ORANGE COUNTY FIRE AUTHORITY

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Fire Safe Development in State Responsibility Areas

Guideline B-09a

Fire Safe Development in State Responsibility Areas

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Fire Safe Development in State Responsibility Areas

PURPOSE

This Guideline applies to new, remodeled, reconstructed, or relocated residential or commercial structures and developments and other facilities *located within State Responsibility Area (SRA) lands* for which emergency firefighting response or evacuation may be necessary.

Section 4290 of the Public Resources Code requires the Board of Forestry and Fire Protection to "adopt regulations implementing minimum fire safety standards related to defensible spaces which are applicable to state responsibility area lands under the authority of the department." This statue is further clarified and made specific in regulation in Title 14, the Natural Resources Division of the California Code of Regulations.

In some cases, state regulations governing development within state responsibility areas (SRA) in Title 14 are more stringent than local standards enforced by OCFA based on the California Fire Code. In such cases, the more stringent state regulation would take precedence. Conversely, where the local regulation is more stringent and has been certified by the Board of Forestry and Fire Protection, it would take precedence over the state regulation.

Guideline B-09a is intended to assist the applicant in attaining compliance with both local and statewide requirements for projects within SRA land and is intended to be used *in conjunction with and not in place of* Guideline B-09. The text of Title 14 pertaining to access and water requirements for fire safe development has been reproduced in this Guideline and, where relevant, comments have been provided in a box after each Title 14 requirement. The comments may direct you to a more stringent local requirement where conflicting requirements exist, direct you to comply with a combination of state and local requirements where requirements are compatible or supplementary, or refer you to other codes or standards for additional guidance.

It is incumbent upon the developer and owner, and his/her agents and representatives, to ensure that projects comply with the requirements of all Authorities Having Jurisdiction. Nothing in this Guideline or Guideline B-09 is intended to abrogate the authority of CAL FIRE to enforce state regulations independently from or in addition to local design standards.

CALIFORNIA BOARD OF FORESTRY AND FIRE PROTECTION

SRA FIRE SAFE REGULATIONS

As of January 1, 2016
California Code of Regulations
Title 14 Natural Resources
Division 1.5 Department of Forestry
Chapter 7 - Fire Protection
Subchapter 2 SRA Fire Safe Regulations
Article 1 | Article 2 | Article 3 | Article 4 | Article 5 | Index

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NOTE: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

History

1. New sections filed 5/30/91; operative 5/30/91 pursuant to Government Code section 11346.2(d) (Register 91, No.27)
2. Amendments filed 1-31-2013; operative 4-1-2013 (Register 2013, No. 5)
3. Amendments filed 4-27-2015; operative 1-1-2016 (Register 2015, No. 18)

ARTICLE 1. ADMINISTRATION

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1270.00. Title

These regulations shall be known as “SRA Fire Safe Regulations,” and shall constitute the basic wildland fire protection standards of the California Board of Forestry.

1270.01. Purpose

These regulations have been prepared and adopted for the purpose of establishing minimum wildfire protection standards in conjunction with building, construction and development in SRA. A local jurisdiction may petition the Board for certification pursuant to section 1270.03. Where Board certification has not been granted, these regulations shall become effective September 1, 1991. The future design and construction of structures, subdivisions and developments in State Responsibility Area (SRA) shall provide for basic emergency access and perimeter wildfire protection measures as specified in the following articles. These measures shall provide for emergency access; signing and building numbering; private water supply reserves for emergency fire use;

and vegetation modification. The fire protection standards which follow shall specify the minimums for such measures.

1270.02. Scope

(a) These regulations shall apply to:

(1) the perimeters and access to all residential, commercial, and industrial building construction within SRA approved after January 1, 1991 except as set forth below in subsection b.);

(2) all tentative and parcel maps or other developments approved after January 1, 1991; and

(3) applications for building permits on a parcel approved in a pre-1991 parcel or tentative map to the extent that conditions relating to the perimeters and access to the buildings were not imposed as part of the approval of the parcel or tentative map.

(b) These regulations do not apply where an application for a building permit is filed after January 1, 1991 for building construction on a parcel that was formed from a parcel map or tentative map (if the final map for the tentative map is approved within the time prescribed by the local ordinance) approved prior to January 1, 1991, to the extent that conditions relating to the perimeters and access to the buildings were imposed by the parcel map or final tentative map approved prior to January 1, 1991.

