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Anthony Lee Washington III
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HDR ENGINEERING, INC.
120 BRENTWOOD COMMONS WAY
SUITE 525
BRENTWOOD, TN 37027
ANTHONY L. WASHINGTON, III, P.E. 119749

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 |
| ROADWAY INDEX AND STANDARD DRAWINGS | 1A |
| ESTIMATED ROADWAY QUANTITIES | 2 |
| TYPICAL SECTIONS AND PAVEMENT SCHEDULE | 2A, 2A1 – 2A3 |
| TABULATED QUANTITIES | 2E |

| YEAR | PROJECT NO. | SHEET NO. |
|------|-----------------|----------------|
| 2024 | STP/HSIP-96(73) | ROADWAY-SIGN 2 |
| | | |
| | | |

REV. 03-11-24: ADDED SHEET

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNATURE
SHEET

ROADWAY INDEX

| SHEET NAME | SHEET NO. |
|--|---------------|
| SIGNATURE SHEETS..... | ROADWAY-SIGN1 |
| | ROADWAY-SIGN2 |
| TITLE SHEET | 1 |
| ROADWAY INDEX AND STANDARD DRAWINGS..... | 1A |
| PROJECT COMMITMENTS | 1B |
| ESTIMATED ROADWAY QUANTITIES | 2 |
| TYPICAL SECTIONS AND PAVEMENT SCHEDULE | 2A, 2A1 – 2A3 |
| GENERAL NOTES..... | 2B |
| SPECIAL NOTES..... | 2C |
| ENVIRONMENTAL NOTES..... | 2D, 2D1 |
| TABULATED QUANTITIES | 2E |
| PAVEMENT MARKING IMPROVEMENTS..... | 2F, 2F1-2F4 |
| BRIDGE REPAIR PLANS | B-1 |
| NOTE: THE ALPHABETICAL LETTERS "I", "O" & "Q" ARE NOT USED IN THE NUMBERING OF SHEETS. | |
| NO UTILITY SHEETS. | |

STANDARD ROADWAY DRAWINGS

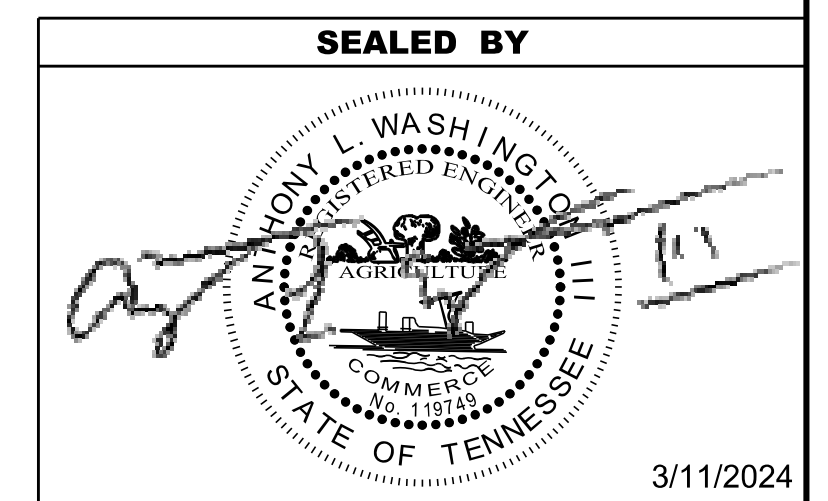
| DWG. | REV. | DESCRIPTION |
|---|----------|---|
| STANDARD ROADWAY TITLE SHEET, ABBREVIATIONS, AND LEGENDS | | |
| RD-A-1 | 02-20-20 | STANDARD ABBREVIATIONS A THROUGH L |
| RD-A-2 | | STANDARD ABBREVIATIONS M THROUGH Z |
| RD-L-1 | 02-20-20 | STANDARD LEGEND |
| RD-L-1A | | STANDARD LEGEND |
| DESIGN - TRAFFIC CONTROL | | |
| T-M-1 | 06-28-19 | DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS |
| T-M-2 | 06-28-19 | 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-16 | 03-04-21 | RUMBLE STRIPE INSTALLATION LAYOUT |
| T-M-16A | 02-03-20 | RUMBLE STRIPE DETAILS FOR EDGE OF PAVEMENT AND CENTERLINE |
| T-WZ-10 | 04-02-12 | ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS |

STANDARD TRAFFIC OPERATIONS DRAWINGS

| DWG. | REV. | DESCRIPTION |
|----------------|----------|---|
| SIGNALS | | |
| 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 |

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-----------------|-----------|
| RESURF | 2024 | STP/HSIP-96(73) | 1A |
| | | | |
| | | | |

