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Jason Ingram

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TENNESSEE DEPARTMENT OF TRANSPORTATION  
7512 VOLKSWAGEN DRIVE

CHATTANOOGA, TN  
JASON MARK INGRAM, P.E. NO. 114814

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE OF TENN. CODE ANN. §62-2-306.

SHEET NAME	SHEET NO.
SIGNATURE SHEET .....	ROADWAY-SIGN3
TITLE SHEET .....	1
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS .....	1A
SPECIAL NOTES.....	2D1, 2D2

YEAR	PROJECT NO.	SHEET NO.
2025	NH/HSIP-40(52)	ROADWAY-SIGN3
	06S040-F8-004	
	06S040-F3-004	

REVISION - LETTING 1-23-25: ADDED SHEET

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

SIGNATURE  
SHEET



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7512 VOLKSWAGEN DRIVE

CHATTANOOGA, TN  
JASON MARK INGRAM, P.E. NO. 114814

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SHEET NAME	SHEET NO.
SIGNATURE SHEET .....	ROADWAY-SIGN2
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS .....	1A
TYPICAL SECTIONS AND PAVEMENT SCHEDULE .....	2B

YEAR	PROJECT NO.	SHEET NO.
2025	NH/HSIP-40(52)	ROADWAY-SIGN2
	06S040-F8-004	
	06S040-F3-004	

REVISION - LETTING 12-16-24: ADDED SHEET.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

SIGNATURE  
SHEET







Index Of Sheets  
SEE SHEET NO. 1A

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING

BRADLEY COUNTY

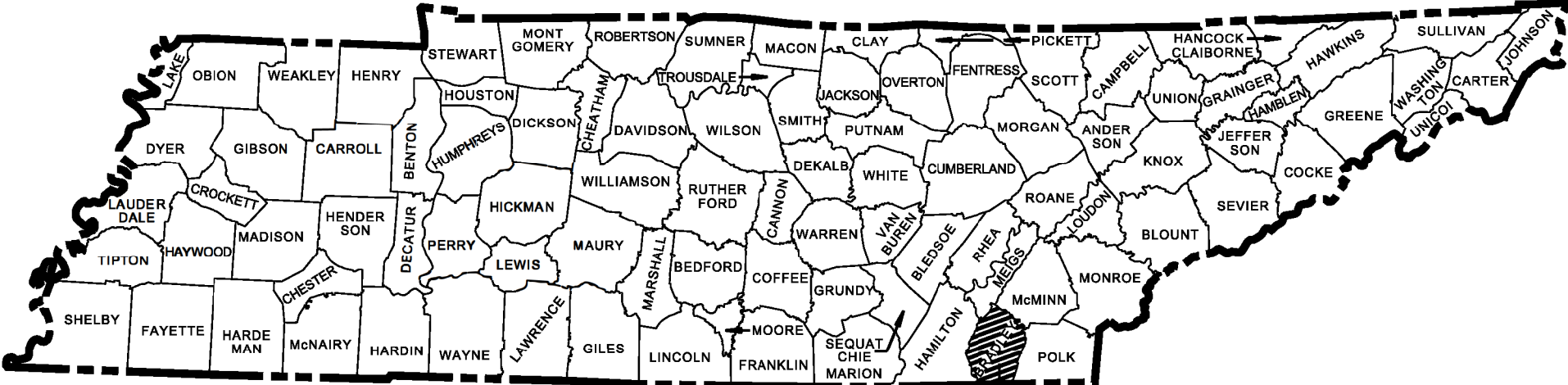
STATE ROUTE 40 (US-64, 74)  
FROM NEAR LYLES ROAD SE (LM 4.96)  
TO POLK COUNTY LINE (LM 9.66)

RESURFACE & SAFETY  
COLD PLANE, RESURFACE 411D, AND PAVEMENT MARKINGS

STATE HIGHWAY NO. 40 F.A.H.S. NO. 64, 74

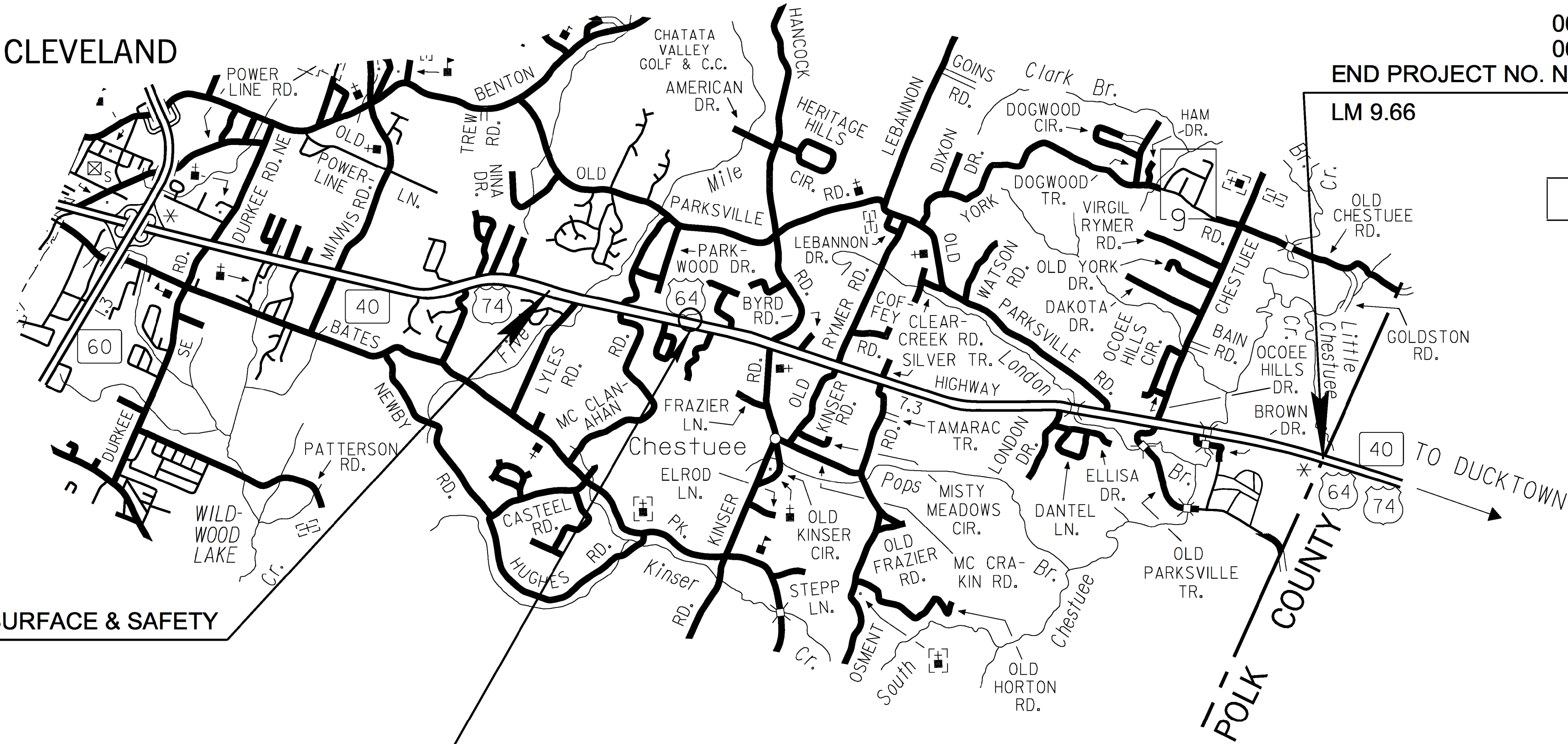
DOES THIS PROJECT QUALIFY FOR UTILITY CHAPTER 86	YES	NO X
WORK ZONE SIGNIFICANCE DETERMINATION		
SIGNIFICANT	YES	NO X

TENN.	YEAR 2025	SHEET NO. 1
FED. AID PROJ. NO.	NH/HSIP-40(52)	
STATE PROJ. NO.	06S040-F8-004, 06S040-F3-004	



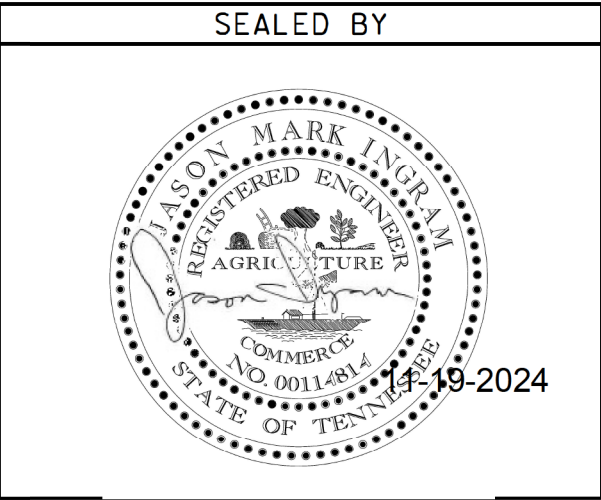
PROJECT LOCATION  
BRIDGE ID. # 06SR0400005 06SR0400006 06SR0400007

BALANCED MIX DESIGN ON EAST BOUND OUTSIDE LANE FROM LM 6.50 TO LM 9.66



06S040-F3-004  
06S040-F8-004  
END PROJECT NO. NH/HSIP-40(52) RESURFACE & SAFETY  
LM 9.66

NO EXCLUSIONS



APPROVED:   
WILL REID, CHIEF ENGINEER

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

APPROVED:   
HOWARD M. ELEY, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

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

06S040-F3-004  
06S040-F8-004  
BEGIN PROJECT NO. NH/HSIP-40(52) RESURFACE & SAFETY  
LM 4.96

SPECIAL NOTES

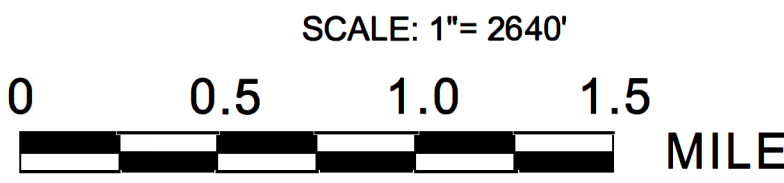
PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2021 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT PROJECT MANAGER : ANDREW ZAZZARA, P.E.  
ENGINEER ON RECORD : JASON M. INGRAM  
DESIGNER : DIANE EVITT CHECKED BY : MEGAN WILDES, P.E.  
P.E. NO. 98023-4217-04  
PIN NO. 124940.00

AUTOMATIC TRAFFIC RECORDER #17 EB & WB  
LM 5.72

PROJECT LENGTH 4.70 MILES  
TOTAL LANE MILES RESURFACED 20.95 MILES



TRAFFIC DATA	
ADT (2025)	15,980
POSTED SPEED	55 MPH



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TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSIP-40(52)	1A
		06S040-F8-004	
		06S040-F3-004	

REVISION - LETTING 12-16-24: ADDED ROADWAY-SIGN2 TO INDEX.

REVISION - LETTING 1-23-25: ADDED ROADWAY-SIGN3 TO INDEX.

## ROADWAY INDEX

SHEET NAME	SHEET NO.
SIGNATURE SHEETS.....	ROADWAY-SIGN3
.....	ROADWAY-SIGN2
.....	ROADWAY-SIGN1
TITLE SHEET .....	1
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS .....	1A
ESTIMATED ROADWAY QUANTITIES .....	2
TYPICAL SECTIONS AND PAVEMENT SCHEDULE .....	2B
GENERAL NOTES.....	2C
SPECIAL NOTES.....	2D, 2D1, 2D2
ENVIRONMENTAL NOTES.....	2E
TABULATED QUANTITIES .....	2F
DETAIL SHEET .....	2G
UTILITY NOTES, AND UTILITY OWNERS.....	3
PAVEMENT EDGE DROP-OFF NOTES FOR TRAFFIC CONTROL .....	T1

NOTES:

THE ALPHABETICAL LETTERS "I", "O" & "Q" ARE NOT USED IN THE NUMBERING OF SHEETS.

NO SHEET 2A SERIES INCLUDED IN THIS SET OF PLANS.

NO PROJECT COMMITMENTS INCLUDED IN THIS PROJECT.