(c) Affected activities include, but are not limited to:

(1) permitting or approval of new parcels, excluding lot line adjustments as specified in Government Code (GC) section 66412(d),

(2) application for a building permit for new construction, not relating to an existing structure,

(3) application for a use permit,

(4) the siting of manufactured homes (manufactured homes are as defined by the National Fire Protection Association, National Fire Code, section 501A, Standard for Fire Safety Criteria for Manufactured Home Installations, Sites and Communities, chapter 1, section 1-2, Definitions, page 4, 1987 edition and Health and Safety Code sections 18007, 18008, and 19971).

(5) road construction, including construction of a road that does not currently exist, or extension of an existing road.

(d) EXEMPTION: Roads used solely for agricultural or mining use and roads used solely for the management and harvesting of wood products.

1270.03. Local Ordinances

Nothing contained in these regulations shall be considered as abrogating the provisions of any ordinance, rule or regulation of any state or local jurisdiction providing such ordinance, rule, regulation or general plan element is equal to or more stringent than these minimum standards. The Board may certify local ordinances as equaling or exceeding these regulations when they provide the same practical effect. The Board's certification of local ordinances pursuant to this section is rendered invalid when previously certified ordinances are subsequently amended by local jurisdictions without Board re-certification of the amended ordinances. The Board's regulations supersede the

amended local ordinance(s) when the amended local ordinance(s) are not re-certified by the Board. Amendments made by local jurisdictions to previously certified ordinances shall be re-certified as described in 14 CCR §§ 1270.01 and 1270.03.

1270.04. Provisions for Application of these Regulations

This subchapter shall be applied as follows:

(a) local jurisdictions shall provide the Director with notice of applications for building permits, tentative parcel maps, tentative maps, and use permits for construction or development within SRA.

(b) the Director may review and make fire protection recommendations on applicable construction or development or maps provided by the local jurisdiction.

(c) the local jurisdiction shall ensure that the applicable sections of this subchapter become a condition of approval of any applicable construction of development permit or map.

1270.05. Inspection Authority

(a) Inspection shall be made pursuant to section 1270.06 by:

(1) the Director, or

(2) local jurisdictions that have assumed state fire protection responsibility on SRA lands, or

(3) local jurisdictions where these regulations have been incorporated verbatim into that jurisdiction's
building permit or subdivision approval process and the inspection duties have been formally delegated by CAL FIRE to the local jurisdiction, or

(4) local jurisdictions where the local ordinances have been certified pursuant to 14 CCR §§ 1270.01 and 1270.03 and the inspection duties have been formally delegated by CAL FIRE to the local jurisdiction.

(b) Nothing in this section abrogates CAL FIRE's authority to inspect and enforce state forest and fire laws even when the inspection duties have been delegated pursuant to this section.

(c) Reports of violations shall be provided to the CAL FIRE Unit headquarters that administers SRA fire protection in the local jurisdiction.

1270.06. Inspections

The inspection entity listed in 14 CCR 1270.05 may inspect for compliance with these regulations. When inspections are conducted, they should occur prior to: the issuance of the use permit; certificate of occupancy; the recordation of the parcel map or final map; the filing of a notice of completion; or the final inspection of any project or building permit.

1270.07. Exceptions to Standards

Upon request by the applicant, exceptions to standards within this subchapter or local jurisdiction certified
ordinances may be allowed by the inspection entity listed in 14 CCR 1270.05, where the exceptions provide the same overall practical effect as these regulations towards providing defensible space. Exceptions granted by the inspection entity listed in 14 CCR 1270.05 shall be made on a case-by-case basis only. Exceptions granted by the

inspection entity listed in 14 CCR 1270.05 shall be forwarded to the appropriate CAL FIRE Unit Office that administers SRA fire protection in that county and shall be retained on file at the Unit Office.

1270.08. Request for Exceptions
Requests for an exception shall be made in writing to the inspection entity listed in 14 CCR 1270.05 by the applicant or the applicant's authorized representative. The request shall state the specific section(s) for which an exception is requested, material facts supporting the contention of the applicant, the details of the exception proposed, and a map showing the proposed location and siting of the exception.

1270.09. Appeals
Where an exception is not granted by the inspection authority, the applicant may appeal such denial to the local jurisdiction. The local jurisdiction may establish or utilize an appeal process consistent with existing local building or planning department appeal processes.

Before the local jurisdiction makes a determination on an appeal, the inspection authority shall be consulted and shall provide to that local jurisdiction documentation outlining the effects of the requested exception on wildland fire protection.

If an appeal is granted, the local jurisdiction shall make findings that the decision meets the intent of providing defensible space consistent with these regulations. Such findings shall include a statement of reasons for the decision. A written copy of these findings shall be provided to the CAL FIRE Unit headquarters that administers SRA fire protection in that local jurisdiction.

