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Steven Lamm Digitally signed by Steven Lamm
Date: 2026.01.05 10:00:02 -06'00'

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NEEL-SCHAFFER, INC.
210 25TH AVE. NORTH
SUITE 800
NASHVILLE, TN 37203
STEVEN C. LAMM, P.E. NO. 111623

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 SHEETS.....	ROADWAY-SIGN1
TITLE SHEET	1
ROADWAY INDEX, STANDARD ROADWAY DRAWINGS, AND STANDARD	
TRAFFIC DESIGN DRAWINGS	1A
ESTIMATED ROADWAY QUANTITIES	2
TYPICAL SECTIONS AND PAVEMENT SCHEDULE	2B
GENERAL NOTES.....	2C
SPECIAL NOTES.....	2D
ENVIRONMENTAL NOTES.....	2E
EROSION PREVENTION AND SEDIMENT CONTROL NOTES.....	2E1
TABULATED QUANTITIES	2F, 2F1
UTILITY NOTES AND UTILITY OWNERS.....	3
PAVEMENT EDGE DROP-OFF NOTES FOR TRAFFIC CONTROL	T1

YEAR	PROJECT NO.	SHEET NO.
2026	29S001-S8-003	ROADWAY-SIGN1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNATURE
SHEETS

12/19/2025 9:54:52 AM Y:\PROJECTS\0015000\0019000\19049 ON-CALL DESIGN - TDOT\19049 TDOT - WO2 - REG 1 RESURFACING\DGNSR-1 GRAINGER CO\0001-GG001-ROADWAY\SIGNATURESHEET1.SHT

Index Of Sheets
SEE SHEET NO. 1A

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

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

TENN.	YEAR	SHEET NO.
	2026	1
CONST. STATE PROJ. NO.	N/A	
STATE PROJ. NO.	29S001-S8-003	
STATE PROJ. NO.	29S001-M3-005	

PROJECT TO BE BUNDLED WITH:
GRAINGER CO. SR-92
PIN 134038.00

GRAINGER COUNTY

SR-1
FROM NEAR LOOP CIRCLE
TO NEAR HELTON ROAD (GFT-26)

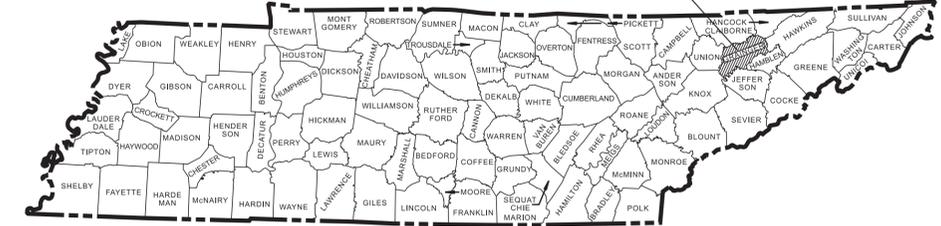
RESURFACING

411TLD OVERLAY @ 85 LB/SY, BRIDGE REPAIR, PAVEMENT MARKINGS, CURB RAMPS

STATE HIGHWAY NO. 1 F.A.H.S. NO. 11W

PROJECT LOCATION

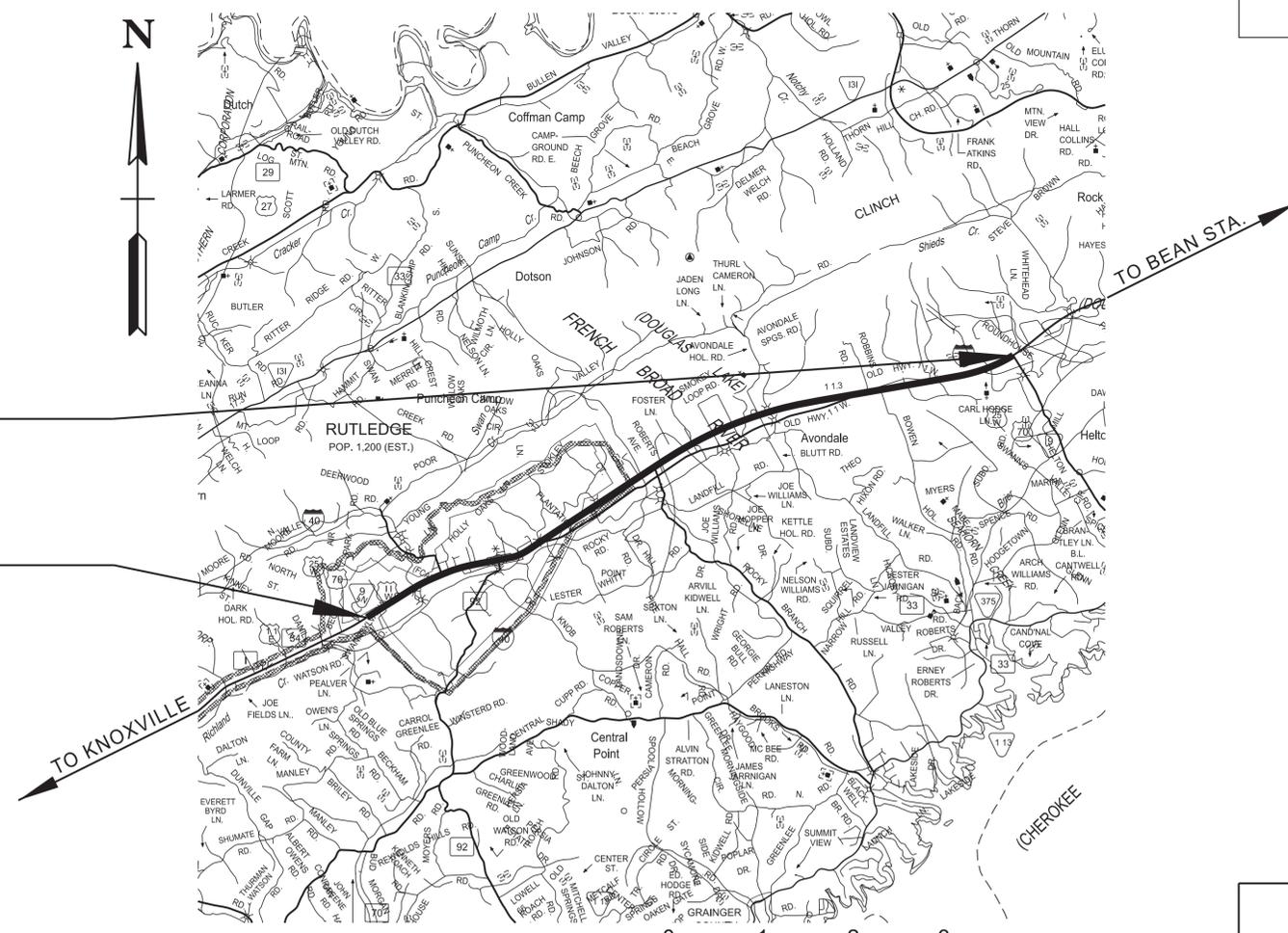
BRIDGE ID. # 29SR0010017, 29SR0010019,
29SR0010021, 29SR0010023



NO EXCLUSIONS

END PROJECT NO. 29S001-S8-003 RESURFACING
L.M. 22.02

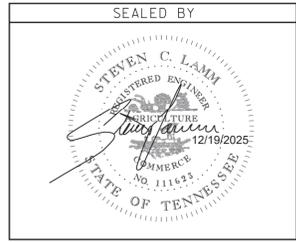
BEGIN PROJECT NO. 29S001-S8-003 RESURFACING
L.M. 14.22



SCALE: 1"= 5280'



PROJECT LENGTH 7.80 MILES
TOTAL LANE MILES RESURFACED 18.70 MILES



APPROVED: *Shane Hester*
SHANE HESTER, CHIEF ENGINEER

DATE: _____

APPROVED: *Will Reid*
WILL REID, COMMISSIONER

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 : ERIC WILSON, P.E.
DESIGN FIRM : NEEL-SCHAFFER, INC.
DESIGNER : STEVEN LAMM, P.E. CHECKED BY ZACH FARRIS, P.E.
P.E. NO. 98013-4203-04 (DESIGN)
PIN NO. 134036.00

TRAFFIC COUNTER & WEATHER STATIONS	
TRAFFIC COUNT STATION 31	L.M. 14.988
TRAFFIC COUNT STATION 33	L.M. 16.743
TRAFFIC COUNT STATION 57	L.M. 18.457

TRAFFIC DATA	
ADT (2025)	6373
POSTED SPEED	45/50 MPH
LM 14.22 - 17.14	45 MPH
LM 17.14 - 22.02	50 MPH

\$\$\$\$\$SYTIME\$\$\$\$\$
\$\$\$\$\$DGN\$P\$C\$\$\$\$\$

ROADWAY INDEX

SHEET NAME	SHEET NO.
SIGNATURE SHEETS.....	ROADWAY-SIGN1
TITLE SHEET	1
ROADWAY INDEX, STANDARD ROADWAY DRAWINGS, AND STANDARD TRAFFIC DESIGN DRAWINGS	1A
ESTIMATED ROADWAY QUANTITIES	2
TYPICAL SECTIONS AND PAVEMENT SCHEDULE	2B
GENERAL NOTES.....	2C
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ENVIRONMENTAL NOTES.....	2E
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BRIDGE REPAIR PLANS ①	B-1

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

NO PROJECT COMMITMENTS SHEET INCLUDED IN THIS PLAN SET.

NO UTILITY SHEETS ARE INCLUDED IN THIS PLAN SET.

① PROVIDED BY TDOT STRUCTURES OFFICE.

STANDARD ROADWAY DRAWINGS

DWG.	REV.	DESCRIPTION
STANDARD ROADWAY TITLE SHEET, ABBREVIATIONS, AND LEGENDS		
RD-TP-1	10-01-24	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
MULTIMODAL		
CR-GN-1		GENERAL NOTES CURB RAMP
CR- GN-2		CURB RAMP NUMBERING
CR-DWS-1		DETECTABLE WARNING SURFACE DETAIL
CR-GTL-1		GUTTER TRANSITION LAYOUT
CR-GTL-2		GUTTER TRANSITION LAYOUT
CR-20	07-01-25	PARALLEL CURB RAMP 5 – FT SIDEWALK
CR-40		MONO-DIRECTIONAL SINGLE CROSSWALK CURB RAMP DETAILS

STANDARD TRAFFIC DESIGN DRAWINGS

DWG.	REV.	DESCRIPTION
SIGN		
T-S-9	07-30-25	STANDARD LAYOUT - GROUND MOUNTED SIGNS
T-S-10	07-30-25	STANDARD MOUNTING DETAILS FLAT SHEET SIGNS, ALUMINUM-STEEL DESIGN
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
T-S-23A	07-30-25	MULTI-DIRECTIONAL SLIP BASE BREAKAWAY P-POST SIGN SUPPORT
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
DESIGN - TRAFFIC CONTROL		
T-M-1	01-24-25	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
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 INTERSTATE AND ACCESS CONTROLLED ROUTES
T-M-15A	01-24-25	ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED RURAL ROUTES
T-M-16	01-24-25	RUMBLE STRIPE INSTALLATION LAYOUT
T-M-16A	01-24-25	RUMBLE STRIPE DETAILS FOR EDGE OF PAVEMENT AND CENTERLINE
T-WZ-10	03-26-25	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-FAB1	03-26-25	FLASHING YELLOW ARROW BOARD
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-36	03-26-25	LANE CLOSURE ON LOW-VOLUME 2-LANE HIGHWAY
T-WZ-40	03-26-25	RIGHT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS
T-WZ-41	03-26-25	LEFT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS
T-WZ-55	03-26-25	SIDEWALK TRAFFIC CONTROL

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2026	29S001-S8-003	1A

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ROADWAY INDEX,
STANDARD ROADWAY
DRAWINGS, AND STANDARD
TRAFFIC DESIGN DRAWINGS

1/5/2026 9:52:14 AM Y:\PROJECTS\0015000\0019000\19049 ON-CALL DESIGN - TDOT\19049 TDOT - WO2 - REG 1 RESURFACING\DGN\SR-1 GRAINGER CO\GG001-ESTIMATEDQUANTITIES.SHT

ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY 29S001-S8-003
(9)(1)	105-01 CONSTRUCTION STAKES, LINES AND GRADES	LS	0.4
(9)(1)	202-01.03 REMOVAL OF TRASH AND DEBRIS	L.S.	0.4
(1)	202-03 REMOVAL OF RIGID PAVEMENTS, SIDEWALK, ETC.	S.Y.	156
(1)	202-08.15 REMOVAL OF CURB AND GUTTER	L.F.	760
(1)	203-07 FURNISHING AND SPREADING TOPSOIL	C.Y.	25
(2)	208-01.05 BROOMING & DEGRASSING SHOULDERS	L.M.	16
(3)	307-01.15 ASC MIX (PG64-22) (BPMLC-HM) GRADING CS	TON	1564
(4)(5)	403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	132
(5)(6)	411-03.13 ACS MIX (PG70-22) THIN LIFT D ASPHALT	TON	8364
(7)	411-12.04 SCORING FOR RUMBLE STRIPE (NON-CONTINUOUS) (8IN WIDTH)	L.M.	11
(8)	415-01.02 COLD PLANING BITUMINOUS PAVEMENT	S.Y.	11400
(1)	701-01.01 CONCRETE SIDEWALK (4")	S.F.	1397
(1)	701-02.01 CONCRETE CURB RAMP (RETROFIT)	S.F.	3316
(1)	702-01 CONCRETE CURB	C.Y.	4
(1)	702-03 CONCRETE COMBINED CURB & GUTTER	C.Y.	34
(23)	705-04.50 PORTABLE BARRIER RAIL DELINEATOR	EACH	50
(9)	712-01 TRAFFIC CONTROL	LS	0.4
...	712-04.01 FLEXIBLE DRUMS (CHANNELIZATION)	EACH	200
	712-05.01 WARNING LIGHTS (TYPE A)	EACH	100
(10)	712-06 SIGNS (CONSTRUCTION)	S.F.	1458
	712-04.01 FLEXIBLE DRUMS (CHANNELIZATION)	EACH	200
	712-05.01 WARNING LIGHTS (TYPE A)	EACH	100
(10)	712-06 SIGNS (CONSTRUCTION)	S.F.	1458
(11)	713-16.20 SIGNS (OH3-L, 12" X 36")	EACH	2
(11)	713-16.21 SIGNS (OH3-R, 12" X 36")	EACH	2
	716-01.21 SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR)(1 COLOR)	EACH	722
	716-01.22 SNOWPLOWABLE RAISED PAVEMENT MARKERS (MONO-DIR)(1 COLOR)	EACH	283
(12)	716-01.30 REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	800
(16)(13)	716-02.04 PLASTIC PAVEMENT MARKING (CHANNELIZATION STRIPING)	S.Y.	1239
(13)	716-02.05 PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	739
(13)(14)	716-02.06 PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	13
(13)(15)	716-02.08 PLASTIC PAVEMENT MARKING (8" DOTTED LINE)	L.F.	143
(13)(15)	716-02.12 PLASTIC PAVEMENT MARKING (8IN LINE)	L.M.	1
(13)(17)	716-04.05 PLASTIC PAVEMENT MARKING (STRAIGHT ARROW)	EACH	3
(13)(18)	716-04.14 PLASTIC PAVEMENT MARKING (LANE REDUCTION ARROW)	EACH	2
(13)	716-03.04 PLASTIC WORD PAVEMENT MARKING (SCHOOL)	EACH	7
(19)	716-05.20 PAINTED PAVEMENT MARKING (6" LINE)	L.M.	14
	716-13.02 SPRAY THERMO PVMT MRKNG (60 MIL)(6IN LINE)	L.M.	35
(20)	716-13.05 SPRAY THERMO PVMT MRKNG (60 MIL) (6IN DOTTED LINE)	L.F.	174
(9)	717-01 MOBILIZATION	LS	0.4
(21)	730-14.02 SAW SLOT	L.F.	400
(21)	730-14.03 LOOP WIRE	L.F.	850
(1)	801-01 SEEDING (WITH MULCH)	UNIT	3

