TOWN OF ARLINGTON

BICYCLE PARKING GUIDELINES

An illustrated guide to Arlington's bicycle parking bylaw.

ABOUT THIS GUIDE

The Town of Arlington's Bike Parking Guidelines provide guidance on physical location and design of short- and long-term bicycle parking. Selecting good locations and equipment for bicycle parking can help maximize ridership and increase safety and security for riders.

These guidelines are part of a collection of resources created to provide clear and illustrated descriptions of Arlington's zoning bylaw requirements, as well as industry best practices.

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1.0
Introduction

A bike parked at an inverted U rack location in the Town Hall parking lot. Photo: DPCD

Bicycle parking at Arlington High School.
Photo: DPCD

What is bicycle parking and why is it important?

The Arlington Zoning Bylaw defines bike parking as the accessory storage of bicycles (which may include trailers or other customary accessories) in a secure manner that allows for quick and convenient access, storage, and removal of bicycles by users who are making trips to or from the associated principal use.

Arlington promotes bicycling as a healthy, environmentally-friendly way of getting around. The Town has made strides in improving bicycling facilities through the adoption of a Complete Streets policy and by promoting sustainable transportation. Many facilities exist in town to support low-stress bicycle travel, including the Minuteman Bikeway, Alewife Brook Greenway, and bicycle lanes on Massachusetts Avenue and Park Avenue. As a result, more people are using their bikes every day for commuting and general transportation. The addition of bike share has even attracted casual riders.

Safe, secure, and adequate bike parking is critical to maintaining a welcoming environment for cyclists. Bicycle parking is an area that allows for the intact and secure storage of bicycles and other accessories in an easily and conveniently accessed location, where both wheels can rest on a stable surface and accessing the space does not require the movement of other bicycles, vehicles or objects. Parking for larger bikes, such as cargo bikes, and bikes with trailer accessories may necessitate additional storage space.

Providing bicycle parking further encourages people to use their bicycles as transportation. People are more likely to use a bicycle if they are confident that they will find convenient and secure parking at their destination. Additionally, providing a designated area for

bicycle parking gives a more orderly appearance to buildings and public space and prevents cyclists from locking their bikes to unacceptable fixtures, such as trees, benches, or railings. However, if a bicycle rack appears insecure, does not fit bicycles well, or is in the wrong location, cyclists will not use it. These guidelines have been created to ensure that bicycle parking is designed properly and is well used. Pedestrians, motorists, and other roadway users also benefit from good bicycle parking: poorly designed, improperly installed, or badly sited bicycle parking can obstruct sidewalks, driveways, parking spaces, building access, wheelchair ramps, and other shared areas.

Bicycle Parking Provisions in the Zoning Bylaw

The Arlington Redevelopment Board (ARB), through their broad jurisdiction under the Environmental Design Review (EDR) Special Permit, had applied bicycle standards to projects subject to EDR depending on the use and context. The ARB found that the regulations, being dependent on the number of vehicular parking spaces, resulted in inadequate bicycle parking for the uses under review.

The ARB determined that bicycle parking regulations and standards for the Town of Arlington needed to be decoupled from vehicular parking requirements in order to achieve the community's goals and create consistency. Rather than use the number of vehicular parking spaces as the standard by which bicycle parking spaces are calculated, the updated bicycle parking standards are based on a structure's use(s). The requirements are also separated into short-term and long-term bicycle parking spaces depending on who uses the structure(s) on a project site.

The 2019 Annual Town Meeting approved the amendment to the Arlington Zoning Bylaw to update the bicycle parking standards in section 6.1.12. Bicycle parking is to be provided for any development or change of use, and building expansions or conversions in the majority of cases. Both short-term and long-term bicycle parking must be incorporated into the development.

Who is this guide for?

The guide is intended to be used by developers, property owners, businesses, Town staff, and residents, whether to understand the requirements and best practices of bike parking in the Town of Arlington or to better understand what bike parking is and why it is important. Along with providing direction to developers about the 2019 revisions to the bicycle parking regulations in the Zoning Bylaw, the guide is also intended to create a standard for bicycle parking installed in public spaces by the Department of Public Works, Parks and Recreation, or contractors selected through public projects and programs.

2.0
General Requirements

Life finds a way. In the absence of dedicated parking, cyclists will lock bikes to street fixtures, sometimes obstructing public walkways.
Photo: DPCD

