F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-10K-1,60-10HB	MADISON	420	285
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 76709

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

Date 4/24/01

ROUTE FAP 586 DESCRIPTION IL 162 over FAI 55/70 @ Troy LOGGED BY Mark Denton

SECTION 60R-2, 37R-1 LOCATION SW 1/4, SEC. 5, TWP. 3N, RNG. 7W, 3 PM

COUNTY Madison DRILLING METHOD Drill Rig HAMMER TYPE 140#

STRUCT. NO. ____ Station ____

BORING NO. 11 NE Corner Cone Station 19+09 Offset 94.00ft RT Ground Surface Elev. 565.10 ft

Surface Water Elev. ____ ft Stream Bed Elev. ____ ft

Groundwater Elev.: First Encounter ____ ft Upon Completion ____ ft After ____ Hrs. ____ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown Silty CLAY (fill)			2		
			5	2.4	25
	562.1		3	S/10	
Gray Silty Clay LOAM				1.5	28
				S/15	
		-5	3		
			2	1.2	
			3	S/15	28
			2		
			4	2.8	
	556.6		5	S/15	28
Dark Brown Robine SILT					45
Burn Results: 8.0% Organics		-10	2		
			4	1.5	
Burn Results: 6.5% Organics			5	S/10	37
	553.6				
Gray Silty CLAY with some Organics			0		
			0	0.7	
			0	S/10	33
	551.1				
Dark Brown Robine SILT					29
		-15	0		
Burn Results: 7.4% Organics			2	1.1	
			3	S/10	49
	549.1				
Gray Silty CLAY			0		
			2	1.0	
		-20	3	S/10	36
Gray Silty CLAY (continued)			0	0.8	
			3	S/10	24
	543.6		3		
Gray Clay LOAM			3		
			4	1.2	
			5	S/5	26
	541.1				
Gray Clay LOAM		-25	0		
			0	0.4	
			0	S/10	28
			8		
			14	4.5	
	536.6		26	S/15	12
Brown Loamy SAND with some Gravel					
See Gradation #11, Depth: 30.5'		-30	9		
			10	NC	
			14		
	533.1				
Brown & Gray Clay LOAM					
		-35	10		
			15	4.3	
			25	S/15	11
		-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
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 2 of 2

Date 4/24/01

ROUTE FAP 586 DESCRIPTION IL 162 over FAI 55/70 @ Troy LOGGED BY Mark Denton

SECTION 60R-2, 37R-1 LOCATION SW 1/4, SEC. 5, TWP. 3N, RNG. 7W, 3 PM

COUNTY Madison DRILLING METHOD Drill Rig HAMMER TYPE 140#

STRUCT. NO. ____ Station ____

BORING NO. 11 NE Corner Cone Station 19+06 Offset 94.00ft RT Ground Surface Elev. 565.10 ft

Surface Water Elev. ____ ft Stream Bed Elev. ____ ft

Groundwater Elev.: First Encounter ____ ft Upon Completion ____ ft After ____ Hrs. ____ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown & Gray Clay LOAM (continued)			3	3.1	
			8	S/15	23
			10		
		-45	5		
			8	3.6	
			12	S/15	19
		-50	9		
			13	3.9	
			17	S/10	16
		-55	8		
			13	4.2	
			17	S/15	17
Fine to Coarse Limestone Gravel		-60			
(Very Dry) Brown & Gray Clay LOAM (continued)			50/.3	3.3	
				S/15	16
	500.1	-65	10	2.0	
			17	S/10	
Gray SILT			22	5.7	23
				S/10	19
		-70	7		
Some wood found	494.6		10	2.0	34
Gray Silty CLAY	494.1		15	S/20	
End of Boring @ 71 ft				2.3	25
				S/15	
		-75			
		-80			

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
Division of Highways
Shively Geotechnical, Inc.

SOIL BORING LOG

Page 1 of 2

Date 1/26/05

ROUTE 586 DESCRIPTION West 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-W001 Station ____

BORING NO. SB-15 Station 1352+01 Offset 84.00ft Right Ground Surface Elev. 560.57 ft

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

Groundwater Elev.: First Encounter Dry ft Upon Completion 515.9 ft ▽ After 23 Days 560.3 ft ▽

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray-Brown Silty Clay LOAM		▽			
			1		
			2	1.0	28.6
			2	S/20	
			1		
			2	1.0	28.1
		-5	3	B/20	
Field shear vane test at 7.5 Feet					
					31.7
Gray SILT	551.07	-10			
Dark Gray Brown Silty Clay LOAM	549.07				
Field shear vane test at 12.5 Feet					
					29.6
		-15			
-Very Dark Gray, with Organics below 15.5 feet			1		
			1	0.7	37.2
			3	B/20	
Dark Gray-Brown Silty CLAY	542.57				
			1		
			2	1.5	24.2
		-20	4	S/20	
Dark Gray-Brown Silty CLAY (continued)	540.07				
Gray CLAY			2		
			2	0.8	23.4
			4	S/15	
Gray SILT	537.57				
			0		
			1	0.4	27.8
		-25	2	S/15	
Gray-Brown Clay LOAM	535.07				
			1		
			2		18.3
			3		
Gray Brown Silty LOAM	532.57				
			2		
			5	1.5	13.0
		-30	9	S/10	
Gray-Brown CLAY	528.82				
			2		
			4	1.8	20.3
		-35	6	B/15	
		-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
Division of Highways
Shively Geotechnical, Inc.

