# Brownfield Cleanup Program Application

(Revised from June 2006 submission)

*Buffalo Development Corp. Hotel Site*
*Buffalo, New York*

June 2007 0099-003-100

Prepared For:

*Buffalo Development Corp.*

Prepared By:

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

726 Exchange Street, Suite 624, Buffalo, New York | phone: (716) 856-0599 | fax: (716) 856-0583

**NEW YORK STATE**
**DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

# BROWNFIELD CLEANUP PROGRAM (BCP)

ECL ARTICLE 27 / TITLE 14

DEPARTMENT USE ONLY
BCP SITE #:_____

7/06

## Section I. Requestor Information

| | | |
|---|---|---|
| NAME Buffalo Development Corporation | | |
| ADDRESS 297 Franklin Street | | |
| CITY/TOWN Buffalo | ZIP CODE 14202 | |
| PHONE 716-842-6800 | FAX 716-847-6296 | E-MAIL |
| NAME OF REQUESTOR'S REPRESENTATIVE Robert E. Knoer | | |
| ADDRESS 1707 Liberty Building, 424 Main Street | | |
| CITY/TOWN Buffalo | ZIP CODE 14202 | |
| PHONE 716-332-0032 | FAX (to be determined) | E-MAIL rknoer@knoercrawford.com |
| NAME OF REQUESTOR'S CONSULTANT Paul Werthman (Benchmark Environmental Engineering and Science, PLLC.) | | |
| ADDRESS 726 Exchange Street, Suite 624 | | |
| CITY/TOWN Buffalo | ZIP CODE 14210 | |
| PHONE 716-856-0599 | FAX 716-856-0583 | E-MAIL pwerthman@benchmarkees.com |
| NAME OF REQUESTOR'S ATTORNEY Robert E. Knoer | | |
| ADDRESS 1707 Liberty Building, 424 Main Street | | |
| CITY/TOWN Buffalo | ZIP CODE 14202 | |
| PHONE 716-332-0032 | FAX (to be determined) | E-MAIL rknoer@knoercrawford.com |

THE REQUESTOR MUST CERTIFY THAT HE/SHE IS EITHER A PARTICIPANT OR VOLUNTEER IN ACCORDANCE WITH ECL § 27-1405 (1) BY CHECKING ONE OF THE BOXES BELOW:

☐ PARTICIPANT

A requestor who either 1) was the owner of the site at the time of the disposal of hazardous waste or discharge of petroleum or 2) is otherwise a person responsible for the contamination, unless the liability arises solely as a result of ownership, operation of, or involvement with the site subsequent to the disposal of hazardous waste or discharge of petroleum.

☑ VOLUNTEER

A requestor other than a participant, including a requestor whose liability arises solely as a result of ownership, operation of or involvement with the site subsequent to the disposal of hazardous waste or discharge of petroleum.

NOTE: By checking this box, the requestor certifies that he/she has exercised appropriate care with respect to the hazardous waste found at the facility by taking reasonable steps to: i) stop any continuing discharge; ii) prevent any threatened future release; and iii) prevent or limit human,environmental, or natural resource exposure to any previously released hazardous waste.

Requestor Relationship to Property (check one):

Previous Owner  Current Owner ☑  Potential /Future Purchaser  Other_____

If requestor is not the site owner, requestor will have access to the property throughout the BCP project. ☑ Yes ☐ No

(Note: proof of site access must be submitted for non-owners)

## Section II. Property Information Summary Sheet

PROPERTY NAME: 275 Franklin Street

ADDRESS/LOCATION Various; see Att. #1-3 CITY/TOWN Buffalo ZIP CODE 14202

MUNICIPALITY(IF MORE THAN ONE, LIST ALL): City of Buffalo, New York

COUNTY Erie SITE SIZE (ACRES) 0.97

LATITUDE (degrees/minutes/seconds) 42 ° 53 ‘ 28 LONGITUDE (degrees/minutes/seconds) 78 ° 52 ‘ 28 “

HORIZONTAL COLLECTION METHOD: ☐ SURVEY ☐ GPS ☑ MAP HORIZONTAL REFERENCE DATUM: USGS

FOR EACH PARCEL, FILL OUT THE FOLLOWING TAX MAP INFORMATION (if more than three parcels, attach additional information)

| Parcel Address | Parcel No. | Section No. | Block No. | Lot No. | Acreage |
|---|---|---|---|---|---|
| 267 Franklin/275-277 Franklin/279 Franklin/432 Pearl | | | | | |
| 111.38-2-20/111.38-2-22/111.38-2-23/111.38-2-4.1 | | | | | |
| *See Attachments #1-3 | | | | | |

1. Do the property boundaries correspond to tax map metes and bounds? ☑ Yes ☐ No
   If no, please attach a metes and bounds description of the property.
2. Is the required property map attached to the application? (application will not be processed without map) ☑ Yes ☐ No
3. Is the property part of a designated En-zone pursuant to Tax Law § 21(b)(6)? ☑ Yes ☐ No

For more information go to: http://www.nylovesbiz.com/BrownField_Redevelopment/default.asp.

If yes, identify area (name) Census Tract 0072011

☐ 50% ☑ 100% of the site is in the En-zone (check one)

PROPERTY DESCRIPTION NARRATIVE:

The Site was the location of an abandoned dry cleaners and is currently a surface parking lot in the City of Buffalo Downtown Entertainment District contaminated with chlorinated organics associated with former dry cleaners

List of Existing Easements (type here or attach information)

| Easement Holder | Description |
|---|---|
| None | |

List of Permits issued by the NYSDEC or USEPA Relating to the Proposed Site (type here or attach information)

| Type | Issuing Agency | Description |
|---|---|---|
| Site Plan Review | City Planning Board | (not required for remediation) |
| Building Permits | City of Buffalo Department of Permits and Inspection Services | (not required for remediation) |

Initials of each Requestor: _____ _____ _____ _____ _____ _____

## Section III. Current Site Owner/Operator Information

| | | |
|---|---|---|
| OWNER'S NAME (if different from requestor) | 430 Niagara Street Associates (Owner 267 Franklin) | |
| ADDRESS 297 Franklin Street | Saturn Development Company (Contract Vendor as to 275-277 Franklin | |
| CITY/TOWN Buffalo, 14202 | Skydeck Corporation (Owner of 279 Franklin and 432 to 470 Pearl) | |
| PHONE 716-842-6800 | FAX | E-MAIL |
| OPERATOR'S NAME (if different from requestor or owner) | | |
| ADDRESS | | |
| CITY/TOWN | ZIP CODE | |
| PHONE | FAX | E-MAIL |

## Section IV. Requestor Eligibility Information (Please refer to ECL § 27-1407)

If answering "yes" to any of the following questions, please provide an explanation as an attachment.

1. Are any enforcement actions pending against the requestor regarding this site? ☐ Yes ☑ No
2. Is the requestor subject to an existing order relating to contamination at the site? ☐ Yes ☑ No
3. Is the requestor subject to an outstanding claim by the Spill Fund for this site? ☐ Yes ☑ No
4. Has the requestor been determined to have violated any provision of ECL Article 27? ☐ Yes ☑ No
5. Has the requestor previously been denied entry to the BCP? ☐ Yes ☑ No
6. Has the requestor been found in a civil proceeding to have committed a negligent or intentionally tortious act involving contaminants? ☐ Yes ☑ No
7. Has the requestor been convicted of a criminal offense that involves a violent felony, fraud, bribery, perjury, theft, or offense against public administration? ☐ Yes ☑ No
8. Has the requestor knowingly falsified or concealed material facts or knowingly submitted or made use of a false statement in a matter before the Department? ☐ Yes ☑ No
9. Is the requestor an individual or entity of the type set forth in ECL 27-1407.8(f) that committed an act or failed to act, and such act or failure to act could be the basis for denial of a BCP application? ☐ Yes ☑ No

## Section V. Property Eligibility Information (Please refer to ECL § 27-1405)

1. Is the property listed on the National Priorities List? ☐ Yes ☑ No
2. Is the property listed on the NYS Registry of Inactive Hazardous Waste Disposal Sites? ☐ Yes ☑ No
   If yes, please provide: Site #_____ Class # _____
3. Is the property subject to a permit under ECL Article 27, Title 9, other than an Interim Status facility? ☐ Yes ☑ No
   If yes, please provide: Permit type:_____ EPA ID Number:_____
   Date permit issued:_____ Permit expiration date:_____
4. Is the property subject to a cleanup order under navigation law Article 12 or ECL Article 17 Title 10? ☐ Yes ☑ No
   If yes, please provide: Order #_____
5. Is the property subject to a state or federal enforcement action related to hazardous waste or petroleum? ☐ Yes ☑ No
   If yes, please provide explanation as an attachment.

## Section VI. Project Description

Please attach a description of the project which includes the following components:

- Purpose and scope of the project
- Estimated project schedule

## Section VII. Property's Environmental History

To the extent that existing information/studies/reports are available to the requestor, please attach the following:

1. **Environmental Reports**
   A phase I environmental site assessment report prepared in accordance with ASTM E 1527 (American Society for Testing and Materials: Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process), and all environmental reports related to contaminants on or emanating from the site.

   If a final investigation report is included, indicate whether it meets the requirements of ECL Article 27-1415(2): ☐ Yes ☐ No

2. **Sampling Data: Indicate known contaminants and the media which are known to have been affected:**

| Contaminant Category | Soil | Groundwater | Surface Water | Sediment | Soil Gas |
|---|---|---|---|---|---|
| Petroleum | | | | | |
| Chlorinated Solvents | X | X | | | X |
| Other VOCs | | | | | |
| SVOCs | X | | | | |
| Metals | X | | | | |
| Pesticides | | | | | |
| PCBs | | | | | |
| Other* | | | | | |

*Please describe: _____

3. **Suspected Contaminants: Indicate suspected contaminants and the media which may have been affected:**

| Contaminant Category | Soil | Groundwater | Surface Water | Sediment | Soil Gas |
|---|---|---|---|---|---|
| Petroleum | | | | | |
| Chlorinated Solvents | X | X | | | X |
| Other VOCs | | | | | |
| SVOCs | | | | | |
| Metals | | | | | |
| Pesticides | | | | | |
| PCBs | | | | | |
| Other* | | | | | |

*Please describe: _____

**4. INDICATE KNOWN OR SUSPECTED SOURCES OF CONTAMINANTS**:

☐ Above Ground Pipeline or Tank ☐ Lagoons or Ponds ☐ Underground Pipeline or Tank ☐ Surface Spill or Discharge
☑ Routine Industrial Operations ☐ Dumping or Burial of Wastes ☐ Septic tank/lateral field ☐ Drums or Storage Containers
☐ Adjacent Property ☐ Seepage Pit or Dry Well ☐ Foundry Sand ☐ Electroplating
☐ Coal Gas Manufacture ☐ Industrial Accident ☐ Unknown

Other:_____

**5. INDICATE PAST LAND USES:**

☐ Coal Gas Manufacturing ☐ Manufacturing ☐ Agricultural Co-op ☑ Dry Cleaner ☐ Salvage Yard ☐ Bulk Plant
☐ Pipeline ☐ Service Station ☐ Landfill ☐ Tannery ☐ Electroplating ☐ Unknown

Other:_____

6. **Owners**
   A list of previous owners with names, last known addresses and telephone numbers (describe requestor's relationship, if any, to each previous owner listed. If no relationship, put "none").
7. **Operators**
   A list of previous operators with names, last known addresses and telephone number (describe requestor's relationship, if any, to each previous operator listed. If no relationship, put "none").

## Section VIII. Contact List Information

Please attach, at a minimum, the names and addresses of the following:

1. The chief executive officer and zoning board chairperson of each county, city, town and village in which the property is located.
2. Residents, owners, and occupants of the property and properties adjacent to the property.
3. Local news media from which the community typically obtains information.
4. The public water supplier which services the area in which the property is located.
5. Any person who has requested to be placed on the contact list.
6. The administrator of any school or day care facility located on or near the property.
7. The location of a document repository for the project (e.g., local library). In addition, attach a copy of a letter sent to the repository acknowledging that it agrees to act as the document repository for the property.

## Section IX. Land Use Factors (Please refer to ECL § 27-1415(3))

Current Use: ☐ Residential ☑ Commercial ☐ Industrial ☐ Vacant ☐ Recreational (check all that apply)

Intended Use: ☐ Unrestricted ☐ Residential ☑ Commercial ☐ Industrial

Please check the appropriate box and provide an explanation as an attachment if appropriate. Provide a copy of the local zoning classifications, comprehensive zoning plan designations, and/or current land use approvals.

| | Yes | No |
|---|---|---|
| 1. Do current historical and/or recent development patterns support the proposed use? (See #12 below re: discussion of area land uses) | ☑ | ☐ |
| 2. Is the proposed use consistent with applicable zoning laws/maps? | ☑ | ☐ |
| 3. Is the proposed use consistent with applicable comprehensive community master plans, local waterfront revitalization plans, designated Brownfield Opportunity Area plans, other adopted land use plans? | ☑ | ☐ |
| 4. Are there any Environmental Justice Concerns? (See §27-1415(3)(p)). | ☐ | ☑ |
| 5. Are there any federal or state land use designations relating to this site? | ☐ | ☑ |
| 6. Do the population growth patterns and projections support the proposed use? | ☑ | ☐ |
| 7. Is the property accessible to existing infrastructure? | ☑ | ☐ |
| 8. Are there important cultural resources, including federal or state historic or heritage sites or Native American religious sites within ½ mile? | ☑ | ☐ |
| 9. Are there important federal, state or local natural resources, including waterways, wildlife refuges, wetlands, or critical habitats of endangered or threatened species within ½ mile? | ☐ | ☑ |
| 10. Are there floodplains within ½ mile? | ☐ | ☑ |
| 11. Are there any institutional controls currently applicable to the property? | ☐ | ☑ |

12. Describe on attachment the proximity to real property currently used for residential use, and to urban, commercial, industrial, agricultural, and recreational areas.

13. Describe on attachment the potential vulnerability of groundwater to contamination that might migrate from the property, including proximity to wellhead protection and groundwater recharge areas.

14. Describe on attachment the geography and geology of the site.

## Statement of Certification and Signatures

(By requestor who is an individual)

I hereby affirm that information provided on this form and its attachments is true and complete to the best of my knowledge and belief. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to section 210.45 of the Penal Law.

Date: [redacted] Signature: [redacted] Print Name: [redacted]

(By an requestor other than an individual)

I hereby affirm that I am PRESIDENT (title) of BUFFALO DEVELOPMENT CORPORATION (entity); that I am authorized by that entity to make this application; that this application was prepared by me or under my supervision and direction; and that information provided on this form and its attachments is true and complete to the best of my knowledge and belief. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Date: 06/07/07 Signature: Mark D. Croce Print Name: MARK D. CROCE

**SUBMITTAL INFORMATION:**

**Three (3)** complete copies are required.

- **Two (2)** copies, one hard copy with original signatures and one electronic copy in Portable Document Format (PDF) on a CD or diskette, must be sent to:

  Chief, Site Control Section
  New York State Department of Environmental Conservation
  Division of Environmental Remediation
  625 Broadway
  Albany, NY 12233-7020

- **One (1)** hard copy must be sent to the DEC regional contact in the regional office covering the county in which the site is located. Please check our website for the address of our regional offices: http://www.dec.state.ny.us/website/der/index.html

**FOR DEPARTMENT USE ONLY**

**BCP SITE T&A CODE:**_____ **LEAD OFFICE:**_____

## LIST OF APPLICATION ATTACHMENTS

*NYSDEC Brownfield Cleanup Program Application*
*Buffalo Development Corp.*
*Buffalo Development Corp. Hotel Site*
*Buffalo, New York*

| Attachment No. | Description |
|---|---|
| 1 | Site Location Map and Site Plan |
| 2 | Tax Maps |
| 3 | Project Description and Schedule |
| 4 | Site Redevelopment Plan |
| 5 | Previous Investigations |
| 6 | Listing of Previous Site Owners |
| 7 | Listing of Previous Site Operators |
| 8 | Contact List Information |
| 9 | Document Repository Confirmation Letter |
| 10 | Environmental Factors and Historic Land Use Considerations |
| 11 | Nearby Land-Use Map |
| 12 | Groundwater Vulnerability Assessment |
| 13 | Description of Site Geography & Geology |

# ATTACHMENT 01

## SITE DESCRIPTION, SITE LOCATION MAP & SITE PLAN

**Attachment 01**

**Site Description**

**Buffalo Development Corp.**
**Hotel Site**
**Brownfield Cleanup Program Application**

## SITE DESCRIPTION

The subject property (Site) is currently developed with one apartment building and an asphalt covered surface parking lot comprised of four contiguous parcels of land totaling approximately 0.97 acres in the City of Buffalo, County of Erie, New York (see Figures 1-1 and 1-2).

The four parcels, which comprise the Site, are:

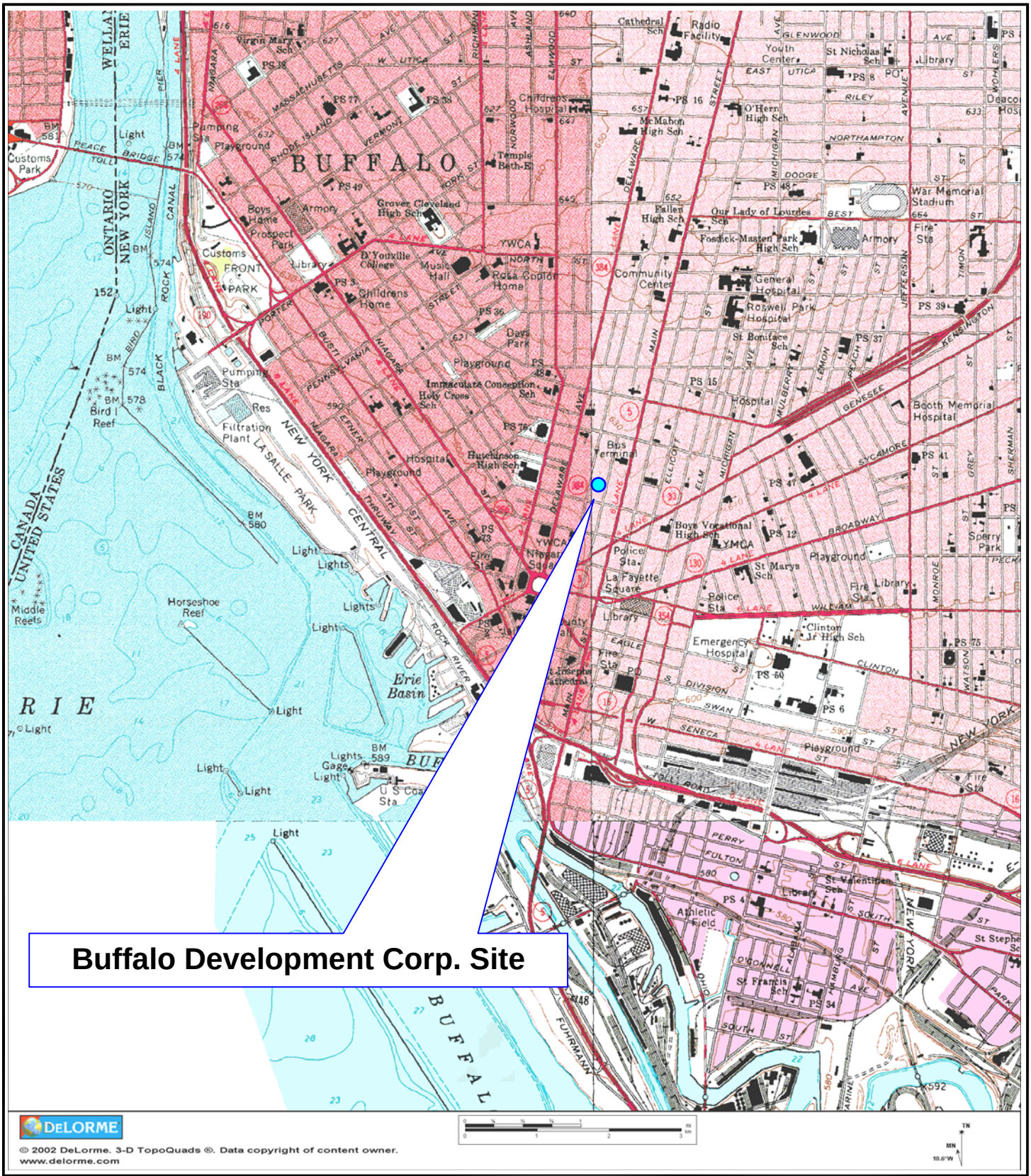
- 267 Franklin Street, Buffalo, New York (SBL No. 111.38-2-20.1, approx. 0.25-acres)
- 275-277 Franklin Street, Buffalo, New York (SBL No. 111.38-2-22, approx. 0.14-acres)
- 279 Franklin Street, Buffalo, New York (SBL No. 111.38-2-23, approx. 0.13-acres)
- 432 Pearl Street, Buffalo, New York (SBL No. 111.38-2-4.1, approx. 0.45-acres)

Parcel addresses listed above per Erie County GIS Maps website.

The Site is bound by a surface parking lot and restaurant to the north, Pearl Street to the east, Franklin Street to the west, and a commercial printing shop to the south. Additionally, Asbury Alley runs through the Site in an approximate north-south direction.

The Site neighbors include various commercial buildings or surface parking lots surrounding the Site. Shea's Performing Arts Center is located across Pearl Street to the east of the Site. There are no private residences adjacent to the Site (besides the on-Site apartment building). A surrounding land-use map is included in Attachment 11.

# FIGURE 1-1





BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

726 EXCHANGE STREET
SUITE 624
BUFFALO, NEW YORK 14210
(716) 856-0599


PROJECT NO.: 2099-002-100

DATE: JUNE 2006

DRAFTED BY: BCH

## SITE LOCATION AND VICINITY MAP

BROWNFIELD CLEANUP PROGRAM APPLICATION

BUFFALO DEVELOPMENT CORP. SITE
BUFFALO, NEW YORK

PREPARED FOR

BUFFALO DEVELOPMENT CORPORATION


BENCHMARK
ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
726 EXCHANGE STREET
SUITE 624
BUFFALO, NEW YORK 14210
(716) 856-0599

PROJECT NO.: 0099-003-100

DATE: MAY 2007

DRAFTED BY: BCH/NTM

# SITE LOCATION PLAN

BROWNFIELD CLEANUP PROGRAM APPLICATION

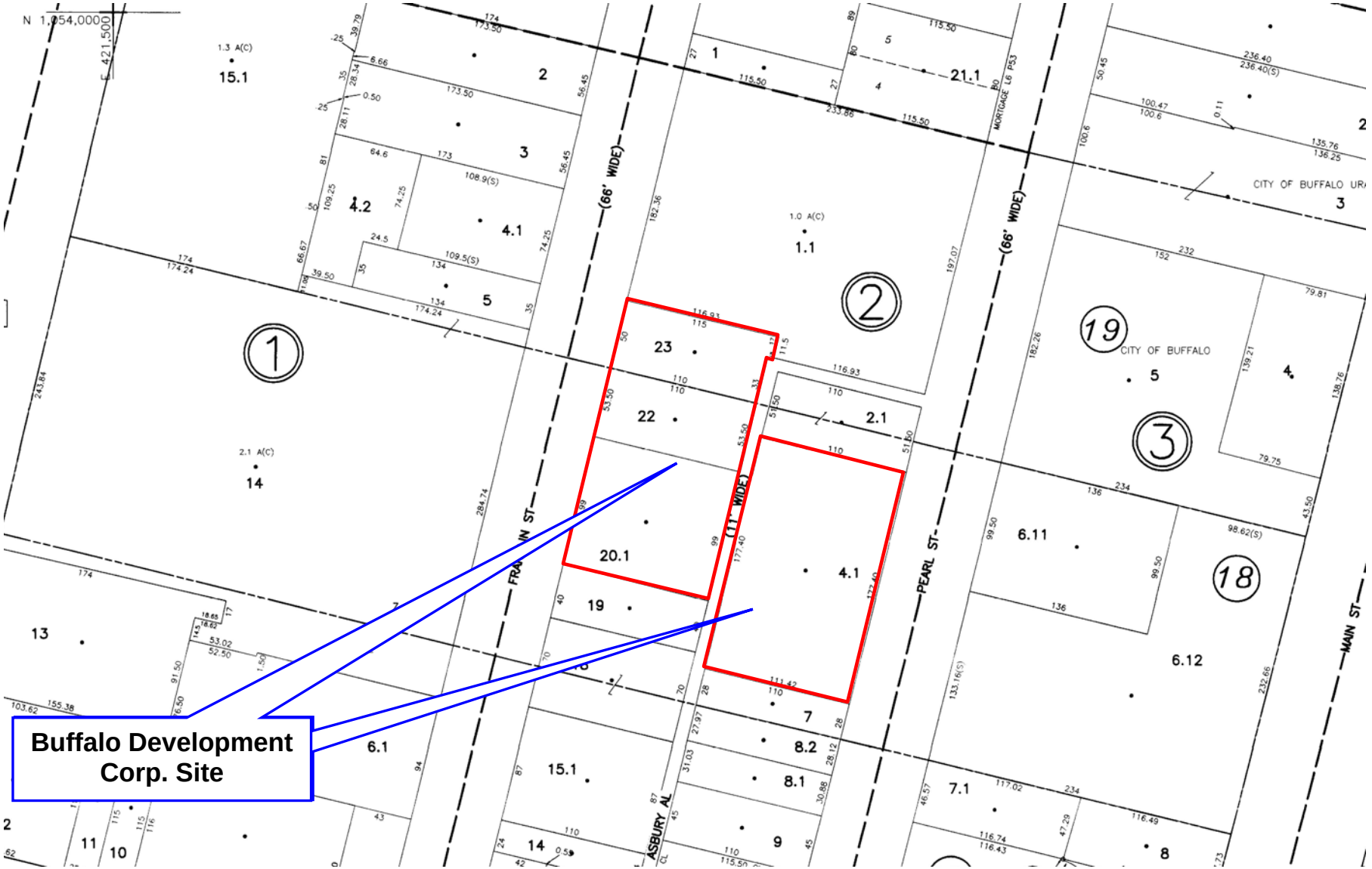
BUFFALO DEVELOPMENT CORP. SITE
BUFFALO, NEW YORK

PREPARED FOR
BUFFALO DEVELOPMENT CORPORATION

FIGURE 1-2

# ATTACHMENT 02

## TAX MAP




BENCHMARK
ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
726 EXCHANGE STREET
SUITE 624
BUFFALO, NEW YORK 14210
(716) 856-0599

PROJECT NO.: 0099-002-100

DATE: MAY 2007

DRAFTED BY: BCH/NTM

# TAX MAP

BROWNFIELD CLEANUP PROGRAM APPLICATION

BUFFALO DEVELOPMENT CORP. SITE
BUFFALO, NEW YORK

PREPARED FOR
BUFFALO DEVELOPMENT CORPORATION

FIGURE 2-1

# ATTACHMENT 03

## PROJECT DESCRIPTION & SCHEDULE

**Attachment 03**
**Project Description and Schedule**

**Buffalo Development Corp.**
**Hotel Site**
**Brownfield Cleanup Program Application**

## BACKGROUND

Buffalo Development Corporation (BDC) is the contract vendee to four contiguous parcels in the former film district of the City of Buffalo between Franklin and Pearl Streets and Chippewa and Tupper Streets, of which it has ownership in three parcels and a contract to purchase a fourth parcel within the Project Redevelopment Area.

