



# **PUBLIC NOTICE**

US Army Corps  
of Engineers  
New York District  
Jacob K. Javits Federal Building  
New York, N.Y. 10278-0090  
ATTN: Regulatory Branch

**In replying refer to:**

Public Notice Number: 2004-00454-OD

Issue Date: August 2, 2005

Expiration Date: September 2, 2005

To Whom It May Concern:

The New York District of the U.S. Army Corps of Engineers has received an application for a Department of the Army authorization pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403), Section 404 of the Clean Water Act (33 U.S.C. 1344) and Section 103 of the Marine Protection, Research & Sanctuaries Act of 1972, as amended (33 USC 1413).

**APPLICANT:** Global Terminal and Container Services  
302 Port Jersey Boulevard  
Jersey City, New Jersey 07303

**ACTIVITY:** Perform new work dredging within an existing berthing area, with subsequent placement of appropriate dredged material to be used as remediation materials at the Historic Area Remediation Site (HARS) in the Atlantic Ocean, with the remaining dredged materials to be beneficially used on a State of New Jersey approved upland site, allow barge overflow and decant excess water.

**WATERWAY:** Upper New York Harbor and Historic Area Remediation Site (HARS) in Atlantic Ocean.

**LOCATION:** City of Bayonne, Hudson County, New Jersey.

A detailed description of the proposed work and drawings of the applicant's proposed activity are enclosed to assist in your review.

The U.S. Army Corps of Engineers neither favors nor opposes permit issuance for the applicant's proposed activity. The purpose of this public notice is to solicit comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order for the U.S. Army Corps of Engineers to acquire information which will be considered in our evaluation of the impacts of this proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to issue, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an environmental assessment and/or an environmental impact statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

The decision whether to issue a Department of the Army permit will be based on an evaluation of the probable impact, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits that reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general the needs and welfare of the people. This activity is also being evaluated to determine that the proposed placement of dredged material will not unreasonably degrade or endanger human health, welfare or amenities, the marine environment, ecological systems or economic potentialities. The decision of whether to issue a Department of the Army Permit for placement of dredged materials as Remediation Materials at the Historic Area Remediation Site (HARS) in the Atlantic Ocean will also be based on whether the material meets the requirements of applicable implementing regulations.

On September 26, 2000, the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers signed a joint Memorandum of Agreement outlining the steps to be undertaken to ensure that remediation of the Historic Area Remediation Site (HARS) continues in a manner appropriately protective of human health and the aquatic environment. In making the determination for evaluating placement of dredged material, the criteria established by the U.S. Environmental Protection Agency will be applied, including the interim change to one matrix value for polychlorinated biphenyls (PCB's) as described in the joint Memorandum of Agreement. In addition, based upon an evaluation of the potential effect which the failure to utilize this ocean site will have on navigation, economic, and industrial development, and foreign and domestic commerce of the United States, an independent determination will be made regarding the need to place the dredged material in ocean waters, other possible methods of disposal, and other appropriate locations.

ALL COMMENTS REGARDING THE PERMIT APPLICATION MUST BE PREPARED IN WRITING AND MAILED TO REACH THIS OFFICE BEFORE THE EXPIRATION DATE OF THIS NOTICE, otherwise, it will be presumed that there are no objections to the activity.

Any person may request, in writing, before this public notice expires, that a public hearing be held to collect information necessary to consider this application. Requests for public hearings shall state, with particularity, the reasons why a public hearing should be held. It should be noted that information submitted by mail is considered just as carefully in the permit decision process and bears the same weight as that furnished at a public hearing.

The proposed action was reviewed based upon the "Biological Assessment for the Closure of the Mud Dump Site and Designation of the Historic Area Remediation Site (HARS) in the New York Bight and Apex," (USEPA, 1997). Based upon this review, and a review of the latest public listing of threatened and endangered species, it has been preliminarily determined that the proposed placement activities for which authorization is sought herein, are not likely to adversely affect the following federally threatened or endangered species (humpback whales, finback whales, right whales, loggerhead turtles, leatherback turtles, green turtles, and Kemp's ridley turtles), or their critical habitat pursuant to Section 7 of the Endangered Species Act (ESA; 16 USC 1531). It is our

preliminary determination that the dredging activities in the Upper New York Harbor are not likely to affect the shortnose sturgeon (*Acipenser brevirostrum*) or its critical habitat. The U.S. Army Corps of Engineers New York District Regulatory (Permits) Branch is currently conducting informal consultations with the National Marine Fisheries Service in accordance with Section 7 of the Endangered Species Act. Those consultations will be completed before a final permit decision is made.

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). Information on regarding the proposed work that would be undertaken is given in the attached Description of Proposed Work. A preliminary review of the proposal and information submitted by the applicant indicates that the overall potential impact on Essential Fish Habitat for designated species is minor due to the temporary nature of the disturbance, and the frequent ship movements into and out of the berthing area. In addition, the applicant volunteered not to dredge between January 1 and May 31 of any calendar year. Among the list of Essential Fish Habitat (EFH) designated species known to occur at the dredging site, the most likely species to be impacted would be spawning, and early-life stage development (nursery) habitat for winter flounder. The primary effects on EFH and EFH-managed species would be a temporary increase in turbidity due to dredging and the disruption of demersal and pelagic habitat. Upland beneficial reuse of dredged materials would not have any effect on Essential Fish Habitat (EFH).

Impacts to Essential Fish Habitat (EFH) species at the Historic Area Remediation Site (HARS) would most likely emanate from the settling of the dredged material for remediation through the water column to the bottom. These events would also be short-lived and be episodic in nature over the several months the proposed placement at the Historic Area remediation Site (HARS) would take. The overall potential impact for all the work proposed at the Historic Area Remediation Site (HARS) on Essential Fish Habitat (EFH) for designated species is small because of the temporary nature of the disturbance, the low abundance of most species for which this region is designated as Essential Fish Habitat (EFH), and the apparent lack of viable existing conditions.

Based upon the foregoing, the U.S. Army Corps of Engineers New York District Regulatory (Permits) Branch has made the preliminary determination that the site-specific adverse effects are not likely to be substantial. Therefore, the EFH assessment does not recommend mitigation for the proposed impacts, other than the seasonal dredging restriction. However, consultation with the National Marine Fisheries Service regarding Essential Fish Habitat (EFH) impacts and conservation recommendations is being conducted and will be concluded prior to a final permit decision.

Based upon a review of the latest published version of the National Register of Historic Places, the only known wrecks on or eligible for inclusion on the National Register are two located in Primary Remediation Area Number 1 of the Historic Area Remediation Site (HARS). As noted in the designation of the Historic Area Remediation Site (HARS), dredged material for remediation will not be allowed to be placed within 0.27 nautical miles of the identified wrecks or other wrecks that might be found. Otherwise, there are no known sites eligible for, or included in, the National Register within the proposed permit area.

Reviews of the activity pursuant to Section 404 of the Clean Water Act will include application of the guidelines announced by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act. The applicant will obtain a water quality certificate or waiver from the appropriate state agency in accordance with Section 401 of the Clean Water Act prior to any final permit decision.

Pursuant to Section 307(c) of the Coastal Zone Management Act of 1972 as amended [16 USC 1456(c)], for activities under consideration that are located within the coastal zone of a state which has a federally approved coastal zone management program, the applicant is responsible for ensuring that the proposed activities are undertaken in a manner that is consistent with, to the maximum extent practicable, the approved state coastal zone management program. By this public notice, we are requesting the state's views on the consistency of this project with the State's approved CZM Program. For activities within the coastal zone of the State of New Jersey, the applicant's certification and accompanying information is available from the New Jersey Department of Environmental Protection, Bureau of Coastal Regulation, CN 401, 501 East State Street, Second Floor, Trenton, New Jersey 08625-0401, Telephone Number (609) 633-2289. Comments regarding the applicant's certification and copies of any letters addressed to this office commenting on this proposal should be so addressed.

In addition to any required water quality certificate and coastal zone management program concurrence, the applicant has obtained or requested the following governmental authorization for the proposed activity under consideration: A Waterfront Development Permit from the State of New Jersey Department of Environmental Protection

It is requested that you communicate the foregoing information concerning this activity to any persons known by you to be interested and who did not receive a copy of this notice.

If you have any questions concerning this permit application, you may contact this office by telephone at 917-790-8412 and ask for Mr. James Cannon. Comments or questions may also be FAXED to 212-264-4260, ATTN: Mr. James Cannon.

Questions about the Historic Area Remediation Site (HARS) can be addressed to Mr. Douglas Pabst, Team Leader, Dredged Material Management Team, U.S. Environmental Protection Agency Region 2 at 212-637-3797.

For more information on the U.S. Army Corps of Engineers New York District programs, please visit our website at <http://www.nan.usace.army.mil>

*FOR*   
Richard L. Tomer  
Chief, Regulatory Branch

Enclosures

## DESCRIPTION OF PROPOSED WORK

The permit applicant, the Global Terminal and Container Services, is requesting a Department of the Army permit to dredge the existing 110 foot wide by 2000 foot long berthing area to a depth of 45 feet below the plane of Mean Low Water (MLW), with an allowable overdepth of 2 feet. The site is located adjacent to the Port Jersey Federal Navigation Channel, within the upper New York Harbor, in the City of Bayonne, Hudson County, New Jersey.

Portions of the existing Port Jersey Federal Navigation Channel are currently under review by the U.S. Army Corps of Engineers (USACE), Public Notice Number 2004-01167-OD, for new work dredging. It should be noted that the public notice for this work has cited the need for access to the Global Terminal by deeper draft vessels, as justification for the Port Jersey Channel deepening project.

