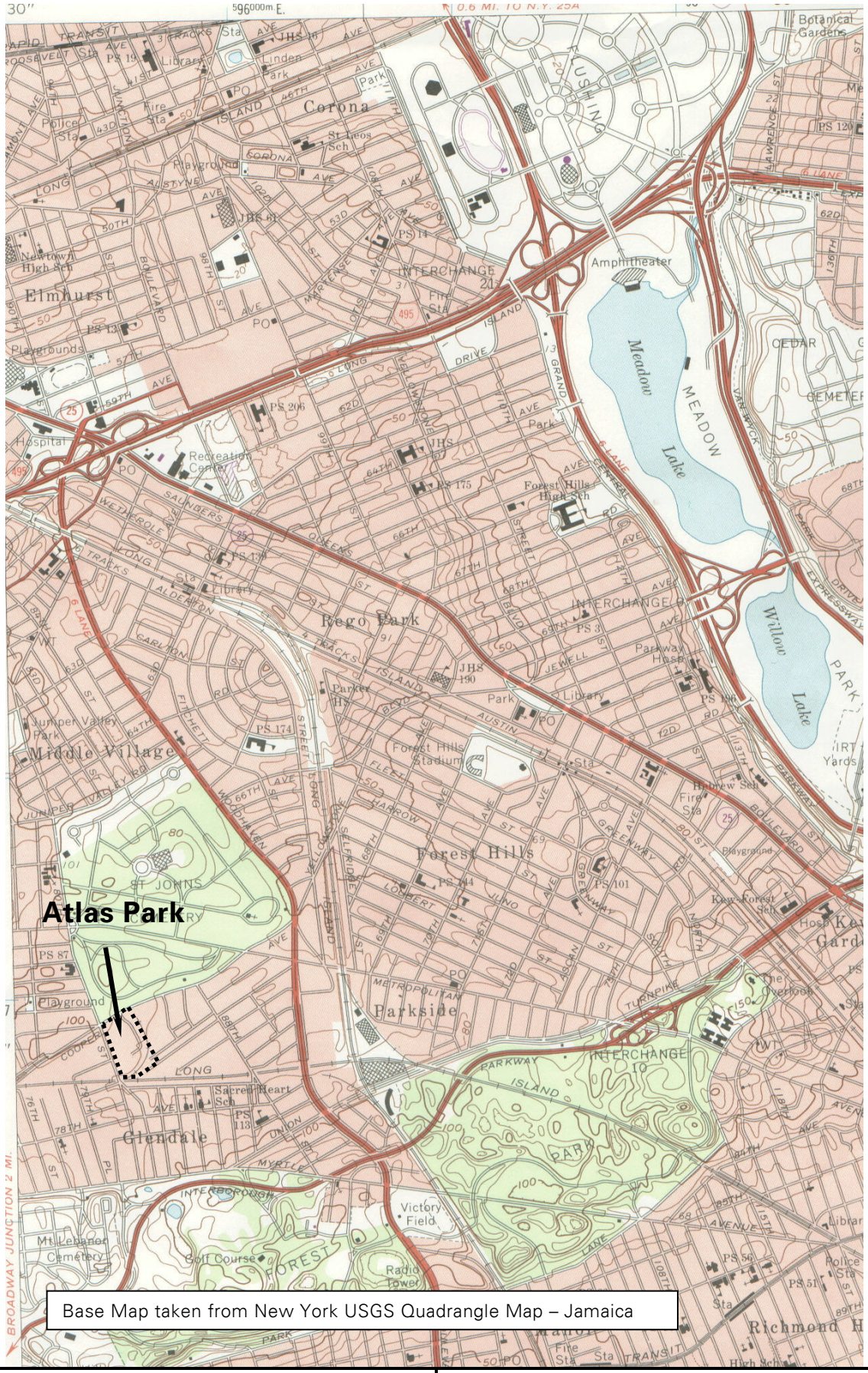

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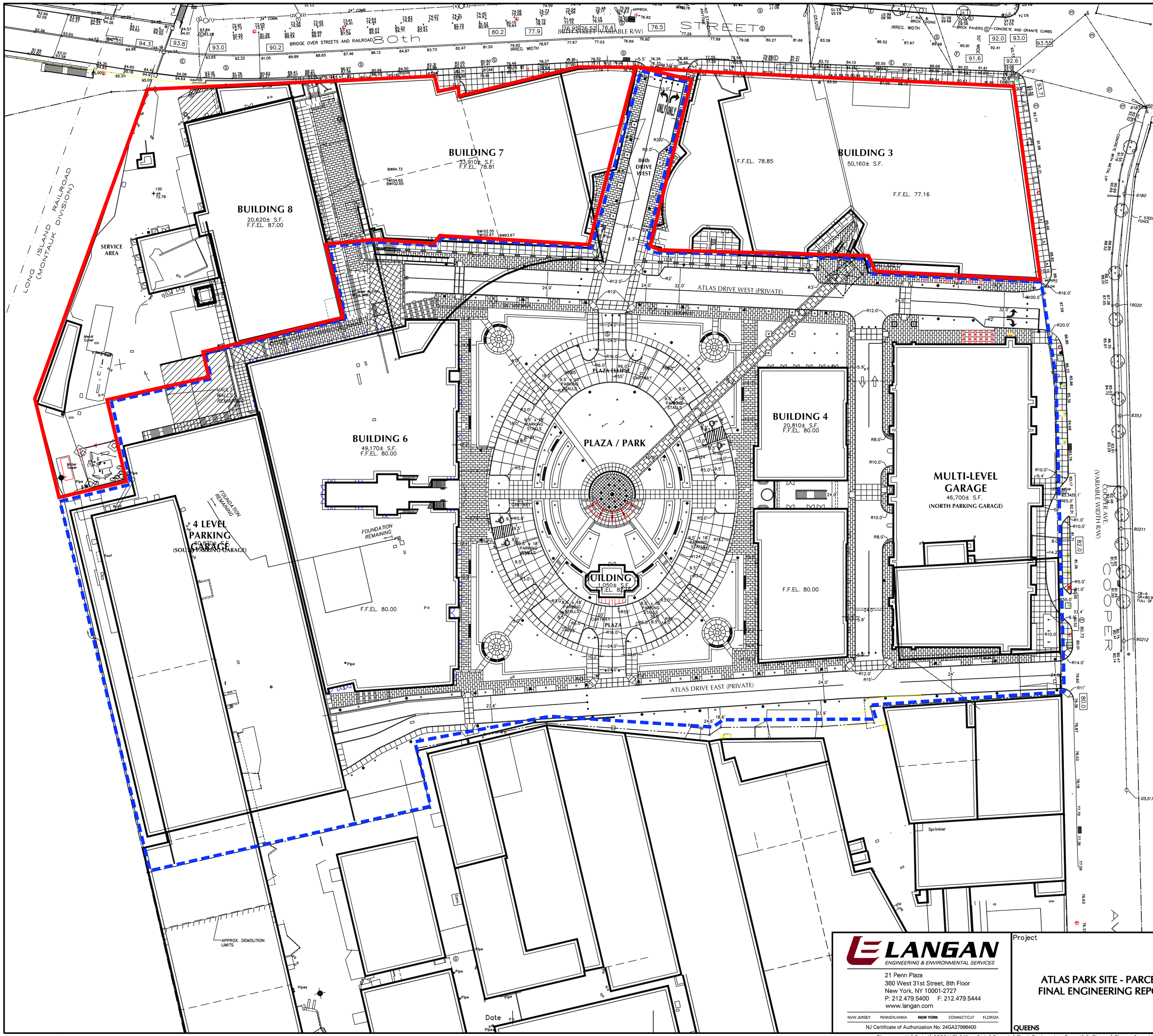
TOPOGRAPHIC MAP OF PROJECT SITE
ATLAS PARK
FINAL ENGINEERING REPORT

Queens **New York**

PROJ.NO	5555113	SCALE:	NTS	DATE	9/14/06	FIG:	1



LEGEND

- SITE BOUNDARY
- EXISTING BUILDINGS
- PARCEL A BOUNDARY
- PARCEL B BOUNDARY

NOTES

1. BASE SURVEY PLAN WAS OBTAINED FROM A DRAWING TITLED CITY OF NEW YORK, COUNTY OF QUEENS, TAX BLOCK 3810, TAX LOT 2, BY MONTROSE SURVEYING CO., LLP. DATED 17 DECEMBER 2001 SUPPLIED BY ATCO.
2. ELEVATIONS ARE REFERENCED TO BOROUGH PRESIDENT OF QUEENS TOPOGRAPHICAL DATUM, WHICH IS 2.725 FT. ABOVE NGVD 1929 MEAN SEA LEVEL AT SANDY HOOK, NJ. (BPQ=USGS-2.725 FT).
3. PROPOSED SITE LAYOUT AND BUILDING LOCATIONS ARE TAKEN FROM THE LANGAN BASE DRAWING TITLED 5555111_si01.

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21 Penn Plaza
360 West 31st Street, 8th Floor
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Project
ATLAS PARK SITE - PARCEL B
FINAL ENGINEERING REPORT
QUEENS NEW YORK

Drawing Title
ATLAS PARK SITE DEVELOPMENT PLAN

Project No.	5555113
Date	9/14/06
Scale	1"=40
Drn. By	JB
Last Revised	02/06/06
Drawing No.	2
	1 Of 1

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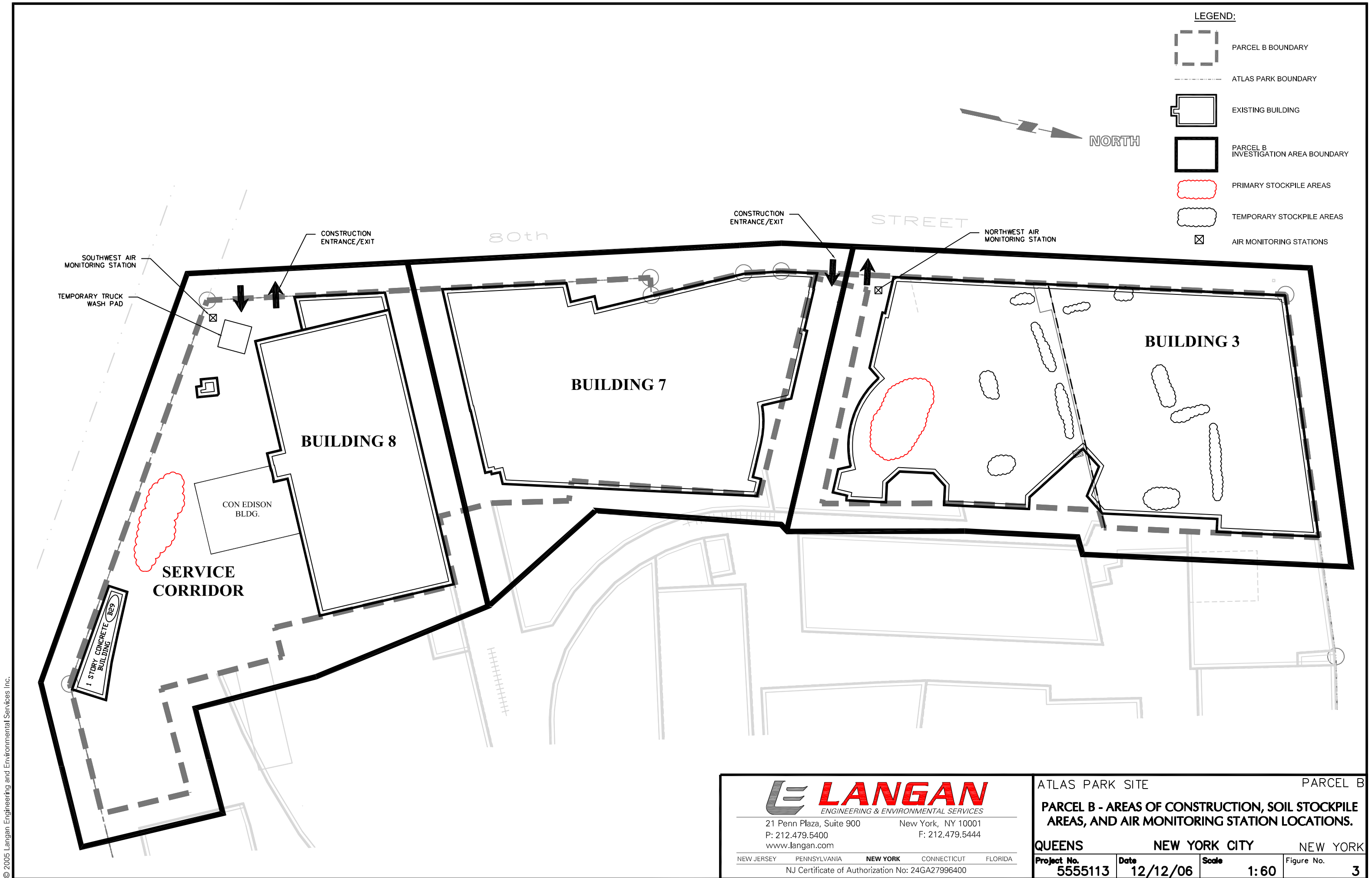
Filename: U:\Data1\5555113\Office Data\Reports\Final Engineering Report\2 Figures\Figure 2 – Atlas Park Parcel A and B.dwg Date: 1/8/2007 Time: 18:06 User: jbarr Style Table: Langan Color.stb Layout: FER D Size Sheet (Bottom)



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ATLAS PARK SITE PARCEL B

PARCEL B - AREAS OF CONSTRUCTION, SOIL STOCKPILE AREAS, AND AIR MONITORING STATION LOCATIONS.