The Project Redevelopment Area is comprised of four contiguous environmentally impaired parcels in the City of Buffalo, New York, encompassing approximately 0.97 acres consisting of 267 Franklin Street (~0.25 acres) 275-277 Franklin Street (~0.14 acres), 279 Franklin Street (~0.13 acres), and 432 Pearl Street (~0.45 acres).

There is one residential apartment building located on the 267 Franklin Street parcel. Otherwise, there are no structures on the Site. 275-277 Franklin Street had previously been a dry-cleaning operation before its prior owners abandoned operations and defaulted on their municipal tax obligations resulting in its sale in the City's In Rem tax foreclosure auction in 2004. The 1925 Sanborn Fire Insurance Map indicates 432 Pearl was located in between a radiator manufacturer and carpet cleaning company. The 275-277 Franklin Street, 279 Franklin Street and 432 Pearl Street parcels are now underutilized as surface parking lots. Franklin Street in the immediate area of the Project is mixed use commercial and residential with a concentration on entertainment. Pearl Street as it adjoins the site is predominantly commercial servicing the City's Theatre District.

The proposed redevelopment of the parcels by BDC will include the construction of a multi level 125-150 unit extended stay hotel tower with a health club and banquet facility which will serve the adjoining commercial and entertainment uses. The contemplated development would total approximately 150,000 square feet of commercial space. The contemplated structures compliment the City's Urban Renewal Plan for the area. Adjoining the hotel tower will be mixed use commercial space, underlying an elevated parking structure.

The proposed redevelopment project would turn underutilized urban property to productive reuse with a capital investment of approximately $30 million dollars to redevelop the site. The proposed site redevelopment will create approximately 100 short-term construction jobs and 150 long-term jobs.

**Attachment 03**
**Project Description and Schedule**

**Buffalo Development Corp.**
**Hotel Site**
**Brownfield Cleanup Program Application**

## KNOWN AND SUSPECTED ENVIRONMENTAL CONDITIONS

A Limited Environmental Investigation was performed at 275-277 Franklin Street by Nature's Way Environmental Consultants & Contractors, Inc. in September 2004. That investigation identified tetrachloroethene (PCE) in groundwater and saturated soil at the site.

In March 2006, Benchmark performed a Preliminary Site Investigation at 279 Franklin Street and 432 Pearl Street. The Preliminary Site Investigation was performed to assess soil/fill materials and soil vapor on-site and to ascertain if subsurface environmental conditions on these parcels were likely to impact Site redevelopment. The results of the investigation indicate that Site soils have been impacted by semi-volatile organic compounds (SVOCs), mercury, and lead. In addition, soil vapor samples collected from 279 Franklin Street and 432 Pearl Street contained one or more chlorinated volatile organic compounds VOCs that are linked to the impacted groundwater from the former dry cleaning operations at 275-277 Franklin.

A Remedial Investigation was completed by Benchmark in November 2006 through January 2007 (a copy of the draft RI report was submitted to the NYSDEC Region 9 office in May 2007). The results of that investigation indicated that the shallow groundwater (approximately eight to ten feet below ground surface) across the Project Redevelopment Area has been impacted by PCE. Shallow soil gas samples collected at the 432 Pearl Street parcel also indicated that soil gas is present at concentrations that may pose significant vapor intrusion concern in future on-site buildings.

The results of the previous investigations indicate that the Project Site's saturated soils, soil gases, and/or groundwater have been impacted by PCE, a chlorinated VOC, typically associated with dry cleaning operations. The environmental impacts will severely hinder reuse of the site without implementation of a remediation plan. As site redevelopment places foundations and slabs closer to the shallow groundwater the potential impacts of soil vapor are expected to be greater.

## SCHEDULE

A proposed Project Schedule is attached. During remediation, the property will be used for surface parking to the extent it can be safely separated from remediation activities. The interim use will help support the demand created by the surrounding theatre, entertainment,

and dining facilities. It is anticipated that the construction phase of the project will last approximately two years after approval of final site plans and permits by the City.

PROJECT SCHEDULE
BUFFALO DEVELOPMENT CORP.
275 FRANKLIN STREET SITE
BROWNFIELD CLEANUP PROGRAM APPLICATION

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

| ID | Task Name |
|---|---|
| 1 | Revised BCP Application |
| 2 | NYSDEC Review |
| 3 | Application Deemed Complete |
| 4 | Advertise BCP Appln, Distribute Fact Sheet |
| 5 | BC Agreement Issued |
| 6 | BC Agreement Reviewed/Executed |
| 7 | Draft RI Report Submitted |
| 8 | NYSDEC Report Review/Revisions |
| 9 | Prepare IRM Work Plan |
| 10 | Issue Fact Sheet |
| 11 | NYSDEC Review/Revisions |
| 12 | Public Comment Period |
| 13 | IRM Construction |
| 14 | IRM Monitoring |
| 15 | Draft AAR Submittal |
| 16 | NYSDEC Report Review/Revisions |
| 17 | Begin Site Construction (est. 2 years) |

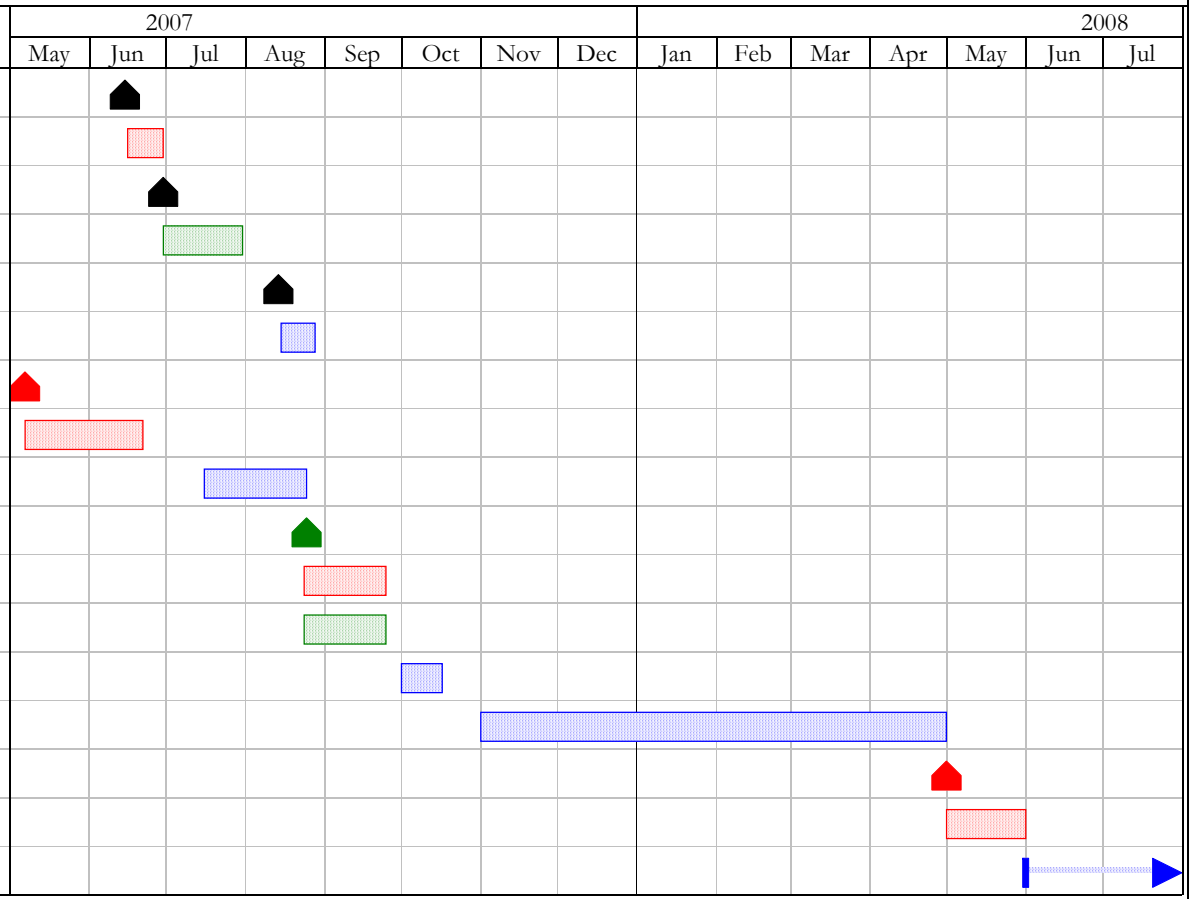



FIGURE 3-1

# ATTACHMENT 04

## SITE REDEVELOPMENT PLAN

**(TO BE DETERMINED)**

# ATTACHMENT 05

## PREVIOUS INVESTIGATIONS

# ATTACHMENT 05a

## LIMITED ENVIRONMENTAL INVESTIGATION (SEPTEMBER 2004)

CRITTENDEN
(716) 937-6527
SYRACUSE
(315) 635-9818

September 15, 2004

Mark Croce
c/o Robert Knoer, Esq.
Knoer Crawford & Bender
14 Lafayette Square, Suite 1700
Buffalo, New York 14203

NOV 15 2004

Re: Limited Environmental Investigation
275 Franklin Street
Buffalo, New York

Gentlemen:

As we have discussed, please find the following summary of findings with respect to sampling and analytical testing of soil and groundwater at the above referenced site. I am providing this abbreviated summary so that you may proceed with written notification of appropriate parties. A more detailed report will follow.

At your request Nature's Way Environmental has performed a limited Phase II type Environmental Assessment of the subject property focused on potential impacts related to its former use as a dry-cleaner.

This work involved sampling subsurface soils at from two indoor and four outdoor locations, as shown on the attached site map. Groundwater samples were obtained through temporary well screens installed in two of the borings. Field instrument screening and observation indicated the presence of volatile organic compounds in samples from two of the borings (B-3 and B-5). Soil samples from 10-12 foot depth interval at those borings as well as groundwater samples from both temporary wells were analyzed for chlorinated organics by EPA Method 8010.

Laboratory analytical reports have confirmed the presence of Tetrachloroethene in all samples analyzed. It was reported at concentrations in excess of applicable NYS Groundwater Quality Standards in both groundwater samples; at137,000 ppb in BMW-3 and 70,400 ppb in BMW-5, as compared to published standards ranging from 0.7 - 5 ppb. One of the soil samples was also reported to contain Tetrachloroethene at a level exceeding Recommended Soil Cleanup Objectives published NYSDEC TAGM #4046. Specifically, the sample from B-3 was reported to contain Tetrachloroethene at a concentration of 12,700 ppb in comparison with the 1.4 ppm (1,400 ppb) Recommended Soil Cleanup Objective. There were no other method target compounds identified in any of the samples. Copies of laboratory reports are attached.

CRITTENDEN
(716) 937-6527
SYRACUSE
(315) 635-9818



Please call if you should have any questions or require additional information.

Respectfully,

Gregory J. Weber
Sr. Project Manager

3553 CRITTENDEN ROAD • CRITTENDEN, NEW YORK 14038 • FAX (716) 937-9360
7035 VAN BUREN ROAD; BLDG 2 • SYRACUSE, NEW YORK 13209 • FAX (315) 635-9577

CRITTENDEN
(716) 937-6527
SYRACUSE
(315) 635-9818

Hole Number: B 1

DATE: 9/07/04 ELEVATION:

PROJECT: Subsurface Investigation at the Property Located at 275 Franklin Street, Buffalo, New York

PREPARED FOR: Knoer, Crawford & Bender

BORING LOCATION: See Map

| SN | 0/6 | 6/12 | 12/18 | 18/24 | N | OVM | LITH | DESCRIPTION AND CLASSIFICATION | REC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | 0.0 | | Moist, dark gray and gray, gravelly (SILTY-SAND) fill with 15 to 30% gravel, very fine to fine size sand | 1.8' | Sandy fill to 2.0 feet over water sorted and deposited sand with little silt to end of boring |
| 2 | | | | | | 0.0 | | 2.5 Moist, distinctly mottled, brown (SILTY-SAND) with very fine to fine size sand, little silt, thinly bedded | 1.8' | |
| 3 | | | | | | 0.0 | | | 2.0' | |
| 4 | | | | | | 0.0 | | 6.0 Wet, faintly mottled, brown (SILTY-SAND) with very fine to fine size sand, little silt, thinly bedded | 2.0' | |
| 5 | | | | | | 0.0 | | | 2.0' | |
| 6 | | | | | | 0.0 | | | 2.0' | |
| | | | | | | | | 12.0 Earthprobe Boring Completed at 12.0 feet | | |

LOGGED BY: Dale M. Gramza / Senior Geologist PAGE 1 of 1

CRITTENDEN
(716) 937-6527
SYRACUSE
(315) 635-9818

Hole Number: B 2

DATE: 9/07/04 ELEVATION:

PROJECT: Subsurface Investigation at the Property Located at 275 Franklin Street, Buffalo, New York

PREPARED FOR: Knoer, Crawford & Bender

BORING LOCATION: See Map

| SN | 0/6 | 6/12 | 12/18 | 18/24 | N | OVM | LITH | DESCRIPTION AND CLASSIFICATION | REC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | 0.0 | | Asphalt 0.3<br>Moist, dark gray to black, gravelly (SAND) fill with 20 to 40% gravel, cinders and red brick fragments | 1.4' | Asphalt to 0.3 foot over sandy fill with some gravel, cinders and bricks to 4.5 feet over water sorted and deposited sand with little silt to end of boring |
| 2 | | | | | | 3.0 | | | 1.5' | |
| 3 | | | | | | 11.0 | | 4.5 | 2.0' | |
| | | | | | | | | Moist becoming wet below 8.5 feet (SILTY-SAND) with very fine to fine size sand, little silt, thinly bedded | | |
| 4 | | | | | | 0.0 | | | 2.0' | |
| 5 | | | | | | 0.0 | | | 2.0' | |
| 6 | | | | | | 0.0 | | | 2.0' | |
| | | | | | | | | 12.0<br>Earthprobe Boring Completed at 12.0 feet | | |

LOGGED BY: Dale M. Gramza / Senior Geologist PAGE 1 of 1

CRITTENDEN
(716) 937-6527
SYRACUSE
(315) 635-9818

Hole Number: BMW 3

DATE: 9/07/04 ELEVATION:

PROJECT: Subsurface Investigation at the Property Located at 275 Franklin Street, Buffalo, New York

PREPARED FOR: Knoer, Crawford & Bender

BORING LOCATION: See Map

| SN | 0/6 | 6/12 | 12/18 | 18/24 | N | OVM | LITH | DESCRIPTION AND CLASSIFICATION | REC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | 0.0 | | Moist, dark brown, gravelly (SILTY-SAND) fill with 5 to 15% gravel, very fine to medium size sand, little silt | 1.7' | Sandy fill with little gravel and silt to 1.0 feet over sandy fill with trace gravel to 2.0 feet over sandy fill with brick to 4.0 feet over water sorted and deposited sand to end of boring |
| | | | | | | | | 1.0 | | |
| 2 | | | | | | 0.0 | | Moist, brown (SAND) with 3 to 5% gravel, very fine to fine size sand, trace silt | 1.8' | |
| | | | | | | | | 2.0 | | |
| | | | | | | | | Moist, light brown (SAND) fill iwth brick cobbles and fragments | | |
| | | | | | | | | 4.0 | | |
| 3 | | | | | | 0.0 | | Moist, light brown (SAND) with very fine size sand, trace silt, thinly bedded | 1.4' | |
| | | | | | | | | 6.0 | | |
| 4 | | | | | | 0.0 | | Extremely moist to wet below 8.0 feet, brown (SAND) with very fine to fine size sand, little silt, thinly bedded | 1.6' | |
| 5 | | | | | | 0.0 | | | 1.7' | |
| 6 | | | | | | 80.0 | | | 1.8' | |
| | | | | | | | | 12.0 | | |
| | | | | | | | | Earthprobe Boring Completed at 12.0 feet | | |

LOGGED BY: Dale M. Gramza / Senior Geologist PAGE 1 of 1

CRITTENDEN
(716) 937-6527
SYRACUSE
(315) 635-9818

Hole Number: B 4

DATE: 9/07/04 ELEVATION:

PROJECT: Subsurface Investigation at the Property Located at 275 Franklin Street, Buffalo, New York

PREPARED FOR: Knoer, Crawford & Bender

BORING LOCATION: See Map

| SN | 0/6 | 6/12 | 12/18 | 18/24 | N | OVM | LITH | DESCRIPTION AND CLASSIFICATION | REC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | 0.0 | | Black and dark brown (SILTY-SAND) fill with 5 to 15% gravel and occasional brick fragments | 1.4' | Sandy fill with some gravel and brick to 2.0 feet over apparent water sorted and deposited sand with trace silt to 8.0 feet over water sorted and deposited sand with trace gravel and little silt to end of boring |
| | | | | | | | | 2.0 | | |
| 2 | | | | | | 0.0 | | Moist, light brown (SILTY-SAND) with very fine to fine size sand, trace silt, thinly bedded | 1.6' | |
| 3 | | | | | | 0.0 | | | 1.8' | |
| | | | | | | | | 6.0 | | |
| 4 | | | | | | 0.0 | | Extremely moist to wet below 8.0 feet, brown (SILTY-SAND) with 3 to 5% gravel, very fine to fine size sand, little silt, thinly bedded | 1.5' | |
| 5 | | | | | | 0.0 | | | 1.7' | |
| 6 | | | | | | 0.0 | | | 1.7' | |
| | | | | | | | | 12.0 | | |
| | | | | | | | | Earthprobe Boring Completed at 12.0 feet | | |

LOGGED BY: Dale M. Gramza / Senior Geologist PAGE 1 of 1

3553 CRITTENDEN ROAD • CRITTENDEN, NEW YORK 14038 • FAX (716) 937-9360
7035 VAN BUREN ROAD; BLDG 2 • SYRACUSE, NEW YORK 13209 • FAX (315) 635-9577

CRITTENDEN
(716) 937-6527
SYRACUSE
(315) 635-9818

Hole Number: BMW 5

DATE: 9/07/04 ELEVATION:

PROJECT: Subsurface Investigation at the Property Located at
275 Franklin Street, Buffalo, New York

PREPARED FOR: Knoer, Crawford & Bender

BORING LOCATION: See Map

| SN | 0/6 | 6/12 | 12/18 | 18/24 | N | OVM | LITH | DESCRIPTION AND CLASSIFICATION | REC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | 8.0 | | Asphalt pavement 0.2<br>Moist, grayish brown and brown, gravelly (SILTY-SAND) fill with 20 to 40% gravel, and red brick fragments | 1.4' | Asphalt pavement to 0.2 foot over sandy fill with some gravel and bricks to 4.5 feet over water sorted and deposited sand with litlte silt to end of boring |
| 2 | | | | | | 0.0 | | | 1.6' | |
| 3 | | | | | | 0.0 | | 4.5 | 1.6' | |
| 4 | | | | | | 0.0 | | Moist becoming extremely moist below 7.5 feet (SILTY-SAND) with very fine size sand, little silt | 1.7' | |
| 5 | | | | | | 0.0 | | | 1.8' | |
| 6 | | | | | | 82.0 | | 12.0<br>Earthprobe Boring Completed at 12.0 feet | 1.7' | |

LOGGED BY: Dale M. Gramza / Senior Geologist PAGE 1 of 1

3553 CRITTENDEN ROAD • CRITTENDEN, NEW YORK 14038 • FAX (716) 937-9360
7035 VAN BUREN ROAD; BLDG 2 • SYRACUSE, NEW YORK 13209 • FAX (315) 635-9577

CRITTENDEN
(716) 937-6527
SYRACUSE
(315) 635-9818

Hole Number: B 6

DATE: 9/07/04 ELEVATION:

PROJECT: Subsurface Investigation at the Property Located at 275 Franklin Street, Buffalo, New York

PREPARED FOR: Knoer, Crawford & Bender

BORING LOCATION: See Map

| SN | 0/6 | 6/12 | 12/18 | 18/24 | N | OVM | LITH | DESCRIPTION AND CLASSIFICATION | REC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | 0.0 | | Moist, dark brown (SANDY-SILT) fill with little to some very fine size sand, | 1.5' | Coarse silty fill to 1.5 fet over water sorted and deposited sand with little silt to end of boring |
| | | | | | | | | 1.5 | | |
| 2 | | | | | | 0.0 | | Moist, brown (SILTY-SAND) with very fine to fine size sand, weakly thinly bedded | 1.5' | |
| 3 | | | | | | 0.0 | | | 2.0' | |
| 4 | | | | | | 0.0 | | | 2.0' | |
| | | | | | | | | 8.0 | | |
| 5 | | | | | | 0.0 | | Wet, brown (SILTY-SAND) with very fine to fine size sand, little silt, thinly bedded | 2.0' | |
| 6 | | | | | | 0.0 | | | 2.0' | |
| | | | | | | | | 12.0 | | |
| | | | | | | | | Earthprobe Boring Completed at 12.0 feet | | |

0 5 10 15 20

LOGGED BY: Dale M. Gramza / Senior Geologist PAGE 1 of 1

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

04-249

# Volatile Analysis Report for Soils/Solids/Sludges

**Client:** Nature's Way Environmental

| | | | |
|---|---|---|---|
| **Client Job Site:** | 275 Franklin St. | **Lab Project Number:** | 04-2622 |
| | | **Lab Sample Number:** | 8914 |
| **Client Job Number:** | N/A | | |
| **Field Location:** | B-3, 10'-12' | **Date Sampled:** | 09/08/2004 |
| **Field ID Number:** | N/A | **Date Received:** | 09/10/2004 |
| **Sample Type:** | Soil | **Date Analyzed:** | 09/14/2004 |

| Halocarbons | Results in ug / Kg | Halocarbons | Results in ug / Kg |
|---|---|---|---|
| Bromodichloromethane | ND< 140 | trans-1,2-Dichloroethene | ND< 140 |
| Bromomethane | ND< 140 | 1,2-Dichloropropane | ND< 140 |
| Bromoform | ND< 140 | cis-1,3-Dichloropropene | ND< 140 |
| Carbon Tetrachloride | ND< 140 | trans-1,3-Dichloropropene | ND< 140 |
| Chloroethane | ND< 140 | Methylene chloride | ND< 349 |
| Chloromethane | ND< 140 | 1,1,2,2-Tetrachloroethane | ND< 140 |
| 2-Chloroethyl vinyl Ether | ND< 140 | Tetrachloroethene | 12,700 |
| Chloroform | ND< 140 | 1,1,1-Trichloroethane | ND< 140 |
| Dibromochloromethane | ND< 140 | 1,1,2-Trichloroethane | ND< 140 |
| 1,1-Dichloroethane | ND< 140 | Trichloroethene | ND< 140 |
| 1,2-Dichloroethane | ND< 140 | Trichlorofluoromethane | ND< 140 |
| 1,1-Dichloroethene | ND< 140 | Vinyl chloride | ND< 140 |
| Chlorobenzene | ND< 140 | 1,3-Dichlorobenzene | ND< 140 |
| 1,2-Dichlorobenzene | ND< 140 | 1,4-Dichlorobenzene | ND< 140 |

ELAP Number 10958 Method: EPA 8010 Data File: 24238.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger, Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

# Volatile Analysis Report for Soils/Solids/Sludges

**Client:** Nature's Way Environmental

**Client Job Site:** 275 Franklin St.
**Client Job Number:** N/A
**Field Location:** B-5, 10'-12'
**Field ID Number:** N/A
**Sample Type:** Soil

**Lab Project Number:** 04-2622
**Lab Sample Number:** 8915

**Date Sampled:** 09/08/2004
**Date Received:** 09/10/2004
**Date Analyzed:** 09/14/2004

| Halocarbons | Results in ug / Kg | Halocarbons | Results in ug / Kg |
|---|---|---|---|
| Bromodichloromethane | ND< 27.0 | trans-1,2-Dichloroethene | ND< 27.0 |
| Bromomethane | ND< 27.0 | 1,2-Dichloropropane | ND< 27.0 |
| Bromoform | ND< 27.0 | cis-1,3-Dichloropropene | ND< 27.0 |
| Carbon Tetrachloride | ND< 27.0 | trans-1,3-Dichloropropene | ND< 27.0 |
| Chloroethane | ND< 27.0 | Methylene chloride | ND< 67.5 |
| Chloromethane | ND< 27.0 | 1,1,2,2-Tetrachloroethane | ND< 27.0 |
| 2-Chloroethyl vinyl Ether | ND< 27.0 | Tetrachloroethene | 671 |
| Chloroform | ND< 27.0 | 1,1,1-Trichloroethane | ND< 27.0 |
| Dibromochloromethane | ND< 27.0 | 1,1,2-Trichloroethane | ND< 27.0 |
| 1,1-Dichloroethane | ND< 27.0 | Trichloroethene | ND< 27.0 |
| 1,2-Dichloroethane | ND< 27.0 | Trichlorofluoromethane | ND< 27.0 |
| 1,1-Dichloroethene | ND< 27.0 | Vinyl chloride | ND< 27.0 |
| Chlorobenzene | ND< 27.0 | 1,3-Dichlorobenzene | ND< 27.0 |
| 1,2-Dichlorobenzene | ND< 27.0 | 1,4-Dichlorobenzene | ND< 27.0 |

ELAP Number 10958 Method: EPA 8010 Data File: 24244.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

# Volatile Analysis Report for Non-potable Water

**Client:** Nature's Way Environmental

**Client Job Site:** 275 Franklin St.
**Client Job Number:** N/A
**Field Location:** BMW-5
**Field ID Number:** N/A
**Sample Type:** Water

**Lab Project Number:** 04-2622
**Lab Sample Number:** 8916

**Date Sampled:** 09/08/2004
**Date Received:** 09/10/2004
**Date Analyzed:** 09/14/2004

| Halocarbons | Results in ug / L | Halocarbons | Results in ug / L |
|---|---|---|---|
| Bromodichloromethane | ND< 2,000 | trans-1,2-Dichloroethene | ND< 2,000 |
| Bromomethane | ND< 2,000 | 1,2-Dichloropropane | ND< 2,000 |
| Bromoform | ND< 2,000 | cis-1,3-Dichloropropene | ND< 2,000 |
| Carbon Tetrachloride | ND< 2,000 | trans-1,3-Dichloropropene | ND< 2,000 |
| Chloroethane | ND< 2,000 | Methylene chloride | ND< 5,000 |
| Chloromethane | ND< 2,000 | 1,1,2,2-Tetrachloroethane | ND< 2,000 |
| 2-Chloroethyl vinyl Ether | ND< 2,000 | Tetrachloroethene | 70,400 |
| Chloroform | ND< 2,000 | 1,1,1-Trichloroethane | ND< 2,000 |
| Dibromochloromethane | ND< 2,000 | 1,1,2-Trichloroethane | ND< 2,000 |
| 1,1-Dichloroethane | ND< 2,000 | Trichloroethene | ND< 2,000 |
| 1,2-Dichloroethane | ND< 2,000 | Trichlorofluoromethane | ND< 2,000 |
| 1,1-Dichloroethene | ND< 2,000 | Vinyl chloride | ND< 2,000 |
| Chlorobenzene | ND< 2,000 | 1,3-Dichlorobenzene | ND< 2,000 |
| 1,2-Dichlorobenzene | ND< 2,000 | 1,4-Dichlorobenzene | ND< 2,000 |

ELAP Number 10958 Method: EPA 8010 Data File: 24246.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

# PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

## CHAIN OF CUSTODY

REPORT TO:

COMPANY:
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:
COMMENTS:

INVOICE TO:

COMPANY:
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #:
CLIENT PROJECT #:

TURNAROUND TIME: (WORKING DAYS)

STD OTHER
☐ 1 ☐ 2 ☐ 3 ☐ 5 ☐

PROJECT NAME/SITE NAME:

REQUESTED ANALYSIS

| | DATE | TIME | COMPOSITE | GRAB | SAMPLE LOCATION/FIELD ID | MATRIX | NUMBER CONTAINERS | | | | | | | | | | REMARKS | PARADIGM LAB SAMPLE NUMBER | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | |

**LAB USE ONLY**

SAMPLE CONDITION: Check box if acceptable or note deviation:

CONTAINER TYPE: ☐ PRESERVATIONS: ☐ HOLDING TIME: ☐ TEMPERATURE: ☐

Sampled By: Date/Time:

Relinquished By: Date/Time:

Received By: Date/Time:

Relinquished By: Date/Time:

Received By: Date/Time:

Received @ Lab By: Date/Time:

Total Cost:

P.I.F.

