TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO. ___

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	70004-1291-94	2
CONST	2014	BR-NH-40(16)	11A
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BORINGS DRILLED IN EXISTING STATE ROUTE 40

Sample No.	Station No.	Depth (feet)	Description	In-Situ Moisture (%)	LL	PI	AASHTO Class	USCS Class
1	Boring B-1, 65+85.75 25.5 feet left	2 - 3 1/2	2' - 17': Rock fragments (GP), silty fine sand (SM) and silty clay (CL), brown, gray, yellow-brown and orange-brown, firm, loose and dense - FILL 17' - 19.5': Silty fine sand (SM), orange-brown, micaceous, moist, very loose - ALLUVIUM 19.5' - 27': Silt					
2		4 - 5 1/2		1.5				
3		6 1/2 - 8		0.2				
4		9 - 10 1/2		4.5				
5		14 - 15 1/2		3.0				
6		19 - 20 1/2		34.9				
7		24 - 25 1/2		39.4				
8		29 - 30 1/2		45.2				
9		34 - 35 1/2		40.3	33	7	A-4	ML
10		39 - 40 1/2		33.0				
11		44 - 44.2		9.2				
1	Boring B-2, 65+85.75, 15 feet left	2 - 3 1/2	2' - 16.5': Clayey silt (ML) with large shale fragments, brown, gray and red-brown, very stiff and stiff - FILL 16.5' - 17.5': Rock fragments (GP), gray, firm - FILL 17.5' - 22': Sandy silt (ML) with shale fragments, gray and brown, moist to wet, stiff					
2		4 - 5 1/2		1.8				
3		6 1/2 - 8		0.3				
4		9 - 10 1/2		4.3				
5		14 - 15 1/2		4.5				
6		17 - 18 1/2						
7		19 - 20 1/2		11.8				
8		24 - 25 1/2		37.1				
9		29 - 30 1/2		43.5				
10		34 - 35 1/2		45.3				
11		39 - 40 1/2						
12		44 - 45 1/2		43.8				
13		49 - 50 1/2		26.3				
14		52 1/2 - 52.6		9.5				
1	Boring B-3, 66+90.75, 25.5 feet left	2 - 3 1/2	2' - 3': Rock fragments (GP) and sandy silt (ML), yellow-brown, very firm - FILL 3' - 5': Silty clay (CL) with rock fragments, orange-brown, very stiff to stiff - FILL 5' - 12': Weathered shale fragments and sandy silt (ML), yellow-brown, stiff to firm					
2		4 - 5 1/2						
3		6 1/2 - 8						
4		9 - 10 1/2						
5		14 - 15 1/2						
6		19 - 20 1/2						
7		24 - 25 1/2						
8		29 - 29.6			25	4	A-2-4	CL-ML
1	Boring B-4, 66+90, 15 feet left	2 - 3 1/2	2' - 4': Rock and weathered shale fragments (GP) and silty sand (SM) with some silty clay, yellow-brown, gray and red-brown, firm - FILL 4' - 20': Weathered shale fragments with clayey silt, gray and brown, stiff, firm and very stiff - FILL 20' - 22':					
2		4 - 5 1/2						
3		6 1/2 - 8						
4		9 - 10 1/2						
5		14 - 15 1/2						
6		19 - 20 1/2						
7		26 1/2 - 28						
8		29 - 30 1/2						

BORINGS DRILLED IN LAKE OCOEE

(NOTE: Sample depths are below top of lake bottom)

Sample No.	Station No.	Depth (feet)	Description	In-Situ Moisture (%)	LL	PI	AASHTO Class	USCS Class
1	Boring B-5, Station 61+72, 72 feet right	1 - 2 1/2	0' - 2.8': Silty clay (CL), dark brown, wet, very soft - ALLUVIUM 2.8' - 6.3': Coarse sand (SP) with gravel and rock fragments, dark gray-brown, wet, very loose - ALLUVIUM 6.3' - 8.3': Sandy silt (ML), dark yellow-brown, wet, very soft - ALLUVIUM 8.3'					
2		3 /1 2 -5						
3		6 - 7 1/2		49.8	32	6	A-4	ML
4		7 1/2 - 9						
5		9 - 10 1/2						
6		13 1/2 - 15						
7		18 1/2 - 20						
8		20 1/2 - 21.9						
1	Boring B-6, Station 62+86, 65 feet right	0 - 1 1/2	0' - 1.7': Silty clay (CL), dark brown, wet, very soft - ALLUVIUM 1.7' - 6.7': Sandy silt (ML), dark gray-brown, wet, very soft to soft - ALLUVIUM 6.7' - 9.7': Silty medium sand (SM), organics (plant matter) at about 15 feet, brown, wet, very loose - A					
2		2.9 - 4.4						
3		4.9 - 6.4						
4		6.4 - 7.9						
5		12.4 - 13.9						
6		18.5 - 20						
7		23.5 - 25						