QUEENS NEW YORK CITY NEW YORK

Project No.	Date	Scale	Figure No.
5555113	12/12/06	1:60	3

Filename: U:\Data1\5555113\Office Data\Reports\Final Engineering Report\2 Figures\Figure 3 - Parcel B - Areas of Construction.dwg Date: 1/8/2007 Time: 18:04 User: jbarr Style Table: Langan Color.stb Layout: Figure 3 11by17 Size

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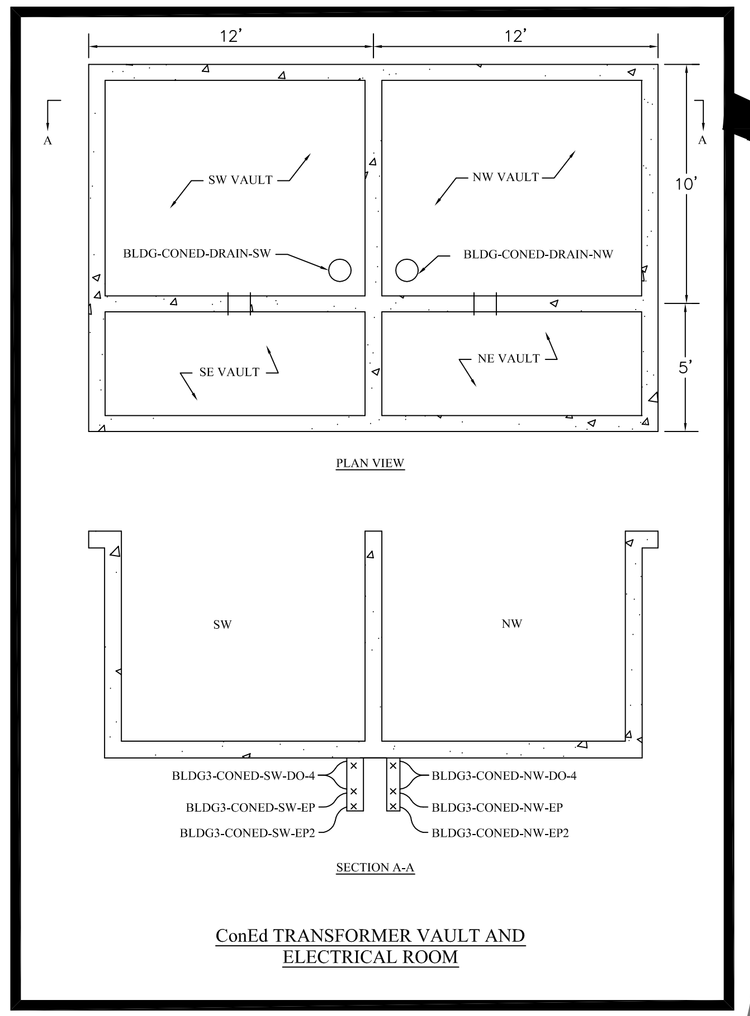

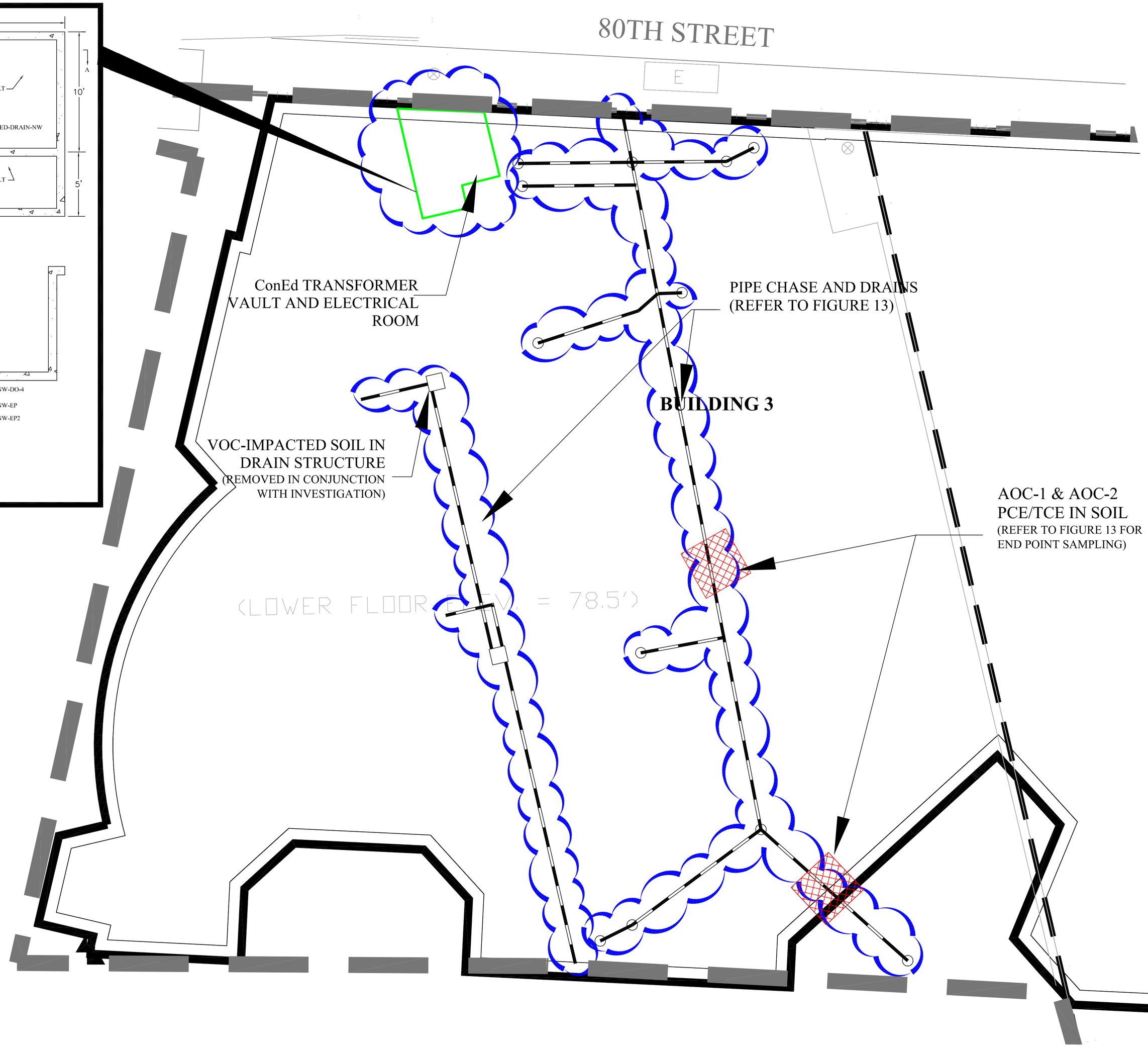

LEGEND

- EXISTING BUILDING OUTLINE
- ATLAS PARK SITE - PARCEL B
- AREAS OF CONCERN REMOVED FROM SITE OR CLOSED IN PLACE
- 10' x 10' x 4' AREA EXCAVATED TO REMOVE SOURCE AREA
- ENDPOINT SOIL SAMPLE LOCATION

BASE MAP NOTES

1. BASE SURVEY PLAN WAS OBTAINED FROM A DRAWING TITLED CITY OF NEW YORK, COUNTY OF QUEENS, TAX BLOCK 3810, TAX LOT 2, BY MONTROSE SURVEYING CO., LLP, DATED 17 DECEMBER 2001 SUPPLIED BY ATCO.

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Project	Drawing Title	Project No. 5555113	Figure No.
ATLAS PARK SITE- PARCEL B FINAL ENGINEERING REPORT	BUILDING 3 AREAS OF CONCERN	Date 12/12/06	4
QUEENS NEW YORK		Scale 1"=10'	
		Drn. By VMT	
		Last Revised 12/12/06	1 Of 1

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Filename: U:\Data1\5555113\Office Data\Reports\Final Engineering Report\2 Figures\Figures 4_5_6 AOCS.dwg Date: 1/8/2007 Time: 18:00 User: jbarr Style Table: Langan.stb Layout: Figure 4 – Building 3 D Size

80th

88.65 87.46 86.12 84.87 83.73 82.47 81.20 79.92 78.67 77.67 77.03 76.69 76.80

80TH STREET

NORTH

FORMER PROCESS USTs

FORMER PROCESS PIPING

BLDG28-T1A BLDG28-T1B BLDG28-T1C BLDG28-T1D BLDG28-T1E BLDG28-T4A BLDG28-T4B BLDG28-T4C BLDG28-T4D BLDG28-T4E

BLDG28-T2A BLDG28-T2B BLDG28-T2C BLDG28-T2D BLDG28-T2E BLDG28-T5A BLDG28-T5B BLDG28-T5C BLDG28-T5D BLDG28-T5E

BLDG28-T3A BLDG28-T3B BLDG28-T3C BLDG28-T3D BLDG28-T3E

BLDG 28-PIPE TRENCH-SOUTH END

BLDG 28-PIPE TRENCH-CENTER

BLDG 28-PIPE TRENCH-NORTH END

BLDG 28-GP5A

BLDG 28-GP4A

BLDG 28-GP3A

BLDG 28-GP2A

BLDG 28-GP1A

FORMER PROCESS VAULTS

B7-5

B7-5E

B7-1N

B7-1

B-48

INFERRED POTENTIAL HAZARDOUS LEAD AREA

BUILDING 7

(LOWER FLOOR SLAB ELEV. = 78.5')

LEAD AND VOC AREA OF CONCERN

EP(SW)-13-122904

SW

LEGEND

- EXISTING BUILDING OUTLINE
- ATLAS PARK SITE - PARCEL B
- ALLEYWAY AND NORTHWEST CORNER OF BUILDING 8 REMEDIATED TO TRACK 1 CLEANUP LEVELS
- AREAS OF CONCERN REMOVED FROM SITE OR CLOSED IN PLACE
- SOIL BORING SAMPLE LOCATION
- SIDEWALL SOIL SAMPLE LOCATION
- ENDPOINT SOIL SAMPLE LOCATION (AT TANK PIT AND PIPE TRENCH)
- GEOPOROBE SOIL SAMPLE LOCATION (BETWEEN VAULTS)

BASE MAP NOTES

1. BASE SURVEY PLAN WAS OBTAINED FROM A DRAWING TITLED CITY OF NEW YORK, COUNTY OF QUEENS, TAX BLOCK 3810, TAX LOT 2, BY MONTROSE SURVEYING CO., LLP, DATED 17 DECEMBER 2001 SUPPLIED BY ATCO.

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Project
ATLAS PARK SITE-PARCEL B FINAL ENGINEERING REPORT
QUEENS NEW YORK

Drawing Title
BUILDING 7 AREAS OF CONCERN

Project No. 5555113	Figure No. 5
Date 12/12/06	
Scale 1"=10'	
Drn. By VMT	
Last Revised 12/12/06	1 Of 1

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Filename: U:\Data1\5555113\Office Data\Reports\Final Engineering Report\2 Figures\Figures 4_5_6 AOCS.dwg Date: 1/8/2007 Time: 17:53 User: jbarr Style Table: Langan Color.stb Layout: Figure 5 – Building 7 D Size