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

04-244

# Volatile Analysis Report for Non-potable Water

**Client:** Nature's Way Environmental

**Client Job Site:** 275 Franklin St.
**Client Job Number:** N/A
**Field Location:** BMW-3
**Field ID Number:** N/A
**Sample Type:** Water

**Lab Project Number:** 04-2623
**Lab Sample Number:** 8917

**Date Sampled:** 09/09/2004
**Date Received:** 09/10/2004
**Date Analyzed:** 09/14/2004

| Halocarbons | Results in ug / L | Halocarbons | Results in ug / L |
|---|---|---|---|
| Bromodichloromethane | ND< 2,000 | trans-1,2-Dichloroethene | ND< 2,000 |
| Bromomethane | ND< 2,000 | 1,2-Dichloropropane | ND< 2,000 |
| Bromoform | ND< 2,000 | cis-1,3-Dichloropropene | ND< 2,000 |
| Carbon Tetrachloride | ND< 2,000 | trans-1,3-Dichloropropene | ND< 2,000 |
| Chloroethane | ND< 2,000 | Methylene chloride | ND< 5,000 |
| Chloromethane | ND< 2,000 | 1,1,2,2-Tetrachloroethane | ND< 2,000 |
| 2-Chloroethyl vinyl Ether | ND< 2,000 | Tetrachloroethene | 137,000 |
| Chloroform | ND< 2,000 | 1,1,1-Trichloroethane | ND< 2,000 |
| Dibromochloromethane | ND< 2,000 | 1,1,2-Trichloroethane | ND< 2,000 |
| 1,1-Dichloroethane | ND< 2,000 | Trichloroethene | ND< 2,000 |
| 1,2-Dichloroethane | ND< 2,000 | Trichlorofluoromethane | ND< 2,000 |
| 1,1-Dichloroethene | ND< 2,000 | Vinyl chloride | ND< 2,000 |
| Chlorobenzene | ND< 2,000 | 1,3-Dichlorobenzene | ND< 2,000 |
| 1,2-Dichlorobenzene | ND< 2,000 | 1,4-Dichlorobenzene | ND< 2,000 |

ELAP Number 10958 Method: EPA 8010 Data File: 24247.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

# PARADIGM
## ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

# CHAIN OF CUSTODY

**REPORT TO**

COMPANY: NWEHC
ADDRESS: 3553 Crittenden Rd.
CITY: Crittenden STATE: NY ZIP: 14038
PHONE: (716)937-6527 FAX: 937-9360
ATTN: R. Savage/G. Weber
COMMENTS: please fax report

**INVOICE TO**

COMPANY: Same
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 04-2623
CLIENT PROJECT #:
TURNAROUND TIME: (WORKING DAYS) Rush - ASAP
STD
OTHER
☐ 1 ☐ 2 ☐ 3 ☐ 5 ☐

PROJECT NAME/SITE NAME: 275 Franklin St.

**REQUESTED ANALYSIS**

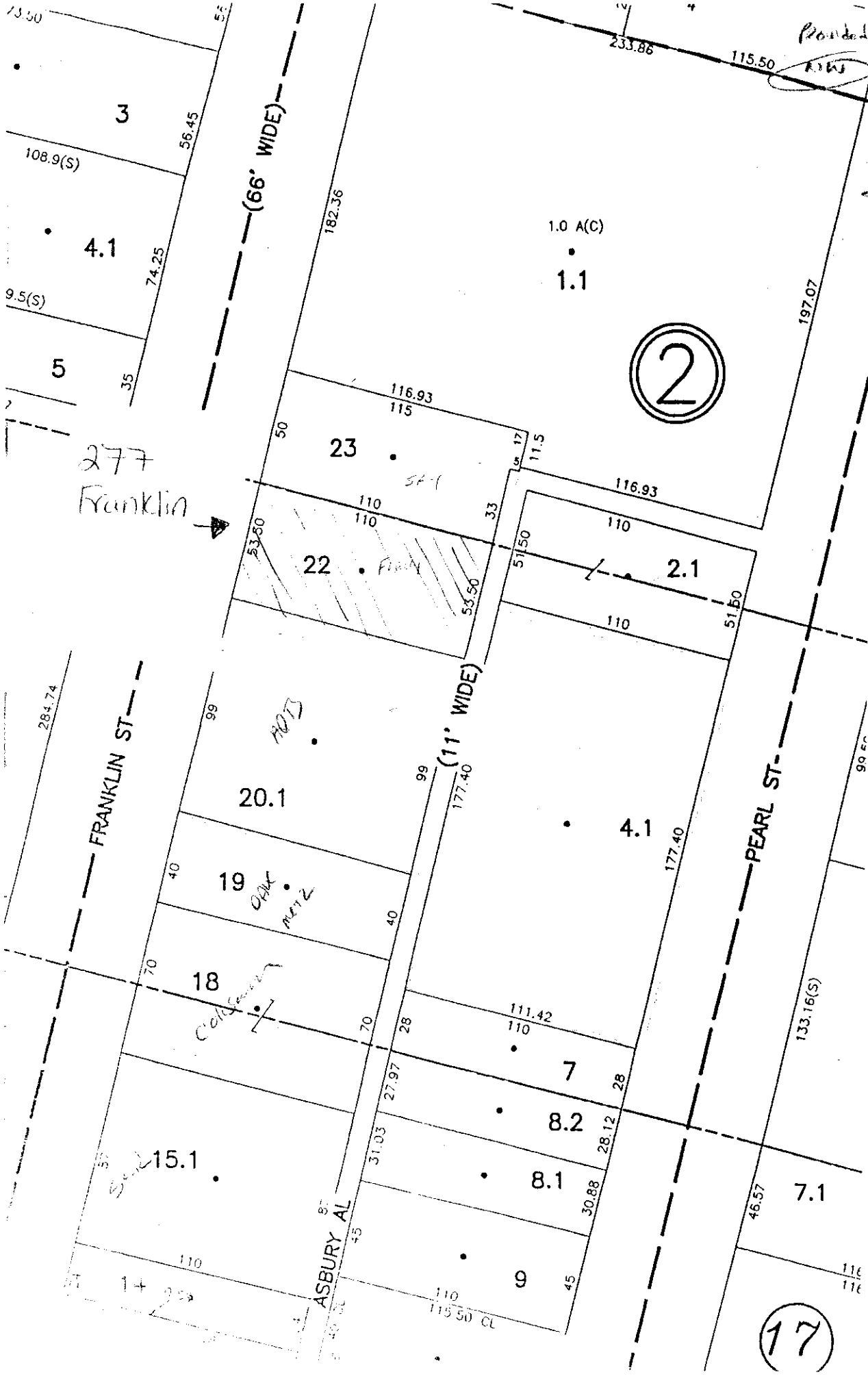
| | DATE | TIME | COMPOSITE | GRAB | SAMPLE LOCATION/FIELD ID | MATRIX | NUMBER CONTAINERS | EPA 8010 | REMARKS | PARADIGM LAB SAMPLE NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 9/9/04 | | | X | BMW-3 | Aqu. | 2 | X | | 8917 |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |

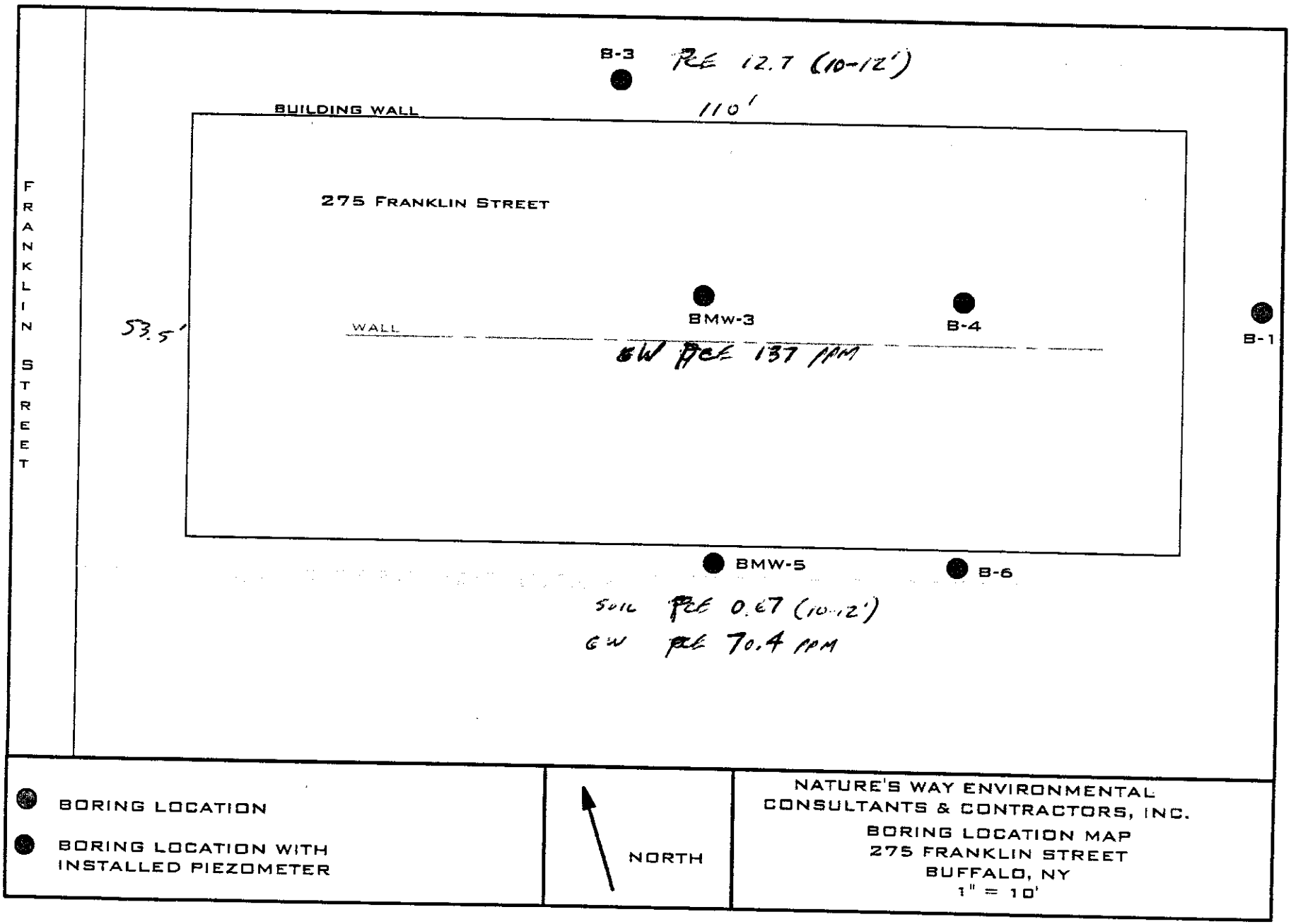
**LAB USE ONLY**

SAMPLE CONDITION: Check box if acceptable or note deviation:
CONTAINER TYPE: ☑ PRESERVATIONS: ☑ VOA<2 HOLDING TIME: ☑ TEMPERATURE: ☐ 12

Sampled By: James Davey Date/Time:
Relinquished By: Date/Time:
Received By: Date/Time:
Relinquished By: Date/Time:
Received By: John Huff Date/Time: 9/9/04 4:30PM
Received @ Lab By: Kelly Crandall Date/Time: 9/10/04 946

Total Cost:
P.I.F.


Revised to
8/10/04
277 Franklin
(66' WIDE)
1.0 A(C)
1.1
2
277
Franklin
23
22
2.1
(11' WIDE)
FRANKLIN ST
PEARL ST
20.1
19
18
15.1
4.1
7
8.2
8.1
9
7.1
3
4.1
5
ASBURY AL
17


B-3
PCE 12.7 (10-12')
BUILDING WALL
110'
FRANKLIN STREET
275 FRANKLIN STREET
53.5'
WALL
BMW-3
B-4
B-1
GW PCE 137 PPM
BMW-5
B-6
SOIL PCE 0.67 (10-12')
GW PCE 70.4 PPM
BORING LOCATION
BORING LOCATION WITH INSTALLED PIEZOMETER
NORTH
NATURE'S WAY ENVIRONMENTAL CONSULTANTS & CONTRACTORS, INC.
BORING LOCATION MAP
275 FRANKLIN STREET
BUFFALO, NY
1" = 10'

# ATTACHMENT 05b

## PRELIMINARY SITE INVESTIGATION (MARCH 2006)*
## &
## ADDENDUM TO PRELIMINARY SITE INVESTIGATION (JUNE 2006)

* Relative to the Preliminary Site Investigation report, it should be noted that certain addresses were incorrectly identified. Therefore, any reference to 277 Franklin Street in that report should correctly be identified as 279 Franklin Street and any reference to 275 Franklin Street in that report should correctly be identified as 275/277 Franklin Street.

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

March 10, 2006

Robert E. Knoer, Esq.
Knoer, Crawford, and Bender, LLP
14 Lafayette Square
Suite 1700
Buffalo, N.Y. 14203

Re: Preliminary Site Investigation
275 & 277 Franklin Street and 470 Pearl Street parcels

Dear Mr. Knoer:

We have prepared this letter report summarizing the results of the Preliminary Site Investigation at 277 Franklin Street and 470 Pearl Street parcels in accordance with the Preliminary Investigation Work Plan (December 2005). The work was performed to ascertain if subsurface environmental conditions on these parcels were likely to impact redevelopment and thereby provide the New York State Department of Environmental Conservation (NYSDEC) a basis to determine eligibility for participation in the NYSDEC Brownfield Cleanup Program (BCP). A summary of findings is presented below. In addition, a summary of the data obtained from the Limited Environmental Investigation previously performed by Nature's Way on the 275 Franklin Street parcel (September 2004) is also included for completeness.

**Soil Boring Sampling Results**

The boring program, conducted on January 18, 2006, consisted of advancing direct-push (Geoprobe®) boreholes as shown in Figure 1. All direct-push boreholes were advanced using 1.5-inch diameter macro-samplers. The 4-foot sample cores were retrieved from the boring locations in clear PVC sleeves to allow for field characterization of the subsurface lithology and collection of soil samples.

Soil/fill samples were retrieved from each boring and field screened for headspace VOC content utilizing a hand-held photoionization detector (PID). The PID is capable of detecting the presence of certain volatile organic contaminants. PID scans of the soil borings resulted in no readings above background concentrations.

Direct grab soil samples were collected from the upper fill zone of each boring (see Figure 1 for approximate sample location). Each grab sample was analyzed for Target Compound List (TCL) semi-volatile organic compounds-base neutral fraction (SVOCs) via USEPA Method 8270, TCL polychlorinated biphenyls (PCBs) via

USEPA Method 8082, chromium, arsenic, mercury, and lead via USEPA Method 6010 (7471 for Mercury).

The soil analytical results are summarized in Tables 1 through 3. Each compound that was analyzed is listed on the table, with its associated result, to provide a complete data summary. Recommended Soil Cleanup Objectives as published in NYSDEC Technical Assistance and Guidance Memorandum (TAGM) HWR-94-4046 are also presented for comparative purposes.

As indicated on Table 1, the soil borings indicate concentrations of various semi-volatile organic compounds in the composite soil sample. In particular, several polynuclear aromatic hydrocarbons (PAHs) were detected above the NYSDEC Recommended Soil Cleanup Objectives (RSCOs). No PCBs were found above laboratory detection level (see Table 2).

Inorganic metals concentrations (see Table 3) exceeded RSCO for mercury and lead in one or more soil samples at each of the parcels.

**Soil Vapor Sampling Results**

The soil vapor sampling program, conducted on January 20, 2006, consisted of collecting and analyzing three samples from beneath asphalt paving (see Figure 1 for approximately locations) in the vicinity of the former dry cleaning operation. Summa Canisters fitted with an 8-hour regulator were utilized.

Soil vapor samples were analyzed for Target Compound List volatile organic compounds (VOCs) in accordance with USEPA Method TO-15. The purpose of this sampling effort was to determine if subsurface VOCs from impacted soil or groundwater was present in sufficient concentration to likely require mitigation in the context of planned redevelopment. Results are presented in Table 4

The New York State Department of Health has published a draft document entitled "Guidance for Evaluating Soil Vapor Intrusion in the State of New York." This document is presently guiding NYSDOH and NYSDEC decisions concerning the need for subslab vapor mitigation at sites undergoing investigation, cleanup and monitoring under NY State remedial programs (e.g., Brownfield Cleanup Program sites, Inactive Hazardous Waste Site Remediation Program sites, etc.). The guidance presents two soil vapor/indoor air matrices to assist in interpreting subslab and ambient air data (i.e., Matrix 1 and Matrix 2). To date, three chemicals have been assigned to these two matrices: trichloroethene (TCE) is assigned to Matrix 1, while tetrachloroethene (also known as perchloroethene, or PCE) and 1,1,1-trichloroethane (1,1,1-TCA) are assigned to Matrix 2.

As indicated in Table 4, a comparison of TCE levels with Matrix 1 indicate no further action is recommended for the 470 Pearl Street parcel, however, sample results of 70 ug/m$^3$ for the 277 Franklin St. parcel indicates that mitigation/monitoring is recommended as per NYSDOH guidance.

Comparison of the soil vapor data for PCE to the Matrix 2 values indicates that mitigation is recommended for the 277 Franklin St. parcel with a value of 14,000 ug/m$^3$. When comparing 1,1,1-TCA, mitigation/monitoring is recommended for the 277 Franklin St. parcel, with a value of 71 ug/m$^3$.

**275 Franklin Street Parcel Soil and Groundwater Sampling Results**

Nature's Way performed a limited Phase II environmental assessment on the 275 Franklin Street parcel in September of 2004. The sampling included both sub-surface soil sampling and groundwater sampling and analysis by EPA Method 8010. Volatile organic compounds were found in both soil samples and both groundwater samples (see Table 5). Tetrachloroethene (PCE) was detected above the NYSDEC Recommended Soil Cleanup Objectives (RSCOs) in one of the soil samples, and exceeded NYSDEC Groundwater Quality Standards in both locations.

**Conclusion**

Soil sampling results at all three parcels exhibited semi-volatile and inorganic contamination in excess of the NYSDEC recommended soil cleanup objectives at one or more shallow subsurface locations. Soil vapor sampling results at 277 Franklin Street indicate the presence of one or more chlorinated solvents at concentrations that would require mitigation or monitoring in accordance with NYSDOH guidance.

As such, environmental conditions at all three subject parcels are likely to impact redevelopment activity and therefore should be deemed eligible for participation in the NYSDEC Brownfields Cleanup Program.

Sincerely,
Benchmark Environmental Engineering & Science, PLLC

Paul H. Werthman, P.E.
Principal Engineer

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

# TABLE 1
## SUMMARY OF SOIL ANALYTICAL RESULTS - SVOCs
## 470 Pearl Street, LLC
## BUFFALO, NEW YORK

| Location | 277 Franklin St. | | 470 Pearl Street | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **SB-1** | **SB-2** | **SB-1** | **SB-2** | **SB-3** | **SB-4** | **SB-5** | **Rec. Soil Cleanup Objective [1] (mg/kg)** |
| ***TCL Semi-Volatile Organic Compounds (SVOCs) -mg/kg*** | | | | | | | | |
| Acenaphthene | <7.8 | <7.1 | 3.2 J | 1.5 J | <4.1 | 0.30 J | 0.095 J | 50 |
| Acenaphthylene | <7.8 | <7.1 | 1.6 J | <7.9 | 0.73 J | 0.14 J | 0.019 J | 41 |
| Anthracene | <7.8 | <7.1 | 8.8 | 3.2 J | 0.62 J | 0.62 J | 0.16 J | 50 |
| Benzo(a)anthracene | <7.8 | 0.44 J | 22 | 6.5 J | 2.8 J | 1.5 J | 0.73 | 0.224 |
| Benzo(b)fluoranthene | <7.8 | 0.57 J | 26 | 7.6 J | 5.1 | 1.9 | 1.3 | 1.1 |
| Benzo(k)fluoranthene | <7.8 | <7.1 | 9.1 | 2.1 J | 1.6 J | 0.71 J | 0.44 | 1.1 |
| Benzo(ghi)perylene | <7.8 | 0.47 J | 8.0 J | 2.4 J | 2.5 J | 0.65 J | 0.5 | 50 |
| Benzo(a)pyrene | <7.8 | <7.1 | 20 | 5.7 J | 3.7 J | 1.4 J | 0.9 | 0.061 |
| Benzyl alcohol | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | - |
| Bis (2-chloroethoxy) methane | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | - |
| Bis (2-chloroethyl) ether | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | - |
| 2,2'-Oxybis (1-Chloropropane | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | - |
| Bis (2-ethylhexyl) phthalate | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | 0.098 J | 0.063 J | 50 |
| 4-Bromophenyl phenyl ether | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | - |
| Butyl benzyl phthalate | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | 50 |
| 4-Chloroaniline | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | 0.22 |
| 2-Chloronaphthalene | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | 0.24 |
| 4-Chlorophenyl phenyl ether | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | - |
| Chrysene | <7.8 | <7.1 | 20 | 6.6 J | 3.2 J | 1.4 J | 0.9 | 0.4 |
| Dibenzo (a,h) anthracene | <7.8 | <7.1 | 2.4 J | 0.74 J | 0.54 J | 0.18 J | 0.13 J | 0.014 |
| Dibenzofuran | <7.8 | <7.1 | 1.8 J | 1.0 J | <4.1 | 0.23 J | 0.088 J | 6.2 |
| Di-n-butyl phthalate | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | 8.1 |
| 1,2-Dichlorobenzene | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | - |
| 1,3-Dichlorobenzene | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | - |
| 1,4-Dichlorobenzene | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | - |
| 3,3'-Dichlorobenzidine | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | - |
| Diethyl phthalate | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | 7.1 |
| Dimethyl phthalate | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | 2 |
| 2,4-Dinitrotoluene | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | - |

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**TABLE 1**
**SUMMARY OF SOIL ANALYTICAL RESULTS - SVOCs**
**470 Pearl Street, LLC**
**BUFFALO, NEW YORK**

| Location | 277 Franklin St. | | 470 Pearl Street | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **SB-1** | **SB-2** | **SB-1** | **SB-2** | **SB-3** | **SB-4** | **SB-5** | **Rec. Soil Cleanup Objective [1] (mg/kg)** |
| ***TCL Semi-Volatile Organic Compounds (SVOCs) -mg/kg*** | | | | | | | | |
| 2,6-Dinitrotoluene | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | 1 |
| Di-n-octyl phthalate | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | 50 |
| Fluoranthene | 0.63 J | 0.55 J | 49 | 14 | 5.9 | 3.4 | 2.0 | 50 |
| Fluorene | <7.8 | <7.1 | 3.4 J | 1.5 J | <4.1 | 0.25 J | 0.08 J | 50 |
| Hexachlorobenzene | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | 0.41 |
| Hexachlorobutadiene | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | - |
| Hexachlorocyclopentadiene | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | - |
| Hexachloroethane | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | - |
| Indeno (1,2,3-cd) pyrene | <7.8 | <7.1 | 7.4 J | 2.0 J | 2.1 J | 0.57 J | 0.44 | 3.2 |
| Isophorone | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | 4.4 |
| 2-Methylnaphthalene | <7.8 | <7.1 | 0.89 J | 0.72 J | <4.1 | 0.15 J | 0.097 J | 36 |
| Naphthalene | <7.8 | <7.1 | 1.1 J | 1.1 J | <4.1 | 0.19 J | 0.067 J | 13 |
| 2-Nitroaniline | <7.8 | <34 | <42 | <38 | <20 | <7.7 | <1.8 | 0.43 |
| 3-Nitroaniline | <7.8 | <34 | <42 | <38 | <20 | <7.7 | <1.8 | 0.5 |
| 4-Nitroaniline | <38 | <34 | <42 | <38 | <20 | <7.7 | <1.8 | - |
| Nitrobenzene | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | 0.2 |
| N-Nitrosodiphenylamine | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | - |
| N-Nitroso-Di-n-propylamine | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | - |
| Phenanthrene | <7.8 | <7.1 | 35 | 14 | 2.8 J | 2.8 | 1.2 | 50 |
| Pyrene | 0.53 J | 0.58 J | 38 | 12 | 5.3 | 2.5 | 1.8 | 50 |
| 1,2,4-Trichlorobenzene | <7.8 | <7.1 | <8.6 | <7.9 | <4.1 | <1.6 | <0.36 | - |

Notes:

1. NYSDEC Technical and Administrative Guidance Memorandum (TAGM #4046), issued January 1994.
2. Highlighted values indicate exceedances of the NYSDEC Recommended Soil Cleanup Objectives.
3. J = estimated concentration.
4. Analytical results were reported in ug/kg and converted to mg/kg for comparison to TAGM Values.

