

Index Of Sheets

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATED ROADWAY QUANTITIES AND TABULATED QUANTITIES
2A	TYPICAL SECTIONS AND PAVEMENT SCHEDULE
2B	GENERAL NOTES
2C	SPECIAL NOTES

"NO PROJECT COMMITMENTS SHEET INCLUDED IN THIS SET OF PLANS."  
 "NO UTILITY SHEETS"

**STANDARD ROADWAY DRAWINGS**

DWG. NO.	REV.	DESCRIPTION
<b>ROADWAY DESIGN STANDARDS</b>		
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
<b>DRAINAGE-CATCH BASINS AND MANHOLES</b>		
D-CBB-12A	05-27-01	TYPE "B" CAST IRON FRAME, GRATE & NONMOUNTABLE INLET DETAILS FOR NOS. 10, 12, 14, 16, & 17 TYPE CATCH BASINS
<b>SAFETY APPURTENANCES AND FENCE</b>		
S-GR31-1	12-01-14	W-BEAM GUARDRAIL
S-GRT-2	11-03-14	TYPE 38 GUARDRAIL TERMINAL
S-GRT-2R		EARTH PAD FOR TYPE 38 (RETROFIT)
S-GRT-4	11-06-14	TYPE 13 GUARDRAIL TERMINAL (TRAILING END)
S-GRA-3		GUARDRAIL ANCHOR FOR TYPE 21, 13, AND IN-LINE TERMINALS
<b>TRAFFIC CONTROL APPURTENANCES</b>		
T-FAB-1	05-27-97	FLASHING YELLOW ARROW BOARD
T-M-1	07-24-14	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	07-24-14	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS & PAVED SHOULDERS ON CONVENTIONAL ROADS
T-M-3	07-24-14	MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS & PAVED SHOULDERS ON CONVENTIONAL ROADS
T-M-4	07-24-14	STANDARD INTERSECTION PAVEMENT MARKINGS
T-M-15A	01-30-15	ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED ROUTES
T-M-16	12-01-14	ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED ROUTES
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS

STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
 BUREAU OF ENGINEERING

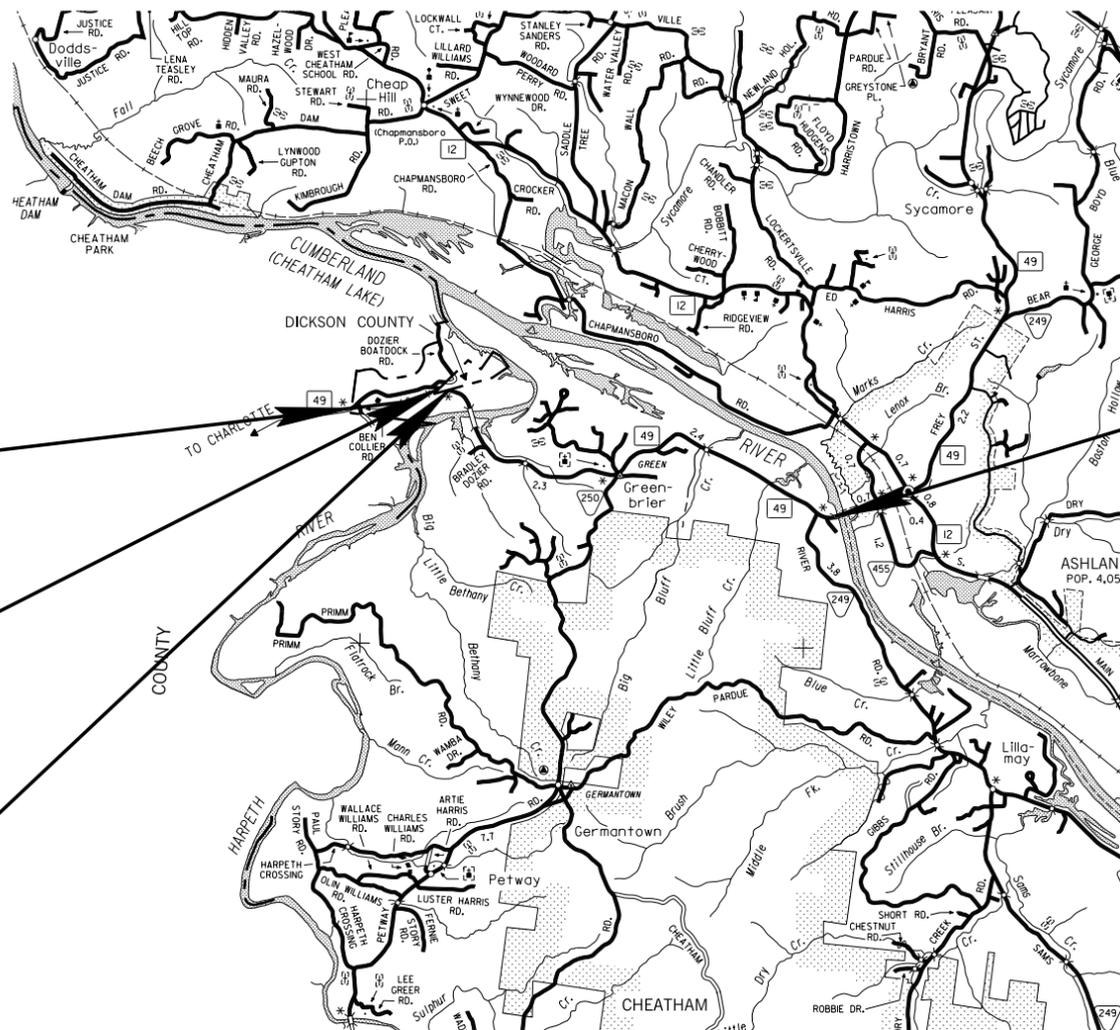
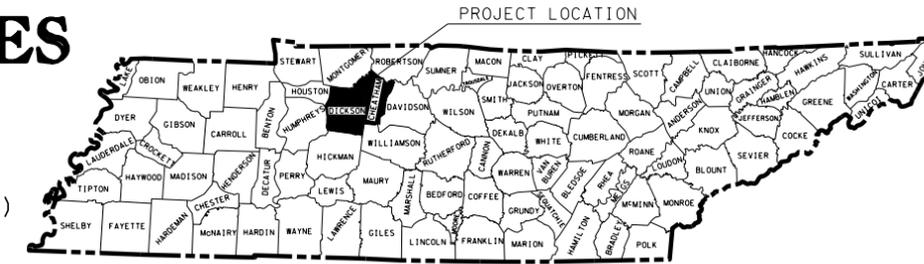
TENN.	YEAR	SHEET NO.
	2015	1
FED. AID PROJ. NO.	HSIP-49(39)	
STATE PROJ. NO.	11007-4239-04	
STATE PROJ. NO.	11007-3239-94	

