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September 14, 2010

Mr. Ethan Caldwell, LG
North Carolina Department of Transportation
Geotechnical Engineering Unit
1589 Mail Service Center
Raleigh, North Carolina 27699-1589

Reference: Preliminary Site Assessment
WS Realty, Inc., Property (Parcel #27)
245 S. Bragg Blvd.
Spring Lake, Cumberland County, North Carolina
NCDOT Tip No. U-4444B
WBS Element 36492.1.2
AECOM Project No. 60158550

Dear Mr. Caldwell:

AECOM Technical Services of North Carolina, Inc., (AECOM) has completed the Preliminary Site Assessment conducted at the above-referenced property. The work was performed in accordance with the Technical and Cost proposal dated July 6, 2010, and the North Carolina Department of Transportation's (NCDOT's) Notice to Proceed dated July 7, 2010. Activities associated with the assessment consisted of conducting a geophysical investigation, collecting soil samples for laboratory analysis, and reviewing applicable North Carolina Department of Environment and Natural Resources (NCDENR) records. The purpose of this report is to document the field activities, present the laboratory analyses, and provide recommendations regarding the property.

Location and Description

The WS Realty, Inc., Property (Parcel #27) is located at 245 S. Bragg Boulevard in Spring Lake, Cumberland County, North Carolina. The property is situated on the east side of Bragg Boulevard and about 500 feet south of the intersection of Bragg Boulevard and Lake Avenue (Figure 1). Based on information supplied by the NCDOT and the site visit, AECOM understands that, as of the date of this report, the site is a vacant lot where a former building has been demolished. Following demolition, two metal pipes were observed that resembled fill ports or vent pipes that may have been associated with underground storage tanks (USTs). No structures are present at the site other than demolition remnants and the asphalt parking lot (Figure 2). The NCDOT has advised that the proposed right-of-way/easement will affect the asphalt area including the possible fill ports (Figure 2). Because of the potential for unknown tanks, the NCDOT requested a Preliminary Site Assessment. The scope of work as defined in the Request for Technical and Cost Proposal was to evaluate the proposed right-of-way with

respect to the presence of known and unknown USTs and assess where contamination may exist on the right-of-way. If present, an estimate of the quantity of impacted soil was to be provided.

AECOM reviewed the on-line NCDENR Incident Management database and no Incident Number has been assigned to the property. AECOM also examined the UST registration database to obtain UST ownership information. No USTs are registered to the site address.

Geophysical Survey

Prior to AECOM's mobilization to the site, Pyramid Environmental conducted a geophysical survey as part of this project to evaluate if USTs were present on the right-of-way/easement. The geophysical survey consisted of an electromagnetic survey using a Geonics EM61 time-domain electromagnetic induction meter to locate buried metallic objects, specifically USTs. A survey grid was laid out at the property with the X-axis oriented approximately perpendicular to Bragg Boulevard and the Y-axis oriented approximately parallel to Bragg Boulevard. The grid was located to cover the accessible portions of the proposed right-of-way. The survey lines were spaced 5 feet apart. Magnetic data was collected continuously along each survey line with a data logger. After collection, the data was reviewed in the field with graphical computer software. Following the electromagnetic survey, a ground penetrating radar (GPR) survey was conducted where needed to further evaluate any significant metallic anomalies.

Access was available to all areas of the right-of-way and several anomalies were detected with the geophysical survey. Most of these anomalies were attributed to buried utility lines or conduits. However, a significant anomaly on the south side of the property was interpreted to be two USTs. The apparent dimensions reported for the anomaly suggests USTs approximately 2,000 to 3,000 gallons in size. A detailed report of findings and interpretations is presented in Attachment A.

Site Assessment Activities

On August 10, 2010, AECOM mobilized to the site to conduct a Geoprobe® direct push investigation to evaluate soil conditions within the proposed right-of-way/easement. Continuous sampling using direct push technology (Regional Probing of Wake Forest, North Carolina) resulted in generally good recovery of soil samples from the direct-push holes. Soil samples were collected and contained in acetate sleeves inside the direct push sampler. Each of these sleeves was divided into 2-foot long sections for soil sample screening. Each 2-foot interval was placed in a resealable plastic bag and the bag was set aside for a sufficient amount of time to allow volatilization of organic compounds from the soil to the bag headspace. The probe of a flame ionization detector/photo ionization detector (FID/PID) was inserted into the bag and the reading was recorded. After terminating the sample hole, the soil sample from the depth interval with the highest FID/PID reading was submitted for analysis to SGS North America in Wilmington, North Carolina, using standard chain-of-custody procedures. The laboratory

analyzed the soil samples for total petroleum hydrocarbons (TPH) in the diesel range organics (DRO) and gasoline range organics (GRO).

Three direct-push holes (WS-1 through WS-3) were advanced within the right-of-way to a depth of 12 feet as shown in Figure 2 and Attachment B. Boring WN-1 was located on the south side of the geophysical anomaly, boring WS-2 was placed on the west side of the anomaly, and boring WS-3 was situated on the north side of the anomaly to evaluate the soil conditions around the probable USTs (Attachment C). The lithology encountered by the direct-push samples generally was consistent throughout the site. The ground surface was covered with about 2 to 3 inches of asphalt. Below the surface to a depth of 12 feet was a medium brown, loose, coarse-grained sand. The "Geologic Map of North Carolina" dated 1985 indicates that the site is underlain by the Middendorf and Cape Fear Formations, each of which consists predominantly of sand and mudstone. The soil observed at the site is consistent with this parent rock. All the borings were terminated at a depth of 12 feet. No groundwater was observed in any of the borings. Based on field screening, soil samples were submitted for laboratory analyses, which are summarized in Table 1. Following completion, each boring was backfilled in accordance with 15A NCAC 2C.

Analytical Results

Based on the laboratory reports, summarized in Table 1 and presented in Attachment D, no petroleum hydrocarbon compounds identified as DRO and/or GRO were detected in any of the three soil samples collected from the site on August 10, 2010. Consequently, no concentrations are present above applicable action levels.

Conclusions and Recommendations

A Preliminary Site Assessment was conducted to evaluate the WS Realty, Inc., Property (Parcel #27) located at 245 S. Bragg Boulevard in Spring Lake, Cumberland County, North Carolina. A geophysical investigation was conducted to evaluate the site for unknown USTs. The investigation indicated that two probable metallic USTs, with accompanying piping, were present within the proposed right-of-way. Three soil borings were advanced to evaluate the soil conditions surrounding the probable USTs. The laboratory reports of the soil samples from these borings suggest that no DRO and/or GRO concentrations were present above the action level in any of the three soil samples analyzed.

AECOM appreciates the opportunity to work with the NCDOT on this project. Because no compounds were detected above the method detection limits in the soil samples, no notification is required to the NCDENR. If you have any questions, please contact me at (919) 854-6238.

