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**Matthew Newman**  
2025.07.17 16:03:28 -05'00'

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GRESHAM SMITH  
222 2ND AVE SOUTH  
NASHVILLE, TN 37201  
MATT NEWMAN, P.E., PE. NO. 124700

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

SHEET NAME	SHEET NO.
SIGNATURE SHEETS.....	ROADWAY-SIGN1
TITLE SHEET .....	1
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS .....	1A
PROJECT COMMITMENTS.....	1B
ESTIMATED ROADWAY AND TABULATED QUANTITIES.....	2
TYPICAL SECTIONS AND PAVEMENT SCHEDULE .....	2B
GENERAL NOTES.....	2C
SPECIAL NOTES.....	2D
ENVIRONMENTAL AND EPSC NOTES.....	2E-2E1
PRESENT / PROPOSED & EROSION CONTROL PLANS.....	3
TRAFFIC CONTROL PLANS .....	T1-T8B

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

YEAR	PROJECT NO.	SHEET NO.
2025	19I040-M3-015	ROADWAY-SIGN1

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION
SIGNATURE SHEET



SHEET NAME	SHEET NO.
SIGNATURE SHEET .....	BRIDGE-SIGN1
LAYOUT OF BRIDGE TO BE REPAIRED .....	BR-132-831
ESTIMATED BRIDGE QUANTITIES.....	BR-132-832
BRIDGE GENERAL NOTES.....	BR-132-833
SUPERSTRUCTURE REPAIR DETAILS.....	BR-132-834
SUPERSTRUCTURE REPAIR DETAILS.....	BR-132-835
BENT DETAILS.....	BR-132-836
MISCELLANEOUS REPAIR DETAILS.....	BR-132-837
MISCELLANEOUS REPAIR DETAILS.....	BR-132-838

**STATE OF TENNESSEE**  
**DEPARTMENT OF TRANSPORTATION**

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**SIGNATURE**  
**SHEET**



Index Of Sheets  
SEE SHEET NO. 1A

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING

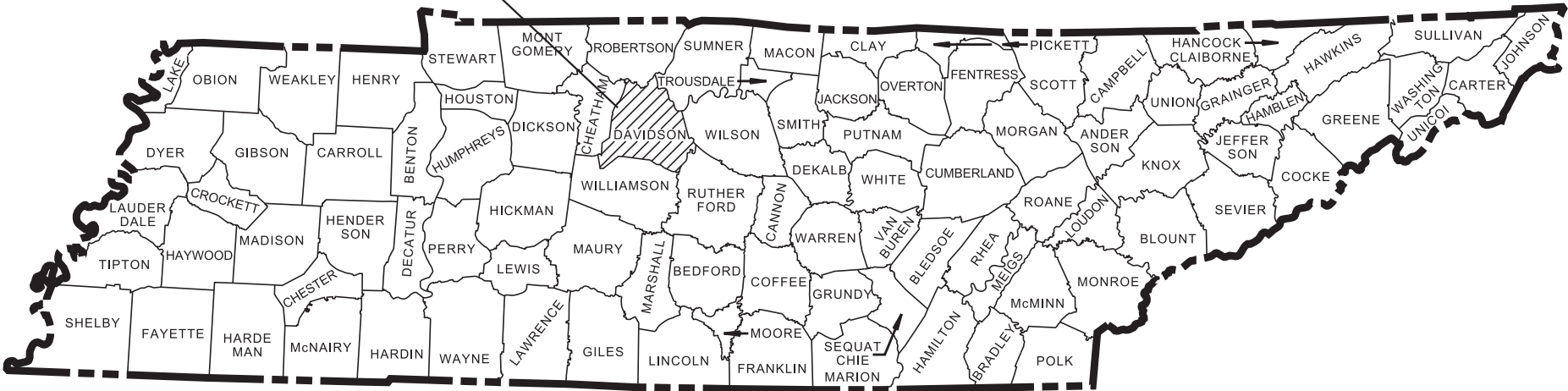
DAVIDSON COUNTY

EXIT 221 A RAMP OVER  
I-40 (LOG MILE 29.02)

PS&E  
BRIDGE REPAIR

PROJECT LOCATION

BRIDGE ID. # 19I00400161



END PROJECT NO. 19I040-M3-015 PS&E

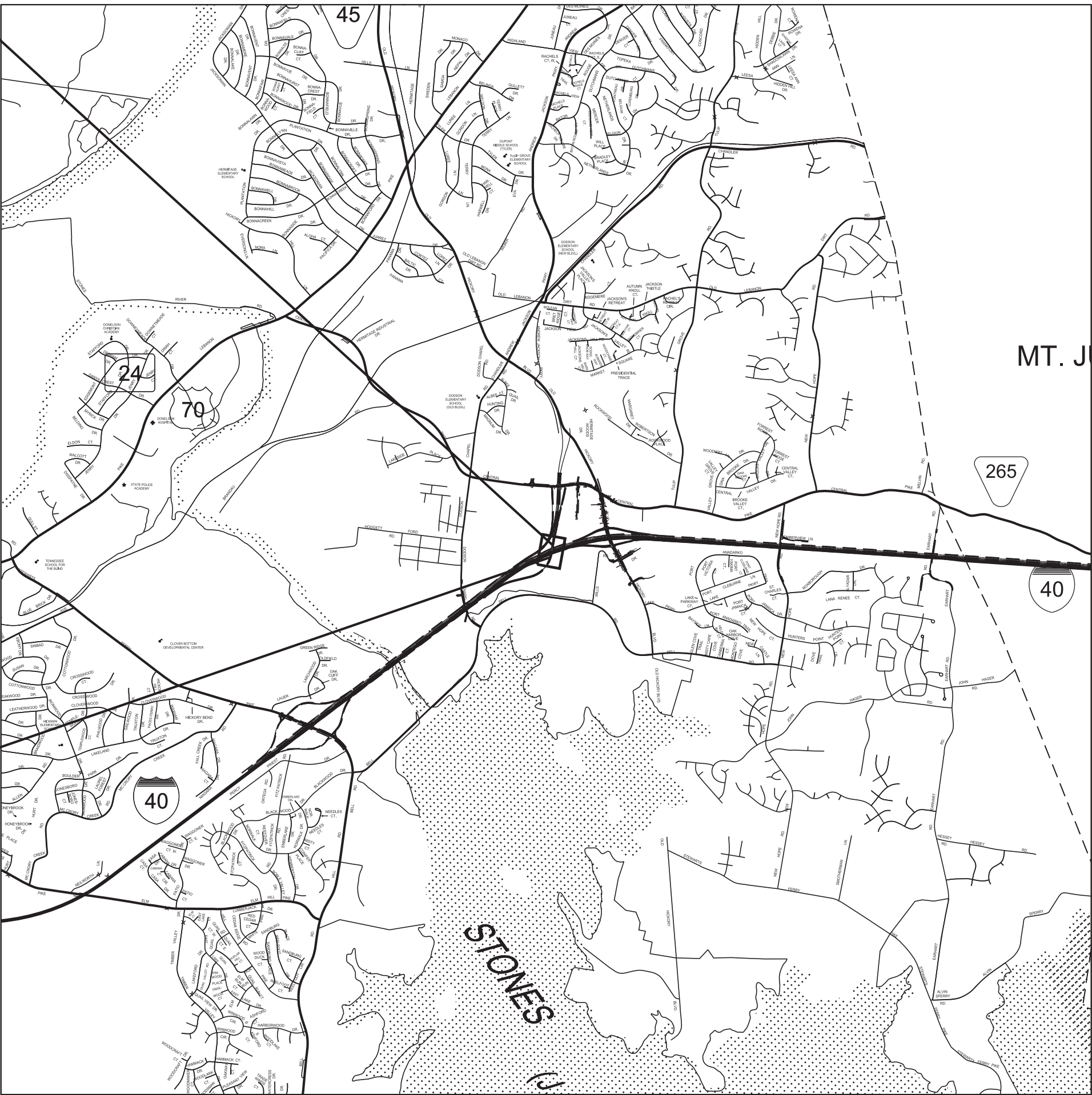
STA. 86+12.31

N 668947.1681 E 1789477.5369

BEGIN PROJECT NO. 19I040-M3-015 PS&E

STA. 82+72.27

N 668627.3737 E 1789416.8417



ROADWAY LENGTH 0.011 MILES  
BRIDGE LENGTH 0.053 MILES  
PROJECT LENGTH 0.064 MILES

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 REPAIR OFFICE DESIGN MANAGER: JOSEPH BENDER, P.E.

DESIGNED BY: GRESHAM SMITH

DESIGNER: RUTH PARK, P.E. CHECKED BY DONALD MCCRARY, P.E.

P.E. NO. 19I040-M3-015

PIN NO. 133533.00

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

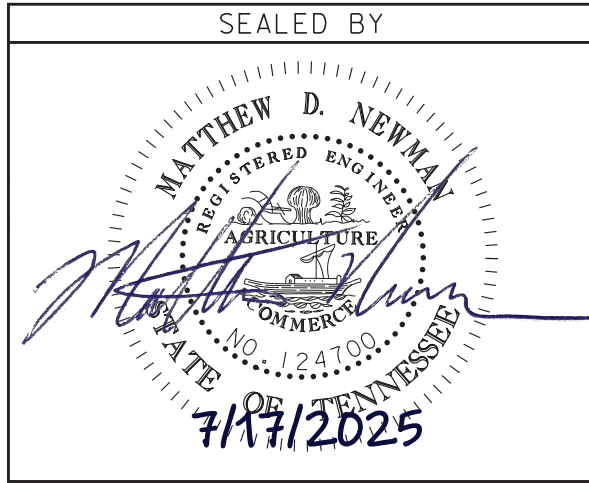
TENN.	YEAR	SHEET NO.
	2025	1
FED. AID PROJ. NO.		
STATE PROJ. NO.	19I040-M3-015	

NO EXCLUSIONS

LAND DISTURBANCE  
LESS THAN 1 ACRE

ROAD TO BE CLOSED  
DURING CONSTRUCTION

THIS PROJECT WILL  
BE BUNDLED WITH  
PIN 134893.00  
AND PIN 113872.01



APPROVED: WILL REID, CHIEF ENGINEER

DATE:

APPROVED: WILL REID, COMMISSIONER

TRAFFIC DATA (RAMP EXIT 221A)	
ADT (2024)	20,157
POSTED SPEED	45 MPH

TRAFFIC DATA (I-40)	
ADT (2024)	106,460
POSTED SPEED	70 MPH



ROADWAY INDEX

SHEET NAME	SHEET NO.
SIGNATURE SHEETS.....	ROADWAY-SIGN1
TITLE SHEET .....	1
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS .....	1A
PROJECT COMMITMENTS.....	1B
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TYPICAL SECTIONS AND PAVEMENT SCHEDULE .....	2B
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SPECIAL NOTES.....	2D
ENVIRONMENTAL AND EPSC NOTES .....	2E-2E1
PRESENT / PROPOSED & EROSION CONTROL PLANS.....	3
TRAFFIC CONTROL PLANS .....	T1-T8B
BRIDGE PLANS .....	B-1
NOTE: THE ALPHABETICAL LETTERS “I”, “O” & “Q” ARE NOT USED IN THE NUMBERING OF SHEETS.	

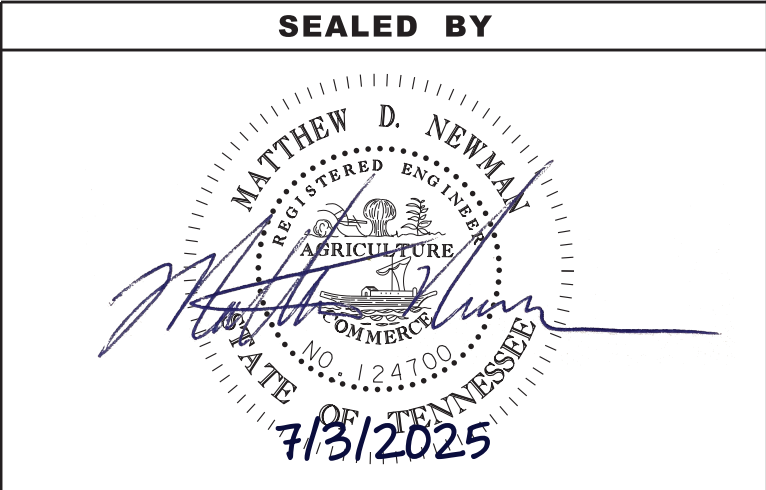
STANDARD ROADWAY DRAWINGS

DWG.	REV.	DESCRIPTION
<b>10-100.00 STANDARD ROADWAY TITLE SHEET, ABBREVIATIONS, AND LEGENDS</b>		
RD-TP-1	10-01-24	STANDARD ROADWAY DRAWINGS TITLE SHEET
RD-A-1	02-20-20	STANDARD ABBREVIATIONS A THROUGH L
RD-A-2		STANDARD ABBREVIATIONS M THROUGH Z
RD-L-1	02-20-20	STANDARD LEGEND
RD-L-1A		STANDARD LEGEND
RD-L-5	07-30-24	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-6	02-20-20	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-7	02-20-20	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
<b>10-101.00 ROADWAY DESIGN STANDARD</b>		
RD11-TS-5B		DESIGN STANDARDS FOR FREEWAYS WITH MEDIAN BARRIER (4 AND 6 LANE)
<b>10-107.00 EROSION PREVENTION AND SEDIMENT CONTROL</b>		
EC-STR-37	06-10-14	SEDIMENT TUBE

STANDARD TRAFFIC DESIGN DRAWINGS

DWG.	REV.	DESCRIPTION
<b>10-204.00 DESIGN - TRAFFIC CONTROL</b>		
T-M-1	01-24-25	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-5	01-24-25	MARKING DETAIL FOR EXPRESSWAY AND FREEWAYS
T-M-6	01-24-25	MARKING DETAIL FOR EXPRESSWAY AND FREEWAY INTERCHANGES
T-M-7	01-24-25	GORE MARKINGS DETAILS FOR EXPRESSWAY & FREEWAY INTERCHANGES
T-M-8	01-24-25	MARKING DETAILS FOR EXPRESSWAYS & FREEWAYS
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-16	07-30-24	LANE SHIFT FOR DIVIDED HIGHWAYS AND FREEWAYS
T-WZ-18	07-07-23	SHOULDER CLOSURE DETAIL FOR FREEWAYS AND DIVIDED HIGHWAYS
T-WZ-FAB1		FLASHING YELLOW ARROW BOARD
T-WZ-PCB1	10-10-24	10 FOOT PORTABLE CONCRETE BARRIER RAIL
T-WZ-PCB2	10-01-24	20 FOOT PORTABLE CONCRETE BARRIER RAIL
T-WZ-PCB2A	10-01-24	20 FOOT PORTABLE CONCRETE BARRIER RAIL STIFFENER TUBE
T-WZ-PCB3	01-28-22	PORTABLE CONCRETE BARRIER RAIL DETAILS
T-WZ-PCB4	12-09-22	PORTABLE CONCRETE BARRIER RAIL ANCHOR PIN DETAILS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	1A



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION


ROADWAY INDEX  
AND  
STANDARD  
ROADWAY  
DRAWINGS



TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	1B

PROJECT COMMITMENTS			
COMMITMENT ID	SOURCE DIVISON	DESCRIPTION	STA. / LOCATION
EDHZ001	ENVIRONMENTAL DIVISION, HAZARDOUS MATERIALS	AN ASBESTOS CONTAINING MATERIAL (ACM) SURVEY WAS COMPLETED ON BRIDGE NO.19I00400161 RAMP M OVER I-40 LM 29.02. 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 STRUCTURE (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 (STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (JANUARY 1, 2021) SECTIONS 107.08D AND 202.03).	BRIDGE NO.19I00400161

SEALED BY



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

PROJECT  
COMMITMENTS


TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	2

ESTIMATED ROADWAY QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	19I040-M3-015 QUANTITY
209-05	SEDIMENT REMOVAL	C.Y.	2
712-01	TRAFFIC CONTROL	LS	0.33
(4) 712-02.10	PORTABLE BARRIER RAIL (MASH TL-3)	L.F.	2004
(4) 712-02.12	PORTABLE BARRIER RAIL, REDUCED DEFLECTION (MASH TL-3)	L.F.	735
(2) 712-02.60	TEMPORARY WORK ZONE CRASH CUSHION (MASH TL-3)	EACH	2
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	330
712-04.50	BARRIER RAIL DELINEATOR	EACH	137
(3) 712-06	SIGNS (CONSTRUCTION)	S.F.	1684
712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	40
712-08.03	ARROW BOARD (TYPE C)	EACH	13
(1) 712-08.09	DIGITAL SPEED LIMIT SIGN ASSEMBLY	EACH	4
(1) 713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	6
(8) 716-02.07	PLASTIC PAVEMENT MARKING (24" BARRIER LINE)	L.F.	40
(6) 716-05.02	PAINTED PAVEMENT MARKING (8" BARRIER LINE)	L.F.	31064
(7) 716-09.86	CONTRAST PAVEMENT MARKING 6"	L.M.	0.1
(8) 716-12.02	ENHANCED FLATLINE THERMO PVMT MARKNG (8IN LINE)	L.M.	0.7
(8) 716-12.03	ENHANCED FLATLINE THERMO PVMT MARKNG (8IN BARRIER LINE)	L.F.	215
717-01	MOBILIZATION	LS	0.33
(1) (5) 740-11.04	TEMPORARY SEDIMENT TUBE 20IN	L.F.	160
(1) (5) 801-01	SEEDING (WITH MULCH)	UNIT	5

FOOTNOTES:

- (1) TO BE USED AS DIRECTED BY ENGINEER.
- (2) 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 SHOWN ON THE MANUFACTURER'S DRAWING.
- (3) SEE THIS SHEET FOR TRAFFINC CONTROL SIGN SCHEDULE, ADDITIONAL SIGNS INSTALLED AS DIRECTED BY THE ENGINEER SHALL BE PAID FOR AT THE UNIT COST FOR THIS ITEM.
- (4) NO BARRIER RAIL SHALL BE PLACED EARLIER THAN 10 DAYS BEFORE WORK IS TO BE DONE AT THAT LOCATION. IF NO WORK TAKES PLACE IN THE CONSTURCTION ZONE BEHIND BARRIER RAIL OVER 2 SUCCESSIVE WEEKS AND THE ENGINEERS DETERMINE THAT THE RAIL IS NOT WARRANTED, THE BARRIER RAIL MUST BE REMOVED AT THE CONTRACTORS EXPENSE AND A SAFE CONDITION CREATED.
- (5) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT
- (6) ASSUMES 1 APPLICATION PER PHASE.
- (7) RIBBON METHOD OF APPLICATION WILL NOT BE PERMITTED ON CONCRETE OR NEW EPOXY COATED ROADWAY SURFACES.
- (8) ITEM TO BE USED TO REPLACE PERMANENT PAVEMENT MARKINGS THAT CONFLICTED WITH TEMPORARY TRAFFIC CONTROL PAVEMENT MARKING LINES.

