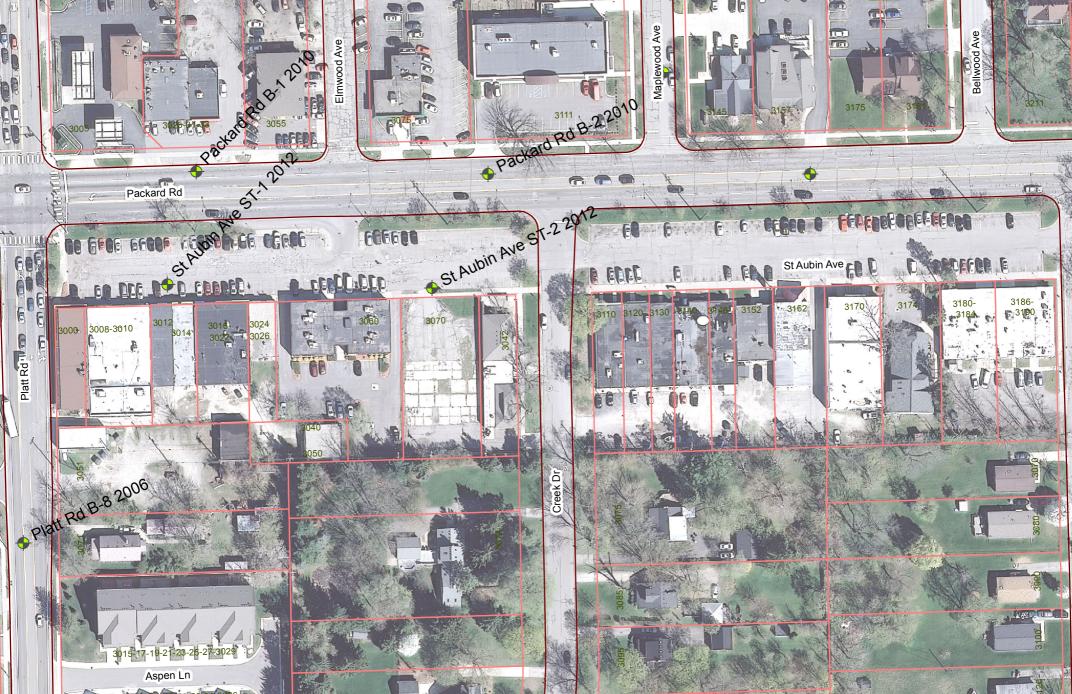
# APPENDIX A – SOIL BORINGS



Project Location: Ann Arbor, Michigan

G2 Project No. 120547A

Latitude: N/A Longitude: N/A



		SUBSURFACE PROFILE		SOIL SAMPLE DATA						
DEPTH (ft)	PRO- FILE	GROUND SURFACE ELEVATION: N/A	DEPTI (ft)	SAMPLE TYPE/NO.	DCP BLOWS/ 1.75-INCHES	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCOF. COMP. ST (PSF)		
		Bituminous Concrete (4 inches)	0.3	AS-1						
		Fill: Brown Sand and Gravel with trace silt (Natural Aggregate Base, 7 inches)	0.9	AS-1	5	21.4		1500*		
-		Fill: Medium Dark Gray Sandy Clay with trace gravel		- 180 2	4	21.1		1300		
		Ç			4					
-			-	_	4					
			3.5							
-		Very Stiff Brown and Gray Silty Clay with	-	-	8					
5		Very Stiff Brown and Gray Silty Clay with trace sand and gravel	5.0 5	AS-3	10	18.7		4500*		
		End of Boring @ 5ft								
-			-	-						
_			-	1						
_				_						
_										
10			10							
-				1						
_			Ī	1						
-			-	1						
-			<u> </u>	1						
15			15	1						
Total l Drillir Inspec	Depth: ng Date:	5ft September 21, 2012	Wate Dr	r Level Obs y during an	ervation: d upon compl	etion of drill	ing operation	ıs		
Contra Driller	actor:	G2 Consulting Group, LLC J. Hayball, P.E.	Note:	s: ring perforr	ned 7 feet nor	th of South S	Sidewalk			

G2 Consulting Group, LLC J. Hayball, P.E. Contractor:

Drilling Method:

4-inch diameter diamond tipped core barrel; 3-inch

diameter hand auger

Boring performed 7 feet north of South Sidewalk \* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:

Borehole backfilled with auger cuttings and capped with cold

patch

Project Location: Ann Arbor, Michigan

G2 Project No. 120547A

Latitude: N/A Longitude: N/A



		SUBSURFACE PROFILE		SOIL SAMPLE DATA						
DEPTH (ft)	PRO- FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE/NO.	DCP BLOWS/ 1.75-INCHES	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCOF. COMP. ST (PSF)		
		Fill, Duarym Cand and Charrel with the as ailt	0.3	AS-1 AS-2	4	10.2		1000*		
-		Fill: Medium Dark Gray Sandy Clay with trace gravel			4					
_		Very Stiff Brown and Gray Silty Clay with trace sand and gravel	3.0		3					
5		End of Boring @ 5ft	5.0 5	AS-3	9	18.0		5000*		
_		End of Borning (a) 511	-	-						
_			_	_						
_			_	-						
10			10							
			-	-						
-			_							
=			_	_						
15			15							
Total I Drillin	Depth:	5ft September 21, 2012	Water	Level Obs	ervation: d upon comple	etion of drilli	ing operation	S		
Inspec Contra Driller	ictor:	G2 Consulting Group, LLC J. Hayball, P.E.	Notes Bor	ing nerform	ned 17 feet no	orth of South	Sidewalk			

G2 Consulting Group, LLC J. Hayball, P.E. Contractor:

Drilling Method:

4-inch diameter diamond tipped core barrel; 3-inch

diameter hand auger

Boring performed 17 feet north of South Sidewalk \* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:

Borehole backfilled with auger cuttings and capped with cold

patch





### Legend

Pavement Cores/Hand Auger Borings performed by G2 Consulting Group, LLC on November 26, 2013

#### **Soil Boring Location Plan**

2013 Ann Arbor Geotechnical Linwood Avenue Ann Arbor, Mihigan



Project No.	130744
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Drawn by: JMH

 Date: 12/2/2013
 Plate

 Scale: NTS
 No. 2

Project Location: Ann Arbor, Michigan

G2 Project No. 130744

Latitude: 42.284281° Longitude: -83.770317°



		SUBSURFACE PROFILE		SOIL SAMPLE DATA				
ELEV. (ft)	PRO- FILE	GROUND SURFACE ELEVATION: 900.0 ft	DEPTH (ft)	SAMPLE TYPE/NO.	DCP BLOWS/ 1.75-INCHES	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCOF. COMP. ST. (PSF)
-		Bituminous Concrete (3 inches)  Fill: Brown Sand and Gravel with trace silt (Natural Aggregate Base, 9 inches)  Loose Brown Sand with trace silt and gravel	 	BS-1	0			
395.0		Stiff Brown Sandy Clay with trace silt and gravel	 	BS-2 BS-3	7	18.5		2000*
-		End of Boring @ 5ft						
-								
90.0			10					
-			 					
385.0			15					
380.0			20					
375.0			 25					
-								
-			- 					
370.0			30					

Total Depth: Drilling Date: Inspector:

November 27, 2013

Contractor:

G2 Consultin Group, LLC

Driller:

J. Hayball, P. E.

Drilling Method:

4-inch diameter diamond tipped core barrel; 3-inch diameter hand auger

Water Level Observation:

Dry during and upon completion of drilling operations

Linwood Avenue, Station 1+50 \* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Borehole backfilled with auger cuttings and capped with cold patch

Project Location: Ann Arbor, Michigan

G2 Project No. 130744

Latitude: 42.284414° Longitude: -83.769400°



		SUBSURFACE PROFILE		SOIL SAMPLE DATA						
ELEV. (ft)	PRO- FILE	GROUND SURFACE ELEVATION: 898.0 ft	DEPTH (ft)	SAMPLE TYPE/NO.	DCP BLOWS/ 1.75-INCHES	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCOF. COMP. ST. (PSF)		
		Bituminous Concrete (3 inches) Fill: Brown Sand and Gravel with trace silt	).3 1.8	BS-1						
-		(Natural Aggregate Base, 6 inches)  Compact Brown Gravelly Sand with trace	-							
-	. () °	Compact Brown Gravelly Sand with trace silt	-	BS-2	37					
-	9/1		-							
-		Stiff Brown Sandy Clay with trace silt and gravel	-							
893.0			5.0 5	BS-3	8	20.6		2500*		
-	_	End of Boring @ 5ft	-							
-			-							
-										
-	_		-							
888.0	1		10							
_			ļ .							
_										
383.0	1		15							
-			-							
-	1		-							
-	1		-							
-	1		20							
378.0	1		20							
-	-		-							
-	1		-							
-	-		-							
-	_		-							
373.0	_		25							
-			-							
-			-							
_			-							
-			ļ .							
868.0			30							
Γotal	Depth:	5ft	Water	Level Obs	servation:					
Drilliı	ng Date:	November 27, 2013	Dry	during an	d upon compl	etion of dril	ling operatio	ns		
Inspec Contr	actor:	G2 Consultin Group, LLC	Notes:							
Drille	r:	J. Hayball, P. E.	Lin	wood Avei	nue, Station 4	+50				

