

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

John M. Reese  
jreese@fisherarnold.com  
2025.12.01 14:10:52-06'00'

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED. THE SIGNATURE MUST BE VERIFIED ON THE ELECTRONIC DOCUMENTS.

FISHER ARNOLD, INC.  
9180 CRESTWYN HILLS DRIVE  
MEMPHIS, TN 38125  
JOHN M. REESE, P.E. 118371

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-SIGN2

ESTIMATED ROADWAY QUANTITIES .....2

TYPICAL SECTIONS AND PAVEMENT SCHEDULE .....2B

YEAR	PROJECT NO.	SHEET NO.
2025	NH/HISIP-5(127)	ROADWAY-SIGN2

REV. 12/1 /25: ADDED SHEET.

**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION**

SIGNATURE  
SHEET

[illegible]



ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	QUANTITY 55S005-F8-011	QUANTITY 55S005-F3-011	TOTAL QUANTITY
202-03.01	REMOVAL OF ASPHALT PAVEMENT	S.Y.	1634		1634
203-06	WATER	M.G.	17		17
(1) 208-01.05	BROOMING & DEGRASSING SHOULDERS	L.M.	11.5		11.5
(2) 303-02	MINERAL AGGREGATE, TYPE B BASE, GRADING (C OR D)	TON	2263		2263
(3) 307-02.08	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2	TON	739		739
(4) 308-01.10	COLD IN PLACE RECYCLED BITUMINOUS PAVEMENT	S.Y.	163306		163306
(4) 308-01.15	ENGINEERED ASPHALT EMULSION	TON	1201		1201
(4) 309-01.02	PORTLAND CEMENT (A-CBC)	TON	401		401
(5) 403-02.01	TRACKLESS TACK COAT	TON	96		96
(6)(7) 411-01.21	LONGITUDINAL JOINT SEALANT	L.M.	35		35
(8) 411-03.13	ACS MIX(PG70-22) THIN LIFT D ASPHALT	TON	9241		9241
411-03.34	ACS MIX(PG64-22) THIN LIFT E SHOULDER	TON	3241		3241
(9)(10) 411-12.02	SCORING SHOULDERS (NON-CONTINUOUS) (16IN WIDTH)	L.M.	8.7		8.7
(11) 415-01.01	COLD PLANING BITUMINOUS PAVEMENT	TON	11646		11646
(12) 705-02.10	GUARDRAIL TRANSITION 27IN TO 31IN	EACH		9	9
(12) 705-06.10	GR TERMINAL TRAILING END (TYPE 13) MASH TL-3	EACH		4	4
(12) 705-06.20	TANGENT ENERGY ABSORBING TERM MASH TL-3	EACH		4	4
(12) 706-01	GUARDRAIL REMOVED	L.F.		250	250
(13) 712-01	TRAFFIC CONTROL	LS	1		1
(14) 712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	82		82
(14) 712-05.01	WARNING LIGHTS (TYPE A)	EACH	74		74
712-05.03	WARNING LIGHTS (TYPE C)	EACH	8		8
(15) 712-06	SIGNS (CONSTRUCTION)	S.F.	1966		1966
712-08.03	ARROW BOARD (TYPE C)	EACH	1		1
713-16.04	CHANGEABLE MESSAGE SIGN UNIT (DESCRIPT)	EACH	1		1
716-01.21	SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR) (1 COLOR)	EACH		1550	1550
716-01.22	SNOWPLOWABLE RAISED PAVMENT MARKERS (MONO-DIR)(1 COLOR)	EACH	737	13	750
716-01.30	REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	1514		1514
(16)(17) 716-02.04	PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING)	S.Y.	36		36
(16)(17)(18) 716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	410		410
(16)(17) 716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	34		34
(16)(17) 716-03.06	PLASTIC WORD PAVEMENT MARKING (SIGNAL AHEAD)	EACH	8		8
(16)(17) 716-04.01	PLASTIC PAVEMENT MARKING (STRAIGHT-TURN ARROW)	EACH	2		2
(16)(17) 716-04.02	PLASTIC PAVEMENT MARKING(DOUBLE TURNING ARROW)	EACH	9		9
716-04.04	PLASTIC PAVEMENT MARKING (TRANSVERSE SHOULDER)	L.F.	1800		1800
(16)(17) 716-04.05	PLASTIC PAVEMENT MARKING (STRAIGHT ARROW)	EACH	1		1
(16)(17) 716-04.12	PLASTIC PAVEMENT MARKING (YIELD LINE)	S.F.	30		30
(19) 716-05.20	PAINTED PAVEMENT MARKING (6" LINE)	L.M.	58.5		58.5
(16) 716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.		29.3	29.3
717-01	MOBILIZATION	LS	1		1
(20) 730-12.01	CONDUIT 1" DIAMETER (PVC SCHEDULE 40)	L.F.	50		50
(20) 730-14.01	SHIELDED DETECTOR CABLE	L.F.	50		50
(20) 730-14.02	SAW SLOT	L.F.	1080		1080
(20) 730-14.03	LOOP WIRE	L.F.	2724		2724