Sincerely,

Michael W. Branson, P.G.
Project Manager

Attachments

c: Project File

TABLE 1

SOIL FIELD SCREENING AND ANALYTICAL RESULTS
WS REALTY, INC., PROPERTY (PARCEL #27)
SPRING LAKE, CUMBERLAND COUNTY, NORTH CAROLINA
NCDOT PROJECT NO. U-4444B
WBS ELEMENT 36492.1.2
AECOM PROJECT NO. 60158550

LOCATION	DEPTH (ft)	FID READING (ppm)	SAMPLE ID	ANALYTICAL RESULTS (mg/kg)	ASSUMED ACTION LEVEL (mg/kg)
WS-1	0 - 2	1.46			
	2 - 4	3.59	WS-1	DRO (BQL) GRO (BQL)	10 10
	4 - 6	2.82			
	6 - 8	2.97			
	8 - 10	2.78			
	10 - 12	3.61			
WS-2	0 - 2	4.05			
	2 - 4	3.95			
	4 - 6	4.06	WS-2	DRO (BQL) GRO (BQL)	10 10
	6 - 8	4.02			
	8 - 10	2.65			
	10 - 12	2.86			
WS-3	0 - 2	4.73			
	2 - 4	5.13	WS-3	DRO (BQL) GRO (BQL)	10 10
	4 - 6	3.21			
	6 - 8	2.84			
	8 - 10	3.61			
	10 - 12	2.71			

Soil samples were collected on August 10, 2010.

DRO - Diesel range organics.
GRO - Gasoline range organics.
BQL - Below quantitation limit.
ppm - parts per million.
mg/kg - milligrams per kilogram.

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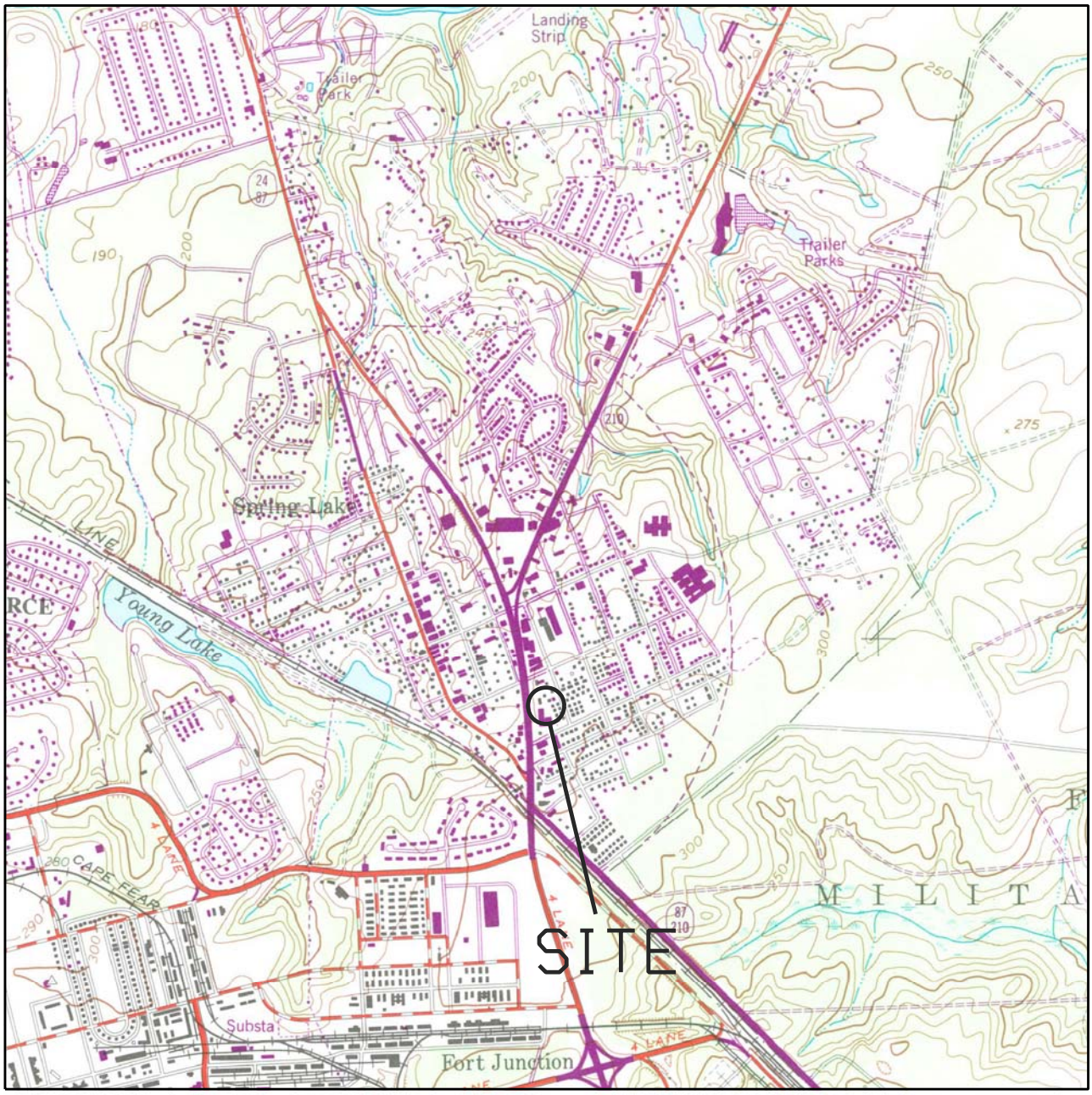
FIGURES



SCALE 1:24,000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

SOURCE: U.S. GEOLOGICAL SURVEY 7.5 MIN QUADRANGLE: MANCHESTER, NC (REV 1987)

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FIGURE 1
VICINITY MAP
WS REALTY, INC., PROPERTY (PARCEL #27)
SPRING LAKE, CUMBERLAND COUNTY NORTH CAROLINA

