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HDR ENGINEERING, INC.
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BRENTWOOD, TN 37027
DANIEL K. MCGAHA, P.E. 108037

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
STANDARD TRAFFIC DESIGN DRAWINGS	1A
ESTIMATED ROADWAY QUANTITIES.....	2
TYPICAL SECTIONS AND PAVEMENT SCHEDULE	2B

YEAR	PROJECT NO.	SHEET NO.
2025	STP-NH/HSIP-15(239)	ROADWAY-SIGN 2

REV. 11-24-25: ADDED SHEET.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**SIGNATURE
SHEET**

ROADWAY INDEX**STANDARD ROADWAY DRAWINGS****STANDARD TRAFFIC DESIGN DRAWINGS**

SHEET NAME	SHEET NO.
SIGNATURE SHEETS.....	ROADWAY-SIGN1
SIGNATURE SHEETS.....	ROADWAY-SIGN2
TITLE SHEET	1
ROADWAY INDEX, STANDARD ROADWAY DRAWINGS, AND STANDARD TRAFFIC DESIGN DRAWINGS	1A
PROJECT COMMITMENTS	1B
ESTIMATED ROADWAY QUANTITIES	2
TYPICAL SECTIONS AND PAVEMENT SCHEDULE	2B
GENERAL NOTES.....	2C
SPECIAL NOTES.....	2D
ENVIRONMENTAL NOTES.....	2E, 2E1
TABULATED QUANTITIES	2F
PAVEMENT MARKING IMPROVEMENTS.....	2G, 2G1 – 2G7
UTILITY NOTES, AND UTILITY OWNERS.....	3
PAVEMENT EDGE DROP-OFF NOTES FOR TRAFFIC CONTROL	T1
BRIDGE REPAIR PLANS	B-1

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

NO UTILITY SHEETS ARE INCLUDED IN THIS SET OF PLANS.

10-100.00 STANDARD ROADWAY TITLE SHEET, ABBREVIATIONS, AND LEGENDS

DWG.	REV.	DESCRIPTION
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

10-200.00 SIGN

T-S-16	07-30-25	GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS
T-S-17	07-30-25	STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOCKOUT SQUARE TUBE
T-S-19	07-30-25	STANDARD STEEL SIGN SUPPORTS
T-S-20	07-30-25	SIGN DETAILS

10-203.00 PAVEMENT MARKINGS

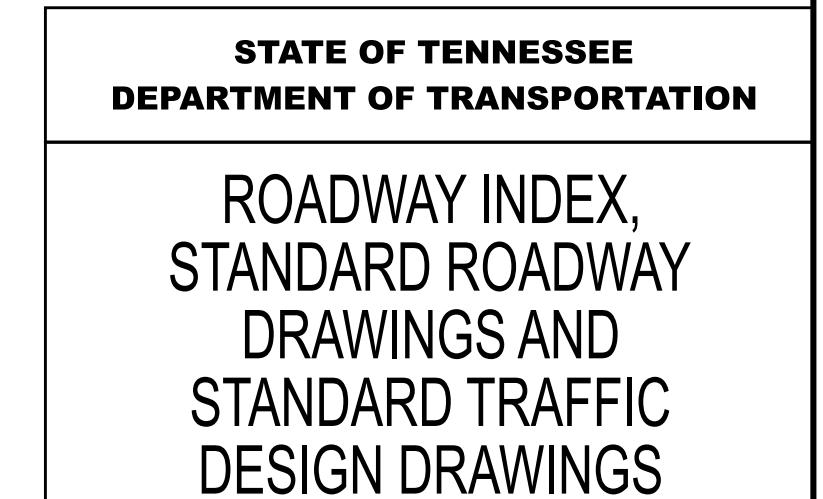
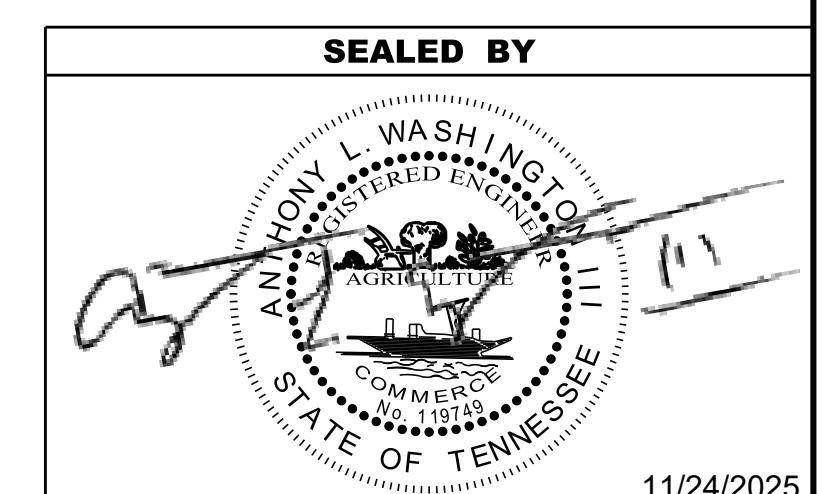
T-M-2	01-24-25	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-3	01-24-25	MARKING STANDARDS FOR TRAFFIC ISLANDS, PAVED SHOULDERS AND MEDIANS FOR CONVENTIONAL ROADS
T-M-4	01-24-25	STANDARD INTERSECTION PAVEMENT MARKINGS
T-M-15	01-24-25	ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR INTERSTATES AND ACCESS CONTROLLED ROUTES
T-M-15A	01-24-25	ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED RURAL ROUTES