NOTE: THERE ARE NO UTILITY ADJUSTMENTS ON THIS PROJECT.

FOOTNOTES	
(1)	TO BE USED FROM L.M. 6.13 TO L.M. 10.50. INCLUDES THE COST OF REMOVING DEBRIS AND SWEEPING PRIOR TO WORK. SEE SHEET NO. 2C, SECTION "FINAL PAVING MARKING" NOTE (6) REGARDING BROOMING AND DEGRASSING FOR MORE INFORMATION.
(2)	INCLUDES 1106 TONS FOR BREAKOUTS.
(3)	FOR REPLACEMENT OF QUANTITY REMOVED UNDER ITEM 202-03.01.
(4)	FOG SEAL SHALL BE USED FROM L.M. 10.50 TO 11.71 AND MAY BE USED ELSEWHERE AS NEEDED, COST TO BE INCLUDED IN CIR ITEMS, SEE SPECIAL PROVISION 308CIR.
(5)	INCLUDES 4 TONS FOR DRIVEWAYS, CITY STREETS, COUNTY ROADS, FIELD AND BUSINESS ENTRANCES, AND TURN LANES.
(6)	USE CRAFCO PAVEMENT JOINT ADHESIVE #34524. PAVON JOIN ADHESIVE BY PAVON CORPORATION OR DENSO TAPE BY DENSO.
(7)	TO BE USED FOR SEALING OF ALL SURFACE LAYER CONSTRUCTION JOINTS ALONG THE TRAVEL LANES AND SHOULDERS AS DIRECTED BY THE ENGINEER.
(8)	INCLUDES 100 TONS FOR SPOT LEVELING AND 487 TONS FOR DRIVEWAYS, CITY STREETS, COUNTY ROADS, FIELD AND BUSINESS ENTRANCES, AND TURN LANES.
(9)	TO BE USED FROM L.M. 6.13 TO L.M. 10.50.
(10)	GRIND AT A DEPTH OF 3/8" +/- 1/16". LONGITUDINAL SPACING MAY BE AFFECTED BY SHALLOWER GRINDS. RUMBLE GRADING SHOULD NOT PENETRATE COMPLETELY THROUGH THE NEWLY PAVED LAYER OR CAUSE PREMATURE DAMAGE
(11)	INCLUDES 6530 TONS FOR PRE-MILLING PRIOR TO CIR TREATMENT, 471 TONS FOR EXTRA WIDTH PAVING, AND 4645 TONS FOR MILLING CENTER TURN LANE AND TAPER MILLED SHOULDERS. SEE SHEET 2B FOR TAPER MILLING DETAILS.
(12)	SEE PROPOSED GUARDRAIL (RESURFACING) ON SHEET 2F.
(13)	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.
(14)	TO BE USED FOR TRANSITION TAPERS.
(15)	THE CONTRACTOR IS RESPONSIBLE FOR THE STAKING OF CONSTRUCTION SIGNS. IN THE EVENT THAT A CONSTRUCTION AND/OR REGULATORY SIGN IS TEMPORARILY DESIGNATED NOT IN USE DURING THE CONSTRUCTION PHASE OF A PROJECT, THE CONTRACTOR SHALL CHOOSE A SIGN COVERING APPROVED BY THE ENGINEER. TEMPORARY SIGN COVERINGS SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE PRICE BID FOR ITEM NO. 712-06 SIGNS (CONSTRUCTION).
(16)	ITEM TO BE USED FOR FINAL PAVEMENT MARKING ONLY.
(17)	THE CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
(18)	ALL STOP BARS ON SIDE STREETS WILL BE MARKED AS DIRECTED BY THE ENGINEER.
(19)	ITEM TO BE USED FOR TEMPORARY PAVEMENT MARKING ONLY.
(20)	SEE SIGNALIZATION TABULATION (RESURFACING) ON SHEET 2F.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSIP-5(127)	2

