

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

Bridge Geotechnical Investigation  
Montgomery County Highway Route No. 7  
(FAS 723) Section 08-00129-00-BR  
Existing Structure No. 068-3012  
Project #132-3928

**ATLAS SOILS, INC.**  
HILLSBORO, ILLINOIS  
PHONE 217/532-3959

DATE: April 6, 2009 (Revised 6/24/09)  
BORING TECH.: J. Weiser  
DRILLING TECH.: M. Hough

**FOUNDATION BORING LOG**

BORING NO.: 1 STATION: 441+20, 9' LT  SURFACE ELEV.: 633.8 ft.	N Value	Qu (tsf)	W (%)	REC (%)	GROUNDWATER ELEV. COMP.: -7.5 ft; Bridge at -10.0 ft. AFTER 24 HRS.: --	N Value	Qu (tsf)	W (%)	REC (%)	
4" Oil and Chip Road Surface										
4" Aggregate										
SILTY CLAY LOAM (CL), Brown, Gray, Mottled, Moist, Stiff	10	1.0	20.8	45		19	2.83	5.4	100	
SANDY LOAM (SP), Brown, Moist, Loose	5	7	NP	--	80		4.04	12.6		
					SAND (SW), Gray, Moist, Fine to Medium Coarse	25	42	NP	--	90
SILTY CLAY (CL), Dark Brown, Moist, Medium Stiff, Trace of Sand	5	1.75	15.4	80		61	NP	--	100	
					SAND (SP), Brown, Moist, Very Dense, Medium Coarse to Coarse, Little Clay					
CLAY (CL), Dark Gray, Moist, Soft, Trace of Sand	10	3	1.0	25.9	100					
					CLAY (CH), Gray, Moist, Stiff					
Medium Stiff	4	1.5	19.2	85		30	13	3.03	23.2	100
SANDY CLAY LOAM (SC), Gray, Moist, Soft	15	3	0.5	22.1	95					
					CLAY TILL (CL), Gray, Brown, Mottled, Moist, Very Stiff, Trace of Sand	35	15	3.84	21.2	100
CLAY TILL (CL), Gray and Olive, Moist, Medium Stiff, Trace of Sand and Gravel	5	3.64	14.6	75						
Gray, Very Stiff	20	15	3.64	14.8	100	40	30	4.04	13.1	100

N: Blows per ft. to Drive 2" O.D. Split Spoon Sampler  
12" with 140 lb. Hammer falling 30"  
(Standard Penetration Test)

RQD: Rock Quality Determination

Qu: Unconfined Compression Strength  
NP: Non-Plastic  
ST: Shelby Tube  
W: Water Content

Type Failure:  
B: Bulge Failure  
S: Shear Failure  
NS: No Sample  
P: Penetrometer

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**FOUNDATION BORING LOG**

BORING NO.: 1 (cont) STATION: 441+20, 9' LT  SURFACE ELEV.: 633.8 ft.	N Value	Qu (tsf)	W (%)	REC (%)	GROUNDWATER ELEV. COMP.: -7.5 ft; Bridge at -10.0 ft. AFTER 24 HRS.: --	N Value	Qu (tsf)	W (%)	REC (%)	
CLAY TILL (CL), Gray, Moist, Hard, Trace of Sand and Gravel										
Dry to Moist										
					SAND (SW), Gray, Moist, Fine to Medium Coarse	45	32	4.85	11.5	100
Stiff										
End of Exploration at 50.0 ft.										
					CLAY TILL (CL), Gray, Brown, Mottled, Moist, Very Stiff, Trace of Sand	55				75
					Gray, Hard, Trace of Gravel	60				80

N: Blows per ft. to Drive 2" O.D. Split Spoon Sampler  
12" with 140 lb. Hammer falling 30"  
(Standard Penetration Test)

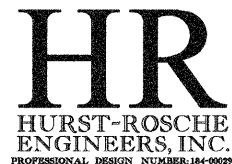
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Note:  
Borehole backfilled with soil  
cuttings upon final groundwater  
measurement.

DESIGNED JLG
CHECKED JSP
DRAWN UJ
CHECKED CJC



**BORING LOGS  
STRUCTURE NO. 068-3359**

SHEET NO. 8 9 SHEETS	F.A.S. RTE. 723	SECTION 08-00129-00-BR	COUNTY MONTGOMERY	TOTAL SHEETS 18	SHEET NO. 12
	<b>CONTRACT NO. 93498</b>				
FED. ROAD DIST. NO. 6   ILLINOIS   FED. AID PROJECT					