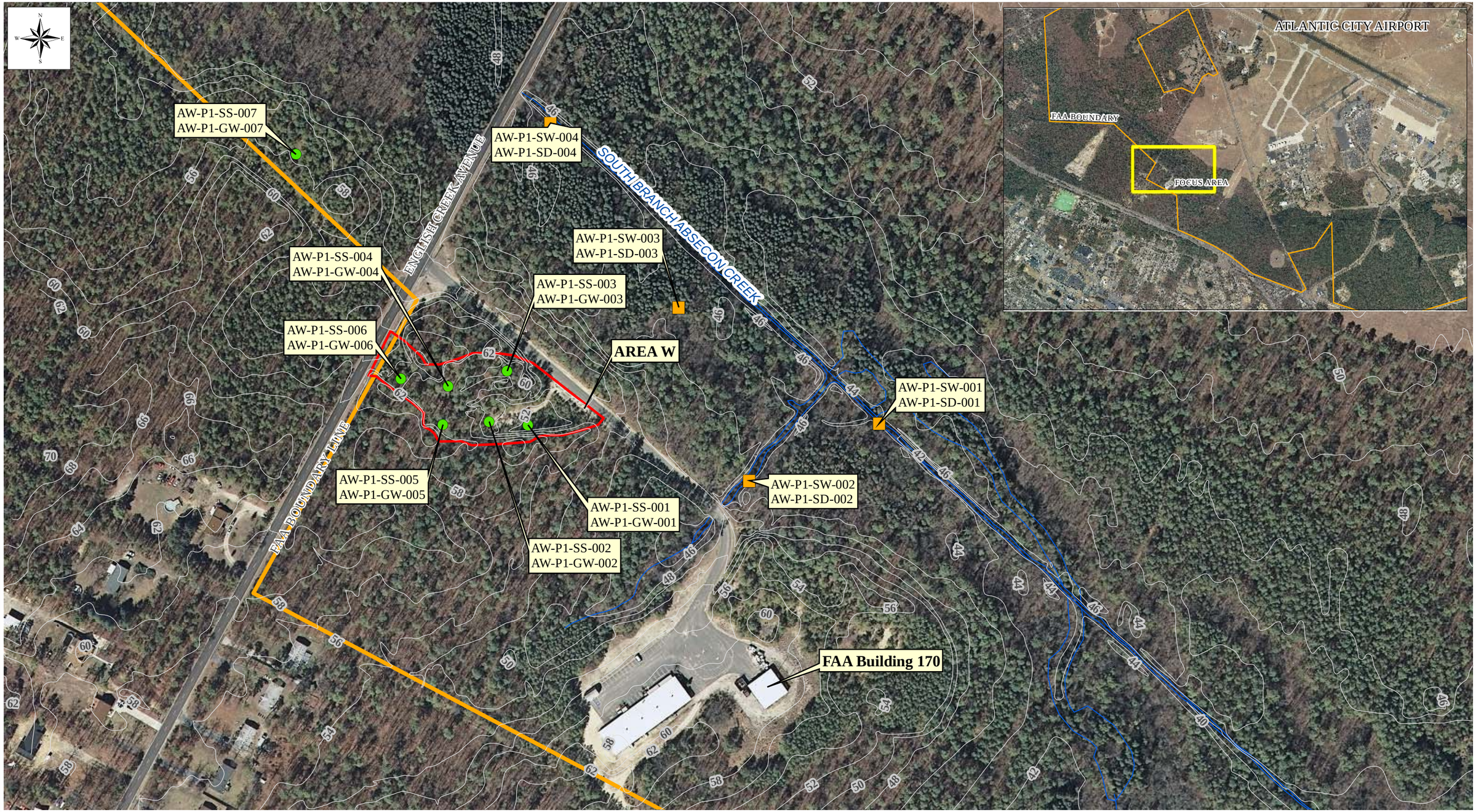
SOURCE:
US DEPT. OF THE INTERIOR, GEOLOGICAL SURVEY
7.5 MINUTE SERIES (TOPOGRAPHIC)
PLEASANTVILLE, NJ, 1989

GRAPHIC SCALE
3000 1500 0 1500 3000
APPROXIMATE SCALE IN FEET

ATLANTIC CITY NAVAL AIR STATION FORMERLY USED DEFENSE SITES (FUDS) SITE INVESTIGATION AT AREA W EGG HARBOR TOWNSHIP, NEW JERSEY	DEPARTMENT OF THE ARMY NEW ENGLAND DISTRICT CORPS OF ENGINEERS CONCORD, MASSACHUSETTS
SITE LOCATION MAP	WESTON SOLUTIONS CONCORD NEW HAMPSHIRE

DRAWN	BEG
DATE	DEC 2011
FIGURE NO.	1–1



Legend

- Sediment / Surface Water Sample Location
- Soil / Groundwater Sample Location
- 56 Elevation Contours (2-foot contour interval)
- Area W
- Waterway
- FAA Property Line Boundary

SCALE: 0 100 200 400 Graphic Scale in Feet

PROJECT: AREA W SITE INVESTIGATION

CLIENT NAME: U.S. ARMY CORPS OF ENGINEERS

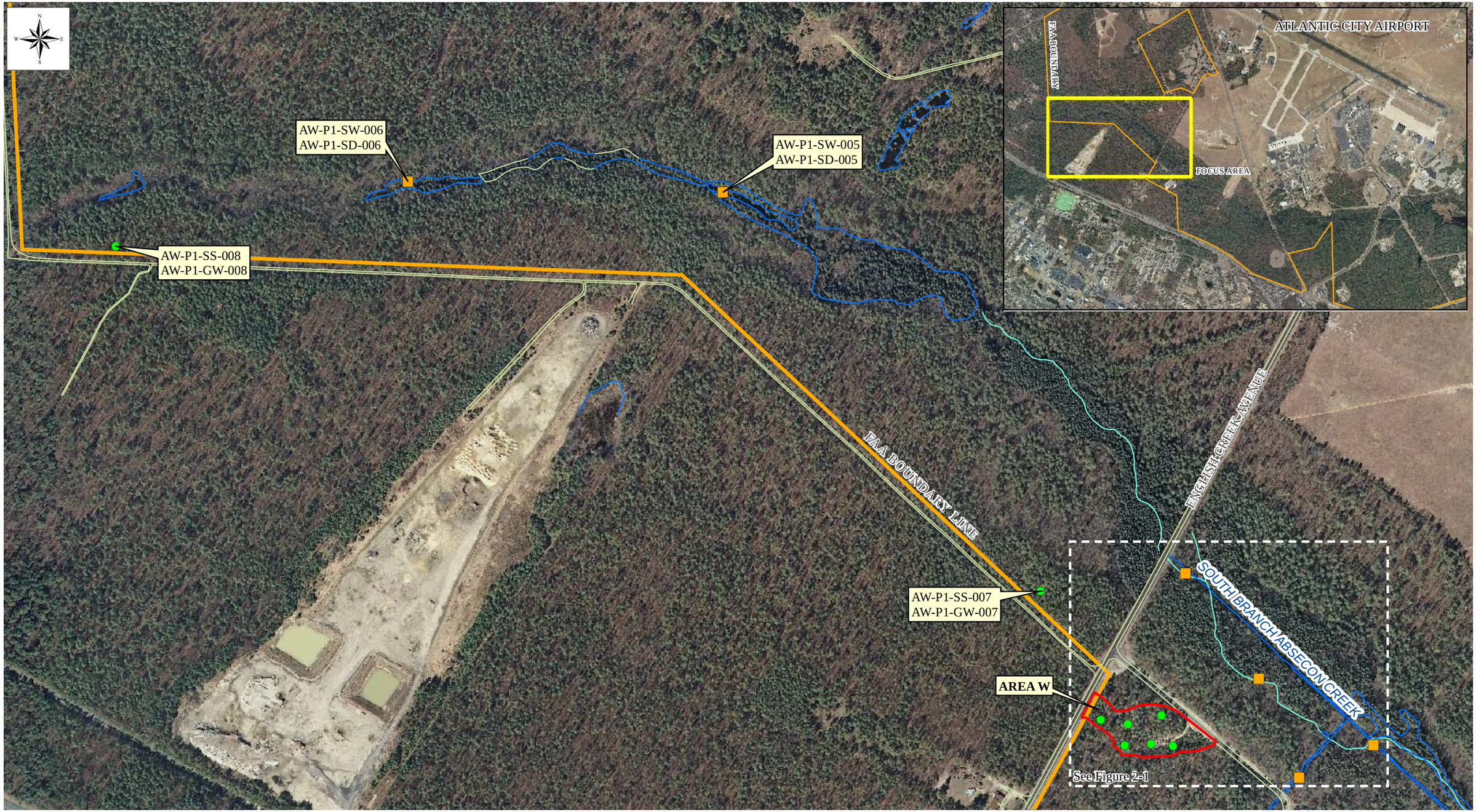
TITLE: SAMPLE LOCATIONS
AREA W
ATLANTIC CITY NAVAL AIR STATION
FORMERLY USED DEFENSE SITE
EGG HARBOR TOWNSHIP, NEW JERSEY

