

## FILE NAME

"Application.VCP.v00615.2004-10-25.Application\_VCP.pdf"

## NOTE

- Contains folded images. Images must be copied in their entirety.
- Images may contain color.
- Documents must be returned in the same arrangement in which they were received.

**\*Please return electronic copies to Sally Dewes\***

New York State Department of Environmental Conservation  
Notification of Availability for Review



**To** GEORGE D HYDE  
THOMAS GIBBONS

**From** KATHRYN D MCGUCKIN **Send Date** October 20, 2004  
NYSDEC REGION 2 HEADQUARTERS **Reply By** November 01, 2004  
LONG ISLAND CITY NY 11101 5407

**Application Id** 2-6401-00280/00002 **Batch ID** 940316

**SPDES ID** **Mined Land ID** **Solid Waste ID**

**Permits Applied** 1 - Article 25 Tidal Wetlands  
1 - Section 401 - Clean Water Act Water Quality Certification

**Applicant/Owner** PORT AUTHORITY OF NEW YORK & NEW JERSEY **Owner ID** 19867

**Facility Name** PORT IVORY

**County** RICHMOND COUNTY **NYTM-E:**  
**Town** STATEN ISLAND **NYTM-N:**

**Description**  
Intermodal Facility

**Sender Comments**

**George:**

The Applicant needs a SPDES General Permit for Construction Activities. They have submitted their NOITT to Albany and have sent the SWPPP to us along with their other application materials. Please review the SWPPP and let me know if it is acceptable. I also need to know whether the facility will need a SPDES Industrial Permit.

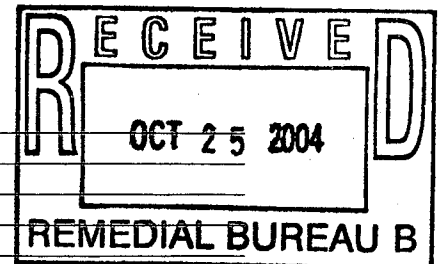
**Tom:**

The attached application os for a facility (Port Ivory) that is enrolled in DEC's Voluntary Clean-Up Program. Dan Walsh suggested that you would be the person to review the application for consistency with the VCP program.

Thank you both for your time and expertise. Please email your comments/questions to me by Monday, October 1, 2004.

Reviewer Comments / Recommendations

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Comments continued on back \_\_\_\_\_

Comments attached \_\_\_\_\_

Reviewed By \_\_\_\_\_  
(name)

UPS Delivery

14<sup>th</sup> Floor SW

September 15, 2004

Mr. John Cryan  
Regional Permit Administrator  
New York State Department of Environmental Conservation  
47-40 21<sup>st</sup> Street  
Long Island City, NY 11101

Re: HHMT-Port Ivory Intermodal Facility (PIIF).

Dear Mr. Cryan:

With regard to the referenced matter, the Port Authority of New York and New Jersey herewith submits a "Joint Application for Permit" form and supporting documents for your review. Concurrently, permit and approval application forms are being submitted to the ACOE and the NYSDOS for the project (copies enclosed).

The proposed project involves the construction of a new intermodal facility at Port Ivory, a former Proctor & Gamble manufacturing facility located in the northwest corner of Staten Island. The intermodal facility will provide for the transfer of shipping containers to and from rail cars for distribution to other states in support of the container terminal operations at the Port Authority's Howland Hook Marine Terminal.

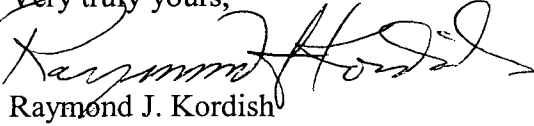
The project will be constructed in three phases. Phase 1A at the PIIF site will include five loading/unloading rail tracks, a new paved "tabletop", a bridge over Bridge Creek connecting the CTO with the PIIF, and a "lead track" joining the PIIF with the Staten Island Railroad North Connection, the Chemical Coast Line in New Jersey, and to other linked rail systems. Phase 1B will include two additional loading/unloading rail tracks within the PIIF, tentatively scheduled on or about 2008. Phase 2, anticipates four additional rail tracks within the PIIF, with a projected time frame of 2010+. Permit applications for project elements in the subsequent phases will be submitted within the projected time frames.

Mitigation for project impacts will involve the re-profiling—deepening and widening—of approximately 2,600 feet of Bridge Creek downstream of the Western Avenue Bridge, within Port Authority property, to enhance tidal flow upstream into a degraded wetland site east of Western Avenue.

**THE PORT AUTHORITY OF NY & NJ**

Thank you for your consideration of this matter. Please call me at (973) 565-7564 if you have any questions or require additional information.

Very truly yours,



Raymond J. Kordish  
Permits and Governmental Approvals  
Environmental Engineering Unit

Enclosures

Cc: S. Zahn, NYSDEC, DMR  
M. Vissichelli, ACOE, EPS  
V. Barr, NYSDOS, CMP  
W. Woods, NYCDP, WRP

# JOINT APPLICATION FOR PERMIT



New York State  
United States Army Corps of Engineers

95-19-3 (8/00) pfp

Applicable to agencies and permit categories listed in Item 1. Please read all instructions on back. Attach additional information as needed. Please print legibly or type.

### 1. Check permits applied for:

#### NYS Dept. of Environmental Conservation

- Stream Disturbance (Bed and Banks)
- Navigable Waters (Excavation and Fill)
- Docks, Moorings or Platforms (Construct or Place)
- Dams and Impoundment Structures (Construct, Reconstruct or Repair)
- Freshwater Wetlands
- Tidal Wetlands
- Coastal Erosion Control
- Wild, Scenic and Recreational Rivers
- 401 Water Quality Certification
- Potable Water Supply
- Long Island Wells
- Aquatic Vegetation Control
- Aquatic Insect Control
- Fish Control

#### NYS Office of General Services (State Owned Lands Under Water)

- Lease, License, Easement or other Real Property Interest Utility Easement (pipelines, conduits, cables, etc.)
- Docks, Moorings or Platforms (Construct or Place)

#### Adirondack Park Agency

- Freshwater Wetlands Permit
- Wild, Scenic and Recreational Rivers

#### Lake George Park Commission

- Docks (Construct or Place)
- Moorings (Establish)

#### US Army Corps of Engineers

- Section 404 (Waters of the United States)
- Section 10 (Rivers and Harbors Act)
- Nationwide Permit (s) Identify Number(s)

For Agency Use Only:  
DEC APPLICATION NUMBER

US ARMY CORPS OF ENGINEERS

### 2. Name of Applicant (Use full name)

The Port Authority of New York and New Jersey

### Telephone Number (daytime)

973-565-7565

### Mailing Address

Two Gateway Center, 14th Floor SW

### Post Office

Newark

### State

NJ

### Zip Code

07102

### 3. Taxpayer ID (If applicant is not an individual)

### 4. Applicant is a/an: (check as many as apply)

- Owner
- Operator
- Lessee
- Municipality / Governmental Agency

Bi-State Authority

### 5. If applicant is not the owner, identify owner here - otherwise, you may provide Agent/Contact Person information.

Owner or Agent/Contact Person  Owner  Agent /Contact Person

Bernice R. Malione

### Telephone Number (daytime)

973-565-7565

### Mailing Address

Same as item 2.

### Post Office

### State

### Zip Code

### 6. Project / Facility Location (mark location on map, see instruction 1a.)

County: Richmond Town/City/Village: New York

Tax Map Section/Block /Lot Number:

### Location (including Street or Road)

40 Western Avenue

### Telephone Number (daytime)

718-981-9693

### Post Office

Staten Island

### State

NY

### Zip Code

10303

### 7. Name of Stream or Waterbody (on or near project site)

Bridge Creek; Arthur Kill

### 8. Name of USGS Quad Map:

### Location Coordinates:

NYTM-E

NYTM-N 4

### 9. Project Description and Purpose: (Category of Activity e.g. new construction/installation, maintenance or replacement; Type of Structure or Activity e.g. bulkhead, dredging, filling, dam, dock, taking of water; Type of Materials and Quantities; Structure and Work Area Dimensions; Need or Purpose Served)

As part of the Phase 1A development of a five-track, intermodal facility (rail transfer of shipping containers) at the Howland Hook Marine Terminal Port Ivory site, the Port Authority proposes to construct a new bridge and a storm water outfall, and reconstruct two storm water outfalls within the regulated tidal wetland zone of Bridge Creek. Mitigation for the loss of wetlands due to the project will consist of re-profiling part of the bed and banks of Bridge Creek to enhance tidal flow to off-site, upstream, tidal wetlands.

Project details are provided in the enclosed application documents.

### 10. Proposed Use:

- Private
- Public
- Commercial

### 11. Will Project Occupy State Land?

- Yes
- No

### 12. Proposed Start Date:

1/2005

### 13. Estimated Completion Date:

9/2006

### 14. Has Work Begun on Project? (If yes, attach explanation of why work was started without permit.)

- Yes
- No

### 15. List Previous Permit / Application Numbers and Dates: (If Any)

### 16. Will this Project Require Additional Federal, State, or Local Permits?

- Yes
- No

If Yes, Please List: ACOE, Section 10/404; NYSDOS, CMP Concurrence.

### 17. If applicant is not the owner, both must sign the application

I hereby affirm that information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law. Further, the applicant accepts full responsibility for all damage, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from said project. In addition, Federal Law, 18 U.S.C., Section 1001 provides for a fine of not more than \$10,000 or imprisonment for not more than 5 years, or both where an applicant knowingly and willingly falsifies, conceals, or covers up a material fact; or knowingly makes or uses a false, fictitious or fraudulent statement.

Date 9-10-04 Signature of Applicant Peter J. Zup

Contact Person

Date 9-10-04 Signature of Owner Bernice R. Malione

Francis J. Lombardi, P.E.

Title Chief Engineer

Bernice R. Malione

Title Supervisor, PGA, Enviro. Engr.

# Joint Application For Permit – New York State and U.S. Army Corps of Engineers

## Additional Text

### 9. Project Description and Purpose

#### *Introduction*

The Port Authority of New York and New Jersey (the Port Authority) is proposing the construction of a new intermodal facility at Port Ivory in Staten Island, New York. Figure 1 on the following page shows the location of the project. The Port Ivory Intermodal Facility (PIIF) will provide for the transfer of shipping containers to and from rail cars for distribution to other states. (See HAR Drawing HA-1.) The intermodal facility will be a support unit for the container terminal operations (CTO) located west of the PIIF, at the Port Authority's Howland Hook Marine Terminal (HHMT).

The project site is the former Proctor & Gamble's Ivory Soap manufacturing facility located in the northwest corner of Staten Island. The PIIF site is bound by Western Avenue to the south and east, Bridge Creek to the south and west, and Richmond Terrace to the north. The site once contained over thirty manufacturing buildings, most of which have been demolished by the Port Authority.

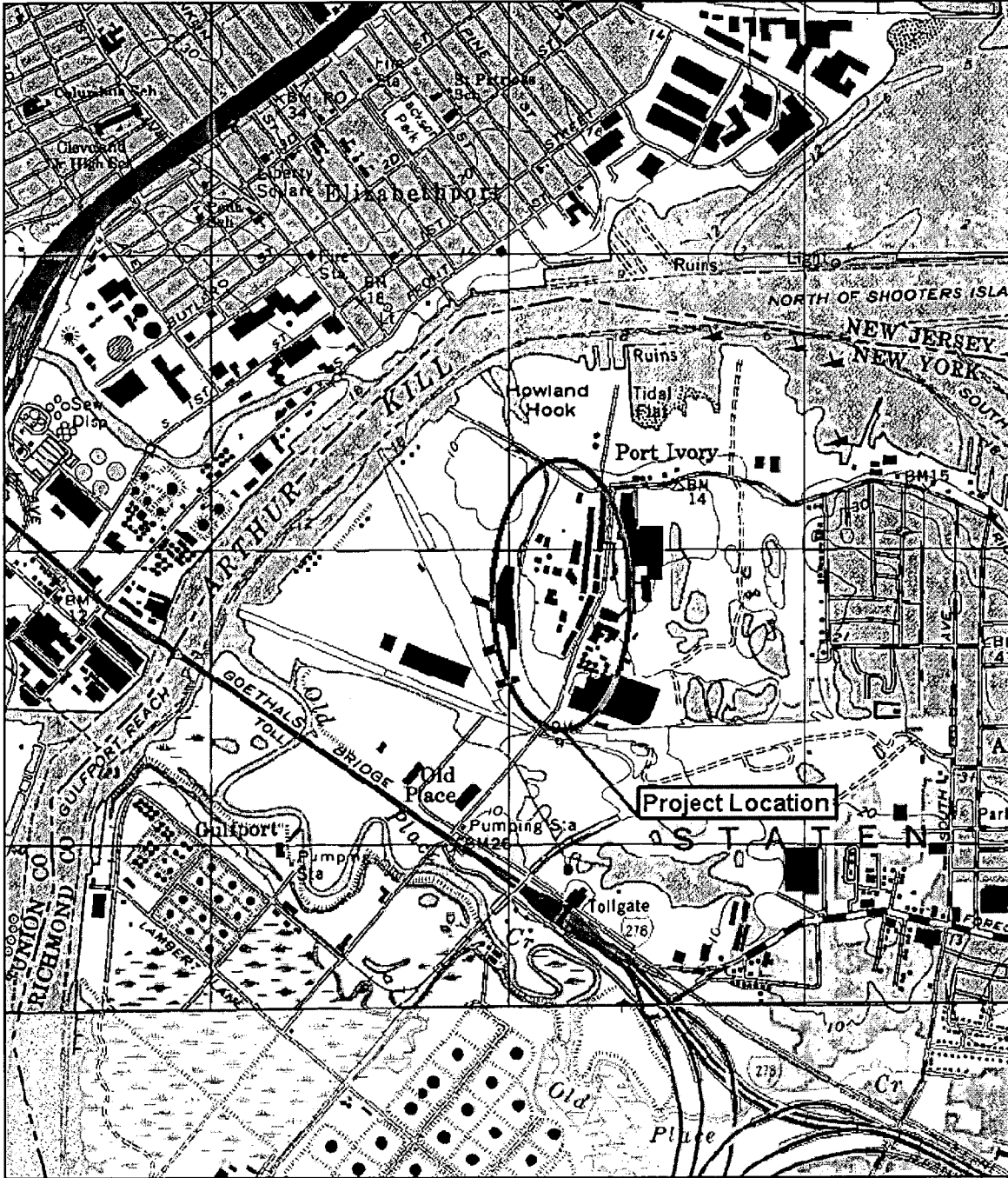
#### *Existing Conditions*

Bridge Creek is a tidal creek connected to the Arthur Kill in the northwest corner of Staten Island. Historically, Bridge Creek has been impacted by development throughout its length. On the east side, where the PIIF is proposed, fill material was placed in prior years to the edge of the creek resulting in relatively steep banks. In addition to the fill material, riprap was placed along the sides of the creek at a number of locations. The riprap (2"-4" stone) ranges from 2 to 5 feet in height at various locations along its length. Both sides of Bridge Creek, to varying degrees, are vegetated by tidal wetland and upland plants (see application drawing Sheets 1, 3, 5 and 7).

Figure 4 on page 13 of the HAR depicts the wetlands on the site as classified by the New York State Department of Environmental Conservation. Bridge Creek is noted as "coastal shoals, bars, and mudflats" (SM), which changes to "littoral zone" (LZ) north of Richmond Terrace where the creek joins the Arthur Kill. Also noted on this figure is a group of "freshwater wetlands" (FW) located east of the PIIF property line.

There are seven existing, non-functioning, storm water outfalls to Bridge Creek from the PIIF site (see SWPPP, Figure 3).

Figure 1 – Project Location



Scale 50,000:1

The upland portion of the site had been extensively disturbed throughout the 1900's. Fill material was deposited over the site and industrial buildings were erected. Following closure of the Proctor and Gamble Company manufacturing facility and the sale of the property to the Port Authority, the majority of structures were removed and the site was enrolled in the NYSDEC's voluntary clean up program. The buildings remaining are located on the eastern side of the site, adjacent to Western Avenue. The only vegetation on the PIIF site is along both sides of Bridge Creek and scattered landscaped areas in the vicinity of the remaining buildings.

The HAR discusses the wildlife and vegetation species observed or expected to occur on the site. State or federally listed species were not observed, or are known to use the site. Potential impacts to wildlife species are also discussed in the report.

### *Proposed Action*

Phase 1A at the PIIF site will include five loading/unloading rail tracks, a new paved "tabletop", a bridge over Bridge Creek connecting the CTO with the PIIF, and a "lead track" joining the PIIF with the Staten Island Railroad North Connection, the Chemical Coast Line in New Jersey, and rail systems into other states. Phase 1B will include two additional loading/unloading rail tracks within the PIIF, tentatively scheduled on or about 2008. Phase 2, anticipates four additional rail tracks within the PIIF, with a projected time frame of 2010+. [See enclosed "Storm Water Pollution Prevention Plan" (SWPPP) Drawing SK3.] Permit applications for project elements in the subsequent phases will be submitted within the projected time frames.

In Phase 1A, the PIIF will be connected to the existing CTO by a new bridge (approximately 53x120-foot) over Bridge Creek. Figure 3 (S2) in the HAR shows the proposed bridge layout and profile. (Detail also shown on drawing Sheets 5 and 6.)

Stormwater improvements include a new closed storm water system. The proposed storm water system will include a higher level of treatment than currently exists at the site through use of water quality treatment units (vortex chambers) placed before all outfalls to Bridge Creek. During Phase 1A at the proposed PIIF, two outfalls (L and C) will be reconstructed and one new outfall (H-ALT) will be constructed. Three of the remaining outfalls will be reconstructed during one or both of the later phases of the project. The existing outfall pipes are in poor condition and are undersized for the storm water proposed to outlet at these locations. Two existing outfalls will be abandoned. (See drawing Sheets 2, 4 and 8 and SWPPP figures for additional details.)

A lighting system will be installed to facilitate 24-hour activities at the site. A fire protection system will also be installed, with hydrants at key locations throughout the site. Figure 2 (HA-1) on page 8 of the HAR shows the overall site plan for the proposed activities. New York City sewer and water lines are located in Western Avenue and are connected to the existing buildings.



The wetland impacts associated with this project involve: the placement of the easterly bridge abutment within the intertidal zone of Bridge Creek; portions of the headwalls of outfalls L and H-ALT; and grading and placement of backfill material (including riprap) within the tidal zone at the outfalls and at the bridge footings for bed and bank stabilization. The areas of impact to both wetlands and NYSDEC regulated buffer zone are tabulated below. The areas in brackets represent the loss of wetlands (i.e., below MHW) due to the proposed structures and to riprap erosion control measures.

<b>Summary of Wetland Impacts</b>	
<b>Impact Site</b>	<b>Area of Impact (square feet)</b>
Outfall L	400 (below MHW=100)
Outfall C	990 (below MHW=225)
Bridge	5,600 (below MHW=570)
Outfall H-Alt	900 (below MHW=150)

Construction of the bridge abutments will require the installation of steel sheet pile cofferdams to allow work to continue throughout the daily tidal cycles. The sheet piles will be cut off at or below the mudline following completion of construction. Riprap will be added for slope and erosion protection as shown on Figure 2 (S2), page 9, of the HAR.

As part of Phase 1A, the Port Authority also proposes to replace and upgrade a section of the “lead track” that will connect the PIIF with the Staten Island Railroad tracks at the southerly end of the project site. This project element will include upgrading the existing storm water drainpipes located at the foot of the embankment leading to the Staten Island Railroad tracks in Arlington Yard. [See enclosed drawing C39 and SWPPP Drawing N1 (1 of 6).] The pipes convey storm water from Mariner’s Marsh to the east, under the “lead track”, to Bridge Creek to the west.

*Mitigation*

The loss of tidal wetlands (below MHW elevation 3.18’ NGVD 29; 2.08’ NAVD 88) due to project features will be mitigated as directed by the NYSDEC. As mitigation, approximately 2,600 feet of Bridge Creek downstream of the Western Avenue Bridge, within Port Authority property, will be re-profiled—deepened (elevation 1.6’ NGVD 29; 0.5’ NAVD 88) and widened (15’min. at creek bottom)—to enhance tidal flow upstream into a degraded wetland site east of Western Avenue that is being restored by the NYSDEC. Approximately 3,300 cubic yards of creek bed and bank soils will be removed for containment and disposal behind gabions as indicated on the drawings. The bottom of the gabions will be located above MHW. Immediately following the re-profiling, all disturbed areas of the site will be stabilized with riprap, as may be necessary, and replanted with native plants. The set of the mitigation plans is enclosed.

## *Alternatives to the Proposed Action*

Various alternatives were considered for the proposed project and project elements and are discussed below.

### No Build Alternative

If the proposed PIIF is not constructed, the CTO would continue to transport containers via trucks to their respective destinations. Without implementation of an intermodal component, truck traffic would increase in response to increased container shipments, adding to congestion and air pollution on area and distant roadways.

### Alternative Intermodal Sites

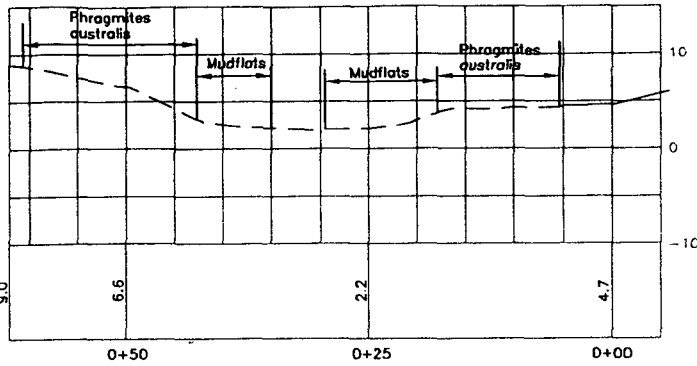
Review of alternative sites for an intermodal facility was simplified because of the requirements of such a facility and the characteristics of the Port Ivory site. The Port Ivory site has rail access to an interstate railroad system, is an industrial site, is adjacent to a viable container ship terminal, has the area required for a multiple rail track layout, has the area need for container transfer vehicle movement, has the area required for the temporary storage of containers waiting for shipment, and the site was available for purchase. These characteristics could not be duplicated on another site within this sector of Staten Island. Therefore, the Port Ivory site was selected for the development of an intermodal facility.

### Alternative Bridge Locations

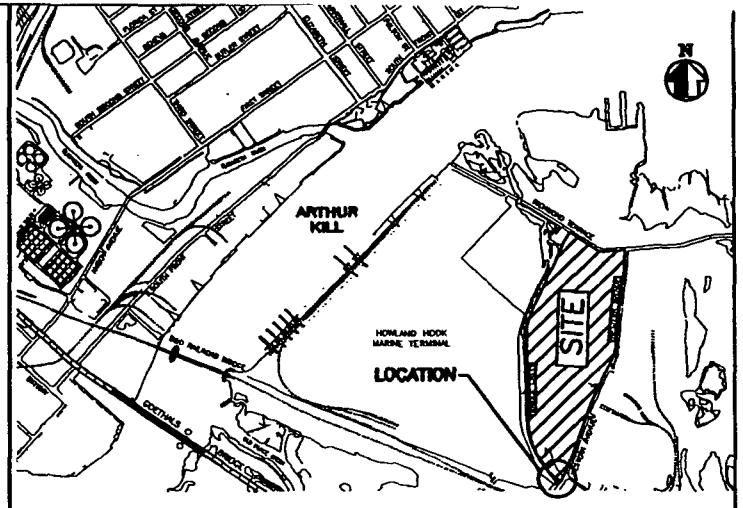
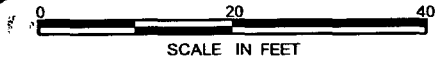
The proposed location for the Bridge Creek crossing was selected for its operational efficiency. The existing CTO has a 30-foot wide transport vehicle lane that bisects the site and runs in a southeasterly direction from the piers at the Arthur Kill to Bridge Creek. This is the CTO's main corridor for specialized vehicles transporting containers between the storage areas of the CTO and ocean-going container vessels. The intent and need is for the proposed bridge to the PIIF to be an extension of this corridor. Containers at the dock, or within the storage yard, will be able to be transferred by the specialized vehicles directly across Bridge Creek and onto waiting rail cars or temporary storage areas. Empty containers will follow the same process in reverse.

