

**SITE MANAGEMENT PLAN  
1 - 15 BUFFALO STREET  
HAMBURG, NEW YORK**

**Prepared For:**

Estate of Anthony C. Ilardo  
c/o Duke, Holzman, Yaeger & Photiadis, LLP  
Buffalo, New York

**Prepared By:**

GZA GeoEnvironmental of New York  
Buffalo, New York

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**SITE MANAGEMENT PLAN  
5 BUFFALO STREET  
HAMBURG, NEW YORK**

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**FIGURE**

FIGURE 1           LOCUS PLAN

FIGURE 2           VAPOR MITIGATION SYSTEM LAYOUT

**ATTACHMENTS**

ATTACHMENT 1    ANNUAL SITE INSPECTION FORM

## 1.00 OVERVIEW AND OBJECTIVES

The Site is an approximate 0.6-acre commercial retail property, currently owned by the Estate of Anthony Ilardo, located at 1 to 15 Buffalo Street in Hamburg, New York. The location of the property is shown on Figure 1. Site conditions have been characterized during several previous investigations, which are identified below.

1. "Phase I Environmental Site Assessment, Retail Buildings, 1-15 Buffalo Street and 20 Buffalo Street, Hamburg, New York" completed for HSBC Bank USA by GZA GeoEnvironmental of New York (GZA), dated January 2003.
2. "Phase II Investigation, 5 and 7 Buffalo Street, Hamburg, New York" completed for Damon & Morey LLP by GZA, dated February 2003.
3. "Additional Environmental Services, 5 Buffalo Street, Hamburg, New York", prepared for Estate of Anthony C. Ilardo c/o Damon & Morey, LLP, by GZA, dated May 2003.
4. "Remedial Investigation Report, 5 Buffalo Street, Hamburg, New York" prepared for the Estate of Anthony C. Ilardo c/o Damon & Morey, LLP, by GZA, dated September 2005.

The user should refer to these investigation reports for more detail, as needed.

The objective of this Site Management Plan (SMP) is to set guidelines for the following.

- Management of soil material that may be generated by subsurface activities resulting from construction, demolition, or utility installation/repair done in and around the Site building; and
- Inspection of the sub-slab vapor mitigation system (VMS) installed within the Site building (see Reference 4 above or the attached Figure 2).

In addition to this SMP, deed restrictions have also been put into place for the Site. The following is a summary of those restrictions.

- The property use must remain similar – restricted commercial/non-residential.
- The alleyway along the eastern portion of the Site must remain unpaved.
- The sump in the basement of 11 Buffalo Street must remain connected to the sanitary sewer system. Additional/future sumps, which may be added, must also be connected to the sanitary sewer.
- The vapor mitigation system (VMS) must be properly operated and maintained.

- Soil excavated and/or removed from the Site must be done in accordance with this SMP.

## **2.00 CONTAMINATES OF INITIAL CONCERN**

Based on data obtained from investigations conducted and during the interim remedial measures (IRM) done at the Site, contaminants of concern were determined to be tetrachloroethylene (PCE) and its breakdown products trichloroethylene (TCE) and 1,2-dichloroethene (1,2-DCE). These contaminants are volatile organic compounds (VOCs) that were primarily identified within surface and subsurface soils located in the alleyway behind (east side) the 5 Buffalo street location and were associated with a dry cleaning business which formerly operated at the Site.

Additional chemical classes of semi-volatile organic compounds (SVOC), polychlorinated biphenyls (PCBs) and metals, were analyzed from one sample collected during the on-Site interim remedial measure (IRM). These chemical classes were either not detected above method detection limits or were not identified at concentrations exceeding their respective New York State standards or guidance values, and are therefore not considered to be a concern at the Site.

### **2.10 SOIL**

Approximately 200-tons of soils impacted with PCE contamination were excavated and removed from the Site as part of our IRM. Small quantities of contaminated soils, with low concentration levels, remain beneath the alleyway behind the Site building and beneath the building's foundation. In these areas, utility lines or stability concerns (close proximity to building foundations) prevented complete excavation of impacted soils.

