



February 15, 2012

New York City Office of Environmental Remediation
City Brownfield Cleanup Program
c/o Shaminder Chawla
100 Gold Street, 2nd Floor
New York, NY 10038

Re: 12CBCP024K
210 North 12th Street
Remedial Action Work Plan (RAWP) Stipulation List

Dear Mr. Chawla:

Environmental Business Consultants hereby submits a Remedial Action Work Plan (RAWP) Stipulation List for the subject site to the New York City Office of Environmental Remediation (NYCOER) on behalf of ADIR Group LLC. This letter serves as an addendum to the RAWP to stipulate additional content, requirements and procedures that will be followed during the site remediation. The contents of this list are added to the RAWP and will supersede the content in the RAWP where there is a conflict in purpose or intent. The additional requirements/procedures include the following:

Stipulation List

1. The criterion attached in Addendum 1 will be utilized if petroleum containing tank or vessel is identified during the remedial action or subsequent redevelopment excavation activities. All petroleum spills will be reported to the NYSDEC hotline as required by applicable laws and regulations. This contingency plan is designed for heating oil tanks and other small or moderately sized storage vessels. If larger tanks, such as gasoline storage tanks are identified, OER will be notified before this criterion is utilized.
2. Track 4 SCO's will be 24 ppm for Arsenic, 1200 ppm for Lead, 3.0 ppm for Mercury, 250 ppm for total SVOCs, and Track 2 Restricted Residential SCOs for all other parameters.
3. Based on the SCOs for the site, two hot spot areas will be removed as shown in Addendum 2.
4. Collection and analysis of End Point Samples will be conducted to evaluate the performance of the remedy with respect to attainment of Track 4 SCOs. End point samples will be taken for parameters of concern. A map indicating post-remedial End Point Sampling Locations is attached as Addendum 2.
5. The remedy will include installation of a passive sub-slab depressurization system (SSDS) beneath the portion of the building slab where ventilated parking is not proposed.
6. The vapor barrier planned for this project is a GDE or equivalent 20 mil barrier to be installed beneath the building slab. This barrier is an impermeable membrane that is capable of preventing the migration of soil vapor into the new building. The vapor barrier membrane will be chemically resistant to the contaminants present at the site and will have a manufacturer's warranty against defects. If the vapor barrier cannot be shown to be chemically resistant to the





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contaminants present, or if the warranty cannot be obtained, then either indoor verification testing will be performed in the first floor gymnasium area, or the passive SSDS will be converted to an active SSDS.

7. Certified, signed, and stamped by PE/ RA of record architectural and engineering plans, including final cover slab design, excavation diagram for footings/development-related excavation, vapor barrier design (cross-section and plan showing horizontal extent), and sub-slab depressurization system design are attached in Addendum 3.
8. Certified letter/ project description from architect/ engineer of record describing the development, including plans to install vapor barrier and passive sub-slab depressurization system is included in Addendum 4.
9. This NYC BCP project involving the removal and transportation of hazardous waste may be subject to the New York State Department of Environmental Conservation's Special Assessment Tax (ECL 27-0923) and Hazardous Waste Regulatory Fees (ECL 72-00402). See DEC's website for more information: <http://www.dec.ny.gov/chemical/9099.html>.
10. A CD containing the final RAWP including this approved Stipulation List will be placed in the library that constitutes the primary public repository for project documents.
11. Signage for the project will include a sturdy placard mounted in a publically accessible right of way to building and other permits signage will consist of the NYC BCP Information Sheet (attached Addendum 5) announcing the remedial action. The Information sheet will be laminated and permanently affixed to the placard.
12. Signed and stamped RAWP certification page is provided in Addendum 6.

Very truly yours,

Environmental Business Consultants

Charles B. Sosik, P.G., P.H.G.
Principal

cc: H. Moore



Addendum 1

Generic Procedures for Management of Underground Storage Tanks Identified under the NYC BCP

Prior to Tank removal, the following procedures should be followed:

- Remove all fluid to its lowest draw-off point.
- Drain and flush piping into the tank.
- Vacuum out the “tank bottom” consisting of water product and sludge.
- Dig down to the top of the tank and expose the upper half.
- Remove the fill tube and disconnect the fill, gauge, product, vent lines and pumps. Cap and plug open ends of lines.
- Temporarily plug all tank openings, complete the excavation, remove the tank and place it in a secure location.
- Render the tank safe and check the tank atmosphere to ensure that petroleum vapors have been satisfactorily purged from the tank.
- Clean tank or remove to storage yard for cleaning.
- If the tank is to be moved, it must be transported by licensed waste transporter. Plug and cap all holes prior to transport leaving a 1/8 inch vent hole located at the top of the tank during transport.
- After cleaning, the tank must be made acceptable for disposal at a scrap yard, cleaning the tanks interior with a high pressure rinse and cutting the tank in several pieces.

