DETAILED ENVIRONMENTAL FILE REVIEW AND DATA GAPS ANALYSIS

WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Prepared For:

Lighthouse Pointe Property Associates, LLC

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LIST OF ACRONYMS/SHORT FORMS

AMSL	Above Mean Sea Level
BCP	New York State Brownfield Cleanup Program
CRA	Conestoga-Rovers & Associates, Inc.
ESA	Environmental Site Assessment
GIS	Geographic Information System
HSA	Hollow-Stem Augers
MCSW	Monroe County Water Authority
NYSDEC	New York State Department of Environmental Conservation
PCBs	Polychlorinated Biphenyls
Project	Waterfront Property Development
Property	Waterfront Property
Report	Detailed Environmental File Review and Data Gaps Analysis Report
Site	Waterfront Property
SVOCs	Semivolatile Organic Compounds
TAGM	New York State Department of Environmental Conservation's Technical and Administrative Guidance Memorandum
TAL	U.S. EPA Target Analyte List
TCL	U.S. EPA Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
U.S. EPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds

1.0 INTRODUCTION

Conestoga-Rovers & Associates, Inc. (CRA) has prepared this Detailed Environmental File Review and Data Gaps Analysis for the Waterfront Property Development (Project) at the request of Lighthouse Pointe Property Associates, L.L.C.

The Waterfront Property (Site or Property) to be developed consists of approximately 20 parcels of land with a total area of approximately 50 acres. The Site is located in the City of Rochester, Monroe County, New York. The Genesee River forms the approximate 2,800-foot long western boundary of the Property.

The Site location is presented on Figure 1.1. Figure 1.2 presents the current Site layout.

This Detailed Environmental File Review and Data Gaps Analysis Report (Report) is presented in the following titled sections:

1.0 Introduction;
2.0 Description of Current Conditions;
3.0 Conclusions;
4.0 Environmental Data Gap Analysis; and
5.0 References.

2.0 DESCRIPTION OF CURRENT CONDITIONS

The following summary and review is based on CRA's review of existing and available information on the Site. A summary of the documents reviewed to develop this Report is presented in Section 5.0.

2.1 HISTORY

The following history was compiled based on the review of previous reports and aerial photographs.

The Site was a freshwater wetland prior to development to its current conditions.

The railroad lines that form the northern and southern boundaries of the Site were present by 1930. A spur from the northern line extending south along the east bank of the Genesee River was also present by 1930. The spur was used to load barges and existed until it was abandoned at some time between 1938 and 1951.

Residential and commercial development of the area of the Site to the south of Pattonwood Drive was completed by 1930. The undeveloped part of the area of the Site to the south of Pattonwood Drive was graded with fill by 1951.

Residential and commercial development of the area of the Site to the north of Pattonwood Drive took place in the late 1950s and 1960s.

An approximate 28-acre parcel of land at the north end of the Site was used by the City of Rochester as a municipal landfill (Old Rochester City Landfill). The City of Rochester began using the Site as a landfill in the late 1940s. These landfilling operations consisted of the placement of residential refuse, ash, slag, sewage sludge, and construction debris. These landfilling operations have been reported to have ceased in approximately 1962, but may have continued as late as 1978. At least some of this disposal activity may have been associated with the deposition of soils from expansion and dredging of the Shumway Marina Basin which occurred in 1970. The Old Rochester City Landfill may include approximately 15,000 cubic yards of dredged material from the Genesee River and 10,000 cubic yards of sewage sludge that was generated at the adjacent Irondequoit Township Waste Water Treatment Plant which was located on the Site.

2.2 SITE LAND USE AND ZONING

The eastern portion of the Site is located within the Town of Irondequoit. The western portion of the Site is located within the City of Rochester. The portions of the Site located within the Town of Irondequoit and the City of Rochester are shown on Figure 2.1.

The portion of the Site located within the Town of Irondequoit is zoned "River Harbor". This designation permits moderate- to high-density residential development as well as certain commercial, recreational, and open space developments seen as an advantage to the community and its visitors.

The portion of the Site located within the City of Rochester is zoned "Harbortown Village District". This designation permits water-oriented and water-enhanced land uses and encourage the development of a lively, pedestrian-friendly, and attractive mixed-use district.

2.3 WATER SUPPLY AND POTABLE GROUNDWATER WELLS

The Site and surrounding area is serviced with potable water from either the Town of Irondequoit or the City of Rochester.

The Town of Irondequoit obtains potable water from the Monroe County Water Authority (MCWA). The MCWA obtains its water from Lake Ontario.

The City of Rochester obtains potable water from Hemlock and Canadice Lakes that are located approximately 30 miles south of Rochester. The City of Rochester supplements this water supply with water obtained from MCWA. According to information provided on the City of Rochester website, the portion of the City of Rochester in the area of the Site is almost always supplied with water obtained from MCWA.

MCWA obtains the majority of their potable water from several miles offshore in Lake Ontario. MCWA obtains a small amount of their potable water from a well supply located in the Village of Corfu. MCWA supplements this water supply with water obtained from the City of Rochester, the Town of Ontario, the City of Batavia, and the Erie County Water Authority.

2.4 SITE GEOLOGY

The Site is located in the Central Lowland physiographic province of New York State. The Site vicinity is underlain by recent glacial and lacustrine sediments. The regional bedrock stratigraphy consists of several thousand feet of shale, dolostone, sandstone, and limestone which was deposited during the Upper Ordovician, Silurian, and Devonian Periods. The units dip slightly to the south, exposing the oldest bedrock to the north. Locally, bedrock underlying the Site is assumed to be the Upper Ordovician Queenston Formation. This shale and siltstone bedrock was encountered less than one-quarter mile west of the Site at a depth of approximately 15 feet below grade. The depth to bedrock drops off considerably towards the Genesee River.

Much of the Site is classified by Soil Conservation Service as "made land" (Engineering-Science, Inc., 1992b). Ground surface elevations at the Site range from approximately 250 to 275 feet above mean sea level (AMSL). Previous investigations at the Site indicate that this fill material ranges in depth from 4 to 26 feet deep and includes municipal solid waste, construction and demolition debris, and dredging spoils.

Native soils encountered below fill at the Site typically include, in order of increasing depth, black peat, brown sand and silt, and gray clay, silt, and sand (estimated hydraulic conductivity of between 10^{-4} and 10^{-7} cm/sec; Engineering-Science, Inc., 1992b). The native soils are expected to be on the order of 10 to 20 feet thick below the Site.

Bedrock has not been encountered in any boring at the Site. The maximum depth of all on-Site borings was 30 feet.

A schematic cross-section illustrating the typical stratigraphic sequence at the Site is presented on Figure 2.2.

2.5 SITE HYDROGEOLOGY

Groundwater is encountered at the Site at depths ranging from 7 to 15 feet below grade, typically within the fill material, at an elevation of approximately 245 to 250 feet AMSL. Groundwater flow is generally to the west toward the Genesee River. The typical surface water elevation in the Genesee River adjacent to the Site is approximately 247 feet AMSL.

2.6 SITE HYDROLOGY

The Site lies within the Genesee River drainage basin. The Genesee River, immediately west of the Site, is a Class B waterway, suitable for primary contact recreation, fishing, and fish propagation, but not suitable as a source of potable water (Engineering-Science, Inc., 1992b). Water from the Genesee River enters Lake Ontario less than 2,000 feet north of the Site.

Lake Ontario is classified as a Class A special water body, suitable for drinking water supplies, culinary or food processing purposes, and primary contact recreation activities (Engineering-Science, Inc., 1992b).

Fill areas are elevated and vegetated. The maximum on-Site elevation difference is approximately 20 feet. Cleared areas contain various buildings and boat storage areas. There are two distinct mounded fill areas in the portion of the Site that is north of Pattonwood Drive. Surface water drainage from the elevated fill areas is assumed to be locally radial. General surface drainage, however, is to the west towards the Genesee River.

2.7 PREVIOUS PHASE I ENVIRONMENTAL SITE ASSESSMENTS

This section summarizes the results of previous Phase I Environmental Site Assessments (Phase I ESAs) that have been conducted at the various properties that are included in the Site. A Phase I ESA was also prepared by CRA and is included as Appendix B.

2.7.1 VOYAGER BOAT SALES (AUGUST 1992)

A Phase I ESA conducted on the Voyager Boat Sales property (presented on Figure 1.2) by Edward O. Watts in 1992 identified the following findings (Edward O. Watts, P.E., P.C., 1992, pg. 15):

1. *"The subject property is partially located on a site known as the Old Rochester City Landfill. The City of Rochester operated this facility as a municipal landfill between 1956 and 1962. Aerial photographs indicate that dumping may have been occurring as early as 1930 and as late as 1978. The extent of landfilling and waste disposal activity has not been determined. No documentation of hazardous waste disposal has been uncovered."*

2. *"A soils investigation of the subject property revealed the presence of lead and chromium contamination. However, the concentration of these contaminants were well below the levels needed to classify this soil as a hazardous material."*

3. *"Phase II remedial investigations under way at the time by the NYSDEC and NYSDOT indicate the presence of soil and groundwater contamination throughout the Old Rochester City Landfill site. Contaminants include volatile and semivolatile organics, pesticides, PCBs, and heavy metals. Final reports from these investigations had not been issued at the time."*

4. *"A stormwater discharge line from a sump pump was observed to be discharging into the Genesee River during the Site inspection. No record of a SPDES (State Pollutant Discharge Elimination System) permit was available."*

5. *"A petroleum bulk storage tank was observed on the subject property during the site inspection. This tank stores heating oil used to fuel a furnace. No record of a petroleum bulk storage permit was available."*

6. *"No suspect asbestos containing materials were observed on site."*

2.7.2 SHUMWAY MARINA (MAY 1999)

A Phase I ESA conducted on the Shumway Marina property (presented on Figure 1.2) by C&O Technologies, Inc. in 1999 identified the following conclusions with respect to Recognized Environmental Conditions at the site (C&O Technologies, Inc., 1999, pg. 16):

1. *"Former Rochester City Landfill:*
   - *The eastern portion of the Site was previously used as a municipal landfill.*
   - *This landfill was previously listed by the NYSDEC as an IHWDS and has undergone extensive environmental investigation.*
   - *The investigations did not show the presence of hazardous wastes as currently defined by existing regulations and the landfill has been delisted.*
   - *The environmental investigations did indicate the presence of hazardous substances and petroleum compounds in both soil and groundwater on the site.*
   - *The presence of hazardous substances in on-site soil and groundwater represents a Recognized Environmental Condition."*

2. *"On-Site Underground Fuel Oil Tank*
   - *There is an underground fuel oil tank on Site that is used to supply fuel to heat the service building.*

- *The installation date of this tank is unknown and to the best of our knowledge it has never been tightness tested.*
- *The fuel oil tank and the fact that its installation date are unknown represents a Recognized Environmental Condition.*"

"*There is also an open petroleum spill file on record at the NYSDEC. The spill file is the result of some soil contamination that was encountered during the removal of four on-site underground storage tanks in March of 1999.*

According to the spill report that was provided by the NYSDEC, approximately 300 tons of contaminated soil were removed from the excavation where the tanks were removed. Analytical results for the soil samples collected from the excavation bottom and sidewalls were provided by the tank removal contractor (Okar Equipment). These results indicated that no petroleum hydrocarbons were detectable when the excavation was closed.

Although it appears as though no Recognized Environmental Conditions remain relative to the open spill file, all relative information should be provided to the NYSDEC for their review. If the NYSDEC does not require additional investigation or corrective action then the spill file can be closed."

2.7.3 SHUMWAY MARINA (OCTOBER 2001)

A Phase I ESA conducted on the Shumway Marina property (presented on Figure 1.2) by LaBella Associates, P.L. in 2001 identified the following findings (LaBella Associates, P.C., 2001, pg. 23):

1. "*As detailed in Sections 3.4.3, 5.1.3, 5.1.8, and 5.1.9 above, there appears to be a Recognized Environmental Condition at the site with regard to the known presence of a municipal landfill at the Site. This Recognized Environmental Condition represents a Recognized Environmental Condition with regard to soil and/or groundwater impairment at and in the immediate vicinity of the Site. There are known elevated levels of PCBs, lead, and fly ash in some areas of this former landfill.*"
2. "*As detailed in Sections 3.4.6, and 5.1.11 above, there appears to be a Recognized Environmental Condition at the Site with regard to the undocumented removal of the 1,000-gallon heating oil tank as well as a listed permit for a 3,000-gallon tank at the Site. This Recognized Environmental Condition represents a Recognized Environmental*

Condition with regard to soil and/or groundwater impairment at and in the immediate vicinity of the Site."

3. *"As detailed in Section 3.4.4 above, there appears to be a Recognized Environmental Condition at the Site with regard to the presence of a floor drain in the repair shop area of the Site which does not appear to be connected to the sewer system. This Recognized Environmental Condition represents a Recognized Environmental Condition with regard to soil and/or groundwater impairment at and in the immediate vicinity of the Site."*

2.8 SUMMARY OF PREVIOUS INVESTIGATIONS

This section summarizes the previous environmental investigations that have been conducted at the various properties that are included in the Site.

The New York State Brownfield Cleanup Program (BCP) outlines a multi-track approach for the remediation of soil contamination, based on numerical soil cleanup objectives that are currently being developed. Given the absence of such BCP-specific soil criteria, the total soil analytical data discussed in the following sections are compared to NYSDEC's Technical and Administrative Guidance Memorandum #4046 Recommended Soil Cleanup Objectives (New York State TAGM #4046 Soil Cleanup Objectives). New York State TAGM #4046 Soil Cleanup Objectives are conservative generic soil cleanup objectives that, if achieved, ensure that no significant threats to human health and/or the environment exist at a site under an unrestricted use scenario. For the purposes of this report, the TAGM objectives are being used as screening criteria. An exceedance of the conservative screening criteria does not necessarily include an unacceptable risk. This will be determined by performing a Site-specific risk assessment.

The groundwater TCL/TAL analytical data discussed in the following sections are compared to New York State Ambient Water Quality Standards and guidance values (for parameters that do not have standards). Similarly, exceedances of these screening values do not necessarily include an unacceptable risk. This will be determined by performing a Site-specific risk assessment.

2.8.1 VOYAGER'S BOAT YARD SOIL AND GROUNDWATER SAMPLING

Malcolm Pirnie, Inc. was retained to conduct an investigation of soil and groundwater on the Voyager Boat Sales property in December 1988 in relation to a proposed building

(Malcolm Pirnie, Inc., 1989). A total of 12 test pits (TP-1 through TP-12) were excavated. Samples of soil/fill and groundwater were collected depending on material encountered in the test pits. Sample locations are presented on Figure 2.3.

Grab samples of soil/fill from test pits TP-1, TP-3, TP-4, TP-8, TP-10, and TP-12 were analyzed for volatile organic compounds (VOCs). Two exceedances of New York State TAGM #4046 Soil Cleanup Objectives were observed for benzene.

One composite sample of soil/fill from test pits TP-1 through TP-12 was analyzed for PCBs and metals. Exceedances of New York State TAGM #4046 Soil Cleanup Objectives were observed for cadmium, chromium (total), and mercury.

Grab samples of groundwater from test pits TP-1, TP-3, TP-4, TP-8, TP-10, and TP-12 were analyzed for flashpoint. All groundwater samples were found to have a flashpoint above 160°F.

2.8.2 HAZARDOUS WASTE ASSESSMENT – STUTSON STREET BRIDGE PROJECT

Engineering-Science, Inc. was retained under a subcontract agreement with Parsons-DeLeuw to identify potential hazardous waste impacts regarding the replacement of the Stutson Street Bridge in December 1991 for the New York State Department of Transportation (Engineering-Science, Inc., 1992a). The purpose of the assessment was to identify potential hazardous waste impacts on the three final bridge replacement alternatives. Sample locations are presented on Figure 2.4.

The study area was divided into eight areas of concern. Four of these areas are within the Site, including:

Pattonwood-South Disposal Area

Engineering-Science, Inc. indicated that historical aerial photos showed extensive landfilling in this area and that soil samples previously collected in the area contained VOCs, semivolatile organic compounds (SVOCs), and heavy metals.

Ground Surface Beneath Stutson Street Bridge

Engineering-Science, Inc. indicated that routine maintenance and sandblasting of the structure may have contaminated the soil beneath the bridge with lead paint.

Old Rochester City Landfill

Engineering-Science, Inc. indicated that at that time the landfill was listed on the New York State Registry of Inactive Hazardous Waste Sites.

Town of Irondequoit Sewage Treatment Plant

Engineering-Science, Inc. indicated that this property may be contiguous with portions of the Old Rochester City Landfill. Portions of the property may have been filled with unknown materials.

Composite subsurface soil samples were collected from 59 locations within the Site (SB-3 through 61). For each boring, one sample was composited over the upper 10 feet. In borings where fill extended below 10 feet, a second sample was composited from 10 feet to the bottom of fill. The soil samples were analyzed for U.S. EPA's Target Compound List (TCL) VOCs, TCL SVOCs, TCL pesticides/PCBs, U.S. EPA's Target Analyte List (TAL) metals, and cyanide. Based on the results of these analyses, selected samples were analyzed using U.S. EPA's Toxicity Characteristic Leaching Procedure (TCLP). Exceedances of New York State TAGM #4046 Soil Cleanup Objectives were observed for acetone, 4-chloroanaline, 4-methylphenol, benzoic acid, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(f)fluoranthene, chrysene, dibenzofuran, di-n-butylphthalate, fluoranthene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, phenol, pyrene, aldrin, arsenic, barium, beryllium, chromium (total), cobalt, copper, iron, lead, mercury, nickel, selenium, and zinc in samples analyzed for total constituents. No exceedances of U.S. EPA TCLP criteria were observed.

Ten composite surface soil samples were collected beneath the Stutson Street Bridge (SS-1 through SS-10) and analyzed for total lead. Exceedances of the New York State TAGM #4046 Soil Cleanup Objective for lead were observed in eight of the ten samples.

Three groundwater monitoring wells were installed in selected boreholes advanced on the Site (GW-11, GW-19, and GW-33). Groundwater samples were analyzed for TCL VOCs, TCL SVOCs, TCL pesticides/PCBs, TAL metals, and cyanide. Exceedances of New York State Ambient Water Quality Standards and guidance values (for parameters

that do not have standards) were observed for benzene, methylene chloride, antimony, arsenic, barium, beryllium, chromium (total), copper, iron, lead, magnesium, manganese, mercury, sodium, and zinc.

2.8.3 ENGINEERING INVESTIGATION AT INACTIVE HAZARDOUS WASTE SITES – OLD ROCHESTER CITY LANDFILL

Engineering-Science, Inc. was retained by the New York State Department of Environmental Conservation (NYSDEC) to conduct an investigation at the Old Rochester City Landfill over the period of November 1990 through December 1992 in order to determine whether hazardous wastes are present, to determine whether contaminants are present in soils and groundwater, and to determine if any contaminants are migrating and posing a potential threat to human health and the environment (Engineering-Science, Inc., 1992b). Information gathered during this investigation was intended to allow NYSDEC to establish the relative risk posed by the landfill, to reclassify the landfill on the New York State List of Inactive Hazardous Waste Sites, or to remove the landfill from the list, if justified by the findings. Sample locations are presented on Figure 2.5.

An electromagnetic survey was conducted to determine the extent of landfilling, possible contaminant plumes, and buried metallic objects.

Seven soil borings were advanced on the Site (SSSB-1 through SSSB-7). Composite subsurface soil samples were collected from these borings (total of 11 subsurface soil samples) and analyzed for TCL VOCs, TCL SVOCs, TCL pesticides/PCBs, TAL metals, and cyanide, and regulated hazardous metals using the EP Tox analytical method. Exceedances of New York State TAGM #4046 Soil Cleanup Objectives were observed for benzene, ethylbenzene, toluene, xylene (total), total VOCs, benzo(a)anthracene, benzo(a)pyrene, bis(2-ethylhexyl)phthalate, dibenz(a,h)anthracene, di-n-butylphthalate, dieldrin, arsenic, barium, beryllium, cadmium, chromium (total), copper, iron, lead, mercury, nickel, selenium, and zinc.

Four groundwater monitoring wells were installed on the Site (GW-1, GW-3, GW-4, and GW-5). A total of four investigative groundwater samples (as well as one duplicate sample) were collected and analyzed for TCL VOCs, TCL SVOCs, TCL pesticides/PCBs, and TAL metals and cyanide. Exceedances of New York State Ambient Water Quality Standards and guidance values (for parameters that do not have standards) were

observed for benzene, methylene chloride, tetrachloroethene, trichloroethene, endrin, total PCBs, barium, iron, lead, magnesium, manganese, mercury, nickel, sodium, and zinc.

2.8.4 PATTONWOOD TREATMENT PLANT SITE PHASE II ENVIRONMENTAL INVESTIGATION

Passero Associates, P.C. was retained by the Town of Irondequoit to investigate conditions at the Pattonwood Waste Water Treatment Plant over the period of May through August 1994, prior to demolition of the treatment plant (Passero Associates, P.C., 1994a).

Soil/fill samples were collected from five test pits (TP-1 through TP-5) and analyzed using TCLP to determine whether hazardous substances are present as a result of past site activities. No exceedances of USEPA TCLP criteria were observed.

Additional test trenches were excavated and sampled to investigate an area where maintenance workers may have formerly disposed of waste materials (Passero Associates, P.C., 1994b). Four composite soil samples were analyzed for TCLP analysis. No exceedances of USEPA TCLP criteria were observed.

2.8.5 OLD ROCHESTER CITY LANDFILL SAMPLING AND CHARACTERIZATION INVESTIGATION

F-E-S Associates was retained by Mr. Skip Shumway to characterize the portion of the Old Rochester City Landfill on the Shumway Marina property in June 1995 (F-E-S Associates, 1995). Sample locations are presented on Figure 2.6.

Surface soil sampling was conducted by overlaying a two dimensional sampling grid on a portion of the Site with a grid spacing of 100 feet between samples. Sample aliquots were collected, using a hand auger, over the 0- to 2-foot depth interval and typically composited in groups of four. A total of ten surface soil samples were analyzed for all U.S. EPA Priority Pollutants. Of these, nine were reported with location information and one was not. Only the nine samples with associated locations are evaluated herein. Sample locations include A-1, C-1, A-3, C-3; A-5, C-5, A-7, C-7; A-9, C-9, A-11, L-11; A-12, C-12, A-13; E-1, G-1, E-3, G-3; E-5, G-5, E-7, G-7; E-9, G-9, E-11, G-11; E-12, G-12; and H-1, H-3. Exceedances of New York State TAGM #4046 Soil Cleanup Objectives

were observed for benzo(a)anthracene, chrysene, arsenic, beryllium, cadmium, chromium (total), copper, mercury, nickel, and zinc.

Subsurface fill sampling was conducted by advancing nine boreholes using hollow-stem augers (HSA) with split-spoon sampling. One composite subsurface fill sample was formed from a representative sample of all material from sample points 1 through 8. Due to its unique visual appearance, a separate sample was formed from the material obtained at sample point 9. Both samples were analyzed for TCLP parameters. No exceedances of U.S. EPA TCLP criteria were observed.

2.8.6 DETAILED SITE INVESTIGATION REPORT FOR THE HAZARDOUS WASTE/CONTAMINATED MATERIALS ASSESSMENT OF STUTSON STREET BRIDGE

Watts Engineers was retained under a subcontract agreement with Bergmann Associates, P.C. to further delineate the areas of concern in relation to the proposed Stutson Street Bridge alternative in August 1998 for the New York State Department of Transportation (Watts Engineers, 1998). Sample locations are presented on Figure 2.7.

One test pit was excavated within the limits of the Site (STUT-ESB/A-TP-1). One soil sample was collected from this test pit and analyzed for VOCs and SVOCs. No exceedances of New York State TAGM #4046 Soil Cleanup Objectives were observed.

Three soil borings were advanced within the limits of the Site, including STUT-ESB/A-SB-01, STUT-ESB/P3/B, and STUT-ESB/P4/B. One soil sample was collected from soil boring STUT-ESBIA-SB-01 and analyzed for VOCs, SVOCs, and metals. One exceedance of the New York State TAGM #4046 Soil Cleanup Objective for benzo(a)pyrene was observed.

Three groundwater grab samples were collected from locations STUT-ESB/A-SB-01, STUT-ESB/P3/B, and STUT-ESB/P4/B. Groundwater samples were analyzed for lead. Exceedances of the New York State Ambient Water Quality Standard for lead were observed in all three samples.

2.8.7 ENVIRONMENTAL INVESTIGATION, MARINA DRIVE, TOWN OF IRONDEQUOIT

Passero Associates, P.C. was retained by the Town of Irondequoit to conduct an environmental investigation concurrently with the geotechnical investigation for construction of Marina Drive in July and August 1999 (Passero Associates, P.C., 1999). Sample locations are presented on Figure 2.8.

Nine boreholes were advanced within the limits of the Site (B-1 through B-9). Composite samples from boreholes B-4, B-5, B-6, and B-9 and analyzed using TCLP. No exceedances of USEPA TCLP criteria were observed.

2.9 SUMMARY OF EXISTING ENVIRONMENTAL DATA

This section summarizes the data that has been obtained through previous environmental investigations that have been conducted at the Site.

All available historic environmental data for the Site are provided in Appendix C in CRA's Electronic Data Access Tool (e:DAT). e:DAT is CRA's geographical information system (GIS) software program that integrates site maps and environmental monitoring databases with digital photographs, 3-D visualization, boring logs, and monitoring reports. e:DAT is a stand-alone data access tool requiring no additional database or GIS software. Installation instructions for e:DAT are provided on the CD.

2.9.1 PHYSICAL DATA

Approximate delineation of the Old Rochester City Landfill, as reported by Engineering-Science, Inc., is presented on Figure 1.2.

All available stratigraphic logs for boreholes and test pits at the Site are provided in Appendix A.

Based on review of the borehole and test pit stratigraphic logs in Appendix A, the following observations are made:

- waste or refuse material encountered includes cinders, glass, wood, soil, slag, brick, paper, plastic, cloth, asphalt, rubber, sawdust, cinder block, ash, and concrete;

- an oily sheen was observed in several boreholes;
- the thickness of waste/fill ranges from 0 to 26 feet;
- where present the layer of peat was found immediately below waste/fill and ranged from 1 to 3 feet thick; and
- soils found beneath peat (where present) or waste include sands (with some gravel), silts, and clays with clay and silt content generally increasing with depth.

2.9.2 SURFACE SOIL

Locations where surface soil samples have been collected at the Site are presented on Figure 2.9. TCL/TAL surface soil analytical data are provided in Table 2.1. Table 2.1 also provides a comparison of the surface soil analytical data to New York State TAGM #4046 Soil Cleanup Objectives.

Based on review of Table 2.1, the following observations are made:

- one VOC (methylene chloride) was detected;
- detected SVOCs include benzo(a)anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, bis(2-ethylhexyl)phthalate, chrysene, di-n-butylphthalate, fluoranthene, indeno(1,2,3-cd) pyrene, phenanthrene, and pyrene;
- no pesticides were detected;
- one PCB (Aroclor-1260) was detected;
- detected metals include arsenic, beryllium, cadmium, chromium (total), copper, lead, mercury, nickel, silver, and zinc; and
- exceedances of TAGM #4046 Soil Cleanup Objectives were noted for benzo(a)anthracene, chrysene, arsenic, beryllium, cadmium, chromium (total), copper, lead, mercury, nickel, and zinc.

Note that for some metals a Site-specific background valve can be substituted for the New York State TAGM #4046 Soil cleanup Objective, if available.

Exceedances of New York State TAGM #4046 Soil Cleanup Objectives for surface soil are presented on Figure 2.10. Examination of Figure 2.10 reveals that the surface soil within the limits of the Old Rochester City Landfill is impacted with SVOCs and metals and

that the area of the former Stutson Street bridge is impacted with lead. Neither of these impacted areas are delineated.

2.9.3 SUBSURFACE FILL/SOIL

Locations where subsurface fill/soil samples have been collected at the Site are presented on Figure 2.11.

TCL/TAL subsurface fill/soil analytical data are provided in Table 2.2. Table 2.2 also provides a comparison of the subsurface soil/fill analytical data to New York State TAGM #4046 Recommended Soil Cleanup Objectives.

Based on review of Table 2.2, the following observations are made:

- detected VOCs include 2-butanone, acetone, benzene, carbon disulfide, chlorobenzene, ethylbenzene, methylene chloride, tetrachloroethene, toluene, o-xylene, p-xylene, and xylene (total);
- detected SVOCs include 1,2,4-trichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 2,4-dimethylphenol, 2-chloronaphthalene, 2-methylnaphthalene, 3&4-methylphenol, 4-methylphenol, 4-chloroaniline, acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, benzoic acid, bis(2-ethylhexyl)phthalate, butyl benzylphthalate, chrysene, dibenz(a,h)anthracene, dibenzofuran,diethyl phthalate, di-n-butylphthalate, di-n-octyl phthalate, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, phenol, and pyrene;
- detected pesticides include 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, aldrin, and dieldrin;
- detected PCBs include Aroclor-1242 and Aroclor-1254;
- detected metals include aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium (total), cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, vanadium, and zinc; and
- exceedances of New York State TAGM #4046 Recommended Soil Cleanup Objectives were noted for acetone, benzene, ethylbenzene, toluene, xylene (total), total VOCs, 1,2-dichlorobenzene, 4-chloroaniline, 4-methylphenol, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzoic acid, bis(2-ethylhexyl)phthalate, chrysene, dibenz(a,h)anthracene,

dibenzofuran, di-n-butylphthalate, fluoranthene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, phenol, pyrene, total SVOCs, aldrin, dieldrin, arsenic, barium, beryllium, cadmium, chromium (total), copper, iron, lead, mercury, nickel, selenium, and zinc.

Note that for some metals a Site-specific background value can be substituted for the New York State TAGM #4046 Soil Cleanup Objective, if available.

Exceedances of TAGM #4046 Soil Cleanup Objectives for VOCs, SVOCs, Pesticides, and Metals in subsurface fill/soil are presented on Figures 2.12, 2.13, 2.14, 2.15, respectively.

Examination of Figure 2.12 reveals several areas of subsurface soil that is impacted with VOCs. These areas are all within the limits of the Old Rochester City Landfill. Exceedances at locations SB-45, SB-46, and SB-36 are delineated. Exceedances at locations SSSB-3, TP-3, TP-1, SB-23, and SB-22 are not delineated.

Examination of Figure 2.13 reveals that the majority of the Old Rochester City Landfill is impacted with SVOCs. These exceedances are not delineated.

Examination of Figure 2.14 reveals one area impacted with aldrin (delineated) and one area impacted with dieldrin (not delineated).

Examination of Figure 2.15 reveals that the majority of the Old Rochester city Landfill and the area of the former Stutson Street bridge are impacted with metals. These exceedances are not delineated.

TCLP subsurface fill/soil analytical data are provided in Table 2.3. Table 2.3 also provides a comparison of the subsurface fill/soil analytical data to the U.S. EPA TCLP criteria for identifying hazardous waste based on toxicity and indicates exceedances.

Based on review of Table 2.3, the following observations are made:

- one parameter (lead) was detected; and
- no exceedances of TCLP criteria were observed.

EP Tox metals subsurface fill/soil analytical data are provided in Table 2.4. The EP Tox method was the predecessor to current TCLP methods which are used to identify hazardous waste based on toxicity.

Based on review of Table 2.4 the following observations are made:

- detected metals include arsenic, barium, cadmium, chromium (total), lead, mercury, and silver.

2.9.4 GROUNDWATER

Locations where groundwater samples have been collected at the Site are presented on Figure 2.16. TCL/TAL groundwater analytical data are provided in Table 2.4. Table 2.4 also provides a comparison of the groundwater analytical data to New York State Ambient Water Quality Standards and guidance values (for parameters that do not have standards).

Based on review of Table 2.1, the following observations are made:

- detected VOCs include acetone, benzene, chlorobenzene, methylene chloride, tetrachloroethene, trichloroethene, and xylene (total);
- detected SVOCs include benzoic acid and bis(2-ethylhexyl)phthalate;
- one pesticide (endrin) was detected;
- detected PCBs include Aroclor-1254 and Aroclor-1260;
- detected metals include aluminum, antimony, arsenic, barium, beryllium, calcium, chromium (total), cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, vanadium, and zinc; and
- exceedances of New York State Ambient Water Quality Standards and guidance values for groundwater (for parameters that do not have standards) were noted for benzene, methylene chloride, tetrachloroethene, trichloroethene, endrin, total PCBs, antimony, arsenic, barium, beryllium, chromium (total), copper, iron, lead, magnesium, manganese, nickel, sodium, and zinc.

Exceedances of New York State Ambient Water Quality Standards and guidance values (for parameters that do not have standards) are presented on Figure 2.17.

Examination of Figure 2.17 reveals that the majority of the groundwater in the area of the Old Rochester City Landfill is impacted with VOCs, SVOCs, Pesticides, and metals. Groundwater near the eastern portion of the Site (upgradient) appears relatively less

impacted than groundwater in the Central and Western (downgradient) portions of the Site.

Information regarding groundwater sampling methodologies for previous investigations is not sufficient to confirm the adequacy of the methods used. Groundwater samples with elevated turbidity (caused by collecting grab samples from open boreholes and insufficient development and purging of monitoring wells) are likely contributing factors to the elevated metals concentrations discussed above.

3.0 SUMMARY

The locations of all previous soil and groundwater samples are presented on Figure 3.1.

Previous investigations at the Site have provided a significant amount of environmental data for the northern portion of the Site. Given the Site history, this area of the Site is expected to exhibit the most significant environmental impact. The fill material in this area is not delineated. While there are exceedances of TAGM #4046 Soil Cleanup Objectives and New York State Ambient Water Quality Standards and guidance values, a site-specific risk assessment should be conducted based on the intended Site use.

No environmental data are currently available for the southern portion of the Site. According to Engineering-Science, Inc., previous soil sampling in this area indicated the possible presence of VOCs, SVOCs, and metals (Engineering-Science, Inc. 1992a). Given the Site history, this area of the Site is expected to have similar or less environmental impact in comparison to the north portion of the Site. This area, however, has not been characterized or delineated.

4.0 ENVIRONMENTAL DATA GAP ANALYSIS

The purpose of this section is to summarize the data gaps which need to be addressed through a Supplemental Remedial Investigation under the New York state Brownfields Clean-up Program.

Based on review of all available environmental data for the Site, the following environmental data gaps are identified:

1. a detailed Site map and topographic survey is required to provide an appropriate method of tracking Site information;
2. a Site-specific GIS should be maintained to spatially track information;
3. a test trench investigation is required to confirm the limits of waste disposal for the Old Rochester City Landfill;
4. determination of Site-specific background concentrations of metals in soil;
5. additional surface soil and subsurface fill/soil analytical data for the portion of the Site inside the limits of the Old Rochester City landfill are required to delineate constituents detected in historical samples and to determine if dioxins/furans and/or 1,4-dioxane are present;
6. a radiation survey is required to determine radiation levels within the filled areas of the Site;
7. additional surface soil and subsurface fill/soil analytical data from the portion of the Site outside the limits of the Old Rochester City landfill (especially the southern portion of the Site) are required to accurately determine the current nature and extent of potential soil contamination;
8. additional groundwater elevation measurements across the Site over time are required to further define groundwater flow direction;
9. additional groundwater analytical data from across the Site (especially the upgradient and downgradient property boundaries) are required to accurately determine the nature and extent of current potential groundwater contamination; and
10. soil vapor gas probes are required within the Old Rochester City landfill and other fill areas and monitored to determine the presence and characteristics of landfill gas and other soil vapor constituents., if present.

A separate investigation work plan will be prepared to fill the identified data gaps.

5.0 REFERENCES

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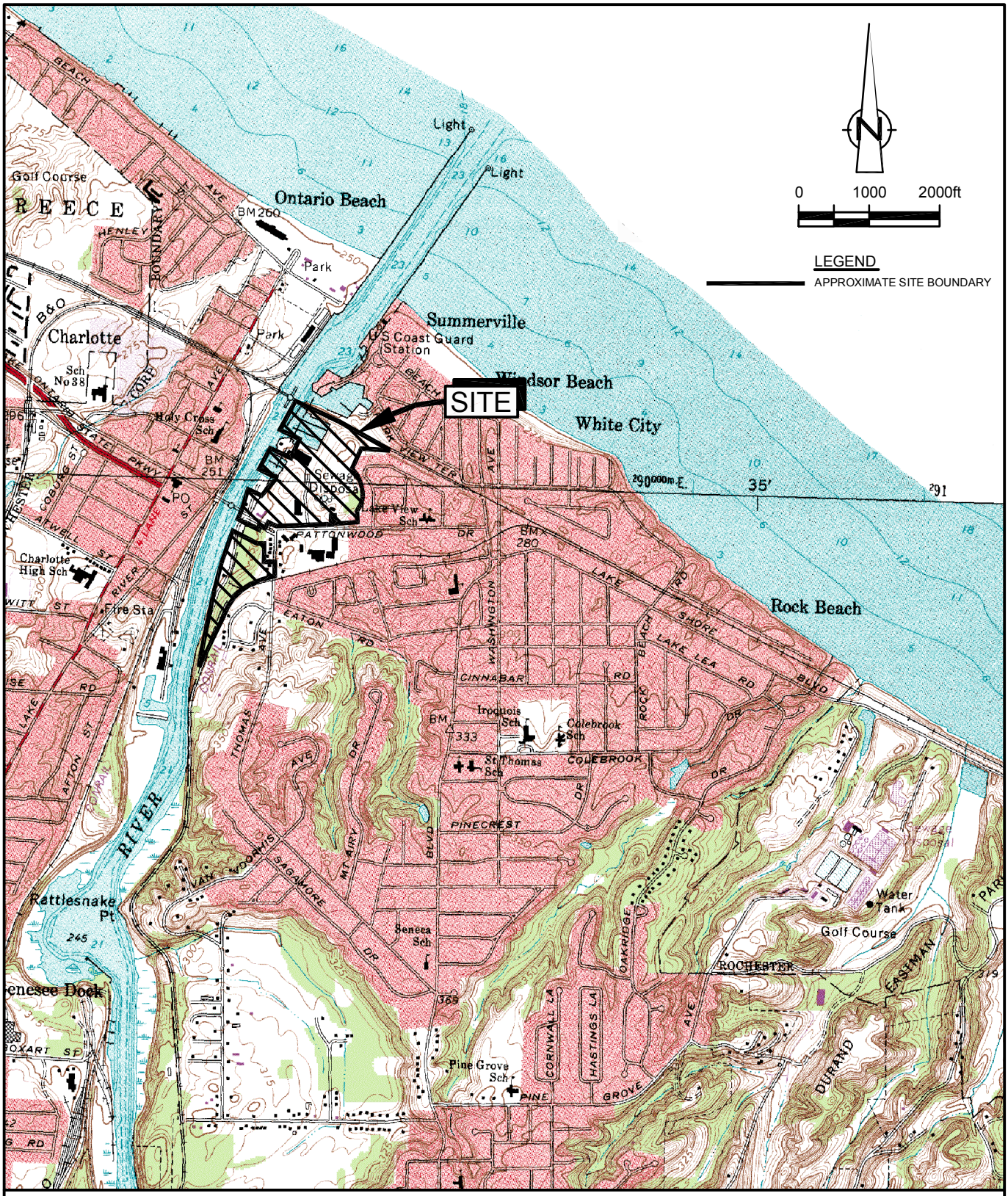
Passero Associates, P.C., August 30, 1994b letter report. Pattonwood Treatment Plant Site Phase II Environmental Investigation – Additional Sampling.

Passero Associates, P.C., July 12, 1994a letter report. Pattonwood Treatment Plant Site Phase II Environmental Investigation.

Watts Engineers, November 1998. Detailed Site Investigation Report for the Hazardous Waste/Contaminated Materials Assessment of Stutson Street Bridge.



SOURCE: USGS QUADRANGLE MAPS:
ROCHESTER EAST, NEW YORK
ROCHESTER WEST, NEW YORK

figure 1.1

SITE LOCATION MAP
WATERFRONT PROPERTY DEVELOPMENT
Rochester, New York

42271-00(002)GN-WA004 AUG 31/2005

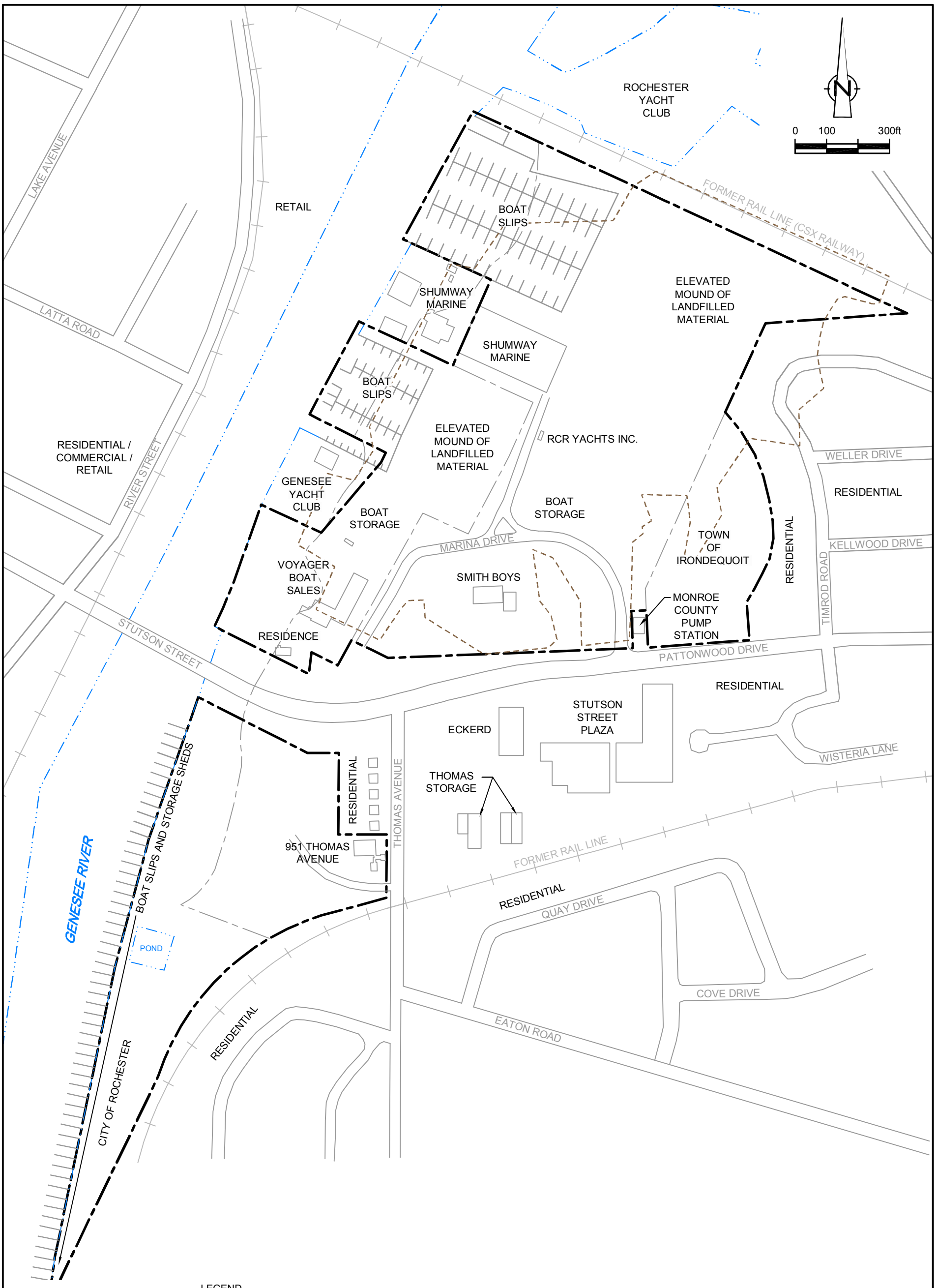


figure 1.2

SITE PLAN
WATERFRONT PROPERTY DEVELOPMENT
Rochester, New York

42271-00(002)GN-WA005 SEP 02/2005

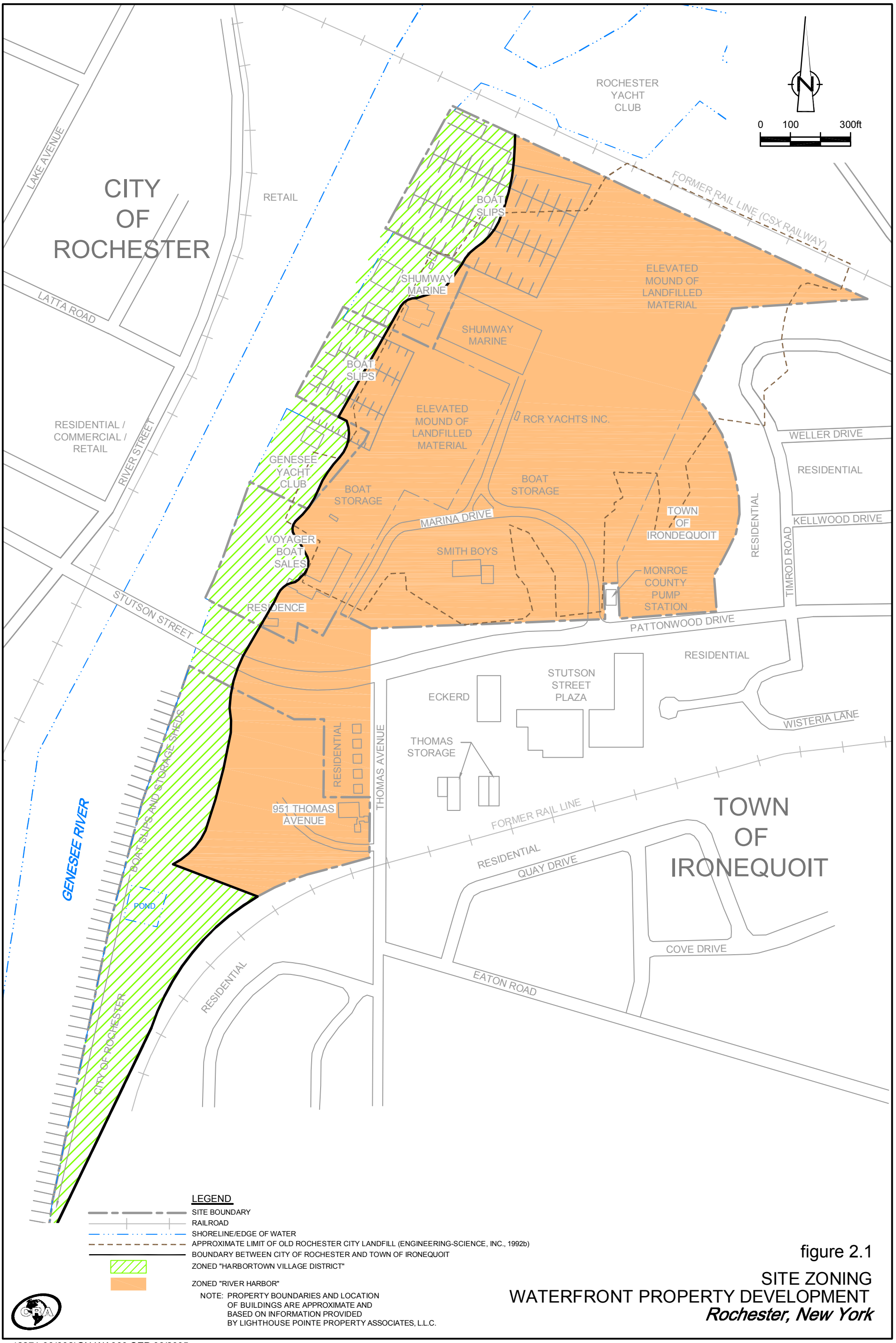
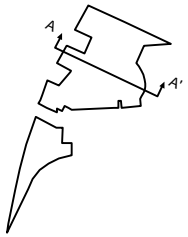


figure 2.1

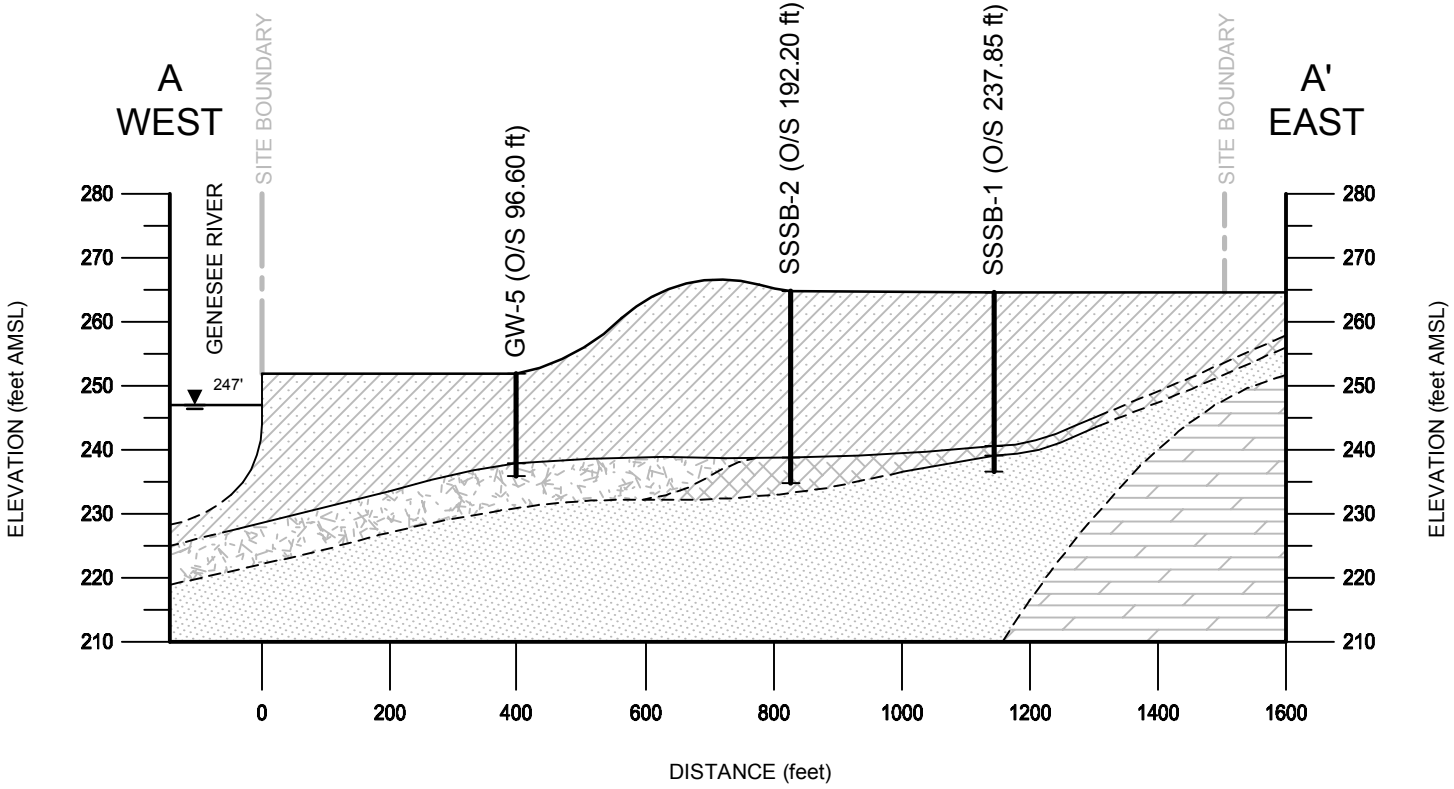
SITE ZONING
WATERFRONT PROPERTY DEVELOPMENT
Rochester, New York

42271-00(002)GN-WA009 SEP 06/2005



KEY PLAN

N.T.S.



LEGEND

- FILL
- PEAT
- GRAY SAND, SILT, AND CLAY
- RED-BROWN CLAY, SILTY SAND, AND GRAVEL
- BEDROCK

GW-5 — WELL DESIGNATION

GROUND SURFACE

OBSERVATION WELL INSTALLATION

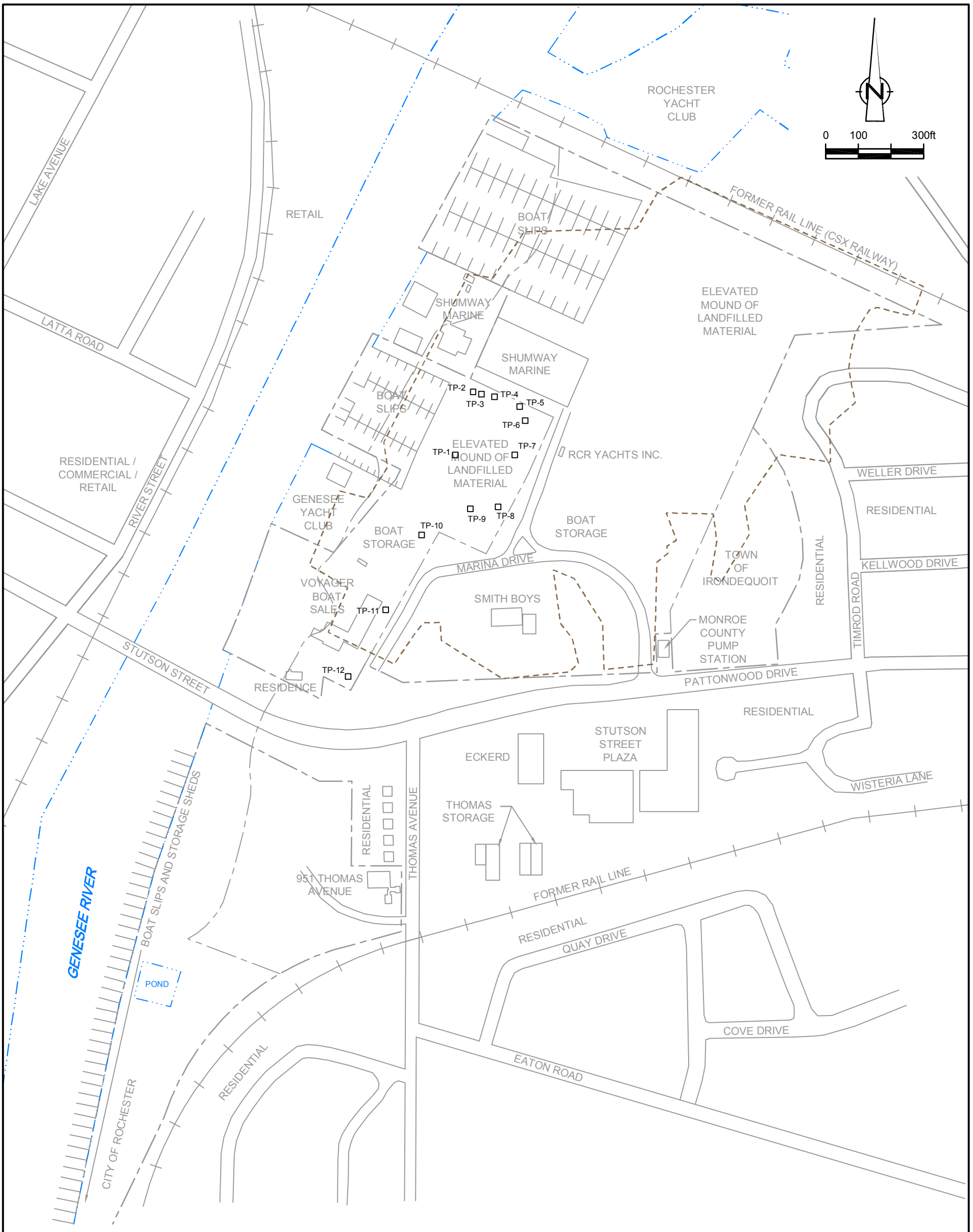
STRATIGRAPHIC BOUNDARY

SCALE: HORZ. 1" = 300'
VERT. 1" = 30'

figure 2.2

SCHEMATIC CROSS -SECTION
WATERFRONT PROPERTY DEVELOPMENT
Rochester, New York

42271-00(002)GN-WA016 SEP 09/2005



LEGEND

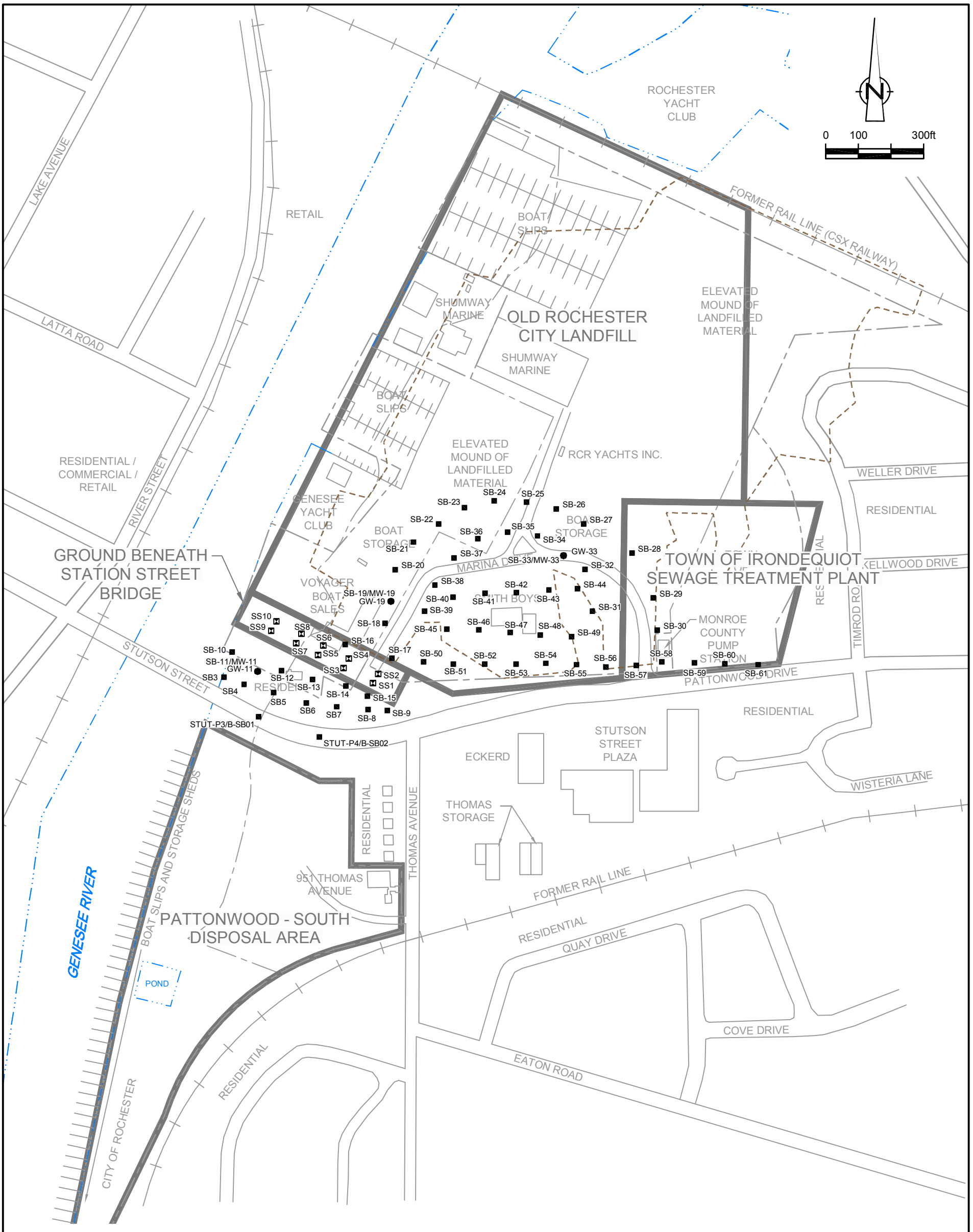
- SITE BOUNDARY
- RAILROAD
- SHORELINE/EDGE OF WATER
- APPROXIMATE LIMIT OF OLD ROCHESTER CITY LANDFILL (ENGINEERING-SCIENCE, INC., 1992b)
- TP12 ☐ TEST PIT LOCATION

figure 2.3

VOYAGER'S BOAT YARD
SOIL AND GROUNDWATER SAMPLING LOCATIONS
WATERFRONT PROPERTY DEVELOPMENT
Rochester, New York

NOTE: PROPERTY BOUNDARIES AND LOCATION OF BUILDINGS ARE APPROXIMATE AND BASED ON INFORMATION PROVIDED BY LIGHTHOUSE POINTE PROPERTY ASSOCIATES, L.L.C.

