F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	*	MADISON	420	312
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* 60-10K-1, 60-10HB

CONTRACT NO. 76709

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways
Shively Geotechnical, Inc.

Page 1 of 2

Date 1/31/05

ROUTE 586 DESCRIPTION East Retaining Wall LOGGED BY MH/PMK

SECTION 60-10-4HB LOCATION SW 1/4, SEC. 5, TWP. 3N, RNG. 7W, 3rd PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140-lb Hydraulic

STRUCT. NO. 060-W002
Station

BORING NO. SB-21
Station 1348+40
Offset 115.00ft Left
Ground Surface Elev. 562.47 ft

Surface Water Elev. NA ft
Stream Bed Elev. NA ft

Groundwater Elev.:
First Encounter 546.5 ft ▼
Upon Completion 537.5 ft ▽
After ___ Days ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray-Brown CLAY			2		
			3 5	2.4 S/15	23.8
	559.47				
Gray-Brown Silty Clay LOAM			1		
			2 2	0.1 B/20	25.0
		-5			
			1		
			1 4	0.2 S/10	32.6
	554.47				
Dark Gray-Brown Silty Clay LOAM			1		
			2 2	1.0 B/20	28.1
		-10			
	551.97				
Dark Gray SILT			1		
			1 2	0.5 B/20	30.7
	549.47				
Very Dark Brown Silty Clay LOAM, with Organics			1		
			3 4	0.3 S/5	36.7
		-15			
	545.97		1		
Dark Gray-Brown Silty Clay LOAM			2 2	0.8 B/20	39.6
			1		
			2 2	0.2 B/20	32.5
		-20			
Dark Gray-Brown Silty Clay LOAM (continued)	541.97				
Gray CLAY			2		
			2 3	0.7 S/15	27.3
			2		
			3 4	1.3 S/10	25.3
		-35			
			2		
			3 4	1.7 S/15	22.0
	534.47				
Gray Sandy LOAM			2		
			2 3	1.0 B/15	22.1
		-30			
	530.72				
Gray-Brown CLAY			3		
			7 11	3.1 S/20	17.9
		-35			
			5		
			9 14	4.8 S/15	14.8
		-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)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways
Shively Geotechnical, Inc.

Page 2 of 2

Date 1/31/05

ROUTE 586 DESCRIPTION East Retaining Wall LOGGED BY MH/PMK

SECTION 60-10-4HB LOCATION SW 1/4, SEC. 5, TWP. 3N, RNG. 7W, 3rd PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140-lb Hydraulic

STRUCT. NO. 060-W002
Station

BORING NO. SB-21
Station 1348+40
Offset 115.00ft Left
Ground Surface Elev. 562.47 ft

Surface Water Elev. NA ft
Stream Bed Elev. NA ft

Groundwater Elev.:
First Encounter 546.5 ft ▼
Upon Completion 537.5 ft ▽
After ___ Days ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray-Brown CLAY (continued)					
			5 10 13	4.0 S/15	18.2
		-45			
			3 6 10	2.8 S/20	17.7
	512.47	-50			
End of Boring					
		-60			

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)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways
Shively Geotechnical, Inc.

Page 1 of 2

Date 1/31/05

ROUTE 586 DESCRIPTION East Retaining Wall LOGGED BY MH/PMK

SECTION 60-10-4HB LOCATION SW 1/4, SEC. 5, TWP. 3N, RNG. 7W, 3rd PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140-lb Hydraulic

STRUCT. NO. 060-W002
Station

BORING NO. SB-22
Station 1348+90
Offset 100.00ft Left
Ground Surface Elev. 565.22 ft

Surface Water Elev. NA ft
Stream Bed Elev. NA ft

Groundwater Elev.:
First Encounter 549.2 ft ▼
Upon Completion 547.7 ft ▽
After 18 Days 561.7 ft ▽

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Dark Brown Silty Clay LOAM, trace Organics			1		
			3 5	1.8 S/15	23.9
-Very Dark Brown below 3.0 Feet					
			4		
			6 7	2.2 S/10	20.6
		-5			
Very Dark Gray Silty CLAY	559.72				
			1		
			2 3	0.8 S/20	26.1
			1		
			1 3	0.1 S/10	29.3
		-10			
Dark Gray-Brown Silty Clay LOAM	554.72				
			1		
			1 2	0.4 S/15	29.3
-Gray-Brown below 13.0 Feet					
			1		
			1 2	0.1 B/20	30.9
		-15			
Dark Gray-Brown SILT	549.72				
			2		
			3 3	1.8 B/20	27.5
Dark Gray-Brown Silty Clay LOAM	547.22				
			1		
			1 2	0.9 B/20	30.5
		-20			
Dark Gray-Brown Silty Clay LOAM (continued)					
			1		
			1 2	0.2 S/10	32.8
-Dark Gray below 23.0 Feet					
			1		
			2 3		30.0
		-25			
			1		
			1 2		30.9
			1		
			1 2		28.6
		-30			
Gray Clay LOAM	533.47				
			3		
			5 10	2.6 S/20	14.0
		-35			
Gray CLAY	528.47				
			4		
			5 7	1.9 S/15	12.1
		-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)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways
Shively Geotechnical, Inc.

