





Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts ( $N_{60}$ )	Shear Data	Field Tests	Index Tests
0		0.0-0.8' CONCRETE							
		0.8-1.0' CRUSHED AGGREGATE BASE							
		1.0-21.0' Light brown, LEAN CLAY trace gravel, very stiff to medium stiff, moist, few pieces of limestone and shale (FILL)	590						
5				40			Qu Test Results UCS = 2.52 ksf MC = 19.8% $\gamma_{moist}$ = 127.4 pcf	PP = 3.00 tsf Torvane = 0.90 tsf	LL = 40 PL = 19 MC = 18.1% $\gamma_{sat}$ = 133 pcf <sup>(1)</sup>
			585	57				PP = 1.25 tsf Torvane = 0.60 tsf	MC = 21.1% $\gamma_{sat}$ = 129 pcf <sup>(1)</sup>
10				56			Qu Test Results UCS = 2.58 ksf MC = 22.3% $\gamma_{moist}$ = 127.9 pcf	PP = 1.00 tsf Torvane = 0.50 tsf	LL = 37 PL = 18 MC = 21.5% $\gamma_{sat}$ = 129 pcf <sup>(1)</sup>
			580	64				PP = 1.75 tsf Torvane = 1.00 tsf	MC = 21.6% $\gamma_{sat}$ = 129 pcf <sup>(1)</sup>
15				52			Direct Shear Results Phi° = 30.2° c° = 333 psf MC = 24.595% $\gamma_{moist}$ = 124.2061 pcf	PP = 0.75 tsf Torvane = 0.60 tsf	LL = 37 PL = 19 MC = 21.6% $\gamma_{sat}$ = 129 pcf <sup>(1)</sup>
			575	16				PP = 1.00 tsf Torvane = 0.60 tsf	MC = 21.1% $\gamma_{sat}$ = 129 pcf <sup>(1)</sup>
20				60				PP = 1.00 tsf Torvane = 0.60 tsf	MC = 21.0% LL = 37 PL = 21 MC = 23.8% $\gamma_{sat}$ = 128 pcf <sup>(1)</sup>
		21.0-35.0' Brown, LEAN CLAY, stiff, moist	570	92				PP = 1.00 tsf Torvane = 0.30 tsf	MC = 29.6% $\gamma_{sat}$ = 121 pcf <sup>(1)</sup>
25				92				PP = 1.25 tsf Torvane = 0.60 tsf	MC = 26.2% LL = 33

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Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts ( $N_{60}$ )	Shear Data	Field Tests	Index Tests	
25		21.0-35.0' Brown, LEAN CLAY, stiff, moist (continued)	565		92			PP = 1.25 tsf Torvane = 0.60 tsf	PL = 20 MC = 25.1% $\gamma_{sat} = 125 \text{ pcf}^{(1)}$	
30					88				MC = 26.4% $\gamma_{sat} = 124 \text{ pcf}^{(1)}$	
					88				PP = 1.50 tsf Torvane = 0.66 tsf	MC = 25.9% LL = 41 MC = 26.1% $\gamma_{sat} = 124 \text{ pcf}^{(1)}$
					84				PP = 1.50 tsf Torvane = 0.60 tsf	MC = 26.8% $\gamma_{sat} = 123 \text{ pcf}^{(1)}$
35									Bottom of borehole at 35.0 feet.	

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Missouri Department of Transportation  
Construction and Materials

BORING NO. T-15-55  
Page 1 of 2

Job No.: J613056  
Design: S2321  
Bent: 61+75  
Station: 61+75  
Offset: 45 R  
Elevation: 592.9  
Requested Station: 61+75  
Requested Offset: 45 R  
Requested Elevation: 592.9  
Drill No.: G-9577

County: St. Louis  
Skew: 0  
Logged By: Kevin Moore  
Northing: 1029045.73  
Easting: 801225.59  
Requested Northing: 1029045.73  
Requested Easting: 801225.59  
Location Note: 0