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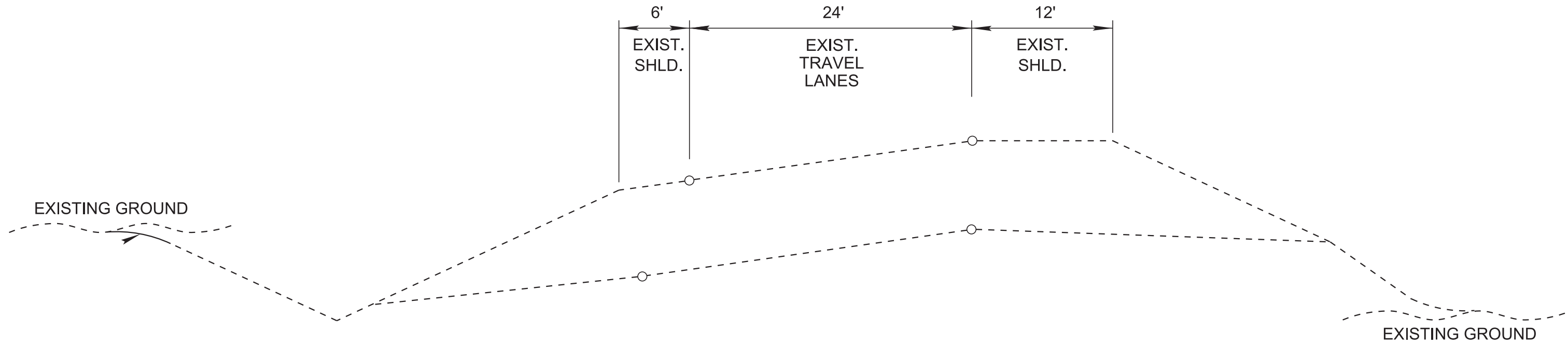


STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

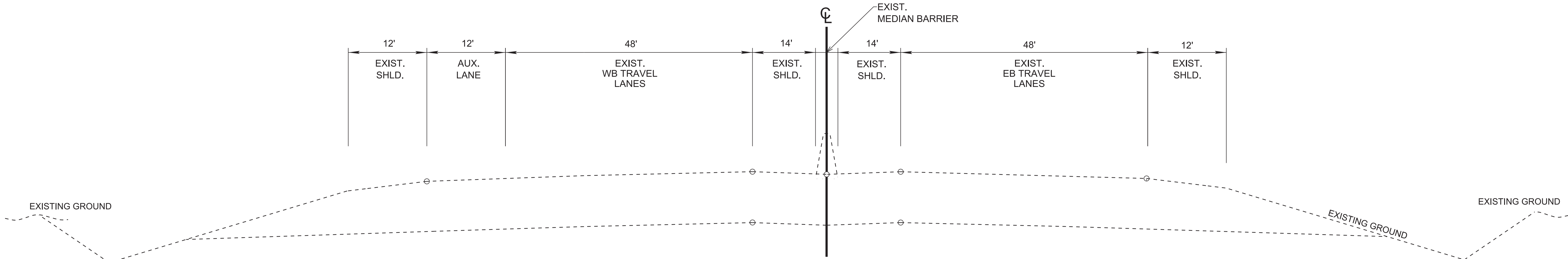
ESTIMATED  
QUANTITIES



TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	2B



SUPERELEVATED SECTION  
(BASED ON STD. DWG. RD01-TS-4)  
EXIT 221A RAMP  
(NOTE: NO PROPOSED PAVING ANTICIPATED IN THIS CONTRACT)



TANGENT SECTION  
(BASED ON STD. DWG. RD11-TS-5B) (MODIFIED)  
INTERSTATE 40  
(NOTE: NO PROPOSED PAVING ANTICIPATED IN THIS CONTRACT)

SEALED BY

MATTHEW D. NEWMYER  
REGISTERED ENGINEER  
AGRICULTURE  
COMMERCIAL  
STATE OF TENNESSEE  
No. 124100  
7/3/2025

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

TYPICAL  
SECTIONS AND  
PAVEMENT  
SCHEDULE



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GENERAL NOTES

GRADING

- (1) ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- (2) CERTIFICATION FOR ALL BORROW PITS MUST BE OBTAINED IN ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS.
- (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.

MISCELLANEOUS

- (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.

ROAD CLOSURE

- (1) NO LESS THAN SEVEN (7) DAYS PRIOR TO THE CLOSURE OF THE ROAD, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING INDIVIDUALS OR AGENCIES COMPLETELY DESCRIBING THE AFFECTED ROADS AND THE APPROXIMATE DURATION OF THE CONSTRUCTION: THESE PARTIES INCLUDE, BUT ARE NOT LIMITED TO: (1) LOCAL LAW ENFORCEMENT OFFICE, (2) LOCAL FIRE DEPARTMENT, (3) AMBULANCE SERVICE, (4) LOCAL SCHOOL SUPERINTENDENT, (5) UNITED STATES POSTAL SERVICE, AND (6) LOCAL ROAD SUPERINTENDENT.

PAVEMENT MARKINGS

FINAL PAVEMENT MARKING

- (8) 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.
- (9) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 8" 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. **716-12.03**, ENHANCED FLATLINE THERMO PVMT MRKNG (8IN BARRIER LINE), L.F. 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.

DETOURS, LANE SHIFTS AND MEDIAN CROSS-OVERS

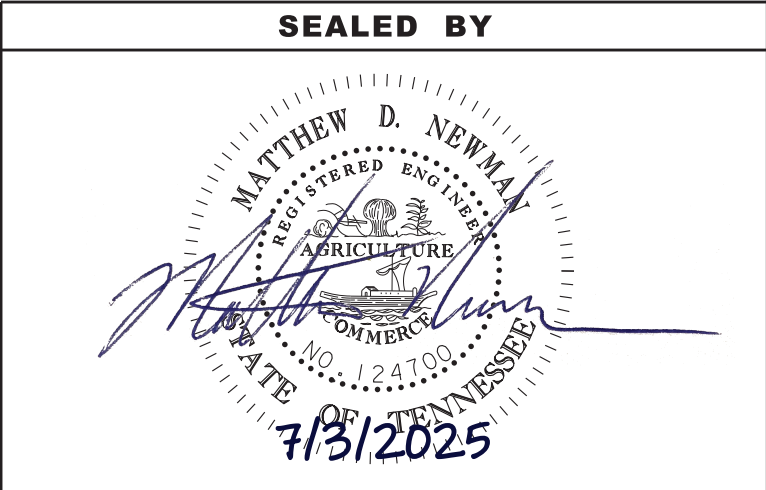
- (16) THE PAVEMENT MARKING ON THE LANE SHIFTS AND LANE CLOSURES FOR EDGE AND LANE LINES WILL BE INSTALLED AND MAINTAINED TO THE SAME STANDARDS AS FOR PERMANENT MARKINGS ON THE MAIN ROADWAY. THESE MARKINGS SHALL BE IN PLACE PRIOR TO ALLOWING TRAFFIC ONTO THE PAVEMENT. THESE PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.02, L.F.
- (18) BEFORE OPENING THE LANE SHIFTS AND CLOSURES TO TRAFFIC, THE TRANSITIONAL MARKINGS ON THE EXISTING ROADWAY MUST BE IN PLACE. ALL EXISTING MARKINGS IN THE AREA OF THESE TRANSITIONAL MARKINGS SHALL BE OBLITERATED AND ALL EXISTING RAISED PAVEMENT MARKERS SHALL BE REMOVED TO ELIMINATE CONFLICTING MARKINGS. REMOVAL OF THE EXISTING CONFLICTING MARKINGS AND RAISED PAVEMENT MARKERS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE

COST WILL BE INCLUDED IN ITEM NO. **712-01**, TRAFFIC CONTROL, LUMP SUM.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- (1) ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.
- (2) IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO. **712-06**, SIGNS (CONSTRUCTION) PER SQUARE FOOT.
- (3) A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.
- (4) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
- (5) USE OF BARRICADES, PORTABLE BARRIER RAILS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- (6) THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF AN OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- (7) ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- (8) ALL DETOURS SHALL BE PAVED, STRIPED, SIGNED, AND FLEXIBLE DRUMS ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC.
- (9) THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING CONSTRUCTION SIGNS. THE COST OF THIS WORK SHALL BE INCLUDED IN ITEM NO. **712-06**, SIGNS (CONSTRUCTION), S.F.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	2C



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

GENERAL  
NOTES



SPECIAL NOTES

DEMOLITION

DEMOLITION, REPAIR, OR REHABILITATION OF BRIDGES

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


PAVEMENT MARKINGS

FINAL PAVEMENT MARKING

- (1) PERMANENT PAVEMENT LINE MARKINGS ON CONCRETE OR EPOXY SURFACES SHALL BE 6" CONTRAST PAVEMENT MARKING 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. 716-09.86, CONTRAST PAVEMENT MARKING 6”, 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.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	2D

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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

SPECIAL  
NOTES



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# 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.

### SUPPORT ACTIVITIES

- (18) MATERIALS AND STAGING AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY ENVIRONMENTAL PERMITS, OBTAINED SOLELY BY THE CONTRACTOR. THE CONTRACTOR SHALL REVIEW ALL EXISTING PERMITS TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED EXPIRATION DATES. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE TDOT PROJECT RESPONSIBLE PARTY TO COMMENCE PERMIT RENEWAL PROCESS.

### ENVIRONMENTAL

- (20) EXCEPT AS OTHERWISE SPECIFIED, THERE ARE NO KNOWN SPECIAL ENVIRONMENTAL FACTORS PRESENT ON THIS PROJECT THAT INDICATE A NEED FOR SEASONAL LIMITATIONS ON THE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OPERATIONS OR ON THE TOTAL AREA OF EXPOSED SOIL.

## 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.

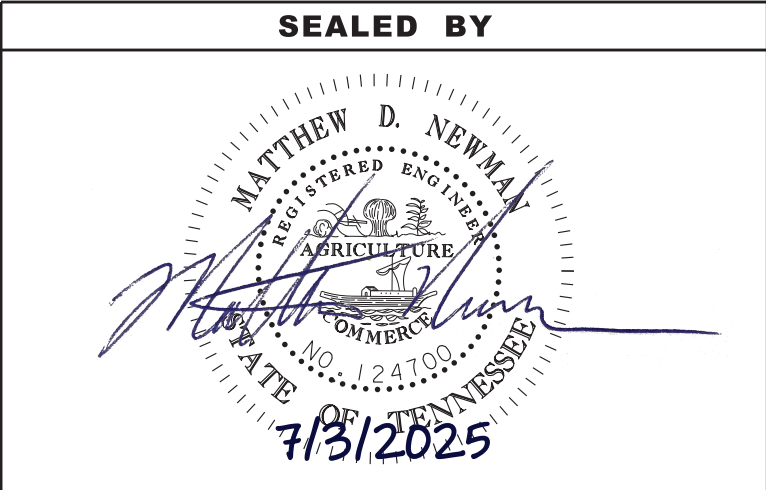
### PROJECT COMMITMENTS

- (5) SEE PROJECT COMMITMENTS, SHEET 1B, FOR DETAILS RELATING TO SPECIAL ENVIRONMENTAL COMMITMENTS REQUIRED BY THIS PROJECT.

### SCOPE OF WORK

- (6) PROPOSED BRIDGE BEAM STIFFENERS, THIN LIFT EPOXY OVERLAY.

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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL  
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ENVIRONMENTAL NOTES

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.

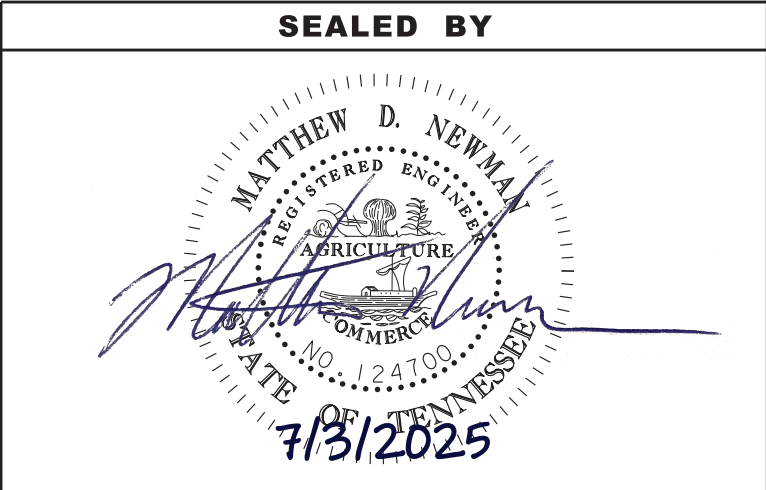
SPILL PREVENTION, MANAGEMENT & NOTIFICATION

- (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.
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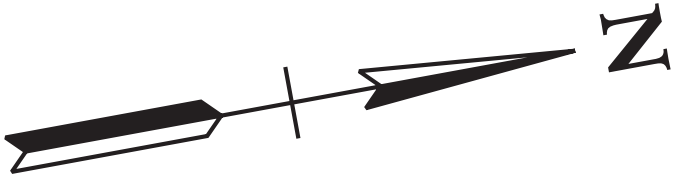


STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL  
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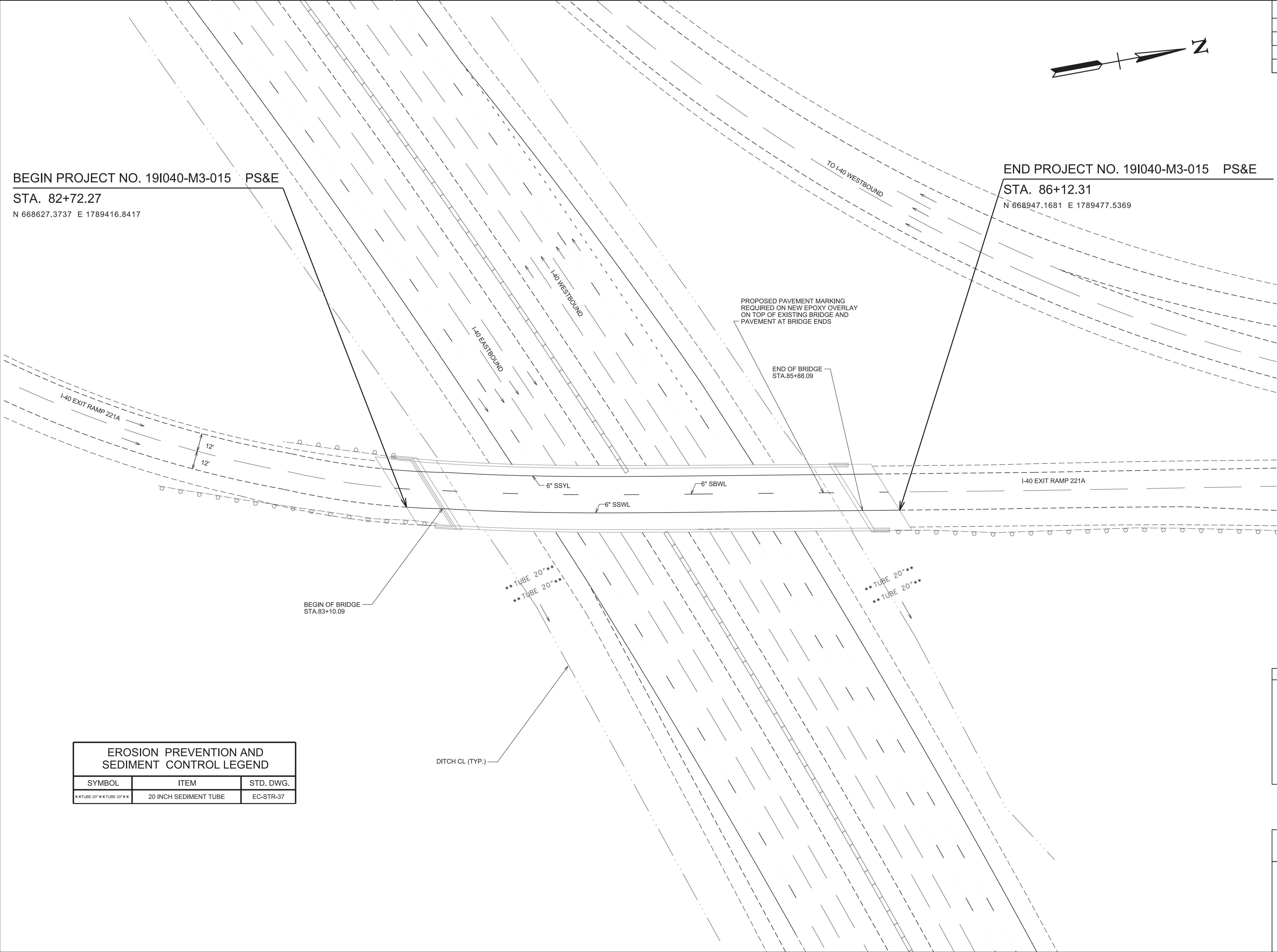


TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	3



BEGIN PROJECT NO. 19I040-M3-015 PS&E  
STA. 82+72.27  
N 668627.3737 E 1789416.8417

END PROJECT NO. 19I040-M3-015 PS&E  
STA. 86+12.31  
N 668947.1681 E 1789477.5369



EROSION PREVENTION AND SEDIMENT CONTROL LEGEND		
SYMBOL	ITEM	STD. DWG.
※TUBE 20″※※TUBE 20″※※	20 INCH SEDIMENT TUBE	EC-STR-37

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PRESENT/PROPOSED  
& EPSC PLANS

STA. 82+72.27 TO 86+12.31  
SCALE: 1"= 30'



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PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

A. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES OR TRAFFIC LANE AND SHOULDER WHERE THE TRAFFIC LANE IS BEING USED BY TRAFFIC, CAUSED BY BASE, PAVING OR RESURFACING:

1. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 0.75 INCH AND NOT EXCEEDING 1.75 INCHES:

a. WARNING SIGNS, UNEVEN LANES (W8-11) AND/OR SHOULDER DROP-OFF WITH PLAQUE (W8-17 AND W8-17P), SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

b. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY ADDED PAVEMENT SHALL BE ELIMINATED WITHIN THREE WORKDAYS.

c. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY COLD PLANING SHALL BE ELIMINATED WITHIN THREE WORKDAYS.

d. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE TRAFFIC LANE BEING UTILIZED BY TRAFFIC AND SHOULDER THE DIFFERENCE IN ELEVATION SHALL BE ELIMINATED WITHIN SEVEN WORKDAYS AFTER THE CONDITION IS CREATED.
2. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 1.75 INCHES AND NOT EXCEEDING 6 INCHES, TRAFFIC IS NOT TO BE ALLOWED TO TRAVERSE THIS DIFFERENCE IN ELEVATION.

