PROPOSED REMEDIAL ACTION PLAN
Former Bellport Gas Station Site

Environmental Restoration Project
Suffolk County, New York
Site No. E1-52-194

August 2010

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

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SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for the above referenced site. The disposal of petroleum contamination at the site has resulted in threats to public health and the environment that would be addressed by the remedy proposed by this Proposed Remedial Action Plan (PRAP). The disposal of petroleum contamination at this site, as more fully described in Sections 5 of this document, have contaminated various environmental media. The proposed remedy, discussed in detail in Section 8, is intended to attain the remedial action objectives identified for this site in Section 6 for the protection of public health and the environment. This PRAP identifies the preferred remedy, summarizes the other alternatives considered, and discusses the reasons for the preferred remedy. The Department will select a final remedy for the site only after careful consideration of all comments received during the public comment period.

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 PRAP 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 which are available for review at the document repositories. The public is encouraged to review the reports and documents, which are available at the following repositories:

Patchogue Medford Library
54-60 East Main Street
Patchogue, NY 11772
Director: Judith R. Gibbara
Assistant Director: Dina McNeece Chrils
Phone: (631) 654-4700
Hours: Monday- Friday 9:30AM-9 PM
Sat. 9:30 AM-5:30 PM, Sun. 1PM-5PM

NYSDEC Region One
SUNY at Stony Brook
50 Circle Road
Stony Brook, NY 11790-3409
Attn: William Fonda
Phone: 631-444-0350
Hours: Monday-Friday 8:30-4:45PM

The list below identifies names, addresses and phone numbers of contact people within the Department and

NYSDOH who can answer questions and address public concerns about the Site:

New York State Department of Environmental Conservation (NYSDEC):
John C. Sheehan, Project Manager
Remediation Bureau A
Division of Environmental Remediation
NYSDEC Region One
SUNY at Stony Brook
50 Circle Road
Stony Brook, NY 11790-3409
631-444-0240

New York State Department of Health (NYSDOH):
Renata Ockerby, Project Manager
NYSDOH-Bureau of Environmental Exposure Investigation
Flanagan Square, Room 300
547 River Street
Troy, NY 12180-2216
Phone: 518-402-7880

The Department seeks input from the community on all PRAPs. A public comment period has been set from September 1, 2010 through October 15, 2010 to provide an opportunity for public participation in the remedy selection process. A public meeting is scheduled for September 23, 2010 at the South Country Public Library, 22 Station Road, Bellport, beginning at 7:00 pm.

At the meeting, the findings of the remedial investigation (RI) and the alternative analysis (AA) will be presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period will be held, during which verbal or written comments may be submitted on the PRAP. Written comments may also be sent to Mr. John C. Sheehan at the above address through The Department may modify the proposed remedy or select another of the alternatives presented in this PRAP, based on new information or public comments. Therefore, the public is encouraged to review and comment on all of the alternatives identified here. Comments will be summarized and addressed in the responsiveness summary section of the Record of Decision (ROD). The ROD is the Department's final selection of the remedy for this site.

SECTION 2: SITE DESCRIPTION AND HISTORY

The following section provides a description of the site as well as the operational and remedial history.

2.1: Location and Description

The 0.3-acre former Bellport Gas Station site is located at 1401 Montauk Highway, East Patchogue, Town of Brookhaven, in Suffolk County. The property is situated on the north side of Montauk Highway and bounded on the east by Lenox Avenue, on the north by residential properties and on the west and south by commercial properties (Figures 1 and 2). The property is currently zoned for commercial use and the intended future use is most

likely commercial. The residences in the area have municipal water service provided by the Suffolk County Water Authority (SCWA).

The predominant site feature was a dilapidated service station building. The building, which was abandoned for several years and in a state of disrepair, was inspected by a qualified engineer who determined that the building was displaying signs of structural failure. As a result, the building was razed in April 2010.

The site is located in an Environmental Justice (EJ) Community. An EJ community is one in which efforts are being made on improving the environment in selected communities, specifically minority and low-income communities, and addressing disproportionate adverse environmental impacts that may exist in those communities.

Site Topography:

The site is located approximately 40 feet above mean sea level. The site's topography is relatively undisturbed. No recent disturbances were observed; small trees and shrubs have almost re-vegetated the entire area north of the former one story building. No erosion of surface areas was noted. Site drywells were removed from service as a component of the Interim Remedial Measures (IRM)s that were implemented in October 2008 and April 2010. Recharges ran directly into the subsurface or into the former storm water drywells with no evidence of overland flow away from the site towards surface-water bodies. The nearest surface-water body is Hedges Creek/Dunton Lake, a class SB saline surface water body, located approximately 5,000 feet to the south-southeast (Figure 1). Based upon site topography, overland flow to this surface-water body is unlikely.

Regional Geology / Hydrogeology:

The geologic setting of Long Island is well documented and consists of crystalline bedrock composed of schist and gneiss overlain by layers of unconsolidated deposits. Immediately overlying the bedrock is the Raritan Formation, consisting of the Lloyd sand confined by the Raritan Clay Member. The Lloyd sand is an aquifer and consists of discontinuous layers of gravel, sand, sandy and silty clay, and solid clay. The Raritan Clay is a solid and silty clay that is gray, red or white in color with few lenses of sand and gravel and abundant lignite and pyrite. Above the Raritan Clay lies the Magothy Formation. The Magothy aquifer consists of layers of fine to coarse sand of moderate to high permeability, with inter-bedded lenses of silt and clay of low permeability resulting in areas of preferential horizontal flow. Therefore, this aquifer generally becomes more confined with depth. The Magothy Formation is overlain by the Upper Glacial deposits which contains the Upper Glacial aquifer. The Upper Glacial aquifer is the water-table aquifer at this location and is comprised of medium to coarse sand and gravel with occasional thin lenses of fine sand and brown clay. This aquifer extends from the water table to the top of the Magothy and, therefore, is hydraulically connected to the Magothy aquifer.

The aquifer of concern at the former Bellport Gas Station site is the Upper Glacial aquifer which is an unconsolidated mixture of sand and gravel. The Upper Glacial aquifer is approximately 100 feet thick at the site, and has an estimated average horizontal hydraulic conductivity (permeability) of 270 feet/day and a vertical hydraulic conductivity of 27 feet/day (Franke & Cohen, 1972). Clay layers, such as the Gardiners clay and the "20-Foot-clay," where present, may act as local confining units, separating the Upper Glacial aquifer from the underlying Magothy aquifer which is the principal source of drinking water in Suffolk County. These clay layers extend throughout much of the south shore of Long Island. Based on data collected during monitoring well installation, depth to groundwater at the site ranged from approximately 18.84 to 19.46 feet below ground surface (bgs). No confining unit (clay) was present at the monitoring well locations. Regional groundwater flow at the site is to the south. Based upon the groundwater measurements obtained from the site

monitoring wells on June 6, 2009, local groundwater flow direction was determined to be to the south-southwest (Figure 3).

2.2: Operational/Disposal History

This property has been occupied by many different independent retail gasoline service stations, such as Eastern Petroleum (1983), Major Fuel (1986), National (1987), Independent (1991), and Ocean/Coastal (1991-1998). Suffolk County acquired the property in 1999 for failure to pay property taxes. Since then, the property has been vacant and laid dormant.