General requirements for bicycle parking

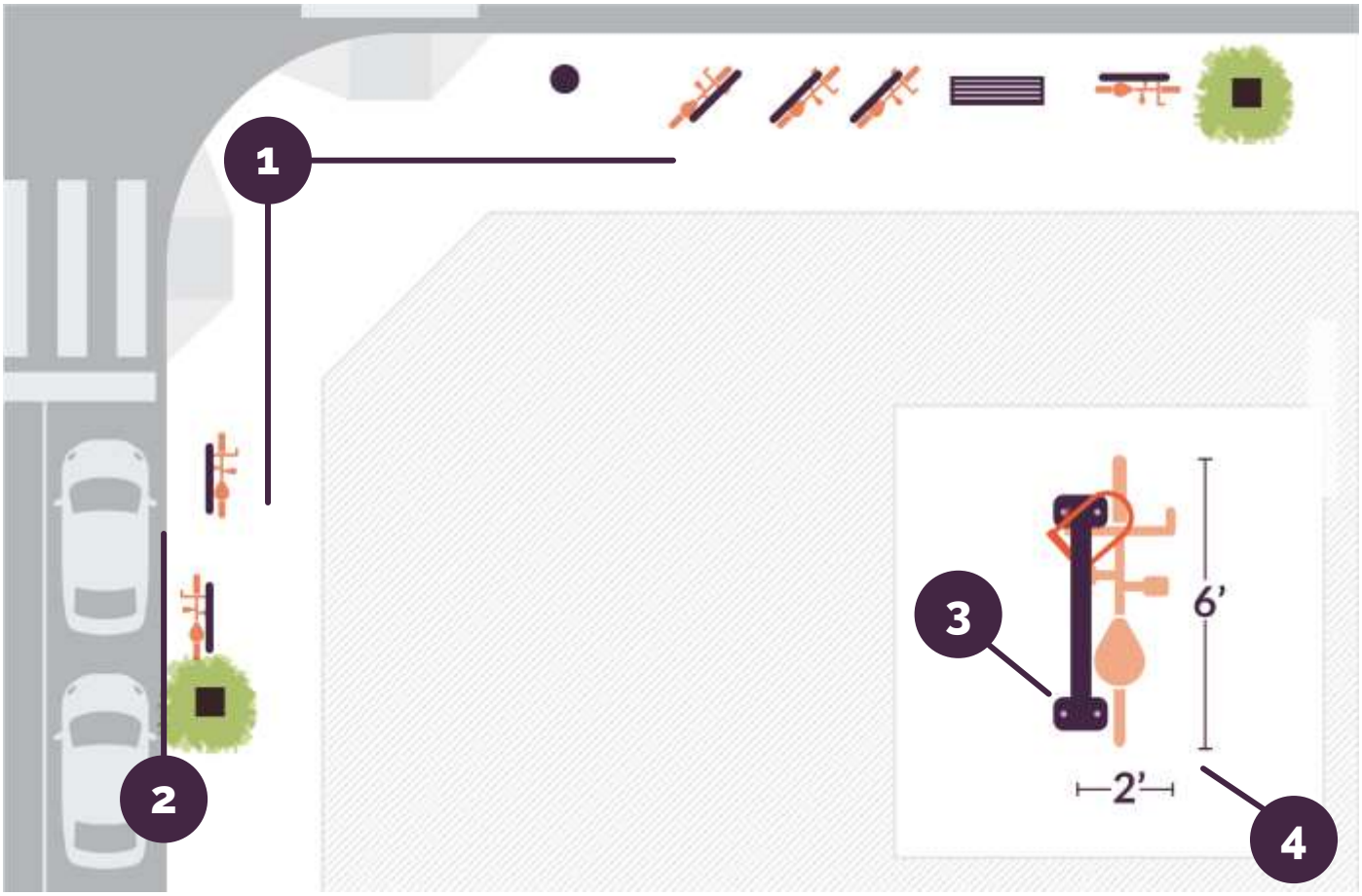
Short- and long-term bicycle parking is required for new developments or changes of use, building expansions, or conversions. This section details the general requirements and best practices of the design, maintenance and materials, and amount (as part of developments) of all types of bicycle parking in Arlington.

In some non-residential cases subject to approval, there is the ability to swap the long-term bicycle parking spaces for short-term bicycle parking spaces. Additionally, the ARB and the Board of Appeals have broad jurisdiction to modify the requirements based on specific conditions unique to a proposal.

Design Requirements

The design of bicycle parking is critical to its functionality and security. It should be intuitive to use, easy to access and find on a site, secure and safe for users, accommodate a variety of bicycles and attachments, and provide for an orderly and uncluttered appearance. Poorly-designed parking is difficult to use and access, does not hold as many bicycles as its advertised capacity, and provides limited security for users. As a result, poorly-designed parking discourages users from parking there, leading them to attach bicycles to sign posts, light poles, trees, and other street furniture not designed for bicycle parking. There are minimum design criteria that all bicycle parking in Arlington must meet.

A bicycle parked near Uncle Sam Plaza in Arlington Center. Photo: DPCD

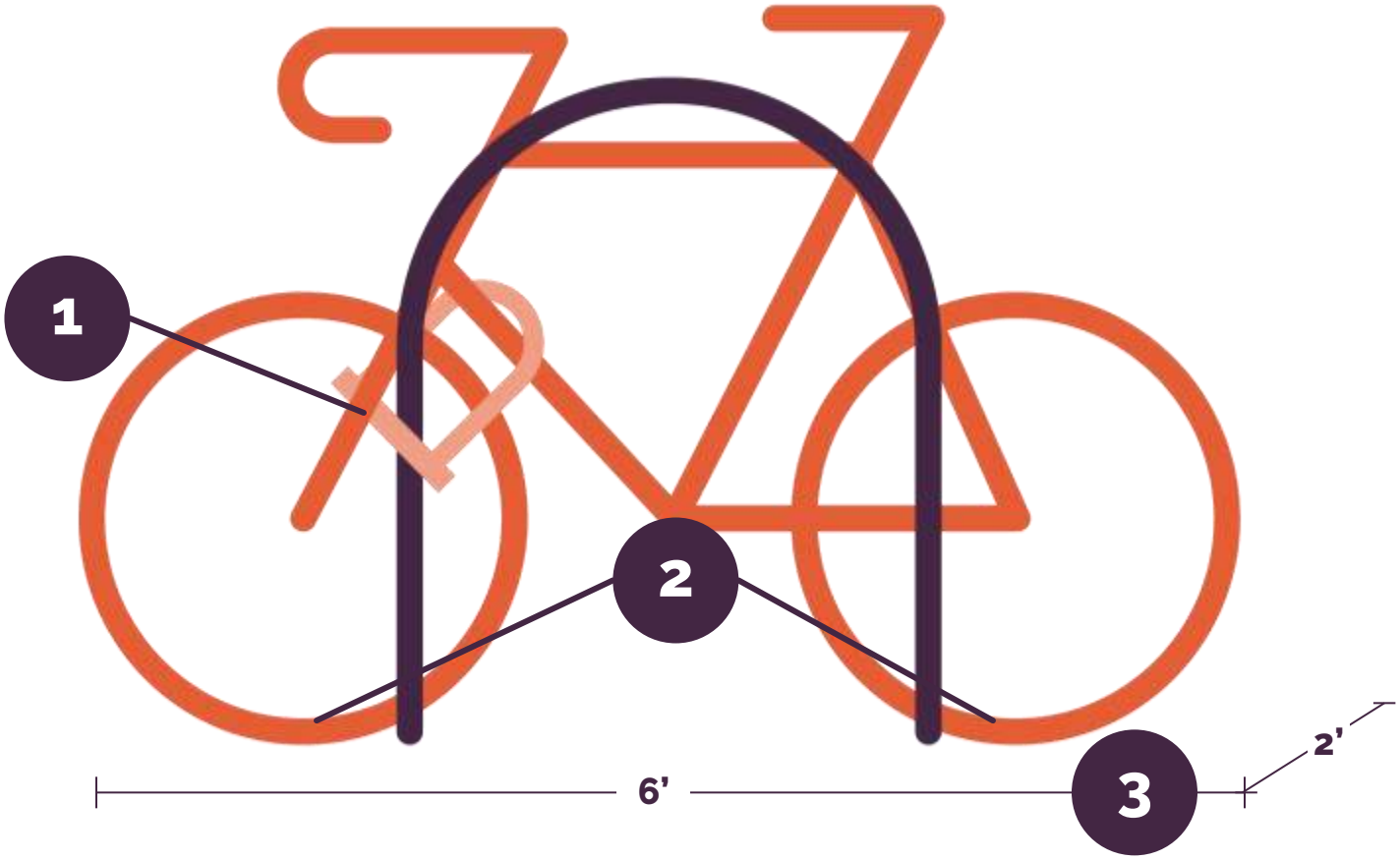


1 **Circulation:** bike racks and storage may not obstruct pedestrian or vehicular traffic. Specific dimensional guidelines are provided in the sections on short- and long-term parking.