Another factor in the bridge location selection process was operational security throughout the CTO and PIIF. The CTO is segregated in a way that keeps conventional employee and support vehicles separate from arriving and departing container transport trucks. This is done through the use of separate entrances and security gates. Currently there are two separate crossings of Bridge Creek that directly access the CTO. One crossing, off Western Avenue, provides visitor and employee access to the administration building. The second, and northernmost crossing, is along a westerly section of Richmond Terrace recently de-mapped and incorporated into the Port Authority's HHMT

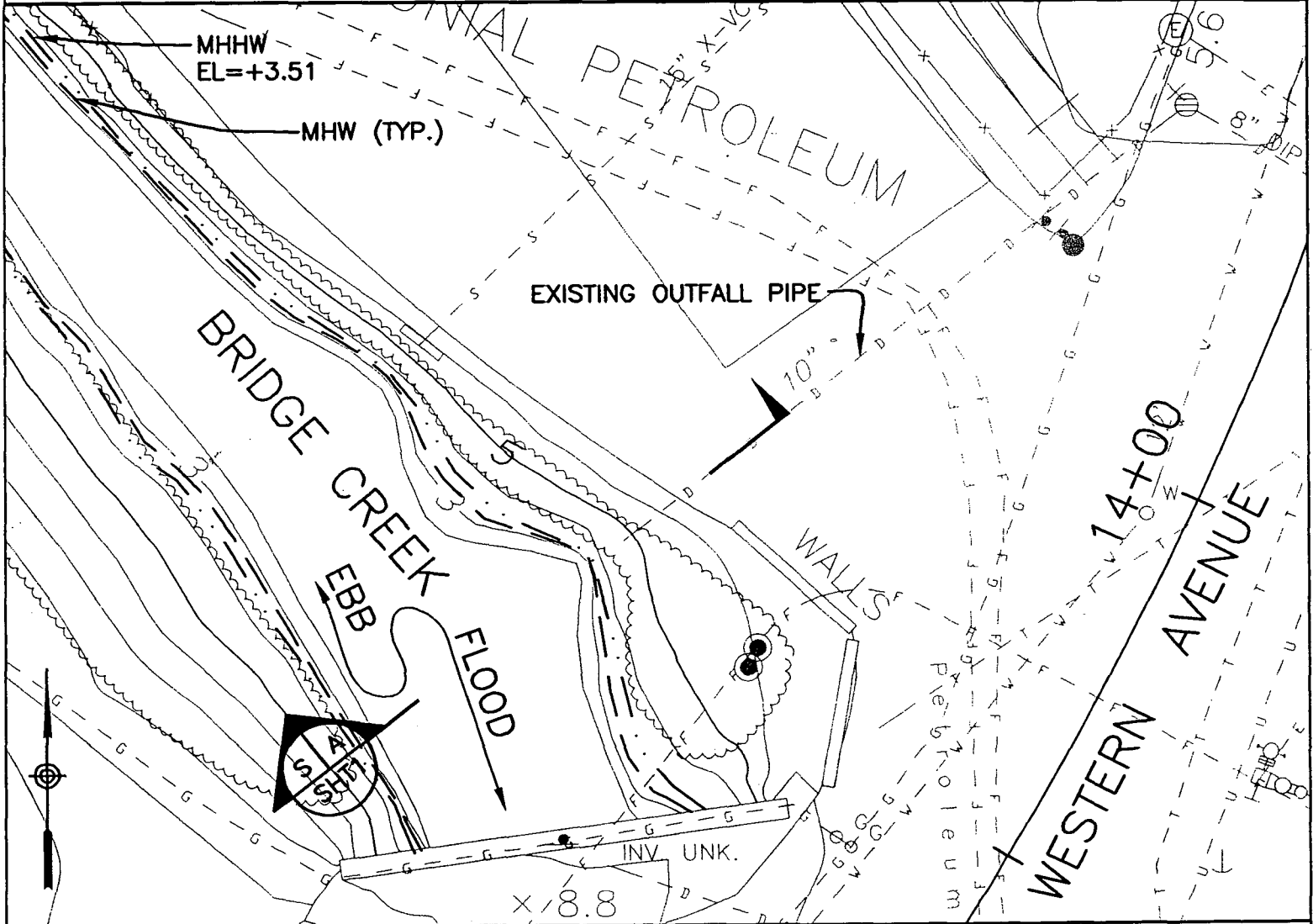
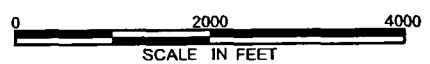
leasehold and used to access trailer chassis storage areas located on PIIF land north of the former city street. This westerly section of street is now gated and access is restricted to facility vehicles. The Richmond Terrace bridge is not designed for use by the specialized container loading and unloading vehicles and is too remote to be an efficient route into the PIIF.



**OUTFALL L EXISTING  
CROSS SECTION**



**VICINITY MAP**



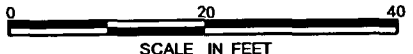
**PURPOSE: OUTFALL L INTO  
BRIDGE CREEK**

**DATUM: NGVD 29 NAVD 88**

**MHHW = SPRING HIGH WATER**

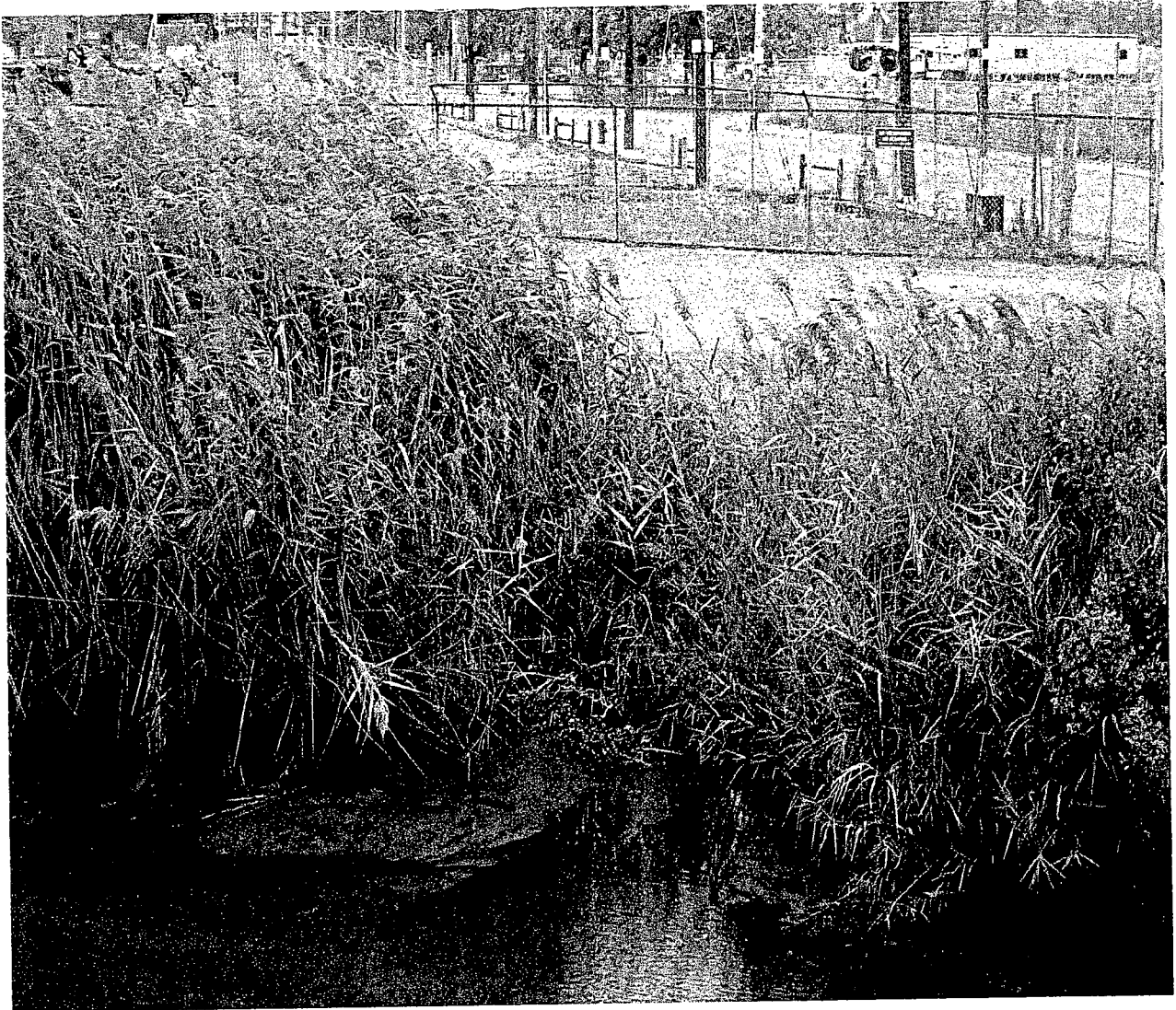
<b>MHHW</b>	<b>3.51'</b>	<b>2.41'</b>
<b>MHW</b>	<b>3.18'</b>	<b>2.08'</b>
<b>MLW</b>	<b>-1.82'</b>	<b>-2.92'</b>

**EXISTING PLAN VIEW**

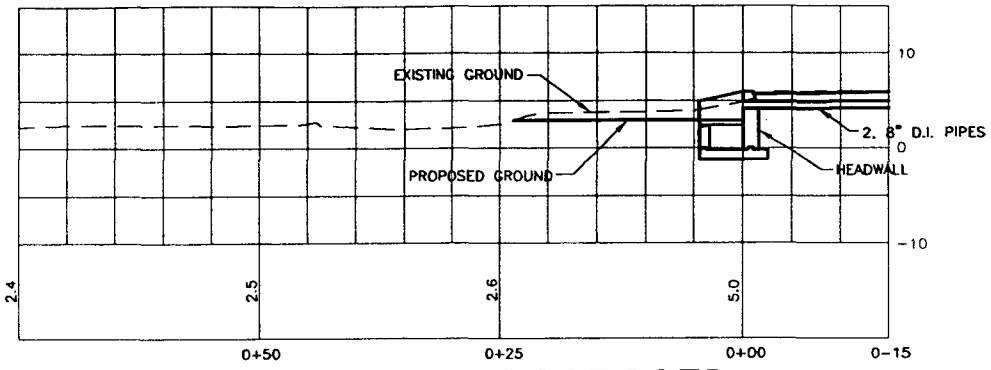


**MAGUIRE GROUP INC.  
3131 PRINCETON PIKE  
BUILDING 6, SUITE 112  
LAWRENCEVILLE, N.J.  
08648**

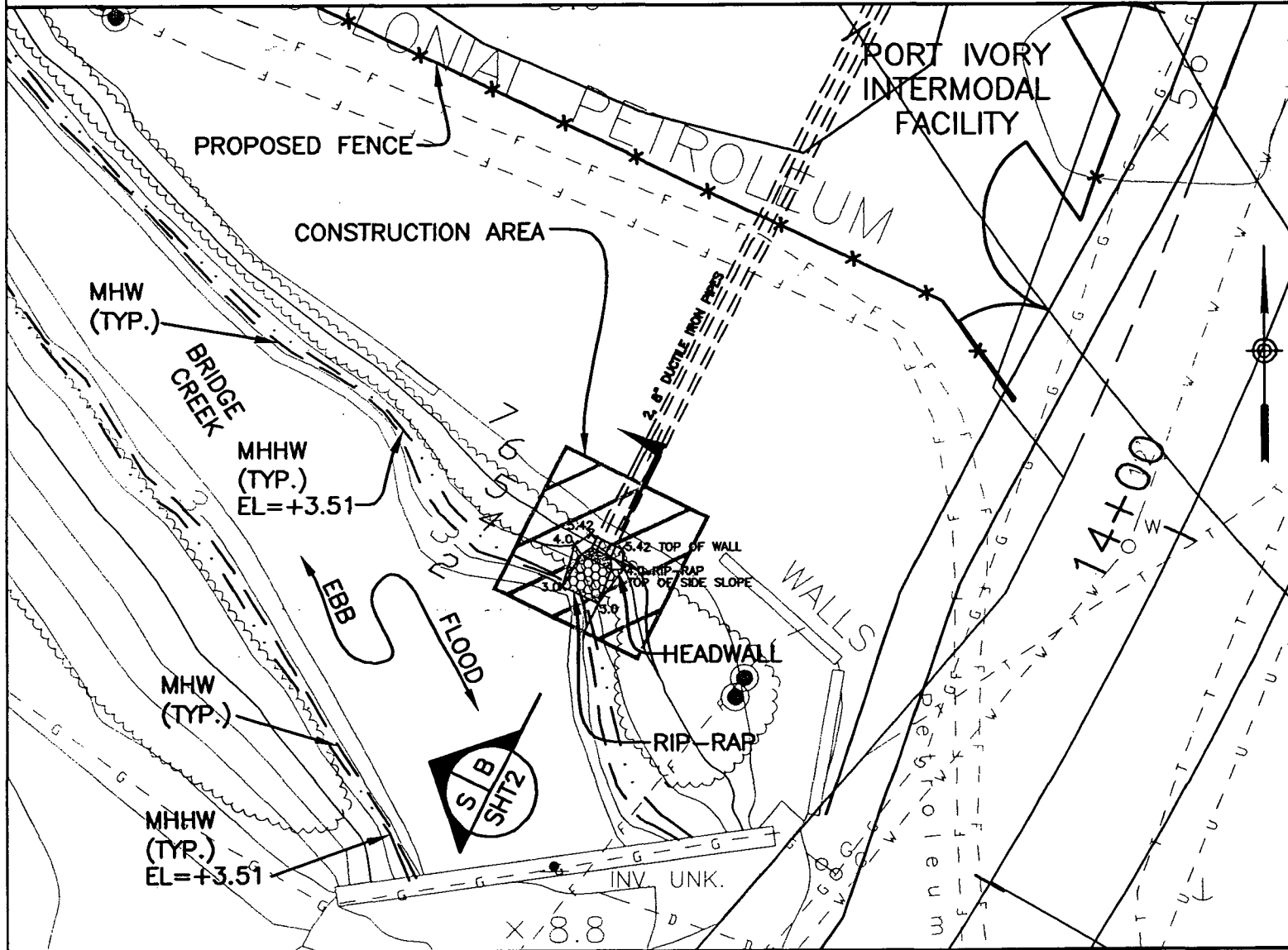
**IN: HOWLAND HOOK MARINE TERMINAL  
AT: UP STREAM OF RICHMOND TERR.  
COUNTY OF: RICHMOND  
APPLICATION BY: P.A. of N.Y. & N.J.  
SHEET 1 OF 8 DATE: 9/8/2004**



Port Ivory Intermodal Facility. Existing outfall at location "L". View easterly. 9/04.



### OUTFALL L PROPOSED CROSS SECTION



PURPOSE: OUTFALL L INTO BRIDGE CREEK

DATUM: NGVD 29 NAVD 88

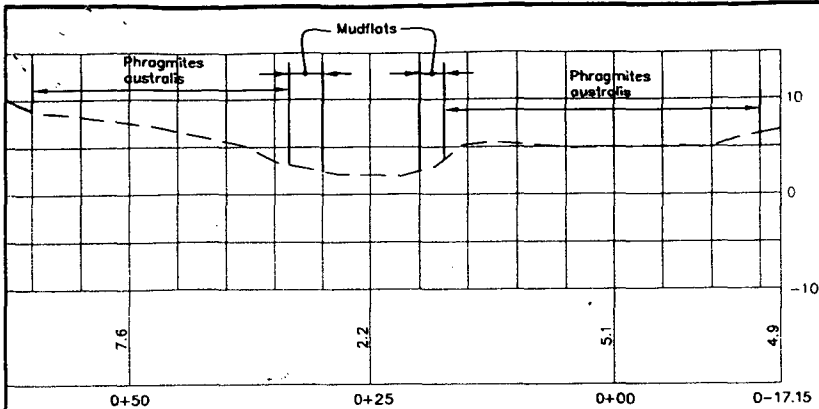
MHHW = SPRING HIGH WATER	
MHHW	3.51' 2.41'
MHW	3.18' 2.08'
MLW	-1.82' -2.92'

### PROPOSED PLAN VIEW

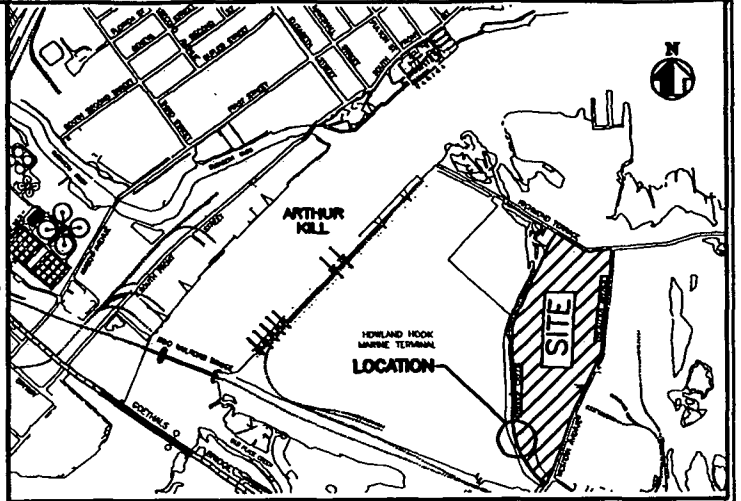
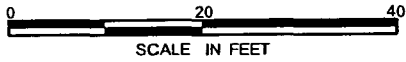


MAGUIRE GROUP INC.  
 3131 PRINCETON PIKE  
 BUILDING 6, SUITE 112  
 LAWRENCEVILLE, N.J.  
 08648

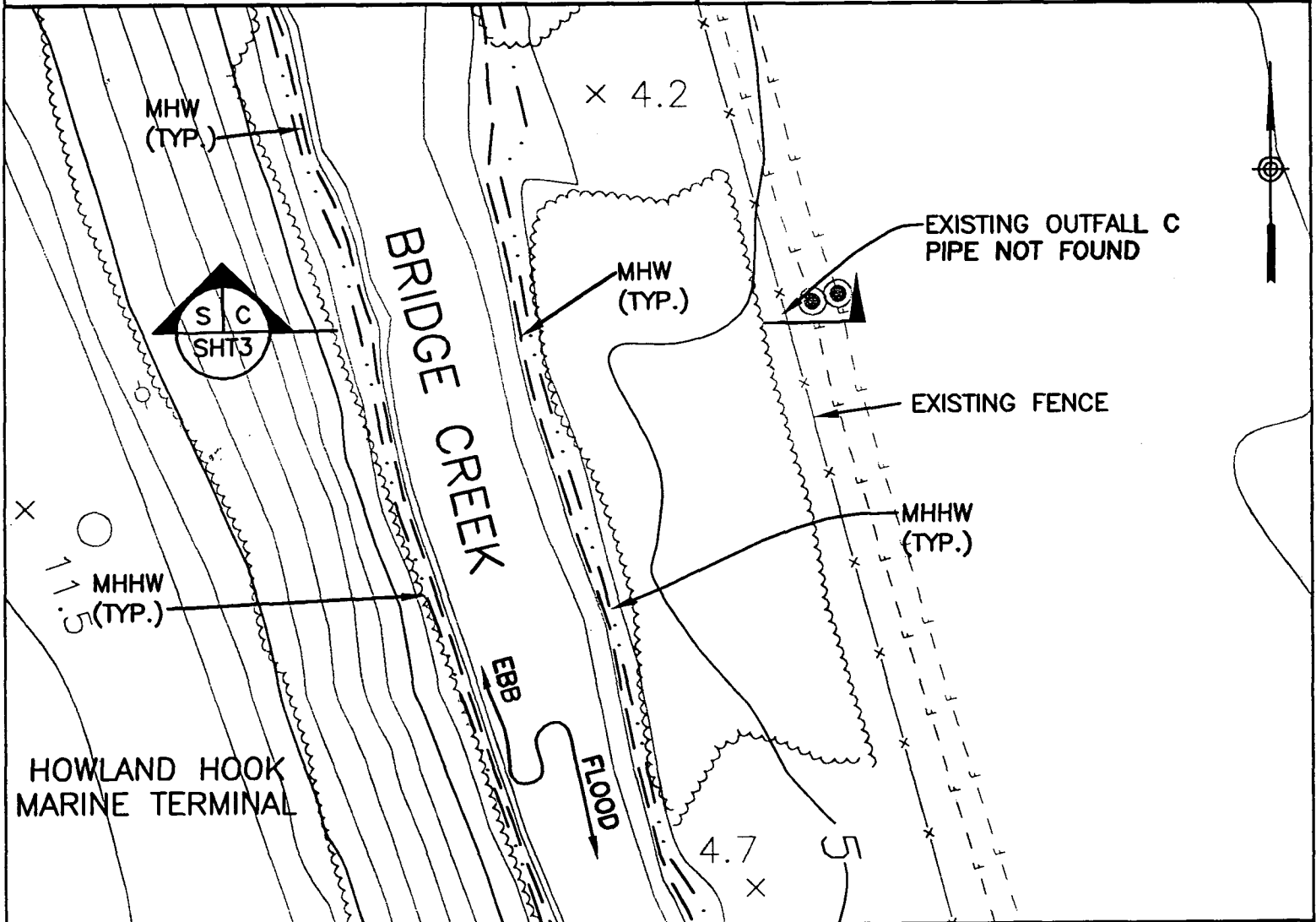
IN: HOWLAND HOOK MARINE TERMINAL  
 AT: UP STREAM OF RICHMOND TERR.  
 COUNTY OF: RICHMOND  
 APPLICATION BY: P.A. of N.Y. & N.J.  
 SHEET 2 OF 8 DATE: 9/8/2004



**OUTFALL C EXISTING  
CROSS SECTION**



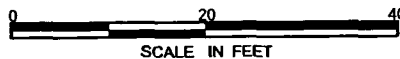
**VICINITY MAP**



PURPOSE: OUTFALL C INTO  
BRIDGE CREEK

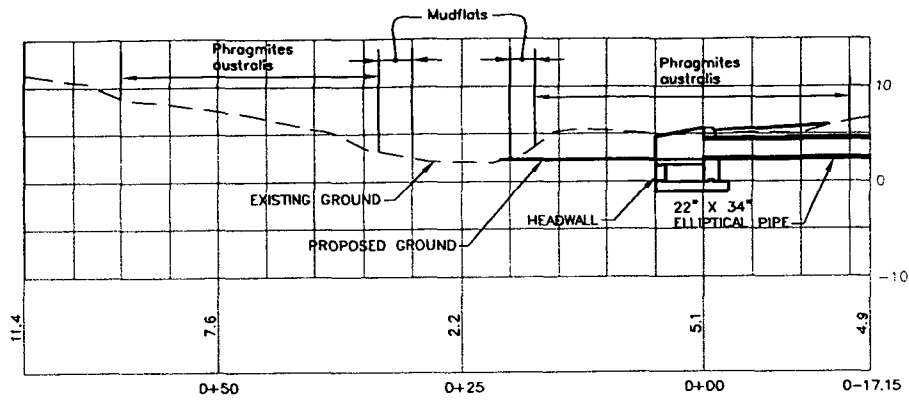
DATUM: NGVD 29    NAVD 88  
 MHHW = SPRING HIGH WATER  
 MHHW    3.51'      2.41'  
 MHW      3.18'      2.08'  
 MLW     -1.82'     -2.92'

**EXISTING PLAN VIEW**

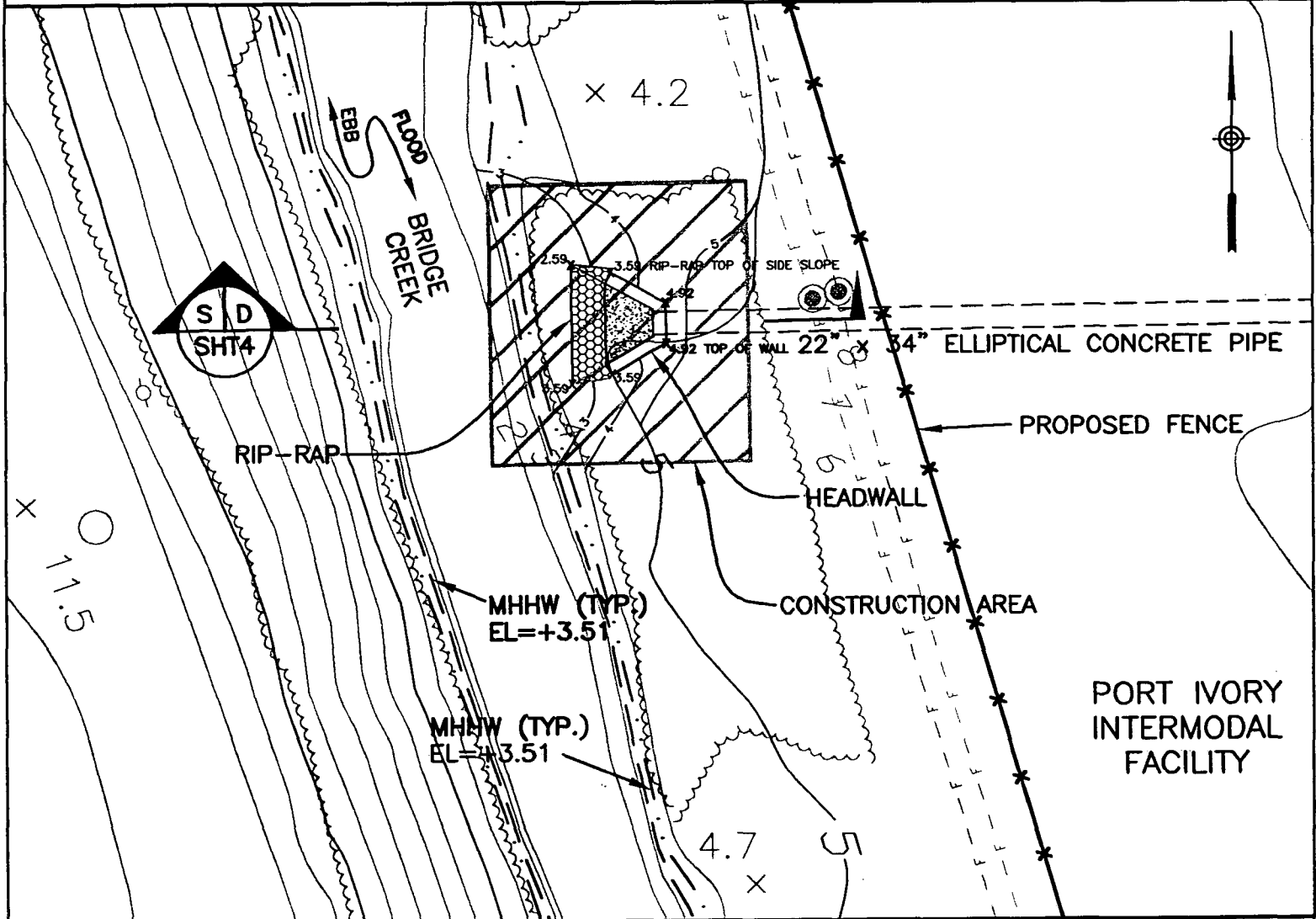
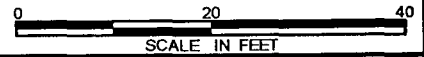


MAGUIRE GROUP INC.  
 3131 PRINCETON PIKE  
 BUILDING 6, SUITE 112  
 LAWRENCEVILLE, N.J.  
 08648

IN: HOWLAND HOOK MARINE TERMINAL  
 AT: UP STREAM OF RICHMOND TERR.  
 COUNTY OF: RICHMOND  
 APPLICATION BY: P.A. of N.Y. & N.J.  
 SHEET 3 OF 8 DATE: 9/8/2004