TRANSFORMER PAD SAMPLES	
KEY ID	SAMPLE ID
CONCRETE SAMPLES	
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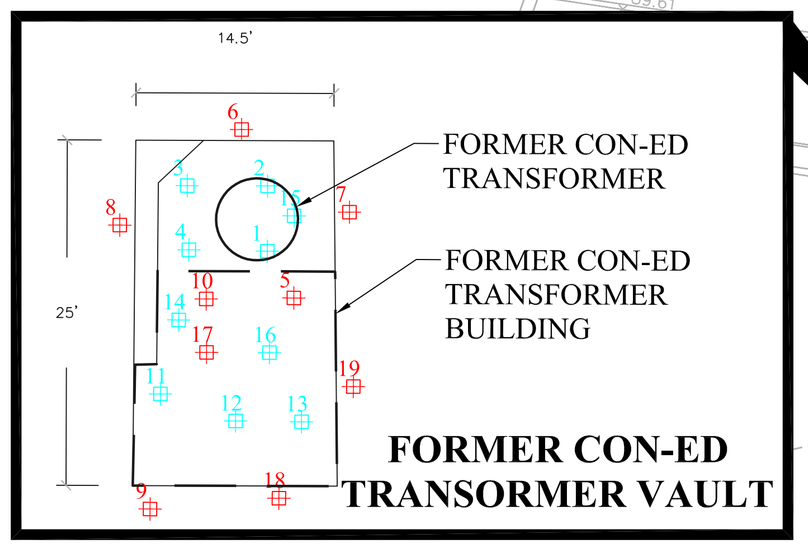
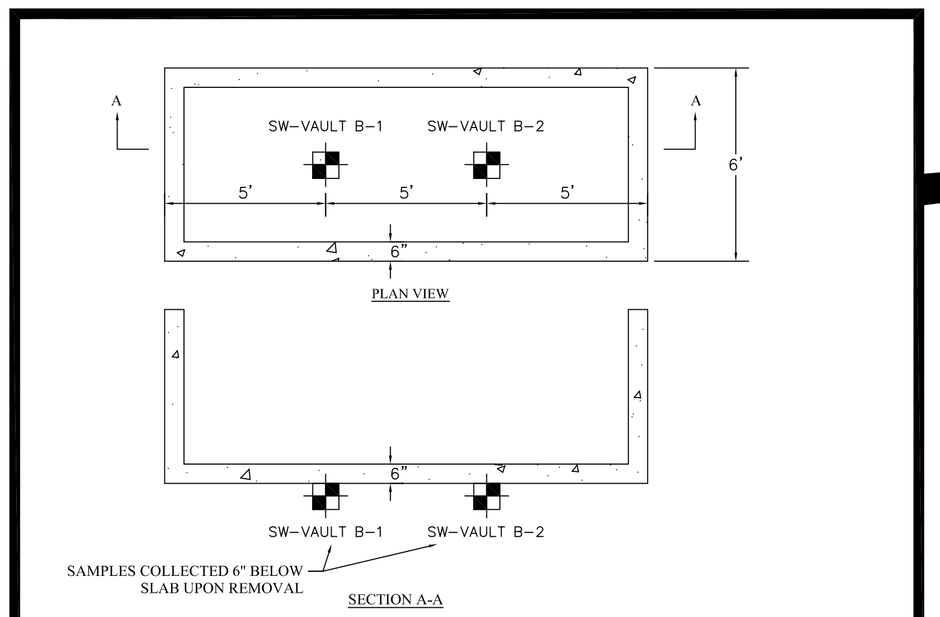
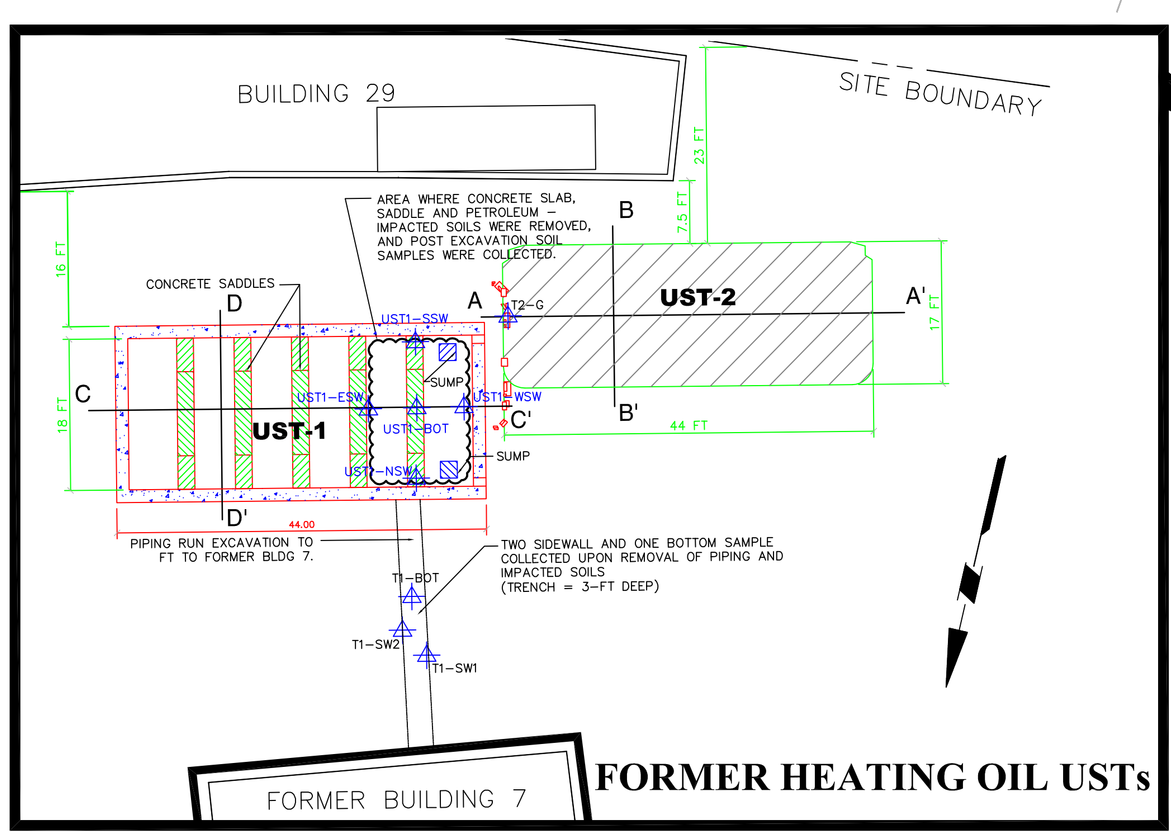
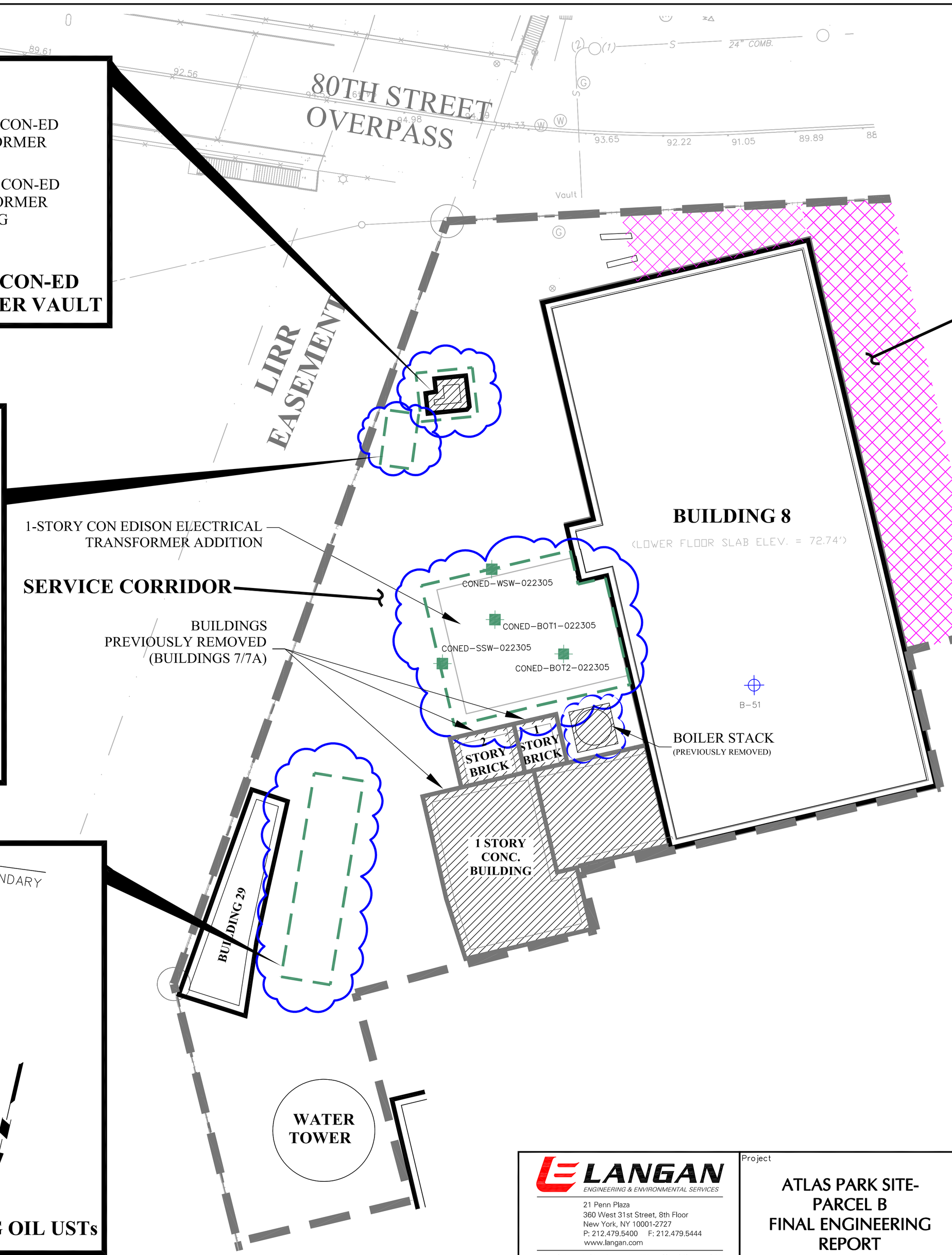
2	TBC2-020306
3	TBC3-020306
4	TBC4-020306
11	TBC11-020806
12	TBC12-020806
13	TBC13-020806
14	TBC14-020806
15	TBC15-020806
SOIL SAMPLES	
5	TB5-020606
6	TB6-020606
7	TB7-020606
8	TB8-020606
9	TB9-020606
10	TB10-020806
16	TB16-020806
17	TB17-020906
18	TB18-020906
19	TB19-020906









LEGEND

- EXISTING BUILDING OUTLINE
- STRUCTURE DEMOLISHED FOR CONSTRUCTION
- ATLAS PARK SITE - PARCEL B
- ALLEYWAY AND NORTHWEST CORNER OF BUILDING 8 REMEDIATED TO TRACK 1 CLEANUP LEVELS
- AREAS OF CONCERN REMOVED FROM SITE OR CLOSED IN PLACE
- SOIL BORING SAMPLE LOCATION
- AREAS INVESTIGATED DURING SITE RENOVATION (WITH ENDPOINT SOIL SAMPLE)
- UST AREA SOIL ENDPOINT SAMPLE
- TRANSFORMER AREA CONCRETE SAMPLE
- TRANSFORMER AREA SOIL ENDPOINT SAMPLE
- SOUTHWEST VAULT AREA SOIL ENDPOINT SAMPLE

BASE MAP NOTES

1. BASE SURVEY PLAN WAS OBTAINED FROM A DRAWING TITLED CITY OF NEW YORK, COUNTY OF QUEENS, TAX BLOCK 3810, TAX LOT 2, BY MONTROSE SURVEYING CO., LLP. DATED 17 DECEMBER 2001 SUPPLIED BY ATCO.

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Project: ATLAS PARK SITE- PARCEL B FINAL ENGINEERING REPORT
QUEENS NEW YORK

Drawing Title: BUILDING 8/SERVICE CORRIDOR AREAS OF CONCERN

Project No.	5555113
Date	12/12/06
Scale	1"=20'
Drn. By	VMT
Last Revised	12/12/06
Figure No.	6
	1 Of 1

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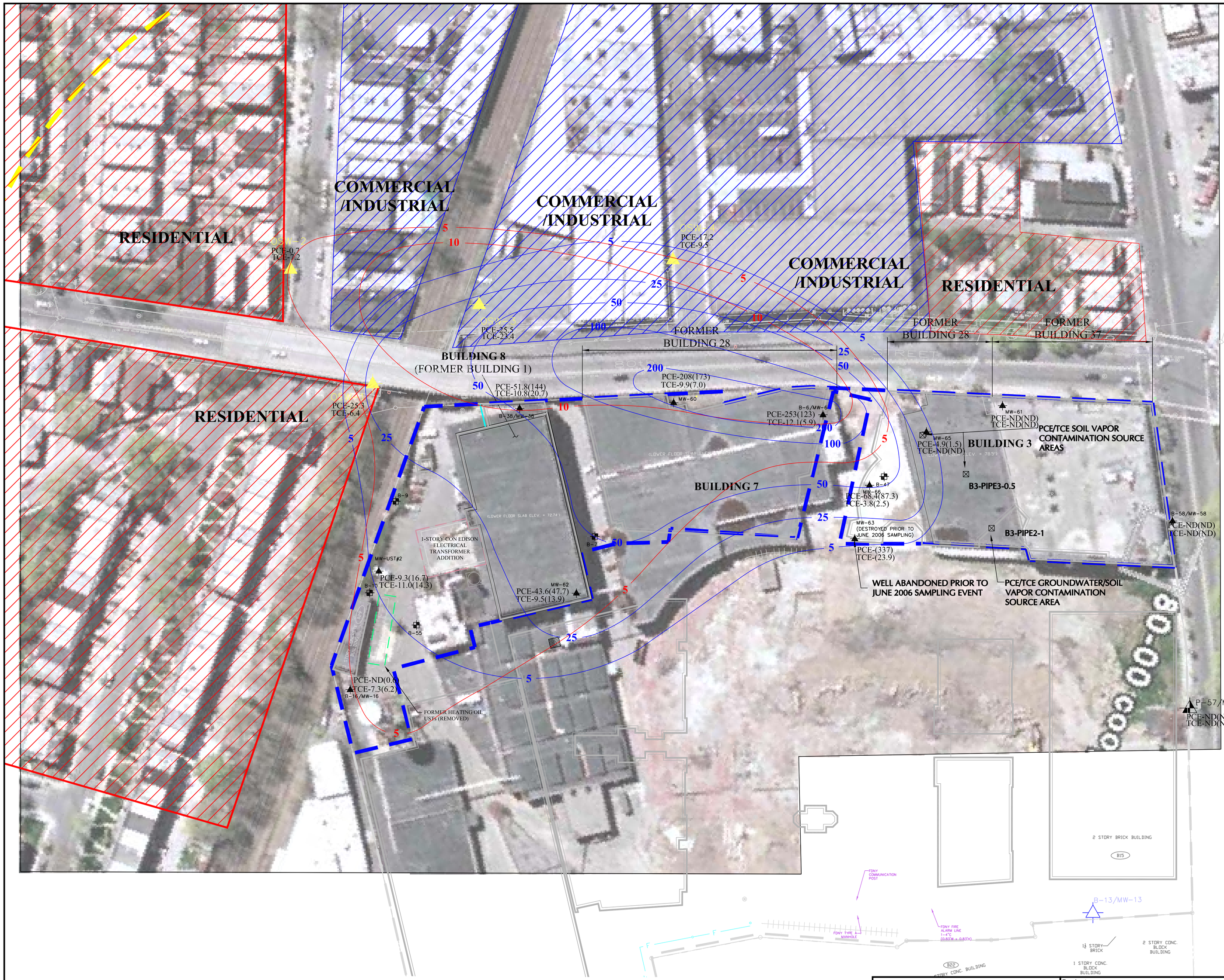
Filename: U:\Data1\5555113\Office Data\Reports\Final Engineering Report\2 Figures\Figures 4_5_6 AOCS.dwg Date: 1/8/2007 Time: 17:54 User: jbarr Style Table: Langan.stb Layout: Figure 6 – Building 8 D Size



LEGEND

- OSW-4 — OFFSITE GROUNDWATER MONITORING WELL LOCATION
- MW-60 — GROUNDWATER MONITORING WELL (PCE AND TCE CONCENTRATIONS IN ug/l)
- ATLAS PARK - PARCEL B BOUNDARY
- PCE-68.4(87.3) — PCE CONCENTRATION (ug/L) - June 2006 Sample (PCE CONCENTRATION (ug/L) - Feb/Mar 2006 Sample)
- TCE-3.8(2.5) — TCE CONCENTRATION (ug/L) - June 2006 Sample (TCE CONCENTRATION (ug/L) - Feb/Mar 2006 Sample)
- 5 — PCE ISOCONCENTRATION CONTOUR (ug/L)
- 5 — TCE ISOCONCENTRATION CONTOUR (ug/L)
- RESIDENTIAL PROPERTIES
- COMMERCIAL/INDUSTRIAL PROPERTIES

NOTE:

1. CONTOURS DASHED WHERE INFERRED.
2. BASEMAP WAS REFERENCED FROM GOOGLE EARTH(TM)
3. ALL MONITORING WELLS ONSITE WERE PREVIOUSLY SAMPLED IN FEB/MAR 2006. THOSE CONCENTRATIONS ARE SHOWN IN PARENTHESES.