**CHEATHAM-DICKSON COUNTIES**

**STATE ROUTE NO. 49**

FROM DICKSON COUNTY LINE THROUGH CHEATHAM COUNTY  
 AND DICKSON COUNTY (L.M. 0.00)  
 TO CUMBERLAND RIVER BRIDGE IN CHEATHAM COUNTY (L.M. 4.95)  
**RESURFACING**

STATE HIGHWAY NO. 49 F.A.H.S. NO. NA



EXCLUSIONS	
LOG MILE	LENGTH (FT.)
L.M. 0.39 - HARPETH RIVER	1040'
TOTAL =	1,040'

11007-4239-04  
 11007-3239-94  
 END PROJ. NO. HSIP-49(39)  
 L.M. 4.95 (CHEATHAM CO.)

11007-4239-04  
 11007-3239-94  
 BEGIN PROJ. NO. HSIP-49(39)  
 L.M. 0.00 (CHEATHAM CO.)  
 END PROJ. NO. HSIP-49(39)  
 L.M. 1.01 (CHEATHAM CO.)  
 BEGIN PROJ. NO. HSIP-49(39)  
 L.M. 0.00 (DICKSON CO.)  
 END PROJ. NO. HSIP-49(39)  
 L.M. 0.03 (DICKSON CO.)  
 BEGIN PROJ. NO. HSIP-49(39)  
 L.M. 0.00 (CHEATHAM CO.)

**SPECIAL NOTES**

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2015 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

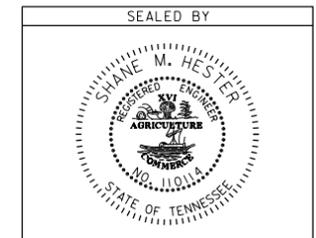
TRANS PROJ SPEC SPV 2 BILLY BINION  
 DESIGNER DARRELL GRAY CHECKED BY JESSE HOOVER  
 P.E. NO. 98034-4299-04 (Design)  
 PIN NO. 120908.00

