



661 ANDERSEN DRIVE - PITTSBURGH, PENNSYLVANIA 15220-2745 (412) 921-7090

**MINUTES OF RESTORATION ADVISORY BOARD (RAB)
PUBLIC MEETING
FEBRUARY 22, 1995
(REVISED JUNE 6, 1995)**

To: NSB-NLON RAB Members
From: Matt Cochran of Halliburton NUS Corporation (HNUS)
Subject: RAB and Public Meeting Minutes - February 22, 1995
Installation Restoration Program
Naval Subbase-New London (NSB-NLON)
Groton, Connecticut

Attendees of the meeting

Suzanne Berkman	NSB-NLON
Gene Cioffi	RAB Member
Matt Cochran	HNUS
Richard Conant	NSB-NLON
Jeff Dale	NORTHDIV
Deborah Motycka Downie	RAB Member (Community Representative)
Mark Evans	NORTHDIV
Tim Evans	HNUS
Bob Hamilton	New London Day
Brian Helland	NORTHDIV
Robert Jones	COMSUBGRU TWO
Leo Kay	USEPA
Kymerlee Keckler	USEPA
Mark Leipert	NORTHDIV
Mark Lewis	CTDEP
David B. Murphy	Naval Air Station, South Weymouth, Massachusetts
Andrew M. Parella	RAB Member (City of Groton)
Bart Pearson	Groton Resident
Susan Pezzullo	Ledyard Resident
Norman Richards	The Mohegan Tribe of Indians of Connecticut
Lt. Pat Rios	ROICC NLON, NSB-NLON
Mark Schultz	NSB-NLON
Andy Stackpole	NSB-NLON
Harry Watson	RAB Member (Town of Groton)
Glenn Zitka	Naval Air Station, South Weymouth, Massachusetts

Agenda

The agenda for the meeting was as follows.

1. Welcome and Introduction
2. Review of Meeting Minutes from last RAB meeting
3. Phase II Remedial Investigations (RI) Update and Status of Area A Landfill
4. Fuel Farm Tank Closure Update
5. Remedial Action Update: DRMO and Spent Acid Storage Area
6. Pier 4 Quay Wall Response and Investigation
7. Community Participation
8. Future Meeting Date/Time

Greetings and Introduction

Suzanne Berkman of NSB-NLON opened the meeting at 7:00 p.m. with an introduction and welcome.

Review of November 9, 1995, meeting minutes

Andy Stackpole of NSB-NLON reviewed the meeting minutes of the last RAB meeting.

Review of Phase II Remedial Investigation (RI) and Schedule for Delivery

Mark Evans of NORTHDIV introduced himself and provided a discussion of the Phase II RI report status and schedule for delivery. See Attachment 1 for the Phase II RI report schedule. Mark indicated that any RAB members interested in a copy of the report should contact either him or Matt Cochran (HNUS). It was decided that Sue Pezzullo of Groton will receive a complete copy of the report and two additional copies of Volumes I and II. He also indicated that the report will be available in the repositories.

Review of Area A Landfill (Site 2)

Mark continued with an update of the Area A Landfill remedial action. He indicated that the action is "fast-track" and has been budgeted for this year. He indicated that the probable remedial action to be implemented will be a landfill cap. See Attachment 2 for the schedule of action. The Draft Final Focused Feasibility Study (FFS) is scheduled for March 10, 1995. A Draft Proposed Plan has been submitted to USEPA and CTDEP. A Final Proposed Plan will be submitted in mid-May 1995. A public meeting/hearing will be held at the beginning of June during the 30-day public comment period. The public comment period will end on June 18, and a Draft ROD with Response Summary will be submitted on July 18, 1995.

Fuel Farm Tank Closure Update

Suzanne Berkman introduced Lt. Pat Rios, who works for the Resident Officer In-Charge of Construction (ROICC) Office NSB-NLON. Lt. Rios provided an overview of the closure of Tanks 1,2, and 3 and replacement of Tanks 4, 7, 8, and 9. See Attachment 3 for details of the site location maps, and tank construction.

Cleaning the tanks consists of 4 tasks: 1) dewatering and on-site disposal of the groundwater from the tanks, 2) sludge removal, 3) power washing, washing with biodegradable detergent, rinsing three times, residue removal, and sampling and inspection, and 4) demolition and soil disposal.