WESTON SOLUTIONS SM

DATE: 7/3/2012

FIGURE #: 2-1

P:\Atlantic_City_Reservoir\GIS\MXD\2012_07_AreaW\11476_AC_AreaW_SampleLocations_wContours.mxd



Legend

- Sediment / Surface Water Sample Location
- Soil / Groundwater Sample Location
- South Branch Absecon Creek (Current)
- South Branch Absecon Creek (Original)
- Roadway
- FAA Property Line Boundary
- Area W

SCALE:
0 175 350 700
Graphic Scale in Feet

PROJECT:
AREA W SITE INVESTIGATION

CLIENT NAME:
U.S. ARMY CORPS OF ENGINEERS

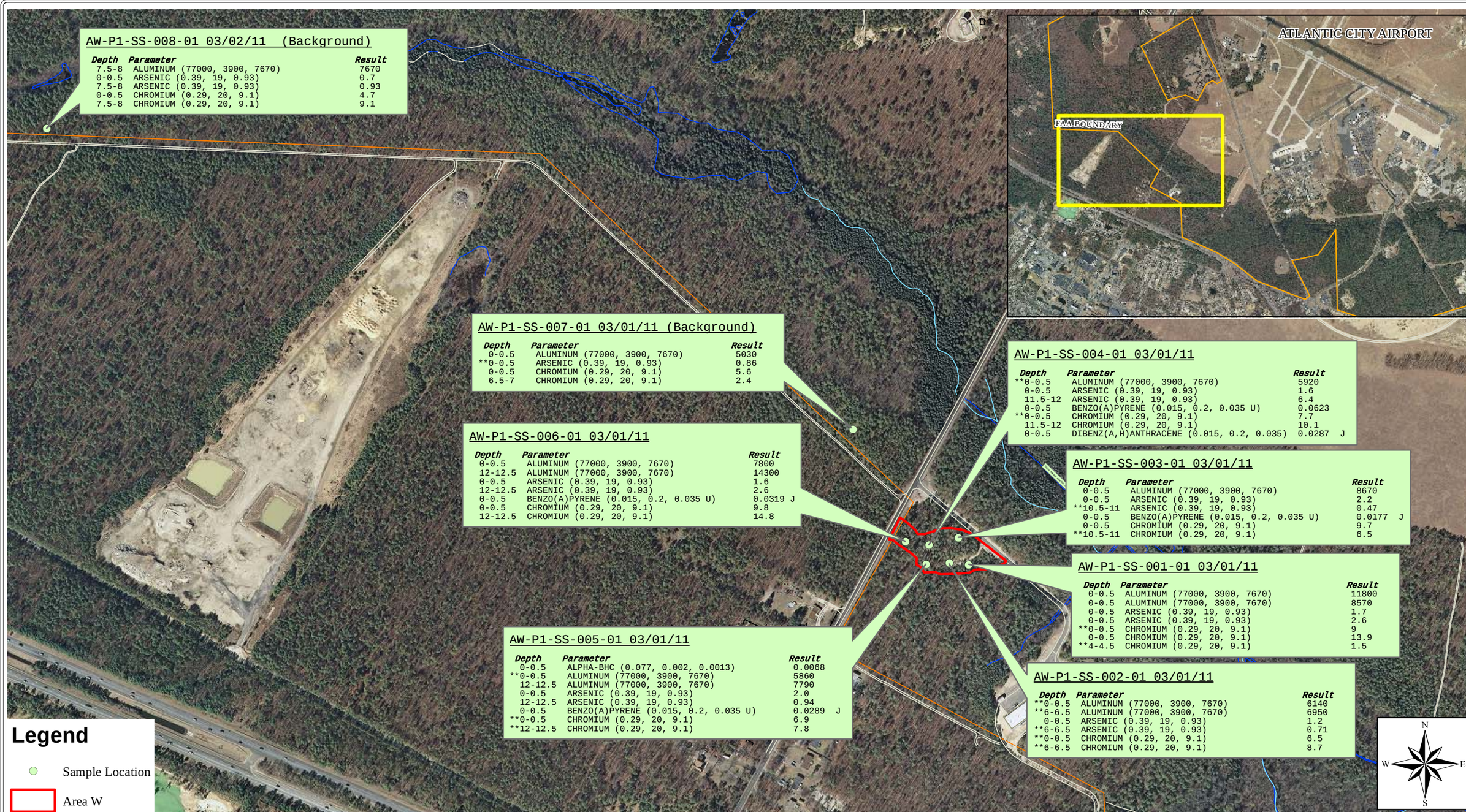
TITLE:
SAMPLE LOCATIONS
BACKGROUND
ATLANTIC CITY NAVAL AIR STATION
FORMERLY USED DEFENSE SITE
EGG HARBOR TOWNSHIP, NEW JERSEY

WESTON SOLUTIONS SM

DATE: 7/3/2012

FIGURE #: 2-2

P:\Atlantic_City_Reservoir\GIS\MXD\2012_07_AreaW\111477_AC_AreaW_BackgroundSamples.mxd



AW-P1-SS-008-01 03/02/11 (Background)

Depth	Parameter	Result
7.5-8	ALUMINUM (77000, 3900, 7670)	7670
0-0.5	ARSENIC (0.39, 19, 0.93)	0.7
7.5-8	ARSENIC (0.39, 19, 0.93)	0.93
0-0.5	CHROMIUM (0.29, 20, 9.1)	4.7
7.5-8	CHROMIUM (0.29, 20, 9.1)	9.1

AW-P1-SS-007-01 03/01/11 (Background)

Depth	Parameter	Result
0-0.5	ALUMINUM (77000, 3900, 7670)	5030
**0-0.5	ARSENIC (0.39, 19, 0.93)	0.86
0-0.5	CHROMIUM (0.29, 20, 9.1)	5.6
6.5-7	CHROMIUM (0.29, 20, 9.1)	2.4

AW-P1-SS-006-01 03/01/11

Depth	Parameter	Result
0-0.5	ALUMINUM (77000, 3900, 7670)	7800
12-12.5	ALUMINUM (77000, 3900, 7670)	14300
0-0.5	ARSENIC (0.39, 19, 0.93)	1.6
12-12.5	ARSENIC (0.39, 19, 0.93)	2.6
0-0.5	BENZO(A)PYRENE (0.015, 0.2, 0.035 U)	0.0319 J
0-0.5	CHROMIUM (0.29, 20, 9.1)	9.8
12-12.5	CHROMIUM (0.29, 20, 9.1)	14.8

AW-P1-SS-005-01 03/01/11

Depth	Parameter	Result
0-0.5	ALPHA-BHC (0.077, 0.002, 0.0013)	0.0068
**0-0.5	ALUMINUM (77000, 3900, 7670)	5860
12-12.5	ALUMINUM (77000, 3900, 7670)	7790
0-0.5	ARSENIC (0.39, 19, 0.93)	2.0
12-12.5	ARSENIC (0.39, 19, 0.93)	0.94
0-0.5	BENZO(A)PYRENE (0.015, 0.2, 0.035 U)	0.0289 J
**0-0.5	CHROMIUM (0.29, 20, 9.1)	6.9
**12-12.5	CHROMIUM (0.29, 20, 9.1)	7.8

AW-P1-SS-004-01 03/01/11

Depth	Parameter	Result
**0-0.5	ALUMINUM (77000, 3900, 7670)	5920
0-0.5	ARSENIC (0.39, 19, 0.93)	1.6
11.5-12	ARSENIC (0.39, 19, 0.93)	6.4
0-0.5	BENZO(A)PYRENE (0.015, 0.2, 0.035 U)	0.0623
**0-0.5	CHROMIUM (0.29, 20, 9.1)	7.7
11.5-12	CHROMIUM (0.29, 20, 9.1)	10.1
0-0.5	DIBENZ(A,H)ANTHRACENE (0.015, 0.2, 0.035)	0.0287 J

AW-P1-SS-003-01 03/01/11

Depth	Parameter	Result
0-0.5	ALUMINUM (77000, 3900, 7670)	8670
0-0.5	ARSENIC (0.39, 19, 0.93)	2.2
**10.5-11	ARSENIC (0.39, 19, 0.93)	0.47
0-0.5	BENZO(A)PYRENE (0.015, 0.2, 0.035 U)	0.0177 J
0-0.5	CHROMIUM (0.29, 20, 9.1)	9.7
**10.5-11	CHROMIUM (0.29, 20, 9.1)	6.5