Drilling Method:

4-inch diameter diamond tipped core barrel; 3-inch

diameter hand auger

Linwood Avenue, Station 4+50 \* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Borehole backfilled with auger cuttings and capped with cold patch

Project Location: Ann Arbor, Michigan

G2 Project No. 130744

Latitude: 42.284481° Longitude: -83.768328°



		SUBSURFACE PROFILE	SOIL SAMPLE DATA						
ELEV. (ft)	PRO- FILE	GROUND SURFACE ELEVATION: 892.0 ft	DEPTH (ft)	SAMPLE TYPE/NO.	DCP BLOWS/ 1.75-INCHES	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCOF. COMP. ST. (PSF)	
	XXXX	Bituminous Concrete (5 inches) 0 Fill: Brown Silty Sand with trace clay and		BS-1					
		graver (10 inches)	3 -	-					
-		Loose Brown Clayey Sand with trace gravel	-	BS-2	6				
-		Stiff Brown Sandy Clay with trace silt and gravel		DG 2	7	10.6		2500*	
887.0	<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>	End of Boring @ 5ft	5	BS-3	7	19.6		2500*	
-									
- 382.0			10						
_									
-									
- 377.0			15						
_									
-									
- 372.0			20						
_									
-									
- 367.0			25						
_			_						
-									
- 362.0			30						
Drillin	Depth:	5ft November 27, 2013	Water Dry	Level Obs	servation: d upon compl	etion of dril	ling operatio	ns	
Inspec Contra Driller	actor:	G2 Consultin Group, LLC J. Hayball, P. E.	Notes:	wood Avei	nue, Station 7	+50			

Drilling Method:

4-inch diameter diamond tipped core barrel; 3-inch

diameter hand auger

Linwood Avenue, Station 7+50 \* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Borehole backfilled with auger cuttings and capped with cold patch

Project Location: Ann Arbor, Michigan

G2 Project No. 130744

Latitude: 42.284481° Longitude: -83.767550°



	SUBSURFACE PROFILE	SOIL SAMPLE DATA					
ELEV. PRO- (ft) FILE	GROUND SURFACE ELEVATION: 885.0 ft	DEPTH (ft)	SAMPLE TYPE/NO.	DCP BLOWS/ 1.75-INCHES	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCOF. COMP. ST. (PSF)
	Bituminous Concrete (3 inches)  Fill: Brown Silty Clay (2 inches)  Fill: Brown Sand and Gravel with trace silt  (2 inches)  Very Stiff Brown and Grav Silty Clay with	5 <del>1</del> 3 	BS-1	14	16.2		5000*
880.0	Very Stiff Brown and Gray Silty Clay with trace sand and gravel	5	BS-3	15	15.3		5000*
	End of Boring @ 5ft						
-							
75.0		10					
-							
70.0		15					
-							
65.0		20					
-							
60.0		25					
-							
1							
355.0		30					
Total Depth: Drilling Date:	5ft November 27, 2013	Water Dry	Level Obs	ervation: d upon compl	etion of dril	ling operatio	ns
nspector: Contractor: Oriller:	G2 Consultin Group, LLC J. Hayball, P. E.	Notes:	wood Avei	nue, Station 9	+50		

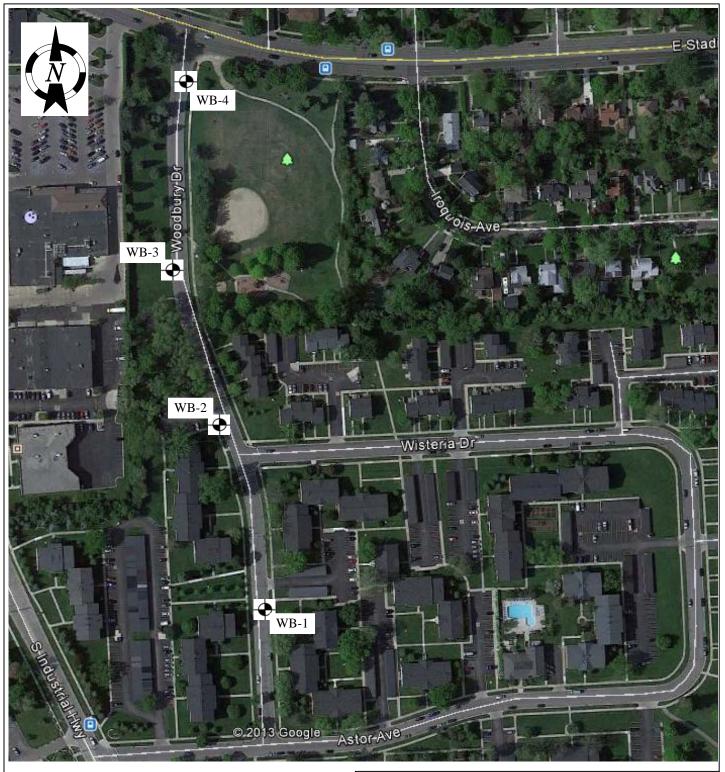
Drilling Method:

4-inch diameter diamond tipped core barrel; 3-inch

diameter hand auger

Linwood Avenue, Station 9+50 \* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Borehole backfilled with auger cuttings and capped with cold patch



#### Legend

Pavement Cores/Hand Auger Borings performed by G2 Consulting Group, LLC on November 26, 2013

#### **Soil Boring Location Plan**

2013 Ann Arbor Geotechnical Woodbury Drive Ann Arbor, Michigan



Project No.	130744
Drawn by: J	MH

Date: 12/2/2013 Plate Scale: NTS No. 3

Project Location: Ann Arbor, Michigan

G2 Project No. 130744

Latitude: 42.256861° Longitude: -83.735017°



		SUBSURFACE PROFILE		SOIL SAMPLE DATA						
LEV. (ft)	PRO- FILE	GROUND SURFACE ELEVATION: 827.0 ft	DEPTH (ft)	SAMPLE TYPE/NO.	DCP BLOWS/ 1.75-INCHES	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCOF. COMP. ST. (PSF)		
		Bituminous Concrete (8 inches)	7							
-		Fill: Medium Compact Dark Brown Silty Sand with trace clay, gravel, and organic	-	-						
		matter	-	BS-1	22	10.4				
		(Organic Matter Content = 2.8%)	0 .			10.1				
_		Fill: Medium Compact Gray Silty Sand with trace gravel and occasional clay seams								
22 N		trace gravel and occasional clay seams	5	BS-2	19					
22.0	*****		0 3	B5 2	17					
	-	End of Boring @ 5ft	-	-						
			-							
			ļ .							
17.0			10							
17.0				1						
-	-		-	-						
			-	-						
			ļ .							
_										
312.0			15							
,12.0			10	1						
-	-		-	-						
			-	-						
07.0			20							
07.0				1						
-			-	=						
			-							
02.0			25							
	1			1						
-			-	-						
-			-							
			ļ .							
97.0			30							

Total Depth: Drilling Date: Inspector:

November 27, 2013

Contractor:

G2 Consultin Group, LLC

Driller:

J. Hayball, P. E.

Drilling Method:

4-inch diameter diamond tipped core barrel; 3-inch diameter hand auger

Dry during and upon completion of drilling operations

Woodbury Drive, Station 1+50

**Excavation Backfilling Procedure:** 

Borehole backfilled with auger cuttings and capped with cold patch

Project Location: Ann Arbor, Michigan

G2 Project No. 130744

Latitude: 42.258631° Longitude: -83.735339°



	SUBSURFACE PROFILE		SOIL SAMPLE DATA					
ELEV. PRO- (ft) FILE	GROUND SURFACE ELEVATION: 828.0 ft	DEPTH (ft)	SAMPLE TYPE/NO.	DCP BLOWS/ 1.75-INCHES	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCOF. COMP. ST (PSF)	
	Bituminous Concrete (8 inches)	.7						
	Fill: Brown Clayey Sand (2 inches)	.8						
		-	BS-1	34				
	Compact Brown Sand with trace silt and gravel	-						
	<i>g</i> -1-1-1							
823.0	5	.0 5	BS-2	31				
	End of Boring @ 5ft							
1								
818.0		10						
818.0		10						
-		-						
-		-						
-		-						
-		-						
813.0		15						
_								
808.0		20						
808.0		20						
-		-						
-		-						
-		-						
-		-						
803.0		25						
1								
798.0		30						
			1 101		I	1		
Total Depth: Drilling Date	5ft E: November 27, 2013	Water Drv	Level Obs	servation: d upon compl	etion of drill	ling operatio	ns	
Inspector:		-	_	1 ·· T		<i>O</i> 1		
Contractor: Driller:	G2 Consultin Group, LLC J. Hayball, P. E.	Notes:	odbury Dri	ive, Station 6-	<b>⊦</b> 09			

Drilling Method:

