

6.100 - BICYCLE PARKING

6.101 Purpose. In order to support the ongoing viability of bicycle travel as a transportation option that mitigates the impacts of automobile use, the following regulations are provided to ensure that secure, conveniently accessible bicycle parking is provided in adequate quantity to serve new development and land uses throughout the city.

6.102 General Terms and Standards for Bicycle Parking.

- 6.102.1 Definition and Use.** Bicycle parking, as the term is applied in this Zoning Ordinance, shall refer to the accessory storage of non-motorized 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.
- 6.102.2** Bicycle parking serving a principal use in accordance with this Article 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, so long as the use exists which the facilities were designed to serve. Bicycle parking facilities designed in accordance with this Article 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.
- 6.102.3** Wherever else in this Zoning Ordinance the term "parking" is used without specific reference to bicycle parking, such term shall refer only to parking for motor vehicles and not to bicycle parking.
- 6.102.4 Bicycle Parking Spaces.** A Bicycle Parking Space shall be defined as an area within which one intact bicycle may be conveniently and securely stored and removed in an upright position with both wheels resting upon a stable surface, without requiring the use of a kickstand, and without requiring the movement of other parked bicycles, vehicles or other objects to access the space.
- 6.102.5 Types of Bicycle Parking.** Bicycle Parking Spaces may be classified as Long-Term or Short-Term depending on their characteristics as set forth below.
- a. Long-Term Bicycle Parking shall be located within an enclosed, limited-access area designed so as to protect bicycles from precipitation and from theft. Long-Term Bicycle Parking shall be intended primarily to serve residents, employees or 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 may be provided within the following types of facilities:
 - (i) Enclosed spaces within a building, such as bicycle rooms or garages.
 - (ii) Bicycle sheds, covered bicycle cages, or other enclosed structures designed to provide secure and fully covered parking for bicycles.
 - (iii) Bicycle lockers, or fixed-in-place containers into which single bicycles may be securely stored and protected.

- (iv) Weather-protected bicycle parking spaces that are monitored at all times by an attendant or other security system to prevent unauthorized use or theft.
- b. Short-Term Bicycle Parking shall be located in a publicly accessible space near pedestrian entrances to the uses they are intended to serve. Short-Term Bicycle Parking shall be intended primarily to serve visitors, such as retail patrons, making trips of up to a few hours to a particular use; however, it may serve other bicycle users as needed. Short-Term Bicycle Parking may be provided adjacent to public streets and sidewalks, or in some cases within the public right of way, as set forth further below in this Section.

6.103 *Applicability of Bicycle Parking Requirements.*

- 6.103.1** Bicycle parking requirements shall apply to the following projects, except where exempted by Subsection 6.103.2 below:
- a. The construction of a new building or establishment of a new open-air use on a lot.
 - b. An increase of at least fifteen percent (15%) in the number of residential dwelling units on a lot or in the amount of non-residential Gross Floor Area on a lot from the time of adoption of this Section 6.100.
 - c. The conversion of existing Gross Floor Area to a new category of non-residential use, where such conversion results in at least a fifteen percent (15%) increase in the total number of bicycle parking spaces that would be required for the entire building by this Section 6.100.
- 6.103.2** Notwithstanding the requirements in 6.103.1 above, bicycle parking shall not be required for the following:
- a. Detached one-family or two-family dwellings as set forth in Section 4.31, Paragraphs (a-c) of this Zoning Ordinance.
 - b. The enlargement, expansion or conversion of an existing building, where the difference between the bicycle parking required for the proposed building and the bicycle parking that would be required for the existing building (under this Section 6.100) equals fewer than two (2) bicycle parking spaces.
 - c. The enlargement, expansion or conversion of an existing building resulting in a dwelling containing three (3) or fewer dwelling units.
- 6.103.3** Where bicycle parking requirements are applicable pursuant to this Section, they shall be applied to the entirety of any use that is established, expanded or enlarged within a building or on a lot, and not only to the incremental increase in the intensity of such use.

6.104 *Location of Bicycle Parking.*

- 6.104.1** Long-Term Bicycle Parking shall be provided within the building containing the use or uses that it is intended to serve, or within a structure whose pedestrian entrance is no more than two hundred feet (200') from a pedestrian entrance to such building. Long-Term Bicycle Parking

serving multiple uses or buildings may be pooled into a single area, enclosure or facility. Where Long-Term Bicycle Parking is located adjacent to motor vehicle parking or loading facilities, a physical barrier shall be provided to prevent damage to bicycles by other vehicles.