42271-00(002)GN-WA010 SEP 02/2005



LEGEND

- SITE BOUNDARY
- RAILROAD
- SHORELINE/EDGE OF WATER
- APPROXIMATE LIMIT OF OLD ROCHESTER CITY LANDFILL (ENGINEERING-SCIENCE, INC., 1992b)
- APPROXIMATE LIMIT OF AREA OF CONCERN (ENGINEERING-SCIENCE, INC., 1992a)
- SB3 — SOIL BORING LOCATION
- SS1 — SURFACE SOIL SAMPLING LOCATION
- GW-1 — MONITORING WELL LOCATION

NOTE: PROPERTY BOUNDARIES AND LOCATION OF BUILDINGS ARE APPROXIMATE AND BASED ON INFORMATION PROVIDED BY LIGHTHOUSE POINTE PROPERTY ASSOCIATES, L.L.C.

figure 2.4

HAZARDOUS WASTE ASSESSMENT STUTSON STREET BRIDGE PROJECT SAMPLING LOCATIONS WATERFRONT PROPERTY DEVELOPMENT

Rochester, New York

42271-00(002)GN-WA011 SEP 02/2005

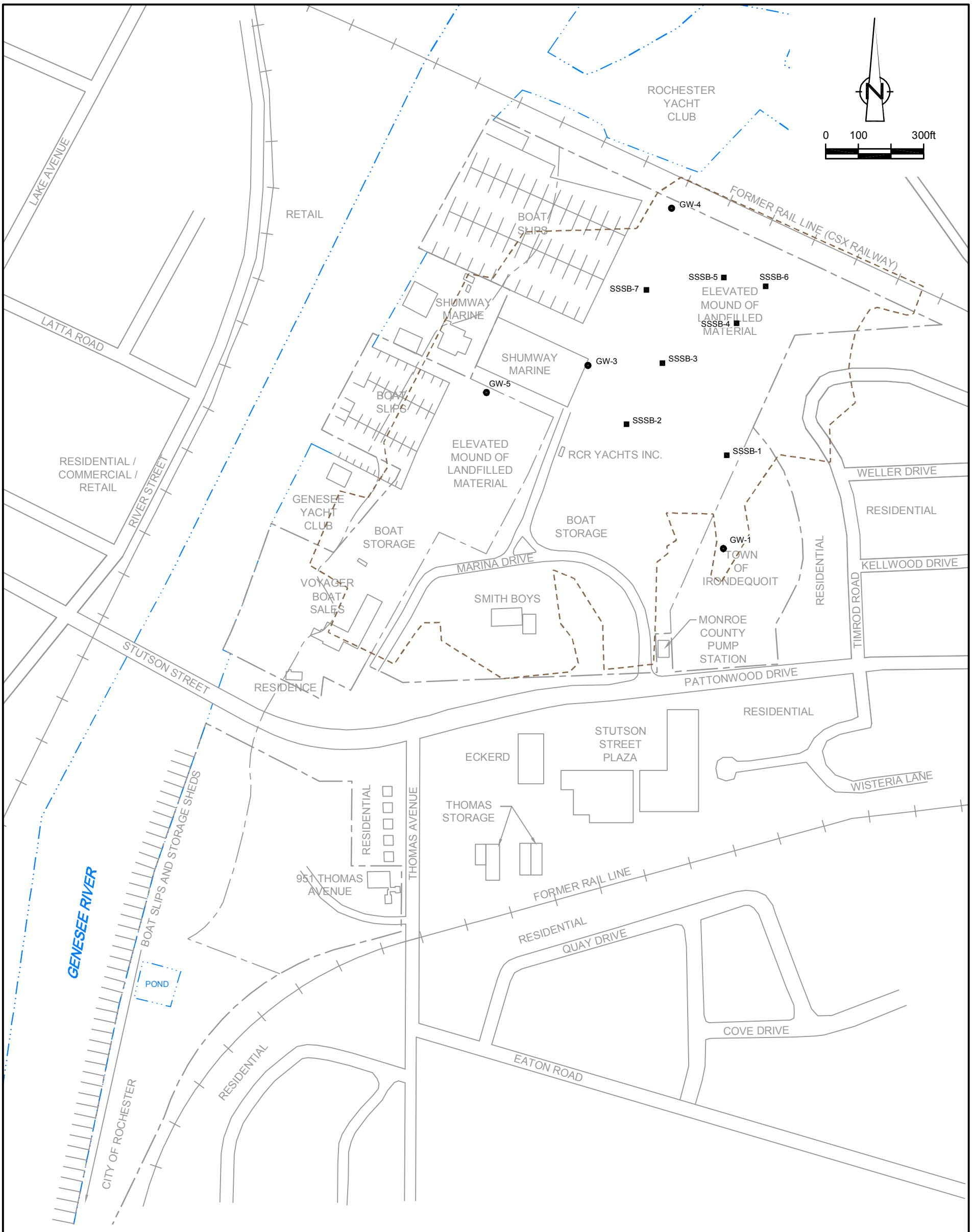
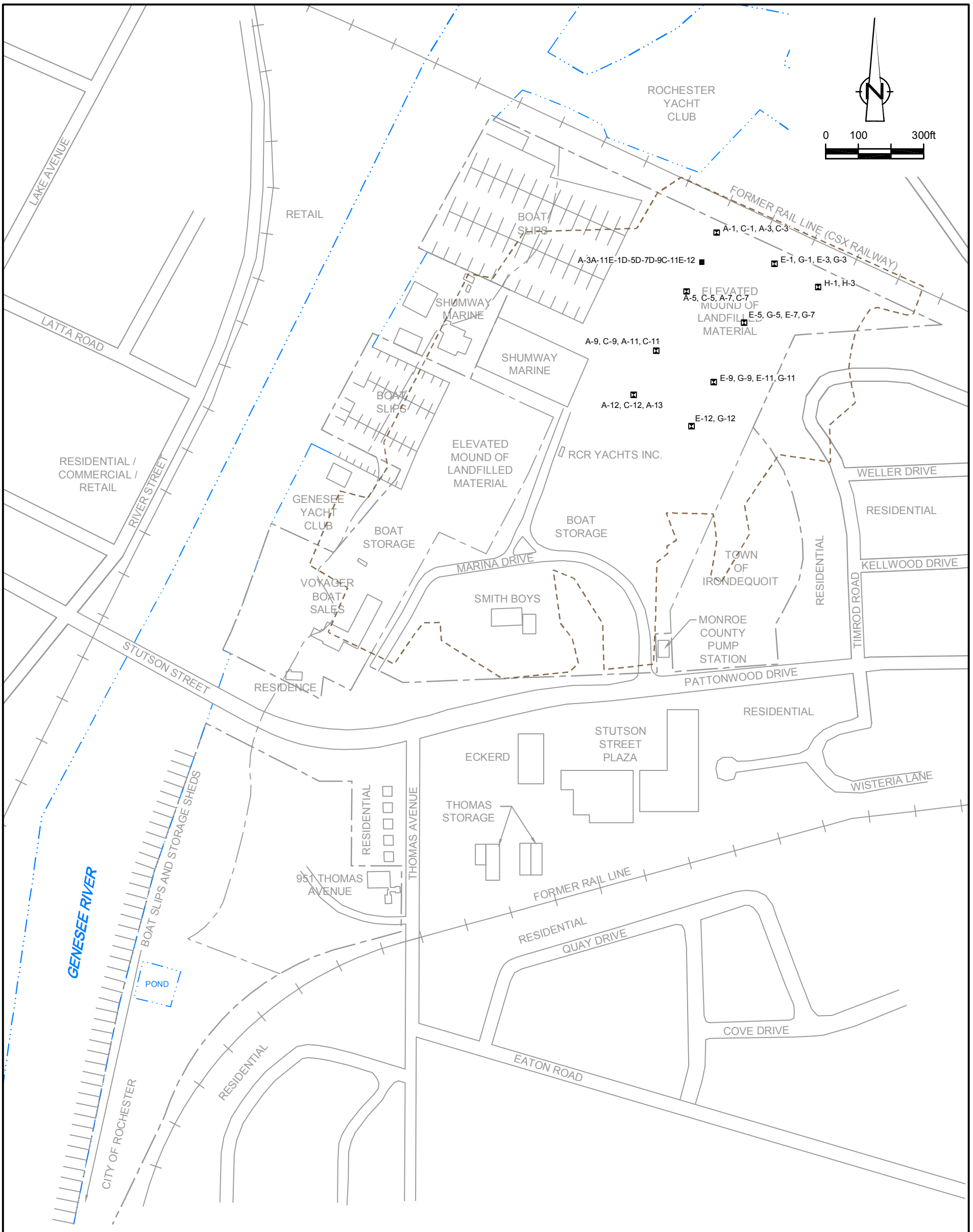


figure 2.5

ENGINEERING INVESTIGATION AT INACTIVE HAZARDOUS WASTE SITES - OLD ROCHESTER CITY LANDFILL SAMPLING LOCATIONS WATERFRONT PROPERTY DEVELOPMENT

Rochester, New York

NOTE: PROPERTY BOUNDARIES AND LOCATION OF BUILDINGS ARE APPROXIMATE AND BASED ON INFORMATION PROVIDED BY LIGHTHOUSE POINTE PROPERTY ASSOCIATES, L.L.C.



LEGEND

- SITE BOUNDARY
- RAILROAD
- SHORELINE/EDGE OF WATER
- APPROXIMATE LIMIT OF OLD ROCHESTER CITY LANDFILL (ENGINEERING-SCIENCE, INC., 1992b)
- SB3 ■ SOIL BORING LOCATION
- SS1 ⊠ SURFACE SOIL SAMPLING LOCATION

figure 2.6

OLD ROCHESTER CITY LANDFILL SAMPLING AND CHARACTERIZATION INVESTIGATION SAMPLING LOCATIONS WATERFRONT PROPERTY DEVELOPMENT

Rochester, New York

NOTE: PROPERTY BOUNDARIES AND LOCATION OF BUILDINGS ARE APPROXIMATE AND BASED ON INFORMATION PROVIDED BY LIGHTHOUSE POINTE PROPERTY ASSOCIATES, L.L.C.

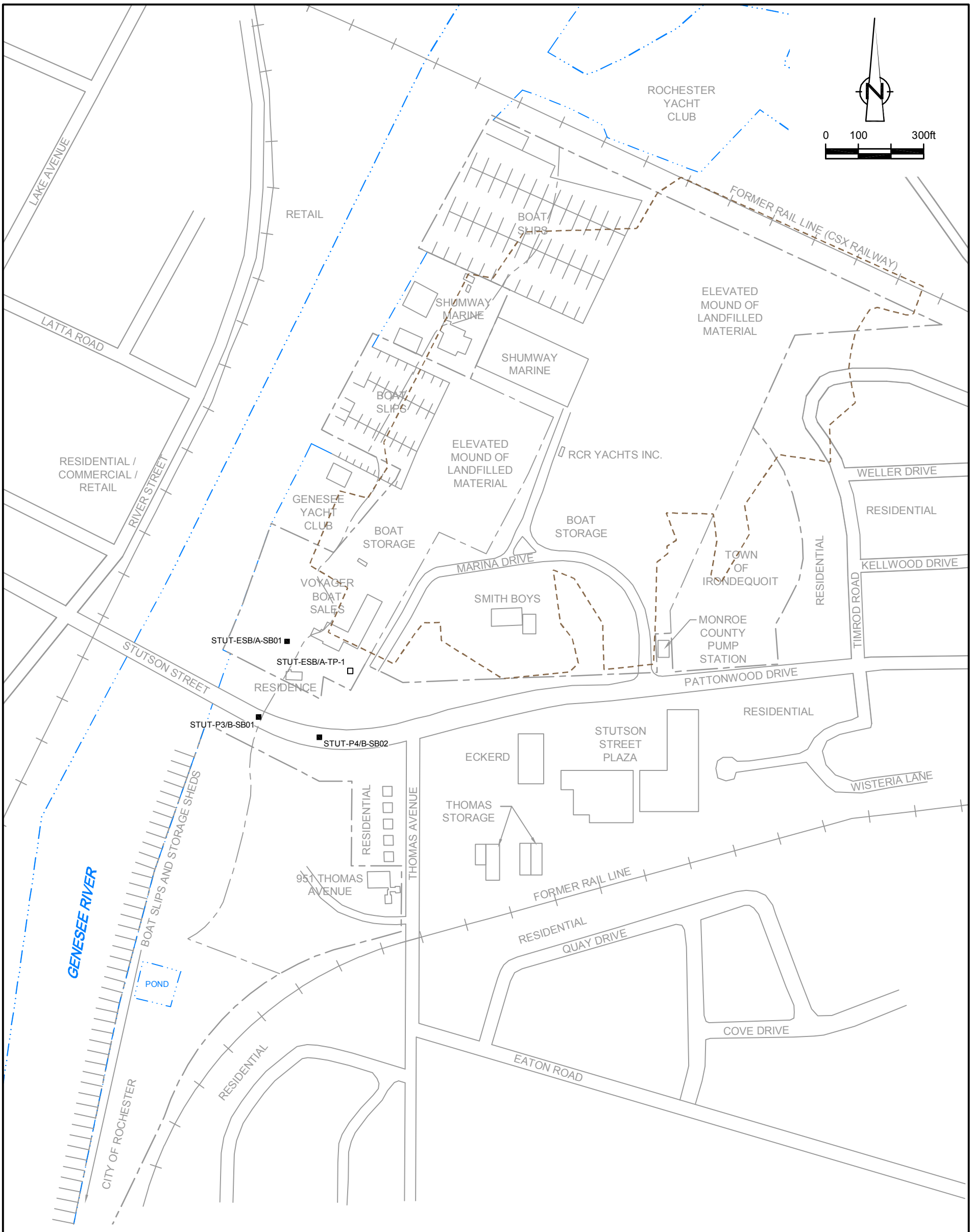
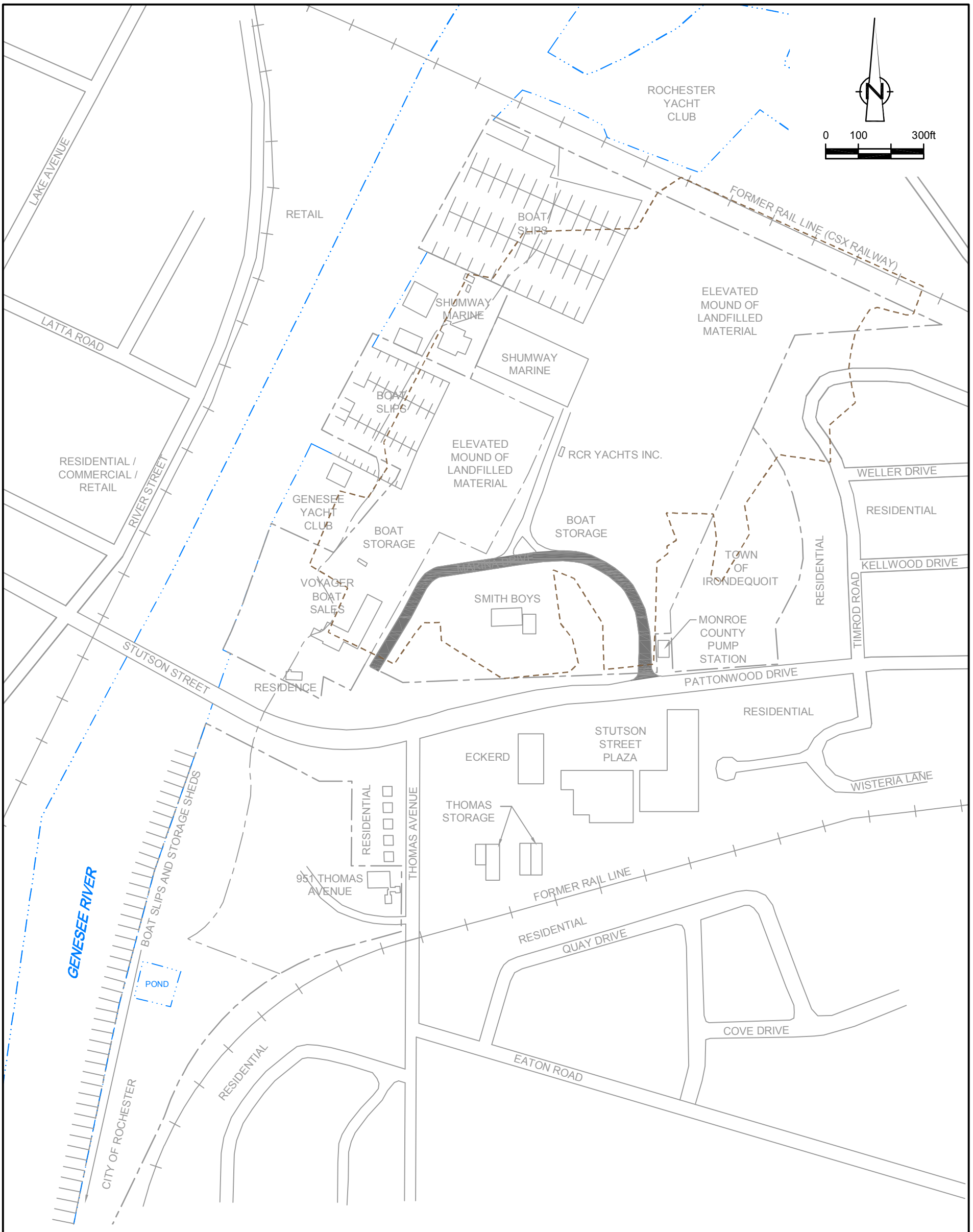


figure 2.7

DETAILED SITE INVESTIGATION REPORT FOR THE HAZARDOUS WASTE / CONTAMINATED MATERIALS ASSESSMENT OF STUTSON STREET BRIDGE SAMPLING LOCATIONS WATERFRONT PROPERTY DEVELOPMENT

Rochester, New York

NOTE: PROPERTY BOUNDARIES AND LOCATION OF BUILDINGS ARE APPROXIMATE AND BASED ON INFORMATION PROVIDED BY LIGHTHOUSE POINTE PROPERTY ASSOCIATES, L.L.C.



LEGEND

- SITE BOUNDARY
- RAILROAD
- SHORELINE/EDGE OF WATER
- APPROXIMATE LIMIT OF OLD ROCHESTER CITY LANDFILL (ENGINEERING-SCIENCE, INC., 1992b)
- APPROXIMATE LOCATION OF SOIL BORINGS B1 THROUGH B9

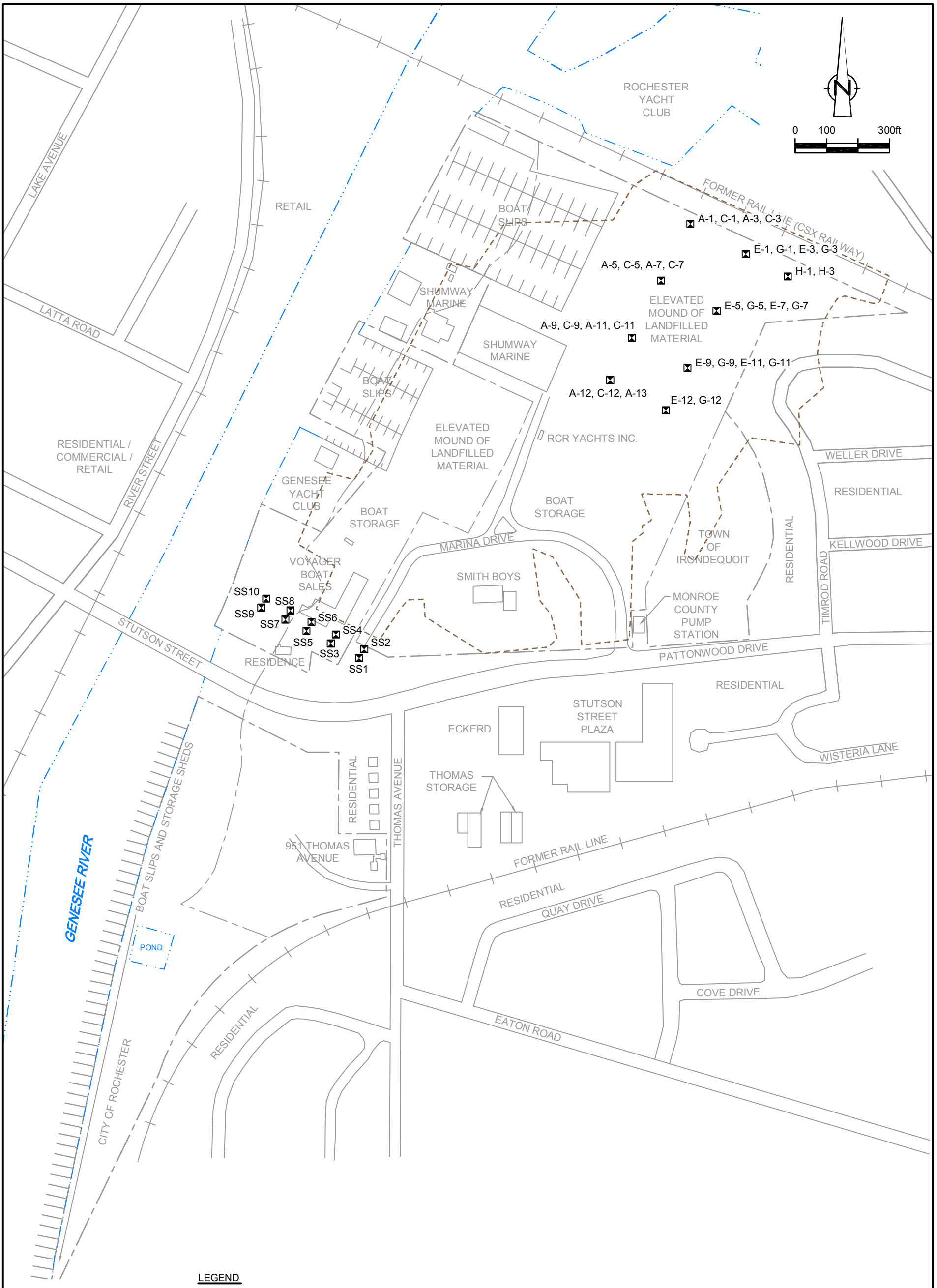
figure 2.8

ENVIRONMENTAL INVESTIGATION, MARINA DRIVE, TOWN OF IRONDEQUIT SAMPLING LOCATIONS WATERFRONT PROPERTY DEVELOPMENT

Rochester, New York

NOTE: PROPERTY BOUNDARIES AND LOCATION OF BUILDINGS ARE APPROXIMATE AND BASED ON INFORMATION PROVIDED BY LIGHTHOUSE POINTE PROPERTY ASSOCIATES, L.L.C.

42271-00(002)GN-WA015 SEP 02/2005



LEGEND

- SITE BOUNDARY
- RAILROAD
- SHORELINE/EDGE OF WATER
- APPROXIMATE LIMIT OF OLD ROCHESTER CITY LANDFILL (ENGINEERING-SCIENCE, INC., 1992b)
- SS1 ⊠ SURFACE SOIL SAMPLING LOCATION

NOTE: PROPERTY BOUNDARIES AND LOCATION OF BUILDINGS ARE APPROXIMATE AND BASED ON INFORMATION PROVIDED BY LIGHTHOUSE POINTE PROPERTY ASSOCIATES, L.L.C.

figure 2.9

SURFACE SOIL SAMPLING LOCATIONS
WATERFRONT PROPERTY DEVELOPMENT
Rochester, New York

A-12- C-12- A-13	6/15/95
SVOCs	
Benzo(a)anthracene	0.63 (a)
Chrysene	0.75 (ab)
Metals	
Arsenic	6.35
Beryllium	1.02 (a)
Cadmium	2.22 (a)
Chromium Total	24.9 (a)
Copper	252 (a)
Lead	672 (a)
Mercury	1.59 (a)
Nickel	24.0 (a)
Zinc	371 (a)

A-9- C-9- A-11- C-11	6/15/95
SVOCs	
Benzo(a)anthracene	0.51 (a)
Chrysene	0.51 (ab)
Metals	
Arsenic	6.61
Beryllium	1.58 (a)
Cadmium	ND (1.00)
Chromium Total	21.4 (a)
Copper	38.3 (a)
Lead	86.2
Mercury	0.24 (a)
Nickel	22.5 (a)
Zinc	131 (a)

A-5- C-5- A-7- C-7	6/15/95
SVOCs	
Benzo(a)anthracene	ND (0.4)
Chrysene	ND (0.4)
Metals	
Arsenic	5.10
Beryllium	1.53 (a)
Cadmium	4.31 (a)
Chromium Total	21.3 (a)
Copper	38.9 (a)
Lead	87.9
Mercury	0.22 (a)
Nickel	20.0 (a)
Zinc	146 (a)

A-1- C-1- A-3- C-3	6/15/95
SVOCs	
Benzo(a)anthracene	ND (0.4)
Chrysene	ND (0.4)
Metals	
Arsenic	3.93
Beryllium	1.62 (a)
Cadmium	2.15 (a)
Chromium Total	22.5 (a)
Copper	54.4 (a)
Lead	85.8
Mercury	0.56 (a)
Nickel	24.4 (a)
Zinc	130 (a)

E-1- G-1- E-3- G-3	6/15/95
SVOCs	
Benzo(a)anthracene	ND (0.36)
Chrysene	ND (0.36)
Metals	
Arsenic	5.29
Beryllium	1.61 (a)
Cadmium	3.40 (a)
Chromium Total	20.8 (a)
Copper	29.2 (a)
Lead	132
Mercury	0.14 (a)
Nickel	22.4 (a)
Zinc	122 (a)

E-12- G-12	6/15/95
SVOCs	
Benzo(a)anthracene	ND (0.4)
Chrysene	ND (0.4)
Metals	
Arsenic	4.37
Beryllium	1.38 (a)
Cadmium	1.76 (a)
Chromium Total	19.6 (a)
Copper	25.5 (a)
Lead	48.4
Mercury	0.07
Nickel	22.6 (a)
Zinc	78.9 (a)

H-1- H-3	6/15/95
SVOCs	
Benzo(a)anthracene	0.44 (a)
Chrysene	0.59 (ab)
Metals	
Arsenic	8.66 (a)
Beryllium	0.89 (a)
Cadmium	3.92 (a)
Chromium Total	30.5 (a)
Copper	46.1 (a)
Lead	71.2
Mercury	0.38 (a)
Nickel	25.3 (a)
Zinc	179 (a)

E-5- G-5- E-7- G-7	6/15/95
SVOCs	
Benzo(a)anthracene	ND (0.41)
Chrysene	ND (0.41)
Metals	
Arsenic	4.45
Beryllium	1.75 (a)
Cadmium	1.88 (a)
Chromium Total	21.2 (a)
Copper	28.8 (a)
Lead	62.2
Mercury	0.12 (a)
Nickel	22.0 (a)
Zinc	86.3 (a)

E-9- G-9- E-11- G-11	6/15/95
SVOCs	
Benzo(a)anthracene	ND (0.4)
Chrysene	ND (0.4)
Metals	
Arsenic	4.51
Beryllium	1.77 (a)
Cadmium	ND (0.99)
Chromium Total	20.3 (a)
Copper	30.9 (a)
Lead	85.6
Mercury	0.12 (a)
Nickel	20.6 (a)
Zinc	90.0 (a)

SS10	11/1/91
Metals	
Lead	264

SS8	11/1/91
Metals	
Lead	633 (a)

SS9	11/1/91
Metals	
Lead	568 (a)

SS6	11/1/91
Metals	
Lead	1240 (a)

SS2	11/1/91
Metals	
Lead	2860 (a)

SS7	11/1/91
Metals	
Lead	546 (a)

SS3	11/1/91
Metals	
Lead	233

SS5	11/1/91
Metals	
Lead	3320 (a)

SS4	11/1/91
Metals	
Lead	2080 (a)

SS1	11/1/91
Metals	
Lead	1070 (a)

Parameter	TAGM #4046 Recommended Soil Cleanup Objectives (A) (mg/kg)	TAGM #4046 Recommended Soil Cleanup Objectives to Protect Groundwater Quality(1) (B) (mg/kg)
SVOAs		
Benzo(a)anthracene	0.224	3
Chrysene	0.4	0.4
Metals		
Arsenic	7.5(3)	
Beryllium	0.16(3)	
Cadmium	1(3)	
Chromium Total	10(3)	
Copper	25(3)	
Lead	500(4)	
Mercury	0.1	
Nickel	13(3)	
Zinc	20(3)	

NOTES:
1. Correction factor (CF) of 100 is used per TAGM #4046.
3. Criterion is listed value or site background.
4. Criterion is site background. Value listed is upper limit of typical background range listed in TAGM #4046 for metropolitan or suburban areas or near highways.

LEGEND
- SITE BOUNDARY
- RAILROAD
- SHORELINE/EDGE OF WATER
- APPROXIMATE LIMIT OF OLD ROCHESTER CITY LANDFILL (ENGINEERING-SCIENCE, INC., 1992b)
- SS1 — SURFACE SOIL SAMPLING LOCATION
- SAMPLE LOCATION
- SS4 | 11/1/91 — SAMPLE DATE
- Metals / Lead | 2080 {A} — CONCENTRATION (mg/kg)
- PARAMETER
- EXCEEDANCE

NOTE: PROPERTY BOUNDARIES AND LOCATION OF BUILDINGS ARE APPROXIMATE AND BASED ON INFORMATION PROVIDED BY LIGHTHOUSE POINTE PROPERTY ASSOCIATES, L.L.C.

figure 2.10

SURFACE SOIL TAGM #4046 EXCEEDANCES
WATERFRONT PROPERTY DEVELOPMENT
Rochester, New York

42271-00(002)GN-WA006 SEP 09/2005

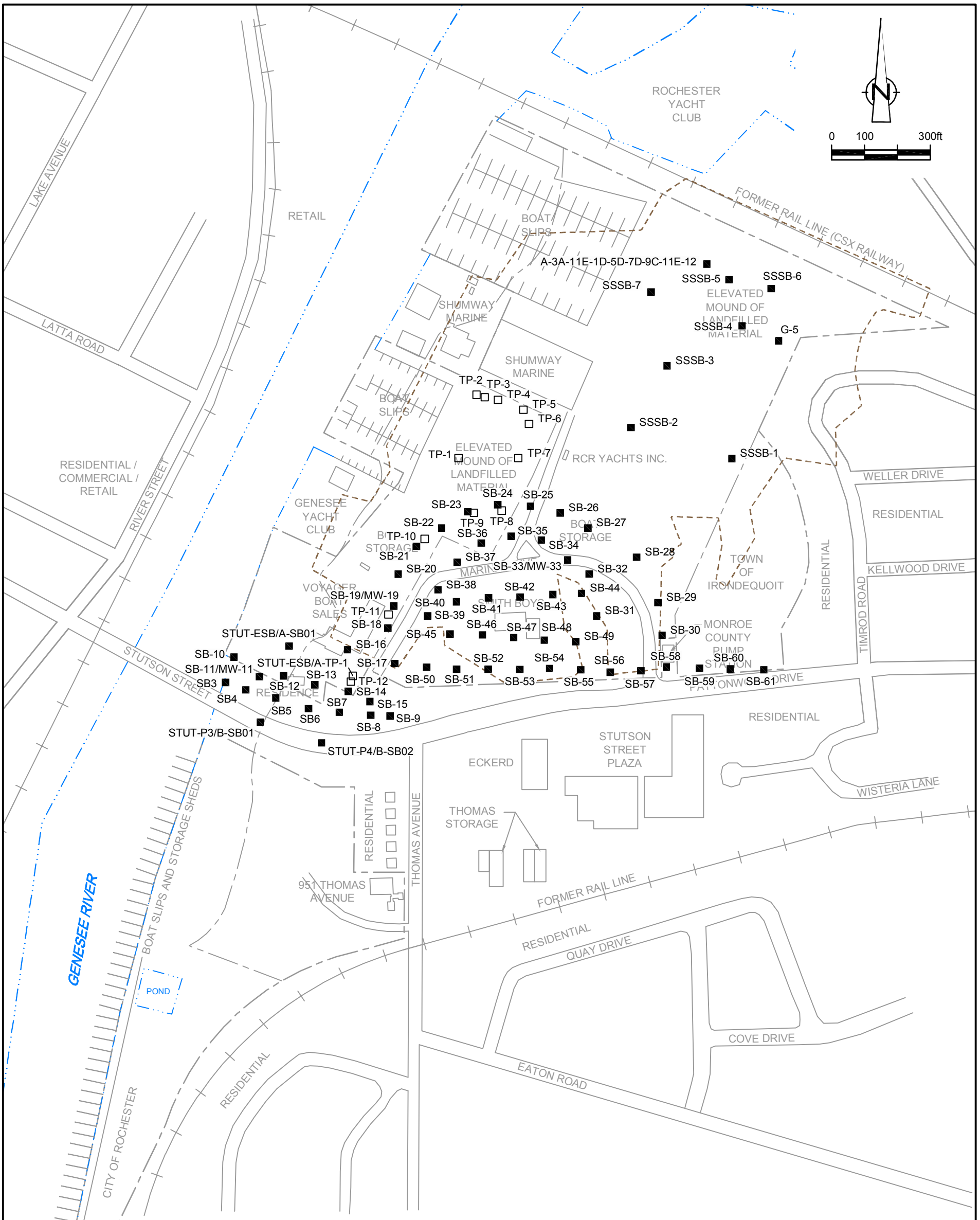
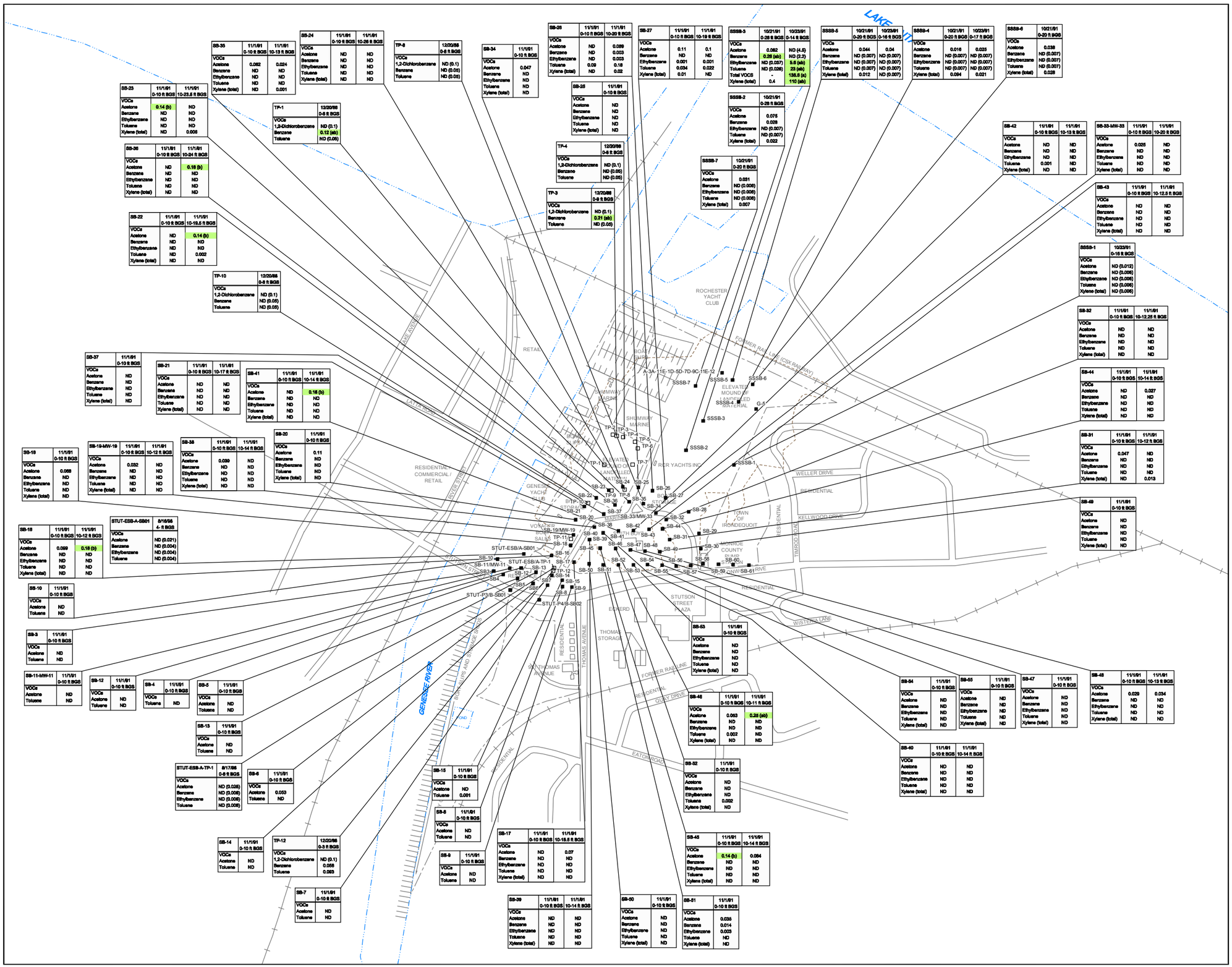


figure 2.11

SUBSURFACE FILL/SOIL SAMPLING LOCATIONS
WATERFRONT PROPERTY DEVELOPMENT
Rochester, New York



SB-23	11/1/91	11/1/91
	0-10 ft BGS	10-23.5 ft BGS
VOCs		
Acetone	0.14 (b)	ND
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	0.005

SB-35	11/1/91	11/1/91
	0-10 ft BGS	10-13 ft BGS
VOCs		
Acetone	0.062	0.024
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	0.001

SB-24	11/1/91	11/1/91
	0-10 ft BGS	10-26 ft BGS
VOCs		
Acetone	ND	ND
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	ND

TP-8	12/20/88
	0-8 ft BGS
VOCs	
1,2-Dichlorobenzene	ND (0.1)
Benzene	ND (0.05)
Toluene	ND (0.05)

SB-34	11/1/91
	0-10 ft BGS
VOCs	
Acetone	0.047
Benzene	ND
Ethylbenzene	ND
Toluene	ND
Xylene (total)	ND

SB-26	11/1/91	11/1/91
	0-10 ft BGS	10-20 ft BGS
VOCs		
Acetone	ND	0.089
Benzene	ND	0.003
Ethylbenzene	ND	0.003
Toluene	0.09	0.18
Xylene (total)	ND	0.02

SB-27	11/1/91	11/1/91
	0-10 ft BGS	10-19 ft BGS
VOCs		
Acetone	0.11	0.1
Benzene	ND	ND
Ethylbenzene	0.001	0.001
Toluene	0.034	0.022
Xylene (total)	0.01	ND

SSSB-3	10/21/91	10/23/91
	0-28 ft BGS	0-14 ft BGS
VOCs		
Acetone	0.082	ND (4.5)
Benzene	0.28 (eb)	ND (2.2)
Ethylbenzene	ND (0.037)	5.6 (eb)
Toluene	ND (0.026)	23 (eb)
Total VOCS	-	138.8 (a)
Xylene (total)	0.4	110 (eb)

SSSB-5	10/21/91	10/23/91
	0-20 ft BGS	0-16 ft BGS
VOCs		
Acetone	0.044	0.04
Benzene	ND (0.007)	ND (0.007)
Ethylbenzene	ND (0.007)	ND (0.007)
Toluene	ND (0.007)	ND (0.007)
Xylene (total)	0.012	ND (0.007)

SSSB-4	10/21/91	10/23/91
	0-20 ft BGS	0-17 ft BGS
VOCs		
Acetone	0.016	0.025
Benzene	ND (0.007)	ND (0.007)
Ethylbenzene	ND (0.007)	ND (0.007)
Toluene	ND (0.007)	ND (0.007)
Xylene (total)	0.094	0.021

SSSB-6	10/21/91
	0-20 ft BGS
VOCs	
Acetone	0.038
Benzene	ND (0.007)
Ethylbenzene	ND (0.007)
Toluene	ND (0.007)
Xylene (total)	0.028

SB-1	11/1/91	11/1/91
	0-10 ft BGS	10-24 ft BGS
VOCs		
Acetone	ND	0.18 (b)
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	ND

TP-1	12/20/88
	0-8 ft BGS
VOCs	
1,2-Dichlorobenzene	ND (0.1)
Benzene	0.12 (eb)
Toluene	ND (0.05)

SSSB-2	10/21/91
	0-28 ft BGS
VOCs	
Acetone	0.075
Benzene	0.028
Ethylbenzene	ND (0.007)
Toluene	ND (0.007)
Xylene (total)	0.022

SB-42	11/1/91	11/1/91
	0-10 ft BGS	10-13 ft BGS
VOCs		
Acetone	ND	ND
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	0.001	ND
Xylene (total)	ND	ND

SB-33-MW-33	11/1/91	11/1/91
	0-10 ft BGS	10-20 ft BGS
VOCs		
Acetone	0.025	ND
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	ND

SB-2	11/1/91	11/1/91
	0-10 ft BGS	10-19.5 ft BGS
VOCs		
Acetone	ND	0.14 (b)
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	0.002
Xylene (total)	ND	ND

TP-4	12/20/88
	0-8 ft BGS
VOCs	
1,2-Dichlorobenzene	ND (0.1)
Benzene	ND (0.05)
Toluene	ND (0.05)

SSSB-7	10/21/91
	0-20 ft BGS
VOCs	
Acetone	0.031
Benzene	ND (0.008)
Ethylbenzene	ND (0.008)
Toluene	ND (0.008)
Xylene (total)	0.007

SB-43	11/1/91	11/1/91
	0-10 ft BGS	10-12.5 ft BGS
VOCs		
Acetone	ND	ND
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	ND

TP-3	12/20/88
	0-8 ft BGS
VOCs	
1,2-Dichlorobenzene	ND (0.1)
Benzene	0.21 (eb)
Toluene	ND (0.05)

SSSB-1	10/23/91
	0-15 ft BGS
VOCs	
Acetone	ND (0.012)
Benzene	ND (0.006)
Ethylbenzene	ND (0.006)
Toluene	ND (0.006)
Xylene (total)	ND (0.006)

TP-10	12/20/88
	0-8 ft BGS
VOCs	
1,2-Dichlorobenzene	ND (0.1)
Benzene	ND (0.05)
Toluene	ND (0.05)

SB-32	11/1/91	11/1/91
	0-10 ft BGS	10-12.25 ft BGS
VOCs		
Acetone	ND	ND
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	ND

SB-37	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Benzene	ND
Ethylbenzene	ND
Toluene	ND
Xylene (total)	ND

SB-21	11/1/91	11/1/91
	0-10 ft BGS	10-17 ft BGS
VOCs		
Acetone	ND	ND
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	ND

SB-41	11/1/91	11/1/91
	0-10 ft BGS	10-14 ft BGS
VOCs		
Acetone	ND	0.18 (b)
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	ND

SB-44	11/1/91	11/1/91
	0-10 ft BGS	10-14 ft BGS
VOCs		
Acetone	ND	0.027
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	ND

SB-20	11/1/91
	0-10 ft BGS
VOCs	
Acetone	0.11
Benzene	ND
Ethylbenzene	ND
Toluene	ND
Xylene (total)	ND

SB-31	11/1/91	11/1/91
	0-10 ft BGS	10-12 ft BGS
VOCs		
Acetone	0.047	ND
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	0.013

SB-18	11/1/91
	0-10 ft BGS
VOCs	
Acetone	0.059
Benzene	ND
Ethylbenzene	ND
Toluene	ND
Xylene (total)	ND

SB-19-MW-19	11/1/91	11/1/91
	0-10 ft BGS	10-12 ft BGS
VOCs		
Acetone	0.032	ND
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	ND

SB-38	11/1/91	11/1/91
	0-10 ft BGS	10-14 ft BGS
VOCs		
Acetone	0.039	ND
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	ND

SB-49	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Benzene	ND
Ethylbenzene	ND
Toluene	ND
Xylene (total)	ND

SB-16	11/1/91	11/1/91
	0-10 ft BGS	10-12 ft BGS
VOCs		
Acetone	0.099	0.18 (b)
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	ND

STUT-ESB-A-SB01	8/16/96
	4- ft BGS
VOCs	
Acetone	ND (0.021)
Benzene	ND (0.004)
Ethylbenzene	ND (0.004)
Toluene	ND (0.004)

SB-10	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Toluene	ND

SB-3	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Toluene	ND

SB-11-MW-11	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Toluene	ND

SB-12	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Toluene	ND

SB-4	11/1/91
	0-10 ft BGS
VOCs	
Toluene	ND

SB-5	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Toluene	ND

SB-13	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Toluene	ND

STUT-ESB-A-TP-1	8/17/96
	0-8 ft BGS
VOCs	
Acetone	ND (0.026)
Benzene	ND (0.006)
Ethylbenzene	ND (0.006)
Toluene	ND (0.006)

SB-6	11/1/91
	0-10 ft BGS
VOCs	
Acetone	0.053
Toluene	ND

SB-15	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Toluene	0.001

SB-8	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Toluene	ND

SB-14	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Toluene	ND

TP-12	12/20/88
	0-3 ft BGS
VOCs	
1,2-Dichlorobenzene	ND (0.1)
Benzene	0.058
Toluene	0.063

SB-9	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Toluene	ND

SB-7	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Toluene	ND

SB-17	11/1/91	11/1/91
	0-10 ft BGS	10-15.5 ft BGS
VOCs		
Acetone	ND	0.07
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	ND

SB-39	11/1/91	11/1/91
	0-10 ft BGS	10-14 ft BGS
VOCs		
Acetone	ND	ND
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	ND

SB-50	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Benzene	ND
Ethylbenzene	ND
Toluene	ND
Xylene (total)	ND

SB-51	11/1/91
	0-10 ft BGS
VOCs	
Acetone	0.035
Benzene	0.014
Ethylbenzene	0.003
Toluene	ND
Xylene (total)	ND

SB-53	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Benzene	ND
Ethylbenzene	ND
Toluene	ND
Xylene (total)	ND

SB-46	11/1/91	11/1/91
	0-10 ft BGS	10-11 ft BGS
VOCs		
Acetone	0.053	0.25 (eb)
Benzene	ND	ND
Ethylbenzene	ND	ND
Tpluene	0.002	ND
Xylene (total)	ND	ND

SB-52	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Benzene	ND
Ethylbenzene	ND
Toluene	0.002
Xylene (total)	ND

SB-45	11/1/91	11/1/91
	0-10 ft BGS	10-14 ft BGS
VOCs		
Acetone	0.14 (b)	0.064
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	ND

SB-54	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Benzene	ND
Ethylbenzene	ND
Toluene	ND
Xylene (total)	ND

SB-55	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Benzene	ND
Ethylbenzene	ND
Toluene	ND
Xylene (total)	ND

SB-47	11/1/91
	0-10 ft BGS
VOCs	
Acetone	ND
Benzene	ND
Ethylbenzene	ND
Toluene	ND
Xylene (total)	ND

SB-48	11/1/91	11/1/91
	0-10 ft BGS	10-13 ft BGS
VOCs		
Acetone	0.029	0.034
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	ND

SB-40	11/1/91	11/1/91
	0-10 ft BGS	10-14 ft BGS
VOCs		
Acetone	ND	ND
Benzene	ND	ND
Ethylbenzene	ND	ND
Toluene	ND	ND
Xylene (total)	ND	ND

N

0 100 300ft

LEGEND

- SITE BOUNDARY
- RAILROAD
- SHORELINE/EDGE OF WATER
- APPROXIMATE LIMIT OF OLD ROCHESTER CITY LANDFILL (ENGINEERING-SCIENCE,INC., 1992b)
- SB3 ■ SOIL BORING LOCATION
- TP12 □ TEST PIT LOCATION
- SAMPLE LOCATION
- SSSB-1 | 10/21/91 | 0-10 ft BGS — SAMPLE DATE / SAMPLE DEPTH
- Metals | Zinc | 172 [A] — CONCENTRATION (mg/Kg)
- PARAMETER
- EXCEEDANCE

NOTE: PROPERTY BOUNDARIES AND LOCATION OF BUILDINGS ARE APPROXIMATE AND BASED ON INFORMATION PROVIDED BY LIGHTHOUSE POINTE PROPERTY ASSOCIATES, L.L.C.

Parameter	TAGM #4046 Recommended Soil Cleanup Objectives (A) (mg/kg)	TAGM #4046 Recommended Soil Cleanup Objectives to Protect Groundwater Quality(1)(B) (mg/kg)
VOCs		
Acetone	0.2	0.11
Benzene	0.06	0.06
Ethylbenzene	5.5	5.5
Toluene	1.5	1.5
Total VOCS	10	
Xylene (total)	1.2	1.2

NOTES:
1. Correction factor (CF) of 100 is used per TAGM #4046.
3. Criterion is listed value or site background.
4. Criterion is site background. Value listed is upper limit of typical background range listed in TAGM #4046 for metropolitan or suburban areas or near highways.

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

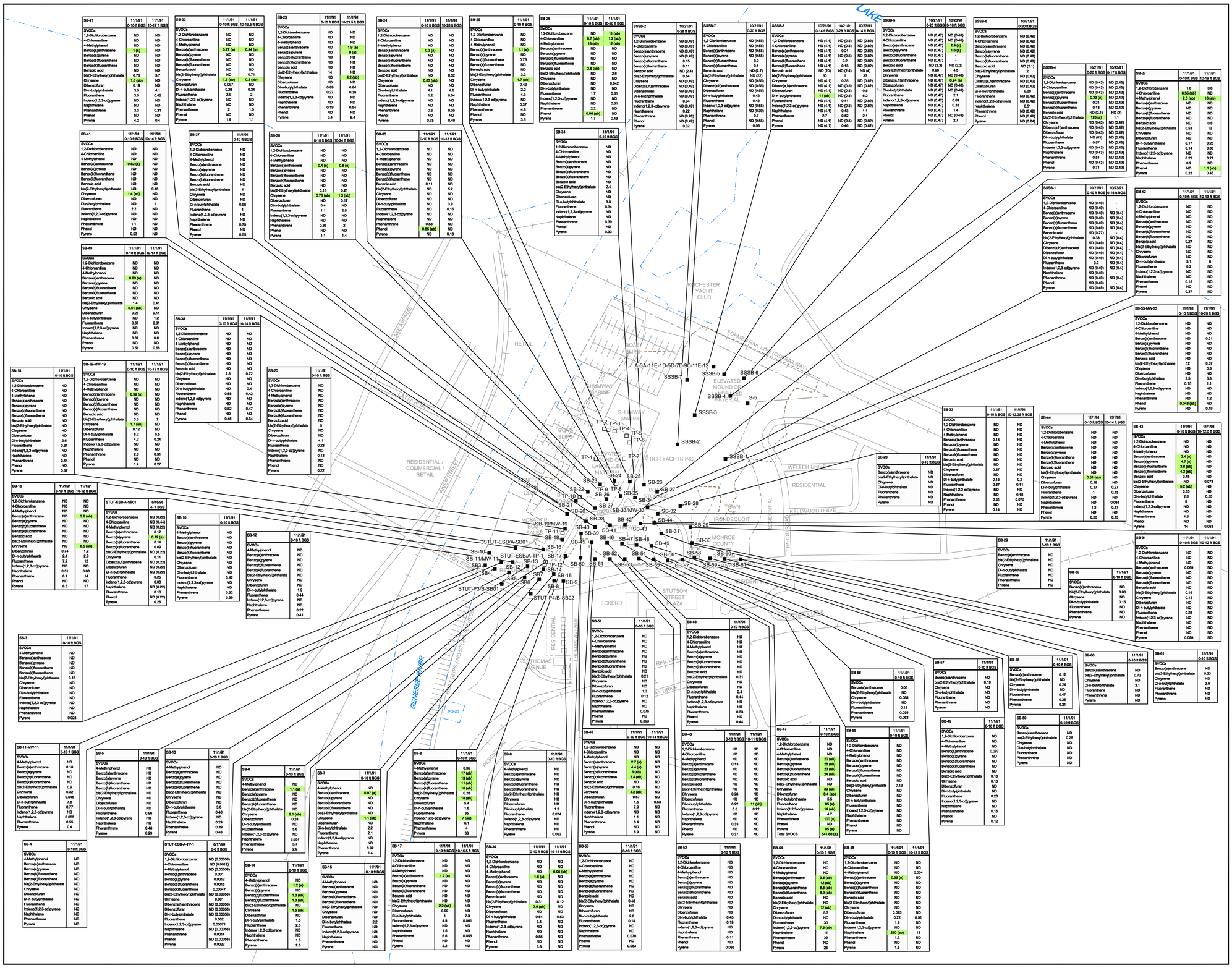
SUBSURFACE FILL/SOIL
TAGM #4046 VOC EXCEEDANCES

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

Project Manager:	Reviewed By:	Date: SEPTEMBER 2005	
Scale: 1"=300'	Project N #: 42271-00	Report N #: 002	Drawing N #: 2.12

42271-00(002)GN-WA007 SEP 09/2005



0 100 300ft

LEGEND

- SITE BOUNDARY
- RAILROAD
- SHORELINE/EDGE OF WATER
- APPROXIMATE LIMIT OF OLD ROCHESTER CITY LANDFILL (ENGINEERING-SCIENCE,INC., 1992b)

SB3 ■ SOIL BORING LOCATION
TP12 ☐ TEST PIT LOCATION

SSSB-1	10/21/91 0-10 ft BGS
Metals Zinc	172 {A}

SAMPLE LOCATION
SAMPLE DATE
SAMPLE DEPTH
CONCENTRATION (mg/Kg)
PARAMETER
🟩 EXCEEDANCE

NOTE: PROPERTY BOUNDARIES AND LOCATION
OF BUILDINGS ARE APPROXIMATE AND
BASED ON INFORMATION PROVIDED
BY LIGHTHOUSE POINTE PROPERTY ASSOCIATES, L.L.C.