AW-P1-SS-001-01 03/01/11

Depth	Parameter	Result
0-0.5	ALUMINUM (77000, 3900, 7670)	11800
0-0.5	ALUMINUM (77000, 3900, 7670)	8570
0-0.5	ARSENIC (0.39, 19, 0.93)	1.7
0-0.5	ARSENIC (0.39, 19, 0.93)	2.6
**0-0.5	CHROMIUM (0.29, 20, 9.1)	9
0-0.5	CHROMIUM (0.29, 20, 9.1)	13.9
**4-4.5	CHROMIUM (0.29, 20, 9.1)	1.5

AW-P1-SS-002-01 03/01/11

Depth	Parameter	Result
**0-0.5	ALUMINUM (77000, 3900, 7670)	6140
**6-6.5	ALUMINUM (77000, 3900, 7670)	6950
0-0.5	ARSENIC (0.39, 19, 0.93)	1.2
**6-6.5	ARSENIC (0.39, 19, 0.93)	0.71
**0-0.5	CHROMIUM (0.29, 20, 9.1)	6.5
**6-6.5	CHROMIUM (0.29, 20, 9.1)	8.7

Legend

- Sample Location
- Area W

Notes:
1. Background Locations: AW-P1-SS-007-01 and AW-P1-SS-008-01.
2. ** - Results less than maximum background concentration.
3. Compounds listed exceed the most stringent of:
   A. U.S. Environmental Protection Agency - strictest of industrial and residential soil screening criteria. Regional Screening Levels (November, 2010).
   B. New Jersey Department of Environmental Protection Agency - strictest of Non-Residential Soil Remediation Standards, Residential Soil Remediation Standards and Impact to Groundwater Soil Remediation Standards
4. U - Not detected at method detection limit

Results reported in mg/kg

Field Sample ID — Date

AW-P1-SS-004-01 | 03/01/11

Depth	Parameter	Result
0-0.5	BENZO(A)PYRENE (0.015, 0.2, 0.035 U)	0.0623

USEPA Reglatory Limit — NJDEP Reglatory Limit — Maximum Background Sample Value

SCALE: 0 195 390 780 Feet

PROJECT: AREA W SITE INVESTIGATION

CLIENT NAME: U.S. ARMY CORPS OF ENGINEERS

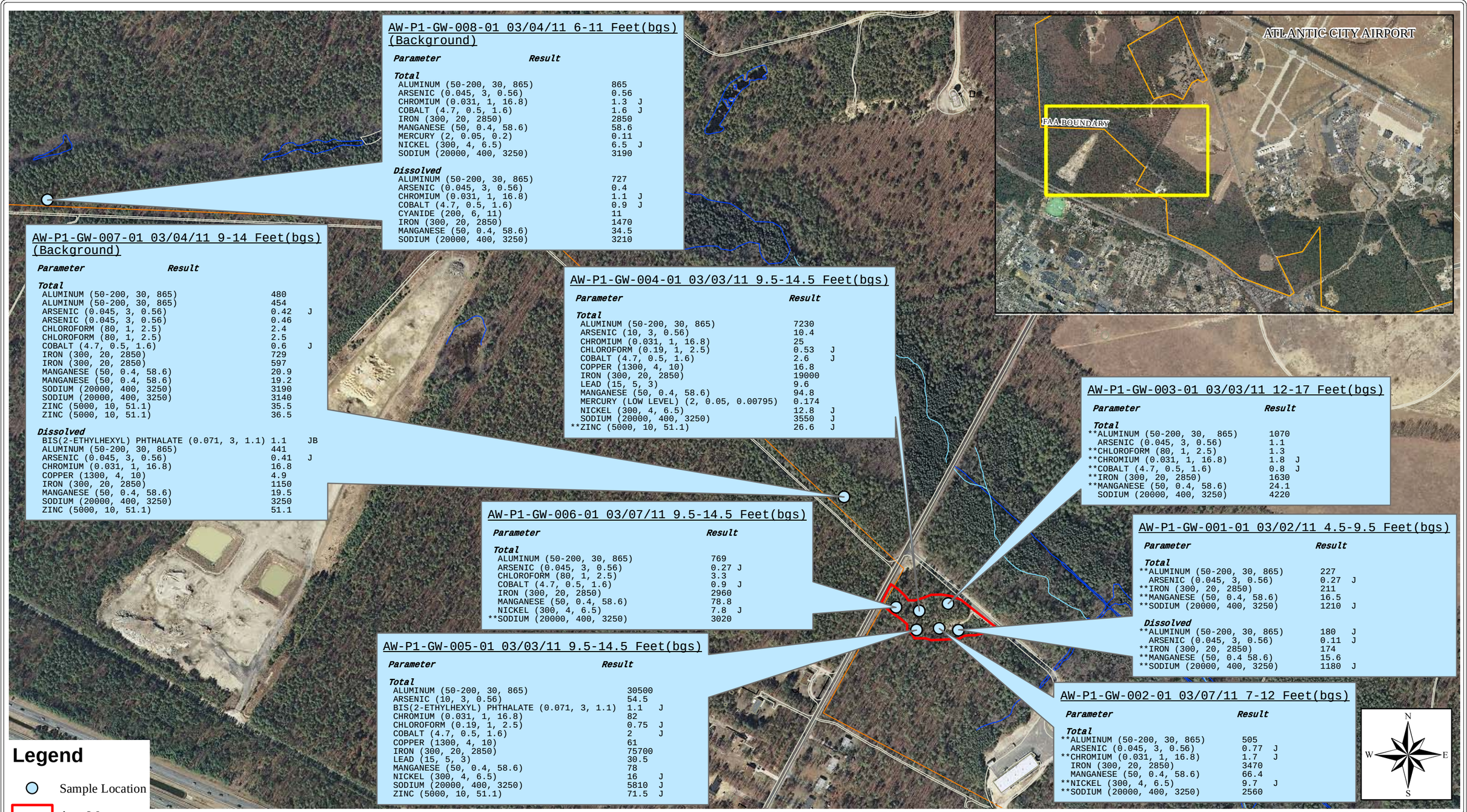
TITLE: SOIL SAMPLE LOCATIONS
AREA W
ATLANTIC CITY NAVAL AIR STATION
FORMERLY USED DEFENSE SITE
EGG HARBOR TOWNSHIP, NEW JERSEY

WESTON SOLUTIONS SM

DATE: 7/23/2012

FIGURE #: 3-1

P:\Atlantic_City_Reservoir\GIS\MXD\2012_07_AreaW\11478_AC_AreaW_SS_Exceedances.mxd



AW-P1-GW-008-01 03/04/11 6-11 Feet(bgs) (Background)

Parameter	Result	
Total		
ALUMINUM (50-200, 30, 865)	865	
ARSENIC (0.045, 3, 0.56)	0.56	
CHROMIUM (0.031, 1, 16.8)	1.3	J
COBALT (4.7, 0.5, 1.6)	1.6	J
IRON (300, 20, 2850)	2850	
MANGANESE (50, 0.4, 58.6)	58.6	
MERCURY (2, 0.05, 0.2)	0.11	
NICKEL (300, 4, 6.5)	6.5	J
SODIUM (20000, 400, 3250)	3190	
Dissolved		
ALUMINUM (50-200, 30, 865)	727	
ARSENIC (0.045, 3, 0.56)	0.4	
CHROMIUM (0.031, 1, 16.8)	1.1	J
COBALT (4.7, 0.5, 1.6)	0.9	J
CYANIDE (200, 6, 11)	11	
IRON (300, 20, 2850)	1470	
MANGANESE (50, 0.4, 58.6)	34.5	
SODIUM (20000, 400, 3250)	3210	

AW-P1-GW-007-01 03/04/11 9-14 Feet(bgs) (Background)

Parameter	Result	
Total		
ALUMINUM (50-200, 30, 865)	480	
ALUMINUM (50-200, 30, 865)	454	
ARSENIC (0.045, 3, 0.56)	0.42	J
ARSENIC (0.045, 3, 0.56)	0.46	
CHLOROFORM (80, 1, 2.5)	2.4	
CHLOROFORM (80, 1, 2.5)	2.5	
COBALT (4.7, 0.5, 1.6)	0.6	J
IRON (300, 20, 2850)	729	
IRON (300, 20, 2850)	597	
MANGANESE (50, 0.4, 58.6)	20.9	
MANGANESE (50, 0.4, 58.6)	19.2	
SODIUM (20000, 400, 3250)	3190	
SODIUM (20000, 400, 3250)	3140	
ZINC (5000, 10, 51.1)	35.5	
ZINC (5000, 10, 51.1)	36.5	
Dissolved		
BIS(2-ETHYLHEXYL) PHTHALATE (0.071, 3, 1.1)	1.1	JB
ALUMINUM (50-200, 30, 865)	441	
ARSENIC (0.045, 3, 0.56)	0.41	J
CHROMIUM (0.031, 1, 16.8)	16.8	
COPPER (1300, 4, 10)	4.9	
IRON (300, 20, 2850)	1150	
MANGANESE (50, 0.4, 58.6)	19.5	
SODIUM (20000, 400, 3250)	3250	
ZINC (5000, 10, 51.1)	51.1	

