	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Yale Design Standard Division: 32 00 00 Site Improvements	Section: 32 33 13 Requirements for Site Bicycle Racks
		Date: 07/15/2019
		Author: Landscaping and Grounds Management

PART 1 - GENERAL

1.1 SUMMARY

- A. Section contains general design and installation criteria for site bicycle racks and pads.


1.2 REFERENCE STANDARDS

- A. Association of Pedestrian and Bicycle Professionals (APBP) Bicycle Parking Guidelines (2010)

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Approved Yale University Bicycle Racks (Individual Loops)
 - 1. Central Campus, Yale School of Medicine, and Athletics Locations
 - a. Manufacturer: Kimo, Inc.
 - b. Model: Yale Classical Bike Rack
 - c. Individual loop:
 - 1) Material: 5/8" Cold-Drawn, High Strength Stainless Steel Rod.
 - 2) Finish: Type 304, 316 or sim
 - 3) Bend Radius: 3 inches
 - d. Other Components:
 - 1) Material: 6061 Aluminum
 - 2) Finish: Black Anodized
 - e. Owner-supplied and contractor installed
 - f. Skidded racks not permitted
 - g. See APPENDIX A-323313 of this Section for product information.
 - 2. West Campus Locations
 - a. Manufacturer: Landscape Forms
 - b. Model: Ride
 - c. Material: Aluminum
 - d. Color: Metallic Silver
 - e. Skidded racks not permitted
 - f. See APPENDIX A-323313 of this Section for product information.
- B. Approved Finish Substrates
 - 1. Substrate to be coordinated with existing conditions and determined based on site requirements on a project and location specific basis. Racks may be installed on the following substrates:
 - a. Granite setts
 - b. Bluestone pavers
 - c. Cast in place concrete

	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Yale Design Standard Division: 32 00 00 Site Improvements	Section: 32 33 13 Requirements for Site Bicycle Racks
		Date: 07/15/2019
		Author: Landscaping and Grounds Management

2. Racks shall not be installed in asphalt, gravel, or crushed stone finish substrates.
3. Substrates deviating from those noted above must be reviewed approved by Yale Landscaping and Grounds Management and Office of Facilities- Planning and Construction
4. See APPENDIX B-322213 of this Section for requirements for substrate preparation and anchoring.

PART 3 - EXECUTION


3.1 INSTALLATION AND ANCHORING GUIDELINES

- A. Yale University Classical Rack:
 1. Install per Manufacturer's recommendations with compatible hardware per Manufacturer's specification.
 2. Anchor each rack into concrete footings or onto a concrete slab.
 3. Installation must include subsurface footings regardless of substrate/surface material.
 4. Installing contractor is responsible for rack assembly and hardware connecting rack to the hardscape.
 5. See APPENDIX B-323313 of this Section for acceptable anchoring.
- B. Yale West Campus Rack:
 1. Install per Manufacturer's recommendations with compatible hardware per Manufacturer's specification.
 2. Anchor each rack into concrete footings or onto a concrete slab.
 3. Installation must include subsurface footings regardless of substrate/surface material.
 4. Installing contractor is responsible for rack assembly and hardware connecting rack to the hardscape.
 5. See APPENDIX B-323313 of this Section for acceptable anchoring.

3.2 PAD AND RACK PLACEMENT GUIDELINES

- A. Place racks and pads to allow year-round accessibility.
- B. Place pads tangent to footpaths and near building entrances.
- C. Evaluate placement location such that design:
 1. Avoids obstructions such as utilities, sprinklers, plantings, and informal footpaths.
 2. Minimizes travel distance and permit ease-of-access to entrances of surrounding buildings.
 3. Minimizes landscape maintenance.
 4. Minimizes negative impacts on aesthetic/functionality of existing site.
- D. Avoid the following locations:
 1. Requiring deviations from specification.
 2. Requiring extensive site reconfiguration
 3. Interfering with building appearance/historic integrity.