N

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Project
THE SHOPS AT ATLAS PARK-PARCEL B
FINAL ENGINEERING REPORT
QUEENS NEW YORK

Drawing Title
TCE/PCE GROUNDWATER ISOCONCENTRATION CONTOURS JUNE 2006

Project No.	5555113
Date	6/26/06
Scale	1"=50'
Drn. By	JLV
Last Revised	N/A
Drawing No.	7
	1 Of 1

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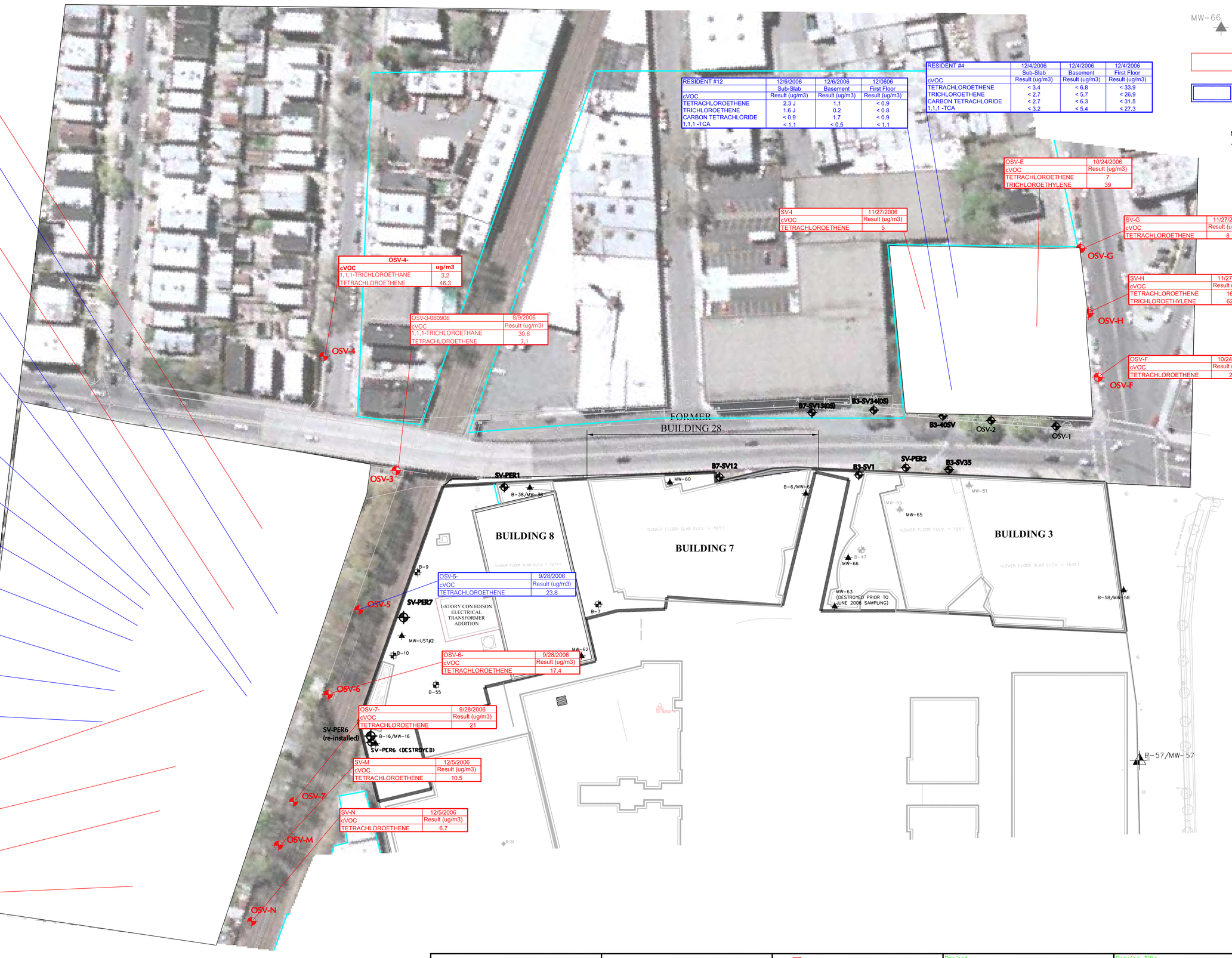
Filename: \\NYSTORAGE\Data1\5555113\Office Data\Reports\Site Management Plan\Figures\OLD Figures\Figure 4 – TCE_PCE Isonconcentrations.dwg Date: 1/8/2007 Time: 17:50 User: jbarr Style Table: Langan Color.stb Layout: FER Figure 7 D Size Sheet (Bottom)

LEGEND

- OSV-5 — SOIL VAPOR SAMPLING POINTS
- ATLAS PARK - PARCEL B BOUNDARY
- OFFSITE GROUND WATER MONITORING WELL
- MW-66 — ONSITE GROUND WATER MONITORING WELL
- SOIL VAPOR SAMPLE RESULTS (cVOC) [RED SPIDER BOX]
- RESIDENTIAL VAPOR SAMPLE RESULTS (cVOC) [BLUE SPIDER BOX]

NOTE:
1) BASEMAP WAS REFERENCED FROM GOOGLE EARTH (TM)



OSV-A	Result (ug/m3)	
cVOC	10/16/06	11/21/06
TETRACHLOROETHENE	2.7 (J)	3.9

RESIDENT #6	12/5/2006	12/5/2006	12/5/2006
	Sub-Slab	Basement	First Floor
cVOC	Result (ug/m3)	Result (ug/m3)	Result (ug/m3)
TETRACHLOROETHENE	< 33.6	< 6.8	< 6.8
TRICHLOROETHENE	< 26.9	< 5.7	< 5.7
CARBON TETRACHLORIDE	< 31.5	< 6.3	< 6.3
1,1,1 -TCA	< 27.3	< 5.4	< 5.4

OSV-B	Result (ug/m3)	
cVOC	10/13/06	11/21/06
TETRACHLOROETHENE	1.9	5.2
TRICHLOROETHYLENE	ND	1.9 (J)

RESIDENT #10	12/7/2006	12/7/2006	12/7/2006
	Sub-Slab	Basement	First Floor
cVOC	Result (ug/m3)	Result (ug/m3)	Result (ug/m3)
TETRACHLOROETHENE	13.8	< 0.9	< 3.5
TRICHLOROETHENE	< 3.2	< 0.8	< 3.2
CARBON TETRACHLORIDE	< 3.8	< 0.9	< 3.8
1,1,1 -TCA	13.7	< 1.1	< 4.4

RESIDENT #5	12/6/2006	12/6/2006	12/6/2006
	Sub-Slab	Basement	First Floor
cVOC	Result (ug/m3)	Result (ug/m3)	Result (ug/m3)
TETRACHLOROETHENE	< 68.7	< 3.4	< 3.4
TRICHLOROETHENE	< 53.7	< 2.7	< 2.7
CARBON TETRACHLORIDE	< 62.9	< 2.7	< 2.7
1,1,1 -TCA	< 54.6	< 3.2	< 3.2

RESIDENT #3	12/4/2006	12/4/2006	12/4/2006
	Sub-Slab	Basement	First Floor
cVOC	Result (ug/m3)	Result (ug/m3)	Result (ug/m3)
TETRACHLOROETHENE	< 33.6	< 3.4	< 6.8
TRICHLOROETHENE	< 26.9	< 2.7	< 5.7
CARBON TETRACHLORIDE	< 31.5	< 2.7	< 6.3
1,1,1 -TCA	< 27.3	< 3.2	< 5.4

RESIDENT #9	12/5/2006	12/5/2006	12/5/2006
	Sub-Slab	Basement	First Floor
cVOC	Result (ug/m3)	Result (ug/m3)	Result (ug/m3)
TETRACHLOROETHENE	121	< 3.4	< 6.8
TRICHLOROETHENE	< 2.7	< 2.7	< 5.7
CARBON TETRACHLORIDE	< 3.2	< 2.7	< 6.3
1,1,1 -TCA	4	< 3.2	< 5.4

RESIDENT #7	12/5/2006	12/5/2006	12/5/2006
	Sub-Slab	Basement	First Floor
cVOC	Result (ug/m3)	Result (ug/m3)	Result (ug/m3)
TETRACHLOROETHENE	< 33.6	< 3.4	< 6.8
TRICHLOROETHENE	< 26.9	< 2.7	< 5.7
CARBON TETRACHLORIDE	< 31.5	< 2.7	< 6.3
1,1,1 -TCA	< 27.3	< 3.2	< 5.4

RESIDENT #1	12/4/2006	12/4/2006	12/4/2006
	Sub-Slab	Basement	First Floor
cVOC	Result (ug/m3)	Result (ug/m3)	Result (ug/m3)
TETRACHLOROETHENE	< 33.6	< 3.4	< 33.9
TRICHLOROETHENE	< 26.9	< 2.7	< 26.9
CARBON TETRACHLORIDE	< 31.5	< 2.7	< 31.5
1,1,1 -TCA	< 27.3	< 3.2	< 27.3

RESIDENT #11	12/7/2006	12/7/2006	12/7/2006
	Sub-Slab	Basement	First Floor
cVOC	Result (ug/m3)	Result (ug/m3)	Result (ug/m3)
TETRACHLOROETHENE	< 0.9	< 0.9	< 0.9
TRICHLOROETHENE	< 0.8	< 0.8	< 0.8
CARBON TETRACHLORIDE	< 0.9	< 0.9	< 0.9
1,1,1 -TCA	< 1.1	< 1.1	< 1.1

RESIDENT #8	12/5/2006	12/5/2006	12/5/2006
	Sub-Slab	Basement	First Floor
cVOC	Result (ug/m3)	Result (ug/m3)	Result (ug/m3)
TETRACHLOROETHENE	6.9	< 3.4	< 6.8
TRICHLOROETHENE	< 2.7	< 2.7	< 5.7
CARBON TETRACHLORIDE	< 3.2	< 2.7	< 6.3
1,1,1 -TCA	< 2.7	< 3.2	< 5.4

RESIDENT #2	12/4/2006	12/4/2006	12/4/2006
	Sub-Slab	Basement	First Floor
cVOC	Result (ug/m3)	Result (ug/m3)	Result (ug/m3)
TETRACHLOROETHENE	3.3 J	< 3.4	< 3.4
TRICHLOROETHENE	< 2.7	< 2.7	< 2.7
CARBON TETRACHLORIDE	< 2.7	< 2.7	< 2.7
1,1,1 -TCA	< 3.2	< 3.2	< 3.2

OSV-C	Result (ug/m3)	
cVOC	10/13/06	11/21/06
1,1,1-TRICHLOROETHANE	ND	1.7 (J)
TETRACHLOROETHENE	14.2	12.5
TRICHLOROETHYLENE	ND	3.1

OSV-D	Result (ug/m3)	
cVOC	10/13/06	11/21/06
1,1,1-TRICHLOROETHANE	ND	2.4 (J)
TETRACHLOROETHENE	35.7	14.5
TRICHLOROETHYLENE	ND	1.8 (J)

cVOC	Result (ug/m3)
1,1,1-TRICHLOROETHANE	2.2 (J)
TETRACHLOROETHENE	33.9
TRICHLOROETHYLENE	3.8

cVOC	Result (ug/m3)
TETRACHLOROETHENE	5.6

RESIDENT #12	12/6/2006	12/6/2006	12/0606
	Sub-Slab	Basement	First Floor
cVOC	Result (ug/m3)	Result (ug/m3)	Result (ug/m3)
TETRACHLOROETHENE	2.3 J	1.1	< 0.9
TRICHLOROETHENE	1.6 J	0.2	< 0.8
CARBON TETRACHLORIDE	< 0.9	1.7	< 0.9
1,1,1 -TCA	< 1.1	< 0.5	< 1.1

RESIDENT #4	12/4/2006	12/4/2006	12/4/2006
	Sub-Slab	Basement	First Floor
cVOC	Result (ug/m3)	Result (ug/m3)	Result (ug/m3)
TETRACHLOROETHENE	< 3.4	< 6.8	< 33.9
TRICHLOROETHENE	< 2.7	< 5.7	< 26.9
CARBON TETRACHLORIDE	< 2.7	< 6.3	< 31.5
1,1,1 -TCA	< 3.2	< 5.4	< 27.3

OSV-E	10/24/2006
cVOC	Result (ug/m3)
TETRACHLOROETHENE	7
TRICHLOROETHYLENE	39

SV-I	11/27/2006
cVOC	Result (ug/m3)
TETRACHLOROETHENE	5

SV-G	11/27/2006
cVOC	Result (ug/m3)
TETRACHLOROETHENE	8

SV-H	11/27/2006
cVOC	Result (ug/m3)
TETRACHLOROETHENE	16.5
TRICHLOROETHYLENE	62.3

OSV-F	10/24/2006
cVOC	Result (ug/m3)
TETRACHLOROETHENE	22

OSV-4-	ug/m3
cVOC	
1,1,1-TRICHLOROETHANE	3.2
TETRACHLOROETHENE	46.3

OSV-3-080906	8/9/2006
cVOC	Result (ug/m3)
1,1,1-TRICHLOROETHANE	30.6
TETRACHLOROETHENE	7.1

OSV-5-	9/28/2006
cVOC	Result (ug/m3)
TETRACHLOROETHENE	23.8

OSV-6-	9/28/2006
cVOC	Result (ug/m3)
TETRACHLOROETHENE	17.4

OSV-7-	9/28/2006
cVOC	Result (ug/m3)
TETRACHLOROETHENE	21

SV-M	12/5/2006
cVOC	Result (ug/m3)
TETRACHLOROETHENE	10.5

SV-N	12/5/2006
cVOC	Result (ug/m3)
TETRACHLOROETHENE	6.7

Date	Description	No.
Revisions		

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Project: ATLAS PARK PARCEL B GLENDALE QUEENS NY

