RECORD OF DECISION

210 Sconondoa Street
Environmental Restoration Project
Oneida, Madison County
Site No. E727012
March 2013

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

DECLARATION STATEMENT - RECORD OF DECISION

210 Sconondoa Street
Environmental Restoration Project
Oneida, Madison County
Site No. E727012
March 2013

Statement of Purpose and Basis

This document presents the remedy for the 210 Sconondoa Street site, an environmental restoration site. The remedial program was chosen in accordance with the 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 decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the 210 Sconondoa Street site and the public's input to the proposed remedy presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. A site cover will be required to allow for commercial use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site

development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d). Approximately 3,000 square feet will be capped.

3. Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allows the use and development of the controlled property for commercial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- requires compliance with the Department approved Site Management Plan.

4. A Site Management Plan is required, which includes the following:

a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:
Institutional Controls: The Environmental Easement discussed in Paragraph 3 above.
Engineering Controls: The soil cover discussed in Paragraph 2 above
This plan includes, but may not be limited to:

o an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
o a provision for further investigation to refine the nature and extent of contamination in the following areas where access was previously hindered: within the footprint of the building if and when it is demolished
o a provision for removal or treatment of the source area located under the building if and when the building is demolished.
o descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
o a provision for evaluation of the potential for soil vapor intrusion should the use of the on-site building change and for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
o provisions for the management and inspection of the identified engineering controls;
o maintaining site access controls and Department notification; and
o the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

b. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

o monitoring of groundwater to assess the performance and effectiveness of the remedy;
o a schedule of monitoring and frequency of submittals to the Department; and

o monitoring for vapor intrusion for any buildings as may be required by the Institutional and Engineering Control Plan discussed above.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

March 28,2013

Date

Robert W. Schick, P.E., Director
Division of Environmental Remediation

RECORD OF DECISION

210 Sconondoa Street
Oneida, Madison County
Site No. E727012
March 2013

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, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum. The remedy is intended to attain the remedial action objectives identified for this site for the protection of public health and the environment. This Record of Decision (ROD) identifies the selected remedy, summarizes the other alternatives considered, and discusses the reasons for selecting the remedy.

The 1996 Clean Water/ Clean Air Bond Act provides funding to municipalities for the investigation and cleanup of brownfields. Brownfields are abandoned, idled, or under-used properties where redevelopment is complicated by real or perceived environmental contamination. They typically are former industrial or commercial properties where operations may have resulted in environmental contamination. Brownfields often pose not only environmental, but legal and financial burdens on communities. Under the Environmental Restoration Program, the state provides grants to municipalities to reimburse up to 90 percent of eligible costs for site investigation and remediation activities. Once remediated, the property can then be reused.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 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: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repository:

A public meeting was also conducted. At the meeting, the findings of the remedial investigation

(RI) and the alternatives analyses (AA) were presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period was held, during which verbal or written comments were accepted on the proposed remedy.

Comments on the remedy received during the comment period are summarized and addressed in the responsiveness summary section of the ROD.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The site is located at 210 Sconondoa Street in the City of Oneida, Madison County, New York. The site is located in a commercial-urban area, bordered by an open grass lot to the west, a former Manufactured Gas Plant (MGP) site to the north, an automobile repair shop to the east, and to the south an open grassy lot, with a two-story storage building.

Site Features: The site is approximately 0.21 acres in size. The site is occupied by a four-story, wood frame and brick structure which was formally a multiple family apartment complex.

Current Zoning/ Uses: Currently, the site is being utilized as a field training fire/rescue center owned and operated by the City of Oneida. The site is zoned light-industrial/commercial and the outlying areas include a mixed setting of urban residential, commercial and retail businesses.

Past Use of the Site: The site itself and neighboring properties were once warehouse/storage facilities for rail yards during the late 1800's through the early 1930's. Contamination of the site is believed to have resulted from four leaking underground fuel storage tanks (USTs) that were initially closed in-place. The tanks were subsequently removed by the City of Oneida in 2002. During these efforts the USTs, their waste oil contents and contaminated soil were removed. However, a heavily fortified concrete vault which encapsulated the USTs made it difficult to remove all contaminated soil without additional equipment, as a result, the vault and contaminated soils remained at the site. A supplemental subsurface and hydro-geological investigation was completed in August 2004. The results of the investigation indicated pockets of petroleum contamination suggesting a source remained on-site. The site was accepted into the ERP in 2006.

Geology/Hydrogeology: The natural soil in the area consists of brownish-grey silty fine to medium sand with trace gravel found at depths approximately 12 feet below grade. Overlying

this soil is urban fill material, such as bricks, some coal-ash, stone, sand, rubble, some lumber, and broken up pavement down to approximately six feet below ground surface (bgs). This fill is underlain by brownish sand with silty-clays from 7 to 13 feet bgs. Groundwater flow direction is to the south-southwest.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to commercial use (which allows for industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the RI to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

No PRPs have been documented to date.