Parameter	TAGM #4046 Recommended Soil Cleanup Objectives (A) (mg/kg)	TAGM #4046 Recommended Soil Cleanup Objectives to Protect Groundwater Quality(1)(B) (mg/kg)
SVOCs		
1,2-Dichlorobenzene	7.9	7.9
4-Chloroaniline	0.220	0.22
4-Methylphenol	0.9	0.9
Benzo(a)anthracene	0.224	3
Benzo(a)pyrene	0.061	11
Benzo(b)fluoranthene	1.1	1.1
Benzo(k)fluoranthene	1.1	1.1
Benzoic acid	2.7	2.7
bis(2-Ethylhexyl)phthalate	50	435
Chrysene	0.4	0.4
Dibenz(a,h)anthracene	0.014	165000
Dibenzofuran	6.2	6.2
Di-n-butylphthalate	8.1	8.1
Fluoranthene	50	1900
Indeno(1,2,3-cd)pyrene	3.2	3.2
Naphthalene	13	13
Phenanthrene	50	220
Phenol	0.03	0.03
Pyrene	50	665
Total SVOCS	500	

NOTES:
1. Correction factor (CF) of 100 is used per TAGM #4046.
3. Criterion is listed value or site background.
4. Criterion is site background. Value listed is upper limit of typical background range listed in TAGM #4046 for metropolitan or suburban areas or near highways.

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

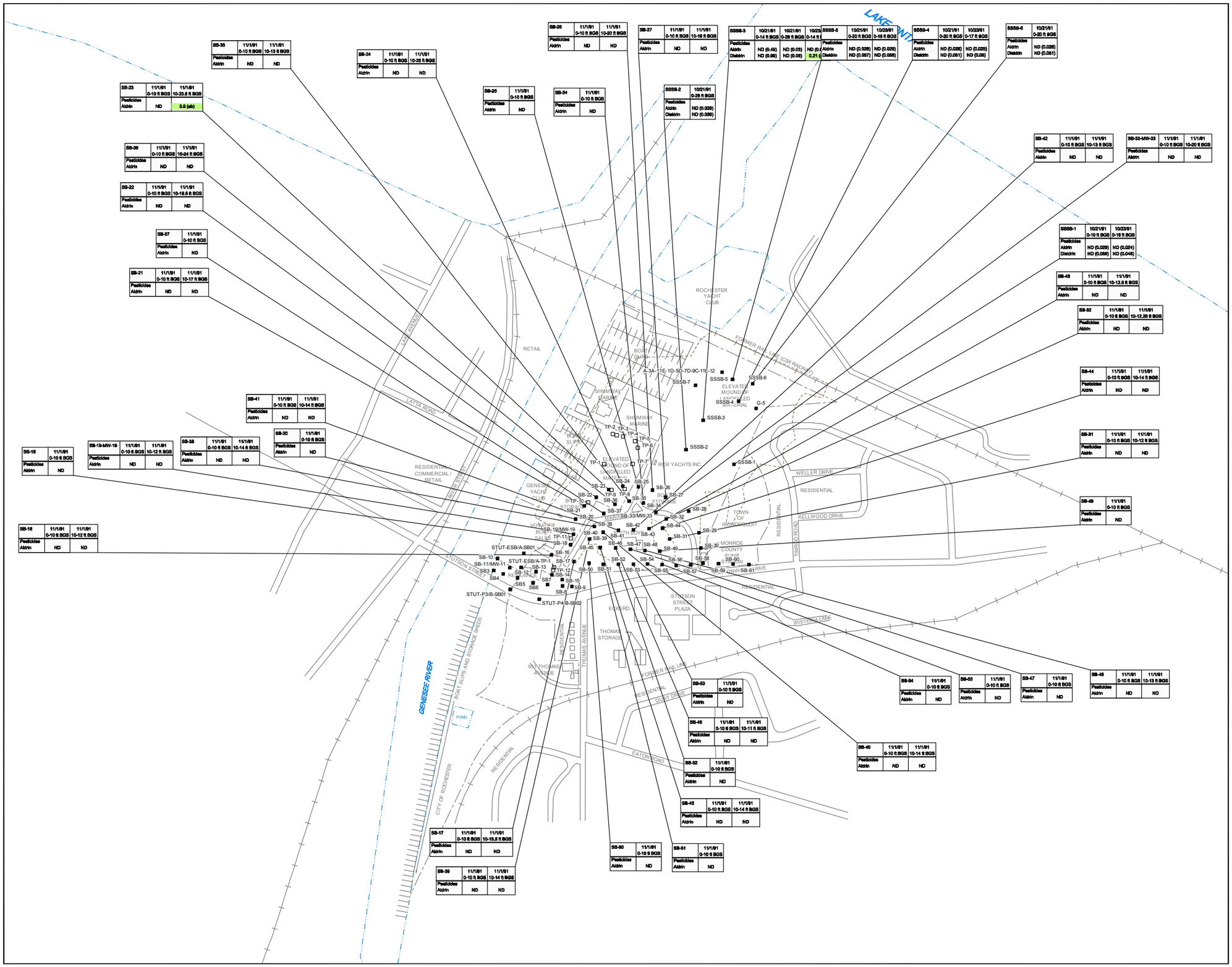
SUBSURFACE FILL/SOIL
TAGM #4046 SVOC EXCEEDANCES

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

Project Manager:	Reviewed By:	Date: SEPTEMBER 2005	
Scale: 1"=300'	Project Nº: 42271-00	Report Nº: 002	Drawing Nº: 2.13

42271-00(002)GN-WA018 SEP 12/2005



0 100 300ft

LEGEND

- SITE BOUNDARY
- RAILROAD
- SHORELINE/EDGE OF WATER
- APPROXIMATE LIMIT OF OLD ROCHESTER CITY LANDFILL (ENGINEERING-SCIENCE,INC., 1992b)
- SB3 — SOIL BORING LOCATION
- TP12 — TEST PIT LOCATION
- SAMPLE LOCATION
- SSSB-1 | 10/21/91 | 0-10 ft BGS — SAMPLE DATE / SAMPLE DEPTH
- Metals | Zinc | 172 (A) — CONCENTRATION (mg/Kg)
- PARAMETER
- EXCEEDANCE

NOTE: PROPERTY BOUNDARIES AND LOCATION OF BUILDINGS ARE APPROXIMATE AND BASED ON INFORMATION PROVIDED BY LIGHTHOUSE POINTE PROPERTY ASSOCIATES, L.L.C.

Parameter	TAGM #4046 Recommended Soil Cleanup Objectives (A) (mg/kg)	TAGM #4046 Recommended Soil Cleanup Objectives to Protect Groundwater Quality(1)(B) (mg/kg)
Pesticides		
Aldrin	0.041	0.5
Dieldrin	0.044	0.1

NOTES:
1. Correction factor (CF) of 100 is used per TAGM #4046.
3. Criterion is listed value or site background.
4. Criterion is site background. Value listed is upper limit of typical background range listed in TAGM #4046 for metropolitan or suburban areas or near highways.

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

WATERFRONT PROPERTY DEVELOPMENT ROCHESTER, NEW YORK

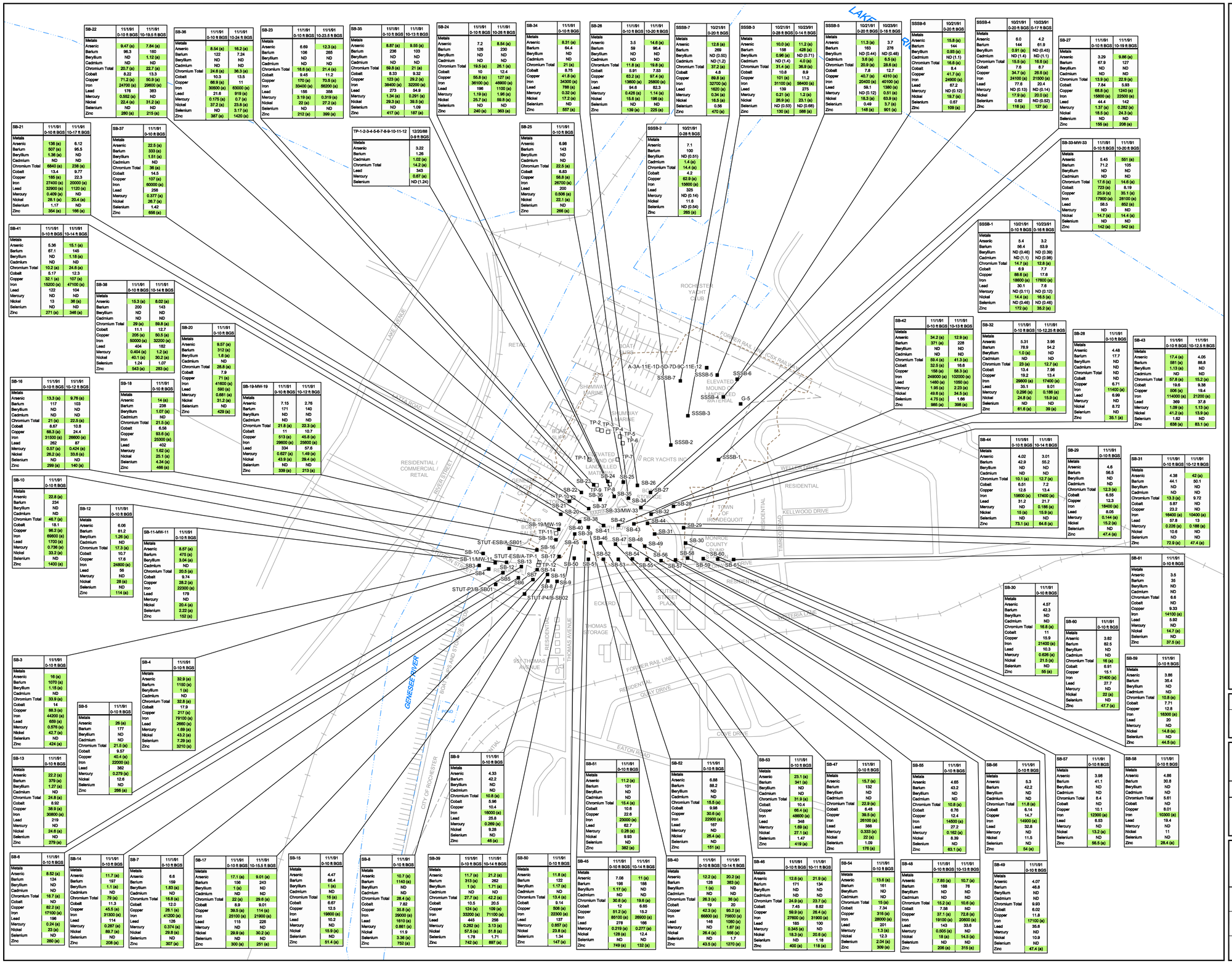
SUBSURFACE FILL/SOIL TAGM #4046 PESTICIDE EXCEEDANCES

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

Project Manager:	Reviewed By:	Date: SEPTEMBER 2005	
Scale: 1"=300'	Project No.: 42271-00	Report No.: 002	Drawing No.: 2.14

42271-00(002)GN-WA019 SEP 09/2005



LEGEND

- SITE BOUNDARY
- RAILROAD
- SHORELINE/EDGE OF WATER
- APPROXIMATE LIMIT OF OLD ROCHESTER CITY LANDFILL (ENGINEERING-SCIENCE,INC., 1992b)
- SB3 ■ SOIL BORING LOCATION
- TP12 ☐ TEST PIT LOCATION

SSSB-1	10/21/91 0-10 ft BGS
Metals Zinc	172 {A}

- SAMPLE LOCATION
- SAMPLE DATE
- SAMPLE DEPTH
- CONCENTRATION (mg/Kg)
- PARAMETER
- 🟩 EXCEEDANCE

NOTE: PROPERTY BOUNDARIES AND LOCATION
OF BUILDINGS ARE APPROXIMATE AND
BASED ON INFORMATION PROVIDED
BY LIGHTHOUSE POINTE PROPERTY ASSOCIATES, L.L.C.

Parameter	TAGM #4046 Recommended Soil Cleanup Objectives (A) (mg/kg)	TAGM #4046 Recommended Soil Cleanup Objectives to Protect Groundwater Quality(1)(B) (mg/kg)
Metals		
Arsenic	7.5(3)	
Barium	300(3)	
Beryllium	0.16(3)	
Cadmium	1(3)	
Chromium Total	10(3)	
Cobalt	30(3)	
Copper	25(3)	
Iron	2000(3)	
Lead	500(4)	
Mercury	0.1	
Nickel	13(3)	
Selenium	2(3)	
Zinc	20(3)	

NOTES:
1. Correction factor (CF) of 100 is used per TAGM #4046.
3. Criterion is listed value or site background.
4. Criterion is site background. Value listed is upper limit of typical background range listed in TAGM #4046 for metropolitan or suburban areas or near highways.

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

SUBSURFACE FILL/SOIL
TAGM #4046 METALS EXCEEDANCES

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

Project Manager:	Reviewed By:	Date: SEPTEMBER 2005	
Scale: 1"=300'	Project Nº: 42271-00	Report Nº: 002	Drawing Nº: 2.15

42271-00(002)GN-WA020 SEP 12/2005

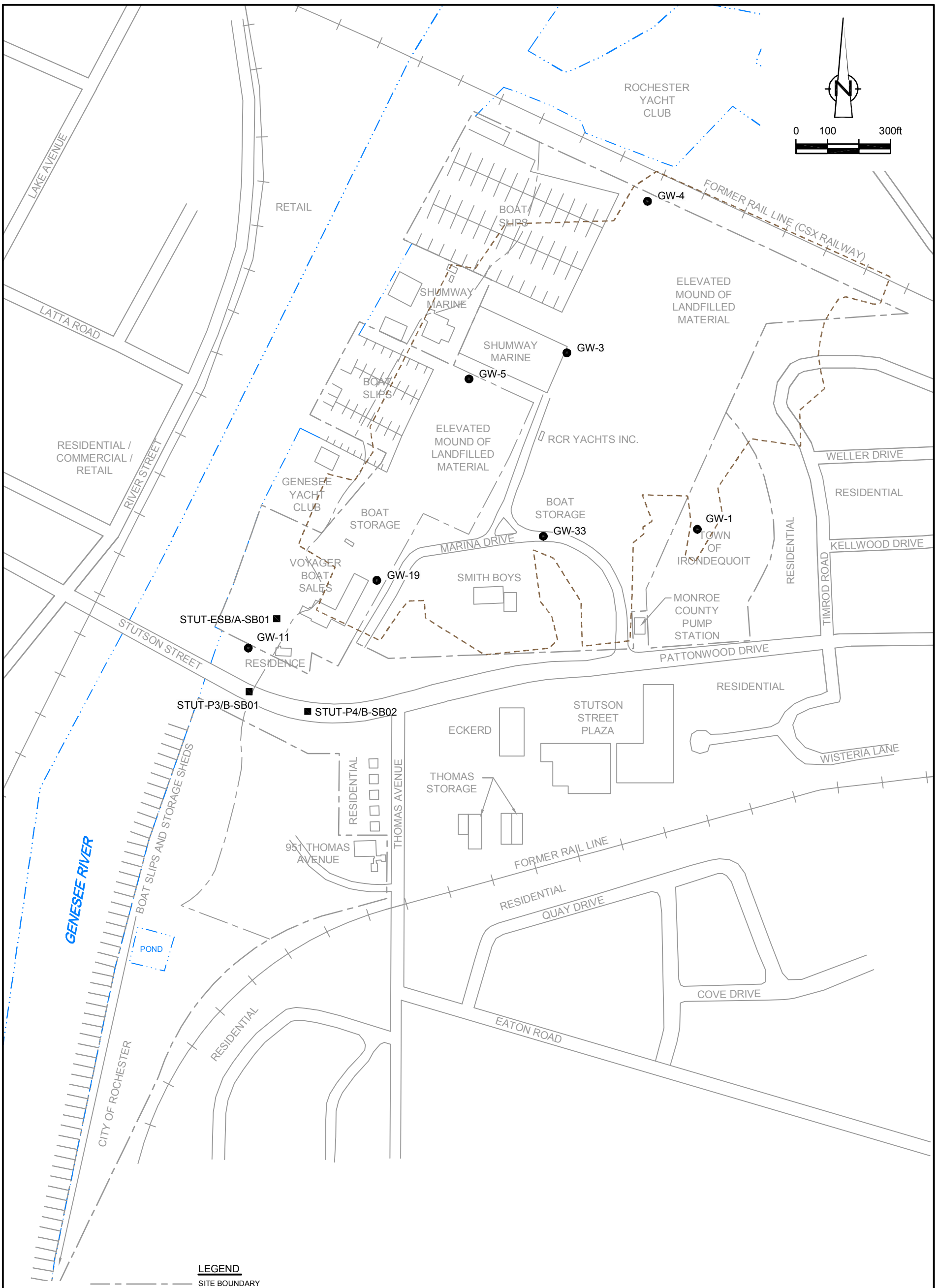


figure 2.16

GROUNDWATER SAMPLING LOCATIONS
WATERFRONT PROPERTY DEVELOPMENT
Rochester, New York

GW-19	12/17/91
VOCs	
Benzene	12.0
Methylene chloride	4.0
SVOCs	
Benzoic acid	ND
Metals	
Antimony	130
Arsenic	ND
Barium	1890
Beryllium	10
Chromium Total	185
Cobalt	120
Copper	244
Iron	263000
Lead	619
Magnesium	86300
Manganese	4180
Nickel	258
Sodium	36300
Zinc	2170

GW-5	11/21/91
VOCs	
Benzene	8/7
Methylene chloride	ND (5)/ND (5)
Tetrachloroethene	ND (5)/ND (5)
Trichloroethene	ND (5)/ND (5)
SVOCs	
Benzoic acid	25/9
Pesticides	
Endrin	0.25/0.22
Total PCBs	12.1/10
Metals	
Antimony	ND (17.0)/ND (17.0)
Arsenic	4.7/9.7
Barium	1170/1370
Beryllium	ND (2.0)/ND (2.0)
Chromium Total	6.1/12.7
Cobalt	ND (5.0)/9.1
Copper	10.5/62.8
Iron	39300/54400
Lead	37.5/129
Magnesium	72700/79100
Manganese	169/265
Mercury	ND (0.20)/0.28
Nickel	ND (8.0)/23.3
Sodium	89700/93700
Zinc	54.8/212

GW-3	11/21/91
VOCs	
Benzene	28
Methylene chloride	ND (5)
Tetrachloroethene	ND (5)
Trichloroethene	ND (5)
SVOCs	
Benzoic acid	20
Pesticides	
Endrin	ND (0.10)
Total PCBs	4.1
Metals	
Antimony	ND (17.0)
Arsenic	11.1
Barium	522
Beryllium	ND (2.0)
Chromium Total	19.5
Cobalt	8.6
Copper	180
Iron	34700
Lead	468
Magnesium	58700
Manganese	734
Mercury	1.3
Nickel	16.8
Sodium	43400
Zinc	430

GW-4	11/21/91
VOCs	
Benzene	ND (5)
Methylene chloride	ND (5)
Tetrachloroethene	17
Trichloroethene	11
SVOCs	
Benzoic acid	ND (48)
Pesticides	
Endrin	ND (0.10)
Metals	
Antimony	ND (17.0)
Arsenic	6.1
Barium	62.1
Beryllium	ND (2.0)
Chromium Total	ND (4.0)
Cobalt	5.2
Copper	ND (5.0)
Iron	9300
Lead	ND (2.0)
Magnesium	40900
Manganese	3160
Mercury	ND (0.20)
Nickel	ND (8.0)
Sodium	89600
Zinc	11.1

GW-33	12/17/91
VOCs	
Benzene	ND
Methylene chloride	6.0
SVOCs	
Benzoic acid	ND
Metals	
Antimony	ND
Arsenic	60
Barium	609
Beryllium	ND
Chromium Total	ND
Cobalt	ND
Copper	ND
Iron	46300
Lead	ND
Magnesium	47500
Manganese	1740
Nickel	ND
Sodium	59200
Zinc	37

GW-1	11/21/91
VOCs	
Benzene	ND (5)
Methylene chloride	ND (5)
Tetrachloroethene	ND (5)
Trichloroethene	ND (5)
SVOCs	
Benzoic acid	ND (48)
Pesticides	
Endrin	ND (0.10)
Metals	
Antimony	ND (17.0)
Arsenic	3.6
Barium	133
Beryllium	ND (2.0)
Chromium Total	ND (4.0)
Cobalt	ND (5.0)
Copper	ND (5.0)
Iron	3050
Lead	ND (2.0)
Magnesium	22800
Manganese	677
Mercury	ND (0.20)
Nickel	ND (8.0)
Sodium	8090
Zinc	10.2

STUT-ESB-A-SB01	8/18/98
Metals	
Lead	2600

GW-11	12/17/91
VOCs	
Benzene	ND
Methylene chloride	4.0
SVOCs	
Benzoic acid	36.0
Metals	
Antimony	104
Arsenic	36
Barium	1060
Beryllium	ND
Chromium Total	142
Cobalt	103
Copper	186
Iron	196000
Lead	248
Magnesium	111000
Manganese	4670
Nickel	224
Sodium	43700
Zinc	719

STUT-P3-B-SB01	8/18/98
Metals	
Lead	2000

STUT-P4-B-SB02	8/18/98
Metals	
Lead	3200

Parameter	New York State Ambient Groundwater Standards and Guidance Values (ug/L)
Antimony	3 S
Arsenic	25 S
Barium	1000 S
Benzene	1 S
Benzoic acid	5 S
Beryllium	3 G
Chromium Total	50 S
Cobalt	5 S
Copper	200 S
Endrin	ND S
Iron	300 S
Lead	25 S
Magnesium	35000 G
Manganese	300 S
Mercury	0.7 S
Methylene chloride	5 S
Nickel	100 S
Sodium	20000 S
Tetrachloroethene	5 S
Total PCBs	0.9 S
Trichloroethene	5 S
Zinc	2000 G

NOTES:
G - New York State water quality guidance value
S - New York State water quality standard
All results reported in ug/L

ROCHESTER YACHT CLUB
ELEVATED MOUND OF LANDFILLED MATERIAL
FORMER RAIL LINE
SHUMWAY MARINE
BOAT SLIPS
GENESEE YACHT CLUB
BOAT STORAGE
RCR YACHTS INC.
WELLER DRIVE
MARINA DRIVE
VOYAGER BOAT SALES
SMITH BOYS
TOWN OF IRONDEQUOIT
RESIDENTIAL
MONROE COUNTY PUMP STATION
PATTONWOOD DRIVE
RESIDENCE
ECKERD
STUTSON STREET PLAZA
THOMAS STORAGE
951 THOMAS AVENUE
THOMAS AVENUE
QUAY DRIVE
EATON ROAD
GENESEE RIVER
BOAT SLIPS AND STORAGE SHEDS
POND
CITY OF ROCHESTER
GW-1
GW-3
GW-4
GW-5
GW-11
GW-19
GW-33
STUT-ESB/A-SB01
STUT-P3/B-SB01
STUT-P4/B-SB02
N
0 100 300ft

LEGEND
- SITE BOUNDARY
- RAILROAD
- SHORELINE/EDGE OF WATER
- APPROXIMATE LIMIT OF OLD ROCHESTER CITY LANDFILL (ENGINEERING-SCIENCE, INC., 1992b)
- GW-1 ● MONITORING WELL LOCATION
- STUT-P4/B-SB02 ■ SOIL BORING LOCATION
- SAMPLE LOCATION
- SAMPLE DATE
- CONCENTRATION (ug/L)
- PARAMETER
- EXCEEDANCE

GW-1	11/21/91
Metals	
Iron	3050
Manganese	677

NOTE: PROPERTY BOUNDARIES AND LOCATION OF BUILDINGS ARE APPROXIMATE AND BASED ON INFORMATION PROVIDED BY LIGHTHOUSE POINTE PROPERTY ASSOCIATES, L.L.C.

figure 2.17

GROUNDWATER NEW YORK STATE AMBIENT WATER QUALITY STANDARD/GUIDANCE VALUE EXCEEDANCES WATERFRONT PROPERTY DEVELOPMENT

Rochester, New York

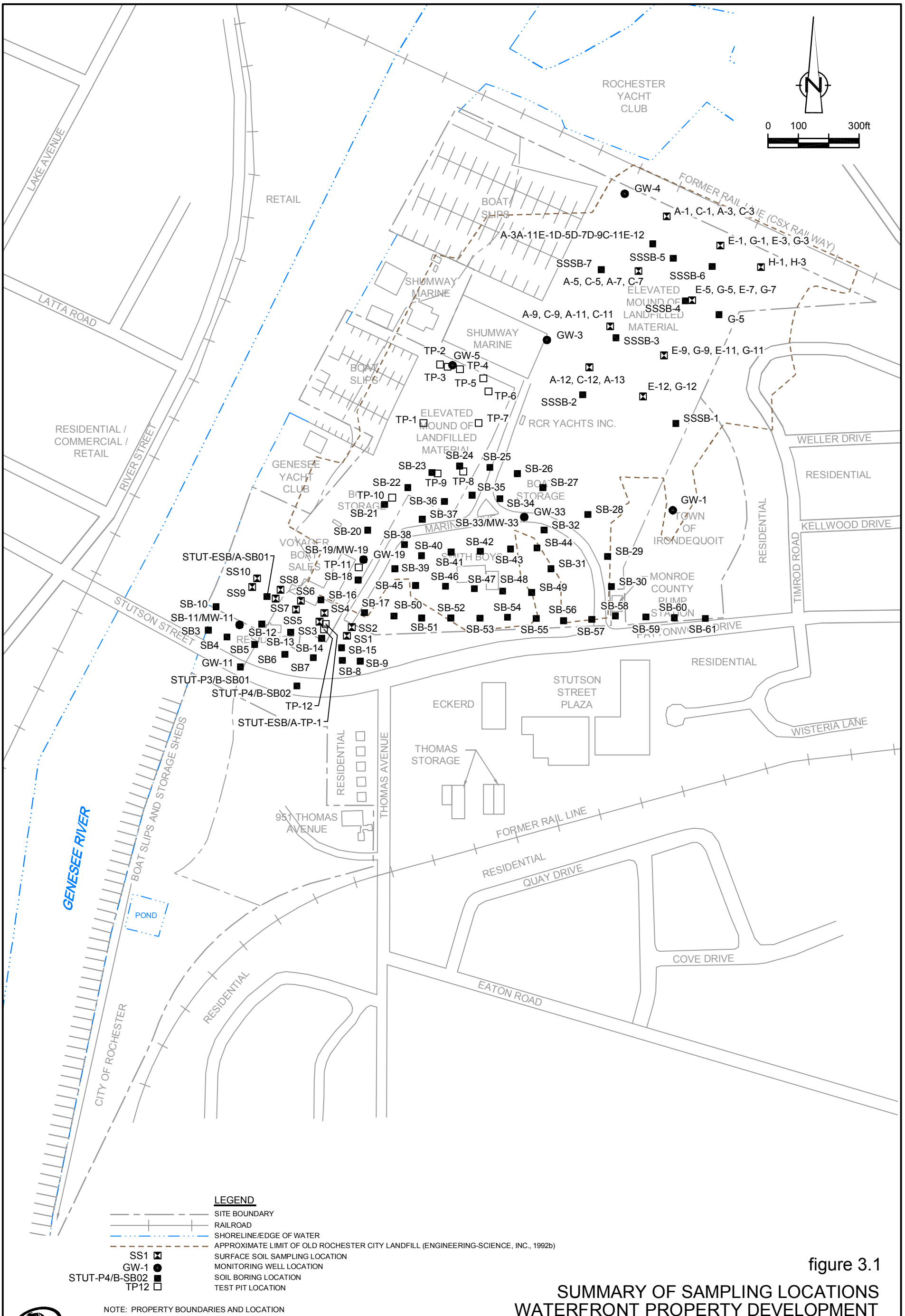


figure 3.1

SUMMARY OF SAMPLING LOCATIONS
WATERFRONT PROPERTY DEVELOPMENT
Rochester, New York

42271-00(002)GN-WA017 SEP 06/2005

TABLE 2.1

ANALYTICAL RESULTS SUMMARY - SURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:			*New York State*	*A-1, C-1, A-3, C-3*	*A-5, C-5, A-7, C-7*	*A-9, C-9, A-11, C-11*	*A-12, C-12, A-13*	*E-1, G-1, E-3, G-3*	*E-5, G-5, E-7, G-7*	*E-9, G-9, E-11, G-11*	*E-12, G-12*	*H-1, H-3*	*SS1*	*SS2*	*SS3*
Sample ID:			*TAGM #4046*	*COMPI*	*COMPIV*	*COMPVI*	*COMPVIII*	*COMPII*	*COMPV*	*COMPVII*	*COMPIX*	*COMPIII*	*SS1-91*	*SS2-91*	*SS3-91*
Sample Date:		*New York State TAGM #4046 Recommended Soil Cleanup Objectives a*	*Recommended Soil Cleanup Objectives to Protect Groundwater Quality [1] b*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*11/1/1991*	*11/1/1991*	*11/1/1991*
Parameters	*Units*														
Volatile Organic Compounds (VOCs)															
1,1,1-Trichloroethane	mg/kg	0.8	0.76	ND (0.006)	ND (0.005)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	0.6	0.6	ND (0.006)	ND (0.006)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
1,1,2-Trichloroethane	mg/kg	--	--	ND (0.006)	ND (0.006)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
1,1-Dichloroethane	mg/kg	0.2	0.2	ND (0.006)	ND (0.005)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.0072)	ND (0.0072)	ND (0.006)	--	--	--
1,1-Dichloroethene	mg/kg	0.4	0.4	ND (0.006)	ND (0.006)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.0072)	ND (0.0072)	ND (0.006)	--	--	--
1,2-Dichloroethane	mg/kg	0.1	0.1	ND (0.006)	ND (0.005)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
1,2-Dichloropropane	mg/kg	--	--	ND (0.006)	ND (0.005)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
2-Butanone (Methyl Ethyl Ketone)	mg/kg	0.3	0.3	ND (0.06)	ND (0.06)	ND (0.055)	ND (0.06)	ND (0.055)	ND (0.065)	ND (0.06)	ND (0.06)	ND (0.06)	--	--	--
2-Hexanone	mg/kg	--	--	ND (0.06)	ND (0.06)	ND (0.055)	ND (0.06)	ND (0.055)	ND (0.065)	ND (0.06)	ND (0.06)	ND (0.06)	--	--	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/kg	1	1	ND (0.06)	ND (0.06)	ND (0.055)	ND (0.06)	ND (0.055)	ND (0.065)	ND (0.06)	ND (0.06)	ND (0.06)	--	--	--
Acetone	mg/kg	0.2	0.11	ND (0.06)	ND (0.06)	ND (0.055)	ND (0.06)	ND (0.055)	ND (0.065)	ND (0.06)	ND (0.06)	ND (0.06)	--	--	--
Benzene	mg/kg	0.06	0.06	ND (0.006)	ND (0.005)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
Bromodichloromethane	mg/kg	--	--	ND (0.006)	ND (0.005)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
Bromoform	mg/kg	--	--	ND (0.012)	ND (0.012)	ND (0.011)	ND (0.012)	ND (0.011)	ND (0.013)	ND (0.012)	ND (0.012)	ND (0.012)	--	--	--
Bromomethane (Methyl Bromide)	mg/kg	--	--	ND (0.012)	ND (0.012)	ND (0.011)	ND (0.012)	ND (0.011)	ND (0.013)	ND (0.012)	ND (0.012)	ND (0.012)	--	--	--
Carbon disulfide	mg/kg	2.7	2.7	ND (0.012)	ND (0.012)	ND (0.011)	ND (0.012)	ND (0.011)	ND (0.013)	ND (0.012)	ND (0.012)	ND (0.012)	--	--	--
Carbon tetrachloride	mg/kg	0.6	0.6	ND (0.006)	ND (0.005)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
Chlorobenzene	mg/kg	1.7	1.7	ND (0.006)	ND (0.006)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
Chloroethane	mg/kg	1.9	1.9	ND (0.012)	ND (0.012)	ND (0.011)	ND (0.012)	ND (0.011)	ND (0.013)	ND (0.012)	ND (0.012)	ND (0.012)	--	--	--
Chloroform (Trichloromethane)	mg/kg	0.3	0.3	ND (0.006)	ND (0.005)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
Chloromethane (Methyl Chloride)	mg/kg	--	--	ND (0.012)	ND (0.012)	ND (0.011)	ND (0.012)	ND (0.011)	ND (0.013)	ND (0.012)	ND (0.012)	ND (0.012)	--	--	--
cis-1,2-Dichloroethene	mg/kg	--	--	ND (0.006)	ND (0.005)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.0072)	ND (0.0072)	ND (0.006)	--	--	--
cis-1,3-Dichloropropene	mg/kg	--	--	ND (0.006)	ND (0.005)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
Dibromochloromethane	mg/kg	--	--	ND (0.006)	ND (0.006)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
Ethylbenzene	mg/kg	5.5	5.5	ND (0.006)	ND (0.006)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
Methyl Tert Butyl Ether	mg/kg	--	--	ND (0.006)	ND (0.006)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
Methylene chloride	mg/kg	0.1	0.1	0.0094	ND (0.005)	ND (0.0055)	ND (0.006)	ND (0.0086)	0.0074	ND (0.0072)	ND (0.0072)	ND (0.006)	--	--	--
Styrene	mg/kg	--	--	ND (0.006)	ND (0.006)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
Tetrachloroethene	mg/kg	1.4	1.4	ND (0.006)	ND (0.006)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
Toluene	mg/kg	1.5	1.5	ND (0.006)	ND (0.006)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
trans-1,2-Dichloroethene	mg/kg	0.3	0.3	ND (0.006)	ND (0.005)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.0072)	ND (0.0072)	ND (0.006)	--	--	--
trans-1,3-Dichloropropene	mg/kg	--	--	ND (0.006)	ND (0.006)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
Trichloroethene	mg/kg	0.7	0.7	ND (0.006)	ND (0.005)	ND (0.0055)	ND (0.006)	ND (0.0055)	ND (0.0065)	ND (0.006)	ND (0.006)	ND (0.006)	--	--	--
Vinyl acetate	mg/kg	--	--	ND (0.06)	ND (0.06)	ND (0.055)	ND (0.06)	ND (0.055)	ND (0.065)	ND (0.06)	ND (0.06)	ND (0.06)	--	--	--
Vinyl chloride	mg/kg	0.2	0.12	ND (0.012)	ND (0.012)	ND (0.011)	ND (0.012)	ND (0.011)	ND (0.013)	ND (0.012)	ND (0.012)	ND (0.012)	--	--	--
Xylene (total)	mg/kg	1.2	1.2	ND (0.012)	ND (0.012)	ND (0.011)	ND (0.012)	ND (0.011)	ND (0.013)	ND (0.012)	ND (0.012)	ND (0.012)	--	--	--
Total VOCs	mg/kg	10	--	0.0094	0	0	0	0	0.0074	0	0	0	N/A	N/A	N/A
Semivolatile Organic Compounds (SVOCs)															
1,2,4-Trichlorobenzene	mg/kg	3.4	3.4	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
1,2-Dichlorobenzene	mg/kg	7.9	7.9	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
1,3-Dichlorobenzene	mg/kg	1.6	1.55	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
1,4-Dichlorobenzene	mg/kg	8.5	8.5	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	mg/kg	--	--	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
2,4,5-Trichlorophenol	mg/kg	0.1	0.1	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
2,4-Dichlorophenol	mg/kg	0.4	0.4	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
2,4-Dinitrophenol	mg/kg	0.200	0.2	ND (2)	ND (2)	ND (1.8)	ND (2)	ND (1.8)	ND (2.05)	ND (2)	ND (2)	ND (2)	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
2,6-Dinitrotoluene	mg/kg	1	1	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
2-Chloronaphthalene	mg/kg	--	--	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
2-Chlorophenol	mg/kg	0.8	0.8	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
2-Methyl-4,6-dinitrophenol	mg/kg	--	--	ND (0.79)	ND (0.79)	ND (0.72)	ND (0.79)	ND (0.72)	ND (0.81)	ND (0.79)	ND (0.79)	ND (0.79)	--	--	--
2-Methylnaphthalene	mg/kg	36.4	36.4	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
2-Methylphenol	mg/kg	0.100	0.1	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
2-Nitroaniline	mg/kg	0.430	0.43	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
2-Nitrophenol	mg/kg	0.330	0.33	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
3-Nitroaniline	mg/kg	0.500	0.5	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
4-Chloro-3-methylphenol	mg/kg	0.240	0.24	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
4-Chloroaniline	mg/kg	0.220	0.22	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
4-Methylphenol	mg/kg	0.9	0.9	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--

TABLE 2.1

ANALYTICAL RESULTS SUMMARY - SURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:			*New York State*	*A-1, C-1, A-3, C-3*	*A-5, C-5, A-7, C-7*	*A-9, C-9, A-11, C-11*	*A-12, C-12, A-13*	*E-1, G-1, E-3, G-3*	*E-5, G-5, E-7, G-7*	*E-9, G-9, E-11, G-11*	*E-12, G-12*	*H-1, H-3*	*SS1*	*SS2*	*SS3*
Sample ID:			*TAGM #4046*	*COMPI*	*COMPIV*	*COMPVI*	*COMPVIII*	*COMPII*	*COMPV*	*COMPVII*	*COMPIX*	*COMPIII*	*SS1-91*	*SS2-91*	*SS3-91*
Sample Date:		*New York State TAGM #4046 Recommended Soil Cleanup Objectives*	*Recommended Soil Cleanup Objectives to Protect Groundwater Quality* [1]	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*11/1/1991*	*11/1/1991*	*11/1/1991*
Parameters	***Units***	***a***	***b***												
4-Nitroaniline	mg/kg	--	--	ND (0.79)	ND (0.79)	ND (0.72)	ND (0.79)	ND (0.72)	ND (0.81)	ND (0.79)	ND (0.79)	ND (0.79)	--	--	--
4-Nitrophenol	mg/kg	0.100	0.1	ND (0.79)	ND (0.79)	ND (0.72)	ND (0.79)	ND (0.72)	ND (0.81)	ND (0.79)	ND (0.79)	ND (0.79)	--	--	--
Acenaphthene	mg/kg	50	90	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.44)	--	--	--
Acenaphthylene	mg/kg	41	41	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.44)	--	--	--
Anthracene	mg/kg	50	700	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.44)	--	--	--
Benzidine	mg/kg	--	--	ND (2)	ND (2)	ND (1.8)	ND (2)	ND (1.8)	ND (2.05)	ND (2)	ND (2)	ND (2)	--	--	--
Benzo(a)anthracene	mg/kg	0.224	3	ND (0.4)	ND (0.4)	**0.51**[a]	**0.63**[a]	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	**0.44**[a]	--	--	--
Benzo(a)pyrene	mg/kg	0.061	11	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
Benzo(b)fluoranthene	mg/kg	1.1	1.1	ND (0.4)	ND (0.4)	0.44	0.59	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	0.59	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	800	ND (0.4)	ND (0.4)	0.36	0.55	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	0.55	--	--	--
Benzo(k)fluoranthene	mg/kg	1.1	1.1	ND (0.4)	ND (0.4)	0.44	0.4	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	0.59	--	--	--
Benzoic acid	mg/kg	2.7	2.7	ND (2)	ND (2)	ND (1.8)	ND (2)	ND (1.8)	ND (2.05)	ND (2)	ND (2)	ND (2)	--	--	--
Benzyl Alcohol	mg/kg	--	--	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
bis(2-Ethylhexyl)phthalate	mg/kg	50	435	0.42	ND (0.4)	1.1	2.6	ND (0.36)	2.6	ND (0.4)	0.42	0.55	--	--	--
Butyl benzylphthalate	mg/kg	50	122	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
Chrysene	mg/kg	0.4	0.4	ND (0.4)	ND (0.4)	**0.51**[a,b]	**0.75**[a,b]	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	**0.59**[a,b]	--	--	--
Dibenz(a,h)anthracene	mg/kg	0.014	165000	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
Dibenzofuran	mg/kg	6.2	6.2	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
Diethyl phthalate	mg/kg	7.1	7.1	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
Dimethyl phthalate	mg/kg	2	2	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
Di-n-butylphthalate	mg/kg	8.1	8.1	0.55	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	0.55	ND (0.4)	--	--	--
Di-n-octyl phthalate	mg/kg	50	120	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
Fluoranthene	mg/kg	50	1900	ND (0.4)	ND (0.4)	0.94	0.87	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	0.87	--	--	--
Fluorene	mg/kg	50	350	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
Hexachlorobenzene	mg/kg	0.41	1.4	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
Hexachlorobutadiene	mg/kg	--	--	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	ND (0.79)	ND (0.79)	ND (0.72)	ND (0.79)	ND (0.72)	ND (0.81)	ND (0.79)	ND (0.79)	ND (0.79)	--	--	--
Hexachloroethane	mg/kg	--	--	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	3.2	3.2	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	0.44	--	--	--
Isophorone	mg/kg	4.4	4.4	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
Naphthalene	mg/kg	13	13	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
Nitrobenzene	mg/kg	0.200	0.2	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
N-Nitrosodimethylamine	mg/kg	--	--	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
Pentachlorophenol	mg/kg	1.0	1	ND (0.79)	ND (0.79)	ND (0.72)	ND (0.79)	ND (0.72)	ND (0.81)	ND (0.79)	ND (0.79)	ND (0.79)	--	--	--
Phenanthrene	mg/kg	50	220	ND (0.4)	ND (0.4)	0.7	0.51	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	1.1	--	--	--
Phenol	mg/kg	0.03	0.03	ND (0.4)	ND (0.4)	ND (0.36)	ND (0.4)	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	--	--	--
Pyrene	mg/kg	50	665	ND (0.4)	ND (0.4)	1.2	2.5	ND (0.36)	ND (0.41)	ND (0.4)	ND (0.4)	1.5	--	--	--
Total SVOCs	mg/kg	500	--	0.97	N/A	6.2	9.4	N/A	2.6	N/A	0.97	7.22	N/A	N/A	N/A
Metals															
Antimony	mg/kg	--[2]	--	ND (0.48)	ND (0.49)	ND (0.50)	ND (0.48)	ND (0.50)	ND (0.49)	ND (0.40)	ND (0.50)	ND (0.50)	--	--	--
Arsenic	mg/kg	7.5[3]	--	3.93	5.10	6.61	6.35	5.29	4.45	4.51	4.37	**8.66**[a]	--	--	--
Beryllium	mg/kg	0.16[3]	--	**1.62**[a]	**1.53**[a]	**1.58**[a]	**1.02**[a]	**1.61**[a]	**1.75**[a]	**1.77**[a]	**1.38**[a]	**0.89**[a]	--	--	--
Cadmium	mg/kg	1[3]	--	**2.15**[a]	**4.31**[a]	ND (1.00)	**2.22**[a]	**3.40**[a]	**1.88**[a]	ND (0.99)	**1.76**[a]	**3.92**[a]	--	--	--
Chromium Total	mg/kg	10[3]	--	**22.5**[a]	**21.3**[a]	**21.4**[a]	**24.9**[a]	**20.8**[a]	**21.2**[a]	**20.3**[a]	**19.6**[a]	**30.5**[a]	--	--	--
Copper	mg/kg	25[3]	--	**54.4**[a]	**38.9**[a]	**38.3**[a]	**252**[a]	**29.2**[a]	**28.8**[a]	**30.9**[a]	**25.5**[a]	**46.1**[a]	--	--	--
Lead	mg/kg	500[4]	--	85.8	87.9	86.2	**672**[a]	132	62.2	85.6	48.4	71.2	**1070**[a]	**2860**[a]	233
Mercury	mg/kg	0.1	--	**0.56**[a]	**0.22**[a]	**0.24**[a]	**1.59**[a]	**0.14**[a]	**0.12**[a]	**0.12**[a]	0.07	**0.38**[a]	--	--	--
Nickel	mg/kg	13[3]	--	**24.4**[a]	**20.0**[a]	**22.5**[a]	**24.0**[a]	**22.4**[a]	**22.0**[a]	**20.6**[a]	**22.6**[a]	**25.3**[a]	--	--	--
Selenium	mg/kg	2[3]	--	ND (0.48)	ND (0.49)	ND (0.50)	ND (0.48)	ND (0.50)	ND (0.49)	ND (0.48)	ND (0.50)	ND (0.50)	--	--	--
Silver	mg/kg	--[2]	--	ND (2.33)	4.55	ND (2.50)	ND (2.04)	4.45	ND (2.40)	ND (2.46)	ND (2.45)	12.2	--	--	--
Thallium	mg/kg	--[2]	--	ND (0.48)	ND (0.49)	ND (0.50)	ND (0.48)	ND (0.50)	ND (0.49)	ND (0.48)	ND (0.50)	ND (0.50)	--	--	--
Zinc	mg/kg	20[3]	--	**130**[a]	**146**[a]	**131**[a]	**371**[a]	**122**[a]	**86.3**[a]	**90.0**[a]	**78.9**[a]	**179**[a]	--	--	--

TABLE 2.1

ANALYTICAL RESULTS SUMMARY - SURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:			*New York State*	*A-1, C-1, A-3, C-3*	*A-5, C-5, A-7, C-7*	*A-9, C-9, A-11, C-11*	*A-12, C-12, A-13*	*E-1, G-1, E-3, G-3*	*E-5, G-5, E-7, G-7*	*E-9, G-9, E-11, G-11*	*E-12, G-12*	*H-1, H-3*	*SS1*	*SS2*	*SS3*
Sample ID:			*TAGM #4046*	*COMPI*	*COMPIV*	*COMPVI*	*COMPVIII*	*COMPII*	*COMPV*	*COMPVII*	*COMPIX*	*COMPIII*	*SS1-91*	*SS2-91*	*SS3-91*
Sample Date:		*New York State TAGM #4046 Recommended Soil Cleanup Objectives*	*Recommended Soil Cleanup Objectives to Protect Groundwater Quality* [1]	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*6/15/1995*	*11/1/1991*	*11/1/1991*	*11/1/1991*
Parameters	*Units*	*a*	*b*												
PCBs															
Aroclor-1016 (PCB-1016)	mg/kg	--	--	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	0.00015	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	--	--	--
Aroclor-1262 (PCB-1262)	mg/kg	--	--	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	--	--	--
Aroclor-1268 (PCB-1268)	mg/kg	--	--	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	ND (0.000042)	--	--	--
Total PCBs	mg/kg	1	10.0	0.00015	0	0	0	0	0	0	0	0	N/A	N/A	N/A
Pesticides															
4,4'-DDD	mg/kg	2.9	7.7	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
4,4'-DDE	mg/kg	2.1	4.4	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
4,4'-DDT	mg/kg	2.1	2.5	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
Aldrin	mg/kg	0.041	0.5	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.037)	--	--	--
alpha-BHC	mg/kg	0.11	0.2	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
alpha-Chlordane	mg/kg	--	--	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
beta-BHC	mg/kg	0.2	0.2	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
Chlordane	mg/kg	0.54	2	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
delta-BHC	mg/kg	0.3	0.3	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
Dieldrin	mg/kg	0.044	0.1	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
Endosulfan I	mg/kg	0.9	0.9	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
Endosulfan II	mg/kg	0.9	0.9	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
Endosulfan sulfate	mg/kg	1	1	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
Endrin	mg/kg	0.1	0.1	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
Endrin aldehyde	mg/kg	--	--	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
Endrin ketone	mg/kg	--	--	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
gamma-BHC (Lindane)	mg/kg	0.06	0.06	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
Heptachlor	mg/kg	0.1	0.1	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
Heptachlor epoxide	mg/kg	0.02	0.02	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	ND (0.019)	--	--	--
Methoxychlor	mg/kg	10	900	ND (0.095)	ND (0.095)	ND (0.095)	ND (0.095)	ND (0.095)	ND (0.095)	ND (0.095)	ND (0.095)	ND (0.095)	--	--	--
Toxaphene	mg/kg	--	--	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	--	--	--
Total Pesticides	mg/kg	10	--	0	0	0	0	0	0	0	0	0	N/A	N/A	N/A
Wet Chemistry															
Cyanide (total)	mg/kg	--	--	0.977	0.922	1.44	1.57	1.69	1.23	3.03	1.54	0.773	--	--	--
Phenolics (Total)	mg/kg	--	--	3.46	ND (1.0)	1.63	4.76	1.85	2.36	1.99	ND (1.0)	ND (1.0)	--	--	--
Total Solids	%	--	--	85.1	83.3	88.6	86.2	87.9	79.7	83.4	85.4	83.9	--	--	--

Notes:

ND() - Not detected at the detection limit listed in parentheses.
N/A - Not analyzed.
1 - Correction factor (CF) of 100 is used per TAGM #4046.
2 - Criterion is site background.
3 - Criterion is listed value or site background.
4 - Criterion is site background. Value listed is upper limit of typical background range listed in TAGM #4046 for metropolitan or suburban areas or near highways.
Exceedance of New York TAGM #4046 Recommended Soil Cleanup Objective.

TABLE 2.1

ANALYTICAL RESULTS SUMMARY - SURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:			***New York State***	***SS4***	***SS5***	***SS6***	***SS7***	***SS8***	***SS9***	***SS10***
Sample ID:			***TAGM #4046***	***SS4-91***	***SS5-91***	***SS6-91***	***SS7-91***	***SS8-91***	***SS9-91***	***SS10-91***
Sample Date:		***New York State TAGM #4046 Recommended Soil Cleanup Objectives***	***Recommended Soil Cleanup Objectives to Protect Groundwater Quality*** [1]	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***
Parameters	***Units***	***a***	***b***							
Volatile Organic Compounds (VOCs)										
1,1,1-Trichloroethane	mg/kg	0.8	0.76	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	0.6	0.6	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/kg	0.2	0.2	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/kg	0.4	0.4	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/kg	0.1	0.1	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl Ethyl Ketone)	mg/kg	0.3	0.3	--	--	--	--	--	--	--
2-Hexanone	mg/kg	--	--	--	--	--	--	--	--	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/kg	1	1	--	--	--	--	--	--	--
Acetone	mg/kg	0.2	0.11	--	--	--	--	--	--	--
Benzene	mg/kg	0.06	0.06	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	--	--	--	--	--	--	--	--	--
Bromoform	mg/kg	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl Bromide)	mg/kg	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/kg	2.7	2.7	--	--	--	--	--	--	--
Carbon tetrachloride	mg/kg	0.6	0.6	--	--	--	--	--	--	--
Chlorobenzene	mg/kg	1.7	1.7	--	--	--	--	--	--	--
Chloroethane	mg/kg	1.9	1.9	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/kg	0.3	0.3	--	--	--	--	--	--	--
Chloromethane (Methyl Chloride)	mg/kg	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/kg	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	5.5	5.5	--	--	--	--	--	--	--
Methyl Tert Butyl Ether	mg/kg	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/kg	0.1	0.1	--	--	--	--	--	--	--
Styrene	mg/kg	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	1.4	1.4	--	--	--	--	--	--	--
Toluene	mg/kg	1.5	1.5	--	--	--	--	--	--	--
trans-1,2-Dichloroethene	mg/kg	0.3	0.3	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/kg	0.7	0.7	--	--	--	--	--	--	--
Vinyl acetate	mg/kg	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/kg	0.2	0.12	--	--	--	--	--	--	--
Xylene (total)	mg/kg	1.2	1.2	--	--	--	--	--	--	--
Total VOCs	mg/kg	10	--	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Semivolatile Organic Compounds (SVOCs)										
1,2,4-Trichlorobenzene	mg/kg	3.4	3.4	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	7.9	7.9	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	1.6	1.55	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	8.5	8.5	--	--	--	--	--	--	--
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	mg/kg	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	0.1	0.1	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	0.4	0.4	--	--	--	--	--	--	--
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	0.200	0.2	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	1	1	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	0.8	0.8	--	--	--	--	--	--	--
2-Methyl-4,6-dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	36.4	36.4	--	--	--	--	--	--	--
2-Methylphenol	mg/kg	0.100	0.1	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	0.430	0.43	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	0.330	0.33	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	0.500	0.5	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	0.240	0.24	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	0.220	0.22	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/kg	0.9	0.9	--	--	--	--	--	--	--

TABLE 2.1

ANALYTICAL RESULTS SUMMARY - SURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:			***New York State***	***SS4***	***SS5***	***SS6***	***SS7***	***SS8***	***SS9***	***SS10***
Sample ID:			***TAGM #4046***	***SS4-91***	***SS5-91***	***SS6-91***	***SS7-91***	***SS8-91***	***SS9-91***	***SS10-91***
Sample Date:		***New York State***	***Recommended Soil***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***
		TAGM #4046	***Cleanup Objectives***							
		Recommended Soil	***to Protect***							
Parameters	***Units***	***Cleanup Objectives***	***Groundwater Quality*** [1]							
		a	***b***							
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	0.100	0.1	--	--	--	--	--	--	--
Acenaphthene	mg/kg	50	90	--	--	--	--	--	--	--
Acenaphthylene	mg/kg	41	41	--	--	--	--	--	--	--
Anthracene	mg/kg	50	700	--	--	--	--	--	--	--
Benzidine	mg/kg	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/kg	0.224	3	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/kg	0.061	11	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/kg	1.1	1.1	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	800	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/kg	1.1	1.1	--	--	--	--	--	--	--
Benzoic acid	mg/kg	2.7	2.7	--	--	--	--	--	--	--
Benzyl Alcohol	mg/kg	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	mg/kg	50	435	--	--	--	--	--	--	--
Butyl benzylphthalate	mg/kg	50	122	--	--	--	--	--	--	--
Chrysene	mg/kg	0.4	0.4	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/kg	0.014	165000	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	6.2	6.2	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	7.1	7.1	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	2	2	--	--	--	--	--	--	--
Di-n-butylphthalate	mg/kg	8.1	8.1	--	--	--	--	--	--	--
Di-n-octyl phthalate	mg/kg	50	120	--	--	--	--	--	--	--
Fluoranthene	mg/kg	50	1900	--	--	--	--	--	--	--
Fluorene	mg/kg	50	350	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	0.41	1.4	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	3.2	3.2	--	--	--	--	--	--	--
Isophorone	mg/kg	4.4	4.4	--	--	--	--	--	--	--
Naphthalene	mg/kg	13	13	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	0.200	0.2	--	--	--	--	--	--	--
N-Nitrosodimethylamine	mg/kg	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	1.0	1	--	--	--	--	--	--	--
Phenanthrene	mg/kg	50	220	--	--	--	--	--	--	--
Phenol	mg/kg	0.03	0.03	--	--	--	--	--	--	--
Pyrene	mg/kg	50	665	--	--	--	--	--	--	--
Total SVOCs	mg/kg	500	--	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Metals										
Antimony	mg/kg	--[2]	--	--	--	--	--	--	--	--
Arsenic	mg/kg	7.5[3]	--	--	--	--	--	--	--	--
Beryllium	mg/kg	0.16[3]	--	--	--	--	--	--	--	--
Cadmium	mg/kg	1[3]	--	--	--	--	--	--	--	--
Chromium Total	mg/kg	10[3]	--	--	--	--	--	--	--	--
Copper	mg/kg	25[3]	--	--	--	--	--	--	--	--
Lead	mg/kg	500[4]	--	**2080[a]**	**3320[a]**	**1240[a]**	**546[a]**	**633[a]**	**568[a]**	264
Mercury	mg/kg	0.1	--	--	--	--	--	--	--	--
Nickel	mg/kg	13[3]	--	--	--	--	--	--	--	--
Selenium	mg/kg	2[3]	--	--	--	--	--	--	--	--
Silver	mg/kg	--[2]	--	--	--	--	--	--	--	--
Thallium	mg/kg	--[2]	--	--	--	--	--	--	--	--
Zinc	mg/kg	20[3]	--	--	--	--	--	--	--	--

TABLE 2.1

ANALYTICAL RESULTS SUMMARY - SURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:			***New York State***	***SS4***	***SS5***	***SS6***	***SS7***	***SS8***	***SS9***	***SS10***
Sample ID:			***TAGM #4046***	***SS4-91***	***SS5-91***	***SS6-91***	***SS7-91***	***SS8-91***	***SS9-91***	***SS10-91***
Sample Date:		***New York State TAGM #4046 Recommended Soil Cleanup Objectives***	***Recommended Soil Cleanup Objectives to Protect Groundwater Quality*** [1]	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***
Parameters	***Units***	***a***	***b***							
PCBs										
Aroclor-1016 (PCB-1016)	mg / kg	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg / kg	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg / kg	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg / kg	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg / kg	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg / kg	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg / kg	--	--	--	--	--	--	--	--	--
Aroclor-1262 (PCB-1262)	mg / kg	--	--	--	--	--	--	--	--	--
Aroclor-1268 (PCB-1268)	mg / kg	--	--	--	--	--	--	--	--	--
Total PCBs	mg / kg	1	10.0	N / A	N / A	N / A	N / A	N / A	N / A	N / A
Pesticides										
4,4'-DDD	mg / kg	2.9	7.7	--	--	--	--	--	--	--
4,4'-DDE	mg / kg	2.1	4.4	--	--	--	--	--	--	--
4,4'-DDT	mg / kg	2.1	2.5	--	--	--	--	--	--	--
Aldrin	mg / kg	0.041	0.5	--	--	--	--	--	--	--
alpha-BHC	mg / kg	0.11	0.2	--	--	--	--	--	--	--
alpha-Chlordane	mg / kg	--	--	--	--	--	--	--	--	--
beta-BHC	mg / kg	0.2	0.2	--	--	--	--	--	--	--
Chlordane	mg / kg	0.54	2	--	--	--	--	--	--	--
delta-BHC	mg / kg	0.3	0.3	--	--	--	--	--	--	--
Dieldrin	mg / kg	0.044	0.1	--	--	--	--	--	--	--
Endosulfan I	mg / kg	0.9	0.9	--	--	--	--	--	--	--
Endosulfan II	mg / kg	0.9	0.9	--	--	--	--	--	--	--
Endosulfan sulfate	mg / kg	1	1	--	--	--	--	--	--	--
Endrin	mg / kg	0.1	0.1	--	--	--	--	--	--	--
Endrin aldehyde	mg / kg	--	--	--	--	--	--	--	--	--
Endrin ketone	mg / kg	--	--	--	--	--	--	--	--	--
gamma-BHC (Lindane)	mg / kg	0.06	0.06	--	--	--	--	--	--	--
Heptachlor	mg / kg	0.1	0.1	--	--	--	--	--	--	--
Heptachlor epoxide	mg / kg	0.02	0.02	--	--	--	--	--	--	--
Methoxychlor	mg / kg	10	900	--	--	--	--	--	--	--
Toxaphene	mg / kg	--	--	--	--	--	--	--	--	--
Total Pesticides	mg / kg	10	--	N / A	N / A	N / A	N / A	N / A	N / A	N / A
Wet Chemistry										
Cyanide (total)	mg / kg	--	--	--	--	--	--	--	--	--
Phenolics (Total)	mg / kg	--	--	--	--	--	--	--	--	--
Total Solids	%	--	--	--	--	--	--	--	--	--

Notes:

ND() - Not detected at the detection limit listed in parentheses.
N / A - Not analyzed.
1 - Correction factor (CF) of 100 is used per TAGM #4046.
2 - Criterion is site background.
3 - Criterion is listed value or site background.
4 - Criterion is site background. Value listed is upper limit of typical background range listed in TAGM #4046 for metropolitan or suburban areas or near highways.
Exceedance of New York TAGM #4046 Recommended Soil Cleanup Objective.