AUGUST 2010

60158550

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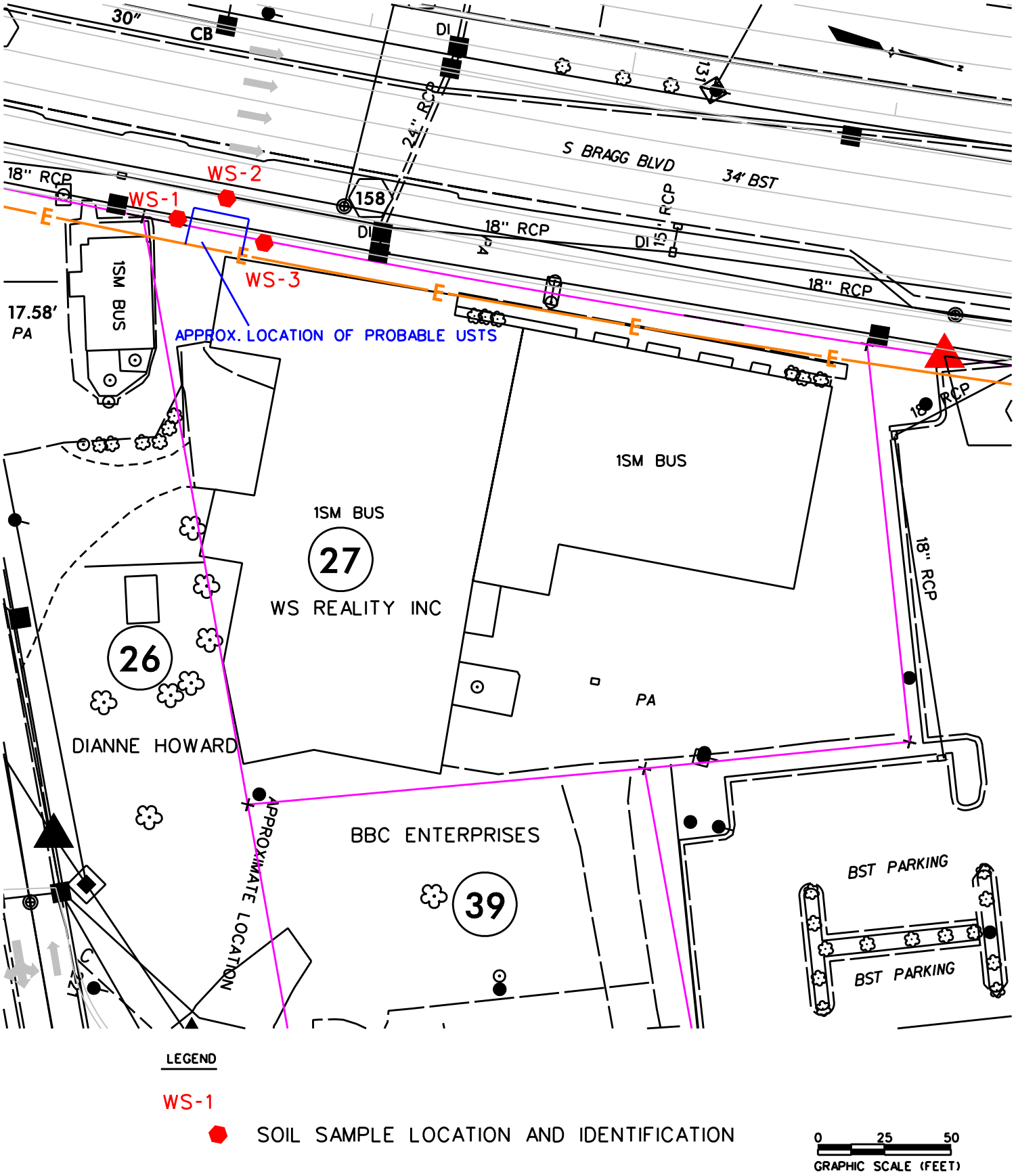

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FIGURE 2
SITE MAP
W S REALTY, INC., PROPERTY (PARCEL #27)
SPRING LAKE, CUMBERLAND COUNTY, NORTH CAROLINA

AUGUST 2010 60158550

...\WS REALTY PARCEL 27(10).dgn 9/2/2010 9:50:37 AM

ATTACHMENT A

Pyramid Project # 2010176

GEOPHYSICAL INVESTIGATION REPORT

EM61 & GPR SURVEYS

WS REALITY PROPERTY (PARCEL 27)
South Bragg Boulevard
Spring Lake, North Carolina

August 25, 2010

Report prepared for: **Michael W. Branson, PG**
AECOM Environment
701 Corporate Center Drive, Suite 475
Raleigh, North Carolina 27607

Prepared by: _____
Mark J. Denil, P.G.

Reviewed by: _____
Douglas Canavello, P.G.

PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.
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GREENSBORO, NC 27416-0265
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AECOM Environment
GEOPHYSICAL INVESTIGATION REPORT
WS REALITY PROPERTY (PARCEL 27)
Spring Lake, North Carolina

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FIGURES

1.0 INTRODUCTION

Pyramid Environmental conducted a geophysical investigation for AECOM Environmental across the proposed Right-of-Way (ROW) area at the WS Reality property (Parcel 27) located along the easterly side of South Bragg Boulevard, approximately 0.1 mile north of Poe Avenue in Spring Lake, North Carolina. Conducted on July 22 and August 2, 2010, the geophysical investigation was performed as part of the North Carolina Department of Transportation (NCDOT) preliminary site assessment project to determine if unknown, metallic underground storage tanks (USTs) were present beneath the proposed ROW area of the site.

The WS Reality property consists of the presently vacant Wellons Plaza (strip mall) and the proposed ROW area encompasses the asphalt pavement between the building and South Bragg Boulevard. The proposed ROW area (geophysical survey area) has a maximum length and width of 280 feet and 50 feet, respectively.

AECOM Environment representative Mr. Michael Branson, PG identified the geophysical survey area to Pyramid Environmental personnel and provided site maps showing the boundaries of the proposed survey area prior to conducting the investigation. Photographs of the geophysical equipment used in this investigation and a portion of the ROW area at the WS Reality property are shown in **Figure 1**.

2.0 FIELD METHODOLOGY

Prior to conducting the geophysical investigation, a 10-foot by 20-foot survey grid was established across the geophysical survey area (property) using measuring tapes and water-based marking paint. These grid marks were used as X-Y coordinates for location control when collecting the geophysical data and establishing base maps for the geophysical results.

The geophysical investigation consisted of electromagnetic (EM) induction-metal detection surveys and ground penetrating radar (GPR) surveys. The EM survey was performed on July 22, 2010 using

a Geonics EM61-MK1 metal detection instrument. According to the instrument specifications, the EM61 can detect a metal drum down to a maximum depth of approximately 8 feet. Smaller objects (1-foot or less in size) can be detected to a maximum depth of 4 to 5 feet. All of the EM61 data were digitally collected at approximately 0.8 foot intervals along northerly-southerly, or easterly-westerly, parallel survey lines spaced five feet apart. All of the data were downloaded to a computer and reviewed in the field and office using the Geonics DAT61W and Surfer for Windows Version 7.0 software programs.

GPR surveys were conducted on August 2, 2010 across selected EM61 differential anomalies using a GSSI SIR-2000 unit equipped with a 400 MHz antenna. Data were digitally collected in a continuous mode along X-axis and/or Y-axis survey lines, spaced 2.5 to 5.0 feet apart using a vertical scan of 512 samples, at a rate of 48 scans per second. A 70 MHz high pass filter and an 800 MHz low pass filter were used during data acquisition with the 400 MHz antenna. GPR data were collected down to a maximum depth of approximately 5 feet, based on an estimated two-way travel time of 8 nanoseconds per foot. All of the GPR data were downloaded to a field computer and reviewed in the field and office using Radprint software.

Contour plots of the EM61 bottom coil and differential results are presented in **Figures 2 and 3**, respectively**.** The bottom coil results represent the most sensitive component of the EM61 instrument and detect metal objects regardless of size. The bottom coil response can be used to delineate metal conduits or utility lines, small, isolated metal objects, and areas containing insignificant metal debris. The differential results are obtained from the difference between the top and bottom coils of the EM61 instrument. The differential results focus on the larger metal objects such as drum and UST-size objects and ignore the smaller insignificant metal objects.

Preliminary contour plots of the EM61 bottom coil and EM61 differential results obtained from the survey area were emailed to Mr. Branson during the week of August 9, 2010.