4-inch diameter diamond tipped core barrel; 3-inch

diameter hand auger

**Excavation Backfilling Procedure:** 

Borehole backfilled with auger cuttings and capped with cold patch

Project Location: Ann Arbor, Michigan

G2 Project No. 130744

Latitude: 42.259631° Longitude: -83.737500°



	SUB	SURFACE PROFILE			SOIL SAMPLE DATA				
ELEV. PR	O- LE GROUN	D SURFACE ELEVATION: 827.0	ft	DEPTH (ft)	SAMPLE TYPE/NO.	DCP BLOWS/ 1.75-INCHES	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCOF. COMP. ST (PSF)
Mar A.A.	В	ituminous Concrete (8 inches)	0.7						
7000	Loose B	rown Sand with trace silt and gravel and occasional clay seams			BS-1	8			
322.0			5.0	5	BS-2	7			
-		End of Boring @ 5ft							
+									
-									
17.0									
317.0				10					
1				-					
1				-					
1									
312.0				15					
807.0				20					
-									
-									
-									
-									
302.0				25					
-				-					
+				-					
+				-					
- 797.0				30					
Fotal Dep Drilling D	ate: Novemb	per 27, 2013		Water	Level Obs	ervation:	etion of dril	ling operatio	ns
Inspector: Contracto Driller:		sultin Group, LLC		Notes:		ve, Station 9-			

Drilling Method:

4-inch diameter diamond tipped core barrel; 3-inch

diameter hand auger

**Excavation Backfilling Procedure:** 

Borehole backfilled with auger cuttings and capped with cold patch

Project Location: Ann Arbor, Michigan

G2 Project No. 130744

Latitude: 42.260492° Longitude: -83.735572°



		SUBSURFACE PROFILE		SOIL SAMPLE DATA						
ELEV. (ft)	PRO- FILE	GROUND SURFACE ELEVATION: 829.0 ft	DEPTH (ft)	SAMPLE TYPE/NO.	DCP BLOWS/ 1.75-INCHES	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCOF. COMP. ST. (PSF)		
	****	Bituminous Concrete (7 inches)  Fill: Brown Clayey Sand with trace gravel (7 inches)  Very Stiff Brown and Gray Silty Clay with trace sand and gravel		BS-1						
		Fill: Brown Clayey Sand with trace gravel (/ inches)	-							
		trace sand and gravel	_	BS-2	14	16.0		4000*		
	*******	3,0	<del>'</del>							
240		Loose Brown Sand with trace silt and gravel		DC 2	0					
24.0	<u> </u>	5.0	5	BS-3	9					
	1	End of Boring @ 5ft	-							
			-							
	-		-							
-	-		-							
19.0	-		10							
-	-		-							
	-		-							
			-							
314.0			15							
			_							
09.0			20							
_										
	1		_							
04.0	1		25							
51.0			25							
-			-							
-			-							
			-							
			-							
99.0			30							

Total Depth: Drilling Date: Inspector:

November 27, 2013

Contractor: G2 Consultin Group, LLC

J. Hayball, P. E. Driller:

Drilling Method:

4-inch diameter diamond tipped core barrel; 3-inch

diameter hand auger

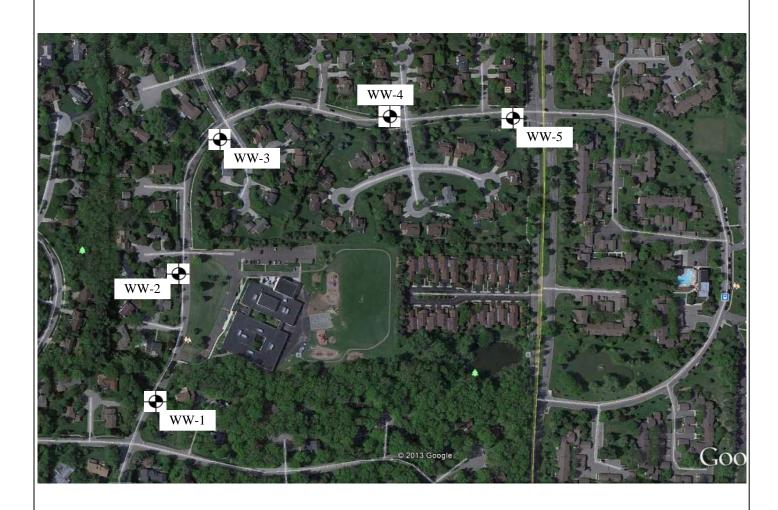
Water Level Observation:

Dry during and upon completion of drilling operations

Woodbury Drive, Station 12+50 \* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Borehole backfilled with auger cuttings and capped with cold patch





### **Legend**

Pavement Cores/Hand Auger Borings performed by G2 Consulting Group, LLC on November 26, 2013

#### **Soil Boring Location Plan**

2013 Ann Arbor Geotechnical Waldenwood Drive Penberton to Earnhart Ann Arbor, Michigan



Project No.	130744
Drawn by: J	MH

Date: 12/2/2013 Plate
Scale: NTS No. 4

Project Location: Ann Arbor, Michigan

G2 Project No. 130744

Latitude: 42.283967° Longitude: -83.687769°



	SUBSURFACE PROFILE		SOIL SAMPLE DATA							
ELEV. PRO- (ft) FILE	GROUND SURFACE ELEVATION: 882.0 ft	DEPTH (ft)	SAMPLE TYPE/NO.	DCP BLOWS/ 1.75-INCHES	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCOF. COMP. ST. (PSF)			
	Bituminous Concrete (5-1/2 inches) Fill: Bituminous Concrete Millings (4 inches)	).5 ).8	BS-1			STURE   DRY   UNCOF. COMP. ST. (%)				
	inches)									
	Hard Brown and Gray Silty Clay with trace sand and gravel		BS-2	27	14.8		8000*			
	sand and gravel									
877.0		5.0 5	BS-3	32	15.6		9000*			
27.11	End of Boring @ 5ft									
872.0		10								
		ļ.,								
		ļ								
867.0		15								
		ļ.,								
_										
		ļ								
862.0		20								
_			-							
-		-								
-			_							
-										
857.0		25								
-		-	-							
-		-								
-		-								
-		-								
852.0		30								
Total Depth: Drilling Date:	5ft November 27, 2013	Water Dry	Vater Level Observation: Dry during and upon completion of drilling operations							
Inspector: Contractor:			Notes:							
Driller:	G2 Consultin Group, LLC J. Hayball, P. E.	Wal	denwood	Drive						

Drilling Method:

4-inch diameter diamond tipped core barrel; 3-inch diameter hand auger

\* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Borehole backfilled with auger cuttings and capped with cold

patch

Project Location: Ann Arbor, Michigan

G2 Project No. 130744

Latitude: 42.285272° Longitude: -83.687292°



	SUBSURFACE PROFILE			SOI	IL SAMPL						
ELEV. PRO- (ft) FILE	GROUND SURFACE ELEVATION: 883.0 ft	DEPTH (ft)	SAMPLE TYPE/NO.	DCP BLOWS/ 1.75-INCHES	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCOF. COMP. ST. (PSF)				
****	Bituminous Concrete (9 inches)  Fill: Bituminous Concrete Millings (4	3	BS-1								
	Fill: Bituminous Concrete Millings (4 inches)										
	Very Stiff Brown and Gray Silty Clay with		BS-2	12	18.4		5000*				
	trace sand and gravel										
378.0	5,1	5	BS-3	14	20.1		6000*				
	End of Boring @ 5ft										
		-									
		-									
-		-									
373.0		10									
-		-									
-		-									
-		-									
-											
868.0		15									
-		-									
-		-									
1		-									
363.0		20									
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,											
		_									
358.0		25									
		-									
		-									
		-									
-		-									
353.0		30									
Fotal Depth: Drilling Date:	5ft November 27, 2013	Water	Water Level Observation: Dry during and upon completion of drilling operations								
Inspector: Contractor:		-	_	а арон сотрі	chon or un	g operation	,11,5				
Driller:	G2 Consultin Group, LLC J. Hayball, P. E.	Notes: Waldenwood Drive									

Drilling Method:

4-inch diameter diamond tipped core barrel; 3-inch

diameter hand auger

\* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Borehole backfilled with auger cuttings and capped with cold patch

Project Location: Ann Arbor, Michigan

G2 Project No. 130744

Latitude: 42.286919° Longitude: -83.686881°



_		SUBSURFACE PROFILE		SOIL SAMPLE DATA								
ELEV. (ft)	PRO- FILE	GROUND SURFACE ELEVATION: 882.0 ft	DEPTH (ft)	SAMPLE TYPE/NO.	DCP BLOWS/ 1.75-INCHES	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCOF. COMP. ST. (PSF)				
		Bituminous Concrete (7-1/2 inches) 0.6 Fill: Bituminous Concrete Millings (2-1/2 inches) 0.8		BS-1								
		Very Stiff Brown and Gray Silty Clay with trace sand and gravel	- 	BS-2	17	25.9		6000*				
77.0		5.0	5	BS-3	16	23.0		6500*				
		End of Boring @ 5ft										
			-									
372.0			10									
867.0			15									
807.0			15									
	-		_									
862.0			20									
			_									
			-									
357.0	-		25									
			-									
	-											
352.0			30									

Total Depth: Drilling Date: Inspector:

5ft

November 27, 2013

Contractor:

G2 Consultin Group, LLC

Driller:

J. Hayball, P. E.

Drilling Method:

4-inch diameter diamond tipped core barrel; 3-inch

diameter hand auger

Water Level Observation:

Dry during and upon completion of drilling operations

Notes:

Waldenwood Drive

\* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Borehole backfilled with auger cuttings and capped with cold patch

Project Location: Ann Arbor, Michigan

G2 Project No. 130744

Latitude: 42.287067° Longitude: -83.684964°



	SUBSURFACE PROFILE	ON: 897.0 ft   DEPTH (ft)   SAMPLE TYPE/NO.   DCP BLOWS/ L75-INCHES   DRY CONTENT (%)   DENSITY (PCF)   DENSITY (PCF)    BS-1   BS-2   16   13.5   5000									
ELEV. PRO- (ft) FILE	GROUND SURFACE ELEVATION: 897.0 ft	DEPTH (ft)	SAMPLE TYPE/NO.	DCP BLOWS/ 1.75-INCHES	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCOF. COMP. ST. (PSF)				
	Bituminous Concrete (9 inches)	0.8	BS_1								
	Fill: Brown Clayey Sand with trace gravel	1.5	D5-1								
		-	BS-2	16	13.5		5000*				
	Very Stiff Brown and Gray Silty Clay with trace sand and gravel	-									
	trace sand and gravel										
392.0		5.0 5	BS-3	20	13.0		7000*				
_	End of Boring @ 5ft										
387.0		10									
,0,10											
1		-									
-		-									
-		-									
-		-									
882.0		15									
-		ļ									
_											
377.0		20									
1											
1		-									
+		-									
+		-									
372.0		25									
-		-									
4		-									
4		-									
		ļ									
367.0		30									
Γotal Depth	: 5ft	Water	Water Level Observation:								
Drilling Dat	November 27, 2013	Dry during and upon completion of drilling operations									
inspector: Contractor:	G2 Consultin Group, LLC	Notes									
Oriller:	G2 Consultin Group, LLC J. Hayball, P. E.	Waldenwood Drive									

Drilling Method:

4-inch diameter diamond tipped core barrel; 3-inch diameter hand auger

\* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Borehole backfilled with auger cuttings and capped with cold patch

Project Location: Ann Arbor, Michigan

G2 Project No. 130744

Latitude: 42.287114° Longitude: -83.682844°



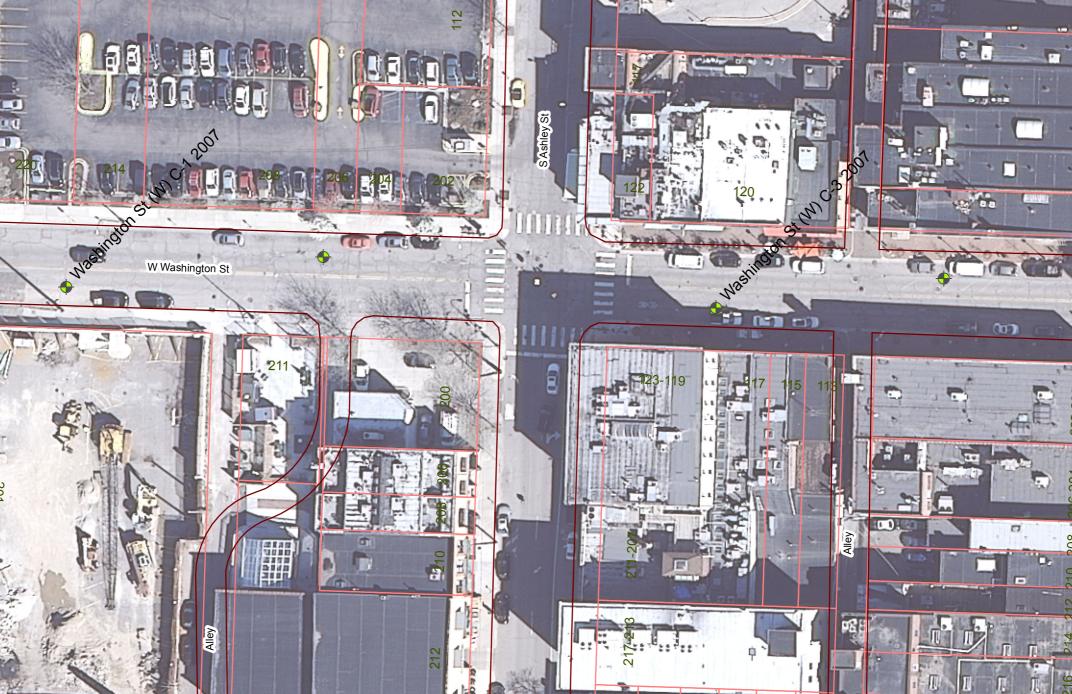
	SUBSURFACE PROFILE		SOIL SAMPLE DATA							
ELEV. PRO- (ft) FILE	GROUND SURFACE ELEVATION: 894.0 ft	DEPTH (ft)	SAMPLE TYPE/NO.	DCP BLOWS/ 1.75-INCHES	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCOF. COMP. ST. (PSF)			
	Bituminous Concrete (6-1/2 inches)  Fill: Bituminous Concrete Millings (4	. <u>5</u>	BS-1							
	Fill: Bituminous Concrete Millings (4 inches)									
	Stiff to Very Stiff Brown and Gray Silty Clay with trace sand and gravel	-	BS-2	11	10.3		3000*			
889.0	5	.0 5	BS-3	14	14.3		4500*			
-	End of Boring @ 5ft	-								
_										
-										
884.0		10								
]										
]										
070.0										
879.0		15								
-										
-		-								
874.0		20								
-		-								
-		-								
869.0		25								
-		-								
-		-								
1										
864.0		30								
Total Depth: Drilling Date: Inspector:	5ft November 27, 2013	ater Level Observation: Dry during and upon completion of drilling operations								
Contractor: Driller:	G2 Consultin Group, LLC J. Hayball, P. E.	Notes: Waldenwood Drive								

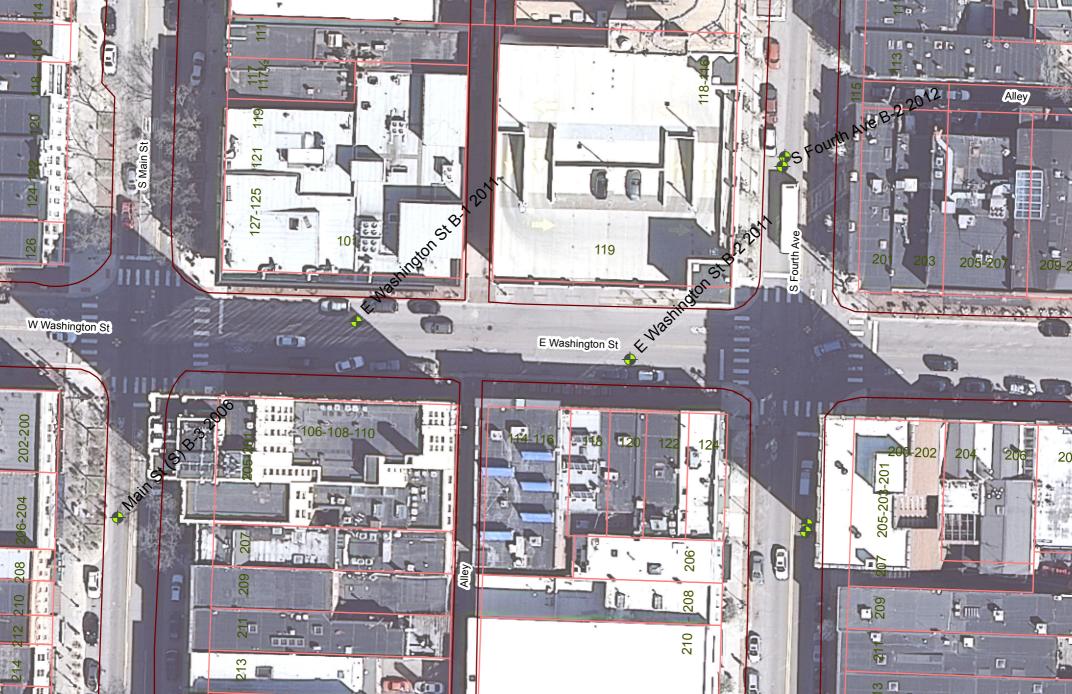
Drilling Method:

4-inch diameter diamond tipped core barrel; 3-inch diameter hand auger

\* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
Borehole backfilled with auger cuttings and capped with cold patch







#### Testing Engineers & Consultants, Inc.

1343 Rochester Road - PO Box 249 - Troy, Michigan - 48099-0249 (248) 588-6200 or (313) T-E-S-T-I-N-G Fax (248) 588-6232

Boring No.: WA2 Washington

Job No.: 51989

Project: Miscellaneous Geotechnical Services, Bundle

Client: City of Ann Arbor

Location: Ann Arbor, Michigan

Type of Rig: Truck

Drilled By: I. Mickle

**Ground Surface Elevation:** 

Drilling Method: Solid Stem Augers

Started: 12/3/2011

Completed: 12/3/2011

Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	ď	qu
2.5	LS	6 7 7	.33 1.08 3	ASPHALT (4")  CONCRETE (9")	3.3	107	
5.0	LS	4 3 3	5	Medium Compact Moist Brown Medium To Fine Sand With Some Gravel & Clay-FILL  Loose Moist Brown SAND With Some Gravel	2.8	104	
7.5				Bottom of Borehole at 5'			
10.0							
12.5—							
15.0							
17.5							
20.0						:	
22.5							
"N" - Standard Penetration Resistance SS - 2" ).D. Split Spoon Sample LS - Sectional Liner Sample ST - Shelby Tube Sample AS - Auger Sample DP - Direct Push				Water Enco Onlined Compression, psf ect Push  Water Enco At Complete			