FOOTNOTES

- (1) PROVIDED BY OTHERS. SEE CURB RAMP REFERENCE FILES FOR ADDITIONAL INFORMATION.
- (2) INCLUDES THE COST OF REMOVING DEBRIS AND SWEEPING SHOULDERS PRIOR TO WORK. SEE SHEET NO. 2C, FINAL PAVEMENT MARKING NOTE (6) FOR MORE INFORMATION.
- (3) TO BE USED FOR SPOT LEVELING. SPOT LEVELING TO BE USED ONLY TO CORRECT DEFICIENCIES ON EXISTING PAVEMENT AND IS NOT TO BE COMBINED WITH OTHER COURSES.
- (4) INCLUDES 11.8 TONS FOR SPOT LEVELING AND 3.9 TONS FOR COUNTY ROADS.
- (5) PAVING NOT REQUIRED FOR BRIDGES AT L.M. 16.28 AND L.M. 17.07.
- (6) INCLUDES, 269.3 TONS FOR TURN LANES, AND 258.0 TONS FOR COUNTY ROADS. BUSINESS ENTRANCES AND PRIVATE DRIVES ARE TO BE TIED-IN AS NEEDED OR AS DIRECTED BY THE TDOT MANAGER. PAVING NOT REQUIRED FOR BRIDGE AT L.M. 16.28 OR BRIDGE AT L.M. 17.07.
- (7) QUANTITY BASED ON ACTUAL LENGTH OF PAVEMENT SCORED.
- (8) QUANTITY INCLUDES 400 SY FOR EACH BEGINNING AND END SEGMENTS AT BRIDGES AT L.M. 16.28 L.M. 17.07 AND 200 SY AT THE BEGINNING AND END OF PROJECT, 1100 SY FOR SIDE ROADS AND 9700 SY ALONG EX C&G.
- (9) TO BE BUNDLED WITH GRAINGER COUNTY SR-92, PIN 134038.00.
- (10) SEE SHEET 2F FOR TRAFFIC CONTROL SIGNS TABULATION.
- (11) FOR EX STRUCTURE AT L.M. 19.54. EX SIGN REMOVAL, FACE, SUPPORT, INSTALLATION, AND HARDWARE TO BE INCLUDED.
- (12) ANY DAMAGE OCCURRED DURING REMOVAL SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE TDOT MANAGER.
- (13) THE CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMO.
- (14) FOUR(4) ARROWS ARE TO BE USED ON THE CENTER TURN LANE ON SR-1 BETWEEN PIONEER DR. AND BRYAN DR. NINE(9) ARROWS ARE TO BE USED ON THE CENTER TURN LANE ON SR-1 BETWEEN RUTLEDGE HIGH AND BROWN RD.
- (15) TO BE USED AT THE LEFT TURN LANE/ACCELERATION LANE AT ROBBINS ROAD.
- (16) TO BE USED AT THE MARKED MEDIAN ISLANDS THROUGHOUT THE PROJECT
- (17) TO BE USED TO REPLACE THE EXISTING STRAIGHT ARROWS ONE SIDE ROADS.
- (18) TO BE USED AT L.M. 20.05 AT ACCELERATION LANE.
- (19) TO BE USED FOR TEMPORARY STRIPING DURING PLACEMENT OF SPOT LEVELING ONLY. NO PAYMENT WILL BE MADE FOR TEMPORARY STRIPING DURING PLACEMENT OF THE FINAL SURFACE (ON EITHER EXISTING OR FINAL SURFACE) COURSE DUE TO THE CONTRACTOR'S METHODS OF CONSTRUCTION.
- (20) INCLUDES 35 LF TO BE USED AT THE INTERSECTION OF PINOEER DR AND SR-1. AND 145 LF TO BE USED AT BOTH THE END OF THE DEVELOPING TAPER FOR THE LEFT TURN LANE FROM ROBBINS RD. ONTO SR-1 AND THE BEGINNING OF THE DEVELOPING TAPER FROM SR-1 ONTO ROBBINS RD.
- (21) TO BE USED FOR EXISTING SIGNAL AT SR-92/MARSHALL AVE AS DIRECTED BY THE TDOT MANAGER.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2026	29S001-S8-003	2

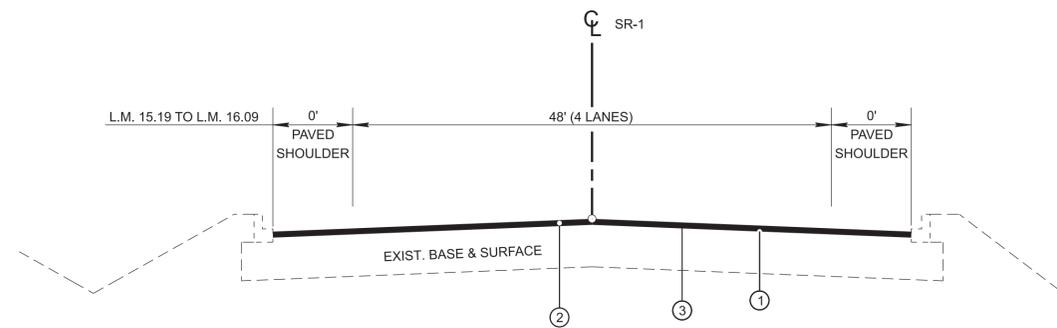
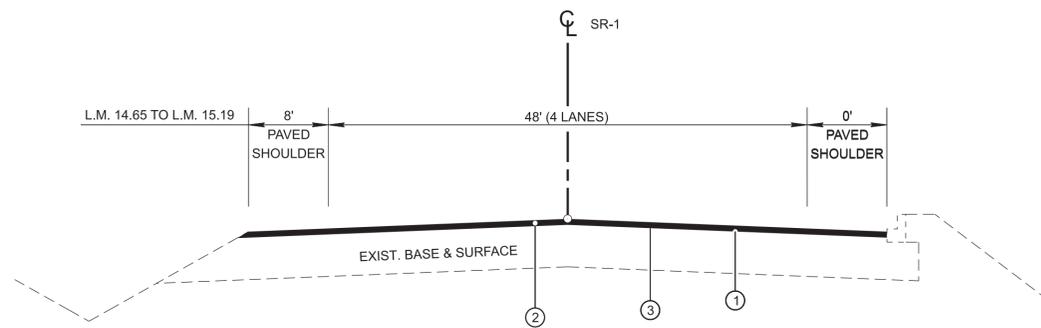
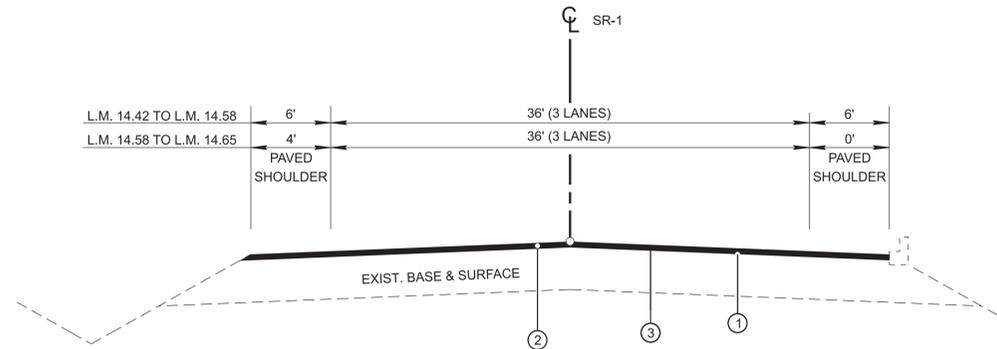
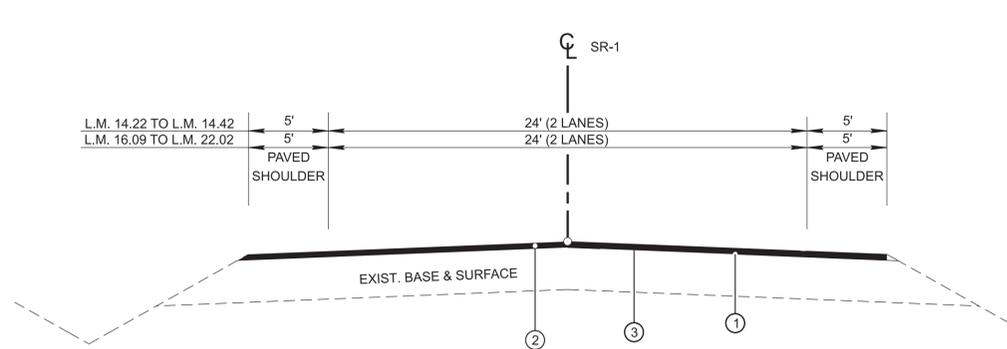
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED
ROADWAY
QUANTITIES

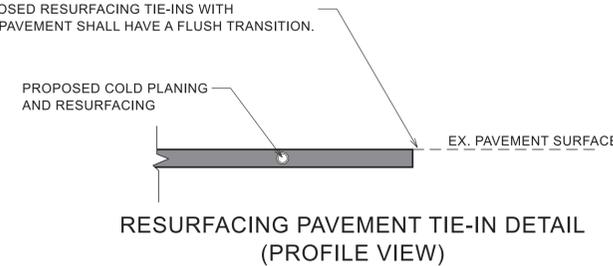
TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2026	29S001-S8-003	2B



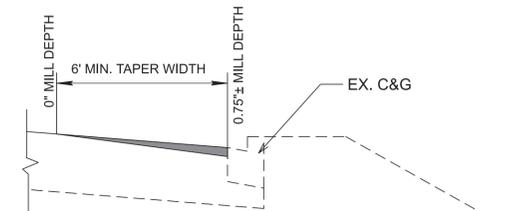
TYPICAL SECTION NOTE: EXISTING GUARDRAIL VARIES THROUGHOUT PROJECT.

PROPOSED PAVEMENT SCHEDULE	
①	TACK COAT (TC) 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) SEE SECTION 403.05 OF THE STANDARD SPECIFICATION FOR DETERMINING APPLICATION RATE IN THE FIELD.
②	ASPHALTIC CONCRETE SURFACE (HOT MIX) PG70-22 THIN LIFT D ASPHALT @ 0.75"± THICK (APPROX. 85 LB/SY) 411-03.13 ACS MIX (PG70-22) THIN LIFT D ASPHALT
③	BITUMINOUS COURSE (SPOT LEVELING) 307-01.15 ACS MIX (PG64-22) (BPMLC-HM) GRADING CS
COLD PLANING THICKNESS VARIES 0"-0.75" THICK (APPROX. 80 LBS/SY) ITEM 415-01.02 COLD PLANING BITUMINOUS PAVEMENT, S.Y. AS REQ'D FOR TIE-INS, BRIDGE APPROACHES, ETC.	

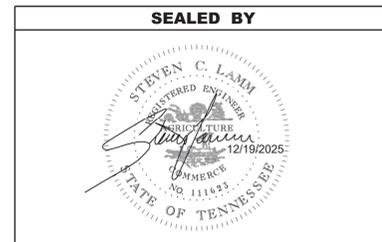
ALL PROPOSED RESURFACING TIE-INS WITH EXISTING PAVEMENT SHALL HAVE A FLUSH TRANSITION.



RESURFACING PAVEMENT TIE-IN DETAIL (PROFILE VIEW)



TAPER MILLING AT CURB AND GUTTER DETAIL



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS AND PAVEMENT SCHEDULE
N.T.S.

GENERAL NOTES

GRADING

- (1) ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- (3) THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) WITHOUT APPROVAL BY FEMA. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE OR LOCAL AGENCY.

GUARDRAIL

- (1) THE CONTRACTOR SHALL NOT REMOVE ANY SECTIONS OF EXISTING GUARDRAIL TO REWORK SHOULDERS OR FLATTEN SLOPES UNTIL THE ENGINEER CONCURS IN THE NECESSITY OF REMOVAL DUE TO CONSTRUCTION REQUIREMENTS AND THE APPROPRIATE WARNING DEVICES ARE INSTALLED. THE PROPOSED GUARDRAIL, INCLUDING ANY ANCHOR SYSTEM, SHALL BE INSTALLED QUICKLY TO MINIMIZE TRAFFIC EXPOSURE TO ANY HAZARD. NO PAYMENT WILL BE MADE FOR A SECTION OF PROPOSED GUARDRAIL, INCLUDING ANCHORS, UNTIL IT IS COMPLETE IN PLACE.
- (3) IF ANY APPROACH END OF A SECTION OF GUARDRAIL OR BRIDGE RAIL MUST TEMPORARILY BE LEFT INCOMPLETE AND EXPOSED TO TRAFFIC, THE CONTRACTOR SHALL USE TWO (2) TEMPORARY BARRICADES OR DRUMS WITH TYPE "A" LIGHTS AND ROUNDED END ELEMENTS AS MINIMUM MEASURES TO PROTECT TRAFFIC FROM THE HAZARD OF AN EXPOSED END. ALL COST OF FURNISHING AND INSTALLING TEMPORARY BARRICADES OR DRUMS WITH TYPE "A" LIGHTS TO DELINEATE GUARDRAIL END AND A TEMPORARY ROUNDED END ELEMENT SHALL BE INCLUDED IN THE COST OF THE PROPOSED GUARDRAIL END TERMINAL.

MISCELLANEOUS

- (2) THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES AND POSTS WHERE AND AS DIRECTED BY THE ENGINEER. COST TO BE INCLUDED IN PRICE BID FOR OTHER CONSTRUCTION ITEMS.
- (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

- (2) 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. 716-05.20, PAINTED PAVEMENT MARKING (6" LINE), L.M.

FINAL PAVEMENT MARKING

- (6) THE CONTRACTOR WILL BE REQUIRED TO PERFORM THE FOLLOWING WORK:
 - a. BROOMING & DE-GRASSING SHOULDERS SHALL INCLUDE CLIPPING OF MATERIAL INTERFERING WITH PROPER DRAINAGE OF ROADWAY (INCLUDING PAVED AND GRAVEL SHOULDERS), AS DIRECTED BY THE ENGINEER.
 - b. ALL MATERIAL FROM CLIPPING, BROOMING AND DE-GRASSING SHOULDERS SHALL BE PICKED UP, REMOVED AND PROPERLY DISPOSED AS DIRECTED BY THE ENGINEER.
 - c. ALL COSTS ASSOCIATED WITH PICKING UP, REMOVAL AND PROPER DISPOSAL SHALL BE PAID FOR UNDER ITEM NO. 208-01.05.
 - d. REMOVE ALL GARBAGE AND CONSTRUCTION DEBRIS FROM PROJECT. THE COST FOR THIS WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- (11) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 6" SPRAY THERMOPLASTIC (60 mil) INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-13.02, SPRAY THERMO PVMT MRKNG (60 MIL)(6IN LINE),

L.M. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS.

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.
- (7) ON CURB AND GUTTER SECTIONS, PUBLIC ROAD INTERSECTIONS SHALL BE RESURFACED TO THE END OF RADIUS. A SATISFACTORY TRANSITION FROM THE NEW PAVEMENT TO THE EXISTING GRADE OF THE INTERSECTING PUBLIC ROAD SHALL BE PROVIDED.
- (8) ON URBAN TYPICAL SECTIONS, (CURB AND GUTTER), RESIDENTIAL DRIVEWAYS AND BUSINESS ENTRANCES SHALL HAVE A MINIMUM WIDTH OF MATERIAL NOT LESS THAN ONE FOOT USED IN THE TRANSITION TO FEATHER THE PAVEMENT EDGE.
- (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

- (12) ALL SIGNS WHICH INTERFERE WITH CONSTRUCTION WILL BE RELOCATED OUTSIDE LIMITS OF CONSTRUCTION BY THE CONTRACTOR. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR WILL RESTORE THE SIGNS TO ORIGINAL LOCATION. THE CONTRACTOR SHALL CHECK WITH THE REGIONAL TRAFFIC ENGINEER PRIOR TO MOVING ANY PERMANENT SIGNS.

TRAFFIC CONTROL DIRECTIONAL SIGNING

- (7) WHEN EXISTING "TOURIST ORIENTED DIRECTIONAL SIGNS" (TODS) ARE ON NON-ACCESS CONTROLLED CONSTRUCTION PROJECTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THESE SIGNS IN FULL VIEW TO THE MOTORING PUBLIC DURING ALL PHASES OF CONSTRUCTION. ALL WORK IN MOVING THESE "TODS" AND TEMPORARY SUPPORTS ARE TO BE PAID FOR UNDER ITEM NO. 712.01, AS DIRECTED BY THE ENGINEER. NEW SUPPORTS AND SIGN FACE FOR FINAL LOCATION WILL BE PAID FOR UNDER OTHER ITEMS OF CONSTRUCTION.

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

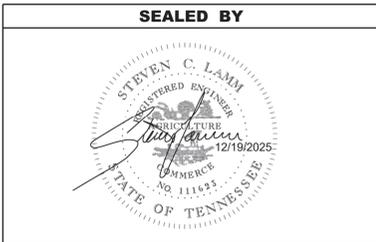
BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.

- (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.
- (7) ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- (8) ALL DETOURS SHALL BE PAVED, STRIPED, SIGNED, AND FLEXIBLE DRUMS ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC.
- (9) THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING CONSTRUCTION SIGNS. THE COST OF THIS WORK SHALL BE INCLUDED IN ITEM NO. 712-06, SIGNS (CONSTRUCTION), S.F.

