APPLICATION

NYSDEC
Clean Water/Clean Air Bond Act
Environmental Restoration Project

VOLUME I

BUFFALO LAKESIDE COMMERCE PARK
PARCEL 4
BUFFALO, NEW YORK

Submitted By:
ERIE COUNTY INDUSTRIAL DEVELOPMENT AGENCY

Prepared by:
Malcolm Pirnie, Inc.
40 Centre Drive
Orchard Park, New York 14127

April 2005

4080-004

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1.0 ERP Application Form

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ENVIRONMENTAL RESTORATION PROGRAM (ERP) APPLICATION

1996 CLEAN WATER/CLEAN AIR BOND ACT

ECL ARTICLE 56, TITLE 5 - 6NYCRR 375-4

9/3/04

Applicant Information		
NAME OF MUNICIPALITY	Erie County Industrial Development Agency	
NAME OF INDIVIDUAL AUTHORIZED TO SIGN APPLICATION	Peter M. Cammarata	
TITLE OF AUTHORIZED INDIVIDUAL	Director of Urban Development	
ADDRESS	275 Oak Street	
CITY/TOWN Buffalo	ZIP CODE 14203	
PHONE (716) 856-6526	FAX (716) 856-6754	E-MAIL pcammarata@ecidany.com
NAME OF COMMUNITY BASED ORGANIZATION (IF APPLICABLE)	N/A	
COMMUNITY BASED ORGANIZATION'S REPRESENTATIVE		
ADDRESS		
CITY/TOWN	ZIP CODE	
PHONE	FAX	E-MAIL

Site Information	
SITE NAME Buffalo Lakeside Commerce Park - Parcel 4	
SITE ADDRESS 1714 Fuhrmann Blvd. (SBL# 132.19-1-4.2)	
CITY/TOWN Buffalo	ZIP CODE 14203
COUNTY Erie	SIZE (ACRES) 19.665+/-
LATITUDE (degrees/minutes/seconds) 42 ° 50 ' 08 "	LONGITUDE (degrees/minutes/seconds) 78 ° 51 ' 18 "

PLEASE ATTACH A COUNTY TAX MAP WITH IDENTIFIER NUMBERS, ALONG WITH ANY FIGURES NEEDED TO SHOW THE LOCATION AND BOUNDARIES OF THE SITE. ALSO INCLUDE A USGS 7.5 MINUTE QUAD MAP IN WHICH THE SITE IS LOCATED.

1. DO THE SITE BOUNDARIES CORRESPOND TO TAX MAP METES AND BOUNDS? ☒ YES ☐ NO
   IF NO, PLEASE ATTACH A METES AND BOUNDS DESCRIPTION OF THE SITE.
2. IS THE SITE PART OF A DESIGNATED BROWNFIELD OPPORTUNITY AREA PURSUANT TO GML970-R? IF YES, IDENTIFY AREA (NAME)_____ ☐ YES ☒ NO
3. IS THE SITE LISTED ON THE NYS REGISTRY OF INACTIVE HAZARDOUS WASTE DISPOSAL SITES? ☐ YES ☒ NO
   IF YES, FILL IN CURRENT REGISTRY SITE NUMBER AND CLASSIFICATION.

   REGISTRY SITE NUMBER:_____ CLASSIFICATION: _____

Applicant Eligibility Information

1. HAS THE APPLICANT GENERATED, TRANSPORTED OR DISPOSED OF, OR ARRANGED FOR OR CAUSED THE GENERATION, TRANSPORTATION OR DISPOSAL OF, HAZARDOUS WASTE OR PETROLEUM ON THE SITE? ☐YES ☒NO

2. HAS THE APPLICANT UNDERTAKEN, OR INTEND TO UNDERTAKE, ANY INDEMNIFICATION OBLIGATION RESPECTING A PARTY RESPONSIBLE UNDER LAW FOR THE REMEDIATION OF THE SITE? ☐YES ☒NO

3. HAS THE APPLICANT LEASED THE SITE TO ANOTHER PARTY THAT GENERATED, TRANSPORTED OR DISPOSED OF, OR THAT ARRANGED FOR OR CAUSED THE GENERATION, TRANSPORTATION OR DISPOSAL OF HAZARDOUS WASTE OR PETROLEUM ON THE SITE? IF YES, CHECK ONE OF THE FOLLOWING: ☐YES ☒NO

   ☐ A. THE APPLICANT DID NOT KNOW THAT SUCH OTHER PARTY GENERATED, TRANSPORTED OR DISPOSED OF, OR ARRANGED FOR OR CAUSED THE GENERATION, TRANSPORTATION OR DISPOSAL OF SUCH HAZARDOUS WASTE OR PETROLEUM.

   ☐ B. THE APPLICANT KNEW THAT SUCH OTHER PARTY GENERATED, TRANSPORTED OR DISPOSED OF, OR ARRANGED FOR OR CAUSED THE GENERATION, TRANSPORTATION OR DISPOSAL OF SUCH HAZARDOUS WASTE OR PETROLEUM AND DID NOT TAKE ACTION TO REMEDIATE OR CAUSE THE REMEDIATION OF SUCH HAZARDOUS WASTE OR PETROLEUM.

   ☐ C. THE APPLICANT KNEW THAT SUCH OTHER PARTY GENERATED, TRANSPORTED OR DISPOSED OF, OR ARRANGED FOR OR CAUSED THE GENERATION, TRANSPORTATION OR DISPOSAL OF SUCH HAZARDOUS WASTE OR PETROLEUM AND TOOK ACTION TO REMEDIATE OR CAUSE THE REMEDIATION OF SUCH HAZARDOUS WASTE OR PETROLEUM.

4. DOES THE APPLICANT CURRENTLY OWN THE SITE OR HAS IT OBTAINED TEMPORARY INCIDENTS OF OWNERSHIP FOR AN INVESTIGATION PURSUANT TO ECL 56-0508? ☒YES ☐NO

Project Description

PLEASE ATTACH A DESCRIPTION OF THE PROJECT WHICH INCLUDES THE FOLLOWING INFORMATION (REFER TO THE ENVIRONMENTAL RESTORATION PROGRAM PROCEDURES HANDBOOK FOR DETAILED INSTRUCTIONS).

- PURPOSE AND SCOPE OF THE PROJECT;
- CURRENT AND PROPOSED FUTURE USE OF THE SITE (RESIDENTIAL, COMMERCIAL, INDUSTRIAL);
- ESTIMATED PROJECT COST (INCLUDE ANY RESPONSIBLE PARTY COST RECOVERY PAYMENTS RECEIVED OR ANTICIPATED, AS WELL AS ANY OTHER ACTUAL OR POTENTIAL FUNDING SOURCES FOR THE PROJECT);
- HOW THE PROJECT WOULD SATISFY THE CRITERIA OF ECL 56-0505; AND
- ESTIMATED PROJECT SCHEDULE (FIELD WORK MUST BEGIN WITHIN 12 MONTHS OF THE APPLICATION APPROVAL DATE)

Site's Environmental History

TO THE EXTENT THAT EXISTING INFORMATION/STUDIES/REPORTS ARE AVAILABLE TO THE APPLICANT, PLEASE ATTACH THE FOLLOWING:

1. **ENVIRONMENTAL DATA**
   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.
2. **OWNERS**
   A LIST OF PREVIOUS OWNERS WITH NAMES, LAST KNOWN ADDRESSES AND TELEPHONE NUMBERS (DESCRIBE APPLICANT'S RELATIONSHIP, IF ANY, TO EACH PREVIOUS OWNER LISTED. IF NO RELATIONSHIP, PUT "NONE").
3. **OPERATORS**
   A LIST OF PREVIOUS OPERATORS WITH NAMES, LAST KNOWN ADDRESSES AND TELEPHONE NUMBER (DESCRIBE APPLICANT'S RELATIONSHIP, IF ANY, TO EACH PREVIOUS OPERATOR LISTED. IF NO RELATIONSHIP, PUT "NONE").

Contaminant Information

INDICATE KNOWN OR SUSPECTED CONTAMINANTS AND THE MEDIA WHICH ARE KNOWN OR SUSPECTED TO HAVE BEEN AFFECTED:

Contaminant Category	Soil	Groundwater	Surface Water	Sediment	Soil Gas
Petroleum					
Chlorinated Solvents					
Other VOCs					
SVOCs		X		X	
Metals	X	X	X	X	
Pesticides					
PCBs	X				
Other*_____		High pH			Not Sampled

*PLEASE DESCRIBE: _____

Project Information (Complete for Remediation Projects Only)

1. HAS THE DEC ISSUED A RECORD OF DECISION FOR THE SITE UNDER THE ERP? ☐YES ☒NO
2. HAS GROUNDWATER OR A SURFACE WATER BODY BEEN CONTAMINATED ABOVE STANDARDS? ☒YES ☐NO
   IF YES, CHECK ALL THAT APPLY:
   - ☐ A. THE INFLUENT TO A PUBLIC OR PRIVATE WATER SUPPLY HAS BEEN CONTAMINATED OR THREATENED.
   - ☐ B. A CLASS A OR AA SURFACE WATER BODY OR A PRIMARY OR PRINCIPAL AQUIFER HAS BEEN CONTAMINATED WITHOUT AFFECTING AN EXISTING WATER SUPPLY.
   - ☒ C. GROUNDWATER HAS BEEN CONTAMINATED ABOVE STANDARDS OR A SURFACE WATER HAS BEEN IMPACTED.
3. HAVE ENDANGERED, THREATENED OR RARE SPECIES, STATE PROTECTED STREAMS, OR STATE REGULATED WETLANDS BEEN IMPACTED BY RELEASES FROM THE SITE? ☐YES ☒NO
4. ARE CONTAMINANTS PRESENT IN SOILS/WASTE AT LEVELS THAT EXCEED DEC DIVISION OF ENVIRONMENTAL REMEDIATION GUIDANCE VALUES? ☒YES ☐NO
5. IS THE SITE LOCATED IN A DESIGNATED EMPIRE ZONE? ☐YES ☒NO
6. IS THE SITE LOCATED IN A DESIGNATED EN-ZONE PURSUANT TO TL § 21 (b)(6)? ☐YES ☒NO
7. HAS ALL OR PART OF THE SITE BEEN IDLE OR ABANDONED FOR MORE THAN ONE YEAR? ☒YES ☐NO
7. HAS THE APPLICANT SIGNED AN AGREEMENT WITH A PRIVATE PARTY TO REUSE THE SITE ONCE IT IS RESTORED? ☐YES ☒NO
8. HAS THE APPLICANT COMMITTED TO A NEW PUBLIC OR RECREATIONAL USE? ☐YES ☒NO
9. HAS THE APPLICANT COMPLIED WITH THE STATE ENVIRONMENTAL QUALITY REVIEW ACT (SEQRA) REGARDING THIS ACTION? IF YES, INCLUDE THE DETERMINATION (NEGATIVE DECLARATION OR FINDINGS STATEMENT) IN THE ATTACHED PROJECT DESCRIPTION AND IDENTIFY ALL INVOLVED AGENCIES IN THE COORDINATED REVIEW. ☐YES ☒NO
10. IS THE APPLICANT AWARE OF OTHER FUNDING SOURCES FOR REMEDIATING THE SITE? ☐YES ☒NO
    IF YES, PROVIDE SOURCES(S) AND DOLLAR AMOUNT IN THE ATTACHED PROJECT DESCRIPTION.

Municipality Certification

The undersigned on behalf of the applicant does hereby certify that:

- All statements made for the purpose of obtaining State assistance for the proposed project either are set out in full in this application, or are set out in full in exhibits attached to this application and incorporated by this reference; and
- The individual whose signature appears hereon is authorized to sign this application for the municipality.

A FALSE STATEMENT MADE HEREIN IS PUNISHABLE AS A CLASS "A" MISDEMEANOR PURSUANT TO SECTION 210.45 OF THE PENAL LAW.

Signature of Individual Authorized to Sign the Application

4/25/05
Date

Community Based Organization Certification (if applicable)

The undersigned on behalf of the Community Based Organization acting in partnership with the municipality does hereby certify that:

- The Community Based Organization is a not-for-profit corporation, exempt from taxation under section 501(c)(3) of the internal revenue code whose stated mission is promoting reuse of brownfield sites within a specified geographic area in which the Community Based Organization is located, which has 25% or more of its board of directors residing in the community in such area;
- The Community Based Organization represents a community with a demonstrated financial need;
- Not more than 25% of the members, officers or directors of the Community Based Organization are or were employed by or receiving compensation from any person responsible for a site under title 13 or title 14 of article 27 of the Environmental Conservation Law, article 12 of the navigation law or under applicable principles of statutory or common law liability; and
- The individual whose signature appears hereon is authorized to sign this application for the Community Based Organization.

A FALSE STATEMENT MADE HEREIN IS PUNISHABLE AS A CLASS "A" MISDEMEANOR PURSUANT TO SECTION 210.45 OF THE PENAL LAW.

Signature of Individual Authorized to Sign for the Community Based Organization

Date

SUBMITTAL INFORMATION:

Three (3) complete copies of the application 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:

ERP SITE NO:_____ **ERP SITE T&A CODE:**_____ **PROJECT MANAGER:**_____

2.0 Municipal Authorization

RESOLUTIONS OF THE BOARD OF THE
ERIE COUNTY INDUSTRIAL DEVELOPMENT AGENCY
REGARDING ENVIRONMENTAL INVESTIGATIONS AND ACTIVITIES
RELATED TO THE REDEVELOPMENT
OF PARCEL 4 OF BUFFALO LAKESIDE COMMERCE PARK

WHEREAS, the Agency has worked in conjunction with the Buffalo Urban Development Corporation ("BUDC") in the redevelopment of Buffalo Lakeside Commerce Park; and

WHEREAS, BUDC owns a twenty acre brownfields parcel located within the boundaries of Buffalo Lakeside Commerce Park referred to as Parcel 4, which Parcel was formerly owned by the Hanna Furnace Corporation; and

WHEREAS, after thorough consideration and study of available data, the Agency and BUDC have determined that certain environmental investigatory work in connection with Parcel 4 is desirable, is in the public interest and is required in order to evaluate the suitability of Parcel 4 for environmental remediation and redevelopment; and

WHEREAS, Article 56 of the Environmental Conservation Law authorizes New York State to provide financial assistance to municipalities (including industrial development agencies) for environmental restoration projects ("ERP") pursuant to the terms of a contract to be entered into between New York State and the municipality (including an IDA); and

WHEREAS, the Agency deems it to be in the public interest and benefit to apply to New York State for an ERP investigation grant regarding Parcel 4 in conjunction with BUDC and/or a not-for-profit community benefit organization ("CBO") to be formed, and, if such application is approved, to enter into an agreement with New York State governing the terms of the ERP investigation grant; and

WHEREAS, it is a condition precedent to the receipt of ERP investigation grant funding that the municipality (or IDA) applying for such grant own the property for which the ERP grant application is made; and

WHEREAS, the Agency may take title to Parcel 4 for the purpose of qualifying for the ERP investigation grant; and

WHEREAS, the Agency and BUDC will enter into one or more agreements pursuant to which BUDC will indemnify and hold the Agency harmless in connection with the Agency's acquisition of title to Parcel 4 and the conduct of the investigatory activities on Parcel 4, and the Agency will enter into similar agreements with consultants retained to perform the environmental investigation for Parcel 4.

NOW, THEREFORE, BE IT RESOLVED by the Erie County Industrial Development Agency as follows:

Section 1. That the Agency is authorized to take title to Parcel 4 and to act together with BUDC and/or the CBO in all matters related to ERP assistance under Article 56 of the New York Environmental Conservation Law and is also authorized to make application, execute the State Assistance Contract, submit ERP documentation, and to otherwise act in all matters related to the ERP project.

Section 2. That, in carrying out the activities authorized under Section 1, the Agency's commitment to meet all New York State ERP grant requirements shall be conditioned on obtaining prior agreements with BUDC and/or the CBO to fund any and all of the costs of the project not otherwise funded by New York State, to indemnify the Agency for all matters relating to the project and to meet any and all conditions of New York State ERP assistance.

Section 3. That the Agency is authorized to receive funds and to disburse and administer funding awards and monitor funding activities in accordance with the terms of the awards.

Section 4. That the Agency is hereby authorized to engage consultants for activities related to the environmental investigation of Parcel 4 and that the Agency is hereby authorized to engage in any or all activities or enter into any and all agreements necessary or appropriate to carry out the purposes of these Resolutions.

Section 5. That the President/CEO, Executive Director, Deputy Director, Treasurer, and Assistant Treasurer, and any other officer of the Agency are hereby authorized to execute any documents or agreements necessary or desirable to effectuate the purposes of these resolutions, the form and content of which agreements shall be approved by the President/CEO or Executive Director and Agency legal counsel.

Section 6. These Resolutions shall take effect immediately.

Adopted: March 14, 2005

C Hurley 5-505

Christopher J. Hurley, Assistant Secretary

CERTIFICATION

The undersigned, being the Assistant Secretary of ERIE COUNTY INDUSTRIAL DEVELOPMENT AGENCY (the "Agency"), hereby certifies that annexed hereto is a true and complete copy of the resolutions unanimously adopted by the Agency at a duly called meeting of the Agency held on March 14, 2005 at which a quorum was present and that said resolutions have not been changed or modified since their adoption by the Agency and remain in full force and effect as of the date hereof.

IN WITNESS WHEREOF, I have signed this certification as of the 5th of May, 2005.

5-5-05

Christopher J. Hurley, Assistant Secretary

[SEAL]

Item 4.2

MEMORANDUM

TO: **Buffalo Urban Development Corporation Board of Directors**

FROM: **Charles E. Webb, President**

SUBJECT: **Creation of 501 (c) 3 Charitable Not-for-Profit Corporation**

DATE: **March 24, 2005**

As discussed at prior Board meetings, the State's Brownfield Environmental Restoration Program stipulates that Community Based Organizations (CBO) participating in the program must be certified as a 501(c)3 charitable not-for-profit whose primary mission is "promoting reuse of brownfield sites within a specified geographic area."

Although Board members have suggested use of 501(c) 3's corporations affiliated with either the Buffalo Niagara Partnership or the ECIDA, staff and counsel belief that it is more appropriate to create a new 501(c) 3 corporation that is directly affiliated with BUDC for these purposes.

A new corporation will limit environmental liability exposure, will allow for a corporate mission tailored to State ERP requirements without the necessity of modifying the mission of any existing corporations, and establish a long-term vehicle for brownfield remediation for the City and Region. Since the State will not require transfer of title or the creation of the 501(c) 3 until such time as the State Assistance Contract is ready to be executed – at least 8 to 12 weeks after submission of the ERP application – there is adequate time to create the corporation and obtain IRS certification.

This recommendation was reviewed with the Board's Real Estate Committee on March 17, 2005 and approved for recommendation to the full Board.

ACTION:

I am requesting Board authorization to create a new 501(c) 3 corporation whose primary mission is the remediation and redevelopment of brownfield sites in the City of Buffalo and County of Erie.

APPROVED ON: 3/24/05

Peter M. Cannata
Corporate Secretary

CERTIFICATION

The undersigned, being the Secretary of Buffalo Urban Development Corporation (the "Corporation"), hereby certifies that annexed hereto is a true and complete copy of the memorandum unanimously adopted by the Corporation at a duly called meeting of the Corporation held on March 24, 2005, at which a quorum was present and that said memorandum has not been changed or modified since its adoption by the Corporation and remains in full force and effect as of the date hereof.

IN WITNESS WHEREOF, I have signed this certificate as of the 2nd of May, 2005.

Peter M. Cammarata
Corporate Secretary

5/2/2005

STATE OF NEW YORK)
) SS.:
COUNTY OF ERIE)

On the 2 day of May in the year of 2005, before me, the undersigned, a Notary Public in and for said state, personally appeared Peter Cammarata, personally known to me or proven to me on the basis of satisfactory evidence to by the individual whose name is subscribed to the within instrument and acknowledged to me that s/he executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed this instrument.

Notary Public

DAVID W. KERCHOFF
NOTARY PUBLIC, STATE OF NEW YORK
QUALIFIED IN ERIE COUNTY
My Commission Expires May 12, 20 06

3.0 Project Description, Budget, and Schedule

3.1 Project Description

3.1.1 Purpose and Scope

The Buffalo Lakeside Commerce Park (BLCP), formerly The Union Ship Canal or Hanna Furnace Site, occupies approximately 113 acres at the Southern edge of the City of Buffalo. The site is bordered to the west by New York State Route 5, to the south by Lackawanna Commerce Park, to the east by railroad tracks, and to the north by railroad tracks, wetland areas, and the former Shenango furnace property. The BLCP includes the eastern portion of the Union Ship Canal. Based on its historic use, the City's current development needs and plans, and the findings of previous investigations, the BLCP site was divided into four Parcels for characterization and development purposes.

This Bond Act Application has been created specifically for Parcel 4, which is an approximately 20 acre Parcel located north of the Union Ship Canal. The Erie County Industrial Development Agency (ECIDA) intends to redevelop Parcel 4 of the BCLP consistent with the ongoing redevelopment activities on Parcels 1, 2 and 3. The purpose of the proposed investigation of Parcel 4 of the BLCP is to develop the data necessary to assess environmental risks and develop, if necessary, a feasible remedial program that supports redevelopment of the Parcel.

The project objectives include:

- Assessment of environmental conditions at the site
- A focused site investigation to determine the nature and degree of possible contamination at the site.
- Evaluation of remedial options, which are protective of human health and the environment, based on community needs and end-use planning for the property.

The scope of work includes site surveying, surface soil sampling and analysis, subsurface soil sampling and analysis, and groundwater sampling and analysis. Each of these project components is discussed in the attached Site Investigation Remedial Alternatives Evaluation Work Plan.

3.1.2 Proposed Future Use

The ECIDA intends to redevelop Parcel 4 as light industrial/commercial space, consistent with the ongoing redevelopment of Parcels 1 and 2.

3.1.3 Satisfying Criteria of ECL 56-0505

According to ECL 56-0505, the NYSDEC determines the eligibility of an environmental restoration project for state assistance based upon four criteria. These criteria are listed below, and are followed by a discussion as to how Parcel 4 of the BLCP site meets these criteria.

a) The benefit to the environment realized by the expeditious remediation of the property proposed to be subject to such project.

Response: The investigation of Parcel 4 of the BLCP site will characterize the contamination known to be present in the soil and groundwater, allowing for successful remediation of those contaminants. Additionally, as with all brownfield sites, the redevelopment of brownfields conserves greenspace, providing a substantial benefit to the environment.

b) The economic benefit to the state by the expeditious remediation of the property proposed to be subject to such project.

Response: The City has aggressively pursued the redevelopment of former industrial facilities throughout the City since the economic downturn in the area caused the closure of those facilities. This project represents ECIDA's primary effort to support the City's continued efforts to redevelop and utilize former industrial sites to create job opportunities and restore a stable tax base.

c) The potential opportunity of the property proposed to be subject to such project to be used for public recreational purposes.

Response: The ECIDA's primary interest at this point is in creating an opportunity for the private sector to develop an enterprise on the site that will generate employment as well as municipal, state, and federal tax revenues.

d) The opportunity for other funding sources to be available for the remediation of such property, including but not limited to, enforcement actions against responsible parties (other than the municipality to which the state assistance was provided under this title; or a successor in title, lender or lessee who was not otherwise a responsible party prior to such municipality taking title to the property), state assistance payments pursuant to title thirteen of article twenty – seven of this chapter, and the existence of private parties willing to remediate such property using private funding sources. Highest priority shall be granted to projects for which other such funding sources are not available.

Response: At this time, there are no other known or potential sources of funding for the investigation of Parcel 4 of the BLCP site.

3.2 Project Budget

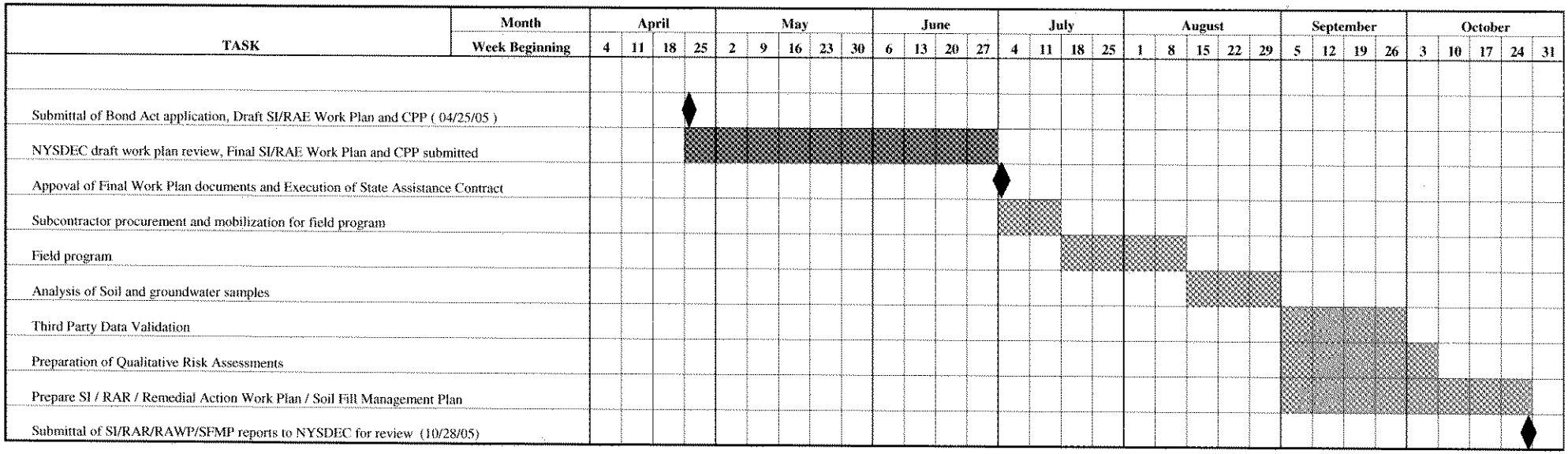
The proposed Site Investigation and Remedial Alternatives Analysis Report is estimated to cost $149,600.

