

APPENDIX D

South Placer Fire Protection District 6900 Eureka Road, Granite Bay CA. 95746 (916) 791-7059

The following are general requirements of the South Placer Fire Protection District for new commercial building sites. These comments are for site plans only. Plans submitted for approval shall reflect all requirements that apply. All of the following comments shall be printed on a comment sheet attached to the plans submitted for approval. Prior to final approval, all applicable fees must be paid.

Commercial Building Site Infrastructure

Fire Safety During Construction, Alteration or Demolition of a Building

Buildings undergoing construction, alteration or demolition shall be in accordance with **Chapter 33** of the most current California Fire Code.

Fire Alarm System

All occupancies except Group R, Division 3 and Group U occupancies shall have an approved automatic fire alarm system installed when the occupancy / building has 1,500 square feet or more of total floor area unless other sections of the CBC/CFC or California State Fire Marshals regulations are more restrictive, then the more restrictive shall apply. Fire alarm systems shall be in accordance with Section 907 of the California Fire Code or the current edition of NFPA 72.

Additionally, all A, E, H, I and M occupancies shall have an automatic smoke / heat detection system installed in addition to any other system(s) required by this code, when required by the local authority having jurisdiction. Where additions increase the total size of the building to 1,500 square feet or more, the addition and the existing occupancy / building shall be provided with an approved automatic smoke / heat detection system.

Fire Control Room

An approved fire control room shall be provided for all buildings protected by an automatic fire extinguishing system. Said room shall contain all system control valves, fire alarm control panels and other fire equipment required by the fire district. Fire Control rooms shall be located within the building at a location approved by the fire district, and shall be provided with a means to access the room directly from the exterior. Durable signage shall be provided on the exterior side of the access door to identify the fire control room. Minimum dimensions of the fire control room shall be five feet by seven feet; provided with a door with a clear width of not less than 32 inches and height of not less than 80 inches. A durable sign shall be affixed to the exterior of the door with the words "FIRE CONTROL ROOM" in letters not less than 3 inches in height. A key box complying with Knox Box shall be installed adjacent to the door.

Fire Sprinkler System

All occupancies except Group U occupancies shall have an approved automatic fire sprinkler system installed when the occupancy / building has 3,600 square feet or more of total floor area unless other sections of the CFC or California State Fire Marshals regulations, and / or local fire district ordinances applicable to a project are more restrictive, then the more restrictive shall apply. Where additions increase the total size of the building to 3,600 square feet or more, the addition and the existing occupancy / building shall be provided with an approved automatic fire sprinkler system.

Bridges

Bridges designed for major ingress/egress roads serving subdivisions or used as part of a fire apparatus access road shall be constructed and designed to meet standard, AASHTO HB-17. Bridges shall be no narrower than the driving portion of the road serving each end. The bridge or culvert crossing shall be designed for a live load of a minimum of 70,000 pounds gross vehicle weight. Vehicle load limits shall be posted at both entrances to bridges and culvert crossings.

Building Access

Access roadways shall extend to within 150 feet of all portions of the exterior walls of the first story of any building.

APPENDIX D

Dead End Access Roads

Dead-end fire apparatus access roads more than 150 feet in length shall be provided with an approved turnaround for fire apparatus. (See Attached Details)

Gate Entrances

Gate entrances shall be at least two feet wider than the width of the traffic lane serving that gate. All gates providing access from a road to a driveway or private road shall be located at least 30 feet from the roadway and open to allow a vehicle to stop without obstructing traffic on that road. Gates shall be accessible to the fire district by approved electric key switch; strobe entry, person gate and standard key pad access code. Gates shall be provided with an emergency power source that will open the gates in the event of a power failure. During a power emergency, gates shall automatically open and remain open during the period when the primary source of power is not available.

Electronically opened access gates located across fire apparatus access roads shall be provided with an approved strobe switch access system that interfaces with the TOMAR Model 780-1228-PRE or 3M OPTICOM traffic preemption optical signal emitter provided on all District emergency vehicles. An acceptance test of the emergency vehicle strobe switch system shall be witnessed by the fire department prior to final approval. Gates shall be coded to allow a minimum of fifteen (15) minutes of open access time when activated by the strobe entry device.

All electronically opened perimeter access gates located across fire apparatus access roads shall be provided with a vehicle detection loop on the out-bound drive aisle from the site. The vehicle detection loop shall be placed a minimum of ten-feet from the gate to permit fire apparatus to activate the detection loop without interference from the gate. The vehicle detection loop shall be provided with a 30-second delay prior to closing the gate.