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

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

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

b. IF THE DIFFERENCE IN ELEVATION IS ELIMINATED OR DECREASED TO 2 INCHES OR LESS BY THE END OF EACH WORKDAY, CONES MAY BE USED DURING DAYLIGHT HOURS IN LIEU OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES MENTIONED IN PARAGRAPH a, PROVIDED WARNING SIGNS ARE ERECTED. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

c. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE THROUGH TRAFFIC LANE AND THE SHOULDER AND THE ELEVATION DIFFERENCE IS LESS THAN 3 INCHES, THE CONTRACTOR MAY USE WARNING SIGNS AND/OR PROTECTIVE DEVICES AS APPLICABLE AND APPROVED BY THE REGIONAL TRAFFIC ENGINEER. SEE PARAGRAPH a REGARDING USE OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES. WARNING SIGNS (UNEVEN LANES AND/OR SHOULDER DROP-OFF) WILL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 2 MILES IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

3. DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 6 INCHES BUT NOT EXCEEDING 18 INCHES, THE CONTRACTOR, WITH THE ENGINEER'S APPROVAL, MAY UTILIZE ONE OF THE FOLLOWING:

a. THE CONTRACTOR SHALL ACCOMPLISH SEPARATION BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

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

(2) WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OR 50 FEET, WHICHEVER SPACING IS GREATER.
- IN ORDER TO USE THIS METHOD, THE CONTRACTOR MUST REDUCE THE DIFFERENCE IN ELEVATION TO 6 INCHES OR LESS BY THE END OF THE WORKDAY THAT THE CONDITION IS CREATED.
- b. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a, AND CONSTRUCT A STONE WEDGE WITH A 4:1 SLOPE, OR FLATTER, TO ELIMINATE THE VERTICAL OFFSET IF THE LOWER ELEVATION IS AT OR BELOW SUBGRADE AT THE END OF EACH DAY.

c. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH a AND IF THE LOWER ELEVATION IS BASE STONE OR ASPHALT PAVEMENT, PLACEMENT OF SUBSEQUENT LAYERS OF PAVEMENT MUST BEGIN THE NEXT WORK DAY AND PROGRESS CONTINUOUSLY UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED OR REDUCED TO 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.
- |      |      |               |           |
|------|------|---------------|-----------|
| TYPE | YEAR | PROJECT NO.   | SHEET NO. |
| PS&E | 2025 | 19I040-M3-015 | T1        |
|      |      |               |           |
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DEPARTMENT OF TRANSPORTATION

PAVEMENT EDGE  
DROP-OFF NOTES  
FOR  
TRAFFIC CONTROL



TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T2

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DEPARTMENT OF TRANSPORTATION

TABULATED  
TRAFFIC  
CONTROL  
QUANTITIES

TRAFFIC CONTROL QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
712-01	TRAFFIC CONTROL	LS	0.33
(4) 712-02.10	PORTABLE BARRIER RAIL (MASH TL-3)	L.F.	2004
(4) 712-02.12	PORTABLE BARRIER RAIL, REDUCED DEFLECTION (MASH TL-3)	L.F.	735
(2) 712-02.60	TEMPORARY CRASH CUSHION (MASH TL-3)	EACH	2
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	330
712-04.50	BARRIER RAIL DELINEATOR	EACH	137
(3) 712-06	SIGNS (CONSTRUCTION)	S.F.	1684
712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	40
712-08.03	ARROW BOARD (TYPE C)	EACH	13
(1) 712-08.09	DIGITAL SPEED LIMIT SIGN ASSEMBLY	EACH	4
(1) 713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	6
(5) 716-05.02	PAINTED PAVEMENT MARKING (8" BARRIER LINE)	L.F.	31064

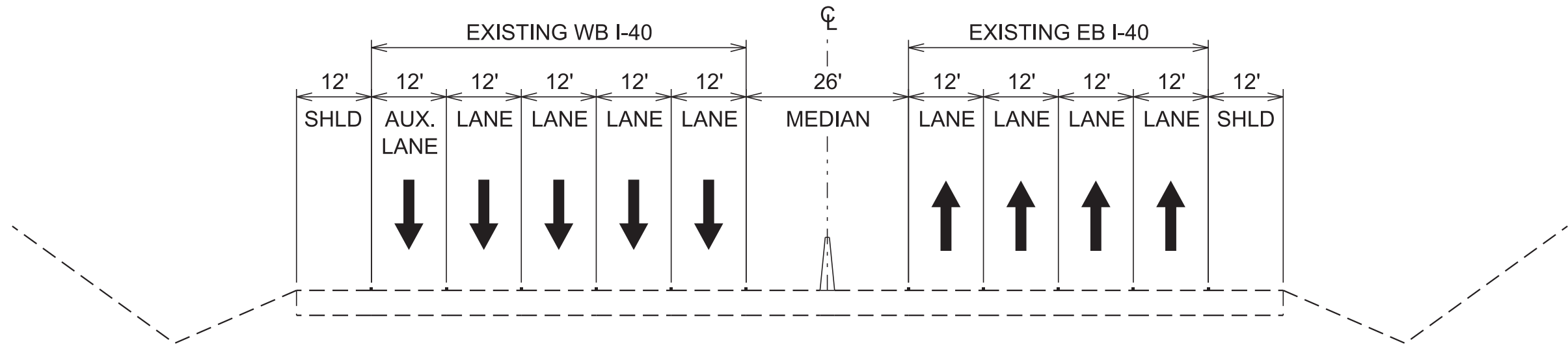
FOOTNOTES:

- (1) TO BE USED AS DIRECTED BY ENGINEER.
- (2) 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 SHOWN ON THE MANUFACTURER'S DRAWING.
- (3) SEE THIS SHEET FOR TRAFFINC CONTROL SIGN SCHEDULE, ADDITIONAL SIGNS INSTALLED AS DIRECTED BY THE ENGINEER SHALL BE PAID FOR AT THE UNIT COST FOR THIS ITEM.
- (4) NO BARRIER RAIL SHALL BE PLACED EARLIER THAN 10 DAYS BEFORE WORK IS TO BE DONE AT THAT LOCATION. IF NO WORK TAKES PLACE IN THE CONSTURCTION ZONE BEHIND BARRIER RAIL OVER 2 SUCCESSIVE WEEKS AND THE ENGINEERS DETERMINE THAT THE RAIL IS NOT WARRANTED, THE BARRIER RAIL MUST BE REMOVED AT THE CONTRACTORS EXPENSE AND A SAFE CONDITION CREATED.
- (5) ASSUMES 1 APPLICATION PER PHASE.

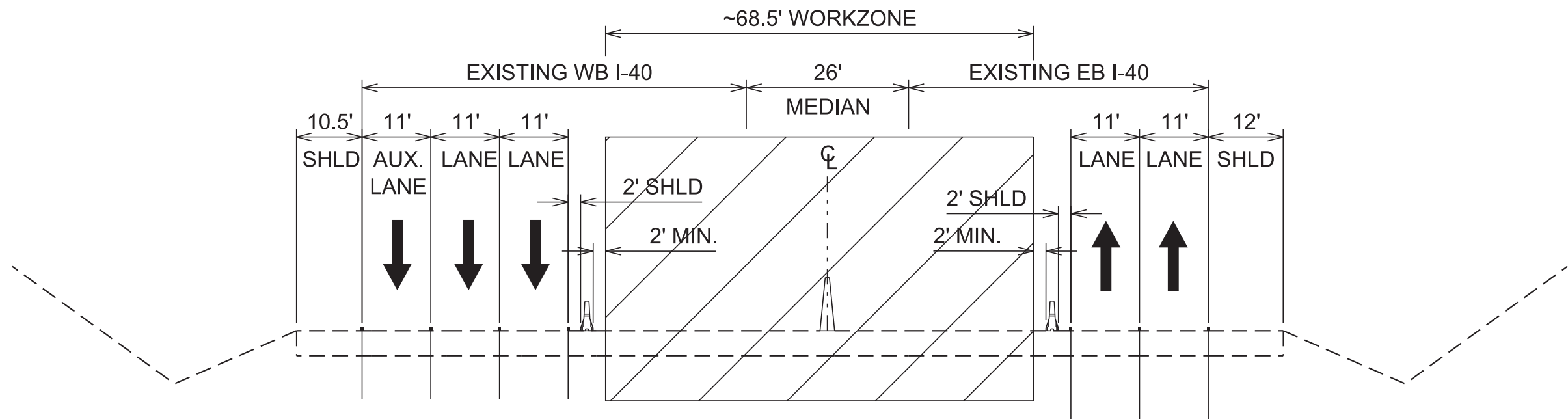
TRAFFIC CONTROL SIGNS				
M.U.T.C.D. NO.	DESCRIPTION	SIZE	NO.	ITEM NO. 712-06 (S.F.)
G20-2	END ROAD WORK	48" X 24"	16	128
M1-1	EXT NUMBER	24" X 24"	2	8
M4-8	DETOUR	24" X 12"	2	4
M6-1L	LEFT	21" X 15"	1	2
M5-1L	ADVANCE TURN (LEFT)	21" X 15"	1	2
R11-2	ROAD CLOSED	48" X 30"	1	10
W1-4BL	DOUBLE REVERSE CURVE (LEFT)	48" X 48"	4	64
W1-4BR	DOUBLE REVERSE CURVE (RIGHT)	48" X 48"	4	64
W4-1	MERGE	48" X 48"	2	32
W4-2LC	LANE ENDS (LEFT)	48" X 48"	12	192
W20-1	ROAD WORK AHEAD	48" X 48"	24	384
W20-1M	ROAD WORK 1/2 MILE	48" X 48"	4	64
W20-1M	ROAD WORK 1 MILE	48" x 48"	2	32
W20-5AL	2 LEFT LANES CLOSED AHEAD	48" x 48"	8	128
W20-5LF	LEFT LANE CLOSED 1000 FT	48" x 48"	8	128
W20-5LF	LEFT LANE CLOSED 1500 FT	48" X 48"	12	192
W20-5LM	LEFT LANE CLOSED 1/2 MILE	48" X 48"	12	192
W21-5AR	RIGHT SHOULDER CLOSED	48" X 48"	3	48
W21-5BR	RIGHT SHOULDER CLOSED 1500 FEET	30" X 24"	2	10
			TOTAL	1684



TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T3

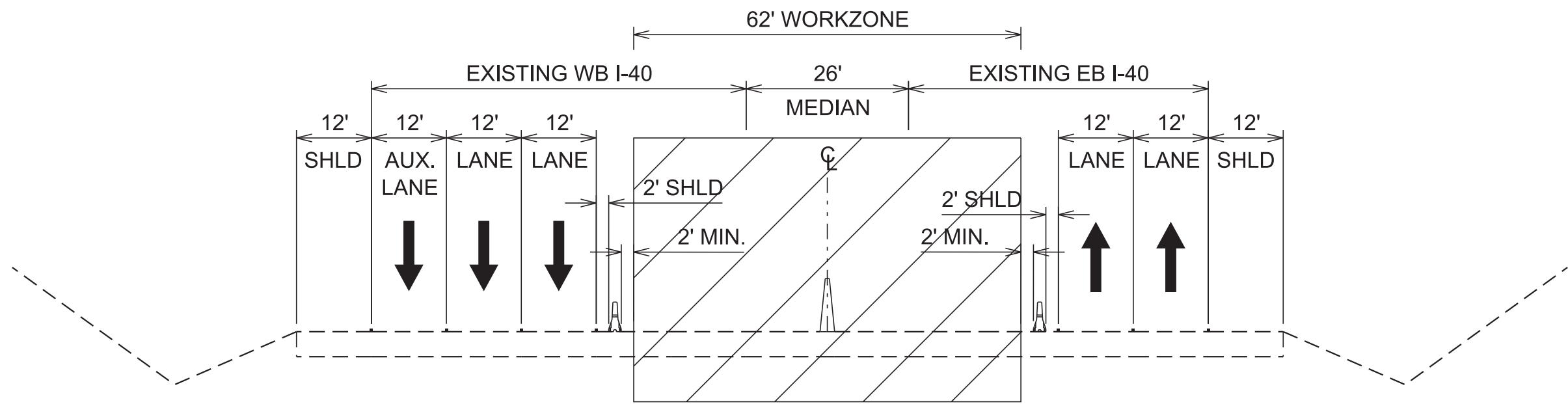


EXISTING I-40 TYPICAL SECTION



EXISTING I-40 TYPICAL SECTION

I-40 - MEDIAN CLOSURE (PHASE 1)  
2 LANES CLOSED WITH SHIFT

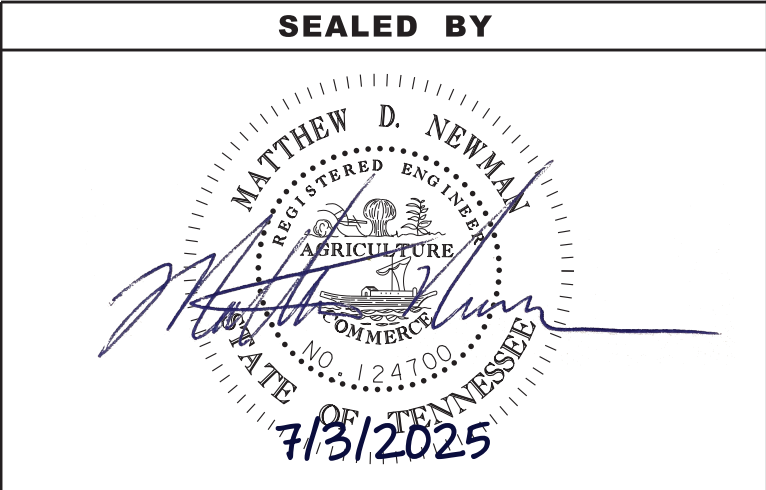


EXISTING I-40 TYPICAL SECTION

I-40 - MEDIAN CLOSURE (PHASE 2)  
2 LANES CLOSED

PHASING NOTES: (I-40)

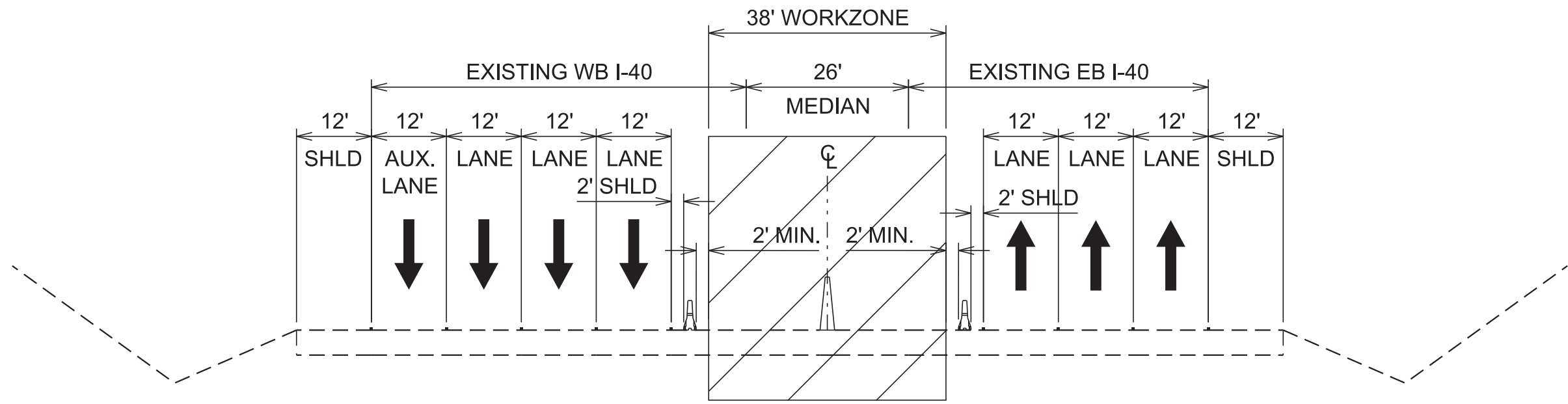
- PHASE 1:** \*EB I-40 REDUCED TO 2 THROUGH LANES  
\*WB I-40 REDUCED TO 2 THROUGH LANES + AUX LANE  
\*ALL LANE WIDTHS REDUCED TO 11' WIDE.  
\*EB I-40 LANES SHIFTED 2' TOWARDS OUTSIDE SHOULDERS  
\*WB I-40 SHIFTED 4.5' TOWARDS OUTSIDE SHOULDERS  
\*MOST RESTRICTIVE PHASE FOR TRAVEL WAY REQUIRED TO ATTACHED THE OUTER MOST PROPOSED STIFFENERS TO THE BRIDGE BEAMS AT THE MEDIAN.
- PHASE 2:** \*EB I-40 REDUCED TO 2 THROUGH LANES  
\*WB I-40 REDUCED TO 2 THROUGH LANES + AUX LANE  
\*OPEN LANES REMAIN IN EXISTING LOCATIONS  
\*PHASE REQUIRED TO REDUCE THE DURATION OF PHASE I WHILE STILL PROVIDING ACCESS TO OUTER MOST STIFFENERS ALONG THE MEDIAN.
- PHASE 3:** \*EB I-40 REDUCED TO 3 THROUGH LANES  
\*WB I-40 REDUCED TO 3 THROUGH LANES + AUX LANE  
\*OPEN LANES REMAIN IN EXISTING LOCATIONS  
\*PHASE REQUIRED TO ATTACH ALL REMAINING STIFFENERS TO EXISTING BRIDGE BEAMS AT THE MEDIAN.
- PHASE 4:** \*ALL I-40 LANES REMAIN OPEN.  
\*OUTSIDE SHOULDERS CLOSED.  
\*PHASE REQUIRED TO ATTACH ALL BEAM STIFFENERS NEAR THE OUTSIDE ABUTMENTS OF THE EXISTING BRIDGE.
- GENERAL:** \*THE ORDER AND SEQUENCE OF THE TRAFFIC PHASING IS NOT REQUIRED TO FOLLOW THE ORDER ABOVE AND IS TO BE DETERMINED BY THE ENGINEER.  
\*THE VARIOUS TRAFFIC PHASES FOR I-40 MAY BE USED CONCURRENTLY WITH EXIT 221A RAMP CLOSURE AS DIRECTED BY THE ENGINEER.  
\*SEE SHEET T3B FOR DETAILS REGARDING WHICH PROPOSED STIFFENERS CAN BE INSTALLED DURING EACH PHASE.



