STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Geo Services, Inc
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(630) 305-3838

SOIL BORING LOG

DATE 9182008

LOGGED BY MD

JOB NUMBER P-91-186-08 GSI JOB No. 08015

ROUTE I-294 & I-57 DESCRIPTION I-57 & I-294 Interchange Improvements (PTB 146, Item 1)

SECTION – LOCATION I-57 Over I-294

COUNTY Cook DRILLING METHOD Straight Flight Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. 016-1096 & 016-1097
Station –
BORING NO. I57-I294 B-9
Station: 260+15
Offset: 6.0' Right
Ground Surface Elev. 636.0

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

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)	
				5.0" ASPHALT, 6.5" CONCRETE, 2.5" CRUSHED STONE 634.8
	4			
	6			CLAY with Crushed Stone– medium dense (Fill) 633.0
	6	NP	12	
	3			CLAY–brown & gray– very stiff to hard (A–6) Fill
	5			
–5	5	4.0P	19	
	3		109	
	5	3.7S@		
	6	11.3%	20	CLAY–brown & gray– very stiff to hard (A–6) Fill
	4			
	7			
–10	8	4.5P	17	
	6		108	
	9			
	10	4.25B	18	
	3		106	
	4			SILTY LOAM to SILT–gray– medium dense to very dense (A–4)
–15	5	2.5B	22	
	5		106	
	8			
	9	2.6B	20	
	5		107	
	6			
–20	7	3.5B	20	

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)	
	5		106	
	8	2.2B	21	
	5		109	CLAY–brown & gray– very stiff to hard (A–6) Fill
–25	8	3.7B	20	
	8		105	
	10			
	11	2.4B	22	
	6		106	
	8			
–30	10	2.7B	22	
	3			
	4			
–35	6	NP	23	SILTY LOAM to SILT–gray– medium dense to very dense (A–4)
	30			
	506"			
–40		NP	13	

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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SECTION – LOCATION I-57 Over I-294

COUNTY Cook DRILLING METHOD Straight Flight Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. 016-1096 & 016-1097
Station –
BORING NO. I57-I294 B-9
Station: 260+15
Offset: 6.0' Right
Ground Surface Elev. 636.0

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

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)	
				SILTY LOAM to SILT–gray– medium dense to very dense (A–4)
	17			
	19			
–45	22	NP	12	
				589.0
	40			Drillers Observation: Cobbles or boulder from –49.5' to –51.0'.
	503"			
–50		NP	11	
				SANDY LOAM with Fractured Rock– gray–very dense (A–2/A–4)
	505"			
–55		NP	10	
				578.0
				Drillers Observation: Apparent Bedrock.
				576.0 –60

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)	
				Run 1 (–60.0' to –70.0') Silurian System Niagaran Series Dolomite
				Light gray to gray with horizontal bedding. Fine grained with some varving. Horizontal fractures @ –60.3', –60.8', –60.9', –61.1', –62.0' & –62.3'. Vertical fracture from –62.3' to –62.8'. Horizontal fractures @ ~ 62.9', –63.3', –63.4', –63.9', –64.2', –65.9', –66.1', –66.2', –67.2', –67.6' & –67.9'. 1.5" clay parting @ –68.4'. Horizontal fracture @ –68.9'.
–65				RUN 1
				Recovery = 93.0% R.Q.D. = 47.0%
				566.0 –70
				End Of Boring @ –70.0' Straight Flight Augers To –10.0' Rotary Drilling To Completion CME Automatic Hammer 10.0' 4.0"* Casing Used 60.0' 3.0"* Casing Used
–75				
–80				

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

BORING LOGS 2
S.N. 016-1252

TY·LIN INTERNATIONAL

DESIGNED	-	DY
CHECKED	-	AD,LS
DRAWN	-	DY,EI
CHECKED	-	LS,SP,PDF
DATE	-	03/18/10

REVISIONS	
NAME	DATE

SHEET NO. 58
62 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	1414.2B	COOK	516	371
		CONTRACT NO. 60J27		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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