Since no viable PRPs have been identified, there are currently no ongoing enforcement actions. However, legal action may be initiated at a future date by the state to recover state response costs should PRPs be identified. City Of Oneida will assist the state in its efforts by providing all information to the state which identifies PRPs. City Of Oneida will also not enter into any agreement regarding response costs without the approval of the Department.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,

- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- groundwater
- surface water
- soil
- soil vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to 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. The tables found in Exhibit A list the applicable SCGs in the footnotes. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

The data have 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 Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

BENZENE
TOLUENE
CHLOROBENZENE
ETHYLBENZENE
O-XYLENE
STYRENE
Isopropylbenzene
NAPHTHALENE
ARSENIC
CADMIUM
LEAD
MERCURY
ETHYLBENZENE
BENZO(A)PYRENE
BENZO(B)FLUORANTHENE
DIBENZ[A,H]ANTHRACENE
BENZ(A)ANTHRACENE
ACETONE

METHYL ETHYL KETONE PCB-AROCLOR 1260

As illustrated in Exhibit A, the contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- soil

6.2: 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 Record of Decision.

There were no IRMs performed at this site during the RI.

6.3: 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 Fish and Wildlife Resources Impact Analysis (FWRIA) for OU 01, which is included in the RI report, presents a detailed discussion of the existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination

Soil:

Analysis of the surface soils at 0-2 inches, identified several semi-volatile organic compounds (SVOCs) at concentrations slightly above commercial soil cleanup objectives (SCOs) which include benzo(b)fluoranthene up to 7.9 parts per million (ppm), compared to the SCO of 5.6 ppm, and benzo(a)pyrene up to 4.1 ppm, compared to the SCO of 1 ppm.

Analysis of sub-surface soils identified three volatile organic compounds (VOCs) that exceeded the protection of groundwater SCOs which were ethylbenzene up to 110 ppm compared to the SCO of 1 ppm, benzene up to 12 ppm compared to the SCO of 0.06 ppm, and toluene up to 8.2 ppm compared to the SCO of 0.7 ppm. In addition, one ethylbenzene sample was moderately above the commercial SCO of 390 ppm, with a sample result of 450 ppm. Laboratory analysis of sub-surface soils identified several SVOCs at concentrations moderately above commercial SCOs including benzo(a)anthracene up to 8.1 parts ppm, compared to the SCO of 5.6 ppm, and benzo(b)fluoranthene up to 7.9 ppm, compared to the SCO of 5.6 ppm.

Confirmation soil samples from the former UST-vault area and the UST excavation containing Tanks 2 through 4, revealed PCB contamination (Aroclor 1260) at concentrations slightly above the commercial SCO of 1.0 ppm, with a value of 1.3 ppm at both locations.

Groundwater:

The results of the groundwater sampling and analysis indicate that the principal groundwater contaminants are VOCs (benzene, toluene, chlorobenzene, ethylbenzene, o-xylene, styrene, isopropylbenzene).

Exceedances of the groundwater standards by VOCs are limited to the north-eastern portion of the site, primarily within the area of the former underground storage tanks. These VOCs include benzene as high as 250 parts per billion (ppb) (standard is 0.7); toluene as high as 27 ppb (standard is 5); ethylbenzene up to 1,100 ppb (standard is 5); o-xylene up to 210 ppb (standard is 5); and isopropylbenzene up to 95 ppb (standard is 5). One SVOC, naphthalene, exceeded the groundwater standard of 10 ppb, with a value of 33 ppb at one location.

Lead is the predominant inorganic contaminant in groundwater at the site; however most samples only slightly exceeded the standard of 25 ppb while three samples of 153, 167, and 562 ppb, respectively were well above the standard. These elevated concentrations may have resulted from the unfiltered sample method since no soils were found in excess of the protection of groundwater SCO. Three other metals were found in groundwater at levels that slightly exceed the standard: cadmium up to 11 ppb (standard is 5); total mercury up to 1.4 ppb (standard is 0.7) and arsenic up to 31.5 ppb (standard is 25). The frequency of detection of these three metals was limited across the site, is not indicative of a significant plume and is attributed to the presence of historic urban fill.

Surface Water:

A buried drainage culvert runs from the south-east corner of the site and day-lights to an open concrete channel at the north-west corner of the property. Some surface grading across the back of the property enters into a catch basin located at the midpoint of the culvert. Analysis of water samples collected from both ends (upstream and downstream) of the culvert did not find any contaminants that exceeded water quality standards.

Soil Vapor:

Soil vapor analysis revealed elevated concentrations of tetra-chloroethene, methylene chloride, and benzene located on the north-east, north and south-east portions of the property. The most probable source is the four USTs that were discovered and removed during the IRM efforts.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure.*

People are not drinking contaminated groundwater because the area is served by a public water supply that is not affected by site-related contamination. Most of the site is covered with clean stone fill and a building, therefore, people are not likely to come into contact with site-related

soil and groundwater contamination unless they dig below the surface. Volatile organic compounds in the residual soil and groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. The inhalation of site-related contaminants due to soil vapor intrusion does not currently represent a concern for the site. However, soil vapor intrusion may represent a concern should the current use site building change or if new buildings are constructed and occupied on-site.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

SECTION 7: SUMMARY OF THE SELECTED REMEDY

To be selected the remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. The remedy must also attain the remedial action objectives identified for the site, which are presented in Section 6.5. Potential remedial alternatives for the Site were identified, screened and evaluated in the alternatives analysis (AA) report.

