

WARRANT ARTICLE DESCRIPTION

The Department of Planning and Community Development (DPCD), in consultation with the Building Department, proposes an amendment to Section 6.05, bicycle parking and design requirements.

DPCD wishes to acknowledge Town Meeting Members Anthony Ishak and David Kroop for proposing that bicycle parking requirements in the Brookline Zoning By-Law be amended to address the lack of reliable facilities in multifamily housing. Their discussions with staff were informed by their thoughtful research of best practices and engagement with the Brookline community.

This amendment would (a) increase the required minimum bicycle parking ratios and (b) specify enforceable design standards to ensure that bicycle parking areas are accessible and feasible facilities that provide protection from theft, vandalism, and inclement weather. The new requirements would better implement several strategies in the Town's Climate Action Plan and would support the Town's affordable housing goals by increasing options for less expensive, multi-modal transportation.

A newly revised Section 6.05 in the Zoning By-Law—along with the companion Bicycle Parking Design Standards residing outside of the By-Law (see Exhibit A)—would regulate bicycle parking areas and would be enforceable by the Building Commissioner.

Applicability and Required Minimums

Multiple dwellings of eight or more units would be required to provide 1.1 long-term bicycle parking spaces for each dwelling unit. This ratio is consistent with contemporary standards for urban areas as well as conditions applied to several recent multifamily developments, including c.40B projects, permitted by the Board of Appeals. The current ratio of 1 bicycle space for every 5 dwelling units excluding ground floor units has long been outdated and insufficient.

Multiple dwellings that are either 100% affordable or age-restricted would be required to provide 0.5 bicycle parking spaces per dwelling unit.

No minimum parking spaces would be required for short-term parking (less than two-hours of parking) and for non-residential uses in this proposal. For a future amendment, staff is researching possible ratios for customer and employee parking in commercial uses, in tandem with colleagues in the Department of Public Works, who are assessing opportunities for increased bicycle parking supply in the public way.

In addition to parking demand, the compact nature of bicycle parking supports this increase in ratio: Eight bicycle parking spaces and a five-foot wide aisle would be equivalent to just one standard motor vehicle parking stall. Twenty bicycle parking spaces, plus two large-bicycle parking spaces, with a five-foot wide aisle would require approximately 459 square feet—equivalent to three standard motor vehicle parking stalls (excluding the drive aisle).

In addition, the Bicycle Parking Design Standards would allow for a limited number of high-density bicycle racks as well as bicycle lockers and bicycle sheds to provide even more flexibility in configuring parking plans.

Inclusiveness

When 16 or more long-term bicycle parking spaces are required, then 5% (no less than 2) large-bicycle spaces shall be prioritized for, but not exclusively reserved for, non-standard bicycle types such as recumbent bicycle or bicycles with cargo trailers and child seats.

Waivers

To avoid regulatory barriers to developing infill housing and to encourage adaptive reuse instead of demolition, the Board of Appeals may waive by Special Permit up to one-half the bicycle parking spaces required in the following cases *as long as the change or conversion does not meet the definition of demolition as defined in Article 5.3 of the General By-Laws*:

- (a) conversion to residential use with eight units or more, or
- (b) an existing residential use with at least seven units or more in which the number of dwelling units is increased by one or more

Enforcement

The proposed amendment would authorize the Building Commissioner to set forth and enforce Bicycle Parking Design Standards. Because contemporary industry standards for bicycle parking may evolve in regard to dimensional requirements and clearances to be more accessible and inclusive, the amendment would authorize the Building Commissioner, in conjunction with the Planning Director, to amend the Bicycle Parking Design Standards to be consistent with accepted best practices.

Town Counsel's Opinion

Town Counsel Jonathan has reviewed the language of both the proposed amendment and the standalone Design Standards, and staff has incorporated his recommended language to specify how the Building Commissioner would be authorized to set forth, enforce, and (with the Planning Director) amend the Design Standards as contemporary bicycle parking best practices continue to evolve.

EXHIBIT A: BICYCLE PARKING DESIGN STANDARDS

Bicycle Parking Spaces and Areas not in the public way are regulated under the Zoning By-Law Sec. 6.05 and the Bicycle Parking Design Standards.

Performance Criteria and Requirements for Location of and Access to Long-Term Rack Areas

The Long-Term Bicycle Parking Area shall be:

1. [Security] Located in an enclosed space room in a building such a dedicated Bicycle Parking Area or portion of a Parking Garage that provides protection from theft and vandalism with secured or supervised access limited to defined user groups, such as but not limited to residents of the building;
2. [Weather Protection] Located within a roof-covered enclosure to provide protection from weather;
3. [Fixtures] Equipped with securely installed Racks to resist tampering and theft and that accommodate a wide variety bicycle types;
4. [Convenience] Located preferably on the ground floor or comparably to the nearest non-accessible Vehicular Parking Spaces. When that is not possible, ramps with slopes no steeper than 5% or elevators large enough to accommodate a pedestrian walking a bicycle are provided;

5. [Separated] Physically protected from Vehicular Parking Spaces and Loading Areas by an enclosure, bollards, or other physical barrier;
6. Aisles providing access to the Long-Term Bicycle Parking Area shall comply with all of the following:
 - a. [Clear of Obstructions] Are at least 5 feet wide and have at least 7 feet of vertical clearance to accommodate at least one pedestrian walking a bicycle and the entire width of which is clear from overhead or other obstructions;
 - b. Have a slope no greater than 5%;
 - c. Be protected from vehicular traffic traveling on the same access way;
 - d. Be illuminated to provide safe access; and
 - e. Constriction points, such as a doorway, shall be not be less than 3 feet wide and shall not conflict with the MA State Building Code.