Drawing Title: OFFSITE VAPOR AND SOIL VAPOR RESULTS

Project No. 5555113
Date 12/17/06
Scale 1"=50'
Drn. By JLV
Last Revised JPB

Drawing No. 8

1 Of 1

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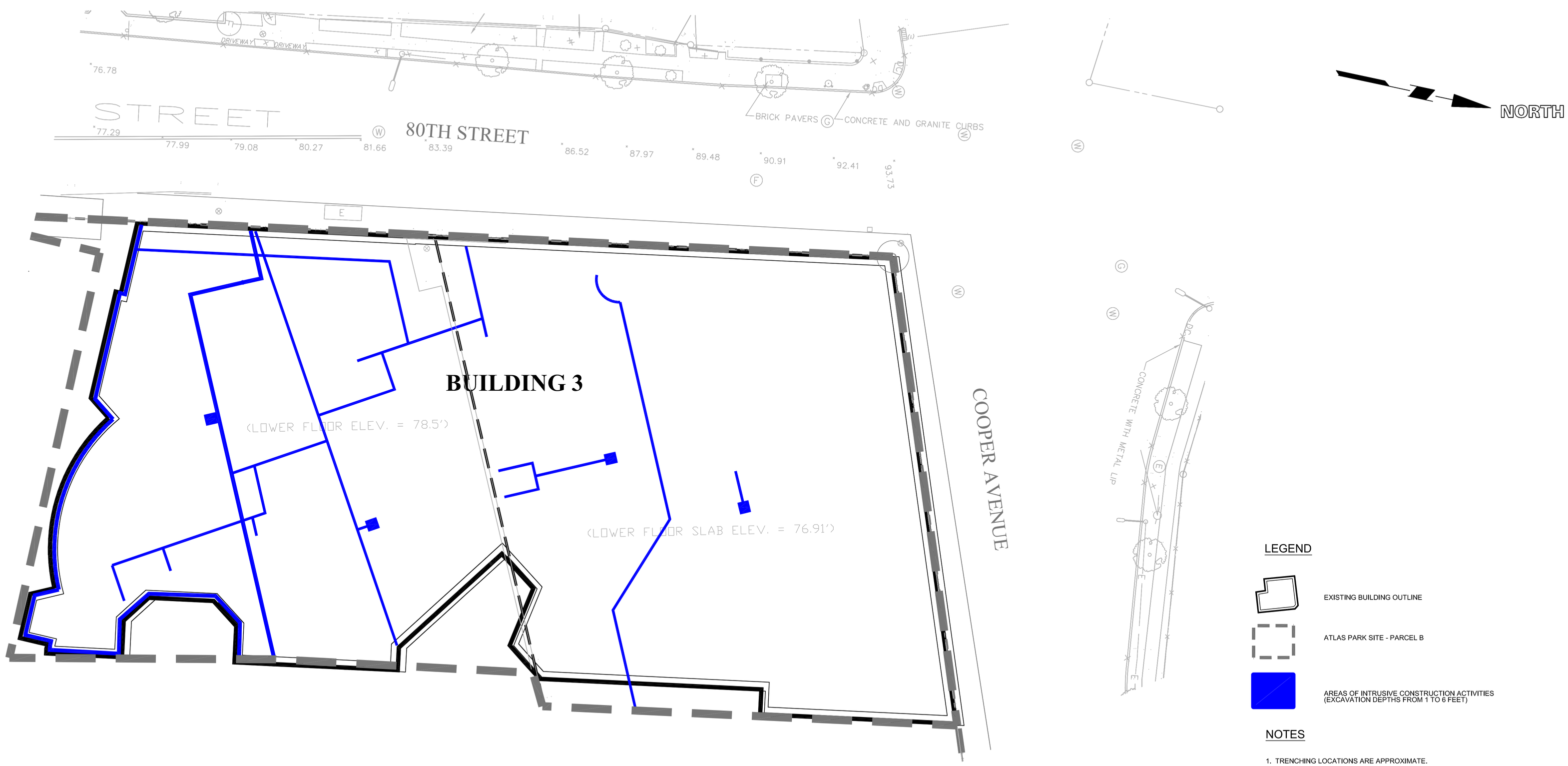

LEGEND

EXISTING BUILDING OUTLINE

ATLAS PARK SITE - PARCEL B

AREAS OF INTRUSIVE CONSTRUCTION ACTIVITIES (EXCAVATION DEPTHS FROM 1 TO 6 FEET)

NOTES

1. TRENCHING LOCATIONS ARE APPROXIMATE.

BASE MAP NOTES

1. BASE SURVEY PLAN WAS OBTAINED FROM A DRAWING TITLED CITY OF NEW YORK, COUNTY OF QUEENS, TAX BLOCK 3810, TAX LOT 2, BY MONTROSE SURVEYING CO., LLP, DATED 17 DECEMBER 2001 SUPPLIED BY ATCO.

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Project
ATLAS PARK SITE-PARCEL B
FINAL ENGINEERING REPORT
QUEENS NEW YORK

Drawing Title
BUILDING 3
AREAS OF INTRUSIVE CONSTRUCTION ACTIVITIES

Project No.	5555113
Date	12/11/06
Scale	1"=20'
Drn. By	VMT
Last Revised	VMT

Figure No. 9

1 Of 1

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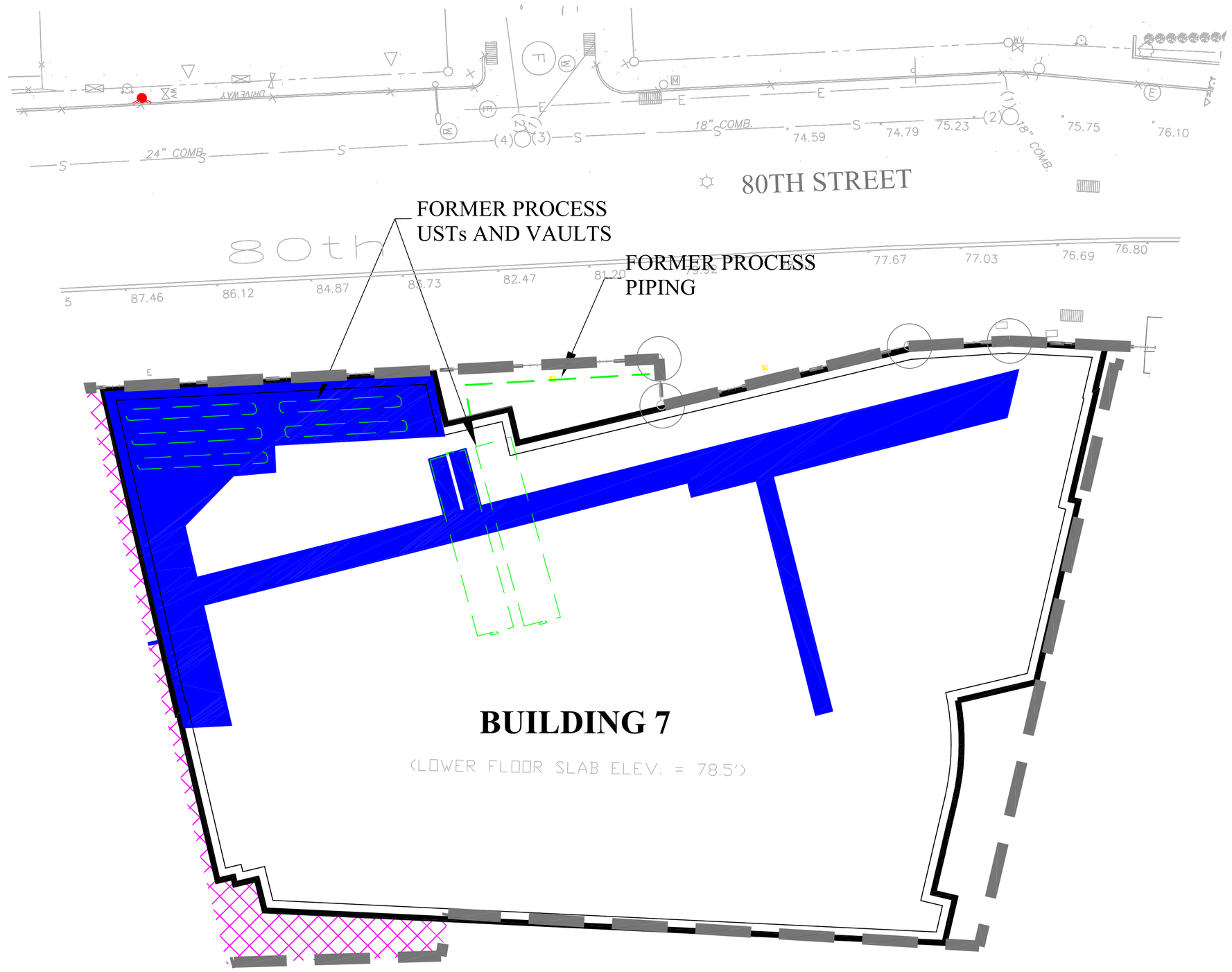
Filename: U:\Data1\5555113\Office Data\Reports\Final Engineering Report\2 Figures\Figure 9_10_11 – Intrusive Activities.dwg Date: 1/8/2007 Time: 17:41 User: jbarr Style Table: Langan.stb Layout: 9 Bldg 3 DSIZE



NORTH

LEGEND

- EXISTING BUILDING OUTLINE
- ATLAS PARK SITE - PARCEL B
- ALLEYWAY AND SOUTH EAST CORNER OFF BUILDING 7
- AREAS OF INTRUSIVE CONSTRUCTION ACTIVITIES (EXCAVATION DEPTHS FROM 1 TO 6 FEET)

NOTES

1. TRENCHING LOCATIONS ARE APPROXIMATE.

BASE MAP NOTES

1. BASE SURVEY PLAN WAS OBTAINED FROM A DRAWING TITLED CITY OF NEW YORK, COUNTY OF QUEENS, TAX BLOCK 3810, TAX LOT 2, BY MONTROSE SURVEYING CO., LLP. DATED 17 DECEMBER 2001 SUPPLIED BY ATCO.

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Project	Drawing Title	Project No.	Figure No.
ATLAS PARK SITE-PARCEL B FINAL ENGINEERING REPORT QUEENS NEW YORK	BUILDING 7 AREAS OF INTRUSIVE CONSTRUCTION ACTIVITIES	5555113	10
		Date 12/11/06	
		Scale 1"=20'	
		Drn. By VMT	
		Last Revised VMT	1 Of 1

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80TH STREET OVERPASS

BUILDING 8

NORTH

TRANSFORMER BUILDING/PAD (DEMOLISHED)

SOUTHWEST VAULT (UNDERGROUND CONCRETE VAULT)

LIRR EASEMENT

1-STORY CON EDISON ELECTRICAL TRANSFORMER ADDITION

460 VOLT CON EDISON SPOT NETWORK & ATLAS PARK SITE ELECTRICAL DISTRIBUTION (SLAB ON GRADE STRIP FOOTING 4' DEEP)

EXIST. BUILDINGS AND BOILER STACK PREVIOUSLY REMOVED (BUILDINGS 7/7A)

FORMER HEATING OIL USTs

ALLEYWAY (REMEDIATED TO TRACK 1 SCOs)

(LOWER FLOOR SLAB ELEV. = 72.74')

2 STORY BRICK

1 STORY BRICK

HIGH 1 STORY CONC. BUILDING

BUILDING 29

WATER TOWER

LEGEND

- EXISTING BUILDING OUTLINE
- DEMOLISHED STRUCTURE
- ATLAS PARK SITE - PARCEL B
- ALLEYWAY AND SOUTH EAST CORNER OFF BUILDING 7
- AREAS OF INTRUSIVE CONSTRUCTION ACTIVITIES (EXCAVATION DEPTHS FROM 1 TO 6 FEET)

NOTES

1. TRENCHING LOCATIONS ARE APPROXIMATE.

BASE MAP NOTES

1. BASE SURVEY PLAN WAS OBTAINED FROM A DRAWING TITLED CITY OF NEW YORK, COUNTY OF QUEENS, TAX BLOCK 3810, TAX LOT 2, BY MONTROSE SURVEYING CO., LLP, DATED 17 DECEMBER 2001 SUPPLIED BY ATCO.

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Project
ATLAS PARK SITE-PARCEL B
FINAL ENGINEERING REPORT
QUEENS NEW YORK

Drawing Title
BUILDING 8/ SERVICE CORRIDOR AREAS OF INTRUSIVE CONSTRUCTION ACTIVITIES

Project No.	5555113
Date	12/11/06
Scale	1"=20'
Drn. By	VMT
Last Revised	VMT

Figure No. 11

1 Of 1

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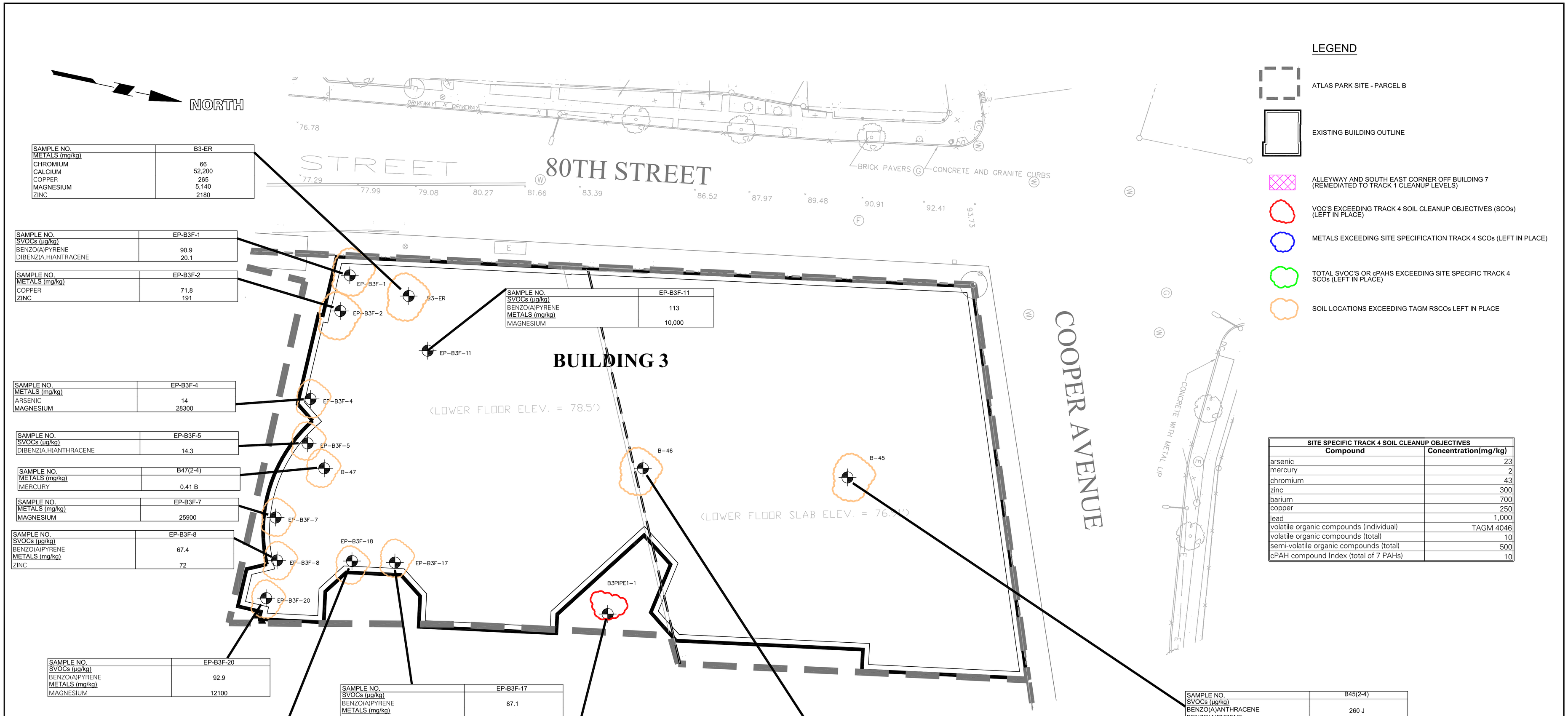

