

BIKE PARKING SOURCEBOOK

SAMPLE POLICIES,
MUNICIPAL CODES,
& PROGRAMS



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INCORPORATED BY REFERENCE:

APBP Bicycle Parking Guidelines, 2nd Edition (Association of Pedestrian & Bicycle Professionals, 2010)

INTRODUCTION

HCAOG staff has prepared this guide as part of implementing the Humboldt Regional Bicycle Master Plan (Update 2012). The Bike Plan identifies as a priority a “Regional Bicycle Parking Program.” The HCAOG Board devoted resources for staff time and printing costs to implement this program in fiscal year 2014/15. The program’s

(t)asks include researching ‘best practices’ and local examples of bike rack design standards, maintenance, and building codes. HCAOG will produce a guidebook/brochure to disseminate to jurisdictions and other stakeholders. Sharing this information could help foster more consistent standards throughout the region.¹

Staff has compiled samples of bicycle parking policies and standards from jurisdictions around the U.S., predominantly from California cities. Sample codes range from bicycle parking design standards that are fairly basic to ones that are more detailed, with a few that include graphics.

Locally, only the City of Arcata has adopted land use codes for bicycle parking. Arcata’s code requires bicycle parking spaces based on automobile parking requirements; it does not include design standards for bicycle parking. The City of Fortuna has adopted a General Plan policy that it shall revise the zoning ordinance to incorporate bicycle parking standards into its parking requirements.

This guide also provides examples of special bike programs for event parking and in-street bike parking (also known as bike corrals).

In addition to the samples reproduced herein, the “APBP Bicycle Parking Guidelines,”² provides more comprehensive information and graphics on bike rack designs, bike parking dimensions, locations, as well as sample code language. The APBP Guidelines span 83 pages and thus are included only by reference. (File download is available at www.apbp.org.)



Photo credit: sacbee.com

¹ “Progress Report 2013/14 for the Humboldt Regional Bicycle Plan” (HCAOG, May 2014).

² 2nd Edition (2010), by the Association of Pedestrian and Bicycle Professionals (APBP).

SAMPLE POLICIES

CITY OF ARCATA

ARCATA GENERAL PLAN: 2020³

CHAPTER 2. COMMUNITY DEVELOPMENT - TRANSPORTATION ELEMENT

Policy T-5e Bicycle parking facilities. Secure bicycle parking facilities should be provided at important activity centers, civic facilities, apartment complexes, employment centers, shopping centers, major bus stops, and schools. Bicycle parking facilities include racks, lockers, and bollards.

Developers shall be required to provide a minimum number of bicycle parking devices at convenient and visible locations within the development. The required number of bicycle parking spaces shall be calculated as a proportion of the number of vehicle parking spaces.

ARCATA PEDESTRIAN & BICYCLE MASTER PLAN 2010⁴

Objective E: Provide short- and long-term bicycle parking in employment and commercial areas, in multifamily housing, at schools and colleges, and at transit facilities. (Outside bicycle racks are considered short-term bicycle parking; long-term bicycle parking includes covered parking, bike lockers, bike rooms, and other enclosed or indoor bicycle parking facilities.)

Actions:

1. Require the installation of bike racks, sheltered bike parking, and bike lockers at these locations.
2. Work with Humboldt State University and area elementary, middle, and high schools to promote bicycle commuting and to assist in purchasing and siting long- and short- term bicycle parking.
3. Consider adopting zoning requirement for lockers and showers to be added to new buildings.
4. Require secure bicycle parking at major events to help ease traffic and parking. Bicycle parking may include valet parking, racks furnished by the event sponsor, and/or racks furnished by the City.
5. Assist transit providers in providing and promoting secure bicycle racks and lockers in the transit system to encourage bicycle use.

CHAPTER 5. BICYCLE FACILITIES

Facilities for Changing & Storing Equipment - Some commuter bicyclists need showers, lockers, and changing rooms at trip destinations. For bicyclists who dress more formally, travel

³ http://www.cityofarcata.org/sites/default/files/document_center/Building%20-%20Planning/General%20Plan%202020/GP%202020-%20Transportation%20Element.pdf

⁴ <http://www.cityofarcata.org/filebrowser/download/16253>

longer distances, or bicycle during wet conditions, having showers and changing rooms available can be as critical as bicycle storage. Only a few offices currently have these facilities; the City will encourage employers to make available to their employees facilities for changing and storing clothes and equipment.

CITY OF FORTUNA – GENERAL PLAN “ENVISION”⁵

CHAPTER 4. TRANSPORTATION AND CIRCULATION

Bicycle & Trail Facilities, Goal TC-5 – To provide an interconnected and effective system of bikeways, bicycle parking facilities, and trails for people wishing to walk or bicycle for commuting and/or recreational trips.

Policy TC-5.1 Bicycle Transportation Plan. ...The City shall strive to fully implement the proposed facilities to fill in gaps in the existing bicycle network, improve existing bicycle facilities, improve motor vehicle and bicycle interactions, and increase bicyclist safety. The City shall also identify the locations of planned bicycle parking facilities in the plan linked to schools, government buildings, shopping centers and transit stops, establish bicycle parking standards, and strive to coordinate Class II bikeway striping with surfacing of city streets.

Policy TC-5.10 Bicycle Parking. The City shall encourage the development of adequate, convenient, and secure bicycle parking at employment centers, recreational facilities, key transit stops, commercial businesses, Downtown, and other locations where people congregate.

Policy TC-5.11 Retail Bike Parking. The City shall require that large retail developments, such as shopping centers, provide bicycle parking facilities in highly visible areas such as near storefronts.

PROGRAMS: TC-17. The City shall revise the Zoning Ordinance to incorporate bicycle parking standards into its parking requirements. Responsibility: Community Development, Administration, Planning Commission, City Council.



Photo credit: citymetric.com

⁵ Adopted October 2010. <http://friendlyfortuna.com/DocumentCenter/Home/View/538>

COUNTY OF HUMBOLDT – GENERAL PLAN-PART 2 (DRAFT)⁶

CHAPTER 7. CIRCULATION ELEMENT

7.4 Goals and Policies, Policies - Public Transportation

C-P23. Public Transit Service.

B. Automobile and bicycle transport should be integrated with public transit by developing adequate parking facilities at major bus stops and, where feasible, transporting bicycles on intercity and regional buses. [BOS tentative revision 1-28-2013]

7.4 Goals and Policies, Policies - Bicycle and Pedestrian Travel

C-P34. Bicycle Facilities. Encourage the planned placement of secure and/or weather-protected bicycle storage facilities at public buildings and bus stops, where appropriate. Incentivize placement of bicycle parking and storage at businesses, new or modified bus stops and multi-family housing. [BOS tentative revision 1-14-2013; Straw Vote 5-0]

CITY OF DAVIS – BICYCLE PLAN 2009⁷

GOAL: INCREASE AND ENHANCE ACTIVITIES TO ENCOURAGE BICYCLING AS A VIABLE MODE FOR ALL FORMS OF LOCAL TRAVEL AND TO HELP REACH GOAL OF 25% BICYCLE SHARE FOR ALL TRIPS.

Objective: Encourage bicycle use for work and non-work trips.

Establish standards for employee bicycle parking, and encourage the inclusion of other bicycle commute necessities, such as showers or storage space.

Include employee bicycle parking standards and guidelines in a City Bicycle Parking ordinance.

Encourage shopping by bicycle.

Work with the Farmer's Market to do a monthly "Bike to Market" event with incentives.

Inventory bicycle parking downtown and at all commercial centers, and develop plan to improve or enhance bicycle parking.

Encourage citizens to travel to City events by bicycle.

Provide bicycle valet parking at all City events with expected attendance greater than 1,000 people.

Provide, where possible, incentives for residents to arrive at City events by bicycle.

Objective: Build on Davis' cycling past by experimenting or piloting new technology or programs for bicycles.

⁶ May 6, 2013, Board of Supervisors Mark-up Draft Chapters Tentatively Approved by the Board of Supervisors.
<http://humboldt.gov.org/documentcenter/view/1819>

⁷ <http://bicycles.cityofdavis.org/Media/Default/Documents/PDF/Bicycles/Bike-Plan-2009.pdf>

Incorporate state-of-the-art practices in transportation design.

- Pilot on-street bicycle parking.

Objective: Improve routine maintenance and improvements.

Develop a procedure for routine inspection and maintenance of bicycle parking, including parking installations in parks, on greenbelts and at City facilities.

- Update inventory every two years.
- Develop a rubric for maintenance and replacement that includes type, condition, occupancy rate, and proximate land use.

Objective: Plan for bicycles in all new development.

Work with public and private development to provide linkages to the existing bicycle systems, and provide bicycle parking and necessities.

- Update bikeway design standards.
- Adopt a bicycle parking ordinance.

Aid private developments, where possible, in retrofitting to current bicycle standards.

- Inventory major private shopping centers for parking and connectivity.

GOAL: ENSURE THE VIABILITY OF BICYCLES AS A TRANSPORTATION MODE WITH EQUAL TREATMENT.

Objective: Consider bicycles in all transportation projects and treat as an equal roadway user in planning, engineering, policy or funding.

Develop bicycle parking and facility standards for public and private development, and adopt ordinances that make these standards mandatory.

- Develop Bicycle Parking Ordinance.



Bike rack on H Street, Arcata

SAMPLE CODES

CITY OF ARCATA — LAND USE CODE⁸

Article 3 - Site Planning and Project Design Standards

9.36.060 Bicycle Parking

Each multi-family project and non-residential land use shall provide bicycle parking in compliance with this Section.

A. Number of bicycle spaces required. Sufficient bicycle parking and storage space shall be provided on sites except those with only one or two residential dwelling units in compliance with Table 3-7 and this Section.

Table 3-7 - Minimum Number of Bicycle Parking Spaces Required

Vehicle Parking Spaces Required*	Number of Bicycle Spaces Required
3 – 10	100% of vehicle parking spaces
11 +	50% of vehicle parking spaces

**per AMC 9.36.040, Table 3-6-Parking Requirements by Land Use*

(For illustrative purposes only, a triplex, which is required to provide six off-street vehicle parking spaces, would need to provide a minimum of six bicycle parking spaces. A multi-family development project requiring 20 off-street parking spaces would be required to provide a minimum of 10 bicycle parking spaces.)

B. Bicycle parking design and devices. Each bicycle parking or storage space shall be no less than six feet long by two feet wide, plus additional space as may be needed for access, and shall have a rack or rain-sheltered structure capable of supporting and securing bicycles of various types and sizes in an upright position. Each space shall be conveniently located for intended uses.

CITY OF CALISTOGA — MUNICIPAL CODE⁹

17.36.151 Bicycle Parking.

A. Nonresidential Standard. One bicycle parking space shall be provided for every 10 vehicles spaces required.

B. Multifamily Residential. One bicycle parking space shall be provided for every three dwelling units.

C. Required Facilities. Bicycle parking requirements shall be fulfilled through the installation of lockers, racks, or equivalent structures in or upon which a bicycle may be locked by the user. All

⁸ <http://www.codepublishing.com/ca/arcata/>

⁹ <http://codepublishing.com/ca/calistoga/mobile/?pg=Calistoga17/Calistoga1736.html#17.36.151>

racks shall be securely anchored to the ground or building surface. Racks shall be designed to accommodate U-shaped locks.

D. Location. Bicycle parking shall be located in a clearly designed, safe and convenient location. A “safe parking location” is defined as a location whereby activity around bicycle parking is easily observable, conveniently located to the bicyclist’s destination, and adequately separated from motor vehicles and pedestrians. Surfaces around bicycle parking facilities shall be maintained, mud and dust free. (Ord. 638 § 1, 2007).

CITY OF DAVIS – BICYCLE PLAN 2009¹⁰

BICYCLE PARKING GUIDELINES

The requirement to provide adequate bicycle parking for the various land uses within the city is contained in the city’s zoning ordinance. It is the function of the Design Review Process to assess the bicycle parking plan of developers and project applicants to ensure that adequate facilities are provided. The following features shall be considered.

1. The quantity of parking shall adequately consider the nature of the land use, its proximity to bike routes, and other factors that may affect bicycle parking.
2. Bicycle parking shall be located on the project to promote its use. Bike racks should be visible and as close as possible to the main entrance or doorway of the cyclist’s destination.
3. The bicycle circulation within the project shall be adequately considered to minimize conflicts and hazards with motor vehicles.
4. Bicycle racks must be conducive for use with the most common locking devices: “u-locks.”
5. Bicycle parking must be illuminated at night.
6. Bicycle parking should be sheltered, if possible.
7. Bicycle parking shall be at least as convenient as the planned motor vehicle parking.
8. In order to prevent damage to bicycles, racks must support them with at least two contact points (e.g. inverted “U” racks). Therefore, some rack types formerly used by the city (e.g. “ribbon racks”) are no longer considered acceptable.

The amount of bicycle parking needed for a particular project depends upon a variety of factors such as the type of occupancy, the location and proximity to streets with heavy bicycle traffic, and the relationship of the project to adjacent and nearby businesses, etc. The following are suggested amounts of bicycle parking for several types of land use. These amounts can be adjusted up or down for a particular project as circumstances suggest.

1. For multi-family residential, two bicycle parking spaces per dwelling unit.

¹⁰ <http://bicycles.cityofdavis.org/Media/Default/Documents/PDF/Bicycles/Bike-Plan-2009.pdf>

2. Commercial, all zones, bicycle spaces numbering 30 percent of motor vehicle spaces otherwise required.
3. Provide one bicycle space for every two employees during the heaviest work shift in addition to bicycle parking otherwise required for visitors/patrons. This parking may be located separately from the public parking but shall be at least as convenient as employee motor vehicle parking.
4. For public facilities (such as municipal offices, parks, swimming pools, museums, parks, auditoriums, churches and similar uses), provide bicycle spaces numbering 30 percent of the motor vehicle parking normally required or immediately available to the facility.
5. Public and private schools K-12, provide bicycle spaces numbering 85 percent of peak enrollment. For post-secondary, provide spaces at least 50 percent of peak enrollment.