1271.00. Definitions
Accessory building: Any building used as an accessory to residential, commercial, recreational, industrial, or educational purposes as defined in the California Building Code, 1989 Amendments, Chapter 11, Group M, Division 1 Occupancy that requires a building permit.

Agriculture: Land used for agricultural purposes as defined in a local jurisdiction's zoning ordinances.

Building: Any structure used or intended for supporting or sheltering any use of occupancy that is defined in the California Building Code, 1989 Amendments, Chapter 11, except Group M, Division 1, Occupancy. For the purposes of this subchapter, building includes mobile homes and manufactured homes, churches, and day care facilities.
CDF: California Department of Forestry and Fire Protection.

Dead-end road: A road that has only one point of vehicular ingress/egress, including cul-de- sacs and looped roads.

Defensible space: The area within the perimeter of a parcel, development, neighborhood or community where basic wildland fire protection practices and measures are implemented, providing the key point of defense from an approaching wildfire or defense against encroaching wildfires or escaping structure fires. The perimeter as used in this

regulation is the area encompassing the parcel or parcels proposed for construction and/or development, excluding the physical structure itself. The area is characterized by the establishment and maintenance of emergency vehicle access, emergency water reserves, street names and building identification, and fuel modification measures.

Development: As defined in Section 66418.1 of the California Government Code.

Director: Director of the Department of Forestry and Fire Protection or his/her designee.

Driveway: A vehicular access that serves no more than two buildings, with no more than three dwelling units on a single parcel, and any number of accessory buildings.

Dwelling unit: Any building or portion thereof which contains living facilities, including provisions for sleeping, eating, cooking and/or sanitation for not more than one family.

Exception: An alternative to the specified standard requested by the applicant that may be necessary due to health, safety, environmental conditions, physical site limitations or other limiting conditions such as recorded historical sites, that provide mitigation of the problem.

Fire valve: See hydrant.

Fuel modification area: An area where the volume of flammable vegetation has been reduced, providing
reduced fire intensity and duration.

Greenbelts: A facility or land-use, designed for a use other that fire protection, which will slow or resist the spread of a wildfire. Includes parking lots, irrigated or landscaped areas, golf courses, parks, playgrounds, maintained vineyards, orchards or annual crops that do not cure in the field.

Hammerhead/T: A roadway that provides a "T" shaped, three-point turnaround space for emergency equipment, being no narrower that the road that serves it.

Hydrant: A valved connection on a water supply/storage system, having at least one 2 1/2 inch outlet, with male American National Fire Hose Screw Threads (NH) used to supply fire apparatus and hoses with water.

Local Jurisdiction: Any county, city/county agency or department, or any locally authorized district that issues or approves building permits, use permits, tentative maps or tentative parcel maps, or has authority to regulate development and construction activity.

Occupancy: The purpose for which a building, or part thereof, is used or intended to be used.

One-way road: A minimum of one traffic lane width designed for traffic flow in one direction only.

Roads, streets, private lanes: Vehicular access to more than one parcel; access to any industrial or commercial occupancy; or vehicular access to a single parcel with more than two buildings or four or more dwelling units.

Roadway: Any surface designed, improved, or ordinarily used for vehicle travel.

Roadway structures: Bridges, culverts, and other appurtenant structures which supplement the roadway bed or shoulders.

Same Practical Effect: As used in this subchapter means an exception or alternative with the capability of applying accepted wildland fire suppression strategies and tactics, and provisions for fire fighter safety, including:
(a) access for emergency wildland fire equipment,
(b) safe civilian evacuation,
(c) signing that avoids delays in emergency equipment response,
(d) available and accessible water to effectively attack wildfire or defend a structure from wildfire, and
(e) fuel modification sufficient for civilian and fire fighter safety.

State Board of Forestry (SBOF): A nine member board, appointed by the Governor, which is responsible for developing the general forest policy of the state, for determining the guidance policies of the Department of Forestry and Fire Protection, and for representing the state's interest in federal land in California.

State Responsibility Area (SRA): As defined in the Public Resources Code section 4126-4127; and the
California Code of Regulations, Title 14, Division 1.5, Chapter 7, Article 1, Sections 1220-1220.5.

Structure: That which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.

Subdivision: As defined in Section 66424 of the Government Code.

Traffic lane: The portion of a roadway that provides a single line of vehicle travel.

Turnaround: A roadway, unobstructed by parking, which allows for a safe opposite change of direction for emergency equipment. Design of such area may be a hammerhead/T or terminus bulb.