#### Testing Engineers & Consultants, Inc.

1343 Rochester Road - PO Box 249 - Troy, Michigan - 48099-0249 (248) 588-6200 or (313) T-E-S-T-I-N-G Fax (248) 588-6232

Boring No.: WA1 Washington

Job No.: 51989

Project: Miscellaneous Geotechnical Services, Bundle

Client: City of Ann Arbor

Type of Rig: Truck

Location: Ann Arbor, Michigan

Drilling Method: Solid Stem Augers

Drilled By: i. Mickle

Ground Surface Elevation;

Started: 12/3/2011

Completed: 12/3/2011

	·			2011,012011								
Depth (ft)	Sample Type	N	Strata Change	Soil Classification	w	d	qu					
2.5	LS	10 6 6	.42 .71	ASPHALT (5")  BRICK (3 1/2")	11.9	105						
5.0	LS	4 4 2/2"	5	Medium Compact Moist Brown Medium To Fine Sand With Some Gravel & Clay-FILL  Loose Moist Brown Clayey SAND With Some Gravel	10.4	102						
7.5—				Bottom of Borehole at 5'								
10.0	٠											
12.5—				,								
15.0-				•								
17.5—												
20.0-			e e e e e e e e e e e e e e e e e e e		- MANAGE							
22.5 <del>-</del>						The state of the s						
		,										

<sup>&</sup>quot;N" - Standard Penetration Resistance SS -2" ),D. Split Spoon Sample LS - Sectional Liner Sample ST - Shelby Tube Sample AS - Auger Sample

w - H2O, % of dry weight d - Bulk Density, pcf qu - Unconfined Compression, psf DP - Direct Push

Water Encountered: None

At Completion: None

Boring No. WA1 Washington

	Project: City of Ann Arbor 2008 Road Construction Project							TES CONSULTANTS, P.C.										
	Cli	ent: C	ity of Ann A	Arbor					_		2394	3 Ind	ustr	ial P	ark	Dri	⁄e	
	Locat	ion: A	nn Arbor, I	Michigan								ningte		-				
	Proje	ct #: 07	7-1192	Boring Log #:	C-4-Was	hingt	on	Stre	et	t Ph: (248) 615-3000 Fx: (248) 615-								512
Sample No./Type	Recovery (in.)	Depth (ff.)		Description of Material Surface Elevation =		Moisture Conten N-Value (blows				s/ft) - s	quares	io		ned C (tsf)	- tria	ngles		
		0 — 1 —		6.0" of Bituminous Concrete  Note 1		1.0 -						1.0						
SS-1	18	2— 3—		C SILTY CLAY - occasional silt iun stiff - black - and brown - (O	- 1	2.0 - 3.0 -	6		22.6			3.0		0.75				
SS-2	18	4— 5—	medi	COARSE SAND - trace silt and gum dense - moist - brown - (SP-S	M)	4.0 - 5.0 -			24			4.0 5.0	-	- IN TANASAN				
		6—	1	0" OF SILTY FINE TO COARSE to some gravel - moist - brown - ( Fill)	1	6.0 -						6.0						
		7— 8—				7.0 - 8.0 -						7.0						
		9 <u> </u>				9.0 -						9.0						
		10—				10.0						10.0						
		11 — 12 —				12.0		i				12.0						
		13				13.0 -						13.0						
		14—				14.0						14.0						
		15— — 16—				15.0 -						15.0						
		17—				17.0 -						17.0		WALL DO NOT THE REAL PROPERTY.				
		18—				18.0						18.0						
		19—				19.0						19.0						
		20		End of Boring (ft): 5.0'										-				
Water :	Level (	) Dbserva	ations:	Boring Started:	10/5/07			***********	T			A	ppr	oved	1	4		
While	e Drilli	ng:		Boring Completed: 1					l						/"	7		
	mpleti	-			CME 55							D	raw	n By	: Al	H		
	ave-In			Driller: J						-				•				

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Project: City of Ann Arbor 2008 Road Construction Project TES CONSULTANTS, P.C. Client: City of Ann Arbor 23943 Industrial Park Drive Location: Ann Arbor, Michigan Farmington Hills, MI 48335 Ph: (248) 615-3000 Fx: (248) 615-3512 Boring Log #: Project #: 07-1192 C-3-Washington Street Sample No./Type Recovery Depth (ft.) (in.) Moisture Content (%) - circles Unconfined Compressive Strength N-Value (blows/ft) - squares (tsf) - triangles Description of Material 10 20 30 40 50 60 0.00 0.50 1.00 1.50 2.00 2.50 3.50 4.00 4.50 Ground Surface Elevation = 3.0" of Brick Paver 1.0 1.0 Note 2 SS-1 18 2.0 2.0 SANDY CLAY FILL - some silt - trace gravel - very 3.0 3.0 stiff to stiff - dark brown - (CL-ML Fill) 4.0 4.0 SS-2 18 8 **11.3** 5.0 5.0 Note 1: 4.0" of Bituminous Concrete Pavement 6.0 6.0 Note 2: 9.0" OF SILTY FINE TO COARSE SAND 7.0 FILL - trace to some gravel - moist - brown - (SM-GM Fill) 8.0 9.0 9.0 10-10.0 10.0 11. 11.0 11.0 12. 12.0 12.0 13 13.0 13.0 14-14.0 14.0 15 15.0 15.0 16-16.0 16.0 17 17.0 18 18.0 18.0 19 19.0 19.0 20 20.0 End of Boring (ft): 5.0' Water Level Observations: Boring Started: 10/5/07 Approved: While Drilling: **Boring Completed:** 10/5/07 At Completion: Rig: CME 55 Drawh-By: AH Cave-In At: Driller: J. Faitel

	Project: City of Ann Arbor 2008 Road Construction Project						TES CONSULTANTS, P.C.									
			ity of Ann		ion i roject					industr		•				
			nn Arbor, I							igton F						
	<del></del>	et #: 07			C-2-Wasl	L 2 4.	on C4ma4	Ph: (24		_	-					
. 0			-1192	Boring Log #:	C-2-wasi	ungu	on Street	111. (24	240) 0.	15-5512						
Sample No./Type	Recovery (in.)	Depth (ft.)		Description of Material			oisture Conte Value (blow			Unconfined Compressive Str (tsf) - triangles						
	,		Ground	Surface Elevation =		0	10 20	30 40 50	60	0.00	1.00	2.50	3.50 4.00 4.50			
		0		of Bituminous Concrete Paveme	ent	0.0			<b>-</b>	0.0						
		1		6.0" of PCC Pavement		1.0				1.0						
GG 1	10	_ ^_		Note 1		1.0										
SS-1	18	2 <u>—</u>		LAY FILL - some topsoil and grapown - (CL-ML with Some OL Fil		2.0	<b>1</b> 14	A second		2.0 -	1.25					
		3-				3.0 -	12.6			3.0 -						
SS-2	18	4-		NE TO COARSE SAND - trace gr - very dense - moist - brown - (Sl	l l	4.0		***************************************		4.0			1 100			
		5—				5.0			<b>a</b>	5.0 -						
		$\dashv$		0" OF SILTY FINE TO COARSI					TI							
		6—	AND GRAV	VEL CRUSHED LIMESTONE FI GM Crushed Limestone Fill)	ILL - (SM-	6.0 -				6.0 -	-					
		7				7.0 -				7.0						
		8				8.0				8.0						
]		9—				9.0				9.0 -						
		10				10.0				10.0						
		11				11.0 -				11.0						
		12			:	12.0 -				12.0						
		13			1	13.0 -				13.0 -						
		14—			<b>[</b> 1	14.0 -				14.0						
		15			3	15.0				15.0						
		16—			1	16.0				16.0						
		17			1	17.0 -	3 0000000000000000000000000000000000000			17.0						
		18—			] 1	18.0				18.0						
		19			1	9.0 -				19.0						
		20			2	.0.0			_	20.0						
				End of Boring (ft): 5.0'							•					
Water I	Level C	)bserva	tions:	Boring Started:	10/5/07					Appr	oved:	1	2			
While	Drilli	ng: Dry	,	Boring Completed:			l			• •		/ "	<b>,</b>			
		on: Dry			CME 55					Draw	n By:	АH				
	we-In .	•		Driller: J			İ			~1 a W	y.					
	VV AM			Dimer.												