### **Proposed Dredging Activities**

The applicant proposes to dredge approximately 57,600 cubic yards of sediment in order to deepen the existing berth to -45 feet MLW with an allowable overdepth of 2 feet. Approximately 2,900 cubic yards is Holocene silt material that would be processed and beneficially used on a State of New Jersey approved upland site. The Applicant intends to seek an Acceptable Use Determination from the State of New Jersey Department of Environmental Protection Office of Dredging and Sediment Technology (NJ DEP) in order to identify a suitable upland or confined aquatic disposal location for this material. All decant water associated with the dredging of the Holocene silt material would be held in a decant scow a minimum of 24 hours prior to its discharge to the waterway within the project area.

The remaining 54,700 cubic yards of dredged sediments, made up of Pleistocene glacial till, would be placed in the Atlantic Ocean at the Historic Remediation Site (HARS) as material for remediation. The dredging would include 1V:3H slopes adjacent to the existing berth in the areas to the north and south of the existing wharf structure. Barge overflow is proposed to maximize barge loading of the glacial till. The glacial till would be transported by bottom-opening barges to the placement site.

The proposed volumes have been determined using hydrographic survey data from December 2003 and geological core borings collected between 1989 and 2004. Current bottom depths in the berth range from -36 to -48 feet MLW. The proposed dredging would utilize an environmental clamshell bucket to remove approximately 2,900 cubic yards of Holocene silt material from the terminal berth. The environmental clamshell bucket would be used to the point of refusal over the entire dredging footprint in order to remove all existing Holocene silt material. The dredged Holocene silt material would then be transported and placed at an upland site to be determined by the NJDEP. To remove the Pleistocene glacial till, the applicant proposes to utilize a large, barge-mounted excavator. The dredged Pleistocene glacial till material would then be transported and placed at the HARS site. Prior to any Department of the Army permit decision, the applicant shall submit to the New York District Corps of Engineers, for review and approval, a Material Separation Plan that indicates how the applicant would ensure that all upland material (Holocene silt) within the proposed dredging area

has been removed prior to the removal of HARS material (Pleistocene glacial till) during each of the two dredging events. The applicant has estimated that the completion of the proposed dredging and disposal activities may require approximately 90 days.

### **Sequencing of Dredging Activities**

In order to keep pace with the Federal Deepening Project of the Port Jersey Channel, the applicant proposes to sequence the deepening of the existing berth in two phases. As such, the applicant proposes to dredge in the Summer 2005 to a design depth of -43 feet MLW (with 2 feet allowable overdepth), and then to -45 feet MLW (+ 2 feet overdepth) in calendar year 2006. The applicant anticipates that each phase of the deepening would consist of maintenance dredging with an environmental clamshell bucket to remove Upland-destined Holocene silt material that may have collected in the berth, followed by dredging with a backhoe excavator to remove Pleistocene glacial till to the -45 feet MLW (+2 feet overdepth).

The applicant has indicated that the proposed berth dredging activities would allow the applicant to meet cargo trans-shipment demands by accepting larger draft vessels at its Port Jersey Channel Terminal. Current design estimates indicated that, once moored in the berth, deeper draft vessels would be positioned approximately 50 feet or more from the proposed Federal Navigation Channel.

### **Introduction to the Historic Area Remediation Site (HARS):**

In 1972, Congress enacted the Marine Protection Research and Sanctuaries Act (MPRSA) to address and control the dumping of materials into ocean waters. Title I of the Act authorized the U.S. Environmental Protection Agency (USEPA) and the U.S. Army Corps of Engineers (USACE) to regulate dumping in ocean waters. The USEPA and the USACE share responsibility for the MPRSA permitting and ocean disposal site management. The USEPA regulations implementing the MPRSA are found at 40 CFR Sections 220 through 229. With few exceptions, the MPRSA prohibits the transportation of material from the United States for the purpose of ocean dumping except as may be authorized by a permit issued under the MPRSA. The MPRSA divides permitting responsibility between the USEPA and the USACE. Under Section 102 of the MPRSA, the USEPA has responsibility for issuing permits for all materials other than dredged material. Under Section 103 of the MPRSA, the Secretary of the Army has the responsibility for issuing permits for dredged material, subject to the USEPA's concurrence.

In the fall of 1997, the USEPA de-designated and terminated the use of the New York Bight Dredged Material Disposal Site (commonly known as the Mud Dump Site or MDS). The Mud Dump Site (MDS) had been designated in 1984 for the disposal of up to 100 million cubic yards of dredged material from navigation channels and other port facilities within the Port of New York and New Jersey. Simultaneous with the closure of the Mud Dump Site (MDS), the site and surrounding areas that had been used historically as disposal sites for dredged materials were redesignated as the Historic Area Remediation Site (HARS) (Figures 3 & 4) under authority of Section 102[c] of Marine Protection, Research, and Sanctuaries Act (MPRSA) at 40 CFR Sections 228.15(d)(6) (See 62 Fed. Reg. 46142 (August 29, 1997); 62 Fed. Reg. 26267 (May 13, 1997)). The Historic Area Remediation Site (HARS) will be managed to reduce impacts of historical disposal activities at the site to acceptable levels in accordance with 40 CFR Sections 228.11(c). The need to remediate the Historic Area Remediation Site (HARS) is supported by

the presence of toxic effects, dioxin bioaccumulation exceeding Category 1 levels in worm tissue, as well as TCDD/PCB contamination in area lobster stocks. Individual elements of those data do not establish that sediments within the Study Area are imminent hazards to the New York Bight Apex ecosystem, living resources, or human health. However, the collective evidence presents cause for concern, and justifies the need for remediation. Further information on the surveys performed and the conditions in the Historic Area Remediation Site (HARS) Study Area may be found in the Supplemental Environmental Impact Statement (U.S. Environmental Protection Agency Region 2, 1997).

The designation of the Historic Area Remediation Site (HARS) identifies an area in and around the former Mud Dump Site (MDS) that has exhibited the potential for adverse ecological impacts. The Historic Area Remediation Site (HARS) will be remediated with dredged material that meets current Category 1 standards and it will not cause significant undesirable effects including through bioaccumulation or unacceptable toxicity, in accordance with 40 CFR 227.6. This dredged material is referred to as "Material for Historic Area Remediation Site (HARS) Remediation" or "Historic Area Remediation Site (HARS) Remediation Material".

As of the end of May 2005, dredged materials from at least forty-one different completed and ongoing private and federal dredging projects in the Port of New York and New Jersey has been dredged and placed as Remediation Material in the ocean at the Historic Area Remediation Site (HARS) since the closure of the Mud Dump Site (MDS) and designation of the Historic Area Remediation Site (HARS) in 1997. This represents approximately 23,271,000 cubic yards of Remediation Material.

The Historic Area Remediation Site (HARS), which includes the 2.2 square nautical mile area of the former Mud Dump Site (MDS), is an approximately 15.7 square nautical mile area located approximately 3.5 nautical miles east of Highlands, New Jersey and 7.7 nautical miles south of Rockaway, New York. The former Mud Dump Site (MDS) is located approximately 5.3 nautical miles east of Highlands, New Jersey and 9.6 nautical miles south of Rockaway, New York. When determined by bathymetry that capping is complete, the U.S. Environmental Protection Agency will undertake any necessary rulemaking to de-designate the Historic Area Remediation Site (HARS). The Historic Area Remediation Site (HARS) includes the following three areas:

**Priority Remediation Area (PRA):** A 9.0 square nautical mile area to be remediated with at least 1 meter of Remediation Material. The Priority Remediation Area (PRA) encompasses an area of degraded sediments as described in greater detail in the SEIS.

**Buffer Zone:** An approximately 5.7 square nautical mile area. It is a 0.27 nautical mile wide band around the Priority Remediation Area (PRA) in which no placement of the Material for Remediation will be allowed, but which may receive Material for Remediation that incidentally spreads out of the Priority Remediation Area (PRA).

**No Discharge Zone:** An approximately 1.0 square nautical mile area in which no placement or incidental spread of the Material for Remediation is allowed.

To improve management and monitoring of placement activities at the Historic Area Remediation Site (HARS), electronic monitoring equipment is used on-board vessels carrying Remediation Material to the Historic Area Remediation Site (HARS). This equipment records

vessel positions and scow draft throughout the duration of each trip to the Historic Area Remediation Site (HARS) and during remediation operations. To improve communication reliability between tugs and scows, a prescribed formal communication procedure has been put in place (copies of this procedure are available upon request).

Additional information concerning the Historic Area Remediation Site (HARS) itself can be obtained from Mr. Douglas Pabst of the U.S. Environmental Protection Agency Region 2, Dredged Material Management Team Leader, at telephone number (212) 637-3797.

**HARS SUITABILITY TESTING FOR GLACIAL TILL:**

In accordance with geological testing and assessment procedures set forth in the July 17, 2004 joint U.S. Environmental Protection Agency Region 2 and U.S. Army Corps of Engineers New York District standardized operating procedures, these 54,700 cubic yards of dredged material are glacial till because the material lacks detectible fossils or shells, has low organic carbon content, has a primarily red to red-brown color, is comprised of a poorly sorted layer of clay particles, silts, sands, gravels and boulders, and has a stratigraphic setting consistent with other Pleistocene age deposits in the vicinity of the Port Jersey Channel. A copy of the March 31, 2005 glacial till determination may be requested from Mr. James Cannon, manager for this permit application review process, at 917-790-8412.

Pleistocene age glacial till in the vicinity of the Port Jersey Channel was previously tested to determine suitability for use as Remediation Material at the Historic Area Remediation Site (HARS). This testing of glacial till was conducted in accordance with test protocols for ocean placement established by the U.S. Environmental Protection Agency Region 2 and U.S. Army Corps of Engineers New York District. Public notice of previous Pleistocene age glacial till chemical analysis, toxicity, and 28-day bioaccumulation test results for a determination of suitability for Historic Area Remediation Site (HARS) remediation purposes was provided in U.S. Army Corps of Engineers New York District Public Notice FP63-PJCA1-2003 issued on April 7, 2003 for the Port Jersey Channel first construction contract area. Those chemical analyses, toxicity, and 28-day bioaccumulation test results are included in this public notice (attached Tables 1-3) for informational purposes only.