PROJECT LENGTH **5.79 MILES**  
 TOTAL LANE MILES RESURFACED **11.9 MILES**

SCALE: 1" = 1 MILE

**UNOFFICIAL SET  
 NOT FOR BIDDING**

TRAFFIC DATA	
ADT (2015)	4,990
V	50 MPH



APPROVED: Paul D. Degges  
 PAUL D. DEGGES, CHIEF ENGINEER

DATE: \_\_\_\_\_

APPROVED: John Schroer  
 JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION  
 FEDERAL HIGHWAY ADMINISTRATION

APPROVED: \_\_\_\_\_  
 DIVISION ADMINISTRATOR DATE

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2015	HSIP-49(39)	2

### ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	SAFETY	TOTAL
			11007-4239-04	11007-3239-94	HSIP-49(39)
1,2	303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	711	350	1061
3	307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	500		500
	403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	41		41
4,5	411-03.12 ACS MIX(PG64-22) THIN LIFT D ASPHALT	TON	4238		4238
6	411-12.02 SCORING SHOULDERS (NON-CONTINUOUS) (16IN WIDTH)	L.M.		0.6	0.6
7	411-12.03 SCORING FOR RUMBLE STRIPE (NON-CONTINUOUS) (8IN WIDTH)	L.M.		8.5	8.5
8	415-01.01 COLD PLANING BITUMINOUS PAVEMENT	TON	3968		3968
1	611-09.01 ADJUSTMENT OF EXISTING CATCHBASIN	EACH	2		2
	705-02.02 SINGLE GUARDRAIL (TYPE 2)	L.F.		3050	3050
	705-02.05 RUB-RAIL (ONLY)	L.F.		200	200
	705-04.05 GUARDRAIL TERMINAL (TYPE-IN-LINE)	EACH		4	4
	705-04.07 TAN ENERGY ABSORBING TERM (NCHRP 350, TL3)	EACH		14	14
	706-01 GUARDRAIL REMOVED	L.F.		3100	3100
	706-02 GUARDRAIL RESET	L.F.		700	700
9	712-01 TRAFFIC CONTROL	LS	1		1
	712-04.01 FLEXIBLE DRUMS (CHANNELIZING)	EACH	45		45
	712-05.01 WARNING LIGHTS (TYPE A)	EACH	4		4
10	712-06 SIGNS (CONSTRUCTION)	S.F.	604		604
1	712-08.03 ARROW BOARD (TYPE C)	EACH	1		1
	716-01.21 SNWPLWBLE PVMT MRKRS (BI-DIR)(1 COLOR)	EACH		355	355
	716-01.22 SNWPLWBLE PVMT MRKRS (MONO-DIR)(1 COLOR)	EACH		48	48
11	716-02.04 PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING)	S.Y.	2100		2100
11	716-02.05 PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	144		144
11	716-02.06 PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	2		2
	716-05.01 PAINTED PAVEMENT MARKING (4" LINE)	L.M.	22		22
12	716-12.02 ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.		11	11
	716-12.06 ENHANCED FLAT LINE THERMO (8IN LINE)	L.F.		575	575
13	716-13.02 SPRAY THERMO PVMT MRKNG (60 mil) (6IN LINE)	L.M.		11	11
	717-01 MOBILIZATION	LS	1		1

