



THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Benjamin E. Graves

2026.07.14 16:45:04-05'00'

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COMPANY NAME HDR ENGINEERING
ADDRESS 120 BRENTWOOD COMMONS WAY
SUITE 525
CITY, STATE BRENTWOOD, TN 37211
PE NAME, PE NUMBER B. EVAN GRAVES, 117107

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.....	STRUCTURE-SIGN1
TITLE SHEET.....	1
ESTIMATED QUANTITIES.....	2
GENERAL NOTES.....	3
PROJECT COMMITMENTS.....	4
TRAFFIC CONTROL PLANS.....	5-6
TRAFFIC CONTROL QUANTITIES AND NOTES.....	7
SMART WORKZONE NOTES.....	7A
BRIDGE PLANS.....	BR-133-365 THRU -133-369

YEAR	PROJECT NO.	SHEET NO.
2025	ER-BR-STP-353(13)	STRUCTURE-SIGN-1

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET



Benjamin Graves
2026.08.07 12:52:46-05'00'
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AND SEALED. THE SIGNATURE MUST BE VERIFIED ON THE
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COMPANY NAME HDR ENGINEERING
ADDRESS 120 BRENTWOOD COMMONS WAY
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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.....	STRUCTURE-SIGN2
TITLE SHEET.....	1
ESTIMATED QUANTITIES.....	2

YEAR	PROJECT NO.	SHEET NO.
2026	ER-BR-STP-353(13)	STRUCTURE-SIGN-2

**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

SIGNATURE SHEET

Index Of Sheets

SIGNATURE SHEET	STRUCTURE-SIGN1 THRU STRUCTURE-SIGN2
TITLE SHEET	1
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GENERAL NOTES.....	3
PROJECT COMMITMENTS.....	4
TRAFFIC CONTROL PLANS.....	5-6
TRAFFIC CONTROL QUANTITIES AND NOTES.....	7
SMARTWORKZONE NOTES.....	7A

Standard Drawings		
DRAWING NO.	CURRENT REVISION DATE	DESCRIPTION
ROADWAY DESIGN STANDARDS		
RD-A-1	02-20-20	STANDARD ABBREVIATION A THROUGH L
RD-A-2		STANDARD ABBREVIATION M THROUGH Z
RD-L-1	01-30-26	STANDARD LEGEND
RD-L-1A		STANDARD LEGEND
RD11-S-11A		ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION

ROADWAY & PAVEMENT APPURTENANCES		
RP-J-9	05-01-20	CONTRACTION AND CONSTRUCTION JOINTS FOR CONCRETE PAVEMENT

DESIGN - TRAFFIC CONTROL		
T-WZ-10	03-26-25	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-16	03-26-25	LANE SHIFT FOR DIVIDED HIGHWAYS AND FREEWAYS
T-WZ-18	03-26-25	SHOULDER CLOSURE DETAIL FOR FREEWAYS AND DIVIDED HIGHWAYS
T-TW-FAB1	03-26-25	FLASHING YELLOW ARROW BOARD
T-TW-PCB2	03-26-25	20 FOOT PORTABLE CONCRETE BARRIER RAIL
T-TW-PCB3	03-26-25	PROTABLE CONCRETE BARRIER RAIL DETAILS

<u>REFERENCE DRAWINGS</u>		
(TO BE PRINTED WITH PLANS)		
M-262-121 THRU M-262-134	EXISTING BRIDGE PLANS	
<u>SPECIAL PROVISIONS</u>		
108B		
725SWZ		

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 APRIL 1, 2026 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

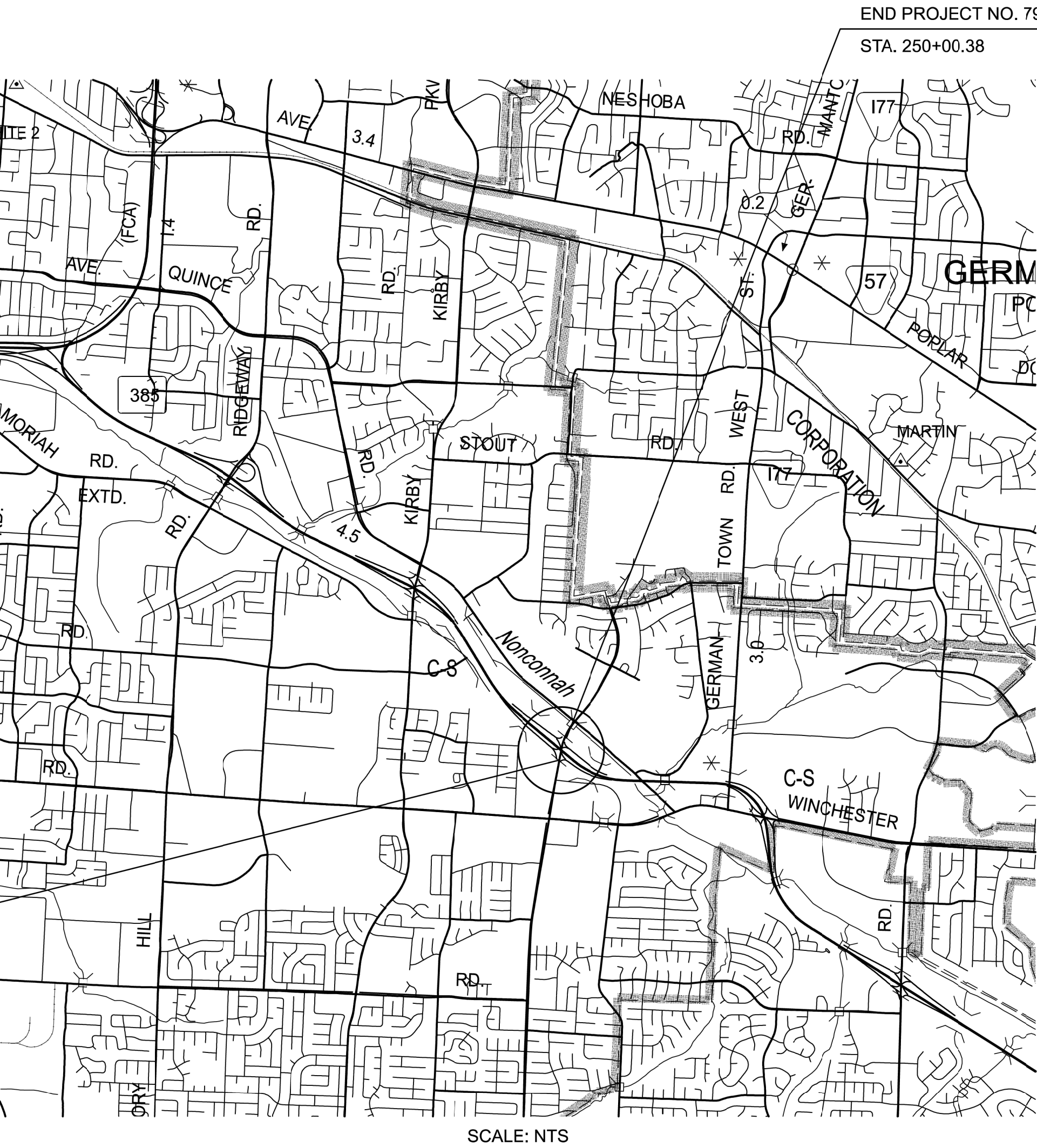
TDOT DESIGN MANAGER: SEAN MONTGOMERY		
DESIGNER : EVAN GRAVES	CHECKED BY : CARTER BEARDEN	
P.E. NO.	79S385-M3-002	
PIN NO.	132865.00	

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

SHELBY COUNTY

BRIDGE OVER RIVERDALE ROAD, LM 3.57

PS&E	
BRIDGE REPAIR	
SR385	F.A.H.S. NO.



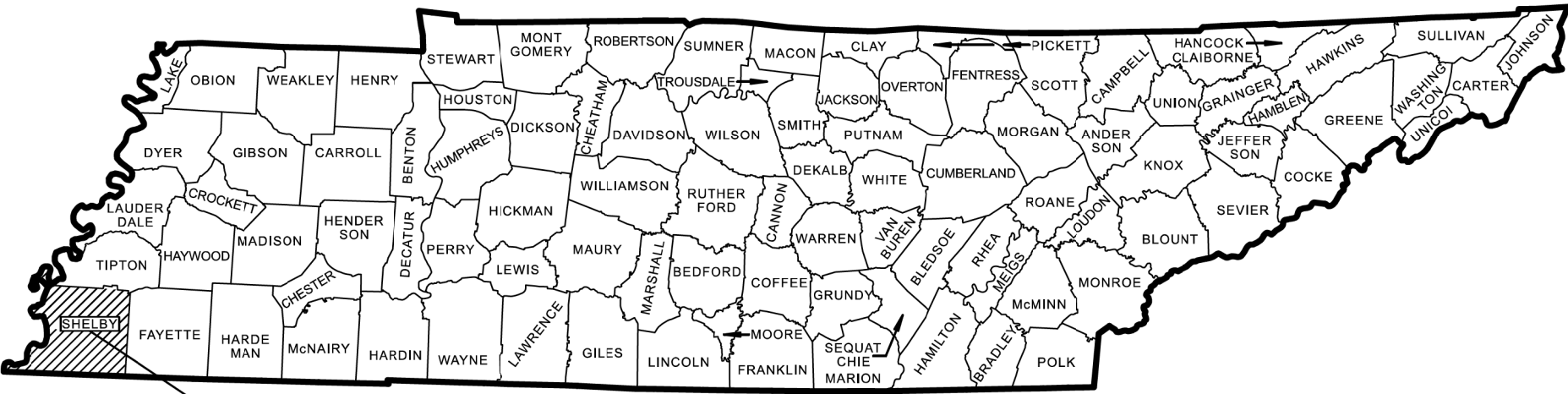
BRIDGE LENGTH	0.044 MILES
PROJECT LENGTH	0.064 MILES

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

NO UTILITY CONFLICTS ARE ANTICIPATED
BASED ON SCOPE OF WORK

TENN.	YEAR	SHEET NO.
	2026	1
FED. AID PROJ. NO.		
STATE PROJ. NO.	79S385-M3-002	

REVISION 08-07-26: INDEX OF SHEETS AND MAP REVISED.

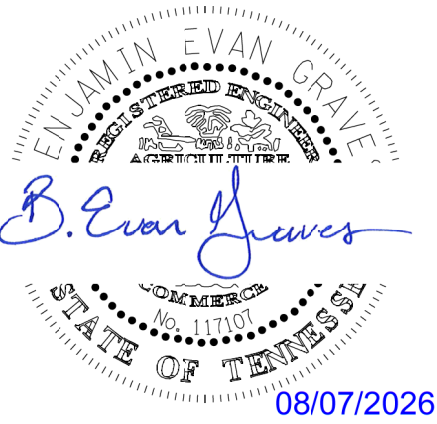


PROJECT LOCATION
BRIDGE ID. NO. 79-SR385-03.57

LIST OF BRIDGE DRAWINGS

LAYOUT OF BRIDGE TO BE REPAIRED	BR-133-365
ESTIMATED QUANTITIES	BR-133-366
GENERAL NOTES	BR-133-367
PHASED CONSTRUCTION DETAILS	BR-133-368
GENERAL REPAIR DETAILS	BR-133-369

NO EXCLUSIONS



APPROVED:	SHANE HESTER, DEPUTY COMMISSIONER / CHIEF ENGINEER
DATE:	
APPROVED:	WILL REID, DEPUTY GOVERNOR & COMMISSIONER

TRAFFIC DATA	
AADT (2021)	115,199
POSTED SPEED	55 MPH

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED:	
DIVISION ADMINISTRATOR	DATE

CONST. NO. 79S385-M3-002

PROJECT NO.	YEAR	SHEET NO.
79S385-M3-002	2026	2

[illegible]

	ESTIMATED BRIDGE QUANTITIES			
	ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY
①	201-05.31	VEGETATION REMOVAL	LS	1
①②	303-01.02	GRANULAR BACKFILL (BRIDGES)	TON	185
③	502-08.02	RESEALING JOINTS (SILICONE SEALANT)	L.F.	831
④	604-04.05	BRIDGE END DRAINS (12")	EACH	4
①	610-07.01	12" PIPE DRAIN (BRIDGE DRAIN)	L.F.	403
⑤	703-01	PORTLAND CEMENT CONCRETE DITCH PAVING	C.Y.	18,2
	712-01	TRAFFIC CONTROL	LS	1
	712-02.10	PORTABLE BARRIER RAIL (MASH TL-3)	L.F.	1270
⑥	712-02.60	TEMPORARY WORK ZONE CRASH CUSHION (MASH TL-3)	EACH	2
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	119
	712-04.50	BARRIER RAIL DELINEATOR	EACH	40
	712-06	SIGNS (CONSTRUCTION)	S.F.	568
	712-09.08	REMOVABLE PAVEMENT MARKING (6" LINE)	L.F.	17520
	712-09.30	REMOVABLE BLACK-OUT TAPE (6")	L.F.	11580
	716-01.11	RAISED PYMT MARKERS (BI-DIRECTIONAL) (1 COLOR LENS)	EACH	228
	717-01	MOBILIZATION	LS	1
⑦⑧	725-21.07	PORTABLE SMART WORK ZONE SYSTEM	DAY	50

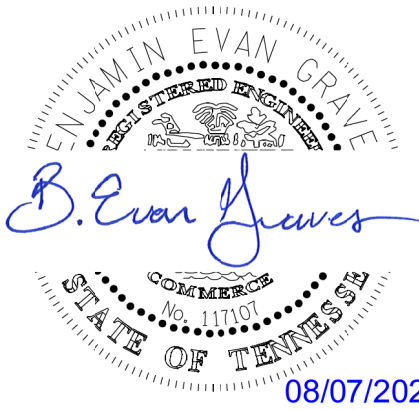
- ① THIS ITEM MAY BE INCREASED OR DECREASED AS DIRECTED BY THE ENGINEER.
- ② 303-01.02 INCLUDES COST OF ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED FOR REMOVAL OF VEGETATION, GRADING, AND PLACEMENT OF TYPE A GRADING D BACKFILL IN AREAS OF EROSION BETWEEN WINGWALLS & RETAINING WALLS AND THE COST OF ALL LABOR AND MATERIALS TO FURNISH, HALL, AND PLACE FILL MATERIAL FOR THE SIDE DRAIN AT THE BRIDGE CORNERS. FOR NOTES AND DETAILS, SEE DWG. NOS. BR-133-365 AND BR-133-369.
- ③ 502-08.02 INCLUDES COST OF ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED FOR PLACEMENT OF SILICONE JOINTS BETWEEN FLUMES AND ABUTMENTS OR RETAINING WALLS. FOR NOTES AND DETAILS, SEE DWG. NOS. BR-133-365 AND BR-133-369.
- ④ 604-04.05 INCLUDES COST OF ALL LABOR, EQUIPMENT, MATERIALS, HIGH EARLY STRENGTH CONCRETE, NEW REINFORCING STEEL AND EXCAVATION NECESSARY FOR NEW CONCRETE DRAINS. FOR NOTES AND DETAILS, SEE DWG. NO. BR-133-369.
- ⑤ 703-01 INCLUDES COST TO FORM AND POUR CONCRETE FOR PAVED DITCH BETWEEN ABUTMENTS & RETAINING WALLS. FOR NOTES AND DETAILS, SEE DWG. NO. BR-133-365.
- ⑥ 712-02.60 THIS ITEM SHALL BE A PORTABLE ENERGY ABSORBING TERMINAL MEETING THE REQUIREMENTS OF AASHTO MASH FOR TEST LEVEL 3. THE PAY ITEM WILL INCLUDE FURNISHING AND INSTALLING ALL COMPONENTS AS LISTED ON THE MANUFACTURER'S BILL OF MATERIALS.
- ⑦ THE PORTABLE SMART WORK ZONE SYSTEM (SWZS) DESCRIPTION CAN BE FOUND IN THE SPECIAL PROVISION PAY ITEM 725-21.07. PORTABLE SMART WORK ZONE SYSTEM SHALL INCLUDE EIGHT (8) PORTABLE FULL MATRIX CHANGEABLE MESSAGE SIGNS (PCMS), FOUR (4) PORTABLE CLOSED-CIRCUIT TELEVISION CAMERAS (CCTV), FOUR (4) PORTABLE RADAR DETECTION STATIONS (PRDS), TWENTY-TWO (22) SPEED SENSORS AND ALL NECESSARY REMOTE CLIENT OPERATIONAL SOFTWARE, MAINTENANCE, COMMUNICATIONS, EQUIPMENT AND CELLULAR FEES FOR FULLY FUNCTIONING SWZS FOR THE DURATION OF THE PROJECT, AS DESCRIBED IN THE SPECIAL PROVISION SP725SWZ.
- ⑧ DAYS SHALL BE MEASURED AS 24 HOUR PERIODS.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES

STATE ROUTE 385
OVER RIVERDALE RD
BRIDGE NO. 79-SR385-03.57
FED. ID NO. 79SR3850013
SHELBY COUNTY
2026

DESIGNED BY Rawleigh S. Richardson Jr. DATE 07/09/24
 DRAWN BY Rawleigh S. Richardson Jr. DATE 07/09/24
 SUPERVISED BY Benjamin E. Graves DATE 07/22/24
 CHECKED BY Lane M. Decker DATE 07/22/24



BR-133-366

[illegible]

PROJECT NO.	YEAR	SHEET NO.
79S385-M3-002	2026	3

[illegible]

ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE (1) WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.

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.

A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS FLAGGER SIGNS MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.

TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.

USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, 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. 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 THIRTY (30) FEET SETBACK, THE CONTRACTOR SHALL DETERMINE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

THE CONTRACTOR WILL 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. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO BE PARKED WITHIN THIRTY (30) FEET OF AN OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS THIRTY (30) FEET SETBACK, THE CONTRACTOR SHALL DETERMINE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL DETOURS SHALL BE PAVED, STRIPED, SIGNED AND THE CHANNELIZING DEVICES ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC.

NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA.

THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED.

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.

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.

SOME UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111.

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 A CONTRACT ITEM, 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 OF THE PROJECT DIRECTED BY THE ENGINEER.

CLEARING, GRUBBING AND OTHER DISTURBANCE TO VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. EXISTING VEGETATION SHOULD BE PRESERVED TO THE MAXIMUM EXTENT POSSIBLE. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.

ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICAL. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES OVER TEMPORARY EPSC MEASURES.

CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STATE ROUTE 385
OVER RIVERDALE RD
BRIDGE NO. 79-SR385-03.57
FED. ID NO. 79SR3850013
SHELBY COUNTY
2026



07/14/2026

BR-133-367

DESIGNED BY <u>Rawleigh S. Richardson Jr.</u>	DATE <u>07/09/24</u>
DRAWN BY <u>Rawleigh S. Richardson Jr.</u>	DATE <u>07/09/24</u>
SUPERVISED BY <u>Benjamin E. Graves</u>	DATE <u>07/22/24</u>
CHECKED BY <u>Lane M. Decker</u>	DATE <u>07/22/24</u>



TYPE	YEAR	PROJECT NO.	SHEET NO.
L&G	2026	79S385-M3-002	4

PROJECT COMMITMENTS			
COMMITMENT ID	SOURCE DIVISION	DESCRIPTION	STA. / LOCATION
EDHZ001	ENVIRONMENTAL DIVISION, HAZARDOUS MATERIALS	AN ASBESTOS CONTAINING MATERIAL (ACM) SURVEY WAS COMPLETED ON BRIDGE NO. 79SR3850013 SR-385 OVER RIVERDALE ROAD LM 3.57 (79-SR385-03.57). NO ASBESTOS WAS DETECTED. PLEASE SEE THE REPORT FOR FURTHER DETAILS AND PHOTOGRAPHS. 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 STRJCTURE (BRIDGE OR BUILDING), THE CONTRACTOR IS REQUIRED TO SUBMIT THE NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS STANDARD 10-DAY NOTICE OF DEMOLITION TO THE TDEC DIVISION OF AIR POLLUTION CONTROL (PER TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (APRIL 1, 2026) SECTIONS 107.08.D AND 202.03).	79-SR385-03.57 (RT<)

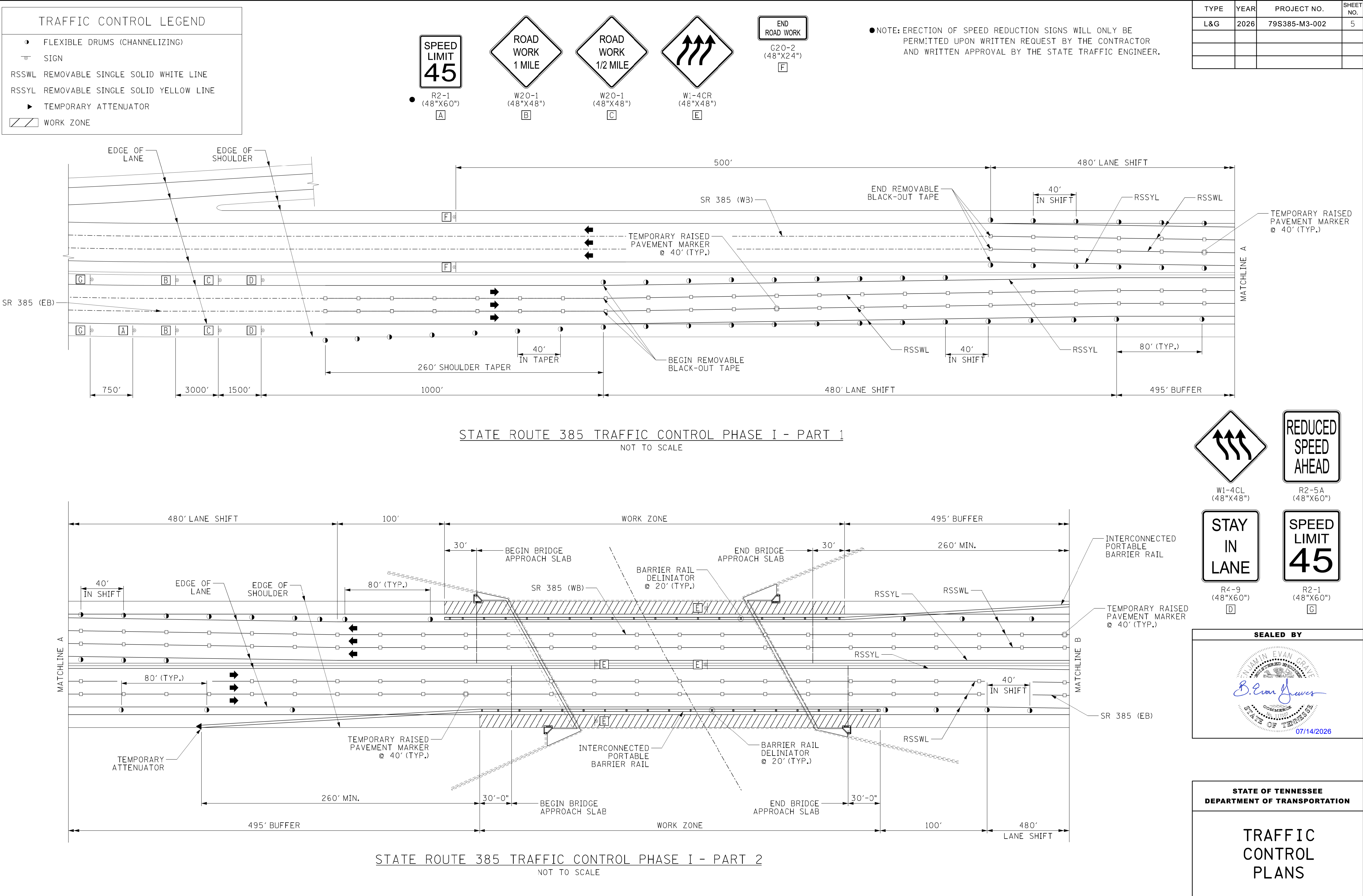
SEALED BY

The image shows the official seal of the State of Tennessee. The seal is circular with a scalloped outer edge. Inside the seal, the words "ENJOYMENT EVAN GRAPE" are written in an arc at the top. In the center is a smaller circular emblem featuring a landscape with a river, mountains, and a sun, with the words "AGRICULTURE" and "COMMERCE" on either side. Below this central emblem, the words "COMMERCE" and "STATE OF TENNESSEE" are written in an arc. The date "JUN 11 1796" is inscribed at the bottom of the seal. Overlaid on the seal is a handwritten signature in blue ink that reads "B. Evan Grape". To the right of the seal, the date "07/14/2026" is printed in blue.

07/14/2026

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROJECT
COMMITMENTS



CONSTRUCTION WORK ZONE & TRAFFIC CONTROL NOTES

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, VERTICAL PANELS, 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. 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 THIRTY (30) FEET SETBACK, THE ENGINEER SHALL APPROVE ALTERNATE LOCATIONS.

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. 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. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS THIRTY (30) FEET SETBACK, THE ENGINEER SHALL APPROVE ALTERNATE LOCATIONS.

7. ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

8. T.D.O.T. CONSTRUCTION OFFICE SHALL NOTIFY THE OVERWEIGHT AND PERMITS OFFICE OF LANE WIDTH RESTRICTIONS DURING CONSTRUCTION PRIOR TO ALLOWING THE CONTRACTOR TO INSTALL TRAFFIC CONTROL. PERMIT VEHICLES WILL NOT BE ALLOWED UNTIL CONSTRUCTION IS COMPLETE AND FULL LANE WIDTHS HAVE BEEN RESTORED.

ADDITIONAL TRAFFIC CONTROL NOTES

ADVANCED WARNING SIGNS TO BE PLACED PRIOR TO CONSTRUCTION AND REMAIN IN PLACE UNTIL THE COMPLETION OF THIS PROJECT.

THE TRAFFIC CONTROL PLAN DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF INSTALLING TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE CURRENT EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

IF ADDITIONAL SIGNS ARE DEEMED NECESSARY BY THE ENGINEER, THEY SHALL BE FURNISHED AND INSTALLED AT THE UNIT PRICE BID, ITEM NO. 712-06 SIGNS (CONSTRUCTION) S.F.

MISCELLANEOUS NOTES

1. 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 BUSINESSES ALONG THE PROPOSED CONSTRUCTION AREA.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OR LOSS OF EXISTING SIGNS DURING CONSTRUCTION. EXISTING SIGNS SHALL BE REMOVED AND REPLACED AS NECESSARY.

SPECIAL NOTES

1. TRAFFIC CONTROL PLAN - SEE SHEETS 5 THROUGH 6 AND STD. DWG. NOS. T-WZ-10 AND T-WZ-16.

TRAFFIC CONTROL SIGN QUANTITIES

TYPE	DESCRIPTION	SIZE	EACH	S.F.
G20-2	END ROAD WORK	48"X24"	4	32
R2-1	SPEED LIMIT 45	48"X60"	6	120
R2-5A	REDUCED SPEED AHEAD	48"X60"	4	80
R4-9	STAY IN LANE	48"X60"	4	80
W1-4CL	3 LANE SHIFT - LEFT	48"X48"	4	64
W1-4CR	3 LANE SHIFT - RIGHT	48"X48"	4	64
W20-1	ROAD WORK 1 MILE	48"X48"	4	64
W20-1	ROAD WORK 1/2 MILE	48"X48"	4	64
TOTAL				568

TRAFFIC CONTROL QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
712-01	TRAFFIC CONTROL	LS	1
712-02.10	PORTABLE BARRIER RAIL (MASH TL-3)	L.F.	1270
712-02.60	TEMPORARY WORK ZONE CRASH CUSHION (MASH TL-3)	EACH	2
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	119
712-04.50	BARRIER RAIL DELINEATOR	EACH	40
712-06	SIGNS (CONSTRUCTION)	S.F.	568
712-09.08	REMOVABLE PAVEMENT MARKING (6" LINE)	L.F.	17520
712-09.30	REMOVABLE BLACK-OUT TAPE (6")	L.F.	11580
716-01.11	RAISED PVMT MARKERS (BI-DIRECTIONAL) (1 COLOR LENS)	EACH	228
717-01	MOBILIZATION	LS	1
725-21.07	PORTABLE SMART WORK ZONE SYSTEM	DAY	50

1 712-02.60 THIS ITEM SHALL BE A PORTABLE ENERGY ABSORBING TERMINAL MEETING THE REQUIREMENTS OF AASHTO MASH FOR TEST LEVEL 3. THE PAY ITEM WILL INCLUDE FURNISHING AND INSTALLING ALL COMPONENTS AS LISTED ON THE MANUFACTURERS BILL OF MATERIALS.

2 THE PORTABLE SMART WORK ZONE SYSTEM (SWZS) DESCRIPTION CAN BE FOUND IN THE SPECIAL PROVISION PAY ITEM 725-21.07. PORTABLE SMART WORK ZONE SYSTEM SHALL INCLUDE EIGHT (8) PORTABLE FULL MATRIX CHANGEABLE MESSAGE SIGNS (PCMS), FOUR (4) PORTABLE CLOSED-CIRCUIT TELEVISION CAMERAS (CCTV), FOUR (4) PORTABLE RADAR DETECTION STATIONS (PRDS), TWENTY-TWO (22) SPEED SENSORS AND ALL NECESSARY REMOTE CLIENT OPERATIONAL SOFTWARE, MAINTENANCE, COMMUNICATIONS, EQUIPMENT AND CELLULAR FEES FOR FULLY FUNCTIONING SWZS FOR THE DURATION OF THE PROJECT, AS DESCRIBED IN THE SPECIAL PROVISION SP725SWZ.

3 DAYS SHALL BE MEASURED AS 24 HOUR PERIODS.

SEALD BY

TRUAMIN EVAN GRAVE

B. Evan Graves

07/14/2026

STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL QUANTITIES AND NOTES

\$\$\$\$SYTIME\$\$\$\$\$
 \$\$\$\$DGNDEC\$\$\$\$\$

1. ALL SIGNS AND TRAFFIC CONTROL DEVICES ARE TO CONFORM TO THE MANUAL ON STANDARD TRAFFIC CONTROL DEVICES.
2. EQUIPMENT AND SIGNAGE SHOWN ON THESE PLANS ARE IN APPROXIMATE LOCATIONS. ALL EQUIPMENT SHALL BE FIELD LOCATED BY THE CONTRACTOR WITH PROPOSED LOCATIONS APPROVED BY REGIONAL TRAFFIC ENGINEER. TO VERIFY PROPER PLACEMENT AND BEST SIGHT DISTANCE FOR PORTABLE CHANGEABLE MESSAGE SIGNS(PCMS), ADEQUATE ROADSIDE PROTECTION, ADEQUATE DETECTION AND DETECTOR SPACING, ETC. THE CONTRACTOR SHALL STAKE EACH PROPOSED LOCATION PRIOR TO REQUEST FOR REVIEW BY THE REGIONAL TRAFFIC ENGINEER. THE COST OF THE FIELD STAKING WILL NOT BE MEASURED FOR SEPARATE PAYMENT, BUT WILL BE INCLUDED UNDER OTHER ITEMS. THE CONTRACTOR SHALL PLACE ALL EQUIPMENT WITHIN PUBLIC RIGHT-OF-WAY.
3. SMART WORKZONE DEVICES ARE REQUIRED WELL OUTSIDE OF THE PROJECT LIMITS. NO ADDITIONAL COMPENSATION FOR SUCH WORK WILL BE MADE EXCEPT AS APPROVED BY SPECIFIC PAY ITEMS INCLUDED IN THE PLANS.
4. FOR APPROVED PCMS AUTOMATED MESSAGING AND SMART WORKZONE DESCRIPTIONS, SEE THE SPECIAL PROVISIONS SP725SWZ.
5. A SMART WORKZONE SYSTEM SHALL BE UTILIZED TO PROVIDE PROTECTION OF TRAFFIC QUEUES CAUSED BY CONTRACT-OPERATIONS. THE SYSTEM SHALL CONSIST OF PORTABLE RADAR SENSORS, PORTABLE CHANGEABLE MESSAGE SIGNS, AND APPROPRIATE SOFTWARE THAT WILL MONITOR AND CONTROL ITS OPERATION. THE DEPLOYMENT OF THE SYSTEM SHALL AS CLEARLY ALERT MOTORISTS OF SPEED DIFFERENTIALS AHEAD. THE CONTRACTOR SHALL MAINTAIN AND UPDATE THE SYSTEM AS REQUIRED THROUGHOUT THE DURATION OF THE PROJECT.
6. THE PRECISE POSITION OF THE PCMS AND SENSORS MAY BE ESTABLISHED BY THE ENGINEER IF THERE IS ANY ISSUE INSTALLING THE PCMS & SENSORS AT THE LOCATIONS DESIGNATED IN THE PLANS.
7. IF TRAFFIC BACKS UP BEYOND THE LAST CHANGEABLE MESSAGE SIGN UNIT, TDOT PERSONNEL SHOULD BE NOTIFIED SO ADJUSTMENTS CAN BE MADE TO RELOCATE THE LAST CMS WITH SPEED SENSORS TO THE NEW END OF THE QUEUE AND ADJUST ANY SPACING OF THE INTERMITTENT SPEED SENSORS.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING SURE TENNESSEE 511 SIGNS ARE POSTED IN ADVANCE OF WORKZONES. CONTRACTOR SHALL COORDINATE WITH NEIGHBORING STATE FOR SIGN LOCATIONS.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH TDOT ON THE INTEGRATION OF THE SMART WORK ZONE SYSTEM'S COMMUNICATION TO THE TRAFFIC MANAGEMENT CENTER (TMC).
10. WEEKLY TRAFFIC DATA REPORTS SHALL BE PROVIDED TO THE ENGINEER AND SHOULD INCLUDE SPEED DATA PER SENSOR LOCATION AND QUEUE LENGTHS IN BOTH GRAPHICAL AND NUMERICAL FORMATS. REAL TIME DATA SHALL ALSO BE MADE AVAILABLE UPON REQUEST OF THE ENGINEER.

(1)(2)(3)(4)

FOOTNOTES

(1) THE PORTABLE SMART WORK ZONE SYSTEM (SWZS) DESCRIPTION CAN BE FOUND IN THE SPECIAL PROVISIONS PAY ITEM 725-21.07. PORTABLE SMART WORK ZONE SYSTEM SHALL INCLUDE EIGHT (8) PORTABLE FULL MATRIX CHANGEABLE MESSAGE SIGNS (PCMS), FOUR (4) PORTABLE CLOSED-CIRCUIT TELEVISION CAMERAS (CCTV), FOUR (4) PORTABLE RADAR DETECTION STATIONS (PRDS), TWENTY-TWO (22) SPEED SENSORS AND ALL NECESSARY REMOTE CLIENT OPERATIONAL SOFTWARE, MAINTENANCE, COMMUNICATIONS, EQUIPMENT AND CELLULAR FEES FOR FULLY FUNCTIONING SWZS FOR THE DURATION OF THE PROJECT, AS DESCRIBED IN THE SPECIAL PROVISION SP725SWZ.

(2) DAYS SHALL BE MEASURED AS 24 HOUR PERIODS.

(3) THE EXACT LOCATIONS OF THESE SMARTZONE COMPONENTS ARE SUBJECT TO CHANGE BASED ON FIELD CONDITIONS.

(4) INCLUDES COST OF ALL EQUIPMENT FOR SIX (6) CONSTRUCTION ADVANCED WARNING SYSTEMS, (SIX (6) RADAR DETECTION TRAILERS AND SIX (6) EDGE LIT WIG WAG TRAILERS TOTAL) THREE (3) SYSTEMS REQUIRED IN EACH DIRECTION, QUANTITY REPRESENTS TOTAL NUMBER OF CALENDAR DAYS FOR ALL PHASES, INCLUDES ALL COST WITH DEPLOYING, PROGRAMMING, AND MAINTAINING THE CONSTRUCTION ADVANCED WARNING SYSTEM PER THE MANUFACTURER'S RECOMMENDATIONS FOR THE DURATION OF THE PROJECT.

1. SYSTEM TO INCLUDE ALL EQUIPMENT FOR A TDOT EVALUATED SOLAR ADVANCED WARNING SYSTEM OR EQUIVALENT THAT ALERTS DRIVERS OF CONSTRUCTION VEHICLES EMERGING FROM THE WORK ZONE INTO THE ROADWAY. SYSTEM MUST UTILIZE EIGHT (8) OR MORE ENCRYPTED CHANNELS OF FIELD PROGRAMMABLE RADIO FREQUENCY COMMUNICATION TO TRIGGER AN ARRAY OF EDGE LIT WIG WAG SIGNS WITH BEACONS THAT ALERTS THE DRIVER ONLY DURING ACTIVE EGRESS FROM THE WORK ZONE.
2. INCLUDES COST OF ALL EQUIPMENT FOR SIX (6) CONSTRUCTION ADVANCED WARNING SYSTEMS, (SIX (6) RADAR DETECTION TRAILERS AND SIX (6) EDGE LIT WIG WAG TRAILERS TOTAL) THREE (3) SYSTEMS REQUIRED IN EACH DIRECTION. QUANTITY REPRESENTS TOTAL NUMBER OF CALENDAR DAYS FOR ALL PHASES. INCLUDES ALL COST WITH DEPLOYING, PROGRAMMING, AND MAINTAINING THE CONSTRUCTION ADVANCED WARNING SYSTEM PER THE MANUFACTURER'S RECOMMENDATIONS FOR THE DURATION OF THE PROJECT.

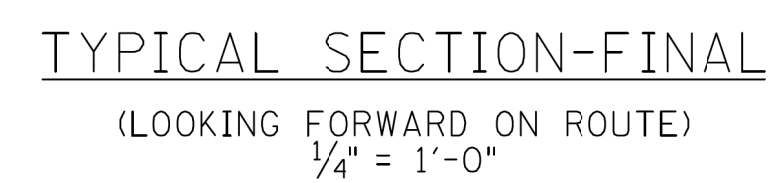
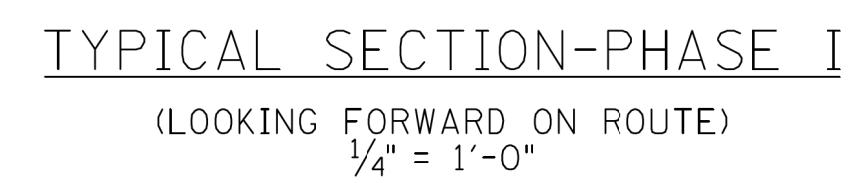
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DIRECTION OF TRAVEL 

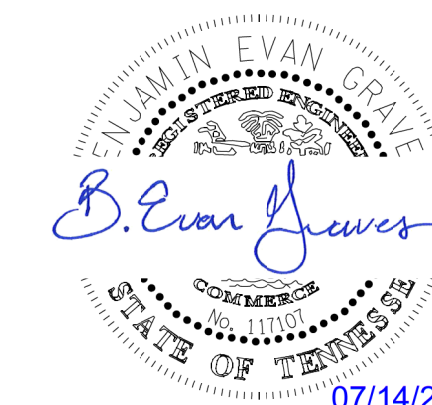
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SMART WORKZONE
NOTES

PROJECT NO.	YEAR	SHEET NO.
79S385-M3-002	2026	

[illegible]

STATE ROUTE 385
OVER RIVERDALE RD
BRIDGE NO. 79-SR385-03.57
FED. ID NO. 79SR3850013
SHELBY COUNTY
2026



BR-133-368

DESIGNED BY Rawleigh S. Richardson Jr. DATE 07/09/24
 DRAWN BY Rawleigh S. Richardson Jr. DATE 07/09/24
 SUPERVISED BY Benjamin E. Graves DATE 07/22/24
 CHECKED BY Lane M. Decker DATE 07/22/24



PROJECT NO.	YEAR	SHEET NO.
79S385-M3-002	2026	

[illegible]

Technical drawing showing a cross-section of a drainage structure. The drawing includes the following components and dimensions:

- NEW 12"Ø DRAINAGE PIPE**: A vertical pipe with a diameter of 12 inches.
- FINISHED GRADE LINE**: A dashed line indicating the ground surface.
- 6" MIN.**: Minimum height of the concrete curb above the pipe.
- 1'-3"**: Width of the concrete curb.
- W6X8.5 POST**: A vertical post embedded in the concrete curb.
- EXACT SLOPE TO BE DETERMINED BY TDDOT ENGINEER**: A note indicating the slope of the roadway surface.
- #4 BARS @ 12" O.C.**: Reinforcement bars (No. 4) spaced at 12 inches on center.
- 1½" X ¾" FORMED GROOVES**: Grooves in the concrete curb.
- TOP OF ROADWAY SURFACE**: The upper edge of the roadway.
- MINERAL AGGREGATE ITEM NO. 303-01.02 TYPE A BASE GRADING D**: The material used for the base grading.
- 2'-8"**: Total height of the concrete curb.
- 4'-0" MIN. EMBED.**: Minimum embedment depth of the concrete curb into the base grading.

SCALE: $\frac{1}{2}" = 1'-0"$



SECTION C-C

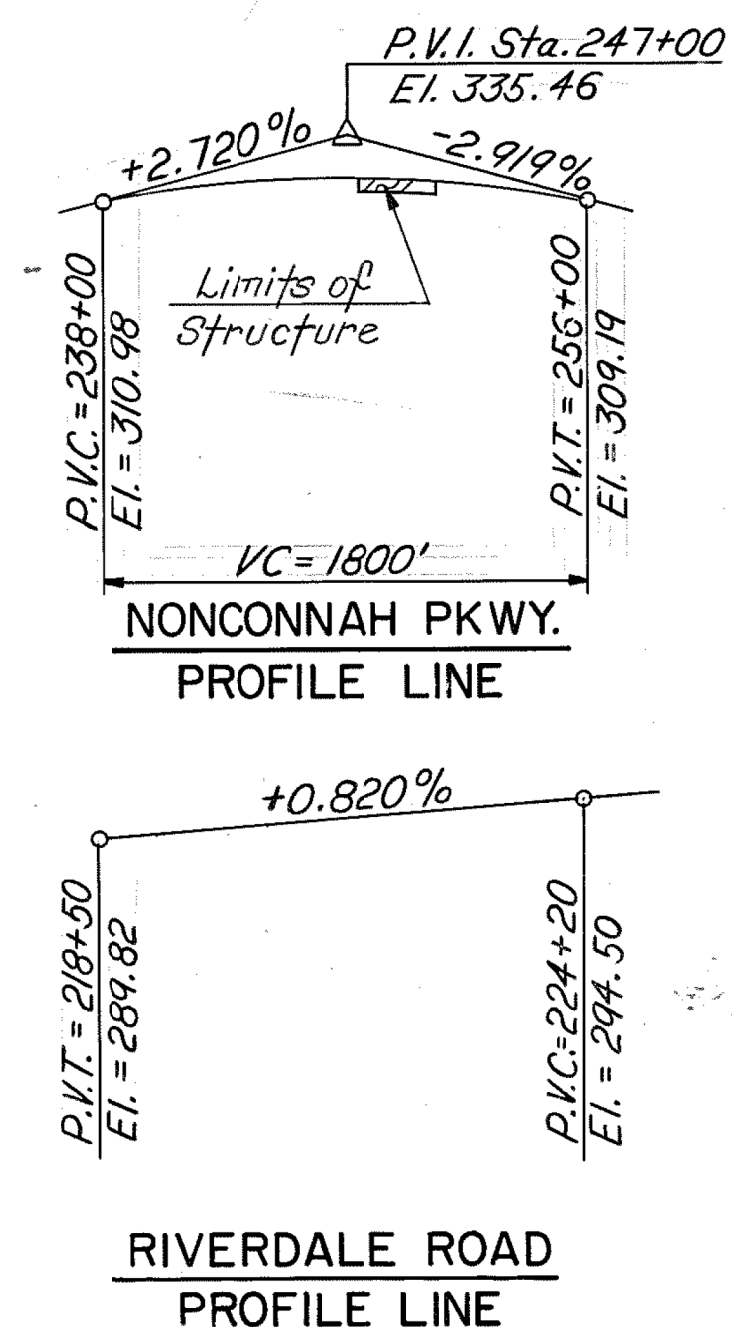
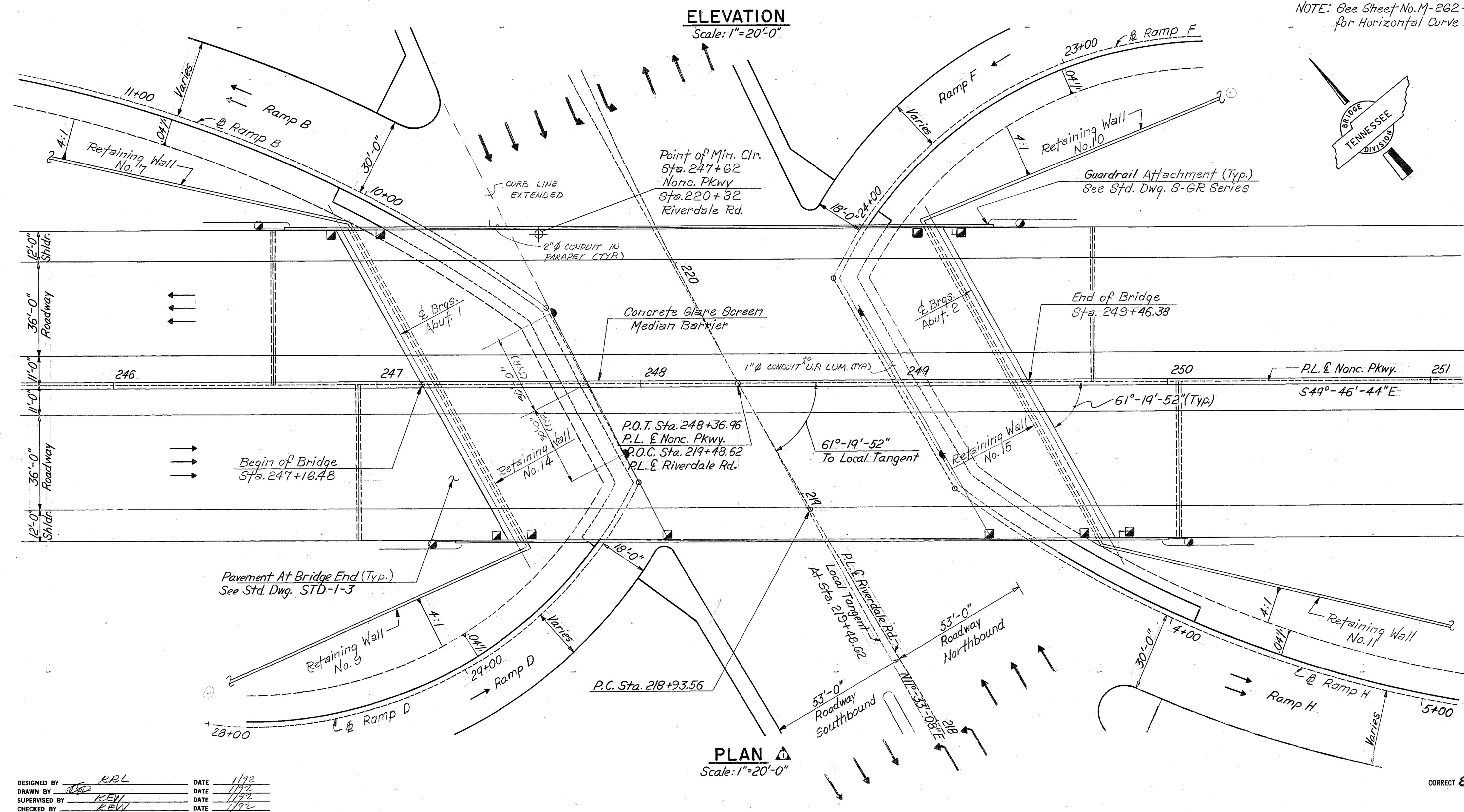
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$P.V.I. \text{ Sta. } 247+00$
 $El. \text{ } 335.46$
 $+2.720\%$
 -2.919%
 $P.I.C. = 238+00$
 $El. = 370.98$
Limits of Structure
 $VC = 1800'$
 $P.V.T. = 256+00$
 $El. = 309.19$
NONCONNAH PKWY.
PROFILE LINE

$+0.820\%$
 $P.V.T. = 219+50$
 $El. = 289.82$
 $P.V.C. = 224+20$
 $El. = 294.50$



LEGEND

→ Indicates Direction of Traffic

I Denotes Integral Abutment

▢ Denotes Bridge End Drain

▣ DENOTES GROUND MOUNTED PULL BOX

▤ DENOTES RECESSED PULL BOX IN PARAPET

▥ DENOTES FUTURE UNDERPASS LUMINAIRE

▦ SUSPENDED UNDER DECK SIMILAR TO SIGNAL HEAD SUSPENSION

Roadway Width = 120'-0" With STD-1-1 Rails
Design Speed = 60 MPH
Estimated 2010 ADT = 72,000

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BRIDGE NO. 5
LAYOUT
NONCONNAH PARKWAY (S.R. 385)
OVER RIVERDALE ROAD
BRIDGE I.D. NO. 79SR3850013
STATION 248+36.96 (NONC. PKWY.)
STATION 219+48.62 (RIVERDALE RD.)
SHELBY COUNTY
Edward P. Wasserman
ENGINEER OF STRUCTURES 1992

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

M-262-121

LIST OF DRAWINGS

TITLE

LAYOUT

LIST OF DRAWINGS AND QUANTITIES

GENERAL NOTES

FOUNDATION DATA

SUPERSTRUCTURE

DECK SCREED ELEVATIONS

FRAMING PLAN

CAMBER TABLE

STEEL DETAILS

FIELD SPLICES

ABUTMENTS - PLAN & ELEVATION

ABUTMENTS - DETAILS

ABUTMENTS - WINGWALLS

BILL OF STEEL

TRAFFIC SIGNAL APPURTENANCES

DWG. NO.

REV. DATE

M-262-121

M-262-122

M-262-123

M-262-124

M-262-125

M-262-126

M-262-127

M-262-128

M-262-129

M-262-130

M-262-131

M-262-132

M-262-133

M-262-134

M-262-130A

LIST OF STANDARD DRAWINGS

TITLE

DRAWING NO.

REV. DATE

* BRIDGE RAILING CONCRETE PARAPET

STD-1-1

11- 5-91

* REINF. CONCRETE PAVEMENT AT BRIDGE ENDS

STD-1-3

12-16-91

* BRIDGE END DRAIN DETAILS

STD-1-4 thru 6

12-16-91

* STANDARD CONCRETE MEDIAN BARRIER

STD-2-2

11- 5-91

* STANDARD PARAPET DRAINS

STD-2-3

11- 5-91

STANDARD PILE DETAILS

STD-5-1 & 2

9- 1-91

STANDARD SEISMIC DETAILS

STD-6-1

9- 1-91

REINFORCING BAR SUPPORT DETAILS

FOR CONCRETE SLABS

STD-9-1

9- 1-91

MISCELLANEOUS ABUTMENT & DRAINAGE DETAILS

STD-10-1

9-18-91

LIGHT STANDARD SUPPORT DETAILS

STD-8-2

9- 1-91

CONST. NO. 79185-3212-44

PROJECT NO. YEAR SHEET NO.

1XA-385 (4) 1991

REVISIONS

NO. DATE BY BRIEF DESCRIPTION

1 4-23-92 RAP ADDED STD. DWG. STD-8-2, ITEM

NO. 714-01.05 AND FOOTNOTE

(10) REV. DATE

2 6-16-92 REH ADDED ITEM AND DRAWING NO. 5

3 9-30-92 JHW MATERIALS REQUIRED

4 10-6-93 JHW LATEST REVISION DATES

5 9-7-94 JHW Rev. Bridge Deck Conc. Quantity Dates

6 11-11-96 AEP Rev. CLASS 'D' CONC. QTY., DATE

* THESE DRAWINGS ARE TO BE PRINTED WITH PLANS.

LIST OF SPECIAL PROVISIONS

TITLE

PROV. NO.

REV. DATE

REVISIONS AND ADDITIONS TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, MARCH 1, 1981

100

12- 16-91

REGARDING APPROVAL OF SHOP DRAWINGS

105A

7-21-87

REGARDING SECTION 602 - STEEL STRUCTURES

602

5-15-89

REGARDING PAINTING

603A

8- 5-91

REGARDING CONCRETE STRUCTURES

604

12-16-91

REGARDING CONTRACTOR-MIX DESIGN AND TESTING STRUCTURAL CONCRETE

604CX

12-16-91

REGARDING PRECAST PRESTRESSED DECK PANELS

604P

12-16-91

REGARDING RIDEABILITY OF BRIDGE DECKS AND ROADWAY APPROACHES

604R

5-14-90

REGARDING PRECAST PRESTRESSED CONCRETE BRIDGE MEMBERS

615

12-16-91

REGARDING MACHINED RIP-RAP

709

5- 4-87

REGARDING EPOXY COATED REINFORCING STEEL

907A

3-25-85

ESTIMATED BRIDGE QUANTITIES

ITEM NO.	204-02.01	303-01.02	602-04.03	604-02.03	604-03.01	604-03.02	604-03.04	604-03.09	604-04.01	606-10.01	606-10.02	606-10.03	606-12.01	620-03.10	710-09.01	710-09.02	711-02.04	714-01.05	730-03.01	730-12.02
ITEM	DRY EXCAVATION (BRIDGES) C.Y. ①	GRANULAR BACKFILL (BRIDGES) TONS ②	STEEL STRUCTURES (BRIDGE NO. 5 STA. 248+36.96) L.S. ③	EPOXY COATED REINFORCING STEEL LBS.	CLASS "A" CONCRETE (BRIDGES) C.Y. ⑤	STEEL BAR REINFORCEMENT (BRIDGES) LBS.	PAVEMENT AT BRIDGE ENDS S.Y. ③	CLASS "D" CONCRETE (BRIDGE DECK) C.Y. ③	APPLIED TEXTURE FINISH S.Y. ③	TEST PILES (PRECAST CONC.) 16" SQ. L.F.	LOADING TEST (PRECAST CONC.) 16" SQ. EA.	16" SQ. PRESTRESSED CONCRETE PILES L.F.	PILE ANCHOR. SYSTEM (SEISMIC) EA. ⑦	CONCRETE PARAPET (STD-1-1) L.F. ⑥	6" PERF. PIPE W/VERTICAL DRAIN SYSTEM L.F. ④	6" PIPE UNDERDRAINS L.F.	REINF. CONC. MEDIAN BARRIER (5" MEDIAN) L.F.	STRUCTURE LIGHTING L.S. ⑩	INSTALL. PULL BOX EA. ⑧	CONDUIT 2" DIAMETER L.F. ⑧
SUPERSTRUCTURE	—	—	1	198,060	—	—	—	814	1012	—	—	—	—	460	—	—	230	—	2	92
ABUTMENT NO. 1	120	42	—	7,723	272	16,847	535	—	84	120	1	2700	56	37	165	25	25	—	—	—
ABUTMENT NO. 2	120	42	—	7,723	272	16,847	535	—	84	120	1	2700	56	37	165	25	25	—	—	—
TOTAL	240	84	1	213,506	544	33,694	1070	814	1180	240	2	5400	112	534	330	50	280	1	2	92

NOTES:

① EXCAVATION BASED ON LOWER ROAD PROFILES.

② THE COST OF BITUMINOUS FIBERBOARD AND ALL MISCELLANEOUS JOINT MATERIAL TO BE INCLUDED IN BRIDGE ITEMS BID ON.

③ SQUARE YARD FOR PAVEMENT AT BRIDGE ENDS SHALL BE MEASURED AS ROAD SURFACE AREA AND SHALL INCLUDE ALL CONCRETE, REINFORCING STEEL, PILES, JOINT MATERIAL, BRIDGE END DRAIN SYSTEM, NOTCH FOR ROADWAY DRAIN, SURFACE FINISH AS PER SP604 AND ANY OTHER INCIDENTALS NECESSARY FOR COMPLETE INSTALLATION. PRIOR TO CONSTRUCTION OF THE PAVEMENT AT BRIDGE ENDS, THE CONTRACTOR SHALL SUBMIT A PROPOSED BILL OF STEEL TO THE ENGINEER FOR APPROVAL.

④ COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN COST OF PERFORATED C.M. PIPE.

⑤ COST OF RUBBER BONDING CEMENT AND ELASTOMERIC BEARING PADS TO BE INCLUDED IN UNIT PRICE BID FOR CLASS "A" CONCRETE.

⑥ A.) THE COST OF 8 INSERT ASSEMBLIES AND 32-7/8" DIA. x 4" HEX. HEAD BOLTS, (A307), TO BE INCLUDED IN ITEM 620-03.10.
B.) ALL REINFORCING STEEL IN THE PARAPET SHALL BE EPOXY COATED. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 620-03.10.
C.) DELINEATORS AS DETAILED ON STANDARD DRAWING S-MB-1 SHALL BE PLACED ON THE PARAPET AT 12'-6" MAXIMUM SPACING WITH WHITE REFLECTORS. COST OF MATERIALS AND INSTALLATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PARAPET.

⑦ COST OF PREPARATION OF THE TOP OF PILE FOR SEISMIC REQUIREMENTS SHALL BE INCLUDED IN ITEM 606-12.01. SEE STANDARD DRAWING STD-6-1 FOR DETAILS.

⑧ GRANULAR BACKFILL SHALL BE CLASS "A" GRADING "D" MATERIAL. SEE STANDARD DRAWING STD-10-1.

⑨ NOTE: LUMP SUM: TOTAL ESTIMATED WEIGHT OF 1,790,250 LBS.
613,700 LBS. A36 (INCLUDES ANCHOR BOLTS)
1,159,425 LBS. A572 GRADE 50
17,125 LBS. A325 (BOLTS)

INCLUDES SHEAR CONNECTORS, BOLTS, ETC. ALSO SEE TENNESSEE STANDARD SPECIFICATIONS SECTION 602.53 AND 602.54.

⑩ LUMP SUM FOR STRUCTURE LIGHTING, ITEM NO. 714-01.05 INCLUDES 580 L.F. 2" Ø (PVC SCH. 40) CONDUIT AND 220 L.F. 1" Ø (PVC SCH. 40) CONDUIT, 10 EA. 6" x 6" x 8" PULL BOXES, 4 EA. TYPE B GROUND MOUNTED PULL BOXES AND ALL INCIDENTAL MATERIALS, & LABOR INCLUDING PULL WIRES, FOR FUTURE LIGHTING.

STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 5

LIST OF DRAWINGS AND QUANTITIES

NONCONNAH PARKWAY (S.R. 385)
OVER RIVERDALE ROAD
STATION 248+36.96 (NONC. PKWY.)
STATION 219+48.62 (RIVERDALE RD.)
SHELBY COUNTY
1992DESIGNED BY KPL DATE 1/92
DRAWN BY CEF DATE 1/92
SUPERVISED BY KPL DATE 1/92
CHECKED BY KPL DATE 1/92CORRECT Edward P. Wooten
ENGINEER OF STRUCTURES

M-262-122

n5quan.dgn

GENERAL NOTES

SPECIFICATIONS:	STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION (MARCH 1981 EDITION).
DESIGN SPECIFICATIONS:	1989 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, WITH ADDENDA. 1983 AASHTO SEISMIC DESIGN OF HIGHWAY BRIDGES, WITH ADDENDA. SPC C AND ACCELERATION COEFFICIENT = 0.20.
DESIGN:	LOAD FACTOR DESIGN METHOD.
LOADING:	H520-44 (DEAD LOAD SHALL INCLUDE 33 P.S.F. FOR FUTURE ASPHALT OVERLAY AND S.I.P. FORMS)
CONCRETE:	TO BE CLASS 'A' $f_c' = 3,000$ P.S.I. UNLESS OTHERWISE NOTED.
CONCRETE BRIDGE DECK:	CLASS 'D' CONCRETE FOR BRIDGE DECKS SHALL BE IN ACCORDANCE WITH SECTION 604 OF THE STANDARD SPECIFICATIONS EXCEPT AS MODIFIED BY SPECIAL PROVISION 604-CX. (MINIMUM 28 DAY COMPRESSIVE STRENGTH = 4,500 P.S.I.)
BRIDGE DECK SURFACE FINISH:	TO BE IN ACCORDANCE WITH NOTE C, SHEET 2, OF SPECIAL PROVISION 604.
BRIDGE DECK FORMS:	BRIDGE DECK FORMS FOR CONCRETE DECKS SHALL BE CONSTRUCTED USING EITHER REMOVABLE FORMS OR PERMANENT FORMS. PERMANENT FORMS MAY BE EITHER REMAIN-IN-PLACE STEEL OR PRECAST, PRESTRESSED CONCRETE PANELS. IN EITHER CASE, FORMS SHALL BE ATTACHED BY MEANS OTHER THAN WELDING TO SUPPORT MEMBERS. THE CONTRACTOR SHALL TAKE STEPS TO ASSURE THE STABILITY OF THE EXTERIOR GIRDER AGAINST TWISTING OR OVERTURNING DURING SLAB POURING OPERATIONS. SEE STANDARD DRAWINGS STD-4-1, 2, 3 AND SPECIAL PROVISION 604P. IF THE USE OF PERMANENT DECK FORMS REQUIRES ADDITIONAL SLAB THICKNESS, THE CONTRACTOR WILL BE REQUIRED TO REDESIGN THE GIRDERS WHEN THE SLAB THICKNESS IS INCREASED MORE THAN 1-1/2 INCHES. ALL CHANGES TO THE GIRDERS SHALL BE AT THE CONTRACTOR'S EXPENSE.
REINFORCING STEEL:	TO BE ASTM A615 (GRADE 60). STANDARD CRSI HOOK DETAILS APPLY UNLESS OTHERWISE NOTED. "R" RAIL OF STEEL. SPACING DIMENSIONS ARE CENTER TO CENTER AND COVER DIMENSIONS ARE CLEAR DISTANCE UNLESS OTHERWISE NOTED. PLACING TOLERANCES ARE $\pm 1/2$ " FOR SPACING AND $\pm 1/8$ " OR $\pm 3/8$ " FOR COVER. (THE SUFFIX E, FOR BARS SO MARKED, DENOTES EPOXY COATED REINFORCEMENT. SEE SPECIAL PROVISION 907A.)
STRUCTURAL STEEL:	SEE TENNESSEE STANDARD SPECIFICATIONS SECTION 602 AND STRUCTURAL STEEL NOTES, DRAWING M-262-128 & 129.
BRIDGE RAIL SYSTEM:	BUILD PARAPETS ACCORDING TO STANDARD DRAWING STD-1-1.
SHOP DRAWINGS:	SEE SPECIAL PROVISION NO. 105A.
HIGH STRENGTH BOLTS:	ASTM A325, TYPE 1.
WELDING:	SEE SPECIAL PROVISION NO. 602 AND NOTES ON DRAWING M-262-128.
ERECTION:	THE SAFE ERECTION OF THE BRIDGE BY ANY METHOD IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

INSPECTION:	FOR RADIOGRAPHIC, ULTRASONIC, AND MAGNETIC INSPECTION, SEE PROVISION NO. 602.
NON-PAY ITEMS:	ONLY ITEMS SHOWN ON THE PROPOSAL AS PAY ITEMS WILL BE PAID FOR. COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND INCIDENTALS FOR THE ENTIRE CONTRACT SHALL BE INCLUDED IN THE PRICE BID FOR PAY ITEMS.
FALSEWORK OVER TRAFFIC:	IN ALL CASES WHEN FALSEWORK MUST BE USED TO CONSTRUCT STRUCTURES OVER HIGHWAY TRAFFIC, THE CONTRACTOR SHALL SUBMIT DETAILED WORKING DRAWINGS TO THE ENGINEER FOR REVIEW. THE FALSEWORK DRAWINGS SHALL INCLUDE SIZES AND MATERIALS FOR ALL MEMBERS AND SHALL INCLUDE A SUPERSTRUCTURE PLACING DIAGRAM SHOWING PROPOSED CONCRETE PLACING SEQUENCE AND CONSTRUCTION JOINT LOCATIONS. UPON REQUEST, THE CONTRACTOR SHALL FURNISH COPIES OF THE DESIGN CALCULATIONS TO THE ENGINEER FOR EXAMINATION. THESE DRAWINGS SHALL BE PREPARED AND SIGNED BY AN ENGINEER REGISTERED IN THE STATE OF TENNESSEE. THE FALSEWORK SHALL BE CONSTRUCTED SUBSTANTIALLY TO THE FALSEWORK DRAWINGS, AS STATED IN ARTICLES 107.14 AND 107.18 OF THE STANDARD SPECIFICATIONS. BY REVIEW OF THESE DRAWINGS THE ENGINEER SHALL ASSUME NO LIABILITY UPON HIMSELF OR THE STATE NOR SHALL THIS REVIEW RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR THE SUFFICIENCY OF THE FALSEWORK AND FORMS. THE COST SHALL BE INCLUDED IN BRIDGE ITEMS BID ON.

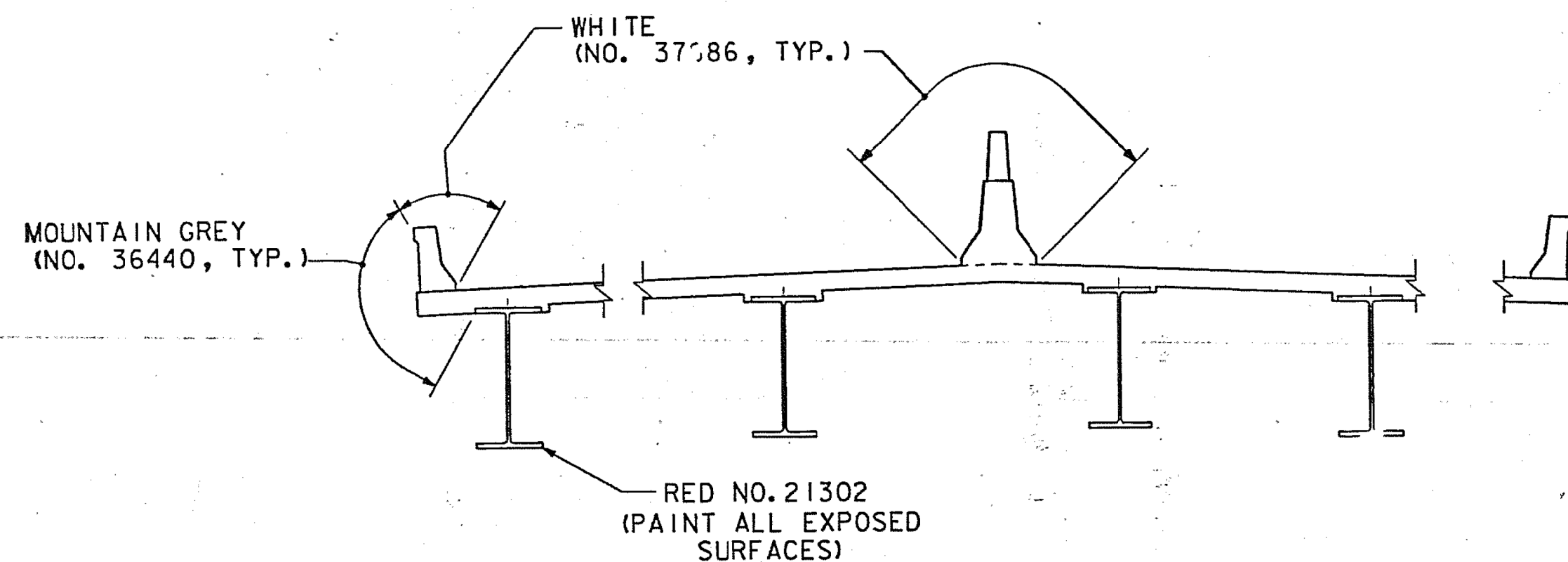
ALTERNATE PILES:	THE CONTRACTOR MAY USE PILING OF A DIFFERENT MATERIAL OR CONFIGURATION FROM THAT SHOWN ON THE PLANS PROVIDED THE SUBSTITUTION MEETS MINIMUM DESIGN STANDARDS AND SPECIFICATIONS, AND IS APPROVED BY THE ENGINEER.
REINFORCED CONCRETE MEDIAN BARRIER RAIL:	THE REINFORCED CONCRETE MEDIAN BARRIER RAIL SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS SHOWN ON DRAWING STD-2-2 AND SHALL BE GIVEN AN APPLIED TEXTURE FINISH. THE COLOR OF THE FINISH SHALL BE SIMILAR TO WHITE, FEDERAL SPECIFICATION NO. 37886. THE COST OF THE FINISH AND REINFORCING STEEL DETAILED SHALL BE INCLUDED IN THE LINEAR FOOT PRICE BID FOR THE MEDIAN RAIL. PRECAST BRIDGE DECK PANELS ARE NOT PERMITTED UNDERNEATH THE MEDIAN BARRIER RAIL.
PAINT:	SYSTEM B - INORGANIC ZINC - URETHANE FINISH RED TOP COAT - SEE TENNESSEE STANDARD SPECIFICATION 603.05 (b) AND SPECIAL PROVISION 603A.
PAINTING STRUCTURAL STEEL:	ALL SURFACES OF STRUCTURAL STEEL GIRDERS MUST BE PAINTED. HOWEVER, THE FAYING SURFACES OF FIELD SPLICES, THE TOP OF THE TOP FLANGE, AND BEARING AREAS, SHALL RECEIVE ONLY 1 MIL THICKNESS OF SHOP COAT.

△ FRICTION PILES : TO BE SIZE 11. AFTER EXCAVATION TO THE PROPOSED FOOTING ELEVATIONS, A TEST PILE SHALL BE DRIVEN AT EACH SUBSTRUCTURE AT THE LOCATION DESIGNATED ON THE DRAWING NUMBER M-262-121. A LOAD TEST WILL THEN BE APPLIED TO THE TEST PILE IN ABUTMENTS NO. 1 AND 2. FROM THE RESULTS OF THE LOAD TEST, THE ENGINEER OF STRUCTURES WILL DETERMINE FINAL PILE TIP ELEVATIONS AND THE REQUIRED MINIMUM BEARING FOR THE PRODUCTION PILES UP TO A MAXIMUM OF 150 TONS BASED ON THE DRIVING EQUATION. THE PILE LOAD TEST SHALL BE CONDUCTED IN ACCORDANCE WITH THE SPECIFICATIONS. THE PILE LOAD TEST APPARATUS FOR APPLYING LOADS AND MEASURING MOVEMENT SHALL MEET THE REQUIREMENTS OF ASTM D-1143, STANDARD METHOD OF TESTING PILES UNDER STATIC AXIAL COMPRESSIVE LOAD. WHEN INSUFFICIENT CLEARANCE IS AVAILABLE WITHIN AN EXCAVATION, THE CLEARANCE REQUIREMENTS IN ART. 4.1.1 MAY BE REDUCED BUT ONLY WITH PRIOR APPROVAL OF THE ENGINEER. FOR PILE DESIGN LOADS AND CUT-OFF ELEVATIONS, SEE TABLE ON DRAWING NUMBER M-262-124 & 131.

CONST. NO. 79185-3212-44		
PROJECT NO.	YEAR	SHEET NO.
1XA-385 (4)	1991	
REVISIONS		
NO.	DATE	BY
1	4-14-92	RAP
		REV. NOTE

RIVERDALE RD. CURVE DATA

P. I. STA.	223+28.95
N	263,997.39
E	854,256.85
Δ	29° 47' 17"
D	3° 30' 00"
R	1,637.02'
L	851.09'
T	435.40'
E	56.91'
C	841.54'
S. E.	0.028 FT. / FT.
S. E. TRANS.	250.00' BACK
	200.00' AHD.
DESIGN SPEED	= 40 M.P.H.

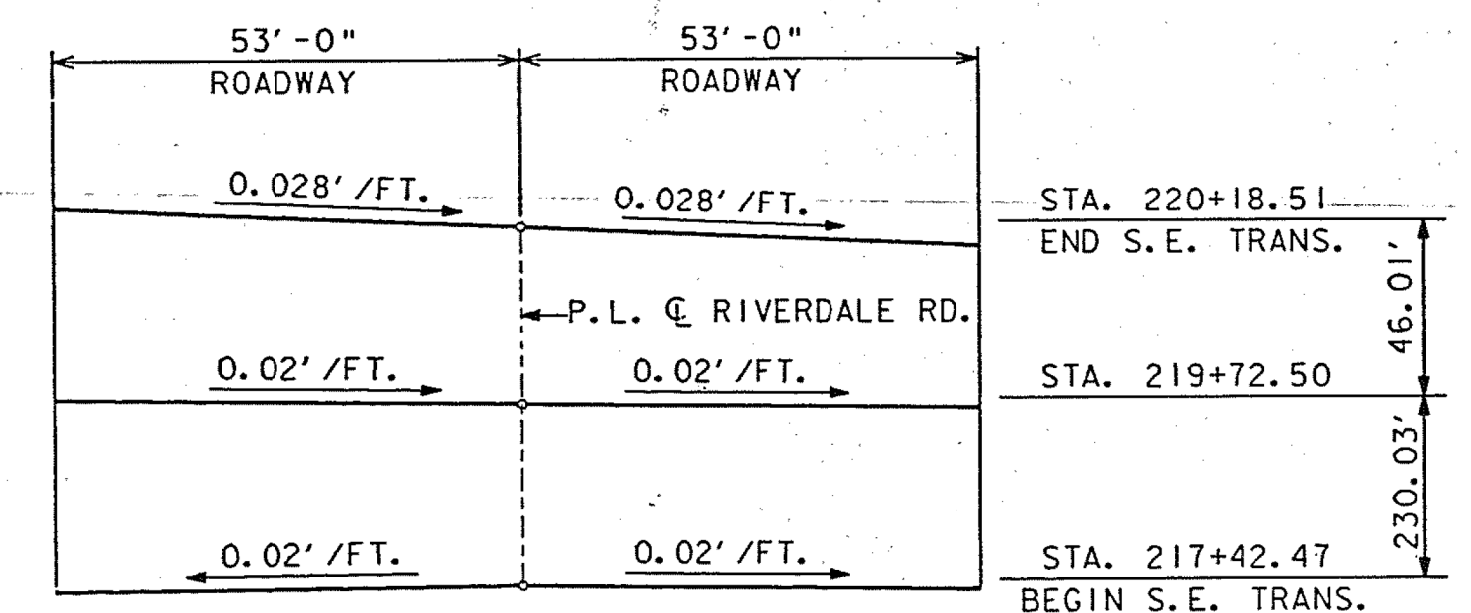


FINISHING CONCRETE SURFACES:
CONCRETE FINISHING SHALL BE IN ACCORDANCE WITH SECTION 604.22 OF THE TENNESSEE STANDARD SPECIFICATIONS. AN APPLIED TEXTURE FINISH SHALL BE USED IN LIEU OF A CLASS 2 FINISH. THE COLOR OF THE FINISH SHALL BE SIMILAR TO MOUNTAIN GREY, FEDERAL SPECIFICATION NO. 36440, FEDERAL COLOR STANDARD NO. 595a, EXCEPT THAT THE INSIDE FACE AND THE TOP OF THE PARAPET SHALL BE WHITE, FEDERAL SPECIFICATION NO. 37886. A COLOR SAMPLE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. NO TEXTURE FINISH SHALL BE APPLIED PRIOR TO COMPLETION OF PAVING AND HAULING OPERATIONS AT THE BRIDGE SITE. PAYMENT FOR THE APPLIED TEXTURE FINISH SHALL BE UNDER ITEM NO. 604-04.01.

IN ADDITION TO THE SURFACES SHOWN IN THE DETAIL ABOVE, ALL EXPOSED CONCRETE SURFACES OF THE ABUTMENTS AND WINGWALLS ARE TO RECEIVE AN APPLIED TEXTURE FINISH, MOUNTAIN GREY NO. 36440.

STEEL SURFACES:
STEEL SURFACES TO BE PAINTED AS DESIGNATED IN THE ABOVE DETAIL.

SURFACE FINISH DETAIL



TRANSITION SLOPE DETAIL - RIVERDALE RD.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BRIDGE NO. 5

GENERAL NOTES

NONCONNAH PARKWAY (S.R. 385)
OVER RIVERDALE ROAD
STATION 248+36.96 (NONC. PKWY.)
STATION 219+48.62 (RIVERDALE RD.)
SHELBY COUNTY
1992

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

M-262-123

/usr2/nonc/n5note.dgn

DESIGNED BY KEW DATE 1/92
DRAWN BY CEH DATE 1/92
SUPERVISED BY KEW DATE 1/92
CHECKED BY KEW DATE 1/92

CONST. NO. 79185-3212-44

PROJECT NO.	YEAR	SHEET NO.
IXA-385(4)	1991	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
1	9-7-94	JHW	Rev. Bridge Deck Concrete Quantity

[illegible]

The Slab shall not be poured until all Structural Steel is Erected and all Welding or Bolting Complete.
All Pours are to be made in numerical Sequence.

The Contractor shall make adequate provisions during placement of slab to prevent the Exterior Beam from Twisting. No portion of the Median Barrier or Parapet shall be poured until the entire Slab is in place.



NOTE: All Slab Construction Joints shall be in Accordance with Slab Construction Joint Detail.



Scale: $3/16" = 1'-0"$
Looking Ahead on Survey



Scale: 1" = 20'-0"

ESTIMATED QUANTITIES

ITEM	UNIT	QUANTITY
Class "D" Concrete (Bridge Deck)	C.Y.	802
Epoxy Coated Reinforcing Steel	LBS.	198,060

SUPERSTRUCTURE

**NONCONNAH PARKWAY (S.R. 385)
OVER RIVERDALE ROAD
STATION 248+36.96(NONC.PKWY.)
STATION 219+48.62(RIVERDALE RD.)
SHELBY COUNTY**

1992

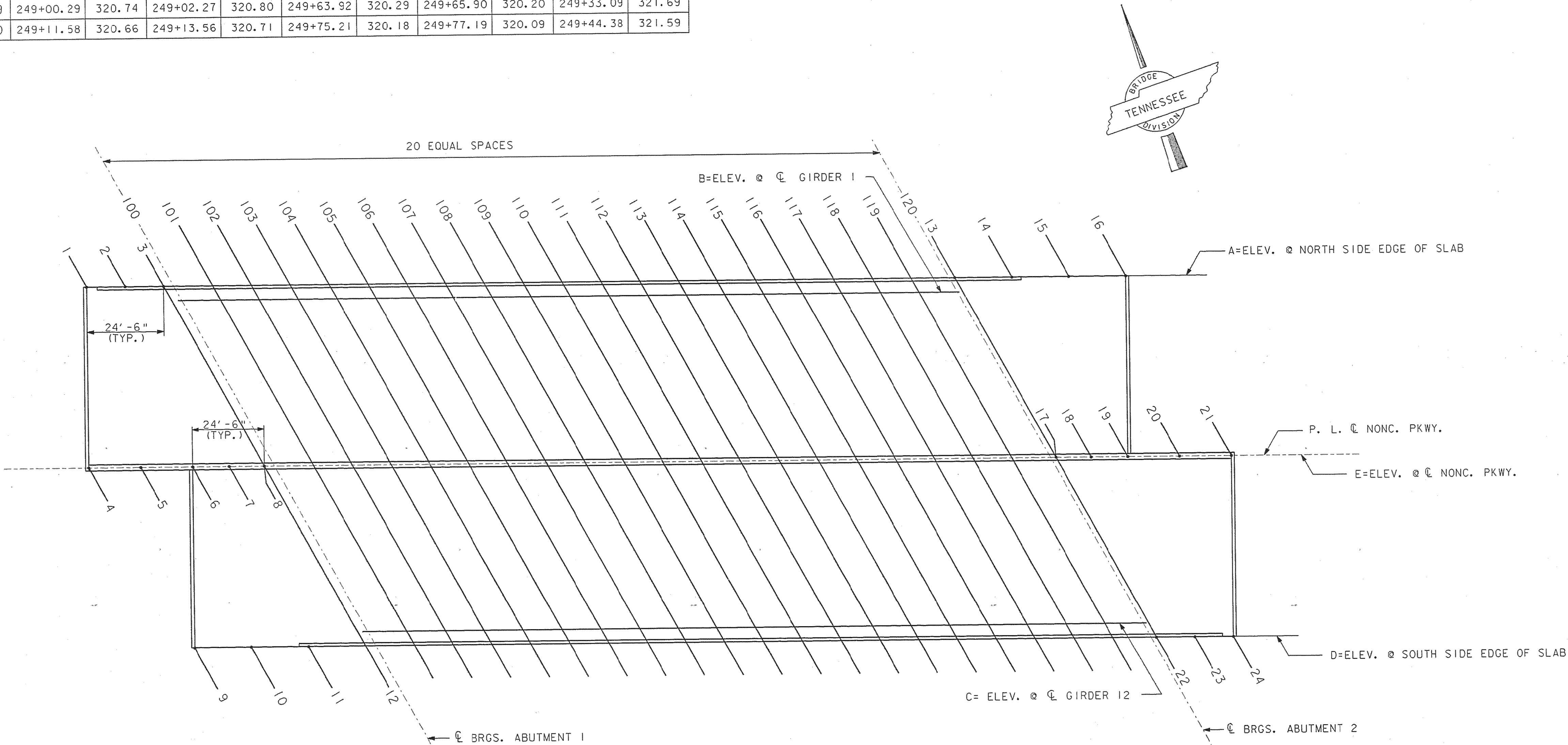
CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

DESIGNED BY VC DATE 1/92
 DRAWN BY JTF DATE 1/92
 SUPERVISED BY KEW DATE 1/92
 CHECKED BY KLR DATE 1/92

TOP OF DECK ELEVATIONS TABLE										
POINT	A		B		C		D		E	
	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
100	246+85.67	321.58	246+87.65	321.65	247+49.30	321.56	247+51.28	321.48	247+18.47	322.75
101	246+96.97	321.57	246+98.95	321.64	247+60.60	321.52	247+62.58	321.45	247+29.77	322.73
102	247+08.26	321.56	247+10.24	321.63	247+71.89	321.49	247+73.87	321.41	247+41.06	322.70
103	247+19.56	321.54	247+21.54	321.61	247+83.19	321.45	247+85.17	321.37	247+52.36	322.67
104	247+30.85	321.52	247+32.83	321.59	247+94.48	321.41	247+96.46	321.33	247+63.65	322.64
105	247+42.15	321.50	247+44.13	321.57	248+05.78	321.36	248+07.76	321.28	247+74.95	322.61
106	247+53.44	321.47	247+55.42	321.54	248+17.07	321.31	248+19.05	321.23	247+86.24	322.57
107	247+64.74	321.44	247+66.72	321.51	248+28.37	321.26	248+30.35	321.17	247+97.54	322.52
108	247+76.04	321.40	247+78.02	321.47	248+39.67	321.20	248+41.65	321.11	248+08.84	322.48
109	247+87.33	321.36	247+89.31	321.43	248+50.96	321.13	248+52.94	321.05	248+20.13	322.42
110	247+98.63	321.32	248+00.61	321.38	248+62.26	321.07	248+64.24	320.98	248+31.43	322.37
111	248+09.92	321.27	248+11.91	321.33	248+73.55	321.00	248+75.53	320.91	248+42.72	322.31
112	248+21.22	321.22	248+23.20	321.28	248+84.85	320.92	248+86.83	320.84	248+54.02	322.24
113	248+32.52	321.16	248+34.50	321.22	248+96.15	320.84	248+98.13	320.76	248+65.32	322.18
114	248+43.81	321.10	248+45.79	321.16	249+07.44	320.76	249+09.42	320.67	248+76.61	322.10
115	248+55.11	321.04	248+57.09	321.10	249+18.74	320.67	249+20.72	320.59	248+87.91	322.03
116	248+66.40	320.97	248+68.38	321.03	249+30.03	320.58	249+32.01	320.49	248+99.20	321.95
117	248+77.70	320.90	248+79.68	320.96	249+41.33	320.49	249+43.31	320.40	249+10.50	321.87
118	248+88.99	320.82	248+90.97	320.88	249+52.62	320.39	249+54.60	320.30	249+21.79	321.78
119	249+00.29	320.74	249+02.27	320.80	249+63.92	320.29	249+65.90	320.20	249+33.09	321.69
120	249+11.58	320.66	249+13.56	320.71	249+75.21	320.18	249+77.19	320.09	249+44.38	321.59

TOP OF SLAB ELEVATIONS TABLE					
WEST APPROACH			EAST APPROACH		
POINT	STATION	ELEVATION	POINT	STATION	ELEVATION
1	246+59.17	321.59	13	249+13.57	320.65
2	246+71.42	321.59	14	249+32.67	320.49
3	246+83.67	321.58	15	249+51.78	320.33
4	246+59.17	322.79	16	249+70.88	320.15
5	246+75.58	322.79	17	249+46.38	321.58
6	246+91.98	322.78	18	249+58.63	321.47
7	247+04.23	322.77	19	249+70.88	321.35
8	247+16.48	322.75	20	249+87.28	321.19
9	246+91.98	321.58	21	250+03.69	321.03
10	247+11.08	321.56	22	249+79.18	320.07
11	247+30.18	321.53	23	249+91.44	319.95
12	247+49.29	321.49	24	250+03.69	319.83

CONST. NO. 79185-3212-44			
PROJECT NO.		YEAR	SHEET NO.
IXA-385 (4)		1991	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



BRIDGE SCREED - PLAN

Scale: 1"=20'-0"

DESIGNED BY KEL DATE 1/92
 DRAWN BY KEL DATE 1/92
 SUPERVISED BY KEL DATE 1/92
 CHECKED BY KEL DATE 1/92

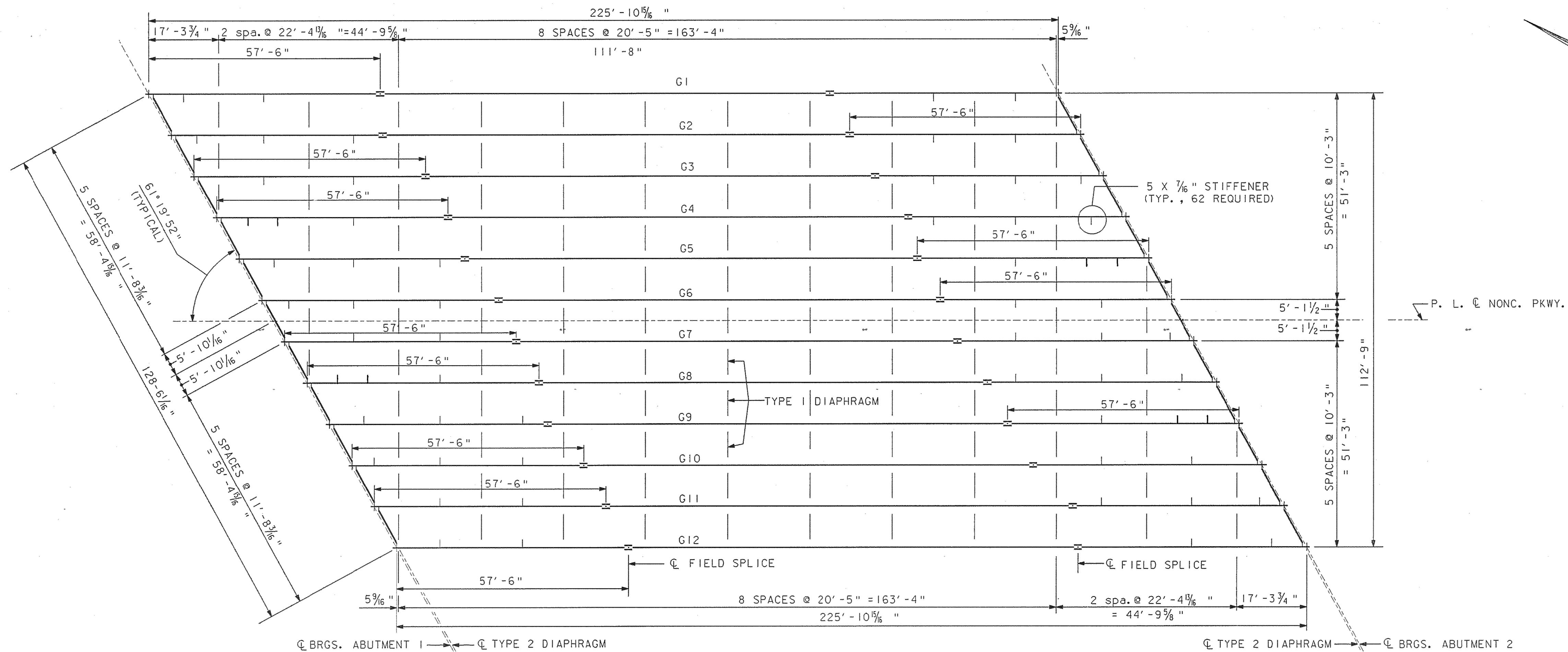
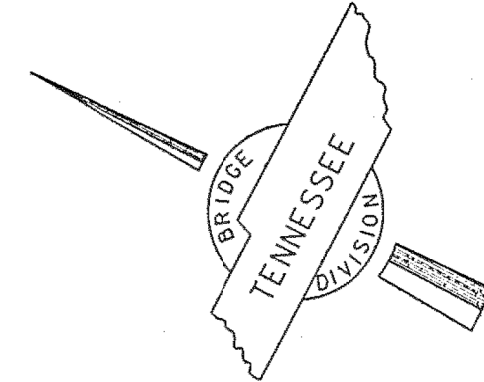
CORRECT Edward P. Wasserman
 ENGINEER OF STRUCTURES

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BRIDGE NO. 5
 DECK SCREED ELEVATIONS
 NONCONNAH PARKWAY (S.R. 385)
 OVER RIVERDALE ROAD
 STATION 248+36.96 (NONC. PKWY.)
 STATION 219+48.62 (RIVERDALE RD.)
 SHELBY COUNTY
 1992

M-262-126

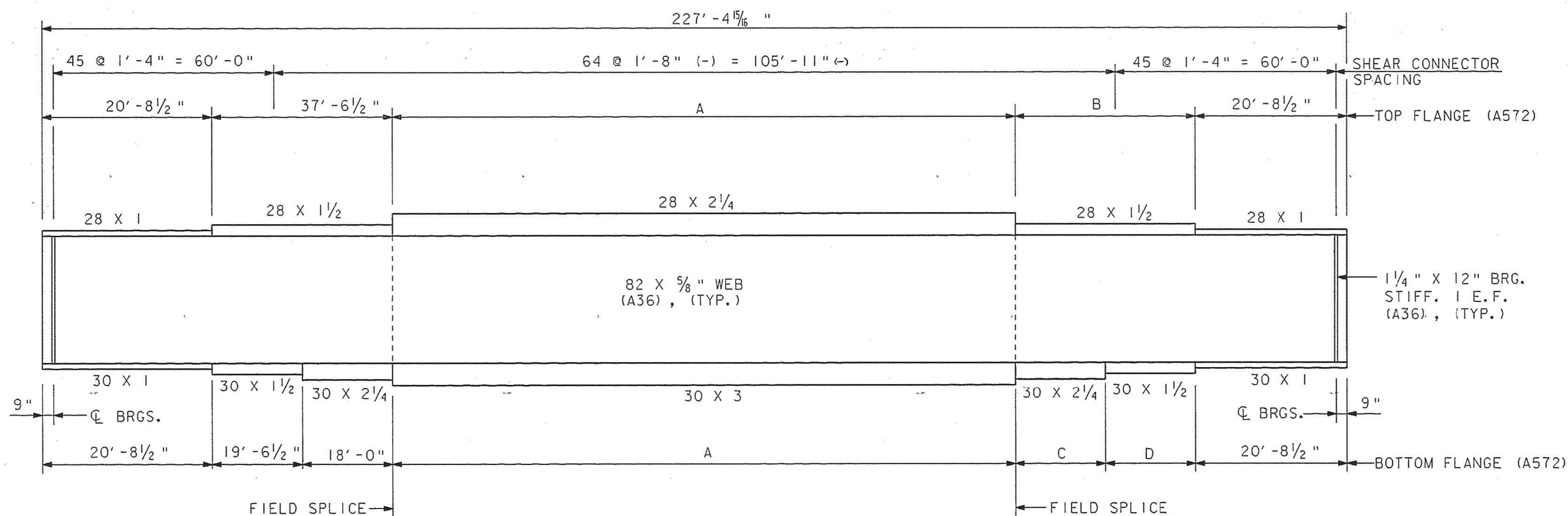
n5dkel.dgn

PROJECT NO.		YEAR	SHEET NO.
IXA-385 (4)		1991	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



FRAMING PLAN
Scale: 1"=15'-0"

NOTES:
WORK THIS DRAWING WITH DRAWING M-262-128 & 129.
SEE DRAWING NO. M-262-128 FOR SUPERSTRUCTURE NOTES.
INTERMEDIATE STIFFENERS ARE EQUALLY SPACED BETWEEN DIAPHRAGMS.



TYPICAL GIRDER ELEVATION

GIRDER DIMENSIONS				
GIRDER	A	B	C	D
1, 3, 10 & 12	111'-8"	36'-9 7/16"	18'-0"	18'-9 7/16"
2 & 11	115'-11"	32'-6 7/16"	16'-3 1/4"	16'-3 3/16"
4 & 9	114'-3"	34'-2 7/16"	18'-0"	16'-2 7/16"
5 & 8	112'-5"	36'-0 7/16"	18'-0"	18'-0 7/16"
6 & 7	109'-8"	38'-9 7/16"	20'-0"	18'-9 7/16"

DESIGNED BY KRL DATE 1/92
DRAWN BY CEH DATE 1/92
SUPERVISED BY CEH DATE 1/92
CHECKED BY CEH DATE 1/92

N.T.S.

NOTE: GIRDERS 2, 5, 6 & 9
SHOWN OPPOSITE HAND.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BRIDGE NO. 5

FRAMING PLAN

NONCONNAH PARKWAY (S.R. 385)
OVER RIVERDALE ROAD
STATION 248+36.96 (NONC. PKWY.)
STATION 219+48.62 (RIVERDALE RD.)
SHELBY COUNTY
1992

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

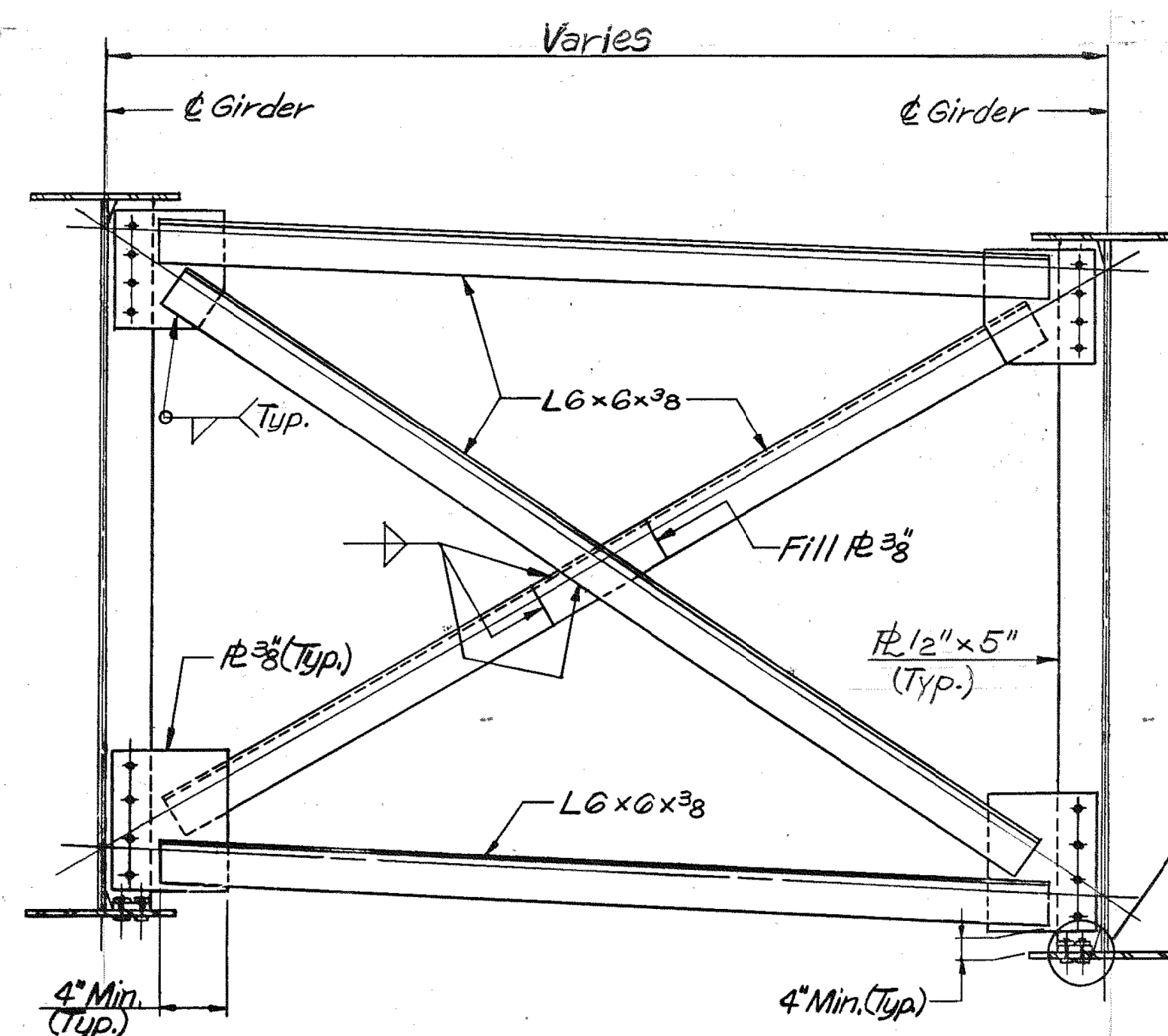
M-262-127

n5 fram. dgn

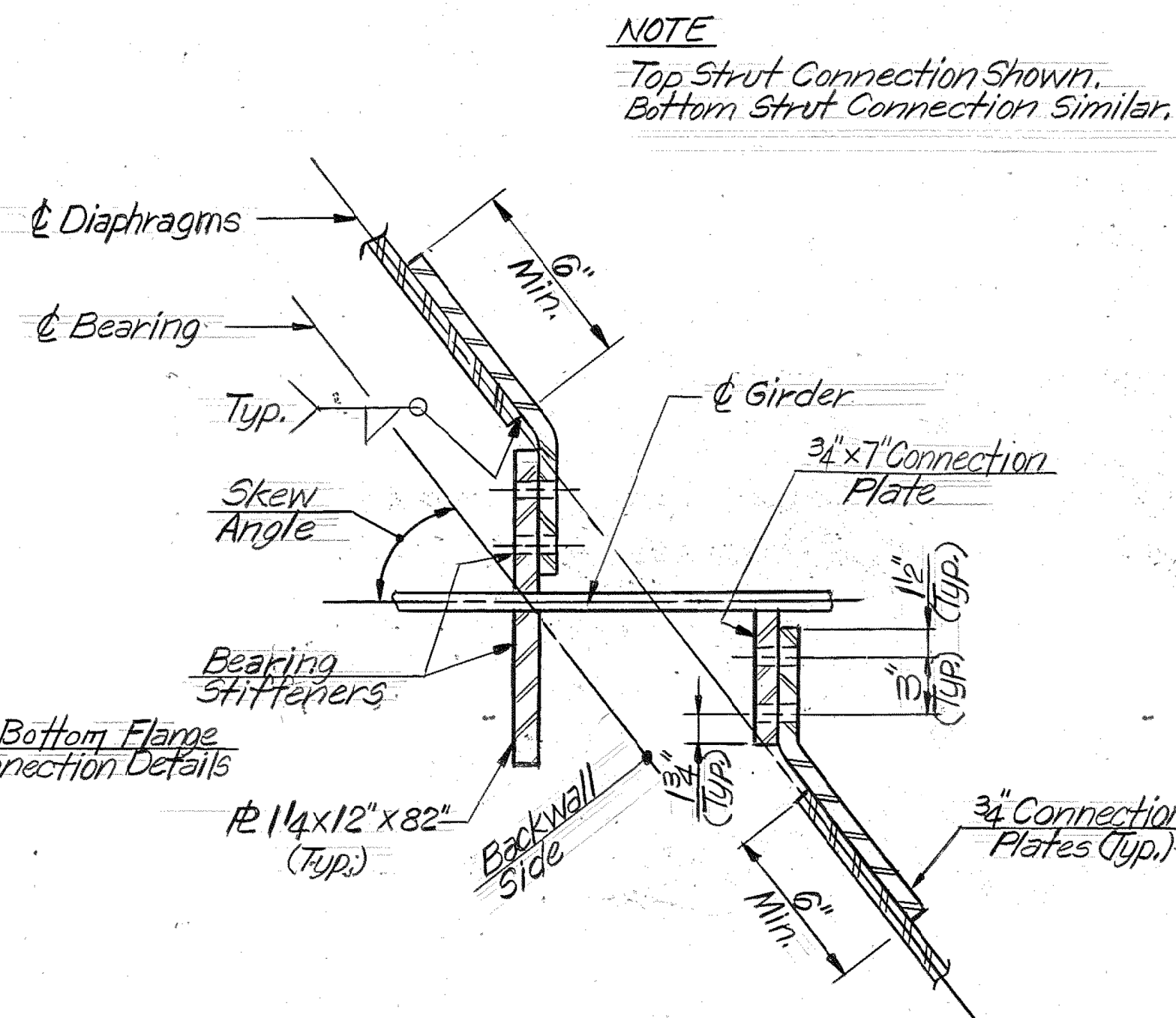
PROJECT NO.	YEAR	SHEET NO.
XA-385(4)	99	

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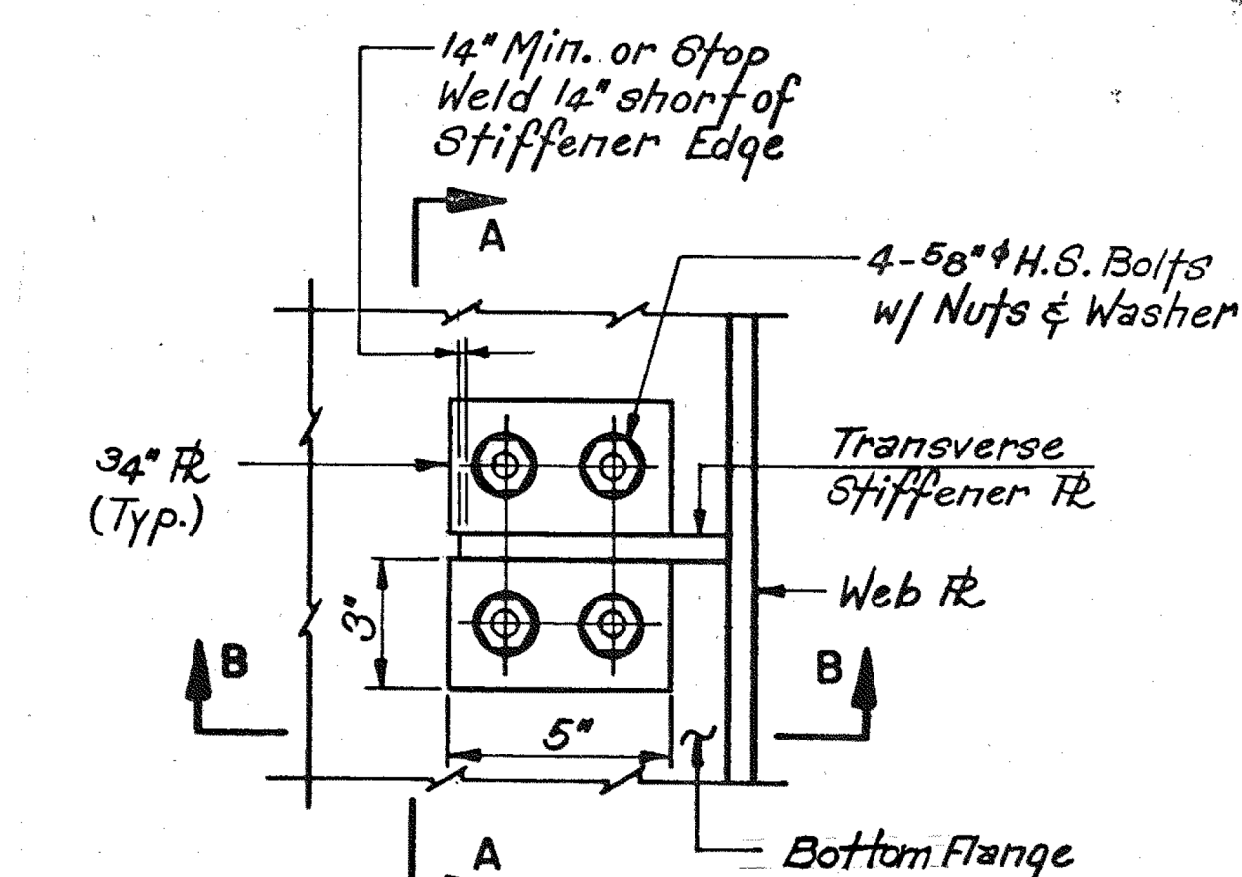
NOTE:
Detail For Transverse Stiffener Show
Type-1 Diaphragm Connection.
Plate Similar.



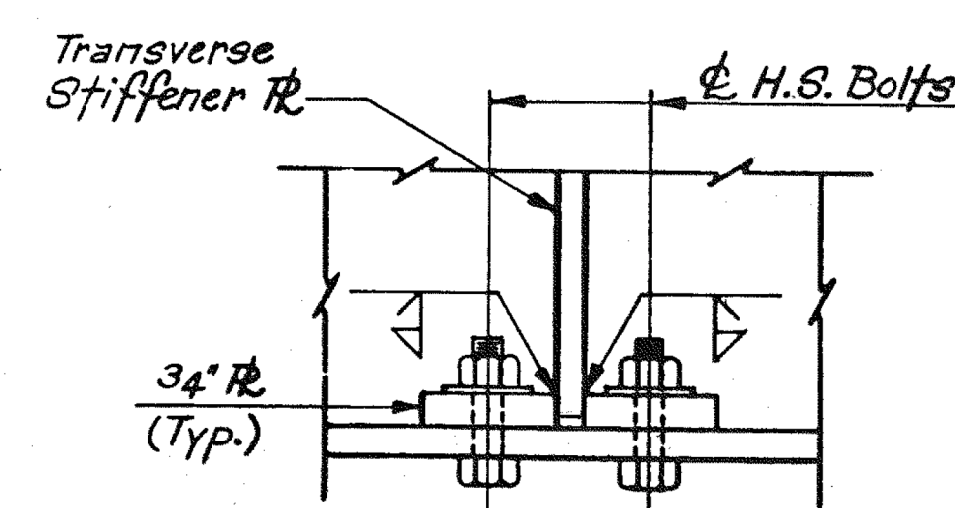
TYPE 1 DIAPHRAGM
N.T.S.



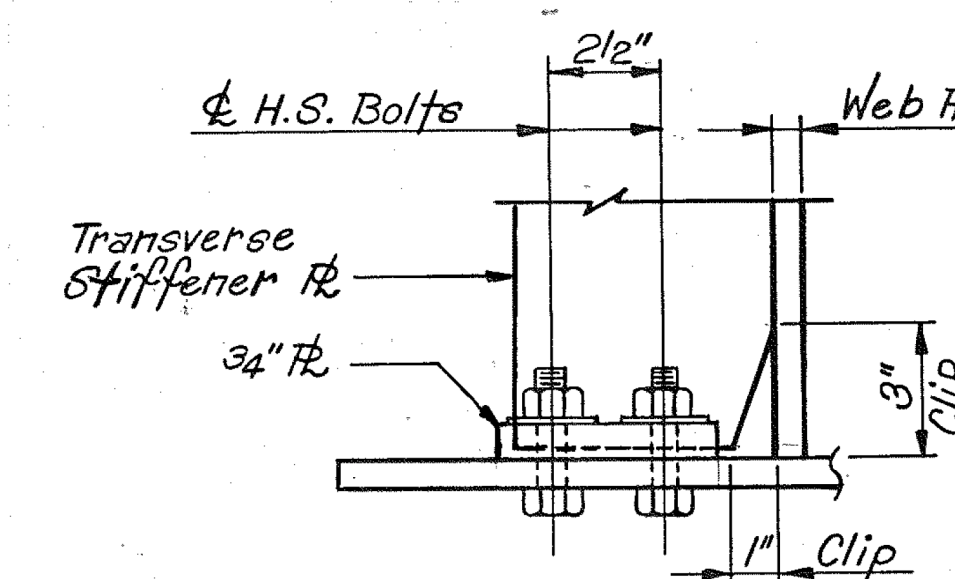
TYPE 2 DIAPHRAGM CONNECTION DETAILS



PLAN

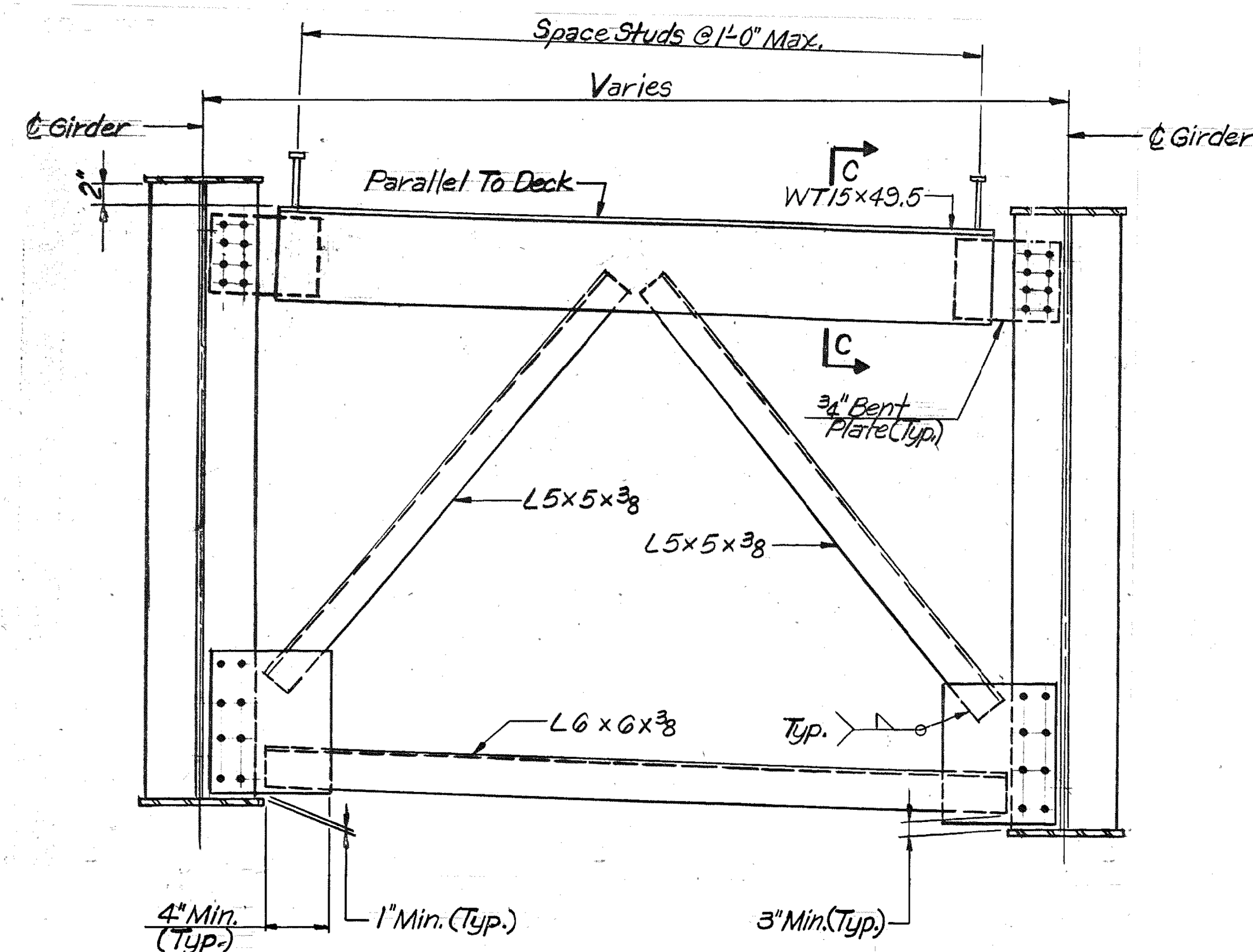


SECTION A-A

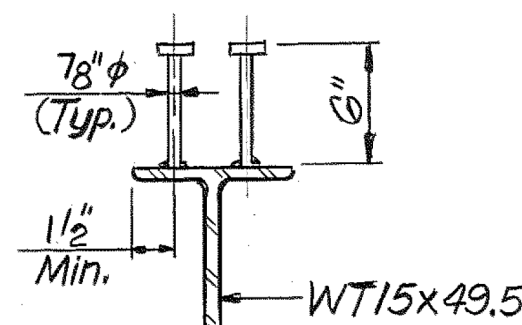


SECTION B-B

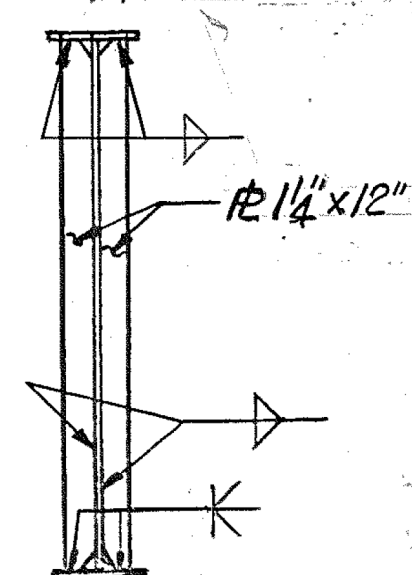
BOTTOM FLANGE CONNECTION DETAILS

$$500/2 : 3'' = 1'-0''$$


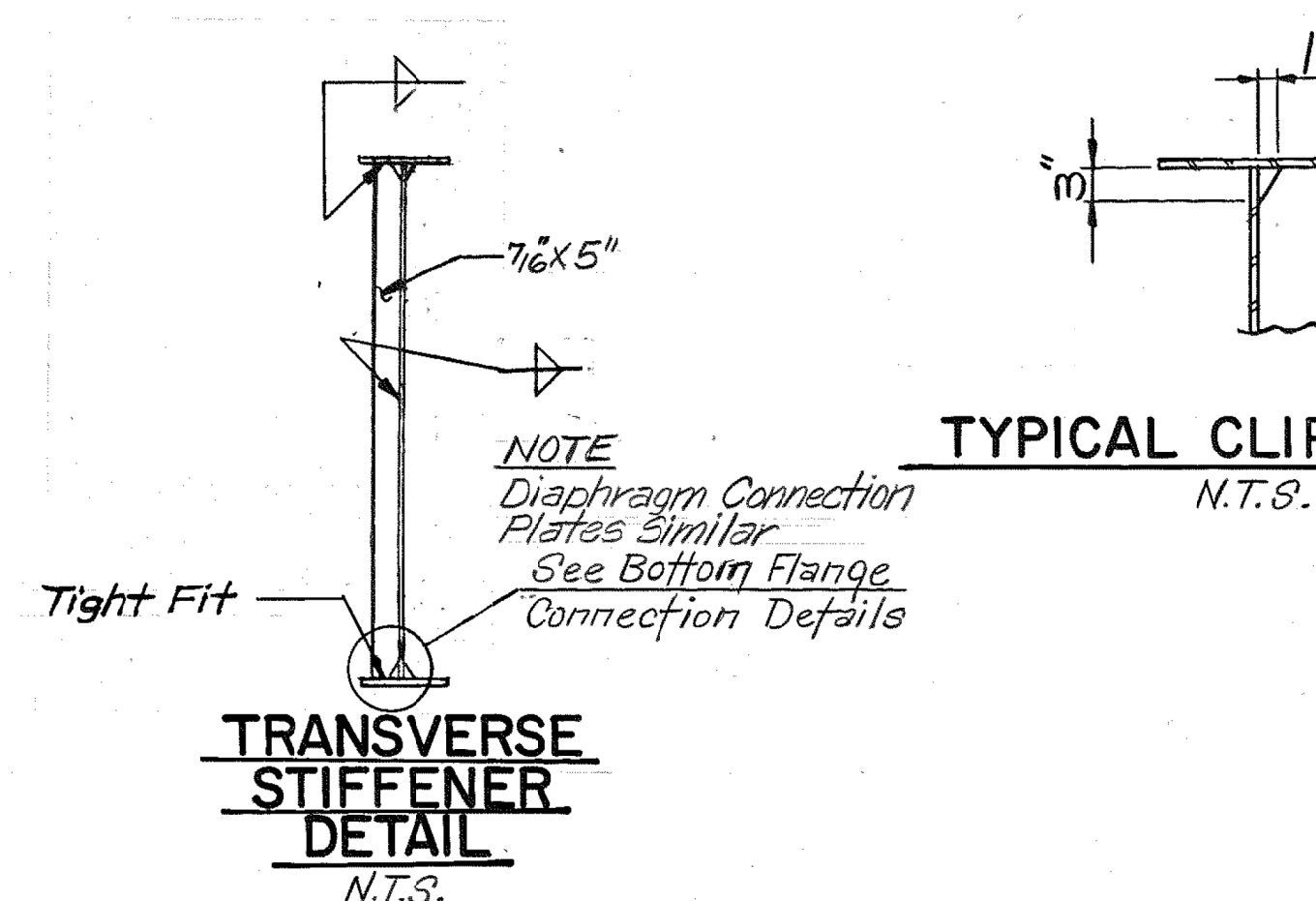
TYPE 2 DIAPHRAGM
N.T.S.



SECTION C-C
N.T.S.



BEARING
STIFFENER
AT ABUTMENTS.
N.T.S.



TYPICAL CLIP DETAIL

NTS

NOTE
Diaphragm Connection
Plates Similar
See Bottom Flange
Connection Details

Tight Fit

TRANSVERSE
STIFFENER
DETAIL
N.T.S.

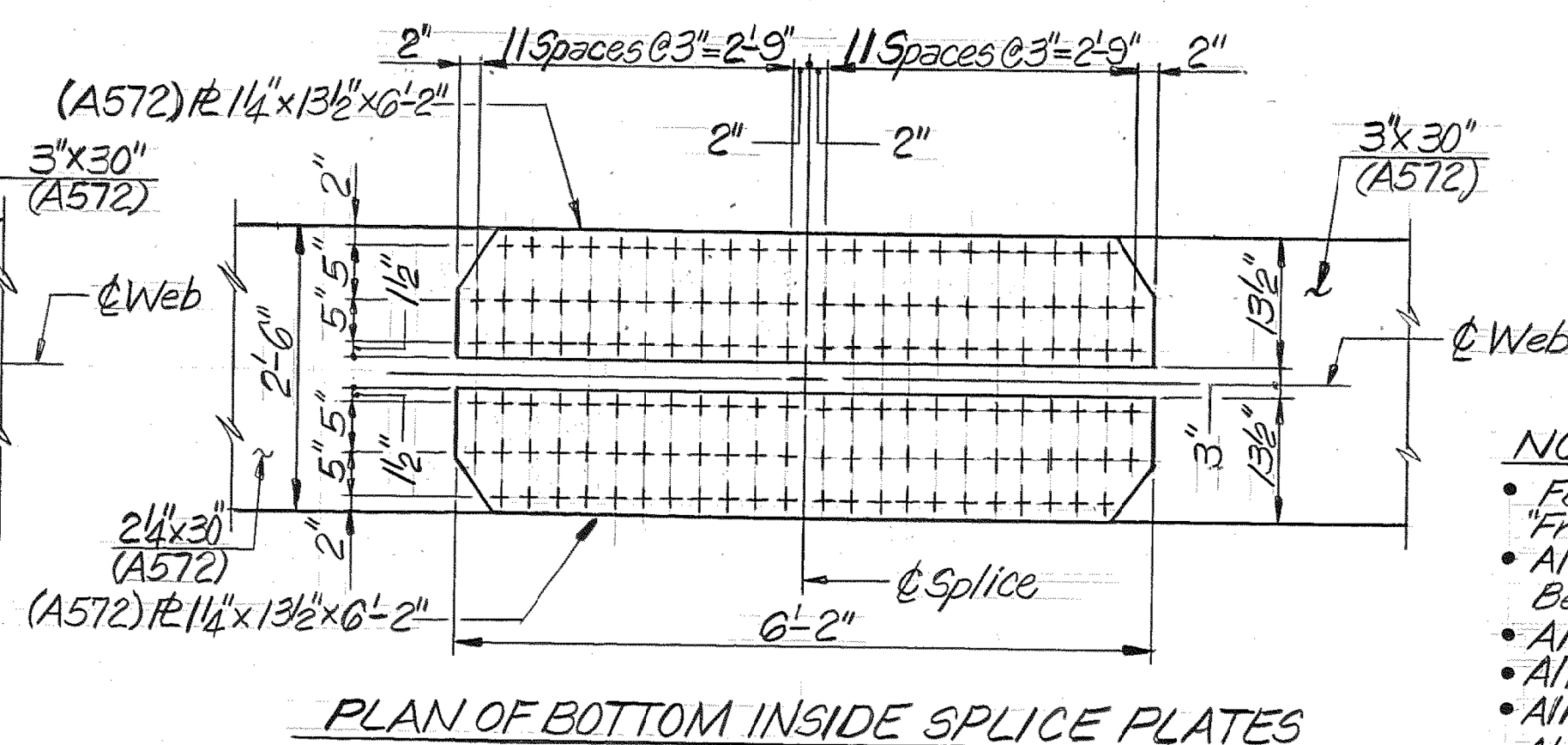
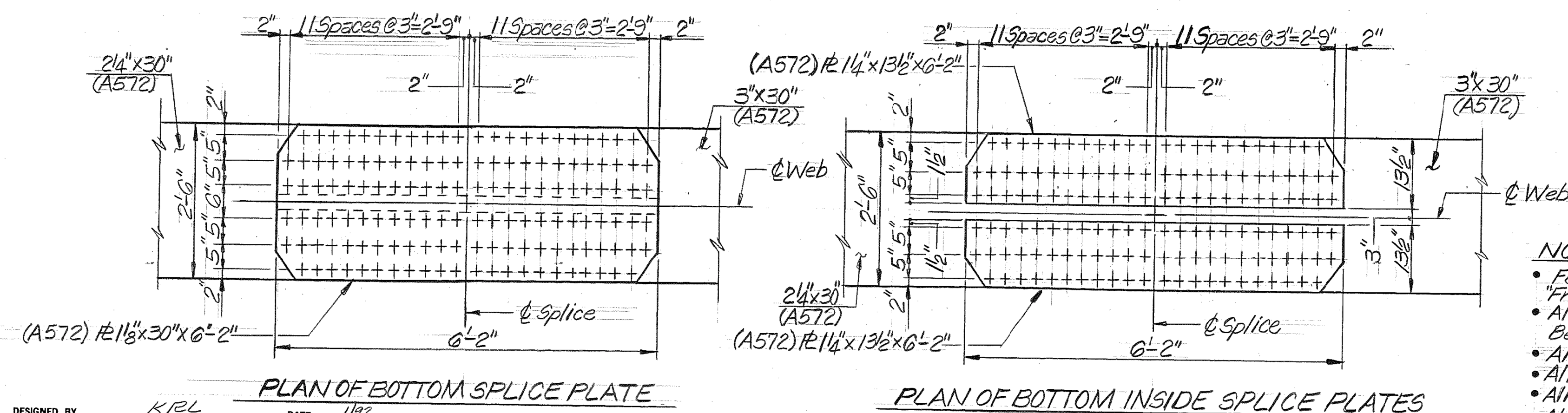
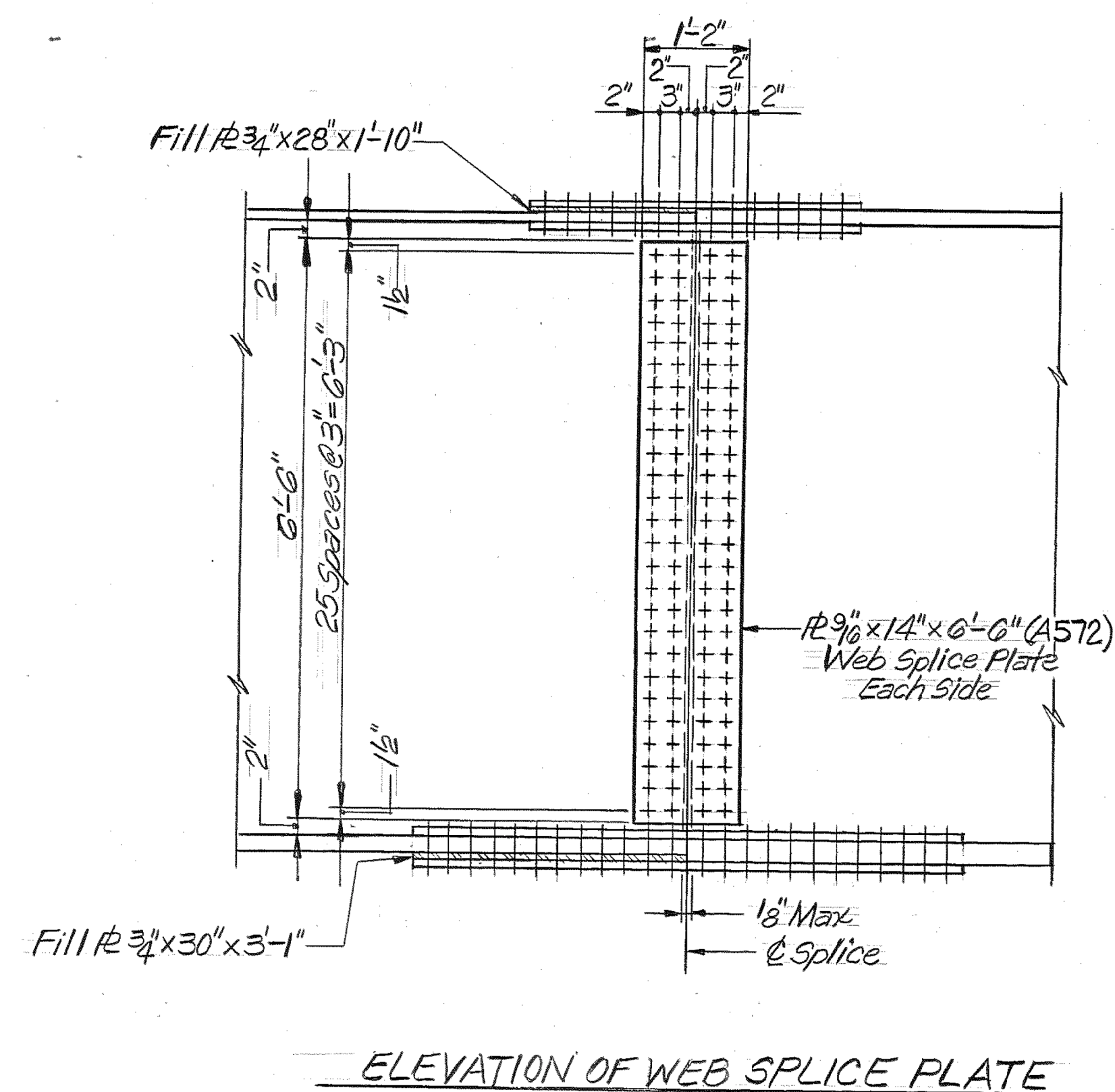
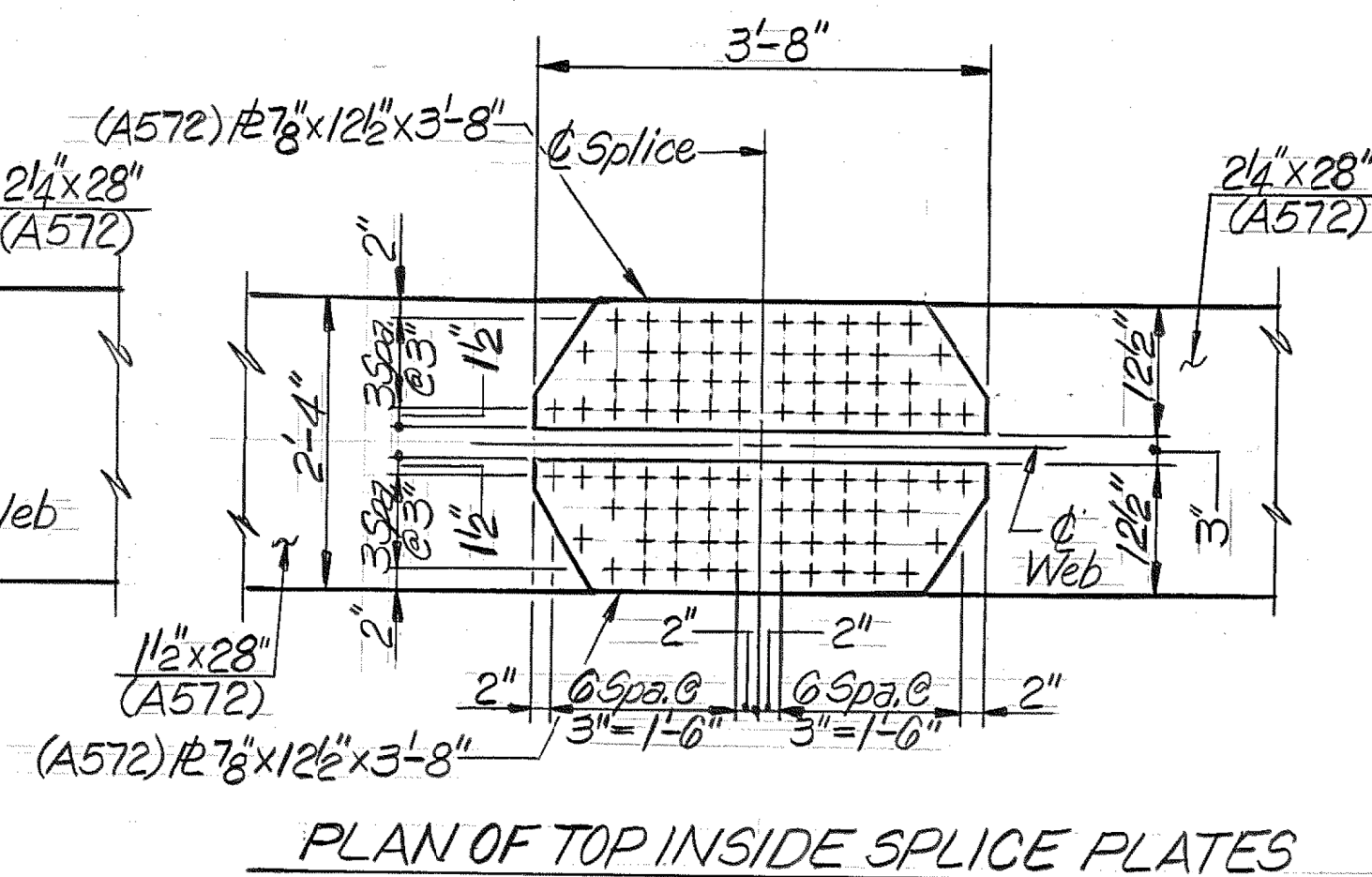
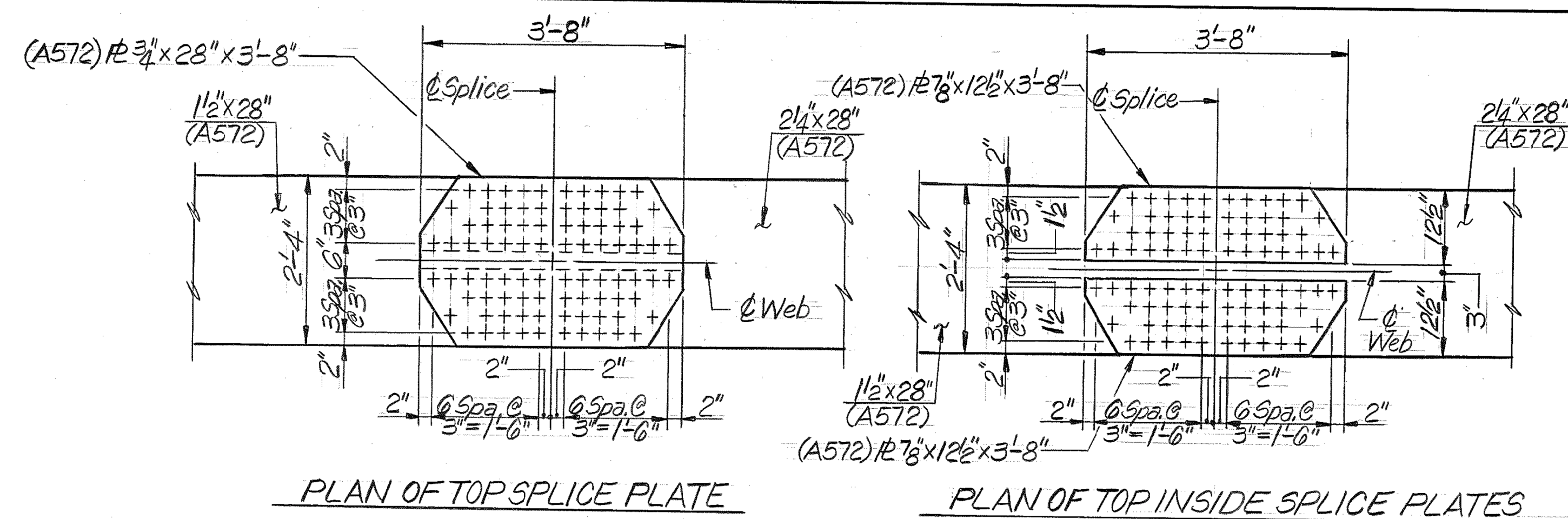
N.T.S

- NOTES:**
- All Diaphragms, Transverse Stiffeners, Bearing Stiffeners and Connection Plates are A36 Steel.
 - All Bolted Connections use 7/8" Dia. A325 Bolts, unless Noted.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BRIDGE NO.5
STEEL DETAILS
NONCONNAH PARKWAY (S.R. 385)
OVER RIVERDALE ROAD
STATION 248 + 36.96 (NONC.PKWAY.)
STATION 219 + 48.62 (RIVERDALE RD.)
SHELBY COUNTY

CORRECT Edward P. Wasserman 1992
ENGINEER OF STRUCTURES

DESIGNED BY KRL DATE 1/92
DRAWN BY R.G.H. DATE 1/92
SUPERVISED BY KEW DATE 1/92
CHECKED BY MMP DATE 1/92



- NOTES:**
- For Splice Locations, See "Framing Plan" Sheet No. M-262-127
 - All Splice Contact Surfaces Shall Be Slip Resistant Class B.
 - All Bolts Are 18" (A325) In Top Splice Plates.
 - All Bolts Are 18" (A325) In Bottom Splice Plates.
 - All Bolts Are 18" (A325) In Web Splice Plates.
 - All Bolt Threads Shall Be Excluded From The Shear Plane.

[illegible]

STEEL BEAM DESIGN DATA
FOR GIRDERS NO. 2-11

CTION FACTOR 1.86 WHEELS

NG BEAM WT.)

= 1.460 LB/FT

= 396 LB/FT

MENT:(INCLUDING BEAM WT.) LOAD FACTORED

G = 3.286 K-FT

OSITE= 17.446 K-FT

= 11.742 K-FT

= 32.474 K-FT

LAB (F'c=3000 psi): 108 IN. X 9 IN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BRIDGE NO.5
FIELD SPLICES
NONCONNAH PARKWAY (S.R. 385)
OVER RIVERDALE ROAD
STATION 248 + 36.96 (NONC.PKWy.)
STATION 219 + 48.62 (RIVERDALE RD.)
SHELBY COUNTY

CORRECT Edward P. Wasserman 1992
ENGINEER OF STRUCTURES

DESIGNED BY KRL DATE 1/92
DRAWN BY R.C.H. DATE 1/92
SUPERVISED BY KEW DATE 1/92
CHECKED BY mmr DATE 1/92

SUPERVISED BY KEW DATE 1/92
CHECKED BY mm DATE 1/92

SUPERVISED BY KEW DATE 1/92
CHECKED BY mm DATE 1/92

SUPERVISED BY KEW DATE 1/92
CHECKED BY mm DATE 1/92

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

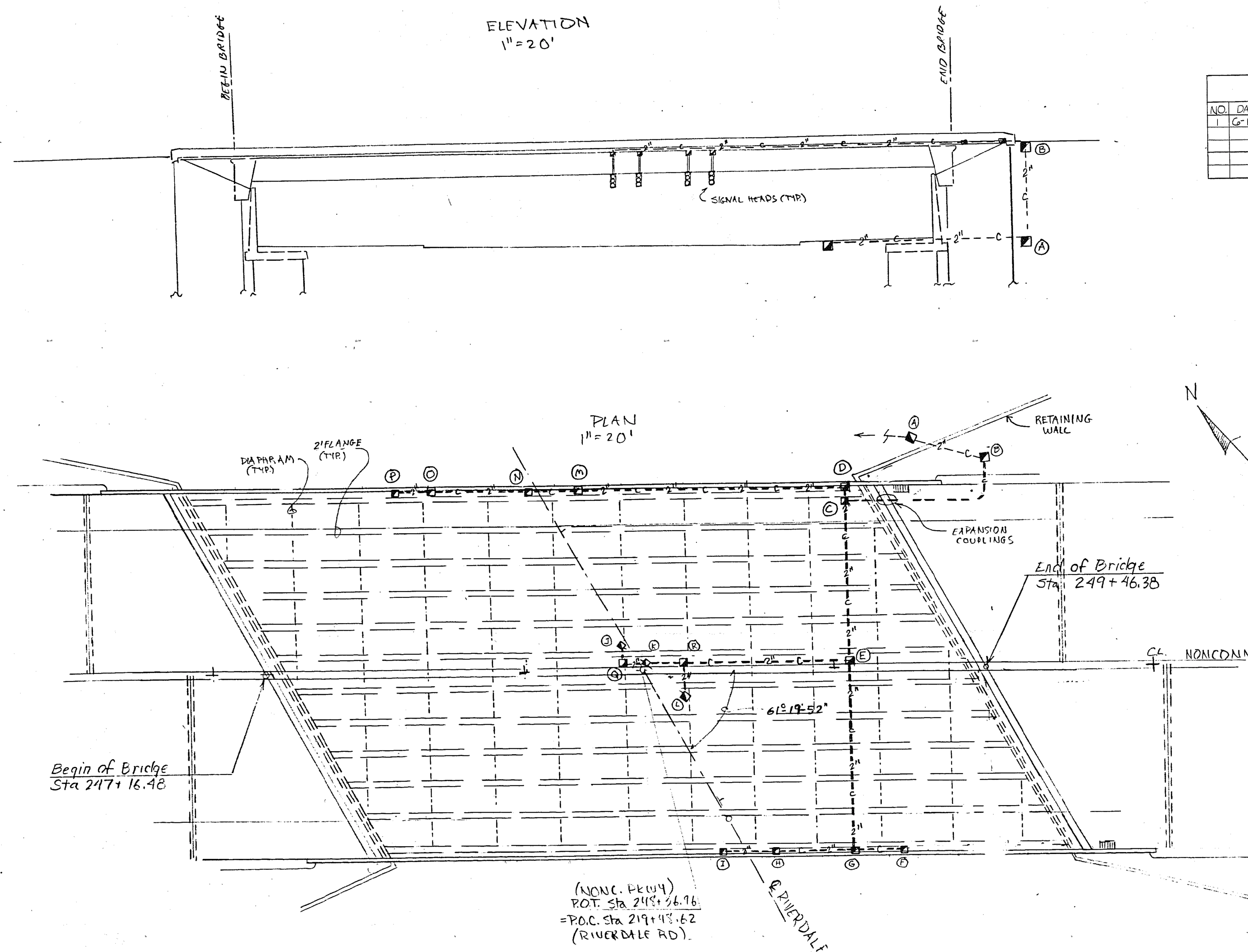
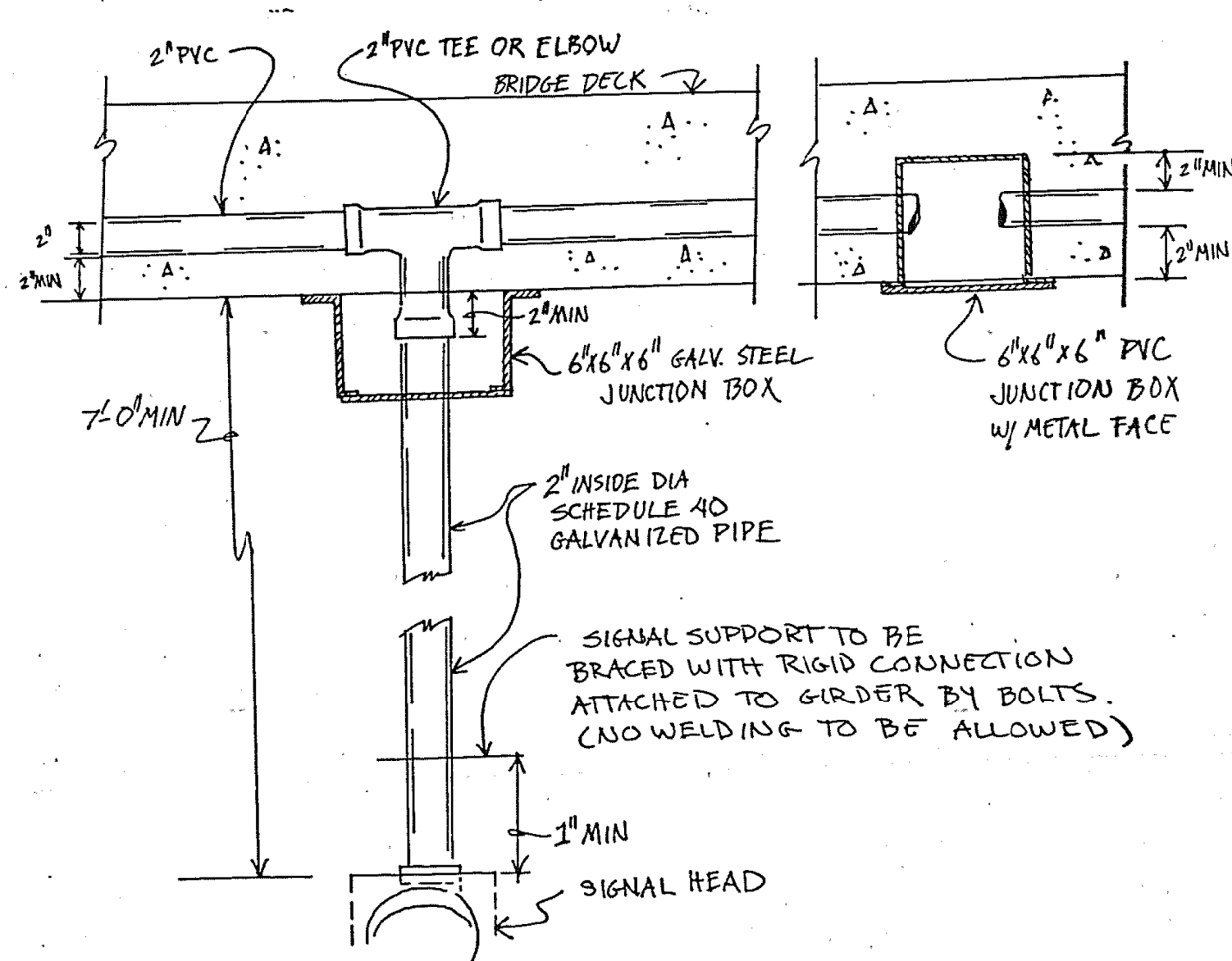
M-262-130

TYPE	YEAR	PROJECT NO.	SHEET NO.
	1992		

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	6-16-92	BEH	ADDED SHEET TO PLANS

JUNCTION BOX TYPE & LOCATION				
BOX	TYPE	SIZE	MATL.	USE
A**	24"x16"x18"	CONC	TRAFFIC SIGNAL	LOCATE IN FIELD
B**	24"x16"x18"	CONC	TRAFFIC SIGNAL	LOCATE IN FIELD
C**	6"x6"x6"	PVC	ELEC IN-SLAB	249+02.00 54'-0" LT
D**	6"x6"x6"	PVC	ELEC IN-SLAB	249+02.00 58'-0" LT
E**	6"x6"x6"	PVC	ELEC IN-SLAB	249+02.00 2'-0" RT
F**	6"x6"x6"	6"x6"x6" GALV STEEL	ELEC BELOW SLAB	249+13.00 58'-0" RT
G	"	"	"	249+02.00 58'-0" RT
H	"	"	"	248+78.00 58'-0" RT
I	"	"	"	248+59.00 58'-0" RT
J	"	"	"	248+29.00 7'-6" LT
K	"	"	"	248+35.00 2'-0" LT
L	"	"	"	248+50.50 7'-6" RT
M	"	"	"	248+18.00 58'-0" LT
N	"	"	"	248+05.00 58'-0" LT
O	"	"	"	248+74.00 58'-0" LT
P**	"	"	"	247+57.00 58'-0" LT
Q**	6"x6"	PVC	ELEC IN-SLAB	248+29.00 2'-0" LT
R	6"x6"x6"	PVC	ELEC IN-SLAB	249+50.50 2'-0" LT

* FROM E NONCONNAN PKWY
 ** STANDARD DWG T-SG-2
 *** STANDARD DWG STD-8-2



- NOTES:
- SCOPE OF WORK AS SHOWN ON THIS SHEET INCLUDES THE INSTALLATION OF ELECTRICAL WIRING CONDUIT AND JUNCTION BOXES IN THE BRIDGE SLAB TO SERVE PROPOSED TRAFFIC SIGNALS (SEE SHEETS 75 THROUGH 84H). ALSO INCLUDED IS SIGNAL SUPPORT CONDUIT AND BRACING AND INSTALLATION OF DIRECT BURIED CONDUIT AND PULL BOXES IN FILL AREA IN FRONT OF AND BEHIND RETAINING WALL.
 - WORK ON BOTH BRIDGES #2 AND #5 TO BE PAID FOR UNDER THE FOLLOWING:
- | NUMBER | ITEM | UNIT | BR#2 | BR#5 | TOTAL |
|-----------|--------------------------------|------|------|------|-------|
| 730-03.01 | INSTALL PULL BOX | EACH | 2 | 2 | 4 |
| 730-12.02 | CONDUIT 2" DIAMETER | L.F. | 85' | 92' | 177' |
| 730-12.10 | CONDUIT (STRUCTURES, 2" PVC)* | L.F. | 486' | 472' | 958' |
| 730-12.11 | CONDUIT (STRUCTURES, 2" RGS)** | L.F. | 84' | 77' | 161' |
- * INCLUDES ALL TEES, ELBOWS, EXPANSION COUPLINGS AND PVC IN-SLAB JUNCTION BOXES WITHIN THE BRIDGE DECK.
- ** INCLUDES GALVANIZED STEEL, BELOW-DECK JUNCTION BOXES, RIGID GALVANIZED STEEL SIGNAL SUPPORTS AND BRACING AND ALL NUTS, BOLTS, PLATES, ETC. NECESSARY TO SECURE THE SIGNAL SUPPORT CONDUIT TO THE BRIDGE.
- CONTRACTOR IS TO COORDINATE ALL WORK WITH TRAFFIC SIGNAL SUB-CONTRACTOR.

BRIDGE No. 5

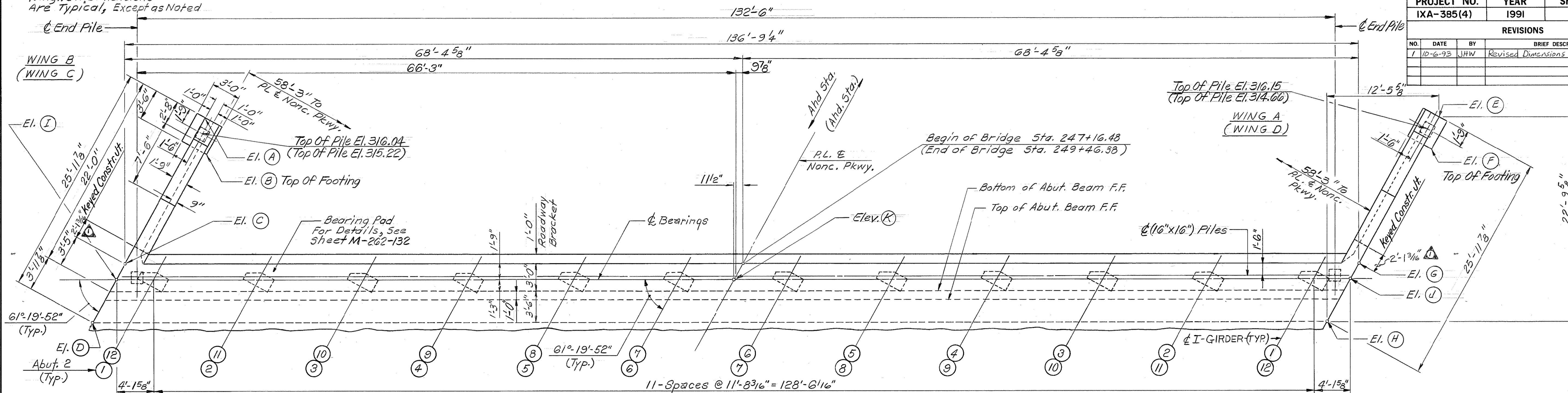
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF PLANNING & DEVELOPMENT

TRAFFIC SIGNAL APPURTENANCES
 NONCONNAN PARKWAY
 OVER RIVERDALE ROAD
 STATION 248+36.96
 SHELBY COUNTY
 1992

M-262-130A

Note:
Wingwall Dimensions
Are Typical, Except as Noted

CONST. NO. 79185-3212-44		
PROJECT NO.	YEAR	SHEET NO.
IXA-385(4)	1991	
REVISIONS		
NO.	DATE	BY
1	10-6-93	JHW



PLAN

Scale: 3/16" = 1'-0"

Abut. 1 Shown, Abut. 2 Similar Except as Noted Thus ()
Abut. 1 Looking Back on Survey, Abut. 2 Looking Ahead on Survey

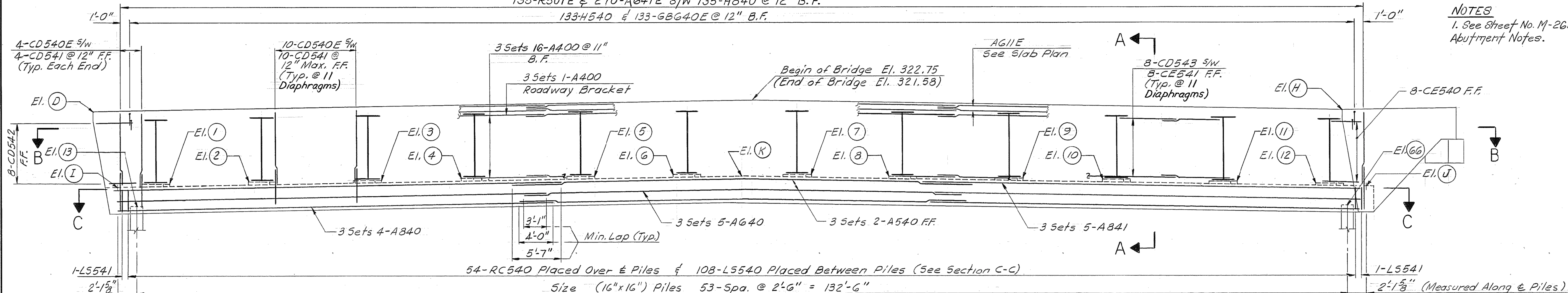
135-R501E & 270-A641E S/W 135-H840 @ 12" B.F.
133-H540 & 133-G640E @ 12" B.F.

LEGEND

F.F. - Denotes Front Face
B.F. - Denotes Back Face
E.F. - Denotes Each Face

NOTES

1. See Sheet No. M-262-133 for Abutment Notes.



ELEVATION

Scale: 3/16" = 1'-0"

(14) - Test Pile
(65) - Test Pile

TOP OF RISER BLOCK ELEVATIONS					
El.	Abut #1	Abut #2	El.	Abut #1	Abut #2
1	313.65	312.72	7	314.64	313.47
2	313.86	312.88	8	314.43	313.21
3	314.06	313.04	9	314.21	312.96
4	314.25	313.20	10	313.99	312.70
5	314.45	313.36	11	313.78	312.44
6	314.65	313.51	12	313.56	312.18

PILE CUT-OFF ELEVATIONS											
El.	Abut #1	Abut #2	El.	Abut #1	Abut #2	El.	Abut #1	Abut #2	El.	Abut #1	Abut #2
13	311.04	310.21	22	311.46	310.53	31	311.88	310.82	40	312.25	311.08
(14)	311.09	310.24	23	311.50	310.56	32	311.92	310.86	41	312.21	311.03
15	311.10	310.28	24	311.55	310.58	33	311.97	310.89	42	312.16	310.97
16	311.19	310.32	25	311.60	310.63	34	312.01	310.92	43	312.12	310.92
17	311.23	310.35	26	311.64	310.65	35	312.06	310.96	44	312.08	310.86
18	311.28	310.39	27	311.69	310.69	36	312.11	310.99	45	312.03	310.81
19	311.33	310.42	28	311.74	310.72	37	312.15	311.03	46	311.99	310.75
20	311.36	310.46	29	311.78	310.75	38	312.20	311.06	47	311.95	310.70
21	311.41	310.49	30	311.83	310.79	39	312.25	311.09	48	311.91	310.64

ELEVATIONS											
El.	Abut #1	Abut #2	El.	Abut #1	Abut #2	El.	Abut #1	Abut #2	El.	Abut #1	Abut #2
A	321.53	320.50	J	313.35	311.86						
B	317.79	316.97	K	314.52	313.36						
C	321.49	320.65									
D	321.47	320.70									
E	321.59	319.89									
F	317.90	316.41									
G	321.58	320.07									
H	321.58	320.15									
I	313.25	312.43									

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BRIDGE NO. 5
ABUTMENTS-PLAN & ELEVATION
NONCONNAH PARKWAY (S.R. 385)
OVER RIVERDALE ROAD
STATION 248+36.96(NONC.PKWKY.)
STATION 219+48.62(RIVERDALE RD.)
SHELBY COUNTY
1992

CORRECT *Edward P. Wasserman*
ENGINEER OF STRUCTURES

M-262-131

BILL OF STEEL

[illegible]

ABUTMENT NO.1 & NO.2									
BAR	LOCATION	SIZE	NO.1 REQ'D	BENDING DIMENSIONS				LENGTH	
				A	B	C	D		
SUPERSTRUCTURE									
A400	Abut. Backwall	4	102						46'-3"
A402	Abutment Corner	4	4						3'-9"
A541E	Abut. Diaphragm	5	32						7'-10"
R501E	Abut. Backwall	5	270	3'-0"	2'-1"				5'-1"
H540	Roadway Bracket	5	266	1'-7"	7"				2'-9"
R401E	Abutment Backwall	6	540						7'-11"
CD540E	Abut. Diaphragm	5	236	8'-3"	1'-6"	5'-4"			9'-9"
CD542	"		16	3'-10"	1'-6"	8'-8"			5'-4"
CD543	"		176	7'-0"	1'-6"	8'-8"			8'-0"
CD545	Wing A & D	5	18	3'-9"	1'-6"	8'-8"			5'-3"
CD640	"	6	6	(3)	1'-6"	8'-8"			11'-7 7/16"
CD740	"	7	18	(3)	2'-1"	1'-0"			11'-8 7/16"
CE540	Abut. Diaphragm	5	16	3'-10"	1'-6"	8'-8"			5'-4"
CE541	"		176	6'-4"	1'-6"	8'-8"			7'-10"
CE542	Wing B & C	5	18	3'-9"	1'-6"	8'-8"			5'-3"
CE643	"	6	6	(3)	1'-6"	8'-8"			11'-7 7/16"
CE740	"	7	18	(3)	2'-1"	1'-0"			11'-8 7/16"
CE1040E	Top of Wingwall	10	8	17'-1"	3'-2"	1'-0"			20'-3"
6B640E	Roadway Bracket	6	266	2'-9"	2'-2 1/2"	3'-11 1/2"			6'-7"
SUBSTRUCTURE									
A540	Abutment Beam	5	12						46'-6"
A541	"	5	32						3'-10"
A640	Abutment Beam	6	30						47'-6"
A840	Abutment Beam	8	24						48'-0"
A841	"	8	30						49'-0"
RG540	Abutment Beam	5	108	2'-6"	2'-6"	10"			9'-2"
LS540	Abutment Beam	5	216	2'-6"	2'-6"	10"			11'-8"
LS541	"	5	4	2'-10"	2'-6"	10"			12'-4"
H542	Abutment Corner	5	12	8"	10'-0"				20'-8"
H840	Abutment Backwall	8	270	8"	4'-7"				3'-10"
CD541	Abut. Diaphragm	5	236	4'-6"	6"	2"			5'-0"
CD544	Abutment Beam	5	4	5'-5"	2'-2"	11'-4"			7'-7"
CD741	Abut. Brt. Wing A & D	7	6	(5)	2'-1"	1'-0"			9'-4 1/16"
CD840	Abutment Beam	8	4	5'-5"	4'-11"	4'-4 3/4"			10'-4"
CE741	Abut. Brt. Wing B & C	7	6	(5)	2'-1"	1'-0"			9'-4 1/16"

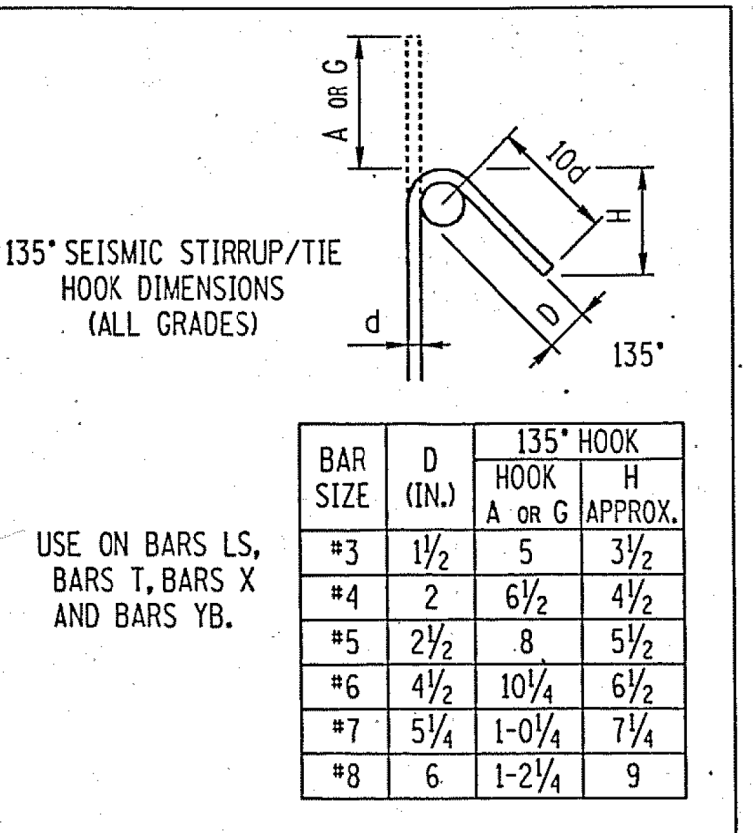
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REINFORCING STEEL CODE

TYPE	SIZE	SERIES
A	5	06

NOTE: DIMENSIONS SHOWN ON THIS SHEET
ARE OUTSIDE TO OUTSIDE OF BAR.
STANDARD C.R.S.I. HOOK DETAILS
SHALL APPLY, EXCEPT AS NOTED.

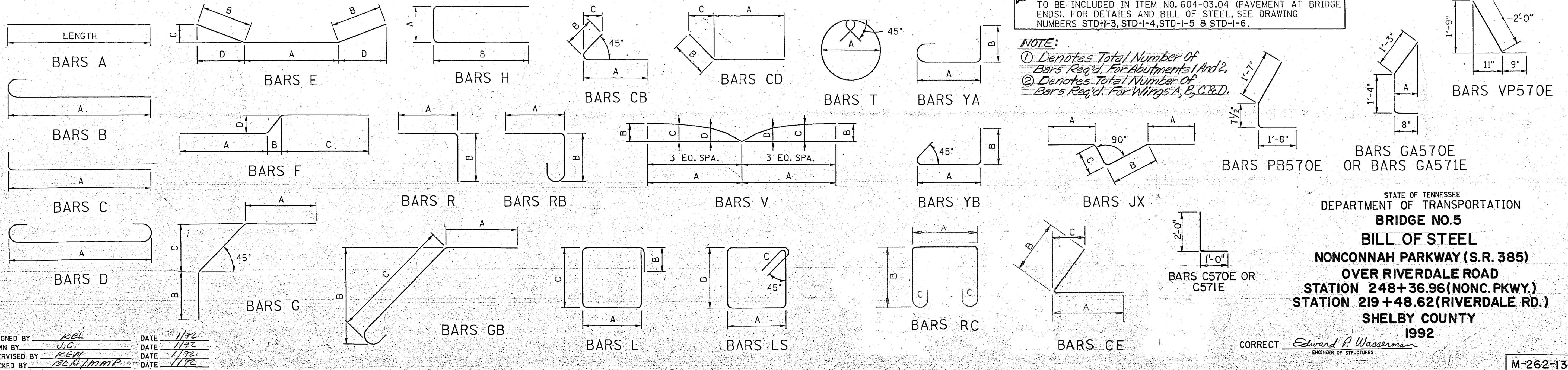
NOTE: THE SUFFIX E, FOR BARS SO MARKED,
DENOTES EPOXY COATED REINFORCEMENT.



BRIDGE END DRAINS REQUIRED. QUANTITIES FOR DRAIN BOX TO BE INCLUDED IN ITEM NO. 604-03.04 (PAVEMENT AT BRIDGE ENDS). FOR DETAILS AND BILL OF STEEL, SEE DRAWING NUMBERS STD-I-3, STD-I-4, STD-I-5 & STD-I-6.

NOTE:

- ① Denotes Total Number Of Bars Req'd. For Abutments 1 And 2.
- ② Denotes Total Number Of Bars Req'd. For Wings A, B, C & D.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BRIDGE NO.5
BILL OF STEEL
NONCONNAH PARKWAY (S.R. 385)
OVER RIVERDALE ROAD
STATION 248 + 36.96 (NONC. PKWY.)
STATION 219 + 48.62 (RIVERDALE RD.)
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1-262-134