## STANDARD ROADWAY DRAWINGS

DWG.	REV.	DESCRIPTION
<b>10-100.00 STANDARD ROADWAY TITLE SHEET, ABBREVIATIONS, AND LEGENDS</b>		
RD-TP-1	09-26-16	STANDARD ROADWAY DRAWINGS TITLE SHEET
RD-A-1	02-20-20	STANDARD ABBREVIATIONS A THROUGH L
RD-A-2		STANDARD ABBREVIATIONS M THROUGH Z
RD-L-1	02-20-20	STANDARD LEGEND
RD-L-1A		STANDARD LEGEND
RD-L-2	02-20-20	STANDARD LEGEND FOR UTILITY INSTALLATIONS
RD-L-3	03-01-23	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
<b>10-108.00 DESIGN - TRAFFIC CONTROL</b>		
T-M-1	06-28-19	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	01-09-24	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-3	07-07-23	MARKING STANDARDS FOR TRAFFIC ISLANDS, PAVED SHOULDERS AND MEDIANS FOR CONVENTIONAL ROADS
T-M-4	07-17-20	STANDARD INTERSECTION PAVEMENT MARKINGS
T-M-15A	06-28-19	ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED RURAL ROUTES
T-M-16	03-04-21	RUMBLE STRIPE INSTALLATION LAYOUT
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-11	03-04-21	ONE LANE CLOSURE DETAIL ON DIVIDED HIGHWAYS
T-WZ-21	05-01-20	LANE CLOSURE WITH LEFT HAND MERGE AND LANE SHIFT
T-WZ-60		FREEWAY RESURFACING SIGNING LAYOUT
T-WZ-FAB1		FLASHING YELLOW ARROW BOARD

## STANDARD TRAFFIC OPERATIONS DRAWINGS

DWG.	REV.	DESCRIPTION
<b>SIGNS</b>		
T-S-16	07-02-15	GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS
T-S-20	07-11-17	SIGN DETAILS
<b>SIGNALS</b>		
T-SG-2	06-27-16	LOOP LEAD-INS, CONDUIT AND PULL BOXES
T-SG-3	07-11-17	STANDARD NOTES AND DETAILS OF INDUCTIVE LOOPS

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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

ROADWAY INDEX  
AND  
STANDARD  
ROADWAY  
DRAWINGS



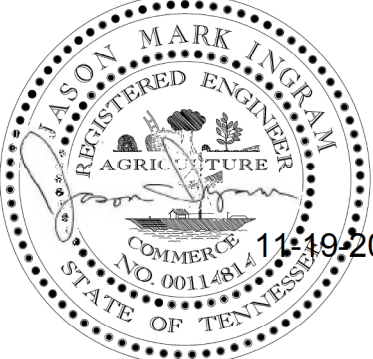
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TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSIP-40(52)	2
		06S040-F8-004	
		06S040-F3-004	

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	QUANTITY 06S040-F8-004	QUANTITY 06S040-F3-004	TOTAL QUANTITY
(1)	208-01.05 BROOMING & DEGRASSING SHOULDERS	L.M.	18.8		18.8
(2)	303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON		827	827
(3)	403-02.01 TRACKLESS TACK COAT	TON	101		101
(4)	411-02.10 ACS MIX(PG70-22) GRADING D	TON	15312		15312
(5)	411-05.02 BMD ACS MIX (BALANCED MIX DESIGN)	TON	1474		1474
	411-12.01 SCORING SHOULDERS (CONTINUOUS) (16IN WIDTH)	L.M.	7.6		7.6
	411-12.02 SCORING SHOULDERS (NON-CONTINUOUS) (16IN WIDTH)	L.M.	3.8		3.8
	411-12.03 SCORING FOR RUMBLE STRIPE (NON-CONTINUOUS) (8IN WIDTH)	L.M.		3.8	3.8
(6)	415-01.01 COLD PLANING BITUMINOUS PAVEMENT	TON	15044		15044
(7)	705-04.20 GUARDRAIL DELINEATION ENHANCEMENT	EACH		1349	1349
	712-01 TRAFFIC CONTROL	LS	1		1
(7)	712-04.01 FLEXIBLE DRUMS (CHANNELIZING)	EACH	128		128
(7)	712-06 SIGNS (CONSTRUCTION)	S.F.	2370		2370
	712-08.03 ARROW BOARD (TYPE C)	EACH	2		2
	713-16.01 CHANGEABLE MESSAGE SIGN UNIT	EACH	2		2
(8)	713-16.20 SIGNS ("BEGIN TEST SECTION #", SIGN, POST, AND INSTALLATION, (10.5"x5.5" ))	EACH	13		13
	716-01.22 SNOWPLOWABLE RAISED PAVMENT MARKERS (MONO-DIR)(1 COLOR)	EACH	170		170
	716-01.23 SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR)(2 COLOR)	EACH	620		620
	716-01.30 REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	790		790
(9)	716-02.05 PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.		1039	1039
(9)	716-02.06 PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH		27	27
(9)(10)	716-02.08 PLASTIC PAVEMENT MARKING (8" DOTTED LINE)	L.F.		760	760
(9)(10)	716-02.12 PLASTIC PAVEMENT MARKING (8IN LINE)	L.M.		0.5	0.5
(11)(12)	716-05.01 PAINTED PAVEMENT MARKING (4" LINE)	L.M.	21.4	4.7	26.1
(11)	716-05.05 PAINTED PAVEMENT MARKING (STOP LINE)	L.F.	1039		1039
(13)(14)	716-12.02 ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	21.5		21.5
	717-01 MOBILIZATION	LS	1		1
(15)(16)	730-03.25 INSTALL PULL BOX (29" x 21")	EACH		3	3
(15)(16)	730-12.02 CONDUIT 2" DIAMETER (PVC)	L.F.		124	124
(15)(16)	730-12.08 CONDUIT 2" DIAMETER (RGS)	L.F.		62	62
(15)	730-14.01 SHIELDED DETECTOR CABLE	L.F.		768	768
(15)	730-14.02 SAW SLOT	L.F.		260	260
(15)	730-14.03 LOOP WIRE	L.F.		1000	1000

FOOTNOTES	
(1)	INCLUDES THE COST OF REMOVING DEBRIS AND SWEEPING SHOULDERS PRIOR TO WORK.
(2)	TO BE USED FOR LOW SHOULDERS AS DIRECTED BY THE TDOT PROJECT ENGINEER. (QUANTITY BASED ON 15280' LENGTH, 5' WIDTH, 5" DEPTH)
(3)	INCLUDES 9.20 TONS FOR CROSS-OVERS, COUNTY RDS, DRIVEWAYS AND BUSINESS ENTRANCES.
(4)	INCLUDES 1340 TONS FOR CROSS-OVERS, COUNTY RDS, DRIVEWAYS AND BUSINESS ENTRANCES.
(5)	SEE SHEET NOS. 2B, 2D1, 2D2, & 2F FOR BMD LOCATIONS, SPECIAL NOTES AND TABULATION.
(6)	INCLUDES 1203 TONS FROM CROSS-OVERS, COUNTY ROADS AND BUSINESS ENTRANCES.
(7)	SEE SHEET 2F FOR TABULATION.
(8)	SIGNS ARE FOR DESIGNATING TEST STRIP LOCATIONS AND TO BE LABELED AS "BEGIN TEST SECTION 1" THROUGH "BEGIN TEST SECTION 13" RESPECTIVELY AT THE BEGINNING LOG MILE OF EACH TEST SECTION. SEE SHEET 2B FOR SIGN DETAIL.
(9)	CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
(10)	TO BE USED FOR LEFT TURN LANES. SEE STD DWG T-M-4 FOR INFORMATION.
(11)	QUANTITY LISTED UNDER RESURFACING COLUMN IS TEMPORARY MARKINGS ON COLD PLANED SURFACE AS DIRECTED BY THE TDOT PROJECT ENGINEER.
(12)	QUANTITY LISTED UNDER SAFETY COLUMN IS TEMPORARY EDGE LINE MARKING TO SERVE AS A TRACER LINE FOR 8" RUMBLE STRIPE INSTALLATION ON WEST BOUND OUTSIDE SHOULDER.
(13)	INCLUDES 0.02 LM FOR STRIPING A BAR/STRIPE ON THE ADJACENT 10' SHOULDER TO SIGNAL OFFICIAL START AND STOP LOCATIONS FOR THE DESIGNATED BMD ANALYSIS ZONES.
(14)	CONTRACTOR SHALL USE THE EXTRUDED OR RIBBON METHOD FOR APPLICATION.
(15)	SEE DETAIL SHEET 2G FOR INFORMATION.
(16)	EXISTING PULL BOXES AND CONDUIT, IF NOT BROKEN OR DAMAGED, CAN BE REUSED.

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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