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**TABLE 2**
**SUMMARY OF SOIL ANALYTICAL RESULTS**
**PCBs**
**470 Pearl Street, LLC**
**BUFFALO, NEW YORK**

| Location | 277 Franklin St. | | 470 Pearl Street | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **SB-1** | **SB-2** | **SB-1** | **SB-2** | **SB-3** | **SB-4** | **SB-5** | **Rec. Soil Cleanup Objective [1] (mg/kg)** |
| ***PCB's (mg/kg)*** | | | | | | | | |
| Aroclor 1016 | <0.02 | <0.018 | <0.022 | <0.02 | <0.021 | <0.02 | <0.018 | note 2 |
| Aroclor 1221 | <0.02 | <0.018 | <0.022 | <0.02 | <0.021 | <0.02 | <0.018 | note 2 |
| Aroclor 1232 | <0.02 | <0.018 | <0.022 | <0.02 | <0.021 | <0.02 | <0.018 | note 2 |
| Aroclor 1242 | <0.02 | <0.018 | <0.022 | <0.02 | <0.021 | <0.02 | <0.018 | note 2 |
| Aroclor 1248 | <0.02 | <0.018 | <0.022 | <0.02 | <0.021 | <0.02 | <0.018 | note 2 |
| Aroclor 1254 | <0.02 | <0.018 | <0.022 | <0.02 | <0.021 | <0.02 | <0.018 | note 2 |
| Aroclor 1260 | <0.02 | <0.018 | <0.022 | <0.02 | <0.021 | <0.02 | <0.018 | note 2 |

Notes:

1. NYSDEC Technical and Administrative Guidance Memorandum (TAGM #4046), issued January 1994.
2. Total PCB Cleanup Objective = 1 mg/kg surface, 10 mg/kg subsurface.
3. Analytical results were reported in ug/kg and converted to mg/kg for comparison to soil cleanup objective values.

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# TABLE 3
# SUMMARY OF SOIL ANALYTICAL RESULTS
# INORGANICS
# 470 Pearl Street, LLC
# BUFFALO, NEW YORK

| Location | 277 Franklin St. | | 470 Pearl Street | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Parameter** | **SB-1** | **SB-2** | **SB-1** | **SB-2** | **SB-3** | **SB-4** | **SB-5** | **Rec. Soil Cleanup Objective [1] (mg/kg)** |
| ***Inorganics (mg/kg)*** | | | | | | | | |
| Arsenic | 3.5 | 5.1 | 10.3 | 10.1 | 4.3 | 4.8 | 3.8 | 12 |
| Mercury | 0.18 | 0.33 | 0.93 | 0.16 | 0.12 | 0.81 | 0.41 | 0.2 |
| Chromium | 6.3 | 11.1 | 12.7 | 6.4 | 9.0 | 6.0 | 5.5 | 40 |
| Lead | 87.8 | 358 | 938 | 313 | 115 | 663 | 262 | 500 [3] |

Notes:

1. NYSDEC Technical and Administrative Guidance Memorandum (TAGM #4046), issued January 1994.
2. Highlighted values indicate exceedances of the NYSDEC Recommended Soil Cleanup Objectives.
3. Urban typical range 200-500 mg/kg.

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# TABLE 4
## SUMMARY OF SOIL VAPOR ANALYTICAL RESULTS

## 470 Pearl Street, LLC
## BUFFALO, NEW YORK

| Location | 277 Franklin St. | 470 Pearl Street | |
|---|---|---|---|
| **Parameter** | **Air** | **Air -1** | **Air -2** |
| ***Soil Vapor Concentration (ug/m$^3$)*** | | | |
| Trichloroethene (TCE) | 70 | 1.1 | 1.1 |
| Tetrachloroethene (PCE) | 14000 | 2.4 | 1.4 |
| 1,1,1-trichloroethane (1,1,1-TCA) | 71 | 1.1 | 1.1 |

Notes:

- Highlight indicates Monitoring or Mitigation required under the Recommended Action Level as per NYSDOH Indoor Air Matrix 1 and 2 Guidances
- Highlight indicates Mitigation required under the Recommeded Action Level as per NYSDOH Indoor Air Matrix 1 and 2 Guidances

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# TABLE 5

## SUMMARY OF SOIL AND GROUNDWATER ANALYTICAL RESULTS

### September 2004 Investigation

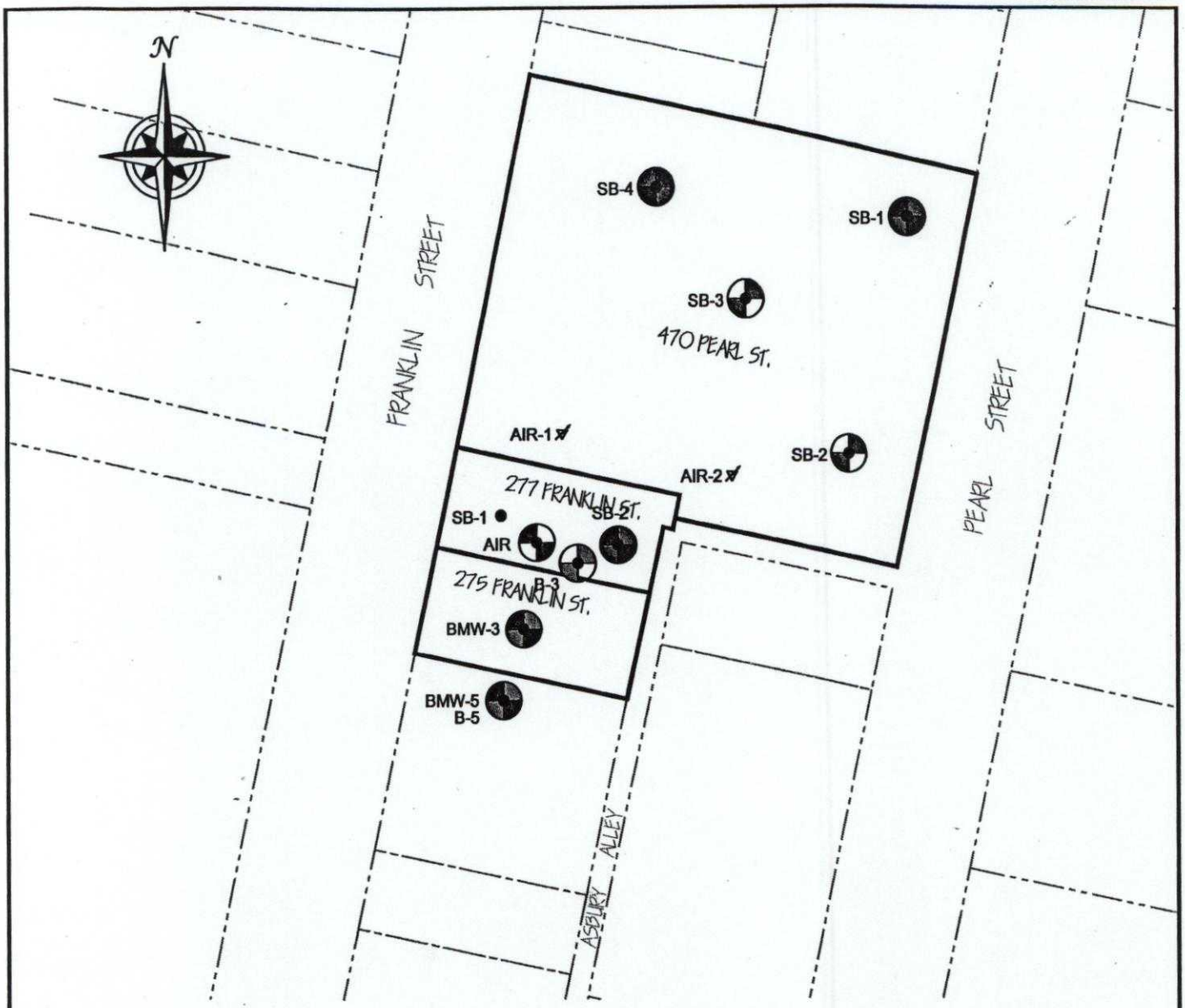
### 470 Pearl Street, LLC
### BUFFALO, NEW YORK

| Location | 275 Franklin Street | | | |
|---|---|---|---|---|
| **Media** | **Soil (ug/Kg)** | | **Groundwater (ug/L)** | |
| **Parameter** | **B-3** | **B-5** | **BMW-3** | **BMW-5** |
| ***Concentration*** | | | | |
| Tetrachloroethene (PCE) | 12,700 | 671 | 137,000 | 70,400 |

Notes:

- Highlight indicated soil exceedance of NYSDEC Technical and Administrative Guidance Memorandum (TAGM #4046), issued January 1994.
- Highlight indicated groundwater exceedance of NYSDEC Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (TOGS 1.1.1) Class GA used for comparison

**FIGURE 1**




LEGEND:

| | |
|---|---|
| ——— | PROPERTY BOUNDARY |
| SB-1 ● | GEOPROBE SOIL BORING LOCATION |
| AIR-1 ⊠ | SUBSLAB VAPOR SAMPLE LOCATION |
| SB-4 | EXCEEDS RSCO FOR SVOCs AND INORGANICS |
| SB-4 | EXCEEDS RSCO FOR SVOCs |
| AIR | SUBSLAB VAPOR MITIGATION/MONITORING REQD. |
| B-3 | EXCEEDS RSCO FOR VOCs |
| BMW-3 | EXCEEDS GROUNDWATER STD. FOR VOCs |

80' 0' 80' 160'

SCALE: 1 INCH = 80 FEET
SCALE IN FEET
(approximate)

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726 EXCHANGE STREET
SUITE 624
BUFFALO, NEW YORK 14210
(716) 856-0599

PROJECT NO.: 2099-002-100
DATE: DECEMBER 2005
DRAFTED BY: BCH

# OFFSITE SAMPLE LOCATIONS

470 PEARL STREET, LLC SITE
BUFFALO, NEW YORK

PREPARED FOR
470 PEARL STREET, LLC

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

June 26, 2006

Robert E. Knoer, Esq.
Knoer, Crawford and Bender, LLP
14 Lafayette Square
Suite 1700
Buffalo, N.Y. 14203

Re: Addendum to March 2006 Preliminary Site Investigation
432 Pearl Street, Buffalo, New York Property

Dear Mr. Knoer:

We have prepared this Addendum to the March 2006 Preliminary Site Investigation to include the investigative results for the property located at 432 Pearl Street, Buffalo, New York. The investigation of this property was conducted concurrently with the investigation of the 275/277 & 279 Franklin Street properties in accordance with the Preliminary Investigation Work Plan (December 2005). The work was performed to ascertain if subsurface environmental conditions on these parcels were likely to impact redevelopment and thereby provide the New York State Department of Environmental Conservation (NYSDEC) a basis to determine eligibility for participation in the NYSDEC Brownfield Cleanup Program (BCP). A summary of the findings for the 432 Pearl Street property is presented below.

**Soil Boring Sampling Results**

The boring program, conducted on January 18, 2006, consisted of advancing three direct-push (Geoprobe®) boreholes as shown in Figure A-1. All direct-push boreholes were advanced using 1.5-inch diameter macro-samplers. The 4-foot sample cores were retrieved from the boring locations in clear PVC sleeves to allow for field characterization of the subsurface lithology and collection of soil samples.

Soil/fill samples were retrieved from each boring and field screened for headspace VOC content using a hand-held photoionization detector (PID). The PID is capable of detecting the presence of certain volatile organic contaminants. PID scans of the soil borings resulted in no readings above background concentrations.

Direct grab soil samples were collected from the upper fill zone of each boring (see Figure A-1 for approximate sample location). Each grab sample was analyzed for Target Compound List (TCL) semi-volatile organic compounds (SVOCs) – base neutral fraction via USEPA Method 8270, TCL polychlorinated biphenyls (PCBs) via



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phone: (716) 856-0599 | fax: (716) 856-0583

USEPA Method 8082, chromium, arsenic, mercury, and lead via USEPA Method 6010 (7471 for mercury).

The soil analytical results are summarized in Table A-1. Each compound that was analyzed is listed on the table, with its associated result, to provide a complete data summary. Recommended Soil Cleanup Objectives (RSCOs) as published in NYSDEC Technical Assistance and Guidance Memorandum (TAGM) HWR-94-4046 are also presented for comparative purposes.

As indicated on Table A-1, the soil borings indicate concentrations of various SVOCs in the composite soil sample. In particular, several polynuclear aromatic hydrocarbons (PAHs) were detected above the NYSDEC RSCOs. No PCBs were found above laboratory detection level. Inorganic metals concentrations exceeded RSCO for mercury and lead in the sample collected from soil boring SB-2.

**Soil Vapor Sampling Results**

The soil vapor sampling program, conducted on January 20, 2006, consisted of collecting and analyzing one sample from beneath asphalt pavement (refer to Figure A-1 for approximately location). A Summa Canister fitted with an 8-hour regulator was used for sample collection.

The soil vapor sample was analyzed for TCL volatile organic compounds (VOCs) in accordance with USEPA Method TO-15. The purpose of this sampling effort was to determine if subsurface VOCs from impacted soil or groundwater was present in sufficient concentration to likely require mitigation in the context of planned redevelopment.

The New York State Department of Health has published a draft document entitled, "Guidance for Evaluating Soil Vapor Intrusion in the State of New York." This document is presently guiding NYSDOH and NYSDEC decisions concerning the need for subslab vapor mitigation at sites undergoing investigation, cleanup and monitoring under NY State remedial programs (e.g., Brownfield Cleanup Program, Inactive Hazardous Waste Site Remediation Program, etc.). The guidance presents two soil vapor/indoor air matrices to assist in interpreting subslab and ambient air data (i.e., Matrix 1 and Matrix 2). To date, three chemicals have been assigned to these two matrices: trichloroethene (TCE) is assigned to Matrix 1, while tetrachloroethene (also known as perchloroethene, or PCE) and 1,1,1-trichloroethane (1,1,1-TCA) are assigned to Matrix 2.

Of the three chemicals of concern, only PCE was detected at a concentration of 140 $\mu g/m^3$. Comparison of the soil vapor data for PCE to the Matrix 2 value (100

$\mu g/m^3$) indicates that mitigation/monitoring for this compound is recommended for the 432 Pearl Street property .

**Conclusion**

Soil sampling results exhibit SVOC and inorganic contamination in excess of the NYSDEC RSCOs at one or more shallow subsurface locations. Soil vapor sampling results indicate the presence of PCE at a concentration that would require mitigation/monitoring in accordance with NYSDOH guidance.

As such, environmental conditions at the 432 Pearl Street parcel is likely to impact future redevelopment activities and therefore, the parcel should be eligible for participation in the NYSDEC Brownfields Cleanup Program.

Sincerely,
Benchmark Environmental Engineering & Science, PLLC

Patrick T. Martin, P.E.
Project Manager

c: File: 0099-003-100

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

**TABLE A-1**
**SUMMARY OF SOIL ANALYTICAL RESULTS**
**432 PEARL STREET PROPERTY**

**BUFFALO DEVELOPMENT CORP.**
**BUFFALO, NEW YORK**

| Parameter | SB-1 | SB-2 | SB-3 | Rec. Soil Cleanup Objective [1] (mg/kg) |
|---|---|---|---|---|
| *TCL Semi-Volatile Organic Compounds (mg/kg)* | | | | |
| Acenaphthene | <75 | 1.4 J | <3.9 | 50 |
| Acenaphthylene | <75 | 0.48 J | <3.9 | 41 |
| Anthracene | <75 | 2.7 J | 0.34 J | 50 |
| Benzo(a)anthracene | 7.2 J | 7.7 J | 0.80 J | 0.224 |
| Benzo(b)fluoranthene | 10.0 J | 12.0 | 0.93 J | 1.1 |
| Benzo(k)fluoranthene | 4.4 J | 2.6 J | 0.35 J | 1.1 |
| Benzo(ghi)perylene | 4.7 J | 4.2 J | 0.38 J | 50 |
| Benzo(a)pyrene | 7.2 J | 8.3 | 0.74 J | 0.061 |
| Benzyl alcohol | <75 | <8.2 | <3.9 | - |
| Bis (2-chloroethoxy) methane | <75 | <8.2 | <3.9 | - |
| Bis (2-chloroethyl) ether | <75 | <8.2 | <3.9 | - |
| 2,2'-Oxybis (1-Chloropropane) | <75 | <8.2 | <3.9 | - |
| Bis (2-ethylhexyl) phthalate | <75 | <8.2 | <3.9 | 50 |
| 4-Bromophenyl phenyl ether | <75 | <8.2 | <3.9 | - |
| Butyl benzyl phthalate | <75 | <8.2 | <3.9 | 50 |
| 4-Chloroaniline | <75 | <8.2 | <3.9 | 0.22 |
| 2-Chloronaphthalene | <75 | <8.2 | <3.9 | 0.24 |
| 4-Chlorophenyl phenyl ether | <75 | <8.2 | <3.9 | - |
| Chrysene | 7.8 J | 8.4 | 0.71 J | 0.4 |
| Dibenzo (a,h) anthracene | <75 | 1.3 J | <3.9 | 0.014 |
| Dibenzofuran | <75 | 1.1 J | <3.9 | 6.2 |
| Di-n-butyl phthalate | <75 | <8.2 | <3.9 | 8.1 |
| 1,2-Dichlorobenzene | <75 | <8.2 | <3.9 | - |
| 1,3-Dichlorobenzene | <75 | <8.2 | <3.9 | - |
| 1,4-Dichlorobenzene | <75 | <8.2 | <3.9 | - |
| 3,3'-Dichlorobenzidine | <75 | <8.2 | <3.9 | - |
| Diethyl phthalate | <75 | <8.2 | <3.9 | 7.1 |
| Dimethyl phthalate | <75 | <8.2 | <3.9 | 2 |
| 2,4-Dinitrotoluene | <75 | <8.2 | <3.9 | - |
| 2,6-Dinitrotoluene | <75 | <8.2 | <3.9 | 1 |
| Di-n-octyl phthalate | <75 | <8.2 | <3.9 | 50 |
| Fluoranthene | 18.0 J | 20.0 | 1.9 J | 50 |
| Fluorene | <75 | 1.3 J | <3.9 | 50 |
| Hexachlorobenzene | <75 | <8.2 | <3.9 | 0.41 |
| Hexachlorobutadiene | <75 | <8.2 | <3.9 | - |
| Hexachlorocyclopentadiene | <75 | <8.2 | <3.9 | - |
| Hexachloroethane | <75 | <8.2 | <3.9 | - |
| Indeno (1,2,3-cd) pyrene | 4.3 J | 3.8 J | 0.36 J | 3.2 |
| Isophorone | <75 | <8.2 | <3.9 | 4.4 |

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**TABLE A-1**
**SUMMARY OF SOIL ANALYTICAL RESULTS**
**432 PEARL STREET PROPERTY**

**BUFFALO DEVELOPMENT CORP.**
**BUFFALO, NEW YORK**

| Parameter | SB-1 | SB-2 | SB-3 | Rec. Soil Cleanup Objective [1] (mg/kg) |
|---|---|---|---|---|
| ***TCL Semi-Volatile Organic Compounds (mg/kg)*** | | | | |
| 2-Methylnaphthalene | <75 | 0.66 J | <3.9 | 36 |
| Naphthalene | <75 | 1.3 J | <3.9 | 13 |
| 2-Nitroaniline | <360 | <40 | <19 | 0.43 |
| 3-Nitroaniline | <360 | <40 | <19 | 0.5 |
| 4-Nitroaniline | <360 | <40 | <19 | - |
| Nitrobenzene | <75 | <8.2 | <3.9 | 0.2 |
| N-Nitrosodiphenylamine | <75 | <8.2 | <3.9 | - |
| N-Nitroso-Di-n-propylamine | <75 | <8.2 | <3.9 | - |
| Phenanthrene | 12.0 J | 17.0 | 1.5 J | 50 |
| Pyrene | 17.0 J | 21.0 | 1.7 J | 50 |
| 1,2,4-Trichlorobenzene | <75 | <8.2 | <3.9 | - |
| ***PCBs (mg/kg)*** | | | | |
| Aroclor 1016 | <0.018 | <0.021 | <0.020 | note 2 |
| Aroclor 1221 | <0.018 | <0.021 | <0.020 | note 2 |
| Aroclor 1232 | <0.018 | <0.021 | <0.020 | note 2 |
| Aroclor 1242 | <0.018 | <0.021 | <0.020 | note 2 |
| Aroclor 1248 | <0.018 | <0.021 | <0.020 | note 2 |
| Aroclor 1254 | <0.018 | <0.021 | <0.020 | note 2 |
| Aroclor 1260 | <0.018 | <0.021 | <0.020 | note 2 |
| ***Inorganic Compounds (mg/kg)*** | | | | |
| Arsenic | 5.3 | 9.0 | 4.3 | 12 |
| Mercury | 0.089 | 1.1 | 0.11 | 0.2 |
| Chromium | 6.6 | 11.4 | 8.2 | 40 |
| Lead | 103 | 507 | 78.1 | 500 [3] |

Notes:

1. NYSDEC Technical and Administrative Guidance Memorandum (TAGM #4046), issued January 1994.
2. Total PCB Cleanup Objective = 1 mg/kg surface, 10 mg/kg subsurface.
3. Urban typical range 200-500 mg/kg.

Highlighted values indicate exceedances of the NYSDEC Recommended Soil Cleanup Objectives.
J = estimated concentration.
Analytical results were reported in ug/kg and converted to mg/kg for comparison to TAGM Values.

# FIGURE A-1

G:\CAD\Benchmark\470 Pearl Street, LLC (Buffalo Development Corp)\BCP Attachment Figures\Figure A-1; Sample Locations.dwg


LEGEND:

- PROPERTY BOUNDARY
- SB-1 GEOPROBE SOIL BORING LOCATION
- SB-4 EXCEEDS RSCO FOR SVOCs AND INORGANICS
- SB-4 EXCEEDS RSCO FOR SVOCs
- AIR SUBSLAB VAPOR MITIGATION/MONITORING REQD.

80' 0' 80' 160'

SCALE: 1 INCH = 80 FEET
SCALE IN FEET
(approximate)


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DATE: JUNE 2006
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## SAMPLE LOCATIONS

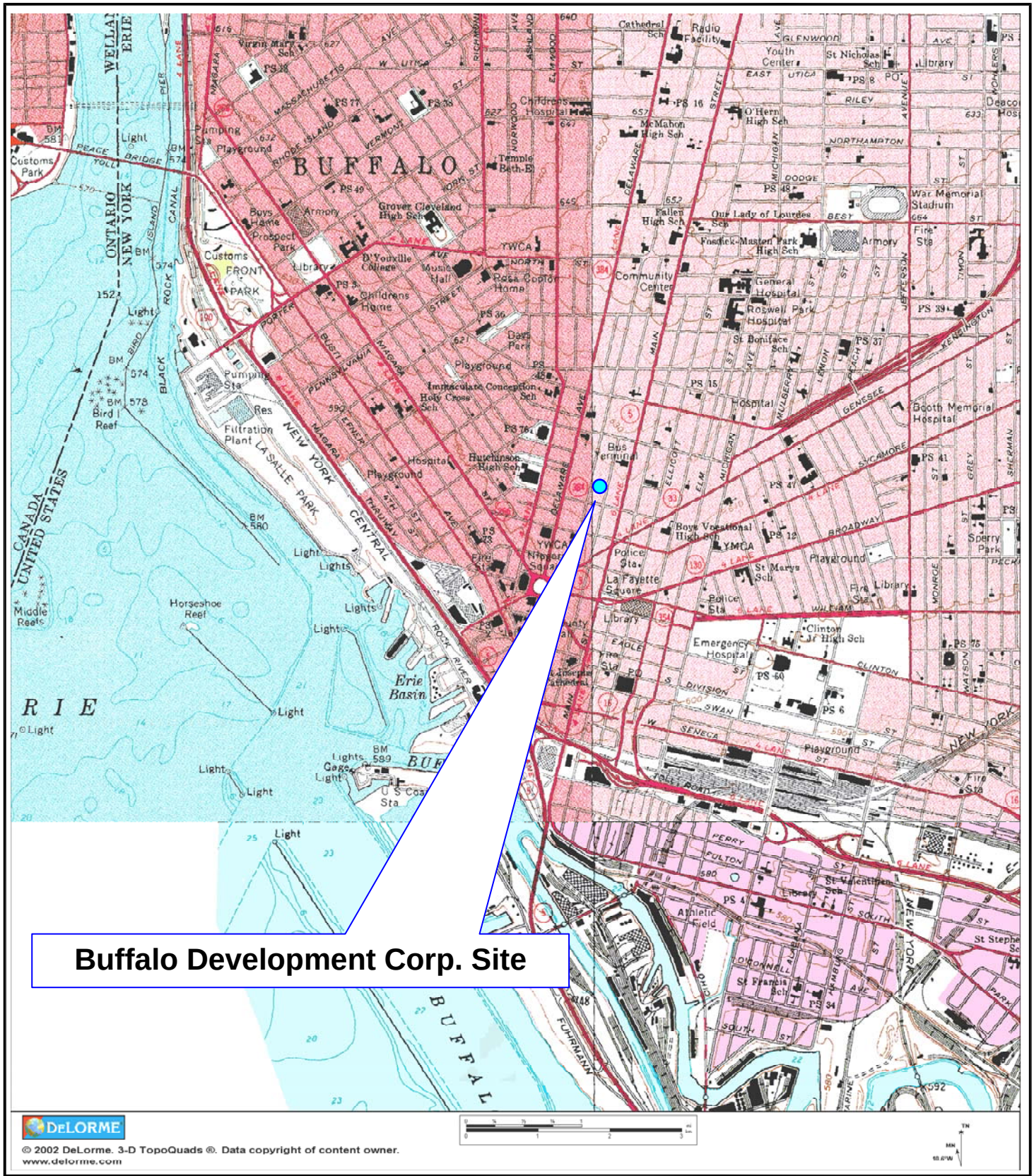
BUFFALO DEVELOPMENT CORP.
BUFFALO, NEW YORK

PREPARED FOR
432 PEARL STREET PROPERTY

# ATTACHMENT 05c

## REMEDIAL INVESTIGATION TABLES AND FIGURES (MAY 2007)

# FIGURE 1





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## SITE LOCATION AND VICINITY MAP

