

## APPENDIX C

### 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 residential homes and home sites. These comments are for residential homes and residential 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.

#### **Residential Civil and Building Site:**

**Address numbers.** All new and existing buildings shall place and maintain approved numbers or address identification on the buildings so as to be plainly visible and legible from the street or road fronting the property. Approved numbers or address identification shall be placed prior to occupancy on all new buildings. Said numbers shall contrast with their background and shall be visible at all hours of the day and night by way of internal or external illumination. Numbers shall be a minimum of 4 inches high with a minimum stroke width of .5 inch. External source illumination shall have an intensity of not less than 5.0 foot-candles.

**Residential signage.** The address of a residence shall be posted and visible from the access roadway fronting the property. Whenever the numbers on the building will not be clearly visible from the access roadway, the numbers shall be placed at the access roadway and the driveway. Address numbers shall be clearly visible from both directions of travel on the roadway fronting the property. Said numbers shall be a minimum of 4 inches in height, with 3/8-inch stroke, reflectorized, and contrast with their background.

**Buildings under construction.** Approved numbers or addresses shall be placed at each fire access road entry into and on each building within construction sites. *Numbers shall be visible from at least 100 feet.*

#### **Driveways**

Driveways for access to one- and two-family dwellings, shall conform to the following criteria as applicable:

1. Driveways serving one parcel with no more than five structures shall be a minimum of twelve (12) feet in width. The chief may require up to a twenty (20) foot wide driveway when more than five structures exist.
2. Roadways serving more than one parcel, but less than five parcels, shall be a minimum twenty (20) feet in width. Roadways serving five parcels or more shall be no less than 24 feet in width.
3. Vertical clearance shall be a minimum of fifteen (15) feet.
4. When the driveway exceeds 150 feet in length, provide a turnout at the midpoint. For driveways not exceeding 400 feet in length, the turnout may be omitted if full sight distance is maintained. If the driveway exceeds 800 feet in length, turnouts shall be no more than 400 feet apart.
5. When a driveway exceeds 300 feet in length, a turnaround shall be provided no greater than 50 feet from the structure.
6. The driveway must be provided with an all-weather surface capable of supporting a 75,000 lb. vehicle loading. When the road grade exceeds ten (10) percent, the road shall be surfaced with asphalt or concrete.

#### **Roadway and Driveway Width**

Roadway width shall mean driving surface to face of curb or flow line of rolled gutter. All roadways and access roads shall be completed before any building construction.

#### **Driveway 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 75,000 pounds gross vehicle weight. Vehicle load limits shall be posted at both entrances to bridges and culvert crossings. Bridges serving a single-family dwelling only shall be designed and stamped by a Civil Engineer and must be capable of supporting a minimum of 75,000lbs.

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### **Driveway Grades**

In order to accommodate driveway grades in excess of sixteen (16) percent, the driveway shall be designed to have a finished surface of grooved concrete or rough asphalt to hold a 45,000 lb. traction load. The concrete grooves shall be ¼ inch wide by ¼ inch deep and ¾ inch on center. The road design shall be certified by a registered engineer and approved by the chief.

### **Driveway Radius**

The inside turning radius for an access road shall be 30 feet or greater. The outside turning radius for an access road shall be 50 feet or greater. (See Attached Details)

### **Driveway Surface**

Driveway surfaces shall be paved, concrete, or similar all-weather driving surface, capable of supporting a 75,000lbs load. If crushed rock will be utilized for the driveway a letter from a Geo-Technical Engineer shall be provided to the Fire District stating that the rock surface is compacted to a point where it is able to support 75,000lbs prior to a Fire Final being issued.

### **Driveway Turnarounds**

Turnarounds are required on driveways and dead-end roads as specified. Cul-de-sacs radius shall be 42 feet of driving surface, 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)

### **Gated Entrances – Residential Lot**

Gate entrances on driveways to individual lots shall provide a clear open width at least two feet wider than the width of the driveway. Property owner should contact the Fire Prevention Division to determine the best option of providing Fire District access

Electronically opened access gates shall be provided at all electrically powered gates with a Model #3502 electronic override switch manufactured by the KNOX Company of Irvine, California. Said switch shall interface with the keypad at the entry gate to provide fire apparatus access to the site. An acceptance test of the Knox access system shall be witnessed by the fire department prior to final approval of the project.

### **Dry and Dead Vegetation Abatement**

Open areas around residential homes shall be maintained in a fire safe condition. The homeowner shall be responsible to remove dead and dry vegetation at least 100 feet or to the lot line from all non-fire resistive structures as per CFC, Sections 304.1.1; 304.1.2 and California Public Resource Code 4291. This includes all homes and outbuildings.

