

APPENDIX

**Fire Hydrants, Mains and
Fire Alarm Boxes.***

* As to committee on fire, lights and water, see § 2-23 of this Code. As to duty of street excavators to maintain free access to fire hydrants and water gates, see § 22-15. As to duty of subdivider to construct fire plugs, mains and fire boxes, see § 23-4.

Editor's note.—The standards and specifications contained in this appendix are derived from Ord. No. 928, passed March 5, 1962, as amended by Ord. No. 961, § 1, passed January 7, 1963, and Ord. No. 1004, § 1, passed February 17, 1964.

I. That all installations of fire hydrants, water mains and fire alarm boxes within the city, whether constructed and installed by a subdivider, water service agency, or any person, shall conform to the following standards and specifications, a copy of which shall be kept on file in the office of the city engineer.

**FIRE HYDRANTS, MAINS, AND FIRE
ALARM BOXES****A. FIRE HYDRANTS.****1. Requirements.**

Fire Plugs—A fire flow of three thousand gallons per minute is required for a duration period of ten hours in the high value and heavy industrial areas of the community; a fire flow of seven hundred and fifty gallons per minute is required for a duration period of ten hours in the standard residential sections, and a fire flow of one thousand five hundred gallons per minute for a ten hour period in high value closely built-upon residential areas in which churches, schools, and other similar structures, would be interspersed. Static water pressure shall be such as to deliver the required fire flows at a flowing or residual pressure of twenty pounds per square inch over and above the normal consumption demands of the system.

In residential areas fire hydrant distribution shall be on the basis of no less than one hydrant for each one hundred twenty thousand square feet of built-upon area of the district. In the commercial industrial area fire hydrant distribution shall be on the basis of

no less than one hydrant for each one hundred thousand square feet of built-upon area. In no case shall the fire hydrant spacing be more than four hundred feet from fire hydrant to fire hydrant, nor more than three hundred feet from fire hydrant to the center of the front of any lot.

2. Material.

Fire hydrants shall be of the type manufactured by M. Greenberg's Sons, and shall be of the improved Los Angeles type 53 GR, residential district and 54 GR, high value district as shown in Greenberg's Catalog T, or equal. Each hydrant shall be fitted with six inch inlet bury, six inch gate valve and main to-steel pipe, for connection between bury and gate valve and main together with the necessary fitting required to connect the six inch steel pipe to the main, and all fittings required to connect the hydrant to the main. An eight inch diameter metal valve box and metal cover set to finish pavement grade shall be installed to allow operation of the six inch valve.

3. Construction.

The connection to the main must be acceptable, inspected, and approved by the California Water Service Company, or other water service agency and the city engineer. The work must be done in accordance with City of Oroville Construction Standard Drawing S-11.

4. Gridiron.

The gridiron of minor distributors supplying residential districts shall consist of mains at least six inch in size arranged so that the lengths on the long sides of blocks between intersecting mains do not exceed six hundred feet. Where longer lengths of six inch pipe are necessary, eight inch or larger intersecting mains should be used. Where initial pressures are high, a satisfactory gridiron may be obtained with longer lengths of six inch pipe between intersecting mains.

In new construction eight inch pipe shall be used where dead ends and poor gridironing are likely to exist for a considerable period or where the layout of the streets and the topography are not well adapted to the above arrangement.

In high-valve districts, the minimum size shall be eight inch with intersecting mains in each street;

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twelve inch or larger mains shall be used on the principal streets and for all long lines that are not connected to other mains at intervals close enough for proper mutual support.

5. Spacing of Valves.

The distribution system shall be equipped with a sufficient number of valves so located that no single case of accident, breakage, or repair to the pipe system, exclusive of arteries, will necessitate the shut-down of an artery or a length of pipe greater than five hundred feet in high-value districts or greater than eight hundred feet in other sections.

B. FIRE ALARM BOXES.

1. Requirements.

In residential areas the fire alarm boxes shall be located so as to be within eight hundred feet and visible from the front of any residence. If visibility from the front of any residence to the fire alarm box is impaired for any reason, the fire alarm boxes shall be located so as to be within five hundred feet from the front of any residence.

In mercantile and manufacturing districts the fire alarm boxes shall be located so as to be within five hundred feet and visible from the front of any building. If the visibility from the front of any building to the fire alarm box is impaired for any reason, the fire alarm boxes shall be located so as to be within three hundred feet from the front of any building.

The boxes shall be conspicuously located at street corners where practicable. The box and a portion of the supporting pole or post shall be painted "signal" red, preferably with white stripes above and below the red.

2. Materials.

The fire alarm boxes shall be of the Gamewell Peerless Three Fold Type. Material to comply with the standards of the National Board of Fire Underwriters' "Municipal Fire Alarm System" and National Electrical Code.

3. Construction.

The subdivider shall furnish and install all material, labor and equipment required to place the new construction in the same effective operating condition as the existing fire alarm system in the City

of Oroville. The equipment may be placed on the poles of either of the public utility companies. The subdivider is to secure permit to place equipment on the utility poles on behalf of the City of Oroville.

All of said work is to be constructed at the places and in the locations indicated on the plans. Construction will comply with the National Board of Fire Underwriters' "Municipal Fire Alarm System" and the National Electrical Code. (Ord. No. 1004, § 1.)

I. The above standards and specifications may be amended at any time by resolution of the city council, and such resolution of amendment shall be kept on file in the office of the city engineer.

II. A wilful violation of this ordinance shall be a misdemeanor. Any wilful or intentional misrepresentation of any fact made for the purpose of influencing the action of any officer or public body herein named pursuant hereto shall be a violation of this ordinance.

III. The purpose of this ordinance is to promote and obtain a reasonable minimum level of fire protection performance for water supply facilities hereafter constructed, replaced, extended or rehabilitated to serve new subdivisions and new residential, commercial and industrial improvements in the city. (Ord. No. 961.)

IV. The provisions of this ordinance are not intended to cause any unnecessary hardships or practical difficulties inconsistent with economic feasibility and normal development in which event the city council shall have the right to waive portions of this ordinance; nor shall the provisions of this ordinance be construed to require the replacement or abandonment of water facilities existing at the date hereof. (Ord. No. 961.)

V. This ordinance shall not impose upon water utilities, and they shall not be subject to, any civil liability either for damages or otherwise, which liability would not exist if this ordinance had not been adopted. (Ord. No. 961.)