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:				*SB-3*	*SB-4*	*SB-5*	*SB-6*	*SB-7*	*SB-8*	*SB-9*	*SB-10*	*SB-11/MW-11*	*SB-12*	*SB-13*	*SB-14*	*SB-15*
Sample ID:			*TAGM #4046*	*SB3A-91*	*SB4A-91*	*SB5A-91*	*SB6A-91*	*SB7A-91*	*SB8A-91*	*SB9A-91*	*SB10A-91*	*SB11A-91*	*SB12A-91*	*SB13A-91*	*SB14A-91*	*SB15A-91*
Sample Date:			*Recommended Soil*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*
Sample Depth:		*TAGM #4046*	*Cleanup Objectives*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*
Parameter	*Units*	*Recommended Soil Cleanup Objectives*	*to Protect Groundwater Quality* [1]													
		a	*b*													
Volatile Organic Compounds (VOCs)																
1,1,1-Trichloroethane	mg/kg	0.8	0.76	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	0.6	0.6	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/kg	0.2	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/kg	0.4	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	7.9	7.9	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/kg	0.1	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	1.6	1.55	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	8.5	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl Ethyl Ketone)	mg/kg	0.3	0.3	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/kg	1	1	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/kg	0.2	0.11	ND	ILL	ND	0.053	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	mg/kg	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl Bromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/kg	2.7	2.7	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	mg/kg	0.6	0.6	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/kg	1.7	1.7	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	mg/kg	1.9	1.9	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/kg	0.3	0.3	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl Chloride)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	5.5	5.5	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/kg	0.1	0.1	0.005 J	0.006 J	0.001 J	0.023	ND	0.002 J	ND	ND	ND	0.005 J	0.002 J	0.004 J	0.004 J
m-xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	1.4	1.4	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	mg/kg	1.5	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001 J
trans-1,2-Dichloroethene	mg/kg	0.3	0.3	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/kg	0.7	0.7	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl acetate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/kg	0.2	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylene (total)	mg/kg	1.2	1.2	--	--	--	--	--	--	--	--	--	--	--	--	--
Total VOCs	mg/kg	10	--	0.005	0.006	0.001	0.076	0	0.002	0	0	0	0.005	0.002	0.004	0.005
Semivolatile Organic Compounds (SVOCs)																
1,2,4-Trichlorobenzene	mg/kg	3.4	3.4	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	7.9	7.9	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	1.6	1.55	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	8.5	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	0.1	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	0.4	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:				*SB-3*	*SB-4*	*SB-5*	*SB-6*	*SB-7*	*SB-8*	*SB-9*	*SB-10*	*SB-11/MW-11*	*SB-12*	*SB-13*	*SB-14*	*SB-15*
Sample ID:			*TAGM #4046*	*SB3A-91*	*SB4A-91*	*SB5A-91*	*SB6A-91*	*SB7A-91*	*SB8A-91*	*SB9A-91*	*SB10A-91*	*SB11A-91*	*SB12A-91*	*SB13A-91*	*SB14A-91*	*SB15A-91*
Sample Date:			*Recommended Soil*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*
Sample Depth:		*TAGM #4046*	*Cleanup Objectives*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*
Parameter	*Units*	*Recommended Soil Cleanup Objectives*	*to Protect Groundwater Quality* [1]													
		a	*b*													
2,4-Dimethylphenol	mg/kg	--	--	ND	ND	ND	ND	ND	0.26 J	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	mg/kg	0.200	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	1	1	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	0.8	0.8	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	36.4	36.4	ND	ND	0.082 J	ND	ND	3.1	ND	ND	ND	0.16 J	0.37 J	0.16 J	ND
2-Methylphenol	mg/kg	0.100	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	0.430	0.43	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	0.330	0.33	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	0.500	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	0.240	0.24	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	0.220	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/kg	0.9	0.9	ND	ND	ND	ND	ND	0.35 J	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	0.100	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	50	90	ND	ND	ND	0.39 J	ND	5.3	ND	ND	0.072 J	ND	ND	0.16 J	ND
Acenaphthylene	mg/kg	41	41	ND	ND	ND	ND	ND	ND	ND	ND	0.029 J	ND	ND	ND	ND
Anthracene	mg/kg	50	700	ND	ND	0.075 J	0.61 J	0.29 J	13	ND	0.1 J	0.14 J	ND	ND	0.38 J	ND
Benzo(a)anthracene	mg/kg	0.224	3	ND	ND	ND	**1.1 J[a]**	**0.97 J[a]**	**17[ab]**	ND	ND	0.18 J	ND	ND	**1.2 J[a]**	ND
Benzo(a)pyrene	mg/kg	0.061	11	ND	ND	ND	ND	ND	**13[ab]**	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	mg/kg	1.1	1.1	ND	ND	ND	ND	ND	**11[ab]**	ND	ND	ND	ND	ND	**1.3 J[ab]**	ND
Benzo(b)fluoranthene / Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	800	ND	ND	ND	ND	ND	6	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	mg/kg	1.1	1.1	ND	ND	ND	ND	ND	**10[ab]**	ND	ND	ND	ND	ND	**1.3 J[ab]**	ND
Benzoic acid	mg/kg	2.7	2.7	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl Alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	mg/kg	50	435	0.13 J	ND	ND	ND	ND	0.28 J	ND	ND	0.9	ND	ND	ND	ND
Butyl benzylphthalate	mg/kg	50	122	0.065 J	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	0.4	0.4	ND	ND	ND	**2.1 J[ab]**	**1.1 J[ab]**	**18[ab]**	ND	ND	0.32 J	ND	ND	**1.5 J[ab]**	ND
Dibenz(a,h)anthracene	mg/kg	0.014	165000	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	6.2	6.2	ND	ND	ND	0.24 J	ND	5.4	ND	ND	0.046 J	ND	ND	ND	ND
Diethyl phthalate	mg/kg	7.1	7.1	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	2	2	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate	mg/kg	8.1	8.1	ND	ND	ND	ND	2.2	1.6 J	1.2	ND	7.8 E	1.9	3.6	1.5 J	2.2
Di-n-octyl phthalate	mg/kg	50	120	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	mg/kg	50	1900	ND	ND	0.96 J	5.6	2.1 J	35	0.074 J	0.42 J	0.77	0.44	0.46 J	2.5	ND
Fluorene	mg/kg	50	350	ND	ND	ND	0.44 J	ND	8.5	ND	ND	0.12 J	ND	ND	ND	ND
Hexachlorobenzene	mg/kg	0.41	1.4	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	3.2	3.2	ND	ND	ND	ND	ND	**7[ab]**	ND	ND	ND	ND	ND	ND	ND
Isophorone	mg/kg	4.4	4.4	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	13	13	ND	ND	ND	0.037 J	ND	6.1	ND	ND	0.068 J	ND	0.29 J	ND	ND
Nitrobenzene	mg/kg	0.200	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	1.0	1	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	50	220	ND	ND	0.48 J	3.7	0.92 J	4	ND	0.32 J	0.55	0.22 J	0.39 J	1.3 J	ND
Phenol	mg/kg	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	mg/kg	50	665	0.024 J	ND	0.29 J	2.9	1.4 J	33	0.052 J	0.39 J	0.4 J	0.41	0.48 J	2.6	ND

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:				*SB-3*	*SB-4*	*SB-5*	*SB-6*	*SB-7*	*SB-8*	*SB-9*	*SB-10*	*SB-11/MW-11*	*SB-12*	*SB-13*	*SB-14*	*SB-15*
Sample ID:			*TAGM #4046*	*SB3A-91*	*SB4A-91*	*SB5A-91*	*SB6A-91*	*SB7A-91*	*SB8A-91*	*SB9A-91*	*SB10A-91*	*SB11A-91*	*SB12A-91*	*SB13A-91*	*SB14A-91*	*SB15A-91*
Sample Date:			*Recommended Soil*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*
Sample Depth:		*TAGM #4046*	*Cleanup Objectives*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*
Parameter	*Units*	*Recommended Soil Cleanup Objectives*	*to Protect Groundwater Quality* [1]													
		a	*b*													
Total SVOCs	mg/kg	500	--	0.219	0	1.887	17.117	8.98	197.89	1.326	1.23	12.395	3.13	5.59	13.9	2.2
Metals																
Aluminum	mg/kg	--[2]	--	11300	8590	11100	5050	11900	8680	7930	12400	15700	15000	10100	11600	12800
Antimony	mg/kg	--[2]	--	19.6	20.4	ND	7.75	16.5	9.65	ND	21.8	10	6.54	8.09	18.8	ND
Arsenic	mg/kg	7.5[3]	--	**16***	**32.9***	**26***	**8.52***	6.6	**10.7***	4.33	**22.8***	**8.57***	6.06	**22.2***	**11.7***	4.47
Barium	mg/kg	300[5]	--	**1070***	**1150***	177	124	159	**1140***	42.2	234	**475***	81.2	**379***	197	66.4
Beryllium	mg/kg	0.16[3]	--	**1.15***	**1***	ND	ND	**1.83***	ND	ND	ND	**3.04***	**1.26***	**1.27***	**1.1***	**1***
Cadmium	mg/kg	1[4]	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	mg/kg	--[2]	--	9280	19600	63000	53300	35400	24000	40800	9430	41500	23500	47000	19600	46700
Chromium Total	mg/kg	10[3]	--	**33.9***	**32.8***	**21.5***	**16.7***	**16.8***	**28.4***	**10.8***	**46.7***	**20.5***	**17.3***	**24.8***	**79***	**16***
Cobalt	mg/kg	30[5]	--	14	17.9	9.57 ILL	ND	12.0	7.82	5.96	18.1	9.74	10.7	8.92	11.3	6.67
Copper	mg/kg	25[3]	--	**88.3***	**217***	**40.4***	**82.2***	**28.1***	**35.8***	10.4	**96.2***	**28.2***	17.6	**38.9***	**45.5***	12.5
Iron	mg/kg	2000[5]	--	**44200***	**79100***	**22000***	**17100***	**41200***	**29000***	**16000***	**69600***	**22300***	**24800***	**30800***	**31300***	**19800***
Lead	mg/kg	500[6]	--	**659***	**2660***	382	196	126	**1610***	25.8	**1700***	179	56	219	114	10.2
Magnesium	mg/kg	--[2]	--	5590	2070	11000	23900	12300	5090	10700	5090	10200	6600	9350	9050	25100
Manganese	mg/kg	--[2]	--	276	462	472	233	580	386	594	392	523	408	248	494	514
Mercury	mg/kg	0.1	--	**0.576***	**1.69***	**0.279 ILL***	**0.24***	**0.374***	**0.861***	**0.269***	**0.736***	ND	ND	ND	**0.287***	ND
Nickel	mg/kg	13[3]	--	**42.7***	**43.2***	12.6	**23***	**29.8***	11.9	9.28	**33.2***	**20.4***	**28***	**24.6***	**89.7***	**15.9***
Potassium	mg/kg	--[2]	--	1940	914	2870	749	1330	1180	1300	1770	2280	1610	1130	1680	1900
Selenium	mg/kg	2[4]	--	ND	**7.29***	ND	ND	ND	**3.36***	ND	ND	**2.22***	ND	ND	ND	ND
Silver	mg/kg	--[2]	--	ND	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	mg/kg	--[2]	--	308	681	314	273	456	226	200	255	294	466	550	311	279
Thallium	mg/kg	--[2]	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	mg/kg	150[3]	--	32	32.3	27.9	21.6	29.3	20.8	18.2	26.3	21.9	20.9	38.8	36.2	29.2
Zinc	mg/kg	20[3]	--	**424***	**3210***	**266***	**280***	**307***	**752***	**46***	**1400***	**152***	**114***	**279***	**208***	**51.4***
PCBs																
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	10	10.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:				***SB-3***	***SB-4***	***SB-5***	***SB-6***	***SB-7***	***SB-8***	***SB-9***	***SB-10***	***SB-11/MW-11***	***SB-12***	***SB-13***	***SB-14***	***SB-15***
Sample ID:			***TAGM #4046***	***SB3A-91***	***SB4A-91***	***SB5A-91***	***SB6A-91***	***SB7A-91***	***SB8A-91***	***SB9A-91***	***SB10A-91***	***SB11A-91***	***SB12A-91***	***SB13A-91***	***SB14A-91***	***SB15A-91***
Sample Date:			***Recommended Soil***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***
Sample Depth:		***TAGM #4046***	***Cleanup Objectives***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***
Parameter	***Units***	***Recommended Soil Cleanup Objectives*** a	***to Protect Groundwater Quality*** [1] ***b***													
Pesticides																
4,4'-DDD	mg/kg	2.9	7.7	ND	ND	ND	ND	ND	0.15	ND	ND	ND	ND	ND	0.106	ND
4,4'-DDE	mg/kg	2.1	4.4	--	--	--	--	--	--	--	--	--	--	ND	0.088 J	ND
4,4'-DDT	mg/kg	2.1	2.5	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND
Aldrin	mg/kg	0.041	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	0.11	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	0.2	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	0.54	2	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	0.3	0.3	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	0.044	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	0.9	0.9	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	0.9	0.9	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	1	1	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	0.1	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin ketone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (Lindane)	mg/kg	0.06	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-Chlordane	mg/kg	0.54	14	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	0.1	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	10	900	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Pesticides	mg/kg	10	--	0	0	0	0	0	1.55	0	0	0	0	0	0.194	0
Wet Chemistry																
Cyanide (total)	mg/kg	--	--	ND	0.00049	0.00025	ND	ND	0.00022	ND	0.00041	0.00117	0.00373	ND	ND	0.00027
Ignitability	no unit	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Solids	%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

ND() - Not detected at the detection limit listed in parentheses.
N/A - Not analyzed.
1 - Correction factor (CF) of 100 is used per TAGM #4046.
2 - Criterion is site background.
3 - Criterion is listed value or site background.
4 - Criterion is site background. Value listed is upper limit of typical background range listed in TAGM #4046 for metropolitan or suburban areas or near highways.
Exceedance of New York TAGM #4046 Recommended Soil Cleanup Objective.

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		*SB-16*	*SB-16*	*SB-17*	*SB-17*	*SB-18*	*SB-19/MW-19*	*SB-19/MW-19*	*SB-20*	*SB-21*	*SB-21*	*SB-22*	*SB-22*	*SB-23*	*SB-23*	*SB-24*	*SB-24*	*SB-25*
Sample ID:		*SB16A-91*	*SB16B-91*	*SB17A-91*	*SB17B-91*	*SB18A-91*	*SB19A-91*	*SB19B-91*	*SB20A-91*	*SB21A-91*	*SB21B-91*	*SB22A-91*	*SB22B-91*	*SB23A-91*	*SB23B-91*	*SB24A-91*	*SB24B-91*	*SB25A-91*
Sample Date:		*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*
Sample Depth:		*0 - 10*	*10 - 12*	*0 - 10*	*10 - 15.5*	*0 - 10*	*0 - 10*	*10 - 12*	*0 - 10*	*0 - 10*	*10 - 17*	*0 - 10*	*10 - 19.5*	*0 - 10*	*10 - 23.5*	*0 - 10*	*10 - 26*	*0 - 10*
Parameter	***Units***																	
Volatile Organic Compounds (VOCs)																		
1,1,1-Trichloroethane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl Ethyl Ketone)	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.034 T	ND	ND	ND	ND
2-Hexanone	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg / kg	0.099	**0.18 J[a]**	ND	0.07	0.068	0.032 T	ND	0.11	ND	ND	ND	**0.14 T[a]**	**0.14 T[a]**	ND	ND	ND	ND
Benzene	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl Bromide)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl Chloride)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg / kg	0.007	0.015 J	0.005 J	0.013	0.01	0.006 T	0.012 T	ND	0.014 TB	0.016 TB	0.002 J	0.018 TB	0.006 T	0.005 J	0.005 JB	0.017 B	0.006
m-xylene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-Xylene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.002 J	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl acetate	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylene (total)	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.006 J	ND	ND	ND
Total VOCs	mg / kg	0.106	0.195	0.005	0.083	0.078	0.038	0.012	0.11	0.014	0.016	0.002	0.16	0.18	0.011	0.005	0.017	0.006
Semivolatile Organic Compounds (SVOCs)																		
1,2,4-Trichlorobenzene	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		*SB-16*	*SB-16*	*SB-17*	*SB-17*	*SB-18*	*SB-19/MW-19*	*SB-19/MW-19*	*SB-20*	*SB-21*	*SB-21*	*SB-22*	*SB-22*	*SB-23*	*SB-23*	*SB-24*	*SB-24*	*SB-25*
Sample ID:		*SB16A-91*	*SB16B-91*	*SB17A-91*	*SB17B-91*	*SB18A-91*	*SB19A-91*	*SB19B-91*	*SB20A-91*	*SB21A-91*	*SB21B-91*	*SB22A-91*	*SB22B-91*	*SB23A-91*	*SB23B-91*	*SB24A-91*	*SB24B-91*	*SB25A-91*
Sample Date:		*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*
Sample Depth:		*0 - 10*	*10 - 12*	*0 - 10*	*10 - 15.5*	*0 - 10*	*0 - 10*	*10 - 12*	*0 - 10*	*0 - 10*	*10 - 17*	*0 - 10*	*10 - 19.5*	*0 - 10*	*10 - 23.5*	*0 - 10*	*10 - 26*	*0 - 10*
Parameter	***Units***																	
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	0.42 J	0.67 J	0.72 J	ND	ND	ND	ND	0.37 J	ND	ND	ND	ND	ND	0.61 J	ND	0.22 J	ND
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	0.7 J	1.2 J	0.58 J	ND	ND	0.22 J	0.038 J	ND	0.31 J	ND	0.26 J	ND	ND	ND	ND	ND	0.61 J
Acenaphthylene	mg/kg	ND	0.48 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	mg/kg	1.5 J	2.9 J	1.6 J	ND	ND	0.74 J	0.079 J	ND	1.1 T	ND	0.5 J	0.32 J	0.064 J	0.16 J	0.17 J	0.097 J	1.3 J
Benzo(a)anthracene	mg/kg	ND	**3.2 J[a0]**	**1.2 J[a]**	ND	ND	**0.92 J[a]**	ND	ND	**1 T[a]**	ND	**0.77 J[a]**	**0.44 J[a]**	ND	**1.9 J[a]**	**0.3 J[a]**	ND	**1.1 J[a]**
Benzo(a)pyrene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**9 T[a]**	ND	ND	ND
Benzo(b)fluoranthene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.75 J
Benzo(b)fluoranthene / Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic acid	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	mg/kg	ND	ND	ND	ND	ND	3.5 T	2 T	5	0.76 J	3.7 T	ND	0.71 J	14 T	ND	ND	0.32 J	3.2
Butyl benzylphthalate	mg/kg	ND	ND	ND	ND	ND	0.19 J	ND	ND	ND	2.7 T	ND	ND	ND	ND	ND	ND	ND
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	ND	**8.5[a0]**	**2.2[a0]**	ND	ND	**1.7 J[a0]**	ND	ND	**1.6 T[a0]**	ND	**1.3 T[a0]**	**0.8 J[a0]**	ND	**4.2 T[a0]**	**0.63 J[a0]**	ND	**1.7 J[a0]**
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	0.74 J	1.2 J	0.99 J	ND	ND	0.12 J	ND	ND	0.19 J	ND	0.097 J	ND	ND	ND	ND	ND	0.42 J
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate	mg/kg	2.4 J	2.9 J	1 J	2.3	2.6 J	6.2 T	5.5 T	4.1	3.5 T	4.1 T	0.26 J	0.34 J	0.69 J	0.64 J	4.1	4.2	2.2
Di-n-octyl phthalate	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	mg/kg	7.2	12	4.9	0.061 J	0.61 J	4.2 T	0.24 J	0.23 J	3.5 T	0.45 J	2.9 T	2 T	0.27 J	0.38 J	1.2	0.54 J	4.3
Fluorene	mg/kg	1.1 J	2.1 J	1.4 J	ND	ND	0.29 J	0.055 J	ND	0.42 J	ND	0.24 J	ND	ND	ND	ND	ND	0.68 J
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	0.51 J	0.88 J	1.5 J	ND	ND	ND	ND	0.13 J	ND	ND	ND	ND	ND	ND	ND	ND	0.37 J
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	8.9	14	6.6	0.055 J	0.44 J	2.8 T	0.31 J	ND	3.3 T	0.31 J	2 T	1.5 T	0.19 J	0.54 J	0.6 J	0.35 J	4.8
Phenol	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	mg/kg	8.5	17	2.2	ND	0.37 J	1.4 J	0.27 J	0.22 J	4.2 T	0.4 J	1.9 T	1.1 T	0.4 J	2.4 J	0.75 J	0.49 J	3.5

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***SB-16***	***SB-16***	***SB-17***	***SB-17***	***SB-18***	***SB-19/MW-19***	***SB-19/MW-19***	***SB-20***	***SB-21***	***SB-21***	***SB-22***	***SB-22***	***SB-23***	***SB-23***	***SB-24***	***SB-24***	***SB-25***
Sample ID:		***SB16A-91***	***SB16B-91***	***SB17A-91***	***SB17B-91***	***SB18A-91***	***SB19A-91***	***SB19B-91***	***SB20A-91***	***SB21A-91***	***SB21B-91***	***SB22A-91***	***SB22B-91***	***SB23A-91***	***SB23B-91***	***SB24A-91***	***SB24B-91***	***SB25A-91***
Sample Date:		***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***
Sample Depth:		***0 - 10***	***10 - 12***	***0 - 10***	***10 - 15.5***	***0 - 10***	***0 - 10***	***10 - 12***	***0 - 10***	***0 - 10***	***10 - 17***	***0 - 10***	***10 - 19.5***	***0 - 10***	***10 - 23.5***	***0 - 10***	***10 - 26***	***0 - 10***
Parameter	***Units***																	
Total SVOCs	mg / kg	31.97	67.03	24.89	2.416	4.02	22.28	8.492	10.05	19.88	11.66	10.227	7.21	15.614	19.83	7.75	6.217	24.93
Metals																		
Aluminum	mg / kg	8730	12300	8960	8230	7710	9880	11600	14600	12100	9190	8970	12800	7730	5720	8830	9810	10100
Antimony	mg / kg	6.59	ND	ND	ND	ND	24.3	5.81	12.2	219	8.61	9.89	13.2	18.4	28.4	ND	16.9	ND
Arsenic	mg / kg	**13.3***	**9.76***	**17.1***	**9.01***	**14***	7.15	2.76	**9.57***	**136***	6.12	**9.47***	**7.84***	6.69	**12.3***	7.2	**8.54***	6.98
Barium	mg / kg	117	103	156	243	238	171	140	**312***	**507***	95.5	96.3	160	106	285	126	230	143
Beryllium	mg / kg	ND	ND	**1***	ND	**1.07***	ND	ND	**1.6***	**1.36***	ND	ND	**1.12***	ND	ND	ND	ND	ND
Cadmium	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	mg / kg	15600	8580	23000	7720	27500	39000	4120	2400	14500	7350	53100	12600	ILL	10100	28100	25300	37300
Chromium Total	mg / kg	**21***	**22.5***	**22***	**29.6***	**21.5***	**21.8***	**22.3***	**28.8***	**6840***	**238***	**20.7***	**22.7***	**16.6***	**21.4***	**19.5***	**26.1***	**22.5***
Cobalt	mg / kg	8.67	10.8	8.9	9.01	6.58	11	10.7	7.9	13.4	9.77	8.22	13.3	9.45	11.2	10	12.4	6.83
Copper	mg / kg	**68.3***	24.4	**39.5***	**114***	**93.6***	**513***	**45.8***	**71***	**185***	22.3	**71.2***	**50.9***	**170***	**70.5***	**55.8***	**127***	**58.8***
Iron	mg / kg	**31500***	**26600***	**25100***	**21900***	**25300***	**29600***	**25600***	**41600***	**27400***	**20000***	**24700***	**29600***	**33400***	**56200***	**36100***	**46900***	**26700***
Lead	mg / kg	262	87	115	226	402	334	57.6	**590***	**32900***	**1120***	176	383	155	358	196	**1100***	200
Magnesium	mg / kg	5360	5130	10000	1560	5430	16300	4110	5440	3490	3860	8810	5900	19500	2870	7700	8350	19300
Manganese	mg / kg	304	237	326	141	201	438	325	494	257	207	319	304	369	337	549	1160	408
Mercury	mg / kg	**0.57***	**0.424***	ND	ND	**1.62***	**0.627***	**1.49***	**0.681***	**0.409***	ND	**0.552***	ND	**3.19***	**0.319***	**1.19***	**1.96***	**0.506***
Nickel	mg / kg	**26.2***	**33.6***	**29.9***	**30.2***	**25.1***	**43.9***	**29.4***	**31.2***	**28.1***	**20.4***	**22.4***	**31.2***	**22***	**27.2***	**25.7***	**59.8***	**22.1***
Potassium	mg / kg	1070	2090	1280	1060	862	1340	1900	1210	ILL	1300	1430	1890	1200	758	1350	1540	1880
Selenium	mg / kg	ND	ND	ND	ND	**4.34***	ND	ND	ND	1.17	ND	ND	ND	ND	ND	ND	ND	ND
Silver	mg / kg	ND	ND	ND	ND	ND	5.37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	mg / kg	318	244	294	688	396	192	167	401	6.18	179	434	264	486	299	172	277	224
Thallium	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	mg / kg	29.5	37.7	30.1	30.6	35.6	21.2	24.3	28	14	18.6	29	24.1	18.7	17.9	21.9	22.7	19.7
Zinc	mg / kg	**299***	**140***	**300***	**251***	**466***	**339***	**213***	**429***	**354***	**166***	**280***	**215***	**212***	**399***	**240***	**363***	**266***
PCBs																		
Aroclor-1016 (PCB-1016)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg / kg	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg / kg	0	0	0	0	0	0	0	1.1	0	0	0	0	0	0	0	0	0

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***SB-16***	***SB-16***	***SB-17***	***SB-17***	***SB-18***	***SB-19/MW-19***	***SB-19/MW-19***	***SB-20***	***SB-21***	***SB-21***	***SB-22***	***SB-22***	***SB-23***	***SB-23***	***SB-24***	***SB-24***	***SB-25***
Sample ID:		***SB16A-91***	***SB16B-91***	***SB17A-91***	***SB17B-91***	***SB18A-91***	***SB19A-91***	***SB19B-91***	***SB20A-91***	***SB21A-91***	***SB21B-91***	***SB22A-91***	***SB22B-91***	***SB23A-91***	***SB23B-91***	***SB24A-91***	***SB24B-91***	***SB25A-91***
Sample Date:		***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***
Sample Depth:		***0 - 10***	***10 - 12***	***0 - 10***	***10 - 15.5***	***0 - 10***	***0 - 10***	***10 - 12***	***0 - 10***	***0 - 10***	***10 - 17***	***0 - 10***	***10 - 19.5***	***0 - 10***	***10 - 23.5***	***0 - 10***	***10 - 26***	***0 - 10***
Parameter	***Units***																	
Pesticides																		
4,4'-DDD	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 T	ND	ND	0.09
4,4'-DDE	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5 T[4]	ND	ND	ND
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin ketone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (Lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Pesticides	mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	3.74	0	0	0.09
Wet Chemistry																		
Cyanide (total)	mg/kg	ND	ND	ND	ND	ND	0.00027	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ignitability	no unit	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Solids	%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

ND() - Not detected at the detection limit listed in parentheses.
N/A - Not analyzed.
1 - Correction factor (CF) of 100 is used per TAGM #4046.
2 - Criterion is site background.
3 - Criterion is listed value or site background.
4 - Criterion is site background. Value listed is upper limit of typical background range listed in TAGM #4046 for metropolitan or suburban areas or near highways.
Exceedance of New York TAGM #4046 Recommended Soil Cleanup Objective.

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***SB-26***	***SB-26***	***SB-27***	***SB-27***	***SB-28***	***SB-29***	***SB-30***	***SB-31***	***SB-31***	***SB-32***	***SB-32***	***SB-33/MW-33***	***SB-33/MW-33***	***SB-34***	***SB-35***	***SB-35***	***SB-36***
Sample ID:		***SB26A-91***	***SB26B-91***	***SB27A-91***	***SB27B-91***	***SB28A-91***	***SB29A-91***	***SB30A-91***	***SB31A-91***	***SB31B-91***	***SB32A-91***	***SB32B-91***	***SB33A-91***	***SB33B-91***	***SB34A-91***	***SB35A-91***	***SB35B-91***	***SB36A-91***
Sample Date:		***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***
Sample Depth:		***0 - 10***	***10 - 20***	***0 - 10***	***10 - 19***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***10 - 12***	***0 - 10***	***10 - 12.25***	***0 - 10***	***10 - 20***	***0 - 10***	***0 - 10***	***10 - 13***	***0 - 10***
Parameter	***Units***																	
Volatile Organic Compounds (VOCs)																		
1,1,1-Trichloroethane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl Ethyl Ketone)	mg / kg	ND	ND	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg / kg	ND	0.089	0.11 T	0.1 T	--	--	--	0.047	ND	ND	ND	0.025	ND	0.047	0.062	0.024	ND
Benzene	mg / kg	ND	0.003 J	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl Bromide)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg / kg	ND	ND	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg / kg	0.003 J	0.009	0.08 T	0.003 J	--	--	--	0.037	ND	ND	ND	ND	ND	0.003	ND	0.003 J	ND
Chloroethane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl Chloride)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg / kg	ND	0.003 J	0.001 J	0.001 J	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg / kg	0.005 JB	0.007 JB	ND	ND	ND	0.004 J	ND	ND	0.002 J	0.002 J	0.003 J	0.006	0.007	0.008	0.008	0.015	0.002 J
m-xylene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-Xylene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg / kg	ND	0.002 J	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	mg / kg	0.09	0.18	0.034 T	0.022 T	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl acetate	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylene (total)	mg / kg	ND	0.02	0.01 T	ND	--	--	--	ND	0.013	ND	ND	ND	ND	ND	ND	0.001 J	ND
Total VOCs	mg / kg	0.098	0.313	0.235	0.126	0	0.004	0	0.084	0.015	0.002	0.003	0.031	0.007	0.058	0.07	0.043	0.002
Semivolatile Organic Compounds (SVOCs)																		
1,2,4-Trichlorobenzene	mg / kg	ND	0.33 J	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	0.42 J	ND	ND
1,2-Dichlorobenzene	mg / kg	ND	11[D]	1.6 T	3.8 T	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	mg / kg	ND	ND	0.052 J	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	mg / kg	3.1	5.5	3.2 T	1.9 T	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		*SB-26*	*SB-26*	*SB-27*	*SB-27*	*SB-28*	*SB-29*	*SB-30*	*SB-31*	*SB-31*	*SB-32*	*SB-32*	*SB-33/MW-33*	*SB-33/MW-33*	*SB-34*	*SB-35*	*SB-35*	*SB-36*
Sample ID:		*SB26A-91*	*SB26B-91*	*SB27A-91*	*SB27B-91*	*SB28A-91*	*SB29A-91*	*SB30A-91*	*SB31A-91*	*SB31B-91*	*SB32A-91*	*SB32B-91*	*SB33A-91*	*SB33B-91*	*SB34A-91*	*SB35A-91*	*SB35B-91*	*SB36A-91*
Sample Date:		*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*
Sample Depth:		*0 - 10*	*10 - 20*	*0 - 10*	*10 - 19*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*10 - 12*	*0 - 10*	*10 - 12.25*	*0 - 10*	*10 - 20*	*0 - 10*	*0 - 10*	*10 - 13*	*0 - 10*
Parameter	***Units***																	
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	ND	ND	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	ND	0.29 J	0.21 J	0.36 J	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	**0.7 J[a]**	**1.2[a]**	**0.35 J[a]**	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/kg	**18[a]**	**12[a]**	**2.5 J[a]**	**16 J[a]**	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	ND	ND	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	mg/kg	ND	ND	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.17 J
Anthracene	mg/kg	0.5 J	0.095 J	ND	0.18 J	ND	ND	ND	ND	ND	0.11 J	ND	ND	0.4 J	ND	ND	ND	0.16 J
Benzo(a)anthracene	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.069	ND	0.15 J	ND	ND	0.21 J	ND	ND	ND	**0.4 J[a]**
Benzo(a)pyrene	mg/kg	ND	ND	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	mg/kg	ND	ND	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene / Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	ND	ND	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	mg/kg	ND	ND	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic acid	mg/kg	**3.6 J[a]**	ND	ND	0.8 J	--	--	--	ND	ND	ND	ND	ND	ND	ND	0.11 J	ND	ND
Benzyl Alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	mg/kg	ND	2.6	0.53 J	12 T	ND	ND	0.03 J	0.16	ND	ND	ND	12	0.37 J	2.4	ND	5.2	0.13 J
Butyl benzylphthalate	mg/kg	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.39 J	ND	ND	ND	ND
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.13	ND	0.27 J	ND	ND	0.3 J	ND	ND	ND	**0.76 J[a]**
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	ND	0.042 J	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate	mg/kg	ND	ND	0.17 J	0.25 J	ND	ND	0.15 J	ND	ND	0.15 J	0.2 J	3.5	5.8	3.3	ND	3.9	0.4 J
Di-n-octyl phthalate	mg/kg	ND	ND	ND	ND	--	--	--	ND	ND	ND	ND	18	ND	ND	2.4	ND	ND
Fluoranthene	mg/kg	1.7	0.31 J	0.14 J	0.36 J	ND	ND	ND	0.23	ND	0.67 J	0.11 J	0.15 J	1.1 J	0.34	ND	0.15 J	1.1 T
Fluorene	mg/kg	ND	ND	ND	0.16 J	--	--	--	ND	ND	ND	ND	ND	0.14 J	ND	0.83 J	ND	ND
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	ND	ND	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	ND	0.51 J	0.22 J	0.27 J	--	--	--	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	ND
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	2.2	ND	0.2 J	ND	ND	ND	ND	ND	ND	0.31 J	0.075 J	ND	1.2 J	0.39	0.53 J	ND	0.36 J
Phenol	mg/kg	**0.96 J[a]**	ND	ND	**1.1 J[a]**	--	--	--	ND	ND	ND	ND	**0.048 J[a]**	ND	ND	**0.55 J[a]**	ND	ND
Pyrene	mg/kg	1.7	0.43 J	0.23 J	0.45 J	ND	ND	ND	0.098	ND	0.14 J	ND	ND	0.19 J	0.33	ND	0.13 J	1.1 T

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***SB-26***	***SB-26***	***SB-27***	***SB-27***	***SB-28***	***SB-29***	***SB-30***	***SB-31***	***SB-31***	***SB-32***	***SB-32***	***SB-33/MW-33***	***SB-33/MW-33***	***SB-34***	***SB-35***	***SB-35***	***SB-36***
Sample ID:		***SB26A-91***	***SB26B-91***	***SB27A-91***	***SB27B-91***	***SB28A-91***	***SB29A-91***	***SB30A-91***	***SB31A-91***	***SB31B-91***	***SB32A-91***	***SB32B-91***	***SB33A-91***	***SB33B-91***	***SB34A-91***	***SB35A-91***	***SB35B-91***	***SB36A-91***
Sample Date:		***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***
Sample Depth:		***0 - 10***	***10 - 20***	***0 - 10***	***10 - 19***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***10 - 12***	***0 - 10***	***10 - 12.25***	***0 - 10***	***10 - 20***	***0 - 10***	***0 - 10***	***10 - 13***	***0 - 10***
Parameter	***Units***																	
Total SVOCs	mg / kg	32.46	37.507	9.402	37.63	0	0	0.18	0.687	0	1.8	0.565	33.698	10.1	6.76	4.84	9.38	4.58
Metals																		
Aluminum	mg / kg	6590	10300	6000	6800	5110	8520	11600	6690	8950	17200	10100	8960	7300	5830	10000	1360	9500
Antimony	mg / kg	ND	7.99	7.56	13.9	5.63	ND	14.2	8.8	ND	19.4	ND	14.3	9.87	24.9	12	ND	14.5
Arsenic	mg / kg	3.5	**14.6**	3.29	**9.86**	4.48	4.6	4.57	4.38	**42**	5.31	3.96	5.45	**551**	**8.31**	**8.87**	**9.55**	**8.54**
Barium	mg / kg	59	96.4	67.9	127	17.7	56.5	42.3	44.1	50.1	78.9	54.2	71.2	105	64.4	236	103	122
Beryllium	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.0**	ND	ND	ND	ND	ND	ND	ND
Cadmium	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	mg / kg	66800	14800	21600	20300	4340	40000	2560	28600	3200	5840	44800	47600	22900	75900	24400	23300	24300
Chromium Total	mg / kg	**11.8**	**19.8**	**13.9**	**22.9**	ND	**12.3**	**16.8**	**13.3**	9.72	**23**	**12.7**	**17.6**	**14.6**	**21**	**59.8**	**21**	**24.6**
Cobalt	mg / kg	5.91	7.53	7.84 ILL	5.93	ND	6.55	11	5.87	ND	13.4	7.96	**723**	8.19 ILL	8.75	8.33	9.32	10.3
Copper	mg / kg	**63.2**	**97.4**	**68.8**	**1240**	6.71	12.3	15.9	23.2	ND	19.2	13.4	**25.9**	**35.1**	**41.8**	**123**	**29.2**	**66.9**
Iron	mg / kg	**13600**	**25800**	**15800**	**22500**	**11400**	**18400**	**21400**	**16400**	**10400**	**29800**	**17400**	**17900**	**28100**	**34300**	**38400**	**32200**	**30500**
Lead	mg / kg	94.6 ILL	82.3	44.4	142	6.99	8.05	10.3	57.8	13	35.1	9.01	58.5	**852**	**788**	273	54.9	21.6
Magnesium	mg / kg	18300	5400	9800	5710	3030	12800	3900	13100	1760	5290	9230	13600	7340	21600	7260	6330	8330
Manganese	mg / kg	334	258	441	376	274	425	462	349	83.1	282	376	359	926	362	399	426	454
Mercury	mg / kg	**0.426**	**1.14**	**1.37**	**0.282**	ND	**0.144**	**0.626**	**0.226**	**0.188**	**0.296**	**0.186**	ND	ND	**0.32**	**1.34**	**0.291**	**0.175**
Nickel	mg / kg	**15.6**	**196**	**18.5**	**24.3**	8.72	**15.2**	**21.5**	10.6	ND	**24.8**	**15.9**	**14.7**	**14.4**	**17.2**	**29.3**	**39.5**	**37.2**
Potassium	mg / kg	1210	2180	1680	1750	263	896	2080	960	ND	2830	1800	1380	1280	1620	1270	2330	1440
Selenium	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.09	ND
Silver	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	mg / kg	180	373	354	648	ND	ND	145	92.3	ND	181	166	216	167	770	570	287	169
Thallium	mg / kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	mg / kg	17.8	16.9	14.7	13.4	10.2	18.7	25	16.1	12.2	28	23	23.1	18	12.6	22	24.1	22.4
Zinc	mg / kg	**139**	**225**	**155**	**208**	**35.1**	**47.4**	**55**	**72.9**	**47.4**	**61.6**	**39**	**142**	**542**	**557**	**417**	**187**	**387**
PCBs																		
Aroclor-1016 (PCB-1016)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg / kg	ND	ND	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	mg / kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg / kg	0	0	0	0	N / A	N / A	N / A	0	0	0	0	0	0	0	0	0	0

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***SB-26***	***SB-26***	***SB-27***	***SB-27***	***SB-28***	***SB-29***	***SB-30***	***SB-31***	***SB-31***	***SB-32***	***SB-32***	***SB-33/MW-33***	***SB-33/MW-33***	***SB-34***	***SB-35***	***SB-35***	***SB-36***
Sample ID:		***SB26A-91***	***SB26B-91***	***SB27A-91***	***SB27B-91***	***SB28A-91***	***SB29A-91***	***SB30A-91***	***SB31A-91***	***SB31B-91***	***SB32A-91***	***SB32B-91***	***SB33A-91***	***SB33B-91***	***SB34A-91***	***SB35A-91***	***SB35B-91***	***SB36A-91***
Sample Date:		***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***
Sample Depth:		***0 - 10***	***10 - 20***	***0 - 10***	***10 - 19***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***10 - 12***	***0 - 10***	***10 - 12.25***	***0 - 10***	***10 - 20***	***0 - 10***	***0 - 10***	***10 - 13***	***0 - 10***
Parameter	***Units***																	
Pesticides																		
4,4'-DDD	mg/kg	ND	ND	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	mg/kg	ND	ND	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	ND	ND	ND	ND	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin ketone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (Lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Pesticides	mg/kg	0	0	0	0	N/A	N/A	N/A	0	0	0	0	0	0	0	0	0	0
Wet Chemistry																		
Cyanide (total)	mg/kg	ND	0.00074	ND	ND	0.00022	ND	0.00024	ND	0.00041	ND	0.00029	ND	ND	ND	ND	ND	ND
Ignitability	no unit	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Solids	%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

ND() - Not detected at the detection limit listed in parentheses.
N/A - Not analyzed.
1 - Correction factor (CF) of 100 is used per TAGM #4046.
2 - Criterion is site background.
3 - Criterion is listed value or site background.
4 - Criterion is site background. Value listed is upper limit of typical background range listed in TAGM #4046 for metropolitan or suburban areas or near highways.
Exceedance of New York TAGM #4046 Recommended Soil Cleanup Objective.

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***SB-36***	***SB-37***	***SB-38***	***SB-38***	***SB-39***	***SB-39***	***SB-40***	***SB-40***	***SB-41***	***SB-41***	***SB-42***	***SB-42***	***SB-43***	***SB-43***	***SB-44***	***SB-44***	***SB-45***
Sample ID:		***SB36B-91***	***SB37A-91***	***SB38A-91***	***SB38B-91***	***SB39A-91***	***SB39B-91***	***SB40A-91***	***SB40B-91***	***SB41A-91***	***SB41B-91***	***SB42A-91***	***SB42B-91***	***SB43A-91***	***SB43B-91***	***SB44A-91***	***SB44B-91***	***SB45A-91***
Sample Date:		***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***
Sample Depth:		***10 - 24***	***0 - 10***	***0 - 10***	***10 - 14***	***0 - 10***	***10 - 14***	***0 - 10***	***10 - 14***	***0 - 10***	***10 - 14***	***0 - 10***	***10 - 13***	***0 - 10***	***10 - 12.5***	***0 - 10***	***10 - 14***	***0 - 10***
Parameter	***Units***																	
Volatile Organic Compounds (VOCs)																		
1,1,1-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl Ethyl Ketone)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.03 T
2-Hexanone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/kg	**0.18 T[w]**	ND	0.039 T	ND	ND	ND	ND	ND	ND	**0.18 T[w]**	ND	ND	ND	ND	ND	0.027 T	**0.14 T[w]**
Benzene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl Bromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.015 T	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/kg	ND	ND	ND	0.026 T	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.011 T	ND
Chloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl Chloride)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/kg	0.013 T	0.01	0.006 J	0.007 T	0.012 T	0.04 TB	0.003 J	0.007 J	0.011 TB	0.017 TB	0.005 JB	0.011 B	0.005 JB	0.007 JB	0.006 T	0.006 T	0.006 J
m-xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001 J	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl acetate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylene (total)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs	mg/kg	0.193	0.01	0.045	0.033	0.012	0.04	0.003	0.007	0.011	0.212	0.006	0.011	0.005	0.007	0.006	0.044	0.176
Semivolatile Organic Compounds (SVOCs)																		
1,2,4-Trichlorobenzene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		*SB-36*	*SB-37*	*SB-38*	*SB-38*	*SB-39*	*SB-39*	*SB-40*	*SB-40*	*SB-41*	*SB-41*	*SB-42*	*SB-42*	*SB-43*	*SB-43*	*SB-44*	*SB-44*	*SB-45*
Sample ID:		*SB36B-91*	*SB37A-91*	*SB38A-91*	*SB38B-91*	*SB39A-91*	*SB39B-91*	*SB40A-91*	*SB40B-91*	*SB41A-91*	*SB41B-91*	*SB42A-91*	*SB42B-91*	*SB43A-91*	*SB43B-91*	*SB44A-91*	*SB44B-91*	*SB45A-91*
Sample Date:		*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*
Sample Depth:		*10 - 24*	*0 - 10*	*0 - 10*	*10 - 14*	*0 - 10*	*10 - 14*	*0 - 10*	*10 - 14*	*0 - 10*	*10 - 14*	*0 - 10*	*10 - 13*	*0 - 10*	*10 - 12.5*	*0 - 10*	*10 - 14*	*0 - 10*
Parameter	***Units***																	
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	ND	0.063 J	0.061 J	0.4 J
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/kg	ND	ND	ND	ND	ND	0.96 J[a0]	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	0.24 J	0.073 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	0.21 J	ND	0.85 J
Acenaphthylene	mg/kg	ND	ND	ND	ND	0.73 J	ND	ND	ND	ND	ND	ND	ND	0.63 J	ND	ND	ND	ND
Anthracene	mg/kg	0.53 J	0.18 J	ND	0.12 J	0.42 J	ND	0.18 J	0.1 J	ND	ND	ND	ND	1.1 J	ND	0.32 J	0.042 J	2.6 T
Benzo(a)anthracene	mg/kg	0.8 J[a]	ND	ND	ND	1.6 J[a]	ND	0.23 J[a]	ND	0.62 J[a]	ND	ND	ND	2.4[a]	ND	ND	ND	2.7 T[a]
Benzo(a)pyrene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.7[a]	ND	ND	ND	4.4 T[a]
Benzo(b)fluoranthene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8[a0]	ND	ND	ND	3 T[a0]
Benzo(b)fluoranthene / Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2[a0]	ND	ND	ND	3.4 T[a0]
Benzoic acid	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	0.45 J	ND	ND	ND	ND
Benzyl Alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	mg/kg	0.21 J	4	2.8 T	0.72 J	0.31 J	0.12 J	1.4 J	0.41 J	ND	0.46 J	ND	ND	ND	0.073 J	ND	ND	0.16 J
Butyl benzylphthalate	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	1.3 J[a0]	ND	ND	ND	2.9 T[a0]	ND	0.51 J[a0]	ND	1.4 J[a0]	ND	ND	ND	5.2[a0]	ND	0.51 J[a0]	ND	4.2 T[a0]
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	0.17 J	ND	ND	ND	ND	ND	0.26 J	0.11 J	ND	ND	ND	ND	0.15 J	ND	0.18 J	ND	0.67 J
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate	mg/kg	ND	0.98 J	ND	0.4 J	0.64 J	0.53 J	ND	1.2 J	ND	1 J	3.1	6	2.8	0.65 J	0.17 J	0.27 J	1.5 T
Di-n-octyl phthalate	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	mg/kg	2.8 T	1 J	0.88 J	0.42 J	3.4 T	ND	0.87 J	0.31 J	2.2 J	ND	0.2 J	ND	8	ND	1 J	0.15 J	7.9 T
Fluorene	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	ND	ND	ND	0.35 J	ND	0.2 J	ND	1.3 T
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.084 J	1.1 T
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	2 J	0.75 J	0.82 J	0.47 J	0.85 J	ND	0.87 J	0.6 J	1.1 J	ND	0.15 J	ND	4.5	ND	1.2 J	0.17 J	8.4 T
Phenol	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	mg/kg	1.4 J	0.55 J	0.46 J	0.34 J	3.3 T	ND	0.51 J	0.68 J	0.93 J	ND	0.37 J	ND	14	0.053 J	0.35 J	0.13 J	8.9 T

TABLE 2.2

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WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***SB-36***	***SB-37***	***SB-38***	***SB-38***	***SB-39***	***SB-39***	***SB-40***	***SB-40***	***SB-41***	***SB-41***	***SB-42***	***SB-42***	***SB-43***	***SB-43***	***SB-44***	***SB-44***	***SB-45***
Sample ID:		***SB36B-91***	***SB37A-91***	***SB38A-91***	***SB38B-91***	***SB39A-91***	***SB39B-91***	***SB40A-91***	***SB40B-91***	***SB41A-91***	***SB41B-91***	***SB42A-91***	***SB42B-91***	***SB43A-91***	***SB43B-91***	***SB44A-91***	***SB44B-91***	***SB45A-91***
Sample Date:		***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***
Sample Depth:		***10 - 24***	***0 - 10***	***0 - 10***	***10 - 14***	***0 - 10***	***10 - 14***	***0 - 10***	***10 - 14***	***0 - 10***	***10 - 14***	***0 - 10***	***10 - 13***	***0 - 10***	***10 - 12.5***	***0 - 10***	***10 - 14***	***0 - 10***
Parameter	***Units***																	
Total SVOCs	mg/kg	9.45	7.533	4.96	2.47	14.15	1.61	4.83	3.63	6.25	1.46	4.09	6	52.9	0.776	4.203	0.907	51.48
Metals																		
Aluminum	mg/kg	7910	9490	10100	13500	10900	10300	12100	10800	6140	8340	6660	7290	8600	11200	9370	8350	11000
Antimony	mg/kg	24.7	24.6	22.9	ND	14.7	28.5	23.8	24.2	10.4	13.8	97.1	28.5	51	14.6	14.1	ND	27.5
Arsenic	mg/kg	16.2*	22.5*	15.3*	8.02*	11.7*	21.2*	12.2*	20.2*	5.36	15.1*	34.2*	12.9*	17.4*	4.05	4.02	3.01	7.08
Barium	mg/kg	7.24	333*	200	143	313*	262	128	383*	67.1	145	371*	228	581*	88.8	42.9	55.2	196
Beryllium	mg/kg	ND	1.51 ILL*	ND	ND	1*	1.71*	1*	ND	ND	1.18*	ND	ND	1.13*	ND	ND	ND	1.17 ILL*
Cadmium	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	mg/kg	31600	8280	38900	4690	48800	21000	36400	12300	76400	10600	16300	20000 ILL	18200	20400	24500	35300	19400
Chromium Total	mg/kg	36.3*	36*	29*	59.8*	27.7*	42.2*	26.3*	36*	10.2*	24.6*	59.4*	41.3*	57.8*	15.2*	10.1*	12.7*	30.8*
Cobalt	mg/kg	13.5	14.5	11.1	12.7	10.5	20.5	19	20	5.17	12.3	32.5*	16.6	19.6	9.38	6.51	7.2	12
Copper	mg/kg	11	107*	205*	50.5*	124*	109*	42.3*	95.2*	32.1*	107*	158*	58.3*	506*	19.4	12.6	13.4	51.2*
Iron	mg/kg	63000*	60000*	50000*	32200*	33200*	71100*	66800*	75600*	15200*	47100*	249000*	102000*	114000*	21200*	15600*	17400*	85100*
Lead	mg/kg	919*	256	404	182	445	256	146	1080*	122	104	1460*	1050*	369	37.8	31.2	21.7	278
Magnesium	mg/kg	7310	1910	8840	4060	12500	2700	13600	4070	26600	2550	2660	2220	5160	6280	8720	7120	2330
Manganese	mg/kg	550	303	464	260	476	431	1230	482	303	247	1080	629	464	317	304	454	418
Mercury	mg/kg	0.7*	0.377*	0.404*	1.2*	0.262*	3.13*	ND	1.67*	ND	ND	1.95*	2.23*	1.09*	1.13*	ND	0.186*	0.219*
Nickel	mg/kg	23.8*	26.7*	40.1*	30.2*	57.5*	51.8*	26.4*	556*	13	36*	49.6*	34.5*	41.2*	13.9*	15*	15.9*	128*
Potassium	mg/kg	1180	935	1960	1750	1130	1190	1390	1880	899	880	840	1010	733	1630	1550	1430	1940
Selenium	mg/kg	3.17*	1.42	1.24	1.07	1.78	1.71	ND	1.7	ND	ND	4.75*	1.66	1.62	ND	ND	ND	ND
Silver	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	mg/kg	372	374	2070	246	438	661	223	304	190	312	465	272	315	210	259	207	3440
Thallium	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	mg/kg	23.7	24.2	20.8	28.4	22.6	26.8	ND	25.5	36.4	36.6	27.8	18.5	26.8	23.1	18.6	22.6	22
Zinc	mg/kg	1420*	656*	543*	283*	742*	897*	43.5*	1270*	271*	346*	985*	398*	638*	83.1*	73.1*	64.6*	749*
PCBs																		
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***SB-36***	***SB-37***	***SB-38***	***SB-38***	***SB-39***	***SB-39***	***SB-40***	***SB-40***	***SB-41***	***SB-41***	***SB-42***	***SB-42***	***SB-43***	***SB-43***	***SB-44***	***SB-44***	***SB-45***
Sample ID:		***SB36B-91***	***SB37A-91***	***SB38A-91***	***SB38B-91***	***SB39A-91***	***SB39B-91***	***SB40A-91***	***SB40B-91***	***SB41A-91***	***SB41B-91***	***SB42A-91***	***SB42B-91***	***SB43A-91***	***SB43B-91***	***SB44A-91***	***SB44B-91***	***SB45A-91***
Sample Date:		***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***
Sample Depth:		***10 - 24***	***0 - 10***	***0 - 10***	***10 - 14***	***0 - 10***	***10 - 14***	***0 - 10***	***10 - 14***	***0 - 10***	***10 - 14***	***0 - 10***	***10 - 13***	***0 - 10***	***10 - 12.5***	***0 - 10***	***10 - 14***	***0 - 10***
Parameter	***Units***																	
Pesticides																		
4,4'-DDD	mg/kg	ND	ND	0.18 T	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin ketone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (Lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Pesticides	mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wet Chemistry																		
Cyanide (total)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00088	ND	0.00021	ND	ND	ND	ND
Ignitability	no unit	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Solids	%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

ND() - Not detected at the detection limit listed in parentheses.
N/A - Not analyzed.
1 - Correction factor (CF) of 100 is used per TAGM #4046.
2 - Criterion is site background.
3 - Criterion is listed value or site background.
4 - Criterion is site background. Value listed is upper limit of typical background range listed in TAGM #4046 for metropolitan or suburban areas or near highways.
Exceedance of New York TAGM #4046 Recommended Soil Cleanup Objective.

