## 2. FIRE PROTECTION

### ENVIRONMENTAL SETTING

#### **Fire Protection**

Fire prevention, fire suppression, and life safety services are provided throughout the City of Los Angeles by the Los Angeles Fire Department (LAFD), as governed by the Fire Protection and Prevention Plan (Plan), an element of the City's General Plan, as well as the Fire code section of the Los Angeles Municipal Code. The Plan and the Fire Code serve as guides to City Departments, government offices, developers, and the public for the construction, maintenance, and operation of fire protection facilities located within the City of Los Angeles. Policies and programs addressed in these documents include the following: fire station distribution and location, required fire flow (i.e. water supply), fire hydrant standards and locations, access provision, and emergency ambulance service.

#### **Fire Stations**

The project site would be served by three fire stations: Station No. 23, Station No. 69, and Station No. 19. In addition, back up support is provided through mutual aid agreements between the LAFD and jurisdictions neighboring the area. Fire Station No. 23 is located only 0.3 miles from the project site, at the intersection of Los Liones Drive and Sunset Boulevard. This station is a Paramedic Engine Company and has a staff of 4.

The City of Los Angeles Fire Code specifies maximum response distances allowed between specific sites and engine and truck companies, based upon land use and fire flow requirements. The Los Angeles Fire Code states that the maximum response distance from an engine company should be 1.5 miles.<sup>4</sup> The maximum response distance for fire stations based on a project's proposed land use is shown in Table IV.I-2. When response distances exceed these requirements, all structures must be equipped with automatic fire sprinkler systems and any other fire protection devices deemed necessary by the Fire Chief (e.g. fire signaling systems, fire extinguishers, smoke removal systems, etc.) The proposed project site is located approximately 0.3 miles from Station No. 23 and is within the Fire Code's maximum prescribed response distance.

Los Angeles Fire Code, Los Angeles Municipal Code (LAMC), Section 57.09.07.

Table IV.I–2
Maximum Response Distance (miles)

Land Use	Engine Company	Truck Company
Neighborhood Land Uses	1.5	2.0
<ul> <li>Low Density Residential/High Density Residential/Neighborhood</li> </ul>		
Regional Land Uses	1.0	1.5
Commercial Industrial/Commercial		
Commercial and Industrial Centers	0.75	1.0
High Density Commercial/High Density Industrial		
Source: City of Los Angeles Fire Code, Los Angeles Municipal Code (LAMC), Section 57.09.07.		

Response time relates directly to the physical linear travel distance (i.e., miles between a fire station and a site) and the Fire Department's ability to successfully navigate the given access ways and adjunct circulation system. Roadway congestion, intersection level of service, weather conditions, and construction traffic along the response route can increase response times.

#### Fire Flow

The adequacy of fire protection for a given area is based on required fire flow, response time from existing fire stations, and the LAFD's judgment of assessing the needs in a given area. The required fire flow is closely related to the type and size of the land use. The quantity of water necessary for fire protection varies with the type of development, life hazard, occupancy, and the degree of fire hazard. City-established fire flow requirements vary from 2,000 gallons per minute (gpm) in low-density residential areas, to 12,000 gpm in high-density commercial or industrial areas. In any instance, a minimum residual water pressure of 20 pounds per square inch (PSI) is to remain in the water system while the required gpm is flowing.<sup>5</sup> As determined by the LAFD, the overall fire flow requirement for the proposed project is 4,000 G.P.M. from four fire hydrants flowing simultaneously.<sup>6</sup>

The City of Los Angeles Department of Water and Power (DWP) currently provides fire flow for the proposed project. Fire flows are supplied by the same water mains as the domestic water system, including the lines located in local streets and major roadways (Please refer to Section IV.I.2 Water, for a complete discussion of water service infrastructure).

Los Angeles Fire Code, Los Angeles Municipal Code (LAMC), Section 57.09.06.

<sup>&</sup>lt;sup>6</sup> Correspondence from the City of Los Angeles Fire Department, Alfred B. Hernandez, Assistant Fire Marshal, June 6, 2002.

The project site is located in a Moderate Fire Hazard Severity Zone and the Mountain Fire District.<sup>7</sup> The climate of Southern California is classified as a Mediterranean type, where hot summer droughts are followed by winter season rainfall. The hot, dry summers subject vegetation to prolonged periods of moisture stress at times when wildfire is most likely. Seasonal weather changes introduce periods with distinctly different "fire weather" conditions. As the end of the summer, Santa Ana winds could exacerbate fire hazard levels in the project vicinity.