**ALTERNATIVES TO HARS PLACEMENT:**

Regarding ocean placement of dredged material, the Ocean Dumping Regulations [Title 40 CFR Sections 227.16(b)] states that ". . . alternative methods of disposal are practicable when they are available at reasonable incremental cost and energy expenditures which need not be competitive with the costs of ocean dumping, taking into account the environmental impacts associated with the use of alternatives to ocean dumping . . ." U.S Army Corps of Engineers New York District has evaluated the regional practicability of potential disposal alternatives in the September, 1999 Draft "Implementation Report for the Dredged Material Management Plan for the Port of New York and New Jersey." The Recommended Plan within the report addresses both the long and short term dredged material placement options in two specific timeframes, heretofore referred to as the 2010 Plan and the 2040 Plan, respectively.

The 2010 Plan relies heavily on the creation, remediation, and restoration of a variety of existing degraded or impacted habitats in the region with dredged material that would be considered

unsuitable for Historic Area Remediation Site (HARS) restoration. The remaining material is treated and stabilized, as needed, and then applied to remediate degraded and potentially polluting areas such as brownfields, landfills, and abandoned strip mines. Nearly all of the options considered in the 2010 Plan have a placement cost of \$29/cubic yard or higher.

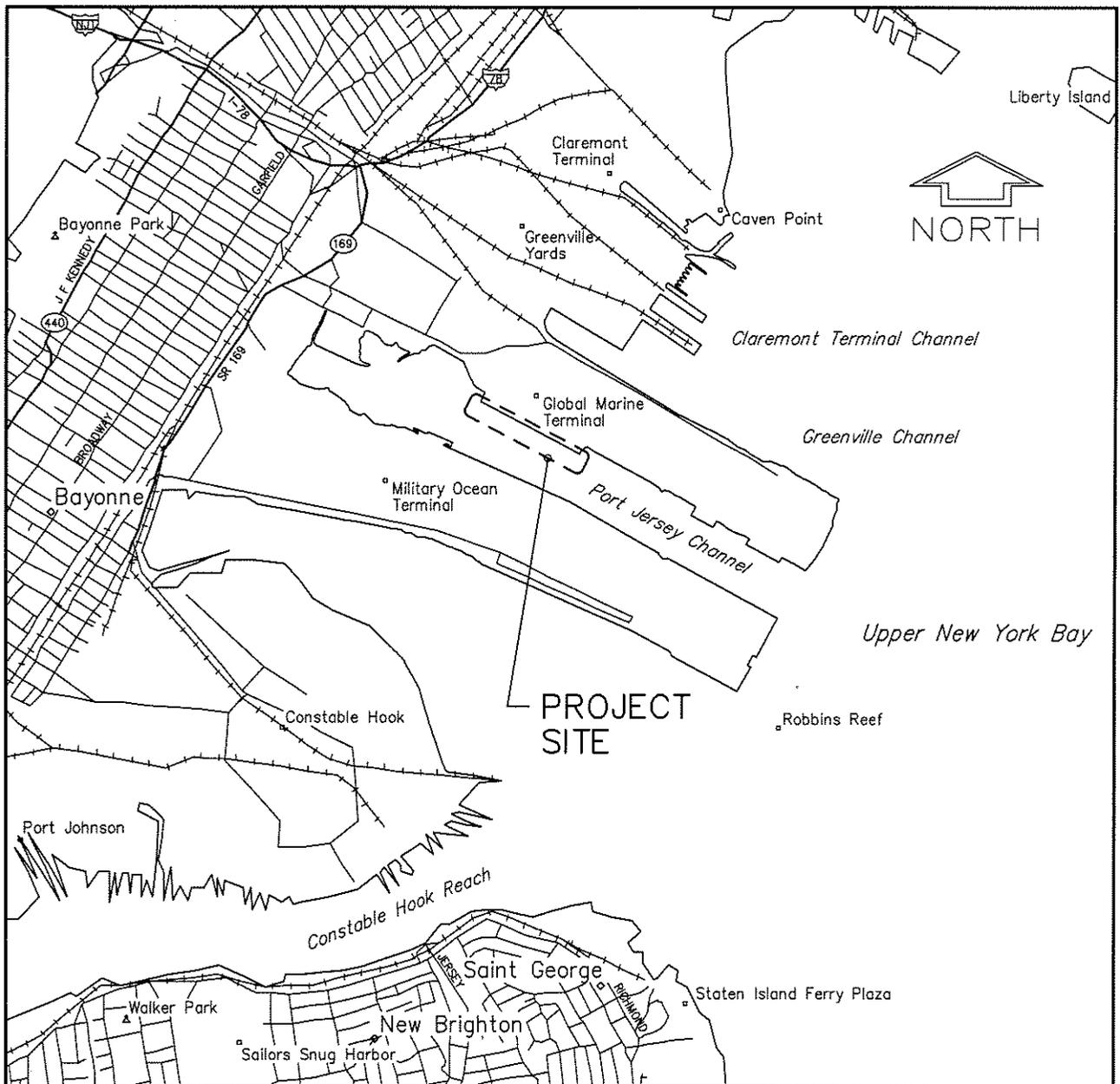
Similar to the 2010 Plan, the 2040 Plan relies heavily upon the use of land remediation and decontamination methods for the management of Historic Area Remediation Site (HARS) unsuitable dredged material. As in the 2010 Plan, maximum use of all practicable alternatives to the Historic Area Remediation Site (HARS) is envisioned.

Many of the dredged material management options presented in the 2010 Plan however, are not presently permitted and/or are presently under construction at this time and therefore considered unavailable for the purposes of this application. Other options are not available at reasonable incremental costs, thus leaving Historic Area Remediation Site (HARS) placement as material for remediation as the only other preferred alternative. For more information on the New York District Corps of Engineers programs, visit our website at <http://www.nan.usace.army.mil>.

### **Conclusion**

The U.S. Army Corps of Engineers New York District and the U.S. Environmental Protection Agency Region 2 have determined that this glacial till material proposed for dredging and ocean placement from the Global Terminal and Container Services is Category I under USEPA Region 2/CENAN guidance, and is suitable for placement at the HARS under Section 228.15(d)(6) as Remediation Material, without need for further site-specific testing, in accordance with the 26 August 2003 US Environmental Protection Agency –Region 2 and US Army Corps of Engineers – New York District joint Memorandum for The Record, titled Joint Federal Position on Testing Glacial Till Dredged Materials from Selected Areas of New York Harbor.

Placement of this material at the HARS would serve to reduce impacts at the HARS to acceptable levels and improve benthic conditions. Unremediated sediments in the HARS have been found to adversely impact benthic marine organisms. Placement of project material over existing unremediated HARS sediments would serve to remediate those areas. In addition, by covering the existing sediments at the HARS with this project material, surface dwelling organisms will be exposed to sediments exhibiting Category 1 qualities, which will ameliorate the existing sediment conditions.



TAKEN FROM DeLORME MAPEXPRT  
WINDOWS V2.0

### VICINITY MAP

0 2000 4000 6000 FEET



SCALE

FOR PERMIT USE ONLY  
NOT FOR CONSTRUCTION

PURPOSE: TO PERFORM DEEPENING  
AT EXISTING CARGO TERMINAL

DATUM: MEAN LOW WATER

ADJACENT PROPERTY OWNERS:

1. PORT AUTHORITY OF NY & NJ (BLOCK 398, LOT 3)
2. U.S. GOVERNMENT (BLOCK 404, LOT 1)

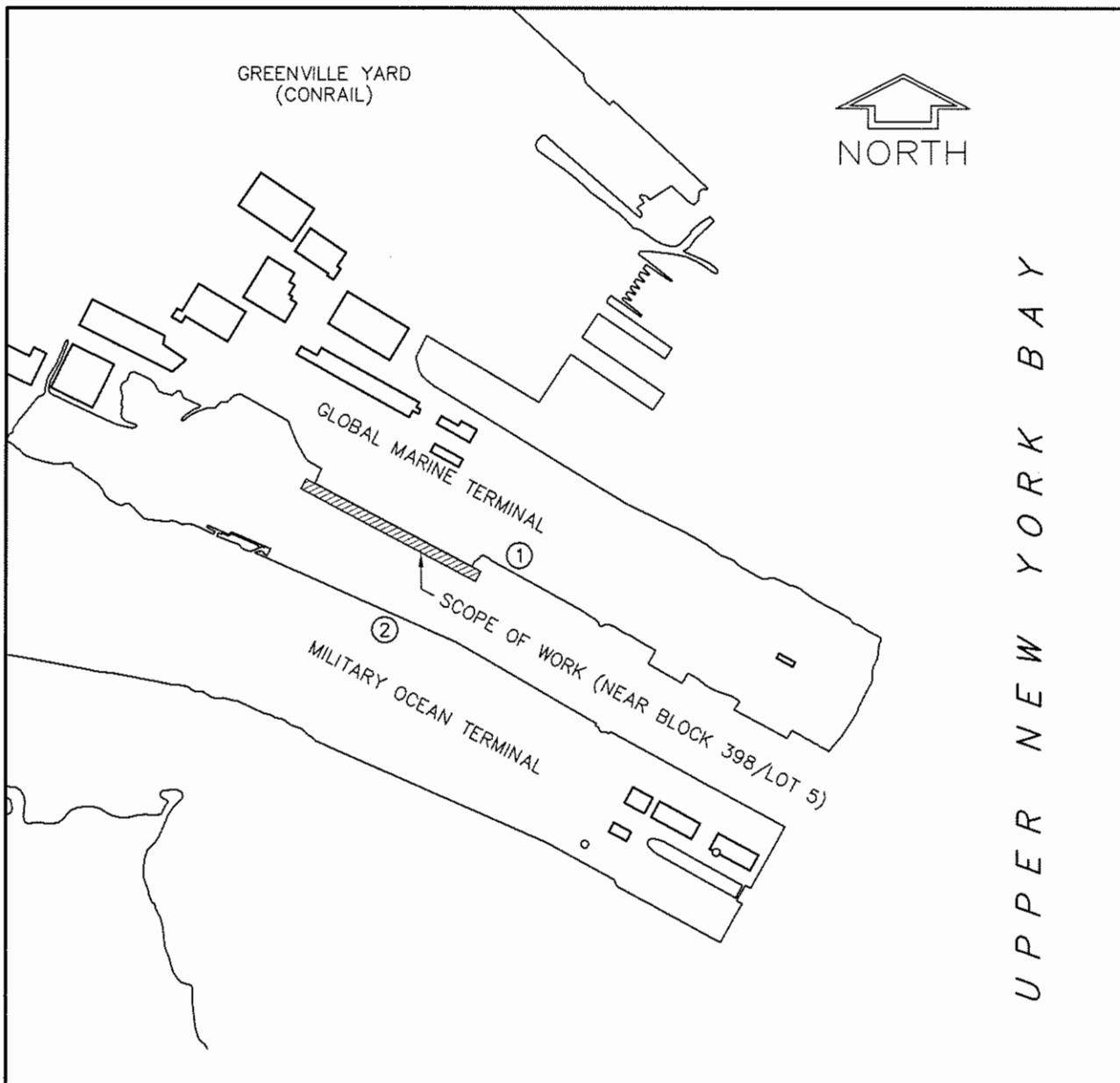
AGENT: OCEAN AND COASTAL CONSULTANTS, INC.