2 **Damage protection:** bike parking should be separated from vehicular parking to minimize the possibility of damage to either cars or bikes.

3 **Theft protection:** bike racks and storage must be securely attached to a permanent surface.

4 **Dimensions:** Parking fixtures must accommodate bicycles at least six feet long and two feet wide.



1 **Security:** Bike parking must be capable of securing a bike frame and one wheel using a U-type security lock without needing to remove either wheel. Bicycle racks designed to hold a bicycle by only the front wheel are not acceptable.

2 **Accessibility:** Parking must not require lifting bicycles off the floor or carrying bicycles up or down steps or stairs, whether indoor or outdoor. ADA standards must be maintained including maximum slope of ramps and access widths leading to bicycle parking areas.

3 **Dimensions:** Parking fixtures must accommodate bicycles at least six feet long and two feet wide.

The following types of bicycle parking and storage are not acceptable to meet the requirements of the Zoning Bylaw, and should be avoided for all types of bike parking:

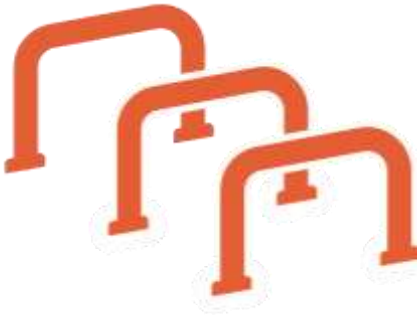
- Storage that requires bikes to be lying down or requires a kickstand to remain upright.
- Storage that requires bikes to be hung with one or both wheels in the air.
- Storage that requires the user to lift their bike off the ground or floor without assistance.

Design Guidance on the Dos and Don'ts of Bike Parking

Certain types of bicycle parking fixtures widely available from manufacturers meet the Zoning Bylaw requirements and are preferred by the Town.

DO: Hoop/inverted U racks

DO: Post and ring, hitch, or "lollipop" racks



DO: Inverted U multiples

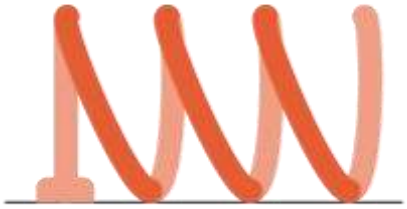
DO: Artistic racks or other rack/fixture designs that meet the basic design standards described in this guide

There are specific types of bicycle racks and designs that do not meet the Zoning Bylaw requirements and are generally not preferred for public or private bicycle parking. These racks fail to provide the proper security, functionality, and accessibility of well-designed racks.

DON'T: Schoolyard, wheelbender, comb racks

DON'T: Wave/undulating racks

DON'T: Coathanger racks



DON'T: Spiral racks

DON'T: Wheelwell fixtures

Racks that hold bikes at only one point or otherwise do not meet the requirements of the bylaw, including some artistic racks, do not meet Zoning Bylaw requirements.

Examples of Good Bike Parking

Good: The new inverted-u bike racks at the Robbins Library are properly spaced, provide two points of contact with a bicycle, allow for bikes to be securely locked, and provide sufficient room for bikes with trailers.

Photo: DPCD

Good: These racks at Town Hall are located adjacent to but separated from vehicle parking, minimizing the risk of damage to cars or bicycles and providing convenient access to several Town Hall entrances.

Photo: DPCD

Good: These post and ring-style racks are securely installed at a safe distance from pedestrian line of travel.

Photo: DPCD

Good: Because it is not securely affixed to the ground, this rack is not not permitted for short-term bicycle parking, however, it is ideal for temporary or event bicycle parking.

Photo: DPCD

Good: This temporary in-street bike corral parks ten bicycles in the space of a single car, provides protection from vehicular traffic, and allows for two points of contact between bicycles and the rack.

Photo: Philafrenzy / CC-BY-SA-4.0

Examples of Unsatisfactory Bike Parking

Unsatisfactory: There is less than 24" between the bike rack and the stone wall, thereby barring cyclists from securely locking their bikes.

Photo: DPCD

Unsatisfactory: This rack is not secured to the ground, does not allow for cyclists to lock the frame of their bikes to the rack, holds fewer bikes than advertised, and can result in bikes falling over easily and being damaged.

Photo: DPCD

Unsatisfactory: Wave frames like the one shown above only support bikes at one location when used as intended, and rarely allows for as many parked bikes as advertised.

Photo: DPCD

Unsatisfactory: Wheel lock bike racks do not provide suitable security for the entire bicycle.

Photo: Kristian Ovaska, (CC BY-SA 2.5)

Unsatisfactory: Bike racks should not be used to support or store materials other than bicycles. Racks should be kept free of debris and construction materials.

Photo: DPCD

Unsatisfactory: While space efficient, this method for long-term bicycle storage requires one wheel of a bike to be lifted off the ground, and thereby does not comply with the bike parking requirements.

Photo: City of Toronto (CC BY 2.0)

Maintenance, Installation & Materials

Like any other infrastructure, bicycle parking requires regular maintenance to ensure its long-term usability. Most commercially-available bicycle parking is made of durable materials and has no or few moving parts. Steel and stainless steel are common and appropriate materials for most general-use racks.

As with landscaping, signage, facades, and hardscapes on any property, bicycle parking infrastructure should be included in regular maintenance schedules.