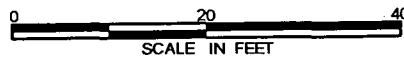
### OUTFALL C PROPOSED CROSS SECTION



PURPOSE: OUTFALL C INTO BRIDGE CREEK

DATUM: NGVD 29 NAVD 88  
 MHHW = SPRING HIGH WATER  
 MHHW 3.51' 2.41'  
 MHW 3.18' 2.08'  
 MLW -1.82' -2.92'

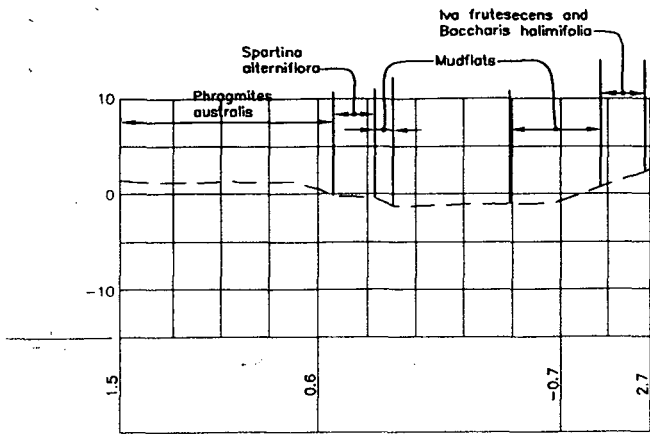
### PROPOSED PLAN VIEW



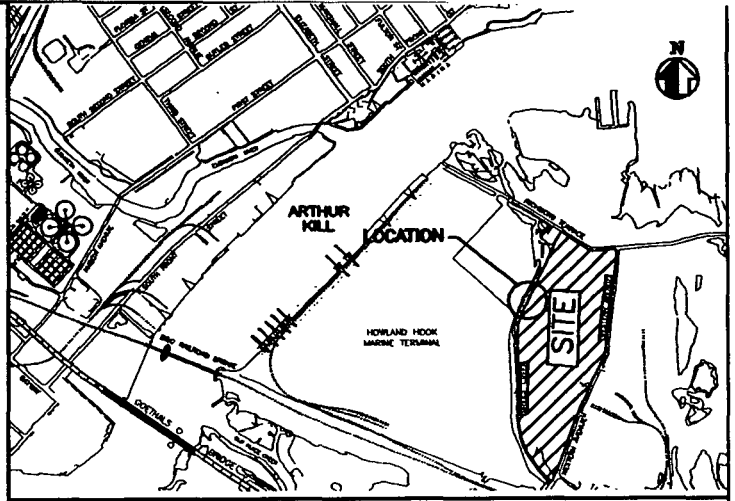
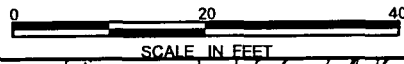
MAGUIRE GROUP INC.  
 3131 PRINCETON PIKE  
 BUILDING 6, SUITE 112  
 LAWRENCEVILLE, N.J.  
 08648

IN: HOWLAND HOOK MARINE TERMINAL  
 AT: UP STREAM OF RICHMOND TERR.  
 COUNTY OF: RICHMOND  
 APPLICATION BY: P.A. of N.Y. & N.J.  
 SHEET 4 OF 8 DATE: 9/8/2004

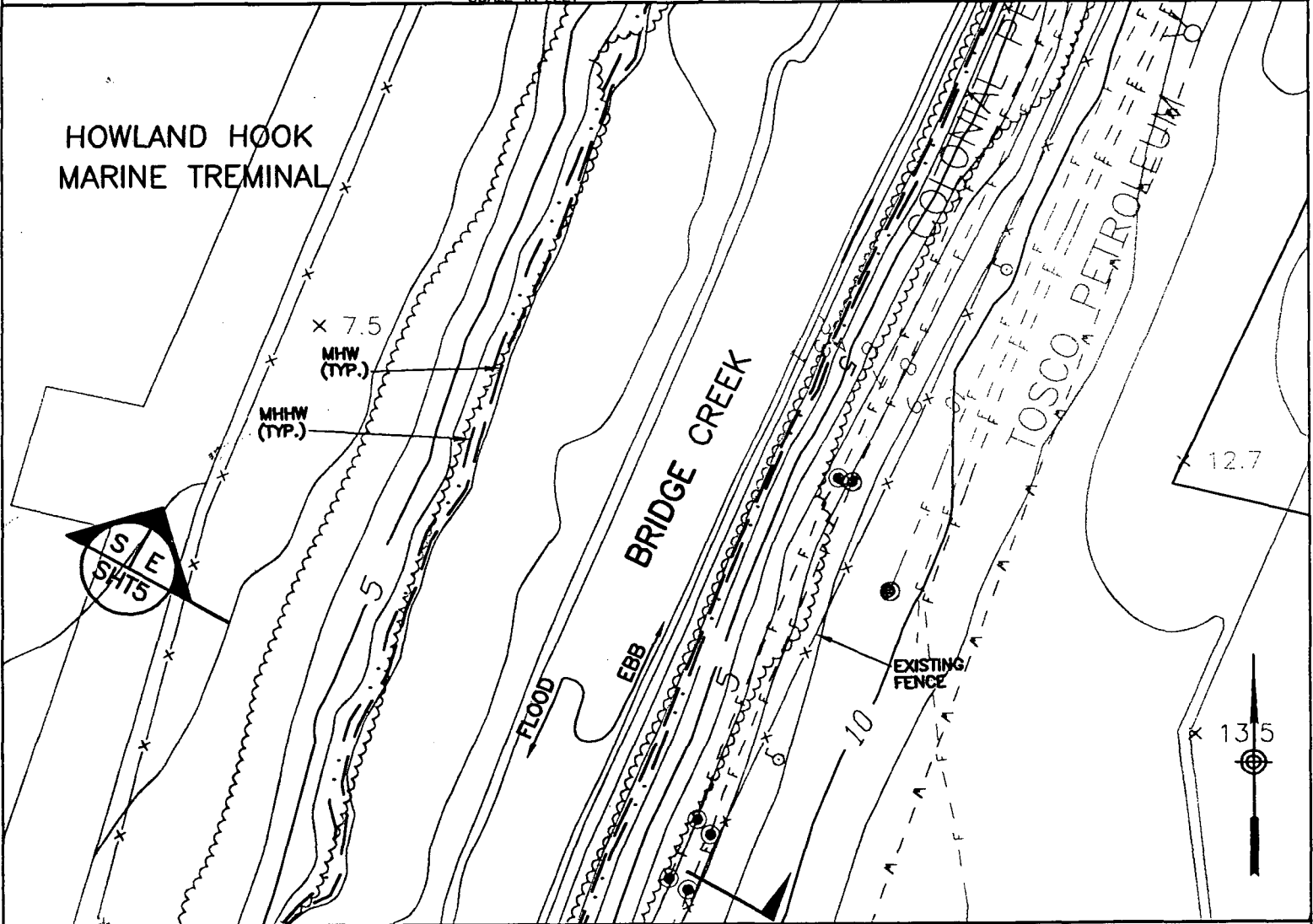
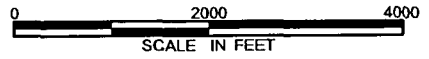




**BRIDGE EXISTING  
CROSS SECTION**



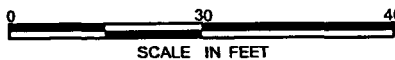
**VICINITY MAP**



**PURPOSE: PROPOSED NEW BRIDGE  
OVER BRIDGE CREEK**

**DATUM: NGVD 29 NAVD 88**  
**MHHW = SPRING HIGH WATER**  
 MHHW 3.51' 2.41'  
 MHW 3.18' 2.08'  
 MLW -1.82' -2.92'

**EXISTING PLAN VIEW**



**MAGUIRE GROUP INC.**  
 3131 PRINCETON PIKE  
 BUILDING 6, SUITE 112  
 LAWRENCEVILLE, N.J.  
 08648

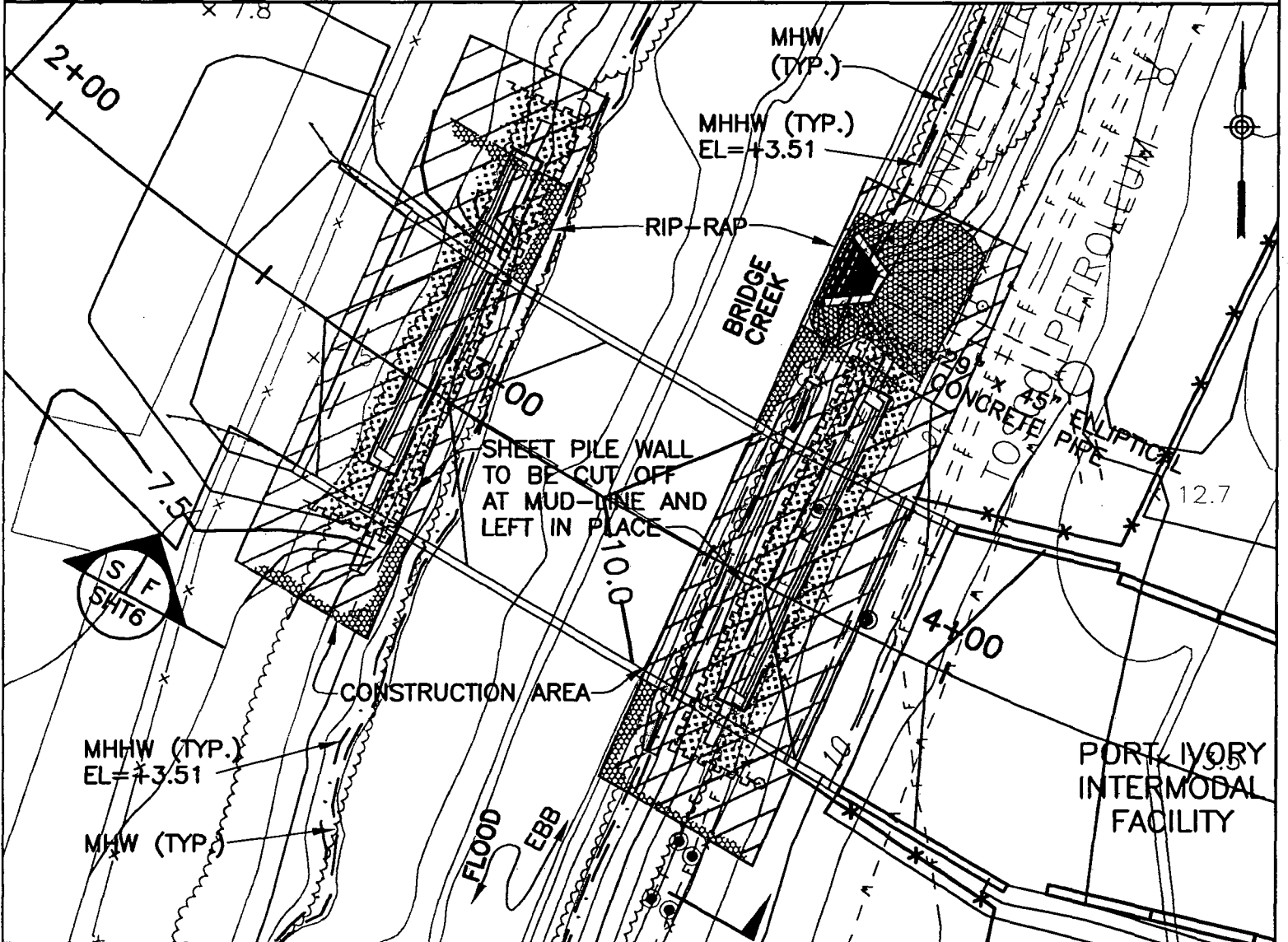
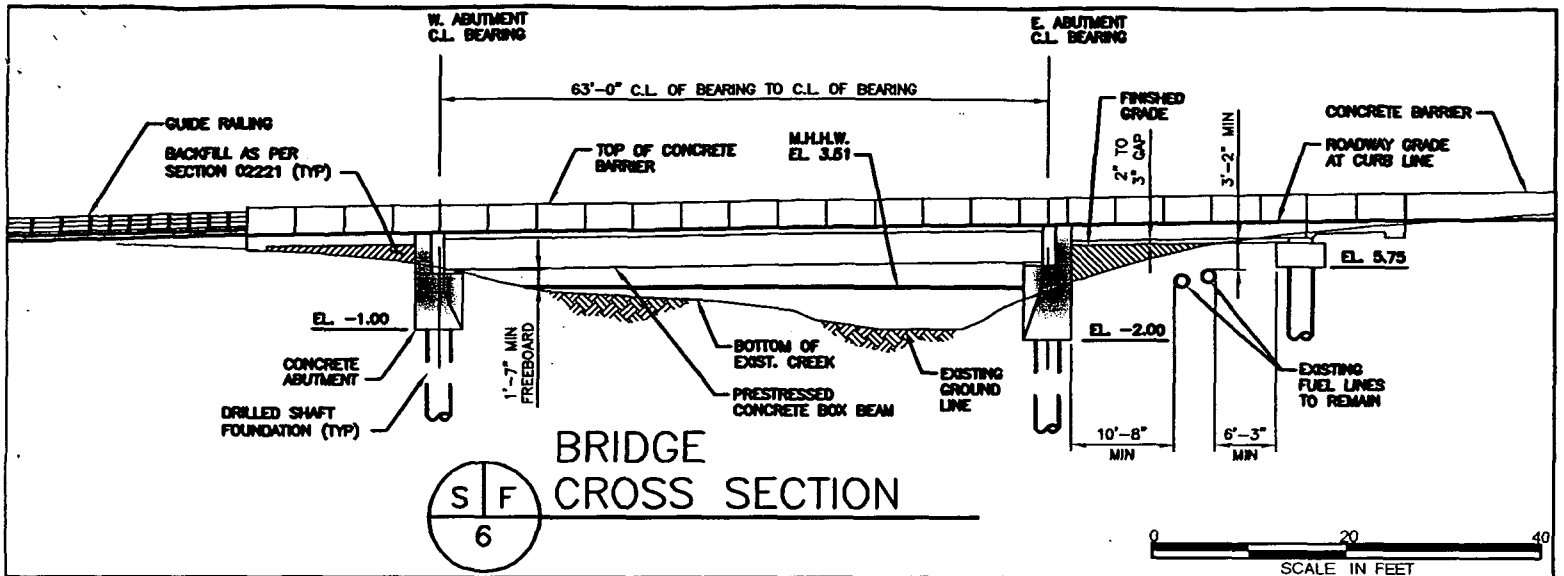
**IN: HOWLAND HOOK MARINE TERMINAL**  
**AT: UP STREAM OF RICHMOND TERR.**  
**COUNTY OF: RICHMOND**  
**APPLICATION BY: P.A. of N.Y. & N.J.**  
**SHEET 5 OF 8 DATE: 9/8/2004**



Port Ivory Intermodal Facility. Location of the bridge over Bridge Creek. View southwesterly. 5/04.



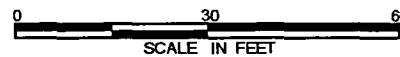
Port Ivory Intermodal Facility. Location of proposed bridge over Bridge Creek. View southwesterly. 4/04.



PURPOSE: PROPOSED NEW BRIDGE  
OVER BRIDGE CREEK

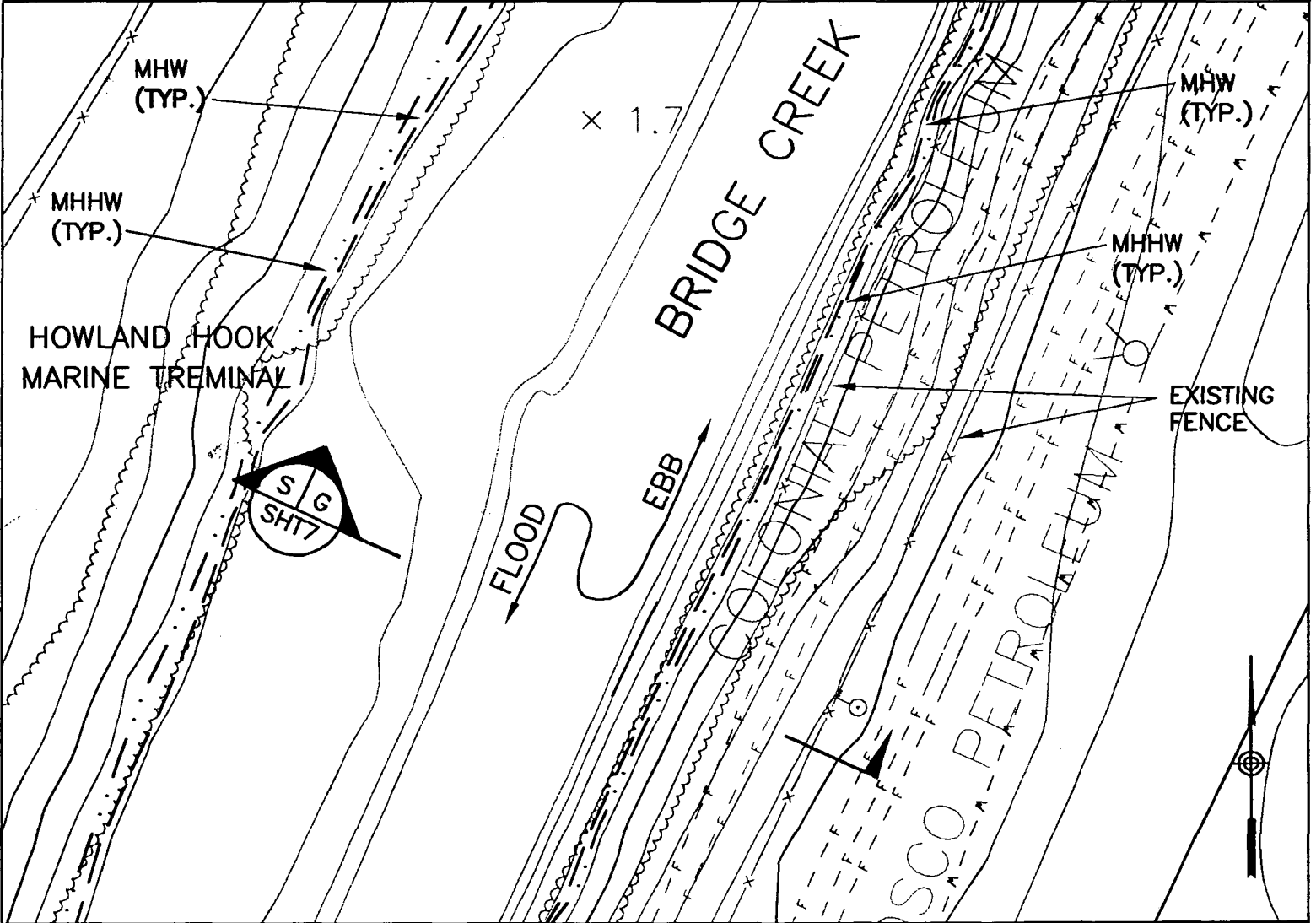
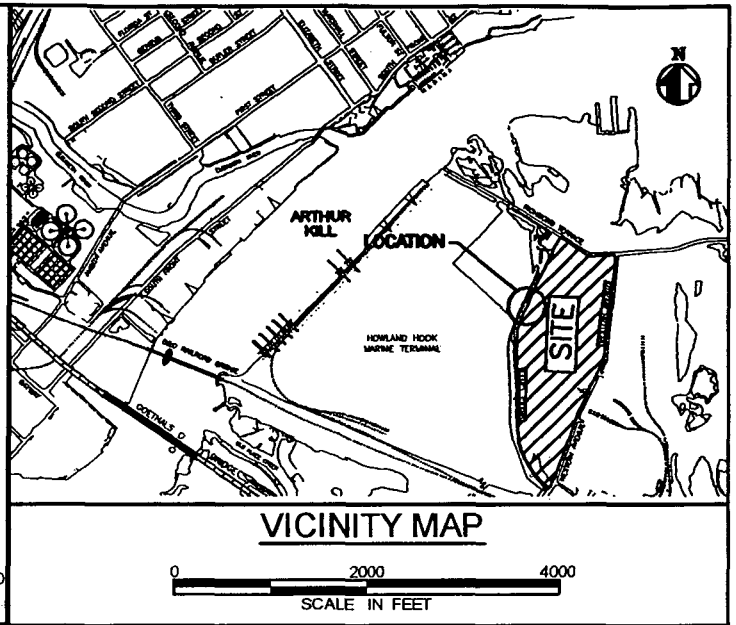
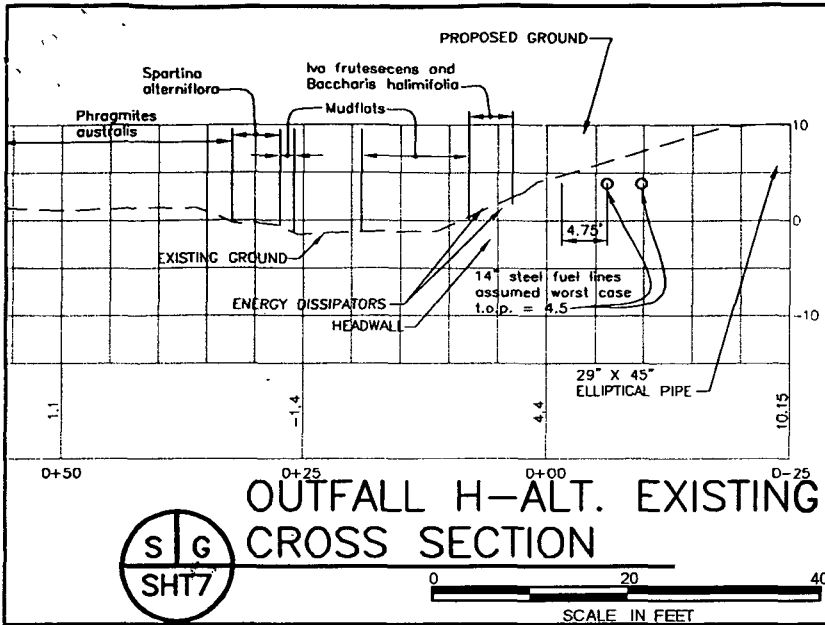
DATUM: NGVD 29 NAVD 88  
 MHHW = SPRING HIGH WATER  
 MHHW 3.51' 2.41'  
 MHW 3.18' 2.08'  
 MLW -1.82' -2.92'

PROPOSED PLAN VIEW



MAGUIRE GROUP INC.  
 3131 PRINCETON PIKE  
 BUILDING 6, SUITE 112  
 LAWRENCEVILLE, N.J.  
 08648

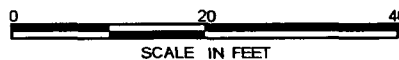
IN: HOWLAND HOOK MARINE TERMINAL  
 AT: UP STREAM OF RICHMOND TERR.  
 COUNTY OF: RICHMOND  
 APPLICATION BY: P.A. of N.Y. & N.J.  
 SHEET 6 OF 8 DATE: 9/8/2004



**PURPOSE: OUTFALL H-ALT INTO BRIDGE CREEK**

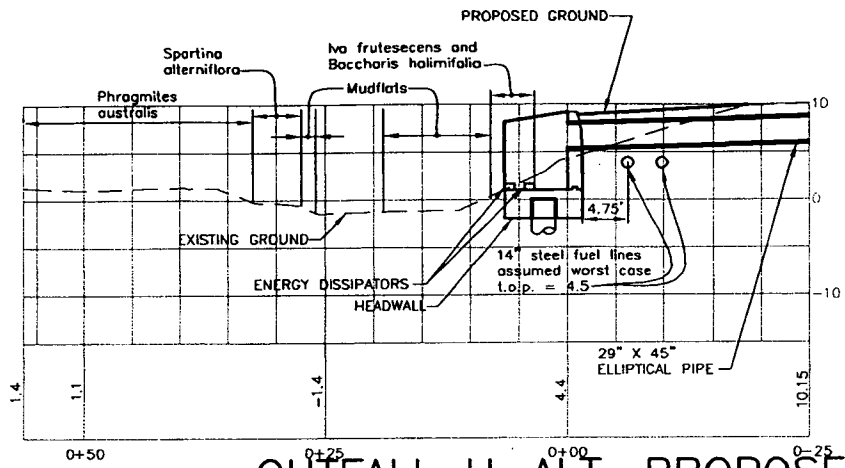
**DATUM: NGVD 29 NAVD 88**  
 MHHW = SPRING HIGH WATER  
 MHHW 3.51' 2.41'  
 MHW 3.18' 2.08'  
 MLW -1.82' -2.92'