BORINGS DRILLED IN LAKE OCOEE (continued)

(NOTE: Sample depths are below top of lake bottom)

1	Boring B-7, Station 63+93, 66 feet right	1/2 - 2	0' - 5.8': Silty clay (CL) with fine sand, dark gray-brown, wet, very soft - ALLUVIUM 5.8' - 8.3': Silty fine sand (SM), dark gray-brown, wet, very loose - ALLUVIUM 8.3' - 23.9': Silty medium sand (SM) with occasional rock fragments, organics (plant ma					
2		4.1 - 5.6						
3		6 - 7 1/2						
4		8 1/2 - 10						
5		13 1/2 - 15						
6		18 1/2 - 20						
1	Boring B-8, Station 64+88, 77 feet right	1 - 2 1/2	1' - 9.5': Clayey coarse sand (SC) with wood, gravel, and rounded pebbles, loose and very loose - ALLUVIUM 9.5' - 13.5': Silty medium sand (SM) with rock fragments, rounded pebbles, and trace mica, gray, wet, loose - ALLUVIUM 13.5' - 22.7': Silty fine					
2		3 1/2 - 5						
3		6 - 7 1/2						
4		8 1/2 - 10						
5		13 1/2 - 15						
6		18 1/2 - 20						
7		23 1/2 - 25						
1	Boring B-9. Station 65+86. 27 feet right	1 - 2 1/2	0' - 0.5': Boulders 0.5' - 2.5': Silty coarse sand (SM) with gravel and cobbles, gray-brown, wet, firm - ALLUVIUM 2.5' - 5.5': Silty sandy clay (CL) with gravel, dark gray-brown, wet, loose - ALLUVIUM 5.5' - 9.1': Silty medium sand (SM) with some orga					
2		3 1/2 - 5						
3		7 - 8 1/2						
4		8 1/2 - 10						
5		13 1/2 - 15						
6		18 1/2 - 20						
7		23 1/2 - 25		51.7	33	2	A-4	ML
8		28 1/2 - 30						
1	Boring B-10. Station 67+00, 43 feet right	1 - 2 1/2	0' - 1': Boulders 1' - 3': Silty medium sand (SM), dark gray-brown, organics, wet, very loose - ALLUVIUM 3' - 21': Silty coarse sand (SM) with occasional rock fragments, dark gray-brown, some organics, wet, very loose - ALLUVIUM 21' - 31.8': Silty fin					
2		4 - 5 1/2						
3		6 - 7 1/2						
4		8 1/2 - 10						
5		15 - 16 1/2						
6		18 1/2 - 20						
7		23 1/2 - 25		44.6	NP	NP	A-2-4	SM
8		28 1/2 - 30						
1	Boring B-11, Station 68+35, 95 feet right	1 - 2 1/2	0' - 2.8': Rock fragments with silty coarse sand, dark gray-brown, loose - ALLUVIUM 2.8' - 5.5': Silty coarse sand (SM) with rock fragments, dark gray-brown, firm - ALLUVIUM					
2		3 1/2 - 5						
1	Boring B-12, Station 69+50, 71 feet right	1 - 2 1/2	1' - 6': Clayey coarse sand (SC) with rounded pebbles and shells, brown, dark brown and red-brown, loose - ALLUVIUM 6' - 14.5': Clayey silt (ML) with trace mica and fine sand, dark brown, very moist, very soft - ALLUVIUM 14.5' - 18.5': Silty fine sand					
2		3 1/2 - 5						
3		6 - 7 1/2		59.3	43	14	A-7-6	ML
4		13 1/2 - 15						
5		18 1/2 - 20						
6		22.2 - 23.7						
1	Boring B-13, Station 70+84, 64 feet right	1 - 2 1/2	1' - 5.9': Clayey coarse sand (SC) with rounded pebbles, shells, and pieces of wood, dark brown, brown, and red-brown, wet, very loose - ALLUVIUM 5.9' - 12.9': Silty fine sand (SM), gray, micaceous, very loose - ALLUVIUM 12.9' - 17.9': Clayey fine sand					
2		3 1/2 - 5						
3		6 - 7 1/2						
4		8 1/2 - 10						
5		13 1/2 - 15						
6		18 1/2 - 20						
7		22.1 - 23.6						
1	Boring B-14, Station 72+03, 67 feet right	1 - 2 1/2	1' - 2.6': Silty coarse sand (SM) with rounded pebbles and shells, brown, dark brown, and red-brown, wet, loose - ALLUVIUIM					

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

SOIL DESCRIPTION SHEET

STATE ROUTE 40
US 64
BRIDGE AND APPROACHES OVER
MADDENS BRANCH
BRIDGE I.D. NO 70SR0400011
POLK COUNTY
2013