Slope steepness and the ruggedness of terrain influences the speed of fire spread and the fire-fighting accessibility and response times. Upslope fires move significantly faster than downslope fires because of an upslope "wind effect" which accelerates the spread of fire. As slope steepness increases, the ability to utilize fire truck and bulldozers to directly attack fires decreases.

## **ENVIRONMENTAL IMPACTS**

## Thresholds of Significance

According to the Los Angeles CEQA Thresholds Guide (1998), fire and emergency services impacts would be considered significant if existing available Fire Department station, personnel or equipment can not adequately meet the demand for fire and emergency services caused by the proposed project.

## **Project Impacts**

As discussed in Section IV.B, Traffic, the demolition, grading and construction phases of the proposed project would add construction employee vehicles and heavy trucks on the project area roadways, including Tramonto Drive which fronts the project site. Such activities could increase response times for emergency calls further uphill on Tramonto Drive and in the Castellammare area. These are considered to be potentially significant impacts that can be mitigated to less than significant levels via the implementation of the mitigation measures included in Section IV.B, Traffic, of the Draft EIR.

Implementation of the proposed project would increase the need for fire protection and emergency medical services in the project area due to the increased number of residents and visitors to the project site. The proposed project site is located 0.3 miles from the nearest fire station. Because this response distance is within City Fire Code requirements, there are no impacts with respect to distance criteria. However, the proposed project would incorporate a number of fire safety features in accordance with applicable City fire-safety code and ordinance requirements for construction, access, fire flows, and fire hydrants.

Los Angeles City Environmental and Public Facilities Maps, 1996, pages 12 and 13.

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Additionally, water service to the proposed project site for fire protection services would continue to be provided by the City of Los Angeles Department of Water and Power (LADWP). The existing water system would serve both domestic and firewater needs.

According to the LAFD, the existing staffing levels and facilities could accommodate the proposed project's increased demand for fire protection service. Therefore, impacts to fire protection services by the proposed project would be less than significant.

### **CUMULATIVE IMPACTS**

Implementation of the proposed project in conjunction with the related projects would further increase demands for fire and emergency services. The development of the proposed project, along with other cumulative development could result in the need for additional fire protection staff and equipment. However, the LAFD continually evaluates fire station placement and overall Department services for the entire City, as well as specific areas. Impacts created by new development would be reduced by the incorporation of mitigation measures as well as compliance with existing fire-safety code and ordinance requirements. In addition, the LAFD would monitor the need for fire services, and would propose appropriate service enhancements through the yearly budgetary process. Cumulative impacts related to fire protection service would be less than significant.

### MITIGATION MEASURES

The proposed project shall comply with all applicable State and local codes and ordinances, and the guidelines found in the Fire Protection and Fire Prevention Plan, as well as the Safety Plan, both of which are elements of the City of Los Angeles C.P.C 19708. Additionally, the following recommendations of the Fire Department relative to fire safety shall be incorporated into building plans, which includes the submittal of a plot plan for approval by the Fire Department either prior to the recordation of a final map or the approval of a building permit. The plot plan shall include the following minimum design features:

- Adequate off-site public and on-site private fire hydrants may be required. Their number and location to be determined after the Fire Department's review of the plot plan;
- Construction of a private roadway in the proposed development shall not exceed 15 percent in grade;
- Private development shall conform to the standard street dimensions shown on Department of Public Works Standard Plan D-22549;

• 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;

- Fire lanes, where required, and dead-ending streets shall terminate in a cul-de-sac or other approved turning area;
- No proposed development utilizing cluster, group, or condominium design of one or two family dwellings shall be more than 150 feet from the edge of the roadway of an improved street, access road, or designated fire lane;
- All access roads, including fire lanes, shall be maintained in an unobstructed manner, removal
  of obstructions shall be at the owner's expense. The entrance to all required fire lanes or
  required private driveways shall be posted with a sign no less than three square feet in area in
  accordance with Section 57.09.05 of the Los Angeles Municipal Code;
- Standard cut-corners will be used on all turns;
- 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, or exit of individual units;
- The entrance or exit of all ground apartment 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;
- Where access for a given development requires accommodation of Fire Department apparatus, overhead clearance shall not be less than 14 feet; and
- Where fire apparatus will be driven onto the road level surface of the subterranean parking structure, that structure shall be engineered to withstand a bearing pressure of 8,600 pounds per square foot.

# LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts on fire service would be less than significant.