DECISION DOCUMENT

915 Cleveland Avenue
Brownfield Cleanup Program
Niagara Falls, Niagara County
Site No. C932133
October 2010

Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - DECISION DOCUMENT

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Statement of Purpose and Basis

This document presents the remedy for the 915 Cleveland Avenue site, a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law, 6 NYCRR Part 375, and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the 915 Cleveland Avenue and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

The site soils and 4 USTs were removed as an IRM under an approved BCP IRM work plan. Soils were excavated until bedrock was encountered. Approximately 22,000 tons of impacted soils were disposed at off-site disposal facilities. There is no overburden groundwater. Localized bedrock groundwater contains PCE, TCE and associated breakdown contaminants. As a precaution against possible vapor intrusion, the construction of the new City public safety building included a vapor barrier and sub-slab depressurization system.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

10/1/10
Date

Coordinator
Remedial Bureau E

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SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, have contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: SITE DESCRIPTION AND HISTORY

The 915 Cleveland Ave. site is a parcel approximately 0.27 acres in size that had been used for auto repair and dry cleaning businesses. It is located on the south side of Cleveland Avenue about 300 feet east of the intersection of Main Street and Cleveland Avenue. The surrounding area is mostly commercial properties, but there are residential properties to the east. This parcel was accepted into the BCP in November 2007, and is being managed as a single operable unit. It was one of several lots on the block that were being redeveloped into a new City of Niagara Falls Courthouse and Public Safety complex. The original 2007 site assessment of 915 Cleveland Avenue identified several suspected USTs and confirmed VOCs (including TCE, PCE) in site groundwater. The IRM soil removal work that was conducted in 2007-2008 determined that petroleum and solvent contaminated soils extended well beyond the limits of the 915 Cleveland Avenue parcel. Construction activities for the public safety site building were completed in the Spring of 2009. The City took ownership and opened the building for use in May 2009. In October 2009, an Amended BCP Application was submitted to expand the site limits to additional parcels that had contaminated soil excavations, increasing the site size to approximately 0.79 acres. The expanded BCP site was accepted and the amended Brownfield

Cleanup Agreement was approved on March 3, 2010. A 45 day public comment period on the draft RI/RAR was held from February 19, 2010 – April 6, 2009. No comments were received on the draft report. The final RI/RAR was approved on August 24, 2010. The FER and SMP are being finalized, and the easement package assembled. A COC is expected by the end of 2010. Since the building is municipally owned, there will not be tax credits associated with the COC.

A site location map is attached as Figure 1. A site detail map is attached as Figure 2.

SECTION 3: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonable anticipated future land use of the site and its surroundings when assessing the nature and extent of contamination. For this site alternatives that may restrict the use of the site to commercial criteria as described in Part 375-1.8(g) were evaluated in addition to unrestricted SCGs.

A comparison of the appropriate SCGs for the identified land use against the unrestricted use SCGs for the site contaminants is available in the RI.

SECTION 4: ENFORCEMENT STATUS

The Applicant under the Brownfield Cleanup Agreement is a Volunteer. The Applicant does not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

SECTION 5: SITE CONTAMINATION

5.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 5.4.

5.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/2393.html

5.1.2: RI Information

The analytical data collected on this site includes data for:

- groundwater
- soil

The data has identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized in section 5.4. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

tetrachloroethylene (pce)	toluene
trichloroethene (tce)	xylene (mixed)
1,2,4-trimethylbenzene	benzene
naphthalene	

Prior to implementation of the IRM (see below) the contaminant(s) of concern exceeded the applicable standards, criteria and guidance for: groundwater.

5.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

Because of the construction schedule necessary for the City Public Safety building, the removal of the impacted soils and USTs were done as an IRM. Soils were excavated until bedrock was encountered. Approximately 22,000 tons of impacted soils were disposed at off-site disposal facilities. The IRM work was completed in 2008.

5.3: Summary of Human Exposure Pathways

This section describes the current or potential human exposures to persons at or around the site that may result from the contamination. A more detailed discussion of the human exposure pathways can be found in the RI Report (or appropriate document) available at the document repository. An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five elements: [1] a contaminant source, [2] contaminant release and transport mechanisms, [3] a point of exposure, [4] a route of exposure, and [5] a receptor population.