A summary of the remedial alternatives that were considered for this site is presented in Exhibit B. Cost information is presented in the form of present worth, which represents the amount of

money invested in the current year that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives with an indefinite duration. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved. A summary of the Remedial Alternatives Costs is included as Exhibit C.

The basis for the Department's remedy is set forth at Exhibit D.

The selected remedy is referred to as the Soil Cover with Groundwater Monitoring remedy.

The estimated present worth cost to implement the remedy is $82,800. The cost to construct the remedy is estimated to be $26,950 and the estimated average annual cost is $7,200.

The elements of the selected remedy are as follows:

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. A site cover will be required to allow for commercial use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d). Approximately 3,000 square feet will be capped.

3. Imposition of an institutional control in the form of an environmental easement for the controlled property that:

• requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
• allows the use and development of the controlled property for commercial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
• restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
• requires compliance with the Department approved Site Management Plan.

4. A Site Management Plan is required, which includes the following:
a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:
Institutional Controls: The Environmental Easement discussed in Paragraph 3 above.
Engineering Controls: The soil cover discussed in Paragraph 2 above
This plan includes, but may not be limited to:
o an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
o a provision for further investigation to refine the nature and extent of contamination in the following areas where access was previously hindered: within the footprint of the building if and when it is demolished
o a provision for removal or treatment of the source area located under the building if and when the building is demolished.
o descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
o a provision for evaluation of the potential for soil vapor intrusion should the use of the on-site building change and for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
o provisions for the management and inspection of the identified engineering controls;
o maintaining site access controls and Department notification; and
o the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
b. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
o monitoring of groundwater to assess the performance and effectiveness of the remedy;
o a schedule of monitoring and frequency of submittals to the Department; and
o monitoring for vapor intrusion for any buildings as may be required by the Institutional and Engineering Control Plan discussed above.

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The contaminants are arranged into volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and in-organics (metals). For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCGs identified in Section 6.1.1 are also presented.

Waste/Source Areas

As described in the RI report, waste/source materials were identified at the site and are impacting groundwater, soil, and soil vapor.

Wastes are defined in 6 NYCRR Part 375-1.2(aw) and include solid, industrial and/or hazardous wastes. Source areas are defined in 6 NYCRR Part 375(au). Source areas are areas of concern at a site were substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Wastes and source areas that were identified at the site include, underground storage tanks (USTs) and contaminated historic urban fill material petroleum hydrocarbons (VOCs), SVOCs and metals that have impacted surface soil, subsurface soil and groundwater quality.

Certain waste/source areas identified at the site were addressed by IRM(s) consisting of removal of [4] underground storage tanks, surrounding soils, and soils beneath the vault area with confirmatory samples as more fully described in Section 6.2. The remaining waste/source area(s) identified during the RI will be addressed in the remedy selection process.

Groundwater

Groundwater samples were collected from overburden monitoring wells. The samples were collected to assess groundwater conditions on and off-site. The results indicate that contamination in shallow groundwater at the site exceeds the SCGs for VOCs, SVOCs (only one compound) and metals.

Table 1 – Groundwater
(Based on 8 samples obtained)

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
Benzene	7.6 to 250	0.7	3/8
Toluene	8.7 to 27	5	3/8
Chlorobenzene	5.6	5	1/8
Ethylbenzene	9.7 to 1100	5	3/8
o-Xylene	7.9 to 210	5	3/8
Styrene	6.5	5	1/8
Isopropylbenzene	6.1 to 95	5	4/8
SVOCs			
Naphthalene	33	10	1/8
Inorganics			
Metals:			
Arsenic	6.18 to 31.5	25	2/8
Cadmium	2.07 to 11	5	1/8
Lead	18.2 to 562	25	7/8
Total Mercury	0.19 to 1.4	0.7	1/8

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

The benzene, toluene, ethylbenzene, xylene, and naphthalene impacts can be attributed to historical underground tank storage on the property based on the plume location. This plume does not extend off-site and it is expected that these contaminant concentrations will attenuate over time due to natural processes. Metals that exceed groundwater quality standards (i.e., arsenic, cadmium, lead and total mercury) are attributed to the presence of historic urban fill material (i.e., coal and wood ash) across the property which was identified during the subsurface investigation. Sampling methodology [unfiltered samples] may have influenced the concentrations reported. None of the metals values in soils exceeded the protection of groundwater SCOs.

No site-related groundwater contamination of concern was identified during the RI. Therefore, no remedial alternatives need to be evaluated for groundwater.

