K. PUBLIC SERVICES

1. FIRE

ENVIRONMENTAL SETTING

As shown in **Table 43: Fire Stations**, the Los Angeles Fire Department (LAFD) has fire stations at the following locations for initial response into the project area:

TABLE 43
FIRE STATIONS

Fire Station No.	Address	Services Available	Staff	Distance from Site
104	8349 Winnetka Ave Canoga Park CA 91306	Single Engine Company Paramedic Rescue Ambulance	6	1.5
103	18143 Parthenia St Northridge CA 91324	Single Engine Company	4	2.0
107	20225 Devonshire St Chatsworth CA 91311	Single Engine Company Paramedic Rescue Ambulance	6	2.2

SOURCE: Letter from William R. Bamattre, Fire Chief, LAFD, to Carrie Riordan, Planning Associates, Inc., July 25, 2002.

Fire stations are shown in **Figure 23: Public Facilities Map**. Currently intersections studied and identified in the **Section IV. M: Traffic** operate at a LOS E or F, which would impede fire response times. These intersections are listed in **Tables 61, 63, 65, 67, 73, 75, 77, and 79: Summary of Volume to Capacity Ratios and Levels of Service AM and PM Peak Hours**. The remaining intersections operate at a LOS of D or better and do not impede fire response times.

Fire service needs are analyzed by the LAFD on the basis of required fire-flows, minimum distance to fire stations, and the judgement of the LAFD on the need for fire protection services within the project area. Fire-flow is defined as the quantity of water needed for fire protection in a given area, normally measured in both gallons per minute (gpm) and duration of flow. Required fire-flow is defined as the rate of water flow measured in gpm and duration needed for fire-fighting purposes to confine a major fire to the buildings within a block or other group complex.

Figure 23: Public Facilities Map

THRESHOLDS OF SIGNIFICANCE

According to the City of Los Angeles CEQA Thresholds Guide, 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;
- fire service response time is not adequate, including when project implementation increases the number of intersections that operate at LOS E or F;
- when a project does not comply with all applicable LAFD code and ordinance requirements for construction, fire-flow, water mains, fire hydrants, and access; or
- when a project requires the addition of a new fire station or the expansion, consolidation or relocation of an existing facility in order to meet the demand for additional staff and equipment capabilities.

ENVIRONMENTAL IMPACTS

Project Site

Fire-flow requirements range from 2,000 gpm in residential areas to 12,000 gpm in high density commercial and industrial areas. A minimum residual water pressure of 20 pounds per square inch (psi) must remain in the water system with the required gpm flowing. The LAFD has determined that fire-flow for this Project has been set between 6,000 and 9,000 gpm from four to six fire hydrants flowing simultaneously.[68]

A hydraulic analysis was performed on the existing water distribution system in the vicinity of the proposed development to simulate additional demands at critical locations in the system.[69] It was assumed that additional water and pressure demands would be required at the midpoint of each block on Prairie Street, Nordhoff Street, and Shirley Avenue. These proposed demands were run in pairs to indicate fire services running simultaneously or public fire hydrant demands. The hydraulic analysis indicated that:

- the existing water distribution system is capable of handling an additional 4,000 gpm flow at a minimum pressure of 25 psi from Shirley Avenue, between

[68] Letter from William R. Bamattre, Fire Chief, LAFD, to Carrie Riordan, Planning Associates, Inc., July 25, 2002.

[69] Letter from Gail Glauz, Engineer of West Valley District Water Distribution Engineering, to Carrie Riordan, Planning Associates, Inc., September 24, 2002.

Nordhoff Street and Plummer Street, and from Nordhoff Street, between Corbin Avenue and Shirley Avenue. However, compliance with Fire and Building Code requirements at the time of development may impact the available flow

or

- the existing water distribution system is capable of handling an additional 2,500 gpm flow at a minimum pressure of 25 psi from Prairie Street, between Corbin Avenue and Shirley Avenue and an additional 5,000 gpm flow at a minimum pressure of 25 psi from Nordhoff Street, between Corbin Avenue and Shirley Avenue. However, compliance with Fire and Building Code requirements at the time of development may impact the available flow.

Based on the required fire-flow of 6,000 to 9,000 gpm, the first due engine company should be within 1.0 miles of the site and the first due truck company should be within 1.5 miles of the site for industrial properties.[70] Based on response distance criteria, fire protection for the Project Site would be considered inadequate. However, the LAFD has not indicated that a new fire station or expansion of an existing station would be necessary. With incorporation of the following mitigation measures determined by the LAFD, any potential impacts will be mitigated to a less than significant level.

The LAFD has indicated that intersections operating with a Level of Service (LOS) of E or F could have a significant impact on fire protection services. **Column [1] of Tables 61, 63, 65, and 67: Summary of Volume to Capacity Ratios and Levels of Service AM and PM Peak Hours** identifies those intersections existing with a LOS of E or F. **Column [4] of Tables 61, 63, 65, and 67: Summary of Volume to Capacity Ratios and Levels of Service AM and PM Peak Hours** identifies the post-Project LOS at each of the study intersections. **Column [5]** of **Tables 61, 63, 65, and 67: Summary of Volume to Capacity Ratios and Levels of Service AM and PM Peak Hours** show the intersection condition after mitigation incorporation as a result of the proposed Project at the Project Site. As shown in these tables, the proposed Project at the Project Site does not decrease the LOS at any of the intersections identified as having a pre-Project LOS of E or F. Additionally, the number of intersections identified as having a LOS of E or F does not increase as a result of the proposed Project at the Project Site. Therefore, the proposed Project at the Project Site will not result in a significant fire protection services impact as a result of intersection conditions in the project area.

