

OCEANSIDE FIRE DEPARTMENT

Fire Prevention Bureau

300 North Coast Highway, Oceanside, CA 92054 760-435-4101

www.ci.oceanside.ca.us/gov/fire

Emergency Access Roadway Guidelines



Date: **January 1, 2014**

Sources: 2013 CFC, Oceanside City Code, OCFA

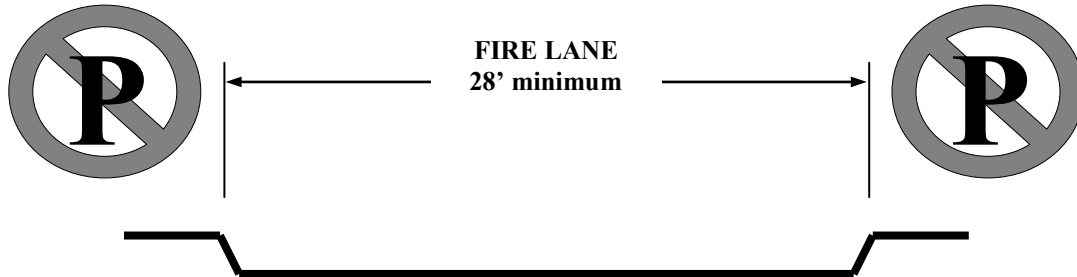
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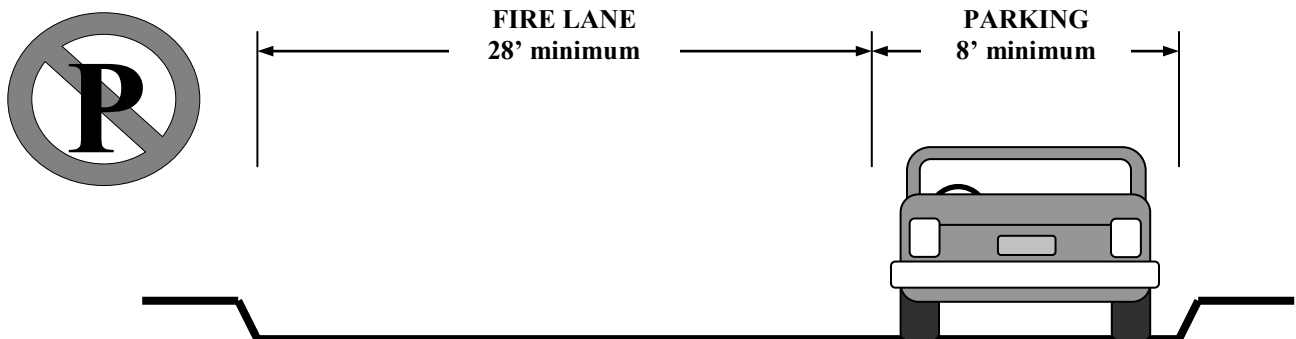
ATTACHMENT 3

Minimum Road Widths

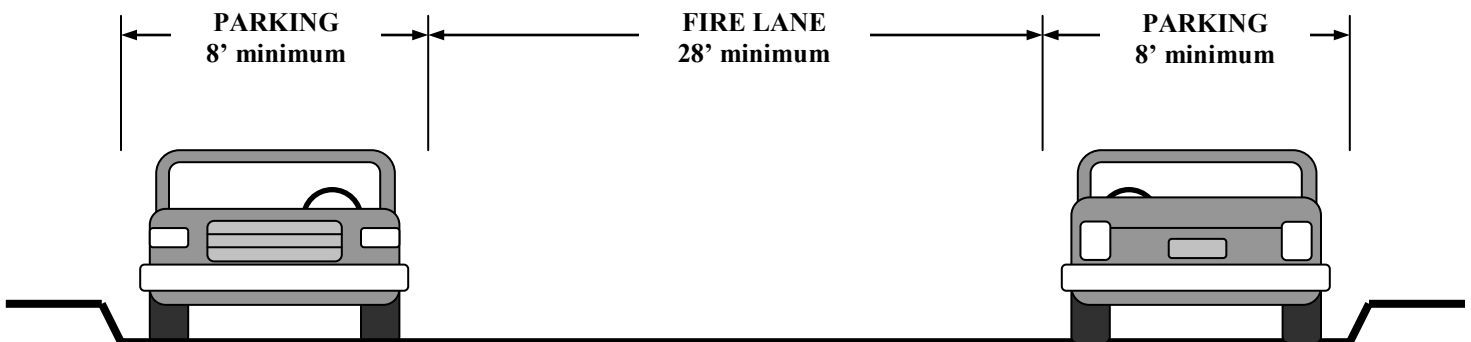
Measured from top face of curb to top face of curb for standard vertical curbs or flow line to flow line for rolled, ramped, or other curb types.



ROADWAY THAT IS 28'
Parking prohibited.
Roadway is required to be posted as a fire lane.



ROADWAY AT LEAST 36' BUT LESS THAN 44'
Parking permitted on one side only.
Roadway is required to be posted as a fire lane.

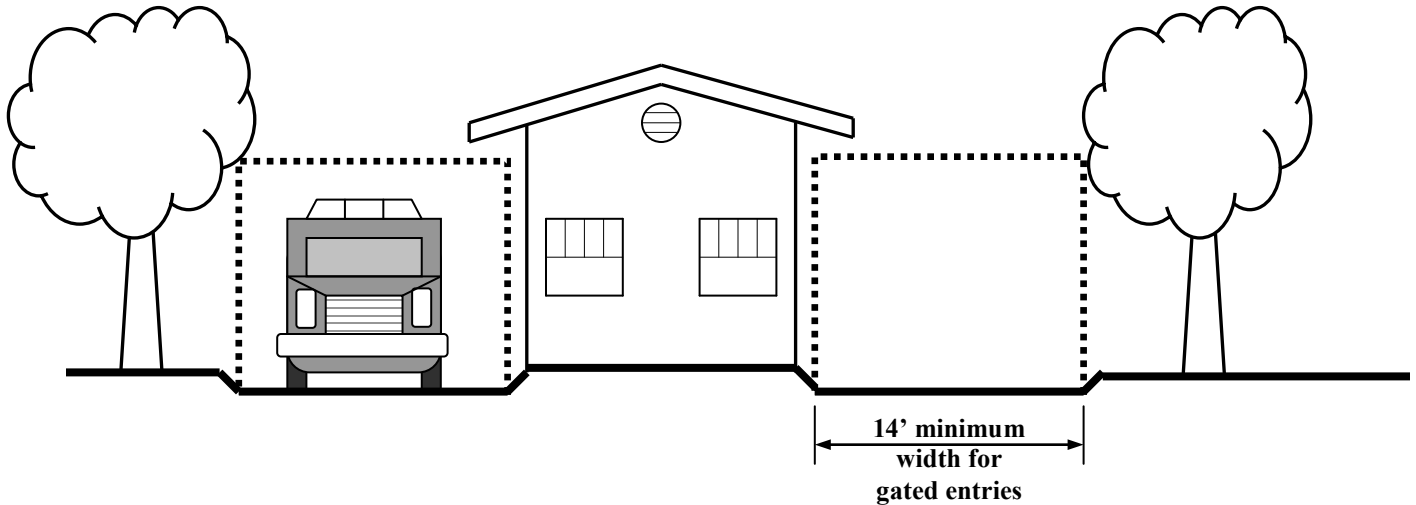


ROADWAY 44' OR WIDER
Parking permitted on both sides

ATTACHMENT 4

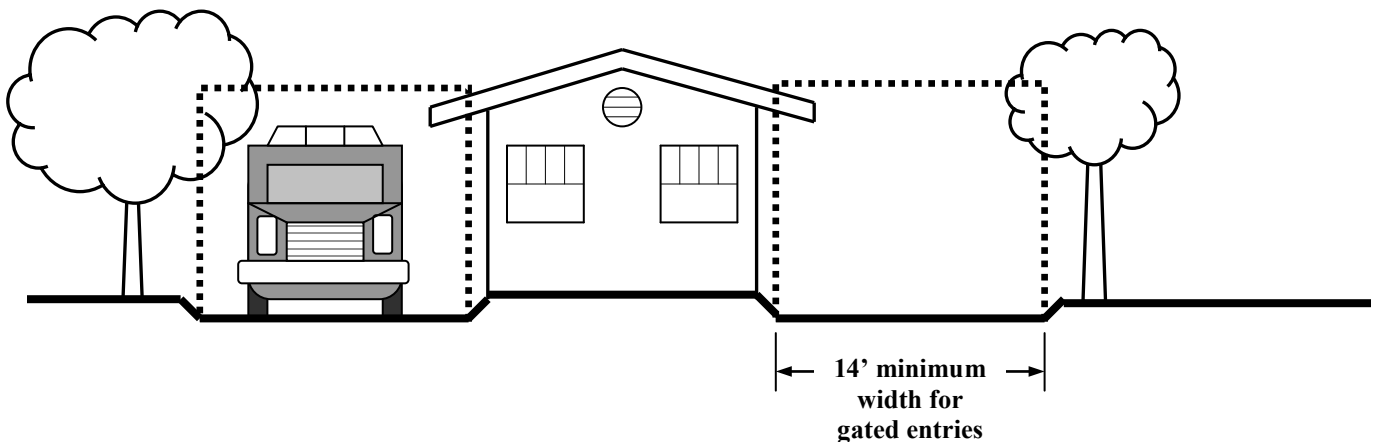
Fire Apparatus Access Roadway Clearance For Typical Gated Community Guard House

Fire lane width reductions detailed below are applicable only to the area immediately adjacent to the guard house or gate. Roads leading up to and beyond the guard house or gate shall meet standard fire lane width requirements prescribed in Section 2.A.5 of this guideline.



PROPER CLEARANCE PROVIDED

Eaves and vegetation do not encroach upon the 11'-wide by 13'-6" high minimum dimensions allowed for the fire access roadway next to the guard house.

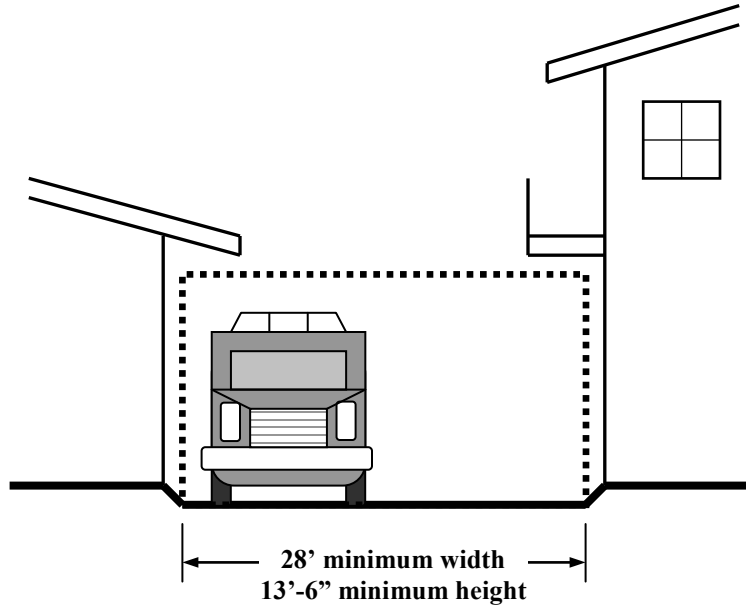


INSUFFICIENT CLEARANCE

While a 11'-wide access roadway is provided next to the guard house, eaves and vegetation encroach upon the minimum clear height of the fire lane.