Soil

Surface and subsurface soil samples were collected at the site during the RI. Surface soil samples were collected from a depth of 0-2 inches to assess direct human exposure. Subsurface soil samples were collected from a depth of 4 - 12 feet to assess soil contamination impacts to groundwater. Soil confirmation samples were collected during the Interim Remedial Measures (IRM) efforts. These samples were obtained from the side-wall and bottom of the excavation(s) at depths ranging from seven to ten feet below grade. The results indicate that soils at the site exceed the unrestricted SCG for several VOCs and SVOCs. Note that no metals concentrations were observed above the unrestricted SCGs.

Table 2 – Soil

7 Surface (S) and 8 Sub-Surface (SS) for a total of 15 samples obtained
IRM Soil Confirmation Sampling (SCS) for total of 7 samples obtained

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Commercial Use SCG[c] (ppm)	Frequency Exceeding Restricted SCG
VOCs					
Acetone	0.180 to 0.790	0.05	0/7 (S), 6/8 (SS)	500	0/15 (SS)
Acetone (IRM SCS)	0.610 to 3.0	0.05	3/7	500	0/7
Ethylbenzene (IRM SCS)	110 to 450	1.0	3/7	1.0 [d]	3/7
Ethylbenzene	0.026 to 110	1.0	0/7 (S), 2/8 (SS)	1.0 [d]	2/8(SS)
2-Butanone *(IRM SCS)	0.330 to 0.910	0.12	2/7	500	0/7
Benzene (IRM SCS)	0.210 to 12.0	0.06	4/7	0.06 [d]	4/7
Toluene (IRM SCS)	0.670 to 8.20	0.7	2/7	0.7 [d]	2/7
SVOCs					
Benzo(a)anthracene	0.310 to 8.10	1.0	0/7 (S), 2/8 (SS)	5.6	1/8 (SS)
Benzo(a) anthracene (IRMSCS	1.60	1.0	1/7	5.6	0/7
Benzo(b)fluoranthene	0.210 to 7.90	1.0	1/7 (S), 3/8 (SS)	5.6	1/7 (S)1/8 (SS)
Benzo(k)fluoranthene	0.120 to 3.30	0.8	0/7 (S), 1/8 (SS)	56	0/15 (SS)
Benzo(a)pyrene	1.60 to 4.10	1.0	5/7 (S), 0/8 (SS)	1.0	5/8 (S)
Chrysene	0.170 to 6.60	1.0	0/7 (S), 2/8 (SS)	56	0/15 (SS)
Chrysene (IRM SCS)	1.2	1.0	1/7	56	0/7
Dibenzo(a,h)anthracene	0.450 to 0.570	0.33	2/7 (S), 0/8 (SS)	0.56	1/7 (S)
In organics					
None detected above unrestricted SCG	Not Applicable				
Pesticides/PCBs					
Arclor 1260	1.3	0.1	2/7 (SCS)	1.0	2/7 (SCS)

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.
c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Commercial Use, unless otherwise noted.
d-SCG:Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for Protection of Groundwater
*- *2 Butanone is also known as Methyl-ethyl-ketone*

The primary soil contaminants of concern are VOCs and SVOCs which are associated with residues from the storage/leakage of gasoline and waste oil in the former underground waste oil tanks (USTs).

Based on the findings of the Remedial Investigation and the confirmation sampling from the IRM tank removal efforts, the presence of petroleum (gasoline) and waste-oil products has resulted in the contamination of soil. The site contaminants identified in soil which are considered to be the primary contaminants of concern, to be addressed by the remedy selection process are: ethylbenzene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, and dibenzo(a,h)anthracene.

Soil Vapor

The evaluation of the potential for soil vapor intrusion resulting from the presence of site related soil or groundwater contamination was evaluated by the sampling of soil vapor. At this site due to the presence of buildings in the impacted area, a full suite of samples were collected to evaluate whether soil vapor intrusion (SVI) was occurring.

Based on the concentration detected, and in comparison with the NYSDOH Soil Vapor Intrusion Guidance, it has been determined the primary soil vapor contaminant is benzene, which is commonly associated with gasoline. The most probable source is the four USTs that were discovered and removed during the IRM efforts. Laboratory results show the elevated benzene concentrations for two out four sampling points appear to be within the vicinity of the former UST locations.

Based on the findings of the Remedial Investigation, the disposal of petroleum waste the presence of tetrachloroethene, methylene chloride and benzene has resulted in the contamination of soil vapor. The site contaminant that is considered to be the primary contaminant of concern which will drive the remediation of soil vapor to be addressed by the remedy selection process are tetrachloroethene and methylene chloride.

Exhibit B

Description of Remedial Alternatives

The following alternatives were considered based on the remedial action objectives (see Section 6.5) to address the contaminated media identified at the site as described in Exhibit A.

Alternative 1: No Further Action

The No Further Action Alternative recognizes the remediation of the site completed by the IRM(s) described in Section 6.2 This alternative leaves the site in its present condition and does not provide any additional protection of the environment.