REV. 03-11-24: ADDED ROADWAY-SIGN2 TO INDEX



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

 ROADWAY INDEX
 AND
 STANDARD
 DRAWINGS

ESTIMATED ROADWAY QUANTITIES

| ITEM NO. | DESCRIPTION | UNIT | QUANTITY | QUANTITY | TOTAL QUANTITY |
|----------|--|------|---------------|---------------|----------------|
| | | | 94S096-F8-005 | 94S096-F3-005 | |
| (1) | 208-01.05 BROOMING & DEGRASSING SHOULDERS | L.M. | 11.1 | | 11.1 |
| (2) | 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D | TON | 1498 | | 1498 |
| (3) | 307-01.08 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2 | TON | 150 | | 150 |
| (4) | 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) | TON | 63 | | 63 |
| (5) | 411-01.10 ACS MX(PG64-22) GRADING D | TON | 7880 | | 7880 |
| | 411-12.03 SCORING FOR RUMBLE STRIPE (NON-CONTINUOUS) (8IN WIDTH) | L.M. | 9.6 | | 9.6 |
| (6)(7) | 415-01.01 COLD PLANING BITUMINOUS PAVEMENT | TON | 7950 | | 7950 |
| (8) | 712-01 TRAFFIC CONTROL | LS | 1 | | 1 |
| | 712-04.01 FLEXIBLE DRUMS (CHANNELIZING) | EACH | 110 | | 110 |
| (9) | 712-06 SIGNS (CONSTRUCTION) | S.F. | 979 | | 979 |
| | 712-08.03 ARROW BOARD (TYPE C) | EACH | 1 | | 1 |
| | 716-01.21 SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR) (1 COLOR) | EACH | 573 | | 573 |
| | 716-01.22 SNOWPLOWABLE RAISED PAVEMENT MARKERS (MONO-DIR)(1 COLOR) | EACH | 148 | | 148 |
| | 716-01.30 REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER | EACH | 721 | | 721 |
| (10) | 716-02.04 PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING) | S.Y. | 163 | 178 | 341 |
| (10)(11) | 716-02.05 PLASTIC PAVEMENT MARKING (STOP LINE) | L.F. | 237 | | 237 |
| (10) | 716-02.06 PLASTIC PAVEMENT MARKING (TURN LANE ARROW) | EACH | 34 | | 34 |
| (10) | 716-02.08 PLASTIC PAVEMENT MARKING (8" DOTTED LINE) | L.F. | | 578 | 578 |
| (10) | 716-02.12 PLASTIC PAVEMENT MARKING (8IN LINE) | L.M. | | 0.6 | 0.6 |
| (10) | 716-03.01 PLASTIC WORD PAVEMENT MARKING (ONLY) | EACH | 1 | 1 | 2 |
| (10) | 716-04.04 PLASTIC PAVEMENT MARKING (TRANSVERSE SHOULDER) | L.F. | 800 | | 800 |
| (10) | 716-04.12 PLASTIC PAVEMENT MARKING (YIELD LINE) | S.F. | 45 | | 45 |
| (12) | 716-05.01 PAINTED PAVEMENT MARKING (4" LINE) | L.M. | 19.5 | | 19.5 |
| (13) | 716-12.02 ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE) | L.M. | 19.5 | | 19.5 |
| | 716-12.05 ENHANCED FLATLINE THERMO PVMT MRKNG (6IN DOTTED LINE) | L.F. | 1100 | | 1100 |
| | 717-01 MOBILIZATION | LS | 1 | | 1 |
| (14) | 730-14.02 SAW SLOT | L.F. | 544 | | 544 |
| (14) | 730-14.03 LOOP WIRE | L.F. | 1088 | | 1088 |

THERE ARE NO UTILITY ADJUSTMENTS ON THIS PROJECT

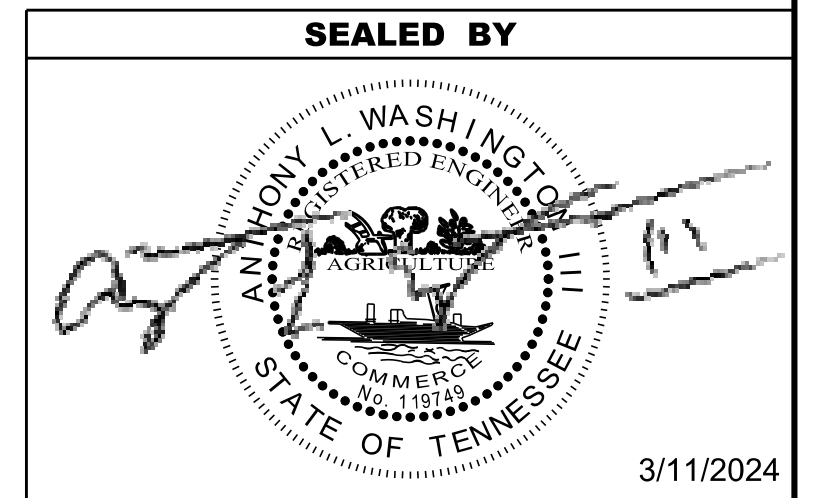
THERE ARE NO GUARDRAIL ADJUSTMENTS ON THIS PROJECT

FOOTNOTES

- (1) NO BUILD UP OR DEBRIS TO BE LEFT ON SHOULDERS.
- (2) TO BE USED AS DIRECTED BY THE ENGINEER.
- (3) TO BE USED AS DIRECTED BY THE ENGINEER FOR SPOT REPAIRS.
- (4) INCLUDES 2 TONS FOR PRIVATE DRIVES, COUNTY ROADS, FIELD ENTRANCES, AND BUSINESS ENTRANCES.
- (5) INCLUDES 350 TONS FOR PRIVATE DRIVES, COUNTY ROADS, FIELD ENTRANCES, AND BUSINESS ENTRANCES.
- (6) INCLUDES 139 TONS FOR SPOT REPAIR.
- (7) INCLUDES 351 TONS FOR PRIVATE DRIVES, COUNTY ROADS, FIELD ENTRANCES, AND BUSINESS ENTRANCES.
- (8) 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.
- (9) 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).
- (10) 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.
- (11) ALL STOP BARS ON SIDE STREETS WILL BE RETRACED AS DIRECTED BY THE ENGINEER.
- (12) ITEM TO BE USED FOR TEMPORARY PAVEMENT MARKINGS ON INTERMEDIATE LAYERS.
- (13) ITEM TO BE USED AS PERMANENT MARKING FOR EGDELINES AND CENTERLINES. CENTERLINE QUANTITY BASED ON 5.0% PASSING, 28.0% NO PASS ON ONE SIDE, AND 67% NO PASS ON BOTH SIDES.
- (14) FOR REPLACEMENT OF LOOP DETECTION AT THE INTERSECTION AT DRAG STRIP ROAD & I-40 WB RAMP AT LM 0.36 AND FOR THE INTERSECTION AT I-40 EB RAMP AT LM 0.71.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|----------------|-----------|
| RESURF | 2024 | STP/HSP-96(73) | 2 |

REV. 03-11-24: ADDED FOOTNOTES TO ITEMS; REVISED QUANTITY FOR ITEMS 303-01 & 307-01.08; REVISED FOOTNOTE 3, RENUMBERED FOOTNOTES 10 & 11