6.104.2 Short-Term Bicycle Parking shall be located in one of the two following ways:

- a. *Private Lot.* Short-Term Bicycle Parking on a private lot shall be located within fifty feet (50') feet of a pedestrian entrance to the building or buildings containing the use or uses it serves. For buildings or uses requiring more than eight (8) Short-Term Bicycle Parking Spaces, some of the required spaces may be located at a greater distance from the entrances, so long as eight (8) Short-Term Bicycle Parking Spaces are available within fifty feet (50') of any entrance.
- b. *Public Contribution.* If Short-Term Bicycle Parking cannot be reasonably provided on the lot, a property owner may satisfy the requirements for Short-Term Bicycle Parking by providing funds for the installation of bicycle parking on public land. The City shall determine the location and design of such bicycle parking, which may include permanent bicycle racks, seasonal bicycle corrals or other facilities, and may vary from the standards set forth in this Section 6.100. The City shall have the right to install bicycle parking on the sidewalk adjacent to the lot, or may choose to retain the funds provided in a Public Bicycle Parking Fund to support the installation or replacement of public bicycle parking at a future time. In either case, prior to issuance of a Certificate of Occupancy, the property owner shall enter into an agreement with the City which sets forth the cost of installing the required number of Bicycle Parking Spaces, which shall be the amount of funds provided by the owner, the timing by which payments are made, and each party's responsibilities for ongoing maintenance of the facilities, if applicable.

6.105 *Design and Layout of Bicycle Parking.* Required bicycle parking shall be provided in some combination of Bicycle Racks or Bicycle Lockers according to the standards set forth below. Other design options may be allowed pursuant to Section 6.108 further below.

6.105.1 *Bicycle Racks.* Long-Term Bicycle Parking or Short-Term Bicycle Parking requirements may be satisfied by the installation of Bicycle Racks which meet the design and layout standards set forth in this Subsection. Installers of Bicycle Racks may consult the City of Cambridge Bicycle Parking Guide, 2008 or later version, for illustrations of acceptable Bicycle Rack design and layout.

- a.

A Bicycle Rack shall mean a fixed-in-place stand, solidly anchored to the ground or other fixed object, which allows a bicycle to lean against it in an upright position with both wheels on a level surface. A bicycle shall make contact with the stand at two (2) points along the length of the bicycle and shall allow one or both wheels to be locked to the stand by way of a cable, chain, U-lock or shackle. Types of permissible Bicycle Racks include, but are not necessarily limited to, those commonly known as "Inverted U-shape," "Swerve" and "Post-and-Ring" racks. Stands commonly known as "Wave Racks" do not meet the standards for Bicycle Racks set forth herein.

- b. Each Bicycle Rack, if designed to the spacing requirements set forth herein, may provide up to two Bicycle Parking Spaces, with one Bicycle Parking Space provided on each side of the Bicycle Rack. If a Bicycle Rack meets the spacing requirements on one side of the stand but not the other (as may be the case where a Bicycle Rack is attached to a wall), then it may provide one Bicycle Parking Space,
- c. A single interconnected structure may provide parking for more than two bicycles, in which case the term Bicycle Rack as applied in this Ordinance shall refer to any vertical element of the structure upon which one or two bicycles may be secured and which otherwise meets the layout standards set forth herein.
- d. To provide adequate space to store and remove a standard bicycle, there shall be at least three feet (3') clear horizontal distance from the center point of the Bicycle Rack in a direction perpendicular to the length of the bicycle, and at least four feet (4') clear horizontal distance from the center point of the Bicycle Rack in each direction parallel to the length of the bicycle.
- e. Where twenty (20) or more Bicycle Parking Spaces are required, at least five percent (5%) of the required spaces must provide an additional two feet (2') of space parallel to the length of the bicycle to accommodate tandem bicycles or bicycles with trailers.
- f. Bicycle Racks shall generally be arranged either in rows (where bicycles are parked side-to-side) or in alignment (where bicycles are parked end-to-end). Where Bicycle Racks are arranged in rows, they shall be spaced at least three feet (3') apart on-center. Where Bicycle Racks are arranged in alignment, they shall be spaced at least eight feet (8') on-center.
- g. In addition to the requirements set forth herein, all Bicycle Racks shall conform to any applicable federal, state or local requirements for accessibility by disabled persons.

