

APPENDIX I: GREENWAY DESIGN STANDARDS

The goal of this report is to develop a palette of standard design elements that will help establish a distinct identity for the Bronx River Greenway. The greenway is located within multiple jurisdictions – within NYC parklands, on New York State lands administered by the NYSDOT, within the NY Botanical Garden and the Bronx Zoo (Wildlife Conservation Society), and on City streets and rights-of-ways.

The challenges of developing a consistent palette of standard design elements along the length of the greenway include:

- The existence of proposed or approved plans for parks along the river that already include a palette of design elements;
- The route of the greenway, which travels through multiple parks and segment links that may or may not have consistent elements.
- Safety and practice issues defined in the Manual of Uniform Traffic Control Devices (MUTCD), which include specific design guidelines.

We received valuable assistance from the staff of Parks and the NYSDOT in the identification of the design elements that are currently proposed at City and State parks.

Design Approach

Ten key elements were identified and prioritized. They are:

- | | |
|------------|---|
| Priority 1 | Signage and site-appropriate native plantings |
| Priority 2 | Pavement, bike racks, lighting, and trash receptacles |
| Priority 3 | Railings, bollards, benches and bird shelters |

The priority system is used to define those elements, for which:

- 1- Consistency is essential for the length of the greenway, extending through parks
- 2- Consistency is essential for the length of the greenway, extending through parks where possible
- 3- Consistency is recommended of the greenway, extending through parks where possible

The design elements selected are from the NYC Parks or NYCDOT standards, unless otherwise directed by NYC Parks staff. In two instances, a second tier choice may be warranted. For railings, a simple pipe rail may best reflect the environment and scale of the pathway location. For lighting and benches, there may be instances where the Riverside fixture and 1939 World's Fair bench are in use and a brief interruption of this palette with the proposed 'Candela' Park fixture and 1964 World's Fair bench would be inappropriate. In this case the Tier 2 pairing (Riverside/1939 WFB) should replace the Tier 1 pairing (Candela Park/1964 WFB). In each case the lighting and bench pairing is key.

Priority 1

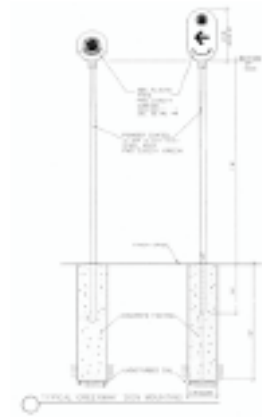
Signage

Type 1: NYCDPR Greenway Signage
Type 2: NYCDPR Mile markers
Type 3: MUTCD standard for on street bikeway
Type 4: Gateway signage, Alliance prototype
Type 5: Interpretive signage, Alliance prototype compatible
(material, color)

Material: Galvanized Steel posts, Stainless steel posts
Finish: Paint – Standard Dark Green, PMS 3282 CV
Size:
Construction: Concrete pier footings (not concrete slab)

Design Intent: Provides a consistent visual reference through various parks along the Bronx River.

Related text: Hardscape goals and management practices



Site appropriate native planting

Type: Plant list developed by Bronx River Alliance
Material: Site appropriate
Finish: N/A
Size:
Construction:

Design Intent: Provides a visual reference and education for the user about Bronx River's ecosystem
Increases ecological connectivity and habitat diversity

Related text: Landscape goals and management practices
Storm water goals and management practices
Sustainable goals and maintenance practices

Priority 2

Pavement

- Type: Class I Exclusive 2 way bikeway, 8'-0" wide
Class II Shared (with pedestrians), protected bikeway, 8'-0" wide, 1'-0" rumble strips on either side
Class III Unprotected bike lane with pavement symbols, 6'-0" min.
Class IV Unprotected, shared (with parking) bike lane with pavement symbols, 12'-0" min.
- Material: For all pavement markings, consider use of High Build Acrylic Coating to reduce volatile organic compounds (VOC's).
- Finish: Asphalt, 7, 7F with light colored aggregate
- Size:
- Construction: For all bikeway pavement section within parks, refer to NYC Parks standards and specifications.
For all bikeway pavement section on streets, refer to NYCDOT/ NYSDOT standards and specifications.
Refer to AASHTO standards for design and dimensions of various classes of bikeway.
Refer to MUTCD standards for all bike lane pavement symbols on unprotected street conditions like- minor intersections, signalized intersections, T intersections and turning lanes.
- Design Intent: To minimize pavement area by providing a material that requires little or no maintenance over its lifecycle.
To maximize pavement albedo through the use of light colored aggregate.
- Related text: Hardscape goals management practices
Streetscape goals management practices
Greenway Signage