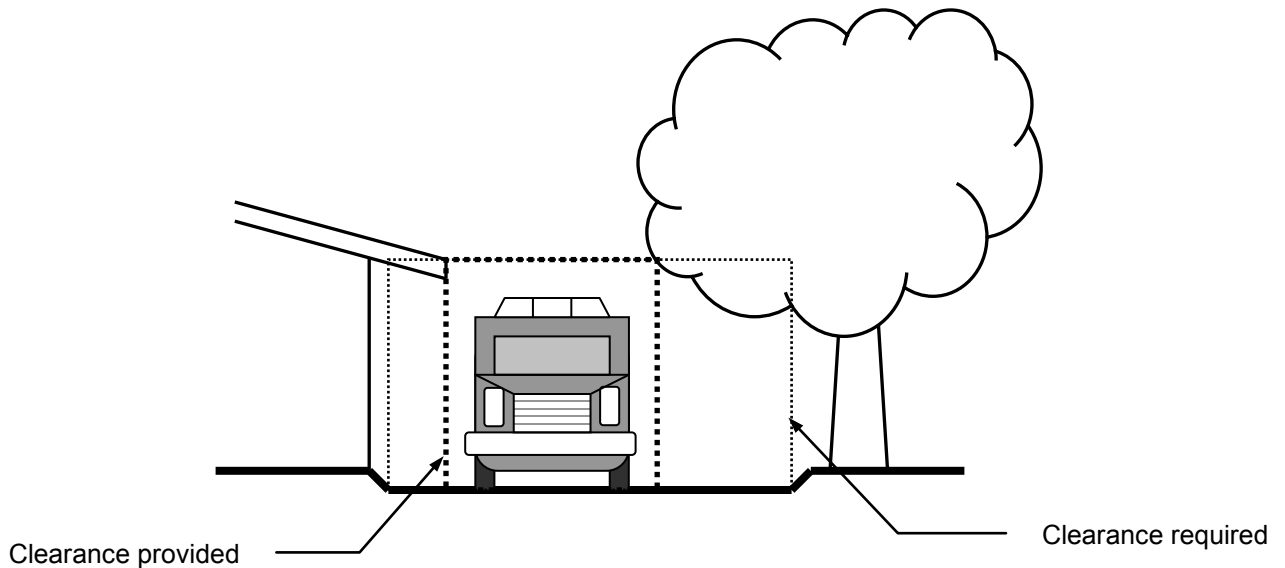
ATTACHMENT 5

Fire Apparatus Access Roadway Clearance



PROPER CLEARANCE PROVIDED

Eaves, balconies, and other obstructions do not encroach upon the 28' wide by 13'-6" high fire access roadway envelope.

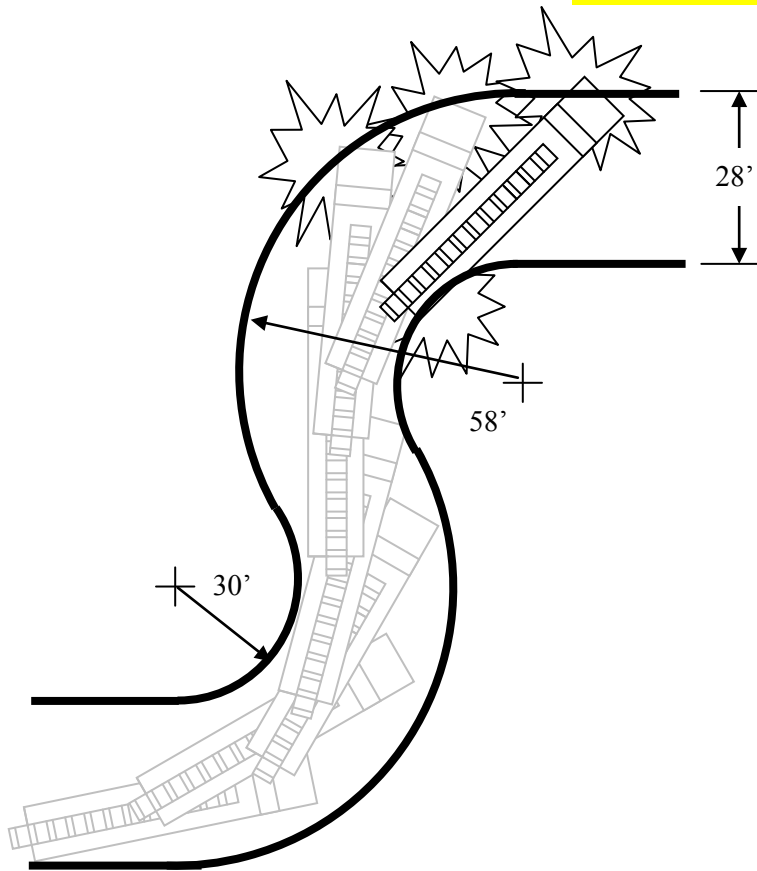


INSUFFICIENT CLEARANCE

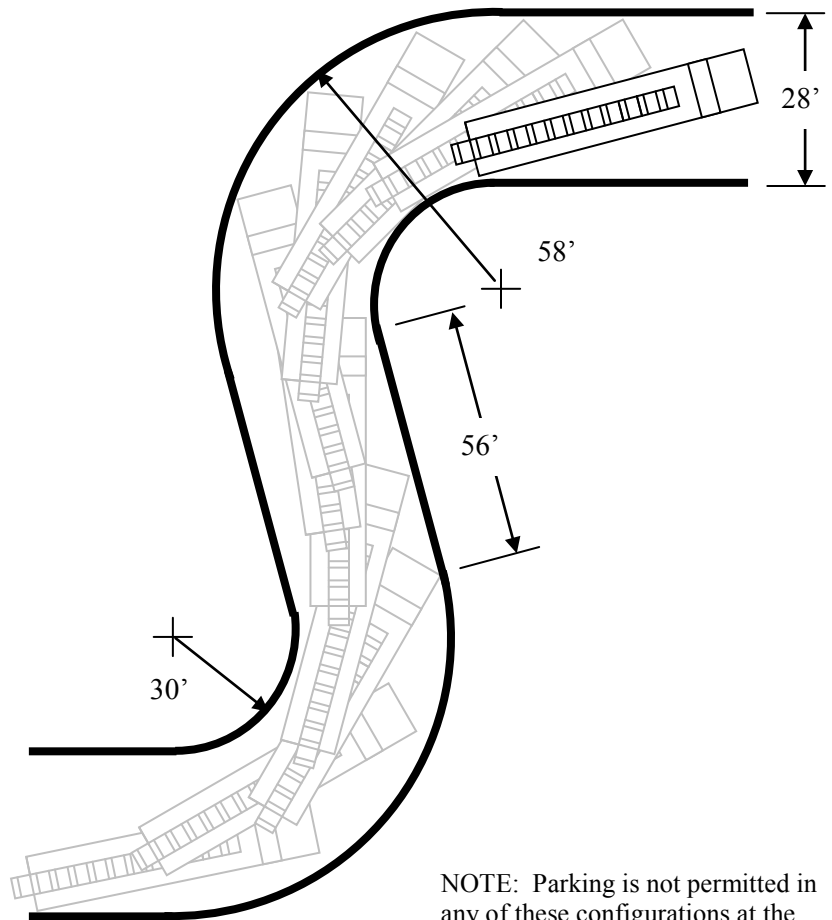
A 28' wide roadway has been provided, but eaves and vegetation effectively reduce the clear dimensions below required minimums.

ATTACHMENT 6

"S" Curves



NOT PERMITTED
OFD apparatus are unable to negotiate tight "S" curves, such as the one shown to the left.



PERMITTED

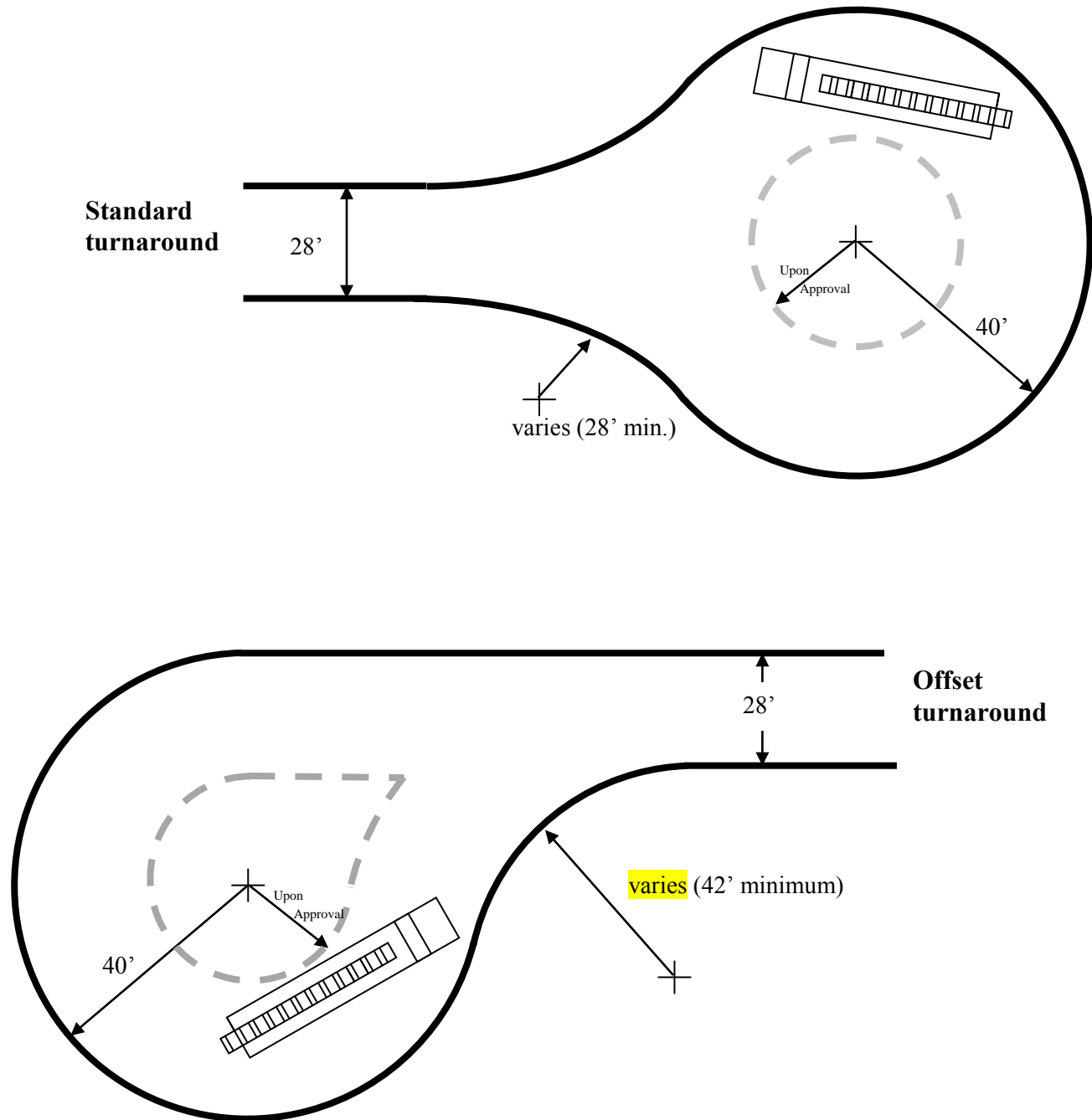
A 56' straight leg is required between the turns in a compound curve to provide sufficient recovery distance for the apparatus. Alternatively, the length of the straight leg may be reduced if the road width and/or turning radii are increased to allow for a wider turn.