In *Essentials of Bike Parking*, the Association of Pedestrian and Bicycle Professionals (APBP) notes that before purchasing bike racks, buyers should speak with suppliers about their particular conditions and choose a material and coating that suits their needs. APBP goes on to note the common choices and maintenance considerations for rack materials and coatings:

RACK MATERIAL – COATING	RELATIVE PURCHASE COST	DURABILITY	CAUTIONS
Carbon steel – galvanized	Usually lowest	Highly durable and low-maintenance; touch-up, if required, is easy and blends seamlessly	Utilitarian appearance; can be slightly rough to the touch
Carbon steel – powder coat* (TGIC or similar)	Generally marginally higher than galvanized	Poor durability	Requires ongoing maintenance; generally not durable enough for long service exposed to weather; not durable enough for large-scale public installations
Carbon steel – thermoplastic	Intermediate	Good durability	Appearance degrades over time with scratches and wear; not as durable as galvanized or stainless
Stainless steel – no coating needed, but may be machined for appearance	Highest	Low-maintenance and highest durability; most resistant to cutting	Can be a target for theft because of salvage value; maintaining appearance can be difficult in some locations

** When applied to carbon steel, TGIC powder coat should be applied over a zinc-rich primer or galvanization to prevent the spread of rust beneath the surface or at nicks in the finish.*

Source: Essentials of Bike Parking, Association of Pedestrian and Bicycle Professionals, 2017.

Number of Parking Spaces Required

The Zoning Bylaw requires certain amounts of short- and long-term bicycle parking based on the land use. The following table provides the ratios of parking spaces required based on number of rooms, square feet, or other metric depending on the use:

USE	MIN # OF LONG-TERM SPACES	MIN # OF SHORT-TERM SPACES
Residential Uses		
Single-, two-, or three-family dwelling and townhouse structures	No minimum	No minimum
Apartment building	1.5 spaces per dwelling unit	0.10 spaces per dwelling unit
Assisted living residence	0.5 spaces per dwelling unit	0.05 spaces per dwelling unit
Single-room occupancy building	1 space per dwelling unit	0.10 spaces per dwelling unit
Group home	0.5 spaces per bed	0.05 spaces per bed
Business or Industrial Use		
Auto sales, similar retail and service establishments with extensive display areas that are unusually extensive in relation to customer traffic	0.08 spaces per 1,000 sq. ft. of gross floor area	0.06 spaces per 1,000 sq. ft. of gross floor area
Hotel/motel	0.02 spaces per sleeping room	0.05 spaces per sleeping room
Other retail or service use	0.10 spaces per 1,000 sq. ft. of gross floor area	0.60 spaces per 1,000 sq. ft. of gross floor area
Office, business or professional	0.30 spaces per 1,000 sq. ft. of gross floor area	0.50 spaces per 1,000 sq. ft. of gross floor area
Wholesale business and storage	0.80 spaces per 1,000 sq. ft. of gross floor area	0.60 spaces per 1,000 sq. ft. of gross floor area
Manufacturing, Light	0.80 spaces per 1,000 sq. ft. of gross floor area	0.60 spaces per 1,000 sq. ft. of gross floor area
Office, medical or clinic	0.30 spaces per 1,000 sq. ft. of gross floor area	0.50 spaces per 1,000 sq. ft. of gross floor area

Examples based on typical uses in Arlington (for illustrative purposes only):

2,000 sf restaurant
long-term: 1 space
short-term: 2 spaces

1,000 sf office space
long-term: 1 space
short-term: 1 space

5 unit multifamily building
long-term: 8 space
short-term: 1 space

For mixed-use, the requirement is the sum of each individual use requirement

Note that single-family, two-family and three-family buildings have no minimum bicycle parking requirements.

Use	Minimum Number of Long-Term Bicycle Parking Spaces	Minimum Number of Short-Term Bicycle Parking Spaces
Institutional, Educational Use		
Hospital	0.20 spaces per 1,000 sq. ft. of gross floor area	0.10 spaces per 1,000 sq. ft. of gross floor area
Nursing home	0.5 spaces per bed	0.05 spaces per bed
Non-exempt educational use	0.30 spaces per classroom or 0.015 spaces per auditorium seat, whichever is greater	1.70 spaces per classroom or 0.085 spaces per auditorium seat, whichever is greater
Other school	0.30 spaces per classroom or 0.015 spaces per auditorium seat, whichever is greater	1.70 spaces per classroom or 0.085 spaces per auditorium seat, whichever is greater
Public, Recreational or Entertainment		
Municipal facility	0.30 spaces per 1,000 sq. ft. of gross floor area	0.50 spaces per 1,000 sq. ft. of gross floor area
Indoor Motion Picture Theater, restaurant, gymnasium, auditorium or similar place of public assembly with seating facilities	0.20 spaces per 1,000 sq. ft. of gross floor area	1 space per 1,000 sq. ft. of gross floor area
Health club or indoor athletic facility	0.10 spaces per 1,000 sq. ft. of gross floor area	1 space per 1,000 sq. ft. of gross floor area
Utility, Transportation, Communications		
Public utility	0.08 spaces per 1,000 sq. ft. of gross floor area	0.06 spaces per 1,000 sq. ft. of gross floor area
Transportation terminal	0.08 spaces per 1,000 sq. ft. of gross floor area	0.06 spaces per 1,000 sq. ft. of gross floor area
Other Uses		
Mixed-use	Sum of uses computed separately	Sum of uses computed separately
Any other use permitted in this Bylaw	Closest similar use as shall be interpreted to be covered by this table, as determined by the Building Inspector	Closest similar use as shall be interpreted to be covered by this table, as determined by the Building Inspector

3.0
Short-Term Bicycle Parking

Short-term post and ring parking at Learn to Grow, a daycare center on Broadway. Photo: DPCD