Experience has shown that modest amounts of bicycle parking at many dispersed locations is preferable to a few high capacity facilities. Cyclists tend to avoid bike parking facilities unless they are very close to their destination. The best way to determine the need and amount of bicycle parking is to identify those locations where parked bikes exceed the available parking, and to find those locations where bikes are parked and no parking is provided. In this manner, parking can be provided to meet the need. The relocation of unused parking facilities to higher demand locations can help make available resources go farther.

CITY OF EMERYVILLE –ORDINANCE¹¹

Ordinance No. 08-009

ARTICLE 68. BICYCLE PARKING

9-4.68.1 Title and Purpose

Article 68 establishes bicycle parking requirements for development. The purpose of these requirements is to ensure that adequate bicycle parking is provided and is conveniently located and sufficiently secure from theft and damage. The bicycle parking requirements contained herein are assumed to be minimums only. It is the responsibility of the developer, owner, or operator of any specific use to provide adequate bicycle parking facilities.

9-4.68.2 Definitions

As used in this article:

(a) “Abandoned bicycle” shall mean a bicycle that has been parked continuously in one place for at least two weeks in short-term parking or at least one month in long-term parking, excluding seasonal bicycle storage as agreed upon between the property owner and the bicycle owner.

...

(f) “Long-term bicycle parking” shall mean bicycle parking intended for the primary use of residents, employees and others who park bicycles for a duration of four (4) hours or more.

...

¹¹ <http://emeryville.org/DocumentCenter/Home/View/1006>

(k) "Short-term bicycle parking" shall mean bicycle parking intended for the primary use of customers, messengers, guests and others who park bicycles for less than four (4) hours.

9-4.68.3 General Requirements

Short-term publicly accessible bicycle parking for visitors, and long-term secured bicycle parking for building occupants, shall be required when:

- (a) A building is constructed;
 - (b) An existing building, including a legal nonconforming structure, is enlarged for any purpose;
- or
- (c) The use of any building or portion thereof is changed to one requiring the issuance of a conditional use permit and then only to that portion of the building subject to the change of use.

9-4.68.4 Exemptions

No bicycle parking is required for single-family detached, two-family, or single-family semiattached dwellings.

9-4.68.5 Standards for All Bicycle Parking

(a) Design and Installation

(1) A bicycle parking space shall be in a paved, level, drained, lighted area with access to a right of way without the use of stairs, and shall consist of either:

(A) one side of a securely fixed rack element that supports the bicycle upright by its frame, prevents the bicycle from tipping over, and allows the frame and at least one wheel to be locked to the rack element with one lock;

or

(B) a bicycle locker constructed of theft-resistant material with a lockable door which opens to the full width and height of the locker. Bicycle lockers shall be weather-proof if exposed to the elements.

(2) Each bicycle parking space shall be no less than fifteen (15) inches wide, by six (6) feet deep, with an overhead clearance of no less than seven (7) feet. Wedge-shaped spaces may be narrower than fifteen (15) inches at one end. Each row of bicycle parking spaces shall be served by an aisle no less than four (4) feet wide. Rack elements must be placed 2 feet from walls, fences or curbs.

(3) Required bicycle parking may not be tandem; parking or removing a bicycle shall not require moving another parked bicycle.

(4) Bicycle rack elements shall be fixed, securely anchored to the ground or to a structure by means that resist tampering or removal. Bicycle locker edges shall be secured with no exposed fittings or connectors. The Planning Director may specify preferred installation methods, such as, but not limited to, embedded mounting in poured-in-place concrete, recessed bolt heads or grouted-in anchoring.

(b) Location

- (1) Direct access from the bicycle parking to the public right-of-way shall be provided by means of access ramps, if necessary, and pedestrian access from the bicycle parking area to the building entrance shall also be provided.
- (2) Where bicycle parking is not directly visible and obvious from the right-of-way, signs shall be provided, except that directions to long-term bicycle parking may be posted or distributed by the building management, as appropriate.
- (3) Bicycle parking must be separated from automobile parking by a sufficient distance to prevent damage from moving automobiles or their loading and unloading. The Planning Director may require a barrier or curb between bicycle and automobile parking areas on constrained sites.
- (4) Bicycle parking may be provided inside a building, provided it is easily accessible from a building entrance and a bicyclist does not have to use stairs to reach it.
- (5) The placement of bicycle parking, bicycle rack elements and bicycle lockers shall not interfere with pedestrian circulation.
- (6) Required spaces may not be located within offices, commercial or industrial work areas, dwelling units or balconies.

9-4.68.6 Short-Term Bicycle Parking

(a) Short-term bicycle parking shall be provided within a convenient distance of, and clearly visible from, the main entrance to the building, as determined by the Planning Director, and it shall not be farther than the closest automobile parking space, excluding disabled parking.

(b) At the discretion of the Planning Director, some or all required short-term bicycle parking may be provided in a required yard.

(c) Minimum Short-Term Bicycle Parking Requirements

- (1) Civic, Commercial, and Industrial uses shall include the greater of
 - (A) one (1) short-term bicycle parking space, or
 - (B) one (1) short-term bicycle parking space for every twenty (20) required automobile parking spaces.
- (2) Multi-family projects shall include one (1) short-term bicycle parking space for every four (4) visitor automobile parking spaces required by Section 9-4.55.3(a)(2)(D).

(d) Property owners shall remove abandoned bicycles from short-term bicycle parking associated with their property on a monthly basis, after posting a notice of removal on such bicycles for two weeks.

9-4.68.7 Long-Term Bicycle Parking

(a) To ensure security, long-term bicycle parking must be in an enclosed, covered, locked area, surrounded by a fence or wall at least seven (7) feet tall, restricted to bicycle parking users, which includes fixed rack elements; or in bicycle lockers that are either weather-proof or covered.

(b) Minimum Long-Term Bicycle Parking Requirements

(1) Civic, Commercial, and Industrial uses shall include the greater of

(A) one (1) long-term bicycle parking space, or

(B) one (1) long-term bicycle parking space for every twenty (20) required automobile parking spaces.

(2) Multi-family projects shall include one (1) covered long-term bicycle parking space for every one (1) dwelling unit.

(d) Property owners shall remove abandoned bicycles from long-term parking associated with their property on a quarterly basis after posting a notice of removal warning on such bicycles for one month. This requirement shall not preclude provision of seasonal bicycle storage.

(e) Non-residential uses are encouraged to provide showers and clothes lockers where bicycle parking is required. There shall be a vehicle parking credit of one space per shower, up to one shower per 25 required bicycle parking spaces. This credit shall be in addition to the bicycle parking credit of one (1) parking space for each six (6) bicycle parking spaces allowed under Section 9-4.55.2(e) of this chapter.

CITY OF PALO ALTO – MUNICIPAL CODE¹²

BICYCLE PARKING REQUIREMENTS

Section 18.83.050

Table 1. Minimum Off-Street Parking Requirements [abridged]

Use	Minimum Off-Street Parking Requirement	Minimum Bicycle Parking Requirement	
		Spaces	Class ⁽¹⁾
Accessory employee housing or guest cottage	1 space per unit		
Administrative office services:			
(a) In single-family residential district	1 space for each 27.9 sq. m. (300 sq. ft.) of gross floor area	10% of auto parking	80% - I, 20% - II
(b) In all other districts	1 space for each 23.2 sq. m. (250 sq. ft.) of gross floor area	10% of auto parking	80% - I, 20% - II
Animal care facilities	1 space for each 32.5 sq. m. (350 sq. ft.) of gross floor area	10% of auto parking or 1 space – whichever is greater	80% - I, 20% - III
Automobile service station:	1 space for each 32.5 sq. m. (350 sq. ft.) of gross enclosed floor area, plus queue capacity equivalent to the service capacity of gasoline pumps	None	
Automotive services:			
(a) Enclosed	1 space for each 32.5 sq. m. (350 sq. ft.) of gross floor area		
(b) Open lot	1 space for each 46.5 sq. m. (500 sq. ft.) of exterior sales, display, or storage site area	None	

Continues on next page

¹² Source: *Menlo Park Comprehensive Bicycle Development Plan*, Appendix E: Sample Bicycle Parking Code Language.

Use	Minimum Off-Street Parking Requirement	Minimum Bicycle Parking Requirement	
		Spaces	Class ⁽¹⁾
Business and trade schools	1 space for each 4-person capacity, or 1 space for each 23.2 sq. m. (250 sq. ft.) of gross floor area, whichever is greater	10% of auto parking	40% - I, 60% - II – covered
Churches and religious institutions	1 space for each 4 sets or 4- person capacity, based on maximum use of all facilities at the same time	10% of auto parking	20% - I, 40% - II, 40% - III,
Commercial recreation	1 space for each 4 seats or 4-person capacity, or as adjusted by the Zoning Administrator as part of the conditional use permit, not to exceed a 30% reduction	25% of auto parking	20% - I, 20% - II, 60% - III or as adjusted by the Zoning Administrator as part of the conditional use permit
Community facilities, including swim club, tennis club, golf course, community centers, neighborhood centers, and similar activities	1 space for each 4-person capacity based on maximum use of all facilities, or as adjusted by the Zoning Administrator as part of the conditional use permit, not to exceed a 30% reduction	25% of auto parking	20% - I, 20% - II – covered, 60% - III or as adjusted by the Zoning Administrator as part of the conditional use permit
Convalescent facilities	1 space for each 2.5 patient beds	10% of auto parking	2 spaces – I, remainder – III
Day care centers, day care homes, family day care homes, and residential care homes			
(a) Day care centers:	1 space for each 1.5 employees	25% of auto parking	100% - I
(b) Day care homes:	2 spaces per dwelling unit, of which one space shall be covered	25% of auto parking	100% - II
(c) Family day care homes:	2 spaces per dwelling unit, or which one space shall be covered	None	
(d) Residential day care homes:	2 spaces, or which one space shall be covered, for the resident owners or tenants. Where such uses are conditional, to be established by use permit condition	None	
Downtown University Avenue Parking Assessment Area - all uses	1 space for each 23.2 sq. m. (250 sq. ft.) of gross floor area	10% of auto parking	40% - I, 60% - II
Drive-up windows providing services to occupants in vehicles	Queue line for 5 cars, not blocking any parking spaces, in addition to other applicable requirements	None	
Eating and drinking services:			
(a) With drive-in or take out facilities	3 spaces for each 9.3 sq. m. (100 sq. ft.) of gross floor area	25% of auto parking	40% - I, 60% - III
(b) All others, except parking assessment areas	1 space for each 60 gross sq. ft. of public service area, plus one space for each 200 gross sq. ft. for all other areas	10% of auto parking	40% - I, 30% - II, 30% - III
Financial Services			
(a) Bank, savings and loan offices with 696.7 sq. m. or less (7,500 sq. ft.) of gross floor area:			
(1) Except in the parking assessment areas	1 space for each 18.6 sq. m. (200 sq. ft.) of gross floor area	10% of auto parking	40% - I, 60% - III
(b) Banks, savings and loan offices with more than 696.7 sq. m. (7,500 sq. ft.) of gross floor area:			

Use	Minimum Off-Street Parking Requirement	Minimum Bicycle Parking Requirement	
		Spaces	Class ⁽¹⁾
(1) Except in the parking assessment area	1 space for each 23.2 sq. m. (250 sq. ft.) of gross floor area	10% of auto parking	40% - I, 60% - III
(c) Others	1 space for each 23.2 sq. m. (250 sq. ft.) of gross floor area	10% of auto parking	40% - I, 60% - III
General business services:			
(a) Enclosed, except in parking assessment areas	1 space for each 3.25 sq. m. (350 sq. ft.) of gross floor area	10% of auto parking	
c) Open lot	1 space for each 46.5 sq. m. (500 sq. ft.) of sales, display, or storage site area	10% of auto parking	80% - I, 20% - II
Hospitals	1 space for each 1.5 patient beds	10% of auto parking	60% - I, 40% - II
Hotel	1 space per guestroom; plus the applicable requirement for eating and drinking, banquet, assembly, commercial or other as required for such use, less 75 percent of the spaces required for guestrooms	10% of auto parking	40% - I, 30% - II, 30% - III
Lodging	1 space for each lodging unit in addition to other residential use requirements	1 space per lodging unit	100% - I
Manufacturing:			
(a) In the LM district	1 space for each 27.9 sq. m. (300 sq. ft.) of gross floor area	10% of auto parking	80% - I, 20% - II
(b) In all other districts	1 space for each 46.5 sq. m. (500 sq. ft.) of gross floor area	10% of auto parking	80% - I, 20% - II
Medical, professional, and general business offices			
(a) In the LM district	1 space for each 27.9 sq. m. (300 sq. ft.) of gross floor area	10% of auto parking	60% - I, 40% - II
(b) In all other districts, except in parking assessment areas	1 space for each 23.2 sq. m. (310 sq. ft.) of gross floor area	10% of auto parking	60% - I, 40% - II
Mortuaries	1 space for each 4 seats or 4-person capacity, plus funeral procession queue capacity of 5 cars	2 spaces	100% - II
Multiple-family residential use:			
	1.25 spaces per studio unit, 1.5 spaces per 1-bedroom unit, and 2 spaces per 2-bedroom or larger unit, of which at least one space per unit must be covered.	1 space per unit	100% - I
(a) Guest parking	For projects exceeding 3 units: 1 space plus 10% of total number of units, provided that if more than one space per unit is assigned or secured parking, then guest spaces equal to 33% of all units is required.	1 space for each 10 units	100% - III
Personal services:			
(a) Except in parking assessment areas	1 space for each 18.6 sq. m. (200 sq. ft.) of gross floor area	10% of auto parking	20% - I, 40% - II, 40% - III
Private clubs, lodges and fraternal organizations:	1 space for each 4 seats or 4-person capacity based on maximum use of all space at one time	10% of auto parking	20% - I, 40% - II, 40% - III
Research and development:			
(a) In the LM district	1 space for each 27.9 sq. m. (300 sq. ft.) of gross floor area		80% - I, 20% - II
(b) In all other districts	1 space for each 23.2 sq. m. (250 sq. ft.) of gross floor area	10% of auto parking	80% - I, 20% - II
Retail:			
(a) Intensive, except in parking assessment areas	1 space for each 18.6 sq. m. (200 sq. ft.) of gross floor area	10% of auto parking	20% - I, 40% - II, 40% - III

