

TENNESSEE D.O.T.

DESIGN DIVISION

FILE NO.

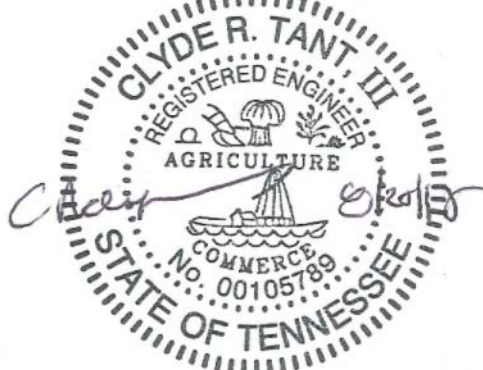
SOIL TEST BORING SAMPLE LOCATIONS AND TYPE				
SOIL TEST BORING	SAMPLE NUMBER	DEPTH (ft)	SAMPLE TYPE	SAMPLE TESTED
R1-14	1	1.0 - 2.5	SS	
	2	3.0 - 4.0	SS	
R1-15-CA	1	11.0 - 12.5	SS	
	2	14.0 - 15.5	SS	
	3	16.0 - 17.5	SS	
	4	19.0 - 20.5	SS	
	5	21.0 - 22.5	SS	
	1	1.0 - 2.5	SS	X
DV-1	2	3.5 - 5.0	SS	X
	3	6.0 - 7.5	SS	X
	4	8.5 - 10.0	SS	X
	1	1.0 - 2.5	SS	X
DV-2	2	3.5 - 5.0	SS	X
	3	6.0 - 7.5	SS	X
	4	8.5 - 10.0	SS	X
	1	1.0 - 2.5	SS	X
DV-3	2	3.5 - 5.0	SS	X
	3	6.0 - 7.5	SS	X
	4	8.5 - 10.0	SS	X
	1	1.0 - 2.5	SS	X
DV-4	2	3.5 - 5.0	SS	X
	3	6.0 - 7.5	SS	X
	4	8.5 - 10.0	SS	X
	1	1.0 - 2.5	SS	X
DV-5	2	3.5 - 5.0	SS	X
	3	6.0 - 7.5	SS	X
	4	8.5 - 10.0	SS	X
	1	1.0 - 2.5	SS	X
DV-6	2	3.5 - 5.0	SS	X
	3	6.0 - 7.5	SS	X
	4	8.5 - 10.0	SS	X
	1	1.0 - 2.5	SS	X
DV-7	2	3.5 - 5.0	SS	X
	3	6.0 - 7.5	SS	X
	4	8.5 - 10.0	SS	X
	1	1.0 - 2.5	SS	X
DV-8	2	3.5 - 5.0	SS	X
	3	6.0 - 7.5	SS	X
	4	8.5 - 10.0	SS	X
	5	13.5 - 15.0	SS	X
DV-9	1	1.0 - 2.5	SS	X
	2	3.5 - 5.0	SS	X
	3	6.0 - 7.5	SS	X
	4	8.5 - 10.0	SS	X
DV-10	1	1.0 - 2.5	SS	X
	2	3.5 - 5.0	SS	X
	3	6.0 - 7.5	SS	X
	4	8.5 - 10.0	SS	X
DV-11	5	13.5 - 15.0	SS	X
	1	1.0 - 2.5	SS	X
DV-12	2	3.5 - 5.0	SS	X
	3	6.0 - 7.5	SS	X
	4	8.5 - 10.0	SS	X
	5	13.5 - 15.0	SS	X
RT3-1	1	1.0 - 1.5	SS	
	2	3.5 - 5.0	SS	
	3	6.0 - 7.5	SS	X
	4	8.5 - 10.0	SS	X
	5	13.5 - 15.0	SS	X
	1	1.0 - 1.5	SS	
RT3-2	2	3.5 - 5.0	SS	
	3	6.0 - 7.5	SS	
	4	8.5 - 10.0	SS	X
	5	13.5 - 15.0	SS	X
	6	18.5 - 20.0	SS	X