Project: City of Ann Arbor 2008 Road Construction Project TES CONSULTANTS, P.C. Client: City of Ann Arbor 23943 Industrial Park Drive Location: Ann Arbor, Michigan Farmington Hills, MI 48335 Project #: 07-1192 Ph: (248) 615-3000 Fx: (248) 615-3512 Boring Log #: C-1-Washington Street Recovery (in.) Depth (ft.) Moisture Content (%) - circles Unconfined Compressive Strength N-Value (blows/ft) - squares (tsf) - triangles Description of Material 20 30 40 0.00 0.50 1.00 1.50 2.50 2.50 3.00 4.00 4.50 Ground Surface Elevation = 7.0" of PCC Pavement 1.0 1.0 SS-1 18 SILTY CLAY FILL - trace sand - occasional silty sand 2.0 2.0 16 seams - stiff - brown - (CL-Fill) 13.0 3.0 -3.0 SANDY CLAY - some gravel and silt - hard - brown -4.0 4.0 SS-2 18 (CL-ML) 10.3 5.0 5.0 Note 1: 4.0" of Bituminous Concrete Pavement 6.0 6.0 7.0 7.0 8.0 8.0 9.0 9.0 10.0 10.0 11.0 11.0 12.0 13 13.0 13.0 14.0 14.0 15 15.0 15.0 16 16.0 16.0 17 17.0 17.0 18 18.0 18.0 19 19.0 19.0 20. End of Boring (ft): 5.0' Water Level Observations: Boring Started: 10/5/07 Approved; While Drilling: Dry **Boring Completed:** 10/5/07 At Completion: Dry Rig: CME 55 Drawn By: AH Cave-In At: Driller: J. Faitel



Boring performed 18' east of curb, 60' north of driveway to 2525 Newport Road  $\,$ 

# BORING NUMBER: Newport B-9 PAGE 1 OF 1

CLIENT City of Ann Arbor	PROJEC	PROJECT NAME 2012 Ann Arbor Misc. Geotechnical Services - North Area Borings									
PROJECT NUMBER 3122040060-1	PROJEC	CT LOCAT	ION _	Ann Arbor,	Michi	gan					
DATE STARTED 10/8/12 COMPL	ETED <u>10/8/12</u> GROUN	D ELEVA	TION _	N/A							
DRILLING CONTRACTOR Stearns Drilling	GROUN	D WATER	LEVE	LS:							
DRILLING METHOD 2-1/4 inch HSA	D	JRING DR	ILLING	3 None							
LOGGED BY G. Geerlings CHECK	ED BY T. Marsik A	AFTER DRILLING None									
NOTES Boring backfilled with auger cuttings a	nd patched.	COLLAPSE DEPTH 3'6"									
O.O DEPTH GRAPHIC LOG	DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf) UNC. STRENGTH (psf)	NATURAL MOISTURE CONTENT (%)	SI 	MC 40 S CON	60 : L 60	80 LL -I 80	
7 inches ASPHALT PAVEMEN	Т						:	:	:	:	
5 inches of gray moist crushed	LIMESTONE - (FILL)	₩ GB	100								
Dark brown moist silty fine to m and organics - (FILL)	edium SAND with traces of gravel	SS 1	100	11-8-6 (14)			<b>^</b>				
Brown moist medium dense fine and occasional clay seams - (S	e SAND with some silt and gravel P-SM)	SS 2	89	3-3-9 (12)							
	rehole at 5.0 feet.	<u> </u>						<u> </u>		:	



Boring performed 5' east of curb, across from driveway to 2562 Newport Road

# **BORING NUMBER: Newport B-8**PAGE 1 OF 1

PROJECT NAME 2012 Ann Arbor Misc. Geotechnical Services - North Area Borings

PROJ	IECT N	UMBER 3122040060-1 PROJE	PROJECT LOCATION Ann Arbor, Michigan									
DATE	STAR	TED 10/8/12 COMPLETED 10/8/12 GROU	ND E	ELEVAT	TION _	N/A						
DRILL	LING C	ONTRACTOR Stearns Drilling GROU	ND V	NATER	LEVE	LS:						
DRILL	LING M	ETHOD 2-1/4 inch HSA	DUR	ING DR	ILLING	3 None						_
LOGG	GED BY	Y G. Geerlings CHECKED BY T. Marsik	AFTER DRILLING None									
NOTE	<b>S</b> <u>Bo</u>	ring backfilled with auger cuttings and patched.	COLLAPSE DEPTH 3' 6"									
o DEPTH	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf) UNC. STRENGTH (psf)	NATURAL MOISTURE CONTENT (%)	20 PL L 20 FINES	T N VAL 40 60 MC 40 60 CONTE	) 80 LL 	_
		7 inches ASPHALT PAVEMENT									:	
		5 inches of gray moist crushed LIMESTONE - (FILL)	w	₿ GB	100							
 		Brown moist medium dense clayey fine to medium SAND with trace of gravel - (SC)	X	ss 1	94	6-5-6 (11)			<b>↑</b>			
2.5		Brown moist medium dense silty fine to medium SAND with trace of gravel and occasional clay lenses - (SM)	/_	<u>\</u>			_					
  5.0		Gray moist medium medium dense silty fine to medium SAND with gravel - (SM)		SS 2	100	6-9-11 (20)						
		Bottom of borehole at 5.0 feet.										



# BORING NUMBER: Newport B-7 PAGE 1 OF 1

PROJ DATE	PROJECT NAME 2012 Ann Arbor PROJECT NAME 2012 Ann Arbor Misc. Geotechnical Services - North Are PROJECT NUMBER 3122040060-1 PROJECT LOCATION Ann Arbor, Michigan  OATE STARTED 10/8/12 COMPLETED 10/8/12 GROUND ELEVATION N/A  ORILLING CONTRACTOR Stearns Drilling GROUND WATER LEVELS:						al Services - North Area Borings					
DRILLING METHOD 2-1/4 inch HSA DURING DRILLING None												
		Y G. Geerlings CHECKED BY T. Marsik ring backfilled with auger cuttings and patched.	AFTER DRILLING None  COLLAPSE DEPTH 3' 6"									
O DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf) UNC. STRENGTH (psf)	NATURAL MOISTURE CONTENT (%)	A SPT N VALUE A  20 40 60 80  PL MC LL  20 40 60 80  □ FINES CONTENT (%) □  20 40 60 80			
		6 inches ASPHALT PAVEMENT										
	$\ggg$	6 inches of gray moist crushed LIMESTONE - (FILL)		∰ GB	100							
  2.5		Brown moist very dense fine to medium SAND with some g and silt and occasional cobbles - (SP-SM)	ravel	SS 1	56	16-60/4"						
			,	\ /								
				SS 2	78	11-21-36 (57)			<b>A</b>			

Bottom of borehole at 5.0 feet.

Boring performed 10' west of curb, 31' north of driveway to 2601 Newport Road  $\,$ 



# BORING NUMBER: Newport B-6 PAGE 1 OF 1

CLIENT City of Ann Arbor			PROJECT NAME 2012 Ann Arbor Misc. Geotechnical Services - North Area Borings									
PROJECT NUMBER <u>3122040060-1</u>			PROJECT LOCATION Ann Arbor, Michigan									
<b>DATE STARTED</b> 10/8/12 <b>COMPLETED</b> 10/8/12			GROUND ELEVATION N/A									
DRILLING C	CONTRACTOR Stearns Drilling	GROUND WATER LEVELS:										
DRILLING N	IETHOD 2-1/4 inch HSA	DU	RING DR	ILLING	None None							
LOGGED B	Y G. Geerlings CHECKED BY T. Marsik	AFTER DRILLING None										
NOTES BO	oring backfilled with auger cuttings and patched.	COLLAPSE DEPTH 3'6"										
GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf) UNC. STRENGTH (psf)	NATURAL MOISTURE CONTENT (%)	A SPT N VALUE A 20 40 60 80  PL MC LL 20 40 60 80  □ FINES CONTENT (%) □ 20 40 60 80				
	4 inches ASPHALT PAVEMENT											
	8 inches gray moist crushed LIMESTONE - (FILL)		∰ GB	100								
2.5	Brown moist medium stiff CLAY with silt, some gravel and sand - (CL)	trace of	SS 1	89	5-5-12 (17)	0.75	22	<b>A</b>				
5.0	Brown moist medium dense fine to medium SAND with so and trace of gravel - (SP-SM)  Bottom of borehole at 5.0 feet	me silt	SS 2	100	8-12-14 (26)			<b>A</b>				

Bottom of borehole at 5.0 feet.