### **Residential Sprinkler Systems:**

**All proposed one- and two-family homes will require a residential sprinkler fire system and Fire Marshal site plan review.** This standard is pursuant to the most recent adopted editions of the California Residential Code, and the California Fire Code. The design and installation shall meet both the latest adopted edition of NFPA Standard 13-D and South Placer Fire District Amendments as well. Rooms with ceiling heights over 24 feet or more than 600 square feet may require a 3 or 4 head calculation based on the number of heads that may activate during a fire (NFPA 13D, 2016 Edition, Section 10.2.4 and A10.2.4) One pilot head will be required in all attic areas, usually installed near the HVAC if installed in the attic space.

All hydraulic calculations for the Fire Sprinkler systems shall include a 10% safety factor

### **Remodel/Addition sprinkler requirements**

An automatic sprinkler system shall be provided throughout an existing R-3 occupancy wherein the addition of a new fire area exceeds **fifty percent** of the existing fire area of the original structure. For purposes of this section “Fire Area” is defined as the aggregate floor area bounded by exterior walls as measured from the interior wall surface of the exterior walls

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**Detached Garages.** Automatic sprinkler protection shall be provided in detached garages under the following circumstances:

1. An exterior wall of the garage is closer than six (6) feet from an exterior wall of an adjacent sprinklered Group R occupancy.
2. A roof projection of the garage is closer than four (4) feet from a roof projection of an adjacent sprinklered Group R occupancy.

### **San Juan Water District:**

Automatic sprinkler systems installed within the San Juan Water District jurisdiction, after January 1, 2017, in one- and two-family dwellings; Group R-3; and townhomes shall be designed using an approved Modified Passive Purge System design.

*Exception: When an automatic fire sprinkler system is installed with an approved backflow assembly valve to protect the public water supply source.*

**Alarms in Group R3 Occupancies.** Automatic sprinkler systems in R-3 occupancies shall be equipped with a water flow switch, an exterior horn-strobe located on the address side of the structure, and interconnection to the smoke detector alarm circuit.

### **Fire Flow Requirements - Residential**

<b>Fire Area</b> <i>(square feet)</i>	<b>Fire Flow</b> <i>(gallons per minute)</i>
<b>0 - 3,600</b>	<b>1,500</b>
3,601 - 4,800	1,750
4,801 - 6,200	2,000
6,201 - 7,700	2,250
7,701 - 9,400	2,500
9,401 - 11,300	2,750
11,301 - 13,400	3,000
13,401 - 15,600	3,250

*Note: Fire Flow may be reduced by up to 50% when provided with an approved automatic fire sprinkler system providing that reduced flow is not less than 1500 gallons per minute (GPM).*

### **Standpipe**

Proposed homes that do not meet California Fire Code, Section 503.1.1 standard may be required to install an underground Standpipe. Underground installation shall meet the latest edition of NFPA 24 standards.

### **Water Supply**

On site water supply for firefighting shall be as follows for one- and two-family dwellings: For new subdivisions when more than four parcels are created the minimum fire flow, through approved fire hydrants, shall be 1,500 gallons per minute at 20 pounds residual pressure. Fire-flow and flow duration for dwellings having a fire-flow calculation area in excess of 3600 square feet (344.5 sq. m.) shall not be less than that specified in Table B105.1(2). 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,

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“Standard on Water Supplies for Suburban and Rural Fire Fighting”. On site water supply for firefighting is not required for lot splits or minor subdivisions of 4 or less.

*Exception: A reduction in required fire flow of up to 50 percent, as approved by the fire chief, is allowed when the building is provided with an approved automatic fire sprinkler system and the reduced flow is not less than 1500 gallons per minute.*

