

**LEGEND - RSV ENGINEERING INC. (NOW BLOOM CONSULTANTS, LLC) TEST BORING LOGS**

A-1 to A-7 (and subgroups) Engineering classifications of soil samples in accordance with AASHTO M 145 standard specification.

BLOWS/150mm Number of blows required to drive a standard soil sampling device 150 mm as conducted in accordance with AASHTO T 206 standard specification.

q<sub>u</sub>, kPa Unconfined compression strength of soil sample in kilopascals determined in accordance with AASHTO T 208 standard specification.

STRAIN, % Actual strain of soil sample at failure (15 percent maximum allowed) during unconfined compression strength test (see AASHTO T 208 specification).

WATER CONTENT, % Natural moisture content of soil sample in percent determined in accordance with AASHTO T 265 standard specification.

Penetrometer Estimate An approximation of the unconfined compressive strength of the soil sample in kilopascals obtained with the use of a calibrated hand penetrometer device.

50 mm ST 50 mm diameter thin-walled tube (Shelby Tube) relatively undisturbed soil sample obtained in accordance with AASHTO T 207 standard specification.

γ<sub>d</sub> Dry unit weight of soil specimen in kilograms per cubic meter.

REC. Length of sample recovered in millimeters.

ROUTE NO.	SECT.	COUNTY	SHEET NO.	TOTAL SHEETS
F.A.I. 74	(72-7) R-3	PEORIA	592	1360
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 68200	

RSV ENGINEERING, INC.		SCHAUMBURG, ILLINOIS						
BORING LOG								
JOB NO: 98600	CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO: RWA3N-1	STATION: 10+438					
PROJECT: Interstate Route 74 Improvements - Peoria, Illinois		LOCATION: Retaining Wall Ramp A-3 SN 072-8555	OFFSET: 4.0m Rt					
BORING RIG & METHOD: CME-55 w/Hollow Stem Augers		SURF ELEV: 191.31						
SOIL DESCRIPTION	ELEV.	DEPTH	SAMPLE FROM - TO	REC. mm	BLOWS/150mm	q <sub>u</sub> kPa	STRAIN %	WATER CONTENT %
Very Stiff Br Clay Loam A-4			0.00-0.30	Auger				23
			0.30-0.76	178	2-2	192		24
Very Stiff Br Clay Loam A-4	189.42		1.07-1.52	305	2 3-5	196	15	23
			1.83-2.29	406	3 3-5	322	15	16
Loose Br Sand A-1-b	188.41		2.59-3.05	457	3 5-4			22
Hard Br Silty Clay Loam A-4	188.11		3.35-3.81	457	5 8-12	423	15	13
Dense Br Sandy Loam A-2-4	187.19		4.11-4.57	457	8 15-22			18
			4.88-5.33	457	3 5-7	294	15	15
Very Stiff Br to Gr Loam A-4	186.58	5	5.64-6.10	457	2 5-6	294	15	14
			6.40-6.86	305	4 6-8	220	15	12
Very Stiff to Hard Gr Loam A-4	183.30		7.16-7.62	457	6 7-9	294	15	12
			7.92-8.38	457	4 7-9	294	15	13
Very Stiff Gr Loam A-4	182.08		8.69-9.14	457	3 5-8	306	15	12
			9.45-9.91	457	3 6-9	334	15	12
Very Stiff Gr Loam A-4	180.59	10	10.21-10.67	457	4 7-11	393	15	12
			10.97-11.43	457	6 10-10	508	15	11
Very Stiff Gr Loam A-4	179.27		11.73-12.19	457	5 8-9	450	15	11
Boring terminated at 19.1m								
REMARKS CME Automatic Hammer Used. *Denotes Calibrated Penetrometer Estimate								
WATER 16.8m ELEV. 174.54 DURING DRILLING CORE SIZE mm DATE: Mar 14, 00								
WATER m ELEV. AT COMPLETION CASING LENGTH m DRILLER: Winslow								
WATER 14.8m ELEV. 176.46 AFTER 1/4 HRS. CASING DIAMETER mm INSPECTOR: Hjord								