SIGNALIZATION

- (7) IF RESURFACING IS INCLUDED IN THE PROJECT, SIGNAL DETECTION LOOPS SHALL BE INSTALLED BEFORE THE FINAL SURFACE IS APPLIED.
- (11) THE PROJECT ENGINEER SHALL NOTIFY THE LOCAL GOVERNMENTAL AGENCY RESPONSIBLE FOR TRAFFIC CONTROL MAINTENANCE AT LEAST ONE DAY IN ADVANCE OF THE COLD PLANING ACTIVITY AT SIGNALIZED INTERSECTIONS WHERE DETECTOR LOOPS ARE ON THE PAVEMENT. THE MAINTAINING AGENCY WILL THEN BE RESPONSIBLE FOR DISCONNECTING THE LOOP DETECTORS AND MAKING ANY NECESSARY TIMING ADJUSTMENTS IN THE SIGNAL CONTROLLER PRIOR TO THE CONSTRUCTION.
- (12) THE PROJECT ENGINEER SHALL BE RESPONSIBLE FOR SUPPLYING THE CONTRACTOR WITH AS BUILT SIGNAL PLANS AT THE PRE-CONSTRUCTION CONFERENCE. THESE PLANS WILL PROVIDE THE CONTRACTOR WITH THE DESIRED LOCATION FOR DETECTOR LOOP REPLACEMENT.
- (13) LOOPS SHALL BE INSTALLED IN THE LEVELING COURSE IF A LEVELING COURSE IS PROVIDED.
- (14) LOOP REPLACEMENT SHALL BE IN ACCORDANCE WITH SECTION 730 OF THE STANDARD SPECIFICATIONS.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2026	29S001-S8-003	2C



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL
NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2026	29S001-S8-003	2D

SPECIAL NOTES

DEMOLITION

DEMOLITION, REPAIR, OR REHABILITATION OF BRIDGES

- (1) THE CONTRACTOR SHALL VERIFY THAT AN ASBESTOS SURVEY HAS BEEN COMPLETED PRIOR TO ANY DEMOLITION, REPAIR OR REHABILITATIONS ACTIVITIES (NOT INCLUDING ASPHALT MILLING OR OVERLAY).
- (2) ASBESTOS-CONTAINING MATERIALS (ACM) ABATEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE COMPLETED PRIOR TO ANY DEMOLITION, REPAIR OR REHABILITATION OF BRIDGE(S). ABATEMENT SHOULD BE ACCOMPLISHED PER SP202ACM SPECIAL PROVISION REGARDING REMOVAL OF ASBESTOS-CONTAINING MATERIALS. STATE OF TENNESSEE ASBESTOS ACCREDITATION REQUIREMENTS (TCA 1200-01-20) MANDATE THAT ACM ABATEMENT WORK BE PERFORMED BY AN ACCREDITED FIRM (CONTRACTOR) USING ACCREDITED ABATEMENT WORKERS AND SUPERVISORS.
- (3) THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING A NOTICE TO THE TDEC, DIVISION OF AIR POLLUTION CONTROL TEN (10) DAYS IN ADVANCE OF ANY ACM ABATEMENT, DEMOLITION, OR MAJOR REPAIR INVOLVING THE REMOVAL/REPLACEMENT OF A STRUCTURAL COMPONENT.

MISCELLANEOUS

- (1) ALL GUARDRAIL, GUARDRAIL POSTS AND SIGNS WHICH INTERFERE WITH CONSTRUCTION WILL BE REMOVED AND STORED BY STATE FORCES.
- (2) ALL SIGNING AND PAVEMENT MARKINGS ARE TO BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

PAVEMENT

RESURFACING

- (2) THE CONTRACTOR WILL BE REQUIRED TO PERFORM THE FOLLOWING WORK:
 - A. BROOMING & DEGRASSING SHALL INCLUDE NOTCHING THE GRAVEL SHOULDER PRIOR TO MILLING. THE NOTCH SHALL BE 1.5 IN DEEP AND 2 FT WIDE, OR AS DIRECTED BY THE TDOT PROJECT ENGINEER.
 - B. ALL MATERIAL FROM NOTCHING AND BROOMING SHOULDERS SHALL BE PICKED UP, REMOVED AND PROPERLY DISPOSED AS DIRECTED BY THE TDOT PROJECT ENGINEER.
 - C. ALL COSTS ASSOCIATED WITH NOTCHING, PICKING UP, REMOVAL AND PROPER DISPOSAL SHALL BE PAID FOR UNDER ITEM NO. 208-01.05.
- (3) SURFACE IS TO BE CROWNED AS DIRECTED BY THE TDOT MANAGER.
- (4) THE CONTRACTOR WILL PLACE THE SPOT LEVELING WHERE AND AS DIRECTED BY THE TDOT MANAGER.
- (5) ALL SURPLUS PATCHING, JOINT MATERIAL AND CRACK SEALANT IS TO BE REMOVED BEFORE PLACING THE FIRST LAYER OF ASPHALT.
- (6) STATE FORCES WILL REMOVE ALL RAISED PAVEMENT MARKERS, IF ANY, BEFORE RESURFACING IS BEGUN.
- (7) COLD PLANING IS TO BE DONE IMMEDIATELY PRIOR TO THE COMMENCEMENT OF PAVING OPERATIONS. COLD PLANED SURFACES ARE NOT TO BE LEFT EXPOSED FOR MORE THAN FIVE (5) CALENDAR DAYS BEFORE BEING OVERLAYED BY THE FIRST COURSE OF ASPHALT. IF NECESSARY, COLD PLANING OPERATIONS ARE TO BE SUSPENDED TO ALLOW PAVING OPERATIONS TO CATCH UP. AFTER COLD PLANING AND PRIOR TO ALLOWING USE BY TRAFFIC, THE CONTRACTOR WILL RAMP ASPHALT AROUND EXISTING UTILITIES TO ELIMINATE HAZARD TO VEHICLES. ALL COLD PLANING REQUIRED ON CITY STREETS OR SIDE ROADS WILL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM NO. 415-01.02

SIGNALIZATION

- (1) LOOP REPLACEMENT SHALL BE IN ACCORDANCE WITH THE TDOT STANDARD SPECIFICATIONS, SECTION 730.
- (2) SIGNAL DETECTION LOOPS SHALL BE INSTALLED BEFORE THE FINAL SURFACE IS APPLIED.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- (2) ANY WORK REQUIRING LANE CLOSURES INCLUDING PAVEMENT MARKING OPERATIONS SHALL BE AT NIGHT BETWEEN THE HOURS OF 7:00 P.M. AND

6:00 A.M. SUNDAY THROUGH THURSDAY AND 10:00 PM AND 8 AM FRIDAY THROUGH SATURDAY UNLESS OTHERWISE DIRECTED BY THE TDOT MANAGER.

MULTIMODAL

- (1) DURING CONSTRUCTION, IF THE CONSTRUCTION SUPERVISOR IDENTIFIES CURB RAMP LOCATIONS WITHIN THE PROJECT LIMITS WHERE THE TDOT ROADWAY STANDARDS CANNOT BE USED DUE TO SITE LIMITATIONS, A SKETCH OR PICTURE, SHOWING EXISTING CONDITIONS AS WELL AS PROPOSED MODIFICATIONS SHOULD BE SUBMITTED TO THE REGIONAL PROJECT DEVELOPMENT OFFICE THREE WEEKS PRIOR TO THE BEGINNING OF CURB RAMP CONSTRUCTION. THE OFFICE WILL REVIEW AND EVALUATE THE LOCATIONS TO DEVELOP PROPER CURB RAMP DESIGN THAT WILL MEET REGULATIONS.

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SPECIAL
NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2026	29S001-S8-003	2E

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

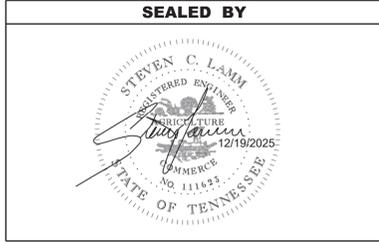
- (1) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION COMPLIANCE AND FIELD SERVICES OFFICE SHALL BE INVITED TO ALL PRE-CONSTRUCTION MEETINGS.

ECOLOGY

- (2) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE SHALL ADVISE THE CONTRACTOR DURING THE PRECONSTRUCTION MEETING WHEN ENVIRONMENTAL DIVISION PERSONNEL OR A DESIGNATED CONSULTANT WILL NEED TO BE ONSITE FOR WORK BEING DONE WHICH COULD AFFECT WATERS OF THE STATE/U.S. OR SPECIES.
- (3) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE SHALL ATTEND THE PRE-CONSTRUCTION MEETING FOR ALL PROJECTS WHICH HAVE THREATENED OR ENDANGERED SPECIES OR CRITICAL HABITAT PROXIMAL TO SCHEDULED WORK. THIS WILL PROVIDE THE OPPORTUNITY TO ENSURE THAT PERSONNEL INCLUDING THE CONTRACTOR'S PERSONNEL AND SUBCONTRACTORS ARE MADE AWARE OF THE NECESSARY PRECAUTIONS THAT MUST BE FOLLOWED.
- (4) ALL PROJECTS WITH LEGALLY PROTECTED SPECIES OR CRITICAL HABITAT IDENTIFIED SHALL HAVE MEASURES IN PLACE TO CONTAIN CONCRETE DUST, CEMENT DUST AND ALL OTHER MATERIALS. THESE MATERIALS ARE NOT ALLOWED TO ENTER WATERS OF THE STATE/U.S.

SCOPE OF WORK

- (6) 411TLD OVERLAY @ 85 LB/SY, BRIDGE REPAIR, CURB RAMPS, AND PAVEMENT MAKRINGS.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL
NOTES

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EROSION PREVENTION AND SEDIMENT CONTROL 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.

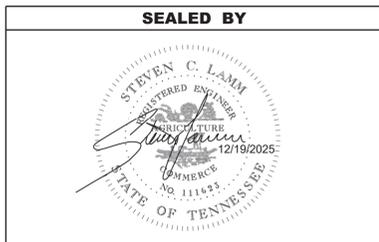
- (36) ALL PAINT CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHALL BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.
- (37) ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN A MANNER WHICH IS COMPLIANT 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.	2026	29S001-S8-003	2E1



**STATE OF TENNESSEE
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**EROSION
PREVENTION
AND SEDIMENT
CONTROL NOTES**

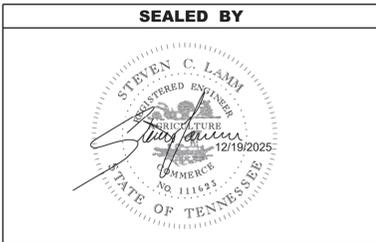
TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2026	29S001-S8-003	2F

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	x	W			
G-20-1	ROAD WORK NEXT 2 MILES	36"	x	18"	5	2	9
G20-2	END ROAD WORK	36"	x	18"	5	2	9
W3-4	BE PREPARED TO STOP	48"	x	48"	16	2	32
W8-11	UNEVEN LANES	48"	x	48"	16	40	640
W20-1	ROAD WORK AHEAD	48"	x	48"	16	36	576
W20-1	ROAD WORK 1 MILE	48"	x	48"	16	2	32
W20-1	ROADW WORK 1/2 MILE	48"	x	48"	16	2	32
W20-1	ROAD WORK 1500 FT	48"	x	48"	16	2	32
W20-4	ONE LANE ROAD AHEAD	48"	x	48"	16	2	32
W20-7	FLAGGER (SYMBOL)	48"	x	48"	16	2	32
W21-2	FRESH OIL	48"	x	48"	16	2	32
TOTAL						1458	

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 (RESURFACING)				
BRIDGE NUMBER	LOCATION LOG MILE	CROSSES OVER/UNDER	BRIDGE LENGTH	BRIDGE DECK RECOMMENDATIONS
29SR0010017	14.88	BRANCH	24'	PAVE WITH PLANS MIX/TREATMENT TYPE
29SR0010019	16.28	RICHLAND CREEK	85.5'	PROVIDE DECK REPAIR ITEM- SEAL WITH TYPE 1 THIN EPOXY OVERLAY (BRIDGE SHEETS INCLUDED) REPLACE BRIDGE JOINTS (BRIDGE SHEETS INCLUDED) BRIDGE CONSTRUCTION PLANS REQUIRED
29SR0010021	17.07	RICHLAND CREEK	114'	PROVIDE DECK REPAIR ITEM- SEAL WITH TYPE 1 THIN EPOXY OVERLAY (BRIDGE SHEETS INCLUDED) REPLACE BRIDGE JOINTS (BRIDGE SHEETS INCLUDED) BRIDGE CONSTRUCTION PLANS REQUIRED
29SR0010023	19.30	BRANCH	32.1'	PAVE WITH PLANS MIX/TREATMENT TYPE

PROVIDED BY TDOT STRUCTRES OFFICE



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

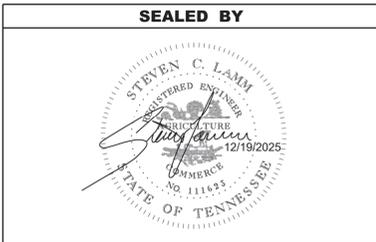
TABULATED
QUANTITIES

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2026	29S001-S8-003	2F1

CURB RAMP TABULATION

ROADWAY		LOCATION			RAMP TYPE	STANDARD DRAWING DUNMBER	CONCRETE (RETROFIT) ITEM NO. 701-02.01 SF	CONCRETE SIDEWALK (4") ITEM NO. 701-01.01 S.F.	REMARKS
MAINLINE	INTERSECTING	LOG MILE (L.M.)	RAMP NUMBER	QUADRANT					
SR-1 / RUTLEDGE PIKE	PIONEER DR	14.57	56	SE	PARALLEL	CR-20	100.0	45.1	
SR-1 / RUTLEDGE PIKE	COFFEY LN	15.18	34	NE	PARALLEL	CR-20	100.0	50.8	
SR-1 / RUTLEDGE PIKE	MILL AVE	15.27	2	NW	PARALLEL	CR-20	100.0	44.0	
SR-1 / RUTLEDGE PIKE	MILL AVE	15.27	3	NE	PARALLEL	CR-20	100.0	47.9	POTENTIAL CONFLICT WITH EXISTING CURB INLET.
SR-1 / RUTLEDGE PIKE	CEDAR AVE	15.36	12	NW	PARALLEL	CR-20	100.0	47.8	POTENTIAL CONFLICT WITH EXISTING CURB INLET.
SR-1 / RUTLEDGE PIKE	CEDAR AVE	15.36	34	NE	PARALLEL	CR-20	100.0	54.8	POTENTIAL CONFLICT WITH EXISTING CURB INLET.
SR-1 / RUTLEDGE PIKE	UNITED STATES POST OFFICE ENT-1	15.39	2	NW	MONO- DIRECTIONAL	CR-40	100.0	20.0	
SR-1 / RUTLEDGE PIKE	UNITED STATES POST OFFICE ENT-1	15.39	3	NE	MONO- DIRECTIONAL	CR-40	100.0	20.0	
SR-1 / RUTLEDGE PIKE	UNITED STATES POST OFFICE ENT-2	15.40	2	NW	MONO- DIRECTIONAL	CR-40	100.0	19.9	
SR-1 / RUTLEDGE PIKE	UNITED STATES POST OFFICE ENT-2	15.40	3	NE	MONO- DIRECTIONAL	CR-40	100.0	20.0	
SR-1 / RUTLEDGE PIKE	WATER ST	15.41	78	SW	PARALLEL	CR-20	100.0	50.7	
SR-1 / RUTLEDGE PIKE	WATER ST	15.41	56	SE	PARALLEL	CR-20	100.0	50.0	
SR-1 / RUTLEDGE PIKE	ROSEDALE AVE	15.52	12	NW	PARALLEL	CR-20	100.0	50.7	
SR-1 / RUTLEDGE PIKE	ROSEDALE AVE	15.52	34	NE	PARALLEL	CR-20	100.0	50.9	
SR-1 / RUTLEDGE PIKE	SPRING AVE	15.57	12	NW	PARALLEL	CR-20	100.0	50.9	
SR-1 / RUTLEDGE PIKE	SPRING AVE	15.57	34	NE	PARALLEL	CR-20	100.0	50.8	
SR-1 / RUTLEDGE PIKE	PECK AVE	15.70	12	NW	PARALLEL	CR-20	100.0	50.8	
SR-1 / RUTLEDGE PIKE	PECK AVE	15.70	78	SW	PARALLEL	CR-20	100.0	51.6	
SR-1 / RUTLEDGE PIKE	PECK AVE	15.70	34	NE	PARALLEL	CR-20	100.0	47.7	POTENTIAL CONFLICT WITH EXISTING CURB INLET.
SR-1 / RUTLEDGE PIKE	PECK AVE	15.70	56	SE	PARALLEL	CR-20	100.0	51.3	
SR-1 / RUTLEDGE PIKE	BEETS AVE	15.75	12	NW	PARALLEL	CR-20	100.0	50.8	
SR-1 / RUTLEDGE PIKE	BEETS AVE	15.75	78	SW	PARALLEL	CR-20	100.0	50.9	
SR-1 / RUTLEDGE PIKE	BEETS AVE	15.75	34	NE	PARALLEL	CR-20	100.0	50.8	
SR-1 / RUTLEDGE PIKE	BEETS AVE	15.75	56	SE	PARALLEL	CR-20	100.0	50.8	
SR-1 / RUTLEDGE PIKE	COURT ST	15.86	12	NW	PARALLEL	CR-20	100.0	40.0	POTENTIAL CONFLICT WITH EXISTING CURB INLET.
SR-1 / RUTLEDGE PIKE	COURT ST	15.86	34	NE	PARALLEL	CR-20	100.0	40.6	POTENTIAL CONFLICT WITH EXISTING CURB INLET.
SR-1 / RUTLEDGE PIKE	MORGAN AVE	15.91	12	NW	PARALLEL	CR-20	100.0	45.7	POTENTIAL CONFLICT WITH EXISTING CURB INLET.
SR-1 / RUTLEDGE PIKE	MORGAN AVE	15.91	34	NE	PARALLEL	CR-20	100.0	51.7	POTENTIAL CONFLICT WITH EXISTING CURB INLET.
SR-1 / RUTLEDGE PIKE	WATER ST	15.91	78	SW	PARALLEL	CR-20	115.1	44.5	
SR-1 / RUTLEDGE PIKE	WATER ST	15.91	56	SE	PARALLEL	CR-20	100.0	50.8	
SR-1 / RUTLEDGE PIKE	CAMBRIDGE AVE	16.06	2	NW	MONO- DIRECTIONAL	CR-40	100.0	20.0	
SR-1 / RUTLEDGE PIKE	CAMBRIDGE AVE	16.06	3	NE	MONO- DIRECTIONAL	CR-40	100.0	24.8	
SR-1 / RUTLEDGE PIKE	CAMBRIDGE AVE (END OF SIDEWALK)	16.06	2	NW	MONO- DIRECTIONAL	CR-40	100.0	0.0	
Total							3315.1	1396.9	