NOTE: Parking is not permitted in any of these configurations at the dimensions shown.

Drawing not to scale; for illustration purposes only.

ATTACHMENT 7

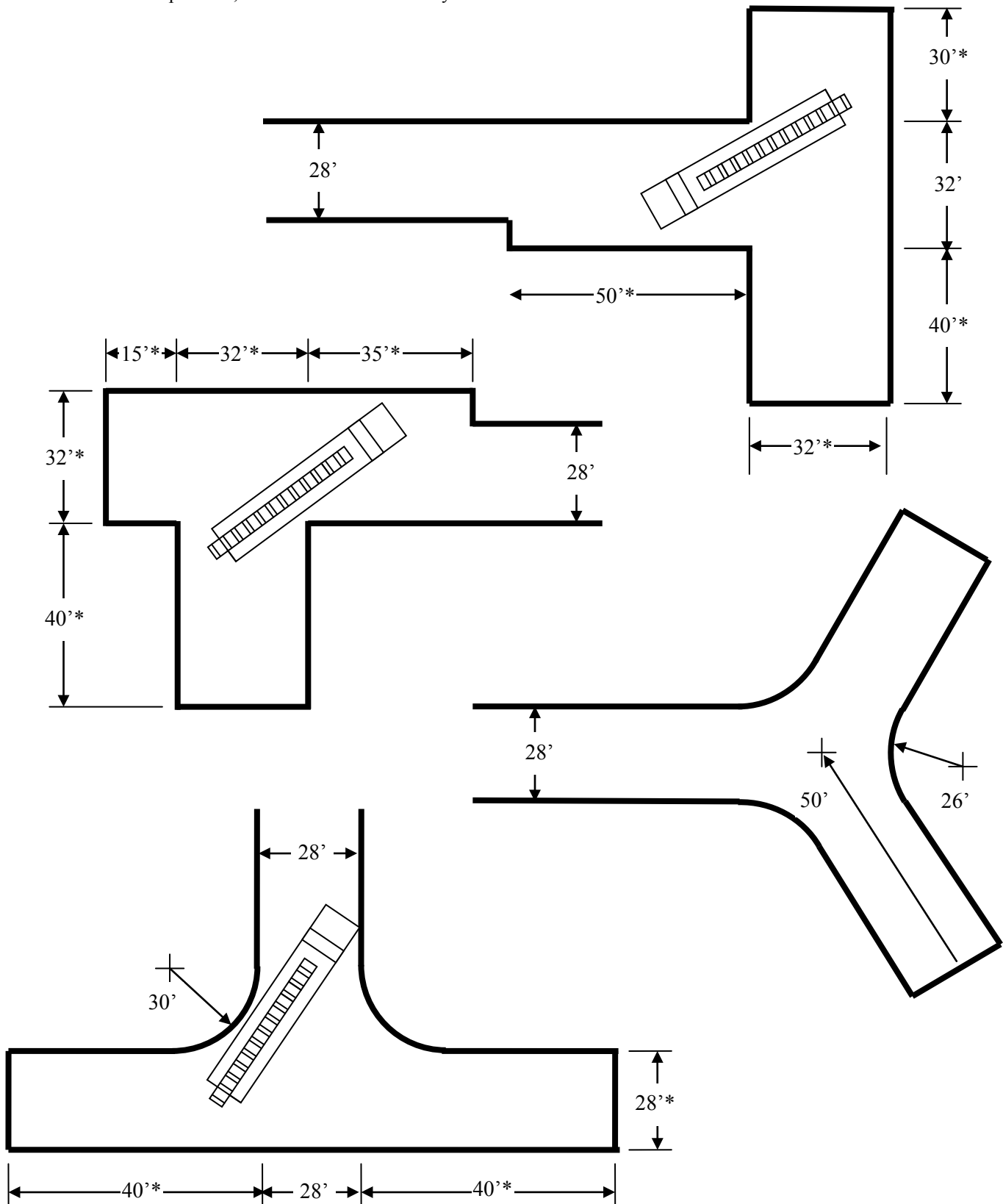
Minimum Turnaround and Hammerhead Dimensions



NOTE: Parking is not permitted in these turnarounds at the dimensions shown. Islands or other obstructions may be allowed to be located within the area bounded by the dashed line representing the inner turning radius.

NOTE: Parking is not permitted in any of these hammerheads at the dimensions shown.

* Wherever possible, increase this dimension by five feet.



ATTACHMENT 8

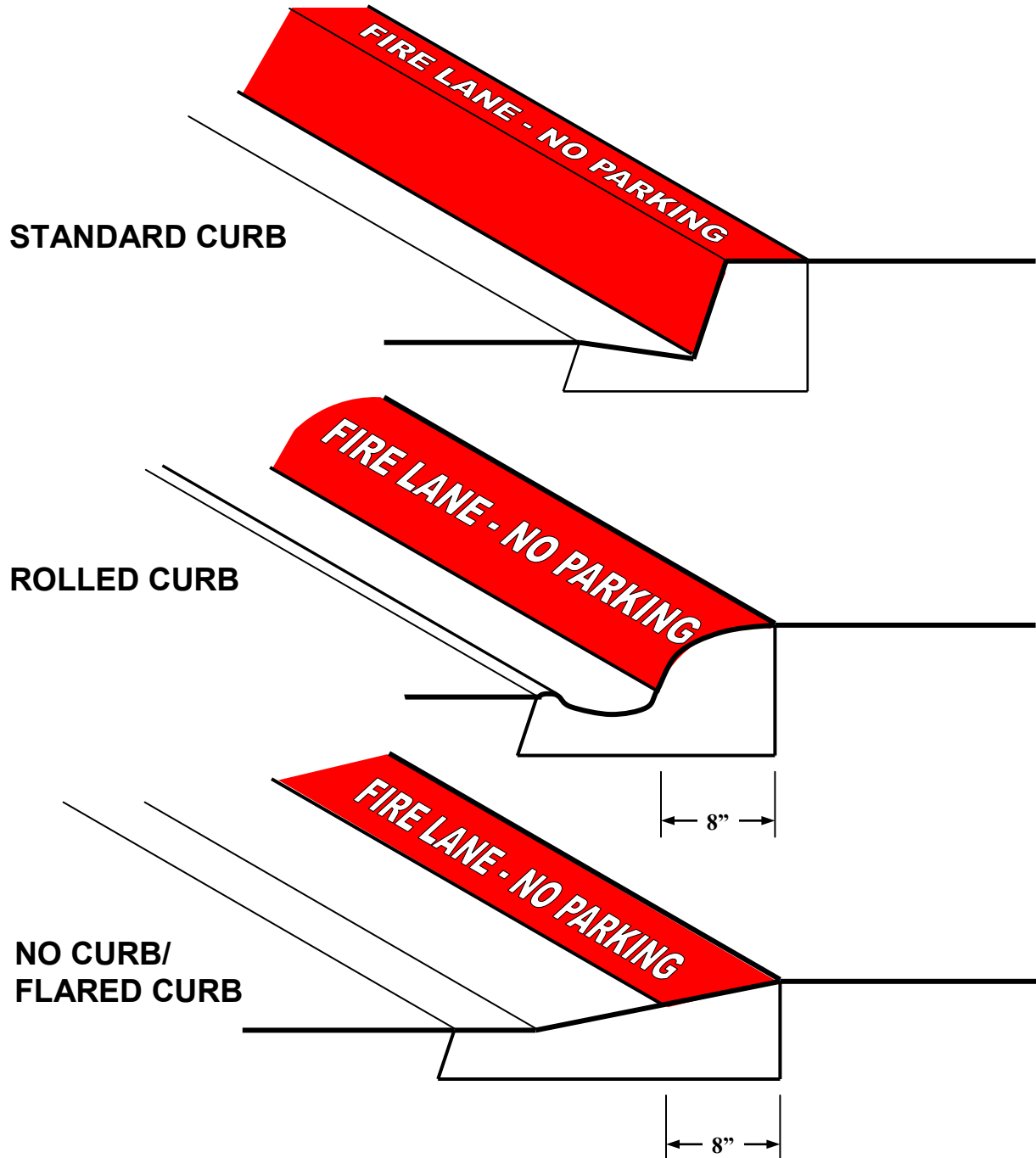
Fire Lane Parking Violations

The California Fire Code (CFC) and California Vehicle Code (CVC) specify rules of the road for stopping, standing, and parking in fire lanes or near fire hydrants.

- A. Section 22500.1 states that no person shall stop, park, or leave standing any vehicle whether attended or unattended, in any location designated as a fire lane by the Fire Authority except when necessary to avoid conflict with other traffic or in compliance with the direction of a peace officer or official traffic control device. Vehicles illegally parked in a fire lane may be towed per CVC 22953(b).
- B. There shall be no parking of any vehicles other than fire department vehicles within 15 feet of either side of a fire hydrant in accordance with CVC 22514(c). Such vehicles may be towed per CVC 22651(e).
- C. CVC 22658(a) permits the owner or person in lawful possession of any private property, subsequent to notifying local law enforcement, to cause the removal of a vehicle parked on such property to the nearest public garage, if:
 - 1) A sign is displayed in plain view at all entrances to the property specifying:
 - a) The ordinance prohibiting public parking, *and*
 - b) A notation indicating that vehicles will be removed at the owner's expense, *and*
 - c) The telephone number of the local traffic law enforcement agency, *or*
 - 2) The lot or parcel upon which the vehicle is parked has a single-family dwelling.
- D. CFC 503.4 states that the required width of a fire apparatus access road shall not be obstructed in any manner, including parking of vehicles. Minimum required widths and clearances shall be maintained at all times.
- E. CFC 507.5.4 states that vehicles and other obstructions shall not be placed or kept near fire hydrants, fire department inlet connections or fire-protection system control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernible. The fire department shall not be deterred or hindered from gaining immediate access to fire-protection equipment or hydrants.