### FOOTNOTES

- AS DIRECTED BY THE ENGINEER.
- IF GUARDRAIL TERMINAL PADS ARE BEING CONSTRUCTED, THE CONTRACTOR SHALL USE 303-01 MINERAL AGGREGATE BASE STONE. INCLUDES 350 TON FOR GUARDRAIL TERMINAL PADS.
- FOR SPOT LEVELING AS DIRECTED BY THE ENGINEER.
- INCLUDES QUANTITY FOR PRIVATE DRIVES, BUSINESS ENTRANCES AND COUNTY ROADS.
- FOR MATERIAL TRANSFER DEVICE, SEE SPECIAL PROVISION NO. 407G.
- FROM L.M. 4.650 TO L.M. 4.95. (FOR SHOULDERS 8' OR GREATER)
- FROM L.M. 0.000 TO L.M. 4.650. (FOR SHOULDERS 2' OR GREATER BUT LESS THAN 8')
- FOR PROFILE MILLING, CONTRACTOR SHALL USE A MILLING MACHINE MEETING THE REQUIREMENT OF 415 AND HAVE A MINIMUM OF A 12' MILLING HEAD WITH A MAXIMUM OF 3/8" SPACING OF TEETH. CONTRACTOR SHALL USE GRADE CONTROLS ON MILLING MACHINE TO IMPROVE SMOOTHNESS OF THE ROAD.
- THE CONTRACTOR SHALL COMPLY WITH SECTION 712 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION REGARDING TEMPORARY TRAFFIC CONTROL AND THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- IN THE EVENT THAT A CONSTRUCTION AND/OR REGULATORY SIGN IS TEMPORAIRILY DESIGNATED NOT IN USE DURING THE CONSTRUCTION PHASE OF A PROJECT, THE CONTRACTOR SHALL CHOOSE A SIGN COVERING METHOD FROM A DESIGNATED LIST OF METHODS ACCEPTED BY THE DEPARTMENT. SAID SIGN COVERING METHOD SHALL BE SELECTED FROM QUALIFIED PRODUCTS LIST 10, SECTION D OR APPROVED BY THE DIVISION OF MATERIALS AND TEST AND SHALL BE USED TO COVER THESE SIGNS. NO OTHER METHOD FOR SIGN COVERING WILL BE ALLOWED. TEMPORARY SIGN COVERINGS SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE PRICE BID FOR ITEM NO. 712-06 SIGNS (CONSTRUCTION).
- THE CONTRACTOR MAY ELECT TO SUBSITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
- QUANTITY IS BASED ON 2.1 % PASS, 8.9 % NO PASS ONE SIDE, AND 89.0 % NO PASS BOTH SIDES AND EDGELINES FROM L.M. 4.650 TO L.M. 4.95 FOR FINAL PAVEMENT MARKINGS.
- SPRAY THERMO FOR EDGE LINES WITH RUMBLE STRIPE FROM L.M. 0.000 TO L.M. 4.650. SEE SPECIAL PROVISION 716ST FOR FINAL PAVEMENT MARKING DETAILS.

### SIGNS (CONSTRUCTION) 712-06

QUANTITY	M.U.T.C.D. NO.	DESCRIPTION	SIZE	712-06 S.F.
2	G20-1	ROAD WORK NEXT 6 MILES	64 x 24	21.33
2	G20-2	END ROAD WORK	48 x 24	16
2	W20-1	ROAD WORK 1500'	48 x 48	32
2	W20-1	ROAD WORK 1000'	48 x 48	32
2	W20-1	ROAD WORK 500'	48 x 48	32
12	W20-1	ROAD WORK AHEAD	48 x 48	192
2	W20-4	ONE LANE ROAD 1000' - PORTABLE	36 x 36	18
2	W4-2R	LANE CLOSED MERGE RIGHT	48 x 48	32
2	W4-2L	LANE CLOSED MERGE LEFT	48 x 48	32
2	W20-5R	RIGHT LANE CLOSED AHEAD	48 x 48	32
2	W20-5L	LEFT LANE CLOSED AHEAD	48 x 48	32
2	W20-7a	FLAGGER SYMBOL - PORTABLE	36 x 36	18
2	W16-2	SUPPLEMENTAL PLATE	24 x 18	6
2	W21-2	FRESH OIL - PORTABLE	36 x 36	18
2	W21-5	SHOULDER WORK - PORTABLE	36 x 36	18
2	W8-9a	SHOULDER DROP-OFF - PORTABLE	36 x 36	18
6	W8-11	UNEVEN LANES - PORTABLE	36 x 36	54
<b>TOTAL S.F.</b>				<b>603.33</b>

OTHER SIGNS, AS DIRECTED BY THE ENGINEER MAY BE REQUIRED DURING VARIOUS PHASES OF CONSTRUCTION AND WILL BE MEASURED AND PAID FOR AT THE UNIT BID PRICE. SEE CURRENT M.U.T.C.D. FOR STANDARDS AND TYPICAL APPLICATIONS.

### GUARDRAIL

LOCATION (L.M.)	SIDE		GUARDRAIL SINGLE 705-02.02 (L.F.)	GUARDRAIL RUB-RAIL 705-02.05 (L.F.)	ANCHOR IN-LINE 705-04.05 (EACH)	ANCHOR TYPE 38 705-04.07 (EACH)	GUARDRAIL REMOVED 706-01 (L.F.)	GUARDRAIL RESET 706-02 (L.F.)
	LT	RT						
1.31	X		50			2		
3.008	X					1	50	
3.16	X		1150			1	1150	
3.453	X					1		175
3.516	X					1		175
3.635	X		650	50	1	1	650	
4.18	X		200	50	1	1	200	
4.224	X		950	50	1	1	950	
4.824	X					1	50	
1.317		X	50	50	1	1		
2.763		X				1	50	
3.445		X				1		175
3.509		X				1		175
			<b>3050</b>	<b>200</b>	<b>4</b>	<b>14</b>	<b>3100</b>	<b>700</b>