During the tank and pipe line removal, the following field observations should be made and recorded:

- A description and photographic documentation of the tank and pipe line condition (pitting, holes, staining, leak points, evidence of repairs, etc.).
- Examination of the excavation floor and sidewalls for physical evidence of contamination (odor, staining, sheen, etc.).
- Periodic field screening (through bucket return) of the floor and sidewalls of the excavation, with a calibrated photoionization detector (PID).

Impacted Soil Excavation Methods

The excavation of the impacted soil will be performed following the removal of the existing tanks. Soil excavation will be performed in accordance with the procedures described under Section 5.5 of Draft DER-10 as follows:

- A description and photographic documentation of the excavation.
- Examination of the excavation floor and sidewalls for physical evidence of contamination (odor, staining, sheen, etc.).
- Periodic field screening (through bucket return) of the floor and sidewalls of the excavation, with calibrated photoionization detector (PID).

Final excavation depth, length, and width will be determined in the field, and will depend on the horizontal and vertical extent of contaminated soils as identified through physical examination (PID response, odor, staining, etc.). Collection of verification samples will be performed to evaluate the success of the removal action as specified in this document.

The following procedure will be used for the excavation of impacted soil (as necessary and appropriate):

- Wear appropriate health and safety equipment as outlined in the Health and Safety Plan.
- Prior to excavation, ensure that the area is clear of utility lines or other obstructions. Lay plastic sheeting on the ground next to the area to be excavated.
- Using a rubber-tired backhoe or track mounted excavator, remove overburden soils and stockpile, or dispose of, separate from the impacted soil.
- If additional UST's are discovered, the NYSDEC will be notified and the best course of action to remove the structure should be determined in the field. This may involve the continued trenching around the perimeter to minimize its disturbance.
- If physically contaminated soil is present (e.g., staining, odors, sheen, PID response, etc.) an attempt will be made to remove it, to the extent not limited by the site boundaries or the bedrock surface. If possible, physically impacted soil will be removed using the backhoe or excavator, segregated from clean soils and overburden, and staged on separated dedicated plastic sheeting or live loaded into trucks from the disposal facility. Removal of the impacted soils will continue until visibly clean material is encountered and monitoring instruments indicate that no contaminants are present.
- Excavated soils which are temporarily stockpiled on-site will be covered with tarp material while disposal options are determined. Tarp will be checked on a daily basis and replaced, repaired or adjusted as needed to provide full coverage. The sheeting will be shaped and secured in such a manner as to drain runoff and direct it toward the interior of the property.

Once the site representative and regulatory personnel are satisfied with the removal effort, verification of confirmatory samples will be collected from the excavation in accordance with DER-10.