Costs to perform the replacement activities were also addressed. See Attachment 3 for costs and project progress for these activities (90-C-0006). To date, Tanks 7, 8, and 9 have been cleaned, demolished, and backfilled. Tank 4 is in the process of sludge removal and disposal.

For the closure of Tanks 1,2, and 3, see Attachment 3 for costs (93-C-0697).

Lt. Rios showed a video of the tank cleaning and demolition activities. One hundred thousand cubic yards of soil were required to fill the tanks. It took one week to demolish the top of a tank.

Tank 2 is completed, Tank 3 has just been cleaned and requires inspection, and Tank 1 has been dewatered is ready for sludge removal.

Question: What was the source of soil backfill?

Response: A farm in Connecticut.

Question from Andrew Parella: Has the Navy been performing any groundwater studies regarding long term effects concerning lead and metals contamination mentioned in two reports?

Response: Andy Stackpole indicated that the Phase II RI shows groundwater flow directions. It also addresses sources of contamination. A gas station located across the street from the Fuel Farm had UST leaks and is having a air sparging system installed to address the gasoline portion of contamination. As for the heavier phases associated with the tank farm, bioremediation might be a remedial alternative. Groundwater flows to the river. No appreciable heavy metal contamination has been seen from this source.

Questions from Andrew Parella: What is the State of Connecticut's role in the process, considering the base is federal property? Is the base a contributor to the Long Island Sound contamination?

Response: Mark Lewis indicated that the Navy contractor executes the studies, and the State of Connecticut is active in the process of establishing the source and nature of contamination and ensures laws and regulations are followed. Kymberlee Keckler of USEPA indicated that the Subbase is a possible source of contamination to Long Island Sound, and the USEPA, Navy, and CTDEP will determine if the contaminants are at unacceptable levels. The Long Island Sound study is investigating all sources of contamination in order to determine the major problems, which appear to be low oxygen levels and runoff in municipal areas.

Question from Kymberlee Keckler: What is the status of Tanks 5 and 6?

Response from Lt. Rios? Tank 6 under Building 461 was abandoned because it could not pass the test to hold water. Work for Tank 5 was awarded to OHM to conduct work this spring or summer.

Question from resident: What is the long term groundwater monitoring plan?

Response: Matt Cochran of HNUS indicated that a work assignment is in place to perform a Phase II RI at the tank farm. Brian Helland of NORTHDIV indicated that work should begin in the spring. Suzanne Berkman pointed out that the tanks are being closed under UST regulations and time limits but is being studied under the RI program.

Remedial Action Update: DRMO and Spent Acid Storage Area

Suzanne Berkman introduced Andy Stackpole, who provided a discussion of the Spent Acid Storage Disposal Area and DRMO cleanup actions. He indicated that cleanup had been completed at both sites and that cleanup activities were done concurrently because both sites had similar contamination (lead at both sites plus PCBs at DRMO). See Attachment 4 for site locations.

At DRMO, 4,700 tons of lead-contaminated soil and 100 tons of PCB-contaminated soil were removed from the site. PCBs were excavated first, and side-wall verification sampling was then conducted.

A video of DRMO cleanup activities and the completed cap was viewed. High tides caused some difficulty with excavation. A cap was installed to limit surface water influence on contaminant migration.

Cleanup activities at the Spent Acid Disposal Area were completed in two days. A 3' x 10' tank was removed along with the surrounding soil.

All soils were disposed at a RCRA landfill in Ohio. PCB-contaminated soils from DRMO were disposed at a TSCO landfill. DRMO groundwater will be further investigated for removal alternatives. At Spent Acid, no further actions are required as all contamination was removed.

Question: When was the work completed?

Response: Spent Acid was completed in mid- to late January. DRMO was just completed.

Question: When was low tide vs. high tide?

Response: Work activities shifted position with daily tidal changes.

Pier 4 Quay Wall Response and Investigation

Matt Cochran summarized the Pier 4 quay wall investigation. See Attachment 5 for locations and diagrams. Five wells were installed by Halliburton NUS to recovery product below the wood planking system. The storm sewer pipe in question has been plugged with an expandable plug at its outfall and filled with sand at its inflow. Halliburton NUS submitted a Quay Wall Investigation and Emergency Response Letter and an Action Memorandum to CTDEP on behalf of the Navy. A Removal Site Evaluation is also being prepared.

Question: Where is the contamination derived?