Hydrants

Hydrants shall be wet barrel type with two 2-½ inch discharges and one 4-½ inch discharge, with individual valves for each discharge. (RICH 960 or equivalent). Two-way blue reflective pavement markers shall be placed in the roadway (eight inches from the center line on the hydrant side) at each hydrant location. The area around the hydrant will be kept clear of obstructions including fences, trees and shrubs so as to provide for clear access to the hydrant from the roadway. The center of the lowest discharge shall be a minimum of 18 inches and a maximum of 28 inches off the ground. Hydrant setback location shall meet the appropriate water agency standards, but shall not be greater than 6' from the face of curb or edge of pavement if no curb is present. Water supply and hydrants to be provided before any building construction is allowed. Final acceptance of the water supply system shall be granted only after testing and inspection by the fire district. Water supply system testing and inspections will only be conducted with a written letter or verbal approval from the water district that provides service to the project. (See Attached Details)

Hydrant Spacing

Hydrants shall be spaced a maximum of 300 feet apart. One hydrant shall be placed within 40 feet of each fire department connection when the building is protected by an automatic fire sprinkler system. Ballards shall be provided to protect appliances from vehicle damage when necessary.

Parking

There shall be no parking on fire access roadways less than 32 ft in width or in required fire apparatus turnaround areas. Parking will only be allowed in designated parking areas. Parking will be allowed on one side of the road on roadways 32 feet to 38 feet. On roadways, over 38 feet, parking will be allowed on both sides. When the roadway width restricts parking, 'NO PARKING FIRE LANE' signs shall be posted every 200 ft and curbs to be painted red with 'NO PARKING FIRE LANE' stenciled on them every 25 feet. (See Attached Details)

Roadways and Access Routes

APPENDIX D

The minimum number of access roads serving new commercial buildings shall be determined by the size of the building, the planned use for the building and the fire protection proposed for the building.

Roadway Grades

The grade for all private lanes and driveways over 16% shall be approved by the Fire Marshal. Emergency Fire access roads and response routes 12% or more shall be approved by the Fire Marshal.

Roadway Radius

No roadway shall have a horizontal outside radius curvature of less than 50 feet or an inside radius curvature of more than 30 feet. (See Attached Details)

Road Surface

Driveway, roadway and emergency access roadway surfaces shall be paved, all weather-driving surface capable of supporting a 70,000 lb load.

Roadway Turnarounds

Turnarounds are required on driveways and dead end roads as specified. Cul-de-sac's radius shall be 42 feet of driving surface. Radius is measured from face of curb or flow line of rolled curb. If a hammerhead/T is used, the top of the (T) shall be a minimum of 80 feet in length. (See Attached Details)

Road Width

Driveways, thruways, entrances and fire access roads shall be 26 feet in width for commercial buildings 2 stories or less in height and 28 feet for commercial building 3 stories or more in height where aerial apparatus is required. Vertical clearance shall be 15 feet for the width of the road. For the purpose of this section, roadway width shall mean driving surface to face of curb or flow line of rolled curb. Emergency access roadways shall be marked with approved signs stating 'EMERGENCY FIRE ACCESS ROAD'. All roadways and access roads shall be completed before any building construction. (See Attached Details)

Water Supply

On site water supply for firefighting shall be as follows for new commercial buildings: The minimum number of fire hydrants and amount of available water for commercial buildings shall be determined by the size of the building, the planned use for the building and the fire protection proposed for the building. Fire flow and the number of hydrants for new commercial buildings shall be no less than those amounts specified in Appendix B, Section B105.1 of the 2013 California Fire Code. All proposed water supplies shall come from a reliable source such as a fixed underground water distribution system or a static water system equaling or exceeding the National Fire Protection Association (NFPA) Standard 1142, "Standard on Water Supplies for Suburban and Rural Fire Fighting". (A reduction in fire flow may be allowed when the building is provided with an approved automatic sprinkler system, but in no case shall the fire flow be less than 1,500 gallons per minute at 20 pounds residual pressure). THE FIRE FLOW FOR THE PROPOSED BUILDING SHALL BE DETERMINED BY THE FIRE DISTRICT AND INDICATED ON THE FINAL APPROVED PLANS.

Final Plans Accepted

The final plans shall be approved only when stamped and/or signed by authorized the South Placer Fire Protection District personnel.