6.105.2 *Bicycle Lockers.* Long-Term Bicycle Parking or Short-Term Bicycle Parking requirements may be satisfied by the installation of Bicycle Lockers which meet the design and layout standards set forth in this subsection.

- a. A Bicycle Locker shall mean an enclosed, lockable structure which a single user may open and close for the purpose of storing one or more bicycles. Although a Bicycle Locker is allowed to store more than one bicycle, for the purpose of meeting the requirements of this Section

6.100, a single-use Bicycle Locker may provide only one Bicycle Parking Space. A lockable structure may provide more than one Bicycle Parking Space only if it contains Bicycle Racks designed in accordance with the requirements of 6.105.1 above.

- b. A Bicycle Locker shall be secured by means of a lockable door or an object inside the Bicycle Locker to which the bicycle frame and one or both wheels may be secured by way of a cable, chain, U-lock or shackle.
- c. A Bicycle Locker must allow for a bicycle to stand upright within the locker without requiring the use of a kickstand.
- d. To accommodate a standard bicycle, a Bicycle Locker must provide an interior space at least two feet (2') in width and six feet (6') in length. However, as provided in 6.105.1(d) above, where twenty (20) or more Bicycle Parking Spaces are required, at least five percent (5%) of the required spaces must accommodate an additional two feet (2') of bicycle length to accommodate tandem bicycles or bicycles with trailers.
- e. In addition to the requirements set forth herein, all Bicycle Lockers shall conform to any applicable federal, state or local requirements for accessibility by disabled persons.

6.105.3 *Unacceptable Bicycle Parking Designs.* Bicycle Parking Spaces shall not be deemed to meet the requirements of this Section 6.100 if any of the following are true:

- a. Bicycles must be stored lying down or require a kickstand to remain upright.
 - b. Bicycles must be "hung" with one or both wheels suspended in the air.
 - c. Bicycles must be lifted off of the ground or floor without any physical assistance provided.
- Otherwise, flexibility in the design of bicycle parking shall be allowed pursuant to the provisions for modification by special permit as set forth in Section 6.108 below. Such modifications shall allow for consideration of new or innovative technologies that provide equal or greater convenience and accessibility to bicyclists when compared to facilities designed according to the Bicycle Parking Guide standards.

6.106 *Access Standards for Bicycle Parking.*

6.106.1 *Primary Access.* All Bicycle Parking Spaces must be accessible by way of at least one clear, stabilized-surface access route. Such access route shall connect to the Bicycle Parking Spaces from any point or points along the public right of way from which bicyclists would be reasonably expected to approach the site, and shall meet the following additional requirements:

- a. The primary access route must be at least five (5) feet in width.
- b. If there is a change in grade from the public right-of-way to the Bicycle Parking Spaces, then the primary access route must have a slope no greater than five percent (5%), or may have a slope of no greater than eight percent (8%) if level landings are provided at every thirty (30)

feet of linear distance; or access may be provided by means of an elevator with minimum interior dimensions of eighty (80) inches by fifty-four (54) inches.

- c. The primary access route must not require lifting bicycles over any steps or stairs.
- d. All access routes must be clear of obstructions, which shall include Bicycle Parking Spaces, motor vehicle parking spaces and loading spaces; however, doors or gates that must be opened to access the Bicycle Parking Spaces shall not be considered obstructions so long as they may be conveniently opened and closed by bicycle users.
- e. All access routes, along with the Bicycle Parking Spaces themselves, must be appropriately lighted to allow for safe nighttime use.

6.106.2 *Additional Access.* So long as there is at least one primary access route meeting the requirements set forth in Section 6.106.1 above, Bicycle Parking Spaces may be accessed secondarily by routes that do not meet those exact requirements, such as parking garage entrance ramps or stairways with adjacent flat stairway channels along at least one edge of the stairway. However, all access routes must be clear of obstructions as set forth in 6.106.1(d) above.