Due to the depth of residual contamination and clean gravel cover or slab-on-grade cover, it is unlikely for dermal contact or ingestion to occur to commercial workers or patrons at the Site. Therefore, this likelihood of exposure is considered low at this time. However, future intrusive work on-Site should be conducted in accordance with the requirements of this Site Management Plan, including the recognition of potential contaminants of concern, proper health and safety training/monitoring and proper planning.

No additional work is required to address Site soil.

### **2.20 GROUNDWATER**

Two water-bearing units were encountered during the investigations. A discontinuous perched condition was found 6 to 7 feet below ground surface at one location where a sand and silt layer was encountered. No groundwater was encountered during the IRM soil excavation, which was done to a depth of 10 feet bgs. PCE was identified in the perched groundwater at levels above New York State Department of Environmental Conservation (NYSDEC) groundwater/drinking water criteria.

A second and deeper water-bearing zone was measured at a depth of approximately 16 feet below ground surface. A groundwater sample collected from the deeper water bearing zone did not identify VOC contamination. Overburden soil encountered between the two water bearing zones consisted of a dense glacial till (e.g., silty clay).

The Site is serviced by a public water system. Potential human exposure to either water bearing unit is considered low. However, future intrusive work on-Site should be conducted in accordance with the requirements of this Site Management Plan, including health and safety monitoring and proper planning.

No additional work is required to address Site groundwater.

### 2.30 SUMP WATER

Water within the sump, located in the basement at 11 Buffalo Street, contained a detectable concentration of PCE that slightly exceeded its Class GA groundwater (drinking water) standard. The discharge location of the sump was determined to be the Erie County sanitary sewer. The sump was covered with a piece of lexan and sealed with silicone to prevent vapors from migrating from the sump to the basement.

The source of the contamination has been removed from the Site, which should decrease the potential for further impact to sump water and the sump has been repaired to minimize the quantity of water allowed to accumulate within it. Future repairs to the on-Site sump at 11 Buffalo Street should be conducted in accordance with the requirements of this Site Management Plan, including proper health and safety monitoring and planning.

No additional work is necessary to address on-Site sump water.

### 2.40 AMBIENT AND SUB-SLAB AIR

Detectable concentrations of VOCs (e.g., PCE and TCE), within the Site building units, are below NYSDOH air guidance. A sub-slab vapor mitigation system (VMS) was installed, within the Site building (see Figure 2), to mitigate the intrusion of soil vapor, thus maintaining the resulting indoor air quality within regulatory guidance limits.

Excavation or trenching work on utilities at the Site could result in exposure to vapors or residual contaminated soil at locations around the Site building. The likelihood of this exposure is considered low because the majority of the contaminated soils have been removed from the alleyway where the utilities are located. However, future intrusive work on the Site should be conducted in accordance with the requirements of this Site management Plan, including recognition of potential exposure, health and safety monitoring and proper planning.

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### **3.00 CONTEMPLATED USE**

The Site has been approved by NYSDEC for restricted commercial use as permitted in the zoning ordinance of the Town of Hamburg, New York.

### **4.00 PURPOSE AND DESCRIPTION OF SURFACE COVER SYSTEM**

The surface cover system, which exists in the alleyway, was placed to eliminate the potential for human contact with residual contaminated soil. The cover system consists of a 1-foot thick layer of 1-inch crushed stone, graded to allow surface runoff to be directed away from the areas excavated and to discharge to the northern portion of the alleyway. A 2-inch thick concrete slab-on-grade floor exists within the Site building. This 2-inch thick concrete slab should be maintained/repared if it is necessary to cut through the slab to make utility repairs or perform subsurface activities.