NOTE: QUANTIES PROVIDED BY OTHERS, SEE CURB RAMP REFERENCE FILES FOR ADDITIONAL INFORMATION.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED
QUANTITIES

TYPE	YEAR	PROJECT NO.	SHEET NO.
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UTILITY

- (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

CABLE:

CHARTER
 10417 WALLACE ST.
 KINGSPORT, TN 37663
 CONTACT: ROBERT WALKER
 OFFICE PHONE: 423 212 2367
 CELL PHONE: 423 736 3244
 Email: Robert.walker@charter.com

ELECTRIC:

APPALACHIAN ELECTRIC COOPERATIVE
 PO BOX 400, HILL DRIVE
 NEW MARKET, TN
 CONTACT: CHAD SEALS
 OFFICE PHONE: 865 475 2032 ext. 1037
 CELL PHONE: ___ ___ ___
 Email: cseals@aecoop.org

WATER/SEWER:

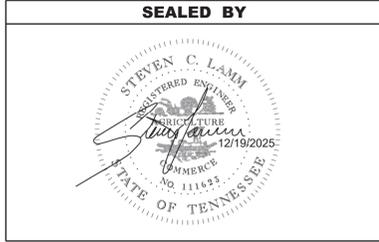
RUTLEDGE WASTEWATER
 P.O. BOX 36, 385 BRYAN ROAD
 RUTLEDGE, TN 37861
 CONTACT: SAM CRUZE/GREG KITTS
 OFFICE PHONE: 865 828 5381
 OFFICE PHONE: 865 828 4513
 Email: Address

TELEPHONE:

FRONTIER COMMUNICATIONS
 725 MARKHAM AVE.
 DURHAM, NC 27701
 CONTACT: CHAD FOSTER/JAMES HEATHERLY
 OFFICE PHONE: 919 886 8028
 OFFICE PHONE: 919 471 3654
 Email: Chad.d.foster@ftr.com/
james.heatherly@ftr.com

FIBER

TRILIGHT
 528 PATRIOT DRIVE
 DANDRIDGE, TN 37725
 CONTACT: BRENT HARRELL
 OFFICE PHONE: 833 847 0824
 CELL PHONE: ___ ___ ___
 Email: bharrell@trilight.net



**STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION**

**UTILITY NOTES
 AND
 UTILITY OWNERS**

PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF.	2026	29S001-S8-003	T1

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:

1. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 0.75 INCH AND NOT EXCEEDING 1.75 INCHES:
 - a. 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.
 - b. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY ADDED PAVEMENT SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
 - c. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY COLD PLANING SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
 - d. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE TRAFFIC LANE BEING UTILIZED BY TRAFFIC AND SHOULDER THE DIFFERENCE IN ELEVATION SHALL BE ELIMINATED WITHIN SEVEN WORKDAYS AFTER THE CONDITION IS CREATED.
2. 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.
 - a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
 - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
 - (2) 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.
 - b. 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.
 - c. 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.

3. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 6 INCHES BUT NOT EXCEEDING 18 INCHES, THE CONTRACTOR, WITH THE ENGINEER'S APPROVAL, MAY UTILIZE ONE OF THE FOLLOWING:
 - a. THE CONTRACTOR SHALL ACCOMPLISH SEPARATION BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
 - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
 - (2) 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.

IN ORDER TO USE THIS METHOD, THE CONTRACTOR MUST REDUCE THE DIFFERENCE IN ELEVATION TO 6 INCHES OR LESS BY THE END OF THE WORKDAY THAT THE CONDITION IS CREATED.

- b. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a, AND CONSTRUCT A STONE WEDGE WITH A 4:1 SLOPE, OR FLATTER, TO ELIMINATE THE VERTICAL OFFSET IF THE LOWER ELEVATION IS AT OR BELOW SUBGRADE AT THE END OF EACH DAY.
- c. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a AND IF THE LOWER ELEVATION IS BASE STONE OR ASPHALT PAVEMENT, PLACEMENT OF SUBSEQUENT LAYERS OF PAVEMENT MUST BEGIN THE NEXT WORK DAY AND PROGRESS CONTINUOUSLY UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED OR REDUCED TO 6 INCHES OR LESS.
- d. THE CONTRACTOR SHALL PROVIDE SEPARATION BY PORTABLE BARRIER RAIL.

FOR PRECEDING CONDITIONS a, b, AND c, THE CONTRACTOR SHALL USE THE SHOULDER DROP-OFF WARNING SIGN WITH PLAQUE (W8-17 AND W8-17P). IT SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN THE SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE 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 IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

4. FOR DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 18 INCHES.

SEPARATION WILL BE PROVIDED BY USE OF PORTABLE BARRIER RAIL.

IN THIS SITUATION THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1 MILE 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.

B. IF THE DIFFERENCE IN ELEVATION IS WITHIN 30 FEET OF THE NEAREST TRAFFIC LANE BEING USED BY TRAFFIC CAUSED BY GRADING, EXCAVATION FOR UTILITIES, DRAINAGE STRUCTURES, UNDERCUTTING, ETC.:

1. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 0.75 INCH AND NOT EXCEEDING 2 INCHES.
 - a. 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.

2. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 2 INCHES AND NOT EXCEEDING 6 INCHES:
 - a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
 - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
 - (2) 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.

3. IF THE DIFFERENCE IN ELEVATION IS WITHIN 8 FEET OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 6 INCHES:
 - a. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
 - (1) WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
 - (2) 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.
 - b. ELIMINATE VERTICAL OFFSET BY CONSTRUCTING A STONE WEDGE OR GRADING TO A 4:1 SLOPE, OR FLATTER, OR USE PORTABLE BARRIER RAIL.

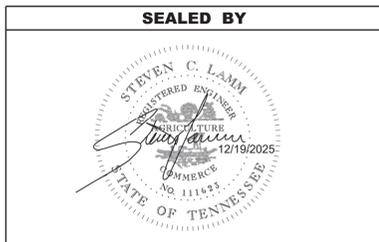
THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE WITHIN 8 FEET OF A TRAFFIC LANE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

C. IF THE DIFFERENCE IN ELEVATION IS FARTHER THAN 8 FEET FROM THE NEAREST TRAFFIC LANE BUT NOT MORE THAN 30 FEET FROM THE NEAREST TRAFFIC LANE:

SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

1. WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
2. 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.

THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE
DROP-OFF NOTES
FOR
TRAFFIC CONTROL

PROJECT NO.	YEAR	SHEET NO.	
29S001-M3-005	2026	B-1	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
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-	-		
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INDEX OF DRAWINGS

DWG. NO.

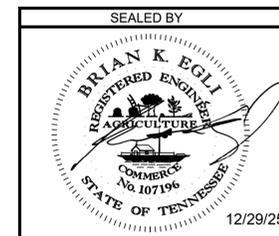
LAST
REV. DATE

SIGNATURE SHEET	BRIDGE-SIGN 1
INDEX OF DRAWINGS	B-1
BRIDGE TABULATION, ESTIMATED QUANTITIES, AND EXPANSION JOINT DETAILS AT	
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DWG. NO.

LAYOUT OF BRIDGE	BR-102-28
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REINFORCED CONCRETE PAVEMENT AT BRIDGE ENDS	STD-1-5



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
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29-SR1-16.28 & 29-SR1-17.07
OVER RICHLAND CREEK
FED. BRIDGE ID NOS
29SR0010019 & 29SR0010021
GRAINGER COUNTY
2026

PIN NO.: 134036.00
DESIGN BY: _____ DATE: / /
DRAWN BY: SILESHI ERGICHO DATE: 11/25
SUPERVISED BY: KEVIN MARTINKO DATE: 11/25
CHECKED BY: _____ DATE: / /

PROJECT NO.	YEAR	SHEET NO.	
29S001-M3-005	2026	B-2	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
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TABULATION OF BRIDGE RELATED WORK AND ESTIMATED QUANTITIES				
LOCATION OF BRIDGE AND BRIDGE NUMBER	REFERENCE DRAWINGS TO BE PRINTED WITH CONTRACT DRAWINGS	TYPE OF WORK	604-10.44 EXPANSION JOINT REPAIRS L.F.	617-04.01 TYPE 1 THIN EPOXY OVERLAY (EPOXY-URETHANE) S.Y.
29-SR1-16.28 OVER RICHLAND CREEK (29SR0010019)	BR-102-28 BR-102-32 STD-1-5	EXPANSION JOINT REPAIRS TYPE 1 THIN EPOXY OVERLAY	72	534
29-SR1-17.07 OVER RICHLAND CREEK (29SR0010021)	BR-102-42 BR-102-43 STD-1-5	EXPANSION JOINT REPAIRS TYPE 1 THIN EPOXY OVERLAY	72	626
TOTAL			144	1160

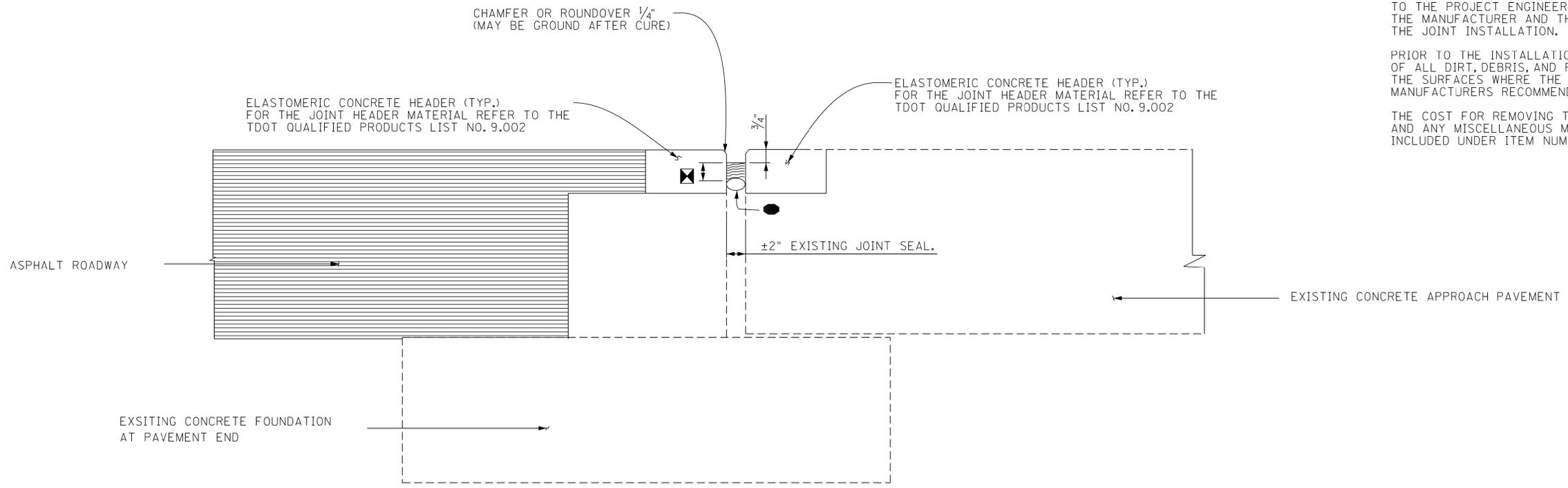
EXPANSION JOINT REPAIR NOTES:

THE JOINT HEADER SYSTEM SHALL BE FROM QPL 9.002. THE JOINT SEAL SYSTEM CONSISTS OF THE ELASTOMERIC HEADER MATERIAL AND A TWO-PART COLD POUR SILICONE SEALANT. THE CONTRACTOR SHALL ALSO HAVE THE OPTION OF USING A PRECOMPRESSED FOAM WITH SILICONE TOPPED PRODUCT (SIMILAR TO AND INCLUDING BEJS) FROM QPL 7.001 WITH AN APPROPRIATELY SIZED SEAL FOR THE JOINT OPENING, AND AN ELASTOMERIC CONCRETE FROM QPL 9.001. THE SYSTEM SHALL BE INSTALLED UNDER THE DIRECT SUPERVISION OF AN AUTHORIZED TECHNICIAN PROVIDED BY THE SYSTEM MANUFACTURER. THE TECHNICIAN MUST APPROVE ALL ASPECTS OF THE GEOMETRY AND PREPARATION OF THE JOINT LOCATIONS PRIOR TO ANY INSTALLATION OF THE JOINT SYSTEM MATERIALS. PRODUCTS FROM QPL 7.001 "ON A ROLL" AND "COMPRESSION ONLY" WILL NOT BE ALLOWED. THE TOP OF THE QPL 7.001 JOINT FILLER SHALL BE A MINIMUM OF 3/4 OF AN INCH BELOW THE ROADWAY SURFACE UNLESS THE MANUFACTURER REQUIRES A DEEPER DEPTH.

MANUFACTURERS SPECIFICATIONS AND INSTALLATION PROCEDURES SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW PRIOR TO THE JOINT REPLACEMENT/REPAIR WORK. THE MANUFACTURER AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE WORKMANSHIP OF THE JOINT INSTALLATION.

PRIOR TO THE INSTALLATION OF THE NEW JOINT, THE EXISTING JOINT OPENING SHALL BE CLEANED OF ALL DIRT, DEBRIS, AND PRIOR CONSTRUCTION MATERIAL, ETC., THE FULL DEPTH OF THE OPENING. THE SURFACES WHERE THE NEW MATERIAL BONDS TO STAY IN PLACE, SHALL BE CLEANED PER MANUFACTURERS RECOMMENDATION, TO REMOVE ANY SUBSTANCES THAT WOULD INHIBIT BONDING.

THE COST FOR REMOVING THE OLD JOINT SYSTEM, INSTALLING THE NEW JOINT SYSTEM, LABOR, AND ANY MISCELLANEOUS MATERIALS NECESSARY TO INSTALL THE NEW EXPANSION JOINT, IS TO BE INCLUDED UNDER ITEM NUMBER 604-10.44, EXPANSION JOINT REPAIRS, L.F.

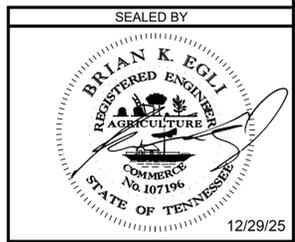


EXPANSION JOINT SYSTEM

● NOTE: THE EXISTING JOINT OPENING SHALL BE CAULKED WITH A BACKER ROD OF SUITABLE DIAMETER, THE ROD SHALL BE PLACED AT A DEPTH TO INSURE THE CORRECT WIDTH/DEPTH RATIO OF THE NEW JOINT SEALANT MATERIAL. BACKER ROD SHALL BE AS PER JOINT MANUFACTURERS RECOMMENDATIONS.

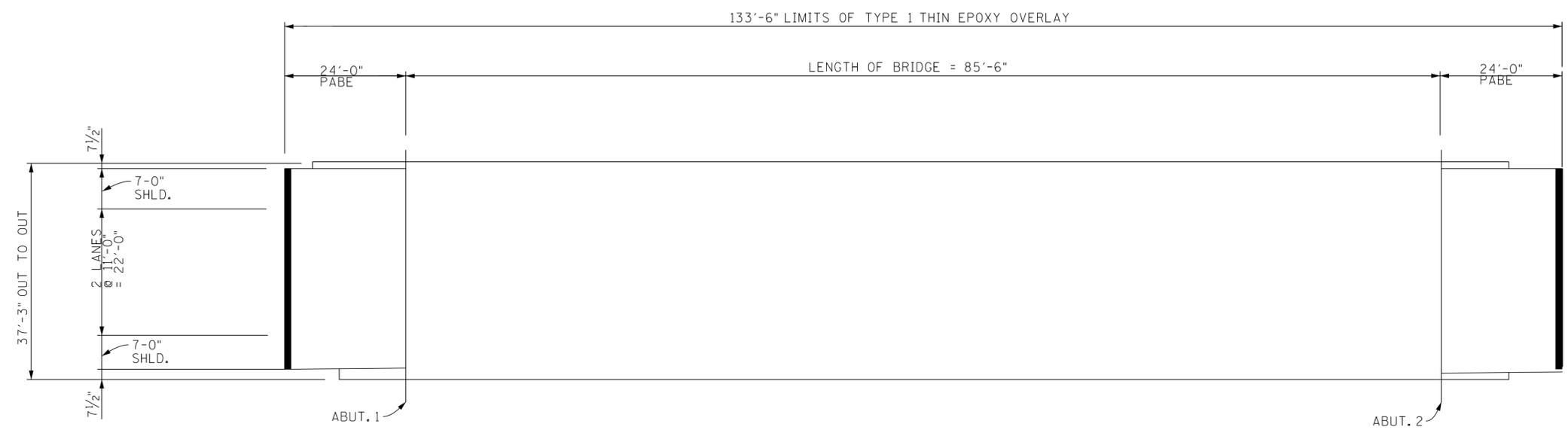
☒ NOTE: FULL DEPTH OF ALL EXISTING JOINTS SHALL BE RESEALED WITH NEW JOINT SEALER. THE NEW JOINT SEALER SHALL BE A COLD POUR TWO PART SILICONE SEALER FROM QPL 5.001.