REMEDIAL INVESTIGATION REPORT

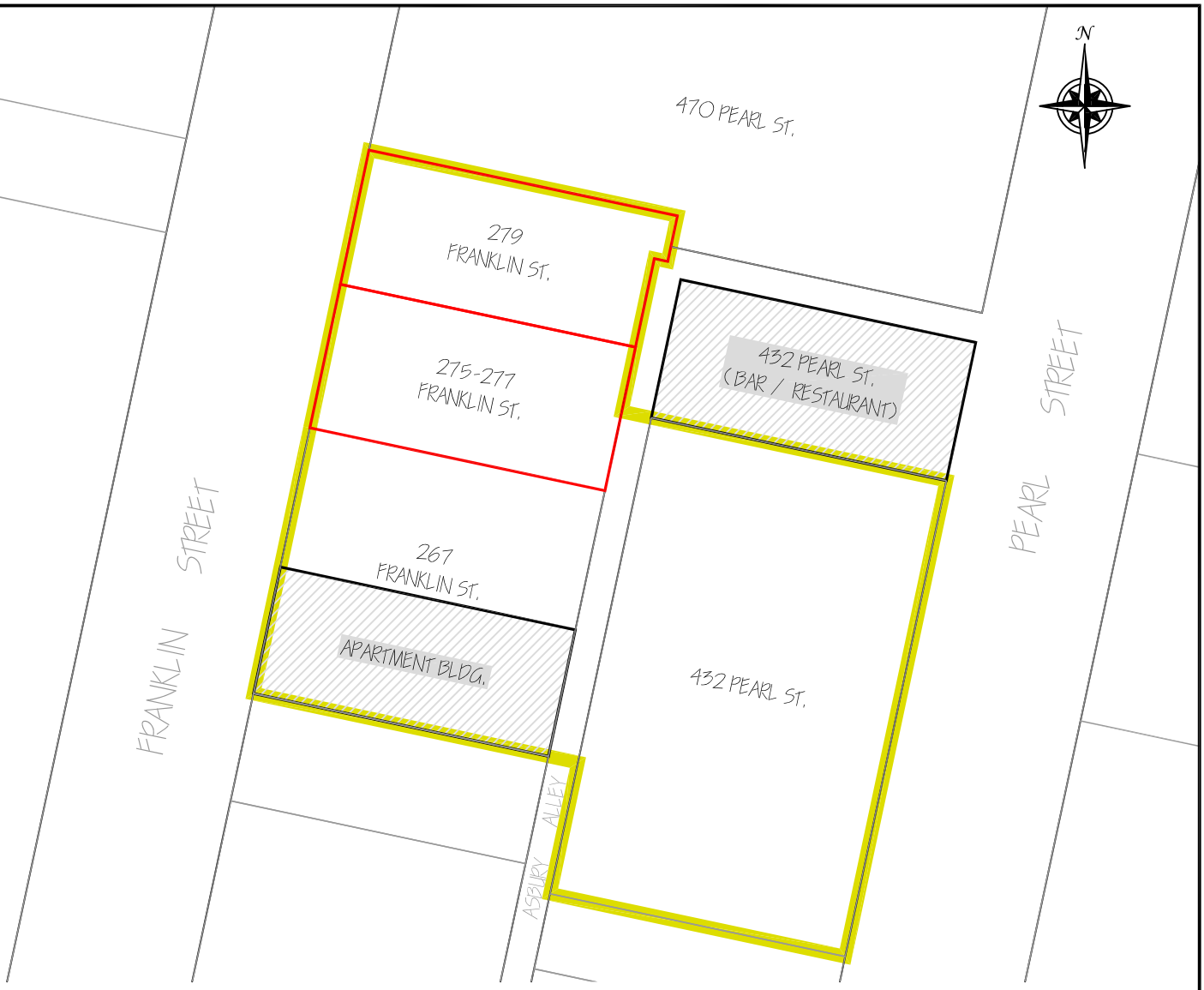
BUFFALO DEVELOPMENT CORP. SITE
BUFFALO, NEW YORK

PREPARED FOR

BUFFALO DEVELOPMENT CORPORATION

F:\CAD\Benchmark\Knoer Crawford & Bender\Buffalo Development Corp\RI Report\FIGURES\Figure 2; Site Plan.dwg

# FIGURE 2




LEGEND:

BCP SITE BOUNDARY

PROJECT REDEVELOPMENT AREA

60' 0' 60' 120'

SCALE: 1 INCH = 60 FEET
SCALE IN FEET
(approximate)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## SITE PLAN

REMEDIAL INVESTIGATION REPORT

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BUFFALO, NEW YORK

PREPARED FOR
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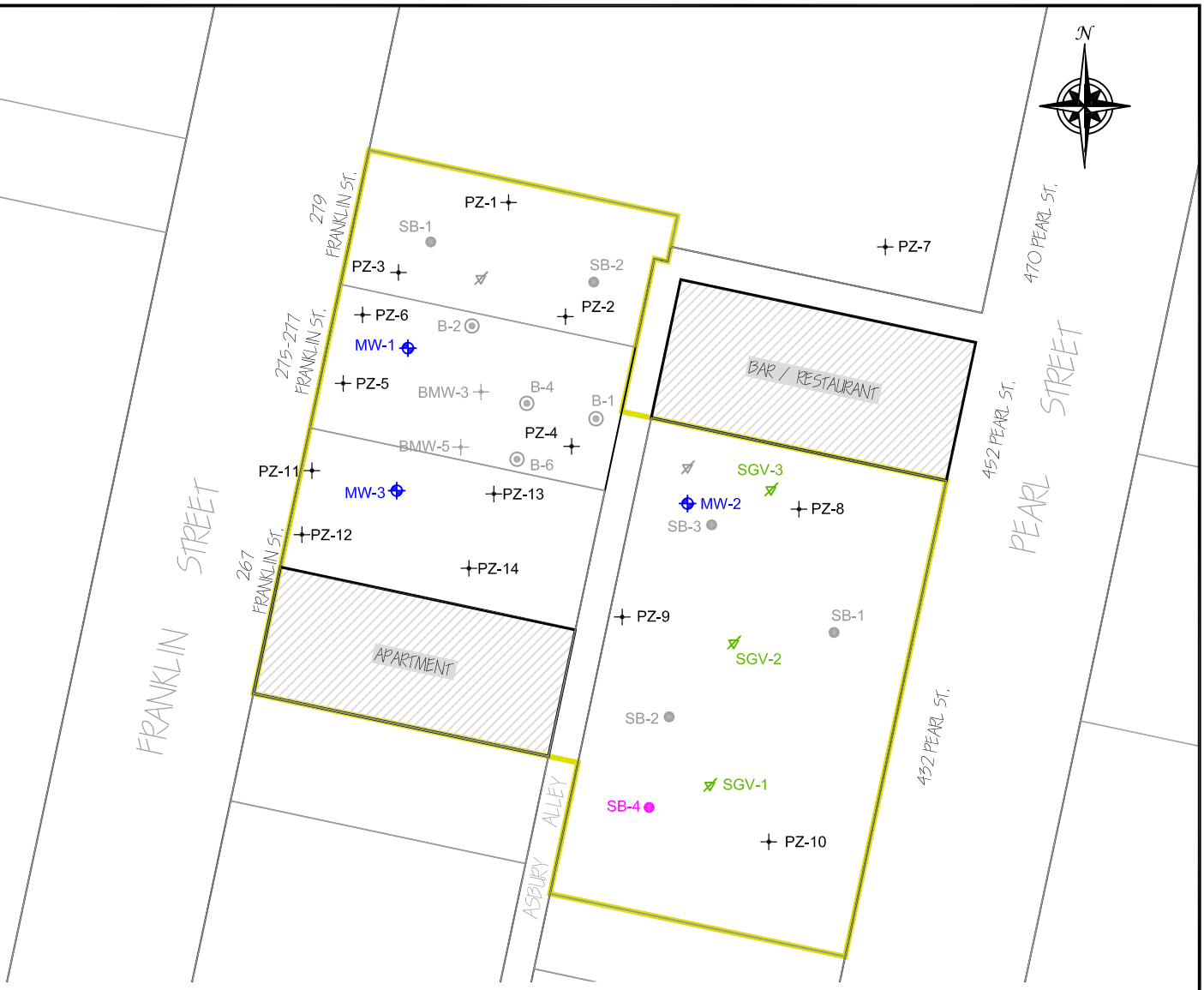
F:\CAD\Benchmark\Knoer Crawford & Bender\Buffalo Development Corp\RI Report\FIGURES\Figure 3; Sampling Locations.dwg

# FIGURE 3




LEGEND:

- PROPERTY BOUNDARY
- B-1 PREVIOUS SOIL BORING (Nature's Way, September 2004)
- BMW-3 PREVIOUS TEMP. MONITORING WELL (Nature's Way, Sept. 2004)
- SB-1 PREVIOUS SOIL BORING (Benchmark, January 2006)
- PREVIOUS SUBSLAB VAPOR SAMPLE (Benchmark, January 2006)
- SB-4 RI SOIL BORING (1) (Benchmark, November 2006)
- SGV-1 RI SUBGRADE VAPOR SAMPLE (3) (Benchmark, November 2006)
- PZ-1 RI SOIL BORING/PIEZOMETER (14) (Benchmark, November 2006)
- MW-1 RI MONITORING WELL (3) (Benchmark, November 2006)

60' 0' 60' 120'

SCALE: 1 INCH = 60 FEET
SCALE IN FEET
(approximate)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## SAMPLING LOCATIONS

REMEDIAL INVESTIGATION REPORT

BUFFALO DEVELOPMENT CORP. SITE
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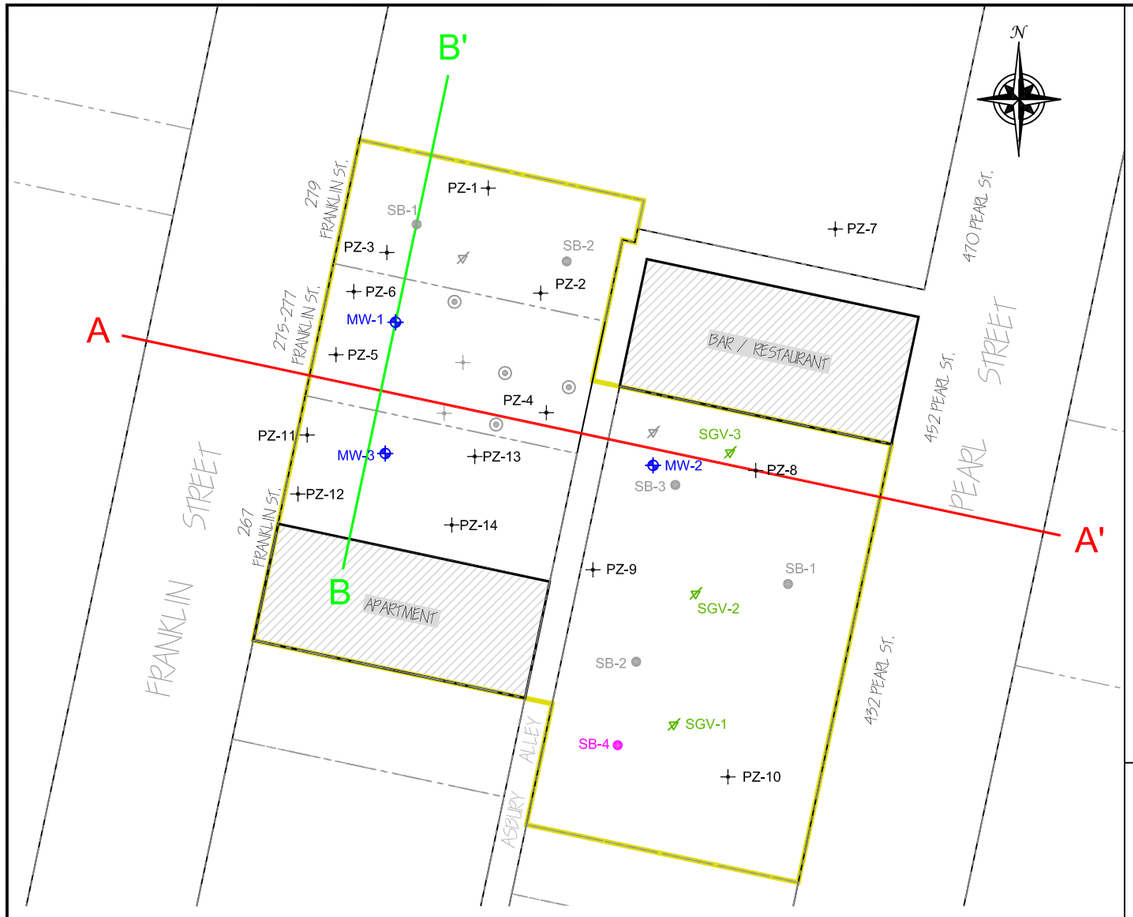
F:\CAD\Benchmark\Konoer Crawford & Bender\Buffalo Development Corp\RI Report\FIGURES\Figure 4; Geologic Cross-Sections A & B.dwg




LEGEND:

- PROPERTY BOUNDARY
- PREVIOUS SOIL BORING (Nature's Way, September 2004)
- PREVIOUS TEMP. MONITORING WELL (Nature's Way, Sept. 2004)
- SB-1 PREVIOUS SOIL BORING (Benchmark, January 2006)
- PREVIOUS SUBSLAB VAPOR SAMPLE (Benchmark, January 2006)
- SB-4 RI SOIL BORING (1) (Benchmark, November 2006)
- SGV-1 RI SUBGRADE VAPOR SAMPLE (3) (Benchmark, November 2006)
- PZ-1 RI SOIL BORING/PIEZOMETER (14) (Benchmark, November 2006)
- MW-1 RI MONITORING WELL (3) (Benchmark, November 2006)

60' 0' 60' 120'

SCALE: 1 INCH = 60 FEET
SCALE IN FEET
(approximate)

DATE: FEBRUARY 2007
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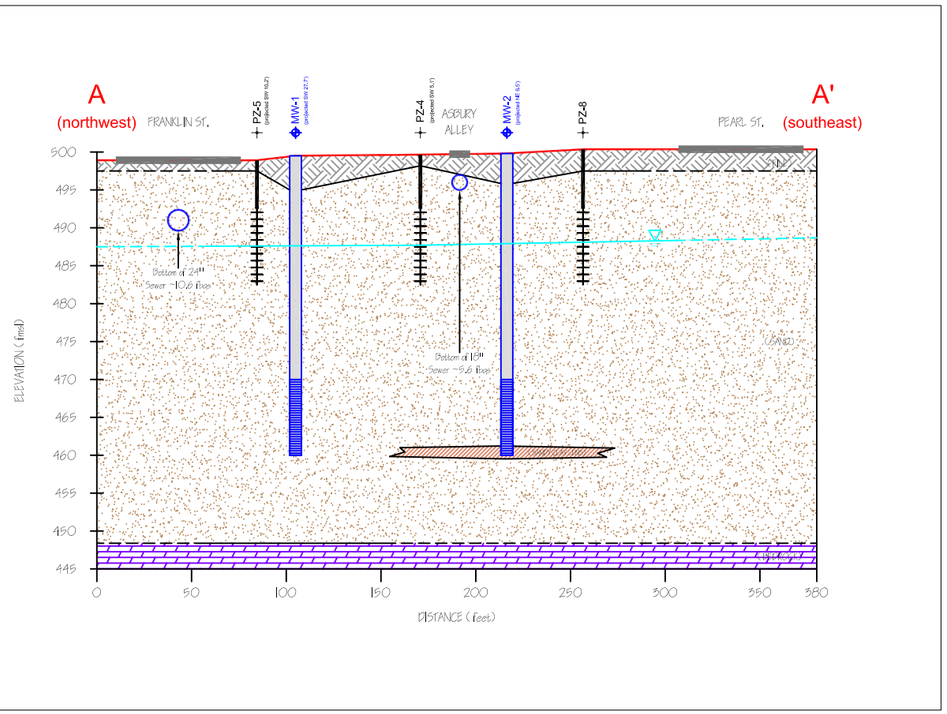


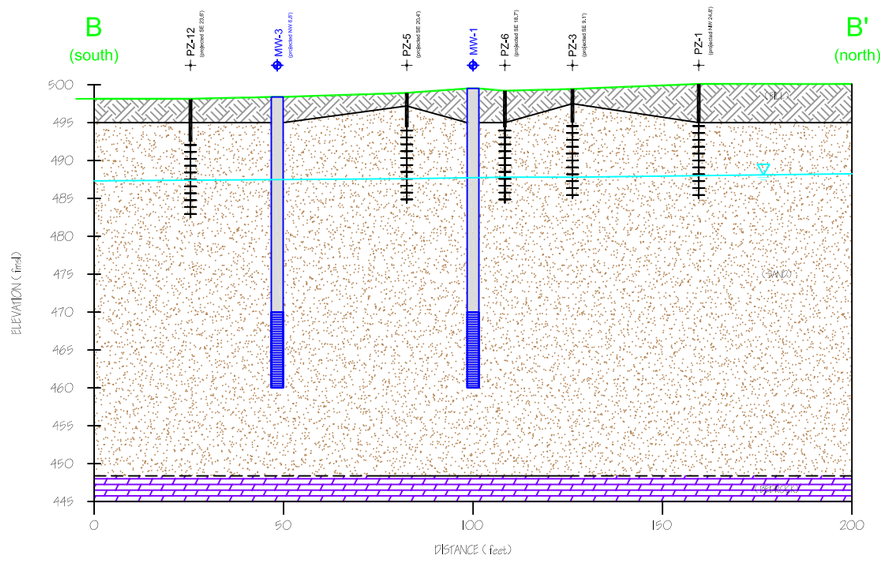



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# GEOLOGIC CROSS SECCTIONS A & B

REMEDIAL INVESTIGATION REPORT

BUFFALO DEVELOPMENT CORP. SITE
BUFFALO, NEW YORK

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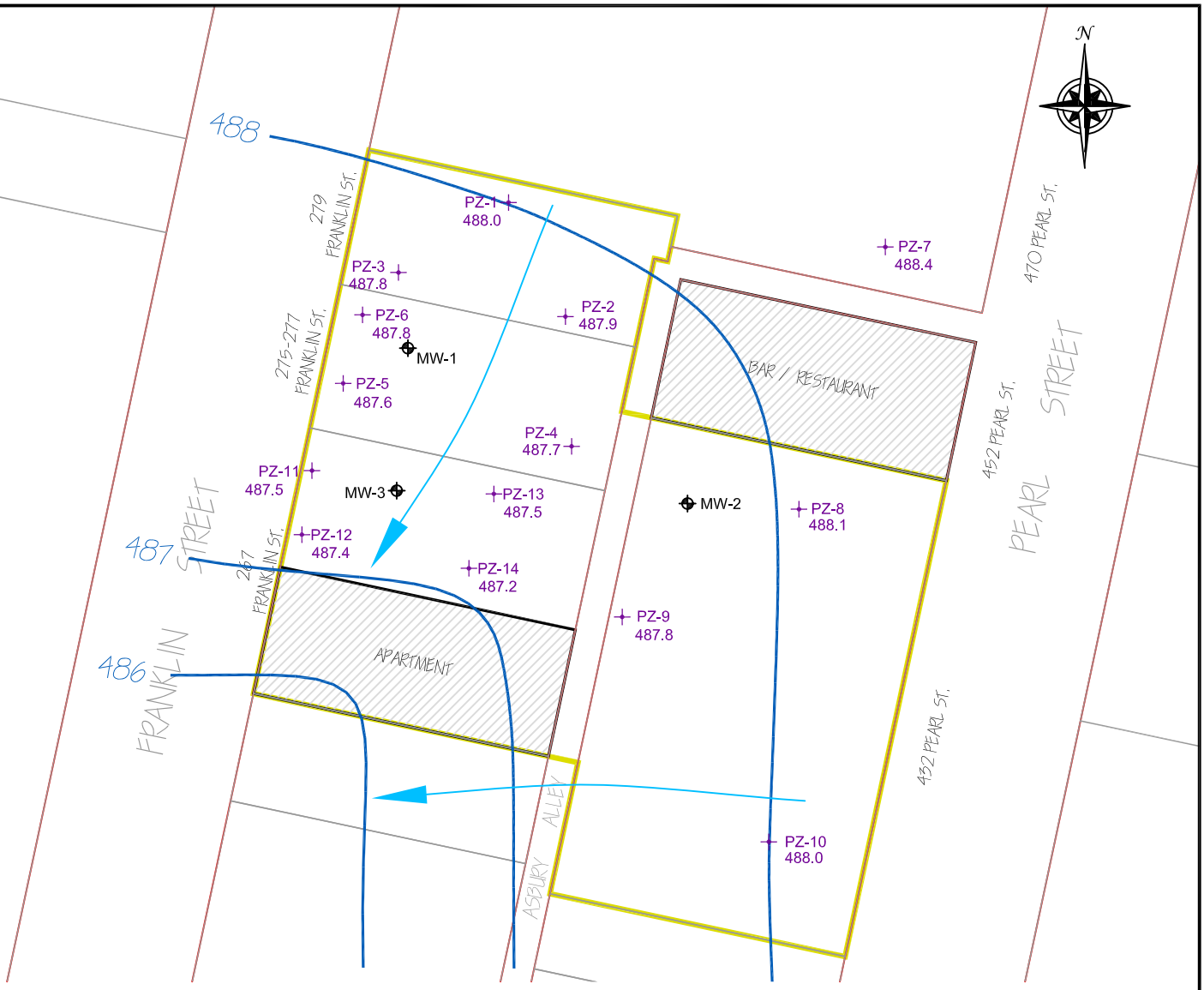
**FIGURE 4**

F:\CAD\Benchmark\Knoer Crawford & Bender\Buffalo Development Corp\RI Report\FIGURES\Figure 5; Isopotential Map.dwg

# FIGURE 5




LEGEND:

- PROPERTY BOUNDARY
- PZ-1 488.0 — RI PIEZOMETER WITH GROUNDWATER ELEVATION (fmsl) (14)
- MW-1 — RI MONITORING WELL (3)
- 488 — GROUNDWATER CONTOUR (shallow groundwater ≤ 16 fbgs)
- GROUNDWATER FLOW DIRECTION

60' 0' 60' 120'

SCALE: 1 INCH = 60 FEET
SCALE IN FEET
(approximate)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## ISOPOTENTIAL MAP

REMEDIAL INVESTIGATION REPORT

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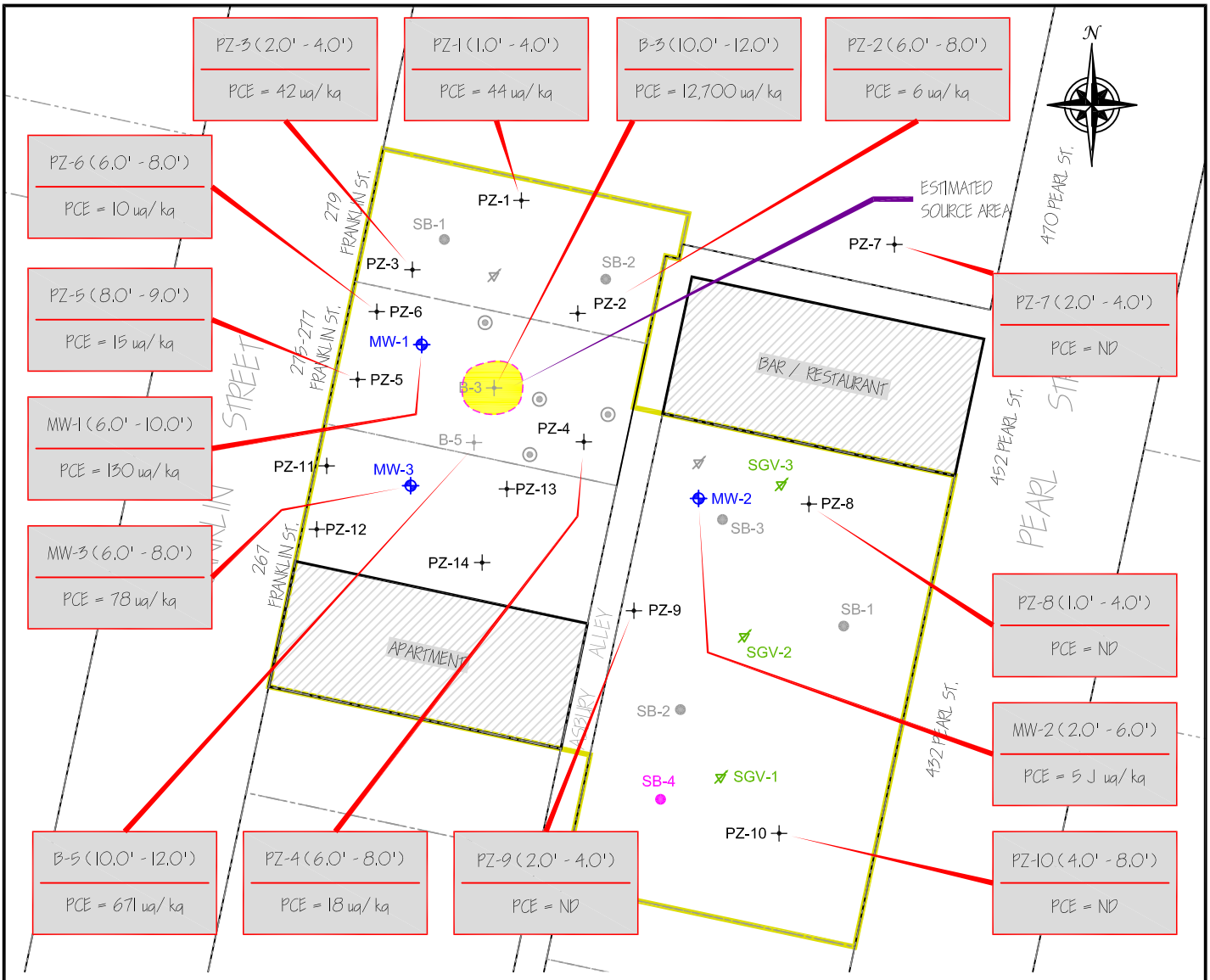
F:\CAD\Benchmark\Knoer Crawford & Benden\Buffalo Development Corp\RI Report\FIGURES\Figure 6; PCE in Soil.dwg

# FIGURE 6




LEGEND:

- PROPERTY BOUNDARY
- PREVIOUS SOIL BORING (Nature's Way, September 2004)
- PREVIOUS TEMP. MONITORING WELL (Nature's Way, Sept. 2004)
- SB-1 PREVIOUS SOIL BORING (Benchmark, January 2006)
- PREVIOUS SUBSLAB VAPOR SAMPLE (Benchmark, January 2006)
- SB-4 RI SOIL BORING (1) (Benchmark, November 2006)
- SGV-1 RI SUBGRADE VAPOR SAMPLE (3) (Benchmark, November 2006)
- PZ-1 RI SOIL BORING/PIEZOMETER (14) (Benchmark, November 2006)
- MW-1 RI MONITORING WELL (3) (Benchmark, November 2006)
- PZ-1 (1.0' - 4.0') / PCE = 44 ug/ kg — SOIL SAMPLE LOCATION WITH SAMPLE DEPTH (fbgs) & PCE CONCENTRATION (ug/kg)

60' 0' 60' 120'

SCALE: 1 INCH = 60 FEET
SCALE IN FEET
(approximate)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# PCE IN SOIL