**EXISTING PLAN VIEW**

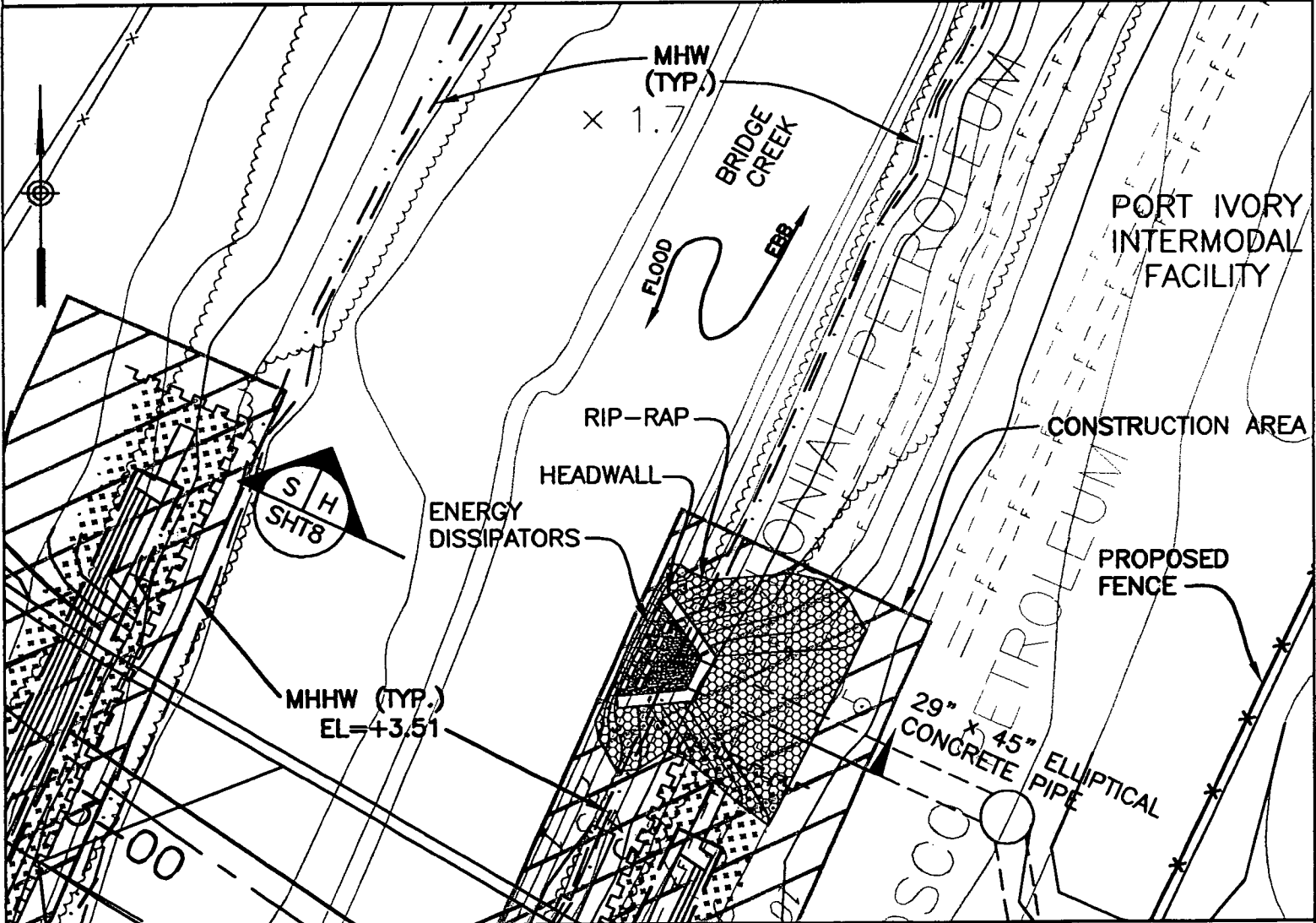
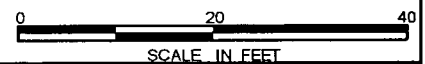


**MAGUIRE GROUP INC.**  
 3131 PRINCETON PIKE  
 BUILDING 6, SUITE 112  
 LAWRENCEVILLE, N.J.  
 08648

**IN: HOWLAND HOOK MARINE TERMINAL**  
**AT: UP STREAM OF RICHMOND TERR.**  
**COUNTY OF: RICHMOND**  
**APPLICATION BY: P.A. of N.Y. & N.J.**  
**SHEET 7 OF 8 DATE: 9/8/2004**



## OUTFALL H-ALT. PROPOSED CROSS SECTION



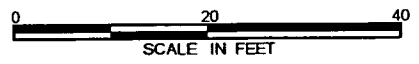
**PURPOSE: OUTFALL H-ALT INTO  
BRIDGE CREEK**

**DATUM: NGVD 29 NAVD 88**

**MHHW = SPRING HIGH WATER**

MHHW	3.51'	2.41'
MHW	3.18'	2.08'
MLW	-1.82'	-2.92'

### PROPOSED PLAN VIEW



**MAGUIRE GROUP INC.**  
3131 PRINCETON PIKE  
BUILDING 6, SUITE 112  
LAWRENCEVILLE, N.J.  
08648

**IN: HOWLAND HOOK MARINE TERMINAL**  
**AT: UP STREAM OF RICHMOND TERR.**  
**COUNTY OF: RICHMOND**  
**APPLICATION BY: P.A. of N.Y. & N.J.**  
**SHEET 8 OF 8 DATE: 9/8/2004**

Sheet

**THE PORT AUTHORITY OF NY & NJ**  
**DMJM HARRIS**  
 Architects, Engineers, Planners  
 and Intermodal Consultants  
 100 WALL STREET  
 SUITE 2000  
 NEW YORK, NY 10038

ORIGINAL SEALED AND SIGNED BY  
 Edward A. Schmitt, Jr.  
 N.Y. Professional Engineer #028522

**100% SUBMISSION**  
 AUGUST 20, 2004

No.	Date	Revisions	Approved
ENGINEERING DEPARTMENT			
HOWLAND HOOK MARINE TERMINAL			

CIVIL  
 TITLE  
**PORT IVORY INTERMODAL FACILITY PHASE 1A**  
**UTILITY PLAN 1 OF 6**

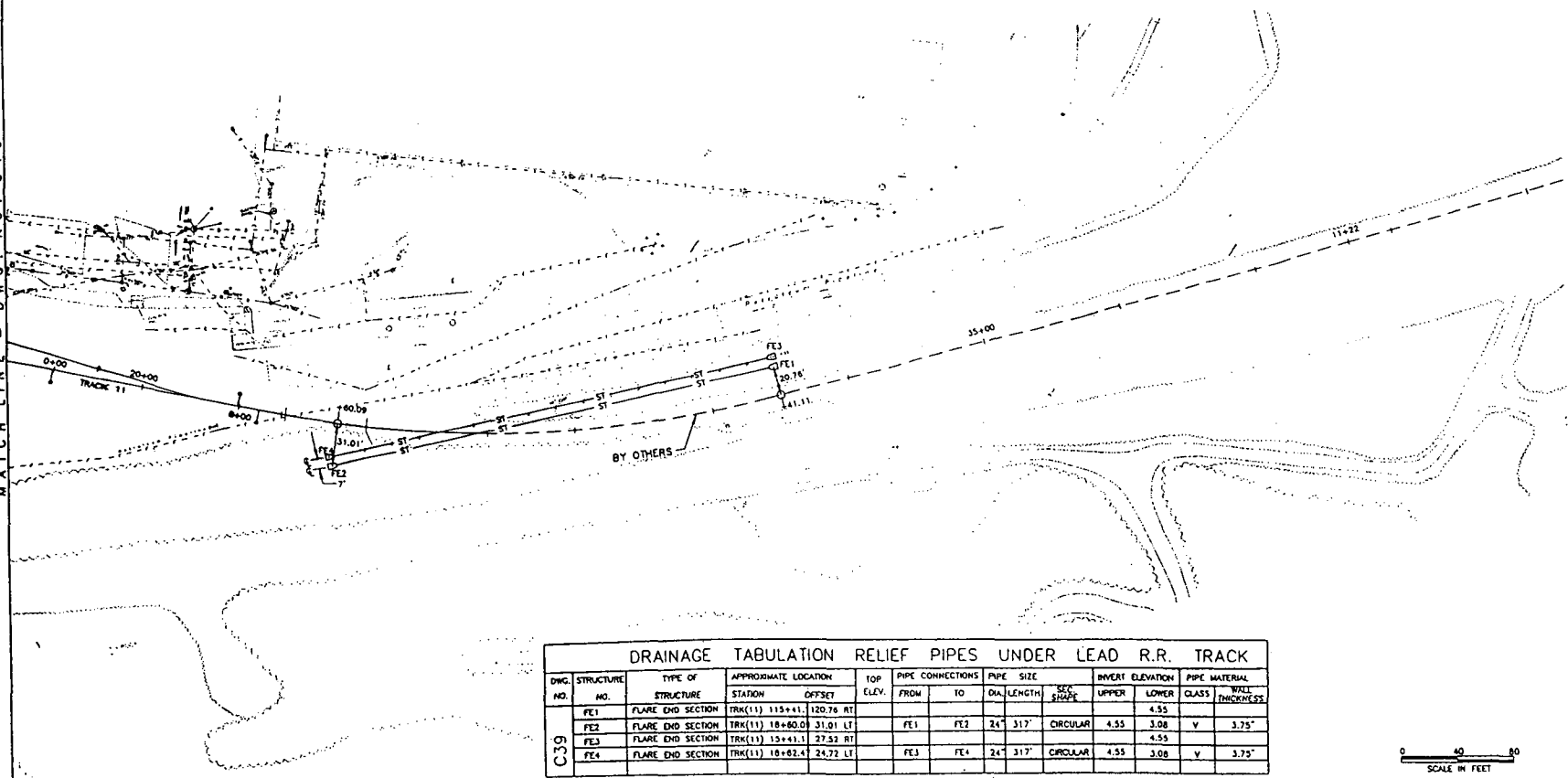
This drawing subject to conditions in contract. All dimensions, ideas, designs and profiles herein are reserved to Port Authority or may not be used without its written consent.

WCY  
 Designed by Drawn by Checked by

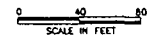
Date  
 Contract Number **HH-234.92**

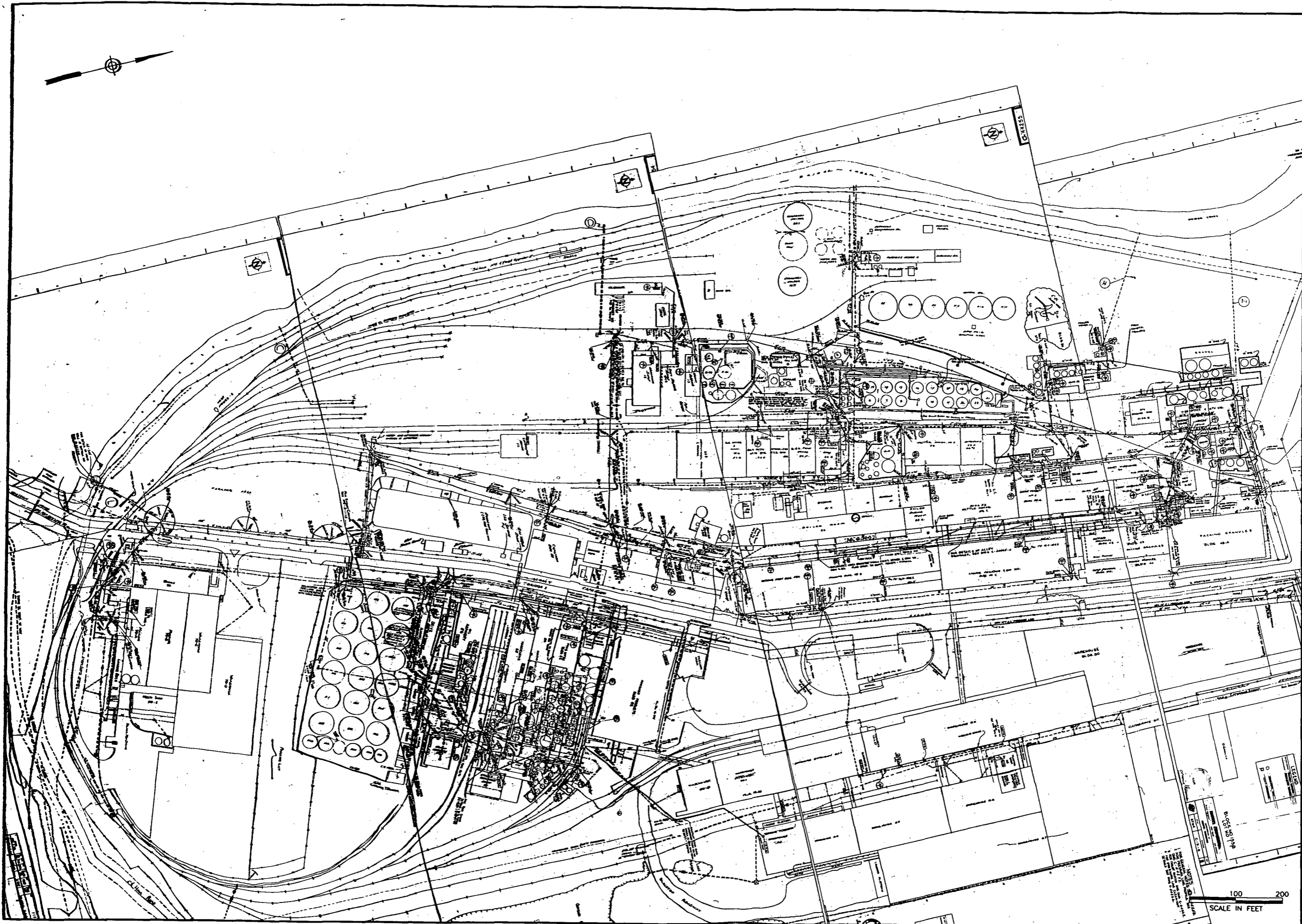
Drawing Number **031**

MATCH LINE - DWG. NO. C40



DRAINAGE TABULATION RELIEF PIPES UNDER LEAD R.R. TRACK													
DWG. NO.	STRUCTURE NO.	TYPE OF STRUCTURE	APPROXIMATE LOCATION		TOP ELEV.	PIPE CONNECTIONS		PIPE SIZE		INVERT ELEVATION		PIPE MATERIAL CLASS	WALL THICKNESS
			STATION	OFFSET		FROM	TO	DIAMETER	LENGTH	UPPER	LOWER		
C39	FE1	FLARE END SECTION	TRK(11) 115+41.1	120.76 RT									
	FE2	FLARE END SECTION	TRK(11) 18+60.0	31.01 LT		FE1	FE2	24"	317'	CIRCULAR	4.55	3.08	V 3.75"
	FE3	FLARE END SECTION	TRK(11) 13+41.1	27.53 RT									
	FE4	FLARE END SECTION	TRK(11) 18+82.4	24.72 LT		FE3	FE4	24"	317'	CIRCULAR	4.55	3.08	V 3.75"





Sheet of



ENGINEERING PROGRAM MANAGER  
PORT COMMERCE

**DMJM HARRIS**  
AN AECOM COMPANY  
Maguire Group Inc.  
Architects/Engineers/Planners  
ORIGINAL SEALED AND SIGNED BY

Edward J. Spinard, Jr.  
N.Y. Professional Engineer #080332

**SWPPP**  
AUGUST 27, 2004

No.	Date	Revision	Approved
ENGINEERING DEPARTMENT			

**HOWLAND HOOK  
MARINE TERMINAL**

CIVIL  
Title

PORT IVORY  
INTERMODAL FACILITY  
PHASE 1A  
  
EXISTING OUTFALL  
LOCATION PLAN

This drawing subject to conditions in contract.  
All inventions, ideas, designs and methods  
herein are reserved to Port Authority and  
may not be used without its written consent.

WGY OBS  
Designed by Drawn by Checked by

Date

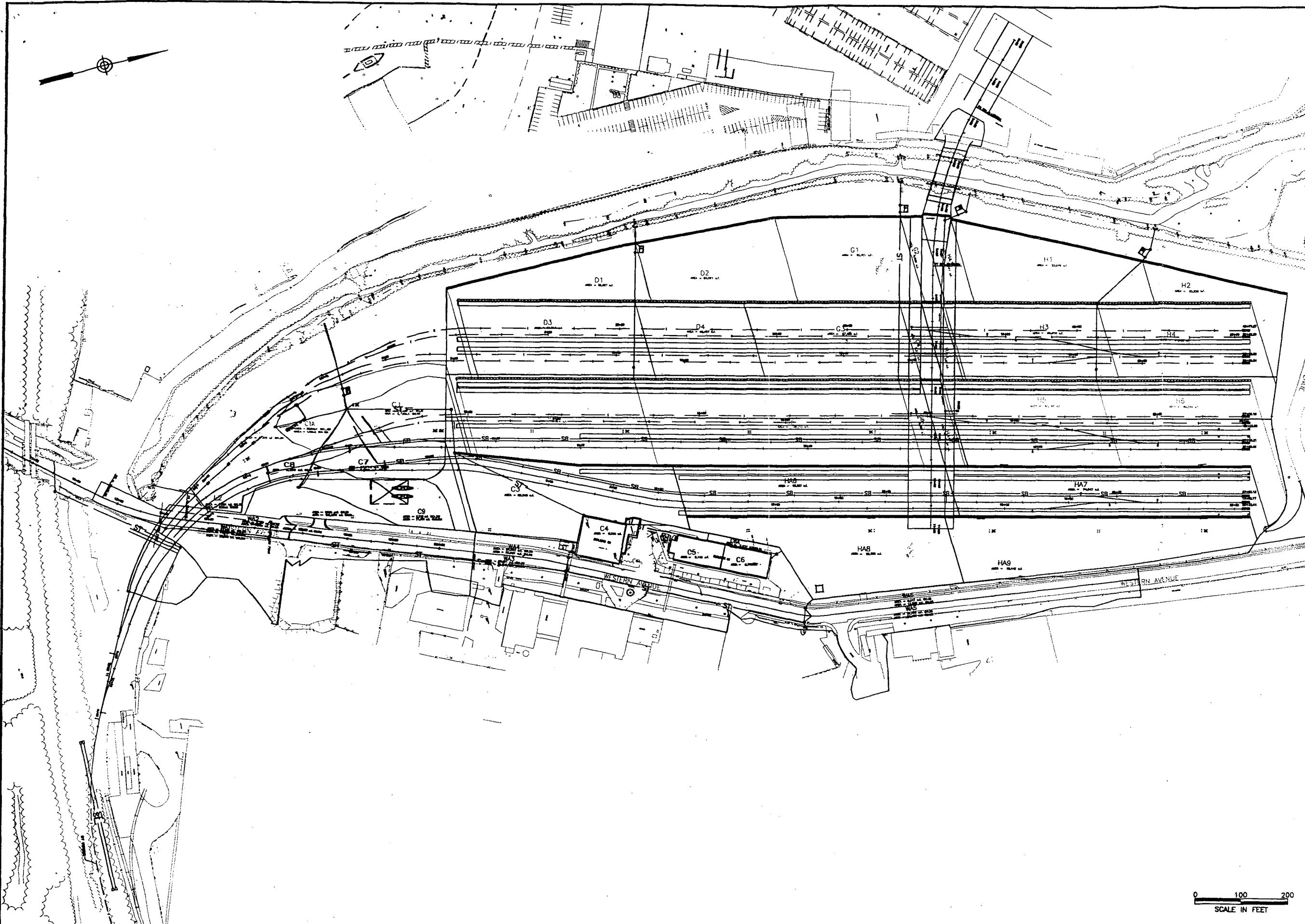
Contract Number **HH-234.927**

Drawing Number

PID/ 00250005

100 200  
SCALE IN FEET





Sheet \_\_\_\_\_ of \_\_\_\_\_  
**THE PORT AUTHORITY OF NY & NJ**

ENGINEERING PROGRAM MANAGER  
 PORT COMMERCE  
**DMJM HARRIS**  
 AN AMERICAN COMPANY  
 Modjeski & Masters, Inc.  
 Architects/Engineers/Planners  
 ORIGINAL SEALED AND SIGNED BY

Edward J. Spinard, Jr.  
 N.Y. Professional Engineer #080332

**SWPPP**  
 AUGUST 27, 2004

No.	Date	Revision	Approved
ENGINEERING DEPARTMENT			
<b>HOWLAND HOOK MARINE TERMINAL</b>			

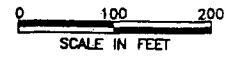
CIVIL  
 Title  
**PORT MORY INTERMODAL FACILITY PHASE 1A**  
**WATERSHEDS AND STORMWATER CONVEYANCE SYSTEM FULL BUILD-OUT**

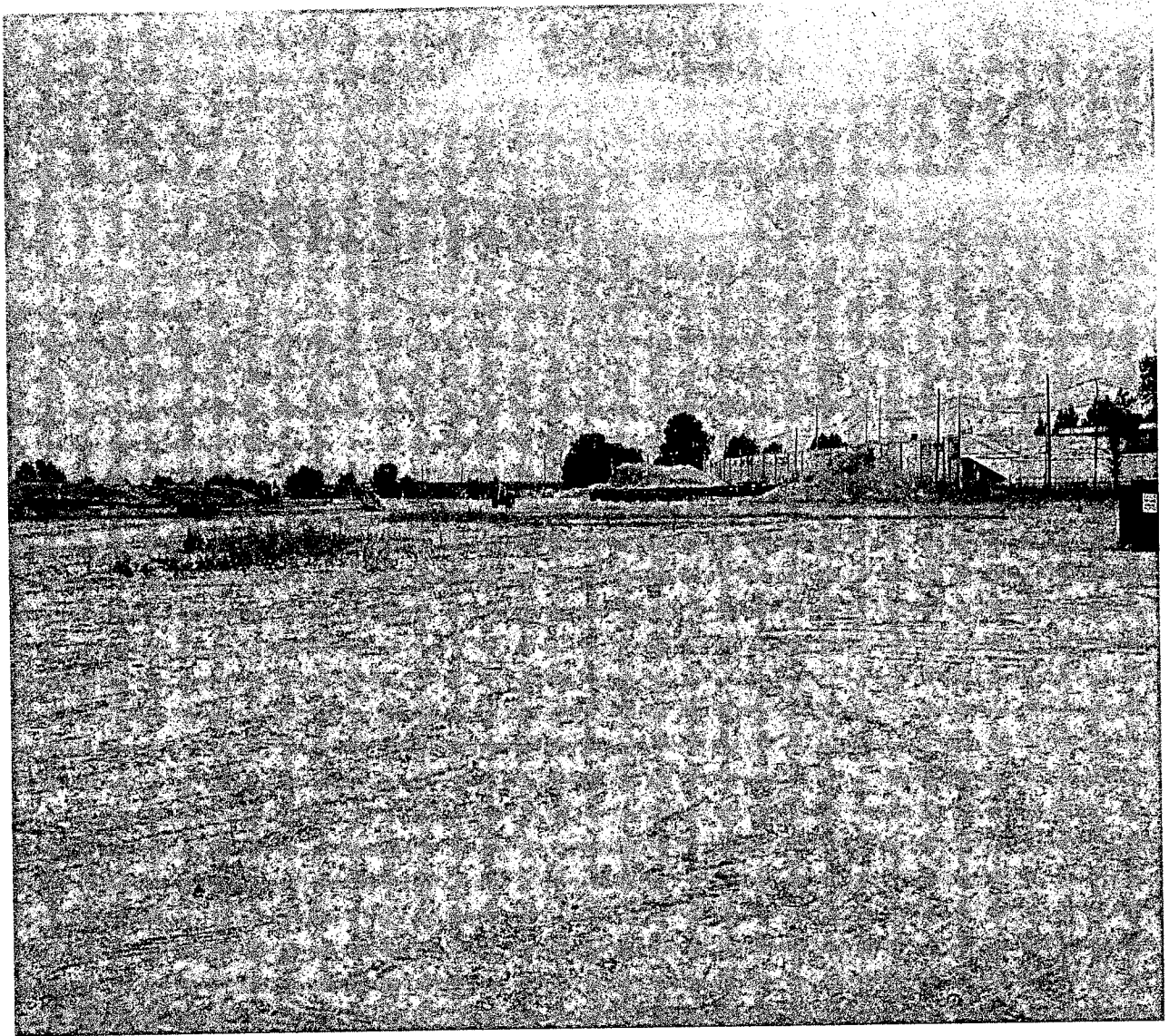
This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

WGY DBS  
 Designed by Drawn by Checked by  
 Date

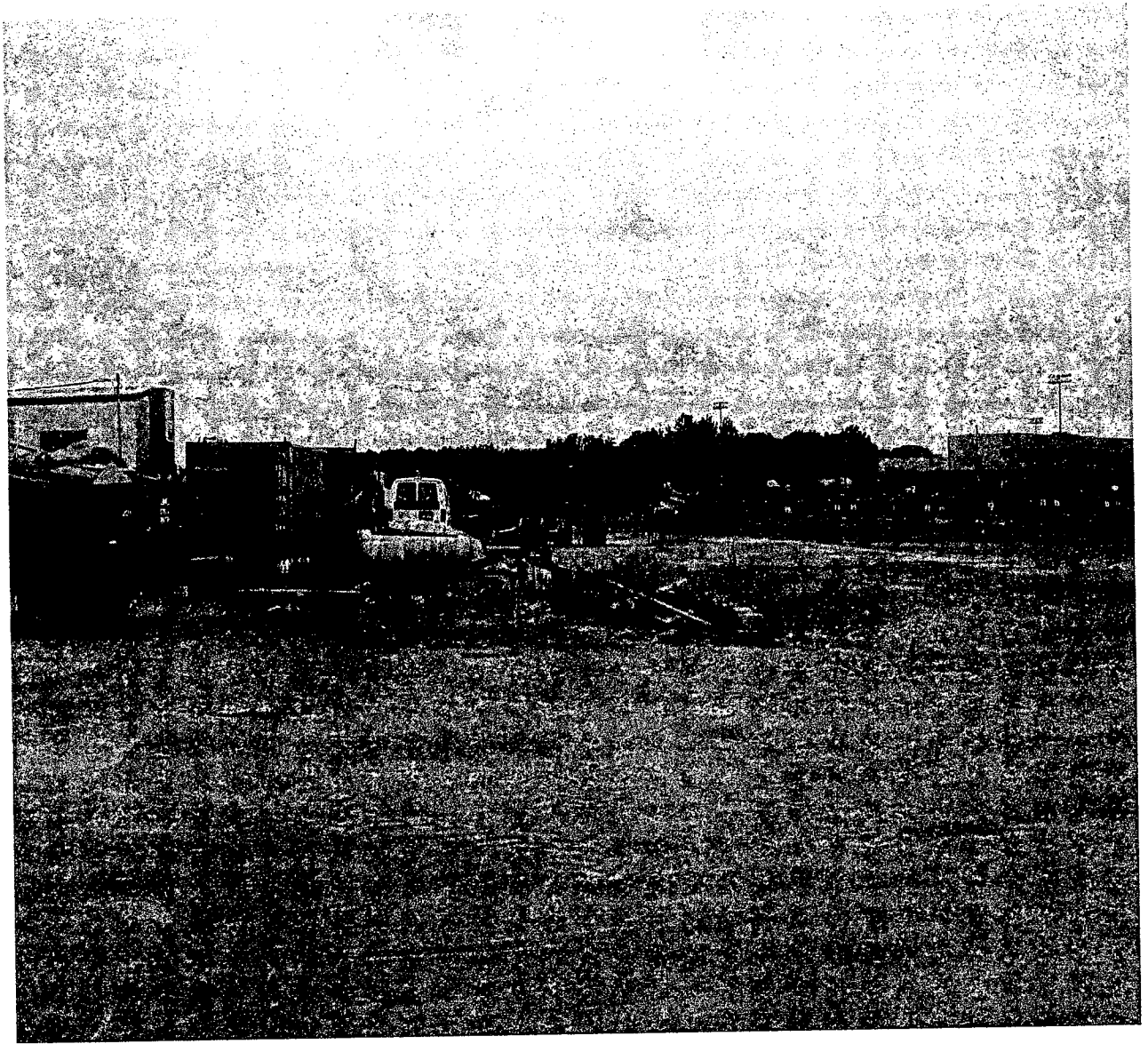
Contract Number **HH-234.927**

Drawing Number  
 PID# 00250005





Port Ivory Intermodal Facility site. View northerly. 9/04.



