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**Appendix P
Real Estate Plan**

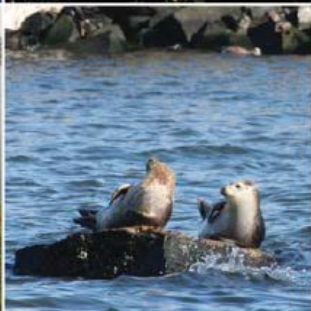
**Draft Integrated Feasibility Report &
Environmental Assessment
February 2017**

**Prepared by the New York District, North Atlantic Division,
U.S. Army Corps of Engineers**



**THE PORT AUTHORITY
OF NY & NJ**





Hudson-Raritan Estuary Ecosystem Restoration Feasibility Study
Appendix P: Real Estate Plan

Table of Contents

Paragraph 1:Introduction	1
1.1 Study Authorizations.....	1
1.2 Official Project Designation.....	1
1.3 Study Location.....	1
1.4 Non-Federal Sponsors.....	2
Paragraph 2:Statement of Purpose	4
2.1 Project Purpose	4
2.2 Plan of Improvement.....	4
2.2.1 Jamaica Bay Planning Region	4
2.2.2 Harlem River, East River, and Western Long Island Sound Planning Region	6
2.2.3 Newark Bay, Hackensack River and Passaic River	8
2.2.4 Upper Bay Planning Region.....	9
2.2.5 Lower Bay Planning Region.....	10
2.3 Required Lands, Easements, and Right of-Way (LER)	10
Planning Region.....	10
Permanent Easement.....	10
Temporary Easement.....	10
Public Parcels	10
Private Parcels	10
Total Parcels	10
2.4 Appraisal Information.....	11
Paragraph 3:LER Owned by the Non-Federal Sponsor.....	12
Paragraph 4:Non-Standard Estates.....	12
Newark Bay, Hackensack River	13
and Passaic River	13
Newark Bay, Hackensack River	13
and Passaic River	13
Paragraph 5:Existing Federal Projects.....	13
Paragraph 6:Federally-Owned Land.....	13
Paragraph 7:Navigational Servitude.....	14
Paragraph 8:Maps.....	14
Paragraph 9:Induced Flooding	14



Paragraph 10:Baseline Cost Estimate for Real Estate (BCERE)	14
Paragraph 11:Public Law 91-646, Uniform Relocation Assistance	15
Paragraph 12:Minerals and Timer Activity	15
Paragraph 13:Land Acquisition Experience and Capability of the Non-Federal Sponsor	15
Paragraph 14:Zoning	15
Paragraph 15:Schedule of Acquisition.....	16
Paragraph 16:Facility/Utility Relocations	16
Paragraph 17:Hazardous, Toxic, and Radioactive Waste (HTRW)	16
Paragraph 18:Project Support	16
Paragraph 19:Notification to Non-Federal Sponsor	16
Paragraph 20:Additional Information	16
Paragraph 21:Point of Contacts.....	17
Paragraph 22:Recommendations	17

List of Tables

Table 1-1 Non-Federal Sponsors	2
Table 2-1 Total Acreage by Planning Region	10
Table 3-1: Lands Owned by Non-Federal Sponsor	12
Table 4-1: Non Standard Easements	12
Table 4-2: Non Standard Aquatic Enhancement Easements Required by Planning Region.....	12
Table 4-3: Non Standard Wetland Easements Required by Planning Region	13
Table 6-1: Federally-Owned Lands	13
Table 10-1: Total Estimated Real Estate Cost for HRE Feasibility Study	14
Table 10-2: Total Estimated LERRD Expenses for the HRE Feasibility Study	15

List of Figures

Figure 1-1: HRE Study Area, with Planning Regions	3
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Paragraph 1: Introduction

1.1 Study Authorizations

There are multiple authorities for the restoration “source” studies included in the scope of this Hudson Raritan Estuary (HRE) Draft Integrated Feasibility Report and Environmental Assessment (FR/EA).

- The *HRE, HRE-Lower Passaic River, and HRE-Hackensack Meadowlands Feasibility Studies* were authorized in a resolution of the Committee on Transportation and Infrastructure of the U.S. House of Representatives, dated 15 April 1999. Funds to conduct the Section 905(b) Preliminary Analysis were provided in the FY 2000 Energy and Water Development Appropriations Act (House Report 106-336).
- *The Flushing Creek and Bay Feasibility Study* was authorized by a resolution of Congress, Docket 2442 dated 28 September 1994.
- *The Bronx River Feasibility Study* was authorized by the U.S. House of Representatives Committee on Transportation and Infrastructure Resolution, Docket # 2551 dated March 24, 1998.
- *The Jamaica Bay, Marine Park and Plumb Beach, New York Feasibility Study* was authorized by a resolution adopted by the Committee on Public Works and Transportation of the United States House of Representatives on August 1, 1990. The Reconnaissance Study was completed in January 1994.
- The first “Spin-Off” Feasibility Study for Liberty State Park (2005) and Chief’s Report (2006) was approved and authorized for construction in the Water Resource Development Act (WRDA) 2007, Section 1001 (31).

See Chapter 1 of the HRE FR/EA for Study authorization resolution language.

1.2 Official Project Designation

Hudson Raritan Estuary (HRE) Ecosystem Restoration Feasibility Study, hereinafter the “HRE Feasibility Study” or “Study Area.” The HRE Feasibility Study incorporates the recommendations from the HRE- Lower Passaic River, HRE- Hackensack Meadowlands, Flushing Bay and Creek, Bronx River, and Jamaica Bay, Marine Park and Plumb Beach Ecosystem Restoration Feasibility Studies.

1.3 Study Location

The HRE Feasibility Study Area includes the following eight Planning Regions located in an approximate 25-mile radius around the Statue of Liberty in New York:

- | | |
|--|------------------------------|
| 1) Jamaica Bay | 6) Lower Raritan River |
| 2) Harlem River, East River, and Western Long Island Sound | 7) Arthur Kill/Kill Van Kull |
| 3) Newark Bay, Hackensack River and Passaic River | 8) Lower Hudson River |
| 4) Upper Bay | |
| 5) Lower Bay | |



1.4 Non-Federal Sponsors

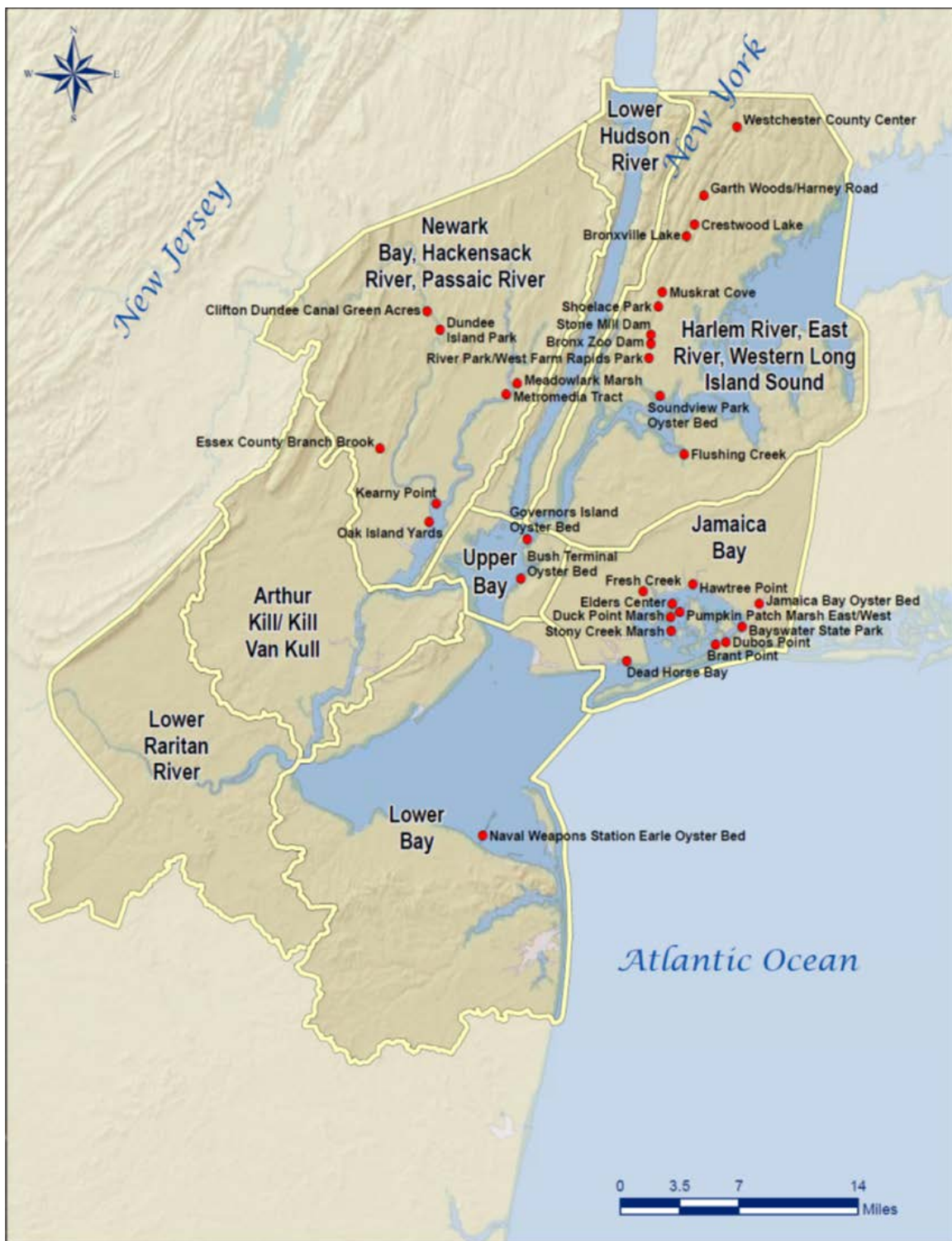
There are 11 non-federal sponsors (NFS) for the HRE Feasibility Study Area. Below is a list of the NFSs, with Table 1-1 identifying them by planning region.

- New York State Department of Environmental Conservation (NYSDEC)
- New York State Office of Parks, Recreation and Historic Preservation (NYSOPR)
- New Jersey Department of Transportation (NJDOT)
- New Jersey Department of Environmental Protection (NJDEP)
- New York City Department of Environmental Protection (NYCDEP)
- New York City Department of Parks and Recreation (NYC Parks)
- Port Authority of New York and New Jersey (PANYNJ)
- New York Harbor Foundation (NYHF)
- New York/New Jersey Baykeeper (NY/NJ Baykeeper)
- Hudson River Foundation (HRF)
- New Jersey Sports and Exposition Authority (NJSEA)

Table 1-1 Non-Federal Sponsors

Planning Region	"Source" Feasibility Study	Study Sponsor(s)	Potential Construction Sponsor(s)
Jamaica Bay	Jamaica Bay, Marine Park, Plumb Beach	NYCDEP	NYCDEP, NYC Parks, NYSDEC, NYSOPR
Harlem River, East River, and Western Long Island Sound	HRE Overall	PANYNJ	NYHF, NY/NJ Baykeeper, HRF
	Bronx River Basin	NYCDEP	NYCDEP and NYC Parks
	Flushing Bay and Creek	NYC DEP and PANY/NJ	NYCDEP
Newark Bay, Hackensack River and Passaic River	HRE-Lower Passaic River	NJDOT	NJDEP ¹
	HRE- Hackensack Meadowlands	NJSEA	NJSEA
Upper Bay	HRE Overall	PANY/NJ	NYHF;
	HRE – Liberty State Park		NJDEP
Lower Bay	HRE Overall		NY/NJ Baykeeper

Figure 1-1: HRE Study Area, with Planning Regions





Paragraph 2: Statement of Purpose

The purpose of this Real Estate Plan (REP) is to present the Lands, Easement, Right-of-Ways, Relocations and Disposal (LERRD) requirements for the constructions, operation, maintenance, repair, replacement, and rehabilitation for the tentatively selected plan (TSP) of the HRE Feasibility Study. This REP discusses the LERRD requirements of the TSP for the five (5) planning regions presented in Table 1-1. This report supersedes all previous REPs prepared for the Study Areas, including those prepared for specific planning regions and or individual sites within the Study Area.

2.1 Project Purpose

The purpose of the proposed actions is to restore and sustain a mosaic of habitats within the human-dominated landscape important to the people of the Hudson-Raritan Estuary Region and the nation in a cost-effective and socially feasible manner with minimal risks, and support monitoring and adaptive management to ensure the success of the restoration objectives. Additional restoration opportunities within the Arthur Kill/Kill Van Kull, Lower Hudson River and Lower Raritan River, as well as other sites in the 5 Planning Regions will be recommended as future feasibility “spin-off” studies.

2.2 Plan of Improvement

Alternatives were developed and evaluated based on local site constraints, standard biological and physical parameters for salt marsh restoration, and other design guidelines developed during a series of planning/design initiatives during implementation of each “Source” Feasibility Study. The basic alternative layouts were developed in accordance with the overall project goals. The restoration measures proposed for the site alternatives are based on Target Ecosystem Characteristics (TECs). TECs were created by estuarine scientists for the HRE Comprehensive Restoration Plan (CRP) with input from the public. The twelve TECs created are specific ecosystem properties or features that are related to ecosystem restoration goals that work to address ecosystem problems. Descriptions of the various restoration measures proposed are listed in Exhibit “E” as a reference to the bulleted restoration plans for each site.

2.2.1 Jamaica Bay Planning Region

A total of 12 restoration sites have been proposed within the Jamaica Bay Planning Region. Six (6) perimeter sites, five (5) marsh islands and one (1) oyster restoration project where previously restoration efforts have been implemented by NYCDEP under the Oyster Restoration Research Partnership (ORRP). The remaining sites combine wetland restoration, bank protection, and wildlife habitat improvements. The proposed restoration measures for each site are as follows:

- (1) Bayswater Point State Park
 - Marsh (2.67 acre [ac.])
 - Beach (0.47 ac.)
 - Rip rap (1.08 ac.)
 - Habitat for fish, crab, and lobster (0.76 ac.)
- (2) Brant Point
 - High marsh (0.73 ac.)
 - Low marsh (1.86 ac.)
 - Grassland (2.47 ac.)

- Coastal and maritime forest (2.44 ac.)
- Rip rap (0.07 ac.)

(3) Dead Horse Bay

- High marsh (6.82 ac.)
- Low marsh (31.31 ac.)
- Coastal and maritime forest (48.51 ac.)
- Beach (8.86 ac.)
- Dune (27.68 ac.)
- Channel (3.67 ac.)
- Upland (11.92 ac.)

(4) Dubos Point

- High marsh (0.85 ac.)
- Low marsh (3.33 ac.)
- Coastal and maritime forest (1.95 ac.)
- Habitat for fish, crab, and lobster (0.42 ac.)
- Creek (0.32 ac.)

(5) Fresh Creek

- High marsh (2.52 ac.)
- Low marsh (13.57 ac.)
- Coastal and maritime forest (11.25 ac.)
- Channel regrading (42.41 ac.)
- Rip rap (0.03 ac.)
- Habitat for fish, crab, and lobster (1.50 ac.)

(6) Hawtree Point

- High marsh (0.06 ac.)
- Shrub (1.73 ac.)

(7) Jamaica Bay (Oyster Restoration)

- Hanging trays/oyster beds (12.42 ac.)

(8) Stony Creek Marsh Island

- High marsh (25.3 ac.)
- Low marsh (26 ac.)

(9) Duck Point Marsh Island

- High marsh (12.5 ac.)
- Low marsh (15.4 ac.)

(10) Pumpkin Patch East Marsh Island

- High marsh (16.8 ac.)
- Low marsh (18.5 ac.)

(11) Pumpkin Patch West Marsh Island

- High marsh (5.5 ac.)
- Low marsh (10.8 ac.)



(12) Elders Point Center Marsh Island

- High marsh (7.5 ac.)
- Low marsh (8.5 ac.)

2.2.2 Harlem River, East River, and Western Long Island Sound Planning Region

Eleven sites have been identified within the Harlem River, East River, and Western Long Island Sound planning area. One of the sites is an oyster restoration project at Soundview Park where previous restoration efforts have been implemented under the Oyster Restoration Research Partnership (ORRP). The remaining sites combine wetland restoration, channel improvement, and wildlife habitat improvements. The proposed restoration measures for each site are as follows:

(1) Flushing Creek

- Low salt marsh (2.42 ac.)
- Uplands (6.59 ac.)
- Ephemeral Pond (0.28 ac.)
- Water (8.1 ac.)

(2) Bronx River - West Farm Rapids Park

- Emergent wetland creation (0.04 ac.)
- Invasive species removal w/ native plantings (0.19 ac.)
- Shoreline softening (0.21 ac.)
- Channel modification w/ instream structures (0.24 ac.)
- Bed restoration (0.36 ac.)
- Debris removal (0.36 ac.)
- Select Native Plantings (0.59 ac.)
- Educational signage

(3) Bronx Zoo and Dam

- Emergent wetland creation (0.54 ac.)
- Invasive species removal w/ native plantings (0.82 ac.)
- Fish ladder (0.04 ac.)
- Sediment load reduction (0.02 ac.)
- Select native plantings (0.10 ac.)
- Boat/water access
- Educational signage

(4) Stone Mill Dam

- Invasive species removal w/ native plantings (0.01 ac.)
- Fish attractors/habitat improvements (0.02 ac.)
- Select native plantings (0.03 ac.)
- Educational signage

(5) Shoelace Park

- Invasive species removal w/ native plantings (0.23 ac.)
- Bank stabilization (0.73 ac.)
- Shoreline softening (0.01 ac.)

- Channel modification w/ instream structures (2.33 ac.)
- Sediment load reduction (2.07 ac.)
- Forested and/or scrub/shrub wetland creation (2.99 ac.)
- Realign channel w/ instream structures (3.12 ac.)
- Select native plantings (9.36 ac.)
- Bench w/ viewshed
- Wildlife view platform/designated area
- Boat/water access
- Proposed path (0.13 ac.)
- Educational signage

(6) Muskrat Cove

- Invasive species removal w/ native plantings (0.88 ac.)
- 20% invasive species removal w/ native plantings (10.52 ac.)
- Shoreline softening (0.59 ac.)
- Bank stabilization (0.36 ac.)
- Channel modification w/ instream structures (0.37 ac.)
- Debris removal (1.24 ac.)
- Snag removal (0.01 ac.)
- Educational signage

(7) Bronxville Lake

- Emergent wetland creation (4.87 ac.)
- Forested and/or scrub/shrub wetland creation (2.88 ac.)
- Weir notch/modification (0.01 ac.)
- Realign channel w/ instream structures (1.30 ac.)
- Forebay (0.41 ac.)
- Sediment load reduction (0.30 ac.)
- Select native plantings (5.69 ac.)
- Sediment dredging (0.56 ac.)
- Bench w/ viewshed
- Wildlife view platform/designated area
- Boat/water access
- Educational signage

(8) Crestwood Lake

- Emergent wetland creation (4.79 ac.)
- Invasive species removal w/ native plantings (0.16 ac.)
- Weir notch/modification (0.03 ac.)
- Realign channel w/ instream structures (1.24 ac.)
- Forebay (1.90 ac.)
- Bench w/ viewshed
- Wildlife view platform/designated area
- Boat/water access
- Realigned/proposed path (0.22 ac.)
- Educational signage



- (9) Harney Road/Garth Woods
 - Emergent wetland creation (0.80 ac.)
 - Emergent wetlands (cattails) (0.53 ac.)
 - Emergent wetlands (wet meadow) (1.18 ac.)
 - Forested and/or scrub/shrub wetland creation (0.04 ac.)
 - Invasive species removal w/ native plantings (0.06 ac.)
 - Weir notch/modification (0.01 ac.)
 - Shoreline softening (0.01 ac.)
 - Channel modification w/ instream structures (0.86 ac.)
 - Select native plantings (0.046 ac.)
 - Sediment load reduction (0.03 ac.)
 - Bench w/ viewshed
 - Educational signage
- (10) Westchester County Center
 - Emergent wetland creation (2.93 ac.)
 - Invasive species removal w/ native plantings (0.27 ac.)
 - Realign channel w/ instream structures (0.40 ac.)
 - Channel plug w/ select native plantings (0.06 ac.)
 - Sediment basin (0.05 ac.)
 - Proposed path (0.05 ac.)
 - Select native plantings (4.84 ac.)
 - Bed restoration (0.20 ac.)
 - Bank stabilization (0.48 ac.)
 - Channel modification w/ instream structures (2.39 ac.)
 - Educational signage
- (11) Soundview Park (Oyster Restoration)
 - Gabion blocks (6.75 ac.)

2.2.3 Newark Bay, Hackensack River and Passaic River

Seven sites have been identified within the Newark Bay, Hackensack River and Lower Passaic River planning area. The sites combine tidal and freshwater wetland restoration, bank protection, and wildlife habitat improvements. The proposed restoration measures for each site are as follows:

- (1) Metromedia Tract
 - Emergent wetland creation (58.2 ac.)
 - Riparian Buffer (1.1 ac.)
- (2) Meadowlark Marsh
 - Emergent wetland creation (66.73 ac.)
 - Riparian Buffer (3.21 ac.)
 - Culvert replacement (1)
- (3) Oak Island Yards
 - Emergent wetland creation (8.84 ac.)
 - Riparian Buffer (1.86 ac.)
 - Habitat for Fish, Crab and Lobster (0.89 ac.)

- Habitat for Fish, Crab and Lobster - Channel Creation Length (1,526 lf)
- Bank Stabilization / Shoreline Softening (0.22 ac.)
- Public Overlook Pier/Dock (0.04 ac.)
- Public Access - Trail Enhancement (3,711 lf)

(4) Kearny Point

- Emergent wetland creation (22.18 ac.)
- Riparian Buffer (13.49 ac.)
- Habitat for Fish, Crab and Lobster (0.48 ac.)
- Habitat for Fish, Crab and Lobster - Channel Creation Length (1,750 lf)
- Bank Stabilization / Shoreline Softening (1,776 lf)
- Public Access - Trail Enhancement (4,530 lf)

(5) Essex County Branch Brook Park

- Shoreline Softening (10,320 lf)
- Channel Deepening (23.52 ac.)
- Goose Management (8.49 ac.)
- Invasive species removal with native plantings (5.23ac.)
- Public Overlook Pier/Dock (0.04 ac.)
- Educational Signage

(6) Dundee Island Park / Pulaski Park

- Bank Stabilization / Shoreline Softening (0.71 ac.)
- Select Native Plantings (1.79 ac.)
- Public Access - Trail Enhancement (1,580 lf)

(7) Clifton Dundee Canal Green Ac. Purchase and Dundee Island Preserve

- Emergent wetland creation (2.94 ac.)
- Shoreline and Shallows – debris removal (0.82 ac.)
- Habitat for Fish, Crab and Lobster (0.27 ac.)
- Sediment Basin (0.11 ac.)
- Invasive species removal with native plantings (5.5.5ac.)
- Public Overlook Pier/Dock (0.01 ac.)
- Public Access - Trail Enhancement (1,081 lf)
- Public Access – Boat Launch (0.15 ac.)

2.2.4 Upper Bay Planning Region

Two sites have been identified in the Upper Bay planning area. Oyster restoration has been proposed at both sites. Restoration efforts have been implemented in the past at Governors Island under the Oyster Restoration Research Partnership (ORRP) and most recently at Bush Terminal by the NY Harbor School. The proposed restoration measures for each site are as follows:

(1) Bush Terminal(Oyster Restoration)

- Gabion blocks (8.48 ac.)
- Oyster condos (3.49 ac.)
- Spat-on-shell (31.65 ac.)
- Hanging tray (0.23 ac.)



(2) Governors Island (Oyster Restoration)

- Gabion blocks/oyster condos (7.12 ac.)
- Lantern bags/hanging trays (1.83 ac.)

2.2.5 Lower Bay Planning Region

One site has been identified in the Lower Bay planning area. Oyster restoration has been proposed for the site and restoration efforts have been implemented in the past under the Oyster Restoration Research Partnership (ORRP). The restoration measures for the site are as follows:

Naval Weapons Station Earle (Oyster Restoration)

- Gabion blocks (3.23 ac.)
- Reef balls (1.32 ac.)
- Spat-on-shell (3.08 ac.)

2.3 Required Lands, Easements, and Right-of-Way (LER)

Approximately 641.58 total acres are required in LER across the 5 Planning Regions as part of the TSP. Table 2-1 identifies the total acres required by Planning Region.

Table 2-1 Total Acreage by Planning Region

Planning Region	Permanent Easement	Temporary Easement	Public Parcels	Private Parcels	Total Parcels
Jamaica Bay	±181.97 ac	±52.39 ac	94	20	114
Harlem River, East River, and Western Long Island Sound	±89.87 ac	±23.29 ac	45	0	45
Newark Bay, Hackensack River and Passaic River	±198.48 ac	±9.69 ac	18	10	40
Upper Bay	±52.80 ac	±15.24 ac	5	0	0
Lower Bay	±7.64 ac	±10.22 ac	1	0	1
Total:	±530.75 ac	±110.83 ac	163	30	200

Below describes the estates required for each site recommended in the HRE Feasibility Study. Exhibit "B", *Parcel Data*, provides a description of the aggregated acres required for each estate for a respective block and lot. Language to the below recommended estates are provided in Exhibit "C", *Estates*.

- Channel Improvement Easement (CIE) (Standard Estate No. 8)- Approximately 85.34 ac are required for the construction of stream and tidal channel restoration work associated with realigning channels with instream structures, channel modifications with the modifications within the channel to steer, direct, and/or control the channel away from a specific area. Channels will remain within their current banks. This easement affects 55 parcels, 52 publicly-owned and 3 privately-owned parcels.

- *Bank Protection Easement (BPE) (Standard Estate No. 21)*- Approximately 249.96 ac are required for the purpose of establishing and implementing measures to prevent and/or fix erosion and stabilize embankments. This easement affects 108 parcels, 85 publicly-owned and 23 privately-owned parcels.
- *Beach Storm Damage Reduction Easement (BSDRE) (Standard Estate No. 26)*- Approximately 32.39 ac are required for the purpose of construction of the beach/dunes, and coastal armoring structures (Riprap). This easement affects 3 publicly-owned and 0 privately-owned parcels.
- *Temporary Work Area Easement (TWAE) (Standard Estate No. 15)*- Approximately 110.83 ac. are required for the purpose of temporary construction access, staging area and storage during construction across the different Planning Regions. The term of the easement will range from 1 month to 36 months depending on work performed at the specific site. This easement affects 24 publicly-owned and 0 privately-owned parcels.
- *Non-Standard (Perpetual) Aquatic Enhancement Easement (NSAEE)*- Approximately 80.22 ac are required for the purpose of construction of the oyster restoration such as spat on shell, oyster condos, gabion blocks, reef balls, and hanging trays. This easement affects 8 publicly-owned and 0 privately-owned parcels. See Paragraph 5, *Non-Standard Estates*, for additional information.
- *Non-Standard (Perpetual) Wetland Easement (NSWE)*- Approximately 82.85 ac are required for the purpose of excavating and filling areas to create an emergent wetland or scrub/shrub wetlands to replace invasive areas to provide a habitat that is less likely to become revegetated with the same upland invasive species. This easement affects 62 publicly owned and 2 privately-owned parcels. See Paragraph 5, *Non-Standard Estates*, for additional information.

The size of the real estate interests required for the TSP as identified in this REP are estimates based on available Geographic Information System (GIS) data. Since the DRAFT TSP is at a feasibility level study, the real estate requirements outlined herein are subject to change based upon project refinements during pre-construction, engineering and design (PED). Should any of the sites real estate requirements change, this REP will be updated.

The Sponsors are advised to obtain a land survey and legal description for all lands acquired to determine precise size and boundary limits and to obtain title insurance to protect against “defects” in title and to identify potential encumbrances. Currently, there are no known requirements for relocations nor are there real estate interests required for borrow material, dredging, or for excavated material disposal. Should the requirements change during the later design stage, the real estate plan will be updated accordingly. Ingress and egress to all sites will be via existing public roads and waterways.

2.4 **Appraisal Information**

Due to the TSP schedule, a land value cost estimate has yet to be developed. A land value cost estimate will be available in the updated REP prepared for final report submittal in January 2018.



Paragraph 3: LER Owned by the Non-Federal Sponsor

Table 3-1 presents a list of NFSs with the number of parcels owned within HRE Study Area. The ownership interest of the NFSs is sufficient and available for the Project. No special value considerations or crediting principles will be applied to lands owned by a NFS.

Table 3-1: Lands Owned by Non-Federal Sponsor

NFS	Site	No. of Parcels
NYSOPR	Bayswater Point State Park	5
NYC Parks	Brant Point, Dead Horse Bay, Dubos Point, Fresh Creek, Hawtree Point, Flushing Creek, Bronx River Park, Bronx Zoo and Dam, Muskrat Cove, Shoelace Park, Stone Mill Dam, Soundview Park	96
NJDOT	Clifton Dundee Canal Green Acres and Island Preserve	1
NJSEA	Metromedia Tract, Meadowlark Marsh	9
Total:		111

Paragraph 4: Non-Standard Estates

There are two non-standard estates proposed for the TSP:

Table 4-1: Non Standard Easements

Non-Standard Easement	Acres Required
(Perpetual) Aquatic Enhancement Easement.....	±80.22
(Perpetual) Wetland Easement.....	±82.85
Total:	±163.07

a. A perpetual Aquatic Enhancement Easement is required for the proposed oyster restoration, which includes establishment of oyster colonies with means of oyster condos, reef balls, spat on shale, hanging trays and wire cages/gabions filled with oysters. The oyster reefs, or beds, provide spatially complex substrate and benthic structure that is important for many estuarine organisms. There are no standard estates available to perform such work. Aquatic Easements are required for the following Sites:

Table 4-2: Non Standard Aquatic Enhancement Easements Required by Planning Region

Planning Region	Acres
Jamaica Bay	±12.98
Harlem River, East River, and Western Long Island Sound	±6.80

Planning Region	Acres
Newark Bay, Hackensack River and Passaic River	±0.00
Upper Bay	±52.80
Lower Bay	±7.64
Total:	±80.22

b. A perpetual Wetland Easement is required for the creation of new freshwater and tidal wetlands, restoration of degraded wetland by means of removal of invasive species and restoring native marsh/wetland vegetation and restoration of wetland habitat. There are no standard estates available to perform such work. Wetland Easements are required for the following sites:

Table 4-3: Non Standard Wetland Easements Required by Planning Region

Planning Region	Acres
Jamaica Bay	±53.22
Harlem River, East River, and Western Long Island Sound	±29.63
Newark Bay, Hackensack River and Passaic River	0.00
Upper Bay	0.00
Lower Bay	0.00
Total:	±82.85

As of this report, the District is in the process of drafting language to the abovementioned non-standard estates for HQ USACE review and approval.

Paragraph 5: Existing Federal Projects

No Federal project lies fully or partially within the LER required for the TSP.

Paragraph 6: Federally-Owned Land

There are approximately 159.5 acres of Federally-owned land required for the TSP. These lands are managed by the National Parks Service (NPS). All Federally-owned lands are located at the Jamaica Bay Planning Region (including Dead Horse Bay, Hawtree Point, five (5) marsh islands) with the exception of the proposed oyster restoration sites located in Federal waters. NPS is supportive of the Project and communications are ongoing to determine the appropriate legal instrument to authorize use of the land for project purposes, with a Use Permit accompanied with a Memorandum of Understanding as the likely documents.

Approximately 82.85+/- acres required consist of lands underwater. See Paragraph 7, *Navigational Servitude* for more information. The following is a list of NPS-managed lands.

Table 6-1: Federally-Owned Lands



Managing Federal Agency	Site	Block & Lot	Acres
National Park Service	Fresh Creek	4452_2	±0.60
National Park Service	Hawtree Point	14214_1800	±0.074
National Park Service	Dead Horse Bay	8590_700	±2.92
National Park Service	Hawtree Point	14214_1800	±155.89
Total:			±159.49

Paragraph 7: Navigational Servitude

Approximately 82.85 +/- ac of the required real estate for oyster restoration is located below the mean high watermark. Since the HRE Feasibility Study is for environmental restoration purposes and does not serve a purpose which is in the aid of commerce, navigation or flood control, navigational servitude is not applicable to the TSP. Submerged lands will be acquired from the appropriate landowner or managing entity.

Paragraph 8: Maps

Draft real estate maps are provided in Exhibit "A".

Paragraph 9: Induced Flooding

The TSP does not propose induced flooding.

Paragraph 10: Baseline Cost Estimate for Real Estate (BCERE)

Due to the TSP schedule, a cost estimate for land values has not been developed. A land value cost estimate will be available in the updated REP prepared for final report submittal in January 2018. At which time, the BCERE will be adjusted with updated costs. Currently, the BCERE accounts for only estimated non-Federal incidental costs associated with real estate acquisition.

The BCEREs by planning regions are provided in Exhibit "D". The estimated real estate cost for the HRE Feasibility Study is \$224,400, which includes Federal and non-Federal incidental expenses. Table 10-1 provides the estimated costs by planning region.

Table 10-1: Estimated Real Estate Cost for HRE Feasibility Study

Planning Region	01-Lands & Damages	02-Relocations	Total Real Estate Costs
Jamaica Bay	\$81,600	\$0	\$81,600
Harlem River...	\$74,800	\$0	\$74,800
Newark Bay...	\$47,600	\$0	\$47,600
Upper Bay	\$13,600	\$0	\$13,600
Lower Bay	\$6,800	\$0	\$6,800

Planning Region	01-Lands & Damages	02-Relocations	Total Real Estate Costs
Totals:	\$224,400	\$0	\$224,400

The Sponsor's estimated credible LERRD expenses for the HRE Feasibility Study is \$224,400, which include non-Federal incidental expenses only. Table 10-2 provide LERRD costs by site.

Table 10-2: Estimated LERRD Expenses for the HRE Feasibility Study

Planning Region	LER	Relocations	Disposals	Total LERRD
Jamaica Bay	\$81,600	\$0	\$0	\$81,600
Harlem River...	\$74,800	\$0	\$0	\$74,800
Newark Bay...	\$47,600	\$0	\$0	\$47,600
Upper Bay	\$13,600	\$0	\$0	\$13,600
Lower Bay	\$6,800	\$0	\$0	\$6,800
Totals:	\$224,400	\$0	\$0	\$224,400

Paragraph 11: Public Law 91-646, Uniform Relocation Assistance

No persons or businesses are anticipated to be displaced as a result of the Project. Therefore, Public Law 91-646, as amended, is not applicable to the Project.

Paragraph 12: Minerals and Timber Activity

There are no present or anticipated mineral extraction or timber harvesting activities in the Study Area.

Paragraph 13: Land Acquisition Experience and Capability of the Non-Federal Sponsor

USACE is currently assessing the land acquisition experience and capabilities of all NFSs. The draft Non-Federal Sponsor Capability Assessment Checklist is provided in Exhibit "E". The updated REP will have completed assessments of the NFSs therein.

Paragraph 14: Zoning

Application or enactment of zoning ordinances is not anticipated for the Project.



Paragraph 15: Schedule of Acquisition

Each site recommended in the TSP are considered “separable elements” of the overall HRE Feasibility Study. Sites may have their own Project Partnership Agreement (PPA) or two or more sites may be included in a particular PPA. An acquisition schedule by site will be provided in the updated REP when the execution of the PPA(s) are known.

<u>Milestone</u>	<u>Date</u>
PPA Execution.....	<i>TBD</i>
Notice to Proceed with Acquisition.....	<i>TBD</i>
Sponsor’s Authorization for Entry for Construction.....	<i>TBD</i>
Corps’ Certification of Real Estate.....	<i>TBD</i>
Ready to Advertise for Construction.....	<i>TBD</i>

Paragraph 16: Facility/Utility Relocations

There are currently no anticipated facilities or utility relocations required for the Project. The extent of any potential utility relocation that may be required due to construction activities will be known upon completion of surveys conducted during PED. If facilities or utilities are identified for relocation, this REP will be updated accordingly.

Paragraph 17: Hazardous, Toxic, and Radioactive Waste (HTRW)

The Study Area has been inhabited and industrialized over past 200 years and many contaminants have traveled to the estuary and river channel over the years. There were known contamination and superfund sites located within each planning region and in the vicinity of project sites. However, no LER required for the TSP is located within the known contaminated areas. However, the Kearny Point and Oak Island Yards are within a Superfund Study area and would be restored following USEPA remedial actions within the Lower Passaic River. See Appendix H for a detailed summary of the HTRW data analyses available for each site.

Paragraph 18: Project Support

Local officials and residents are supportive of the TSP. No opposition has been expressed by public or private persons, or organizations on the implementation of the proposed TSP.

Paragraph 19: Notification to Non-Federal Sponsor

In accordance with Engineering Regulation 405-1-12, Real Estate Handbook, Change 31, 1 May 98, (hereinafter “Real Estate Handbook”), letters are being drafted to NFSs to provide a formal written notice identifying the risks associated with acquiring the LER for the Project prior to the full execution of the PPA.

Paragraph 20: Additional Information

There are few sites located within known historic districts. The impacts to the historic site or structure are not known currently and will be evaluated during the additional cultural resources investigation during PED phase of the HRE Feasibility Study. Additional site specific information can be found in Appendix I – Cultural Resources Documentations.

Paragraph 21: Point of Contacts

The point of contact for this REP is the Real Estate Project Delivery Team member Carlos E. Gonzalez at (917) 790-8465 (email: carlos.e.gonzalez@usace.army.mil) or the District Chief of Real Estate Ms. Noreen D. Dresser at (917) 790-8430 (email: noreen.d.dresser@usace.army.mil).

Paragraph 22: Recommendations

This REP has been prepared in accordance with Chapter 12, ER 405-1-12, Real Estate Handbook, 20 Nov 85, as amended.

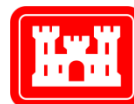
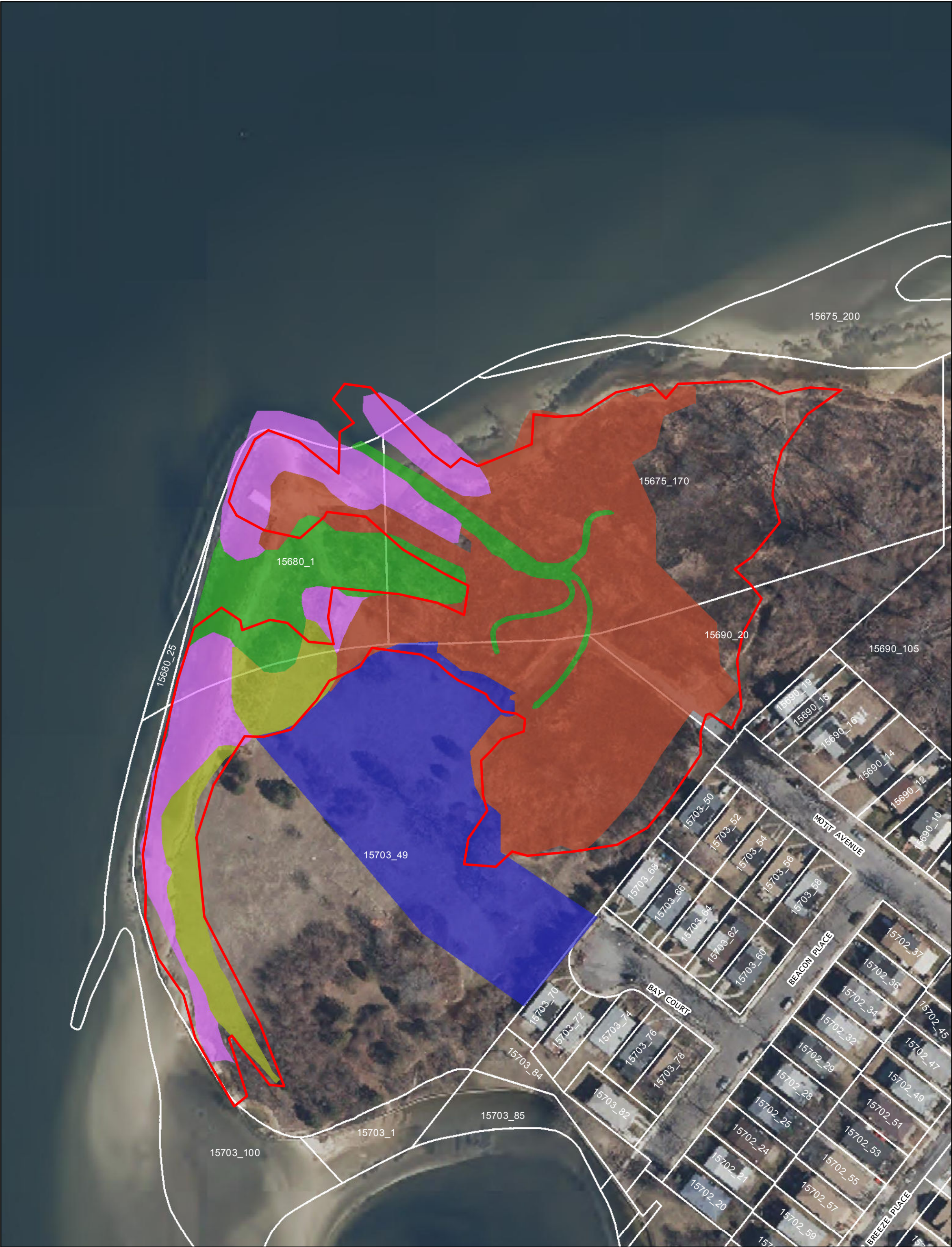


EXHIBIT "A"
REAL ESTATE MAPS



HRE Ecosystem Restoration - Jamaica Bay

Bayswater State Park

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

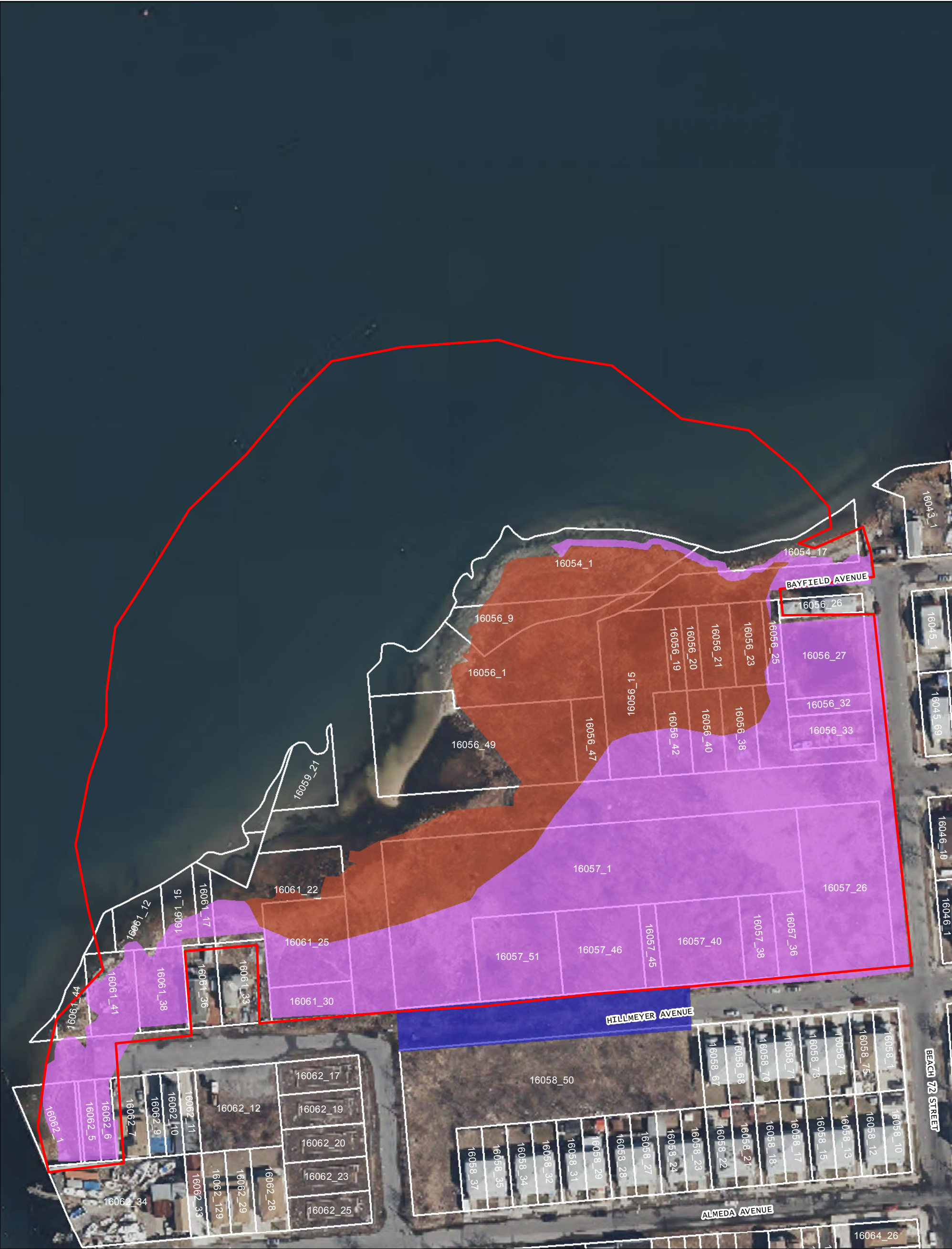
Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement



HRE Ecosystem Restoration - Jamaica Bay
Brant Point

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

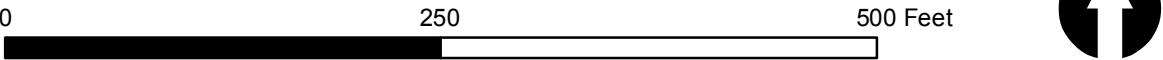
Bank Protection Easement

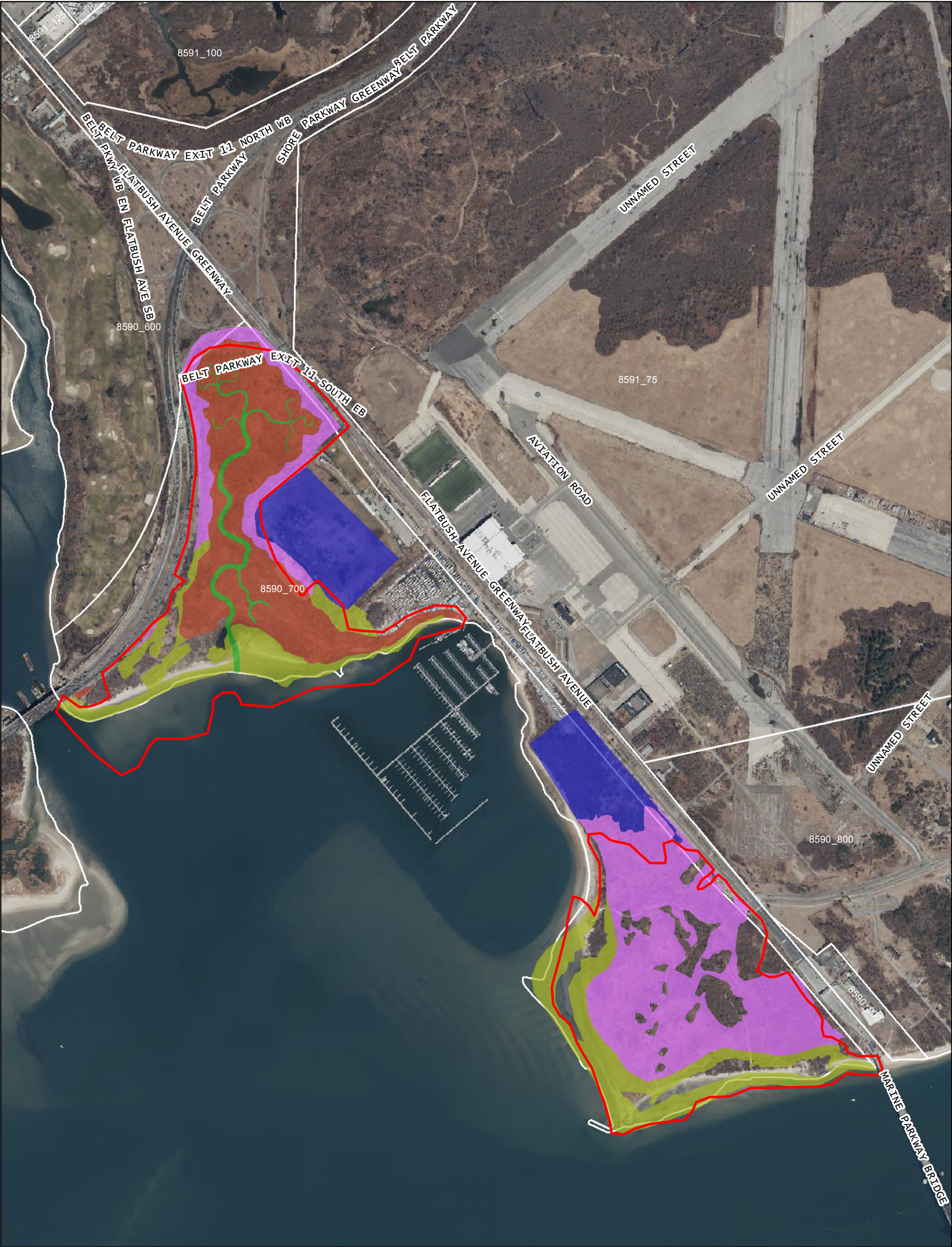
Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement





HRE Ecosystem Restoration - Jamaica Bay
Dead Horse Bay

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

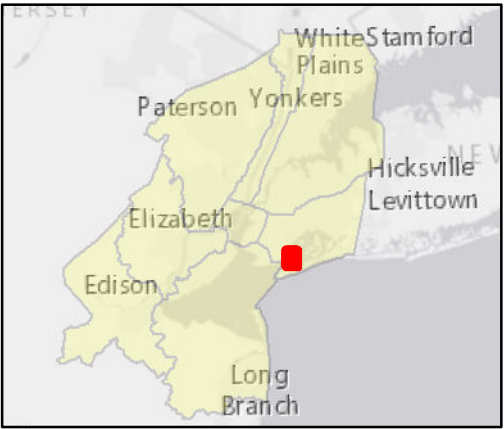
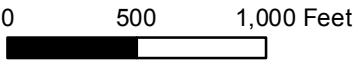
Bank Protection Easement

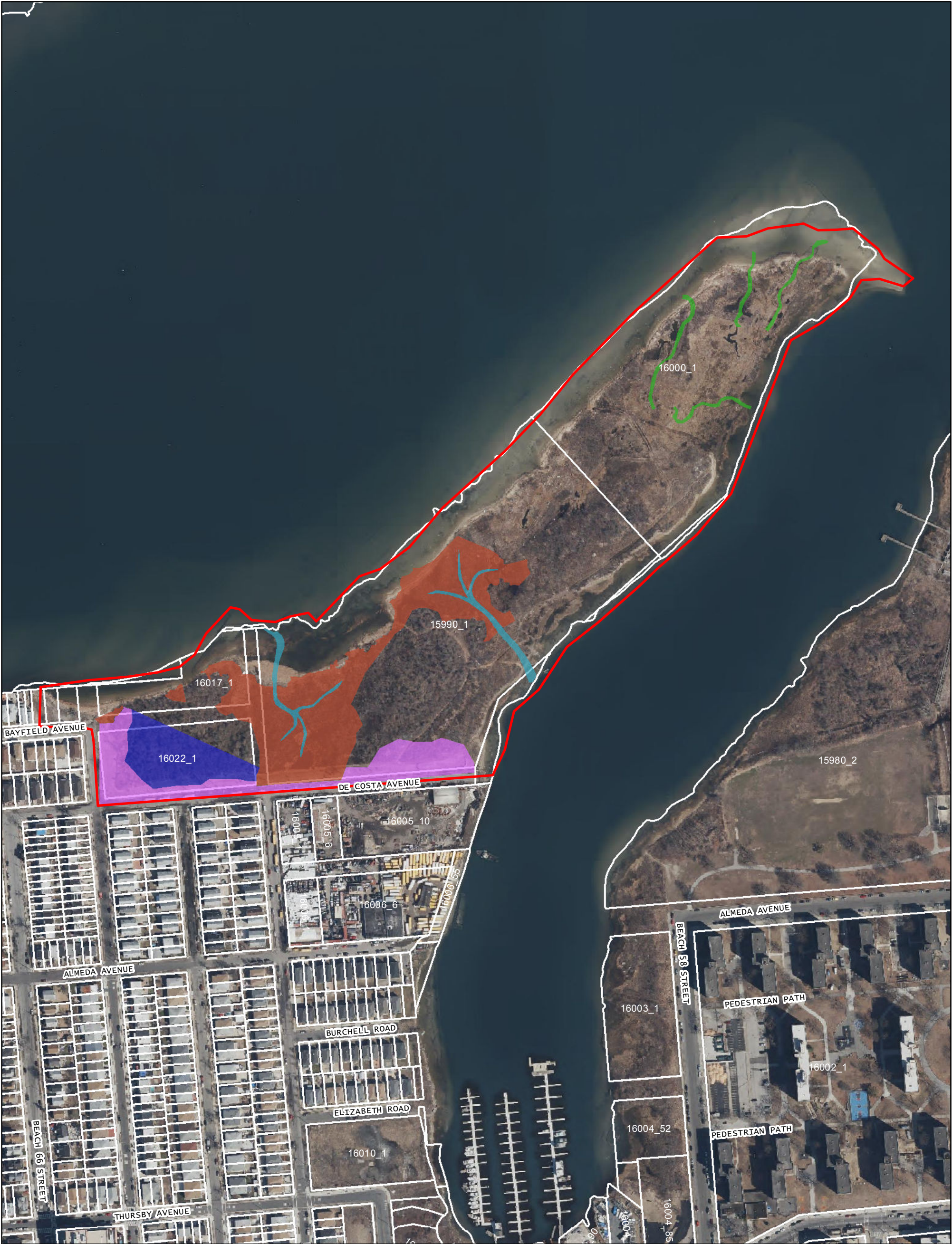
Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement

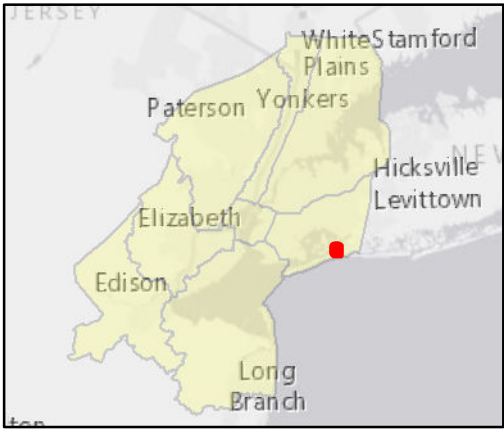


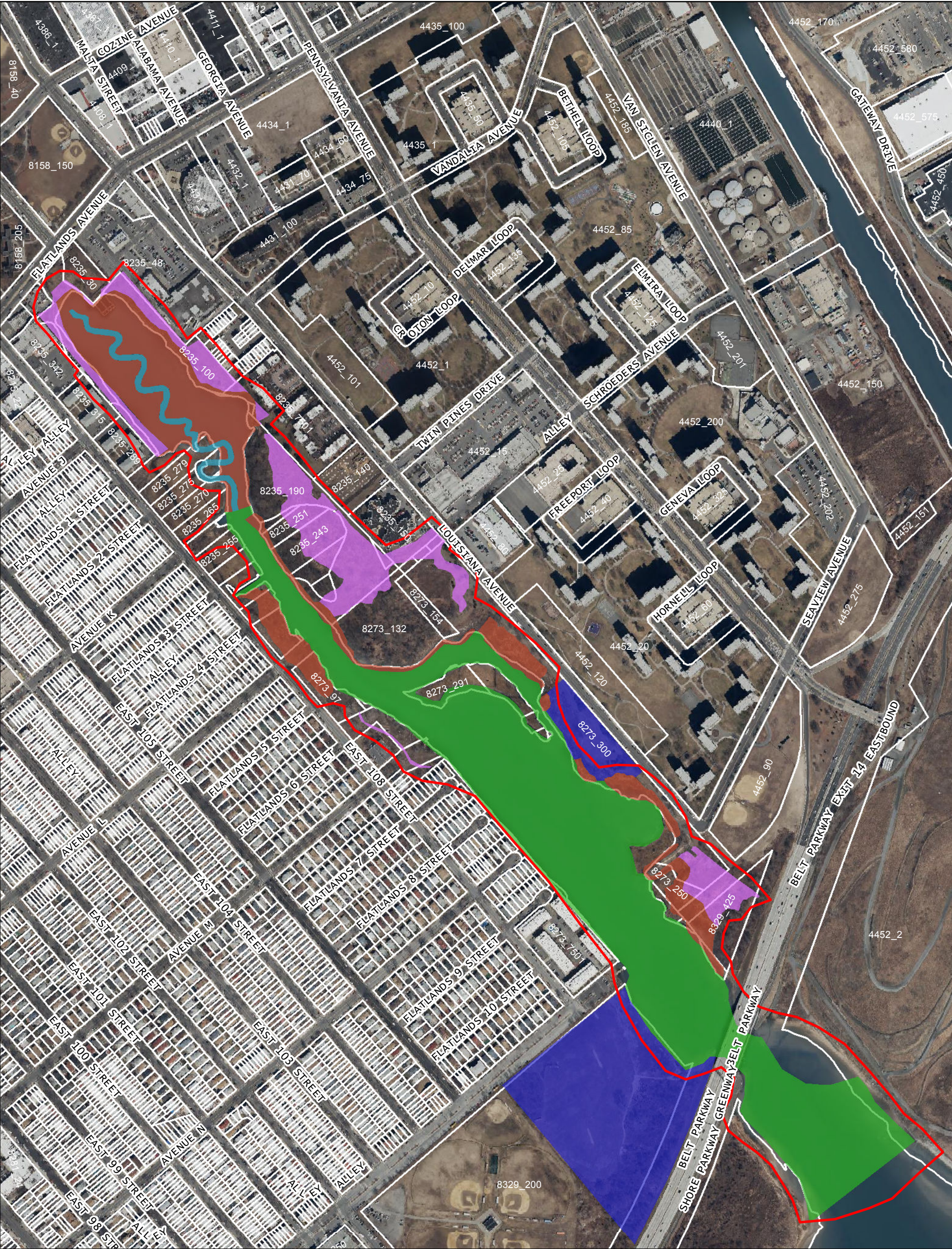


**HRE Ecosystem Restoration - Jamaica Bay
Dubos Point**

- Legend**
- | | |
|-----------------|---------------------------------------|
| Parcel Boundary | Easement Type |
| Site Boundary | Channel Improvement Easement |
| | Bank Protection Easement |
| | Beach Storm Damage Reduction Easement |
| | Aquatic Enhancement Easement |
| | Wetland Easement |
| | Temporary Work Area Easement |

0 500 1,000 Feet





HRE Ecosystem Restoration - Jamaica Bay Fresh Creek

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

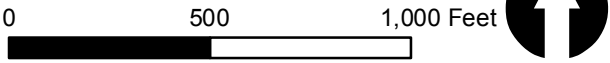
Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement





HRE Ecosystem Restoration - Jamaica Bay
Hawtree Point

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

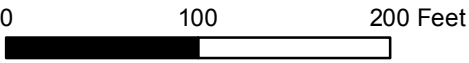
Bank Protection Easement

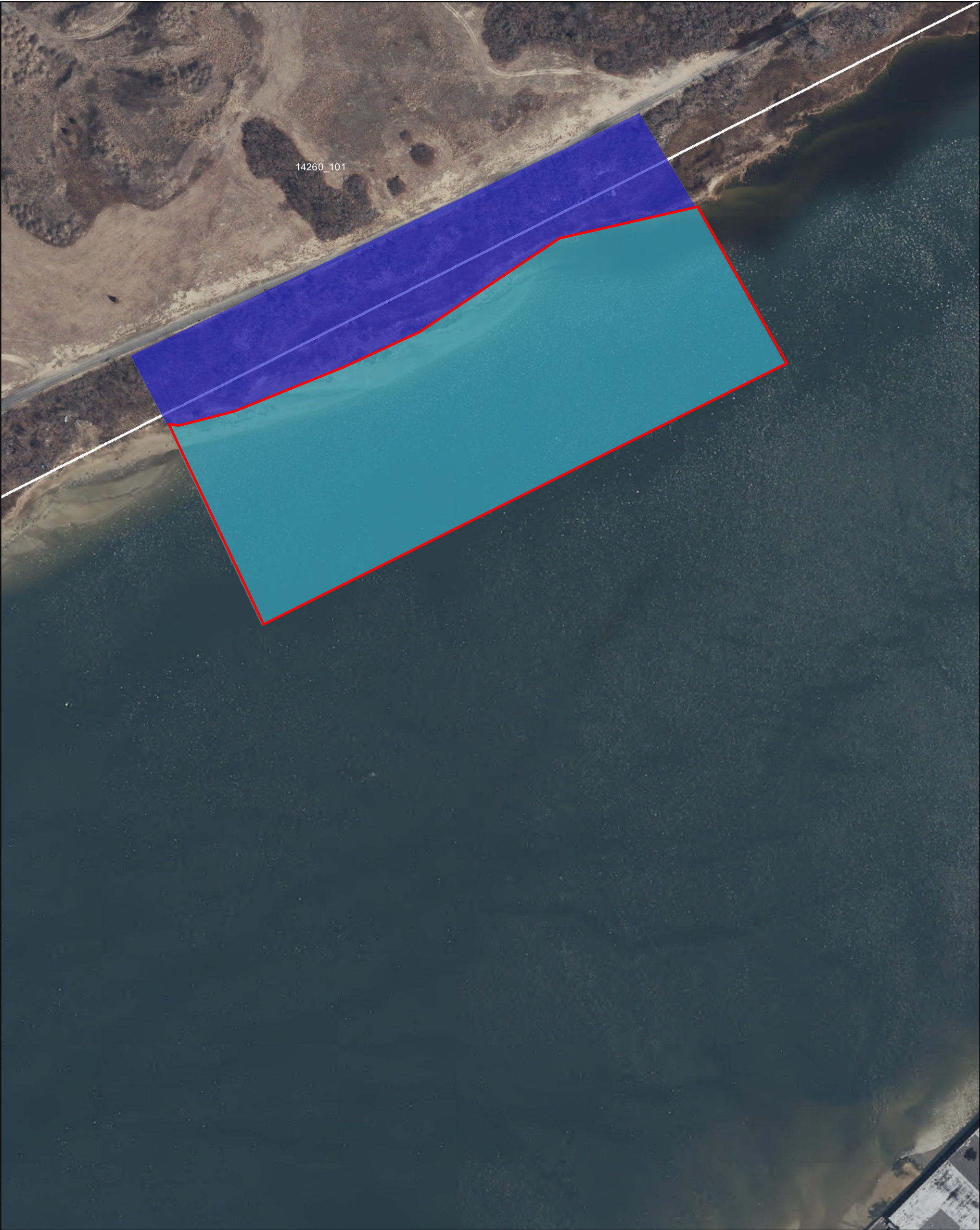
Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement





HRE Ecosystem Restoration - Jamaica Bay

Jamaica Bay

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

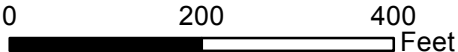
Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement





HRE Ecosystem Restoration - Harlem River, East River, and Western Long Island Sound Flushing Creek

Parcel Boundary

Site Boundary

Channel Improvement Easement

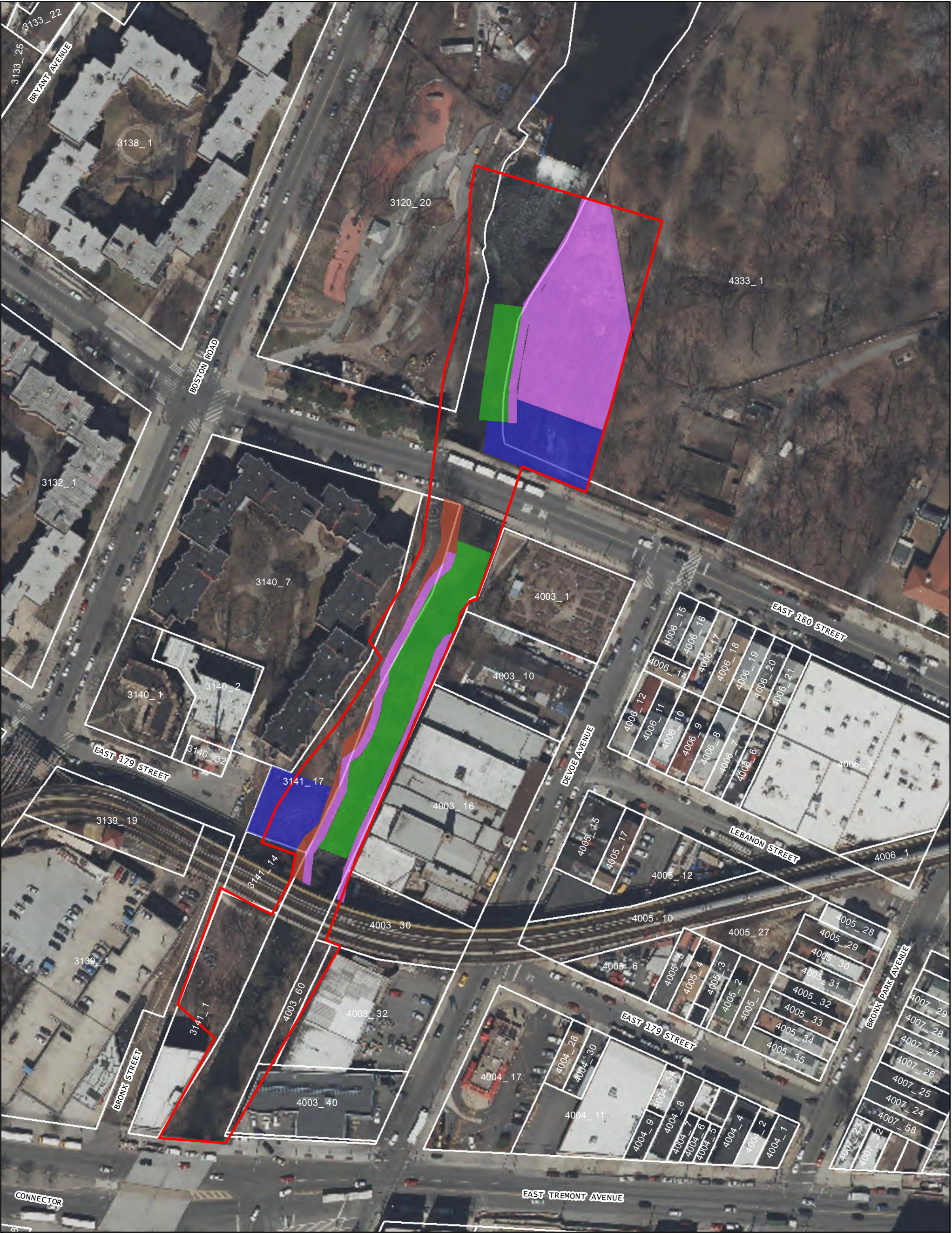
Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement



HRE Ecosystem Restoration - Bronx River River Park/West Farm Rapids Park

Parcel Boundary

Site Boundary

Channel Improvement Easement

Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

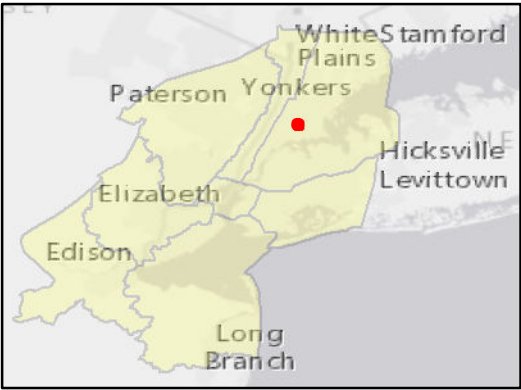
Wetland Easement

Temporary Work Area Easement

0

100

200 Feet





HRE Ecosystem Restoration - Bronx River Bronx Zoo and Dam

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement



HRE Ecosystem Restoration - Bronx River
Stone Mill Dam

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

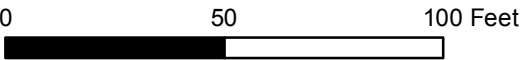
Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement





HRE Ecosystem Restoration - Bronx River
Shoelace Park North

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

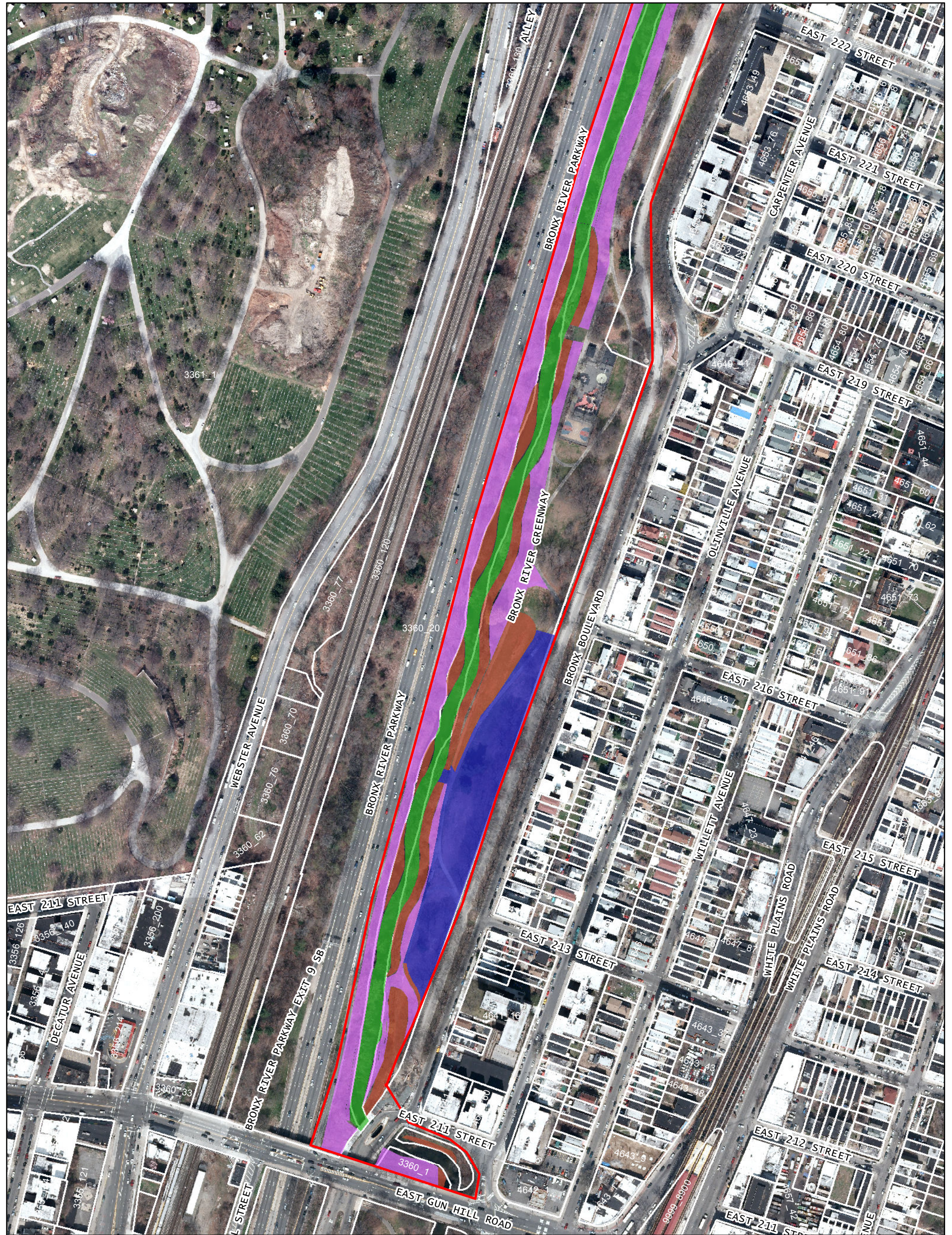
Wetland Easement

Temporary Work Area Easement

A scale bar indicating distances in feet. It is marked with 0, 200, and 400 feet.

A north arrow pointing upwards, indicating the orientation of the map.

An inset map showing the location of the project area within the New York City region. The map highlights the Bronx and surrounding areas, including White Plains, Stamford, Paterson, Yonkers, Hicksville, Levittown, Elizabeth, Edison, Long Branch, and Trenton. A red dot marks the project location in the Bronx.



HRE Ecosystem Restoration - Bronx River
Shoelace Park South

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement



HRE Ecosystem Restoration - Bronx River
Muskrat Cove

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

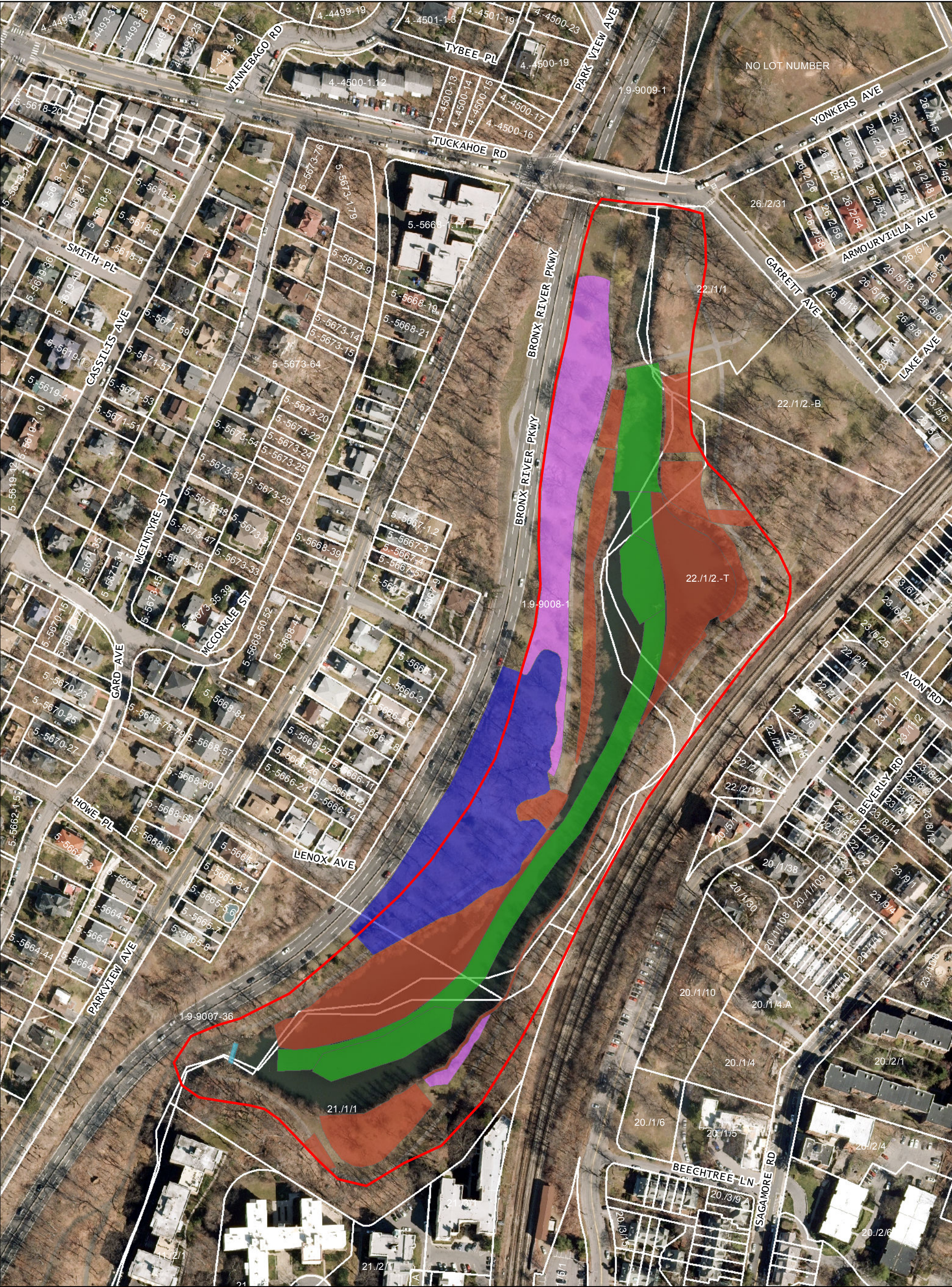
Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement



HRE Ecosystem Restoration - Bronx River
Bronxville Lake

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

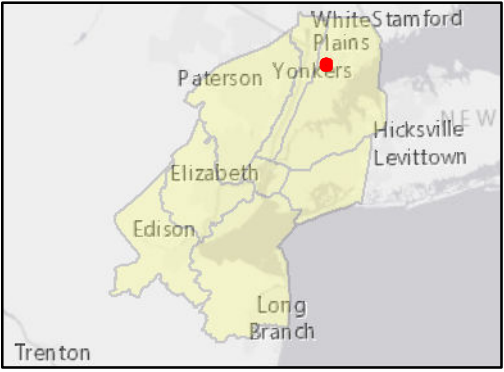
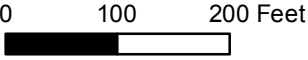
Bank Protection Easement

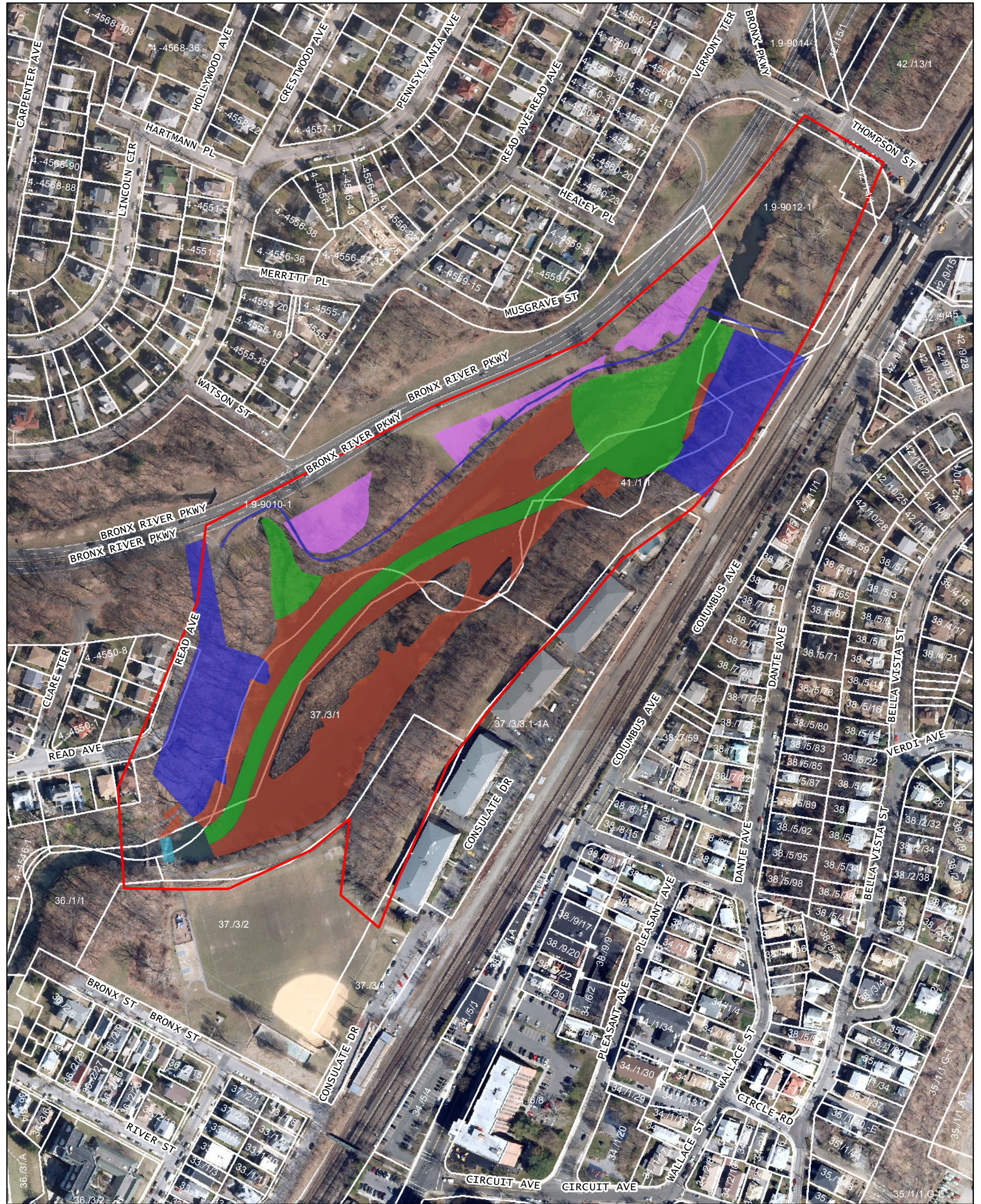
Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement





HRE Ecosystem Restoration - Bronx River
Crestwood Lake

- Legend**

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

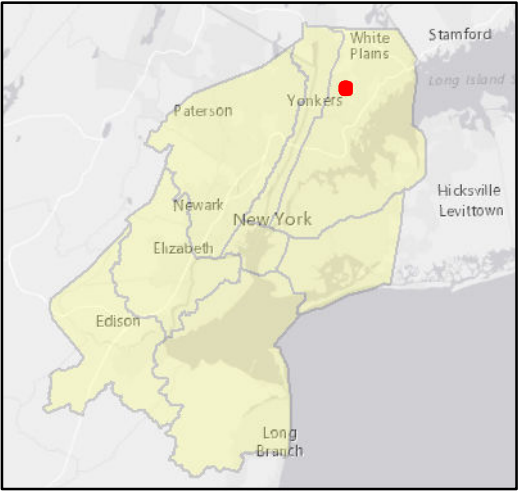
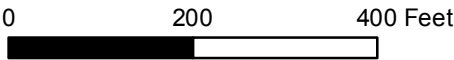
Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement





HRE Ecosystem Restoration - Bronx River
Harney Road

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement



HRE Ecosystem Restoration - Bronx River Garth Woods

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

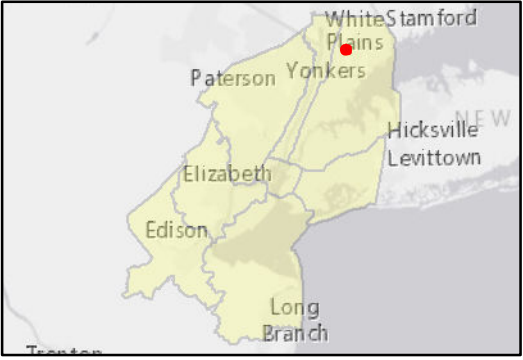
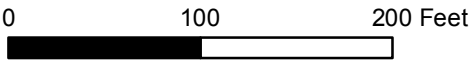
Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement





HRE Ecosystem Restoration - Bronx River
Westchester County Center

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

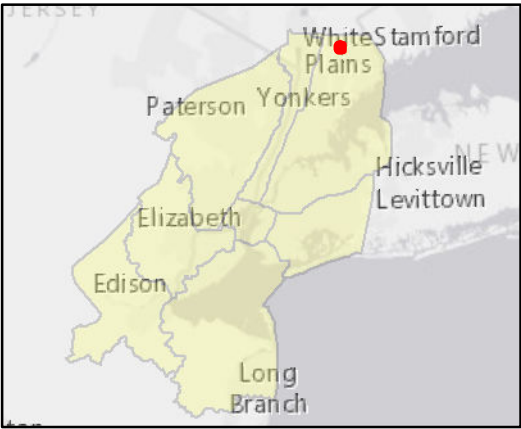
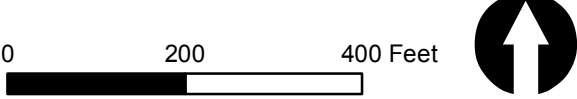
Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement





HRE Ecosystem Restoration - Harlem River, East River, and Western Long Island Sound

Soundview Park

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

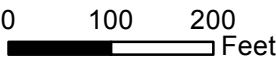
Bank Protection Easement

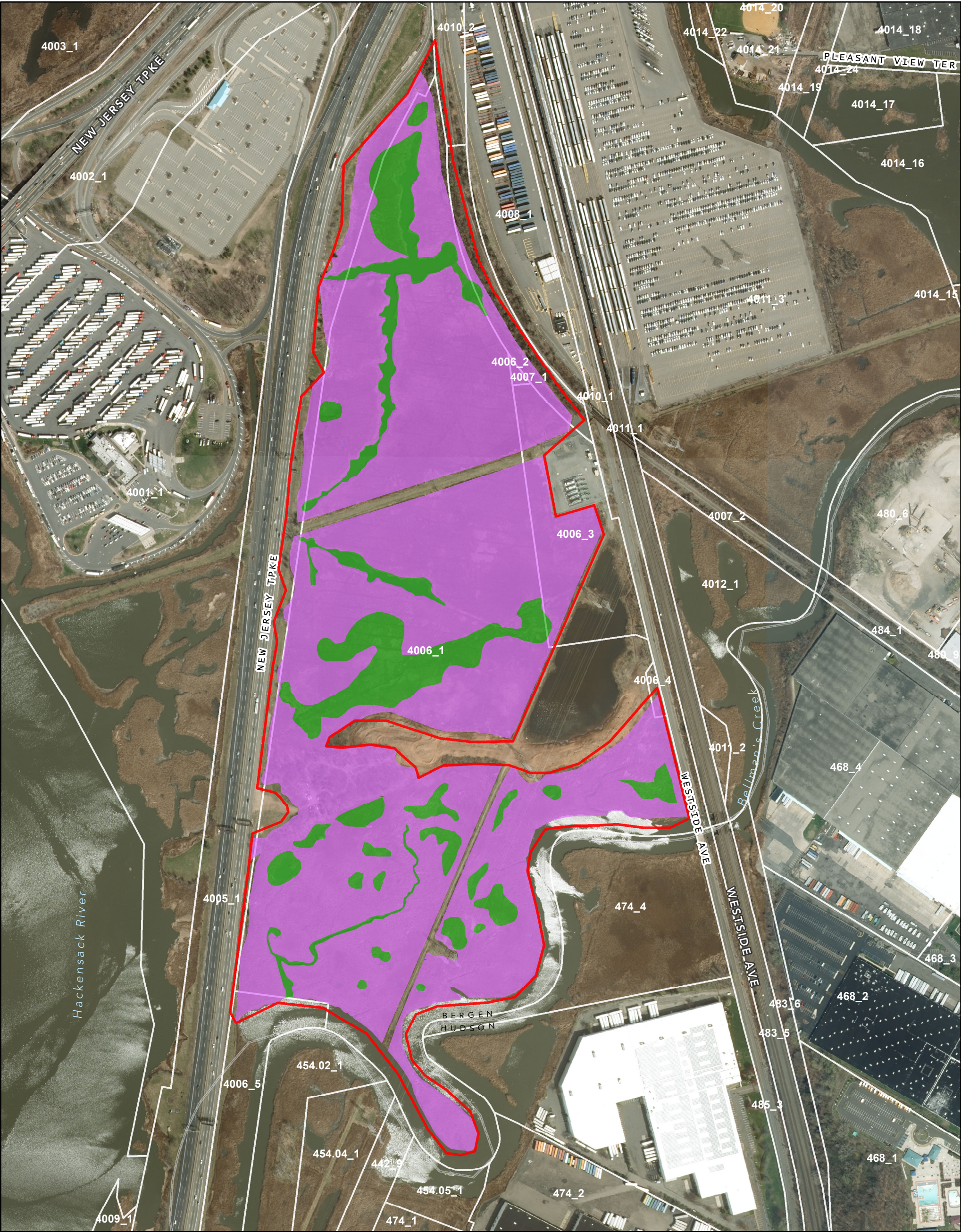
Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement





HRE Ecosystem Restoration - Hackensack River Meadowlark Marsh

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

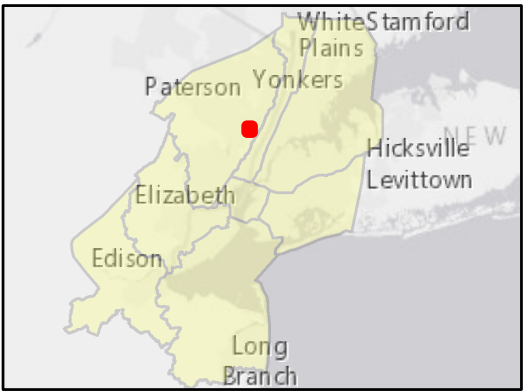
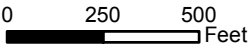
Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement


Temporary Work Area Easement







HRE Ecosystem Restoration - Lower Passaic River
Kearny Point


Legend


 Parcel Boundary


 Site Boundary


Easement Type


 Channel Improvement Easement

 Bank Protection Easement

 Beach Storm Damage Reduction Easement

 Aquatic Enhancement Easement

 Wetland Easement

 Temporary Work Area Easement



**HRE Ecosystem Restoration - Lower Passaic River
Essex County Branch Brook Park (North)**

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

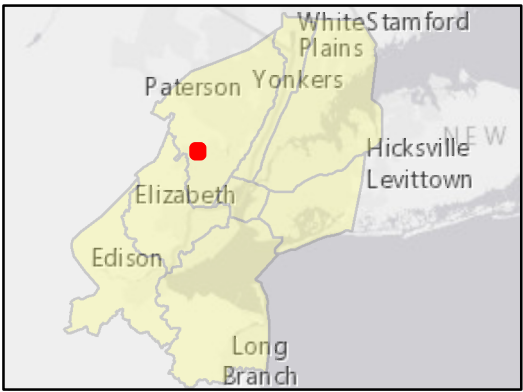
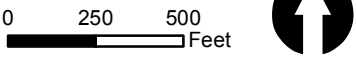
Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement









Wetland Easement

Temporary Work Area Easement



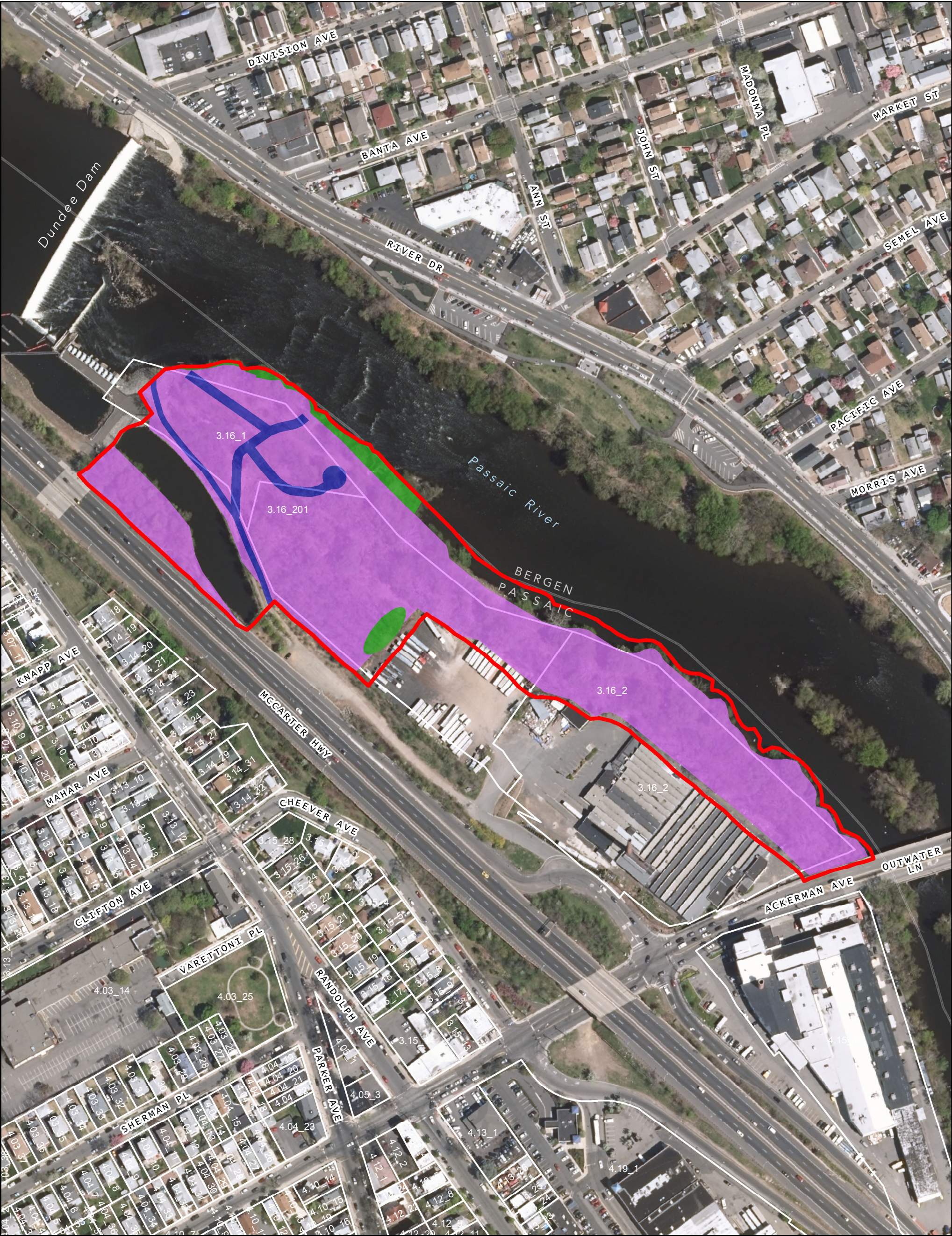


HRE Ecosystem Restoration - Lower Passaic River
Dundee Island Park

- Legend**
- | | |
|--|---|
|  Parcel Boundary | Easement Type |
|  Site Boundary |  Channel Improvement Easement |
| |  Bank Protection Easement |
| |  Beach Storm Damage Reduction Easement |
| |  Aquatic Enhancement Easement |
| |  Wetland Easement |
| |  Temporary Work Area Easement |

0 75 150 Feet





HRE Ecosystem Restoration - Lower Passaic River
Dundee Canal Green Acres

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

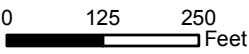
Bank Protection Easement

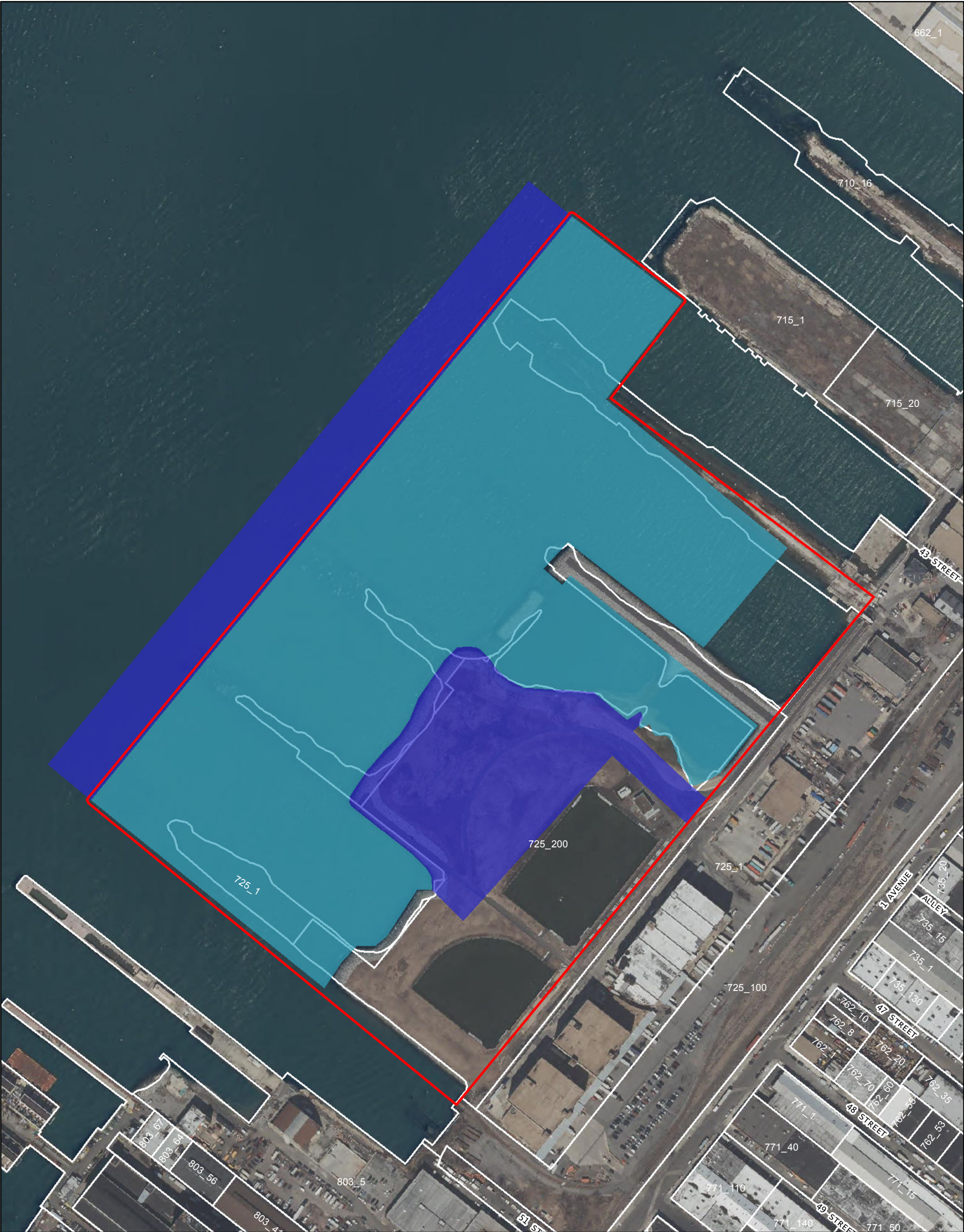
Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement





HRE Ecosystem Restoration - Upper Bay Bush Terminal

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement



HRE Ecosystem Restoration - Upper Bay Governors Island

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement



HRE Ecosystem Restoration - Lower Bay Naval Weapons Station Earle

Legend

Parcel Boundary

Site Boundary

Easement Type

Channel Improvement Easement

Bank Protection Easement

Beach Storm Damage Reduction Easement

Aquatic Enhancement Easement

Wetland Easement

Temporary Work Area Easement

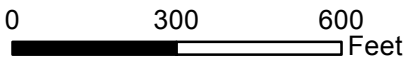


EXHIBIT “B”

PARCEL DATA

JAMAICA BAY

SITE	BLOCK_LOT	OWNER	CIE	BPE	BSDRE	NSAEE	NSWE	TWAE	TOTAL ACRES
Bayswater Point State Park	15675_170	NYS DIV OF LANDS AND	0.262031	0.185066	0	0	1.256102	0.001587	1.704786
	15680_1	NEW YORK STATE	0.473311	0.428617	0.037474	0	0.19136	0	1.130762
	15680_25	DEPARTMENT OF PARKS &	0	0.000096	0	0	0	0	0.000096
	15690_20	NEW YORK STATE	0.000021	0	0	0	0.257407	0	0.257428
	15703_49	NYS PARKS & RECREATION	0.024522	0.366019	0.428012	0	0.968832	2.41798	4.205365
Total			0.759885	0.979798	0.465486	0	2.673701	2.419567	7.298437
Brant Point	16054_1	PARKS AND RECREATION	0	0.034416	0	0	0.252381	0	0.286797
	16054_17	PARKS AND RECREATION	0	0.036475	0	0	0.033455	0	0.06993
	16056_1	PARKS AND RECREATION	0	0	0	0	0.360833	0	0.360833
	16056_15	PARKS AND RECREATION	0	0.070815	0	0	0.249235	0	0.32005
	16056_19	PARKS AND RECREATION	0	0	0	0	0.046566	0	0.046566
	16056_20	PARKS AND RECREATION	0	0	0	0	0.046414	0	0.046414
	16056_21	PARKS AND RECREATION	0	0	0	0	0.092267	0	0.092267
	16056_23	PARKS AND RECREATION	0	0.001606	0	0	0.089819	0	0.091425
	16056_25	PARKS AND RECREATION	0	0.025446	0	0	0.014045	0	0.039491
	16056_27	PARKS AND RECREATION	0	0.212501	0	0	0	0	0.212501
	16056_32	PARKS AND RECREATION	0	0.047981	0	0	0	0	0.047981

SITE	BLOCK_LOT	OWNER	CIE	BPE	BSDRE	NSAEE	NSWE	TWAE	TOTAL ACRES
	16056_33	PARKS AND RECREATION	0	0.092809	0	0	0	0	0.092809
	16056_35	PARKS AND RECREATION	0	0.121495	0	0	0.014373	0	0.135868
	16056_38	PARKS AND RECREATION	0	0.042999	0	0	0.048833	0	0.091832
	16056_40	PARKS AND RECREATION	0	0.043493	0	0	0.048339	0	0.091832
	16056_42	PARKS AND RECREATION	0	0.051205	0	0	0.040628	0	0.091833
	16056_47	PARKS AND RECREATION	0	0.015171	0	0	0.076661	0	0.091832
	16056_49	PARKS AND RECREATION	0	0	0	0	0.224002	0	0.224002
	16056_9	PARKS AND RECREATION	0	0	0	0	0.119764	0	0.119764
	16057_1	PARKS AND RECREATION	0	1.087362	0	0	0.300614	0	1.387976
	16057_26	PARKS AND RECREATION	0	0.461165	0	0	0	0	0.461165
	16057_36	PARKS AND RECREATION	0	0.0922	0	0	0	0	0.0922
	16057_38	PARKS AND RECREATION	0	0.0922	0	0	0	0	0.0922
	16057_40	PARKS AND RECREATION	0	0.2305	0	0	0	0	0.2305
	16057_45	PARKS AND RECREATION	0	0.046101	0	0	0	0	0.046101
	16057_46	PARKS AND RECREATION	0	0.230501	0	0	0	0	0.230501
	16057_51	KURK, MITCHELL	0	0.230501	0	0	0	0	0.230501
	16061_12	PARKS AND RECREATION	0	0.006874	0	0	0	0	0.006874

SITE	BLOCK_LOT	OWNER	CIE	BPE	BSDRE	NSAEE	NSWE	TWAE	TOTAL ACRES
	16061_15	PARKS AND RECREATION	0	0.02338	0	0	0	0	0.02338
	16061_17	PARKS AND RECREATION	0	0.015855	0	0	0	0	0.015855
	16061_22	PARKS AND RECREATION	0	0.047023	0	0	0.037387	0	0.08441
	16061_25	PARKS AND RECREATION	0	0.124614	0	0	0.10865	0	0.233264
	16061_30	PARKS AND RECREATION	0	0.087064	0	0	0	0	0.087064
	16061_38	PARKS AND RECREATION	0	0.12322	0	0	0	0	0.12322
	16061_41	PARKS AND RECREATION	0	0.104015	0	0	0	0	0.104015
	16061_44	PARKS AND RECREATION	0	0.003981	0	0	0	0	0.003981
	16062_1	RE, EDWARD D JR	0	0.072671	0	0	0	0	0.072671
	16062_34	BENROAL REALTY ASSOCI	0	0.000004	0	0	0	0	0.000004
	16062_4	MORNING HOMES, LLC	0	0.010957	0	0	0	0	0.010957
	16062_5	MORNING HOMES, LLC	0	0.04301	0	0	0	0	0.04301
	16062_6	MORNING HOMES, LLC	0	0.040139	0	0	0	0	0.040139
	Total		0	3.969749	0	0	2.204266	0	6.174015
Dead Horse Bay	8590_600	PARKS AND RECREATION	0	0.964868	0	0	0.028434	0	0.993302
	8590_700	NATIONAL PARK SERVICE	3.670138	56.85983	31.92076	0	38.1036	25.33692	155.891242
Total			3.670138	57.8247	31.92076	0	38.13203	25.33692	156.884544
Dubos Point	15990_1	NYC PARKS	0	0.661006	0	0.40162	3.521434	0	4.58406
	15990_200	PARKS AND	0	0	0	0.019784	0	0	0.019784

SITE	BLOCK_LOT	OWNER	CIE	BPE	BSDRE	NSAEE	NSWE	TWAE	TOTAL ACRES
		RECREATION							
	16000_1	NYC PARKS	0.317106	0	0	0	0	0	0.317106
	16017_1	NYC PARKS	0	0.011596	0	0	0.295329	0.002882	0.309807
	16022_1	PARKS AND RECREATION	0	0.597324	0	0	0.006665	1.131923	1.735912
Total			0.317106	1.269926	0	0.421404	3.823428	1.134805	6.966669
Fresh Creek	4452_2	NATIONAL PARK SERVICE	0.602021	0	0	0	0	0	0.602021
	8235_10	KFC U.S. PROPERTIES,	0	0.007216	0	0	0	0	0.007216
	8235_100	DYCE, HEATHER ANGELLA	0	1.400651	0	0	0.596262	0	1.996913
	8235_109	SMITH, GERALD	0	0.000098	0	0	0	0	0.000098
	8235_110	GLENDORA SAUNDERS	0	0.001678	0	0	0	0	0.001678
	8235_111	BARBARA A BARNES	0	0.000495	0	0	0	0	0.000495
	8235_112	TURTON, JAIME L	0	0.000051	0	0	0	0	0.000051
	8235_115	LYDE, PRINCESS	0	0.001641	0	0	0	0	0.001641
	8235_116	JAMES H THOMAS	0	0.010023	0	0	0	0	0.010023
	8235_13	PARKS AND RECREATION	0	0.071056	0	0	0	0	0.071056
	8235_150	LOUISIANA NURSING REA	0	0.391558	0	0	0	0	0.391558
	8235_189	PARKS AND RECREATION	0	0.083996	0	0	0	0	0.083996
	8235_190	PARKS AND RECREATION	0.009029	3.243001	0	0	0.389573	0	3.641603
	8235_20	PARKS AND RECREATION	0	0.713828	0	0	0.133343	0	0.847171
	8235_205	PARKS AND RECREATION	0	0.065092	0	0	0	0	0.065092
	8235_225	PARKS AND	0.001121	0	0	0	0.551554	0	0.552675

SITE	BLOCK_LOT	OWNER	CIE	BPE	BSDRE	NSAEE	NSWE	TWAE	TOTAL ACRES
		RECREATION							
	8235_238	PARKS AND RECREATION	0.018822	0.249331	0	0	0.263275	0	0.531428
	8235_243	PARKS AND RECREATION	0.069146	0.898375	0	0	0.184242	0	1.151763
	8235_251	PARKS AND RECREATION	0.042797	0.381434	0	0	0.053254	0	0.477485
	8235_255	PARKS AND RECREATION	0.04893	0.047125	0	0	0.035424	0	0.131479
	8235_261	PARKS AND RECREATION	0.011359	0	0	0	0.000387	0	0.011746
	8235_265	PARKS AND RECREATION	0.000515	0	0	0	0.02491	0	0.025425
	8235_270	PARKS AND RECREATION	0	0	0	0.003462	0.011211	0	0.014673
	8235_275	PARKS AND RECREATION	0	0	0	0.062977	0.006526	0	0.069503
	8235_279	PARKS AND RECREATION	0	0	0	0.071733	0.029233	0	0.100966
	8235_284	PARKS AND RECREATION	0	0.005952	0	0.000895	0.048242	0	0.055089
	8235_30	SHERADEL ASSOCIATES	0	0.041315	0	0	0	0	0.041315
	8235_330	PARKS AND RECREATION	0	0.201091	0	0	0	0	0.201091
	8235_48	SHERADEL ASSOCIATES	0	0.122366	0	0	0	0	0.122366
	8235_7501	JAL DIVERSIFIED MANAG	0	0.165147	0	0	0.140151	0	0.305298
	8273_132	PARKS AND RECREATION	0	0.171645	0	0	0.175273	0	0.346918
	8273_155	THE CITY OF NEW YORK	0	0.007361	0	0	0	0	0.007361

SITE	BLOCK_LOT	OWNER	CIE	BPE	BSDRE	NSAEE	NSWE	TWAE	TOTAL ACRES
	8273_160	THE CITY OF NEW YORK	0	0.07782	0	0	0	0	0.07782
	8273_165	THE CITY OF NEW YORK	0	0.082599	0	0	0	0	0.082599
	8273_197	PARKS AND RECREATION	0.01983	0	0	0	0	0	0.01983
	8273_220	NYC PARKS	0.189465	0	0	0	0.042028	0	0.231493
	8273_250	PARKS AND RECREATION	0.002229	0.103654	0	0	0.421678	0	0.527561
	8273_26	PARKS AND RECREATION	0.086907	0	0	0	0	0	0.086907
	8273_277	PARKS AND RECREATION	0.000213	0	0	0	0	0	0.000213
	8273_291	PARKS AND RECREATION	0.380683	0	0	0	0	0	0.380683
	8273_300	PARKS AND RECREATION	0.284357	1.226492	0	0	2.137693	2.548142	6.196684
	8273_377	PARKS AND RECREATION	0.075367	0.018144	0	0	0	0	0.093511
	8273_50	PARKS AND RECREATION	0.01418	0	0	0	0	0	0.01418
	8273_56	PARKS AND RECREATION	0.009169	0	0	0	0	0	0.009169
	8273_61	PARKS AND RECREATION	0.007293	0	0	0	0	0	0.007293
	8273_67	PARKS AND RECREATION	0.033254	0	0	0	0	0	0.033254
	8273_7501	OWNER / AGENT	0.02007	0	0	0	0	0	0.02007
	8273_77	PARKS AND RECREATION	0.041587	0.047123	0	0	0	0	0.08871
	8273_83	YOUNG ISRAEL OF CANAR	0	0.031744	0	0	0	0	0.031744
	8273_91	PARKS AND	0.049087	0.062377	0	0	0	0	0.111464

SITE	BLOCK_LOT	OWNER	CIE	BPE	BSDRE	NSAEE	NSWE	TWAE	TOTAL ACRES
		RECREATION							
	8273_97	PARKS AND RECREATION	0.051641	0.001013	0	0	0.50382	0	0.556474
	8329_1005	NYC PARKS	0.026585	0	0	0	0.186224	0	0.212809
	8329_200	PARKS AND RECREATION	0.179112	0	0	0	0	13.94047	14.119581
	8329_425	PARKS AND RECREATION	0	0.593102	0	0	0.385011	0	0.978113
	8334_50	UNITED STATES OF AMER	0.074367	0	0	0	0	0	0.074367
Total			2.349136	10.52559	0	0.139067	6.319314	16.48861	35.821722
Hawtree Point	14214_1800	NATIONAL PARK SERVICE	0	1.675732	0	0	0.064474	1.178457	2.918663
	14241_900	CNY/NYCTA	0	0.016534	0	0	0	0	0.016534
	14252_1795	DEPARTMENT OF PARKS &	0	0.011376	0	0	0	0	0.011376
	14252_2795	UNKNOWN	0	0.011619	0	0	0	0	0.011619
Total			0	1.715261	0	0	0.064474	1.178457	2.958192
Jamaica Bay (Oyster Restoration)	14260_101	DEPT OF SMALL BUSINESS	0	0	0	0	0	5.830000	5.830000
	Submerged Lands	STATE OF NY	0	0	0	12.420000	0	0	12.42
Total			0	0	0	12.42	0	5.830000	18.250000
Marsh Islands (Jamaica Bay)	15100_1	UNITED STATES OF AMERICA	Pending	Pending	Pending	Pending	Pending	Pending	Pending
	Submerged Lands	STATE OF NY	Pending	Pending	Pending	Pending	Pending	Pending	Pending
Total			0	0	0	0	0	0	0
GRAND TOTAL			7.096265	76.28503	32.38625	12.98047	53.21722	52.38836	234.353579

HARLEM RIVER, EAST RIVER, AND WESTERN LONG ISLAND SOUND

SITE	BLOCK_LOT	OWNER	CIE	BPE	BSDRE	NSAEE	NSWE	TWAE	TOTAL ACRES
Flushing Creek	2018_200	CNY/NYCTA		0.512787	0	0	0.314352	0	0.827139
	2018_300	LONG ISLAND RAIL ROAD	0.544443	3.517716	0	0	2.380258	0	6.442417
	2018_75	NEW YORK CITY TRANSIT		0.010297	0	0	0	0	0.010297
	5066_105	PARKS AND RECREATION	0.00046	0.011224	0	0	0	0	0.011684
	5066_190	DEPARTMENT OF PARKS &	0.019159	0.019136	0	0	0	0	0.038295
	5066_250	UNKNOWN	0.038458	0.600647	0	0	0	0	0.639105
	Submerged Lands	STATE OF NY	7.49948	1.887268	0	0	0	0	9.386748
Total			8.102	6.559075	0	0	2.69461	0	17.355685
Bronx River	3141_1	DEPARTMENT OF CULTURA	0.004041	0.040242	0	0	0.03807	0.170944	0.253297
	4333_1	PARKS AND RECREATION	0.013674	0.619225	0	0	0.038972	0.153303	0.825174
	3141_14	NEW YORK CITY TRANSIT	0	0.00008	0	0	0.006917	0.003902	0.010899
	3141_17	PARKS AND RECREATION	0.008844	0.039841	0	0	0.096428	0.146394	0.291507
	4003_30	NEW YORK CITY TRANSIT	0	0.006479	0	0	0.00086	0	0.007339
	4003_60	PARKS AND RECREATION	0	0	0	0	0.005976	0	0.005976
Total			0.026559	0.705867	0	0	0.187223	0.474543	1.394192
Bronx Zoo and Dam	3120_20	DEPT OF PARKS AND REC	0	0.037222	0	0	0.032475	0	0.069697

SITE	BLOCK_LOT	OWNER	CIE	BPE	BSDRE	NSAEE	NSWE	TWAE	TOTAL ACRES
	4333_1	PARKS AND RECREATION	0.055858	0	0	0	0.30156	0.929952	1.28737
Total			0.055858	0.037222	0	0	0.334035	0.929952	1.357067
Bronxville Lake	0001_1	WEST CO PARK COMM	0.383767	0.096345	0	0.001129	1.602472	0	2.083713
	0001_2	WEST CO PARK COMM	0.297767	0	0	0	1.049943	0	1.34771
	9007_36	WESTECHESTER COUNTY	0.053974	0	0	0.00699	0.535998	0.084875	0.681837
	9008_1	WESTECHESTER COUNTY	1.0227	1.293975	0	0	1.223648	2.005658	5.545981
	NA	WESTECHESTER COUNTY	2.280079	5.687665		0.009457		7.398261	15.375462
Total			4.038287	7.077985	0	0.017576	4.412061	9.488794	25.034703
Crestwood Lake	9010_1	Westchester County	2.889816	1.145499	0	0	2.753707	1.970194	8.759216
	9012_1	Westchester County	0	0.000094	0	0	0	0	0.000094
	37_3_1	WEST. CO. PARK COMM.	0.731889	0	0	0.010716	2.683314	0.041984	3.467903
	41_1_1	WEST. CO. PARK COMM.	0.569074	0	0	0	0.244108	0.78801	1.601192
Total			4.190779	1.145593	0	0.010716	5.681129	2.800188	13.828405
Garth Woods	9021_1	Westchester County	0	0.141658	0	0	0.0659	0.184977	0.392535
	49_1_1	WEST CO PARK COMM	0	0	0	0	0.013552	0	0.013552
Total			0	0.141658	0	0	0.079452	0.184977	0.406087
Harney	9019_1	Westchester County	0.001777	0.006968	0	0.004798	0	0	0.013543
	9020_1	Westchester County	0.528793	0	0	0	0	1.054466	1.583259
	49_1_1	WEST CO PARK COMM	0.009714	0.037769	0	0	0	0	0.047483
	63_1_2	WEST CO PARK COMM	0.005043	0.000002	0	0.000702	0	0	0.005747
Total			0.545327	0.044739	0	0.0055	0	1.054466	1.650032

SITE	BLOCK_LOT	OWNER	CIE	BPE	BSDRE	NSAEE	NSWE	TWAE	TOTAL ACRES
Muskrat Cove	3399_3	PARKS AND RECREATION	0.111926	0.928062	0	0	0.70322	0.86525	2.608458
	3399_44	PARKS AND RECREATION	0.023138	0.020573	0	0	0.672246	0	0.715957
	5064_10	MTA - METRO NORTH	0	0	0	0	0.78739	0	0.78739
	5064_30	PARKS AND RECREATION	0	0	0	0	6.310828	0	6.310828
	5064_50	PARKS AND RECREATION	0	0	0	0	0.317507	0	0.317507
	5064_60	THE CITY OF NEW YORK/	0	0	0	0	0.093796	0	0.093796
	5064_72	MTA - METRO NORTH	0	0	0	0	0.049468	0	0.049468
Total			0.135064	0.948635	0	0	8.934455	0.86525	10.883404
Shoelace Park North	3360_20	PARKS AND RECREATION	0.569896	4.216839	0	0	2.12252	2.322799	9.232054
Total			0.569896	4.216839	0	0	2.12252	2.322799	9.232054
Shoelace Park South	3360_1	PARKS AND RECREATION	0	0.203084	0	0	0.067528	0	0.270612
	3360_20	PARKS AND RECREATION	0.732339	5.505545	0	0	1.915975	2.413636	10.567495
Total			0.732339	5.708629	0	0	1.983503	2.413636	10.838107
Stone Mill Dam	3272_1	DEPT OF GENERAL SERVI	0	0.027141	0	0.01556	0.004523	0.051039	0.098263
	4336_1	PARKS AND RECREATION	0	0	0	0	0	0.025547	0.025547
Total			0	0.027141	0	0.01556	0.004523	0.076586	0.12381
Westchester County Center	NA	WESTCHESTER COUNTY	3.053317	5.374093	0	0	3.196171	1.33589	12.959471
Total			3.053317	5.374093	0	0	3.196171	1.33589	12.959471
Soundview Park (Oyster Restoration)	3463_1	PARKS AND RECREATION	0	0	0	0	0	1.346097	1.346097
	Submerged Lands	STATE OF NY	0	0	0	6.750763	0	0.000000	6.750763

SITE	BLOCK_LOT	OWNER	CIE	BPE	BSDRE	NSAEE	NSWE	TWAE	TOTAL ACRES
Total			0	0	0	6.750763	0	1.346097	8.09686
GRAND TOTAL			21.44943	31.98748	0	6.800115	29.62968	23.29318	113.159877

NEWARK BAY, HACKENSACK RIVER AND PASSAIC RIVER

SITE	BLOCK_LOT	OWNER	CIE	BPE	PBSDRE	NSAEE	NSWE	TWAE	TOTAL ACRES
Kearny Point	288_1	TOWN OF KEARNY	1.645648	3.435359	0	0	0	0	5.081007
	288_2,3,3.01	HP REAL ESTATE LLC	13.52518	17.667908	0	0	0	0	31.193088
	294_1.01	TOWN OF KEARNY	0	1.645177	0	0	0	0	1.645177
	294_1.02	HAVENICK ASSOCIATES	0.003795	0.398493	0	0	0	0	0.402288
	294_1.03	TOWN OF KEARNY	1.326263	10.689776	0	0	0	0	12.016039
Total			16.500886	33.836713	0	0	0	0	50.337599
Oak Island Yards	5074_5	CITY OF NEWARK	3.675666	12.123728	0	0	0	0	15.799394
	5074_5	EIP DOREMUS LLC,							0
	5074_25.01	BUCKEYE TERMINALS LL	0	0.261429	0	0	0	0	0.261429
	5074_11.01	UNKNOWN	0	0.203038	0	0	0	0	0.203038
Total			3.675666	12.588195	0	0	0	0	16.263861
Essex County Branch Brook Park	690_1	ESSEX COUNTY PARK COMMISSION	3.13026	2.260548	0	0	0	3.490514	8.881322
	504_1	ESSEX COUNTY PARK COMMISSION	7.766357	7.894124	0	0	0	1.797729	17.45821
	459_1	ESSEX COUNTY PARK COMMISSION	12.630596	1.418464	0	0	0	3.189454	17.238514
Total			23.527213	11.573136	0	0	0	8.477697	43.578046
Dundee Island Park	1001.A_2	UNKNOWN	0	2.060771	0	0	0	0.704357	2.765128
Total			0	2.060771	0	0	0	0.704357	2.765128
Clifton Dundee Canal Green Acres and Island Preserve	3.16_1	STATE OF N J DEPT OF TRANS	0.000476	1.229631	0	0	0	0.357596	1.587703
	3.16_2.02	PARADISE ISLAND LLC	0	2.958086	0	0	0	0	2.958086
	3.16_2.03	FANTASY ISLAND PROPERTY LLC							0
	3.16_2.04	CITY OF CLIFTON							0
	3.16_201	UNKNOWN	0.107229	3.948916	0	0	0	0.034839	4.090984
	Submerged Lands	STATE OF NJ	0.264587	3.548621	0	0	0	0.115767	3.928975
Total			0.372292	11.685254	0	0	0	0.508202	12.565748
Metromedia Tract	137_22	UNKNOWN	Pending	Pending	Pending	Pending	Pending	Pending	Pending

SITE	BLOCK_LOT	OWNER	CIE	BPE	PBSDRE	NSAEE	NSWE	TWAE	TOTAL ACRES
	137_29	UNKNOWN	Pending	Pending	Pending	Pending	Pending	Pending	Pending
	137_31	UNKNOWN	Pending	Pending	Pending	Pending	Pending	Pending	Pending
	137_32	UNKNOWN	Pending	Pending	Pending	Pending	Pending	Pending	Pending
	137_33	UNKNOWN	Pending	Pending	Pending	Pending	Pending	Pending	Pending
	138_3	NEW JERSEY MEADOWLANDS COMMISSION	Pending	Pending	Pending	Pending	Pending	Pending	Pending
	138_4	NEW JERSEY MEADOWLANDS COMMISSION	Pending	Pending	Pending	Pending	Pending	Pending	Pending
	138_5	NEW JERSEY MEADOWLANDS COMMISSION	Pending	Pending	Pending	Pending	Pending	Pending	Pending
	138_6	NEW JERSEY MEADOWLANDS COMMISSION	Pending	Pending	Pending	Pending	Pending	Pending	Pending
	138_7	NEW JERSEY MEADOWLANDS COMMISSION	Pending	Pending	Pending	Pending	Pending	Pending	Pending
	138_8	DIECKMANN'S ESTATE C/O WENDICK	Pending	Pending	Pending	Pending	Pending	Pending	Pending
	138_9	NEW JERSEY MEADOWLANDS COMMISSION	Pending	Pending	Pending	Pending	Pending	Pending	Pending
	138_10	NEW JERSEY MEADOWLANDS COMMISSION	Pending	Pending	Pending	Pending	Pending	Pending	Pending
Total			0	0					0
Meadowlark Marsh	4005_1	NEW JERSEY TURNPIKE AUTHORITY	0.172924	2.565881	0	0	0	0	2.738805
	4006_1	NJ MEADOWLNDs COMMISSION	12.459567	62.584875	0	0	0	0	75.044442
	4006_2	NY SUSQUEHANNA & WESTERN RAILWAY	0	0.117491	0	0	0	0	0.117491
	4006_3	TRANSCONTINENTAL PIPE LINE CORP	0.038849	3.496141	0	0	0	0	3.53499
	4006_4	UNKNOWN	0	0.064536	0	0	0	0	0.064536
	4006_5	UNKNOWN	0.000141	0.25537	0	0	0	0	0.255511
	4007_1	UNKNOWN	0.05026	0.854687	0	0	0	0	0.904947
	4010_2	CSX TAX DEPT., C910	0	0	0	0	0	0	0
Total			12.721741	69.938981	0	0	0	0	82.660722
GRAND TOTAL			56.797798	141.68305	0	0	0	9.690256	208.171104

UPPER BAY

SITE	BLOCK_LOT	OWNER	CIE	BPE	BSDRE	NSAEE	NSWE	TWAE	TOTAL ACRES
Bush Terminal	725_1	SANITATION	0	0	0	3.442	0	0.2456	3.6876
	725_200	THE CITY OF NEW YORK	0	0	0	0.8127	0	6.4747	7.2874
	Submerged Lands	STATE OF NY	0	0	0	39.59203	0	7.585763	47.17779
Total			0	0	0	43.84673	0	14.30606	58.15279
Governors Island	1_10	GOVERNORS ISLAND CORP	0	0	0	0	0	0.931437	0.931437
	Submerged Lands	STATE OF NY	0	0	0	8.95213	0	0	8.95213
Total			0	0	0	8.95213	0	0.931437	9.883567
GRAND TOTAL			0	0	0	52.79886	0	15.2375	68.036357

LOWER BAY

SITE	BLOCK_LOT	OWNER	CIE	BPE	BSDRE	NSAEE	NSWE	TWAE	TOTAL ACRES
Naval Weapons Station Earle	Submerged Lands	STATE OF NJ	0	0	0	7.64	0	10.22	17.86
GRAND TOTAL			0	0	0	7.64	0	10.22	17.86

EXHIBIT “C”

ESTATES

CHANNEL IMPROVEMENT EASEMENT.

A perpetual and assignable right and easement to construct, operate, and maintain channel improvement works on, over and across the land described in Schedule A the purposes as authorized by the Act of Congress approved [Appropriate authority for the relevant Planning Region], including the right to clear, cut, fell, remove and dispose of any and all timber, trees, underbrush, buildings, improvements and/or other obstructions therefrom; to excavate: dredge, cut away, and remove any or all of said land and to place thereon dredge or spoil material; and for such other purposes as may be required in connection with said work of improvement; reserving, however, to the owners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

TEMPORARY WORK AREA EASEMENT.

A temporary easement and right-of-way in, on, over and across the land described in Schedule A for a period not to exceed [The appropriate term as applicable to the work being performed], beginning with date possession of the land is granted to the United States, for use by the United States, its representatives, agents, and contractors as a work area, including the right to move, store and remove equipment and supplies, and erect and remove temporary structures on the land and to perform any other work necessary and incident to the construction of the Hudson Raritan Estuary (HRE) and HRE – Lower Passaic River Ecosystem Restoration Project, together with the right to trim, cut, fell and remove therefrom all trees, underbrush, obstructions, and any other vegetation, structures, or obstacles within the limits of the right-of-way; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing

BANK PROTECTION EASEMENT.

A perpetual and assignable easement and right-of-way in, on, over and across the land hereinafter described for the location, construction, operation, maintenance, alteration, repair, rehabilitation and replacement of a bank protection works, and for the placement of stone, riprap and other materials for the protection of the bank against erosion; together with the continuing right to trim, cut, fell, remove and dispose therefrom all trees, underbrush, obstructions, and other vegetation; and to remove and dispose of structures or obstructions within the limits of the right-of-way; and to place thereon dredged, excavated or other fill material, to shape and grade said land to desired slopes and contour, and to prevent erosion by structural and vegetative methods and to do any other work necessary and incident to the project; together with the right of ingress and egress for such work; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however

PERPETUAL BEACH STORM DAMAGE REDUCTION EASEMENT.

A perpetual and assignable easement and right-of-way in, on, over and across the land described in Schedule A for use by the *[Name of appropriate non-Federal Sponsor]*, its representatives, agents, contractors, and assigns, to construct; preserve; patrol; operate; maintain; repair; rehabilitate; and replace; a public beach (*a dune system*) and other erosion control and storm damage reduction measures together with appurtenances thereto, including the right to deposit sand; to accomplish any alterations of contours on said land; to construct berms (*and dunes*); to nourish and renourish periodically; to move, store and remove equipment and supplies; to erect and remove temporary structures; and to perform any other work necessary and incident to the construction, periodic renourishment and maintenance of the Hudson Raritan Estuary (HRE) and HRE – Lower Passaic River Ecosystem Restoration Project, together with the right of public use and access; *(to plant vegetation on said dunes and berms; to erect, maintain and remove silt screens and sand fences; to facilitate preservation of dunes and vegetation through the limitation of access to dune areas;)* to trim, cut, fell, and remove from said land all trees, underbrush, debris, obstructions, and any other vegetation, structures and obstacles within the limits of the easement (*except_____*); *(reserving, however, to the grantor(s), (his) (her) (its) (their) (heirs), successors and assigns, the right to construct dune overwalk structures in accordance with any applicable Federal, State or local laws or regulations, provided that such structures shall not violate the integrity of the dune in shape, dimension or function, and that prior approval of the plans and specifications for such structures is obtained from the (designated representative of the Project Sponsor) and provided further that such structures are subordinate to the construction, operation, maintenance, repair, rehabilitation and replacement of the project; and further)* reserving to the grantor(s), *(his) (her) (its) (their) (heirs)*, successors and assigns all such rights and privileges as may be used and enjoyed without interfering with or abridging the rights and easements hereby acquired; subject however to existing easements for public roads and highways, public utilities, railroads and pipelines.

NONSTANDARD WETLAND EASEMENT

[Being drafted]

NONSTANDARD AQUATIC ENHANCEMENT EASEMENT

[Being drafted]

EXHIBIT “D”

BASELINE COST ESTIMATE FOR REAL ESTATE

BASELINE COST ESTIMATE FOR REAL ESTATE
HUDSON RARITAN ESTUARY ECOSYSTEM RESTORATION FEASIBILITY STUDY

	TENTATIVELY SELECTED PLAN REAL ESTATE COSTS	NON-FEDERAL	FEDERAL	TOTAL COSTS
01A	INCIDENTAL COSTS	\$224,400	\$0	\$224,400
01A1	Acquisition (Admin Costs)	\$224,400	\$0	\$224,400
01A1A	By the Non-Federal Sponsor (NFS)	\$224,400	-	
01A1B	By Government (Gov't) on behalf of NFS	-	-	
01A1C	By Gov't	-	\$0	
01A2	Survey	\$0	\$0	\$0
01A2A	By NFS	\$0	-	
01A2B	By Gov't on behalf of NFS	-	-	
01A2C	Review of NFS	-	\$0	
01A3	Appraisal	\$0	\$0	\$0
01A3A	By NFS	\$0	-	
01A3B	By Gov't on behalf of NFS	-	-	
01A3C	Review of NFS	-	\$0	
01A4	Title Services	\$0	\$0	\$0
01A4A	By NFS	\$0	-	
01A4B	By Gov't on behalf of NFS	-	-	
01A4C	Review of NFS	-	\$0	
01A5	Closing Services	\$0	\$0	\$0
01A5A	By NFS	\$0	-	
01A5B	By Gov't on behalf of NFS	-	-	
01A5C	Review of NFS	-	\$0	
01A6	Other Professional Services	\$0	\$0	\$0
01A6A	By NFS	\$0	-	
01A6B	By Gov't on behalf of NFS	-	-	
01A6C	Review of NFS	-	\$0	
01A7	PL 91-646 Assistance	\$0	\$0	\$0
01A7A	By NFS	\$0	-	
01A7B	By Gov't on behalf of NFS	-	-	
01A7C	Review of NFS	-	\$0	
01A8	Audit	\$0	\$0	\$0
01A8A	BY NFS	-	-	
01A9B	By Gov't	-	\$0	
01B	ACQUISITION COSTS	\$0	\$0	\$0
01B1	Land Payments	\$0	\$0	\$0
01B1A	By NFS	\$0	-	
01B1B	By Gov't on behalf of NFS	-	-	
01B2	Damage Payments	\$0	\$0	\$0
01B2A	By NFS	\$0	-	
01C2B	By Gov't on behalf of NFS	-	\$0	
01B3	PL 91-646 Payment	\$0	\$0	\$0
01B3A	By NFS	\$0	-	
01B3B	By Gov't on behalf of NFS	-	\$0	
01B4	Condemnation	\$0	\$0	\$0
01B4A	By NFS	\$0	-	
01B4B	By Gov't on behalf of NFS	-	\$0	
01B5	Disposals	\$0	\$0	\$0
01B5A	By Government	\$0	-	
01B5B	By NFS	-	-	
01B5C	By Gov't on behalf of NFS	-	\$0	
	Total Land & Damages (01A & 01B)	\$224,400	\$0	\$224,400
	Contingency (25%)	-	-	\$0
01	Grand Total Lands & Damages	\$224,400	\$0	\$224,400

**BASELINE COST ESTIMATE FOR REAL ESTATE
HUDSON RARITAN ESTUARY ECOSYSTEM RESTORATION FEASIBILITY STUDY
JAMAICA BAY**

	TENTATIVELY SELECTED PLAN REAL ESTATE COSTS	NON-FEDERAL	FEDERAL	TOTAL COSTS
01A	INCIDENTAL COSTS	\$81,600	\$0	\$81,600
01A1	Acquisition (Admin Costs)	\$81,600	\$0	\$81,600
01A1A	By the Non-Federal Sponsor (NFS)	\$81,600	-	
01A1B	By Government (Gov't) on behalf of NFS	-	-	
01A1C	By Gov't	-	\$0	
01A2	Survey	\$0	\$0	\$0
01A2A	By NFS	\$0	-	
01A2B	By Gov't on behalf of NFS	-	-	
01A2C	Review of NFS	-	\$0	
01A3	Appraisal	\$0	\$0	\$0
01A3A	By NFS	\$0	-	
01A3B	By Gov't on behalf of NFS	-	-	
01A3C	Review of NFS	-	\$0	
01A4	Title Services	\$0	\$0	\$0
01A4A	By NFS	\$0	-	
01A4B	By Gov't on behalf of NFS	-	-	
01A4C	Review of NFS	-	\$0	
01A5	Closing Services	\$0	\$0	\$0
01A5A	By NFS	\$0	-	
01A5B	By Gov't on behalf of NFS	-	-	
01A5C	Review of NFS	-	\$0	
01A6	Other Professional Services	\$0	\$0	\$0
01A6A	By NFS	\$0	-	
01A6B	By Gov't on behalf of NFS	-	-	
01A6C	Review of NFS	-	\$0	
01A7	PL 91-646 Assistance	\$0	\$0	\$0
01A7A	By NFS	\$0	-	
01A7B	By Gov't on behalf of NFS	-	-	
01A7C	Review of NFS	-	\$0	
01A8	Audit	\$0	\$0	\$0
01A8A	BY NFS	-	-	
01A9B	By Gov't	-	\$0	
01B	ACQUISITION COSTS	\$0	\$0	\$0
01B1	Land Payments	\$0	\$0	\$0
01B1A	By NFS	\$0	-	
01B1B	By Gov't on behalf of NFS	-	-	
01B2	Damage Payments	\$0	\$0	\$0
01B2A	By NFS	\$0	-	
01C2B	By Gov't on behalf of NFS	-	\$0	
01B3	PL 91-646 Payment	\$0	\$0	\$0
01B3A	By NFS	\$0	-	
01B3B	By Gov't on behalf of NFS	-	\$0	
01B4	Condemnation	\$0	\$0	\$0
01B4A	By NFS	\$0	-	
01B4B	By Gov't on behalf of NFS	-	\$0	
01B5	Disposals	\$0	\$0	\$0
01B5A	By Government	\$0	-	
01B5B	By NFS	-	-	
01B5C	By Gov't on behalf of NFS	-	\$0	
	Total Land & Damages (01A & 01B)	\$81,600	\$0	\$81,600
	Contingency (25%)	-	-	\$0
01	Grand Total Lands & Damages	\$81,600	\$0	\$81,600

**BASELINE COST ESTIMATE FOR REAL ESTATE
HUDSON RARITAN ESTUARY ECOSYSTEM RESTORATION FEASIBILITY STUDY
HARLEM RIVER, EAST RIVER, WESTERN LONG ISLAND**

	TENTATIVELY SELECTED PLAN REAL ESTATE COSTS	NON-FEDERAL	FEDERAL	TOTAL COSTS
01A	INCIDENTAL COSTS	\$74,800	\$0	\$74,800
01A1	Acquisition (Admin Costs)	\$74,800	\$0	\$74,800
01A1A	By the Non-Federal Sponsor (NFS)	\$74,800	-	
01A1B	By Government (Gov't) on behalf of NFS	-	-	
01A1C	By Gov't	-	\$0	
01A2	Survey	\$0	\$0	\$0
01A2A	By NFS	\$0	-	
01A2B	By Gov't on behalf of NFS	-	-	
01A2C	Review of NFS	-	\$0	
01A3	Appraisal	\$0	\$0	\$0
01A3A	By NFS	\$0	-	
01A3B	By Gov't on behalf of NFS	-	-	
01A3C	Review of NFS	-	\$0	
01A4	Title Services	\$0	\$0	\$0
01A4A	By NFS	\$0	-	
01A4B	By Gov't on behalf of NFS	-	-	
01A4C	Review of NFS	-	\$0	
01A5	Closing Services	\$0	\$0	\$0
01A5A	By NFS	\$0	-	
01A5B	By Gov't on behalf of NFS	-	-	
01A5C	Review of NFS	-	\$0	
01A6	Other Professional Services	\$0	\$0	\$0
01A6A	By NFS	\$0	-	
01A6B	By Gov't on behalf of NFS	-	-	
01A6C	Review of NFS	-	\$0	
01A7	PL 91-646 Assistance	\$0	\$0	\$0
01A7A	By NFS	\$0	-	
01A7B	By Gov't on behalf of NFS	-	-	
01A7C	Review of NFS	-	\$0	
01A8	Audit	\$0	\$0	\$0
01A8A	BY NFS	-	-	
01A9B	By Gov't	-	\$0	
01B	ACQUISITION COSTS	\$0	\$0	\$0
01B1	Land Payments	\$0	\$0	\$0
01B1A	By NFS	\$0	-	
01B1B	By Gov't on behalf of NFS	-	-	
01B2	Damage Payments	\$0	\$0	\$0
01B2A	By NFS	\$0	-	
01C2B	By Gov't on behalf of NFS	-	\$0	
01B3	PL 91-646 Payment	\$0	\$0	\$0
01B3A	By NFS	\$0	-	
01B3B	By Gov't on behalf of NFS	-	\$0	
01B4	Condemnation	\$0	\$0	\$0
01B4A	By NFS	\$0	-	
01B4B	By Gov't on behalf of NFS	-	\$0	
01B5	Disposals	\$0	\$0	\$0
01B5A	By Government	\$0	-	
01B5B	By NFS	-	-	
01B5C	By Gov't on behalf of NFS	-	\$0	
	Total Land & Damages (01A & 01B)	\$74,800	\$0	\$74,800
	Contingency (25%)	-	-	\$0
01	Grand Total Lands & Damages	\$74,800	\$0	\$74,800

**BASELINE COST ESTIMATE FOR REAL ESTATE
HUDSON RARITAN ESTUARY ECOSYSTEM RESTORATION FEASIBILITY STUDY
NEWARK BAY, HACKENSACK RIVER AND LOWER PASSAIC**

	TENTATIVELY SELECTED PLAN REAL ESTATE COSTS	NON-FEDERAL	FEDERAL	TOTAL COSTS
01A	INCIDENTAL COSTS	\$47,600	\$0	\$47,600
01A1	Acquisition (Admin Costs)	\$47,600	\$0	\$47,600
01A1A	By the Non-Federal Sponsor (NFS)	\$47,600	-	
01A1B	By Government (Gov't) on behalf of NFS	-	-	
01A1C	By Gov't	-	\$0	
01A2	Survey	\$0	\$0	\$0
01A2A	By NFS	\$0	-	
01A2B	By Gov't on behalf of NFS	-	-	
01A2C	Review of NFS	-	\$0	
01A3	Appraisal	\$0	\$0	\$0
01A3A	By NFS	\$0	-	
01A3B	By Gov't on behalf of NFS	-	-	
01A3C	Review of NFS	-	\$0	
01A4	Title Services	\$0	\$0	\$0
01A4A	By NFS	\$0	-	
01A4B	By Gov't on behalf of NFS	-	-	
01A4C	Review of NFS	-	\$0	
01A5	Closing Services	\$0	\$0	\$0
01A5A	By NFS	\$0	-	
01A5B	By Gov't on behalf of NFS	-	-	
01A5C	Review of NFS	-	\$0	
01A6	Other Professional Services	\$0	\$0	\$0
01A6A	By NFS	\$0	-	
01A6B	By Gov't on behalf of NFS	-	-	
01A6C	Review of NFS	-	\$0	
01A7	PL 91-646 Assistance	\$0	\$0	\$0
01A7A	By NFS	\$0	-	
01A7B	By Gov't on behalf of NFS	-	-	
01A7C	Review of NFS	-	\$0	
01A8	Audit	\$0	\$0	\$0
01A8A	BY NFS	-	-	
01A9B	By Gov't	-	\$0	
01B	ACQUISITION COSTS	\$0	\$0	\$0
01B1	Land Payments	\$0	\$0	\$0
01B1A	By NFS	\$0	-	
01B1B	By Gov't on behalf of NFS	-	-	
01B2	Damage Payments	\$0	\$0	\$0
01B2A	By NFS	\$0	-	
01C2B	By Gov't on behalf of NFS	-	\$0	
01B3	PL 91-646 Payment	\$0	\$0	\$0
01B3A	By NFS	\$0	-	
01B3B	By Gov't on behalf of NFS	-	\$0	
01B4	Condemnation	\$0	\$0	\$0
01B4A	By NFS	\$0	-	
01B4B	By Gov't on behalf of NFS	-	\$0	
01B5	Disposals	\$0	\$0	\$0
01B5A	By Government	\$0	-	
01B5B	By NFS	-	-	
01B5C	By Gov't on behalf of NFS	-	\$0	
	Total Land & Damages (01A & 01B)	\$47,600	\$0	\$47,600
	Contingency (25%)	-	-	\$0
01	Grand Total Lands & Damages	\$47,600	\$0	\$47,600

**BASELINE COST ESTIMATE FOR REAL ESTATE
HUDSON RARITAN ESTUARY ECOSYSTEM RESTORATION FEASIBILITY STUDY
UPPER BAY**

	TENTATIVELY SELECTED PLAN REAL ESTATE COSTS	NON-FEDERAL	FEDERAL	TOTAL COSTS
01A	INCIDENTAL COSTS	\$13,600	\$0	\$13,600
01A1	Acquisition (Admin Costs)	\$13,600	\$0	\$13,600
01A1A	By the Non-Federal Sponsor (NFS)	\$13,600	-	
01A1B	By Government (Gov't) on behalf of NFS	-	-	
01A1C	By Gov't	-	\$0	
01A2	Survey	\$0	\$0	\$0
01A2A	By NFS	\$0	-	
01A2B	By Gov't on behalf of NFS	-	-	
01A2C	Review of NFS	-	\$0	
01A3	Appraisal	\$0	\$0	\$0
01A3A	By NFS	\$0	-	
01A3B	By Gov't on behalf of NFS	-	-	
01A3C	Review of NFS	-	\$0	
01A4	Title Services	\$0	\$0	\$0
01A4A	By NFS	\$0	-	
01A4B	By Gov't on behalf of NFS	-	-	
01A4C	Review of NFS	-	\$0	
01A5	Closing Services	\$0	\$0	\$0
01A5A	By NFS	\$0	-	
01A5B	By Gov't on behalf of NFS	-	-	
01A5C	Review of NFS	-	\$0	
01A6	Other Professional Services	\$0	\$0	\$0
01A6A	By NFS	\$0	-	
01A6B	By Gov't on behalf of NFS	-	-	
01A6C	Review of NFS	-	\$0	
01A7	PL 91-646 Assistance	\$0	\$0	\$0
01A7A	By NFS	\$0	-	
01A7B	By Gov't on behalf of NFS	-	-	
01A7C	Review of NFS	-	\$0	
01A8	Audit	\$0	\$0	\$0
01A8A	BY NFS	-	-	
01A9B	By Gov't	-	\$0	
01B	ACQUISITION COSTS	\$0	\$0	\$0
01B1	Land Payments	\$0	\$0	\$0
01B1A	By NFS	\$0	-	
01B1B	By Gov't on behalf of NFS	-	-	
01B2	Damage Payments	\$0	\$0	\$0
01B2A	By NFS	\$0	-	
01C2B	By Gov't on behalf of NFS	-	\$0	
01B3	PL 91-646 Payment	\$0	\$0	\$0
01B3A	By NFS	\$0	-	
01B3B	By Gov't on behalf of NFS	-	\$0	
01B4	Condemnation	\$0	\$0	\$0
01B4A	By NFS	\$0	-	
01B4B	By Gov't on behalf of NFS	-	\$0	
01B5	Disposals	\$0	\$0	\$0
01B5A	By Government	\$0	-	
01B5B	By NFS	-	-	
01B5C	By Gov't on behalf of NFS	-	\$0	
	Total Land & Damages (01A & 01B)	\$13,600	\$0	\$13,600
	Contingency (25%)	-	-	\$0
01	Grand Total Lands & Damages	\$13,600	\$0	\$13,600

**BASELINE COST ESTIMATE FOR REAL ESTATE
HUDSON RARITAN ESTUARY ECOSYSTEM RESTORATION FEASIBILITY STUDY
LOWER BAY**

	TENTATIVELY SELECTED PLAN REAL ESTATE COSTS	NON-FEDERAL	FEDERAL	TOTAL COSTS
01A	INCIDENTAL COSTS	\$6,800	\$0	\$6,800
01A1	Acquisition (Admin Costs)	\$6,800	\$0	\$6,800
01A1A	By the Non-Federal Sponsor (NFS)	\$6,800	-	
01A1B	By Government (Gov't) on behalf of NFS	-	-	
01A1C	By Gov't	-	\$0	
01A2	Survey	\$0	\$0	\$0
01A2A	By NFS	\$0	-	
01A2B	By Gov't on behalf of NFS	-	-	
01A2C	Review of NFS	-	\$0	
01A3	Appraisal	\$0	\$0	\$0
01A3A	By NFS	\$0	-	
01A3B	By Gov't on behalf of NFS	-	-	
01A3C	Review of NFS	-	\$0	
01A4	Title Services	\$0	\$0	\$0
01A4A	By NFS	\$0	-	
01A4B	By Gov't on behalf of NFS	-	-	
01A4C	Review of NFS	-	\$0	
01A5	Closing Services	\$0	\$0	\$0
01A5A	By NFS	\$0	-	
01A5B	By Gov't on behalf of NFS	-	-	
01A5C	Review of NFS	-	\$0	
01A6	Other Professional Services	\$0	\$0	\$0
01A6A	By NFS	\$0	-	
01A6B	By Gov't on behalf of NFS	-	-	
01A6C	Review of NFS	-	\$0	
01A7	PL 91-646 Assistance	\$0	\$0	\$0
01A7A	By NFS	\$0	-	
01A7B	By Gov't on behalf of NFS	-	-	
01A7C	Review of NFS	-	\$0	
01A8	Audit	\$0	\$0	\$0
01A8A	BY NFS	-	-	
01A9B	By Gov't	-	\$0	
01B	ACQUISITION COSTS	\$0	\$0	\$0
01B1	Land Payments	\$0	\$0	\$0
01B1A	By NFS	\$0	-	
01B1B	By Gov't on behalf of NFS	-	-	
01B2	Damage Payments	\$0	\$0	\$0
01B2A	By NFS	\$0	-	
01C2B	By Gov't on behalf of NFS	-	\$0	
01B3	PL 91-646 Payment	\$0	\$0	\$0
01B3A	By NFS	\$0	-	
01B3B	By Gov't on behalf of NFS	-	\$0	
01B4	Condemnation	\$0	\$0	\$0
01B4A	By NFS	\$0	-	
01B4B	By Gov't on behalf of NFS	-	\$0	
01B5	Disposals	\$0	\$0	\$0
01B5A	By Government	\$0	-	
01B5B	By NFS	-	-	
01B5C	By Gov't on behalf of NFS	-	\$0	
	Total Land & Damages (01A & 01B)	\$6,800	\$0	\$6,800
	Contingency (25%)	-	-	\$0
01	Grand Total Lands & Damages	\$6,800	\$0	\$6,800

EXHIBIT “E”

NON-FEDERAL SPONSOR CAPABILITY ASSESSMENT CHECKLIST

ASSESSMENT OF NON-FEDERAL SPONSOR'S REAL ESTATE ACQUISITION CAPABILITY

[SPONSOR NAME AND SITES]

I. Legal Authority.

- a. Does the sponsor have legal authority to acquire and hold title to real property for project purposes?
- b. Does the sponsor have the power of eminent domain for this project?
- c. Does the sponsor have "quick-take" authority for this project?
- d. Are any of the lands/interests in land required for the project located outside the sponsor's political boundary?
- e. Are any of the lands/interests in land required for the project owned by an entity whose property the sponsor cannot condemn?

II. Human Resource Requirements.

- a. Will the sponsor's in-house staff require training to become familiar with the real estate requirements of Federal projects including P.L. 91-646, as amended?
- b. If the answer to II.a is "yes," has a reasonable plan been developed to provide such training?
- c. Does the sponsor's in-house staff have sufficient real estate acquisition experience to meet its responsibilities for the project?
- d. Is the sponsor's projected in-house staffing level sufficient considering its other workload, if any, and the project schedule?
- e. Can the sponsor obtain contractor support, if required in a timely fashion?
- f. Will the sponsor likely request USACE assistance in acquiring real estate?

III. Other Project Variables.

- a. Will the sponsor's staff be located within reasonable proximity to the project site?
- b. Has the sponsor approved the project/real estate schedule/milestones?

IV. Overall Assessment.

- a. Has the sponsor performed satisfactorily on other USACE projects?

b. With regard to this project, the sponsor is anticipated to be: highly capable/fully capable/moderately capable/marginally capable/insufficiently capable. If sponsor is believed to be “insufficiently capable,” provide explanation.

V. Coordination.

- a. Has this assessment been coordinated with the sponsor?
- b. Does the sponsor concur with this assessment?

Concur:

[SPONSOR REPRESENTATIVE NAME]
[SPONSOR REPRESENTATIVE TITLE]
[SPONSOR ORGANIZATION]

Reviewed and approved by:

Noreen Dean Dresser
Chief of Real Estate Division
Real Estate Contracting Officer
New York District Corps of Engineers

EXHIBIT “F”
RESTORATION MEASURES

Measure	Description
Emergent Wetland Creation	Excavating and filling areas to create an emergent wetland to replace upland invasive areas to provide a habitat that is less likely to become revegetated with the same upland invasive species.
Forested and/or Scrub/Shrub Wetland Creation	Excavating and filling areas to create a forested and/or scrub/shrub wetland to provide continuous fringe habitat around and shade for fish habitat (from trees/shrubs).
Invasive Species Removal with Native Plantings	Removal of non-native plants and replanting those areas with plants native to the ecosystem. Invasive species removal will be in coordination with other ecological restoration measures
Shoreline Softening	The removal of existing structures and armoring and creating a living shoreline to protect against erosion and to provide and preserve natural habitat.
Bank Stabilization	Establishing and implementing measures to prevent and/or fix erosion and stabilize the embankment.
Riparian Buffer	Establishing and implementing measures to prevent and/or fix erosion and stabilize the embankment.
Realign Channel w-Instream Structures	Changing the realignment of the channel and utilizing instream structures to modify the channel's hydrologic and hydraulic characteristics.
Channel Plug w-Select Native Plantings (Realign Channel w-Instream Structures)	Block water from entering the secondary channel to create more adequate stream morphology in the main channel section.
Channel Modification w-Instream Structures	Modifications within the channel to steer, direct, and/or control the channel away from a specific area. The channel will remain within its current banks, but that sinuosity/more stable geometry will be achieved with the structures.
Bed Restoration	Modifications to the channel bed to create a low flow channel.
Debris Removal	The removal of substantial debris within the channel.
Sediment Dredging	Dredging of sediment laden areas within the channel to fix the hydraulic characteristics within the channel.
Forebay/Sediment Basin	Creation of forebay/sediment basin to capture sediment laden water and reduce the amount of sediment from settling in the channel.
Sediment Load Reduction	The reduction of sediment erosion in specified location.
Fish Ladders	A structure that allows fish to migrate around obstacles like dams.
Weir Modification (Fish Passage)	Modifying the existing weir to create modifications to the hydraulic characteristics of the weir.
Bench w-Viewshed	The addition of a bench with a viewing area.
Wildlife View Platform/Designated Area	The addition of a wildlife viewing platform for public.
Boat/Water Access	Creating a boat/water access for the public to access the water.
Proposed Path	Realignment of the existing path to avoid proposed restoration measures.
Educational Signage	Addition of education signage for public use.
Spat on Shell Oyster Beds	Produced through aquaculture using local broodstock
Reef Balls	A half dome concrete structure. Within the top and surface of the structure, holes are placed allowing the water to flow through the

Measure	Description
	structure and allows for fish and other aquatic creatures to inhabit the structures interior.
Oyster Condos	Triangular structures constructed with welded rebar designed to hold gabion bags of oysters upright in the water column
Wire Cages / Gabion Blocks	Wire cages are filled with oyster shells pre-seeded with spat. The cages are then left on the bottom.
Hanging Trays	Square or rectangular, high-density polyethylene crates that allow for the placement of oysters vertically in the water column. To restore oysters, as opposed to constructing oyster reefs, sets of interlocking trays can be suspended from a structure or a float, allowing water to circulate and flow through the trays and disperse veliger (larvae) to the water column and, ultimately, to nearby constructed reefs or beds, or other areas of hard substrate.
Lantern Bags	Mesh bag filled with oysters placed on the bottom historically used in aquaculture and shoreline stabilization efforts