ATTACHMENT 9

Fire Lane Identification – Red Curbs

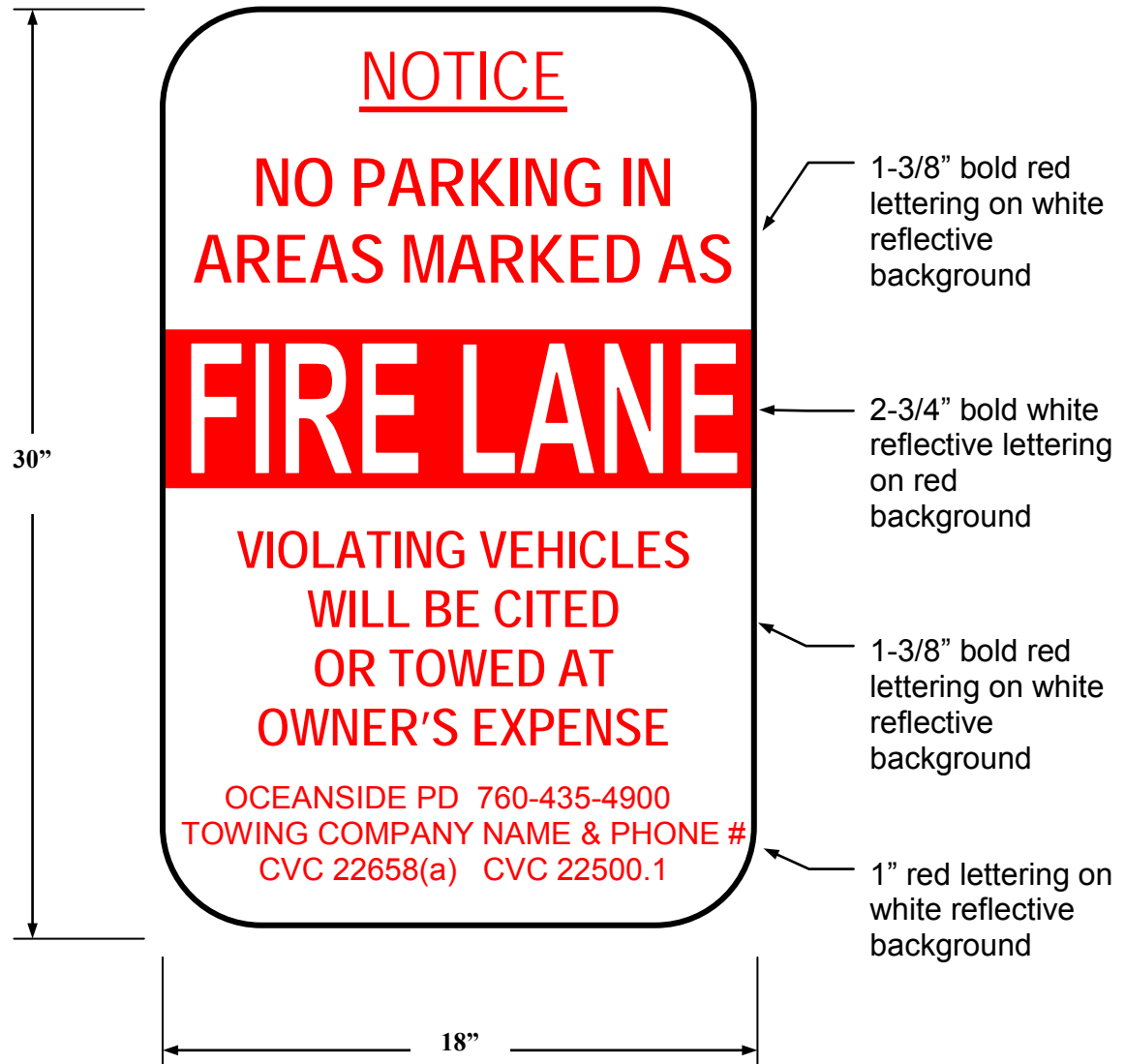


1. Fire lane entrance sign(s) shall also be provided per Attachment 10 or 11.
2. Curbs shall be painted OSHA safety red.
3. "FIRE LANE – NO PARKING" shall be painted on top of curb in 3" white lettering at a spacing of 30' on center or portion thereof.

ATTACHMENT 10

Specifications for Fire Lane Entrance Signs

To be used only at *vehicle entry points*
to areas that contain “Fire Lane—No Parking” signs or red curbs



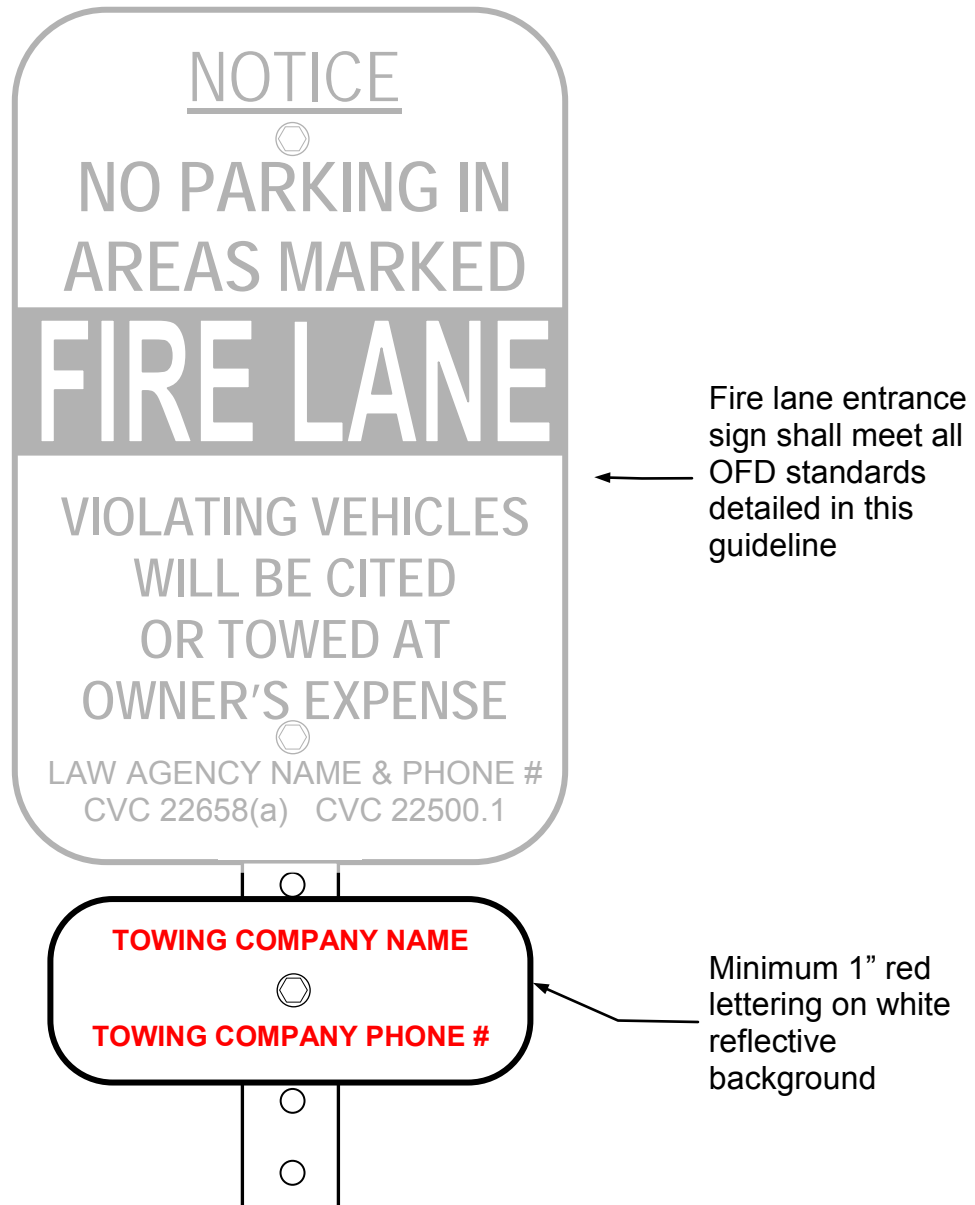
All sign and lettering dimensions shown are minimums. “Arial Narrow” font used is used in sample above though other legible sans-serif fonts may be acceptable.

This sign shall be posted at all vehicle entrances to areas marked with either red curbs or fire lane “No Parking” signs. Signs shall be securely mounted facing the direction of travel and clearly visible to oncoming traffic entering the designated area. Signs shall be made of durable material and installed per Attachments 13 and 14.

Towing company contact information is required for all properties with a standing written agreement for services with a towing company per the California Vehicle Code.

ATTACHMENT 11

Specifications for Alternate Location of Towing Company Information

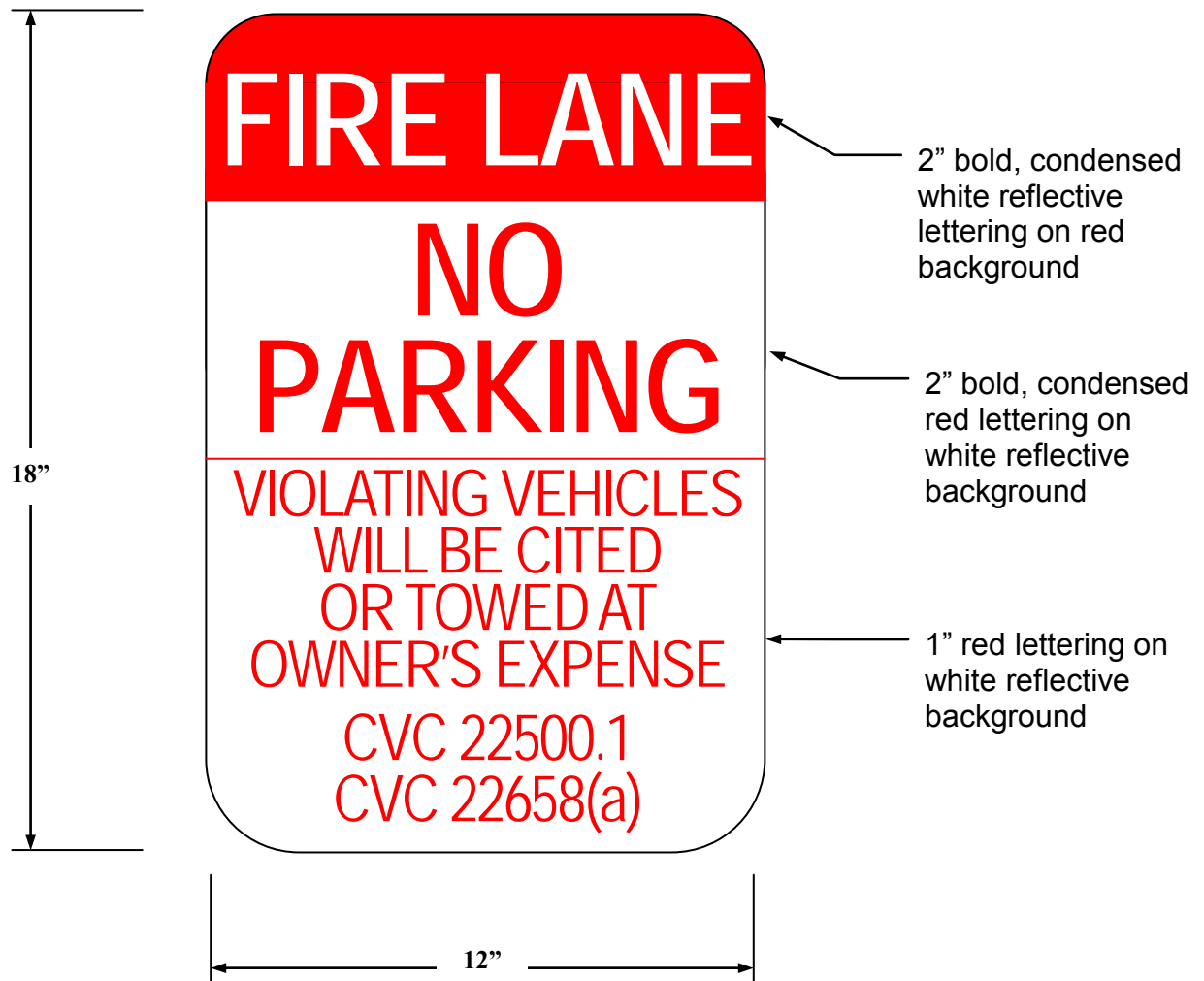


Towing company contact information is required for all properties with a standing written agreement for services with a towing company per the California Vehicle Code.

To facilitate periodic changes in towing company contracts, the towing company contact information may be posted on a separate sign mounted directly below the fire lane entrance sign instead of on the entrance sign itself. The method of attachment to the post shall not obscure the wording on either sign.