Previous investigations/inspections of the property had identified the presence of the former sanitary system, three storm-water drywell (DW-1, 2 and 3), and a floor drain (FD-1). A single four inch diameter Orangeburg pipe ran from the bathroom located at the northeast corner of the building to a leaching cesspool (CP-1) consisting of a six foot diameter block pool approximately six feet deep with a brick chimney and solid concrete cover. An inspection of FD-1 identified the structure to have a solid concrete bottom with a single four inch diameter Orangeburg pipe exiting to the northeast. The pipe was traced from the northwest corner of the building to a leaching drywell DW-3 consisting of a six foot diameter block pool approximately six feet deep with a solid concrete cover. No overflow pipes were identified in CP-1 and DW-3. Stormwater drywell DW-1 was inspected and was found to be constructed of an eight-foot diameter precast concrete ring and had a depth of approximately four feet. The location of underground injection control (UIC) structures, which were properly abandoned in place as a component of two separate IRMs, are identified on Figure 3.

2.3: Remedial History

The site remedial program is being performed by Suffolk County in the Department's Environmental Restoration Program (ERP). Historically, site environmental conditions were assessed by the two site investigations conducted by the Department's Bureau of Spill Prevention and Response (Spill numbers 8703461 and 94-04094), an environmental audit which was conducted in 1998 and a site characterization that was performed in 2006.

1. Remedial Parties and Program. No Remedial parties have been identified. Suffolk County took title in 1999 for failure to pay property taxes. To address the areas of environmental impacts identified at the site, Suffolk County applied for inclusion into the Department's ERP in February 2007. The site was approved for entry in June 2007 and the State Assistance Contract (SAC) was executed by the Department on July 1, 2008.

2. Investigation/Actions.

- The Department opened a spill number (8703461) in 1987 after an underground storage tank (UST) failed a tank test. Three (3) gasoline/diesel USTs and one (1) waste oil UST were removed from the site in 1988. The spill number was closed in late 1988.
- In 1994 the Department opened another spill number (94-04094) after MTBE was detected in an off-site private well, hydraulically down gradient of the subject property. The Department performed a back track investigation from the impacted homes that showed this site was the source of a large plume of petroleum contaminated groundwater. An in depth off-site groundwater investigation was performed which delineated the extent of the off-site petroleum impacts. The Department's spill unit remediated the off-site contaminated groundwater plume by using an Air Sparge/Soil Vapor Extraction System. The system was installed on-site and at off-site locations down gradient of this property and operated until 2003, at which

time it was dismantled and removed. The investigation concluded that impacts to private wells were eliminated through connections to public water, MTBE exposure at Dunton Lake and tidal creeks were not expected to cause adverse impacts to aquatic or terrestrial organism populations and impacts to Bellport Bay were expected to be minimal. As a result, the off-site spill file was closed in 2008.

- In May 1998, Suffolk County Department of Health Services (SCDHS) received the results of an environmental audit that was conducted at the site. The report documented several area of contamination, including underground injection control (UIC) structures.
- A USEPA Target Site Assessment (TSA) was performed in 2006 by the Department's standby consultant.

SECTION 3: LAND USE

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) are being evaluated in addition to unrestricted and restricted residential SCGs because the site is an abandoned gas station which is zoned for commercial use. However, the future use of the site is currently undefined and therefore, the Department will evaluate several soil cleanup objectives (SCOs) found in Table 375-6.8 (b) in assessing the nature and extent of site contamination.

A comparison of the appropriate SCGs (restricted residential) for the identified land use against the unrestricted and residential use SCGs for the site contaminants is included in the Tables for the media being evaluated in section 5.1.2.

SECTION 4: 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.

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. Suffolk County will assist the state in its efforts by providing all information to the state which identifies PRPs. Suffolk County will also not enter into any agreement regarding response costs without the approval of the Department.

SECTION 5: SITE CONTAMINATION

A remedial investigation has been conducted to determine the nature and extent of contamination and to evaluate the alternatives for addressing the significant threats to human health and the environment.

5.1: Summary of the Remedial Investigation

The purpose of the Remedial Investigation (RI) was to define the nature and extent of any contamination resulting from previous activities at the site. The RI was conducted between May and June 2009. 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,
- Survey of residential water supply wells,
- Soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater and soil vapor
- Ecological and Human Health Exposure Assessments.

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 surface and subsurface soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in the following Sections list the applicable SCG in the footnotes. For a full listing of all SCGs see:

http://www.dec.ny.gov/regulations/61794.html

Based on the RI results, in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the site have been impacted. These are summarized in Section 5.1.2. More complete information can be found in the RI Report.

5.1.2: Nature and Extent of Contamination

This section describes the findings for all environmental media that were evaluated. As described in the RI report, groundwater, soil, soil gas and soil vapor intrusion samples were collected to characterize the nature and extent of contamination. See Figure 4 for sample locations.

For each media, a table summarizes the findings of the investigation. The table presents the range of contamination found at the site in each media and compares the data with the applicable SCGs for the site. The contaminants are arranged into three categories; Volatile Organic Compounds (VOCs), semivolatile organic compounds (SVOCs), and inorganics (metals). For comparison purposes the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Residential and Restricted Use SCG identified in Section 3 are also presented.

Groundwater

Extent of Contamination in Groundwater

Groundwater samples were collected to assess groundwater quality on-site and immediately down gradient of the site. Concentrations of VOCs exceeding the Department's groundwater standards were detected in each of

the three groundwater monitoring wells and two of the three temporary geoprobe wells (Figure 5). It is evident that VOC impacts remain in subsurface soils in the former UST area located in the south-central sector of the property. Soil borings installed in that area of the site revealed petroleum staining at the water table as well as elevated PID readings. Elevated levels of VOC compounds were detected in the groundwater immediately down gradient of the former tank bed. A petroleum sheen and odor were also observed when sampling the down gradient wells.

In addition, elevated levels of metals exceeding the Department's groundwater standards were detected in each of the groundwater samples collected. However, many of these metals are naturally occurring and are common in shallow groundwater. Concentrations of metals in groundwater are shown to be greatly reduced when the samples are filtered, as metals tend to adhere to sediments in turbid samples. It should be noted that elevated concentrations of metals are contained only in the samples collected from the permanent monitoring wells. The reason for the elevated concentrations of some of these metals is unknown, as significant sources of these metals in the soils were not encountered during the Remedial Investigation (Table 1).

Table 1 – Groundwater

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
Isopropylbenzene	ND – 66	5	3 of 6
Ethyl Benzene	ND -140	5	2 of 6
m/p-xylene	ND – 120	5	4 of 6
o-Xylene	ND – 81	5	2of 6
SVOCs			
Naphthalene	ND – 45	10	2 of 6
Metals			
Beryllium	ND – 4.43	3	1 of 6
Chromium	ND – 82.6	50	2 of 6
Iron	904 – 83,700	500	6 of 6
Lead	ND – 152	25	3 of 6
Manganese	202 – 1,640	300	2 of 6
Sodium	4,320 – 62,900	20,000	3 of 6

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 primary groundwater contaminants are petroleum based VOCs associated with the operation of the former gas station. Specifically, the remaining petroleum contaminated soil associated with the location of the former underground storage tanks appears to be the cause of the elevated levels of VOCs found in groundwater.

It is not believed that the metals detected in the groundwater samples are a result of an on-site source of contamination. Therefore, the metals found in groundwater are not considered to be site specific contaminants of concern.

Based on the findings of the RI, the release of petroleum has resulted in the contamination of site groundwater. The site contaminants are marginal, yet require that site groundwater be monitored as part of the selected remedy.

Soil

Extent of Contamination in Soil

Surface soil samples were collected at two depths during the Remedial Investigation (RI); 0-2 inches bgs and 1-1.5 feet bgs. Subsurface soil samples were collected at two depths during the RI; 16-18 feet bgs and 22-24 feet bgs. Soil/sludge samples were also collected from the base of on-site UIC structures. The soil/sludge samples collected from the bases of the UIC structures were analyzed for VOCs, SVOCs and metals in accordance with SCDHS and ERP procedures and protocol. Based on the results of soil samples previously collected at the site during the TSA investigation, the surface soil samples were analyzed for the presence of VOCs and metals, while the subsurface samples were analyzed for VOCs only.