10-107.02 WORK ZONES

T-WZ-10	03-26-25	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-11	03-26-25	ONE LANE CLOSURE DETAIL ON DIVIDED HIGHWAYS
T-WZ-12	03-26-25	ONE LANE CLOSURE DETAIL FOR BRIDGES ON DIVIDED HIGHWAYS
T-WZ-FAB1	03-26-25	FLASHING YELLOW ARROW BOARD

TYPE	YEAR	PROJECT NO.	sheet no.
RESURF	2025	STP-NH/HSIP-15(239)	1A

REV. 11-24-25: ADDED ROADWAY-SIGN2 TO INDEX.

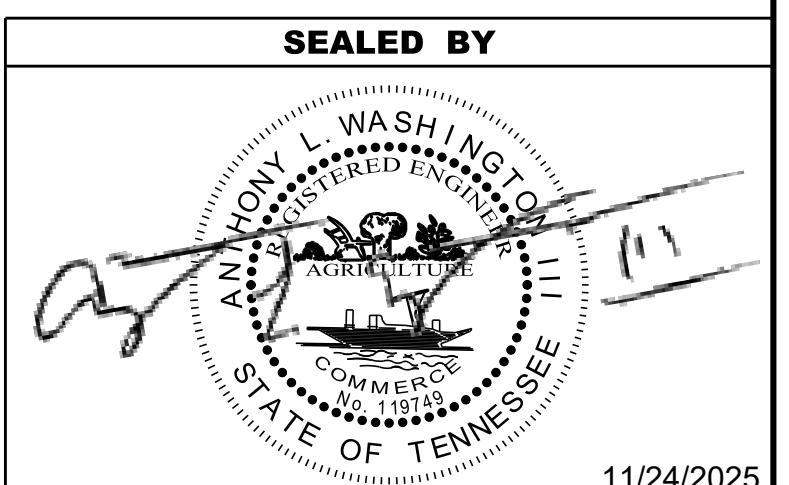


ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	QUANTITY 50S015-F8-003	QUANTITY 50S015-F3-003	TOTAL QUANTITY
(1)(2)	208-01.05 BROOMING & DEGRASSING SHOULDERS	L.M.	17.2		17.2
(2)	303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	2271		2271
	411-12.01 SCORING SHOULDERS (CONTINUOUS) (16IN WIDTH)	L.M.	8.6		8.6
	411-12.02 SCORING SHOULDERS (NON-CONTINUOUS) (16IN WIDTH)	L.M.	6.9		6.9
(3)	712-01 TRAFFIC CONTROL	LS	1		1
	712-04.01 FLEXIBLE DRUMS (CHANNELIZING)	EACH	100		100
	712-05.03 WARNING LIGHTS (TYPE C)	EACH	25		25
	712-08.03 ARROW BOARD (TYPE C)	EACH	2		2
(4)	713-02.14 FLEXIBLE DELINEATOR (WHITE)	EACH	26		26
(5)	713-16.50 REMOVE AND REPLACE SIGN (R4-7)	EACH	2		2
(5)	713-16.51 REMOVE AND REPLACE SIGN (R1-1, R5-1, R6-1L, R6-1R, & R6-3a)	EACH	1		1
(5)	713-16.52 REMOVE AND REPLACE SIGN (R5-1, R6-1L, & R6-1R)	EACH	1		1
	716-01.22 SNOWPLOWABLE RAISED PAVEMENT MARKERS (MONO-DIR)(1 COLOR)	EACH	367		367
	716-01.23 SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR)(2 COLOR)	EACH	602		602
(6)	716-01.30 REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	969		969
(7)(8)	716-02.04 PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING)	S.Y.	54		54
(7)(8)(9)	716-02.05 PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	144		144
(7)(8)	716-02.06 PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	39		39
(7)(8)	716-02.07 PLASTIC PAVEMENT MARKING (24" BARRIER LINE)	L.F.	91		91
(7)(8)	716-02.08 PLASTIC PAVEMENT MARKING (8" DOTTED LINE)	L.F.	2376		2376
(7)(8)	716-02.12 PLASTIC PAVEMENT MARKING (8IN LINE)	L.M.	1.4		1.4
(7)(8)	716-04.12 PLASTIC PAVEMENT MARKING (YIELD LINE)	S.F.	180	264	444
(7)(11)	716-09.86 CONTRAST PAVEMENT MARKING 6"	L.M.	1		1
(7)(11)	716-09.94 CONTRAST PAVEMENT SHADOW MARKING 6"	L.M.	0.3		0.3
(7)	716-12.02 ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	20.2		20.2
	717-01 MOBILIZATION	LS	1		1
	ALTERNATE AA1				
(13)	403-01.01 BITUMINOUS MATERIAL FOR TACK COAT (MICRO-SURFACING)	TON	31		31
(14)	414-03.01 EMULSIFIED ASPHALT FOR MICRO-SURFACING	TON	432		432
(15)	414-03.02 AGGREGATE FOR MICRO SURFACING	TON	3590		3590
(16)(17)	712-06 SIGNS (CONSTRUCTION)	S.F.	688		688
(10)	716-05.20 PAINTED PAVEMENT MARKING (6" LINE)	L.M.	20.2		20.2
	716-08.04 REMOVAL OF PAVEMENT MARKING (CHANNELIZATION STRIPING)	S.Y.	54		54
	716-08.05 REMOVAL OF PAVEMENT MARKING (STOP LINE)	L.F.	144		144
	716-08.06 REMOVAL OF PAVEMENT MARKING (TURN LANE ARROW)	EACH	51		51
	716-08.09 REMOVAL OF PAVEMENT MARKING (DOTTED LINE)	L.F.	792		792
	716-08.19 REMOVAL OF PAVEMENT MARKING (YIELD LINE)	S.F.	180		180
	716-08.20 REMOVAL OF PAVEMENT MARKING (LINE)	L.M.	22.8		22.8
	716-08.21 REMOVAL OF PAVEMENT MARKING (24IN BARRIER LINE)	L.F.	91		91
	ALTERNATE AA2				
(18)	403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	75		75
(19)	411-03.07 ACS MIX(PG64-22) THIN LIFT ASPHALT	TON	9612		9612
	415-01.01 COLD PLANING BITUMINOUS PAVEMENT	TON	686		686
(16)(20)	712-06 SIGNS (CONSTRUCTION)	S.F.	762		762