Turnouts: A widening in a roadway to allow vehicles to pass.

Vertical clearance: The minimum specified height of a bridge or overhead projection above the roadway.

Wildfire: As defined in Public Resources Code Section 4103 and 4104.

See also definitions provided in the “Scope” section of OCFA Guideline B-09 and Chapter 2 of the California Fire Code.

1271.05. Distance Measurements
All specified or referenced distances are measured along the ground, unless otherwise stated.

1272.00. Maintenance of Defensible Space Measures
To ensure continued maintenance of properties in conformance with these standards and measures and to assure continue availability, access, and utilization of the defensible space provided for these standards during a wildfire, provisions for annual maintenance shall be included in the development plans and/or shall be provided as a condition of the permit, parcel or map approval.

ARTICLE 2. EMERGENCY ACCESS AND EGRESS

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§ 1273.10. Driveways
§ 1273.11. Gate Entrances

1273.00. Intent
Road and street networks, whether public or private, unless exempted under section 1270.02(e), shall provide for safe access for emergency wildland fire equipment and civilian evacuation concurrently, and shall provide unobstructed traffic circulation during a wildfire emergency consistent with Sections 1273.00 through 1273.11.

1273.01. Road Width
All roads shall be constructed to provide a minimum of two ten (10) foot traffic lanes, not including shoulder and striping. These traffic lanes shall provide for two-way traffic flow to support emergency vehicle and civilian egress, unless other standards are provided in this article, or additional requirements are mandated by local jurisdictions or local subdivision requirements.

Guideline B-09 Section 2.A.4:
In wildfire risk areas, fire lanes shall be at least 28 feet wide.

> *Exception: fire lanes that are 150 feet or less in length may be 24 feet wide if serving one to three dwelling units; where all structures served by the fire lane are protected with fire sprinklers, this length may be increased to 400 feet.*

This width shall be provided to a logical termination outside of the wildfire risk area. Refer to the Fire Hazard Severity Zone maps on the OCFA website.

1273.02. Roadway Surface
Roadways shall be designed and maintained to support the imposed load of fire apparatus weighing at least 75,000 pounds and provide an aggregate base. Project proponent shall provide engineering specifications to support design, if requested by the local authority having jurisdiction.

In SRA areas, roads shall comply with the more stringent state requirement of 75,000

1273.03. Roadway Grades
The grade for all roads, streets, private lanes and driveways shall not exceed 16 percent.

Guideline B-09 Section 2.A.7:
Fire Apparatus Access Road Grade - The grade for access roads shall not exceed 10% or 5.7 degrees (7% or 4 degrees in Irvine unless otherwise approved by the City Engineer). The grade may be increased to a maximum of 15% or 8.5 degrees for approved lengths of access roadways, when all structures served by the access road are protected by automatic fire sprinkler systems. Cross-slope shall not be greater than 2% for paved access roadways.

1273.04. Roadway Radius
(a) No roadway shall have a horizontal inside radius of curvature of less than 50 feet and additional surface width of 4 feet shall be added to curves of 50-100 feet radius; 2 feet to those from 100-200 feet.

(b) The length of vertical curves in roadways, exclusive of gutters, ditches, and drainage structures designed to hold or divert water, shall be not less than 100 feet.

Guideline B-09 Section 2.A.7:
Cross-slope shall not be greater than 2% for paved access roadways.

1273.05. Roadway Turnarounds

Turnarounds are required on driveways and dead-end roads. The minimum turning radius for a turnaround shall be forty (40) feet, not including parking, in accordance with the following figure. If a hammerhead/T is used instead, the top of the "T" shall be a minimum of sixty (60) feet in length.

See also Guideline B-09 Attachment 7. Circular and hammerhead turnarounds shall meet the more stringent minimum requirements of CAL FIRE and OCFA. For example, a circular turnaround would need a 40' outer radius (per CAL FIRE) and a 28' radius where the "bulb" connects to the 20' wide "neck."