PIN NO.: 134036.00
 DESIGN BY: _____ DATE: / /
 DRAWN BY: SILESHI ERGICHO DATE: 11/25
 SUPERVISED BY: KEVIN MARTINKO DATE: 11/25
 CHECKED BY: _____ DATE: / /



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BRIDGE TABULATION,
 ESTIMATED QUANTITIES
 AND EXPANSION JOINT DETAILS
 AT APPROACHES PAVEMENTS ENDS
 29-SR1-16.28 & 29-SR1-17.07
 OVER RICHLAND CREEK
 FED. BRIDGE ID NOS.
 29SR0010019 & 29SR0010021
 GRAINGER COUNTY
 2026

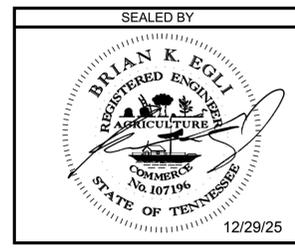
PROJECT NO.	YEAR	SHEET NO.	
29S001-M3-005	2026	B-3	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
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PLAN VIEW
29-SR1-16.28

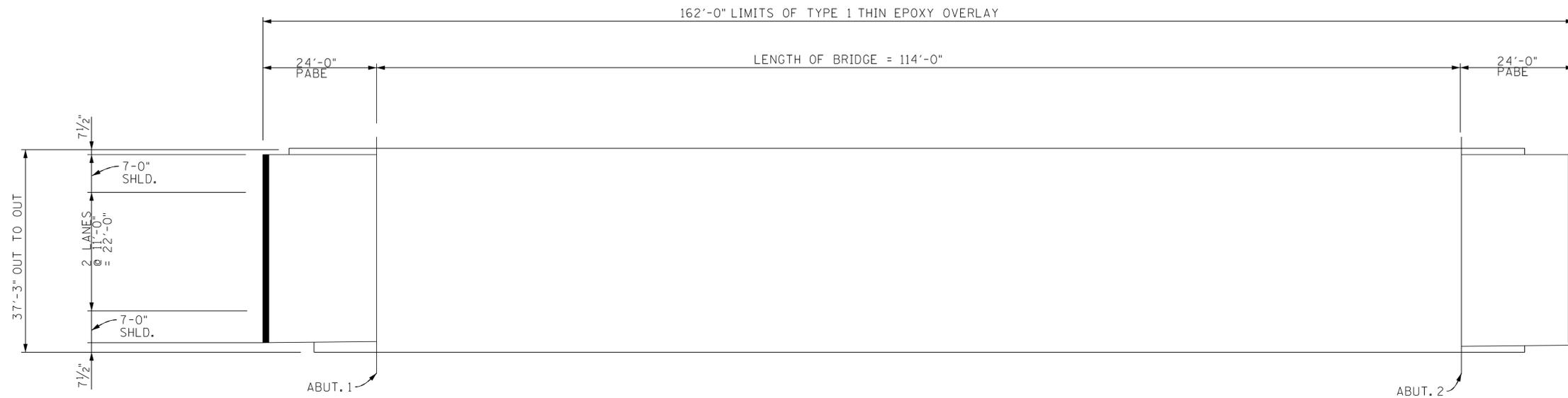
█ DENOTES: APPROXIMATE EXPANSION JOINT REPAIRS LOCATIONS

PIN NO.: 134036.00
 DESIGN BY: SILESHI ERGICHO DATE: 11/25
 DRAWN BY: KEVIN MARTINKO DATE: 11/25
 SUPERVISED BY: DATE: 11/25
 CHECKED BY: DATE: 11/25



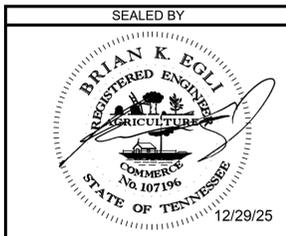
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 PLAN VIEW
 REPAIRS LOCATIONS
 29-SR1-16.28 OVER
 RICHLAND CREEK
 FED. BRIDGE ID NO.
 29SR0010019
 GRAINGER COUNTY
 2026

PROJECT NO.	YEAR	SHEET NO.	
29S001-M3-005	2026	B-4	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
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PLAN VIEW
29-SR1-17.07

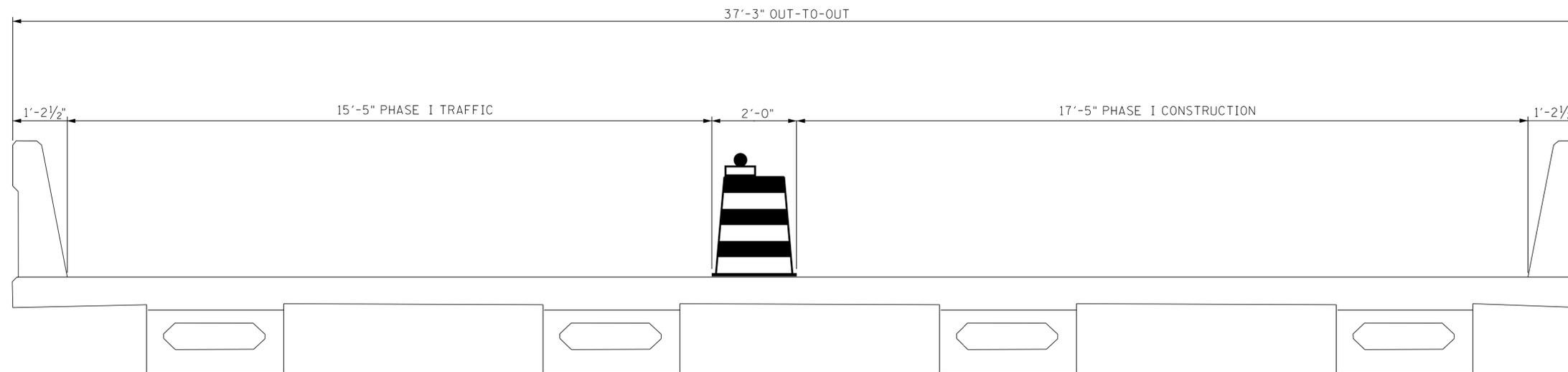
█ DENOTES: APPROXIMATE EXPANSION JOINT REPAIRS LOCATIONS



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PLAN VIEW
REPAIRS LOCATIONS
29-SR1-17.07 OVER
RICHLAND CREEK
FED. BRIDGE ID NO.
29SR0010021
GRAINGER COUNTY
2026

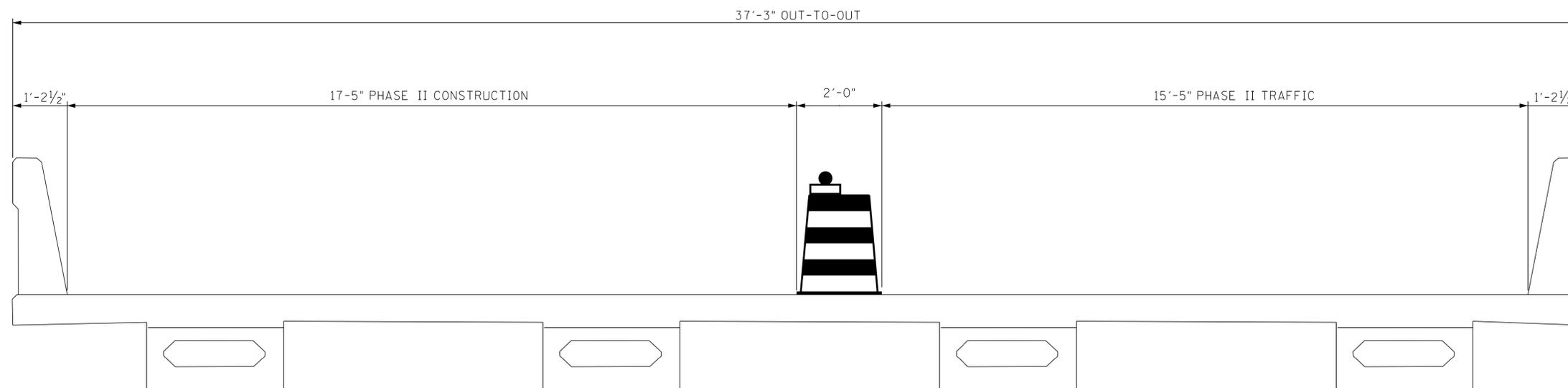
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DESIGN BY: _____ DATE: / /
DRAWN BY: SILESHI ERGICHO DATE: 11/25
SUPERVISED BY: KEVIN MARTINKO DATE: 11/25
CHECKED BY: _____ DATE: / /

PROJECT NO.	YEAR	SHEET NO.	
29S001-M3-005	2026	B-5	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
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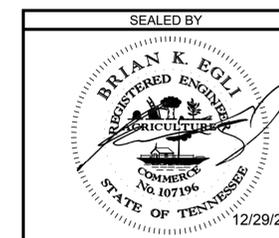
PHASE I CONSTRUCTION

(LOOKING AHEAD ON THE SURVEY)



PHASE II CONSTRUCTION

(LOOKING AHEAD ON THE SURVEY)



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PHASE CONSTRUCTION
29-SR1-16.28 & 29-SR1-17.07
OVER RICHLAND CREEK
FED. BRIDGE ID NOS.
29SR0010019 & 29SR0010021
GRAINGER COUNTY
2026

PIN NO.: 134036.00
DESIGN BY: DATE: / /
DRAWN BY: SILESHI ERGICHO DATE: 11/25
SUPERVISED BY: KEVIN MARTINKO DATE: 11/25
CHECKED BY: DATE: / /

PROJECT NO.	YEAR	SHEET NO.	
29S001-M3-005	2026	B-6	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
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TYPE 1 THIN EPOXY OVERLAY NOTES :

TYPE 1 THIN EPOXY OVERLAY SYSTEM - USE DECK PRETREATMENT/PRIMER PER MANUFACTURER'S RECOMMENDATION, AND 2 LIFTS OF AN EPOXY-URETHANE COPOLYMER AND AGGREGATE. TYPE 1 OVERLAY SHALL BE APPLIED MECHANICALLY USING METERED EQUIPMENT; HAND MIXING OF MATERIAL IS NOT PERMITTED.

THIN OVERLAY SYSTEM SHALL BE FROM THE QUALIFIED PRODUCTS LIST 23.005 TYPE 1 THIN OVERLAY (EPOXY URETHANE). MINIMUM OVERLAY THICKNESS SHALL BE 3/8 INCH.

APPLICATION EQUIPMENT SHOULD :

- A) BE CAPABLE OF METERING, MIXING AND DISTRIBUTING THE POLYMER AND PRETREATMENT TO MANUFACTURER'S RECOMMENDATION.
- B) USE AN APPLICATION MACHINE THAT FEATURES POSITIVE DISPLACEMENT VOLUMETRIC METERING PUMPS CONTROLLED BY A HYDRAULIC POWER UNIT.
- C) STORE COMPONENTS IN TEMPERATURE CONTROLLED RESERVOIRS CAPABLE OF MAINTAINING 100 DEGREES FAHRENHEIT (PLUS OR MINUS 10 DEGREES) TO INSURE OPTIMAL MIXING.
- D) CHECK MIXING RATIO AT THE PUMP OUTLETS AS WELL AS CYCLE COUNTING CAPABILITIES TO MONITOR OUTPUT ON STANDARD FEATURES.
- E) USE MOTIONLESS IN-LINE MIXING SO AS TO NOT OVERLY SHEAR THE MATERIAL TO ENTRAP AIR IN THE MIX.
- F) MAXIMIZE MATERIAL WORKING TIME BY MIXING IT IMMEDIATELY BEFORE DISPENSING.

AGGREGATE SHALL BE ANGULAR, HAVING LESS THAN 0.2% MOISTURE AND FREE OF DIRT, CLAY, ASPHALT AND OTHER FOREIGN OR ORGANIC MATERIALS. AGGREGATE FOR ALL LAYERS SHALL BE BAUXITE OR FLINT ROCK PRODUCTS FLINT AND MEETS THE FOLLOWING GRADATION:

SIEVE SIZE	% PASSING
NO. 6	95-100
NO. 10	10-35
NO. 20	0-3

FULL AND PARTIAL DEPTH DECK REPAIR SHALL CURE A MINIMUM OF 28 DAYS BEFORE THE OVERLAY IS PLACED. THE 28 DAYS MAY BE WAIVED IF THE OVERLAY MANUFACTURER PROVIDES A METHOD OF TESTING THE REPAIRED AREAS AND APPROVES THE PLACEMENT BY LETTER. TRAFFIC SHALL BE ALLOWED TO USE THE BRIDGE DURING THE CURING PERIOD OF THE PATCHES BUT NOT AFTER SHOTBLASTING. MAGNESIUM PHOSPHATE BASED MATERIALS WILL NOT BE ALLOWED.

THE CONCRETE DECK SURFACE SHALL BE CLEANED BY SHOTBLASTING TO REMOVE ANY OIL, DIRT, RUBBER, TRAFFIC STRIPING, OR ANY OTHER POTENTIAL DETRIMENTAL MATERIAL SUCH AS CURING COMPOUND AND LAITANCES, WHICH THE MANUFACTURER AND ENGINEER'S OPINION WOULD PREVENT PROPER BONDING AND CURING OF THE MATERIAL. IN AREAS WHERE SHOTBLASTING EQUIPMENT CAN NOT REACH (I.E., ALONG CURBS AND BRIDGE RAILS) SANDBLASTING IS PERMITTED TO AN EXTENT TO THE ENGINEER'S AND MANUFACTURER'S APPROVAL, IMMEDIATELY BEFORE APPLICATION. ALL PREPARED SURFACES SHALL BE CLEANED WITH COMPRESSED AIR OR VACUUMED TO REMOVE DUST AND DEBRIS. THE CONTRACTOR IS TO PREVENT THE TRACKING OF TACK COAT AND CONSTRUCTION DEBRIS ACROSS THE BRIDGE DECK PRIOR TO THE APPLICATION OF THE THIN OVERLAY. MILLING THE BRIDGE DECK WILL NOT BE AN OPTION FOR TACK COAT OR DEBRIS REMOVAL. REMOVAL SHALL BE AT THE CONTRACTOR'S EXPENSE.

ALL SURFACES THAT ARE TREATED SHALL BE DRY AT THE TIME OF APPLICATION. THE OVERLAY SHALL NOT BE APPLIED WHEN IT HAS RAINED 24 HOURS PRIOR TO, OR RAIN IS FORECAST WITHIN 8 HOURS AFTER, APPLICATION. THE MOISTURE CONTENT IN THE DECK SUBSTRATE SHALL BE TESTED. MOISTURE IS NOT TO EXCEED 4.5 PERCENT WHEN MEASURED BY ELECTRONIC METER. IF THE TEST SHOWS EXCESS MOISTURE, THE DECK SHALL CONTINUE TO DRY BEFORE APPLICATION PROCEEDS.

BLUSHING (A WAXY SURFACE COATING ON THE EPOXY) IS CAUSED BY THE REACTION OF MOISTURE WITH THE HARDENING AGENT. BLUSHING CREATES A SURFACE THAT MAKES FUTURE LAYERS DIFFICULT TO ADHERE. LIFTS THAT SHOW SIGNS OF BLUSHING SHALL BE REMOVED AND REPLACED PRIOR TO APPLICATION OF THE NEXT. THE COST TO REMOVE AND REPLACE THESE AREAS SHALL BE AT THE CONTRACTOR'S EXPENSE.

TRAFFIC, OTHER THAN APPLICATION EQUIPMENT, SHALL NOT BE ALLOWED ON ANY PORTION OF THE DECK THAT HAS BEEN SHOTBLASTED OR WHERE PART OF THE APPLICATION HAS BEEN PLACED.

SEE MANUFACTURER'S RECOMMENDATIONS FOR REQUIRED AMBIENT AND SURFACE TEMPERATURES AND HUMIDITY LIMITS FOR APPLICATION.

