

Preliminary Site Assessment
Guy Duvall Property Parcel #39
Franklin, Macon County, NC

H&H Job No. ROW-150
State Project R-2408A and B
WBS Element # 34427.1.1
July 14, 2008



2923 South Tryon Street
Suite 100
Charlotte, NC 28203
704-586-0007

3334 Hillsborough Street
Raleigh, NC 27607
919-847-4241

**Preliminary Site Assessment
Guy Duvall Property Parcel #39
Franklin, Macon County, North Carolina
H&H Project ROW-150**

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**Preliminary Site Assessment Report
Guy Duval Property Parcel #39
Franklin, Macon County, North Carolina
H&H Project ROW-150**

1.0 Introduction

Hart & Hickman PC (H&H) has prepared this Preliminary Site Assessment (PSA) report to document assessment activities performed at the Guy Duval property (NC DOT Parcel #39) located at 1716 Bryson City Road Franklin, Macon County, North Carolina. The site is located at the intersection of Bryson City Road and Hughes Lane. This assessment was conducted on behalf of the North Carolina Department of Transportation (NC DOT) in accordance with the scope of work outlined in our May 21, 2008 proposal.

The purpose of this assessment was to check for the presence or absence of impacted soil at the subject property in the proposed construction areas related to the widening of US Highway 28 (Bryson City Road) and State Road 1363 (Riverview Street, State Project R-2408A and B). A site location map is included as Figure 1 and a site map is presented as Figure 2. The NC DOT preliminary plan of the Bryson City Road widening area near the Giles O'Neal property is included in Appendix A.

Based on information provided by the NC DOT, the Guy Duval property currently operates as an antique dealership but there were concerns an underground storage tank (UST) may be present in the right-of-way at the site. H&H did not observe surface evidence of current USTs or of a previous UST removal on this property.

2.0 Site Assessment

Soil Assessment Field Activities

H&H mobilized to the property on May 29, 2008 to advance five soil borings (39-1 through 39-5) by direct push technology (DPT). Prior to advancing the soil borings, H&H reviewed a geophysical survey performed by Schnabel Engineering South (Schnabel) of Greensboro, North Carolina between May 21 and May 27, 2008. Schnabel utilized ground penetrating radar (GPR) and time domain electromagnetic (TDEM) technology to identify geophysical anomalies and potential USTs

at the site. Several geophysical anomalies were noted resulting from above ground site features (metal carport canopy and parked automobile) present in close proximity to the geophysical survey area.

Two geophysical anomalies were noted in the proposed right-of-way along Hughes Lane, not attributable to above ground site features (Figure 2). Based on the TDEM and the GPR data, Schnabel concluded that one of these anomalies could possibly be a UST. However, the geophysical data was not definitive and Schnabel could not conclude with certainty whether this anomaly is a UST or buried metal debris. The anomaly was detected at 1-2 feet below ground surface (bgs). Schnabel's report including a site map depicting the results of the GPR and TDEM surveys is included in Appendix B.

Prior to conducting soil borings, utilities were marked by NC One Call and by Schnabel. Borings were also cleared to a four foot depth by hand auger. H&H utilized Subsurface Environmental Investigations, LLC (SEI) of Statesville, North Carolina to advance soil borings 39-1 through 39-5 (Figure 2). To facilitate the selection of soil samples for laboratory analysis, soil from each boring was screened continuously for the presence of volatile organic compounds (VOCs) with an organic vapor analyzer (OVA). Additionally, H&H observed the soil for visual and olfactory indications of petroleum impacts. In general, soil samples that exhibited the highest readings on the OVA were selected for laboratory analysis. Soil boring logs are included in Appendix C.

H&H submitted five samples, 39-1 through 39-5 all collected at 2-4 ft, for laboratory analysis. Soil samples are identified by the NC DOT Parcel number, soil boring number, and the depth interval in ft. The soil sampling interval was chosen based on OVA readings and the depth of the potential UST anomaly. OVA readings did not indicate hydrocarbon impacts from ground surface to a completion depth of 12 feet. The depth of the potential UST was reported at approximately 1-2 feet below grade.

Samples were sent to Research and Analytical Laboratories, Inc. (RAL) using standard chain-of-custody protocol. All soil samples were analyzed for total petroleum hydrocarbons (TPH) for gasoline-range organics (GRO) by EPA Method 5030/8015B and TPH diesel-range organics

(DRO) by EPA Method 3550/8015B. Sample depths and analytical results are summarized in Table 1. Laboratory analytical data sheets for the Parcel 39 samples and chain-of-custody documentation are provided in Appendix D. Data for other sites unrelated to Parcel 39 are also shown on the laboratory report. The analytical results are discussed below.

3.0 Analytical Results

TPH GRO and DRO were not detected in the soil samples analyzed for Parcel #39. Based on laboratory analytical results and OVA readings, it appears that no impacted soil is present at the site in the vicinity of the soil boring locations. DOT plans indicate a proposed fill along Bryson City Road in this area. Based on the proposed fill and results of soil sampling activities noted above, impacted soil should not be encountered at this site during NC DOT road work.

4.0 Summary and Regulatory Considerations

H&H has reviewed geophysical survey results and collected five soil samples at Parcel 39. A potential UST was identified within the proposed right-of-way along Hughes Lane. However, Schnabel could not definitively conclude that the geophysical anomaly was a buried UST and it may be buried metal debris. If a UST is encountered, the tank and its contents should be properly managed. Target compounds were not detected on Parcel #39. DOT plans indicate a proposed fill along Bryson City Road in this area. Based on the results of soil sampling activities, impacted soil should not be encountered at this site during NC DOT road work.