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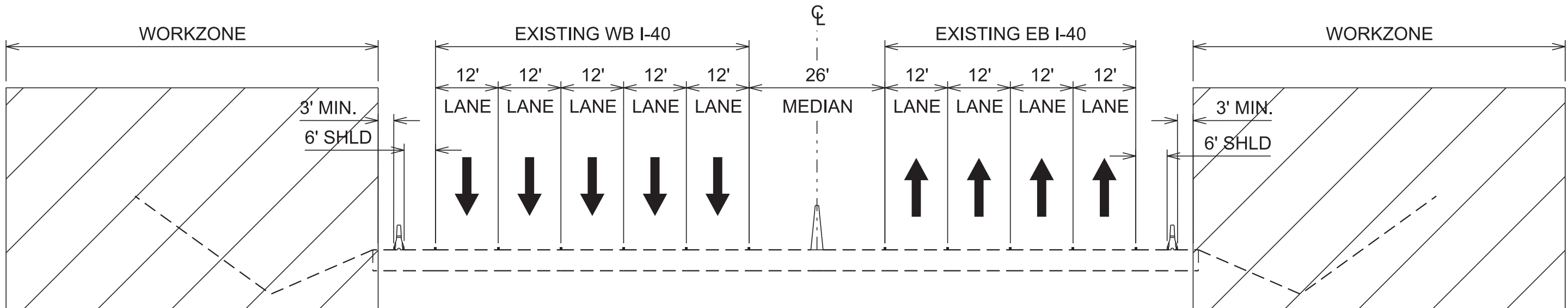
TRAFFIC CONTROL  
TYPICAL SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T3A



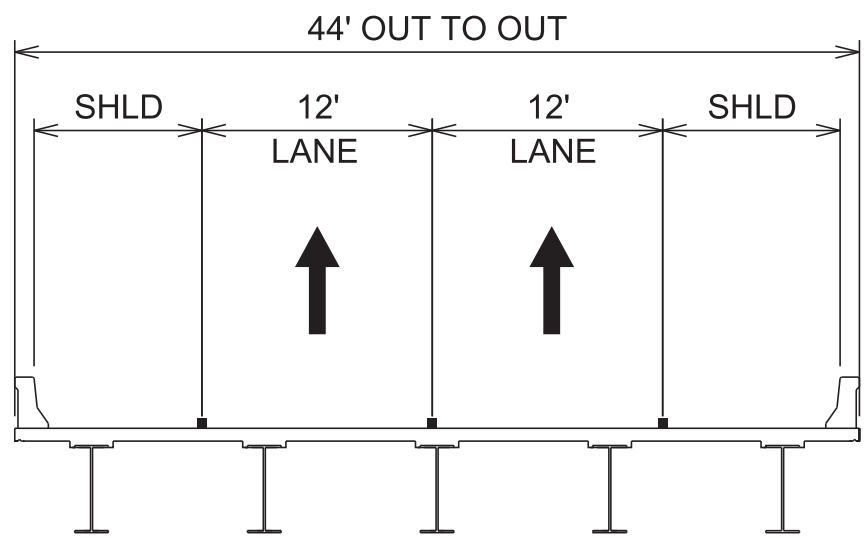
EXISTING I-40 TYPICAL SECTION

I-40 - MEDIAN CLOSURE (PHASE 3)  
1 LANES CLOSED

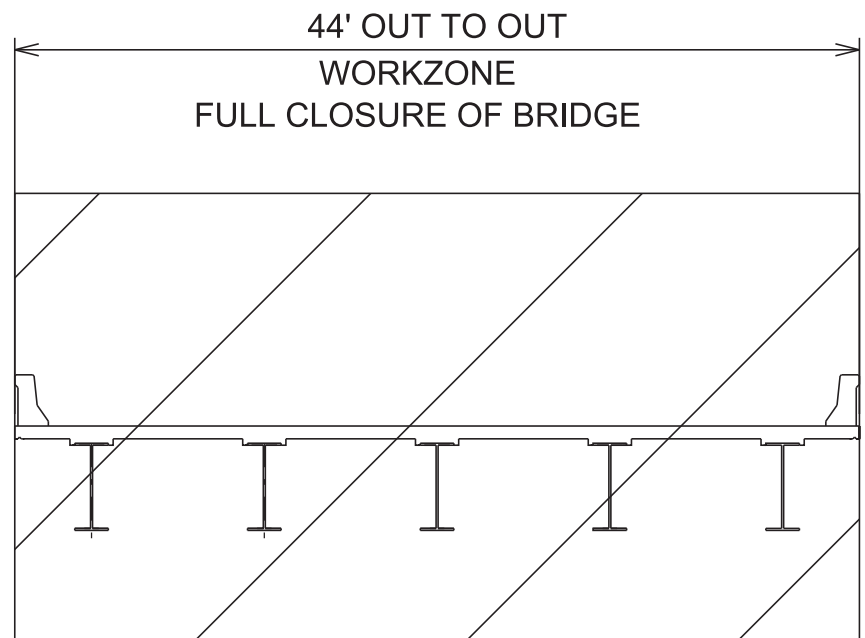


EXISTING I-40 TYPICAL SECTION

I-40 - OUTSIDE SHOULDER CLOSURE (PHASE 4)



EXISTING EXIT 221A RAMP BRIDGE TYPICAL SECTION

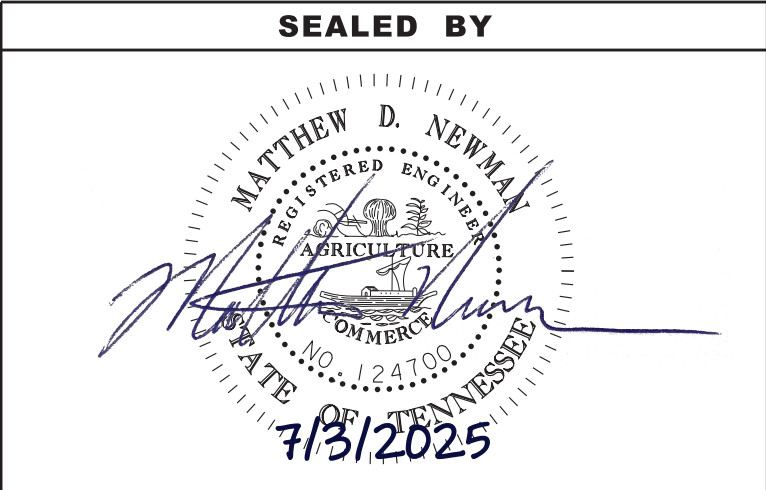


EXISTING EXIT 221A RAMP BRIDGE TYPICAL SECTION

RAMP CLOSURE

PHASING NOTES: (EXIT 221A RAMP)

- GENERAL:
- \*EXIT 221A RAMP TO BE CLOSED FOR CONSTRUCTION.
  - \*TRAFFIC TO BE REROUTED TO EXIT 221B OLD HICKORY BLVD DURING CLOSURE.
  - \*EB I-40 AUX LANE BETWEEN STEWARTS FERRY PIKE AND EXIT 221A TO BE CLOSED DURING RAMP CLOSURE.
  - \*CLOSURE IS REQUIRED FOR BRIDGE REPAIRS ALONG THE RAMP AND TO REDUCE LIVE LOADS DURING THE ADDITION OF THE PROPOSED BEAM STIFFENERS.



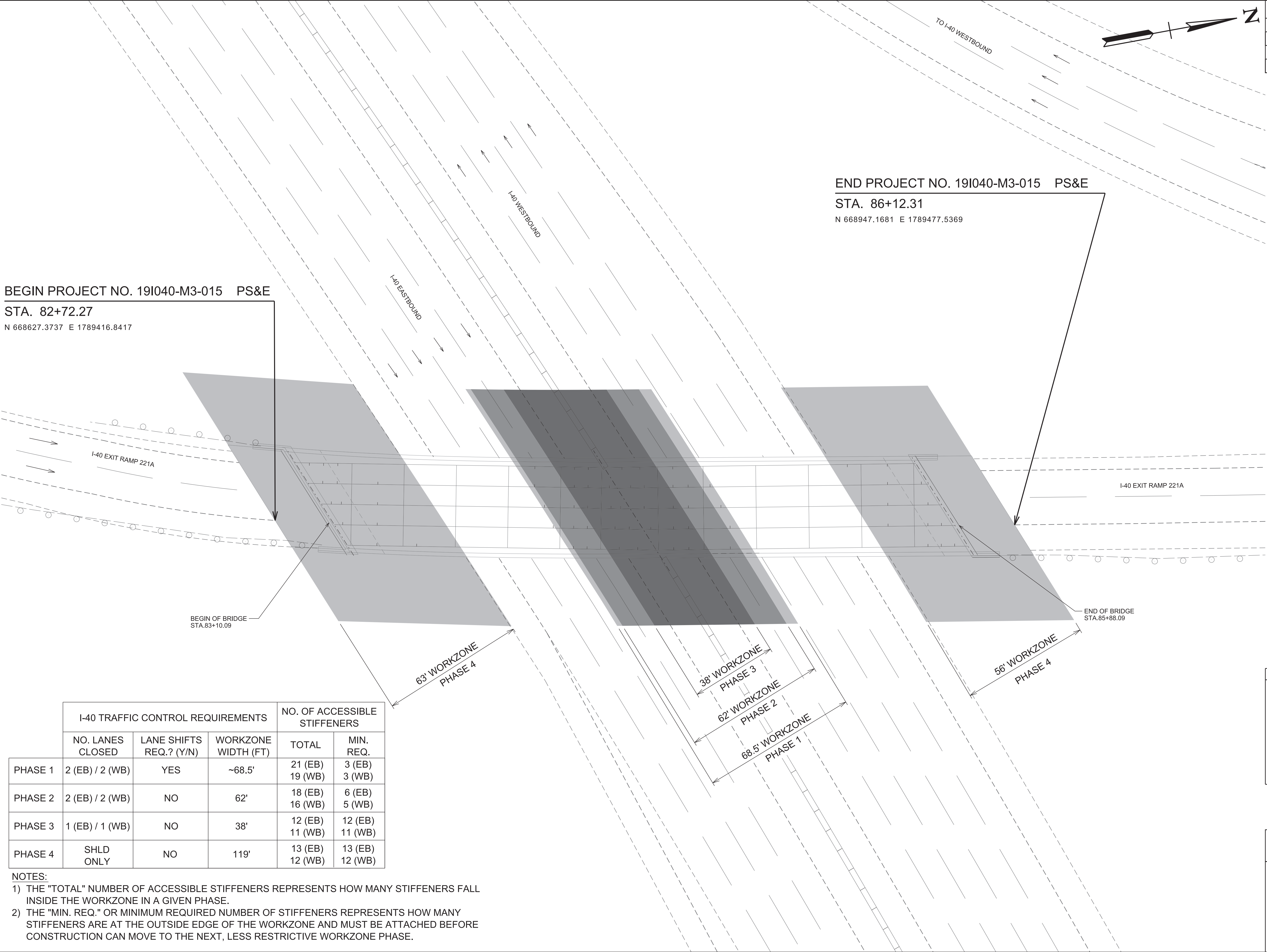
STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL  
TYPICAL SECTIONS



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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T3B



	I-40 TRAFFIC CONTROL REQUIREMENTS			NO. OF ACCESSIBLE STIFFENERS	
	NO. LANES CLOSED	LANE SHIFTS REQ.? (Y/N)	WORKZONE WIDTH (FT)	TOTAL	MIN. REQ.
PHASE 1	2 (EB) / 2 (WB)	YES	~68.5'	21 (EB) 19 (WB)	3 (EB) 3 (WB)
PHASE 2	2 (EB) / 2 (WB)	NO	62'	18 (EB) 16 (WB)	6 (EB) 5 (WB)
PHASE 3	1 (EB) / 1 (WB)	NO	38'	12 (EB) 11 (WB)	12 (EB) 11 (WB)
PHASE 4	SHLD ONLY	NO	119'	13 (EB) 12 (WB)	13 (EB) 12 (WB)

- NOTES:
- 1) THE "TOTAL" NUMBER OF ACCESSIBLE STIFFENERS REPRESENTS HOW MANY STIFFENERS FALL INSIDE THE WORKZONE IN A GIVEN PHASE.
  - 2) THE "MIN. REQ." OR MINIMUM REQUIRED NUMBER OF STIFFENERS REPRESENTS HOW MANY STIFFENERS ARE AT THE OUTSIDE EDGE OF THE WORKZONE AND MUST BE ATTACHED BEFORE CONSTRUCTION CAN MOVE TO THE NEXT, LESS RESTRICTIVE WORKZONE PHASE.

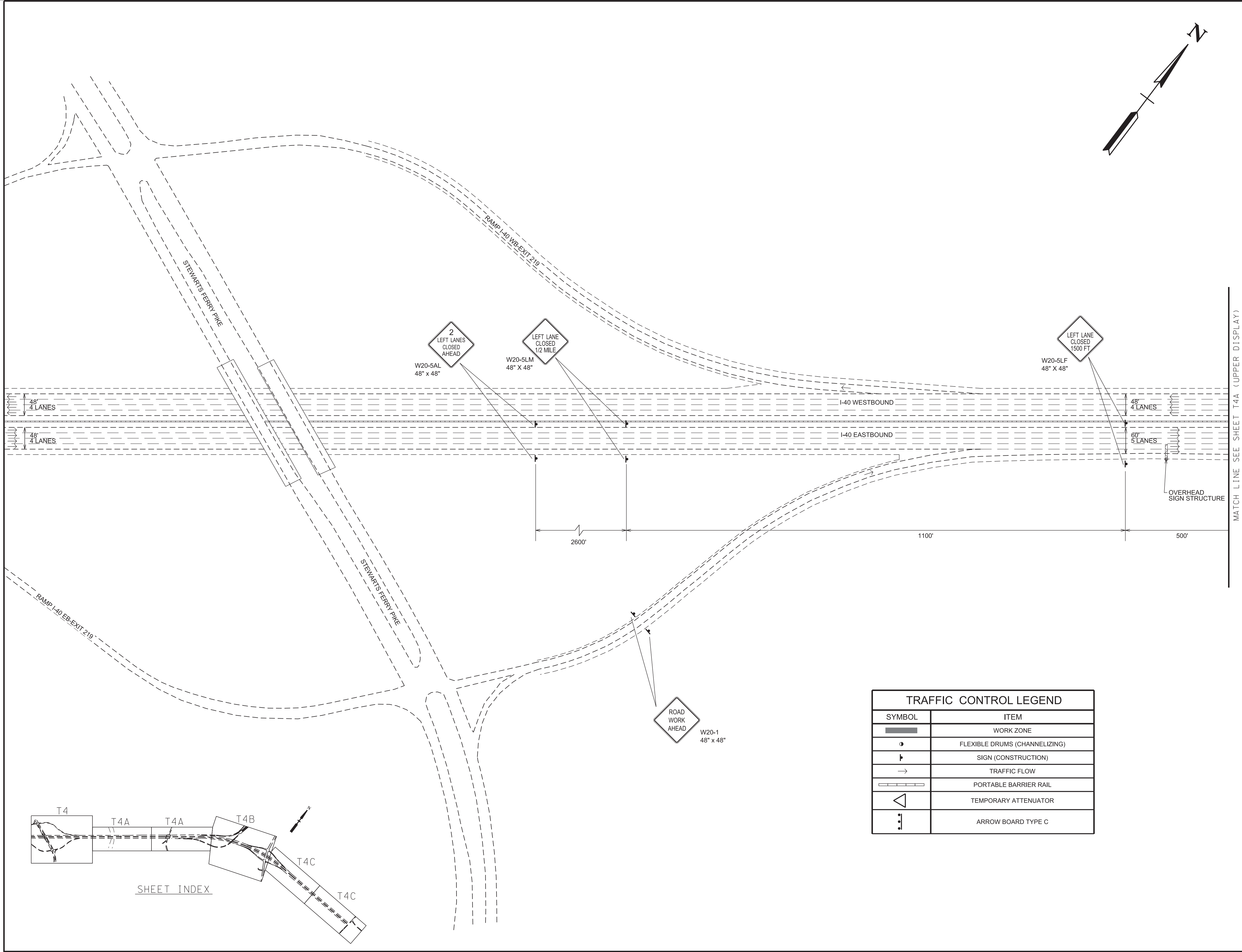
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WORKZONE  
DETAIL

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T4

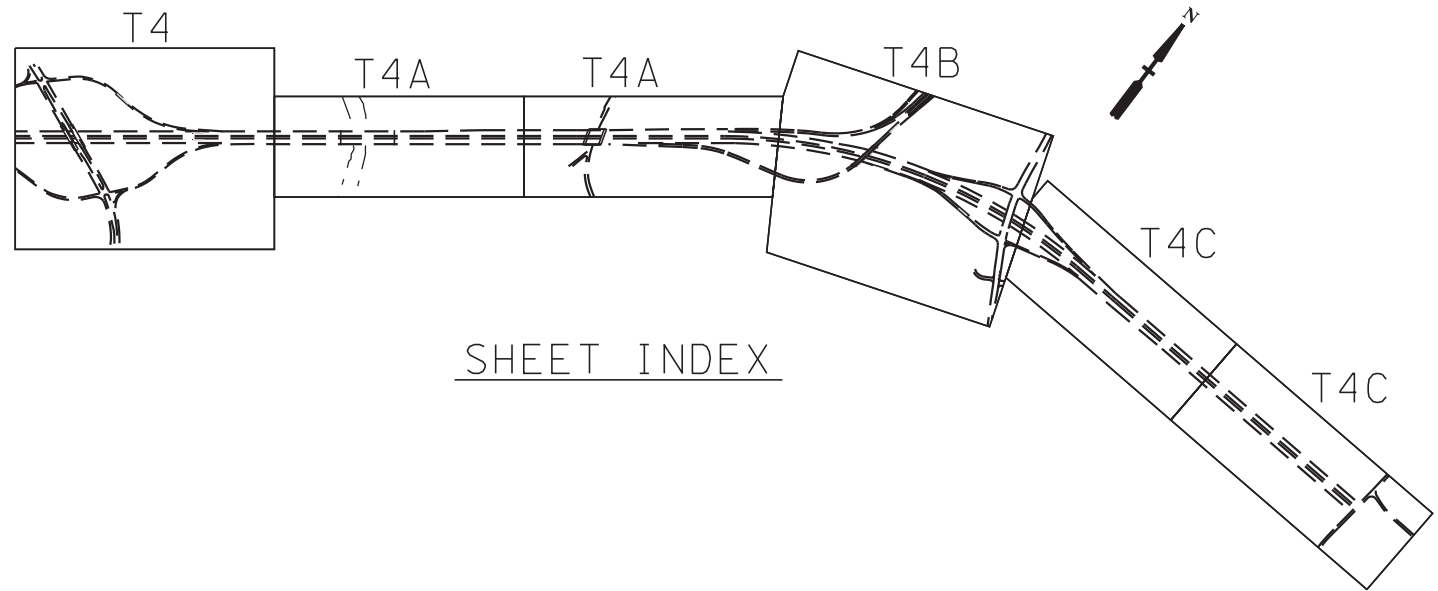
TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	WORK ZONE
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	TRAFFIC FLOW
	PORTABLE BARRIER RAIL
	TEMPORARY ATTENUATOR
	ARROW BOARD TYPE C

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REGISTERED ENGINEER  
AGRICULTURE  
COMMERCIAL  
No. 124100  
STATE OF TENNESSEE  
7/3/2025