Capital Cost:..... $0
Capital Cost:..... $0
Annual Costs:..... $0

Alternative 2: Restoration to Pre-Disposal or Unrestricted Conditions with Off-Site Disposal

This alternative achieves all of the SCGs discussed in Section 6.1.1 and Exhibit A and soil meets the unrestricted soil cleanup objectives listed in Part 375-6.8(a). This alternative includes the removal of soil from an area of approximately 2,500 square feet to an average depth of 7 feet. Allowing for field conditions; practicing good engineering judgment, and allowing for slight over-excavation of the estimated contaminated zone, would result in the removal of an estimated 650 cubic yards (970 tons) of contaminated soils. It should be noted that uncertain sub-surface conditions could preclude full removal to achieve unrestricted SCGs and/or pose complications for excavation that could increase the estimated soil volumes and/or costs for this alternative. The excavated soil will be transported to an off-site permitted disposal facility. The excavation will be backfilled with approved clean material and finished to grade with gravel, topsoil and grass seed. During the excavation operations it is anticipated dewatering of groundwater in the excavation pit may be required. To address this potential issue, a temporary groundwater recovery pump and treatment system will be utilized. Upon completion of remediation efforts, two subsequent rounds of groundwater sampling and analysis (monitoring) will occur to assure groundwater quality have been addressed. It is estimated that the field work can be completed in two weeks. Results of the clearance soil sampling analysis takes approximately one month; post-closure monitoring of the groundwater wells will be conducted over two sampling events for a period of six months, therefore the estimated time to complete this alternative is six months.

Present Worth: ..... $217,000.
Capital Cost:..... $0.
Annual Costs:..... $0.

Alternative 3: Soil Excavation meeting Commercial Use Soil Cleanup Objectives (SCOs) with Off-Site Disposal

This alternative achieves the SCGs discussed in Section 6.1.1 and Exhibit A and soil meets the commercial soil cleanup objectives listed in Part 375-6.8(b). This alternative includes the removal of an estimated 445 cubic yards (670 tons) of soil from an area of approximately 1,710 square feet to an average depth of 7 feet. The seven foot depth is based upon the laboratory analysis results of the soil borings from the remedial investigation. At this average depth, soil contaminant concentrations are below Commercial Use Soil Cleanup Objectives (SCOs). Soil samples will be obtained from the side walls and bottom of the excavation. Laboratory analysis of these samples will assure Commercial Use SCOs have been achieved. Results of the laboratory analysis will take approximately one month. Removal of the contaminated soil will likely decrease residual groundwater contaminate concentrations and improve groundwater quality to within NYSDEC groundwater standards. The excavated soil will be transported to an off-site permitted disposal facility. The excavation will be backfilled with acceptable clean material that meets the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d) and finished to grade with gravel, topsoil and grass seed. It is estimated that the field work can be completed in two weeks. This alternative includes groundwater monitoring in order to ensure that the remedy is protective. A minimum of two groundwater sampling events will be obtained within the year of the soil removal efforts. This alternative will reduce various exposure pathways including ingestion and absorption of surface and subsurface soils and groundwater, as well as reduce inhalation of subsurface soils and groundwater via construction activities or soil vapor. This alternative includes a site management plan as well as an imposition of an environmental easement or environmental notice in order to limit site use.

Present Worth: $184,435
Capital Cost:..... $166,610
Annual Costs:..... $17,825

Alternative 4: Soil Cover with Groundwater Monitoring

This alternative achieves the SCGs discussed in Section 6.1.1 and Exhibit A and soil meets the commercial soil clean objectives listed in Part 375-6.8(b). The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d). Approximately 3,000 square feet will be covered. It is estimated that the installation of the cover system can be completed within two weeks. This alternative includes imposition of an environmental easement in order to limit site use and provide for implementation of a site management plan which includes groundwater monitoring.

Present Worth: $82,800
Capital Cost:..... $26,950
Annual Costs:..... $7,200

Exhibit C

Remedial Alternative Costs

Remedial Alternative	Capital Cost ($)	Annual Costs ($)	Total Present Worth ($)
No Further Action	0	0	0
Restoration to Pre-Disposal or Unrestricted Conditions with Off-Site Disposal	0	0	217,000
Soil Excavation meeting Commercial Use Soil Cleanup Objectives (SCOs) with Off-Site Disposal	166,610	17,825	184,435
Soil Cover with Groundwater Monitoring	26,950	7,200	82,800

Exhibit D

SUMMARY OF THE PROPOSED REMEDY

The Department is proposing Alternative 4, Soil Cover with Groundwater Monitoring as the remedy for this site. Alternative 4 would achieve the remediation goals for the site by minimizing human exposure as well as reducing the potential for mobilization of contaminants and in turn allowing for natural degradation (attenuation) of contaminants to occur. The elements of this remedy are described in Section 7. The proposed remedy is depicted in Figure 2.

Basis for Selection

The proposed remedy is based on the results of the RI and the evaluation of alternatives. The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375. A detailed discussion of the evaluation criteria and comparative analysis is included in the AA report.

The first two evaluation criteria are termed "threshold criteria" and must be satisfied in order for an alternative to be considered for selection.

