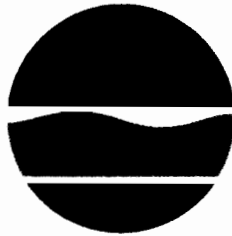


**REMEDIAL INVESTIGATION/
FEASIBILITY STUDY**



**OPERABLE UNIT II
123 POST AVENUE
WESTBURY, NASSAU COUNTY, NEW YORK
(SITE NO. 1-30-088)**

WORK ASSIGNMENT NO. D003600-23
Prepared For

**New York State Department
of Environmental Conservation**

MARCH 2001



DVIRKA AND BARTILUCCI
CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.



REMEDIAL INVESTIGATION/FEASIBILITY STUDY

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WORK PLAN

Thomas Sh
APPROVED

OPERABLE UNIT II
123 POST AVENUE SITE
WESTBURY
NASSAU COUNTY, NEW YORK

(SITE REGISTRY NO. 1-30-088)

PREPARED FOR

NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

BY

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CONSULTING ENGINEERS
WOODBURY, NEW YORK

DECEMBER 2000

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**WORK PLAN
123 POST AVENUE
REMEDIAL INVESTIGATION/FEASIBILITY STUDY**

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1.0 INTRODUCTION

As part of New York State's program to investigate and remediate hazardous waste sites, the New York State Department of Environmental Conservation (NYSDEC) issued a Work Assignment to Dvirka and Bartilucci Consulting Engineers (D&B) under its Superfund Standby Contract to conduct a Remedial Investigation/Feasibility Study (RI/FS) to evaluate off-site groundwater contamination potentially related to an active dry cleaning facility located at 123 Post Avenue in the Village of Westbury, Nassau County, New York. The off-site groundwater investigation is being conducted as Operable Unit II (OU II) with funds allocated under the New York State Superfund Program. The goals of the OU II RI/FS are to:

- Determine the nature and extent of off-site groundwater contamination which has resulted from tetrachloroethene disposal activities at the 123 Post Avenue Site;
- Determine whether groundwater contamination from the 123 Post Avenue Site is impacting nearby public or private water supply wells;
- Determine whether human or environmental exposure pathways exist and, if so, determine the risk which exists; and
- Evaluate remedial options if remediation of the off-site groundwater contamination is warranted and recommend a remedial action.

Investigation of on-site soil and groundwater contamination is being conducted by the potentially responsible parties (PRPs) as Operable Unit I.

This document has been prepared in accordance with NYSDEC Technical and Administrative Guidance Memoranda and contains site-specific information for conducting the OU II RI/FS at the site. Detailed field investigation, quality assurance and quality control (QA/QC), and health and safety procedures and protocols are provided in the draft document entitled "Remedial Investigation and Feasibility Study Generic Work Plan, Dry Cleaner Sites", dated February 1996.

This site-specific work plan provides information pertaining to the following:

- Summary of existing information;
- Scope of the RI/FS field program;
- Project organization;
- Site-specific QA/QC Plan;
- Site-specific Health and Safety Plan;
- Site-specific Community Relations Plan; and
- Schedule 2.11s.

Section 2



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2.0 SUMMARY OF EXISTING INFORMATION

2.1 Study Area Location and Description

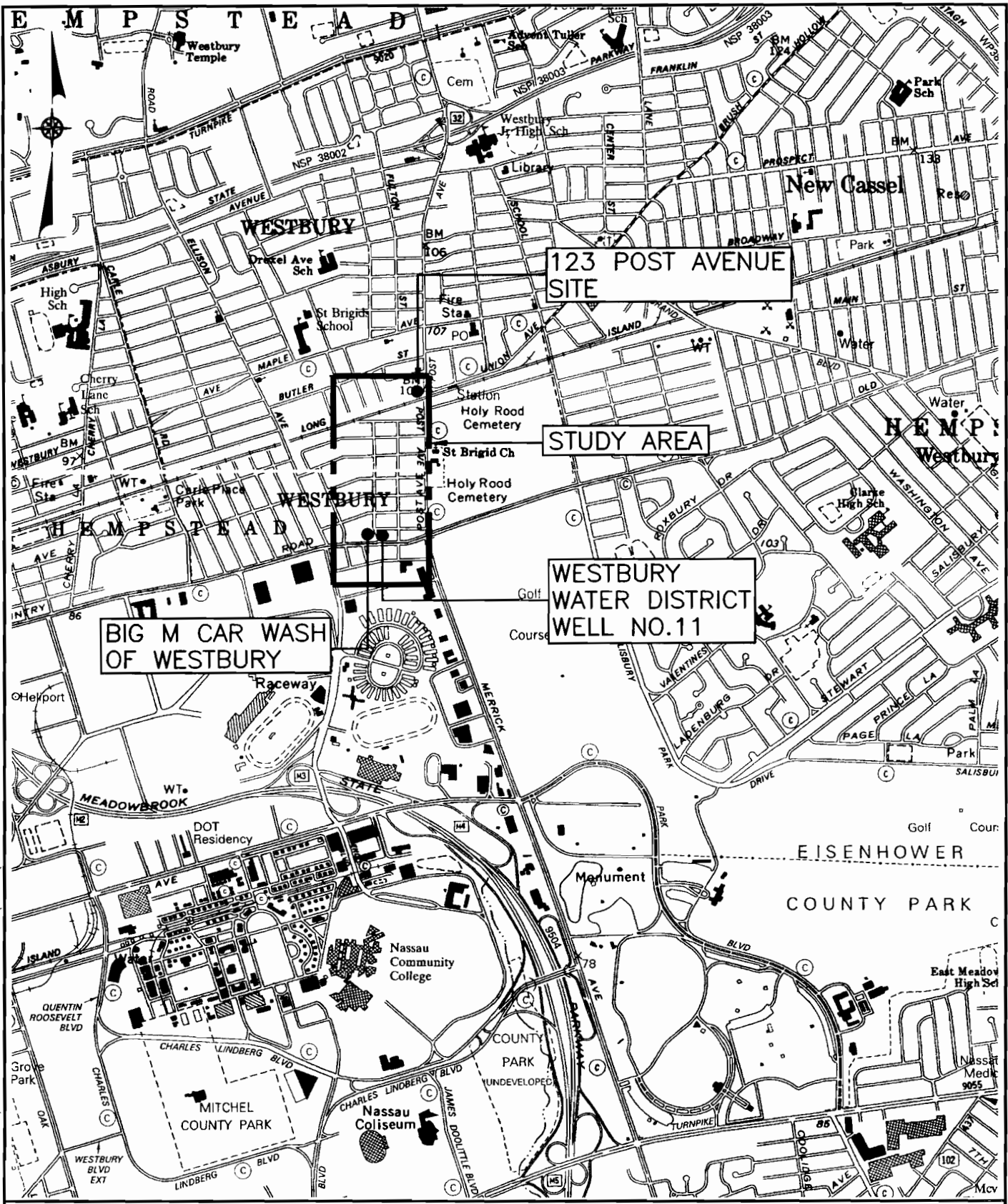
The 123 Post Avenue Site is an active dry cleaning facility (Westbury Valet Dry Cleaners) located at 123 Post Avenue in the Village of Westbury, Nassau County, New York. The site location and study area are shown in Figure 2-1. The site is approximately 0.2 acre in size, and is bounded by retail stores on the north, the Long Island Railroad (LIRR) elevated tracks on the south, Post Avenue on the east and an apartment complex on the west.

The area south of the 123 Post Avenue Site (Site) and north of Old Country Road is primarily residential. Commercial businesses, offices and a parking lot occupy the western side of Post Avenue between the Site and Old Country Road. The eastern side of Post Avenue between the Site and Old Country Road is occupied by a LIRR station, cemeteries and a church. South of Old Country Road, the study area is occupied by commercial businesses.

The study area is served by public water and sewer systems. A public water supply well (Westbury Water District Well No. 11, NYSDEC designation N-5654) is located on Myrtle Avenue, approximately 1,800 feet south-southwest of the 123 Post Avenue Site (see Figure 2-1). Well No. 11 is screened in the Magothy aquifer from 474 feet to 535 feet below ground surface and yields approximately 2,000,000 gallons per day (1,400 gallons per minute). Water from Well No. 11 is distributed to approximately 30,000 customers. Currently, the water from Well No. 11 is not treated for removal of contaminants prior to distribution.

In addition to Well No. 11, there is a water supply well at the Big M Car Wash of Westbury, located at the intersection of Old Country Road and Grand Avenue (see Figure 2-1). This well is screened from 54 feet to 64 feet below ground surface with a maximum yield of 37 gallons per minute. The water extracted from the well is utilized for car washing only. Potable water for the car wash is supplied by the Westbury Water District.

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123 POST AVENUE RI/FS OU II
 WESTBURY, NEW YORK
 LOCATION MAP

db Dvirka and Bartilucci
 Consulting Engineers
 A Division of William F. Cosulich Associates, P.C.

FIGURE 2-1

According to information obtained from the NCDH, shallow groundwater flow in this area is toward the south-southwest or southwest. Depth to groundwater in the study area is approximately 35 to 40 feet below ground surface.

2.2 Site History and Previous Investigations

A review of NYSDEC and Nassau County Department of Health (NCDH) files was conducted to determine the site history and previous investigations conducted in the study area.

The on-site building was constructed in 1949 with at least one expansion in 1957. The site has been occupied by a dry cleaner since at least 1957. The building was connected to the municipal sanitary sewer system in 1979 or 1980.

Periodic inspections of the 123 Post Avenue Site have been conducted by the NCDH since at least 1985. In July 1995, a NCDH inspection revealed the presence of two floor drains in the rear (western) portion of the on-site building, one in the boiler room and one in the workroom near the dry cleaning machine. Due to the presence of the floor drains, the site was referred to the United States Environmental Protection Agency (USEPA) for action under the Underground Injection Control (UIC) program.

A property transfer investigation was conducted in 1997 at 117 Post Avenue, immediately south of the LIRR tracks. As part of this investigation, a total of seven monitoring wells were constructed in two phases. Samples collected from these wells showed that shallow groundwater contained volatile organic compounds (VOCs), principally PCE, at levels exceeding NYSDEC groundwater standards. PCE was detected in each of the seven wells, at concentrations ranging from 9.6 micrograms per liter (ug/l) to 15,000 ug/l. Trichloroethene (TCE), a break down product of PCE, was detected in five of the seven wells, at concentrations ranging from 0.52 ug/l to 110 ug/l. The report prepared for this investigation concluded that the 123 Post Avenue Site was the source of the groundwater contamination.

In December 1997, the NYSDEC issued a Notice of Intent to Designate a Potential Hazardous Waste Disposal Site for the 123 Post Avenue Site. In June 1998, the USEPA approved a UIC Closure Plan for the floor drains in the building at 123 Post Avenue. In July 1998, it was revealed to the NCDH that soil samples had been collected from the two floor drains in January 1996. At that time, soil from the floor drain in the boiler room contained PCE at concentrations up to 18,000 micrograms per kilogram (ug/kg) and TCE at concentrations up to 100 ug/kg. Soil from the floor drain in the workroom contained PCE at concentrations up to 5,800,000 ug/kg and TCE at concentrations up to 40,000 ug/kg.

In August 1998, soils were excavated from each of the floor drains. Clean endpoint samples were collected from the floor drain in the boiler room, however, endpoint samples collected within the workroom floor drain contained PCE at concentrations up to 220,000 ug/kg. No additional soil was removed from the floor drain. In October 1998, ten drums (7,000 pounds) of PCE-contaminated soil from the floor drains were transported off-site for disposal as hazardous waste. Based on these results, the Site was placed on the New York State Registry of Inactive Hazardous Waste Sites in December 1998.