Bike Racks

- Type: HS 2 by Creative Pipe Inc., Boa10 by Dobra Design, or equal
- Material: Galvanized Steel
- Finish:
- Size:
- Construction: Concrete pier footings (not concrete slab)
- Design Intent: Provides a consistent look for the greenway



- Related text: Streetscape goals and management practices

Lighting

Type: NYCDOT 'Candela' Park/ Pedestrian streetlight
Material: Cast Ductile Iron
Finish: Paint – Standard Dark Green, PMS 3282 CV
Size: 15'- 18' posts/ poles
Construction: Concrete pier footings (not concrete slab)

Design Intent: Modern design unifies the various parks proposed along the greenway parks and provides a distinctive look for the greenway.

Related text: Streetscape goals and management practices

Tier 2 Lighting

Type: NYCDOT 'TBTA' streetlight
Material: Cast Ductile Iron
Finish: Paint – Standard Dark Green, PMS 3282 CV
Size: 15'- 18' posts/ poles
Construction: Concrete pier footings (not concrete slab)

Design Intent: Blends with the nature trails-greenway.

Related text: Streetscape goals and management practices

Trash Receptacles

Type: MI36 Waste Receptacle by United Receptacle, Inc. or equal
Material: 30% Recycled Steel
Finish: Paint – Standard Dark Green, PMS 3282 CV
Size: 36 gallon
Construction:

Design Intent: Provides a consistent look for the greenway

Related text: Streetscape goals and management practices



Priority 3

Railings

Type: NYC Parks Sea Rail
Material: Stainless Steel
Finish:
Size:
Construction: Concrete pier footings (not concrete slab)

Design Intent: Provides a consistent look for the greenway

Related text: Streetscape goals and management practices

TIER 2 RAILING

Type: NYC Parks Pipe Rail
Material: Galvanized Steel
Finish: Paint – Standard Dark Green, PMS 3282 CV
Size:
Construction: Concrete pier footings (not concrete slab)

Design Intent: Blends with the nature trail- greenway

Related text: Streetscape goals and management practices

Bollards

Type: DG5 by Urban Accessories, NY Bollards by Canterbury International, or equal
Material: Steel
Finish: Paint – Standard Dark Green, PMS 3282 CV
Size:
Construction: Concrete pier footings (not concrete slab)

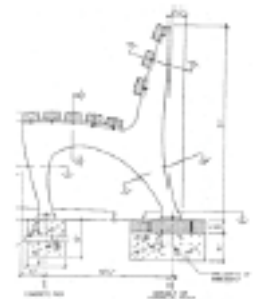
Design Intent: Provides a consistent look for the greenway

Related text: Streetscape goals and management practices



I. Benches

Type: NYCDPR Type D Bench (1964 World Fair)
Material: Cast Ductile Iron
Finish: Paint – Standard Dark Green, PMS 3282 CV
Size:
Construction: Concrete pier footings (not concrete slab)



Design Intent: Modern design unifies the various bench types proposed in the greenway parks, while providing a distinctive look for the greenway segments outside of parks.

Tier 2 Bench

Type: NYC Parks Type A Bench (1939 World Fair)
Material: Cast Ductile Iron
Finish: Paint – Standard Dark Green, PMS 3282 CV
Size:
Construction: Concrete pier footings (not concrete slab)

Design Intent: Blends with the nature trails- greenway

Related text: Streetscape goals and management practices

Bird Shelters

Type: Individual bird specific
Material: Galvanized steel post
Finish:
Size:
Construction: Concrete pier footings (not concrete slab)

Design Intent: Requirements of birds specific to the Bronx River system; obtain from Ecology Team. Or from native bird societies for example- Bluebird nest boxes per North American Bluebird Society. The design of a project should incorporate bird shelters as a design element.

Related text: Landscape goals and management practices