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ADDENDUM 2
HOT SPOT REMOVAL AND ENDPOINT
SAMPLING PLAN



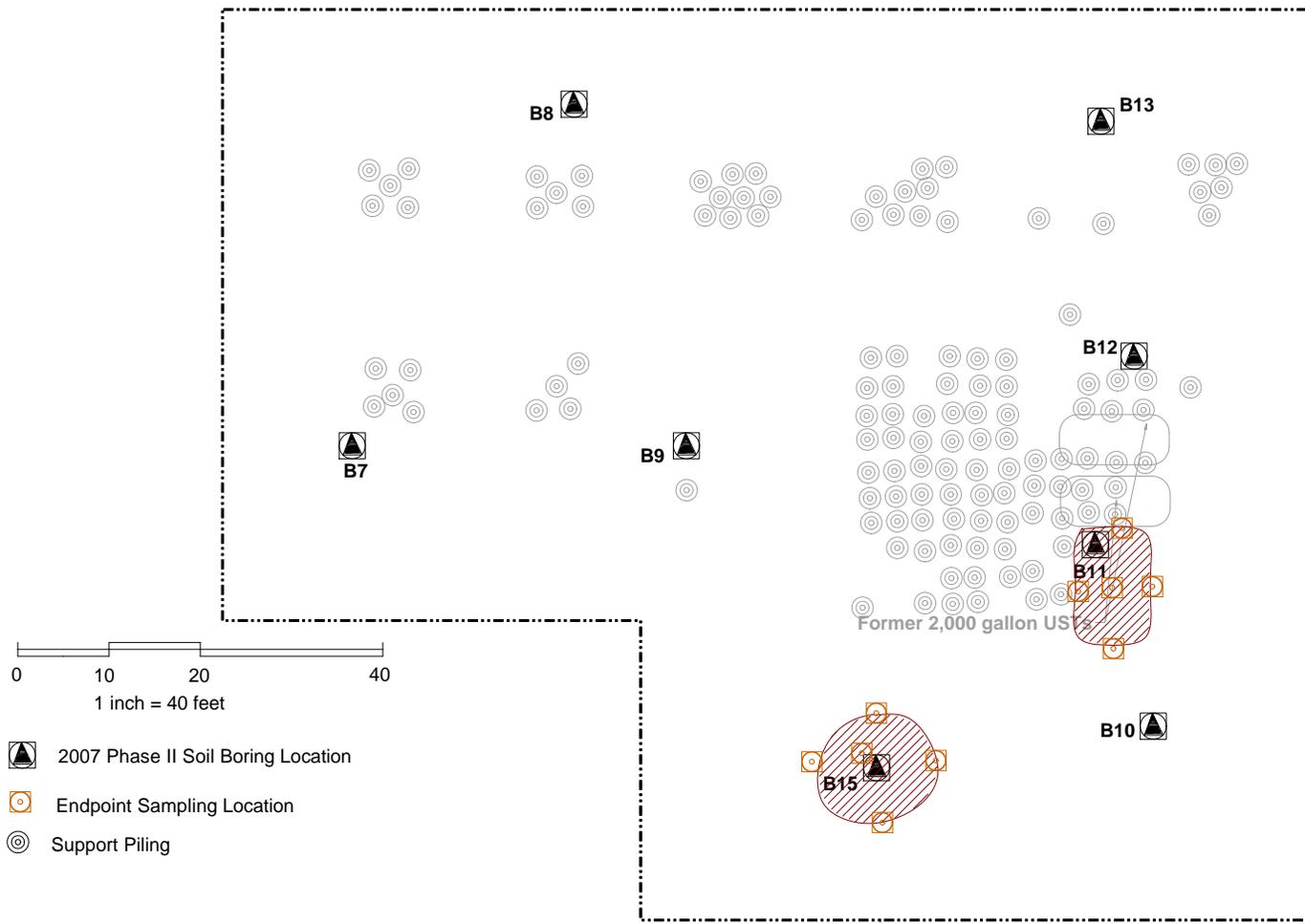
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N. 12th STREET



DRIGGS AVENUE



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**210 N. 12TH STREET, BROOKLYN, NY
BLOCK 2291 LOT 17**