SAMPLE NO.	B3-ER
METALS (mg/kg)	
CHROMIUM	66
CALCIUM	52,200
COPPER	265
MAGNESIUM	5,140
ZINC	2180

SAMPLE NO.	EP-B3F-1
SVOCs (µg/kg)	
BENZO(A)PYRENE	90.9
DIBENZ(A,H)ANTRACENE	20.1

SAMPLE NO.	EP-B3F-2
METALS (mg/kg)	
COPPER	71.8
ZINC	191

SAMPLE NO.	EP-B3F-11
SVOCs (µg/kg)	
BENZO(A)PYRENE	113
METALS (mg/kg)	
MAGNESIUM	10,000

SAMPLE NO.	EP-B3F-4
METALS (mg/kg)	
ARSENIC	14
MAGNESIUM	28300

SAMPLE NO.	EP-B3F-5
SVOCs (µg/kg)	
DIBENZ(A,H)ANTHRACENE	14.3

SAMPLE NO.	B47(2-4)
METALS (mg/kg)	
MERCURY	0.41 B

SAMPLE NO.	EP-B3F-7
METALS (mg/kg)	
MAGNESIUM	25900

SAMPLE NO.	EP-B3F-8
SVOCs (µg/kg)	
BENZO(A)PYRENE	67.4
METALS (mg/kg)	
ZINC	72

SAMPLE NO.	EP-B3F-20
SVOCs (µg/kg)	
BENZO(A)PYRENE	92.9
METALS (mg/kg)	
MAGNESIUM	12100

SAMPLE NO.	EP-B3F-17
SVOCs (µg/kg)	
BENZO(A)PYRENE	87.1
METALS (mg/kg)	
MAGNESIUM	10200

SAMPLE NO.	EP-B3F-18
SVOCs (µg/kg)	
BENZO(A)PYRENE	66
METALS (mg/kg)	
ZINC	52

SAMPLE NO.	B3PIPE1-1
BENZENE (µg/kg)	87.6

SAMPLE NO.	B46(4-6)
SVOCs (µg/kg)	
BENZO(A)PYRENE	180 J
BENZO(B)FLOURATHENE	230 J,M
METALS (mg/kg)	
MAGNESIUM	8670
ZINC	70.1
SAMPLE NO.	B46(6-8)
SVOCs (µg/kg)	
BENZO(A)PYRENE	80 J
METALS (mg/kg)	
MERCURY	0.43 N
ZINC	58.9

SITE SPECIFIC TRACK 4 SOIL CLEANUP OBJECTIVES	
Compound	Concentration(mg/kg)
arsenic	23
mercury	2
chromium	43
zinc	300
barium	700
copper	250
lead	1,000
volatile organic compounds (individual)	TAGM 4046
volatile organic compounds (total)	10
semi-volatile organic compounds (total)	500
cPAH compound Index (total of 7 PAHs)	10

SAMPLE NO.	B45(2-4)
SVOCs (µg/kg)	
BENZO(A)ANTHRACENE	260 J
BENZO(A)PYRENE	430
BENZO(B)FLOURATHENE	320 J,M
BENZO(K)FLOURATHENE	430 M
DIBENZO(A,H)ANTHRACENE	84 J,M
METALS (mg/kg)	
MERCURY	0.21 N
SAMPLE NO.	B45(5-7)
SVOCs (µg/kg)	
BENZO(A)ANTHRACENE	430
BENZO(A)PYRENE	970
BENZO(B)FLOURATHENE	650 M
BENZO(K)FLOURATHENE	850 M
CHRYSENE	540
DIBENZO(A,H)ANTHRACENE	95 J,M

NOTE:
ACETONE EXCEEDED THE TAGM 4046 RSCO'S IN NUMEROUS SOIL SAMPLES TAKEN AT THE SITE. THIS IS LIKELY ATTRIBUTED TO LABORATORY ARTIFACT AND IS THEREFORE NOT REPRESENTED IN THIS FIGURE.

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Project
ATLAS PARK SITE-PARCEL B
FINAL ENGINEERING REPORT
QUEENS NEW YORK

Drawing Title
BUILDING 3-
RESIDUAL CONAMINATION ABOVE TAGM 4046 AND TRACK 4 SCOs

Project No. 5555113
Date 12/8/06
Scale 1"=20'
Drn. By JPB
Last Revised JR
Drawing No. 12
1 Of 1

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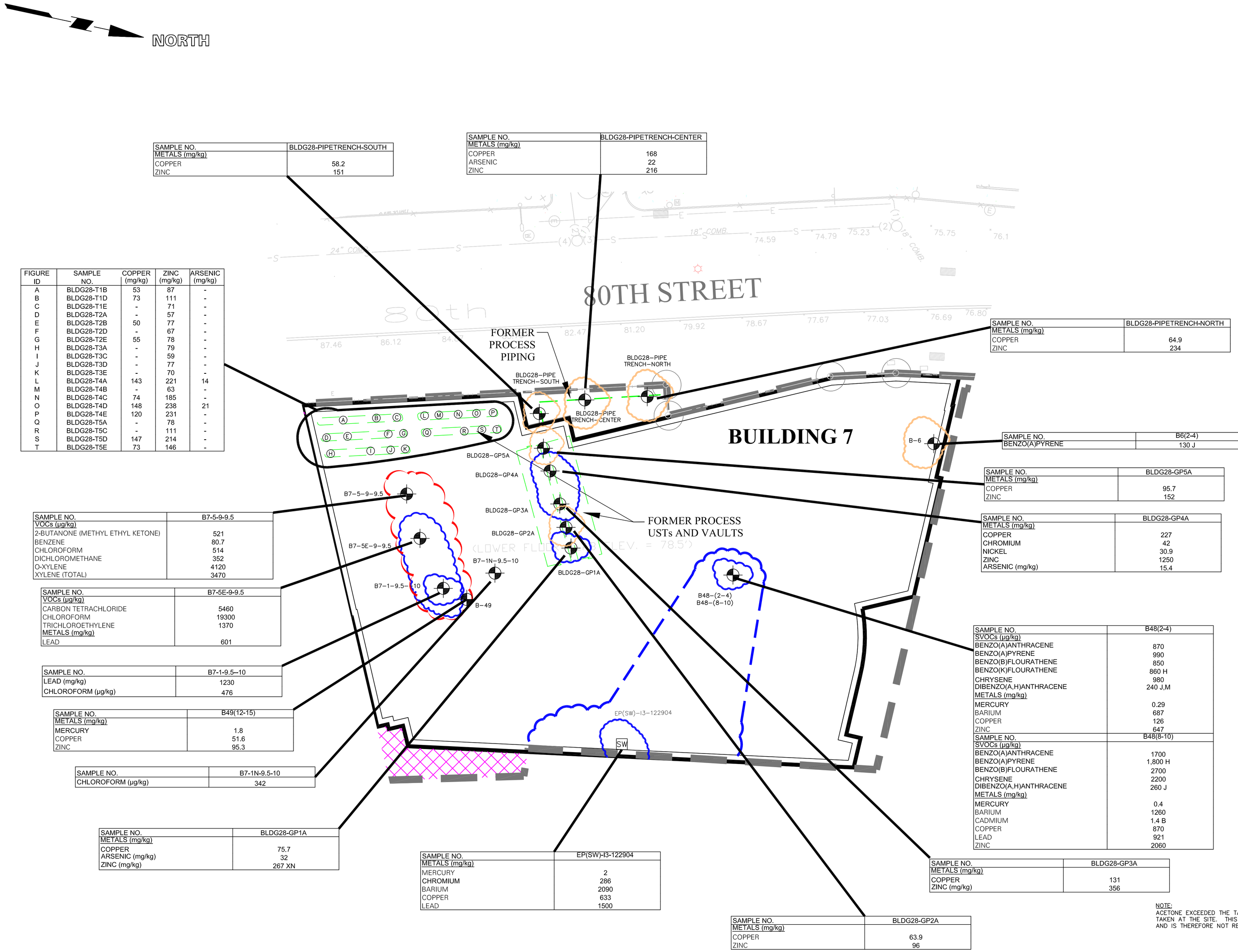

SAMPLE NO.	BLDG28-PIPETRENCH-SOUTH
METALS (mg/kg)	
COPPER	58.2
ZINC	151

SAMPLE NO.	BLDG28-PIPETRENCH-CENTER
METALS (mg/kg)	
COPPER	168
ARSENIC	22
ZINC	216

FIGURE ID	SAMPLE NO.	COPPER (mg/kg)	ZINC (mg/kg)	ARSENIC (mg/kg)
A	BLDG28-T1B	53	87	-
B	BLDG28-T1D	73	111	-
C	BLDG28-T1E	-	71	-
D	BLDG28-T2A	-	57	-
E	BLDG28-T2B	50	77	-
F	BLDG28-T2D	-	67	-
G	BLDG28-T2E	55	78	-
H	BLDG28-T3A	-	79	-
I	BLDG28-T3C	-	59	-
J	BLDG28-T3D	-	77	-
K	BLDG28-T3E	-	70	-
L	BLDG28-T4A	143	221	14
M	BLDG28-T4B	-	63	-
N	BLDG28-T4C	74	185	-
O	BLDG28-T4D	148	238	21
P	BLDG28-T4E	120	231	-
Q	BLDG28-T5A	-	78	-
R	BLDG28-T5C	-	111	-
S	BLDG28-T5D	147	214	-
T	BLDG28-T5E	73	146	-

SAMPLE NO.	BLDG28-PIPETRENCH-NORTH
METALS (mg/kg)	
COPPER	64.9
ZINC	234

SAMPLE NO.	B6(2-4)
BENZO(A)PYRENE	130 J

SAMPLE NO.	BLDG28-GP5A
METALS (mg/kg)	
COPPER	95.7
ZINC	152

SAMPLE NO.	BLDG28-GP4A
METALS (mg/kg)	
COPPER	227
CHROMIUM	42
NICKEL	30.9
ZINC	1250
ARSENIC (mg/kg)	15.4

SAMPLE NO.	B7-5-9-9.5
VOCs (µg/kg)	
2-BUTANONE (METHYL ETHYL KETONE)	521
BENZENE	80.7
CHLOROFORM	514
DICHLOROMETHANE	352
O-XYLENE	4120
XYLENE (TOTAL)	3470

SAMPLE NO.	B7-5E-9-9.5
VOCs (µg/kg)	
CARBON TETRACHLORIDE	5460
CHLOROFORM	19300
TRICHLOROETHYLENE	1370
METALS (mg/kg)	
LEAD	601

SAMPLE NO.	B7-1-9.5--10
LEAD (mg/kg)	1230
CHLOROFORM (µg/kg)	476

SAMPLE NO.	B49(12-15)
METALS (mg/kg)	
MERCURY	1.8
COPPER	51.6
ZINC	95.3

SAMPLE NO.	B7-1N-9.5-10
CHLOROFORM (µg/kg)	342

SAMPLE NO.	BLDG28-GP1A
METALS (mg/kg)	
COPPER	75.7
ARSENIC (mg/kg)	32
ZINC (mg/kg)	267 XN

SAMPLE NO.	EP(SW)-I3-122904
METALS (mg/kg)	
MERCURY	2
CHROMIUM	286
BARIUM	2090
COPPER	633
LEAD	1500

SAMPLE NO.	BLDG28-GP2A
METALS (mg/kg)	
COPPER	63.9
ZINC	96

SAMPLE NO.	B48(2-4)
SVOCs (µg/kg)	
BENZO(A)ANTHRACENE	870
BENZO(A)PYRENE	990
BENZO(B)FLOURATHENE	850
BENZO(K)FLOURATHENE	860 H
CHRYSENE	980
DIBENZO(A,H)ANTHRACENE	240 J,M
METALS (mg/kg)	
MERCURY	0.29
BARIUM	687
COPPER	126
ZINC	647
SAMPLE NO.	B48(8-10)
SVOCs (µg/kg)	
BENZO(A)ANTHRACENE	1700
BENZO(A)PYRENE	1,800 H
BENZO(B)FLOURATHENE	2700
CHRYSENE	2200
DIBENZO(A,H)ANTHRACENE	260 J
METALS (mg/kg)	
MERCURY	0.4
BARIUM	1260
CADMIUM	1.4 B
COPPER	870
LEAD	921
ZINC	2060

SAMPLE NO.	BLDG28-GP3A
METALS (mg/kg)	
COPPER	131
ZINC (mg/kg)	356

NOTE:
ACETONE EXCEEDED THE TAGM 4046 RSCO'S IN NUMEROUS SOIL SAMPLES TAKEN AT THE SITE. THIS IS LIKELY ATTRIBUTED TO LABORATORY ARTIFACT AND IS THEREFORE NOT REPRESENTED IN THIS FIGURE.