AW-P1-GW-004-01 03/03/11 9.5-14.5 Feet(bgs)

Parameter	Result	
Total		
ALUMINUM (50-200, 30, 865)	7230	
ARSENIC (10, 3, 0.56)	10.4	
CHROMIUM (0.031, 1, 16.8)	25	
CHLOROFORM (0.19, 1, 2.5)	0.53	J
COBALT (4.7, 0.5, 1.6)	2.6	J
COPPER (1300, 4, 10)	16.8	
IRON (300, 20, 2850)	19000	
LEAD (15, 5, 3)	9.6	
MANGANESE (50, 0.4, 58.6)	94.8	
MERCURY (LOW LEVEL) (2, 0.05, 0.00795)	0.174	
NICKEL (300, 4, 6.5)	12.8	J
SODIUM (20000, 400, 3250)	3550	J
**ZINC (5000, 10, 51.1)	26.6	J

AW-P1-GW-003-01 03/03/11 12-17 Feet(bgs)

Parameter	Result	
Total		
**ALUMINUM (50-200, 30, 865)	1070	
ARSENIC (0.045, 3, 0.56)	1.1	
**CHLOROFORM (80, 1, 2.5)	1.3	
**CHROMIUM (0.031, 1, 16.8)	1.8	J
**COBALT (4.7, 0.5, 1.6)	0.8	J
**IRON (300, 20, 2850)	1630	
**MANGANESE (50, 0.4, 58.6)	24.1	
SODIUM (20000, 400, 3250)	4220	

AW-P1-GW-006-01 03/07/11 9.5-14.5 Feet(bgs)

Parameter	Result	
Total		
ALUMINUM (50-200, 30, 865)	769	
ARSENIC (0.045, 3, 0.56)	0.27	J
CHLOROFORM (80, 1, 2.5)	3.3	
COBALT (4.7, 0.5, 1.6)	0.9	J
IRON (300, 20, 2850)	2960	
MANGANESE (50, 0.4, 58.6)	78.8	
NICKEL (300, 4, 6.5)	7.8	J
**SODIUM (20000, 400, 3250)	3020	

AW-P1-GW-001-01 03/02/11 4.5-9.5 Feet(bgs)

Parameter	Result	
Total		
**ALUMINUM (50-200, 30, 865)	227	
ARSENIC (0.045, 3, 0.56)	0.27	J
**IRON (300, 20, 2850)	211	
**MANGANESE (50, 0.4, 58.6)	16.5	
**SODIUM (20000, 400, 3250)	1210	J
Dissolved		
**ALUMINUM (50-200, 30, 865)	180	J
ARSENIC (0.045, 3, 0.56)	0.11	J
**IRON (300, 20, 2850)	174	
**MANGANESE (50, 0.4 58.6)	15.6	
**SODIUM (20000, 400, 3250)	1180	J

AW-P1-GW-005-01 03/03/11 9.5-14.5 Feet(bgs)

Parameter	Result	
Total		
ALUMINUM (50-200, 30, 865)	30500	
ARSENIC (10, 3, 0.56)	54.5	
BIS(2-ETHYLHEXYL) PHTHALATE (0.071, 3, 1.1)	1.1	J
CHROMIUM (0.031, 1, 16.8)	82	
CHLOROFORM (0.19, 1, 2.5)	0.75	J
COBALT (4.7, 0.5, 1.6)	2	J
COPPER (1300, 4, 10)	61	
IRON (300, 20, 2850)	75700	
LEAD (15, 5, 3)	30.5	
MANGANESE (50, 0.4, 58.6)	78	
NICKEL (300, 4, 6.5)	16	J
SODIUM (20000, 400, 3250)	5810	J
ZINC (5000, 10, 51.1)	71.5	J

AW-P1-GW-002-01 03/07/11 7-12 Feet(bgs)

Parameter	Result	
Total		
**ALUMINUM (50-200, 30, 865)	505	
ARSENIC (0.045, 3, 0.56)	0.77	J
**CHROMIUM (0.031, 1, 16.8)	1.7	J
IRON (300, 20, 2850)	3470	
MANGANESE (50, 0.4, 58.6)	66.4	
**NICKEL (300, 4, 6.5)	9.7	J
**SODIUM (20000, 400, 3250)	2560	

N
W E
S

Legend

Sample Location

Area W

Notes:
1. Background Locations: AW-P1-GW-007-01 and AW-P1-GW-008-01.
2. ** - Results less than maximum background concentration.
3. Compounds listed exceed the most stringent of:
   A. U.S. Environmental Protection Agency - Maximum Contaminant Levels (MCLs)
   B. New Jersey Department of Environmental Protection Agency - Practical Quantitation limits (PQLs)
4. J - Estimated
5. B - Detected in blank

Sample ID — Sample Date — Depth

AW-P1-GW-001-01 03/02/11 4.5-9.5 Feet(bgs)

Parameter	Result	
Total		
**ALUMINUM (50-200, 30, 865)	227	
Dissolved		
**ALUMINUM (50-200, 30, 865)	180	J

Unfiltered — Filtered — USEPA Reglatory Limit — NJDEP Reglatory Limit — Maximum Background Sample Value — Sample Flag

Results reported in ug/l

SCALE: 0 195 390 780 Feet

PROJECT: AREA W SITE INVESTIGATION

CLIENT NAME: U.S. ARMY CORPS OF ENGINEERS

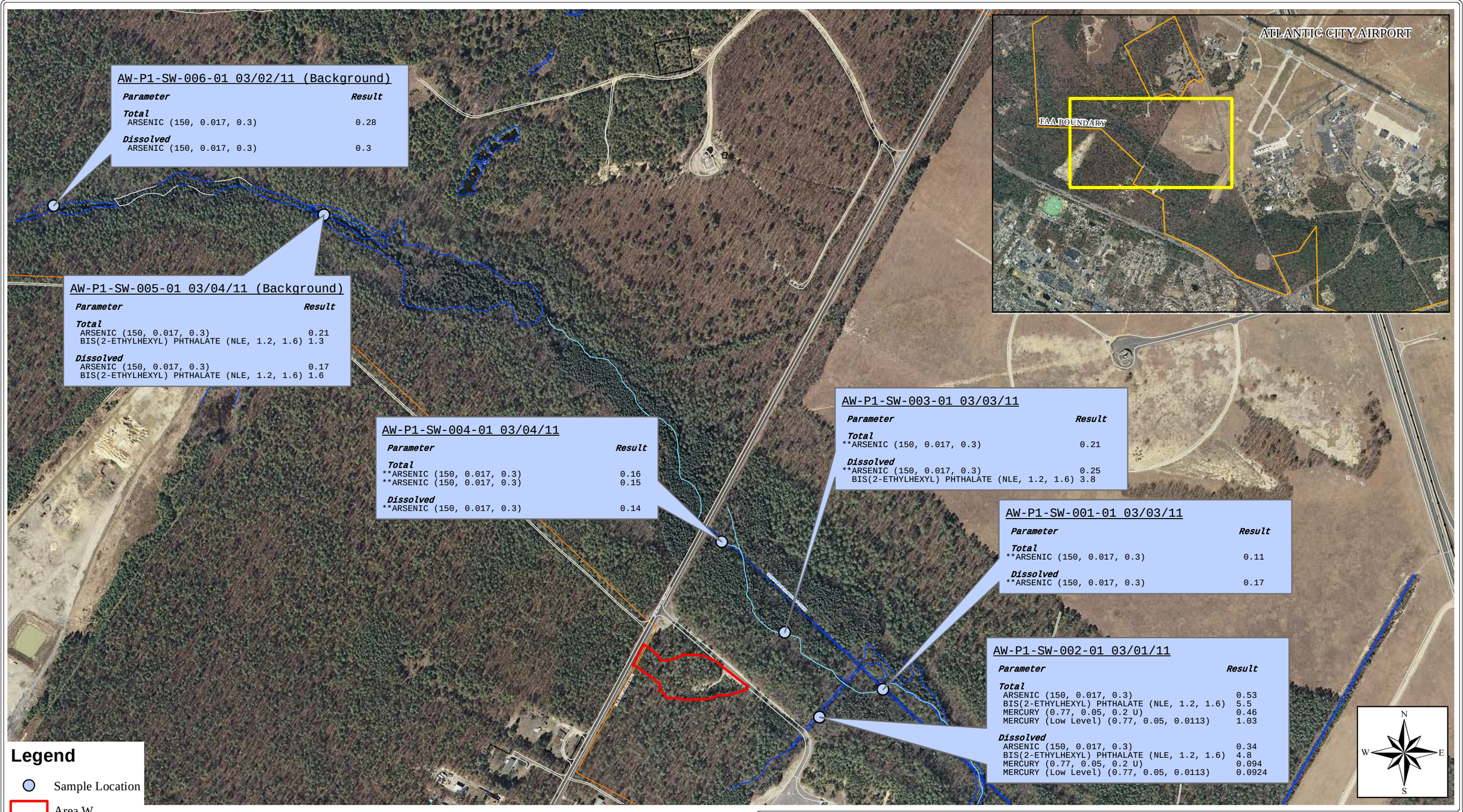
TITLE: GROUNDWATER SAMPLE LOCATIONS
AREA W
ATLANTIC CITY NAVAL AIR STATION
FORMERLY USED DEFENSE SITE
EGG HARBOR TOWNSHIP, NEW JERSEY

