Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

PAGE 1 of 3
DATE 12/22/2010
LOGGED BY DR
GSI JOB No. 10023

ROUTE FAI 94 @ FAP 341
DESCRIPTION I-94/Stony Island Feeder Interchange Improvements #P-91-184-10
SECTION 1212B-1
LOCATION SEC. 11, 12, 13, & 14, TWP. 37 N., RNG. 14 E., 3rd P.M.
COUNTY Cook
DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. SN 016-2436
Station
BORING NO. **S36-B**
Station: 817+72
Offset: 11.5' Right
Ground Surface Elev. 602.4

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ___ Hrs.

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
9.5" CONCRETE, 10.5" CRUSHED STONE	600.7		4		*111*
CLAY LOAM-brown & gray-medium stiff to very stiff (A-6) FILL			2		
			4	3.1B	16
			2		*104*
		-5	2		
			3	0.9B	20
			2		
			2		
			2	1.75P	14
			2		
		-10	3		
			3	1.0P	17
			2		
			3		
			3	0.5P	15
	589.4				
CLAY-brown & gray-stiff (A-6)			3		
			3		
		-15	4	1.25P	23
	586.9				
CLAY-gray-stiff to very stiff (A-6)			2		*111*
			3		
			4	1.1B	19
			3		*111*
		-20	4		
			5	1.5B	19
CLAY-gray-stiff to very stiff (A-6)			4		*113*
			5		
			7	2.4B	18
			4		*111*
		-25	8		
			10	3.4B	20
			4		*104*
			8		
			13	2.4B	19
			7		*118*
		-30	9		
			14	6.2B	14
	565.4				
SILTY LOAM-gray-medium dense (A-4)			6		*111*
			12		
		-35	16	4.1B	19
			5		
			8		
		-40	10	NP	22

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS=Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR-No Recovery

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LOCATION SEC. 11, 12, 13, & 14, TWP. 37 N., RNG. 14 E., 3rd P.M.
COUNTY Cook
DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. SN 016-2436
Station
BORING NO. **S36-B**
Station: 817+72
Offset: 11.5' Right
Ground Surface Elev. 602.4

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ___ Hrs.

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SILTY LOAM-gray-medium dense (A-4)	560.4				
CLAY LOAM-gray-hard (A-6)			5		*120*
			11		
		-45	13	5.2B	15
			15		*121*
		-50	21		
			29	4.2B	15
			9		*121*
		-55	14		
			17	7.8B	13
			14		*122*
		-60	12		
			14	5.0B	13
CLAY LOAM-gray-hard (A-6)	540.4				
SILTY CLAY LOAM-gray-dense (A-4)			10		*122*
			14		
		-65	19	5.7B	13
	535.4				
CLAY LOAM-gray-hard (A-6)			9		*119*
			14		
		-70	21	4.9B	14
			8		*106*
		-75	16		
			25	4.1B	22
	525.4				
SILTY CLAY LOAM-gray-dense to very dense (A-4)			25		*114*
			26		
		-80	29	2.9B	14

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS=Vane Shear Test
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Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After ___ Hrs.

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SILTY CLAY LOAM-gray-dense to very dense (A-4)			23		*125*
			38		
		-85	50/3"	5.8B	11
	513.4				
			50/4"		
		-90		NP	7
Silty SAND, GRAVEL & FRACTURED ROCK-gray-very dense (A-2)					
			50/3"		
		-95			NR
	505.9				
Drillers Observation: Cobbles & Boulders	504.4				
SILTY LOAM-gray-very dense (A-4)			27		
			50/5"		
	502.4	-100		NP	19

Drillers Observation: Apparent Bedrock 501.4

RUN 1 (-101.0' to -111.0')
Silurian System Niagaran Series Dolomite

Light gray to gray & fine grained with horizontal bedding.

Recovery=93.0%
R.Q.D.=92.0%

RUN 1

-105
-110
-115
-120

491.4

End Of Boring @ -111.0'
Hollow Stem Augers To -10.0'
Rotary Drilling To Completion
CME Automatic Hammer
10.0' Of 4.0"ø Casing Used

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS=Vane Shear Test
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BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com

USER NAME =	DESIGNED - TL	REVISED -	
	CHECKED - BAK	REVISED -	
PLOT SCALE =	DRAWN - TL	REVISED -	
PLOT DATE = 03/29/2013	CHECKED - BAK	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS II
STRUCTURE NO. 016-2470
SHEET NO. S-40 OF S-53 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2012-059-BR	COOK	631	415
		CONTRACT NO. 60J12		
		ILLINOIS FED. AID PROJECT		