3.3 Project Schedule

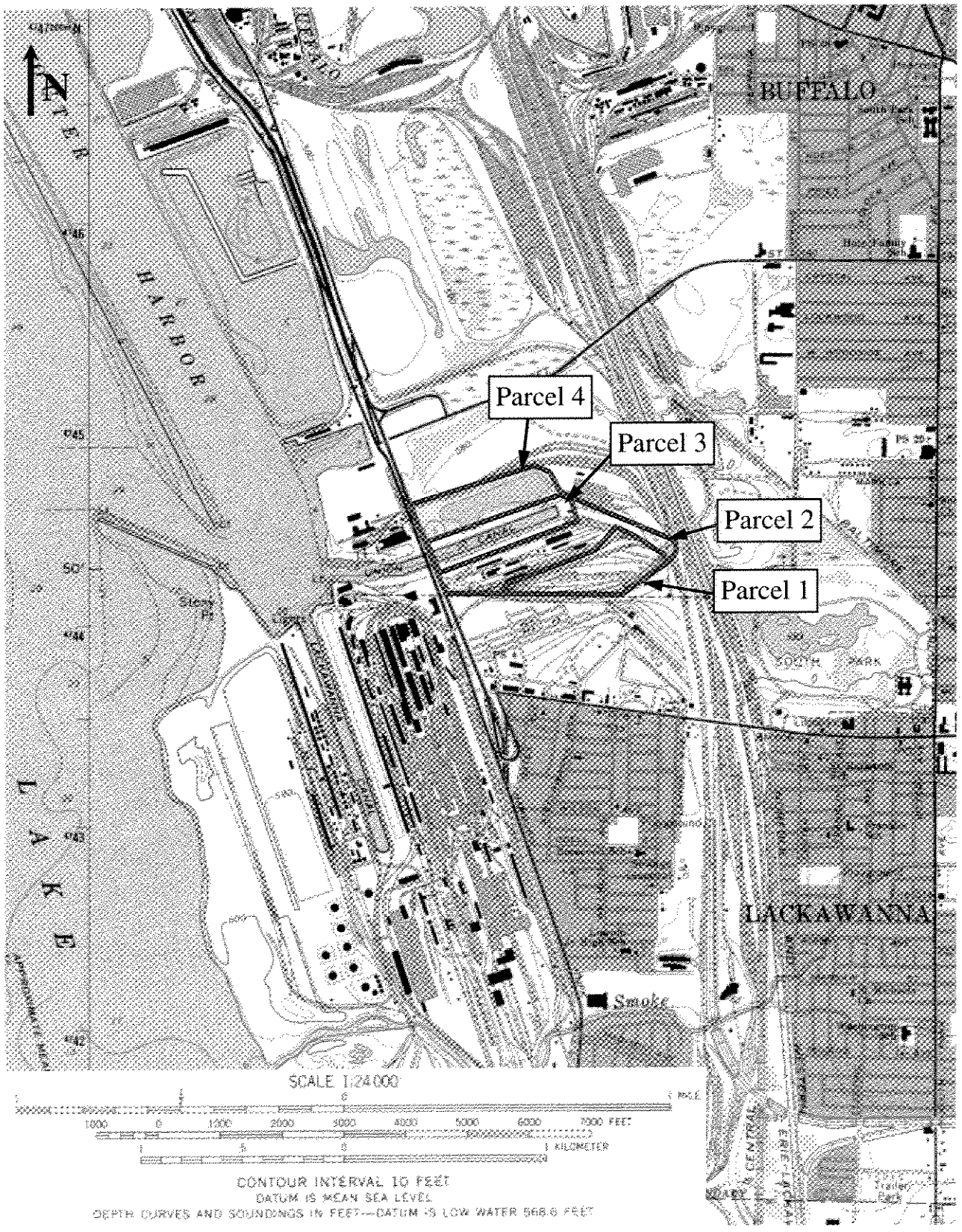
A detailed project schedule is included at the end of this section and in the attached Project Work Plan. The schedule estimates a 6-month timeline for the completion of the investigation activities. The start date of the investigation activities will be dependent on: review and certification of application completeness; execution of the State Assistance Contract; and finalization of the work plan and budget.

FIGURE 3-1

PROJECT SCHEDULE
BUFFALO LAKESIDE COMMERCE PARK (BLCP)
PARCEL 4
BUFFALO, NEW YORK



4.0 Site Location Map and Site Tax Map



MALCOLM PIRNIE OCT 2004 4080-001-400	**BUFFALO LAKESIDE COMMERCE PARK (PARCEL 4)** BUFFALO, NEW YORK	**SITE LOCATION MAP**

N 1,034,000
E 426,000

27.857 A
2

PEOPLE OF THE STATE OF NEW YORK
3.1 A(C)
1

FILLMORE BLVD.
(90' WIDE)

(PENNDEL)
(PENN CENTRAL RAILROAD)
CONRAIL
6.2 A(C)
3.2

(PENNDEL)
(PENN CENTRAL)
CONRAIL
6.0 A(C)
2.2

N 1,034,0000
E 429,000

1

14.95 A(C)
4.2

CITY OF BUFFALO
9.36 A(C)
4.1

UNION SHIP
CANAL

CITY OF BUFFALO

14.63 A(C)
5.1

65.44 A(C)
5.2

24.61 A
8

15.559 A
7

N 1,032,000
E 426,000

N 1,032,000
E 429,000

HSS J

LACKAWANNA FIRE DISTRICT

CITY OF LACKAWANNA

BL STA 102+37.17

PT STA 140+04.77

LACKAWANNA SCHOOL DISTRICT

PREPARED BY
AERO SERVICE
Division of Litton
Philadelphia, Pennsylvania 19136

PREPARED FOR
DIVISION OF REAL PROPERTY TAX SERVICES
ERIE COUNTY, NEW YORK © 1981

NOTES

THIS MAP WAS PREPARED FOR TAX PURPOSES ONLY AND IS NOT TO BE REPRODUCED OR USED FOR SURVEYING OR CONVEYANCING.

MAP CONVERTED TO AUTOCAD DIGITAL FORMAT BY ANALYTICAL SURVEYS, INC. IN COOPERATION WITH WEILER MAPPING INC. FEB. 1989

REVISION TABLE

DATE	MADE BY	CHANGES OR ADDITIONS

SPECIAL DISTRICTS

SCHOOL	BUFFALO PUBLIC SHCOOL DISTRICT	DRAINAGE
FIRE	CITY OF BUFFALO FIRE DISTRICT	SEWER
WATER		

LEGEND

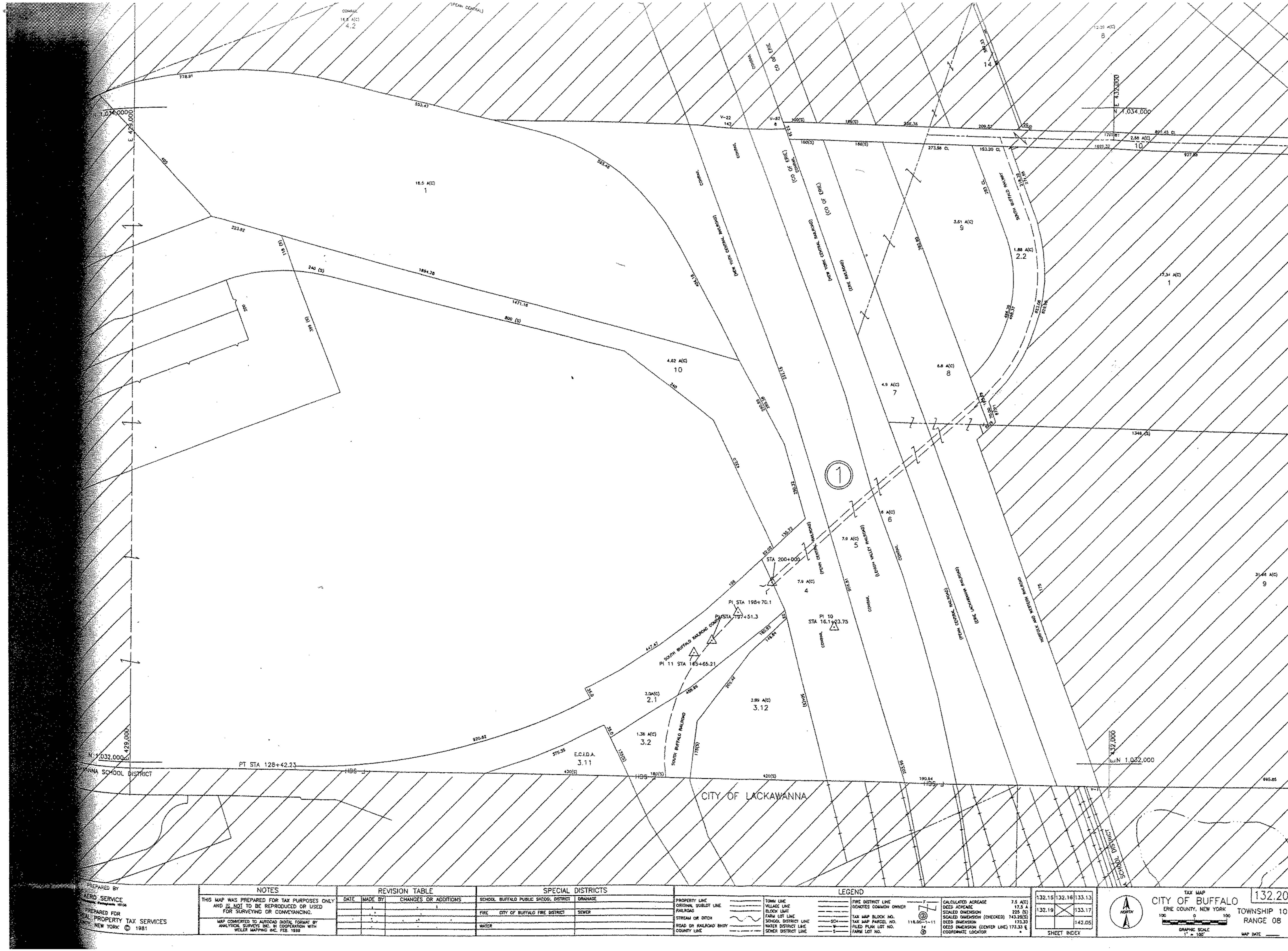
PROPERTY LINE
ORIGINAL SUBLOT LINE
RAILROAD
STREAM OR DITCH
ROAD OR RAILROAD BNDY
COUNTY LINE
TOWN LINE
VILLAGE LINE
BLOCK LINE
FARM LOT LINE
SCHOOL DISTRICT LINE
WATER DISTRICT LINE
SEWER DISTRICT LINE
FIRE DISTRICT LINE
DENOTES COMMON OWNER
TAX MAP BLOCK NO.
TAX MAP PARCEL NO. 116.00-1-111
FILED PLAN LOT NO. 74
FARM LOT NO. 2

CALCULATED ACREAGE 7.5 A(C)
DEED ACREAGE 17.5 A
SCALED DIMENSION 225 (S)
SCALED DIMENSION (CHECKED) 743.25(S)
DEED DIMENSION 175.33
DEED DIMENSION (CENTER LINE) 175.33 ℄
COORDINATE LOCATOR

132.14		132.15
132.18		132.20

SHEET INDEX

NORTH



CONRAIL
16.5 A(C)
4.2
(PENN CENTRAL)
16.5 A(C)
1
4.62 A(C)
10
CO OF ERIE
(CO OF ERIE)
CONRAIL
(NEW YORK CENTRAL RAILROAD)
(ERIE RAILROAD)
SOUTH BUFFALO RAILWAY
12.20 A(C)
8
14
N 1,034,000
E 432,000
E 429,000
2.58 A(C)
10
3.51 A(C)
9
1.88 A(C)
2.2
17.34 A(C)
1
6.8 A(C)
8
4.9 A(C)
7
6 A(C)
6
7.9 A(C)
5
7.9 A(C)
4
(PENN CENTRAL RAILROAD)
(LEHIGH VALLEY RAILROAD)
(ERIE LACKAWANNA RAILROAD)
NORFOLK AND WESTERN RAILROAD
31.66 A(C)
9
STA 200+000
PI STA 198+70.1
PI STA 197+51.3
PI 11 STA 185+65.21
PI 10
STA 16.1+23.75
SOUTH BUFFALO RAILROAD CONRAIL
SOUTH BUFFALO RAILROAD
3.0A(C)
2.1
2.99 A(C)
3.12
1.36 A(C)
3.2
E.C.I.D.A.
3.11
N 1,032,000
PT STA 128+42.23
LACKAWANNA SCHOOL DISTRICT
CITY OF LACKAWANNA
PREPARED BY
AERO SERVICE
PREPARED FOR
REAL PROPERTY TAX SERVICES
NEW YORK © 1981
NOTES
THIS MAP WAS PREPARED FOR TAX PURPOSES ONLY AND IS NOT TO BE REPRODUCED OR USED FOR SURVEYING OR CONVEYANCING.
MAP CONVERTED TO AUTOCAD DIGITAL FORMAT BY ANALYTICAL SURVEYS INC. IN COOPERATION WITH WEILER MAPPING INC. FEB. 1999
REVISION TABLE
DATE
MADE BY
CHANGES OR ADDITIONS
SPECIAL DISTRICTS
SCHOOL BUFFALO PUBLIC SCHOOL DISTRICT
DRAINAGE
FIRE CITY OF BUFFALO FIRE DISTRICT
SEWER
WATER
LEGEND
PROPERTY LINE
ORIGINAL SUBLOT LINE
RAILROAD
STREAM OR DITCH
ROAD OR RAILROAD BNDY
COUNTY LINE
TOWN LINE
VILLAGE LINE
BLOCK LIMIT
FARM LOT LINE
SCHOOL DISTRICT LINE
WATER DISTRICT LINE
SEWER DISTRICT LINE
FIRE DISTRICT LINE
DENOTES COMMON OWNER
TAX MAP BLOCK NO.
TAX MAP PARCEL NO. 116.00-1-11
FILED PLAN LOT NO.
FARM LOT NO.
CALCULATED ACREAGE 7.5 A(C)
DEED ACREAGE 17.5 A
SCALED DIMENSION 225 (S)
SCALED DIMENSION (CHECKED) 743.25(S)
DEED DIMENSION 173.33
DEED DIMENSION (CENTER LINE) 173.33 ℄
COORDINATE LOCATOR
132.15 132.16 133.13
132.19 133.17
142.05
SHEET INDEX
NORTH
TAX MAP
CITY OF BUFFALO
ERIE COUNTY, NEW YORK
132.20
TOWNSHIP 10
RANGE 08
GRAPHIC SCALE
1" = 100'
MAP DATE

5.0 Site Background

5.1 Site History

The southern portion of the BLCP site was purchased and incorporated by the Buffalo Union Steel Corporation in 1900. Soon after, the Union ship canal was constructed near the northern edge of the property to provide the pig iron manufacturing operations access to barges with raw materials transported via Lake Erie. The canal was approximately 20 feet deep when it was constructed. Pig iron manufacturing commenced during the period of 1900 to 1915 with the construction of the blast furnaces. Following the construction of the blast furnaces, the Hanna Furnace Company acquired the property from Buffalo Union Steel. The National Steel Company subsequently purchased the property in 1929, and the new corporate entity became known as the Hanna Furnace Corporation. During peak production, the Hanna Furnace Corporation employed over 800 personnel at its facility in South Buffalo.

The Pennsylvania Railroad first owned the land north of the canal and used the property for unloading ores into train cars. The Hanna Furnace Corporation purchased approximately 25 acres of this property from the Pennsylvania Railroad in 1960. Swampy ponds with depths up to 15 feet occupied much of the property at the time. The swampy area was subsequently filled in with silty sand and gravel, with some black cinders, as described in Recra Environmental, Inc.'s 1988 report. Based on a review of aerial photographs, it appears that this area was subsequently used for the unloading and storage of iron ore and limestone.

Based on a review of Sanborn maps, the area immediately to the south of the canal and north of the manufacturing area was used to unload iron ore and limestone brought in to the site by ship and barge. Apparently, the limestone and ore were placed on massive concrete pads that occupy the bulk of the southern portion of Subparcel 3. The concrete pads are approximately 4 feet thick.

The Hanna Furnace Corporation ceased all operations during 1982 due to foreign competition, and due to the closure of the Shenango Furnace Company, a primary recipient of pig iron from Hanna Furnace. The Jordan Foster Scrap Corporation purchased the site in 1983 and subsequently dismantled the blast furnaces, the casting mill and several other buildings. The Jordan Foster Scrap Corporation filed for bankruptcy in 1986, and leased the site briefly to the Equity Scrap Processing Company. The Hanna Furnace Site has been essentially unoccupied since 1986.

The City of Buffalo acquired 114 acres of this land in the 1990s after the previous owners declared bankruptcy and abandoned the property. The previous owners had removed

most of the operating equipment and all of the rolling stock. Many of the buildings on the site were demolished for scrap, but the bankruptcies interrupted that process. The remaining ruins (buildings, foundations, vaults and furnaces) were demolished by the City of Buffalo and the Buffalo Urban Development Corporation (BUDC), formerly Development Downtown, Inc. (DDI) between the summer of 2001 and the spring of 2003.

When the City of Buffalo purchased the land, it subdivided it into four parcels, which reflected the diverse industrial land usage by the previous owners of the site. Parcel 1 was primarily used as a railroad yard and surface storage area. Parcel 2 was primarily used as the heavy production area and included the furnaces and numerous buildings. Parcel 3 was primarily used for loading and unloading functions. Parcel 4 was primarily used as a fill area, accepting substantial quantities of flue ash and slag.

Development Downtown, Inc., acquired Parcels 1, 2 and 4 from the City of Buffalo in December of 2002. The acquisition was agreed upon several years ago, and was timed to take place at the point when DDI finalized a Generic Environmental Impact Statement (GEIS) for the 275-acre project area. The GEIS process was completed during the summer of 2002, with the filing of a Findings Statement on July 1st, 2002. Parcel 3 will remain in title to the City of Buffalo.

The GEIS document included a "draft" zoning ordinance, designed to set up land use parameters for future development at the site. The three zones established were Office and Light Industrial, Manufacturing and Light Industrial, and Open Space. It is felt that this development program blends the areas environmental features, with the numerous transportation linkages, to produce a modern commerce park with "urban" appeal.

As established previously, the Buffalo Lakeside Commerce Park redevelopment area has a long and varied history of industrial use. Environmental investigations conducted to date in the BLCP area have indicated that industrial contamination resulting from this historic use does exist. The required investigations and subsequent remediations are ongoing and will progress under the applicable and relevant regulatory programs. *BUDC/DDI or the City of Buffalo did not play any role in the contamination of this site.*

Specifically, Parcel 1 is covered by a Brownfield Cleanup Program (BCP) Agreement with the New York State Department of Environmental Conservation, which includes a Soils Management Plan (SMP) consisting of a 12-inch cover over undeveloped acreage. Parcel 2 is covered by a separate BCP agreement with an identical SMP. Parcel 3 is being investigated under the New York State Environmental Bond Act Program. Parcel 4 has not been sufficiently characterized and will be discussed further in this application.

5.2 Owner and Operator History

See Tables 5-1 and 5-2.

5.3 Environmental History

The New York State Department of Environmental Conservation (NYSDEC) prepared an "Inactive Hazardous Waste Disposal Site Report" regarding the Hanna Furnace Site in 1983. The NYSDEC subsequently identified the property as Site# 915029, and assigned the site a classification of "2A," indicating that the site was a potential hazardous waste site; but that insufficient data were available to properly characterize potential issues at the site. Following several environmental investigations at the site, ABB Environmental Services conducted a Preliminary Site Assessment of the Hanna Furnace Site in 1995 for the NYSDEC. The results of this investigation confirmed that contaminants present on the Hanna Furnace Site did not pose a serious threat to human health or the environment. Based on the results of this investigation, the Hanna Furnace Site was delisted from the registry of potential hazardous waste sites. The delisting of the Hanna Furnace Site provides the opportunity for funding under the 1996 Bond Act.

In addition to the 1995 investigation performed by the NYSDEC, several environmental investigations have been performed at the Hanna Furnace Site over the last 20 years by various agencies, none of which concluded that remedial action was necessary. However, the areas investigated at the Hanna Furnace Site have varied between investigations; therefore, it is important to keep in mind the area of investigation when evaluating and comparing data results and recommendations.

5.4 Historical Characterization for Parcel 4

Table 1 summarizes the historical characterization data relative to the number of wells, borings, test pits, and samples for each Parcel to date. Review of this information indicates that the investigative work performed on Parcel 4 has been comparable with the work performed on Parcels 1, 2, and 3 with the exception of:

- Borings: only three borings were completed on Parcel 4, while one per acre and over two per acre were completed on Parcels 1 and 2, respectively.
- Monitoring wells: only one monitoring well was installed on Parcel 4, while six and nine were installed on Parcels 1 and 2, respectively.

TABLE 5

COMPARISON OF HISTORICAL CHARACTERIZATION EFFORTS TO PROPOSED EFFORT FOR PARCEL 4
BUFFALO LAKESIDE COMMERCE PARK
BUFFALO, NEW YORK

Activity	Parcel 1	Parcel 2	Parcel 3	Parcel 4 (Current)	Parcel 4 (With Proposed)
Acres	43.5	32	20	20	20
Soil Samples	80	101	53	56	107
Groundwater Samples	6	14	16	3	17
Surface Water Samples	0	0	8	3	3
Sediment Samples	0	0	22	3	3
Monitoring Wells	6	9	11	1	8
Borings	42	74	22	3	23
Test Pits	20	14	18	25	36

Note: Does not include design/construction-related boring and characterization efforts.

- Groundwater samples: only three groundwater samples were collected from Parcel 4 (three events from one well), while six and 14 were collected from Parcels 1 and 2, respectively.

Based on the sampling locations and analytical results, the characterization efforts appear to have been focused predominantly on the FC/FA and Debris Disposal Areas. Insufficient information regarding the portions of Parcel 4 outside of the FC/FA and Debris Disposal Areas exists; additional characterization efforts are planned in these areas.

5.4.1 Filter Cake and Flue Ash Area

A total of 17 surface soil and five subsurface soil samples were collected from the FC/FA Area. All of the samples were analyzed for metals and a limited number were analyzed for organic compounds.

5.4.1.1 Soil Samples

- Volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, and polychlorinated biphenyls (PCBs) were either not detected or detected at low concentrations, below the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 Recommended Soil Cleanup Objectives (RSCOs) or Maximum Concentration of Contaminants for the Toxicity Characteristic (MCCTC). These results were consistent with those detected in Parcels 1, 2, and 3.

- Generally, the concentrations of metals were consistent with those detected during investigations of Parcels 1, 2, and 3. The following items are noteworthy:

  - Concentrations of lead were generally higher than the Site-Specific Action Levels (SSALs) approved for Parcels 1 and 2. In addition, these concentrations were higher than those detected during the investigations of Parcels 1, 2 and 3. The concentration of lead in one of the USEPA Toxicity Characteristic Leaching Procedure (TCLP) samples exceeded the MCCTC, and, based on this result, the material is considered a hazardous waste. Further delineation of this high-TCLP lead area indicated that it is limited to the sampled location and not more than a 40-foot square area.

  - Zinc concentrations were generally higher than those in samples collected from Parcels 1, 2, and 3.

  - Barium concentrations were generally below the RSCOs and the SSALs with the exception of the NYSDEC surface soil samples. The concentrations in some of these samples were significantly above the SSALs. Although the NYSDEC laboratory in Albany analyzed the samples, it is not known if third-

party validation of the data was performed. The quality of the NYSDEC data is questionable.

5.4.1.2 Groundwater Samples

- Although no groundwater samples were collected in the FC/FA Area, groundwater samples were collected from MW-101 and MW-307 in Parcel 3, located downgradient of the FC/FA Area. The information from these downgradient wells may be indicative of the quality of the groundwater in Parcel 4. Analytical results for these samples indicate:

  - With the exception of acetone and phenols, VOCs and SVOCs, respectively, either was not detected or was detected at low concentrations, below the NYSDEC groundwater quality standards.

  - Pesticides and PCBs were not detected in the samples.

  - Elevated concentrations of arsenic, cyanide, iron, selenium and sodium were detected in at least one of the groundwater samples.

  - Lead was not detected in either sample.

  - Values of pH were highest in the western portion of Parcel 3, and were reported to be greater than 11 in this area. Some pH measurements were reported higher than 12.5 (the hazardous limit) and these values are considered questionable.

5.4.2 Debris Disposal Area

A total of 16 surface soil, 15 subsurface soil, three surface water, two sediment, and two groundwater samples were collected from the Debris Disposal Area.

5.4.2.1 Soil Samples

- VOCs, SVOCs, and PCBs either were not detected or were detected at low concentrations, below the RSCOs, SSALs, or MCCTC. These concentrations were consistent with those detected in Parcels 1, 2, and 3.

- With the exception of one of the USEPA samples, pesticides either were not detected or were detected at low concentrations, below the RSCOs or MCCTC. Silvex was detected in a sample that was analyzed using the Toxicity Characteristic Leaching Procedure (TCLP) at a concentration above the MCCTC. Based on this result, the material is considered a hazardous waste.

- Generally, the concentrations of metals were consistent with those detected during investigations of Parcels 1, 2, and 3. The following items are noteworthy:

- Lead and zinc concentrations were generally lower than those in samples collected from the FC/FA area. Lead concentrations slightly exceeded the SSALs approved for Parcels 1 and 2 in seven of the 31 soil samples.

- Barium concentrations were generally below the RSCOs and the SSALs with the exception of the NYSDEC surface soil samples. The concentrations in some of these samples were significantly above the SSALs. Again, the quality of the NYSDEC data is suspect.

5.4.2.2 Surface Water Samples

- VOCs, SVOCs, and pesticides either were not detected or were detected at low concentrations, below the Class C Surface Water Quality Standards.

- PCBs were detected in one of the samples at concentrations above the Class C Surface Water Quality Standards.

- Aluminum concentrations were above the Class C Surface Water Quality Standards in two of the samples, and lead concentrations were above the Class C Surface Water Quality Standards in one of the samples.

5.4.2.3 Sediment Samples

- VOCs, pesticides, and PCBs were not detected in the samples.

- SVOCs were detected in the samples at concentrations above the RSCOs.

- Nine metals were detected at concentrations above the RSCOs. These concentrations were consistent with concentrations detected in soil samples collected from Parcels 1, 2, and 3.

5.4.2.4 Groundwater Samples

- In addition to the three groundwater samples collected from MW-103, located near the Debris Disposal Area, a groundwater sample was collected from MW-306 in Subparcel 3, located potentially downgradient of the Debris Disposal Area. Analytical results for these samples indicate:

  - VOCs, pesticides and PCBs were not detected in the samples.

  - One SVOC (phenol) was detected at concentrations above the NYSDEC groundwater quality standards in the on-site well, and five SVOCs (polynuclear aromatic compounds) were detected above the standards in well MW-306.

- Elevated concentrations of cyanide, iron, manganese, and sodium were detected in at least one of the groundwater samples.

- Lead was detected in only one sample, and was not detected in the filtered portion of that sample. Therefore, the lead concentration was due to suspended solids in the sample.

5.5 General Site Characterization Observations

- Although elevated concentrations of lead were detected in the soil samples collected from the fill in the FC/FA Area, the groundwater sampling results indicate that lead is not leaching into the groundwater.

- Although elevated cyanide concentrations were detected in the groundwater samples, non-detectable to low cyanide concentrations were present in soil on Parcel 4, indicating that the source of the cyanide may be Parcel 3.

Section 7 of this application package contains copies of existing environmental documentation.

