



THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Anthony Lee Washington III
2024.11.19 12:35:37-06'00'

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HDR ENGINEERING, INC.
120 BRENTWOOD COMMONS WAY
SUITE 525
BRENTWOOD, TN 37027
ANTHONY L. WASHINGTON III, P.E. NO. 119749

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

SHEET NAME	SHEET NO.
SIGNATURE SHEET	ROADWAY-SIGN1
TITLE SHEET	1
ROADWAY INDEX, STANDARD ROADWAY DRAWINGS, AND STANDARD	
TRAFFIC OPERATIONS DRAWINGS	1A
PROJECT COMMITMENTS	1B
ESTIMATED ROADWAY QUANTITIES	2
TYPICAL SECTIONS AND PAVEMENT SCHEDULE	2B, 2B1
GENERAL NOTES	2C, 2C1
SPECIAL NOTES	2D
ENVIRONMENTAL NOTES	2E, 2E1
TABULATED QUANTITIES	2F
UTILITY NOTES AND UTILITY OWNERS	3
PAVEMENT EDGE DROP-OFF NOTES FOR TRAFFIC CONTROL	4



YEAR	PROJECT NO.	SHEET NO.
2025	NH/HSIP-15(231)	ROADWAY-SIGN 1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNATURE
SHEET

Index Of Sheets
SEE SHEET NO. 1A

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

HARDEMAN COUNTY

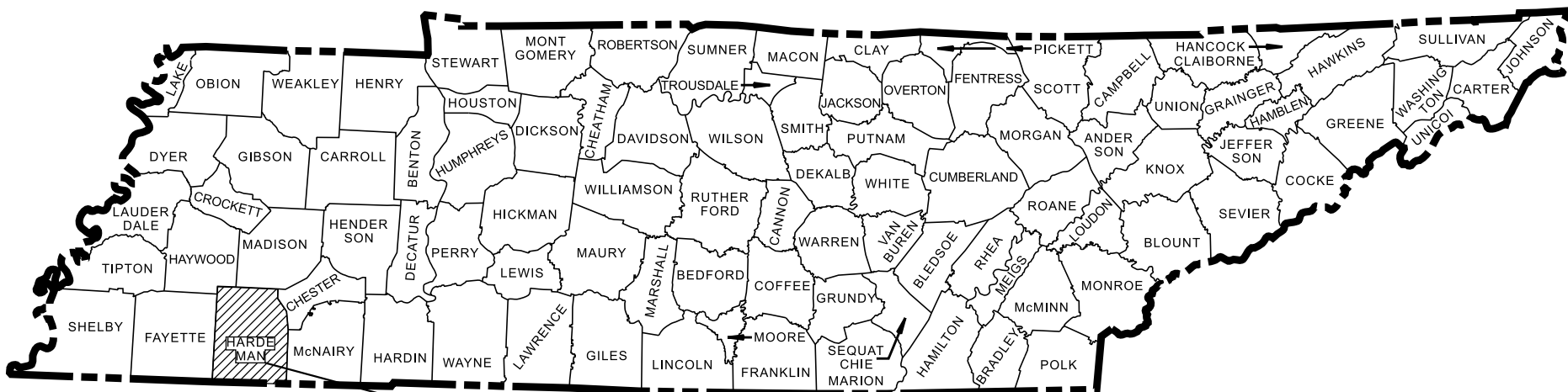
S.R. 15
FROM: L.M. 9.23 (WALTON RD.)
TO: L.M. 18.65 (DAVIS WAY)

RESURFACE & SAFETY
MILL, 411D, GUARDRAIL, CURB RAMPS, PAVEMENT MARKINGS

STATE HIGHWAY NO. 15 F.A.H.S. NO. 64

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

TENN.	YEAR	SHEET NO.
	2025	1
FED. AID PROJ. NO.	NH/HSIP-15(231)	
STATE PROJ. NO.	35S015-F8-005	
STATE PROJ. NO.	35S015-F3-005	
STATE PROJ. NO.	35S015-M3-006	



PROJECT LOCATION

BRIDGE ID. #	35SR0150003	35SR0150005	35SR0150007
	35SR0150033	35SR0150051	35SR0150009
	35SR0150011	35SR0150013	35SR0150017
	35SR0150055	35SR0150015	35SR0150017
	35SR0150057	35SR0150019	

35S015-F3-005
35S015-F8-005
BEGIN PROJECT NO. NH/HSIP-15(231) RESURFACE & SAFETY
L.M. 9.23 (WALTON RD.)

BRIDGE-DECK-REPAIR PROJECT NO. 35S015-M3-006

- SR-15 @ L.M. 11.78
- SR-15 @ L.M. 16.09
- SR-15 @ L.M. 16.37
- SR-15 @ L.M. 16.47
- SR-15 @ L.M. 16.64
- SR-15 @ L.M. 16.99
- SR-15 @ L.M. 17.26
- SR-15 @ L.M. 17.52
- SR-15 @ L.M. 17.68

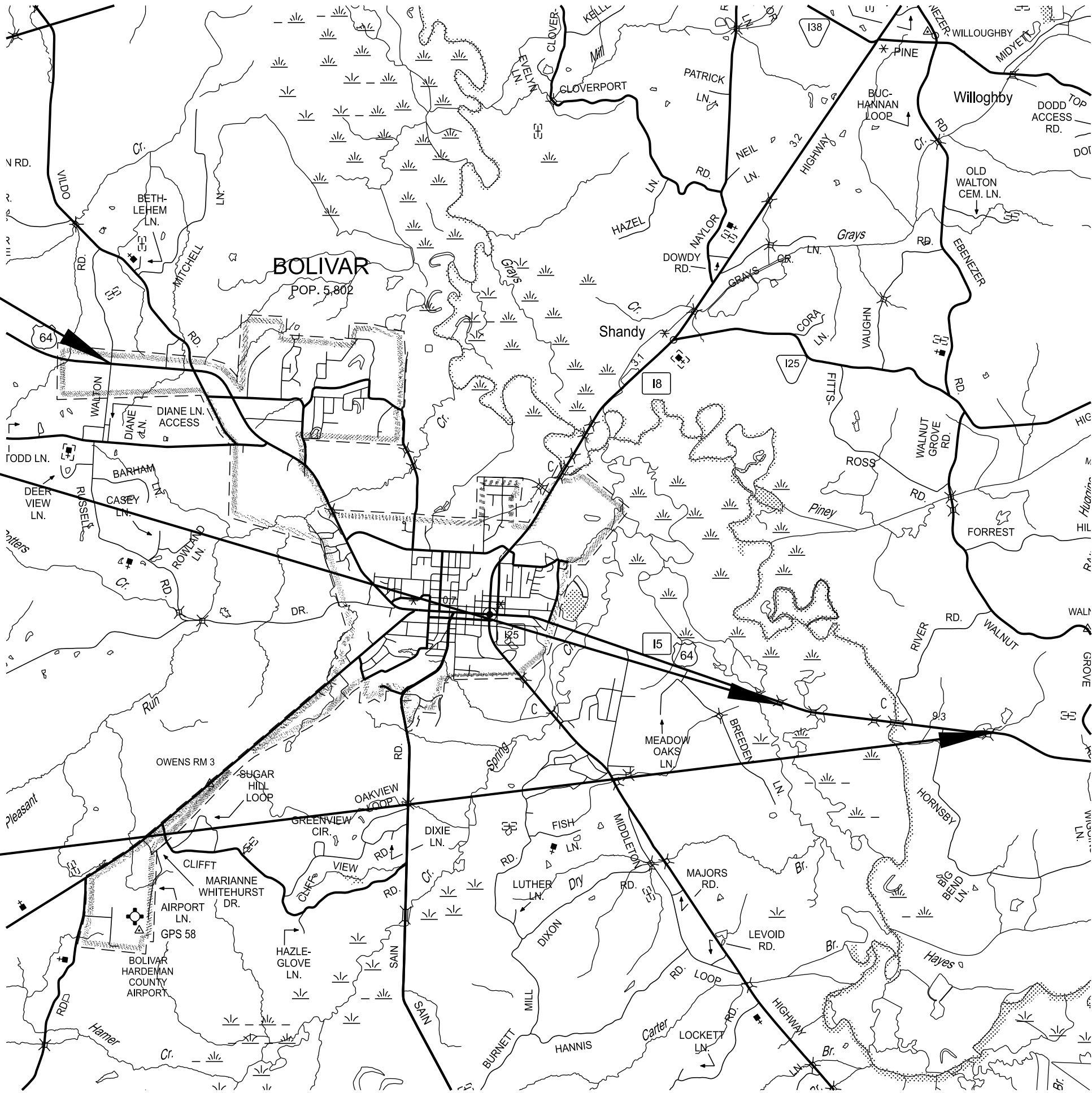
35S015-F3-005
35S015-F8-005
END PROJECT NO. NH/HSIP-15(231) RESURFACE & SAFETY
L.M. 18.65 (DAVIS WAY)

SPECIAL NOTES

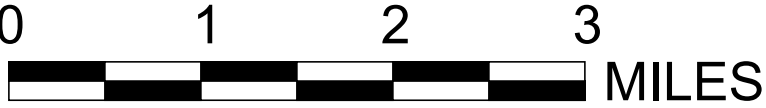
PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

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: LYNN EVANS, P.E., REG. 4
DESIGNED BY : HDR ENGINEERING, INC.
DESIGNER : ANTHONY L. WASHINGTON, III, P.E. CHECKED BY DAVID HORNE, P.E.
P.E. NO. 98043-4283-04
PIN NO. 133798.00



SCALE: 1" = 5280'



ROADWAY LENGTH 9.01 MILES
TOTAL LANE MILES RESURFACED 33.44 MILES



EXCLUSIONS

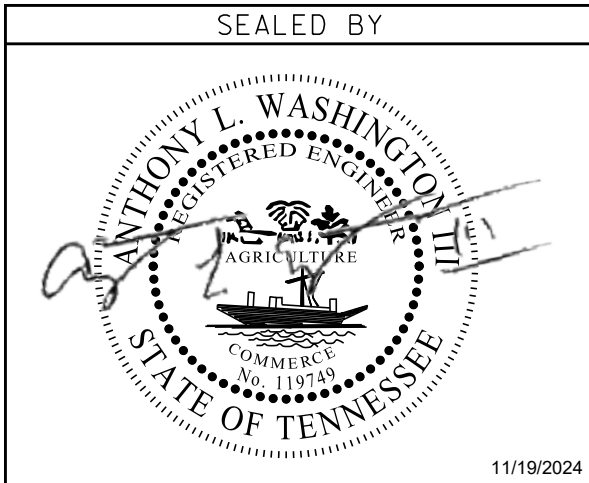
STATION TO STATION	LENGTH (FT.)
11.92 - 12.33	2164.80
-	.
-	.
TOTAL=	2164.80

TRAFFIC COUNTER & WEATHER STATIONS

STATION LOCATION	LOG MILE
TC STATION 23	12.144
TC STATION 103	13.033
TC STATION 71	13.313
TC STATION 70	13.650
TC STATION 27	14.568

TRAFFIC DATA

ADT (2025)	15,350
POSTED SPEED LIMITS	
L.M. 9.23 TO L.M. 9.81	65 MPH
L.M. 9.81 TO L.M. 10.86	55 MPH
L.M. 10.86 TO L.M. 12.23	45 MPH
L.M. 12.23 TO L.M. 12.94	40 MPH
L.M. 12.94 TO L.M. 14.43	30 MPH
L.M. 14.43 TO L.M. 16.02	45 MPH
L.M. 16.02 TO L.M. 18.65	55 MPH



APPROVED: WILL REID, CHIEF ENGINEER

DATE:

APPROVED: HOWARD H. ELEY, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: DIVISION ADMINISTRATOR DATE

ROADWAY INDEX

SHEET NAME	SHEET NO.
SIGNATURE SHEET	ROADWAY-SIGN1
TITLE SHEET	1
ROADWAY INDEX, STANDARD ROADWAY DRAWINGS, AND	
STANDARD TRAFFIC OPERATIONS DRAWINGS	1A
PROJECT COMMITMENTS	1B
ESTIMATED ROADWAY QUANTITIES	2
TYPICAL SECTIONS AND PAVEMENT SCHEDULE	2B, 2B1
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SPECIAL NOTES.....	2D
ENVIRONMENTAL NOTES.....	2E, 2E1
TABULATED QUANTITIES	2F
UTILITY NOTES AND UTILITY OWNERS.....	3
PAVEMENT EDGE DROP-OFF NOTES FOR TRAFFIC CONTROL.....	4
BRIDGE REPAIR PLANS	B-1

NO UTILITY SHEETS INCLUDED IN THIS SET OF PLANS

STANDARD ROADWAY DRAWINGS


DWG.	REV.	DESCRIPTION
STANDARD ROADWAY TITLE SHEET, ABBREVIATIONS, AND LEGENDS		
RD-A-1	02-20-20	STANDARD ABBREVIATIONS A THROUGH L
RD-A-2		STANDARD ABBREVIATIONS M THROUGH Z
RD-L-1	02-20-20	STANDARD LEGEND
RD-L-1A		STANDARD LEGEND
10-105.00 MULTIMODAL		
MM-CR-7		CURB RAMPS IN CURVE BI-DIRECTIONAL DUAL CROSSING
SAFETY DESIGN AND GUARDRAILS		
S-GRS-4	05-04-22	SPECIAL CASE GUARDRAIL HEIGHT TRANSITION DETAIL
S-GRT-2	06-28-19	TYPE 38 GUARDRAIL END TERMINAL
S-GRT-2R	06-28-19	EARTH PAD FOR TYPE 38 AND TYPE 21 TERMINAL (RETROFIT)
S-GRA-3	01-09-24	TYPE 13 GUARDRAIL ANCHOR
DESIGN - TRAFFIC CONTROL		
T-M-1	06-28-19	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	01-09-24	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-3	07-07-23	MARKING STANDARDS FOR TRAFFIC ISLANDS, PAVED SHOULDERS AND MEDIANS FOR CONVENTIONAL ROADS
T-M-4	07-17-20	STANDARD INTERSECTION PAVEMENT MARKINGS
T-M-15	06-28-19	ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR INTERSTATE AND ACCESS CONTROLLED ROUTES
T-M-15A	06-28-19	ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED RURAL ROUTES
T-M-16	07-30-24	RUMBLE STRIPE INSTALLATION LAYOUT
T-M-16A	02-03-20	RUMBLE STRIPE DETAILS FOR EDGE OF PAVEMENT AND CENTERLINE
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-11	03-04-21	ONE LANE CLOSURE DETAIL ON DIVIDED HIGHWAYS
T-WZ-12	03-04-21	ONE LANE CLOSURE DETAIL FOR BRIDGES ON DIVIDED HIGHWAYS
T-WZ-40	03-05-17	RIGHT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS
T-WZ-41	03-05-17	LEFT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS

STANDARD TRAFFIC OPERATIONS DRAWINGS

DWG.	REV.	DESCRIPTION
SIGNALS		
T-SG-2	06-27-16	LOOP LEAD-INS, CONDUIT AND PULL BOXES
T-SG-3	07-11-17	STANDARD NOTES AND DETAILS OF INDUCTIVE LOOPS
T-SG-3A	06-27-16	ALTERNATE DETECTION DETAILS

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSSIP-15(231)	1A

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11/19/2024

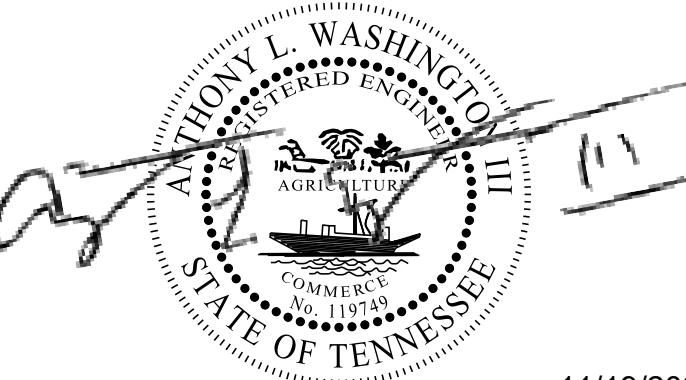
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ROADWAY INDEX,
STANDARD ROADWAY
DRAWINGS, AND
STANDARD TRAFFIC
OPERATIONS DRAWINGS

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSP-15(231)	1B

PROJECT COMMITMENTS			
COMMITMENT ID	SOURCE DIVISON	DESCRIPTION	STA. / LOCATION
EDHZ001	ENVIRONMENTAL DIVISION HAZARDOUS MATERIALS	NO SPECIAL ACCOMMODATIONS FOR DEMOLITION AND WASTE DISPOSAL ARE ANTICIPATED FOR THESE STRUCTURES AND THE MATERIAL CAN BE DEPOSITED IN A C&D LANDFILL. PRIOR TO THE DEMOLITION OR REHABILITATION OF ANY STRUCTURE (BRIDGE OR BUILDING), THE CONTRACTOR IS REQUIRED TO SUBMIT THE NATIONAL EMISSION FOR HAZARDOUS AIR POLLUTANTS STANDARD 10-DAY NOTICE OF DEMOLITION TO THE TDEC DIVISION OF AIR POLLUTION CONTROL (PER TDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION (JANUARY 1, 2021) SECTIONS 107.08.D AND 202.03.	BRIDGE NO. 35SR0150003 SR-15 OVER PEASANT RUN CREEK L.M. 11.78 (35-SR015-11.78) BRIDGE NO. 35SR0150051 SR-15 OVER HATCHIE RIVE OVERFLOW L.M. 16.14 (35-SR015-16.14) BRIDGE NO. 35SR0150009 SR-15 OVER OVERFLOW L.M. 16.36 (35-SR015-16.36) BRIDGE NO. 35SR0150053 SR-15 OVER HATCHIE RIVER OVERFLOW L.M. 16.50 (35-SR015-16.50) BRIDGE NO. 35SR0150011 SR-15 OVER OVERFLOW L.M. 16.64 (35-SR015-16.64)
EDHZ002	ENVIRONMENTAL DIVISION HAZARDOUS MATERIALS	SEE NOTE EDHZ001. ASBESTOS CONTAINING MATERIAL SURVEYS WERE COMPLETED ON THE FOLLOWING BRIDGES AND NO ASBESTOS WAS DETECTED. PLEASE SEE THE REPORTS FOR FURTHER DETAILS AND PHOTOGRAPHS. BRIDGE NO. 35SR0150003 SR-15 OVER PEASANT RUN CREEK L.M. 11.78 (35-SR015-11.78), BRIDGE NO. 35SR0150051 SR-15 OVER HATCHIE RIVE OVERFLOW L.M. 16.14 (35-SR015-16.14), BRIDGE NO. 35SR0150009 SR-15 OVER OVERFLOW L.M. 16.36 (35-SR015-16.36), BRIDGE NO. 35SR0150053 SR-15 OVER HATCHIE RIVER OVERFLOW L.M. 16.50 (35-SR015-16.50), BRIDGE NO. 35SR0150011 SR-15 OVER OVERFLOW L.M. 16.64 (35-SR015-16.64)	BRIDGE NO. 35SR0150003 SR-15 OVER PEASANT RUN CREEK L.M. 11.78 (35-SR015-11.78) BRIDGE NO. 35SR0150051 SR-15 OVER HATCHIE RIVE OVERFLOW L.M. 16.14 (35-SR015-16.14) BRIDGE NO. 35SR0150009 SR-15 OVER OVERFLOW L.M. 16.36 (35-SR015-16.36) BRIDGE NO. 35SR0150053 SR-15 OVER HATCHIE RIVER OVERFLOW L.M. 16.50 (35-SR015-16.50) BRIDGE NO. 35SR0150011 SR-15 OVER OVERFLOW L.M. 16.64 (35-SR015-16.64)
EDHZ003	ENVIRONMENTAL DIVISION HAZARDOUS MATERIALS	SEE NOTE EDHZ001. ASBESTOS CONTAINING MATERIAL SURVEYS WERE COMPLETED ON THE FOLLOWING BRIDGES AND NO ASBESTOS WAS DETECTED. PLEASE SEE THE REPORTS FOR FURTHER DETAILS AND PHOTOGRAPHS. BRIDGE NO. 35SR0150013 SR-15 OVER OVERFLOW L.M. 16.98 (35-SR015-16.98), BRIDGE NO. 35SR0150055 SR-15 OVER HATCHIE RIVER OVERFLOW L.M. 17.30 (35-SR015-17.30), BRIDGE NO. 35SR0150015 SR-15 OVER OVERFLOW L.M. 17.52 (35-SR015-17.52), BRIDGE NO. 35SR0150017 SR-15 OVER HATCHIE RIVER L.M. 17.68 (35-SR015-17.68)	BRIDGE NO. 35SR0150013 SR-15 OVER OVERFLOW L.M. 16.98 (35-SR015-16.98) BRIDGE NO. 35SR0150055 SR-15 OVER HATCHIE RIVER OVERFLOW L.M. 17.30 (35-SR015-17.30) BRIDGE NO. 35SR0150015 SR-15 OVER OVERFLOW L.M. 17.52 (35-SR015-17.52) BRIDGE NO. 35SR0150017 SR-15 OVER HATCHIE RIVER L.M. 17.68 (35-SR015-17.68)

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROJECT
COMMITMENTS

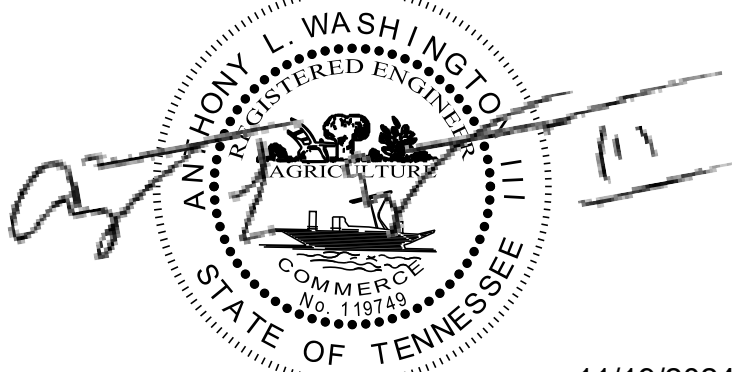
ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	QUANTITY	TOTAL QUANTITY
			35S015-F8-005	35S015-F3-005	
(1)	202-03.01 REMOVAL OF ASPHALT PAVEMENT	S.Y.	706		706
	203-06 WATER	M.G.	20		20
(1)(2)	208-01.05 BROOMING & DEGRASSING SHOULDERS	L.M.	13.1		13.1
(3)	303-02 MINERAL AGGREGATE, TYPE B BASE, GRADING (C OR D)	TON	2327		2327
(4)	307-02.01 ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A	TON	325		325
(5)	403-02.01 TRACKLESS TACK COAT	TON	145		145
(6)(7)	411-01.21 LONGITUDINAL JOINT SEALANT	L.M.	33.9		33.9
(8)	411-02.10 ACS MIX(PG70-22) GRADING D	TON	23641		23641
	411-12.02 SCORING SHOULDERS (NON-CONTINUOUS) (16IN WIDTH)	L.M.	10.5		10.5
	411-12.03 SCORING FOR RUMBLE STRIPE (NON-CONTINUOUS) (8IN WIDTH)	L.M.	1.94		1.94
(9)	415-01.01 COLD PLANING BITUMINOUS PAVEMENT	TON	22991		22991
(10)(11)	611-03.04 GRAY IRON CASTINGS (CATCHBASIN)	LB.	13750		13750
(10)	611-09.01 ADJUSTMENT OF EXISTING CATCHBASIN	EACH	2		2
(10)	705-02.10 GUARDRAIL TRANSITION 27IN TO 31IN	EACH		13	13
(10)	705-04.09 EARTH PAD FOR TYPE 38 GR END TREATMENT	EACH		12	12
(10)	705-06.10 GR TERMINAL TRAILING END (TYPE 13) MASH TL-3	EACH		7	7
(10)	705-06.20 TANGENT ENERGY ABSORBING TERM MASH TL-3	EACH		4	4
(10)	705-06.30 GR TERMINAL (ENERGY ABSORBING) MASH TL2	EACH		2	2
(10)	706-01 GUARDRAIL REMOVED	L.F.		650	650
(12)	712-01 TRAFFIC CONTROL	LS	1		1
(13)	712-04.01 FLEXIBLE DRUMS (CHANNELIZING)	EACH	50		50
(14)	712-06 SIGNS (CONSTRUCTION)	S.F.	5384		5384
	712-08.03 ARROW BOARD (TYPE C)	EACH	1		1
	716-01.21 SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR) (1 COLOR)	EACH	853		853
	716-01.22 SNOWPLOWABLE RAISED PAVMENT MARKERS (MONO-DIR)(1 COLOR)	EACH	785		785
	716-01.23 SNOWPLOWABLE RAISED PAVEMENT MARKERS (BI-DIR)(2 COLOR)	EACH	286		286
	716-01.30 REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	667		667
(15)(16)	716-02.04 PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING)	S.Y.	104		104
(15)(16)(17)	716-02.05 PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	996	40	1036
(15)(16)	716-02.06 PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	90		90
(15)(16)	716-02.08 PLASTIC PAVEMENT MARKING (8" DOTTED LINE)	L.F.		300	300
(15)(16)	716-02.09 PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	1013	1070	2083
(15)(16)	716-03.01 PLASTIC WORD PAVEMENT MARKING (ONLY)	EACH	18		18
(15)(16)	716-03.06 PLASTIC WORD PAVEMENT MARKING (SIGNAL AHEAD)	EACH	4		4
(15)(16)	716-04.01 PLASTIC PAVEMENT MARKING (STRAIGHT-TURN ARROW)	EACH	3		3
(15)(16)	716-04.04 PLASTIC PAVEMENT MARKING (TRANSVERSE SHOULDER)	L.F.	424		424
(15)(16)	716-04.05 PLASTIC PAVEMENT MARKING (STRAIGHT ARROW)	EACH	1		1
(15)(16)	716-04.12 PLASTIC PAVEMENT MARKING (YIELD LINE)	S.F.		40	40
(15)(16)	716-04.14 PLASTIC PAVEMENT MARKING (LANE REDUCTION ARROW)	EACH	2		2
(15)	716-05.08 PAINTED PAVEMENT MARKING (PARKING LINE)	L.F.	415		415
(18)	716-05.20 PAINTED PAVEMENT MARKING (6" LINE)	L.M.	80		80
(15)	716-12.02 ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.		40	40
(15)	716-12.03 ENHANCED FLATLINE THERMO PVMT MRKNG (8IN BARRIER LINE)	L.F.		2292	2292
(15)	716-12.05 ENHANCED FLATLINE THERMO PVMT MRKNG (6IN DOTTED LINE)	L.F.		360	360
	717-01 MOBILIZATION	LS	1		1
(10)	730-12.01 CONDUIT 1" DIAMETER (PVC)	L.F.	50		50
(10)	730-14.01 SHIELDED DETECTOR CABLE	L.F.	50		50
(10)	730-14.02 SAW SLOT	L.F.	2396		2396
(10)	730-14.03 LOOP WIRE	L.F.	6126		6126

FOOTNOTES	
(1)	TO BE USED AS DIRECTED BY THE ENGINEER.
(2)	NO DIRT OR DEBRIS TO BE LEFT ON SHOULDER, THIS WORK TO BE PERFORMED BEFORE ALL OTHER OPERATIONS.
(3)	INCLUDES 100 TONS FOR BREAKOUT AREAS.
(4)	FOR REPLACEMENT OF QUANTITY REMOVED UNDER ITEM 202-03.01.
(5)	INCLUDES 9 TONS FOR EXTRA WIDTH PAVING, DRIVEWAYS, CITY STREETS, COUNTY ROADS, FIELD ENTRANCES, AND BUSINESS ENTRANCES.
(6)	USE CRAFTCO PAVEMENT JOINT ADHESIVE #34524. PAVON JOINT ADHESIVE BY PAVON CORPORATION OR DENSO TAPE BY DENSO.
(7)	TO BE USED FOR SEALING OF ALL SURFACE LAYER CONSTRUCTION JOINTS ALONG THE TRAVEL LANES AND SHOULDERS AS DIRECTED BY THE ENGINEER.
(8)	INCLUDES 1,450 TONS FOR EXTRA WIDTH PAVING, DRIVEWAYS, CITY STREETS, COUNTY ROADS, FIELD ENTRANCES, AND BUSINESS ENTRANCES. INCLUDES 700 TONS FOR SPOT LEVELING.
(9)	INCLUDES 1,702 TONS FOR EXTRA WIDTH PAVING, DRIVEWAYS, CITY STREETS, COUNTY ROADS, FIELD ENTRANCES, AND BUSINESS ENTRANCES.
(10)	SEE TABULATED QUANTITIES, SHEET 2F.
(11)	COST TO INCLUDE REMOVAL OF EXISTING GRATE AND REPLACEMENT OF BICYCLE FRIENDLY GRATES WHERE APPLICABLE, INCLUDING MATERIAL, PARTS, LABOR, EQUIPMENT, MACHINERY, TOOLS, OR APPARATUS NECESSARY FOR REMOVAL AND INSTALLATION. THE CONTRACTOR SHALL VERIFY GRATE DIMENSIONS IN THE FIELD.
(12)	THE CONTRACTOR SHALL COMPLY WITH SECTION 712 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION REGARDING TEMPORARY TRAFFIC CONTROL AND THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
(13)	TO BE USED FOR TRANSITION TAPERS.
(14)	THE CONTRACTOR IS RESPONSIBLE FOR THE STAKING OF CONSTRUCTION SIGNS. IN THE EVENT THAT A CONSTRUCTION AND/OR REGULATORY SIGN IS TEMPORARILY DESIGNATED NOT IN USE DURING THE CONSTRUCTION PHASE OF A PROJECT, THE CONTRACTOR SHALL CHOOSE A SIGN COVERING APPROVED BY THE ENGINEER. TEMPORARY SIGN COVERINGS SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE PRICE BID FOR ITEM NO. 712-06 SIGNS (CONSTRUCTION)
(15)	ITEM TO BE USED AS PERMANENT MARKING ONLY.
(16)	THE CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
(17)	ALL STOP BARS ON SIDE STREETS WILL BE RETRACED AS DIRECTED BY THE ENGINEER.
(18)	ITEM TO BE USED FOR TEMPORARY PAVEMENT MARKING ONLY.

THERE ARE NO UTILITY ADJUSTMENTS ON THIS PROJECT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HVIP-15(231)	2

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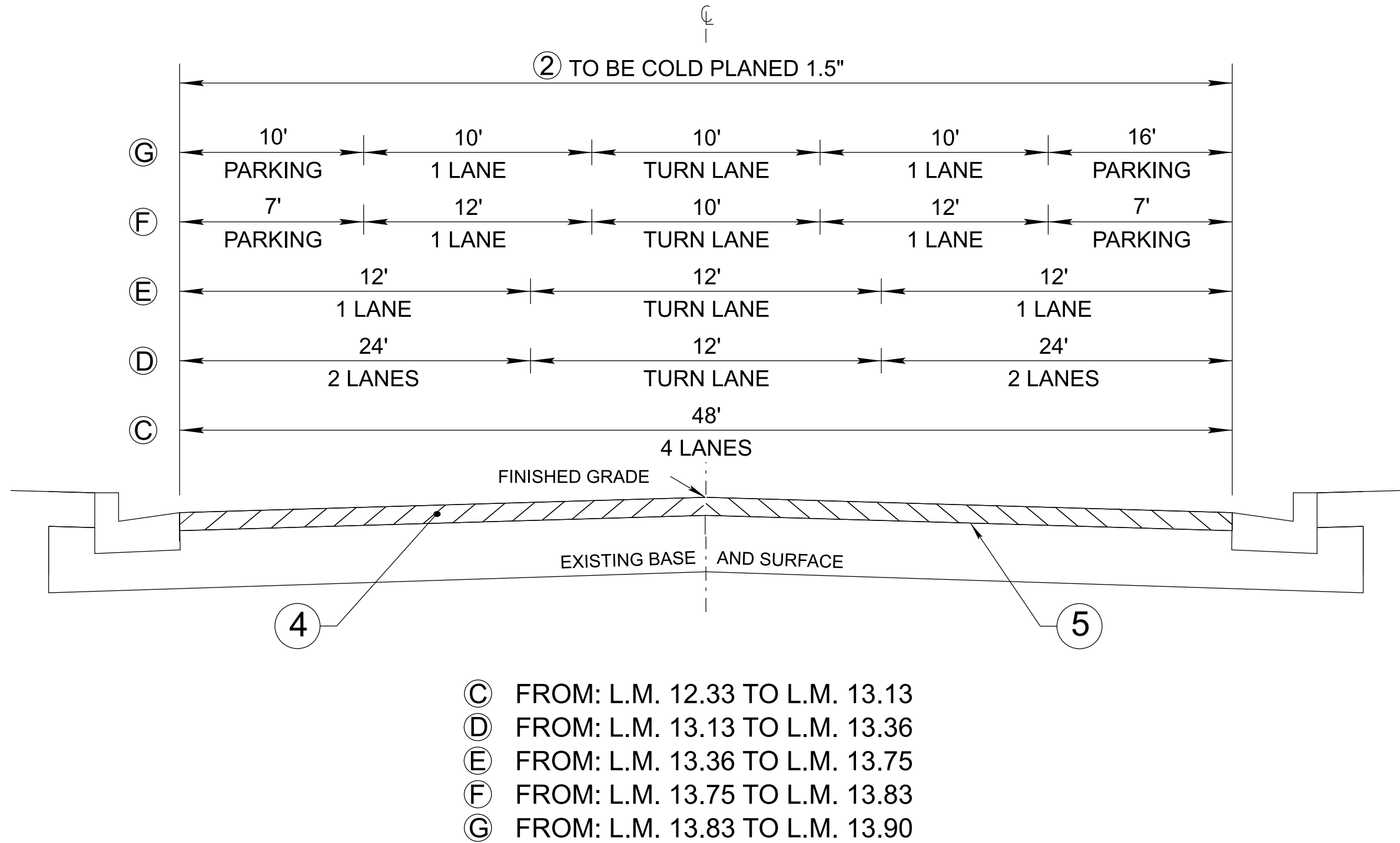
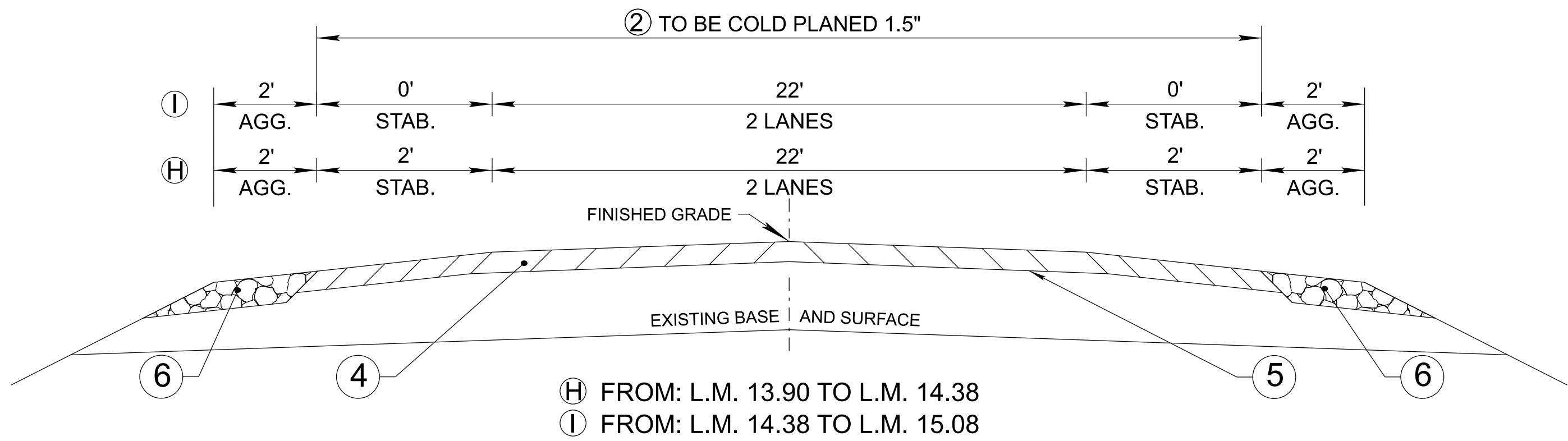


11/19/2024

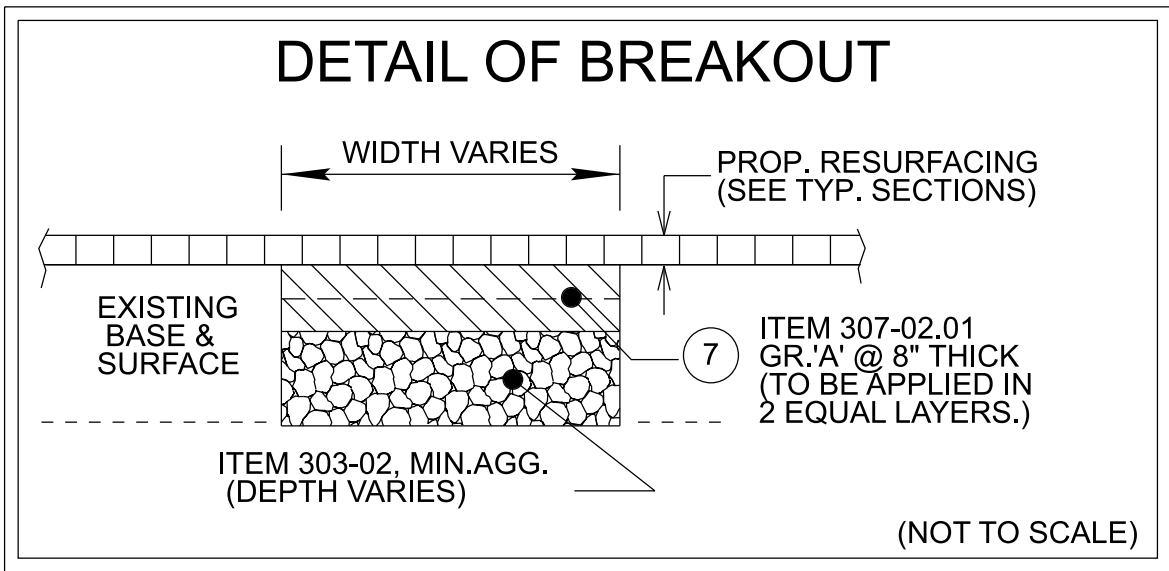
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED
ROADWAY
QUANTITIES

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSP-15(231)	2B1



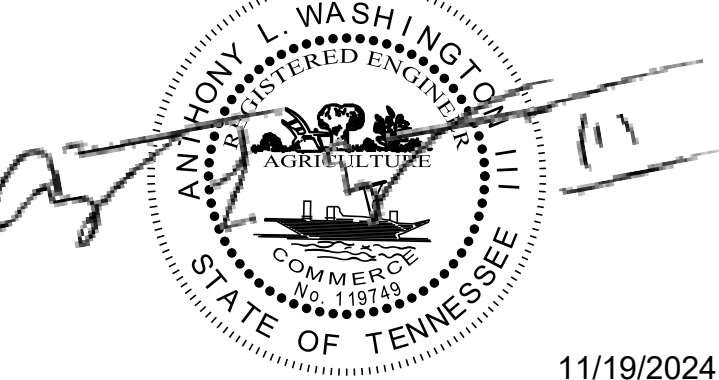
EXCLUSION: L.M. 11.92 TO L.M. 12.33



PROPOSED PAVEMENT SCHEDULE	
1	COLD PLANING @ 1.25"± THICK (APPROX. 131.25 LBS./S.Y.) ITEM 415-01.01 COLD PLANING BITUMINOUS PAVEMENT
2	COLD PLANING @ 1.50"± THICK (APPROX. 157.5 LBS./S.Y.) ITEM 415-01.01 COLD PLANING BITUMINOUS PAVEMENT
3	ASPHALTIC CONCRETE SURFACE (ACS) @ 1.25"± THICK (APPROX. 132.5 LBS./S.Y.) ITEM 411-02.10 ACS MIX (PG70-22) GRADING "D"
4	ASPHALTIC CONCRETE SURFACE (ACS) @ 1.50"± THICK (APPROX. 159.0 LBS./S.Y.) ITEM 411-02.10 ACS MIX (PG70-22) GRADING "D"
5	TACK COAT (TC) ITEM 403-02.01 TRACKLESS TACK COAT (TC) (SEE 403.05 FOR DETERMINING APPLICATION RATE IN THE FIELD)
6	MINERAL AGGREGATE BASE @ 2.00"± THICK FOR SHOULDERS ITEM 303-02 MINERAL AGGREGATE, TYPE "B" BASE, GRADING "C OR D"
7	BITUMINOUS COURSE (BLACK BASE) @ 8.00"± THICK (APPROX. 920.0 LBS./S.Y.) ITEM 307-02.01 ASPHALT CONCRETE MIX (PG70-22)(BPMB-HM) GRADING "A" (THIS ITEM IS TO BE USED FOR BREAKOUT ONLY)

BRIDGE NOTES			
LOCATION	BRIDGE NO.	LENGTH (FT.)	TREATMENT
L.M. 11.78	35SR0150003	240.00	SEAL WITH TYPE 1 THIN EPOXY OVERLAY (BRIDGE SHEETS INCLUDED)
L.M. 14.59	35SR0150005	370.50	COLD PLANE 1.25" OF THE EXISTING ASPHALT AND REPLACE WITH 1.25 OF NEW ASPHALT
L.M. 14.71	35SR0150007	427.5	COLD PLANE 1.25" OF THE EXISTING ASPHALT AND REPLACE WITH 1.25 OF NEW ASPHALT
L.M. 14.91	35SR0150033	26.20	PAVE WITH PLANS MIX/TREATMENT TYPE
L.M. 16.09	35SR0150051	700.46	SEAL WITH TYPE 1 THIN EPOXY OVERLAY / REPLACE BRIDGE JOINTS (BRIDGE SHEETS INCLUDED)
L.M. 16.37	35SR0150009	272.08	SEAL WITH TYPE 1 THIN EPOXY OVERLAY / REPLACE BRIDGE JOINTS (BRIDGE SHEETS INCLUDED)
L.M. 16.47	35SR0150053	500.33	SEAL WITH TYPE 1 THIN EPOXY OVERLAY / REPLACE BRIDGE JOINTS (BRIDGE SHEETS INCLUDED)
L.M. 16.64	35SR0150011	305.75	SEAL WITH TYPE 1 THIN EPOXY OVERLAY / REPLACE BRIDGE JOINTS (BRIDGE SHEETS INCLUDED)
L.M. 16.99	35SR0150013	407.25	SEAL WITH TYPE 1 THIN EPOXY OVERLAY / REPLACE BRIDGE JOINTS (BRIDGE SHEETS INCLUDED)
L.M. 17.26	35SR0150055	700.46	SEAL WITH TYPE 1 THIN EPOXY OVERLAY / REPLACE BRIDGE JOINTS (BRIDGE SHEETS INCLUDED)
L.M. 17.52	35SR0150015	272.08	SEAL WITH TYPE 1 THIN EPOXY OVERLAY / REPLACE BRIDGE JOINTS (BRIDGE SHEETS INCLUDED)
L.M. 17.68	35SR0150017	501.50	SEAL WITH TYPE 1 THIN EPOXY OVERLAY / REPLACE BRIDGE JOINTS (BRIDGE SHEETS INCLUDED)
L.M. 18.05	35SR0150057	26.00	PAVE WITH PLANS MIX/TREATMENT TYPE
L.M. 18.57R	35SR0150019	26.3	PAVE WITH PLANS MIX/TREATMENT TYPE
L.M. 18.57L	35SR0150019	26.3	PAVE WITH PLANS MIX/TREATMENT TYPE

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NOT TO SCALE

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TYPICAL
SECTIONS AND
PAVEMENT
SCHEDULE

GENERAL NOTES

GRADING

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

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

- (9) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 6" ENHANCED FLATLINE THERMOPLASTIC INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-12.02, ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE), L.M. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS.

SNOWPLOWABLE REFLECTIVE PAVEMENT MARKERS

- (20) 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

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

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

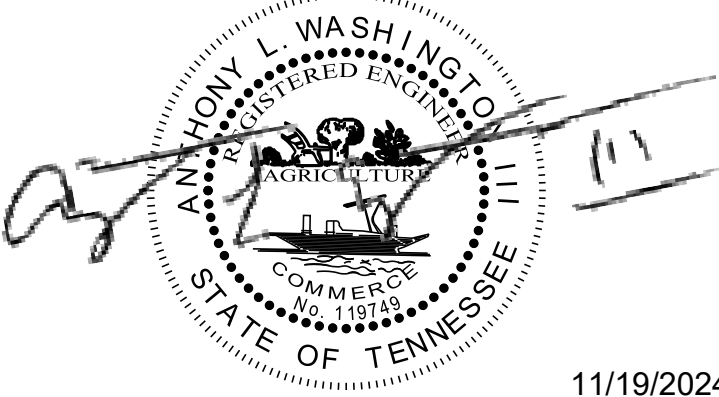
- (10) ALL SIGNS WHICH INTERFERE WITH CONSTRUCTION WILL BE RELOCATED OUTSIDE LIMITS OF CONSTRUCTION BY THE CONTRACTOR. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR WILL RESTORE THE SIGNS TO ORIGINAL LOCATION. THE CONTRACTOR SHALL CHECK WITH THE REGIONAL TRAFFIC ENGINEER PRIOR TO MOVING ANY PERMANENT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

SIGNALS

- (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.
- (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.

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GENERAL
NOTES

GENERAL NOTES (CONT.)

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.
- (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.

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GENERAL
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SPECIAL NOTES

RESURFACING

- (1) SURFACE IS TO BE CROWNED AS DIRECTED BY THE ENGINEER.
- (2) WHEN A PERFORMANCE GRADE (PG) ASPHALT MIX WITH PROPERTIES GREATER THAN THAT OF PG64-22 IS CALLED FOR ON RESURFACING PLANS AND IS THE ONLY ASPHALT GRADE ON THE PROJECT, THE CONTRACTOR HAS THE OPTION OF USING EITHER THE ASPHALT GRADE SHOWN IN THE PLANS OR AN ASPHALT GRADE EQUAL TO OR BETTER THAN PG64-22 FOR DRIVEWAYS AND BUSINESS ENTRANCES, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE MATERIAL WILL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THE ASPHALT OR ASPHALT MIX. THE MATERIAL TICKETS SHALL BE MARKED "FOR DRIVEWAYS AND BUSINESS ENTRANCES ONLY" AT THE POINT OF MANUFACTURE.
- (3) THE INSIDE SHOULDER WILL BE PAVED CONCURRENTLY WITH THE INSIDE TRAFFIC LANE.
- (4) THE CONTRACTOR SHALL TAKE EXTREME CARE WHEN COLD PLANING THE EXISTING ASPHALT OFF BRIDGE DECK SO AS NOT TO DAMAGE THE EXISTING DECK SEALANT AND/OR EXPANSION JOINT MEMBERS (STEEL PLATES, BARS, AND/OR HEADERS). IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR NECESSARY REPAIRS TO ALL DAMAGED MEMBERS TO THE SATISFACTION OF THE PROJECT ENGINEER AT NO ADDITIONAL COST.
- (5) THE BITUMINOUS MATERIAL DESIGNATED TO RESTORE THE COLD PLANING AREA WILL BE PLACED WITHIN 96 HOURS OF THE COMMENCEMENT OF COLD PLANING OPERATIONS. COLD PLANING OPERATIONS WILL BE LIMITED TO AN AREA EQUAL TO THAT WHICH CAN BE COVERED WITH BITUMINOUS MATERIAL WITHIN THE TIME LIMITS SPECIFIED, EVEN IF COLD PLANING OPERATIONS MUST BE SUSPENDED UNTIL PAVING CATCHES UP.

STORM DRAIN STRUCTURES

- (1) TAPER AROUND ALL CATCH BASINS AS DIRECTED BY THE ENGINEER.
- (2) THE CONTRACTOR SHALL PROPERLY ADJUST ALL CATCH BASINS, AREA DRAINS, AND MANHOLES TO THE FINISHED GRADE OF THE PAVEMENT. EXTENSION RINGS SHALL BE ADDED/REMOVED FROM EXISTING CATCH BASINS, AREA DRAINS, AND MANHOLES TO RAISE/LOWER THE GRATE OR LID TO FINAL PAVEMENT ELEVATION. ADJUSTMENTS ARE TO BE MADE PRIOR TO THE LAYING OF SURFACE MIX ITEM 411-02.10. PAYMENT FOR MANHOLE, AREA DRAIN, AND CATCH BASIN ADJUSTMENTS WILL BE MADE AT THE UNIT PRICE BID FOR ITEM 611-09.01 ADJUSTMENT OF EXISTING CATCH BASIN (EACH).

PAVEMENT MARKING

- (6) UNDER THE DIRECTION OF THE ENGINEER, THE CONTRACTOR MAY BE REQUIRED TO APPLY PAINTED MARKINGS IN THE PAVEMENT AREAS NOT SPECIFICALLY DETAILED IN THE PLANS. PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR ITEM NO. 716-05.20.
- (7) UNDER THE DIRECTION OF THE ENGINEER, THE CONTRACTOR MAY BE REQUIRED TO APPLY PLASTIC MARKINGS IN THE PAVEMENT AREAS NOT SPECIFICALLY DETAILED IN THE PLANS. PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR ITEM NO. 716-12.02.

SIGNS

- (1) IF THE CONTRACTOR ELECTS TO UTILIZE SIGN POST ANCHORS (STUBS) FOR SIGN ERECTION, THESE SHALL BE REMOVED WHEN THE SIGNS ARE REMOVED TO AVOID FUTURE DAMAGE TO MOWERS OR OTHER MACHINERY.

MISCELLANEOUS

- (1) ITEM 303-02 TO BE PLACED BEFORE PLACING SURFACING MATERIAL.
- (4) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ANY SIGNS AND MAILBOXES DURING THE OPERATION. ANY SIGNS OR MAILBOXES DAMAGED AS A RESULT OF THE OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

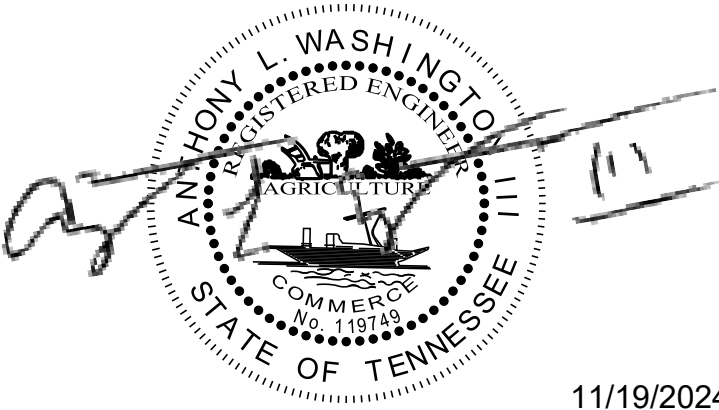
- (1) THE CONTRACTOR SHALL KEEP TWO TRAFFIC LANES, ONE IN EACH DIRECTION, OPEN TO TRAFFIC DURING NON-WORK HOURS OR NON-WORK DAYS.

JOINT SEALANTS

- (1) THE CONTACT SURFACE OF TRANSVERSE JOINTS AND LONGITUDINAL JOINTS IN THE SURFACE LIFT SHALL BE SEALED BY APPLYING JOINT SEALANT PRIOR TO PLACEMENT OF ADDITIONAL ASPHALT AGAINST THE PREVIOUSLY PLACED MATERIAL. MANUFACTURER'S RECCOMENDATIONS SHALL BE FOLLOWED IF THE MATERIAL NEEDS TO BE RE-HEATED, AND WHEN PLACING THE THIN, UNIFORM LAYER.
- (3) PRIOR TO APPLICATION OF THE SEALANT, THE FACE OF THE JOINT SHALL BE THOROUGHLY DRY AND FREE FROM DUST OR ANY OTHER MATERIAL THAT WOULD PREVENT PROPER SEALING. ALL JOINTS SHALL BE SWEEPED OR BLOWN FREE OF LOOSE MATERIAL DIRT, VEGETATION, AND OTHER DEBRIS BY MEANS OF COMPRESSES AIR OR A POWER SWEEPER.
- (4) TRUCK AND VEHICLE TRAFFIC SHALL NOT DRIVE ACROSS A SEALED JOINT UNTIL IT HAS DIRED SUFFICIENT TO PREVENT DAMAGE FROM TRACKING.

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SPECIAL
NOTES

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 PRE-CONSTRUCTION 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)

THIS PROJECT INCLUDES RESURFACING, STRIPING, TRAFFIC CONTROL, GUARDRAIL WORK, AND BROOMING AND DEGRASSING SHOULDERS.

EROSION PREVENTION AND SEDIMENT CONTROL GENERAL NOTES

DISTURBED AREA

- (1)

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

SEDIMENT CONTROL

- (6)

EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES.
- (8)

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

GOOD HOUSEKEEPING MEASURES & WASTE DISPOSAL

- (29)

THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS SHALL BE REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFFSITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EPSC SHALL BE REMOVED FROM THE SITE.
- (30)

THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION. APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED.
- (31)

CONTRACTORS SHALL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED, NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE, AND PROPERLY SIGNED. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS SHALL NOT BE PERMITTED ONSITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.
- (32)

WHEEL WASH WATER SHALL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER SHALL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM.
- (33)

IF PORTABLE SANITARY FACILITIES ARE PROVIDED ON CONSTRUCTION SITES, SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT CONTRACTOR OR AS REQUIRED BY ANY REGULATIONS. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.
- (34)

ONLY CONSTRUCTION PRODUCTS NEEDED SHALL BE STORED ONSITE BY THE CONTRACTOR. THE CONTRACTOR SHALL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING SHALL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR'S RESPONSIBLE PARTY SHALL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL.

- (35)

WHEN POSSIBLE, ALL PRODUCTS SHALL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFFSITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS SHALL BE FOLLOWED.
- (36)

ALL PAINT CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHALL BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.
- (37)

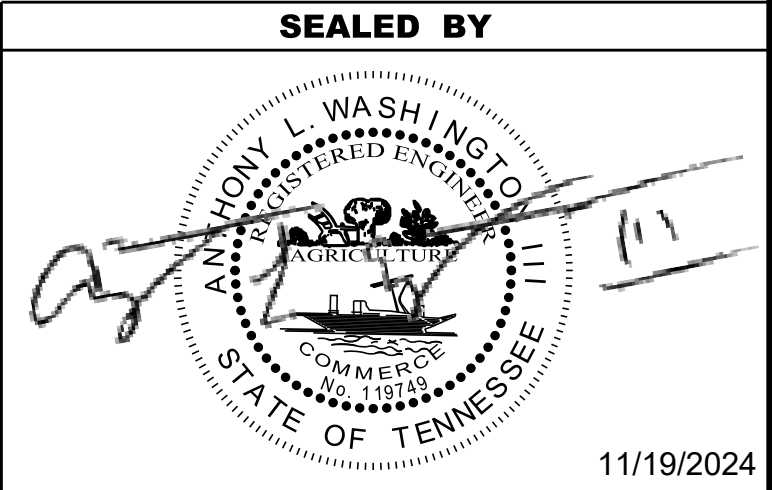
ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN A MANNER WHICH IS COMPLIANT WITH LOCAL OR STATE REGULATIONS. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES, AND THE INDIVIDUAL DESIGNATED AS THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.
- (38)

OPEN BURNING IS PROHIBITED UNLESS IT IS SPECIFICALLY ALLOWED BY LAW. IF ALLOWED, NATURAL VEGETATION, TREES, AND UNTREATED LUMBER SHALL BE THE ONLY MATERIALS THAT CAN BE OPEN BURNED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE STATE AND LOCAL PERMITS PRIOR TO ANY BURNING.
- (39)

DISPOSAL OF ONSITE VEGETATION AND TREES BY CHIPPING THEM INTO MULCH IS PREFERABLE TO OPEN BURNING. THIS MULCH MAY BE USED AS AN ONSITE SOIL STABILIZATION MEASURE WHERE APPROPRIATE.
- (40)

WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR. IMPACTS TO WATERS OF THE STATE/U.S. SHALL BE AVOIDED IF POSSIBLE. IF UNAVOIDABLE, THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S), CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSHIP-15(231)	2E



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL
NOTES

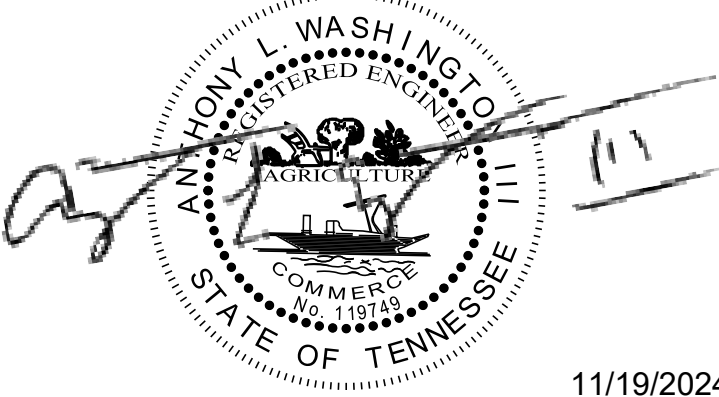
ENVIRONMENTAL NOTES (CONT.)

SPILL PREVENTION, MANAGEMENT & NOTIFICATION

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSIP-15(231)	2E1

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ENVIRONMENTAL
NOTES

TRAFFIC CONTROL SIGN TABULATION (RESURFACING)						
M.U.T.C.D. SIGN NO.	LEGEND \ DESCRIPTION	SIZE IN INCHES			S.F.	TOTAL NUMBER REQUIRED
		L	x	W		
G20-1	ROAD WORK NEXT 10 MILES	48"	x	24"	8	4
G20-2	END ROAD WORK	48"	x	24"	8	51
W4-2L	LEFT LANE ENDS	48"	x	48"	16	4
W4-2R	RIGHT LANE ENDS	48"	x	48"	16	4
W8-11	UNEVEN LANES	48"	x	48"	16	62
W8-15	GROOVED PAVEMENT	48"	x	48"	16	62
W8-15P	MOTORCYCLE PLAQUE	48"	x	48"	16	62
W20-1	ROAD WORK 1 MILE	48"	x	48"	16	4
W20-1	ROAD WORK 1/2 MILE	48"	x	48"	16	4
W20-1	ROAD WORK 1000 FEET	48"	x	48"	16	4
W20-1	ROAD WORK AHEAD	48"	x	48"	16	51
W20-5L	LEFT LANE CLOSED 1/2 MILE	48"	x	48"	16	4
W20-5L	LEFT LANE CLOSED 1500 FT	48"	x	48"	16	4
W20-5R	RIGHT LANE CLOSED 1/2 MILE	48"	x	48"	16	4
W20-5R	RIGHT LANE CLOSED 1500 FT	48"	x	48"	16	4
W20-7A	FLAGGER SYMBOL - PORTABLE	48"	x	48"	16	4
W21-2	FRESH OIL - PORTABLE	48"	x	48"	16	4
W21-5	SHOULDER WORK	48"	x	48"	16	28
THIS CONSTRUCTION SIGNING IS TO BE A MINIMUM. OTHER SIGNS AS DIRECTED BY THE ENGINEER MAY BE REQUIRED DURING DIFFERENT PHASES.					TOTAL	5384

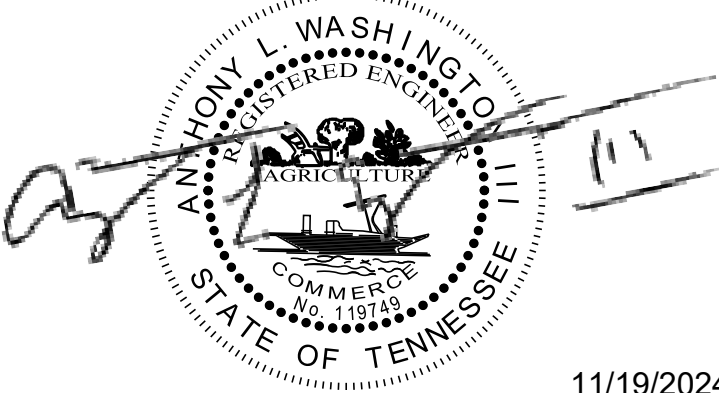
PROPOSED GUARDRAIL (RESURFACING)									
SIDE			LOG MILE	GUARDRAIL			TERMINAL ANCHORS		
				GUARDRAIL TRANSITION 27 IN TO 31 IN	EARTH PAD FOR TYPE 38 GR. END TREATMENT	GUARDRAIL REMOVED	TYPE 13 MASH TL3 (9.375')	TYPE 38 MASH TL3 (26.896')	TYPE 21 MASH TL2 (21.875')
DIR	LT	RT		705-02.10 (EACH)	705-04.09 (EACH)	706-01 (L.F.)	705-06.10 (EACH)	705-06.20 (EACH)	705-06.30 (EACH)
WB		X	9.845	1	1	50	1		
EB		X	9.908	1	1	50	1		
EB		X	11.136	1	1	50	1		
EB		X	11.412	1		50		1	
WB		X	11.457	1	1	50			1
EB		X	11.533	1	1	50	1		
WB		X	11.647	1	1	50			1
EB		X	11.923	1	1	50	1		
WB		X	16.224	1	1	50		1	
WB		X	16.340	1	1	50		1	
WB		X	17.231	1	1	50		1	
WB		X	18.554	1	1	50	1		
EB		X	18.559	1	1	50	1		
TOTALS				13	12	650	7	4	2

ESTIMATED SIGNAL QUANTITIES				
HARDEMAN CO. SR 15 (BEG. 9.23 - 18.65)				
LOOP REPLACEMENT FOR RESURFACING JOB				
INTERSECTION	LOOP WIRE (LF) 730-14.03	SAW SLOT (LF) 730-14.02	SHIELDED CABLE (LF) 730-14.01	1" CONDUIT (PVC) (LF) 730-12.01
SR 15 @ WALMART DR**	2760	1160	50	50
SR 15 @ SR 18*	1332	446	0	0
SR 15 @ JONES ST*	1254	462	0	0
SR 15 @ SR 125*	780	328	0	0
* MAINLINE ONLY				
** INCLUDES SIDE STREETS				
TOTALS	6126	2396	50	50

CATCH BASINS					
LOG MILE	DIR	LEFT	RIGHT	GRAY IRON CASTINGS (CATCH BASIN) 611-03.04	ADJUSTMENT OF EXISTING CATCH BASIN 611-09.01
12.113	EB		X	250	
12.226	EB		X	250	
12.266	WB	X		250	
12.267	EB		X	250	
12.276	WB	X		250	
12.277	WB	X		250	
12.307	EB		X	250	
12.315	WB	X		250	
12.367	WB	X		250	
12.372	EB		X	250	
12.426	WB	X		250	
12.432	EB		X	250	
12.460	WB	X		250	
12.469	EB		X	250	
12.504	WB	X		250	
12.546	EB		X	250	
12.637	WB	X		250	
12.644	EB		X	250	
12.668	WB	X		250	
12.699	EB		X	250	
12.700	EB		X	250	
12.707	WB	X		250	
12.707	WB	X		250	
12.756	EB		X	250	
12.763	WB	X		250	
12.814	EB		X	250	
12.818	WB	X		250	
12.912	WB	X		250	
13.010	WB	X		250	
13.062	WB	X		250	
13.063	WB	X		250	
13.066	EB		X	250	
13.067	EB		X	250	
13.081	EB		X	250	
13.088	WB	X		250	
13.110	EB		X	250	
13.121	WB	X		250	
13.142	EB		X	250	
13.159	EB		X	250	
13.178	EB		X	250	
13.186	WB	X		250	
13.195	WB	X		250	
13.209	WB	X		250	
13.225	WB	X		250	
13.227	EB		X	250	
13.227	EB		X	250	
13.248	EB		X	250	
13.252	WB	X		250	
13.261	EB		X	250	
13.292	WB	X		250	
13.308	EB		X	250	
13.339	EB		X	250	
13.344	WB	X		250	
13.601	EB		X	250	1
13.677	EB		X	250	1
TOTAL				13750	2

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSP-15(231)	2F

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED
QUANTITIES

UTILITIES

- (1) 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

GAS/WATER/SEWER:
BOLIVAR UTILITY DEPARTMENT
115 N. Washington St.
Bolivar, TN 38008
CONTACT: Cliff Henson
OFFICE PHONE: 731 658 5894
Email: chenson.cityofbolivar@gmail.com

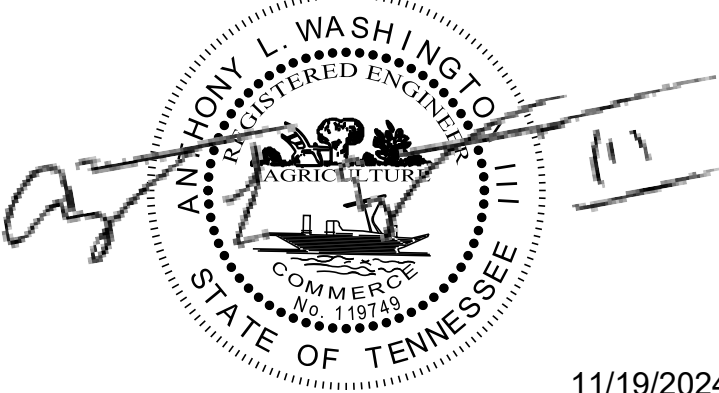
CABLE:
CHARTER COMMUNICATIONS
24 Circle Drive
McKenzie, TN 38201
CONTACT: Keith Chesser
OFFICE PHONE: 731 352 1146
CELL PHONE: 731 621 9552
Email: keith.chesser@charter.com

ELECTRIC:
BOLIVAR ENERGY AUTHORITY
815 Tennessee St.
Bolivar, TN 38008
CONTACT: Randy Plunk
OFFICE PHONE: 731 658 5257
Email: rplunk@bea-tn.com

COMMUNICATIONS:
AT&T
315 E. College Street
Jackson, TN 38301
CONTACT: Daniel R. Potts
OFFICE PHONE: 901 488 2359
Email: dp7607@att.com

TYPE	YEAR	PROJECT NO.	SHEET NO.
RESURF	2025	NH/HSIP-15(231)	3

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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	2025	NH/HSSIP-15(231)	4

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.

- (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 SIX 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 3/4 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.

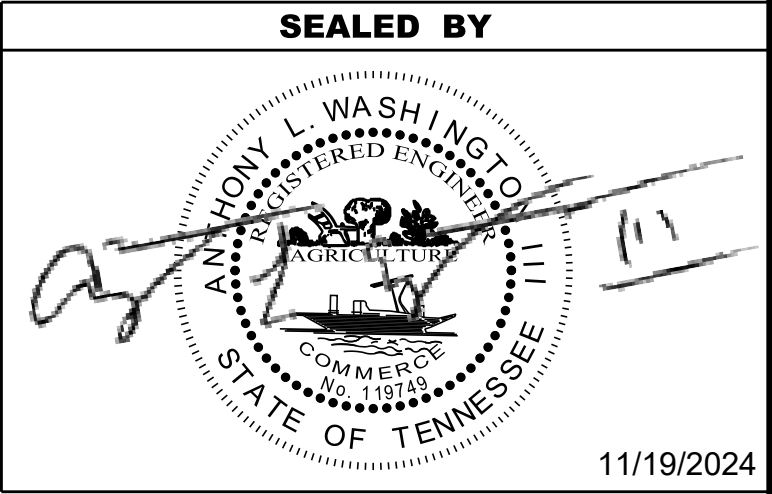
THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE WITHIN 8 FEET OF A TRAFFIC LANE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE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

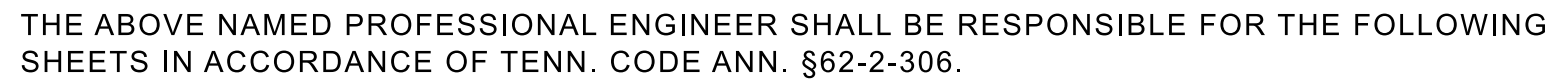
1. WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
2. WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.

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



Brian Egli
2024.11.14 11:16:56 -06'00'
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED
AND SEALED. THE SIGNATURE MUST BE VERIFIED ON THE
ELECTRONIC DOCUMENTS.

SHEET NAME	SHEET NO.
SIGNATURE SHEET _____	STRUCTURE-SIGN 1
BRIDGE PLANS _____	BI THRU B14

YEAR	PROJECT NO.	SHEET NO.
2025	35S015-M3-006	STRUCTURE-SIGN 1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

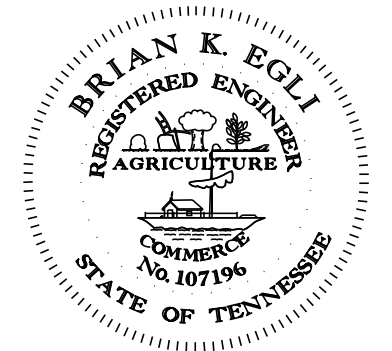
SIGNATURE
SHEET

PIN 133798.00

[illegible]

INDEX OF DRAWINGS	DWG. NO.	LAST REV. DATE
SIGNATURE SHEET	STRUCTURE-SIGN 1	
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TYPE I THIN EPOXY OVERLAY NOTES	B3	
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PHASE CONSTRUCTION	B5	
PLAN VIEW (35SR0150051)	B6	
PLAN VIEW (35SR0150009)	B7	
PLAN VIEW (35SR0150053)	B8	
PLAN VIEW (35SR0150011)	B9	
PLAN VIEW (35SR0150013)	B10	
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DEPARTMENT OF TRANSPORTATION
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HATCHIE RIVER
BR. NOS. 35SR0150003
35SR0150051
35SR0150009
35SR0150053
35SR0150011
35SR0150013
35SR0150055
35SR0150015
35SR0150017
HARDEMAN COUNTY
2025

DESIGNED BY _____ DATE _____
DRAWN BY Z.HAYNES DATE 8/24
SUPERVISED BY K. MARTINKO DATE 8/24
CHECKED BY _____ DATE _____


DESIGNED BY _____	DATE _____
DRAWN BY _____ Z.HAYNES	DATE 8/24
SUPERVISED BY _____ K. MARTINKO	DATE 8/24
CHECKED BY _____	DATE _____

Y. _____	DATE _____
Z.HAYNES	DATE 8/24
BY K. MARTINKO	DATE 8/24
_____	DATE _____

EXPANSION JOINT REPAIR NOTES

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.

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.



BRIDGE TABULATION,
ESTIMATED QUANTITIES, AND
EXPANSION JOINT REPAIR
NOTES

PLEASANT RUN CREEK

35-SR15-16.37

35-SR15-16.47

35-SR15-16.64

35-SR15-16.99

35-SR15-17.26

35-SR15-17.52

OVER

OVERFLOW
75 0015 17 00

35-SR15-17.68
DUEB

OVER
HATCHE DIVER

HATCHIE RIVER
RD NO 6 75600150

BR. NOS. 35SR0150003
35SR01500051

35SR0150051
35SR0150000

35SR0150009
35SR0150009

35SR0150053
35SR0150011

35SR0150011
35SR0150013

35SR0150013
35SR0150055

35SR0150055
35SR0150015

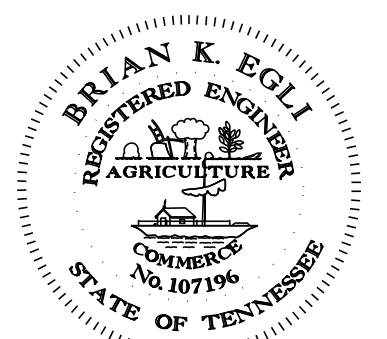
35SR0150015
35SR0150017

353R0150017
HARDEMAN COUNTY

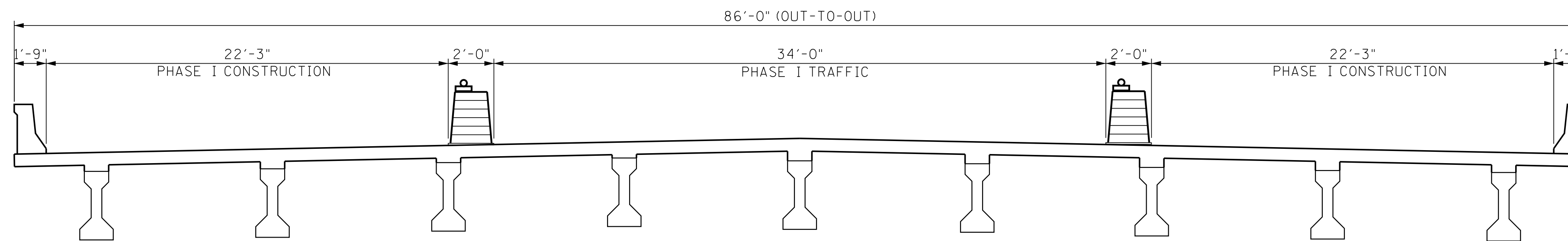
HARDEMAN COUNTY
2025

[illegible]

DESIGNED BY _____ DATE _____
 DRAWN BY Z.HAYNES DATE 8/24
 SUPERVISED BY K. MARTINKO DATE 8/24
 CHECKED BY _____ DATE _____



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PLAN VIEW
35-SR15-11.78
OVER
PLEASANT RUN CREEK
BR. NO. 35SR0150003
HARDEMAN COUNTY
2025

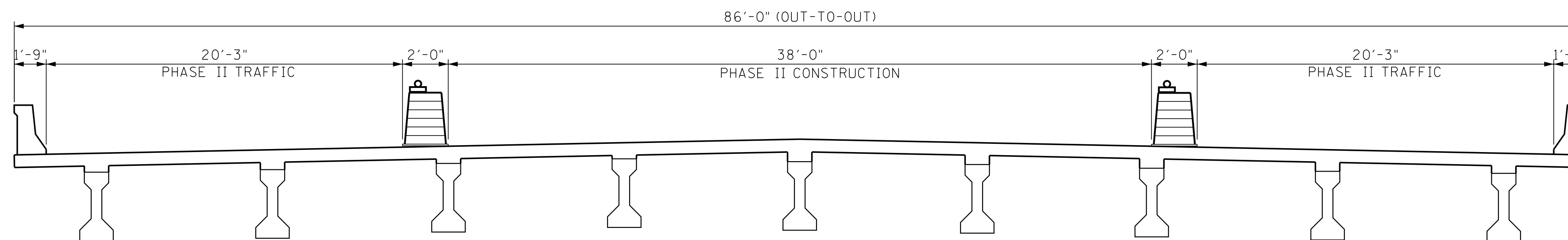
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EASTBOUND BRIDGE

(35-SR15-11.78)

PHASE I CONSTRUCTION

(LOOKING AHEAD ON SURVEY)

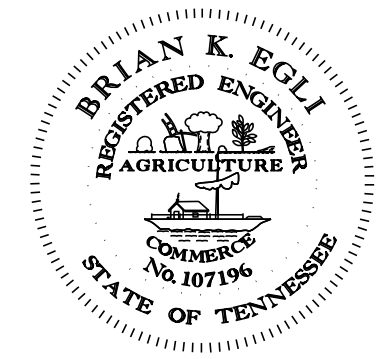


EASTBOUND BRIDGE

(35-SR15-11.78)

PHASE II CONSTRUCTION

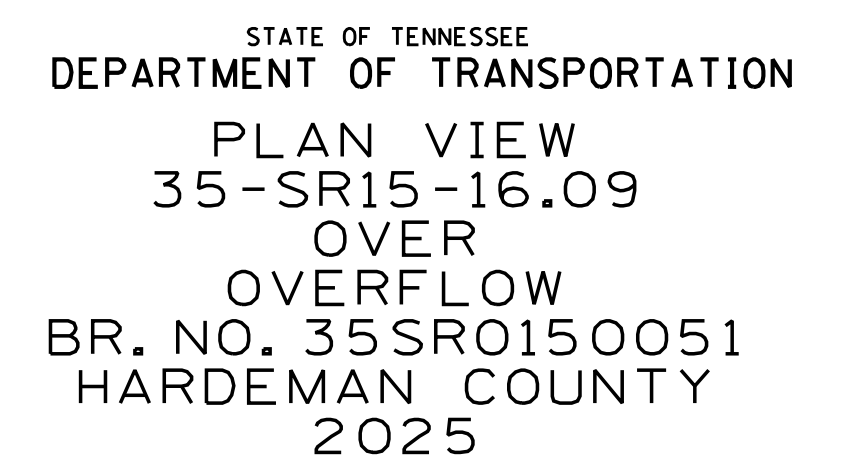
(LOOKING AHEAD ON SURVEY)



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PHASE CONSTRUCTION
35-SR15-11.78
OVER
PLEASANT RUN CREEK
BR. NO. 35SR0150003
HARDEMAN COUNTY
2025

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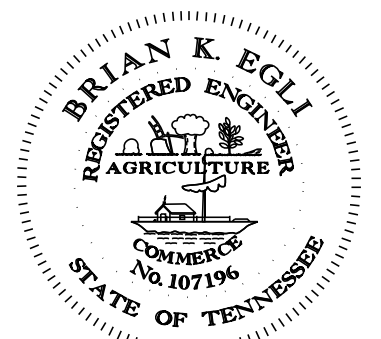
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DETAIL @ APPROACH END NO. 2
FOR DETAILS



B6

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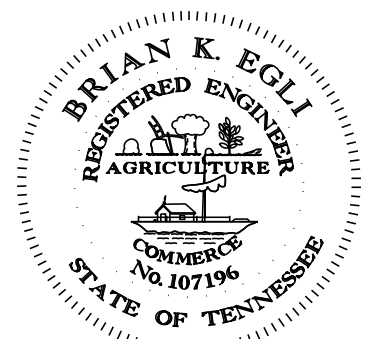
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DETAIL @ APPROACH END NO. 2
FOR DETAILS



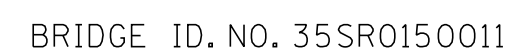
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PLAN VIEW
35-SR15-6.37
OVER
OVERFLOW
BR. NO. 35SR0150009
HARDEMAN COUNTY
2025

[illegible]

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DETAIL @ APPROACH END NO.2
FOR DETAILS

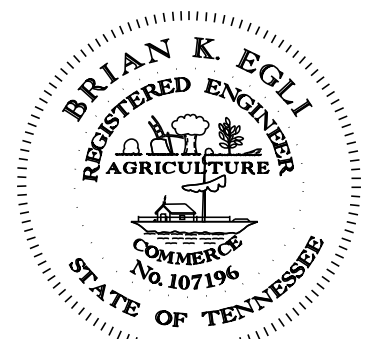
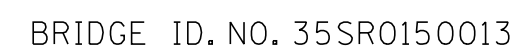


B8

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PLAN VIEW
35-SR15-16.64
OVER
OVERFLOW
BR. NO. 35SR0150011
HARDEMAN COUNTY
2025

[illegible]

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PLAN VIEW
35-SR15-16.99
OVER
OVERFLOW
BR. NO. 35SR0150013
HARDEMAN COUNTY
2025

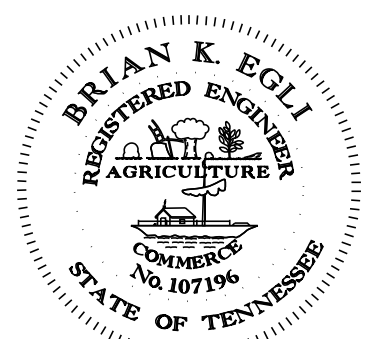
DESIGNED BY _____ DATE _____
 DRAWN BY Z.HAYNES DATE 8/24
 SUPERVISED BY K. MARTINKO DATE 8/24
 CHECKED BY _____ DATE _____

[illegible]

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DETAIL @ APPROACH END NO. 2
FOR DETAILS



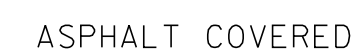
DESIGNED BY _____ DATE _____
 DRAWN BY Z.HAYNES DATE 8/24
 SUPERVISED BY K. MARTINKO DATE 8/24
 CHECKED BY _____ DATE _____



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PLAN VIEW
35-SR15-17.26
OVER
OVERFLOW
BR. NO. 35SR0150055
HARDEN COUNTY
2025

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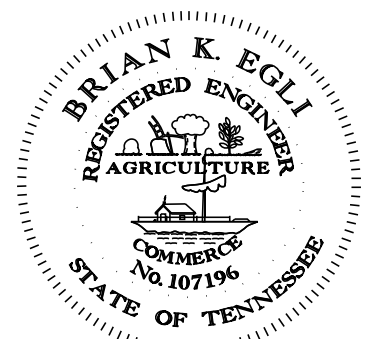
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DETAIL @ APPROACH END NO.2
FOR DETAILS



PLAN VIEW
35-SR15-17.52
OVER
OVERFLOW
BR. NO. 35SR0150015
HARDEMAN COUNTY
2025

[illegible]

SEE EXPANSION JOINT REPAIR —
DETAIL @ APPROACH END NO. 2
FOR DETAILS



PLAN VIEW
35-SR15-17.68
OVER
HATCHIE RIVER
BR. NO. 35SR0150017
HARDEMAN COUNTY
2025

DESIGNED BY _____ DATE _____
 DRAWN BY Z.HAYNES DATE 8/24
 SUPERVISED BY K. MARTINKO DATE 8/24
 CHECKED BY _____ DATE _____

PROJECT NO.	YEAR	SHEET NO.
35S015-M3-006	2025	B14

[illegible]

PHASE I CONSTRUCTION

EASTBOUND BRIDGE

PHASE II CONSTRUCTION

DESIGNED BY _____ DATE _____
 DRAWN BY Z.HAYNES DATE 8/24
 SUPERVISED BY K. MARTINKO DATE 8/24
 CHECKED BY _____ DATE _____



35-SR15-16.09
35-SR15-16.37
35-SR15-16.47
35-SR15-16.64
35-SR15-16.99
35-SR15-17.26
35-SR15-17.52

35-SR15-17.68
OVER

HARDEMAN COUNTY
2025

[illegible]

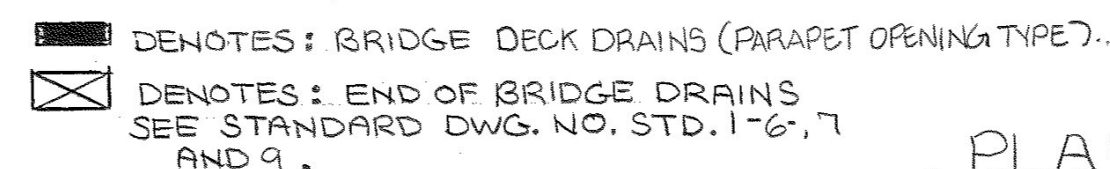
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DRAINAGE AREA ----- 24.9 SQ. MILES
DESIGN DISCHARGE (100 YEAR) ----- 6190 C.F.S.
WATER AREA PROVIDED BELOW EL. 360.53 = 1208 SQ. FT.
100 YEAR VELOCITY ----- 5.13 FT./SEC.
100 YEAR BRIDGE BACKWATER ----- 0.97 FT.
ROADWAY OVERTOPPING ELEVATION ----- 368.00
100 YEAR BRIDGE BACKWATER ELEVATION ----- 361.51
500 YEAR DISCHARGE 7820 CFS AT ELEVATION 362.44

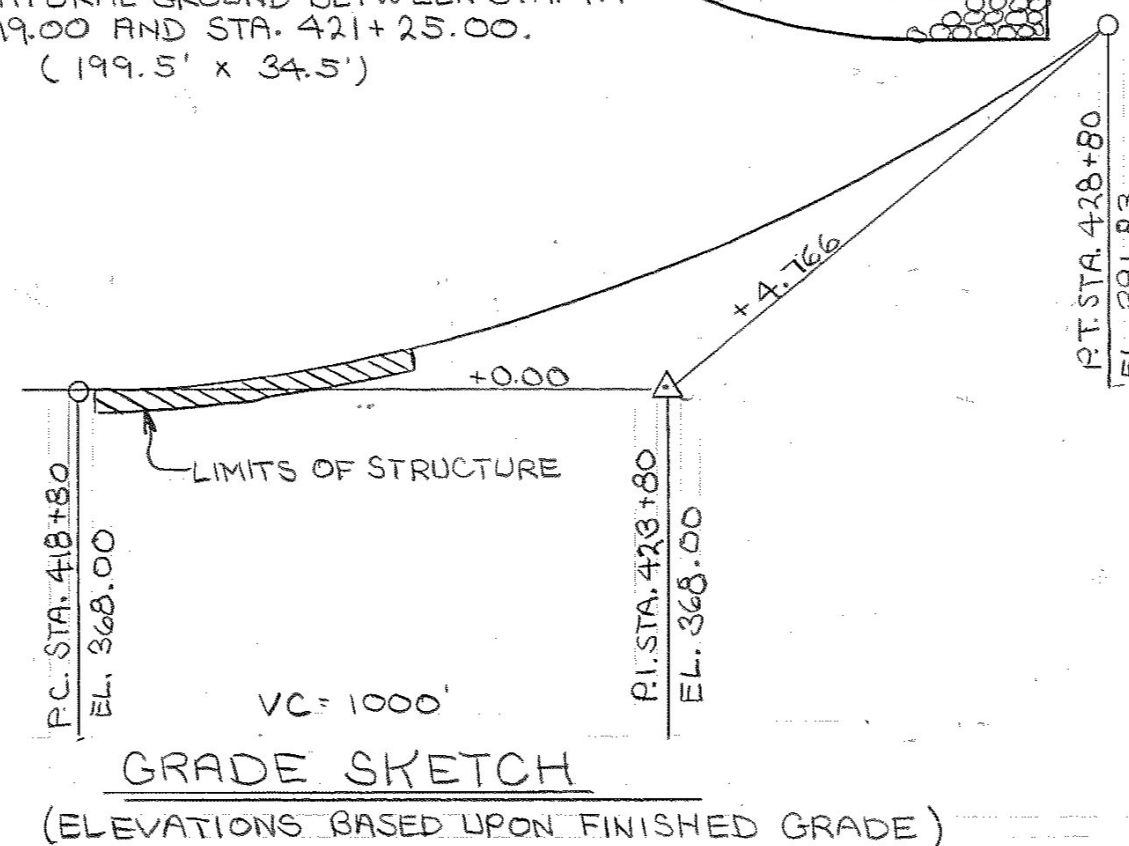
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① DENOTES INTEGRAL
② DENOTES FIXED



EXISTING BRIDGE NO. 35-15-11.88)
AND APPROACHES TO BE REMOVED TO
NATURAL GROUND BETWEEN STA. 419
419.00 AND STA. 421+25.00.
(199.5' x 34.5')



APPROVAL OF SHOP DRAWINGS _____ 105A _____ 3-06-95

2015 ADT = 9,692
84'-0" ROADWAY W/STD-1-1 BRIDGERAIL
DESIGN SPEED = 50 MPH

BRIDGE-NO. 2

STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

LAYOUT

STATE ROUTE 15 OVER
PLEASANT RUN CREEK

BRIDGE I.D. NO. 35SR0150003

STATION 420+10.50 (LOG MILE 11.88)

HARDEMAN COUNTY

1995

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

M-306-27

DESIGNED BY	REGINA HILL	DATE	10/92
DRAWN BY	MORGAN MANNCHEN	DATE	11/94
SUPERVISED BY	RLH/ RAP	DATE	11/94
CHECKED BY	REH	DATE	12/94

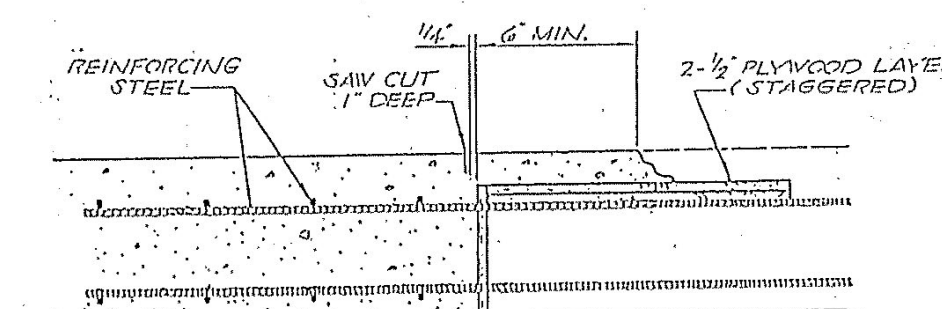
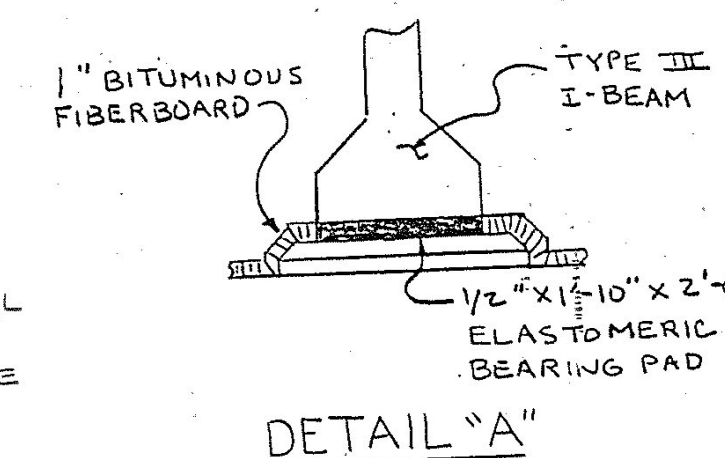
TEMPORARY MEDIAN BARRIER (L.F.) = 289

CONST. NO. 35001-3245-14

PROJECT NO.	YEAR	SHEET NO.
MA-NH-15(61)	1995	

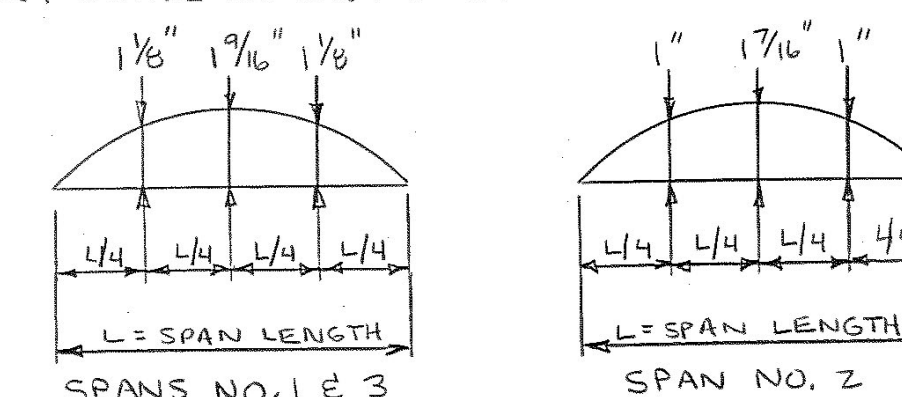
REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION



SLAB CONSTRUCTION JOINT DETAIL

NOTE: DECK CONCRETE POURING SEQUENCE: SLAB CONSTRUCTION JOINTS MAY BE LOCATED AT THE CONTRACTOR'S OPTION SUBJECT TO THE FOLLOWING: 1) NO CONSTRUCTION JOINT MAY BE LOCATED CLOSER THAN 10 FEET OR FURTHER THAN 15 FEET FROM AN INTERIOR SUPPORT. 2) 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. THE CONTRACTOR SHALL MAKE ADEQUATE PROVISIONS DURING PLACEMENT OF SLAB TO PREVENT THE EXTERIOR BEAM FROM TWISTING. NO EQUIPMENT SHALL BE PERMITTED ON THE BRIDGE UNTIL ALL POURS ARE MADE AND THE CONCRETE IS PROPERLY CURED. ALL SLAB CONSTRUCTION JOINTS SHALL BE IN ACCORDANCE WITH THE SLAB CONSTRUCTION JOINT DETAIL SHOWN ABOVE.



DEAD LOAD CORRECTION CURVE

NOTE: THIS CURVE IS FOR DEAD LOAD SLAB AND ALL DEAD LOADS THAT ARE APPLIED AFTER SLAB IS IN PLACE AND SHOULD BE CORRECTED TO COMPENSATE FOR THE EFFECTS DUE TO VERTICAL CURVE. IF PRESTRESSED DECK PANELS ARE USED AND BEAMS ARE PROFILED AFTER PANELS ARE IN PLACE, REDUCE THE DEAD LOAD CORRECTION VALUES SHOWN BY 25%.

NOTE: NO PORTION OF THE PARAPET SHALL BE POURED UNTIL THE ENTIRE DECK SLAB IS IN PLACE.

NOTE: WHEN POURING SLAB, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPET. THE PARAPET SHALL NOT BE POURED UNTIL THE SLAB IS POURED AND CURED. ALSO SEE DWG. NOS. STD-11-13 M-306-34 AND 36.

NOTE: THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SUPPORTING THE BEAMS TO PREVENT DAMAGE DUE TO TWISTING OR OVERTURNING DURING ALL PHASES OF CONSTRUCTION.

NOTE: PH. 1 DENOTES PHASE 1
PH. 2 DENOTES PHASE 2

BRIDGE NO. 2

STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE

STATE ROUTE 15 OVER

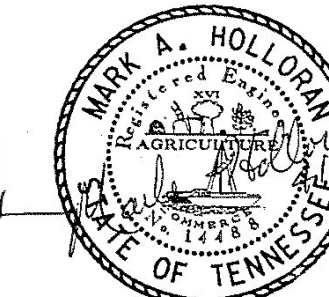
PLEASANT RUN CREEK

STATION 420+10.50

LOG MILE 11.88

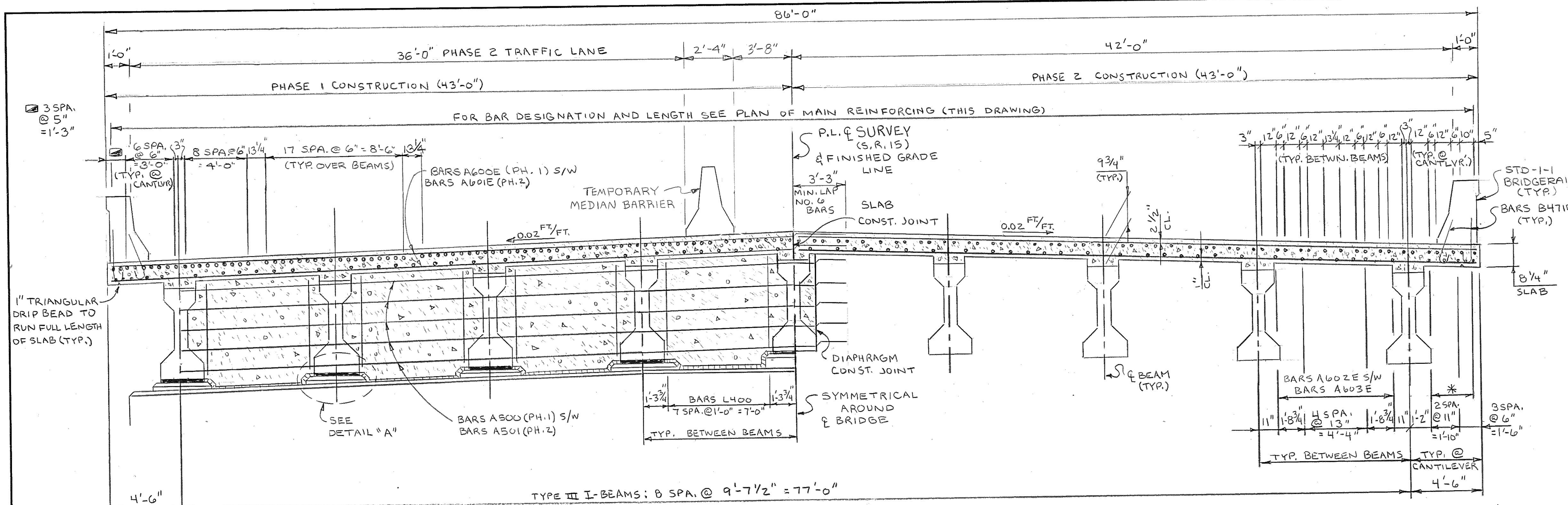
HARDEMAN COUNTY

1995



CORRECT *Edward P. Whisenand*
ENGINEER OF STRUCTURES

M-306-30



213.500m TOTAL BRIDGE LENGTH

BEGIN. OF BRIDGE
STA. 12+785.250
F.G. EL. 108.342

END OF BRIDGE
STA. 12+998.750
F.G. EL. 107.999

23.901m 23.671m 23.671m 23.671m 23.671m 23.671m 23.671m 23.901m

€ BENT NO. 1
STA. 12+809.150
F.G. EL. 108.331

€ BENT NO. 2
STA. 12+832.821
F.G. EL. 108.292

€ BENT NO. 3
STA. 12+856.492
F.G. EL. 108.234

€ BENT NO. 4
STA. 12+880.163
F.G. EL. 108.180

€ BENT NO. 5
STA. 12+903.834
F.G. EL. 108.136

€ BENT NO. 6
STA. 12+927.505
F.G. EL. 108.100

€ BENT NO. 7
STA. 12+951.176
F.G. EL. 108.067

€ BENT NO. 8
STA. 12+974.847
F.G. EL. 108.033

LOW GIRDER
EL. 106.371

APPROX. EXIST. GROUND LINE

CONCRETE PILES (TYP.) @ EA. ABUTMENT

CLASS "B" RIP-RAP (0.750 THICK - TYP.)

STEEL PIPE PILES (TYP.) @ EA. BENT

100 YR. CONTRACTION SCOUR = 2.85 FT. @ ELEV. 103.13

100 YR. CONTRACTION PIER SCOUR = 0.0 FT.

CONCRETE COLLAR (TYP.) @ EACH BENT

2:1 SLOPE @ RT. Δ TO ABUT. (TYP.)

① DENOTES INTEGRAL

Ⓢ DENOTES FIXED

12+780 12+800 12+820 12+840 12+860 12+880 12+900 12+920 12+940 12+960 12+980 13+000 13+320 13+340

/// DENOTES: HATCHED AREA TO BE EXCAVATED TO EL. 104.000 AND PAID FOR AS A ROADWAY ITEM (TYP.)

[illegible]

DWG. NO.	LATEST REV. DATE
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LAYOUT	U-28-1
GENERAL NOTES	U-28-2
ESTIMATED QUANTITIES	U-28-3
FOUNDATION DATA	U-28-4
SUPERSTRUCTURE	U-28-5
SUPERSTRUCTURE DETAILS	U-28-6
SUPERSTRUCTURE DETAILS	U-28-7
PRESTRESSED I-BEAM DETAILS	U-28-8
ABUTMENT NO. 1	U-28-9
ABUTMENT NO. 1 DETAILS	U-28-10
ABUTMENT NO. 2	U-28-11
ABUTMENT NO. 2 DETAILS	U-28-12
BENTS NO. 1 THRU 8	U-28-13
BENTS NO. 1 THRU 8 DETAILS	U-28-14
FINAL FOUNDATION DATA	U-28-15
BILL OF STEEL	U-28-16

S	DWG. NO.	LATEST REV. DATE
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BRIDGE RAILING SINGLE SLOPE CONCRETE PARAPET	STD-1-1SS	10-15-08
SLIDER PLATES AND DECK DRAINS	STD-1-2SS	
PAVEMENT AT BRIDGE ENDS	STD-1-5	08-08-08
BRIDGE END DRAIN w/ P.A.B.E.	STD-1-6	4-28-99
BRIDGE END DRAIN w/ P.A.B.E.	STD-1-7	7-31-00
BRIDGE END DRAIN 4'-0" x 8'-7" w/ P.A.B.E.	STD-1-9	05-01-95
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	3-02-02
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS		
CONSTRUCTION DETAILS	STD-4-4	6-10-96
STD. PILE DETAILS	STD-5-1	10-25-93
STD. PILE DETAILS	STD-5-2	04-08-05
STANDARD SEISMIC DETAILS	STD-6-1	5-21-99
REINFORCING BAR SUPPORT DETAILS		
FOR CONCRETE SLAB	STD-9-1	10-07-08
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	STD-10-1	04-08-05
STANDARD DETAILS AND INT. DIAPH. DETAILS		
FOR I-BEAMS	STD-14-2	10-15-00

NOTE: ALL DIMENSIONS SHOWN IN METERS,
WITH THE EXCEPTION OF STATIONS AND
ELEVATIONS, UNLESS OTHERWISE NOTED.

NOTE: CONTRACTOR SHALL BE RESPONSIBLE FOR
CONVERSION FROM METRIC UNITS.

2026 ADT = 11,821
25.200m ROADWAY WITH STD-1-1SS PARAPET
DESIGN SPEED = 90 km/h

BRIDGE NO. 1
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
LAYOUT OF BRIDGE
STATE ROUTE 15 OVER
HATCHIE RIVER OVERFLOW
STATION 12+892.000
BRIDGE I.D. NO. 35SR0150041
LOG MILE 16.14
HARDEMAN COUNTY
2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

U-28-1

ELEVATION

[illegible]

■ DENOTES: END OF BRIDGE DRAINS
(4'-0" X 8'-7") REQUIRED.
SEE STANDARD DRAWINGS STD-1-6,
STD-1-7, & STD-1-9.


 DENOTES: BRIDGE DECK GRATE DRAINS REQUIRED
 AT STATIONS SHOWN ABOVE. SEE STD.
 DWG. STD-1-2.

GRADE SKETCH

HYDRAULIC DATA

DRAINAGE AREA = 3346.02 km²
DESIGN DISCHARGE (100 YR.) = 361.21 m³/s
TOTAL DESIGN DISCHARGE = 1915.64 m³/s
WATER AREA PROVIDED BELOW EL.107.02 = 557.60 m²
100 YR. VELOCITY = 0.65 m/s
100 YR. BRIDGE BACKWATER = 0.06 m @ EL.107.37
ROADWAY OVERTOPPING EL. = 107.40

LIST OF SPECIAL PROVISIONS

	LAST
PROV. NO.	REV. DATE

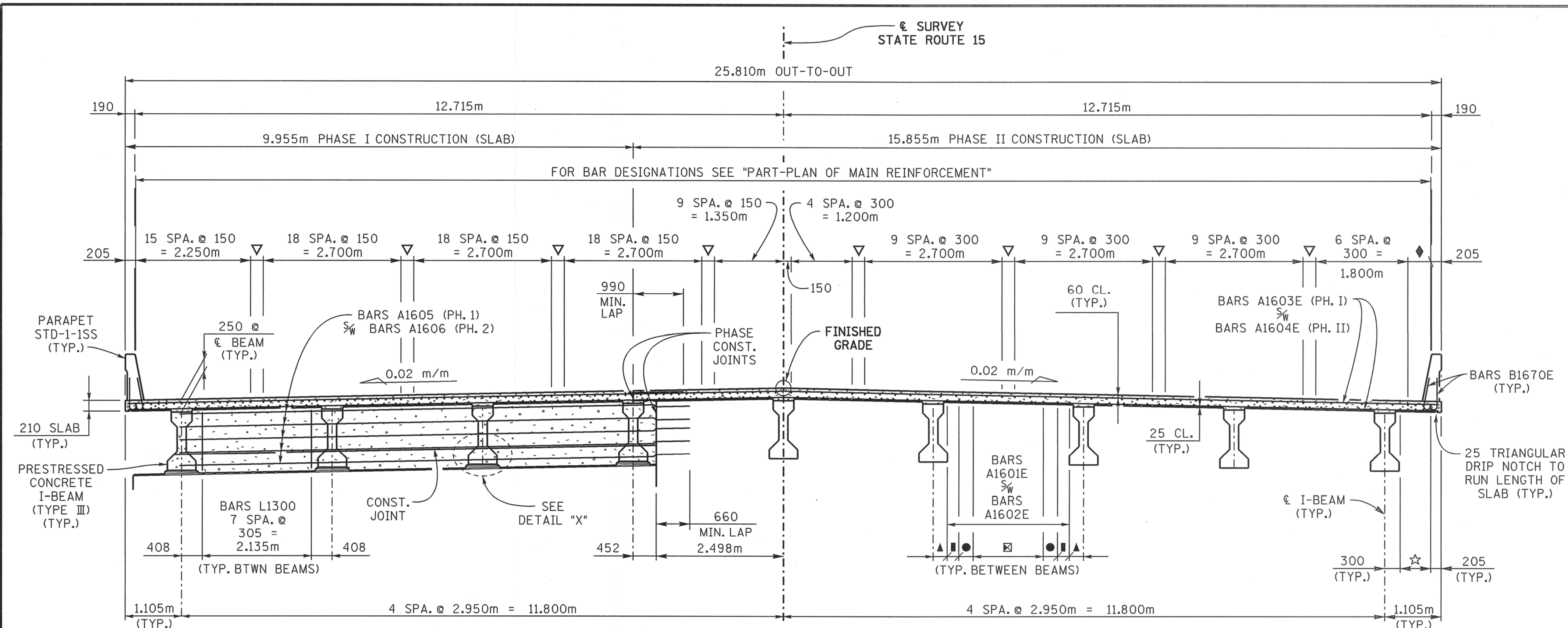
REGARDING BRIDGE DECK CRACK SEALING ----- 604CR ----- 03-01-06

NOTE: ANY WORK WITHIN THE STREAM CHANNEL AREA(EG. FOR PIER FOOTING, RIP-RAP PLACEMENT, MULTI-BARREL CULVERT/BRIDGE CONSTRUCTION, ETC.) SHALL BE SEPARATED FROM FLOWING WATER BY EXPOSED LOW POINTS AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL DURING DIVERSION OF FLOW OR REDUCED FLOW, UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS, EC-STR-31 AND TEMPORARY DIVERSION CULVERTS, EC-STR-32 FOR SINGLE BARREL CULVERT CONSTRUCTION.

DESIGNED BY <u>S. GOAD</u>	DATE <u>8-01</u>
DRAWN BY <u>M. R. MANNCHEN</u>	DATE <u>3-05</u>
SUPERVISED BY <u>M.B.C. / K.D.M.</u>	DATE <u>3-05</u>
CHECKED BY <u>D. SHIKE</u>	DATE <u>3-07</u>

TEMPORARY MEDIAN BARRIER = 752 L.F.

CLASS "B" RIP-RAP = 1463 TONS



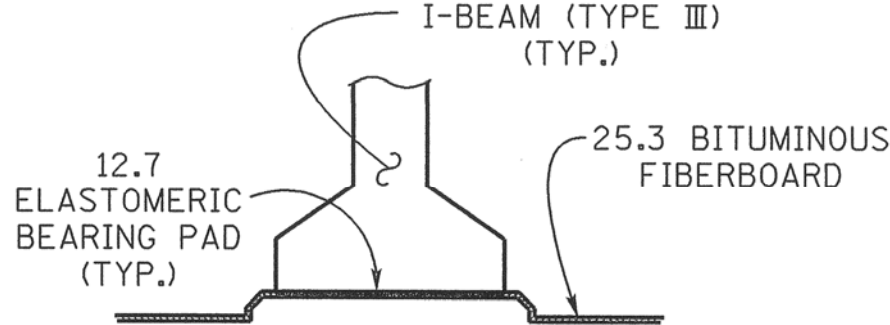
- ◆ DENOTES 6 SPA. @ 230 = 1.380m (TYP. BETWEEN BEAMS)
- DENOTES 280 (TYP. BETWEEN BEAMS)
- DENOTES 230 (TYP. BETWEEN BEAMS)
- ▲ DENOTES 278 (TYP. BETWEEN BEAMS)

TYPICAL AT SUPPORT

TYPICAL CROSS-SECTION
(LOOKING FORWARD ON SURVEY)

TYPICAL AT MID-SPAN

- ◆ DENOTES 3 SPA. @ 150 = 450 (TYP. @ CANT.)
- ☆ DENOTES BARS A1601E & BARS A1602E - 4 SPA. @ 150 = 600 (TYP. @ CANT.)
- ▽ DENOTES 1 SPA. @ 250 (TYP.)



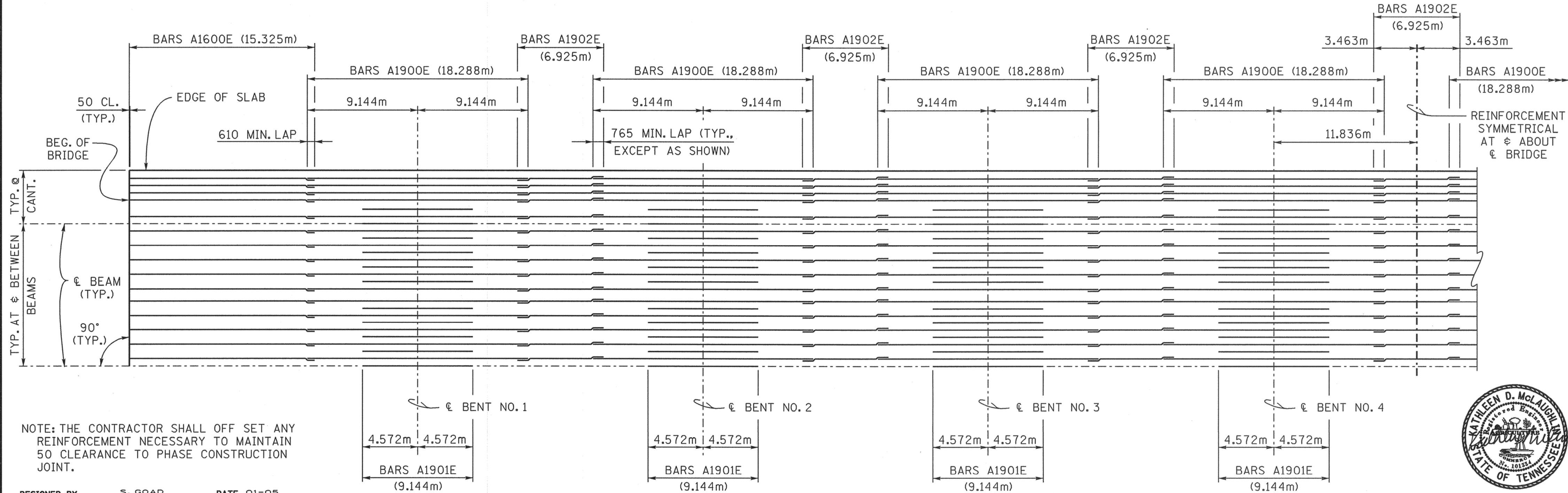
DETAIL X



NOTE: ALL DIMENSIONS SHOWN IN MILLIMETERS, WITH THE EXCEPTION OF STATIONS AND ELEVATIONS, UNLESS OTHERWISE NOTED.

ESTIMATED QUANTITIES

CLASS 'D' CONCRETE (BRIDGE DECK) C.Y.	EPOXY COATED REINFORCING STEEL LBS.	STEEL BAR REINFORCEMENT (BRIDGES) LBS.
1,687	468,828	10,770



NOTE: THE CONTRACTOR SHALL OFF SET ANY REINFORCEMENT NECESSARY TO MAINTAIN 50 CLEARANCE TO PHASE CONSTRUCTION JOINT.

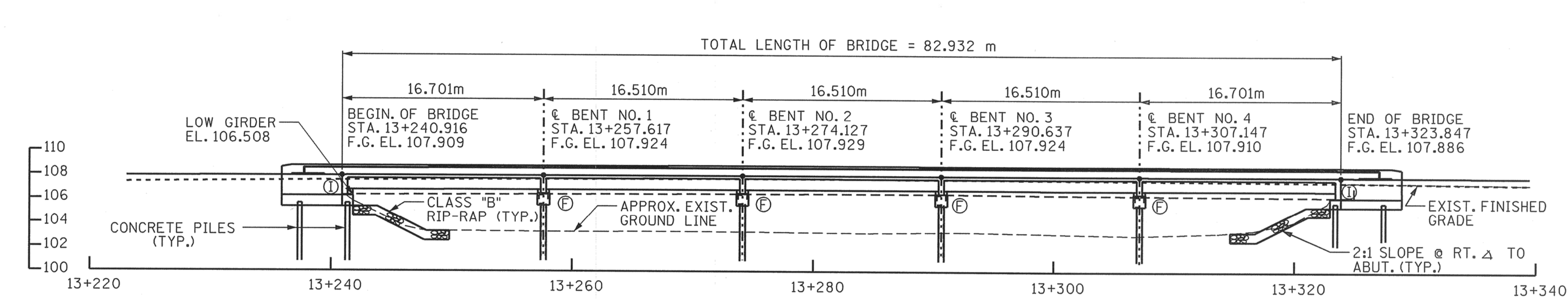
DESIGNED BY S. GOAD DATE 01-05
DRAWN BY (MTJ) A. LOVELL DATE 01-05
SUPERVISED BY MBC / KDM DATE 01-05
CHECKED BY DAN SHIKE DATE 03-07

PART-PLAN OF MAIN REINFORCEMENT



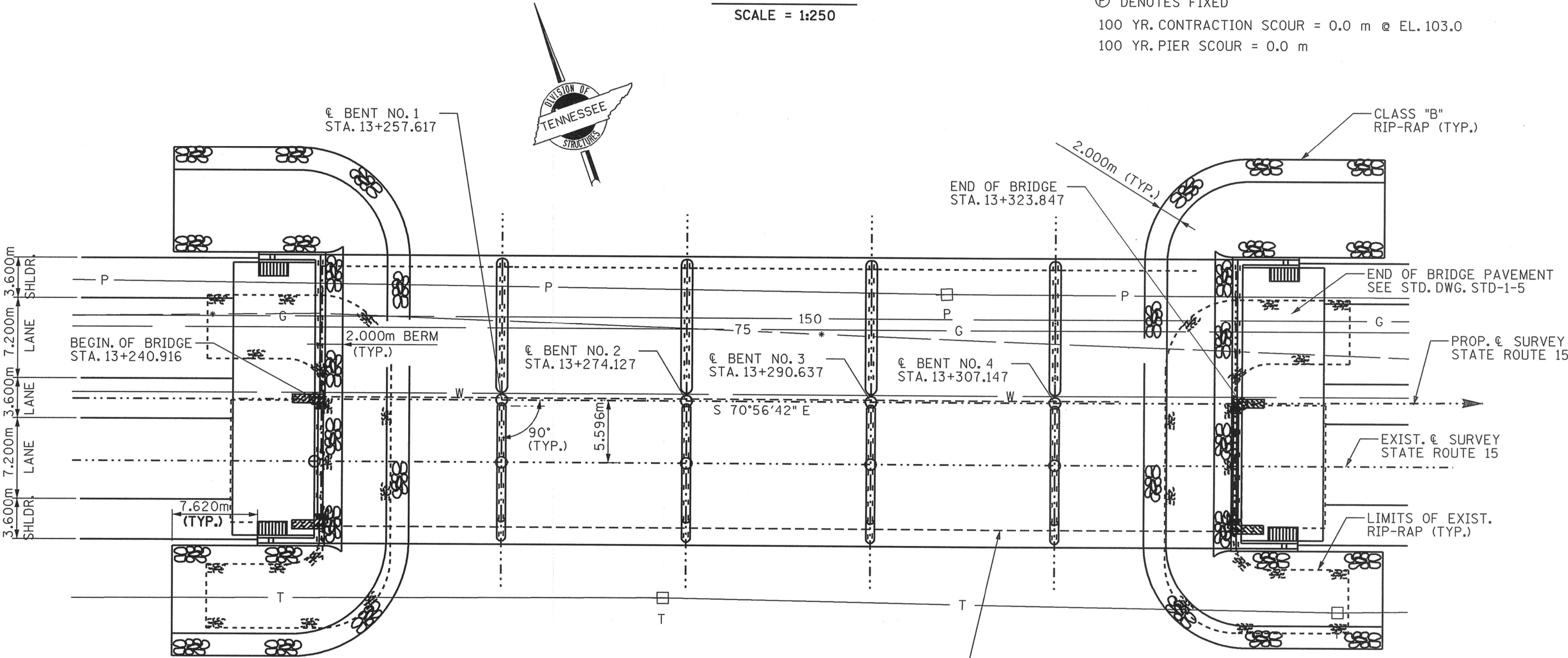
CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

BRIDGE NO. 1
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE
STATE ROUTE 15
OVER
HATCHIE RIVER OVERFLOW
STATION 12+892.000
LOG MILE 16.14
HARDEMAN COUNTY
2010



ELEVATION
SCALE = 1:250

① DENOTES INTEGRAL
② DENOTES FIXED
100 YR. CONTRACTION SCOUR = 0.0 m @ EL. 103.0
100 YR. PIER SCOUR = 0.0 m



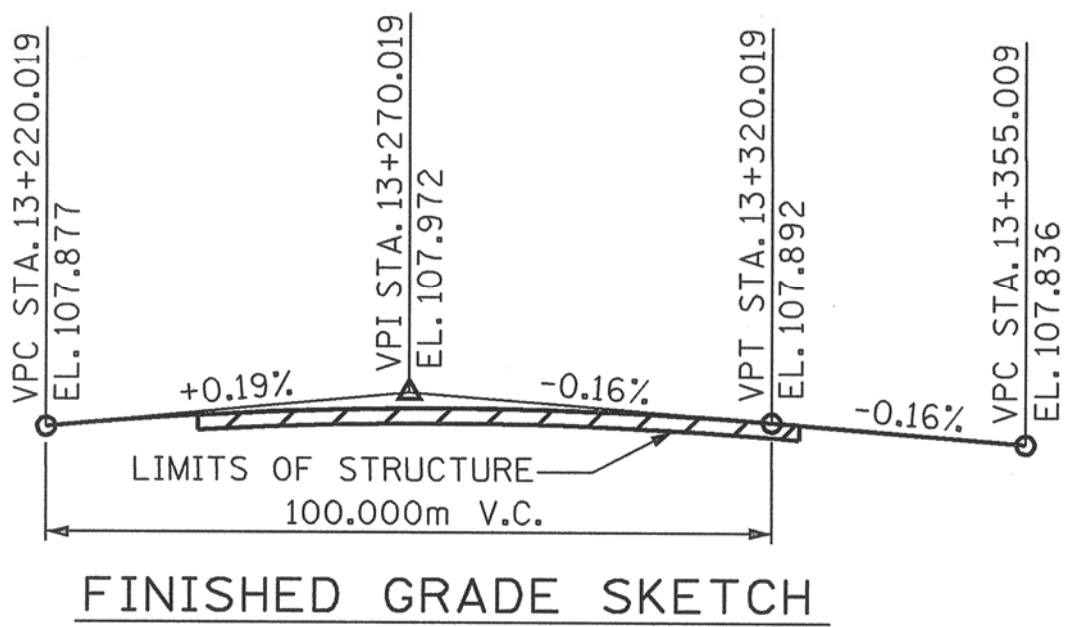
PLAN
SCALE = 1:250

NOTE: ANY WORK WITHIN THE STREAM CHANNEL AREA (e.g., FOR PIER FOOTING, RIP-RAP PLACEMENT, MULT-BARREL CULVERT / BRIDGE CONSTRUCTION, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS, EC-STR-31 AND TEMPORARY DIVERSION CULVERTS, EC-STR-32 FOR SINGLE BARREL CULVERT CONSTRUCTION.

HYDRAULIC DATA

DRAINAGE AREA = 3346.02 km²
DESIGN DISCHARGE (100 YR.) = 152.46 m³/s
TOTAL DESIGN DISCHARGE = 1915.64 m³/s
WATER AREA PROVIDED BELOW EL. 107.02 = 229.00 m²
100 YR. VELOCITY = 0.66 m/s
100 YR. BRIDGE BACKWATER = 0.06 m @ EL. 107.37
ROADWAY OVERTOPPING EL. = 107.40

NOTE: CONTRACTOR SHALL BE RESPONSIBLE FOR CONVERSION FROM METRIC UNITS.
NOTE: ALL DIMENSIONS SHOWN IN METERS, WITH THE EXCEPTION OF STATIONS AND ELEVATIONS UNLESS OTHERWISE NOTED.



FINISHED GRADE SKETCH

CONST. NO. 35001-3266-14		
PROJECT NO.	YEAR	SHEET NO.
NHE-15(91)	2010	
REVISIONS		
NO.	DATE	BY
		BRIEF DESCRIPTION

LIST OF DRAWINGS		DWG. NO.	LAST REV. DATE
LAYOUT OF BRIDGE	U-28-17	--	
GENERAL NOTES AND ESTIMATED QUANTITIES	U-28-18	--	
FOUNDATION DATA	U-28-19	--	
SUPERSTRUCTURE	U-28-20	--	
SUPERSTRUCTURE DETAILS	U-28-21	--	
SUPERSTRUCTURE DETAILS	U-28-22	--	
SUPERSTRUCTURE DETAILS	U-28-23	--	
PRESTRESSED CONCRETE I-BEAM	U-28-24	--	
PRESTRESSED CONCRETE I-BEAM	U-28-25	--	
PRESTRESSED CONCRETE I-BEAM	U-28-26	--	
PRESTRESSED CONCRETE I-BEAM	U-28-27	--	
ABUTMENT NO. 1	U-28-28	--	
ABUTMENT NO. 1 DETAILS	U-28-29	--	
ABUTMENT NO. 2	U-28-30	--	
ABUTMENT NO. 2 DETAILS	U-28-31	--	
ABUTMENT NO. 2 DETAILS	U-28-32	--	
ABUTMENT NO. 2 DETAILS	U-28-33	--	
BENT NO. 1 THRU 4	U-28-34	--	
BENT NO. 1 DETAILS	U-28-35	--	
BENT NO. 2 DETAILS	U-28-36	--	
BENT NO. 3 DETAILS	U-28-37	--	
BENT NO. 4 DETAILS	U-28-38	--	
BENT NO. 1 THRU 4 DETAILS	U-28-39	--	
FINAL FOUNDATION DATA	U-28-40	--	
BILL OF STEEL	U-28-41	--	
BILL OF STEEL	U-28-42	--	
LIST OF STANDARD DRAWINGS		DWG. NO.	LAST REV. DATE
BRIDGE RAILING CONCRETE PARAPET	STD-1-1SS	--	10-15-08
PAVEMENT AT BRIDGE ENDS	STD-1-5	--	08-08-08
BRIDGE END DRAIN W/PABE	STD-1-6	--	04-28-97
BRIDGE END DRAIN W/PABE	STD-1-7	--	07-31-00
BRIDGE END DRAIN 4'-0" X 8'-7" W/PABE	STD-1-9	--	05-01-95
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
STD. PILE DETAILS	STD-5-1	--	10-25-93
STD. PILE DETAILS	STD-5-2	--	04-08-05
STANDARD SEISMIC DETAILS	STD-6-1	--	05-21-99
REINFORCING BAR SUPPORT DETAILS			
FOR CONCRETE SLABS	STD-9-1	--	10-07-08
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	STD-10-1	--	04-08-05
STD. DETAILS AND INT. DIAPH. DETAILS			
FOR I-BEAMS	STD-14-2	--	10-15-08

2026 ADT = 11821
25.200 m ROADWAY WITH STD-1-1SS PARAPET
DESIGN SPEED = 90 km/h

BRIDGE NO. 2

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

LAYOUT OF BRIDGE
WIDENING OF
STATE ROUTE 15 OVER
HATCHIE RIVER OVERFLOW
STATION 13+282.382
LOG MILE 16.38
HARDEMAN COUNTY
2010



CORRECT *Edward P. Wasserman*
ENGINEER OF STRUCTURES

DESIGNED BY K.D.M.
DRAWN BY BILL EASTON
SUPERVISED BY M.B.C. / K.D.M.
CHECKED BY
DATE 04-04(09-02)
DATE 04-06
DATE 04-06
DATE

TEMPORARY MEDIAN BARRIER 322 FEET RIP-RAP CLASS "B" = 1,849 TONS

U-28-17



DRAINAGE AREA = 3346.02 km²
 DESIGN DISCHARGE (100 YR.) = 222.20 m³ / s
 TOTAL DESIGN DISCHARGE = 1915.64 m³ / s
 WATER AREA PROVIDED BELOW EL. 106.34 = 332.00 m²
 100 YR. VELOCITY = 0.67 m/s
 100 YR. BRIDGE BACKWATER = 0.06 m @ EL. 107.37
 ROADWAY OVERTOPPING EL. = 107.40

NOTE: ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G. FOR PIER FOOTING, RIP-RAP PLACEMENT, MULTI-BARREL CULVERT/BRIDGE CONSTRUCTION, ETC) SHALL BE SEPARATED FROM FLOWING WATER BY A FLOW DIVERSION AND REMOVED DURING FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW OR CONTROLLED FLOW, UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS, EC-STR-31 AND TEMPORARY DIVERSION CULVERTS, EC-STR-32 FOR SINGLE BARREL CULVERT CONSTRUCTION.

DESIGNED BY S. GOAD DATE 8-01
DRAWN BY M. R. MANNCHEN DATE 3-05
SUPERVISED BY M.B.C./K.D.M. DATE 3-05
CHECKED BY D. SHIKE DATE 3-05

DWG. NO.	LATEST REV. DATE
----------	---------------------

LAYOUT OF BRIDGE	U-28-43
GENERAL NOTES	U-28-44
ESTIMATED QUANTITIES	U-28-45
FOUNDATION DATA	U-28-46
SUPERSTRUCTURE	U-28-47
SUPERSTRUCTURE DETAILS	U-28-48
SUPERSTRUCTURE DETAILS	U-28-49
PRESTRESSED I-BEAM DETAILS	U-28-50
ABUTMENT NO. 1	U-28-51
ABUTMENT NO. 1 DETAILS	U-28-52
ABUTMENT NO. 2	U-28-53
ABUTMENT NO. 2 DETAILS	U-28-54
BENTS NO. 1 THRU 6	U-28-55
BENTS NO. 1 THRU 6 DETAILS	U-28-56
FINAL FOUNDATION DATA	U-28-57
BILL OF STEEL	U-28-58

<u>LIST OF STANDARD DRAWINGS</u>	<u>DWG. NO.</u>	<u>LATEST REV. DATE</u>
BRIDGE RAILING SINGLE SLOPE CONCRETE PARAPET	STD-1-1SS	10-15-08
SLIDER PLATES AND DECK DRAINS	STD-1-2SS	
PAVEMENT AT BRIDGE ENDS	STD-1-5	08-08-08
BRIDGE END DRAIN W/ PABE	STD-1-6	4-28-97
BRIDGE END DRAIN W/ PABE	STD-1-7	7-31-00
BRIDGE END DRAIN 4'-0" x 8'-7" W/ PABE	STD-1-9	05-01-95
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS		
GENERAL DETAILS	STD-4-1	4-08-05
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS		
DESIGN CRITERIA	STD-4-2	4-08-05
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS		
GENERAL DETAILS	STD-4-3	3-02-02
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS		
CONSTRUCTION DETAILS	STD-4-4	6-10-96
STD. PILE DETAILS	STD-5-1	10-25-93
STD. PILE DETAILS	STD-5-2	4-08-05
STANDARD SEISMIC DETAILS	STD-6-1	5-21-99
STANDARD SEISMIC DETAILS	STD-6-2	11-07-94
REINFORCING BAR SUPPORT DETAILS		
FOR CONCRETE SLAB	STD-9-1	11-07-08
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	STD-10-1	4-08-05
STANDARD DETAILS AND INT. DIAPH. DETAILS		
FOR I- BEAMS	STD-14-2	10-15-08

<u>LIST OF SPECIAL PROVISIONS</u>	<u>PROV. NO.</u>	<u>LAST REV. DATE</u>
REGARDING BRIDGE DECK CRACK SEALING -----	604CR -----	03-01-06

2026 ADT = 11,821
25.200 m ROADWAY WITH STDN-1-SS PARAPET
DESIGN SPEED = 90 km/h

BRIDGE NO. 3
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
LAYOUT OF BRIDGE
STATE ROUTE 15 OVER
HATCHIE RIVER OVERFLOW
STATION 13+483.250
BRIDGE I.D. NO. 35SR0150043
LOG MILE 16.50
HARDEMAN COUNTY
2010

NOTE: ALL DIMENSIONS SHOWN IN METERS,
WITH THE EXCEPTION OF STATIONS AND
ELEVATIONS, UNLESS OTHERWISE NOTED.

NOTE: CONTRACTOR SHALL BE RESPONSIBLE FOR
CONVERSION FROM METRIC UNITS.

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

U-28-43

TEMPORARY MEDIAN BARRIER = 552 LF

CLASS "B" RIP-RAP = 1776 TONS



NOTE: NO PORTION OF THE PARAPET SHALL BE POURED UNTIL THE ENTIRE DECK SLAB IS IN PLACE.

NOTE: WHEN POURING SLAB, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR THE PARAPET. THE PARAPET SHALL NOT BE POURED UNTIL THE SLAB IS POURED AND CURED. ALSO SEE DRAWING NO. STD-I-ISS.

NOTE: 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 INSTALLED PRIOR TO PLACING ANY LOADS ON THE GIRDERS. HOWEVER, TEMPORARY ERECTION DIAPHRAGMS MUST BE IN PLACE AT THE TIME THE SLAB IS POURED IN SAID SPAN.

NOTE: THE SUPPORT DIAPHRAGM AT THE BENTS SHALL BE FORMED AND THE BOTTOM 15 INCHES POURED AS SOON AS POSSIBLE AFTER THE BEAMS HAVE BEEN SET. THE REMAINDER OF THE DIAPHRAGM SHALL BE POURED CONCURRENTLY WITH THE DECK SLAB, BUT MAY NOT BE POURED UNTIL THE BEAMS ATTAIN AN AGE OF 90 DAYS. ALL DIAPHRAGM CONCRETE SHALL BE INCLUDED IN THE QUANTITY FOR ITEM 604-03.09.



NOTE: ALL DIMENSIONS SHOWN IN MILLIMETERS,
WITH THE EXCEPTION OF STATIONS AND
ELEVATIONS, UNLESS OTHERWISE NOTED.

ESTIMATED QUANTITIES

CLASS 'D' CONCRETE (BRIDGE DECK) C.Y.	EPOXY COATED REINFORCING STEEL LBS.	STEEL BAR REINFORCEMENT (BRIDGES) LBS.
1,209	334,887	8,078

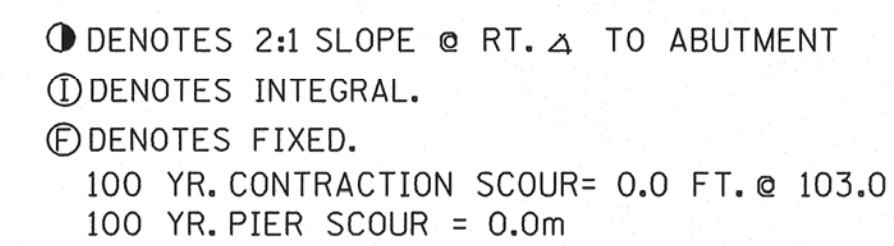
BRIDGE NO. 3

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
 STATE ROUTE 15
 OVER
 HATCHIE RIVER OVERFLOW
 STATION 13+483.250
 LOG MILE 16.50
 HARDEMAN COUNTY
 2010



CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES



HYDRAULIC DATA

DRAINAGE AREA = 3346.02 km²
DESIGN DISCHARGE (100 YR.) = 160.95 m³/s
TOTAL DESIGN DISCHARGE = 1915.64 m³/s
WATER AREA PROVIDED BELOW EL. 106.02 = 239.00 m²
100 YR. VELOCITY = 0.66 m/s
100 YR. BRIDGE BACKWATER = 0.06 m @ EL. 107.37
ROADWAY OVERTOPPING EL. = 107.40



PLAN

NOTE: ANY WORK WITHIN THE STREAM CHANNEL AREA(EG. FOR PIER FOOTING, RIP-RAP PLACEMENT, MULTI-BARREL CULVERT/BRIDGE CONSTRUCTION, ETC) SHALL BE SEPARATED FROM FLOOD WALLS OR FLOOD WALLS WITH FLOW DIVERSIONS DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW OR EXPECTED FLOW, UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS, EC-STR-31 AND TEMPORARY DIVERSION CULVERTS, EC-STR-32 FOR SINGLE BARREL CULVERT CONSTRUCTION.

NOTE: ALL DIMENSIONS ARE SHOWN IN METERS,
WITH THE EXCEPTION OF STATIONS AND ELEVATIONS,
UNLESS OTHERWISE NOTED.

NOTE: CONTRACTOR SHALL BE RESPONSIBLE
FOR CONVERSION FROM METRIC UNITS.

DESIGNED BY K.D. MCLAUGHLIN DATE 8-01
 DRAWN BY M. MANNCHEN DATE 5-10
 SUPERVISED BY M.B.C./K.D.M. DATE 5-10
 CHECKED BY _____ DATE _____

[illegible]

<u>LIST OF DRAWINGS</u>	<u>DWG. NO.</u>	<u>LATEST REV. DATE</u>
LAYOUT OF BRIDGE	U-28-59	
GENERAL NOTES AND ESTIMATED QUANTITIES	U-28-60	
FOUNDATION DATA	U-28-61	
SUPERSTRUCTURE	U-28-62	
SUPERSTRUCTURE DETAILS	U-28-63	
SUPERSTRUCTURE DETAILS	U-28-64	
SUPERSTRUCTURE DETAILS	U-28-65	
PRESTRESSED I-BEAM DETAILS (SPAN 1 AND 6)	U-28-66	
PRESTRESSED I-BEAM DETAILS (SPAN 1 AND 6)	U-28-67	
PRESTRESSED I-BEAM DETAILS (SPANS 2 THRU 5)	U-28-68	
PRESTRESSED I-BEAM DETAILS (SPANS 2 THRU 5)	U-28-69	
ABUTMENT NO. 1	U-28-70	
ABUTMENT NO. 1 DETAILS	U-28-71	
ABUTMENT NO. 2	U-28-72	
ABUTMENT NO. 2 DETAILS	U-28-73	
ABUTMENT NO. 1 AND 2 DETAILS	U-28-74	
BENTS NO. 1 THRU 5	U-28-75	
BENT NO. 1 DETAILS	U-28-76	
BENT NO. 2 DETAILS	U-28-77	
BENT NO. 3 DETAILS	U-28-78	
BENT NO. 4 DETAILS	U-28-79	
BENT NO. 5 DETAILS	U-28-80	
BENT NO. 1 THRU 5 DETAILS	U-28-81	
FINAL FOUNDATION DATA	U-28-82	
BILL OF STEEL	U-28-83	
BILL OF STEEL	U-28-84	

<u>LIST OF STANDARD DRAWINGS</u>	<u>DWG. NO.</u>	<u>DATE</u>
BRIDGE RAILING SINGLE SLOPE CONCRETE PARAPET	STD-1-15S	10-15-08
PAVEMENT AT BRIDGE ENDS	STD-1-5	08-08-08
BRIDGE END DRAIN W/ PABE	STD-1-6	4-28-97
BRIDGE END DRAIN W/ PABE	STD-1-7	7-31-00
BRIDGE END DRAIN 4'-0" x 8'-7" W/ PABE	STD-1-9	05-01-95
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS		
GENERAL DETAILS	STD-4-1	4-08-05
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS		
DESIGN CRITERIA	STD-4-2	4-08-05
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS		
GENERAL DETAILS	STD-4-3	3-02-02
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS		
CONSTRUCTION DETAILS	STD-4-4	6-10-96
STD. PILE DETAILS	STD-5-1	10-25-93
STD. PILE DETAILS	STD-5-2	4-08-05
STANDARD SEISMIC DETAILS	STD-6-1	5-21-99
REINFORCING BAR SUPPORT DETAILS		
FOR CONCRETE SLAB	STD-9-1	10-07-08
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	STD-10-1	4-08-05
STANDARD DETAILS AND INT. DIAPH. DETAILS		
FOR I- BEAMS	STD-14-2	10-15-08

2026 ADT = 11,821
25.200 m ROADWAY WITH STD-1-1SS PARAPET
DESIGN SPEED = 90 km/h

BRIDGE NO. 4


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

LAYOUT OF BRIDGE
WIDENING OF
STATE ROUTE 15 OVER
HATCHIE RIVER OVERFLOW
STATION 13+724.802
BRIDGE I.D.NO. 35SR0150011
LOG MILE 16.66
HARDEMAN COUNTY
2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

U-28-59

TEMPORARY MEDIAN BARRIER = 355 L.F. CLASS "B" RIP-RAP = 1.787 TONS

 DENOTES: BARS A1609E
 S_w BARS A1602E
 4 SPA. @ 266 = 1.064m

[illegible]

NOTE: THE SUPPORT DIAPHRAGMS AT THE BENTS SHALL BE FORMED AND THE BOTTOM 381mm POURED AS SOON AS POSSIBLE AFTER THE BEAMS HAVE BEEN SET. THE REMAINDER OF THE DIAPHRAGM SHALL BE POURED CONCURRENTLY WITH THE DECK SLAB, BUT MAY NOT BE POURED UNTIL THE BEAMS ATTAIN AN AGE OF 90 DAYS. ALL DIAPHRAGM CONCRETE SHALL BE INCLUDED IN THE QUANTITY FOR ITEM NO. 604-03.09.

FOR BAR SPACING "SEE TYPICAL CROSS-SECTION"

PHASE I CONSTRUCTION

PHASE II CONSTRUCTION

50 CL. (TYP.)

BARS A1605E 10.700m 610 MIN LAP (TYP.)

BARS A2200E 12.500m

BARS A2201E 9.144m 3.919 5.225

BARS A1607E 4.200m

BARS A2202E 11.025m BARS A2203E 7.100m 3.516 3.574

BARS A1608E 5.725m

BARS A2204E 10.975m BARS A2205E 7.125m 3.560 3.560

BARS A1608E 5.725m

BARS A2202E 11.025m BARS A2203E 7.100m 3.574 3.516

BARS A1607E 4.200m

BARS A2200E 12.500m

BARS A2201E 9.144m 5.225 3.919

BARS A1605E 10.700m

50 CL. (TYP.)

EDGE OF SLAB

CONSTRUCTION JOINT

END OF BRIDGE

50 CL. (TYP.)

50 CL. (TYP.)

18.288m

610 MIN LAP BARS NO. 16 (TYP.)

18.288m

18.288m

18.288m

18.288m

18.288m

4.705m

BENT NO. 1

BENT NO. 2

BENT NO. 3

BENT NO. 4

BENT NO. 5

EDGE OF SLAB

50 CL. (TYP.)

BARS A1609E

BARS A1609E

BARS A1609E

BARS A1609E

BARS A1609E

BARS A1606E

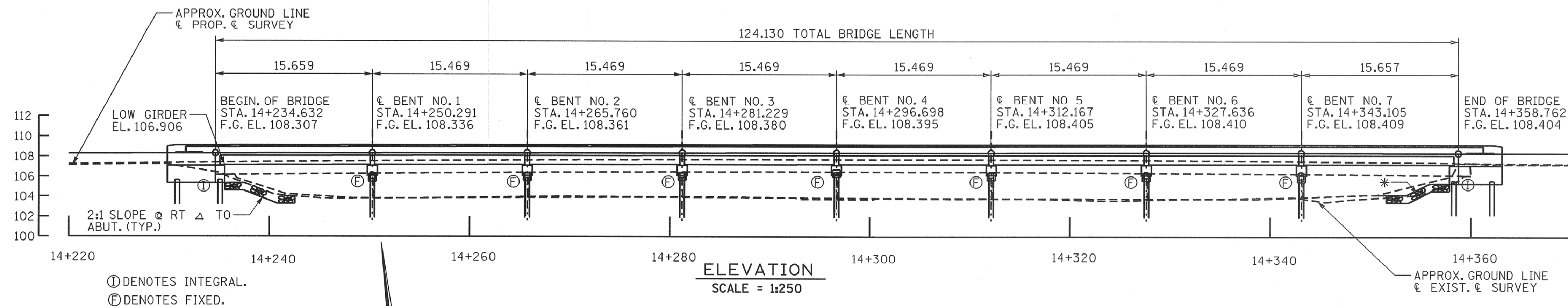
THE BEAMS A BE INCLUDED

WATKINS

ESTIMATED QUANTITIES		
CLASS "D" CONCRETE (BRIDGE DECK) C.Y.	EPOXY COATED REINFORCING STEEL LB.	STEEL BAR REINFORCEMENT LB.
743	205,589	4,799



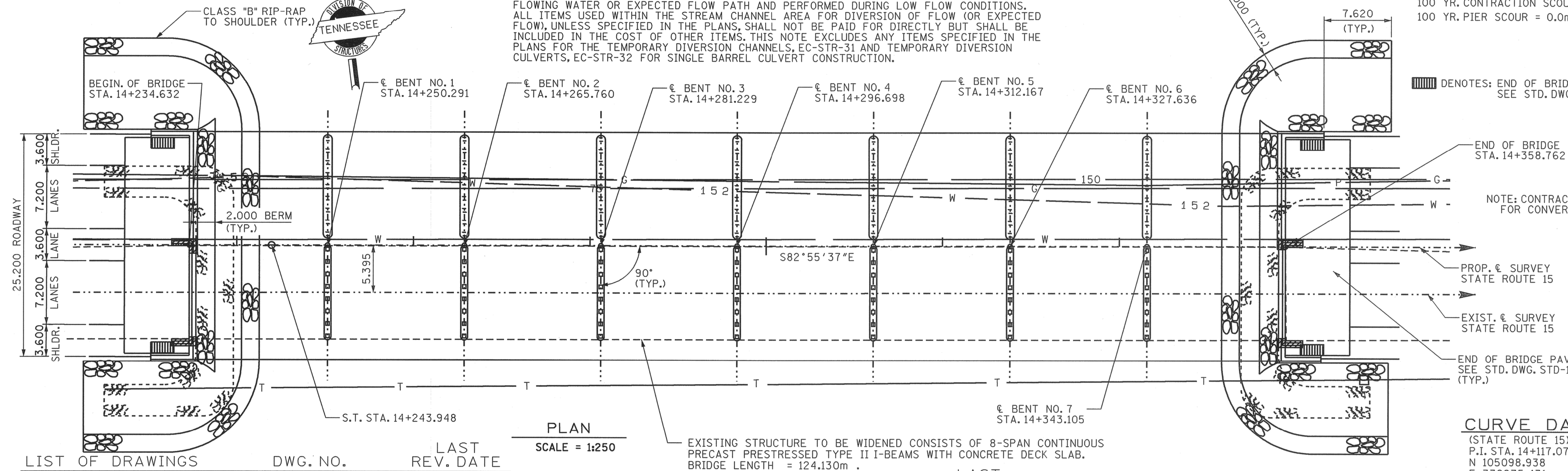
CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES



NOTE: ANY WORK WITHIN THE STREAM CHANNEL AREA (e.g., FOR PIER FOOTING, RIP-RAP PLACEMENT, MULT-BARREL CULVERT / BRIDGE CONSTRUCTION, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS, EC-STR-31 AND TEMPORARY DIVERSION CULVERTS, EC-STR-32 FOR SINGLE BARREL CULVERT CONSTRUCTION.

* DENOTES CLASS "B" RIP-RAP
0.750 THICK (TYP.)
100 YR. CONTRACTION SCOUR = 0.0m @ ELEV. 103.50
100 YR. PIER SCOUR = 0.0m

███ DENOTES: END OF BRIDGE DRAIN 4'-0" X 8'-7" REQ'D.
SEE STD. DWG. NO. STD-1-6, 7 & 9.



CURVE DATA

(STATE ROUTE 15)
P.I. STA. 14+117.076
N 105098.938
E 332875.431
Δ 11° 58' 55"
D 2° 00' 45"
Rc 867.702
Lc 108.458
Ts 127.586
Ls 73.000
Os 2° 24' 37"
Xc 72.987
Yc 1.023

2028 ADT = 12,541
25.200 m ROADWAY WITH STD-1-1SS PARAPET
DESIGN SPEED = 90 km/h

BRIDGE NO. 5
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

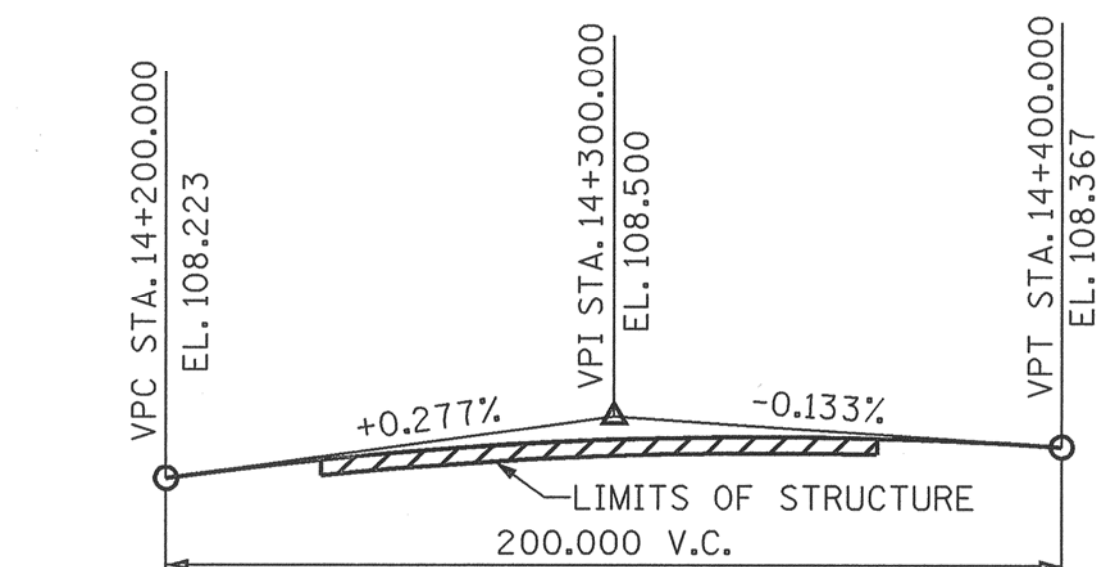
LAYOUT OF BRIDGE
WIDENING OF
STATE ROUTE 15 OVER
HATCHIE RIVER OVERFLOW
BRIDGE I.D. NO. 35SR0150013
STATION 14+296.698
LOG MILE 17.00
HARDEMAN COUNTY
2010

LIST OF DRAWINGS	DWG. NO.	LAST REV. DATE
LAYOUT OF BRIDGE	U-28-85	
GENERAL NOTES	U-28-86	
ESTIMATED QUANTITIES	U-28-87	
FOUNDATION DATA	U-28-88	
SUPERSTRUCTURE	U-28-89	
SUPERSTRUCTURE DETAILS	U-28-90	
SUPERSTRUCTURE DETAILS	U-28-91	
SUPERSTRUCTURE DETAILS	U-28-92	
PRESTRESSED I-BEAM DETAILS	U-28-93	
PRESTRESSED I-BEAM DETAILS	U-28-94	
PRESTRESSED I-BEAM DETAILS	U-28-95	
PRESTRESSED I-BEAM DETAILS	U-28-96	
ABUTMENT NO. 1	U-28-97	
ABUTMENT NO. 1 DETAILS	U-28-98	
ABUTMENT NO. 2	U-28-99	
ABUTMENT NO. 2 DETAILS	U-28-100	
ABUTMENT NO. 1 & 2 DETAILS	U-28-101	
BENT NO. 1 THRU 7	U-28-102	
BENT NO. 1 DETAILS	U-28-103	
BENT NO. 2 DETAILS	U-28-104	
BENT NO. 3 DETAILS	U-28-105	
BENT NO. 4 DETAILS	U-28-106	
BENT NO. 5 DETAILS	U-28-107	
BENT NO. 6 DETAILS	U-28-108	
BENT NO. 7 DETAILS	U-28-109	
BENT NO. 1 THRU NO. 7 DETAILS	U-28-110	
FINAL FOUNDATION DATA	U-28-111	
BILL OF STEEL	U-28-112	
BILL OF STEEL	U-28-113	

LIST OF STANDARD DRAWINGS	DWG. NO.	LAST REV. DATE
BRIDGE RAILING SINGLE SLOPE CONCRETE PARAPET	STD-1-1SS	10-15-08
PAVEMENT AT BRIDGE ENDS	STD-1-5	08-08-08
BRIDGE END DRAIN W/ PABE	STD-1-6	4-28-97
BRIDGE END DRAIN W/ PABE	STD-1-7	7-31-00
BRIDGE END DRAIN 4'-0" X 8'-7" W / PABE	STD-1-9	05-01-95
STD. PRECAST PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS	STD-4-1	4-8-05
STD. PRECAST PRESTRESSED BRIDGE DECK PANELS DESIGN CRITERIA	STD-4-2	4-8-05
STD. PRECAST PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS	STD-4-3	3-02-02
STD. PRECAST PRESTRESSED BRIDGE DECK PANELS CONSTRUCTION DETAILS	STD-4-4	6-10-96
STD. PILE DETAILS	STD-5-1	10-25-93
STD. PILE DETAILS	STD-5-2	4-8-05
STD. SEISMIC DETAILS	STD-6-1	05-21-99
REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLABS	STD-9-1	10-07-08
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	STD-10-1	4-8-05
STD. DETAILS AND INT. DIAPH. DETAILS FOR I-BEAMS	STD-14-2	10-15-08

LIST OF SPECIAL PROVISIONS

BRIDGE DECK CRACK SEALING 604CR 3-1-06



HYDRAULIC DATA

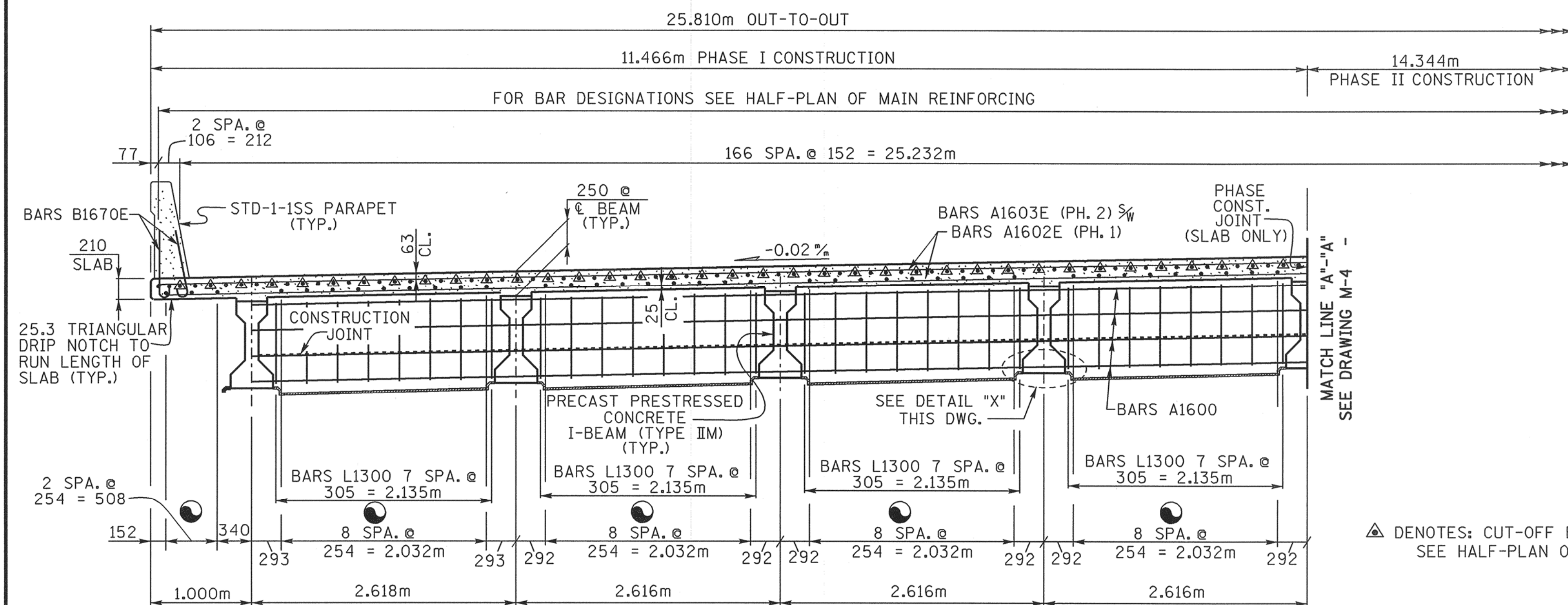
DRAINAGE AREA = 3346.02 km²
DESIGN DISCHARGE (100 YR.) = 149.91 m³/s
TOTAL DESIGN DISCHARGE = 1915.64 m³/s
WATER AREA PROVIDED BELOW EL. 106.02 = 223.00 m²
100 YR. VELOCITY = 0.67 m/s
100 YR. BRIDGE BACKWATER = 0.06 m @ EL. 107.37
ROADWAY OVERTOPPING EL. = 107.40

NOTE: ALL DIMENSIONS SHOWN IN METERS

CORRECT *Edward P. Wasserman*
ENGINEER OF STRUCTURES

U-28-85

TEMPORARY MEDIAN BARRIER = 456 FEET CLASS "B" RIP-RAP = 1,804 TONS



TYPICAL CROSS-SECTION @ SUPPORT

(LOOKING FORWARD ON SURVEY)
(PHASE I CONSTRUCTION)

● DENOTES: BARS A1605E & A1606E

▲ DENOTES: CUT-OFF BARS LOCATED AT BENTS ONLY.
SEE HALF-PLAN OF MAIN REINFORCING, THIS SHEET.

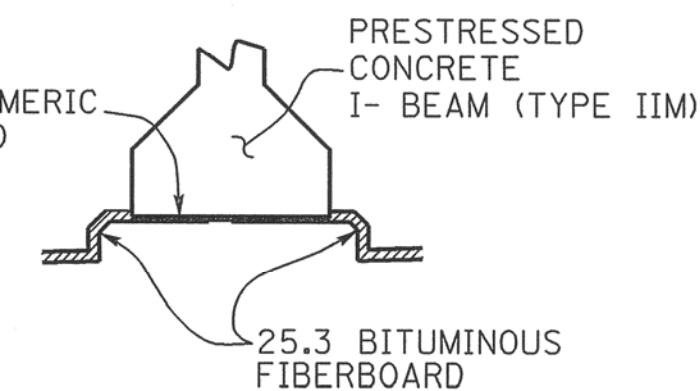
NOTE: NO PORTION OF THE PARAPET SHALL BE POURED UNTIL THE ENTIRE DECK SLAB IS IN PLACE.

NOTE: WHEN POURING SLAB, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPET. THE PARAPET SHALL NOT BE POURED UNTIL THE SLAB IS POURED AND CURED. ALSO SEE DRAWING NO. STD-1-1SS.

NOTE: 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 INSTALLED 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.

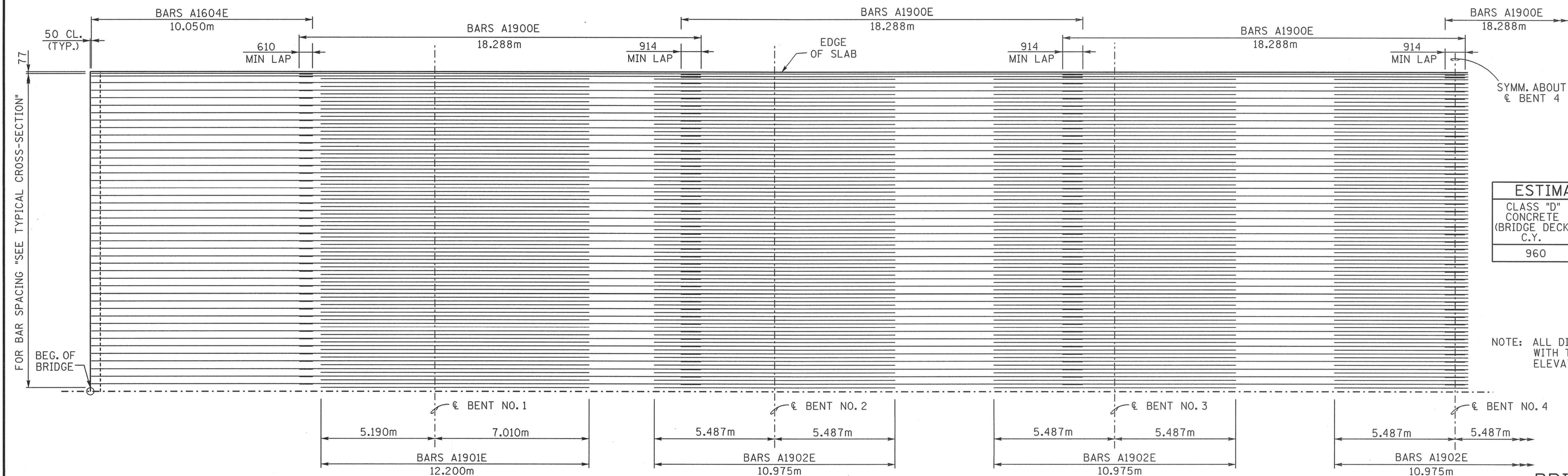
NOTE: THE SUPPORT DIAPHRAGMS AT THE BENTS SHALL BE FORMED AND THE BOTTOM 381mm POURED AS SOON AS POSSIBLE AFTER THE BEAMS HAVE BEEN SET. THE REMAINDER OF THE DIAPHRAGM SHALL BE POURED CONCURRENTLY WITH THE DECK SLAB, BUT MAY NOT BE POURED UNTIL THE BEAMS ATTAIN AN AGE OF 90 DAYS. ALL DIAPHRAGM CONCRETE SHALL BE INCLUDED IN THE QUANTITY FOR ITEM NO. 604-03.09.

12.7 ELASTOMERIC BEARING PAD



DETAIL "X"

NOTE: THE CONTRACTOR SHALL OFFSET ANY REINFORCING STEEL NECESSARY TO MAINTAIN 50 CLEARANCE TO PHASE CONSTRUCTION JOINT.



HALF-PLAN MAIN REINFORCING

ESTIMATED QUANTITIES		
CLASS "D" CONCRETE (BRIDGE DECK) C.Y.	EPOXY COATED REINFORCING STEEL LB.	STEEL BAR REINFORCEMENT LB.
960	241,228	7,041



NOTE: ALL DIMENSIONS SHOWN IN MILLIMETERS, WITH THE EXCEPTION OF STATIONS AND ELEVATIONS, UNLESS OTHERWISE NOTED.

BRIDGE NO. 5

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE
WIDENING OF
STATE ROUTE 15OVER
HATCHIE RIVER OVERFLOW
STATION 14+296.698
LOG MILE 17.00
HARDAMAN COUNTY
2010CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

U-28-89

DESIGNED BY L. FITTRO DATE 12-05
 DRAWN BY PMM (JED) DATE 05-05
 SUPERVISED BY MBC/KDM DATE 05-05
 CHECKED BY L. FITTRO DATE 5-07

213.500 m TOTAL BRIDGE LENGTH

23.901 m 23.671 m 23.671 m 23.671 m 23.671 m 23.671 m 23.671 m 23.674 m 23.901 m

APPROX. EXIST. GROUND LINE

BEGIN. OF BRIDGE STA. 14+676.800 F.G. EL. 108.016

€ BENT NO. 1 STA. 14+700.700 F.G. EL. 107.998

€ BENT NO. 2 STA. 14+724.371 F.G. EL. 107.985

€ BENT NO. 3 STA. 14+748.042 F.G. EL. 107.975

€ BENT NO. 4 STA. 14+771.713 F.G. EL. 107.970

€ BENT NO. 5 STA. 14+795.384 F.G. EL. 107.969

€ BENT NO. 6 STA. 14+819.055 F.G. EL. 107.973

€ BENT NO. 7 STA. 14+842.726 F.G. EL. 107.980

€ BENT NO. 8 STA. 14+866.400 F.G. EL. 107.992

END OF BRIDGE STA. 14+890.300 F.G. EL. 108.008

EXISTING FINISHED GRADE

CONCRETE PILES (TYP. @ ABUTMENTS)

CLASS "B" RIP-RAP (0.750 THICK)

① DENOTES INTEGRAL.
Ⓢ DENOTES FIXED.

STEEL PIPE PILES (TYP.) @ EACH BENT

100 YR. CONTRACTION SCOUR = 0.78 m @ ELEV. 103.13
100 YR. PIER SCOUR = 0.0 m

CONCRETE COLLAR, (TYP.) @ EACH BENT

LOW GIRDER EL. 106.379
2:1 SLOPE @ RT. Δ TO ABUTMENT (TYP.)

/// DENOTE EXCAVATION TO EL. 104.000 (TO BE PAID FOR AS A ROADWAY ITEM)

14+640 14+660 14+680 14+700 14+720 14+740 14+760 14+780 14+800 14+820 14+840 14+860 14+880 14+900

[illegible][illegible]

DRAINAGE AREA = 3346.02 km²
 DESIGN DISCHARGE (100 YR.) = 337.85 m³/s
 TOTAL DESIGN DISCHARGE = 1915.64 m³/s
 WATER AREA PROVIDED BELOW EL.106.70 = 521.30 m²
 100 YR. VELOCITY = 0.65 m/s
 100 YR. BRIDGE BACKWATER = 0.06 m @ EL.107.37
 ROADWAY OVERTOPPING EL. = 107.40

DESIGNED BY S. GOAD DATE 8-01
DRAWN BY M. R. MANNCHEN DATE 3-05
SUPERVISED BY M.B.C/K.D.M. DATE 3-05
CHECKED BY D. SHIKE DATE 4-07

NOTE: ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G. FOR PIER FOOTING, RIP-RAP PLACEMENT, MULTI-BARREL CULVERT/BRIDGE CONSTRUCTION, ETC) SHALL BE SEPARATED FROM FLOWING WATER BY AN EXCEPTED DIVERSION CHANNEL DURING THE LOW FLOW CONDITION. ALL ITEMS WITHIN THE STREAM CHANNEL AREA OR DIVERSION OF FLOW OR EXPECTED FLOW, UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS, EC-STR-31 AND TEMPORARY DIVERSION CULVERTS, EC-STR-32 FOR SINGLE BARREL CULVERT CONSTRUCTION.

LAYOUT OF BRIDGE	U-28-114
GENERAL NOTES	U-28-115
ESTIMATED QUANTITIES	U-28-116
FOUNDATION DATA	U-28-117
SUPERSTRUCTURE	U-28-118
SUPERSTRUCTURE DETAILS	U-28-119
SUPERSTRUCTURE DETAILS	U-28-120
PRESTRESSED I-BEAM DETAILS	
(SPANS 1, THRU 9)	U-28-121
ABUTMENT NO. 1	U-28-122
ABUTMENT NO. 1 DETAILS	U-28-123
ABUTMENT NO. 2	U-28-124
ABUTMENT NO. 2 DETAILS	U-28-125
BENTS NO. 1 THRU 8	U-28-126
BENTS NO. 1 THRU 8 DETAILS	U-28-127
FINAL FOUNDATION DATA	U-28-128
BILL OF STEEL	U-28-129

BRIDGE RAILING SINGLE SLOPE CONCRETE PARAPET	STD-1-ISS	10-15-08
SLIDER PLATES AND DECK DRAINS	STD-1-2SS	
PAVEMENT AT BRIDGE ENDS	STD-1-5	08-08-08
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS		
GENERAL DETAILS	STD-4-1	4-08-05
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS		
DESIGN CRITERIA	STD-4-2	4-08-05
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS		
GENERAL DETAILS	STD-4-3	3-02-02
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS		
CONSTRUCTION DETAILS	STD-4-4	6-10-96
STD. PILE DETAILS	STD-5-1	10-25-93
STD. PILE DETAILS	STD-5-2	4-08-05
STANDARD SEISMIC DETAILS	STD-6-1	5-21-99
REINFORCING BAR SUPPORT DETAILS		
FOR CONCRETE SLAB	STD-9-1	10-07-08
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	STD-10-1	4-08-05
STANDARD DETAILS AND INT. DIAPH. DETAILS		
FOR I-BEAMS	STD-14-2	10-15-08

REGARDING BRIDGE DECK CRACK SEALING _ _ _ _ _ 604CR _ _ _ _ _ 03-01-06

2026 ADT = 11,821
25.200 m ROADWAY WITH STD-1-1SS PARAPET
DESIGN SPEED = 90 km/h

BRIDGE NO. 6

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

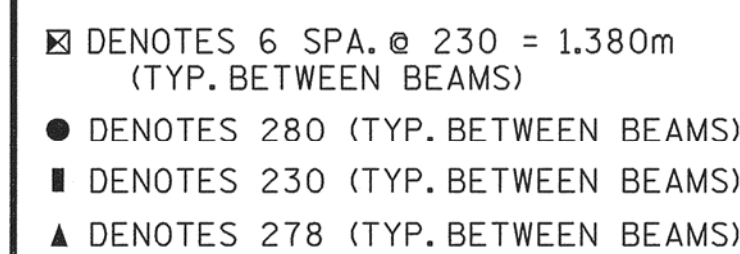
LAYOUT OF BRIDGE
STATE ROUTE 15 OVER
HATCHIE RIVER OVERFLOW
STATION 14+783.549
BRIDGE ID NO. 35SR0150045
LOG MILE 17.30
HARDEMAN COUNTY
2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

U-28-114

TEMPORARY MEDIAN BARRIER = 752 L.F.

CLASS "B" RIP-RAP = 1464 TONS

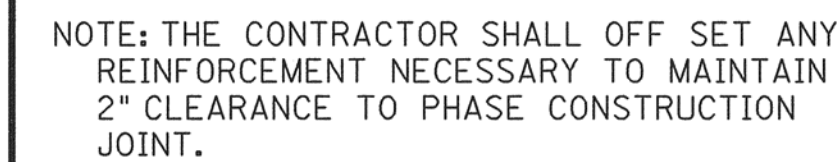


TYPICAL CROSS-SECTION (LOOKING FORWARD ON SURVEY)

◆ DENOTES 3 SPA. @ 150 = 450
(TYP. @ CANT.)

☆ DENOTES BARS A1601E S_W
BARS A1602E - 4 SPA. @
150 = 600 (TYP. @ CANT.)

▽ DENOTES 1 SPA. @ 250 (TYP.)



DESIGNED BY S. GOAD DATE 01-05
DRAWN BY A. LOVELL (MTJ) DATE 01-05
SUPERVISED BY RLH / KDM DATE 01-05
CHECKED BY DAN SHIKE DATE 04-07

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

NOTE: NO PORTION OF THE PARAPET SHALL BE POURED UNTIL THE ENTIRE DECK SLAB IS IN PLACE.

NOTE: WHEN POURING SLAB, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR THE PARAPET. THE PARAPET SHALL NOT BE POURED UNTIL THE SLAB IS POURED AND CURED. ALSO SEE DRAWING NO. STD-1-1SS.

NOTE: THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SUPPORTING THE BEAMS TO PREVENT DAMAGE DUE TO TWISTING OR OVERTURNING DURING ALL PHASES OF CONSTRUCTION.

NOTE: THE SUPPORT DIAPHRAGM AT THE BENTS SHALL BE FORMED AND THE BOTTOM 15 INCHES POURED AS SOON AS POSSIBLE AFTER THE BEAMS HAVE BEEN SET. THE REMAINDER OF THE DIAPHRAGM SHALL BE POURED CONCURRENTLY WITH THE DECK SLAB, BUT MAY NOT BE POURED UNTIL THE BEAMS ATTAIN AN AGE OF 90 DAYS. ALL DIAPHRAGM CONCRETE SHALL BE INCLUDED IN THE QUANTITY FOR ITEM 604-03.09.

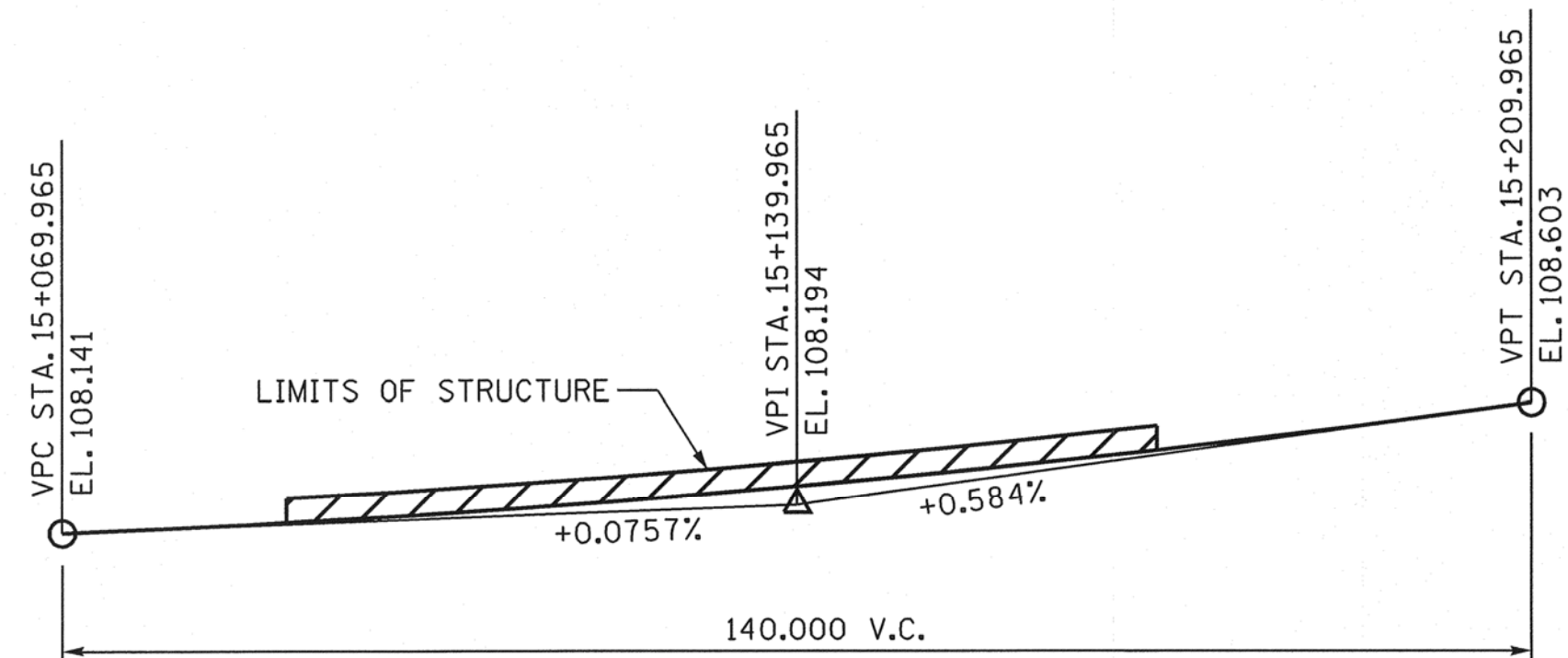
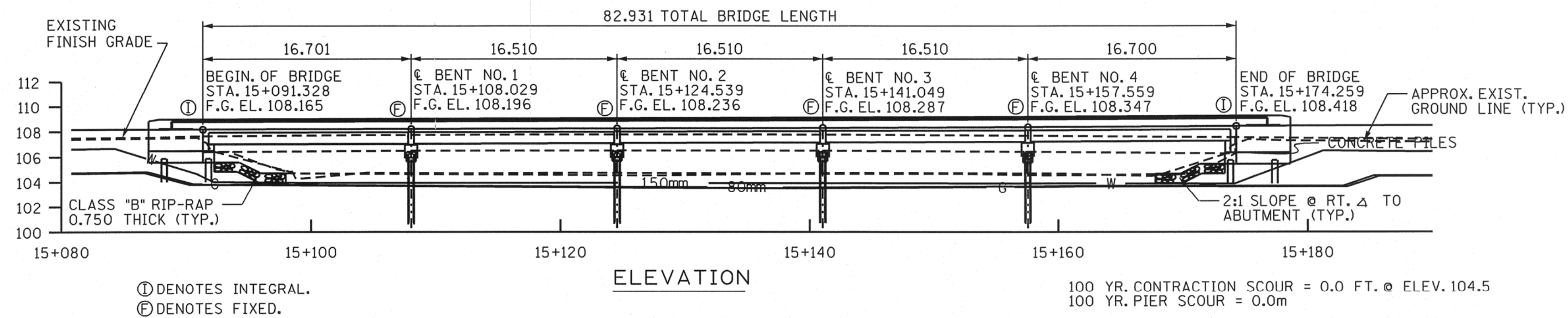


NOTE: ALL DIMENSIONS SHOWN IN MILLIMETERS,
WITH THE EXCEPTION OF STATIONS AND
ELEVATIONS, UNLESS OTHERWISE NOTED.

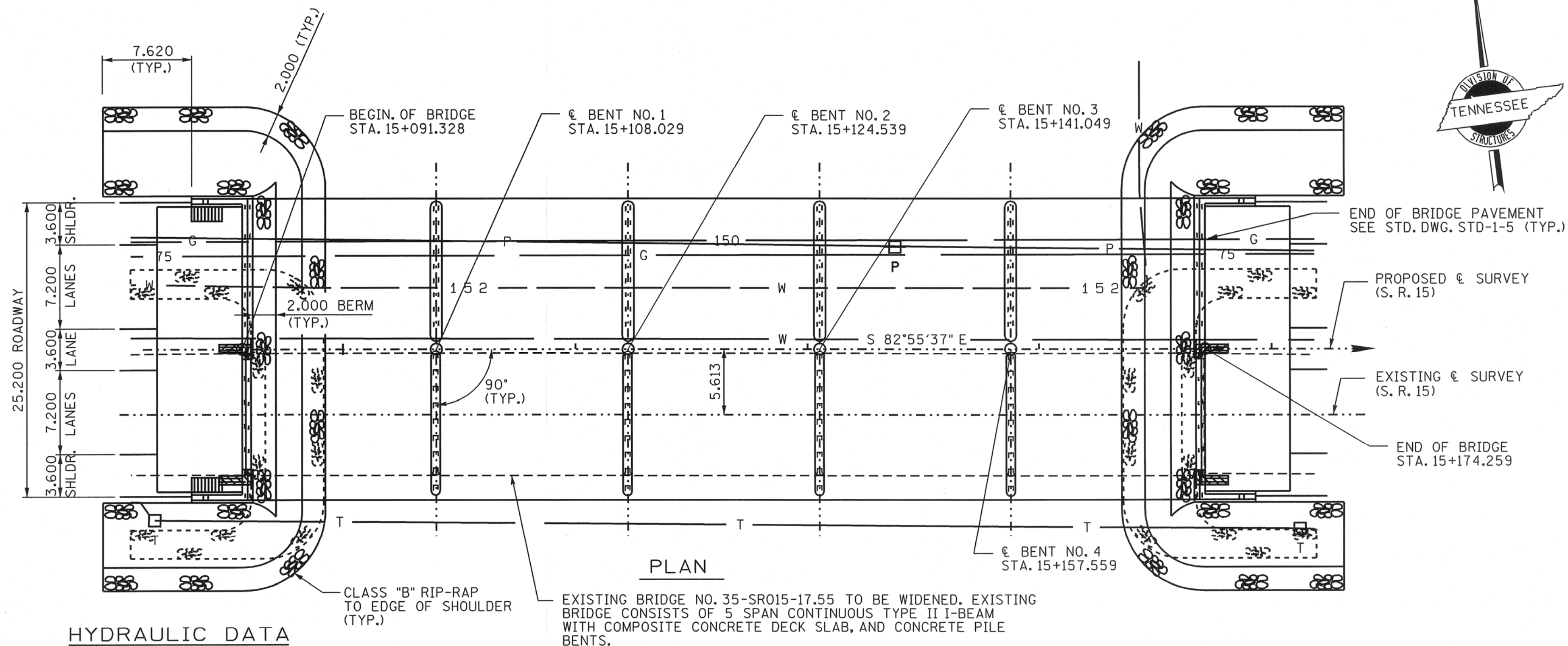
CLASS 'D' CONCRETE (BRIDGE DECK) C.Y.	EPOXY COATED REINFORCING STEEL LBS.	STEEL BAR REINFORCEMENT (BRIDGES) LBS.
1,687	468,828	10,770

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STATE ROUTE 15
OVER
HATCHIE RIVER OVERFLOW
STATION 14+783.549
LOG MILE 17.30
HARDEMAN COUNTY
2010



NOTE: ANY WORK WITHIN THE STREAM CHANNEL AREA (EG. FOR PIER FOOTING, RIP-RAP PLACEMENT, MULTI-BARREL CULVERT/BRIDGE CONSTRUCTION, ETC) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW OR EXPECTED FLOW, UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS, EC-STR-31 AND TEMPORARY DIVERSION CULVERTS, EC-STR-32 FOR SINGLE BARREL CULVERT CONSTRUCTION.



HYDRAULIC DATA

DRAINAGE AREA = 3346.02 km²
 DESIGN DISCHARGE (100 YR.) = 90.59 m³/s
 TOTAL DESIGN DISCHARGE = 1915.64 m³/s
 WATER AREA PROVIDED BELOW EL. 107.02 = 140.10 m²
 100 YR. VELOCITY = 0.65 m/s
 100 YR. BRIDGE BACKWATER = 0.06 m @ EL. 107.37
 ROADWAY OVERTOPPING EL. = 107.40

DESIGNED BY K. McLAUGHLIN DATE 8-01
 DRAWN BY M.R.M. (K.D.M.) DATE 8-01
 SUPERVISED BY M.B.C. / K.D.M. DATE 8-01
 CHECKED BY DATE 8-01

Ⓔ DENOTES: END OF BRIDGE DRAIN (4'-0" X 8'-7") REQ'D.
 SEE STD. DWG. NO. STD-1-6, 7 & 9.

NOTE: ALL DIMENSIONS SHOWN IN METERS, WITH THE EXCEPTION OF STATIONS, AND ELEVATIONS LESS NOTED OTHERWISE.

NOTE: CONTRACTOR SHALL BE RESPONSIBLE FOR CONVERSION FROM METRIC UNITS.

CONST. NO. 35001-3266-14

PROJECT NO.	YEAR	SHEET NO.
NHE-15(91)	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

LIST OF DRAWINGS

	DWG. NO.	LATEST REV. DATE
LAYOUT OF BRIDGE	U-28-130	
GENERAL NOTES	U-28-131	
ESTIMATED QUANTITIES	U-28-132	
FOUNDATION DATA	U-28-133	
SUPERSTRUCTURE	U-28-134	
SUPERSTRUCTURE DETAILS	U-28-135	
SUPERSTRUCTURE DETAILS	U-28-136	
SUPERSTRUCTURE DETAILS	U-28-137	
PRESTRESSED I-BEAM DETAILS (SPAN 1 AND 5)	U-28-138	
PRESTRESSED I-BEAM DETAILS (SPAN 1 AND 5)	U-28-139	
PRESTRESSED I-BEAM DETAILS (SPANS 2 THRU 4)	U-28-140	
PRESTRESSED I-BEAM DETAILS (SPANS 2 THRU 4)	U-28-141	
ABUTMENT NO. 1	U-28-142	
ABUTMENT NO. 1 DETAILS	U-28-143	
ABUTMENT NO. 1 DETAILS	U-28-144	
ABUTMENT NO. 2	U-28-145	
ABUTMENT NO. 2 DETAILS	U-28-146	
ABUTMENT NO. 2 DETAILS	U-28-147	
BENTS NO. 1 THRU 4	U-28-148	
BENT NO. 1 DETAILS	U-28-149	
BENT NO. 2 DETAILS	U-28-150	
BENT NO. 3 DETAILS	U-28-151	
BENT NO. 4 DETAILS	U-28-152	
BENT NO. 1 THRU 4 DETAILS	U-28-153	
FINAL FOUNDATION DATA	U-28-154	
BILL OF STEEL	U-28-155	
BILL OF STEEL	U-28-156	

LIST OF STANDARD DRAWINGS

	DWG. NO.	LATEST REV. DATE
BRIDGE RAILING SINGLE SLOPE CONCRETE PARAPET	STD-1-1SS	10-15-08
PAVEMENT AT BRIDGE ENDS	STD-1-5	08-08-08
BRIDGE END DRAIN W/ PABE	STD-1-6	4-28-97
BRIDGE END DRAIN W/ PABE	STD-1-7	7-31-00
BRIDGE END DRAIN 4'-0" X 8'-7" W/ PABE	STD-1-9	05-01-95
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS	STD-4-1	4-08-05
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS DESIGN CRITERIA	STD-4-2	4-08-05
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS	STD-4-3	3-02-02
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS CONSTRUCTION DETAILS	STD-4-4	6-10-96
STD. PILE DETAILS	STD-5-1	10-25-93
STD. PILE DETAILS	STD-5-2	4-08-05
STANDARD SEISMIC DETAILS	STD-6-1	5-21-99
REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLAB	STD-9-1	10-07-08
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	STD-10-1	4-08-05
STANDARD DETAILS AND INT. DIAPH. DETAILS FOR I- BEAMS	STD-14-2	10-15-08

2026 ADT = 11,821
 25.200 m ROADWAY WITH STD-1-1 PARAPET
 DESIGN SPEED = 90 km/h

BRIDGE NO. 7

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

LAYOUT OF BRIDGE
 WIDENING OF
 STATE ROUTE 15 OVER
 HATCHIE RIVER OVERFLOW
 STATION 15+132.794
 BRIDGE I.D. NO. 35SR0150015
 LOG MILE 17.55
 HARDEMAN COUNTY
 2010

CORRECT *Edward P. Wasserman*
 ENGINEER OF STRUCTURES

U-28-130

TEMPORARY MEDIAN BARRIER = 322 L.F.

CLASS "B" RIP-RAP = 1,428 TONS



BASE CONST. JOINT
(SLAB ONLY)

MATCH LINE
"A"-"A"
SEE DRAWING M-4

REVISIONS

NOTE: NO PORTION OF THE PARAPET SHALL BE POURED UNTIL THE ENTIRE DECK SLAB IS IN PLACE.

NOTE: WHEN POURING SLAB, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPET. THE PARAPET SHALL NOT BE POURED UNTIL THE SLAB IS POURED AND CURED. ALSO SEE DRAWING NO. STD-1-1.SS.

NOTE: 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 INSTALLED 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.

NOTE: THE SUPPORT DIAPHRAGMS AT THE BENTS SHALL BE FORMED AND THE BOTTOM 381mm POURED AS SOON AS POSSIBLE AFTER THE BEAMS HAVE BEEN SET. THE REMAINDER OF THE DIAPHRAGM SHALL BE POURED CONCURRENTLY WITH THE DECK SLAB, BUT MAY NOT BE POURED UNTIL THE BEAMS ATTAIN AN AGE OF 90 DAYS. ALL DIAPHRAGM CONCRETE SHALL BE INCLUDED IN THE QUANTITY FOR ITEM NO. 604-03.09.



NOTE: ALL DIMENSIONS SHOWN IN MILLIMETERS,
WITH THE EXCEPTION OF STATIONS AND
ELEVATIONS, UNLESS OTHERWISE NOTED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

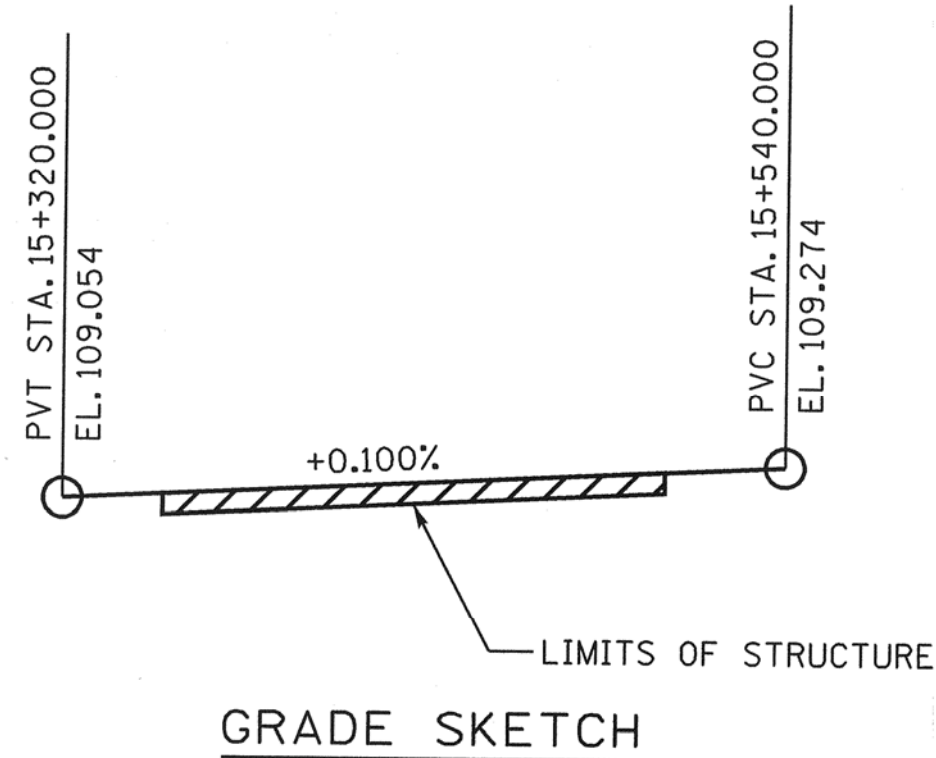
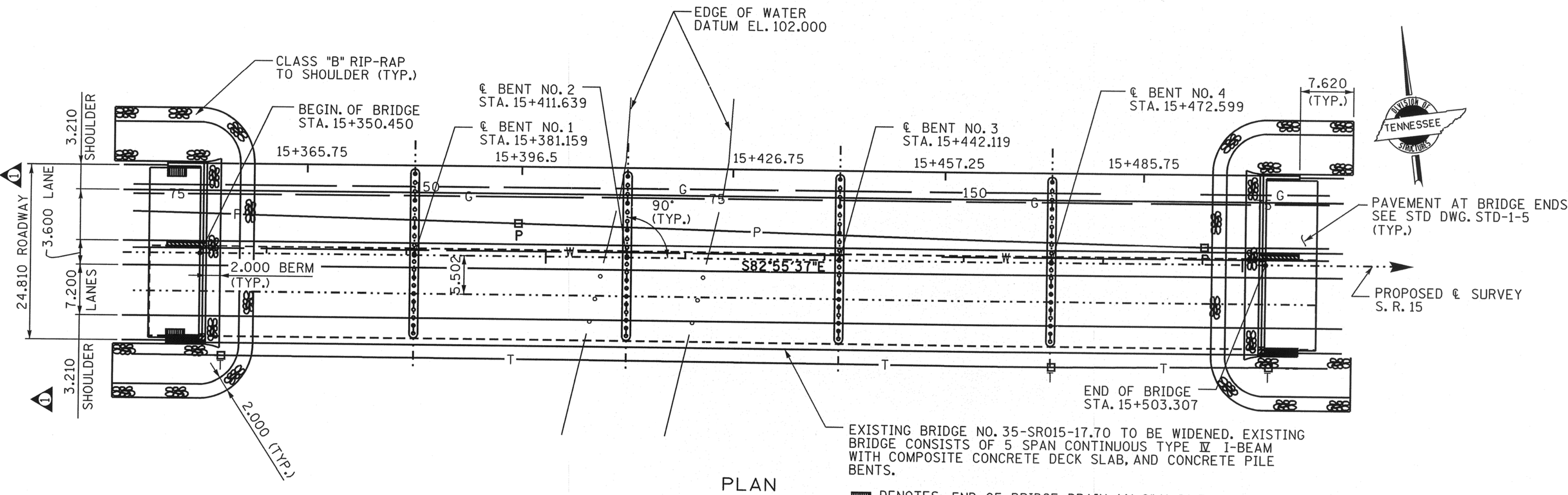
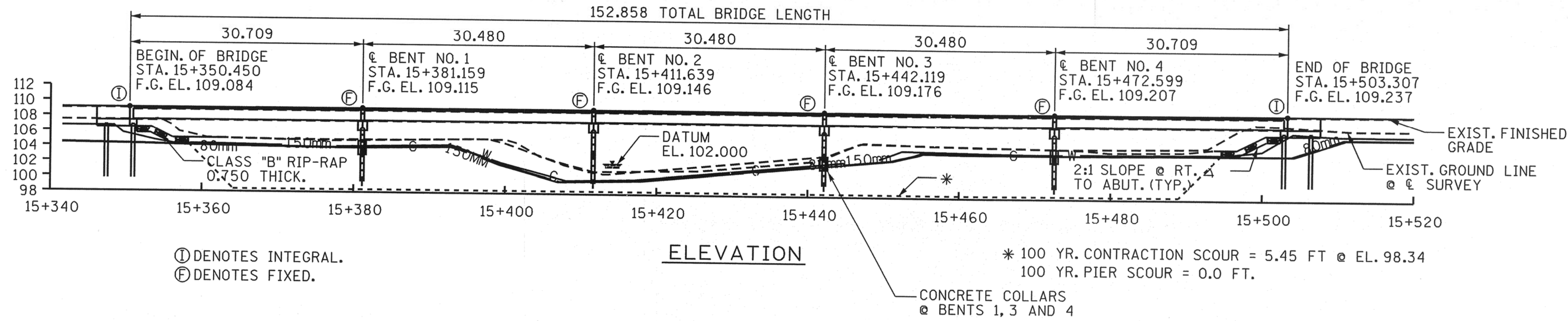
OVER
HATCHIE RIVER OVERFLOW
ATION 15+132.794 L.M. 17.55
HARDEMAN COUNTY
2010

J-28-134



PLAN OF MAIN REINFORCEMENT

DESIGNED BY K. MCLAUGHLIN DATE 05-05
 DRAWN BY PMM (JED) DATE 05-05
 SUPERVISED BY MBC/KDM DATE 05-05
 CHECKED BY _____ DATE _____



HYDRAULIC DATA

DRAINAGE AREA = 3346.02 km²
DESIGN DISCHARGE (100 YR.) = 428.46 m³/s
TOTAL DESIGN DISCHARGE = 1915.64 m³/s
WATER AREA PROVIDED BELOW EL. 107.02 = 569.70 m²
100 YR. VELOCITY = 0.75 m/s
100 YR. BRIDGE BACKWATER = 0.06 m @ EL. 107.37
ROADWAY OVERTOPPING EL. = 107.40

DESIGNED BY LANCE FITTRO DATE 12-05
DRAWN BY M. MANNCHEN DATE 7-06
SUPERVISED BY KDM/MBC DATE 7-06
CHECKED BY LANCE FITTRO DATE 6-07

LIST OF SPECIAL PROVISIONS PROV. NO. LAST REV. DATE

REGARDING BRIDGE DECK CRACK SEALING ----- 604CR ----- 03-01-06

TEMPORARY MEDIAN BARRIER = 552 L.F.

CLASS "B" RIP-RAP = 1,522 TONS

CONST. NO. 35001-3226-14

PROJECT NO.	YEAR	SHEET NO.
NHE-15(91)	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
1	10/21/10	DJS	REV. SHOULDER WIDTH AND REV. DATES

LIST OF DRAWINGS

DWG. NO.	LATEST REV. DATE
LAYOUT OF BRIDGE	U-28-157 --- 10-21-10
GENERAL NOTES	U-28-158 ---
ESTIMATED QUANTITIES	U-28-159 --- 10-21-10
FOUNDATION DATA	U-28-160 ---
SUPERSTRUCTURE	U-28-161 --- 10-21-10
SUPERSTRUCTURE DETAILS	U-28-162 --- 10-21-10
SUPERSTRUCTURE DETAILS	U-28-163 --- 10-21-10
PRESTRESSED I-BEAM DETAILS	U-28-164 ---
ABUTMENT NO. 1	U-28-165 --- 10-21-10
ABUTMENT NO. 1 DETAILS	U-28-166 --- 10-21-10
ABUTMENT NO. 2	U-28-167 --- 10-21-10
ABUTMENT NO. 2 DETAILS	U-28-168 --- 10-21-10
ABUTMENT NO. 1 AND 2 DETAILS	U-28-169 --- 10-21-10
BENTS NO. 1 AND 4	U-28-170 ---
BENT NO. 2	U-28-171 ---
BENT NO. 3	U-28-172 ---
FINAL FOUNDATION DATA	U-28-173 --- 10-21-10
BILL OF STEEL	U-28-174 --- 10-21-10

LIST OF STANDARD DRAWINGS

DWG. NO.	LATEST REV. DATE
BRIDGE RAILING SINGLE SLOPE CONCRETE PARAPET	STD-1-1SS --- 10-15-08
SLIDER PLATES AND DECK DRAINS	STD-1-2SS ---
PAVEMENT AT BRIDGE ENDS	STD-1-5 --- 08-08-08
BRIDGE END DRAIN W/ P.A.B.E.	STD-1-6 --- 4-28-97
BRIDGE END DRAIN W/ P.A.B.E.	STD-1-7 --- 07-31-00
BRIDGE END DRAIN 4'-0" X 8'-7" W/ P.A.B.E.	STD-1-9 --- 05-01-95
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS	
GENERAL DETAILS	STD-4-1 --- 4-08-05
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS	
DESIGN CRITERIA	STD-4-2 --- 4-08-05
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS	
GENERAL DETAILS	STD-4-3 --- 3-02-02
STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS	
CONSTRUCTION DETAILS	STD-4-4 --- 6-10-96
STD. PILE DETAILS	STD-5-1 --- 10-25-93
STD. PILE DETAILS	STD-5-2 --- 4-08-05
STANDARD SEISMIC DETAILS	STD-6-1 --- 5-21-99
REINFORCING BAR SUPPORT DETAILS	
FOR CONCRETE SLAB	STD-9-1 --- 10-07-08
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	STD-10-1 --- 4-08-05
STANDARD DETAILS AND INT. DIAPH. DETAILS	
FOR I-BEAMS	STD-14-2 --- 10-15-08

BRIDGE NO. 8

2028 ADT = 12,541
25,200 m ROADWAY WITH STD-1-1SS PARAPET
DESIGN SPEED = 90 km/h

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

LAYOUT OF BRIDGE
WIDENING OF
STATE ROUTE 15 OVER
HATCHIE RIVER
STATION 15+426.879
BRIDGE I.D. NO. 35SR0150017
LOG MILE 17.70
HARDEN COUNTY
2010



NOTE: ALL DIMENSIONS SHOWN IN METERS,
WITH THE EXCEPTION OF STATIONS AND
ELEVATIONS, UNLESS OTHERWISE NOTED.

NOTE: CONTRACTOR SHALL BE RESPONSIBLE FOR
CONVERSION FROM METRIC UNITS.

CORRECT *Edward P. Wasserman*
ENGINEER OF STRUCTURES

U-28-157

D:\dgn\sup\sup766MR1.dgn
26-OCT-2010
09:00



CLASS 'D' (BRIDGE DECK) C.Y.	EPOXY COATED REINFORCING STEEL LBS.	STEEL BAR REINFORCEMENT (BRIDGES) LBS.
593	145,163	2,943



NOTE: ALL DIMENSIONS SHOWN IN MILLIMETERS,
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ELEVATIONS, UNLESS OTHERWISE NOTED.

BRIDGE NO. 8

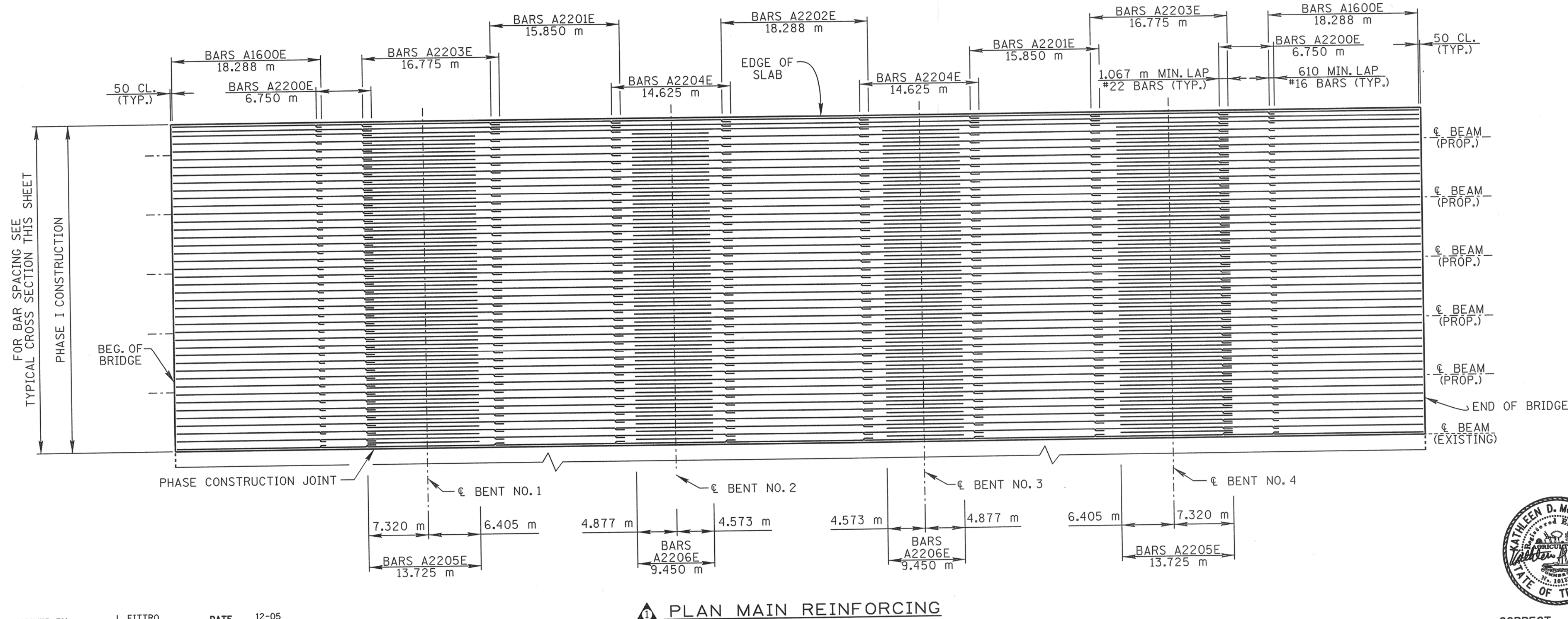
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
 WIDENING OF STATE ROUTE 15
 OVER
 HATCHIE RIVER
 STATION 15+426.879
 LOG MILE 17.70
 HARDEMAN COUNTY
 2010



CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

U-28-161



DESIGNED BY	<u>L. FITTRO</u>	DATE	<u>12-05</u>
DRAWN BY	<u>(JED) A. HUNTER</u>	DATE	<u>02-06</u>
SUPERVISED BY	<u>M.B.C./K.D.M.</u>	DATE	<u>02-06</u>
CHECKED BY	<u>L. FITTRO</u>	DATE	<u>06-07</u>