### **Final Plans Accepted:**

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

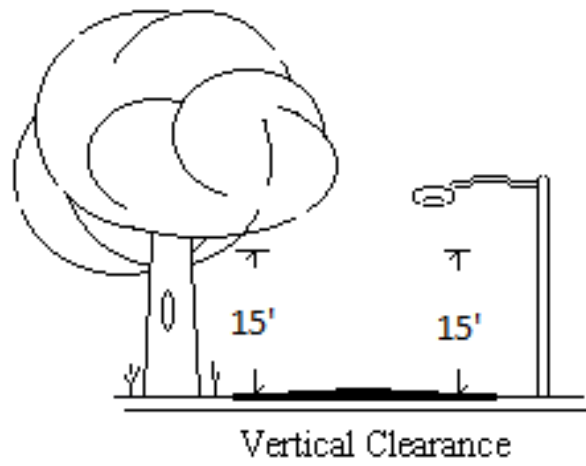
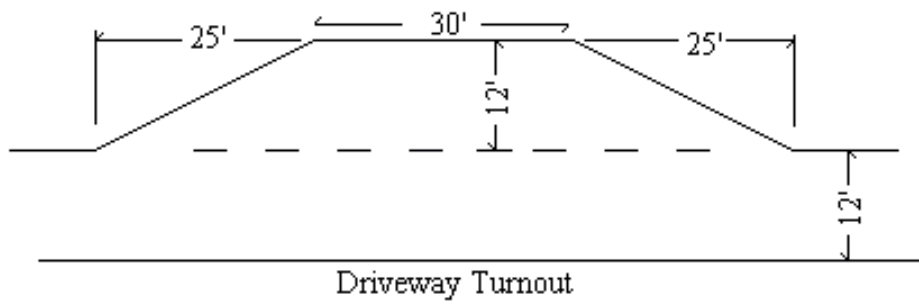
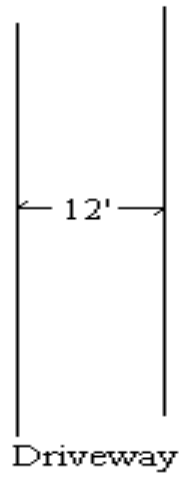
### **Residential Home Final Acceptance:**

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

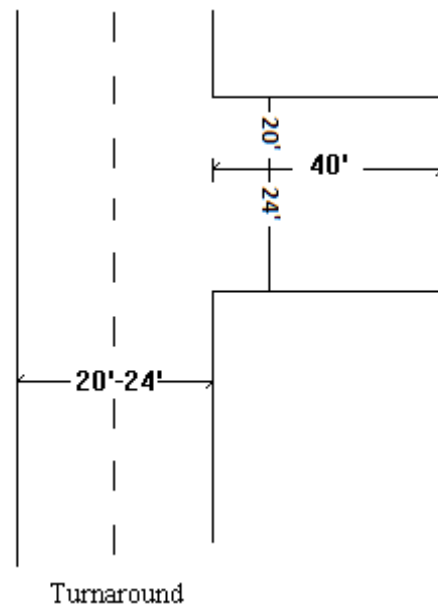
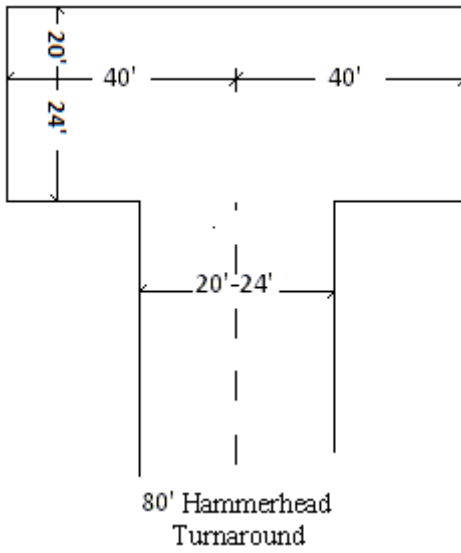
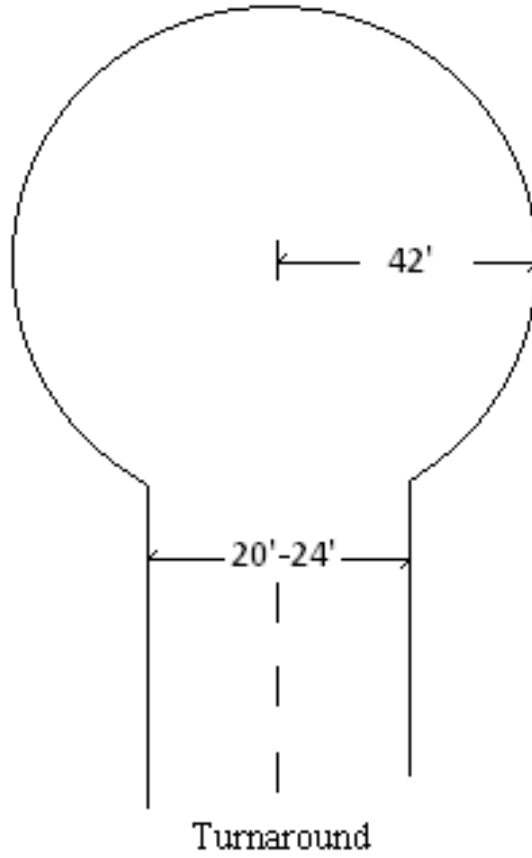
*Note: See the South Placer Fire Local Ordinance for greater detail*

**Note: Attached details on the following pages are not drawn to scale**

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