REV. 12/1/25: REMOVED ITEM NUMBER 307-02.01.  
ADDED ITEM NUMBER 307-02.08.  
ADDED FOOTNOTE 4.

SEALED BY

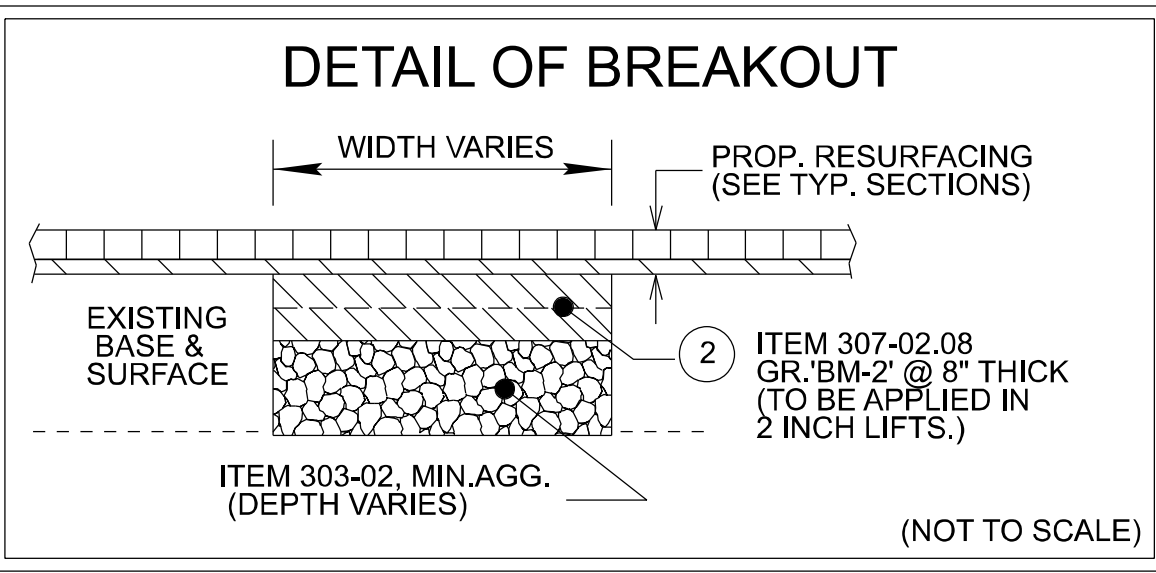