In March 1999, a soil boring was constructed at the location of the work room floor drain to evaluate the vertical distribution of the detected contamination. PCE was detected in each sample, with a maximum concentration of 270,000 ug/kg at a depth of 10 to 11 feet below ground surface. PCE concentrations decreased with depth to the water table (53 ug/kg at 20 to 22 feet and 17 ug/kg at 30 to 32 feet), and increased slightly just below the water table (62 ug/kg at 36 to 40 feet).

In February 1999, the USEPA approved a source area investigation for the Site to evaluate groundwater contamination from the floor drains. As part of this investigation, one upgradient and two downgradient monitoring wells were constructed at the Site in March 1999. The upgradient well contained PCE at a concentration of 95 ug/l and the downgradient wells contained PCE at concentrations up to 20,000 ug/l. The USEPA response to the June 1999 report describing the on-site groundwater investigation, provided recommendations for additional on-site investigative activities, but did not address the need for off-site investigation.

In August 2000, a revised work plan for additional investigation at the 123 Post Avenue Site was submitted to the NYSDEC by the consultant for the property owner. Activities to be conducted include collection of soil/sediment samples from the former on-site septic system; collection of groundwater samples (including vertical profiling); and design, construction and operation of an on-site soil remediation system.

In September 2000, Work Assignment D003600-23 was issued to Dvirka and Bartilucci Consulting Engineers to conduct Operable Unit II of the RI/FS. Operable Unit II involves evaluation and characterization of groundwater quality off-site and downgradient of the 123 Post Avenue Site to determine whether impacts to human health or the environment resulting from the identified on-site contamination currently exist or could potentially exist.

In May 1998, TCE was detected in Westbury Water District Well No. 11 at a concentration of 1.00 ug/l. A summary of the Well No. 11 water quality results from 1995 through August 2000 is provided in Table 2-1. Since May 1998, TCE has consistently been detected in Well No. 11 and 1,2-DCE has been detected four times in Well No. 11. PCE has not been detected in any sample collected from this well.

On October 31, 2000, a sample from the well at the Big M Car Wash of Westbury was collected by the NCDH for volatile organic compound (VOC) analysis at the NCDH laboratory. The sample contained tetrachloroethene (PCE) at concentration of 1.3 ug/l, chloroform at a concentration of 4 ug/l and methyl-tert butyl ether at a concentration of 15 ug/l. No other sample results for this well were available.

Table 2-1

**SUMMARY OF WATER QUALITY
WESTBURY WATER DISTRICT WELL NO. 11**

Sample Date	Tetrachloroethene (PCE) Concentration	Trichloroethene (TCE) Concentration	1,2-Dichloroethene (1,2-DCE) Concentration
8/8/00	ND	2.7	0.5
5/8/00	ND	1.7	ND
4/3/00	ND	1.6	ND
2/18/00	ND	1.1	ND
11/1/99	ND	2.0	0.5
8/2/99	ND	2.6	0.6
5/10/99	ND	1.7	ND
2/8/99	ND	1.7	0.6
11/3/98	ND	ND	ND
8/3/98	ND	1.40	ND
5/5/98	ND	1.00	ND
2/10/98	ND	ND	ND
11/4/97	ND	ND	ND
8/5/97	ND	ND	ND
5/9/97	ND	ND	ND
2/4/97	ND	ND	ND
11/19/96	ND	ND	ND
8/19/96	ND	ND	ND
5/14/96	ND	ND	ND
2/20/96	ND	ND	ND
11/21/95	ND	ND	ND
8/22/95	ND	ND	ND
5/16/95	ND	ND	ND
2/14/95	ND	ND	ND

Notes:

ND: Not detected (less than 0.5 microgram per liter)

Units are micrograms per liter.

Section 3





3.0 SCOPE OF REMEDIAL INVESTIGATION/FEASIBILITY STUDY

The approach to the OU II RI/FS for the 123 Post Avenue Site is to perform a focused field investigation and feasibility study, with emphasis on horizontal and vertical delineation of the groundwater plume emanating from the Site. On-site source investigation and remediation will be conducted as part of OU I of the RI/FS. Once the off-site groundwater plume has been characterized, potential receptors will be identified and the risks to those receptors from the groundwater contamination will be evaluated. If appropriate, an Interim Remedial Measure (IRM) will be selected. Based on the results of the Remedial Investigation, presumptive remedies appropriate for dry cleaner sites will be evaluated as part of the Focused Feasibility Study. While the emphasis is on an accelerated investigation and selection of a remedial action, this Work Plan is structured to be in conformance with the Federal Superfund Amendments and Reauthorization Act (SARA), the National Contingency Plan and the New York State Superfund Program.

3.1 Objectives and Approach

The objectives of the 123 Post Avenue Site OU II RI/FS are to:

- Determine the nature and extent of off-site groundwater contamination which has resulted from tetrachloroethene disposal activities at the 123 Post Avenue Site;
- Determine whether groundwater contamination from the 123 Post Avenue Site is impacting nearby public or private water supply wells;
- Determine whether human or environmental exposure pathways exist and, if so, determine the risk which exists; and
- Evaluate remedial options if remediation of the off-site groundwater contamination is warranted and recommend a remedial action.

These objectives will be achieved through collection of groundwater samples for laboratory analysis. The field investigation described below has been developed to allow for a thorough evaluation of groundwater quality downgradient of the Site utilizing sampling techniques that are as minimally disruptive to the surrounding community as possible. On-site

laboratory services and/or accelerated laboratory turnaround time will be utilized to allow the field program as described in this Work Plan to be modified, if necessary in a timely manner based on the initial sample results, to ensure that sample locations are appropriate for plume delineation purposes.

A detailed description of the field investigation is provided below.

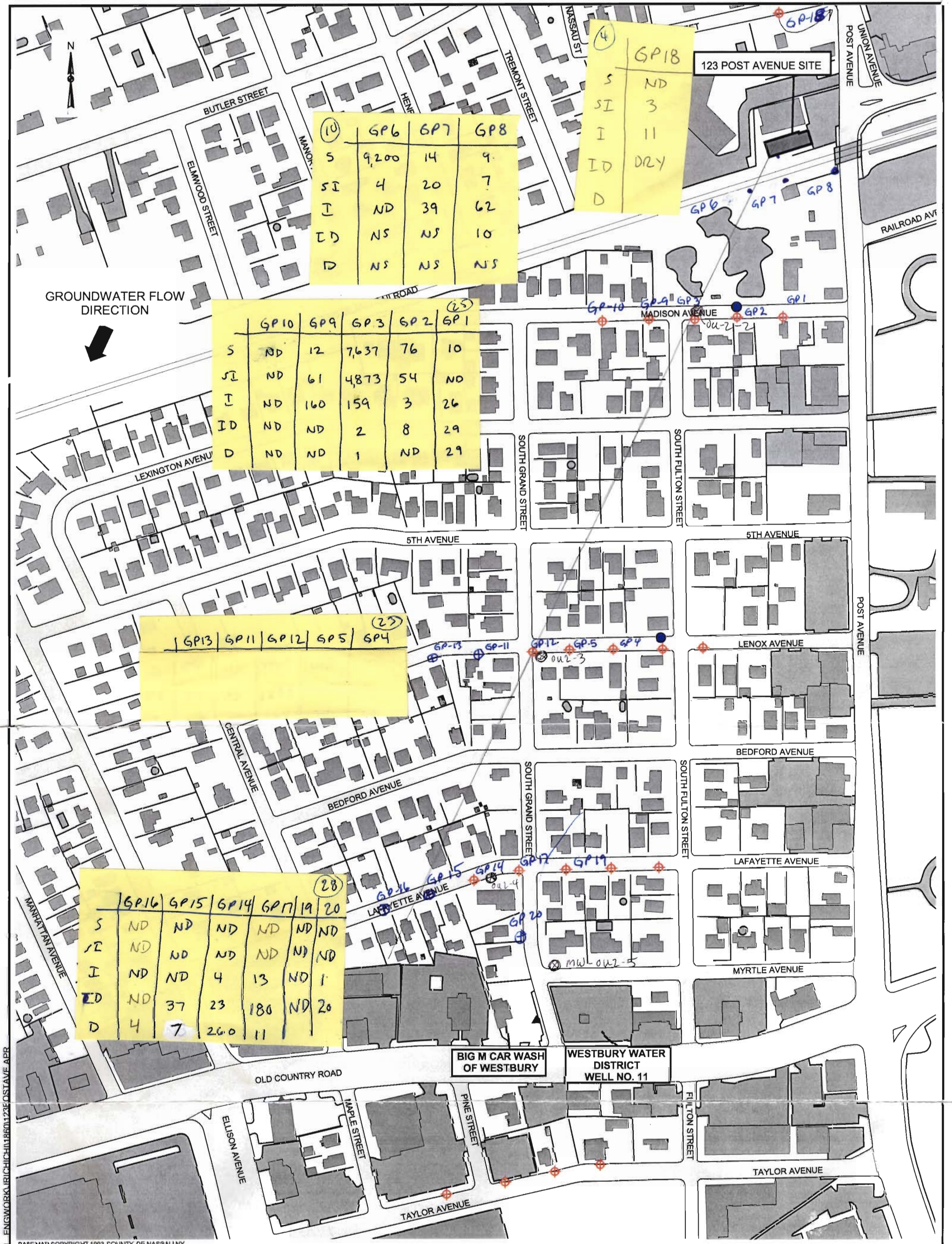
3.2 Field Investigation

The field investigation will include the following tasks:

- well search to obtain information on nearby existing wells;
- geologic characterization utilizing a direct push rig and soil conductivity probe;
- groundwater sampling utilizing a direct push sampler;
- groundwater sampling utilizing hollow stem augers and a Hydropunch sampler;
- construction of permanent monitoring wells;
- sampling of permanent monitoring wells and nearby existing wells; and
- surveying and mapping.

NYSDEC well records will be reviewed to determine whether there are any other existing wells in the area of the 123 Post Avenue Site. Groundwater samples may be collected from some or all of the identified wells as part of this program.

The focus of the investigation will be on geologic characterization, and horizontal and vertical plume delineation near the 123 Post Avenue Site. This will be accomplished by continuous soil conductivity logging and groundwater sampling, respectively, utilizing a direct push rig, such as a Geoprobe. Soil conductivity logging will be conducted at two locations between the Site and Westbury Water District Well No. 11 (see Figure 3-1 for proposed locations) to the maximum depth reachable by the direct push rig (assumed to be approximately



⑩

	GP6	GP7	GP8
S	9,200	14	9
SI	4	20	7
I	ND	39	62
ID	NS	NS	10
D	NS	NS	NS

④

GP18	
S	ND
SI	3
I	11
ID	DRY
D	

②⑤

	GP10	GP9	GP3	GP2	GP1
S	ND	12	7,637	76	10
SI	ND	61	4,873	54	ND
I	ND	160	159	3	26
ID	ND	ND	2	8	29
D	ND	ND	1	ND	29

②⑦

GP13	GP11	GP12	GP5	GP4

②⑧

	GP16	GP15	GP14	GP17	19	20
S	ND	ND	ND	ND	ND	ND
SI	ND	ND	ND	ND	ND	ND
I	ND	ND	4	13	ND	1
ID	ND	37	23	180	ND	20
D	4	7	260	11		

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BASEMAP COPYRIGHT, 1993, COUNTY OF NASSAU, NY.