6.0 Proof of Ownership

ENVIRONMENTAL RESTORATION INVESTIGATION
PROJECT AGREEMENT

THIS ENVIRONMENTAL RESTORATION INVESTIGATION PROJECT AGREEMENT ("Agreement"), made as of the _____ day of April, 2005, is by and among ERIE COUNTY INDUSTRIAL DEVELOPMENT AGENCY, a New York public benefit corporation with offices located at 275 Oak Street, Suite 150, Buffalo, New York 14203 ("ECIDA"); BUFFALO URBAN DEVELOPMENT CORPORATION, a New York not-for-profit local development corporation with offices located at 275 Oak Street, Buffalo, New York 14203 ("BUDC"); and BUFFALO BROWNFIELD RESTORATION CORPORATION, a New York not-for-profit corporation with an address at 275 Oak Street, Buffalo, New York 14203 ("BBRC").

RECITALS:

A. ECIDA has provided technical assistance to BUDC with respect to the redevelopment of Buffalo Lakeside Commerce Park pursuant to the terms of those certain Project Development Agreements dated November 6, 2003 and June 29, 2004, respectively.

B. BUDC owns a twenty (20) acre parcel of real property located within the boundaries of Buffalo Lakeside Commerce Park referred to as Parcel 4, as more particularly described on Schedule A attached hereto and made a part hereof (hereinafter, "Parcel 4").

C. ECIDA and BUDC have determined that certain environmental investigatory work in connection with Parcel 4 is required in order to evaluate the suitability of Parcel 4 for environmental remediation and redevelopment.

D. The New York State Department of Environmental Conservation ("NYSDEC") is authorized under Article 56 of the New York Environmental Conservation Law ("ECL") to enter into contracts on behalf of the State of New York to provide financial assistance to municipalities (including industrial development agencies) to undertake environmental restoration projects pursuant to the New York Environmental Restoration Program ("ERP Program").

E. Article 56 of the ECL authorizes a municipality to partner with a Community Based Organization to apply for environmental restoration project funding and undertake environmental restoration projects.

F. It is a requirement of the ERP Program that the municipality applying for ERP Program funding have ownership of the property for which funding is sought at the time that the municipality enters into a State Assistance Contract with NYSDEC.

G. BUDC has requested that ECIDA: (i) apply BBRC to NYSDEC for an environmental restoration investigation project grant for Parcel 4 (the "ERIP Grant"), (ii) acquire title to Parcel 4 from BUDC for the purpose of qualifying Parcel 4 for the ERIP Grant and (iii) enter into a State Assistance Contract with respect to the performance of the environmental restoration investigation project (collectively, the "ERI Project").

H. ECIDA is willing to undertake the foregoing tasks in accordance with the terms of this Agreement, provided that BUDC and BBRC agree to pay all costs and expenses not otherwise funded by the ERIP Grant and that BUDC and BBRC agree to indemnify and hold ECIDA harmless in connection with ECIDA's activities on the ERI Project, including without limitation, ECIDA's acquisition of title to Parcel 4 and the conduct of all environmental restoration investigation activities on Parcel 4.

NOW, THEREFORE, in consideration of mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties hereto, the parties agree as follows:

1. Recitals. The foregoing Recitals are hereby incorporated into this Agreement and made a part hereof as if fully set forth herein.

2. Definitions. As used in this Agreement, all terms with initial capital letters shall have the meanings set forth below, unless otherwise specifically provided herein:

"Agreement" shall mean this Environmental Restoration Investigation Project Agreement dated as of April ___, 2005, by and among ECIDA, BUDC and BBRC, and all amendments, modifications and supplements hereto.

"Community Based Organization" shall have the same meaning as given to that term in paragraph 1 of Section 56-0502 of the New York State Environmental Conservation Law, as the same may be amended from time to time.

"Environment" means any water or water vapor, any land, including land surface or subsurface, air, fish, wildlife, biota and all other natural resources.

"Environmental Laws" mean all federal, state and local environmental, land use, zoning, health, chemical use, safety and sanitation laws, statutes, ordinances and codes relating to the protection of the Environment and/or governing the use, storage, treatment, generation, transportation, processing, handling, production or disposal of Hazardous Substances and the rules, regulations, policies, guidelines, interpretations, decisions, orders and directives of federal, state and local governmental agencies and authorities with respect thereto.

"Environmental Permits" mean all permits, licenses, approvals, authorizations, consents or registrations required by any applicable Environmental Law in connection with the ownership, use and/or operation of Parcel 4 for the storage, treatment, generation, transportation, processing, handling, production or disposal of Hazardous Substances or the sale, transfer or conveyance of Parcel 4.

"ERI Project" shall have the meaning set forth in the Recitals to this Agreement.

"ERI Project Consultant" shall mean, individually or collectively, as the context may require, the consulting firm or firms engaged to perform any of the ERI Project.

"ERI Project Expenses" shall mean all costs and expenses arising from or related

to the ERI Project, including without limitation (i) any costs determined by NYSDEC to eligible for reimbursement under the ERP Program; (ii) any costs not eligible for reimbursement by NYSDEC under the ERP Program; (iii) the amount of the "local match" required pursuant the ERP Program for the ERI Project; and (iv) any out-of-pocket expenses incurred by ECIDA in connection with the ERI Project, including without limitation, payments made by ECIDA to the ERI Project Consultant.

"Governmental Authority" shall mean the United States, the State of New York, any political subdivisions of the United States or the State of New York, and any agency, department, commission, board, bureau or instrumentality of any of them, now existing or hereafter created.

"Hazardous Substance" means any substance (i) the presence of which requires investigation or remediation under any Environmental Law; or (ii) which is or becomes defined as a "hazardous waste", "hazardous substance", "toxic substance", pollutant or contaminant under the Comprehensive Environmental Response, Compensation and Liability Act, as amended (42 U.S.C. section 9601 et seq.) and/or the Resource Conservation and Recovery Act (42 U.S.C. section 6901 et seq.) as amended and/or the Hazardous Materials Transportation Act, as amended (49 U.S.C. Section 1801 et seq.) and/or the Toxic Substances Control Act, as amended (15 U.S.C. Section 2601, et seq.), and/or Articles 15 or 27 of the New York State Environmental Conservation Law, or any other applicable Environmental Law or any regulations promulgated under any of the foregoing; or (iii) which is toxic (including, but not limited to, toxic mold), explosive, corrosive, flammable, infectious, radioactive, carcinogenic, mutagenic, or otherwise hazardous and is or becomes regulated by any Governmental Authority; or (iv) the presence of which on Parcel 4 causes or threatens to cause a nuisance upon the property or to adjacent properties or poses or threatens to pose a hazard to the health or safety of persons on or about Parcel 4; or (v) which contains gasoline, diesel fuel or other petroleum hydrocarbons; or (vi) which contains polychlorinated biphenyls (PCBs), asbestos or urea formaldehyde foam insulation.

"Legal Requirements" shall mean all federal, state, county, municipal and other governmental statutes, laws (including without limitation Environmental Laws), rules, orders, permits (including without limitation any Environmental Permits), licenses, regulations, ordinances, judgments, decrees or injunctions affecting Parcel 4 or the use or occupancy thereof, whether now or hereafter enacted or in force, ordinary or extraordinary, foreseen or unforeseen, all covenants, agreements, restrictions and encumbrances contained in any instrument affecting Parcel 4, including without limitation, any environmental covenants, agreements, restrictions and encumbrances or any kind or nature.

"NYSDEC" shall mean the New York State Department of Environmental Conservation.

"Release" shall have the same meaning as given to that term in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. Sections 9601, et seq.), and the regulations promulgated thereunder.

"State" shall mean the State of New York.

"State Assistance Contract" shall mean the agreement entered into with NYSDEC concerning the ERI Project.

3. Application for ERIP Grant. ECIDA will apply to NYSDEC for an ERIP Grant to fund the ERI Project for Parcel 4 of Buffalo Lakeside Commerce Park. The parties acknowledge that the ERP Application will not seek funding for any environmental remediation of Parcel 4. The parties will enter into discussions at a later date to determine whether it is advisable or appropriate to apply for ERP remediation funding for Parcel 4. In the event that the parties determine that applying for ERP remediation funding for Parcel 4 is appropriate, the parties will enter into an agreement with terms and conditions similar to those contained in this Agreement.

4. Community Based Organization Requirements.

(a) At its sole expense, BBRC shall promptly take such actions and execute such documents as may be necessary or appropriate to qualify BBRC as a Community Based Organization, including without limitation, applying to the Internal Revenue Service for tax-exempt status under Section 501(c)(3) of the Internal Revenue Code and providing such documentation to NYSDEC or other Governmental Authority as may be required in order to qualify BBRC as a Community Based Organization.

(b) The parties intend for BBRC to serve as the lead participant with respect to the ERI Project and the performance of the terms and conditions of the State Assistance Contract, including the retention of one or more consultants to perform the environmental investigatory work on Parcel 4. BBRC will be added as a co-applicant to the ERP Application at such time as BBRC has qualified as a Community Based Organization. In the event that NYSDEC declines to add BBRC as a co-applicant on the ERP Application or BBRC does not otherwise qualify as a Community Based Organization for the ERI Project, then ECIDA shall proceed with the ERI Project as the lead participant, subject to the terms and conditions set forth in this Agreement. Notwithstanding the foregoing, BBRC shall remain responsible for performing all of its obligations set forth in this Agreement, including without limitation, those obligations set forth in Sections 9, 10, 12, 13, 15 and 17 of this Agreement.

5. Transfer of Title to Parcel 4.

(a) The parties acknowledge that a requirement of the ERP Program is that the municipality have ownership of the property for which funding is sought before the municipality enters into the State Assistance Contract with NYSDEC. The parties therefore agree that BUDC will transfer title to Parcel 4 to ECIDA and BBRC, subject to the terms and conditions set forth in Section 5(b) below.

(b) BUDC agrees to convey to ECIDA and BBRC good and marketable title to Parcel 4 in fee simple, free and clear of all liens and encumbrances. Upon execution of this Agreement, BUDC shall provide ECIDA with such evidence of title to Parcel 4 as ECIDA may reasonably require (including without limitation an updated tax and title search and updated survey for Parcel 4). Upon ECIDA's receipt of the foregoing title documentation, ECIDA shall have a reasonable period of time to determine whether there exist any restrictions, liens or

encumbrances applicable to Parcel 4 that are unacceptable to ECIDA for any reason. In the event ECIDA determines that there are unacceptable restrictions, liens or encumbrances applicable to Parcel 4, ECIDA may terminate this Agreement without liability to any of the parties hereto. If after reviewing the title documentation, ECIDA determines to proceed with the acquisition of title to Parcel 4, the parties agree that BUDC will transfer title to ECIDA and BBRC at such time as ECIDA provides written notice to BUDC that NYSDEC has approved the application for the ERIP Grant. BUDC will transfer title by warranty deed to ECIDA and BBRC as tenants in common, with each party to have an undivided fifty percent (50%) interest in Parcel 4. The parties agree to execute appropriate documentation to effectuate the transfer of title. BUDC shall pay for the tax and title search (including any update to the date of transfer) and for the survey, and any applicable transfer taxes, filing fees, recording fees and any other expenses related to the transfer of title.

6. Parcel 4 Obligations. BBRC shall be responsible for all taxes, insurance, maintenance and repairs to Parcel 4 and shall pay for all costs and expenses in connection therewith, and all other costs and expenses that arise from or are related to the ownership, operation and/or use of Parcel 4. BBRC shall also comply, at its own expense, with any and all present and future Legal Requirements concerning Parcel 4 or any part thereof. The parties acknowledge that ECIDA is not required to furnish any services or facilities or to make any repairs or alterations in or to Parcel 4 nor is ECIDA obligated to make any payments of any kind with respect to Parcel 4. BBRC assumes full and sole responsibility for the condition, operation, maintenance, repairs and alterations to Parcel 4.

7. State Assistance Contract. Upon the acquisition of title to Parcel 4 as provided in Section 5 of this Agreement and presentation by NYSDEC of the State Assistance Contract for signature, ECIDA (and BBRC) will execute the State Assistance Contract with NYSDEC. Subject to Section 4(b) of this Agreement, BBRC will serve as the lead participant with respect to the performance of the terms and conditions of the State Assistance Contract, including the retention of one or more consultants to perform the environmental investigatory work on Parcel 4. The parties agree to require all ERI Project Consultants working on the ERI Project to maintain appropriate liability insurance, including without limitation, comprehensive general liability, environmental and professional liability policies in such form and amounts as are acceptable to the parties. ECIDA, BBRC and BUDC shall be named as additional insureds on all such insurance policies, and the ERI Project Consultant shall defend and indemnify ECIDA, BBRC and BUDC for any claims arising from the ERI Project Consultant's work.

8. Re-conveyance of ECIDA Ownership Interest. ECIDA will convey its ownership interest in Parcel 4 to BUDC, or to BBRC if requested by BUDC, upon the occurrence of any of the following events: (i) completion or termination of the ERI Project; (ii) completion or termination of an environmental restoration remediation project for Parcel 4, if the parties determine at a later date to seek ERP remediation funding; (iii) upon mutual agreement of the parties; (iv) as provided in Section 11 of this Agreement; or (v) at the discretion of ECIDA, provided that such re-conveyance is not otherwise prohibited under the terms of the State Assistance Contract. BUDC and BBRC each agree to accept ECIDA's conveyance of ECIDA's ownership interest in Parcel 4 as provided herein and jointly and severally constitute and appoint ECIDA as attorney-in-fact in the name, place and stead of each of BUDC and BBRC to execute, deliver and record and any all documents and instruments necessary or appropriate to convey

ECIDA's ownership interest in Parcel 4 to BUDC or BBRC in accordance with this Section 8. BUDC and BBRC acknowledge that the deed to re-convey title to Parcel 4 may include deed restrictions required by NYSDEC and agree to accept Parcel 4 from ECIDA subject to any and all deed restrictions required by NYSDEC or any other Governmental Authority having jurisdiction. BUDC shall pay for any applicable transfer taxes, filing fees, recording fees and other expenses related to the reconveyance of title pursuant to this Section 8.

9. Payment of ERI Project Expenses. BBRC and/or BUDC shall be responsible for the payment of all ERI Project Expenses. ECIDA agrees to pay ERI Project Expenses on behalf of BBRC and BUDC and will seek reimbursement of all ERI Project Expenses from BUDC and BBRC, and from NYSDEC (to the extent that such costs are eligible for reimbursement from NYSDEC). BBRC and BUDC jointly and severally agree to reimburse ECIDA for all ERI Project Expenses upon demand.

10. Insurance Requirements.

(a) Liability Insurance Requirements. BUDC and BBRC shall maintain insurance against such risks, loss, damage and liability (including liability to third parties) and for such amounts as are customarily insured against by other enterprises of like size and type including, without limitation, public liability with respect to the ERI Project and Parcel 4, in a minimum amount of Five Million and 00/100 Dollars ($5,000,000.00) per occurrence and aggregate coverage, which insurance (A) will also provide coverage of the indemnity obligations under Section 12 of this Agreement, (B) may be effected under overall blanket or excess coverage policies of BUDC and BBRC or any affiliate thereof, and (C) shall not contain any provision for deductible amount. Each of the policies or binders evidencing the required insurance shall:

(i) designate ECIDA as an additional insured;

(ii) provide that there shall be no recourse against the additional insured for the payment of premiums or commissions or (if such policies or binders provide for the payment thereof) additional premiums or assessments;

(iii) provide that such insurance shall be primary insurance without any right of contribution from any other insurance carried by the additional insured to the extent that such other insurance provides the additional insured with contingent and/or excess liability insurance with respect to its respective interest as such in the ERI Project, and shall expressly provide that all provisions thereof, except the limits of liability (which shall be applicable to all insureds as a group) and liability for premiums (which shall be solely a liability of BUDC and BBRC) shall operate in the same manner as if there were a separate policy covering each insured;

(iv) provide that if the insurers cancel such insurance for any reason whatsoever, or the same is allowed to lapse or expire, or there be any reduction in amount, or any material change is made in the coverage, such cancellation, lapse, expiration, reduction or change shall not be effective as to the additional insured until at least thirty (30) days after receipt by the additional insured of written notice by such insurers of such cancellation, lapse, expiration or change; and

(v) waive any right of subrogation of the insurers thereunder against any person insured under such policy, and waive any right of the insurers to any set-off or counterclaim or any other deduction, whether by attachment or otherwise, in respect of any liability of any person insured under such policy.

(b) BUDC and BBRC shall deliver or cause to be delivered to ECIDA duplicate copies of insurance policies and/or binders or certificates of insurance evidencing compliance with the insurance requirements of subsection (a) upon execution of this Agreement. At least thirty (30) business days prior to the expiration of any such policy, BUDC and BBRC shall furnish ECIDA with evidence that such policy has been renewed or replaced or is no longer required by this Agreement. All insurance required by subsection (a) of this Section 10 shall be procured and maintained with financially sound and generally recognized responsible insurance companies authorized to write such insurance in the State of New York.

(c) Environmental Liability Insurance. At their sole expense, BUDC and BBRC agree to apply for and obtain environmental liability insurance for Parcel 4 at such time as such insurance becomes available for Parcel 4 at commercially reasonable rates. ECIDA shall be named as an additional insured on the environmental liability insurance policy and shall be provided with a certificate evidencing same once such policy is obtained.

11. Events of Default. BUDC and/or BBRC shall be in default under this Agreement if either shall fail to observe or perform any of their respective obligations under this Agreement, and such failure shall continue for a period of ten (10) days after written notice thereof is delivered by ECIDA specifying any such failure. Upon the happening of any such event of default, ECIDA shall have the right to terminate this Agreement and reconvey its ownership interest in Parcel 4 to BUDC or BBRC, and thereafter ECIDA shall have no further obligations hereunder. Furthermore, should NYSDEC require the return by ECIDA of all or any portion of the ERIP Grant that may have been disbursed by NYSDEC, BUDC and BBRC shall remit the same to ECIDA immediately upon ECIDA's demand therefor. ECIDA shall also have such remedies for any breach of this Agreement by BUDC and/or BBRC as may be permitted under applicable law.

12. Indemnification. BUDC and BBRC jointly and severally covenant and agree, at their sole cost and expense, to indemnify, protect, defend, and save harmless and hold harmless ECIDA and its respective officers, members, employees and agents (the "Indemnitee") from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation, attorneys' and experts' fees for attorneys and experts selected by the Indemnitee, expenses and disbursements) of any kind or nature whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against the Indemnitee relating to, resulting from or arising out of (i) the breach by BUDC or BBRC of any term, provision, covenant, condition or representation contained in this Agreement, (ii) the environmental investigation activities conducted pursuant to the ERI Project, (iii) the performance of or compliance with any of the terms, provisions, covenants or conditions contained in this Agreement, the State Assistance Contract or any agreement with the ERI Project Consultant, and/or (iv) ECIDA's participation in the ERI Project. BUDC and BBRC agree to assume, at their sole expense, the defense of any such Claim upon receiving notice from the Indemnitee of the same. The Indemnitee shall be entitled to select legal counsel for the defense of any such Claim and BUDC and BBRC agree to pay all

counsel fees and other costs and expenses in connection therewith. BUDC further agrees that if the Indemnitee employs the services of an attorney by reason of any failure by BUDC or BBRC in the observance of any term, provision, condition, representation, warranty, covenant or obligation of BUDC contained in this Agreement, BUDC and BBRC shall be liable for reasonable attorneys' fees and all other reasonable costs and expenses incurred by the Indemnitee in connection with the enforcement by the Indemnitee of any available remedy.

13. Environmental Indemnification. The parties acknowledge the agreement of BUDC and BBRC to indemnify ECIDA as provided in Section 12 and this Section 13 is a material inducement to ECIDA agreeing to enter into this Agreement and acquiring title to Parcel 4. BUDC and BBRC hereby jointly and severally covenant and agree, at their sole cost and expense, to indemnify, protect, defend, and save harmless ECIDA and its respective officers, members, employees and agents (the "Environmental Indemnitee") from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation, attorneys' and experts' fees for attorneys and experts selected by the Environmental Indemnitee, expenses and disbursements) of any kind or nature whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against the Environmental Indemnitee relating to, resulting from or arising out of (a) the use of Parcel 4 for the storage, treatment, generation, transportation, processing, handling, production or disposal of any Hazardous Substance or as a landfill or other waste disposal site or for military, manufacturing or industrial purposes or for the storage of petroleum or petroleum based products, (b) the presence or claimed presence of any Hazardous Substance or a Release or the threat of a Release on, at or from Parcel 4, (c) the failure to promptly undertake and diligently pursue to completion all necessary, appropriate and legally authorized investigative, containment, removal, clean-up and other remedial actions with respect to a Release or the threat of a Release on, at or from Parcel 4, (d) human exposure to any Hazardous Substance, noises, vibrations or nuisances of whatever kind to the extent the same arise from the condition of Parcel 4 or the ownership, use, operation, sale, transfer or conveyance thereof, (e) a violation of any applicable Environmental Law, (f) non-compliance with any Environmental Permit or any Legal Requirement, (g) a material misrepresentation or inaccuracy in any representation or warranty or a material breach of or failure to perform any covenant made by BUDC and/or BBRC in this Agreement, and (h) the designation by the NYSDEC, the United States Environmental Protection Agency or any other Governmental Authority of ECIDA as a party responsible or potentially responsible for the remediation of any condition on Parcel 4 (collectively, the "Indemnified Environmental Matters"). BUDC and BBRC agree to assume, at their sole expense, the defense of any such Indemnified Environmental Matter upon receiving notice from the Environmental Indemnitee of the same. The Environmental Indemnitee shall be entitled to select legal counsel for the defense of any such Indemnified Environmental Matter and BUDC and BBRC agree to pay all counsel fees and other costs and expenses in connection therewith.

14. Exculpatory Provisions. ECIDA's obligations under this Agreement and under any agreement to be entered into by ECIDA in connection with the ERI Project shall be deemed executory except to the extent that funds are received by ECIDA for use in connection herewith or therewith and no liability on account thereof shall be incurred by ECIDA beyond monies available for the purpose thereof. No provision, covenant or agreement contained in this Agreement or any obligations herein imposed upon ECIDA, or the breach thereof, shall constitute or give rise to or impose upon ECIDA a pecuniary liability or a charge upon its general credit. All covenants,

stipulations, promises, agreements and obligations of ECIDA contained herein shall be deemed to be covenants, stipulations, promises, agreements and obligations of ECIDA and not of any member, director, officer, employee or agent of ECIDA in his or her individual capacity, and no recourse shall be had for any claim hereunder against any member, director, officer, employee or agent of ECIDA. All covenants, stipulations, promises and agreements and obligations of BUDC and BBRC contained herein shall be deemed to be covenants, stipulations, promises, agreements and obligations of BUDC and BBRC and not of any member, director, officer, employee or agent of BUDC or BBRC in his or her individual capacity, and no recourse shall be had for any claim hereunder against any member, director, officer, employee or agent of BUDC or BBRC.

15. Guarantee. BUDC and BBRC hereby unconditionally guarantee to ECIDA the payment of all ERI Project Expenses. BUDC and BBRC agree that, within thirty (30) days of ECIDA's written notification and demand, BUDC and BBRC shall pay to ECIDA an amount equal to any ERI Project Expense. Should BUDC and BBRC default in their obligations set forth in this Section, ECIDA may, but shall not be obligated to, pay for any such item, and all sums so expended shall be due and payable by BUDC and BBRC on demand, and shall bear interest from the date of such demand at the rate of nine percent (9%) per annum.

16. Force Majeure. ECIDA may cancel or extend its obligations hereunder if, by reason of force majeure, any party hereto shall be rendered unable wholly or in part to carry out its obligations under this Agreement. The term "force majeure," as employed herein, shall mean acts of God, strikes, lockouts or other industrial disturbances, acts of the public enemy, orders of any kind of the government of the United States or the State or any civil or military authority, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, hurricanes, storms, floods, washouts, droughts, arrests, restraining of government and people, civil disturbances, explosions, partial or entire failure of utilities, shortages of labor, materials, supplies or transportation, or any other similar or different cause not reasonably within the control of the party claiming such inability. It is understood and agreed that the settlement of existing or pending strikes, lockouts, or other industrial disturbances shall be entirely within the discretion of the party having the difficulty and that the requirement that any force majeure be reasonably beyond the control of the party as well as that is shall be remedied with all reasonable dispatch shall be deemed to be fulfilled even though such existing or impending strikes, lockouts, or other industrial disturbances may not be settled but could have been settled by acceding to the demands of the opposing person or persons.

17. Incorporation of Agreements. The State Assistance Contract is hereby incorporated into this Agreement and made a part hereof. BUDC and BBRC agree to meet any and all conditions of ERP Program assistance as set forth in the State Assistance Contract and as otherwise set forth under Article 56 of the ECL and the regulations promulgated thereunder. BUDC and BBRC agree to comply with all requests for information, inspections and audits made by NYSDEC (or by ECIDA at the request of NYSDEC) pursuant to the terms of the State Assistance Contract. BUDC and BBRC agree to cooperate with ECIDA and to comply with all reasonable requests made by ECIDA as may be necessary to permit ECIDA to perform its obligations under the State Assistance Contract.

18. Miscellaneous.

(a) The provisions of this Agreement shall be severable, and if any clause, sentence, paragraph, provision or other part hereof shall be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair or invalidate the remainder hereof, which remainder shall continue in full force and effect.

(b) This Agreement shall be governed by and interpreted, construed and enforced in accordance with, and subject to, the laws of the State of New York.

(c) No waiver by any party of any breach, default or violation of any term, warranty, representation, agreement, covenant, condition or provision hereof shall constitute a waiver of any subsequent breach, default or violation of the same or any other term, warranty, representation, agreement, covenant, condition or provision hereof.

(d) The provisions of this Agreement shall bind and benefit the successors and assigns of the parties hereto, provided that no party shall assign this Agreement, or any of their rights or obligations hereunder, without the prior written consent of the other parties hereto. This Agreement is made for the sole benefit of the parties hereto, and no other person or entity shall have any rights hereunder.

(e) This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

(f) All notices that may be given in connection with this Agreement shall be in writing and shall be delivered personally or mailed postage prepaid, by regular mail, to the parties at their addresses as set forth above. Notices shall be effective from the date of delivery if delivered personally, or from one (1) business day after the day of deposit with the U.S. mail, if mailed.

(g) The captions herein are for convenience only and are not to be construed as a part of this Agreement, nor shall the same be construed as defining or limiting in any way the scope or intent of the provisions hereof.

(h) Each party hereto acknowledges its full understanding of this Agreement, that there are no verbal promises, undertakings or agreements in connection herewith and that this Agreement can be modified only by a written agreement signed by the parties hereto.

(i) The obligations of BUDC and BBRC set forth in Sections 6, 9, 10, 12, 13, 15 and 17 shall survive any termination of this Agreement.

[THE REMAINDER OF THIS PAGE IS LEFT INTENTIONALLY BLANK]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date and year first written above.

BUFFALO URBAN DEVELOPMENT CORPORATION

By: _____

ERIE COUNTY INDUSTRIAL DEVELOPMENT AGENCY

By: _____

BUFFALO BROWNFIELD REDEVELOPMENT CORPORATION

By: _____

STATE OF NEW YORK)
) SS.:
COUNTY OF ERIE)

On the ____ day of _____, in the year 2005, before me, the undersigned, a Notary Public in and for said state, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that s/he executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed this instrument.