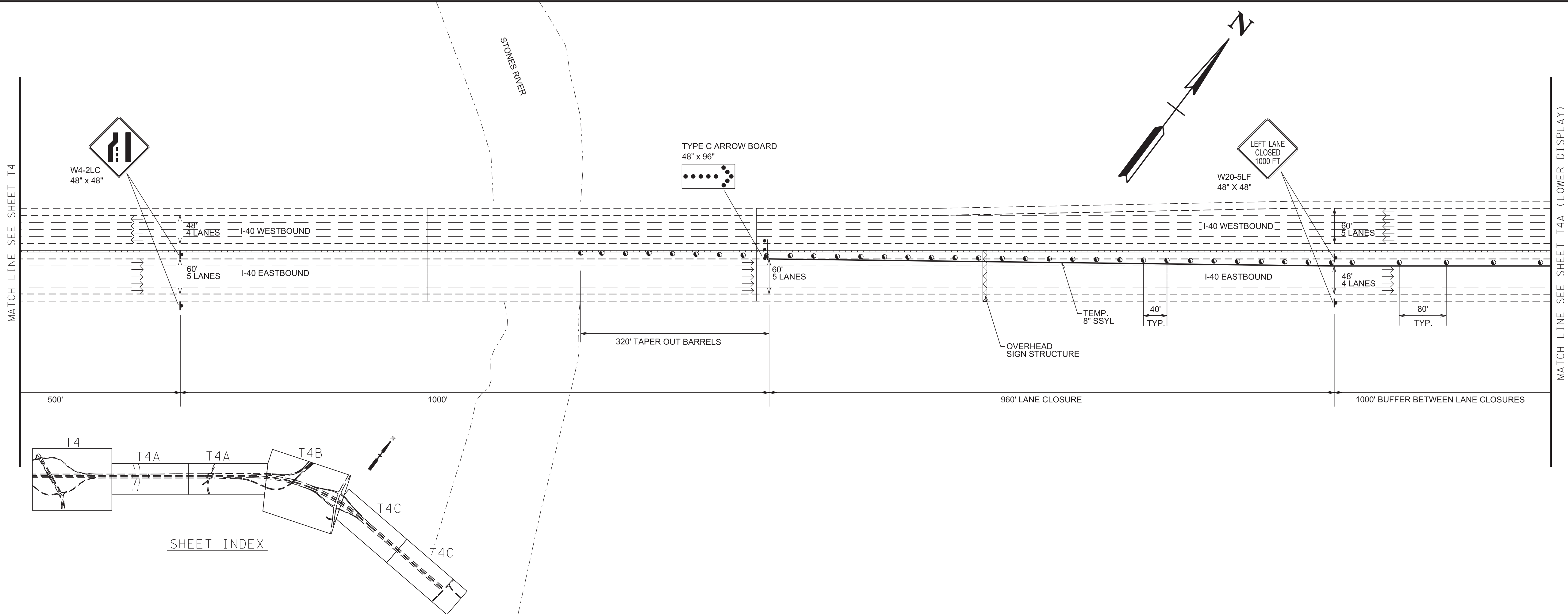
STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL  
PLANS-PHASE 1  
EXIT 221A RAMP OVER I-40  
SCALE: 1"=100'

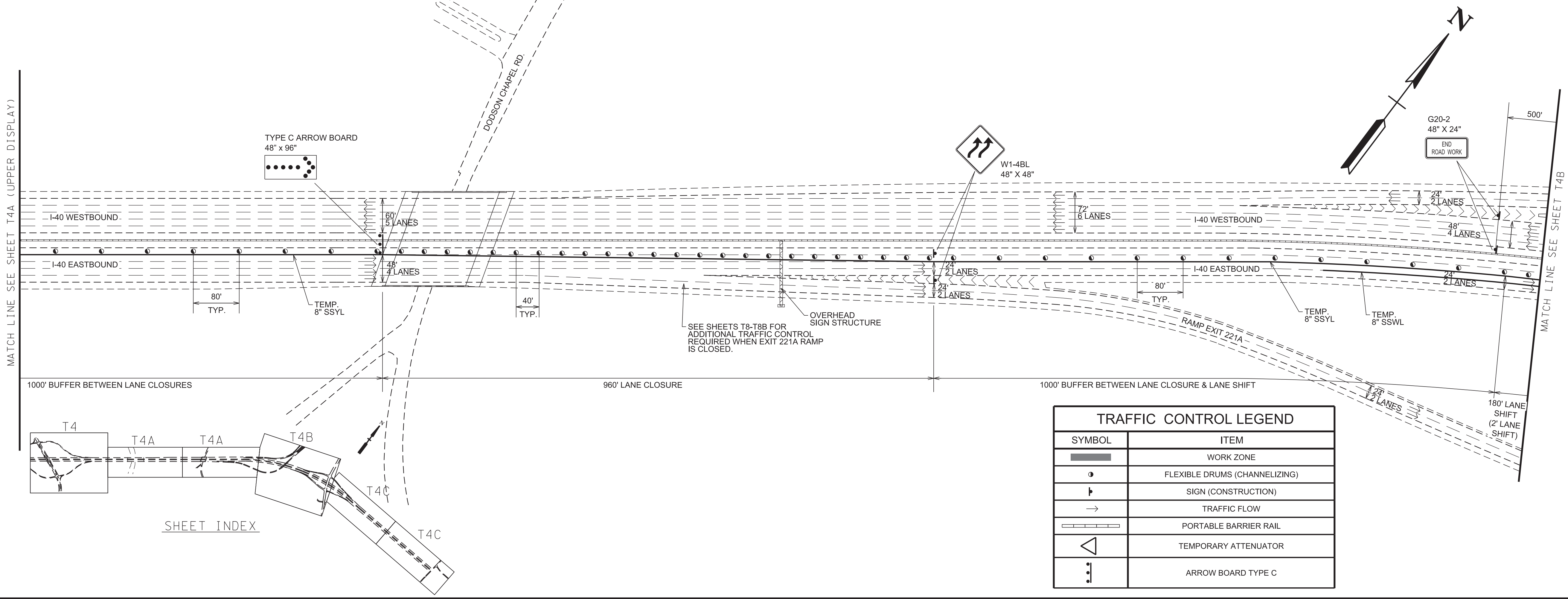




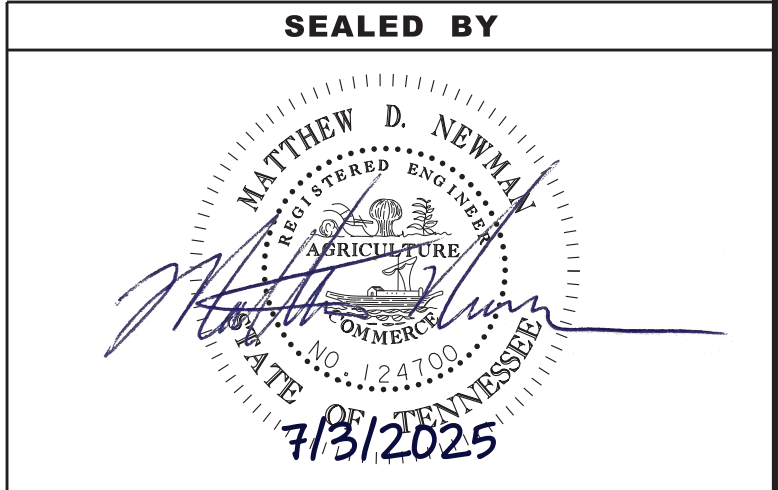
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T4A



TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	WORK ZONE
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	TRAFFIC FLOW
	PORTABLE BARRIER RAIL
	TEMPORARY ATTENUATOR
	ARROW BOARD TYPE C



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL  
PLANS-PHASE 1  
EXIT 221A RAMP OVER I-40  
SCALE: 1"=100'

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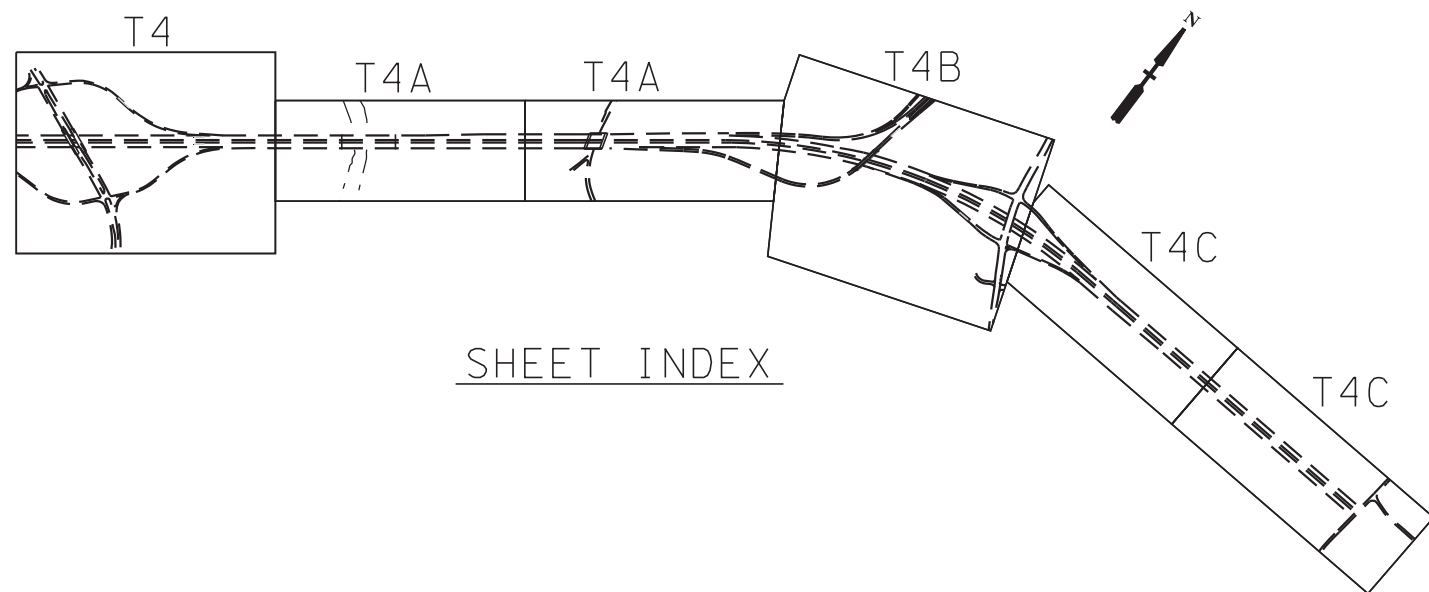
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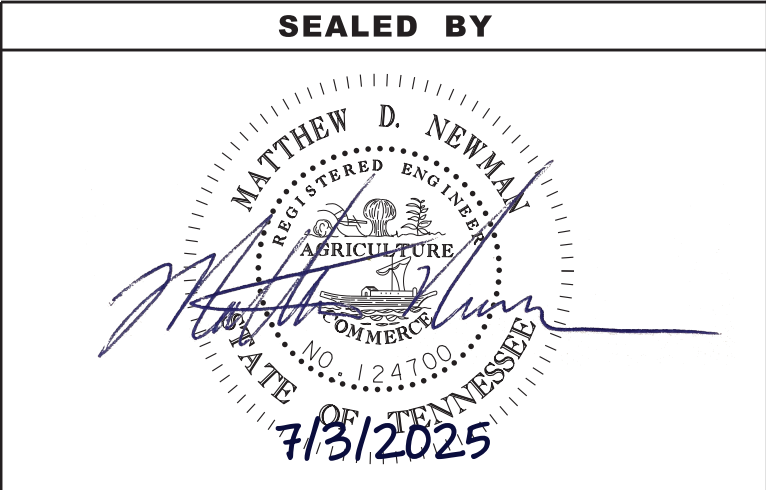
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TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	WORK ZONE
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	TRAFFIC FLOW
	PORTABLE BARRIER RAIL
	TEMPORARY ATTENUATOR
	ARROW BOARD TYPE C

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T4B

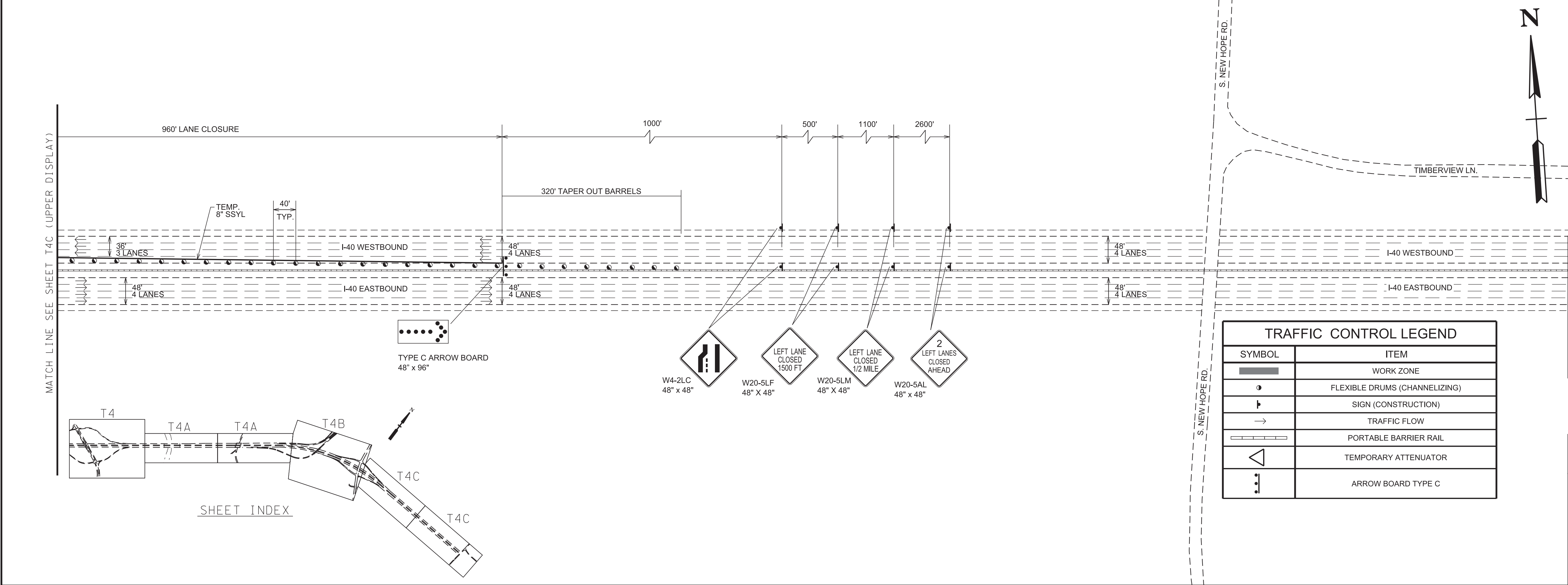
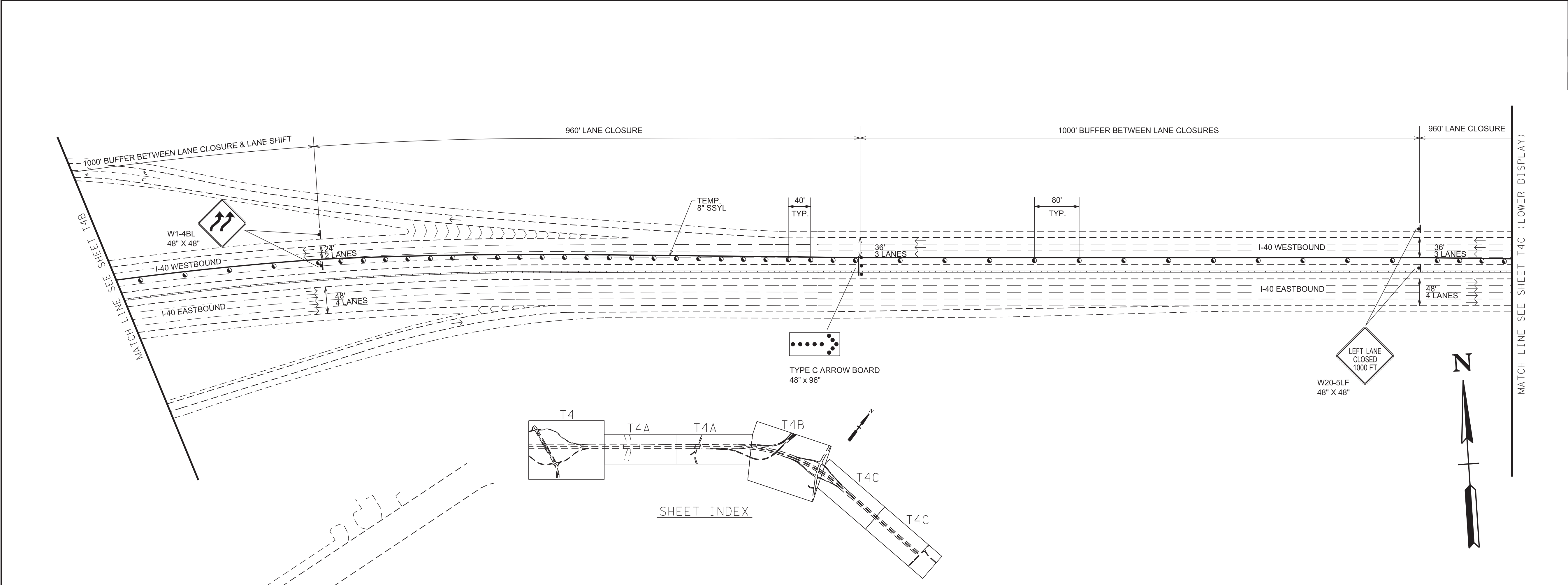


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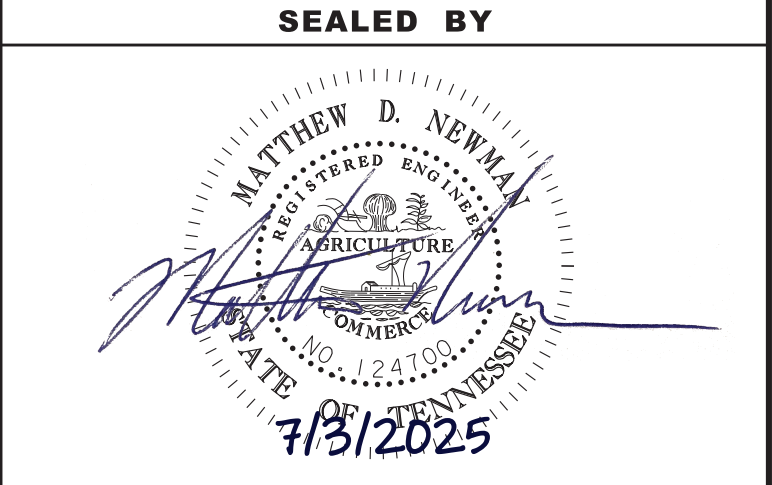
TRAFFIC  
CONTROL  
PLANS-PHASE 1  
EXIT 221A RAMP OVER I-40  
SCALE: 1"=100'



TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T4C



TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	WORK ZONE
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	TRAFFIC FLOW
	PORTABLE BARRIER RAIL
	TEMPORARY ATTENUATOR
	ARROW BOARD TYPE C

