



# Sacramento Metropolitan Fire District

Community Risk Reduction Division

[www.metrofire.ca.gov](http://www.metrofire.ca.gov)

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SACRAMENTO METROPOLITAN FIRE DISTRICT			
FIRE PREVENTION STANDARD			
STANDARD TITLE:	Residential Civil Engineering Notes		
STANDARD NUMBER:	13	EFFECTIVE DATE:	01/21/2004
		REVISION DATE:	01/01/2023

## **OBJECTIVE**

To provide standard notes for Civil Drawings.

## **PROCEDURE**

The following information must be reproduced as “Sacramento Metropolitan Fire District Notes” for Residential Subdivisions or Parcel Splits:

1. The minimum required fire flow for residential developments with a total area per structure not exceeding 3,600 square feet is 1,000 gallons per minute at 20 pounds per square inch residual pressure. A Fire District certificate of release is required for structures exceeding 3,600 square feet in total area. For the purposes of fire flow calculation all areas under the buildings roof line, including covered porches, patios, garages, breezeways, etc. are considered. (2022 CFC Appendix B)
2. Prior to any construction (including foundation) or storage of combustible materials on-site, the following improvements shall be provided (2022 CFC Appendix B and 503.1):
  - a. Fire hydrants capable of providing the required fire flow shall be installed, tested and approved.
  - b. Fire apparatus access roads shall be installed, identified and approved prior to construction or storage of combustible material. Roads may be installed to the “first lift” (up to the last 1” of pavement).
3. Blue reflective hydrant markers shall be placed adjacent to the fire hydrants in accordance with Department of Transportation guidelines. (2022 CFC 509.1)
4. The following information applies to fire hydrant installations, unless the water purveyor having jurisdiction has more specific requirements:
  - a. Fire hydrants shall meet the following minimum requirements:

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- I. Fire hydrants shall have a .9 coefficient of discharge or greater and with a maximum head loss of 2 psi at 1000 gpm. Provide specification sheet to plan review section prior to installation. (2022 CFC Appendix B)
- II. Outlets shall be National Standard Thread with one 4.5 inch and two 2.5 inch outlets. (NFPA 24 § 7.1.2)
  - b. Fire hydrants shall be located within eight (8) feet of the roadway with the 4-½ inch outlet facing the road. The bottom flange is to be installed a minimum of two (2) inches above the finished grade. The centerline of the 4½-inch discharge outlet is to be a minimum of eighteen (18) inches above the finished grade. (NFPA 24 § 7.1.2)
5. The installation of perimeter fencing, gates, or barriers that obstruct fire apparatus access roads shall require a separate plan submittal, review, and approval by the Fire District prior to installation. (2022 CFC 503.6)