Use	Minimum Off-Street Parking Requirement	Minimum Bicycle Parking Requirement	
		Spaces	Class ⁽¹⁾
(c) Extensive	1 space for each 32.5 sq. m. (350 sq. ft.) of gross floor area	0% of auto parking	20% - I, 40% - II, 40% - III
(d) Open lot	1 space for each 46.5 sq. m. (500 sq. ft.) of sales, display, or storage site area	10% of auto parking	100% - III
Schools and educational facilities:			
(a) Grades K-8	2 spaces per teaching station	1 space per every 3 students	100% - III enclosed
(b) Grades 9-12	4 spaces per teaching station	1 space per every 3 students	100% - III enclosed
Shopping center	1 space for each 25.6 sq. m. (275 sq. ft.) of gross floor area	10% of auto parking	40% - I, 30% - II, 30% - III
Single-family residential use: (including second detached single-family dwelling units)			
(a) In the O-S district	For the primary dwelling unit, 4 spaces, of which one space must be covered For all additional units, 2 spaces per unit, of which one space must be covered	None	
(b) In all other districts	2 spaces per unit, of which one space must be covered	None	
Two-family residential use	1.5 spaces per unit, of which one space must be covered	1 space per unit	100% - I
Warehousing and distribution:	1 space for each 92.9 sq. m. (1,000 sq. ft.) of gross floor area	10% of auto parking	80% - I, 20% - II
Any use not specified	To be determined by the Director of Planning and Community Environment	To be determined by the Director of Planning and Community Environment	

⁽¹⁾ For description of bicycle parking classes, refer to section 18.83.080 (*below*).



PALO ALTO MUNICIPAL CODE – *continued*

DESIGN STANDARDS: BICYCLE PARKING FACILITIES

Section 18.83.080

(a) **Classifications of Bicycle Parking Facilities.**

(1) **Class I Facilities.** Intended for long-term parking; protects against theft of entire bicycle and of its components and accessories. The facility must also protect the bicycle from inclement weather, including wind-driven rain. Three design alternatives for Class I facilities are as follows:

Bicycle Locker. A fully enclosed space accessible only by the owner or operator of the bicycle. Bicycle lockers may be pre-manufactured or designed for individual sites. All bicycle lockers must be fitted with key locking mechanisms.

In multiple-family developments, the Class I bicycle parking and required storage area for each dwelling unit may be combined into one locked multi-use storage facility provided that the total space requirement shall be the sum of the requirements for each use computed separately.

The preferred Class I facility is a bicycle locker. Restricted access facilities and enclosed cages may be considered as alternatives to bicycle lockers as indicated below. Class I facilities other than lockers, restricted access rooms, or enclosed cages, but providing the same level of security, may be approved by the Director of Planning and Community Environment.

Restricted Access. Class II bicycle parking facilities located within a locked room or locked enclosure accessible only to the owners or operators of the bicycles parked within. The maximum capacity of each restricted room or enclosure shall be ten (10) bicycles. An additional locked room or enclosure is required for each maximum increment of ten additional bicycles. The doors of such restricted access enclosures must be fitted with key locking mechanisms.

In multiple-family residential developments, a common locked garage area with Class II bicycle parking facilities shall be deemed restricted access provided the garage is accessible only to the residents of the units for whom the garage is provided.

Enclosed Cages. A fully enclosed chain link enclosure for individual bicycles, where contents are visible from the outside, and which can be locked by a user-provided lock. The locking mechanism must accept a 3/8" diameter padlock. This type of facility is only to be used for retail and service uses and multiple family developments.

(2) **Class II Facilities.** Intended for short-term parking. A stationary object to which the user can lock the frame and both wheels with only a lock furnished by the user. The facility shall be designed so that the lock is protected from physical assault. A Class II rack must accept padlocks and high security U-shaped locks.

(3) **Class III Facilities.** Intended for short term parking. A stationary object to which the user can lock the frame and both wheels with a user-provided cable or chain (6 foot) and lock. All Class III facilities must be located at street floor level.

(b) **Bicycle Parking Design Standards.**

The following general design standards shall be observed:

(1) **Clearance.** Class II and Class III facilities shall provide at least a twenty-four inch clearance from the centerline of each adjacent bicycle, and at least eighteen inches from walls or other obstructions.

(2) **An aisle** or other space shall be provided to bicycles to enter and leave the facility. This aisle shall have a width of at least five feet (1.5 meters) to the front or the rear of a standard six-foot (1.8 meters) bicycle parked in the facility.

(3) **Stable support.** Parking facilities shall support bicycles in a stable position without damage to wheels, frame, or components. Facilities designed for hanging or vertical storage of bicycles shall not satisfy the requirements of this chapter.

(4) **Location.** Bicycle parking should be situated at least as conveniently as the most convenient vehicle parking area. Bicycle and vehicle parking areas shall be separated by a physical barrier or sufficient distance to protect parked bicycles from damage by vehicles.

(A) Class I facilities at employment sites shall be located near the building entrances used by employees.

(B) Class II or Class III facilities intended for customers or visitors shall be located near the main building entrances used by the public.

(5) **Paving** of bicycle parking areas is required.

(6) **Convenient access** to bicycle parking facilities shall be provided. Where access is via a sidewalk or pathway, curb ramps shall be installed where appropriate.

(7) **Signage** for Bicycle Parking Facilities.

(A) Where bicycle parking areas are not clearly visible to approaching bicyclists, signs shall be posted to direct cyclists to the facilities.

(B) All bicycle parking areas shall be identified by a sign of a minimum of 12" X 12" in size to identify the area for bicycle parking and to give the name, phone number or location of the person in charge of the facility.

(C) Where Class I parking required by this chapter is provided by restricted access parking, the sign shall state that the bicycle enclosure shall be kept locked at all times.

(8) **Lighting** shall be provided in all bicycle parking areas. In both exterior and interior locations, lighting of not less than one footcandle of illumination at ground level shall be provided.

(9) **Director’s Review.** The director of planning and community environment shall have the authority to review the design of all bicycle parking facilities required by this chapter with respect to safety, security, and convenience.

EMPLOYEE SHOWER FACILITY REQUIREMENTS

Section 18.49.040

(e) Requirement for Showers.

Employee shower facilities shall be provided for any new building constructed or for any addition to or enlargement of any existing building in compliance with the following table:

Use	Gross Floor Area of New Construction	Number of Showers Required
Medical, professional, general business offices, financial services, business and trade schools and general business services.	0-9,999 sq. ft.	No requirement
	10,000-19,999 sq. ft.	1
	20,000-49,999 sq. ft.	2
	50,000 sq. ft. and up	4
Retail, personal and eating and drinking services.	0-24,999 sq. ft.	No requirement
	25,000-49,999 sq. ft.	1
	50,000-99,999 sq. ft.	2
	100,000 sq. ft. and up	4

CITY OF SACRAMENTO

ZONING CODE PARKING REGULATIONS¹³

Short-term and long-term bicycle parking now required separate from the vehicle parking requirement and is now specific to the land use (e.g. office, retail, etc.).

- The central business district, urban, and traditional areas will have requirements reflecting a bicycle mode share greater than 5%.
- The suburban areas will have requirements reflecting a bicycle mode share of less than 5%.

INSTALLATION GUIDELINES FOR BIKE RACKS¹⁴

The Installation Guidelines for City bicycle racks are part of the City’s **Public Bicycle Rack Program** (described under Special Programs, below).

¹³ “Parking Ordinance Summary Sheet.” <http://portal.cityofsacramento.org/Community-Development/Planning/Current%20Planning/Zoning/Zoning%20Code%20Parking%20Regulations>

¹⁴ <http://portal.cityofsacramento.org/Public-Works/Transportation/Programs-and-Services/Racks/Installation%20Guidelines>

Public Right-of-Way: City sponsored racks will only be installed in the public right-of-way. Public bicycle racks will be installed at locations where there is insufficient space on adjacent private property that may be used for bicycle parking.

Visibility: The bicycle rack should be located in clear sight from within the building. Placement near a main entrance or a front window is often the best solution.

Surface Conditions: The ground surface for the rack may be mowed lawn, decomposed granite or any walk-able paved surface. The surface should be flat enough to properly park bicycles, but also sloped enough to prevent puddling.

Clearances:

- Typical bicycles are six feet long and two feet wide at the handle bars. Placement of the rack should include consideration of how it will work when bicycles are parked at the rack.
- The bicycle rack and secured bicycles cannot interfere with pedestrian traffic on the sidewalk and should be accessible to pedestrians.
- Installation of racks must not create a hazard or impediment to any existing uses.
- The rack cannot be located closer to the curb than two feet. When placed next to a curb that has on-street car parking, allow a 30-inch clear zone. Three feet from the curb is ideal, although in certain circumstances, the distance may be greater.
- Ideally, the bicycle rack should be located two to three feet from any existing street encroachments.

Restrictions:

- The bicycle rack cannot be located adjacent to a blue curb zone (disabled parking).
- The rack with bicycles parked at it shall maintain a two foot clearance from any street utility vaults, such as PG&E.
- Racks shall be placed outside of the clear sight triangle required at all street intersections.
- The bicycle rack shall not be located to impede access to a store/building entrance or exit.
- The bicycle rack shall not be installed in a driveway.



Rack Design:

Generally, the City of Sacramento will provide an “inverted-U” type design which allows bicycles to lean against the rack, providing at least two points of contact to prevent the bicycles from falling over. Areas of higher volume bicycle usage may require larger capacity racks which come in a multiple “inverted-U” design.

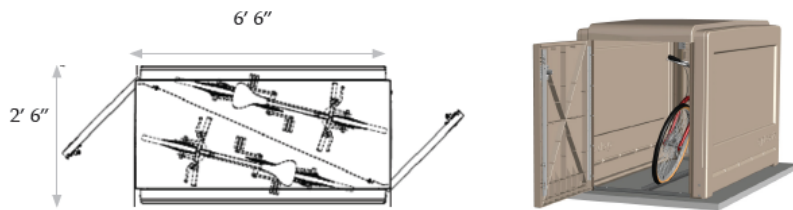
All bicycle parking racks are intended to be permanently fixed to the ground and require that the user provide a lock. Anchoring methods may be the embedded type or surface flange type. Anchors will be installed to prevent removal.

SAN FRANCISCO – PLANNING CODE

BICYCLE PARKING REQUIREMENTS: DESIGN AND LAYOUT¹⁵

Class One Bicycle Parking

Class One bicycle parking includes bicycle lockers, bicycle rooms or cages where each bicycle can be individually locked. Bicycle lockers provide secure space with a separate access door for every bicycle. Lockers shall provide a minimum depth of 6 feet and an access door of 2 feet wide when providing space for one bicycle. Some lockers divide the space into two triangular shaped spaces. Such lockers shall provide a slightly larger space as shown in the figure below.



All aisles that provide access to a locker shall be minimum of 6 feet wide.

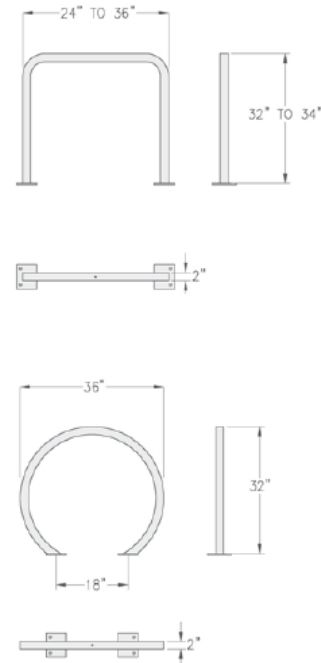
Where Class One bicycle parking is provided as bicycle racks in a garage, cage or otherwise locked room, any acceptable rack type, including space efficient racks, identified in this bulletin may be used. Required clearances for rows of racks provided in such facilities are described later in this Bulletin.

Class Two Bicycle Parking

Bicycle racks are the most common form of Class Two bicycle parking. Bicycle racks come in many forms and shapes. The most common types are the inverted “U” and the circular racks. The dimensions of such racks are shown here. Each rack that comply with dimensions and requirements set forth in this bulletin will count as two bicycle parking spaces.

All bicycle racks shall:

- support bicycles at two points of contact in order to prevent bicycles from falling;
- allow locking of bicycle frames and one wheel with U-locks;
- use square tubes to resist illegal rack cutting;
- minimize maintenance costs (i.e. galvanized finish resists corrosion);
- not require lifting of a bicycle;
- be mounted securely to the floor; and
- provide visibility to approaching cyclists and pedestrians with a minimum height of 32 inches.