### UTILITY ADJUSTMENTS

TYPE	OWNER	NUMBER
SEWER MANHOLE		0
TELEPHONE MANHOLE		0
GAS VALVE		0
WATER VALVE		0

### STATE STORM DRAIN ADJUSTMENTS

CATCHBASINS	2
MANHOLES	0

**UNOFFICIAL  
SET  
NOT FOR  
BIDDING**

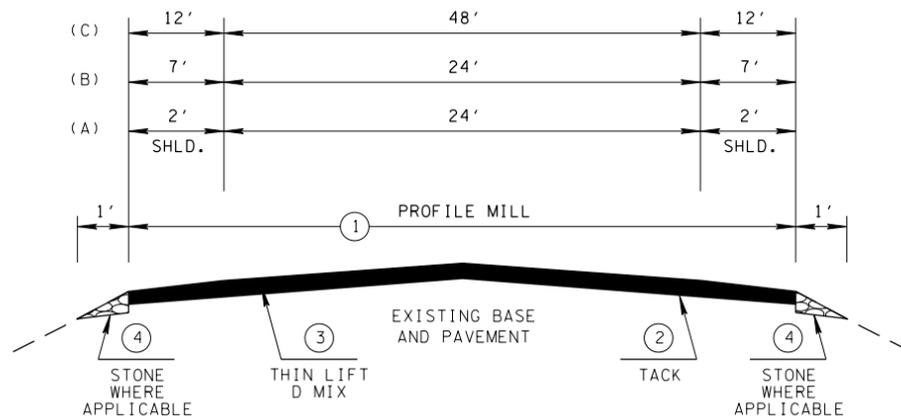
SEALED BY



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**ESTIMATED  
ROADWAY  
QUANTITIES  
AND TABULATED  
QUANTITIES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2015	HS1P-49(39)	2A



**TYPICAL SECTION**

- (A) L.M. 0.000 TO L.M. 1.010 CHEATHAM CO.
- (A) L.M. 0.000 TO L.M. 0.030 DICKSON CO.
- (A) L.M. 0.000 TO L.M. 0.118 CHEATHAM CO.  
L.M. 0.118 TO L.M. 0.802 CHEATHAM CO. (EXCLUSION)
- (B) L.M. 0.802 TO L.M. 0.914 CHEATHAM CO.
- (A) L.M. 0.914 TO L.M. 4.650 CHEATHAM CO.
- (C) L.M. 4.650 TO L.M. 4.950 CHEATHAM CO.

PAVING SCHEDULE	
1	COLD PLANING BITUMINOUS PAVEMENT @ 0.75" PROFILE MILL (APPROX 78.75 LBS/SY) 415-01.01 COLD PLANING BITUMINOUS PAVEMENT
2	TACK COAT @ 0.07 GAL/SY (GENERAL USE) 0.10 GAL/SY (MILLING - COLD PLANE) 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)
3	GRADING "D" SURFACE @ 0.75" THICK (APPROX 85.0 LBS/SY) 411-03.12 ACS MIX (PG64-22) THIN LIFT D ASPHALT
4	MINERAL AGGREGATE BASE (WEDGE) @ 2.00" THICK 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D

**\* SPECIAL PAVING NOTE \***

ALL SHOULDERS WILL BE DEGRADED / CLIPPED AND CLEANED OF ALL VEGETATION, GRASS, AND DEBRIS. SEE SPECIAL NOTES. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

BRIDGE NOTES			
LOCATION	BRIDGE NO.	LENGTH (FT.)	RECOMMENDATION
L.M. 0.39	11SR0490001	1040	LEAVE AS IS
L.M. 1.30	11SR0490003	32	PAVE WITH PLANS QUANTITY
L.M. 3.43	11SR0490005	172	COLD PLANE 1.25" OF THE EXISTING ASPHALT AND REPLACE WITH 1.25" NEW ASPHALT **
<b>** SPECIAL NOTE</b>			
THE CONTRACTOR SHOULD TAKE EXTREME CARE WHEN COLD PLANING THE EXISTING ASPHALT OFF BRIDGE DECK, SO AS NOT TO DAMAGE THE EXISTING DECK, SEALANT AND/OR EXPANSION JOINT MEMBERS (STEEL PLATES, BARS, AND/OR HEADERS). IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR NECESSARY REPAIRS ON ALL DAMAGED MEMBERS TO THE SATISFACTION OF THE PROJECT ENGINEER AT NO ADDITIONAL COST.			