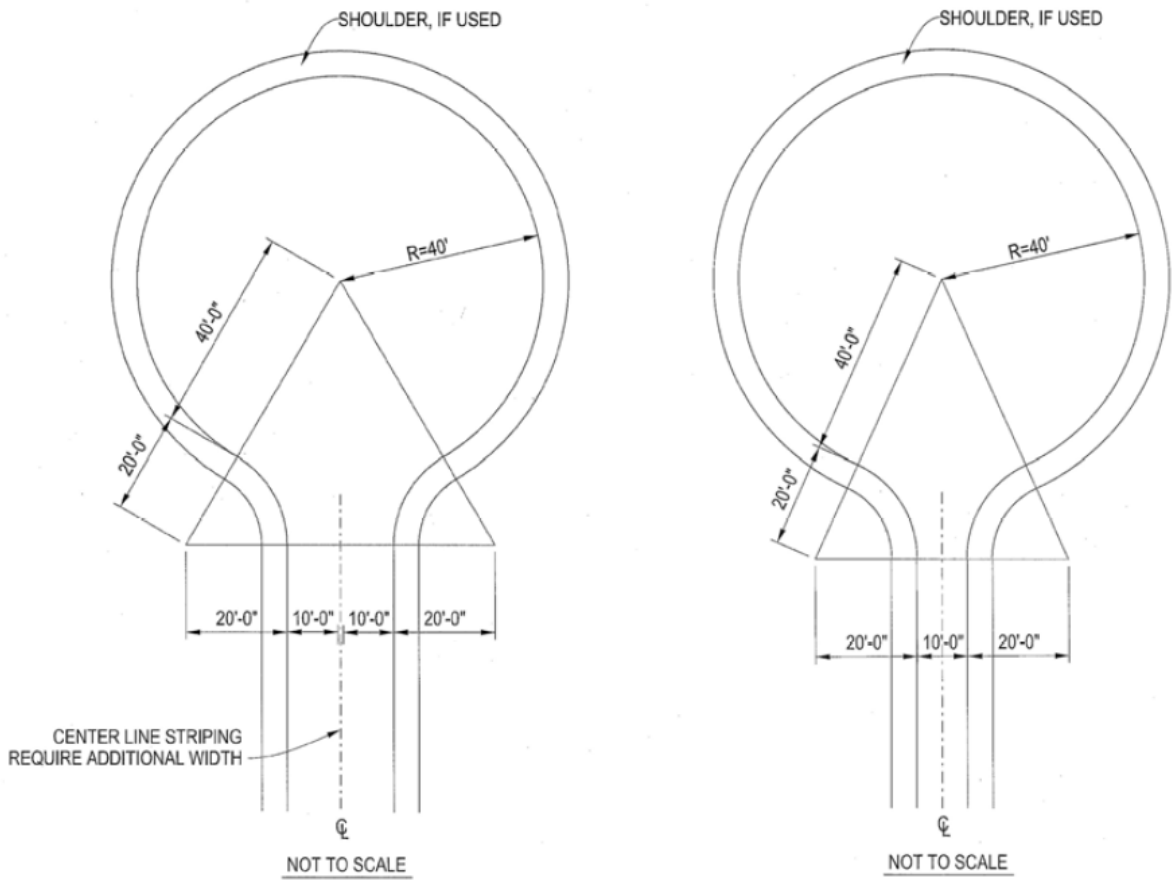
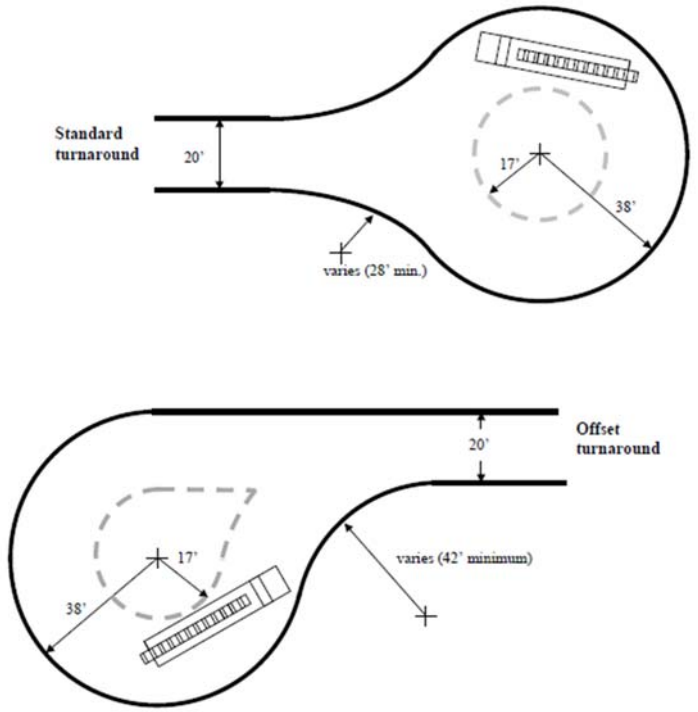


FIGURE FOR 14 CCR § 1273.05. TURNAROUND EXAMPLES

ATTACHMENT 7
Minimum Turnaround and Hammerhead Dimensions



1273.06. Roadway Turnouts
Turnouts shall be a minimum of twelve (12) feet wide and thirty (30) feet long with a minimum twenty-five (25) foot taper on each end.