Response: It is believed that it is derived from the former waste oil pit in Building 79.

Community Participation

Leo Kay of USEPA emphasized the importance of community involvement at the meetings. One individual indicated that it may be appropriate to have other environmental issues addressed at the meetings. Bart Pearson of Groton expressed that people appear to be comfortable with the investigative and remediation process, which may be the reason for the lack of involvement. Leo Kay indicated that a technical assistance grants are available for groups to hire a technical advisor to review technical reports. Norm Richards of the Mohegan Tribe of Indians of Connecticut requested that all references cited in the RI report be available in repositories for readers to perform a comprehensive review. Matt Cochran pointed out that supplying all references cited would be a major undertaking. Kymberlee Keckler indicated that for a ROD all information used in decision making must be available but does not

include guidance documents. She offered that the guidance documents could be made available in Connecticut and that the TAG grants could also be used to obtain more information. Suzanne Berkman indicated that beyond the guidance documents, reference availability in the repositories will be case by case. Sue Pezzulo requested that all RAB members receive the executive summary from the Phase II RI report.

Harry Watson of Groton suggested advertising the RAB meetings on the local public access television station.

Future Meeting Date/Time

It was agreed upon to continue to hold the meetings on Wednesday evenings. The next meeting is scheduled for May 10 at 7:00 p.m. .

Leo Kay suggested that introductions be made at the beginning of each meeting.

The meeting was adjourned at approximately 8:45 p.m.

ATTACHMENT 1

PHASE II RI REPORT SCHEDULE

DRAFT - MARCH 1, 1995

RECEIVE COMMENTS - MAY 1, 1995

RESPOND TO COMMENTS - JUNE 12, 1995

DRAFT FINAL - JULY 24, 1995

RECEIVE COMMENTS - AUGUST 24, 1995

**RESPOND TO COMMENTS - SEPTEMBER 25,
1995**

FINAL - OCTOBER 23, 1995

ATTACHMENT 2

NAVAL SUBMARINE — NEW LONDON REMEDIAL ACTION PROJECT STATUS

AREA A LANDFILL

- DRAFT FINAL FEASIBILITY STUDY - MARCH 10, 1995
- PROPOSED PLAN - MAY 19, 1995
- PUBLIC COMMENT PERIOD - MAY 20 THRU JUNE 18, 1995
- PUBLIC MEETING - JUNE 1995
- DRAFT ROD AND RESPONSIVENESS SUMMARY - JULY 18, 1995