The results of the soil samples and UIC structure samples collected as part of the RI were compared to Restricted-Residential Soil Cleanup Objectives (RRSCOs). They were also compared to the Protection of Groundwater SCOs, which are incorporated into the Unrestricted SCOs. None of the surface soil samples collected contained concentrations of VOCs above the RRSCOs. A sample collected from one of the UIC structures (CP-1) contained concentrations of SVOCs above the RRSCOs. In addition, samples collected from two other UIC structures (CP-1 and DW-3) contained concentrations of metals above the RRSCOs. The remediation and closure of the unused site UICs was conducted as a component of the two IRMs that were implemented at the site in October 2008 and April 2010..

Although VOCs were detected in the subsurface soils in the vicinity of the former USTs, the concentrations were below the Restricted Residential Soil Cleanup Objectives (RRSCOs). The remaining VOCs detected in the soil in the vicinity of the former UST tank area exhibited nuance characteristics of petroleum odor and staining and appears to be related to the elevated levels of VOCs detected in the groundwater.

As shown on Table 2, the detected compound that were above unrestricted SCOs, were well below RRSCOs. It should be noted that the UICs, which contained elevated levels of VOCs above RRSCOs have been removed from service as a component of IRMs that have been implemented at the site. A detailed description of the IRMs is presented in Section 5.2.

Table 2 - Soil							
Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCO[b] (ppm)	Frequency Exceeding Unrestricted SCO	Residential SCO[c] (ppm)	Frequency Exceeding Residential SCO	Restricted Residential SCO[d] (ppm)	Frequency Exceeding Restricted SCO
VOCs							
Ethylbenzene	ND – 11	1	1 of 21	30	0 of 21	41	0 of 21
m/p-xylene	ND – 46	0.26	1 of 21	100	0 of 21	100	0 of 21
o-xylene	ND – 23	0.26	1 of 21	100	0 of 21	100	0 of 21
Acetone	ND – 0.26	0.05	1 of 21	100	0 of 21	100	0 of 21

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCO: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.
c - SCO: Part 375-6.8(b), Residential Soil Cleanup Objectives.
d - SCO: Part 375-6.8(b), Restricted Residential Soil Cleanup Objectives.

The primary sub-surface soil contaminants are the petroleum based VOCs associated with the operation of the former gas station. The soil contamination is associated with the petroleum contaminated soils located at the water table interface in the former tank bed area.

Based on the findings of the RI, the release of petroleum has resulted in the contamination of site soil. Since the concentrations of the VOCs in site soils were below the RRSCOs, the soils will be managed as part of the selected remedy.

Soil Vapor Intrusion

Extent of Contamination in Soil Gas

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 and sub-slab soil vapor under the building that formerly existed on-site at the time of the RI. During the implementation of the RI, the on-site building on site was abandoned, so vapor intrusion was not a current concern at the site. No site-related soil vapor contamination of concern was identified during the RI. Therefore, no remedial alternatives need to be evaluated for soil vapor.

Three soil vapor samples, one sub-slab sample, an indoor and an ambient outdoor sample were collected on-site to evaluate the potential for soil vapor intrusion. VOCs were detected in each of the soil gas points at concentrations above laboratory method detection limits. Several of the detected compounds are common constituents in gasoline. Detected compounds, and a comparison to ambient air samples collected, are presented on Table 3.

Using the outdoor air sample as a comparison to the indoor air concentration versus the sub-slab sample collected, VOCs were not intruding into the building that formerly existed on-site. Due to the building displaying signs of structural failure, the building was razed in April 2010.

Table 3 – Sub-Slab/Soil Gas

Detected Constituents in Soil Vapor	Concentration Range Detected (ug/m3)	Indoor Air (ug/m3)	Outdoor Air (ug/m3)
VOCs			
1,2,4-Trimethylbenzene	4.03 – 18.29	ND	2.21
1,3,5- Trimethylbenzene	1.08 – 7.96	ND	ND
1,3 Dichlorobenzene	1.92 – 4.09	ND	ND
2,2,4- Trimethylpentane	3.64 – 204.11	ND	ND
Acetone	32.81 – 80.53	13.42	10.9
Benzene	2.49 – 55.59	0.77	0.67
Carbon disulfide	1.03 – 11.12	ND	ND
Ethyl Benzene	2.35 – 25.84	ND	ND
Heptane	4.02 – 89.34	ND	ND
Hexane	4.44 – 143.79	0.63	0.81
m + p Xylene	7.99 – 76.97	2.5	ND
O Xylene	2.78 – 25.93	ND	ND
Tetrachloroethane	1.42 – 5.97	ND	2.92
Toluene	12.78 – 256.26	ND	2.56
Trichloroethane	ND – 0.27	ND	ND

Based on the findings of the RI, the release of petroleum has resulted in the detection of VOCs in soil vapor. Since the levels detected are marginal and exposure to the levels is non-existent since the single structure that existed on-site was demolished by Suffolk County, the remediation of site soil vapor will not be required.

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 Record of Decision.

Emergency Action IRM I: DW-2

Prior to commencing the RI, a site drywell, DW-2, partially collapsed due to heavy rains. The drywell was slated for evaluation as part of the RI. Since the collapsed drywell posed a hazardous condition to the

surrounding public, an emergency action IRM was performed. The objective of the IRM, which was performed by the County on October 7, 2008, was to excavate and backfill the drywell to a level surface with clean fill. The work was conducted in accordance with the approved IRM work plan. Preliminary sludge and bottom samples revealed the presence of elevated concentrations of SVOCs and lead in the structure. Remediation activities were performed using Department of Public Works (DPW) equipment. Liquids contained in the structure were transferred to the adjacent on-site storm water drywell (DW-1). A vacuum powered truck was then used to remove approximately five feet of sediment from the base of the structure. Remedial activities were overseen by a SCDHS representative. Following the cleanout activities, an endpoint sample was collected from the base of the structure. Endpoint sample analytical results indicated that no VOCs, SVOCs, or metals were detected in the endpoint sample at concentrations exceeding applicable unrestricted soil cleanup objectives.

Following collection of the endpoint sample, the structure was permanently abandoned and backfilled with clean sand. Sediments which were removed from DW-2 were placed on poly sheeting inside the building on site for subsequent off-site disposal at a permitted facility. Approximately five cubic yards of sediments were staged inside the building, awaiting disposal. The sediments were sampled and disposed of as a component of the subsequent emergency IRM that was performed in April 2010. Information regarding the IRM performed by the SCDHS, including a description of activities preformed, photos, endpoint sample results, and clean fill receipts, is contained in the RI report.

Emergency Action IRM II: Site UICs and removal of impacted sediments.

In April 2010, an inspection of the single story building that existed on site revealed evidence of structure failure. Due to safety issues regarding the dilapidated building, Suffolk County proceeded with its demolition in accordance with all State and County applicable requirements and regulations. Since demolition activities may damage the integrity of the remaining on-site UIC structures, the UICs were addressed as an interim remedial measure.

Prior to building demolition, the IRM was implemented on April 21, 2010. The scope of work included the removal of impacted sediments from CP-1, DW-3, and FD-1, closure of the on-site structures, and the removal of SVOC impacted sediments from DW-2 that were being stored within the building. Remediation was performed under the supervision of the SCDHS and the Department.

Standing liquids (where present) were removed from the UICs using a vacuum powered truck. The liquids were disposed of in accordance with Federal, State and County regulations. Following the removal of the liquids, a vacuum powered truck was used to remove impacted soils from the base of each impacted structure and from the soil stockpiled in the building from DW-2. The removal of impacted soils from the base of the structure using a vacuum truck and subsequent off-site disposal was conducted in accordance with Federal, State, and County regulations.