- PROPOSED GEOPROBE SOIL CONDUCTIVITY BORING LOCATION
- ⊕ PROPOSED GEOPROBE GROUNDWATER SAMPLE LOCATION



NOTE: ACTUAL SAMPLE LOCATIONS MAY BE MODIFIED BASED ON RESULTS OF PRIOR SAMPLES



123 POST AVENUE RI/FS OU II
WESTBURY, NEW YORK

PROPOSED SAMPLE LOCATIONS

FIGURE 3-1

100 feet below ground surface). Groundwater samples will be collected at one upgradient location and four or five locations along each of four east-west traverses along streets south-southwest of the Site for a total of 20 direct push locations (see Figure 3-1 for proposed locations). If access to the 117 Post Avenue property can be obtained, then some of the locations proposed for Madison Street (the downgradient traverse that is nearest to the 123 Post Avenue Site) may be constructed on the 117 Post Avenue property. At each location, as many as four samples will be collected, depending on the maximum depth reachable by the direct push rig. The sampler will be installed to the maximum depth possible (assumed to be approximately 100 feet below ground surface) and, after purging, a groundwater sample will be collected. The sampler will then be pulled back at 20-foot intervals to the water table (approximately 35 to 40 feet below ground surface), purged and additional groundwater samples collected. The samples will be delivered to the laboratory for Target Compound List (TCL) VOC analysis utilizing 24-hour turnaround time. After logging or sampling has been completed, each borehole will be pressure-grouted to ground surface.

Based on the sample results, the sample locations along the next downgradient traverse will be selected. This process vertical profiling of groundwater quality and accelerated turnaround time will be utilized for the remaining traverses. As shown on Figure 3-1, it is initially proposed that three of the direct push traverses will be located north of the Westbury Water District Well No. 11 and one traverse will be located south of Old Country Road. However, the locations of the traverses and samples along the traverses may be modified based on the sample results from the previous sample locations.

If the results of the direct push sampling program indicate that the VOC contamination is deeper than the maximum depth of the direct push rig, then deeper samples will be collected at selected locations utilizing a hollow stem auger drill rig and Hydropunch sampler. Samples will be collected beginning at 20 feet below the deepest direct push sample and continue at 20-foot intervals to approximately 150 feet below ground surface. The log for Westbury Water District Well No. 11 (see Appendix A) shows a clay layer from 148 feet to 166 feet below ground surface. It is assumed that Hydropunch sampling will be conducted at four locations and that three samples will be collected at each location, including one immediately above the clay layer.

Each sample will be analyzed for TCL VOCs utilizing 24-hour turnaround time. After sampling has been completed at each borehole, gamma logging will be conducted to provide geologic information and allow selection of appropriate screen zones for permanent monitoring wells. No split spoon sampling will be conducted.

Following gamma logging, the augers will be retracted to approximately 100 feet below ground surface for construction of selected permanent monitoring wells, as described below. If the formation does not collapse as the augers are withdrawn, then the open borehole will be pressure grouted to 10 feet below the proposed bottom of the well and the remaining space will be backfilled with clean sand before well construction.

Groundwater samples will be collected at a total of 24 locations (20 direct push locations and 4 Hydropunch locations).

Permanent monitoring wells will be constructed at selected locations. The actual number, depths and locations for the permanent wells will be based on the results of the vertical profiling of groundwater quality to be conducted using the direct push and Hydropunch samplers. For planning purposes, it is assumed that permanent wells will be constructed at the four locations where Hydropunch sampling will be conducted and that a three-well cluster will be constructed at each location using the hollow stem auger drilling method. Each cluster will consist of a shallow (water table) well, an intermediate depth well and a deep well. The assumed depths of the wells in each cluster are 50 feet, 100 feet and 150 feet below ground surface, respectively. Each well will be constructed using 2-inch diameter PVC screen and casing. Screen lengths will be 15 feet for the shallow wells (screened across the water table) and 10 feet for the intermediate and deep wells.

Direct push and Hydropunch sampling equipment will be decontaminated between sample locations utilizing high-pressure steam. A portable decontamination pad will be utilized to collect decontamination fluids. Decontamination and purge fluids generated during the groundwater sampling program (direct push and Hydropunch sampling) and the monitoring well construction program will be discharged to the Nassau County municipal sewer system. Drill

cuttings will be stockpiled in a roll-off container staged at the Village of Westbury Department of Public Works yard and sampled for proper disposal.

After construction, each monitoring well will be developed to ensure a good connection to the aquifer. It is assumed that each well will be developed for two hours. Water generated during well development will be discharged to the Nassau County municipal sewer system.

Each of the new monitoring wells will be surveyed in order to develop groundwater elevation contour maps for the water table, intermediate and deep zones. The ground surface elevation and measuring point elevation for each well will be surveyed by a licensed surveyor.

After development, the wells will be allowed to equilibrate to the aquifer for a minimum of one week before samples are collected. It is planned to conduct two rounds of groundwater sampling. For each round, the depth to water will be measured in each well prior to sampling. Well sampling procedures are described in the draft document entitled "Remedial Investigation and Feasibility Study Generic Work Plan, Dry Cleaner Sites," dated February 1996. The well samples will be analyzed for TCL VOCs. In addition, during the initial round of sampling, one sample from each zone (water table, intermediate and deep) will be analyzed for total iron and total manganese to evaluate potential groundwater treatment processes. Dissolved metals will not be analyzed (even if the turbidity is above 50 NTUs) since influent to any treatment plant will likely not be filtered. However, it should be noted that, whenever possible, samples to be analyzed for iron and manganese will be collected from wells with minimal turbidity. The wells sampled for iron and manganese will be within the area of VOC contamination. Purge fluids generated during the monitoring well sampling program will be discharged to the Nassau County municipal sewer system.

Since the focus of the field investigation is off-site groundwater contamination, no soil or air samples will be collected for laboratory analysis. However, if conditions such as elevated levels of VOCs in soil or shallow groundwater in the vicinity of occupied buildings are detected, then soil vapor and/or indoor air samples may be collected in conjunction with the NCDH. A summary of the samples to be collected during the field investigation is provided in Table 3-1.

Table 3-1

**FIELD INVESTIGATION SAMPLE MATRIX
123 Post Avenue Site Remedial Investigation/Feasibility Study OU II**

Program Element	Environmental Medium	Sample Type/Depth	Number of Samples and Locations	Equipment	Laboratory Analyses
Direct Push Sampling	Groundwater	Grab sample from decontaminated direct push sampler	80 samples from 20 sample locations	Decontaminated direct push sampler	TCL VOCs using ASP Method 95-1 (24-hour turnaround)
Hydropunch Sampling	Groundwater	Grab sample from decontaminated Hydropunch sampler	12 samples from 4 sample locations	Decontaminated Hydropunch sampler	TCL VOCs using ASP Method 95-1 (24-hour turnaround)
Well Sampling	Groundwater	At surface of water in well after purging 3 to 5 casing volumes	24 samples from 12 sample locations*	2-inch submersible pump and dedicated disposable bailer	TCL VOCs using ASP Method 95-1 (28-day turnaround)
Well Sampling	Groundwater	At surface of water in well after purging 3 to 5 casing volumes	3 samples from 3 sample locations	2-inch submersible pump and dedicated disposable bailer	Iron and manganese using USEPA Method 6010
Trip Blank	Aqueous	Distilled water	19 samples**	Sample supplied by laboratory	TCL VOCs using ASP Method 95-1 (24-hour and 28-day turnaround)
Matrix Spike/ Matrix Spike Duplicate	Groundwater	Groundwater (split of sample)	14 samples***	Direct push sampler, Hydropunch sampler or bailer	TCL VOCs using ASP Method 95-1 (24-hour and 28-day turnaround)
Matrix Spike/ Matrix Spike Duplicate	Groundwater	Groundwater (split of sample)	2 samples***	2-inch submersible pump and dedicated disposable bailer	Iron and manganese using USEPA Method 6010

*Four well cluster locations, three wells per cluster and two rounds of sampling.

**One trip blank will accompany each shipment of aqueous samples for VOC analysis analyzed by off-site laboratory.

***One Matrix Spike/Matrix Spike Duplicate set for each medium for every 20 samples collected.

3.3 Data Validation

In accordance with the Work Assignment, all data for samples analyzed by an off-site laboratory will be validated. Data validation will be conducted by a third-party individual meeting the NYSDEC requirements for a data validator.

3.4 Remedial Investigation Report

The results of the Remedial Investigation will be described in a Remedial Investigation Report. The information and results obtained during the field investigation will be used to characterize the groundwater conditions in the study area, including groundwater flow characteristics and the nature and extent of groundwater contamination. The groundwater data will be compared to appropriate standards, criteria and guidelines, including NYSDEC Class GA Groundwater Standards and Guidance Values. The report will also include a human health exposure assessment, an evaluation of the need for implementation of an IRM to address immediate threats to human health resulting from off-site groundwater contamination, conclusions and recommendations regarding additional investigation and remediation, if warranted. Since the study area is highly developed with little wildlife habitat and the focus of the investigation is off-site groundwater contamination, a wildlife habitat survey will not be conducted.

A Draft Remedial Investigation Report will be prepared and submitted to the NYSDEC for review. Comments received on the draft report will be incorporated into the Final Remedial Investigation Report.

3.5 Feasibility Study

If it is determined that remediation of the off-site groundwater contamination is required, then a Focused Feasibility Study (FS) will be conducted to identify and evaluate remediation technologies, and recommend a remedial action. The Focused FS will be prepared after the Remedial Investigation Report has been finalized. As part of the FS, presumptive remedies

described in February 1996 draft “Remedial Investigation and Feasibility Study Generic Work Plan, Dry Cleaner Sites” will be evaluated. If applicable, new technologies not identified as presumptive remedies for dry cleaner sites will also be evaluated as part of the FS. The FS will include development, preliminary screening and detailed evaluation of remediation alternatives.

A Draft Feasibility Study Report will be prepared and submitted to the NYSDEC for review. Comments received on the draft report will be incorporated into the Final Feasibility Study Report.

3.6 Citizen Participation

It is expected that two NYSDEC-run public information meetings will be held to describe the investigation and to provide opportunities for public input. As currently scheduled, the first meeting will be held to present the Final Work Plan and the second will be held to present the Proposed Remedial Action Plan (PRAP). Citizen participation activities are described more fully in Section 6.0 (Site-Specific Citizen Participation Plan).

Section 4





4.0 PROJECT MANAGEMENT

4.1 Project Schedule and Key Milestones/Reports

The schedule for the 123 Post Avenue Site RI/FS OU II is provided in Table 4-1. Key milestones are identified to monitor work progress. The following are the milestones proposed for this project:

- Milestone 1: Submittal of the Draft Site-Specific Work Plan;
- Milestone 2: Submittal of the Draft Remedial Investigation Report; and
- Milestone 3: Submittal of the Draft Feasibility Study Report.

4.2 Project Management, Organization and Key Technical Personnel

Dvirka and Bartilucci Consulting Engineers will be the prime consultant responsible for performance of the RI/FS. Subcontractors proposed to be used for this project include:

- Zebra Environmental Corporation - direct push sampling;
- Land, Air, Water Environmental Services, Inc. (WBE) - Hydropunch sampling and monitoring well installation;
- Aqua Terra Geophysics, Inc. - gamma logging;
- Chemtech Consulting Group, Inc. (MBE) - laboratory analysis;
- Nancy Potak (WBE) - data validation; and
- YEC, Inc. (MBE) - surveying.

The project organization for the RI/FS, indicating management and project responsibilities for the project team and key personnel, is shown on Figure 4-1.

