



**Menlo Park Fire Protection District  
Fire Prevention Bureau**

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***MENLO PARK FIRE DISTRICT  
GUIDELINE FOR PRIVATE ROADS AND DRIVEWAYS  
Includes requirements for Gates, Turnarounds & Turnouts***

**SCOPE.** This guideline provides the minimum requirements necessary for Driveways of any length with Gates, Driveways exceeding 150 feet in length, and Private Roads of any distance. In addition to the requirements set forth within this guideline, Private Roads or Driveways shall also comply with the 2013 California Fire Code (CFC), Chapter 5 and Appendix D.

When necessary, these guidelines may be modified to ensure adequate access for fire apparatus and public safety. Some factors that may contribute to modifications include walls, cliffs along roads or driveways, angle of approach or departure, grade/slope and the likelihood of future obstructions.

**DEFINITIONS**

AASHTO HB-17: American Association of State Highway and Transportation Officials, the 17<sup>th</sup> edition *Standard for Highway Bridges*.

**ALL WEATHER ROAD:** A road or driveway constructed of asphalt, concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds (34 050 kg).

**DRIVEWAY:** An access road serving not more than 2 dwelling units and is located within the boundaries of the properties being served.

**PRIVATE ROAD:** An access road that is outside the boundaries of the properties being served and/or serving 3 or more dwelling units.

**GATES**

The design for all gates across driveways and private roads shall be approved by the Fire District. Gates shall comply with all of the following criteria:

1. A minimum clear, unobstructed width of not less than 16 feet shall be provided.
2. Gates shall be of the swinging or sliding type.

3. Gates may have electric opening devices, but shall allow manual operation by one person.
4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
5. All locking devices shall provide for Fire District access. Electric gates shall have a Knox® override key switch installed. Please see Menlo Park Fire District Guideline on Key Box Installations for details on Knox® override switches.
6. Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of forcible entry tools, a Knox® Pad Lock is used, or when a Knox® Key Box containing the key(s) to the lock is installed at the gate location.
7. Locking device specifications shall be submitted to the Menlo Park Fire District for approval by the fire code official.

## **DRIVEWAYS**

**Driveway Specifications.** Driveways shall extend to within 150 feet of all portions of the facility and all portions of the exterior walls of the first story of the building. Driveways shall provide a minimum unobstructed width of 16 feet (3658 mm) and a minimum unobstructed height of 13 feet 6 inches (4115 mm). Driveways in excess of 150 feet (45 720 mm) in length shall be provided with turnarounds. Driveways in excess of 500 feet (60 960 mm) in length and less than 20 feet (6096 mm) in width shall be provided with turnouts in addition to turnarounds.

**Fire Sprinkler Allowance.** When the most remote single family residence is provided with automatic fire sprinkler protection and is less than 3600 square feet, the driveway distance may be measured from the edge of the street to the face of the structure.

**Turnarounds.** Driveway turnarounds shall have inside turning radii of not less than 30 feet (9144 mm) and an outside turning radii of not less than 45 feet (13 716 mm). Driveways that connect with a road or roads at more than one point may be considered as having a turnaround if all changes of direction meet the radii requirements for driveway turnarounds.

Driveways exceeding 1 mile in length shall be provided with approved turnaround areas at ½ mile intervals.

**Turnouts.** Driveway turnouts shall be an all-weather road surface at least 10 feet (3048 mm) wide and 30 feet (9144 mm) long. Driveway turnouts shall be located every 500 feet or at the midpoint if the road is 1,000 feet or less.

## **PRIVATE ROADWAYS**

**Roadway Specifications.** Private roadways serving 3 or more residential occupancies shall be all-weather roads with a minimum width of 20 feet (6096 mm) and a clear height of 13 feet 6 inches (4115 mm). Roadways shall be designed to accommodate the weight of fire apparatus and the minimum turning radii of 36 feet for fire apparatus. Dead-end roads in excess of 150 feet

(45 720 mm) in length shall be provided with turnarounds as specified by CFC Appendix D, Table D103.4. Access roads exceeding 1 mile in length shall be provided with approved turnaround areas at ½ mile intervals.

**Marking of roads.** . All road identification signs and supports shall be of noncombustible materials. Signs shall have minimum 4-inch-high (102 mm) reflective letters with 1/2 inch (12.7 mm) stroke on a contrasting 6-inch-high (152 mm) sign. Road identification signage shall be mounted at a height of 7 feet (2134 mm) from the road surface to the bottom of the sign.

**Marking of Fire Protection Equipment.** Fire protection equipment and fire hydrants shall be clearly identified accordance with the Menlo Park Fire District Guideline, “Water Supplies and Fire Hydrants.” On-site fire hydrants shall not be obstructed.

**Cul-de-sacs, Curves, and 90° Turns.** Cul-de-sacs, curves, and 90° turns shall be in accordance with CFC Appendix D. No obstructions are allowed within the cul-de-sac, such as trees, planters, islands etc.

## **GENERAL REQUIREMENTS**

**Surface.** All the items in this standard shall meet the requirements for an all weather road.

**Landscape.** Landscaping shall not interfere with the required fire apparatus access.

**Parking.** Parking (or any other obstruction) will not be allowed on any of the items in this standard, unless additional space is provided and approved.

**Fire Lane Signs.** Installation and placement of signs and markings and designating fire lanes shall be in accordance with Menlo Park Fire Protection District Guideline for “Designation and Marking of Fire Lanes.”

**Easements.** Access improvements (roads, turnarounds and turnouts) that cross property lines shall be recorded with the San Mateo County Tax Assessors Office.

**Bridges and elevated surfaces.** Where a bridge or an elevated surface is part of the private roadway or driveway, the bridge shall be constructed and maintained in accordance with AASHTO HB-17 and CFC Chapter 5 Section 503.2.6.

**Address markers.** All buildings shall have a permanently posted address, which shall be placed at each driveway entrance and be visible from both directions of travel along the road. Permanent addresses on new construction and substantial remodels shall be internally or externally illumined from dusk to dawn. Addresses shall be posted at the beginning of construction and shall be maintained thereafter. The address shall be visible and legible from the road on which the address is located. Address signs along one-way roads shall be visible from both the intended direction of travel and the opposite direction.

Where multiple addresses are required at a single driveway, they shall be mounted on a single post, and additional signs shall be posted at locations where driveways divide. 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.

**Grades.** The gradient for private roadways and driveways shall not exceed 10%. Turnarounds and cul-de-sacs shall not have a grade greater than 5% in any direction. Turnouts, curves, and 90° turns shall not have a grade greater than allowed for the road they are on. Transitions between grade changes shall not exceed 5% and shall not interfere with the angle of approach, angle of departure or high centering of fire apparatus.

**Timing of Installation.** Access roadways and water supply, including the items required by this guideline, shall be provided prior to and kept in place during the time of construction.

### **PLAN CHECKS**

**Plan check.** Two copies of a clear accurate site plan, with scale shown, are required for plan review. Plans shall include fire hydrant location(s) with the submittal. When approved, one copy will be kept by the Fire Prevention Division and all the others will be returned to the applicant. Final approval is subject to an onsite inspection.

**Gates.** All gates across any driveway or private road shall be approved by the Fire District. Plans and specifications shall be submitted to Menlo Park Fire District for review and approval prior to construction.