_____
Notary Public

STATE OF NEW YORK)
) SS.:
COUNTY OF ERIE)

On the ____ day of _____, in the year 2005, before me, the undersigned, a Notary Public in and for said state, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that s/he executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed this instrument.

_____
Notary Public

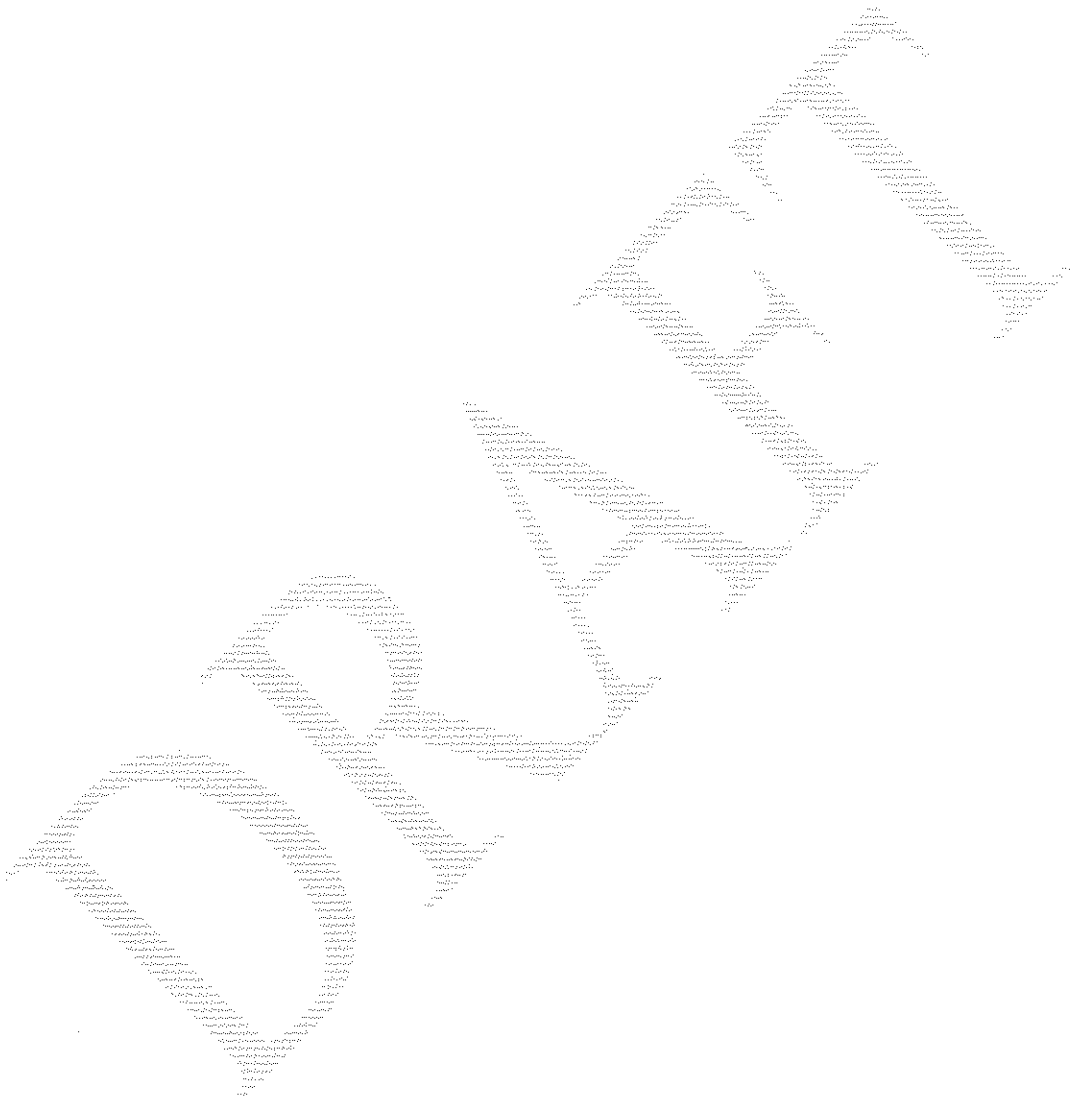
STATE OF NEW YORK)
) SS.:
COUNTY OF ERIE)

On the ____ day of _____, in the year 2005, before me, the undersigned, a Notary Public in and for said state, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that s/he executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed this instrument.

_____
Notary Public

SCHEDULE A

Description of Parcel 4



7.0 Pertinent Environmental Reports

(Provided as Volume II)

- **Phase I Investigation** – By Engineering Science for NYSDEC- January 1986
- **Site Characterization and Environmental Assessment** – By RECRA Environmental for NYSDEC - August 1988
- **Preliminary Sampling Report** – NYSDEC - July, 1994
- **Preliminary Site Assessment Report** – by ABB Environmental Services for NYSDEC, - November, 1995
- **TCLP Lead Investigation Sampling Results** – Letter Report by Development Downtown, Inc. - February 2003

8.0 Supporting Plans

- Draft Site Investigation /Remedial Alternatives Evaluation Work Plan (with Health and Safety Plan)
- Draft Citizen Participation Plan

MALCOLM PIRNIE

Site Investigation Remedial Alternatives Evaluation Work Plan

BUFFALO LAKESIDE COMMERCE PARK
PARCEL 4
BUFFALO, NEW YORK

Prepared For

ERIE COUNTY INDUSTRIAL DEVELOPMENT AGENCY

Submitted by:
Malcolm Pirnie, Inc.
40 Centre Drive
Orchard Park, NY 14127

4080-004

APRIL 2005

MALCOLM PIRNIE

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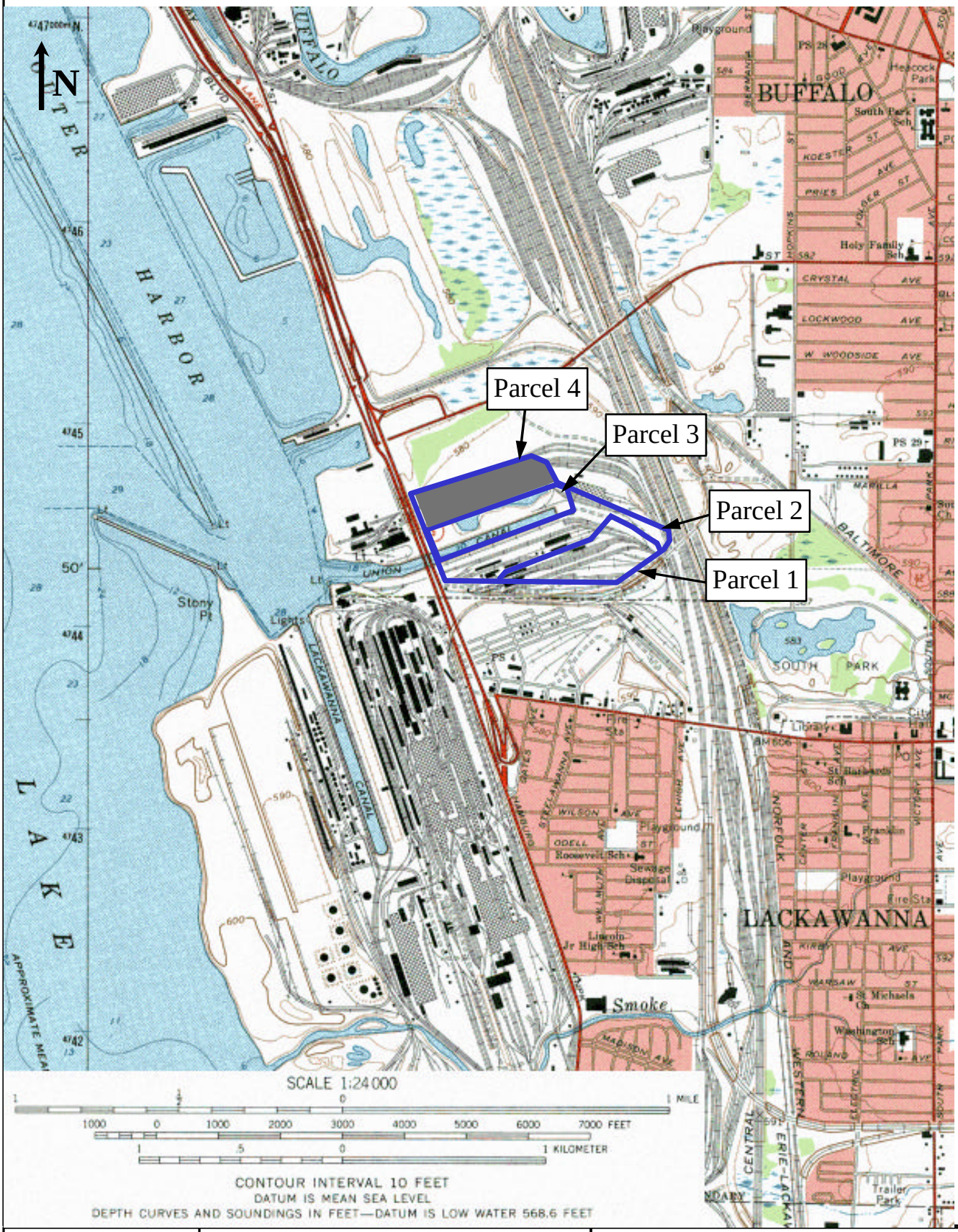
Introduction

SECTION 1

As an element of an application to the New York State Department of Environmental Conservation (NYSDEC), 1996 Clean Water/Clean Air Bond Act Environmental Restoration Projects-Title 5, the Erie County Industrial Development Agency (ECIDA) has prepared this Site Investigation Remedial Alternatives Evaluation Work Plan (FSP/RAEWP) for investigation of the approximately 20-acre Parcel 4 portion of the 113-acre Buffalo Lakeside Commerce Park (formerly Hanna Furnace) Site in Buffalo, New York (see Figure 1-1). ECIDA intends to redevelop Parcel 4 of the Buffalo Lakeside Commerce Park (BLCP), formerly the Union Ship Canal or Hanna Furnace site, consistent with the ongoing redevelopment activities on Parcels 1, 2 and 3. The purpose of the proposed investigation of Parcel 4 of the BLCP is to develop the data necessary to assess environmental risks and develop, if necessary, a feasible remedial program that supports redevelopment of the parcel.

The BLCP has been segregated into four parcels to facilitate investigation, remediation and redevelopment. Parcels 1 and 2 are being redeveloped and remediated under the New York State Voluntary Cleanup Program or the New York State Brownfield Cleanup Program. Parcel 3 (Union Ship Canal and 200 feet of surrounding land) is being addressed by the City of Buffalo under the New York State Bond Act. Parcel 4 is the subject of this Bond Act proposal.

As part of the proposed commercial/industrial redevelopment of the BLCP Site, Parcel 4 will be investigated and remediated in accordance with the requirements of the New York State Department of Environmental Conservation (NYSDEC) Environmental Quality Bond Act (EQBA). The City will direct redevelopment activities at the site.



MALCOLM PIRNIE

OCT 2004 4080-001-400

BUFFALO LAKESIDE COMMERCE PARK (PARCEL 4)
BUFFALO, NEW YORK

FIGURE 1-1
SITE LOCATION MAP

1.1 Site History

The Buffalo Union Steel Corporation purchased the manufacturing and railroad yard portions of the site in 1900. The Union Ship Canal was constructed near the northern edge of the Buffalo Union Steel property in 1910 to service the facility. Pig iron manufacturing commenced during the period of 1900 to 1915 with the construction of the blast furnaces. Following the construction of the blast furnaces, the Hanna Furnace Company acquired the property from Buffalo Union Steel. The National Steel Company subsequently purchased the property in 1929, and the corporate entity became known as the Hanna Furnace Corporation. During peak production, the Hanna Furnace Corporation employed over 800 personnel.

The portion of the Union Ship Canal owned by the City of Buffalo is approximately 1,900 feet long, 200 feet wide and 20 feet deep. Iron ore, lime, coke and other raw materials were received via the canal, and were stockpiled along the northern and southern edges of the canal. The raw materials were placed on massive concrete pads that occupy the area immediately to the south of the canal and north of the manufacturing area.

The Pennsylvania Railroad first owned the land to the north of the canal and used the property for unloading ores from ships in the canal into train cars. The 1940 and 1950 Sanborn maps show a watchman's building and a 35,000-gallon elevated water tower in this area. The Hanna Furnace Corporation purchased an approximately 25-acre portion of property located to the north of the canal, which included the northern portion of the 200-foot Buffer Area, from the Pennsylvania Railroad in 1960. Approximately 20 acres of the 25-acre purchase is what is now referred to as Parcel 4 of the BLCP site. Poorly drained swampy areas with depths up to 15 feet occupied much of the property at the time. The swampy area was subsequently backfilled with silty sand and gravel as described in Recra Environmental, Inc.'s 1988 report. Also, the Hanna Furnace Corporation disposed filter cake and flue ash, generated by production activities, in the western portion of the parcel (FC/FA Area) and building rubble, furnace brick, and other debris in a pond in the central portion of the parcel (Debris Disposal Area). Following closure of the Hanna Furnace

facility in 1982, several environmental investigations have been completed on the site, the following is a summary of those investigations that included sampling on Parcel 4:

- The U.S. Geological Survey collected one subsurface soil sample in 1982.
- Recra Environmental collected one pond sediment and eight surface soil samples in 1988.
- The New York State Department of Environmental Conservation (NYSDEC) collected 17 surface soil samples in 1994.
- ABB collected eight surface soil, 10 subsurface soil, two surface water, two sediment, and two groundwater samples in 1995.
- The U.S. Environmental Protection Agency (USEPA) collected nine subsurface soil samples from three fill piles in 2000.
- URS collected one groundwater sample in 2001.
- Malcolm Pirnie collected and analyzed four subsurface soil samples in 2001.

The Hanna Furnace Corporation ceased all operations at the site in 1982 due to foreign competition and closure of the Shenango Furnace Company, a primary recipient of pig iron from Hanna Furnace. The Jordan Foster Scrap Corporation purchased the site in 1983 and subsequently dismantled many of the buildings and removed rails from the Former Railroad Yard for scrap. The Jordan Foster Scrap Corporation filed for bankruptcy during 1986, and leased the site briefly to the Equity Scrap Processing Company. In 1998, the City of Buffalo gained title to the BLCP Site due to nonpayment of taxes. The Site has been essentially unoccupied and unsecured since 1986.

1.2 Previous Investigations

A number of environmental investigations have been performed at the BLCP Site over the last 20 years by various agencies, none of which concluded that remedial action was necessary. However, portions of the site that have been investigation have varied in size and location. Therefore, it is important to keep in mind the area of investigation when evaluating and comparing data results and recommendations. MAP 1 (folded pocket)

shows the locations of samples collected in each of the four Parcels during previous investigations. The following is a chronological summary of the significant site investigations performed at the Hanna Furnace Site and the results or recommendations of each:

- In 1979 Rupley, Bahler, and Blake, Consulting Engineers prepared a Solid Waste Management Facility Report for the Hanna Furnace Corporation. This report includes an evaluation of surface water quality in the Union Ship Canal and an on-site pond. The samples collected from the Canal contained phenols, cyanide, and iron at concentrations above NYSDEC Class C Water Quality Guidance Values.

- In April 1982, after the cessation of pig iron manufacturing at the site, the Erie County Department of Environment and Planning inspected the site and prepared a report entitled "Inactive Site Profile Report". The report recommended that the NYSDEC downgrade the classification of the site to a "class F" which pertains to a site where no further action is warranted and little to no environmental hazard potential exists.

- In 1983, the NYSDEC, after inspection of the site, prepared an "Inactive Hazardous Waste Disposal Site Report". The inactive landfill located on Parcel 4 was assigned a site number (# 915029).

- Also in 1983, the United States Geological Survey (USGS) drilled and sampled seven test borings on the north side of the Union Ship canal. Samples from these borings were analyzed for chromium, copper, iron, and lead. In their report entitled "Draft Report of Preliminary Evaluation of Chemical Migration to the Niagara River from Hazardous Waste Disposal Sites in Erie and Niagara Counties," the USGS concluded that there was potential for lateral migration of contaminants at and away from the site. The analysis of the five samples located in Parcel 3 showed that the NYSDEC TAGM 4046 Soil Cleanup Objectives were exceeded for copper and iron.

- In 1985, a site inspection and Phase I investigation was performed for the NYSDEC by Engineering-Science and Dames & Moore. The Phase I investigation was limited to areas north of the Union Ship Canal and included a records search and scoring the site using the Hazard Ranking Scoring (HRS) system. The study area was assigned a score of 8.73 out of 100 in the Phase I report. Sites with scores greater than 28.5 are generally considered to pose an immediate threat to human health and the environment and are recommended for placement on the National Priorities List. Additional data needs were identified by the Phase I investigation and a Phase II investigation was recommended and outlined.

- In 1988, Recra Environmental, Inc. (Recra) performed a "Site Characterization and Environmental Assessment" for the New York State Department of Transportation. The characterization and assessment included the entire 113-acre site. The work involved the collection of samples of surface and subsurface soil/fill, surface water, sediment and groundwater, performance of a risk assessment, and an evaluation of remedial alternatives. The investigation included the collection and analysis of eight surface soil, six subsurface soil, three sediment, three surface water, and three groundwater samples in Parcel 3.

  The soil, surface water, and sediment samples were analyzed for arsenic, chromium, copper, lead, cyanide, oil and grease, ammonia, and PCBs, and the groundwater samples were analyzed for those parameters as well as VOCs, SVOCs, pesticides, and PCBs. Analytical results indicated that concentrations of the metals were detected in excess of the applicable guidelines in the surface soil, groundwater, and sediment samples. PCBs were detected at concentrations above the applicable guidelines in one of the surface soil samples and the three sediment samples. No VOCs, SVOCs, or PCBs were detected in the groundwater samples, but two pesticides were detected at concentrations above the applicable guidelines.

  The HRS score of the Hanna Furnace site was recalculated using the data collected from the site characterization. The revised HRS, as scored by Recra, remained low at 12.28 out of 100, and Recra concluded that the entire Site does not pose an immediate threat to human health and the environment.

- In 1990, The NYSDEC collected and analyzed surface soil samples from the Former Production Area (Parcel 2).

- In 1994, the NYSDEC collected 36 surface soil samples from the Site.

- In 1995, ABB Environmental Services performed a Preliminary Site Assessment (PSA) for the NYSDEC at the site. The PSA included not only the 113-acre BLCP Site but also the adjacent Shenango Steel Site. The purpose of the PSA was to more thoroughly characterize the site, recalculate the site score using the HRS system, and reclassify the site. The soil and groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), SVOCs, pesticides/PCBs, and Target Analyte List (TAL) metals plus cyanide.

  Analytical results for the surface soil samples indicated that no VOCs were detected at concentrations in excess of applicable guidelines, and PCBs were not detected in the samples. One pesticide and three SVOCs were detected at concentrations above the Sediment Criteria in the sediment samples. One SVOC

was also detected at a concentration above the Water Quality Standards in one of the surface water samples. Metals were detected at concentrations exceeding the applicable guidelines in samples collected from the various media sampled during this investigation.

No disposal of listed or characteristic hazardous waste was documented at the Site. Therefore, the NYSDEC removed the former Hanna Furnace Site from its Registry of Inactive Hazardous Waste Disposal Sites.

- In 1997, Ecology and Environment, Inc., performed an Environmental Site Assessment for the Buffalo Urban Renewal Agency. The objective of the assessment was to summarize all available and pertinent environmental information, to identify variations in current site conditions relative to those defined in earlier investigations, and to identify potential areas of concern. The assessment involved a review of records as well as the performance of three site inspections.

  The assessment report presented the findings in order of environmental concern by area. The report concluded that the elevated contaminant concentrations in the sediment samples were within expected ranges for industrial areas, and that these concentrations may become an issue if the canal is developed for non-industrial uses.

- In 1999, the Army Corps of Engineers collected eleven samples from the top layer of sediment in the Union Ship Canal. However, as shown in Figure 1-2, only eight of these samples (USC-4 through USC-11) were collected in the area of the canal currently owned by the City of Buffalo. The remaining samples (USC-1 through USC-3) were collected to the west of the City's property.

  These sediment samples were analyzed for polynuclear aromatic hydrocarbons (PAHs), PCBs, TAL metals, oil and grease, and ammonia. Based on an assumed conservative total organic content of one percent, two PAHs (benzo(a)pyrene and phenanthrene) were detected at concentrations above NYSDEC sediment screening criteria, and PCBs were detected in nine of the eleven samples at concentrations above NYSDEC sediment screening criteria. The metals arsenic, cadmium, chromium, copper, lead, manganese, mercury, nickel, silver, and zinc were also detected at concentrations above NYSDEC sediment screening criteria.

1.3 Site Redevelopment Plan

Based on its historic use, the City's current development needs and plans, and the findings of previous investigations, the 113 acre Buffalo Lakeside Commerce Park site was divided into four Parcels (Parcels 1 through 4) for characterization and redevelopment purposes. An overall redevelopment plan for the BLCP was prepared and is now in progress. Remediation and redevelopment of Parcels 1 and 2 are in progress and the first of many planned businesses at the BLCP was constructed on Parcel 1 and officially began operations in January of 2005.

The 20-acre Parcel 4 will be redeveloped consistent with the ongoing redevelopment activities on Parcels 1, 2 and 3 including light industrial and commercial businesses

MALCOLM PIRNIE

Purpose

SECTION 2

Although several environmental investigations have been performed on the BLCP Site, additional characterization of Parcel 4 is needed to fulfill the requirements for Environmental Quality Bond Act (EQBA). This EQBA Site Investigation (SI) is proposed to provide the additional information necessary to complete the characterization of the Parcel 4 Area. Based on the historical use of the site and historical analytical results of sampling in and near this area, Malcolm Pirnie developed an investigation scope to more thoroughly characterize Parcel 4 commensurate with the property's proposed intended end use. The initial investigation will be conducted to achieve the following objectives:

- To the extent practicable, identify and characterize the potential source(s) of contamination.
- Describe the amount, concentration, persistence, mobility, form (e.g., solid, liquid), and other significant characteristics of the contamination present.
- Define hydrogeological factors (e.g., permeability, depth to saturated zone, hydrologic gradients, proximity to a drinking water aquifer, and floodplains and wetlands proximity).
- Identify potential routes of exposure.
- Identify potential population(s) at risk and environmental concerns.
- Define the extent to which the contaminants have migrated or are expected to migrate from their original source area, or from their new location if they have migrated, and whether future migration may pose a threat to human health or the environment.
- Evaluate the extent to which natural or man-made barriers currently contain the substances.

- Qualitatively describe the site's potential contribution to an air, land, water, or food chain contamination problem.
- Describe groundwater characteristics and current and potential groundwater use (e.g., characteristics related to the groundwater classes described in the EPA Groundwater Protection Strategy).
- Determine the extent to which potential contamination levels pose an unacceptable risk to public health and the environment.
- If necessary, identify private wells in the area and include an appropriate sampling plan for them.
- Provide sufficient information to allow for the preliminary identification of feasible remedial alternatives.

Following the completion of the SI and the identification of preliminary remedial alternatives, a determination will be made as to the necessity for additional investigation to assist with the further evaluation of remedial alternatives.

The Remedial Action Objectives (RAOs) for the site will be developed based on the contaminant characterization results, exposure pathways, and risk evaluation data. Based on our knowledge of potential site issues, the RAOs for the site may include the following:

- Prevent direct contact/ingestion of contaminated soils to eliminate human health and environmental risk.

MALCOLM PIRNIE

Scope of Work

SECTION 3

3.1 Introduction

The investigation of Parcel 4 of the BLCP Site will include the following field tasks:

- Site map preparation.
- Test pit excavation and sampling.
- Groundwater infiltration testing.
- Drilling and sampling of soil borings.
- X-ray fluorescence pilot study.
- Monitoring well drilling, installation, development, and testing.
- Groundwater sampling

Table 3-1 provides a summary of environmental investigation activities performed and proposed at Parcel 4. Each of the proposed field tasks is described below.

3.2 Field Investigation

3.2.1 Map Preparation

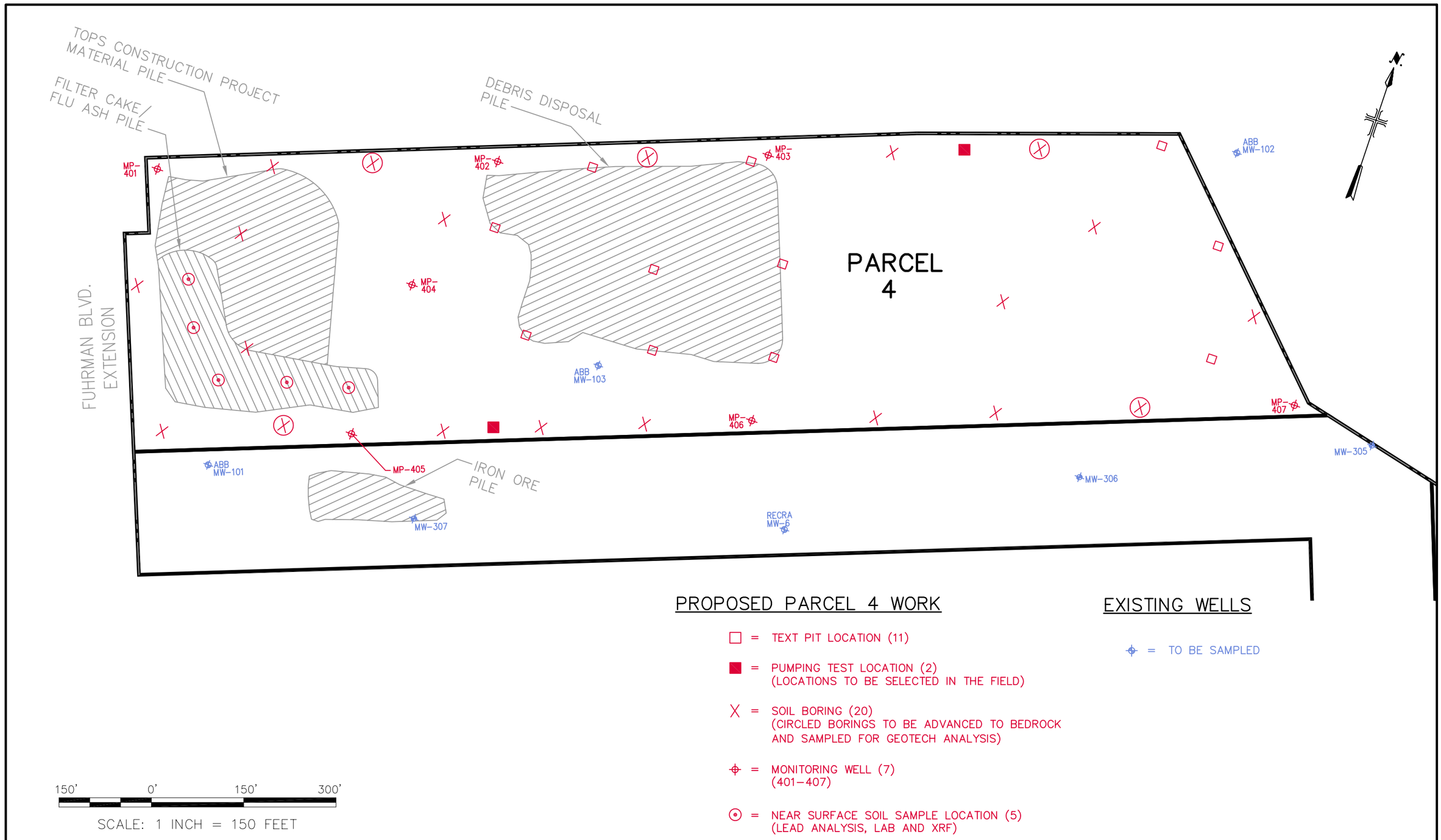
A survey will be conducted at the Site to update the existing base map, and to determine the locations of sampling and investigation activities relative to Site features. The survey will include:

- Boundaries of the Site.
- Relevant features of the Site (i.e., streets, utilities, fill piles, surface features);
- Sampling locations.
- Topography.
- Elevation of groundwater monitoring wells.