Table 4-1

PROJECT SCHEDULE

Task 1 - Work Plan Preparation

- | | |
|-------------------------------|---------------|
| • Site Visit/Scoping Meeting | October 2000 |
| • Preliminary Draft Work Plan | November 2000 |
| • Draft RI/FS Work Plan | December 2000 |
| • Final RI/FS Work Plan | January 2001 |
| • Public Meeting | January 2001 |

Task 2 - Field Investigation

- | | |
|--------------------------------|---------------|
| • Field Investigation | |
| – Direct Push Sampling | February 2001 |
| – Hydropunch Sampling | February 2001 |
| – Monitoring Well Installation | March 2001 |
| – Surveying | March 2001 |
| • Monitoring Well Sampling | March 2001 |
| | April 2001 |
| • Laboratory Analysis | April 2001 |
| | May 2001 |
| • Data Validation | June 2001 |

Task 3 - Remedial Investigation Report

- | | |
|---------------------------------------|----------------|
| • Draft Remedial Investigation Report | August 2001 |
| • Final Remedial Investigation Report | September 2001 |

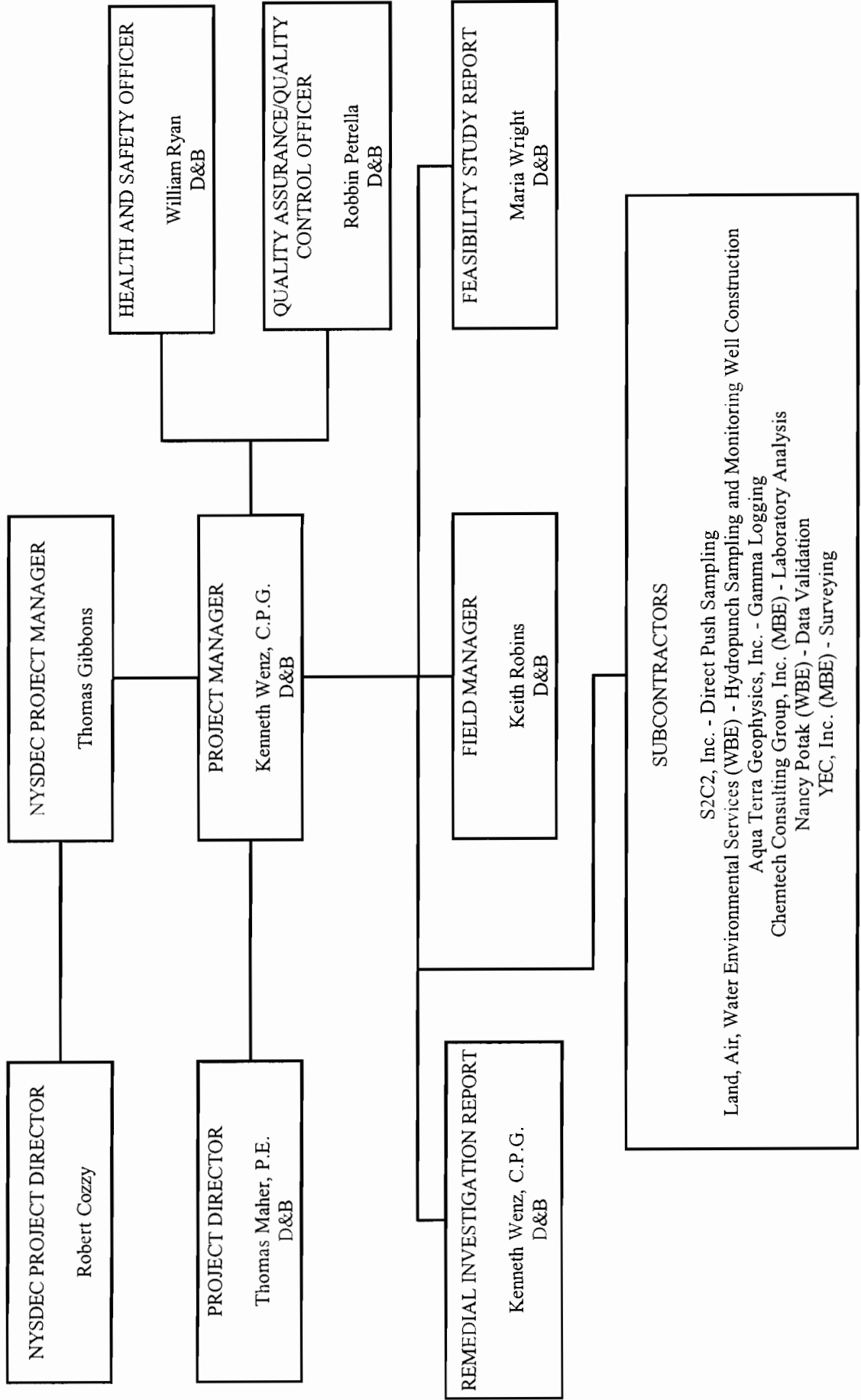
Task 4 - Feasibility Study

- | | |
|--|---------------|
| • Draft Feasibility Study Report | October 2001 |
| • Final Feasibility Study Report | November 2001 |
| • Public Meeting (Proposed Remedial Action Plan) | December 2001 |

FIGURE 4-1

PROJECT ORGANIZATION

123 POST AVENUE RI/FS OU II
WESTBURY, NY





Section 5





5.0 SITE-SPECIFIC QUALITY ASSURANCE/QUALITY CONTROL PLAN

This section presents the site-specific quality assurance/quality control (QA/QC) plan that will be utilized during this investigation. Except as noted below, sampling procedures, analytical protocols and QA/QC procedures are described in the February 1996 draft "Remedial Investigation and Feasibility Study Generic Work Plan, Dry Cleaner Sites."

Sample analyses will be conducted by Chemtech Consulting Group, Inc. Chemtech is certified by the New York State Department of Health Environmental Laboratory Accreditation Program (ELAP) for the analyses to be conducted during this investigation. Samples will be analyzed in accordance with the NYSDEC 1995 Analytical Services Protocol (ASP). Category B data deliverable packages will be provided for all samples analyzed at the off-site laboratory.

If required, on-site laboratory services will be provided by S2C2, Inc. While not ELAP-certified, the S2C2 mobile laboratory has been utilized by D&B under the NYSDEC Superfund Standby Contract at the Tappan Terminal and the data provided by the S2C2 mobile laboratory have been accepted by the NYSDEC. In addition, the S2C2 mobile laboratory is certified for environmental analyses by the New Jersey Department of Environmental Protection.

One trip blank will be sent with each shipment containing aqueous samples to be analyzed for VOCs at the off-site laboratory. Samples will be shipped to the off-site laboratory to ensure that samples will be received at the laboratory within 48 hours after collection. Trip blanks will not be utilized for samples analyzed by the on-site laboratory.

Matrix spike/matrix spike duplicate (MS/MSD) sample sets will be collected for direct push and Hydropunch groundwater samples that are analyzed at the off-site laboratory and during each of the two rounds of sample collection from the permanent monitoring wells. MS/MSD sample sets will be collected at a frequency of one set per twenty samples. MS/MSD sample sets will not be collected for samples analyzed by the on-site laboratory.



Section 6





6.0 SITE-SPECIFIC HEALTH AND SAFETY PLAN

This section presents the site-specific health and safety information to supplement the generic Health and Safety Plan (HASP) included in the February 1996 draft "Remedial Investigation and Feasibility Study Generic Work Plan, Dry Cleaner Sites."

Project Name:	<u>123 Post Avenue Remedial Investigation/Feasibility Study</u> <u>Study area includes Post Avenue, Madison Avenue,</u> <u>Lexington Avenue, Fifth Avenue, Bedford Avenue,</u> <u>Lafayette Avenue, Myrtle Avenue and Taylor Avenue,</u> <u>Westbury, New York</u>
Telephone:	<u>Not available</u>
Date of HASP Preparation	<u>November 2000</u>
Dates of Field Investigation:	<u>February through April 2001</u>
Project Objectives:	<u>Investigate and characterize groundwater contamination off-site and downgradient of the 123 Post Avenue site.</u>

Project Organization:

	Name	Telephone
Project Director:	Thomas Maher	(516) 364-9890
Project Manager:	Kenneth Wenz	(516) 364-9890
Health and Safety Officer (HSO):	William Ryan	(516) 364-9890
Field Operations Manager/ Alternate HSO:	Keith Robins	(516) 364-9890
Field Subcontractors:	S2C2, Inc.	(908) 542-1999
	Land, Air, Water Environmental Services	(631) 874-2112
	Aqua Terra Geophysics, Inc.	(631) 286-7699
	YEC, Inc.	(914) 268-3203

Medical Assistance:

Physician: Plainview Medical Group, P.C.
Address: 100 Manetto Hill Road, Suite 205
Plainview, NY 11803
Telephone: (516) 822-2541

Hospital: Nassau County Medical Center
Telephone: (516) 572-0123
Directions: Proceed south on Post Avenue (which becomes Merrick
(see Figure 6-1) Avenue south of Old Country Road) to Route 24
(Hempstead Turnpike). Turn left (east) on Route 24.
Hospital is approximately 1 mile on the left (north) side of
Route 24.

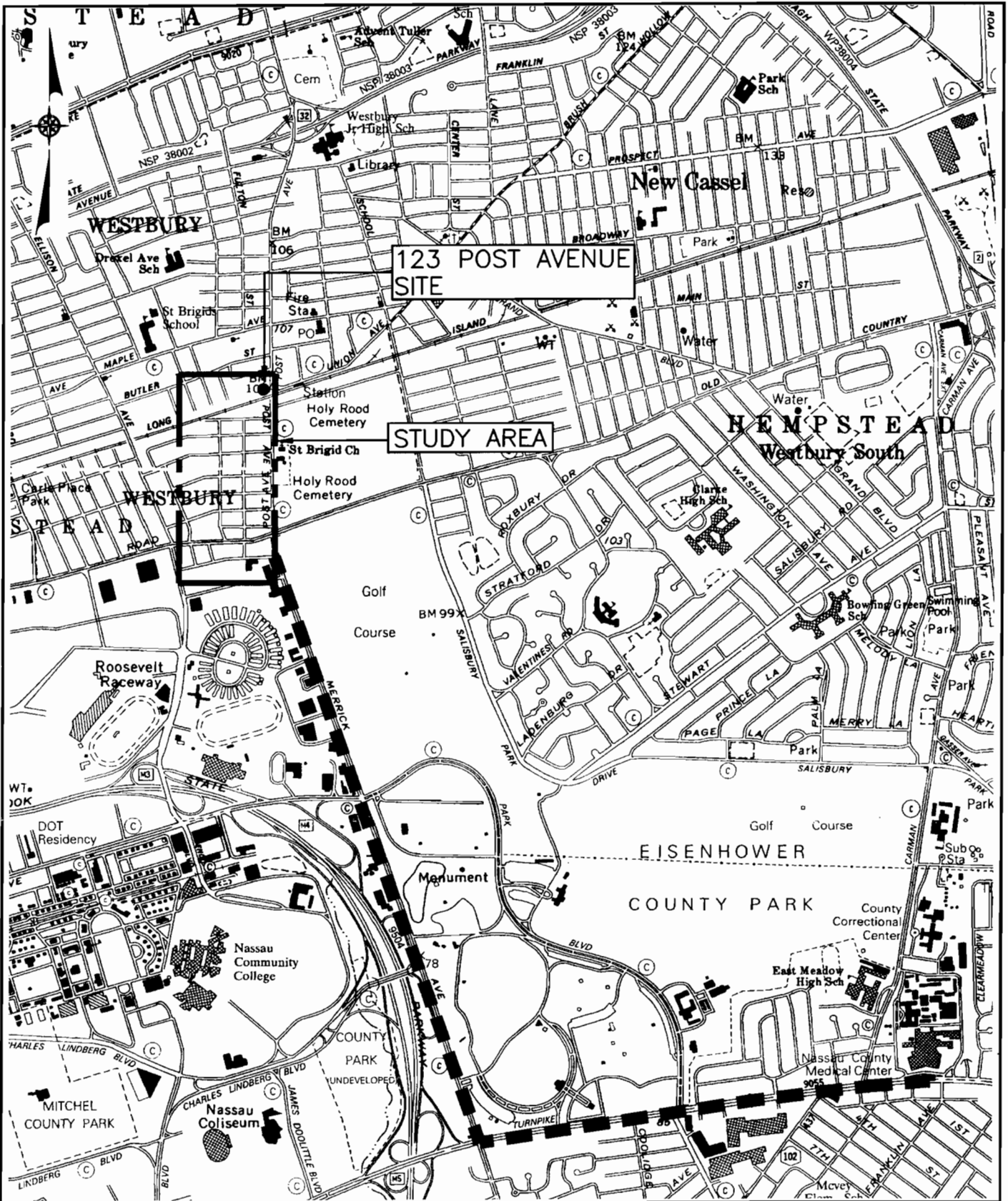
Emergency Contacts:

Agency/Facility	Telephone	Emergency Telephone
EMS - Ambulance		911
Police Department	(516) 573-6300	911
Westbury Fire Department	(516) 334-7968	911 or (516) 334-7924
Hospital	(516) 572-0123	
Poison Control Center	(516) 542-2323	

Additional site-related information (including special hazards, site control, waste storage and disposal, personal protective equipment, decontamination area location, special engineering controls, etc.):

Staging area for drums containing drill cuttings, decontamination water and/or purge water to be determined.

