

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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**SOIL BORING LOG**

DATE 9/19/2008  
LOGGED BY DR  
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-8  
Station: 260+46  
Offset: 67.5' Left  
Ground Surface Elev. 635.1

D E P T H H S	B L O C K S Q <sub>u</sub>	U N D E R S T R U C T U R E	M O I S T U R E %	Surface Water Elev. n/a	Stream Bed Elev. n/a	Groundwater Elevation: First Encounter n/a Upon Completion n/a	After Hrs.	D E P T H H S	B L O C K S Q <sub>u</sub>	U N D E R S T R U C T U R E	M O I S T U R E %
18.0" ASPHALT											
633.6											
CRUSHED STONE with Clay-very dense (Fill)											
632.1											
CLAY-brown & gray-very stiff to hard (A-6) Fill											
CLAY-brown & gray-very stiff to hard (A-6) Fill											
604.1											
SILTY LOAM to LOAM-dark brown & gray-medium dense (A-4)											
598.1											
SANDY LOAM with Fractured Rock-gray-dense to very dense (A-2/A-4)											

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 (ASTM D 1586) The Unit Dry Weight (pcf) is noted in italics above moist (%)  
NB-No Recovery

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DATE 9/19/2008  
LOGGED BY DR  
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-8  
Station: 260+46  
Offset: 67.5' Left  
Ground Surface Elev. 635.1

D E P T H H S	B L O C K S Q <sub>u</sub>	U N D E R S T R U C T U R E	M O I S T U R E %	Surface Water Elev. n/a	Stream Bed Elev. n/a	Groundwater Elevation: First Encounter n/a Upon Completion n/a	After Hrs.	D E P T H H S	B L O C K S Q <sub>u</sub>	U N D E R S T R U C T U R E	M O I S T U R E %
SANDY LOAM with Fractured Rock-gray-dense to very dense (A-2/A-4)											
580.1											
577.6											
RUN 1											
RUN 2											
RUN 1											

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 (ASTM D 1586) The Unit Dry Weight (pcf) is noted in italics above moist (%)  
NB-No Recovery

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**ROCK CORE LOG**

DATE 9/19/2008  
LOGGED BY DR  
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 CORING METHOD Rotary Wash

STRUCT. NO. 016-1096 & 016-1097  
Station -  
BORING NO. I57-I294 B-8  
Station: 260+46  
Offset: 67.5' Left  
Ground Surface Elev. 635.1

CORING BARREL TYPE & SIZE NX Double Swivel-10 ft  
Core Diameter 2.0 in  
Top of Rock Elev. 577.6  
Begin Core Elev. 577.6

D E P T H H S	C O R E R U N S	R E C O V E R Y %	R E Q U I R E D D I A M E T E R (in)	R E C O R D E D D I A M E T E R (in)	S T R E N G T H (tsf)
Run 1 (-57.5' to -65.5')					
577.6					
Silurian System Niagaran Series Dolomite					
Light gray to gray with horizontal bedding. Fine grained with some varving. Highly fractured from -57.5' to -58.5' with 4.0" clay parting @ -57.8'. Transverse fracture from -58.5' to -58.9'. Horizontal fractures @ -59.2', -59.3' & -60.3'. 2.0" clay parting @ -66.5'. Horizontal fracture @ -61.9'. Vertical fracture with intersecting horizontal fractures from -61.9' to -63.7'. Horizontal fractures @ -64.0' & -63.7'.					
Recovery = 97.5% R.Q.D. = 41.9%					
569.6					
Run 2 (-65.5' to -73.5')					
Silurian System Niagaran Series Dolomite					
Light gray to gray with horizontal bedding. Fine grained with some varving. Horizontal fractures @ -66.1' & -66.6'. Tight vertical fracture from -67.8' to -69.5'. Horizontal fractures @ -68.4', -70.4', -70.8' & -71.5'.					
Recovery = 97.5% R.Q.D. = 95.6%					
561.6					
End Of Boring @ -73.5'					
Straight Flight Augers To -10.0'					
Rotary Drilling To Completion					
CME Automatic Hammer					
10.0' 4.0" Casing Used					
58.0' 3.0" Casing Used					
580.1					
577.6					
RUN 1					
RUN 2					
RUN 1					

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 8**  
**STRUCTURE NO. 016-1251**

<b>TYLIN INTERNATIONAL</b>	DESIGNED - JMA	REVISIONS		SHEET NO. 64	F.A.I RTE. 57	SECTION 1414.2B	COUNTY COOK	TOTAL SHEETS 516	SHEET NO. 309
	CHECKED - SP,	NAME	DATE						
	DRAWN - JMA								
	CHECKED - SP,PDF								
DATE - 03/18/10				68 SHEETS CONTRACT NO. 60J27					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT									

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