Note to the Designer/Architect/Engineer: These Specifications are basic minimum criteria to be met in preparing the final project specifications for this section, which is the responsibility of the Designer

York University Building Standards

1.0 GENERAL

- 1.1 Scope of Work
- 1.2 Guideline Principles
- 1.3 Location
- 1.4 Density
- 1.5 Related York University Standards
- 1.6 References
- 1.6 Features
- 1.7 Warranty (Standard Warranty and Extended Warranty)

2.0 PRODUCTS

2.1 Acceptable Products

3.0 EXECUTION

- 3.1 Minimum requirements for installations:
- 3.2 Coordination

Prepared by: Paul	Reviewed by: Nicole	Authorized by: Richard
Mayol, Project Manager,	Arsenault, Manager	Francki, Assistant Vice
Office of the Vice	Transportation & Student	President Campus
President Finance and	Services, CSBO	Services and Business
Administration	Bob Smith, Director,	Operations
	Custodial, Grounds and	
	Glendon Facilities	
	Services, CSBO	
	Tim Haagsma, Manager,	
	Grounds, Fleet & Waste	
	Management, CSBO	

1.0 GENERAL

1.1 Scope of Work

.1 This standard covers minimum requirements for outdoor bicycle racks and indoor (covered) bicycle lockers

1.2 Guideline Principles

- .1 Bike racks and bike lockers are intended to support and encourage cycling as a viable alternative mode of transportation to and from the University. The provision of safe and secure bicycle parking is in support of a sustainable transportation alternative and is intended to support commuters by providing convenient, accessible, safe and secure bicycle parking to cycling commuters.
- .2 Appropriate bicycle parking shall address both short and long term cycling parking needs
 - .1 short term (one to 3 hours or a single day basis) bike parking (outdoor bike racks located adjacent to building entrances target group includes students, visitors staff, faculty or couriers
 - .2 long term (minimum daily and likely multi day basis) bike parking (covered bike parking located within Parking Structures) ... target group: faculty and staff for academic and administrative buildings, and long-term residents for undergrad residences and apartments
 - .3 Covered bike parking lockers are located at the Keele campus at the following locations:
 - .1 Student Services Parking Structure (South entrance)
 - .2 William Small Parking Structure

page 3 Section 12 93 13 and 14

.4 Where bicycle parking is expected to be used by staff, faculty or students who commute to work or school, provide 1 male and 1 female shower and change facility for every 30 bicycle parking spaces

1.3 Location

- .1 In order to enhance the security of bicycles, short term bike parking shall be located as close to the primary entrance to a building as possible preferably within 10 to 15 meters from this entrance.
- .2 Short-term and long term bicycle parking shall be established at grade, on the ground floor of the building, or on the first floor of the building below grade used for vehicular parking spaces
- .3 For long-term bicycle parking, a secure and safe (lockable) bicycle parking shall be established within parking structures.

1.4 Density

.1 For outdoor long-term bicycle parking provide 0.13 occupant bicycle parking spaces per 100 m2 of GFA and provide the greater of 0.15 for short-term bicycle parking spaces per 100 m2 of GFA

1.5 Related York University Standards

- .1 Interior Signage Standards Manual (2004) York University, CSBO
- .2 Exterior Lighting, York University CSBO (standard is in draft form)

1.6 References

- .1 City of Toronto Bike Plan
- .2 Toronto Green Standard City of Toronto
- .3 LEED Credit SS4.2 Alternative Bicycle Storage and Changing Rooms

1.7 Features

.1 Short-term bicycle parking shall:

- .1 Maximize available space such that multiple bicycles can be secured to the rack system
- .2 be constructed of durable materials such as galvanized steel, stainless steel or carbon steel with plastic or rubberized coating
- .3 be constructed so that there are no moving parts
- .4 be constructed so that there are no linked or connected parts that could potentially be tampered with
- .5 be able to accommodate various styles of bicycles and locks (including narrow U-locks)
- .6 be Able to support the bicycle by the frame in at least two places to prevent the wheels of the bicycle from tilting or twisting
- .7 enable the bicycle to be secured at multiple points including both wheels and the frame
- .8 be designed with a profile that has no protruding parts, and will not create a trip hazard to pedestrians
- .9 be designed so that the proper method of use is obvious, and that improper parking will not decrease rack capacity.