Turnouts intended only for passage of vehicles shall be 12 feet wide by 50 feet long to accommodate OCFA apparatus. Where the turnout also functions as a staging area for firefighting, the width shall be increased to 16 feet. Please refer to the access section in Guideline H-01 for additional considerations regarding turnouts used for firefighting.

1273.07. Roadway Structures
(a) All driveway, road, street, and private lane roadway structures shall be constructed to carry at least the maximum load and provide the minimum vertical clearance as required by Vehicle Code Sections 35250, 35550, and 35750.

(b) Appropriate signing, including but not limited to weight or vertical clearance limitations, one-way road or single lane conditions, shall reflect the capability of each bridge.

(c) Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with the American Association of State and Highway Transportation Officials Standard Specifications for Highway Bridges, 17th Edition, published 2002 (known as AASHTO HB-17), hereby incorporated by reference. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the local authority having jurisdiction. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, barriers, or signs, or both, as approved by the local authority having jurisdiction, shall be installed and maintained. A bridge with only one traffic lane may be authorized by the local jurisdiction; however, it shall provide for unobstructed visibility from one end to the other and turnouts at both ends.

1273.08. One-Way Roads

All one-way roads shall be constructed to provide a minimum, not including shoulders, of one twelve (12) foot traffic lane. The local jurisdiction may approve one-way roads. All one-way roads shall connect to a two-lane roadway at both ends, and shall provide access to an area currently zoned for no more than ten (10) dwelling units. In no case shall it exceed 2,640 feet in length. A turnout shall be placed and constructed at approximately the midpoint of each one-way road.

Where one-way roads are allowed by OCFA, they shall be a minimum of 13 feet wide, consistent with the minimum width allowed in OCFA Guideline B-09 Section 5.A for one-way fire lanes passing through gates.

1273.09. Dead-End Roads

(a) The maximum length of a dead-end road, including all dead-end roads accessed from the dead-end road, shall not exceed the following cumulative lengths, regardless of the numbers of parcels served:
parcels zoned for less than one acre – 800 feet
parcels zoned for 1 acre to 4.99 acres – 1320 feet
parcels zoned for 5 acres to 19.99 acres – 2640 feet
parcels zoned for 20 acres or larger – 5280 feet

All lengths shall be measured from the edge of the roadway surface at the intersection that begins the road to the end of the road surface at the intersection that begins the road to the end of the road surface at its farthest point. Where a dead-end road crosses areas of differing zoned parcel sizes, requiring different length limits, the shortest allowable length shall apply.

(b) Where parcels are zoned 5 acres or larger, turnarounds shall be provided at a maximum of 1320 foot intervals.

(c) Each dead-end road shall have a turnaround constructed at its terminus.

Regardless of parcel size, dead-end fire lanes over 800 feet long shall have a mid-point turnaround or other approved form of mitigation per Guideline B-09 Section 2.A.9.

1273.10. Driveways

(a) All driveways shall be constructed to provide a minimum of one (1) ten (10) foot traffic lane and fourteen (14) feet unobstructed horizontal clearance and unobstructed vertical clearance of fifteen (15) feet.

(b) Driveways exceeding 150 feet in length, but less than 800 feet in length, shall provide a turnout near the midpoint of the driveway. Where the driveway exceeds 800 feet, turnouts shall be provided no more than 400 feet apart.

(c) A turnaround shall be provided to all building sites on driveways over 300 feet in length, and shall be within fifty (50) feet of the building.

Driveways that are designated fire lanes shall also comply with all applicable requirements in Guideline B-09 or the provisions of an approved alternate methods and materials proposal. In no case shall they be less stringent than Title 14.

1273.11. Gate Entrance

(a) Gate entrances shall be at least two (2) feet wider than the width of the traffic lane(s) serving that gate and a minimum width of fourteen (14) feet unobstructed horizontal clearance and unobstructed vertical clearance of fifteen (15) feet.

(b) All gates providing access from a road to a driveway shall be located at least thirty (30) feet from the roadway and shall open to allow a vehicle to stop without obstructing traffic on that road.

(c) Security gates shall not be installed without approval and where security gates are installed, they shall have an approved means of emergency operation. Approval shall be by the local authority having jurisdiction. The security gates and the emergency operation shall be maintained operational at all times.