Short-Term Parking

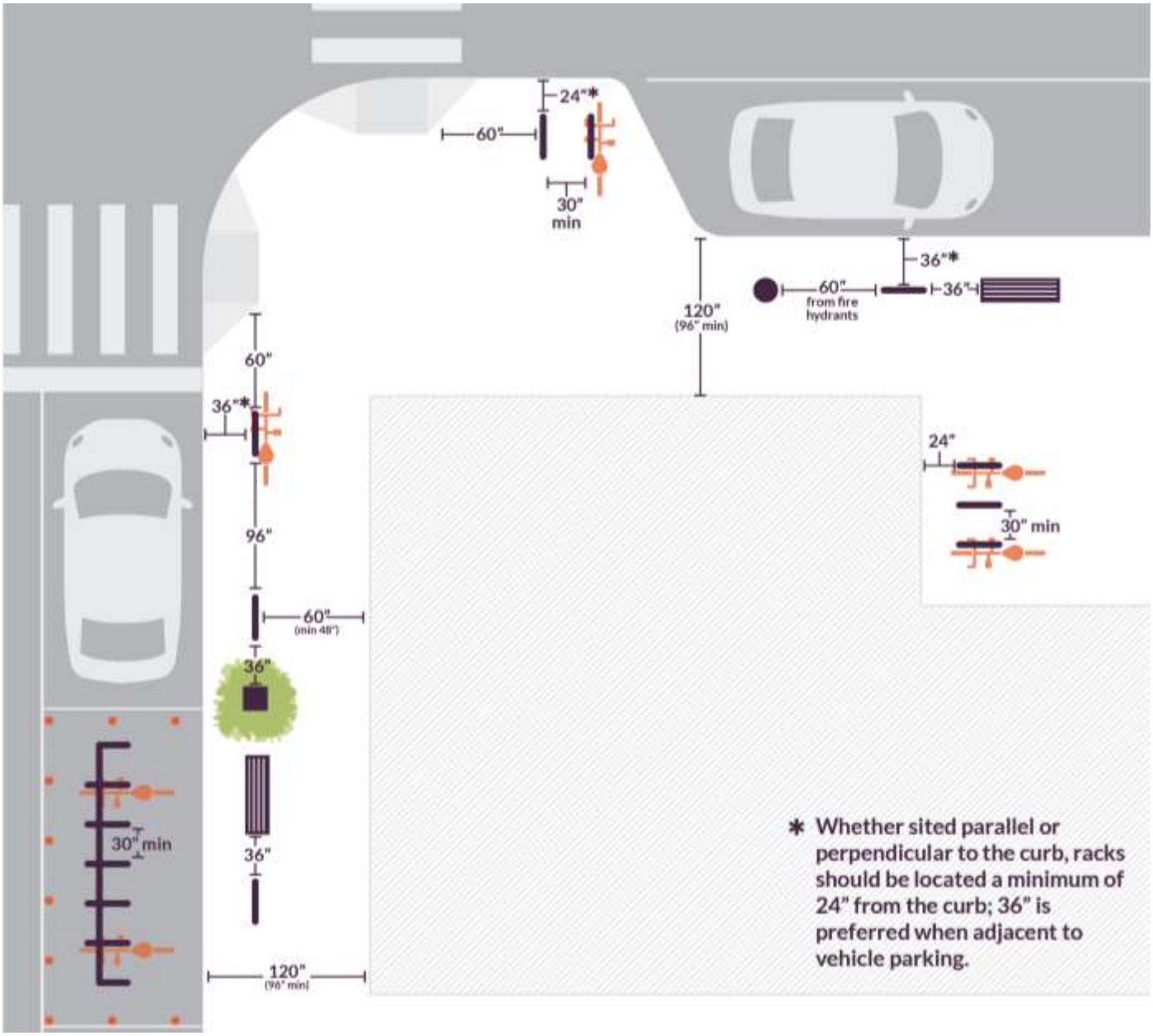
Short-term bicycle parking is intended to serve visitors of a site, typically individuals making trips of up to two hours, although it may be used for longer periods. It must be located in a publicly accessible area near pedestrian entrances. Specific requirements for short-term parking include:

Location: It must be located within 50 feet of the main entrance of the building or no further than the nearest off-street parking space.

Signage: Appropriate signage must be provided if bike parking is not visible from the main entrance.

Short-term parking must conform to the general requirements in the previous section.

Short-term bicycle parking on inverted U-racks in the Town Hall parking lot. Photo: DPCD



Layout Guidelines

For outdoor bicycle parking with high usage, consider using a shelter or other covering to protect bicycles from inclement weather, if space allows.

The site layout of short-term bicycle parking is important because it allows parking to be used effectively and efficiently by cyclists without sacrificing mobility and circulation for pedestrians and other travelers. The dimensional standards provided here are based on industry best practices and are standard for most bicycle parking guidelines nationally. Since most short-term bicycle parking is located outdoors, the dimensions generally refer to street side locations; please refer to the layout guidelines for long-term parking for more secured, indoor spaces. Additional space should be considered for cargo bikes and bikes with trailers.

If a sidewalk is not wide enough and the need is demonstrated, it may be necessary to widen the sidewalk to the appropriate width by building into a grass strip at the curb or behind the sidewalk. If on-street parking is available, consider creating an in-street bicycle corral within one of the parking spaces.

4.0
Long-Term Bicycle Parking

Secured long-term bicycle parking for residents in Arlington, VA. Photo: Arlington Transportation Partners

Long-term bicycle parking at Alewife MBTA Station in Cambridge.
Photo: David Chase, CC BY-NC-SA 2.0.