3.3 PAD AND LOOP CLEARANCE AND SPACING GUIDELINES


	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Yale Design Standard Division: 32 00 00 Site Improvements	Section: 32 33 13 Requirements for Site Bicycle Racks
		Date: 07/15/2019
		Author: Landscaping and Grounds Management

A. Yale Classical Rack

1. Pad Depth
 - a. Minimum: 72 inches
 - b. Where site restrictions require a pad less than 72 inches deep:
 - 1) Maintain minimum 36 inches between center of rack and pathway
 - 2) Extend pad remainder of allowable width
 - a) Distance may encroach no more than 18 inches into adjacent groundcover.
 - c. See APPENDIX B-323313 of this Section for diagram.
2. Multiple Rows
 - a. Where dimensions permit, multiple parallel rows of racks may be used.
 - b. Center of rows to be no less than 9 feet apart (O.C.)
 - c. See APPENDIX B-323313 of this Section for diagram.
3. Clearances
 - a. Perpendicular dimension of pad edge, wall, or obstruction to center of end rack: 20 inches minimum
 - b. Parallel dimension of pad edge, wall or obstruction to end of rack row: 36 inches minimum
 - c. Rack Space (O.C.): 30 inches
 - d. See APPENDIX B-323313 of this Section for diagram.

B. Yale West Campus Rack

1. Pad Depth
 - a. Minimum: 78 inches
 - b. Where site restrictions require a pad less than 78 inches deep:
 - 1) Maintain minimum 39 inches between center of rack and pathway
 - 2) Extend pad remainder of allowable width
 - a) Distance may encroach no more than 18 inches into adjacent groundcover.
 - c. See APPENDIX B-323313 of this Section for diagram.
2. Multiple Rows
 - a. Where dimensions permit, multiple parallel rows of racks may be used.
 - b. Center of rows to be no less than 9 feet apart (O.C.)
 - c. See APPENDIX B-323313 of this Section for diagram.
3. Clearances
 - a. Perpendicular dimension of pad edge, wall, or obstruction to center of end rack: 24 inches minimum
 - b. Parallel dimension of pad edge, wall or obstruction to end of rack row: 36 inches minimum
 - c. Rack Spacing (O.C.): 30 inches
 - d. See APPENDIX B-323313 of this Section for diagram.

	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Yale Design Standard Division: 32 00 00 Site Improvements	Section: 32 33 13 Requirements for Site Bicycle Racks
		Date: 07/15/2019
		Author: Landscaping and Grounds Management

Date	Description of Change	Pages / Sections Modified	ID
04/04/19	Entire document	-	MAW229
05/08/19	Revisions to document for clarity		LCP34
07/15/19	Removal of temp racks – awaiting approval, clarification of terminology		MAW229

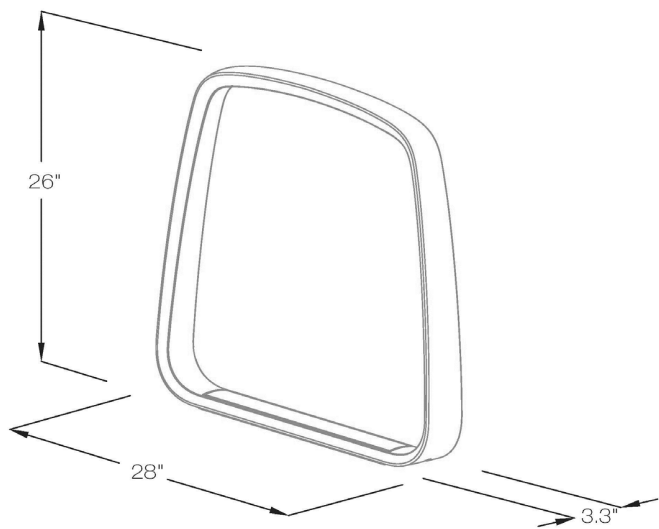
	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Yale Design Standard Division: 32 00 00 Site Improvements	Section: APPENDIX A 32 33 13 Requirements for Site Bicycle Racks
		Date: 07/15/2019
		Author: Landscaping and Grounds Management

