

# **Interdepartmental Standards Relating to the Placement of Fire Hydrants With Respect to Distance to Curb**

## **I. BACKGROUND**

The previous San Francisco Fire Department (SFFD) policy that all hydrants be located within 18-24 inches of the curb has translated into significant costs borne by various City departments when implementing pedestrian safety, accessibility and streetscape enhancements throughout San Francisco. Primarily, projects that propose installation of a corner bulb-out in order to increase pedestrian visibility and shorten pedestrian crossings have required the relocation of existing fire hydrants to conform to an 18-24" distance to curb requirement. This could have doubled the cost of construction, which often translated into abandonment of project proposals.

The installation of curb extensions and bulb-outs in areas with high pedestrian traffic and/or pedestrian visibility concerns improves safety conditions for both pedestrians and motorists alike. Curb extensions increase visibility of pedestrians and drivers to each other and provide visual and physical cues that encourage turning drivers to slow down. In addition, they narrow the street, thereby shortening the distance for pedestrians to cross and reducing their exposure to vehicular traffic. Bulb-outs are supported by the City's Better Streets Plan.

## **II. THE WAY IT IS WAS**

Both low pressure and AWSS hydrants had to be located within 18-24" of the curb face at all times. If the curb face directly perpendicular to the hydrant was extended such that the curb is no longer within this distance of the hydrant, the hydrant would have been relocated.

## **III. THE WAY IT IS NOW**

In keeping with the City's pedestrian safety and accessibility goals and the Fire Department's operational, access, and visibility needs articulated in (IV) below, fire hydrants can remain in their existing location when corner bulb-outs are implemented, but shall be relocated when an entire block face is widened.

### **i. Locations where only bulb-outs are being constructed**

In order to maximize visibility of hydrants along a street corridor and to minimize the cost of pedestrian safety bulb-out projects (which are often very low budget), hydrants may remain in their existing location, so long as Fire Department operational needs listed in (V) below can be met.

### **ii. Locations where an entire block face is being widened**

In cases where the entire block face is being widened, all hydrants shall be relocated so that they are situated within the furnishing zone of the sidewalk (18-24" from curb face). Hydrants should be located in horizontal alignment along the block face.

**iii. Locations with new construction.**

In locations where new hydrants will be installed along bulb-outs, the hydrants shall be located in line with other hydrants along the block.

**iv. All locations**

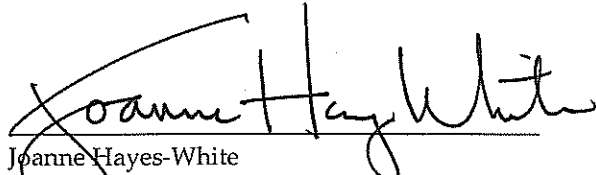
All hydrants – existing and new - should be demarcated using a standard blue raised deflector located in the centerline of the street on which the hydrant faces.

#### **IV. FIRE DEPARTMENT OPERATIONAL NEEDS**

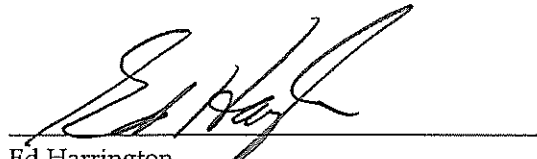
The following functional parameters represent the needs of the SFFD with respect to the location of hydrants:

- i. Ensure distance between hydrant location and pump truck is no longer than standard hose length.** Currently, the standard SFFD hose length is between 15-20 feet. Accounting for all fixed obstructions, such as a parked vehicle, the distance between the hydrant and where a pump truck stations itself must not exceed this standard hose length. Generally, a pump truck stations itself approximately 5-7' from the curb face (to minimize hose kinking) but in a position that still allows for other fire vehicles to pass the stationed pump truck. The width of a typical engine is 99" and 122" when stabilizers are fully deployed. These widths should be considered when determining adequate passing distance.
- ii. Ensure that parked vehicles do not block perpendicular access to a hydrant from the street.** Physical and or curb color elements should be used that preclude a vehicle from parking in front of a hydrant. Generally, a painted red zone is used to demarcate this zone. Physical elements that preclude a vehicle from parking but do not inhibit access by a fire truck should also be considered, as appropriate.
- iii. Ensure visibility of hydrants.** Hydrants must be visible from the roadway at all times. They cannot be placed behind other objects that would otherwise obscure their location. At corner locations, hydrants should be visible from the intersection by a vehicle traveling any of the streets that form the intersection. Similarly, objects must not be placed in the line of site of hydrants at corner locations. Elements should not be placed between the fire hydrant and the curb to ensure the ability to locate the hydrant should there be building debris in the right of way.
- iv. Maintain consistency of hydrant locations.** To the greatest extent feasible and to facilitate quick identification of hydrant locations, hydrants should be placed along a street corridor so as to provide visual consistency.
- v. Maintain access to control valves.** Low pressure control valves must be located at grade. If the grade of the surface where the control valve is located changes, a bib must be used in order to bring the valve to grade. At AWSS locations, the control box must be located such that a truck carrying service equipment can easily locate itself next to the box.


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