Long-Term Parking

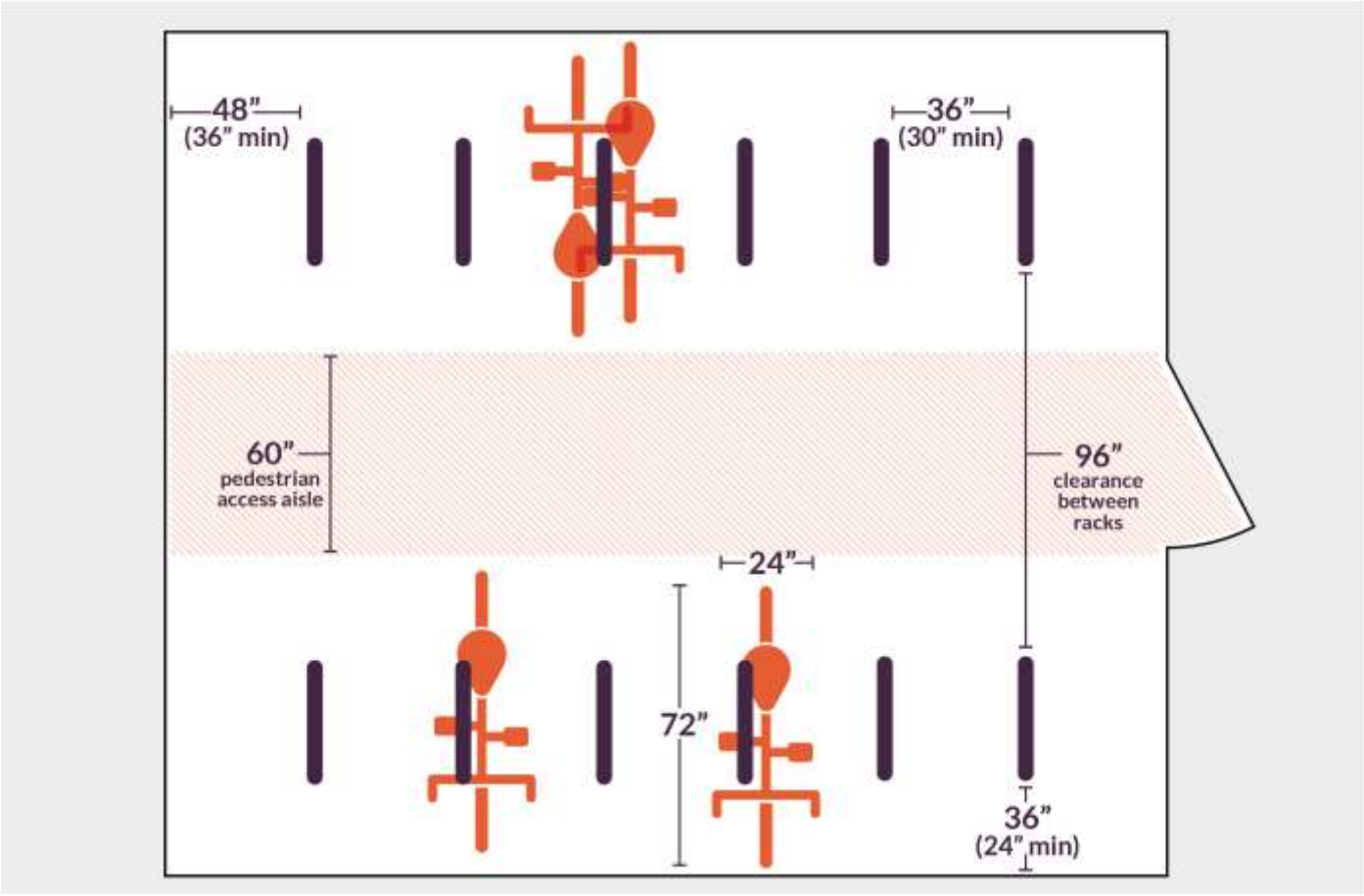
Design for all types of users. High capacity long-term bike parking should be easily usable by individuals with lower upper body strength or those riding heavy bicycles. Unassisted upper level parking (shown above) does not count toward the required parking spaces.

Long-term bicycle parking is intended to serve residents, employees, and others who need to park their bicycle for a substantial portion of the day, overnight, or for multiple days, although it may serve other bicycle users as needed. It is typically located within an enclosed, limited access area designed to protect bikes from inclement weather and theft. The requirements for long-term bicycle parking are:

Location: it must be located within the building containing the use that it is intended to serve, or in a structure no more than 200 feet from the main entrance. It may be pooled into a single secure area to serve multiple uses or buildings, as applicable.

Residential units: While bicycle parking requirements in the Zoning Bylaw cannot be satisfied within individual residential dwelling units, residents shall be permitted to bring their bicycles into their unit for storage.

Long-term parking must conform to the general requirements in the previous sections.



Layout Guidelines

Similar to short-term bicycle parking, the site or room layout for long-term parking is critical to ensure it is convenient, accessible, and functional. The following dimensional guidelines are based on industry best practices and are standard for most bicycle parking guidelines nationally. These guidelines are primarily for indoor locations or outdoor locations that are secure and weather-protected. Additional space should be considered for cargo bikes and bikes with trailers.

Other Types of Long-Term Bicycle Parking

Manufacturers also sell long-term bicycle parking units in the form of lockers and other secure fixtures. These are generally acceptable as a form of long-term parking, as long as they meet the following minimum dimensions:

- 24” wide at the door
- 8” wide at the opposite end
- 72” in length
- 48” in height

Top: Bike lockers at the South Acton Commuter Rail station. Photo: rumrunn6, bikeforums.net..

Right: Bike lockers in a University of Texas parking garage. Photo: Megan Ann, Creative Commons 2.0.

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5.0
Public Space & Event Bicycle Parking

A row of temporary bike parking provided for soccer fans outside a Portland Thorns game. Photo: Sarah Mirk, Wikimedia Commons

Bicycle Parking in the Right-of-Way and Public Bicycle Parking

Not all demand for bicycle parking can be accommodated through land development and the requirements of the Zoning Bylaw. The Town may install bicycle parking on public property for accessing adjacent uses. The Town must also make accommodations for bicycle users to access public buildings, parks, museums, and other public space or resources. Large roadway and streetscape projects also provide opportunities to incorporate bicycle parking in the public right-of-way. Bicycle parking installed in the right-of-way is usually short-term in nature, but could incorporate shelters and overhangs that allow for longer-term use. Site layouts and designs should follow the guidelines presented earlier in this document.

In general, developers and private property owners may not install bike parking in the public right-of-way or on town property without permission from the Town. Right-of-way encroachments require approval by the Select Board.

A bicycle corral at Diesel Café in Davis Square.
Photo: DPCD.

Guidance for Different Types of Public Space Bicycle Parking

Sidewalk: The most common form of public space bicycle parking is racks on the sidewalk. Racks should be placed in sidewalk furnishing areas out of the pedestrian walking zone, with sufficient space to allow for maneuvering bicycles on and off the rack and to allow for uninterrupted pedestrian traffic while the bicycle is attached to the rack. The site layout guidelines for short-term bicycle parking should be followed when installing bicycle parking in the sidewalk. Bicycle parking should be located near the entrances to businesses, multifamily housing, and other uses with potentially high demand for bicycle access. Depending on the intensity of the land use, bicycle parking may be pooled into a single location to serve multiple uses, on a block-by-block basis.

A combined sidewalk post-and-ring rack and parking . Photo: Minneapolis Public Works.

In-Street Bicycle Racks: When sidewalk space is very limited, or the volume of pedestrians requires wider sidewalk clearance than usual, and on-street car parking has been provided, in-street bicycle "corrals" should be considered. One car parking space is equivalent to 8-12 bicycle spaces, allowing for the dramatic increase of bicycle parking in an area and the number of people that are served by the parking space. It also increases the visibility of bicycling in an area and is easier for bicycle riders to find. As of this writing, no bike corrals have been installed in the Town of Arlington, but there are many local and national examples of bicycle corrals that can be investigated. Dimensions, materials, safety, appropriate location, and public comments (particularly to adjacent businesses or residences) should be included in reviewing possible locations for bicycle corrals.