Route: I-64 & US 40  
Location: Chesterfield Parkway West over I-64 & US 4  
Operator: Michael Donahoe  
Date of Work: 07/28/15-07/28/15  
Depth to Water: 0  
Depth Hole Open: 0  
Time Change: 0  
Hammer Efficiency: 84%  
Drilling Method: Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N <sub>60</sub> )	Shear Data	Field Tests	Index Tests
0		0.0-15.0' Light brown, LEAN CLAY trace gravel, stiff, moist, few pieces of limestone and shale (FILL)							
			590		40			PP = 3.50 tsf Torvane = 1.15 tsf	MC = 27.0% γ <sub>sat</sub> = 123 pcf <sup>(1)</sup>
					27	2-3-13 (22)		PP = 1.50 tsf	MC = 14.2% γ <sub>sat</sub> = 138 pcf <sup>(1)</sup>
5					48			PP = 3.00 tsf Torvane = 0.80 tsf	LL = 35 PL = 20 MC = 20.8% γ <sub>sat</sub> = 129 pcf <sup>(1)</sup>
			585		80	2-3-4 (10)		PP = 2.00 tsf	MC = 20.1% γ <sub>sat</sub> = 130 pcf <sup>(1)</sup>
10					48			PP = 2.50 tsf Torvane = 0.70 tsf	MC = 14.7% γ <sub>sat</sub> = 137 pcf <sup>(1)</sup>
			580		93	2-5-7 (17)		PP = 2.25 tsf	MC = 24.5% γ <sub>sat</sub> = 125 pcf <sup>(1)</sup>
15		15.0-41.5' Brown, LEAN CLAY, stiff to very stiff, moist			92			PP = 1.25 tsf Torvane = 0.50 tsf	MC = 24.1% γ <sub>sat</sub> = 126 pcf <sup>(1)</sup>
			575		93	3-4-6 (14)		PP = 1.75 tsf	LL = 33 PL = 22
20					72			PP = 2.25 tsf Torvane = 1.00 tsf	MC = 27.2% γ <sub>sat</sub> = 123 pcf <sup>(1)</sup>
			570		107	2-3-3 (8)			
25									

N<sub>60</sub> = (Em/60)/Nm N<sub>60</sub> - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value  
(1) = Assumed, (2) = Actual  
Coordinate System: Modified U.S. State Plane 1983 Coordinate Zone: Missouri East Coordinate Proj. Factor: 1.0000878  
Coordinate Datum: NAD 83 (CONUS) Coordinate Units: U.S. Survey Feet

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Missouri Department of Transportation  
Construction and Materials

BORING NO. T-15-55  
Page 2 of 2

Job No.: J613056  
Design: S2321  
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Station: 61+75  
Offset: 45 R  
Elevation: 592.9  
Requested Station: 61+75  
Requested Offset: 45 R  
Requested Elevation: 592.9  
Drill No.: G-9577

County: St. Louis  
Skew: 0  
Logged By: Kevin Moore  
Northing: 1029045.73  
Easting: 801225.59  
Requested Northing: 1029045.73  
Requested Easting: 801225.59  
Location Note: 0

Route: I-64 & US 40  
Location: Chesterfield Parkway West over I-64 & US 4  
Operator: Michael Donahoe  
Date of Work: 07/28/15-07/28/15  
Depth to Water: 0  
Depth Hole Open: 0  
Time Change: 0  
Hammer Efficiency: 84%  
Drilling Method: Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N <sub>60</sub> )	Shear Data	Field Tests	Index Tests
25		15.0-41.5' Brown, LEAN CLAY, stiff to very stiff, moist (continued)							
			565						
30					120	2-3-5 (11)			MC = 25.4% γ <sub>sat</sub> = 125 pcf <sup>(1)</sup>
			560						
35					120	2-3-4 (10)		PP = 1.00 tsf	MC = 26.8% γ <sub>sat</sub> = 123 pcf <sup>(1)</sup>
			555						
40					100	2-5-5 (14)		PP = 1.75 tsf	MC = 24.3% γ <sub>sat</sub> = 126 pcf <sup>(1)</sup>
		Bottom of borehole at 41.5 feet.							

N<sub>60</sub> = (Em/60)/Nm N<sub>60</sub> - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value  
(1) = Assumed, (2) = Actual  
Coordinate System: Modified U.S. State Plane 1983 Coordinate Zone: Missouri East Coordinate Proj. Factor: 1.0000878  
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Expires 12/31/18

DATE 11/10/16

DATE PREPARED 10/12/16

ROUTE I-64 STATE MO

DISTRICT SL SHEET NO. 7

COUNTY ST LOUIS

JOB NO. WRSL064B

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-275-6636)