RSV ENGINEERING, INC.		SCHAUMBURG, ILLINOIS						
BORING LOG								
JOB NO: 98600	CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO: RWA3N-1	STATION: 10+438					
PROJECT: Interstate Route 74 Improvements - Peoria, Illinois		LOCATION: Retaining Wall Ramp A-3 SN 072-8555	OFFSET: 4.0m Rt					
BORING RIG & METHOD: CME-55 w/Hollow Stem Augers		SURF ELEV: 191.31						
SOIL DESCRIPTION	ELEV.	DEPTH	SAMPLE FROM - TO	REC. mm	BLOWS/150mm	q <sub>u</sub> kPa	STRAIN %	WATER CONTENT %
Very Stiff Gr Loam A-4			12.50-12.95	457	4 8-10	236	15	13
			13.26-13.72	457	3 6-8	283	15	12
Very Stiff Gr Loam A-4	172.26	15	14.02-14.48	305	5 9-10	267	15	19
			14.78-15.24	457	2 5-8	196	15	13
Very Stiff Gr Loam A-4			15.54-16.00	457	4 6-8	243	15	12
			16.31-16.76	457	5 8-8	196	15	13
Very Stiff Gr Loam A-4			17.07-17.53	305	4 8-11	196	15	13
			17.83-18.29	457	3 5-9	236	15	13
Very Stiff Gr Loam A-4			18.59-19.05	457	3 7-9	220	15	13
Boring terminated at 19.1m								
REMARKS CME Automatic Hammer Used. *Denotes Calibrated Penetrometer Estimate								
WATER 16.8m ELEV. 174.54 DURING DRILLING CORE SIZE mm DATE: Mar 14, 00								
WATER m ELEV. AT COMPLETION CASING LENGTH m DRILLER: Winslow								
WATER 14.8m ELEV. 176.46 AFTER 1/4 HRS. CASING DIAMETER mm INSPECTOR: Hjord								

RSV ENGINEERING, INC.		SCHAUMBURG, ILLINOIS						
BORING LOG								
JOB NO: 98600	CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO: RWA3N-2	STATION: 10+456					
PROJECT: Interstate Route 74 Improvements - Peoria, Illinois		LOCATION: Retaining Wall Ramp A-3 SN 072-8555	OFFSET: 4.0m Rt					
BORING RIG & METHOD: CME-55 w/Hollow Stem Augers		SURF ELEV: 190.86						
SOIL DESCRIPTION	ELEV.	DEPTH	SAMPLE FROM - TO	REC. mm	BLOWS/150mm	q <sub>u</sub> kPa	STRAIN %	WATER CONTENT %
Root Zone Material: Black Silty Loam A-4; Organic matter noted	190.49		0.00-0.30	Auger				37
			0.30-0.76	1330	1 2-4	192		27
Very Stiff Br to Gr Loam A-4			1.07-1.52	457	1 4-5	201	15	14
			1.83-2.29	457	3 6-6	345	15	14
Very Stiff Br to Gr Loam A-4			2.59-3.05	457	4 7-10	373	15	14
			3.35-3.81	457	4 6-10	335	15	12
Very Stiff Br to Gr Loam A-4	183.30	5	4.11-4.57	457	7 9-10	316	15	23
			4.88-5.33	457	7 9-10	259	15	18
Very Stiff Br to Gr Loam A-4			5.64-6.10	457	4 5-6	239	15	11
			6.40-6.86	457	5 7-8	192	15	13
Medium Dense Gr Sand A-1-b	182.08		7.16-7.62	457	3 5-7	239	15	7
			7.92-8.38	457	4 5-5			9
Very Stiff Gr Loam A-4	180.59	10	8.69-9.14	457	4 5-9	278	15	13
			9.45-9.91	457	5 10-12	192	15	17
Loose to Medium Dense Gr Sand A-2-4			10.21-10.67	457	3 3-4			15
			10.97-11.43	457	9 9-7			12
Loose to Medium Dense Gr Sand A-2-4			11.73-12.19	457	3 7-9			13
REMARKS CME Automatic Hammer Used. *Denotes Calibrated Penetrometer Estimate								
WATER 10.1m ELEV. 180.74 DURING DRILLING CORE SIZE mm DATE: Mar 2, 00								
WATER m ELEV. AT COMPLETION CASING LENGTH m DRILLER: Winslow								
WATER 11.0m ELEV. 179.88 AFTER 1/4 HRS. CASING DIAMETER mm INSPECTOR: Nelson								

**STATE OF ILLINOIS**  
DEPARTMENT OF TRANSPORTATION

**BORING LOGS VII**

MSE WALL NO. 8 - RAMP A-3  
F.A.I. ROUTE 74 SECTION (72-7) R-3  
PEORIA COUNTY  
STA. 10+426.116 TO STA. 10+673.439 (RAMP A-3)  
STRUCTURE NUMBER 072-8556

PARSONS TRANSPORTATION GROUP  
CHICAGO, ILLINOIS

DRAWING NO. 16	SCALE N.T.S.	DATE 6-25-04	SHEET NO. 16
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Time: 12:04:14 PM

Date: 11/22/2004

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