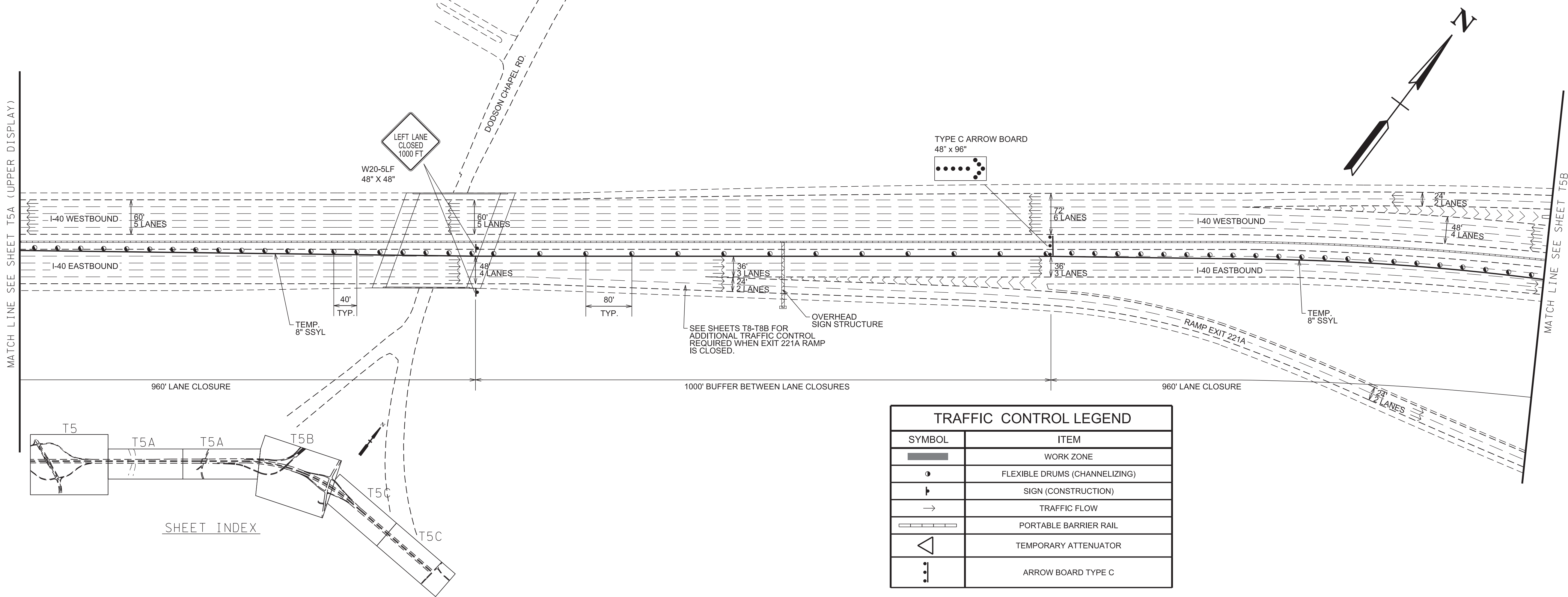
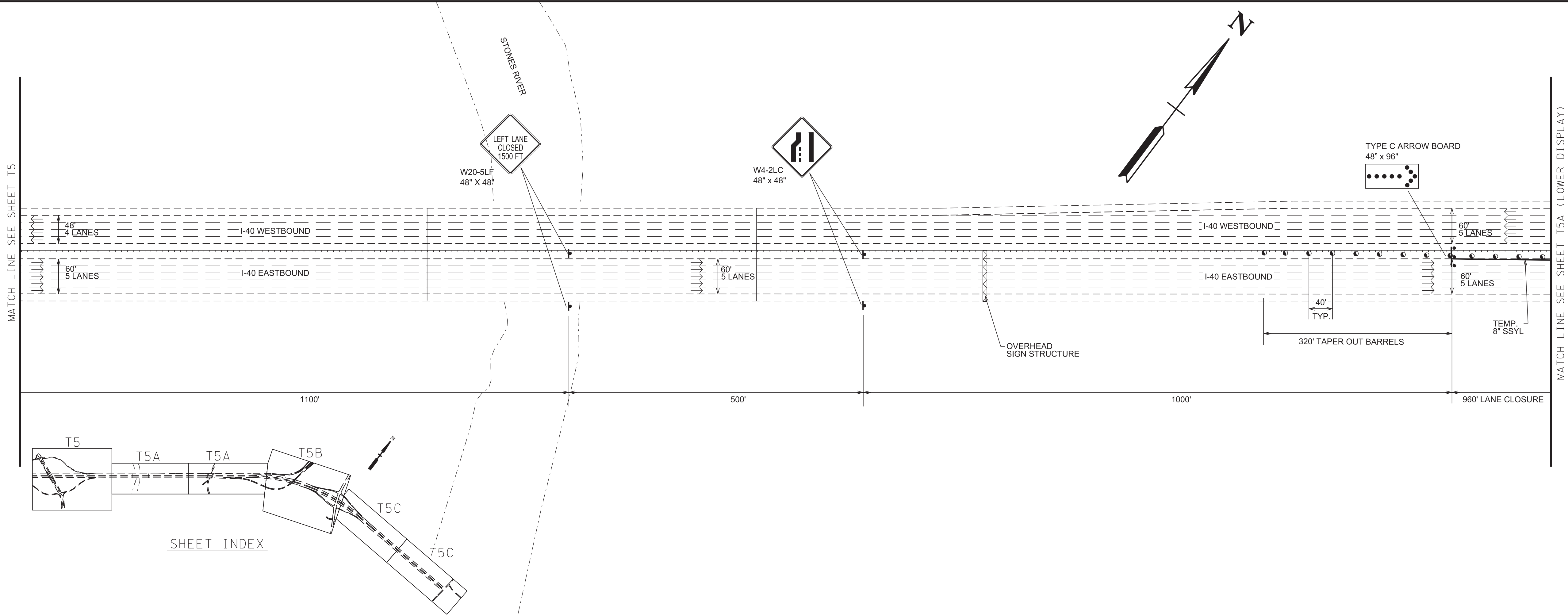


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DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL  
PLANS-PHASE 1  
EXIT 221A RAMP OVER I-40  
SCALE: 1"=100'







TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	WORK ZONE
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	TRAFFIC FLOW
	PORTABLE BARRIER RAIL
	TEMPORARY ATTENUATOR
	ARROW BOARD TYPE C

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T5A

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AGRICULTURE  
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STATE OF TENNESSEE  
7/3/2025

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DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL  
PLANS-PHASE 2  
EXIT 221A RAMP OVER I-40  
SCALE: 1"=100'



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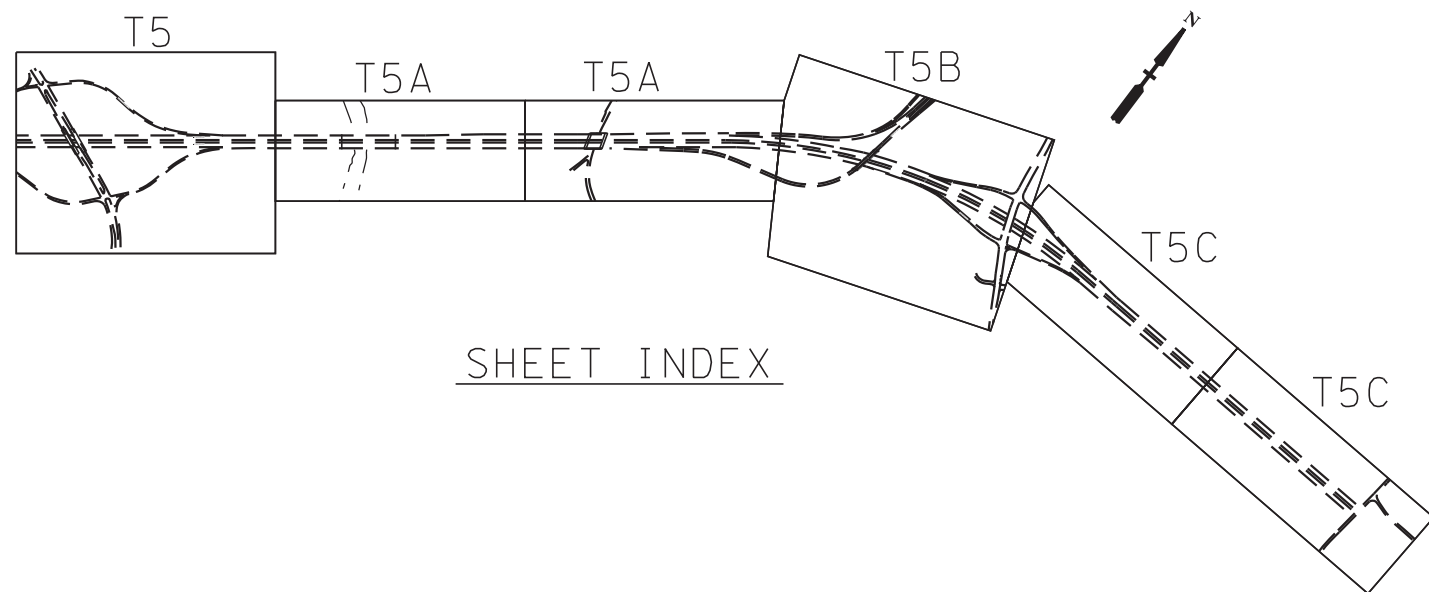
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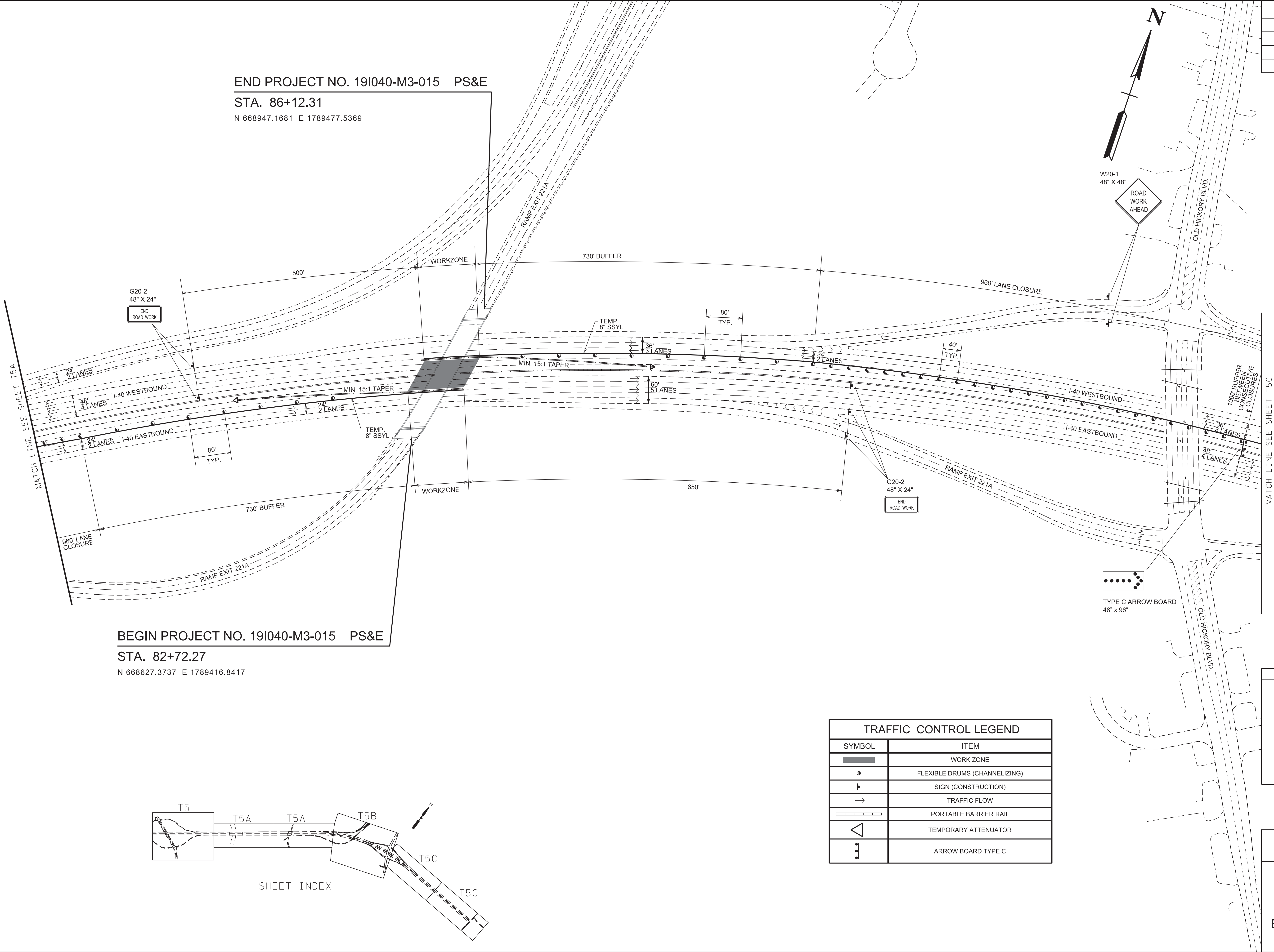
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TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	WORK ZONE
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	TRAFFIC FLOW
	PORTABLE BARRIER RAIL
	TEMPORARY ATTENUATOR
	ARROW BOARD TYPE C

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T5B



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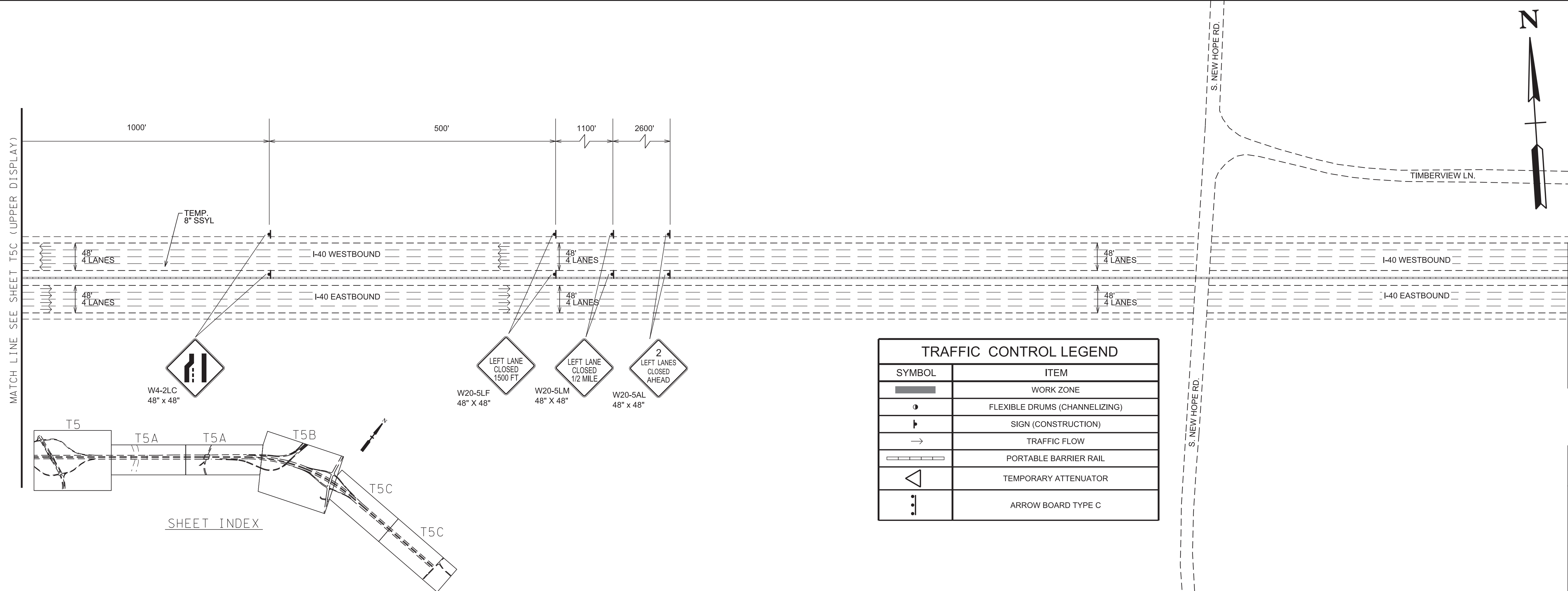
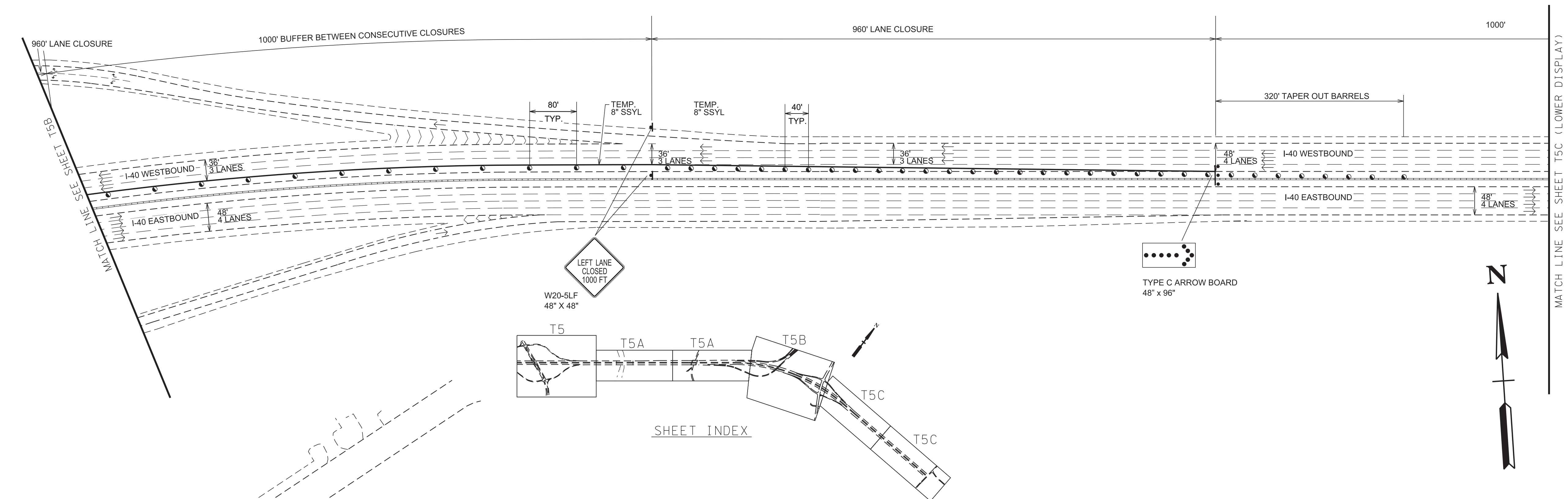
MATTHEW D. NEWMAN  
REGISTERED ENGINEER  
AGRICULTURE  
COMMERCIAL  
NO. 124100  
DATE 7/3/2025

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

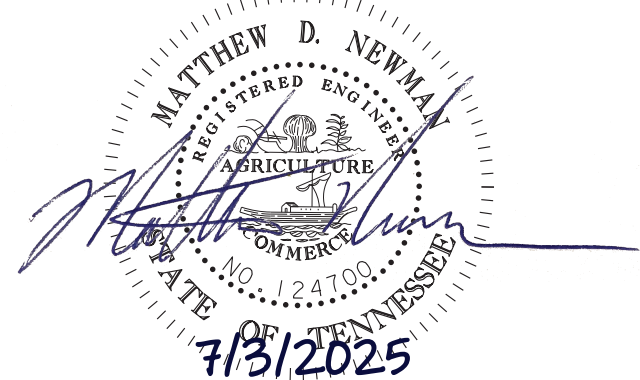
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PLANS-PHASE 2  
EXIT 221A RAMP OVER I-40  
SCALE: 1"=100'