Port Ivory Intermodal Facility site. View southerly. 9/04.

617.20
Appendix A
State Environmental Quality Review
FULL ENVIRONMENTAL ASSESSMENT FORM

Purpose: The full EAF is designed to help applicants and agencies determine, in an orderly manner, whether a project or action may be significant. The question of whether an action may be significant is not always easy to answer. Frequently, there are aspects of a project that are subjective or unmeasurable. It is also understood that those who determine significance may have little or no formal knowledge of the environment or may not be technically expert in environmental analysis. In addition, many who have knowledge in one particular area may not be aware of the broader concerns affecting the question of significance.

The full EAF is intended to provide a method whereby applicants and agencies can be assured that the determination process has been orderly, comprehensive in nature, yet flexible enough to allow introduction of information to fit a project or action.

Full EAF Components: The full EAF is comprised of three parts:

- Part 1: Provides objective data and information about a given project and its site. By identifying basic project data, it assists a reviewer in the analysis that takes place in Parts 2 and 3.
Part 2: Focuses on identifying the range of possible impacts that may occur from a project or action. It provides guidance as to whether an impact is likely to be considered small to moderate or whether it is a potentially-large impact. The form also identifies whether an impact can be mitigated or reduced.
Part 3: If any impact in Part 2 is identified as potentially-large, then Part 3 is used to evaluate whether or not the impact is actually important.

DETERMINATION OF SIGNIFICANCE— Type 1 and Unlisted Actions

Identify the Portions of EAF completed for this project: [X] Part 1 [ ] Part 2 [ ] Part 3

Upon review of the information recorded on this EAF (Parts 1 and 2 and 3 if appropriate), and any other supporting information, and considering both the magnitude and importance of each impact, it is reasonably determined by the lead agency that:

- [ ] A. The project will not result in any large and important impact(s) and, therefore, is one which will not have a significant impact on the environment, therefore a negative declaration will be prepared.
[ ] B. Although the project could have a significant effect on the environment, there will not be a significant effect for this Unlisted Action because the mitigation measures described in PART 3 have been required, therefore a CONDITIONED negative declaration will be prepared.\*
[ ] C. The project may result in one or more large and important impacts that may have a significant impact on the environment, therefore a positive declaration will be prepared.

\* A Conditioned Negative Declaration is only valid for Unlisted Actions

Howland Hook Marine Terminal -- Port Ivory Intermodal Facility

Name of Action

New York State Department of Environmental Conservation

Name of Lead Agency

Print or Type Name of Responsible Officer in Lead Agency

Title of Responsible Officer

Signature of Responsible Officer in Lead Agency

Signature of Preparer (If different from responsible officer)

Date

## PART 1—PROJECT INFORMATION

### Prepared by Project Sponsor

**NOTICE:** This document is designed to assist in determining whether the action proposed may have a significant effect on the environment. Please complete the entire form, Parts A through E. Answers to these questions will be considered as part of the application for approval and may be subject to further verification and public review. Provide any additional information you believe will be needed to complete Parts 2 and 3.

It is expected that completion of the full EAF will be dependent on information currently available and will not involve new studies, research or investigation. If information requiring such additional work is unavailable, so indicate and specify each instance.

<b>NAME OF ACTION</b> Howland Hook Marine Terminal -- Port Ivory Intermodal Facility		
<b>LOCATION OF ACTION (include Street Address, Municipality and County)</b> 40 Western Avenue, Staten Island, New York City, Richmond County.		
<b>NAME OF APPLICANT/SPONSOR</b> The Port Authority of New York and New Jersey		<b>BUSINESS TELEPHONE</b> (973 ) 565-7565
<b>ADDRESS</b> Two Gateway Center, 14th Floor SW		
<b>CITY/PO</b> Newark	<b>STATE</b> NJ	<b>ZIP CODE</b> 07102
<b>NAME OF OWNER (if different)</b> Same		<b>BUSINESS TELEPHONE</b> ( )
<b>ADDRESS</b> Same		
<b>CITY/PO</b>	<b>STATE</b>	<b>ZIP CODE</b>
<b>DESCRIPTION OF ACTION</b> As part of the Phase 1A development of a five-track, intermodal facility (rail transfer of shipping containers) at the Howland Hook Marine Terminal Port Ivory site, the Port Authority proposes to construct a new bridge and a storm water outfall, and reconstruct two storm water outfalls within the regulated tidal wetland zone of Bridge Creek. Mitigation for the loss of wetlands due to the project will consist of re-profiling part of the bed and banks of Bridge Creek to enhance tidal flow to off-site, upstream, tidal wetlands.		

**Please Complete Each Question—Indicate N.A. if not applicable**

### A. Site Description

Physical setting of overall project, both developed and undeveloped areas.

1. Present land use:     Urban     Industrial     Commercial     Residential (suburban)     Rural (non-farm)  
                                   Forest     Agriculture     Other \_\_\_\_\_

2. Total acreage of project area:    approximately 47 acres. Intermodal site = 38 acres; Bridge Creek = 9 acres.

APPROXIMATE ACREAGE	PRESENTLY	AFTER COMPLETION
Meadow or Brushland (Non-agricultural)	<u>0</u> acres	<u>0</u> acres
Forested	<u>0</u> acres	<u>0</u> acres
Agricultural (Includes orchards, cropland, pasture, etc.)	<u>0</u> acres	<u>0</u> acres
Wetland (Freshwater or tidal as per Articles 24, 25 of ECL)	<u>approx. 7</u> acres	<u>approx. 8</u> acres
Water Surface Area	<u>approx. 5.5</u> acres	<u>approx. 6.5</u> acres
Unvegetated (Rock, earth or fill)	<u>approx. 45.5</u> acres	<u>approx. 45.5</u> acres
Roads, buildings and other paved surfaces	<u>approx. 5</u> acres	<u>approx. 15</u> acres
Other (Indicate type) <u>Gravel and landscaped</u>	<u>approx. 10</u> acres	<u>approx. 23</u> acres

3. What is predominant soil type(s) on project site? fill
- a. Soil drainage:     Well drained \_\_\_\_\_ % of site     Moderately well drained 100 % of site  
                                   Poorly drained \_\_\_\_\_ % of site
- b. If any agricultural land is involved, how many acres of soil are classified within soil group 1 through 4 of the NYS Land Classification System? NA acres. (See 1 NYCRR 370).
4. Are there bedrock outcroppings on project site?     Yes     No
- a. What is depth to bedrock? greater than 50 (in feet)

5. Approximate percentage of proposed project site with slopes:  0-10% 100 %  10-15% \_\_\_\_\_ %  
 15% or greater \_\_\_\_\_ %
6. Is project substantially contiguous to, or contain a building, site, or district, listed on the State or the National Registers of Historic Places?  Yes  No
7. Is project substantially contiguous to a site listed on the Register of National Natural Landmarks?  Yes  No
8. What is the depth of the water table? approx 5 (in feet)
9. Is site located over a primary, principal, or sole source aquifer?  Yes  No
10. Do hunting, fishing or shell fishing opportunities presently exist in the project area?  Yes  No
11. Does project site contain any species of plant or animal life that is identified as threatened or endangered?  
 Yes  No According to \_\_\_\_\_  
 Identify each species \_\_\_\_\_
12. Are there any unique or unusual land forms on the project site? (i.e., cliffs, dunes, other geological formations)  
 Yes  No Describe  
 \_\_\_\_\_
13. Is the project site presently used by the community or neighborhood as an open space or recreation area?  
 Yes  No If yes, explain
14. Does the present site include scenic views known to be important to the community?  
 Yes  No
15. Streams within or contiguous to project area: Bridge Creek  
 a. Name of Stream and name of River to which it is tributary Arthur Kill
16. Lakes, ponds, wetland areas within or contiguous to project area:  
 a. Name Tidal wetlands along Bridge Creek b. Size (In acres) approx. 7 acres
17. Is the site served by existing public utilities?  Yes  No  
 a) If Yes, does sufficient capacity exist to allow connection?  Yes  No  
 b) If Yes, will improvements be necessary to allow connection?  Yes  No
18. Is the site located in an agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304?  Yes  No
19. Is the site located in or substantially contiguous to a Critical Environmental Area designated pursuant to Article 8 of the ECL, and 6 NYCRR 617?  Yes  No
20. Has the site ever been used for the disposal of solid or hazardous wastes?  Yes  No

## B. Project Description

1. Physical dimensions and scale of project (fill in dimensions as appropriate)
- Total contiguous acreage owned or controlled by project sponsor approx. 300 acres.
  - Project acreage to be developed. approx. 38 acres initially; approx. 38 acres ultimately.
  - Project acreage to remain undeveloped 0 acres.
  - Length of project, in miles: NA (If appropriate)
  - If the project is an expansion, indicate percent of expansion proposed NA %;
  - Number of off-street parking spaces existing NA; proposed \_\_\_\_\_
  - Maximum vehicular trips generated per hour NA (upon completion of project)?
  - If residential: Number and type of housing units:
 

	One Family	Two Family	Multiple Family	Condominium
Initially	<u>NA</u>	_____	_____	_____
Ultimately	_____	_____	_____	_____
  - Dimensions (in feet) of largest proposed structure NA height; \_\_\_\_\_ width, \_\_\_\_\_ length.
  - Linear feet of frontage along a public thoroughfare project will occupy is? 2,600 ft.

2. How much natural material (i.e., rock, earth, etc.) will be removed from the site? NA tons/cubic yards
3. Will disturbed areas be reclaimed?  Yes  No  N/A  
 a. If yes, for what intended purpose is the site being reclaimed? Erosion control.  
 b. Will topsoil be stockpiled for reclamation?  Yes  No  
 c. Will upper subsoil be stockpiled for reclamation?  Yes  No
4. How many acres of vegetation (trees, shrubs, ground covers) will be removed from site? NA acres.
5. Will any mature forest (over 100 years old) or other locally-important vegetation be removed by this project?  
 Yes  No
6. If single phase project: Anticipated period of construction NA months, (including demolition).
7. If multi-phased:  
 a. Total number of phases anticipated 3 (number).  
 b. Anticipated date of commencement phase 1 January month 2005 year, (including demolition).  
 c. Approximate completion date of final phase NA month 2010+ year.  
 d. Is phase 1 functionally dependent on subsequent phases?  Yes  No
8. Will blasting occur during construction?  Yes  No
9. Number of jobs generated: during construction approx. 50; after project is complete approx. 50.
10. Number of jobs eliminated by this project NA.
11. Will project require relocation of any projects or facilities?  Yes  No if yes, explain \_\_\_\_\_
- 
12. Is surface liquid waste disposal involved?  Yes  No  
 a. If yes, indicate type of waste (sewage, industrial, etc.) and amount \_\_\_\_\_  
 b. Name of water body into which effluent will be discharged \_\_\_\_\_
13. Is subsurface liquid waste disposal involved?  Yes  No Type \_\_\_\_\_
14. Will surface area of an existing water body increase or decrease by proposal?  Yes  No  
 Explain Mitigation element will increase width of Bridge Creek to enhance tidal flow.
15. Is project or any portion of project located in a 100 year flood plain?  Yes  No
16. Will the project generate solid waste?  Yes  No  
 a. If yes, what is the amount per month \_\_\_\_\_ tons  
 b. If yes, will an existing solid waste facility be used?  Yes  No  
 c. If yes, give name \_\_\_\_\_; location \_\_\_\_\_  
 d. Will any wastes not go into a sewage disposal system or into a sanitary landfill?  Yes  No  
 e. If Yes, explain \_\_\_\_\_
- 
17. Will the project involve the disposal of solid waste?  Yes  No  
 a. If yes, what is the anticipated rate of disposal? \_\_\_\_\_ tons/month.  
 b. If yes, what is the anticipated site life? \_\_\_\_\_ years.
18. Will project use herbicides or pesticides?  Yes  No
19. Will project routinely produce odors (more than one hour per day)?  Yes  No
20. Will project produce operating noise exceeding the local ambient noise levels?  Yes  No
21. Will project result in an increase in energy use?  Yes  No  
 If yes, indicate type(s) \_\_\_\_\_
22. If water supply is from wells, indicate pumping capacity NA gallons/minute.
23. Total anticipated water usage per day NA gallons/day.
24. Does project involve Local, State or Federal funding?  Yes  No  
 If Yes, explain \_\_\_\_\_

**25. Approvals Required:**

		Type	Submittal Date
City, Town, Village Board	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sewer, water line connections	concurrent
City, Town, Village Planning Board	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
City, Town Zoning Board	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
City, County Health Department	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Other Local Agencies	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Coastal Management Program	concurrent
Other Regional Agencies	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
State Agencies	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Coastal Management Program	concurrent
Federal Agencies	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Section 10, 404	concurrent

**C. Zoning and Planning Information**

- Does proposed action involve a planning or zoning decision?  Yes  No  
 If Yes, indicate decision required:  
 zoning amendment    zoning variance    special use permit    subdivision    site plan  
 new/revision of master plan    resource management plan    other \_\_\_\_\_
- What is the zoning classification(s) of the site? M3 Industrial/Commercial.
- What is the maximum potential development of the site if developed as permitted by the present zoning?  
100 percent.
- What is the proposed zoning of the site? NA
- What is the maximum potential development of the site if developed as permitted by the proposed zoning?  
NA
- Is the proposed action consistent with the recommended uses in adopted local land use plans?  Yes  No
- What are the predominant land use(s) and zoning classifications within a ¼ mile radius of proposed action?  
Industrial/Commercial.
- Is the proposed action compatible with adjoining/surrounding land uses within a ¼ mile?  Yes  No
- If the proposed action is the subdivision of land, how many lots are proposed? NA  
 a. What is the minimum lot size proposed? \_\_\_\_\_
- Will proposed action require any authorization(s) for the formation of sewer or water districts?  Yes  No
- Will the proposed action create a demand for any community provided services (recreation, education, police, fire protection)?  Yes  No  
 a. If yes, is existing capacity sufficient to handle projected demand?  Yes  No
- Will the proposed action result in the generation of traffic significantly above present levels?  Yes  No  
 a. If yes, is the existing road network adequate to handle the additional traffic?  Yes  No

**D. Informational Details**

Attach any additional information as may be needed to clarify your project. If there are or may be any adverse impacts associated with your proposal, please discuss such impacts and the measures which you propose to mitigate or avoid them.

**E. Verification**

I certify that the information provided above is true to the best of my knowledge.

Applicant/Sponsor Name <sup>Contact Person</sup> Bernice R. Malione Date 9-9-04  
 Signature [Signature] Title Supervisor, PGA/EEU

If the action is in the Coastal Area, and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment.



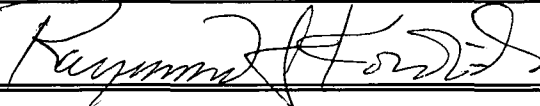


New York State Department of Environmental Conservation  
Supplement to Joint Application for Permit

**STRUCTURAL ARCHEOLOGICAL ASSESSMENT FORM (SAAF)**

<b>PART 1 -- APPLICANT COMPLETES</b>	
<b>APPLICANT INFORMATION</b>	
1. Applicant Name	The Port Authority of New York and New Jersey
2. Applicant Address	Two Gateway Center, 14th Floor SW, Newark, NJ, 07102
<b>PROJECT INFORMATION</b>	
3. Project/Facility Name	Howland Hook Marine Terminal - Port Ivory Intermodal Facility
4. Project/Facility Location	40 Western Avenue, Staten Island, New York
5. Is the proposed project adjacent to, or does it contain a building or structure listed in the State or National Register of Historic Places?	G Yes G <input checked="" type="checkbox"/> No
6. Are there any buildings or structures 50 years old or older adjacent to or within the proposed project area?	G Yes G <input checked="" type="checkbox"/> No
If the answer to question 5 and/or 6 is yes, provide the following information for each building and structure (use attachments if necessary):	
a. Name of structure	
b. Location	
c. Type of structure (ex. house, outbuilding, barn, bridge, dam, ruins)	
d. Approximate age or date of construction	
7. Might the proposed project have any impact (physical/visual) upon any buildings or structures listed in the State or National Register of Historic Places <u>or</u> 50 years old or older?	G Yes G <input checked="" type="checkbox"/> No
If yes, describe briefly (use attachments if necessary):	

APPLICANT SECTION CONTINUES ON REVERSE SIDE

<b>PART 1 -- APPLICANT COMPLETES</b>							
<p>8. Provide photographs of every building and structure that may be impacted by the project as described in number 7, on the opposite side of this page. The following standards are recommended:</p> <ul style="list-style-type: none"> <li>! Minimum of 2 photographs</li> <li>! Minimum size 4" X 4" prints from negatives preferred; polaroid photos are acceptable</li> <li>! Photos must be <b>clear</b> and <b>focused</b></li> <li>! Clearly label photos so it is obvious what is being illustrated; key photos to map or plan, if possible</li> <li>! Photo 1: show both the entire front and side of the structure in a single shot from as close to the building as possible. Be sure the structure is not partially or fully blocked by trees or other obstructions</li> <li>! Photo 2: show relationship of building or structure to roadway or surroundings</li> </ul>							
<p>9. Has the land within the proposed project area been previously disturbed or altered (excavated, landscaped, filled, utilities installed)?</p>	<p><b>G</b> <del>Y</del> <b>G</b> No</p>						
<p>If yes, describe briefly, including depth of disturbance (use attachments if necessary):</p>							
<p>By former owner the Proctor and Gamble Company. Extensively modified to accommodate their manufacturing facilities.</p>							
<p>10. Approximate percentage of proposed project area with slopes:</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">0 - 10%</td> <td style="width: 40%; text-align: right;">100 %</td> </tr> <tr> <td>10 - 15%</td> <td style="text-align: right;">%</td> </tr> <tr> <td>15% or greater</td> <td style="text-align: right;">%</td> </tr> </table>	0 - 10%	100 %	10 - 15%	%	15% or greater	%
0 - 10%	100 %						
10 - 15%	%						
15% or greater	%						
<p>11. Approximate percentage of proposed project site with the following drainage characteristics:</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Well drained</td> <td style="width: 40%; text-align: right;">%</td> </tr> <tr> <td>Moderately well drained</td> <td style="text-align: right;">100 %</td> </tr> <tr> <td>Poorly drained</td> <td style="text-align: right;">%</td> </tr> </table>	Well drained	%	Moderately well drained	100 %	Poorly drained	%
Well drained	%						
Moderately well drained	100 %						
Poorly drained	%						
<p>Prepared By (Print or type name): Raymond J. Kordish</p>							
<p>Signature: </p>	<p>Date: 9-9-04</p>						

The Public burden for this collection of information is estimated to average 10 hours per response, although the majority of applications should require 5 hours or less. This includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Service Directorate of Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302; and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003), Washington, DC 20503. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please **DO NOT RETURN** your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

**PRIVACY ACT STATEMENT**

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research and Sanctuaries Act, 33 USC 1413, Section 103. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

**(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)**

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETED
--------------------	----------------------	------------------	-------------------------------

**(ITEMS BELOW TO BE FILLED BY APPLICANT)**

5. APPLICANT'S NAME The Port Authority of New York and New Jersey	8. AUTHORIZED AGENT'S NAME AND TITLE <i>(an agent is not required)</i> Bernice R. Malione, Supervisor, PGA/EEU
6. APPLICANT'S ADDRESS Two Gateway Center, 14th Floor SW, Newark, NJ 07102	9. AGENT'S ADDRESS Same as applicants.
7. APPLICANT'S PHONE NOS. W/AREA CODE a. Residence b. Business 973/565-7565	10. AGENT'S PHONE NOS. W/AREA CODE a. Residence b. Business 973/565-7565

**11. STATEMENT OF AUTHORIZATION**

I hereby authorize, Bernice R. Malione to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

  
APPLICANT'S SIGNATURE

9/10/04  
DATE

**NAME, LOCATION AND DESCRIPTION OF PROJECT OR ACTIVITY**

12. PROJECT NAME OR TITLE <i>(see instructions)</i> Howland Hook Marine Terminal - Port Ivory Intermodal Facility	
13. NAME OF WATERBODY, IF KNOWN <i>(if applicable)</i> Bridge Creek	14. PROJECT STREET ADDRESS <i>(if applicable)</i> 40 Western Avenue Staten Island, NY 10303 718/981-9693
15. LOCATION OF PROJECT Richmond COUNTY                      New York STATE	
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN, <i>(see instructions)</i> NA	
17. DIRECTIONS TO THE SITE See enclosed location drawings.	

18. Nature of Activity (Description of project, include all features)

As Phase 1A of the project, the development of a five-track, intermodal facility (rail transfer of shipping containers) at the Port Ivory site of the Howland Hook Marine Terminal, the Port Authority proposes to construct a bridge and three storm water outfalls within the regulated tidal wetland zone of Bridge Creek. Mitigation for the loss of wetlands will consist of re-profiling part of the bed and banks of Bridge Creek to enhance tidal flow to off-site, upstream, tidal wetlands. Project details are provided in the enclosed application documents.

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

Reduce the number of truck movements of shipping containers to and from the New York Container Terminal, Inc. at the Howland Hook Marine Terminal by developing a rail-transfer facility.

USE BLOCKS 20-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

Minor discharges of clean fill and riprap at the proposed bridge and storm water outfall locations, and at bank side locations along Bridge Creek in the area of bed and bank re-profiling related to project mitigation.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards

Stone and clean sand. Approximately 100 cubic yards of material.

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Bridge abutment--385 square feet. Outfall H-ALT--200 square feet.

23. Is Any Portion of the Work Already Complete? Yes  No  IF YES, DESCRIBE THE COMPLETED WORK

24. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (If more than can be entered here, please attach a supplemental list).

Adjoining property is owned or leased by the Port Authority of New York and New Jersey.

25. List of Other Certifications or Approvals/Denials Received from other Federal, State or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
NYSDEC	Tidal Wetland Permit		Concurrent application.		
NYSDOS	CMP Consistency Concurrence		Concurrent application.		

\*Would include but is not restricted to zoning, building and flood plain permits

26. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

	
SIGNATURE OF APPLICANT	SIGNATURE OF AGENT
9/10/04	9-10-04
DATE	DATE

Francis J. Lombardi, P.E., Chief Engineer  
Bernice R. Malione  
The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

## **ENVIRONMENTAL QUESTIONNAIRE**

***This is intended to supplement ENG Form 4345, Application for Department of the Army Permit, or the Joint Application for Permit used in the State of New York. Please provide complete answers to all questions below which are relevant to your project. Any answers may be continued on separate sheet(s) of paper to be attached to this form.***

### **PRIVACY ACT STATEMENT**

***The purpose of this form is to provide the Corps of Engineers with basic information regarding your project. This information will be used to facilitate evaluation of your permit application and for public dissemination as required by regulation. Failure to provide complete information may result in your application being declared incomplete for processing, thereby delaying processing of your application.***

### **GENERAL--APPLICABLE TO ALL PROJECTS**

#### ***1. Explain the need for, and purpose of, the proposed work.***

As Phase 1A of the project, the development of a five-track, intermodal facility (rail transfer of shipping containers) at the Port Ivory site of the Howland Hook Marine Terminal, the Port Authority proposes to construct a bridge and three storm water outfalls within the regulated tidal wetland zone of Bridge Creek. Mitigation for the loss of wetlands will consist of re-profiling part of the bed and banks of Bridge Creek to enhance tidal flow to off-site, upstream, tidal wetlands.

Project details are provided in the enclosed application documents.

The project will significantly reduce the number of truck movements of shipping containers to and from the New York Container Terminal, Inc. at the Howland Hook Marine Terminal by developing a rail-transfer facility.

#### ***2. Provide the names and addresses of property owners adjacent to your work site (if not shown on the application form or project drawings).***

Adjacent properties are owned by or leased by the applicant.

***(Please note that depending upon the nature and extent of your project, you may be requested to provide the names and addresses of additional property owners proximate to your project site to ensure proper coordination.)***

#### ***3. Photographs of the project site should be submitted. For projects in tidal areas, photographs of the waterway vicinity should be taken at low tide. Using a separate copy of your plan view, indicate the location and direction of each photograph as well as the date and time at which the photograph was taken. Provide a sufficient number of photographs so as to provide a clear understanding of conditions on and proximate to your project site.***

Photo's enclosed.

#### ***4. Provide a copy of any environmental impact statement, or any other environmental report which was prepared for your project.***

Environmental report enclosed.

**5. Provide a thorough discussion of alternatives to your proposal. This discussion should include, but not necessarily be limited to, the "no action" alternative and alternative(s) resulting in less disturbance to waters of the United States. For filling projects in waters of the United States, including wetlands, your alternatives discussion should demonstrate that there are no practicable alternatives to your proposed filling and that your project meets with current mitigation policy (i.e. avoidance, minimization and compensation).**

See enclosed detailed project description for alternatives analysis.

### **DREDGING PROJECTS**

**Answer the following if your project involves dredging.**

**1. Indicate the estimated volume of material to be dredged and the depth (below mean low water) to which dredging would occur. Would there be overdepth dredging?**

Volume = approximately 3,300 cubic yards of creek bank and bottom sediment to be removed as part of the NYSDEC required mitigation for the project. Re-profiling of a section of Bridge Creek will enhance tidal flow into the easterly reaches of the creek system, site of the NYSDEC's wetland restoration project.