In-street bike corral in Somerville, MA. Photo: DPCD.

Public Buildings and Spaces: the Town can encourage bicycling to public buildings and amenities by installing bicycle parking on public property. Bicycle parking has been installed at many public buildings and parks, including Town Hall, the Robbins Library, most elementary schools and the high school, and many public parks; however, the quantity and quality of the racks varies widely. In addition, there may be bicycle parking areas in one part of a complex, convenient to one section of park or playground, but distant and inconvenient to other areas. Some parks have no bicycle parking at all, even though they are directly adjacent to the Minuteman Bikeway. Through a dedicated bicycle parking program, public spaces without bicycle parking can be addressed and damaged or poor quality bicycle racks can be replaced.

These new racks were recently installed by the Town at Robbins Library to replace an out-of-date wave-style bicycle rack. *Photo: DPCD*

Public bicycle parking request process: Requests for bicycle parking can be sent to the Department of Planning and Community Development, which will review the request and coordinate with the requester and the Department of Public Works on installation, if applicable.

Monitored Event Bicycle Parking

This section provides information and recommendations for temporary monitored bicycle parking for large events. Permits for large events are not administered by the ARB or under the jurisdiction of the Zoning Bylaw. The guidance provided is intended for event coordinators and the Select Board, which permits large events in Arlington.

Monitored bicycle parking uses portable racks that can be stored on-site or brought to a large public event and set up quickly and easily. A secure area is typically roped or fenced off and staff or volunteers check bicycles in and out. If the bicycle parking cannot be physically separated or secured, it should be monitored for the duration of the event by the event organizer to discourage and prevent theft.

Monitored bicycle parking greatly reduces theft potential, clutter at events, barriers to pedestrian travel, and can potentially increase attendance if secure bicycle parking is advertised in advance of the event. In general, temporary event bicycle parking:

- Presents alternative transportation options to attendees of sporting events, festivals, fairs, etc. This could include valet bike parking.
- Helps ease traffic congestion at the start and finish of these events.
- Can be provided by local organizations like MassBike, which provides bike valet services at a rate based on time and capacity.

If providing staff to monitor temporary event parking is not feasible for the event organizer, an alternative is to secure the temporary racks to a grounded fixture.

Organizers of reoccurring events may be asked to adjust the availability of temporary bicycle parking based on attendance.

APPENDIX A:
Bike Parking Bylaw

6.1.12 BICYCLE PARKING

1. Bicycle parking shall be provided for any development or change of use. Bicycle parking is also required for building expansions or conversions, except where the difference of bicycle parking required for the new building and the bicycle parking for that would be required for the existing building under this Section equals fewer than 2 bicycle parking spaces. The Board of Appeals or the Arlington Redevelopment Board, as applicable, may modify the requirements of this Section based on specific conditions unique to the proposal.
2. Bicycle parking as required by this Section refers to the accessory storage of bicycles (which may include trailers or other customary accessories) in a secure manner that allows for quick and convenient access, storage, and removal of the bicycles by users who are making trips to or from the associated principal use. Bicycle parking shall be maintained exclusively for the parking of bicycles and not for the storage of other objects unrelated to bicycle use or for other purposes, as long as the use exists which the facilities were designed to serve. Bicycle parking facilities designed in accordance with this Section shall be available for use at all times when the associated principal use is in operation, except when access may be restricted for necessary maintenance from time to time.
3. When bicycle parking is required long-term and short-term bicycle parking spaces shall be provided:
    a. Long-term bicycle parking shall be intended primarily to serve residents, employees, and other persons who would require storage of a bicycle for a substantial portion of the day, for an overnight period, or for multiple days; however, it may serve other bicycle users as needed. Long-term bicycle parking is typically located within an enclosed, limited-access area designed so as to protect bicycles from precipitation and from theft.
    b. Short-term bicycle parking shall be intended primarily to serve visitors, such as retail patrons, making trips of up to two hours to a particular use; however, it may serve other bicycle users as needed. Short-term bicycle parking is typically located in a publicly accessible area near pedestrian entrances to the use they are intended to serve.
4. The minimum number of bicycle parking spaces shall be as set forth in the following table. The computed number of bicycle parking spaces will be rounded up to the nearest whole number. Bicycle parking spaces shall be provided in addition to the off-street parking space requirements of Section 6.1.4.

Use	Minimum Number of Long-Term Bicycle Parking Spaces	Minimum Number of Short-Term Bicycle Parking Spaces
Residential Uses		
Single-, two-, or three-family dwelling and townhouse structures	No minimum	No minimum
Apartment building	1.5 spaces per dwelling unit	0.10 spaces per dwelling unit

Use	Minimum Number of Long-Term Bicycle Parking Spaces	Minimum Number of Short-Term Bicycle Parking Spaces
Assisted living residence	0.5 spaces per dwelling unit	0.05 spaces per dwelling unit
Single-room occupancy building	1 space per dwelling unit	0.10 spaces per dwelling unit
Group home	0.5 spaces per bed	0.05 spaces per bed
Business or Industrial Use		
Auto sales, similar retail and service establishments with extensive display areas that are unusually extensive in relation to customer traffic	0.08 spaces per 1,000 sq. ft. of gross floor area	0.06 spaces per 1,000 sq. ft. of gross floor area
Hotel/motel	0.02 spaces per sleeping room	0.05 spaces per sleeping room
Other retail or service use	0.10 spaces per 1,000 sq. ft. of gross floor area	0.60 spaces per 1,000 sq. ft. of gross floor area
Office, business or professional	0.30 spaces per 1,000 sq. ft. of gross floor area	0.50 spaces per 1,000 sq. ft. of gross floor area
Wholesale business and storage	0.80 spaces per 1,000 sq. ft. of gross floor area	0.60 spaces per 1,000 sq. ft. of gross floor area
Manufacturing, Light	0.80 spaces per 1,000 sq. ft. of gross floor area	0.60 spaces per 1,000 sq. ft. of gross floor area
Office, medical or clinic	0.30 spaces per 1,000 sq. ft. of gross floor area	0.50 spaces per 1,000 sq. ft. of gross floor area
Institutional, Educational Use		
Hospital	0.20 spaces per 1,000 sq. ft. of gross floor area	0.10 spaces per 1,000 sq. ft. of gross floor area
Nursing home	0.5 spaces per bed	0.05 spaces per bed
Non-exempt educational use	0.30 spaces per classroom or 0.015 spaces per auditorium seat, whichever is greater	1.70 spaces per classroom or 0.085 spaces per auditorium seat, whichever is greater
Other school	0.30 spaces per classroom or 0.015 spaces per auditorium seat, whichever is greater	1.70 spaces per classroom or 0.085 spaces per auditorium seat, whichever is greater
Public, Recreational or Entertainment		
Municipal facility	0.30 spaces per 1,000 sq. ft. of gross floor area	0.50 spaces per 1,000 sq. ft. of gross floor area
Indoor Motion Picture Theater, restaurant, gymnasium, auditorium or similar place of public assembly with seating facilities	0.20 spaces per 1,000 sq. ft. of gross floor area	1 space per 1,000 sq. ft. of gross floor area
Health club or indoor athletic facility	0.10 spaces per 1,000 sq. ft. of gross floor area	1 space per 1,000 sq. ft. of gross floor area