PROPOSED NEW WORK DREDGING  
BAYONNE TERMINAL (BLOCK 398, LOT 5)  
PORT JERSEY CHANNEL  
COUNTY OF HUDSON  
STATE OF NEW JERSEY

APPLICATION BY: GLOBAL MARINE TERMINAL AND  
CONTAINER SERVICES

DATE: 12-8-04

SHEET 1 OF 7

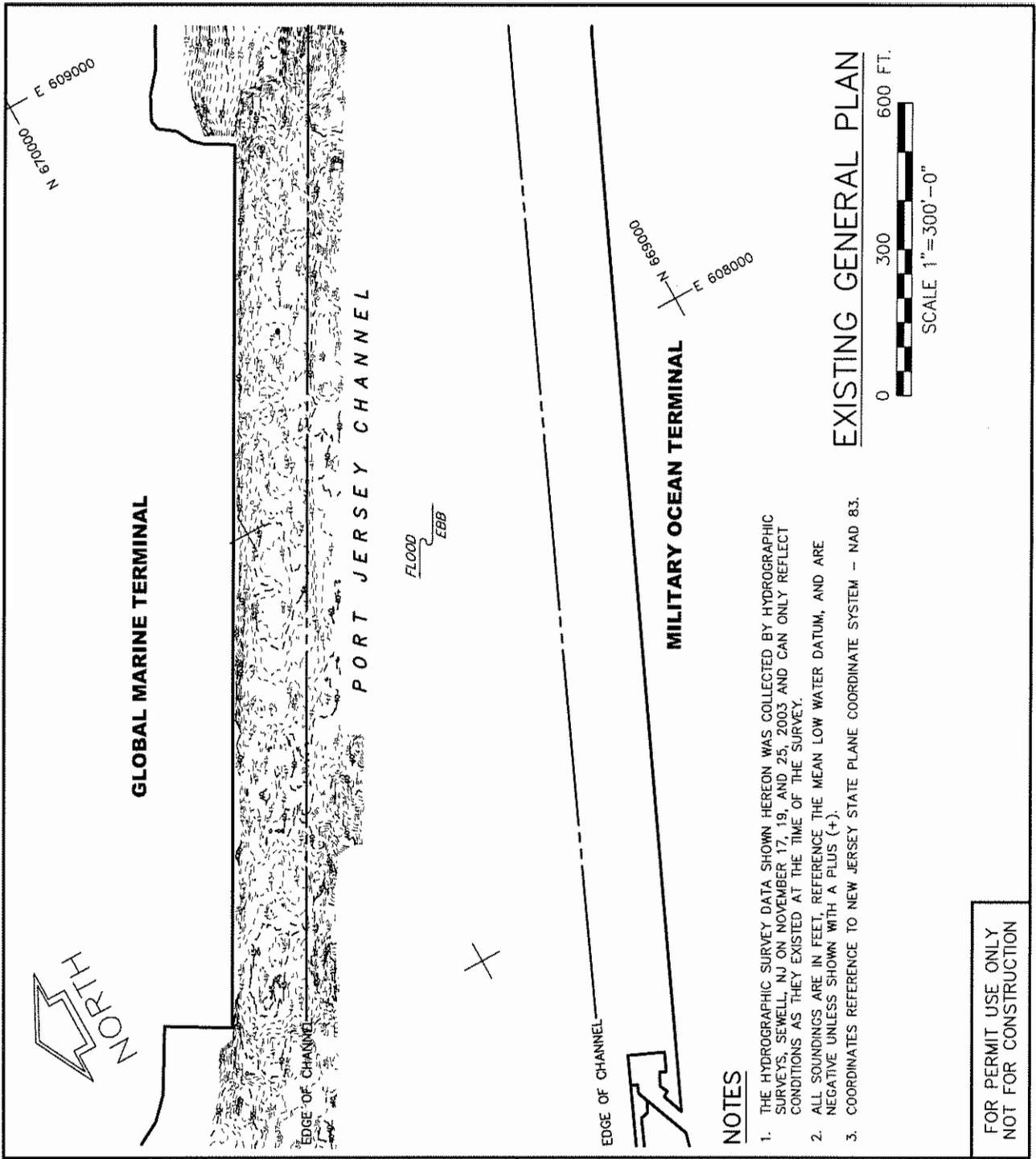


**EXISTING SITE PLAN**



FOR PERMIT USE ONLY  
NOT FOR CONSTRUCTION

<p>PURPOSE: TO PERFORM DEEPENING AT EXISTING CARGO TERMINAL</p> <p>DATUM: MEAN LOW WATER</p> <p>ADJACENT PROPERTY OWNERS:</p> <ol style="list-style-type: none"> <li>1. PORT AUTHORITY OF NY &amp; NJ (BLOCK 398, LOT 3)</li> <li>2. U.S. GOVERNMENT (BLOCK 404, LOT 1)</li> </ol> <p>AGENT: OCEAN AND COASTAL CONSULTANTS, INC.</p>	<p>PROPOSED NEW WORK DREDGING BAYONNE TERMINAL (BLOCK 398, LOT 5) PORT JERSEY CHANNEL COUNTY OF HUDSON STATE OF NEW JERSEY</p> <p>APPLICATION BY: GLOBAL MARINE TERMINAL AND CONTAINER SERVICES</p> <p>DATE: 12-8-04</p> <p style="text-align: right;">SHEET 2 OF 7</p>
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**EXISTING GENERAL PLAN**

**NOTES**

1. THE HYDROGRAPHIC SURVEY DATA SHOWN HEREON WAS COLLECTED BY HYDROGRAPHIC SURVEYS, SEWELL, NJ ON NOVEMBER 17, 19, AND 25, 2003 AND CAN ONLY REFLECT CONDITIONS AS THEY EXISTED AT THE TIME OF THE SURVEY.
2. ALL SOUNDINGS ARE IN FEET, REFERENCE THE MEAN LOW WATER DATUM, AND ARE NEGATIVE UNLESS SHOWN WITH A PLUS (+).
3. COORDINATES REFERENCE TO NEW JERSEY STATE PLANE COORDINATE SYSTEM - NAD 83.

FOR PERMIT USE ONLY  
NOT FOR CONSTRUCTION

PURPOSE: TO PERFORM DEEPENING  
AT EXISTING CARGO TERMINAL

DATUM: MEAN LOW WATER

ADJACENT PROPERTY OWNERS:

1. PORT AUTHORITY OF NY & NJ (BLOCK 398, LOT 3)
2. U.S. GOVERNMENT (BLOCK 404, LOT 1)

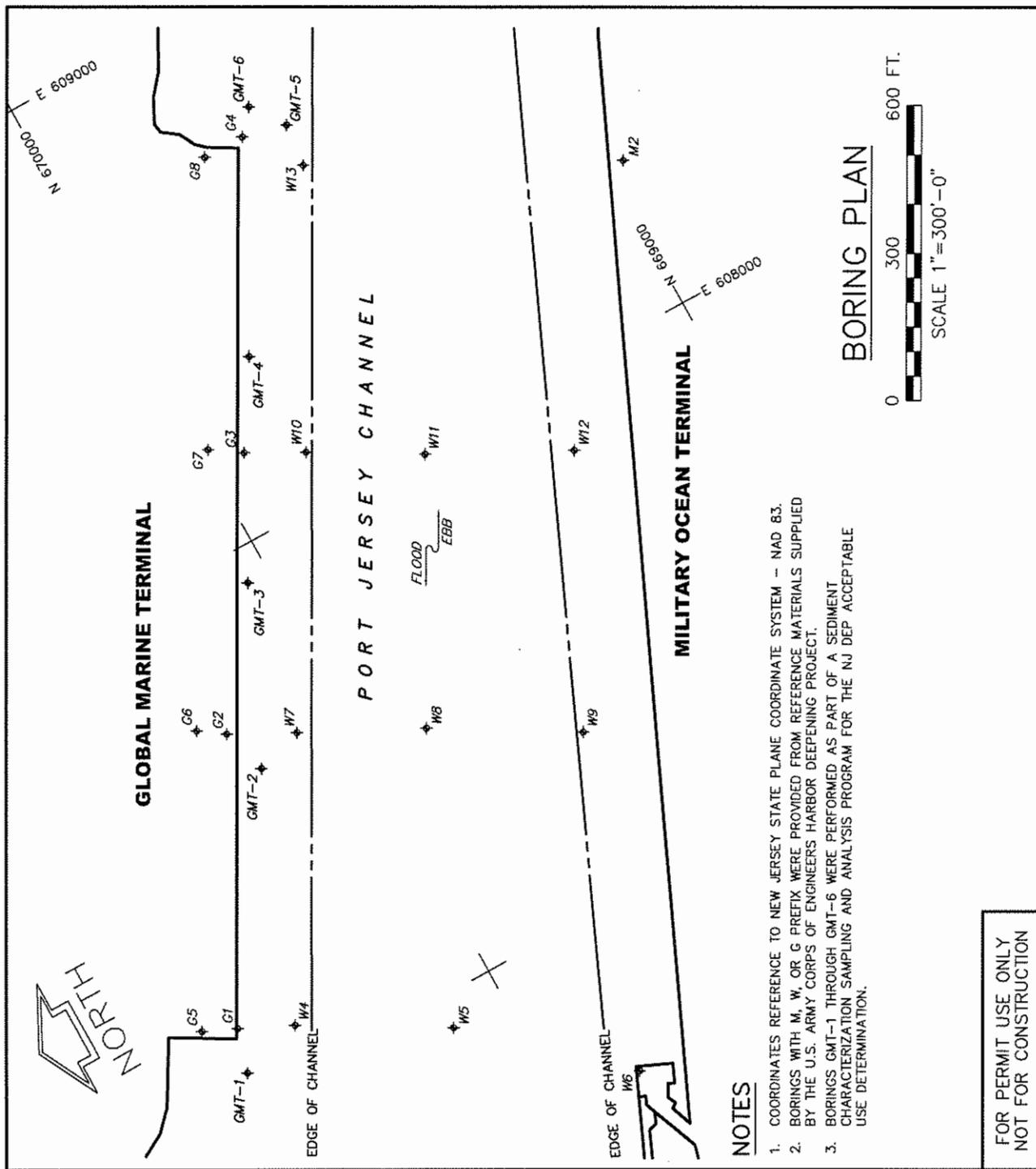
AGENT: OCEAN AND COASTAL CONSULTANTS, INC.

PROPOSED NEW WORK DREDGING  
BAYONNE TERMINAL (BLOCK 398, LOT 5)  
PORT JERSEY CHANNEL  
COUNTY OF HUDSON  
STATE OF NEW JERSEY

APPLICATION BY: GLOBAL MARINE TERMINAL AND  
CONTAINER SERVICES

DATE: 12-8-04

SHEET 3 OF 7



PURPOSE: TO PERFORM DEEPENING AT EXISTING CARGO TERMINAL

DATUM: MEAN LOW WATER

ADJACENT PROPERTY OWNERS:

1. PORT AUTHORITY OF NY & NJ (BLOCK 398, LOT 3)
2. U.S. GOVERNMENT (BLOCK 404, LOT 1)

AGENT: OCEAN AND COASTAL CONSULTANTS, INC.

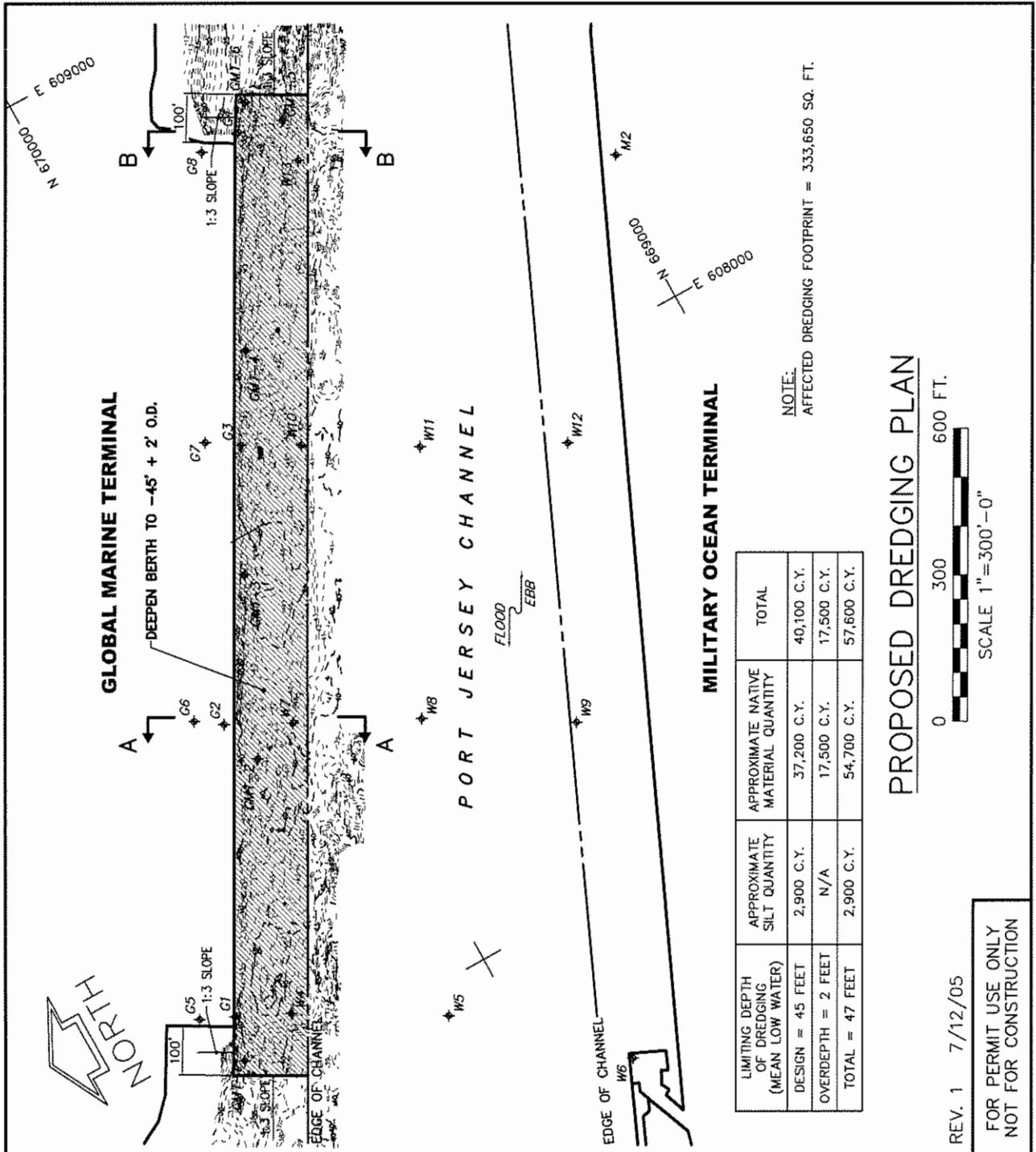
PROPOSED NEW WORK DREDGING BAYONNE TERMINAL (BLOCK 398, LOT 5)

PORT JERSEY CHANNEL  
COUNTY OF HUDSON  
STATE OF NEW JERSEY

APPLICATION BY: GLOBAL MARINE TERMINAL AND CONTAINER SERVICES

DATE: 12-8-04

SHEET 4 OF 7

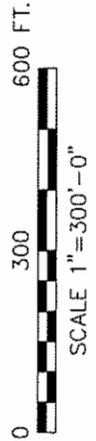


NOTE:  
AFFECTED DREDGING FOOTPRINT = 333,650 SQ. FT.

**MILITARY OCEAN TERMINAL**

LIMITING DEPTH OF DREDGING (MEAN LOW WATER)	APPROXIMATE SILT QUANTITY	APPROXIMATE NATIVE MATERIAL QUANTITY	TOTAL
DESIGN = 45 FEET	2,900 C.Y.	37,200 C.Y.	40,100 C.Y.
OVERDEPTH = 2 FEET	N/A	17,500 C.Y.	17,500 C.Y.
TOTAL = 47 FEET	2,900 C.Y.	54,700 C.Y.	57,600 C.Y.

