

**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	587	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: RWA35-3	STATION: 10460					
PROJECT: Interstate Route 74 Improvements - Peoria, Illinois		LOCATION: Retaining Wall Ramp A-3 SN 072-8556	OFFSET: 7.0m Lt					
BORING RIG & METHOD: CME-55 w/Hollow Stem Augers		SURF ELEV: 190.57						
SOIL DESCRIPTION	ELEV.	DEPTH	SAMPLE FROM - TO	REC. mm	BLOWS/150mm	q <sub>u</sub> MPa	STRAIN %	WATER CONTENT %
Very Stiff to Hard Gr Loam A-4	175.18	15	12.50-12.95	457	7 10-14	192*		12
			13.26-13.72	457	6 10-13	239	15	12
			14.02-14.48	457	7 8-14	287	15	12
			14.78-15.24	457	7 8-11	412	15	12
Very Stiff Gr Loam A-4	169.23	20	15.54-16.00	457	3 5-8	278	15	24
			16.31-16.76	457	5 8-12	278	15	13
			17.07-17.53	457	5 10-14	259	15	12
			17.83-18.29	457	5 9-17	259	15	13
			18.59-19.05	457	8 13-16	335	15	12
			19.35-19.81	457	6 9-14	239	15	13
			20.12-20.57	457	7 11-13	201	15	13
			20.88-21.34	457	5 9-12	239	15	11
Boring terminated at 21.3m								
REMARKS: CME Automatic Hammer Used. #Denotes Calibrated Penetrometer Estimate								
WATER 3.7m ELEV. 186.91 DURING DRILLING CORE SIZE mm DATE: Mar 10, 00								
WATER m ELEV. AT COMPLETION CASING LENGTH m DRILLER: Winslow								
WATER 6.1m ELEV. 184.47 AFTER 1/2 HRS. CASING DIAMETER mm INSPECTOR: Reed								

RSV ENGINEERING, INC.		SCHAUMBURG, ILLINOIS						
BORING LOG								
JOB NO: 98600	CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO: RWA35-4	STATION: 10485					
PROJECT: Interstate Route 74 Improvements - Peoria, Illinois		LOCATION: Retaining Wall Ramp A-3 SN 072-8556	OFFSET: 7.0m Lt					
BORING RIG & METHOD: CME-75 w/Hollow Stem Augers		SURF ELEV: 190.40						
SOIL DESCRIPTION	ELEV.	DEPTH	SAMPLE FROM - TO	REC. mm	BLOWS/150mm	q <sub>u</sub> MPa	STRAIN %	WATER CONTENT %
Very Stiff to Hard Br & Gr Loam A-4(7)	188.72	5	0.00-0.30	457	Auger 5-10	354	15	17
			0.30-0.76	457	5 5			
			1.07-1.52	279	9-13	43*	24	
Stiff to Very Stiff Br Clay Loam A-4	186.44	5	1.83-2.29	457	5 6-9	153	15	25
			2.59-3.05	457	3 4-6	115	15	16
			3.35-3.81	305	3 5-9	211	15	15
Hard to Very Stiff Br Loam A-4	167.54	10	4.11-4.57	457	8 11-18	460	15	13
			4.88-5.33	457	5 8-11	259	15	13
			5.64-6.10	457	4 7-10	297	15	13
			6.40-6.86	457	3 8-11	239	15	12
			7.16-7.62	457	3 7-9	220	15	12
			7.92-8.38	457	8 10-12	239	15	12
			8.69-9.14	457	6 9-14	259	15	12
			9.45-9.91	457	4 7-11	211	15	12
Hard to Very Stiff Br Loam A-4	167.54	10	10.21-10.67	457	5 7-11	249	15	13
			10.97-11.43	457	8 11-14	259	15	13
			11.73-12.19	457	4 8-11	259	15	12
REMARKS: #Denotes Calibrated Penetrometer Estimate								
WATER 9.1m ELEV. 181.25 DURING DRILLING CORE SIZE mm DATE: Mar 10, 00								
WATER m ELEV. AT COMPLETION CASING LENGTH m DRILLER: Fahl								
WATER Cased at 6.7m ELEV. 183.69 AFTER 1/4 HRS. CASING DIAMETER mm INSPECTOR: Shock								

RSV ENGINEERING, INC.		SCHAUMBURG, ILLINOIS						
BORING LOG								
JOB NO: 98600	CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO: RWA35-4	STATION: 10485					
PROJECT: Interstate Route 74 Improvements - Peoria, Illinois		LOCATION: Retaining Wall Ramp A-3 SN 072-8556	OFFSET: 7.0m Lt					
BORING RIG & METHOD: CME-75 w/Hollow Stem Augers		SURF ELEV: 190.40						
SOIL DESCRIPTION	ELEV.	DEPTH	SAMPLE FROM - TO	REC. mm	BLOWS/150mm	q <sub>u</sub> MPa	STRAIN %	WATER CONTENT %
Hard to Very Stiff Br Loam A-4	176.53	15	12.50-12.95	457	6 9-10	259	15	13
			13.26-13.72	457	6 8-10	201	15	13
			14.02-14.48	457	4 8-10	172	15	13
			14.78-15.24	457	6 9-13	268	15	13
Stiff to Very Stiff Br Silty Clay Loam A-4	168.91	20	15.54-16.00	457	7 8-12	192	15	13
			16.31-16.76	457	6 9-11	192	15	13
			17.07-17.53	457	5 8-10	220	15	12
			17.83-18.29	457	7 8-12	239	15	12
			18.59-19.05	457	9 12-13	259	15	12
			19.35-19.81	457	10 11-14	278	15	12
Hard Br Loam A-4	167.54	10	20.12-20.57	457	7 10-15	297	15	12
			20.88-21.34	457	6 10-15	278	15	14
			21.64-22.10	457	10 15-22	393	15	13
Boring terminated at 22.9m								
REMARKS: #Denotes Calibrated Penetrometer Estimate								
WATER 9.1m ELEV. 181.25 DURING DRILLING CORE SIZE mm DATE: Mar 10, 00								
WATER m ELEV. AT COMPLETION CASING LENGTH m DRILLER: Fahl								
WATER Cased at 6.7m ELEV. 183.69 AFTER 1/4 HRS. CASING DIAMETER mm INSPECTOR: Shock								

**STATE OF ILLINOIS**  
DEPARTMENT OF TRANSPORTATION

**BORING LOGS II**

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. 11	SCALE N.T.S.	DATE 6-25-04	SHEET NO. 11
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Time: 11:59:48 AM

Date: 11/22/2004

Filename: P:\649996\structure\A3\072-8556\sheet\Tracings\BLOD02-IA0728556.dgn