¹⁵ “Zoning Administrator Bulletin No. 9 – Bicycle Parking Requirements: Design & Layout” (San Francisco Planning Department, August 2013) www.sf-planning.org/ftp/files/publications_reports/ZAB_BicycleParking_9-7-13.pdf

Some acceptable and unacceptable types of bicycle racks are shown below:



Acceptable
These bicycle racks provide two points of support for bicycles. They are constructed with square tubed material which makes the racks resistant to cutting.

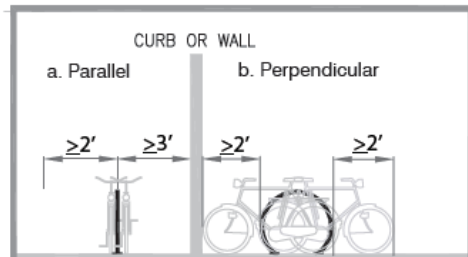


Unacceptable
These bicycle racks either provide only one point of support for bicycles, are constructed with round tubed material which makes them prone to cutting, or do not allow locking a frame and wheel directly to the rack with a U-lock.

Alternative bicycle rack types that are not shown here may be considered upon review. For example, some bicycle racks do not provide two points of contact but would secure a bicycle against being knocked over by holding the front wheel stationary, provide an additional point of contact, and allow standard U-locks to lock the frame with a wheel to the rack. Use of such racks must be approved by the Zoning Administrator (in consultation with the SFMTA) for determination of equivalency.

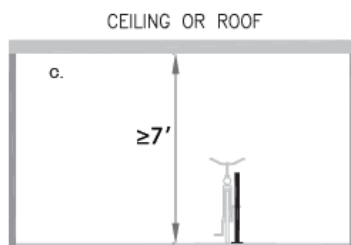
CLEARANCE REQUIREMENTS FOR BICYCLE RACKS

I. Clearance from a vertical obstruction (wall, curb, bollards) for parallel and perpendicular racks



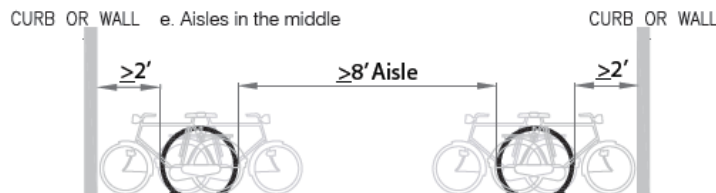
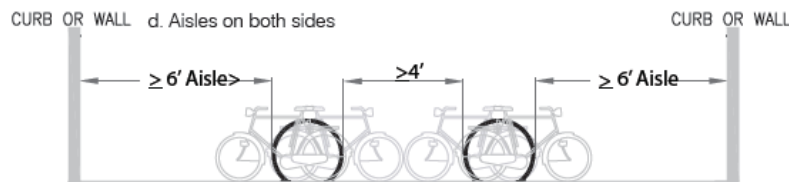
- a. When placed parallel to a wall, a rack must be at least three feet away from any vertical obstruction. If the bicycle rack is only two feet away, such rack would only satisfy one required bicycle parking space.
- b. When placed perpendicular to a wall, the rack must be at least two feet and preferably three feet away from the vertical obstruction. A standard bicycle sticks out about two feet from a standard inverted U or circular rack.

II. Minimum Vertical Clearance

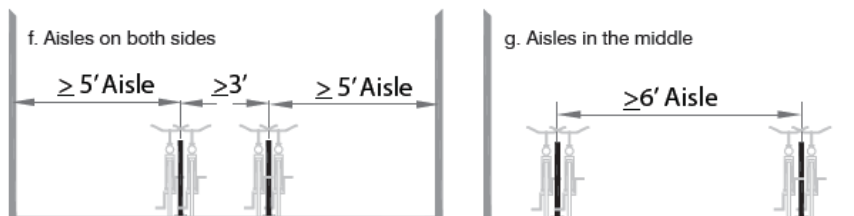


- c. Bicycle racks must be located in areas with at least seven feet of clearance between the ground and the ceiling or any elevated obstruction. Bicycle racks also should be installed on surfaces with minimal slopes, preferably as close to 0% grade as possible.

III. Layout of racks perpendicular to the aisles



IV. Layout of racks parallel to the aisles



In cases shown in illustration (g) racks must be at least three feet from the wall to allow two bikes parked to one rack. If this distance is lower than three feet, such rack would only count for one bicycle parking space.

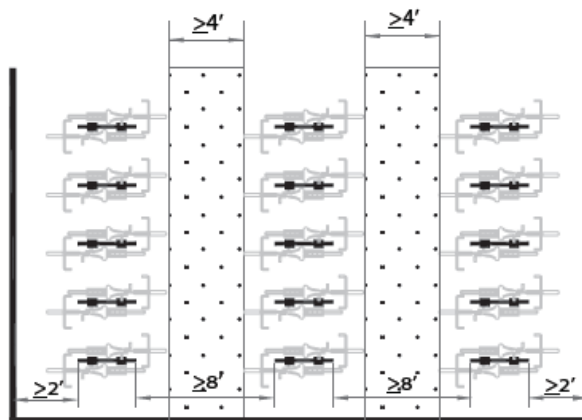
Illustration (d) through (g)- An **aisle** is the space used to provide access for bicycles in and out of the racks. Aisles may be provided on both sides of the rack as shown in Illustrations (d) and (f) or in the middle of racks as shown in Illustrations (e) and (g).

A four foot continuous clear space for **pedestrian circulation** - from the front of a bike on one side to the front of the bike on the other side - must be maintained in all aisles. Each bicycle rack shall have at least one such aisle on its side.

Illustration (d) & (e)- When racks are placed perpendicular to the aisles (III), a standard parked bicycle sticks out of the rack and intrudes into the aisle space about two feet. Therefore, in order to maintain the four feet wide pedestrian circulation, the aisles must be at least 6 feet wide when placed on the sides (d), and at least 8 feet wide when placed in the middle (e). The recommended aisle width for these cases are 8 feet and 10 feet respectively.

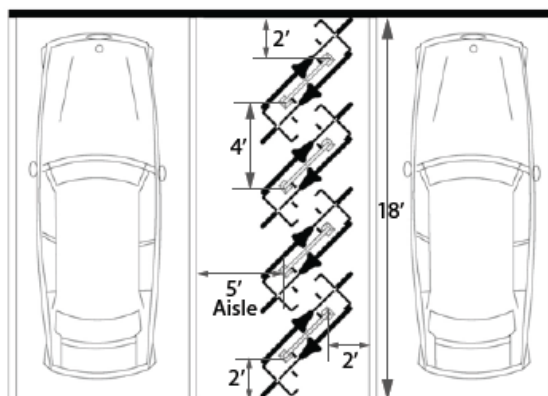
Illustration (f) & (g)-When racks are placed parallel to the aisles, each parked bicycle in the aisle zone consumes about one foot of the aisle width. In order to maintain the four foot wide pedestrian circulation space, the aisles must be at least 5 feet wide when placed on the sides (f), and 6 feet wide when placed in the middle (g). The recommended aisle width for these cases are 7 feet and 8 feet respectively.

h. An example of a layout where racks are perpendicular to the aisles and aisles placed between rows of racks



CONVERTING AUTOMOBILE PARKING TO BICYCLE PARKING

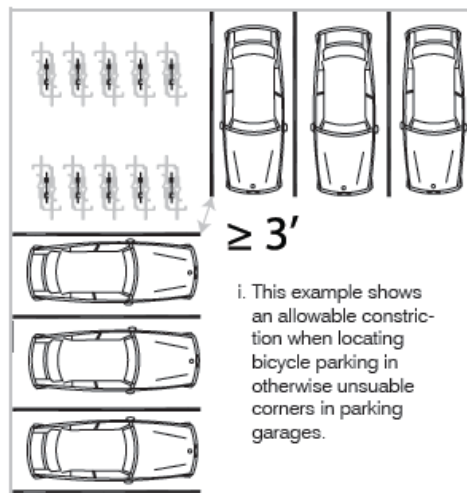
Section 151 of the Planning Code allows replacement of required off-street automobile parking spaces with bicycle parking in order to satisfy the bicycle parking requirements.



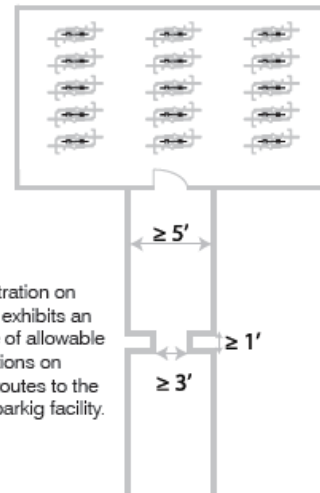
i. Shown here is an example to convert one car parking space into eight bicycle parking spaces by installing four inverted U style bicycle racks. This space must be separated from the adjacent car parking spaces with bollards or other physical dividers. If dividers are not provided, the distance between racks and the nearest stripe of car parking space must be at least three feet (increased from two feet shown in the diagram) and the aisle space must be 6 feet (increased from five feet shown in the diagram).

ACCESS ROUTES AND ALLOWED CONSTRICTIONS

Section 151.1(b)(1)(A) of the Planning Code regulates the access routes to and from bicycle parking facilities. Where direct access to the bicycle parking from the street is not provided, this Section requires "a minimum five foot wide hallway or lobby space that leads to the bicycle parking major entrance." It also establishes that "such access route may include up to two limited constriction points such as doorways, provided that these constrictions are no narrower than three feet wide and extend for no more than one foot of distance."



i. This example shows an allowable constriction when locating bicycle parking in otherwise unusable corners in parking garages.



j. The illustration on the right exhibits an example of allowable constrictions on access routes to the bicycle parking facility.

Characteristics of Different Types of Bicycles

The layout requirements established in this bulletin are based on measurements of a consisting standard bicycle (2 feet by 6 feet). When designing a bicycle parking space, especially Class One spaces, project sponsors are encouraged to consider other types of bicycles, as well as bicycles with trailers or child seats. These types of bicycles are especially important for projects that include 2-3 bedroom units. Larger clearances are recommended to accommodate parking for bicycles that are longer and/or wider than a typical bicycle.



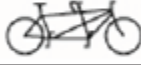





BICYCLE TYPE		DIMENSIONS (FEET)		
		Length	Height	Width
Standard Bicycle		6	4	2
Child Bicycle		5	2-3	2
Tandem Bicycle		9	4	2
Cargo Bicycle		8	4	3
Bicycle+Trailer Bike		10	4	2
Bicycle + Child Trailer		10	4	3
Bicycle and Child Seat		6	5	2
Recumbent Bicycle		7	4	3



Photo credit: Marta Lindsey, S.F. Chronicle 2015

BICYCLE PARKING AND SHOWER FACILITIES & LOCKER REQUIREMENTS¹⁶

Excerpts from San Francisco Planning Code, Sections 155.1-4.

SEC. 155.1. BICYCLE PARKING REQUIREMENTS FOR CITY-OWNED AND LEASED BUILDINGS.

In all City-owned and leased buildings, regardless of whether off-street parking is available, the responsible city official, as defined in Section 155.1(a)(11) below, shall provide bicycle parking according to the schedule in Section 155.1(c) below, except as otherwise provided in Section 155.2. The provisions of this Section shall not apply in any case where the City occupies property as a tenant under a lease the term of which does not exceed six months. In the event that a privately owned garage, as defined in Section 155.2, is in a building in which the City leases space, Section 155.2 and not this Section shall apply. All required bicycle parking shall conform to the requirements of Sections 155.1(b) (Location of Facilities) and 155.1(c) (Number of Spaces) set forth below:

(a) Definitions.

(1) **Monitored Parking.** A location where Class 2 parking spaces are provided within an area under constant surveillance by an attendant or security guard or by a monitored camera.

(2) **Restricted Access Parking.** A location that provides Class 2 parking spaces within a locked room or locked enclosure accessible only to the owners of bicycles parked within.

(3) **Personal Storage.** Storage within the view of the bicycle owner in either the operator's office or a location within the building.

(4) **Class 1 Bicycle Parking Space(s).** Facilities which protect the entire bicycle, its components and accessories against theft and against inclement weather, including wind-driven rain. Examples of this type of facility include (1) lockers, (2) check-in facilities, (3) monitored parking, (4) restricted access parking, and (5) personal storage.

(5) **Class 2 Bicycle Parking Space(s).** Bicycle racks which permit the locking of the bicycle frame and one wheel to the rack and, which support the bicycle in a stable position without damage to wheels, frame or components.

(b) Location of Facilities.

(1) At locations where the majority of parking spaces will be long-term (e.g., occupied by building employees for eight hours or more), at least ½ of the required bicycle parking spaces shall be Class 1 spaces. The remaining spaces may be Class 2 spaces. The Director may approve alternative types of parking spaces that provide an equivalent measure of security.

¹⁶ Source: *Menlo Park Comprehensive Bicycle Development Plan*, Appendix E: Sample Bicycle Parking Code Language

(2) **Alternative Locations.** In the event that compliance with Section 155.1(b)(1) may not be feasible because of demonstrable hardship, the responsible city official may apply to the Director for approval of an alternative storage location. In acting upon such applications, the Director shall be guided by the following criteria: Such alternative facilities shall be well-lighted and secure. The entrance shall be no more than 50 feet from the entrance of the building, unless there are no feasible locations within a 50 foot zone that can be provided without impeding sidewalk or pedestrian traffic. However, in no event shall an alternative location be approved that is farther from the entrance of the building than the closest automobile parking space.



Photo credit: sanfranshuttertours.com

(3) **Exemptions.** If no feasible alternative parking facility exists nearby which can be approved pursuant to Section 155.1(b)(1) or (2) or, securing an alternative location would be unduly costly and pose a demonstrable hardship on the landlord, or on the City, where the City owns the building, the Director may issue an exemption. In order to obtain an exemption, the responsible City official shall certify to the Director in writing that the landlord, or the City, where the City owns the building, will not prohibit bicycle operators from storing bicycles within their office space, provided that they are stored in such a way that the Fire Code is not violated and that the normal business of the building is not disrupted.