## REMEDIAL INVESTIGATION REPORT

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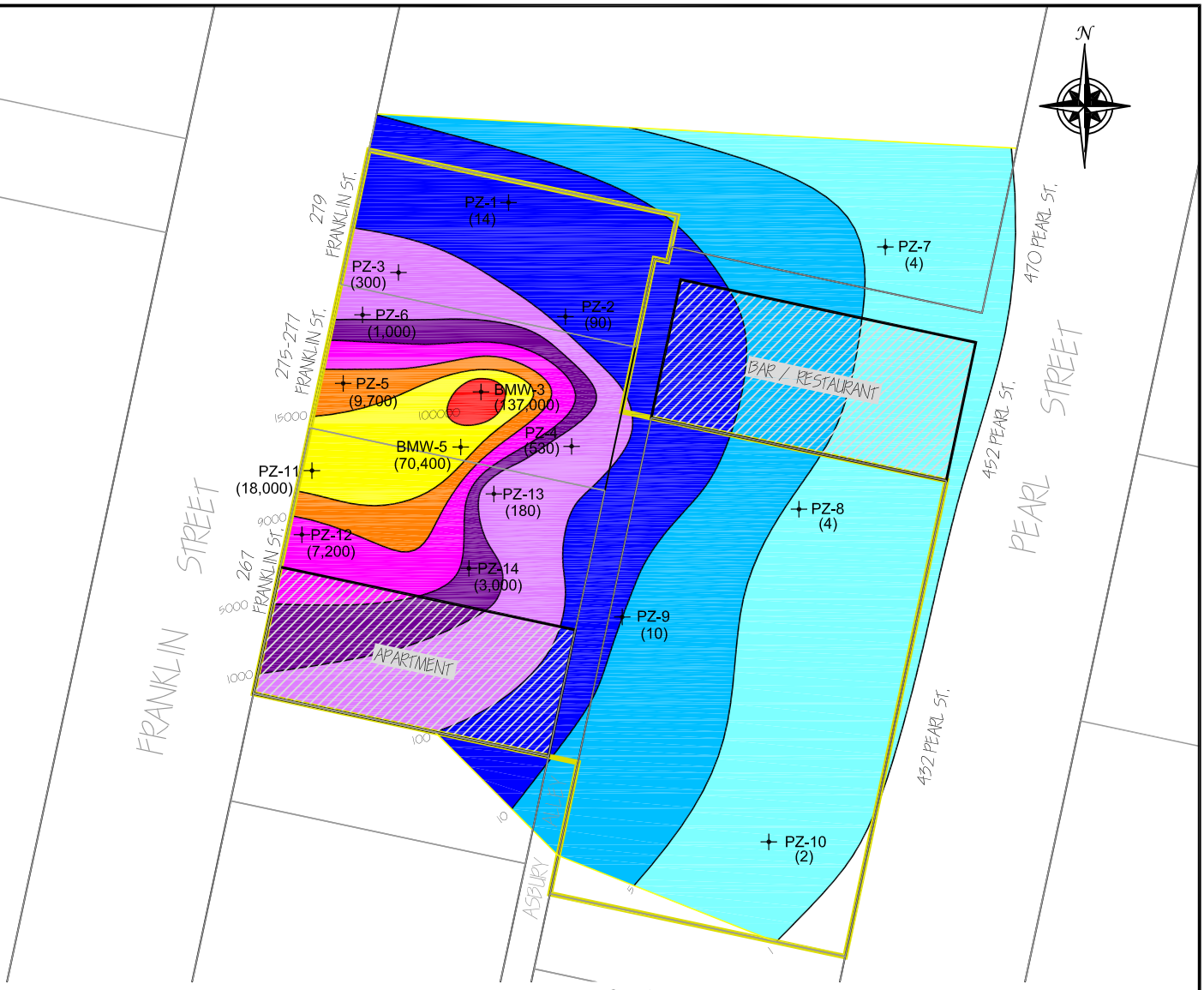
F:\CAD\Benchmark\Knoer Crawford & Bender\Buffalo Development Corp\RI Report\FIGURES\Figure 7; PCE in GW Isoconcentration Map.dwg

# FIGURE 7




LEGEND:

- PROPERTY BOUNDARY
- PCE CONCENTRATION > 100,000 ppb
- PCE CONCENTRATION 15,000 to 100,000 ppb
- PCE CONCENTRATION 9,000 to 15,000 ppb
- PCE CONCENTRATION 5,000 to 9,000 ppb
- PCE CONCENTRATION 1,000 to 5,000 ppb
- PCE CONCENTRATION 100 to 1,000 ppb
- PCE CONCENTRATION 10 to 100 ppb
- PCE CONCENTRATION 5 to 10 ppb
- PCE CONCENTRATION 1 to 5 ppb
- BMW-3 (137,000) — PREVIOUS TEMP. MONITORING WELL (ppb) (2) (Nature's Way, Sept. 2004)
- PZ-1 (14) — RI PIEZOMETER WITH PCE CONCENTRATION (ppb) (14)

60' 0' 60' 120'

SCALE: 1 INCH = 60 FEET
SCALE IN FEET
(approximate)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# PCE IN GROUNDWATER ISOCONCENTRATION MAP

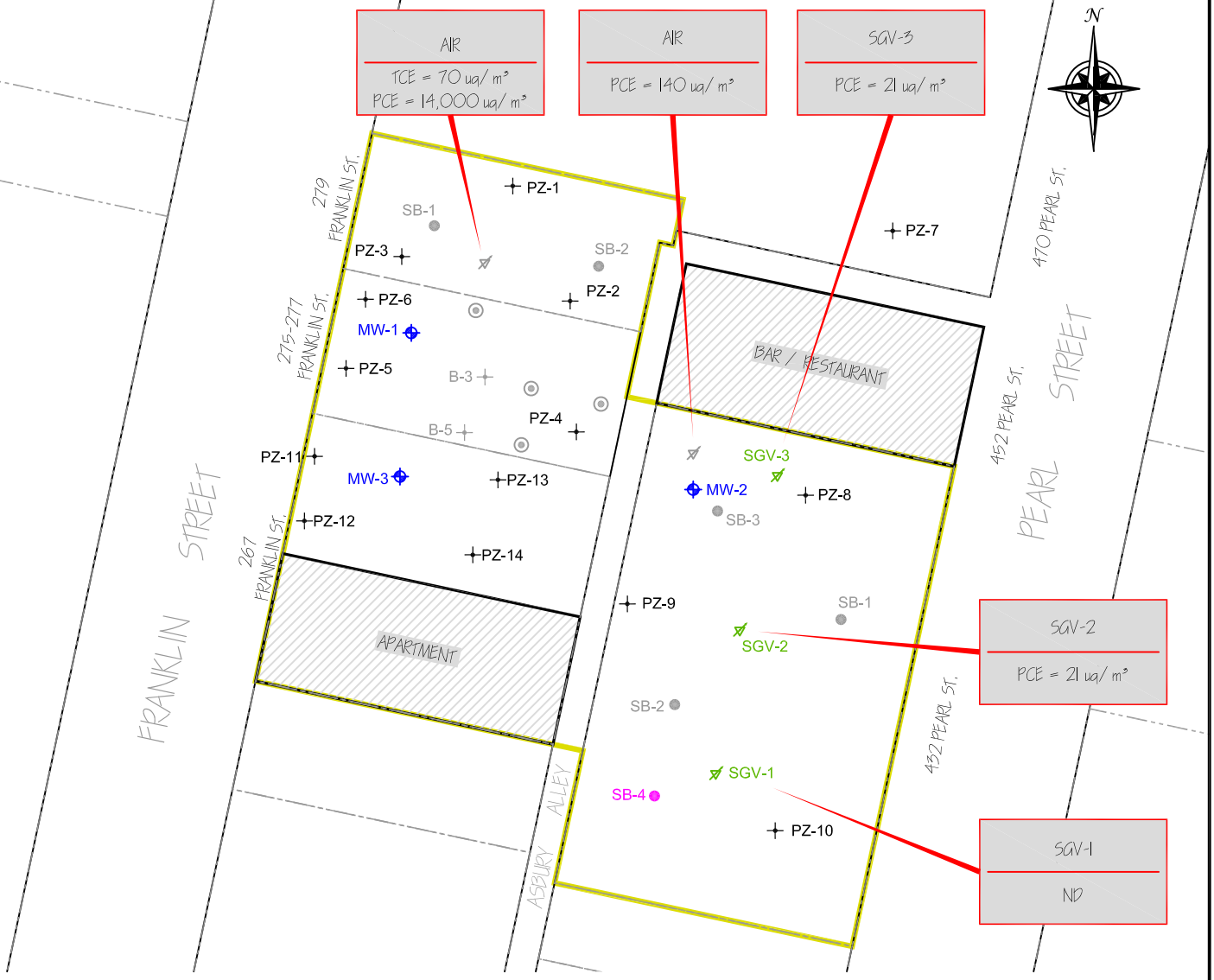
REMEDIAL INVESTIGATION REPORT

BUFFALO DEVELOPMENT CORP. SITE
BUFFALO, NEW YORK

PREPARED FOR
BUFFALO DEVELOPMENT CORPORATION

F:\CAD\Benchmark\Knoer Crawford & Bender\Buffalo Development Corp\RI Report\FIGURES\Figure 8; Chlorinated VOCs in Soil Gas.dwg

# FIGURE 8




LEGEND:

- PROPERTY BOUNDARY
- PREVIOUS SOIL BORING (Nature's Way, September 2004)
- PREVIOUS TEMP. MONITORING WELL (Nature's Way, Sept. 2004)
- SB-1 PREVIOUS SOIL BORING (Benchmark, January 2006)
- PREVIOUS SUBSLAB VAPOR SAMPLE (Benchmark, January 2006)
- SB-4 RI SOIL BORING (1) (Benchmark, November 2006)
- SGV-1 RI SUBGRADE VAPOR SAMPLE (3) (Benchmark, November 2006)
- PZ-1 RI SOIL BORING/PIEZOMETER (14) (Benchmark, November 2006)
- MW-1 RI MONITORING WELL (3) (Benchmark, November 2006)
- SGV-2 PCE = 21 ug/m³ CHLORINATED VOCs IN SOIL GAS CONCENTRATION (ug/m³)

60' 0' 60' 120'

SCALE: 1 INCH = 60 FEET
SCALE IN FEET
(approximate)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# CHLORINATED VOCs IN SOIL GAS

## REMEDIAL INVESTIGATION REPORT

BUFFALO DEVELOPMENT CORP. SITE
BUFFALO, NEW YORK

PREPARED FOR
BUFFALO DEVELOPMENT CORPORATION

BENCHMARK
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# TABLE 1

## GROUNDWATER ELEVATIONS

## BUFFALO DEVELOPMENT CORPRATION HOTEL SITE
## BUFFALO, NEW YORK

| Monitoring Location | Top of Protective Casing Elev. | TOR Elevation (fmsl) | Depth to Water (fbTOR) | Groundwater Elevation (fmsl) |
|---|---|---|---|---|
| MW-1 | 499.51 | 499.22 | 11.43 | 487.79 |
| MW-2 | 500.08 | 499.81 | 7.98 | 491.83 |
| MW-3 | 498.38 | 498.13 | 10.53 | 487.60 |
| PZ - 1 | 500.10 | 500.04 | 12.09 | 487.95 |
| PZ- 2 | 499.84 | 499.70 | 11.85 | 487.85 |
| PZ - 3 | 499.44 | 499.32 | 11.54 | 487.78 |
| PZ - 4 | 499.66 | 499.42 | 11.68 | 487.74 |
| PZ - 5 | 498.92 | 498.65 | 11.05 | 487.60 |
| PZ - 6 | 499.21 | 499.10 | 11.33 | 487.77 |
| PZ- 7 | 501.13 | 500.95 | 12.55 | 488.40 |
| PZ - 8 | 500.37 | 500.16 | 12.02 | 488.14 |
| PZ - 9 | 499.01 | 498.79 | 10.95 | 487.84 |
| PZ - 10 | 499.03 | 498.80 | 10.83 | 487.97 |
| PZ - 11 | 498.18 | 498.02 | 10.55 | 487.47 |
| PZ - 12 | 498.14 | 497.93 | 10.57 | 487.36 |
| PZ -13 | 498.47 | 498.05 | 10.53 | 487.52 |
| PZ -14 | 498.26 | 497.92 | 10.75 | 487.17 |

All wells surveyed on 1/11/07 with site specific datum of 500 feet.

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**TABLE 2**
**SUMMARY OF SOIL ANALYTICAL RESULTS**

**BUFFALO DEVELOPMENT CORP.**
**BUFFALO, NEW YORK**

| Parameter [1] | Sample Event | | | | | | | | | | | | | | | | | | | | | | | Restricted-Commercial SCOs [3] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Historical Data | | | | | | | Brownfield Cleanup Program Remedial Investigation Data | | | | | | | | | | | | | | | | |
| | 275-277 Franklin St. (September 2004) | | 279 Franklin St. (January 2006) | | 432 Pearl St. (January 2006) | | | 279 Franklin St. (November 2006) | | | 275-277 Franklin St. (November 2006) | | | | | 432 Pearl St. (November 2006) | | | | | | 267 Franklin St. (November 2006) | |
| | B-3 (10-12') | B-5 (10-12') | SB-1 | SB-2 | SB-1 | SB-2 | SB-3 | PZ-1 (1-4') | PZ-2 (6-8') | PZ-3 (2-4') | PZ-4 (6-8') | PZ-5 (8-9') | PZ-6 (6-8') | MW-1 (6-10') | BD[2] (6-10') | PZ-8 (1-4') | PZ-9 (2-4') | PZ-9 (4-8') | PZ-10 (4-8') | SB-4 (4-8') | MW-2 (2-6') | MW-3 (6-8') | |
| ***TCL Volatile Organic Compounds (VOCs) - mg/kg*** [4] | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.006 J | ND | 0.002 J | 0.003 J | ND | ND | NA | ND | ND | ND | ND | **500** * |
| Tetrachloroethene | 12.7 | 0.671 | ND | ND | ND | ND | ND | 0.044 | 0.006 J | 0.042 | 0.018 | 0.015 | 0.01 | 0.13 J | 0.54 J | ND | ND | NA | ND | ND | ND | 0.078 | **150** |
| *Total VOCs* | *12.70* | *0.67* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.04* | *0.01* | *0.04* | *0.02* | *0.02* | *0.01* | *0.13* | *0.54* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.08* | |
| ***TCL SVOCs - base neutral fraction (mg/kg)*** [4] | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | NA | NA | ND | ND | ND | 1.4 J | ND | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | ND | NA | ND | NA | NA | |
| Acenaphthylene | NA | NA | ND | ND | ND | 0.48 J | ND | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | ND | NA | ND | NA | NA | |
| Anthracene | NA | NA | ND | ND | ND | 2.7 J | ND | NA | NA | NA | NA | NA | NA | ND | 0.009 J | 0.024 J | NA | ND | NA | ND | NA | NA | **500** * |
| 2,4-Dinitrophenol | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 1.4 J | 3.7 J | 1 J | NA | 0.86 J | NA | 0.85 J | NA | NA | **--** |
| Benzo(a)anthracene | NA | NA | ND | 0.44 J | 7.2 J | 7.7 J | 0.8 J | NA | NA | NA | NA | NA | NA | 0.013 J | 0.041 J | 0.14 J | NA | ND | NA | ND | NA | NA | **5.6** |
| Benzo(b)fluoranthene | NA | NA | ND | 0.57 J | 10 J | 12 | 0.93 J | NA | NA | NA | NA | NA | NA | 0.015 J | 0.062 J | 0.16 J | NA | ND | NA | ND | NA | NA | **5.6** |
| Benzo(k)fluoranthene | NA | NA | ND | ND | 4.4 J | 2.6 J | 0.35 J | NA | NA | NA | NA | NA | NA | 0.012 J | 0.016 J | 0.16 J | NA | ND | NA | ND | NA | NA | **56** |
| Benzo(ghi)perylene | NA | NA | ND | 0.47 J | 4.7 J | 4.2 J | 0.38 J | NA | NA | NA | NA | NA | NA | 0.014 J | 0.035 J | 0.05 J | NA | ND | NA | ND | NA | NA | **500** * |
| Benzo(a)pyrene | NA | NA | ND | ND | 7.2 J | 8.3 | 0.74 J | NA | NA | NA | NA | NA | NA | 0.009 J | 0.044 J | 0.14 J | NA | ND | NA | ND | NA | NA | **1** |
| Bis (2-ethylhexyl) phthalate | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 11 | 5.9 | ND | NA | ND | NA | ND | NA | NA | **--** |
| Butyl benzyl phthalate | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 0.75 | 0.4 | ND | NA | ND | NA | ND | NA | NA | **--** |
| Carbazole | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | ND | ND | 0.039 J | NA | ND | NA | ND | NA | NA | **--** |
| Chrysene | NA | NA | ND | ND | 7.8 J | 8.4 J | 0.71 J | NA | NA | NA | NA | NA | NA | 0.012 J | 0.04 J | 0.2 J | NA | ND | NA | ND | NA | NA | **56** |
| Dibenzo (a,h) anthracene | NA | NA | ND | ND | ND | 1.3 J | ND | NA | NA | NA | NA | NA | NA | 0.014 J | 0.011 J | 0.017 J | NA | ND | NA | ND | NA | NA | **0.56** |
| Dibenzofuran | NA | NA | ND | ND | ND | 1.1 J | ND | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | ND | NA | ND | NA | NA | |
| Di-n-butyl phthalate | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 0.18 J | 0.13 J | ND | NA | ND | NA | ND | NA | NA | **--** |
| Di-n-octyl phthalate | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 0.52 | 0.3 J | ND | NA | ND | NA | ND | NA | NA | **--** |
| Fluoranthene | NA | NA | 0.63 J | 0.55 J | 18 J | 20 | 1.9 J | NA | NA | NA | NA | NA | NA | 0.019 J | 0.083 J | 0.49 | NA | ND | NA | ND | NA | NA | **500** * |
| Fluorene | NA | NA | ND | ND | ND | 1.3 J | ND | NA | NA | NA | NA | NA | NA | ND | ND | 0.011 J | NA | ND | NA | ND | NA | NA | **500** * |
| Indeno (1,2,3-cd) pyrene | NA | NA | ND | ND | 4.3 J | 3.8 J | 0.36 J | NA | NA | NA | NA | NA | NA | 0.016 J | 0.038 J | 0.065 J | NA | ND | NA | ND | NA | NA | **5.6** |
| 2-Methylnaphthalene | NA | NA | ND | ND | ND | 0.66 J | ND | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | ND | NA | ND | NA | NA | |
| Naphthalene | NA | NA | ND | ND | ND | 1.3 J | ND | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | ND | NA | ND | NA | NA | |
| N-Nitroso-Di-n-propylamine | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | ND | ND | ND | 0.34 J | 0.34 J | NA | ND | NA | NA | |
| Phenanthrene | NA | NA | ND | ND | 12 J | 17 | 1.5 J | NA | NA | NA | NA | NA | NA | 0.01 J | 0.044 J | 0.22 J | NA | ND | NA | ND | NA | NA | **500** * |
| Pyrene | NA | NA | 0.53 J | 0.58 J | 17 J | 21 | 1.7 J | NA | NA | NA | NA | NA | NA | 0.016 J | 0.059 J | 0.27 J | NA | ND | NA | ND | NA | NA | **500** * |
| *Total SVOCs* | | | *1.16* | *2.61* | *92.60* | *113.36* | *9.37* | | | | | | | *14.00* | *10.91* | *2.99* | *0.34* | *1.20* | | *0.85* | | NA | |
| ***Pesticides (mg/kg)*** [4] | | | | | | | | | | | | | | | | | | | | | | | |
| Dieldrin | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 0.0051 J | 0.0038 J | ND | NA | ND | NA | ND | NA | NA | **1.4** |
| 4,4'-DDE | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 0.0053 J | 0.0037 J | ND | NA | ND | NA | ND | NA | NA | **62** |
| 4,4'-DDD | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 0.0089 J | 0.0067 J | ND | NA | ND | NA | ND | NA | NA | **92** |
| 4,4'-DDT | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 0.044 J | 0.026 J | 0.00045 J | NA | ND | NA | ND | NA | NA | **47** |
| Methoxychlor | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | ND | 0.0068 NJ | ND | NA | ND | NA | ND | NA | NA | **--** |
| Endrin | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 0.015 J | 0.019 J | ND | NA | ND | NA | ND | NA | NA | |
| Endrin ketone | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 0.003 J | ND | ND | NA | 0.00068 J | NA | ND | NA | NA | **--** |
| Endrin aldehyde | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | ND | ND | 1E-03 NJ | NA | ND | NA | ND | NA | NA | **--** |
| alpha-Chlordane | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 0.0035 J | ND | ND | NA | ND | NA | ND | NA | NA | **24** |
| gamma-Chlordane | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 0.0034 J | 0.0024 NJ | ND | NA | ND | NA | ND | NA | NA | **--** |
| Archlor 1254 | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 0.15 J | 0.19 J | ND | NA | ND | NA | ND | NA | NA | |

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

**TABLE 2**
**SUMMARY OF SOIL ANALYTICAL RESULTS**

**BUFFALO DEVELOPMENT CORP.**
**BUFFALO, NEW YORK**

| Parameter [1] | Sample Event | | | | | | | | | | | | | | | | | | | | | | Restricted-Commercial SCOs [3] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Historical Data | | | | | | | Brownfield Cleanup Program Remedial Investigation Data | | | | | | | | | | | | | | | |
| | 275-277 Franklin St. (September 2004) | | 279 Franklin St. (January 2006) | | 432 Pearl St. (January 2006) | | | 279 Franklin St. (November 2006) | | | 275-277 Franklin St. (November 2006) | | | | | 432 Pearl St. (November 2006) | | | | | | 267 Franklin St. (November 2006) | |
| | B-3 (10-12') | B-5 (10-12') | SB-1 | SB-2 | SB-1 | SB-2 | SB-3 | PZ-1 (1-4') | PZ-2 (6-8') | PZ-3 (2-4') | PZ-4 (6-8') | PZ-5 (8-9') | PZ-6 (6-8') | MW-1 (6-10') | BD[2] (6-10') | PZ-8 (1-4') | PZ-9 (2-4') | PZ-9 (4-8') | PZ-10 (4-8') | SB-4 (4-8') | MW-2 (2-6') | MW-3 (6-8') | |
| ***TAL Metals (mg/kg)*** | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 2190 J | 2770 J | 5930 * | NA | 2310 * | NA | 1500 * | NA | NA | -- |
| Antimony | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 0.92 B | ND | ND | NA | ND | NA | ND | NA | NA | -- |
| Arsenic | NA | NA | 3.5 | 5.1 | 5.3 | 9 | 4.3 | NA | NA | NA | NA | NA | NA | 1.6 J | 1.9 J | 2.6 J | NA | 0.44 J | NA | 0.69 J | NA | NA | **16** |
| Barium | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 15.7 B | 21.6 | 111 | NA | 13.2 B | NA | 12.5 B | NA | NA | **400** |
| Beryllium | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 0.09 B | 0.1 B | ND | NA | ND | NA | ND | NA | NA | **590** |
| Cadmium | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 0.14 B | 0.22 B | 0.16 B | NA | ND | NA | 0.1 B | NA | NA | **9.3** |
| Calcium | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 41200 J | 53300 J | 28600 * | NA | 59200 * | NA | 38300 * | NA | NA | -- |
| Chromium | NA | NA | 6.3 | 11.1 | 6.6 | 11.4 | 8.2 | NA | NA | NA | NA | NA | NA | 3.9 | 7.1 | 7.6 | NA | 3.3 | NA | 2.5 | NA | NA | **1500** |
| Cobalt | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 1.8 B | 2.3 B | 2.9 B | NA | 1.3 B | NA | 1.3 B | NA | NA | -- |
| Copper | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 5.8 | 12.4 | 16.4 | NA | 4.2 | NA | 4.8 | NA | NA | **270** |
| Iron | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 6370 | 8470 | 8910 * | NA | 5680 * | NA | 4010 * | NA | NA | -- |
| Lead | NA | NA | 87.8 | 358 | 103 | 507 | 78.1 | NA | NA | NA | NA | NA | NA | 6.3 J | 9.4 J | 72.3 J | NA | 3.8 J | NA | 8.3 J | NA | NA | **1000** |
| Magnesium | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 18800 | 24400 | 6960 * | NA | 24300 * | NA | 16900 * | NA | NA | -- |
| Manganese | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 208 J | 266 J | 428 J | NA | 157 J | NA | 137 J | NA | NA | **10000** |
| Mercury | NA | NA | 0.18 | 0.33 | 0.089 | 1.1 | 0.11 | NA | NA | NA | NA | NA | NA | ND | ND | 0.426 | NA | ND | NA | ND | NA | NA | **2.8** |
| Nickel | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 3.7 B | 4.7 | 7.0 | NA | 3.2 B | NA | 2.6 B | NA | NA | **310** |
| Potassium | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 547 | 707 | 886 | NA | 615 | NA | 382 B | NA | NA | -- |
| Selenium | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | ND | ND | 0.69 B | NA | ND | NA | ND | NA | NA | **1500** |
| Silver | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | ND | ND | 0.15 B | NA | ND | NA | ND | NA | NA | **1500** |
| Sodium | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 153 B | 224 B | 1080 | NA | 124 B | NA | 113 B | NA | NA | -- |
| Thallium | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | ND | NA | ND | NA | NA | -- |
| Vanadium | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 9.3 | 12.2 | 12.9 | NA | 8.1 | NA | 5.4 | NA | NA | -- |
| Zinc | NA | NA | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | NA | 52.3 J | 64.9 J | 88.8 * | NA | 42.9 * | NA | 43.6 * | NA | NA | **10000** |
| ***Wet Chemistry Analysis (units as indicated)*** | | | | | | | | | | | | | | | | | | | | | | | |
| Leachable pH (S.U.) | NA | NA | NA | NA | NA | NA | NA | 7.84 | 8.1 | 8.31 | 8.03 | 8.06 | 8.19 | 8.38 | 7.85 | 9.18 | 9.28 | 8.12 | 8.62 | 8.85 | NA | NA | -- |

**Notes:**

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Blind duplicate collected from MW-1.
3. Values per NYSDEC draft Part 375 Soil Cleanup Objectives (June 2006); "**500*** " = the SCOs for commercial use were capped at a maximum value of 500 ppm.
4. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparison to SCOs.

**Definitions:**

ND = Parameter not detected above laboratory detection limit.
NA = Sample not analyzed for parameter.
"--" = No SCO available.
b = Analyte was detected in the associated blank as well as in the sample. Value is above the action level for consideration as being external contamination.
B = Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.
* = Indicates the spike or duplicate analysis is not within the quality control limits.
D = All compounds were identified in an analyisis at the secondary dilution factor.
N = Indicates spike sample recovery is not within the quality control limits.
E = Indicates value estimated or not reported due to the presence of interferences.
P = Detected concentrations between the two GC columns is greater than 25%; lower value is reported and flagged (for CLP methodology only).