WESTON SOLUTIONS SM

DATE: 7/23/2012

FIGURE #: 3-2

P:\Atlantic_City_Reservoir\GIS\MXD\2012_07_AreaW\11479_AC_AreaW_GW_Exceedances.mxd



AW-P1-SW-006-01 03/02/11 (Background)

Parameter	Result
Total	
ARSENIC (150, 0.017, 0.3)	0.28
Dissolved	
ARSENIC (150, 0.017, 0.3)	0.3

AW-P1-SW-005-01 03/04/11 (Background)

Parameter	Result
Total	
ARSENIC (150, 0.017, 0.3)	0.21
BIS(2-ETHYLHEXYL) PHTHALATE (NLE, 1.2, 1.6)	1.3
Dissolved	
ARSENIC (150, 0.017, 0.3)	0.17
BIS(2-ETHYLHEXYL) PHTHALATE (NLE, 1.2, 1.6)	1.6

AW-P1-SW-004-01 03/04/11

Parameter	Result
Total	
**ARSENIC (150, 0.017, 0.3)	0.16
**ARSENIC (150, 0.017, 0.3)	0.15
Dissolved	
**ARSENIC (150, 0.017, 0.3)	0.14

AW-P1-SW-003-01 03/03/11

Parameter	Result
Total	
**ARSENIC (150, 0.017, 0.3)	0.21
Dissolved	
**ARSENIC (150, 0.017, 0.3)	0.25
BIS(2-ETHYLHEXYL) PHTHALATE (NLE, 1.2, 1.6)	3.8

AW-P1-SW-001-01 03/03/11

Parameter	Result
Total	
**ARSENIC (150, 0.017, 0.3)	0.11
Dissolved	
**ARSENIC (150, 0.017, 0.3)	0.17

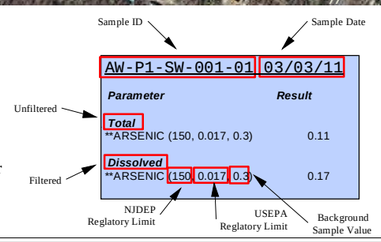
AW-P1-SW-002-01 03/01/11

Parameter	Result
Total	
ARSENIC (150, 0.017, 0.3)	0.53
BIS(2-ETHYLHEXYL) PHTHALATE (NLE, 1.2, 1.6)	5.5
MERCURY (0.77, 0.05, 0.2 U)	0.46
MERCURY (Low Level) (0.77, 0.05, 0.0113)	1.03
Dissolved	
ARSENIC (150, 0.017, 0.3)	0.34
BIS(2-ETHYLHEXYL) PHTHALATE (NLE, 1.2, 1.6)	4.8
MERCURY (0.77, 0.05, 0.2 U)	0.094
MERCURY (Low Level) (0.77, 0.05, 0.0113)	0.0924

Legend

- Sample Location
- Area W

Notes:
1. Background Locations: AW-P1-SW-005-01 and AW-P1-SW-006-01-01.
2. ** - Results less than maximum background concentration.
3. Compounds listed exceed the most stringent of:
   A. U.S. Environmental Protection Agency - National Recommended Water Quality Criteria (lowest of CMC and CCC values)
   B. New Jersey Department of Environmental Protection Agency - Surface Water Quality Criteria for Toxic Substances (lowest of protection of Human Health, chronic, or acute).
4. U - Not detected at method detection limit



Results reported in ug/l

SCALE: 0 195 390 780 Feet

PROJECT: AREA W SITE INVESTIGATION

CLIENT NAME: U.S. ARMY CORPS OF ENGINEERS

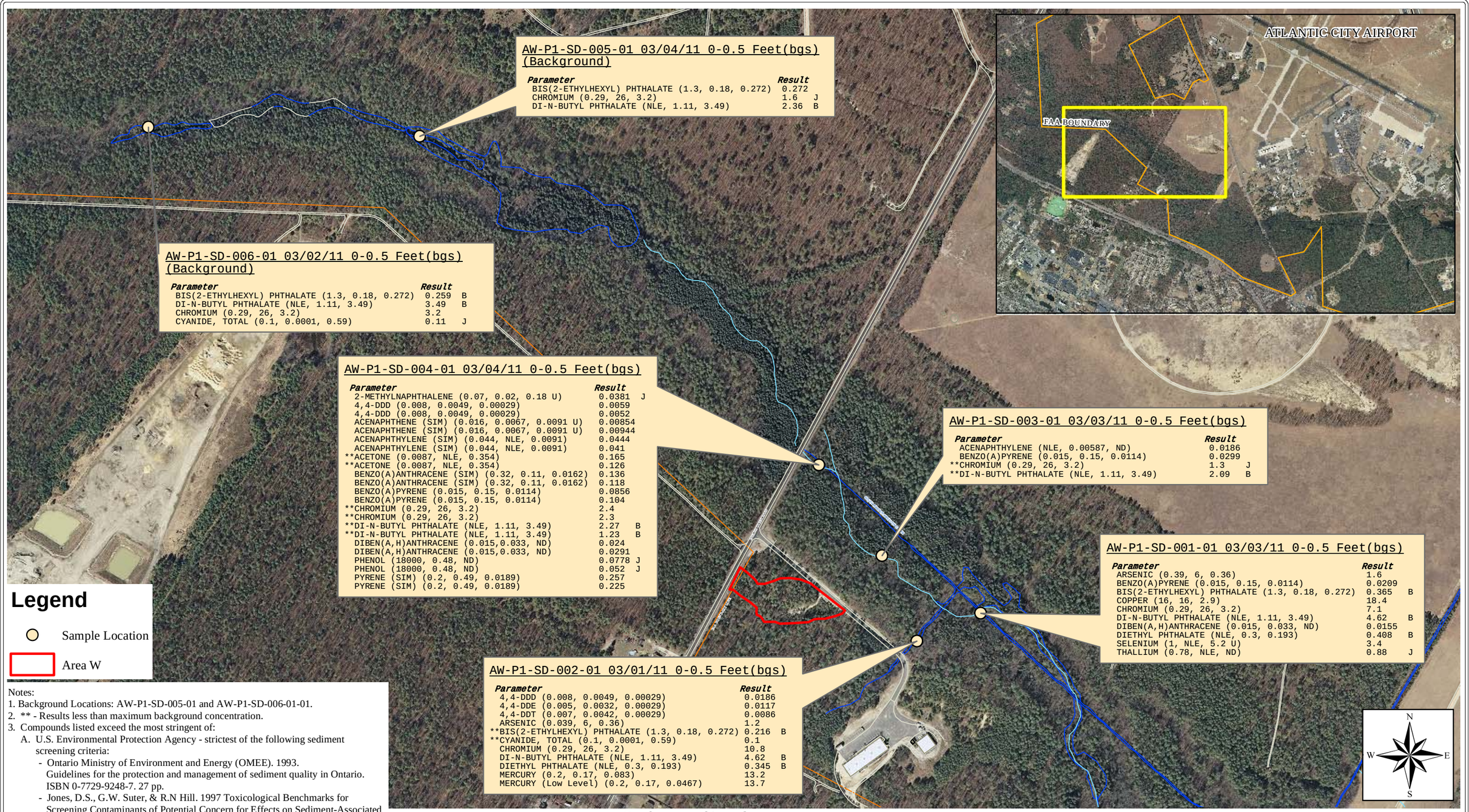
TITLE: SURFACE WATER SAMPLE LOCATIONS
AREA W
ATLANTIC CITY NAVAL AIR STATION
FORMERLY USED DEFENSE SITE
EGG HARBOR TOWNSHIP, NEW JERSEY