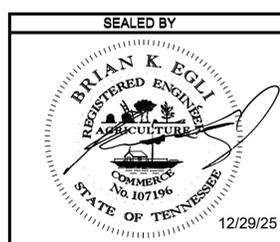
THE MANUFACTURER SHALL HAVE A REPRESENTATIVE ON THE JOB SITE AT ALL TIMES DURING APPLICATION AND CURE TIME. THE REPRESENTATIVE, ALONG WITH CONSULTATION WITH ENGINEER, MAY SUSPEND ANY ITEM OF WORK THAT IS SUSPECT AND DOES NOT MEET THE REQUIREMENTS OF THE SPECIFICATIONS. WORK SHALL NOT RESUME UNTIL THE ENGINEER AND REPRESENTATIVE ARE SATISFIED THAT APPROPRIATE REMEDIAL ACTION HAS BEEN TAKEN BY THE CONTRACTOR.

ALL COSTS FOR AGGREGATE, EPOXY FOR MINIMUM OF TWO LIFTS, SURFACE PREPARATION, LABOR AND ANY OTHER MISCELLANEOUS MATERIALS REQUIRED TO PLACE THIN OVERLAY SHALL BE INCLUDED IN ITEM NO. 617-04.01, TYPE 1 THIN EPOXY OVERLAY (EPOXY URETHANE), S.Y.

THICKNESS VERIFICATION: THE PROJECT ENGINEER SHALL BE NOTIFIED OF THE NUMBER OF GALLONS USED ON THE PROJECT WITH NOTARIZED QUANTITY STATEMENTS FROM THE CONTRACTOR AND THE MANUFACTURER. THE CONTRACTOR SHALL VERIFY TO TDOT THAT THE OVERLAY IS AN AVERAGE OF AT LEAST 3/8 INCH THICK AT THREE RANDOM LOCATIONS AGREED UPON BY THE PROJECT ENGINEER AND THE MATERIAL MANUFACTURER REPRESENTATIVE. IF 3/8 INCH AVERAGE IS NOT ACHIEVED, A RETEST SHALL BE PERFORMED IN ADJOINING AREAS. THIN AREAS SHALL BE RE-COATED AS DESCRIBED ABOVE BY THE CONTRACTOR AND RE-VERIFIED AT NO ADDITIONAL COST TO TDOT. THIS VERIFICATION MAY CONSIST OF CORES MADE BY THE CONTRACTOR WITH A CORING BIT NOT LESS THAN 1 1/2" DIAMETER. THE TESTED AREAS SHALL BE REPAIRED BY THE CONTRACTOR BEFORE FINAL ACCEPTANCE BY THE PROJECT ENGINEER.

THE MANUFACTURER SHALL HAVE A REP ON THE JOB SITE AT ALL TIME DURING APPLICATION AND CURE TIME. THE REP WITH THE ENGINEER, MAY SUSPEND AN ITEM OF WORK THAT IS SUSPECT AND DOES NOT MEET THE REQUIREMENTS OF THE SPECS. WORK SHALL NOT RESUME UNTIL THE ENGINEER AND REP ARE SATISFIED THAT APPROPRIATE REMEDIAL ACTION HAS BEEN TAKEN BY THE CONTRACTOR.

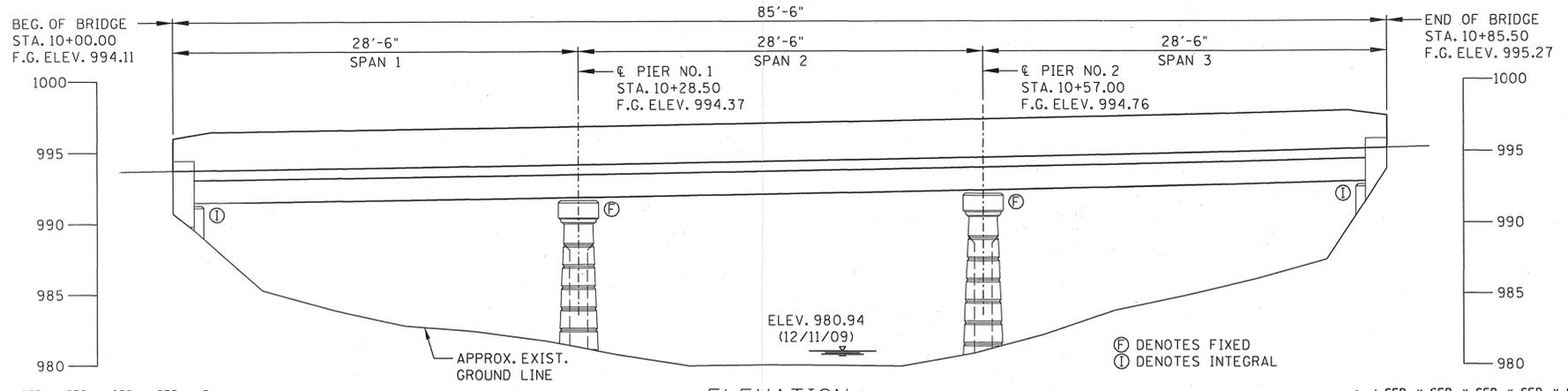
**** SPECIAL NOTE:**
 THE CONTRACTOR IS TO PREVENT THE TRACKING OF TACKCOAT AND CONSTRUCTION DEBRIS ACROSS THE BRIDGE DECK PRIOR TO APPLICATION OF THE THIN EPOXY OVERLAY.
 MILLING THE BRIDGE DECK WILL NOT BE AN OPTION FOR TACKCOAT OR DEBRIS REMOVAL.
 REMOVAL SHALL BE AT THE CONTRACTOR'S EXPENSE.



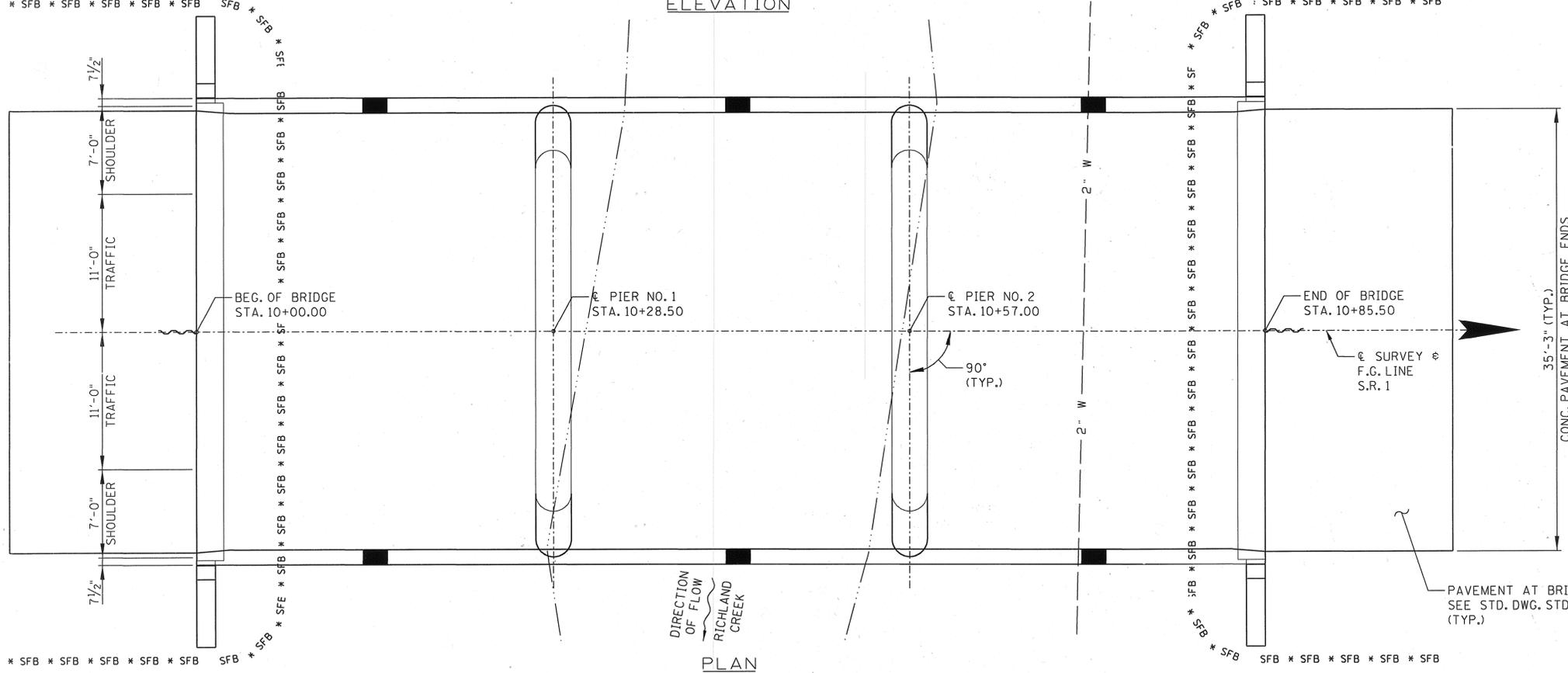
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 TYPE 1 THIN EPOXY
 OVERLAY NOTES
 29-SR1-16.28 & 29-SR1-17.07
 OVER RICHLAND CREEK
 FED. BRIDGE ID NOS.
 29SR0010019 & 29SR0010021
 GRAINGER COUNTY
 2026

\$\$\$\$\$YTIME\$\$\$\$\$
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PIN NO.: 134036.00
 DESIGN BY: DATE: //
 DRAWN BY: SILESHI ERGICHO DATE: 11/25
 SUPERVISED BY: KEVIN MARTINKO DATE: 11/25
 CHECKED BY: DATE: //