ESTIMATED  
ROADWAY  
QUANTITIES

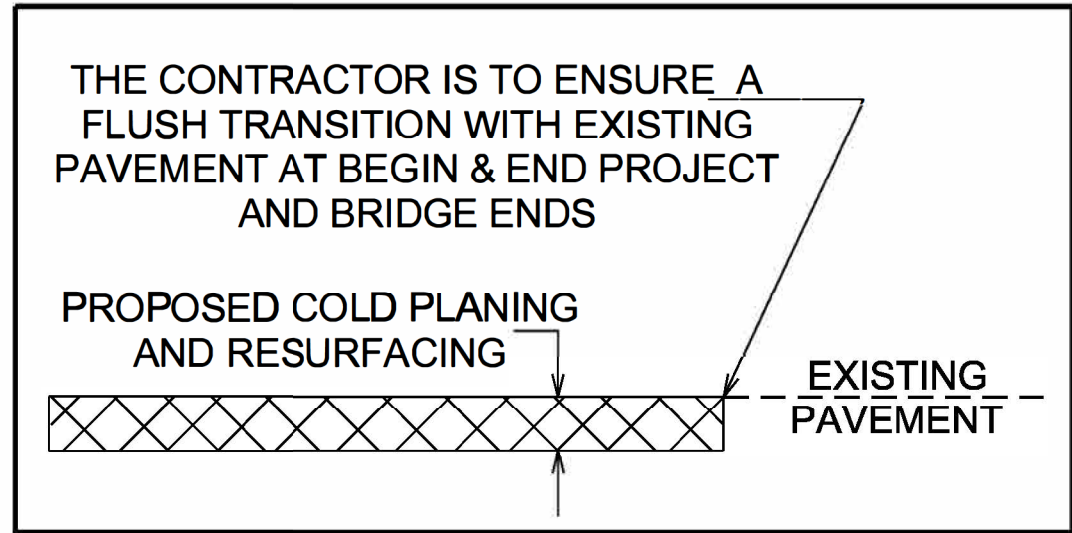
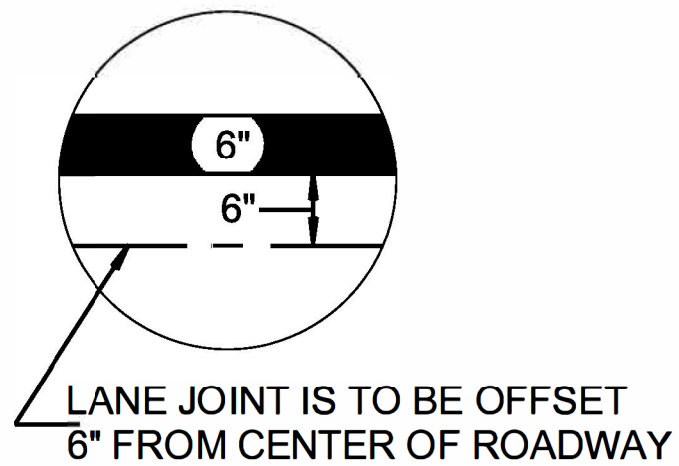
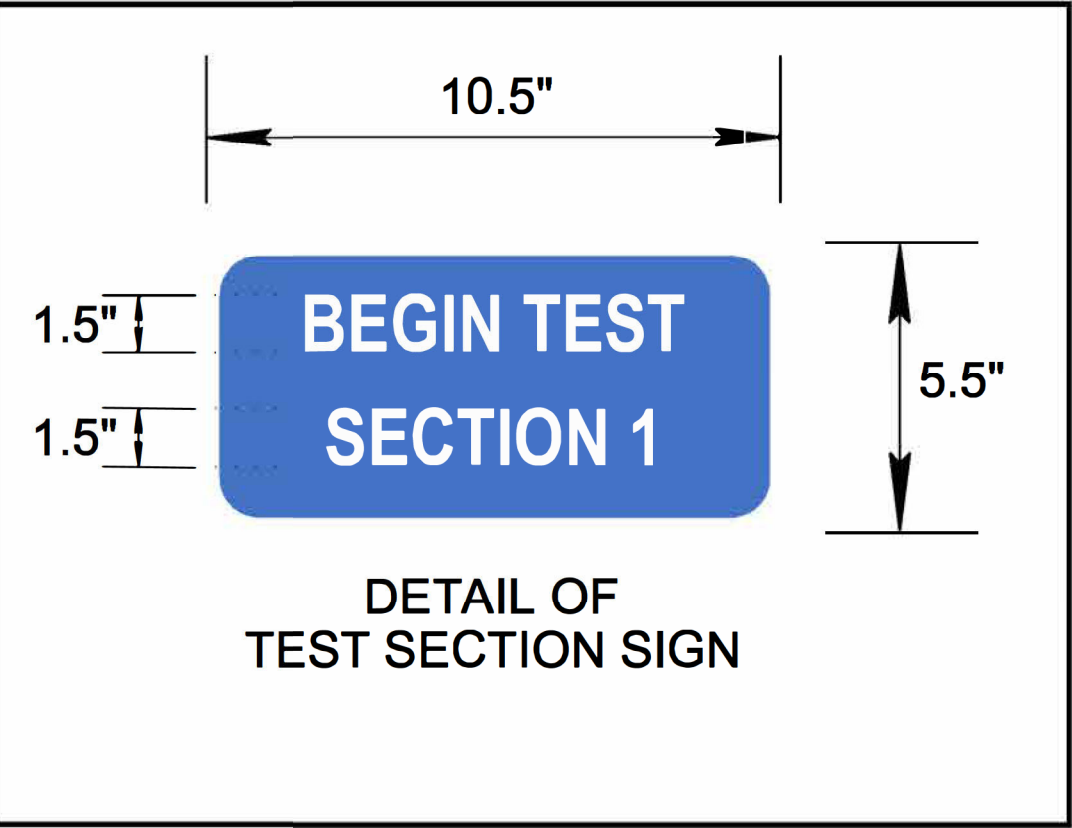
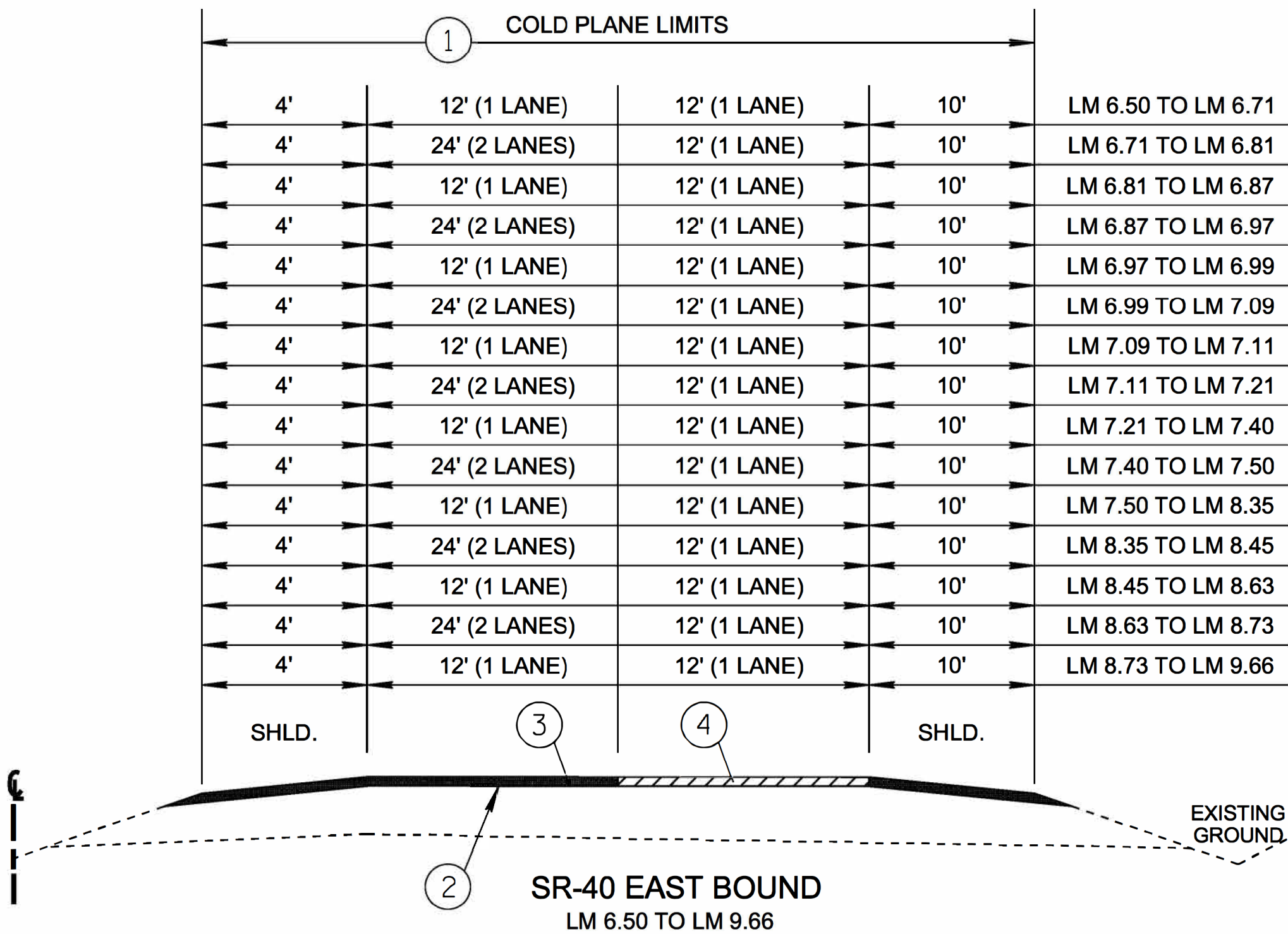
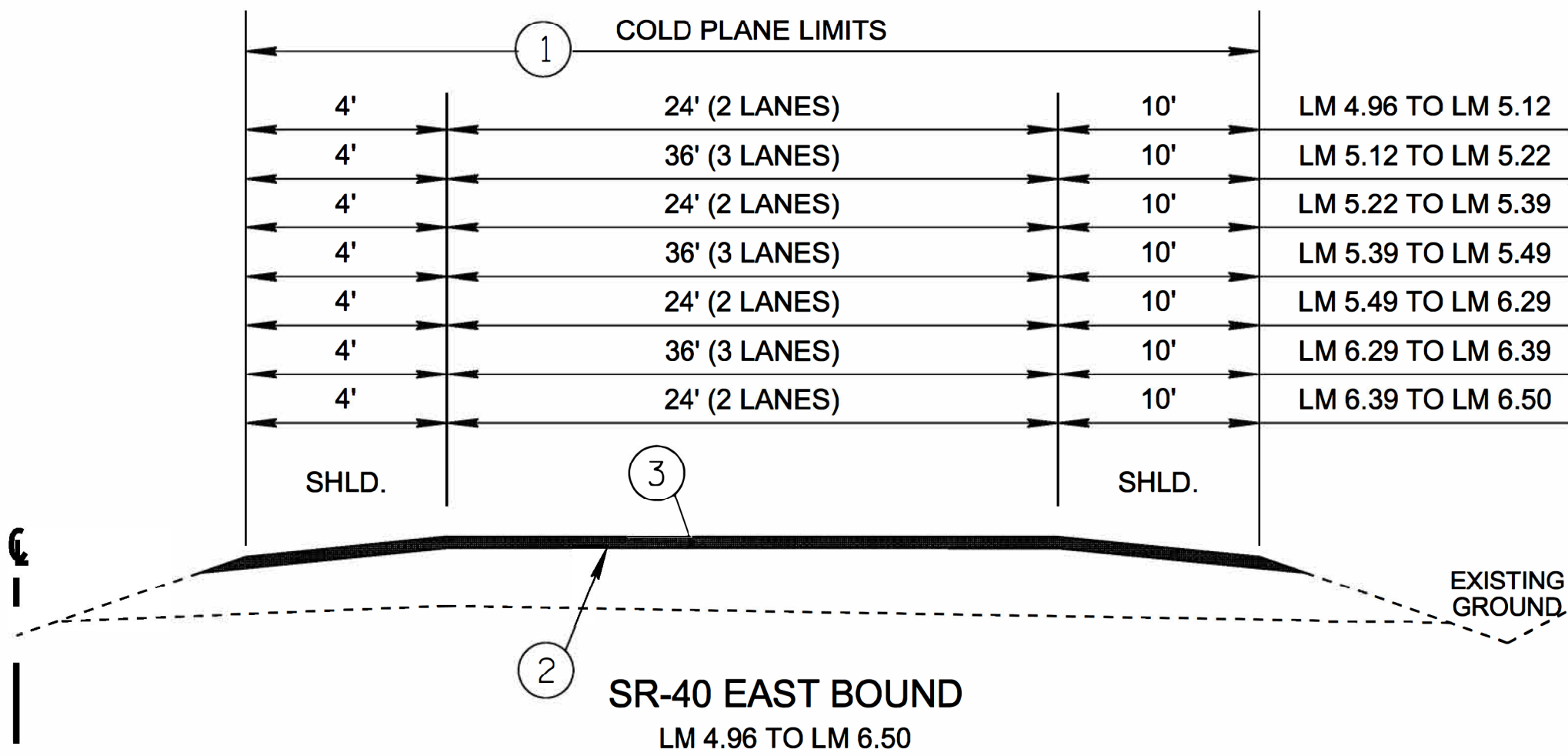
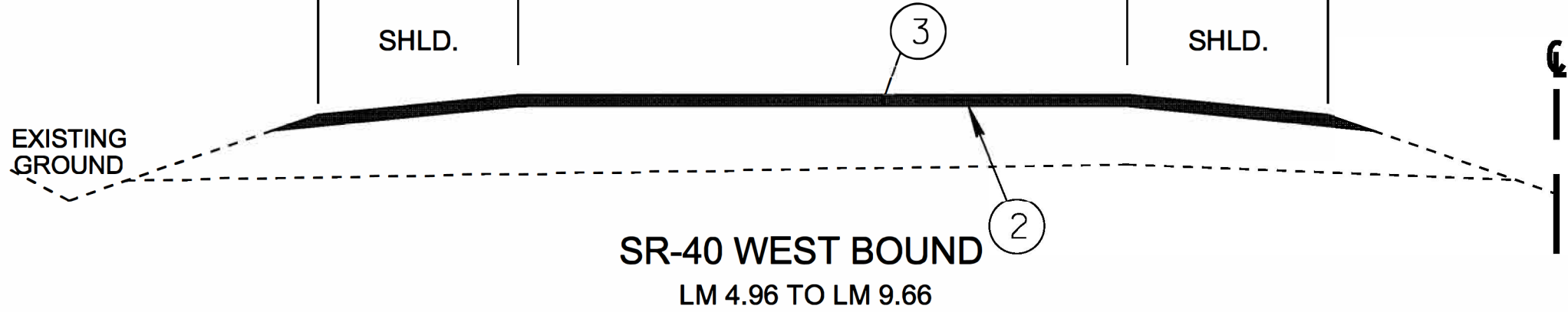


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TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSIP-40(52)	2B
		06S040-F8-004	
		06S040-F3-004	

REVISION - LETTING 12-16-24: DELETED NOTE (C)  
FROM NOTES BLOCK.

COLD PLANE LIMITS ①			
LM 4.96 TO LM 5.12	5'	24' (2 LANES)	4'
LM 5.12 TO LM 5.22	5'	36' (3 LANES)	4'
LM 5.22 TO LM 5.39	5'	24' (2 LANES)	4'
LM 5.39 TO LM 5.49	5'	36' (3 LANES)	4'
LM 5.49 TO LM 5.64	5'	24' (2 LANES)	4'
LM 5.64 TO LM 5.69	5'	36' (3 LANES)	4'
LM 5.69 TO LM 6.29	5'	24' (2 LANES)	4'
LM 6.29 TO LM 6.39	5'	36' (3 LANES)	4'
LM 6.39 TO LM 6.71	5'	24' (2 LANES)	4'
LM 6.71 TO LM 6.81	5'	36' (3 LANES)	4'
LM 6.81 TO LM 6.87	5'	24' (2 LANES)	4'
LM 6.87 TO LM 6.97	5'	36' (3 LANES)	4'
LM 6.97 TO LM 6.99	5'	24' (2 LANES)	4'
LM 6.99 TO LM 7.09	5'	36' (3 LANES)	4'
LM 7.09 TO LM 7.11	5'	24' (2 LANES)	4'
LM 7.11 TO LM 7.21	5'	36' (3 LANES)	4'
LM 7.21 TO LM 7.40	5'	24' (2 LANES)	4'
LM 7.40 TO LM 7.50	5'	36' (3 LANES)	4'
LM 7.50 TO LM 7.71	5'	24' (2 LANES)	4'
LM 7.71 TO LM 7.76	5'	36' (3 LANES)	4'
LM 7.76 TO LM 8.35	5'	24' (2 LANES)	4'
LM 8.35 TO LM 8.45	5'	36' (3 LANES)	4'
LM 8.45 TO LM 8.63	5'	24' (2 LANES)	4'
LM 8.63 TO LM 8.73	5'	36' (3 LANES)	4'
LM 8.73 TO LM 8.90	5'	24' (2 LANES)	4'
LM 8.90 TO LM 8.95	5'	36' (3 LANES)	4'
LM 8.95 TO LM 9.66	5'	24' (2 LANES)	4'



PROPOSED PAVEMENT SCHEDULE	
①	COLD PLANING, 1.25" DEPTH @131.25 LBS/SY ITEM 415-01.01 COLD PLANING BITUMINOUS PAVEMENT, TON
②	TRACKLESS TACK COAT 403-02.01 TRACKLESS TACK COAT (TC), TON SEE 403.05 FOR DETERMINING APPLICATION RATE IN THE FIELD.
③	SURFACE MIX 1.25" THICK @ APPROX. 132.5 LBS/SY 411-02.10 ACS MIX (PG 70-22) GRADING D, TON
④	BALANCED MIX DESIGN 1.25" THICK @ APPROX. 132.5 LBS/SY 411-05.02 BMD ACS MIX (BALANCED MIX DESIGN), TON SEE SPECIAL NOTES ON SHEETS 2D1 & 2D2 FOR INFORMATION.