APPENDIX A – APPROVED YALE UNIVERSITY BIKE RACKS

1.1 Product: Central Campus, Yale School of Medicine, and Athletics Locations



1.2 Approved Rack: West Campus Locations



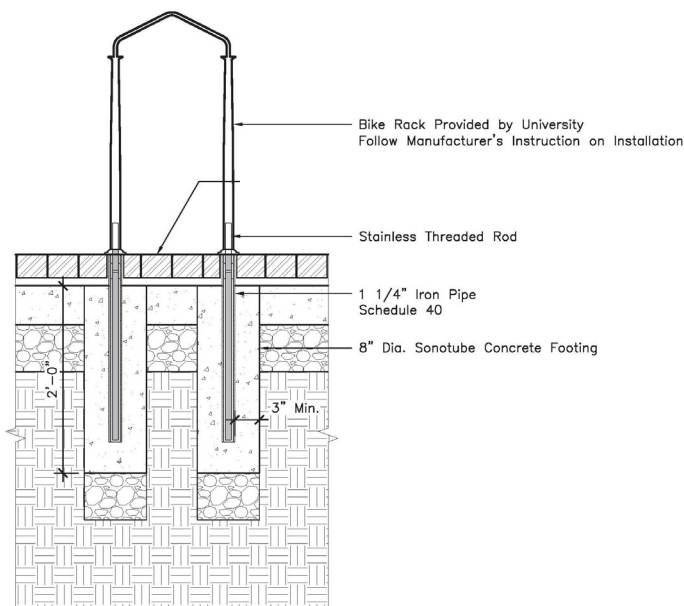
Date	Description of Change	Pages / Sections Modified	ID
04/04/19	Entire document	-	MAW229
05/08/19	Revisions to document for clarity		LCP34
07/15/19	Removal of temp racks – awaiting approval		MAW229

	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Yale Design Standard Division: 32 00 00 Site Improvements	Section: APPENDIX B 32 33 13 Requirements for Site Bicycle Racks
		Date: 05/09/2019
		Author: Landscaping and Grounds Management

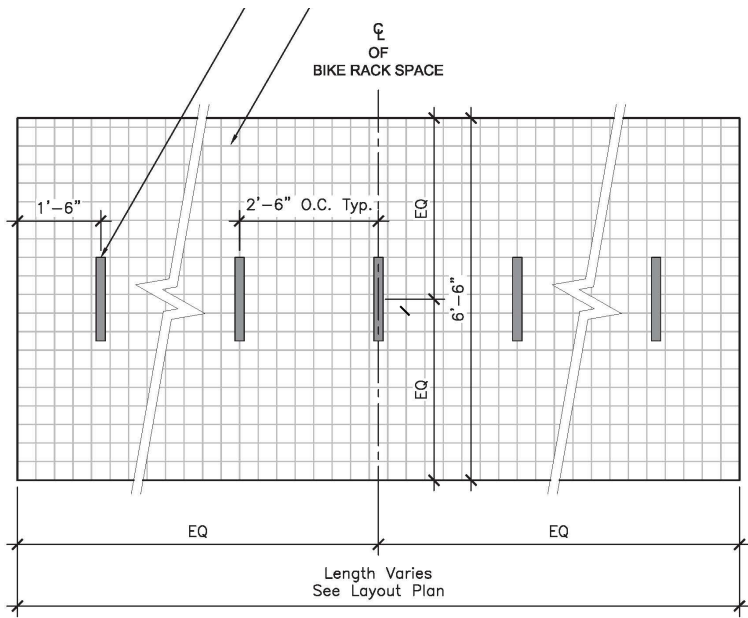
APPENDIX B – APPROVED INSTALLATION OF YALE UNIVERSITY BIKE RACKS

1.1 INSTALLATION AND ANCHORING GUIDELINES

a. Section View: Central Campus, Yale School of Medicine, and Athletics Locations