(c) **Required Number of Bicycle Parking Spaces.**

(1) **Class 1 Bicycle Parking Spaces.** The following standards shall govern the number of Class 1, long-term, bicycle parking spaces a responsible City official must provide:

- (A) In buildings with one to 20 employees, at least two bicycle parking spaces shall be provided.
- (B) In buildings with 21 to 50 employees, at least four bicycle parking spaces shall be provided.
- (C) In buildings with 51 to 300 employees, the number of bicycle parking spaces provided shall be equal to at least five percent of the number of employees at that building, but in no event shall fewer than five bicycle spaces be provided.
- (D) In buildings with more than 300 employees, the number of bicycle parking spaces provided shall be equal to at least three percent of the number of employees at that building but in no event shall fewer than 16 bicycle parking spaces be provided.

(2) **Class 2 Bicycle Parking Spaces.** In addition to the Class 1 bicycle parking spaces required above, a responsible City official shall also provide Class 2 bicycle parking spaces according to the below enumerated schedule:

- (A) In buildings with one to 40 employees, at least two bicycle parking spaces shall be provided.
- (B) In buildings with 41 to 50 employees, at least four bicycle parking spaces shall be provided.
- (C) In buildings with 51 to 100 employees, at least six bicycle parking spaces shall be provided
- (D) In buildings with more than 100 employees, at least eight bicycle parking spaces shall be provided. Wherever a responsible City official is required to provide eight or more Class 2 bicycle parking spaces, at least 50 percent of those parking spaces shall be covered.

(3) **Public Buildings with Public Services.** In public buildings where the City provides a public service to members of the public who are patrons or users of the buildings, such as libraries, museums, and sports facilities, the responsible City official shall provide the number of bicycle parking spaces as set out in Section 155.1(c)(1) and (2), except that the average patron load in a building during peak use hours as determined by the Director, rather than the number of employees, shall determine the number of spaces required. This Section shall not apply where a public building has a “garage” (as such term is defined in Section 155.2(a)) that is open to the general public, in which case Section 155.2 shall apply.

(4) **Annual Survey.** The Director shall annually survey the amount, location, and usage of provided bicycle parking spaces in all buildings subject to the requirements of this Section in order to ascertain whether current requirements are adequate to meet demand for such parking spaces. If current requirements are inadequate, the Director shall draft and submit to the Board of Supervisors proposed legislation that would remedy the deficiency.

(5) **Reductions.** The Director may grant a reduction from the number of bicycle parking spaces required by this Section where the applicant shows based upon the type of patronage, clientele, or employees using the building that there is no reason to expect a sufficient number of bicycle-riding patrons, clientele or employees to justify the number of spaces otherwise required by the Section.

(d) **Layout of Spaces.**

Class 1 and Class 2 bicycle parking spaces or alternative spaces approved by the Director shall be laid out according to the following:

(1) An aisle or other space to enter and leave the facility shall be provided. The aisle shall provide a width of five feet to the front or rear of a standard six-foot bicycle parked in the facility.

(2) Each bicycle parking space shall provide an area at least two feet wide by six feet deep. Vertical clearance shall be at least 78 inches.

(3) Bicycle parking shall be at least as conveniently located as the most convenient nondisabled car parking. Safe and convenient means of ingress and egress to bicycle parking facilities shall be provided. Safe and convenient means include, but are not limited to stairways, elevators and escalators.

(4) Bicycle parking and automobile parking shall be separated by a physical barrier or sufficient distance to protect parking bicycles from damage.

(5) Class 2 bicycle racks shall be located in highly visible areas to minimize theft and vandalism.

(6) Where Class 2 bicycle parking areas are not clearly visible to approaching bicyclists, signs shall indicate the locations of the facilities.

(7) The surface of bicycle parking spaces need not be paved, but shall be finished to avoid mud and dust.

(8) All bicycle racks and lockers shall be securely anchored to the ground or building structure.

(9) Bicycle parking spaces may not interfere with pedestrian circulation.

(e) **Miscellaneous Requirements.**

(1) Buildings with existing traditional-type racks which support only one wheel shall have two years from the effective date of this Section to replace them with conforming racks.

SEC. 155.3. SHOWER FACILITIES AND LOCKERS REQUIRED IN NEW COMMERCIAL AND INDUSTRIAL BUILDINGS AND EXISTING BUILDINGS UNDERGOING MAJOR RENOVATIONS.

(a) **Definitions.**

(1) **New Building.** A commercial or industrial building for which a building permit is issued at least six months after the effective date of this legislation.

(2) **Major Renovations.** Any construction or renovation project (i) for which a building permit is issued commencing at least six months after the date of enactment of this legislation (ii) which involves an enlargement of an existing public or privately owned commercial or industrial building, and (iii) which has an estimated cost of at least \$1,000,000.00. For purposes of this Section, the term “enlargement” shall mean an increase in the square footage of the ground story of a building.

(3) **Commercial Building.** The term “commercial building” shall include, but is not limited to, public or privately owned buildings containing employees working for City government agencies or departments.

(b) **Requirements for New Buildings and Buildings With Major Renovations.**

New buildings and buildings with major renovations shall provide shower and clothes locker facilities for short-term use of the tenants or employees in that building in accordance with this Section. Where a building undergoes major renovations, its total square footage after the renovation is the square footage that shall be used in calculating how many, if any, showers and clothes lockers are required.

(1) **Shower & Locker – Professional Services.** For new buildings and buildings with major renovations whose primary use consists of medical or other professional services, general business offices, financial services, City government agencies and departments, general business services, business and trade schools, colleges and universities, research and development or manufacturing, the following schedule of required shower and locker facilities applies:

- (A) Where the gross square footage of the floor area exceeds 10,000 square feet but is no greater than 20,000 square feet, one shower and two clothes lockers are required.
- (B) Where the gross square footage of the floor area exceeds 20,000 square feet but is no greater than 50,000 square feet, two showers and four clothes lockers are required.
- (C) Where the gross square footage of the floor area exceeds 50,000 square feet, four showers and eight clothes lockers are required.

(2) **Retail.** For new buildings and buildings with major renovations whose primary use consists of retail, eating and drinking or personal services, the following table of shower and locker facilities applies:

- (A) Where the gross square footage of the floor area exceeds 25,000 square feet but is no greater than 50,000 square feet, one shower and two clothes lockers are required.
- (B) Where the gross square footage of the floor area exceeds 50,000 square feet but is no greater than 100,000 square feet, two showers and four clothes lockers are required.
- (C) Where the gross square footage of the floor area exceeds 100,000 square feet, four showers and eight clothes lockers are required.

(c) **Exemptions.**

An owner of an existing building subject to the requirements of this Section shall be exempt from Subsections (b)(1) and (b)(2) upon submitting proof to the Director of the Department of City Planning that the owner has made arrangements with a health club or other facility, located within a four-block radius of the building, to provide showers and lockers at no cost to the employees who work in the owner's building.

(d) **Exclusion for Hotels, Residential Buildings and Live/Work Units.**

This Section shall not apply to buildings used primarily as hotels or residential buildings. In addition, this Section shall not apply to “live/work units” as defined in Section 102.13 of the San Francisco Planning Code.

(e) **Owners of Existing Buildings Encouraged to Provide Shower and Clothes Locker Facilities.**

The City encourages private building owners whose buildings are not subject to this Section to provide safe and secure shower and clothes locker facilities for employees working in such buildings.

(f) **Amending Requirements.**

The Department of City Planning may establish more definitive requirements for shower and locker facilities in accordance with this Section.

SEC. 155.4. BICYCLE PARKING REQUIRED IN NEW AND RENOVATED COMMERCIAL BUILDINGS.

(b) **Requirements for New Commercial Buildings and Commercial Buildings with Major Renovations.**

New commercial buildings and commercial buildings with major renovations, as a condition of approval, shall provide bicycle parking in that building in accordance with this Section. Where a building undergoes major renovations, its total square footage after the renovation shall be used in calculating how many, if any, bicycle parking spaces are required.

New commercial buildings and commercial buildings with major renovations shall offer either Class 1 bicycle parking, as defined in Section 155.1(a)(6), or Class 2 bicycle parking, as defined in Section 155.1(a)(7), or a combination of Class 1 and Class 2 bicycle parking.

(1) **Bicycle Parking Spaces - Professional Services.** For new commercial buildings and commercial buildings with major renovations whose primary use consists of medical or other professional services, general business offices, financial services, general business services, business and trade schools, colleges and universities, research and development or manufacturing, the following schedule of required bicycle parking applies:

- (A) Where the gross square footage of the floor area exceeds 10,000 square feet but is no greater than 20,000 feet, 3 bicycle spaces are required.
- (B) Where the gross square footage of the floor area exceeds 20,000 square feet but is no greater than 50,000 feet, 6 bicycle spaces are required.
- (C) Where the gross square footage of the floor area exceeds 50,000 square feet, 12 bicycle spaces are required.

(2) **Commercial Bicycle Parking Spaces—Retail.** For new commercial buildings and commercial buildings with major renovations whose primary use consists of retail, eating and drinking or personal service, the following schedule of required bicycle parking applies:

- (A) Where the gross square footage of the floor area exceeds 25,000 square feet but is no greater than 50,000 feet, 3 bicycle spaces are required.
- (B) Where the gross square footage of the floor area exceeds 50,000 square feet but is no greater than 100,000 feet, 6 bicycle spaces are required.
- (C) Where the gross square footage of the floor area exceeds 100,000 square feet, 12 bicycle spaces are required.

(3) **Notice of Bicycle Parking - Commercial.** New commercial buildings and commercial buildings with major renovations subject to this Section must provide adequate signs or notices to advertise the availability of bicycle parking.

(4) **Layout of Spaces.** Owners of new commercial buildings and commercial buildings with major renovations subject to this Section are encouraged to follow the requirements set forth in Section 155.1(d) (Layout of Spaces) in installing Class 1 and Class 2 bicycle parking.

(5) **Owners of Existing Buildings Encouraged to Provide Bicycle Parking Spaces.** The City encourages building owners whose buildings are not subject to this Section to provide bicycle parking spaces in such buildings.

(6) **Exemption.** Where a new commercial building or building with major renovations includes residential uses, the building's total non-residential square footage shall be used in calculating how many, if any, bicycle parking spaces are required.

(7) **Authority.** This Section shall not be interpreted to interfere with the Department of Planning's authority to require more than the minimum bicycle parking spaces required by this Section as a condition of approval of a project, where appropriate.

SPECIAL PROGRAMS

CITY OF ALAMEDA – MONITORED BICYCLE PARKING REQUIREMENTS FOR EVENT PERMIT

Application Conditions (Events Greater Than 1,000 Participants)

- 1) Organizers should reserve space for bike parking commensurate with at least 5% of the total expected crowd. Expect a greater need for bicycle parking (10%) at any event located on Recreation and Park property.
- 2) In parking bicycles, an average length of 6 feet and width of 2 feet should be reserved for a single bike.
- 3) Bicycle parking should be within sight of a regular entrance to the event (maximum of a one block radius). This can include car garages, schoolyards, parking lots, or on- street parking.
- 4) Valet parkers must handle the parking and return of bicycles. Bicycles should be returned upon receiving a claim check to ensure the same bicycles are returned that were left. Valet parkers should record the number of bicycles parked at the event and provide that number to the event sponsor in order to estimate the amount of space needed for the following year's event.
- 5) Bicycle parking should be monitored at all times by someone approved by the event sponsor.
- 6) Hours of operation of the secured attended bicycle parking must be at least the same hours as the event.
- 7) The sponsor shall be financially responsible for the secured attended bicycle parking in the event that bicycles are damaged or stolen.
- 8) Bicycle parking information must be provided whenever any kind of transportation or directional information is advertised for the event, in the same format and with equal amount of space. All events must indicate the location of the secured attended parking facilities and all event personnel must be aware of this location.

Source: *City of Alameda - Bicycle Facility Design Standards* (March 2013)

CITY OF ARCATA – MAJOR SPECIAL EVENT PERMIT

“Major events” are those involving more than 50 participants, and/or require City services.

Safety & Security – #13. Additional bicycle parking and/or lock-up space must be provided for all events.

CITY OF SACRAMENTO – PUBLIC BICYCLE RACK PROGRAM¹⁷

The City of Sacramento Public Works Department will install bicycle racks in the public right-of-way for businesses that have a need for bicycle parking. The installation of bicycle racks nearby business' has several important benefits:

- Increased bicycle ridership
- An alternative to driving
- Decreased demand for parking

Businesses requesting a City bicycle rack are encouraged to submit an application to the Transportation Division. Due to limited funding, property owners requesting a City bicycle rack will have to meet the minimum requirements. The City will give highest priority to property owners who meet the qualifying criteria.

Qualifying Criteria

Due to limited funding, highest priority will be given to property owners who meet the following set criteria:

- Business must be currently in operation and have customers, employees or visitors whom utilize bicycles to travel to the business.
- Business must have limited or no space on the property to provide bicycle parking
- A demonstrated demand for bicycle parking must be evident
- Businesses that are required to provide on-site bicycle parking as a condition of a planning entitlement or building permit do not qualify
- Only requests made by property owners or tenants for commercial uses will be considered. This includes retail, restaurants, offices and businesses in mixed-use areas.

Application Process

Businesses meeting the qualifying criteria outlined above are encouraged to complete an application. Requests to participate in the Public Bicycle Rack Program will be subject to an eligibility screening through an application and interview process. All applications received will be initially screened for eligibility against the qualifying criteria.