ELEVATION



PLAN

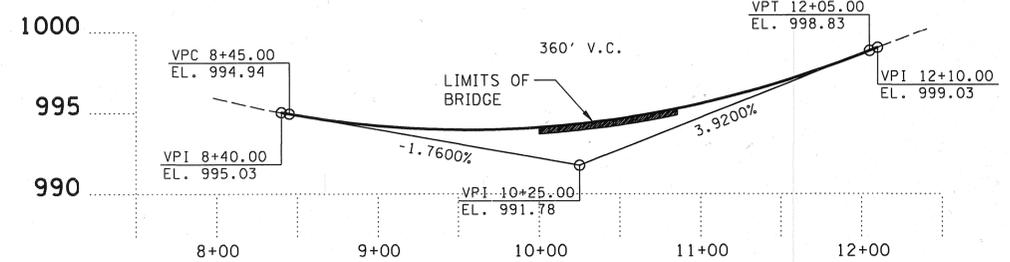
PARAPET DRAIN LOCATIONS

(TYP. LEFT & RIGHT SIDE)
 STA. 10+14.25
 STA. 10+43.25
 STA. 10+71.75

■ DENOTES PARAPET DRAIN (SEE STD. DWG. STD-1-2SS) FOR LOCATIONS, SEE TABLE ON THIS SHEET.
 ~~~~~ DENOTES TEMPORARY SHORING  
 \* SFB DENOTES SILT FENCE WITH WIRE BACKING

SCOPE OF WORK

1. PROVIDE REQUIRED TRAFFIC CONTROL AND PHASED CONSTRUCTION MAINTAINING ONE LANE OF TRAFFIC USING A TRAFFIC LIGHT SYSTEM.
2. REMOVE EXISTING BRIDGE SUPERSTRUCTURE.
3. PLACE NEW PRESTRESSED CONCRETE BEAMS, CONCRETE DECK, AND CONCRETE PARAPETS (STD-1-1SS) CREATING A WIDTH FROM TOP-OF-PARAPET TO TOP-OF-PARAPET OF 36'-0".
4. PLACE NEW CONCRETE PAVEMENT AT BRIDGE ENDS.
5. MODIFY EXISTING SUBSTRUCTURES AS REQUIRED TO ACCOMMODATE NEW SUPERSTRUCTURE.
6. MECHANICALLY GROOVE THE NEW CONCRETE DECK AND PAVEMENT AT BRIDGE ENDS.
7. APPLY A METHACRYLATE SEALER ALONG LONGITUDINAL CONSTRUCTION JOINT.
8. REMOVE AND REPAIR DETERIORATED AREAS OF CONCRETE ON SUBSTRUCTURES.
9. APPLY TEXTURE COAT FINISH TO PARAPETS, SLAB CANTILEVERS, OUTSIDE AND BOTTOM OF FASCIA BEAMS, AND SUBSTRUCTURES.
10. CONSTRUCT ROADWAY TRANSITIONS AT BEGINNING AND END OF BRIDGE.
11. REPLACE GUARDRAIL AT BRIDGE ENDS WITH APPROVED END TERMINALS.
12. REMOVE VEGETATION ON BRIDGE (COST TO BE INCLUDED IN ITEMS BID ON).



FINISHED GRADE SKETCH

|                       |      |           |
|-----------------------|------|-----------|
| PROJECT NO.           | YEAR | SHEET NO. |
| FEDERAL BH-STP-1(254) | 2010 |           |
| STATE 29002-3239-94   |      |           |

LIST OF SPECIAL PROVISIONS

| NO.   | LAST REV. DATE | REGARDING                    |
|-------|----------------|------------------------------|
| 604CR | **             | REPAIR OF BRIDGE DECK CRACKS |

\*\* DENOTES CURRENT REVISION DATE AS PER CONTRACT DOCUMENTS

REVISIONS

| NO. | DATE | BY | BRIEF DESCRIPTION |
|-----|------|----|-------------------|
|     |      |    |                   |
|     |      |    |                   |
|     |      |    |                   |
|     |      |    |                   |

LIST OF DRAWINGS

| DRAWING                                    | DRAWING NO. | LAST REV. DATE |
|--------------------------------------------|-------------|----------------|
| LAYOUT OF BRIDGE                           | BR-102-28   |                |
| GENERAL NOTES                              | BR-102-29   |                |
| ESTIMATED QUANTITIES                       | BR-102-30   |                |
| PHASE CONSTRUCTION DETAILS                 | BR-102-31   |                |
| SUPERSTRUCTURE                             | BR-102-32   |                |
| SUPERSTRUCTURE DETAILS                     | BR-102-33   |                |
| FRAMING PLAN                               | BR-102-34   |                |
| PRESTRESSED BOX BEAM DETAILS - SPANS 1 & 3 | BR-102-35   |                |
| PRESTRESSED BOX BEAM DETAILS - SPAN 2      | BR-102-36   |                |
| ABUTMENT NO. 1 & 2                         | BR-102-37   |                |
| ABUTMENT DETAILS                           | BR-102-38   |                |
| PIER DETAILS                               | BR-102-39   |                |
| SUBSTRUCTURE REPAIR DETAILS                | BR-102-40   |                |
| BILL OF STEEL                              | BR-102-41   |                |

LIST OF REFERENCE DRAWINGS

(TO BE PRINTED WITH PLANS)  
 E-9-126, E-4-36, E-2-87, E-8-116, A-0-10, E-8-117

LIST OF STANDARD DRAWINGS

| TITLE                                                                                        | DRAWING NO. | LAST REV. DATE |
|----------------------------------------------------------------------------------------------|-------------|----------------|
| BRIDGE RAILING SINGLE SLOPE CONCRETE PARAPET                                                 | STD-1-1SS   | 10-15-08       |
| STEEL SLIDER PLATE ASSEMBLIES FOR SINGLE SLOPE CONCRETE AND BRIDGE DECK DRAIN DETAILS - 2007 | STD-1-2SS   |                |
| PAVEMENT AT BRIDGE ENDS                                                                      | STD-1-5     | 08-08-08       |
| BRIDGE MOUNTED INTERCONNECTED PORTABLE BARRIER RAIL                                          | STD-2-1     | 10-15-08       |
| STD. PRECAST PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS                                  | STD-4-1     | 04-08-05       |
| STD. PRECAST PRESTRESSED BRIDGE DECK PANELS DESIGN CRITERIA                                  | STD-4-2     | 04-08-05       |
| STD. PRECAST PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS                                  | STD-4-3     | 03-02-02       |
| STD. PRECAST PRESTRESSED BRIDGE DECK PANELS CONSTRUCTION DETAILS                             | STD-4-4     | 06-10-96       |
| STANDARD SEISMIC DETAILS                                                                     | STD-6-1     | 05-21-99       |
| REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLABS                                           | STD-9-1     | 10-07-08       |
| STD. DETAILS FOR PRESTRESSED BOX BEAMS                                                       | STD-14-3    | 10-15-08       |

POSTED SPEED LIMIT = 45 M.P.H.  
 36'-0" ROADWAY WITH STD-1-1SS PARAPET  
 ADT (2010) = 7,200

STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION



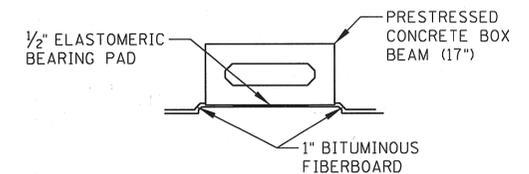
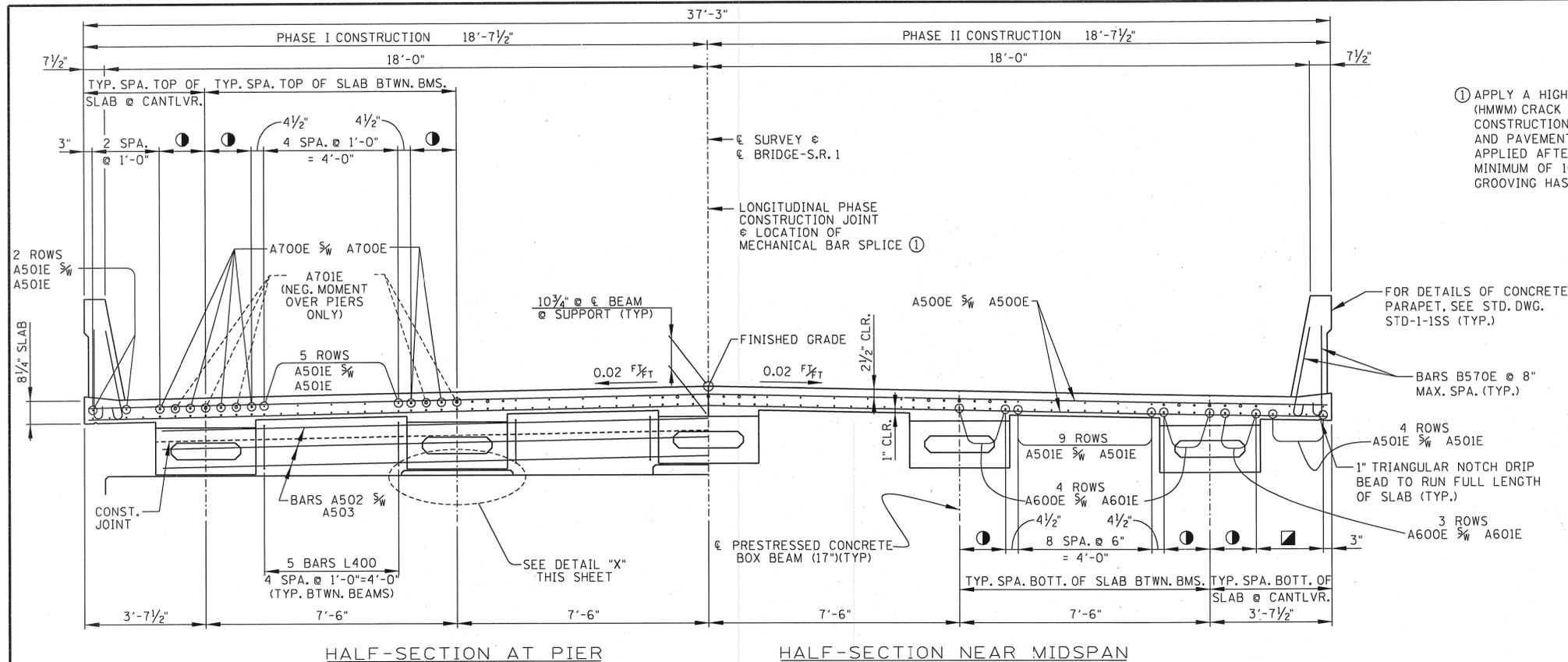
LAYOUT OF BRIDGE  
 BRIDGE NO. 29-SR001-16.28  
 S.R. 1 OVER RICHLAND CREEK  
 GRAINGER COUNTY  
 2010

DESIGNED BY G.S. WILSON DATE 12/2009  
 DRAWN BY C.D. VICTORY DATE 12/2009  
 SUPERVISED BY G.S. HENDERSON DATE 12/2009  
 CHECKED BY G.S. HENDERSON DATE 12/2009

|                       |      |           |
|-----------------------|------|-----------|
| PROJECT NO.           | YEAR | SHEET NO. |
| FEDERAL BH-STP-1(254) | 2010 |           |
| STATE 29002-3239-94   |      |           |

| REVISIONS |      |    |                   |
|-----------|------|----|-------------------|
| NO.       | DATE | BY | BRIEF DESCRIPTION |
|           |      |    |                   |
|           |      |    |                   |
|           |      |    |                   |
|           |      |    |                   |

① APPLY A HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM) CRACK SEALER IN THE LONGITUDINAL CONSTRUCTION JOINT FOR FULL LENGTH OF BRIDGE AND PAVEMENT AT BRIDGE ENDS. SEALER SHALL BE APPLIED AFTER ALL CONCRETE HAS BEEN PLACED A MINIMUM OF 10 DAYS AND AFTER MECHANICAL DECK GROOVING HAS BEEN COMPLETED.



DETAIL "X"

NOTES:

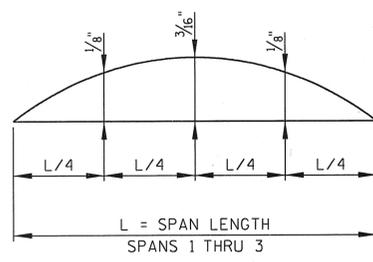
- NO PORTION OF THE PARAPET SHALL BE POURED UNTIL THE ENTIRE DECK SLAB IS IN PLACE AND PROPERLY CURED.
- WHEN POURING SLAB, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR BRIDGE PARAPET. THE PARAPET SHALL NOT BE POURED UNTIL THE SLAB IS POURED AND CURED. ALSO, SEE STD. DWG. STD-1-1SS.
- NO PRECAST CONCRETE DECK FORMS ARE TO BE USED IN BAYS ADJACENT TO EXISTING STRUCTURES.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SUPPORTING THE BEAMS TO PREVENT DAMAGE DUE TO TWISTING OR OVERTURNING DURING ALL PHASES OF CONSTRUCTION. IT IS STRONGLY RECOMMENDED THAT THE TEMPORARY ERECTION DIAPHRAGMS BE POURED AND CURED PRIOR TO PLACING ANY LOADS ON THE GIRDERS. HOWEVER, TEMPORARY ERECTION DIAPHRAGMS MUST BE IN PLACE IN THE SPAN AT THE TIME THE SLAB IS POURED IN SAID SPAN.

TYPICAL CROSS SECTION

(LOOKING FORWARD ON SURVEY)

NOTE: OFF-SET REINFORCING STEEL AS REQUIRED TO MAINTAIN A MINIMUM OF 2" CLEAR TO PHASE CONSTRUCTION JOINT.

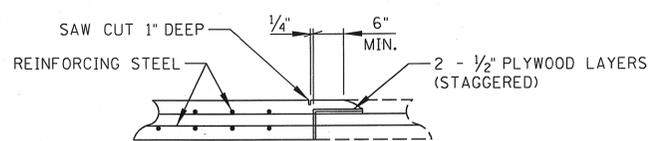
- 3 SPA. @ 5 1/2" = 1'-4 1/2"
- 4 SPA. @ 6" = 2'-0"



DEAD LOAD CORRECTION CURVE

NOTE: THIS CURVE IS FOR DEAD LOAD SLAB AND ALL DEAD LOADS THAT ARE APPLIED AFTER THE SLAB IS IN PLACE AND SHOULD BE CORRECTED TO COMPENSATE FOR THE EFFECTS DUE TO VERTICAL CURVE.

NOTE: IF PRESTRESSED DECK PANELS ARE USED AND THE BEAMS ARE PROFILED AFTER THE PANELS ARE IN PLACE, REDUCE THE DEAD LOAD CORRECTION VALUES SHOWN BY 25%.



SLAB CONSTRUCTION JOINT DETAIL

DECK CONCRETE POURING SEQUENCE: SLAB CONSTRUCTION JOINTS MAY BE LOCATED AT THE CONTRACTOR'S OPTION SUBJECT TO THE FOLLOWING:

- NO CONSTRUCTION JOINT MAY BE LOCATED CLOSER THAN 10 FEET OR FURTHER THAN 15 FEET FROM AN INTERIOR SUPPORT.
- THE SLAB IN THE MIDDLE SECTION OF BOTH ADJACENT SPANS MUST BE POURED TO WITHIN AT LEAST 15 FEET OF THE SUPPORTS EITHER PRIOR TO OR CONCURRENTLY WITH THE SLAB OVER AN INTERIOR SUPPORT.
- ALL SLAB CONSTRUCTION JOINTS SHALL BE IN ACCORDANCE WITH THE "SLAB CONSTRUCTION JOINT DETAIL" SHOWN ABOVE.

ESTIMATED QUANTITIES

| CLASS "D" CONCRETE (BRIDGE DECK) C.Y. | EPOXY COATED REINFORCING STEEL LBS. | STEEL BAR REINFORCEMENT LBS. |
|---------------------------------------|-------------------------------------|------------------------------|
| 96                                    | 30,390                              | 640                          |

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE  
BRIDGE NO. 29-SR001-16.28  
S.R. 1 OVER RICHLAND CREEK  
GRAINGER COUNTY  
2010



Palmer ENGINEERS  
DESIGNED BY: C.M. SHONDEL DATE 12/2009  
DRAWN BY: C.D. VICTORY DATE 12/2009  
SUPERVISED BY: G.S. HENDERSON DATE 12/2009  
CHECKED BY: G.S. HENDERSON DATE 12/2009

BEG. OF BRIDGE  
STA. 20+00.00  
F.G. ELEV. 1050.73

114'-0"

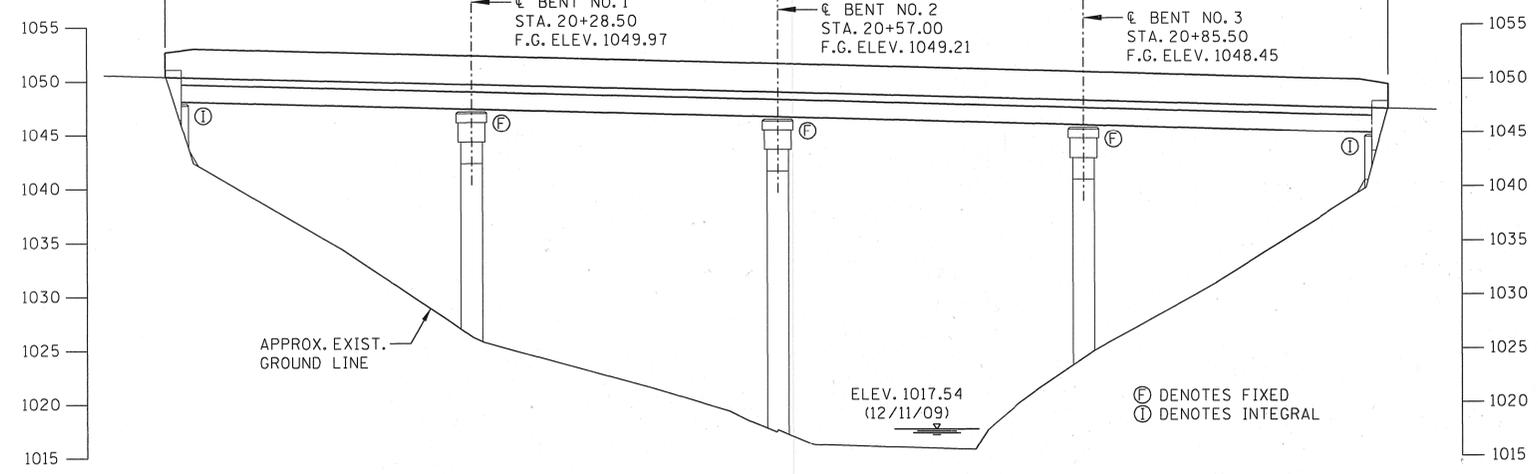
28'-6" SPAN 1

28'-6" SPAN 2

28'-6" SPAN 3

28'-6" SPAN 4

END OF BRIDGE  
STA. 21+14.00  
F.G. ELEV. 1047.69



ELEVATION

LIST OF SPECIAL PROVISIONS

| NO.   | LAST REV. DATE | REGARDING                    |
|-------|----------------|------------------------------|
| 604CR | **             | REPAIR OF BRIDGE DECK CRACKS |

\*\* DENOTES CURRENT REVISION DATE AS PER CONTRACT DOCUMENTS

| PROJECT NO.           | YEAR | SHEET NO. |
|-----------------------|------|-----------|
| FEDERAL BH-STP-1(254) | 2010 |           |
| STATE 29002-3239-94   |      |           |

| REVISIONS |      |    |                   |
|-----------|------|----|-------------------|
| NO.       | DATE | BY | BRIEF DESCRIPTION |
|           |      |    |                   |
|           |      |    |                   |
|           |      |    |                   |
|           |      |    |                   |

LIST OF DRAWINGS

| DRAWING                                    | DRAWING NO. | LAST REV. DATE |
|--------------------------------------------|-------------|----------------|
| LAYOUT OF BRIDGE                           | BR-102-42   |                |
| GENERAL NOTES                              | BR-102-29   |                |
| ESTIMATED QUANTITIES                       | BR-102-30   |                |
| PHASE CONSTRUCTION DETAILS                 | BR-102-31   |                |
| SUPERSTRUCTURE                             | BR-102-43   |                |
| SUPERSTRUCTURE DETAILS                     | BR-102-44   |                |
| FRAMING PLAN                               | BR-102-45   |                |
| PRESTRESSED BOX BEAM DETAILS - SPANS 1 & 4 | BR-102-46   |                |