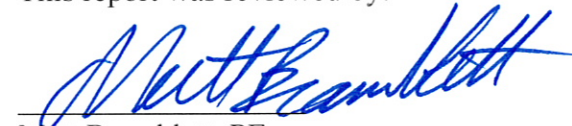
5.0 Signature Page

This report was prepared by:



Matthew J. Tendam, PE
Senior Project Engineer for
Hart and Hickman, PC

This report was reviewed by:



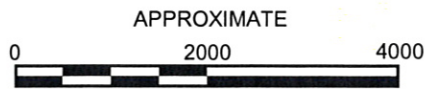
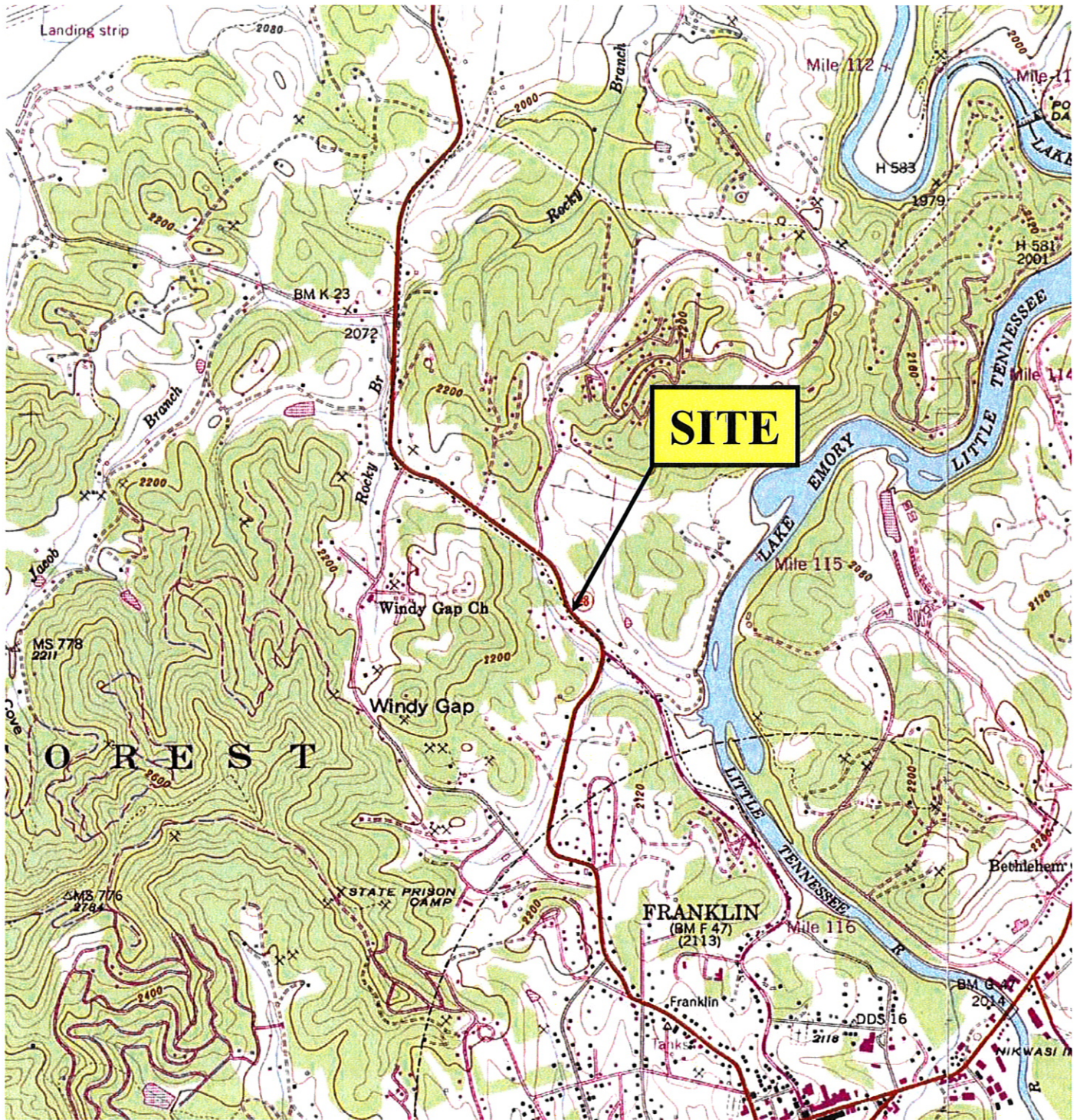
Matt Bramblett, PE
Principal and Project Manager for
Hart and Hickman, PC

Table 1
Soil Analytical Results - Guy Duval Property Parcel 39
Franklin, Macon County, North Carolina
H&H Job No. ROW-150

Sample ID	39-1	39-2	39-3	39-4	39-5	NC DENR Action Level (mg/kg)
	2-4 5/29/2008 (mg/kg)	2-4 5/29/2008 (mg/kg)	2-4 5/29/2008 (mg/kg)	2-4 5/29/2008 (mg/kg)	2-4 5/29/2008 (mg/kg)	
<u>TPH-GRO (EPA Method 5030)</u> Gasoline-Range Organics (GRO)	<10	<10	<10	<10	<10	10
<u>TPH-DRO (EPA Method 3550)</u> Diesel-Range Organics (DRO)	<10	<10	<10	<10	<10	10

Notes:

TPH=total petroleum hydrocarbons
mg/kg=milligrams per kilogram




SCALE IN FEET

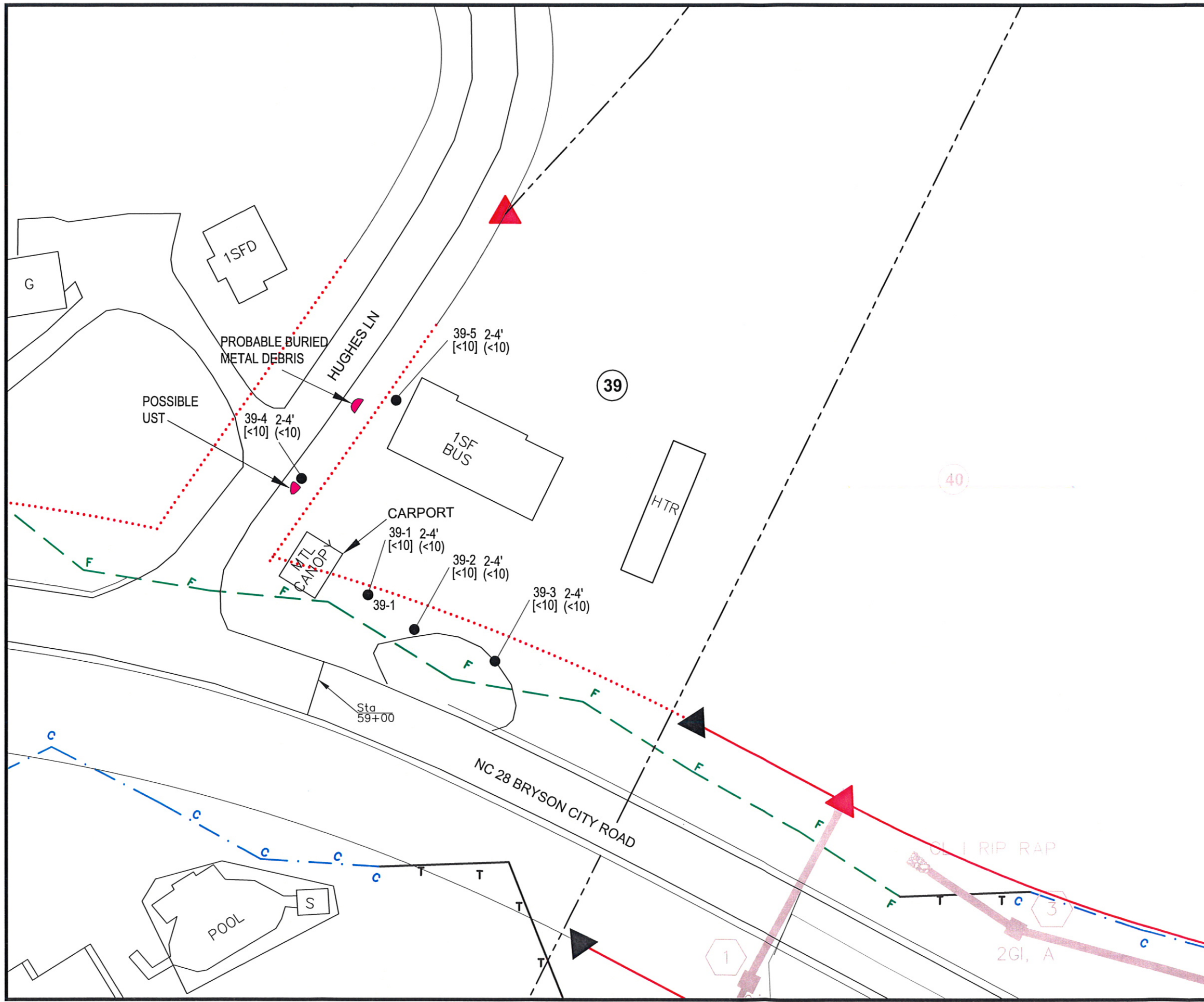
U.S.G.S. QUADRANGLE MAP

**FRANKLIN, NC 1946
PHOTOREVISED 1978**

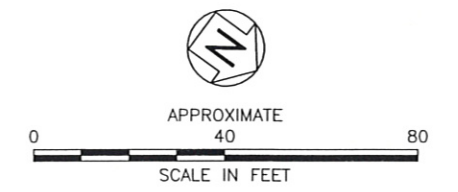
QUADRANGLE
7.5 MINUTE SERIES (TOPOGRAPHIC)

TITLE	SITE LOCATION MAP	
PROJECT	GUY DUVAL PROPERTY; PARCEL 39 FRANKLIN, NORTH CAROLINA	
 2923 South Tryon Street-Suite 100 Charlotte, North Carolina 28203 704-586-0007 (p) 704-586-0373 (f)		
DATE:	7/08/08	REVISION NO: 0
JOB NO:	ROW-150	FIGURE NO: 1

S:\AAA-Master Projects\NC DOT Right-of-Way - ROW\ROW-150 Franklin PSA\FIGURES\DWGS-BINDED\ALL (7-9-08).dwg_39_71142008 11:49:57 AM 1:1



- LEGEND**
- PROPERTY LINE
 - EXISTING RIGHT-OF-WAY
 - (▲)--- PROPOSED RIGHT-OF-WAY
 - .-.-C-.-.- PROPOSED CUT LINE
 - .-.-F-.-.- PROPOSED FILL LINE
 - T- PROPOSED TRANSITION LINE
 - (+)--- PROPOSED DRAINAGE PIPE AND CATCH BASIN
 - SOIL BORING
 - 39 PARCEL NUMBER
 - ▲ = GEOPHYSICAL ANOMALY
 - [] = TPH GRO IN mg/kg
 - () = TPH DRO IN mg/kg



TITLE
SITE MAP AND SOIL ANALYTICAL RESULTS

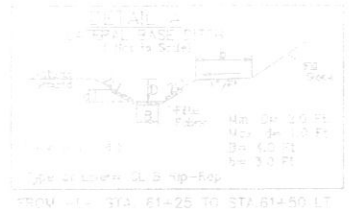
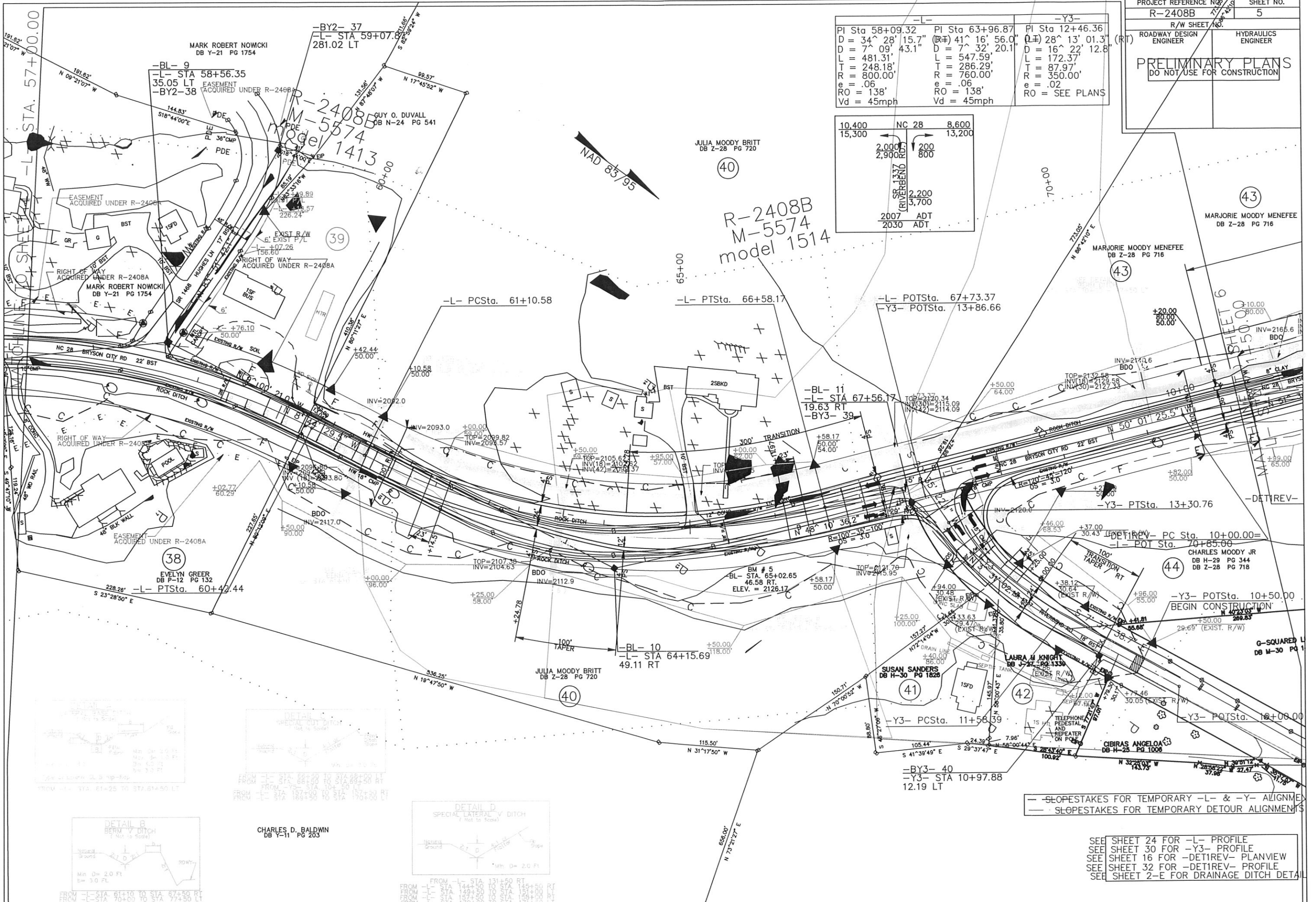
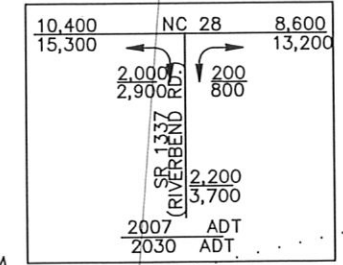
PROJECT
GUY DUVALL PROPERTY
PARCEL #39
FRANKLIN, NORTH CAROLINA

Hart & Hickman
A PROFESSIONAL CORPORATION
2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

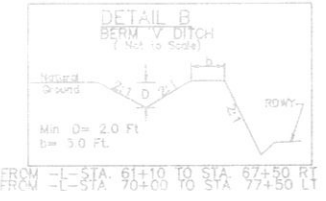
DATE: 6-9-08	REVISION NO. 0
JOB NO: ROW-150	FIGURE: 2

Appendix A
NC DOT Preliminary Plan

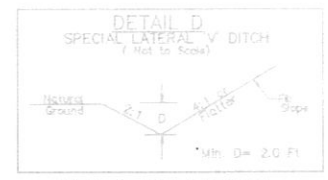
-L-		-Y3-	
PI Sta 58+09.32	PI Sta 63+96.87	PI Sta 12+46.36	
D = 34° 28' 15.7"	D = 41° 16' 56.0"	D = 28° 13' 01.3"	(RT)
L = 481.31'	L = 547.59'	L = 172.37'	
R = 248.18'	T = 286.29'	T = 87.97'	
e = .06	R = 760.00'	R = 350.00'	
RO = 138'	e = .06	RO = SEE PLANS	
Vd = 45mph	Vd = 45mph		



FROM -L- STA. 61+25 TO STA. 61+50 LT
 FROM -L- STA. 61+50 TO STA. 61+50 RT
 FROM -Y3- STA. 10+15 TO STA. 10+15 RT
 FROM -Y3- STA. 10+15 TO STA. 10+15 LT



CHARLES D. BALDWIN
 DB Y-11 PG 203



FROM -L- STA. 131+50 RT
 FROM -L- STA. 144+50 TO STA. 144+50 RT
 FROM -L- STA. 149+50 TO STA. 149+50 RT
 FROM -L- STA. 170+00 TO STA. 171+50 LT

— SLOPESTAKES FOR TEMPORARY -L- & -Y- ALIGNMENTS
 — SLOPESTAKES FOR TEMPORARY DETOUR ALIGNMENTS

SEE SHEET 24 FOR -L- PROFILE
 SEE SHEET 30 FOR -Y3- PROFILE
 SEE SHEET 16 FOR -DETIREV- PLANVIEW
 SEE SHEET 32 FOR -DETIREV- PROFILE
 SEE SHEET 2-E FOR DRAINAGE DITCH DETAILS

Appendix B

Schnabel Geophysical Report

June 5, 2008

Mr. Matt Bramblett, PE
Hart & Hickman, PC
2923 South Tryon Street, Suite 100
Charlotte, NC 28203

Via email (pdf)

cc: Mr. Cyrus Parker, NCDOT

State Project: R-2408A and B
WBS Element: 34427.1.1
County: Macon
Description: Riverview Street (SR 1323) and Bryson City Road (NC 28) from
Depot Street Extension (SR 1729) to Bennett Road (SR 1378)

SUBJECT: Parcel #39, Guy Duvall Property
Report on Geophysical Surveys to Locate Possible UST's
Schnabel Engineering Project No. 07210023.10

Dear Mr. Bramblett:

This letter contains our report on the geophysical surveys we conducted on the subject property. We understand this letter report will be included as an appendix in your report to the NCDOT. The report includes one 8.5x11 color figure and two 11x17 color figures.

1.0 INTRODUCTION

Schnabel Engineering conducted geophysical surveys on May 21 and May 27, 2008, in the accessible areas of the proposed right-of-way (ROW) section of Parcel 24 (Guy Duvall Property) under our 2007 contract with the NCDOT. Parcel 39 is located at the northwest corner of the intersection of NC 28 (Bryson City Road) and Hughes Lane. A site photo of the parcel is shown in Figure 1. The work was conducted at the locations indicated by Hart & Hickman to support their environmental assessment of the subject parcel. The purpose of the geophysical surveys was to locate possible metal

underground storage tanks (UST's) and associated metal product lines in the accessible areas of the site, and to investigate planned boring locations for the presence of buried utilities.

2.0 FIELD METHODOLOGY

Locations of geophysical data points were obtained using a sub-meter Trimble Pro-XRS DGPS system. References to direction and location in this report are based on the US State Plane 1983 system, North Carolina 3200 zone, using the NAD 83 datum, with units in US survey feet. The locations of existing site features (building, curbs, signs, etc.) were recorded for later correlation with the geophysical data and for location references to the NCDOT drawings. The geophysical investigation consisted of an electromagnetic (EM) induction survey using a Geonics EM61-MK2 instrument, and a Ground-Penetrating Radar (GPR) survey using a Geophysical Survey Systems SIR-3000 system equipped with a 400 MHz antenna.

The EM61 data were collected along parallel survey lines spaced about 2.5 feet apart. The EM61 and DGPS data were recorded digitally using a field computer and later transferred to a desktop computer for data processing. The GPR data were collected over selected EM61 anomalies and over the planned boring locations.

3.0 DISCUSSION OF RESULTS

The contoured EM61 data are shown on Figures 2 and 3. The EM61 early time gate results are plotted on Figure 2. The early time gate data provide the most sensitive detection of metal object targets, regardless of size. Figure 3 shows the difference between the response of the top and bottom coils of the EM61 instrument (differential response). The difference is taken to remove the effect of surface and very shallowly buried metallic objects. Typically, the differential response emphasizes anomalies from deeper and larger objects such as UST's.

The early time gate and differential results show several anomalies attributed to known site features, and two anomalies not attributed to known site features (Figures 2 and 3). GPR data were collected over the two anomalies not attributed to known site features, and around and under the metal canopy in the corner of the parcel. The anomaly at Easting 688,294, Northing 557,132 appears to be caused by buried metal debris. The GPR data collected in the area of the anomaly at Easting 688,340, Northing 557,131 was inconclusive. Due to the high amplitude of this anomaly, we cannot rule out the possible presence of a metal UST at this location.

4.0 CONCLUSIONS

Our evaluation of the geophysical data collected on Parcel 39 of Project R-2408A and B in Franklin, NC indicates the following:

- The geophysical data indicate the possible presence of a metal UST at Easting 688,294, Northing 557,132.

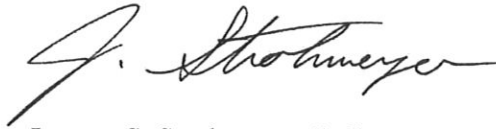
5.0 LIMITATIONS

These services have been performed and this report prepared for Hart & Hickman and the North Carolina Department of Transportation in accordance with generally accepted guidelines for conducting geophysical surveys. It is generally recognized that the results of geophysical surveys are non-unique and may not represent actual subsurface conditions.

Thank you for the opportunity to serve you on this project. Please call if you need additional information or have any questions.

Sincerely,

SCHNABEL ENGINEERING SOUTH, P.C.



Jeremy S. Strohmeyer, L.G.
Project Manager



Edward D. Billington, L.G.
Senior Vice President

JS/NB

Attachment: Figures (3)

FILE: G:\2007 PROJECTS\07210023 (NCDOT 2007 GEOPHYSICAL SERVICES)\PHASE 10 (R-2408A AND B - FRANKLIN AND MACON CO)\REPORT\PARCEL 39\REPORT ON PARCEL 39.DOC



Parcel 39 – Guy Duvall Property, looking northwest



NC Department of Transportation
Geotechnical Engineering Unit

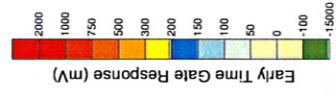
State Project No. R-2408A and B
Macon County, North Carolina

**PARCEL 39
SITE PHOTO**

FIGURE 1



EXPLANATION	
⬮	UTILITY POLE
+	GUY WIRE
○	UST LID
⊗	UTILITY LID
⊠	METALLIC OBJECT
●	METAL DRUM
△	NC DOT ROW MEASUREMENT MARKER
◇	SIGN
○	MONITORING WELL
⊕	ELECTRIC BOX
⊙	TELEPHONE
⊞	AIR PUMP
⊞	GPR SURVEY AREA

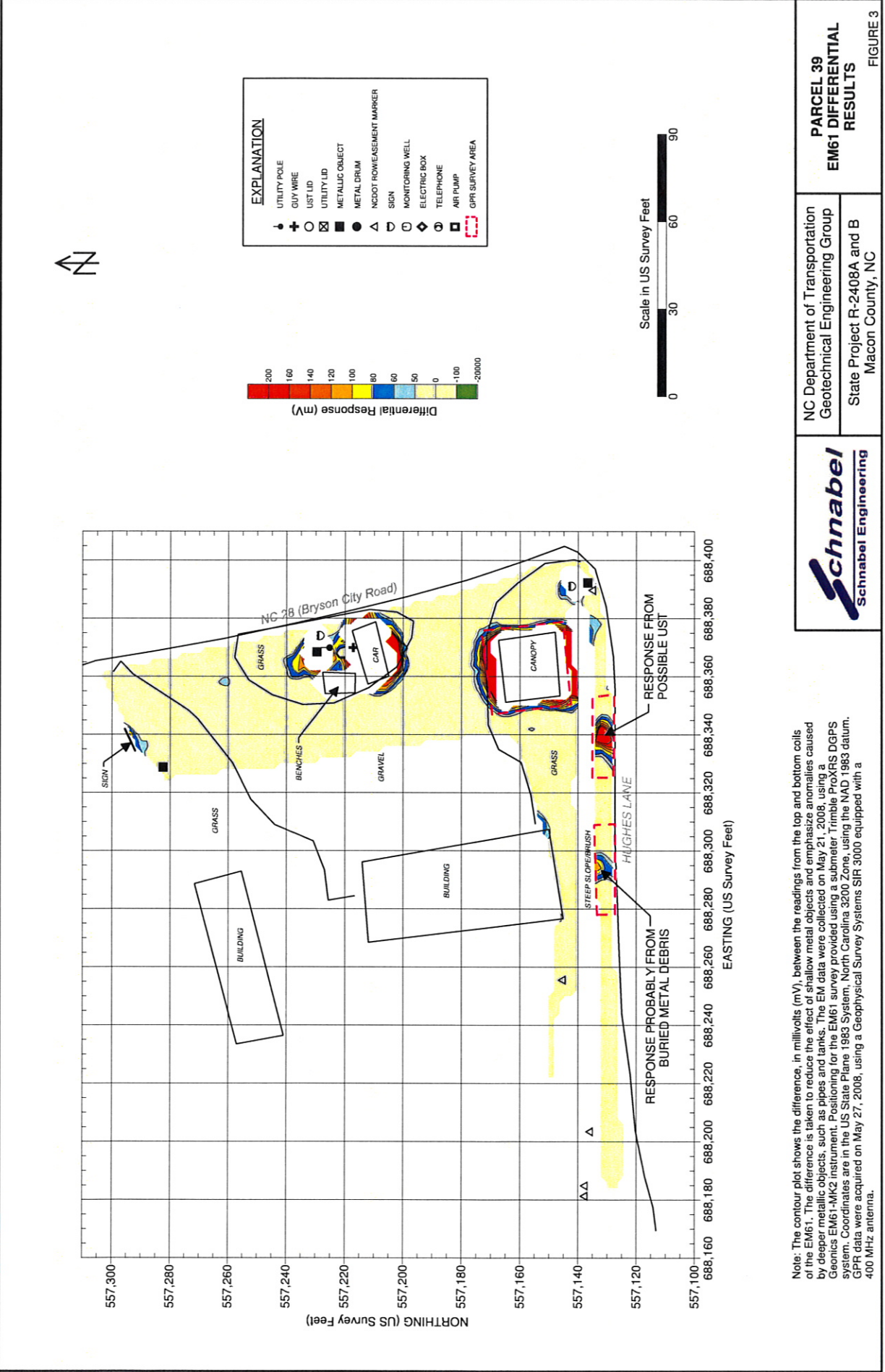


NC Department of Transportation
 Geotechnical Engineering Group
 State Project R-2408A and B
 Macon County, NC



Note: The contour plot shows the earliest and most sensitive time gate of the EM61 bottom coil/channel in millivolts (mV). The EM data were collected on May 21, 2008, using a Geonics EM61-MK2 instrument. Positioning for EM61 survey provided using a submeter Trimble ProXRIS DGPS system. Coordinates are in the US State Plane 1983 System, North Carolina Zone 3200, using the NAD 1983 datum. GPR data were acquired on May 27, 2008, using a Geophysical Survey Systems SIF 3000 equipped with a 400 MHz antenna.

PARCEL 39
 EM61 EARLY TIME GATE
 RESULTS
 FIGURE 2



Note: The contour plot shows the difference, in millivolts (mV), between the readings from the top and bottom coils of the EM61. The difference is taken to reduce the effect of shallow metal objects and emphasize anomalies caused by deeper metallic objects, such as pipes and tanks. The EM data were collected on May 21, 2008, using a Geonics EM61-MK2 instrument. Positioning for the EM61 survey provided using a submeter Trimble ProXR5 DGPS system. Coordinates are in the US State Plane 1983 System, North Carolina 3200 Zone, using the NAD 1983 datum. GPR data were acquired on May 27, 2008, using a Geophysical Survey Systems SIR 3000 equipped with a 400 MHz antenna.

Appendix C
Soil Boring Logs



BORING NUMBER 39-1

2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

PROJECT: Franklin PSAs
JOB NUMBER: ROW.150
LOCATION: Franklin, NC

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	OVA (ppm)	LITHOLOGY	MATERIAL DESCRIPTION	BORING DIAGRAM
0						
			PID = 0	0.3	Gravel	
			PID = 0	2.0	Red-Brown clayey-silt with sand and gravel. Moist	
			PID = 0	4.0	Light brown clayey-silt with sand. Moist.	
5			PID = 0	5.0	Light brown clayey-silt with sand and black organics. Moist.	
			PID = 0	10.0	Light brown clayey-silt with sand. Moist. Stiff.	
10			PID = 0	12.0	Brown clayey-silt with sand. Moist. Stiff.	

Bottom of borehole at 12.0 feet.

ENVIRONMENTAL BH - HART HICKMAN.GDT - 7/14/08 14:08 - S:\AAA-MASTER GINT PROJECTS\ROW.150.GPJ

DRILLING CONTRACTOR: SEI
DRILL RIG/ METHOD: 6620 DT / Direct-Push Sleeve
SAMPLING METHOD: DPT Sleeves
LOGGED BY: WP
DRAWN BY:

BORING STARTED: 5/29/08
BORING COMPLETED: 5/29/08
TOTAL DEPTH: 12 ft.
SURFACE ELEV:
DEPTH TO WATER:

Remarks:
Borehole hand-augered to 4 feet. Soil sample collected at 2-4 feet for laboratory analysis.



BORING NUMBER 39-2

2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

PROJECT: Franklin PSAs

JOB NUMBER: ROW.150

LOCATION: Franklin, NC

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	OVA (ppm)	LITHOLOGY	MATERIAL DESCRIPTION	BORING DIAGRAM
0						
0.3				Gravel	Gravel	
			PID = 0		Red-brown clayey-silt with sand and gravel. Moist	
			PID = 0			
4.0					Red-brown clayey-silt with some sand and white rocks. Moist. Stiff.	
			PID = 0			
			PID = 0			
			PID = 0			
10.0					Light brown and black clayey-silt with sand. Moist. Stiff.	
			PID = 0			
12.0						

Bottom of borehole at 12.0 feet.

ENVIRONMENTAL BH - HART HICKMAN.GDT - 7/14/08 14:08 - S:\AAA-MASTER GINT PROJECTS\ROW.150.GPJ

DRILLING CONTRACTOR: SEI
DRILL RIG/ METHOD: 6620 DT / Direct-Push Sleeve
SAMPLING METHOD: DPT Sleeves
LOGGED BY: WP
DRAWN BY:

BORING STARTED: 5/29/08
BORING COMPLETED: 5/29/08
TOTAL DEPTH: 12 ft.
SURFACE ELEV:
DEPTH TO WATER:

Remarks:
Borehole hand augered to 4 feet. Soil sample collected at 2-4 feet for laboratory analysis.



BORING NUMBER 39-3

2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

PROJECT: Franklin PSAs

JOB NUMBER: ROW.150

LOCATION: Franklin, NC

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0			0	0		Gravel and grass.		0
						Red-brown clayey-silt with sand. Moist.		
100						Red-brown clayey-silt with sand. Moist		
5						Dark brown clayey-silt with sand and black coal-like pieces. Stiff. Moist.		5
100						Orange clayey-silt with sand. Stiff. Moist		
10	100					Orange and black clayey-silt with sand. Stiff. Moist		10
						Bottom of borehole at 12.0 feet.		
15								15
20								20
25								25

LOG OF BORING - HART HICKMAN.GDT - 7/8/08 15:12 - S:\AAA-MASTER GINT PROJECTS\ROW.150.GPJ

DRILLING CONTRACTOR: SEI
 DRILL RIG/ METHOD: 6620 DT / Direct-Push Sleeve
 SAMPLING METHOD: DPT Sleeves
 LOGGED BY WP
 DRAWN BY:

BORING STARTED 5/29/08
 BORING COMPLETED: 5/29/08
 TOTAL DEPTH: 12
 SURFACE ELEV:
 DEPTH TO WATER:

Remarks:
 Borehole hand-augered to 4 feet. Soil sample collected at 2-4 feet for laboratory analysis.



BORING NUMBER 39-4

2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

PROJECT: Franklin PSAs

JOB NUMBER: ROW.150

LOCATION: Franklin, NC

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0						Grass.		0
0-4			0	0	[Hatched Lithology Box]	Red-brown clayey-silt with some sand and organics. Moist.		0-4
4-5						Red-brown clayey-silt with sand. Moist		4-5
5-10						Red-brown clayey-silt with sand and some rock. Moist. Stiff		5-10
10-12						Brown and black clayey-silt with sand. Very moist		10-12
12.0						Bottom of borehole at 12.0 feet.		12.0
15								15
20								20
25								25

LOG OF BORING - HART HICKMAN.GDT - 7/8/08 15:12 - S:\AAA-MASTER GINT PROJECTS\ROW.150.GPJ

DRILLING CONTRACTOR: SEI
DRILL RIG/ METHOD: 6620 DT / Direct-Push Sleeve
SAMPLING METHOD: DPT Sleeves
LOGGED BY: WP
DRAWN BY:

BORING STARTED: 5/29/08
BORING COMPLETED: 5/29/08
TOTAL DEPTH: 12
SURFACE ELEV:
DEPTH TO WATER:

Remarks:
Borehole hand-augered to 4 feet. Soil sample collected at 2-4 feet for laboratory analysis.



BORING NUMBER 39-5

2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

PROJECT: Franklin PSAs

JOB NUMBER: ROW.150

LOCATION: Franklin, NC

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0						Grass.		0
0-4			0	0		Red-brown clayey silt with sand and organics. Moist.		0-4
4-5						Orange clayey silt with sand. Moist. Stiff		4-5
5-12						Brown-black silty clay with sand and mica. Stiff. Moist		5-12
12.0						Bottom of borehole at 12.0 feet.		12.0

LOG OF BORING - HART HICKMAN.GDT - 7/8/08 15:12 - S:\AAA-MASTER GINT PROJECTS\ROW.150.GPJ

DRILLING CONTRACTOR: SEI
 DRILL RIG/ METHOD: 6620 DT / Direct-Push Sleeve
 SAMPLING METHOD: DPT Sleeves
 LOGGED BY WP
 DRAWN BY:

BORING STARTED 5/29/08
 BORING COMPLETED: 5/29/08
 TOTAL DEPTH: 12
 SURFACE ELEV:
 DEPTH TO WATER:

Remarks:
 Borehole hand-augered to 4 feet. Soil sample collected at 2-4 feet for laboratory analysis.

Appendix D

Laboratory Analytical Report



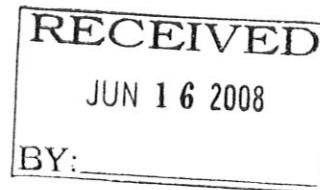
RESEARCH & ANALYTICAL LABORATORIES, INC.

Analytical/Process Consultations



June 11, 2008

Hart & Hickman, PC
2923 S. Tryon St. Suite 100
Charlotte, NC 28203
Attention: Matt Tendam



Chemical Analysis for Total Petroleum Hydrocarbons (TPH) Sampling identified as Franklin PSA's (A Hart & Hickman, PC Project #ROW.150, collected 28-29 May 2008)

<u>Sample Identification</u>	<u>RAL Sample#</u>	<u>Date Taken</u>	<u>Time (hrs)</u>	<u>Quantitation Limit (mg/kg)</u>	<u>EPA Method 5030 (mg/kg)</u>	<u>EPA Method 3550 (mg/kg)</u>
39-1 (2-4')	618465	05/29/08	1245	10	BQL	BQL
39-2 (2-4')	618466	05/29/08	1300	10	BQL	BQL
39-3 (2-4')	618467	05/29/08	1310	10	BQL	BQL
39-4 (2-4')	618468	05/29/08	1320	10	BQL	BQL
39-5 (2-4')	618469	05/29/08	1330	10	BQL	BQL
24-1 (0-2')	618470	05/29/08	0845	10	13.3	17.4
24-2 (8-10')	618471	05/29/08	0910	10	BQL	BQL
24-3 (8-10')	618472	05/29/08	0925	10	BQL	BQL
24-4 (2-4')	618473	05/29/08	1020	10	BQL	BQL
24-5 (2-4')	618474	05/29/08	1030	10	BQL	BQL
24-6 (2-4')	618475	05/29/08	1040	10	BQL	BQL
24-7 (2-4')	618476	05/29/08	1055	10	BQL	BQL
83-1 (10-12')	618477	05/28/08	1945	10	BQL	BQL
83-2 (10-12')	618478	05/28/08	2000	10	BQL	BQL
83-3 (10-12')	618479	05/28/08	2005	10	BQL	BQL
83-4 (10-12')	618480	05/28/08	2016	10	BQL	BQL
83-5 (10-12')	618481	05/28/08	2025	10	BQL	BQL
83-6 (10-12')	618482	05/28/08	2040	10	BQL	BQL
81-1 (3-5')	618483	05/28/08	1835	10	BQL	31.6
81-1 (10-12')	618484	05/28/08	1840	10	13.6	59.4
81-2 (0-2')	618485	05/28/08	1815	10	23.2	375
81-3 (10-12')	618486	05/28/08	1855	10	BQL	13.3

mg/kg = milligrams per kilogram = parts per million (ppm)

BQL = Below Quantitation Limit

---- = Not Requested

EPA Method 3550 = Total Petroleum Hydrocarbons as Diesel

EPA Method 5030 = Total Petroleum Hydrocarbons as Gasoline



RESEARCH & ANALYTICAL LABORATORIES, INC.

Analytical/Process Consultations



June 11, 2008

Hart & Hickman, PC
2923 S. Tryon St. Suite 100
Charlotte, NC 28203
Attention: Matt Tendam

Chemical Analysis for Sample Locations Identified as Franklin PSA's (A Hart & Hickman, PC Project #ROW.150, collected 28-29 May 2008)

<u>Sample Identification</u>	<u>RAL Sample#</u>	<u>Date Taken</u>	<u>Time (hrs)</u>	<u>Moisture (%)</u>
39-1 (2-4')	618465	05/29/08	1245	17.8
39-2 (2-4')	618466	05/29/08	1300	19.6
39-3 (2-4')	618467	05/29/08	1310	20.9
39-4 (2-4')	618468	05/29/08	1320	21.4
39-5 (2-4')	618469	05/29/08	1330	23.4
24-1 (0-2')	618470	05/29/08	0845	25
24-2 (8-10')	618471	05/29/08	0910	18.2
24-3 (8-10')	618472	05/29/08	0925	22.2
24-4 (2-4')	618473	05/29/08	1020	20.9
24-5 (2-4')	618474	05/29/08	1030	20.5
24-6 (2-4')	618475	05/29/08	1040	16.1
24-7 (2-4')	618476	05/29/08	1055	20.5
83-1 (10-12')	618477	05/28/08	1945	22.3
83-2 (10-12')	618478	05/28/08	2000	19.7
83-3 (10-12')	618479	05/28/08	2005	33.4
83-4 (10-12')	618480	05/28/08	2016	20.8
83-5 (10-12')	618481	05/28/08	2025	20.2
83-6 (10-12')	618482	05/28/08	2040	37.3
81-1 (3-5')	618483	05/28/08	1835	26.2
81-1 (10-12')	618484	05/28/08	1840	23.2
81-2 (0-2')	618485	05/28/08	1815	5.1
81-3 (10-12')	618486	05/28/08	1855	15.5

% = Percent

---- = Not Requested