.2 Long-term bicycle parking:

- .1 Long-term bicycle parking shall be covered; ideally this type of bicycle parking shall be co-located within a parking structure, but could also be established in other building types or as a stand-alone structure
- .2 Covered bicycle parking shall be established within a lockable secure enclosure (such as a fully lockable floor to ceiling metal cage or a dedicated room) that offers safe and secure long-term parking for commuters' bicycles
- .3 Long-term bicycle parking shall provide adequate lighting that provides sufficient illumination for the enclosure, contents and that promotes users' sense of security and safety.
- .4 in an effort to maximize the allocated space for longterm bicycle parking, a stackable or a hanging bicycle rack system shall be used
- .5 Bicycle racks employed in covered bicycle parking

- shall be permanently affixed to the floor or walls of the enclosure
- .6 Shall be able to accommodate various style and sizes of bicycles
- .7 Designed with a profile that has no protruding parts, and will not create a trip hazard to pedestrians
- 1.7 Warranty (Standard Warranty and Extended Warranty)
 - .1 A twenty-year manufacturers warranty against defects of materials and workmanship shall be provided by bike rack supplier

2.0 PRODUCTS

- 2.1 Acceptable Products:
 - .1 Exterior short-term bicycle parking
 - Cora 'Expo" series model W7510 (colour: black) .1
 - .2 Post-and-ring type bicycle rack
 - .2 Interior long-term bicycle parking
 - Information to be added to this section by **Transportation Services**

3.0 EXECUTION

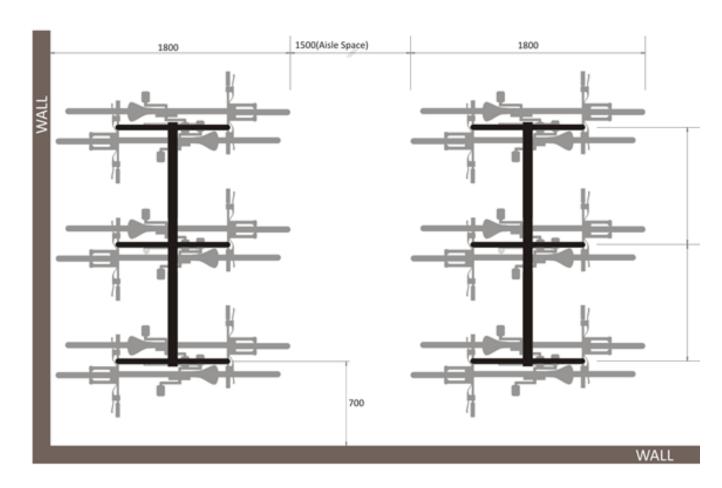
- 3.1 Minimum requirements for installations:
 - .1 Areas designated for bike racks shall have adequately lighting
 - bike racks shall be installed at a distance of 10 to 15 meters .2 from the buildings primary entrance
 - bike racks shall be installed so that the racks are arranged to .3 allow ample maneuverability on a concrete or interlocking stone pad.
 - .4 Bike rack installations shall provide maximum visibility utilizing principles of Crime Prevention Through Environmental Design (CEPTED), located in active public areas, lit in accordance with York University's Exterior Lighting requirements with adjacent landscape material that preserves a clear view between 92 cm (3 feet) and 213 cm (7 feet) from ground level.
 - .5 Where possible bike racks shall be installed using building

- overhangs or other architectural features so as to provide some degree of protection from the elements, ease of access, security and safety for users
- .6 Two or more single racks may be mounted in a row or in parallel (as allocated space permits) on a common concrete or interlocking stone base
- .7 Racks shall be placed so that they do not block a building entrance, inhibit pedestrian flow in or out of a building, or generally impede snow removal.
- .8 If placed along a sidewalk, or pedestrian walkway, bicycle racks shall be placed so that at least 152 cm of sidewalk width is maintained.
- .9 Covered bike lockers shall be established in a dedicated room or a metal cage of sufficiently strong gauge to prevent theft.
- .10 Bike room/cage shall be equipped with a lock, where a proximity card access lock system would be an ideal deployment.
- .11 Where multiple bicycle racks are installed in rows with aisles separating the rows the following dimensions shall apply:
 - .1 minimum aisle width shall be 150 cm, where the aisle is measured from tip to tip of the bike tire across the space between bicycle racks
 - .2 minimum depth shall be 180 cm for each row of parked bicycles

3.2 Coordination

.1 Location and installation of bicycle racks shall be coordinated with Grounds, Fleet & Waste Management, CSBO, Transportation and Student Services, CSBO, and Parking Operations and Technology, Parking Services CSBO

Appendix 1



End of Section