VOCs and dust will be monitored in the work zone. If warranted, a Community Air Monitoring Plan will be implemented in accordance with the attached protocol.



SUN, NOV 26, 2000 12:09 P. T.MCC F:\1860\1860-2A.DWG

123 POST AVENUE RI/FS OU II
WESTBURY, NEW YORK

ROUTE TO HOSPITAL



Dvirka and Bartilucci
Consulting Engineers
A Division of William F. Cosulich Associates, P.C.

FIGURE 6-1



New York State Department of Health Generic Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical-specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for volatile organic compounds (VOCs) and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a **continuous** basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored **continuously** at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed $150 \text{ mcg}/\text{m}^3$ above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than $150 \text{ mcg}/\text{m}^3$ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within $150 \text{ mcg}/\text{m}^3$ of the upwind level and in preventing visible dust migration.

All readings must be recorded and be available for State (DEC and DOH) personnel to review.

June 20, 2000

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Section 7



THE UNIVERSITY OF CHICAGO PRESS

7.0 SITE-SPECIFIC CITIZEN PARTICIPATION PLAN

As part of the Remedial Investigation/Feasibility Study (RI/FS) to be conducted for Operable Unit II at the 123 Post Avenue Site, this site-specific Citizen Participation Plan (CPP) has been developed in accordance with the generic CPP presented in the February 1996 draft "Remedial Investigation and Feasibility Study Generic Work Plan, Dry Cleaner Sites."

7.1 Elected Officials

The following elected officials have been identified:

Hon. Ernest J. Strada, Mayor
Village of Westbury
235 Lincoln Place
Westbury, NY 11590

Hon. May W. Newburger, Supervisor
Town of North Hempstead
220 Plandome Road
Manhasset, NY 11030

Hon. Doreen E. Banks, Councilwoman
Town of North Hempstead
220 Plandome Road
Manhasset, NY 11030

Hon. Anthony D'Urso, Councilman
Town of North Hempstead
220 Plandome Road
Manhasset, NY 11030

Hon. Angelo P. Ferrara, Councilman
Town of North Hempstead
220 Plandome Road
Manhasset, NY 11030

Hon. James P. O'Connor, Councilman
Town of North Hempstead
220 Plandome Road
Manhasset, NY 11030

Hon. Richard Corbin
Nassau County Legislature
District 2
1 West Street
Mineola, NY 11501

Hon. Judith Jacobs
Presiding Officer
Nassau County Legislature
1 West Street
Mineola, NY 11501

Hon. Thomas S. Gulotta
Nassau County Executive
1 West Street
Mineola, NY 11501

Hon. Donna Ferrara
New York State Assembly
District 15
150 Post Avenue
Westbury, NY 11590

Hon. Michael A. L. Balboni
New York State Senate
District 7
20 Shortridge Road
Mineola, NY 11501

Hon. Carolyn McCarthy
United States Congresswoman
District 4
1 Fulton Avenue, Suite 30
Hempstead, NY 11350

7.2 Affected and/or Interested Public and Media

The following list of parties who have expressed an interest in the site investigation or are potentially affected by the site or the RI/FS program will be updated as required to include those who express an interest in the investigation by attending meetings, responding to fact sheets or contacting project representatives. A list of the residents and businesses in the study area has

been developed by the NYSDEC and is therefore not included in this CPP. The following interested and/or affected parties have been identified:

Ms. Cynthia Brown
Public Information Specialist
Nassau County Department of Health
240 Old Country Road
Mineola, NY 11501-4250

Mr. Italo Vacchio
Superintendent
Westbury Water District
160 Drexel Avenue
Westbury, NY 11590

Mr. John Waltz
Commissioner
Nassau County Department of Public Works
1 West Street
Mineola, NY 11501

Mr. Joseph DeFranco
Nassau County Department of Health
240 Old Country Road
Mineola, NY 11501-4250

Mr. Kenneth Arnold
Nassau County Department of Public Works
1 West Street
Mineola, NY 11501

Ms. Rosemary Konatich
c/o Senator Thomas DiNapoli
11 Middle Neck Road, Suite 200
Great Neck, NY 11021

Westbury Public Schools
Superintendent of Schools
Jericho Turnpike
Westbury, NY 11590

Ms. Barbara Jarvie
Managing Editor
Long Island Community News Group
216 E. 2nd Street
Mineola, NY 11501-3502

Mr. Daniel Fagin
Newsday
235 Pinelawn Avenue
Melville, NY 11747

Litmore Publications
Assignment Desk
81 East Barclay Street
Hicksville, NY 11801

News 12 Long Island
Assignment Desk
1 Media Crossways
Woodbury, NY 11797

Mr. Michael Cooper, Chief
New York Times
Long Island Bureau
1235 Franklin Avenue, Suite 335
Garden City, NY 11530

Newsday
Assignment Desk
235 Pinelawn Road
Melville, NY 11747

Mr. Paul Laursen, Editor
L&M Publications
1840 Merrick Avenue
Merrick, NY 11566-2730

Mr. Peter Mastro
Nassau Newsgroup
216 E. 2nd Street
Mineola, NY 11501

Westbury Times/Anton Community
Publications
132 E. 2
Mineola, NY 11501

Bethpage Republicans Club
164 Post Avenue
Westbury, NY 11590
Conservation Advisory Committee
171 Jericho Turnpike
Mineola, NY 11501

Ms. Elizabeth Henley
Mineola Coalition for Health and a Safe
Environment
PO Box 451
Mineola, NY 11501

Ms. Fran Kritchek
Long Island Breast Cancer Action Coalition
Adelphi University
Garden City, NY 11530

League of Women Voters
102 Shore Road
Douglaston, NY 11363

Ms. Geri Barish
1 in 9: The Long Island Breast Cancer
Coalition
2201 Hempstead Turnpike
East Meadow, NY 11554

Ms. Joan Vecchione
Citizens for Pure Water
506 Bay Avenue
Massapequa, NY 11758

Mr. Neil Lewis
Long Island Neighborhood Network
90 Pennsylvania Ave., 2nd Floor
Massapequa, NY 11758

Ms. Sarah Meyland
Citizens Campaign for the Environment
225A Main Street, Suite 2
Farmingdale, NY 11735

Ms. Vicki DeJong
Citizens Committee for Civic Action
800 Captains Gate
Westbury, NY 11590

Westbury Neighborhood Association
334 Winthrop Avenue
Westbury, NY 11590

7.3 Identification of NYSDEC and NYSDOH Contacts

The following individuals from the NYSDEC and the New York State Department of Health (NYSDOH) can be contacted regarding the site investigation:

New York State Department of Environmental Conservation

Project Director: Robert Cozzy, Chief
Remedial Section C
Bureau of Eastern Remedial Action
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

Project Manager: Thomas Gibbons
Environmental Geologist 2
Remedial Section C
Bureau of Eastern Remedial Action
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

Citizen Participation Specialist:
Mark Lowery
Citizen Participation Specialist
New York State Department of Environmental Conservation
SUNY Building 40
Stony Brook, NY 11790

New York State Department of Health

John Olm
New York State Department of Health
Bureau of Environmental Exposure Investigation
547 River Street, Room 300
Troy, NY 12180-2216

7.4 Identification of Document Repositories

Two locations where documents related to this investigation will be available for public review have been identified. One will be the Westbury Memorial Public Library and the other will be the NYSDEC regional office. The addresses, telephone numbers and hours of the two repositories are:

Westbury Memorial Public Library
445 Jefferson Street
Westbury, NY 11590
Telephone: (516) 333-0176
Hours: Monday through Friday, 9:30 a.m. to 9 p.m.
Saturday, 9:30 a.m. to 5:30 p.m.
Sunday, 1 p.m. to 5 p.m.

NYSDEC Region 1 Office
Environmental Remediation Unit
SUNY Campus, Building 40
Stony Brook, NY 11790
Telephone: (631) 444-0249
Hours: Monday through Friday, 8:30 a.m. to 4:45 p.m.

7.5 Description of Citizen Participation Activities

7.5.1 Work Plan Stage

A NYSDEC-run public information meeting was held on February 6, 2001, to present the draft RI/FS Work Plan to the public. Elected officials and affected or interested parties were notified through the mailing of a meeting invitation and fact sheet to the contact list, and through a NYSDEC press notice that was distributed to the media on the contact list.

7.5.2 Proposed Remedial Action Plan (PRAP) Stage

After the Remedial Investigation Report and Feasibility Study Report have been finalized, a Proposed Remedial Action Plan (PRAP) will be prepared by the NYSDEC. The PRAP will be distributed to the elected officials and affected/interested parties on the contact list. The NYSDEC will prepare and distribute a fact sheet describing the results of the RI/FS and the PRAP. The NYSDEC will hold a public meeting to present the PRAP and will accept public comment on the PRAP at the meeting and during a written comment period. The NYSDEC may amend its proposed remedial action based on public comments received. It is anticipated that this meeting will be held in December 2001. Notification of the meeting will be through the mechanism described in Section 7.5.1.



8.0 PROJECT COST ESTIMATE (SCHEDULE 2.11s)

This section provides the estimate cost to complete the scope of work described in Section 3.0. The following assumptions have been made as part of the cost estimate:

- All field work can be completed with Level D personal protection;
- Site access for direct push and drilling locations will be secured by the NYSDEC;
- State-owned field equipment will be available for the duration of the project;
- Groundwater sampling utilizing the direct push sampler will be effective to a depth of 100 feet below ground surface;
- Hollow stem auger drilling will be effective for Hydropunch sampling and construction of monitoring wells;
- Drill cuttings will be stockpiled in a roll-off container staged at the Village of Westbury Department of Public Works yard;
- Depth to water is approximately 35 to 40 feet below ground surface;
- Each well will be developed for a maximum of two hours;
- Decontamination, development and purge water will be discharged to the Nassau County municipal sanitary sewer;
- Characterization sampling will not be required for decontamination or purge water;
- Four characterization samples (one per well cluster) to be analyzed for leachable VOCs using the Toxicity Characteristic Leaching Procedure (TCLP) will be required for disposal of drill cuttings;
- All drill cuttings will be disposed as non-hazardous waste;
- Two loads will be required to remove drill cuttings from the site; and
- D&B will be available for two public meetings.