[70] L.A. CEQA Thresholds Guide, Page J2.2. Assumes Regional Land Uses-Commercial Industrial/Commercial.

Add Area

Due to the proximity of the Add Area to the Project Site, fire service needs and fire-flow requirements are similar to those discussed in the Project Site discussion. Refer to text above.

Pursuant to the request of the LADCP, the Add Area north of Prairie Street has been included in the environmental analysis of the proposed Project at the Project Site. The traffic study conducted for the proposed Project analyzed full build out of the proposed Project which includes development scenarios at both the Project Site and Add Area. The information presented in this section does not include LOS for development of the Add Area individually but rather data for full build (Project Site and Add Area).

The LAFD has indicated that intersections operating with a Level of Service (LOS) of E or F could have a significant impact on fire protection services for full build out of the Project. **Column [1] of Tables 73, 75, 77, and 79: Summary of Volume to Capacity Ratios and Levels of Service AM and PM Peak Hours** identifies those intersections existing with a LOS of E or F. **Column [4] of Tables 73, 75, 77, and 79: Summary of Volume to Capacity Ratios and Levels of Service AM and PM Peak Hours** identifies the post-Project LOS at each of the study intersections. **Column [5] of Tables 73, 75, 77, and 79: Summary of Volume to Capacity Ratios and Levels of Service AM and PM Peak Hours** show the intersection conditions after mitigation incorporation as a result of full build out of the Project. As shown in these tables, full build out of the Project does not decrease the LOS at any of the intersections identified as having a pre-Project LOS of E or F. Additionally, the number of intersections identified as having a LOS of E or F does not increase as a result of full Project build out. Therefore, full Project build out will result in a less than significant impact to fire protection services as a result of intersection conditions in the project area.

MITIGATION MEASURES

Environmental impacts may result from project implementation due to the location of the Project Site and Add Area in an area having marginal fire protection facilities. However, any potential impacts resulting from the proposed Project at the Project Site and development scenarios analyzed for the Add Area would be reduced to a less than significant level by the following measures:

41. Adequate off-site public and on-site private fire hydrants may be required, their number and location to be determined after the LAFD reviews the plot plan. (O, C, R)

42. Private streets and entry gates will be built to City standards to the satisfaction of the City Engineer and the LAFD. (O, C, R)

43. In order to mitigate the inadequacy of fire protection in travel distance, sprinkler systems will be required throughout any structure to be built, in accordance with the Los Angeles Municipal Code, Section 57.09.07. (O, C, R)

44. Construction of public or private roadways in the proposed development shall not exceed 15 percent in grade. (O, C, R)

45. Private development shall conform to the standard street dimensions shown on DPW Standard Plan D-22549. (O, C, R)

46. Standard cut-corners will be used on all turns. (O, C, R)

47. The width of private roadways for general access use and fire lanes shall not be less than 20 feet clear to the sky. (O, C, R)

48. 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 secondary access shall be required. (O, C, R)

49. 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. (R)

50. Fire lane width shall not be less than 20 feet. When a fire lane must accommodate the operation of LAFD aerial ladder apparatus or where fire hydrants are installed, those portions shall not be less than 28 feet in width. (O, C, R)

51. Where aboveground 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. (R)

52. Where access for a given development requires accommodation of LAFD apparatus, minimum outside radius of the paved surface shall be 35 feet. An additional six feet of clear space must be maintained beyond the outside radius to a vertical point 13 feet 6 inches above the paved surface of the roadway. (O, C, R)

53. 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. (O, C, R)

54. Where access for a given development requires accommodation of LAFD apparatus, overhead clearance shall not be less than 14 feet. (O, C, R)

55. Access for LAFD apparatus and personnel to and into all structures shall be required. (O, C, R)

56. The LAFD may require additional vehicular access where buildings exceed 28 feet in height. (O, C, R)

57. 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. (O, C, R)

LEVEL OF IMPACT AFTER MITIGATION

Based on the first due engine company distance and response time, the proposed Project at the Project Site and development scenarios analyzed for the Add Area would be considered to be inadequately served. However, implementation of the proposed mitigation measures wold result in the maximum feasible fire protection and access for emergency vehicles. Any potential fire protection service impacts would be reduced to a less than significant level.

CUMULATIVE IMPACTS

Related Projects

Related projects in the immediate area may result in the need for increased staff at existing fire facilities, additional fire protection facilities, or relocation of present fire protection facilities which may produce some area-wide impacts. As with the proposed Project however, related projects would be subject to individual review and approval by the LAFD.

Proposed Project, Add Area, and Related Projects

As discussed above, development of the proposed Project at the Project Site and the development scenarios analyzed for the Add Area will result in a less than significant impact to fire protection services. Related project development in the area may result in the need for increased staff at existing fire protection facilities, additional fire protection facilities, or relocation of present fire facilities, which may produce some area-wide cumulative impacts. However, as with the proposed Project and development scenarios analyzed, related projects would be subject to individual review and approval by the LAFD. Therefore, a significant cumulative impact to fire protection services is not anticipated.