





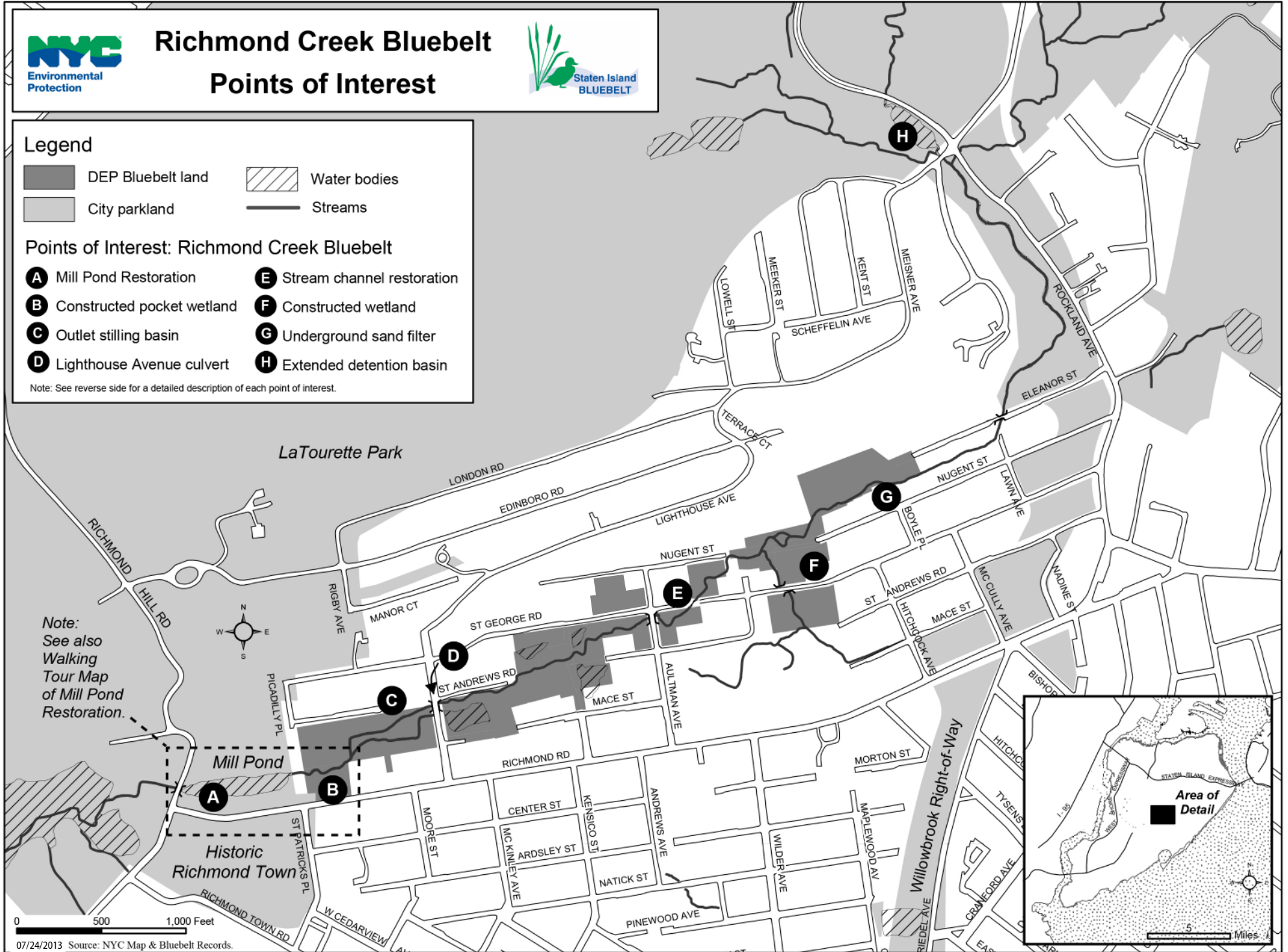
Legend

 DEP Bluebelt land	 Water bodies
 City parkland	 Streams

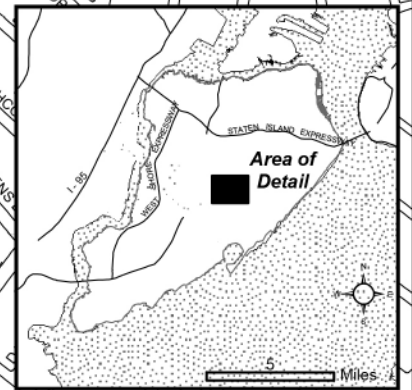
Points of Interest: Richmond Creek Bluebelt

- | | |
|-------------------------------------|-------------------------------------|
| A Mill Pond Restoration | E Stream channel restoration |
| B Constructed pocket wetland | F Constructed wetland |
| C Outlet stilling basin | G Underground sand filter |
| D Lighthouse Avenue culvert | H Extended detention basin |

Note: See reverse side for a detailed description of each point of interest.