3.0 DISCUSSION OF RESULTS

The linear EM61 bottom coil anomalies intersecting grid coordinates X=30 Y=20, X=30 Y=220, X=45 Y=212, X=50 Y=193, and X=65 Y=252 are probably in response to buried utility lines or conduits. The series of northerly-southerly trending EM61 bottom coil anomalies running along grid line X=55 from Y=125 to Y=255 are probably in response to the steel reinforced concrete parking curbs. The bottom coil anomaly centered near grid coordinates X=55 Y=150 is probably in response to the planter and metal store sign.

GPR data suggest the EM61 differential anomaly centered near grid lines X=50 Y=46 is in response to two metallic USTs buried approximately 1.6 feet below the asphalt pavement and oriented in an easterly-westerly direction. Based on the GPR data, each of the probable USTs appears to be 14 to 15 feet long, 6 feet wide and immediately adjacent to two partially exposed fill/vent pipes located along the edge of the asphalt pavement. The footprints of the two probable, metallic USTs were marked in the field using orange marking paint. The image of GPR survey line X=50 which crosses the two probable USTs and a photograph showing the location of the probable USTs are presented in **Figure 4**.

The remaining EM61 anomalies shown in Figures 2 and 3 are probably in response to known surface objects, structures and/or buried lines.

4.0 SUMMARY & CONCLUSIONS

Our evaluation of the EM61 and GPR data collected across the proposed ROW area at the WS Reality property (Parcel 27) located along the east side of South Bragg Boulevard in Spring Lake, North Carolina, provides the following summary and conclusions:

- The EM61 and GPR surveys provided reliable results for the detection of metallic USTs within the surveyed portions of the site.

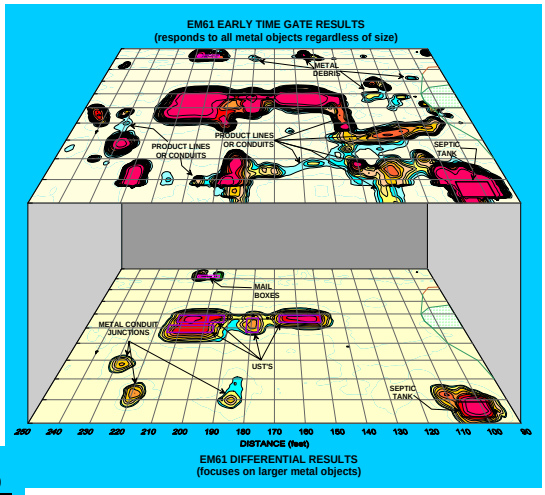
- The linear EM61 bottom coil anomalies intersecting grid coordinates X=30 Y=20, X=30 Y=220, X=45 Y=212, X=50 Y=193, and X=65 Y=252 are probably in response to buried utility lines or conduits.

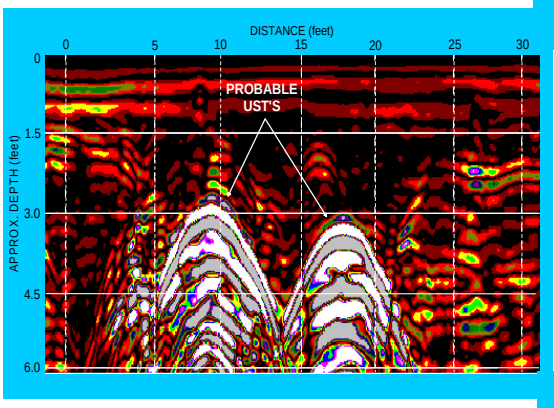
- The series of northerly-southerly trending EM61 bottom coil anomalies running along grid line X=55 from Y=125 to Y=255 are probably in response to the steel reinforced concrete parking curbs.

- GPR data suggest the EM61 differential anomaly centered near grid lines X=50 Y=46 is in response to two metallic USTs buried approximately 1.6 feet below the asphalt pavement and oriented in an easterly-westerly direction. Based on the GPR data, each of the probable USTs appears to be 14 to 15 feet long, 6 feet wide and immediately adjacent to two partially exposed fill/vent pipes located along the edge of the asphalt pavement.

5.0 LIMITATIONS

EM61 and GPR surveys have been performed and this report prepared for AECOM Environmental in accordance with generally accepted guidelines for EM61 and GPR surveys. It is generally recognized that the results of the EM61 and GPR are non-unique and may not represent actual subsurface conditions. The EM61 and GPR results obtained for this project have not conclusively determined that two probable USTs are present within the surveyed portion of the site but that only two probable USTs were detected.

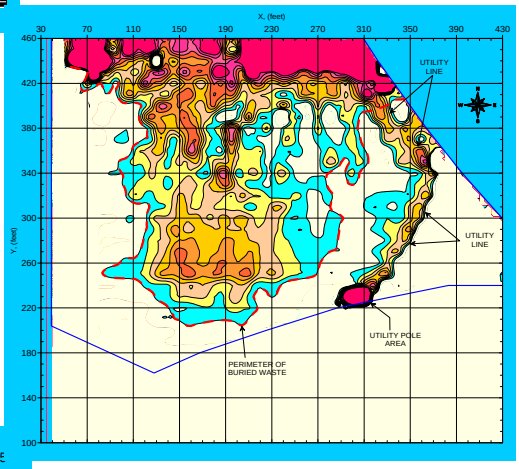


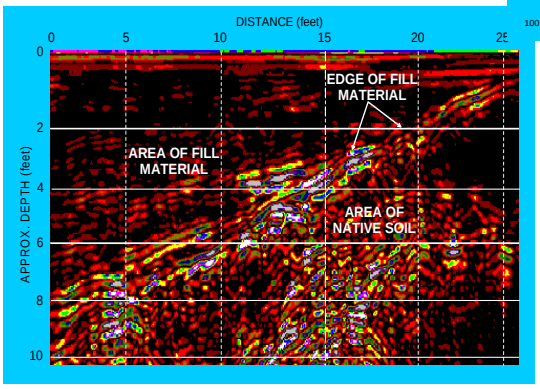


FIGURES

(on the following pages)

Figures shown on this page are for esthetic purposes only and are not related to the geophysical results discussed in this report.





The photograph shows the Geonics EM61 metal detector that was used to conduct the metal detection survey across the proposed ROW area at the WS Reality Inc. property on July 22, 2010.

The photographs show the SIR-2000 GPR system equipped with a 400 MHz antenna that were used to conduct the ground penetrating radar investigation at the WS Reality Inc. property on August 2, 2010.

The photograph shows the proposed ROW area at the WS Reality Inc. property located along the east side of South Bragg Boulevard in Spring Lake, North Carolina. The photograph is viewed in a northerly direction.