Schedule 2.11 (a)

Summary of Work Assignment Price
123 Post Avenue RI/FS OU II

Work Assignment Number D003600-23

1.	Direct Salary Costs (Schedules 2.10 (a) and 2.11(b))	\$40,019
2.	Indirect Costs (Schedule 2.10 (g))	\$63,350
3.	Direct Non-Salary Costs (Schedules 2.11 (c) and (d))	\$7,536

Subcontract Costs

Cost-Plus-Fixed-Fee Subcontracts (Schedules 2.11(e))

	<u>Name of Subcontractor</u>	<u>Services To Be Performed</u>	<u>Subcontract Price</u>
	YEC, Inc.	Well Surveying	\$4,837
4.	Total Cost-Plus-Fixed-Fee Subcontracts		<hr/> \$4,837

Unit Price Subcontracts (Schedules 2.11(f))

	<u>Name of Subcontractor</u>	<u>Services To Be Performed</u>	<u>Subcontract Price</u>
A.	Land, Air, Water Environmental Svcs.	Hydropunch Sampling and Well Construction	\$55,820
B.	Aqua Terra Geophysics, Inc.	Gamma Logging	\$1,800
C.	Zebra Environmental Corp.	Direct Push Sampling	\$16,171
D.	Chemtech Consulting Group, Inc.	Chemical Sample Analysis	\$31,540
E.	Nancy Potak	Data Validation	\$2,142
F.	Waste Management	Cuttings Disposal	\$1,650
5.	Total Unit Price Subcontracts		<hr/> \$109,122
6.	Subcontract Management Fee		\$3,624
7.	Total Subcontract Costs (lines 4 + 5 + 6)		\$117,583
8.	Fixed Fee (Schedule 2.10 (h))		\$8,683
9.	Total Work Assignment Price (lines 1 + 2 + 3 + 7 + 8)		\$237,171

SCHEDULE 2.11 (b)
 SUMMARY
 123 POST AVENUE RI/FS OU II
 WORK ASSIGNMENT NUMBER D003600-23

Average NSPE Wage Rates	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL HOURS
as of July 1, 2000	\$60.04	\$56.25	\$48.89	\$39.38	\$33.10	\$27.95	\$25.37	\$22.02	\$17.56	
as of July 1, 2001	\$61.84	\$57.94	\$50.36	\$40.56	\$34.09	\$28.79	\$26.13	\$22.68	\$18.09	
Task 1	4	0	0	0	108	16	0	28	0	156
Task 2	4	0	0	0	46	60	410	24	0	544
Task 3	10	0	0	0	156	0	76	132	0	374
Task 4	10	0	0	0	150	0	8	76	0	244
Task 5	8	0	0	0	48	0	0	4	0	60
Total 2000 Hours	12	0	0	0	178	76	410	54	0	730
Total 2001 Hours	24	0	0	0	330	0	84	210	0	648
Total Direct Labor Cost	\$2,205	\$0	\$0	\$0	\$17,142	\$2,124	\$12,597	\$5,952	\$0	\$40,019

SCHEDULE 2.11 (b)-1
SUMMARY
123 POST AVENUE RI/FS OU II
WORK ASSIGNMENT NUMBER D003600-23

Average NSPE Wage Rates	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL HOURS
as of July 1, 2000	\$60.04	\$56.25	\$48.89	\$39.38	\$33.10	\$27.95	\$25.37	\$22.02	\$17.56	
as of July 1, 2001	\$61.84	\$57.94	\$50.36	\$40.56	\$34.09	\$28.79	\$26.13	\$22.68	\$18.09	
Task 1	0.5	0	0	0	3	0	0	12	0	15.5
Task 2	0.5	0	0	0	1	0	0	24	0	25.5
Task 3	0.5	0	0	0	1	0	0	12	0	13.5
Task 4	0.5	0	0	0	1	0	0	12	0	13.5
Task 5	0.5	0	0	0	1	0	0	4	0	5.5
Total 2000 Hours	1.25	0	0	0	4.5	0	0	38	0	43.75
Total 2001 Hours	1.25	0	0	0	2.5	0	0	26	0	29.75
Total Direct Labor Cost	\$152	\$0	\$0	\$0	\$234	\$0	\$0	\$1,426	\$0	\$1,813

Dvirka & Bartilucci Consulting Engineers
 123Post Avenue RI/FS OU II
 Work Assignment Number: D003600-23

BREAKDOWN OF ADMINISTRATIVE
 LOE HOURS ON SCHEDULE 2.11(b-1)

ADMIN ACTIVITY	WORK PLAN DEVELOPMENT												REVIEW WORK ASSIGNMENT (WA) PROGRESS																	
	Conflict of Interest Checks						Prepare 2.11 Schedules						Conduct Progress Reviews						Prepare Monthly Report & Update Schedules											
	IX	VIII	VII	VI	V	IV	VIII	VII	VI	V	IV	III	II	I	VIII	VII	VI	V	IV	III	II	I	VIII	VII	VI	V	IV	III	II	I
NSPE																														
TASK 1	0.5									2																				
TASK 2																														
TASK 3																														
TASK 4																														
TASK 5																														
TOTAL	0.5	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ADMIN ACTIVITY	REVIEW WORK ASSIGNMENT (WA) PROGRESS												CAP PREPARATION																	
	MBE/WBE Activities						Program Management						Prepare Monthly Cost Control Report & CAP						Oversee CAP											
	VIII	VII	VI	V	IV	III	II	I	IX	VIII	VII	VI	V	IV	III	II	I	IX	VIII	VII	VI	VIII	VII	VI	V	IV	III	II	I	
NSPE																														
TASK 1																														
TASK 2									0.5																					
TASK 3									0.5																					
TASK 4									0.5																					
TASK 5									0.5																					
TOTAL	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ADMIN ACTIVITY	MISCELLANEOUS												Total Adm. LOE (hrs)																						
	Update NSPE List						Equipment Use and Inventory						Word Proc. and Report Preparation																						
	VIII	VII	VI	V	IV	III	II	I	IV	III	II	I	IV	III	II	I	IX	VIII	VII	VI	V	IV	III	II	I	IX	VIII	VII	VI	V	IV	III	II	I	
NSPE																																			
TASK 1																																			
TASK 2																																			
TASK 3																																			
TASK 4																																			
TASK 5																																			
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.5	0	0	0	7	0	0	0	64

SCHEDULE 2.11 (c)
 DIRECT NON-SALARY COSTS
 SUMMARY
 123 POST AVENUE RI/FS OU II
 Work Assignment No. D003600-23

ITEM	MAXIMUM REIMBURSEMENT RATE	UNIT	ESTIMATED NUMBER OF UNITS	TOTAL ESTIMATED COSTS
IN-HOUSE				
Outside Services*	\$200.00	set	0	\$0.00
Aerial Photographs	\$200.00	photograph	1	\$200.00
Express Mail	\$40.00	package	10	\$400.00
Sample Shipping	\$50.00	shipment	21	\$1,050.00
Level D Safety Equipment	\$14.00	(\$/person/day)	44	\$616.00
Level C Safety Equipment	\$40.00	(\$/person/day)	0	\$0.00
Level B Safety Equipment	\$50.00	(\$/person/day)	0	\$0.00
TRAVEL				
Transportation (Personal Car)	\$0.325	mile	200	\$65.00
Van Rental	\$325.00	week	9	\$2,925.00
Gas	\$50.00	week	9	\$450.00
TOTAL DIRECT NON-SALARY COSTS				\$5,706.00

* Includes photo finishing, slides and any other costs not associated with in-house capabilities.

SCHEDULE 2.11 (d) 1

EQUIPMENT PURCHASED UNDER THE CONTRACT
SUMMARY

123 POST AVENUE RI/FS OU II
Work Assignment No. D003600-23

ITEM	ESTIMATED PURCHASE PRICE	O&M RATE (\$/per month)	TERM OF USAGE (MONTHS)	ESTIMATED USAGE COST (COL. 2 + [3X4])
			TOTAL	\$0.00

Schedule 2.11 (d) 2
Summary

Maximum Reimbursement Rates for Consultant/Subconsultant - Owned Equipment
123 POST AVENUE RI/FS OU II
Work Assignment No. D003600-23

ITEM	PURCHASE PRICE X 85%	USAGE RATE (\$/day)	CAPITAL RECOVERY RATE (\$/Unit of Time)	O & M RATE (\$/Unit of Time)	ESTIMATED USAGE (days)	ESTIMATED USAGE COST (Col. 3x6)
					TOTAL	\$0
						\$0

Notes:
Usage Rate = Capital Recovery Rate + O&M rate

The maximum usage rate for an item of equipment reverts to the O&M rate when the total usage reimbursement exceed 85% of the purchase price.

SCHEDULE 2.11 (d) 3
EQUIPMENT
VENDOR RENTED
SUMMARY

123 POST AVENUE R/IFS OU II
Work Assignment No. D003600-23

ITEM	MAXIMUM REIMBURSEMENT RATE	TIME PERIOD	ESTIMATED USAGE (period of time)	ESTIMATED USAGE COST (Col. 2 X 3)
Century OVA 128	\$125.00	day	0	\$0.00
Photovac Microtip	\$125.00	day	0	\$0.00
MIE Miriram Digital Dust Indicator	\$85.00	day	0	\$0.00
Horiba 190 Water Quality Checker	\$55.00	day	0	\$0.00
Solinst Water Level Indicator	\$25.00	day	0	\$0.00
Generator	\$55.00	day	6	\$330.00
Grunfos Pump	\$125.00	day	0	\$0.00
Total				\$330.00

SCHEDULE 2.11 (d) 4
 SUMMARY
 EXPENDABLE SUPPLIES
 123 POST AVENUE RI/FS OU II
 Work Assignment No. D003600-23

ITEM	ESTIMATED QUANTITY	UNITS	UNIT COST	TOTAL BUDGETED COST (COL. 2 X 3)
Polyethylene tubing Voss disposable polyethylene weighted bailers	3600 1	Feet Case of 24	\$0.25 \$200.00	\$900.00 \$100.00
			TOTAL	\$1,000.00

SCHEDULE 2.11 (d) 5
 CONSUMABLE SUPPLIES
 SUMMARY
 123 POST AVENUE RI/FS OU II
 Work Assignment No. D003600-23

ITEM	ESTIMATED QUANTITY	UNIT COST	TOTAL BUDGETED COST (COL. 2 X 3)
Miscellaneous Supplies	1	\$500.00	\$500.00
		TOTAL	\$500.00

Schedule 2.11 (e)
Cost Plus Fixed-Fee Subcontracts

123 Post Avenue RI/FS OU2 Survey

<u>NAME OF SUBCONTRACTOR</u>	<u>SERVICES TO BE PERFORMED</u>	<u>SUBCONTRACT PRICE</u>
YEC, INC.	Survey & Mapping Services	\$4,837.26

A. Direct Salary Costs

<u>Professional Responsibility Level</u>	<u>Labor Classification</u>	<u>Average Reimbursement Rate (\$/Hr.)</u>		<u>Maximum Reimbursement Rate (\$/Hr.)</u>		<u>Estimated Number of Hours</u>	<u>Total Estimated Direct Salary Cost (\$)</u>
Principal	VIII	2001	52.07	2001	56.24	4	208.28
Senior Geologist/Scientist/ Engineer/ Licensed Surveyor	V	2001	34.43	2001	37.88	28	964.04
Staff Geologist/ Scientist/Engineer	IV	2001	29.93	2001	32.92	0	0.00
Staff Geologist/ Scientist/Engineer/CAD Operator	III	2001	25.97	2001	28.82	8	207.76
Senior Technician/Staff Engineer/Scientist/Geologist	II	2001	19.22	2001	21.53	20	384.40
Technician/Draftsperson	I	2001	17.41	2001	19.50	0	0.00
Total Direct Salary Costs:							1,764.48

B. Indirect Costs - 117% of direct salary cost

Indirect Costs: 2,064.44

C. Maximum Reimbursement Rates for Direct Non-Salary Costs:

<u>Item</u>	<u>Maxium Reimbursement Rate</u>	<u>Estimated No. of Units</u>	
Mileage(Site Survey)	0.31 /mile	200 miles	62.00
Tolls	11.00 /trip	2 trips	22.00
Survey Equipment Rental	65.00 day	2 day	130.00
CAD Equipment	15.00 hour	8 hours	120.00
Tele./Postage/Posts/Reproduction/ Concrete Monuments(4)	100.00 lump sum		100.00
Total Direct Non Salary Costs:			434.00