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

Alternative 4 will satisfy this criterion by limiting the exposure of the contaminated soils to humans and the environment by covering the areas of concern. Future redevelopment or construction activities that could create the potential for contact with residual contaminants below the surface would be addressed by the institutional and engineering controls included in this Alternative. Alternative 4 addresses the groundwater contamination by reducing precipitation recharge into the impacted areas; thus reducing the potential for mobilization of residual contaminants and allows for natural attenuation to occur. Alternative 1 (No Further Action) does not provide any protection to public health and the environment and will not be evaluated further. Alternative 2, by removing all soil contaminated above the “Un-restricted” soil cleanup objective, meets the threshold criteria. Alternative 3 meets this threshold criterion via removal of soils that exceed the commercial use SCO and provision for engineering and institutional controls to manage residual contamination.

2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the Department has determined to be applicable on a case-specific basis.

Alternative 4 complies with SCGs to the extent practicable. It addresses source areas of contamination and complies with the restricted use soil cleanup objectives at the surface through construction of a cover system. It also creates the conditions necessary to restore groundwater quality by reducing precipitation recharge. Alternatives 2 and 3 also meet this criterion via removal or partial removal with institutional controls; therefore, the remaining criteria are particularly important in selecting a final remedy for the site.

The next six "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.

Long-term effectiveness is best accomplished by those alternatives involving excavation of the contaminated overburden soils (Alternatives 2 and 3). Since most of the contamination is in the north-eastern portion within the upper seven feet of the property, Alternative 2 results in removal of almost all of the chemical contamination at the site and removes the need for property use restrictions and long-term monitoring. Alternative 3 would result in the removal of a large portion of the contaminated soil at the site and almost all of the contaminated soil above the water table, but it also requires an environmental easement and monitoring.

Alternatives 2 and 3 would be effective in the long-term. Remediation and post-monitoring of the site can be completed in less than one year. Removal of impacted soils prepares the site for the intended commercial re-use. It is anticipated that groundwater quality will improve over time. Human and environmental exposure risk would be minimal.

Alternative 4 long-term effectiveness is good; the cover system will limit exposure to the public and the environment. The cover system will also reduce precipitation infiltration and groundwater movement while allowing for natural attenuation which will lead to improved groundwater conditions. Long-term groundwater monitoring will evaluate the progress of this alternative. The environmental easement will ensure that the cover system is maintained and the site is properly managed.

4. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

Alternatives 2 and 3, excavation and off-site disposal, reduces the toxicity, mobility and volume of on-site waste by transferring the material to an approved off-site location.

Alternative 4 reduces the mobility of residual contaminants by preventing direct contact and reducing precipitation recharge.

5. Short-term Impacts and Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

Alternatives 2 through 4 all have short-term impacts which could easily be controlled; the time needed to achieve the remediation goals is the shortest for Alternatives 2 and 3; longer for Alternative 4.

6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, institutional controls, and so forth.

Alternatives 2 may not be fully implementable due to uncertain sub-surface conditions that could preclude full removal to achieve unrestricted SCGs and/or pose complications for excavation that could increase the estimated soil volumes and/or costs for this alternative. Alternatives 3, and 4, are readily implementable. The soils excavated under Alternatives 2 and 3 would necessitate increased truck traffic on local roads for approximately a month. Alternative 4 would cause increased truck traffic as well related to bringing in cover material, but to a lesser degree than Alternatives 2 and 3.

7. Cost-Effectiveness. Capital costs and annual operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision.

The costs of the alternatives vary significantly. Due to the large volumes of soil to be handled, Alternatives 2 and 3 (excavation and off-site disposal) exhibit the greatest present worth costs. In addition, uncertain subsurface soil conditions could complicate excavation and/or lead to increased volumes which would increase estimated costs for these alternatives.
Alternative 4 is the most cost effective alternative since it has a considerable lower total present worth cost than Alternatives 2 and 3 and is just as protective and effective in the long-term and more effective in the short-term.

