Illinois Department of Transportation
Division of Highways
Ill. Dept. of Trans. 0-7

SOIL BORING LOG

Page 1 of 2

Date 6/9/05

ROUTE TR 10 DESCRIPTION Rayse Creek LOGGED BY E. Sandschafer

SECTION 03-03113-00-BR LOCATION NW 1/4, SEC. 18, TWP. 2 S, RNG. 1 E, 3 PM

COUNTY Jefferson DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 041-3064
Station

BORING NO. 1 (S Abut)
Station 22' S of exist S Abut
Offset 0.00ft
Ground Surface Elev. 478.78 ft

Surface Water Elev. 465.75 ft
Stream Bed Elev. 464.57 ft

Groundwater Elev.:
First Encounter 456.8 ft
Upon Completion Washed ft
After ___ Hrs. samples ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
478.38			
1" oil & chip surface over mixture of Sandy Loam, oil and Gravel. Very stiff to stiff, damp, red, CLAY w/ trace fine gravel.			
	5		
	6	4.0	13
	8	PP	
474.28			
Stiff, damp, red marbled gray, SILTY LOAM.	6		
-5	6	1.7	18
	5	S	
471.78			
Medium to very soft, very damp, dark gray, SILTY LOAM.	0		
	2	0.6	27
	2	B	
-10	0		
	0	0.1	27
	0	B	
	0		
466.28			
Very soft, very damp, dark gray, SANDY LOAM.	0		
	0	0.1	23
	1	B	
-15	0		
463.66			
Very soft to medium, very damp, gray/brown/red, SILTY LOAM.	0	0.1	25
	0	B	
	0		
	2	0.5	23
	2	B	
-20	0		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	2	0.5	22
Very soft to medium, very damp, gray/brown/red, SILTY LOAM. (continued)	2	B	
456.48			
Medium, damp, red marbled gray, SILTY CLAY.	1		
	2	0.7	21
	3	BS	
453.78			
-25 Very soft, very damp, gray, SILTY LOAM.	0		
	2	0.1	23
	2	B	
451.78			
Soft to medium, damp, dark gray, SILTY CLAY.	0		
	0	0.5	23
	1	B	
-30	0		
	3	0.7	24
	3	B	
* Very dense, moist, gray w/ black specks, SANDSTONE.			
** 50/3"			
50/1"			
50/1"			
443.88			
-35 Very dense, damp, gray, SAND. 13% passing #200 sieve.	17		
	40		20
	50/4"		
439.28			
* 438.98	**		
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Latitude N 39 deg 21.21 min. Longitude W 89 deg 05.45 min. Map Datum WGS 84

Illinois Department of Transportation
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ROCK CORE LOG

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Date 6/9/05

ROUTE TR 10 DESCRIPTION Rayse Creek LOGGED BY E. Sandschafer

SECTION 03-03113-00-BR LOCATION NW 1/4, SEC. 18, TWP. 2 S, RNG. 1 E, 3 PM

COUNTY Jefferson CORING METHOD Rotary, surf set diamond bit

STRUCT. NO. 041-3064
Station

CORING BARREL TYPE & SIZE NW, conv dbl bbl, split inner

BORING NO. 1 (S Abut)
Station 22' S of exist S Abut
Offset 0.00ft
Ground Surface Elev. 478.78 ft

Core Diameter 2.06 in
Top of Rock Elev. 439.28 ft
Begin Core Elev. 438.98 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
438.98					
Gray w/ thin black layering, highly weathered, SANDSTONE.		100	15	0.3	
433.98					
-45 Gray w/ thin black layering, slightly weathered, SANDSTONE.		100	79	0.3	
428.98					
-50 Extent of exploration.					

Benchmark: Nail in 12" dia Birch tree NE of existing bridge = 476.24', provided by Jefferson County Engineer.

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

BBS, form 138 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Ill. Dept. of Trans. 0-7

SOIL BORING LOG

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Date 6/15/05

ROUTE TR 10 DESCRIPTION Rayse Creek LOGGED BY E. Sandschafer

SECTION 03-03113-00-BR LOCATION NW 1/4, SEC. 18, TWP. 2 S, RNG. 1 E, 3 PM

COUNTY Jefferson DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 041-3064
Station

BORING NO. 2 (N Abut)
Station 16' N of exist N Abut
Offset 1.00ft W of centerline
Ground Surface Elev. 479.38 ft

Surface Water Elev. 466.75 ft
Stream Bed Elev. 464.57 ft

Groundwater Elev.:
First Encounter 459.9 ft
Upon Completion 462.4 ft
After ___ Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
478.98			
1" oil & chip surface over mixture of Sandy Loam, oil and Gravel. Medium to soft, damp, gray mottled red, SILTY LOAM.			
	2		
	4	0.8	12
	4	B	
-5	1		
	2	1.1	23
	4	B	
	1		
	1	0.3	24
	1	B	
-10	0		
	0	0.5	23
	2	B	
	0		
	0	0.5	24
	2	B	
-15	0		
464.38			
Soft to medium, damp, gray/brown/red, SILTY CLAY.	1	0.5	25
	2	B	
	1		
	2	0.5	25
	3	B	
459.48			
-20 Gray marbled brown.	0		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	2	1.1	24
Stiff, damp, gray marbled brown, CLAY w/ black specks. (continued)	3	B	
456.66			
Medium, damp, gray marbled red, SILTY CLAY.	1		
	2	0.8	24
	3	B	
-25	0		
	2	0.8	24
	4	B	
	2		
	4	0.8	22
	5	B	
-30	1		
	2	0.8	22
	3	B	
* Extent of exploration.			
Benchmark: Nail in 12" dia Birch tree NE of existing bridge = 476.24', provided by Jefferson County Engineer.			
** 50/2"			
50/1"			
50/1"			
444.88			
-35 Loose, damp, gray, SANDY LOAM w/ many gray, Sandstone fragments and trace Coal.	1		
	2		16
	7		
441.88			
Very dense, moist, gray, SANDSTONE.			
* 439.58	**		
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Latitude N 39 deg 21.23 min. Longitude W 89 deg 05.45 min. Map Datum WGS 84

BORING 1

BORING 2

DESIGNED	A.S.L.
CHECKED	S.W.M.
DRAWN	D.T.M.
CHECKED	D.A.B.

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS
HLR
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400

PROJECT NUMBER 08.0127.130 DATE: 01/21/09

PIERS
STRUCTURE NO. 041-3742

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10	03-03113-00-BR	JEFFERSON	15	15
CASNER ROAD DISTRICT		CONTRACT NO. 99362		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		