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***SB-45***	***SB-46***	***SB-46***	***SB-47***	***SB-48***	***SB-48***	***SB-49***	***SB-50***	***SB-51***	***SB-52***	***SB-53***	***SB-54***	***SB-55***	***SB-56***	***SB-56***	***SB-57***	***SB-58***
Sample ID:		***SB45B-91***	***SB46A-91***	***SB46B-91***	***SB47A-91***	***SB48A-91***	***SB48B-91***	***SB49A-91***	***SB50A-91***	***SB51A-91***	***SB52A-91***	***SB53A-91***	***SB54A-91***	***SB55A-91***	***SB56-91***	***SB56A-91***	***SB57A-91***	***SB58A-91***
Sample Date:		***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***
Sample Depth:		***10 - 14***	***0 - 10***	***10 - 11***	***0 - 10***	***0 - 10***	***10 - 13***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***
Parameter	***Units***																	
Volatile Organic Compounds (VOCs)																		
1,1,1-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl Ethyl Ketone)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
2-Hexanone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	mg/kg	0.084 T	0.053 T	0.25 T[20]	ND	0.029 T	0.034 T	ND	ND	0.035	ND	ND	ND	ND	--	--	--	--
Benzene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	0.014	ND	ND	ND	ND	--	--	--	--
Bromodichloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane (Methyl Bromide)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
Carbon tetrachloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
Chloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane (Methyl Chloride)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	0.003 J	ND	ND	ND	ND	--	--	--	--
m&p-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	mg/kg	0.008 J	0.008 T	0.013 T	0.015 B	0.005 J	0.006 J	0.002 J	0.007	0.006 J	0.014 TB	0.009 B	0.003 J	ND	ND	--	ND	ND
m-xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
Toluene	mg/kg	ND	0.002 J	ND	ND	ND	ND	ND	ND	ND	0.002 J	ND	ND	ND	--	--	--	--
trans-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl acetate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylene (total)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
Total VOCs	mg/kg	0.092	0.063	0.263	0.015	0.034	0.04	0.002	0.007	0.058	0.016	0.009	0.003	N / A	0	N / A	0	0
Semivolatile Organic Compounds (SVOCs)																		
1,2,4-Trichlorobenzene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
1,2-Dichlorobenzene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
1,3-Dichlorobenzene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
1,4-Dichlorobenzene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		*SB-45*	*SB-46*	*SB-46*	*SB-47*	*SB-48*	*SB-48*	*SB-49*	*SB-50*	*SB-51*	*SB-52*	*SB-53*	*SB-54*	*SB-55*	*SB-56*	*SB-56*	*SB-57*	*SB-58*
Sample ID:		*SB45B-91*	*SB46A-91*	*SB46B-91*	*SB47A-91*	*SB48A-91*	*SB48B-91*	*SB49A-91*	*SB50A-91*	*SB51A-91*	*SB52A-91*	*SB53A-91*	*SB54A-91*	*SB55A-91*	*SB56-91*	*SB56A-91*	*SB57A-91*	*SB58A-91*
Sample Date:		*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*	*11/1/1991*
Sample Depth:		*10 - 14*	*0 - 10*	*10 - 11*	*0 - 10*	*0 - 10*	*10 - 13*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*	*0 - 10*
Parameter	***Units***																	
2,4-Dimethylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
2-Chlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	ND	ND	ND	2.5	3 T	0.051 J	ND	ND	ND	ND	ND	4.1	ND	--	--	--	--
2-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	mg/kg	ND	ND	ND	ND	ND	0.034 J	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
4-Nitroaniline	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	mg/kg	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	6	ND	--	--	--	--
Acenaphthylene	mg/kg	ND	ND	ND	0.58 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
Anthracene	mg/kg	ND	0.072 J	ND	46	0.13 J	ND	ND	ND	ND	ND	ND	12	ND	ND	--	ND	0.089 J
Benzo(a)anthracene	mg/kg	ND	0.13 J	ND	20[a,b]	0.35 J[a]	ND	0.097 J	ND	ND	ND	ND	9.5[a,b]	ND	0.05 J	--	ND	0.12 J
Benzo(a)pyrene	mg/kg	ND	ND	ND	28[a,b]	ND	ND	ND	ND	ND	ND	ND	12[a,b]	ND	--	--	--	--
Benzo(b)fluoranthene	mg/kg	ND	ND	ND	23[a,b]	ND	ND	ND	ND	ND	ND	ND	8.6[a,b]	ND	--	--	--	--
Benzo(b)fluoranthene / Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	6.3	ND	--	--	--	--
Benzo(k)fluoranthene	mg/kg	ND	ND	ND	24[a,b]	ND	ND	ND	ND	ND	ND	ND	8.9[a,b]	ND	--	--	--	--
Benzoic acid	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
Benzyl Alcohol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	mg/kg	ND	ND	ND	ND	ND	ND	0.16 J	0.48 J	0.21 J	ND	0.31 J	ND	0.12 J	ND	--	0.19 J	ND
Butyl benzylphthalate	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	ND	ND
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	mg/kg	ND	0.26 J	ND	39[a,b]	ND	ND	0.16 J	ND	ND	ND	ND	12[a,b]	ND	0.088 J	--	ND	0.24 J
Dibenz(a,h)anthracene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	ND	ND	ND	8.4[a,b]	0.075 J	ND	ND	ND	ND	ND	ND	5.7	ND	--	--	--	--
Diethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate	mg/kg	0.53 J	0.22 J	11 T[a,b]	5.5	0.22 J	0.51 T	ND	2.8	1.3	0.45 J	2.4	ND	ND	ND	--	ND	ND
Di-n-octyl phthalate	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
Fluoranthene	mg/kg	ND	0.5 T	0.22 J	85[a]	1.9 J	ND	0.26 J	0.14 J	0.12 J	0.19 J	0.44 J	30	ND	0.13 J	--	ND	0.47
Fluorene	mg/kg	ND	ND	ND	20	ND	ND	ND	ND	ND	ND	ND	9.3	ND	--	--	--	--
Hexachlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	ND	ND	ND	14[a,b]	ND	ND	ND	ND	ND	ND	ND	7.6[a,b]	ND	--	--	--	--
Isophorone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	mg/kg	ND	ND	ND	4.7	210 T[a,b]	13 T	ND	ND	ND	ND	ND	11	ND	--	--	--	--
Nitrobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	mg/kg	ND	0.33 J	ND	100[a]	1.2 T	ND	0.15 J	0.079 J	0.075 J	0.11 J	0.33 J	39	ND	0.058 J	--	ND	0.26 J
Phenol	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
Pyrene	mg/kg	ND	0.37 J	ND	95[a]	1.5 T	ND	0.12 J	0.083 J	0.393	0.085 J	0.44 J	25	ND	0.063 J	--	ND	0.21 J

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***SB-45***	***SB-46***	***SB-46***	***SB-47***	***SB-48***	***SB-48***	***SB-49***	***SB-50***	***SB-51***	***SB-52***	***SB-53***	***SB-54***	***SB-55***	***SB-56***	***SB-56***	***SB-57***	***SB-58***
Sample ID:		***SB45B-91***	***SB46A-91***	***SB46B-91***	***SB47A-91***	***SB48A-91***	***SB48B-91***	***SB49A-91***	***SB50A-91***	***SB51A-91***	***SB52A-91***	***SB53A-91***	***SB54A-91***	***SB55A-91***	***SB56-91***	***SB56A-91***	***SB57A-91***	***SB58A-91***
Sample Date:		***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***
Sample Depth:		***10 - 14***	***0 - 10***	***10 - 11***	***0 - 10***	***0 - 10***	***10 - 13***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***
Parameter	***Units***																	
Total SVOCs	mg/kg	0.53	1.882	11.22	541.68*	218.375	13.595	0.947	3.582	2.098	0.835	3.92	207	0.12	0.389	0	0.19	1.389
Metals																		
Aluminum	mg/kg	8190	10000	8770	7260	6380	6860	8020	8340	9840	11300	7250	4980	7220	--	7060	6350	5320
Antimony	mg/kg	8.13	13.2	12.4	5.89	ND	10.3	ND	ND	8.81	11.3	16.1	12.2	ND	--	5.9	13.2	7.71
Arsenic	mg/kg	11*	12.6*	21.9*	15.7*	7.85*	10.7*	4.07	11.8*	11.2*	6.88	23.1*	13.6*	4.65	--	5.3	3.98	4.86
Barium	mg/kg	188	171	134	132	168	76	46.8	122	101	88.2	341*	161	43.2	--	42.2	41.1	30.8
Beryllium	mg/kg	ND	ND	ND	ND	ND	ND	ND	1.17*	ND	ND	ND	ND	ND	--	ND	ND	ND
Cadmium	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	ND	ND	ND
Calcium	mg/kg	10000	26700	9720	40100	30500	14500	29900	15900	8450	22300	21000	35600	9150	--	19100	29300	31800
Chromium Total	mg/kg	19.6*	24.9*	23.7*	22.9*	15.2*	10.6*	9.93	13.4*	15.4*	15.5*	31.9*	15*	10.8*	--	11.8*	8.4	5.61
Cobalt	mg/kg	6.65	7.45	8.82	6.48	7.58	ND	6.02	9.14	10.6	9.98	10.4	7.34	6.76	--	6.14	ND	ND
Copper	mg/kg	15.2	59.9*	26.4*	39.5*	37.1*	72.8 ILL*	11.8	508*	22.6	30.6*	66.4*	316*	12.4	--	14.7	10.1	8.01
Iron	mg/kg	26900*	27600*	31900*	26100*	19100*	20600*	17100*	22300*	23000*	22900*	48600*	28000*	14500*	--	14900*	12300*	10300*
Lead	mg/kg	166	185	100	388	143	33.6	35.6	137	62.7	167	348	201	27.2	--	32.8	6.53 ILL	19.4
Magnesium	mg/kg	2260	8180	2900	8200	3980	3240	9980	3890	2650	9180	7520	11400	4940	--	6100	6930	7480
Manganese	mg/kg	218	230	214	378	231	181	629	215	343	510	379	299	172	--	327	300	292
Mercury	mg/kg	0.277*	0.345*	ND	0.333*	0.505*	ND	ND	0.857*	0.28*	ND	1.69*	1.3*	0.162*	--	ND	ND	ND
Nickel	mg/kg	12.4	18.3*	20.6*	22*	18*	14.5*	10.9	23.8*	9.93 ILL	25.4*	27.1*	12.3	8.39	--	11.5	13.2*	11
Potassium	mg/kg	688	1310	865	967	674	416	984	877	749	1950	890	302	671	--	653	947	839
Selenium	mg/kg	ND	ND	1.18	1.09	ND	ND	ND	1.34	ND	ND	1.47	2.04*	ND	--	ND	ND	ND
Silver	mg/kg	ND	ND	7.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	ND	ND	ND
Sodium	mg/kg	204	2300	307	198	300	182	357	409	392	266	273	ND	ND	--	77.9	152	138
Thallium	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	ND	ND	ND
Vanadium	mg/kg	18.8	27.6	21.1	21.9	20.7	15.7	18.4	33.2	19.9	24.9	24.2	18.7	14.1	--	16.2	14.8	12.2
Zinc	mg/kg	132*	400*	118*	176*	206*	315*	47.4*	147*	382*	151*	419*	309*	63.1*	--	54*	56.5*	28.4*
PCBs																		
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCBs	mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***SB-45***	***SB-46***	***SB-46***	***SB-47***	***SB-48***	***SB-48***	***SB-49***	***SB-50***	***SB-51***	***SB-52***	***SB-53***	***SB-54***	***SB-55***	***SB-56***	***SB-56***	***SB-57***	***SB-58***
Sample ID:		***SB45B-91***	***SB46A-91***	***SB46B-91***	***SB47A-91***	***SB48A-91***	***SB48B-91***	***SB49A-91***	***SB50A-91***	***SB51A-91***	***SB52A-91***	***SB53A-91***	***SB54A-91***	***SB55A-91***	***SB56-91***	***SB56A-91***	***SB57A-91***	***SB58A-91***
Sample Date:		***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***	***11/1/1991***
Sample Depth:		***10 - 14***	***0 - 10***	***10 - 11***	***0 - 10***	***0 - 10***	***10 - 13***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***
Parameter	***Units***																	
Pesticides																		
4,4'-DDD	mg/kg	ND	ND	ND	ND	0.093 T	ND	ND	ND	ND	ND	0.12	ND	ND	--	--	--	--
4,4'-DDE	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	ND	ND	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
alpha-Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin ketone	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-BHC (Lindane)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Pesticides	mg/kg	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A
Wet Chemistry																		
Cyanide (total)	mg/kg	ND	ND	ND	ND	0.00025	ND	ND	ND	ND	ND	ND	ND	0.00028	--	ND	ND	ND
Ignitability	no unit	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Solids	%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

ND() - Not detected at the detection limit listed in parentheses.
N/A - Not analyzed.
1 - Correction factor (CF) of 100 is used per TAGM #4046.
2 - Criterion is site background.
3 - Criterion is listed value or site background.
4 - Criterion is site background. Value listed is upper limit of typical background range listed in TAGM #4046 for metropolitan or suburban areas or near highways.
Exceedance of New York TAGM #4046 Recommended Soil Cleanup Objective.

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***SB-59***	***SB-60***	***SB-61***	***SSSB-1***	***SSSB-1***	***SSSB-2***	***SSSB-3***	***SSSB-3***	***SSSB-3***	***SSSB-4***	***SSSB-4***	***SSSB-5***	***SSSB-5***	***SSSB-6***	***SSSB-7***	***STUT-ESB/A-SB01***
Sample ID:		***SB59A-91***	***SB60A-91***	***SB61A-91***	***SSSB1-91***	***GW1-91***	***SSSB2-91***	***GW3-91***	***SSSB3-91***	***GW3-91***	***SSSB4-91***	***GW4-91***	***SSSB5-91***	***GW5-91***	***SSSB6-91***	***SSSB7-91***	***STUT-ESB/A-SB01***
Sample Date:		***11/1/1991***	***11/1/1991***	***11/1/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/21/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/21/1991***	***8/18/1998***
Sample Depth:		***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 16***	***0 - 28***	***0 - 14***	***0 - 28***	***0 - 14***	***0 - 20***	***0 - 17***	***0 - 20***	***0 - 16***	***0 - 20***	***0 - 20***	***4***
Parameter	***Units***																
Volatile Organic Compounds (VOCs)																	
1,1,1-Trichloroethane	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
1,1,2,2-Tetrachloroethane	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
1,1,2-Trichloroethane	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
1,1-Dichloroethane	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
1,1-Dichloroethene	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
1,2-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
1,2-Dichloroethene (total)	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	--
1,2-Dichloropropane	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
1,3-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (Methyl Ethyl Ketone)	mg/kg	--	--	--	--	ND (0.012)	0.03	--	ND (0.074)	ND (4.5)	ND (0.014)	ND (0.014)	ND (0.013)	0.015	0.011 J	0.012 J	0.025 Q
2-Hexanone	mg/kg	--	--	--	--	ND (0.012)	ND (0.014)	--	ND (0.074)	ND (4.5)	ND (0.014)	ND (0.014)	ND (0.013)	ND (0.014)	ND (0.014)	ND (0.013)	ND (0.008) Q
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/kg	--	--	--	--	ND (0.012)	ND (0.014)	--	ND (0.074)	ND (4.5)	ND (0.014)	ND (0.014)	ND (0.013)	ND (0.014)	ND (0.014)	ND (0.013)	ND (0.008) Q
Acetone	mg/kg	--	--	--	--	ND (0.012)	0.075	--	0.082	ND (4.5)	0.016	0.025	0.044	0.04	0.038	0.031	ND (0.021) Q
Benzene	mg/kg	--	--	--	--	ND (0.006)	0.028	--	**0.26**[a,b]	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
Bromodichloromethane	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
Bromoform	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
Bromomethane (Methyl Bromide)	mg/kg	--	--	--	--	ND (0.012)	ND (0.014)	--	ND (0.074)	ND (4.5)	ND (0.014)	ND (0.014)	ND (0.013)	ND (0.014)	ND (0.014)	ND (0.013)	ND (0.004) Q
Carbon disulfide	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
Carbon tetrachloride	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
Chlorobenzene	mg/kg	--	--	--	--	ND (0.006)	0.05	--	0.068	ND (2.2)	0.007 J	ND (0.007)	0.035	ND (0.007)	ND (0.007)	0.011	ND (0.004) Q
Chloroethane	mg/kg	--	--	--	--	ND (0.012)	ND (0.014)	--	ND (0.074)	ND (4.5)	ND (0.014)	ND (0.014)	ND (0.013)	ND (0.014)	ND (0.014)	ND (0.013)	ND (0.004) Q
Chloroform (Trichloromethane)	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
Chloromethane (Methyl Chloride)	mg/kg	--	--	--	--	ND (0.012)	ND (0.014)	--	ND (0.074)	ND (4.5)	ND (0.014)	ND (0.014)	ND (0.013)	ND (0.014)	ND (0.014)	ND (0.013)	ND (0.004) Q
cis-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND (0.004) Q
cis-1,3-Dichloropropene	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
Dibromochloromethane	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
Ethylbenzene	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	**5.6**[a,b]	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
m&p-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND (0.004) Q
Methylene chloride	mg/kg	ND	ND	0.001 J	--	ND (0.006)	0.012	--	ND (0.037)	ND (2.2)	0.022	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
m-xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND (0.004) Q
p-Xylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
Tetrachloroethene	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
Toluene	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.026)	**23**[a,b]	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
trans-1,2-Dichloroethene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND (0.004) Q
trans-1,3-Dichloropropene	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
Trichloroethene	mg/kg	--	--	--	--	ND (0.006)	ND (0.007)	--	ND (0.037)	ND (2.2)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.007)	ND (0.006)	ND (0.004) Q
Vinyl acetate	mg/kg	--	--	--	--	ND (0.012)	ND (0.014)	--	ND (0.074)	ND (4.5)	ND (0.014)	ND (0.014)	ND (0.013)	ND (0.014)	ND (0.014)	ND (0.013)	--
Vinyl chloride	mg/kg	--	--	--	--	ND (0.012)	ND (0.014)	--	ND (0.074)	ND (4.5)	ND (0.014)	ND (0.014)	ND (0.013)	ND (0.014)	ND (0.014)	ND (0.013)	ND (0.004) Q
Xylene (total)	mg/kg	--	--	--	--	ND (0.006)	0.022	--	0.4	**110**[a,b]	0.094	0.021	0.012	ND (0.007)	0.028	0.007	--
Total VOCs	mg/kg	0	0	0	N/A	0	0.217	N/A	0.81	**138.6**[a]	0.139	0.046	0.091	0.055	0.077	0.061	0.025
Semivolatile Organic Compounds (SVOCs)																	
1,2,4-Trichlorobenzene	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
1,2-Dichlorobenzene	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
1,3-Dichlorobenzene	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	0.4 JX	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
1,4-Dichlorobenzene	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	0.84	ND (0.22) Q
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
2,4,5-Trichlorophenol	mg/kg	--	--	--	ND (2.4)	--	ND (2.4)	ND (20)	ND (2.4)	ND (4)	ND (2.1)	ND (2)	ND (2.3)	ND (2.3)	ND (2.1)	ND (2.7)	ND (0.22) Q
2,4,6-Trichlorophenol	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
2,4-Dichlorophenol	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***SB-59***	***SB-60***	***SB-61***	***SSSB-1***	***SSSB-1***	***SSSB-2***	***SSSB-3***	***SSSB-3***	***SSSB-3***	***SSSB-4***	***SSSB-4***	***SSSB-5***	***SSSB-5***	***SSSB-6***	***SSSB-7***	***STUT-ESB/A-SB01***
Sample ID:		***SB59A-91***	***SB60A-91***	***SB61A-91***	***SSSB1-91***	***GW1-91***	***SSSB2-91***	***GW3-91***	***SSSB3-91***	***GW3-91***	***SSSB4-91***	***GW4-91***	***SSSB5-91***	***GW5-91***	***SSSB6-91***	***SSSB7-91***	***STUT-ESB/A-SB01***
Sample Date:		***11/1/1991***	***11/1/1991***	***11/1/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/21/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/21/1991***	***8/18/1998***
Sample Depth:		***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 16***	***0 - 28***	***0 - 14***	***0 - 28***	***0 - 14***	***0 - 20***	***0 - 17***	***0 - 20***	***0 - 16***	***0 - 20***	***0 - 20***	***4***
Parameter	***Units***																
2,4-Dimethylphenol	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
2,4-Dinitrophenol	mg/kg	--	--	--	ND (2.4)	ND (1.9)	ND (2.4)	ND (20)	ND (2.4)	ND (4)	ND (2.1)	ND (2)	ND (2.3)	ND (2.3)	ND (2.1)	ND (2.7)	ND (0.87) Q
2,4-Dinitrotoluene	mg/kg	--	--	--	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
2,6-Dinitrotoluene	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
2-Chloronaphthalene	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	0.48 J	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
2-Chlorophenol	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
2-Methylnaphthalene	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	2.6 DJ	ND (0.5)	2.4	ND (0.43)	ND (0.42)	ND (0.47)	0.36 J	0.39 J	0.91	ND (0.22) Q
2-Methylphenol	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
2-Nitroaniline	mg/kg	--	--	--	ND (2.4)	--	ND (2.4)	ND (20)	ND (2.4)	ND (4)	ND (2.1)	ND (2)	ND (2.3)	ND (2.3)	ND (2.1)	ND (2.7)	ND (0.87) Q
2-Nitrophenol	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
3&4-Methylphenol	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	0.28 J	ND (0.48)	ND (0.42)	ND (0.55)	--
3,3'-Dichlorobenzidine	mg/kg	--	--	--	ND (0.97)	ND (0.8)	ND (0.97)	ND (8.2)	ND (1)	ND (1.6)	ND (0.86)	ND (0.84)	ND (0.94)	ND (0.96)	ND (0.85)	ND (1.1)	ND (0.22) Q
3-Nitroaniline	mg/kg	--	--	--	ND (2.4)	ND (1.9)	ND (2.4)	ND (20)	ND (2.4)	ND (4)	ND (2.1)	ND (2)	ND (2.3)	ND (2.3)	ND (2.1)	ND (2.7)	ND (0.87) Q
4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	ND (2.4)	ND (1.9)	ND (2.4)	ND (20)	ND (2.4)	ND (4)	ND (2.1)	ND (2)	ND (2.3)	ND (2.3)	ND (2.1)	ND (2.7)	ND (0.87) Q
4-Bromophenyl phenyl ether	mg/kg	--	--	--	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
4-Chloro-3-methylphenol	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.44) Q
4-Chloroaniline	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.44) Q
4-Chlorophenyl phenyl ether	mg/kg	--	--	--	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND (0.22) Q
4-Nitroaniline	mg/kg	--	--	--	ND (2.4)	ND (1.9)	ND (2.4)	ND (20)	ND (2.4)	ND (4)	ND (2.1)	ND (2)	ND (2.3)	ND (2.3)	ND (2.1)	ND (2.7)	ND (0.87) Q
4-Nitrophenol	mg/kg	--	--	--	ND (2.4)	ND (1.9)	ND (2.4)	ND (20)	ND (2.4)	ND (4)	ND (2.1)	ND (2)	ND (2.3)	ND (2.3)	ND (2.1)	ND (2.7)	ND (0.87) Q
Acenaphthene	mg/kg	--	--	--	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	ND (0.5)	0.49 JX	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
Acenaphthylene	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	0.24 J	ND (0.42)	ND (0.55)	ND (0.22) Q
Anthracene	mg/kg	ND	ND	ND	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	0.44 JX	ND (0.42)	ND (0.55)	ND (0.22) Q
Benzo(a)anthracene	mg/kg	ND	ND	ND	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	0.21 J	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	**2.9 ᵃ**	ND (0.42)	ND (0.55)	0.12 J Q
Benzo(a)pyrene	mg/kg	--	--	--	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	**0.23 J ᵃ**	ND (0.42)	ND (0.47)	**1.6 ᵃ**	ND (0.42)	ND (0.55)	**0.12 J Q ᵃ**
Benzo(b)fluoranthene	mg/kg	--	--	--	ND (0.49)	ND (0.4)	0.15 J	ND (4.1)	0.2 J	ND (0.82)	0.21 J	ND (0.42)	ND (0.47)	--	ND (0.42)	0.2 J	0.14 J Q
Benzo(b)fluoranthene / Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	2.4 Z	--	--	--
Benzo(g,h,i)perylene	mg/kg	--	--	--	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	0.56	ND (0.42)	ND (0.55)	0.07 J Q
Benzo(k)fluoranthene	mg/kg	--	--	--	ND (0.49)	ND (0.4)	0.11 J	ND (4.1)	0.13 J	ND (0.82)	0.18 J	ND (0.42)	ND (0.47)	--	ND (0.42)	0.1 J	0.09 J Q
Benzoic acid	mg/kg	--	--	--	ND (0.27)	--	ND (2.4)	ND (20)	ND (2.4)	ND (4)	ND (2.1)	ND (2)	ND (2.3)	ND (2.3)	ND (2.1)	ND (2.7)	--
Benzyl Alcohol	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	--
bis(2-Chloroethoxy)methane	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
bis(2-Chloroethyl)ether	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
bis(2-Ethylhexyl)phthalate	mg/kg	0.26 J	0.72	0.23 J	0.33 JX	ND (0.4)	0.54	50 D	1	33 E	**120 D ᵃ**	1.1	0.98	4.5	2 X	ND (22)	ND (0.22) Q
Butyl benzylphthalate	mg/kg	ND	0.76	0.2 J	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
Carbazole	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND (0.22) Q
Chrysene	mg/kg	ND	ND	ND	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	0.35 J	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	0.11 J Q
Dibenz(a,h)anthracene	mg/kg	--	--	--	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	**0.24 JX ᵃ**	ND (0.42)	ND (0.55)	ND (0.22) Q
Dibenzofuran	mg/kg	--	--	--	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	ND (0.5)	0.5 JX	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
Diethyl phthalate	mg/kg	--	--	--	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	0.22 J	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	0.25 J	ND (0.22) Q
Dimethyl phthalate	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
Di-n-butylphthalate	mg/kg	ND	3.1	2.6	ND (0.49)	ND (0.4)	ND (0.49)	**11 D ᴰᴱ**	ND (0.5)	6.2	ND (63)	ND (0.42)	ND (0.47)	ND (0.48)	0.38 JX	0.42 J	ND (0.22) Q
Di-n-octyl phthalate	mg/kg	--	--	--	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	0.49 J	ND (0.22) Q
Fluoranthene	mg/kg	ND	ND	ND	0.2 J	ND (0.4)	0.34 J	ND (4.1)	0.41 J	ND (0.82)	0.57	ND (0.42)	ND (0.47)	2.1	ND (0.42)	0.42 J	0.25 Q
Fluorene	mg/kg	--	--	--	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	ND (0.5)	0.81 JX	ND (0.43)	ND (0.42)	ND (0.47)	0.26 JX	ND (0.42)	ND (0.55)	ND (0.22) Q
Hexachlorobenzene	mg/kg	--	--	--	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
Hexachlorobutadiene	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
Hexachlorocyclopentadiene	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
Hexachloroethane	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
Indeno(1,2,3-cd)pyrene	mg/kg	--	--	--	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	0.69 X	ND (0.42)	ND (0.55)	0.08 J Q
Isophorone	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
Naphthalene	mg/kg	--	--	--	ND (0.49)	--	0.22 J	ND (4.1)	0.43 J	1.1 X	ND (0.43)	ND (0.42)	ND (0.47)	0.33 J	0.51	ND (0.39)	ND (0.22) Q
Nitrobenzene	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
N-Nitrosodi-n-propylamine	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
N-Nitrosodiphenylamine	mg/kg	--	--	--	ND (0.49)	ND (0.4)	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
Pentachlorophenol	mg/kg	--	--	--	ND (2.4)	ND (1.9)	ND (2.4)	ND (20)	ND (2.4)	0.78 JX	ND (2.1)	ND (2)	ND (2.3)	ND (2.3)	ND (2.1)	ND (2.7)	ND (0.87) Q
Phenanthrene	mg/kg	ND	ND	ND	ND (0.49)	ND (0.4)	ND (0.28)	2.7 DJ	0.52	2.1	0.51	ND (0.42)	ND (0.47)	1.4	ND (0.42)	0.7	0.10 J Q
Phenol	mg/kg	--	--	--	ND (0.49)	--	ND (0.49)	ND (4.1)	ND (0.5)	ND (0.82)	ND (0.43)	ND (0.42)	ND (0.47)	ND (0.48)	ND (0.42)	ND (0.55)	ND (0.22) Q
Pyrene	mg/kg	ND	ND	ND	ND (0.49)	ND (0.4)	0.32 J	ND (4.1)	0.46 J	ND (0.82)	0.71	ND (0.42)	ND (0.47)	2.7	ND (0.24)	0.55 J	0.26 Q

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***SB-59***	***SB-60***	***SB-61***	***SSSB-1***	***SSSB-1***	***SSSB-2***	***SSSB-3***	***SSSB-3***	***SSSB-3***	***SSSB-4***	***SSSB-4***	***SSSB-5***	***SSSB-5***	***SSSB-6***	***SSSB-7***	***STUT-ESB/A-SB01***
Sample ID:		***SB59A-91***	***SB60A-91***	***SB61A-91***	***SSSB1-91***	***GW1-91***	***SSSB2-91***	***GW3-91***	***SSSB3-91***	***GW3-91***	***SSSB4-91***	***GW4-91***	***SSSB5-91***	***GW5-91***	***SSSB6-91***	***SSSB7-91***	***STUT-ESB/A-SB01***
Sample Date:		***11/1/1991***	***11/1/1991***	***11/1/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/21/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/21/1991***	***8/18/1998***
Sample Depth:		***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 16***	***0 - 28***	***0 - 14***	***0 - 28***	***0 - 14***	***0 - 20***	***0 - 17***	***0 - 20***	***0 - 16***	***0 - 20***	***0 - 20***	***4***
Parameter	***Units***																
Total SVOCs	mg/kg	0.26	4.58	3.03	0.53	0	1.68	66.3	3.71	48.26	122.63	1.1	1.26	20.72	3.28	4.88	1.34
Metals																	
Aluminum	mg/kg	10000	11100	6106	8210	7960	8540	--	12000	7900	11200	10600	10300	10100	10600	5940	--
Antimony	mg/kg	8.53	16	13.4	ND (3.9)	ND (3.3)	ND (4.3)	--	ND (4.8)	ND (6.0)	ND (4.9)	ND (3.8)	ND (3.7)	ND (4.1)	ND (3.6)	27.6	--
Arsenic	mg/kg	3.86	3.82	3.5	5.4	3.2	7.1	--	**10.0 a**	**11.2 a**	6.0	4.2	**11.3 a**	3.7	**15.8 a**	**12.6 a**	--
Barium	mg/kg	35.4	82.5	35	56.4	53.9	100	--	158	**428 a**	144	61.9	163	276	144	269	--
Beryllium	mg/kg	ND	ND	ND	ND (0.46)	ND (0.39)	ND (0.51)	--	**0.96 B a**	ND (0.71)	**0.91 B a**	ND (0.45)	ND (0.44)	ND (0.48)	**0.93 B a**	ND (0.50)	--
Cadmium	mg/kg	ND	ND	ND	ND (1.1)	ND (0.98)	**1.4 a**	--	ND (1.4)	**4.0 a**	ND (1.4)	ND (1.1)	**3.6 a**	**6.5 a**	ND (1.1)	ND (1.2)	--
Calcium	mg/kg	8040	48800	39000	45000	72100	9290	--	23500	41100	28300	38400	29600	20500	20200	14700	--
Chromium Total	mg/kg	**10.8 a**	**16 a**	6.6	**14.7 a**	**12.8 a**	**14.4 a**	--	**31.4 a**	**36.9 a**	**15.5 a**	**16.6 a**	**20.9 a**	**28.6 a**	**16.6 a**	**37.2 a**	--
Cobalt	mg/kg	7.71	6.91	ND	6.9 B	7.7 B	4.2 B	--	10.8 B	8.9 B	7.6 B	8.7 B	7.8 B	12.7	8.4 B	4.6 B	--
Copper	mg/kg	12.8	15.1	9.33	**88.6 a**	17.6	**62.9 a**	--	**101 a**	11.2	**34.7 a**	**26.6 a**	**40.7 a**	**4310 a**	**41.7 a**	**89.8 a**	--
Iron	mg/kg	**18300 a**	**21400 a**	**14100 a**	**18600 a**	**17600 a**	**15600 a**	--	**31100 a**	**58400 a**	**24100 a**	**21500 a**	**20400 a**	**40100 a**	**24900 a**	**32700 a**	--
Lead	mg/kg	20	27.7	5.92	30.1	7.6	325	--	139	275	77.6	20.4	59.1	**1380 a**	67.2	**1620 a**	--
Magnesium	mg/kg	4460	13100	13300	13200	13800	4150	--	7690	8710	8490	15800	9980	6560	5200	4380	--
Manganese	mg/kg	475	541	392	399	465	169	--	457	497	398	413	340	481	403	334	--
Mercury	mg/kg	ND	ND	ND	ND (0.11)	ND (0.12)	ND (0.14)	--	**0.21 a**	**1.2 a**	ND (0.13)	ND (0.14)	ND (0.12)	**0.51 a**	ND (0.12)	**0.34 a**	--
Nickel	mg/kg	**14.8 a**	**22 a**	**14.7 a**	**14.4 a**	**16.5 a**	11.6	--	**26.9 a**	**23.1 a**	**17.9 a**	**20.0 a**	**18.3 a**	**63.9 a**	**19.7 a**	**16.5 a**	--
Potassium	mg/kg	1200	2210	956	1420	1470	1190 B	--	1210 B	742 B	1200 B	1440	1260	1270	1120	586 B	--
Selenium	mg/kg	ND	ND	ND	ND (0.46)	ND (0.46)	ND (0.54)	--	ND (0.53)	ND (0.68)	0.62 B	ND (0.52)	0.49 B	**3.7 a**	0.67 B	0.56 B	--
Silver	mg/kg	ND	ND	ND	ND (0.46)	ND (0.39)	1.7 B	--	2.3 B	2.0 B	1.3 B	ND (0.45)	0.86 B	3.4	0.81 B	1.4 B	--
Sodium	mg/kg	116	197	124	200 B	255 B	146 B	--	228 B	258 B	230 B	169 B	326 B	326 B	212 B	215 B	--
Thallium	mg/kg	ND	ND	ND	ND (0.46)	ND (0.46)	ND (0.54)	--	ND (0.53)	ND (0.68)	ND (0.51)	ND (0.52)	ND (0.43)	0.56 B	ND (0.45)	ND (0.49)	--
Vanadium	mg/kg	19.1	25.5	13.3	17.1	17.8	14.3	--	17.8	11.0 B	15.8	17.8	15.4	15.7	19.2	8.1 B	--
Zinc	mg/kg	**44.5 a**	**47.7 a**	**37.5 a**	**172 a**	**35.2 a**	**265 a**	--	**130 a**	**588 a**	**118 a**	**127 a**	**148 a**	**901 a**	**109 a**	**470 a**	--
PCBs																	
Aroclor-1016 (PCB-1016)	mg/kg	--	--	--	ND (0.29)	ND (0.24)	ND (0.29)	ND (4.9)	ND (0.3)	ND (0.49)	ND (0.26)	ND (0.25)	ND (0.28)	ND (0.29)	ND (0.26)	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	--	ND (0.29)	ND (0.24)	ND (0.29)	ND (4.9)	ND (0.3)	ND (0.49)	ND (0.26)	ND (0.25)	ND (0.28)	ND (0.29)	ND (0.26)	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	--	ND (0.29)	ND (0.24)	ND (0.29)	ND (4.9)	ND (0.3)	ND (0.49)	ND (0.26)	ND (0.25)	ND (0.28)	ND (0.29)	ND (0.26)	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	--	ND (0.29)	ND (0.24)	ND (0.29)	ND (4.9)	ND (0.3)	ND (0.49)	ND (0.26)	ND (0.25)	ND (0.28)	ND (0.29)	ND (0.26)	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	--	ND (0.29)	ND (0.24)	ND (0.29)	ND (4.9)	ND (0.3)	ND (0.49)	ND (0.26)	ND (0.25)	ND (0.28)	ND (0.29)	ND (0.26)	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	--	ND (0.59)	ND (0.48)	ND (0.59)	ND (9.9)	ND (0.6)	ND (0.99)	ND (0.52)	ND (0.5)	ND (0.57)	ND (0.58)	ND (0.51)	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	--	ND (0.59)	ND (0.48)	ND (0.59)	ND (9.9)	ND (0.6)	ND (0.99)	ND (0.52)	ND (0.5)	ND (0.57)	ND (0.58)	ND (0.51)	--	--
Total PCBs	mg/kg	N/A	N/A	N/A	0	0	0	0	0	0	0	0	0	0	0	N/A	N/A

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***SB-59***	***SB-60***	***SB-61***	***SSSB-1***	***SSSB-1***	***SSSB-2***	***SSSB-3***	***SSSB-3***	***SSSB-3***	***SSSB-4***	***SSSB-4***	***SSSB-5***	***SSSB-5***	***SSSB-6***	***SSSB-7***	***STUT-ESB/A-SB01***
Sample ID:		***SB59A-91***	***SB60A-91***	***SB61A-91***	***SSSB1-91***	***GW1-91***	***SSSB2-91***	***GW3-91***	***SSSB3-91***	***GW3-91***	***SSSB4-91***	***GW4-91***	***SSSB5-91***	***GW5-91***	***SSSB6-91***	***SSSB7-91***	***STUT-ESB/A-SB01***
Sample Date:		***11/1/1991***	***11/1/1991***	***11/1/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/21/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/21/1991***	***8/18/1998***
Sample Depth:		***0 - 10***	***0 - 10***	***0 - 10***	***0 - 10***	***0 - 16***	***0 - 28***	***0 - 14***	***0 - 28***	***0 - 14***	***0 - 20***	***0 - 17***	***0 - 20***	***0 - 16***	***0 - 20***	***0 - 20***	***4***
Parameter	***Units***																
Pesticides																	
4,4'-DDD	mg/kg	--	--	--	ND (0.059)	ND (0.048)	ND (0.059)	ND (0.99)	ND (0.06)	1.3	0.41	ND (0.05)	ND (0.057)	ND (0.058)	ND (0.051)	--	--
4,4'-DDE	mg/kg	--	--	--	ND (0.059)	ND (0.048)	ND (0.059)	ND (0.99)	ND (0.06)	ND (0.099)	ND (0.051)	ND (0.05)	ND (0.057)	ND (0.058)	ND (0.051)	--	--
4,4'-DDT	mg/kg	--	--	--	ND (0.059)	ND (0.048)	ND (0.059)	ND (0.99)	ND (0.06)	ND (0.099)	0.33	ND (0.05)	ND (0.057)	ND (0.058)	ND (0.051)	--	--
Aldrin	mg/kg	--	--	--	ND (0.029)	ND (0.024)	ND (0.029)	ND (0.49)	ND (0.03)	ND (0.049)	ND (0.026)	ND (0.025)	ND (0.028)	ND (0.029)	ND (0.026)	--	--
alpha-BHC	mg/kg	--	--	--	ND (0.029)	ND (0.024)	ND (0.029)	ND (0.49)	ND (0.03)	ND (0.049)	ND (0.026)	ND (0.025)	ND (0.028)	ND (0.029)	ND (0.026)	--	--
alpha-Chlordane	mg/kg	--	--	--	ND (0.29)	ND (0.24)	ND (0.29)	ND (4.9)	ND (0.3)	ND (0.49)	ND (0.26)	ND (0.25)	ND (0.28)	ND (0.29)	ND (0.26)	--	--
beta-BHC	mg/kg	--	--	--	ND (0.029)	ND (0.024)	ND (0.029)	ND (0.49)	ND (0.03)	ND (0.049)	ND (0.026)	ND (0.025)	ND (0.028)	ND (0.029)	ND (0.026)	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	ND (0.029)	ND (0.024)	ND (0.029)	ND (0.49)	ND (0.03)	ND (0.049)	ND (0.026)	ND (0.025)	ND (0.028)	ND (0.029)	ND (0.026)	--	--
Dieldrin	mg/kg	--	--	--	ND (0.059)	ND (0.048)	ND (0.059)	ND (0.99)	ND (0.06)	0.21[4]	ND (0.051)	ND (0.05)	ND (0.057)	ND (0.058)	ND (0.051)	--	--
Endosulfan I	mg/kg	--	--	--	ND (0.029)	ND (0.024)	ND (0.029)	ND (0.49)	ND (0.03)	ND (0.049)	ND (0.026)	ND (0.025)	ND (0.028)	ND (0.029)	ND (0.026)	--	--
Endosulfan II	mg/kg	--	--	--	ND (0.059)	ND (0.048)	ND (0.059)	ND (0.99)	ND (0.06)	ND (0.099)	ND (0.051)	ND (0.05)	ND (0.057)	ND (0.058)	ND (0.051)	--	--
Endosulfan sulfate	mg/kg	--	--	--	ND (0.059)	ND (0.048)	ND (0.059)	ND (0.99)	ND (0.06)	ND (0.099)	ND (0.051)	ND (0.05)	ND (0.057)	ND (0.058)	ND (0.051)	--	--
Endrin	mg/kg	--	--	--	ND (0.059)	ND (0.048)	ND (0.059)	ND (0.99)	ND (0.06)	ND (0.099)	ND (0.051)	ND (0.05)	ND (0.057)	ND (0.058)	ND (0.051)	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin ketone	mg/kg	--	--	--	ND (0.059)	ND (0.048)	ND (0.059)	ND (0.99)	ND (0.06)	ND (0.099)	ND (0.051)	ND (0.05)	ND (0.057)	ND (0.058)	ND (0.051)	--	--
gamma-BHC (Lindane)	mg/kg	--	--	--	ND (0.029)	ND (0.024)	ND (0.029)	ND (0.49)	ND (0.03)	ND (0.049)	ND (0.026)	ND (0.025)	ND (0.028)	ND (0.029)	ND (0.026)	--	--
gamma-Chlordane	mg/kg	--	--	--	ND (0.29)	ND (0.24)	ND (0.29)	ND (4.9)	ND (0.3)	ND (0.49)	ND (0.26)	ND (0.25)	ND (0.28)	ND (0.29)	ND (0.26)	--	--
Heptachlor	mg/kg	--	--	--	ND (0.029)	ND (0.024)	ND (0.029)	ND (0.49)	ND (0.03)	ND (0.049)	ND (0.026)	ND (0.025)	ND (0.028)	ND (0.029)	ND (0.026)	--	--
Heptachlor epoxide	mg/kg	--	--	--	ND (0.029)	ND (0.024)	ND (0.029)	ND (0.49)	ND (0.03)	ND (0.049)	ND (0.026)	ND (0.025)	ND (0.028)	ND (0.029)	ND (0.026)	--	--
Methoxychlor	mg/kg	--	--	--	ND (0.29)	ND (0.24)	ND (0.29)	ND (4.9)	ND (0.3)	ND (0.49)	ND (0.26)	ND (0.25)	ND (0.28)	ND (0.29)	ND (0.26)	--	--
Toxaphene	mg/kg	--	--	--	ND (0.59)	ND (0.48)	ND (0.59)	ND (9.9)	ND (0.6)	ND (0.99)	ND (0.52)	ND (0.5)	ND (0.57)	ND (0.58)	ND (0.51)	--	--
Total Pesticides	mg/kg	N/A	N/A	N/A	0	0	0	0	0	0	0	0	0	0	0	N/A	N/A
Wet Chemistry																	
Cyanide (total)	mg/kg	ND	ND	ND	ND (0.61)	ND (0.60)	0.81	--	3.1	5.3	3.7	ND (0.67)	8.4	3.1	2.9	ND (0.64)	--
Ignitability	no unit	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NON Q
Total Solids	%	--	--	--	81.4	82.0	73.1	--	68.1	55.8	68.8	71.9	75.0	71.8	74.2	77.0	79.04 Q

Notes:

ND() - Not detected at the detection limit listed in parentheses.
N/A - Not analyzed.
1 - Correction factor (CF) of 100 is used per TAGM #4046.
2 - Criterion is site background.
3 - Criterion is listed value or site background.
4 - Criterion is site background. Value listed is upper limit of typical background range listed in TAGM #4046 for metropolitan or suburban areas or near highways.
Exceedance of New York TAGM #4046 Recommended Soil Cleanup Objective.

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***STUT-ESB/A-TP-1***	***TP-1***	***TP-1,2,3,4,5,6,7,8,9,10,11,12***	***TP-10***	***TP-12***	***TP-3***	***TP-4***	***TP-8***
Sample ID:		***STUT-ESB/A-TP-1***	***TP1-88***	***COMPI-89***	***TP10-88***	***TP12-88***	***TP3-88***	***TP4-88***	***TP8-88***
Sample Date:		***8/17/1998***	***12/20/1988***	***12/20/1988***	***12/20/1988***	***12/20/1988***	***12/20/1988***	***12/20/1988***	***12/20/1988***
Sample Depth:		***0 - 6***	***0 - 8***	***0 - 9***	***0 - 8***	***0 - 3***	***0 - 9***	***0 - 8***	***0 - 8***
Parameter	***Units***								
Volatile Organic Compounds (VOCs)									
1,1,1-Trichloroethane	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
1,1,2-Trichloroethane	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
1,1-Dichloroethane	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
1,1-Dichloroethene	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	--	ND (0.1)	--	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
1,2-Dichloroethane	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	mg/kg	--	--	--	--	--	--	--	--
1,2-Dichloropropane	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	--	ND (0.1)	--	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
1,4-Dichlorobenzene	mg/kg	--	ND (0.1)	--	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
2-Butanone (Methyl Ethyl Ketone)	mg/kg	ND (0.028) U Q	--	--	--	--	--	--	--
2-Hexanone	mg/kg	--	--	--	--	--	--	--	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/kg	ND (0.011) U Q	--	--	--	--	--	--	--
Acetone	mg/kg	ND (0.028) U Q	--	--	--	--	--	--	--
Benzene	mg/kg	ND (0.006) U Q	**0.12**[au]	--	ND (0.05)	0.058	**0.21**[au]	ND (0.05)	ND (0.05)
Bromodichloromethane	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
Bromoform	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
Bromomethane (Methyl Bromide)	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
Carbon disulfide	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
Carbon tetrachloride	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
Chlorobenzene	mg/kg	ND (0.006) U Q	ND (0.05)	--	ND (0.05)	ND (0.05)	0.071	0.068	ND (0.05)
Chloroethane	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
Chloromethane (Methyl Chloride)	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
Dibromochloromethane	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
Ethylbenzene	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
m&p-Xylene	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
Methylene chloride	mg/kg	ND (0.006) U Q	ND (0.05) LQ	--	ND (0.05)	ND (0.05)	ND (0.05) LQ	ND (0.05) LQ	ND (0.05)
m-xylene	mg/kg	--	ND (0.05)	--	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
o-Xylene	mg/kg	ND (0.006) U Q	ND (0.05)	--	ND (0.05)	ND (0.05)	0.16	2.2	ND (0.05)
p-Xylene	mg/kg	--	0.058	--	ND (0.05)	ND (0.05)	0.085	0.67	ND (0.05)
Styrene	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
Tetrachloroethene	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
Toluene	mg/kg	ND (0.006) U Q	ND (0.05)	--	ND (0.05)	0.093	ND (0.05)	ND (0.05)	ND (0.05)
trans-1,2-Dichloroethene	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
Trichloroethene	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
Vinyl acetate	mg/kg	--	--	--	--	--	--	--	--
Vinyl chloride	mg/kg	ND (0.006) U Q	--	--	--	--	--	--	--
Xylene (total)	mg/kg	--	--	--	--	--	--	--	--
Total VOCs	mg/kg	0	0.178	0	0	0.151	0.526	2.938	0
Semivolatile Organic Compounds (SVOCs)									
1,2,4-Trichlorobenzene	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
1,2-Dichlorobenzene	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
1,3-Dichlorobenzene	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
1,4-Dichlorobenzene	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
2,4-Dichlorophenol	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***STUT-ESB/A-TP-1***	***TP-1***	***TP-1,2,3,4,5,6,7,8,9,10,11,12***	***TP-10***	***TP-12***	***TP-3***	***TP-4***	***TP-8***
Sample ID:		***STUT-ESB/A-TP-1***	***TP1-88***	***COMPI-89***	***TP10-88***	***TP12-88***	***TP3-88***	***TP4-88***	***TP8-88***
Sample Date:		***8/17/1998***	***12/20/1988***	***12/20/1988***	***12/20/1988***	***12/20/1988***	***12/20/1988***	***12/20/1988***	***12/20/1988***
Sample Depth:		***0 - 6***	***0 - 8***	***0 - 9***	***0 - 8***	***0 - 3***	***0 - 9***	***0 - 8***	***0 - 8***
Parameter	***Units***								
2,4-Dimethylphenol	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
2,4-Dinitrophenol	mg/kg	ND (0.0023) U Q	--	--	--	--	--	--	--
2,4-Dinitrotoluene	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
2,6-Dinitrotoluene	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
2-Chloronaphthalene	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
2-Chlorophenol	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
2-Methylnaphthalene	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
2-Methylphenol	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
2-Nitroaniline	mg/kg	ND (0.0023) U Q	--	--	--	--	--	--	--
2-Nitrophenol	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
3&4-Methylphenol	mg/kg	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	mg/kg	ND (0.0012) U Q	--	--	--	--	--	--	--
3-Nitroaniline	mg/kg	ND (0.0023) U Q	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	mg/kg	ND (0.0023) U Q	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	mg/kg	ND (0.0012) U Q	--	--	--	--	--	--	--
4-Chloroaniline	mg/kg	ND (0.0012) U Q	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
4-Methylphenol	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
4-Nitroaniline	mg/kg	ND (0.0023) U Q	--	--	--	--	--	--	--
4-Nitrophenol	mg/kg	ND (0.0023) U Q	--	--	--	--	--	--	--
Acenaphthene	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Acenaphthylene	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Anthracene	mg/kg	0.00036 J Q	--	--	--	--	--	--	--
Benzo(a)anthracene	mg/kg	0.001 Q	--	--	--	--	--	--	--
Benzo(a)pyrene	mg/kg	0.0012 Q	--	--	--	--	--	--	--
Benzo(b)fluoranthene	mg/kg	0.0015 Q	--	--	--	--	--	--	--
Benzo(b)fluoranthene / Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	mg/kg	0.00068 Q	--	--	--	--	--	--	--
Benzo(k)fluoranthene	mg/kg	0.00047 J Q	--	--	--	--	--	--	--
Benzoic acid	mg/kg	--	--	--	--	--	--	--	--
Benzyl Alcohol	mg/kg	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Butyl benzylphthalate	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Carbazole	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Chrysene	mg/kg	0.001 Q	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Dibenzofuran	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Diethyl phthalate	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Dimethyl phthalate	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Di-n-butylphthalate	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Di-n-octyl phthalate	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Fluoranthene	mg/kg	0.002 Q	--	--	--	--	--	--	--
Fluorene	mg/kg	0.00014 J Q	--	--	--	--	--	--	--
Hexachlorobenzene	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Hexachlorobutadiene	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Hexachloroethane	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	mg/kg	0.00071 Q	--	--	--	--	--	--	--
Isophorone	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Naphthalene	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Nitrobenzene	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Pentachlorophenol	mg/kg	ND (0.0023) U Q	--	--	--	--	--	--	--
Phenanthrene	mg/kg	0.0014 Q	--	--	--	--	--	--	--
Phenol	mg/kg	ND (0.00058) U Q	--	--	--	--	--	--	--
Pyrene	mg/kg	0.0022 Q	--	--	--	--	--	--	--

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***STUT-ESB/A-TP-1***	***TP-1***	***TP-1,2,3,4,5,6,7,8,9,10,11,12***	***TP-10***	***TP-12***	***TP-3***	***TP-4***	***TP-8***
Sample ID:		***STUT-ESB/A-TP-1***	***TP1-88***	***COMPI-89***	***TP10-88***	***TP12-88***	***TP3-88***	***TP4-88***	***TP8-88***
Sample Date:		***8/17/1998***	***12/20/1988***	***12/20/1988***	***12/20/1988***	***12/20/1988***	***12/20/1988***	***12/20/1988***	***12/20/1988***
Sample Depth:		***0 - 6***	***0 - 8***	***0 - 9***	***0 - 8***	***0 - 3***	***0 - 9***	***0 - 8***	***0 - 8***
Parameter	***Units***								
Total SVOCs	mg/kg	0.01266	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Metals									
Aluminum	mg/kg	--	--	--	--	--	--	--	--
Antimony	mg/kg	--	--	--	--	--	--	--	--
Arsenic	mg/kg	--	--	3.22	--	--	--	--	--
Barium	mg/kg	--	--	1.26	--	--	--	--	--
Beryllium	mg/kg	--	--	--	--	--	--	--	--
Cadmium	mg/kg	--	--	**1.02**[a]	--	--	--	--	--
Calcium	mg/kg	--	--	--	--	--	--	--	--
Chromium Total	mg/kg	--	--	**14.2**[a]	--	--	--	--	--
Cobalt	mg/kg	--	--	--	--	--	--	--	--
Copper	mg/kg	--	--	--	--	--	--	--	--
Iron	mg/kg	--	--	--	--	--	--	--	--
Lead	mg/kg	--	--	343	--	--	--	--	--
Magnesium	mg/kg	--	--	--	--	--	--	--	--
Manganese	mg/kg	--	--	--	--	--	--	--	--
Mercury	mg/kg	--	--	**0.67**[a]	--	--	--	--	--
Nickel	mg/kg	--	--	--	--	--	--	--	--
Potassium	mg/kg	--	--	--	--	--	--	--	--
Selenium	mg/kg	--	--	ND (1.24)	--	--	--	--	--
Silver	mg/kg	--	--	ND (0.86)	--	--	--	--	--
Sodium	mg/kg	--	--	--	--	--	--	--	--
Thallium	mg/kg	--	--	--	--	--	--	--	--
Vanadium	mg/kg	--	--	--	--	--	--	--	--
Zinc	mg/kg	--	--	--	--	--	--	--	--
PCBs									
Aroclor-1016 (PCB-1016)	mg/kg	--	--	ND (0.20)	--	--	--	--	--
Aroclor-1221 (PCB-1221)	mg/kg	--	--	ND (0.20)	--	--	--	--	--
Aroclor-1232 (PCB-1232)	mg/kg	--	--	ND (0.20)	--	--	--	--	--
Aroclor-1242 (PCB-1242)	mg/kg	--	--	0.23	--	--	--	--	--
Aroclor-1248 (PCB-1248)	mg/kg	--	--	ND (0.20)	--	--	--	--	--
Aroclor-1254 (PCB-1254)	mg/kg	--	--	1.80	--	--	--	--	--
Aroclor-1260 (PCB-1260)	mg/kg	--	--	ND (0.20)	--	--	--	--	--
Total PCBs	mg/kg	N/A	N/A	2.03	N/A	N/A	N/A	N/A	N/A

TABLE 2.2

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***STUT-ESB/A-TP-1***	***TP-1***	***TP-1,2,3,4,5,6,7,8,9,10,11,12***	***TP-10***	***TP-12***	***TP-3***	***TP-4***	***TP-8***
Sample ID:		***STUT-ESB/A-TP-1***	***TP1-88***	***COMPI-89***	***TP10-88***	***TP12-88***	***TP3-88***	***TP4-88***	***TP8-88***
Sample Date:		***8/17/1998***	***12/20/1988***	***12/20/1988***	***12/20/1988***	***12/20/1988***	***12/20/1988***	***12/20/1988***	***12/20/1988***
Sample Depth:		***0 - 6***	***0 - 8***	***0 - 9***	***0 - 8***	***0 - 3***	***0 - 9***	***0 - 8***	***0 - 8***
Parameter	***Units***								
Pesticides									
4,4'-DDD	mg/kg	--	--	--	--	--	--	--	--
4,4'-DDE	mg/kg	--	--	--	--	--	--	--	--
4,4'-DDT	mg/kg	--	--	--	--	--	--	--	--
Aldrin	mg/kg	--	--	--	--	--	--	--	--
alpha-BHC	mg/kg	--	--	--	--	--	--	--	--
alpha-Chlordane	mg/kg	--	--	--	--	--	--	--	--
beta-BHC	mg/kg	--	--	--	--	--	--	--	--
Chlordane	mg/kg	--	--	--	--	--	--	--	--
delta-BHC	mg/kg	--	--	--	--	--	--	--	--
Dieldrin	mg/kg	--	--	--	--	--	--	--	--
Endosulfan I	mg/kg	--	--	--	--	--	--	--	--
Endosulfan II	mg/kg	--	--	--	--	--	--	--	--
Endosulfan sulfate	mg/kg	--	--	--	--	--	--	--	--
Endrin	mg/kg	--	--	--	--	--	--	--	--
Endrin aldehyde	mg/kg	--	--	--	--	--	--	--	--
Endrin ketone	mg/kg	--	--	--	--	--	--	--	--
gamma-BHC (Lindane)	mg/kg	--	--	--	--	--	--	--	--
gamma-Chlordane	mg/kg	--	--	--	--	--	--	--	--
Heptachlor	mg/kg	--	--	--	--	--	--	--	--
Heptachlor epoxide	mg/kg	--	--	--	--	--	--	--	--
Methoxychlor	mg/kg	--	--	--	--	--	--	--	--
Toxaphene	mg/kg	--	--	--	--	--	--	--	--
Total Pesticides	mg/kg	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wet Chemistry									
Cyanide (total)	mg/kg	--	--	--	--	--	--	--	--
Ignitability	no unit	NON Q	--	--	--	--	--	--	--
Total Solids	%	82.22 Q	--	--	--	--	--	--	--

Notes:

ND() - Not detected at the detection limit listed in parentheses.
N/A - Not analyzed.
1 - Correction factor (CF) of 100 is used per TAGM #4046.
2 - Criterion is site background.
3 - Criterion is listed value or site background.
4 - Criterion is site background. Value listed is upper limit of typical background range listed in TAGM #4046 for metropolitan or suburban areas or near highways.
[ ] Exceedance of New York TAGM #4046 Recommended Soil Cleanup Objective.