**HOT SPOT EXCAVATION AREA
ENDPOINT SAMPLING LOCATIONS**



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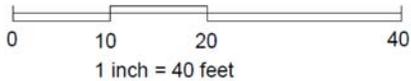
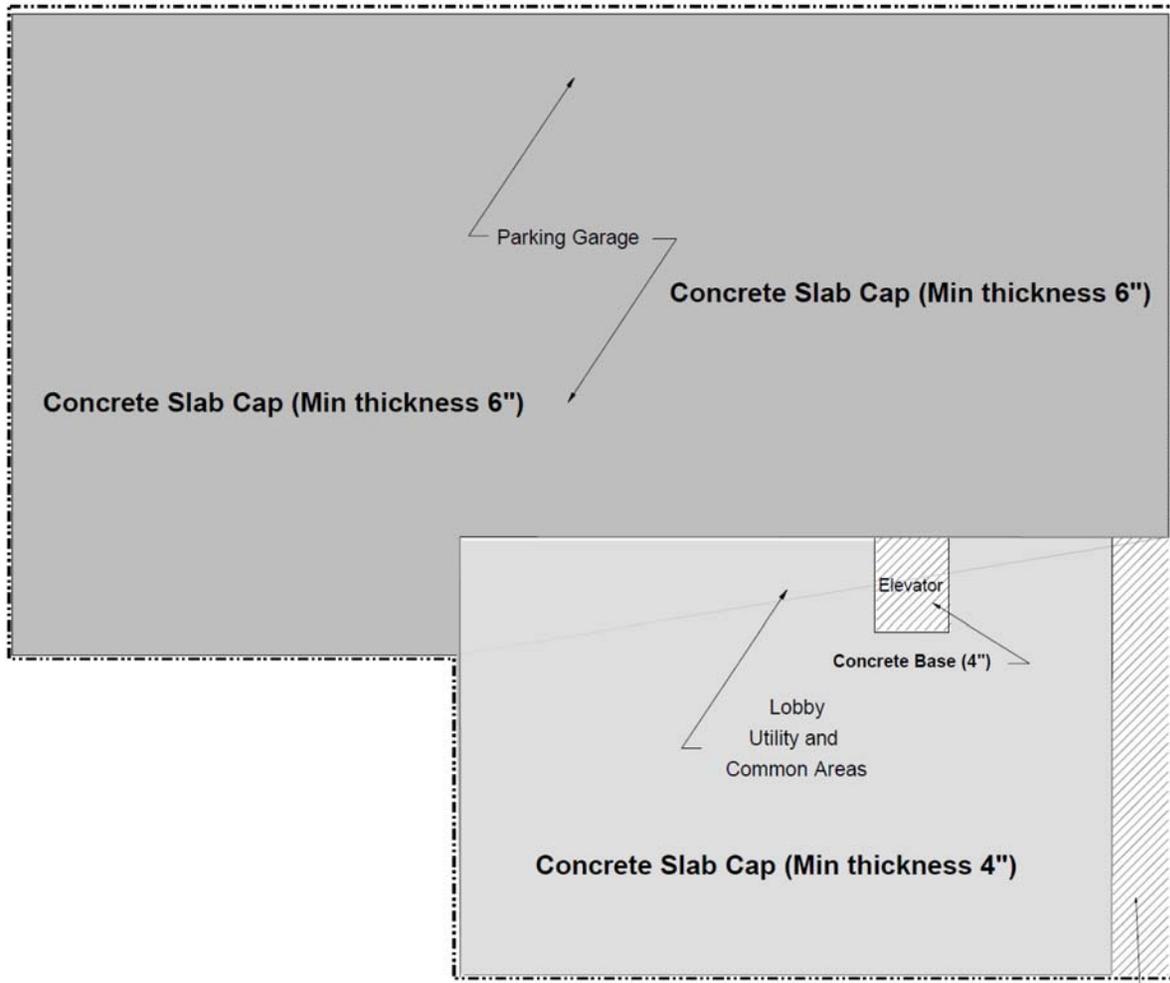
ADDENDUM 3
CONCRETE COVER, VAPOR BARRIER AND
SSDS PLANS