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

**TABLE 3**
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**

**BUFFALO DEVELOPMENT CORP.**
**BUFFALO, NEW YORK**

| Parameter [1] | Sample Location | | | | | | | | | | | | | | | | | | | GWQS/ GV [3] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Historical Data | | Brownfield Cleanup Program Remedial Investigation | | | | | | | | | | | | | | | | | |
| | BMW-3 | BMW-5 | PZ-1 | PZ-2 | PZ-3 | PZ-4 | PZ-5 | PZ-6 | PZ-7 | PZ-8 | PZ-9 | PZ-10 | PZ-11 | PZ-12 | PZ-13 | PZ-14 | MW-1 | MW-2 | Blind Dup [2] | MW-3 | |
| ***TCL Volatile Organic Compounds (VOCs) - ug/L*** | | | | | | | | | | | | | | | | | | | | | |
| Acetone | ND | ND | 1 J | 1 J | 1 J | 2 J | ND | ND | 2 J | 3 J | 2 J | 2 J | ND | ND | ND | ND | ND | ND | ND | ND | **50** |
| Chloroform | ND | ND | ND | ND | ND | ND | 3 J | ND | ND | ND | ND | 1 J | ND | ND | ND | ND | ND | ND | ND | ND | **7** |
| Chloromethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 10 J | ND | |
| Cyclohexane | ND | ND | ND | ND | ND | ND | ND | ND | 1 J | 1 J | 1 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | **--** |
| cis-1,2-Dichloroethene | ND | ND | ND | ND | 1 J | ND | 42 | 26 | ND | ND | ND | ND | 94 | ND | 1 J | 6 J | 2 J | ND | ND | ND | **5** |
| Methylcyclohexane | ND | ND | ND | ND | 1 J | ND | 1 J | 1 J | 2 J | 1 J | 2 J | 1 J | ND | ND | ND | ND | ND | ND | ND | ND | **--** |
| Methylene Chloride | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 10 J | ND | ND | ND | 64 DJ | ND | ND | ND | **5** |
| 1,1,2-Trichloroethane | ND | ND | ND | ND | ND | ND | 1 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | **1** |
| Trichloroethene | ND | ND | ND | ND | ND | 3 J | 11 | 5 J | ND | ND | ND | ND | 17 J | ND | ND | 17 | 21 | ND | ND | ND | **5** |
| Tetrachloroethene | 137,000 | 70,400 | 14 | 90 | 300 | 530 | 9700 | 1000 | 4 J | 4 J | 10 | 2 J | 18000 J | 7200 J | 180 J | 3200 J | 4100 | 5 J | 180 J | 6 J | **5** |
| Toluene | ND | ND | ND | ND | 1 J | 1 J | ND | 1 J | 1 J | 1 J | 2 J | 1 J | ND | ND | ND | ND | ND | ND | ND | ND | **5** |
| 1,2-Dichlorobenzene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1 J | ND | ND | ND | ND | **3** |
| *Total VOCs* | *137000* | *70400* | *15* | *91* | *304* | *536* | *9758* | *1033* | *10* | *10* | *17* | *7* | *18121* | *7200* | *181* | *3224* | *4187* | *5* | *190* | *6* | |
| ***TCL SVOCs - (ug/L)*** | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **20** |
| Acenaphthylene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **--** |
| Acetophenone | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **--** |
| Anthracene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **50** |
| Atrazine | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **7.5** |
| Benzaldehyde | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **--** |
| Benzo(a)anthracene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | 0.8 J | NA | **0.002** |
| Benzo(a)pyrene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | 0.6 J | 1 J | NA | **ND** |
| Benzo(b)fluoranthene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | 2 J | NA | **0.002** |
| Benzo(k)fluoranthene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **0.002** |
| Benzo(g,h,i)perylene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | 1 J | NA | **--** |
| Bis(2-chloroethyl) ether | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **1** |
| Bis(2-chloroethoxy) methane | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **5** |
| 4-Bromophenyl phenyl ether | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **--** |
| Butyl benzyl phthalate | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **50** |
| Caprolactam | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | 1000 J | 940 J | NA | **--** |
| Carbazole | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **--** |
| 1-Chloropropane | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **--** |
| 2-Chloronaphthalene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **10** |
| 4-Chloroaniline | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **5** |
| 4-Chloro-3-methylphenol | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **--** |
| 4-Chlorophenyl phenyl ether | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **--** |
| Chrysene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | 1 J | 2 J | NA | **0.002** |
| Di-n-butyl phthalate | NA | NA | NA | NA | NA | NA | 10 UJ | 0.5 J | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **50** |
| Di-n-octyl phthalate | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **--** |

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

**TABLE 3**
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**

**BUFFALO DEVELOPMENT CORP.**
**BUFFALO, NEW YORK**

| Parameter [1] | Sample Location | | | | | | | | | | | | | | | | | | | GWQS/ GV [3] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Historical Data | | Brownfield Cleanup Program Remedial Investigation | | | | | | | | | | | | | | | | | |
| | BMW-3 | BMW-5 | PZ-1 | PZ-2 | PZ-3 | PZ-4 | PZ-5 | PZ-6 | PZ-7 | PZ-8 | PZ-9 | PZ-10 | PZ-11 | PZ-12 | PZ-13 | PZ-14 | MW-1 | MW-2 | Blind Dup [2] | MW-3 | |
| Dibenzofuran | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | -- |
| Dibenzo(a,h) anthracene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | -- |
| 3,3'-Dichlorobenzidine | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **5** |
| Dimethyl phthalate | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **50** |
| Diethyl phthalate | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **50** |
| 2,4-Dimethylphenol | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **50** |
| 2,4-Dinitrophenol | NA | NA | NA | NA | NA | NA | 40 UJ | 40 UJ | NA | NA | NA | NA | NA | NA | NA | NA | 40 J | 40 J | 40 J | NA | **10** |
| 2,4-Dinitrotoluene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **5** |
| 2,6-Dinitrotoluene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **5** |
| Fluoranthene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | 2 J | 3 J | NA | **50** |
| Flourene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **50** |
| Hexachloroethane | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **5** |
| Hexachlorobenzene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **0.04** |
| Hexachlorobutadiene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **1** |
| Hexachlorocyclopentadiene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **5** |
| Indeno(1,2,3-cd)pyrene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | 0.9 J | NA | **0.002** |
| Isophorone | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **50** |
| 2-Methylnaphthalene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | -- |
| Naphthalene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **10** |
| N-Nitroso-Di-n-propylamine | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | -- |
| N-nitrosodiphenylamine | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **50** |
| Nitrobenzene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **0.4** |
| 2-Nitroaniline | NA | NA | NA | NA | NA | NA | 24 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **5** |
| 3-Nitroaniline | NA | NA | NA | NA | NA | NA | 24 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **5** |
| 4-Nitroaniline | NA | NA | NA | NA | NA | NA | 24 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **5** |
| 2-Nitrophenol | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **1** |
| Phenanthrene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | 1 J | 2 J | NA | **50** |
| Pyrene | NA | NA | NA | NA | NA | NA | 10 UJ | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | 2 J | 2 J | NA | **50** |
| *Total SVOCs* | *0* | *0* | *0* | *0* | *0* | *0* | *602* | *41* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *40* | *1047* | *995* | *0* | |
| ***Pesticides (ug/L)*** | | | | | | | | | | | | | | | | | | | | | |
| alpha-BHC | NA | NA | NA | NA | NA | NA | ND | 0.05 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | 0.014 J | 0.011 J | NA | -- |
| beta-BHC | NA | NA | NA | NA | NA | NA | ND | 0.05 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | -- |
| delta-BHC | NA | NA | NA | NA | NA | NA | ND | 0.05 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | -- |
| gamma-BHC (Lindane) | NA | NA | NA | NA | NA | NA | ND | 0.05 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | -- |
| Heptachlor | NA | NA | NA | NA | NA | NA | ND | 0.05 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **0.04** |
| Aldrin | NA | NA | NA | NA | NA | NA | ND | 0.05 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **ND** |
| Heptachlor epoxide | NA | NA | NA | NA | NA | NA | ND | 0.05 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **0.03** |
| Endosulfan I | NA | NA | NA | NA | NA | NA | ND | 0.05 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | -- |
| Dieldrin | NA | NA | NA | NA | NA | NA | ND | 0.1 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **0.004** |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | ND | 0.1 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **0.3** |
| Endrin | NA | NA | NA | NA | NA | NA | ND | 0.1 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **ND** |

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

**TABLE 3**
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**

**BUFFALO DEVELOPMENT CORP.**
**BUFFALO, NEW YORK**

| Parameter [1] | Sample Location | | | | | | | | | | | | | | | | | | | GWQS/ GV [3] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Historical Data | | Brownfield Cleanup Program Remedial Investigation | | | | | | | | | | | | | | | | | |
| | BMW-3 | BMW-5 | PZ-1 | PZ-2 | PZ-3 | PZ-4 | PZ-5 | PZ-6 | PZ-7 | PZ-8 | PZ-9 | PZ-10 | PZ-11 | PZ-12 | PZ-13 | PZ-14 | MW-1 | MW-2 | Blind Dup [2] | MW-3 | |
| Endosulfan II | NA | NA | NA | NA | NA | NA | ND | 0.1 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | -- |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | ND | 0.1 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **0.3** |
| Endosulfan Sulfate | NA | NA | NA | NA | NA | NA | ND | 0.1 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | 0.021 J | NA | -- |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | ND | 0.1 UJ | NA | NA | NA | NA | NA | NA | NA | NA | 0.094 J | ND | 0.023 J | NA | **0.2** |
| Methoxychlor | NA | NA | NA | NA | NA | NA | ND | 0.5 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **35.0** |
| Endrin ketone | NA | NA | NA | NA | NA | NA | ND | 0.1 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **5.0** |
| Endrin aldehyde | NA | NA | NA | NA | NA | NA | ND | 0.1 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **5.0** |
| alpha-Chlrodane | NA | NA | NA | NA | NA | NA | ND | 0.05 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **0.05** |
| gamma-Chlordane | NA | NA | NA | NA | NA | NA | ND | 0.05 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **0.05** |
| Toxaphene | NA | NA | NA | NA | NA | NA | ND | 5 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **0.06** |
| Aroclor 1016 | NA | NA | NA | NA | NA | NA | ND | 1 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | -- |
| Aroclor 1221 | NA | NA | NA | NA | NA | NA | ND | 2 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | -- |
| Aroclor 1232 | NA | NA | NA | NA | NA | NA | ND | 1 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | -- |
| Aroclor 1242 | NA | NA | NA | NA | NA | NA | ND | 1 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | -- |
| Aroclor 1248 | NA | NA | NA | NA | NA | NA | ND | 1 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | -- |
| Aroclor 1254 | NA | NA | NA | NA | NA | NA | ND | 1 UJ | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | -- |
| Aroclor 1260 | NA | NA | NA | NA | NA | NA | ND | 1 UJ | NA | NA | NA | NA | NA | NA | NA | NA | 0.094 J | 0.1 J | ND | NA | -- |
| ***Inorganic Compounds (ug/L)*** | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | NA | NA | NA | NA | NA | NA | 31300 | 13900 | NA | NA | NA | NA | NA | NA | NA | NA | 1040 | 1450 | 1310 | NA | -- |
| Arsenic | NA | NA | NA | NA | NA | NA | 42.4 | 17.3 | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **25** |
| Barium | NA | NA | NA | NA | NA | NA | 1000 | 288 | NA | NA | NA | NA | NA | NA | NA | NA | 80.2 B | 80.3 B | 78.3 B | NA | **1000** |
| Beryllium | NA | NA | NA | NA | NA | NA | ND | 1.4 B | NA | NA | NA | NA | NA | NA | NA | NA | 0.18 B | 0.47 B | 0.45 B | NA | -- |
| Cadmium | NA | NA | NA | NA | NA | NA | 4.1 B | 1.7 B | NA | NA | NA | NA | NA | NA | NA | NA | 1.2 B | ND | 1 B | NA | **5** |
| Calcium | NA | NA | NA | NA | NA | NA | 671000 J | 366000 | NA | NA | NA | NA | NA | NA | NA | NA | 140000 | 132000 | 132000 | NA | -- |
| Chromium | NA | NA | NA | NA | NA | NA | 67.4 | 28.1 | NA | NA | NA | NA | NA | NA | NA | NA | 1.6 B | 2.1 B | 2.3 B | NA | **50** |
| Cobalt | NA | NA | NA | NA | NA | NA | 70.2 | 34.7 B | NA | NA | NA | NA | NA | NA | NA | NA | 2.2 B | 3 B | 2.9 B | NA | -- |
| Copper | NA | NA | NA | NA | NA | NA | 225 | 75.8 | NA | NA | NA | NA | NA | NA | NA | NA | 3.6 B | 3.3 B | 3.9 B | NA | **200** |
| Iron | NA | NA | NA | NA | NA | NA | 97700 | 33500 J | NA | NA | NA | NA | NA | NA | NA | NA | 1630 J | 2900 J | 2820 J | NA | **300** |
| Iron- Soluble | NA | NA | NA | NA | NA | NA | ND | ND | NA | NA | NA | NA | NA | NA | NA | NA | 130 | 541 | ND | NA | **300** |
| Lead | NA | NA | NA | NA | NA | NA | 156 | 223 | NA | NA | NA | NA | NA | NA | NA | NA | 15.3 | 4 B | 4.6 B | NA | **25** |
| Magnesium | NA | NA | NA | NA | NA | NA | 316000 | 159000 | NA | NA | NA | NA | NA | NA | NA | NA | 59600 | 62000 | 60500 | NA | -- |
| Manganese | NA | NA | NA | NA | NA | NA | 3370 | 1680 | NA | NA | NA | NA | NA | NA | NA | NA | 107 | 392 | 369 | NA | **300** |
| Manganese- Soluble | NA | NA | NA | NA | NA | NA | 42.9 | 24.3 | NA | NA | NA | NA | NA | NA | NA | NA | 59.2 | 263 | ND | NA | **300** |
| Mercury | NA | NA | NA | NA | NA | NA | 0.353 J | 0.097 B | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **0.7** |
| Nickel | NA | NA | NA | NA | NA | NA | 87.5 | 33.8 B | NA | NA | NA | NA | NA | NA | NA | NA | 3.5 B | 3.2 B | 4.1 B | NA | **100** |
| Potassium | NA | NA | NA | NA | NA | NA | 23600 | 15300 | NA | NA | NA | NA | NA | NA | NA | NA | 6240 | 8310 | 8210 | NA | -- |
| Silver | NA | NA | NA | NA | NA | NA | ND | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | **50** |
| Sodium | NA | NA | NA | NA | NA | NA | 582000 | 461000 | NA | NA | NA | NA | NA | NA | NA | NA | 188000 | 238000 | 248000 | NA | **20000** |
| Thallium | NA | NA | NA | NA | NA | NA | 8.5 B | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | -- |
| Vanadium | NA | NA | NA | NA | NA | NA | 80.9 | 32 B | NA | NA | NA | NA | NA | NA | NA | NA | 2.9 B | 2.9 B | 2.7 B | NA | -- |
| Zinc | NA | NA | NA | NA | NA | NA | 999 | 395 | NA | NA | NA | NA | NA | NA | NA | NA | 26.2 B | 30.3 B | 30.9 B | NA | -- |

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

**TABLE 3**
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**

**BUFFALO DEVELOPMENT CORP.**
**BUFFALO, NEW YORK**

| Parameter [1] | Sample Location | | | | | | | | | | | | | | | | | | | GWQS/ GV [3] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Historical Data | | Brownfield Cleanup Program Remedial Investigation | | | | | | | | | | | | | | | | | |
| | BMW-3 | BMW-5 | PZ-1 | PZ-2 | PZ-3 | PZ-4 | PZ-5 | PZ-6 | PZ-7 | PZ-8 | PZ-9 | PZ-10 | PZ-11 | PZ-12 | PZ-13 | PZ-14 | MW-1 | MW-2 | Blind Dup [2] | MW-3 | |
| ***Water Quality Parameters (mg/L)*** | | | | | | | | | | | | | | | | | | | | | |
| Chemical Oxygen Demand | NA | NA | NA | NA | NA | NA | ND | ND | NA | NA | NA | NA | NA | NA | NA | NA | ND | 20.6 | NA | NA | -- |
| Nitrate, mg/L-N | NA | NA | NA | NA | NA | NA | 7.6 J | 3.4 | NA | NA | NA | NA | NA | NA | NA | NA | 1.8 | 0.77 | NA | NA | **10** |
| Sulfate | NA | NA | NA | NA | NA | NA | 125 | 114 J | NA | NA | NA | NA | NA | NA | NA | NA | 113 J | 114 J | NA | NA | **250** |
| ***Field Measurements (units as indicated)*** | | | | | | | | | | | | | | | | | | | | | |
| pH (units) | NA | NA | 7.08 | 7.26 | 7.23 | 7.54 | 7.22 | 7.75 | 7.19 | 7.42 | 7.37 | 7.61 | NA | NA | NA | NA | 7.09 | 7.12 | 7.12 | 7.39 | **6.5 - 8.5** |
| Temperature ($^{o}$C) | NA | NA | 14.0 | 16.3 | 16.3 | 16.3 | 10.9 | 16.0 | 17.0 | 17.1 | 17.0 | 17.1 | NA | NA | NA | NA | 10.5 | 10.4 | 10.4 | 9.8 | |
| Specific Conductance (uS) | NA | NA | 3496 | 4646 | 3590 | 3782 | 3722 | 3679 | 4913 | 3242 | 2944 | 4368 | NA | NA | NA | NA | 1903 | 1968 | 1968 | 1834 | |
| Turbidity | NA | NA | >1000 | >1000 | >1000 | >1000 | >1000 | >1000 | >1000 | >1000 | >1000 | >1000 | NA | NA | NA | NA | >1000 | >1000 | >1000 | >1000 | **50**** |
| ORP (mV) | NA | NA | 20 | 78 | 527 | 49 | 111 | 32 | 529 | 19 | -52 | -89 | NA | NA | NA | NA | 0 | 0 | 0 | 13 | |
| DO (ppm) | NA | NA | 6.69 | 7.27 | 3.77 | 5.92 | 5.42 | 6.17 | 6.6 | 7.86 | 4.38 | 4.8 | NA | NA | NA | NA | 3.02 | 3.58 | 3.58 | 3.76 | |

**Notes:**
1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Blind duplicate collected from MW-2.
3. Regulatory limits are NYSDEC Class “GA” Groundwater Quality Standards (GWQS) as published in NYSDEC Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998).

**Definitions:**
ND or U = Parameter not detected above laboratory detection limit.
NA = Parameter not analyzed.
"--" = No standard available.
J = Indicates an estimated value.
B = Value is between the IDL and the CRDL.
D = Compound identified in an analysis at the secondary dilution factor.
* = Indicates analysis is not within quality control limits.
** = Indicates guidance value
N = Spike sample recovery is not within quality control limits.
E = Indicates value estimated or not reported due to the presence of interferences.

= Result exceeds Class GA Groundwater Standard/Guidance Value.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

**TABLE 4**
**SUMMARY OF SOIL VAPOR ANALYTICAL RESULTS**

**BUFFALO DEVELOPMENT CORP.**
**BUFFALO, NEW YORK**

| Parameter [1] | Sampling Event | | | | |
|---|---|---|---|---|---|
| | 432 Pearl St. (1/20/06) | 279 Franklin St. (1/20/06) | 432 Pearl St. (11/20/06) | | |
| | Air-1 | Air | SGV-1 | SGV-2 | SGV-3 |
| ***TCL Volatile Organic Compounds (VOCs) - ug/m3*** | | | | | |
| 1,3-Butadiene | 5.8 | ND | 8.4 | 9.3 | 13 |
| Acetone | ND | ND | 24 | 31 | 29 |
| Dichlorodifluoromethane | 3.3 | ND | ND | ND | ND |
| Carbon Disulfide | 12 | ND | 18 | 5.9 | 26 |
| n-Hexane | 70 | 190 | 230 | 210 | 170 |
| Methyl Ethyl Ketone | ND | ND | ND | 5.3 | 4.1 |
| Cyclohexane | 45 | 120 | 210 | 100 | 150 |
| 2,2,4-Trimethylpentane | 6.1 | ND | 6.1 | 5.6 | 15 |
| Benzene | 9.9 | ND | 6.4 | 13 | 21 |
| n-Heptane | 45 | 90 | 140 | 90 | 110 |
| Toluene | 27 | 53 | 5.3 | 18 | 29 |
| Tetrachloroethene | 140 | 14000 | ND | 21 | 21 |
| Trichloroethene | ND | 70 | ND | ND | ND |
| Trichlorofluoromethane | 1.8 | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | ND | 71 | ND | ND | ND |
| Ethylbenzene | 5.2 | ND | ND | 2.6 | ND |
| Xylene (m,p) | 22 | ND | 4.8 | 11 | 21 |
| Xylene (o) | 6.5 | ND | 1.8 | 4.8 | 13 |
| Xylene (total) | 27 | ND | 6.5 | 16 | 34 |
| 4-Ethyltoluene | 4.9 | ND | ND | 2.0 | 3.7 |
| 1,3,5-Trimethylbenzene | 2.3 | ND | ND | ND | 3.4 |
| 1,4-Dichlorobenzene | 4.1 | ND | ND | ND | ND |
| 1,2,4-Trimethylbenzene | 6.4 | ND | ND | ND | 3.7 |
| Styrene | 9.8 | ND | 1.7 | ND | ND |

**Notes:**

1. Only those compounds detected above the laboratory reporting limit are presented in this table.

**Definitions:**

ND= Not detected above laboratory detection limits.

# ATTACHMENT 06

## LISTING OF PREVIOUS SITE OWNERS

**Attachment 06**
**Listing of Previous Site Owners**

**Buffalo Development Corp.**
**Buffalo Development Corp. Hotel Site**
**Brownfield Cleanup Program Application**

## INTRODUCTION

The following table lists the previous property owners as described in the Chain of Title. A full title search is available for the 279 Franklin and 267 Franklin properties, and a partial title search for 432 Pearl Street. Property Ownership for 275-277 Franklin was discerned from a review of Deeds filed n the Erie County Clerk's office. Reasonable attempts were made to attain complete previous site owner contact information. In some cases, previous owners complete contact information was not available.

| Year | Owner(s) |
|---|---|
| **267 Franklin Street** | |
| ***Current Owner*** | |
| 1994-Present | 430 Niagara Street Associates<br>460 Niagara Street<br>Buffalo, NY 14201 |
| ***Previous Owners*** | |
| 1886-1898 | Emanuel Ullman |
| 1898-1905 | Frank Niederpruem |
| 1903-1905 | Nation Herkimer County Bank |
| 1905 | William Luther |
| 1905-1908 | National Herkimer County Bank |
| 1909-1911 | Walter Davis |
| 1912 | Peter McNeil |
| 1912-1913 | Thomas Wallace |
| 1913-1940 | Terry & Ethel Arbesman |
| 1914-1936 | Lida M Allen and Thomas G Allen |
| 1936-1941 | Erie County Savings Bank |
| 1941-1974 | Salvatore and Marie Caterina |
| 1974-1980 | Donald J. Reeves |
| 1980-1994 | George Smilanich III |

**Attachment 06**
**Listing of Previous Site Owners**

**Buffalo Development Corp.**
**Buffalo Development Corp. Hotel Site**
**Brownfield Cleanup Program Application**

| Year | Owner(s) |
|---|---|
| **275/277 Franklin Street** | |
| ***Current Owner*** | |
| Present | Saturn Development |
| ***Previous Owners*** | |
| | Willow Top Cleaners, Inc. / Kathryn & Joe Dell Flakes |
| | Betty Scott Trustee (under Land Trust Agreement) |
| | Willow Top Cleaners, Inc. |
| | Dolores J. Wallens |
| | Duratizing Corporation |
| **279 Franklin Street** | |
| ***Current Owner*** | |
| Present | Skydeck Corporation |
| ***Previous Owners*** | |
| | Alanson Farrar & Katherine M. |
| 1917-1949 | Betsy L. Henafelt |
| 1949 | Louise Vidano |
| 1949 | Marie T. DeGasper |
| 1970 | Leon Lawrence Sidell |
| 1982 | Ellis Properties, Inc. |
| 1983 | J & L Management Corp. |
| 1983 | City of Buffalo Urban Renewal Agency |
| **432 Pearl Street** | |
| ***Current Owner*** | |
| 1999-Present | Skydeck Corporation |
| ***Previous Owners*** | |
| 1920 | Anthony J. Parloto to Frank Parloto Realty Co. |
| 1923 | Frank Parloto |
| 1929 | Albert Fisher |
| 1932 | The Marine Trust Company of Buffalo |
| 1945 | Louise Vidan |
| 1945 | James J. DeGasper |
| 1970 | Leon Sidell |
| 1979 | Ellis Properties, Inc. |
| 1980 | Leon Sidell |
| 1973 | William H. Gardner |

**Attachment 06**
**Listing of Previous Site Owners**

**Buffalo Development Corp.**
**Buffalo Development Corp. Hotel Site**
**Brownfield Cleanup Program Application**

| Year | Owner(s) |
|---|---|
| 1983 | J & L Management Corp. |
| 1983 | City of Buffalo Urban Renewal Agency |

# ATTACHMENT 07

## LISTING OF PREVIOUS SITE OPERATORS

**Attachment 07**

**Listing of Previous Site Operators**

**Buffalo Development Corp.**
**Buffalo Development Corp. Hotel Site**
**Brownfield Cleanup Program Application**

## INTRODUCTION

| Year | Operator(s) |
|---|---|
| **267 Franklin Street** | |
| | No other operators identified beyond those listed on ownership history in Attachment 6 |
| **275/277 Franklin Street** | |
| | Willow Top Cleaners, Inc. / Kathryn & Joe Dell Flakes |
| | Duratizing Corporation (formerly known as Sayon Cleaning and Laundry |
| **279 Franklin Street** | |
| | No other operators identified beyond those listed on ownership history in Attachment 6 |
| **432 Pearl Street** | |
| 1925 | Martin Fischer and Sons Hot Air Heaters |
| | No other operators identified beyond those listed on ownership history in Attachment 6 |

# ATTACHMENT 08

## CONTACT LIST INFORMATION

**ATTACHMENT 08**
**Contact List Information**

**Buffalo Development Corp.**
**Buffalo Development Corp. Hotel Site**
**Brownfield Cleanup Program Application**

## CONTACT LIST

The following is the contact list information for the subject property.