(d) Where a one-way road with a single traffic lane provides access to a gated entrance, a forty (40) foot turning radius shall be used.

Gates crossing fire lanes shall comply with the most stringent requirements from Title 14 and B-09. For example, gates shall have a minimum clear opening of 15 feet when serving a single lane of traffic (13 foot minimum road width per B-09 plus an additional 2 feet of clearance per Title 14).

ARTICLE 3. SIGNING AND BUILDING NUMBERING

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§ 1274.10. Installation, Location and Visibility of Addresses

1274.00. Intent

To facilitate locating a fire and to avoid delays in response, all newly constructed or approved roads, street, and buildings shall be designated by names or numbers, posted on signs clearly visible and legible from the roadway. This section shall not restrict the size of letters of numbers appearing on street signs for other purposes.

1274.01. Size of Letters, Numbers and Symbols for Street and Roads Signs

Size of letters, numbers, and symbols for street and road signs shall be a minimum 4 inch letter height, .5 inch stroke, reflectorized, contrasting with the background color of the sign.

1274.02. Visibility and Legibility of Street and Road Signs

Street and road signs shall be visible and legible from both directions of vehicle travel for a distance of at least 100 feet.

1274.03. Height of Street and Road Signs

Height of street and road signs shall be uniform county wide, and meet the visibility and legibility standards of this article.

1274.04. Names and Numbers on Street and Road Signs

Newly constructed or approved public and private roads and streets must be identified by a name or number through a consistent countywide system that provides for sequenced or patterned numbering and/or nonduplicating naming within each county. All signs shall be mounted and oriented in a uniform manner. This section does not require any entity to rename or renumber existing roads or streets, nor shall a roadway providing access only to a single commercial or industrial occupancy require naming or numbering.

1274.05. Intersecting Roads, Streets and Private Lanes
Signs required by this article identifying intersecting roads, streets and private lanes shall be placed at the intersection of those roads, streets, and/or private lanes.

1274.06. Signs Identifying Traffic Access Limitations
A sign identifying traffic access or flow limitations, including but not limited to weight or vertical clearance
limitations, dead-end road, one-way road or single lane conditions, shall be placed:

(a) at the intersection preceding the traffic access limitation, and

(b) no more than 100 feet before such traffic access limitation.

1274.07. Installation of Road, Street and Private Lane Signs
Road, street and private lane signs required by this article shall be installed prior to final acceptance by the local jurisdiction of road improvements.

1274.08. Addresses for Buildings
All buildings shall be issued an address by the local jurisdiction which conforms to that jurisdiction's overall address system. Accessory buildings will not be required to have a separate address; however, each dwelling unit within a building shall be separately identified.

1274.09. Size of Letters, Numbers and Symbols for Addresses
Size of letters, numbers and symbols for addresses shall be a minimum 4 inch letter height, .5 inch stroke, reflectorized, contrasting with the background color of the sign. Address identification shall be plainly legible and visible from the street or road fronting the property. Addresses shall be Arabic numbers or alphabetical letters. Where access is by means of a private road and the address identification cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the address.

OCFA Guideline B-09 Section 4.C
The numbers shall be a *minimum* of 4” in height for single-family homes/duplexes, or individual unit numbers in multi-family residential structures, and 6” or more for commercial structures or the primary building address or address range posted on multi-family residential structures. The 6” numbers shall have a 1” stroke. Building setbacks, elevation, and landscaping can affect these minimum size requirements.

1274.10. Installation, Location and Visibility of Addresses
(a) All buildings shall have a permanently posted address, which shall be placed at each driveway entrance and visible from both directions of travel along the road. In all cases, the address shall be posted at the beginning of construction and shall be maintained thereafter, and the address shall be visible and legible from the road on which the address is located.

(b) Address signs along one-way roads shall be visible from both the intended direction of travel and the opposite direction.

(c) Where multiple addresses are required at a single driveway, they shall be mounted on a single post.

(d) Where a roadway provides access solely to a single commercial or industrial business, the address sign shall be placed at the nearest road intersection providing access to that site.

ARTICLE 4. EMERGENCY WATER STANDARDS

§ 1275.00. Intent
§ 1275.01. Application
§ 1275.10. General Standards
§ 1275.15. Hydrant/Fire Valve
§ 1275.20 Signing of Water Sources

1275.00. Intent

Emergency water for wildfire protection shall be available, accessible, and maintained in quantities and locations specified in the statute and these regulations, in order to attack a wildfire or defend property from a wildfire.