TABLE 2.3

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCLP DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:			*A-3A-11E-1D-5D-7D-9C-11E-12*	*G-5*	*STUT-ESB/A-SB01*	*STUT-ESB/A-SB01*	*STUT-ESB/A-TP-1*
Sample ID:			*TCLP1*	*TCLP2*	*STUT-ESB/A-SB01*	*STUT-ESB/A-SB01*	*STUT-ESB/A-TP-1*
Sample Date:		*TCLP*	*6/22/1995*	*6/22/1995*	*8/18/1998*	*8/18/1998*	*8/17/1998*
Sample Depth:		*Criteria*	*--*	*--*	*2*	*4*	*0 - 6*
		a					
Parameter	***Units***						
Volatile Organic Compounds							
1,1-Dichloroethene	mg/L	0.7	ND (0.050)	ND (0.050)	--	--	--
1,2-Dichloroethane	mg/L	0.5	ND (0.050)	ND (0.050)	--	--	--
2-Butanone (Methyl Ethyl Ketone)	mg/L	200.0	ND (0.50)	ND (0.50)	--	--	--
Benzene	mg/L	0.5	ND (0.050)	ND (0.050)	--	ND (0.0005)	ND (0.0005)
Carbon tetrachloride	mg/L	0.5	ND (0.050)	ND (0.050)	--	--	--
Chlorobenzene	mg/L	100.0	ND (0.050)	ND (0.050)	--	--	--
Chloroform (Trichloromethane)	mg/L	6.0	ND (0.050)	ND (0.050)	--	--	--
Tetrachloroethene	mg/L	0.7	ND (0.050)	ND (0.050)	--	--	--
Trichloroethene	mg/L	0.5	ND (0.050)	ND (0.050)	--	--	--
Vinyl chloride	mg/L	0.2	ND (0.10)	ND (0.10)	--	--	--
Semivolatile Organic Compounds							
1,4-Dichlorobenzene	mg/L	7.5	ND (0.10)	ND (0.10)	--	--	--
2,4,5-Trichlorophenol	mg/L	400.0	ND (0.50)	ND (0.50)	--	--	--
2,4,6-Trichlorophenol	mg/L	2.0	ND (0.10)	ND (0.10)	--	--	--
2,4-Dinitrotoluene	mg/L	0.13	ND (0.10)	ND (0.10)	--	--	--
2-Methylphenol	mg/L	200.0	ND (0.10)	ND (0.10)	--	--	--
3&4-Methylphenol	mg/L		ND (0.20)	ND (0.20)	--	--	--
Hexachlorobenzene	mg/L	0.13	ND (0.10)	ND (0.10)	--	--	--
Hexachlorobutadiene	mg/L	0.5	ND (0.10)	ND (0.10)	--	--	--
Hexachloroethane	mg/L	3.0	ND (0.10)	ND (0.10)	--	--	--
Nitrobenzene	mg/L	2.0	ND (0.10)	ND (0.10)	--	--	--
Pentachlorophenol	mg/L	100.0	ND (0.50)	ND (0.50)	--	--	--
Pyridine	mg/L	5.0	ND (0.20)	ND (0.20)	--	--	--
Metals							
Arsenic	mg/L	5.0	ND (0.10)	ND (0.10)	--	--	--
Barium	mg/L	100.0	ND (5.0)	ND (5.0)	--	--	--
Cadmium	mg/L	1.0	ND (0.05)	ND (0.05)	--	--	--
Chromium Total	mg/L	5.0	0.10	0.10	--	--	--
Lead	mg/L	5.0	ND (0.20)	ND (0.20)	ND (0.440) Q	ND (0.440) Q	ND (0.440) U Q
Mercury	mg/L	0.2	ND (0.10)	ND (0.10)	--	--	--
Selenium	mg/L	1.0	ND (0.10)	ND (0.10)	--	--	--
Silver	mg/L	5.0	ND (0.05)	ND (0.05)	--	--	--
Pesticides							
Chlordane	mg/L	0.03	ND (0.0008)	ND (0.0008)	--	--	--
Endrin	mg/L	0.02	ND (0.0008)	ND (0.0008)	--	--	--
gamma-BHC (Lindane)	mg/L	0.4	ND (0.0008)	ND (0.0008)	--	--	--
Heptachlor	mg/L	0.008	ND (0.0008)	ND (0.0008)	--	--	--
Methoxychlor	mg/L	10.0	ND (0.0008)	ND (0.0008)	--	--	--
Toxaphene	mg/L	0.5	ND (0.01)	ND (0.01)	--	--	--
Herbicides							
2,4,5-TP (Silvex)	mg/L	1.0	ND (0.01)	ND (0.01)	--	--	--
2,4-Dichlorophenoxyacetic acid (2,4-D)	mg/L	10.0	ND (0.01)	ND (0.01)	--	--	--

Note:

ND() - Not detected at the detection limit listed in parentheses.

TABLE 2.3

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL TCLP DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:			***STUT-P3/B-SB01***	***STUT-P3/B-SB01***	***STUT-P4/B-SB02***	***STUT-P4/B-SB02***	***STUT-P4/B-TP-1***
Sample ID:			***STUT-P3/B-SB01***	***STUT-P3/B-SB01***	***STUT-P4/B-SB02***	***STUT-P4/B-SB02***	***STUT-P4/B-TP-1***
Sample Date:		***TCLP***	***8/18/1998***	***8/18/1998***	***8/18/1998***	***8/18/1998***	***8/17/1998***
Sample Depth:		***Criteria a***	***2***	***4***	***2***	***3.5***	***0 - 10***
Parameter	***Units***						
Volatile Organic Compounds							
1,1-Dichloroethene	mg/L	0.7	--	--	--	--	--
1,2-Dichloroethane	mg/L	0.5	--	--	--	--	--
2-Butanone (Methyl Ethyl Ketone)	mg/L	200.0	--	--	--	--	--
Benzene	mg/L	0.5	--	--	--	--	--
Carbon tetrachloride	mg/L	0.5	--	--	--	--	--
Chlorobenzene	mg/L	100.0	--	--	--	--	--
Chloroform (Trichloromethane)	mg/L	6.0	--	--	--	--	--
Tetrachloroethene	mg/L	0.7	--	--	--	--	--
Trichloroethene	mg/L	0.5	--	--	--	--	--
Vinyl chloride	mg/L	0.2	--	--	--	--	--
Semivolatile Organic Compounds							
1,4-Dichlorobenzene	mg/L	7.5	--	--	--	--	--
2,4,5-Trichlorophenol	mg/L	400.0	--	--	--	--	--
2,4,6-Trichlorophenol	mg/L	2.0	--	--	--	--	--
2,4-Dinitrotoluene	mg/L	0.13	--	--	--	--	--
2-Methylphenol	mg/L	200.0	--	--	--	--	--
3&4-Methylphenol	mg/L		--	--	--	--	--
Hexachlorobenzene	mg/L	0.13	--	--	--	--	--
Hexachlorobutadiene	mg/L	0.5	--	--	--	--	--
Hexachloroethane	mg/L	3.0	--	--	--	--	--
Nitrobenzene	mg/L	2.0	--	--	--	--	--
Pentachlorophenol	mg/L	100.0	--	--	--	--	--
Pyridine	mg/L	5.0	--	--	--	--	--
Metals							
Arsenic	mg/L	5.0	--	--	--	--	--
Barium	mg/L	100.0	--	--	--	--	--
Cadmium	mg/L	1.0	--	--	--	--	--
Chromium Total	mg/L	5.0	--	--	--	--	--
Lead	mg/L	5.0	0.676	0.792	ND (0.440)	ND (0.440)	ND (0.440) U Q
Mercury	mg/L	0.2	--	--	--	--	--
Selenium	mg/L	1.0	--	--	--	--	--
Silver	mg/L	5.0	--	--	--	--	--
Pesticides							
Chlordane	mg/L	0.03	--	--	--	--	--
Endrin	mg/L	0.02	--	--	--	--	--
gamma-BHC (Lindane)	mg/L	0.4	--	--	--	--	--
Heptachlor	mg/L	0.008	--	--	--	--	--
Methoxychlor	mg/L	10.0	--	--	--	--	--
Toxaphene	mg/L	0.5	--	--	--	--	--
Herbicides							
2,4,5-TP (Silvex)	mg/L	1.0	--	--	--	--	--
2,4-Dichlorophenoxyacetic acid (2,4-D)	mg/L	10.0	--	--	--	--	--

Note:

ND() - Not detected at the detection limit listed in parentheses.

TABLE 2.4

ANALYTICAL RESULTS SUMMARY - SUBSURFACE SOIL EPTOX DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:		***SSSB-1***	***SSSB-1***	***SSSB-2***	***SSSB-3***	***SSSB-3***	***SSSB-4***	***SSSB-4***	***SSSB-5***	***SSSB-5***	***SSSB-6***	***SSSB-7***
Sample ID:		***SSSB1-91***	***GW1-91***	***SSSB2-91***	***SSSB3-91***	***GW3-91***	***SSSB4-91***	***GW4-91***	***SSSB5-91***	***GW5-91***	***SSSB6-91***	***SSSB7-91***
Sample Date:		***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/23/1991***	***10/21/1991***	***10/21/1991***
Sample Depth:		***0 - 10***	***0 - 16***	***0 - 28***	***0 - 28***	***0 - 14***	***0 - 20***	***0 - 17***	***0 - 20***	***0 - 16***	***0 - 20***	***0 - 20***
Parameter	***Units***											
Metals - EPTOX												
Arsenic	mg/L	0.121	0.197	ND (0.037)	ND (0.037)	0.055	0.0964	0.0829	0.0518	0.0751	0.0477	ND (0.037)
Barium	mg/L	0.511	0.627	0.548	0.771	0.713	0.654	0.431	0.677	1.42	0.551	1.24
Cadmium	mg/L	0.0132	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)	0.0091	ND (0.005)	0.0158	0.071	ND (0.005)	ND (0.005)
Chromium Total	mg/L	ND (0.006)	ND (0.012)	0.0214	ND (0.006)	ND (0.006)	ND (0.006)	0.017	ND (0.006)	0.029	0.0127	0.0264
Lead	mg/L	0.105	0.18	0.928	0.0769	0.26	0.131	0.0852	0.107	9.47	0.0109	5.54
Mercury	mg/L	0.00021	0.00028	0.00021	0.00028	0.00028	0.00021	0.00021	0.00021	ND (0.0002)	0.00021	0.00021
Selenium	mg/L	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)
Silver	mg/L	0.0398	0.0867	0.0017	0.0275	0.034	0.0469	0.0328	0.0387	0.0199	0.0264	0.0205

Note:

ND() - Not detected at the detection limit listed in parentheses.

TABLE 2.5

ANALYTICAL RESULTS SUMMARY - GROUNDWATER TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:			*GW-1*	*GW-3*	*GW-4*	*GW-5*	*GW-5*	*GW-11*	*GW-19*	*GW-33*	*STUT-ESB/A-SB01*	*STUT-P3/B-SB01*	*STUT-P4/B-SB02*
Sample ID:		*New York*	*GW1-91*	*GW3-91*	*GW4-91*	*GW5-91*	*GW6-91*	*GW11-91*	*GW19-91*	*GW33-91*	*STUT-ESB/A-GW01*	*STUT-P3/B-GW01*	*STUT-P4/B-GW02*
Sample Date:		*State Ambient Groundwater Standard or Guidance Value a*	*11/21/1991*	*11/21/1991*	*11/21/1991*	*11/21/1991*	*11/21/1991 Duplicate*	*12/17/1991*	*12/17/1991*	*12/17/1991*	*8/18/1998*	*8/18/1998*	*8/18/1998*
Parameter	***Units***												
Volatile Organic Compounds													
1,1,1-Trichloroethane	µg/L	5 S	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	µg/L	5 S	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
1,1,2-Trichloroethane	µg/L	1 S	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
1,1-Dichloroethane	µg/L	5 S	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
1,1-Dichloroethene	µg/L	5 S	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
1,2-Dichloroethane	µg/L	0.6 S	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
1,2-Dichloroethene (total)	µg/L	5 G	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
1,2-Dichloropropane	µg/L	1 S	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
2-Butanone (Methyl Ethyl Ketone)	µg/L	50 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
2-Hexanone	µg/L	50 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Acetone	µg/L	50 G	ND (10)	7 J	12	ND (10)	ND (10)	11.0 TB	15.0 TB	9.0 JB	--	--	--
Benzene	µg/L	1 S	ND (5)	**28***	ND (5)	**8***	**7***	ND	**12.0 1***	ND	--	--	--
Bromodichloromethane	µg/L	50 G	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
Bromoform	µg/L	50 G	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
Bromomethane (Methyl Bromide)	µg/L	5 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Carbon disulfide	µg/L	--	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
Carbon tetrachloride	µg/L	5 S	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
Chlorobenzene	µg/L	5 S	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND	2.0 J	3.0 J	--	--	--
Chloroethane	µg/L	5 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Chloroform (Trichloromethane)	µg/L	7 S	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
Chloromethane (Methyl Chloride)	µg/L	5 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
cis-1,3-Dichloropropene	µg/L	--	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
Dibromochloromethane	µg/L	50 G	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
Ethylbenzene	µg/L	5 S	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
Methylene chloride	µg/L	5 S	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	4.0 TB	4.0 JB	**6.0 TB***	--	--	--
Styrene	µg/L	5 S	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
Tetrachloroethene	µg/L	5 S	ND (5)	ND (5)	**17***	ND (5)	ND (5)	--	--	--	--	--	--
Toluene	µg/L	5 S	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
trans-1,3-Dichloropropene	µg/L	--	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
Trichloroethene	µg/L	5 S	ND (5)	ND (5)	**11***	ND (5)	ND (5)	--	--	--	--	--	--
Vinyl acetate	µg/L	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Vinyl chloride	µg/L	2 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Xylene (total)	µg/L	--	7	710 E	ND (5)	ND (5)	ND (5)	--	--	--	--	--	--
Semivolatile Organic Compounds													
1,2,4-Trichlorobenzene	µg/L	5 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
1,2-Dichlorobenzene	µg/L	3 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
1,3-Dichlorobenzene	µg/L	3 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
1,4-Dichlorobenzene	µg/L	3 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	µg/L	5 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
2,4,5-Trichlorophenol	µg/L	--	ND (48)	ND (48)	ND (48)	ND (48)	ND (48)	--	--	--	--	--	--
2,4,6-Trichlorophenol	µg/L	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
2,4-Dichlorophenol	µg/L	5 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
2,4-Dimethylphenol	µg/L	50 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
2,4-Dinitrophenol	µg/L	10 G	ND (48)	ND (48)	ND (48)	ND (48)	ND (48)	--	--	--	--	--	--
2,4-Dinitrotoluene	µg/L	5 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
2,6-Dinitrotoluene	µg/L	5 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
2-Chloronaphthalene	µg/L	10 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
2-Chlorophenol	µg/L	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
2-Methylnaphthalene	µg/L	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
2-Methylphenol	µg/L	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
2-Nitroaniline	µg/L	5 S	ND (48)	ND (18)	ND (48)	ND (48)	ND (48)	--	--	--	--	--	--
2-Nitrophenol	µg/L	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
3&4-Methylphenol	µg/L	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
3,3'-Dichlorobenzidine	µg/L	5 S	ND (19)	ND (19)	ND (19)	ND (19)	ND (19)	--	--	--	--	--	--
3-Nitroaniline	µg/L	5 S	ND (48)	ND (48)	ND (48)	ND (48)	ND (48)	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	µg/L	--	ND (48)	ND (48)	ND (48)	ND (48)	ND (48)	--	--	--	--	--	--
4-Bromophenyl phenyl ether	µg/L	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
4-Chloro-3-methylphenol	µg/L	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
4-Chloroaniline	µg/L	5 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	µg/L	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
4-Nitroaniline	µg/L	5 S	ND (48)	ND (48)	ND (48)	ND (48)	ND (48)	--	--	--	--	--	--
4-Nitrophenol	µg/L	--	ND (48)	ND (48)	ND (48)	ND (48)	ND (48)	--	--	--	--	--	--
Acenaphthene	µg/L	20 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--

TABLE 2.5

ANALYTICAL RESULTS SUMMARY - GROUNDWATER TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:			*GW-1*	*GW-3*	*GW-4*	*GW-5*	*GW-5*	*GW-11*	*GW-19*	*GW-33*	*STUT-ESB/A-SB01*	*STUT-P3/B-SB01*	*STUT-P4/B-SB02*
Sample ID:		*New York*	*GW1-91*	*GW3-91*	*GW4-91*	*GW5-91*	*GW6-91*	*GW11-91*	*GW19-91*	*GW33-91*	*STUT-ESB/A-GW01*	*STUT-P3/B-GW01*	*STUT-P4/B-GW02*
Sample Date:		*State Ambient Groundwater Standard or Guidance Value*	*11/21/1991*	*11/21/1991*	*11/21/1991*	*11/21/1991*	*11/21/1991 Duplicate*	*12/17/1991*	*12/17/1991*	*12/17/1991*	*8/18/1998*	*8/18/1998*	*8/18/1998*
Parameter	***Units***	***a***											
Acenaphthylene	µg/L	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Anthracene	µg/L	50 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Benzo(a)anthracene	µg/L	0.002 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Benzo(a)pyrene	µg/L	ND S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Benzo(b)fluoranthene	µg/L	0.002 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Benzo(g,h,i)perylene	µg/L	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Benzo(k)fluoranthene	µg/L	0.002 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Benzoic acid	µg/L	--	ND (48)	20 JX	ND (48)	25 J	9 J	36.0 J	ND	ND	--	--	--
Benzyl Alcohol	µg/L	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	µg/L	5 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
bis(2-Chloroethyl)ether	µg/L	1 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	µg/L	5 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND	3.0 J	ND	--	--	--
Butyl benzylphthalate	µg/L	50 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Chrysene	µg/L	0.002 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Dibenz(a,h)anthracene	µg/L	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Dibenzofuran	µg/L	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Diethyl phthalate	µg/L	50 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Dimethyl phthalate	µg/L	50 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Di-n-butylphthalate	µg/L	50 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Di-n-octyl phthalate	µg/L	50 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Fluoranthene	µg/L	50 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Fluorene	µg/L	50 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Hexachlorobenzene	µg/L	0.04 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Hexachlorobutadiene	µg/L	0.5 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Hexachlorocyclopentadiene	µg/L	5 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Hexachloroethane	µg/L	5 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	µg/L	0.002 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Isophorone	µg/L	50 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Naphthalene	µg/L	10 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Nitrobenzene	µg/L	0.4 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	µg/L	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
N-Nitrosodiphenylamine	µg/L	50 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Pentachlorophenol	µg/L	1 S	ND (48)	ND (48)	ND (48)	ND (48)	ND (48)	--	--	--	--	--	--
Phenanthrene	µg/L	50 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Phenol	µg/L	1 S	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Pyrene	µg/L	50 G	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	--	--	--	--	--	--
Metals													
Aluminum	µg/L	--	1090	3120	95.5 N	2190	6860	88700	124000	5090	--	--	--
Antimony	µg/L	3 S	ND (17.0)	ND (17.0)	ND (17.0)	ND (17.0)	ND (17.0)	**104***	**130***	ND	--	--	--
Arsenic	µg/L	25 S	3.6 B	11.1	6.1 B	4.7 B	9.7 B	**36***	ND	**60***	--	--	--
Barium	µg/L	1000 S	133 B	522	62.1 B	**1170***	**1370***	**1060***	**1890***	609	--	--	--
Beryllium	µg/L	3 G	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND	**10***	ND	--	--	--
Cadmium	µg/L	5 S	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	--	--	--	--	--	--
Calcium	µg/L	--	82400	179000	146000	136000	141000	322000	258000	183000	--	--	--
Chromium Total	µg/L	50 S	ND (4.0)	19.5	ND (4.0)	6.1 B	12.7	**142***	**185***	ND	--	--	--
Cobalt	µg/L	--	ND (5.0)	8.6 B	5.2 B	ND (5.0)	9.1 B	103	120	ND	--	--	--
Copper	µg/L	200 S	ND (5.0)	180	ND (5.0)	10.5 B	62.8	186	**244***	ND	--	--	--
Iron	µg/L	300 S	**3050***	**34700***	**9300***	**39300***	**54400***	**196000***	**263000***	**46300***	--	--	--
Lead	µg/L	25 S	ND (2.0)	**468***	ND (2.0)	**37.5***	**129***	**248***	**619***	ND	**2600***	**2000***	**3200***
Magnesium	µg/L	35000 G	22800	**58700***	**40900***	**72700***	**79100***	**111000***	**86300***	**47500***	--	--	--
Manganese	µg/L	300 S	**677***	**734***	**3160***	169	265	**4670***	**4180***	**1740***	--	--	--
Mercury	µg/L	0.7 S	ND (0.20)	**1.3***	ND (0.20)	ND (0.20)	0.28	--	--	--	--	--	--
Nickel	µg/L	100 S	ND (8.0)	16.8 B	ND (8.0)	ND (8.0)	23.3 B	**224***	**258***	ND	--	--	--
Potassium	µg/L	--	1880 B	46100	8370	35400	37100	17600	38200	18400	--	--	--
Selenium	µg/L	10 S	2.9 B	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	--	--	--	--	--	--
Silver	µg/L	50 S	39.9	8.5 B	ND (2.0)	ND (2.0)	45.0	--	--	--	--	--	--
Sodium	µg/L	20000 S	8090	**43400***	**89600***	**89700***	**93700***	**43700***	**36300***	**59200***	--	--	--
Thallium	µg/L	0.5 G	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	--	--	--	--	--	--
Vanadium	µg/L	--	ND (3.0)	4.3 B	ND (3.0)	4.4 B	12.2 B	154	224	ND	--	--	--
Zinc	µg/L	2000 G	10.2 B	430	11.1 B	54.8	212	719	**2170***	37	--	--	--

TABLE 2.5

ANALYTICAL RESULTS SUMMARY - GROUNDWATER TCL/TAL DATA
WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Sample Location:			*GW-1*	*GW-3*	*GW-4*	*GW-5*	*GW-5*	*GW-11*	*GW-19*	*GW-33*	*STUT-ESB/A-SB01*	*STUT-P3/B-SB01*	*STUT-P4/B-SB02*
Sample ID:		*New York*	*GW1-91*	*GW3-91*	*GW4-91*	*GW5-91*	*GW6-91*	*GW11-91*	*GW19-91*	*GW33-91*	*STUT-ESB/A-GW01*	*STUT-P3/B-GW01*	*STUT-P4/B-GW02*
Sample Date:		*State Ambient Groundwater Standard*	*11/21/1991*	*11/21/1991*	*11/21/1991*	*11/21/1991*	*11/21/1991 Duplicate*	*12/17/1991*	*12/17/1991*	*12/17/1991*	*8/18/1998*	*8/18/1998*	*8/18/1998*
Parameter	*Units*	*or Guidance Value a*											
PCBs													
Aroclor-1016 (PCB-1016)	µg/L	--	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.50)	ND (0.49)	--	--	--	--	--	--
Aroclor-1221 (PCB-1221)	µg/L	--	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.50)	ND (0.49)	--	--	--	--	--	--
Aroclor-1232 (PCB-1232)	µg/L	--	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.50)	ND (0.49)	--	--	--	--	--	--
Aroclor-1242 (PCB-1242)	µg/L	--	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.50)	ND (0.49)	--	--	--	--	--	--
Aroclor-1248 (PCB-1248)	µg/L	--	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.50)	ND (0.49)	--	--	--	--	--	--
Aroclor-1254 (PCB-1254)	µg/L	--	ND (0.96)	4.1	ND (0.95)	ND (0.99)	ND (0.98)	--	--	--	--	--	--
Aroclor-1260 (PCB-1260)	µg/L	--	ND (0.96)	ND (0.95)	ND (0.95)	12.1	10	--	--	--	--	--	--
Total PCBs	µg/L	0.09 S	N/A	**4.1***	N/A	**12.1***	**10***	N/A	N/A	N/A	N/A	N/A	N/A
Pesticides													
4,4'-DDD	µg/L	0.3 S	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	--	--	--	--	--	--
4,4'-DDE	µg/L	0.2 S	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	--	--	--	--	--	--
4,4'-DDT	µg/L	0.2 S	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	--	--	--	--	--	--
Aldrin	µg/L	ND S	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	--	--	--	--	--	--
alpha-BHC	µg/L	0.01 S	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	--	--	--	--	--	--
alpha-Chlordane	µg/L	--	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.50)	ND (0.49)	--	--	--	--	--	--
beta-BHC	µg/L	0.04 S	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	--	--	--	--	--	--
delta-BHC	µg/L	0.04 S	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	--	--	--	--	--	--
Dieldrin	µg/L	0.004 S	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	--	--	--	--	--	--
Endosulfan I	µg/L	--	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	--	--	--	--	--	--
Endosulfan II	µg/L	--	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	--	--	--	--	--	--
Endosulfan sulfate	µg/L	--	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	--	--	--	--	--	--
Endrin	µg/L	ND S	ND (0.10)	ND (0.10)	ND (0.10)	**0.25***	**0.22***	--	--	--	--	--	--
Endrin ketone	µg/L	5 S	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	--	--	--	--	--	--
gamma-BHC (Lindane)	µg/L	0.05 S	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	--	--	--	--	--	--
gamma-Chlordane	µg/L	--	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.50)	ND (0.49)	--	--	--	--	--	--
Heptachlor	µg/L	0.04 S	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	--	--	--	--	--	--
Heptachlor epoxide	µg/L	0.03 S	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	--	--	--	--	--	--
Methoxychlor	µg/L	35 S	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.50)	ND (0.49)	--	--	--	--	--	--
Toxaphene	µg/L	0.06 S	ND (0.96)	ND (0.95)	ND (0.95)	ND (0.99)	ND (0.98)	--	--	--	--	--	--
Wet Chemistry													
Cyanide (total)	µg/L	200 S	ND (10.0)	17.9	ND (10.0)	ND (10.0)	ND (10.0)	ND	ND	ND	--	--	--

Notes:

ND() - Not detected at the detection limit listed in parentheses.
S - New York State ambient water quality standard.
G - New York State ambient groundwater quality guidance value.
N/A - Not analyzed.
Exceedance of New York State Ambient Groundwater Standard or Guidance Value

APPENDIX A

BOREHOLE AND TEST PIT STRATIGRAPHIC LOGS

ENGINEERING–SCIENCE DRILLING RECORD

BORING GW–1

Sheet 1 of 1

Location: North and slightly east of old waste water treatment plant

Empire Soils

Mark Corcimiglia

CRT

Acker AD–2 4 1/4" HSA

PROJECT NAME Old Rochester City Landfill

PROJECT NUMBER SY136.07.01

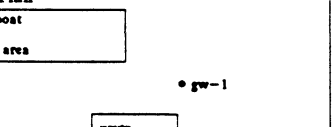
GROUNDWATER OBSERVATIONS

Weather Sunny, 70's

Date/Time Start 10/23/91 1340

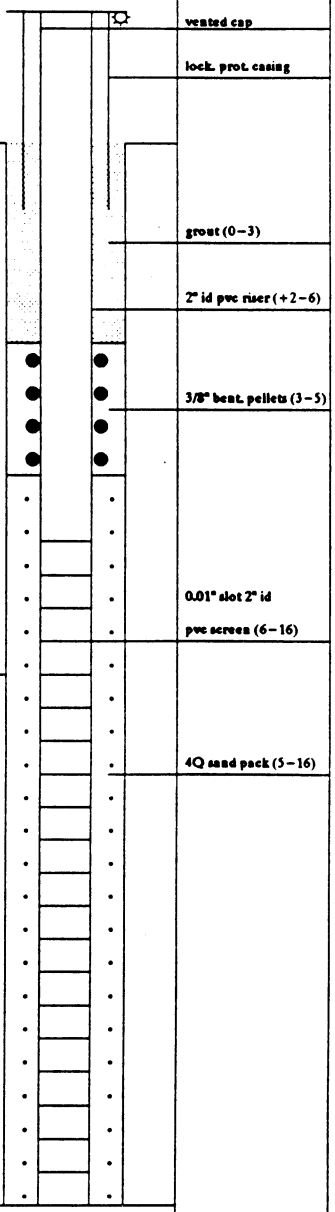
Date/Time Finish 10/23/91 1540

Plot Plan



Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL
			SS	
	0			0
gw1s1		100	4	SILT and SAND; fine, brn, dry
	1		9	
			11	
	2		11	
gw1s1		100	9	as above; dry
	3		12	
			12	
	4		10	
gw1s1		100	5	as above; moist to wet
	5		6	
			8	
	6		9	
gw1s1		100	10	as above; moist to wet
	7		10	
			12	
	8		10	
gw1s1		100	3	as above; wet
	9		6	
			5	
	10		6	
gw1s1		100	8	CLAY and SILT, trace SAND, fine; grey, wet
	11		12	
			12	
	12		12	
gw1s1		100	6	SILT and SAND, fine; grey, wet
	13		8	
			8	
	14		6	
gw1s1		100	5	as above; wet
	15		7	
			7	
	16		4	

WELL SCHEMATIC



COMMENTS

vented cap

lock. prot. casing

grout (0–3)

2" id pvc riser (+2–6)

3/8" bent. pellets (3–5)

0.01" slot 2" id pvc screen (6–16)

4Q sand pack (5–16)

STANDARD PENETRATION TEST

SS = SPLIT SPOON

A = AUGER CUTTINGS

C = CORED

SUMMARY: 0–10', SILT and SAND; 10–12' CLAY and SILT; 12–16' SILT and SAND

G1-~~E~~

WELL INSTALLATION CHECKLIST
PHASE II INVESTIGATIONS

Site Name: Old Rochester City Landfill Date: 10/25/91
Job Number: 5436.C7.01 By: CRT
Boring Number: GW-1

****

Depth of Hole: 16'
Diameter of Hole: 4½"

Comments

ALL MATERIALS INSPECTED PRIOR TO INSTALLATION?
Yes X No ____

SCREEN
Material: PVC
Slot Size: 0.01"
Length: 10'
Threaded: Yes X No ____

RISER PIPE
Material: PVC
Total Length of Well - Screen Length = 16 - 10 = 6
Threaded: Yes X No ____

END CAP
Material: PVC
Threaded: Yes ~~X~~ No X

ALL JOINTS TEFLON TAPED: Yes ____ No X

TOTAL LENGTH OF WELL CASING (Includes screen and stick-up.) 18'

SAND PACK
Type/Size: quartz / 4Q
Amount (Calculated): 400 lb
Amount (Actual): 400 lb
Installed with Tremie: Yes ____ No X

BENTONITE SEAL(S):
Type/Size: pellets / 3/8"
Amount (Calculated): 5 gal
Amount (Actual): 5 gal
Installed with Tremie: Yes ____ No X
Secondary Seal(s) Used: Yes ____ No X
Explain: ____

WELL INSTALLATION CHECKLIST
PHASE II INVESTIGATIONS

GROUT/CEMENT

Mixture (#Cement/#Bentonite): 100/0

Mixture (Gal. water/#dry mix): 5/100 lb

Amount (calculated): 50 lb

Amount (actual): 50 lb

Installed with TREMIE: Yes ___ No X

LOCKING PROTECTIVE CASING INSTALLED: Yes X No ___

Locked immediately after installation: Yes X No ___

Grout sloped at surface to allow run-off: Yes X No ___

Drain hole drilled prior to development: Yes ___ No X

Stick-up: 2.0 ft

ANY FOREIGN OBJECTS LOST IN THE WELL: Yes ___ No X

If yes:

(1) What was lost:

(2) Depth:

(3) Stage of well installation:

(4) Was object retrieved: Yes ___ No X

(All or part/how):

WELL CAPPED: Yes X No ___

WELL IDENTIFIED: Yes X No ___

DISPOSAL OF CUTTINGS:

Left in pile: X

Spread out: ___ (Hnu reading: ___ ppm)

Containerized: ___

Other: ___

DISPOSAL OF FLUIDS:

Run off on ground surface: X

Containerized: ___

Other: ___

CR Torell

Engineering-Science Representative

10/29/91

ENGINEERING–SCIENCE DRILLING RECORD

BORING GW–2

Sheet 1 of 1

Location: Southeast corner of Stutson shopping mall

PROJECT NAME Old Rochester City Landfill

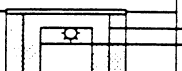
PROJECT NUMBER SY136.07.01

Weather Sunny 60's

Date/Time Start 10/25/91 830

Date/Time Finish 10/25/91 1000

Plot Plan



Operator: Empire Soils

Driller: Mark Corcimiglia

Inspector: CRT

Rig Type: Acker AD–2 4 1/4" HSA

GROUNDWATER OBSERVATIONS

Water Level				
at				
in				
Cas.				
Com				

Sample Rec	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
		0		A	0		
					ASPHALT and CRUSHED STONE, base		flush–mount casing locking gripper cap
		1		SS			
	gw2s1		50	6	FILL; silt and sand, trace clay, red–brn to black, dry		
		2		5	to moist, cinders, glass, wood		3/8" bent pellets (1–3)
				15			
		3		10			
			0	8	No recovery		2" id pvc riser (0.25–4)
		4		4			
				3			
		5		1		wet ↓	
	gw2s1		50	1	FILL; clay and silt, trace sand, fine, red–brn to black, wet, slag		4Q sand pack (3–8)
		6		1			
				1			
		7		1	CLAY and SILT; black, wet, organics		0.01" slot 2" id pvc
	gw2s1		50	1	as above; wet		screen (4–14)
		8		1	SILT and SAND, fine, trace CLAY; grey, wet		
				1			
		9		1			
	gw2s1		100	4	as above; red–brn, wet		indigenous running
		10		3			sand, f–co (8–14)
				4			
		11		5			
0	gw2s1		100	5	SAND; fine to coarse, red–brn, wet		
		12		3			
				4			
		13		3			
0	gw2s1		10	1	as above; wet		
		14		1			
					14		

STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–6.5', FILL; 6.5–7.5, CLAY and SILT
7.5–11', SILT, SAND and CLAY; 11–14', SAND

G1-~~[illegible]~~

WELL INSTALLATION CHECKLIST
PHASE II INVESTIGATIONS

Site Name: Old Rochester City Landfill Date: 10/25/91

Job Number: 54136.07.01 By: CRT

Boring Number: GW-2

****

Depth of Hole: 14' **Comments**

Diameter of Hole: 4 1/2"

ALL MATERIALS INSPECTED PRIOR TO INSTALLATION?
Yes X No ____

SCREEN
Material: PVC
Slot Size: 0.01"
Length: 10'
Threaded: Yes X No ____

RISER PIPE
Material: PVC
Total Length of Well - Screen Length = ~~[illegible]~~ 3 2/3
Threaded: Yes X No ____

END CAP
Material: PVC
Threaded: Yes ____ No X

ALL JOINTS TEFLON TAPED: Yes ____ No X

TOTAL LENGTH OF WELL CASING (Includes screen and stick-up.) ~~[illegible]~~ 13 4/5'

SAND PACK
Type/Size: Quartz / 4Q
Amount (Calculated): 200 lbs
Amount (Actual): 200 lbs
Installed with Tremie: Yes ____ No X

BENTONITE SEAL(S):
Type/Size: pellets / 3/8"
Amount (Calculated): 5 gal
Amount (Actual): 5 gal
Installed with Tremie: Yes ____ No X
Secondary Seal(s) Used: Yes ____ No X
Explain: ____

WELL INSTALLATION CHECKLIST
PHASE II INVESTIGATIONS

GROUT/CEMENT

Mixture (#Cement/#Bentonite): 100/6

Mixture (Gal. water/#dry mix): 5/100lb

Amount (calculated): 100lb

Amount (actual): 100lb

Installed with TREMIE: Yes ___ No X

LOCKING PROTECTIVE CASING INSTALLED: Yes X No ___

Locked immediately after installation: Yes X No ___

Grout sloped at surface to allow run-off: Yes X No ___

Drain hole drilled prior to development: Yes ___ No X

Stick-up: 0.0ft

ANY FOREIGN OBJECTS LOST IN THE WELL: Yes ___ No X

If yes:

(1) What was lost:

(2) Depth:

(3) Stage of well installation:

(4) Was object retrieved: Yes ___ No X

(All or part/how):

WELL CAPPED: Yes X No ___

WELL IDENTIFIED: Yes X No ___

DISPOSAL OF CUTTINGS:

Left in pile: X

Spread out: ___ (Hnu reading: ___ ppm)

Containerized: ___

Other: ___

DISPOSAL OF FLUIDS:

Run off on ground surface: X

Containerized: ___

Other: ___

CR Tolle

Engineering-Science Representative

10/29/91

ENGINEERING–SCIENCE DRILLING RECORD

BORING GW–3

...or:	Empire Soils
...r:	Mark Corcimiglia
...spector:	CRT
...ig Type:	Acker AD–2 4 1/4" HSA

PROJECT NAME Old Rochester City Landfill

PROJECT NUMBER SY136.07.01

Sheet 1 of 1

Location: NE corner of big Shumway boat warehouse

Weather Overcast, 70's

Date/Time Start 10/24/91 1120

Date/Time Finish 10/24/91 1345

GROUNDWATER OBSERVATIONS

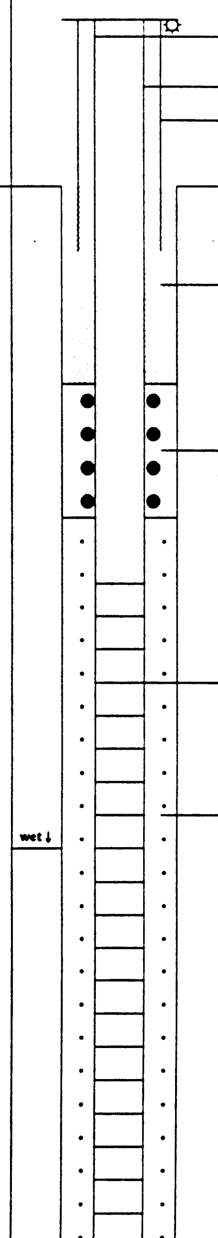
...ater Level				
...a'				
...im				
...eas. ...rom				

Plot Plan

boat warehouse • gw–3	old landfill
↑N	paved boat storage area

Pt...vac R...ing	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL
				SS	
		0			0
	gw3s1		25	2	FILL; silt and clay, brn, moist, glass, brick
		1		4	
				12	
		2		18	
			0	6	No recovery
		3		6	
				5	
		4		4	
			0	1	No recovery
		5		2	
				2	
		6		2	
	gw3s1		50	6	FILL; silt and sand, fine, some clay, brn–black, moist to wet,
		7		4	wood, glass
				3	
		8		3	
			25	13	as above; as above, moist to wet
270	gw3s1	9		10	
				5	
		10		20	
			0	14	No recovery
		11		14	
				8	
		12		3	
0	gw3s1		25	10	FILL; trace silt and clay, black, wet, sawdust, sheen
		13		3	
				2	
		14		100/3	
			0	2	No recovery
		15		1	
				1	
		16		2	
					16

WELL SCHEMATIC / **COMMENTS**



- vented cap
- 2" id pvc riser (+3–6)
- lock. prot. casing
- grout (0–3)
- 3/8" bent. pellets (3–5)
- 0.01" slot 2" id pvc screen (6–16)
- 4Q sand pack (5–16)

STANDARD PENETRATION TEST

SS = SPLIT SPOON

A = AUGER CUTTINGS

C = CORED

SUMMARY: 0–16', FILL

G1-

WELL INSTALLATION CHECKLIST
PHASE II INVESTIGATIONS

Site Name: Old Rochester City Landfill Date: 10/24/91

Job Number: 5436.07.01 By: CRT

Boring Number: GW-3

****

Depth of Hole: 16'

Diameter of Hole: 4 1/2"

Comments

ALL MATERIALS INSPECTED PRIOR TO INSTALLATION?
Yes X No ____

SCREEN
Material: PVC
Slot Size: 0.01"
Length: 10'
Threaded: Yes X No ____

RISER PIPE
Material: PVC
Total Length of Well - Screen Length = ~~6~~ 6'
Threaded: Yes X No ____

END CAP
Material: PVC
Threaded: Yes ____ No X

ALL JOINTS TEFLON TAPED: Yes ____ No X

TOTAL LENGTH OF WELL CASING (Includes screen and stick-up.)
16'

SAND PACK
Type/Size: quartz / 4Q
Amount (Calculated): 250lbs
Amount (Actual): 250lbs
Installed with Tremie: Yes ____ No X

BENTONITE SEAL(S):
Type/Size: pellets / 3/8"
Amount (Calculated): 5 gal
Amount (Actual): 5 gal
Installed with Tremie: Yes ____ No X
Secondary Seal(s) Used: Yes ____ No X
Explain: ____

1g2 -

WELL INSTALLATION CHECKLIST
PHASE II INVESTIGATIONS

GROUT/CEMENT

Mixture (#Cement/#Bentonite): 100/0

Mixture (Gal. water/#dry mix): 5/100lbs

Amount (calculated): 150lbs

Amount (actual): 150lbs

Installed with TREMIE: Yes ___ No X

LOCKING PROTECTIVE CASING INSTALLED: Yes X No ___

Locked immediately after installation: Yes X No ___

Grout sloped at surface to allow run-off: Yes X No ___

Drain hole drilled prior to development: Yes ___ No X

Stick-up: 3'

ANY FOREIGN OBJECTS LOST IN THE WELL: Yes ___ No X

If yes:

(1) What was lost:

(2) Depth:

(3) Stage of well installation:

(4) Was object retrieved: Yes ___ No X

(All or part/how):

WELL CAPPED: Yes X No ___

WELL IDENTIFIED: Yes X No ___

DISPOSAL OF CUTTINGS:

Left in pile: X

Spread out: ___ (Hnu reading: ___ ppm)

Containerized: ___

Other: ___

DISPOSAL OF FLUIDS:

Run off on ground surface: X

Containerized: ___

Other: ___

CR Tolle

Engineering-Science Representative

10/29/91

ENGINEERING–SCIENCE DRILLING RECORD

Contractor: Empire Soils
Driller: Mark Corcimiglia
Inspector: CRT
Rig Type: Acker AD–2 4 1/4" HSA

PROJECT NAME Old Rochester City Landfill
PROJECT NUMBER SY136.07.01

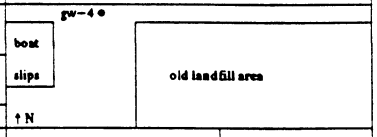
BORING GW–4
Sheet 1 of 1
Location: Northwest corner of old landfill area

GROUNDWATER OBSERVATIONS

Water Level				
Date				
Time				
Meas. From				

Weather Overcast 70's
Date/Time Start 10/24/91 1415
Date/Time Finish 10/24/91 1600

Plot Plan



Photovac Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
							vented cap
							2" id pvc riser (+3–7)
							lock. prot. casing
				SS			
		0			0		
10	gw4s1		50	12	FILL; silt and sand, fine, brn, dry, paper, brick		
		1		30			
				16			grout (0–4)
		2		9			
0	gw4s1		50	6	as above; dry		
		3		3			
				2			
		4		2			
			0	2	No recovery		
		5		4			3/8" bent. pellets (4–6)
				1			
		6		2			
			0	2	No recovery		
		7		1			
				1			
		8		1			0.01" slot 2" id
0	gw4s1		100	2	SILT and CLAY, little SAND, fine; grey, moist to wet		pvc screen (7–17)
		9		3			
				3			
		10		3		wet ↓	
0	gw4s1		100	1	as above; wet		4Q sand pack (6–17)
		11		1			
				2			
		12		2			
0	gw4s1		50	1	as above; trace gravel, wet		
		13		2			
				1			
		14		2			
0	gw4s1		75	1	as above; wet		
		15		1			
				1	as above; some sand, fine, brn, moist, organics		
		16		2			
0	gw4s1		50	3	as above; trace sand, very fine, grey–brn, wet		
		17		7	as above; some sand, fine, brn, moist, organics		

STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–8', FILL; 8–17', SILT, CLAY and SAND

GI-

WELL INSTALLATION CHECKLIST
PHASE II INVESTIGATIONS

Site Name: Old Rochester City Landfill Date: 10/24/91

Job Number: 5413607.01 By: CRT

Boring Number: GW-4

****

Depth of Hole: 17'

Diameter of Hole: 4½"

Comments

ALL MATERIALS INSPECTED PRIOR TO INSTALLATION?
Yes X No ____

SCREEN
Material: PVC
Slot Size: 0.01"
Length: 10'
Threaded: Yes X No ____

RISER PIPE
Material: PVC
Total Length of Well - Screen Length = 7'
Threaded: Yes X No ____

END CAP
Material: PVC
Threaded: Yes ~~X~~ No C

ALL JOINTS TEFLON TAPED: Yes ____ No X

TOTAL LENGTH OF WELL CASING (Includes screen and stick-up.) 20'

SAND PACK
Type/Size: quartz #4Q
Amount (Calculated): 300lbs
Amount (Actual): 300lbs
Installed with Tremie: Yes ____ No X

BENTONITE SEAL(S):
Type/Size: pellets /3/8"
Amount (Calculated): 5 gal
Amount (Actual): 5 gal
Installed with Tremie: Yes ____ No X
Secondary Seal(s) Used: Yes ____ No X
Explain: ____

1g2 -S

WELL INSTALLATION CHECKLIST
PHASE II INVESTIGATIONS

GROUT/CEMENT

Mixture (#Cement/#Bentonite): 100/6

Mixture (Gal. water/#dry mix): 5/100lbs

Amount (calculated): 150 lbs

Amount (actual): 150 lbs

Installed with TREMIE: Yes ____ No X

LOCKING PROTECTIVE CASING INSTALLED: Yes X No ____

Locked immediately after installation: Yes X No ____

Grout sloped at surface to allow run-off: Yes X No ____

Drain hole drilled prior to development: Yes ____ No X

Stick-up: 3'

ANY FOREIGN OBJECTS LOST IN THE WELL: Yes ____ No X

If yes:

(1) What was lost:

(2) Depth:

(3) Stage of well installation:

(4) Was object retrieved: Yes ____ No X

(All or part/how):

WELL CAPPED: Yes X No ____

WELL IDENTIFIED: Yes X No ____

DISPOSAL OF CUTTINGS:

Left in pile: X

Spread out: ____ (Hnu reading: ____ ppm)

Containerized: ____

Other: ____

DISPOSAL OF FLUIDS:

Run off on ground surface: X

Containerized: ____

Other: ____

C R Tall

Engineering-Science Representative

10/24/91

G1-

WELL INSTALLATION CHECKLIST
PHASE II INVESTIGATIONS

Site Name: Old Rochester City Landfill Date: 10/2 4/91

Job Number: 5436.07.01 By: CAT

Boring Number: GW-5

****

Depth of Hole: 16'

Diameter of Hole: 4 1/4"

Comments

ALL MATERIALS INSPECTED PRIOR TO INSTALLATION?
Yes X No ____

SCREEN
Material: PVC
Slot Size: 0.01"
Length: 10'
Threaded: Yes X No ____

RISER PIPE
Material: PVC
Total Length of Well - Screen Length = 4'
Threaded: Yes X No ____

END CAP
Material: PVC
Threaded: Yes X No X

ALL JOINTS TEFLON TAPED: Yes ____ No X

TOTAL LENGTH OF WELL CASING (Includes screen and stick-up.) 19'

SAND PACK
Type/Size: quartz / 40
Amount (Calculated): 250 lbs
Amount (Actual): 250 lbs
Installed with Tremie: Yes ____ No X

BENTONITE SEAL(S):
Type/Size: pellets / 3/8"
Amount (Calculated): 5 gal
Amount (Actual): 5 gal
Installed with Tremie: Yes ____ No X
Secondary Seal(s) Used: Yes ____ No X
Explain: ____

1g2

WELL INSTALLATION CHECKLIST
PHASE II INVESTIGATIONS

GROUT/CEMENT

Mixture (#Cement/#Bentonite): 100/0

Mixture (Gal. water/#dry mix): 5/100/6.5

Amount (calculated): 15C 16s

Amount (actual): 150/6s

Installed with TREMIE: Yes ____ No X

LOCKING PROTECTIVE CASING INSTALLED: Yes X No ____

Locked immediately after installation: Yes X No ____

Grout sloped at surface to allow run-off: Yes X No ____

Drain hole drilled prior to development: Yes ____ No X

Stick-up: 3'

ANY FOREIGN OBJECTS LOST IN THE WELL: Yes ____ No X

If yes:

(1) What was lost:

(2) Depth:

(3) Stage of well installation:

(4) Was object retrieved: Yes ____ No X

(All or part/how):

WELL CAPPED: Yes X No ____

WELL IDENTIFIED: Yes X No ____

DISPOSAL OF CUTTINGS:

Left in pile: X

Spread out: ____ (Hnu reading: ____ ppm)

Containerized: ____

Other: ____

DISPOSAL OF FLUIDS:

Run off on ground surface: X

Containerized: ____

Other: ____

CR Tuttle

Engineering-Science Representative

10/24/91

ENGINEERING–SCIENCE DRILLING RECORD

Contractor: Empire Soils
Driller: Mark Corcimiglia
Inspector: CRT
Rig Type: Acker AD–2 2 1/4" HSA

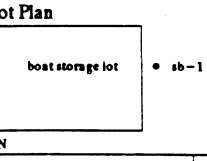
BORING SB–1
Sheet 1 of 1
PROJECT NAME Old Rochester City Landfill
PROJECT NUMBER SY136.07.01
Location: East of paved boat storage lot

GROUNDWATER OBSERVATIONS

Water Level				
Date				
Time				
Meas. From				

Weather Overcast 50's
Date/Time Start 10/21/91 1300
Date/Time Finish 10/21/91 1330

Plot Plan



Photovac Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
				SS			
		0			0		
0	sb1s1		25	2	FILL; silt and sand, fine, brn, dry, plastic, wood		
		1		2			
				2			
		2		5			backfilled with auger cuttings (0–10)
0	sb1s1		05	3	as above; sand, coarse and gravel, red–brn, dry, cloth, rock frags		
		3		3			
				3			
		4		3			
0	sb1s1		05	3	CLAY and SILT; grey, moist to wet		
		5		1			
				3			
		6		6		wet ↓	
0	sb1s1		05	5	as above; moist to wet		
		7		8			
				7			
		8		4			
0	sb1s1		75	4	as above; little sand, fine, moist to wet		
		9		6			
				4			
		10		13			
					10		

STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–4', FILL; 4–10' CLAY and SILT

ENGINEERING–SCIENCE DRILLING RECORD

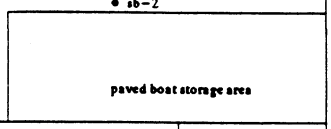
Contractor: Empire Soils
Driller: Mark Corcimiglia
Inspector: CRT
Rig Type: Acker AD–2 2 1/4" HSA

PROJECT NAME Old Rochester City Landfill
PROJECT NUMBER SY136.07.01

BORING SB–2
Sheet 1 of 2
Location: Northern edge of paved boat storage area

Weather Overcast 50's
Date/Time Start 10/21/91 1400
Date/Time Finish 10/21/91 1515

Plot Plan



GROUNDWATER OBSERVATIONS

Water Level				
Date				
Time				
Meas. From				

Photovac Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
				SS			
		0			0		
0	sb2s1		75	3	FILL; silt and sand, fine brn, dry, asphalt and rock frags		
		1		4			
				5			
		2		7			
0	sb2s1		05	6	as above; as above, brn–black, moist, rock frags		
		3		7			
				7			
		4		9			
0	sb2s1		50	3	as above; as above, moist		backfilled with auger cuttings (0–28)
		5		1			
				3			
		6		1			
0	sb2s1		50	3	as above; sand, coarse, black, moist, cinders		
		7		4	as above; silt and sand, fine, grey, moist, glass		
				6			
		8		8			
0	sb2s1		05	2	as above; as above, moist, rubber		
		9		3			
				4			
		10		4		wet ↓	
38	sb2s1		05	3	as above; as above, wet		
		11		6			
				7			
		12		4			
			0	3	No recovery		
		13		4			
				4			
		14		5			
0	sb2s1		50	4	FILL; silt and sand, fine, grey, wet, cloth	↑	
		15		2		|	
				2		|	
		16		3		ch4	
6	sb2s1		40	?	as above; as above, wet, methane noticed out of hole		
		17		?			
				?			
		18		?			

STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–24', FILL; 24–28', SILT SAND and GRAVEL

ENGINEERING–SCIENCE DRILLING RECORD

BORING SB–2

Sheet 2 of 2

Contractor: Empire Soils
Driller: Mark Corcimiglia
Inspector: CRT
Rig Type: Acker AD–2 2 1/4" HSA

PROJECT NAME Old Rochester City Landfill
PROJECT NUMBER SY136.07.01

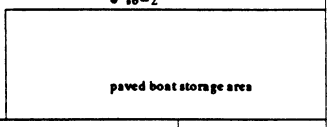
Location: Northern edge of paved boat storage area

GROUNDWATER OBSERVATIONS

Water Level				
Date				
Time				
Meas. From				

Weather Overcast 50's
Date/Time Start 10/21/91 1400
Date/Time Finish 10/21/91 1515

Plot Plan



Photovac Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
				SS			
		18					
			0	4	No recovery		
		19		3			
				3			
		20		2			
			0	2	No recovery		
		21		1			
				4			
		22		4			
0	sb2s1		05	3	FILL; silt and sand, fine, black, wet, sewage odor		backfilled with auger cuttings (0–28)
		23		3			
				2			
		24		4			
0	sb2s1		100	1	SILT and SAND, fine; grey, wet		
		25		3			
				5	SAND, coarse and GRAVEL; red–brn, wet		
		26		5			
0	sb2s1		100	1	as above; as above, wet		
		27		4			
				4			
		28		2			
					28		

STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–24', FILL; 24–28', SILT SAND and GRAVEL

ENGINEERING–SCIENCE DRILLING RECORD

Contractor: Empire Soils
Driller: Mark Corcimiglia
Inspector: CRT
Rig Type: Acker AD–2 2 1/4" HSA

PROJECT NAME Old Rochester City Landfill
PROJECT NUMBER SY136.07.01

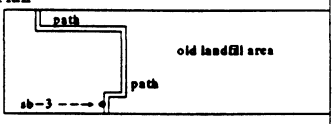
BORING SB–3
Sheet 1 of 2
Location: West of path thru old landfill, lower 1/3 of landfill

GROUNDWATER OBSERVATIONS

Water Level				
Date				
Time				
Meas. From				

Weather Sunny 50's
Date/Time Start 10/22/91 930
Date/Time Finish 10/22/91 1130

Plot Plan



Photovac Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
				SS			
		0			0		
0	sb3s1		75	5	FILL; silt and sand, fine, brn, dry, rock frags, wood		
		1		13			
				13			
		2		12			
0	sb3s1		50	12	as above; silt and clay, trace sand, fine, black, damp		
		3		11	rock frags, wood		
				11			
		4		8			
			0	4	No recovery		backfilled with auger cuttings (0–30)
		5		3			
				3			
		6		3			
0	sb3s1		50	3	FILL; clay and silt, black, moist to wet, plastic, cinders		
		7		3			
				4			
		8		7			
12	sb3s1		25	2	as above; as above, moist to wet, paper, wood		
		9		3			
				4			
		10		12			
0	sb3s1		25	1	as above; as above, moist to wet		
		11		5			
				10			
		12		8		wet ↓	
5	sb3s1		25	7	as above; as above, wet		
		13		13			
				9			
		14		11			
35	sb3s1		15	8	as above; silt and sand, fine, little clay, tan, wet, paper		
		15		8			
				9			
		16		7			
			0	4	No recovery		
		17		15			
				100/3			
		18					

STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–26', FILL; 26–30', SILT, SAND and CLAY

ENGINEERING–SCIENCE DRILLING RECORD

Contractor: Empire Soils
Driller: Mark Corcimiglia
Inspector: CRT
Rig Type: Acker AD–2, 2 1/4" HSA

PROJECT NAME Old Rochester City Landfill
PROJECT NUMBER SY136.07.01

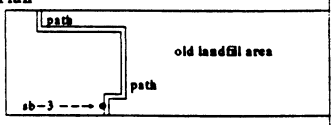
BORING SB–3
Sheet 2 of 2
Location: West of path thru old landfill, lower 1/3 of landfill

GROUNDWATER OBSERVATIONS

Water Level				
Date				
Time				
Meas. From				

Weather Sunny 50's
Date/Time Start 10/22/91 930
Date/Time Finish 10/22/91 1130

Plot Plan



Photovac Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
				SS			
		18					
			0	12	No recovery		
		19		7			
				7			
		20		5			
			0	4	No recovery		
		21		3			
				5			
		22		7			
	sb3s1		15	4	FILL; silt and sand, fine, little clay, black, wet, sheen wood		backfilled with auger cuttings (0–30)
		23		3			
				2			
		24		8			
			0	10	No recovery		
		25		100/4			
		26					
	sb3s1		100	2	SAND, fine, SILT, little CLAY; black, wet, organics		
		27		3			
				4			
		28		4			
			100	2	as above; as above, wet		
		29		5			
				6			
		30		7			
					30		

STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–26', FILL; 26–30', SILT, SAND and CLAY

ENGINEERING–SCIENCE DRILLING RECORD

Contractor: Empire Soils
Driller: Mark Corsiniglia
Inspector: CRT
Rig Type: Acker AD–2, 2 1/4" HSA

PROJECT NAME Old Rochester City Landfill
PROJECT NUMBER SY136.07.01

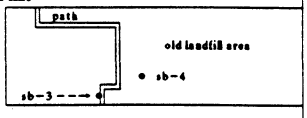
BORING SB–4
Sheet 1 of 1
Location: East pf path thru old landfill, north east of sb–3

GROUNDWATER OBSERVATIONS

Water Level				
Date				
Time				
Meas. From				

Weather Sunny 60's
Date/Time Start 10/22/91 1420
Date/Time Finish 10/22/91 1540

Plot Plan



Photovac Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
				SS			
		0					
0	sb4s1		100	3	FILL; silt and sand, fine, brn, dry, cinders, rock frags		
		1		6			
				9			
		2		9			
0	sb4s1		100	8	as above; as above, dry, paper, wood		
		3		7			
				8			
		4		8			
0	sb4s1		50	1	as above; as above, moist		backfilled with auger cuttings (0–20)
		5		1			
				4			
		6		4			
			0	5	No recovery		
		7		7			
				4			
		8		4			
6	sb4s1		05	2	FILL; clay and silt, brn, moist, wood		
		9		4			
				5			
		10		9			
			0	1	No recovery		
		11		1			
				80			
		12		72			
			0	17	No recovery		
		13		23			
				25			
		14		53			
			0	100/5	No recovery		
		15					
		16					
0	sb4s1		100	31	SILT and SAND, fine, trace CLAY; tan, moist to wet		
		17		13		wet ↓	
				14			
		18		21			
0	sb4s1		100	15	as above; as above, wet		
		19		16			
				19			
		20		15			
					20		

STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–16', FILL; 16–20', SILT and SAND

ENGINEERING–SCIENCE DRILLING RECORD

BORING SB–5

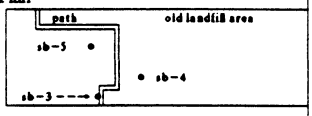
Contractor: Empire Soils
Driller: Mark Corsimiglia
Inspector: CRT
Rig Type: Acker AD–2, 2 1/4" HSA

PROJECT NAME Old Rochester City Landfill
PROJECT NUMBER SY136.07.01

Sheet 1 of 1
Location: West of path thru old landfill, northwest corner

Weather Sunny 70's
Date/Time Start 10/23/91 1220
Date/Time Finish 10/23/91 1310

Plot Plan



GROUNDWATER OBSERVATIONS

Water Level				
Date				
Time				
Meas. From				

Photovac Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
				SS			
		0					
0	sb5s1		25	5	FILL; silt and sand, fine, brn, dry, cloth		
		1		6			
				6			
		2		9			
0	sb5s1		75	8	as above; as above, dry, cinder block frogs		
		3		8			
				12			
		4		16			
28	sb5s1		50	6	as above; as above, red–brn, dry, wire, plastic, metal		backfilled with auger cuttings (0–20)
		5		12			
				10			
		6		11			
0	sb5s1		100	12	as above; silt, red–brn to black, cinders		
		7		9			
				9			
		8		9			
6	sb5s1		75	5	as above; silt and clay, little sand, fine, black, moist, asphalt and cinder block frags		
		9		3			
				5			
		10		7			
0	sb5s1		50	1	as above; as above, moist		
		11		3			
				3			
		12		7			
12	sb5s1		50	6	as above; as above, moist		
		13		66			
				7			
		14		13			
0	sb5s1		50	6	as above; silt and sand, fine, grey, wet, paper		
		15		4			
				7			
		16		7		wet ↓	
86	sb5s1		25	9	as above; as above, wet, wood, cinder block frags		
		17		12			
				12			
		18		8			
11	sb5s1		75	5	as above; silt, black, wet, wood, rock frags		
		19		3			
				5	CLAY, SILT, and trace SAND, fine; grey, wet		
		20		7			
					20		

STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–19', FILL; 19–20', CLAY, SILT and SAND

ENGINEERING–SCIENCE DRILLING RECORD

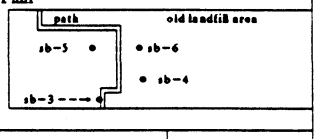
Contractor: Empire Soils
Driller: Mark Coreimiglia
Inspector: CRT
Rig Type: Acker AD–2, 2 1/4" HSA

BORING SB–6
Sheet 1 of 1
Location: East of path thru old landfill, northeast corner

PROJECT NAME Old Rochester City Landfill
PROJECT NUMBER SY136.07.01

Weather Sunny 60's
Date/Time Start 10/23/91 945
Date/Time Finish 10/23/91 1110

Plot Plan



GROUNDWATER OBSERVATIONS

Water Level				
Date				
Time				
Meas. From				

Photovac Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
				SS			
		0					
1	sb6s1		100	7	FILL; silt and sand, fine, little clay, brn, dry, brick		
		1		7			
				6			
		2		7			
1	sb6s1		100	12	as above; as above, dry		
		3		11			
				11			
		4		13			
4	sb6s1		50	7	as above; as above, black, dry		backfilled with auger cuttings (0–20)
		5		3			
				3			
		6		3		wet ↓	
7	sb6s1		50	2	as above; clay and silt, trace sand, fine, black, moist to wet, cinders, wood		
		7		4			
				3			
		8		4			
11	sb6s1		40	3	as above; as above, moist to wet, sponge, wood		
		9		4			
				5			
		10		5			
11	sb6s1		%25	1	as above; as above; moist to wet		
		11		2			
				5			
		12		4			
12	sb6s1		15	4	as above; silt and sand, fine, trace clay, black, wet, wood		
		13		100/3			
		14					
25	sb6s1		30	3	as above; as above, wet, glass		
		15		4			
				4			
		16		4			
1	sb6s1		60	4	as above; silt and clay, little sand, fine, wet, grey, wood asphalt frags		
		17		5			
				5			
		18		7			
0	sb6s1		100	11	as above; silt, sand, fine to coarse, and gravel, wet, black		
		19		13			
				15	SILT, CLAY, and trace SAND, fine; grey, moist		
		20		17			
					20		

STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–19', FILL; 19–20', CLAY and SILT

ENGINEERING–SCIENCE DRILLING RECORD

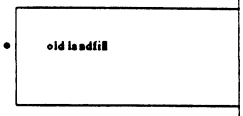
Contractor: Empire Soils
Driller: Mark Corcimiglia
Inspector: CRT
Rig Type: Acker AD–2, 2 1/4" HSA

PROJECT NAME Old Rochester City Landfill
PROJECT NUMBER SY136.07.01

BORING SB–7
Sheet 1 of 1
Location: Western edge of old landfill, center

Weather Sunny 60's
Date/Time Start 10/22/91 1300
Date/Time Finish 10/22/91 1400

Plot Plan



GROUNDWATER OBSERVATIONS

Water Level				
Date				
Time				
Meas. From				

Photovac Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
				SS			
		0					
15	sb7s1		75	3	FILL; silt and sand, fine, little clay, brn, dry, wood, stone frags		
		1		5			
				6			
		2		6			
64	sb7s1		50	5	as above; as above, dry, glass		
		3		6			
				5			
		4		4			
56	sb7s1		05	1	as above; silt and clay, brn, moist, wood, paper		backfilled with auger cuttings (0–20)
		5		30			
				12			
		6		5			
			0	4	No recovery		
		7		5			
				4			
		8		4			
			0	19	No recovery		
		9		8			
				3			
		10		2			
			0	1	No recovery		
		11		3			
				5			
		12		6			
29	sb7s1		05	4	FILL; wood, paper, moist		
		13		14			
				17			
		14		7			
11	sb7s1		50	4	as above; silt, little clay, trace sand, fine, black, moist, paper, wood		
		15		3	plastic		
				2			
		16		3		wet ↓	
0	sb7s1		50	4	as above; silt, little clay, black, wet, sheen, glass		
		17		4			
				4	SILT and SAND, fine to coarse; grey, wet		
		18		4			
0	sb7s1		100	1	as above; wet	↑	
		19		1		|	
				2		|	
		20		1	methane noticed out of hole	sb4	
					20		

STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–17', FILL; 17–20', SILT and SAND

ENGINEERING–SCIENCE DRILLING RECORD

BORING GW–5

Sheet 1 of 1

Location: Southwest corner of large Shumway warehouse

Contractor: Empire Soils
Driller: Mark Corcimiglia
Inspector: CRT
Rig Type: Acker AD–2 4 1/4" HSA

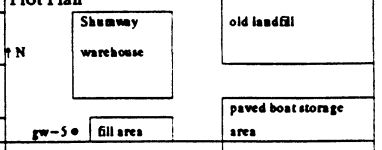
PROJECT NAME Old Rochester City Landfill
PROJECT NUMBER SY136.07.01

GROUNDWATER OBSERVATIONS

Water Level				
Date				
Time				
Meas. From				

Weather Sunny, 60's
Date/Time Start 10/24/91 930
Date/Time Finish 10/24/91 1100

Plot Plan



Photovac Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
							vented cap
							2" id pvc riser (+3–6)
							lock. prot. casing
				SS			
		0			0		
4	gw5s1		75	7	FILL; silt and sand, brn to black, dry, asphalt, cinders		
		1		11			
				7			grout (0–3)
		2		7			
0	gw5s1		50	6	as above; silt and clay, trace sand, fine, dk grey, dry to moist,		
		3		7	rock frags		
				6			
		4		30			3/8" bent. pellets (3–5)
			0	2	No recovery		
		5		3			
				2			
		6		2			
6	gw5s1		40	4	FILL; silt and clay, trace sand, fine, dk grey to black, moist		
		7		5	to wet, cinders, glass		0.01" slot 2" id
				5			pvc screen (6–16)
		8		4		wet ↓	
			0	4	No recovery		
		9		2			
				2			4Q sand pack (5–16)
		10		2			
			0	2	No recovery		
		11		3			
				1			
		12		1			
			0	4	No recovery		
		13		1			
				2			
		14		2			
5	gw5s1		05	1	SILT and CLAY, trace SAND, fine; black, wet, sheen		
		15		1			
				1			
		16		1			
					16		

STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–14', FILL; 14–16', SILT, CLAY and SAND

ENGINEERING–SCIENCE DRILLING RECORD

BORING GW–11

Sheet 1 of 1

Contractor: Empire Soil Investigations
Driller: Rick Labeer
Inspector: C.R. Torell
Rig Type: Acker AD–2 4.25" HSA

PROJECT NAME: Stutson Street Bridge
PROJECT NUMBER: SY126.02

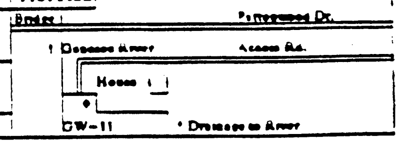
Location: South of Stutson Street Bridge between drainage channel and Genesee River.

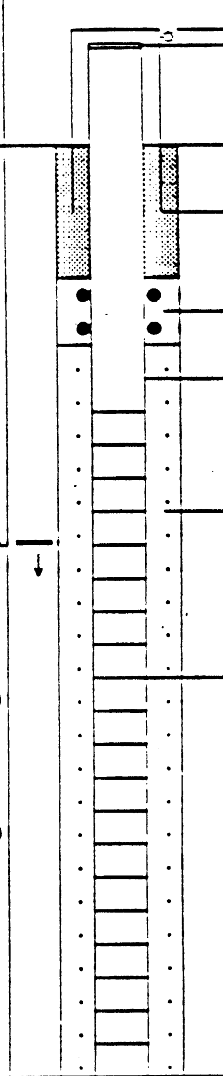
GROUNDWATER OBSERVATIONS

Water Level	6.48 ft	6.19 ft
Date	11/19/91	12/17/91
Time	1650	1250
Meas. From	Top of PVC	Top of PVC

Weather: Light rain, 40s
Date/Time Start: Novemember 15,1991 / 0900
Date/Time Finish: Novemember 15,1991 / 1010

Plot Plan



Photoion Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
							steel protective with lock [illegible]
		0		SS			
0.0	GW–11–A		75	3	FILL–brown – black silt, fine to coarse (moist)		
	GW–11–A	1		5	sand, brick, cinders		concrete grout (0–2)
	GW–11–A			7			
	GW–11–A	2		5			3/8" bentonite
0.0	GW–11–A		35	9	(moist – wet)		pellets (2–3)
	GW–11–A	3		4			
	GW–11–A			9			2" id PVC riser
	GW–11–A	4		5			(3 ft stickup –4)
0.0	GW–11–A		75	1	FILL–gray silt & clay, trace fine sand,		
	GW–11–A	5		8	wood, rock, high organics (moist – wet)		
	GW–11–A			2			#0 sand pack (3–14)
	GW–11–A	6		2	(wet at 6 feet)		
0.0	GW–11–A		70	1	PEAT–gray silt and clay, trace fine sand (wet)		
	GW–11–A	7		1	high organics, trace oily sheen		
	GW–11–A			2			2" id PVC screen
	GW–11–A	8		1			0.01" slot (4–14)
0.0	GW–11–A		100	1	PEAT–gray–brown silt and clay, trace (moist)		
	GW–11–A	9		1	fine sand, high organics		
	GW–11–A			1			
	GW–11–A	10		1			
0.0			100	1	trace coarse sand and gravel (moist)		
		11		1			
				1			
		12		1			
0.0			100	1			
		13		1			
				2			
		14		2			
					Boring terminated at 14 feet.		
		15			Native soil at 6 feet.		
		16					
		17					

STANDARD PENETRATION TEST

SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–6 ft. fill; 6–14 ft. peat

ENGINEERING–SCIENCE DRILLING RECORD

BORING GW-19

Sheet 1 of 1

Contractor: Empire Soil Investigations
Driller: Rick [illegible]
Inspector: C.R. Torell
Rig Type: [illegible] AD-2 4.25" HSA

PROJECT NAME: Stutson Street Bridge
PROJECT NUMBER: SY126.02

Location: In field between [illegible] [illegible] [illegible] and [illegible]. North of [illegible] Drive and [illegible] [illegible] Dodge car lot.

Weather: Overcast, 40s
Date/Time Start: Novemember 14,1991 / 1530
Date/Time Finish: Novemember 14,1991 / 1710

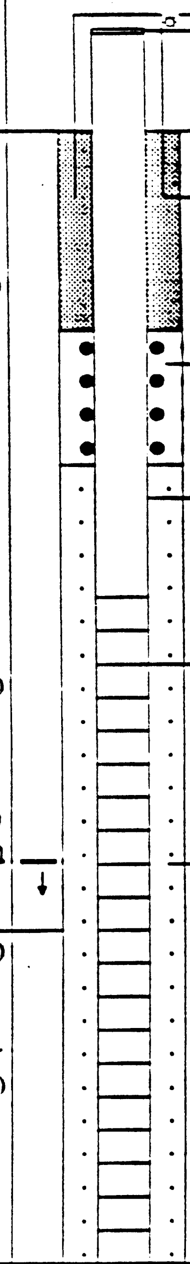
Plot Plan: Slope; Boat yard; ◆ GW-19; [illegible] [illegible]; [illegible] Dodge Car Lot; [illegible] Dr.; ↑N

GROUNDWATER OBSERVATIONS

Water Level	11.14 ft	10.63 ft		
Date	11/19/91	12/17/91		
Time	1435	1235		
Meas. From	Top of PVC	Top of PVC		

Photo Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL
		0		SS	
0.0	GW-19-A		50	10	FILL–silt, sand, brick, rock, glass (dry)
	GW-19-A	1		7	
	GW-19-A			8	
	GW-19-A	2		8	
2.0	GW-19-A		75	11	FILL–red-brown silt, sand, cinders, (dry)
	GW-19-A	3		23	ash, rock
	GW-19-A			9	
	GW-19-A	4		7	
			0	5	
		5		6	
				9	
		6		3	
			0	2	
		7		4	
				4	
		8		7	
1.0	GW-19-A		10	1	FILL–gray silt, sand, cinders, sludge, (moist)
	GW-19-A	9		2	foam padding
	GW-19-A			2	
	GW-19-A	10		2	
2.0	GW-19-B		60	1	FILL–dark brown silt and fine sand. (moist – wet)
	GW-19-B	11		2	(wet at 11 feet)
	GW-19-B			2	sock fragments
	GW-19-B	12		3	
3.0	GW-19-B		50	18	SILT & F.SAND – brown, little clay, trace gravel (wet)
	GW-19-B	13		33	oily sheen
	GW-19-B			18	
	GW-19-B	14		12	-----------(contact gradational)-------------
0.0	GW-19-B		100	2	CLAY–red, little silt, trace gravel (moist)
	GW-19-B	15		4	
	GW-19-B			5	
	GW-19-B	16		4	
				A	
		17		A	
					Boring terminated at 17 feet. Native soil at 12 feet.

WELL SCHEMATIC



COMMENTS

- steel protective [illegible] with lock
- vented cap
- concrete grout (0–3)
- 3/8" bentonite pellets (3–5)
- 2" id PVC riser (2.5 ft stickup–7)
- 2" id PVC screen 0.01" slot (7–17)
- 4Q sand pack (5–17)

STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–12 ft. fill; 12–14 ft. silt and sand; 14–17 ft. clay

ENGINEERING–SCIENCE
DRILLING RECORD

BORING GW–33

Contractor: Empire Soil Investigations
Driller: Rick Lasser
Inspector: C.R. Torell
Rig Type: Acker AD–2 4.25" HSA

PROJECT NAME: Stutson Street Bridge
PROJECT NUMBER: SY126.02

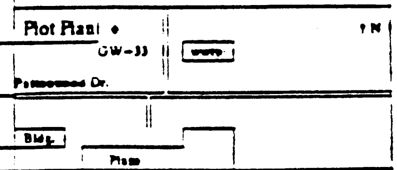
Sheet 1 of 2
Location: On slope near former wastewater treatment plant

GROUNDWATER OBSERVATIONS

Water Level	16.64 ft	16.34 ft		
Date	11/19/91	12/17/91		
Time	1400	1105		
Meas. From	Top of PVC	Top of PVC		

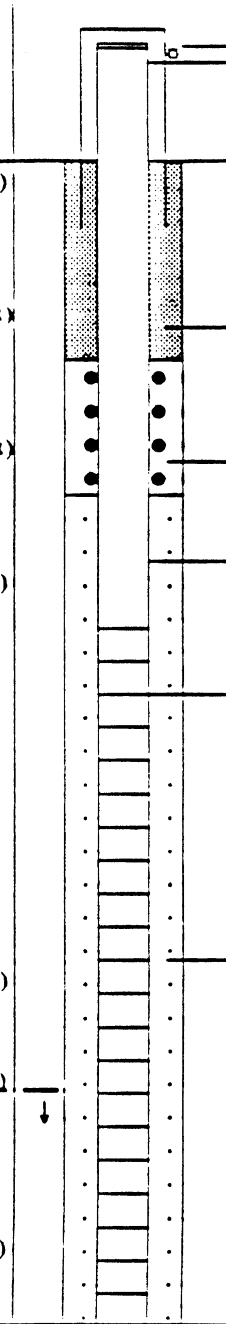
Weather: Overcast, 40s
Date/Time Start: Novemember 13,1991 / 1300
Date/Time Finish: Novemember 13,1991 / 1700

Plot Plan



Photometer Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
						steel protective casing with lock
						vented cap
		0		SS		
0.0	GW–33–A		75	4	FILL—brown silt and fine sand (dry)	
	GW–33–A	1		12		
	GW–33–A			17		
	GW–33–A	2		24		
0.0	GW–33–A		50	18	FILL—brown silt and fine sand, concrete fragments (sl. moist)	concrete grout (0–3)
	GW–33–A	3		>100		
	GW–33–A					
	GW–33–A	4				3/8" bentonite
0.0	GW–33–A		75	5	FILL—dark brown silt and fine sand, with rock, concrete, and asphalt (sl. moist)	pellets (3–5)
	GW–33–A	5		45		
	GW–33–A			70		
	GW–33–A	6		>100		2" Id PVC riser
0.0	GW–33–A		50	9	FILL—tan silt, fine sand, clinkers, slag (moist)	(3.3 ft stickup – 7)
	GW–33–A	7		16		
	GW–33–A			19		2" Id PVC screen
	GW–33–A	8		6		0.01" slot (7–22)
0.0	GW–33–A		50	6		
	GW–33–A	9		9		
	GW–33–A			11		
	GW–33–A	10		8		
0.0	GW–33–B		25	9		
	GW–33–B	11		8		
	GW–33–B			5		
	GW–33–B	12		5		#0 sand pack (3–22)
0.0	GW–33–B		25	4	FILL—dark brown silt, clay, rocks, cinders (moist)	
	GW–33–B	13		6		
	GW–33–B			8		
	GW–33–B	14		13	(wet at 14 feet)	
			0	8		
		15		9		
				9		
		16		7		
0.0	GW–33–B		50	2	FILL—black silt and fine – coarse sand oily sheen (wet)	
	GW–33–B	17		9		
	GW–33–B			9		

WELL SCHEMATIC



STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–20 ft. fill; 20–22 ft. silt, clay, and gravel

ENGINEERING–SCIENCE
DRILLING RECORD

BORING GW–33

Contractor: Empire Soil Investigations
Driller: Rick Laboer
Inspector: C.R. Torell
Rig Type: Acker AD-2 4.25" HSA

PROJECT NAME: Stinson Street Bridge
PROJECT NUMBER: SY126.02

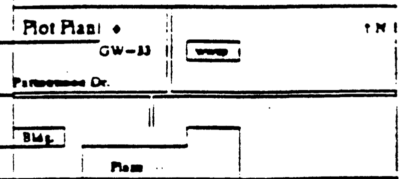
Sheet 2 of 2
Location: On slope near former wastewater treatment plant

GROUNDWATER OBSERVATIONS

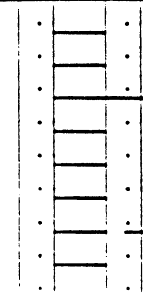
Water Level	16.64 ft	16.38 ft		
Date	11/19/91	12/17/91		
Time	1400	1105		
Meas. From	Top of PVC	Top of PVC		

Weather: Overcast, 40s
Date/Time Start: Novemember 13,1991 / 1300
Date/Time Finish: Novemember 13,1991 / 1700

Plot Plan



Photoion Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS
	GW-33-8	18		4			
	GW-33-8		25	3	FILL—black silt and fine – coarse sand. (wet)		2" ld PVC screen
	GW-33-8	19		7	metal, brick, rock		0.01" slot (7–22)
	GW-33-8			14			
	GW-33-8	20		11			
0.0	GW-33-8		50	10	SILT & CLAY—red, some gravel (wet)		
	GW-33-8	21		3			#0 sand pack (5–22)
	GW-33-8			3			
	GW-33-8	22		3			
					Boring terminated at 22 feet.		
		23			Native soil at 20 feet.		
		24					
		25					



STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–20 ft. fill; 20–22 ft. silt, clay, and gravel

ENGINEERING–SCIENCE DRILLING RECORD

BORING GW–62

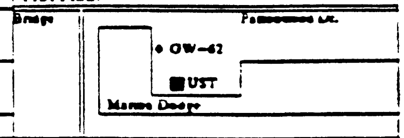
Contractor: Empire Soil Investigations
Driller: Mark Cornmirena
Inspector: C.R. Torell
Rig Type: Acker AD–2 4.25" HSA

PROJECT NAME: Stinson Street Bridge
PROJECT NUMBER: SY126.02

Sheet 1 of 1
Location: Marine Dodge Lot near underground storage tank

Weather: Overcast, 50s
Date/Time Start: Novemember 23,1991 / 1020
Date/Time Finish: Novemember 23,1991 / 1300

Plot Plan:

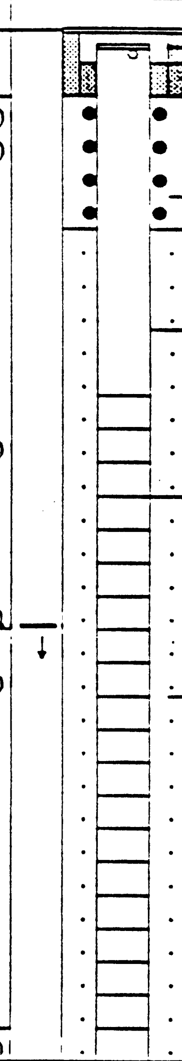


GROUNDWATER OBSERVATIONS

Water Level	6.6 ft	5 [illegible]		
Date	12/4/91	12/17/91		
Time	0930	1310		
Meas. From	Top of PVC	Top of PVC		

Photometer Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL
		0		A	
				A	
		1		SS	ASPHALT
0.0	GW–62–A		75	7	FILL–black silt, cinders, sand (dry)
	GW–62–A	2		8	FILL–brown silt and fine sand (dry)
	GW–62–A			7	
	GW–62–A	3		9	
198	GW–62–A		75	4	hydrocarbon odor
	GW–62–A	4		4	occasional cinders
	GW–62–A			5	
	GW–62–A	5		5	
6.0	GW–62–A		50	1	FILL–brown silt and fine sand,
	GW–62–A	6		1	trace clay, rock, brick
	GW–62–A			1	slight hydrocarbon odor (moist–wet)
	GW–62–A	7		1	
19.0	GW–62–A		5	1	
	GW–62–A	8		1	
	GW–62–A			1	
	GW–62–A	9		1	(wet at 9 feet)
0.0	GW–62–A		50	1	SILT, FINE–COARSE SAND, & FINE GRAVEL– brown
	GW–62–A	10		2	(wet)
	GW–62–A			4	
	GW–62–A	11		3	
0.0	GW–62–B		100	4	
	GW–62–B	12		3	
	GW–62–B			3	
	GW–62–B	13		4	
0.0	GW–62–B		100	1	
	GW–62–B	14		5	
	GW–62–B			6	
	GW–62–B	15		9	
0.0	GW–62–B		100	1	SILT & CLAY–tan–brown, trace fine sand (moist)
					Boring terminated at 15.5 feet.
					Native soil at 9 feet.

WELL SCHEMATIC



COMMENTS

- steel curb box
- locking compression cap
- concrete grout (0–1)
- 3/8" bentonite pellets (1–3)
- 2" Id PVC riser (0.2–5.5)
- 2" Id PVC screen 0.01" slot (5.5–15.5)
- Q sand pack (4–15)

STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–9 ft. fill; 9–15 ft. silt, sand, and gravel; 15–15.5 ft. silt and clay

ENGINEERING-SCIENCE
DRILLING RECORD

BORING GW-63

Sheet 1 of 1

Contractor: Empire Soil Investigations
Driller: Mark Commisso
Inspector: C.R. Torell
Rig Type: Acker AD-2 4.25" HSA

PROJECT NAME: Stutson Street Bridge
PROJECT NUMBER: SY126.02

Location: Marine Dodge lot near underground storage tank.

Weather: Overcast, 50s
Date/Time Start: Novemember 23,1991 / 1400
Date/Time Finish: Novemember 23,1991 / 1600

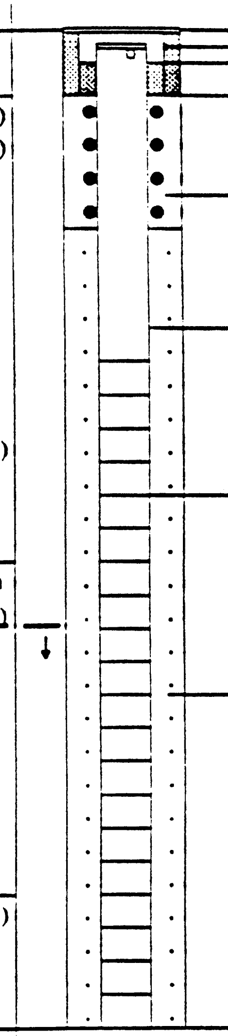
Plot Plan ↑N — Bridge, UST GW-63, Marine Dodge, Pattonwood Dr.

GROUNDWATER OBSERVATIONS

Water Level	9.7 ft	8.[illegible] ft		
Date	12/4/91	12/12/91		
Time	0953	13:20		
Meas. From	Top of PVC	Top of PVC		

Photometer Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL
		0		A	
				A	
		1		SS	ASPHALT
0.0	GW-63-A		75	6	FILL—black silt, cinders, sand, rock (dry)
	GW-63-A	2		7	FILL—brown silt and fine sand (dry)
	GW-63-A			6	
	GW-63-A	3		6	
0.0	GW-63-A		100	6	
	GW-63-A	4		4	
	GW-63-A			4	
	GW-63-A	5		3	
2.0	GW-63-A		75	6	FILL—brown silt and fine sand,
	GW-63-A	6		2	trace clay, stained
	GW-63-A			3	slight hydrocarbon odor (moist)
	GW-63-A	7		4	
0.0	GW-63-A		87.5	7	
	GW-63-A	8		8	
	GW-63-A			27	SILT, FINE-COARSE SAND, & FINE GRAVEL – brown
	GW-63-A	9		8	(wet at 9 feet)
0.0	GW-63-A		75	1	
	GW-63-A	10		1	
	GW-63-A			1	
	GW-63-A	11		1	
0.0	GW-63-B		75	1	
	GW-63-B	12		2	
	GW-63-B			1	
	GW-63-B	13		1	
0.0	GW-63-B		50	4	SILT & CLAY—brown, trace fine sand (wet)
	GW-63-B	14		11	
	GW-63-B			9	
	GW-63-B	15		11	
					Boring terminated at 15 feet.
					Native soil at 8 feet.

WELL SCHEMATIC



COMMENTS

- steel curb box
- locking cover set
- concrete grout (0-1)
- 3/8" bentonite pellets (1-3)
- 2" ID PVC riser (0.2-5)
- 2" ID PVC screen 0.01" slot (5-15)
- 4Q sand pack (3-15)

STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0-8 ft. fill; 8-13 ft. silt, sand, and gravel; 13-15 ft. silt and clay

ENGINEERING–SCIENCE
DRILLING RECORD

BORING GW–69

Contractor: Empire Soil Investigations
Driller: Rick Lauber
Inspector: C.R. Terell
Rig Type: Acker AD-2 4.25" HSA

PROJECT NAME: Stinson Street Bridge
PROJECT NUMBER: SY126.02

Sheet 1 of 1

Location: [illegible] former [illegible].

GROUNDWATER OBSERVATIONS

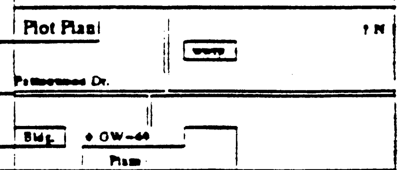
Water Level	5.20 ft	[illegible]
Date	11/19/91	[illegible]
Time	1210	[illegible]
Meas. From	Top of PVC	Top of PVC

Weather: Overcast, 40s

Date/Time Start: Novemember 14, 1991 / 0930

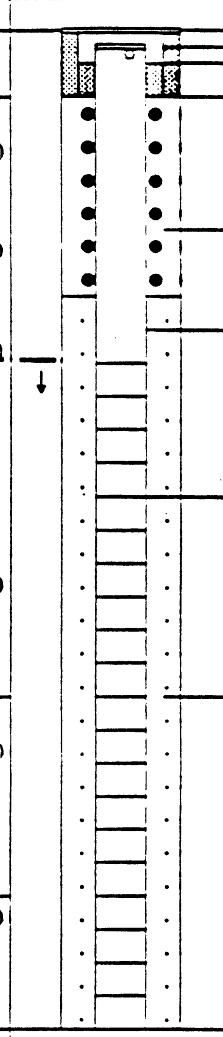
Date/Time Finish: Novemember 14, 1991 / 1130

Plot Plan



Photometer Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
		0		A		
				A		steel curb box [illegible] / locking [illegible] cap
		1		SS	ASPHALT	concrete grout (0–1)
0.0	OW-60-A		100	28	FILL–dark brown–gray silt and fine sand,	
	OW-60-A	2		18	trace clay (moist)	
	OW-60-A			14		3/8" bentonite
	OW-60-A	3		7		pellets (1–4)
0.0	OW-60-A		100	2	(moist–wet)	
	OW-60-A	4		3		
	OW-60-A			2		2" id PVC riser (0.4–5)
	OW-60-A	5		3	(wet at 5 feet)	
0.0	OW-60-A		75	1		
	OW-60-A	6		1		
	OW-60-A			1		2" id PVC screen
	OW-60-A	7		1		0.01" slot (5–15)
3.0	OW-60-A		75	6		
	OW-60-A	8		33		
	OW-60-A			3	FILL–black silt, clay, rock, glass (wet)	
	OW-60-A	9		1	oily sheen	
12	OW-60-A		25	1		
	OW-60-A	10		2		4Q sand pack (4–15)
	OW-60-A			2	PEAT–brown silt and fine sand,	
	OW-60-A	11		3	high organics (moist)	
0.0			50	1		
		12		2		
				2		
		13		4		
0.0			75	2	SILT & CLAY–gray, trace gray–red very fine sand, (moist)	
		14		5	soft	
				5		
		15		6		

WELL SCHEMATIC



Boring terminated at 15 feet.
Native soil at 10 feet.

STANDARD PENETRATION TEST
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

SUMMARY: 0–10 ft. fill; 10–13 ft. peat; 13–15 ft. silt and clay

Contractor: Empire Soil Investigations	**ENGINEERING–SCIENCE DRILLING RECORD**	**BORING GW–77**
Driller: Rick Lanner	PROJECT NAME: Stutson Street Bridge	Sheet 1 of 1
Inspector: C.R. Terrell	PROJECT NUMBER: SY126.02	Location: [illegible]
Rig Type: Acker AD–2 [illegible] HSA		

GROUNDWATER OBSERVATIONS

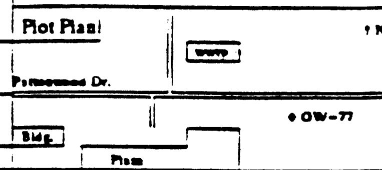
Water Level	17.58 ft	[illegible]		
Date	11/19/91	[illegible]		
Time	1330	[illegible]		
Meas. From	Top of PVC	Top of PVC		

Weather: Overcast, 40s

Date/Time Start: Novemember 14,1991 / 1145

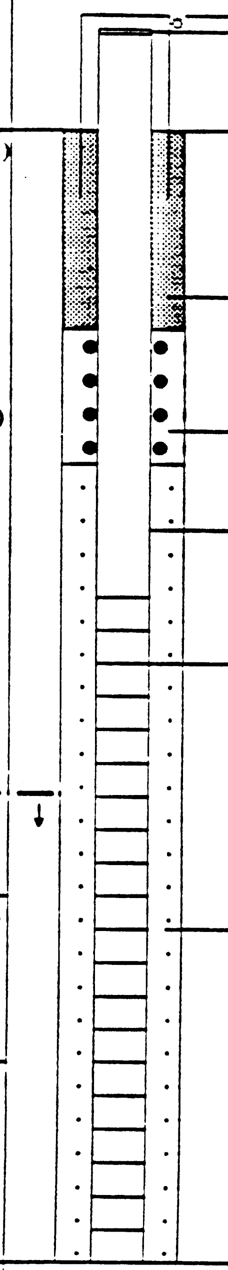
Date/Time Finish: Novemember 14,1991 / 1400

Plot Plan



Photometer Reading	Sample I.D.	Sample Depth	Percent Recovery	SPT	FIELD IDENTIFICATION OF MATERIAL
		0		SS	
0.0	GW–77–A		75	5	**SILT & SAND** –light brown, fine to coarse (sl. moist)
	GW–77–A	1		5	
	GW–77–A			7	
	GW–77–A	2		9	
0.0	GW–77–A		75	6	
	GW–77–A	3		8	
	GW–77–A			9	
	GW–77–A	4		14	
0.0	GW–77–A		100	6	trace organics (dry)
	GW–77–A	5		7	
	GW–77–A			10	
	GW–77–A	6		10	
0.0	GW–77–A		100	7	
	GW–77–A	7		9	
	GW–77–A			10	
	GW–77–A	8		8	
0.0	GW–77–A		100	2	
	GW–77–A	9		4	
	GW–77–A			3	
	GW–77–A	10		3	(wet at 10 feet)
0.0			100	1	
		11		1	
				3	
		12		6	**CLAY**–gray, trace–little silt, soft (moist)
0.0			75	5	trace very fine sand (wet)
		13		6	
				6	
		14		10	
0.0			100	3	**SILT & CLAY**–trace fine sand, gray (wet)
		15		8	
				3	
		16		4	
				A	
		17		A	
					Boring terminated at 17 feet. Native soil at 0 feet.

WELL SCHEMATIC



COMMENTS

steel protective [illegible] with lock [illegible]

concrete grout (0–3)

3/8" bentonite pellets (3–5)

2" Id PVC riser (3 ft stickup – 7)

2" Id PVC screen 0.01" slot (7–17)

#Q sand pack (5–17)

STANDARD PENETRATION TEST

SS = SPLIT SPOON

A = AUGER CUTTINGS

C = CORED

SUMMARY: 0–11.5 ft. silt and sand; 11.5–14 ft. clay; 14–17 ft. silt and clay

APPENDIX B

PHASE I ENVIRONMENTAL SITE ASSESSMENT

11/16/05
PRIVILEGED AND CONFIDENTIAL
PREPARED AT THE REQUEST OF COUNSEL

PHASE I ENVIRONMENTAL SITE ASSESSMENT

WATERFRONT PROPERTY DEVELOPMENT
ROCHESTER, NEW YORK

Prepared For:
Lighthouse Pointe Property Associates, LLC

NOVEMBER 2005
REF. NO. 42271 (1)
This report is printed on recycled paper.

TABLE OF CONTENTS

LIST OF FIGURES
(Following Text)

LIST OF APPENDICES

EXECUTIVE SUMMARY

Conestoga-Rovers & Associates Inc. (CRA) was retained by Lighthouse Pointe Property Associates, LLC (LPA) to perform a Phase I Environmental Site Assessment (ESA) for a group of adjacent properties along the waterfront (property and buildings) located on the east side of the Genesee River at the Port of Rochester in Rochester, New York (Site or Property). The purpose of the Phase I ESA was to identify Recognized Environmental Conditions (RECs), as defined by ASTM Standard E1527-00, at the Site. The Phase I ESA Site inspection was conducted by CRA on July 28 and July 29, 2005.

The Site is approximately 50 acres in size and is comprised of approximately 20 parcels of land. We have not reviewed abstracts of title, however, it is our understanding that these parcels of land are currently owned by the Town of Irondequoit, The City of Rochester, and entities controlled by Al and Joyce Gilbert, and Skip Shumway. LPA intends to purchase the property for a waterfront re-development project. In general, the Site is currently being used as a marina and for outdoor storage.

Based on the Phase I ESA, the following potential Recognized Environmental Conditions, as defined in ASTM Standard E1527-00, were identified at the Site.

Potential Historic Recognized Environmental Conditions

The following potential historic RECs were identified at the Site:

i) **Historic UST**: One UST containing gasoline was operated on the Voyager Boat Sales property from the mid 1960s to 1975, when it was removed. Existing documentation does not conclusively confirm that clean closure of the USTs was achieved or that NYSDEC has approved the closure as complete.

Potential Current Recognized Environmental Conditions

The following potential current RECs were identified at the Site:

i) **Historic Landfilling:** From as early as the 1930s to at least 1962, and possibly as late as 1978, a large portion of the Site was landfilled. Several investigations have been conducted at the Site and revealed the presence of volatile organic compounds, semivolatile organic compounds, pesticides, PCBs, metals, and cyanide in the subsurface soils and volatile organic compounds, semivolatile

organic compounds, and metals in the groundwater at the Site. The Site was listed on the New York State Registry of Inactive Hazardous Waste Disposal Sites, but was delisted due to lack of evidence of hazardous waste disposal (as that term was defined at the time), not because hazardous substances were not present. The new definition of hazardous waste, as amended by the 2003 laws enacting the Brownfield Cleanup Program, now includes CERCLA hazardous substances. The Site is currently listed on the Hazardous Substance Waste Disposal Site Inventory. A portion of the Site is listed in the NFRAP Sites Report for the Rochester landfill, located on the north side of Pattonwood Drive. The full nature and extent of soil and groundwater impacts to the Site associated with the historic landfilling activities have not been defined.

ii) **Historic Site Operations**: The property located at 951 Thomas Avenue has reportedly been a lumber store since 1880. More recently the property has been used as a radio repair business during the 1980s and an outboard motor repair business during the 1990s. At the time of the Site inspection, CRA did not have access to inspect the three buildings present on the property. In addition, the Town of Irondequoit operated a WWTP at the Site from 1920 to the early 1980s. Seven companies, including a residential pool supply business, a sail maker, and a pool table manufacturer occupied the central portion of the Site from the 1960s to the mid-1980s. No specific details were available during the Phase I ESA regarding the types and quantities of chemicals used, stored, and handled at the Site, the types and quantities of wastes generated by the previous occupants of the Site from 1880s to the mid 1960s, or the ultimate disposition location of their wastes. Potential impact from historic Site operations could not be determined.

iii) **Adjacent Land Use**: Several underground fuel tanks were historically located in the southeast corner of the intersection of Thomas Avenue and Pattonwood Drive. Three USTs are currently located on the Shumway Marine property west of the Site. In addition, a portion of the Rochester landfill was located southeast of the Site, south of Pattonwood Drive. The landfill is listed in the NFRAP Sites Report. The presence of former solid waste landfill and former USTs located southeast of the Site are identified as potential sources of environmental impairment, if releases have occurred on these properties and migrated onto the Site. Potential impacts to the Site have not been fully defined.

Recognized Environmental Conditions

CRA has performed a Phase I Environmental Site Assessment of the waterfront site (property and buildings) located on the east side of the Genesee River at the Port of

Rochester in Rochester, New York, in conformance with the scope and limitations of ASTM Practice E1527-00. Any exceptions to or deletions from this practice are described in Section 1.0 of this report. This assessment has identified the following Recognized Environmental Conditions at this Site:

- Historic UST
- Historic Landfilling
- Historic Site Operations
- Adjacent Land Use

1.0 INTRODUCTION

Conestoga-Rovers & Associates Inc. (CRA) was retained by Lighthouse Pointe Property Associates, LLC (LPA) to perform a Phase I Environmental Site Assessment (ESA) for a group of properties along the waterfront (property and buildings) located on the east side of the Genesee River at the Port of Rochester in Rochester, New York (Site or Property). The purpose of the Phase I ESA was to identify Recognized Environmental Conditions, as defined in ASTM Standard E1527-97, associated with prior or current activities conducted at the Site. A Site location map is provided on Figure 1. The approximate Site boundary is provided on Figure 2. It is CRA's understanding that LPA is considering the purchase of the Site for re-development purposes.

The Site is approximately 50 acres in size and is comprised of approximately 20 parcels of land. We have not reviewed abstracts of title, however, it is our understanding that these parcels of land are currently owned by the Town of Irondequoit, The City of Rochester, and entities controlled by Al and Joyce Gilbert, and Skip Shumway. LPA intends to purchase the property for a waterfront re-development project. In general, the Site is currently being used as a marina for the storage and sales of boats.

The Phase I ESA Site inspection was conducted by CRA on July 28 and July 29, 2005, and the observations and findings summarized herein are based on the Site conditions observed and information obtained at that time.

The Phase I ESA was conducted in general accordance with ASTM Standard E1527-00 for conducting environmental assessments. The assessment included an electronic environmental database search, historical records review, an inspection of accessible areas of the Site, a review of relevant Site records made available to CRA, and interviews with individuals associated with the Site. During the Site inspection, CRA did not have access to inspect the buildings located at 951 Thomas Avenue or the approximately 84 personal storage sheds located along the east bank of the Genesee River, south of the Stutson Street bridge. In addition, CRA was not able to interview City of Rochester personnel. This Phase I ESA was prepared by Mr. Greig Chapman and reviewed by Mr. Brian Boevers of CRA. Copies of curricula vitae outlining their qualifications are presented in Appendix A.

The following tasks were conducted during the assessment:

- review of federal and state environmental databases and historical records;
- review of aerial photographs of the Site;

- review of past and current property use and adjacent property occupancy;
- inspection of the facilities, equipment, utility services, operations, and associated Site records;
- observations of conditions that represented potential environmental concerns;
- review of chemical use and storage and spill/release incidents;
- review of the results of prior inspections conducted at the Site;
- review of waste handling, accumulation, storage, and disposal practices;
- review of air emissions and wastewater discharges;
- review of equipment that potentially contain polychlorinated biphenyls (PCBs);
- observation of potential asbestos-containing materials (ACM);
- review of aboveground and underground storage tank records; and
- review of previous environmental reports prepared for the Site.

CRA relied on information received from Site personnel as accurate unless contradicted by written documentation or field observations.

The following report summarizes the information gathered by CRA during the Phase I ESA and identifies Recognized Environmental Conditions, as defined in ASTM Standard E1527-00 associated with the Site, as of July 29, 2005.

The Phase I ESA has been prepared solely for the use of LPA and may not be relied upon by any other party without written consent from CRA.

2.0 ENVIRONMENTAL DATABASES SEARCH AND HISTORICAL RECORDS SEARCH

2.1 ENVIRONMENTAL DATABASES SEARCH

CRA contracted Environmental Data Resources, Inc. (EDR) to conduct a search of federal and state environmental databases. Based on the location of the Site, the database searches were completed to assist in the identification of conditions at the Site and within a radius distance specified in ASTM Standard E1527-00. A copy of the database search is included as Appendix B. The following databases were searched with the findings as follows:

2.1.1 FEDERAL DATABASES

1. National Priority List (NPL) - The NPL is a United States Environmental Protection Agency (USEPA) listing of the nation's worst uncontrolled or abandoned hazardous waste sites. NPL Sites are targeted for possible long-term remedial action under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980. In addition, the NPL Report includes information concerning cleanup agreements between the USEPA and potentially responsible parties, any liens filed against contaminated properties, as well as the past and current USEPA budget expenditures tracked within the Superfund Consolidated Accomplishments Plan (SCAP).

   FINDING: According to the databases searched, the Site was not on the NPL. No sites within a 1-mile radius of the Site were on the NPL.

2. Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) – The CERCLIS List contains data on potentially hazardous waste sites that may have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the NPL and sites which are in the screening and assessment phase for possible inclusion on the NPL.

   FINDING: According to the databases searched, the Site was not on the CERCLIS List. No sites within a 1/2-mile radius of the Site were on the CERCLIS List.

3. No Further Remedial Action Planned Sites Report (NFRAP) – As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 CERCLIS sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors, and affected citizens to promote economic redevelopment of unproductive urban sites.

   FINDING: According to the databases searched, the Site was listed in the NFRAP Sites Report as the Rochester Landfill located North of Pattonwood Drive. One adjacent site was listed in the NFRAP Sites Report, that being the Rochester City Landfill located south of Pattonwood Drive. The Stutson Street Plaza has been constructed on a portion of the landfill located south of Pattonwood Drive. No other sites within a half-mile radius of the Site were listed in the NFRAP Sites Report.

4. Resource Conservation and Recovery Information System (RCRIS) - Non-Corrective Action Treatment, Storage and Disposal (TSD) Facilities Report - The RCRIS-TSD Report contains information regarding those facilities that either treat, store or dispose of USEPA-regulated hazardous waste. The following information also is included in the RCRIS-TS Report: information regarding the status of facilities tracked by the Resource Conservation and Recovery Act (RCRA) Administrative Action Tracking System (RAATS); inspections and evaluations conducted by federal and state agencies; all reported facility violations, the environmental statutes violated and any proposed and actual penalties; and a complete listing of USEPA-regulated hazardous wastes which are generated or stored on site.

   FINDING: According to the databases searched, the Site was not listed in the RCRIS-TSD Report. No sites within a 1-mile radius of the Site were listed in the RCRIS-TSD Report.

5. Resource Conservation and Recovery Act (RCRA) - Corrective Action (CORRACTS) Report - The CORRACTS Report contains information pertaining to hazardous waste treatment, storage and disposal facilities (RCRA TSDs) which have conducted or are currently conducting corrective actions as regulated by the Resource Conservation and Recovery Act. The following information also is

included in the CORRACTS Report: information regarding the status of facilities tracked by the RAATS; inspections and evaluations conducted by federal and state agencies; all reported facility violations, the environmental statutes violated and any proposed and actual penalties; information pertaining to corrective actions undertaken by the facility or the USEPA; and a complete listing of USEPA-regulated hazardous wastes which are generated or stored on site.

FINDING: According to the databases searched, the Site was not listed in the CORRACTS Report. No sites within a 1-mile radius of the Site were listed in the CORRACTS Report.

6. Resource Conservation and Recovery Information System - Large Quantity Generators (RCRIS-LQG) Report - The RCRIS-LQG Report contains information regarding facilities that either generate more than 1,000 kilograms (kg) of USEPA-regulated hazardous waste per month or meet other applicable requirements of RCRA. The following information also is included in the RCRIS-LQG Report: information regarding the status of facilities tracked by the RAATS; inspections and evaluations conducted by federal and state agencies; all reported facility violations, the environmental statutes violated and any proposed and actual penalties; information pertaining to corrective actions undertaken by the facility or the USEPA; and a complete listing of USEPA-regulated hazardous wastes which are generated or stored on site.

   FINDING: According to the databases searched, the Site was not listed in the RCRIS-LQG Report. The following site within a ¼-mile radius of the Site was listed in the RCRIS-LQG Report:

Facility	*Address*
CSX Transportation Inc.	480 River Street North of Latta Road

7. Resource Conservation and Recovery Information System - Small Quantity Generators (RCRIS-SQG) Report - The RCRIS-SQG Report contains information regarding facilities that either generate between 100 kg and 1,000 kg of USEPA-regulated hazardous waste per month or meet other applicable requirements of RCRA. The following information also is included in the RCRIS-SQG Report: information regarding the status of facilities tracked by the RAATS; inspections and evaluations conducted by Federal and State Agencies; all reported facility violations, the environmental statutes violated and any proposed and actual penalties; information pertaining to corrective actions undertaken by the facility or the USEPA; and a complete listing of USEPA-regulated hazardous wastes which are generated or stored on site.

FINDING: According to the databases searched, the Site was not listed in the RCRIS-SQG Report. The following adjacent sites were listed in the RCRIS-SQG Report:

Facility	*Address*
Shumway Marine	70 Pattonwood Drive
Marina Dodge Inc.	65 Pattonwood Drive
Gregerica Development Corp.	Pattonwood Drive

It is noted that although Shumway Marine is listed as a RCRIS-SQG, according to Skip Shumway and based on visual observations made by CRA the portion of the Shumway Marine property that is located on the Site, does not currently generate regulated hazardous waste.

The following additional sites within a 1/4-mile radius of the Site were listed in the RCRIS-SQG Report:

Facility	*Address*
Pelican Marina Inc.	560 River Street
Tapelon Inc.	465-475 River Street
US Coast Guard STA Rochester	5500 St. Paul Boulevard
Brothers Collision Inc.	141 Latta Road
Erdle Manufacturing	46 Latta Road
Latta Collision & Boat Repair	45 Latta Road
Cumberland Farms #3209	4370 Lake Avenue
Brothers Collision Inc.	4401 Lake Avenue
Rochester Hollow Grinder Inc.	34 Stutson Street
Rochester City of	56 Stutson Street
Sugar Creek Stores	3910 Lake Avenue

The following sites were listed in the RCRIS-SQG Report, but could not be located with respect to the Site due to incomplete address information:

Facility	*Address*
Rochester City of Stutson Street Bridge	Stutson St Bridge over CSX
NYSDOT BIN 3317120	Stutson St CR 255 Bridge over CSX

8. Emergency Response Notification System - ERNS records and stores information on reported releases of oil and hazardous substances.

FINDING: According to the databases searched, the Site was not listed in the ERNS.

9. Toxic Chemical Release Inventory System (TRIS) - The TRIS Database identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

FINDING: According to the databases searched, the Site was not listed in the TRIS Database. No sites within a 1/2-mile radius of the Site were listed in the TRIS Database.

2.1.2 STATE DATABASES

1. Underground Storage Tank (UST Database) – USTs are regulated under Subtitle 1 of RCRA. The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database.