### New York State Contacts:

Director Abby Snyder
NYSDEC, Region 9
270 Michigan Avenue
Buffalo, NY 14203

Mr. Martin Doster
NYSDEC, Region 9
270 Michigan Avenue
Buffalo, NY 14203

Mr. Gene Melnyk
NYSDEC, Region 9
270 Michigan Avenue
Buffalo, NY 14203

Ms. Meaghan Boice-Green
NYSDEC, Region 9
270 Michigan Ave.
Buffalo, N.Y 14203

Ms. Megan Gollwitzer
NYSDEC, Region 9
270 Michigan Ave.
Buffalo, N.Y 14203

Community Outreach File
NYSDEC, Region 9
270 Michigan Ave.
Buffalo, N.Y 14203

Mr. Cameron O'Connor
NYSDOH
584 Delaware Avenue
Buffalo, NY 14202

Mr. Matt Forcucci
NYSDOH
584 Delaware Avenue
Buffalo, NY 14202

Senator Hillary Rodham-Clinton
U.S. Senate
Larkin Building
726 Exchange St., Suite 511
Buffalo, NY 14210

Senator Charles Schumer
U.S. Senate
130 South Elmwood Avenue, Suite 660
Buffalo, NY 14202

Representative Brian M. Higgins
Congressional District 27
726 Exchange Street, Suite 601
Buffalo, NY 14210

Representative Louise M. Slaughter
109th Congress – District 28
465 Main Street, Suite 105
Buffalo, NY 14203

**ATTACHMENT 08**
**Contact List Information**

**Buffalo Development Corp.**
**Buffalo Development Corp. Hotel Site**
**Brownfield Cleanup Program Application**

## New York State Contacts:

Assemblymember Crystal D. Peoples
NYS Assembly – District 141
792 E. Delavan Avenue
Buffalo, NY 14215

Assemblymember Sam Hoyt
NYS Assembly – District 144
125 Main Street
Buffalo, NY 14203

Senator Marc Coppola
60th District, NYS Senate
65 Court St., Rm. 213
Buffalo, NY 14202

Senator William Stachowski
58th District, NYS Senate
2030 Clinton Street
Buffalo, NY 14206

Mr. Michael Basile
WNY Public Information Office
186 Exchange St.
Buffalo, NY 14204

## Erie County Contacts:

Mr. Joel Giambra, County Executive
95 Franklin Street
Rath Building
Buffalo, NY 14202

Mr. George Holt
Legislator – District 3
427 William Street
Buffalo, NY 14204

Commissioner Michael Walters
Erie Co. Emergency Services
95 Franklin Street
Buffalo, NY 14202

Mr. Paul Kranz
Erie Co. Environment & Plan.
95 Franklin Street
Buffalo, NY 14202

Mr. Michael Raab
Erie Co. Environment & Plan.
95 Franklin Street
Buffalo, NY 14202

Commissioner Andrew Eszak
Erie Co. Environment & Plan.
95 Franklin Street
Buffalo, NY 14202

**ATTACHMENT 08**
**Contact List Information**

**Buffalo Development Corp.**
**Buffalo Development Corp. Hotel Site**
**Brownfield Cleanup Program Application**

**Erie County Contacts:**

Commissioner Anthony Billittier
Erie Co. Health Dept., Rm 931
95 Franklin Street
Buffalo, NY 14202

Mr. Paul Leone
Erie County IDA
275 Oak Street
Buffalo, NY 14203

Mr. Kevin Kelley
Erie County Legislature Clerk
25 Delaware Avenue
Buffalo, NY 14202

Mr. Patrick Daley
Erie County Local Emergency
95 Franklin Street
Buffalo, NY 14202

**City of Buffalo Contacts:**

Mayor Byron W. Brown
City Hall
Buffalo, NY 14202

**Zoning Board:**

James Lewis, III
Chairman
Room 1801, City Hall
Buffalo, NY 14202

**Supplier of Potable Water:**

Erie County Water Authority
350 Ellicott Square Building
295 Main Street
Buffalo, NY 14203

City of Buffalo Division of Water
City Hall
Buffalo, NY 14202

**Local News Media:**

ATTN: Jay Bonfatti
The Buffalo News
1 News Plaza
Buffalo, NY 14240

ATTN: Melanie Pritchard
WKBW-TV
7 Broadcast Plaza
Buffalo, NY 14202

**ATTACHMENT 08**
**Contact List Information**

**Buffalo Development Corp.**
**Buffalo Development Corp. Hotel Site**
**Brownfield Cleanup Program Application**

**Local News Media:**

WBEN News Radio 930
Entercom Radio of Buffalo
500 Corporate Pkwy, Suite 200
Buffalo, NY 14226

ATTN: Environmental News Desk
WIVB - CH. 4
2077 Elmwood Avenue
Buffalo, NY 14207

ATTN: Anne Marie Franczyk
Business First
465 Main Street
Buffalo, NY 14203-1793

Editor
Metro Community News
25 Boxwood Lane
Buffalo, NY 14227

Editor
Bee Group Newspapers
P.O. Box 150
Buffalo, NY 14231

News Director
WBEN Radio News/Talk 930
500 Corporate Pkwy. #200
Buffalo, NY 14226

ATTN: Environmental News Desk
WJYE
1700 Rand Building
Buffalo, NY 14203

ATTN: Environmental News Desk
WGRZ TV - CH. 2
259 Delaware Avenue
Buffalo, NY 14202

ATTN: Michael Desmond
WNED, Environmental News Desk
PO 1263, Horizons Plaza
Buffalo, NY 14240

ATTN: News Director
Citadel Communications
50 James Casey Dr.
Buffalo, NY 14206

ATTN: News Director
Infinity Broadcasting
14 Lafayette Square, #1300
Buffalo, NY 14203

ATTN: News Director
WB 49
699 Hertel Ave, Suite 100
Buffalo, NY 14207

**Document Repository:**

Buffalo & Erie County Public Library
Central Branch
1 Lafayette Square
Buffalo, NY 14203
Attn: Michael C. Mahaney, Director

**ATTACHMENT 08**
**Contact List Information**

**Buffalo Development Corp.**
**Buffalo Development Corp. Hotel Site**
**Brownfield Cleanup Program Application**

**Nearby Schools:**

Emerson Vocational High School
Principal: James G. Weimer, Jr.
70 W. Chippewa St.
Buffalo, NY 14202
716-816-3018

Empire State College
Dean: Nan M. DiBello, Ph.D.
Market Arcade
617 Main St.
Buffalo, NY 14203-1498
716-853-7700

**Other Interested Groups:**

Mr. Brian Smith
Citizens Campaign-Environment
3144 Main Street
Buffalo, NY 14214

WNY Director
Citizens' Env. Coalition
543 Franklin St., Rm. 2
Buffalo, NY 14202-1109

BENCHMARK
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# ATTACHMENT 08

## Area Property Owners

**Buffalo Development Corp.**
**Buffalo Development Corp. Hotel Site**
**Brownfield Cleanup Program Application**

| Property Address | | Owner and Mailing Address |
|---|---|---|
| No. | Street | |
| 259 | Delaware Avenue | Multimedia Entertainment, Inc.<br>259 Delaware Avenue<br>Buffalo, New York 14202 |
| 257 | Franklin Street | Z Holding Corporation<br>257 Franklin Street<br>Buffalo, New York 14202 |
| 265 | Franklin Street | JDT Properties, LLC<br>265 Franklin Street<br>Buffalo, New York 14202 |
| 280 | Franklin Street | Buffalo Development Corp.<br>294 Franklin Street<br>Buffalo, New York 14202 |
| 284 | Franklin Street | 286 Franklin Street, Inc. c/o AAA Distributors<br>286 Franklin Street<br>Buffalo, New York 14202 |
| 642 | Main Street | City of Buffalo<br>Perfecting Title<br>2501 City Hall<br>Buffalo, New York 14202 |
| 430 | Pearl Street | Charles Davis I<br>426 Pearl Street<br>Buffalo, New York 14202 |
| 439 | Pearl Street | Shea's O'Connell Preservation Guild, Ltd.<br>646 Main Street<br>Buffalo, New York 14202 |
| 452 | Pearl Street | Paul Ramunno<br>247 North Drive<br>Buffalo, New York 14216 |
| 470 | Pearl Street | 470 Pearl Street, LLC<br>297 Franklin Street<br>Buffalo, New York 14202 |
| 622 | Main Street | Acquest Theater Place, LLC<br>80 Curtwright Drive<br>Williamsville, New York 14221 |

# ATTACHMENT 09

## DOCUMENT REPOSITORY CONFIRMATION LETTER

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

June 22, 2006

Michael C. Mahaney
Library Director
Buffalo & Erie County Public Library
Central Branch
1 Lafayette Square
Buffalo, New York 14203

Re: Document Repository for Brownfield Cleanup Program
Buffalo Development Corp.
275/277 & 279 Franklin and 432 Pearl Street Site, Buffalo, New York

Dear Mr. Mahaney,

Per my telephone conversation with your office receptionist, thank you for agreeing to the Central Library acting as the document repository for the above-referenced Site.

Please contact me or Mr. Patrick Martin at 856-0599 if you have questions or require additional information.

Sincerely,
Benchmark Environmental Engineering & Science, PLLC

Lori E. Riker, P.E.
Project Engineer

c: File: 0099-003-100

# ATTACHMENT 10

## ENVIRONMENTAL FACTORS AND HISTORIC LAND USE CONSIDERATIONS

**Attachment 10**
**Environmental Factors & Historic Land Use Considerations**

**Buffalo Development Corp.**
**Buffalo Development Corp. Hotel Site**
**Brownfield Cleanup Program Application**

## INTRODUCTION

The following provides a brief summary of the Site:

- There are no State or Federal wetlands or floodplains on the Site (see attached figure); however, Federal wetlands are located approximately 0.75 miles to the west adjacent to Lake Erie. State wetlands are located more than one mile southwest of the Site.

- A 100-year floodplain is located approximately 0.75 miles southwest of the Site (i.e., Lake Erie).

- The Site is not adjacent to a Significant Coastal Fish and Wildlife Habitat.

- There are no threatened or endangered species or important plant habitats listed at the Site.

# ATTACHMENT 11

## NEARBY LAND USE

**Attachment 11**
**Surrounding Land Use Description**

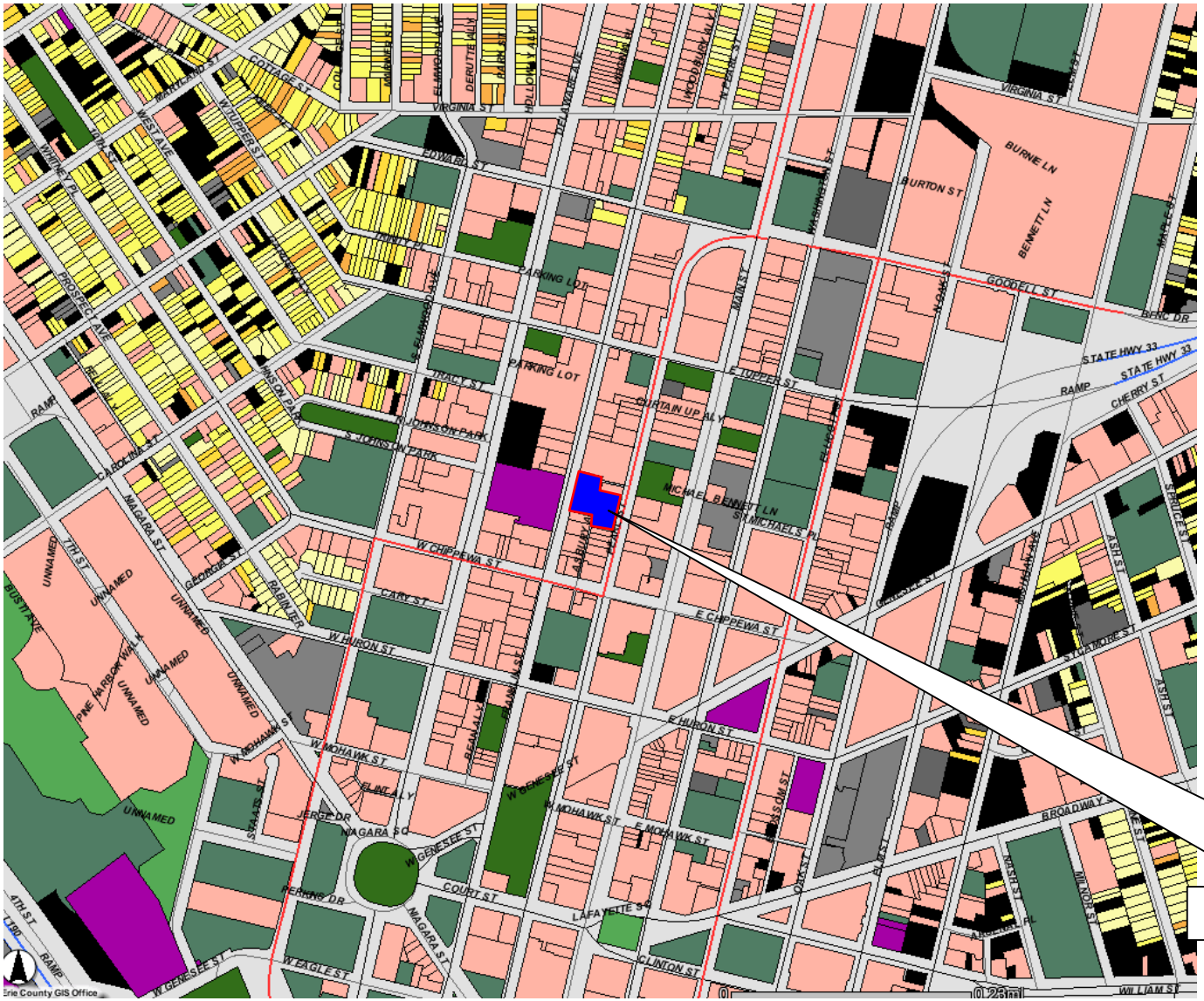
**Buffalo Development Corporation**
**Buffalo Development Corporation Hotel Site**
**Brownfield Cleanup Program Application**

## SURROUNDING LAND USE DESCRIPTION

The subject property (Site) is currently developed with one apartment building and an asphalt covered surface parking lot comprised of four contiguous parcels of land totaling approximately 0.97 acres in the City of Buffalo, County of Erie, New York (see Figures 1-1 and 1-2).

The Site is bound by a surface parking lot and restaurant to the north, Pearl Street to the east, Franklin Street to the west, and a commercial printing shop to the south. Additionally, Asbury Alley runs through the Site in an approximate north-south direction.

The surrounding land-use is mixed use, predominately developed with commercial, public service and entertainment use properties (see Figure 11-1). The Site neighbors include various commercial buildings or surface parking lots surrounding the Site. Shea's Performing Arts Center is located across Pearl Street to the east of the Site. There are no private residences adjacent to the Site (besides the on-Site apartment building). A surrounding land-use map is included in Attachment 11.

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PROJECT NO.: 0099-002-100

DATE: MAY 2007

DRAFTED BY: BCH/NTM

# LAND USE MAP

BROWNFIELD CLEANUP PROGRAM APPLICATION

BUFFALO DEVELOPMENT CORP. SITE
BUFFALO, NEW YORK

PREPARED FOR
BUFFALO DEVELOPMENT CORPORATION

FIGURE 11-1

# ATTACHMENT 12

## GROUNDWATER VULNERABILITY ASSESSMENT

**Attachment 12**
**Groundwater Vulnerability Assessment**

**Buffalo Development Corp.**
**Buffalo Development Corp. Hotel Site**
**Brownfield Cleanup Program Application**

## POTENTIAL VULNERABILITY OF GROUNDWATER TO CONTAMINATION

Groundwater at the Site is contaminated as a result of impacts from the former dry cleaning activities at 275 Franklin Street. Currently, there are no deed restrictions on the use of groundwater at the Site; however, groundwater supply wells are not present on the Site. Regionally, groundwater in the area has not been developed for industrial, agriculture, or public supply purposes. Municipal potable water service is provided on-site and off-site by the Erie County Water Authority.

Historical investigations, including a Remedial Investigation (RI) completed in November 2006 through January 2007, have shown that groundwater across the Project Redevelopment Area has been significantly impacted by chlorinated volatile organic compounds (VOCs), which is likely a result of industrial activities on 275 Franklin Street (i.e., dry cleaning operations). Dry cleaning operations have ceased and the building and infrastructure have been demolished.

## GROUNDWATER FLOW/RECHARGE

During the RI, unconfined groundwater was encountered at the Site within the native soil at depths of approximately 8 to 12 fbgs. Site groundwater flow direction is estimated to the southwest. Regional groundwater appears to flow west/southwest toward Lake Erie.

Hydraulic conductivity testing of the shallow aquifer was conducted via slug testing during the RI. Average hydraulic conductivity was estimated at $6.4 \times 10^{-4}$ centimeters per second (cm/sec) using the Bouwer and Rice Method. Average groundwater velocity was estimated at $1.1 \times 10^{-5}$ cm/sec or $3.0 \times 10^{-2}$ feet per day (ft/day) assuming an effective porosity of 0.35 and an average hydraulic gradient of 0.005.

# ATTACHMENT 13

## DESCRIPTION OF SITE GEOGRAPHY/GEOLOGY

**Attachment 13**
**Description of Site Geography/Geology**

**Buffalo Development Corp.**
**Buffalo Development Corp. Hotel Site**
**Brownfield Cleanup Program Application**

## ECOLOGICAL SETTING

The Site is not vegetated due to the presence of surface parking lots. Viable aquatic habitats in the vicinity of the Site include the Buffalo River (approximately 1 mile southwest) and Lake Erie (approximately 0.75 miles west). Federal wetlands are located approximately 0.75 miles to the west adjacent to Lake Erie. State wetlands are located more than one mile southwest of the Site.

## DEMOGRAPHY AND LAND USE

The Site is currently owned (275-277 Franklin Street, 279 Franklin Street and 432 Pearl Street) or under a pending purchase contract (267 Franklin Street) by Buffalo Development Corporation. The site consists of asphalt paved surface parking lots and one residential apartment building located at 267 Franklin Street. Land use surrounding the Site includes commercial properties, public property, and recreational/community properties (see Figure 11-1).

## REGIONAL GEOLOGY & HYDROGEOLOGY

The Site is located within the Erie-Ontario lake plain physiographic province, which is typified by little topographic relief and gentle slope toward Lake Erie, except in the immediate vicinity of major drainageways (USDA, 1978). The surficial geology of the Lake Erie Plain consists of a thin glacial till (if present), glaciolacustrine deposits, recent alluvium, and the soils derived from these deposits (see Figure 13-1). Glacial till deposits are not encountered on this Site.

Glaciolacustrine deposits are characterized as thinly bedded to laminated silts and clays, which were deposited in lakes impounded between glacial ice and ice-free highland areas. As the glacial ice retreated northward in Erie County, water depths decreased and coarser grained shallow water sediments were deposited. These shallow water deposits included sandy beach ridges that defined lake edges, sand bars associated with offshore currents, and near shore silty fine sands. These sands exist below soil/fill at the Site.

Surface soils within the City are characterized as urban land with level to gently sloping land in which 80 percent or more of the soil surface is covered by asphalt, concrete, buildings, or other impervious structures (USDA, 1978) typical of an urban environment. The presence of overburden fill material is widespread and common throughout the City of Buffalo.

Based on the bedrock geologic map of Erie County (Buehler and Tesmer, 1963), the Site is situated over Onondaga Formation of the Middle Devonian Series (see Figure 13-2). The Onondaga Formation is comprised of a varying texture from coarse to very finely crystalline with a dark gray to tan color and chert and fossils within. The unit has an approximated thickness of 110 to 160 feet.

Structurally, the bedrock formations strike in an east-west direction and exhibit a regional dip that approximates 40 feet per mile (3 to 5 degrees) toward the south and southwest. As a result of this dip, the older Onondaga limestone outcrops or subcrops north of the Hamilton Group. An intersecting, orthogonal patter of fractures and joint sets are common throughout the bedrock strata. The surficial geomorphology of the bedrock strata was modified by period subaerial erosion and continental glaciation.

## SITE GEOLOGY

Site overburden soils have been described as soil/fill to approximately 3- to 4-feet below ground surface (fbgs) overlying native glaciolacustrine sand and silt.

The U.S. Department of Agriculture Soil Conservation Service soil survey map of Erie County[1] describes the general soil type at the Site as urban land. Field characterization confirms the presence of fill over much of the Site.

One exploratory soil boring completed during the RI encountered bedrock below the Site at approximately 52 fbgs.

## SITE GROUNDWATER

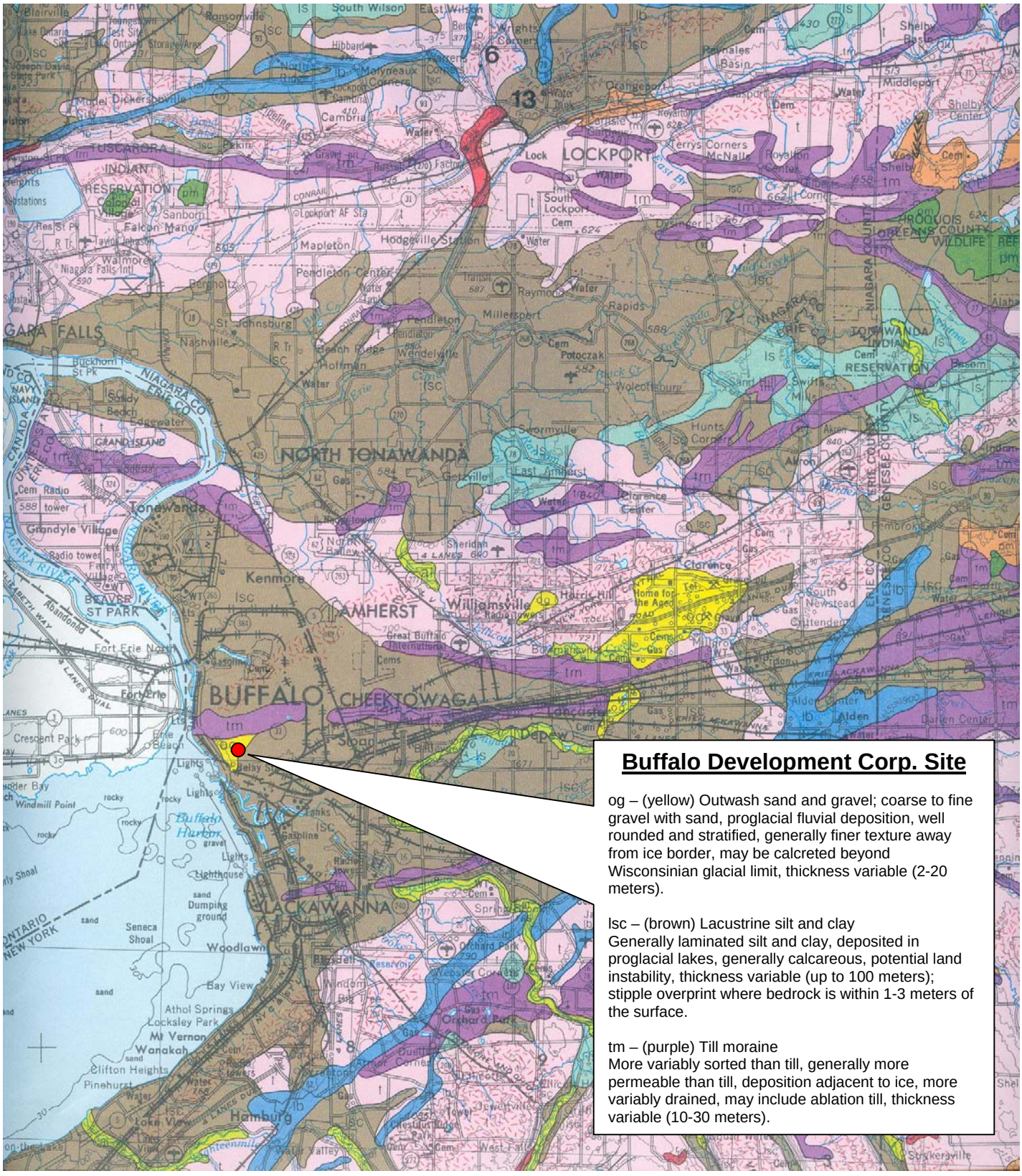
During the RI, unconfined groundwater was encountered at the Site within the native soil at depths of approximately 8 to 12 fbgs. Site groundwater flow direction is estimated to the southwest. Regional groundwater appears to flow west/southwest toward Lake Erie

[1] U.S. Dept. of Agriculture Soil Conservation Service Soil Survey of Erie County, New York, issued October 1972.

## GROUNDWATER RECHARGE & DISCHARGE

Recharge to the Site water table is primarily from rainfall and snowmelt. Precipitation may infiltrate into the soil/fill present on the Site; however asphalt cover and storm water receptors across the site divert precipitation to the storm water sewer system.

# FIGURE 13-1





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DRAFTED BY: BCH/NTM

## SOIL TYPE MAP

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BUFFALO DEVELOPMENT CORP. SITE
BUFFALO, NEW YORK

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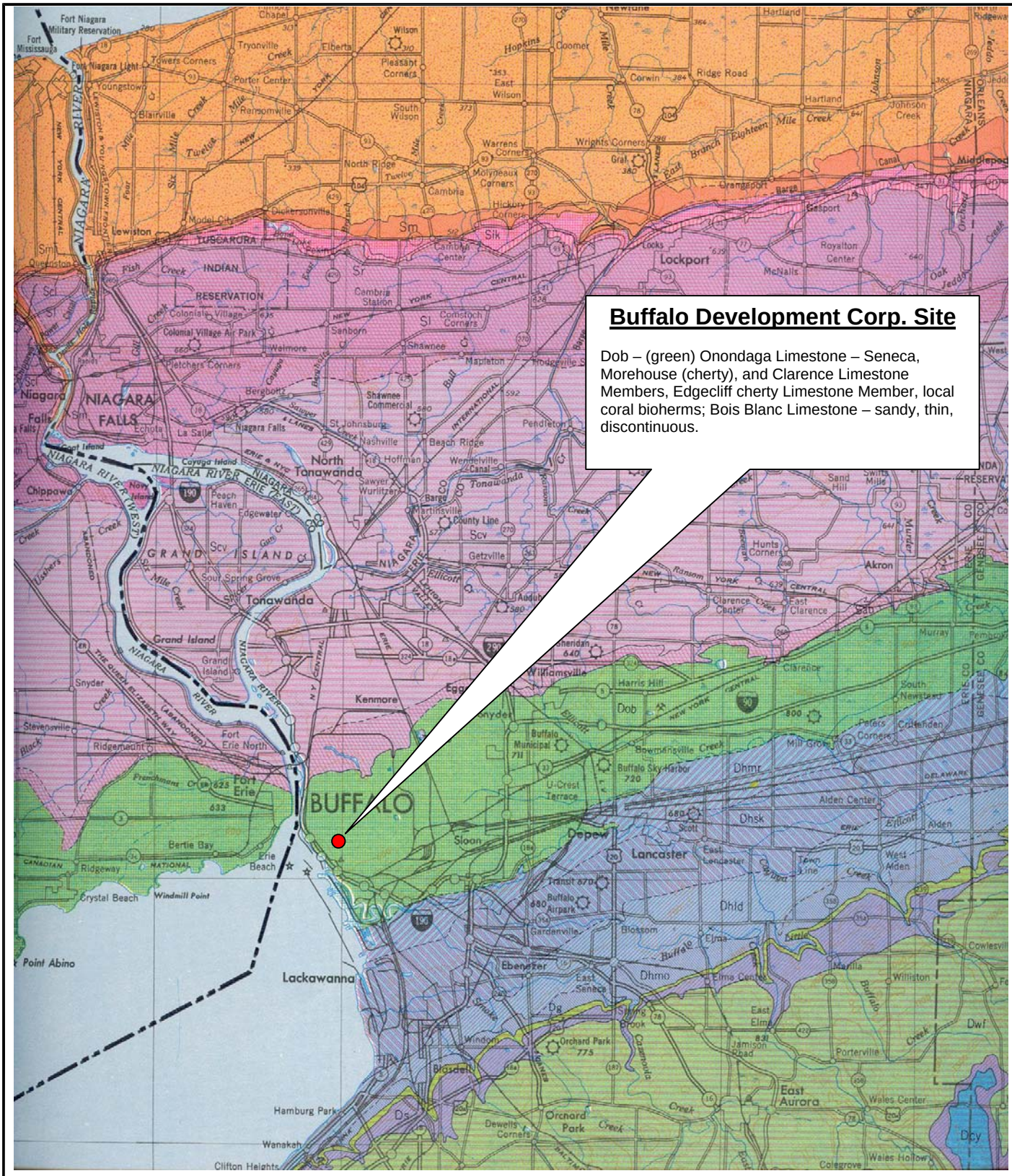
# FIGURE 13-2





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## REGIONAL BEDROCK MAP

BROWNFIELD CLEANUP PROGRAM APPLICATION

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BUFFALO, NEW YORK

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