**2. You can apply for a ten-year permit for maintenance dredging. If you wish to apply for a ten-year permit, please provide the number of additional dredging events during the ten-year life of the permit and the amount of material to be removed during future events.**

NA

**3. Indicate of your drawings the dewatering area (if applicable) and disposal site for the dredged material (except landfill sites). Submit a sufficient number of photographs of the dewatering and disposal sites as applicable so as to provide a clear indication of existing conditions. For ten-year maintenance dredging permits, indicate the dewatering/disposal sites for future dredging events, if known.**

**4. Describe the method of dredging (i.e. clamshell, dragline, etc.) and the expected duration of dredging.**

Excavator. Approximately two weeks.

**5. Indicate the physical nature of the material to be dredged (i.e. sand, silt, clay, etc.) and provide estimated percentages of the various constituents if available. For beach nourishment projects, grain size analysis data is required.**

Erosion and tidal borne sediments -- silt (60%), clay (30%), sand (10%).

**6. Describe the method of dredged material containment (i.e. hay bales, embankment, bulkhead, etc.) and whether return flow from the dewatering/disposal site would reenter any waterway. Also indicate if there would be any barge overflow.**

Excavated material would be placed on an adjacent upland site surrounded by hay bales and filter fabric. Any filtered runoff would be allowed to re-enter Bridge Creek via sheet flow from the containment area.

### **MOORING FACILITIES**

**Answer the following if your project includes the construction or rehabilitation of recreational mooring facilities.**

**1. It is generally recommended that any fixed piers and walk ramps be limited to four feet in width, and that floats be limited to eight feet in width and rest at least two feet above the waterway bottom at mean low water. Terminal floats at private, non-commercial facilities should be limited to 20 feet in length. If you do not believe your proposal can meet with these recommendations, please provide the reason(s).**

NA

**2. Using your plan view, show to scale the location(s), position(s) and size(s) (including length, beam and draft) of vessel(s) to be moored at the proposed facility, including those of transient vessel(s) if known.**

**3. For commercial mooring sites such as marinas, indicate the capacity of the facility and indicate on the plan view the location(s) of any proposed fueling and/or sewage pumpout facilities. If pumpout facilities are not planned, please discuss the rationale below and indicate the distance to the nearest available pumpout station.**

**4. Indicate on your plan view the distance to adjacent marine structures, if any are proximate and show the locations and dimensions of such structures.**

**5. Discuss the need for wave protection at the proposed facility. Please be advised that if a permit is issued, you would be required to recognize that the mooring facility may be subject to wave action from wakes of passing vessels, whose operations would not be required to be modified. Issuance of a permit would not relieve you of ensuring the integrity of the authorized structure(s) and the United States would not be held responsible for damages to the structure(s) and vessel(s) moored thereto from wakes from passing vessels.**

### **BULKHEADING/BANK STABILIZATION/FILLING ACTIVITIES**

**Answer the following if your project includes construction of bulkheading (also retaining walls and seawalls) with backfill, filling of waters/wetlands, or any other bank stabilization fills such as riprap, revetments, gabions, etc.**

**1. Indicate the total volume of fill (including backfill behind a structure such as a bulkhead) as well as the volume of fill to be placed into waters of the United States. The amount of fill in waters of the United States can be determined by calculating the amount of fill to be placed below the plane of spring high tide in tidal areas and below ordinary high water in non-tidal areas.**

Stabilize Bridge Creek embankment = approximately 100 cubic yards of riprap.

**2. Indicate the source(s) and type(s) of fill material.**

Purchased construction grade riprap.

**3. Indicate the method of fill placement (i.e. by hand, bulldozer, crane, etc.). Would any temporary fills be required in waterways or wetlands to provide access for construction equipment? If so, please indicate the area of such waters and/or wetlands to be filled, and show on the plan and sectional views.**

Placement by excavator. Fill in wetlands to provide access will not be required.



***The foregoing requests basic information on the most common types of projects requiring Department of the Army permits. It is intended to obviate or reduce the need for requesting additional information; however, additional information may be requested above and beyond what is requested in this form.***

***Please feel free to add any additional information regarding your project which you believe may facilitate our review.***



Port Ivory Intermodal Facility. Bridge Creek from the container operations administration building bridge at Western Avenue. Typical of channel recommended for re-profiling. View northerly. 9/04.

DHL ~~Express~~ Delivery14<sup>th</sup> Floor SW

October 18, 2004

Ms. KayDee McGuckin  
Division of Environmental Permits  
New York State Department of Environmental Conservation  
47-40 21<sup>st</sup> Street  
Long Island City, NY 11101

Re: HHMT-Port Ivory Intermodal Facility (PIIF) Application for Permit.

Dear Ms. McGuckin:

In follow up to our application for permit dated September 15, 2004, and with regard to the mitigation element described therein, the Port Authority of New York and New Jersey (the Port Authority) herewith submits drawings and supporting information for a change in the sediment/soil disposal location. Concurrently, this change in the mitigation proposal is being submitted to the ACOE and the NYSDOS for their review.

The proposed disposal location for this project element in the application was on Howland Hook Marine Terminal land immediately adjacent to and west of Bridge Creek. However, due to concerns about the volume of sediment/soil (3,300 cubic yards) to be distributed over the limited area available adjacent to Bridge Creek, it was determined that the material be trucked to the upland site (gravel base) within the Port Ivory facility area shown on the enclosed drawings. This alternate location is currently used for the temporary storage of container truck chassis used at the Howland Hook container terminal operations.

The material would be stored at this location pending determination of its suitability for use as fill within the Port Ivory Intermodal project area or, if not suitable, it would be disposed of at an approved solid waste landfill.

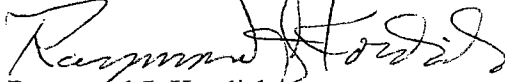
The general work area for the re-profiling effort is shown on enclosed drawing G3 (gray tone area). As shown on G3, the transport route for excavated sediments/soils by truck from the work area would be along a short section of Western Avenue (limited to work along this section of Bridge Creek only), over Bridge Creek via the bridge and entrance to the container terminal's administration building parking lot, through the parking lot, through the easterly sector of the terminal's container storage area to former Richmond Terrace (all on paved surfaces) and to the stockpile location.

During the re-profiling effort, hay bales and silt curtains would be employed along the banks of Bridge Creek, and silt curtains across Bridge Creek, to minimize erosion and sediment transport. Following completion of the re-profiling effort, the work area, currently dominated by common reed (*Phragmites australis*), would be seeded with fast growing grasses to stabilize the disturbed areas as quickly as possible. Relocation of the disposal site will eliminate the need for the gabion retaining wall and stone base shown on the original application drawings.

As indicated on drawing LS12, the temporary stockpile area would be ringed with a silt fence/hay bale barrier as an erosion control measure. The stockpile would be seeded with a mixture of fast growing grasses or soil-sealed using an acrylic polymer to further control erosion.

Thank you for your consideration of this matter. Please call me at (973) 565-7564 if you have any questions or require additional information.

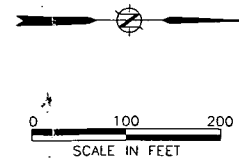
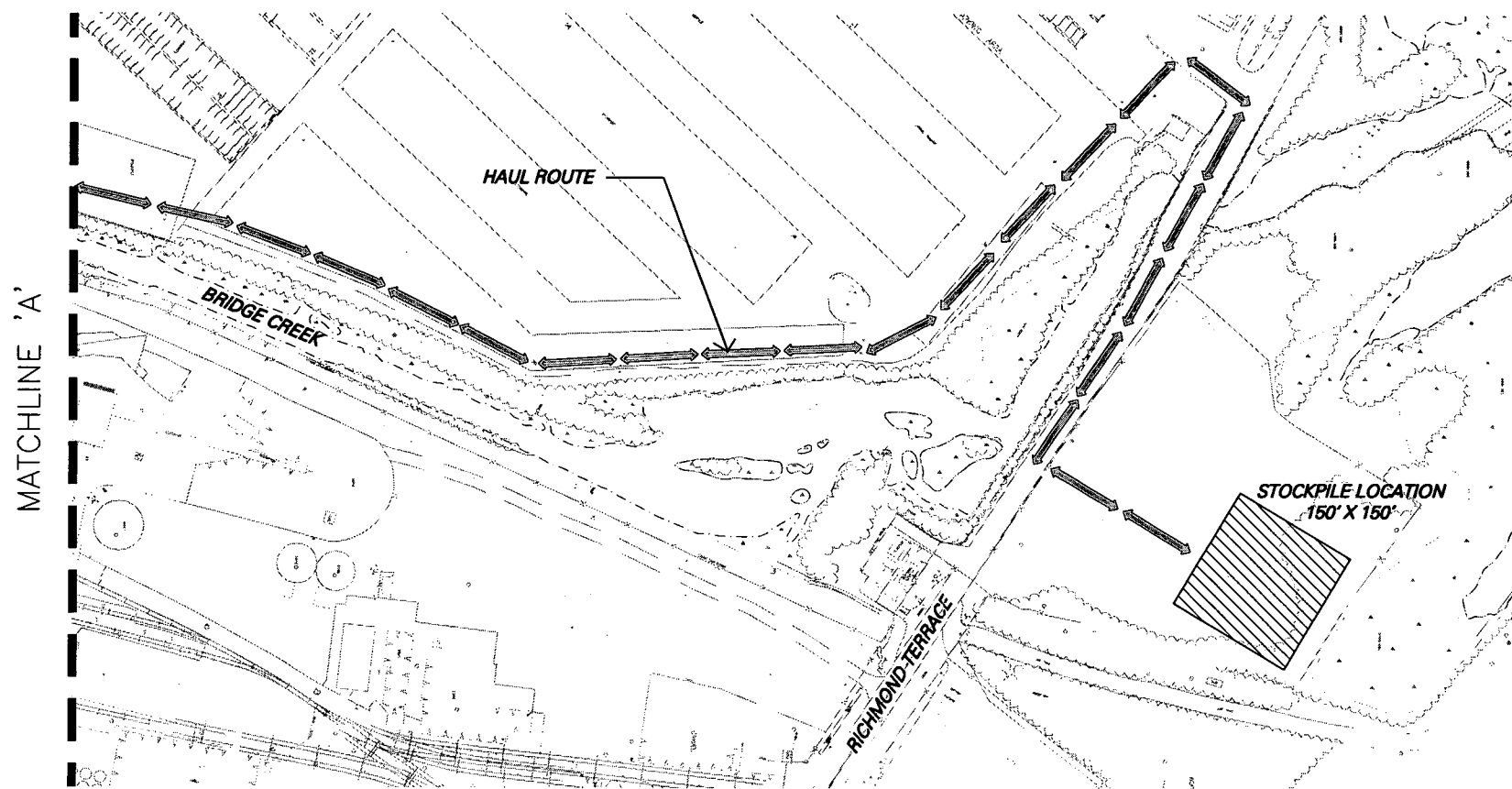
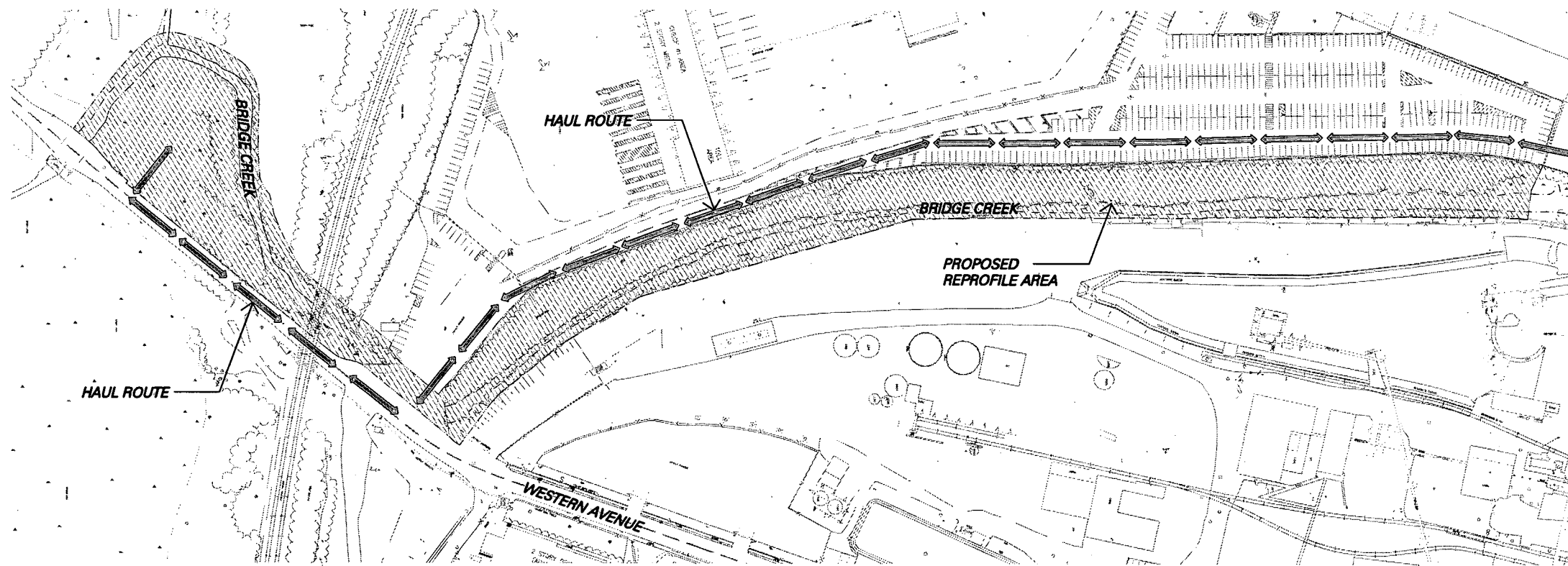
Very truly yours,



Raymond J. Kordish

Permits and Governmental Approvals  
Environmental Engineering Unit

Cc: S. Zahn, NYSDEC, DMR  
C. Spitz, ACOE, EPS  
J. Zappieri, NYSDOS, CMP  
W. Woods, NYCDP, WRP



Sheet of



ENGINEERING PROGRAM MANAGER  
PORT COMMERCE

CHIEF ARCHITECT

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT

**HOWLAND HOOK  
MARINE TERMINAL**

GENERAL

Title  
**BRIDGE CREEK  
REPROFILING**

**HAUL ROUTE  
AND  
STOCKPILE LOCATION**

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

TN                      LDL                      IA  
Designed by      Drawn by      Checked by

Date                      OCTOBER 13, 2004

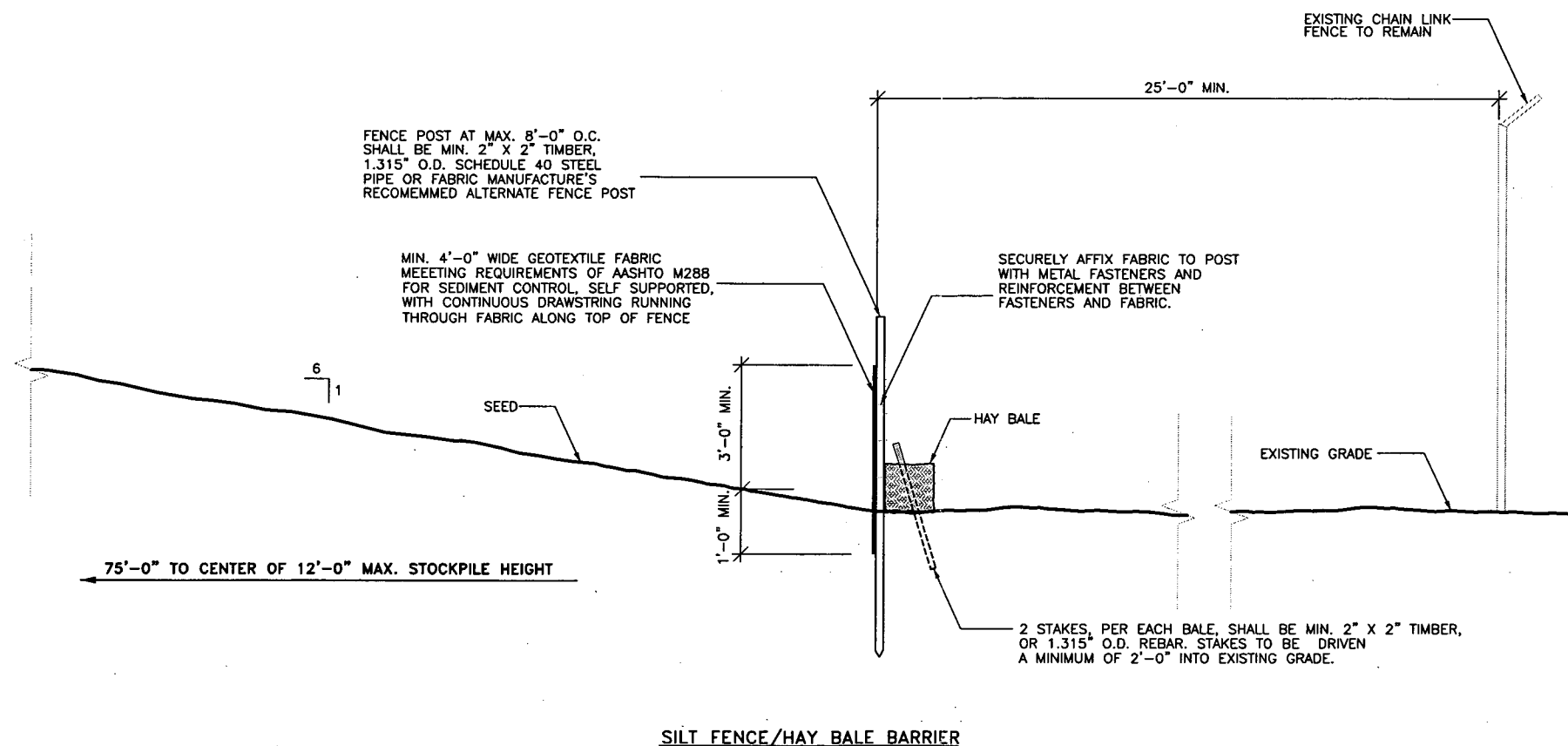
Contract Number                      **HH-334.018**

Drawing Number                      **G3**



ENGINEERING PROGRAM MANAGER  
PORT COMMERCE

CHIEF ARCHITECT



**SILT FENCE/HAY BALE BARRIER**

**D 1** **STOCKPILE CONTAINMENT BARRIER**  
Not to Scale

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT

**HOWLAND HOOK  
MARINE TERMINAL**

LANDSCAPE ARCHITECTURAL

Title  
**BRIDGE CREEK  
REPROFILING**

**DETAILS**  
**-3-**

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

TN                      LDL                      IA  
Designed by            Drawn by            Checked by

Date                      OCTOBER 13, 2004

Contract Number                      **HH-334.018**

Drawing Number                      **LS12**



**THE PORT AUTHORITY** OF NY & NJ

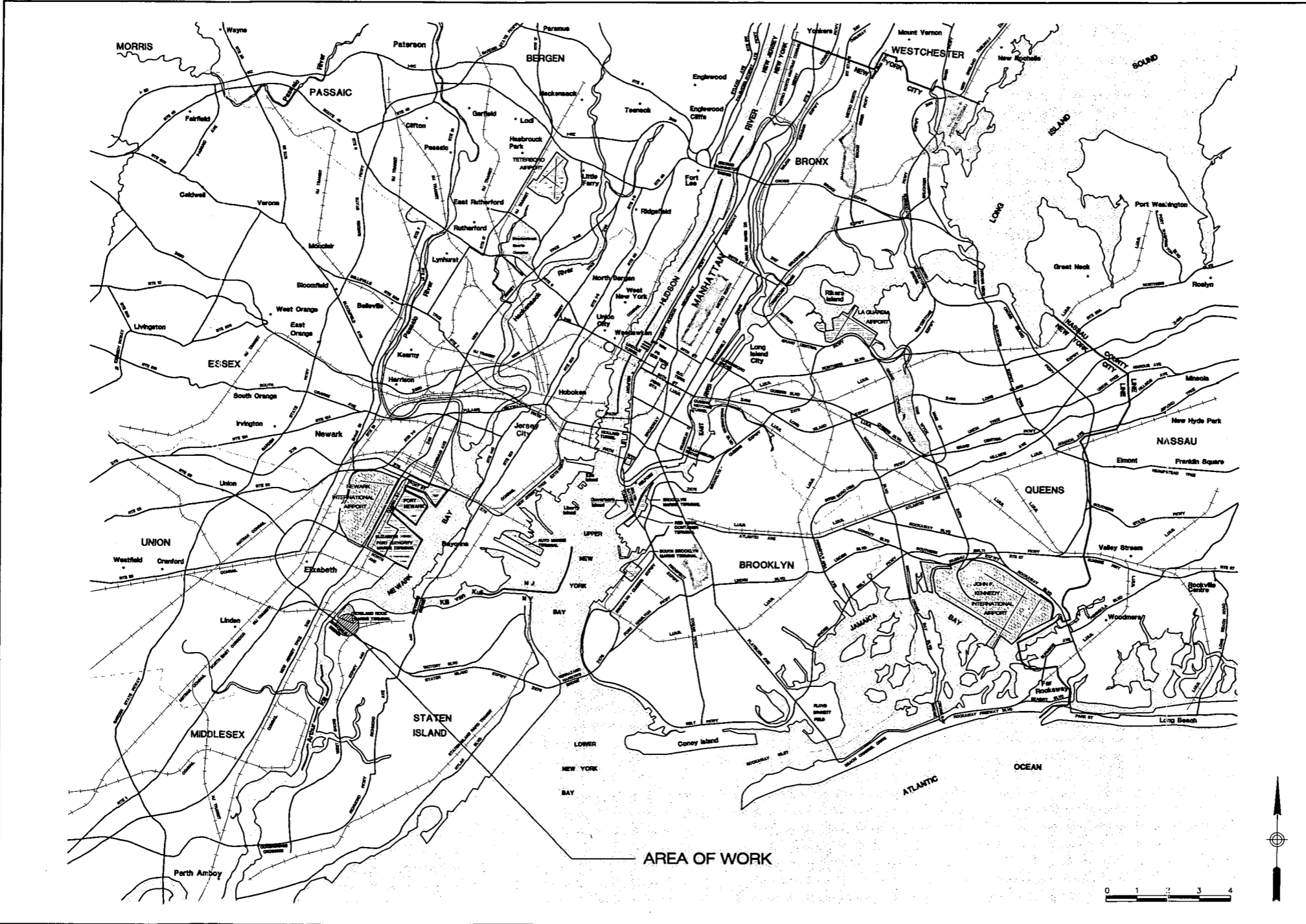
# HOWLAND HOOK MARINE TERMINAL

## BRIDGE CREEK REPROFILING

### CONTRACT No. HH-334.018

No.	Date	Revision	Approved

	<p>ENGINEERING PROGRAM MANAGER PORT COMMERCE ..... DATE .....</p> <p>FACILITY MANAGER ..... DATE .....</p> <p>CHIEF ENGINEER ..... DATE .....</p>	<p>CONTRACT No. HH-334.018</p> <p>DRAWING No. G1</p> <p>TITLE SHEET</p>
--	---	---



Sheet \_\_\_\_\_ of \_\_\_\_\_

**THE PORT AUTHORITY  
OF NY & NJ**

ENGINEERING PROGRAM MANAGER  
PORT COMMERCE

CHIEF ARCHITECT

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT			

**HOWLAND HOOK  
MARINE TERMINAL**

GENERAL

Title

**BRIDGE CREEK  
REPROFILING**

**REGIONAL LOCATION  
MAP**

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

TN	LDL	IA
Designed by	Drawn by	Checked by
Date	SEPTEMBER 3, 2004	

Contract Number **HH-334.018**

Drawing Number **G2**





ENGINEERING PROGRAM MANAGER  
PORT COMMERCE  
CHIEF ARCHITECT

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT			

**GENERAL**  
Title  
**BRIDGE CREEK  
REPROFILING**

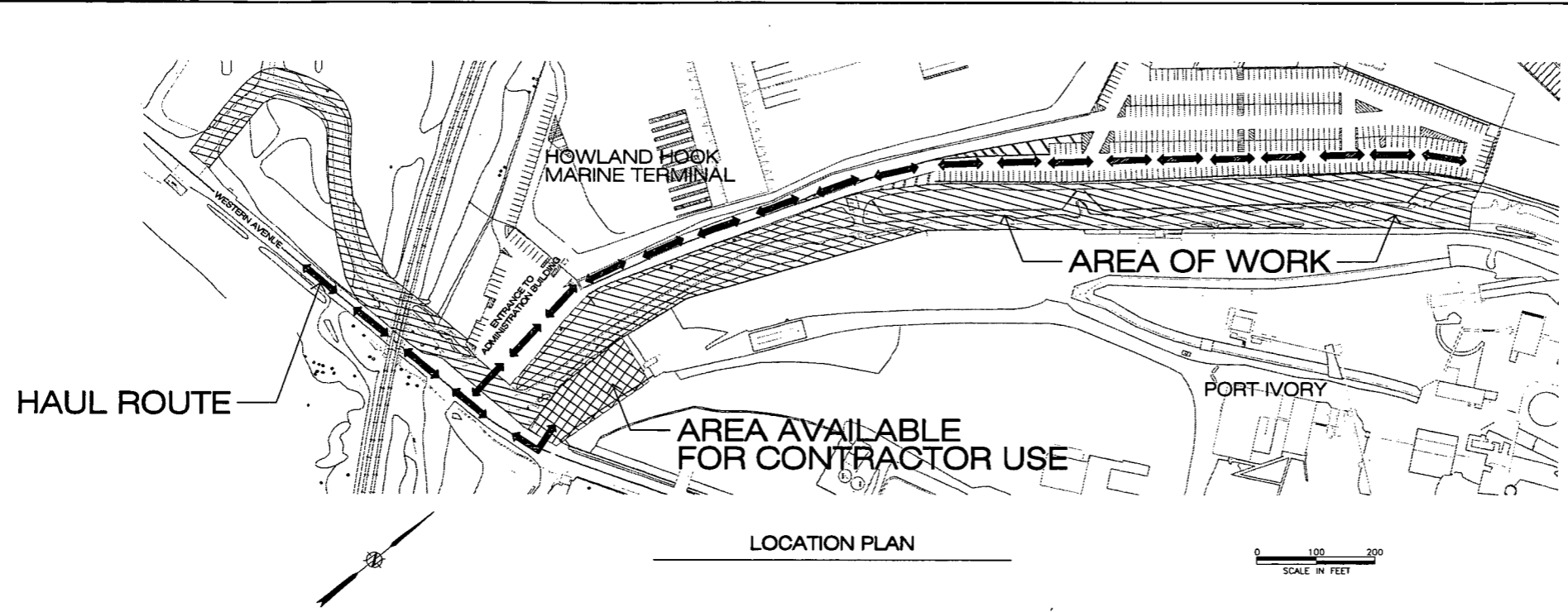
**LOCATION PLAN  
AND  
INDEX OF DRAWINGS**

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

TW      LDL      IA  
Designed by      Drawn by      Checked by  
Date      **SEPTEMBER 3, 2004**

Contract Number      **HH-334.018**

Drawing Number      **G3**



INDEX OF DRAWINGS			
<b>GENERAL</b>			
G1	TITLE SHEET	LS8	SECTIONS -3-
G2	REGIONAL LOCATION MAP	LS9	SECTIONS -4-
G3	LOCATION PLAN AND INDEX OF DRAWINGS	LS10	DETAILS -1-
		LS11	DETAILS -2-
<b>LANDSCAPE ARCHITECTURAL</b>		<b>GEOTECHNICAL</b>	
LS1	SPECIFICATION NOTES	GT1	GEOTECHNICAL NOTES
LS2	PLAN -1-	GT2	GEOTECHNICAL DETAILS
LS3	PLAN -2-		
LS4	PLAN -3-		
LS5	PLAN -4-		
LS6	SECTIONS -1-		
LS7	SECTIONS -2-		

**SPECIFICATION NOTES:**

**A. GENERAL**

**1. TIDES**

Spring High Water	2.41' Elevation	N.A.V.D. 88
Mean High Water	2.08' Elevation	N.A.V.D. 88
Mean Low Water	-2.92' Elevation	N.A.V.D. 88

**2. SITE ACCESS**

- a. A maximum of 15 parking stalls adjacent to the construction site fence line, will be available for closure at any one time.
- b. The Contractor shall remove limited portions of the existing chainlink fence, at the edge of the Howland Hook Marine Terminal parking area, to access Bridge Creek Channel.
- c. Fence fabric shall be re-attached to existing fence posts at the end of each work day as required to maintain terminal security after hours.
- d. The construction site fence line will be inspected at the end of each work day and approved by the Engineer as satisfactory for terminal security, prior to the Contractor's daily departure from the construction site.

