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SOIL BORING LOG

DATE 4/19/2010
LOGGED BY MD
GSI JOB No. 10047

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Archer St., Suite 204
Naperville, Illinois 60565
(830) 355-2838

ROUTE FAI Route 90/94 DESCRIPTION Pump Station 26 Rehabilitation IDOT Project No. C-91-411-99
SECTION 1999-161-1 LOCATION Township 39 N, Range 14 E, SW 1/4 of SW 1/4 Section 16
COUNTY Cook DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. XX
Station XX

BORING NO. **B-1**
Station: 5+94 Union Avenue
Offset: 12.0' Left
Ground Surface Elev. +13.8 CCD

DEPTH (ft)	B L O W S	U C S Qu	M O I S T (%)	Surface Water Elev. <i>n/a</i> Stream Bed Elev. <i>n/a</i> Groundwater Elevation: First Encounter <i>n/a</i> ▼ Upon Completion <i>n/a</i> ▼ After _____ Hrs. ▼	D E P T H	B L O W S	U C S Qu	M O I S T (%)
3.0" ASPHALT, 6.0" CONCRETE +13.0 CCD								
10				Vane Shear @ -21.0' Shear Strength=938 psf				
7	NP	4						ST <0.25F 19
CRUSHED STONE-medium dense (Fill)								
6				CLAY-gray- very soft to medium stiff (A-6)		1		
11						1		
-5	NP	5		Torvane @ -25.0' Shear Strength=287 psf	-25	1	<0.25F	20
+7.8 CCD								
SILTY CLAY LOAM-gray-loose (Fill)+7.3 CCD								
3	NP	17		Vane Shear @ -26.0' Shear Strength=180 psf		0		98
4						1		
3				Torvane @ -27.5' Shear Strength=287 psf		1	0.25F	24
CRUSHED STONE-loose (Fill)								
5								
3								
-10	NP	6			-30	ST	<0.25F	24
+3.3 CCD								
CLAY-gray-very stiff (A-6)								
3			97	Vane Shear @ -31.0' Shear Strength=220 psf				
4								
4	3.5B	25						
+0.8 CCD								
1			106			1		99
2						1		
-15	1	0.7B	22	Torvane @ -35.0' Shear Strength=246 psf	-35	1	0.15B	24
Vane Shear @ -36.0' Shear Strength=256 psf								
CLAY-gray- very soft to medium stiff (A-6)								
ST <0.25F 21								
0						1		
0				Torvane @ -40.0' Shear Strength=154 psf	-40	2	0.25F	25
-20	0	<0.25F	42		-40	2	0.25F	25

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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Vane Shear @ -41.0' Shear Strength=277 psf								
CLAY-gray- very soft to medium stiff (A-6)								
	1		101					
	2							
-45	3	0.7B	23	Torvane @ -45.0' Shear Strength=901 psf	-45	3	0.7B	23
-34.7 CCD								
SAND-gray-medium dense (A-3)								
7								
7								
-50	7	NP	18		-70			
-40.2 CCD								
SILT-gray-medium dense (A-4)								
1								
-41.2	CCD	-55	8	NP	20			
-75								
CLAY-gray-very stiff (A-6)								
End Of Boring @ -60.0' Hollow Stem Augers To -15.0' Rotary Drilling To Completion CME Automatic Hammer 15.0' of 4.0" Casing Used -46.2 CCD -60.12 3.0P 19								
8								
11								
-60								

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NR-No Recovery

DESIGNED JW
CHECKED YMM
DRAWN JLS & PS
CHECKED TPG & JXH



SOIL BORING LOG 1
STRUCTURE NUMBER 016-1308

SHEET NO. S18	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	90/94	2010-075-I	COOK	33	27
S19 SHEETS	CONTRACT NO. 60L61				
DATE: 12-03-10		ILLINOIS FED. AID PROJECT			