D. Fixed Fee (15% of Total Direct and Indirect Salary Costs)

Fixed Fee: 574.34

**SCHEDULE 2.11 (f) 1
UNIT PRICE SUBCONTRACTS
SUMMARY
123 POST AVENUE RI/FS OU II
Work Assignment No. D003600-23**

<u>NAME OF SUBCONTRACTOR</u>	<u>SERVICES TO BE PERFORMED</u>	<u>SUBCONTRACT PRICE</u>	<u>MANAGEMENT FEE</u>
Land, Air, Water Environmental Services (WBE)	Hydropunch Sampling and Well Construction	\$55,820	\$1,954
	Maximum Reimbursement Rate	Estimated No. of Units	Total Estimated Costs
Item			
1 Mobilization and demobilization, including site breakdown, clean-up, repair and site restoration.	\$500 Lump sum	1 Event	\$500
2 Well Set-up	\$150 Per well	12 Wells	\$1,800
3 Temporary mobile decontamination pad.	\$900 Lump Sum	1 Event	\$900
4 Drilling using hollow stem auger			
0-50 feet	\$17 Per foot	600 Feet	\$10,200
50-100 feet	\$17 Per foot	400 Feet	\$6,800
100-200 feet	\$17 Per foot	400 Feet	\$6,800
5 Hydropunch Sampling			
0-50 feet	\$300 Each	0 Samples	\$0
50-100 feet	\$350 Each	0 Samples	\$0
100-200 feet	\$400 Each	12 Samples	\$4,800
6 2" PVC Well Screen	\$7 Per foot	140 Feet	\$980
7 2" PVC Well Riser	\$6 Per foot	1060 Feet	\$6,360
8 Well Screen Sand Pack Material	\$10 Per bag	50 Bags	\$500
9 Bentonite			
A. Pellets	\$40 Per pail	12 Pails	\$480
B. Powder	\$40 Per bag	30 Bags	\$1,200
C. Granular	\$10 Per bag	0 Bags	\$0
10 Cement (Type I)	\$15 Per bag	70 Bags	\$1,050
11 Installation of Flush-mounted Protective Casi	\$80 Each	12 Casings	\$960
12 Well Development	\$150 Per hour	24 Hours	\$3,600
13 Standby Time	\$150 Per hour	20 Hours	\$3,000
14 Pressure Grouting (including all equipment and materials)	\$10 Per foot	80 Feet	\$800
15 Keyed-alike Locks	\$20 Each	12 Locks	\$240
16 Containerization of Probing Waste Material ar Staging of Drums on Pallets (including decontamination and purge water), Filling drums and Transport	\$50 Per drum	65 Drums	\$3,250
	\$50 Per hour	32 Hours	\$1,600
17 Per Diem	\$0 Per person per day	32 Person days	\$0
	SUBTOTAL		\$55,820
	SUBCONTRACT MANAGEMENT FEE		\$1,954
	TOTAL		\$57,774

SCHEDULE 2.11 (f) 2
UNIT PRICE SUBCONTRACTS
SUMMARY
123 POST AVENUE RI/FS OU II
Work Assignment No. D003600-23

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE	MANAGEMENT FEE
Aqua Terra Geophysics, Inc.	Gamma Logging	\$1,800	\$0
	Maximum Reimbursement Rate	Estimated No. of Units	Total Estimated Costs
Mobilization	\$200 Each	4	\$800
Logging	\$250 Each	4	\$1,000
	SUBTOTAL		\$1,800.00
	SUBCONTRACT MANAGEMENT FEE		\$0.00
	TOTAL		\$1,800.00

**SCHEDULE 2.11 (f) 3
UNIT PRICE SUBCONTRACTS
SUMMARY
Plainview Industrial Park
Work Assignment No. D003600-20**

<u>NAME OF SUBCONTRACTOR</u>	<u>SERVICES TO BE PERFORMED</u>	<u>SUBCONTRACTOR PRICE</u>	<u>MANAGEMENT FEE</u>
Zebra Environmental Corporation	Geoprobe Groundwater sampling	\$16,171	\$566
	Maximum Reimbursement Rate	Estimated No. of Units	Total Estimated Costs
	Item		
1	Mobilization and demobilization, including site set-up, breakdown, clean-up, repair and site restoration.	\$85.00 Lump sum	1 Event \$85.00
2	Temporary mobile decontamination pad.	\$85 Each	0 Days \$0.00
3	Truck/van mounted geoprobe system or equivalent with associated tools necessary to complete assigned work.	\$990 Per 8-hour day	12 Days \$11,880.00
4	Overtime	\$90 Per hour	12 Hours \$1,080.00
5	Probe Sampling		
a.	Groundwater Samples	\$12 Per sample	80 Samples \$960.00
6	Soil Conductivity Logging		
a.	Conductivity probe	\$365 Per day	1 Day \$365.00
b.	Logging charge	\$0.90 Per foot	200 Feet \$180.00
7	Portland Cement (Type I or II)	\$16 Per bag	3 Bags \$48.00
8	Asphalt Patch	\$7.50 Per bag	3 Bags \$22.50
9	Bentonite Powder	\$35 Per bag	22 Bags \$770.00
10	Containerization of Probing Waste Material and Stagir Drums on Pallets (including decontamination and purge water)	\$45 Per drum	2 drums \$90.00
11	55-gallon Drums	\$45 Per drum	2 drums \$90.00
12	Standby Time	\$75 Per hour	8 hours \$600.00
13	Per Diem (including meals and hotel charges)	\$125 Per person per day	0 days \$0.00
	SUBTOTAL		\$16,170.50
	SUBCONTRACT MANAGEMENT FEE		\$565.97
	TOTAL		\$16,736.47

*: includes \$900 for the soil conductivity probe and \$400 for one additional technician.

**SCHEDULE 2.11 (f) 4
UNIT PRICE SUBCONTRACTS
SUMMARY
123 POST AVENUE RI/FS OU II
Work Assignment No. D003600-23**

NAME OF SUBCONTRACTOR		SERVICES TO BE PERFORMED	SUBCONTRACT PRICE	MANAGEMENT FEE
Chemtech Consulting Group, Inc. (MBE)		Chemical Sample Analysis	\$31,540	\$1,103.90
Item	Method	Maximum Reimbursement Rate	Estimated No. of Units	Total Estimated Costs
<u>Groundwater</u>				
VOCs (24-hour TAT)	95-1	\$220.00 per sample	92	\$20,240.00
VOCs (28-day TAT)	95-1	\$110.00 per sample	24	\$2,640.00
Iron (28-day TAT)	6010	\$30.00 per sample	3	\$90.00
Manganese (28-day TAT)	6010	\$30.00 per sample	3	\$90.00
<u>Soil</u>				
TCLP VOCs	1311 and 95-1	\$150.00 per sample	4	\$600.00
<u>QA/QC Samples</u>				
<u>Groundwater</u>				
Matrix Spike				
VOCs (24-hour TAT)	95-1	\$220.00 per sample	5	\$1,100.00
VOCs (28-day TAT)	95-1	\$110.00 per sample	2	\$220.00
Iron (28-day TAT)	6010	\$30.00 per sample	1	\$30.00
Manganese (28-day TAT)	6010	\$30.00 per sample	1	\$30.00
Matrix Spike Duplicate				
VOCs (24-hour TAT)	95-1	\$220.00 per sample	5	\$1,100.00
VOCs (28-day TAT)	95-1	\$110.00 per sample	2	\$220.00
Iron (28-day TAT)	6010	\$30.00 per sample	1	\$30.00
Manganese (28-day TAT)	6010	\$30.00 per sample	1	\$30.00
Matrix Spike Blank				
VOCs (24-hour TAT)	95-1	\$220.00 per sample	5	\$1,100.00
VOCs (28-day TAT)	95-1	\$110.00 per sample	2	\$220.00
Iron (28-day TAT)	6010	\$30.00 per sample	1	\$30.00
Manganese (28-day TAT)	6010	\$30.00 per sample	1	\$30.00
Trip Blank				
VOCs (24-hour TAT)	95-1	\$220.00 per sample	15	\$3,300.00
VOCs (28-day TAT)	95-1	\$110.00 per sample	4	\$440.00
SUBTOTAL				\$31,540.00
SUBCONTRACT MANAGEMENT FEE				\$1,103.90
TOTAL				\$32,643.90

SCHEDULE 2.11 (f) 5
UNIT PRICE SUBCONTRACTS
SUMMARY
123 POST AVENUE RI/FS OU II
Work Assignment No. D003600-23

NAME OF SUBCONTRACTOR		SERVICES TO BE PERFORMED	SUBCONTRACT PRICE	MANAGEMENT FEE
Nancy Potak (WBE)		Data Validation	\$2,142	\$0
<u>Item</u>	<u>Method</u>	<u>Maximum Reimbursement Rate</u>	<u>Estimated No. of Units</u>	<u>Total Estimated Costs</u>
<u>Groundwater</u>				
VOCs	95-1	\$13 Per sample	122	\$1,586.00
Iron	243.2	\$0.80 Per sample	3	\$2.40
Manganese	243.2	\$0.80 Per sample	3	\$2.40
<u>QA/QC Samples</u>				
<u>Groundwater</u>				
Matrix Spike				
VOCs	95-1	\$13 Per sample	7	\$91.00
Iron	243.2	\$0.80 Per sample	1	\$0.80
Manganese	243.2	\$0.80 Per sample	1	\$0.80
Matrix Spike Duplicate				
VOCs	95-1	\$13 Per sample	7	\$91.00
Iron	243.2	\$0.80 Per sample	1	\$0.80
Manganese	243.2	\$0.80 Per sample	1	\$0.80
Matrix Spike Blank				
VOCs	95-1	\$13 Per sample	7	\$91.00
Iron	243.2	\$0.80 Per sample	1	\$0.80
Manganese	243.2	\$0.80 Per sample	1	\$0.80
Trip Blank				
VOCs	95-1	\$13 Per sample	21	\$273.00
SUBTOTAL				\$2,141.60
SUBCONTRACT MANAGEMENT FEE				\$0.00
TOTAL				\$2,141.60

SCHEDULE 2.11 (f) 6
 UNIT PRICE SUBCONTRACTS
 SUMMARY
 123 POST AVENUE RI/FS OU II
 Work Assignment No. D003600-23

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED	SUBCONTRACT PRICE	MANAGEMENT FEE
Waste Management of Long Island	Cuttings Disposal	\$1,650	\$0
	Maximum Reimbursement Rate	Estimated No. of Units	Total Estimated Costs
15 cubic yard roll-off (staging, transportatio and disposal)	\$825 Per load	2	\$1,650.00
	\$285 Per drum	0	\$0.00
	SUBTOTAL		\$1,650.00
	SUBCONTRACT MANAGEMENT FEE		\$0.00
	TOTAL		\$1,650.00

transfer of insurance

Active Envir. Group - ~ 650 / roll-offs -

1000 roll-offs

1000 roll-offs

May 10, 2001

Project Name: 123 Post Avenue RI/FS OU II
 Work Assignment No.: D003600-23
 Task No./Name: All Tasks
 Complete: 0.00%

SCHEDULE 2.11 (g)
 SUMMARY

Page 1 of 7
 Date Prepared:
 Billing Period:
 Invoice No.:

MONTHLY COST CONTROL REPORT SUMMARY OF FISCAL INFORMATION								
A	B	C	D	E	F	G	H	
Expenditure Category	Costs Claimed This Period	Paid To Date	Total Disallowed To Date	Total Costs Incurred To Date (A+B+B1)	Estimated Costs To Completion	Total Work Assignment Price (A+B+E)	Approved Budget	Estimated Under/(Over) (G-F)
1. Direct Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$40,019	0.00
2. Indirect	0.00	0.00	0.00	0.00	0.00	0.00	\$63,350	0.00
3. Subtotal Direct Salary Costs and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$103,369	0.00
4. Travel	0.00	0.00	0.00	0.00	0.00	0.00	\$3,440	0.00
5. Other Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$4,096	0.00
6. Subtotal Direct Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$7,536	0.00
7. Subcontractors	0.00	0.00	0.00	0.00	0.00	0.00	\$117,583	0.00
8. Total Work Assignment Cost	0.00	0.00	0.00	0.00	0.00	0.00	\$228,488	0.00
9. Fixed Fee	0.00	0.00	0.00	0.00	0.00	0.00	\$8,683	0.00
10. Total Work Assignment Price	0.00	0.00	0.00	0.00	0.00	0.00	\$237,171	0.00

Project Manager (Engineer) _____ Date _____

Project Name: 123 Post Avenue RI/FS OU II
 Work Assignment No.: D003600-23
 Task No./Name: 1/Work Plan Development
 Complete: 0.00%

SCHEDULE 2.11 (g)

Page 2 of 7
 Date Prepared:
 Billing Period:
 Invoice No.:

MONTHLY COST CONTROL REPORT SUMMARY OF FISCAL INFORMATION								
Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+B1)	E Estimated Costs To Completion	F Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/(Over) (G-F)
1. Direct Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$4,879	0.00
2. Indirect	0.00	0.00	0.00	0.00	0.00	0.00	\$7,723	0.00
3. Subtotal Direct Salary Costs and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$12,602	0.00
4. Travel	0.00	0.00	0.00	0.00	0.00	0.00	\$0	0.00
5. Other Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$200	0.00
6. Subtotal Direct Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$200	0.00
7. Subcontractors	0.00	0.00	0.00	0.00	0.00	0.00	\$0	0.00
8. Total Work Assignment Cost	0.00	0.00	0.00	0.00	0.00	0.00	\$12,802	0.00
9. Fixed Fee	0.00	0.00	0.00	0.00	0.00	0.00	\$1,059	0.00
10. Total Work Assignment Price	0.00	0.00	0.00	0.00	0.00	0.00	\$13,860	0.00

Project Manager (Engineer) _____ Date _____

Project Name: 123 Post Avenue RI/FS OU II
 Work Assignment No.: D003600-23
 Task No./Name: 2/Field Investigation
 Complete: 0.00%

SCHEDULE 2.11 (g)

Page 3 of 7
 Date Prepared:
 Billing Period:
 Invoice No.:

MONTHLY COST CONTROL REPORT SUMMARY OF FISCAL INFORMATION								
Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+B1)	E Estimated Costs To Completion	F Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/(Over) (G-F)
1. Direct Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$14,370	0.00
2. Indirect	0.00	0.00	0.00	0.00	0.00	0.00	\$22,748	0.00
3. Subtotal Direct Salary Costs and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$37,118	0.00
4. Travel	0.00	0.00	0.00	0.00	0.00	0.00	\$3,420	0.00
5. Other Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$3,656	0.00
6. Subtotal Direct Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$7,076	0.00
7. Subcontractors	0.00	0.00	0.00	0.00	0.00	0.00	\$117,583	0.00
8. Total Work Assignment Cost	0.00	0.00	0.00	0.00	0.00	0.00	\$161,776	0.00
9. Fixed Fee	0.00	0.00	0.00	0.00	0.00	0.00	\$3,118	0.00
10. Total Work Assignment Price	0.00	0.00	0.00	0.00	0.00	0.00	\$164,894	0.00

Date

Project Manager (Engineer)

Project Name: 123 Post Avenue RI/FS OU II
 Work Assignment No.: D003600-23
 Task No./Name: 3/Remedial Investigation Report
 Complete: 0.00%

SCHEDULE 2.11 (g)

Page 4 of 7
 Date Prepared:
 Billing Period:
 Invoice No.:

MONTHLY COST CONTROL REPORT SUMMARY OF FISCAL INFORMATION								
Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+B1)	E Estimated Costs To Completion	F Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/(Over) (G-F)
1. Direct Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$10,916	0.00
2. Indirect	0.00	0.00	0.00	0.00	0.00	0.00	\$17,280	0.00
3. Subtotal Direct Salary Costs and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$28,196	0.00
4. Travel	0.00	0.00	0.00	0.00	0.00	0.00	\$0	0.00
5. Other Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$80	0.00
6. Subtotal Direct Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$80	0.00
7. Subcontractors	0.00	0.00	0.00	0.00	0.00	0.00	\$0	0.00
8. Total Work Assignment Cost	0.00	0.00	0.00	0.00	0.00	0.00	\$28,276	0.00
9. Fixed Fee	0.00	0.00	0.00	0.00	0.00	0.00	\$2,368	0.00
10. Total Work Assignment Price	0.00	0.00	0.00	0.00	0.00	0.00	\$30,645	0.00

Project Manager (Engineer) _____ Date _____

Project Name: 123 Post Avenue R//FS OU II
 Work Assignment No.: D003600-23
 Task No./Name: 4/Feasibility Study Report
 Complete: 0.00%

SCHEDULE 2.11 (g)

Page 5 of 7
 Date Prepared:
 Billing Period:
 Invoice No.:

MONTHLY COST CONTROL REPORT SUMMARY OF FISCAL INFORMATION								
A Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+B1)	E Estimated Costs To Completion	F Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/(Over) (G-F)
1. Direct Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$7,665	0.00
2. Indirect	0.00	0.00	0.00	0.00	0.00	0.00	\$12,133	0.00
3. Subtotal Direct Salary Costs and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$19,798	0.00
4. Travel	0.00	0.00	0.00	0.00	0.00	0.00	\$0	0.00
5. Other Non- Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$80	0.00
6. Subtotal Direct Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$80	0.00
7. Subcontractors	0.00	0.00	0.00	0.00	0.00	0.00	\$0	0.00
8. Total Work Assignment Cost	0.00	0.00	0.00	0.00	0.00	0.00	\$19,878	0.00
9. Fixed Fee	0.00	0.00	0.00	0.00	0.00	0.00	\$1,663	0.00
10. Total Work Assignment Price	0.00	0.00	0.00	0.00	0.00	0.00	\$21,541	0.00

Project Manager (Engineer)

Date

Project Name: 123 Post Avenue RI/FS OU II
 Work Assignment No.: D003600-23
 Task No./Name: 5/Public Participation
 Complete: 0.00%

SCHEDULE 2.11 (g)

Page 6 of 7
 Date Prepared:
 Billing Period:
 Invoice No.:

MONTHLY COST CONTROL REPORT SUMMARY OF FISCAL INFORMATION								
Expenditure Category	A Costs Claimed This Period	B Paid To Date	C Total Disallowed To Date	D Total Costs Incurred To Date (A+B+B1)	E Estimated Costs To Completion	F Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/(Over) (G-F)
1. Direct Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$2,189	0.00
2. Indirect	0.00	0.00	0.00	0.00	0.00	0.00	\$3,466	0.00
3. Subtotal Direct Salary Costs and Indirect Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$5,655	0.00
4. Travel	0.00	0.00	0.00	0.00	0.00	0.00	\$20	0.00
5. Other Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$80	0.00
6. Subtotal Direct Non-Salary Costs	0.00	0.00	0.00	0.00	0.00	0.00	\$100	0.00
7. Subcontractors	0.00	0.00	0.00	0.00	0.00	0.00	\$0	0.00
8. Total Work Assignment Cost	0.00	0.00	0.00	0.00	0.00	0.00	\$5,755	0.00
9. Fixed Fee	0.00	0.00	0.00	0.00	0.00	0.00	\$475	0.00
10. Total Work Assignment Price	0.00	0.00	0.00	0.00	0.00	0.00	\$6,230	0.00

Project Manager (Engineer) _____ Date _____

<u>Subcontract Name</u>	<u>Subcontract Costs Claimed This Application Incl. Resubmittals</u>	<u>Subcontract Costs Approved for Payment on Previous Application</u>	<u>Total Subcontract costs to Date (A, plus B)</u>	<u>Subcontract Approved Budget</u>	<u>Management Fee Budget</u>	<u>Management Fee Paid</u>	<u>Total Costs To Date</u>
1. Land, Air, Water Env. Services, Inc.	\$0.00	\$0.00	\$0.00	\$55,820	\$1,954		
2. Aqua Terra Geophysics, Inc.	\$0.00	\$0.00	\$0.00	\$1,800	\$0		
3. Zebra Environmental Corp.	\$0.00	\$0.00	\$0.00	\$16,171	\$566		
4. Chemtech Consulting Group, Inc.	\$0.00	\$0.00	\$0.00	\$31,540	\$1,104		
5. Nancy Potak	\$0.00	\$0.00	\$0.00	\$2,142	\$0		
6. Waste Management of Long Island	\$0.00	\$0.00	\$0.00	\$1,650	\$0		
Total				\$109,122	\$3,624		

Schedule 2.11 (h)

Date Prepared:
Billing Period
Invoice No.

Project Name: 123 Post Avenue R/FS OU II
Work Assignment No.: D003600-23

Monthly Cost Control Report
Summary of Labor Hours
Expended to Date/Estimated To Completion

NSPE Labor Classification	IX EXP/EST	VIII EXP/EST	VII EXP/EST	VI EXP/EST	V EXP/EST	IV EXP/EST	III EXP/EST	I & II EXP/EST	ADMIN/ SUPPORT	TOTAL NUMBER OF DIRECT LABOR HOURS EXP/EST
Task 1	0/ 4	0/ 0	0/ 0	0/ 0	0/ 108	0/ 16	0/ 0	0/ 16	0/ 12	0/ 156
Task 2	0/ 4	0/ 0	0/ 0	0/ 0	0/ 46	0/ 60	0/ 410	0/ 0	0/ 24	0/ 544
Task 3	0/ 10	0/ 0	0/ 0	0/ 0	0/ 156	0/ 0	0/ 76	0/ 120	0/ 12	0/ 374
Task 4	0/ 10	0/ 0	0/ 0	0/ 0	0/ 150	0/ 0	0/ 8	0/ 64	0/ 12	0/ 244
Task 5	0/ 8	0/ 0	0/ 0	0/ 0	0/ 48	0/ 0	0/ 0	0/ 0	0/ 4	0/ 60
Total 2000 Hours	0/ 12	0/ 0	0/ 0	0/ 0	0/ 178	0/ 76	0/ 410	0/ 16	0/ 38	0/ 730
Total 2001 Hours	0/ 24	0/ 0	0/ 0	0/ 0	0/ 330	0/ 0	0/ 84	0/ 184	0/ 26	0/ 648
TOTAL HOURS	0/ 36	0/ 0	0/ 0	0/ 0	0/ 508	0/ 76	0/ 494	0/ 200	0/ 64	0/ 1378

MBE/WBE
 UTILIZATION PLAN
 SUMMARY
 123 POST AVENUE RI/FS OU II
 Work Assignment No. D003600-23

<u>Areas to be Subcontracted</u>	<u>Subcontractor Name</u>	<u>MBE/WBE</u>	<u>Total Subcontract Value</u>	<u>% MBE/WBE Utilization</u>
1. Sample Chemical Analysis	Chemtech Consulting Group	MBE	\$31,540	13.3%
2. Well Surveying	YEC, Inc.	MBE	\$4,837	2.0%
3. Drilling Services	LAWES	WBE	\$55,820	23.5%
4. Data Validation	Nancy Potak	WBE	\$2,142	0.9%
Total MBE Utilization		=	<u>\$36,377</u> \$237,171	15.3%
Total WBE Utilization		=	<u>\$57,962</u> \$237,171	24.4%