6.107 *Required Quantities of Bicycle Parking.*

6.107.1 *Minimum Number of Bicycle Parking Spaces.* The required quantities of Long-Term Bicycle Parking Spaces and Short-Term Bicycle Parking Spaces shall be calculated by independently applying the minimum rates set forth in the Schedule of Long-Term Bicycle Parking Requirements and the Schedule of Short-Term Bicycle Parking Requirements below. Each rate shall be multiplied by the intensity of the applicable land use or uses, measured in Gross Floor Area, number of dwelling units, or other specified unit of measurement. Wherever the application of such rate results in a fractional value, such fraction shall be considered one required Bicycle Parking Space. The total number of Bicycle Parking Spaces required shall be the sum of the required Long-Term Bicycle Parking Spaces and Short-Term Bicycle Parking Spaces. Any Bicycle Parking Space that meets the requirements for both Long-Term Bicycle Parking and Short-Term Bicycle Parking may contribute to the minimum requirement for one type or the other, but not both.

6.107.2 *Schedule of Long-Term Bicycle Parking Requirements.* Minimum rates of Long-Term Bicycle Parking shall apply to specified categories of land use as set forth below. For specific land uses, the following categories are cross-referenced in the Schedule of Parking and Loading Requirements set forth in Section 6.36 of this Zoning Ordinance. In the case of any inconsistency between the list of included uses as set forth below and the categorization set forth in Section 6.36, the categorization in Section 6.36 shall control.

Category	Included Residential Uses	Min. Long-Term Bicycle Parking Rate
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R1	Single-family dwellings, existing single-family dwellings converted for two families, two-family dwellings, rectory or parsonage	No minimum
R2	Townhouse dwellings, multifamily dwellings, trailer park or mobile home park	1.00 space per dwelling unit for the first twenty (20) units in a building; 1.05 spaces per dwelling unit for all units over twenty (20) in a building
R3	Elderly oriented housing, elderly oriented congregate housing	0.50 space per dwelling unit
R4	Group housing, including: lodging houses, convents or monasteries, dormitories, fraternities and sororities	0.50 space per bed
R5	Transient accommodations, including: tourist houses in an existing dwelling, hotels, motels	0.02 space per sleeping room

Category	Included Non-Residential Uses	Min. Long-Term Bicycle Parking Rate
N1	Offices, including: medical, professional, agencies, general, government; radio/television studios, arts/crafts studios	0.30 space per 1,000 square feet
N2	Technical offices, research facilities	0.22 space per 1,000 square feet
N3	Hospitals and clinics; veterinary clinics; public safety facilities; restaurants and eating establishments	0.20 space per 1,000 square feet

N4	Retail stores, consumer service uses, commercial recreation and entertainment	0.10 space per 1,000 square feet
N5	Transportation and utility uses; religious and civic uses; manufacturing, storage and other industrial uses, auto-related uses	0.08 space per 1,000 square feet
E1	Primary or secondary schools, vocational schools	0.30 space per classroom or 0.015 space per auditorium seat, whichever is greater
E2	College or university facilities (excluding residences)	0.20 space per 1,000 square feet
P	Automobile parking lots or parking garages for private passenger cars	1.00 space per 10 motor vehicle parking spaces

6.107.3 *Schedule of Short-Term Bicycle Parking Requirements.* Minimum rates of Short-Term Bicycle Parking shall apply to specified categories of land use as set forth below. For specific land uses, the following categories are cross-referenced in the Schedule of Parking and Loading Requirements set forth in Section 6.36 of this Zoning Ordinance. In the case of any inconsistency between the list of included uses as set forth below and the categorization set forth in Section 6.36, the categorization in Section 6.36 shall control.

Category	Included Residential Uses	Min. Short-Term Bicycle Parking Rate
R1	Single-family dwellings, existing single-family dwellings converted for two families, two-family dwellings, rectory or parsonage	No minimum
R2	Townhouse dwellings, multifamily dwellings, trailer park or mobile home park	0.10 space per dwelling unit on a lot

R3	Elderly oriented housing, elderly oriented congregate housing	0.05 space per dwelling unit
R4	Group housing, including: lodging houses, convents or monasteries, dormitories, fraternities and sororities	0.05 space per bed
R5	Transient accommodations, including: tourist houses in an existing dwelling, hotels, motels	0.05 space per sleeping room