| PRESTRESSED BOX BEAM DETAILS - SPAN 2 & 3  | BR-102-47   |                |
| ABUTMENT NO. 1 & 2                         | BR-102-48   |                |
| ABUTMENT DETAILS                           | BR-102-49   |                |
| BENT DETAILS                               | BR-102-50   |                |
| SUBSTRUCTURE REPAIR DETAILS                | BR-102-51   |                |
| BILL OF STEEL                              | BR-102-52   |                |

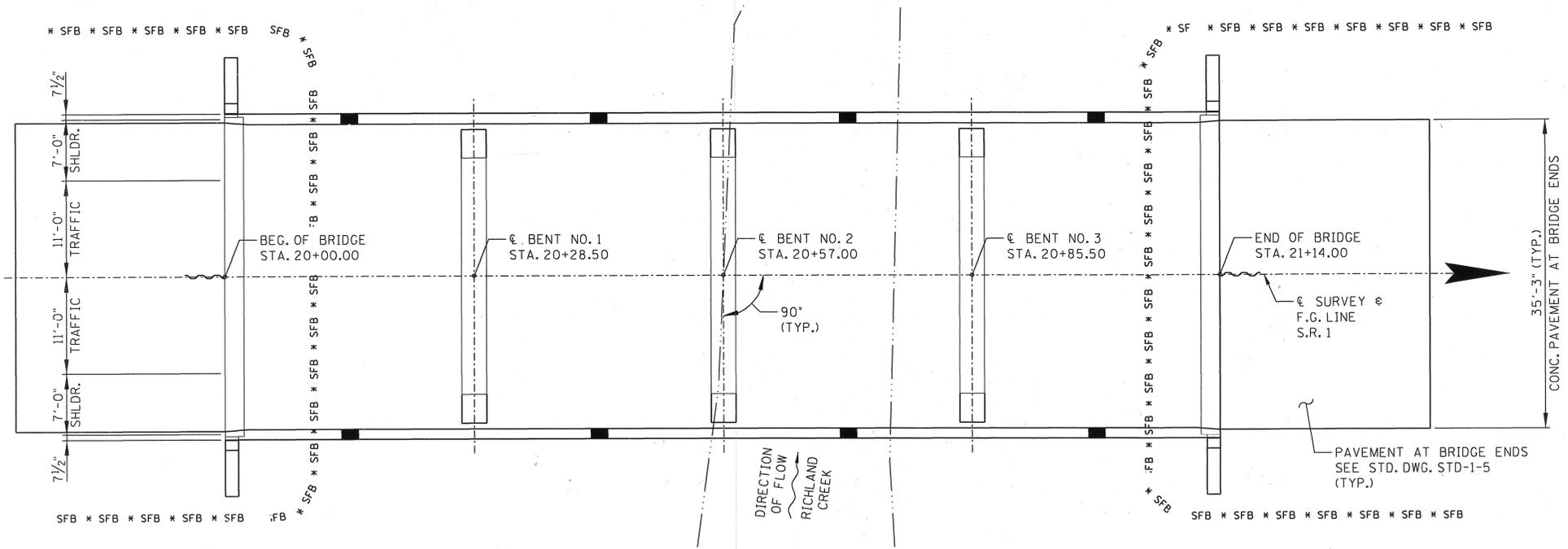
LIST OF REFERENCE DRAWINGS

(TO BE PRINTED WITH PLANS)

E-9-127, E-4-36, E-2-87, C-10-26, C-4-143, E-8-115

LIST OF STANDARD DRAWINGS

| TITLE                                                                                        | DRAWING NO. | LAST REV. DATE |
|----------------------------------------------------------------------------------------------|-------------|----------------|
| BRIDGE RAILING SINGLE SLOPE                                                                  | STD-1-1SS   | 10-15-08       |
| CONCRETE PARAPET                                                                             |             |                |
| STEEL SLIDER PLATE ASSEMBLIES FOR SINGLE SLOPE CONCRETE AND BRIDGE DECK DRAIN DETAILS - 2007 | STD-1-2SS   |                |
| PAVEMENT AT BRIDGE ENDS                                                                      | STD-1-5     | 08-08-08       |
| BRIDGE MOUNTED INTERCONNECTED PORTABLE BARRIER RAIL                                          | STD-2-1     | 10-15-08       |
| STD. PRECAST PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS                                  | STD-4-1     | 04-08-05       |
| STD. PRECAST PRESTRESSED BRIDGE DECK PANELS DESIGN CRITERIA                                  | STD-4-2     | 04-08-05       |
| STD. PRECAST PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS                                  | STD-4-3     | 03-02-02       |
| STD. PRECAST PRESTRESSED BRIDGE DECK PANELS CONSTRUCTION DETAILS                             | STD-4-4     | 06-10-96       |
| STANDARD SEISMIC DETAILS                                                                     | STD-6-1     | 05-21-99       |
| REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLABS                                           | STD-9-1     | 10-07-08       |
| STD. DETAILS FOR PRESTRESSED BOX BEAMS                                                       | STD-14-3    | 10-15-08       |



PLAN

SCOPE OF WORK

1. PROVIDE REQUIRED TRAFFIC CONTROL AND PHASED CONSTRUCTION MAINTAINING ONE LANE OF TRAFFIC USING A TRAFFIC LIGHT SYSTEM.
2. REMOVE EXISTING BRIDGE SUPERSTRUCTURE.
3. PLACE NEW PRESTRESSED CONCRETE BEAMS, CONCRETE DECK, AND CONCRETE PARAPETS (STD-1-1SS) CREATING A WIDTH FROM TOP-OF-PARAPET TO TOP-OF-PARAPET OF 36'-0".
4. PLACE NEW CONCRETE PAVEMENT AT BRIDGE ENDS.
5. MODIFY EXISTING SUBSTRUCTURES AS REQUIRED TO ACCOMMODATE NEW SUPERSTRUCTURE.
6. MECHANICALLY GROOVE THE NEW CONCRETE DECK AND PAVEMENT AT BRIDGE ENDS.
7. APPLY A METHACRYLATE SEALER ALONG LONGITUDINAL CONSTRUCTION JOINT.
8. REMOVE AND REPAIR DETERIORATED AREAS OF CONCRETE ON SUBSTRUCTURES.
9. ADDRESS SETTLEMENT AT ABUTMENTS BY PLACING SHEET PILING BEHIND ABUTMENT BEAM.
10. APPLY TEXTURE COAT FINISH TO PARAPETS, SLAB CANTILEVERS, OUTSIDE AND BOTTOM OF FASCIA BEAMS, AND SUBSTRUCTURES.
11. CONSTRUCT ROADWAY TRANSITIONS AT BEGINNING AND END OF BRIDGE.
12. REPLACE GUARDRAIL AT BRIDGE ENDS WITH APPROVED END TERMINALS.
13. REMOVE VEGETATION ON BRIDGE (COST TO BE INCLUDED IN ITEMS BID ON).

PARAPET DRAIN LOCATIONS

(TYP. LEFT & RIGHT SIDE)

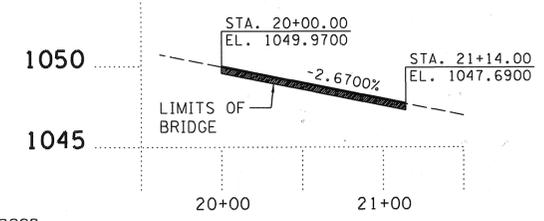
STA. 20+14.25

STA. 20+42.75

STA. 20+71.25

STA. 20+99.75

- DENOTES PARAPET DRAIN (SEE STD. DWG. STD-1-2SS) FOR LOCATIONS, SEE TABLE ON THIS SHEET.
- ~ DENOTES TEMPORARY SHORING
- \* SFB DENOTES SILT FENCE WITH WIRE BACKING



FINISHED GRADE SKETCH

POSTED SPEED LIMIT = 45 M.P.H.  
36'-0" ROADWAY WITH STD-1-1SS PARAPET  
ADT (2010) = 7,200

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION



LAYOUT OF BRIDGE  
BRIDGE NO. 29-SR001-17.07  
S.R. 1 OVER RICHLAND CREEK  
GRAINGER COUNTY  
2010

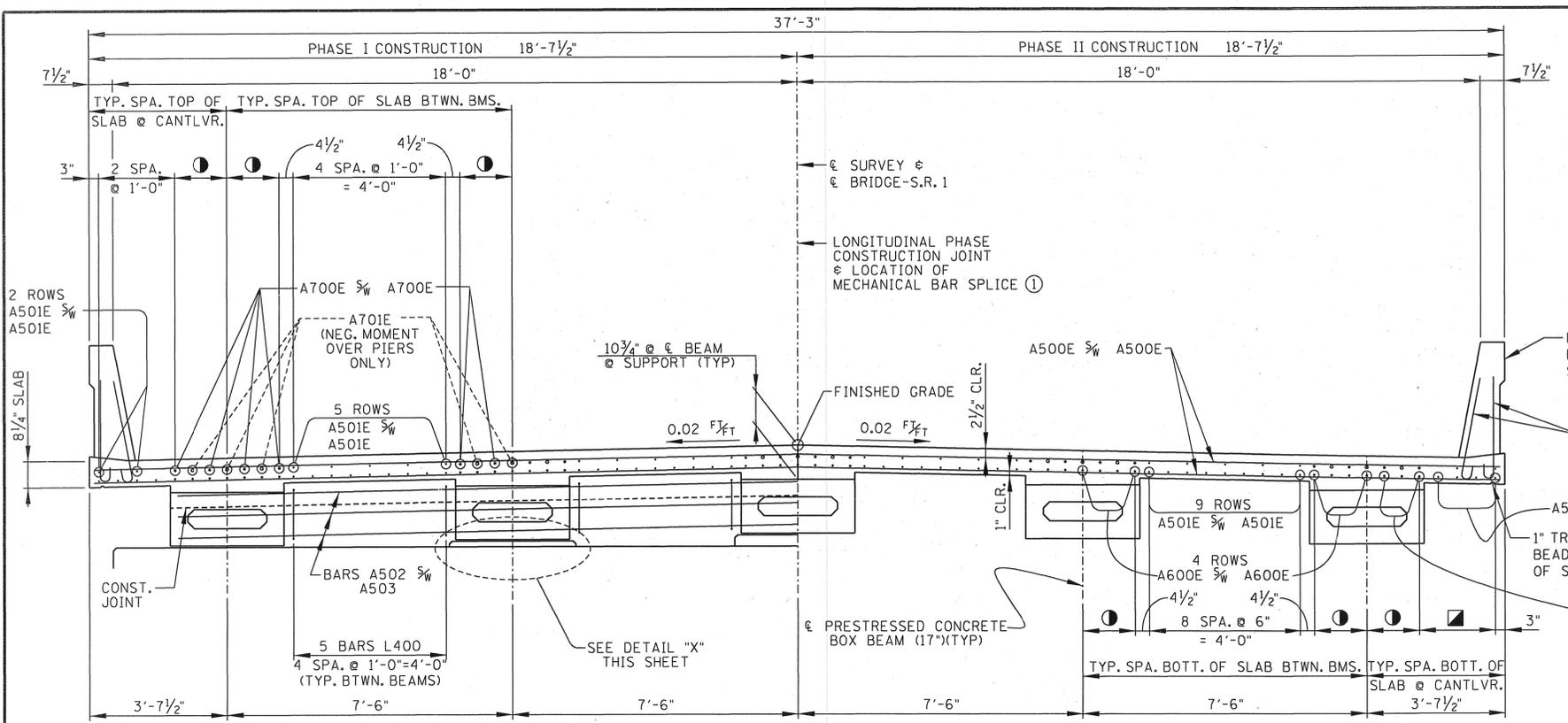
4/1/2010 10:48:55 AM \\S:\STRUCTURES\10070-24\BRIDGES\FINAL\10070-24-LAY-B2.dwg

DESIGNED BY G.S. WILSON DATE 12/2009  
DRAWN BY C.D. VICTORY DATE 12/2009  
SUPERVISED BY G.S. HENDERSON DATE 12/2009  
CHECKED BY G.S. HENDERSON DATE 12/2009

|                       |      |           |
|-----------------------|------|-----------|
| PROJECT NO.           | YEAR | SHEET NO. |
| FEDERAL BH-STP-1(254) | 2010 |           |
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|-----------|------|----|-------------------|
| NO.       | DATE | BY | BRIEF DESCRIPTION |
|           |      |    |                   |
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|           |      |    |                   |
|           |      |    |                   |

① APPLY A HIGH MOLECULAR WEIGHT METHACRYLATE (HMW) CRACK SEALER IN THE LONGITUDINAL CONSTRUCTION JOINT FOR FULL LENGTH OF BRIDGE AND PAVEMENT AT BRIDGE ENDS. SEALER SHALL BE APPLIED AFTER ALL CONCRETE HAS BEEN PLACED A MINIMUM OF 10 DAYS AND AFTER MECHANICAL DECK GROOVING HAS BEEN COMPLETED.



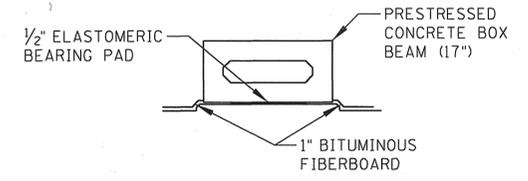
HALF-SECTION AT BENT                      HALF-SECTION NEAR MIDSPAN

TYPICAL CROSS SECTION

(LOOKING FORWARD ON SURVEY)

NOTE: OFF-SET REINFORCING STEEL AS REQUIRED TO MAINTAIN A MINIMUM OF 2" CLEAR TO PHASE CONSTRUCTION JOINT.

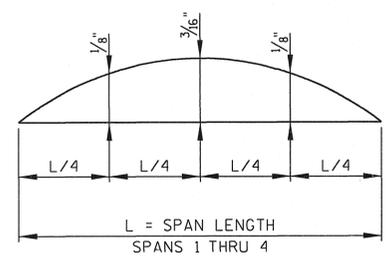
- 3 SPA. @ 5 1/2" = 1'-4 1/2"
- 4 SPA. @ 6" = 2'-0"



DETAIL "X"

NOTES:

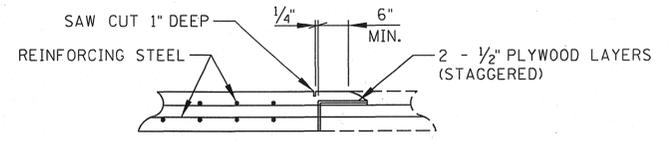
- NO PORTION OF THE PARAPET SHALL BE POURED UNTIL THE ENTIRE DECK SLAB IS IN PLACE AND PROPERLY CURED.
- WHEN POURING SLAB, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR BRIDGE PARAPET. THE PARAPET SHALL NOT BE POURED UNTIL THE SLAB IS POURED AND CURED. ALSO, SEE STD. DWG. STD-1-ISS.
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- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SUPPORTING THE BEAMS TO PREVENT DAMAGE DUE TO TWISTING OR OVERTURNING DURING ALL PHASES OF CONSTRUCTION. IT IS STRONGLY RECOMMENDED THAT THE TEMPORARY ERECTION DIAPHRAGMS BE POURED AND CURED PRIOR TO PLACING ANY LOADS ON THE GIRDERS. HOWEVER, TEMPORARY ERECTION DIAPHRAGMS MUST BE IN PLACE IN THE SPAN AT THE TIME THE SLAB IS POURED IN SAID SPAN.



DEAD LOAD CORRECTION CURVE

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NOTE: IF PRESTRESSED DECK PANELS ARE USED AND THE BEAMS ARE PROFILED AFTER THE PANELS ARE IN PLACE, REDUCE THE DEAD LOAD CORRECTION VALUES SHOWN BY 25%.



SLAB CONSTRUCTION JOINT DETAIL

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- THE SLAB IN THE MIDDLE SECTION OF BOTH ADJACENT SPANS MUST BE POURED TO WITHIN AT LEAST 15 FEET OF THE SUPPORTS EITHER PRIOR TO OR CONCURRENTLY WITH THE SLAB OVER AN INTERIOR SUPPORT.
- ALL SLAB CONSTRUCTION JOINTS SHALL BE IN ACCORDANCE WITH THE "SLAB CONSTRUCTION JOINT DETAIL" SHOWN ABOVE.

ESTIMATED QUANTITIES

| CLASS "D" CONCRETE (BRIDGE DECK) C.Y. | EPOXY COATED REINFORCING STEEL LBS. | STEEL BAR REINFORCEMENT LBS. |
|---------------------------------------|-------------------------------------|------------------------------|
| 129                                   | 40,733                              | 960                          |

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION



SUPERSTRUCTURE  
BRIDGE NO. 29-SR001-17.07  
S.R. 1 OVER RICHLAND CREEK  
GRAINGER COUNTY  
2010

4/7/2010 10:48:55 AM

Palmer  
DESIGNED BY C.M. SHONDEL DATE 12/2009  
DRAWN BY C.D. VICTORY DATE 12/2009  
SUPERVISED BY G.S. HENDERSON DATE 12/2009  
CHECKED BY G.S. HENDERSON DATE 12/2009

**BILL OF STEEL**

| BARS  | LOCATION             | SIZE | NO. REQ'D | BENDING DIMENSIONS |       |    |   | LENGTH    |
|-------|----------------------|------|-----------|--------------------|-------|----|---|-----------|
|       |                      |      |           | A                  | B     | C  | D |           |
| B490E | MEDIAN (WHEN REQ'D.) | 4    | 48        |                    |       |    |   | 2'-8"     |
| A490  | SLAB                 | 4    | 8         |                    |       |    |   | ▲         |
| A690  | SLAB                 | 6    | ▲         |                    |       |    |   | 12'-0"    |
| A691  | SLAB                 | 6    | ▲         |                    |       |    |   | 23'-8"    |
| A692  | SLAB                 | 6    | 31        |                    |       |    |   | ▲         |
| H490  | FOOTING              | 4    | ▲         | 6"                 | 1'-4" |    |   | 3'-4"     |
| L490  | FOOTING              | 4    | ▲         | 2'-7 1/4"          | 1'-0" | 8" |   | 7'-6 1/2" |

▲ THESE NUMBERS VARY DEPENDING UPON ROADWAY WIDTH.

**NOTES**

- QUANTITIES FOR CLASS 'A' CONCRETE, REGULAR AND EPOXY COATED REINFORCING STEEL (WHEN REQUIRED FOR MEDIAN BARRIER), STYROFOAM, GRATE AND MISCELLANEOUS MATERIALS FOR BRIDGE END DRAIN, WHEN REQUIRED, ARE TO BE INCLUDED IN PAVEMENT AT BRIDGE ENDS, S.Y. FOR BAR BENDING DIMENSIONS SEE THIS SHEET AND BILL OF STEEL FOR BRIDGE END DRAIN ON DRAWING NO. STD-1-6.
- COST OF MINERAL AGGREGATE CLASS A GRADING D BASE QUANTITY SHALL BE INCLUDED IN COST OF PAVEMENT AT BRIDGE ENDS. CLASS B GRADING C OR D MAY ALSO BE USED.
- NOTE: TOP OF SLAB AND TOP OF END BEAM TO CONFORM TO ROADWAY SLOPE AND GRADE.

**GENERAL NOTES**

CONCRETE: TO BE CLASS 'A' (f'c = 3,000 psi)  
 REINFORCING STEEL: SHALL BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE. SEE SECTION 604 AND 907 OF THE STANDARD SPECIFICATIONS. SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION (CURRENT EDITION).  
 NOTE: THE APPROACH SLAB SHALL NOT BE POURED UNTIL THE ADJACENT END SPAN DECK SLAB IS IN PLACE AND ACCEPTED BY THE ENGINEER.  
 NOTE: THE APPROACH SLAB CONTROL ELEVATIONS SHALL BE ADJUSTED, (IF REQUIRED), TO MATCH THE IN PLACE DECK SLAB IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS.

**JOINT SEAL SYSTEM:**  
 THE EXPANSION JOINT SYSTEM USED SHALL BE ON THE TDOT APPROVED QUALIFIED LISTS FOR ACCEPTABLE PRODUCTS. THE JOINT SYSTEM SHALL BE INSTALLED UNDER THE DIRECT SUPERVISION OF AN AUTHORIZED TECHNICIAN PROVIDED BY THE EXPANSION JOINT SUPPLIER. FOR EACH JOINT AT EACH BRIDGE AND FOR EACH BRIDGE LOCATION WITHIN THE PROJECT, THE TECHNICIAN MUST APPROVE ALL ASPECTS OF THE GEOMETRY AND PREPARATION, INCLUDING GRINDING AND/OR GROOVING, PRIOR TO ANY JOINT MATERIAL INSTALLATION.

NOTE: THE JOINT SEAL SYSTEM IS NOT REQUIRED WHEN THE BRIDGE HAS AN EXPANSION JOINT AT THE ADJACENT ABUTMENT.

MINOR REVISION - FHWA APPROVAL NOT REQUIRED

STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
 REINFORCED CONCRETE PAVEMENT AT BRIDGE ENDS 1995

CORRECT *Edward P. Wasserman*  
 ENGINEER OF STRUCTURES

SHEET 5 OF 13  
 STD-1-5

DESIGNED BY: C.M. HILES DATE: \_\_\_\_\_  
 DRAWN BY: KIM FRANKENFIELD DATE: 4-95  
 SUPERVISED BY: C.M. HILES DATE: 4-95  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_