SOIL TEST BORING SAMPLE LOCATIONS AND TYPE				
SOIL TEST BORING	SAMPLE NUMBER	DEPTH (ft)	SAMPLE TYPE	SAMPLE TESTED
RT3-3	1	1.0 - 2.5	SS	X
	2	3.5 - 5.0	SS	X
	3	6.0 - 7.5	SS	
	4	8.5 - 10.0	SS	
	5	13.0 - 15.0	UD	
	6	18.5 - 20.0	SS	
	7	23.5 - 25.0	SS	X
	1	1.0 - 2.5	SS	X
RT3-4	2	3.5 - 5.0	SS	X
	3	6.0 - 7.5	SS	
	4	8.5 - 10.0	SS	X
	5	13.5 - 15.0	SS	X
	6	18.0 - 20.0	UD	
	7	23.5 - 25.0	SS	X
	8	28.5 - 30.0	SS	X
	9	33.5 - 35.0	SS	
RT3-5	1	1.0 - 2.5	SS	X
	2	3.5 - 5.0	SS	X
	3	6.0 - 7.5	SS	X
	4	8.5 - 10.0	SS	X
	5	13.5 - 15.0	SS	X
	6	18.5 - 20.0	SS	X
	7	23.5 - 25.0	SS	X
	8	28.5 - 30.0	SS	X
	9	33.5 - 35.0	SS	X