### **5.00 MANAGEMENT OF SOIL/FILL AND MAINTENANCE OF COVER SYSTEM**

Breaches of the soil/fill cover system resulting from construction, demolition, or utility work, must be replaced or repaired using an acceptable borrow. The repaired areas must be covered with a 1-foot thick layer of 1-inch crushed stone or, similar material type.

Prior to any construction activities, on-Site workers are to be notified of the Site conditions and instructed regarding how the work is to proceed. All work shall be performed in accordance with applicable local, state and federal regulations to protect worker health and safety.

Excavated on-Site soil/fill, which appears to be visually impacted, shall be sampled and analyzed. One composite sample shall be collected, at a minimum frequency, for each 100-cubic yards of stockpiled soil/fill. The composite sample shall be analyzed by a laboratory certified under the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP). The analysis shall include total compound list (TCL) VOCs via United States Environmental Protection Agency (USEPA) Method 8260. If analytical results indicate that contaminants are present at concentrations below the NYSDEC TAGM 4046<sup>1</sup> recommended soil cleanup objectives (RSCOs), the soil/fill can be used as backfill on-Site. Otherwise, it must be managed, characterized and properly disposed of or reused in accordance with NYSDEC regulations and directives.

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<sup>1</sup> Technical and Administrative Guidance Memorandum (TAGM) HWR-94-4046: Determination of Soil Cleanup Objectives and Cleanup Levels, prepared by NYSDEC, Division of hazardous Waste Remediation, dated January 1994.

Off-Site fill material brought to the Site for filling and grading purposes shall be certified as "virgin" and meet the applicable TAGM 4046 RSCOs. One sample shall be collected from each source for TCL/Total Analyte List (TAL) analysis.

Annually, on or before January 15<sup>th</sup>, the Site Owner shall submit to NYSDEC an Annual Report certification that the conditions of the deed restriction are still in place, have not been altered and are still effective; that the protective cover and VMS have been maintained; and that the conditions at the Site remain protective of public health and the environment. Included in the Annual Report will be the Annual Inspection Form (see Attachment 1). An individual not affiliated with the Site owner that, at a minimum, has a four-year degree in an environmental science related field must complete the Annual Inspection Form.

If the cover systems are breached during the year covered by that Annual Report, the owner of the property shall include a further certification that work was performed in conformance with this SMP.