Electronic Copy

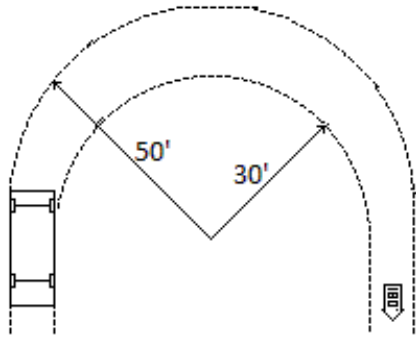
Upon approval of the final set of plans, an electronic copy of the entire set of plans will be submitted in an approved CAD format.

Commercial Building Final Acceptance

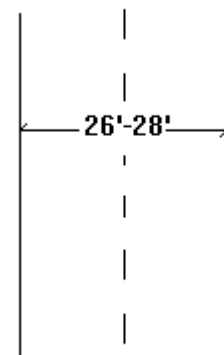
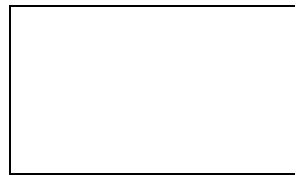
Final acceptance of the project is subject to inspection and testing from the South Placer Fire Protection District. 72-hour notice required previous to inspection and testing.

APPENDIX D

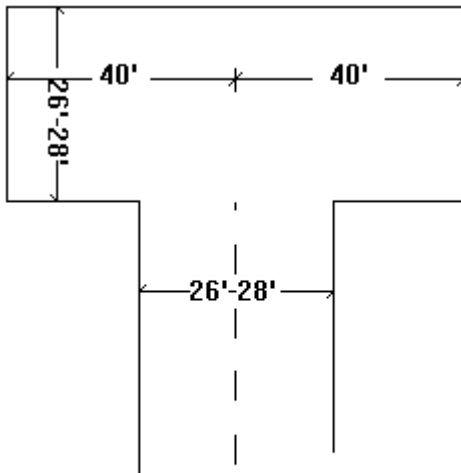
Attached Details Not Drawn To Scale:



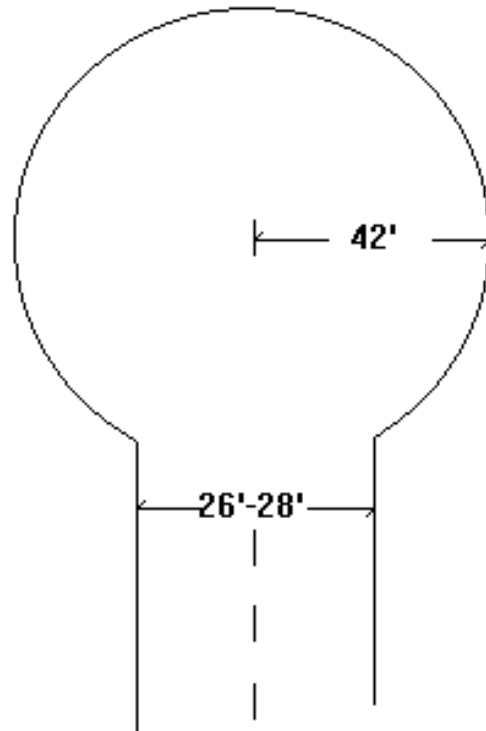
50' Outside; 30' Inside
Turning Radius



Commerical Building
Access Road

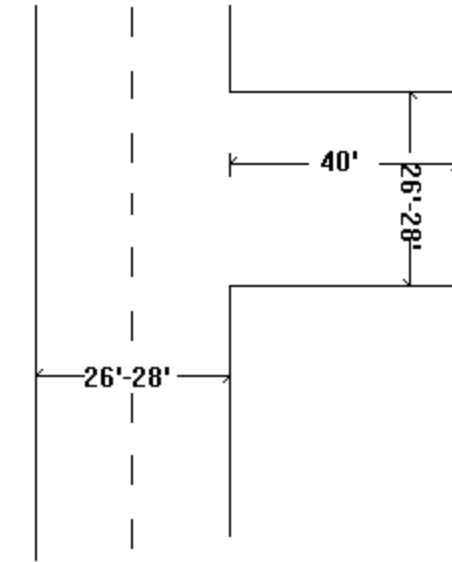


80' Hammerhead
Turnaround
Commerical Roadway

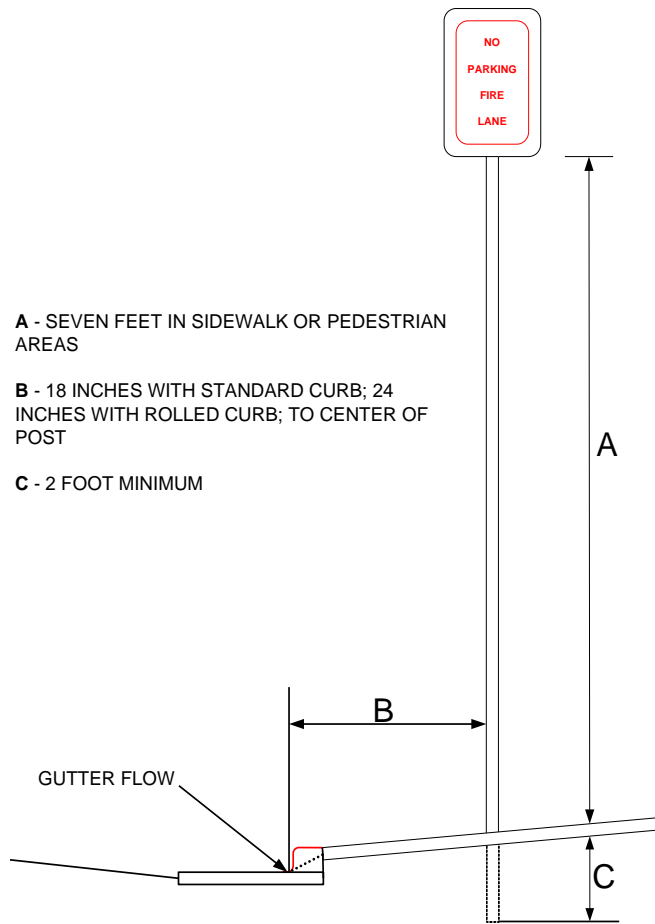


Turnaround

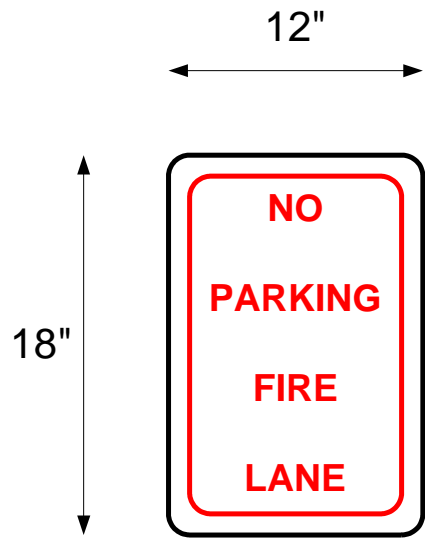
APPENDIX D



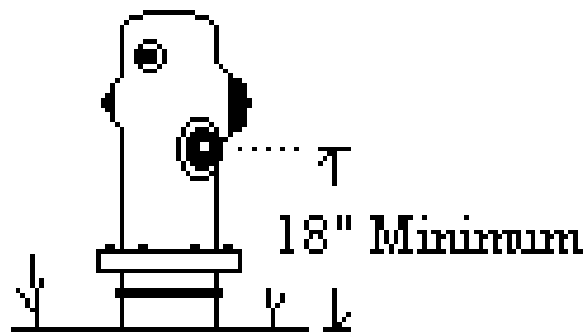
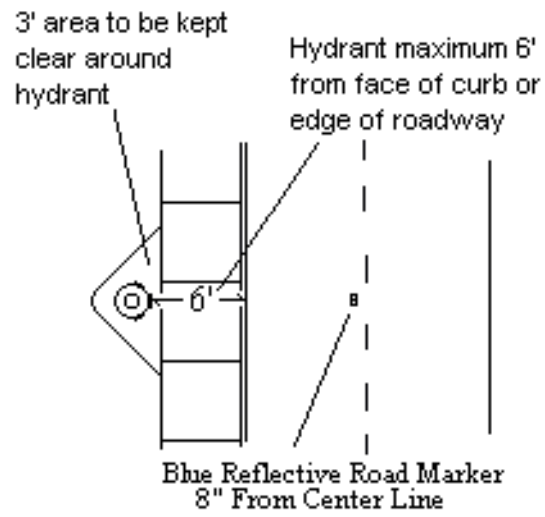
Turnaround
Commercial Roadway



APPENDIX D



APPENDIX D



APPENDIX D

