

FHWA REGION	STATE	PROJECT	DATE
	OHIO	PROPOSED RETAINING WALL STRUCTURE STATE ROUTE 84	5-21-93

# LAKE COUNTY LAK-84

Date Started 5-21-93 Sampler Type S.S. Dia. 2.0" Water Encountered DRY Project I.D.: 142-35022  
 Date Completed 5-21-93 Casing Length 5.0' Dia. 3.25" Water on Completion DRY PROPOSED RETAINING STRUCTURE  
 Surface Elevation 733.54 LAKE COUNTY ST. RT. 84 WILLOUGHBY, OHIO

Boring No: B-1 Station & Offset 203 + 02.05, 5.22' RT.

Elev.	Std. Pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class
728.54	5-4-5	MEDIUM DENSE, MOSTLY MET. BROWN SAND, SOME GRAVEL (SP)	5	SS-2									
723.54	6-8-6		10	SS-4									A-1-b
718.54	4-4-6		15	SS-5									
713.54	5-7-10	V/STIFF, MET. GRAY, CLAYEY SILT, SOME SAND, TRACE ROCK FRAGMENTS (ML)	20	SS-6									
708.54	6-8-11		25	SS-7	8	8	4	62	18	23	5		A-6
703.54	4-5-7	END OF BORING: 30'-0" * 4" ASPHALT CONCRETE * 8" CONCRETE	30	SS-8									

Date Started 5-21-93 Sampler Type S.S. Dia. 2.0" Water Encountered 41"-6" Project I.D.: 142-35022  
 Date Completed 5-21-93 Casing Length 5.0' Dia. 3.25" Water on Completion 41"-10" PROPOSED RETAINING STRUCTURE  
 Surface Elevation 733.11 LAKE COUNTY ST. RT. 84 WILLOUGHBY, OHIO

Boring No: B-2 Station & Offset 203 + 87.57, 6.82'

Elev.	Std. Pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class
728.11	6-4-5	MEDIUM DENSE, MOSTLY BROWN SAND, SOME GRAVEL (SP)	5	SS-2									
723.11	7-5-6		10	SS-4									A-1-c
718.11	12-12-13		15	SS-5									
713.11	6-8-11	V/STIFF TO HARD, MET. GRAY, CLAYEY SILT, SOME SAND, TRACE ROCK FRAGMENTS (ML)	20	SS-6									
708.11	5-9-12		25	SS-7									A-6
703.11	5-9-13		30	SS-8									
698.11	5-9-11		35	SS-8									
693.11	10-12-10	DENSE TO V/DENSE SATURATED, GRAY FINE AND COARSE SAND (SW)	40	SS-10	7	21	40	24	8				A-3a
688.11	28-50/6"		45	SS-11									
683.11	19-20-28	HARD, MOSTLY, GRAY SILT (ML)	50	SS-12									A-6
678.11	50/2"	HARD, MET. GRAY WEATHERED SHALE	55	SS-13									

Date Started 5-21-93 Sampler Type S.S. Dia. 2.0" Water Encountered DRY Project I.D.: 142-35022  
 Date Completed 5-21-93 Casing Length 5.0' Dia. 3.25" Water on Completion DRY PROPOSED RETAINING STRUCTURE  
 Surface Elevation 731.80 LAKE COUNTY ST. RT. 84 WILLOUGHBY, OHIO

Boring No: B-3 Station & Offset 206 + 27.53, 6.57' RT.

Elev.	Std. Pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class
728.80	4-4-5	MEDIUM DENSE, MOSTLY BROWN SAND, SOME GRAVEL (SP)	5	SS-2									
723.80	6-8-6		10	SS-4									A-1-a
718.80	13-12-11		15	SS-5									
713.80	10-15-14	V/STIFF, MET. GRAY, CLAYEY SILT, SOME SAND (ML)	20	SS-6									
708.80	3-6-10		25	SS-7	8	8	4	62	18	23	5		A-6
703.80	3-6-10		30	SS-8									
		END OF BORING: 30'-0" * 5" ASPHALT CONCRETE * 7" CONCRETE	35										

Date Started 5-21-93 Sampler Type S.S. Dia. 2.0" Water Encountered DRY Project I.D.: 142-35022  
 Date Completed 5-21-93 Casing Length 5.0' Dia. 3.25" Water on Completion DRY PROPOSED RETAINING STRUCTURE  
 Surface Elevation 731.30 LAKE COUNTY ST. RT. 84 WILLOUGHBY, OHIO

Boring No: B-4 Station & Offset 207 + 11.93, 5.87' RT.