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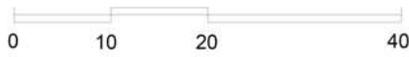
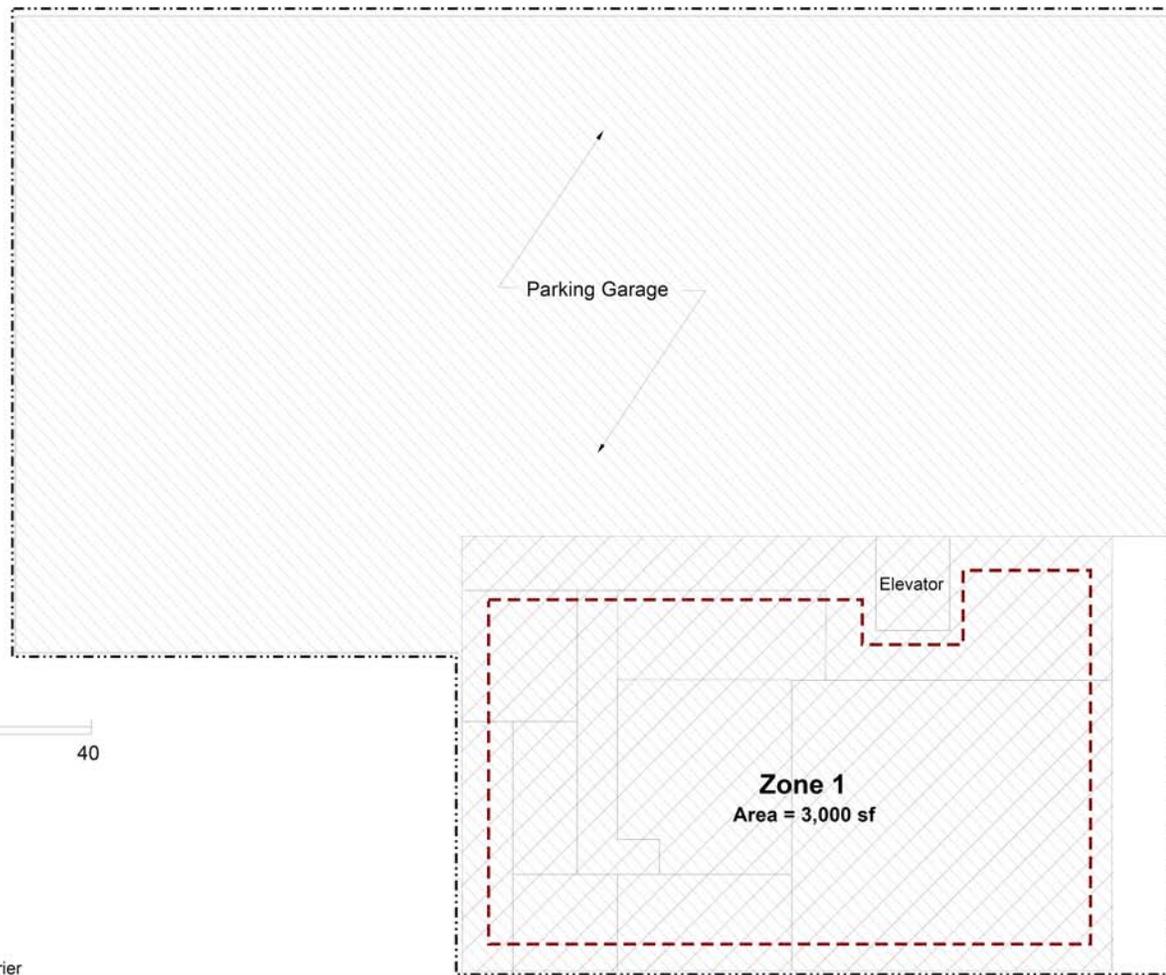
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961

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DRIGGS AVENUE

 AMC ENGINEERING PLLC 99 JERICO TURNPIKE SUITE 300J JERICO, NY 11753 (516) 417-8588	
PROJECT	
210 N. 12th Street, Brooklyn, NY Block 2291 Lot 17	
TITLE:	
FIGURE 5 COMPOSITE SITE COVER	
SEAL & SIGNATURE	DATE: NOV 7, 2011
	PROJECT No:
	DRAWING BY: AC
	CHK BY:
	DWG No: NV-1.00
CADD FILE No: 1 of 3	



1 inch = 40 feet

- 4 inch Corrugated HDPE Pipe
- SSDS Zone
- 20 mil HDPE Vapor Barrier



N. 12th STREET

DRIGGS AVENUE

	AMC ENGINEERING PLLC 99 JERICHO TURNPIKE SUITE 300J JERICHO, NY 11753 (516) 417-8588
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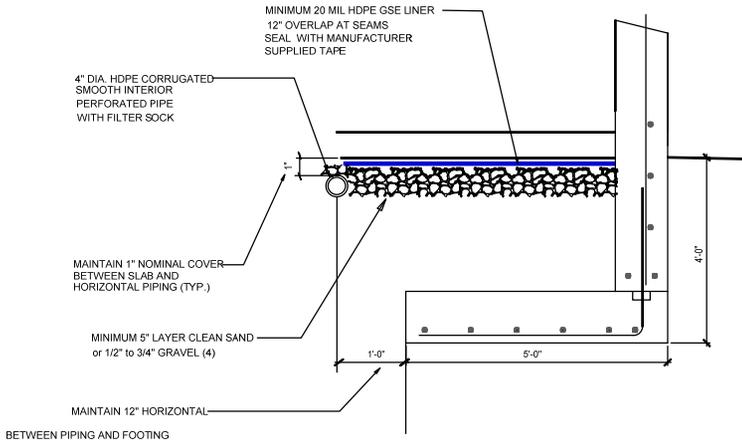
PROJECT
 210 N. 12th Street, Brooklyn, NY
 Block 2291 Lot 17