Boring performed 4' east of curb, 73' north of driveway to 2625 Newport Road  $\,$ 



## BORING NUMBER: Newport B-5 PAGE 1 OF 1

CTI and	l Associa	ates, Inc.											
CLIENT City of Ann Arbor				PROJECT NAME 2012 Ann Arbor Misc. Geotechnical Services - North Area Borings									
PROJ	IECT N	UMBER 3122040060-1	PROJECT LOCATION Ann Arbor, Michigan										
DATE STARTED 10/8/12 COMPLETED 10/8/12 GROUND ELEVATION N/A													
DRILL	LING C	ONTRACTOR Stearns Drilling	GROUNE	WATER	LEVE	LS:							
DRILL	LING M	ETHOD 2-1/4 inch HSA	DU	RING DR	RILLING	3 None							
LOGG	SED BY	G. Geerlings CHECKED BY T. Marsik	AFTER DRILLING None										
NOTE	S Bor	ring backfilled with auger cuttings and patched.	CC	LLAPSE	DEPT	H <u>3' 6"</u>							
DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf) UNC. STRENGTH (psf)	NATURAL MOISTURE CONTENT (%)	20 PL	PT N VALU 40 60 MC 40 60	80 LL 		
0.0				SAI	RE	ے د	UNC.	NATL		CONTEN 40 60	T (%) □ 80		
0.0		6 inches ASPHALT PAVEMENT							- 20	40 00			
-		6 inches of gray moist crushed LIMESTONE - (FILL)		™ GB	100				:				
  - 2.5		Dark brown moist silty fine SAND with traces of gravel, cl organics - (FILL)		SS 1	89	6-5-4 (9)	-		<b>↑</b>				
		Brown moist CLAY with silt and trace of sand - (CL)											
		Reddish-brown moist loose clayey fine SAND with trace (SC)		SS 2	89	3-3-4 (7)							
5.0		Brown moist loose fine to medium SAND with traces of g silt - (SP)	ravel and	/ \									
		Bottom of borehole at 5.0 feet.											
		Boring performed 5' east of curb, 105' south of driveway to Newport Road	o 2705										

# CTI and Associates Inc CTI and Associates, Inc. CLIENT City of Ann Arbor PROJECT NUMBER 3122040060-1 DATE STARTED 10/8/12

## BORING NUMBER: Newport B-4 PAGE 1 OF 1

PROJECT NAME 2012 Ann Arbor Misc. Geotechnical Services - North Area Borings

PROJECT LOCATION Ann Arbor, Michigan

DATE STARTED         10/8/12         COMPLETED         10/8/12			GROUNE	ELEVA	TION _	N/A							
DRILLING CONTRACTOR Stearns Drilling			GROUNE	WATER	LEVE	LS:							
DRILLING METHOD 2-1/4 inch HSA			DURING DRILLING None										
LOGG	ED BY	G. Geerlings CHECKED BY T. Marsik	AF	TER DRI	LLING	None							
NOTES Boring backfilled with auger cuttings and patched.			COLLAPSE DEPTH 3' 6"										
O DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf) UNC. STRENGTH (psf)	NATURAL MOISTURE CONTENT (%)	SI 	40	60 60	80 LL -I 80	
		5 inches ASPHALT PAVEMENT							:	:	:		
		7 inches of gray moist crushed LIMESTONE - (FILL)		∰ GB	100								
2.5		6 inches of dark brown moist silty fine SAND with trace of - (FILL)  Brown moist loose clayey fine SAND with trace of gravel a occasional clay seams - (SC)	_	SS 1	100	8-4-3 (7)			<b>^</b>				
5.0		Brown moist medium dense fine to medium SAND with tragravel - (SP)	ace of	SS 2	89	4-9-5 (14)			<b>\</b>				
		Bottom of borehole at 5.0 feet.					•						

Boring performed 6' east of curb, 80' south of White Oak Drive

Boring performed 4' east of curb, 127' north of White Oak Drive

# BORING NUMBER: Newport B-3 PAGE 1 OF 1

CII and Asso	ciates, inc.										
CLIENT _	City of Ann Arbor F	PROJECT NAME 2012 Ann Arbor Misc. Geotechnical Services - North Area Borings									
PROJECT	NUMBER 3122040060-1 F	PROJECT LOCATION Ann Arbor, Michigan									
DATE STARTED 10/8/12 COMPLETED 10/8/12 GROUND ELEVATION N/A											
DRILLING	CONTRACTOR Stearns Drilling	GROUND	WATER	LEVE	LS:						
DRILLING	METHOD 2-1/4 inch HSA	DU	RING DR	ILLING	None None						
LOGGED	BY G. Geerlings CHECKED BY T. Marsik	AF	TER DRII	LING	None						
NOTES _E	Boring backfilled with auger cuttings and patched.	co	LLAPSE	DEPT	H <u>3' 6"</u>						
O DEPTH (ft)	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf) UNC. STRENGTH (psf)	NATURAL MOISTURE CONTENT (%)	A SPT N VALUE A  20 40 60 80  PL MC LL  20 40 60 80  □ FINES CONTENT (%) □  20 40 60 80			
0.0	7 inches ASPHALT PAVEMENT							20 40 00 00			
	11 inches of gray moist crushed LIMESTONE - (FILL)		₩ GB	100							
2.5	Dark brown moist medium stiff CLAY with silt, trace of organ and occasional sand partings - (CL) Organic Content = 3.6%	nics	SS 1	94	6-4-2 (6)	0.5	25	<b>1</b>			
	Brown moist medium stiff sandy CLAY with silt, trace of gra	ivel and	₩ ss	100	3-3-3	0.5					
5.0	occasional sand partings - (CL)		2	100	(6)	0.5	15				
	Bottom of borehole at 5.0 feet.										



# BORING NUMBER: Newport B-2 PAGE 1 OF 1

CLIENT City of Ann Arbor				PROJECT NAME 2012 Ann Arbor Misc. Geotechnical Services - North Area Borings										
PROJECT NUMBER <u>3122040060-1</u>			PROJECT LOCATION Ann Arbor, Michigan											
DATE STARTED         10/8/12         COMPLETED         10/8/12				GROUND ELEVATION N/A										
DRILL	ING C	ONTRACTOR Stearns Drilling	GROUND WATER LEVELS:											
DRILL	ING M	ETHOD 2-1/4 inch HSA	DU	RING DR	ILLING	3 None								
LOGG	SED BY	G. Geerlings CHECKED BY T. Marsik	AFTER DRILLING None											
NOTE	<b>S</b> _Bo	ring backfilled with auger cuttings and patched.	COLLAPSE DEPTH 3'6"											
O DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf) UNC. STRENGTH (psf)	NATURAL MOISTURE CONTENT (%)	▲ SI 20 PL 20 □ FINES 20	40 MC 40	60 ITENT	80 L <b>I</b> 80		
0.0		5 inches ASPHALT PAVEMENT							:	-10				
		13 inches of gray moist crushed LIMESTONE - (FILL)		₩ GB	100						· · · · · · · · · · · · · · · · · · ·			
		Dark brown moist clayey fine SAND with traces of gravel a organics - (FILL)	and	SS 1	17	7-8-10 (18)	-		•					
 		December 2 de la constitución de		66		2.5.40	_							
5.0		Brown moist medium dense fine to medium SAND with so gravel and trace of silt - (SP)	ome	SS 2	89	3-5-10 (15)			<b>A</b>					
		Bottom of borehole at 5.0 feet.												

Boring performed 5' east of curb, 42' north of driveway to 2731 Newport Road

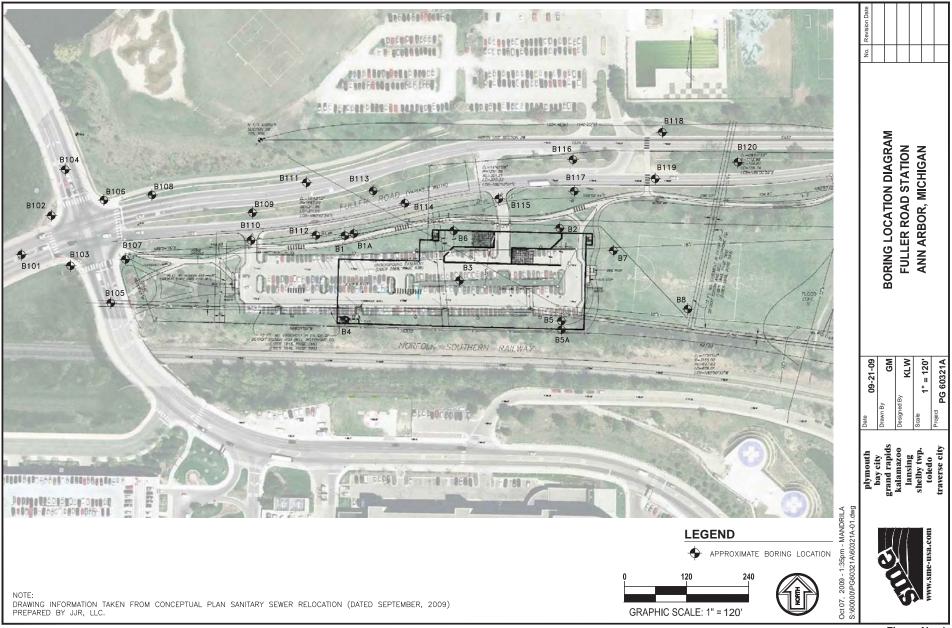


Boring performed 7' east of curb, 55' north of driveway to 2737 Newport Road  $\,$ 

# BORING NUMBER: Newport B-1 PAGE 1 OF 1

PROJECT NAME 2012 Ann Arbor Misc. Geotechnical Services - North Area Borings

PROJECT NUMBER 3122040060-1				LOCAT	ION _	Ann Arbor,	Michi	gan				
DATE STARTED         10/8/12         COMPLETED         10/8/12			ND	ELEVA1	TION _	N/A						
DRILLING CONTRACTOR Stearns Drilling			GROUND WATER LEVELS:									
DRILL	ING M	ETHOD 2-1/4 inch HSA	DU	RING DR	ILLING	3 None						
LOGG	SED BY	G. Geerlings CHECKED BY T. Marsik	AFTER DRILLING None									
NOTE	<b>S</b> _Bo	ring backfilled with auger cuttings and patched.	COLLAPSE DEPTH 3'6"									
o DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf) UNC. STRENGTH (psf)	NATURAL MOISTURE CONTENT (%)	A SPT N VALUE A  20 40 60 80  PL MC LL  20 40 60 80  □ FINES CONTENT (%) □  20 40 60 80			
0.0		4 inches ASPHALT PAVEMENT										
-		20 inches of gray moist crushed LIMESTONE - (FILL)		™ GB	100							
 		Dark brown moist loose silty fine to medium SAND with traces of		SS 1	67	9-15-13 (28)			<u>^</u>			
		gravel (FILL)										
  5.0				SS 2	56	6-3-2 (5)			4			
		Bottom of borehole at 5.0 feet.										