ATTACHMENT 12

Specifications for Fire Lane No Parking Signs



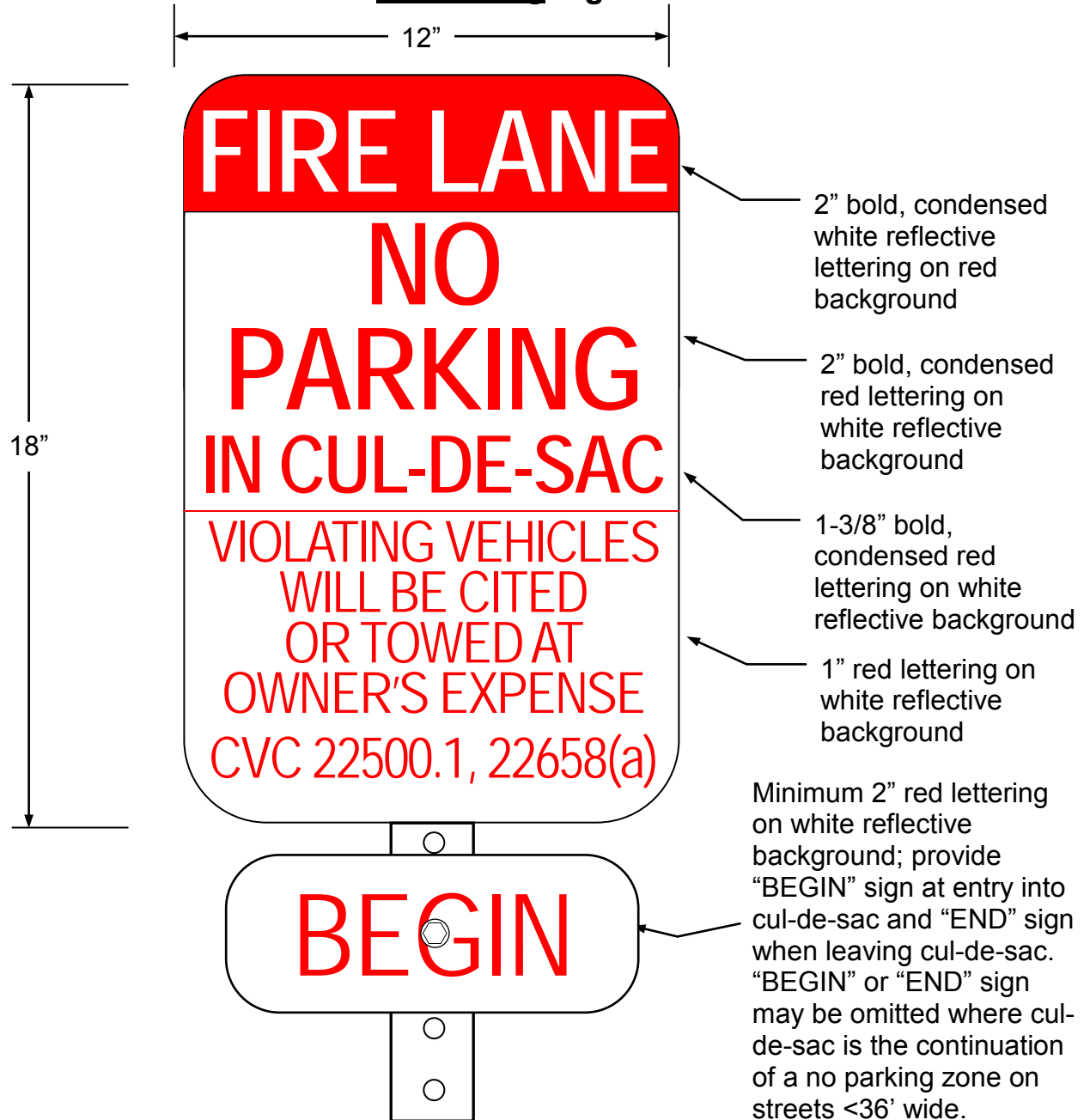
All sign and lettering dimensions shown are *minimums*. "Arial Narrow" font used is used in sample above though other legible sans-serif fonts may be acceptable.

In areas where fire lane parking restrictions are enforced by the California Highway Patrol, "NO STOPPING—FIRE LANE" signs meeting Caltrans standards shall be used.

Signs shall be securely mounted facing the direction of travel and clearly visible to oncoming traffic entering the designated area. Signs shall be made of durable material and installed per Attachments 13 and 14.

ATTACHMENT 12a

Specifications for Cul-de-Sac Fire Lane No Parking Signs



All sign and lettering dimensions shown are *minimums*. "Arial Narrow" font used is used in sample above though other legible sans-serif fonts may be acceptable.

Signs shall be securely mounted facing the direction of travel and clearly visible to oncoming traffic entering the designated area. Signs shall be made of durable material and installed per Attachments 13 and 14.

ATTACHMENT 12b

Specifications for Alternative Fire Lane No Parking Signs



← Additional verbiage shall be 1" bold, condensed red lettering on white reflective background. Where parking stalls are not present, sign may omit "except in designated stalls" and sign height may be reduced to 18".

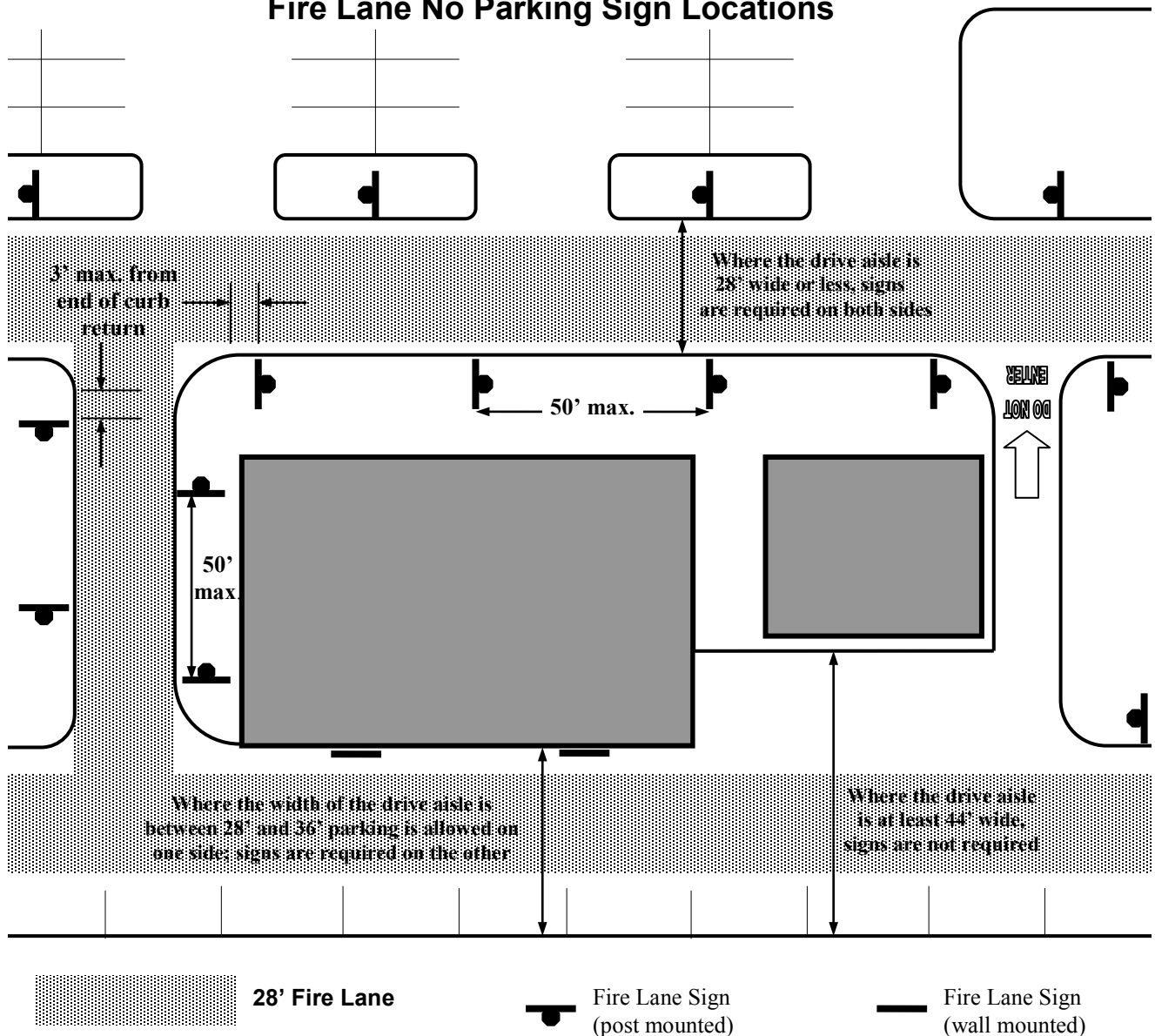
Specifications for the rest of the sign shall match those of standard fire lane no parking signs.

All sign and lettering dimensions shown are *minimums*. "Arial Narrow" font used is used in sample above though other legible sans-serif fonts may be acceptable.

Signs shall be securely mounted facing the direction of travel and clearly visible to oncoming traffic entering the designated area. Signs shall be made of durable material and installed per Attachments 13 and 14.