TITLE:
FIGURE 6
SSDS SYSTEM LAYOUT



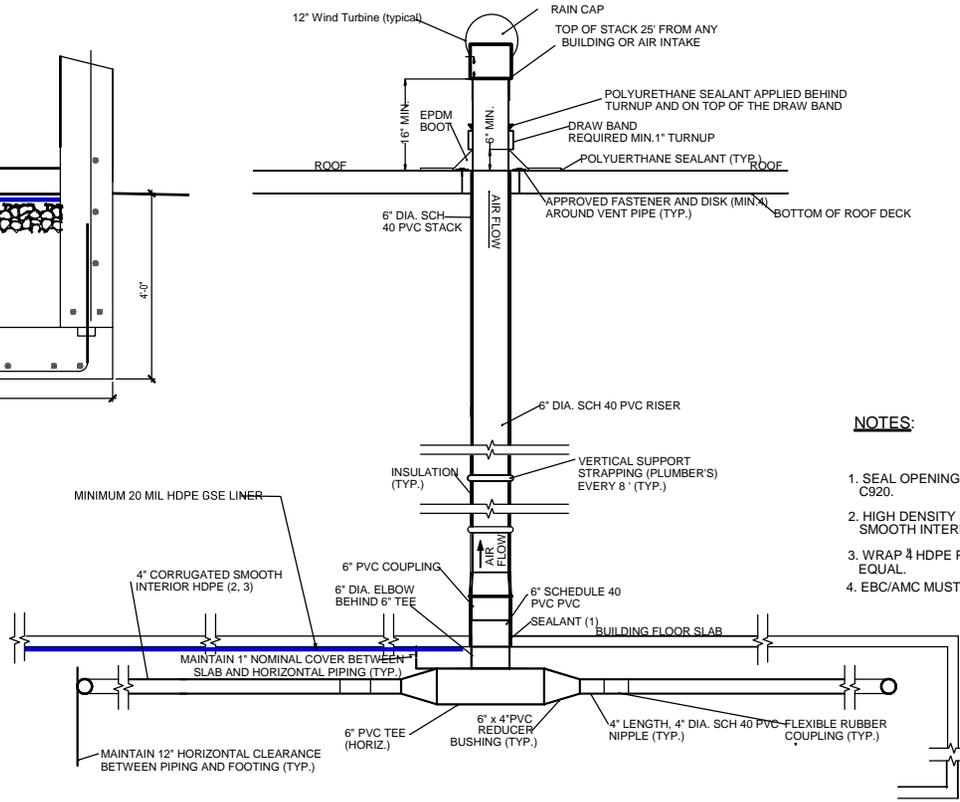
DATE:	NOV 7, 2011
PROJECT No:	
DRAWING BY:	AC
CHK BY:	
DWG No:	ENV-2.00
CADO FILE No:	2 of 3

Detail A



N.T.S.

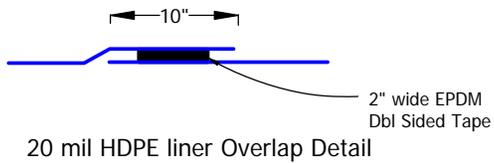
Detail B



NOTES:

1. SEAL OPENING WITH ELASTOMERIC JOINT SEALANT AS DEFINED IN ASTM C920.
2. HIGH DENSITY POLYETHYLENE CORRUGATED PERFORATED PIPE WITH SMOOTH INTERIOR WATERWAY. ADS N-12 OR APPROVED EQUAL.
3. WRAP 4 HDPE PIPE WITH GEOTEXTILE FABRIC, GSE NW4 OR APPROVED EQUAL.
4. EBC/AMC MUST PRE-APPROVE ALL FILL MATERIAL BEFORE DELIVERY TO SITE.