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

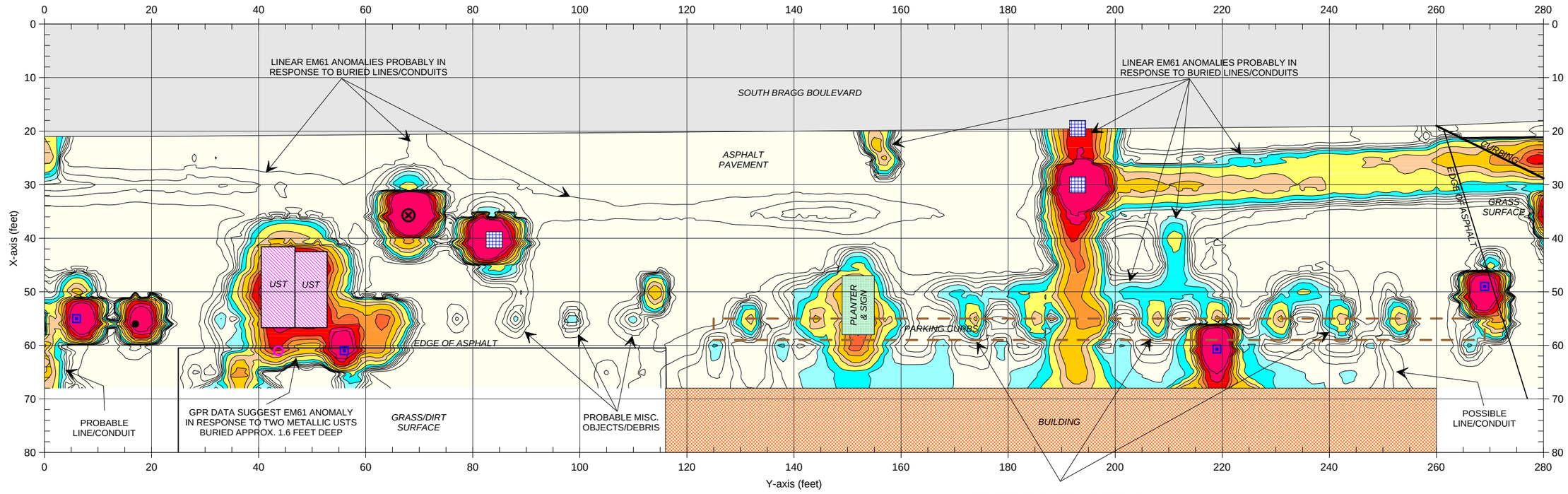
CLIENT	AECOM ENVIRONMENT		DATE	08/23/10	DRWN MJD
SITE	WS REALITY INC. PROPERTY (PARCEL 27)		LAY		CHKD
CITY	SPRING LAKE	STATE NORTH CAROLINA	DWG		
TITLE	GEOPHYSICAL RESULTS		JNO	2010-176	FIGURE

GEOPHYSICAL EQUIPMENT & SITE PHOTOGRAPHS

FIGURE 1

EM61 METAL DETECTION (BOTTOM COIL RESULTS)

FIGURE 2



SERIES OF EM61 ANOMALIES PROBABLY IN RESPONSE TO STEEL REINFORCED CONCRETE PARKING CURBS

LEGEND

- SURVEY AREA: EM61 DATA ACQUIRED ALONG X-AXIS OR Y-AXIS TRENDING SPACED 5 FEET APART
- BUILDING
- MONITORING WELL
- EXPOSED VENT/FILL PIPES
- CONCRETE PARKING CURBS
- WATER LINE VALVE COVER
- STORM SEWER GRATE
- MANHOLE COVER
- PLANTER & STORE SIGN
- UST — PROBABLE UST, AS SUGGESTED BY GPR DATA & EXPOSED VENT/FILL PIPES

APPROXIMATE NORTH

EM61 BOTTOM COIL RESPONSE (MILLIVOLTS)

1000
750
500
400
300
200
150
100
75
60
50
40
30
15
-90
-100
-200
-400
-5000

The contour plot shows the bottom coil (most sensitive) response of the EM61 instrument in millivolts (mV). The bottom coil response shows buried metallic objects regardless of size. The EM metal detection data were collected on July 22, 2010 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on August 2, 2010 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

The geophysical investigation detected two probable, metallic USTs within the surveyed portion of the site.

GRAPHIC SCALE IN FEET

DATE	DWG	LAY	CHKD	DRWN	FIGURE
08/23/10				MJD	2010-176

J.-NO.

CLIENT	SITE	CITY	STATE	TITLE
AECOM ENVIRONMENT	WS REALITY INC. PROPERTY (PARCEL 27)	SPRING LAKE	NORTH CAROLINA	GEOPHYSICAL RESULTS

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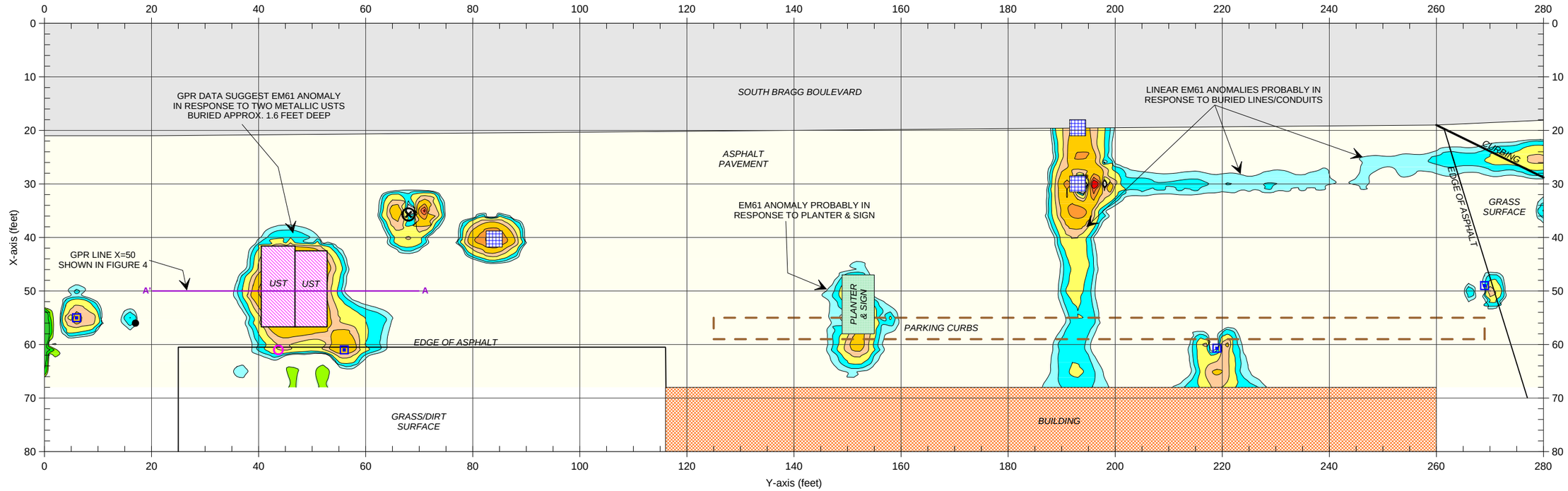
EM61 METAL DETECTION (DIFFERENTIAL RESULTS)

FIGURE 3



LEGEND

- SURVEY AREA: EM61 DATA ACQUIRED ALONG X-AXIS OR Y-AXIS TRENDING SPACED 5 FEET APART
- BUILDING
- MONITORING WELL
- EXPOSED VENT/FILL PIPES
- CONCRETE PARKING CURBS
- WATER LINE VALVE COVER
- STORM SEWER GRATE
- MANHOLE COVER
- PLANTER & STORE SIGN
- UST — PROBABLE UST, AS SUGGESTED BY GPR DATA & EXPOSED VENT/FILL PIPES