**3. MAINTENANCE OF EXISTING UTILITIES AND WESTERN AVENUE**

- a. The Contractor shall verify the location and depth of all existing utilities within the Area of Work, prior to commencement of Work, using the New York One Call System - Code 53.
- b. Sequence, coordinate and conduct excavation and grading operations such as to maintain continuous public safety, access, drainage and utility services to existing facilities requiring these services.
- c. The Contractor shall verify the location and depth of all utilities prior to commencement of Work and exercise all necessary precautions when working next to existing utility lines and other structures to avoid damaging them. Any interference with Work to be done under this Contract shall be brought to the attention of the Engineer immediately.
- d. The Contractor shall maintain safe clearances from overhead electrical lines at all times and take the necessary precautions against injury and damage. Structures or poles supporting overhead lines shall be protected.
- e. Any existing utilities damaged by the Contractor's operations shall be repaired as directed by the Engineer at no additional cost to the Authority.
- f. Utilize a mobile sweeper and water truck, twice daily, for dust control and maintaining the Western Ave. Haul Route free from debris caused by the Contractor's operations.

**B. SPECIFICATION SECTION 02221 - EXCAVATION, BACK FILLING AND FILLING**

THE FOLLOWING INFORMATION SUPERSEDES INFORMATION SHOWN OR NOT INCLUDED IN THIS SPECIFICATION SECTION

**1. GENERAL**

- a. At no time during construction shall any timber mats, construction materials, vehicles or equipment be stored at the construction site.
- b. Dewatering or disruption of the normal twice daily tidal movement due to the construction of dikes or other construction activities within Bridge Creek is prohibited.
- c. All Contractor operations shall only be permitted within the construction site as shown on the Contract Drawings, unless otherwise approved by the Engineer.

**2. WORK SEQUENCING PLAN**

- a. Prior to commencement of Work, The Contractor shall submit to the Engineer, a Work Sequencing Plan showing proposed sequence of work and access points required through secured areas along Bridge Creek, and a list including methods and types of equipment to be used to accomplish the Work, as shown on the Contract Drawings, to the Engineer for review and approval. The Contractor shall not commence Work without receipt of written approval for the Work Sequencing Plan by the Engineer.
- b. The following sequence of Contractor's operations is required unless otherwise approved in writing by the Engineer:
  - 1.) Submit an approved Haul Route Sequencing Plan, including timber mat road locations and typical sections and details of timber mats.
  - 2.) Temporary Turbidity Curtains
    - a.) Temporary turbidity curtains shall consist of a double curtain, installed within Bridge Creek, just outside the limits of the Contractor's excavation and reprofiling operations.
    - b.) Submit an approved turbidity curtain and Plan designating proposed placement locations along Bridge Creek.
  - 3.) Remove all temporary timber mat roads, turbidity curtains and all other materials and equipment from the construction site, upon completion and approval of excavation and grading operations.

**C. EXCAVATION, REPROFILING AND GRADING OPERATIONS**

1. Stake out excavation, reprofiling and grading limits of Bridge Creek, Bridge Creek side-slopes and gabion retaining wall for approval by the Engineer. The Contractor shall obtain written approval, by the Engineer, prior to commencement of any excavation, reprofiling or grading operations.
2. Prior to commencement of excavation/grading operations the Contractor shall install temporary turbidity curtains, at locations along Bridge Creek to prevent materials from grading/excavation operations from washing down stream.
3. Excavate, reprofile and grade soil and install gabion retaining walls as required to establish grades as designated on Contract Drawings LS2, LS3, LS4 and LSS. Obtain Engineer's approval of finished grade elevations.
4. Install gabion retaining wall as shown on Contract Drawings LS4, LSS, LS6, LS7 and LS8 and as per Contract Drawings GT1.
5. Reprofiling Bridge Creek side-slopes of 1:2 gradient (or steeper) shall receive rip-rap as per Detail D2 on Contract Drawing LS10.

**(C. EXCAVATION, REPROFILING AND GRADING OPERATIONS; Continued.)**

**6. TEMPORARY SEDIMENT AND EROSION CONTROLS**

- a. Prior to commencement of excavation/grading operations the Contractor shall install temporary turbidity curtains, at locations along Bridge Creek to prevent materials from grading/excavation operations from washing down or up stream. Install and maintain temporary turbidity curtains throughout the duration of Contractor's operations at the construction site.
- b. The Contractor shall install Temporary Sediment Controls as per Details D1 and D2 on Contract Drawing LS10 and as follows:
  - 1.) Install continuous silt fencing between Area of Work and existing construction, pavements and Western Avenue.
  - 2.) Install hay bales along creek bed edges @ base of creek side slopes.
  - 3.) Install continuous silt fence/hay bales around periphery of stockpiled soils.
  - 4.) Install continuous silt fence/hay bales around periphery of area slated to receive stockpiled soils and fill. Maintain continuous Temporary Sediment Controls through duration of grading operations and 85% vegetative cover of fill areas and Bridge Creek side-slopes.
- c. Temporary turbidity curtains and sediment controls shall be maintained throughout the duration of Contractor's operations at the construction site and include the removal of all temporary turbidity curtains and sediment controls upon acceptance of the Work by the Engineer.

**7. EXCAVATED SOIL**

- a. Install gabion retaining wall prior to transporting excavated soils and installing within areas slated to receive fill, as per Contract Drawings LS4, LSS, LS6, LS7, LS8 and GT1.
- b. Install and maintain continuous, temporary sediment controls at the peripheral edges of disturbed grades and fill areas using hay bales and silt fence as per Contract Drawing LS10, Detail D1.
- c. The Contractor shall maintain temporary turbidity curtains and sediment controls, continuously throughout the duration of Work, until final grades are established and installed soils are stabilized with erosion control mat and seeded as shown on Contract Drawing LS2 through LS9.

8. After excavation and reprofiling operations, Bridge Creek shall have a continuous, minimum width, at creek bottom, of 15'-0" and constant grade of EL. + 0.50, unless otherwise shown on the Contract Drawings. Finish grade elevations shall be within +/- 0.10' of elevations shown on Contract Drawings LS2, LS3, LS4 and LSS. OVER-EXCAVATION WILL NOT BE PERMITTED - NO EXCEPTIONS.

9. After excavated soil materials are installed within areas slated to receive fill, apply a three inch depth of screened topsoil on the surface within the limits of the areas slated to receive fill. Screened topsoil shall be as per Specification Section 02920.

10. No equipment ruts or other surface irregularities shall occur along the reprofiled Bridge Creek, Bridge Creek side-slopes or within areas slated to receive fill at the conclusion of excavating, reprofiling and grading operations. Maintain smooth, gentle transitions between upper and lower elevations on reprofiled Bridge Creek side-slopes and within areas slated to receive fill, as shown on Contract Drawings LS2, LS3, LS4, LSS, LS6, LS7, LS8 and LS9.

**11. FIELD VERIFICATION**

- a. Following the completion of earthwork, the Contractor shall survey the limits and elevations within the limits of reprofiled Bridge Creek, Bridge Creek side-slopes and areas slated to receive fill as shown on Contract Drawing LS2, LS3 LS4 and LSS. The Contractor shall provide a Survey Plan at 1"=30'-0" scale to the Engineer for approval, prior to commencement of seeding operations.
- b. The Contractor shall provide a field verification survey prepared by a surveyor approved by the Engineer. The Contractor shall submit the name, address and telephone number of surveyor to provide the field verification survey to the Engineer for approval. The Contractor shall not commence with field verification surveys until the Engineer has approved the Contractor's surveyor in writing.
- c. The Contractor shall not commence with seeding operations until the Survey Plan is approved in writing by the Engineer.

12. Seeding shall commence only after: (1) all excavation is completed (2) earthwork, reprofiling creek and side-slopes and grading fill areas are approved in writing by the Engineer and (3) seeding is within the planting calendar limitations specified in Specification Section 02930 Appendix 'B'.

13. If seeding operations cannot occur within the calendar dates stated in Appendix 'B' of Specification Section 02930, the Contractor shall apply a soil stabilizer to all areas slated to receive seed and maintain all temporary sediment controls at the work site, until seeding can occur. Soil stabilizer shall be as per Specification Section 02930.

**D. SPECIFICATION SECTION 02930 - SEEDING**

THE FOLLOWING INFORMATION SUPERSEDES INFORMATION SHOWN OR NOT INCLUDED IN THIS SPECIFICATION SECTION:

1. Prior to commencement of seeding operations, the Contractor shall obtain approval from the Engineer, on each location to receive seed.
2. All areas to receive seed shall have "Rodeo" (glyphosate) applied as per the manufacturer's directions, 10 days prior to planting where ever weeds are present and only after the area has been approved for herbicide application by the Engineer.
3. All seeded areas shall receive a two (2) inch depth of compost, incorporated into the top eight (8) inches of existing soils as follows:
  - a. Prepare sub grade as per Specification Section 02930, Part 3.01 B.
  - b. No heavy equipment except for rollers shall be moved over areas to receive seed after the sub grade soil has been prepared and before compost is spread.
  - c. Spread two (2) inches of compost evenly over the entire area to receive seed and thoroughly incorporate into the top eight (8) inches of existing soils.
  - d. Mix hydrogel into the top two (2) inches of soil at the rate of one (1) pound per 1000 square feet.
  - e. Incorporate fertilizer, compost and hydrogel into soil using a disc, rototiller, etc., to a minimum depth of eight (8) inches.
4. Level seed bed with a leveling plank pulled behind the disc, with a York rake or other suitable earth moving equipment. Perform all operations on the contour or perpendicular to the slope.

**5. EROSION CONTROL - SEEDING ON SLOPES EXCEEDING 15%**

a. Erosion Control Mat and staples shall be as follows:

Property:	Test Method:	Typical Value/Units:
Yarn Fiber	---	Woven jute, undyed/unbleached
Yarn Count - Warp	---	78 per width, minimum
Color	---	42 per linear yard, minimum
Fabric Roll Width	---	Natural (Earhtone)
Fabric Weight	---	48 / inches
Grab Tensile Strength - Dry	ASTM D-4632 Warp	0.92 lbs. / sq
Grab Tensile Strength - Wet	ASTM D-4632 Warp	300 lbs. / ft.
Open Area	C.O.E. CW 002215	125 lbs. / ft.
Durability	Field Testing	80 - 65%
Unit Shear Stress	---	1-2 years
		0.45 lbs. / ft.

2.) Staples shall be 6" long, #11 gauge wire staples with a .091" wire thickness.

b. Immediately after seeding areas with slopes exceeding 15% gradient, apply Erosion Control Mat as follows:

- 1.) Secure Erosion Control Mat at the top of the slope by toeing it into existing grade a minimum of six (6) inches deep. Reinforce with a row of staples as per the manufacturer's directions and cover with soil.
- 2.) Roll Erosion Control Mat down the slope.
- 3.) Place staples 18" - 24" on-center throughout to secure the matting to the ground. All staples to be must be driven flush with the soil surface.
- 4.) Always overlap matting edges 4" - 6". At the end of each roll, fold back 4" - 8" of the matting and overlap the start of the next roll. Securely staple the two layers to the soil surface.
- 5.) Erosion Control Mat shall be securely stapled flush to the soil surface without bunching. Bunching of Erosion Control Mat shall not be permitted.

**E. NET COST WORK**

1. "Net Cost" shall be computed in the same manner as is compensation for Extra Work, including any percentage addition to cost, as set forth in the clause of the Contract entitled "Compensation for Extra Work". Performance of such Net Cost Work shall be as directed by the Engineer and subject to all the provisions of the Contract relating to the performance of Extra Work. Compensation for said Net Cost Work shall not be charged against the total amount of compensation authorized for Extra Work.
2. When and as directed by the Engineer, the Contractor shall perform the following Work which will be compensated at the Net Cost thereof:

- a.) Removal of all litter, trash, debris and other deleterious materials, including but not limited to: glass, cans, plastic containers, wreck, timbers, tree branches, from within the Area of Work, as shown on Contract Drawings LS2, LS3, LS4 and LSS. The Contractor shall discard of all removal materials away from Authority property in a legal manner.
- b.) Cut-off existing timber piles located within Bridge Creek to EL. + 0.50 and discard of cuttings away from Authority property in a legal manner.
- c.) Maintenance of Traffic
- d.) Excess or Unsuitable Excavated Materials:

- 1.) All excess soil or soil deemed unsuitable because of the presence of contamination shall be disposed of in accordance with Specification Section 02894 - Handling, Treatment and Disposal of Non-Hazardous Soil Material. The Contractor shall dispose of excess or unsuitable excavated material off Authority property.
- 2.) The Contractor shall submit a minimum of three soil disposal/beneficial reuse facilities to the Engineer for soil disposal. The submittal shall include the facility name, contact with phone number, certification, license and or permit, transporter name, certification, license and or permit, and transportation and disposal cost.



ENGINEERING PROGRAM MANAGER  
PORT COMMERCE

CHIEF ARCHITECT

No.	Date	Revision	Approved
-----	------	----------	----------

**ENGINEERING DEPARTMENT**

**HOWLAND HOOK  
MARINE TERMINAL**

**LANDSCAPE ARCHITECTURAL**

Title

**BRIDGE CREEK  
REPROFILING**

**SPECIFICATION  
NOTES**

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

IA/TM	LDL	IA
-------	-----	----

Designed by Drawn by Checked by

Date SEPTEMBER 3, 2004

Contract Number HH-334.018

Drawing Number **LS1**



**THE PORT AUTHORITY  
OF NY & NJ**

ENGINEERING PROGRAM MANAGER  
PORT COMMERCE

CHIEF ARCHITECT

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT

**HOWLAND HOOK  
MARINE TERMINAL**

LANDSCAPE ARCHITECTURAL

Title  
**BRIDGE CREEK  
REPROFILING**

**PLAN  
-1-**

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

TN	LDL	IA
Designed by	Drawn by	Checked by
Date	SEPTEMBER 3, 2004	

Contract Number **HH-334.018**

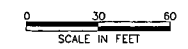
Drawing Number **LS2**

**LEGEND**

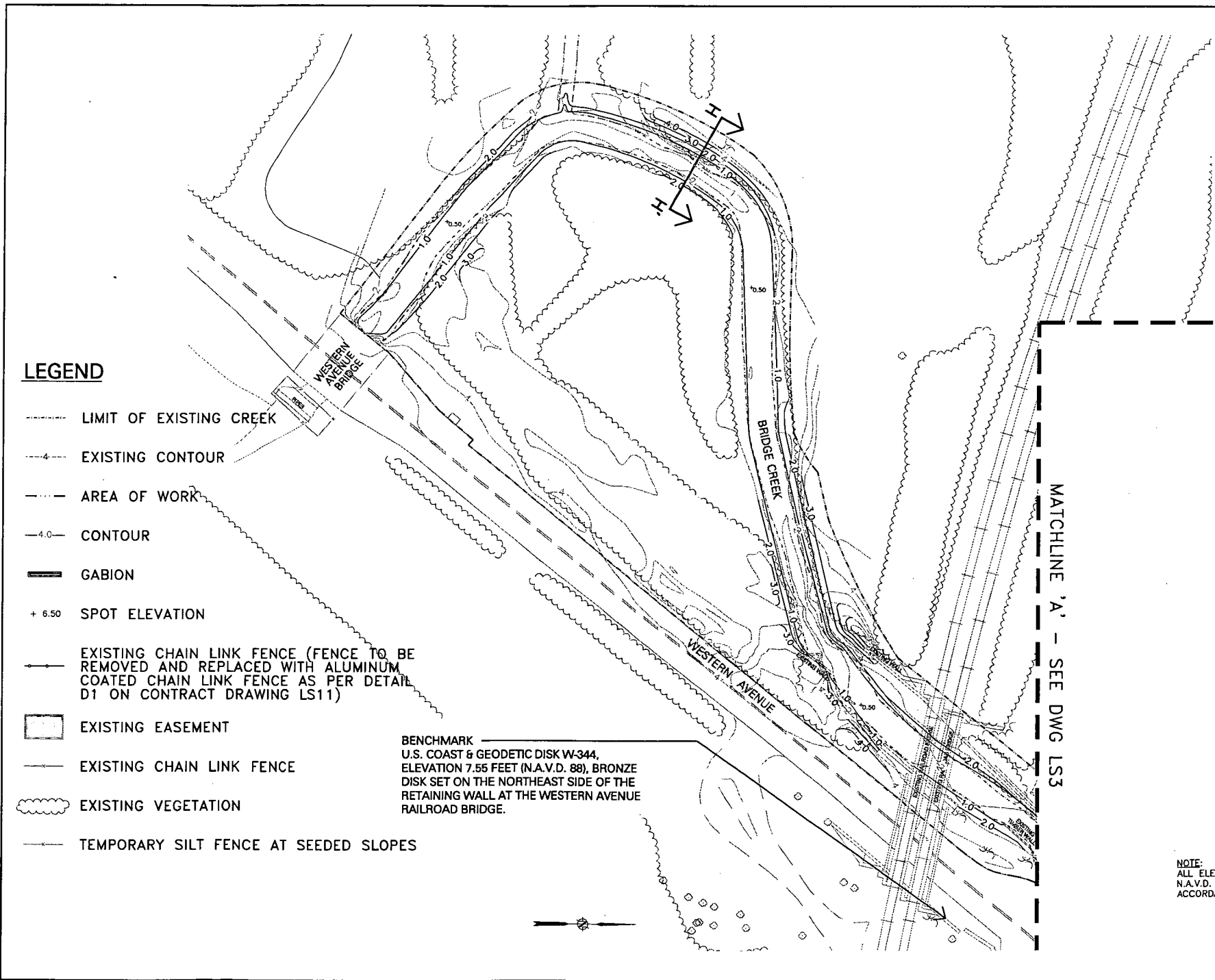
- LIMIT OF EXISTING CREEK
- - - EXISTING CONTOUR
- - - AREA OF WORK
- 4.0- CONTOUR
- ▬ GABION
- + 6.50 SPOT ELEVATION
- EXISTING CHAIN LINK FENCE (FENCE TO BE REMOVED AND REPLACED WITH ALUMINUM COATED CHAIN LINK FENCE AS PER DETAIL D1 ON CONTRACT DRAWING LS11)
- ▭ EXISTING EASEMENT
- EXISTING CHAIN LINK FENCE
- ☁ EXISTING VEGETATION
- TEMPORARY SILT FENCE AT SEEDS SLOPES

BENCHMARK  
U.S. COAST & GEODETIC DISK W-344,  
ELEVATION 7.55 FEET (N.A.V.D. 88), BRONZE  
DISK SET ON THE NORTHEAST SIDE OF THE  
RETAINING WALL AT THE WESTERN AVENUE  
RAILROAD BRIDGE.

NOTE:  
ALL ELEVATIONS ARE REFERENCED TO  
N.A.V.D. 88. ALL WORK SHALL BE IN  
ACCORDANCE WITH BENCHMARK.

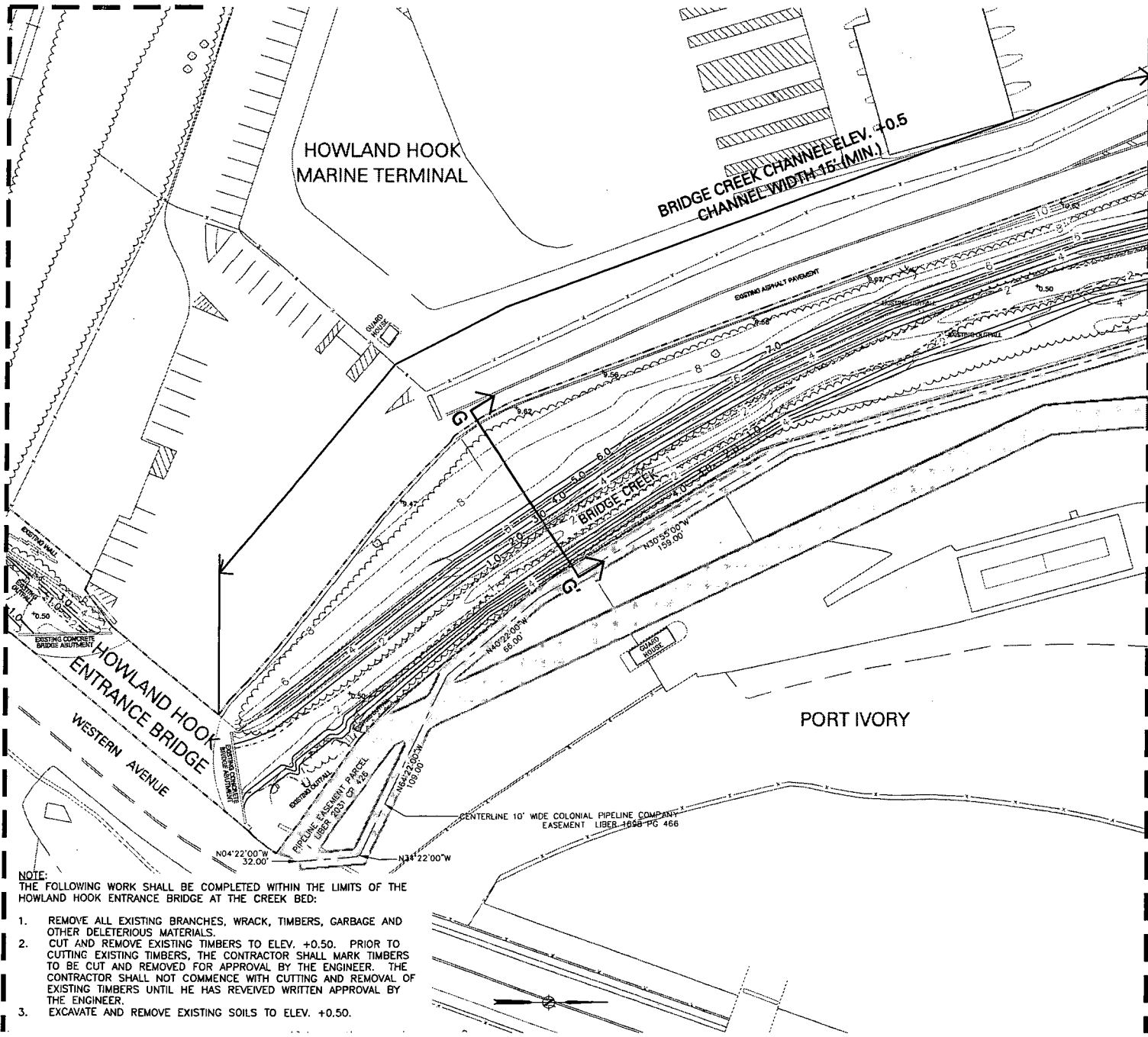


MATCHLINE 'A' - SEE DWG LS3



MATCHLINE 'A' - SEE DWG LS2

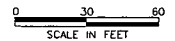
MATCHLINE 'B' - SEE DWG LS4



NOTE:  
THE FOLLOWING WORK SHALL BE COMPLETED WITHIN THE LIMITS OF THE HOWLAND HOOK ENTRANCE BRIDGE AT THE CREEK BED:

1. REMOVE ALL EXISTING BRANCHES, WRACK, TIMBERS, GARBAGE AND OTHER DELETERIOUS MATERIALS.
2. CUT AND REMOVE EXISTING TIMBERS TO ELEV. +0.50. PRIOR TO CUTTING EXISTING TIMBERS, THE CONTRACTOR SHALL MARK TIMBERS TO BE CUT AND REMOVED FOR APPROVAL BY THE ENGINEER. THE CONTRACTOR SHALL NOT COMMENCE WITH CUTTING AND REMOVAL OF EXISTING TIMBERS UNTIL HE HAS RECEIVED WRITTEN APPROVAL BY THE ENGINEER.
3. EXCAVATE AND REMOVE EXISTING SOILS TO ELEV. +0.50.

NOTE:  
ALL ELEVATIONS ARE REFERENCED TO N.A.V.D. 88. ALL WORK SHALL BE IN ACCORDANCE WITH BENCHMARK.



Sheet of



ENGINEERING PROGRAM MANAGER  
PORT COMMERCE  
CHIEF ARCHITECT

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT

**HOWLAND HOOK  
MARINE TERMINAL**

LANDSCAPE ARCHITECTURAL

Title  
**BRIDGE CREEK  
REPROFILING**

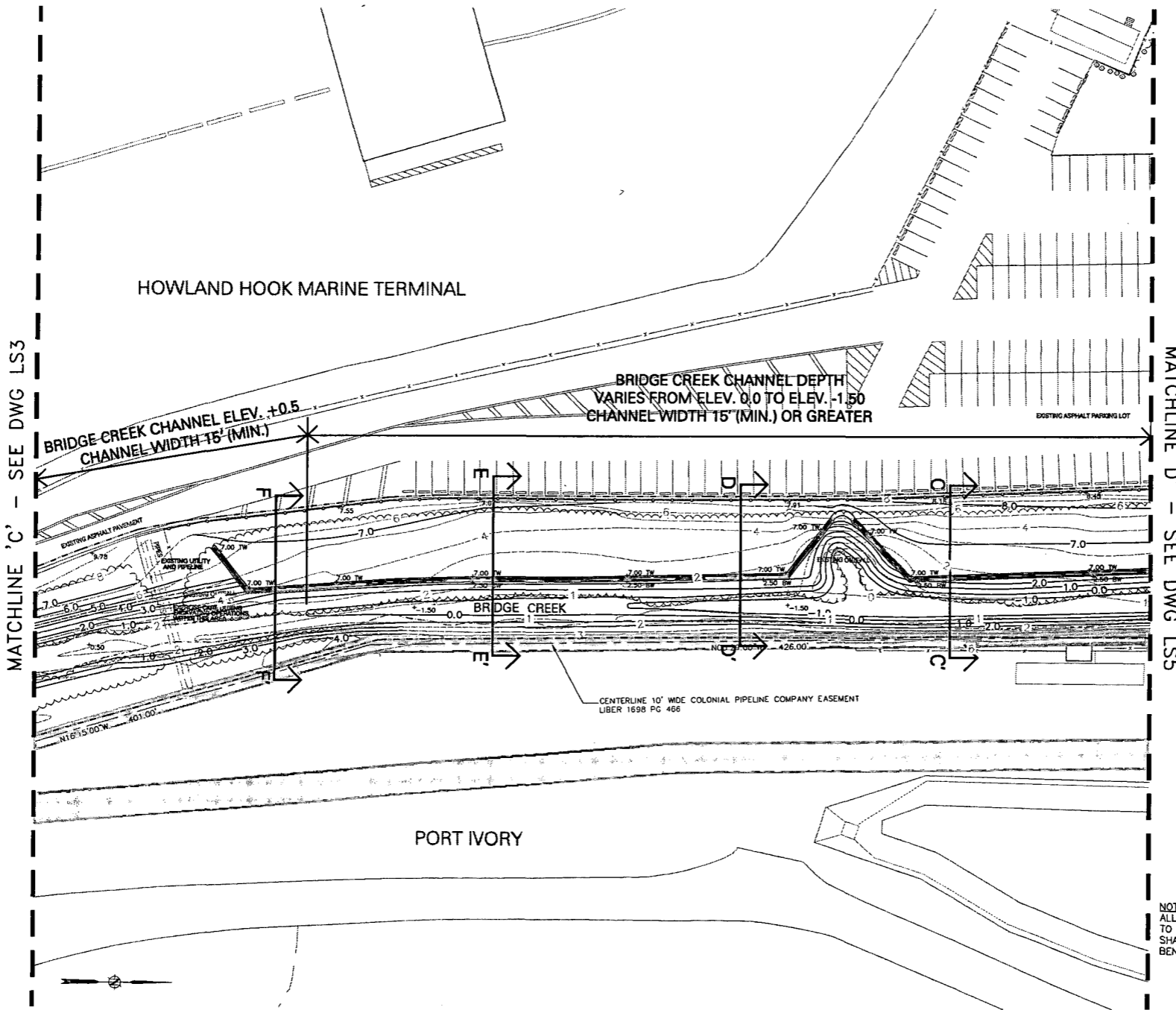
**PLAN  
-2-**

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

TN	LDL	IA
Designed by	Drawn by	Checked by
Date SEPTEMBER 3, 2004		

Contract Number **HH-334.018**

Drawing Number **LS3**



Sheet of



ENGINEERING PROGRAM MANAGER  
PORT COMMERCE  
CHIEF ARCHITECT

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT

**HOWLAND HOOK MARINE TERMINAL**

LANDSCAPE ARCHITECTURAL

Title  
**BRIDGE CREEK REPROFILING**

**PLAN -3-**

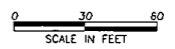
This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

TN	LDL	IA
Designed by	Drawn by	Checked by
Date	SEPTEMBER 3, 2004	

Contract Number **HH-334.018**

Drawing Number **LS4**

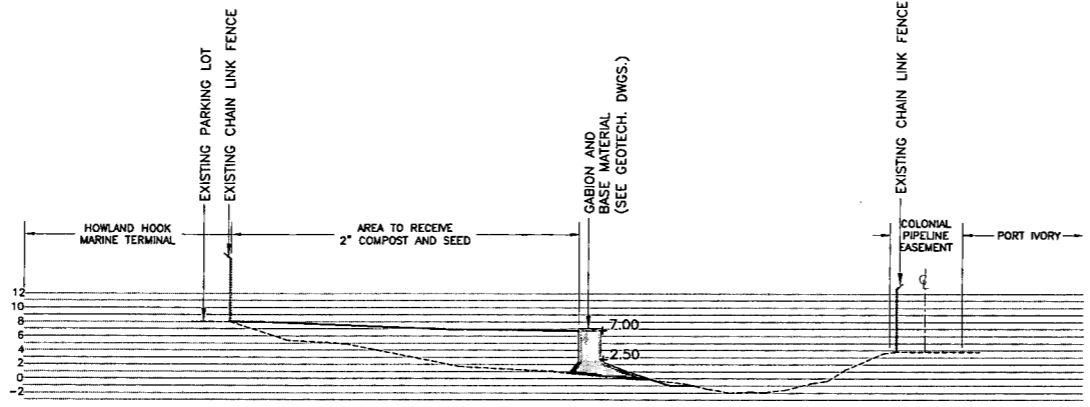
NOTE:  
ALL ELEVATIONS ARE REFERENCED TO N.A.V.D. 88. ALL WORK SHALL BE IN ACCORDANCE WITH BENCHMARK.





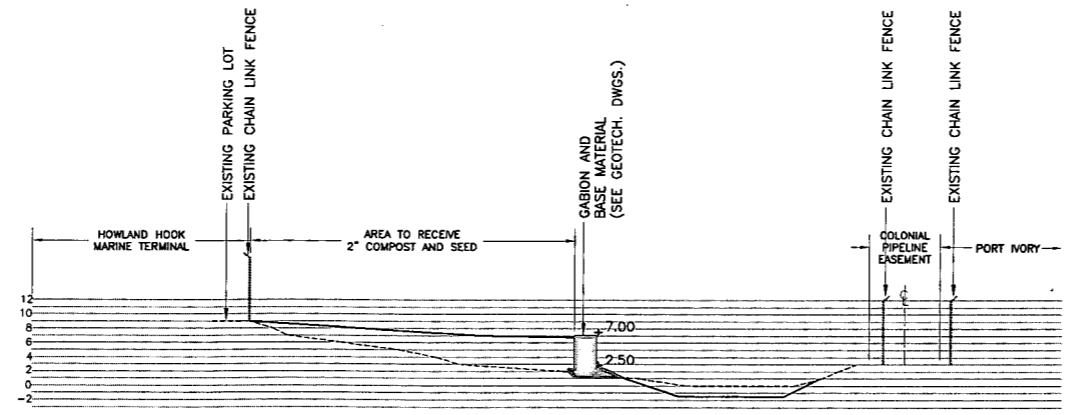


ENGINEERING PROGRAM MANAGER  
PORT COMMERCE  
CHIEF ARCHITECT



--- EXISTING GRADE  
— FINAL GRADE

**S 1** SECTION A-A'  
HORIZONTAL AND VERTICAL SCALE IN FEET



--- EXISTING GRADE  
— FINAL GRADE

**S 2** SECTION B-B'  
HORIZONTAL AND VERTICAL SCALE IN FEET

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT

HOWLAND HOOK  
MARINE TERMINAL

LANDSCAPE ARCHITECTURE

Title  
BRIDGE CREEK  
REPROFILING

SECTIONS  
-1-

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

TH\LDL LDL IA  
Designed by Drawn by Checked by

Date SEPTEMBER 3, 2004

Contract Number HH-334.018

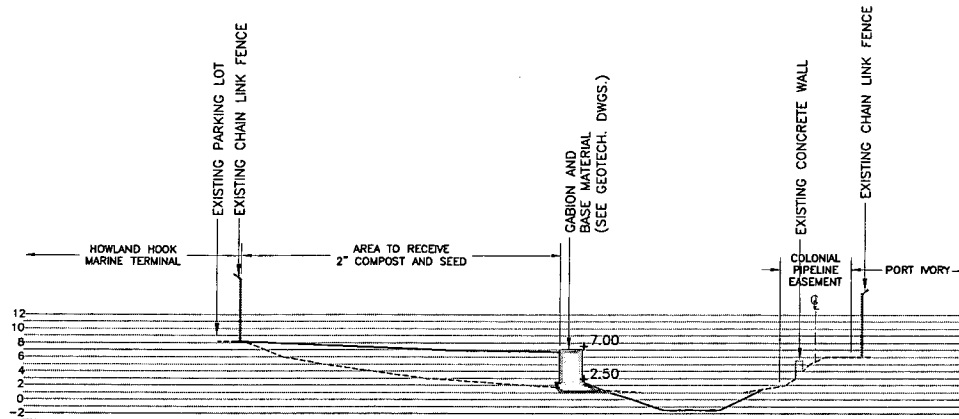
Drawing Number LS6



**THE PORT AUTHORITY  
OF NY & NJ**

ENGINEERING PROGRAM MANAGER  
PORT COMMERCE

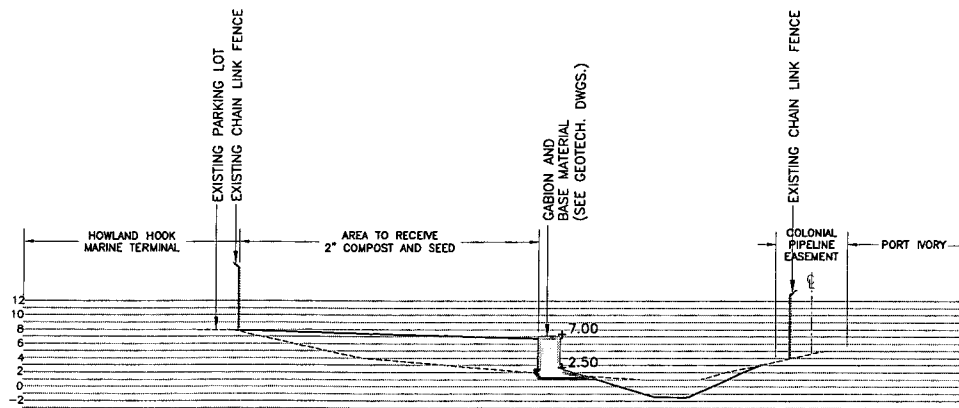
CHIEF ARCHITECT



--- EXISTING GRADE  
— FINAL GRADE

**S 1 SECTION C-C'**

HORIZONTAL AND VERTICAL SCALE IN FEET



--- EXISTING GRADE  
— FINAL GRADE

**S 2 SECTION D-D'**

HORIZONTAL AND VERTICAL SCALE IN FEET

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT

**HOWLAND HOOK  
MARINE TERMINAL**

LANDSCAPE ARCHITECTURE

Title  
**BRIDGE CREEK  
REPROFILING**

**SECTIONS  
-2-**

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

TM/LDL      LDL      IA  
Designed by      Drawn by      Checked by

Date      SEPTEMBER 3, 2004

Contract Number      HH-334.018

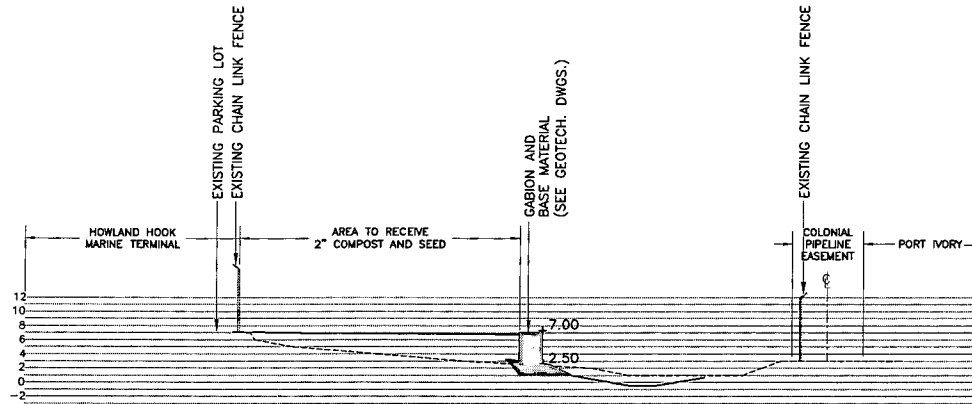
Drawing Number      **LS7**





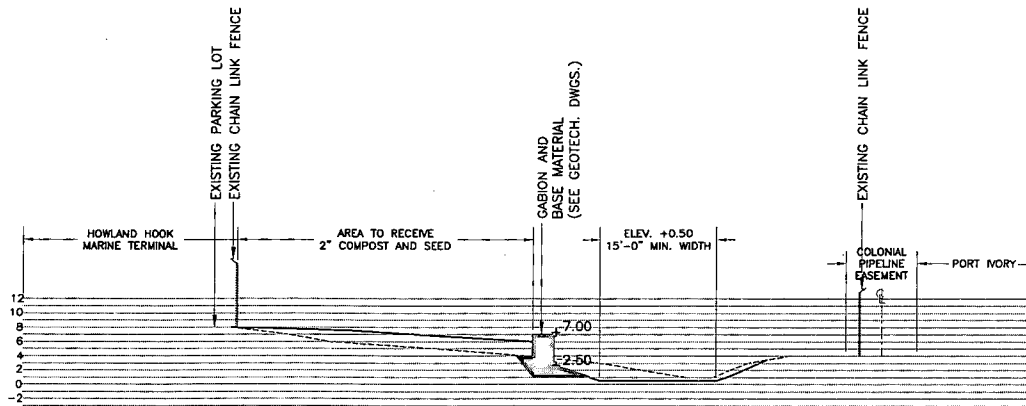
ENGINEERING PROGRAM MANAGER  
PORT COMMERCE

CHIEF ARCHITECT



----- EXISTING GRADE  
——— FINAL GRADE

**S 1** SECTION E-E'  
HORIZONTAL AND VERTICAL SCALE IN FEET



----- EXISTING GRADE  
——— FINAL GRADE

**S 2** SECTION F-F'  
HORIZONTAL AND VERTICAL SCALE IN FEET

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT

**HOWLAND HOOK  
MARINE TERMINAL**

LANDSCAPE ARCHITECTURE

Title  
**BRIDGE CREEK  
REPROFILING**

**SECTIONS  
-3-**

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

TH\LDL LDL IA  
Designed by Drawn by Checked by

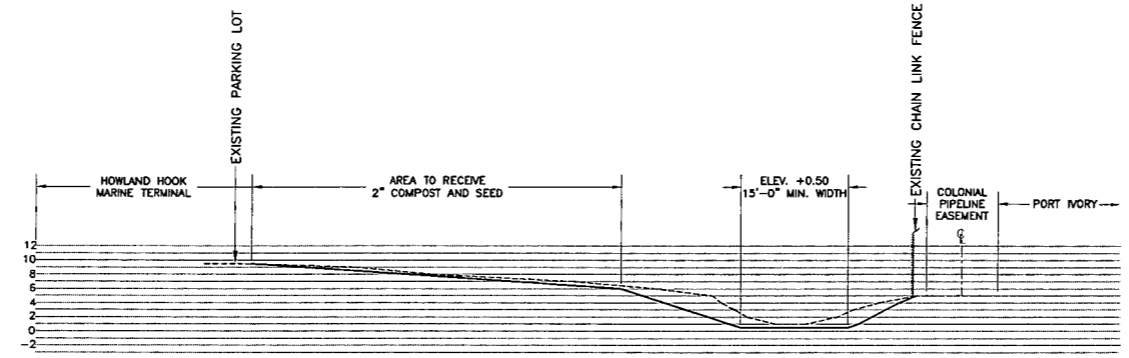
Date SEPTEMBER 3, 2004

Contract Number HH-334.018

Drawing Number LS8

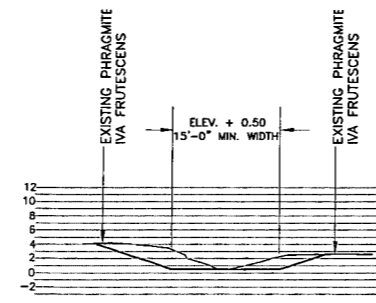


ENGINEERING PROGRAM MANAGER  
PORT COMMERCE  
CHIEF ARCHITECT



----- EXISTING GRADE  
——— FINAL GRADE

**S 1** SECTION G-G'  
HORIZONTAL AND VERTICAL SCALE IN FEET



----- EXISTING GRADE  
——— FINAL GRADE

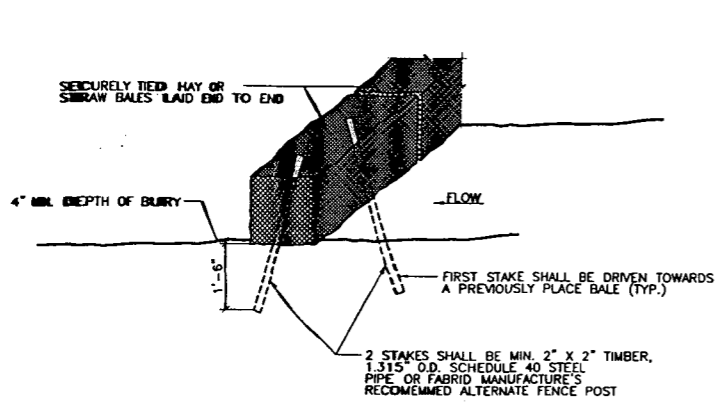
**S 2** SECTION H-H'  
HORIZONTAL AND VERTICAL SCALE IN FEET

No.	Date	Revision	Approved
ENGINEERING DEPARTMENT			
<b>HOWLAND HOOK MARINE TERMINAL</b>			
LANDSCAPE ARCHITECTURE			

Title  
**BRIDGE CREEK REPROFILING**  
  
**SECTIONS -4-**

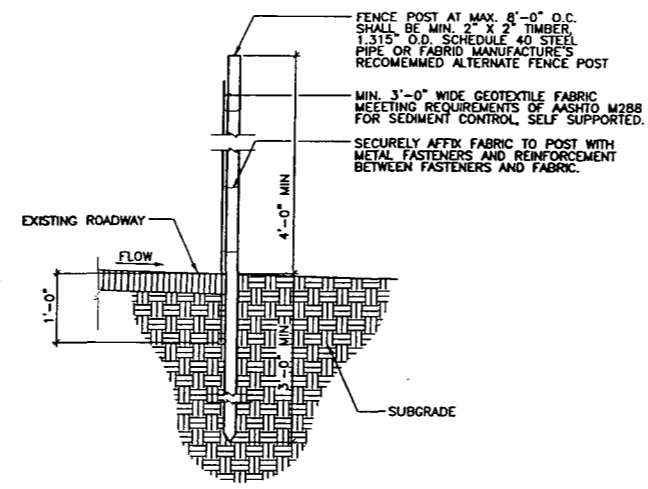
This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

Designed by	LDL	Checked by	IA
Date	SEPTEMBER 3, 2004		
Contract Number	HH-334.018		
Drawing Number	<b>LS9</b>		



**NOTE:**  
 1. HAY BALES SHALL BE USED AS CONTAINMENT EDGE AT PERIPHERY OF BERMS AND WITHIN THE CONTRACTOR'S STORAGE AREA.

BALE BARRIER



SILT FENCE

**D 1** TEMPORARY SEDIMENT BARRIER  
 Not to Scale

- NOTES:**
1. ERECT TEMPORARY SEDIMENT BARRIER WHERE SHOWN ON PLAN OR AS REQUIRED TO INTERCEPT AND DETAIN SEDIMENT RESULTING FROM CONTRACTOR'S OPERATION.
  2. THE CONTRACTOR SHALL INSPECT, MAINTAIN REMOVE AND DISPOSE OF TEMPORARY SEDIMENT BARRIERS AND ACCUMULATED SILT AT NO ADDITIONAL COST TO THE AUTHORITY. DAMAGED BARRIERS SHALL BE REPAIRED PROMPTLY.
  3. REMOVE BARRIER ONLY AFTER UPSLOPE SURFACES HAVE BEEN STABILIZED AND/OR RESTORED. REMOVE BARRIER AND ACCUMULATED SILT TO FINISHED GRADE, AND RESTORE SURFACE TO PRE-EXISTING CONDITION OR AS SHOWN ON THE CONTRACT DRAWINGS.

Sheet of



ENGINEERING PROGRAM MANAGER  
 PORT COMMERCE

CHIEF ARCHITECT

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT

**HOWLAND HOOK  
 MARINE TERMINAL**

LANDSCAPE ARCHITECTURAL

Title  
 BRIDGE CREEK  
 REPROFILING

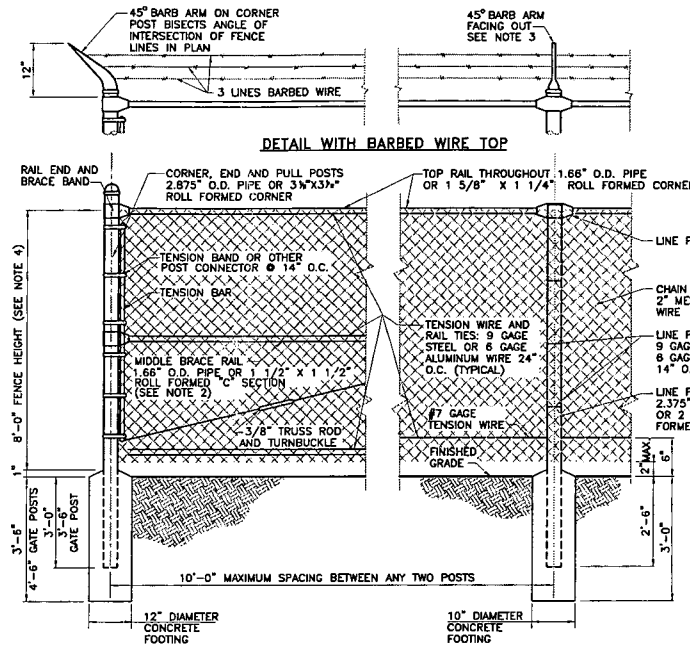
**DETAILS**  
 - 1 -

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

TN      LDL      IA  
 Designed by    Drawn by    Checked by  
 Date            SEPTEMBER 3, 2004

Contract Number      **HH-334.018**

Drawing Number      **LS10**



G A T E P O S T S				
PIPE SIZE		SWING GATE OPENINGS		
NOM. O.D. PIPE	WEIGHT LB/FT	SINGLE GATE	DOUBLE GATE	
2.875"	5.79	UP THRU 6'	UP THRU 12'	
4.000"	9.11	7 THRU 13'	13 THRU 28'	
6.625"	18.97	14 THRU 18'	27 THRU 38'	
8.625"	28.55	19 THRU 32'	37 THRU 64'	

- NOTES:
1. PIPE SECTIONS SHOWN ARE ASTM F1083 FOR STANDARD WEIGHT (SCHEDULE 40) PIPE. EQUIVALENT STEEL SECTIONS FOR FRAME SHALL BE BASED ON PIPE SECTION SHOWN (SEE SPECIFICATIONS).
  2. MIDDLE AND BOTTOM BRACE RAILS AND BRACE ROD ON ONE BAY EACH SIDE OF CORNER, END, PULL AND GATE POSTS ONLY.
  3. ALL FENCE TOPPED WITH BARBED WIRE SHALL BE INSTALLED ONE FOOT INSIDE PROPERTY LINE.
  4. UNLESS OTHERWISE SHOWN ON PLANS.

**D 1 ALUMINUM COATED STEEL CHAIN LINK FENCE**  
 Not to Scale

ENGINEERING PROGRAM MANAGER  
 PORT COMMERCE  
 CHIEF ARCHITECT

No.	Date	Revision	Approved
<b>ENGINEERING DEPARTMENT</b>			
<b>HOWLAND HOOK MARINE TERMINAL</b>			

**LANDSCAPE ARCHITECTURAL**  
 Title  
 BRIDGE CREEK REPROFILING  
 DETAILS  
 -2-

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

TN	LDL	IA
Designed by	Drawn by	Checked by
Date	SEPTEMBER 3, 2004	
Contract Number	HH-334.018	
Drawing Number	LS11	