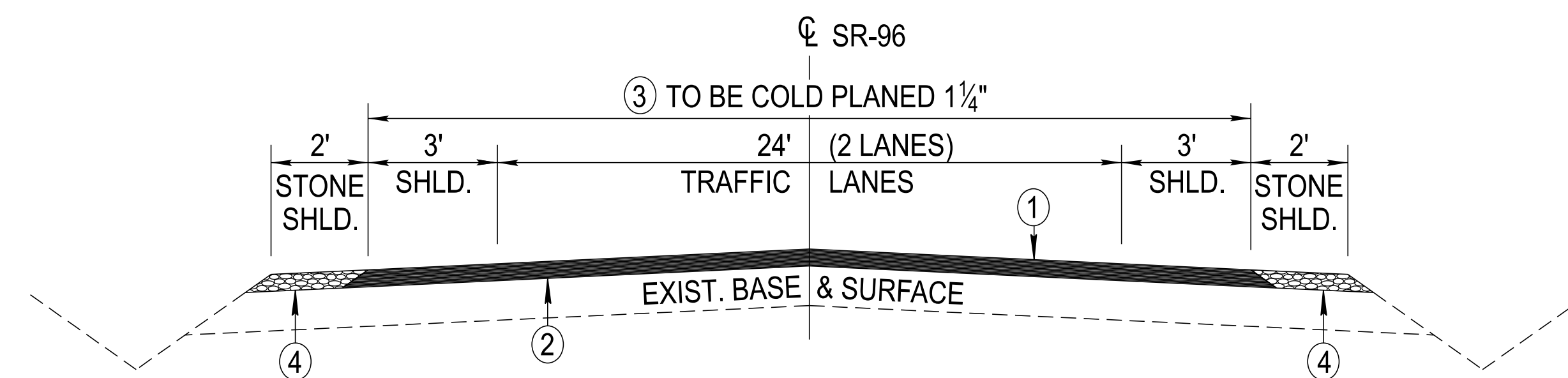


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DEPARTMENT OF TRANSPORTATION**

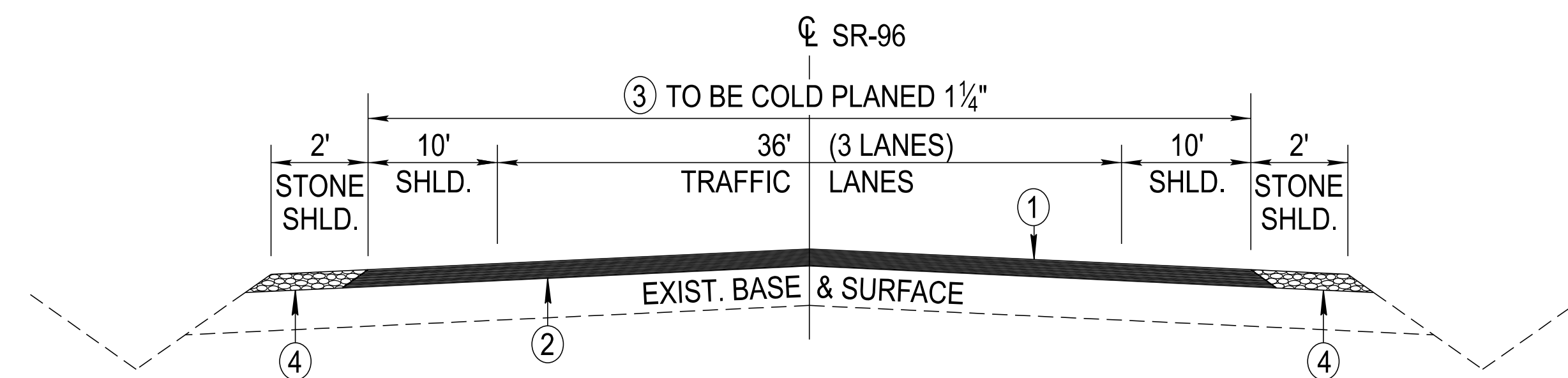
ESTIMATED
ROADWAY
QUANTITIES

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-----------------|-----------|
| RESURF | 2024 | STP/HSIP-96(73) | 2A |
| | | | |

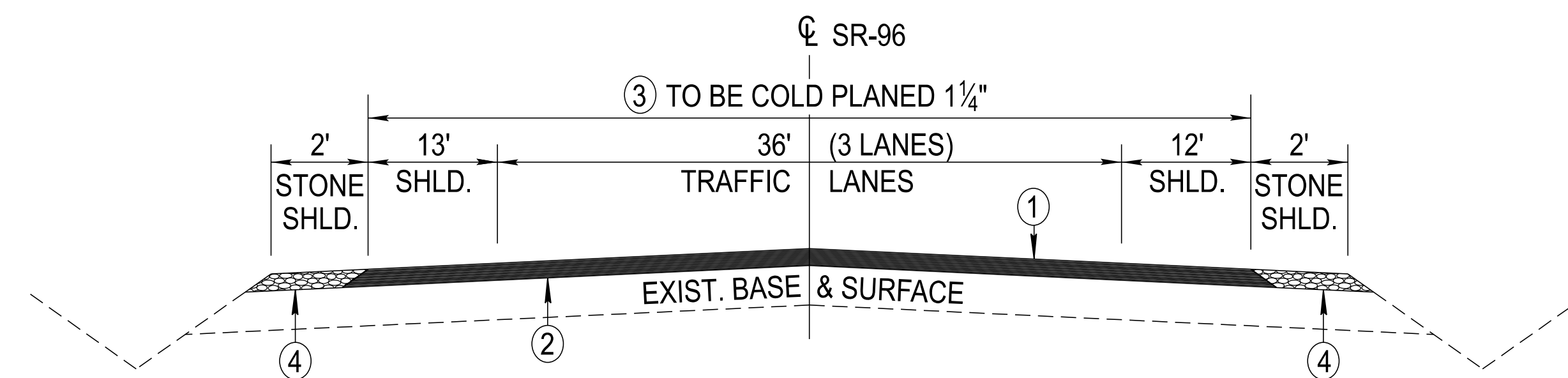
REV. 03-11-24: ADDED 2' STONE SHLD. TO TYPICAL SECTIONS



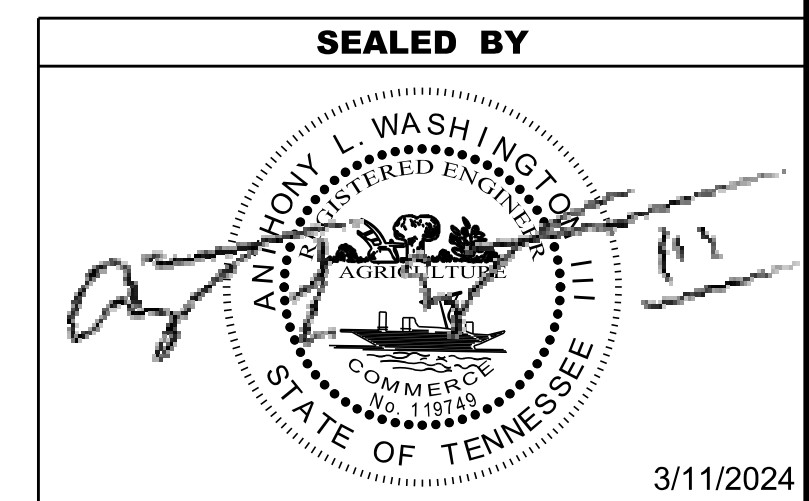
SR-96
 TYPICAL SECTION
 L.M. 0.00 TO L.M. 0.27