The floor drain (FD-1) was visually inspected for cracks and/or penetrations and was found to be in stable condition. Following cleanout, endpoint sampling of CP-1 and DW-3 was conducted. The endpoint samples were collected using a properly decontaminated hand auger. Analytical results for the samples were compared to both the RRSCOs specified in Table 375-6.8(b) of the Department's 6 NYCRR Part 375 Subparts 375-1 to 375-4 and 375-6 (Part 375, RRSCOs for the protection of public health) and the Cleanup Objectives specified in the SCDHS Article 12, Standard Operation Procedure (SOP) 9-95, Pumpout and Soil Cleanup Criteria, January

7, 1999 to determine if remediation of the structures were successful. Post cleanout sampling demonstrated that the impacted sediments/soils had been removed. Each UIC was backfilled with certified clean fill material.

Information regarding the IRM performed, including a detailed description of activities performed, photos, endpoint sample results, and clean fill receipts, is contained in the RI report. A copy of the RI report can be found in the document repositories.

5.3: Summary of Human Exposure Pathways:

This section describes the current or potential human exposures (the way people may come in contact with contamination) that may result from the site contamination. A more detailed discussion of the human exposure pathways can be found in the RI report 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.

Drinking contaminated groundwater is not expected because public water serves the area. Although site access is not restricted, contact with contaminated soils is unlikely since several feet of soil and asphalt cover the site. Exposure via the soil vapor intrusion pathway is considered unlikely, since there are no buildings on the site.

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 Fish and Wildlife Impact Analysis (FWIA), which is included in the RI report, presents a detailed discussion of the existing and potential impacts from the site poses to fish and wildlife receptors.

The site is within an area containing a mix of both commercial and residential uses.

SVOCs and metals were detected in two of the UIC structures at the site. These two structures have been removed from service as a component of IRMs that have been implemented at the site. Therefore, the future migration of these contaminants into groundwater is unlikely.

Groundwater samples collected on the site, and immediately offsite, contained elevated concentrations of

VOCs. The full extent of VOC impacts has been identified as part of the site investigations. The results concluded that the VOCs in groundwater exceeded applicable groundwater standards.

The nearest surface-water body is Hedges Creek/Dunton Lake located approximately 5,000 feet to the south-southeast. Based upon site topography, overland flow to this surface-water body is unlikely. Exposure to VOCs detected in groundwater at Dunton Lake and tidal creeks is not expected to cause adverse impacts to aquatic or terrestrial organism populations. As a result, the FWIA did not identify any current or potential impacts to ecological resources.

SECTION 6: 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 objectives for this site are:

Public Health Protection

Groundwater

- Prevent people from drinking groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with contaminated groundwater.
- Prevent inhalation of contaminants from groundwater.

Soil

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of contaminants volatilizing from the soil.

Environmental Protection

Groundwater

- Restore the groundwater aquifer to meet ambient groundwater quality criteria, to the extent feasible.
- Prevent discharge of contaminated groundwater to surface water.

Soil

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

SECTION 7: SUMMARY OF THE EVALUATION OF ALTERNATIVES

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. Potential remedial alternatives for the Site were identified, screened and evaluated in the alternative analysis report which is available as a component of the RI report at the document repositories established for this site.

A summary of the remedial alternatives that were considered for this site is presented below. 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.

7.1: Description of Remedial Alternatives

The following alternatives were considered to address the contaminated media identified at the site as describe in Section 5:

Impacts to UIC Structures (Subsurface Soil)

The Remedial Investigation identified concentrations of SVOCs and/or metals exceeding both the RRSCOs and the SCDHS Action Levels in two of the three UIC structures. These structures include CP-1 and DW-3 and were located on the north side of the building (Figure 3). These structures have been properly removed from service as a component of two previously implemented IRMs.

Impacts to Surface/Subsurface Soil

None of the surface and/or subsurface soil samples collected as part of the Remedial Investigation contained concentrations of VOCs above Restricted Residential Soil Cleanup Objectives (RSCOs). Elevated levels of VOC compounds were detected in soils immediately down gradient of the former tank bed. Some soil staining and petroleum odor was detected in borings installed in the area. As a result, the soil will be managed as part of a site management plan.

Impacts to Groundwater

The Remedial Investigation identified elevated concentrations of VOCs in the soil and groundwater beneath the site. Remaining VOCs exist in the area of the former underground storage tank bed in the vicinity of the water table and have impacted site groundwater.

Alternative 1: No Action

The No Action Alternative is evaluated as a procedural requirement and as a basis for comparison. This alternative leaves the site in its present condition and does not provide any additional protection to public health and the environment.

Alternative 2: Groundwater Monitoring

This remedial method includes the installation of a monitoring well network and periodic sampling of site groundwater to monitor the detected constituents in the groundwater. The sampling frequency and duration is based on current groundwater conditions. The frequency is often adjusted based on sampling results.

Under this alternative potential contact with site VOC contaminants would not be eliminated and the apparent source of the groundwater contamination would not be removed. Monitoring of the levels of contamination found in groundwater would occur.

An environmental easement would be put in place which would require a site management plan. The site management plan would be developed to monitor the groundwater at the site and the remaining contaminated soils located at the water table. The plan would also monitor site activities to ensure that individuals are not exposed to contaminated soil and groundwater during future redevelopment. The plan would require the installation of additional site monitoring wells, provide long-term groundwater monitoring and provide groundwater use restrictions.

Present Worth: ..... $ 24,300
Capital Cost: ..... $ 15,000
Annual Costs (1- 2 years): ..... $ 5,000

Alternative 3: Air Sparge / Soil Vapor Extraction System Installation

As described in the Department's guidance document DER-15, *Presumption / Proven Remedial Technologies,* Soil Vapor Extraction (SVE) is a primary presumptive remedy, and has been selected most frequently to address VOC contamination. Available performance data indicate that it effectively treats soils in place at a relatively low cost. SVE can be either an in-situ or ex-situ process which physically removes contaminants from unsaturated zone soils by inducing air flow through the soil matrix. The flowing air strips volatile compounds from the soil and carries them to extraction points. The recovered vapors often require further treatment. An SVE system may be coupled with groundwater extraction (commonly called dual phase extraction) to expose the vadose zone in the capillary fringe by groundwater pumping while simultaneously volatilizing the remaining contamination in the vadose zone with SVE.

Air sparging is an in-situ technology in which air is injected through a contaminated aquifer. Injected air traverses horizontally and vertically through the pore spaces in the soil, removing contaminants by volatilization. This injected air helps to flush (bubble) the volatile contaminants up into the unsaturated zone where a vapor extraction system is usually implemented in conjunction with air sparging to remove the generated vapor phase contamination. Another benefit of using air sparging for petroleum is the stimulation of bio-degradation. This technology creates air channels which promote the volatilization of dissolved VOCs and adsorbed contamination.

This alternative achieves all of the SCGs discussed in Section 5.1.1 and soil meets the unrestricted soil cleanup objectives listed in Part 375-6.8 (a). This alternative would include the installation of a remedial system: an air sparge / soil vapor extraction (SVE) system.

The SVE system would continue operation until all soil contamination has been addressed and a source of groundwater contamination is eliminated.

To ensure compliance with the objectives of this alternative, an environmental easement would be put in place requiring a site management plan. The site management plan would be developed to: i) address remaining contaminated soils that may be excavated from the site during future redevelopment. The plan would require soil characterization and, where applicable, disposal/reuse in accordance with the Departmental regulations; ii) provide long-term groundwater monitoring; iii) provide operation and maintenance of the soil vapor extraction system; iv) provide groundwater use restrictions; v) identify any use restrictions.