**UNOFFICIAL  
SET  
NOT FOR  
BIDDING**

SEALED BY



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**TYPICAL  
SECTIONS**

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2015	HS1P-49(39)	2B

## GENERAL NOTES

### GUARDRAIL

- (1) THE PROPOSED GUARDRAIL, INCLUDING ANY ANCHOR SYSTEM, SHALL BE INSTALLED QUICKLY TO MINIMIZE TRAFFIC EXPOSURE TO ANY HAZARD. NO PAYMENT WILL BE MADE FOR A SECTION OF PROPOSED GUARDRAIL, INCLUDING ANCHORS, UNTIL IT IS COMPLETE IN PLACE.

### UTILITIES

- (1) THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.
- (2) UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR ITS REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.
- (3) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- (4) THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106.

### MISCELLANEOUS

- (5) THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES WHERE AND AS DIRECTED BY THE ENGINEER.
- (6) NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA

### PAVEMENT MARKINGS

#### TEMPORARY PAVEMENT MARKING ON INTERMEDIATE LAYERS

- (7) TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAYS WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.01, PAINTED PAVEMENT MARKING (4" LINE), L.M.

#### FINAL PAVEMENT MARKING IF 6" ENHANCED FLATLINE THERMOPLASTIC IS USED

- (8) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 6" ENHANCED FLATLINE THERMOPLASTIC INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-12.02, ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE), L.M. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS.

#### FINAL PAVEMENT MARKING IF 6" SPRAY THERMOPLASTIC (60 mil) IS USED

- (9) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 6" SPRAY THERMOPLASTIC (60 mil) INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-13.02, SPRAY THERMO PVMT MRKNG (60 mil) (6IN LINE), L.M. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS.

### PAVEMENT

#### PAVING

- (10) THE CONTRACTOR SHALL BE REQUIRED TO COLD PLANE AND PAVE IN THE DIRECTION OF TRAFFIC.

#### RESURFACING

- (11) WHERE DIRECTED BY THE TDOT ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO SHAPE PUBLIC SIDE ROADS, BUSINESS ENTRANCES, AND PRIVATE DRIVES, AS WELL AS CLEANING OF EXISTING DRAINS BEFORE PLACING MATERIALS. ALL COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- (12) ALL PUBLIC SIDE ROADS SHALL BE PAVED ONE PAVER WIDTH THROUGH THE INTERSECTION AS A MINIMUM. A SATISFACTORY TRANSITION FROM THE NEW PAVEMENT TO THE EXISTING GRADE OF THE INTERSECTING PUBLIC ROAD OR BUSINESS ENTRANCE SHALL BE PROVIDED. SHOULD THE PAVEMENT OF THE INTERSECTING PUBLIC ROAD BE DISTRESSED, THE RESURFACING WIDTH MAY BE INCREASED TO THE NORMAL RIGHT OF WAY LINE.
- (13) PRIVATE DRIVEWAYS, FIELD ENTRANCES, AND BUSINESS ENTRANCES WILL BE RESURFACED A PAVER WIDTH (LANE WIDTH) AS A MINIMUM. A PAVEMENT TAPER TO TRANSITION THE NEW PAVEMENT SHALL BE REQUIRED, IT SHALL BE BASED ON AN ADDITIONAL ONE FOOT OF WIDTH PER ONE INCH DEPTH OF PAVEMENT. IF THE SHOULDER IS NARROW ENOUGH THAT THE SUM OF THE SHOULDER AND THE TRANSITION ARE LESS THAN A PAVER WIDTH, THE TRANSITION SHALL OCCUR WITHIN THE PAVER WIDTH. IF THE SUM OF THE SHOULDER AND THE TRANSITION IS GREATER THAN A PAVER WIDTH (LANE WIDTH), THE TRANSITION SHALL OCCUR OUTSIDE OF THE PAVER WIDTH.
- (14) IN ALL CASES, THE LENGTH OF THE PAVEMENT TRANSITION, THE THICKNESS AND WIDTH OF THE RESURFACING AND ANY ADDITIONAL PAVEMENT MATERIALS SHALL BE AS DIRECTED BY THE TDOT ENGINEER.

#### CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- (15) ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.
- (16) IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.
- (17) A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.
- (18) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.

- (19) USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- (20) THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF AN OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE.. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- (21) ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

### EROSION PREVENTION AND SEDIMENT CONTROL

#### LITTER, DEBRIS, WASTE, PETROLEUM

- (22) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS. AFTER USE, MATERIALS USED FOR EPSC WILL BE REMOVED FROM THE SITE.
- (23) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.