SOIL BORING LOG

Page 2 of 2

Date 1/26/05

ROUTE 586 DESCRIPTION West 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-W001 Station ____

BORING NO. SB-15 Station 1352+01 Offset 84.00ft Right Ground Surface Elev. 560.57 ft

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

Groundwater Elev.: First Encounter Dry ft Upon Completion 515.9 ft ▽ After 23 Days 560.3 ft ▽

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray-Brown CLAY (continued)					
			3		
		▽	5	2.8	18.1
		-45	8	S/20	
Gray-Brown Clay LOAM	513.82				
			5		
			11	6.6	15.7
			17	S/15	
End of Boring	510.57	-60			
		-65			
		-70			
		-75			
		-80			

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
Division of Highways
Shively Geotechnical, Inc.

SOIL BORING LOG

Page 1 of 2

Date 1/28/05

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-19 Station 1351+76 Offset 84.00ft Left Ground Surface Elev. 562.89 ft

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

Groundwater Elev.: First Encounter 549.9 ft ▼ Upon Completion 529.9 ft ▽ After 18 Days 561.9 ft ▽

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray-Brown Silty Clay LOAM		▽			
			2		
			4	2.8	20.5
			4	S/10	
Gray-Brown SILT	559.89				
			1		
			2	0.7	28.2
		-5	3	B/20	
					27.7
Field shear vane test at 10.0 Feet		-10			
		▼			
					32.5
Dark Gray Silty Clay LOAM	548.39	-15			
Field shear vane test at 15.0 Feet					
			1		
			2	0.5	28.0
			2	S/20	
Dark Gray Silty CLAY	544.89				
			1		
			1	0.2	31.1
		-20	2	B/10	
Dark Gray Silty CLAY (continued)	542.39				
Gray Clay LOAM			1		
			2	0.4	26.2
			3	S/15	
			1		
			3	0.4	16.8
		-25	6	S/10	
			2		
			5	1.2	14.1
			6	S/15	
Brown Silty CLAY	534.89				
			2		
			6	4.2	15.2
		-30	9	S/20	
-Gray below 32.0 Feet		▽			
			5		
			10	5.5	17.0
		-35	11	S/15	
Gray-Brown CLAY	526.14				
			3		
			6	1.8	21.7
		-40	7	S/15	

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
Division of Highways
Shively Geotechnical, Inc.

SOIL BORING LOG

Page 2 of 2

Date 1/28/05

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-19 Station 1351+76 Offset 84.00ft Left Ground Surface Elev. 562.89 ft

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

Groundwater Elev.: First Encounter 549.9 ft ▼ Upon Completion 529.9 ft ▽ After 18 Days 561.9 ft ▽

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray-Brown CLAY (continued)					
			4		
			7	2.9	21.8
		-45	10	S/15	
-Trace Gravel below 47.0 Feet					
			4		
			10	4.3	18.9
			16	S/15	
End of Boring	512.89	-50			
		-55			
		-60			
		-65			
		-70			
		-75			
		-80			

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
Division of Highways
Shively Geotechnical, Inc.

SOIL BORING LOG

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	3.2	19.1
			6	S/15	
			1		
			2	1.0	25.8
		-5	3	B/20	
		▼			
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	0.1	28.5
			3	B/20	
Dark Gray-Brown Silty CLAY	545.08				
			2		
			2	1.0	26.2
		-20	3	S/10	
Dark Gray-Brown Silty CLAY (continued)	542.58				
Gray-Brown Silty LOAM			1		
			1		24.6
			1		
Brown Clay LOAM	540.08				
			2		
			5	1.4	15.8
		-25	8	S/15	
-Gray-Brown below 25.5 Feet					
			3		
			8	1.4	14.4
			4	S/20	
Brown Silty Clay LOAM	535.08				
No recovery in SPT sampler, obtained grab sample			9		
			14		30.2
		-30	17		
Dark Gray-Brown SILT	531.33				
			10		
			14	4.0	17.1
		-35	12	S/15	
Gray-Brown CLAY	526.33				
			4		
		▽			
			5	2.1	25.7
		-40	7	S/15	

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
Division of Highways
Shively Geotechnical, Inc.

SOIL BORING LOG

Page 2 of 2

Date 1/28/05

ROUTE 586 DESCRIPTION West 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-W001 Station ____

BORING NO. SB-15 Station 1352+01 Offset 84.00ft Right Ground Surface Elev. 560.57 ft

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

Groundwater Elev.: First Encounter Dry ft Upon Completion 515.9 ft ▽ After 23 Days 560.3 ft ▽

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray-Brown CLAY (continued)					
			3		
		▽	5	2.8	18.1
		-45	8	S/20	
Gray-Brown Clay LOAM	513.82				
			5		
			11	6.6	15.7
			17	S/15	
End of Boring	510.57	-60			
		-65			
		-70			
		-75			
		-80			

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)

SHT. S-67 OF S-68

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 STATION 499+48.35
STRUCTURE NO. 060-0338

BORING LOGS

DATE: 03/06 DESIGNED: BTO CHECKED: JAN DRAWN: BTO CHECKED: JAN