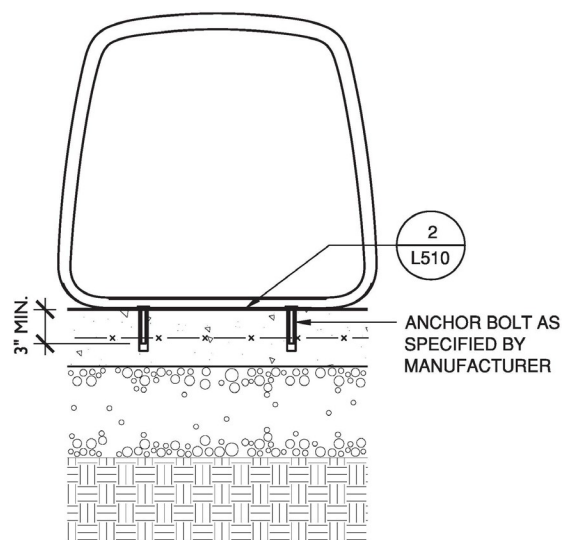


b. Plan View: Central Campus, Yale School of Medicine, and Athletics Installation

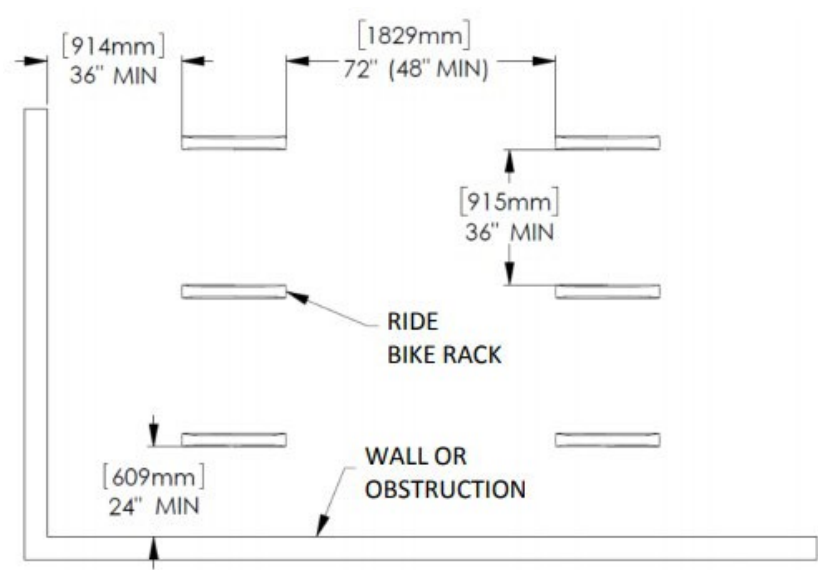


	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Yale Design Standard Division: 32 Site Improvements	Section: APPENDIX B 32 33 13
		Requirements for Site Bicycle Racks
		Date: 05/09/2019
		Author: Landscaping and Grounds Management