## **6.00 INSPECTION AND MANAGEMENT OF SUB-SLAB VAPOR MITIGATION SYSTEM**

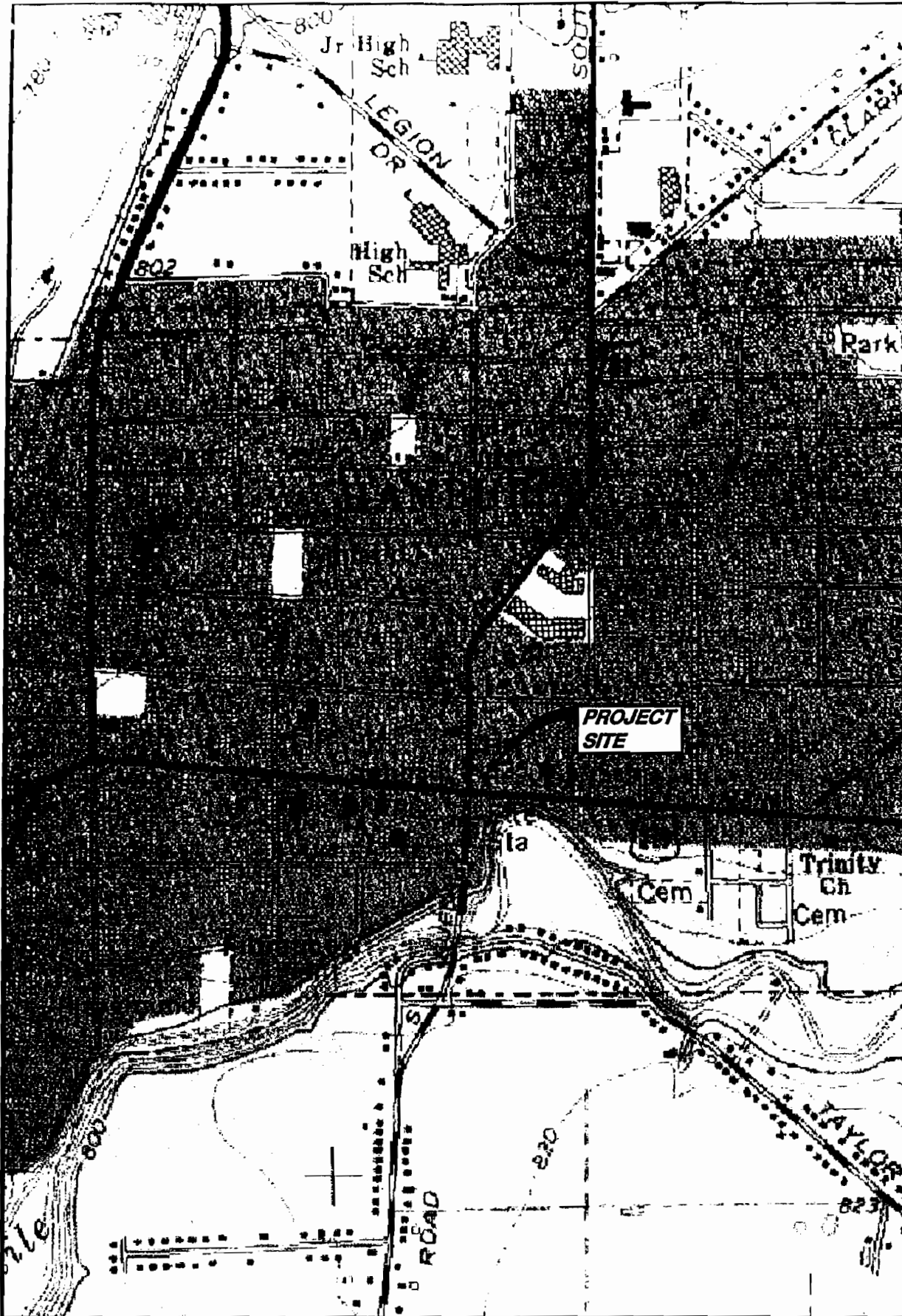
A breach of the sub-slab VMS must be repaired using materials similar to those used in the construction of the original VMS. Should the cover system be breached, it must also be repaired so that the function of the VMS is not compromised. Prior to the shut down or disconnection of the VMS, NYSDEC must be notified. Workers should be advised of Site conditions and instructed in the manner in which the VMS works.

The VMS manometers (see Attachment 2, Pictures), located on the vertical PVC stand pipes within the 5 and 9 Buffalo Street units, should be visually inspected periodically from March to November and monthly the during winter months (December to February). The visual inspection should check that the VMS is operating at a vacuum similar its installed marked. Visual inspections should be noted on the inspection form located next to the manometer identifying the date, level of the reading and individual performing the inspection. If variations in the manometer readings are observed, personnel identified on the "VMS Contact Information Sheet" affixed near the manometer should be notified.

In addition to the manometer, the VMS fan (see picture in Attachment 2) located on the exterior of the building should be checked monthly for ice blockage during the late fall, winter and early spring months (November through March). If ice blockage is occurring personnel identified on the "VMS Contact Information Sheet" should be notified.

**FIGURES**





**NOTE:**

BASE MAP ADAPTED FROM U.S.G.S.  
TOPOGRAPHIC MAPS DOWNLOADED  
FROM TERRASERVER.MICROSOFT.COM



**SITE MANAGEMENT PLAN**  
**15 BUFFALO STREET SITE**  
**HAMBURG, NEW YORK**

PROJECT No.  
**21.0055727.10**

FIGURE No.