ATTACHMENT 3



**Naval Facilities Engineering Command
NORTHERN DIVISION
PHILADELPHIA, PENNSYLVANIA**

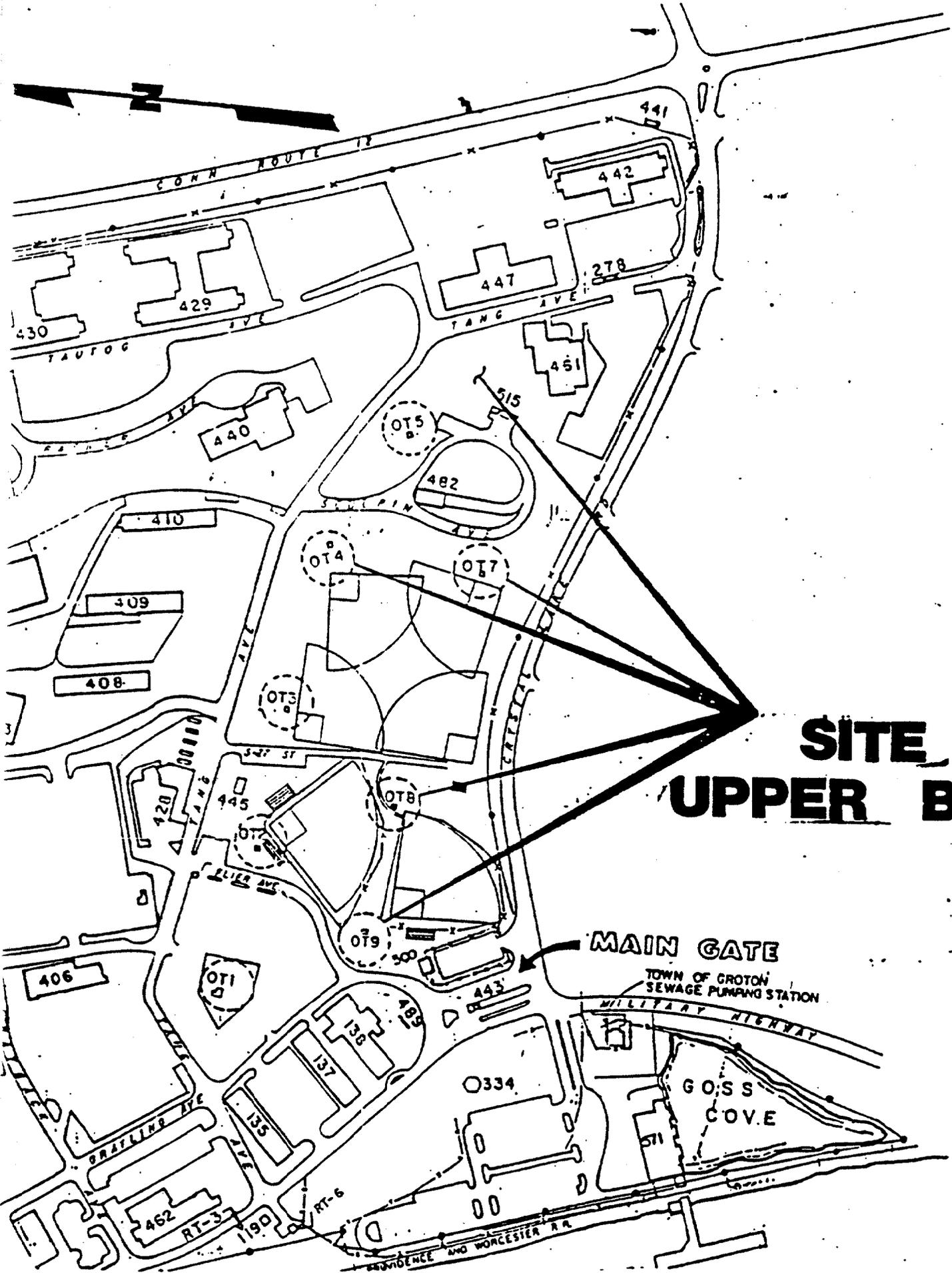
REPLACE UNDERGROUND TANKS

N62472-90-C-0006

UNDERGROUND STORAGE TANK (UST) CLOSURE

N62472-93-C-0697

**NAVAL SUBMARINE BASE NEW LONDON
GROTON, CONNECTICUT**



**SITE
UPPER BASE**

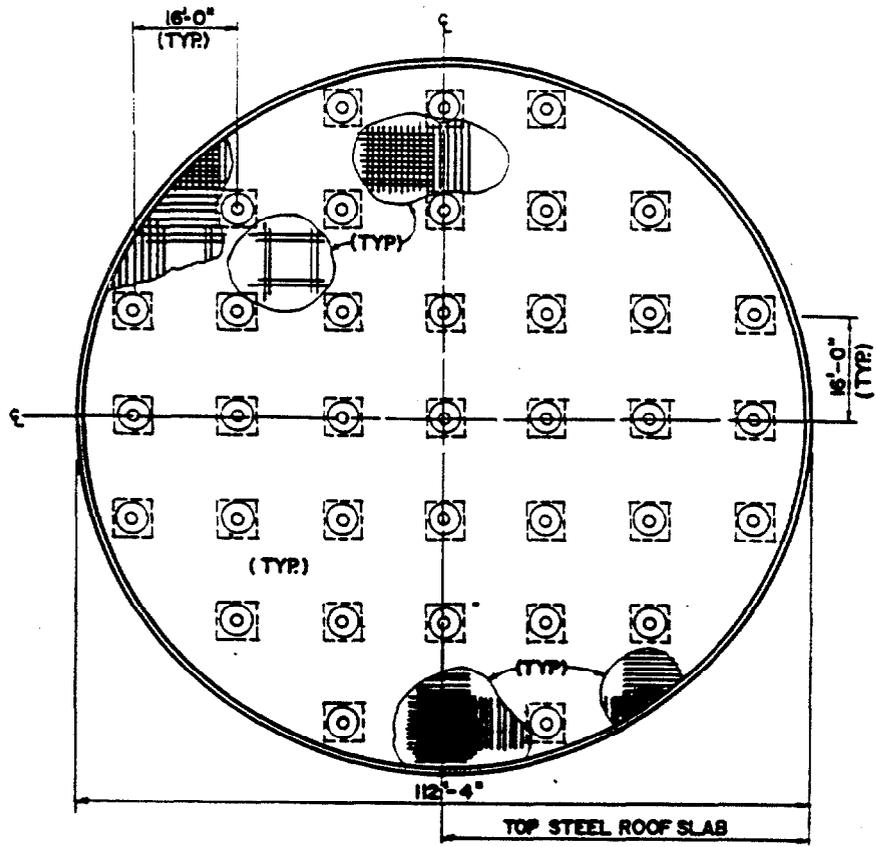
MAIN GATE

TOWN OF GROTON
SEWAGE PUMPING STATION

MILITARY HIGHWAY

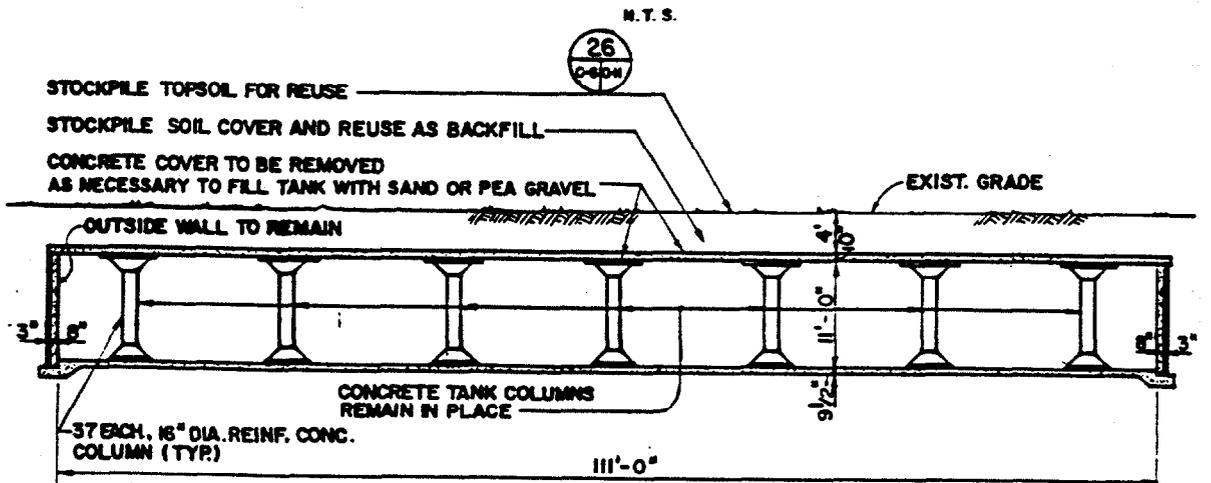
GOSS
COVE

PROVIDENCE AND WORCESTER A.R.



PLAN OF REINF. CONC. ROOF & COLUMN LOCATIONS

FOR Q.T. # 4, 7, 8 & 9.



NOTE: CONTRACTOR SHOULD BE AWARE- COLUMNS IN TANK ARE NOT CONNECTED TO TANK FLOOR AND WILL TOPPLE ONCE COVER IS REMOVED.

ELEVATION OF EXIST. Q.T. # 4, 7, 8 & 9

**4000 CY. EACH
8 100K TO BACKFILL W/GRAVEL**

TANK DECOMMISSIONING DETAIL

NOT TO SCALE

C-5.C-6.C-7

3
CE

Tank Closure

- Each tank is first dewatered using a combination of settling (fractioning trailers) and filtration (granulated activated carbon). Discharge is made to the storm sewer under a CTDEP permit.
- Following dewatering, sludge is removed using pumps and squeegees. The sludge is collected and transported to an oil reclamation facility.
- Cleaning involves a combination of hot water (applied at 175 degrees fahrenheit using either a 3,000 or 20,000 psi power washer). Biodegradable detergents (pine oil or simple green) are applied to tough to clean areas. Diesel fuel is used as a cleaning agent for #6 fuel oil tanks.
- After cleaning, washwater is collected and disposed (off-site). A visual inspection is conducted by government personnel to ensure compliance with National Fire Protection Association (NFPA) Code 30 which requires that the tank be certified vapor free by a Marine Chemist and that all possible residuals be removed.