c. Section View: West Campus Installation

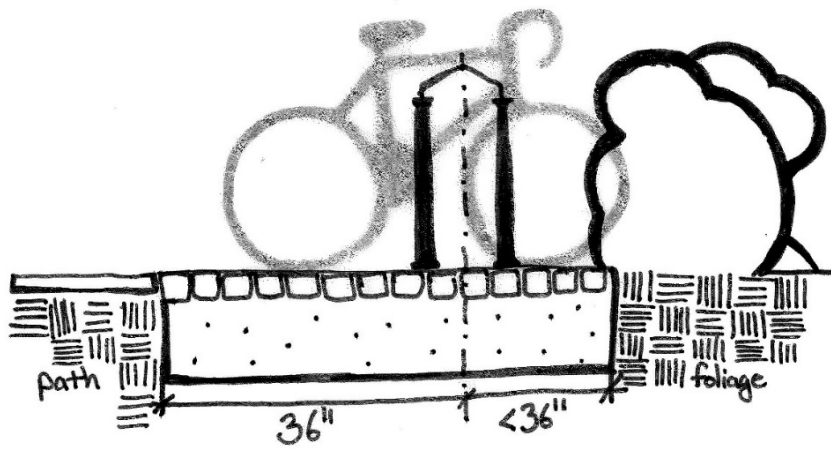


d. Plan View: West Campus Installation

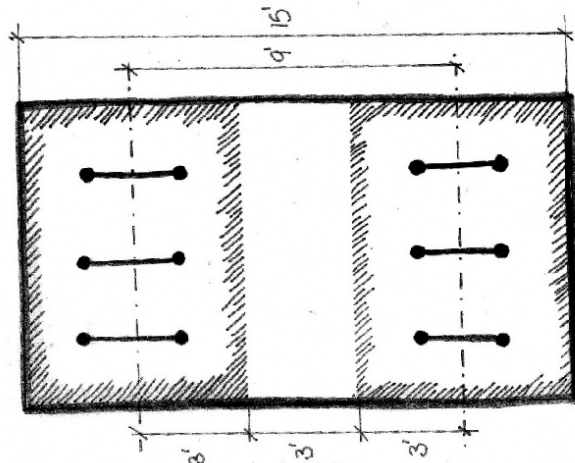


1.2 PAD AND RACK CLEARANCE AND SPACING GUIDELINES

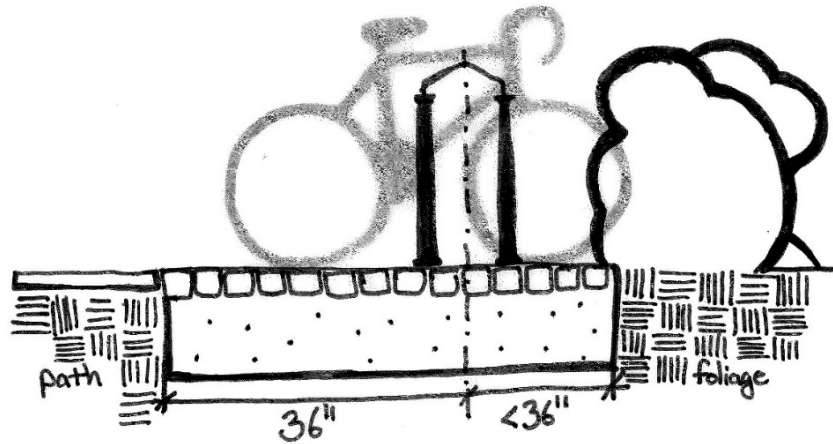
a. Reduced Pad Depth: Central Campus, Yale School of Medicine, and Athletics



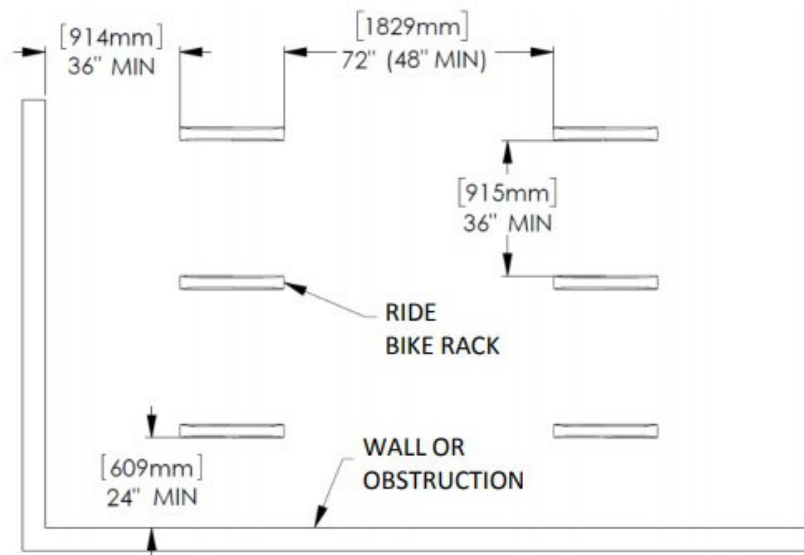
b. Multiple Rows Diagram Central Campus, Yale School of Medicine, and Athletics