FINDING: According to the databases searched, the Site was not listed in the UST Database. The following adjacent sites were listed in the UST Database:

Facility	*Address*	*Number of Tanks*	*Status*
Town of Irondequoit	Public Works Department	6	Removed
Weller Motors Inc.	Pattonwood Drive and Thomas Avenue	2	Closed
Shumway Marine	70 Pattonwood Drive	3	In Use
		4	Removed
Marina Dodge Inc.	65 Pattonwood Drive	4	Removed

According to Site personnel and based on observations made by CRA, the USTs associated with the Shumway Marine facility are located west of the Property boundary. According to Town of Irondequoit personnel, the USTs associated with the Public Works Department were located at 1280 Titus Avenue and not on the Site or on the adjacent property.

The following additional sites within a 1/4-mile radius of the Site were listed in the UST Database:

Facility	*Address*	*Number of Tanks*	*Status*
Harbour Front Marina Inc.	560 River Street	3	In Use
		3	Removed
Genesee Marina Inc.	DBA Riverfront Yacht Basin	3	In Use
		3	Removed
US Coast Guard Station	5500 St. Paul Blvd	2	Closed
Harbour Front Marina Inc.	560 River Street	3	In Use
Noco Express 63	4370 Lake Ave and Stutson	1	Closed
Rochester City School Charlotte	4115 Lake Avenue	1	Closed
City of Rochester	Quint 1, Fire Station	2	In Use
Frank's Auto Care	3885 Lake Avenue	3	In Use
SD Mini Mart	3910 Lake Avenue	3	Removed
		2	In Use

2. Chemical Bulk Storage (CBS) Database – Facilities that store regulated hazardous substances in underground tanks of any size.

   FINDING: According to the databases searched, the Site was not listed in the CBS Database. No sites within a 1/4-mile radius of the Site were listed in the CBS Database.

3. Major Oil Storage Facilities Database (MOSF) Database – Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

   FINDING: According to the databases searched, the Site was not listed in the MOSF Database. No sites within a 1/4-mile radius of the Site were listed in the MOSF Database.

4. Leaking Storage Tank (LST) Incident Report - The LST Incident Report contains an inventory of reported leaking storage tank incidents reported from April 1, 1986 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures, or tank overfills.

   FINDING: According to the databases searched, the Site was not listed in the LST Incident Report. The following adjacent sites were listed in the LST Incident Report:

Facility	*Address*	*Status*
Weller Motors Genesee River	Stutson Thomas Avenue	Closed
Shumway Marina	70 Pattonwood Drive	Closed

According to Skip Shumway, the LST incident report associated with the Shumway Marina facility is for the portion of the property west of the Site.

The following additional sites within a 1/2-mile radius of the Site were listed in the LST Incident Report:

Facility	*Address*	*Status*
Old Railroad Depot	490 River Street	Open
Ontario Beach Bathhouse	212 Beach Avenue	Closed
United States Coast Guard	5500 St. Paul Street	Open
Salconio Home	75 Latta Road	Closed
NSI Station	Lake Avenue/Stutson Street	Closed
Penn Central	RR Switch Stutson Street	Closed
West Irondequoit School	720 Washington Avenue	Closed
Riverview Yacht Basin	18 Petten Street Ext	Closed
Franks Auto Care	3885 Lake Avenue	Closed
Sugar Creek Stores	3910 Lake Avenue	Open
Riscignolo (Rose) Residence	3928 Lake Avenue	Closed

The following site was listed in the LST Incident Report, but could not be located with respect to the Site due to incomplete address:

Facility	*Address*
Pelican Bay Marina	River Street

5. Solid Waste Facility List - The Solid Waste Facility List contains an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

FINDING: According to the databases searched, the Site was not on the Solid Waste Facility List. No sites within a 1/2-mile radius of the Site were on the Solid Waste Facility List.

The following sites were on the Solid Waste Facility List, but could not be located with respect to the Site due to incomplete address information:

Facility	*Address*
Irondequoit (T) Sanitary Landfill	None Provided

6. State Hazardous Waste Sites List – State hazardous waste site records are the states' equivalent to CERCLIS. Priority sites planned for cleanup using state funds are identified along with sites where cleanup will be paid for by the potentially responsible parties.

FINDING: The Site was listed on the New York State Registry of Inactive Hazardous Waste Disposal Sites, but was delisted because there was not enough evidence of disposal of hazardous waste. However, hazardous substances were detected. In 2003, the definition of hazardous waste was changed to encompass hazardous substances. Further, the December 1, 1998 *Hazardous Substance Waste Disposal Site Study* prepared by DEC includes a list of "Active Data Base of Hazardous Substance Waste Disposal Sites in New York," which listed sites that did not qualify for the Registry, chiefly due to the absence of hazardous waste (as defined at the time). This list included the "Old Rochester Landfill," given HS Site Number HS8041. The listing states as follows:

Site Description

The site is located on the east bank of the Genesee River in a former freshwater wet-land. There is presently an active marina on-site and a residential area adjacent to the site. Excavation work in the area uncovered two drums. They contained low levels of PCB's and high levels of lead. Settling has occurred near residential homes (Timrod Drive).

Hazardous Substances Disposed

PCB's, Lead, fly ash

Describe Potential Hazardous Threat

This site is in a wetland and may result in contamination of local surface waters. Buried metallic objects near the residences on Timrod Drive.

No other sites within a 1-mile radius of the Site were on the State Hazardous Waste Sites List.

One site was on the State Hazardous Waste Sites List but could not be located with respect to the Site due to incomplete address information, this being Green Leaf Meadow Apartments located at 500 Green Leaf Road.

7. State NPL Sites List – State NPL site records are the states' equivalent to the Federal NPL. The State of New York does not maintain a State NPL Sites List.

2.2 HISTORICAL RECORDS REVIEW

2.2.1 SANBORN FIRE INSURANCE MAPS

Sanborn Fire Insurance Maps assist in the identification of historic land use and commonly indicate the existence and location of aboveground and underground storage tanks, structures, improvements and facility operations.

EDR provided CRA with copies of Sanborn Fire Insurance Maps covering the surrounding area for the years 1892, 1212, 1924, 1950, 1966, and 1967. It is noted that the Site is not shown on any of the maps. Observations of the Sanborn Fire Insurance Maps are summarized as follows:

- 1892: Review of the 1892 maps identifies the presence of the Genesee River, located adjacent to the west side of the Site. Several railway tracks and spurlines operated by New York Central Railroad (N.Y.C.R.R) are present on the west side of the Genesee River. A planing mill, operated by L. Marvin, is located on the west side of the Genesee River, opposite the current location of Shumway Marine. A boiler and stack are associated with the planing mill. A steam boat wharf is located on the west side of the Genesee River, opposite the current location of Voyager Boat Sales. Properties located further west of the Site are being used for residential, commercial, light industrial, and institutional purposes. It is noted that the adjacent properties located north, east, and south of the Site are not shown on the 1892 maps;
- 1912: The New York State Armory Naval Reserves are located north of the Site, just north of the current Rochester Yacht Club. The U.S. Life Saving Service (currently referred to as the U.S. Coast Guard) is located further north. An underground fuel tank was identified on the U.S. Life Saving Service property. Given the inferred northerly direction of groundwater flow and the distance from the Site, the underground fuel tank is not interpreted to represent an area of environmental impairment to the Site. Other properties north and northeast of the Site included small commercial and residential properties. Land located on the west side of the Genesee River is occupied by several railway lines. The Genesee Furnace Company is located west of the Genesee River, opposite the modern day location of the Rochester Yacht Club. This facility consists of seven buildings, ten coal fired furnaces, and seven stoves. The Charlotte Veneer Works is located west of the

Genesee River, opposite the modern day location of the Shumway Marine. Five buildings are associated with the Charlotte Veneer Works facility and include a veneer cutting/bracket shop, a machine shop, and three boat houses. A boiler and stack are present in the southern portion of the veneer cutting/bracket shop building. Several additional un-named buildings are present in the area of the former planing mill identified on the 1892 map. Several boat docks are present along the west bank of the Genesee River, west of the Site. Properties west of the southern tip of the property and the Genesee River, include a lumber yard operated by A. Matthews which consisted of four buildings that housed a wood-fired boiler and other equipment. No other significant changes to adjacent land use were observed on the 1912 fire insurance map. Properties located further west of the Site are being used for light industrial, commercial, and residential purposes. It is noted that the adjacent properties located north, east, and south of the Site are not shown on the 1912 maps;

- 1924: The McKinney Steel Company now occupies the former Genesee Furnace Company facility. A repair shop, two water tanks, and 2 coal-fired furnaces have been constructed on this property since 1912. A Sewage Disposal Plant is located west of the modern day location of Shumway Marine, on the west side of the Genesee River and the railway spur lines. The Charlotte Veneer Works facility is not present on the 1924 map. Several buildings occupied by W. Miller (boat building) N.J. Karle (brush factory) are located just east of the sewage disposal plant. The lumberyard (operated by A. Matthews) identified on the 1912 map is not present on the 1924 map. A service station is located on Lake Avenue, approximately 0.3 miles west of the Site. A 1,000-gallon gasoline underground storage tank is associated with the service station property. Given the inferred northerly direction of groundwater flow and the distance from the Site, the underground gasoline tank is not interpreted to represent an area of environmental impairment to the Site. The Rochester Boat Works/Rochester Yacht Club are located north of the Site. Ten buildings, including two drying kilns are present on this property. No other significant changes to adjacent land use were observed on the 1924 fire insurance map. Properties located further west, north, east, and south of the Site are being used for light industrial, commercial, and residential purposes. It is noted that the adjacent properties located southeast of the Site are not shown on the 1924 maps;
- 1950: The Site is bounded to the north by railway tracks operated by N.Y.C.R.R. McKinney Steel Company, which occupied lands west of the Genesee River, opposite the modern day location of the Rochester Yacht Club on the 1924 fire insurance map, is not present on the 1950 fire insurance map. The City of Rochester, Municipal Dock Terminal is present just east of the location of the former McKinney

Steel Company. The U.S. Coast Guard Auxiliary is now located between the Sewage Disposal Plant and the Genesee River, directly west of the present day Shumway Marine. No other significant changes to adjacent land use were observed on the 1950 fire insurance map. It is noted that the adjacent properties located southeast of the Site are not shown on the 1950 maps;

- 1966: The 1966 fire insurance maps only provide coverage for properties located northeast of the Site. At that time, these properties were primarily used for residential, commercial, and institutional purposes.
- 1967: The Sewage Disposal Plant, identified on the 1924 fire insurance map is not present on the 1967 fire insurance map. An un-labeled aboveground storage tank is present on the N.J. Karl Brush Factory property. An industrial facility, occupied by Tapecon Incorporated (plastic tape manufacturing) is located just south of N.J. Karl Brush Factory. Seven buildings are associated with the Tapecon facility including a flammable storage building. No other significant changes to adjacent land use were observed on the 1967 fire insurance map. It is noted that the adjacent properties located southeast of the Site are not shown on the 1967 maps.

A copy of the Sanborn fire insurance maps are included as Appendix C.

2.2.2 PROPERTY TITLE INFORMATION

The Site is legally described as Part of Lot 1, Township 14, Range 7, City of Rochester/Town of Irondequoit, Monroe County, New York. According to Site personnel, the Property is approximately 50 acres in size and is comprised of 21 parcels of land. We have not reviewed abstracts of title, however, it is our understanding that these parcels of land are currently owned by the Town of Irondequoit, The City of Rochester, and entities controlled by Al and Joyce Gilbert, and Skip Shumway (see Figure 2).

It is CRA's understanding that during the early 1900s, the Site was owned by the New York Central Rail Road, City of Rochester, Town of Irondequoit, and Morris Lumber (951 Thomas Avenue). In approximately 1964, the western and southern portion of the Property was purchased by Frank Shumway and Al and Joyce Gilbert. In the early 1970s, Al and Joyce Gilbert purchased 951 Thomas Avenue from Morris Lumber.

Numerous leases are associated with the Site. The southwest portion of the Site is leased by Al and Joyce Gilbert from the City of Rochester. The Gilberts sub-lease this

land/docks to 84 individuals for recreational purposes. The property located at 951 Thomas Avenue is currently leased to an individual for residential, storage, and canvas repair purposes. The Gilberts also lease a small portion of land (i.e., less than 0.5 acres) in the central portion of the Site to Navy Point Yacht Sales. Skip Shumway leases two parcels of land in the eastern and southern portion of the Site to RCR Yachts Inc., and Smith Boys.

Site personnel are not aware of any environmental liens that may be associated with the Property.

A title search was not completed by CRA for this Phase I ESA.

2.2.3 AERIAL PHOTOGRAPHS

Aerial photographs assist in the identification of Site features and outdoor activities of potential environmental concern. Aerial photographs of the Site were obtained from Historical Information Gatherers Inc. for the years 1951, 1969, 1985, 1994, and 2002. Observations based on the review of the aerial photographs are summarized as follows:

- 1951 (scale 1" = 500'): In the 1951 aerial photograph, most of the Site has been filled, with several small wetland areas present in the north portion of the Property. The western portion of the Site, along the east bank of the Genesee River, was occupied by boat slips. Numerous small buildings are located along the western Site boundary. The northeast portion and southern tip of the Site are covered by dense trees. A rectangular building is present in the southeast corner of the Site (north of Pattonwood Drive). Five structures are present in the southeast corner of the Site (south of Pattonwood Drive), in the vicinity of 951 Thomas Avenue. Several small buildings and a large irregular shaped building are located southeast of the Site (southeast of the intersection of Thomas Avenue and Pattonwood Drive). The irregular shaped building was occupied by Weller Motors, Inc. (subsequently Marina Dodge), who operated it as a car dealership. Railway tracks bound the Site to the north and southeast. Additional railway tracks are located on the west side of Genesee River. The Rochester Yacht Club is located north of the Site.
- 1969 (scale 1" = 500'): The 1969 aerial photograph indicates that additional filling across the Site has occurred since 1951. The deep water basin associated with Voyager Boat Sales has been constructed and the deep water basin associated with Shumway Marine has been partially constructed. Two rectangular buildings associated with the Voyager Boat Sales operation have been constructed on the west

side of the Site. Numerous boats are stored on the Site, in the vicinity of the Voyager Boat Sales facility. Two buildings have been constructed in the north central portion of the Site, in the location of the present day Smith Boys facility. The building identified on the 1951 aerial photograph in the southeast corner of the Site (north of Pattonwood Drive) has been replaced by four round buildings and three rectangular buildings. These structures were part of the Town of Irondequoit wastewater treatment plant. Most of the trees in the southeast corner of the Site have been removed since 1951. Dense vegetation covers most of the southern portion of the Site. One of the buildings present in the 1951 aerial photograph at 951 Thomas Avenue is not shown on the 1961 aerial photograph. A large rectangular building is present in the northwest corner of the Site. Two rectangular buildings are present to the east of the Site. Numerous boats are docked along the east bank of the Genesee River, adjacent to the west Site boundary. A residential subdivision is located east of the Site, a portion of which was constructed on the Rochester Landfill. No other significant changes in on-Site or adjacent land use had occurred since 1951.

- 1985 (scale 1" = 500'): In the 1985 aerial photograph, the northeast portion of the Site is covered by trees. A small pond is present in the southern portion of the Site. Only three buildings are present at 951 Thomas Avenue on the 1961 aerial photograph. No other significant changes to the Site or surrounding properties were observed on the aerial photograph.
- 1994 (scale 1" = 500'): In the 1994 aerial photograph, one of the buildings present in the central portion of the Site (north of Pattonwood Drive) has been replaced by a smaller rectangular building. No other significant changes to the Site or surrounding properties were observed on the aerial photograph.
- 2002 (scale 1" = 500'): The 2002 aerial photograph indicates that the Town of Irondequoit wastewater treatment plant has been removed from the Site. Concrete supports for the new Stutson Street bridge are present in the central portion of the Site. The Marina Dodge building and several smaller buildings, located adjacent to the southeast portion of the Site, are no longer present. No other significant changes to the Site or surrounding properties were observed on the aerial photograph.

Copies of the aerial photographs are included in Appendix D.

2.2.4 TOPOGRAPHIC MAPS

Topographic maps assist in the identification of historic land use and also indicate the location of surface water bodies, drainage areas, and other features. CRA contracted

Historical Information Gatherers Inc. to obtain topographic maps of the Site and surrounding lands. Maps were available for the years 1952, 1969, 1971, and 1978.

- 1898 (scale 1:62,500): The 1898 topographic map indicates that the site is located an elevation of approximately 250 feet above mean sea level. The majority of the Site is occupied by a freshwater wetland.
- 1912 (scale 1:62,500): The 1912 topographic map indicates that the majority of the Site is occupied by a freshwater wetland.
- 1952 (scale 1:24,000): The 1952 topographic map indicates that the majority of the Site is occupied by a freshwater wetland. It is noted that on the 1951 air photo most of the site had been filled. A small access road is located along the west side of the Site (north of Pattonwood Drive), parallel to the Genesee River. Fourteen small buildings are located on the Site. One of these buildings is located in the southeast corner of the Site (north of Pattonwood Drive). The words "sewage disposal" are located adjacent to this on-Site building. A second building is located in the southeast corner of the Site (south of Pattonwood Drive), in the area of the 951 Thomas Avenue. The remaining 12 buildings are located along the east bank of the Genesee River and are likely associated with boat docks. Pattonwood Drive and Stutson Street traverse the central portion of the Site in an east-west direction. Railway tracks bound the Site to the north and southeast. Several small buildings are located adjacent to the southeast corner of the Site (i.e., intersection of Thomas Avenue and Stutson Street). The property located adjacent to the northeast portion of the Site is undeveloped. The deep water basin of the Rochester Yacht Club is present to the north of the Site. Several railway tracks are located on the west side of the Genesee River.
- 1969 (scale 1:24,000): The 1969 topographic map indicates that two deep water basins have been partially constructed at the Site. Three additional large buildings have been constructed on the Site since 1952. These buildings are associated with the present day Shumway Marina, Smith Boys, and Voyager Boat Sales facilities. Two additional buildings are present on the Shumway Marina property, west of the Site. Several additional buildings have been constructed southeast of the Site (south of Pattonwood Drive). No other significant changes in on-Site or adjacent land use had occurred since 1952.
- 1971 (scale 1:24,000): The 1971 topographic map indicates that significant quantities of fill have been placed across the Site. Two distinct mounds are present in the central and northern portions of the Property. The elevations of these mounds are approximately 265 and 275 feet above mean sea level. The two deep water basins are now rectangular in shape and contain boat slips. Five round shapes (assumed to be

filters and digesters associated with a wastewater treatment facility) are located adjacent to the sewage disposal building. An access road from Pattonwood Drive to the north central portion of the Site and an access road along the southwest portion of the Site are now present. Several roadways are east of the Site. No other significant changes in on-Site or adjacent land use had occurred since 1969.

- 1978 (scale 1:24,000): The 1978 topographic map indicates that no significant changes in on-Site or adjacent land use had occurred since 1971.

Copies of the topographic maps are included in Appendix F.

2.2.5 PREVIOUS ENVIRONMENTAL REPORTS

As part of the Phase I ESA, CRA reviewed the following previous environmental reports:

- Malcolm Pirnie, Inc., February 1989. Voyager's Boat Yard Soil and Groundwater Sampling.
- Edward O. Watts, P.E., P.C., August 19, 1992. Phase I Environmental Site Assessment, Voyager Boat Sales, Stutson Street Extension, Rochester, New York.
- Engineering-Science, Inc., September 1992. Hazardous Waste Assessment Report, Stutson Street Bridge, NYSDOT.
- Engineering-Science, Inc., December 1992. Engineering Investigation at Inactive Hazardous Waste Sites, Phase II Investigations, Old Rochester City Landfill, Irondequoit, New York.
- Passero Associates, P.C., July 12, 1994 letter report. Pattonwood Treatment Plant Site Phase II Environmental Investigation.
- Passero Associates, P.C., August 30, 1994 letter report. Pattonwood Treatment Plant Site Phase II Environmental Investigation – Additional Sampling.
- F-E-S Associates, August 14, 1995 letter report. Old City of Rochester Landfill, Results of Site Sampling and Characterization Investigation.
- Watts Engineers, November 1998. Detailed Site Investigation Report for the Hazardous Waste/Contaminated Materials Assessment of Stutson Street Bridge.
- C&O Technologies, Inc., May 10, 1999. Phase I Environmental Site Assessment, Shumway Marina, City of Rochester, Monroe County, New York.

- Passero Associates, P.C., August 1999. Environmental Investigation, Marina Drive, Town of Irondequoit.
- LaBella Associates, P.C., October 2001. Phase I Environmental Site Assessment, Shumway Marine, 70 Pattonwood Drive, Rochester, New York.

The Phase I ESA conducted on the Voyager Boat Sales property by Edward O. Watts in 1992 identified the following findings:

1. "The subject property is partially located on a site known as the Old Rochester City Landfill. The City of Rochester operated this facility as a municipal landfill between 1956 and 1962. Aerial photographs indicate that dumping may have been occurring as early as 1930 and as late as 1978. The extent of landfilling and waste disposal activity has not been determined. No documentation of hazardous waste disposal has been uncovered."
2. "A soils investigation of the subject property revealed the presence of lead and chromium contamination. However, the concentration of these contaminants were well below the levels needed to classify this soil as a hazardous material."
3. "Phase II remedial investigations underway at the time by the NYSDEC and NYSDOT indicate the presence of soil and groundwater contamination throughout the Old Rochester City Landfill site. Contaminants include volatile and semivolatile organics, pesticides, PCBs, and heavy metals. Final reports from these investigations have not been issued at the time."
4. "A stormwater discharge line from a sump pump was observed to be discharging into the Genesee River during the site inspection. No record of a SPDES (State Pollutant Discharge Elimination System) permit was available."
5. "A petroleum bulk storage tank was observed on the subject property during the site inspection. This tank stores heating oil used to fuel a furnace. No record of a petroleum bulk storage permit was available."

The Phase I ESA conducted on the Shumway Marina property by C&O Technologies, Inc. in 1999 identified the following findings relative to Recognized Environmental Conditions at the site:

1. Former Rochester City Landfill:
   - "The eastern portion of the site was previously used as a municipal landfill.
   - This landfill was previously listed by the NYSDEC as an IHWDS and has undergone extensive environmental investigation.

- The investigations did not show the presence of hazardous wastes as currently defined by existing regulations and the landfill has been delisted.
- The environmental investigations did indicate the presence of hazardous substances and petroleum compounds in both soil and groundwater on the site.
- The presence of hazardous substances in on-site soil and groundwater represents a Recognized Environmental Condition."

2. On-Site Underground Fuel Oil Tank:
   - "There is an underground fuel oil tank on site that is used to supply fuel to heat the service building.
   - The installation data of this tank is unknown and to the best of our knowledge it has never been tightness tested.
   - The fuel oil tank and the fact that its installation date are unknown represents a Recognized Environmental Condition."

The Phase I ESA conducted on the Shumway Marina property by LaBella Associates, P.L. in 2001 identified the following findings:

1. "There appears to be a Recognized Environmental Condition at the site with regard to the known presence of a municipal landfill at the site. This Recognized Environmental Condition represents a Recognized Environmental Condition with regard to soil and/or groundwater impairment at and in the immediate vicinity of the site. There are known elevated levels of PCBs, lead, and fly ash in some areas of this former landfill."
2. "There appears to be a Recognized Environmental Condition at the site with regard to the undocumented removal of the 1,000 gallon heating oil tank as well as a listed permit for a 3,000-gallon tank at the site. This Recognized Environmental Condition represents a Recognized Environmental Condition with regard to soil and/or groundwater impairment at and in the immediate vicinity of the site."
3. "There appears to be a Recognized Environmental Condition at the Site with regard to the presence of a floor drain in the repair shop area of the site which does not appear to be connected to the sewer system. This Recognized Environmental Condition represents a Recognized Environmental Condition with regard to soil and/or groundwater impairment at and in the immediate vicinity of the site."

Based on the information provided in the above noted reports, the following known or potential areas of environmental impairment have been identified:

- On-Site disposal of residential waste in the northern and central portions of the Site;
- On-Site disposal of construction debris in the central portion of the Site;
- On-Site disposal of slag, ash, and cinders in the western portion of the Site;
- On-Site disposal of glass bottles in the southern portion of the Site;
- Soils containing elevated concentrations of volatile organic compounds, semivolatile organic compounds, pesticides, PCBs, metals, and cyanide are present in all areas of the site; and
- Groundwater containing elevated concentrations of volatile organic compounds, semivolatile organic compounds, and metals is present in all areas of the site.

Excerpts from the above-noted reports are provided in Appendix E.

3.0 SITE INSPECTION

On July 28 and July 29, 2005, Mr. Greig Chapman of CRA completed an inspection of the buildings and related property that comprise the Site. The Site inspection included an inspection of the Site structures (with the exception of the 84 sub-leased storage sheds and the three buildings located at 951 Thomas Avenue) and associated land, review of relevant Site records provided to CRA, visual observations of adjacent properties as viewed from the Site and surrounding roadways, and interviews with individuals associated with the Site.

The following personnel were interviewed during the Site inspection:

Site Personnel	*Title*	*Years Familiar with Site*
Al Gilbert	President, Voyager Boat Sales	41
Skip Shumway	President, Shumway Marine	37
Benny O'Brian	Former Employee, Shumway Marine	65
Walt Becker	Labor Foreman, Public Works, Town of Irondequoit	32
Bill Abbott	Deputy Commissioner of Public Works, Town of Irondequoit	7
David Schantz	Supervisor, Town of Irondequoit	8

Site personnel provided information regarding current and historic use of the Site as well as facility operations. CRA was accompanied by Mr. Al Gilbert and Mr. Skip Shumway during the Site inspection.

A photographic log of the Site is provided as Appendix G.

3.1 SITE OVERVIEW

The Site consists of approximately 50 acres of land located on the east side of the Genesee River in Rochester, New York. The Site is irregular in shape and is located approximately 0.3 miles south of Lake Ontario. Pattonwood Drive and the Stutson Street Bridge bisect the central portion of the Site in an east/west direction.

The Stutson Street bridge has recently been replaced. The original bridge was constructed during the early 1900s and was located approximately 250 feet north of the current bridge. Following opening of the new bridge, the original bridge was

demolished, and the concrete bridge supports were removed to a depth of approximately 7 feet below ground surface. All of the bridge demolition debris was removed from the Site.

Approximately 97 buildings/structures are currently located on the Site. These buildings consist of approximately 75,000 square feet of floor space. A breakdown of these buildings is provided below:

- eighty-four buildings (small personal storage sheds, each less than approximately 100 square feet) are associated with the leased boat slips located in the south portion of the Site. These buildings are owned by the individual leasees;
- three buildings are owned by Shumway Marine. One of these buildings (approximately 50,000 square feet in size) is occupied by Shumway. The remaining two buildings are leased to Smith Boys;
- three buildings are associated with 951 Thomas Avenue;
- four buildings are owned by Al and Joyce Gilbert; and
- two buildings are portable office trailers owned by Navy Point Yacht Sales and RCR Yachts Inc.

Two deep water basins are present at the Site. These basins occupy an area of approximately 5 acres and 1.5 acres, and are owned by Shumway Marine and Voyager Boat Sales, respectively. These basins were constructed during the late 1960s and that the spoils generated from their construction were replaced on Site. Mr. O'Brian indicated that hundreds of glass bottles were encountered during the construction of the Shumway deep water basin.

A small pond (approximately 125 feet by 150 feet) is located in the southern portion of the Site. This pond was excavated during the 1970s with the intent of installing additional boat slips. However, due to very unstable soil conditions resulting from the presence of significant quantities of glass bottles, the project was abandoned, leaving the current pond.

The exterior grounds on the west portion of the Site (not occupied by the building footprints) are generally covered with gravel or asphalt grindings. The areas adjacent to the Shumway Marina and adjacent to the building occupied by Smith Boys are covered with asphalt pavement. A small area in the east central portion of the Site is also covered with asphalt pavement. The remaining portions of the Site (i.e., east and southeast) are either covered with low lying vegetation or trees.

Operations conducted at the Site are generally limited to minor boat repairs, boat sales, and boat storage. These operations have been divided into four categories (i.e., Shumway Marine, Smith Boys, Voyager Boat Sales, and the Town of Irondequoit) for clarity. Operations conducted at the Site by Navy Point Yacht Sales and RCR Yachts Inc. are limited to the sales and storage of boats.

Shumway Marine 70 Pattonwood Drive, Rochester, New York

Operations conducted by Shumway on the northern portion of the Site are generally limited to boat storage and minor repairs (i.e., fiberglass repairs and application of touchup paint). These minor repairs are normally conducted in the 48,000-square-foot on-Site building. This building was constructed in approximately 1968. In 2000, a 6,400-square-foot addition was constructed on the rear portion of the building. The building is constructed with a gravel floor, structural steel frame, sloped roof, and metal clad exterior.

At the time of the Site inspection, CRA observed approximately 20 empty 55-gallon plastic drums stored on a grassed portion of land, located east of the building. These plastic drums formerly contained propylene glycol. CRA also observed an empty 55-gallon steel drum in the northeast corner of the Site. No staining, vegetative distress, or other evidence of significant spills or releases was observed by CRA in the vicinity of the empty drums.

Smith Boys (100 Pattonwood Drive, Rochester, New York)

Smith Boys have leased the two buildings in the central portion of the Site from Mr. Shumway since 1993. Operations conducted at the Site are limited to the sales and preparation of new and used boats. The two buildings are constructed of a slab-on-grade concrete floor, structural steel frame, concrete block walls, and a sloped metal clad roof. The main building is used for administrative functions and as a showroom. The smaller building, located adjacent to the east side of the main building is used for minor maintenance purposes (i.e., fluid top up, lubrication, touchup paint, etc.). The main building was constructed in the late 1980s and the maintenance building was constructed in the mid 1960s.

During the Site inspection, CRA observed two empty 55-gallon steel drums located on the north side of the east building. No staining, vegetative distress, or other evidence of significant spills or releases was observed by CRA in the vicinity of the empty drums.

Voyager Boat Sales (90 Pattonwood Drive, Rochester, New York)

Operations by Voyager Boat Sales are generally conducted in the east central portion of the Site and include boat storage, boat sales, and minor boat repairs (i.e., engine fluid top-ups, touch-up paint, minor hull repairs, etc). In addition, Voyager Boat Sales operates a large 145-person chartered paddle boat.

Voyager Boat Sales operates a boat storage building, a maintenance building, and an office building. The boat storage building is constructed of a gravel/recycled asphalt floor, structural steel frame, sloped metal roof, and exterior metal cladding. The maintenance building is constructed of a concrete slab-on-grade floor, structural steel frame, sloped metal roof, and exterior metal cladding. The office, located adjacent to the maintenance building, is constructed of concrete slab-on-grade floor, wood framed walls and siding, and a sloped asphalt shingle roof. All of these buildings were constructed during the mid to late 1960s. A 750-square-foot addition was constructed on the west side of the maintenance building in approximately 1972. A residence, owned by Mr. Gilbert, is located south of the Voyager Boat Sales buildings. This residence was reportedly constructed in 1835. Several upgrades and building additions have been constructed on the house since 1964.

At the time of the Site inspection, CRA observed numerous piles of soil and gravel materials located adjacent to the buildings and south of the Stutson Street Bridge. According to Mr. Gilbert, this material was brought to the Site by local housing contractors (i.e., from digging basements) and from excess material resulting from the upgrades to Pattonwood Drive. According to Mr. Gilbert, no analytical data are available to document the quality of these materials.

During the exterior inspection of the southeast corner of the Site, CRA observed three 55-gallon steel drums (two empty and one containing black solidified material), two empty 250-gallon steel storage tanks, and several pieces of scrap steel and concrete. The drum containing the black solidified material was lying on its side. No staining, vegetative distress, or other evidence of significant spills or releases was observed by CRA in the vicinity of the drums or storage tanks.

The property located at 951 Thomas Avenue is currently being leased to a canvas repair business. Three buildings are currently located on the property. No specific information regarding the nature of operations conducted by the canvas repair company was available to CRA during the Phase I ESA.

Town of Irondequoit

The Town of Irondequoit owns the east central portion of the Site. No structures are currently located on the property. The Town of Irondequoit occasionally uses the Site for the storage of dry materials (i.e., manholes, pipes, etc.).

During the inspection of the eastern portion of the Site, CRA observed two empty 55-gallon steel drums, one empty 250-gallon steel storage tank, and several pieces of scrap steel and concrete. No staining, vegetative distress, or other evidence of significant spills or releases was observed by CRA in the vicinity of the drums or storage tanks.

3.2 HISTORIC SITE OPERATIONS

Most of the Site was a freshwater wetland during the early 1900s. In approximately 1920, the Town of Irondequoit North St. Paul Wastewater Treatment Plant (WWTP) was located in the eastern portion of the Site, just north of Pattonwood Drive. The WWTP consisted of three trickle filters, two digesters, a maintenance garage, and two small storage buildings. Effluent from the WWTP was discharged directly to the Genesee River. Mr. Becker reported that sludge generated from the operation of the wastewater treatment system was removed and disposed of at the town landfill. According to Mr. Becker, operations conducted in the maintenance garage included minor maintenance of vehicles (i.e., oil changes, brake replacement, etc.). Mr. Becker reported that no pits, sumps, or hydraulic elevating devices were present in the garage. Some construction debris (i.e., concrete, wood, drywall, etc.) was landfilled by the Town of Irondequoit in the area of the Site, northeast of the maintenance garage. The operation of the WWTP ceased in the early 1980s and the plant was demolished during the late 1990s. All hazardous substances were reportedly removed from the WWTP prior to commencing the demolition activities. The resulting crushed concrete and brick were generally left on Site, in the vicinity of the former WWTP. No specific information exists to document the operations conducted, the types and quantities of chemicals used and stored at the WWTP, or the ultimate disposition of waste materials from the 1920s to the early 1970s.

Review of a 1931 photograph indicates that a large dock was located on the east bank of the Genesee River, in the central portion of the Site. This dock was used for sand storage and unloading purposes. Several railway spurlines service the dock and traverse the

west and north Site boundaries. A railway roundhouse was also located on the northeast portion of the Site. The railway spur lines, roundhouse, and dock operated at the Site until the early 1950s. The City of Rochester began using the Site as a landfill in the late 1940s. These landfilling operations consisted of the placement of residential refuse, ash, slag, sewage sludge, and construction debris. These landfilling operations have been reported to have ceased in approximately 1962, but may have continued as late as 1978. Several boat slips were present along the west side of the Site from the early 1950s to the mid 1960s. According to Site personnel the railway sold the Site (excluding the portion owned by the Town of Irondequoit and the City of Rochester) in 1964, at which time the Property was developed into the current land use as a marina. Over the past several years, a variety of subsurface investigations have been conducted in the landfilled areas (see Section 2.2.5).

The parcel of property currently occupied by Smith Boys was formerly occupied by a residential pool supply business, a sail maker, and a pool table manufacturer. A fire in 1982 destroyed one of the two buildings, present in this area of the Site. This building was subsequently rebuilt during the mid 1980s. No specific information exists to document the types of operations conducted, the types and quantities of chemicals used and stored in this area of the Site, or the ultimate disposition of waste materials from the 1960s to the mid 1980s.

The property located at 951 Thomas Avenue was originally developed in 1880. Morris Lumber reportedly occupied the buildings from 1880 to the mid 1960s. The property was used for the sales and storage of lumber. The property was vacant from the mid 1960s to the mid 1970s, at which time Al and Joyce Gilbert purchased the property. Since the mid 1970s, the property has been leased to numerous individuals for storage purposes, including a radio repair business during the 1980s and an outboard motor repair business during the 1990s. At the time of the Site inspection, CRA did not have access to inspect the three buildings present on the property. No specific information exists to document the types of operations conducted, the types and quantities of chemicals used and stored in this area of the Site, or the ultimate disposition of waste materials from 1880 to the mid 1960s.

3.3 ENVIRONMENTAL SETTING/ADJACENT PROPERTIES

The Site is located in a mixed commercial/residential area of Rochester, Monroe County, New York. The Site was developed for industrial/commercial use during the early 1900s.

The topography of the Site varies. In general, the Site slopes from east to west. The maximum on-Site elevation difference is approximately 20 feet. Cleared areas contain various buildings and boat storage areas. There are two distinct mounded fill areas in the portion of the Site that is north of Pattonwood Drive. Surface drainage from the elevated fill areas is assumed to be radial. General surface drainage, however, is to the west towards the Genesee River.

The Site is bordered to the west by the Genesee River, Genesee Yacht Club, and Shumway Marine. Railway tracks and residential and retail buildings are located further west of the Site on the west side of the Genessee River. The Site is bordered to the south by a former railway line and residential houses. The Site is bordered to the southeast by Thomas Avenue, Pattonwood Drive, and residential houses. Several buildings currently occupied by Thomas Self Storage, Stutson Bridge Plaza (IGA, Gordons Restaurant, Laundromat/Dry Cleaners (drop off only), Coffee Shop, Encore Chocolates, Drawbridge Liquor, Klippers Korner, Florist, West Marine, Chinese Restaurant, Jordina's Pizza, and Eckerd), and a commercial building currently occupied by U.S. Customs and Border Protection are located further south and southeast of the Site. The Site is bordered to the east by residences and a small building owned by the Monroe County Water Authority. The Site is bordered to the north by a former CSX railway line and further north by the Rochester Yacht Club.

The Shumway Marine property that borders the Site to the west, consists of five buildings (see Figure 3). Three underground fuel tanks are present on this property. These tanks were installed in 1999 and contain gasoline and diesel fuel. These USTs are located in the northwest corner of the property, adjacent to the Genesee River. Based on available information, up to four historic USTs have been operated on the Shumway Marine property. All of these USTs were removed in 1998/1999, at the time the new tanks were installed. During the UST removal activities, approximately 150 tons of soil, slightly impacted with petroleum hydrocarbons, were excavated. In consultation with the NYSDEC, these impacted soils were placed/staged on polyethylene sheeting in the eastern portion of the property. The October 2001, Phase I Environmental Assessment conducted by Labella states that "*the last round of soil sampling from the staged soil from October 1999 showed that all levels of detectable compounds were below guidance levels. Mr. Shumway also had soil samples from the tank excavation taken at the time of tank removal. These soil samples were analyzed for Volatile Organic Compounds by USEPA Method 8021 and for Semi-Volatile Organic Compounds by USEPA Method 8270 STARS. No volatile or semi-volatile organic compounds were detected in these soil samples above method detection limits*". The staged soils were subsequently spread out, and the polyethylene sheeting

disposed of off Site. No groundwater samples were collected in the area of the UST removals.

At the time of the Site inspection, CRA observed a vent pipe adjacent the Monroe County Water Authority building. According to the Town of Irondequoit personnel, this building houses a sewage pump station and the vent pipe is related to a concrete holding tank. The Town of Irondequoit personnel also stated that the pump station is not equipped with an emergency backup generator, and that no hazardous liquids are stored in the building.

Based on a review of available documentation, it appears that the former Rochester City landfill extended onto the adjacent properties to the north, east, and south of the Site. Several of the adjacent properties, Shumway Marine, Weller Motors, and Marina Dodge, were listed in the database search as having potential environmental issues.

Most of the Site is classified by the Soil Conservation Service as "made land". Previous investigations at the Site indicate that this fill material ranges in depth from 4 to 26 feet deep and includes municipal solid waste, construction and demolition debris, and dredging spoils. Bedrock has not been encountered in any boring at the Site. Bedrock was identified to have been encountered between depths of 21 to 35 feet below ground surface during construction of the Stutson Street bridge.

Native soils encountered below fill at the Site typically include, in order of increasing depth, black peat, brown sand and silt, gray clay, silt, and sand (estimated hydraulic conductivity of between 10^{-4} and 10^{-7} cm/sec).

Groundwater was encountered at the Site at depths ranging from 7 to 15 feet below grade, typically within the fill material. Groundwater flow is generally to the west toward the Genesee River.

Two deep water basins are present along the west side of the Site. A small creek is located along the north and east sides the of the residential dwelling occupied by Al and Joyce Gilbert. This creek discharges to the Genesee River located adjacent to the west side of the Site. A small man made pond is located in the southern portion of the Site. Lake Ontario is located approximately 1,700 feet north of the Site.

3.4 UTILITY SERVICES

A summary of the utility services present at the Site is provided below:

Site Area	*Utility Services*	*Building Heat*
Shumway Marine	Electricity (storage building only)	None
RCR Yachts Inc.	Electricity	Electric baseboard
Smith Boys	Electricity, natural gas, potable water, sanitary sewers (septic system prior to 1995)	Natural gas unit heaters
Voyager Boat Sales	Electricity, potable water, septic system	Fuel oil furnaces, heat pump
Navy Point Yacht Sales	Electricity	Electric baseboard
Al & Joyce Gilbert's House	Electricity, potable water, septic system	Fuel oil furnace
591 Thomas Avenue	Electricity, natural gas, potable water, sanitary sewers	Natural gas furnace
Town of Irondequoit	None	Not applicable
City of Rochester	None	None

Potable water is provided by the Monroe County Water Authority. Sanitary sewer service is provided by the Town of Irondequoit. Electricity and natural gas are provided by Rochester Gas and Electric (RG&E). Several pad mounted electrical transformers are located on the Site. These transformers are owned and maintained by RG&E.

It is unknown whether the former septic system associated Smith Boys facility has been removed. According to Site personnel, no industrial wastes or other chemicals have been discharged to the septic systems in the past.

No evidence of on-Site potable water wells was observed by CRA at the time of the Site inspection. Site personnel were not aware of any on-Site potable water wells.

3.5 UNDERGROUND STORAGE TANKS (USTs)

There are no known USTs currently located at the Site. Based on a review of available documentation and discussions with facility personnel, one UST was historically operated at the Site. This UST contained gasoline and was located on the Voyager Boat Sales property approximately 150 feet northwest of the maintenance building. The UST was operated at the Site from the mid 1960s to 1975, when it was removed. The UST was owned by a petroleum company and leased by Voyager Boat Sales. No analytical data exists to document the clean closure of this UST. However, Mr. Gilbert stated that the NYSDEC was on Site during the removal of the UST and that no visual or olfactory evidence of contamination was identified. Mr. Gilbert also stated that in 1985, the Monroe County Water Authority installed a 20-inch diameter watermain through the former UST excavation and they did not encounter any petroleum hydrocarbon related contamination.

Site personnel were not aware of the historic presence of any other USTs. No physical evidence of any current or other historic UST installations (e.g., vent pipes, fill ports, etc.) was observed by CRA during the Site inspection. The Site was not listed in any of the UST databases.

3.6 ABOVEGROUND STORAGE TANKS (ASTs)

Based on visual observations made by CRA and discussions with Site personnel, three ASTs are currently operated at the Site. All of these ASTs are of single wall steel construction. A summary of these ASTs is provided below:

Location	*Contents*	*Capacity (gallons)*
Voyager Boat Sales (Maintenance Garage)	Fuel Oil	2,000
Voyager Boat Sales (Storage Building)	Portable Sanitary Sewage Tank	500
Al and Joyce Gilbert's House	Fuel Oil	250

None of the ASTs identified above are provided with secondary spill containment.

During the Site inspection, CRA observed an empty 500-gallon steel AST located in the storage area of the Voyager Boat Sales facility. According to Site personnel, this tank was recently removed from a customers boat and will be disposed of off Site in the near future. No significant staining was observed in the vicinity of the ASTs.

As noted in Section 3.1, two empty 250-gallon steel ASTs were observed in the wooded area located in the southeast portion of the Site (south of Stutson Street Bridge), and one empty 250-gallon steel AST was observed in the wooded area, northeast of the former Town of Irondequoit WWTP. No staining, vegetative distress, or other evidence of significant spills or releases was observed by CRA in the vicinity of the ASTs.

A 250-gallon steel AST, containing diesel fuel was located in the maintenance garage of the former WWTP. Town of Irondequoit personnel were not aware of any spills or releases associated with the operation of this AST.

No physical evidence of the use or presence of other ASTs at the Site was observed by CRA during Site inspection or based on the aerial photographs. Site personnel were not aware of any other historic ASTs being present at the Site.

3.7 RAW MATERIAL AND CHEMICAL USE AND STORAGE

Raw materials and chemicals used and stored at the Site are limited and are generally associated with minor maintenance activities conducted by Voyager Boat Sales and Smith Boys. A summary of these chemicals and raw materials is provided below.

- Petroleum Oils and Greases;
- Gasoline;
- Diesel;
- Engine fluids;
- Resins/hardeners;
- Fuel oil;
- Paints/stains;
- Solvents (paint thinner and acetone);
- Propylene Glycol; and
- General Building Maintenance Supplies.

Fuel oil is delivered to the Site in bulk and stored in ASTs as described in Section 3.6. The fuel oil is used for heating purposes.

The propylene glycol is delivered to the Site in 55-gallon drums and 5-gallon containers. Petroleum oils and greases, engine fluids, paints/stains, resins, hardeners, and solvents, are delivered to the Site in various sized containers of up to 5 gallons. Small quantities

of solvent are also used in the small portable parts washers located in the maintenance building of Voyager Boat Sales. The parts washer is maintained by NOCO Energy Corp. Gasoline and diesel is obtained from the local fuel station by the employees of Voyager Boat Sales and stored in approved 5-gallon containers. All of the chemicals used at the Site are generally stored in the maintenance buildings associated with the Voyager Boat Sales or Smith Boys facilities or in the garage of the house owned by Al and Joyce Gilbert. Small quantities of paints/stains, resins, hardeners, and solvents that are used in the Shumway Storage building are obtained from the Shumway Marina (located west of the Site).

At the time of the Site inspection, no significant staining was observed on the concrete floors in the vicinity of the chemical storage areas.

Chemicals used and stored in the garage associated with the former WWTP included, oils and greases (approximately four 55-gallon drums stored at the Site at a time), a small portable degreasing unit, small quantities of paint, and automotive fluids. Chemicals used and stored at the Site for wastewater treatment purposes included, chlorine gas, lime, copper sulphate, and acids.

3.8 SOLID AND SPECIAL WASTE

Solid wastes generated at the Site include typical office and lunch room refuse, oil filters, waste bulbs (fluorescent and metal halide), empty drums and pails, used batteries, scrap wood, scrap steel, and other incidental solid wastes.

Refuse, bulbs, oil filters, and other wastes are placed in one of several on-Site dumpsters and transported off Site for disposal by Waste Management. Cardboard, paper, scrap metal, and used batteries are all recycled off Site by local recyclers.

Almost the entire Site has been filled. Two distinct landfill areas are present at the Site and are located east of the deep water basins operated by Shumway Marina and Voyager Boat Sales. These landfill areas are comprised of residential waste, construction debris, ash, and spoils from the construction of the deep water basins. The remaining areas of the Site have been filled with varying amounts of residential waste, construction debris, ash, cinders, slag, and glass bottles.

Several subsurface investigations have been conducted at the Site over the past several years and identified the presence of volatile organic compounds, semivolatile organic

compounds, pesticides, PCBs, metals, and cyanide in the subsurface soils and volatile organic compounds, semivolatile organic compounds, and metals in the groundwater at the Site. The environmental database information identified that the Rochester Landfill was on the Site. This landfill is listed in the NFRAP Sites Report. Additional details concerning the subsurface investigations are provided in Section 2.2.5.

3.9 HAZARDOUS AND INDUSTRIAL WASTE

No hazardous wastes are currently generated at the Site. Based on the environmental database information, Shumway Marine is listed as a small quantity generator of hazardous waste with a United States Environmental Protection Agency (EPA) I.D. Number NYD1000303711. However, it is noted that these wastes are generated and temporarily stored on the portion of the Shumway Marine property that is not included within the Site boundaries.

NOCO Energy Corp. maintains the parts cleaner and changes the solvent in the unit approximately every 2 to 3 years.

At the time of the Site inspection, CRA did not observe the storage of hazardous waste materials. Site personnel are not aware on any on-Site disposal of hazardous waste.

Waste oil and waste propylene glycol generated by Voyager Boat Sales and Smith Boys are primarily stored in 55-gallon steel drums located either in or adjacent to the maintenance garage buildings, pending removal and off-Site disposal. At the time of the Site inspection, CRA observed oil staining on the gravel surface in the vicinity of the waste oil drums stored adjacent to the north side of the Voyager Boat Sales maintenance building.

As described in Section 3.8, the Rochester landfill, located on the Site, north of Pattonwood Drive, is listed in the NFRAP Sites Report.

3.10 WASTEWATER/SEWERS

Wastewater currently generated at the Site is limited to domestic type wastewater from facility washrooms and kitchens. Wastewater associated with the Voyager Boat Sales operation is discharged to two septic systems located adjacent to the residential house and the maintenance garage. Wasterwater generated on the paddle boat is pumped into

a 500-gallon temporary tank and is transported and disposed of in the septic system located adjacent to the maintenance garage. Wastewaters associated with the Smith Boys operation (including a hand washing sink in the maintenance garage) and the property located at 951 Thomas Avenue are discharged to the Town of Irondequoit sanitary sewer system. The buildings currently occupied by Smith Boys were historically serviced by a septic system. The current status of this system is unknown.

Site personnel reported that no chemicals or hazardous wastes have ever been disposed of to the septic systems. No other sources of wastewater generation were observed by CRA at the time of the Site inspection.

3.11 STORMWATER

Stormwater generated at the Site consists of runoff from Site buildings, parking lots, roadways, and landscaped areas. Stormwater is conveyed through surface swales, catch basins, and ditches that ultimately discharge to the Genesee River. Site personnel are not aware of any environmental concerns related to the quality of stormwater from the Site.

CRA did not observe any potential sources of significant impact to stormwater run-off from the Site at the time of the Site inspection.

3.12 AIR EMISSIONS

Air emission sources currently operated at the Site are limited to building comfort heating systems. No adverse impacts to the Site, associated with the operation of air emission equipment, were identified by CRA during the Site inspection.

3.13 ASBESTOS CONTAINING MATERIALS (ACM)

The presence of ACM at the Site was investigated through discussions with facility personnel and visual observations made by CRA. No intrusive investigations were conducted to examine areas of concealed space. Site personnel were not aware of any ACM being present in the buildings or any ACM surveys that have been conducted at the Site. Site personnel indicated that to their knowledge, no asbestos has been removed from the Site.

An ACM survey was not conducted as part of this ESA. Based on observations during the Site inspection, potential ACM observed by CRA was limited to building materials, including ceiling tile, floor tile, and pipe insulation. All materials were observed to be in good structural condition.

3.14 POLYCHLORINATED BIPHENYLS (PCBs)

Electrical service to the Site is provided by RG&E from several pole and pad mounted transformers located across the Site. The transformers are owned and maintained by RG&E. As the owners of the transformers, RG&E would be responsible for any testing, reporting, of response to releases from the transformers.

According to Site personnel, no PCB-containing equipment has been or is currently being used, stored, or handled at the Site. At the time of the Site inspection, potential PCB-containing equipment observed by CRA included the ballasts in the fluorescent and high intensity discharge lighting fixtures in the buildings. During the Site inspection, the lighting fixtures appeared to be in good working condition. PCBs have been detected in on-Site soil and groundwater during previous environmental investigations.

3.15 IONIZING RADIATION

The Site has not used any sources of ionizing radiation in plant operations. No radiation sources were observed by CRA during the Site inspection. Site personnel were unaware of any radon gas testing having been conducted at the Site. The USEPA has determined Monroe County to be in a Level 2 Radon Zone, with indoor air concentrations of radon anticipated to be between 2 pCi/L and 4 pCi/L. The USEPA established action level for radon gas is 4 pCi/L.

3.16 SPILLS/RELEASES

Site personnel were not aware of any spills or releases of chemical or petroleum products that had occurred on the Site. With the exception of the minor oil staining observed on the gravel surface in the vicinity of the waste oil drums (Voyager Boat Sales) no other evidence of any significant spills or releases was observed by CRA

during the Site inspection. No reportable spills at the Site were listed in the environmental database search.

It is noted that no specific information was available regarding any historic releases that may have occurred at the Site from early 1900s to the late 1960s.

3.17 AGENCY RECORDS

Town of Irondequoit personnel are not aware of any environmental issues at the Site, other than those associated with historic landfilling operations.

LPA conducted an FOI file search with the City of Rochester, Town of Irondequoit, and NYDEC in spring of 2005. The results of that file search were provided to CRA and are summarized in Section 2.2.5.

3.18 CERCLA LIABILITY POTENTIAL

According to facility personnel, no one associated with the Site has received notification from any government agency or third party of liability as a potentially responsible party in any hazardous waste treatment, storage, or disposal site. According to facility personnel, no one associated with the Site has defended any environmental-related claims or litigation asserted by any governmental agency.

4.0 SUMMARY OF IDENTIFIED ENVIRONMENTAL ISSUES

4.1 FINDINGS

Based on the Phase I ESA including the Site inspection, database search, historic records reviewed, information provided by Site personnel, and interviews, the following potential Recognized Environmental Conditions, as defined in ASTM Standard E1527-00, were identified at the Site.

4.1.1 POTENTIAL HISTORIC RECOGNIZED ENVIRONMENTAL CONDITIONS

The following potential historic REC was identified at the Site:

i) **Historic UST**: One UST containing gasoline was operated on the Voyager Boat Sales property from the mid 1960s to 1975, when it was removed. Existing documentation does not conclusively confirm that clean closure of the USTs was achieved or that NYSDEC has approved the closure as complete.

4.1.2 POTENTIAL CURRENT RECOGNIZED ENVIRONMENTAL CONDITIONS

The following potential current RECs were identified at the Site:

i) **Historic Landfilling**: From as early as the 1930s to at least 1962, and possibly as late as 1978, a large portion of the Site was landfilled. Several investigations have been conducted at the Site and revealed the presence of volatile organic compounds, semivolatile organic compounds, pesticides, PCBs, metals, and cyanide in the subsurface soils and volatile organic compounds, semivolatile organic compounds, and metals in the groundwater at the Site. The Site was listed on the New York State Registry of Inactive Hazardous Waste Disposal Sites, but was delisted due to lack of evidence of hazardous waste disposal (as that term was defined at the time), not because hazardous substances were not present. The new definition of hazardous waste, as amended by the 2003 laws enacting the Brownfield Cleanup Program, now includes CERCLA hazardous substances. The Site is currently listed on the Hazardous Substance Waste Disposal Site Inventory. A portion of the Site is listed in the NFRAP Sites Report for the Rochester landfill, located on the north side of Pattonwood Drive. The

full nature and extent of soil and groundwater impacts to the Site associated with the historic landfilling activities have not been defined.

ii) **Historic Site Operations**: The property located at 951 Thomas Avenue has reportedly been a lumber store since 1880. More recently the property has been used as a radio repair business during the 1980s and an outboard motor repair business during the 1990s. At the time of the Site inspection, CRA did not have access to inspect the three buildings present on the property. In addition, the Town of Irondequoit operated a WWTP at the Site from 1920 to the early 1980s. Seven companies, including a residential pool supply business, a sail maker, and a pool table manufacturer occupied the central portion of the Site from the 1960s to the mid-1980s. No specific details were available during the Phase I ESA regarding the types and quantities of chemicals used, stored, and handled at the Site, the types and quantities of wastes generated by the previous occupants of the Site from 1880s to the mid 1960s, or the ultimate disposition location of their wastes. Potential impact from historic Site operations could not be determined.

iii) **Adjacent Land Use**: Several underground fuel tanks were historically located in the southeast corner of the intersection of Thomas Avenue and Pattonwood Drive. Three USTs are currently located on the Shumway Marine property west of the Site. In addition, the Rochester landfill was located southeast of the Site, south of Pattonwood Drive. The landfill is listed in the NFRAP Sites Report. The presence of former solid waste landfill and former USTs located southeast of the Site are identified as potential sources of environmental impairment, if releases have occurred on these properties and migrated onto the Site. Potential impacts to the Site have not been fully defined.

4.2 CONCLUSIONS

CRA has performed a Phase I Environmental Site Assessment of the waterfront site (property and buildings) located on the east side of the Genesee River at the Port of Rochester in Rochester, New York, in conformance with the scope and limitations of ASTM Practice E1527-00. Any exceptions to or deletions from this practice are described in Section 1.0 of this report. This assessment has identified Recognized Environmental Conditions at this Site:

- Historic UST;
- Historic Landfilling;

- Historic Site Operations; and
- Adjacent Land Use.

These Recognized Environmental Conditions are presented on Figure 4.

All of Which is Respectfully Submitted,
CONESTOGA-ROVERS & ASSOCIATES

Greig Chapman

Brian Boevers

APPENDIX C

PROJECT e:DAT