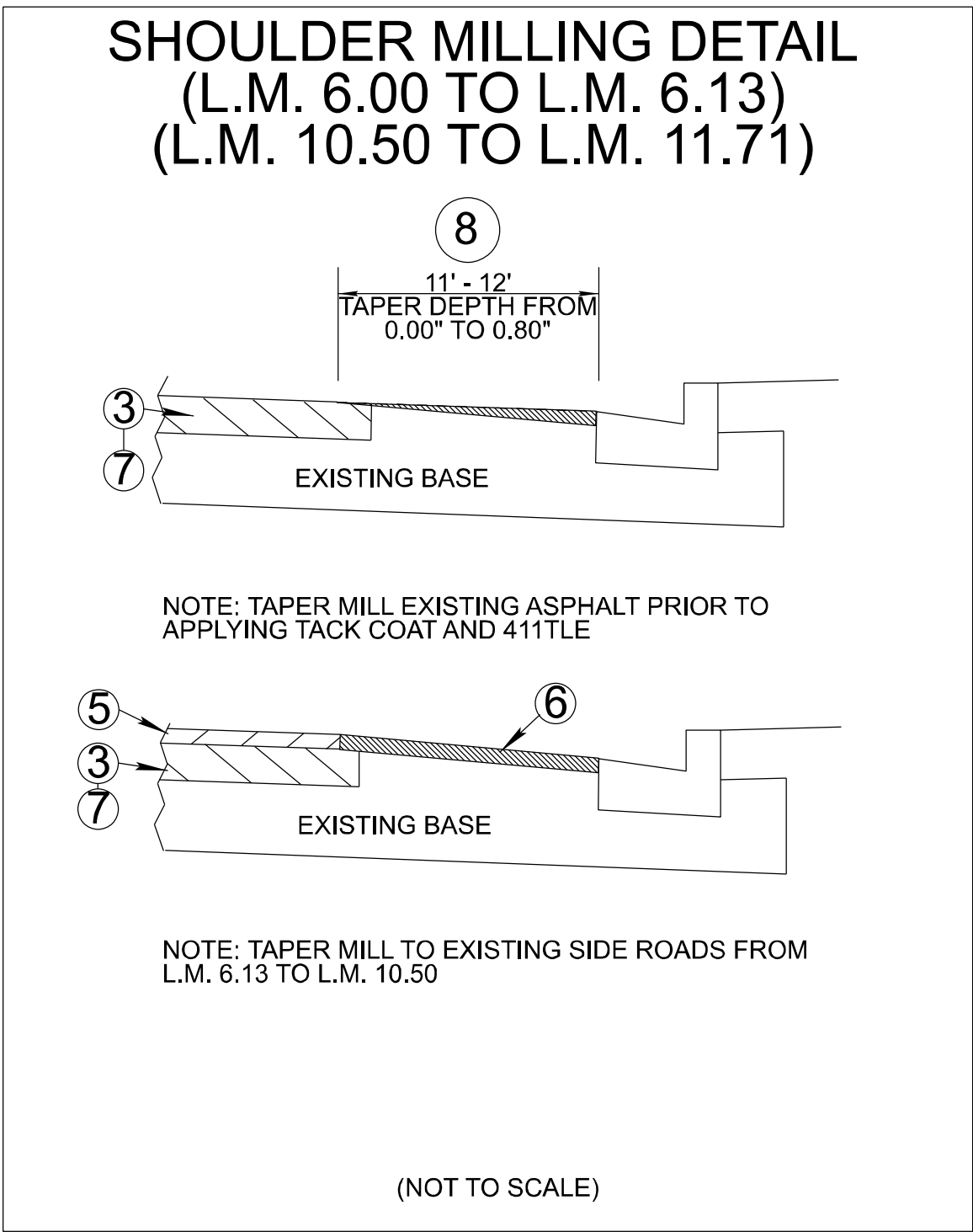
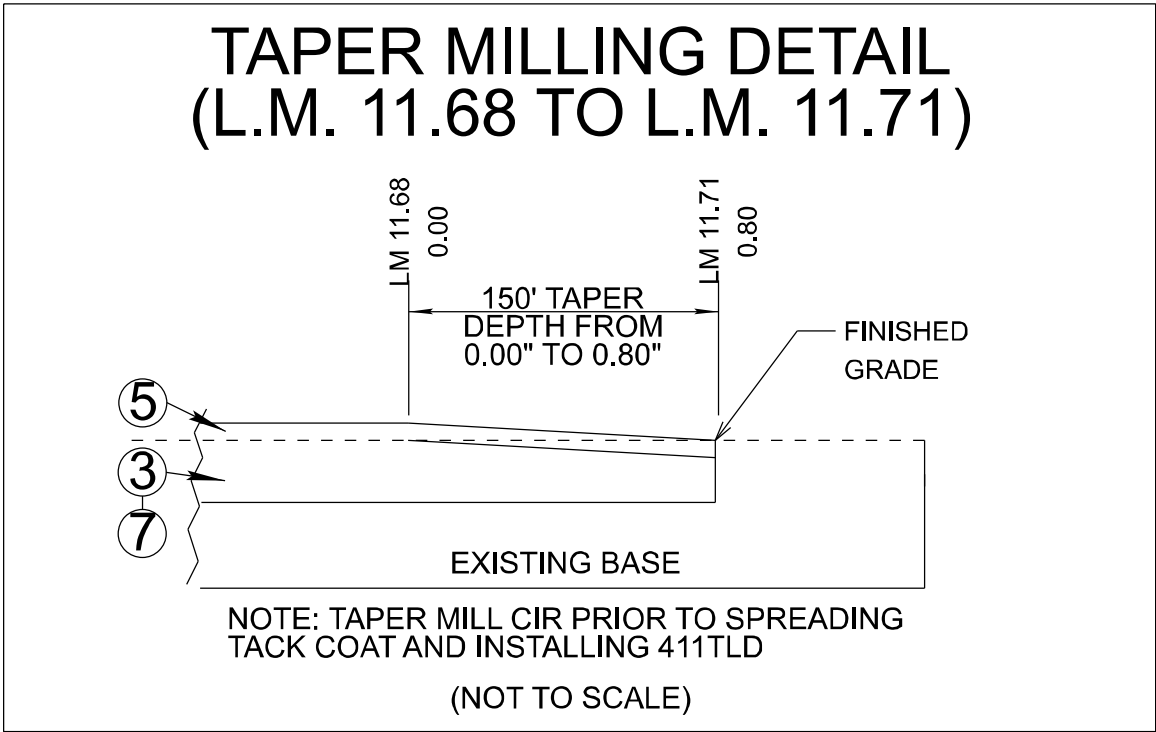