Present Worth: $584,000
Capital Cost: $300,000
Annual Costs (1- 5 years): $80,000

Alternative 4: Source Area In-Situ Chemical Oxidation with Monitoring

As described in the Department's guidance document DER-15, *Presumption / Proven Remedial Technologies,* the commonly used oxidizing agents include: ozone, hydrogen peroxide, permanganate, hypochlorite, chlorine, and chlorine dioxide. Ozone, hydrogen peroxide and permanganate are generally preferred for removing organic compounds because chlorine-based oxidants can produce toxic byproducts. UV light is often used in conjunction with oxidants to promote faster and more complete destruction of organic compounds. Complete oxidation decomposes hydrocarbons into carbon dioxide and water, although chlorinated organic compounds also yield chloride ions. Oxidants are generally added to contaminated groundwater in a mixing tank prior to introduction into the reaction vessel. Post treatment of the aqueous effluent with granulated activated carbon (GAC) may be necessary if destruction is not complete or if toxic byproducts are formed during oxidation. Chemical oxidation may be used in-situ by injecting them directly into the groundwater.

This alternative achieves all of the SCGs discussed in Section 5.1.1 and soil meets the unrestricted soil cleanup objectives listed in Part 375-6.8 (a). This alternative would include in-situ chemical oxidation.

Under this alternative potential contact with site VOC contaminants would be eliminated by the destruction of the VOCs via chemical oxidation. This alternative would inject an oxidant over the approximately 800 square foot area that encompasses the former tank bed area.

To ensure compliance with the objectives of this alternative, an environmental easement would be put in place requiring a site management plan. The site management plan would be developed to: i) address remaining contaminated soils that may be excavated from the site during future redevelopment ii) provide long-term groundwater monitoring; iii) provide operation and maintenance of the soil vapor extraction system; iv) provide groundwater use restrictions; v) identify any use restrictions.

Present Worth: $143,300
Capital Cost: $100,000

Annual Costs (1- 5 years): $10,000

7.2 Evaluation of Remedial Alternatives

The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375, which sets forth the requirements for the remediation of contaminated sites in New York. A detailed discussion of the evaluation criteria and comparative analysis is included in the alternative analysis 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.

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.

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.

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.

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.

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.

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 for each alternative are presented in the Remedial Alternatives Cost Table 4.

Table 4
Remedial Alternative Costs-Groundwater

Remedial Alternative	Capital Cost ($)	Annual Costs ($)	Total Present Worth ($)
Alternative 1: No Action	0	0	0
Alternative 2: Groundwater Monitoring	$ 15,000	$ 5,000	$ 24,300
Alternative 3: Alternative 3: Air Sparge / Soil Vapor Extraction System Installation	$300,000	$80,000	$ 584,000
Alternative 4: In-Situ Chemical Oxidation	$ 100,000	$ 10,000	$ 143,300

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.

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.

SECTION 8: SUMMARY OF THE PROPOSED REMEDY

The Department is proposing Alternative 2: Groundwater Monitoring for site groundwater as the remedy for this site. The elements of this remedy are described at the end of this section.

8.1 Basis for Selection

The proposed remedy is based on the results of the RI and the evaluation of alternatives.

Alternative 1 (No Further Action) does not provide any protection to public health and the environment and will not be evaluated further.

Alternatives 3 (Air Sparge / SVE System) does satisfy the threshold criteria and provides the best balance of the balancing criterion described in Section 7.2. It would achieve the remediation goals for the site by eliminating the VOCs in the soils located above the water table interface. It would prevent the leaching of contamination of groundwater resulting from the rise and fall of the water table through the contaminated soil and it addresses the apparent source of groundwater contamination that exists in the former UST area. However, based on the limited levels of VOCs detected in groundwater, this alternative is not cost effective.

Alternative 4 (In-Situ Chemical Oxidation) does satisfy the threshold criteria and provides a methodology to reduce the toxicity, mobility or volume of the wastes at the site. It would achieve the remediation goals by oxidizing VOCs in the soils located at the water table interface and would require long term monitoring. However, the cost associated with the implementation of this alternative is not the most efficient alternative to address the levels of VOCs in groundwater resulting from the remaining soil contamination detected at the site.

Alternatives 2 (Groundwater Monitoring) does not remove/eliminate the VOCs in on-site soil at depth that is acting as a source of groundwater contamination. However, since VOC levels in on-site groundwater are marginally above SCGs and the petroleum compounds detected in groundwater will naturally degrade over time, the most appropriate alternative is the installation and sampling of a groundwater monitoring network as part of a site management plan to insure that there is a continuing downward trend in the VOCs detected in groundwater.
In addition, even though site soils meet residential SCOs, the site has had a long history of spills and leaks coupled with the fact that site soils at depth in the area of the former tank bed exhibited nuance characteristics of petroleum odor and color, a soil management plan will be required of the site. The plan would be put in place to monitor site soils and will control any future excavation that would occur at the property.

For site groundwater, the estimated present worth cost to implement the remedy is $ 24,300. The cost to construct the remedy is estimated to be $ 15,000 and the estimated average annual costs for 2 years is $ 5,000.

8.2 **Elements of the Proposed Remedy**

The elements of the proposed restricted use remedy are as follows:

1. A remedial design program would be implemented to provide the details necessary for the operation, maintenance, and monitoring of the remedial program.

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

   (a) requires the 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).

   (b) land use is subject to local zoning laws, the remedy allows the use and development of the controlled property for
   □ residential use X restricted residential use □ commercial use □ industrial use

(c) restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the Department, NYSDOH or County DOH;

(d) prohibits agriculture or vegetable gardens on the controlled property;

(e) requires compliance with the Department approved Site Management Plan;

3. Since the remedy results in contamination remaining at the site that does not allow for unrestricted use, 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 assure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls:

The Environmental Easement discussed in Paragraph 2 above.

Engineering Controls:

This plan includes, but may not be limited to:

(i) Soil Management Plan which details the provisions for management of future excavations in areas of remaining contamination; and

(ii) descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions; and

(iii) provisions for the management and inspection of the identified engineering controls; and

(iv) the steps necessary for the periodic reviews and certification of the institutional controls;

(b) A monitoring plan to assess groundwater quality at the site. The plan includes, but not be limited to:

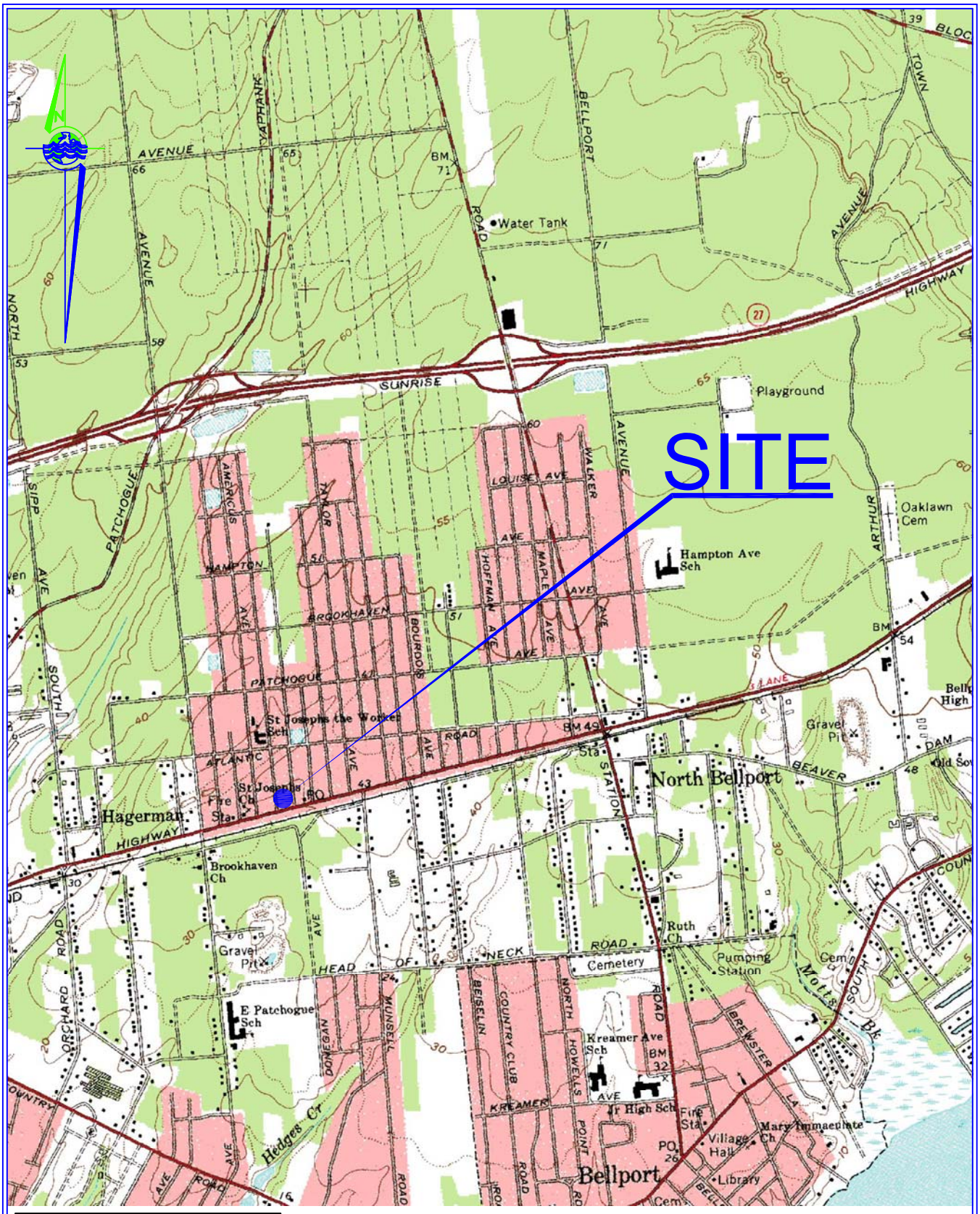
(i) monitoring of groundwater on-site and immediately off site in a downgradient direction; and

(ii) a schedule of monitoring and frequency of submittals to the Department;

(iii) A detailed description of the monitoring program will be incorporated in a Remedial Work Plan (RWP). The RWP will be developed and implemented in accordance with applicable Departmental procedures.

4. To maximize the net environmental benefit, Green remediation and sustainability efforts are considered in the design and implementation of the remedy to the extent practicable, including;

- energy efficiency and green building design
- using renewable energy sources
- reducing green house gas emissions
- encouraging low carbon technologies
- foster green and healthy communities
- conserve natural resources
- increase recycling and reuse of clean materials
- preserve open space and working landscapes
- enhance recreational use of natural resources



Mapped, edited, and published by the Geological Survey
Revised in cooperation with New York
Department of Transportation
Control by USGS, USC&GS, and New Jersey Geodetic Survey

VICINITY MAP

SCALE: 1:24,000

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Project: SHD0902	Figure No: 1
Designed by: DE	
Approved By: PWG	
Drawn By: LLG	Date: 6/22/09

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DESIGNED BY:	DE	DATE:	2/2/10
DRAWN BY:	LLG	SCALE:	AS SHOWN

SHEET TITLE

AERIAL PHOTO

FORMER BELLPORT GAS STATION SITE
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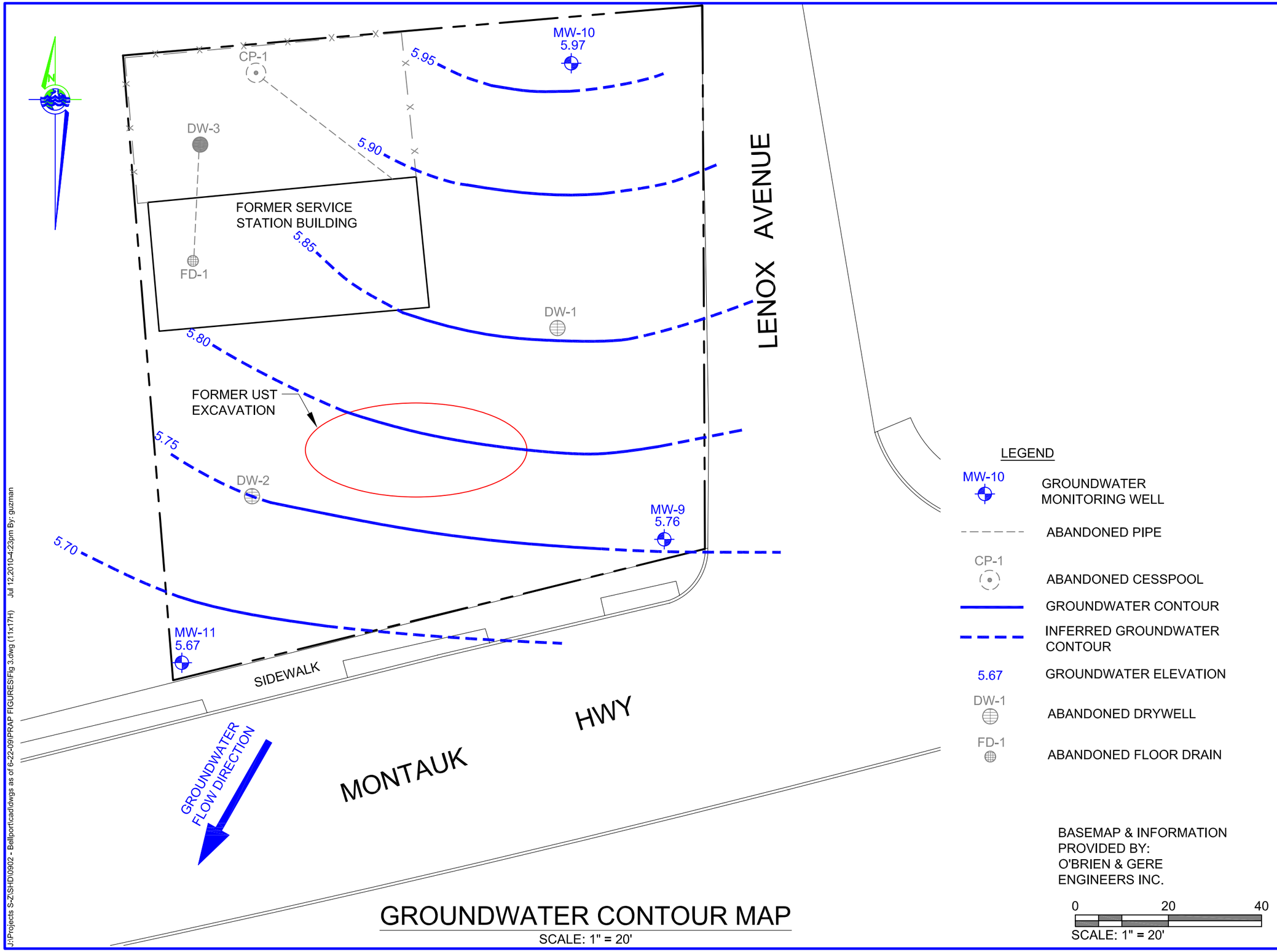
FIGURE NO 2

SHEET - OF -



GROUNDWATER CONTOUR MAP

SCALE: 1" = 20'

LEGEND

- MW-10 — GROUNDWATER MONITORING WELL
- ABANDONED PIPE
- CP-1 — ABANDONED CESSPOOL
- GROUNDWATER CONTOUR
- INFERRED GROUNDWATER CONTOUR
- 5.67 — GROUNDWATER ELEVATION
- DW-1 — ABANDONED DRYWELL
- FD-1 — ABANDONED FLOOR DRAIN