LEGEND

- ATLAS PARK SITE - PARCEL B
- EXISTING BUILDING OUTLINE
- ALLEYWAY AND SOUTH EAST CORNER OFF BUILDING 7 (REMEDIATED TO TRACK 1 CLEANUP LEVELS)
- VOC'S EXCEEDING TRACK 4 SOIL CLEANUP OBJECTIVES (SCOs) (LEFT IN PLACE)
- METALS EXCEEDING SITE SPECIFICATION TRACK 4 SCOs (LEFT IN PLACE)
- TOTAL SVOC'S OR cPAHS EXCEEDING SITE SPECIFIC TRACK 4 SCOs (LEFT IN PLACE)
- SOIL LOCATIONS EXCEEDING TAGM RSCOs LEFT IN PLACE

SITE SPECIFIC TRACK 4 SOIL CLEANUP OBJECTIVES	
Compound	Concentration(mg/kg)
arsenic	23
mercury	2
chromium	43
zinc	300
barium	700
copper	250
lead	1,000
volatile organic compounds (individual)	TAGM 4046
volatile organic compounds (total)	10
semi-volatile organic compounds (total)	500
cPAH compound Index (total of 7 PAHs)	10

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Project
ATLAS PARK SITE-PARCEL B
FINAL ENGINEERING REPORT
QUEENS NEW YORK

Drawing Title
BUILDING 7-
RESIDUAL CONAMINATION ABOVE TAGM 4046 AND TRACK 4 SCOs

Project No.	5555113
Date	12/8/06
Scale	1"=20'
Drn. By	JPB
Last Revised	JR
Drawing No.	13
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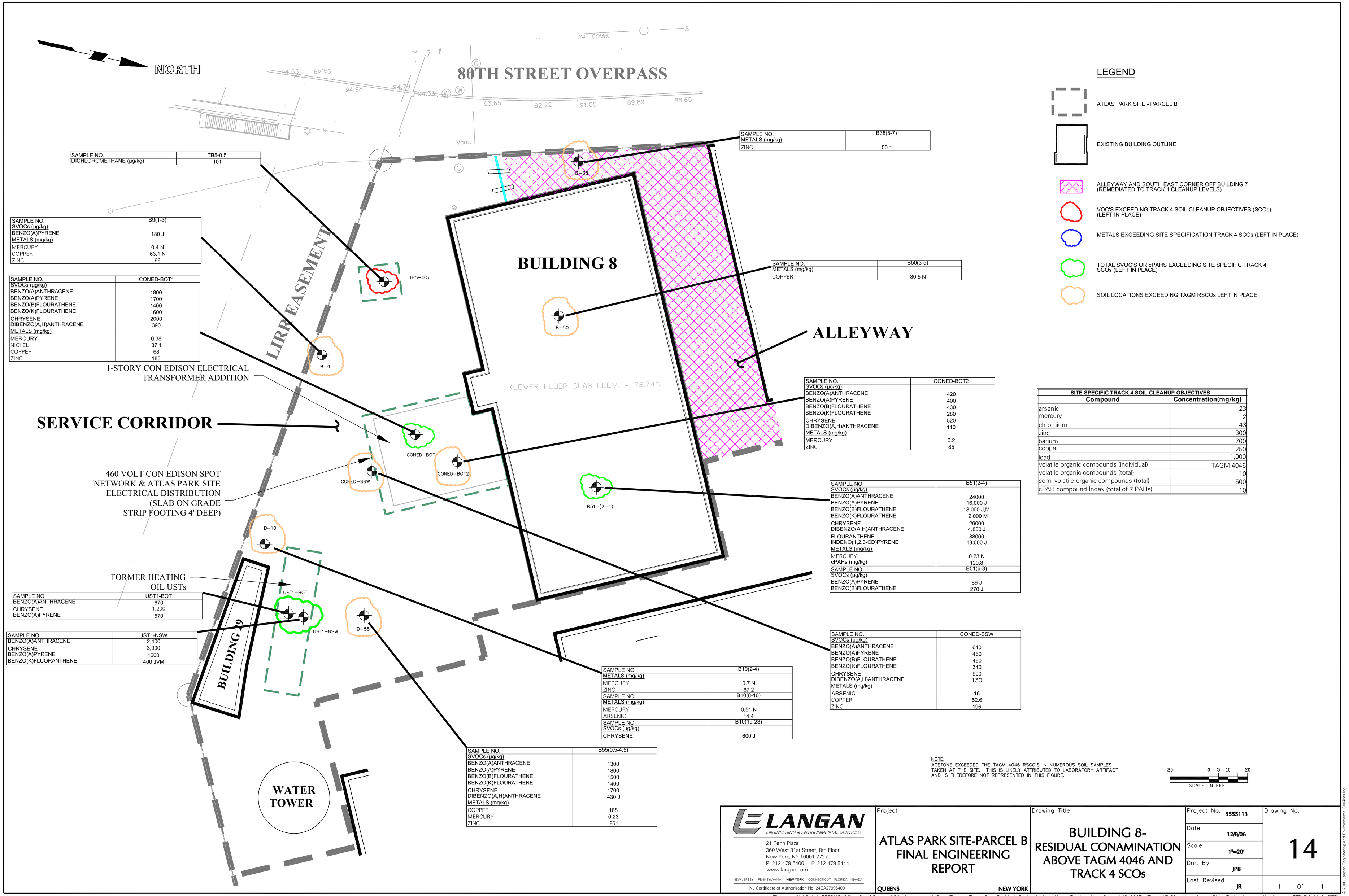
Filename: U:\Data1\5555113\Office Data\Reports\Site Management Plan\Figures\Figure 5 – Residual Contamination Above Track 4.dwg Date: 1/8/2007 Time: 17:31 User: jbarr Style Table: Langan Color.stb Layout: FER FIG 13 D SIZE



SAMPLE NO.	TB5-0.5
DICHLOROMETHANE (µg/kg)	101

SAMPLE NO.	B38(5-7)
METALS (mg/kg)	
ZINC	50.1

SAMPLE NO.	B9(1-3)
SVOCs (µg/kg)	
BENZO(A)PYRENE	180 J
METALS (mg/kg)	
MERCURY	0.4 N
COPPER	63.1 N
ZINC	96

SAMPLE NO.	CONED-BOT1
SVOCs (µg/kg)	
BENZO(A)ANTHRACENE	1800
BENZO(A)PYRENE	1700
BENZO(B)FLOURATHENE	1400
BENZO(K)FLOURATHENE	1600
CHRYSENE	2000
DIBENZO(A,H)ANTHRACENE	390
METALS (mg/kg)	
MERCURY	0.38
NICKEL	37.1
COPPER	68
ZINC	188

SAMPLE NO.	B50(3-5)
METALS (mg/kg)	
COPPER	80.5 N

SAMPLE NO.	CONED-BOT2
SVOCs (µg/kg)	
BENZO(A)ANTHRACENE	420
BENZO(A)PYRENE	400
BENZO(B)FLOURATHENE	430
BENZO(K)FLOURATHENE	280
CHRYSENE	520
DIBENZO(A,H)ANTHRACENE	110
METALS (mg/kg)	
MERCURY	0.2
ZINC	85

SITE SPECIFIC TRACK 4 SOIL CLEANUP OBJECTIVES	
Compound	**Concentration(mg/kg)**
arsenic	23
mercury	2
chromium	43
zinc	300
barium	700
copper	250
lead	1,000
volatile organic compounds (individual)	TAGM 4046
volatile organic compounds (total)	10
semi-volatile organic compounds (total)	500
cPAH compound Index (total of 7 PAHs)	10

SAMPLE NO.	B51(2-4)
SVOCs (µg/kg)	
BENZO(A)ANTHRACENE	24000
BENZO(A)PYRENE	16,000 J
BENZO(B)FLOURATHENE	18,000 J,M
BENZO(K)FLOURATHENE	19,000 M
CHRYSENE	26000
DIBENZO(A,H)ANTHRACENE	4,800 J
FLOURANTHENE	88000
INDENO(1,2,3-CD)PYRENE	13,000 J
METALS (mg/kg)	
MERCURY	0.23 N
cPAHs (mg/kg)	120.8
SAMPLE NO.	B51(6-8)
SVOCs (µg/kg)	
BENZO(A)PYRENE	89 J
BENZO(B)FLOURATHENE	270 J

SAMPLE NO.	UST1-BOT
BENZO(A)ANTHRACENE	670
CHRYSENE	1,200
BENZO(A)PYRENE	570

SAMPLE NO.	UST1-NSW
BENZO(A)ANTHRACENE	2,400
CHRYSENE	3,900
BENZO(A)PYRENE	1600
BENZO(K)FLUORANTHENE	400 JVM

SAMPLE NO.	CONED-SSW
SVOCs (µg/kg)	
BENZO(A)ANTHRACENE	610
BENZO(A)PYRENE	450
BENZO(B)FLOURATHENE	490
BENZO(K)FLOURATHENE	340
CHRYSENE	900
DIBENZO(A,H)ANTHRACENE	130
METALS (mg/kg)	
ARSENIC	16
COPPER	52.6
ZINC	196

SAMPLE NO.	B10(2-4)
METALS (mg/kg)	
MERCURY	0.7 N
ZINC	67.2
SAMPLE NO.	B10(8-10)
METALS (mg/kg)	
MERCURY	0.51 N
ARSENIC	14.4
SAMPLE NO.	B10(19-23)
SVOCs (µg/kg)	
CHRYSENE	600 J

SAMPLE NO.	B55(0.5-4.5)
SVOCs (µg/kg)	
BENZO(A)ANTHRACENE	1300
BENZO(A)PYRENE	1800
BENZO(B)FLOURATHENE	1500
BENZO(K)FLOURATHENE	1400
CHRYSENE	1700
DIBENZO(A,H)ANTHRACENE	430 J
METALS (mg/kg)	
COPPER	188
MERCURY	0.23
ZINC	261

NOTE:
ACETONE EXCEEDED THE TAGM 4046 RSCO'S IN NUMEROUS SOIL SAMPLES TAKEN AT THE SITE. THIS IS LIKELY ATTRIBUTED TO LABORATORY ARTIFACT AND IS THEREFORE NOT REPRESENTED IN THIS FIGURE.

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Project
ATLAS PARK SITE-PARCEL B
FINAL ENGINEERING REPORT
QUEENS NEW YORK

Drawing Title
BUILDING 8-
RESIDUAL CONAMINATION ABOVE TAGM 4046 AND TRACK 4 SCOs

Project No.	5555113
Date	12/8/06
Scale	1"=20'
Drn. By	JPB
Last Revised	JR
Drawing No.	14
	1 Of 1

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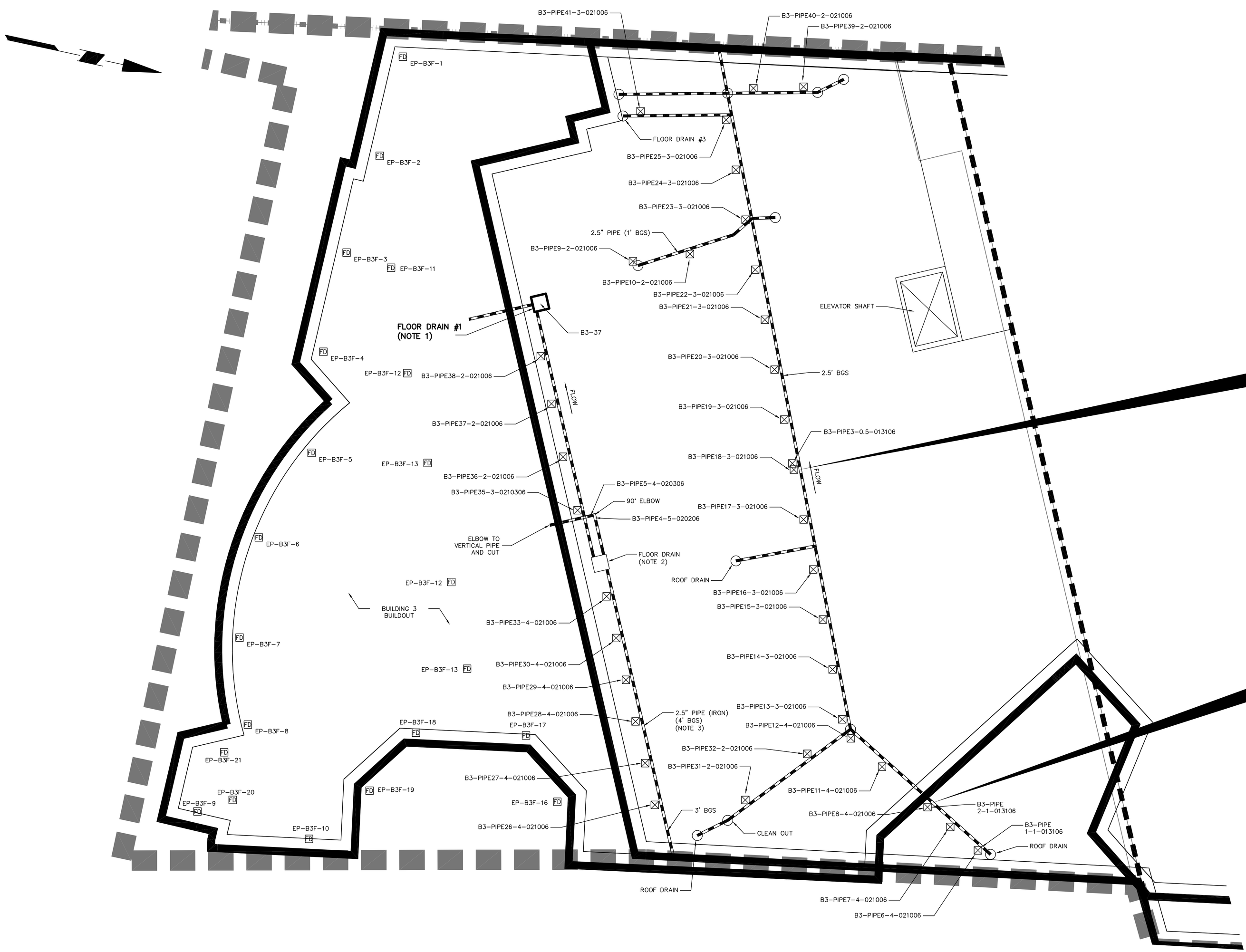
Filename: U:\Data1\5555113\Office Data\Reports\Site Management Plan\Figures\Figure 5 – Residual Contamination Above Track 4.dwg Date: 1/8/2007 Time: 17:32 User: jbarr Style Table: Langan.stb Layout: FER FIG 14 D SIZE

LEGEND

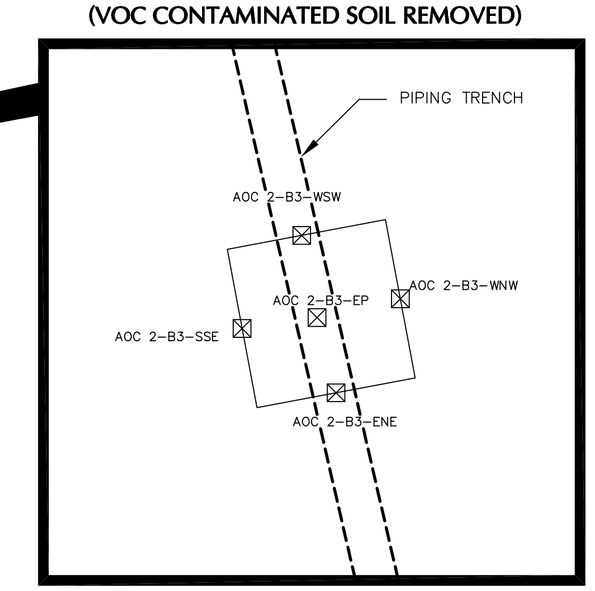
- PARCEL B BOUNDARY
- BUILDING LINE
- EP–B3F–17 / FD — FOUNDATION EXCAVATION END POINT SOIL SAMPLE LOCATION
- B3–PIPE13–3–021006 — SUB-PIPE SOIL SAMPLE LOCATION
- SUBSURFACE PIPING RUN
- ROOF DRAIN LEADER
- FLOOR DRAIN

NOTES

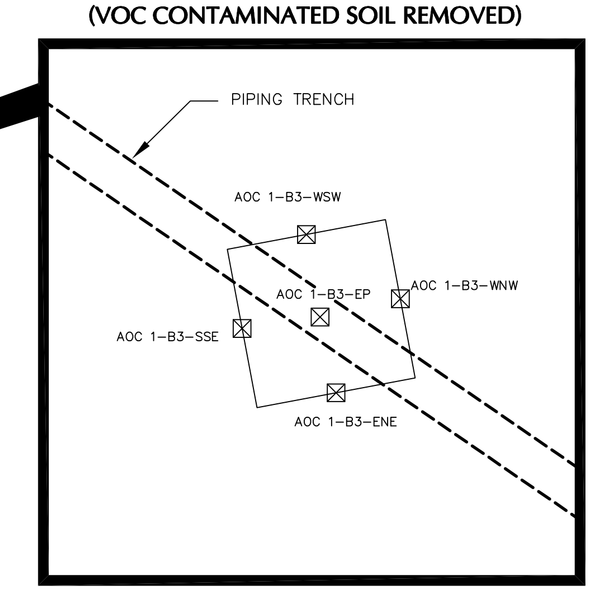
1. 2'X2'X2' FLOOR DRAIN CONTAINING VOC CONTAMINATED SOIL AND SLUDGE - REMOVED
2. 2'X2'X2' FLOOR DRAIN - ONE PIPE ENTERING (NO APPARENT EXIT) - REMOVED
3. 2.5" PIPE PASSING UNDER FLOOR DRAIN #2 - REMOVED



AOC-2
(VOC CONTAMINATED SOIL REMOVED)



AOC-1
(VOC CONTAMINATED SOIL REMOVED)



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LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, NY 10001-2727
P: 212.479.5400 F: 212.479.5444
www.langan.com
NEW JERSEY PENNSYLVANIA **NEW YORK** CONNECTICUT FLORIDA
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Project
ATLAS PARK SITE-PARCEL B
FINAL ENGINEERING REPORT
QUEENS NEW YORK

Drawing Title
BUILDING 3
DRAIN AND PIPE
CHASE PLAN

Project No.	5555113
Date	2/23/06
Scale	1"=10'
Drn. By	JLV
Last Revised	JB
Figure No.	15
	1 Of 1

Filename: U:\Data1\5555113\Office Data\Reports\Final Engineering Report\2 Figures\Figure 15 – Building 3 Pipe Chase Plan 10-26-06.dwg Date: 1/8/2007 Time: 17:29 User: jbarr Style Table: Langon.stb Layout: Figure 13 – Bldg 3 Pipe Chase D SIZE

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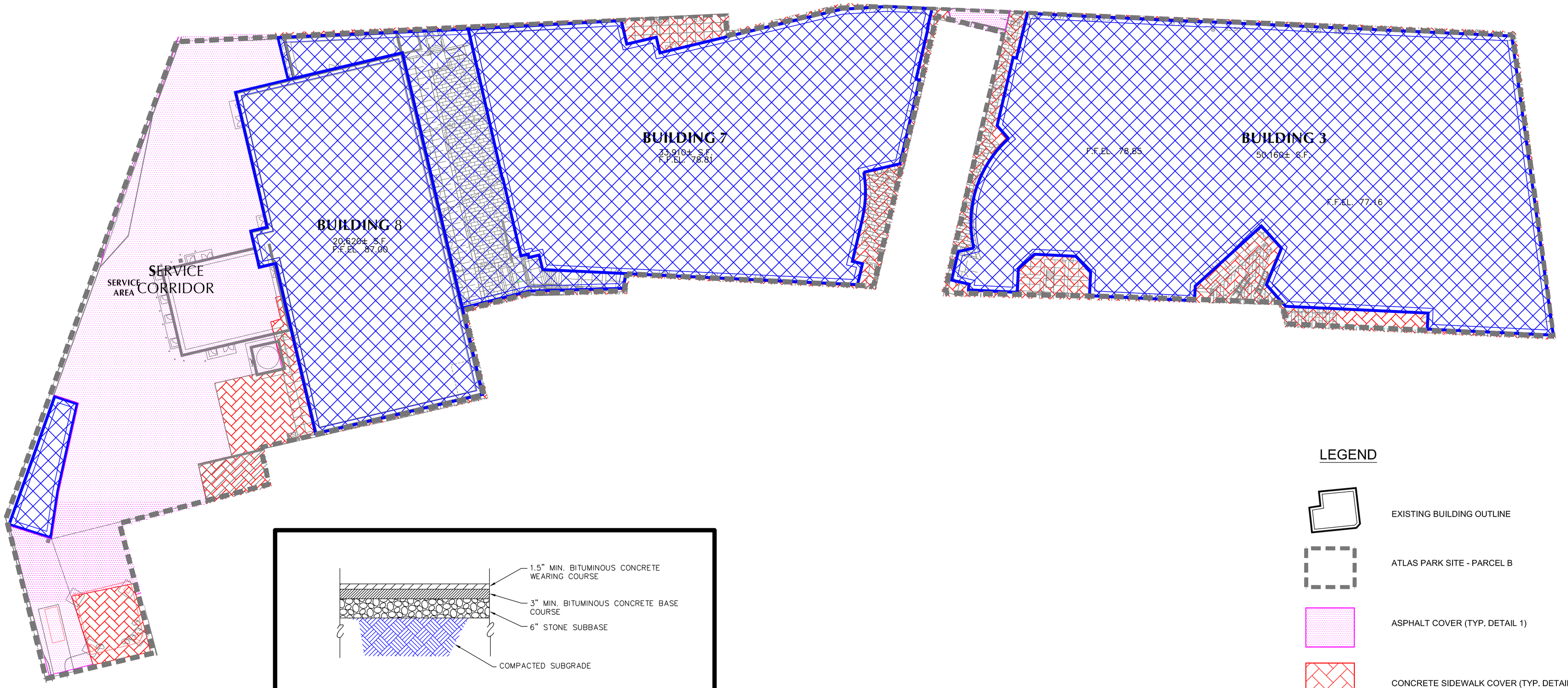
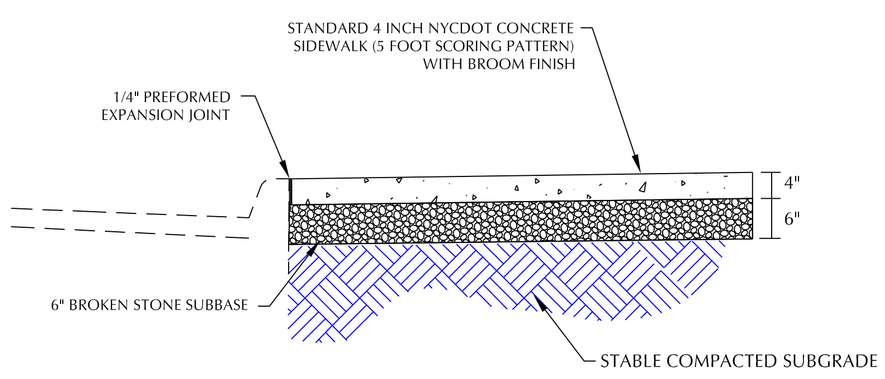


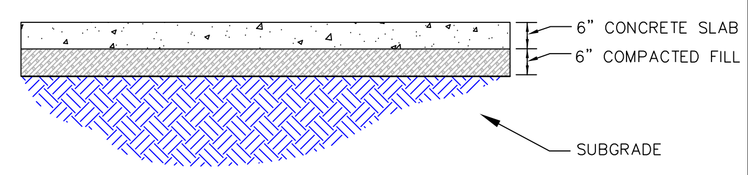
LEGEND

- EXISTING BUILDING OUTLINE
- ATLAS PARK SITE - PARCEL B
- ASPHALT COVER (TYP. DETAIL 1)
- CONCRETE SIDEWALK COVER (TYP. DETAIL 2)
- CONCRETE BUILDING SLAB COVER (TYP. DETAIL 3)

DETAIL 1: TYPICAL ASPHALT PAVEMENT DETAIL
(NOT TO SCALE)



DETAIL 2: TYPICAL CONCRETE SIDEWALK DETAIL
(NOT TO SCALE)



DETAIL 3: TYPICAL BUILDING FOUNDATION DETAIL
(NOT TO SCALE)

BASE MAP NOTES

1. BASE SURVEY PLAN WAS OBTAINED FROM A DRAWING TITLED CITY OF NEW YORK, COUNTY OF QUEENS, TAX BLOCK 3810, TAX LOT 2, BY MONTROSE SURVEYING CO., LLP. DATED 17 DECEMBER 2001 SUPPLIED BY ATCO.

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ENGINEERING & ENVIRONMENTAL SERVICES
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, NY 10001-2727
P: 212.479.5400 F: 212.479.5444
www.langan.com
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Project
ATLAS PARK SITE - PARCEL B
FINAL ENGINEERING REPORT
QUEENS NEW YORK

Drawing Title
ATLAS PARK
PARCEL B
SITE WIDE
COVER SYSTEM

Project No.	5555113
Date	12/14/06
Scale	1"=30
Drn. By	VMT
Last Revised	12/14/06

Drawing No. 16
1 Of 1

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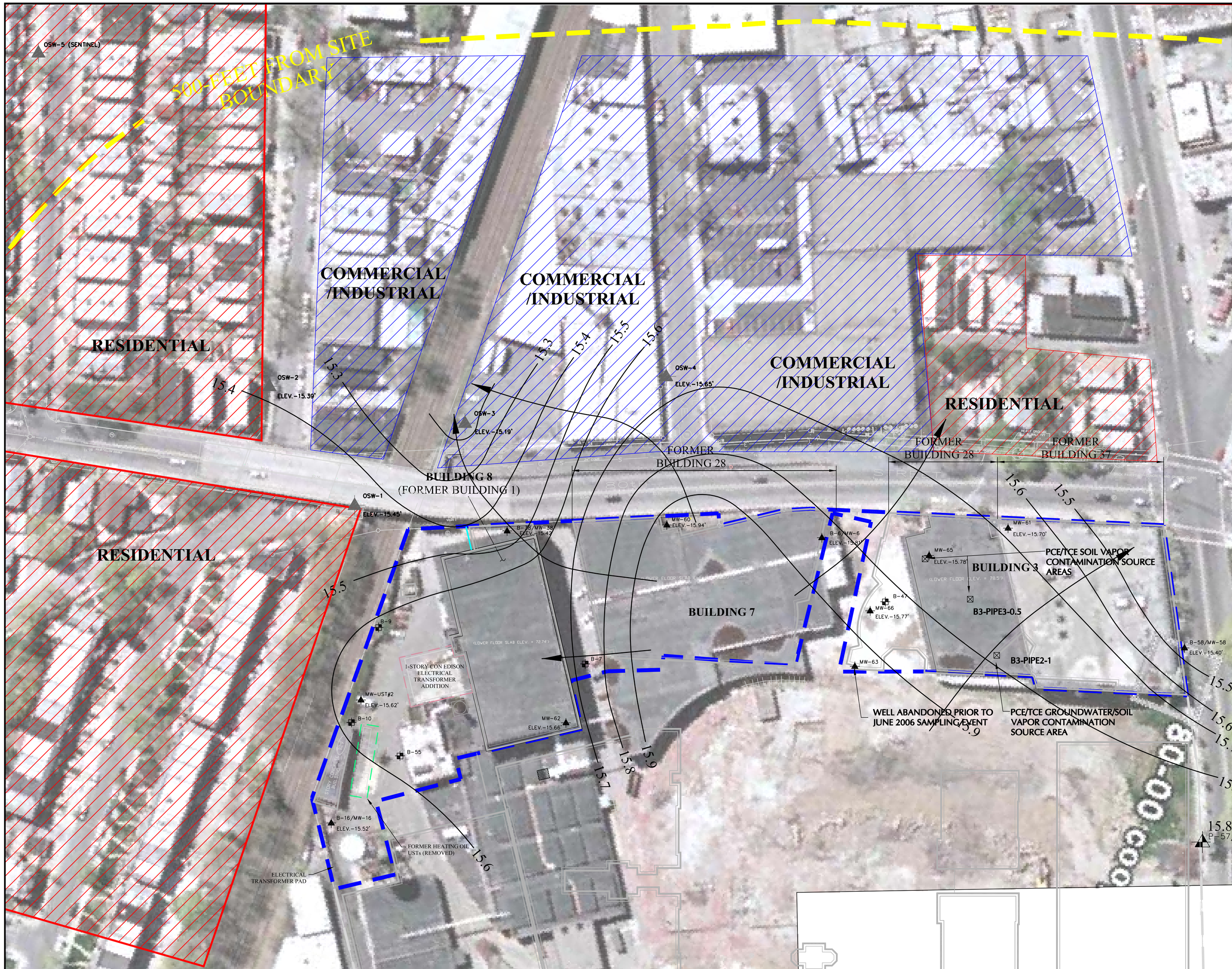
Filename: U:\Data1\5555113\Office Data\Reports\Final Engineering Report\2 Figures\Figure 16 – Capping System.dwg Date: 1/8/2007 Time: 17:25 User: jbarr Style Table: Langan Color.stb Layout: FER D Size Sheet (Bottom) (2)



LEGEND

OSW-4	OFFSITE GROUNDWATER MONITORING WELL LOCATION
ELEV.-15.65'	ELEVATION OF GROUNDWATER (FT MSL)
MW-60 ELEV.-15.78'	GROUNDWATER MONITORING WELL
	ATLAS PARK - PARCEL B BOUNDARY
	RESIDENTIAL PROPERTIES
	COMMERCIAL/INDUSTRIAL PROPERTIES
	GROUNDWATER FLOW ARROW
15.9	GROUNDWATER ELEVATION CONTOUR (FT ABOVE MSL)

NOTE:

1. CONTOURS DASHED WHERE INFERRED.
2. BASEMAP WAS REFERENCED FROM GOOGLE EARTH(TM)
3. ALL MONITORING WELLS ONSITE WERE PREVIOUSLY SAMPLED IN FEB/MAR 2006. THOSE CONCENTRATIONS ARE SHOWN IN PARENTHESES.

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ENGINEERING & ENVIRONMENTAL SERVICES
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, NY 10001-2727
P: 212.479.5400 F: 212.479.5444
www.langan.com
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Project
ATLAS PARK SITE - PARCEL B
FINAL ENGINEERING REPORT
QUEENS NEW YORK

Drawing Title
GROUNDWATER FLOW CONTOURS JUNE 2006

Project No.	5555113
Date	9/14/06
Scale	1"=50'
Drn. By	JLV
Last Revised	N/A
Drawing No.	17
	1 Of 1

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Filename: U:\Data1\5555113\Office Data\Reports\Final Engineering Report\2 Figures\Figure 17 - Groundwater Flow Contours June 2006 120806.dwg Date: 1/8/2007 Time: 17:28 User: jbarr Style Table: Langan Color.stb Layout: FER D SIZE SHEET