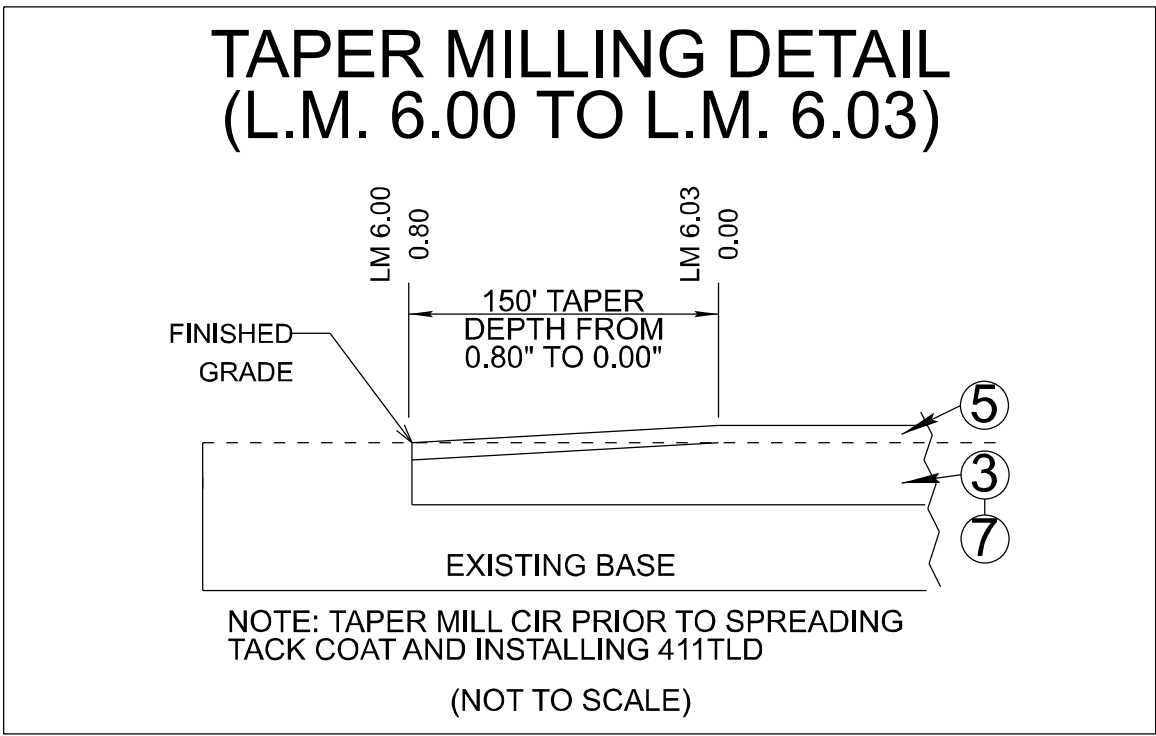
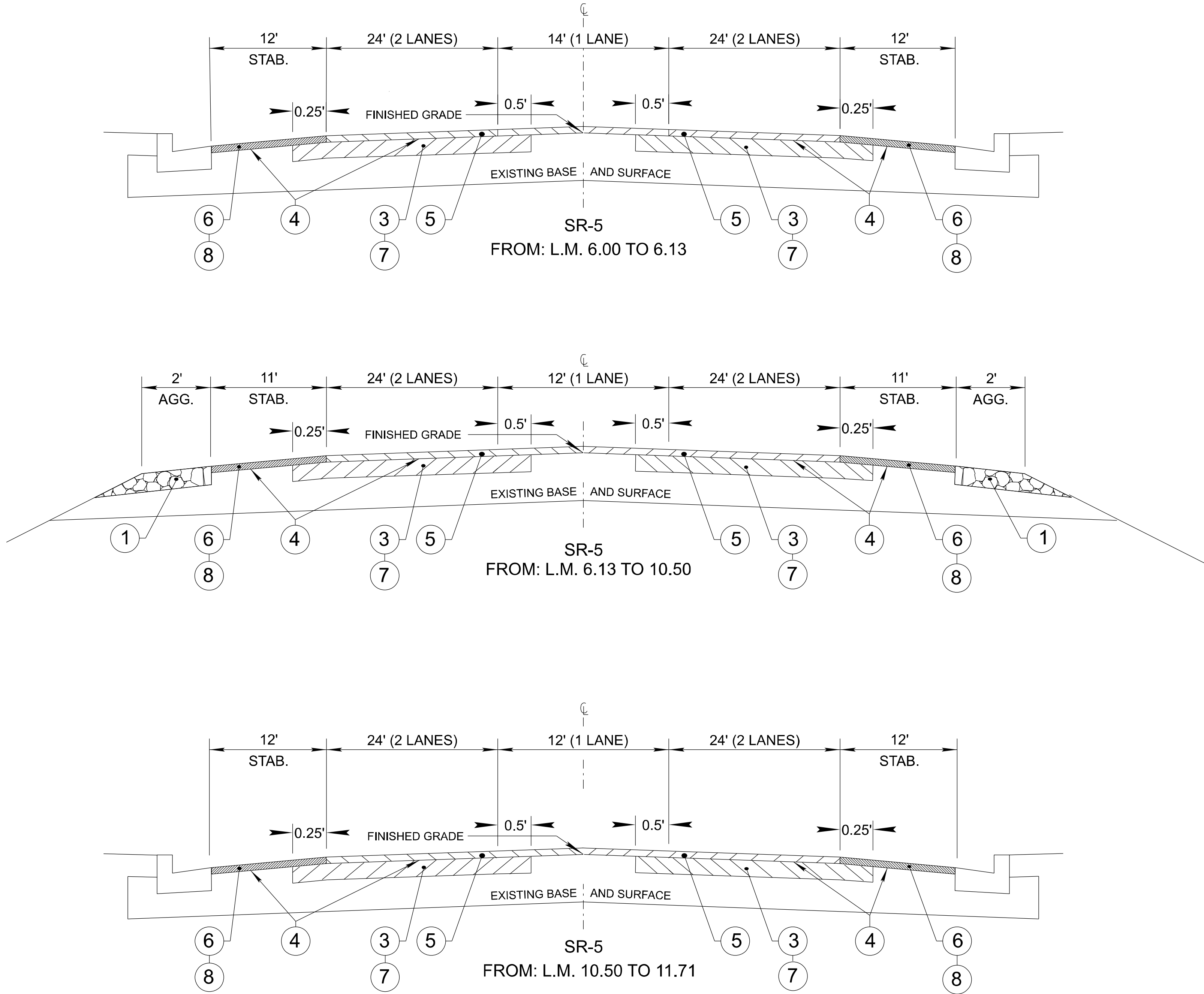