SCALE IN FEET



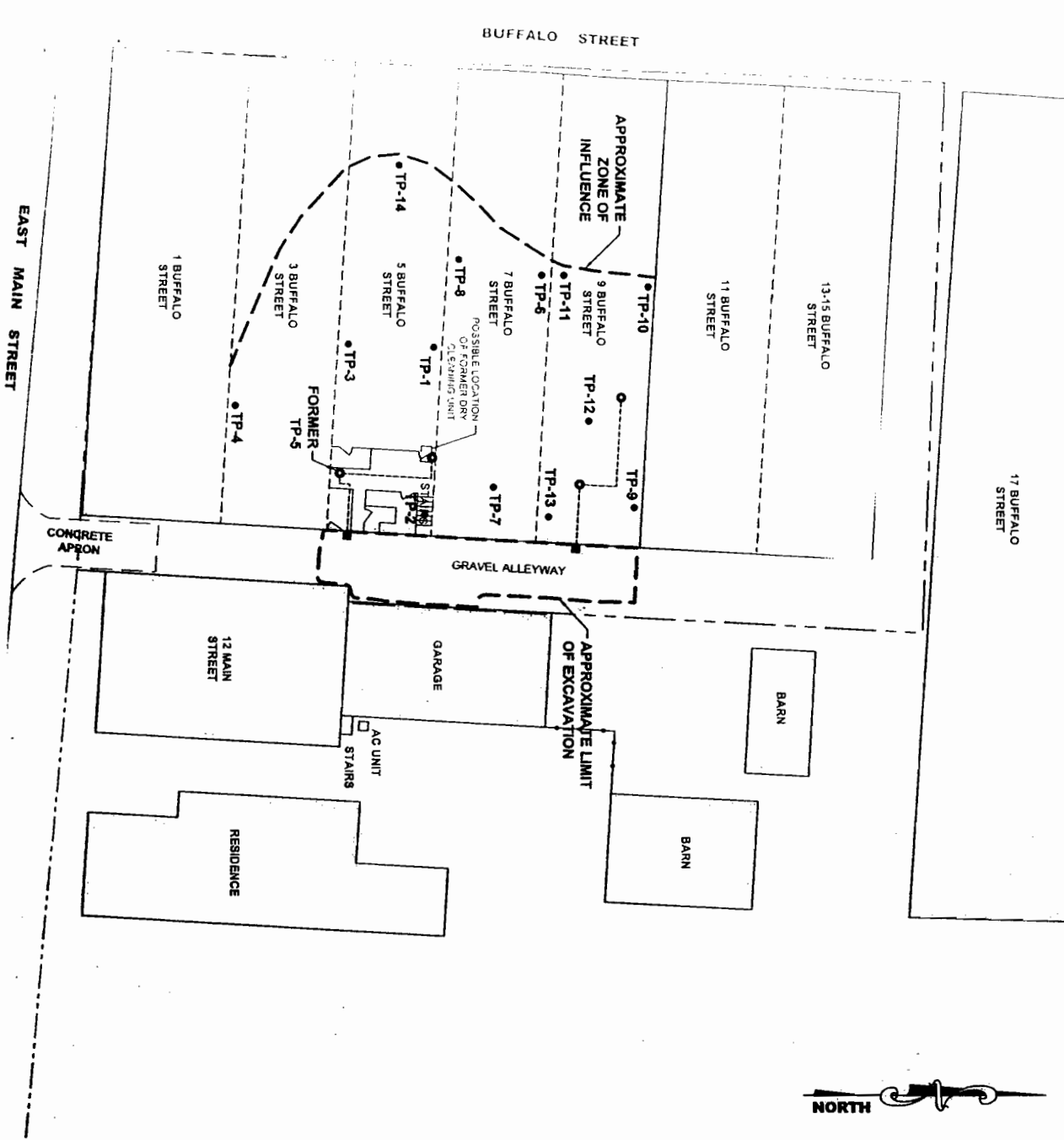
DRAWN BY: DEW

DATE: FEBRUARY 2006



GZA GeoEnvironmental of  
New York

**LOCUS PLAN**



**LEGEND:**

- TP-1 • APPROXIMATE LOCATION AND DESIGNATION OF TEST POINT
- APPROXIMATE LOCATION OF VAPOR MITIGATION SYSTEM SUCTION POINT
- APPROXIMATE LOCATION OF VAPOR MITIGATION SYSTEM 3/8" PVC TRANSFER LINES
- APPROXIMATE LOCATION OF VAPOR MITIGATION SYSTEM DISCHARGE, APPROXIMATELY 2' ABOVE BUILDING ROOF

**NOTES:**

1. BASE MAP ADAPTED FROM AN AERIAL PHOTOGRAPH TAKEN IN 1995, A HAMBURG, NEW YORK TAX ASSESSORS MAP AND FIELD MEASUREMENTS/OBSERVATIONS MADE BY GZA.
2. THE SIZE AND LOCATION OF EXISTING SITE

<b>SITE MANAGEMENT PLAN</b> <b>1 - 15 BUFFALO STREET SITE</b> HAMBURG, NEW YORK	APPROXIMATE SCALE IN FEET 	DRAWN BY: DEW DATE: FEBRUARY 2006
<b>SUB-SLAB VAPOR MITIGATION SYSTEM LAYOUT</b>	<b>GZA GeoEnvironmental of New York</b>	
PROJECT NO. 21.0055727.10		

**ATTACHMENT 1**  
**INSPECTION FORM**

## Annual Site Inspection Form

1 - 15 Buffalo Street

Hamburg, New York

## GENERAL SITE INFORMATION

Representative: _____	Tenants
Date _____	1 Buffalo St: _____
Time _____	3 Buffalo St: _____
Weather Conditions _____	5 Buffalo St: _____
Are Current Site Uses Commercial ? YES NO	7 Buffalo St: _____
If No, identify non-commercial Site use: _____	9 Buffalo St: _____
	11 Buffalo St: _____
	15 Buffalo St: _____

## GENERAL BUILDING CONDITION

Describe, if any, major changes to the interior or exterior building structure: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## GENERAL ALLEYWAY CONDITION