SR-96
 TYPICAL SECTION
 L.M. 0.27 TO L.M. 0.38



SR-96
 TYPICAL SECTION
 L.M. 0.38 TO L.M. 0.72

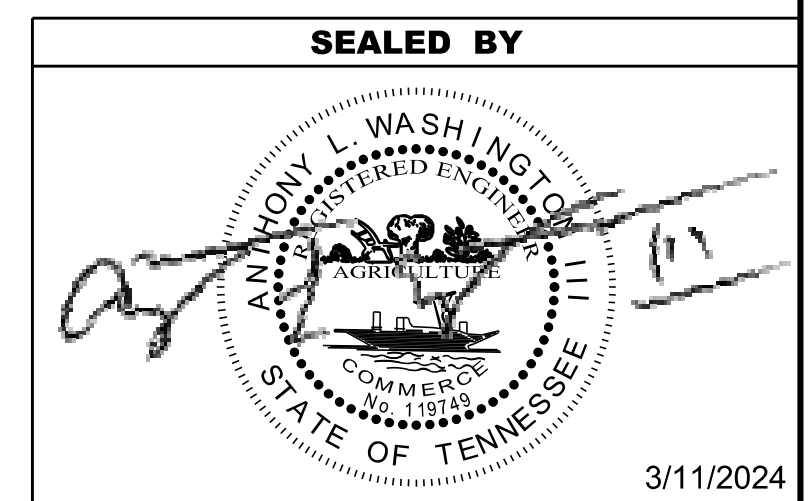