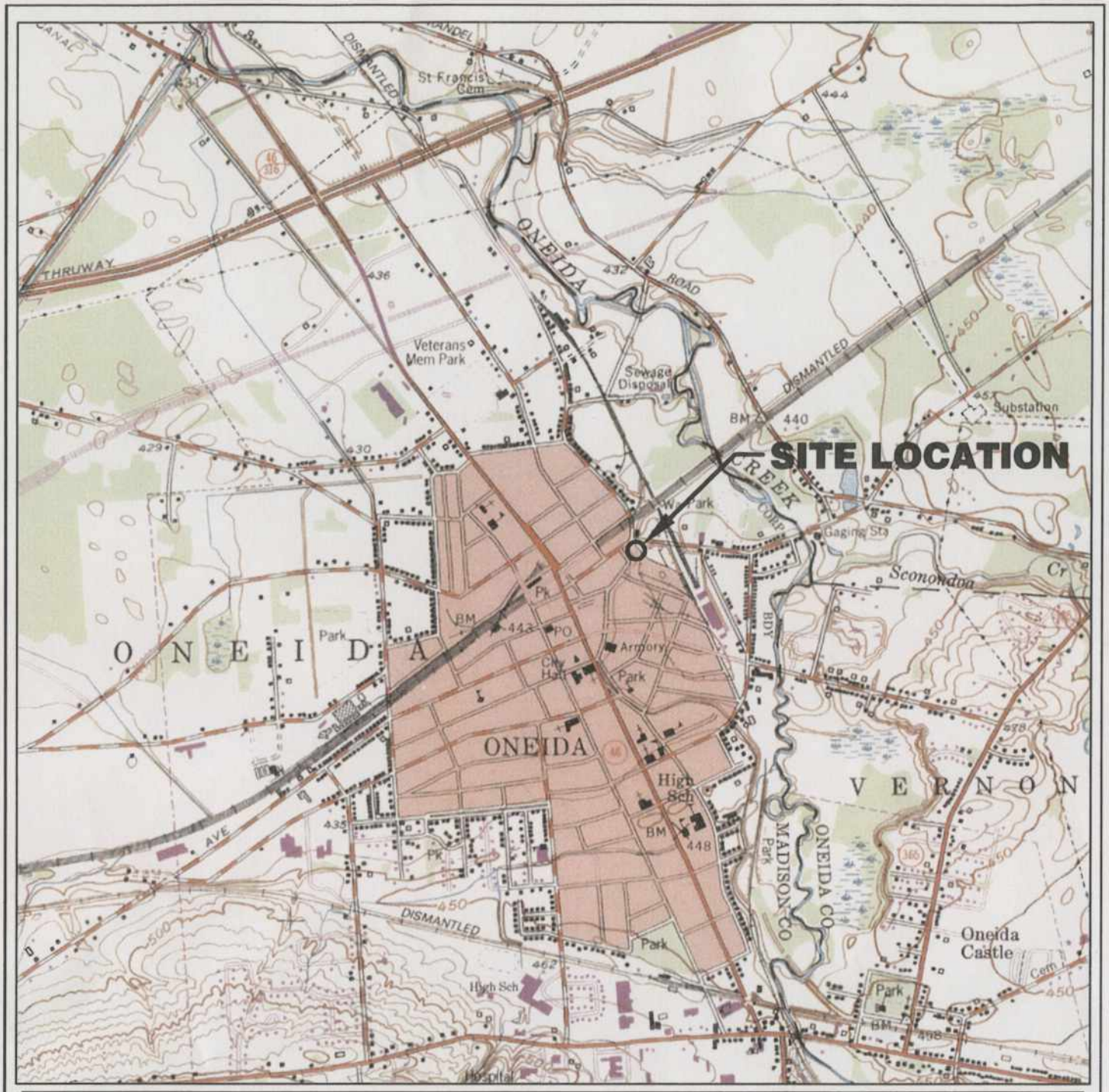
8. Land Use. When cleanup to pre-disposal conditions is determined to be infeasible, the Department may consider the current, intended, and reasonable anticipated future land use of the site and its surroundings in the selection of the soil remedy.

Alternatives 3 and 4, each allow for commercial use of the site. Alternative 2 allows for unrestricted use.

The final criterion, Community Acceptance, is considered a "modifying criterion" and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

9. Community Acceptance. Concerns of the community regarding the investigation, the evaluation of alternatives, and the PRAP are evaluated. A responsiveness summary will be prepared that describes public comments received and the manner in which the Department will address the concerns raised. If the selected remedy differs significantly from the proposed remedy, notices to the public will be issued describing the differences and reasons for the changes.

Alternative 4 is being proposed because, as described above, it satisfies the threshold criteria and provides the best balance of the balancing criterion.



SOURCE: ONEIDA, NEW YORK U.S.G.S. QUADRANGLE MAP, DATE 1955, REVISED 1993.

QUADRANGLE LOCATION

0 2000 4000

SCALE IN FEET

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TRUE OR CALLED NORTH

Barton & Loguidice, P.C.

210 SCONONDOA STREET APARTMENTS
ENVIRONMENTAL RESTORATION PROJECT
CITY OF ONEIDA

SITE LOCATION MAP

CITY OF ONEIDA MADISON COUNTY, NEW YORK

Date	Scale
OCTOBER, 2009	1" = 2000'