TYPE	YEAR	PROJECT NO.	SHEET NO.
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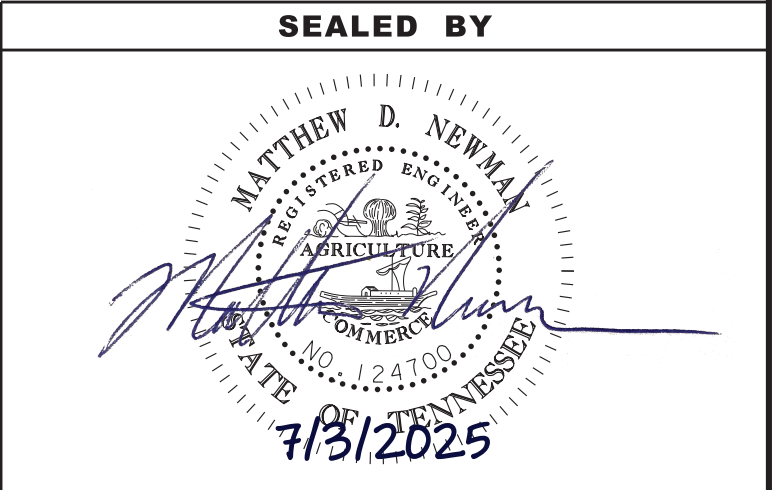
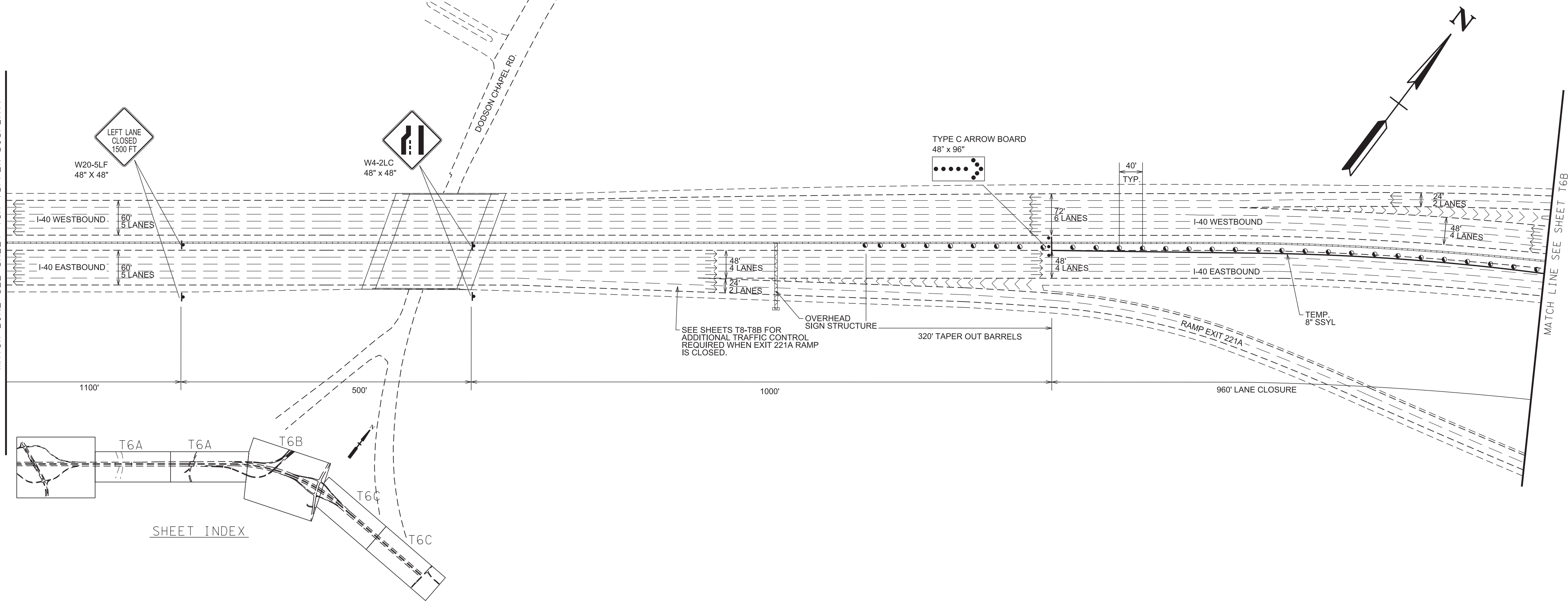
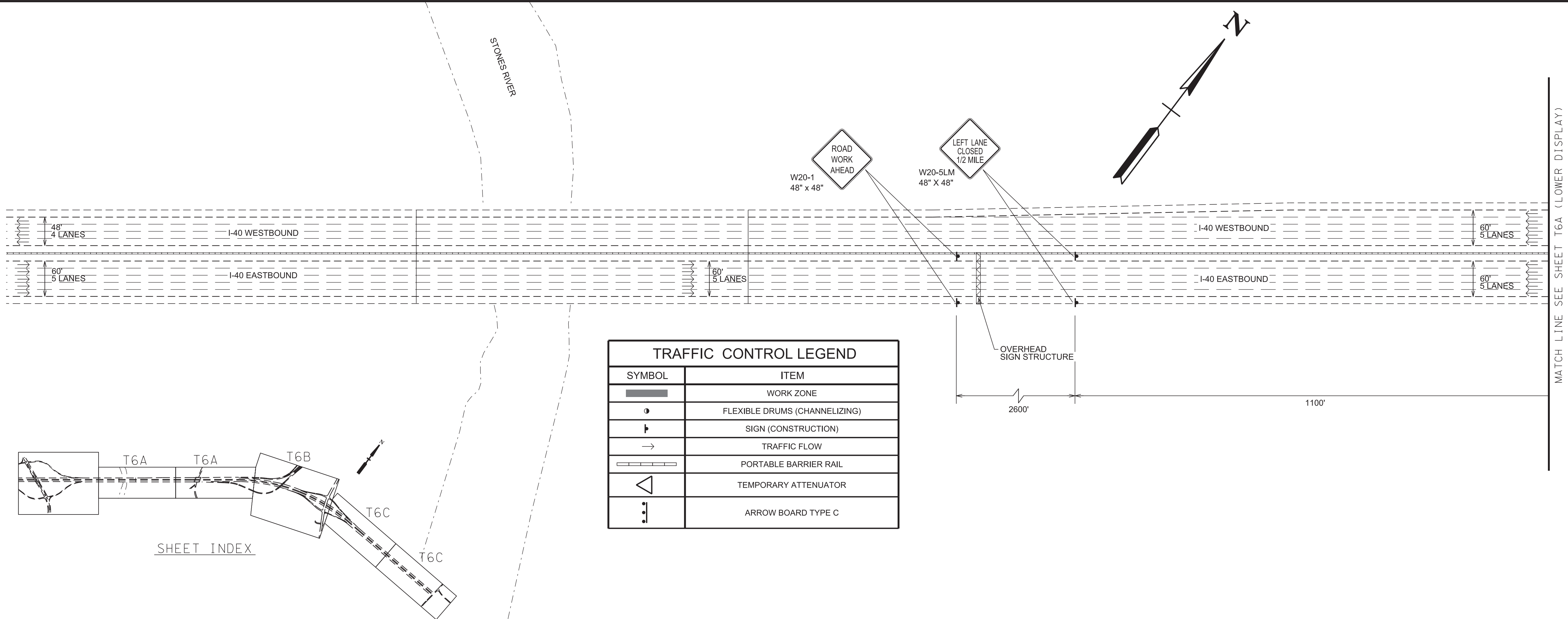
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DEPARTMENT OF TRANSPORTATION**

TRAFFIC  
CONTROL  
PLANS-PHASE 2  
EXIT 221A RAMP OVER I-40  
SCALE: 1"=100'



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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T6A



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DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL  
PLANS-PHASE 3  
EXIT 221A RAMP OVER I-40  
SCALE: 1"=100'



END PROJECT NO. 19I040-M3-015 PS&E

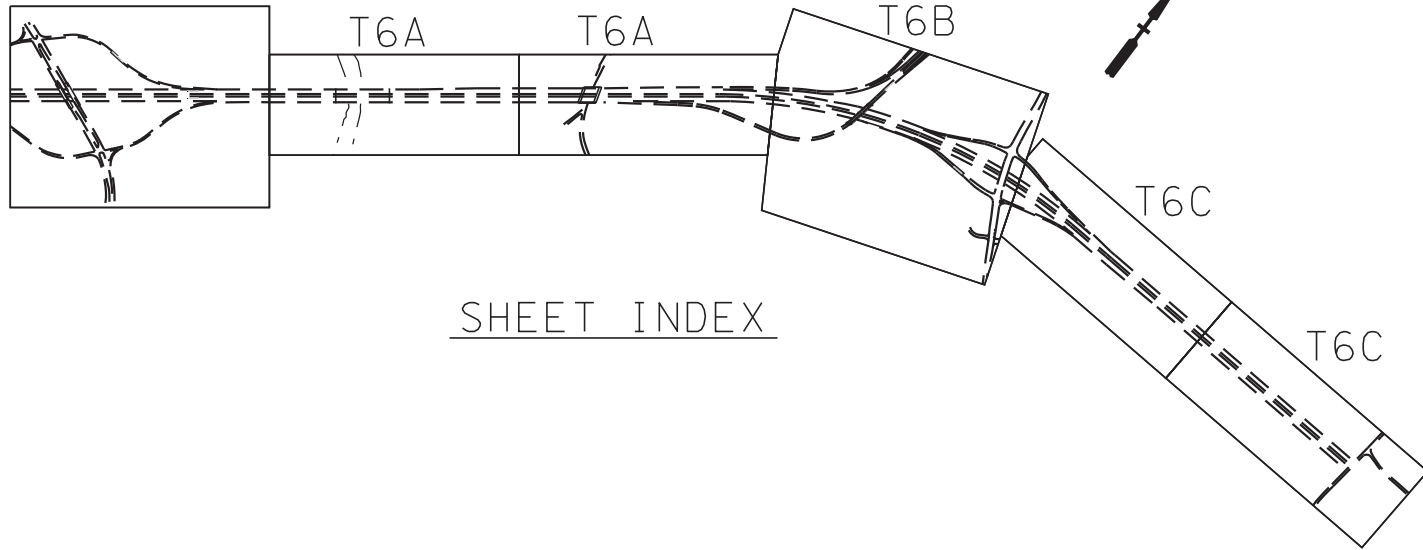
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BEGIN PROJECT NO. 19I040-M3-015 PS&E

STA. 82+72.27

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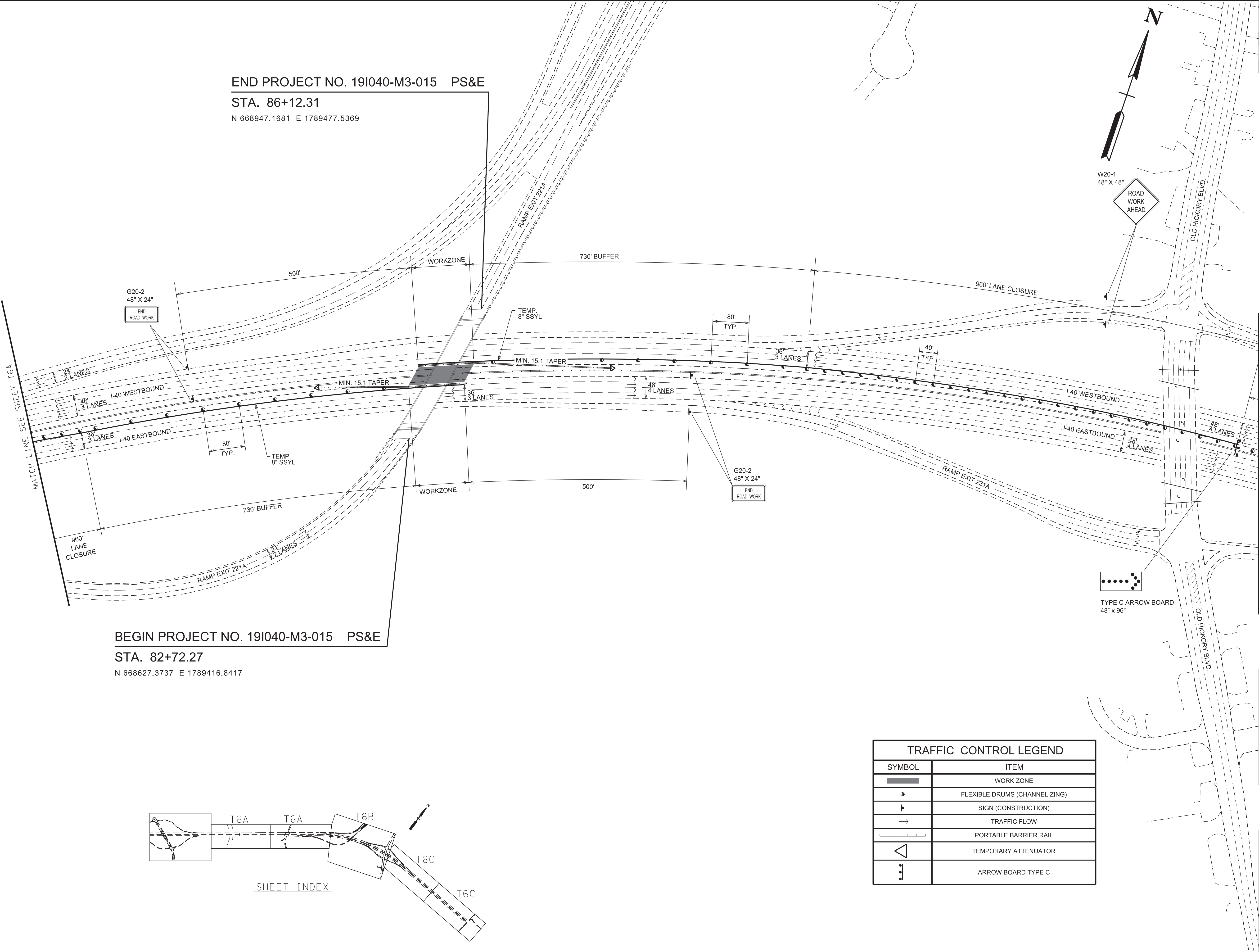
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SYMBOL	ITEM
	WORK ZONE
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	TRAFFIC FLOW
	PORTABLE BARRIER RAIL
	TEMPORARY ATTENUATOR
	ARROW BOARD TYPE C

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T6B

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DEPARTMENT OF TRANSPORTATION

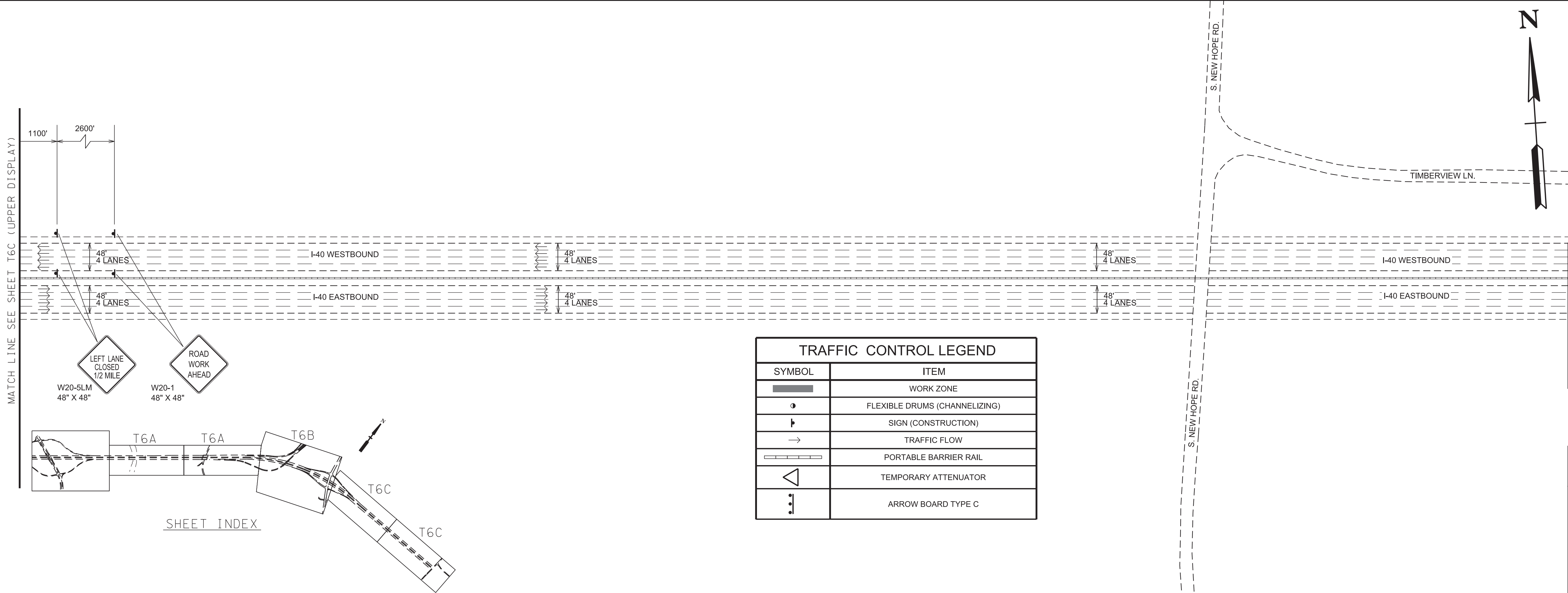
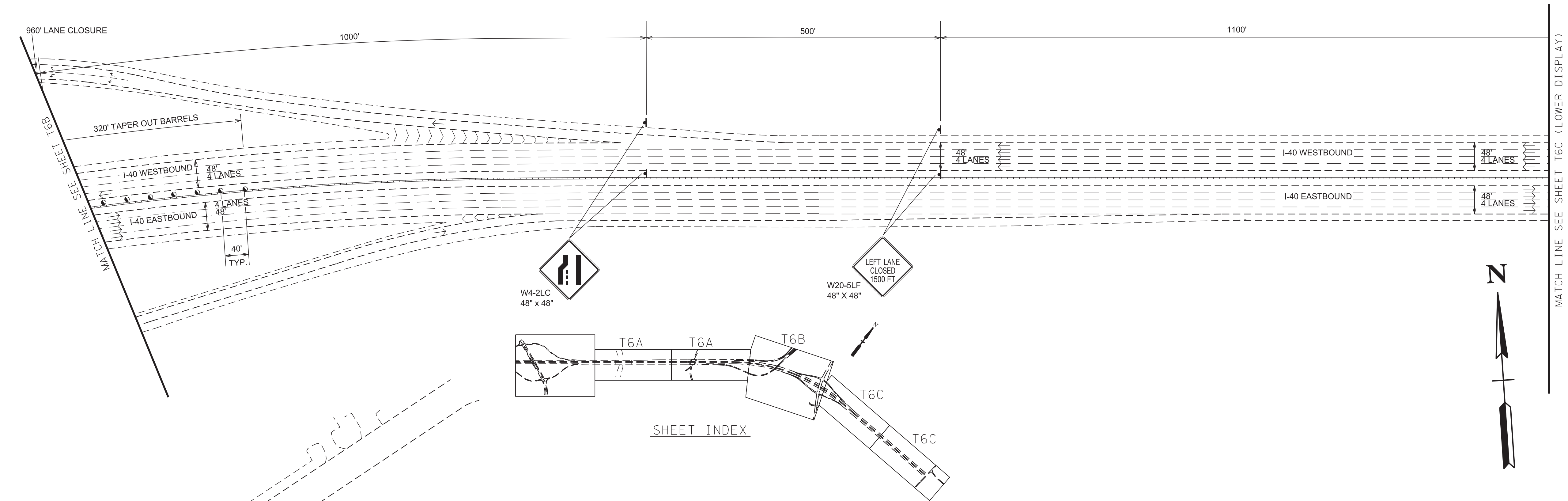
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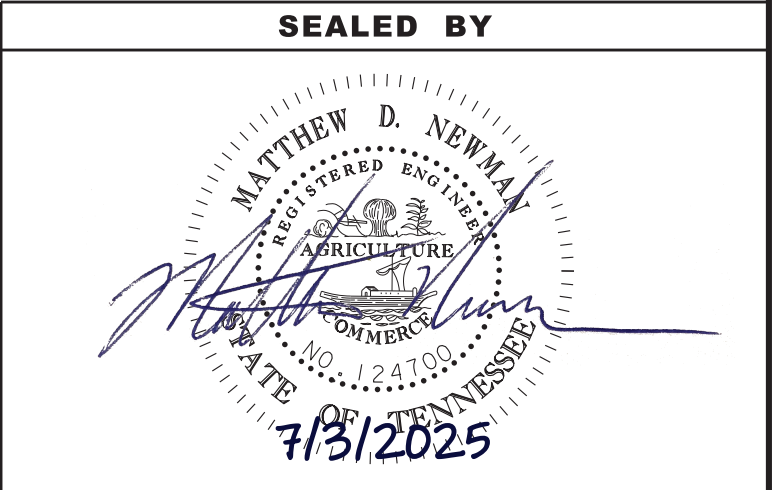