The survey will provide sufficient detail to prepare a SI report and, if required, plans and specifications for remedial activities. The survey will report Northing and Easting coordinates to the nearest 0.1 feet in reference to a relative coordinate system, and elevation to the nearest 0.01 feet in reference to the National Geodetic Vertical Datum (NGVD) of 1929.

3.2.2 Test Pit Excavation and Sampling

Eleven test pits are planned to provide additional data for characterization of the debris disposal area (eight pits) and the area along the easternmost edge of the parcel (three pits). The test pits will be excavated to the maximum depth of the backhoe [approximately 10-12 feet below ground surface (bgs)] provided and operated by the drilling subcontractor. The backhoe will be decontaminated prior to and after all excavation activities. Additionally, the backhoe bucket will be decontaminated between test pit locations. A geologist will screen material removed from the excavations using a photoionization detector (PID) and describe the material and other observations on field logs. One soil sample will be collected for laboratory chemical analyses from each test pit location excavated. Sample collection will be based on visual, olfactory or PID screening results. If no evidence of contamination is observed, the sample will be collected from immediately above the water table. Samples collected from the debris disposal area will be submitted for TCLP Pesticides analysis. Samples collected along the eastern perimeter will be submitted for PCB analyses. The proposed test pit locations are illustrated on Figure 3-1.



PROPOSED PARCEL 4 WORK

- □ = TEXT PIT LOCATION (11)
- ■ = PUMPING TEST LOCATION (2) (LOCATIONS TO BE SELECTED IN THE FIELD)
- X = SOIL BORING (20) (CIRCLED BORINGS TO BE ADVANCED TO BEDROCK AND SAMPLED FOR GEOTECH ANALYSIS)
- ⌖ = MONITORING WELL (7) (401–407)
- ⊙ = NEAR SURFACE SOIL SAMPLE LOCATION (5) (LEAD ANALYSIS, LAB AND XRF)

EXISTING WELLS

- ⌖ = TO BE SAMPLED

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10/04 4080F007

ERIE COUNTY INDUSTRIAL DEVELOPMENT AGENCY

BUFFALO LAKESIDE COMMERCE PARK
PARCEL 4

FIGURE 3–1
PROPOSED SAMPLING LOCATIONS

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TABLE 3-1

SUMMARY OF ENVIRONMENTAL INVESTIGATION
BUFFALO LAKESIDE COMMERCE PARK
PARCEL 4 (20 ACRES)
BUFFALO, NEW YORK

Activity	Historical	Proposed	Total Samples
Soil Samples	56	51	107
Groundwater Samples	3	14	17
Surface Water Samples	3	0	3
Sediment Samples	3	0	3
Monitoring Wells	1	7	8
Borings	3	20	23
Test Pits	25	11	36

Note: Does not include design and construction-related boring and characterization efforts.

3.2.3 Groundwater Infiltration Testing

At two of the 11 test pit locations a rudimentary pumping test will be performed to measure the rate at which groundwater recharges into the excavations. Results of the tests will provide data that will be useful when predicting the volume of groundwater that may be generated from dewatering activities during future remediation and/or redevelopment related construction of on-site subsurface infrastructure. The two test pits at which pumping will be performed will be selected based on proximity to planned facilities and the observed grain size (expected permeability) of the subsurface materials, with a bias towards material that appears to be relatively permeable.

Testing will involve pumping of groundwater from the pit in an attempt to reach stabilized drawdown while monitoring the discharge flow rate and water elevation in the trench. Also, recharge rate will be measured after evacuating nearly all of the water in the trench, shutting off the pump and measuring the rising water level with time. The end results of the tests will be an estimated range of recharge in units of gallons/minute/foot of trench length. All water removed from the trenches during the tests will be discharged to the ground surface in the presumed upgradient direction from the test pit. Access to the test trenches and water discharge locations will be restricted to prevent potential temporary exposure to the public.

3.2.4 Soil Boring Program

The Soil Boring Program will be implemented to further characterize the physical and chemical conditions of the soil and fill of Parcel 4. The Soil Boring Program will include the collection and analysis of both surface and subsurface soil samples. The samples will be collected from 20 proposed borehole locations shown in Figure 3-1. The proposed borehole locations may be modified based on additional information obtained during the course of the investigation.

Split spoon soil samples will be continuously collected from the ground surface to either; penetration of native material or refusal; whichever is shallower. Based on historical information and previous investigations completed at the Hanna Furnace Site, the

anticipated depth of the proposed borings is 15 feet below grade. The split spoons will be decontaminated prior to each use using a solution of Alconox and water followed by a water rinse. To preclude borehole collapse, 4¼-inch I.D. hollow-stem augers will be incrementally advanced following split spoon sample collection. The augers will be decontaminated using a steam cleaner between borehole locations.

Sampling protocols will require that a portion of each split-spoon sample will be immediately placed in a pre-cleaned sampling jar supplied by the laboratory for analysis. The remaining sample in the split spoon will be screened with a photoionization detector (PID) and described on borehole stratigraphic logs by a Malcolm Pirnie geologist. Subsequent to reaching total depth of borehole advancement, a plastic disposable bailer will be used to collect a groundwater grab sample from each boring for the measurement of pH.

The soil sample collected from the surface (0 to 2-inches) will be submitted to the laboratory for analysis of Target Compound List (TCL), polychlorinated biphenyls (PCBs), carcinogenic polyaromatic hydrocarbons (PAHs), and Target Analyte List (TAL) metals plus cyanide analytes. The discrete subsurface soil sample with most evidence of contamination (elevated PID measurements, visual and/or olfactory observations) in each boring will be submitted to the laboratory for analysis. Samples will be submitted for analysis of field duplicates, TCL VOCs, SVOCs, PCBs and pesticides, and TAL metals plus cyanide analytes. If no elevated PID measurements are observed, the sample collected immediately above the water table will be submitted for analysis. Additionally, subsurface samples from the three borings along the western end of the south site boundary will be analyzed for free cyanide. Because the analytical results must be evaluated by an independent validator, appropriate Quality Assurance/Quality Control (QA/QC) samples, including field duplicates, trip blanks, and matrix spike/matrix spike duplicate (MS/MSD) samples, will be collected during the soil sampling program. Table 3-2 shows the proposed sampling and analysis scheme. After total depth has been reached at each of the 20 soil boring locations, the pH of the groundwater in the boring will be measured in the field using a new dedicated disposable bailer and a calibrated electronic pH meter.

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TABLE 3-2

Analytical Program Summary
Buffalo Lakeside Commerce Park
Site Investigation
Parcel 4

Sample Media	Number of Samples				Analyses (Methods)
	Field Samples	Duplicates	MS/MSD	Trip Blanks	
Surface Soils (at Soil Boring Locations)	20	1	1/1	0	TCL Carcinogenic PAHs TCL PCBs TAL Metals + Cyanide
Subsurface Soil/Fill (from Soil Borings)	20	1	1/1	5	TCL VOCs TCL SVOCs TCL Pest/PCBs TAL Metals + Cyanide (3 of 20 also free Cyanide)
	15	0	0	0	Grian Size w/ Hydrometer (ASTM D422) Atterberg Limits (ASTM 4318) Moisture Content - 40 Samples (ASTM D2216) Organic Matter Content (ASTM D2974) Unconfined Compressive Strength (ASTM D2166)
Subsurface Soil/Fill (from Test Pits)	8	1	1/1	0	TCLP Pesticides
	3	1	1/1	0	TCL PCBs
Subsurface Soil/Fill XRF Pilot study (from Filter cake Flue Ash Pile)	5	1	0	0	Lead & Arsenic
Groundwater	14	1	1/1	3	TCL VOCs TCL SVOCs TCL PCBs/Pesticides TAL Metals + Cyanide pH

Notes:

TCL = target compound list
TAL = target analyte list
PCBs = polychlorinated biphenyls
VOCs = volatile organic compounds
SVOCs = semivolatile organic compounds

(1) One groundwater sample will be collected from each of the seven newly installed and seven existing groundwater monitoring wells within and adjacent to Parcel 4.

Five of the 20 borings will be sampled for geotechnical purposes in addition to environmental sampling. The geotechnical data will be useful in evaluating remedial and/or redevelopment related alternatives. The five borings will be drilled to bedrock (assumed depth of 25 to 35 feet bgs) and sampled for geotechnical characteristics which, depending on composition, will include one or more of the following tests:

- Grain size distribution.
- Atterberg limits.
- Moisture content.
- Organic matter content.
- Unconfined compressive strength.

A sample of each distinct overburden deposit (e.g. Sandy fill, lacustrine clay, till etc.) encountered in each of the five geotechnical borings will be sampled for the appropriate characterization tests above. It is assumed that up to three distinct overburden layers may be encountered at each boring location, thus 15 geotechnical samples are assumed.

3.2.5 X-Ray Fluorescence Pilot Study

A pilot study will be performed on the filter cake/flu ash pile to determine if x-ray fluorescence (XRF) field screening is a viable alternative for future characterization during possible handling of this material. An elevated concentration of lead was detected in this material and XRF screening can provide a cost-effective means of quantifying metals concentrations in soil where many samples are planned. Prior to use of XRF, a pilot study is useful to determine the relative accuracy of XRF by comparing the XRF field screening results with results from an off-site laboratory. For the pilot study, five near-surface (0.5 to 1.0 foot) samples will be collected from the filter cake/flu ash material and measured in the field for lead content using an XRF unit. Portions of these same samples also will be sent for off site analysis for lead and arsenic, since arsenic is known to interfere with the quantification of lead using XRF. If the results between the two methods are similar or the XRF is biased either high or low at a consistent

percentage, XRF screening may provide a cost-effective means of measuring lead content in the filter cake/flu ash material during the implementation of remedial measures.

3.2.6 Groundwater Characterization

To characterize the groundwater quality in Parcel 4, seven groundwater monitoring wells will be installed at the site in borings completed during the soil boring program. These seven new monitoring wells and seven existing wells will be sampled. The existing wells are located within Parcels 3 and 4 and on the adjacent property east of Parcel 4. Well locations have been selected based on the results of previous hydrological investigations at the Site, which indicate that groundwater generally flows toward the Union Ship Canal. Figure 3-1 illustrates the locations of the proposed monitoring wells.

3.2.6.1 Monitoring Well Drilling and Installation

Monitoring wells will be installed at the Site to collect groundwater samples for chemical analysis. Groundwater elevations will be measured in the wells to evaluate the vertical and horizontal components of groundwater flow.

A truck mounted rotary drilling rig equipped with 4 1/4-inch I.D. hollow stem augers will be used to create a nominal eight-inch diameter borehole. Two-inch diameter Schedule 40 PVC well materials will be installed to construct the shallow groundwater monitoring well. The well materials will consist of a ten foot long screen having a 0.010 slot size and riser pipe cut to a length sufficient for a 2-foot stick-up.

All down-hole drilling equipment will be cleaned using high pressure hot water before use, between borehole locations, and prior to leaving the Site.

3.2.6.2 Monitoring Well Installation Procedures

The monitoring wells will be constructed using a minimum of six inches of clean filter pack sand emplaced at the bottom of the borehole. The monitoring well assembly, consisting of two-inch I.D. schedule-40 PVC casing with 10 feet of continuous 0.01-inch slot schedule-40 PVC screen and riser of appropriate length, will be inserted through the augers.

Clean filter pack sand will then be poured into the annular space between the augers and the monitoring well assembly as the augers are slowly removed. The filter pack sand will extend approximately two feet above the screened interval. A bentonite pellet seal measuring three feet thick will be placed above the filter pack. The pellet seal will then be allowed to hydrate a minimum of 30 minutes. The augers will then be removed and a 6-inch layer of fine sand placed on top of the bentonite seal as a secondary sandpack to mitigate the potential for grout contamination. The remainder of the annulus will be then filled with grout.

The PVC riser will be finished with a 2-foot stick up. A four-inch diameter protective steel casing with locking lid will be set over the capped PVC and into the grout. After the grout has sufficiently hardened (24-hours minimum), the well will be completed with a 2-foot by 2-foot square by 1-foot thick concrete drainage pad. A "weep" hole will be drilled into the protective casing approximately two inches above the concrete pad to prevent collection of water between the inner and outer casings. The wells will be clearly and permanently labeled for identification and locked with keyed alike padlocks.

3.2.6.3 Monitoring Well Development

The newly installed monitoring wells will be developed no sooner than 24 hours after construction has been completed. The development procedure will require purging of the groundwater and periodically surging the water in the well to loosen and remove suspended fines from the well screen and sandpack. Measurements of the water volume removed and water quality parameters including temperature, pH, conductivity, and turbidity will be recorded at regular intervals throughout the development process. Development will continue until water quality measurements stabilize to within 10% of the previous measurement.

3.2.6.4 Groundwater Sampling

Groundwater samples will be collected from a total of seven newly installed and seven existing monitoring wells located within and adjacent to Parcel 4. The groundwater samples will be collected no sooner than one week following well development and submitted for chemical analysis. Prior to purging and sample

collection, a water level indicator will be used to measure the water table elevation. Parameters including pH, specific conductivity, temperature, turbidity, dissolved oxygen, and redox potential (Eh) will be monitored during a purging process prior to sampling. Each groundwater sample will be analyzed for TCL VOCs, SVOCs, pesticides, and PCBs, and TAL metals plus cyanide analytes. Appropriate QA/QC samples will be collected and analyzed, including one trip blank per day of VOC sampling, one MS/MSD sample, and one field duplicate sample. Tables 3-1 and 3-2 show the proposed sampling and analysis scheme.

3.2.6.5 Hydraulic Conductivity Testing

Testing performed to determine hydrogeologic characteristics at the site will be performed subsequent to groundwater sampling and will include water level monitoring in all new and existing wells to determine hydraulic gradients, and the performance of hydraulic conductivity tests.

In-situ permeability of the screened fill unit will be determined using the variable-head test method ("rising head") by the method of Bouwer and Rice, (1976, 1989). Data will be collected using a down-hole pressure transducer connected to a data logger.

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Qualitative Risk Assessment

SECTION 4

Following the collection of appropriate characterization information for Parcel 4, Malcolm Pirnie will perform a Qualitative Risk Assessment, which includes both qualitative human and qualitative ecological health risk assessments. Each assessment seeks to identify relevant environmental media and chemicals of potential concern that may present a health risk to the populations in and around the vicinity of Parcel 4 of the Hanna Furnace Site. In this context, the objectives of the risk assessment will be to:

- Evaluate the available analytical data in comparison to NYSDEC criteria.
- Evaluate potential receptors and exposure pathways associated with any detected contamination.
- Characterize the potential for adverse impacts to human health and the environment.
- Assist in determining the need for additional action.

The results of the qualitative risk assessment will be important in considering the potential for reuse of Parcel 4 of the BLCP Site.

4.1 Human Health Risk Assessment

The purpose of the human health portion of the risk assessment is to evaluate potential human health risks associated with Parcel 4. The objectives of the risk assessment are to:

- Identify environmental media and chemicals of potential concern;
- Provide an evaluation of potential human receptors and exposure pathways at and around the site.

- Characterize the potential for adverse effects to human health in the absence of any actions to control or mitigate site contamination, if present.
- The human health evaluation is conducted in the typical four-step process:
- Data Evaluation: relevant site data are analyzed, and environmental media and chemicals of concern are identified;
- Exposure Assessment: chemical release mechanisms are analyzed, potentially exposed human populations are identified, and exposure pathways and routes are identified;
- Toxicity Assessment: qualitative toxicity information is presented for the chemicals of concern;
- Risk Characterization: the potential for adverse human health risks (noncarcinogenic and carcinogenic) is evaluated, and the risk information is summarized to determine the baseline risk in the absence of future remediation.

4.2 Ecological Risk Assessment

A qualitative ecological risk assessment will be prepared to characterize the natural resources and potential ecological receptors at Parcel 4 of the BLCP Site. The ecological risk assessment will be performed in accordance with applicable New York State and USEPA guidance for ecological assessments at hazardous waste sites, including the NYSDEC guidance, *Fish and Wildlife Impact Analysis for Inactive Hazardous Waste Sites* (FWIA) (NYSDEC, 1994). This evaluation will consist of the following six components of an ecological risk assessment:

- Ecological characterization
- Identification of chemicals of potential ecological concern.
- Exposure and effects assessment.
- Ecological risk characterization.
- Assessment of uncertainties and limitations.
- Summary

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Quality Assurance/Quality Control (QA/QC)

SECTION 5

5.1 Analytical Methods

All samples collected during the EQBA Investigation will be analyzed using EPA-approved analytical methods that follow the most recent edition of the EPA's "Test Methods for Evaluating Solid Waste" (SW-846), Methods for Chemical Analysis of Water and Wastes" (EPA 600/4-79-020), and Standard Methods for Examination of Water and Wastewater" (prepared and published jointly by the American Public Health Association, American Waterworks Association and Water Pollution Control Federation).

5.2 Laboratory

The laboratory selected will be certified by the New York State Department of Health to perform Contract Laboratory Program (CLP) analysis on all media to be sampled during this investigation. The laboratory will perform the sample analysis in accordance with the most recent (year 2000) NYSDEC Analytical Services Protocol (ASP).

5.3 Data Submittal

Analytical data will be delivered as a complete ASP Category B data package. Procedures for chain of custody, laboratory instrumentation calibration, laboratory analyses, reporting of data, internal quality control, and corrective actions shall be followed as per SW-846 and as per the laboratory's Quality Assurance Plan. Where appropriate, trip blanks, field blanks, field duplicates, and matrix spike, matrix spike duplicate shall be performed at a rate of 5% and will be used to assess the quality of the data. The laboratory's in-house QA/QC limits will be utilized whenever they are more stringent than those suggested by the EPA methods.

5.4 Data Usability Summary Reports

Analytical results of surface soil and subsurface soil samples from borings will be sent to a qualified, independent, data validation specialist for evaluation of the accuracy and precision of the analytical results. A Data Usability Summary Report (DUSR) will be prepared to describe the compliance of the analyses with the analytical method protocols detailed in the NYSDEC Analytical Services Protocol (ASP). The DUSR will provide a determination of whether the data meets the project specific criteria for data quality and data use. The validation effort will be completed in accordance with NYSDEC Division of Environmental Remediation DUSR guidelines.

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Health and Safety

SECTION 6

All field tasks will be performed using industry standard health and safety procedures. A site-specific Health and Safety Plan (HASP) has been prepared for use by the field team during all field activities. This plan details known and potential hazards of the site and field tasks as well as air monitoring and emergency procedures. A copy of the NYSDEC prepared "Community Air Monitoring Plan" is attached to the HASP, included in Appendix A.

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Project Organization

SECTION 7

Malcolm Pirnie has available an in-house team of highly competent professionals who have the expertise necessary to complete this important brownfield redevelopment project to the satisfaction of the BUDC/ECIDA.

The project will be staffed primarily through staff of Malcolm Pirnie's Buffalo office, with support available in other offices including Rochester, White Plains, Albany and Northern New Jersey.

Key individuals available to work on this project are presented below along with brief summaries of their roles and qualifications.

Project Manager – Kent McManus, P.E., DEE

Mr. McManus has managed all of Malcolm Pirnie's brownfield projects located in Western New York. He has established a strong working relationship with BUDC and ECIDA through previous work on the BLCP site, and brings intimate knowledge of the BLCP site to this project.

As Project Manager, Mr. McManus will be the key point of contact for the BUDC/ECIDA. He will be responsible for day-to-day management of the project and for ensuring that project objectives are met in accordance with client expectations and Malcolm Pirnie's business principles.

Project Officer – Peter G. Witko, P.E.

As Project Officer, Mr. Witko will be responsible for all technical aspects of the project including contract negotiation and formation, project execution, health and safety issues, and quality assurance/quality control. He will ensure that timely decisions are made and that the project schedule and quality are maintained.

Site Investigation Leader – James Richert, CPG

Mr. Richert is experienced in all phases of site investigation, including scoping, implementation of field tasks, data collection and interpretation, and final report preparation. He has been geologist/task manager on several large, $1-$2 million, multi-site projects and remedial investigations; and has performed site safety oversight and monitoring at several sites. His experience with field techniques encompasses well installation, geophysical surveys, hydrogeologic testing, and sampling of various media.

Remedial Alternatives Leader – Tracy Hemmerling

Ms. Hemmerling specializes in comprehensive site assessments and evaluation, design, and implementation of remediation systems. She is experienced in planning and performing evaluations of potential remediation options for contaminated sites, as well as coordinating with regulatory agencies and preparing a variety of project reports.

Quality Assurance Officer (QAO) – Shi Ng

Mr. Ng's 15 years of experience includes serving as QAO for the site investigations performed on Subparcels 1 and 2 of the Hanna Furnace Site. Mr. Ng will assist the Project Manager in the development of the work plan, interface with the laboratory to make requests and resolve problems, and interface with the data validator during the development of Data Usability Reports.

Technical Advisor – Anne Marie McManus, P.E., DEE

Ms. McManus has extensive experience in hazardous waste site investigations, engineering feasibility studies, and remedial design. She has served as Program Manager on all hazardous waste remediation projects awarded under Malcolm Pirnie's Standby Contract with the New York State Department of Environmental Conservation (NYSDEC) and as Program Manager for Malcolm Pirnie's General Technical Assistance Contract (GTAC) with the Pennsylvania Department of Environmental Protection.

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Development and Evaluation of Remedial Alternatives

SECTION 8

8.1 Need for Interim Remedial Measures

Upon completion of the investigation analytical data will be evaluated and potential risks to human health and the environment will be assessed. If, based on this assessment, it is determined that the site poses an imminent threat to human health and/or the environment, or may possibly interfere with planned/on going redevelopment activities on Parcels 1, 2, or 3 of the BLCP, interim remedial measures (IRM) may be considered. Such measures can provide a relatively quick remedy of acute site environmental hazards while allowing other broader site remedial measures to be evaluated and implemented to address somewhat less urgent environmental concerns. Examples of typical IRMs include removal of buried drums or storage tanks, stabilization of erosion, removal of physical structural dangers, and restricting access to all or portions of the site.

8.2 Remedial Technology Identification and Screening

The evaluation of remedial alternatives will be based on the planned redevelopment of Parcel 4 as commercial/light industrial space consistent with the overall plan for the BLCP. One of the key objectives will be to regrade the site to create as much development space as possible.

As the development of the proposed remedial and redevelopment response for the site progresses, a list of potentially feasible remedial technologies will be developed. For each General Response Alternative identified, appropriate technologies will also be identified. This identification process will be revised and updated during the site

investigation to ensure that all data required to define these technologies are available for the Remedial Alternatives Evaluation process. The process will concentrate on the possible application of proven or presumptive alternatives but innovative technologies will also be included in the list.

The technologies, which are identified as potentially applicable for remediation of the site, will then undergo a preliminary screening process based upon site conditions, waste characteristics and technical requirements. Specific considerations, which will form the basis of this screening process, will include the following:

- Technologies that would be extremely difficult to implement, that will not achieve remedial goals within a reasonable time frame, or that rely upon unproven technology will be eliminated from consideration.
- Technologies, which are obviously limited by adverse, waste characteristics (e.g., solubility, persistence, toxicity, material incompatibility) or adverse site conditions (e.g., high water table, slope) will be eliminated from consideration.
- Technologies for which performance records or inherent construction, operational or maintenance constraints are deemed unacceptable will be eliminated unless there is a compelling reason for consideration.
- Technologies that may negatively influence the feasibility of effectiveness of other technologies will be modified or eliminated from consideration.

8.3 Development of Remedial Alternatives

A limited number of remedial alternatives, which appear to both adequately address potential site impacts of concern and achieve response goals, will be considered. Each alternative may consist of one or more technologies, which are combined to effectively address response criteria. A reasonable attempt will be made to identify alternatives within the following categories:

- Any alternative involving treatment if contaminant distribution is widespread enough to justify consideration of treatment alternatives.

- Alternatives for groundwater response actions, if necessary to control exposure or migration, developed to address the specific exposure concerns at the site and to surrounding vicinity.

- Alternatives that involve the containment of potentially hazardous constituents with little or no treatment, but provide protection of human health and the environment primarily by either preventing exposure or reducing mobility during subsequent industrial or public access use. These technologies, combined with "hot spot" excavation will be presumptive remedies for this site unless widespread contamination is found.

- Various innovative technologies involving passive or "natural" attenuation including but not limited to: anaerobic in-situ treatment technologies or phytoremediation.

- A no-action alternative.

If one or more of the alternative categories described above is not considered necessary, a brief rationale for deleting the remedial alternative will be provided.

The alternatives identified in the preceding section will be screened to eliminate those that are clearly inappropriate for the Site, thereby narrowing the list of potential alternatives for the detailed analysis. The screening will concentrate on presumptive alternatives as determined by their likely effectiveness and implementability. Two broad criteria will be used in the initial screening of alternatives, including:

- **Effectiveness.** Alternatives will be evaluated as to the degree of protection to human health and the environment they afford; how significantly and permanently they reduce the toxicity, mobility, or volume of hazardous constituents, if any; or how they are effective in other respects;

- **Implementability.** Alternatives will be evaluated as to the technical feasibility and availability of the technologies each alternative would employ; the technical and institutional ability to monitor, maintain, and replace technologies over time; and the administrative feasibility of implementing the alternative.

In addition, the following considerations will apply:

- Innovative alternative technologies will be carried through the screening process if there is a reasonable belief that they will offer the potential for better treatment performance or implementability; relative fewer adverse impacts than other available approaches; or lower costs for similar levels of performance than demonstrated and presumptive alternative treatment technologies; and

- At least one containment alternative and the no action alternative will be carried through the initial screening process to the detailed analysis.