Page 2 of 2

Date 1/31/05

ROUTE 586 DESCRIPTION East Retaining Wall LOGGED BY MH/PMK

SECTION 60-10-4HB LOCATION SW 1/4, SEC. 5, TWP. 3N, RNG. 7W, 3rd PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140-lb Hydraulic

STRUCT. NO. 060-W002
Station

BORING NO. SB-22
Station 1348+90
Offset 100.00ft Left
Ground Surface Elev. 565.22 ft

Surface Water Elev. NA ft
Stream Bed Elev. NA ft

Groundwater Elev.:
First Encounter 549.2 ft ▼
Upon Completion 547.7 ft ▽
After 18 Days 561.7 ft ▽

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray CLAY (continued)					
-Gray-Brown below 37.0 Feet					
			4		
			6 9	2.7 S/15	22.7
		-45			
	515.22	-50	4 9 14	4.4 S/20	17.9
End of Boring					
		-55			
		-60			

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)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways
Shively Geotechnical, Inc.

Page 1 of 2

Date 1/28/05

ROUTE 586 DESCRIPTION East Retaining Wall LOGGED BY MH/PMK

SECTION 60-10-4HB LOCATION NW 1/4, SEC. 8, TWP. 3N, RNG. 7W, 3rd PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140-lb Hydraulic

STRUCT. NO. 060-W002
Station

BORING NO. SB-23
Station 1354+33
Offset 82.00ft Left
Ground Surface Elev. 563.08 ft

Surface Water Elev. NA ft
Stream Bed Elev. NA ft

Groundwater Elev.:
First Encounter 557.1 ft ▼
Upon Completion 524.1 ft ▽
After 21 Days 562.6 ft ▽

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray-Brown SILT					
			5 6 6	3.2 S/15	19.1
			1		
			2 3	1.0 B/20	25.8
		-5			
Field shear vane test at 7.5 Feet					
					29.0
		-10			
Gray-Brown Silty Clay LOAM	552.58				
Field shear vane test at 12.5 Feet					
					26.3
		-15			
			1		
			2 3	0.1 B/20	28.5
Dark Gray-Brown Silty CLAY	545.08				
			2		
			2 3	1.0 S/10	26.2
		-20			
Dark Gray-Brown Silty CLAY (continued)	542.58				
Gray-Brown Silty LOAM			1		
			1 1		24.6
	540.08				
Brown Clay LOAM			2		
			5 8	1.4 S/15	15.8
		-25			
-Gray-Brown below 25.5 Feet					
			3		
			8 4	1.4 S/20	14.4
	535.08				
Brown Silty Clay LOAM					
No recovery in SPT sampler, obtained grab sample			9		
			14 17		30.2
		-30			
	531.33				
Dark Gray-Brown SILT					
			10		
			14 12	4.0 S/15	17.1
		-35			
	526.33				
Gray-Brown CLAY					
			4		
			5 7	2.1 S/15	25.7
		-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)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways
Shively Geotechnical, Inc.

Page 2 of 2

Date 1/28/05

ROUTE 586 DESCRIPTION East Retaining Wall LOGGED BY MH/PMK

SECTION 60-10-4HB LOCATION NW 1/4, SEC. 8, TWP. 3N, RNG. 7W, 3rd PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140-lb Hydraulic

STRUCT. NO. 060-W002
Station

BORING NO. SB-23
Station 1354+33
Offset 82.00ft Left
Ground Surface Elev. 563.08 ft

Surface Water Elev. NA ft
Stream Bed Elev. NA ft

Groundwater Elev.:
First Encounter 557.1 ft ▼
Upon Completion 524.1 ft ▽
After 21 Days 562.6 ft ▽

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray-Brown CLAY (continued)					
-Brown below 42.0 Feet					
			5		
			6 9	3.0 S/20	21.8
		-45			
			4		
			11 18	4.8 S/20	17.8
	513.08	-50			
End of Boring					
		-55			
		-60			

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)

NOTE:

1. Structure Number listed on boring logs as 060-W002 is SN 060-W006.

Sht. R-12 of R-13

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 162 OVER I-55/70 IN TROY
F.A.I ROUTE 70 SECTION 60-10K-1, 60-10HB
MADISON COUNTY STA. 17+40 TO STA. 22+50
STRUCTURE NO. 060-W006

BORING LOGS

DATE: 05/2006

DRAWN: BTO
CHECKED: JAN