WESTON SOLUTIONS SM

DATE: 7/3/2012

FIGURE #: 3-3

P:\Atlantic_City_Reservoir\GIS\MXD\2012_07_AreaW\111481_AC_AreaW_SW_Exceedances.mxd



AW-P1-SD-005-01 03/04/11 0-0.5 Feet(bgs) (Background)

Parameter	Result	
BIS(2-ETHYLHEXYL) PHTHALATE (1.3, 0.18, 0.272)	0.272	
CHROMIUM (0.29, 26, 3.2)	1.6	J
DI-N-BUTYL PHTHALATE (NLE, 1.11, 3.49)	2.36	B

AW-P1-SD-006-01 03/02/11 0-0.5 Feet(bgs) (Background)

Parameter	Result	
BIS(2-ETHYLHEXYL) PHTHALATE (1.3, 0.18, 0.272)	0.259	B
DI-N-BUTYL PHTHALATE (NLE, 1.11, 3.49)	3.49	B
CHROMIUM (0.29, 26, 3.2)	3.2	
CYANIDE, TOTAL (0.1, 0.0001, 0.59)	0.11	J

AW-P1-SD-004-01 03/04/11 0-0.5 Feet(bgs)

Parameter	Result	
2-METHYLNAPHTHALENE (0.07, 0.02, 0.18 U)	0.0381	J
4,4-DDD (0.008, 0.0049, 0.00029)	0.0059	
4,4-DDD (0.008, 0.0049, 0.00029)	0.0052	
ACENAPHTHENE (SIM) (0.016, 0.0067, 0.0091 U)	0.00854	
ACENAPHTHENE (SIM) (0.016, 0.0067, 0.0091 U)	0.00944	
ACENAPHTHYLENE (SIM) (0.044, NLE, 0.0091)	0.0444	
ACENAPHTHYLENE (SIM) (0.044, NLE, 0.0091)	0.041	
**ACETONE (0.0087, NLE, 0.354)	0.165	
**ACETONE (0.0087, NLE, 0.354)	0.126	
BENZO(A)ANTHRACENE (SIM) (0.32, 0.11, 0.0162)	0.136	
BENZO(A)ANTHRACENE (SIM) (0.32, 0.11, 0.0162)	0.118	
BENZO(A)PYRENE (0.015, 0.15, 0.0114)	0.0856	
BENZO(A)PYRENE (0.015, 0.15, 0.0114)	0.104	
**CHROMIUM (0.29, 26, 3.2)	2.4	
**CHROMIUM (0.29, 26, 3.2)	2.3	
**DI-N-BUTYL PHTHALATE (NLE, 1.11, 3.49)	2.27	B
**DI-N-BUTYL PHTHALATE (NLE, 1.11, 3.49)	1.23	B
DIBEN(A,H)ANTHRACENE (0.015,0.033, ND)	0.024	
DIBEN(A,H)ANTHRACENE (0.015,0.033, ND)	0.0291	
PHENOL (18000, 0.48, ND)	0.0778	J
PHENOL (18000, 0.48, ND)	0.052	J
PYRENE (SIM) (0.2, 0.49, 0.0189)	0.257	
PYRENE (SIM) (0.2, 0.49, 0.0189)	0.225	

AW-P1-SD-003-01 03/03/11 0-0.5 Feet(bgs)

Parameter	Result	
ACENAPHTHYLENE (NLE, 0.00587, ND)	0.0186	
BENZO(A)PYRENE (0.015, 0.15, 0.0114)	0.0299	
**CHROMIUM (0.29, 26, 3.2)	1.3	J
**DI-N-BUTYL PHTHALATE (NLE, 1.11, 3.49)	2.09	B

AW-P1-SD-001-01 03/03/11 0-0.5 Feet(bgs)

Parameter	Result	
ARSENIC (0.39, 6, 0.36)	1.6	
BENZO(A)PYRENE (0.015, 0.15, 0.0114)	0.0209	
BIS(2-ETHYLHEXYL) PHTHALATE (1.3, 0.18, 0.272)	0.365	B
COPPER (16, 16, 2.9)	18.4	
CHROMIUM (0.29, 26, 3.2)	7.1	
DI-N-BUTYL PHTHALATE (NLE, 1.11, 3.49)	4.62	B
DIBEN(A,H)ANTHRACENE (0.015, 0.033, ND)	0.0155	
DIETHYL PHTHALATE (NLE, 0.3, 0.193)	0.408	B
SELENIUM (1, NLE, 5.2 U)	3.4	
THALLIUM (0.78, NLE, ND)	0.88	J

AW-P1-SD-002-01 03/01/11 0-0.5 Feet(bgs)

Parameter	Result	
4,4-DDD (0.008, 0.0049, 0.00029)	0.0186	
4,4-DDE (0.005, 0.0032, 0.00029)	0.0117	
4,4-DDT (0.007, 0.0042, 0.00029)	0.0086	
ARSENIC (0.039, 6, 0.36)	1.2	
**BIS(2-ETHYLHEXYL) PHTHALATE (1.3, 0.18, 0.272)	0.216	B
**CYANIDE, TOTAL (0.1, 0.0001, 0.59)	0.1	
CHROMIUM (0.29, 26, 3.2)	10.8	
DI-N-BUTYL PHTHALATE (NLE, 1.11, 3.49)	4.62	B
DIETHYL PHTHALATE (NLE, 0.3, 0.193)	0.345	B
MERCURY (0.2, 0.17, 0.083)	13.2	
MERCURY (Low Level) (0.2, 0.17, 0.0467)	13.7	

Legend

- Sample Location
- Area W

Notes:
1. Background Locations: AW-P1-SD-005-01 and AW-P1-SD-006-01-01.
2. ** - Results less than maximum background concentration.
3. Compounds listed exceed the most stringent of:
   A. U.S. Environmental Protection Agency - strictest of the following sediment screening criteria:
      - Ontario Ministry of Environment and Energy (OMEE). 1993. Guidelines for the protection and management of sediment quality in Ontario. ISBN 0-7729-9248-7. 27 pp.
      - Jones, D.S., G.W. Suter, & R.N Hill. 1997 Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Sediment-Associated Biota: 1997 Revision. ES/ER/TM-95/R4, ORNL, Oak Ridge, TN.
      - Long et al. 1995. Incidence of Adverse Biological Effects Within Ranges of chemical Concentrations in Marine and Estuarine Sediments. (ER-L values)
      - MacDonald, D.D., C.G. Ingersoll, and T.A. Berger. 2000. Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems. Arch.of Env.Cont. and Tox. 39: 20-31.
   B. New Jersey Department of Environmental Protection Agency - lowest effect level (LEL) sediment screening criteria
4. B - Detected in blank
5. J - Estimated
6. U - Not detected at method detection limit

Results reported in mg/kg

Sample ID | Date | Depth

AW-P1-SD-006-01 03/02/11 0-0.5 Feet(bgs) (Background)

Parameter	Result	
ACETONE (0.0087, NLE, 0.354)	0.12	J

USEPA Reglatory Limit | NJDEP Reglatory Limit | Maximum Background Sample Value | Sample Flag