NOTES	
(A) BALANCED MIX DESIGN (BMD), ITEM NO. 411-05.02:	
<ul style="list-style-type: none"><li>SHALL BE USED FOR ALL THE DESIGNATED TEST SECTIONS AND BACK-UP SECTIONS.</li><li>ALL TEST SECTIONS WILL BE FOR THE EASTBOUND OUTSIDE LANE (DOES NOT INCLUDE THE 10 FT SHOULDER)</li><li>SMALL PERMANENT SIGNS WILL BE INSTALLED AT THE BEGINNING LOG MILE OF EACH TEST SECTION. (EXAMPLE TEXT ON SIGN "TS 1")</li><li>PLACE A 6" THERMOPLASTIC "BAR/STRIPE" ON THE ADJACENT 10 FT SHOULDER TO SIGNAL THE OFFICIAL START AND STOP LOCATIONS FOR THE DESIGNATED ANALYSIS ZONE OF EACH TEST SECTION</li><li>SEE SHEET 2D1 &amp; 2D2 FOR SR-40 BMD VALIDATION TEST SECTION SPECIAL NOTES.</li></ul>	
(B) INTELLIGENT COMPACTION SHALL BE USED.	
(C ) DELETED.	

BMD TEST SECTION LOCATIONS			
TEST SECTION NO.	DESCRIPTION	BEGIN LOG MILE	END LOG MILE
1	CONTROL + 0.5%	6.50	6.75
2	CONTROL - 0.5%	6.75	7
3	CONTROL WITH PG64-22	7.00	7.25
4	CONTROL WITH PG76-22	7.25	7.5
5	HIGH NATURAL RIVER SAND	7.50	7.75
6	MEDIUM RAP	7.75	8
7	HIGH RAP	8.00	8.25
8	HIGH RAP WITH RECYCLING AGENT	8.25	8.5
9	HIGH FINE RAP	8.50	8.75
10	CONTRACTOR'S CHOICE BMD	8.75	9.00
11	BACK-UP 1	9.00	9.22
12	BACK-UP 2	9.22	9.44
13	BACK-UP 3	9.44	9.66

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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

TYPICAL  
SECTIONS AND  
PAVEMENT  
SCHEDULE



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# GENERAL NOTES

## MISCELLANEOUS

- (3) 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 MARKINGS ON INTERMEDIATE LAYERS

- (1) 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 DAY'S 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

- (5) THE CONTRACTOR WILL BE REQUIRED TO PERFORM THE FOLLOWING WORK:

a. SHOULDERS SHALL BE BROOMED AND DE-GRASSED AND MATERIAL SHALL BE PICKED UP AND REMOVED. THIS WILL BE PAID FOR UNDER ITEM NO. 208-01.05.

b. REMOVE ALL GARBAGE AND CONSTRUCTION DEBRIS FROM PROJECT. THE COST FOR THIS WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- (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.

### SNOWPLOWABLE REFLECTIVE PAVEMENT MARKERS

- (19) REMOVE EXISTING SNOWPLOWABLE MARKERS PRIOR TO PAVING AND/OR COLD PLANING. REMOVE ALL ADHESIVES PRIOR TO PAVING. PATCH ANY HOLES OR DIVOTS RESULTING FROM THE REMOVAL OF A MARKER IN A MANNER WHICH ENSURES A UNIFORM PAVED SURFACE. PATCH WORK SHALL BE INCLUDED WITH COST OF OTHER ITEMS OF CONSTRUCTION.

## PAVEMENT

### PAVING

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

### RESURFACING

- (4) 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.
- (5) 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.

- (6) 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.
- (9) 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.

## SIGNING


- (4) THE TOP OF THE SIGN FOOTINGS SHALL BE PLACED LEVEL WITH THE GROUND LINE.
- (13) AFTER THE PERMANENT SIGN LOCATIONS HAVE BEEN STAKED, THERE SHALL BE A FIELD INSPECTION AND APPROVAL BY THE CONSTRUCTION FIELD OFFICE. PAYMENT FOR LOCATION AND STAKING SHOULD BE INCLUDED IN THE BID PRICE FOR OTHER ITEMS OF CONSTRUCTION. ANY RELOCATION REQUIRED, DUE TO THE SIGN NOT BEING INSTALLED IN THE CORRECT LOCATION, WILL BE DONE AT THE CONTRACTOR'S EXPENSE.

## CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- (1) 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.
- (2) 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.
- (3) 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.
- (4) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
- (5) USE OF BARRICADES, PORTABLE BARRIER RAILS, 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.
- (6) 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 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.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSIP-40(52)	2C
		06S040-F8-004	
		06S040-F3-004	

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11-19-2024

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

GENERAL  
NOTES



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SPECIAL NOTES

TRAFFIC CONTROL

- (1) THE CONTRACTOR SHALL MAKE PROVISIONS TO SAFELY CONTROL TRAFFIC INGRESS AT ALL ROADWAY ENTRANCES WITHIN THE FLAGGED WORK ZONE TO THE SATISFACTION OF THE TDOT PROJECT ENGINEER, ALL COST ASSOCIATED WITH THE CONTROLS WILL BE INCLUDED IN THE PRICE BID FOR TRAFFIC CONTROL.
- (2) EXISTING CONSTRUCTION, REGULATORY AND WARNING SIGNS WHICH CONFLICT WITH THE CONSTRUCTION SIGNING SHALL BE REMOVED DURING CONSTRUCTION AND REINSTALLED AS DIRECTED BY THE TDOT PROJECT ENGINEER. ALL COSTS TO BE INCLUDED IN THE PRICE BID FOR ITEM NO. 712-01, TRAFFIC CONTROL, PER LUMP SUM.
- (3) THE CONTRACTOR SHALL GIVE THE TDOT PROJECT ENGINEER A MINIMUM OF SEVEN (7) DAYS NOTICE PRIOR TO STARTING WORK SO THAT SUFFICIENT NOTICE CAN BE PREPARED AND DISTRIBUTED TO THE MEDIA.
- (4) IMMEDIATELY UPON COMPLETION OF EACH CONSTRUCTION PHASE, ALL TRAFFIC CONTROL ITEMS THAT ARE NOT NECESSARY FOR THE SUCCEEDING PHASE SHALL BE REMOVED, COVERED OR TURNED TO FACE AWAY FROM TRAFFIC.
- (5) THE CONTRACTOR SHALL PROVIDE FLAGGER AT EACH SIDEROAD WITHIN THE PAVING OPERATION.
- (6) A MINIMUM OF TWO (2) TYPE “C” ARROW BOARDS WILL BE REQUIRED. IF THE CONTRACTOR SCHEDULES HIS OPERATIONS SUCH THAT MORE THAN TWO (2) ARROW BOARDS ARE REQUIRED, THE COST OF ALL ADDITIONAL ARROW BOARDS WILL BE AT THE CONTRACTOR'S EXPENSE.
- (7) CHANGEABLE MESSAGE SIGNS UNITS (ITEM NO. 713-16.01) WILL BE REQUIRED ON THIS PROJECT. THE SIGNS WILL BE USED FOR ADVANCED WARNING OR AS DIRECTED BY THE ENGINEER.
- (8) MESSAGE BOARDS SHALL BE DISPLAYED A MINIMUM OF SEVEN (7) DAYS PRIOR TO STARTING WORK TO INFORM PUBLIC OF UPCOMING CONSTRUCTION PROJECT.
- (9) PRIOR TO DISPLAYING MESSAGES ON CHANGEABLE MESSAGE BOARDS, ALL MESSAGES SHALL BE APPROVED BY THE TDOT PROJECT ENGINEER AND REGION 2 TRAFFIC ENGINEER.
- (10) INFORMATION ON CHANGEABLE MESSAGE BOARDS SHALL BE UPDATED TO REFLECT CURRENT CONSTRUCTION CONDITIONS ACTIVITIES AT ALL TIMES.
- (11) THE CONTRACTOR WILL BE PERMITTED TO CROSS MEDIAN AT EXISTING CROSS-OVERS ONLY.

LANE CLOSURES

- (1) THE RESTRICTION OF TRAFFIC TO ONE LANE SHALL NOT EXCEED A TWO (2) MILE PAVING OPERATION OR AS DIRECTED BY THE TDOT PROJECT ENGINEER.
- (2) LANE CLOSURE WITH LEFT LANE MERGE AND LANE SHIFT TRAFFIC CONTROL SHOULD BE USED ON ALL LANE CLOSURES.
- (3) THE CONTRACTOR SHALL KEEP ALL TRAFFIC LANES OPEN TO TRAFFIC DURING NON-WORKING HOURS AND/OR NON-WORK DAYS.
- (4) OVERNIGHT LANE CLOSURES WILL NOT BE ALLOWED UNLESS DIRECTED BY THE TDOT PROJECT ENGINEER.
- (5) THE CONTRACTOR SHALL NOT BE ALLOWED TO INTERRUPT TRAFFIC FLOW AND SHALL MAINTAIN ALL LANES OF TRAFFIC IN EACH DIRECTION ON THE FOLLOWING DAYS:
  - A. OFFICIAL STATE HOLIDAYS.
  - B. FRIDAY AT 7:00 PM UNTIL TUESDAY AT 6:00 AM, IF A STATE HOLIDAY OCCURS OR IS OBSERVED ON MONDAY.
  - C. THURSDAY AT 7:00 PM UNTIL MONDAY AT 6:00 AM, IF A STATE HOLIDAY OCCURS OR IS OBSERVED ON FRIDAY.
  - D. DURING LOCAL FESTIVALS, GAMES OR EVENTS THAT COULD BE IMPEDED BY THE PAVING OPERATIONS WHERE AND AS DIRECTED BY THE TDOT PROJECT ENGINEER.

PAVING

- (1) BROOMING & DE-GRASSING SHOULDERS SHALL INCLUDE CLIPPING OF MATERIAL INTERFERING WITH PROPER DRAINAGE OF ROADWAY AND SHOULDERS AS DIRECTED BY THE TDOT PROJECT ENGINEER.
- (2) INTELLIGENT COMPLACTION SHALL BE USED.
- (3) THE INSIDE SHOULDER SHALL BE PAVED CONCURRENTLY WITH THE INSIDE TRAFFIC LANE.
- (4) ANY QUANTITY REMAINING ON ITEMS COMPLETED PRIOR TO THE PAVING OPERATION WILL NOT BE CONVERTED TO ADDITIONAL ASPHALT FOR THE ROADWAY.

COLD PLANING

- (1) THE CONTRACTOR WILL BE REQUIRED TO PAVE THE COLD PLANED PAVEMENT WITHIN A PERIOD OF 96 HOURS.
- (2) PROVIDED THAT THE CONTRACTOR USES A COLD PLANING MACHINE WITH THE MILLING DRUM SPECIFICATIONS OF CLOSELY SPACED FINE TOOTH (5/16 INCHES OR SMALLER) MILLING DRUM, MOVING FORWARD AT MODERATE SPEED (50 TO 65 FPM.) AND THE UNDER SURFACE REMAINS INTACT (HAVING NO LOOSE MATERIAL OR GOUGES), THE CONTRACTOR MAY GET PERMISSION FROM THE REGION 2 PROJECT ENGINEER TO MILL ALL SURFACES AS NEEDED BEFORE COVERING WITH BITUMINOUS MATERIAL.
- (3) IF MILLED SURFACE BEGINS TO DETERIORATE, PAVING TO COVER UP DETERIORATING MILLED SURFACES SHOULD OCCUR AS DIRECTED BY THE TDOT PROJECT ENGINEER DURING THE NEXT WORKING DAY. IF SEVERE DISTRESS OCCURS, IMMEDIATE RESPONSE WILL BE REQUIRED.
- (4) IF SUBSURFACE PAVEMENT FAILURE IS EXPOSED AFTER MILLING, REMOVE AREA OF FAILURE TO SOUND PAVEMENT AND REPLACE WITH “GR-D” MIX PRIOR TO PLACING PROPOSED OVERLAY.
- (5) AT THE COMPLETION OF COLD PLANING OPERATION, ANY DEPRESSIONS WILL BE CLEANED AND BROUGHT TO PROPER GRADE WITH “GR-D” MIX MATERIAL. THE COST OF THE CLEAN UP WILL BE INCLUDED IN THE UNIT PRICE FOR “GR D” MIX MATERIAL.
- (6) ADJUSTMENT OF EXISTING MANHOLE INCLUDES LOWERING BEFORE MILLING OPERATION BEGINS AND RAISING BACK UP AFTER FINAL PAVING.

PAVEMENT MARKING

- (1) THE CONTRACTOR IS RESPONSIBLE FOR THE LAYOUT OF ALL PAVEMENT MARKING. ANY CHANGE FROM THE EXISTING PAVEMENT MARKINGS MUST BE APPROVED BY THE REGION 2 TRAFFIC ENGINEER.
- (2) THE PAYMENT FOR MARKING OF START/STOP LOCATIONS OF THE THIRTEEN (13) BMD TEST SECTIONS ARE TO BE INCLUDED IN ITEM NO. 716-12.02.
- (3) EXISTING PAVEMENT MARKINGS IN THE SIDE ROAD RADII SHALL BE RE-TRACED AS DIRECTED BY THE TDOT PROJECT ENGINEER DURING FINAL STRIPING.

PERMANENT SIGNS

- (4) THIRTEEN (13) TEST STRIP SIGNS SHALL BE INSTALLED AT THE BEGINNING LOG MILE OF EACH BMD TEST SECTION AS DIRECTED BY THE TDOT PROJECT ENGINEER. SIGNS ARE TO BE LABELED AS “TS 1 THROUGH TS 13”. ALL COST FOR SIGNS, POSTS, AND INSTALLATION TO BE INCLUDED IN 713-16.20.