90-C-0006

- Awarded value: \$3,298,600.00
- Cleans and closes Oil Tanks # 4, 7, 8, and 9. Originally contained #2 (diesel) oil.
- Original contract called for onsite treatment and discharge/transport and off-site disposal of 433,200 gallons of oily water/oil. During construction this quantity was increased by 453,000 gallons due to additional oily water encountered.
- 400 tons of oil contaminated soil were to be disposed. It is currently projected that another 400 - 500 tons of soil remain to be disposed. All of this soil is being removed to a treatment facility in Massachusetts.
- Current status: Oil Tanks #7, 8, and 9 have already been demolished. Oil Tank #4 is currently having the sludge removed from it. Cleaning operations are expected to begin at the end of next week.

93-C-0697

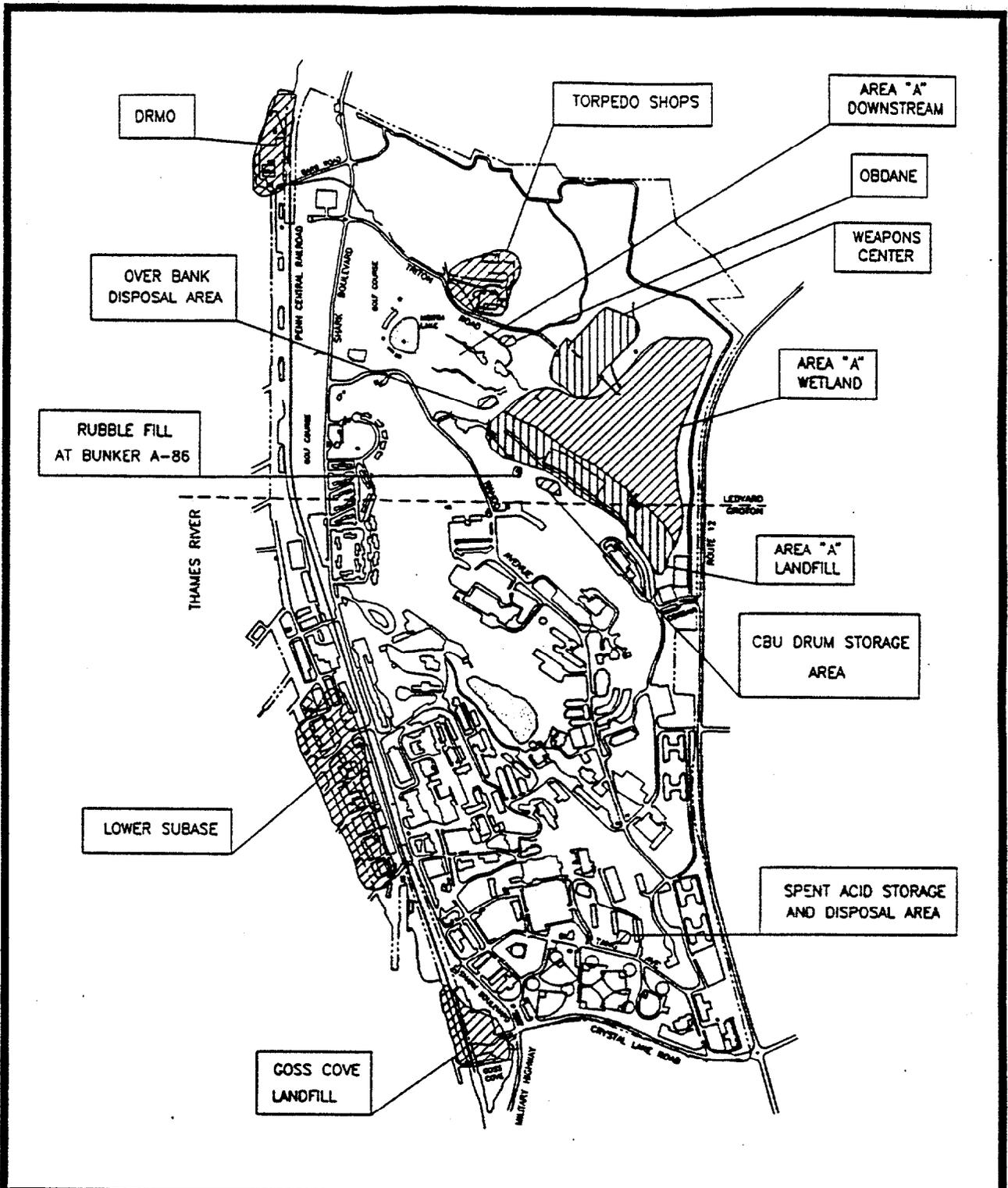
- Awarded value: \$1,445,185.00
- Cleans and closes Oil Tanks #1, 2, and 3. Originally contained #6 (black) oil.