Applicants will be notified shortly after submission of a completed application. If the application meets the qualifying criteria, City staff will arrange an on-site consultation to evaluate the site area and verify that the qualifying criteria have been met. Once the criteria has been verified, the City of Sacramento will provide the property owner with details such as rack design, rack placement, rack installation, and site logistics in relations to the installation phase

On-line Bicycle Rack Application – <http://portal.cityofsacramento.org/Public-Works/Transportation/Programs-and-Services/Racks/Apply-Now>

Installation Guidelines For Bike Racks – See under “Sample Codes” above.

¹⁷ <http://portal.cityofsacramento.org/Public-Works/Parking-Services/Discount-Programs/Bicycle-Parking-Programs>

IN-STREET BICYCLE PARKING

The *2010 APBP Bike Parking Guide* offers the following steps for in-street bicycle parking programs.

IN-STREET BICYCLE PARKING

Making It Happen

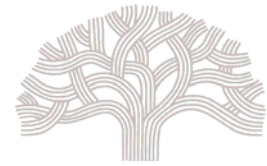
Based on the successes in communities in North America, the following steps are key to developing a successful in-street parking program:

1. Adopt design guidelines: Design guidelines should be officially adopted by the city council or another group of elected officials.
2. Create city policies: Consistent policies for maintenance and liability are an excellent tool when working with the community and local businesses. Policies help address concerns about adding to a city's (or county's) maintenance burden or liability exposure.
3. Choose locations based on merchant requests. The most frequent objection to in-street parking is from merchants who perceive the loss of an automobile parking space as a threat to their livelihood. Seek out bicycle-friendly businesses.
4. Identify funding: Funding can be from local sources, project-by-project, or multiple sites can be bundled together for the purpose of larger grant applications.
5. Pilot locations that will succeed: Pick locations that are a guaranteed success, ones that have the strongest local support and will be the most heavily used. Picking sites with few if any design or installation challenges is also important to speed implementation.
6. Document outcomes: "Before" and "after" documentation should include bicycle parking utilization (bicycle counts) at the site as well as intercept or on-line surveys of cyclists, business patrons, and business owners.

Two city examples follow:

CITY OF OAKLAND – IN-STREET BICYCLE PARKING PROGRAM

LA DOT – BICYCLE CORRAL INFORMATION + APPLICATION



OVERVIEW

An in-street bicycle parking corral (“corral”) is a group of bicycle parking racks placed in the street next to the curb aligned with car parking stalls. Corrals may be prioritized for installation where demand for bike parking is higher than can be accommodated on the sidewalk. Corrals may be installed in other locations based on favorable site-specific circumstances.

CORRAL LOCATION REQUIREMENTS

Corral locations are identified by City staff or based on community or merchant requests. Locations are subject to the support of the fronting business owner(s), and will be installed only where the fronting business and/or local business improvement district (“BID” or similar entity) signs a maintenance agreement. The installation of a corral prevents City street-sweeping vehicles from accessing the parking lane, therefore the agreement requires the maintaining organization to hand sweep the corral area and disposal of debris, as well as ongoing monitoring of the corral’s condition.

Bicycle corrals may be installed in existing red zones (where deemed safe), and may replace metered or unmetered parking stalls. Corrals in locations where the demand for bicycle parking exceeds the available space for sidewalk racks will get the highest priority for installation.

Corrals may be installed at any location on the block so long as adequate space for buffering (typically six feet—three feet on each side) is available. Corrals at street block corners have the benefit of creating de facto curb extensions, shortening the street crossing distance for pedestrians, and improving sight lines for motorists turning into traffic from side streets. Oakland has a surfeit of T intersections that provide opportunities for corral installations at the intersections that do not require removal of car parking spaces.

Corrals will not be located in bus zones and cannot replace blue zones. Due to the changing nature of parking zone allocations in Oakland’s commercial corridors, it may be possible to convert green, yellow, and white zones, or to install the corral in a currently metered parking space. If there is a consensus of business owners on a particular block to convert a yellow zone, for example, such locations can be considered for bike corrals. In such cases, the sometimes time-consuming process for developing such consensus should be led by the applicant. Corral location requirements are further detailed in **In-Street Bike Parking Corral Standards** at www2.oaklandnet.com/n/OAK039388.



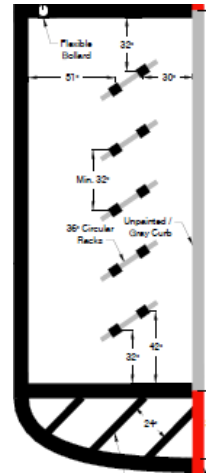
CORRAL ELEMENTS

Corrals elements include the following (use of which vary based on site conditions):

- Bicycle racks
- Buffers and barriers
 - Parking wheel stops
 - Delineators (safe-hit posts)
 - Striping (8" solid white corral perimeter/4" diagonal white buffer)
 - Red curb (external to corral perimeter)
- Signs

Racks, wheel stops, and delineators all feature white reflective tape. The curb adjacent to the corral shall be unpainted (or painted grey). The curb next to the corral shall be painted red.

Corral design and rack type vary based on available corral width, as measured from the curb face. See **In-Street Bike Parking Corral Standards** at www2.oaklandnet.com/n/OAK039388 for layouts based on 7' and 8' widths (typical for the "parking lane").



Bicycle Racks

Types

The two rack types approved for installation in corrals are square tube, galvanized: (1) inverted U, 18" wide; and (2) circular, 36" wide (only for corrals that are a minimum of 8' wide). On asphalt, multiple loop racks on flat bar flanges must be used. On concrete, single-loop racks (considered more aesthetically pleasing) may be used. "Art racks" are not permitted in corrals at this time due to the expense and difficulty of replacing custom racks if damaged.



Orientation to Curb

Bicycle racks installed in a bike corral will generally be installed on a 35 degree angle "to the left" (see diagram) if installed on the right side of a street. (If installed on the left side of a one-way street, the angle will be to the right.) Due to site-specific conditions such as the presence of protective bulb-outs or other streetscape elements, staff may recommend perpendicular installations. The benefit of perpendicular installations is that they create more space for parking bicyclists to maneuver between racks. The downsides of perpendicular installations (as compared to those installed on a 35 degree angle) are that: (1) the 10" of additional curb length they provide is not enough to room to install another loop; and (2) parked bicycles will extend further into the corral, leaving about one foot less of a buffer between the rack and the roadway.

Spacing

Oakland's minimum spacing between bike rack loops is 32". Wider spacing may be recommended if there is the length along the curb. Wider spacing eases access and egress to the racks.¹ Corral

¹ The Association of Pedestrian and Bicycle Professionals recommends a minimum of 36" between racks; Oakland's minimum balances the constrained urban landscape with bike parking demand.

designs will strive to strike the best balance factoring in the competing benefits of rack spacing, number of bike parking spaces, and buffers.

Buffers and barriers

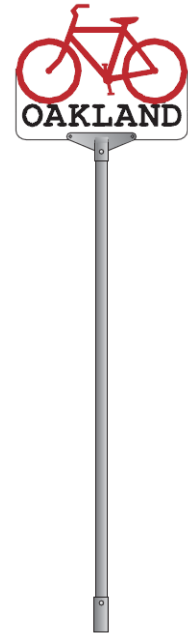
The purpose of buffers and barriers is to alert drivers to the presence of the racks (visually and, as a last resort, physically) and to protect bicyclists using the racks. Treatments are deployed based on the adjoining feature (crosswalk, driveway, intersection, parking space).

Corral buffers include pavement striping and red curb just outside the corral perimeter. An 8" white stripe is installed around the perimeter. The corral edge stripe leaves a minimum 32" internal buffer (typical) to the rack element, and a minimum of 36" outside the perimeter to the adjoining feature. Four inch cross-hatch striping may be installed. Parking Tees adjacent to the corral are installed (or refreshed).

Corral barriers include reflective wheel blocks (4' long, 6" high, 6" wide, black recycled rubber w/ white reflective material) and delineators (Safe-Hit post, white w/ white reflective material, pin-lock base, 36-48" high).

Signs

A 30"-wide "BIKE Oakland" parking sign has been created (image, right) to mark Oakland's bike parking corrals. The sign will be installed if the adjacent business owner supports its use.



CORRAL REQUEST, EVALUATION, AND INSTALLATION PROCESS

Corrals will be installed in response to requests from businesses or business improvement districts (BIDs or similar entities), as detailed below. "Applicant," below, refers to the fronting business and/or BID as applicable.

1. Applicant reviews the **On-Street Bicycle Parking Corral Application and Maintenance Agreement** ("Agreement").
2. Applicant contacts the Bicycle & Pedestrian Facilities Coordinator at bikeped@oaklandnet.com or (510) 238-3983 with a brief description of the proposed location, including the fronting business address, for preliminary application approval.
3. City staff surveys the site using Google maps and may contact the applicant with questions. At this stage, discussion of replacing yellow zones and other activities that will require the Applicant to perform community outreach, will be ascertained.
4. If the location is preliminarily approved, Applicant submits a completed and signed Agreement to bikeped@oaklandnet.com. If the location is denied, staff will evaluate the installation of sidewalk racks.
5. PWA staff conducts a field survey to determine site suitability. Detailed measurements of the corral area and adjacent parking spaces and travel lanes are taken and observations of bike parking demand and traffic patterns are made.

6. *If a corral is recommended*, staff will draft a site plan and circulate it, internally, for reviews and approvals. Next, the drawing is shared with the proposing/maintaining business, BID, and other stakeholders if applicable. The corral will not be installed until the Applicant has approved the proposed layout. *If a corral is not recommended*, the Applicant and requestor will be notified and the reason for denial will be given. Reasons for denial include no evidence of demand, sufficient sidewalk space for racks, poor sight lines, and deteriorated pavement on which bike racks cannot be mounted.
7. If no insurmountable stakeholder objections are presented, a work order will be generated, and the corral will be installed by the Public Works Agency. (See the next section for an explanation of the process to resolve disputes.) The timeline for installations is subject to staff availability, weather, materials in stock, and other factors.

Appealing the decision to approve or reject a corral

At any time during the process, a stakeholder may present objections to City staff. Objections will be resolved on a case-by-case basis. Staff will strive to avoid disputes by conducting an inclusive and transparent process.

The following objections may be the basis for an appeal:

- A nearby location would better serve the same business(es) and the fronting business owner (or BID) is willing to maintain the corral.
- The design doesn't meet the City's guidelines.
- A different number of racks than proposed should be installed.

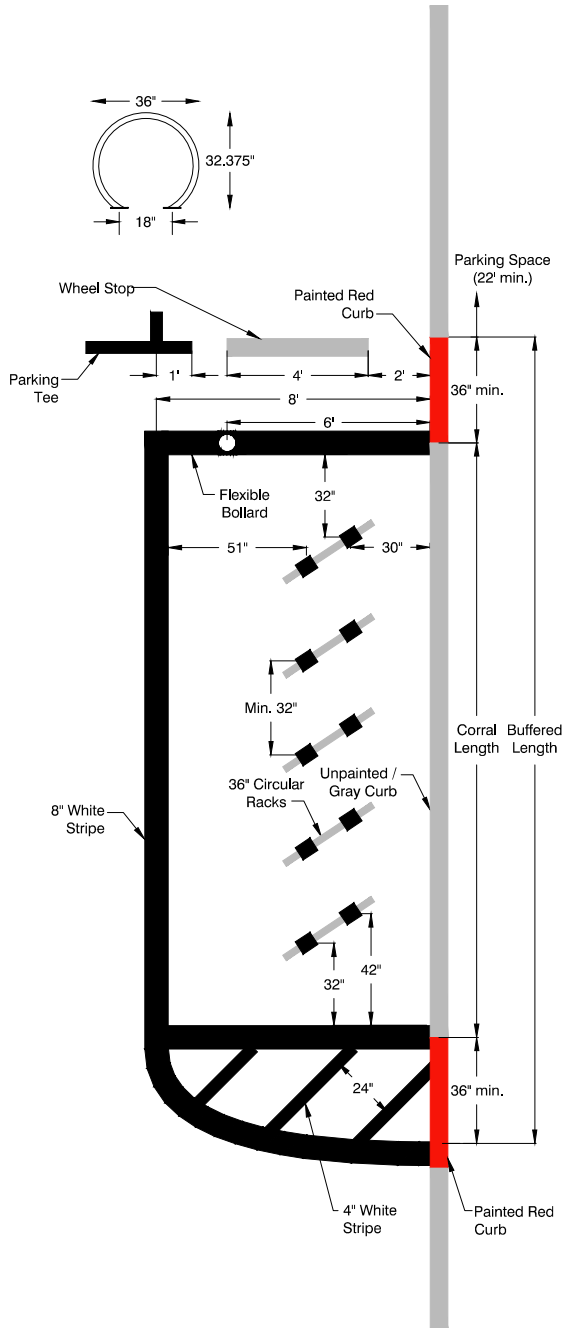
The following objections will not be considered as they have been addressed during the design and outreach process, or they are subjective:

- The corral is dangerous.
- The corral is ugly.
- The corral is unnecessary.