Contaminant release and transport mechanisms carry contaminants from the source to a point where people may be exposed. The exposure point is a location where actual or potential human contact with a contaminated medium may occur. The route of exposure is the manner in which a contaminant actually enters or contacts the body (e.g., ingestion, inhalation, or direct contact). The receptor population is the people who are, or may be, exposed to contaminants at a point of exposure.

An exposure pathway is complete when all five elements of an exposure pathway exist. An exposure pathway is considered a potential pathway when one or more of the elements currently does not exist, but could in the future.

Exposures to contaminated groundwater via drinking water are not expected because public water serves the area. Construction of the new on-site building included the installation of a mitigation system to reduce the potential for vapors to effect the structure. Further evaluation is needed to determine if off-site structures have the potential to be impacted by soil vapor intrusion.

5.4: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of the existing and potential impacts from the site to fish and wildlife receptors.

Site assessment work performed in 2007 revealed significant concentrations of VOCs in site groundwater (including TCE, PCE, and breakdown products- up to 16 ppm). Limited soils data was available at that time. All impacted site soils were excavated to the top of bedrock (approximately 15 feet below grade) during the IRM. Subsequent sampling of impacted site soils removed confirmed significant PCE, TCE and petroleum constituents. A portion of the excavated soils contained PCE concentrations in excess of RCRA criteria, and therefore some of the excavated soils required treatment prior to disposal.

RI work included the installation of additional bedrock groundwater monitoring wells. Overburden groundwater presence in the area is very limited due to the presence of

predominately silt and clay soil. The bedrock groundwater samples both on the site and at adjacent off-site locations indicate residual PCE contaminant concentrations up to 360 ppb. Bedrock groundwater flow is to the west toward the Niagara River gorge. Additional off-site bedrock wells will be installed to access the off-site groundwater impacts.

SECTION 6: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and the evaluation of the remedial criteria are present in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation.

The elements of the selected remedy are as follows:

The IRM was successful in eliminating on-site contamination and met the remedial goals. Engineering and institutional controls for the site will be summarized in the Site Management Plan. The engineering controls are limited to activities related to the periodic inspection and maintenance of the sub-slab depressurization system within the public safety building. The institutional controls will be contained in the environmental easement which limits the site to residential or more restrictive uses.