12/1/2025

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

ESTIMATED  
ROADWAY  
QUANTITIES





PROPOSED PAVEMENT SCHEDULE			
1	MINERAL AGGREGATE BASE @ 2.00"± THICK FOR SHOULDERS ITEM 303-02 MINERAL AGGREGATE, TYPE "B" BASE, GRADING "C OR D"	5	ASPHALTIC CONCRETE SURFACE (ACS) @ 0.80"± THICK (APPROX. 85.00 LBS./S.Y.) ITEM 411-03.13 ACS MIX (PG70-22) THIN LIFT D ASPHALT
2	BITUMINOUS COURSE (BINDER) @ 8.00"± THICK (APPROX. 904.0 LBS./S.Y.) ITEM 307-02.08 ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING "BM-2" (TO BE USED FOR BREAKOUT ONLY)	6	ASPHALTIC CONCRETE SURFACE (ACS) @ 0.80"± THICK (APPROX. 85.00 LBS./S.Y.) ITEM 411-03.34 ACS MIX (PG64-22) THIN LIFT E SHOULDER
3	COLD-IN-PLACE RECYCLED BITUMINOUS PAVEMENT @ 5" DEPTH 308-01.10 COLD IN-PLACE RECYCLED BITUMINOUS PAVEMENT, (S.Y.) 308-01.15 ENGINEERED ASPHALT EMULSION (RATE ESTIMATED 3%/TON) 309-01.02 PORTLAND CEMENT (RATE ESTIMATED 1%/TON)	7	COLD PLANING @ 0.75"± THICK (APPROX. 78.75 LB/SY) 415-01.01 COLD PLANING BITUMINOUS PAVEMENT (TON) PRE-MILL DEPTH ESTIMATED BASED ON 15% BULKING FACTOR OF CIR, ADJUST DEPTH AS NECESSARY BASED ON ACTUAL BULKING FACTOR DETERMINED DURING THE MIX DESIGN
4	TRACKLESS TACK COAT ITEM 403-02.01 TRACKLESS TACK COAT SEE 403.05 FOR DETERMINING APPLICATION RATE IN THE FIELD	8	COLD PLANING (84 LB/SY PER 0.8" DEPTH) 415-01.01 COLD PLANING BITUMINOUS PAVEMENT (TON)

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSP-5(127)	2B

REV. 12/1 /25: REVISED DETAIL OF BREAKOUT.

SEALED BY

NOT TO SCALE

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

TYPICAL  
SECTIONS AND  
PAVEMENT  
SCHEDULE