Short-Term Bicycle Parking Spaces and Areas

Short-Term Bicycle Parking Spaces and Areas shall meet all of the following requirements:

1. Be easily identified and accessible by the public;
2. Be equipped with Bicycle Racks as specified and required in this Section;
3. Be conveniently located near building entrances or, if applicable, as approved by the permit granting authority;
4. Provide at least 4 feet of clearance for pedestrian access;
5. Be separated from vehicular traffic and vehicular parking areas;
6. Not count toward the required minimum quantity of Long-Term Bicycle Parking Spaces; and
7. Not be installed in Bicycle Lockers and Bicycle Sheds.

Layout Requirements for All Bicycle Parking Areas, Bicycle Parking Spaces, Clearances, and Aisles

The Applicant shall comply with these Standards. Layout of Bicycle Parking Areas shall comply these standards or with manufacturers' dimensional specifications. Layouts shall not conflict with the latest edition of the Massachusetts State Building Codes.

Performance Criteria: The following standards are the minimum requirements for Bicycle Parking Areas. Plans for Rack Areas submitted for projects that require a Building Permit such demonstrate:

1. Safe and feasible clearance on all sides of a Parking Spaces for Bicycles of any type is provided that does not require the removal of a bicycle is to access a Bicycle Parking Space;
2. Safe and feasible access to Parking Spaces for Bicycles of any type, including turning radius;
3. At least one aisle at least 5 feet wide to allow for maneuvering. Aisles shall free from obstructions and shall accommodate at least one-way traffic with one pedestrian walking beside a Bicycle. Providing aisles wider than 5 feet or providing more than one aisle may be necessary in high-traffic areas;
4. Bicycles parked in Bicycle Parking Areas do not create obstructions for pedestrians or motor vehicles;
5. Adequate clearance around hydrants and wall hydrants is provided in compliance with State Fire and Building Codes.
6. Bicycle Parking Areas shall have at least one means of egress way no less than 3 feet wide. High-traffic Bicycle Parking Areas may need more than means of egress;

7. Bicycle Lockers and Bicycle Sheds shall be located so that doors can open fully to allow access and not create obstructions in pedestrian aisles and drive aisles; and
8. The minimum distance between Rack shall comply with the requirements of this Section or as required by the Rack manufacturer.
9. Minimum Dimensional Requirements

	TYPE OF BICYCLE PARKING SPACE		
	Long-Term Standard	Long-Term Large	High-Density
ONE BICYCLE SPACE <ul style="list-style-type: none"> ▪ Assumes that two bicycles secured to one Rack are not staggered 	2 feet by 6 feet	3 feet by 10 feet	Follow Manufacturer's Instructions
CLEARANCE, Distance Between Center of Rack and Wall			
<ul style="list-style-type: none"> ▪ Rack Parallel to Wall 	3 feet	Follow Manufacturer's Instructions	Follow Manufacturer's Instructions
<ul style="list-style-type: none"> ▪ Rack Perpendicular to Wall 	3 feet		
<ul style="list-style-type: none"> ▪ Rack Angled 45-Degrees to Any Wall 	3 feet		
CLEARANCE, Distance Between Racks			
<ul style="list-style-type: none"> ▪ Side-by-Side Racks 	<ul style="list-style-type: none"> ▪ One Bicycle Secured: 2.5 feet on center ▪ Two Bicycles Secured: 4 feet on center 	Follow Manufacturer's Instructions Or plans shall demonstrate safe and feasible access and turning radius	Follow Manufacturer's Instructions
<ul style="list-style-type: none"> ▪ In-Line Racks ▪ Distance between rows of Side-by-Side Racks 	10 feet on center		
<ul style="list-style-type: none"> ▪ Racks Angled 45-Degrees 	<ul style="list-style-type: none"> ▪ One Bicycle Secured: 2.5 feet on center ▪ Two Bicycles Secured: 4 feet on center 		
<ul style="list-style-type: none"> ▪ Racks of One Configuration and Racks of Any Other Configuration 	4 feet on center		
WIDTH OF PEDESTRIAN AISLE, Measured between Bicycle Parking Spaces	5 feet minimum and shall not be in conflict with the State Building Codes		
WIDTH OF MEANS OF EGRESS	3 feet minimum and shall not be in conflict with the State Building Codes		

Bicycle Racks

A Bicycle Rack shall meet all of the following performance criteria:

1. Supports the bicycle upright by its frame horizontally: Highest point is at a minimum of 32 inches above the ground. Provides two points of contact with the bicycle. Keeps both wheels on the ground and prevents bicycle from tipping over.
2. Allows locking of bicycle frame and at least one wheel with a U-lock: Diameter of locking pole is no more than 1.5 inches.
3. Materials are durable and secure: Resists tampering and cutting, such as steel or stainless steel.
4. Use is intuitive and does not require written instructions
5. Installation method protects against theft or vandalism: Rack is installed with either the In-Ground Mount or Surface Mount method. Free-standing Racks are not acceptable.
 - a. **In-Ground Mount:** Rack is installed on a permanent concrete-pad foundation.
 - b. **Surface-Mount:** Rack is secured to the surface with a tamper-proof method.

Sample layouts to be provided.