AUTOMATIC TRAFFIC RECORDER (ATR # 17)


- (1) EQUIPMENT AND INSTALLATION OF TRAFFIC SIGNAL ITEMS SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS, SECTION 730.
- (2) DETECTION LOOPS SHALL BE INSTALLED BEFORE THE FINAL SURFACE IS APPLIED.

MISCELLANEOUS

- (1) ALL SAFETY IMPROVEMENTS TO BE PAID FOR UNDER PROJECT NUMBER: NH/HSIP-40(52), 06S040-F3-004.
- (2) RIDEABILITY IN OUTSIDE EASTBOUND LANE SHALL BE WAIVED.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSIP-40(52)	2D
		06S040-F8-004	
		06S040-F3-004	

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# SR-40 BMD VALIDATION TEST SECTION SPECIAL NOTES

## TEST SECTION MIX DESIGNS

THE VALIDATION TEST SECTIONS WILL CONSIST OF 10 DISTINCT MIX DESIGNS AS DETAILED BELOW. THE “CONTROL MIX” FURTHER MENTIONED BELOW WILL REFER TO THE APPROVED PG70-22 D MIX USED THROUGHOUT THE MAJORITY OF THE PROJECT. THE PG70-22 BINDER USED IN THE CONTROL MIX AND ANY TEST SECTION REQUIRING PG70-22 BINDER WILL BE OF SUCH QUALITY THAT IT MEETS THE REQUIREMENTS IN 904.01 OF THE TDOT STANDARD SPECIFICATIONS FOR A PG70-22 AND ALSO WOULD NOT MEET THE REQUIREMENTS FOR A PG76-22.

FOR EACH TEST SECTION MIX DESIGN DESCRIBED BELOW, AS WELL AS THE CONTROL MIX, SUBMIT TO THE TDOT CENTRAL MATERIALS & TESTS LAB THE FOLLOWING :

- (1)

JOB MIX FORMULA ON TDOT MIX DESIGN SOFTWARE IN ACCORDANCE WITH 407.03.C. OF THE TDOT STANDARD SPECIFICATIONS
- (2)

ADDITIONAL LABORATORY TEST RESULTS FOR CRACKING AND RUTTING TESTS DESCRIBED BELOW:

a.

**ASTM D8225 IDEAL CRACKING TEST (IDEAL CT) (6” GYRATORY SPECIMENS)**  
AN AVERAGE OF 5 SPECIMENS SHALL BE TESTED TO CALCULATE THE AVERAGE CT INDEX FOR THE MIX DESIGN. MIXTURE SPECIMENS SHALL BE AGED AS LOOSE MIX FOR 4 HOURS IN A FORCED DRAFT OVEN AT 135°C.

b.

**ASTM D8225 IDEAL CT (6” GYRATORY SPECIMENS, CRITICALLY AGED)**  
AN AVERAGE OF 5 SPECIMENS SHALL BE TESTED TO CALCULATE THE AVERAGE CT INDEX FOR THE MIX DESIGN. MIXTURE SPECIMENS SHALL BE AGED AS LOOSE MIX FOR 4 HOURS IN A FORCED DRAFT OVEN AT 135°C FOR SHORT TERM OVEN AGING. THE LOOSE MIX WILL THEN BE AGED FOR AN ADDITIONAL 8 HOURS AT 135°C FOR CRITICAL AGING.

c.

**ASTM D8225 IDEAL CT (4” MARSHALL SPECIMENS)**  
AN AVERAGE OF 5 SPECIMENS SHALL BE TESTED TO CALCULATE THE AVERAGE CT INDEX FOR THE MIX DESIGN. MIXTURE SPECIMENS SHALL BE AGED AS LOOSE MIX FOR 4 HOURS IN A FORCED DRAFT OVEN AT 135°C. THE TEST METHOD SHALL BE MODIFIED TO TEST 4” DIAMETER SPECIMENS COMPACTED WITH A MARSHALL HAMMER.

d.

**AASHTO T324 HAMBURG WHEEL TRACKING TEST (HWTT)**  
MIXTURE SPECIMENS SHALL BE AGED AS LOOSE MIX FOR 2 HOURS IN A FORCED DRAFT OVEN AT 135°C. SPECIMEN SHALL BE TESTED AT A TEMPERATURE OF 50°C.

e.

**ASTM D8360 IDEAL RUTTING TEST (IDEAL RT)**  
MIXTURE SPECIMENS SHALL BE AGED AS LOOSE MIX FOR 2 HOURS IN A FORCED DRAFT OVEN AT 135°C. SPECIMEN SHALL BE TESTED AT A TEMPERATURE OF 50°C.

f.

**ASTM D6931 HIGH TEMPERATURE INDIRECT TENSION TEST (HT-IDT) (4” MARSHALL SPECIMENS)**  
MIXTURE SPECIMENS SHALL BE AGED AS LOOSE MIX FOR 2 HOURS IN A FORCED DRAFT OVEN AT 135°C. SPECIMEN SHALL BE TESTED AT A TEMPERATURE OF 50°C.

### (3) MATERIALS FOR MIX DESIGN VERIFICATION:

- a.

5 GYRATORY SPECIMENS COMPACTED AT 7±1% VOIDS CONDITIONED IN ACCORDANCE WITH 2.A. FOR IDEAL CT TESTING.
- b.

5 GYRATORY SPECIMENS COMPACTED AT 7±1% VOIDS CONDITIONED IN ACCORDANCE WITH 2.B. FOR CRITICALLY AGED IDEAL CT TESTING.
- c.

7 GYRATORY SPECIMENS COMPACTED AT 7±1% VOIDS CONDITIONED IN ACCORDANCE WITH 2.D. AND 2.E. FOR HWTT AND IDEAL RT TESTING.
- d.

5 MARSHALL SPECIMENS COMPACTED AT 7±1% VOIDS CONDITIONED IN ACCORDANCE WITH 2.C. FOR 4” IDEAL CT TESTING.
- e.

3 MARSHALL SPECIMENS COMPACTED AT 7±1% VOIDS CONDITIONED IN ACCORDANCE WITH 2.F. FOR HT-IDT TESTING.
- f.

3000 GRAMS OF LOOSE MIX FOR RICE GRAVITY TESTING.

### TEST SECTION 1 – CONTROL MIX + 0.5% VIRGIN ASPHALT BINDER – L.M. 6.50 – L.M. 6.75

THIS MIX SHALL HAVE IDENTICAL MATERIAL SOURCES AND AGGREGATE/RAP PROPORTIONS, BY WEIGHT OF AGGREGATE, AS THE CONTROL MIX. IT WILL ALSO HAVE 0.5% OF VIRGIN PG70-22 BINDER MORE THAN THE CONTROL MIX.

### TEST SECTION 2 – CONTROL MIX - 0.5% VIRGIN ASPHALT BINDER – L.M. 6.75 – L.M. 7.00

THIS MIX SHALL HAVE IDENTICAL MATERIAL SOURCES AND AGGREGATE/RAP PROPORTIONS, BY WEIGHT OF AGGREGATE, AS THE CONTROL MIX. IT WILL ALSO HAVE 0.5% OF VIRGIN PG70-22 BINDER LESS THAN THE CONTROL MIX.

### TEST SECTION 3 – CONTROL MIX WITH PG64-22 BINDER – L.M. 7.00 – L.M. 7.25

THIS MIX SHALL HAVE IDENTICAL MATERIAL SOURCES AND AGGREGATE/BINDER/RAP PROPORTIONS, BY WEIGHT OF MIXTURE, AS THE CONTROL MIX. THE BINDER USED WILL BE A PG76-22 BINDER AS SPECIFIED IN 904.04 OF THE STANDARD SPECIFICATIONS.

### TEST SECTION 4 – CONTROL MIX WITH PG76-22 BINDER – L.M. 7.25 – L.M. 7.50

THIS MIX SHALL HAVE IDENTICAL MATERIAL SOURCES AND AGGREGATE/BINDER/RAP PROPORTIONS, BY WEIGHT OF MIXTURE, AS THE CONTROL MIX. THE BINDER USED WILL BE A PG76-22 BINDER AS SPECIFIED IN 904.04 OF THE STANDARD SPECIFICATIONS.

### TEST SECTION 5 – TEST SECTION 5 – HIGH NATURAL RIVER SAND – L.M. 7.50 – L.M. 7.75

THIS MIX SHALL HAVE IDENTICAL MATERIAL SOURCES AS THE CONTROL WITH THE EXCEPTION THAT THE NATURAL SAND USED WILL BE OF A SOURCE THAT HAS BEEN RIVER DREDGED AND OF A ROUNDED SHAPE BY NATURE. THE UNCOMPACTED VOIDS (FINE AGGREGATE ANGULARITY), AS TESTED BY AASHTO T304, OF THE NATURAL RIVER SAND SHALL BE LESS THAN 41%. THE NATURAL RIVER SAND MUST BE BETWEEN 35% - 40% OF THE AGGREGATE BLEND BY TOTAL WEIGHT OF AGGREGATE.

### TEST SECTION 6 – MEDIUM RAP % – L.M. 7.75 – L.M. 8.00

THIS MIX SHALL HAVE IDENTICAL MATERIAL SOURCES AS THE CONTROL MIX. THE RAP USED SHALL BE OF THE SAME STOCKPILE AS THE CONTROL MIX. THE RAP PROPORTIONS SHALL BE BETWEEN 20% - 25% OF THE AGGREGATE BLEND BY TOTAL WEIGHT OF AGGREGATE. THE MIX SHALL CONTAIN AT LEAST 70% VIRGIN BINDER.

### TEST SECTION 7 – HIGH RAP % – L.M. 8.00 – L.M. 8.25

THIS MIX SHALL HAVE IDENTICAL MATERIAL SOURCES AS THE CONTROL MIX. THE RAP USED SHALL BE OF THE SAME STOCKPILE AS THE CONTROL MIX. THE RAP PROPORTIONS SHALL BE BETWEEN 35% - 40% OF THE AGGREGATE BLEND BY TOTAL WEIGHT OF AGGREGATE. THE MIX SHALL CONTAIN AT LEAST 55% VIRGIN BINDER.

### TEST SECTION 8 – HIGH RAP % WITH RECYCLING AGENT – L.M. 8.25 – L.M. 8.50

THIS MIX SHALL HAVE IDENTICAL MATERIAL SOURCES AND PROPORTIONS BY TOTAL WEIGHT OF MIXTURE AS TEST SECTION 7. THE MIX SHALL ALSO INCLUDE THE USE OF AN ASPHALT MIXTURE RECYCLING AGENT (ALSO REFERRED TO AS A REJUVENATOR) FROM THE BELOW LIST:

- ASPHALT & WAX INNOVATIONS – ECOGREEN REJ
- ASPHALT & WAX INNOVATIONS – ECOGREEN FLX
- ASPHALT & WAX INNOVATIONS – ECOGREEN LTA
- CARGILL – ANOVA 1815
- INTEVITY – EVOFLEX X1
- INGEVITY – EVOFLEX CA-9

THE AMOUNT OF RECYCLING AGENT USED SHALL BE CONSIDERED AS PART OF THE VIRGIN BINDER CONTENT FOR MIX DESIGN PURPOSES. DOSAGE RATE OF THE RECYCLING AGENT SHALL BE DETERMINED AS BY THE RECYCLING AGENT’S MANUFACTURER’S RECOMMENDATION. THE RECYCLING AGENT MUST BE IN-LINE BLENDED WITH THE VIRGIN BINDER AT THE ASPHALT PLANT UNLESS A TANKER IS PRE-BLENDED AT THE BINDER TERMINAL.

### TEST SECTION 9 – HIGH FINE RAP % – L.M. 8.50 – L.M. 8.75

THIS MIX SHALL HAVE IDENTICAL MATERIAL SOURCES AS THE CONTROL MIX. THE RAP USED SHALL BE PROCESSED OR FRACTIONATED AND HAVE A MAXIMUM PARTICLE SIZE OF ¼”. THE RAP PROPORTIONS SHALL BE BETWEEN 35% - 40% OF THE AGGREGATE BLEND BY TOTAL WEIGHT OF AGGREGATE. THE MIX SHALL CONTAIN AT LEAST 50% VIRGIN BINDER.

### TEST SECTION 10 – CONTRACTOR’S CHOICE BMD – L.M. 8.75 – L.M. 9.00

THIS MIX SHALL NOT BE LIMITED BY TYPICAL TDOT MIXTURE DEIGN SPECIFICATIONS IN SECTIONS 411 AND 903.11 OF THE TDOT STANDARD SPECIFICATIONS. DEVELOP A BITUMINOUS MIXTURE COMPOSED OF AGGREGATE, MINERAL FILLER, ASPHALT CEMENT, AND ANY REQUIRED OTHER MATERIAL. AGGREGATE FRACTIONS SHALL BE SIZED, UNIFORMLY GRADED, AND COMBINED IN SUCH PROPORTIONS SO THAT THE RESULTING MIXTURES WILL MEET THE GRADING AND PHYSICAL PROPERTIES OF THE APPROVED JOB MIX FORMULA (JMF). OTHER MATERIALS NOT SPECIFIED (SUCH AS BUT NOT LIMITED TO FIBERS, GROUND TIRE RUBBER, CHEMICAL ADMIXTURES, ETC.) MAY BE UTILIZED TO MEET THE MIXTURE TESTING CRITERIA WITH THE DEPARTMENT’S APPROVAL. THE DEPARTMENT RESERVES THE RIGHT TO REVIEW A HISTORICAL DOCUMENTATION AND A QUALITY CONTROL PLAN FOR HOW ANY NEW ADDITIVE IS INTRODUCED INTO THE MIXTURE AND MAY REFUSE THE USE OF ANY ADDITIVE AT THE DEPARTMENT’S DISCRETION.

