STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG

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

PAGE 1 of 2
DATE 11/11-12/2008
LOGGED BY MR
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-6
Station: 257+98
Offset: 122.0' Right
Ground Surface Elev. 615.6

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 (%)
12.0" ASPHALT, 24.0" CRUSHED STONE	612.6		8, 12, 17	NP	7
CLAY-brown & gray- very stiff (A-6) Fill	609.6	-5	4, 6, 9	3.25B	*109* / 19
CRUSHED STONE-dense (Fill)	607.1		10, 14, 19	NP	5
CLAY-brown & gray-hard (A-6) Fill	605.1	-10	4, 8, 11	4.1B	*109* / 19
LOAM-dark brown & gray- loose (A-4)	602.6		2, 2, 3	NP	24
SILTY CLAY-gray- medium stiff (A-6) Wet	600.1	-15	0, 1, 2	0.5P	29
SAND-gray- loose to medium dense (A-3)			3, 5, 7	NP	21
		-20	3, 3, 3	NP	21
SAND-loose to medium dense (A-3)	595.1		13, 31, 50/5"	NP	15
SILTY LOAM with Fractured Rock- gray-very dense (A-4)		-25	22, 30, 41	NP	11
			41, 50/4"	NP	8
		-30	39, 50/4"	NP	9
		-35	21, 27, 35	NP	8
		-40	18, 31, 48	NP	10

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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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-6
Station: 257+98
Offset: 122.0' Right
Ground Surface Elev. 615.6

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 with Fractured Rock- gray-very dense (A-4)	573.6				
FRACTURED ROCK-gray- very dense (A-1)	570.1	-45	48, 50/2"	NP	5
Drillers Observation: Apparent Bedrock.	569.1				
Run 1 (-46.5' to -56.5') Silurian System Niagaran Series Dolomite Light gray to gray with horizontal bedding. Fine grained with some varving. Vertical fracture from -46.5' to -47.2'. Horizontal fracture @ -49.3'. Vertical fracture from -49.7' to -50.3'. Horizontal fractures @ -51.2', -52.3' & -54.3'. ½" clay parting @ -54.6'. Recovery = 96.5% R.Q.D. = 79.0%	559.1	-50, -55	RUN 1		
End Of Boring @ -56.5' Straight Flight Augers To -10.0' Rotary Drilling To Completion CME Automatic Hammer 10.0' 4.0"* Casing Used 3.0"* Casing Used		-60			
		-65, -70, -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

ROCK CORE LOG

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(630) 355-2838

PAGE 1 of 1
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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
CORING METHOD Rotary Wash
STRUCT. NO. 016-1096 & 016-1097
Station -
CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Core Diameter 2.0 in
Top of Rock Elev. 570.1
Begin Core Elev. 569.1
BORING NO. I57-I294 B-6
Station: 257+98
Offset: 122.0' Right
Ground Surface Elev. 615.6

Description	Elev.	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Run 1 (-46.5' to -56.5') Silurian System Niagaran Series Dolomite Light gray to gray with horizontal bedding. Fine grained with some varving. Vertical fracture from -46.5' to -47.2'. Horizontal fracture @ -49.3'. Vertical fracture from -49.7' to -50.3'. Horizontal fractures @ -51.2', -52.3' & -54.3'. ½" clay parting @ -54.6'.	569.1	-51.5 -56.5	1	96.5	79.0	n/a	974@ -48.5'

Color pictures of the cores Yes Cores will be stored for examination for -
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BORING LOGS 6
STRUCTURE NO. 016-1251

TYLININTERNATIONAL	DESIGNED - JMA	
	CHECKED - SP,	
	DRAWN - JMA	
	CHECKED - SP,PDF	
	DATE - 03/18/10	

REVISIONS	
NAME	DATE

SHEET NO. 62
68 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	1414.2B	COOK	516	307

CONTRACT NO. 60J27
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

P:\602540(57-294)\STRUCTURAL\I-57 OVER I294\0161251-60J27-062-BORING6.dgn
3/17/2010