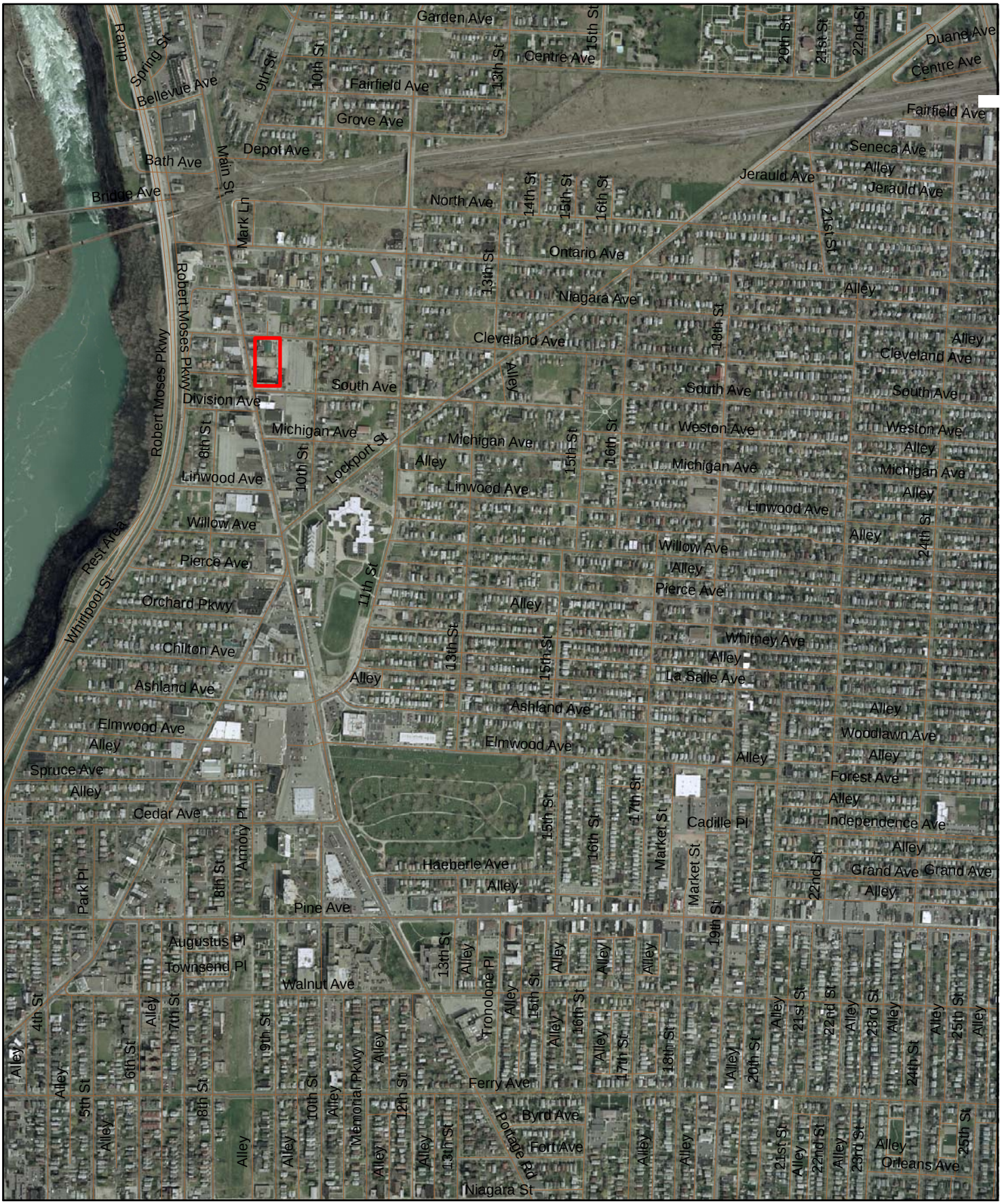
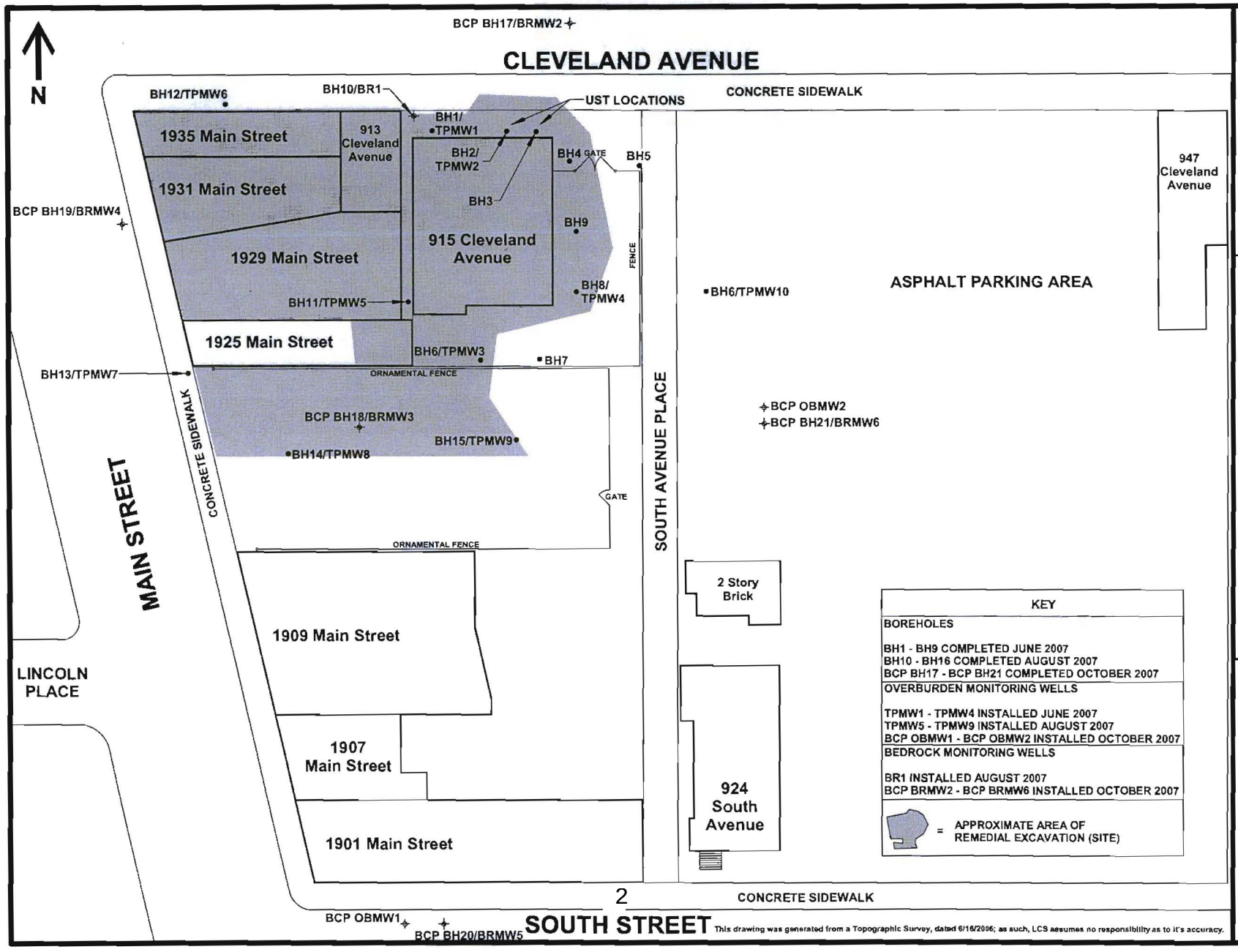