APPROXIMATE NORTH

EM61 DIFFERENTIAL RESPONSE (MILLIVOLTS)

1000
750
500
400
300
200
150
100
75
60
55
-90
-100
-200
-400
-5000

Note: The contour plot shows the differential response between the bottom and top coils of the EM61 instrument in millivolts (mV). The differential response focuses on larger, buried metallic objects such as drums and USTs and ignores smaller miscellaneous, buried, metal debris. The EM61 data were collected on July 22, 2010 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on August 2, 2010 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

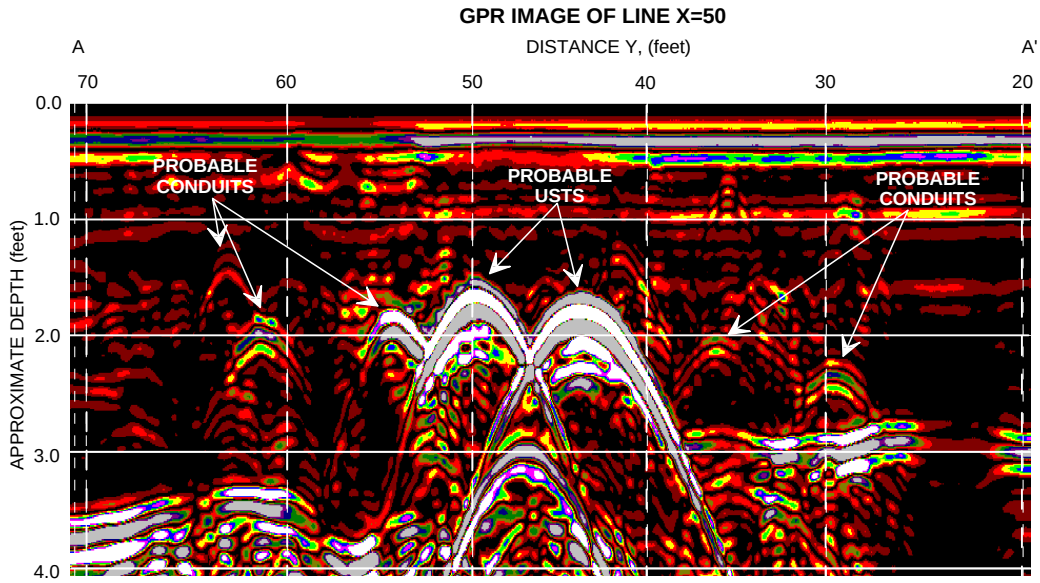
The geophysical investigation detected two probable, metallic USTs within the surveyed portion of the site.

GRAPHIC SCALE IN FEET

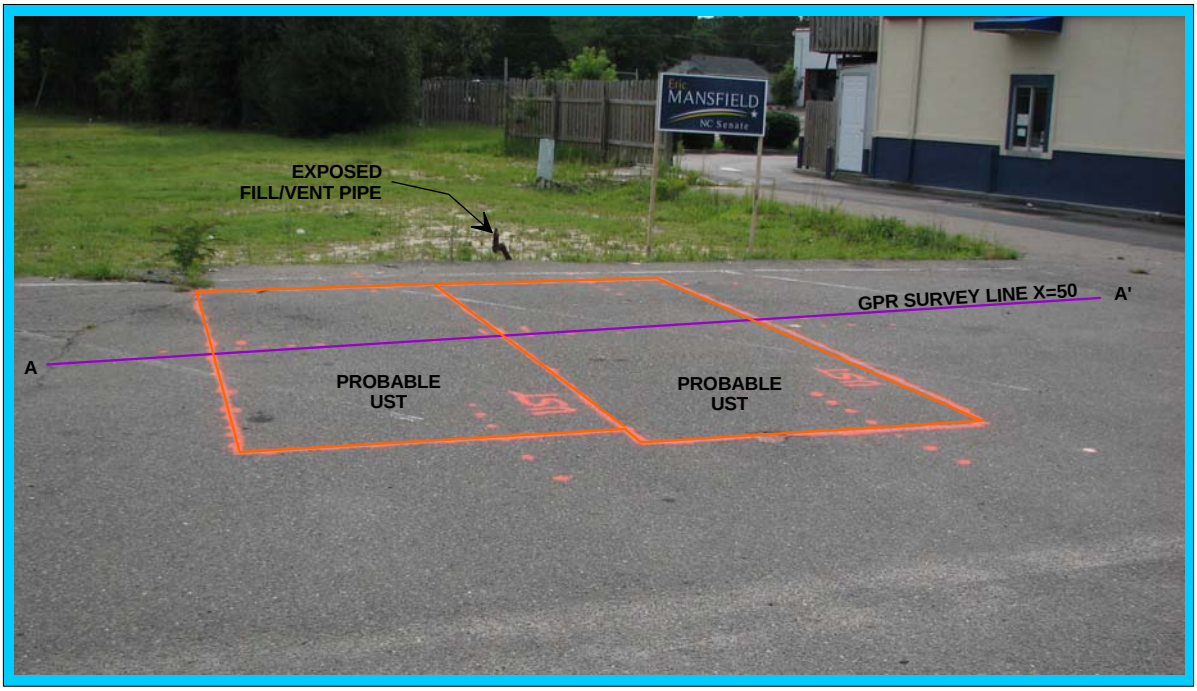
DRWN	CHKD		FIGURE
MJD			
DATE	LAY	DWG	J.NO.
08/23/10			2010-176

CLIENT	SITE	CITY	STATE	TITLE
AECOM ENVIRONMENT	WS REALITY INC. PROPERTY (PARCEL 27)	SPRING LAKE	NORTH CAROLINA	GEOPHYSICAL RESULTS

PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.



The GPR image obtained along a portion of survey line X=50 recorded two high amplitude, hyperbolic anomalies that are probably in response to two metallic USTs buried approx. 1.6 feet below the asphalt pavement. The solid purple line labeled AA' in the photograph below and in Figure 3 shows the location of the GPR image.



The orange rectangles in the photograph represent the approximate perimeters of the two probable, metallic USTs, as suggested by the GPR data, centered near grid coordinates X=50 Y=46. Each of the USTs appears to be approximately 14 to 15 feet long and 6 feet wide.The solid purple line in the photograph labeled AA' and in Figure 3 represents the approximate location of the GPR image shown above. The photograph is viewed in an easterly direction.

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

CLIENT	AECOM ENVIRONMENT		DATE	08/23/10	DRWN MJD
SITE	WS REALITY INC. PROPERTY (PARCEL 27)		LAY		CHKD
CITY	SPRING LAKE	STATE NORTH CAROLINA	DWG		
TITLE	GEOPHYSICAL RESULTS		JNO.	2010-176	FIGURE

GPR IMAGE ACROSS PROBABLE USTS

FIGURE 4

ATTACHMENT B

TEST BORING REPORT

PROJECT WS REALTY, INC., PROPERTY (PARCEL 27)
CLIENT NCDOT
PROJECT NUMBER 60158550 (WBS 36492.1.2)
CONTRACTOR REGIONAL PROBING
EQUIPMENT GEOPROBE

BORING NUMBER WS-1
PAGE 1
ELEVATION
DATE 8/10/2010
DRILLER OPPER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			1.46		2" ASPHALT/GRAVEL, MEDIUM BROWN, LOOSE, COARSE-GRAINED SAND, DRY, NO ODOR.
			3.59		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
			2.82		AS ABOVE, DRY, NO ODOR.
5.0					
			2.97		AS ABOVE, DRY, NO ODOR.
			2.78		AS ABOVE, DRY, NO ODOR.
10.0			3.61		AS ABOVE, DRY, NO ODOR.
					BORING TERMINATED AT 12 FEET. NO GROUNDWATER ENCOUNTERED
15.0					
20.0					

AECOM

TEST BORING REPORT

PROJECT WS REALTY, INC., PROPERTY (PARCEL 27)
CLIENT NCDOT
PROJECT NUMBER 60158550 (WBS 36492.1.2)
CONTRACTOR REGIONAL PROBING
EQUIPMENT GEOPROBE

BORING NUMBER WS-2
PAGE 1
ELEVATION
DATE 8/10/2010
DRILLER OPPER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			4.05		2" ASPHALT/GRAVEL, MEDIUM BROWN, LOOSE, COARSE-GRAINED SAND, DRY, NO ODOR.
			3.95		AS ABOVE, DRY, NO ODOR.
5.0			4.06		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
			4.02		AS ABOVE, DRY, NO ODOR.
			2.65		AS ABOVE, DRY, NO ODOR.
10.0			2.86		AS ABOVE, DRY, NO ODOR.
					BORING TERMINATED AT 12 FEET. NO GROUNDWATER ENCOUNTERED
15.0					
20.0					

AECOM

TEST BORING REPORT

PROJECT WS REALTY, INC., PROPERTY (PARCEL 27)
CLIENT NCDOT
PROJECT NUMBER 60158550 (WBS 36492.1.2)
CONTRACTOR REGIONAL PROBING
EQUIPMENT GEOPROBE

BORING NUMBER WS-3
PAGE 1
ELEVATION
DATE 8/10/2010
DRILLER OPPER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			4.73		2" ASPHALT/GRAVEL, MEDIUM BROWN, LOOSE, COARSE-GRAINED SAND, DRY, NO ODOR.
			5.13		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
5.0			3.21		AS ABOVE, DRY, NO ODOR.
			2.84		AS ABOVE, DRY, NO ODOR.
			3.61		AS ABOVE, DRY, NO ODOR.
10.0			2.71		AS ABOVE, DRY, NO ODOR.
					BORING TERMINATED AT 12 FEET. NO GROUNDWATER ENCOUNTERED
15.0					
20.0					

AECOM

ATTACHMENT C

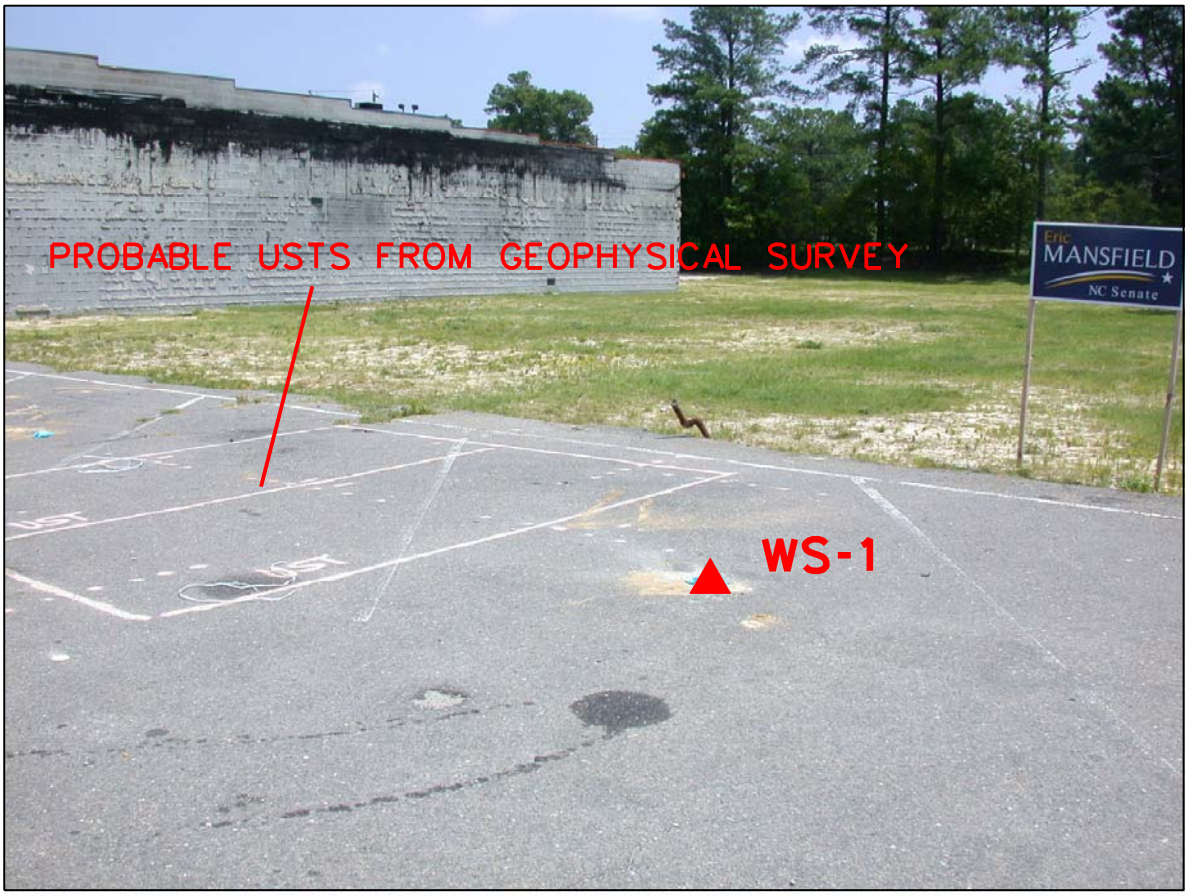


PHOTO 1 - BORING IN PROPOSED R/W LOOKING NORTHEAST

PHOTO 2 - BORING IN PROPOSED R/W LOOKING EAST

PHOTO 3 - BORING WITHIN PROPOSED R/W LOOKING SOUTHEAST

ATTACHMENT D

SGS

Mike Branson
AECOM
701 Corporate Center Drive
Suite 475
Raleigh, NC 27607

Report Number: G1037-96

Client Project: NCDOT

Dear Mike Branson,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or services performed during this project, please call Barbara Hager at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America, Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America, Inc.

Barbara Hager Aug 18.2010

Project Manager
Barbara Hager

Date

List of Reporting Abbreviations
And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

UJ = Target analytes with recoveries that are 10% < %R < LCL; # of MEs are allowable and compounds are not detected in the sample.

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% soilds = Percent Solids

Special Notes:
1) Metals and mercury samples are digested with a hot block; see the standard operating procedure document for details.
2) Uncertainty for all reported data is less than or equal to 30 percent.

MI34.021808.4

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID: WS-1
Client Project ID: NCDOT
Lab Sample ID: G1037-96-1A
Lab Project ID: G1037-96
Report Basis: Dry Weight

Analyzed By: LMC
Date Collected: 8/10/2010 11:45
Date Received: 8/11/2010
Matrix: Soil
Solids 95.72

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	5.75	mg/Kg	1	08/17/10 15:18

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	96.7	96.7		70-130

Comments:

Batch Information

Analytical Batch: VP081710
Analytical Method: 8015
Instrument ID: GC4
Analyst: LMC

Prep Method: 5035
Initial Wt/Vol: 5.45 g
Final Volume: 5 mL

Analyst: LMC

NC Certification #481

Reviewed By: GRO.XLS

Results for Total Petroleum Hydrocarbons

by **GC/FID 8015**

Client Sample ID: WS-2
Client Project ID: NCDOT
Lab Sample ID: G1037-96-2A
Lab Project ID: G1037-96
Report Basis: Dry Weight

Analyzed By: LMC
Date Collected: 8/10/2010 12:00
Date Received: 8/11/2010
Matrix: Soil
Solids 96.05

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	5.45	mg/Kg	1	08/17/10 15:45

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	96.1	96.1		70-130

Comments:

Batch Information

Analytical Batch: VP081710
Analytical Method: 8015
Instrument ID: GC4
Analyst: LMC

Prep Method: 5035
Initial Wt/Vol: 5.73 g
Final Volume: 5 mL

Analyst: LMC

NC Certification #481

Reviewed By: GRO.XLS

Results for Total Petroleum Hydrocarbons

by **GC/FID 8015**

Client Sample ID: WS-3
Client Project ID: NCDOT
Lab Sample ID: G1037-96-3A
Lab Project ID: G1037-96
Report Basis: Dry Weight

Analyzed By: LMC
Date Collected: 8/10/2010 12:10
Date Received: 8/11/2010
Matrix: Soil
Solids 94.53

Analyte	Result	RL	Units	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	5.58	mg/Kg	1	08/17/10 16:13

Surrogate Spike Results

	Added	Result	Recovery	Flag	Limits
BFB	100	97.3	97.3		70-130

Comments:

Batch Information

Analytical Batch: VP081710
Analytical Method: 8015
Instrument ID: GC4
Analyst: LMC

Prep Method: 5035
Initial Wt/Vol: 5.69 g
Final Volume: 5 mL

Analyst: _____

NC Certification #481

Reviewed By: _____

GRO.XLS

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID: WS-1
Client Project ID: NCDOT
Lab Sample ID: G1037-96-1D
Lab Project ID: G1037-96

Date Collected: 8/10/2010 11:45
Date Received: 8/11/2010
Matrix: Soil
Solids 95.72
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	6.42	mg/Kg	1	08/17/10 11:51

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	32.2	80.5

Comments:

Batch Information

Analytical Batch: EP081710
Analytical Method: 8015
Instrument: GC6
Analyst: DTF

Prep batch: 17206
Prep Method: 3541
Prep Date: 08/13/10
Initial Prep Wt/Vol: 32.57 G
Prep Final Vol: 10 mL

Analyst: FM

NC Certification #481

Reviewed By: DRO.XLS

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID: WS-2
Client Project ID: NCDOT
Lab Sample ID: G1037-96-2D
Lab Project ID: G1037-96

Date Collected: 8/10/2010 12:00
Date Received: 8/11/2010
Matrix: Soil
Solids 96.05
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	6.49	mg/Kg	1	08/17/10 12:19

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	33.8	84.4

Comments:

Batch Information

Analytical Batch: EP081710
Analytical Method: 8015
Instrument: GC6
Analyst: DTF

Prep batch: 17206
Prep Method: 3541
Prep Date: 08/13/10
Initial Prep Wt/Vol: 32.1 G
Prep Final Vol: 10 mL

Analyst: FX

NC Certification #481

Reviewed By: DRO.XLS

Results for Total Petroleum Hydrocarbons
by **GC/FID 8015**

Client Sample ID: WS-3
Client Project ID: NCDOT
Lab Sample ID: G1037-96-3D
Lab Project ID: G1037-96

Date Collected: 8/10/2010 12:10
Date Received: 8/11/2010
Matrix: Soil
Solids 94.53
Report Basis: Dry Weight

Parameter	Result	RL	Units	Dilution Factor	Date Analyzed
Diesel Range Organics	BQL	6.56	mg/Kg	1	08/17/10 12:47

Surrogate Spike Results	Spike Added	Control Limits	Spike Result	Percent Recovery
OTP	40	40-140	28	70.1

Comments:

Batch Information

Analytical Batch: EP081710
Analytical Method: 8015
Instrument: GC6
Analyst: DTF

Prep batch: 17206
Prep Method: 3541
Prep Date: 08/13/10
Initial Prep Wt/Vol: 32.26 G
Prep Final Vol: 10 mL

Analyst: FM

NC Certification #481

Reviewed By: CM

DRO.XLS

CHAIN OF CUSTODY RECORD
SGS North America Inc.

Locations Nationwide
- Alaska
- Maryland
- New Jersey
- New York
- North Carolina
- Ohio

www.us.sgs.com

100606

(1)
CLIENT: AECOM
CONTACT: MIKE BRANSON PHONE NO:(919) 854 6238
PROJECT: NCDOT SITE/PWSID#: WS REALTY
REPORTS TO: ABOVE
FAX NO.:(919) 854 6259
INVOICE TO: NCDOT QUOTE #:
P.O. NUMBER WBS # 36492.1.2

SGS Reference: G1037-96

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE (C=COMP G=GRAB)	Preservatives Used: Meoh	—	Analysis Required (3): GRO	DRO	REMARKS
	WS-1	8/10/10	1145	SOIL	3	C	✓	✓			
	WS-2	8/10/10	1202	SOIL	3	C	✓	✓			
	WS-3	8/10/10	1210	SOIL	3	C	✓	✓			

(5)

Collected/Relinquished By:(1)	Date	Time	Received By:
MBranson	8/10/10	1730	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date 8/11/10	Time 1000	Received By:

(4)

Shipping Carrier: Fed Ex
Shipping Ticket No:
Samples Received Cold? (Circle) YES (NO)
Temperature°C: 9.0°C
Special Deliverable Requirements:
Chain of Custody Seal: (Circle) INTACT BROKEN (ABSENT)
Special Instructions:
Requested Turnaround Time: ☐ RUSH _____ Date Needed ☑ STD

❑ 200 W. Potter Drive **Anchorage, AK 99518** Tel: (907) 562-2343 Fax: (907) 561-5301
❑ 5500 Business Drive **Wilmington, NC 28405** Tel: (910) 350-1903 Fax: (910) 350-1557

White - Retained by Lab
Pink - Retained by Client

N.C. Certification #481

SGS North America, Inc.