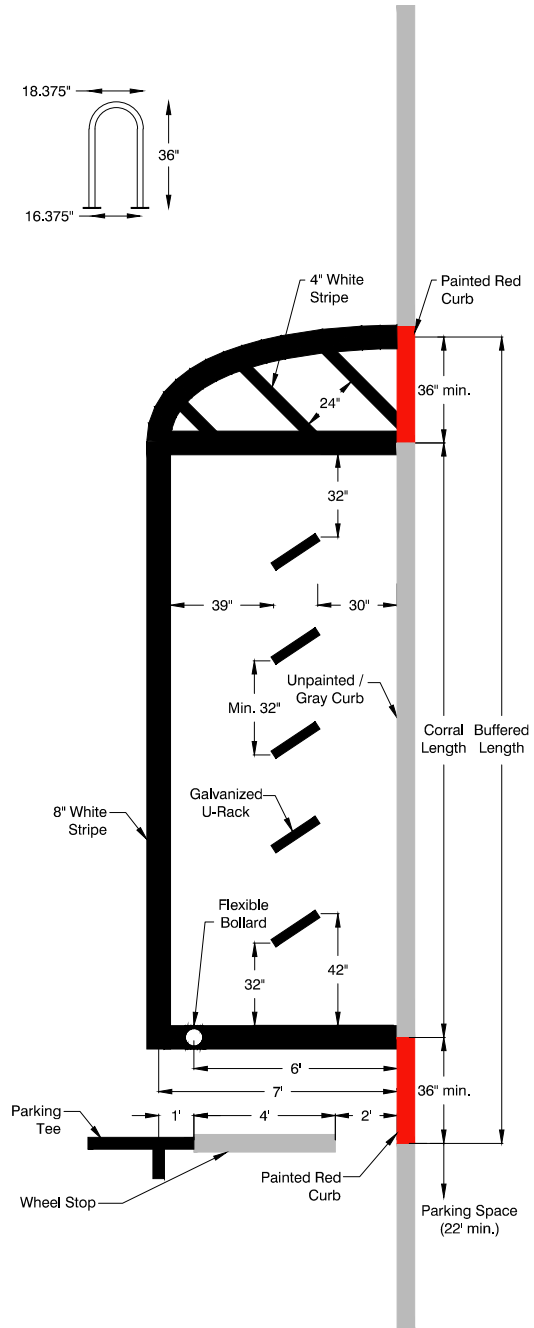
If a location is rejected by City staff, the Applicant may appeal the decision by demonstrating how the location meets the goals and guidelines of the In-Street Bicycle Parking Corral Program.

Typical Corral Layouts

8' Corral



7' Corral



NOTE: If curb length beyond the minimums is available - and no additional racks can (or are needed to) be installed - the space can be allocated to increase internal or external buffer lengths, or to increase the distance between the racks.

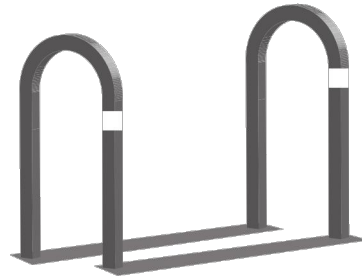
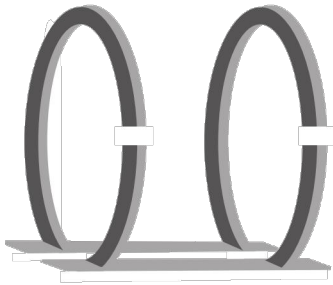
Corral Details

CORRAL LOCATION REQUIREMENTS

1. A signed agreement documenting the business or organization responsible for street sweeping and debris removal is required prior to corral installation. (Street sweeping in the corral and along the adjacent curb out to 20 ft in both directions shall be performed by hand.)
2. Corrals must be a minimum 50' from a storm drainage inlet to accommodate PWA Hydro-Vac vehicles. (PWA Drainage Division shall review proposed corral locations.)
3. Where parallel parking adjoins the corral, the stall should be a minimum of 22' in length.
4. Any rack within the corral must be a minimum of 6' from any fire hydrant and a minimum of 4' away from any in-ground utility covers (manholes, gate pots, etc).
5. Where located at far side of a bus stop, the corral shall begin 15' minimum after AC Transit flag.
6. Racks cannot be installed in asphalt or concrete that is in poor repair.

BIKE RACK SPECIFICATIONS

1. If installed in asphalt (typical for in-street), bike racks must be mounted on flanges (minimum of two loops per flange).
2. In corrals that are less than 8' wide, an 18" inverted U rack (Welle WSH36xx or equal) should be used. In corrals that are at least 8' wide, a 36" wide circular rack (Welle Circular or equal) may be used. (Both racks are 18" wide as measured from center of the base plate flange.)
3. Typical installations (shown, previous page): Racks oriented at 35° angle, diagonal left. Racks may be installed perpendicular to the face of curb if the corral is 8' or wider.
4. Four inch white reflective tape should be adhered to the "leg" of each bike rack loop adjacent to the travel lane (shown below).



Rack Types: Two-loop, flange-mounted, square-tube, galvanized steel; U- and circular-styles w/ 4" white reflective tape adhered to the travel lane side of the rack footer.

Recommended Corral Edge Treatments (x)

Adjoining Feature	█	●	▨
	Wheel Stop	Flexible Bollard	Buffer Striping
Crosswalk			X
Driveway			X
Intersection			X
Parking Space	X	X	

NOTE: The curb along the length of the corral should be painted gray.

CITY OF OAKLAND

DEPARTMENT OF ENGINEERING AND CONSTRUCTION



In-Street Bike Parking Corral Standards
Sheet 2 of 3

DATE: November 2012
REV. DATE: _____

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CORRAL RACK LAYOUT DETAILS BASED ON CORRAL/BUFFER LENGTHS, # OF LOOPS, RACK SPACING

DIAGONAL ORIENTATION (35° angle)

PERPENDICULAR ORIENTATION

CIRCULAR RACKS (36" WIDE)

# loops	Corral length	Min buffered length	# loops	Corral length	Min buffered length
		Recommended minimum spacing: 36"			
5	18'-6"	24'-6"	5	16'-10"	22'-10"
6	21'-6"	27'-6"	6	19'-8"	25'-8"
7	24'-6"	30'-6"	7	22'-6"	28'-6"
8	27'-6"	33'-6"	8	25'-4"	31'-4"
9	30'-6"	36'-6"	9	28'-2"	34'-2"
10	33'-6"	39'-6"	10	31'-0"	37'-0"
		Minimum spacing: 34"			
5	17'-8"	23'-8"	5	16'-10"	22'-10"
6	20'-6"	26'-6"	6	19'-8"	25'-8"
7	23'-4"	29'-4"	7	22'-6"	28'-6"
8	26'-2"	32'-2"	8	25'-4"	31'-4"
9	29'-0"	35'-0"	9	28'-2"	34'-2"
10	31'-10"	37'-10"	10	31'-0"	37'-0"

INVERTED U RACKS (18" WIDE)

# loops	Corral length	Min buffered length	# loops	Corral length	Min buffered length
		Recommended minimum spacing: 34"			
5	17'-8"	23'-8"	5	16'-10"	22'-10"
6	20'-6"	26'-6"	6	19'-8"	25'-8"
7	23'-4"	29'-4"	7	22'-6"	28'-6"
8	26'-2"	32'-2"	8	25'-4"	31'-4"
9	29'-0"	35'-0"	9	28'-2"	34'-2"
10	31'-10"	37'-10"	10	31'-0"	37'-0"
		Minimum spacing: 32"			
5	16'-10"	22'-10"	5	16'-0"	22'-0"
6	19'-6"	25'-6"	6	18'-8"	24'-8"
7	22'-2"	28'-2"	7	21'-4"	27'-4"
8	24'-10"	30'-2"	8	24'-0"	30'-0"
9	27'-6"	33'-6"	9	26'-8"	32'-8"
10	30'-2"	36'-2"	10	29'-4"	35'-4"

CITY OF OAKLAND

DEPARTMENT OF ENGINEERING AND CONSTRUCTION



In-Street Bike Parking Corral Standards
Sheet 3 of 3

DATE: November 2012
REV. DATE: February 2014

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X-3

LA DOT BIKE PROGRAM

Bicycle Corral Information + Application



What is a Bicycle

Corral? A Bicycle Corral is an on-street bicycle parking facility that can accommodate many more bicycles than a typical sidewalk rack. Bike corrals are installed in the vehicular right-of-way along the curb and typically occupy 20 feet (an area equivalent to a single-vehicle parking space) with up to eight bicycle racks – enough space for 12-16 bicycles! They are especially useful in areas with narrow sidewalks or areas heavily trafficked by pedestrians, where it would be impractical or obstructive to install a sidewalk rack.

Benefits

Expanded and Increased Parking that serves local businesses

- Bicycle parking allows unlimited time to park
- Diminishes demand on local car parking: 10-12 customers can park in a bike corral, the same amount of space required for one car
- Help businesses locate in dense neighborhoods without breaking the bank on auto parking space

Increased Business Visibility and Foot Traffic

- Improves sight lines and visibility at intersections for motor vehicle drivers and bicyclists
- Increases the visibility of a business from the street by 53%
- Bicycle corrals increase foot and bike traffic by 67%
- Make streets safer, friendlier and more attractive to visitors and new arrivals

Boom for Business

- Studies in New York City, Toronto, and Portland found that people who biked and walked to commercial areas spent more money per month than those who drove there
- With money saved on auto costs, people who ride bikes have more money to spend at local businesses
- In Seattle, taxable retail sales data showed that bike lanes had a positive economic impact
- Businesses in New York saw retail sales up 49 percent if they were located near protected bicycle lanes

Benefits



Increased Access

- Ample bike parking allows business patrons, visitors, and tourists to park, stroll and visit multiple establishments
- People on bikes are more likely to make repeat trips to their local stores
- Provides a permanent buffer between pedestrian activities on the sidewalk and motor vehicle traffic on the street
- Creates a de facto curb extension, shortening pedestrian crossing distances at intersections
- Increases transportation options for both employees & patrons
- Bicycle users help to decrease traffic congestion in business districts
- Better bicycling infrastructure leads to higher rates of bicycle ridership

Promotes Sustainability

- Bicycles provide a zero emission transportation alternative in a time when climate change is largely attributed to human usage of fossil fuels
- Bicycles help to improve local air quality
- Active transportation improves physical and mental health, providing businesses with healthier and happier customers

Enhances Neighborhood

- Bikes create greater awareness of surrounding neighborhoods and local businesses
- Bicycle infrastructure makes real estate more desirable
- Streets that prioritize bicycling, walking and public transit positively impact the health of local businesses

Bicycle Corral Pilot Program

The Bicycle Corral Program is currently in Phase 2 of its pilot, implementing a limited number of Bicycle Corrals in approved locations across the City through 2014. Though we have a wait list through 2015, the LADOT Bike Program maintains rolling applications for Bicycle Corrals. To begin the process of installing a Bicycle Corral, interested parties should complete the Preliminary Bicycle Corral Application and Maintenance Agreement.

Maintenance Agreement

The Bicycle Corral Program is a public-private partnership. The City pays for the corral, site design, and installation in the public right-of-way. The requesting party then agrees to become a maintenance partner who cares for the Corral's cleanliness and upkeep for the duration of its installation.

What do I do as the Maintenance Partner?

- Sign a Maintenance Agreement with the City of Los Angeles
- Keep the Bicycle Corral and adjacent drainage clean and clear of debris
- Visually inspect the Bicycle Corral at least once per week
- Regularly maintain any plantings and landscaping
- Keep the facility free of graffiti and trash

For more information or to join the wait list for a Bicycle Corral in front of your business, fill out and return the preliminary [Bicycle Corral Application and Signed Maintenance Agreement*](#) to

Elizabeth Gallardo, Assistant Bicycle Coordinator
City of Los Angeles DOT Bicycle Program
100 S. Main Street, 9th Floor, Los Angeles, CA 90012
elizabeth.gallardo@lacity.org

Project Site Feasibility

Applicant Type

- Business Improvement District (BID)
- Ground-floor Business Owner
- Fronting Property Owner
- Non-profit or Community Organization
- Neighborhood Council
- City Council Office or City Agency
- Other applicant types may be considered on a case-by-case basis. Please describe your affiliation:

Applicant Primary Contact Information

First Name: _____ Last Name: _____

E-mail: _____ Phone: _____

Organization or Business Name: _____

Legal Business Name or DBA: _____

Council District: _____ Look up district of proposed location here:
http://navigatela.lacity.org/common/mapgallery/pdf/council_districts/CDindex_8.5_11.pdf

Mailing Address:

Street: _____

City: _____

Zip Code: _____

I have read the bicycle corral application documents and agree to their requirements and process.

_____ Applicant Initials

Project Site Feasibility

Identifying Proposed Location

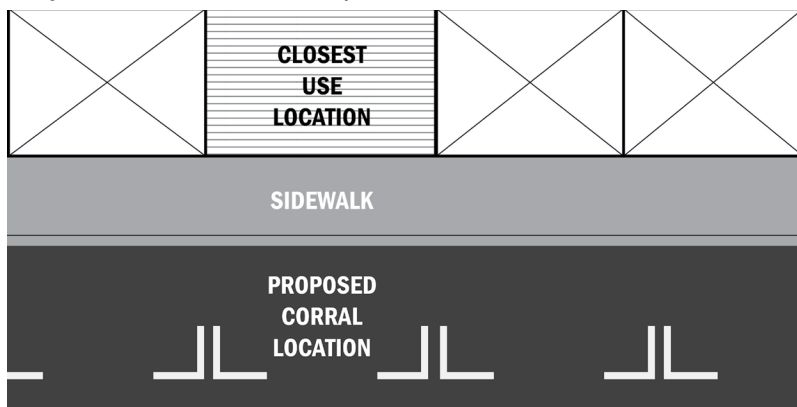
Nearest Valid Address: _____

Nearest Intersection: _____

Please attach an aerial image (printed from Google Maps) indicating the proposed location.