ATTACHMENT 13

Fire Lane No Parking Sign Locations

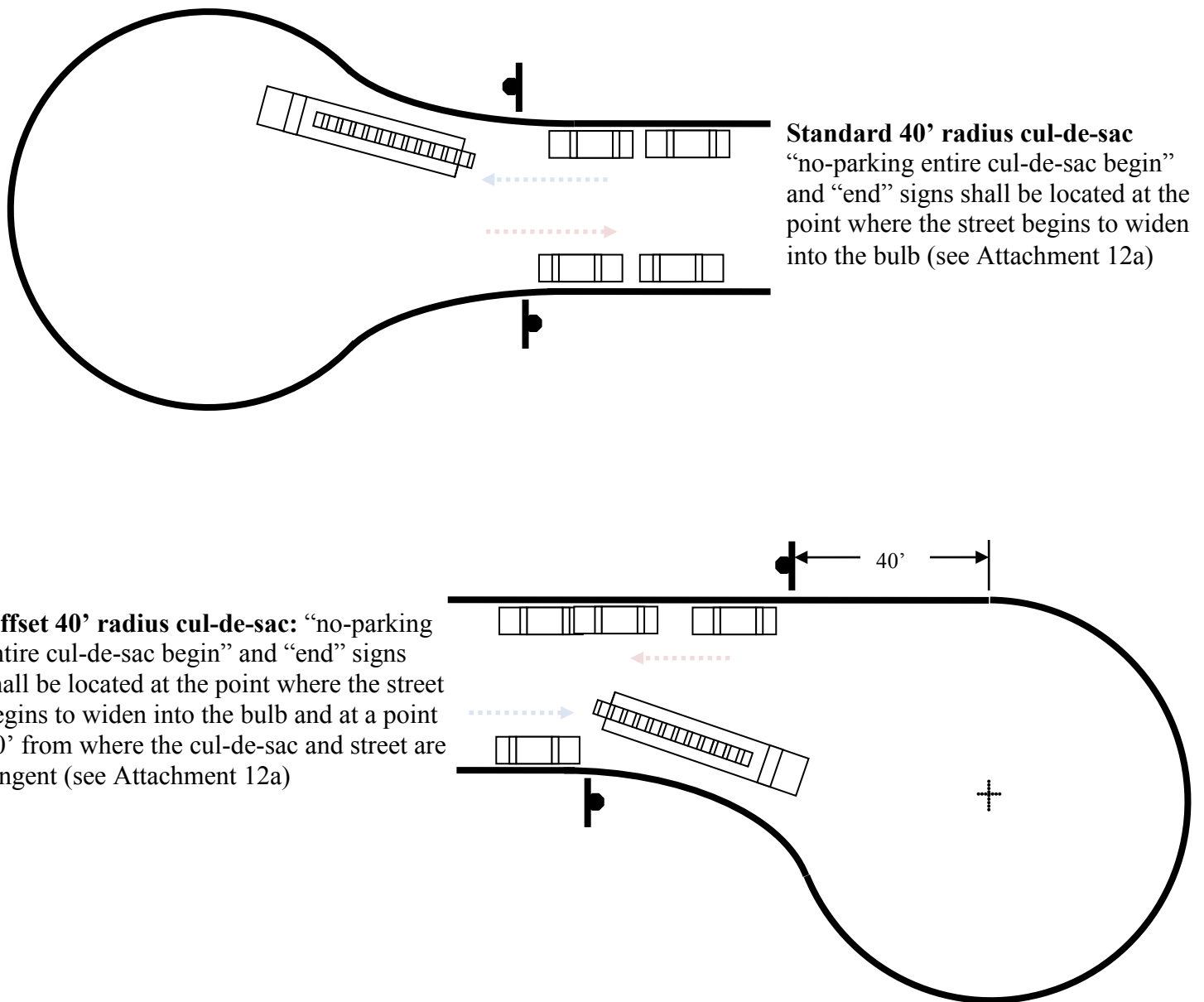


Signs are required within 3' of the end of the curb return at the beginning of each "block" along the fire lane and spaced a maximum of 50' along the entire designated lane. A sign shall be located within a reasonable distance of the end of each block as necessary to clearly identify the extent of the no parking zone. One sign is required for each island adjacent to the fire lane that is large enough to accommodate a parked car.

Signs shall be securely mounted facing the direction of travel and clearly visible to oncoming traffic entering the designated area. Signs shall be made of durable material and installed per Attachment 14. Where sign posts are not practical, signs may be mounted on a wall or fence and are allowed to be oriented perpendicular to the length of the fire lane. OFD inspectors will determine if additional signs or sign locations are required.

ATTACHMENT 13a

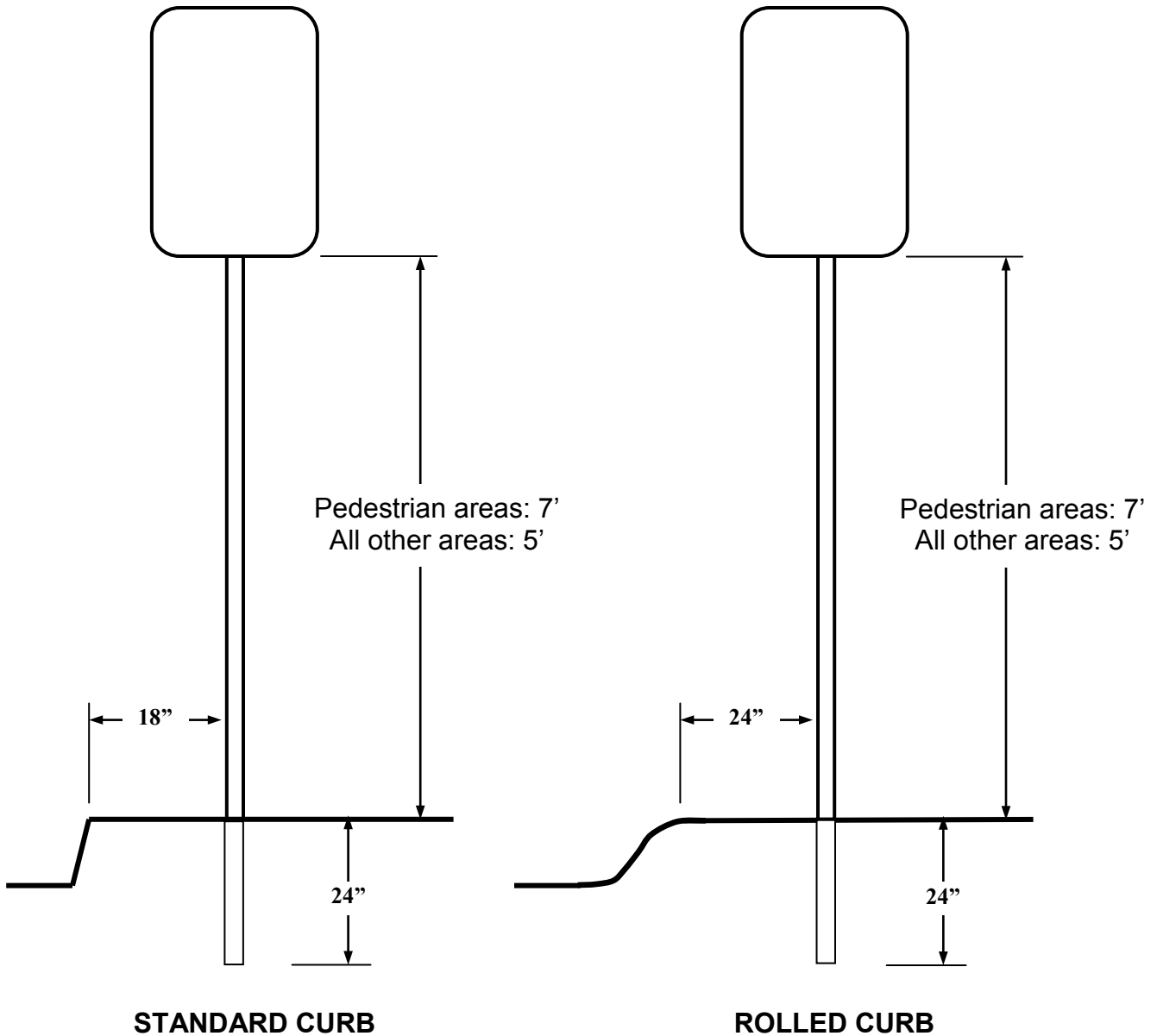
Fire Lane No Parking Sign Locations for Cul-de-sacs



*Drawing
not to scale*

ATTACHMENT 14

Mounting Specifications for Fire Lane Entrance and No Parking Signs



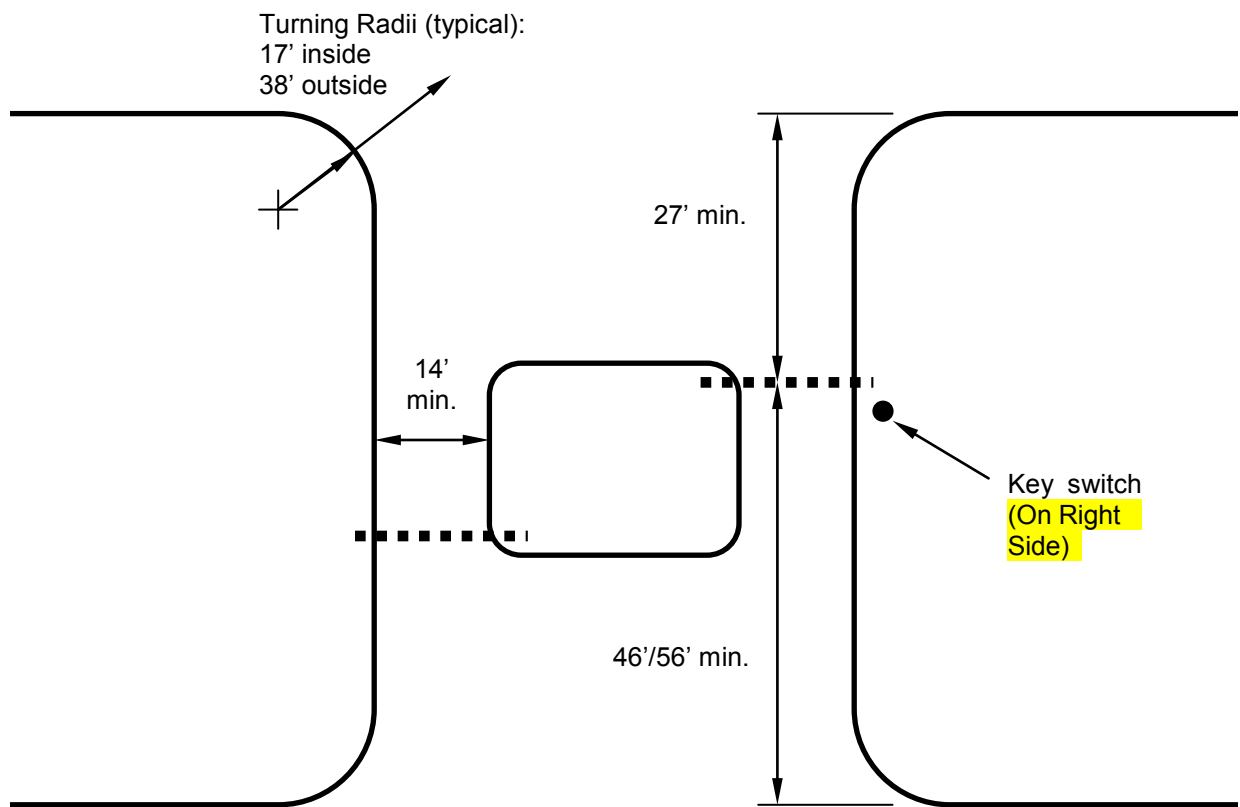
Signs shall be mounted facing the direction of vehicular travel.

Signs may be mounted on existing posts or buildings where the centerline of the sign is no more than 24" from the edge of the roadway.

Depth of bury shall be a *minimum* of 24" and rebar, a concrete footing, or another method to prevent removal of the sign is recommended. Footings for signs located in the public right-of-way shall be per the local jurisdiction's requirements.