c. Reduced Pad Depth: West Campus



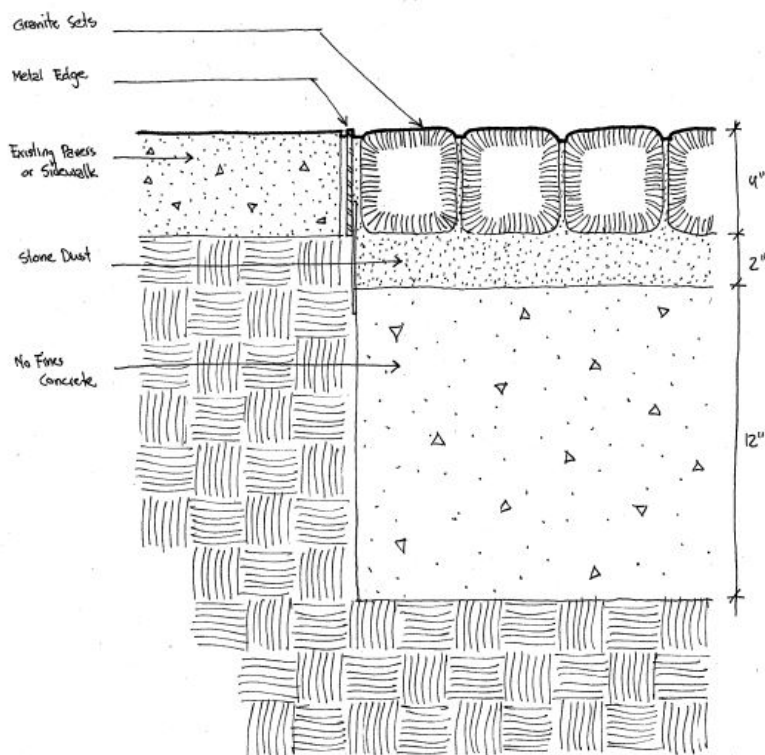
d. Multiple Rows Diagram: West Campus



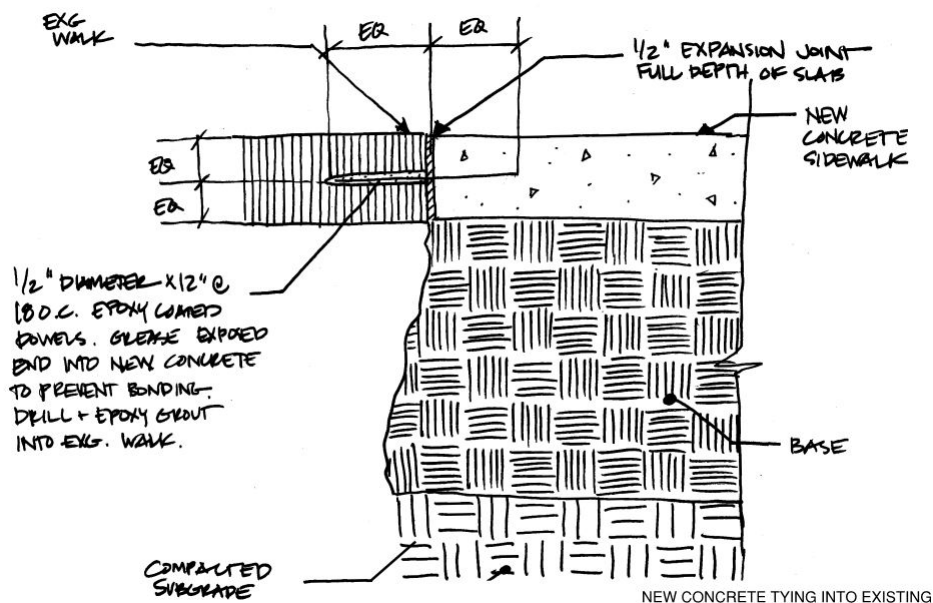



2.1 SUBSTRATE PREPARATION

a. Granite Setts

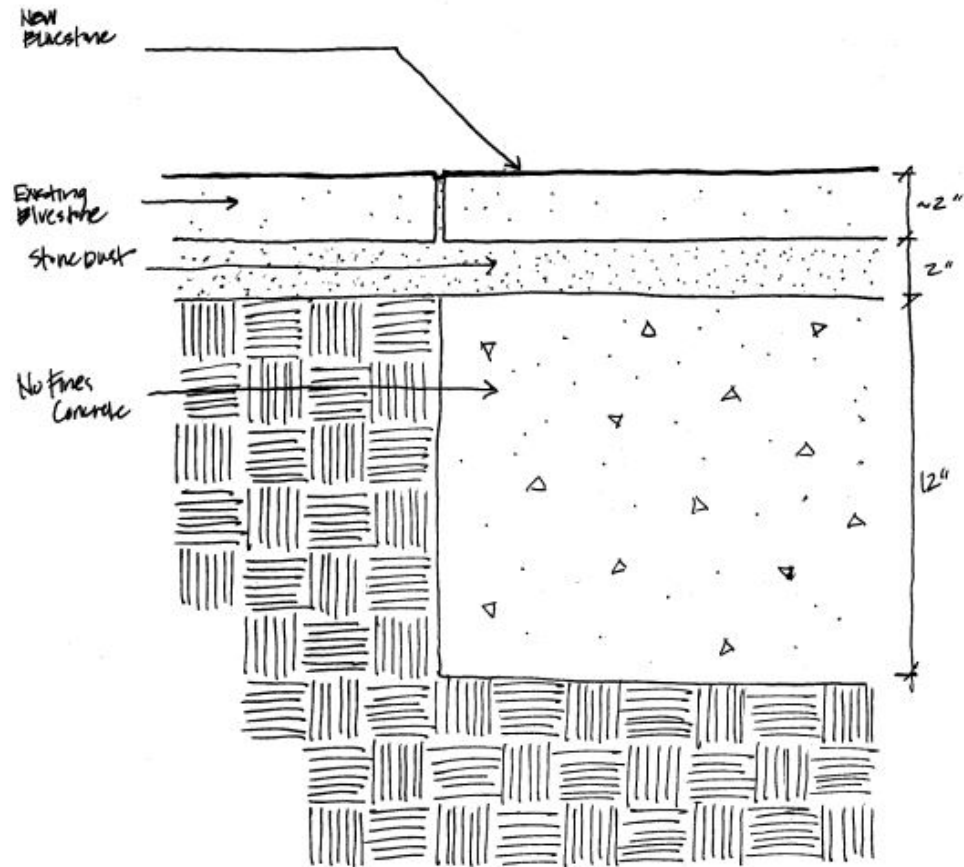


b. Concrete



	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Yale Design Standard Division: 32 Site Improvements	Section: APPENDIX B 32 33 13 Requirements for Site Bicycle Racks
		Date: 05/09/2019
		Author: Landscaping and Grounds Management

c. Bluestone



Date	Description of Change	Pages / Sections Modified	ID
04/04/19	Entire document	-	MAW229
05/08/19	Revisions to document for clarity		LCP34