FOOTNOTES					
(1)	INCLUDES THE COST OF REMOVING DEBRIS AND SWEEPING SHOULDERS PRIOR TO WORK. SEE SHEET 2C, PAVEMENT MARKINGS, FINAL PAVEMENT MARKING NOTE 6.				
(2)	TO BE USED AS DIRECTED BY THE ENGINEER.				
(3)	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.				
(4)	TO BE USED AT MEDIAN CROSSOVERS.				
(5)	SIGNS LOCATED ON THE RAMP TO SR-242 AT L.M. 13.89. INCLUDES THE SIGN, SUPPORT, FOOTING AND ANY ADDITIONAL MATERIALS REQUIRED FOR SIGN INSTALLATION COMPLETE IN PLACE.				
(6)	CONTRACTOR SHALL REMOVE EXISTING SPM BY A METHOD THAT DOES NOT DAMAGE THE EXISTING ASPHALT. IF DAMAGE OCCURS DURING REMOVAL THE CONTRACTOR SHALL MAKE REPAIRS AT THEIR OWN EXPENSE BEFORE PAVING.				
(7)	TO BE USED AS PERMANENT MARKING ONLY.				
(8)	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.				
(9)	ALL STOP BARS ON SIDE STREETS SHALL BE RETRACED AS DIRECTED BY THE ENGINEER,				
(10)	ITEM TO BE USED AS TEMPORARY MARKING ONLY.				
(11)	FOR PERMANENT EDGE LINE MARKING ON CONCRETE SURFACES.				
(12)	FOR PERMANENT LANE LINE MARKING ON CONCRETE SURFACES. ITEM COST INCLUDES 10 L.F. WHITE MARKING AND 10 L.F. BLACK MARKING.				
(13)	INCLUDES 6 TONS FOR DRIVEWAYS, CITY STREETS, TURN LANES, AND EXTRA WIDTH PAVING AREAS.				
(14)	INCLUDES 54 TONS FOR DRIVEWAYS, CITY STREETS, TURN LANES, AND EXTRA WIDTH PAVING AREAS.				
(15)	INCLUDES 448 TONS FOR DRIVEWAYS, CITY STREETS, TURN LANES, AND EXTRA WIDTH PAVING AREAS.				
(16)	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).				
(17)	SEE TRAFFIC CONTROL SIGN TABULATION (RESURF. ALT AA1) ON SHEET 2F.				
(18)	INCLUDES 10 TONS FOR DRIVEWAYS, CITY STREETS, TURN LANES, AND EXTRA WIDTH PAVING AREAS.				
(19)	INCLUDES 1187 TONS FOR DRIVEWAYS, CITY STREETS, TURN LANES, AND EXTRA WIDTH PAVING AREAS.				
(20)	SEE TRAFFIC CONTROL SIGN TABULATION (RESURF. ALT AA2) ON SHEET 2F.				

THERE IS NO GUARDRAIL WORK ON THIS PROJECT

TYPE	YEAR	PROJECT NO.	sheet no.
RESURF	2025	STP-NH/HSIP-15(239)	2

REV. 11-24-25: REMOVED ITEM NUMBER
415-01.01 FROM ALTERNATE AA1.

11/24/2025

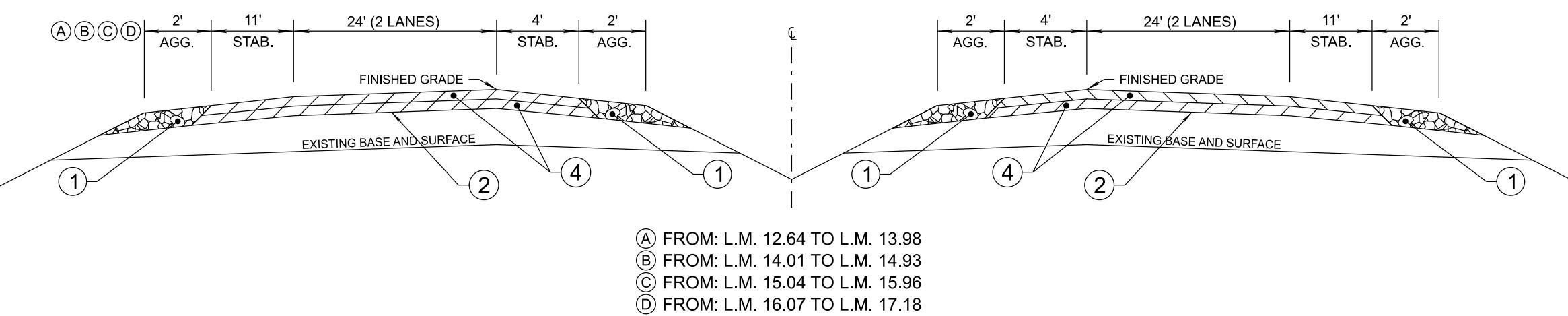
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED
ROADWAY
QUANTITIES