ATTACHMENT 15

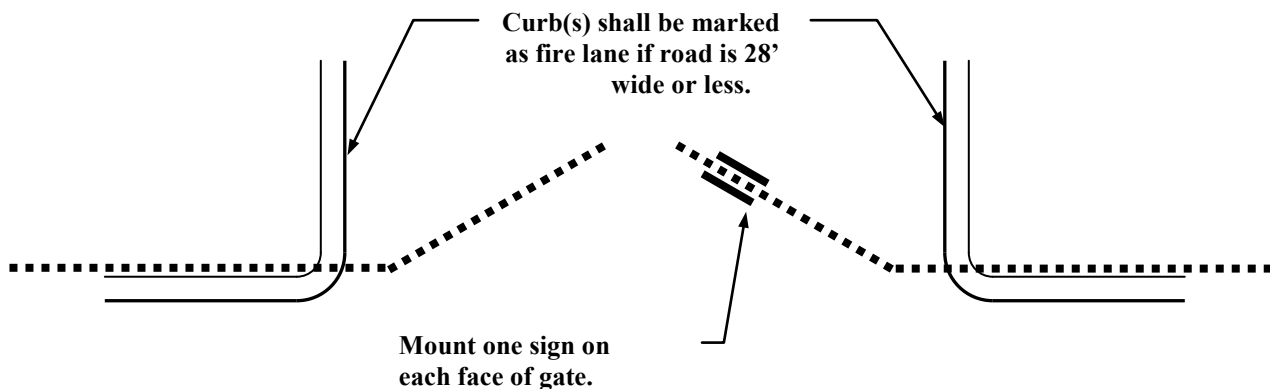
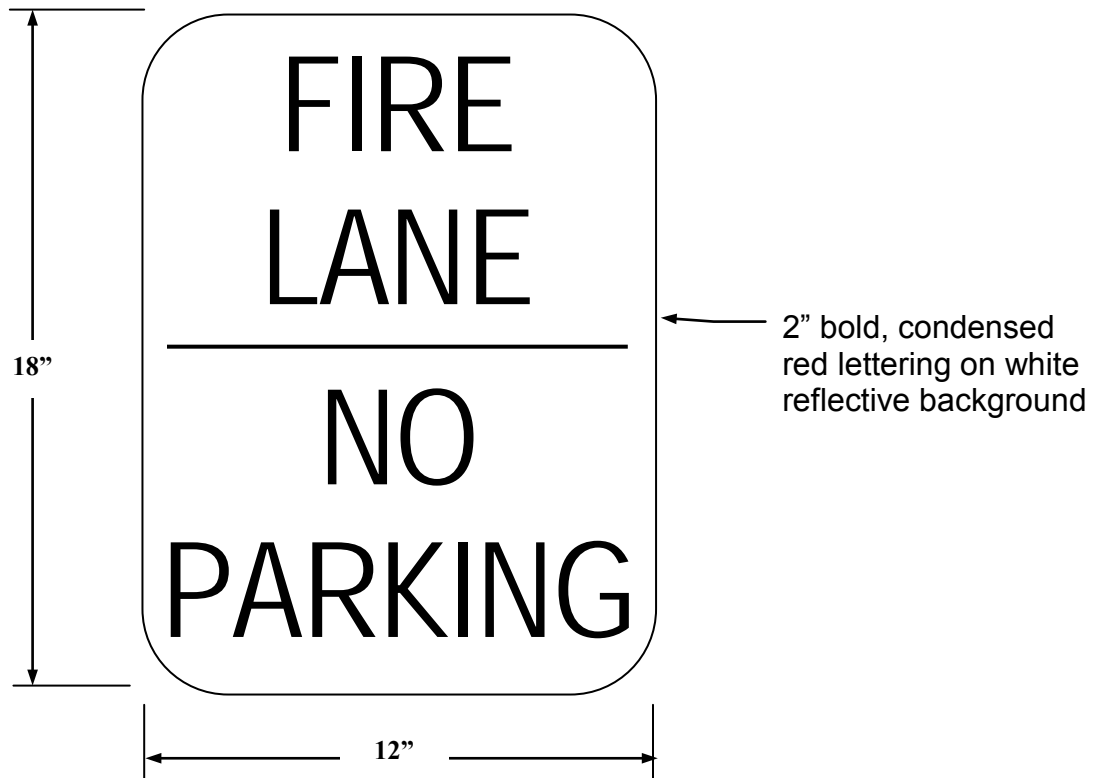
Minimum Gate Setbacks



*Drawing
not to scale*

ATTACHMENT 16

Specifications for “Fire Lane - No Parking” Signs for Manually Operated Gates and Barriers



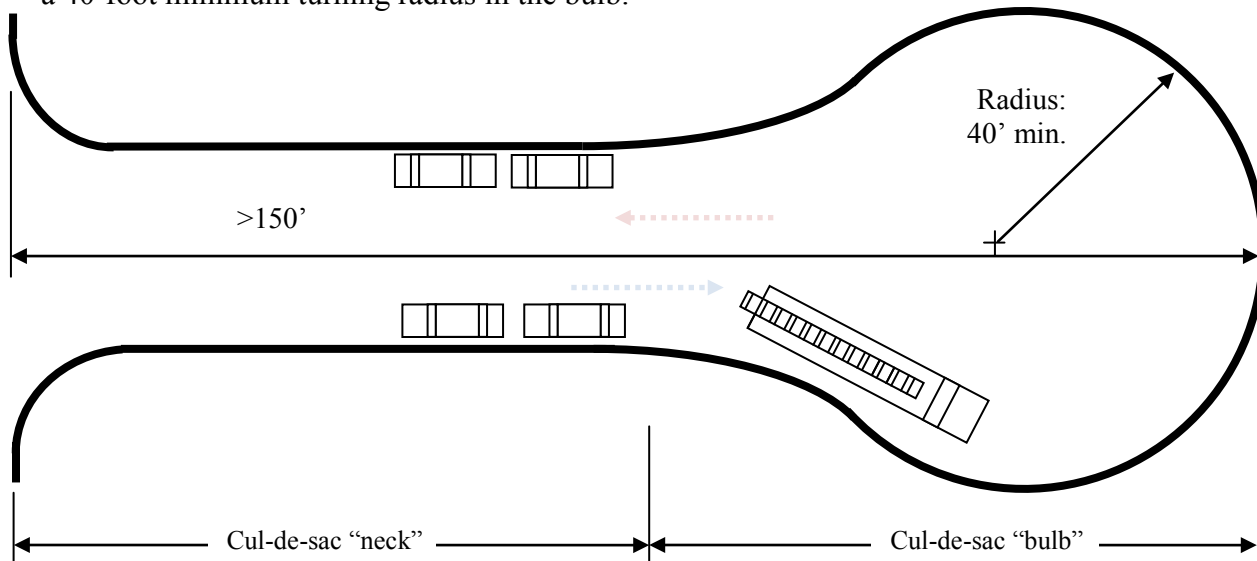
All sign and lettering dimensions shown are minimums. “Arial Narrow” font used is used in sample above though other legible sans-serif fonts may be acceptable.

“Fire Lane—No Parking” sign shown in Attachment 12 may be used as an alternative. Signs shall be securely mounted on the front and back face of the gate clearly visible to traffic entering the designated area. Signs shall be made of a durable material.

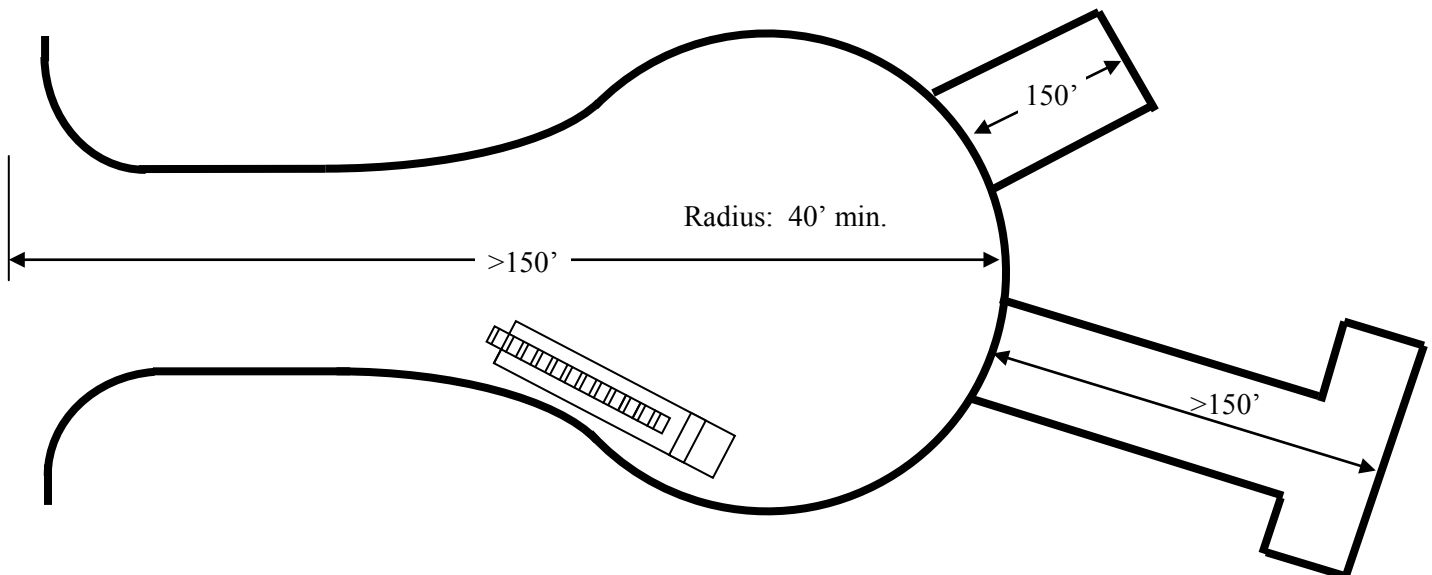
ATTACHMENT 17

Cul-de-sacs and Dead-end Roadways

- 1) Cul-de-sac streets greater than 150 feet in length that are required fire lanes shall be provided with a 40-foot minimum turning radius in the bulb.



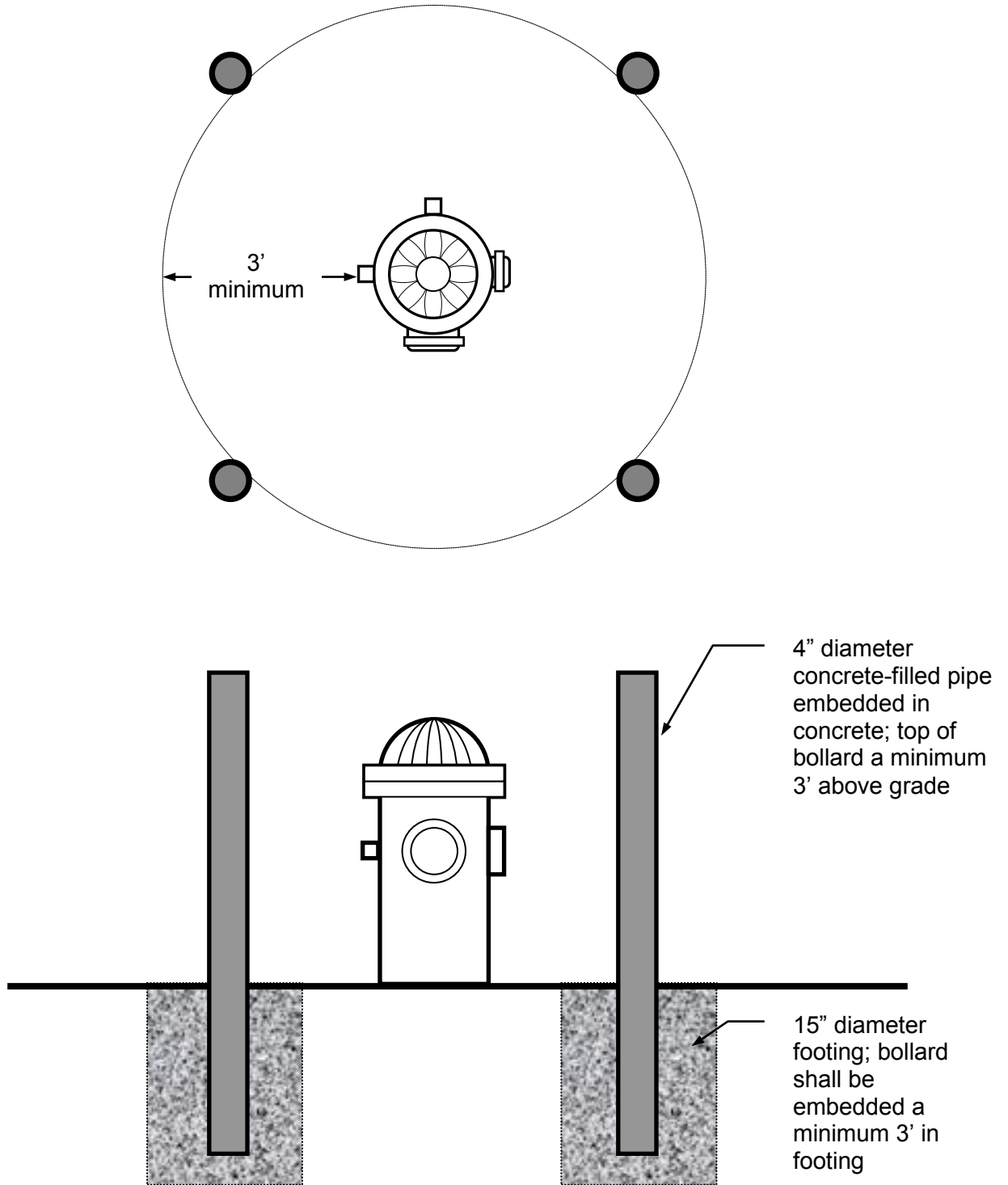
- 2) Where a spur road or private driveway that is a required fire lane is accessed via the cul-de-sac road, the driveway or spur shall be no more than 150' in length unless an approved turnaround has been provided within 150' of the end of the spur or driveway or if approved by the Fire Code Official.