- Original contract called for onsite treatment and discharge of 1,140,000 gallons of oily water. This quantity will escalate by approximately 60,000 gallons.

- 113,000 gallons of oil sludge were scheduled to be removed. This was recently increased by 75,000 gallons due to "wicking".

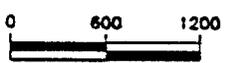
- Contract called for removing and disposing 219 cubic yards of contaminated soil. This quantity appears to be correct.

ATTACHMENT 4



INSTALLATION RESTORATION STUDY
 NAVAL SUBMARINE BASE - NEW LONDON
 GROTON, CT

SOURCE: Naval Submarine Base
 Existing Conditions
 April 1985
 Loureiro Engineering Associates

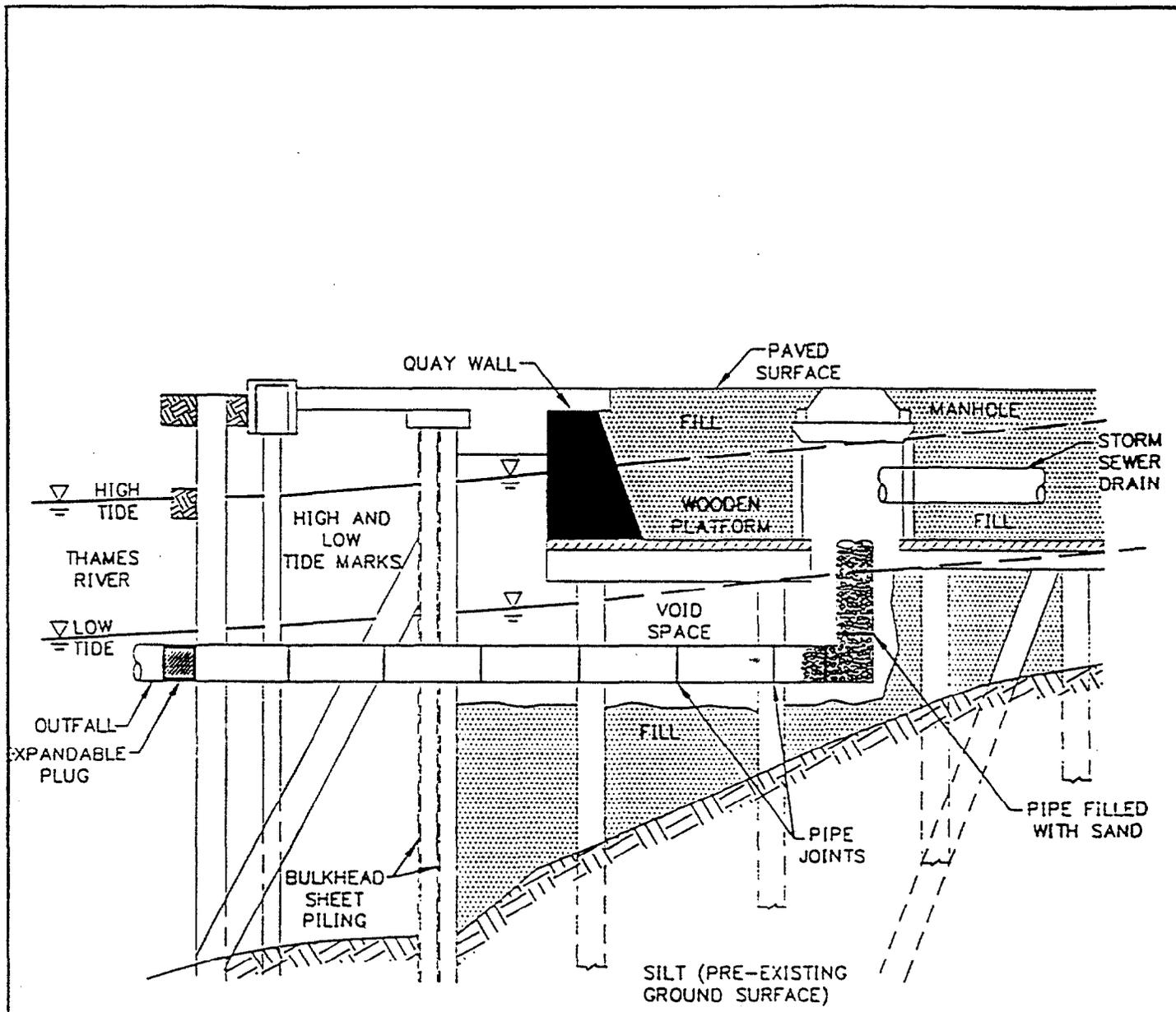



0 600 1200
 GRAPHIC SCALE IN FEET

FIGURE 1-3
 INSTALLATION RESTORATION
 STUDY SITES

ATLANTIC ENVIRONMENTAL SERVICES, INC.

ATTACHMENT 5



BUILT DURING JUNE, 1952

BUILT DURING AUGUST, 1940

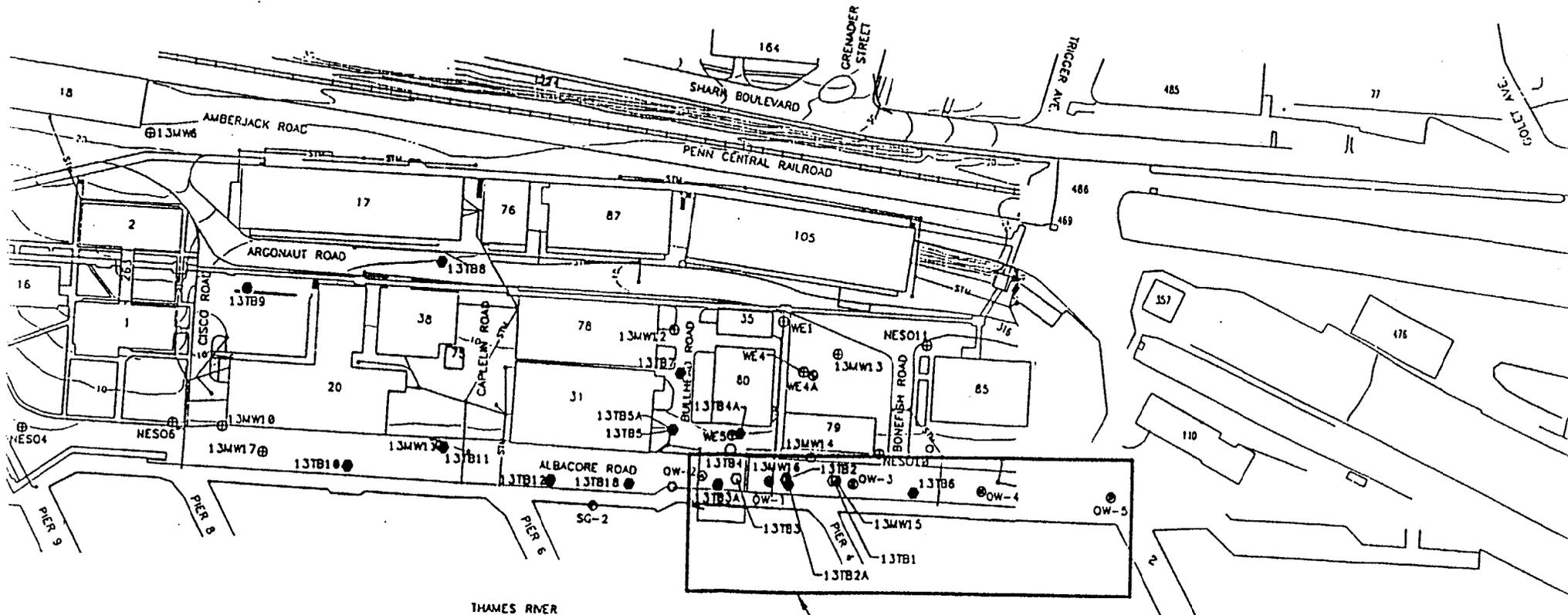
ACAD: 0:\DATA\CADD\9584\QUAY.DWG 12/29/94 US VIEW=PILOT 3/11/94

NOT TO SCALE

SOURCE: WEHREN, 1987

FIGURE B
QUAY WALL/STORM SEWER DIAGRAM





AREA OF CONCERN