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SCALE: 1" = 20'

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DESIGNED BY:	DE	DATE:	6/22/09
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SHEET TITLE

GROUNDWATER CONTOUR MAP

FORMER BELLPORT GAS STATION SITE
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FIGURE NO 3

SHEET - OF -

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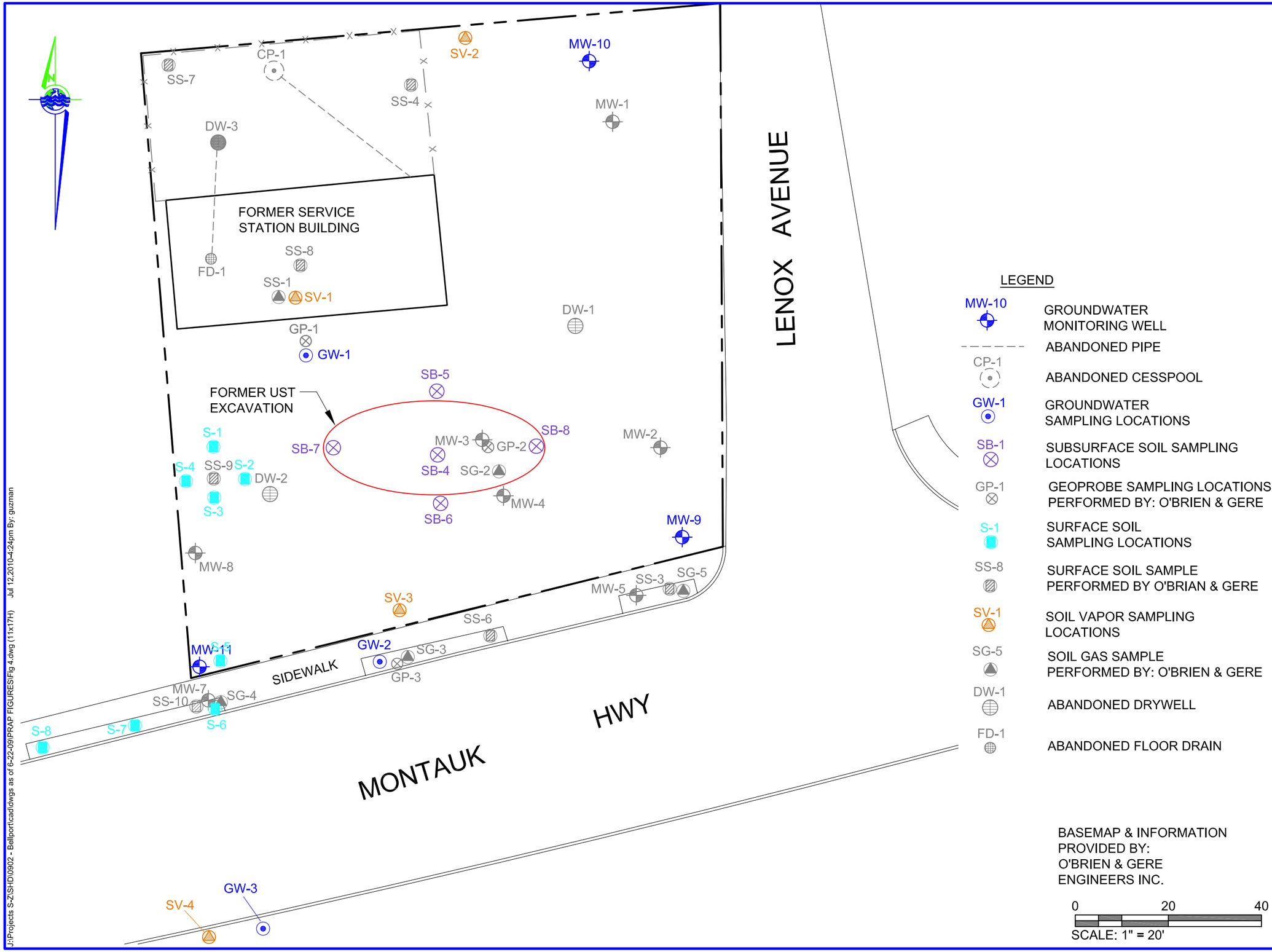

LEGEND

MW-10	GROUNDWATER MONITORING WELL
- - - - - -	ABANDONED PIPE
CP-1	ABANDONED CESSPOOL
GW-1	GROUNDWATER SAMPLING LOCATIONS
SB-1	SUBSURFACE SOIL SAMPLING LOCATIONS
GP-1	GEOPROBE SAMPLING LOCATIONS PERFORMED BY: O'BRIEN & GERE
S-1	SURFACE SOIL SAMPLING LOCATIONS
SS-8	SURFACE SOIL SAMPLE PERFORMED BY O'BRIAN & GERE
SV-1	SOIL VAPOR SAMPLING LOCATIONS
SG-5	SOIL GAS SAMPLE PERFORMED BY: O'BRIEN & GERE
DW-1	ABANDONED DRYWELL
FD-1	ABANDONED FLOOR DRAIN

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SITE PLAN / SAMPLING LOCATIONS

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FIGURE NO 4

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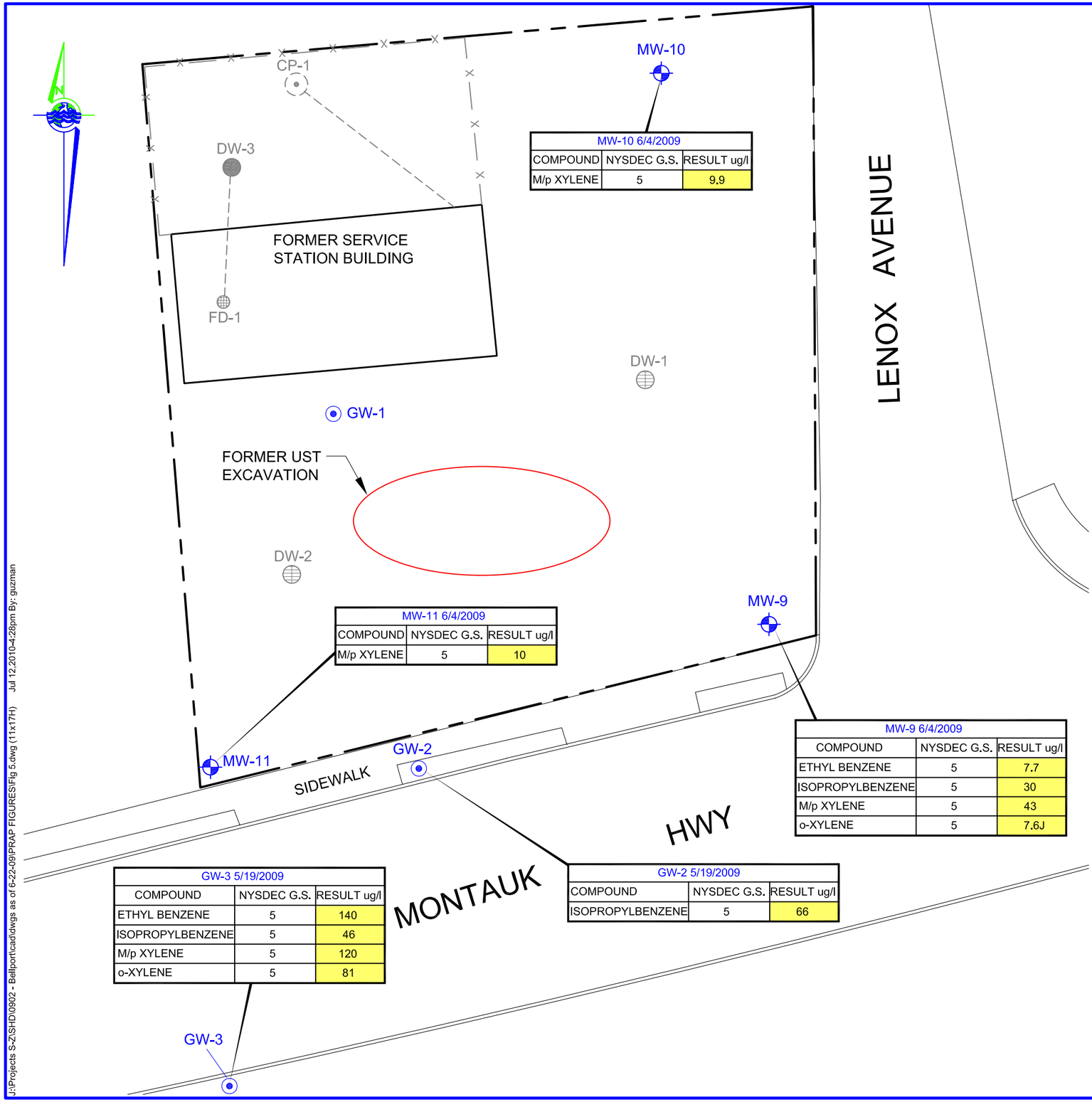