Detailed Site Information and Location Criteria

Project Site Terms Description



Name/Description of Closest Use:

Street Address of Closest Use:

Closest Use Type/Description

choose one:

- | | |
|---|--|
| <input type="checkbox"/> Business | <input type="checkbox"/> Single-Family Residential |
| <input type="checkbox"/> Retail Store | <input type="checkbox"/> Office/Commercial |
| <input type="checkbox"/> Restaurant | <input type="checkbox"/> Other (please explain): |
| <input type="checkbox"/> Cafe | _____ |
| <input type="checkbox"/> Bar | _____ |
| <input type="checkbox"/> Multi-Family Residential | _____ |

Primary Site - Nearby Uses (within 1 block radius)

check all that apply:

- | | |
|---|--|
| <input type="checkbox"/> Business | <input type="checkbox"/> Single-Family Residential |
| <input type="checkbox"/> Retail Store | <input type="checkbox"/> Office/Commercial |
| <input type="checkbox"/> Restaurant | <input type="checkbox"/> Other (please explain): |
| <input type="checkbox"/> Cafe | _____ |
| <input type="checkbox"/> Bar | _____ |
| <input type="checkbox"/> Multi-Family Residential | _____ |

Project Site Feasibility

Detailed Site Information and Location Criteria

Description of Parking Spaces intended for Corral Location:

Parking Regulations at Proposed Site(s): (example: No Parking 7-9AM; 4-6PM)

Parking Zone(s)

What is the existing parking zone designation?

See LADOT website for more info:

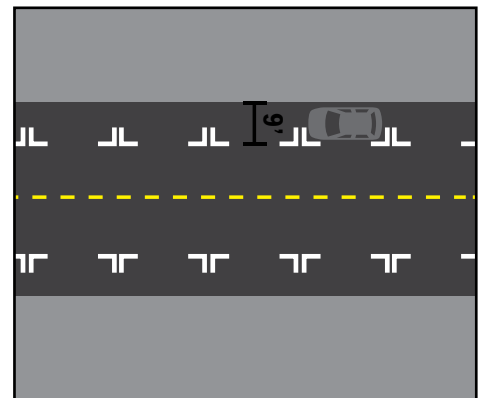
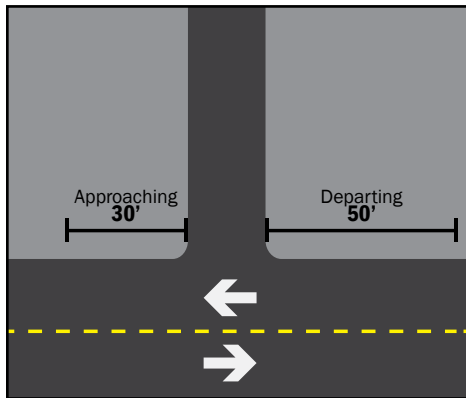
<http://ladot.lacity.org/WhatWeDo/Parking/CanIParkThere/ColoredCurbZones/index.htm>

- Metered Parking (Parking meter or pay station)
- Street Parking (No meters or pay stations, no colored curb)
- Red Zone (requires LADOT pre-approval; contact Bike Program prior to applying)
- Yellow Curb Zone (Commercial Loading)
- White Zone (Passenger Loading)
- Green Zone (Short-term Parking Zones)
- Blue Zone (Disabled)
- Bus Zone
- Not Parking but: _____

Site Location Criteria

This site adheres to the following criteria:

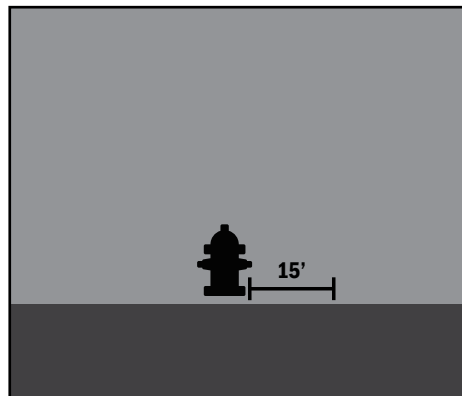
- At least 50' from departing corner or 30' from approaching corner
- Posted speed limit on street is 35 MPH or less
- Parking space or site is at least 9 feet in width (measuring out from curb)



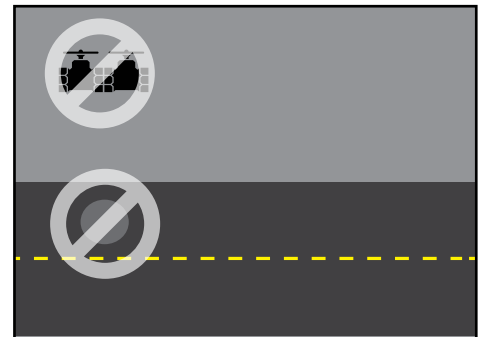
- Does not block driveway access



- Is not within 15 feet of a fire hydrant



- Does not restrict access in any way to public utilities, utility covers, valves, building standpipes, etc.



Project Site Feasibility

Active Transportation on Site

Bikeways Present

Sharrows



Bike Lane



Buffered Bike Lane



Protected Bike Lane or Cycletrack



Bicycle Friendly Street



Bikeway Not Present but Proposed in 2010 Bicycle Plan
(See http://www.bicyclela.org/maps_main.htm#lamaps for map)

Type of Bikeway: _____

No Bikeway Planned

What is the current level of bicycling activity along this street?

- High
- Moderate
- Low

What is the current level of pedestrian activity along this street?

- High
- Moderate
- Low

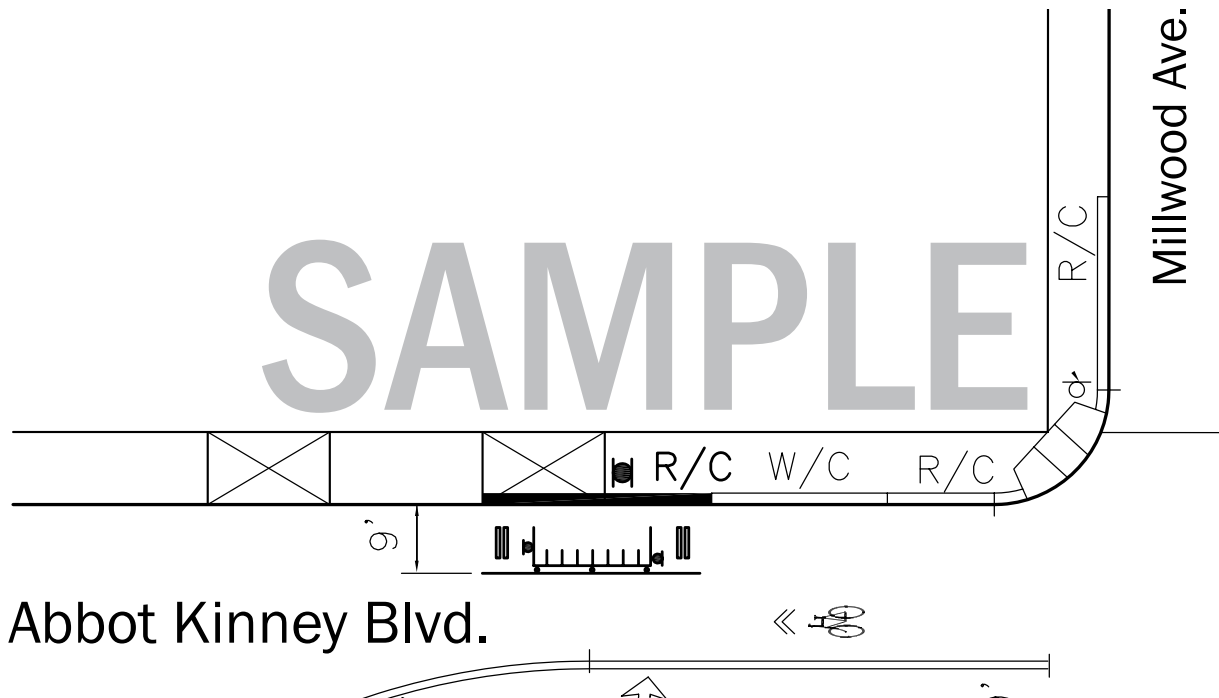
There are other pedestrian or complete streets treatments near my site (describe):

Supporting Documentation Checklist

1. Map of Area (Flat aerial view, please show proposed Corral location)



2. Site Plan Indicating Proposed Corral Location



3. Proof of Outreach and Community Support (letters or statements of support)

Supporting Documentation Checklist

4. Photos of Proposed Site



5. Three (3) original hard copies of Signed Maintenance Agreement*

(*customized agreement will be sent to Maintenance Partner upon request, for more information contact elizabeth.gallardo@lacity.org)

Maintenance Agreement

On-Street Bicycle Parking Facility
Bicycle Corral

Business Name and Location

The City of Los Angeles will install an on-street bicycle parking facility (Bicycle Corral) at **Business Name and Location**. The bicycle corral will be located in the parking stall at **Business Name and Location**.

The business owner at **Business Name and Location**, the owner(s) at said property enter into an agreement with the City to maintain the Bicycle Corral and any associated maintenance in adjacent parking spaces required due to the installation of the Bicycle Corral to City standards.

To facilitate the installation of the Bicycle Corral, it is agreed that:

1. The Bicycle Corral and adjacent impacted parking spaces will be swept and otherwise cleared of all debris at least once per week by **Owner, Business Name and Location**. All trash will be removed from the facility and disposed of in a proper manner.
2. The Bicycle Corral and associated equipment will be kept free of graffiti and stickers by **Owner, Business Name and Location**.
3. **Owner, Business Name and Location**, will regularly maintain any landscaping or plantings added to the facility design.
4. The Bicycle Corral will be visually inspected by **Owner, Business Name and Location** at least once a week for trash, graffiti, proper maintenance of the bicycle parking equipment, landscaping and overall appearance of the facility. The City will regularly inspect the site to determine that **Owner, Business Name and Location** is properly maintaining the site.
5. Should errant motorists, vandalism, or neglect damage the site the City can choose to replace the equipment or remove the Bicycle Corral in its entirety. If funding is not available to replace the equipment or if it is determined the location is underutilized for the purpose of parking bicycles the City reserves the right to remove the Bicycle Corral.
6. Should citizen complaints be received by the City regarding the Bicycle Corral, the following steps will be taken to resolve concerns by the public:
 - a. The City will complete a field inspection of the site and a report will be filed that reviews the condition of the Bicycle Corral to address the concerns of citizen(s).
 - b. If the level of maintenance of the Bicycle Corral is deemed unacceptable

by the inspector of the site, **Owner, Business Name and Location**, will be notified in writing of actions needed to be taken to bring the maintenance of the site to the standard required by the City.

- c. Response to the complaint may result in the following action(s) by the City:
 - i. No action;
 - ii. A warning; or
 - iii. Revocation of this permit and removal of the Bicycle Corral by the City.

- 7. Any changes upgrades or enhancements proposed by **Owner**, owner of **Business Name**, must be approved, in writing, by the City prior to any change in the design, appearance or equipment. Failure to obtain the City's permission in writing for any changes, upgrades or enhancements could result in revocation of this permit and removal of the Bicycle Corral by the City.

- 8. Should the business or property owner change hands or be transferred, the City will retain the right to remove the Bicycle Corral unless the new business or property owner enters into a new agreement with the City.

- 9. The City reserves the right to remove the Bicycle Corral at any time and to revoke this agreement.

IN WITNESS WHEREOF, the parties have executed this agreement by the authorized representatives as of the dates indicated below:

BUSINESS NAME:

By: _____ Date: _____

Owner, Business Name

City of Los Angeles:

CITY OF LOS ANGELES DEPARTMENT OF TRANSPORTATION:

By: _____ Date: _____

Jon Kirk Mukri, General Manager

APPROVED AS TO FORM:

By: _____ Date: _____

Deputy, City Attorney

ADDITIONAL BIKE PARKING RESOURCES

AASHTO (American Association of State Highway and Transportation Officials)

Guide for the Development of Bicycle Facilities, 4th Edition (2012). Or “Draft AASHTO Guide for the Planning, Design, and Operation of Bicycle Facilities” (Feb 2010).

www.railstotrails.org/resources/documents/ourWork/trailBuilding/DraftBikeGuideFeb2010.pdf

CITY OF ALAMEDA

Bicycle Facility Design Standards: In-Street Bicycle Corral

(March 2013) <http://alamedaca.gov/sites/default/files/document-files/bikestandardsfinalcompiled.pdf>

bike corrals

CITY OF NEW YORK

NYDOT Bike Corrals: The Department installs CityRacks in the curbside lane of the street instead of on the sidewalk. Anyone can request a bike corral but every bike corral needs a maintenance partner to keep the bike corral clear of snow and debris.

www.nyc.gov/html/dot/html/bicyclists/bike-corrals.shtml



CITY OF OAKLAND

Bicycle & Pedestrian Program:

In-Street Bicycle Parking Corrals

<http://www2.oaklandnet.com/Government/o/PWA/o/EC/s/BicycleandPedestrianProgram/ISBPC/index.htm>



CITY OF SACRAMENTO

Pilot Parklet Program [<http://portal.cityofsacramento.org/Public-Works/Parking-Services/Pilot-Parklet-Program>] **Sacramento Parklet Program Manual** (Draft 1/28/2014) www.sacparklet.org

CITY & COUNTY OF SAN FRANCISCO

San Francisco “Better Streets Plan,” [www.sf-planning.org/ftp/BetterStreets/proposals.htm]

(Took effect 1/16/2011) Chapter 5. Street Designs, section **5.6 Parking Lane Treatments**

www.sf-planning.org/ftp/BetterStreets/docs/FINAL_5_Street_Designs.pdf



CARGO BIKE RACK

The Copenhagenize Bar by Cyclehoop

www.copenhagenize.com/2014/02/cargo-bike-parking-design-copenhagenize.html