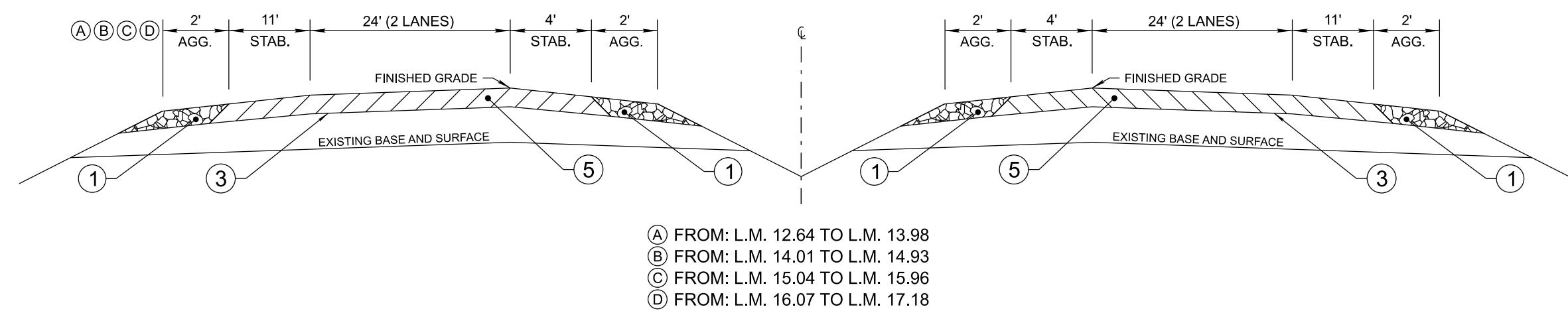
TYPE	YEAR	PROJECT NO.	sheet no.
RESURF	2025	STP-NH/HSIP-15(239)	2B

REV. 11-24-25: REMOVED MILLING DETAILS FROM ALTERNATE AA1.