Figure Number	Project Number
1	288.011

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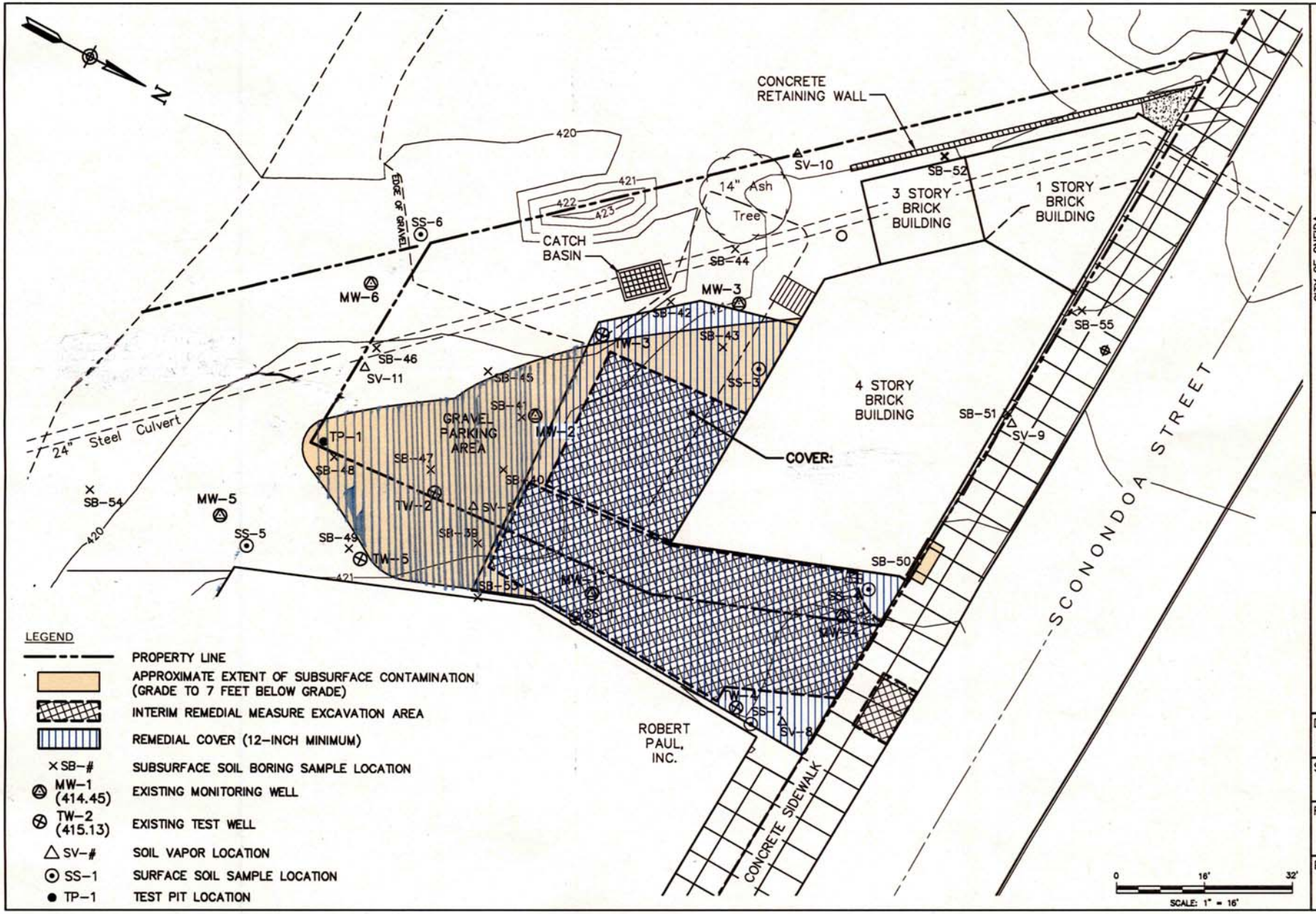

CITY OF ONEIDA
FORMER 210 SCONONDOA STREET APARTMENTS
ENVIRONMENTAL RESTORATION PROJECT

ALTERNATIVE 4
SOIL COVER WITH GROUNDWATER MONITORING

MADISON COUNTY, NEW YORK
CITY OF ONEIDA

Barton & Loguidice, P.C.

Date	FEBRUARY, 2013
Scale	1" = 16'
Figure Number	2
Project Number	288.011

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APPENDIX A

Responsiveness Summary

Responsiveness Summary

210 Sconondoa Street
Environmental Restoration Project
City of Oneida, Madison County, New York
Site No. E727012

The Proposed Remedial Action Plan (PRAP) for the 210 Sconondoa Street site was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on February 11, 2013. The PRAP outlined the remedial measure proposed for the contaminated soil, groundwater and soil vapor at the 210 Sconondoa Street site.

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on March 12, 2013 which included a presentation of the remedial investigation alternative analysis (RI/AA) for the 210 Sconondoa Street as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on March27, 2013.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

The following comments were provided by the public during the March 12, 2013 public meeting:

COMMENT 1: How will the soil cover impact my property (Robert Paul, Inc.) next door?

RESPONSE 1: The soil cover should not have any impact on your property as it will be offset sufficiently from your shared property line with the site or if necessary can be contoured to meet the grades at the property line by some removal of soil at the site.

COMMENT 2: Are there plans to demolish the building? (Question was directed to the City of Oneida Engineer)

RESPONSE 2: The City of Oneida Engineer indicated that there are no current plans to demolish the building.

APPENDIX B

Administrative Record

Administrative Record

210 Sconondoa Street
Environmental Restoration Project
City of Oneida, Madison County, New York
Site No. E727012

1. Proposed Remedial Action Plan for the 210 Sconondoa Street site, dated February 2013.

2. State Assistance Contract, Contract No. C302752, between the Department and the City of Oneida dated August 29, 2005 and Amendments 1, 2, 3, and 4.

3. "Site Investigation Work Plan, April 2006- revised March 2007"- Barton & Loguidice, P.C.

4. "Site Investigation/ Remedial Alternatives Report, August 2011"- Barton & Loguidice, P.C.