Note:
See also
Walking
Tour Map
of Mill Pond
Restoration.



A Mill Pond Restoration

Working with Historic Richmond Town, the NYC Departments of Cultural Affairs and Parks & Recreation, NYCDEP has restored Mill Pond. The pond, located within the historic village, was dredged to remove accumulated sediments, and extensive plantings were installed. A new weir (or dam) was constructed along with a mill race. Water running along the mill race will power a mill wheel to be installed by Historic Richmond Town in the future. The entire 950-acre Richmond Creek watershed flows into this one-acre pond. For more details, see DEP's "Mill Pond Walking Tour" leaflet.



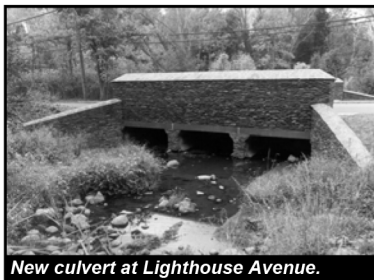
New weirs and mill race at Mill Pond restoration.

B Constructed Pocket Wetland

The small-sized, "pocket" wetland, located along Richmond Road opposite St. Patrick's Place, was built by DEP to filter storm water discharging from a storm sewer pipe which drains a tributary area of 53 acres. This wetland is situated within the 18-acre Richmond Creek Bluebelt, which extends from this point eastward to Eleanor Street.

C Outlet Stilling Basin

Just west of Lighthouse Avenue along St. Andrews Road, DEP constructed an outlet stilling basin in the Bluebelt, which accepts water from a 37-acre sub-watershed. This basin, positioned where the storm sewer pipe ends, reduces the velocity of the water exiting the pipe, and thereby minimizes the danger of that water eroding the downstream sections of the stream. Preventing erosion is important since that process can fill the stream channel with sediment, thus reducing the conveyance capacity of the channel.



New culvert at Lighthouse Avenue.

D Lighthouse Avenue Culvert

At Lighthouse Avenue, the new culvert prevents the flooding that had plagued this stream crossing. The culvert headwalls and wing walls are faced with field stone, giving the engineered structures a rustic appearance. The natural wetland to the east of Lighthouse Avenue up to Mace Street was preserved by DEP as part of the program. A berm along Lighthouse Avenue prevents that wetland's water from spilling onto the street.



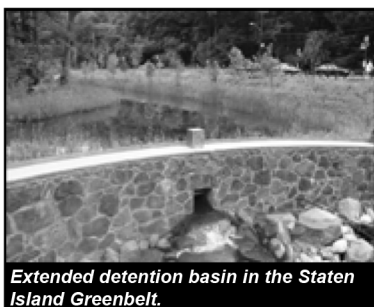
Restored section of Richmond Creek off St. George Road.

E Stream Channel Restoration

As part of DEP's overall Richmond Creek Restoration, this section of stream located off of St. George Road near Aultman Avenue was extensively refurbished. Stream banks were stabilized with materials such as boulders and log-shaped rolls filled with coconut husk fibers. To reduce velocities of water within the channel, the stream was reconstructed with a pool/riffle morphology that also encourages aquatic life. Native plantings complete this natural area restoration.

G Underground Sand Filter

DEP built and maintains an underground sand filter at the intersection of Boyle Place and Nugent Street. The filter is a 50-by-90-foot concrete box built below ground through which storm water is directed and filtered. After being filtered, the storm water flows to Richmond Creek.



Extended detention basin in the Staten Island Greenbelt.

F Constructed Wetland

Adjacent to St. George Road near Ascot Avenue, this constructed wetland handles storm water from a sub-drainage area of approximately 14 acres on the south side of the creek. Just downstream of the storm sewer that discharges into this wetland, DEP constructed a forebay. This forebay absorbs some of the storm water energy and allows debris and sediment to settle out. This location is accessible to maintenance vehicles which periodically remove the debris and sediment. Past the planted wetland, one can see a weir structure that allows for extended detention in the basin, thereby reducing downstream flood levels.

H Extended Detention Basin

Situated at the top of Buck's Hollow, part of the Staten Island Greenbelt, this extended detention pond helps to manage the storm water runoff from a sub-drainage area of about 450 acres. The pond, a half-acre in size during dry weather, expands during heavy storms and detains the peak of the storm water flow, allowing for a more uniform discharge. This reduces downstream high-volume, high-velocity flows, thereby promoting a more stable stream system. The wetland plant species installed along the pond's edge, mainly cattails, are tolerant of the periodic inundation that occurs in the detention basin.