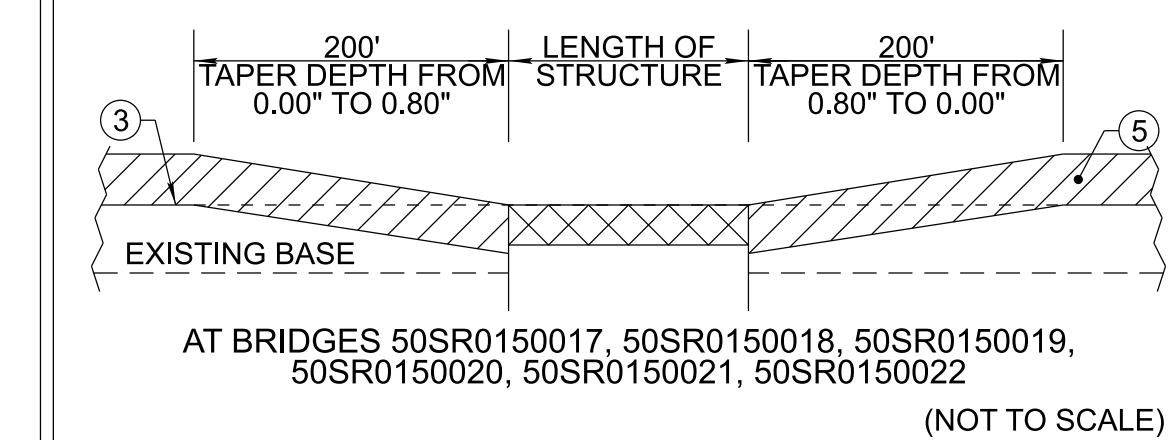
ALTERNATE AA1



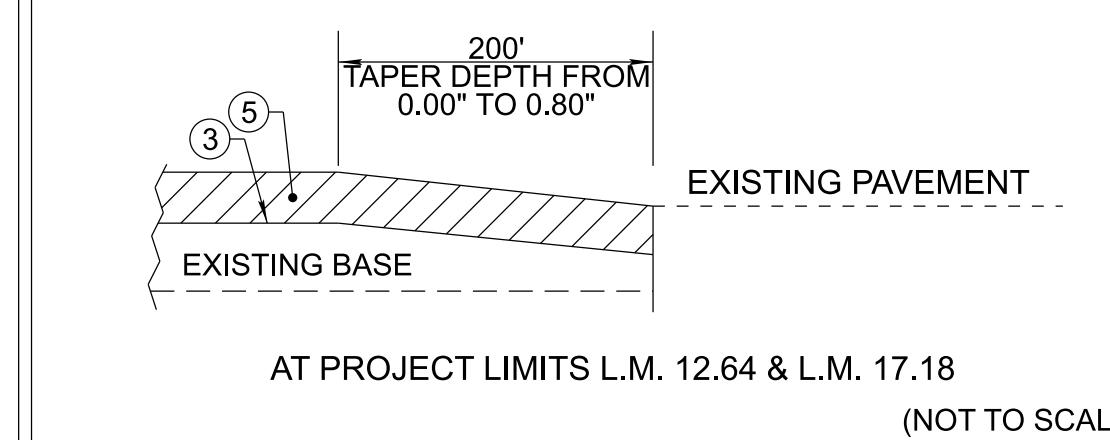
ALTERNATE AA2



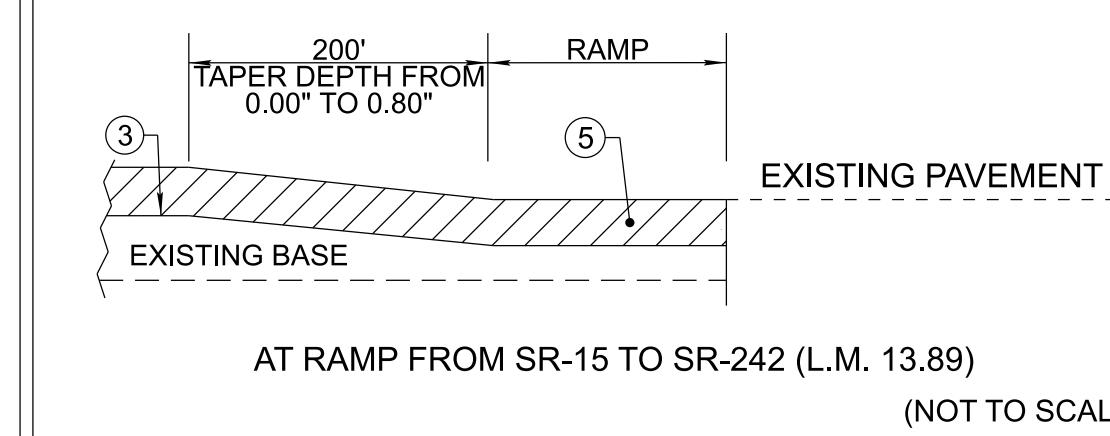
BRIDGE MILLING DETAIL



DETAIL OF TAPER MILL



RAMP MILLING DETAIL



PROPOSED PAVEMENT SCHEDULE

① MINERAL AGGREGATE @ 2.00"± THICK FOR SHOULDERS ITEM 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"	④ MICRO-SURFACING ITEM 414-03.01 EMULSIFIED ASPHALT FOR MICRO-SURFACING EMULSIFIED ASPHALT (AT 12% OF THE DRY WEIGHT OF AGGREGATE) ITEM 414-03.02 AGGREGATE FOR MICRO-SURFACING LEVELING COURSE @ 0.16"± THICK (APPROX. 14.00 LBS/S.Y.) SURFACE COURSE @ 0.21"± THICK (APPROX. 18.00 LBS/S.Y.)
② TACK COAT (TC) FOR MICRO-SURFACING ITEM 403-01.01 BITUMINOUS MATERIAL FOR TACK COAT (TC) SEE 403.05 FOR DETERMINING APPLICATION RATE IN THE FIELD	⑤ ASPHALTIC CONCRETE SURFACE (HM) @ 0.80"± THICK (APPROX. 85 LBS/S.Y.) ITEM 411-03.07 ACS MIX (PG64-22) THIN LIFT ASPHALT
③ TACK COAT ITEM 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) SEE 403.05 FOR DETERMINING APPLICATION RATE IN THE FIELD	

SEALED BY



NOT TO SCALE

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DEPARTMENT OF TRANSPORTATION

TYPICAL
SECTIONS AND
PAVEMENT
SCHEDULE