Have there been any major alterations or changes to the gravel alleyway? YES NO \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Is the gravel alleyway in need of repair? YES NO \_\_\_\_\_  
 \_\_\_\_\_

## DRAIN AND SUMP CONDITIONS IN THE BUFFALO SUBCELL

Is the Lanex sump cover in the basement present and intact? YES NO COMMENTS: \_\_\_\_\_  
 Is the sump connected to the sanitary sewer? YES NO COMMENTS: \_\_\_\_\_  
 Is the Dranjer present within the floor drain north of the sump and does it appear to function properly? YES NO  
 COMMENTS: \_\_\_\_\_  
 Was the Dranjer cover removed and the filter fabric cleaned? YES NO \_\_\_\_\_  
 Is the Lanex sump cover or Dranjer in need of repair? YES NO COMMENT: \_\_\_\_\_

## GENERAL VAPOR MITIGATION SYSTEM CONDITION AND OBSERVATIONS

Does PVC piping on the exterior of the building and its fasteners appear to be in good condition? YES NO  
 COMMENTS: \_\_\_\_\_

Do the vacuum fans appear to be operating and functioning properly? YES NO COMMENTS: \_\_\_\_\_

Are the power switch boxes on the exterior of the building locked? YES NO

Does PVC piping and its joints/fasteners on the interior of the building appear to be in good condition? YES NO  
 COMMENTS: \_\_\_\_\_

Are floor seals at pipe penetrations faulty or visible cracks in the floors apparent? YES NO

COMMENTS: \_\_\_\_\_

What is the current vacuum reading on the manometer at 5 Buffalo St.: \_\_\_\_\_ 9 Buffalo St.: \_\_\_\_\_

Is the System Contact information present and current? YES NO