Figure 1

Site Location - 915 Cleveland Avenue Site (C932133)


N
BCP BH17/BRMW2
CLEVELAND AVENUE
CONCRETE SIDEWALK
BH12/TPMW6
BH10/BR1
UST LOCATIONS
BH1/ TPMW1
BH2/ TPMW2
BH3
BH4
GATE
BH5
BH9
BH8/ TPMW4
FENCE
BH11/TPMW5
BH6/TPMW3
BH7
BH6/TPMW10
ASPHALT PARKING AREA
947 Cleveland Avenue
1935 Main Street
913 Cleveland Avenue
1931 Main Street
1929 Main Street
915 Cleveland Avenue
1925 Main Street
BCP BH19/BRMW4
BH13/TPMW7
ORNAMENTAL FENCE
BCP BH18/BRMW3
BH15/TPMW9
BH14/TPMW8
GATE
ORNAMENTAL FENCE
CONCRETE SIDEWALK
MAIN STREET
SOUTH AVENUE PLACE
BCP OBMW2
BCP BH21/BRMW6
2 Story Brick
1909 Main Street
LINCOLN PLACE
1907 Main Street
924 South Avenue
1901 Main Street
KEY
BOREHOLES
BH1 - BH9 COMPLETED JUNE 2007
BH10 - BH16 COMPLETED AUGUST 2007
BCP BH17 - BCP BH21 COMPLETED OCTOBER 2007
OVERBURDEN MONITORING WELLS
TPMW1 - TPMW4 INSTALLED JUNE 2007
TPMW5 - TPMW9 INSTALLED AUGUST 2007
BCP OBMW1 - BCP OBMW2 INSTALLED OCTOBER 2007
BEDROCK MONITORING WELLS
BR1 INSTALLED AUGUST 2007
BCP BRMW2 - BCP BRMW6 INSTALLED OCTOBER 2007
= APPROXIMATE AREA OF REMEDIAL EXCAVATION (SITE)
CONCRETE SIDEWALK
BCP OBMW1
BCP BH20/BRMW5
SOUTH STREET
This drawing was generated from a Topographic Survey, dated 6/16/2006; as such, LCS assumes no responsibility as to it's accuracy.
Drawn by: DPS
Checked by: DBR
0 40 80
Approximate Scale in Feet
LCS Project # 06B3027.26
FIGURE 3
LCS INC.