THE GRADATION OF THE MIX SHALL BE CONTROLLED ONLY BY THE BELOW CONTROL POINTS. THE REMAINDER OF THE SIEVES WILL BE ESTABLISHED ON THE JMF FOR PRODUCTION TOLERANCE PURPOSES.

#### REQUIRED GRADATION FOR TEST SECTION 10

SIEVE SIZE	TOTAL PERCENT PASSING, BY WEIGHT
5/8 INCH	100
1/2 INCH	90-100
3/8 INCH	CONTRACTOR'S JMF DESIGN
NO. 4	CONTRACTOR'S JMF DESIGN
NO. 8	CONTRACTOR'S JMF DESIGN
NO. 30	CONTRACTOR'S JMF DESIGN
NO. 50	CONTRACTOR'S JMF DESIGN
NO. 100	CONTRACTOR'S JMF DESIGN
NO. 200	CONTRACTOR'S JMF DESIGN

IN ADDITION TO THE APPLICABLE PORTION OF 407.03.C, PRESENT LABORATORY DATA SHOWING THE MIXTURE MEETS THE TESTING CRITERIA IN THE TABLE BELOW.

MIXTURE SPECIMENS TESTED IN ACCORDANCE WITH ASTM D8225 SHALL BE AGED AS LOOSE MIX FOR 4 HOURS IN A FORCED DRAFT OVEN AT 135°C. SPECIMENS TESTED IN ACCORDANCE WITH AASHTO T324 SHALL BE AGED AS LOOSE MIX FOR 2 HOURS IN A FORCED DRAFT OVEN AT 135°C.

#### REQUIRED PERFORMANCE RELATED MIX DESIGN TESTING FOR TEST SECTION 10

MINIMUM CT INDEX PER IDEAL CT (ASTM D8225)	MINIMUM PASSES TO 12.5 MM RUTTING DEPTH PER HAMBURG WHEEL TRACKING TEST (AASHTO T324)	MINIMUM PASSES TO STRIPPING INFLECTION POINT PER HAMBURG WHEEL TRACKING TEST (AASHTO T324)
100	20,000	15,000

### BACK-UP TEST SECTIONS – L.M. 9.00 – L.M. 9.66

THESE SECTIONS WILL BE RESERVED FOR REPLACEMENT OF TEST SECTIONS AS DETERMINED BY TDOT MATERIALS & TESTS. ANY PORTION OF THE BACK-UP TEST SECTIONS THAT ARE NOT NEEDED FOR TEST SECTION REPLACEMENT WILL BE PAVED WITH THE CONTROL MIX AND PAID UNDER ITEM 411-05.02 BMD ACS MIX (BALANCED MIX DESIGN).

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSIP-40(52)	2D1
		06S040-F8-004	
		06S040-F3-004	

REVISION - LETTING 1-23-25:  
CHANGED WORDING OF SECOND PARAGRAPH UNDER TEST SECTION MIX DESIGNS, TEST SECTION 4, TEST SECTION 8, AND TEST SECTION 9.



## BALANCED MIX DESIGN

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

## SPECIAL NOTES



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# SR-40 BMD VALIDATION TEST SECTION SPECIAL NOTES - continued

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSIP-40(52)	2D2
		06S040-F8-004	
		06S040-F3-004	

REVISION - LETTING 1-23-25:  
CHANGED WORDING OF IN-PLACE DENSITY.

## ACCEPTANCE AND VERIFICATION OF TEST SECTIONS

QUALITY ACCEPTANCE FOR THE ASPHALT MIXTURE OF EACH TEST SECTION SHALL BE DONE AS IN ACCORDANCE WITH 407.20 OF THE TDOT STANDARD SPECIFICATIONS, EXCEPT AS NOTED BELOW. EACH TEST SECTION WILL BE CONSIDERED AS 1 LOT FOR EVALUATION OF BOTH THE PLANT MIXTURE AND IN-PLACE DENSITY. THE ASPHALT CEMENT ADJUSTMENT ESTABLISHED IN 407.20.C.1 WILL BE APPLICABLE FOR ALL TEST SECTIONS EXCEPT TEST SECTION 10.

## ASPHALT CEMENT CONTENT AND GRADATION

IF THE ACCEPTANCE TEST FALLS OUT OF THE ACCEPTABLE TOLERANCE RANGE FOR A 1.00 PAY FACTOR FOR EITHER ASPHALT CEMENT CONTENT OR GRADATION, THEN THE TEST SECTION WILL BE EVALUATED USING THE PERFORMANCE RELATED VERIFICATION TESTS TO DETERMINE IF THE TEST SECTION WILL BE EITHER:

- A. LEFT IN PLACE AT THE APPLICABLE PARTIAL PAYMENT INDICATED IN TABLE 407.20 AND NO ADDITIONAL SECTION PLACED IN A RESERVED BACK-UP TEST SECTION.
- B. LEFT IN PLACE AT THE APPLICABLE PARTIAL PAYMENT INDICATED IN TABLE 407.20 AND PLACE AN ADDITIONAL SECTION IN A RESERVED BACK-UP TEST SECTION.
- C. REMOVE AND REPLACE AT NO COST TO THE DEPARTMENT.

## IN-PLACE DENSITY

DENSITY OF THE TEST SECTIONS SHALL BE DETERMINED USING SP407DEN WITH EACH TEST SECTION BEING CONSIDERED AS 1 LOT. IF THE IN-PLACE DENSITY OF THE MAT IS LESS THAN 93.0% OR GREATER THAN 95.0%, THEN THE SECTION WILL BE ACCEPTED IN ACCORDANCE WITH SP407DEN ON THE BASIS OF DENSITY; THE SECTION WILL ALSO BE EVALUATED TO DETERMINE IF THE TEST SECTION WILL BE PLACED AGAIN IN A RESERVED BACK-UP SECTION. IF THE MEASURED DENSITY OF TEST SECTION 1-9 FALLS BELOW THE 100% PAY RANGE DUE TO THE PRESCRIPTIVE NATURE OF THE MIX DESIGN, DENSITY DEDUCTIONS MAY BE WAIVED AS DETERMINED BY THE PROJECT ENGINEER.

## VERIFICATION TESTS


EACH TEST SECTION WILL BE RANDOMLY SAMPLED WITHIN PRODUCTION TO VERIFY THE RESULTS OF THE PERFORMANCE RELATED TESTS FROM THE MIX DESIGN PROCESS. THE FIRST 2 LOADED TRUCKS OF EACH MIX TYPE WILL BE EXCLUDED FROM THE RANDOM SAMPLING TO ALLOW THE PLANT TO ACHIEVE A STEADY STATE OF PRODUCTION. THESE VERIFICATION RESULTS WILL BE USED TO DETERMINE IF A TEST SECTION WILL NEED TO BE REPLACED IN A BACK-UP TEST SECTION.

THE VERIFICATION TESTS WILL INCLUDE:

1. ASTM D8225 IDEAL CT (6" GYRATORY SPECIMENS)
2. ASTM D8225 IDEAL CT (4" MARSHALL SPECIMENS)
3. ASTM D8360 IDEAL RUTTING TEST (IDEAL RT)
4. ASTM D6931 HIGH TEMPERATURE INDIRECT TENSION TEST (HT-IDT) (4" MARSHALL SPECIMENS)
5. AASHTO T324 HWTT (FOR INFORMATION ONLY)

THE SPECIMENS FOR THESE TESTS WILL NOT GO THROUGH SHORT TERM OVEN AGING. THE INTENT IS TO COMPACT THESE VERIFICATION TEST SPECIMENS IMMEDIATELY FOLLOWING SAMPLING WHILE STILL AT COMPACTION TEMPERATURES. IF IT IS DEEMED NECESSARY TO HAVE TO REHEAT SPECIMENS BACK TO COMPACTION TEMPERATURE THAT WILL BE NOTED ON THE RESULTS.

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## BALANCED MIX DESIGN

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

## SPECIAL NOTES



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# ENVIRONMENTAL NOTES

## ENVIRONMENTAL GENERAL NOTES

### NATURAL RESOURCES

- (4) THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS AND EPHEMERAL, INTERMITTENT, AND PERENNIAL STREAMS, IS NOT ALLOWED.
- (9) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS PRIOR TO ANY CONSTRUCTION AND MAINTENANCE ACTIVITIES TO ENSURE THAT ENVIRONMENTAL FEATURES (E.G., STREAMS, WETLANDS, SPRINGS, ETC.) ARE NOT IMPACTED BEYOND PERMITTED LOCATIONS. IF THE CONTRACTOR OR TDOT INSPECTOR IS UNSURE OF THE IDENTITY OF AN ENVIRONMENTAL FEATURE, THE INSPECTOR SHALL CONTACT THE TDOT REGION ENVIRONMENTAL TECH GROUP IMMEDIATELY.

### SPECIES

- (11) SHOULD CLIFF SWALLOW OR BARN SWALLOW NESTS, EGGS, OR BIRDS (YOUNG AND ADULTS) BE PRESENT, THE CONTRACTOR SHALL CONTACT THE REGIONAL ECOLOGY OFFICE TO DETERMINE IF SEASONAL RESTRICTIONS WILL BE NECESSARY. GENERALLY, BIRDS, NESTS, AND EGGS MAY NOT BE DISTURBED BETWEEN APRIL 15 AND JULY 31. FROM AUGUST 1 TO APRIL 14, NESTS CAN BE REMOVED OR DESTROYED SO LONG AS BIRDS OR EGGS ARE NOT PRESENT, AND MEASURES IMPLEMENTED TO PREVENT FUTURE NEST BUILDING AT THE SITE (I.E., CLOSING OFF AREA USING NETTING).
- (12) IF THE REMOVAL OF ANY TREES WITH A DIAMETER AT BREAST HEIGHT (DBH) GREATER THAN 3 INCHES IS DEEMED NECESSARY THE TDOT SUPERVISOR SHALL CONTACT THE TDOT ENVIRONMENTAL DIVISION, ECOLOGY SECTION IMMEDIATELY.

### PERMITS, PLANS & RECORDS

- (15) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE TDOT PERMIT SECTION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS ARE NEEDED. THE ROADWAY DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.

## ENVIRONMENTAL SPECIAL NOTES

### ENVIRONMENTAL

- (1) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION COMPLIANCE AND FIELD SERVICES OFFICE SHALL BE INVITED TO ALL PRE-CONSTRUCTION MEETINGS.

### SCOPE OF WORK

- (6) COLD PLANE, RESURFACING AND PAVEMENT MARKINGS.

## EROSION PREVENTION AND SEDIMENT CONTROL GENERAL NOTES

### DISTURBED AREA

- (1) IF DISTURBED ACREAGE IS EQUAL TO ONE ACRE OR MORE, PLEASE CONTACT TDOT ENVIRONMENTAL DIVISION, PERMITS SECTION AS SOON AS POSSIBLE BECAUSE AN NPDES PERMIT WILL BE REQUIRED.

### SEDIMENT CONTROL

- (6) EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES.
- (8) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFFSITE MIGRATION OR DEPOSIT OF SEDIMENT OFF THE PROJECT LIMITS (E.G. R.O.W., EASEMENTS, ETC.), INTO WATERS OF THE STATE/U.S., OR ONTO ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFFSITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFFSITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE NEGOTIATED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.

## GOOD HOUSEKEEPING MEASURES & WASTE DISPOSAL

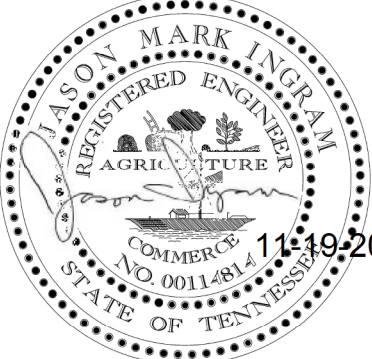
- (29) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS SHALL BE REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFFSITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EPSC SHALL BE REMOVED FROM THE SITE.
- (30) 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. APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED.
- (31) CONTRACTORS SHALL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED, NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE, AND PROPERLY SIGNED. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS SHALL NOT BE PERMITTED ONSITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.
- (32) WHEEL WASH WATER SHALL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER SHALL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM.
- (33) IF PORTABLE SANITARY FACILITIES ARE PROVIDED ON CONSTRUCTION SITES, SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT CONTRACTOR OR AS REQUIRED BY ANY REGULATIONS. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.
- (34) ONLY CONSTRUCTION PRODUCTS NEEDED SHALL BE STORED ONSITE BY THE CONTRACTOR. THE CONTRACTOR SHALL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING SHALL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR'S RESPONSIBLE PARTY SHALL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL.
- (35) WHEN POSSIBLE, ALL PRODUCTS SHALL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFFSITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS SHALL BE FOLLOWED.
- (36) ALL PAINT CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHALL BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.
- (37) ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN A MANNER WHICH IS COMPLIANT WITH LOCAL OR STATE REGULATIONS. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES, AND THE INDIVIDUAL DESIGNATED AS THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.
- (38) OPEN BURNING IS PROHIBITED UNLESS IT IS SPECIFICALLY ALLOWED BY LAW. IF ALLOWED, NATURAL VEGETATION, TREES, AND UNTREATED LUMBER SHALL BE THE ONLY MATERIALS THAT CAN BE OPEN BURNED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE STATE AND LOCAL PERMITS PRIOR TO ANY BURNING.
- (39) DISPOSAL OF ONSITE VEGETATION AND TREES BY CHIPPING THEM INTO MULCH IS PREFERABLE TO OPEN BURNING. THIS MULCH MAY BE USED AS AN ONSITE SOIL STABILIZATION MEASURE WHERE APPROPRIATE.
- (40) WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR. IMPACTS TO WATERS OF THE STATE/U.S. SHALL BE AVOIDED IF POSSIBLE. IF UNAVOIDABLE, THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S), CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS.