Use	Minimum Number of Long-Term Bicycle Parking Spaces	Minimum Number of Short-Term Bicycle Parking Spaces
Utility, Transportation, Communications		
Public utility	0.08 spaces per 1,000 sq. ft. of gross floor area	0.06 spaces per 1,000 sq. ft. of gross floor area
Transportation terminal	0.08 spaces per 1,000 sq. ft. of gross floor area	0.06 spaces per 1,000 sq. ft. of gross floor area
Other Uses		
Mixed-use	Sum of uses computed separately	Sum of uses computed separately
Any other use permitted in this Bylaw	Closest similar use as shall be interpreted to be covered by this table, as determined by the Building Inspector	Closest similar use as shall be interpreted to be covered by this table, as determined by the Building Inspector

5. The general requirements for bicycle parking shall be:

a. A bicycle rack or bicycle storage fixture or structure shall accommodate a bicycle at least six feet in length and two feet wide;

b. Bicycle racks or storage fixtures must be secured against theft by attachment to a permanent surface;

c. Bicycle parking apparatus shall be installed in a manner that will not obstruct pedestrian or motor vehicle traffic;

d. To the extent feasible, bicycle parking shall be separated from motor vehicle parking to minimize the possibility of bicycle or auto damage; and

e. Bike racks or posts shall be capable of securing a standard bicycle frame and one wheel using a common U-type security lock without the need to remove either wheel. Bicycle racks designed to hold a bicycle by its front wheel alone shall not be considered to meet the bicycle parking requirements of this Section.

6. Bicycle parking designed in the following manner shall not be permitted, unless otherwise allowed by the Special Permit Granting Authority upon a finding of unusual circumstances unique to the property:

f. Storage that requires bicycles to be lying down or requiring a kickstand to remain upright;

g. Bicycles that must be hung with one or both wheels suspended in the air; or

h. Bicycles that must be lifted off of the ground or floor without any physical assistance.

7. The location of bicycle parking spaces shall comply with the following requirements:

i. Short-term bicycle parking shall be located within 50 feet of the main entrance of a building or no further away than the nearest off-street parking space, whichever is closer, with appropriate signage leading to the bicycle parking if not visible from the main entrance;

j. Long-term bicycle parking shall be provided within the building containing the use that it is intended to serve, or within a structure that is no more than 200 feet from the main entrance of a building. Bicycle parking serving multiple uses or buildings may be pooled into a single secure area, enclosure, or facility;

k. Bicycle parking must not require lifting bicycles off the floor or carrying bicycles up or down any steps or stairs; and

l. While requirements in this Section shall not be satisfied within individual residential dwelling units, residents may bring bicycles into their individual dwelling unit for storage.

8. The requirements of this Section may be reduced as follows after a finding of the Special Permit Granting Authority that the characteristics of the use, structure, or facility makes the use of bicycles unlikely or would substantially reduce the use of bicycles:

m. For non-residential uses, up to twenty percent of the required long-term bicycle parking spaces or four spaces, whichever is greater, may be converted to short-term bicycle parking spaces; and

n. For residential uses requiring six long-term bicycle parking spaces or fewer, the long-term bicycle parking spaces may be designed to meet the requirements for short-term bicycle parking spaces, so long as the bicycle parking spaces are covered to be protected from precipitation, are in a secure area, and are located on the same lot as the residential uses they serve.

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APPENDIX B:
Signage Recommendations

Standard bicycle parking signage as recommended by the Manual on Uniform Traffic Control Devices (MUTCD). Image: MUTCD.

Appendix B: Signage Recommendations

The Manual on Uniform Traffic Control Devices (MUTCD) defines the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to travel. MUTCD specifies the following requirements for signage regarding bicycle parking facilities:

D4-3

Sign or plaque	Sign designation	Section	Shared-use path	Road-way
Bicycle Parking Area	D4-3	9B.23	12x18"	12x18"

Source: MUTCD Table 9B-1. Bicycle Facility Sign and Plaque Minimum Sizes (page 792 in the 2009 Edition of the MUTCD).

Section 9B.23 Bicycle Parking Area Sign (D4-3)

Option:

01 The Bicycle Parking Area (D4-3) sign (see Figure 9B-4) may be installed where it is desirable to show the direction to a designated bicycle parking area. The arrow may be reversed as appropriate.

Standard:

02 The legend and border of the Bicycle Parking Area sign shall be green on a retroreflectorized white background.

Specific dimensional requirements for the sign are noted in the large graphic at left (page 42).

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APPENDIX C:
Sources

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Sources

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Philafrenzy, "Car shaped bicycle rack in Earlham Street" (CC-BY-SA-4.0) via Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Car_shaped_bicycle_rack_in_Earlham_Street.jpg

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Kristian Ovaska, "StolenBike-FrontWheel.jpg" (CC-BY-SA-2.5) via Wikimedia Commons. https://commons.wikimedia.org/wiki/File:StolenBike-FrontWheel.jpg

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David Chase, "Arlington-side bike cage" (BY-NC-SA-2.0) via flickr. https://www.flickr.com/photos/dr2chase/15196992589

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Andrew Owens, "Armadale station bike shelter.jpg" (CC-BY-SA-4.0) via Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Armadale_station_bike_shelter.jpg

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Megan Ann, "bike lockers (or late night crash pads)" (CC-BY-2.0), via flickr. https://www.flickr.com/photos/chainsawpanda/158671113

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Sarah Mirk, "Bike parking at professional sports game.jpg" (CC0-1.0), via Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Bike_parking_at_professional_sports_game.jpg

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