MW-10 6/4/2009		
COMPOUND	NYSDEC G.S.	RESULT ug/l
M/p XYLENE	5	9.9

MW-11 6/4/2009		
COMPOUND	NYSDEC G.S.	RESULT ug/l
M/p XYLENE	5	10

MW-9 6/4/2009		
COMPOUND	NYSDEC G.S.	RESULT ug/l
ETHYL BENZENE	5	7.7
ISOPROPYLBENZENE	5	30
M/p XYLENE	5	43
o-XYLENE	5	7.6J

GW-3 5/19/2009		
COMPOUND	NYSDEC G.S.	RESULT ug/l
ETHYL BENZENE	5	140
ISOPROPYLBENZENE	5	46
M/p XYLENE	5	120
o-XYLENE	5	81

GW-2 5/19/2009		
COMPOUND	NYSDEC G.S.	RESULT ug/l
ISOPROPYLBENZENE	5	66

LEGEND

GW-1	GROUNDWATER SAMPLING LOCATIONS
MW-10	GROUNDWATER MONITORING WELL
- - - - - -	ABANDONED PIPE
CP-1	ABANDONED CESSPOOL
DW-1	ABANDONED DRYWELL
FD-1	ABANDONED FLOOR DRAIN
	EXCEEDS NYSDEC AMBIENT WATER QUALITY STANDARDS & GUIDANCE VALUES 6/1998
J	THE ANAYLTE WAS POSITIVELY IDENTIFIED; THE ASSOCIATED NUMERICAL VALUE IS THE APPROXIMATE CONCENTRATION OF THE ANAYLTE IN THE SAMPLE

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0 20 40

SCALE: 1" = 20'

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SHEET TITLE

VOC's IN GROUNDWATER

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FIGURE NO 5

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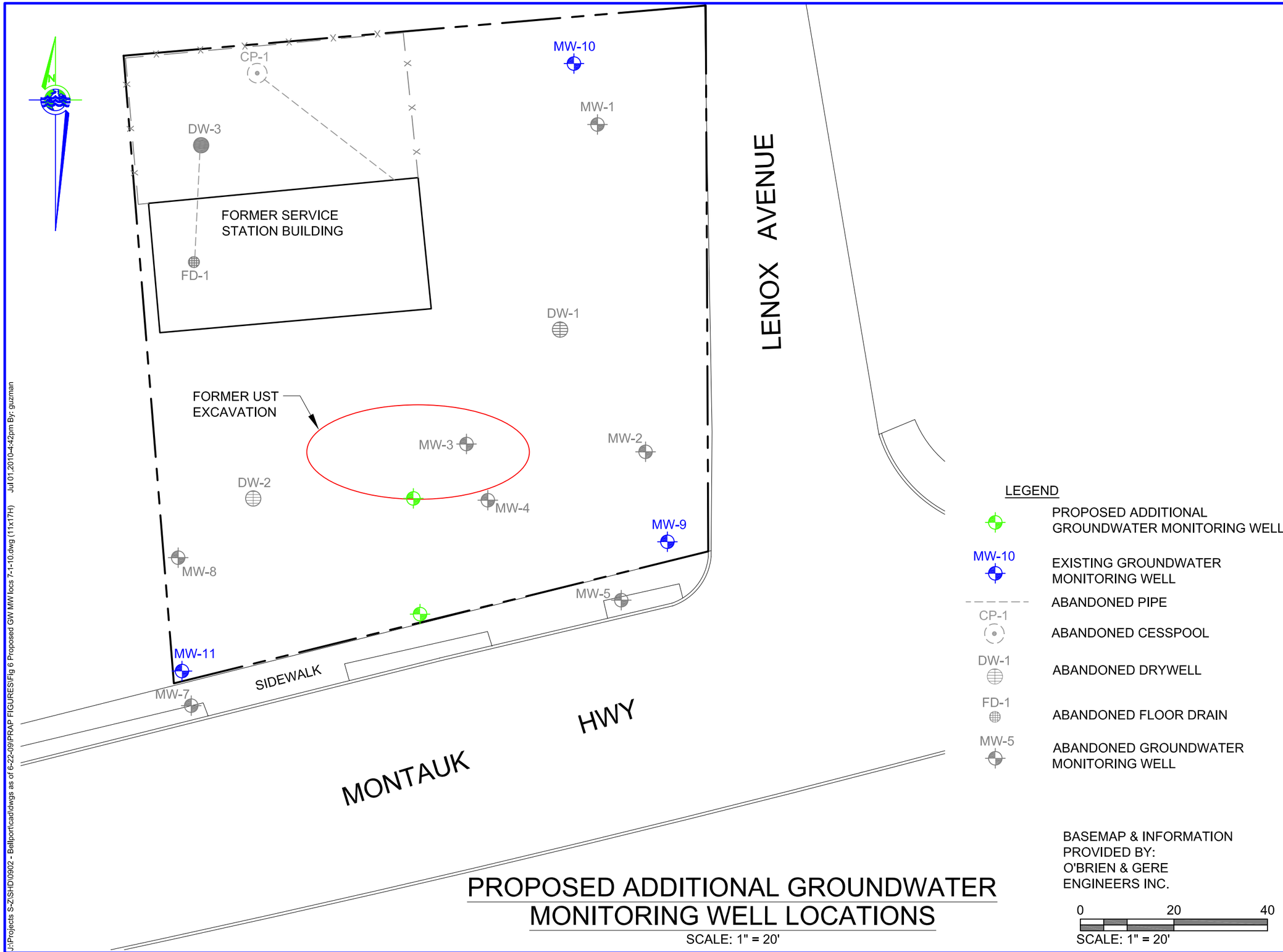

LEGEND

- PROPOSED ADDITIONAL GROUNDWATER MONITORING WELL
- MW-10 — EXISTING GROUNDWATER MONITORING WELL
- ABANDONED PIPE
- CP-1 — ABANDONED CESSPOOL
- DW-1 — ABANDONED DRYWELL
- FD-1 — ABANDONED FLOOR DRAIN
- MW-5 — ABANDONED GROUNDWATER MONITORING WELL

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0 20 40
SCALE: 1" = 20'

PROPOSED ADDITIONAL GROUNDWATER MONITORING WELL LOCATIONS

SCALE: 1" = 20'

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PROPOSED ADDITIONAL GROUNDWATER MONITORING WELL LOCATIONS
FORMER BELLPORT GAS STATION SITE
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FIGURE NO 6

SHEET - OF -

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