MoDOT

Missouri Department of Transportation

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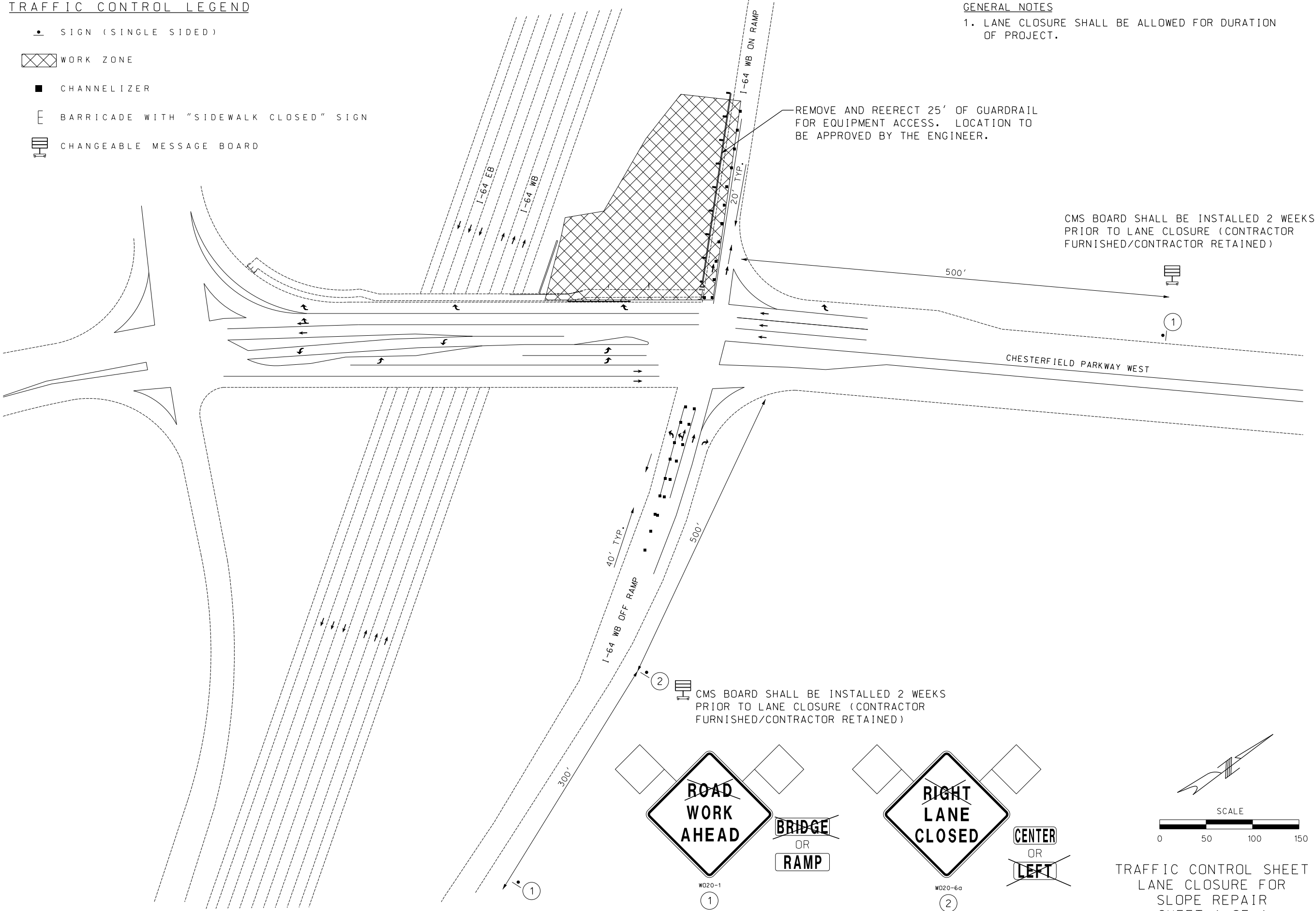
BORING LOGS  
SHEET 2 OF 2



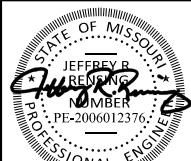
TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- WORK ZONE
- CHANNELIZER
- BARRICADE WITH "SIDEWALK CLOSED" SIGN
- CHANGEABLE MESSAGE BOARD

GENERAL NOTES  
1. LANE CLOSURE SHALL BE ALLOWED FOR DURATION OF PROJECT.



TRAFFIC CONTROL SHEET  
LANE CLOSURE FOR  
SLOPE REPAIR  
SHEET 1 OF 1



Expires 12/31/18

DATE 11/10/16

DATE PREPARED 10/13/16

ROUTE I-64 STATE MO

DISTRICT SL SHEET NO. 8

COUNTY ST LOUIS

JOB NO. WRSL064B

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