DECISION DOCUMENT

Henderson Harbor Mariners' Marina
Voluntary Cleanup Program
Henderson, Jefferson County
Site No. V00585
March 2014

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

DECLARATION STATEMENT - DECISION DOCUMENT

Henderson Harbor Mariners' Marina
Voluntary Cleanup Program
Henderson, Jefferson County
Site No. V00585
March 2014

Statement of Purpose and Basis

This document presents the remedy for the Henderson Harbor Mariners' Marina site, a voluntary cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and applicable guidance.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Henderson Harbor Mariners' Marina site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the remedy are as follows:

1. Remedial Design

A remedial design work plan will be developed to provide the details necessary for the construction, operation, and maintenance and monitoring of the remedial action program. Green remediation principles and techniques will be implemented to the extent feasible in the implementation and site management of the remedy as per the Department guidance, 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 gas 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 will 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. Air Sparge/Soil Vapor Extraction System

Air sparging will be implemented to address the groundwater plume contaminated by volatile organic compounds (VOCs). VOCs will be physically removed from the groundwater and soil below the water table (saturated soil) by injecting air into the subsurface. As the injected air rises through the groundwater, the VOCs volatilize and transfer from the groundwater and/or soil into the injected air. The VOCs are carried with the injected air into the vadose zone (the area below the ground surface but above the water table) where a soil vapor extraction (SVE) system is used to remove the injected air. The SVE system applies a vacuum to wells that have been installed into the vadose zone to remove the VOCs along with the air introduced by the sparging process. The air extracted from the SVE wells is then treated as necessary prior to being discharged to the atmosphere.

At this site, air injection wells will be installed in the source removal area to a depth of approximately 5-8 feet below grade, which is approximately 3 feet below the average water table depth. The horizontal collectors installed during the IRM will be used to capture the volatilized contaminants. The air containing VOCs in the horizontal collectors will be tested to determine whether treatment is necessary. If necessary, the air will be treated using technology such as passing the air stream through activated carbon which removes the VOCs from the air prior to it being discharged to the atmosphere.

3. Site Cover

A site cover currently exists and will be maintained to allow for commercial use of the site. Any site redevelopment will maintain a site cover, which may consist either of the structures such as buildings, pavement and 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 a 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).

4. Institutional Control

Imposition of an institutional control in the form of a Deed Restriction 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 and industrial use 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 New York State Department of Health(NYSDOH) or County DOH; and

- requires compliance with the Department approved Site Management Plan.

5. Site Management Plan

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 remain effective:

- Institutional Controls: The Deed Restriction discussed above;

- Engineering Controls: After it is modified; the active air sparge/soil vapor extraction system and the site cover;

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination.

- descriptions of the provisions of the Deed Restriction including any land use and groundwater use restrictions;

- a provision for evaluation of the potential for soil vapor intrusion for any buildings on the site or developed on the site in the future, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;

- provisions for the management and inspection of the identified engineering controls;

- maintaining site access controls and Department notification; and

- 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 is not necessarily limited to:

- monitoring of the air sparge/soil vapor extraction system;

- monitoring of groundwater to assess the performance and effectiveness of the remedy;

- a schedule of monitoring and frequency of submittals to the Department; and

- monitoring for vapor intrusion for any buildings on the site or developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

c. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:

- compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;

- maintaining site access controls and Department notification; and

- providing the Department access to the site and O&M records.

Declaration

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

March 31, 2014
Date

George Heitzman, Director
Remedial Bureau C

DECISION DOCUMENT

Henderson Harbor Mariners' Marina
Henderson, Jefferson County
Site No. V00585
March 2014

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 Voluntary Cleanup Program (VCP) is a voluntary program. The goal of the VCP is to enhance private sector cleanup of brownfields by enabling parties to remediate sites using private rather than public funds and to reduce the development pressures on "greenfields." 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:

New York State Department of Environmental Conservation
Attn: Peter S. Ouderkirk
317 Washington Street
Watertown, NY 13601
Phone: 315-785-2614

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 Henderson Harbor Mariners Marina is located in a rural setting on the eastern shore of Lake Ontario. The site is located northeast of the Military Road in the Hamlet of Henderson Harbor.

Site Features: The site encompasses 0.274 acres. The main site features include the Marina building, the former underground storage tank area, and adjacent boat docks.

Current Zoning and Land Use: The site is zoned as Harbor and its use is commercial. The surrounding parcels are zoned for a combination of residential and commercial use. The site includes the Marina office and customer service area for the Marina.