SUMMARY OF SOIL LABORTORY TESTING SOIL TEST BORINGS DV-1 THROUGH DV-12, RT3-1 THROUGH RT3-5, AND R1-14										
SOIL TEST BORING	SAMPLE NO.	SAMPLE DESCRIPTION	STANDARD PROCTOR DENSITY (lb/ft³)	OPTIMUM MOISTURE (%)	NATURAL MOISTURE CONTENT (%)	LL	PI	Specific Gravity	AASHTO CLASS	USCS CLASS
DV-1	1	Maroon brown clayey SILT with SHALE frags	---	---	24.7	---	---	---	---	---
	2	Light brown to brown and red silty CLAY	---	---	34.3	46	23	---	A-7-6(15)	CL
	3	Light brown to brown and red silty CLAY	---	---	39.3	---	---	---	---	---
	4	Bluish gray weathered SHALE	---	---	30.7	46	22	---	A-7-6(12)	CL
DV-2	1	Light brown to brown silty CLAY	---	---	30.5	---	---	---	---	---
	2	Light brown to brown silty CLAY	---	---	29.9	45	21	---	A-7-6(19)	CL
	3	Light brown to brown silty CLAY	---	---	50.3	---	---	---	---	---
	4	Bluish gray weathered SHALE	---	---	6.5	NP	NP	---	A-3(0)	SM
DV-3	1	Maroon brown clayey SILT with SHALE frags	---	---	12.7	---	---	---	---	---
	2	Light brown to brown silty CLAY	---	---	29.7	---	---	---	---	---
	3	Light brown to brown silty CLAY	---	---	43.9	63	37	---	A-7-6(29)	CH
	4	Light brown to brown silty CLAY	---	---	28.0	---	---	---	---	---
DV-4	1	Dark brown sandy CLAY to silty CLAY	---	---	14.8	---	---	---	---	---
	2	Dark brown sandy CLAY to silty CLAY	---	---	19.4	26	9	---	A-4(1)	SC
	3	Bluish gray weathered SHALE	---	---	38.2	32	12	---	A-6(3)	CL
	4	Bluish gray weathered SHALE	---	---	8.9	---	---	---	---	---
DV-5	1	Light brown silty CLAY	---	---	9.5	---	---	---	---	---
	2	Light brown silty CLAY	---	---	32.6	48	23	---	A-7-6(20)	CL
	3	Light brown silty CLAY	---	---	41.8	---	---	---	---	---
	4	Dark brown sandy SILT to clayey SILT	---	---	11.0	25	8	---	A-4(0)	SC
DV-6	1	Dark brown sandy CLAY to silty CLAY	---	---	7.6	---	---	---	---	---
	2	Bluish gray to light brown SHALE	---	---	27.4	---	---	---	---	---
	3	Bluish gray to light brown SHALE	---	---	12.4	26	4	---	A-4(0)	SM
	4	Bluish gray to light brown SHALE	---	---	7.1	---	---	---	---	---
DV-7	1	Dark brown silty CLAY	---	---	13.0	---	---	---	---	---
	2	Brown and bluish gray weathered SHALE	---	---	22.8	43	24	---	A-7-6(13)	CL
	3	Maroonish brown and bluish gray SHALE	---	---	11.5	31	8	---	A-2-4(0)	SM
	4	Maroonish brown and bluish gray SHALE	---	---	8.8	---	---	---	---	---
DV-8	2	Dark brown and bluish gray silty CLAY	---	---	21.8	23	6	---	A-4(2)	CL-ML
	3	Dark brown and bluish gray silty CLAY	---	---	21.2	---	---	---	---	---
	4	Bluish gray weathered SHALE	---	---	14.2	28	9	---	A-2-4(0)	SC
	5	Bluish gray weathered SHALE	---	---	5.6	---	---	---	---	---
DV-9	1	Light brown to brown silty CLAY	---	---	19.1	---	---	---	---	---
	2	Light brown to brown silty CLAY	---	---	9.1	NP	NP	---	A-3(0)	SM
	3	Light brown to brown silty CLAY	---	---	10.1	---	---	---	---	---
	4	Light brown to brown silty CLAY	---	---	8.7	---	---	---	---	---
DV-10	1	Light brown to brown silty CLAY	---	---	22.4	---	---	---	---	---
	2	Light brown to brown silty CLAY	---	---	24.3	---	---	---	---	---
	3	Light brown to brown silty CLAY	---	---	24.8	43	26	---	A-7-6(22)	CL
	4	Light brown to brown silty clay with SHALE frags	---	---	30.0	---	---	---	---	---
DV-11	1	Brown to dark brown sandy CLAY to silty CLAY	---	---	10.4	---	---	---	---	---
	2	Brown to dark brown sandy CLAY to silty CLAY	---	---	17.4	---	---	---	---	---
	4	Brown to dark brown sandy CLAY to silty CLAY	---	---	25.7	28	15	---	A-6(11)	CL
	5	Bluish gray weathered SHALE	---	---	14.6	---	---	---	---	---
DV-12	1	Brown to dark brown silty CLAY	---	---	22.1	---	---	---	---	---
	2	Brown to dark brown silty CLAY	---	---	17.7	27	9	---	A-2-4(0)	SC
	3	Brown to dark brown silty CLAY	---	---	16.8	---	---	---	---	---
	4	Bluish gray weathered SHALE	---	---	33.6	28	14	---	A-6(9)	CL
	5	Bluish gray weathered SHALE	---	---	11.1	---	---	---	---	---
RT3-1	3	Brown to dark brown silty CLAY	---	---	19.9	32	15	---	A-6(4)	SC
	4	Brown to dark brown silty CLAY	---	---	18.5	---	---	---	---	---
	5	Brown to dark brown silty CLAY	---	---	21.8	45	22	---	A-7-6(5)	SC
	4	Dark brown silty CLAY	---	---	10.5	29	15	---	A-6(4)	SC
RT3-2	5	Dark brown silty CLAY	---	---	21.5	28	8	---	A-4(6)	CL
	6	Light brown silty CLAY	---	---	20.2	45	24	---	A-7-6(10)	CL
RT3-3	1	Dark brown sandy CLAY	---	---	3.4	---	---	---	---	---
	2	Dark brown sandy CLAY	---	---	5.6	---	---	---	---	---
	3	Light brown to brown silty CLAY to CLAY	---	---	28.1	52	29	---	A-7-6(10)	SC
	4	Light brown to brown silty CLAY to CLAY	---	---	35.6	56	32	---	A-7-6(21)	CH
	7	Light brown to brown silty CLAY to CLAY	---	---	17.1	34	12	---	A-6(1)	SC
RT3-4	1	Brown weathered SHALE	---	---	6.2	---	---	---	---	---
	2	Possible Shotrock fill material	---	---	2.9	---	---	---	---	---
	4	Possible Shotrock fill material	---	---	27.0	35	18	---	A-6(7)	CL
	5	Brown to dark brown silty CLAY	---	---	23.7	---	---	---	---	---
	7	Brown to dark brown silty CLAY	---	---	17.3	---	---	---	---	---
	8	Brown silty CLAY	---	---	23.2	31	18	---	A-6(11)	CL
RT3-5	1	Brown clayey SILT	---	---	2.6	---	---	---	---	---
	2	Brown clayey SILT	---	---	8.3	---	---	---	---	---
	3	Light brown to brown silty CLAY	---	---	35.0	---	---	---	---	---
	4	Light brown to brown silty CLAY	---	---	31.1	51	25	---	A-7-6(25)	CH
	5	Light brown to dark brown and gray silty CLAY	---	---	30.1	---	---	---	---	---
	6	Light brown to dark brown and gray silty CLAY	---	---	19.2	29	12	---	A-6(8)	CL
	7	Light brown silty CLAY	---	---	10.7	---	---	---	---	---
	8	Light brown silty CLAY	---	---	19.3	38	20	---	A-6(17)	CL
	9	Dark brown silty CLAY	---	---	23.7	---	---	---	---	---

TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	2015	NH-1-640-7 (161)	28G

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SOIL
STA. 126+00
TO
STA. 138+00
1-640
KNOX COUNTY