Elev.	Std. Pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class
726.30	7-8-8	MEDIUM DENSE, MOSTLY BROWN SAND, SOME GRAVEL (SP)	5	SS-2									
721.30	8-8-8		10	SS-4									A-1-a
716.30	5-6-8		15	SS-5									
711.30	8-7-10	V/STIFF, MET. GRAY, CLAYEY SILT, SOME SAND, TRACE ROCK FRAGMENTS (ML)	20	SS-6									
706.30	5-8-8		25	SS-7									A-6
701.30	4-5-7	END OF BORING: 30'-0" * 4" ASPHALT CONCRETE * 8" CONCRETE	30	SS-8									

Date Started 5-6-93 Sampler Type S.S. Dia. 2.0" Water Encountered 36'-8" Project I.D.: 142-35022  
 Date Completed 5-6-93 Casing Length 5.0' Dia. 3.25" Water on Completion 44'-4" PROPOSED RETAINING STRUCTURE  
 Surface Elevation 730.98 LAKE COUNTY ST. RT. 84 WILLOUGHBY, OHIO

Boring No: B-5 Station & Offset 207 + 66.66, 8.14' RT.

Elev.	Std. Pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class
725.98	8-5-5	MEDIUM DENSE, MOSTLY BROWN SAND, SOME GRAVEL (SP)	5	SS-2									
720.98	5-2-7		10	SS-3									
715.98	8-10-11		15	SS-4	85	18	7	4	6				A-1-a
710.98	6-10-10		20	SS-5									
705.98	5-8-11	STIFF TO V/STIFF, MET. GRAY, CLAYEY SILT, SOME SAND (ML)	25	SS-6									
700.98	6-10-10		30	SS-7									A-6
695.98	4-8-12		35	SS-8									
690.98	3-9-22	V/DENSE, MOSTLY BROWN SAND, TRACE GRAVEL (SP)	40	SS-9									A-1-a
685.98	5-8-12	DENSE, SATURATED, GRAY FINE SAND (SW)	45	SS-10									A-3a
680.98	30-32-45	V/DENSE, SATURATED, GRAY SILTY SAND, TRACE CLAY (SW)	50	SS-11									A-2-4
675.98	19-31-46	HARD, MOSTLY TO MET. GRAY WEATHERED SHALE	55	SS-12									

Date Started 5-21-93 Sampler Type S.S. Dia. 2.0" Water Encountered DRY Project I.D.: 142-35022  
 Date Completed 5-21-93 Casing Length 5.0' Dia. 3.25" Water on Completion DRY PROPOSED RETAINING STRUCTURE  
 Surface Elevation 730.80 LAKE COUNTY ST. RT. 84 WILLOUGHBY, OHIO

Boring No: B-6 Station & Offset 208 + 35.49, 8.25' RT.

Elev.	Std. Pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class
725.80	7-6-8	SLIGHTLY COMPACT TO DENSE, MOSTLY BROWN SAND, SOME GRAVEL (SP)	5	SS-2									
720.80	9-7-14		10	SS-3									
715.80	5-13-25		15	SS-4									A-1-b
710.80	15-16-14		20	SS-5									
705.80	8-11-13	DENSE, SATURATED, GRAY SILTY SAND, SOME CLAY (SW)	25	SS-6									A-2-4
700.80	5-8-11	V/STIFF, MET. GRAY, CLAYEY SILT, SOME SAND, TRACE ROCK FRAGMENTS (ML)	30	SS-7									A-6
		END OF BORING: 30'-0" * 4" ASPHALT CONCRETE * 8" CONCRETE	35										

Date Started 5-5-93 Sampler Type S.S. Dia. 2.0" Water Encountered DRY Project I.D.: 142-35022  
 Date Completed 5-5-93 Casing Length 5.0' Dia. 3.25" Water on Completion DRY PROPOSED RETAINING STRUCTURE  
 Surface Elevation 730.48 LAKE COUNTY ST. RT. 84 WILLOUGHBY, OHIO

Boring No: B-7 Station & Offset 208 + 73.22, 11.26' RT.

Elev.	Std. Pen. Test	Description	Depth (Feet)	SAMPLE NUMBER	% Agg.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	W.C.	SHTL Class
725.48	5-4-5	MEDIUM DENSE, MOSTLY MET. BROWN SAND, SOME GRAVEL (SP)	5	SS-2									
720.48	9-5-5		10	SS-3									
715.48	5-5-5		15	SS-4									A-1-a
710.48	8-9-6		20	SS-5									
705.48	5-9-11	DENSE, MET. GRAY SILTY SAND, SOME GRAVEL (SW)	25	SS-6									A-2-4
700.48	5-9-11	V/STIFF, MET. GRAY, CLAYEY SILT, SOME SAND (ML)	30	SS-7	12	5	3	68	12	24	7		A-6
695.48	5-6-9		35	SS-8									
690.48	13-16-22	V/DENSE, MET. BROWN FINE SAND (SW)	40	SS-9									A-3a
685.48	29-45-50	HARD, MOSTLY, GRAY SILT, SOME SAND, TRACE ROCK FRAGMENTS (ML)	45	SS-10									A-6
680.48	25-29-43		50	SS-11									
675.48	50/4"	HARD, MOSTLY TO MET. GRAY WEATHERED SHALE	55	SS-12									

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SCALE: NTS APPROVED BY: A.V. DRAWN BY: MTG  
 DATE: 1-24-94 REVISED: 4-25-94  
 CLIENT: CT CONSULTANTS  
 PROJECT NAME: PROPOSED RETAINING STRUCTURE STATE ROUTE 84 DRAWING NUMBER: 142-35022