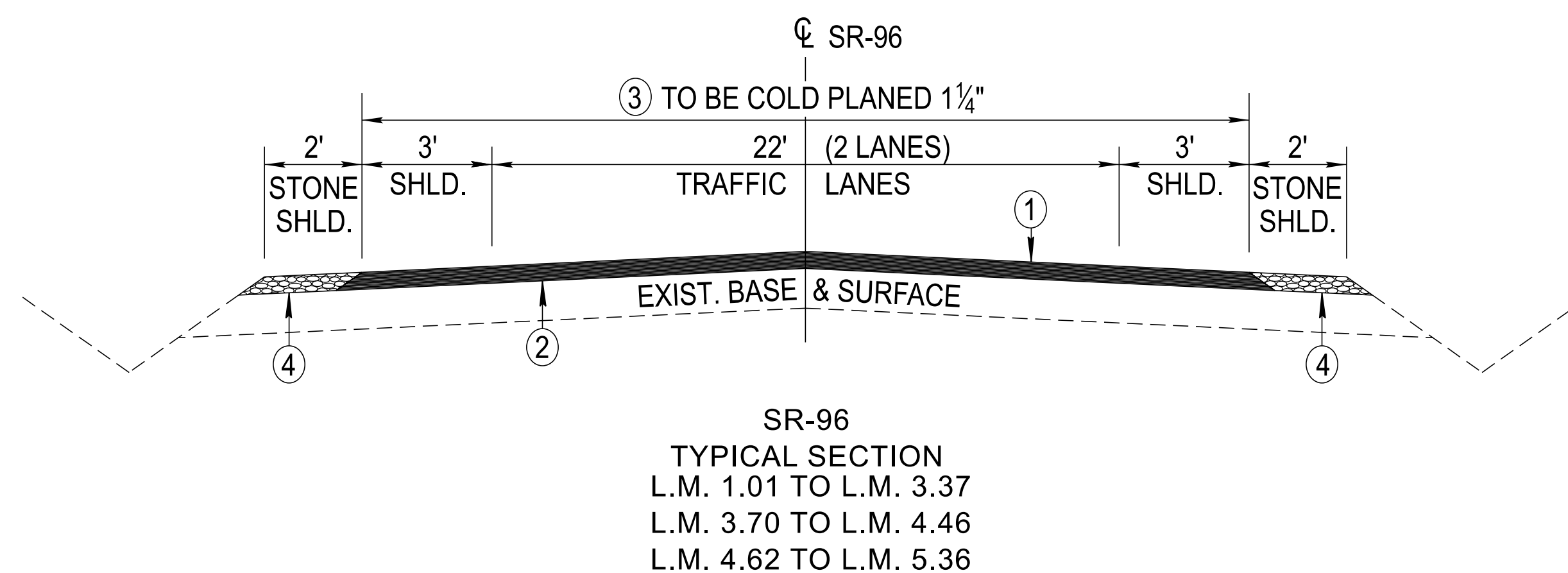
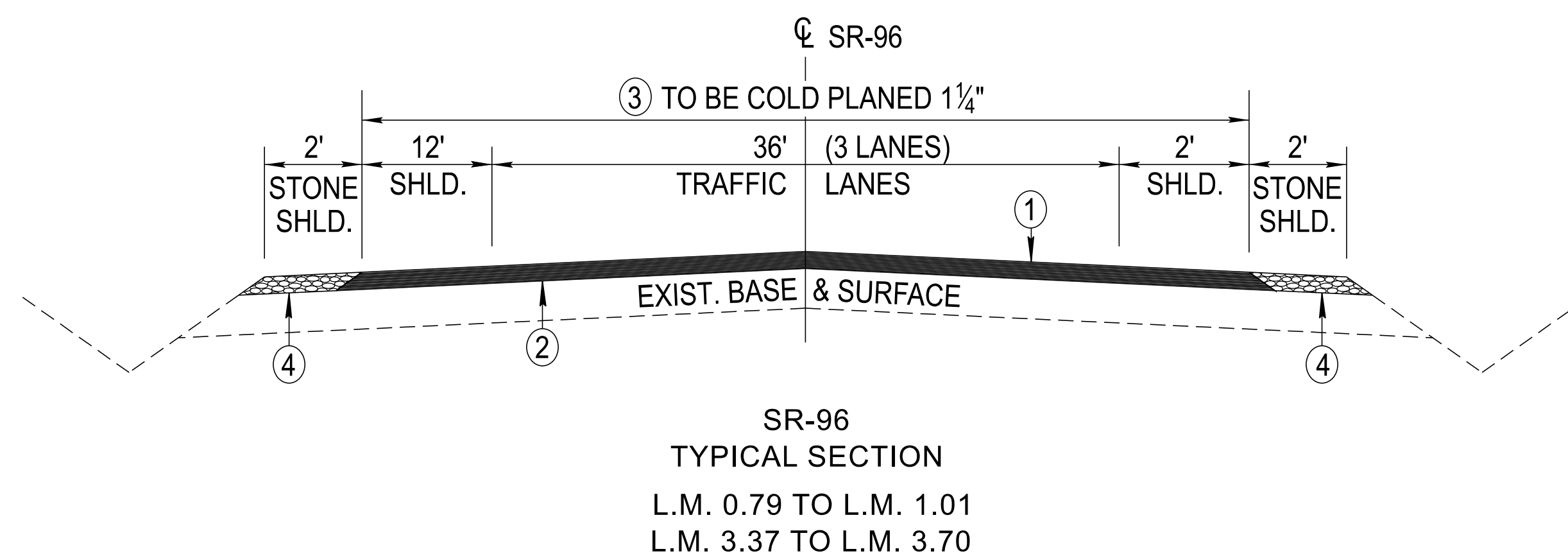
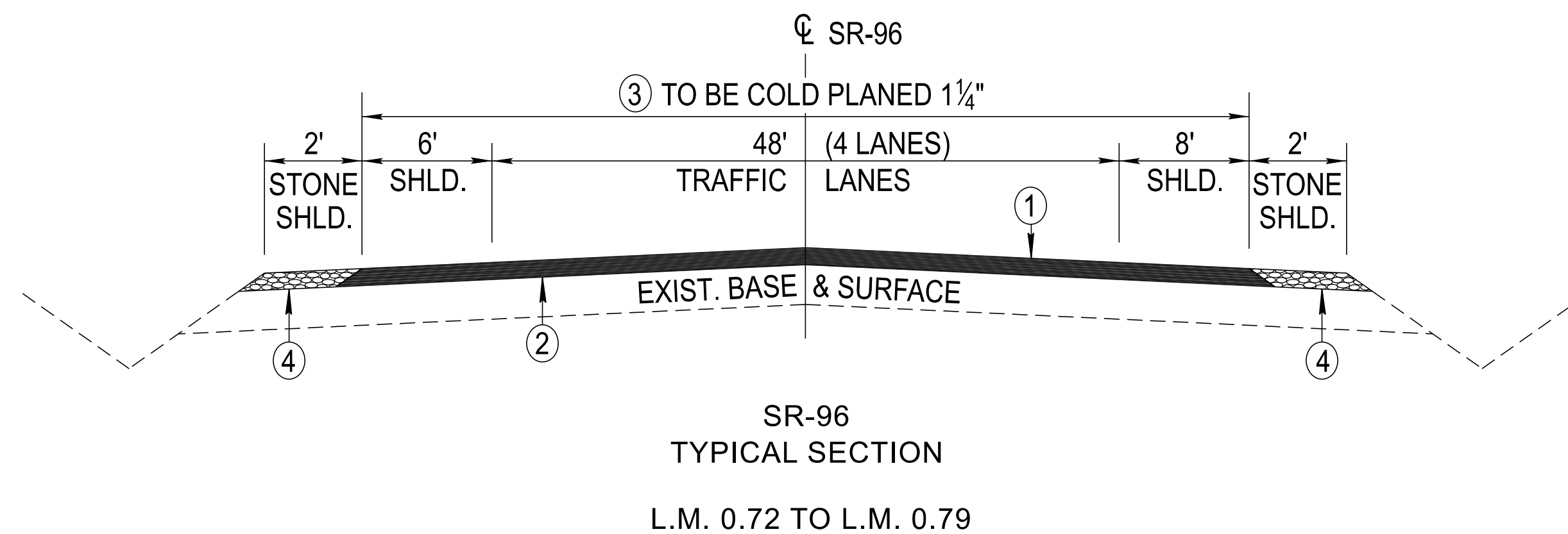


STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

TYPICAL
 SECTIONS AND
 PAVEMENT
 SCHEDULE

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-----------------|-----------|
| RESURF | 2024 | STP/HSIP-96(73) | 2A1 |
| | | | |

REV. 03-11-24: ADDED 2' STONE SHLD. TO TYPICAL SECTIONS

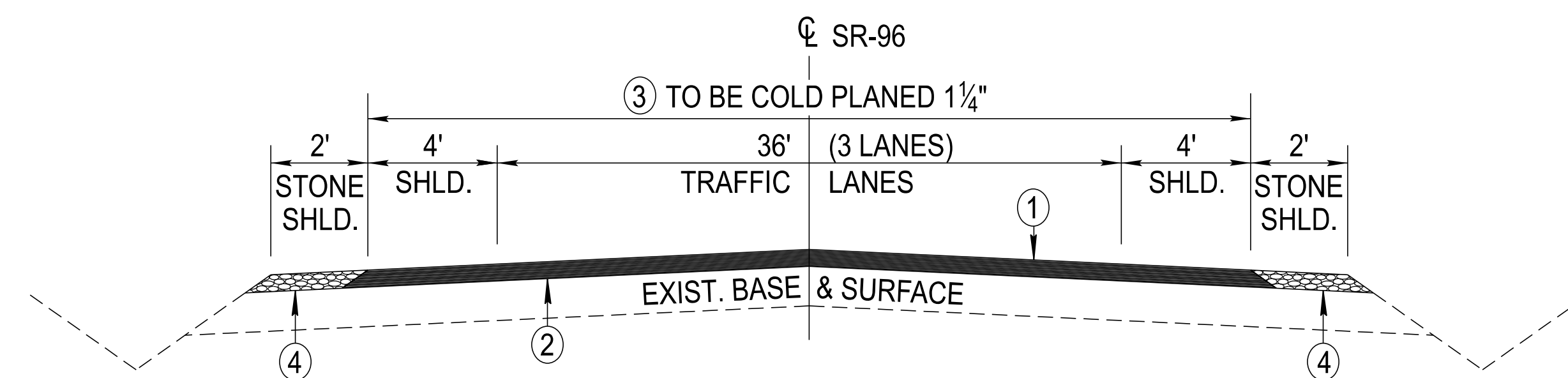


STATE OF TENNESSEE
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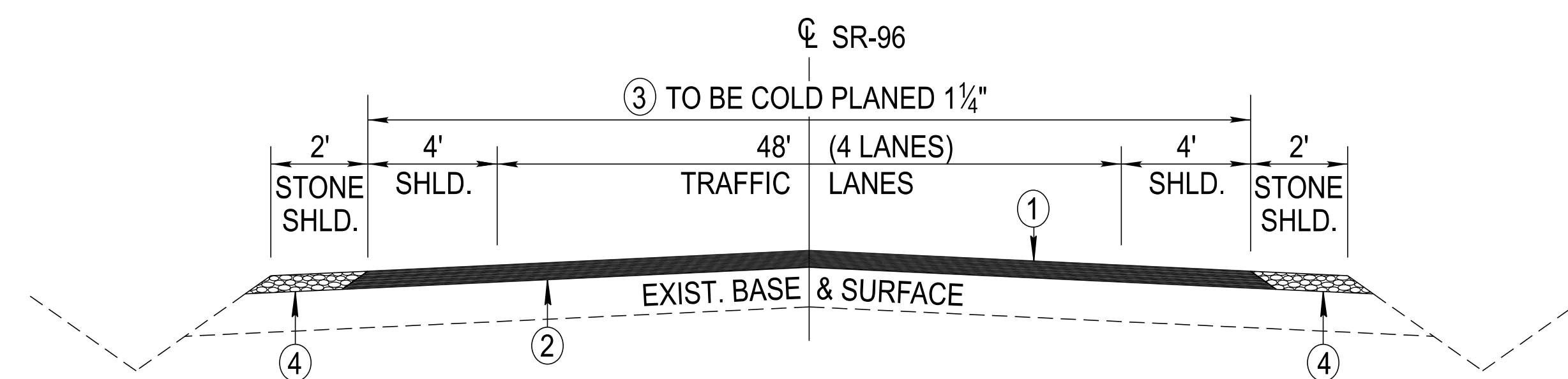
TYPICAL SECTIONS

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-----------------|-----------|
| RESURF | 2024 | STP/HSIP-96(73) | 2A2 |
| | | | |

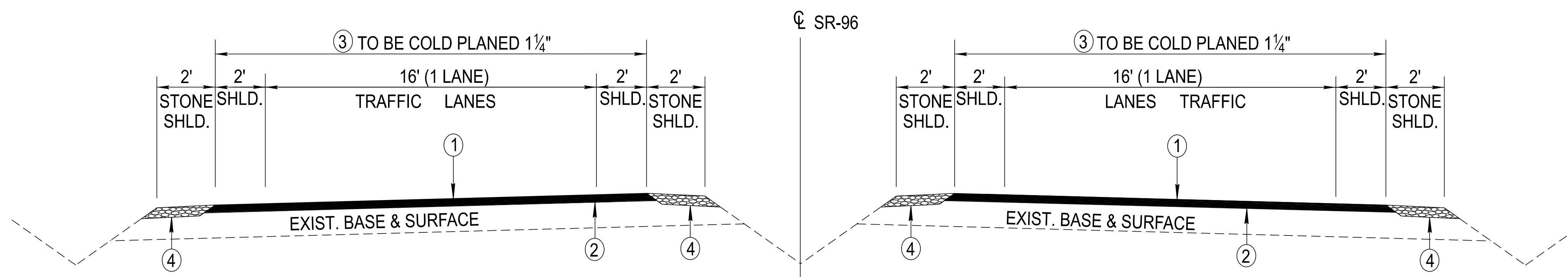
REV. 03-11-24: ADDED 2' STONE SHLD. TO TYPICAL SECTIONS



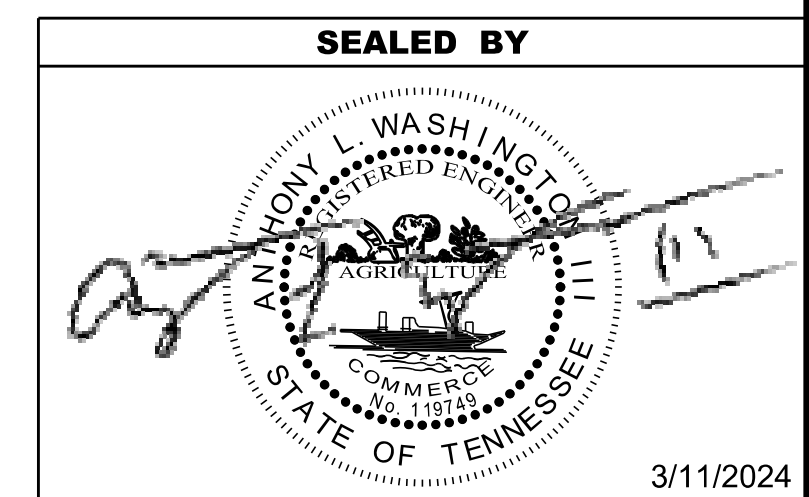
SR-96
TYPICAL SECTION
L.M. 4.46 TO L.M. 4.49
L.M. 4.55 TO L.M. 4.62



