East 7th Street Los Angeles, CA 90014 (Battalion 1 Headquarters)	1.0 mile	<ul style="list-style-type: none"> • Task Force Truck and Engine Company • Paramedic Rescue Ambulance 	13
Fire Station No. 4 450 East Temple Street Los Angeles, CA 90012	1.1 miles	<ul style="list-style-type: none"> • Assessment Engine • BLS Rescue Ambulance • EMS Battalion Captain • Paramedic Rescue Ambulance 	14
Fire Station No. 10 1335 South Olive Street Los Angeles, CA 90015	1.7 miles	<ul style="list-style-type: none"> • Task Force Truck and Engine Company • Paramedic Rescue Ambulance • EMT Rescue Ambulance 	14
Fire Station No. 3 108 North Fremont Avenue Los Angeles, CA 90012 (Division Headquarters)	2.0 miles	<ul style="list-style-type: none"> • Task Force Truck and Engine Company • Paramedic Rescue Ambulance • EMT Rescue Ambulance 	16
Fire Station No. 11 1819 West 7th Street Los Angeles, CA 90057	2.3 miles	<ul style="list-style-type: none"> • Task Force Truck and Engine Company • Paramedic Rescue Ambulance 	14
<p><i>Source: Written correspondence from Ralph M. Terrazas, Fire Chief, and Kristen Crowley, Fire Marshal, Bureau of Fire Prevention and Public Safety, Los Angeles Fire Department, October 17, 2017. See Appendix H of this Draft EIR.</i></p>			

company and beyond the 1.5-mile response distance requirement of a fire station with a truck company. Nonetheless, the LAFD has identified these stations as capable of initial responses needed at the Project Site.

Specific operational response times for these stations in 2016 are shown in Table IV.1.2-3 on page IV.1.2-13. For first-in Fire Station No. 9, the average operational response times were as follows for specific types of emergencies: emergency medical service incidents—5 minutes 47 seconds; non-emergency medical services—5 minutes 31 seconds; advanced life support (ALS) incidents—4 minutes 40 seconds; and structure fires—4 minutes 3 seconds.²³ Fire Station No. 9's response times were similar to or faster than the majority of other stations in the area. Furthermore, in comparison, the

²³ LAFD, *FireStatLA, Station 9 Response Metrics for 2016*, www.lafd.org/fsla/stations-map?st=356&year=2016, accessed April 6, 2018.

**Table IV.1.2-3
Average Operational Fire Response Times (2016)**

Station	Average Response Time to Emergency Medical Services (Minutes:Seconds)	Average Response Time to Non-Emergency Medical Services (Minutes:Seconds)	Average Response Time to Critical ALS (Minutes:Seconds)	Average Response Time to Structure Fire^a (Minutes:Seconds)
Fire Station No. 9	5:47	5:31	4:40	4:03
Fire Station No. 4	6:20	6:12	5:30	4:37
Fire Station No. 10	6:16	5:37	5:15	4:26
Fire Station No. 3	6:21	5:29	5:23	4:41
Fire Station No. 11	5:46	5:17	4:50	4:08
Citywide	6:30	6:16	5:35	5:06

Response times are based on January to December 2016 data.

^a According to the LAFD, for structure fires, the call type is specifically reserved when the LAFD receives a report of a building or structure that is actively burning. Due to the low frequency, these metrics are reported on a quarterly basis.

Source: LAFD, FireStatLA, Station 9 Response Metrics for 2016, www.lafd.org/fsla/stations-map?st=356&year=2016, accessed April 6, 2018; LAFD, FireStatLA, Station 4 Response Metrics for 2016, www.lafd.org/fsla/stations-map?st=301&year=2016#, accessed April 6, 2018; LAFD, FireStatLA, Station 10 Response Metrics for 2016, www.lafd.org/fsla/stations-map?st=361&year=2016, accessed April 6, 2018; LAFD, FireStatLA, Station 3 Response Metrics for 2016, www.lafd.org/fsla/stations-map?st=306&year=2016, accessed April 6, 2018; LAFD, FireStatLA, Station 11 Response Metrics for 2016, www.lafd.org/fsla/stations-map?st=366&year=2016, accessed April 6, 2018; LAFD, FireStatLA, City Wide Response Metrics for 2016, www.lafd.org/fsla/stations-map?year=2016#, accessed April 6, 2018.

Citywide average operational response times were as follows: emergency medical service incidents—6 minutes 30 seconds; non-emergency medical services—6 minutes 16 seconds; critical ALS incidents—5 minutes and 35 seconds; and structure fires—5 minutes and 6 seconds in 2016.²⁴ According to these LAFD metrics, response times for the five fire stations located in the vicinity of the Project Site are all below the Citywide response times.

LAFD has not established response time standards for emergency response, nor adopted the National Fire Protection Association (NFPA) standard of 5 minutes for EMS response and 5 minutes, 20 seconds for fire suppression response. Roadway congestion, intersection level of service (LOS), weather conditions, and construction traffic along a

²⁴ LAFD, FireStatLA, City Wide Response Metrics for 2016, www.lafd.org/fsla/stations-map?year=2016#, accessed April 6, 2018.

response route can affect response time. Generally, multi-lane arterial roadways allow emergency vehicles to travel at higher rates of speed and permit other traffic to maneuver out of the path of an emergency vehicle. Additionally, the LAFD, in collaboration with Los Angeles Department of Transportation (LADOT), has developed a Fire Preemption System (FPS), which automatically turns traffic lights to green for emergency vehicles traveling along designated City streets to aid in emergency response. The City of Los Angeles has over 205 miles of major arterial routes that are equipped with FPS.

According to the LAFD, although response time is considered in assessment of the adequacy of fire protection services, it is one factor among several that LAFD utilizes in evaluating its ability to respond to fires and life and health safety emergencies, along with a variety of other criteria, including required fire flow, response distance from existing fire stations, and the LAFD's judgment for needs in an area. If the number of incidents in a given area increases, it is the LAFD's responsibility to assign new staff and equipment and potentially build new or expanded facilities, as necessary, to maintain adequate levels of service. In conformance with the California Constitution Article XIII, Section 35(a)(2) and the *City of Hayward v. Board Trustee of California State University* (2015) 242 Cal, App. 4th 833, 847 ruling, the City has and will continue to meet its legal constitutional obligations to provide adequate public safety services, including fire protection and emergency medical services.

(2) Emergency Access

As described in Section II, Project Description, of this Draft EIR, the Project Site is currently developed with a surface parking lot, which is currently being used as a staging area for construction of the Metro Regional Connector 2nd Street/Broadway rail station and portal, and a five-story parking structure. All of the adjacent roadways (Broadway, 2nd Street, and Spring Street) may be used to access the Project Site. Vehicular access, including emergency vehicle access, to the parking structure is provided via one ingress/egress driveway on Broadway and two ingress/egress driveways on Spring Street.

(3) Fire Water Infrastructure

As discussed in Section IV.K.1, Water Supply and Infrastructure, of this Draft EIR, in addition to providing domestic water service, the Los Angeles Department of Water and Power (LADWP) also provides water for firefighting services in accordance with the City of Los Angeles Fire Code (LAMC Chapter V, Article 7). According to the Utilities Report, there is an 8-inch diameter water main located on 2nd Street, a 16-inch diameter water main on Broadway, and a 12-inch diameter water main on Spring Street. There are also multiple existing fire hydrants that surround the Project Site including on the southeast corner of 2nd Street and Broadway; on the southeast corner of 2nd Street and Spring

Street; on the west side of the Spring Street, just south of the Project Site; and on the west side of Broadway just south of the Project Site.²⁵

As discussed in the Utilities Report, Service Advisory Requests were provided by LADWP to determine the water pressure and flow capacity for the existing water lines that serve or can serve the Project Site. This data shows water pressure in the adjacent lines ranges between 39 and 56 psi, depending on the street.

(4) Fire Hazard Areas

There are no wildlands located adjacent to or in the vicinity of the Project Site. In addition, the Project Site is not located within a City-designated Very High Fire Hazard Severity Zone.²⁶ However, the Project Site is located in Fire District No. 1, which consists of areas identified by the City that are required to meet additional development regulations to mitigate fire hazard-related risks associated with high density development and high-rises.²⁷ According to the City of Los Angeles Department of Building and Safety, construction and buildings within Fire District No. 1 are required to comply with regulations related to, but not limited to, fire resistance-rated construction, permitted types of exterior walls, roofing, elevations, sprinklers, loading platforms, and material use.²⁸

(5) Reorganization by the LAFD²⁹

In January 2015, the LAFD initiated a major reorganization of the Department's Emergency Services Bureau, creating four distinct geographic bureaus, each with a Deputy Chief reporting directly to the LAFD Chief Deputy of Emergency Operations. The objective of this reorganization was for each new Bureau Commander and their staff to establish a more effective and responsive business model than was previously possible through the traditional rotating shift, platoon duty system. The bureaus were organized to operate

²⁵ Psomas, 222 West 2nd Street Project Utilities Technical Memorandum, November 30, 2018. See Appendix N.2 of this Draft EIR.

²⁶ City of Los Angeles Department of City Planning, ZIMAS, Parcel Profile Report for 222 West 2nd Street, <http://zimas.lacity.org/>, accessed April 5, 2018.

²⁷ City of Los Angeles Department of City Planning, ZIMAS, Parcel Profile Report for 222 West 2nd Street, <http://zimas.lacity.org/>, accessed April 5, 2018.

²⁸ City of Los Angeles Department of Building and Safety, Supplemental Plan Check Corrections Sheet for Fire District 1 and Very High Fire Hazard Severity Zone (2017 LABC), revised January 1, 2017, www.ladbs.org/docs/default-source/forms/plan-check-2017/supplemental-plan-check-corrections-sheet-for-fire-district-1-and-very-high-fire-hazard-severity-zone.pdf?sfvrsn=6, accessed September 4, 2018.

²⁹ LAFD Implements New Bureau Command Structure, January 12, 2015, <http://lafd.org/news/lafd-implements-new-bureau-command-structure>, accessed April 6, 2018.

during normal weekday business hours and allow bureau commanders and staff to be available 24 hours each day to respond to significant emergencies.

As the LAFD has established an organizational model aligned with that of the LAPD, the four bureaus include the Central Bureau (at Fire Station No. 3), South Bureau (at San Pedro City Hall complex), Valley Bureau (at Fire Station No. 88), and West Bureau (at Fire Station No. 82 Annex). The new four-bureau system, similar to that of the LAPD, makes the LAFD more effective and responsive to community needs.

3. Project Impacts

a. Methodology

Project impacts regarding fire services are evaluated by the LAFD on a project-by-project basis. A project's land use, fire-related needs, and whether the project site meets the recommended response distance and fire safety requirements, as well as project design features that would reduce or increase the demand for fire protection services, are taken into account. Beyond the standards set forth in the Los Angeles Fire Code, consideration also is given to the project size and components, required fire flow, and response distance for engine and truck companies, fire hydrant sizing and placement standards, access, and potential to use or store hazardous materials. Further evaluation of impacts considers whether development of the project would create the need for a new fire station or expansion, relocation, or consolidation of an existing facility to accommodate increased demand. Consultation with the LAFD is conducted to determine each project's effect on fire protection and emergency medical services.

The need for or deficiency in adequate fire protection and emergency medical services in and of itself is not a CEQA impact, but rather a social and/or economic impact.³⁰ To the extent a project generates demand for additional fire protection and emergency medical services that results in the need to construct new facilities or expand existing facilities, and the construction could result in a potential impact to the environment, then that impact needs to be evaluated within the project EIR and mitigated, if found to be significant. The ultimate determination of whether a project would result in a significant impact to the environment related to fire protection and emergency medical services is determined by whether construction of new or expanded fire protection and emergency medical facilities would be needed. In the event the City determines that expanded or new fire protection and emergency medical facilities are warranted, such facilities: (1) would occur where allowed under the designated land use; (2) would be located on parcels that

³⁰ *City of Hayward v. Board Trustee of California State University* (2015) 242 Cal. App. 4th 833, 847.

are infill opportunities on lots that are between 0.5 and 1 acre in size; and (3) could qualify for a categorical exemption or Mitigated Negative Declaration under CEQA Guidelines Section 15301 or 15332.

b. Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with State CEQA Guidelines Appendix G (Appendix G), the Project would have a significant impact related to fire protection if it would:

Threshold (a): Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.

(2) 2006 L.A. CEQA Thresholds Guide

The *L.A. CEQA Thresholds Guide* states that the determination of significance shall be made on a case-by-case basis, considering the following criteria to evaluate fire protection:

- A project would normally have a significant impact on fire protection if it requires the addition of a new fire station or the expansion, consolidation or relocation of an existing facility to maintain service.

In assessing impacts related to fire protection in this section, the City will use Appendix G as the thresholds of significance. The criteria identified above from the *L.A. CEQA Thresholds Guide* will be used where applicable and relevant to assist in analyzing the Appendix G threshold questions.

c. Analysis of Project Impacts

(1) Project Design Features

The following Project design feature is proposed with regard to fire protection:

FIR-PDF-1: Install a fire flow pump system in the building, designed in accordance with LAMC fire flow pressure standards, such that a minimum residual water pressure of 20 psi shall remain in the water

system while the required fire flows are flowing per Fire Code requirements.

Additionally, as discussed in Section IV.J, Transportation/Traffic, of this Draft EIR, pursuant to Project Design Feature TR-PDF-1, the Project Applicant or its successor would implement a Construction Traffic Management Plan that includes provisions for maintaining emergency access to the Project Site during construction.

(2) Relevant Project Characteristics

As described in more detail in Section II, Project Description, of this Draft EIR, the Project involves the development of a 30-story, 449-foot-tall, mixed-use building with 107 residential units (137,347 square feet), approximately 7,200 square feet of ground level commercial retail floor area, and 534,044 square feet of office uses.³¹ The proposed residences would include 12 studios, 42 one-bedroom units, 40 two-bedroom units, and 13 three-bedroom units. The existing five-level parking structure located on the southern portion of the Project Site would remain and be reconfigured to provide required vehicular parking and long-term bicycle parking for the proposed uses, with surplus parking remaining available for other nearby uses, as under existing conditions.

With respect to the Project's fire protection design characteristics, as discussed in the Utilities Report, information provided by LADWP indicates water pressure in the existing water lines that serve or can serve the Project Site ranges between 39 and 56 psi, depending on the street. This pressure is generally considered low for a development of the Project's size, and it was determined that a pump will likely be needed to provide adequate fire flow pressures inside the building.

The Project would comply with all applicable regulatory requirements. In particular, the Project would comply with LAMC fire safety requirements, including those established in the Building Code (Chapter 9) and the Fire Code (Chapter 7), as well as LAMC Section 57.507.3.1 regarding fire flow requirements. In addition, as previously discussed, LAFD Requirement No. 10 specifies alternative life safety features that may be implemented in high-rise buildings in lieu of a rooftop emergency helicopter landing facility. In accordance with LAFD Requirement No. 10 and based on approval by the Fire Marshal, the Project

³¹ *The building's height would measure 435 feet at the highest roofline and 449 feet at the top of the highest parapet, which would be set back from the roofline.*

would include supplemental fire safety features for a building of between 420 and 1,000 feet in height, including the following:³²

- Provide two fire service access elevators as required in California Building Code Section 403.6.1.
- Provide two stairways (and a third if added) with roof access. Access to the roof shall be provided through a penthouse per Los Angeles Building Code Section 91.1509.2.
- Provide enclosed elevator lobbies in accordance with Los Angeles Fire Code Section 57.4705.1.
- Escalator openings or stairways that are not part of the means of egress system and connect more than two stories shall be protected by approved power-operated automatic shutters at every penetrated floor. All automatic shutters shall conform to Los Angeles Building Code Section 91.712.1.3.2.
- Provide an automatic sprinkler system installed throughout the high rise building, designed in accordance with Los Angeles Fire Code Section 57.903.3.1. In light and ordinary hazard areas, other than parking garages, listed quick-response sprinklers, including extended coverage quick-response sprinklers, shall be used throughout the system. The National Fire Protection Association 13 reduction to the hydraulic design area of operation for quick-response sprinkler systems shall not be permitted. Note: To meet the intent of this life safety feature it will typically require larger size branch lines for the automatic sprinkler system with quick response sprinkler heads.
- Provide a Video Camera Surveillance System with cameras located in all Fire Service Access Elevator Lobbies and on every 5th floor landing in exit stairway shafts, with an additional camera at the top of the exit stairway shaft. LAFD video surveillance shall be usable from LAFD's "fire control room" and installed with system cabling "survivability" requirements similar to National Fire Protection Association Standard 72 for fire alarm systems. System cameras are required to be active during a fire alarm condition within the building.
- Provide egress stairways with a capacity in inches calculated by multiplying the occupant load served by a means of egress capacity factor of 0.3 inch per person. The capacity shall not be less than specified elsewhere in the building and fire codes.

³² Los Angeles Fire Department, Office of the Fire Marshal, Los Angeles Fire Department Requirement No. 10: Emergency Helicopter Landing Facilities (EHLF) Requirements, revised November 17, 2014.

In addition, in accordance with LAFD recommendations included in Appendix H and based on approval by the Fire Marshal, the Project would comply with and include supplemental fire safety features for the building, including the following:

- Access for Fire Department apparatus and personnel to and into all structures shall be required.
- One or more Knox Boxes shall be installed for LAFD access to the Project. The location and the number of Knox Boxes shall be determined by an LAFD field inspector (refer to LAFD Requirement #75).
- The entrance to any residential lobby must be within 50 feet of the desired street address curb face.
- Where above ground floors are used for residential purposes, the access requirement shall be interpreted as being the horizontal travel distance from the street, driveway, alley, or designated fire lane to the main entrance of individual units.
- The entrance or exit of all ground dwelling units shall not be more than 150 feet from the edge of a roadway of an improved street, access road, or designated fire lane.
- No building or portion of a building shall be constructed more than 150 feet from the edge of a roadway of an improved street, access road, or designated fire lane.
- The Fire Department may require additional vehicular access where buildings exceed 28 feet in height.
- 2014 City of Los Angeles Fire Code Section 503.1.4 Exception:
 - When this exception is applied to a fully fire sprinklered residential building equipped with a wet standpipe outlet inside an exit stairway with at least a two hour rating, the distance from the wet standpipe outlet in the stairway to the entry door of any dwelling unit or guest room shall not exceed 150 feet of horizontal travel, and the distance from the edge of the roadway of an improved street or approved fire lane to the door into the same exit stairway directly from outside the building shall not exceed 150 feet of horizontal travel.
 - It is the intent of this policy that in no case will the maximum travel distance exceed 150 feet inside the structure and 150 feet outside the structure. The term “horizontal travel” refers to the actual path of travel to be taken by a person responding to an emergency in the building.

- This policy does not apply to single-family dwellings or to non-residential buildings.
- Building designs for multi-storied residential buildings shall incorporate at least one access stairwell off the main lobby of the building; but, in no case greater than 150 feet horizontal travel distance from the edge of the public street, private street or fire lane. This stairwell shall extend onto the roof.
- Entrance to the main lobby shall be located off the address side of the building.
- Any required Fire Annuciator panel or Fire Control Room shall be located with 50 feet visual line of site of the main entrance stairwell or to the satisfaction of the Fire Department.
- Fire lane width shall not be less than 20 feet. When a fire lane must accommodate the operation of Fire Department aerial ladder apparatus or where fire hydrants are installed, those portions shall not be less than 28 feet in width.
- The width of private roadways for general access use and fire lanes shall not be less than 20 feet, and the fire lane must be clear to the sky.
- Fire lanes, where required, and dead ending streets shall terminate in a cul-de-sac or other approved turning area. No dead ending street or fire lane shall be greater than 700 feet in length, or a secondary access shall be required.
- Plot plans indicating access road and turning area shall be submitted for Fire Department approval.
- Adequate off-site public and on-site private fire hydrants may be required. Their number and location shall be determined after the Fire Department's review of the plot plan.
- Standard cut-corners shall be used on all turns.
- The Fire Department may require additional roof access via parapet access roof ladders where buildings exceed 28 feet in height and when overhead wires or other obstructions block aerial ladder access.
- All parking restrictions for fire lanes shall be posted and/or painted prior to any Temporary Certificate of Occupancy being issued.
- Plans showing areas to be posted and/or painted "FIRE LANE NO PARKING" shall be submitted and approved by the Fire Department prior to building permit application sign-off.
- Electric gates approved by the Fire Department shall be tested by the Fire Department prior to Building and Safety granting Certificate of Occupancy.

- 2014 City of Los Angeles Fire Code Section 5101.1—Emergency responder radio coverage in new buildings: All new buildings shall have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building. This section shall not require improvement of the existing public safety communications systems.
- Each standpipe in a new high-rise building shall be provided with two remotely located Fire Department Connection for each zone in compliance with National Fire Protection Association 14-2013, Section 7.12.2.
- Plot plans showing fire hydrants and access shall be approved by the Fire Department for each phase of the Project prior to the recording of the final map for that phase. Each phase shall comply independently with code requirements.

As previously discussed, LAFD has confirmed that no additional public or private hydrants would be necessary for the Project.

Project construction activities would require involve limited demolition of paved areas and landscaping as well as approximately 7,000 cubic yards of graded soil materials, which would be exported off-site to Chiquita Canyon Landfill and/or Manning Pit in Irwindale. The haul route to/from Chiquita Canyon Landfill is anticipated to follow segments of 2nd Street, Spring Street, 3rd Street, and Aliso Street in Downtown Los Angeles; CA-110, US-101, CA-170, and I-5; as well as Newhall Ranch Road, SR-126, and Henry Mayo Drive in Castaic. Alternatively, the haul route to/from Irwindale Landfill would follow segments of 2nd Street, Spring Street, 4th Street, Los Angeles Street, El Monte Busway East, and Arcadia Street in Downtown; US-101 and I-10; and Vincent Drive in Irwindale.

(3) Project Impacts

Threshold (a): Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services?

(a) Construction

Construction activities have the potential to result in accidental on-site fires by exposing combustible materials (e.g., wood, plastics, sawdust, coverings and coatings) to fire risks from machinery and equipment sparks, and from exposed electrical lines,

chemical reactions in combustible materials and coatings, and lighted cigarettes. Given the nature of construction activities and the work requirements of construction personnel, OSHA has developed safety and health provisions for implementation during construction, which are set forth in 29 Code of Federal Regulations, Part 1926. Accordingly, construction managers and personnel would be trained in emergency response and fire safety operations, which include the monitoring and management of life safety systems and facilities, such as those set forth in the Safety and Health Regulations for Construction established by OSHA. Additionally, in accordance with the provisions established by OSHA for emergency response and fire safety operations, fire suppression equipment (e.g., fire extinguishers) specific to construction would be maintained on-site.³³ Project construction also would occur in compliance with all applicable federal, state, and local requirements concerning the handling, disposal, use, storage, and management of hazardous materials (refer to Section IV.E, Hazards and Hazardous Materials, of this Draft EIR for further discussion). Thus, compliance with regulatory requirements would effectively reduce the potential for Project construction activities to expose people to the risk of fire or explosion related to hazardous materials and non-hazardous combustible materials to a less-than-significant level.

Project construction also could potentially impact the provision of LAFD services in the Project vicinity as a result of construction-related impacts to the surrounding roadways. Specifically, as discussed in Section IV.J, Transportation/Traffic, of this Draft EIR, while construction activities would primarily be contained within the boundaries of the Project Site, access to the Project Site and the surrounding vicinity could be impacted by temporary lane closures, roadway/access improvements, and the construction of utility line connections. Construction activities also would generate traffic associated with the movement of construction equipment, the hauling of soil and construction materials to and from the Project Site, and construction worker traffic.³⁴ Thus, although construction activities would be short-term and temporary for the area, Project construction activities could temporarily increase response times for emergency vehicles along 2nd Street, Spring Street, 3rd Street, and other main connectors due to travel time delays caused by traffic and temporary lane closures on immediately adjacent streets during the Project's construction phase. However, as discussed in Section IV.J, Transportation/Traffic, of this

³³ *United States Department of Labor, Occupational Safety & Health Administration, Title 29 Code of Federal Regulations, Part 1926, Safety and Health Regulations for Construction, Subpart F, Fire Protection and Prevention, www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10671, accessed April 6, 2018.*

³⁴ *The haul route to/from Chiquita Canyon Landfill is anticipated to follow segments of 2nd Street, Spring Street, 3rd Street, and Aliso Street in Downtown Los Angeles; CA-110, US-101, CA-170, and I-5; as well as Newhall Ranch Road, SR-126, and Henry Mayo Drive in Castaic. Alternatively, the haul route to/from Irwindale Landfill would follow segments of 2nd Street, Spring Street, 4th Street, Los Angeles Street, El Monte Busway East, and Arcadia Street in Downtown; US-101 and I-10; and Vincent Drive in Irwindale.*

Draft EIR, given the permitted hours of construction and the nature of construction projects, daily construction trips would typically be completed outside of the morning and evening peak hours.

With implementation of the Project Design Feature TR-PDF-1, which involves implementation of a Construction Traffic Management Plan, including a worksite traffic control plan, construction trips would not cause significant impacts to emergency vehicles during the A.M. peak and P.M. peak hours. In addition, Project Design Feature J-1 would ensure that adequate and safe access remains available within and near the Project Site during all construction activities. Furthermore, Project Design Feature TR-PDF-1 would include measures to minimize the obstruction of traffic lanes on streets adjacent to the Project Site; schedule construction material deliveries during off-peak periods whenever possible; plan for deliveries and the staging of all equipment and materials to occur on-site as much as possible; and employ flag persons to control traffic movement during temporary traffic flow disruptions. Traffic management personnel would be trained to assist in emergency response by restricting or controlling the movement of traffic that could potentially interfere with emergency vehicle access. Appropriate construction traffic control measures (e.g., detour signage, delineators, etc.) would be implemented, as necessary, to ensure emergency access to the Project Site and traffic flow are maintained on adjacent rights-of-way. The final Construction Traffic Management Plan would be developed in consultation with the Los Angeles Department of Transportation (LADOT). Furthermore, Section 21806 of the California Vehicle Code (CVC) allows drivers of emergency vehicles to use a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes of opposing traffic. Moreover, although the average response times listed above in Table IV.1.2-3 on page IV.1.2-13 for LAFD fire stations in the Project vicinity and citywide meet the NFPA response time standards, LAFD has not formally adopted the NFPA standards.

Based on the above, Project construction would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility in order to maintain service. Therefore, impacts to fire protection and emergency medical services during Project construction would be less than significant, and no mitigation measures are required.

(b) Operation

The analysis of the Project's operational impacts on fire protection and emergency medical services addresses potential impacts associated with LAFD resources and equipment, response distances and access, and the ability of the fire water infrastructure system to provide the necessary fire flows.

(i) Facilities and Equipment

The Project Site is expected to continue to be served by first-in Fire Station No. 9, which falls within the required 1.0-mile engine and 1.5-mile truck company response distances from the Project Site. Furthermore, as shown in Table IV.I.2-2 on page IV.I.2-12, Fire Station Nos. 4, 10, 3, and 11 would also be available to serve the Project in the event of an emergency. Equipment and staffing for these fire stations are also shown therein. Although located beyond the specified response distance requirements, Fire Station Nos. 4, 10, 3, and 11 have been identified by the LAFD as capable of initial responses needed at the Project Site.

As discussed in Section II, Project Description, of this Draft EIR, the existing Project Site is developed with a surface parking lot (currently being used as a construction staging area for the Metro Regional Connector 2nd Street/Broadway rail station and portal) as well as a five-story parking structure, which generate low demand for LAFD fire protection services. The Project includes the development of a 30-story mixed-use building consisting of 107 residential units (137,347 square feet), approximately 7,200 square feet of ground level commercial retail uses, and 534,044 square feet of office uses, which would increase the demand for fire protection and emergency medical services. As discussed in Section IV.H, Population, Housing, and Employment, of this Draft EIR, according to the Los Angeles Department of City Planning, the most recent estimated household size for multi-family housing units in the City of Los Angeles area is 2.44 persons per unit.³⁵ Applying this factor, development of 107 units would result in a net increase of approximately 261 residents. In addition, the Project's commercial retail and office uses would generate approximately 2,322 employees, for a total on-site population of 2,583 persons.³⁶

The proposed uses would be expected to generate a range of fire service calls similar to other such uses, including kitchen/house fires, garbage bin fires, car fires, electrical fires, etc. These types of fires would be adequately suppressed with the fire equipment typically found at fire stations. The Project would not include any unique or especially hazardous uses, such as industrial facilities, that use or generate large quantities of hazardous and/or toxic materials that could pose an extreme risk of serious accident or fire at the Project Site.

³⁵ Based on 2015 Census American Community Survey 5-Year Estimate data (2011–2015), per correspondence with Jack Tsao, Housing Planner, Los Angeles Department of City Planning, March 29, 2017. See Section IV.H, Population, Housing, and Employment, of this Draft EIR for further discussion.

³⁶ Based on employee generation factors from the Los Angeles Unified School District's 2016 Developer Fee Justification Study, Table 15, March 2017, for "Neighborhood Shopping Centers" and "Large High Rise Commercial Office" uses. See Section IV.H, Population, Housing, and Employment, of this Draft EIR for further discussion.

As also discussed in Section II, Project Description, of this Draft EIR, the Project building would be 449 feet tall. Pursuant to LAMC Section 57.4705.4, high-rise buildings are required to provide a rooftop emergency helicopter landing facility or equivalent design features. As previously discussed, in accordance with LAFD Requirement No. 10 and based on approval by the Fire Marshal, the Project would include the required additional fire safety features for a building of between 420 and 1,000 feet in height in lieu of a rooftop emergency helicopter landing facility. In addition, the Project would implement all applicable Los Angeles Building Code and Fire Code requirements regarding structural design, building materials, site access, fire flow, storage and management of hazardous materials, alarm and communications systems, etc. Compliance with applicable Code requirements would be confirmed as part of LAFD's fire/life safety plan review and fire/life safety inspection, as set forth in LAMC Section 57.118, prior to the issuance of a building permit. Furthermore, as discussed above, the proposed building would incorporate supplemental fire safety features in compliance with LAFD recommendations (included in Appendix H) and based on approval by the Fire Marshal.

Compliance with applicable regulatory requirements, including LAFD's fire/life safety plan review and fire/life safety inspection, would ensure that adequate fire prevention features would be provided in order to reduce the demand on LAFD facilities and equipment. As such, compliance with Fire Code requirements would minimize the potential for incidents requiring an emergency response by LAFD and therefore reduce the need for a new fire station, or the expansion, consolidation, or relocation of an existing fire station. In addition, in accordance with the fire protection-related goals, objectives, and policies set forth in the Framework Element, the General Plan Safety Element, and the Central City Community Plan, as listed in the Regulatory Framework discussion above, the City along with LAFD would continue to monitor the demand for existing and projected fire facilities (see Objective 9.16 of the Framework Element, Policy 2.1.6 of the Safety Element, and Fire Protection Policy 6.1.1 of the Central City Community Plan) and coordinate the development of new fire facilities to be phased with growth (see Objective 9.18 of the Framework Element).

Given these procedures and policy directives, as well as LAFD's continued evaluation of existing fire facilities, Project impacts with regard to LAFD facilities and equipment would be less than significant.

(ii) Response Distance, Emergency Access, and Response Times

As previously discussed, the Project Site meets the applicable engine and truck company response distance requirements, pursuant to LAMC Section 57.507.3.3, based on the Project's categorization as an Industrial and Commercial land use. Specifically, first-in Fire Station No. 9 is located approximately 1 mile away, while second-in Fire Station No. 4 is

within 1.1 miles of the Project Site. As such, the Project would comply with LAMC response distance criteria.

Emergency vehicles would continue to access the Project Site directly from the surrounding roadways, including Broadway, 2nd Street, and Spring Street. The Project would not include the installation of any barriers (e.g., perimeter fencing, fixed bollards, etc.) that could impede emergency vehicle access within or in the vicinity of the Project Site. As such, emergency access to the Project Site and surrounding uses would be maintained at all times. Furthermore, the Project would incorporate appropriate and well-marked building access points, fire detection and fire control devices/systems, utility controls, and stairwells to meet Fire Code requirements.

Project-related traffic would have the potential to increase emergency vehicle response times to the Project Site and surrounding properties due to travel time delays caused by additional traffic congestion. As discussed in Section IV.J, Transportation/Traffic, of this Draft EIR, under Future With Project Conditions (2025), traffic generated by the Project would result in significant impacts at two study intersections during the weekday A.M. peak hours and two study intersections during the weekday P.M. peak hours, collectively including two intersections along Figueroa Street, which is a City-designated disaster route. Proposed mitigation identified in Section IV.J, Transportation/Traffic, of this Draft EIR would fully mitigate impacts at two of the affected intersections, but a significant and unavoidable impact would remain at the intersection of Figueroa Street and 2nd Street during the A.M. peak hours, as well as at the intersection of Beaudry Avenue and 2nd Street during the P.M. peak hours. However, Fire Station No. 9, the first-in station for the Project, is located south of the Project Site and therefore fire trucks from its address would not travel through the intersection of Figueroa Street and 2nd Street to access the Project Site.

The area surrounding the Project Site includes an established street system, consisting of freeways, primary and secondary arterials, and collector and local streets, which provide regional, sub-regional, and local access and circulation. Based on the Project Site's location within a highly urbanized area of the City, the streets surrounding the Project Site were designed as standard streets in terms of pavement width and thickness, curb and gutter, and horizontal and vertical curvature. Therefore, the street system surrounding the Project Site is not considered substandard. Additionally, as previously discussed, per CVC Section 21806, the drivers of emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes of opposing traffic. Therefore, the increase in traffic generated by the Project is not expected to significantly impact emergency vehicle response to the Project Site and surrounding area. Furthermore, the Project's driveways and internal circulation would be designed to incorporate all applicable City Building Code and Fire Code requirements regarding site access, including providing adequate emergency vehicle access.

Compliance with applicable Building Code and Fire Code requirements, including emergency vehicle access, would be demonstrated as part of LAFD's fire/life safety plan review and fire/life safety inspection, as set forth in LAMC Section 57.118, prior to the issuance of a building permit. As such, emergency access would be maintained, and Project-related traffic would not impair the LAFD from responding to emergencies at the Project Site or the surrounding area.

Overall, impacts with regard to response distance and emergency access would be less than significant.

(iii) Fire Flow

As addressed in more detail in Section IV.K.1, Water Supply and Infrastructure, of this Draft EIR, domestic and fire water service to the Project Site would continue to be supplied by LADWP. As previously discussed and shown in Table IV.I.2-1 on page IV.I.2-6, LAMC Section 57.507.3 establishes fire flow standards by development type. According to the LAFD, the Project falls within the Industrial and Commercial land use category and is required to provide a fire flow of 6,000 to 9,000 gpm from four to six hydrants flowing simultaneously. Additionally, hydrants must be spaced to provide adequate coverage of the building exterior and must deliver a minimum pressure of 20 psi at full flow.

Currently, there are four existing public fire hydrants in the vicinity of the Project Site. These are located on the southeast corner of 2nd Street and Broadway; on the southeast corner of 2nd Street and Spring Street; on the west side of the Spring Street, just south of the Project Site; and on the west side of Broadway, just south of the Project Site. These hydrants are supplied by the 8-inch diameter water main located on 2nd Street, the 16-inch diameter water main on Broadway, and the 12-inch diameter water main on Spring Street. As discussed in the Utilities Report, on February 2, 2017, Psomas met with Inspector Conneally of the LAFD Hydrants and Access Section to discuss hydrant coverage for the Project. Upon review of the existing water services, the LAFD inspector concluded that the current hydrant location and coverage is adequate, and no additional public or private fire hydrants would be necessary. Therefore, the Project would comply with hydrant standards specified in the LAMC.³⁷

Furthermore, as discussed in the Utilities Report, Service Advisory Requests were provided by LADWP to determine the water pressure and flow capacity for the existing water lines that serve or can serve the Project Site. This data shows water pressure in the

³⁷ Psomas, 222 West 2nd Street Project Utilities Technical Memorandum, November 30, 2018. See Appendix N.2 of this Draft EIR.

adjacent lines ranges between 39 and 56 psi, depending on the street. This pressure is generally considered low for a development of the Project's size, and it was determined that a pump will likely be needed to provide adequate fire flow pressures inside the building. As provided above in Project Design Feature FIR-PDF-1, the Project would include the installation of a fire flow pump system in order to meet water pressure demands.

In addition, as previously discussed, the Project would include supplemental fire protection equipment and systems, such as automatic fire sprinklers, fire service access elevators, a Video Camera Surveillance System, and appropriate roof access. Installation of automatic fire sprinklers would be subject to LAFD review and approval during LAFD's fire/life safety plan review and fire/life safety inspection for the Project, as set forth in LAMC Section 57.118.

Based on the above, LADWP would be able to supply sufficient flow and pressure to satisfy the Project's fire suppression needs. Therefore, with construction of the proposed fire water system improvements (i.e., connections to the existing water mains), and a fire flow pump system in accordance with Project Design Feature FIR-PDF-1, the Project would meet fire flow requirements. Impacts with regard to fire flow would be less than significant.

4. Cumulative Impacts

The geographic context for the cumulative impact analysis of fire protection are the combined service areas of Fire Station Nos. 4, 9, 10, 3, and 11. The Project, in conjunction with growth forecasted in the City through 2025 (i.e., the Project buildout year), would cumulatively generate a demand for fire protection services, thus potentially resulting in cumulative impacts on fire protection facilities. Cumulative growth in the greater Project area through 2025 includes 173 known related projects, as well as general ambient growth projected to occur, as described in Section III, Environmental Setting, of this Draft EIR. Much of this growth is anticipated by the City and will be incorporated into the Central City Community Plan update, known as the DTLA 2040 Plan, which the Department of City Planning is in the process of preparing (refer to Section IV.F, Land Use, of this Draft EIR for further discussion). According to the DTLA 2040 projections, an additional approximately 125,000 people, 70,000 housing units, and 55,000 jobs will be added to the Downtown area by the year 2040.³⁸

³⁸ *Growth projections current as of December 2018. Source: City of Los Angeles, DTLA 2040, About This Project, www.dtl2040.org/, accessed December 6, 2018.*

A number of the identified related projects and ambient growth projections fall within the service areas of Fire Station Nos. 4, 9, 10, 3, and 11. The increase in development and service populations from the Project, related projects, and other future development in the Community Plan area would result in a cumulative increase in the demand for LAFD services and could have a cumulative impact on fire services if the Project, together with other development in the service areas, did not comply with LAFD requirements for design and construction. However, similar to the Project, the related projects would be reviewed by the LAFD on a project-by-project basis to ensure that sufficient fire safety and hazards measures are implemented to reduce potential impacts to fire protection. Furthermore, each related project would be required to comply with regulatory requirements related to fire protection and emergency medical services. As discussed above, each related project and other future development that exceeds the maximum applicable LAMC response distance standards would be required to install automatic fire sprinkler systems in order to compensate for the additional response distance.

In addition, the Project, each related project, and other future development projects in the Community Plan area would be subject to the City's standard construction permitting process, which includes a review by LAFD for compliance with building and site design standards related to fire/life safety, as well as coordinating with LADWP to ensure that local fire flow infrastructure meets current standards for the type and intensity of land uses involved. As such, compliance with Fire Code requirements would minimize the potential for incidents requiring an emergency response by LAFD and therefore reduce the need for a new fire station, or the expansion, consolidation, or relocation of an existing fire station. Given that the Project Site is located within an urban area, each of the related projects identified in the area would likewise be developed within urbanized locations that fall within an acceptable distance from one or more existing fire stations. The Project and related projects also would generate revenues to the City's General Fund (in the form of property taxes, sales revenue, etc.) that could be applied toward the provision of new fire station facilities and related staffing, as deemed appropriate.³⁹ Cumulative increases in demand for fire protection services due to related projects would be identified and addressed through the City's annual programming and budgeting processes. LAFD resource needs would be identified and monies allocated according to the priorities at the time. Any requirement for a new fire station, or the expansion, consolidation, or relocation of an existing fire station would also be identified through this process, the impacts of which would be addressed accordingly. Furthermore, over time, LAFD would continue to monitor population growth and land development throughout the City and identify additional resource needs, including staffing, equipment, trucks and engines, ambulances, other

³⁹ *City of Los Angeles, Budget for the Fiscal Year 2017–18.*

special apparatuses, and possibly station expansions or new station construction, which may become necessary to achieve the required level of service.

LAFD has no known or proposed plans to expand fire facilities or construct new facilities in the Community Plan area. However, if a new fire station, or the expansion, consolidation, or relocation of an existing station was determined to be warranted by LAFD, such facilities: (1) would occur where allowed under the designated land use; (2) would be located on parcels that are infill opportunities on lots that are between 0.5 and 1 acre in size; and (3) could qualify for a categorical exemption or Mitigated Negative Declaration under CEQA Guidelines Section 15301 or 15332.⁴⁰ Therefore, development of a station at this scale is unlikely to result in significant impacts, and projects involving the construction or expansion of a fire station would be addressed independently pursuant to CEQA.

With regard to cumulative impacts on fire protection, consistent with *City of Hayward v. Board Trustees of California State University* (2015) 242 Cal.App.4th 833 ruling and the requirements stated in the California Constitution Article XIII, Section 35(a)(2) discussed in Subsection 3.b.(1) above, the obligation to provide adequate fire protection and emergency medical services is the responsibility of the City. Through the City's regular budgeting efforts, LAFD's resource needs, including staffing, equipment, trucks and engines, ambulances, other special apparatuses and possibly station expansions or new station construction, would be identified and allocated according to the priorities at the time. At this time, LAFD has not identified any new station construction in the area impacted by this Project either because of this Project or other projects in the service area. If LAFD determines that new facilities are necessary at some point in the future, as discussed above, such facilities would not be expected to result in significant impacts. Further analysis, including a specific location, would be speculative and beyond the scope of this document. As such, cumulative impacts on fire protection and emergency medical services would be less than significant.

Based on the above, the Project's contribution to cumulative impacts to fire protection and emergency medical services would not be cumulatively considerable. As such, cumulative impacts on fire protection and emergency medical services would be less than significant.

⁴⁰ Although an EIR was prepared for the construction of LAFD Fire Station No. 39, the EIR concluded there would be no significant impacts. See Notice of Determination for Van Nuys Fire Station 39.

5. Mitigation Measures

Project-level and cumulative impacts with regard to fire protection would be less than significant. Therefore, no mitigation measures are required.

6. Level of Significance After Mitigation

Project-level and cumulative impacts with regard to fire protection would be less than significant without mitigation.