Past Use of the Site: Activities that led to contamination of the site include discharges from four underground petroleum storage tanks and ancillary equipment used to fill boats, use of an above-ground waste oil storage tank and a gasoline spill that occurred in August of 2000.

Several investigations were conducted prior to the site entering the Voluntary Cleanup Program. A Phase I Environmental Site Assessment was conducted in 2001 that identified four Underground Storage Tanks (USTs). A limited Phase II Environmental Site Assessment was conducted in 2002 that included the installation of eleven (11) soil borings. These borings were converted to temporary monitoring wells. Sampling confirmed the presence of petroleum contaminated soil and groundwater. Based on these investigations, the remedial party applied to the VCP in May 2002.

Site Geology and Hydrogeology: The majority of the site is comprised of up to nine feet of fill consisting of fine to coarse grained sand and gravel underlain by silt with little sand. Groundwater levels are essentially the same as the level of Lake Ontario. The base of the on-site building and surrounding grade ranges from 2.4 to 4.5 feet above the average lake level. Groundwater levels correspond and fluctuate with lake levels. Groundwater predominantly flows radially toward the Lake.

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, at a minimum, alternatives (or an alternative) that restrict(s) the use of the site to commercial use (which allows for industrial use) as described in DER-10, Technical Guidance for Site Investigation and Remediation were/was evaluated.

A comparison of the results of the Remedial Investigation (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 available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

Upstate National Bank (Volunteer) entered into the Voluntary Cleanup Program on August 16, 2002. The Volunteer agreed to investigate and remediate the site in accordance with the executed Voluntary Cleanup Program Agreement (Index #A4-0463-0602).

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

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

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

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil

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

BENZENE	1,2,4-TRIMETHYLBENZENE
TOLUENE	1,3,5-Trimethylbenzene
ETHYLBENZENE	Sec-Butylbenzene
XYLENE (MIXED)	NAPHTHALENE
Isopropylbenzene	METHYL-TERT-BUTYL ETHER (MTBE)

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 Decision Document.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

Tank and Source Removal with Passive Soil Vapor Extraction

The source removal IRM included the removal and off-site disposal of 436 tons of petroleum contaminated soil and five abandoned underground petroleum storage tanks. One above ground fuel tank used for waste oil was cleaned and remains on-site. Some of the contamination behind the sheet pile wall could not be removed during the IRM due to concerns regarding the stability of the wall. Therefore, once the excavation was terminated, soil samples were collected to evaluate the nature and extent of the remaining contamination. The results indicate that the source of contamination has successfully been removed and that only low levels of contamination remain. Prior to backfilling two sets of 4-inch diameter horizontal pipes were installed below grade to provide for interim, passive venting of remaining VOCs in the soil and groundwater and in anticipation of installing an active air sparge and soil vapor extraction system. The piping was connected to vertical 4-inch PVC risers above the building’s roof line. The excavation was backfilled with soil meeting the soil cleanup objectives for commercial use and the protection of groundwater. This IRM was completed between November and December of 2009.

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 RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Based on the investigation and interim remedial measure conducted to date, the primary contaminants of concern are volatile organic compounds and semi-volatile organic compounds related to the release of petroleum contamination from five underground storage tanks and associated piping. An IRM was performed to remove the five USTs, contaminated soil, and contaminated groundwater from the source area.

Soil: The soil borings completed as part of this investigation also defined the extent of the remaining contamination which exists to the south and west of the source area. No contamination remains above the commercial use SCOs. Volatile organics were found above the protection of groundwater SCO and include ethylbenzene at 1.1 ppm (SCO 1 ppm), xylene from 3.8 ppm – 7.1 ppm (SCO 1.6 ppm), and 1, 2, 4-trimethylbenzene from 5.2 -6.6 ppm (SCO 3.5 ppm). The data indicates that the contamination related to the former USTs has not migrated significantly to the south or west, however, contamination remains beneath the on-site building.

Groundwater: Groundwater sampling conducted during the RI indicates that contaminant concentrations have decreased in six wells (MW-1, MW-9, MW-11, MW-12, T-2 and T-4) following the source removal IRM. Two wells (MW-4 and MW-5) located directly adjacent to the north side of the excavation showed a slight increase in contamination (methyl tertiary butyl ether (MTBE) from 120 ppb to 1100 ppb, benzene from 38 ppb to 430 ppb, toluene from 2.4 ppb to 67 ppb, ethylbenzene from 14 ppb to 150 ppb, total xylene from 17 ppb to 408 ppb, 1,2,4-trimethylbenzene from 7 ppb to 78 ppb and naphthalene from 16 ppb to 300 ppb). These increases are common in areas close to a source, especially when the excavation extends below the water table. Considering this, these wells will likely take longer to attenuate.

MTBE was the only contaminant detected in five of the monitoring wells MW-6, MW-9, T1, T2 and T3). Three of these wells (MW-6, MW-9 and T2) have shown a decrease in MTBE levels from 37 ppb to 25 ppb, 110 ppb to ND and 260 ppb to 24 ppb respectively. The contamination in well T3 increased from 290 ppb to 390 ppb and in well T1 from 32 ppb to 33 ppb.

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*.

Since contaminated soil remains below the on-site building and at depth near the building, people will not come in contact with contaminated soil unless they dig below the building or

ground surface. Contaminated groundwater at the site is not used for drinking or other purposes. Volatile organic compounds in the 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. Based on the presence of contaminated groundwater beneath the on-site building, the potential for soil vapor intrusion exists. Environmental sampling indicates soil vapor intrusion is not a concern for off-site properties.

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.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

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.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

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

The selected remedy is referred to as the Combined Air Sparge with SVE and a Site Cover with Institutional Controls remedy.

The elements of the selected remedy, as shown in Figure 2, are as follows:

1. Remedial Design

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

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;

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- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Air Sparge/Soil Vapor Extraction System

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into the vadose zone to remove the VOCs along with the air introduced by the sparging process. The air extracted from the SVE wells is then treated as necessary prior to being discharged to the atmosphere.

At this site, air injection wells will be installed in the source removal area to a depth of approximately 5-8 feet below grade, which is approximately 3 feet below the average water table depth. The horizontal collectors installed during the IRM will be used to capture the volatilized contaminants. The air containing VOCs in the horizontal collectors will be tested to determine whether treatment is necessary. If necessary, the air will be treated using technology such as; passing the air stream through activated carbon which removes the VOCs from the air prior to it being discharged to the atmosphere.

3. Site Cover

A site cover currently exists and will be maintained to allow for commercial use of the site. Any site redevelopment will maintain a site cover, which may consist either of the structures such as buildings, pavement and 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 a 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).

4. Institutional Control

Imposition of an institutional control in the form of a Deed Restriction 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 and industrial use 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 New York State Department of Health(NYSDOH) or County DOH; and

- requires compliance with the Department approved Site Management Plan.

5. Site Management Plan

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 remain effective:

- Institutional Controls: The Deed Restriction discussed above;

- Engineering Controls: After it is modified; the active air sparge/soil vapor extraction system and the site cover;

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination.

- descriptions of the provisions of the Deed Restriction including any land use and groundwater use restrictions;

- a provision for evaluation of the potential for soil vapor intrusion for any buildings on the site or developed on the site in the future, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;

- provisions for the management and inspection of the identified engineering controls;

- maintaining site access controls and Department notification; and

- 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 is not necessarily limited to:

- monitoring of the air sparge/soil vapor extraction system;

- monitoring of groundwater to assess the performance and effectiveness of the remedy;

- a schedule of monitoring and frequency of submittals to the Department; and

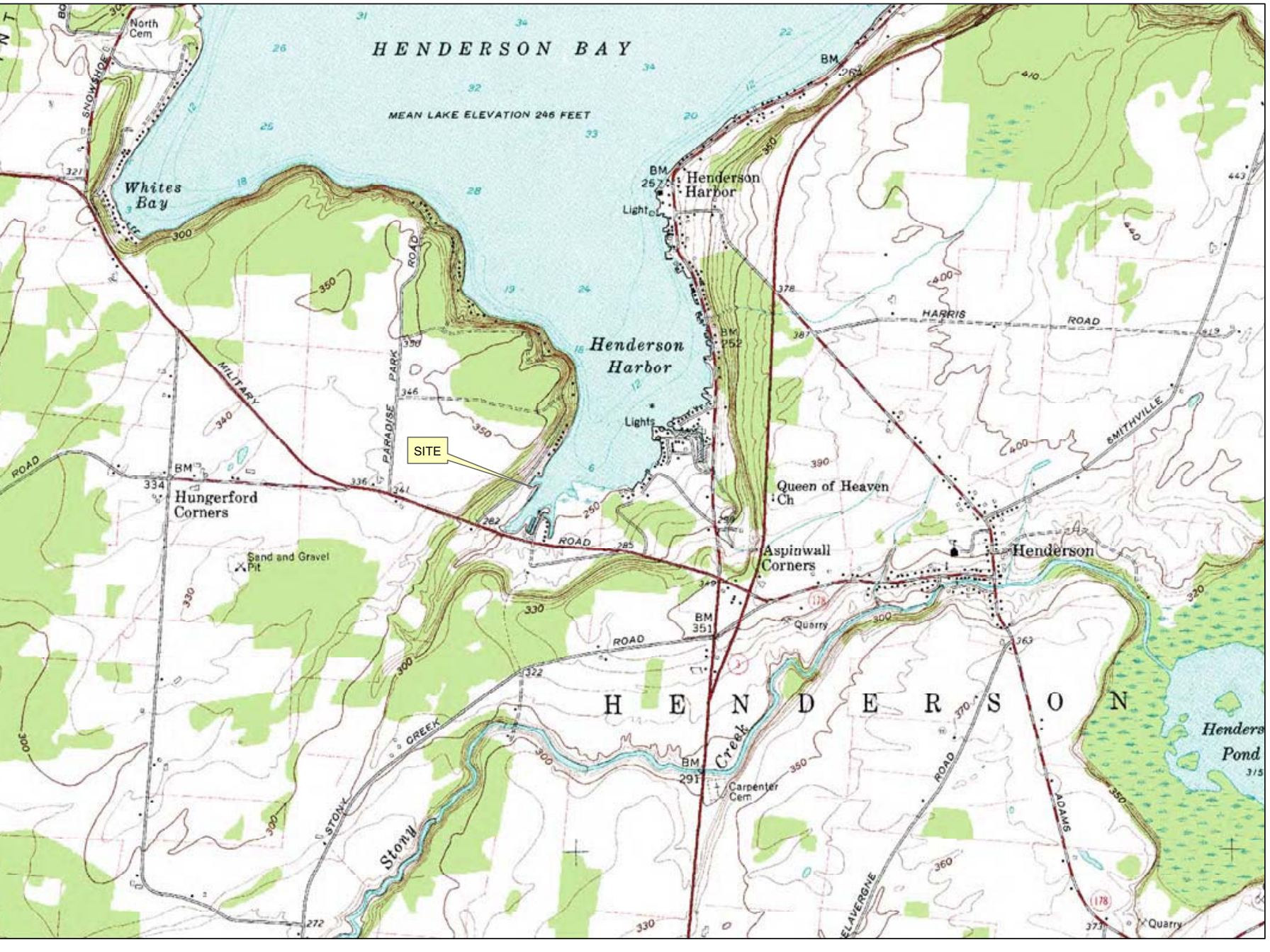
- monitoring for vapor intrusion for any buildings on the site or developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

c. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:

- compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;

- maintaining site access controls and Department notification; and

- providing the Department access to the site and O&M records.



LABELLA Associates, P.C.

RAA/RAWP Report
NYSDEC VCA Index
No. A4-0463-0602
Lake Ontario Mariners Marina
12548 Eastman Tract
Henderson Harbor, New York

Client:
The Upstate National Bank

Project Location with USGS
Topographic Quadrangle

N
W E
S

500 0 1,000
1 inch = 1,500 feet

207820

FIGURE 1

LABELLA Associates, P.C.

RAA/RAWP Report
NYSDEC VCA Index
No. A4-0463-0602
Lake Ontario Mariners Marina
12548 Eastman Tract
Henderson Harbor, New York

Client:
The Upstate National Bank

Site Area Map

N
W E
S

50 0 50
1 inch = 100 feet

207820

FIGURE 2

LABELLA Associates, P.C.

RAA/RAWP Report
NYSDEC VCA Index
No. A4-0463-0602
Lake Ontario Mariners Marina
12548 Eastman Tract
Henderson Harbor, New York

Client:
The Upstate National Bank

Area of Concern
and IRM Excavation
Locations

N
W E
S

0 5 10 15 20 Feet

1 inch = 15 feet

207820

FIGURE 3

LABELLA Associates, P.C.

RAA/RAWP Report
NYSDEC VCA Index
No. A4-0463-0602
Lake Ontario Mariners Marina
12548 Eastman Tract
Henderson Harbor, New York

Client:
The Upstate National Bank

Soil Boring and Monitoring
Well Location Map

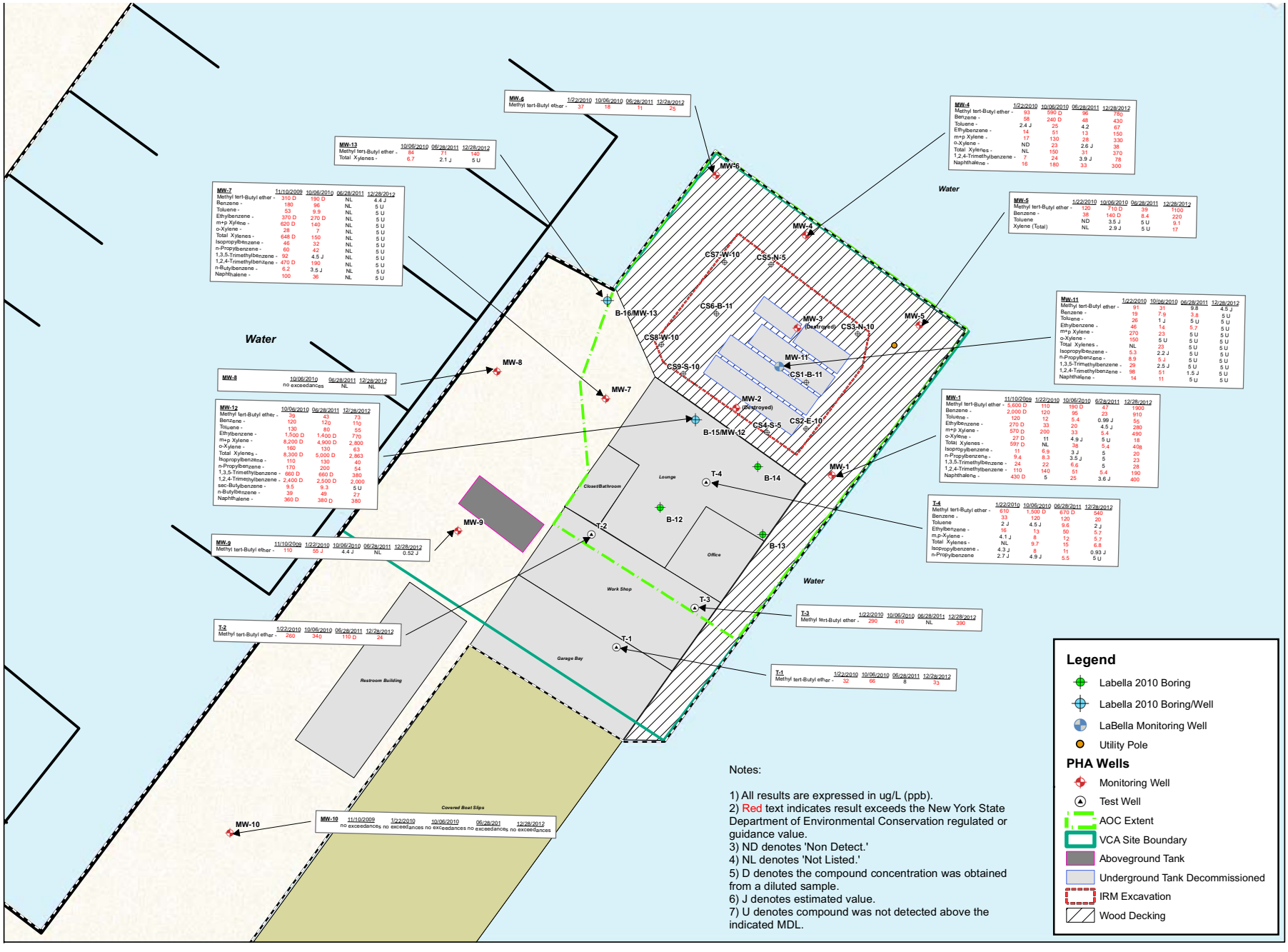
N
W E
S

0 5 10 15 20 Feet

1 inch = 15 feet

207820

FIGURE 4



Notes:

1) All results are expressed in ug/L (ppb).
2) Red text indicates result exceeds the New York State Department of Environmental Conservation regulated or guidance value.
3) ND denotes 'Non Detect.'
4) NL denotes 'Not Listed.'
5) D denotes the compound concentration was obtained from a diluted sample.
6) J denotes estimated value.
7) U denotes compound was not detected above the indicated MDL.

Legend

- Labella 2010 Boring
- Labella 2010 Boring/Well
- LaBella Monitoring Well
- Utility Pole

PHA Wells

- Monitoring Well
- Test Well
- AOC Extent
- VCA Site Boundary
- Aboveground Tank
- Underground Tank Decommissioned
- IRM Excavation
- Wood Decking

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RAA/RAWP Report
NYSDEC VCA Index No. A4-0463-0602
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Client:
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Soil Boring and Monitoring Well Location Map with Groundwater Sample Results

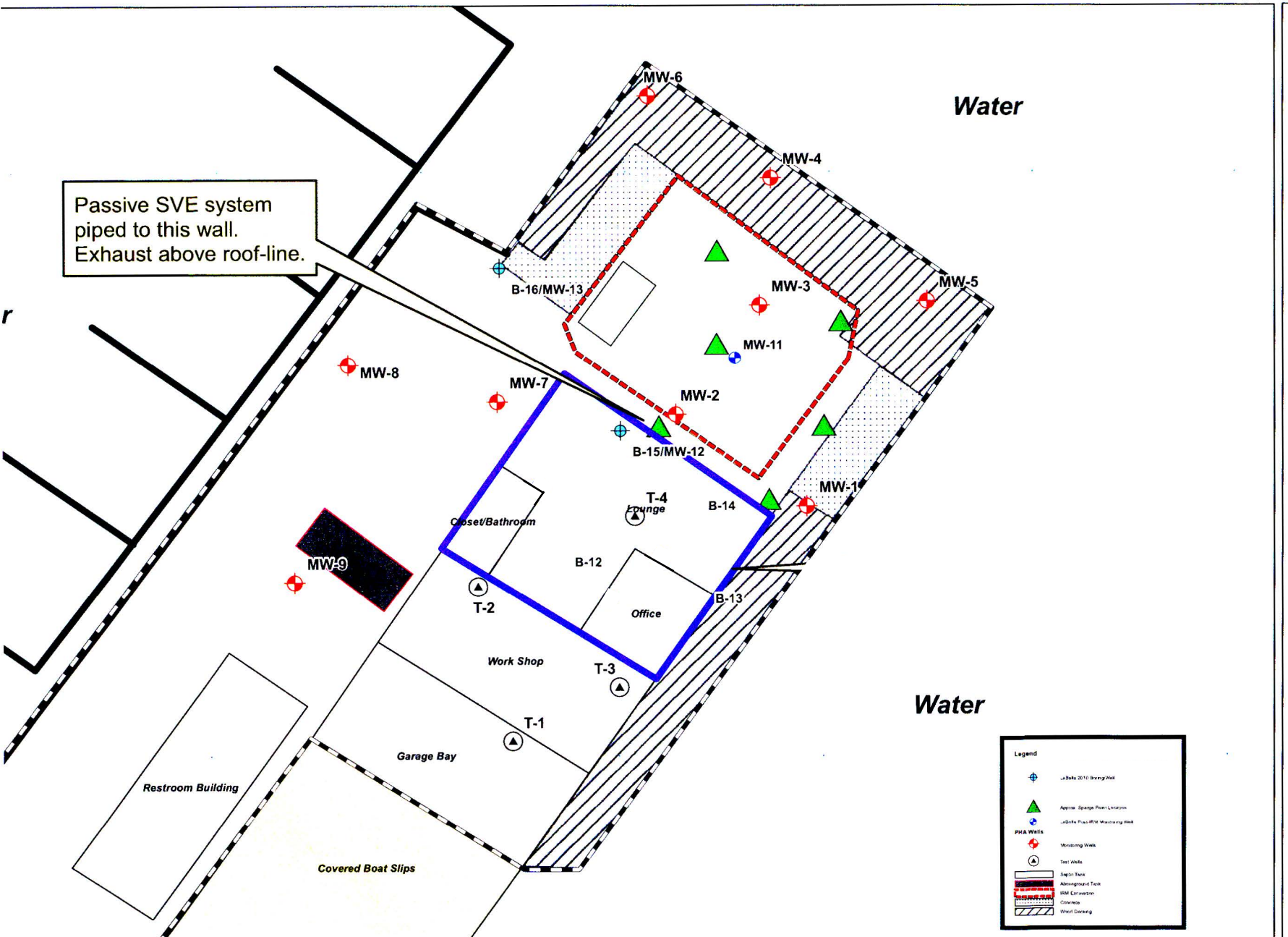
N
W E
S

0 7 14 21 28 Feet

1 inch = 20 feet

207820

FIGURE 5



LABELLA Associates PC

Air Sparging and Sub-Slab Depressurization System Designs

12548 Eastman Tract
Henderson Harbor, NY

10 0 10
1 inch = 15 feet

207820

FIGURE 6