## SPILL PREVENTION, MANAGEMENT & NOTIFICATION

- (44) ALL ONSITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE AND SPILLS.
- (45) FOR ALL HAZARDOUS MATERIALS STORED ONSITE, THE MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEAN UP SHALL BE CLEARLY POSTED. SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATIONS OF THE INFORMATION AND CLEANUP SUPPLIES.
- (46) APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT SHALL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ONSITE AND UNDER COVER. SPILL RESPONSE EQUIPMENT SHALL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR AS NECESSARY TO REPLACE ANY MATERIALS USED IN SPILL RESPONSE ACTIVITIES.
- (47) ALL SPILLS SHALL BE CLEANED IMMEDIATELY AFTER DISCOVERY AND THE MATERIALS DISPOSED OF PROPERLY. THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
- (48) THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SITE SUPERINTENDENT HAS HAD APPROPRIATE TRAINING FOR HAZARDOUS MATERIALS HANDLING, SPILL MANAGEMENT, AND CLEANUP.
- (49) IF AN OIL SHEEN IS OBSERVED ON SURFACE WATER (E.G. SETTLING PONDS, DETENTION PONDS, SWALES), ACTION SHALL BE TAKEN IMMEDIATELY TO REMOVE THE MATERIAL CAUSING THE SHEEN. THE CONTRACTOR SHALL USE APPROPRIATE MATERIALS TO CONTAIN AND ABSORB THE SPILL. THE SOURCE OF THE OIL SHEEN WILL ALSO BE IDENTIFIED AND REMOVED OR REPAIRED AS NECESSARY TO PREVENT FURTHER RELEASES.
- (50) FERTILIZERS SHALL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED. ONCE APPLIED, FERTILIZERS SHALL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER.
- (51) IF A SPILL OCCURS THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE RESPONSIBLE FOR COMPLETING THE SPILL REPORTING FORM AND FOR REPORTING THE SPILL TO THE TDOT PROJECT RESPONSIBLE PARTY. 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.
- (52) WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO OR IN EXCESS OF A REPORTABLE QUANTITY ESTABLISHED UNDER EITHER 40 CFR 117 OR 40 CFR 302 OCCURS DURING A 24 HOUR PERIOD, SEE THE LATEST TENNESSEE GENERAL PERMIT NO. TNR100000 STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES SECTION 5.1 FOR REPORTING REQUIREMENTS.
- (53) CONTRACTOR'S BULK FUEL AND PETROLEUM PRODUCTS STORED ONSITE OR ADJACENT TO THE R.O.W. IN ABOVE GROUND STORAGE CONTAINERS WITH A COMBINED CAPACITY OF 1320 GALLONS OR MORE SHALL HAVE SECONDARY CONTAINMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN FOR THE BULK STORAGE AND BE SOLELY RESPONSIBLE FOR OBTAINING ANY NECESSARY LOCAL, STATE, AND FEDERAL PERMITS. THE SPCC PLAN AND/OR PERMITS SHALL BE KEPT ONSITE AND A COPY PROVIDED TO THE TDOT PROJECT RESPONSIBLE PARTY PRIOR TO STORING 1320 GALLONS ON SITE.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSIP-40(52)	2E
		06S040-F8-004	
		06S040-F3-004	

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ENVIRONMENTAL  
NOTES



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TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSIP-40(52)	2F
		06S040-F8-004	
		06S040-F3-004	

CROSS-OVERS						
LOCATION LM	LENGTH (FT)	WIDTH (FT)	AREA (SY)	COLD PLANE TON	TACK COAT TON	GR "D" MIX TON
5.00	110	110	1345	89	0.6	90
5.12	80	86	765	51	0.4	51
5.39	80	100	889	59	0.4	59
5.64	80	100	889	59	0.4	59
6.29	80	110	978	65	0.5	65
6.71	75	100	834	55	0.4	56
6.87	75	85	709	47	0.4	47
6.99	75	85	709	47	0.4	47
7.11	70	105	817	54	0.4	55
7.40	75	90	750	50	0.4	50
7.71	75	80	667	44	0.3	45
8.35	20	75	167	11	0.1	12
8.65	80	120	1067	71	0.5	71
8.90	90	100	1000	66	0.5	67
TOTAL			11586	768	5.7	774

PROPOSED GUARDRAIL DELINEATION (RESURFACING)	
GR DELINEATION ENHANCEMENT (MONO-DIR) 705-04.20 (EACH)	COMMENTS
1349	LOCATIONS TO BE PROVIDE BY THE TDOT PROJECT ENGINEER.
	DELINEATORS.
	DELINEATORS SHALL BE: <ul style="list-style-type: none"><li>• QPL.</li><li>• MOUNTED TO ALL GUARDRAIL POSTS EXCEPT END TERMINAL SECTIONS.</li><li>• ATTACHED TO GUARDRAIL POST AS PER MANUFACTURER'S SPECIFICATION AND ATTACHMENT METHOD.</li></ul>

TRAFFIC CONTROL SIGN TABULATION (RESURFACING)					
M.U.T.C.D. SIGN NO.	LEGEND \ DESCRIPTION	SIZE IN INCHES L x W	S.F.	TOTAL NUMBER REQUIRED	ITEM NO. 712-06 S.F.
G20-1	ROAD WORK NEXT 5 MILES	48" 24"	8.0	4	32
G20-2	END ROAD WORK	48" 24"	8.0	24	192
W3-4	BE PREPARED TO STOP	48" 48"	16.0	4	64
W4-2R	LANE ENDS (RT)	48" 48"	16.0	4	64.0
W4-2L	LANE ENDS (LT)	48" 48"	16.0	4	64.0
W8-11(MOD)	UNEVEN LANES (W/SYMBOL)	48" 48"	16.0	26	416
W8-15	GROOVED PAVEMENT	48" 48"	16.0	26	416
W8-15P	MOTORCYCLE (PLAQUE)	30" 24"	5.0	26	130
W20-1	ROAD WORK AHEAD	48" 48"	16.0	20	320
W20-1	ROAD WORK 1 MILE	48" 48"	16.0	4	64
W20-1	ROAD WORK 1/2 MILE	48" 48"	16.0	4	64
W20-1	ROAD WORK 1000 FT	48" 48"	16.0	4	64
W20-5R	RIGHT LANE CLOSED 1 MILE	48" 48"	16.0	4	64.0
W20-5R	RIGHT LANE CLOSED 1/2 MILE	48" 48"	16.0	4	64.0
W20-5R	RIGHT LANE CLOSED 1500 FT	48" 48"	16.0	4	64.0
W20-5R	LEFT LANE CLOSED 1 MILE	48" 48"	16.0	4	64.0
W20-5R	LEFT LANE CLOSED 1/2 MILE	48" 48"	16.0	4	64.0
W20-5R	LEFT LANE CLOSED 1500 FT	48" 48"	16.0	4	64.0
W20-7	FLAGGER	48" 48"	16.0	4	64
W21-2	FRESH OIL	48" 48"	16.0	4	64
				TOTAL	2370

SEE FIGURE 6F-1 OF FIGURES SHOWN IN CURRENT M.U.T.C.D. THIS CONSTRUCTION SIGNING IS TO BE CONSTRUCTED AS A MINIMUM. OTHER SIGNS AS DIRECTED BY THE ENGINEER MAY BE REQUIRED DURING DIFFERENT PHASES.

BRIDGE DECK RECOMMENDATIONS (RESURF.)				
BRIDGE NUMBER	LOG MILE	CROSSES OVER	BRIDGE LENGTH	BRIDGE DECK RECOMMENDATIONS
06SR040005 06-SR40-8.18R	8.18	LONDON BRANCH 3 @ 10' x 6' CONC. CULV.	32.7'	PAVE WITH PLANS MIX / TREATMENT TYPE
06SR040006 06-SR40-8.18L	8.18	LONDON BRANCH 3 @ 10' x 6' CONC. CULV.	32.7'	PAVE WITH PLANS MIX / TREATMENT TYPE
06SR040007 06-SR40-8.95R	8.95	CHESTUEE CREEK 3 @ 15' x 8' CONC. CULV.	47.7'	PAVE WITH PLANS MIX / TREATMENT TYPE
06SR040007 06-SR40-8.95L	8.95	CHESTUEE CREEK 3 @ 15' x 8' CONC. CULV.	47.7'	PAVE WITH PLANS MIX / TREATMENT TYPE

STORM DRAIN ADJUSTMENTS (RESURFACING)

NO STORM DRAIN ADJUSTMENTS TO BE INCLUDED IN THIS PROJECT

UTILITY ADJUSTMENTS (RESURFACING)

NO UTILITY ADJUSTMENTS TO BE INCLUDED IN THIS PROJECT

FLEXIBLE DRUMS (CHANNELIZING)

SPEED (S) MPH		POSTED	ADJ.
		55	65
CALCULATIONS BASED ON T-WZ-21 LANE MERGE/SHIFT			
	FORMULA	LENGTH	QUANTITY
OUTSIDE SHOULDER TAPER	(L/3)	390	40
SHIFT LEFT	(L)	780	40
LEFT LANE BAY	(2L)	1560	80
INSIDE SHOULDER TAPER	(L/3)	390	40
SHIFT RIGHT (DRUMS LT & RT OF LANE)		500	40
APPROACH TO WORK ZONE		1000	80
TOTAL NUMBER OF DRUMS PER LANE CLOSURE TAPER			112
QUANTITY FOR MISCELANEOUS TRAFFIC CONTROL			16
TOTAL QUANTITY			128

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TABULATED  
QUANTITIES



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SPECIAL TRAFFIC COUNTER SPECIFICATIONS:

- (1)

THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL RELATED EQUIPMENT. THE CONTRACTOR SHALL MAKE SURE EACH DETECTION LOOP IS OPERATIONAL AT THE COMPLETION OF THE PROJECT. THE STATE’S LONG RANGE PLANNING DIVISION’S TRAFFIC COUNTER PERSONNNEL WILL MAKE THE TRAFFIC COUNTING SITE FULLY USEABLE.
- (2)

ALL TRAFFIC LOOPS SHALL BE 5’ X 7’ FOOT TYPICAL IN SIZE WITH 3 TURNS OF LOOP WIRE. TWO LOOPS SHALL BE LOCATED IN EACH LANE AS NOTED. THE LOOP LEAD WIRES SHALL BE RUN THROUGH 2“ PVC CONDUIT FROM THE ROAD TO AN IN-GROUND PULL BOX, AN EXTRA 20 FOOT OF WIRE SHOULD BE STORED INSIDE THE PULL BOX AND THE LOOP LEADS SHALL BE RUN THROUGH CONDUIT AND PLACED INSIDE THE CABINET. EACH LOOP LEAD-INS SHALL BE MARKED WITH LANE IDENTIFICATION, DENOTING THE LANE AND POSITION IN THE LANE FOR EACH LOOP (SUCH AS NB-1 FOR NORTH BOUND ECT).
- (3)

PLEASE CONTACT STANLEY DUNN AT 615-350-4571 OR 615-210-0431 WHEN ALL TRAFFIC LOOPS ARE INSTALLED AND READY FOR FINAL WIRING INSTALLATION BY TDOT PERSONNEL.

SPECIAL GENERAL NOTES:

- (1)

EQUIPMENT AND INSTALLATION OF TRAFFIC SIGNAL ITEMS SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS, SECTION 730.
- (2)

DETECTION LOOPS SHALL BE INSTALLED BEFORE THE FINAL SURFACE IS APPLIED.