Category	Included Non-Residential Uses	Min. Short-Term Bicycle Parking Rate
N1	Convenience and food stores, restaurants and eating establishments, theaters and commercial recreation	1.00 space per 1,000 square feet
N2	Retail stores and consumer service establishments	0.60 space per 1,000 square feet
N3	Passenger transportation; religious and civic uses; government offices, medical offices and clinics, agency offices, banks (ground floor only); veterinary clinics	0.50 space per 1,000 square feet
N4	Hospitals and infirmaries	0.10 space per 1,000 square feet
N5	Non-passenger transportation and utility uses; laboratories and research facilities; general, professional and technical offices; radio/television and arts/crafts studios; manufacturing, storage and other industrial uses; auto-related uses	0.06 space per 1,000 square feet

E1	Primary or secondary schools	1.70 space per classroom or 0.085 space per auditorium seat, whichever is greater
E2	College or university academic or administrative facilities	0.40 space per 1,000 square feet
E3	College or university student activity facilities	1.00 space per 1,000 square feet
P	Automobile parking lot or parking garage for private passenger cars (6.36.2 b)	No additional requirement for Short-Term Bicycle Parking; however, if motor vehicle parking is provided on an open lot, then required Long-Term Bicycle Parking Spaces may be converted to Short-Term Bicycle Parking Spaces.

6.107.4 *Open-Air Uses.* For any use that occupies land that is open to the air and not enclosed within a building, the minimum parking rate for the extent of such open-air use shall be applied per 3,000 square feet of land area instead of per 1,000 square feet of Gross Floor Area. For such uses, the combined sum of required Long-Term Bicycle Parking Spaces and Short-Term Bicycle Parking Spaces may be provided as Short-Term Bicycle Parking Spaces.

6.107.5 *Permitted Flexibility.* The quantities of Long-Term Bicycle Parking and Short-Term Bicycle Parking may be adjusted as-of-right in the following ways:

- a. For non-residential uses, up to twenty percent (20%) of the required number of Long-Term Bicycle Parking Spaces or four (4) spaces, whichever is greater, may be converted to Short-Term Bicycle Parking Spaces.
- b. For residential uses requiring four (4) Long-Term Bicycle Parking Spaces or fewer, the required Long-Term Bicycle Parking Spaces may be designed to meet the requirements for Short-Term Bicycle Parking Spaces, so long as they are covered to be protected from precipitation and are located on the same lot as the residential uses they serve.

6.108 *Modification of Requirements by Special Permit.*

6.108.1

Any requirement set forth in this Section 6.100 may be modified upon the granting of a special permit by the Planning Board. Given that community standards for bicycle use and bicycle parking have evolved and may continue to evolve in the future, the intent of this provision is to provide a mechanism for the review and approval of alternative technologies and methods for providing bicycle parking that may provide equal or greater benefits to bicycle users but may not conform to the exact requirements set forth in this Section.

6.108.2 *Bicycle Parking Plan Requirements.* When seeking a special permit pursuant to this Section 6.108, the Applicant shall provide a Bicycle Parking Plan as part of the Special Permit Application. Such plan shall include the proposed quantities and locations of bicycle parking facilities as well as exact details and specifications of the design and layout of proposed Bicycle Parking Spaces. The Bicycle Parking Plan shall include a narrative listing the requirements that are proposed to be modified and explaining how the Bicycle Parking Plan would benefit from such modifications. The Bicycle Parking Plan may also include quantitative analyses of expected bicycle usage for the proposed land uses.

6.108.3 *Findings and Approval.* Upon granting a special permit to modify any requirements of this Section 6.100, the Planning Board shall make a general determination that the proposal is consistent with the purpose of this Section 6.100 and that the Bicycle Parking Plan proposes a quantity, design and arrangement of bicycle parking that will serve bicycle users in a way that is sufficiently comparable, given the circumstances of the specific project, to the bicycle parking that would be required under the regulations of this Section 6.100. The Planning Board shall also make specific determinations applicable to the modifications being sought as set forth below:

- a. Where an alternative design or layout of Bicycle Parking Spaces is proposed, the Planning Board shall determine that such design or layout shall be durable and convenient for the users whom it is intended to serve. Where new technologies are proposed, the Board may require that the Applicant demonstrate such technologies for review by City staff.
- b. Where modifications to the location or quantity of bicycle parking is proposed, the Planning Board shall determine that the Bicycle Parking Plan will satisfactorily serve the needs of all expected users, based on quantitative and/or qualitative evidence provided by the Applicant. Such a modification may be appropriate for a campus master plan or other large development site within which bicycle parking is planned comprehensively across an area instead of on a specific site-by-site basis.