*Drawing
not to scale*

ATTACHMENT 18

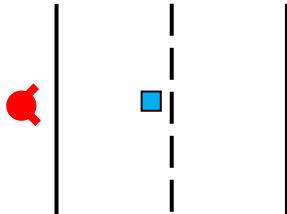
Protection of Hydrants, Detector Checks, Fire Department Connections, and other Appurtenances (When Required)



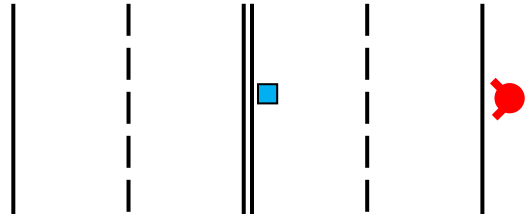
ATTACHMENT 19

Blue Dot Hydrant Marker Location

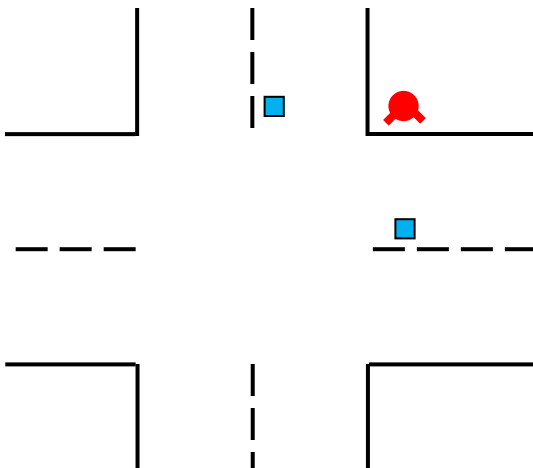
TWO LANE STREET



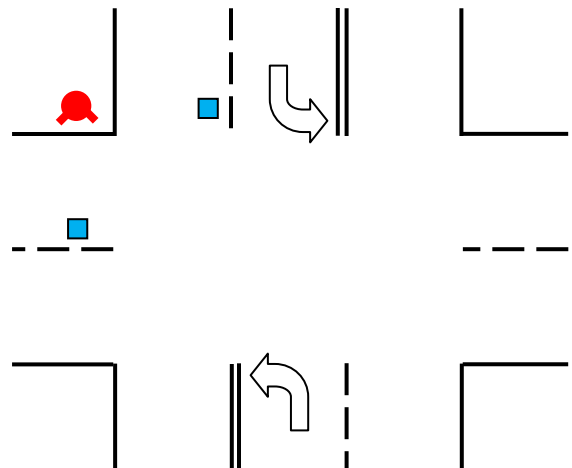
MULTI-LANE STREET



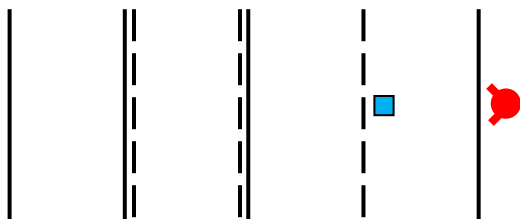
INTERSECTION



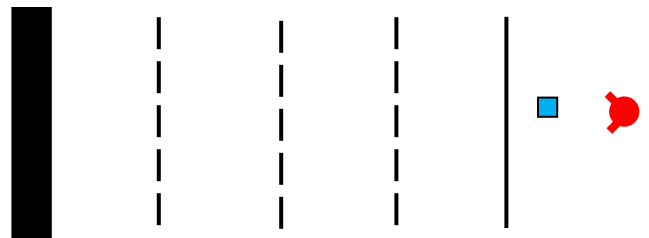
INTERSECTION WITH TURN LANES



MULTILANE STREET WITH TURN LANE



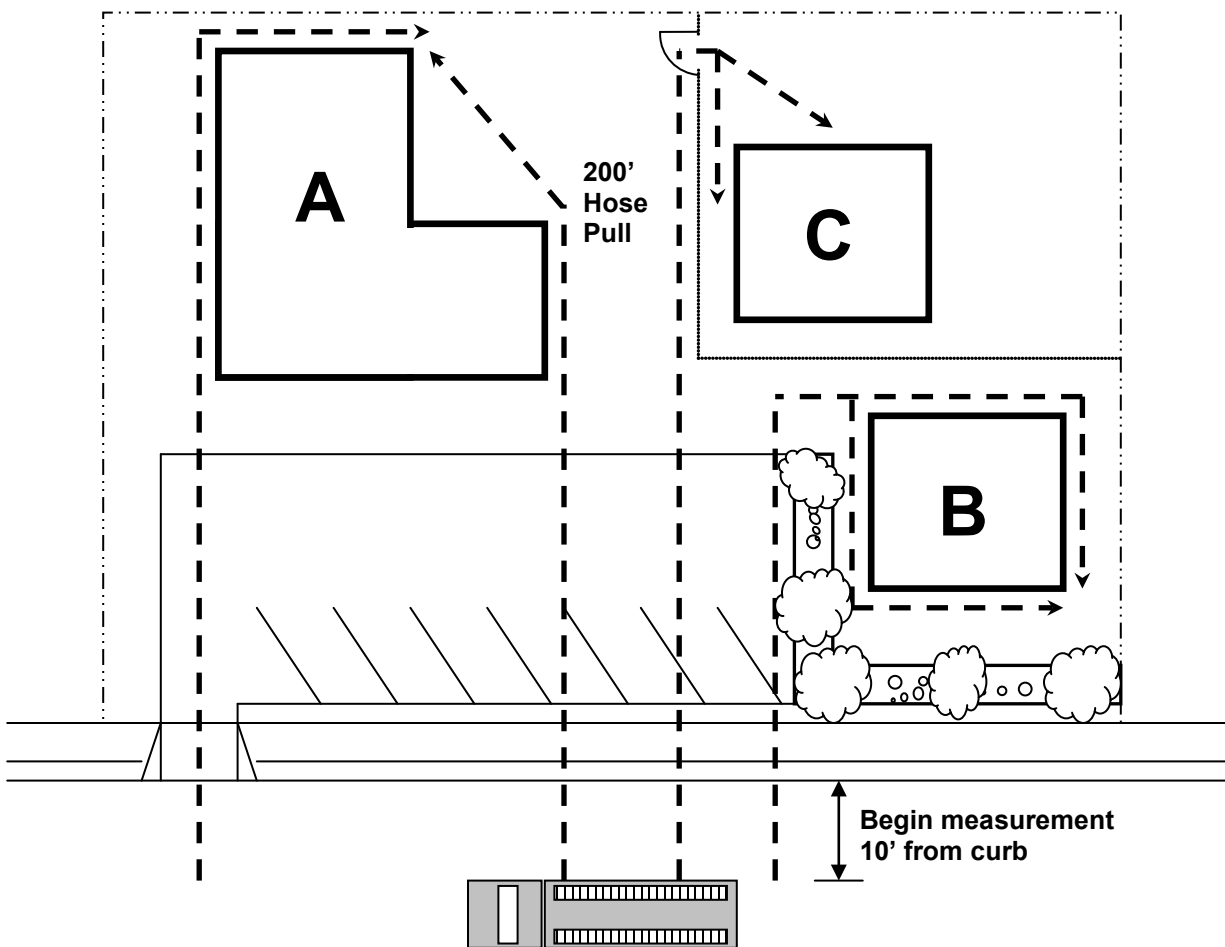
FREEWAYS AND EXPRESSWAYS



The developer is responsible to install the blue dots in the approved manner.

ATTACHMENT 20

Hose Pull



In the example above, assume that the parking lot is not accessible to fire apparatus due to turning radii and fire lane widths less than the required minimums.

- All portions of building “A” are within 200’ feet of the public road as measured along the path of firefighter travel. This building is in access.
- Building “B” is also in access despite the obstruction presented by the planter and hedges.
- Building “C” is out of access; the presence of a chainlink fence forces firefighters to backtrack once they pass through the gate, increasing their travel distance beyond 200’. On-site fire access roadways or a change in the location of the gate and would be necessary to provide access to Building “C”.

ATTACHMENT 21

Hydrants Spacing

A: Hose Pull (Distance from Engine to Building): Represents the amount of fire hose that firefighters must pull from the engine to reach the structure. A Hose Pull may not exceed 200' from the apparatus to the most remote point of the perimeter of the structure, unless if approved by the Fire Code Official. A Hose Pull is measured along the firefighter path of travel, avoiding any obstacles, not "as the crow flies." In the diagram below, firefighters would be able to reach the entire perimeter of the building by pulling no more than 200' of hose from one or more fire engines staged in the shaded portion of the fire lane; the engine in the unshaded roadway has a hose pull distance greater than 200' and the building would be considered "out of access" from that point. For hydrant evaluation purposes, the shaded part of the fire lane is considered to serve the building and must meet hose lay requirements.

See Attachment 20 for further information on hose pull measurement and access to structures.

B: Hose Lay (Distance from Engine to a Hydrant): Represents the amount of hose that must be laid out of the engine to supply water to the engine from the hydrant. No point along the portion of the fire lane serving the structure (the shaded road) may be farther from a hydrant than the distance specified under "Maximum Distance" in CFC, Appendix C, Table C105.1. The hydrant may be located along portions of the fire lane that exceed the hose pull distance (unshaded roadway) provided that it is: 1) on the same property, 2) on an adjacent property where an emergency access easement has been obtained, or 3) on a public road leading to the fire lane serving the property. Hose lay is measured along the vehicle path of travel in the fire lane, not "as the crow flies."

C: Hydrant Spacing (Distance between Hydrants)—the distance between hydrants serving the building shall not exceed twice the "Maximum Distance" listed in CFC Table C105.1, as measured along the fire lane. Hydrants located on portions of the fire lane that do not serve the building do not need to be evaluated for spacing relative to each other, only with respect to hydrants that do serve the structure. For example, when evaluating hydrant placement for the building shown in the diagram below, C₁ may exceed the hydrant spacing requirements, while C₂ and C₃ cannot. The "Average Spacing" from Table C105.1 shall be maintained to prevent multiple hydrants from being concentrated in only one portion of the fire lane. Additional Oceanside Water Department requirements may apply.