SR-96
TYPICAL SECTION
L.M. 4.49 TO L.M. 4.55



SR-96
TYPICAL SECTION
L.M. 5.36 TO L.M. 5.51



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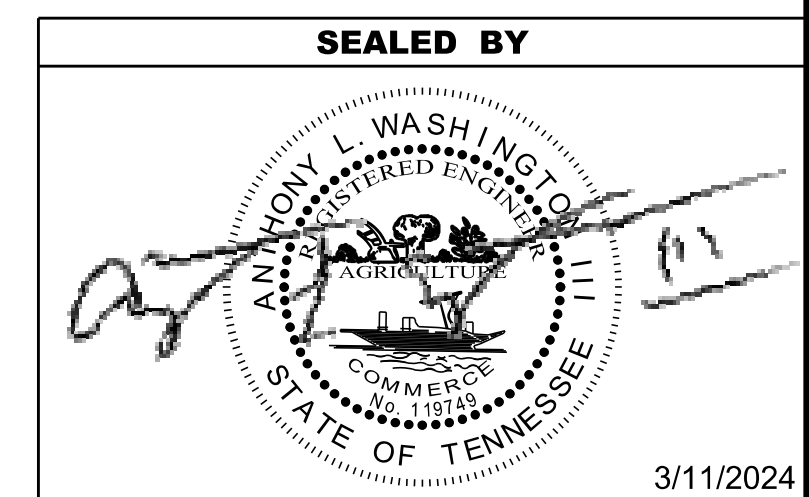
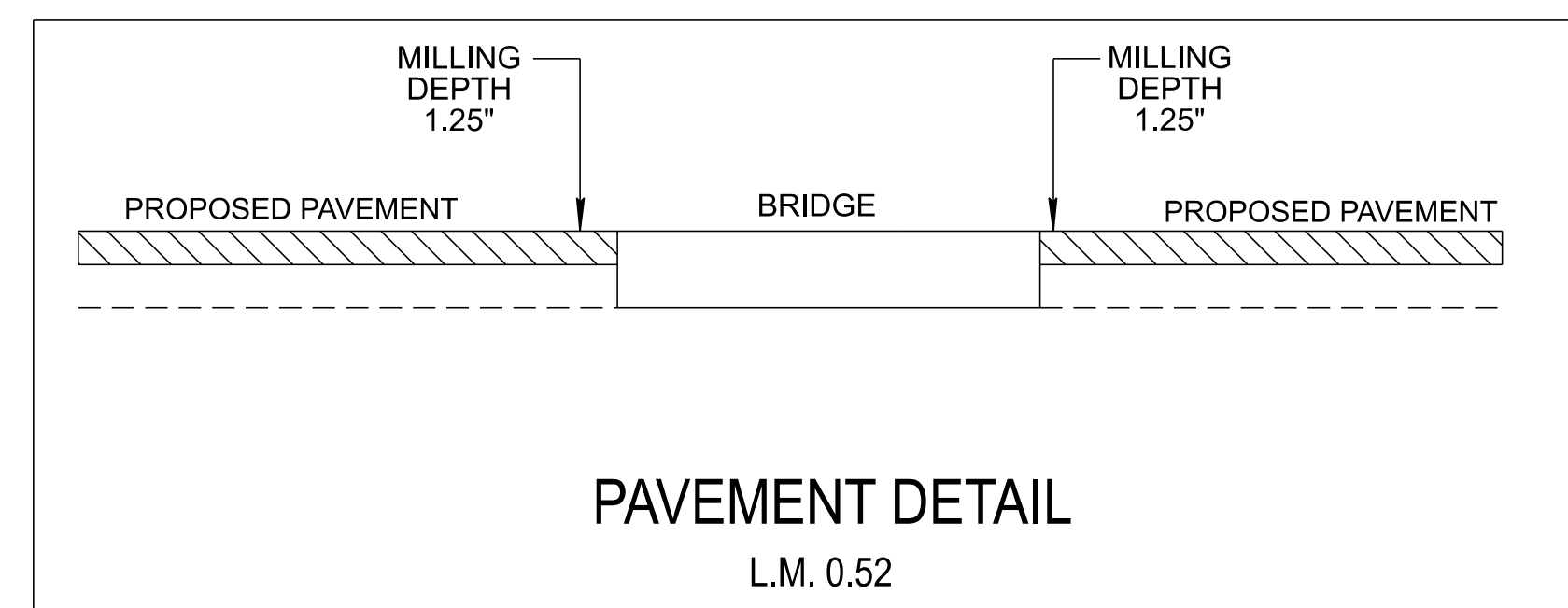
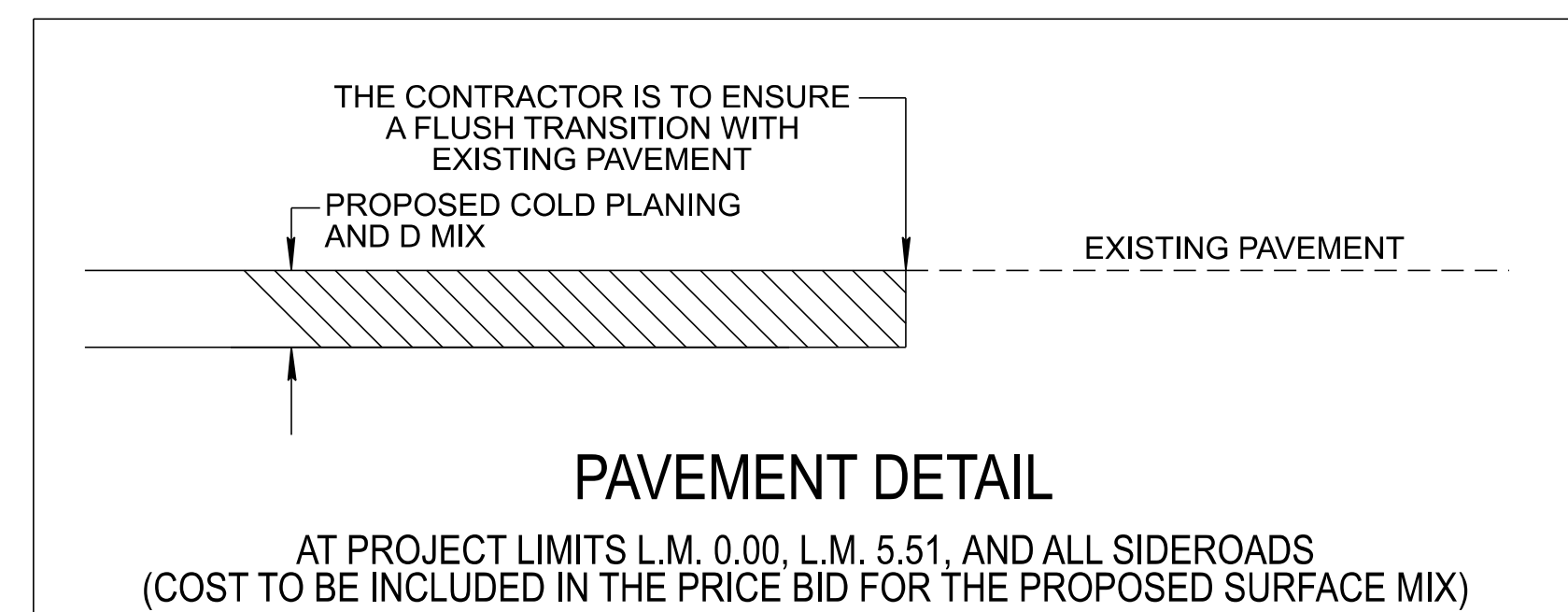
TYPICAL
SECTIONS