**PROPOSED DREDGING PLAN**

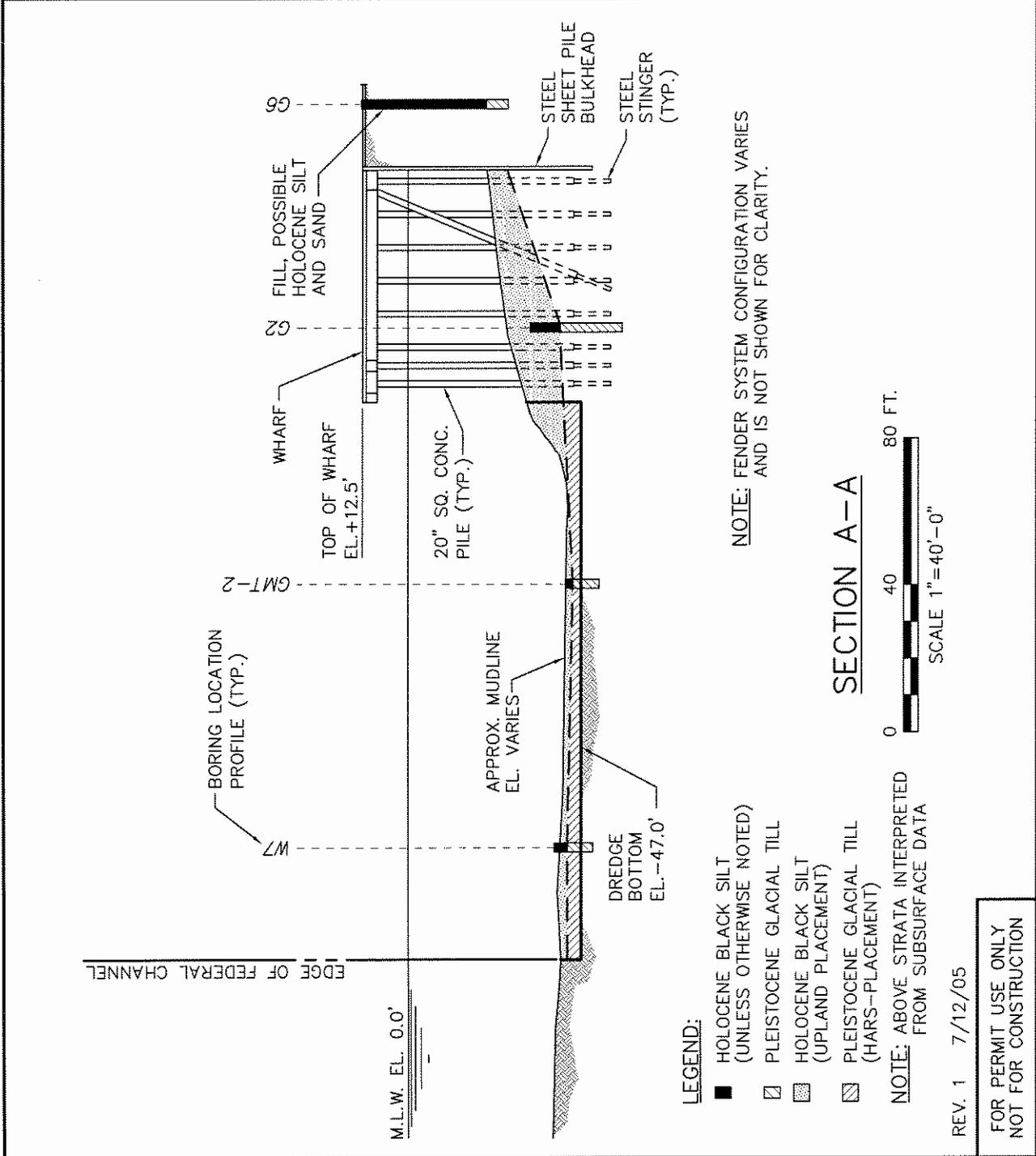


REV. 1 7/12/05

FOR PERMIT USE ONLY  
NOT FOR CONSTRUCTION

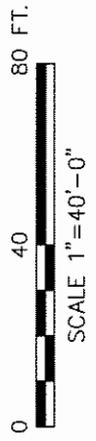
PURPOSE: TO PERFORM DEEPENING AT EXISTING CARGO TERMINAL  
 DATUM: MEAN LOW WATER  
 ADJACENT PROPERTY OWNERS:  
 1. PORT AUTHORITY OF NY & NJ (BLOCK 398, LOT 3)  
 2. U.S. GOVERNMENT (BLOCK 404, LOT 1)  
 AGENT: OCEAN AND COASTAL CONSULTANTS, INC.

PROPOSED NEW WORK DREDGING  
 BAYONNE TERMINAL (BLOCK 398, LOT 5)  
 PORT JERSEY CHANNEL  
 COUNTY OF HUDSON  
 STATE OF NEW JERSEY  
 APPLICATION BY: GLOBAL MARINE TERMINAL AND CONTAINER SERVICES  
 DATE: 12-8-04  
 SHEET 5 OF 7



NOTE: FENDER SYSTEM CONFIGURATION VARIES AND IS NOT SHOWN FOR CLARITY.

SECTION A-A



- LEGEND:**
- HOLOCENE BLACK SILT (UNLESS OTHERWISE NOTED)
  - ▨ PLEISTOCENE GLACIAL TILL
  - ▩ HOLOCENE BLACK SILT (UPLAND PLACEMENT)
  - ▧ PLEISTOCENE GLACIAL TILL (HARS-PLACEMENT)

NOTE: ABOVE STRATA INTERPRETED FROM SUBSURFACE DATA

REV. 1 7/12/05

FOR PERMIT USE ONLY  
NOT FOR CONSTRUCTION

PURPOSE: TO PERFORM DEEPENING AT EXISTING CARGO TERMINAL

DATUM: MEAN LOW WATER

ADJACENT PROPERTY OWNERS:

1. PORT AUTHORITY OF NY & NJ (BLOCK 398, LOT 3)
2. U.S. GOVERNMENT (BLOCK 404, LOT 1)

AGENT: OCEAN AND COASTAL CONSULTANTS, INC.

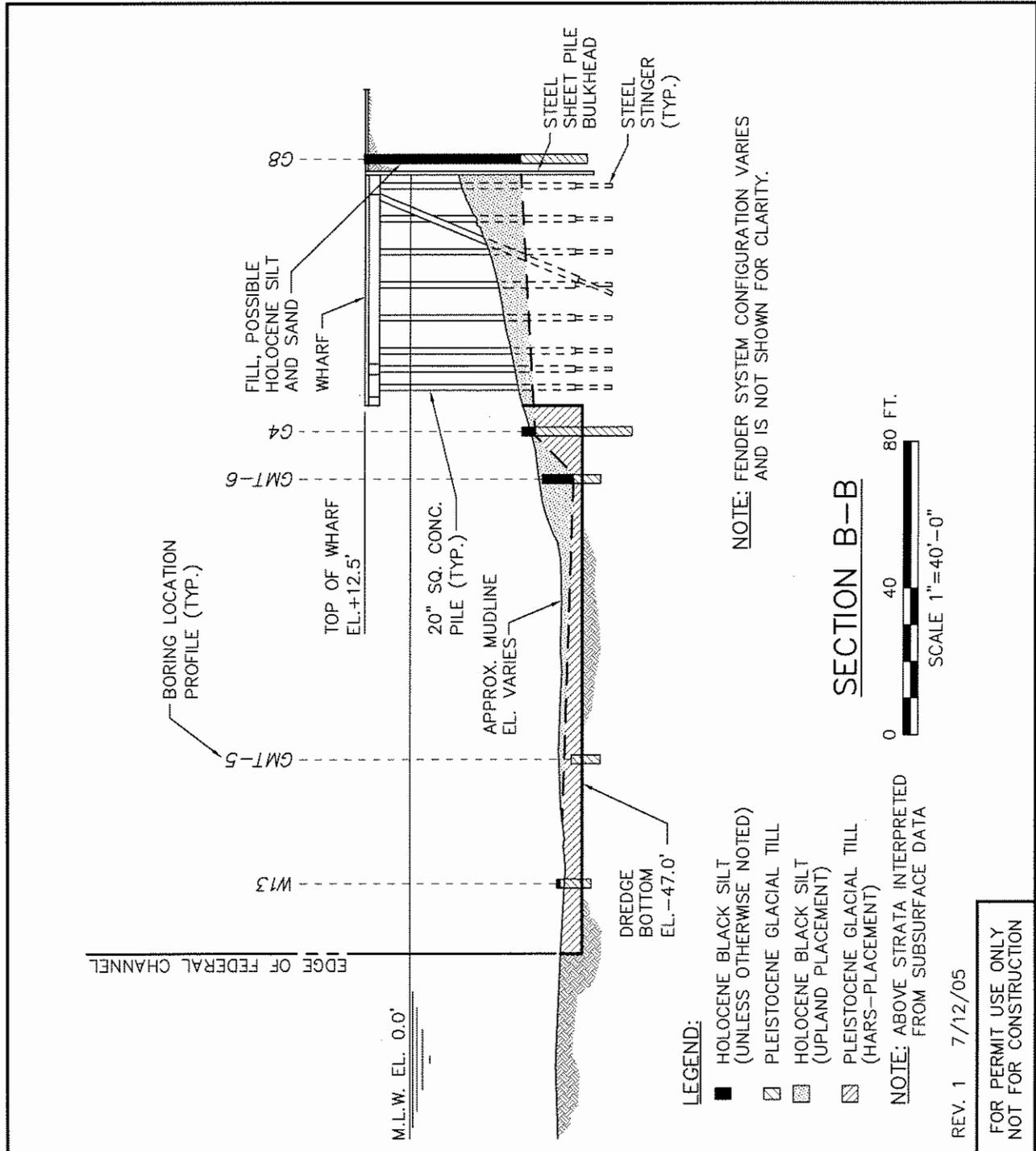
PROPOSED NEW WORK DREDGING BAYONNE TERMINAL (BLOCK 398, LOT 5)

PORT JERSEY CHANNEL  
COUNTY OF HUDSON  
STATE OF NEW JERSEY

APPLICATION BY: GLOBAL MARINE TERMINAL AND CONTAINER SERVICES

DATE: 12-8-04

SHEET 6 OF 7



PURPOSE: TO PERFORM DEEPENING AT EXISTING CARGO TERMINAL

DATUM: MEAN LOW WATER

ADJACENT PROPERTY OWNERS:

1. PORT AUTHORITY OF NY & NJ (BLOCK 398, LOT 3)
2. U.S. GOVERNMENT (BLOCK 404, LOT 1)

AGENT: OCEAN AND COASTAL CONSULTANTS, INC.

PROPOSED NEW WORK DREDGING BAYONNE TERMINAL (BLOCK 398, LOT 5)

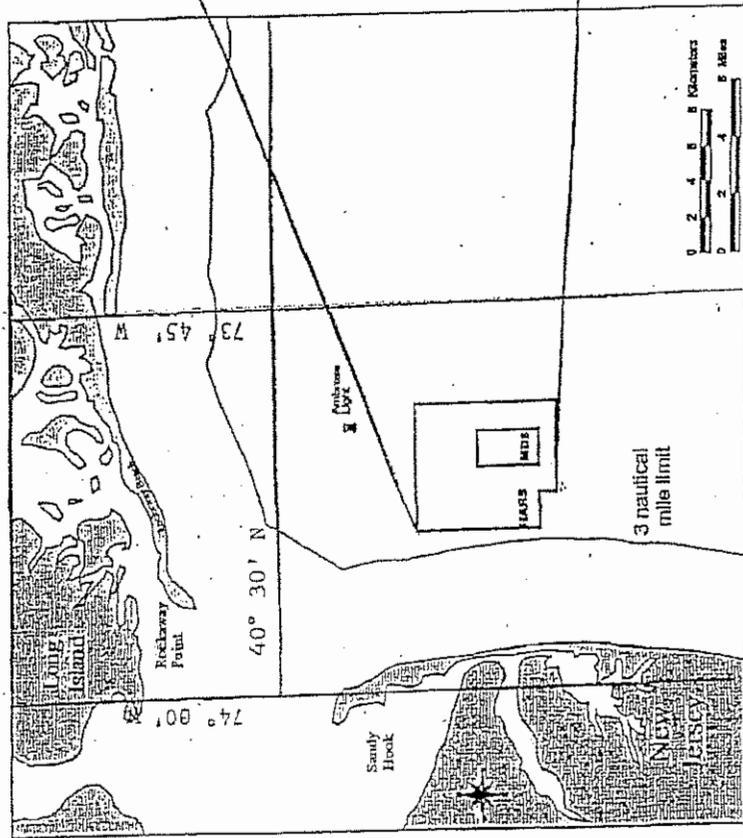
PORT JERSEY CHANNEL  
COUNTY OF HUDSON  
STATE OF NEW JERSEY

APPLICATION BY: GLOBAL MARINE TERMINAL AND CONTAINER SERVICES

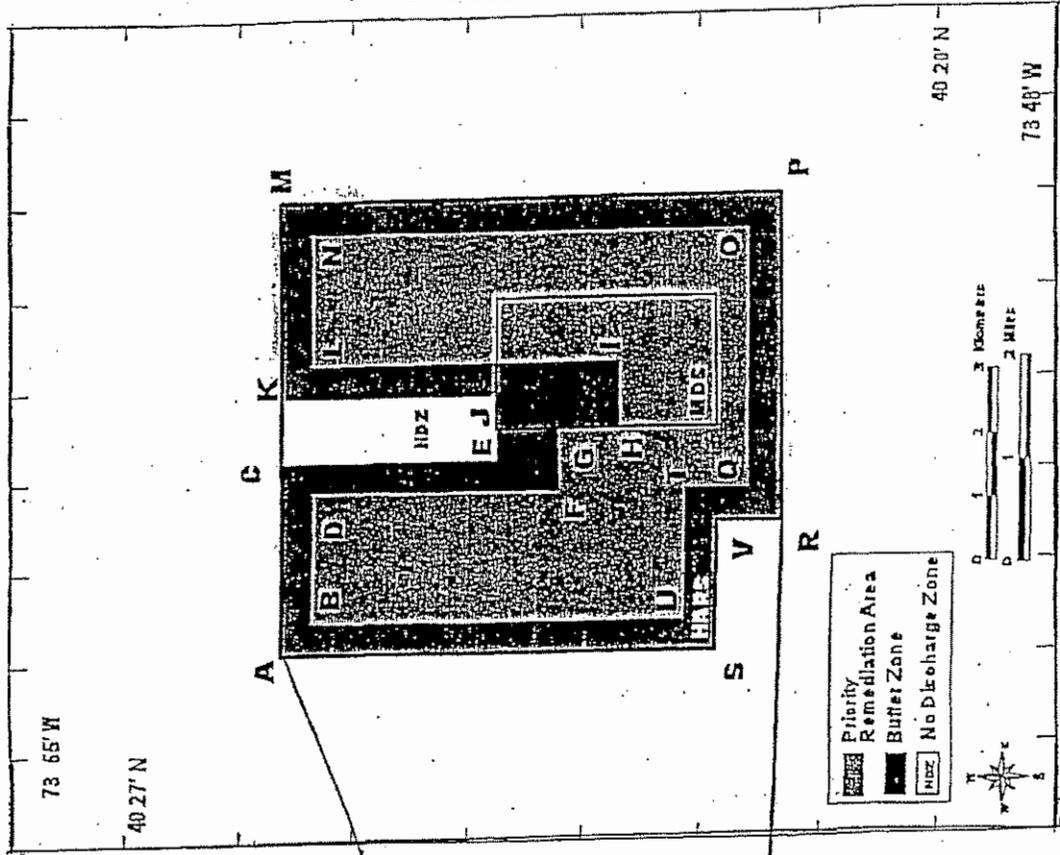
DATE: 12-8-04

SHEET 7 OF 7

HISTORIC AREA REMEDIATION SITE LOCATION MAP

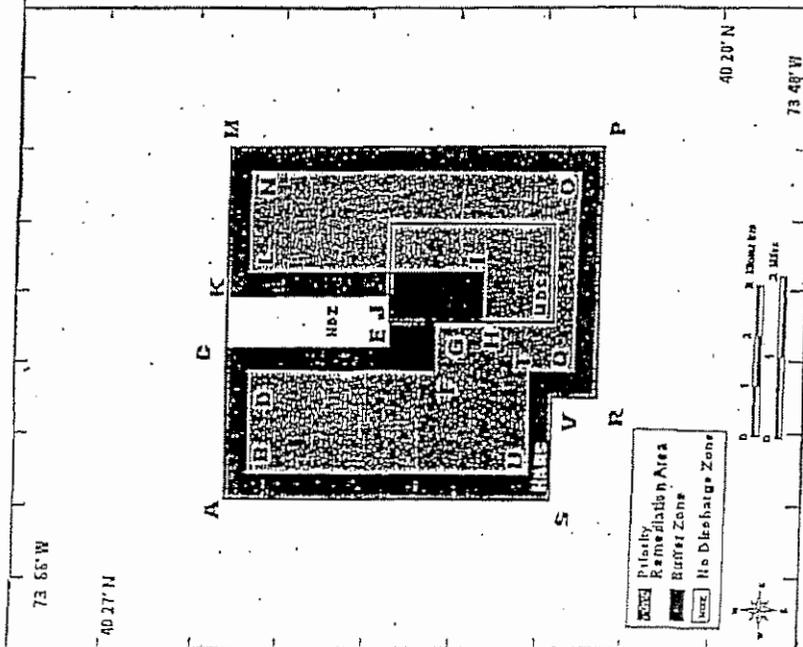


LOCATION OF PRIMARY REMEDIATION AREA WITHIN THE HISTORIC AREA REMEDIATION SITE



00900 ATT. A-2

B



Priority Remediation Area (PRA): 9.0 square nautical mile area to be remediated with at least one meter of Remediation Material, bounded by the following coordinates:

Point	Latitude DMS *	Longitude DMS	Latitude DDM **	Longitude DDM
B	40° 25' 23" N	73° 53' 34" W	40° 25.38' N	73° 53.57' W
D	40° 25' 22" N	73° 52' 08" W	40° 25.37' N	73° 52.13' W
F	40° 23' 13" N	73° 52' 09" W	40° 23.22' N	73° 52.15' W
G	40° 23' 13" N	73° 51' 28" W	40° 23.22' N	73° 51.47' W
H	40° 22' 41" N	73° 51' 28" W	40° 22.68' N	73° 51.47' W
I	40° 22' 41" N	73° 50' 43" W	40° 22.68' N	73° 50.72' W
L	40° 25' 22" N	73° 50' 44" W	40° 25.37' N	73° 50.73' W
N	40° 25' 22" N	73° 49' 19" W	40° 25.37' N	73° 49.32' W

\* -- DMS = Degrees, Minutes, Seconds

\*\* -- DDM = Degrees, Decimal Minutes

SHEET 76 OF 7

**TABLE 1. RESULTS OF CHEMICAL ANALYSIS OF SITE WATER AND ELUTRIATE  
PORT JERSEY - CONTRACT AREA 1**

CONSTITUENTS	SITE WATER		ELUTRIATE	
	DETECTION LIMITS	CONCENTRATION	DETECTION LIMITS	CONCENTRATION
<b>Metals</b>	<b>ppb</b>	<b>ppb</b>	<b>ppb</b>	<b>ppb</b>
Ag		0.032		0.016
Cd		0.068		0.084
Cr		0.522		0.918
Cu		2.10		2.070
Hg		0.005		0.001
Ni		1.30		2.94
Pb		0.69		0.39
Zn		5.45		3.98
<b>Pesticides</b>	<b>pptr (ng/L)</b>	<b>pptr (ng/L)</b>	<b>pptr (ng/L)</b>	<b>pptr (ng/L)</b>
Aldrin	2.83	ND	2.83	ND
$\alpha$ -Chlordane	1.08	ND	1.08	ND
trans Nonachlor	1.01	ND	1.01	ND
Dieldrin	0.98	ND	0.98	ND
4,4'-DDT	0.56	ND	0.56	ND
2,4'-DDT	1.99	ND	1.99	ND
4,4'-DDD	0.60	ND	0.60	ND
2,4'-DDD	0.75	ND	0.75	ND
4,4'-DDE	0.84	ND	0.84	ND
2,4'-DDE	1.71	ND	1.71	ND
<b>Total DDT</b>		<b>3.2</b>		<b>3.2</b>
Endosulfan I	1.11	ND	1.11	ND
Endosulfan II	0.51	ND	0.51	ND
Endosulfan sulfate	0.57	ND	0.57	ND
Heptachlor	1.17	ND	1.17	ND
Heptachlor epoxide	0.95	ND	0.95	ND
<b>Industrial Chemicals</b>	<b>pptr (ng/L)</b>	<b>pptr (ng/L)</b>	<b>pptr (ng/L)</b>	<b>pptr (ng/L)</b>
PCB 8	16.00	ND	16.00	ND
PCB 18	1.39	ND	1.39	ND
PCB 28	1.73	ND	1.73	ND
PCB 44	1.45	ND	1.45	ND
PCB 49	1.49	ND	1.49	ND
PCB 52	1.44	ND	1.44	ND
PCB 66	1.49	ND	1.49	ND
PCB 87	1.13	ND	1.13	ND
PCB 101	1.15	ND	1.15	ND
PCB 105	0.58	ND	0.58	ND
PCB 118	0.87	ND	0.87	ND
PCB 128	1.40	ND	1.40	ND
PCB 138	1.33	ND	1.33	ND
PCB 153	1.07	ND	1.07	ND
PCB 170	1.02	ND	1.02	ND
PCB 180	0.96	ND	0.96	ND
PCB 183	0.93	ND	0.93	ND
PCB 184	0.92	ND	0.92	ND
PCB 187	0.86	ND	0.86	ND
PCB 195	1.09	ND	1.09	ND
PCB 206	1.22	ND	1.22	ND
PCB 209	1.27	ND	1.27	ND
<b>Total PCB</b>		<b>81.5</b>		<b>81.5</b>

ND = Not detected

Total DDT = sum of 2,4'- and 4,4'-DDD, DDE, and DDT

Total PCB = sum of congeners reported x 2

Concentrations shown are the mean of three replicate analyses.

Means were determined using conservative estimates of concentrations of constituents that were at concentrations below the detection limit.

ATTACHMENT 1 - TABLE 1

TABLE 2.

## PORT JERSEY - CONTRACT AREA 1

## TOXICITY TEST RESULTS

## Suspended Particulate Phase

Test Species	Test Duration	LC50/EC50	LPC (a)
<i>Menidia beryllina</i>	96 hours	(b) >100%	1.00
<i>Mysidopsis bahia</i>	96 hours	(b) >100%	1.00
<i>Mytilus edulis</i> (larval survival)	48 hours	(b) >100%	1.00
<i>Mytilus edulis</i> (larval normal development)	48 hours	(c) >100%	1.00

(a) Limiting Permissible Concentration (LPC) is the LC 50 or EC 50 times 0.01.

(b) Median Lethal Concentration (LC50) resulting in 50% mortality at test termination.

(c) Median Effective Concentration (EC50) based on normal development to the D-cell, prodissoconch 1 stage.

## Whole Sediment (10 days)

Test Species	% Survival in Reference	% Survival	% Difference   Reference - Test	Is difference statistically significant? ( $\alpha=0.05$ )
<i>Ampelisca abdita</i>	99%	100%	1%	No
<i>Mysidopsis bahia</i>	95%	99%	4%	No

ATTACHMENT 2 - TABLE 2

**PORT JERSEY- CONTRACT AREA 1**  
**TABLE 3. 28 DAY BIOACCUMULATION TEST RESULTS: CHEMICAL ANALYSIS OF TISSUE**  
**Wet weight concentrations**

CONSTITUENTS	<i>Tapes japonica</i>				<i>Nereis virens</i>			
	REFERENCE		TEST		REFERENCE		TEST	
	DETECTION LIMITS	CONCENTRATION	DETECTION LIMITS	CONCENTRATION	DETECTION LIMITS	CONCENTRATION	DETECTION LIMITS	CONCENTRATION
<b>Metals</b>	ppm (mg/kg)	ppm (mg/kg)	ppm (mg/kg)	ppm (mg/kg)	ppm (mg/kg)	ppm (mg/kg)	ppm (mg/kg)	ppm (mg/kg)
Ag		0.11		0.09		0.01		0.01
As		1.92		1.80		3.43		3.01
Cd		0.22		0.21		0.04		0.05
Cr		0.27		0.62		0.50		0.52
Cu		1.09		1.21		1.75	*	2.46
Hg		0.01		0.01		0.04		0.04
Ni		0.68		0.73		0.25		0.30
Pb		0.02		0.02		0.12		0.10
Zn		8.33		7.99		19.38		21.53
<b>Pesticides</b>	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)
Aldrin	0.02	ND	0.02	ND	0.02	ND	0.03	ND
α-Chlordane		0.03		0.02		0.12		0.12
trans Nonachlor		0.03		0.02		0.29		0.29
Dieldrin		0.04		0.04		0.12		0.16
4,4'-DDT		0.03		0.03		0.03		0.03
2,4'-DDT	0.03	ND	0.03	ND	0.04	ND	0.04	ND
4,4'-DDD		0.04		0.04		0.15		0.13
2,4'-DDD		0.04		0.06		0.14		0.13
4,4'-DDE		0.03		0.04		0.06		0.05
2,4'-DDE	0.09	ND	0.09	ND	0.10	ND	0.10	ND
<b>Total DDT</b>		<b>0.20</b>		<b>0.23</b>		<b>0.44</b>		<b>0.42</b>
Endosulfan I	0.03	ND	0.03	ND	0.04	ND	0.04	ND
Endosulfan II	0.05	ND	0.05	ND	0.05	ND	0.05	ND
Endosulfan sulfate	0.05	ND	0.05	ND	0.06	ND	0.06	ND
Heptachlor	0.03	ND	0.03	ND	0.03	ND	0.03	ND
Heptachlor epoxide		0.02		0.02		0.06		0.05
<b>Industrial Chemicals</b>	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)
PCB 8		0.41		0.42		0.88		0.81
PCB 18		0.04		0.05		0.03	*	0.08
PCB 28		0.15		0.19		0.20		0.13
PCB 44	0.03	ND	0.03	ND	0.03	ND	0.03	ND
PCB 49		0.02		* 0.04		0.06		* 0.08
PCB 52		0.05		* 0.09		0.14		* 0.24
PCB 66	0.03	ND	0.03	ND		0.05		0.04
PCB 87		0.03		0.04		0.04		0.05
PCB 101		0.11		0.13		0.48		0.49
PCB 105		0.04		0.04		0.20		0.19
PCB 118		0.05		0.04		0.21		0.20
PCB 128		0.09		0.08		0.30		0.25
PCB 138		0.17		0.36		1.48		1.35
PCB 153		0.11		0.11		2.18		1.99
PCB 170		0.04		* 0.08		0.43		0.41
PCB 180		0.04		* 0.05		0.93		0.86
PCB 183		0.02		0.02		0.38		0.35
PCB 184	0.05	ND	0.05	ND	0.05	ND	0.05	ND
PCB 187		0.03		* 0.14		0.79		0.79
PCB 195		0.02		0.01		0.16		0.16
PCB 206		0.03		0.04		0.30		0.30
PCB 209		0.04		0.04		0.37		0.33
<b>Total PCB</b>		<b>3.09</b>		* <b>4.00</b>		<b>19.31</b>		<b>18.25</b>
1,4-Dichlorobenzene		0.39		0.37		0.33		0.28

ATTACHMENT 3- TABLE 3

TABLE 3. (Continued)

## PORT JERSEY - CONTRACT AREA 1

CONSTITUENTS	<i>Tapes japonica</i>				<i>Nereis virens</i>			
	REFERENCE		TEST		REFERENCE		TEST	
	DETECTION	CONCEN	DETECTION	CONCEN	DETECTION	CONCEN	DETECTION	CONCEN
	LIMITS	TRATION	LIMITS	TRATION	LIMITS	TRATION	LIMITS	TRATION
PAH's	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)	ppb (ug/kg)
Naphthalene		0.72		0.71		2.49		2.77
Acenaphthylene		0.05		0.04		0.14		0.13
Acenaphthene		0.11		0.11		0.42		0.45
Fluorene		0.18		0.16		0.09		0.11
Phenanthrene		0.80		0.80		0.29		0.31
Anthracene		0.07		0.08		0.05		0.06
Fluoranthene		0.77		0.75		0.26		0.22
Pyrene		0.40		0.51		0.22		0.27
Benzo(a)anthracene		0.44		0.39		0.05		0.05
Chrysene		0.53		0.48		0.15		0.14
Benzo(b)fluoranthene		0.12		0.01		0.03		0.03
Benzo(k)fluoranthene		0.08	0.02	ND		0.03		0.03
Benzo(a)pyrene	0.02	ND	0.02	ND		0.17		0.02
Indeno(1,2,3-cd)pyrene	0.01	ND		0.01	0.01	ND		0.01
Dibenzo(a,h)anthracene	0.02	ND	0.02	ND	0.02	ND		0.01
Benzo(g,h,i)perylene	0.01	ND		0.01		0.04		0.01
Total PAH's		4.29		4.09		4.45		4.62
Dioxins	pptr(ng/kg)	pptr(ng/kg)	pptr(ng/kg)	pptr(ng/kg)	pptr(ng/kg)	pptr(ng/kg)	pptr(ng/kg)	pptr(ng/kg)
2378 TCDD		0.42	0.98	ND		0.28		0.20
12378 PeCDD		0.95	*	2.41		0.14		0.12
123478 HxCDD		0.03	*	5.10		0.08		0.05
123678 HxCDD		0.06	*	1.33		0.27		0.19
123789 HxCDD		0.05	*	1.79		0.17		0.13
1234678 HpCDD		0.18		0.21		1.47		1.03
1234789 OCDD		1.41		1.34		8.28		6.02
2378 TCDF		0.14		0.10		1.66		1.41
12378 PeCDF		0.08	*	1.45		0.19		0.18
23478 PeCDF		0.08	*	1.40		0.31		0.27
123478 HxCDF		0.11		0.55		0.17		0.14
123678 HxCDF		0.05		0.92		0.09		0.08
234678 HxCDF		0.41	*	1.84		0.60		1.19
123789 HxCDF		0.52	*	1.81		0.08		0.06
1234678 HpCDF		0.08		0.47		0.59		0.41
1234789 HpCDF		0.04	*	1.20		0.06		1.50
12346789 OCDF		0.17		0.17		0.60		0.38

ND = Not detected

Total PAH = Sum of all PAHs

Total DDT = sum of 2,4'- and 4,4'-DDD, DDE, and DDT

Total PCB = 2(x), where x = sum of PCB congeners

Concentrations shown are the mean of 5 replicate analyses in wet weight.

Means were determined using conservative estimates of concentrations of constituents that were at concentrations below the detection limit

\* = Statistically significant at the 95% confidence level

ATTACHMENT 3a - TABLE 3 - continued