1275.01. Application

The provisions of this article shall apply in the tentative and parcel map process when new parcels are approved by the local jurisdiction having authority. When a water supply for structure defense is required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except when alternative methods of protection are provided and approved by the local authority having jurisdiction.

1275.10. General Standards

Water systems that comply with the below standard or standards meet or exceed the intent of these regulations. Water systems equaling or exceeding the National Fire Protection Association (NFPA) 1142, "Standard on Water Supplies for Suburban and Rural Fire Fighting," 2012 Edition, hereby incorporated by reference, and California Fire Code, California Code of Regulations title 24, part 9, shall be accepted as meeting the requirements of this article. Such emergency water may be provided in a fire agency mobile water tender, or naturally occurring or man made containment structure, as long as the specified quantity is immediately available. Nothing in this article prohibits the combined storage of emergency wildfire and structural firefighting water supplies unless so prohibited by local ordinance or specified by the local fire agency. Where freeze protection is required by local jurisdictions having authority, such protection measures shall be provided.

1275.15. Hydrant/Fire Valve

(a) The hydrant or fire valve shall be eighteen (18) inches above grade, eight (8) feet from flammable vegetation, no closer than four (4) feet nor farther than twelve (12) feet from a roadway, and in a location were fire apparatus using it will not block the roadway.

The hydrant serving any building shall:

(1) be not less than fifty (50) feet nor more than 1/2 mile by road from the building it is to serve, and
(2) be located at a turnout or turnaround, along the driveway to that building or along the road that intersects with that driveway.

(b) The hydrant head shall be 2 1/2 inch National Hose male thread with cap for pressure and gravity flow
systems and 4 1/2 inch draft systems. Such hydrants shall be wet or dry barrel as required by the delivery system. They shall have suitable crash protection as required by the local jurisdiction.

The hose lay distance to a hydrant shall not exceed 250' (300' for sprinklered detached single-family residences or duplexes)from the structure as measured along the fire lane fronting the structure. Please see Attachments 24 and 29 in Guideline B-09.

1275.20 Signing of Water Sources

Each hydrant/fire valve or access to water shall be identified as follows:

(a) If located along a driveway, a reflectorized blue marker, with a minimum dimension of 3 inches shall be located on the driveway address sign and mounted on a fire retardant post, or

(b) If located along a street or road,

(1) a reflectorized blue marker, with a minimum dimension of 3 inches, shall be mounted on a fire retardant post. The sign post shall be within 3 feet of said hydrant/fire valve, with the sign no less than 3 feet nor greater than 5 feet above ground, in a horizontal position and visible from the driveway, or
(2) as specified in the State Fire Marshal's Guidelines for Fire Hydrant Markings Along State Highways and Freeways, May 1988.

Paved roadways shall also have a "blue dot" reflector installed in the roadway in accordance with Section 8.E and Attachment 26 in Guideline B-09. Before placing any reflector on a state highway or freeway, the developer/owner shall obtain an encroachment permit from the Department of Transportation in accordance with Section 13060 of the Health and Safety Code.

ARTICLE 5. FUEL MODIFICATION STANDARDS

§ 1276.00. Intent
§ 1276.01. Setback for Structure Defensible Space
§ 1276.02. Disposal of Flammable Vegetation and Fuels
§ 1276.03. Greenbelts

1276.00 Intent

To reduce the intensity of a wildfire by reducing the volume and density of flammable vegetation, the strategic siting of fuel modification and greenbelt shall provide

(1) increased safety for emergency fire equipment and evacuating civilians by its utilization around structures and roads, including driveways; and

(2) a point of attack or defense from a wildfire.

1276.01 Setback for Structure Defensible Space

(a) All parcels 1 acre and larger shall provide a minimum 30 foot setback for buildings and accessory buildings from all property lines and/or the center of the road.

(b) For parcels less than 1 acre, the local jurisdiction shall provide for the same practical effect.

1276.02 Disposal of Flammable Vegetation and Fuels

Disposal, including chipping, burying, burning or removal to a landfill site approved by the local jurisdiction, of flammable vegetation and fuels caused by site development and construction, road and driveway construction, and fuel modification shall be completed prior to completion of road construction or final inspection of a building permit.

1276.03 Greenbelts

Subdivision and other developments, which propose greenbelts as a part of the development plan, shall locate said greenbelts strategically, as a separation between wildland fuels and structures. The locations shall be approved by the local authority having jurisdiction and may be consistent with the CAL FIRE Unit Fire Management Plan or Contract County Fire Plan.

Please see OCFA Guideline C-05 for Fuel Modification requirements.