SCALE: 0 200 400 800 Feet

PROJECT: AREA W SITE INVESTIGATION

CLIENT NAME: U.S. ARMY CORPS OF ENGINEERS

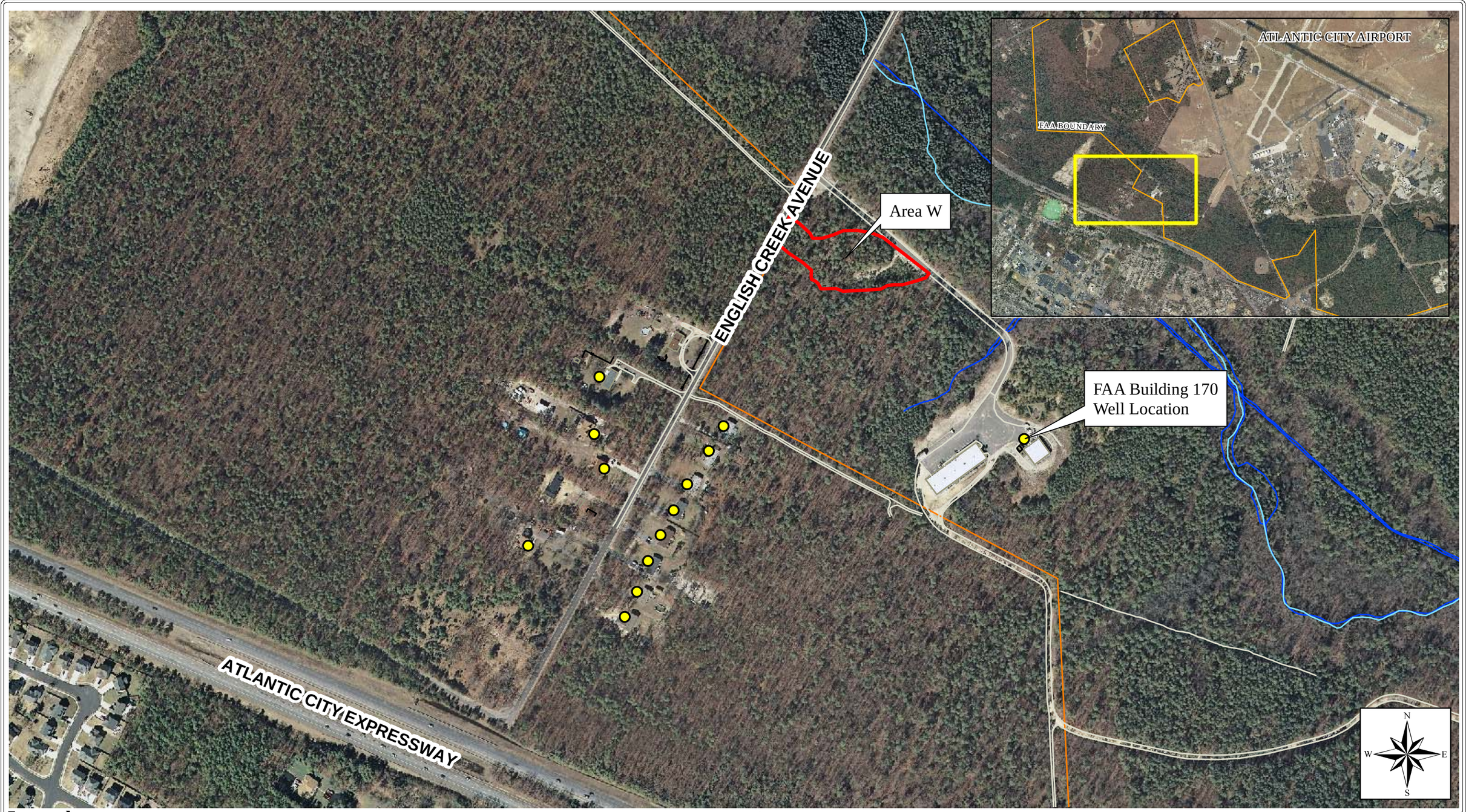
TITLE: SEDIMENT SAMPLE LOCATIONS
AREA W
ATLANTIC CITY NAVAL AIR STATION
FORMERLY USED DEFENSE SITE
EGG HARBOR TOWNSHIP, NEW JERSEY

WESTON SOLUTIONS SM

DATE: 7/23/2012

FIGURE #: 3-4

P:\Atlantic_City_Reservoir\GIS\MXD\2012_07_AreaW\11480_AC_AreaW_Sed_Exceedances.mxd



Legend

- EPA Residential Well Locations
- Area W
- FAA Property Line Boundary
- South Branch Absecon Creek (Current)
- South Branch Absecon Creek (Original)

Note: Sampled by EPA in 2006.
Data provided by FAA on November 17, 2006

SCALE: 0 150 300 600 Feet

PROJECT: AREA W SITE INVESTIGATION

CLIENT NAME: U.S. ARMY CORPS OF ENGINEERS

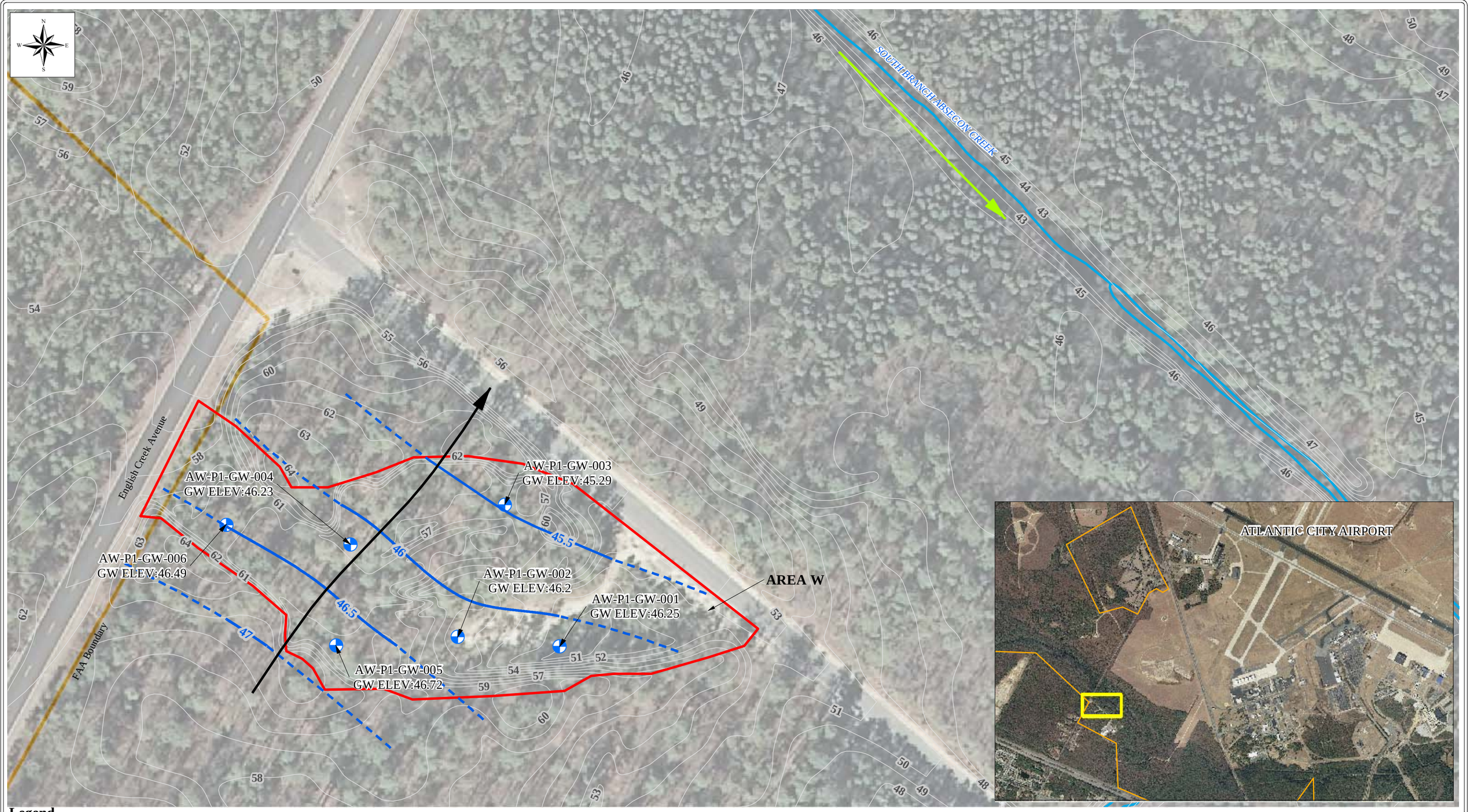
TITLE: ENGLISH CREEK AVENUE EPA RESIDENTIAL WELL SAMPLE LOCATIONS (EPA, 2006)

WESTON SOLUTIONS SM

DATE: 7/3/2012

FIGURE #: 4-1

P:\Atlantic_City_Reservoir\GIS\MXD\2012_07_AreaW\11482_AC_English_Creek_Pvt_Wells.mxd



Legend

- Temporary Well Location
- Groundwater Flow Direction
- Surface Water Flow Direction
- 45 Water Table Elevation (feet)
- Water Table Elevation (feet)
- 64 Elevation Contours (feet)
- South Branch Absecon Creek
- FAA Boundary
- Area W