At the completion of this task, we suggest NYSDEC be notified of the preliminary alternatives listing resulting from the initial screening procedure. This may help to focus detailed analysis of the alternatives to ensure that the issues considered are consistent with the objective and data requirements of the Brownfields Program.

8.4 Detailed Analysis of Alternatives

A restricted list of potentially necessary and effective remedial alternatives will be developed. Each will be evaluated regarding its technical, environmental, public health, cost effectiveness and consistency with proposed long-term site uses. Each potential alternative will be evaluated with respect to the following:

- Short-term impacts and effectiveness.
- Long-term effectiveness and performance.
- Reduction of toxicity, mobility, or volume.
- Feasibility and Implementability.
- Compliance with standards, criteria, guidelines, and proposed long-term Brownfields Redevelopment use.
- Overall protection of human health and the environment.
- Effect on property value, if any.
- Cost effectiveness.
- State and community acceptance.

The detailed analysis will be driven by an examination of each alternative against the broad factors of effectiveness, implementability and cost. Each of these factors addresses specific response goals as indicated below:

- **Effectiveness.** Measures of effectiveness include (but are not limited to) the degree of protection afforded to human health and the environment, including area residents, temporary visitors or on-site industrial or parks and recreation workers, by each alternative and the extent that waste toxicity, mobility and volume reduction are achieved.

- **Implementability.** Measures of this factor include (but are not limited to) the technical feasibility regarding short-term reliability, compatibility with other remedial actions, proposed post-redevelopment site uses, and ability to attain desired remediation goals; the administrative feasibility based on public response and agency approvals; and the availability of necessary equipment and specialists.

- **Cost Effectiveness.** Potential component measures include short-term construction and operating costs prior to complete remediation; long-term O&M costs; present worth of the entire remedial project; and replacement costs for unsatisfactory remedial actions.

Once all of the alternatives are evaluated according to the factors listed above, each alternative will be compared to the others using the above-listed factors and any other factors deemed appropriate for the site. Among the key comparisons will be an evaluation of the relationship between the degree of protection achieved, the degree of protection necessary, and the estimated costs. As part of the recommendation for the most appropriate remedial approach, future use compatibility issues will be evaluated.

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Reporting

SECTION 9

Following receipt of the validated analytical results, Malcolm Pirnie will prepare a Site Investigation/Remedial Alternatives Report (SI/RAR) detailing the results of the investigation activities. The report will summarize the work performed and data collected, and will include data tables, well logs, analytical results, field notes, and maps. The report will also include Malcolm Pirnie's recommendations for further characterization of the Parcel 4, if necessary. If no additional characterization is required, the report will include a Qualitative Risk Assessment. If additional investigation is required, the Qualitative Risk Assessment will be completed following the receipt of validated results of the additional characterization.

The Remedial Alternatives Process will utilize data obtained during the Site Investigation as the basis for identifying, selecting and evaluating remedial action alternatives for consideration at the site. Potential site constituents and migration pathways will be categorized as follows:

- Air and airborne dust.
- Off-site groundwater migration.
- Subsurface soils.
- Surface soils.

Once the degree of contamination associated with these media and other site characteristics are quantified, General Response Actions for site remediation will be defined. The General Response Alternatives that are considered will include the "no action" measure as a baseline against which other remedial measures, if necessary, can be compared.

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Project Schedule

SECTION 10

A schedule showing the planned investigation activities and assessment of remedial alternatives is included in Figure 10-1.

Reporting

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Following the detailed analysis of remedial alternatives, a draft SI/RAR will be prepared which summarizes the results of the site investigation and remedial evaluation for review by the City and the NYSDEC. Subsequently, a final report will be prepared which incorporates technical considerations and comments provided by the NYSDEC and the City. Malcolm Pirnie will be prepared to discuss and present this report in public meetings related to the project.

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References

SECTION 11

ABB Environmental Services. *Preliminary Site Assessment.* November 1995.

Ecology and Environment, Inc. *Environmental Site Assessment.* May 1997.

Engineering Science. *Phase I Investigation.* January 1986.

Erie County Department of Environmental Protection. *Inactive Site Profile Report.* April 1982.

Malcolm Pirnie, Inc. *Characterization of the Former Railroad Yard.* October 1999.

Malcolm Pirnie, Inc. *Supplemental Investigation Report.* July 2000.

New York State Department of Environmental Conservation. Inactive Hazardous Waste Disposal Site Report. 1983.

PADIA Environmental Inc. Final Report for Sediment Sampling and Chemical Analysis at the Union Ship Canal in Buffalo, New York. January 2000.

Recra Environmental. *Site Characterization and Environmental Assessment.* August 1988.

Rupley, Bahler and Burke. *Solid Waste Management Facility Report.* 1979.

United States Geological Survey. Draft Report of Preliminary Evaluation of Chemical Migration to the Niagara River from Hazardous Disposal Sites in Erie and Niagara Counties. 1983.

MALCOLM PIRNIE

Health and Safety Plan

APPENDIX

A

MALCOLM PIRNIE

SITE SPECIFIC SAFETY AND HEALTH PLAN

SECTION 1: GENERAL INFORMATION & DISCLAIMER	
CLIENT NAME: **Erie County Industrial Development Agency**	PROJECT NAME: **BLCP –Parcel 4**
PROJECT MANAGER: **Kent McManus**	
PROJECT LEADER: **Jim Richert**	REVISION DATE:
SITE HEALTH & SAFETY OFFICER: **Brad Walker**	
PREPARED BY: **John P. Hilton**	DATE: **February 2, 2005**

NOTE: This Site Specific Safety and Health Plan (SSSHP) has been prepared for use by Malcolm Pirnie, Inc. employees for work at this site. Malcolm Pirnie, Inc. is not responsible for its use by others. **The plan is written for the specific site conditions, purposes, tasks, dates and personnel specified and must be amended and reviewed by those named in Section 16 if these conditions change.**

Subcontractors shall be solely responsible for the health and safety of their employees and shall comply with all applicable laws and regulations. In accordance with 1910.120(b)(1)(iv) and (v), Malcolm Pirnie, Inc. will inform subcontractors of the site emergency response procedures, and any potential fire, explosion, health, safety or other hazards by making this Site Specific Safety and Health Plan and site information obtained by others available during regular business hours. All contractors and subcontractors are responsible for: (1) developing their own Health and Safety Plan including a written Hazard Communication Program and any other written hazard specific programs required by federal, state and local laws and regulations; (2) providing their own personal protective equipment; (3) providing documentation that their employees have been health and safety trained in accordance with applicable federal, state and local laws and regulations; (4) providing evidence of medical surveillance and medical approvals for their employees; and (5) designating their own site safety officer responsible for ensuring that their employees comply with their own Health and Safety plan and taking any other additional measures required by their site activities.

If an upgrade to Level "C" or above is anticipated, this Site Specific Safety and Health Plan must be reviewed/approved by Health and Safety, Corporate.

SECTION 2: PROJECT INFORMATION

(1) SITE INFORMATION

Site Name:	**BLCP**	Site Project Client Contact:	**Jim Richert**
Address:	**Fuhrmann Blvd**	Phone No.:	**(716) 667- 0900**
	Buffalo, NY 14203	Site Health & Safety Contact:	**Brad Walker**
		Phone No.:	**(716) 667-0900**

(2) SITE CLASSIFICATION: (check and circle all that apply)

	Hazardous (RCRA)		Other
	Construction		
	Sanitary or C and D Landfill	Explain:	
	First Entry		
	Hazardous (CERCLA/State Superfund)		
	UST/LUST		
	Manufacturing		
X	Previously Characterized		
	Active		
X	Inactive		

(3) ENTRY OBJECTIVES AND DATES OF FIELD VISIT(S):

1) Install and Develop New Monitoring Wells

2) Characterize Surface and Subsurface Soil via Soil Boring Program/Test Pit Excavation

3) Collect soil and groundwater samples from test pits and monitoring wells

4) Field work to take place during 2005

(4) MALCOLM PIRNIE TASKS:

1) Oversee Drilling and Test Pit excavation Subcontractors

2) Collect Soil Samples from Borings and test pits

3) Develop and sample new and existing groundwater monitoring wells

4) Oversee site survey of New and Existing Wells, Soil Borings and Site Boundary

TASKS PERFORMED BY OTHERS:

1) Drilling and test pit excavation operations

2) Install shallow groundwater monitoring wells

3) Survey New and Existing Wells, Soil Borings and Site Boundary

(5) PROJECT ORGANIZATION AND COORDINATION - The following Malcolm Pirnie personnel are designated to carry out the stated project job functions on site. (Note: One person may carry out more than one job function.)

	PROJECT MANAGER	**Kent McManus**
	SITE SAFETY OFFICER	**Brad Walker**
	ALTERNATE SITE SAFETY OFFICER	**Scott Compston**
	PUBLIC INFORMATION OFFICER	**N/A**
	SITE RECORDKEEPER	**Brad Walker / Scott Compston**
	ON-SITE PERSONNEL WITH CPR/FA	**Brad Walker / Scott Compston**
	FIELD TEAM LEADER	**Jim Richert**
	FIELD TEAM MEMBERS	**Brad Walker**
VISITORS:	FEDERAL AGENCY REPS (i.e., EPA, OSHA)	**N/A**
	STATE AGENCY REPS	**David Locey (NYDEC)**
		Martin Doster (NYDEC)
		Matt Forcucci (NYDOH)
	LOCAL AGENCY REPS	**N/A**
SUBCONTRACTORS:	SUBCONTRACTOR(S) SITE	**Drilling Co. -TBD**
	SAFETY OFFICERS	**Surveyors - TBD**

All personnel arriving or departing the site should log in and out with the Recordkeeper.

(6) ONSITE CONTROL

Brad Walker has been designated to coordinate access control and security for Malcolm Pirnie operations on site. A safe perimeter has been established ___ **Within 50 feet of Drilling Rig**.

No unauthorized person should be within this area.

The onsite Command Post and staging area have been established at **N/A**

The prevailing wind conditions are **South West**. A wind direction indicator is used to determine daily wind direction. If required, a Command Post will be located upwind from the Exclusion Zone or at a sufficient distance to prevent exposure should a release occur.

Control boundaries have been established and Exclusion Zone(s) (the contaminated area) have been identified. (Attach site map)

These boundaries are identified by: **Site is Non-Hazardous**

SECTION 3: PHYSICAL HAZARDS INFORMATION

(1) IDENTIFY POTENTIAL PHYSICAL HAZARDS TO WORKERS:

___ Confined Space	X Steep/uneven terrain	X Surface water
X Heavy equipment	___ Heat stress	___ Drum handling
X Moving parts	X Extreme cold	X Noise
___ Heavy Lifting	___ Ionizing Radiation	___ Non-Ionizing Radiation
___ Electrical	___ Traffic	___ Falls
___ Overhead Hazards	___ Biological Hazards	

Describe other unsafe environments _

(2) SAFETY EQUIPMENT REQUIRED FOR MALCOLM PIRNIE EMPLOYEES

___ Explosimeter	___ Eye Wash	___ Snake Bite Kit
___ Fall Protection	___ Emergency Shower	___ Floatation Device (USCG Type III)
Equipment	___ Barrier Tape	___ Emergency Air Horn
___ Confined Space	___ Traffic Cones	___ Lights
Equipment	___ Stretcher	___ Lights - emergency
___ Ladder	___ A-B-C Fire Extinguisher	___ Communications - On Site
X First Aid Kit	___ Tick Repellant	___ Communications - Off Site

Describe other:

SECTION 4: CHEMICAL HAZARDS INFORMATION

(1) IDENTIFIED CONTAMINANTS

Known or suspected hazardous/toxic materials (attach historical information, physical description, map of contamination and tabulated data, if available)

Media	Substances Involved	Characteristics	Estimated Concentrations	PEL
GW	Unknown /TBD	High pH	pH > 10	

Media types: GW (ground water), SW (surface water), WW (wastewater), AIR (air), SL (soil), SD (sediment), WL (waste, liquid), WS (waste, solid), WD (waste, sludge), WG (waste, gas), OT (other).

Characteristics: CA (corrosive, acid), CC (corrosive, caustic), IG (ignitable), RA (radioactive), VO (volatile), TO (toxic), RE (reactive), BIO (infectious), UN (unknown), OT (other, describe)

(2) DESCRIBE POTENTIAL FOR CONTACT WITH EACH MEDIA TYPE FOR EACH OF THE MPI TASKS LISTED IN SECTION 2.4:

MPI TASK #	ROUTE OF EXPOSURE	POTENTIAL FOR CONTACT	METHOD OF CONTROL
Soil Boring/Test Pits	Direct Contact	Low	Latex gloves
Well Development	Direct Contact	Low	Latex gloves
Soil Sampling	Direct Contact	Low	Latex gloves
Groundwater Sampling	Direct Contact	Low	Latex gloves

The Site Safety Officer will brief the MPI field team on symptoms and signs of overexposure to chemical hazards.

SECTION 5: HAZARD COMMUNICATION PROGRAM

If chemicals are introduced to the site by Malcolm Pirnie, Inc. (e.g., decontamination liquids, preservatives, etc.), bring a copy of the Malcolm Pirnie, Inc. Hazard Communication Program and Material Safety Data Sheets (MSDSs) to the site. The Site Safety Officer will review this information with all field personnel prior to the start of the project. The Comprehensive List of Chemicals for this site is:

None	

SECTION 6: ENVIRONMENTAL MONITORING

(1) The following environmental monitoring instruments shall be used on site at the specified intervals.

EQUIPMENT		MONITORING PERIOD		PEL/REL/TLV	ACTION LEVEL
Combustible Gas Indicator	-	continuous/hourly/daily/other		25%	10%
O_2 Monitor	-	continuous/hourly/daily/other		19.5 - 25%	19.5
Colorimetric Tubes (type)	-	continuous/hourly/daily/other			
PID (Lamp 10.2 eV)	-	continuous/hourly/daily/other	**Hourly**		**5 ppm**
FID	-	continuous/hourly/daily/other			
Radiation Meter	-	continuous/hourly/daily/other			
Respirable Dust Monitor	-	continuous/hourly/daily/other	**Hourly**		**3.0 mg/cm**
Toxic Gas Indicator	-				
(Type)	-	continuous/hourly/daily/other			
Other	-	continuous/hourly/daily/other			
	-	continuous/hourly/daily/other			

(2) Monitoring equipment is to be calibrated according to manufacturers' instructions. Record calibration data and air concentrations in the Health and Safety on-site log book.

(3) Recommended Action Levels for Upgrade or Downgrade of Respiratory Protection or Site Shutdown and Evacuation. These are average values. Consideration should be given to the potential for release of highly toxic compounds from the waste or from reaction by-products. Levels are for persistent (> 10 min) breathing zone measurements.

Uncharacterized Airborne Vapors or Gases		Characterized Gases, Vapors, Particulates*
Level D	Background*	Up to 50% of PEL, REL or TLV
Level C	Up to 5 ppm above background	Up to 25 times PEL, REL or TLV
Level B	5 ppm to 500 ppm above background	Up to 500 times PEL, REL or TLV
Level A	500 ppm to 1000 ppm above background	Up to 1000 times PEL, REL or TLV

*Off-site "clean" air measurement.

*Use mixture calculations (% allowed = $3C_n$ / PEL_n) if more than one contaminant is present.

Oxygen Deficiency

Concentration	Action Taken
< 19.5% O_2	Leave Area. Reenter only with supplied-air respirators.
19.5 % to 25% O_2	Work may continue. Investigate changes from 21%.
> 25% O_2	Work must stop. Ventilate area before returning.

Flammability

Concentration	Action Taken
< 10% of LEL	Work may continue. Consider toxicity potential.
10% to 25% LEL	Work may continue. Increase monitoring frequency.
> 25% LEL	Work must stop. Ventilate area before returning.

Radiation

Intensity	Action Taken
< .5 mR/hr	Work may continue.
< 1 mR/hr	Work may continue. Continue to monitor. Notify Corporate Health and Safety and Corporate Health Physicist.
5 mR/hr	Radiation work zone. Work must stop.

SECTION 7: HEALTH AND SAFETY TRAINING AND MEDICAL MONITORING PROGRAM

The project staff is included in the Malcolm Pirnie Health and Safety training and medical monitoring programs. (See the Health and Safety Procedures Manual, Sections 3, 4 and 5.)

NAME	MEDICAL (Date)	HAZWOPER TRAINING INITIAL (Hrs/Date)	HAZWOPER TRAINING REFESHER (Date)	HAZWOPER TRAINING MGR/SUPV (Date)	CPR / FA / BBP (Dates)	FIT TEST (Make/Size/Type/Date)
Brad Walker	**3/00**	**40 |5/00**			**5/00| 5/00**	/ / /
		|			| |	/ / /
		|			| |	/ / /
		|			| |	/ / /
		|			| |	/ / /

SECTION 8: PERSONAL MONITORING

The following personal monitoring will be in effect on site:

Personal exposure sampling:

N/A

Medical monitoring: The expected air temperature will be < **60 F**. If it is determined that heat/cold stress monitoring is required (mandatory for heavy exertion in PPE at temperatures over 70^{B}F) the following procedures shall be followed (describe procedures in effect, i.e., monitoring body temperature, body weight, pulse rate):

Will take breaks as necessary.

A copy of personal monitoring results is to be sent to Corporate Health and Safety for inclusion in the Employee's Confidential Exposure Record File.

SECTION 9: CONFINED SPACE ENTRY

(1) WILL CONFINED SPACE ENTRY TAKE PLACE? Yes _____ No X

If yes, attach **Confined Space Entry Program** available from your Branch Health and Safety Coordinator and complete the **Pre-Entry Inspection Checklist** and **Confined Space Entry Permit** prior to entering each confined space, each work shift. The Confined Space Permit must be posted outside the confined space.

Permits will be saved and logged with project documentation.

SECTION 10: COMMUNICATIONS PROCEDURES

The following standard hand signals will be used in case of failure of radio communications:

Hand gripping throat	-	Out of air, can't breathe
Grip partner's wrist or both hands around wrist	-	Leave area immediately
Hands on top of head	-	Need assistance
Thumbs up	-	OK, I am all right, I understand
Thumbs down	-	No, negative

If applicable, telephone communication to the Command Post should be established as soon as practicable. The stationary and/or mobile phone number(s) are **(716) 913-5519 or (716) 913-5513** and **(716)667-0900**.

SECTION 11: DECONTAMINATION PROCEDURES

Personnel and equipment leaving the Exclusion Zone shall be thoroughly decontaminated. The Site Safety Officer is responsible for monitoring adherence with this decontamination plan. The standard **level D** decontamination protocol shall be used with the following decontamination stations*:

(1) _____

(2) _____

(3) _____

(4) _____

(5) _____

(6) _____

(7) _____

(8) _____

(9) _____

(10) _____

Other _____

*See the Malcolm Pirnie Health and Safety Procedures Manual, Section 8, Personal Protective Equipment, for sample decontamination station descriptions.

The following decontamination equipment is required:

Heated Pressure Washer, or Alconox solution in five-gallon pails with a water rinse.

Hot Water will be used as the decontamination solution for large equipment, and a Alconox solution will be used to decontaminate smaller equipment and PPE, when appropriate.

SECTION 12: EMERGENCY PROCEDURES

The following standard emergency procedures will be used by onsite personnel. The Site Safety Officer shall be notified of any onsite emergencies and be responsible for ensuring that the appropriate procedures are followed.

Personnel Injury in the Exclusion Zone: Upon notification of an injury in the Exclusion Zone, the designated emergency signal **(will be discussed at Site safety meeting)** shall be sounded. All site personnel shall assemble at the decontamination line. An outside rescue team summoned by the field team leader or SSO will enter the Exclusion Zone (if required) to remove the injured person to the hotline. The Site Safety Officer and Field Team Leader should evaluate the nature of the injury, and the affected person should be decontaminated to the extent possible prior to movement to the Support Zone. The onsite CPR/FA personnel shall initiate the appropriate first aid, and contact should be made for an ambulance and with the designated medical facility (if required). No persons shall reenter the Exclusion Zone until the cause of the injury or symptoms is determined.

Personal Protective Equipment Failure: If any site worker experiences a failure or alteration of protective equipment that affects the protection factor, that person and his/her buddy shall immediately leave the Exclusion Zone. Reentry shall not be permitted until the equipment has been repaired or replaced.

Fire/Explosion: Upon notification of a fire or explosion on site, the designated emergency signal **(will be discussed at Site safety meeting)** shall be sounded and all site personnel assembled at the decontamination line. The fire department shall be alerted and all personnel moved to a safe distance from the involved area.

Other Equipment Failure: If any other equipment on site fails to operate properly, the Field Team Leader and Site Safety Officer shall be notified and then determine the effect of this failure on continuing operations on site. If the failure affects the safety of personnel or prevents completion of the Work Plan tasks, all personnel shall leave the Exclusion Zone until the situation is evaluated and appropriate actions taken.

The following emergency escape routes are designated for use in those situations where egress from the Exclusion Zone can not occur through the decontamination line (attach map if available):
N/A

In all situations, when an onsite emergency results in evacuation of the Exclusion Zone, personnel shall not reenter until:

1. The conditions resulting in the emergency have been corrected.
2. The hazards have been reassessed by the SSO.
3. The Site Safety Plan has been reviewed by the SSO and Corporate Health and Safety Manager.
4. Site personnel have been briefed on any changes in the Site Safety Plan by the SSO.

SECTION 13. EMERGENCY INFORMATION

TO BE POSTED IN SITE-TRAILER/OFFICE AND IN FIELD VEHICLES

(1) LOCAL RESOURCES

Ambulance (name):	**Rural Metro Ambulance**	Phone:	**911**
Hospital (name):	**Mercy Hospital**	Phone:	**911/826-7000**
Police (local or state):	**Buffalo Police Department**	Phone:	**911**
Fire Dept. (name):	**Sloan Fire Department**	Phone:	**911**
HAZ MAT Responder:	**Poison control**	Phone:	**878-7654**
Nearest phone:	**Cell**		
On-Site CPR/FA(s):			

The hospital is **14** minutes from the site and the ambulance response time is **20** minutes. **N/A** of **N/A** was contacted on _____ and briefed on the situation, the potential hazards, and the substances involved. When IDLH conditions exist, arrangements should be made for onsite standby of emergency services.

(2) DIRECTIONS TO NEAREST HOSPITAL - ATTACH MAP:

Start out going South on Fuhrmann Blvd by turnning left. (~0.9mi)

Turn left onto Tifft St. (~2.1mi)

Turn Right onto McKinley Pkwy (~ 0.2mi)

Enter next roundabout and take 3rd exit onto Red jacket Pkwy (~0.3mi)

Turn left onto Abbot Rd. (~0.2mi)

(3) CORPORATE RESOURCES

Mark A. McGowan, CIH, CSP Manager, Corporate Health & Safety	914-641-2484 Work
Joseph M. Golden, CET, REMT-P	914-641-2978 Work
Nidal Azzam Health Physicist	201-529-4700 Work
Dean Disenza (Branch Health & Safety Coordinator)	
Elayne F. Theriault, M.D. Continuum Healthcare (Corporate Medical Consultant)	800-229-3674 24 Hour Number
(Branch Medical Consultant)	
MPI Emergency Contact Number:	**800-478-6870**

(4) WHOM TO NOTIFY IN CASE OF ACCIDENT:

Also notify: Brenda Verdesi, MPI Benefits Administrator (914) 641-2551
MPI Legal Department (914) 694-2100

SECTION 14: PROTECTIVE EQUIPMENT LIST

TASK*	RESPIRATORS & CARTRIDGE*	USE	CLOTHING	GLOVES	BOOTS	OTHER
Drilling/Test Pits	**D**	**Up**	**C**	**B**	**S**	**H/N/L**
Soil Sampling	**D**	**Up**	**C**	**L/T**	**S**	**H/L**
Well Development	**D**	**Up**	**C**	**CN**	**S**	**H**

*Same as in Section 4(2).

RESPIRATORS	APR CARTRIDGES	USE	CLOTHING	GLOVES	BOOTS	OTHER
B = SCBA	O = Organic vapor	Cont = Continuous	T = Tyvek	B = Butyl	F = Firemans	F = Face Shield
APR = APR	G = Organic vapor/acid gas	UP = Upgrade	P = PE Tyvek	L - Latex	L = Latex	G = Goggles
D = N/A	A = Asbestos (HEPA)		S = Saranex	N = Neoprene	N = Neoprene	L = Glasses
E = Escape	P = Particulate		C = Coveralls	T = Nitrile	S = Safety	H = Hardhat
AL = Airline	C = Combination organic			V = Viton		N = Hearing Protection
	OTH = Other			CN = Cotton		
				P = PVC		
				PA = Polyvinyl Alcohol		
				SS = Silvershield		

SECTION 15: SAFE WORK PRACTICES

THE FOLLOWING PRACTICES MUST BE FOLLOWED BY PERSONNEL ON SITE

1. Smoking, eating, chewing gum or tobacco, or drinking are forbidden except in clean or designated areas.
2. Ignition of flammable liquids within or through improvised heating devices (e.g., barrels) is forbidden.
3. Contact with samples, excavated materials, or other contaminated materials must be minimized.
4. Use of contact lenses is prohibited at all times.
5. Do not kneel on the ground when collecting samples.
6. If drilling equipment is involved, know where the 'kill switch' is.
7. All electrical equipment used in outside locations, wet areas or near water must be plugged into ground fault circuit interrupter (GFCI) protected outlets.
8. A "Buddy System" in which another worker is close enough to render immediate aid will be in effect.
9. Good housekeeping practices are to be maintained.
10. Where the eyes or body may be exposed to corrosive materials, suitable facilities for quick drenching or flushing shall be available for immediate use.
11. In the event of treacherous weather-related working conditions (i.e., thunderstorm, limited visibility, extreme cold or heat) field tasks will be suspended until conditions improve or appropriate protection from the elements is provided.

Site Specific Safe Work Practices: **Reference Appendix "A"**

SECTION 16: EMPLOYEE ACKNOWLEDGEMENTS

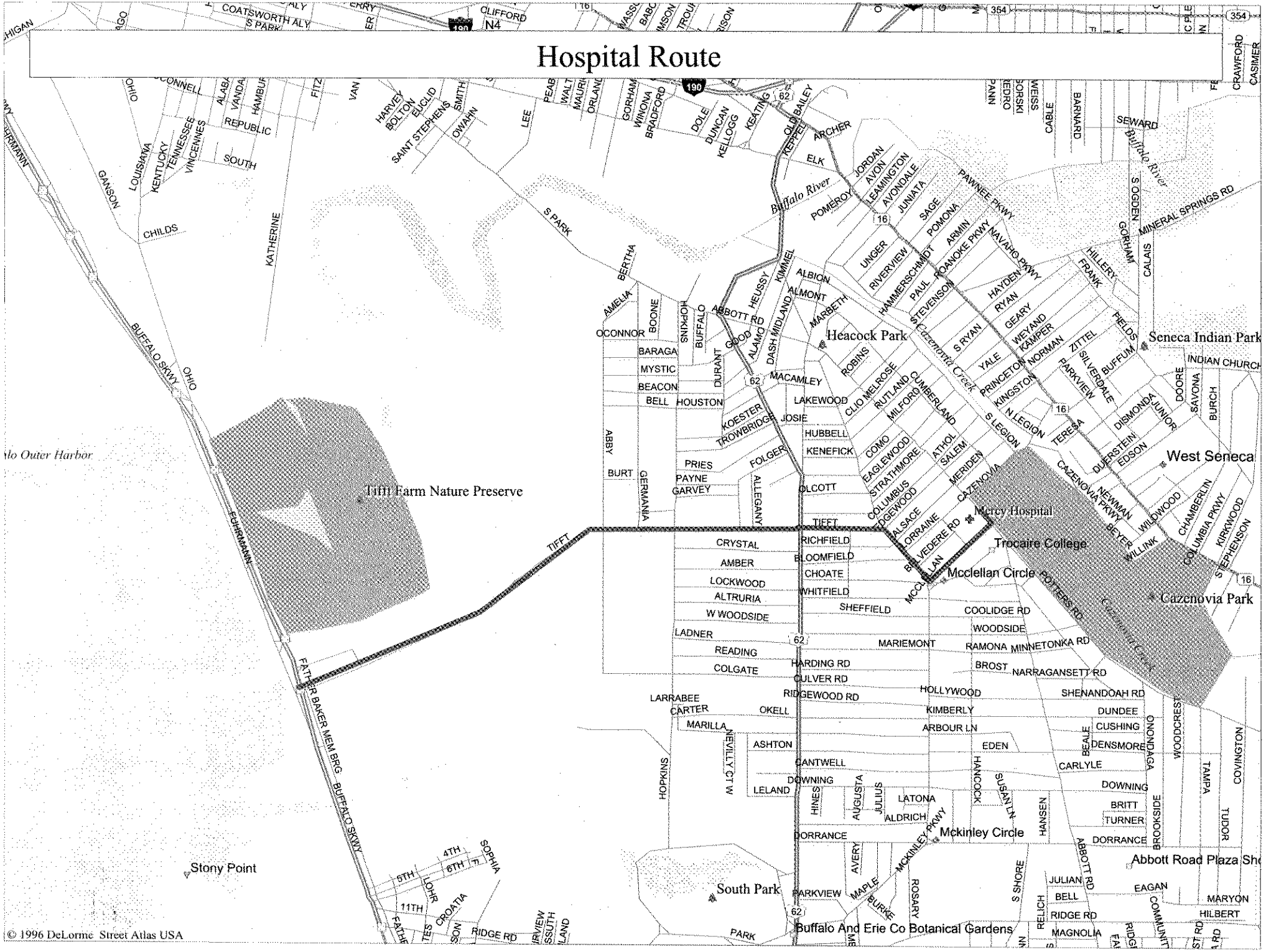
PLAN REVIEWED BY:

		DATE
Corporate Health & Safety:		
Branch H&S Coordinator:		
Project Manager:		
Project Leader:		

I acknowledge that I have read the information on this Site Safety Plan Short Form and the attached Material Safety Data Sheets (MSDSs). I understand the site hazards as described and agreed to comply with the contents of this Plan.

EMPLOYEE (print name)	SIGNATURE	DATE

Hospital Route



APPENDIX A

Community Air Monitoring Plan

Real-time air monitoring, for volatile compounds and particulate levels at the perimeter of the work area is necessary. The plan must include the following:

- Volatile organic compounds must be monitored at the downwind perimeter of the work area on a **continuous** basis. If total organic vapor levels exceed 5 ppm above background, work activities must be halted and monitoring continued under the provisions of a Vapor Emission Response Plan. All readings must be recorded and be available for State (DEC & DOH) personnel to review.

- Particulate should be continuously monitored upwind, downwind and within the work area at temporary particulate monitoring stations. If the downwind particulate level is 150 $\mu g/m^3$ greater than the upwind particulate level, then dust suppression techniques must be employed. All readings must be recorded and be available for State (DEC & DOH) personnel to review.

Vapor Emission Response Plan

If the ambient air concentration of organic vapors exceeds 5 ppm above background at the perimeter of the work area, activities will be halted and monitoring continued. If the organic vapor level decreases below 5 ppm above background, work activities can resume. If the organic vapor levels are greater than 5 ppm over background but less than 25 ppm over background at the perimeter of the work area, activities can resume provided:

- the organic vapor level 200 feet downwind of the work area or half the distance to the nearest residential or commercial structure, whichever is less, is below 5 ppm over background.

If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown. When work shutdown occurs, downwind air monitoring as directed by the Safety Officer will be implemented to ensure that vapor emission does not impact the nearest residential or commercial structure at levels exceeding those specified in the Major Vapor Emission section.

Major Vapor Emission

If any organic levels greater than 5 ppm over background are identified 200 feet downwind from the work area or half the distance to the nearest residential or commercial property, whichever is less, all work activities must be halted.

If, following the cessation of the work activities, or as the result of an emergency, organic levels persist above 5 ppm above background 200 feet downwind or half the distance to the nearest residential or commercial property from the work area, then the air quality must be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20 Foot Zone).

If efforts to abate the emission source are unsuccessful and if the following levels persist for more than 30 minutes in the 20 Foot Zone, then the Major Vapor Emission Response Plan shall automatically be placed into effect;

- if organic vapor levels are approaching 5 ppm above background.

However, the Major Vapor Emission Response Plan shall be immediately placed into effect if organic vapor levels are greater than 10 ppm above background.

Major Vapor Emission Response Plan:

Upon activation. the following activities will be undertaken:

1. All Emergency Response Contacts as listed in the Health and Safety Plan of the Work Plan will go into effect.

2. The local police authorities will immediately be contacted by the Safety Officer and advised of the situation.

3. Frequent air monitoring will be conducted at 30 minutes intervals within the 20 Foot Zone. If two successive readings below action levels are measured, air monitoring may be halted or modified by the Safety Officer.

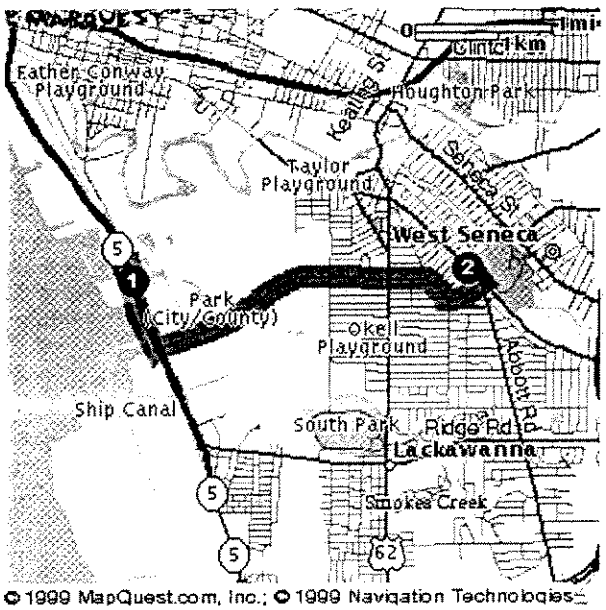
YAHOO! YELLOW PAGES

Yahoo! Yellow Pages

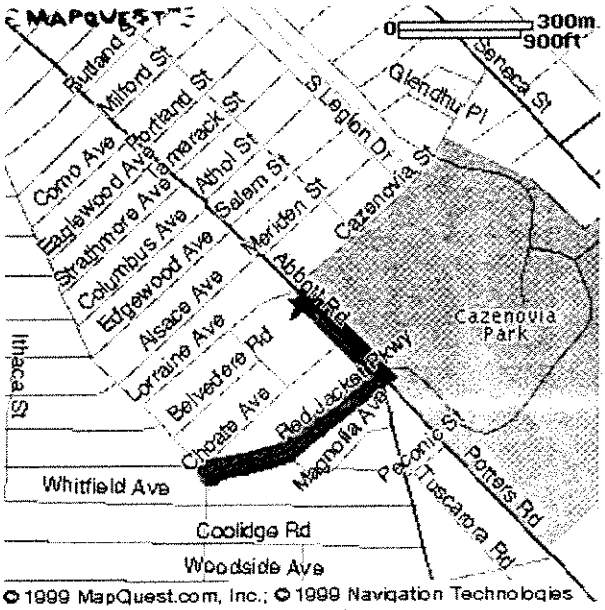
New Search

Starting From:	Arriving At:	Distance:	Approximate Travel Time:
1200 Fuhrmann blvd Buffalo, NY 14203	Mercy Hospital 565 Abbott Rd Buffalo, NY 14220 (716) 826-7000	3.7 miles	14 mins

	Directions	miles
1.	Start out going South on FUHRMANN BLVD by turning left.	0.9
2.	Turn LEFT onto TIFFT ST.	2.1
3.	Turn RIGHT onto MCKINLEY PKWY.	0.2
4.	Enter next roundabout and take 3rd exit onto RED JACKET PKWY.	0.3
5.	Turn LEFT onto ABBOTT RD.	0.2



Full Route



Destination

FACT SHEET

Clean Water/Clean Air Bond Act
Environmental Restoration Program

Buffalo Lakeside Commerce Park
Buffalo, New York

February 2005

Bond Act Application and Draft Site Investigation Remedial Alternatives Evaluation Work Plan Available for Public Comment

The New York State Department of Environmental Conservation (NYSDEC) requests public comments as it reviews an application to the New York State Clean Water/Clean Air Bond Act Environmental Restoration Program (ERP) and a draft work plan to further investigate remedial alternatives that may be proposed at the Parcel 4 Site of the Buffalo Lakeside Commerce Park (BLCP) located on the north side of the former Union Ship canal in Buffalo, New York. See map on page 4 for the location of the site. The draft Site Investigation Remedial Alternatives Evaluation Work Plan was submitted by the Erie County Industrial Development Agency (ECIDA) under the ERP. The proposed end use of the site is for light industrial and commercial business development.

Public Comments about the Application and the Draft Site Investigation Remedial Alternatives Evaluation Work Plan

The NYSDEC is accepting written public comments about the draft work plan for 30 days, from March 1, 2005 through March 30, 2005. The application and proposed work plan are available for public review at the document repository identified on page 3 of this fact sheet.

Comments should be submitted to:

David P. Locey, Project Manager
NYS Department of Environmental Conservation
279 Michigan Avenue
Buffalo, New York 14203-2999

Highlights of the Proposed Investigation

The site investigation has several goals:

1) Better define the nature and extent of contamination in soil materials and groundwater;
2) Identify the source(s) of contamination;
3) Assess the impact of the contamination on public health and/or the environment; and
4) Provide information to support development of a Remedial Work Plan (cleanup plan) to address the contamination.

The investigation will be performed by the ECIDA with limited oversight by the NYSDEC and the New York State Department of Health (NYSDOH).

New York State Clean Water/Clean Air Bond Act: New York's clean water/clean air Bond Act of 1996 allows funding of a variety of programs including environmental restoration projects such as investigation and remediation of Brownfield sites. The Bond Act Environmental Restoration Program encourages the cleanup of brownfields so that they can be reused and redeveloped. These uses include recreation, housing, and commercial and industrial businesses.

A **brownfield** is any real property that is difficult to reuse or redevelop because of the presence or potential presence of hazardous waste, petroleum, pollutant, or contaminant.

For more information about the Bond Act, visit the NYSDEC website at: **www.plsny.org/brownfields/appendixb/html**

Elements of the field investigation activities defined in the proposed work plan include:

- Investigation of surface and subsurface soils and groundwater by excavating test pits, advancing soil borings and installing shallow groundwater monitoring wells;
- Characterization of the areal extent and thickness of soil-fill material deposited at the site. Soil and groundwater samples will be collected for chemical analyses to supplement the existing soil and groundwater analytical data.

The site investigation field activities are scheduled to begin during April 2005.

Next Steps

The NYSDEC will consider public comments when it completes its review, has any necessary revisions made, and approves both the application and Investigation/Evaluation work plan. The NYSDOH must also concur with approval of the Investigation/Evaluation work plan. The approved Work Plan will be placed in the document repository (identified on page 3). After the Work Plan is approved, the ECIDA may proceed with site investigation activities.

The results of the site investigation field activities and supporting historical data from previous investigations will be used to prepare a Site Investigation/Remedial Alternatives Report, a Remedial Action Work Plan and a Soil Fill Management Plan. The report documents are scheduled to be available in August 2005.

NYSDEC will keep the public informed during the investigation and remediation of the Parcel 4 site.

Site Background Information

Four tracts of land referenced as Parcels 1-4 comprise the redevelopment efforts scheduled for the Buffalo Lakeside Commerce Park (BLCP). The BCLP is located along the eastern shore of Lake Erie within a transportation corridor delineated by the Erie-Lackawanna railroad lines to the east and Route 5 to the west. Parcel 4 which occupies the northern-most portion of the BCLP was used for landfilling operations and for the storage and stockpiling of iron ore, lime, coke and other raw materials used for steel manufacturing. The marsh lands and poorly drained areas that characterized the former natural setting were subsequently backfilled with soil materials. Currently, Parcel 4 remains undeveloped with elevated stockpiles of soil and flue ash materials.

A number of investigations completed by consulting firms and governmental agencies were performed to evaluate the environmental impacts (if any) that prior landfill and steel manufacturing activities may have had on the Site. Investigations initiated as early as 1979 have required the excavation of test pits, advancement of borings and the installation of groundwater monitoring wells to characterized surface water, soils and groundwater media.

Investigations completed during the 1980's by the U.S. Geological Survey and environmental firms identified a potential for elevated contaminant concentrations found in surface waters, sediment and subsurface soil samples. Analytical results from surface soils and groundwater samples collected in 1988 exceeded applicable guideline values for selected metals. Elevated concentrations of PCB's were also detected in surface soil samples.

Results of a Preliminary Site Assessment performed in 1995 found evidence of elevated pesticide and semi volatile organic compounds above Water Quality Standards. Metals were also detected above the applicable TAGM (4046) or Water Quality Standard. Since no disposal or evidence of a listed or characteristic Hazardous Waste had been documented at the site, the NYSDEC removed the site from its registry of Inactive Hazardous Waste Disposal Sites.

More recent investigations conducted since 2000 under the auspices of the USEPA and NYSDEC required the collection of surface and subsurface soils from the elevated fill piles within the Parcel 4 boundary. Analytical results from more than 25 soil samples submitted for chemical analysis determined that the major contaminants of concern were the inorganic metals lead and zinc that were found in concentrations above the NYSDEC TAGM 4046 Soil Cleanup Objectives.

FOR MORE INFORMATION

Document Repository

To help keep you informed, the following local document repository has been established to help the public review important project documents including the draft Site Investigation Remedial Alternatives Evaluation Work Plan and the approved application to participate in the Bond Act Program.

Buffalo & Erie County Public Library
JP Dudley Branch
2010 So. Park Avenue
Buffalo, New York 14220
(716) 823-1854

Hours of Operation:
M/F/Sat 10:00 am - 6:00 pm
Tue: 12:00 pm - 8:00 pm
W: Closed
Th: 12:00 pm - 8:00 pm
Sun: 1:00 pm - 5:00 pm

Who to Contact

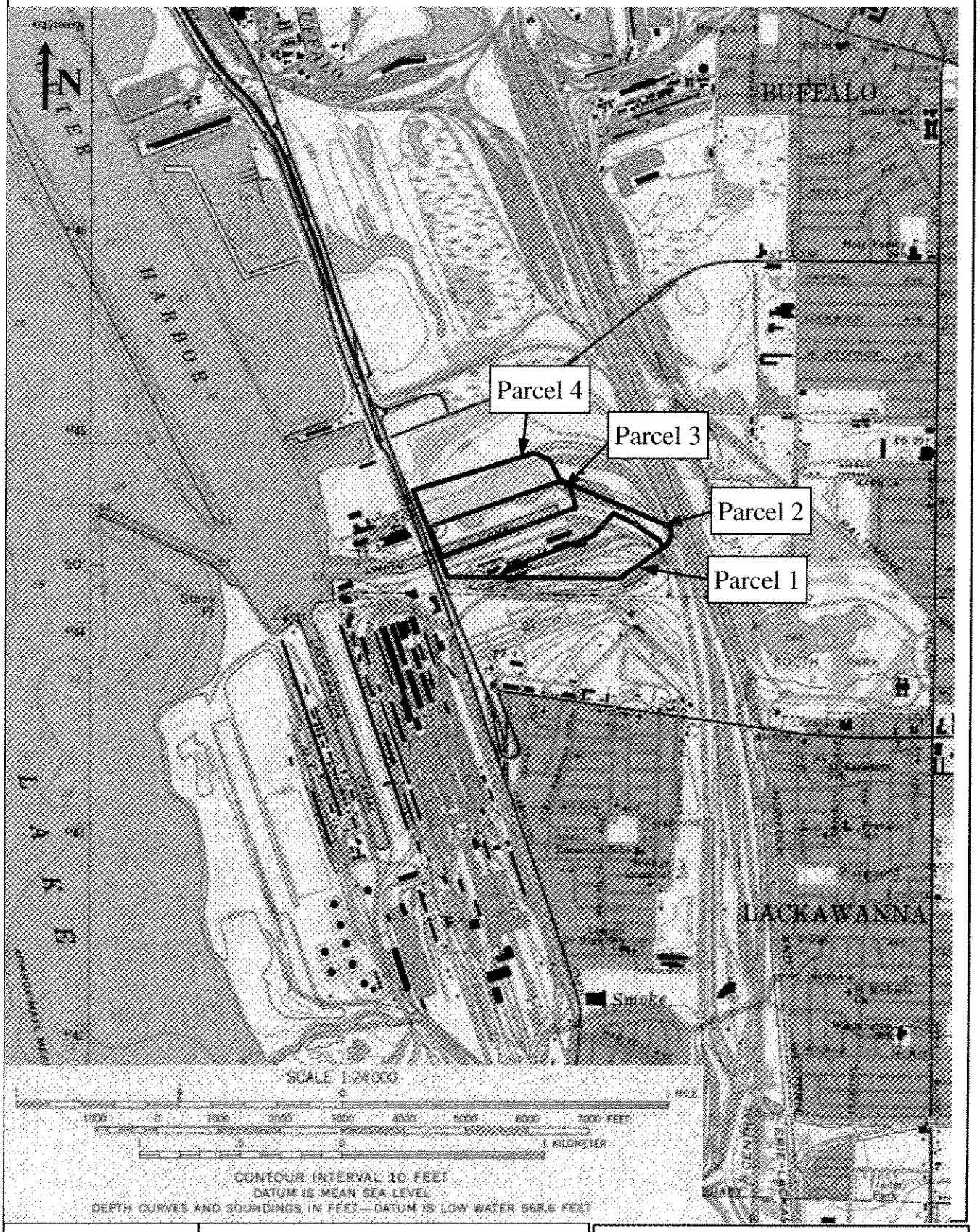
Comments and questions are always welcome and should be directed as follows:

Project Related Questions:

David P. Locey, Project Manager
NYSDEC
270 Michigan Avenue
Buffalo, New York 14203-2999
(716) 851-7220
Email address: dlocey@gw.dec.state.ny.us

Health Related Questions:

Cameron O'Connor, Public Health Specialist
NYS Department of Health
584 Delaware Avenue
Buffalo, New York 14202
(716) 847-4507
Email address: cho01@health.state.ny.us



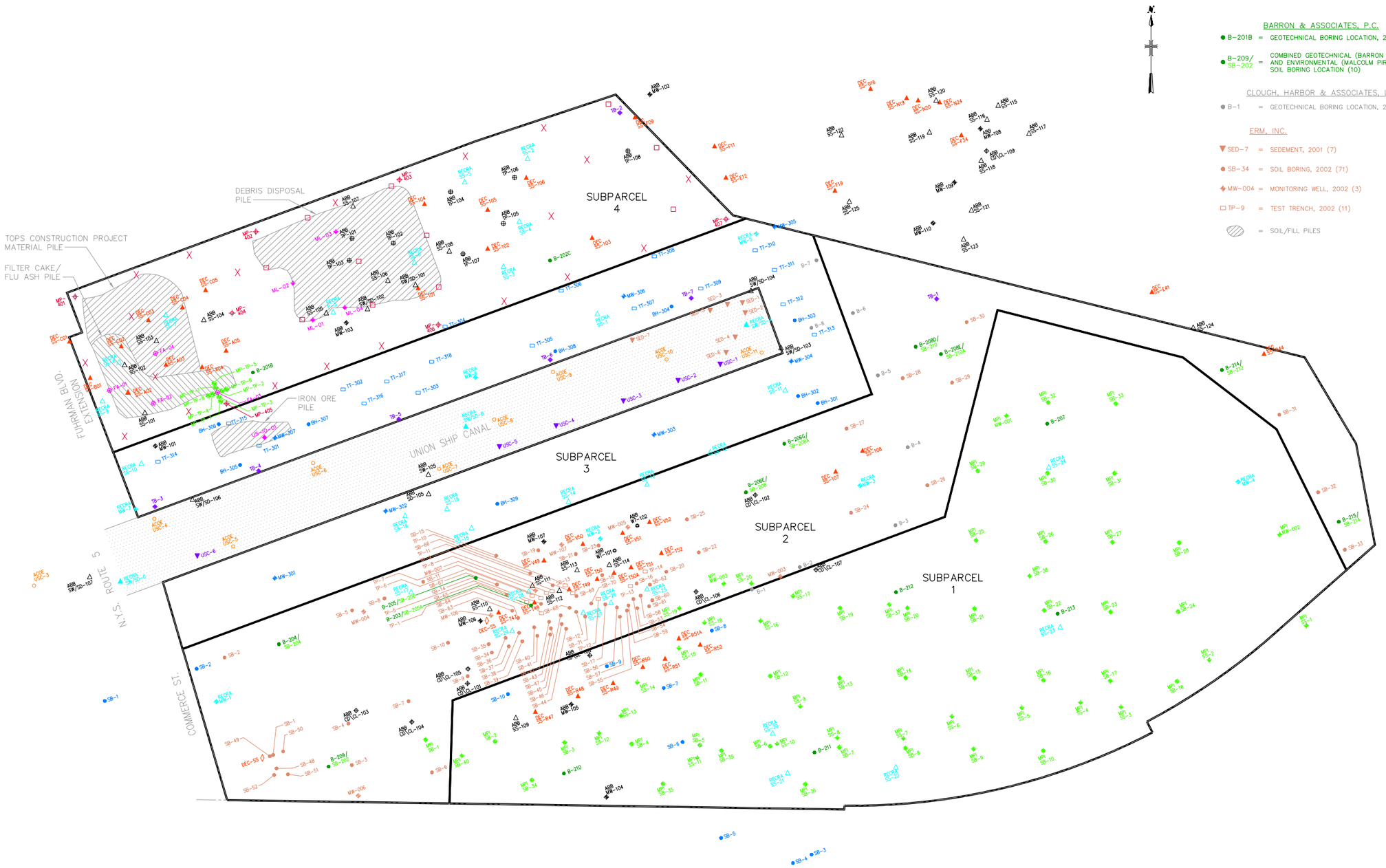
MALCOLM PIRNIE

FEB 2005 4080-001

BUFFALO LAKESIDE COMMERCE PARK (PARCEL 4)
BUFFALO, NEW YORK

SITE LOCATION MAP

MAP 1



LEGEND

BARRON & ASSOCIATES, P.C.

- B-201B = GEOTECHNICAL BORING LOCATION, 2001 (7)
- B-209/SB-202 = COMBINED GEOTECHNICAL (BARRON & ASSOC.) AND ENVIRONMENTAL (MALCOLM PIRNIE) SOIL BORING LOCATION (10)

CLOUGH, HARBOR & ASSOCIATES, LLP

- B-1 = GEOTECHNICAL BORING LOCATION, 2004 (8)

ERM, INC.

- SED-7 = SEDEMENT, 2001 (7)
- SB-34 = SOIL BORING, 2002 (71)
- MW-004 = MONITORING WELL, 2002 (3)
- TP-9 = TEST TRENCH, 2002 (11)
- = SOIL/FILL PILES

US GEOLOGICAL SURVEY

- TB-315 = SOIL BORING, 1982 (7)
- USC-6 = SEDIMENTATION SAMPLE, 2000 (6)

RECRA ENVIRONMENTAL, INC.

- RECRA SS- = SURFACE SOIL SAMPLE, 1988 (27)
- RECRA SW/SD- = SURFACE WATER/SEDEMENT SAMPLE PAIR, 1988 (3)
- RECRA P- = POND WATER/SEDEMENT SAMPLE PAIR, 1988
- RECRA MW- = MONITORING WELL (DESTROYED), 1988 (7)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

- DEC SS- = SURFACE SOIL SAMPLE, 1990 (2)
- DEC SS- = SURFACE SOIL SAMPLE, 1994 (38)

ABB ENVIRONMENTAL SERVICES, INC.

- ABB MW- = MONITORING WELL LOCATION, 1995 (7)
- ABB SS- = SURFACE SOIL SAMPLE LOCATION, 1995 (14)
- ABB SW/SD- = SURFACE WATER/SEDEMENT SAMPLE LOCATION, 1995 (7)
- ABB TP- = TEST PIT LOCATION, 1995 (8)
- ABB WT- = DRUM SAMPLE LOCATION, 1995
- ABB CD/CL = STRUCTURE SEDEMENT/ LIQUID SAMPLE, 1995

MALCOLM PIRNIE, INC.

- MPI SB- = SOIL BORING LOCATION, 1999 (36)
- MPI SB- = SHALLOW BORING, 2000 (7)
- MPI MW- = MONITORING WELL, 2000 (3)
- MPI SS- = DEBRIS PILE SAMPLE, 2000 (20)
- MP-TP-01 = FLU ASH TEST PITS, 2003 (8)

ARMY CORP OF ENGINEERS

- ACOE USC- = SEDIMENT SAMPLE, 1999 (11)

USEPA

- FA-02 = SAMPLE OF FLU ASH PILE, 2001 (4)
- ML-03 = SAMPLE OF MOUNTAIN LANDFILL, 2001 (4)
- US-IO-01 = IRON ORE PILE, 2001 (1)

URS CORPORATION

- TT-315 = TEST TRENCH, 2001 (18)
- MW-302 = MONITORING WELL, 2001 (7)
- BH-303 = SOIL BORING, 2001 (9)
- SB-1 = GEOTECHNICAL BORING LOCATION, 2003 (10)

PROPOSED SUBPARCEL 4 WORK

- = TEXT PIT LOCATIONS (11)
- X = SOIL BORINGS (20)
- = MONITORING WELLS (7) (401-407)

NOTE:
ALL SAMPLING LOCATIONS ARE ESTIMATED EXCEPT FOR MALCOLM PIRNIE, 2000 INVESTIGATION LOCATIONS.

150' 0' 150' 300'

SCALE: 1 INCH = 150 FEET

MALCOLM PIRNIE

REVISIONS			
NO.	BY	DATE	REMARKS

DES
DWN
CKD

BUFFALO URBAN DEVELOPEMENT CORPORATION

BUFFALO LAKESIDE COMMERCE PARK
BUFFALO, NEW YORK

HISTORICAL SAMPLING LOCATION MAP

SCALE: AS NOTED

DATE FEBRUARY 2005

G SHEET X OF X

CAD REF. NO. 4080G007

MALCOLM PIRNIE

Citizen Participation Plan

BUFFALO LAKESIDE COMMERCE PARK
PARCEL 4
BUFFALO, NEW YORK

Prepared For

ERIE COUNTY INDUSTRIAL DEVELOPMENT AGENCY

Submitted by:
Malcolm Pirnie, Inc.
40 Centre Drive
Orchard Park, NY 14127

4080-004

APRIL 2005

MALCOLM PIRNIE

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MALCOLM PIRNIE

Introduction

SECTION 1

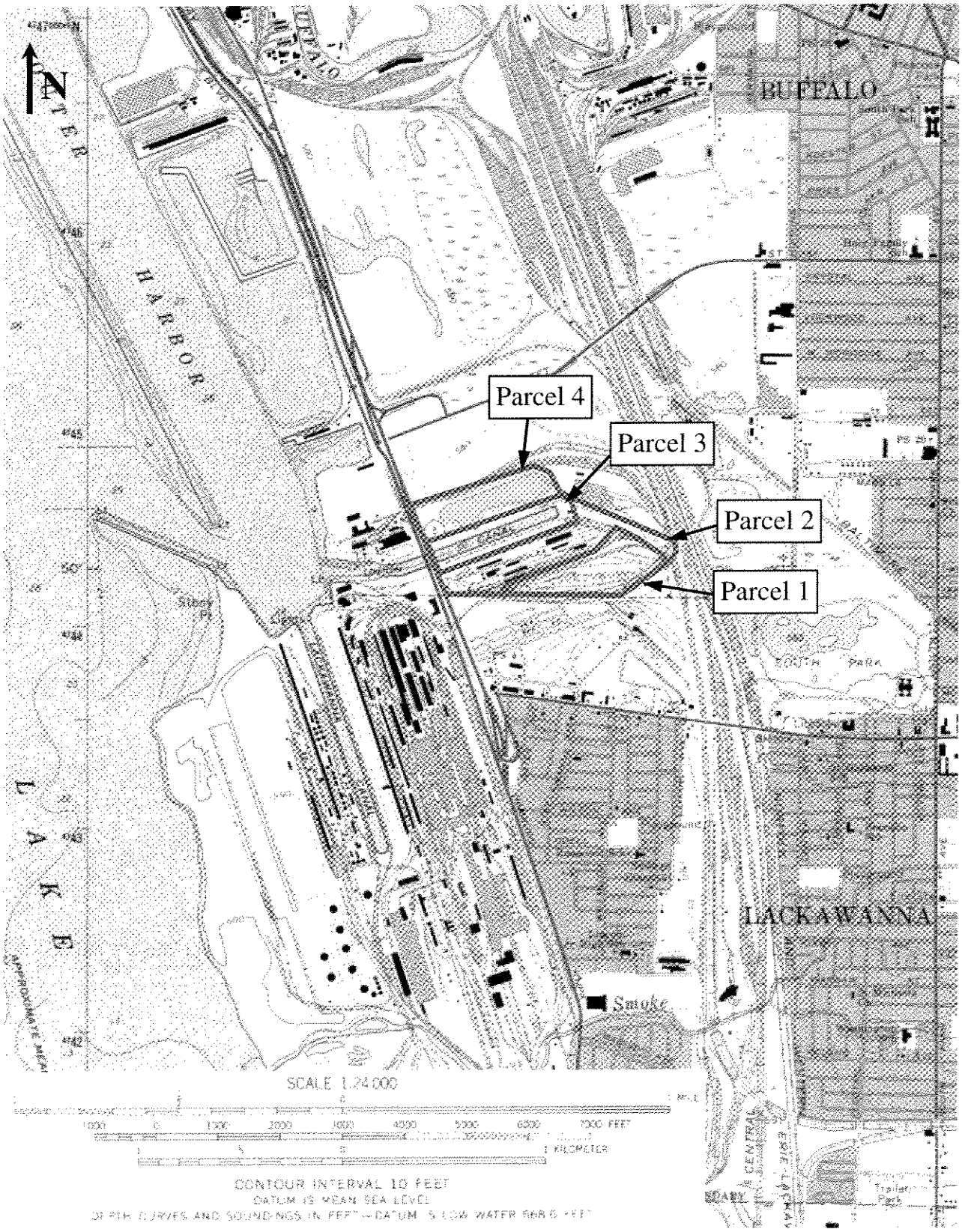
On behalf of the Erie County Industrial Development Agency (ECIDA), Malcolm Pirnie, Inc. (Malcolm Pirnie) has prepared this Citizen Participation Plan for a New York State Department of Environmental Conservation (NYSDEC) Environmental Quality Bond Act investigation of the approximately 20-acre Parcel 4 portion of the 113-acre Buffalo Lakeside Commerce Park (formerly known as the Hanna Furnace Site) in Buffalo, New York. Parcel 4 is the northern most 20 acres of the BLCP property. The other three parcels of the BLCP Site include the Former Railroad Yard (Parcel 1), the Former Manufacturing Area (Parcel 2), and the Union ship canal and 200 foot buffer area (Parcel 3). Figure 1-1 illustrates the location of the BLCP site and outlines the four site parcels.

This Citizen Participation Plan (CP Plan) establishes a framework for upcoming public information and community outreach activities related to Environmental Quality Bond Act Investigation and Remediation of Parcel 4 of the BLCP. These activities are designed to keep adjacent residents, businesses and the public in general, informed of the planned remediation, or clean-up of the site. This CP Plan includes:

- Background information about the site.
- A description of objectives and planned environmental investigation activities.
- A list of citizen participation activities that will be conducted prior to and during the site investigation and remediation.
- Information on whom to contact and where to get more information about the site and the planned investigation and clean-up.

- A glossary of terms and acronyms.

ECIDA (as applicant) is responsible for implementing the CP plan with NYSDEC review of draft related documents including fact sheets and meeting announcements. The CP plan will be periodically updated to include new information concerning the work.



MALCOLM PIRNIE OCT 2004 4080-001-400	**BUFFALO LAKESIDE COMMERCE PARK (PARCEL 4)** BUFFALO, NEW YORK	**FIGURE 1-1** **SITE LOCATION MAP**

MALCOLM PIRNIE

Site Background Information

SECTION 2

2.1 Site Description

The Buffalo Union Steel Corporation purchased the manufacturing and railroad yard portions of the site in 1900. The Union Ship Canal was constructed near the northern edge of the Buffalo Union Steel property in 1910 to service the facility. Pig iron manufacturing commenced during the period of 1900 to 1915 with the construction of the blast furnaces. Following the construction of the blast furnaces, the Hanna Furnace Company acquired the property from Buffalo Union Steel. The National Steel Company subsequently purchased the property in 1929, and the corporate entity became known as the Hanna Furnace Corporation. During peak production, the Hanna Furnace Corporation employed over 800 personnel.

The Union Ship Canal is approximately 20 feet deep. Iron ore, lime, coke and other raw materials were received via the canal, and were stockpiled along the northern and southern edges of the canal. In the area immediately to the south of the canal and north of the manufacturing area, the raw materials were placed on massive concrete pads that occupy the bulk of the southern portion of Parcel 3, and the concrete pads are likely four feet thick.

The Pennsylvania Railroad first owned the land to the north of the canal and used the property for unloading ores into train cars. The Hanna Furnace Corporation purchased an approximately 25-acre portion of property located to the north of the canal, which included the northern portion of the 200-foot Buffer Area, from the Pennsylvania Railroad in 1960. This area between the 200-foot and the northern site boundary is approximately 20 acres and is referred to as Parcel 4. Swampy ponds with depths up to 15 feet occupied much of this area at the time. The swampy area was subsequently filled in

with silty sand and gravel, with some black cinders, as described in Recra Environmental, Inc.'s 1988 report.

The Hanna Furnace Corporation ceased all operations at the site in 1982 due to foreign competition and to the closure of the Shenango Furnace Company, a primary recipient of pig iron from Hanna Furnace. The Jordan Foster Scrap Corporation purchased the site in 1983 and subsequently dismantled many of the buildings and removed the rails from the Former Railroad Yard for scrap. The Jordan Foster Scrap Corporation filed for bankruptcy during 1986, and leased the site briefly to the Equity Scrap Processing Company. In 1998, the City of Buffalo gained title to the Hanna Furnace Site due to nonpayment of taxes. The Hanna Furnace Site has been essentially unoccupied and unsecured since 1986.

2.2 Site Investigation History

A number of environmental site assessments and investigations have occurred at the Hanna Furnace Site, which included Parcel 4. This work has involved the collection and analysis of more than 60 samples of soil/fill, groundwater, surface water and sediments across Parcel 4. Based on the information obtained from these investigations, the ECIDA and Malcolm Pirnie worked with NYSDEC to develop an investigative approach to achieve the objectives described in Section 3.1.

The NYSDEC prepared an "Inactive Hazardous Waste Disposal Site Report" for the Hanna Furnace Site in 1983. The NYSDEC subsequently identified the property as Site # 915029, and initially assigned the site a classification of "2A," indicating that the site was a potential hazardous waste site but that insufficient data were available to properly characterize potential issues at the site. Following several environmental investigations of the Hanna Furnace Site, ABB Environmental Services (ABB) conducted a Preliminary Site Assessment of the site in 1995 for the NYSDEC. The results of this investigation confirmed that contaminants present on the Hanna Furnace Site did not pose a serious threat to human health or the environment. Based on the results of this investigation, the NYSDEC removed the Hanna Furnace Site from its registry of potential hazardous waste sites.

The environmental assessments and investigations that have been completed at the site were documented in the following reports:

- Rupley, Bahler and Burke. Solid Waste Management Facility Report. 1979.
- Erie County Department of Environmental Protection. Inactive Site Profile Report. April 1982.
- Engineering Science. Phase I Investigation. January 1986.
- United States Geological Survey. Draft Report of Preliminary Evaluation of Chemical Migration to the Niagara River from Hazardous Disposal Sites in Erie and Niagara Counties. 1983.
- New York State Department of Environmental Conservation. Inactive Hazardous Waste Disposal Site Report. 1983.
- Dames & Moore. Phase I Investigation - 1985
- Recra Environmental. Site Characterization and Environmental Assessment. August 1988.
- ABB Environmental Services. Preliminary Site Assessment. November 1995.
- Ecology and Environment, Inc. Environmental Site Assessment. May 1997.
- PADIA Environmental Inc. Final Report for Sediment Sampling and Chemical Analysis at the Union Ship Canal in Buffalo, New York.
- Malcolm Pirnie Inc. Focused Investigation Subsurface Soil. 2001.

MALCOLM PIRNIE

Investigation Plan

SECTION 3

Although several environmental investigations have been performed on the Site, additional characterization of Parcel 4 will be required by the NYSDEC to fulfill the requirements for Environmental Quality Bond Act (EQBA). Based on the historical use of the site and historical analytical results of sampling in and near this area, Malcolm Pirnie developed an investigation scope to more thoroughly characterize Parcel 4 commensurate with the property's proposed end use. Malcolm Pirnie's October 2004 Environmental Quality Bond Act Remedial Investigation Work Plan details the specific investigatory objectives and tasks that are briefly outlined below.

3.1 Investigation Objectives

- To the extent practicable, identify and characterize the potential source(s) of contamination.
- Describe the amount, concentration, persistence, mobility, form (e.g., solid, liquid), and other significant characteristics of the contamination(s) potentially present.
- Define hydrogeological factors (e.g., permeability, depth to saturated zone, hydrologic gradients, proximity to a drinking water aquifer, and floodplains and wetlands proximity).
- Identify potential routes of exposure.
- Identify potential population(s) and environmental concerns at risk.
- Define the potential extent to which the substances have migrated or are expected to migrate from the area of their original location, or from their new location if

they have relocated, and whether potential future migration may pose a threat to human health or the environment.

- Evaluate the potential extent to which natural or man-made barriers currently contain the substances.

- Qualitatively describe the site's potential contribution to an air, land, water, or food chain contamination problem.

- Describe groundwater characteristics and current and potential groundwater use (e.g., characteristics related to the groundwater classes described in the EPA Groundwater Protection Strategy).

- Determine the extent to which potential contamination levels pose an unacceptable risk to public health and the environment.

- Identify private wells in the area and include an appropriate sampling plan for them.

3.2 Investigation Tasks

3.2.1 Soil Boring Program

A soil boring program will be implemented to characterize the physical and chemical conditions of Parcel 4. The soil boring program will include the collection and analysis of both surface and subsurface soil samples from 20 borings located throughout Parcel 4.

3.2.2 Groundwater Characterization

To characterize the groundwater quality in Parcel 4, seven groundwater monitoring wells will be installed on the parcel in selected borings completed during the soil boring program. After development, the groundwater in these seven new monitoring wells and seven existing wells installed during previous investigations will be sampled. Well locations were selected based on the results of previous hydrological investigations at the Hanna Furnace Site, which indicate that groundwater flows radially toward the Union Ship Canal.

3.2.3 Excavation of Test Pits

Eleven test pits are planned to be excavated to provide additional data for characterization of the elevated fill area and an area along the easternmost edge of the parcel. One soil sample will be collected for laboratory chemical analyses from each test pit location excavated within the elevated fill area and along the eastern perimeter.

3.2.4 Site Survey

A survey will be conducted at the Site to update the existing site base map, and to determine the locations of sampling and investigation activities relative to Site features. The survey will include:

- Relevant features of the Site (i.e., streets, utilities, surface features);
- Sampling locations
- Topography
- Elevation of groundwater monitoring wells.

The survey will provide sufficient detail to prepare a Site Investigation/Remedial Alternatives Report (SI/RAR) and, if required, plans and specifications for remedial activities. The survey will report Northing and Easting coordinates to the nearest 0.1 feet in reference to a relative coordinate system, and elevation to the nearest 0.01 feet in reference to the National Geodetic Vertical Datum (NGVD) of 1929.

3.3 Quality Assurance/Quality Control (QA/QC)

3.3.1 Analytical Methods

All samples collected during the EQBA Investigation will be analyzed using EPA-approved analytical methods that follow the most recent edition of the EPA's "Test Methods for Evaluating Solid Waste" (SW-846), Methods for Chemical Analysis of

Water and Wastes" (EPA 600/4-79-020), and Standard Methods for Examination of Water and Wastewater" (prepared and published jointly by the American Public Health Association, American Waterworks Association and Water Pollution Control Federation).

3.3.2 Laboratory

The selected laboratory will be certified by the New York State Department of Health to perform Contract Laboratory Program (CLP) analysis on all media to be sampled during this investigation.

3.3.3 Data Submittal

Analytical data will be submitted in complete ASP category B data packs. Procedures for chain of custody, laboratory instrumentation calibration, laboratory analyses, reporting of data, internal quality control, and corrective actions shall be followed as per SW-846 and as per the laboratory's Quality Assurance Plan. Where appropriate, trip blanks, field blanks, field duplicates, and matrix spike, matrix spike duplicate shall be performed at a rate of 5% and will be used to assess the quality of the data. The laboratory's in-house QA/QC limits will be utilized whenever they are more stringent than those suggested by the EPA methods.

3.3.4 Data Usability Summary Reports

Surface soil and subsurface soil data from borings will be sent to a qualified, independent, data validation specialist for evaluation of the accuracy and precision of the analytical results. A Data Usability Summary Report (DUSR) will be prepared to describe the compliance of the analyses with the analytical method protocols detailed in the NYSDEC Analytical Services Protocol (ASP). The DUSR will provide a determination of whether the data meets the project specific criteria for data quality and data use. The validation effort will be completed in accordance with NYSDEC Division of Environmental Remediation DUSR guidelines.

3.4 Health and Safety

All field tasks will be performed using industry standard health and safety procedures. A site-specific Health and Safety Plan (HASP) has been prepared for use by the field team during all field activities. This plan details known and potential hazards of the site and field tasks as well as air monitoring and emergency procedures. A copy of the NYSDEC prepared "Community Air Monitoring Plan" is attached to the HASP included in the Work Plan.

MALCOLM PIRNIE

Qualitative Risk Assessment

SECTION 4

Following the collection of appropriate characterization information for Parcel 4, Malcolm Pirnie will perform a Qualitative Risk Assessment, which includes both qualitative human and qualitative ecological health risk assessments. Each assessment seeks to identify relevant environmental media and chemicals of potential concern that may present a health risk to the populations in and around the vicinity of Parcel 4 of the BLCP Site. In this context, the objectives of the risk assessment will be to:

- Evaluate the available analytical data in comparison to NYSDEC criteria.
- Evaluate potential receptors and exposure pathways associated with any detected contamination.
- Characterize the potential for adverse impacts to human health and the environment.
- Assist in determining the need for additional action.

The results of the qualitative risk assessment will be important in considering the potential for reuse of Parcel 4 of the BLCP Site.

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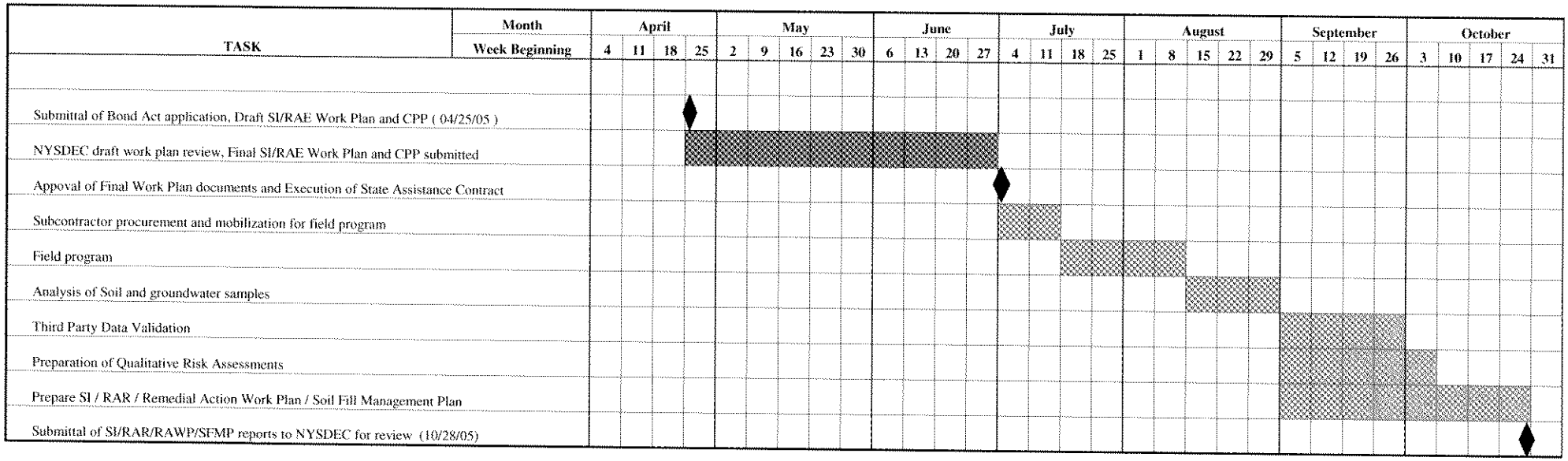
Schedule

SECTION 5

Figure 5-1 shows the planned Sampling and Remedial Alternatives Evaluation Activities schedule.

FIGURE 5-1

PROJECT SCHEDULE
BUFFALO LAKESIDE COMMERCE PARK (BLCP)
PARCEL 4
BUFFALO, NEW YORK



MALCOLM PIRNIE

Who to Contact & Where to Go For More Information

SECTION 6

6.1 NYSDEC and NYSDOH Contacts

The list below identifies names, addresses and phone numbers of contact people within the NYSDEC and NYSDOH who can answer questions and address public concerns about the site:

Mr. David P. Locey
Environmental Engineer
Division of Environmental Remediation
NY State Dept. of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203
(716) 851-7220

Mr. Cameron O'Connor
NY State Dept. of Health
584 Delaware Ave.
Buffalo, New York 14202
(716) 847-4501

6.2 Document Repositories

Documents related to the BLCP Parcel 4 Environmental Quality Bond Act Investigation and Remediation, are available for public review at the document repositories that NYSDEC has established at the following locations:

Buffalo & Erie County Public Library
JP Dudley Branch
2010 So. Park Avenue
Buffalo, New York 14220
(716) 823-1854

Hours of Operation:
M/F/Sat 10:00 am - 6:00 pm
Tue: 12:00 pm - 8:00 pm
W: Closed
Th: 12:00 pm - 8:00 pm
Sun: 1:00 pm - 5:00 pm

Contacts

MALCOLM PIRNIE

NYSDEC
Region 9 Offices
270 Michigan Avenue
Buffalo, New York 14203
(716) 851-7220

Hours of Operation:
M-F, 8:30 am - 4:45 pm
(by appointment only)

Contact: Mr. David Locey, Environmental Engineer

MALCOLM PIRNIE

List of Planned Citizen Participation Activities

SECTION 7

Table 7-1 shows the citizen participation activities that will be performed during the cleanup at this site. The adjacent time line indicates when each activity is tentatively scheduled to be completed and will be updated as necessary to reflect the actual completion dates.

Additional citizen participation activities may be conducted based on the amount of citizen interest shown at the site. Community involvement is important to ensure that the investigation and remediation of the BLCP Parcel 4 does not impose a negative impact on people living and working near/on the site. Additional citizen participation-related activities that will be completed specific to the site will involve updating the document repositories with reports and other documentation, as they become available.

TABLE 7-1

CITIZEN PARTICIPATION ACTIVITIES - ENVIRONMENTAL QUALITY BOND ACT INVESTIGATION AND REMEDIATION BUFFALO LAKESIDE COMMERCE PARK - PARCEL 4 CITIZEN PARTICIPATION PLAN

Activity	Activity Completion Point	Anticipated Activity Completion Date	Actual Activity Completion Date
Post Notice in Local Paper and on Env. News Bulletin	Application Deemed Complete	5/13/2005	
Work Plans in Public Repository for Review and 30-day Comment Period	Application Deemed Complete	5/13/05 to 6/13/2005	
Mail a Start of Investigation Fact Sheet to Mailing List	At least 15 days prior to public meeting	6/10/2005	
Hold a Public Information Session	At Start of Investigation	6/27/2005	
Mail an End of Investigation Fact Sheet to Mailing List	When Investigation is Complete	8/15/2005	
Hold a Public Information Session	When Investigation is Complete	8/2/2005	
Mail a Completion of Report Fact Sheets to Meeting List	When the Report is Complete	10/21/2005	
Hold a Public Information Session	When the Report is Complete	11/11/2005	
Place a copy of SI/RAR in Public Respository	When Draft SI/RAR is Complete	10/24/2005	
30-Day Public Comment Period	When Draft SI/RAR is Complete	11/24/2005	
Place Final Report in Public Respository	When Final SI/RAR is Complete	12/24/2005	
File Notice of Final Report with County Clerk	When Final SI/RAR is Complete	1/24/2006	
Update Mailing List	As Needed During Site Work	8/05 through 1/06	

MALCOLM PIRNIE

SECTION 8

Mailing List

The applicant (ECIDA) is responsible for development, reproduction, and implementation of all mailings. The mailing list is used to provide information to area residents, elected officials, media and other interested parties who want to be kept informed about the BLCP Site. A copy of the list is presented in Appendix A. If you would like to request your name be added to the list, please contact Mr. Michael Podd, Citizen Participation Specialist in the DEC Region 9 Office at (716) 851-7220.

MALCOLM PIRNIE

SECTION 9

References

ABB Environmental Services. *Preliminary Site Assessment.* November 1995.

Ecology and Environment, Inc. *Environmental Site Assessment.* May 1997.

Engineering Science. *Phase I Investigation.* January 1986.

Erie County Department of Environmental Protection. *Inactive Site Profile Report.* April 1982.

Malcolm Pirnie, Inc. *Work Plan for the Environmental Quality Bond Act Investigation of the Union Ship Canal and 200-Foot Buffer Area.* April 2001.

New York State Department of Environmental Conservation. *Inactive Hazardous Waste Disposal Site Report.* 1983.

Dames & Moore. *Phase I Investigation.* 1985.

PADIA Environmental Inc. *Final Report for Sediment Sampling and Chemical Analysis at the Union Ship Canal in Buffalo, New York.* January 2000.

Recra Environmental. *Site Characterization and Environmental Assessment.* August 1988.

Rupley, Bahler and Burke. *Solid Waste Management Facility Report.* 1979.

MALCOLM PIRNIE

APPENDIX

A

Mailing List

APPENDIX A – MAILING LIST

If you would like your name to be added to the list, please contact Mr. Michael Podd at the NYSDEC Region 9 Office at 716-851-7220.

CITIZENS GROUPS

Director William McKeever
Buffalo Audubon Society
712 Main Street
Buffalo, NY 14202

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

Mr. William Hilts, Sr.
Environmental Council
5115 Baer Road
Sanborn, NY 14132

Mr. Earl Robinson
Environmental Mgt. Commission
P.O. Box 981
Buffalo, NY 14240

Mr. Don Kill
Erie County Sportsmen's Fed.
55 Winstead Road
Lackawanna, NY 14218

Director Lauren Makeyenko
Great Lakes Environmental Ed.
P.O. Box 56
Buffalo, NY 14205

Mr. Joseph DePinto
SUNY @ Buffalo, Great Lakes
Jarvis Hall, Room 207
Buffalo, NY 14260

Chairman David Gianturco
Buffalo River Remedial Comm.
465 Brantwood Rd.
Amherst, NY 14226

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

Mr. Richard Lippes
Environmental Management Com.
1260 Delaware Avenue
Buffalo, NY 14209

Mr. Harold Henzler
Erie Co. Fed. Of Sportsmen
17 Parish Road
Cheektowaga, NY 14225

Executive Director
Friends of Buffalo River
567 Potomac Avenue
Buffalo, NY 14222

Ms. Lois Meyer
League of Woman Voters
731 W. Ferry St., Apt. 1-KL
Buffalo, NY 14222

Professor Barry Boyer, Esq.
SUNY @ Buffalo, School of Law
227 Olean Street
East Aurora, NY 14052

CITIZENS GROUPS (Continued)

Chairwoman Jane Jontz
Seirra Club, Niagara Group
62 Lincoln Road
Snyder, NY 14226

President Joseph Fischer
WNY Environmental Federation
17 Kingston Lane
Cheektowaga, NY 14225

LOCAL OFFICIALS/GOVERNMENT REPRESENTATIVES

Congressman Brian Higgins
27th District
726 Exchange St., Suite 601
Buffalo, NY 14210

Senator Hillary Rodham-Clinton
U.S. Senate, 203 Guaranty Blvd.
28 Church Street
Buffalo, NY 14202

Senator Charles Schumer
U.S. Senate, Room 620
111 West Huron Street
Buffalo, NY 14202

Assemblyman Mark Schroeder
145th Assembly District
General Donavan Building
Buffalo, NY 14203

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

Assemblyman Jack Quinn
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