**UNOFFICIAL  
SET  
NOT FOR  
BIDDING**

SEALED BY



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**GENERAL  
NOTES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2015	HS1P-49(39)	2C

## SPECIAL NOTES

### UTILITIES

- (1) AT THE CLOSE OF DAILY OPERATION ALL UTILITY COVERS, RIMS AND BOXES AS WELL AS CATCHBASINS IN THE TRAVELED WAY SHALL BE LEFT IN A SAFE CONDITION. UNDER NO CIRCUMSTANCES SHALL ANYTHING BE LEFT IN SUCH A HAZARDOUS CONDITION AS TO CAUSE DAMAGE TO VEHICLES OR ACCIDENTS. THE CONTRACTOR SHALL ACCEPT FULL RESPONSIBILITY FOR ANY DAMAGE TO VEHICLES OR PERSONAL INJURIES RESULTING FROM HIS FAILURE TO EITHER DEFINE THE LOCATION OR PROTECT THE OBSTACLE BY RAMPING AROUND IT WITH BITUMINOUS MATERIAL.
- (2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF ANY MANHOLE, WATER VALVE OR CATCHBASIN COVERS THAT ARE NECESSARY IN ORDER TO PERFORM THE REQUIRED WORK. THE REMOVAL AND REPLACEMENT OF THESE COVERS WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE PROVIDED PAY ITEMS.
- (3) ADJUSTMENTS OF UTILITIES SHALL NOT BE PERFORMED UNTIL PLACEMENT OF SPOT LEVELING (BM-2) BUT PRIOR TO PLACEMENT OF FINAL SURFACE (D MIX).

### MISCELLANEOUS

- (4) THE CONTRACTOR WILL BE REQUIRED TO PERFORM THE FOLLOWING WORK AND INCLUDE ALL COSTS THEREOF IN THE PRICES BID FOR OTHER ITEMS OF CONSTRUCTION:
  1. REPAIR OF SHOULDERS AND DITCHES THROUGHOUT THE LENGTH OF THE PROJECT.
  2. DEGRASS ALL SHOULDERS, MATERIAL SHALL BE PICKED UP AND REMOVED.
  3. REMOVE ALL GARBAGE AND CONSTRUCTION DEBRIS FROM PROJECT.
  4. CLEANING AND STRAIGHTENING ENDS OF EXISTING SIDEDRAINS AND CROSSDRAINS WHERE DIRECTED BY THE ENGINEER.
- (5) THE CONTRACTOR SHALL TAKE EXTREME CARE WHEN WORKING AROUND EXISTING GUARDRAIL, HIGHWAY SIGNS, OR ANY DEPARTMENT OF TRANSPORTATION STRUCTURE TO AVOID DAMAGE DURING THE COURSE OF CONSTRUCTION. ANY DAMAGE WILL BE REPLACED OR REPAIRED AT HIS OWN EXPENSE.

### PAVEMENT MARKINGS

- (6) THE CONTRACTOR WILL BE REQUIRED TO ESTABLISH AND LOCATE ALL NO-PASSING ZONES. THE ESTABLISHMENT OF NO-PASSING ZONES IS TO BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009, PART III, MARKING. ALL NO-PASSING ZONES WILL BE APPROVED BY THE ENGINEER WITH ADVICE FROM THE REGIONAL TRAFFIC ENGINEER PRIOR TO THE MARKING APPLICATION.
- (7) THE CONTRACTOR IS TO PROVIDE THE LAYOUT OF ALL EXISTING PAVEMENT MARKINGS BEFORE BEGINNING THE RESURFACING PROJECT. EXISTING MARKINGS SHALL BE REFERENCED AS NEEDED TO ENSURE THAT ALL NEW MARKINGS ARE REPLACED IN THEIR CORRESPONDING LOCATIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

### PAVEMENT

#### PAVING

- (8) SURFACE TO BE CROWNED AS DIRECTED BY THE ENGINEER.
- (9) ALL STRUCTURES (DRAINAGE STRUCTURES, MANHOLES, UTILITY BOXES, ETC.) SHALL HAVE A FINISHED GRADE COMPATIBLE WITH THE FINISHED GRADE OF THE ROADWAY.

#### RESURFACING

- (10) DURING COLD PLANING OPERATION, A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION WILL REMAIN OPEN.
- (11) AFTER ANY COLD PLANING OPERATION, TEMPORARY STRIPING WILL BE REQUIRED BEFORE RETURNING TRAFFIC ONTO EXCAVATED ROADWAY.

### CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- (12) THE CONSTRUCTION SIGNS, FLAGMEN AND OTHER TRAFFIC CONTROL DEVICES WILL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- (13) ONE ADVANCE ROAD CONSTRUCTION AHEAD SIGN IS TO BE PLACED ON ALL SIDE ROADS PRIOR TO THEIR INTERSECTION WITH THE PROPOSED PROJECT. LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER OR CONTRACTORS SUPERINTENDENT.

### EROSION PREVENTION AND SEDIMENT CONTROL

#### FOR GUARDRAIL TERMINALS

- (14) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS BEFORE CONSTRUCTING EARTH PADS FOR THE TYPE 38 TERMINALS TO ENSURE THAT ENVIRONMENTAL FEATURES (STREAMS, WETLANDS, OR SPRINGS) ARE NOT IMPACTED DURING CONSTRUCTION. IF THE CONTRACTOR / TDOT INSPECTOR IS UNSURE WHETHER THE ENVIRONMENTAL FEATURES ARE STREAMS, SPRINGS OR WETLANDS, THE INSPECTOR SHALL CONTACT THE TDOT ENVIRONMENTAL DIVISION ECOLOGY OR PERMITS SECTION SO AN ACCURATE DETERMINATION CAN BE ASSESSED.
- (15) DURING CONSTRUCTION OF THE EARTH PADS FOR THE TYPE 38 GUARDRAIL TERMINALS, EXISTING VEGETATION WILL BE REQUIRED TO BE REMOVED FOR THE PROPOSED PAD AND SLOPES. IF DURING THE VEGETATION REMOVAL, ANY TREES GREATER THAN 3 INCHES IN DIAMETER ARE REQUIRED TO BE REMOVED, CONTACT THE TDOT ENVIRONMENTAL DIVISION ECOLOGY SECTION IMMEDIATELY. DUE TO THE RECENT MODIFICATION OF THE USFWS STANCE REGARDING THE INDIANA BAT NO TREES > 3" DBH SHOULD BE CUT WITHOUT CLEARANCE FROM THE TDOT ENVIRONMENTAL DIVISION ECOLOGY SECTION.

#### NPDES

- (16) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS, BEFORE CLEANING OUT OR REMOVAL/REPLACEMENT OF DITCHES, SIDE DRAINS, AND CROSS DRAINS, TO ENSURE THAT THE DRAINAGE FEATURES / WATERCOURSES ARE NOT STREAMS OR WETLANDS. IF THE CONTRACTOR / TDOT INSPECTOR IS UNSURE WHETHER THE DRAINAGE FEATURES ARE STREAMS OR WETLANDS, THE INSPECTOR SHALL CONTACT THE TDOT ENVIRONMENTAL DIVISION, PERMITS SECTION TO OBTAIN THE APPROPRIATE PERMITS.
- (17) DUE TO THE TYPE OF WORK IT IS OUR UNDERSTANDING THAT THE PROJECT WILL NOT DISTURB MORE THAN ONE ACRE. IF THE DISTURBED AREA IS MORE THAN ONE ACRE, PLEASE CONTACT THE TDOT ENVIRONMENTAL DIVISION, PERMITS SECTION BECAUSE A NPDES PERMIT WILL BE REQUIRED.

#### PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

- (18) DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES OR TRAFFIC LANE AND SHOULDER WHERE THE TRAFFIC LANE IS BEING USED BY TRAFFIC, CAUSED BY BASE, PAVING OR RESURFACING:
  1. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 0.75 INCH AND NOT EXCEEDING 2 INCHES:
    - a. WARNING SIGNS, UNEVEN PAVEMENT (W8-11) AND/OR SHOULDER DROP-OFF (W8-9A), SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.
    - b. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY ADDED PAVEMENT SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
    - c. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY COLD PLANING SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
    - d. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE TRAFFIC LANE BEING UTILIZED BY TRAFFIC AND SHOULDER THE DIFFERENCE IN ELEVATION SHALL BE ELIMINATED WITHIN SEVEN WORKDAYS AFTER THE CONDITION IS CREATED.

### WORK RESTRICTIONS

- (19) NO TIME RESTRICTIONS, BUT ALL CONSTRUCTION ACTIVITIES WILL NOT INTERFERE WITH SCHOOL OR WORK TRAFFIC EITHER AM OR PM OR AS DIRECTED BY THE ENGINEER.

**UNOFFICIAL  
SET  
NOT FOR  
BIDDING**

SEALED BY



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

**SPECIAL  
NOTES**