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-----------------|-----------|
| RESURF | 2024 | STP/HSIP-96(73) | 2A3 |
| | | | |

REV. 03-11-24: ADDED 303-01 ITEM TO PAVEMENT SCHEDULE

| PROPOSED PAVEMENT SCHEDULE | |
|----------------------------|---|
| ① | ASPHALTIC CONCRETE SURFACE (HOT MIX) PG64-22 GRADING "D" SURFACE @ 1.25" THICK (APPROX. 132.5 LB./S.Y.) 411-01.10 ACS MIX (PG64-22) GRADING "D" |
| ② | TACK COAT 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) (TON) SEE 403.05 FOR DETERMINING APPLICATION RATE IN THE FIELD |
| ③ | COLD PLANING @ 1.25" THICK (131.25 LB/S.Y.) 415-01.01 COLD PLANING BITUMINOUS PAVEMENT (TON) |
| ④ | MINERAL AGGREGATE BASE (SHOULDERS) @ 2.00" THICK 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D |

NOTE: PUBLIC ROAD INTERSECTIONS WILL BE RESURFACED A PAVER WIDTH THROUGH THE INTERSECTION AT A MINIMUM. ON CURB AND GUTTER SECTIONS, PUBLIC ROAD INTERSECTIONS WILL BE RESURFACED TO THE END OF RADIUS.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL
SECTIONS

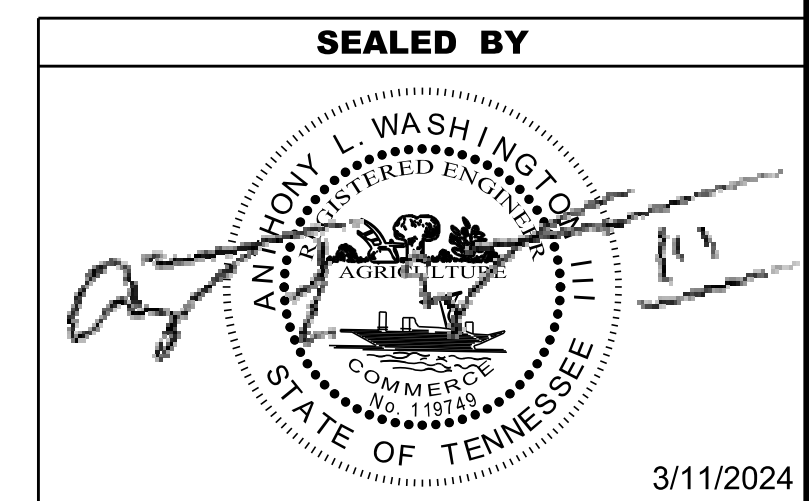
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|-----------------|-----------|
| RESURF | 2024 | STP/HSIP-96(73) | 2E |
| | | | |

REV. 03-11-24: ADDED TOTALS TO TABULATED SPOT REPAIR QUANTITIES

| SPOT REPAIR PAVEMENT QUANTITIES (RESURFACING) | | | | | |
|---|---------------|--------------|----------------|-------------------------------|--|
| LOCATION (LOG MILE) | LENGTH (FEET) | WIDTH (FEET) | DEPTH (INCHES) | TYPE - GRADE - PAY ITEM (TON) | |
| | | | | COLD PLANING (TON) | BITUMINOUS PLANT MIX BASE (HOT MIX) B-M2 (TON) |
| | | | | 415-01.01 | 307-01.08 |
| L.M. 3.39 TO L.M. 3.44 | 264' | 12' | 2.5" | 46.2 | 49.7 |
| L.M. 4.20 TO L.M. 4.23 | 158' | 12' | 2.5" | 27.7 | 29.8 |
| L.M. 4.58 TO L.M. 4.65 | 370' | 12' | 2.5" | 64.8 | 69.7 |
| TOTAL | | | | 139 | 150 |

| TRAFFIC CONTROL SIGN TABULATION (RESURFACING) | | | | | | |
|---|----------------------------------|----------------|-----|------|-----------------------|----------------------|
| M.U.T.C.D. SIGN NO. | LEGEND \ DESCRIPTION | SIZE IN INCHES | | S.F. | TOTAL NUMBER REQUIRED | ITEM NO. 712-06 S.F. |
| | | L | W | | | |
| G20-1 | ROAD WORK NEXT 5 MILES | 48" | 24" | 8 | 2 | 16 |
| G20-2 | END ROAD WORK | 48" | 24" | 8 | 20 | 160 |
| W4-2 | LANE ENDS | 48" | 48" | 16 | 2 | 32 |
| W8-11 | UNEVEN LANES | 48" | 48" | 16 | 7 | 112 |
| W8-15 | GROOVED PAVEMENT | 48" | 48" | 16 | 7 | 112 |
| W8-15P | MOTORCYCLE PLAQUE | 30" | 24" | 5 | 7 | 35 |
| W20-1 | ROADWORK 1 MILE | 48" | 48" | 16 | 2 | 32 |
| W20-1 | ROADWORK 1/2 MILE | 48" | 48" | 16 | 2 | 32 |
| W20-1 | ROADWORK 1000 FEET | 48" | 48" | 16 | 2 | 32 |
| W20-1 | ROAD WORK AHEAD | 48" | 48" | 16 | 20 | 320 |
| W20-4 | ONE LANE ROAD 1000 FT - PORTABLE | 48" | 48" | 16 | 2 | 32 |
| W20-7A | FLAGGER SYMBOL - PORTABLE | 48" | 48" | 16 | 2 | 32 |
| W21-2 | FRESH OIL - PORTABLE | 48" | 48" | 16 | 2 | 32 |
| TOTAL | | | | | 979 | |

| BRIDGE RECOMMENDATIONS | | | |
|------------------------|-------------|--------------|---|
| LOCATION | BRIDGE NO. | LENGTH (FT.) | TREATMENT |
| L.M. 0.52 | 94100400003 | 367.04 | PROVIDE DECK REPAIR ITEM - SEAL WITH TYPE 1 THIN EPOXY OVERLAY (BRIDGE SHEETS INCLUDED) |
| | | | |
| | | | |



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES