

London Breed, Mayor

Cheryl Brinkman, Chairman Malcolm Heinicke, Vice Chairman Art Torres, Director Gwyneth Borden, Director Lee Hsu. Director

Cristina Rubke. Director

Edward D. Reiskin, Director of Transportation

# Sidewalk Bike Share Station Placement Guidelines

#### 1. Background

This document contains required and recommended clearances for placing bicycle sharing stations at sidewalk locations in the public right-of-way, consistent with national and statewide standards and local policies. Except where legal requirements are referenced, these guidelines are not meant to be rigid standards, but rather to provide guidance subject to engineering judgment on a case-by-case basis. Under certain circumstances it may not be feasible to conform completely to the guidelines, but a satisfactory placement may still be achieved. Likewise, in some locations, it may be desirable to provide greater clearances than indicated here. If there are any questions about clearance requirements not addressed by these guidelines, station designers should contact SFMTA Livable Streets, SFMTA Accessible Services, or the owners of adjacent utilities or facilities, as appropriate given the site-specific local context. This document was revised on August 18<sup>th</sup>, 2018.

### 2. Station Siting

The modular design of San Francisco's chosen bicycle sharing stations is inherently flexible. Stations should be placed in the open where they can be seen and easily accessed, where they will have sufficient sunlight to provide solar power and where they can be conveniently maintained by the bicycle sharing vendor. By necessity, most stations will be located in the public right-of-way (on the street, or less commonly, on the sidewalk), but they can also be placed on other public properties such as plazas or parking lots or on private property where appropriate. Given that sidewalks in San Francisco are often heavily used, generally narrow and have an abundance of existing street furniture and fixtures, wherever feasible, bike share stations should be located in the parking lane, similar to parklets and on-street bicycle parking installations. Placing stations on-street greatly reduces the potential for conflicts between pedestrians and both bike share equipment and users of the system.

### 3. Station Placement Requirements and Recommendations

Placement of bicycle sharing stations in the public right-of-way shall comply with State and Federal Guidelines (i.e. California Fire Code, Americans with Disabilities Act). The City of San Francisco has established numerous other applicable guidelines with regards to design of public spaces and placement of objects in the public right-of-way. Planners and engineers implementing bicycle sharing stations should be familiar with these documents

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and apply design principles as appropriate. San Francisco-specific guidance documents include:

- San Francisco Better Streets Plan
- Appendix A (Surface-Mounted Facility Placement Criteria) of <u>DPW Order 182933</u>: REGULATIONS IMPLEMENTING THE REQUIREMENTS OF SAN FRANCISCO PUBLIC WORKS CODE ARTICLE 27
- SFMTA Bicycle Parking Standards, Guidelines & Recommendations

Before placing any stations on the property of, or adjacent to properties or public rightsof-way in districts described in Article 10 (Landmark and Historic Districts) or Article 11(Conservation Districts) of the Planning Code, notice must be sent to the Preservation Coordinator of the San Francisco Planning Department and the Historic Preservation Commission. Such installations may require issuance of a Certificate of Appropriateness or approval of a Permit to Alter, which would be reviewed by Planning Department Preservation staff and in some cases by the Historic Preservation Commission. Updated ESRI GIS shapefiles of Article <u>10</u> and <u>11</u> districts can be found on SF OpenData.

All bike share stations on city sidewalks will be peer-reviewed by the Department of Public Works (DPW) Bureau of Street Use and Mapping for conformance to these guidelines.

The Mayor's Office on Disability (MOD) will be consulted for sidewalk station placement when:

- Bike return and removal is not oriented towards the street; or
- The adjacent pedestrian through-zone is less than 72"; or
- The station is not in the furniture zone; or
- Sidewalk conditions necessitate an installation that does not conform to the guidelines listed below.

San Francisco Department of Recreation and Parks will be consulted for sidewalk station placement when stations are proposed on sidewalks fronting City parks. Special consideration will be given for park access and maintenance activities.

# General Considerations for placing bicycle sharing station on the sidewalk

Where on-street sites are not feasible, bike share stations may be placed within the furnishings zone on the sidewalk (See Figure 1). When the stations are in the sidewalk furnishings zone, the following guidelines apply:



- A. Orientation of the stations should be parallel to the street.
- B. Bike return and removal should be oriented with the rear wheel towards the street (away from the pedestrian through zone)(See Figure 2).
- C. Bike share stations should be designed to ensure detectability and reduce potential for tripping. This will be done by bookending bike share stations with elements such as display cases, safe-hit posts, or street furniture (i.e. benches, trashcans).
- D. Bike share stations shall be designed to avoid obstructing access to bus stops, subway station entrances, white zones, blue zones, or their adjacent sidewalk access (See Figure 3, 4).
- E. Bike share stations shall not obstruct curb ramps, curb ramp side flares, street corners, or crosswalks.
- F. The pedestrian through zone adjacent to the bike share stations should be 72"minimum, consistent with the Better Streets Plan.
- G. A minimum 72" clearance should be provided between the station end and an adjacent bus shelter.

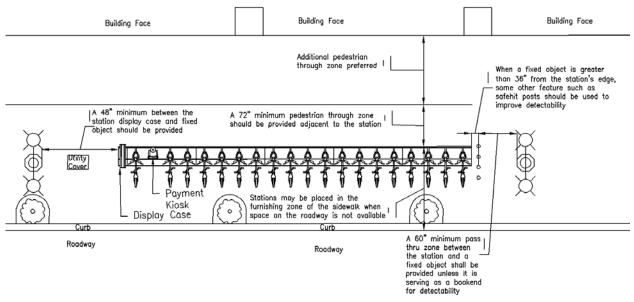


Figure 1: Typical placement of sidewalk bicycle sharing station in the furniture zone with bicycles being withdrawn towards the roadway. This orientation is preferred as it reduces the potential for conflicts in the pedestrian through zone.

H. A minimum of 60" clearance shall be provided for pedestrian pass through between one of the station ends and any permanently affixed element or tree well unless these stationary objects are intended to serve as bookends, in which case, they will be placed less than 36" away from the bike share station end.



- I. If a station's display case is relied upon to improve detectability at a station end, then a minimum 48" clearance should be provided between the station end and any adjacent obstruction.
- J. Display cases should be placed at the end of the station furthest from the intersection to improve visibility of the intersection. Display cases may be placed at the end closest to the intersection if other measures are in place to improve visibility of the intersection or if intersection configuration and traffic controls allow.
- K. Bicycle sharing stations shall not obstruct access to fire hydrants, be placed over water valves, or obstruct access to fire protection equipment at all times.<sup>1</sup>
- L. Bicycle sharing stations should not be placed over or prevent access to man holes or public utility valves and covers.
- M. Bicycle sharing stations should not be placed on the sidewalk immediately adjacent to on-street parking or colored curb zone so as to obstruct access to parked or stopped vehicles.
- N. When possible, bicycle sharing stations should be placed in proximity to commercial loading. This will facilitate bicycle rebalancing and station maintenance by the bicycle sharing system operator.
- O. At all sidewalk locations, the placement of existing trash cans, bike racks, and other non-structural fixtures adjacent to the bike share facilities will be evaluated and potentially removed or relocated to maintain desirable conditions for pedestrian circulation.
- P. Pedestrian access routes should have a maximum allowable cross slope of 2%. Sidewalk bikcycle sharing stations should not reduce the pedestrian access route with a maximum allowable cross slope of 2% to less than 4-feet wide. If the entire sidewalk has a cross slope greater than 2%, the flatest portion should be maintained for a pedestrian access route. Cross-slopes should be shown in site plans at two points: one in the station footprint, and one in the pedestrian access route.

<sup>&</sup>lt;sup>1</sup> 2010 California Fire Code Section 507 – Fire Protection Water Supplies

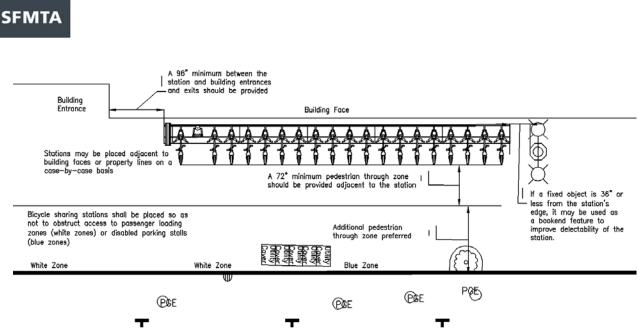


Figure 2: Bicycle sharing stations may be placed adjacent to the property on a case by case basis. Access to passenger loading zone and disabled parking must be maintained. When fixed objects are 36" or less from the station, they may be used as a feature to improve detectability of the station.

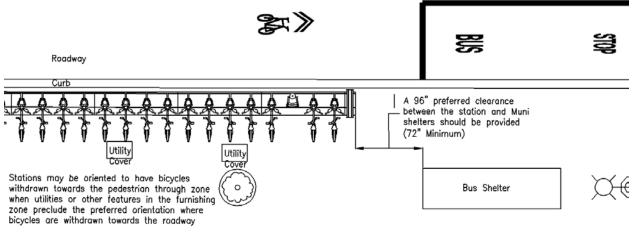


Figure 3: In some instances the bicycle sharing station cannot be oriented to have the bicycle withdrawn from the station towards the roadway, for instance due to utility restrictions. Review of the non-standard configurations will be made on a case-by-case basis.

#### Special Considerations for placing bicycle sharing stations on the sidewalk

At locations where it is not feasible to locate bike share stations in the street or in the furnishings zone, bike share stations may be placed on the sidewalk along the building



face on a case-by-case basis, pending MOD review. When stations are placed adjacent to building faces, they should adhere to the following guidelines:

- A. Orientation of the stations should be parallel to the pedestrian throughway zone or the street.
- B. Both ends of the station will be protected for cane detection. Examples of suitable protection include station display cases or other cane-detectible barriers such as safe-hit posts. If safe-hit posts are used, the lateral spacing of the posts should not exceed 18" on center. Safe-hit posts placed at sidewalk stations should be surface-mounted without anchoring hardware. Protective elements used for detectability will be placed less than 36" away from the station end.
- C. Bike share stations should not obstruct access to building entrances/exits and must be a minimum of 96" from entrances, exits, and fire escapes.
- D. The minimum width of the pedestrian through zone adjacent to bike share stations should be 72", consistent with the Better Streets Plan.
- E. A minimum of 60" clearance shall be provided for pedestrian pass through between the station and any permanently affixed element or tree well unless these stationary objects are intended to serve as caning detection elements (see letter B above).

# <u>Clearance Guidelines</u>

The following table lists preferred and minimum clearances to ensure that the placement of bicycle sharing stations will not impede travel on public streets, block access to utilities, inconvenience property owners, create visual blight, or otherwise limit the use of the public rights-of-way.

Object	Preferred Clearance (ft.)	Minimum Clearance (ft.)
Advertising kiosks		May vary; sufficient to open and access
In-ground utilities, utility covers, man holes.	3*	2*
Driveway or wheelchair ramp		3
Adjacent to curb when placed on the sidewalk		1.5
Muni shelter	8	6
Blue zone		5
School passenger loading zone		20
Crosswalk		5
Fire escape/exit		8



(including building entrances and transit portals)	
Low pressure fire hydrant, HPFS valve cover	5
High pressure hydrant	7.5

Note: All clearances are for the entire envelope of the station, which include the technical platforms and docked bikes, except for the \* items. Clearances to in-ground utilities, utility covers and man holes are to the technical platforms only and are needed to access these utilities; not for pedestrian path of travel. Docked bicycles may rest over in-ground utilities and can be removed when access the utility is needed.

### **Electrification Guidelines**

When electrification for stations involves work within the property lines of individual Article 10 or 11 landmarks, or within the boundaries or Article 10 or 11 districts, abovegrade attachments to buildings shall be avoided. Trenching shall be avoided in those Article 10 or 11 landmark sites and districts where the pavement has been identified as a character-defining feature. In cases where these methods of electrification cannot be avoided, the sponsor shall consult with the Planning Department to determine if additional review would be required.

In circumstances where trenching is required for station electrification, it will not exceed a depth of 24".