Detail C



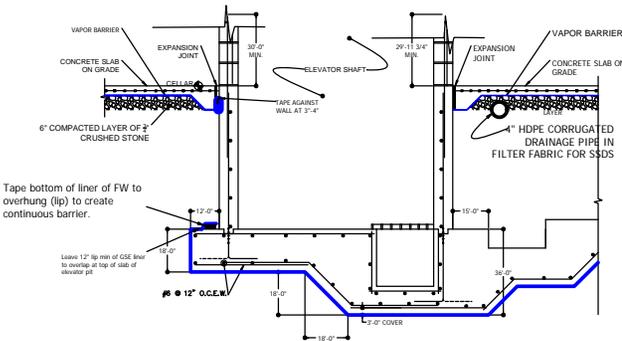
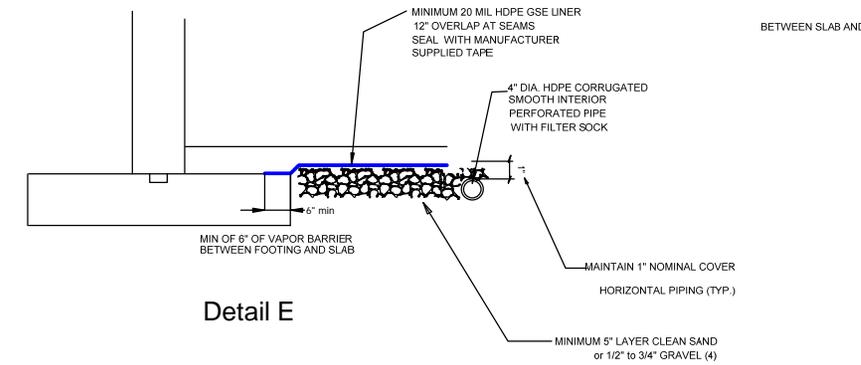
AMC ENGINEERING PLLC
 99 JERICHO TURNPIKE
 SUITE 300J
 JERICHO, NY 11753
 (516) 417-8588

PROJECT
 210 N. 12th Street, Brooklyn, NY
 Block 2291 Lot 17

TITLE:
 FIGURE 7
 SSDS DETAILS

DATE: DEC 30, 2011
 PROJECT No:
 DRAWING BY: AC
 CHK BY:
 DWG No:
ENV-3.02
 CADO FILE No: 3 of 3

Detail E



DETAIL D: ELEVATION PIT



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ADDENDUM 4
CERTIFIED PROJECT DESCRIPTION



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PHILIP TOSCANO, ARCHITECT

418 Graham Avenue Brooklyn, NY 11211 (718) 349-3350 Fax- (718) 349-3479

Date: October 30, 2011

Mr. Maurizio Bertini, Section Chief
Office of the Mayor
Office of Environmental Remediation
E-Designation Program
100 Gold Street, 2nd Floor
New York, NY 10038

Re: Certified Description
Redevelopment Project
210 N. 12th Street, Brooklyn, NY 11211
Block 2281; Lot 17
E- 138 (Hazmat)

Dear Mr. Bertini;

The proposed structure at 210 N. 12th Street consists of a 8-story apartment building. The structure shall be steel , block and plank(Const. Class: I-B as per NYC BC) with Wood Pile foundation. A vapor barrier system will be installed beneath the entire building slab as well as a sub-slab depressurization system (SSDS) beneath a portion of the slab where parking is not proposed. The Gross floor area including the cellar is approximately 47,000.00 ft² and has 43 residential apartments. The building includes parking, recreational space, mechanical space as well as a lobby on the first floor, five 1-bedroom apartments and two 2-bedroom apartments on floors 2 through 6 for a total of 35 residential unit, two 2-bedroom and two 3-bedroom on the 7th floor for a total of 4 units and two 2-bedroom and one 3-bedroom on the 8th floor for a total of 3 units. The 9th floor is allocated as storage space for each of the residential units.

The Project data is as follows:

Location: 210 N. 12th Street, Brooklyn, NY 11211

Zone: M1-2/R7A, MX8

Community Board: 1, Brooklyn

Zoning Floor Area = Approximately 35,900.00 ft²

Gross F.A. (no cellar) = 47,000.00 ft²

Building Height = 80'-0"

Number of Residential Units = 43

Maximum Excavation Depth = approximately 4'-0"

Excavation depth below water table= 0'-0"

The lot consists of approximately 10,400 ft² of green area, no paved areas on site.

If you need any additional information or clarification please feel free to give us a call.

PHILIP TOSCANO ARCHITECT





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ADDENDUM 5
SIGNAGE



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NYC Brownfield Cleanup Program

210 North 12th Street Site

Site #: 12CBCP024K

This property is enrolled in the New York City Brownfield Cleanup Program for environmental remediation. This is a voluntary program administered by the NYC Office of Environmental Remediation.

For more information, log on to:

www.nyc.gov/oer



If you have questions or would like more information, please contact:

Shaminder Chawla at (212) 788-8841
or email us at brownfields@cityhall.nyc.gov



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ADDENDUM 5
RAWP CERTIFICATION PAGE



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