STANDARD DRAWINGS:

RD-L-3  
T-SG-2  
T-SG-3

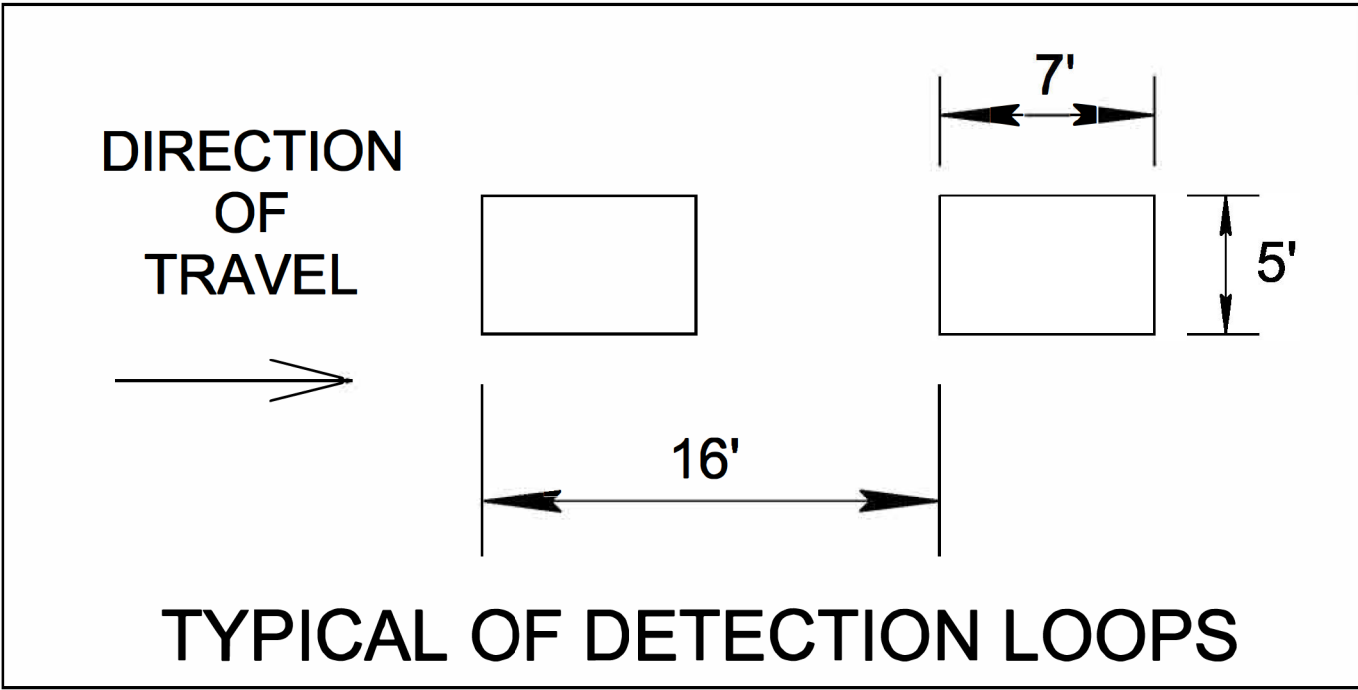
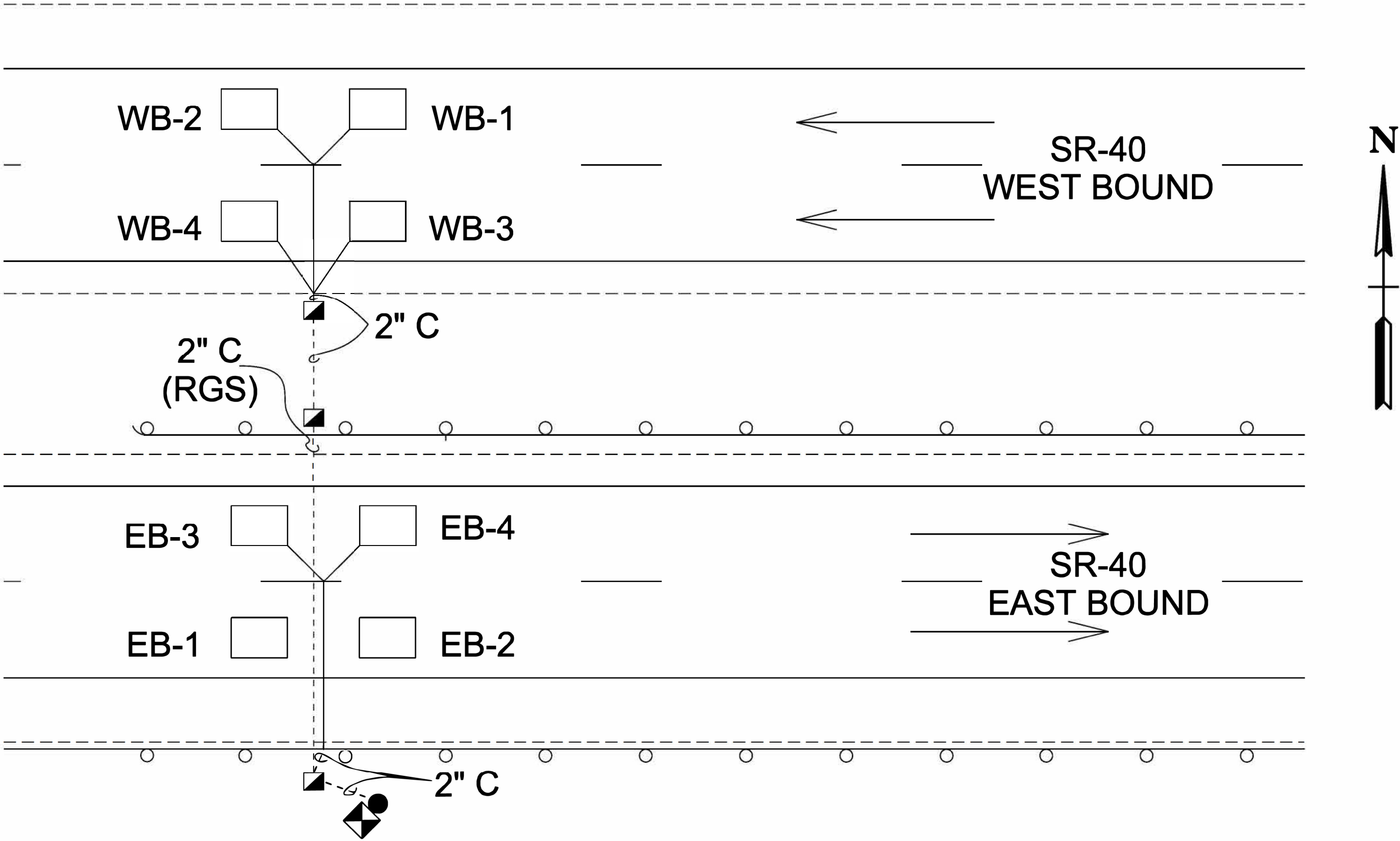
ITEMS AND QUANTITIES:

730-03.25	INSTALL PULL BOX (29" X 21")	EACH	3
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	124
730-12.08	CONDUIT 2" DIAMETER (RGS)	L.F.	62
730-14.01	SHIELDED DETECTOR CABLE	L.F.	768
730-14.02	SAW SLOT	L.F.	260
730-14.03	LOOP WIRE	L.F.	1000

FOOTNOTES:

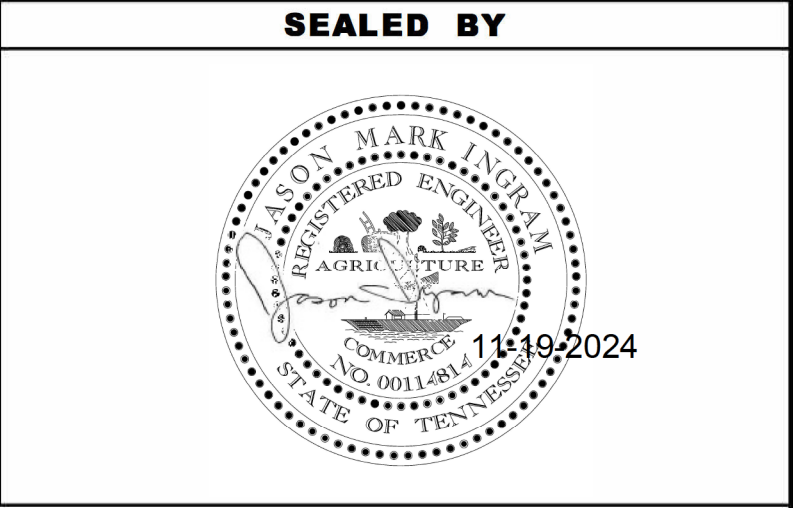
ITEM 730-14.01 IS MEASURED AS ONE CABLE FOR EACH LOOP.

THE PULL BOXES, IF NOT BROKEN OR DAMAGED, CAN BE REUSED AND THE CONDUIT AS WELL.



ATR #17  
SR-40, NEAR LM 5.72  
(NOT TO SCALE)

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSIP-40(52)	2G
		06S040-F8-004	
		06S040-F3-004	



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION
DETAIL SHEET



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TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSIP-40(52)	3
		06S040-F8-004	
		06S040-F3-004	

UTILITY

- (1) THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENANCES AT THE SITE, PUBLIC RECORDS, AND/OR MAPS PREPARED BY OTHERS. THEREFORE, RELIANCE UPON THE TYPE, SIZE, AND LOCATION OF UTILITIES SHOWN SHOULD BE DONE SO WITH THIS CIRCUMSTANCE CONSIDERED. DETAILED VERIFICATION OF EXISTENCE, LOCATION, AND DEPTH SHOULD ALSO BE MADE PRIOR TO ANY DECISION RELATIVE THERETO IS MADE. AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. IN TENNESSEE, IT IS A REQUIREMENT, PER "THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT", THAT ANYONE WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS, NO LESS THAN THREE (3) OR NOT MORE THAN TEN (10) WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE AND ALSO TO AVOID ANY POSSIBLE HAZARD OR CONFLICT. 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) PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.
- (5) 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. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC AT 1-800-351-1111 WILL BE REQUIRED.

UTILITY OWNERS

**CATV/Fiber:**  
**Charter Communications**  
1103 S Hamilton Street  
Dalton GA 30720  
CONTACT: Eric Chadwick  
OFFICE PHONE: 706 483 4925  
Email: eric.chadwick@charter.com

**ELECTRIC:**  
**Tennessees Valley Authority**  
1101 Market St MR-4G  
Chattanooga TN 37402  
CONTACT: Stephen Williams  
OFFICE PHONE: \_\_\_\_ \_\_\_\_ \_\_\_\_  
Email: sewilliams@tva.gov

**GAS:**  
**Chattanooga Gas Company (Southern Co-Atlanta Gas)**  
PO Box 4569  
Atlanta GA 303024569  
CONTACT: Brandon Stephens  
OFFICE PHONE: 404 584 3915  
Email: bstephen@southernco.com


**WATER:**  
**Ocoee Utility District**  
PO Box 305  
Ocoee TN 37361  
CONTACT: Tim Lawson  
OFFICE PHONE: 423 559 8505  
Email: timoud@bellsouth.net

**ELECTRIC:**  
**Cleveland Utilities**  
PO Box 2730  
Cleveland TN 373202730  
CONTACT: Jimmy Isom  
OFFICE PHONE: 423 472 4521  
Email: jisom@clevelandutilities.com

**FIBER:**  
**Volunteer Energy Cooperative**  
PO Box 277  
Decatur TN 37322  
CONTACT: Matthew Teague  
OFFICE PHONE: 423 334 7040  
Email: mteague@vec.org

**TELEPHONE:**  
**Bellsouth dba AT&T**  
300 E Martin Luther King Boulevard, 5th Floor  
Chattanooga TN 37403  
CONTACT: Joe Perrel  
OFFICE PHONE: 423 266 1566  
Email: jp1389@att.com

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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

UTILITY NOTES  
AND  
UTILITY OWNERS



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TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSIP-40(52)	T1
		06S040-F8-004	
		06S040-F3-004	

## PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

- A. 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:
- DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 0.75 INCH AND NOT EXCEEDING 1.75 INCHES:
    - WARNING SIGNS, UNEVEN LANES (W8-11) AND/OR SHOULDER DROP-OFF WITH PLAQUE (W8-17 AND W8-17P), 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.
    - DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY ADDED PAVEMENT SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
    - DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY COLD PLANING SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
    - 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.
  - DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 1.75 INCHES AND NOT EXCEEDING 6 INCHES, TRAFFIC IS NOT TO BE ALLOWED TO TRAVERSE THIS DIFFERENCE IN ELEVATION.
    - SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
      - WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
      - WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.
    - IF THE DIFFERENCE IN ELEVATION IS ELIMINATED OR DECREASED TO 2 INCHES OR LESS BY THE END OF EACH WORKDAY, CONES MAY BE USED DURING DAYLIGHT HOURS IN LIEU OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES MENTIONED IN PARAGRAPH a, PROVIDED WARNING SIGNS ARE ERECTED. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) 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.
    - WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE THROUGH TRAFFIC LANE AND THE SHOULDER AND THE ELEVATION DIFFERENCE IS LESS THAN 3 INCHES, THE CONTRACTOR MAY USE WARNING SIGNS AND/OR PROTECTIVE DEVICES AS APPLICABLE AND APPROVED BY THE REGIONAL TRAFFIC ENGINEER. SEE PARAGRAPH a REGARDING USE OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) WILL 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.

IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 2 MILES IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE  
DROP-OFF NOTES  
FOR  
TRAFFIC CONTROL