## soil and materials engineers, inc.

**PROJECT NAME:** 

**FULLER ROAD STATION** 

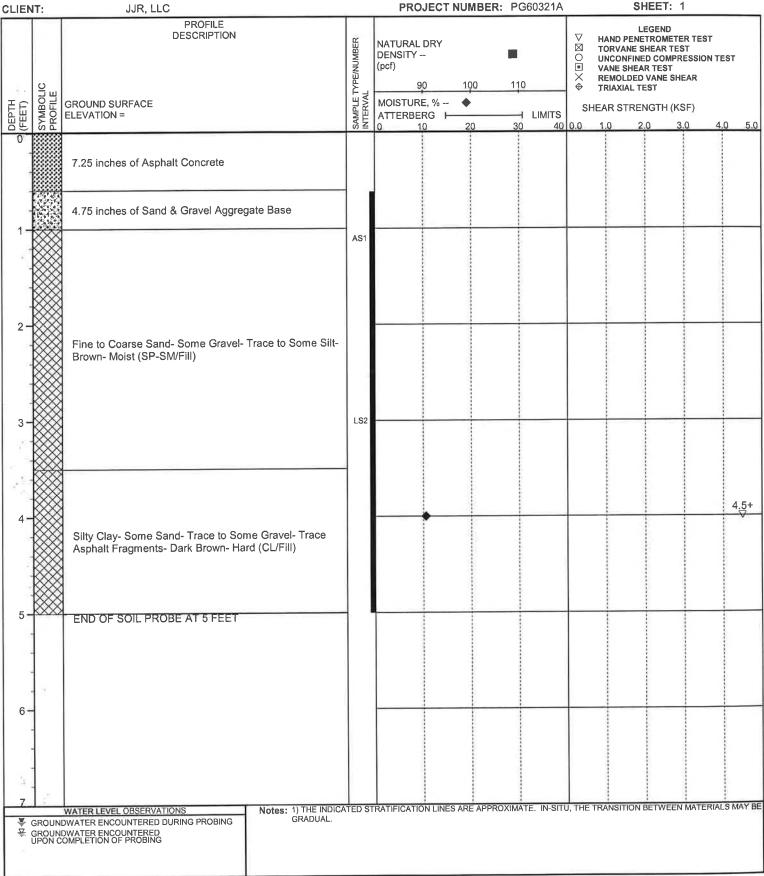
PROJECT LOCATION: ANN ARBOR, MICHIGAN

A/E: JJR, LLC

BY: CGN\KLW DATE: 9/15/09

**BORING B111** 

SHEET: 1



RIG NO.: Soil Probe

OPERATOR: SME-BM BORING METHOD: Direct Push

BACKFILL METHOD: Gravel

WATER LEVEL DURING PROBING: None WATER LEVEL UPON COMPLETION: None

CAVE OF PROBEHOLE AT



## soil and materials engineers, inc.

PROJECT NAME:

**FULLER ROAD STATION** 

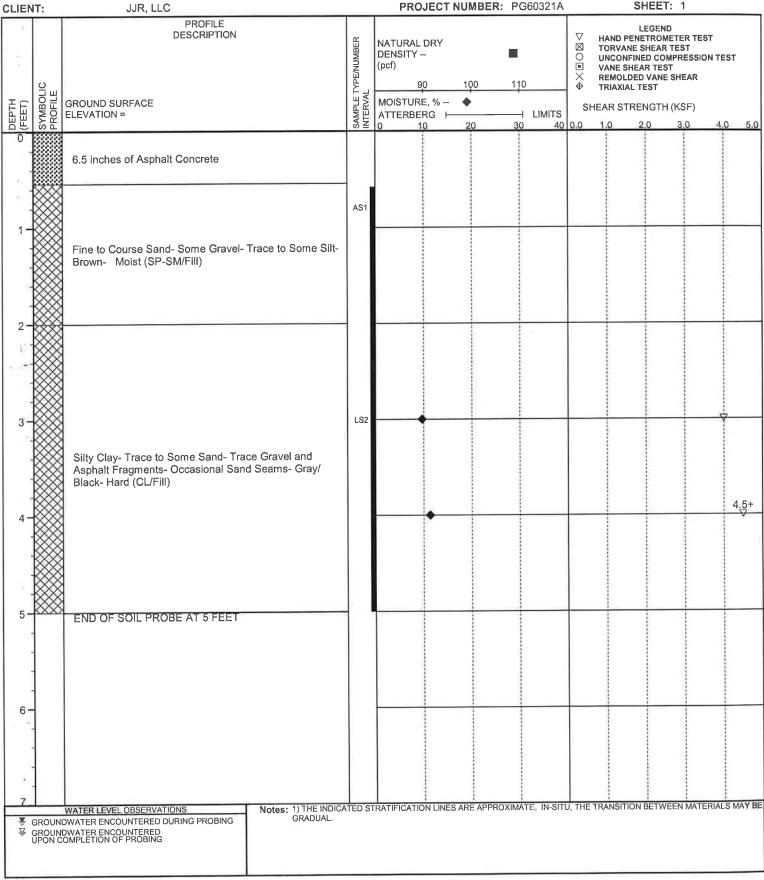
PROJECT LOCATION: ANN ARBOR, MICHIGAN

A/E: JJR, LLC

BY: CGN\KLW DATE: 9/15/09

**BORING B114** 

SHEET: 1



OPERATOR: SME-BM BORING METHOD: Direct Push RIG NO .: Soil Probe

BACKFILL METHOD: Gravel

WATER LEVEL DURING PROBING: None

WATER LEVEL UPON COMPLETION: None

CAVE OF PROBEHOLE AT



## soil and materials engineers, inc.

PROJECT NAME:

**FULLER ROAD STATION** 

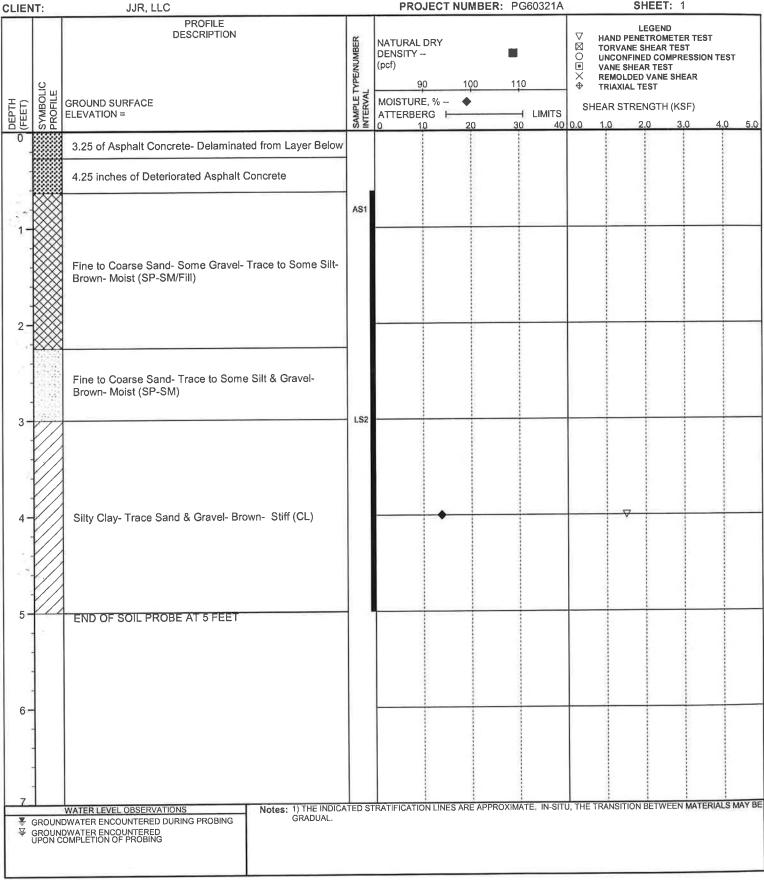
PROJECT LOCATION: ANN ARBOR, MICHIGAN

A/E: JJR, LLC

BY: CGN\KLW DATE: 9/15/09

**BORING B119** 

SHEET: 1



RIG NO .: Soil Probe

OPERATOR: SME-BM BORING METHOD: Direct Push

BACKFILL METHOD: Gravel

WATER LEVEL DURING PROBING: None

WATER LEVEL UPON COMPLETION: None

CAVE OF PROBEHOLE AT