

**DATE:** June 6, 2023

**TO:** Don Jeppson, ADA Coordinator and Chief Building Official

FROM: April Miller, Public Works Director

SUBJECT: DEPARTMENT OF PUBLIC WORKS

GUIDELINES FOR THE PLACEMENT OF BARRICADES AT

**CONSTRUCTION SITES** 

It is the policy of the Department of Public Works that a safe and accessible path of travel be provided for all pedestrians, including those with disabilities, around and/or through construction sites.

### Standard Construction Process for Approval in Public Right-of-Way:

- 1. Contractor shall submit construction plans to the City for review.
- 2. Contractor shall submit Traffic Control Plans to the City for review.
- 3. Contractor to submit site specific Pedestrian Routing Plans to City. Plans shall include pedestrian routing, detours, and barricade plan for the duration of the project schedule and pedestrian & bicycle detour plans compliant with current ADA standards and MUTCD (CA).
- 4. Contractor to call for city inspection after construction barricades are in place, but before the start of any construction or demolition of path of travel or walking surface.

# **Guidelines**:

When erecting barricades, the Contractor shall be conscious of the special needs of pedestrians with physical disabilities. Discretion is given to the contractor to provide protection for pedestrians consistent with all current local, state, and federal codes, including the Americans with Disabilities Act and the California Building Code, Title 24.

The bottom 3 inches minimum of barrier material should be solid. This base will act as a cane guide to blind pedestrians using canes. Walking canes used by blind pedestrians could get caught in plastic snow fence or metal fencing. A safe design can be achieved by attaching a solid, continuous material (i.e., wood, header bender board, sheet metal, solid rod or rail, etc.) to the bottom portion of the fence. Chosen material should have a high visual contrast to the street/sidewalk surface.

When selecting a barricade, it is important that the barricade itself does not create tripping hazards within the path of travel. Some barrier systems are supported by feet

that extend into the path of travel. Any change of level in a path-of-travel which is over 1/4" in. height must be beveled at 45 degree to provide a smooth, non-tripping transition.

Use barricade system with "Flat feet" below:

Not"Obstructing Feet" below:



It is recognized that there are various types of construction activities, including both short-term and long-term projects. Some barricading systems are more appropriate for certain types of construction than others.

The following barricading systems described below are examples of systems which can be used to provide a safe and accessible path of-travel around and through a construction site. They are not intended to be all-inclusive. Any barricading system meeting accessibility standards and the MUTCD (CA) may be considered.

# **BARRICADING METHODS AND MATERIALS**

#### Waterfilled Barriers

Water filled barriers are preferred solution for closing roads or sidewalks. When interlocked, the barriers provide a continuous detection to those pedestrians traveling with the aid of a long cane or who have low vision. Waterfilled barriers are useful for providing separation between vehicles and pedestrians. Water filled barriers may be interlocked to make curves as well as straight lines. Full connectivity reduces the probability of accidental or purposeful alteration of the barriers by vehicles or pedestrians.



# Plastic Pedestrian Barricades

Plastic Pedestrian Barricades are useful for channelizing pedestrian when there is already clear separation from the vehicle travelled way.

Example of Plastic Pedestrian Barricade with no feet or feet tucked away



# A-Frames

A-Frames are useful for provided signage or marking a potential tripping hazard but are not recommended for defining the pedestrian path of travel.

# **Barrier Caution Tape**

Caution tape cannot be used as part of the barricade system since it does not create an adequate and safe structure and cannot be used as a barricade or used to delineate path-of-travel (but can be used in other areas to highlight danger. It can be used in conjunction with other approved barriers, but not as part of a path-of-travel).

Examples of what not to do: No sign, No Barrier, No Accessible & detectable path.





### Closed Crosswalks

If a crosswalk is closed due to construction, then curb ramps leading into that crosswalk should also be appropriately barricaded. Either temporary curb ramps must be installed in the direction of the crosswalk to replace barricaded ramps, or an alternate (detour)

route of travel shall be implemented with MUTCD approved signage. It should be noted that curb ramps are not used solely by persons in wheelchairs. They are also indicators to persons who are blind that a crosswalk exists and that there is a safe path-of-travel to cross the street. Temporary curb ramps should direct blind pedestrians to and through the temporary path-of-travel.



# Open Crosswalks

If crosswalks are to remain open during the project then curb ramp areas should be kept free of debris, staging material, equipment, etc.

NOTE: With the unique nature of each project, certain issues may arise which have not been covered in the above guidelines Each project will have to be reviewed on a case by case basis, to ensure that complete, safe, usable and accessible paths-of-travel are maintained during construction.

### **References:**

#### CBC 3306.3 Directional Barricades

Pedestrian traffic shall be protected by a directional barricade where the walkway extends into the street. The directional barricade shall be of sufficient size and construction to direct vehicular traffic away from the pedestrian path.

# CA MUTCD 2014 Chapter 6D

E. Blocked routes, alternate crossings, and sign and signal information should be communicated to pedestrians with visual disabilities by providing devices such as audible information devices, accessible pedestrian signals, or barriers and channelizing devices that are detectable to the pedestrians traveling with the aid of a long cane or who have low vision. Where pedestrian traffic is detoured to a TTC signal, engineering judgment should be used to determine if pedestrian signals or accessible pedestrian signals should be considered for crossings along an alternate route. F. When channelization is used to delineate a pedestrian pathway, a continuous detectable

edging should be provided throughout the length of the facility such that pedestrians using a long cane can follow it. These detectable edgings should comply with the provisions of Section 6F.74.

<u>Caltrans Temp Pedestrian Access Route Handbook</u>

"Peds must be channelized when routed off existing pedestrian routes" (see figure on page 15).

# City and County of San Francisco Public Works Guidelines

For the Placement of Barricades at Construction Sites. 2008 Order No. 167,840. Referenced in Document 00813.