KEY
AW-P1-GW-005 ← **Sample ID**
GW ELEV: 46.7 ← **Groundwater Elevation**

SCALE: 0 75 150
Graphical Scale in Feet

PROJECT: AREA W SITE INVESTIGATION

CLIENT NAME: U.S. ARMY CORPS OF ENGINEERS

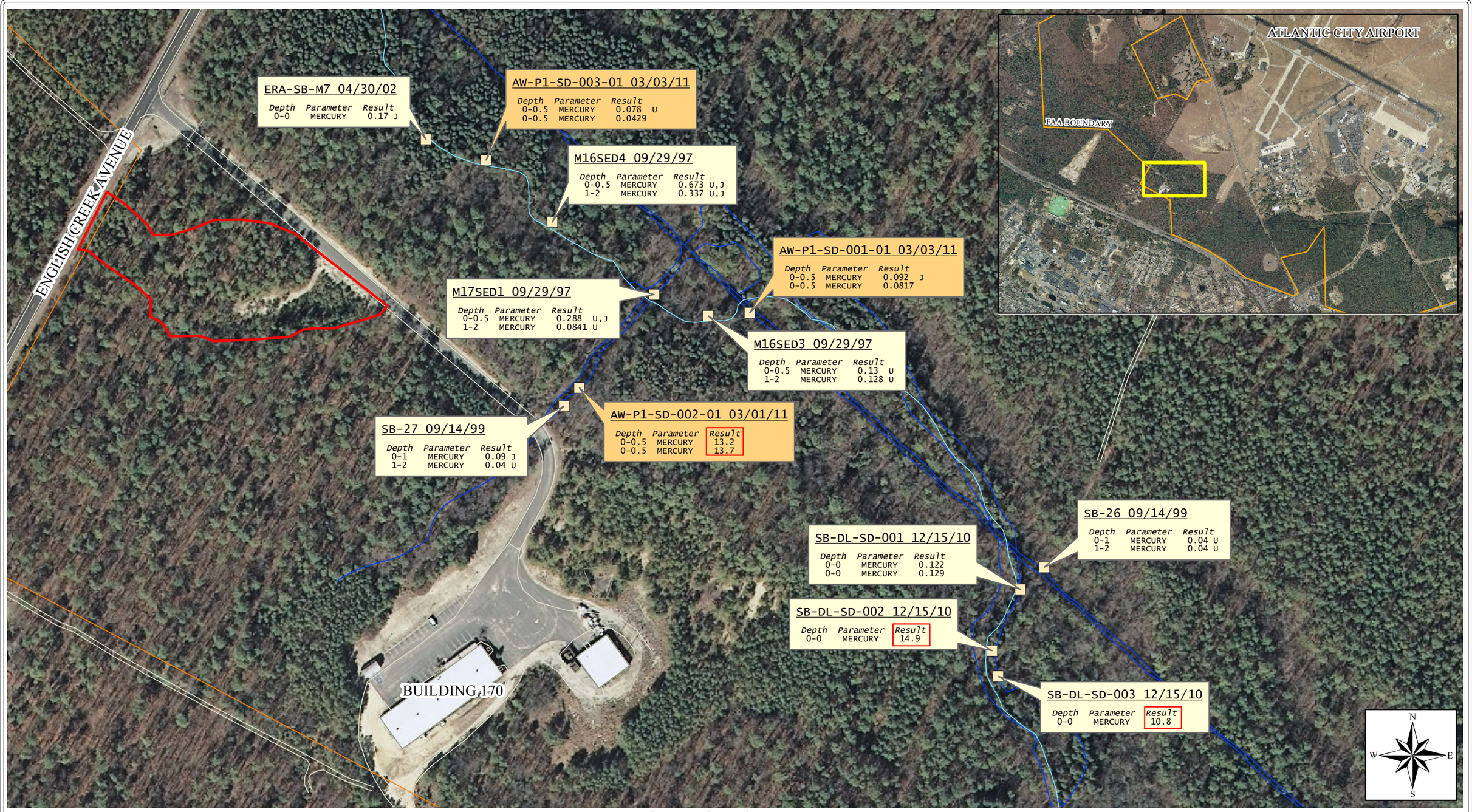
TITLE: GROUNDWATER FLOW DIRECTION
AREA W
ATLANTIC CITY NAVAL AIR STATION
FORMERLY USED DEFENSE SITE
EGG HARBOR TOWNSHIP, NEW JERSEY

WESTON SOLUTIONS SM

DATE: 7/3/2012

FIGURE #: 4-2

P:\Atlantic_City_Reservoir\GIS\MXD\2012_07_AreaW\11483_AC_AreaW_GW_Contours_B.mxd

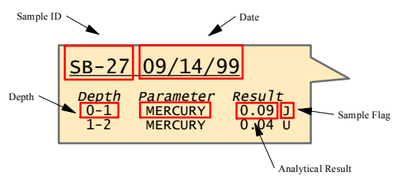


Legend

- Sample Location
- Area W
- Area W SI Samples
- Historical Samples

Notes:
1. Results in red box are greater than the lowest sediment screening criteria for mercury (0.17 mg/kg).
2. J - Estimated
3. U - Not detected at method detection limit

Results reported in mg/kg



SCALE: 0 75 150 300 Feet

PROJECT: AREA W SITE INVESTIGATION

CLIENT NAME: U.S. ARMY CORPS OF ENGINEERS

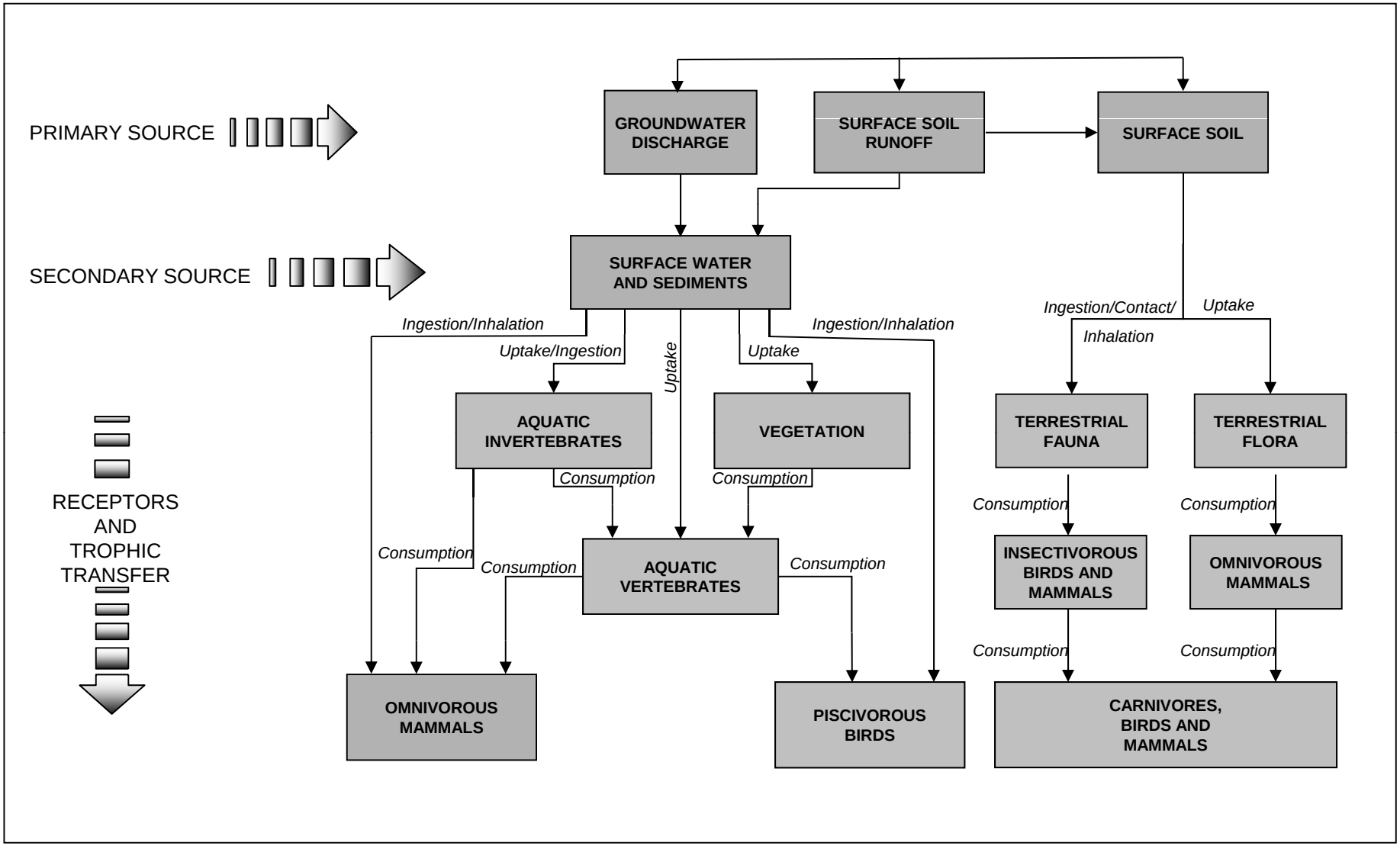
TITLE: CONCENTRATIONS OF MERCURY IN SEDIMENT WITHIN THE VICINITY OF BUILDING 170

WESTON SOLUTIONS SM

DATE: 3/22/2012

FIGURE #: 4-3

P:\Atlantic_City_Reservoir\GIS\MXD\2012_03_AreaU_SRIR\11066_Bldg_170_Hg.mxd



LEGEND

Potential Pathways for Evaluation

FIGURE 5-1
POTENTIAL ECOLOGICAL EXPOSURE PATHWAYS

Area W Site Investigation
Atlantic City Naval Air Station FUDS
Egg Harbor Township, New Jersey