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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T6C



TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	WORK ZONE
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	TRAFFIC FLOW
	PORTABLE BARRIER RAIL
	TEMPORARY ATTENUATOR
	ARROW BOARD TYPE C

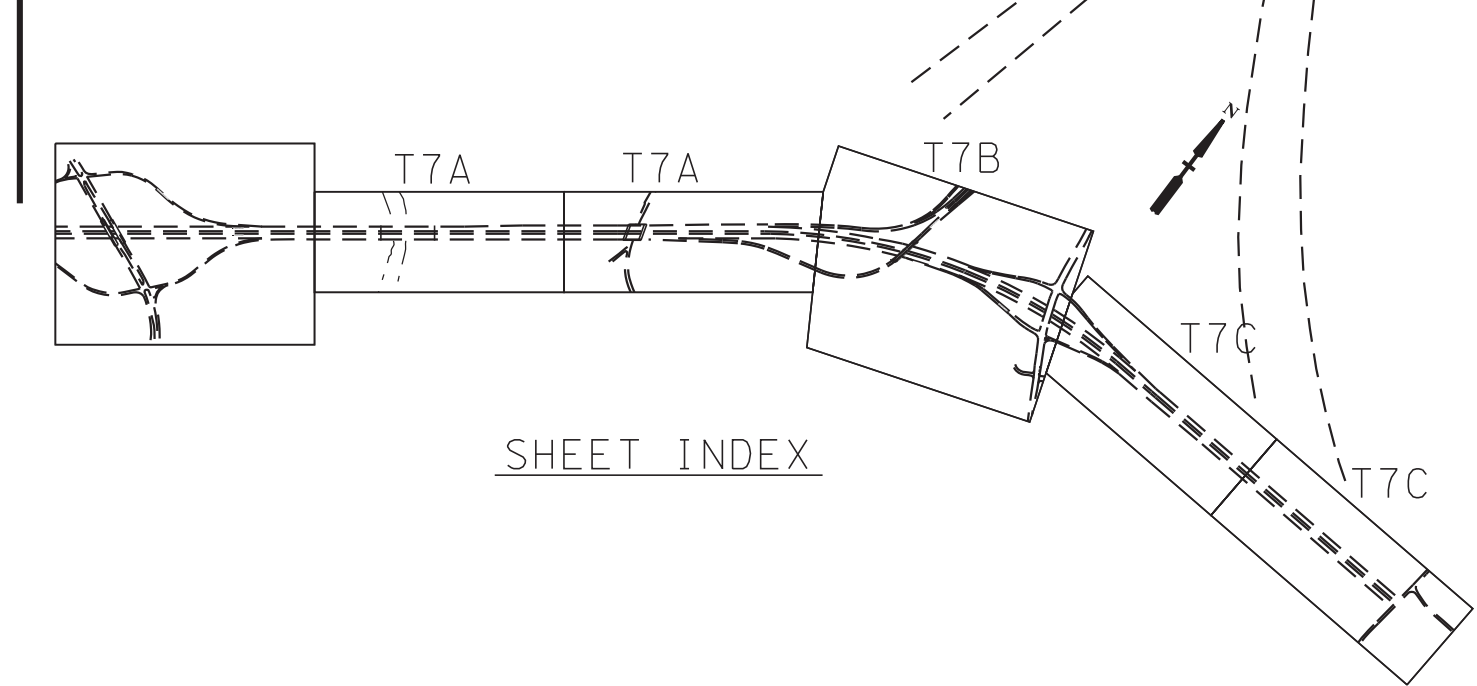
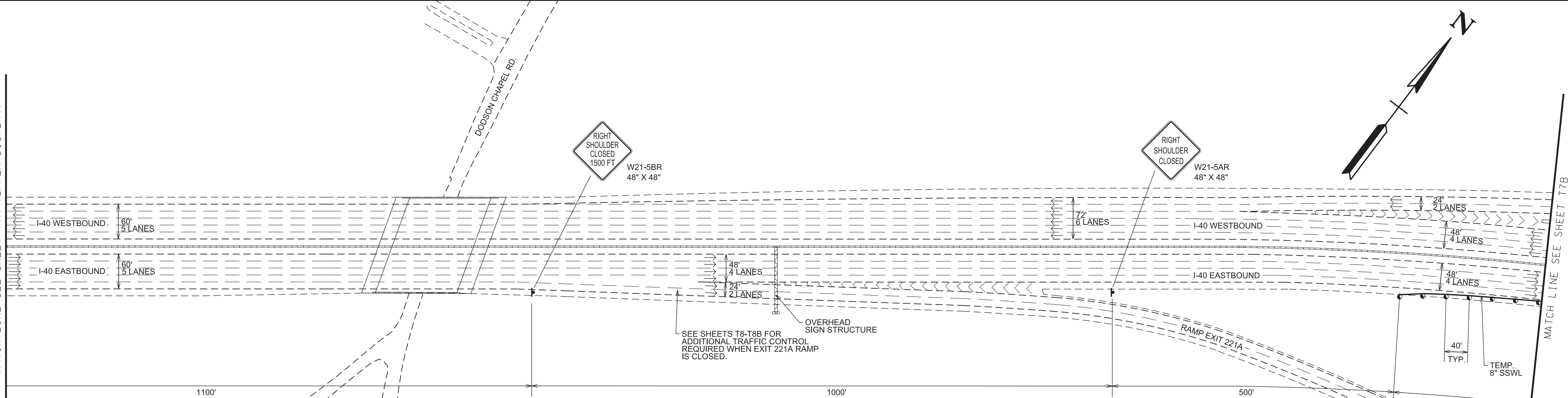
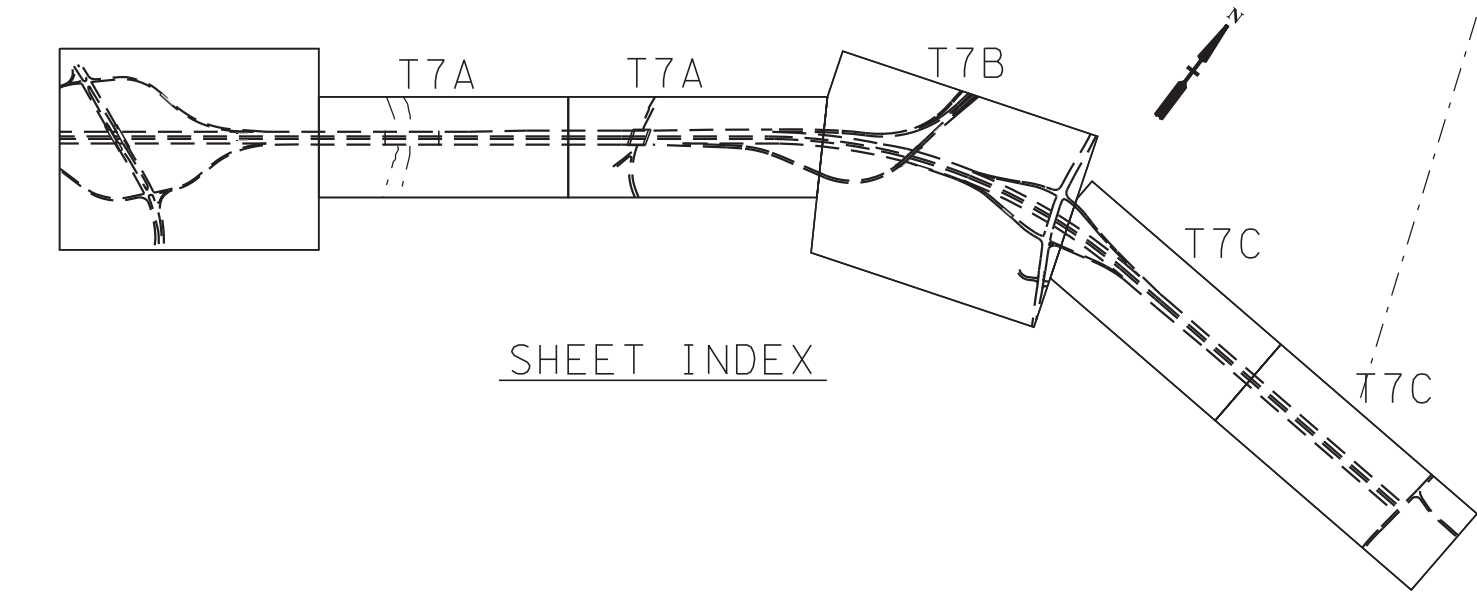
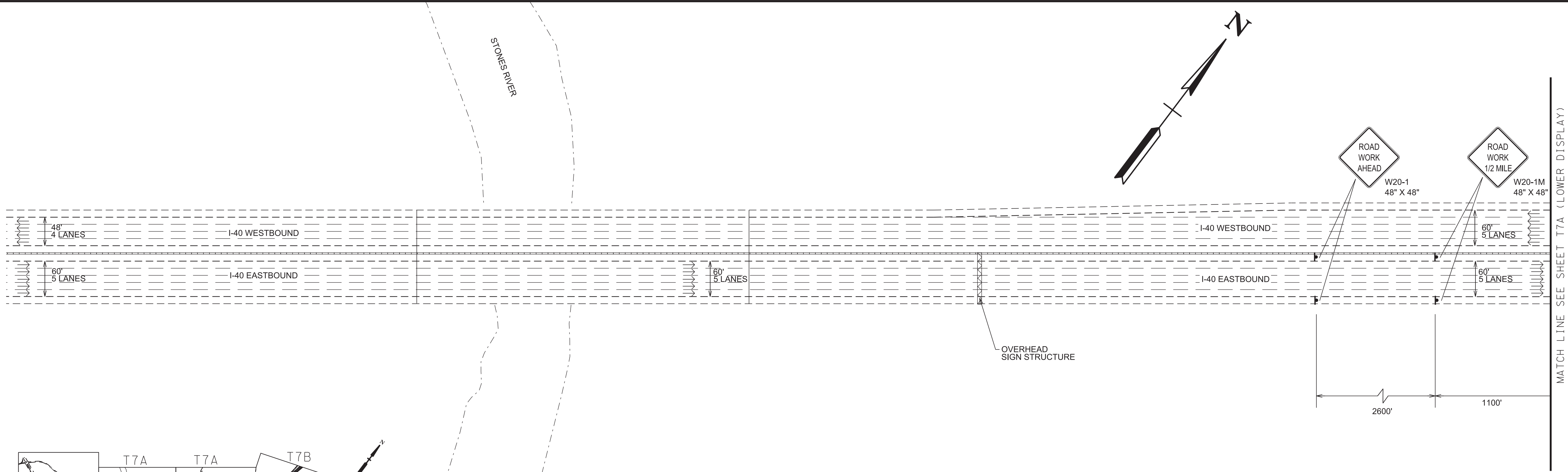


STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

TRAFFIC  
CONTROL  
PLANS-PHASE 3  
EXIT 221A RAMP OVER I-40  
SCALE: 1"=100'



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TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	WORK ZONE
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	TRAFFIC FLOW
	PORTABLE BARRIER RAIL
	TEMPORARY ATTENUATOR
	ARROW BOARD TYPE C

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T7A

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MATTHEW D. NEWMAN  
REGISTERED ENGINEER  
AGRICULTURE  
No. 124100  
DATE 7/3/2025

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL  
PLANS-PHASE 4  
EXIT 221A RAMP OVER I-40  
SCALE: 1"=100'



END PROJECT NO. 19I040-M3-015 PS&E

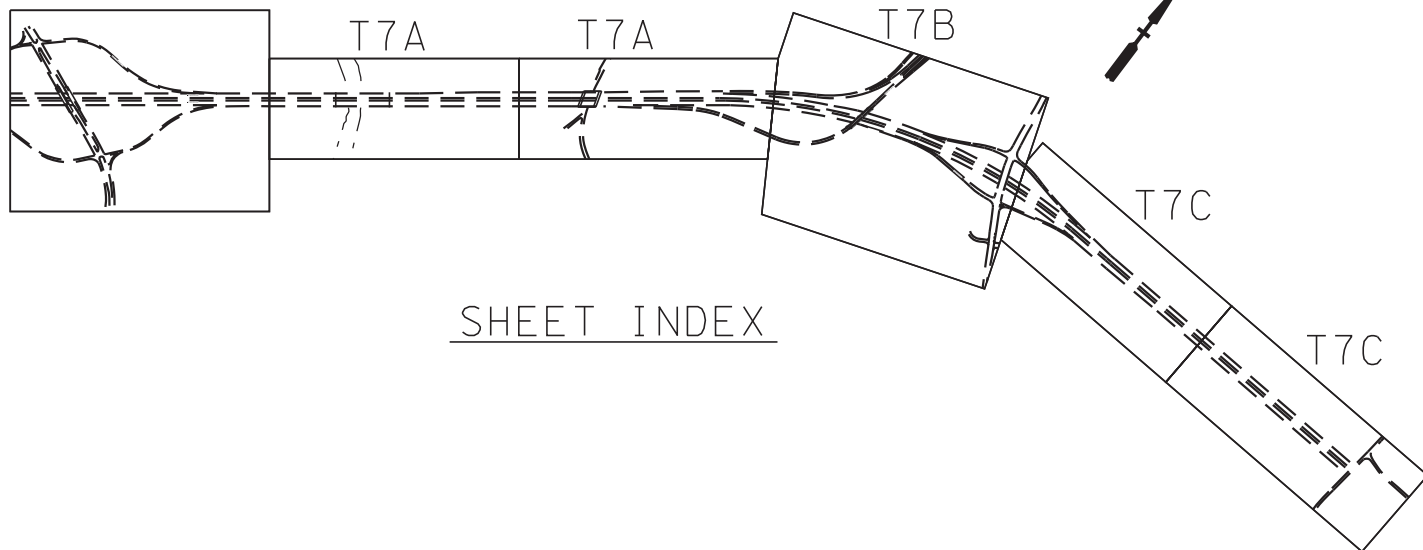
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TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	WORK ZONE
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	TRAFFIC FLOW
	PORTABLE BARRIER RAIL
	TEMPORARY ATTENUATOR
	ARROW BOARD TYPE C

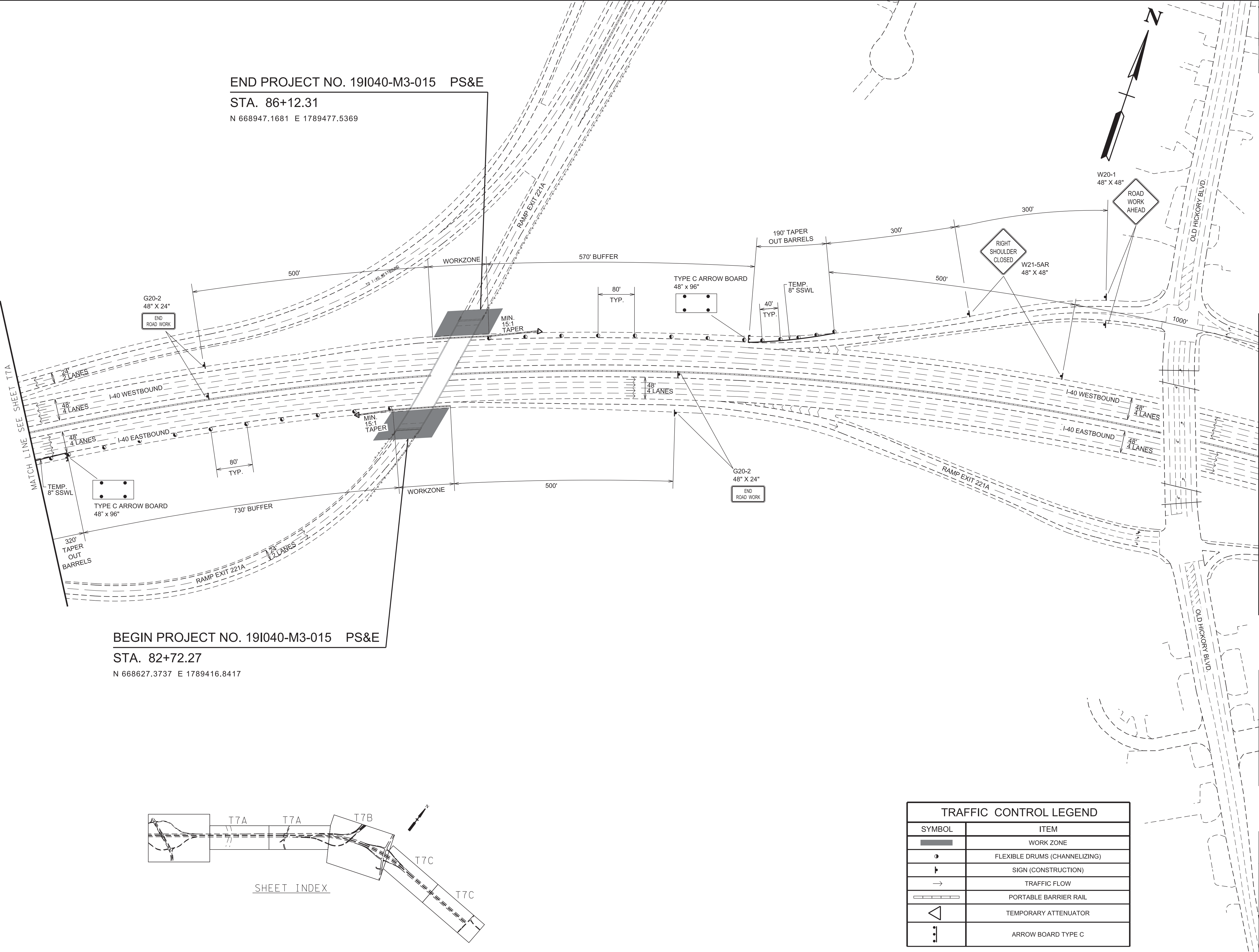
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PS&E	2025	19I040-M3-015	T7B

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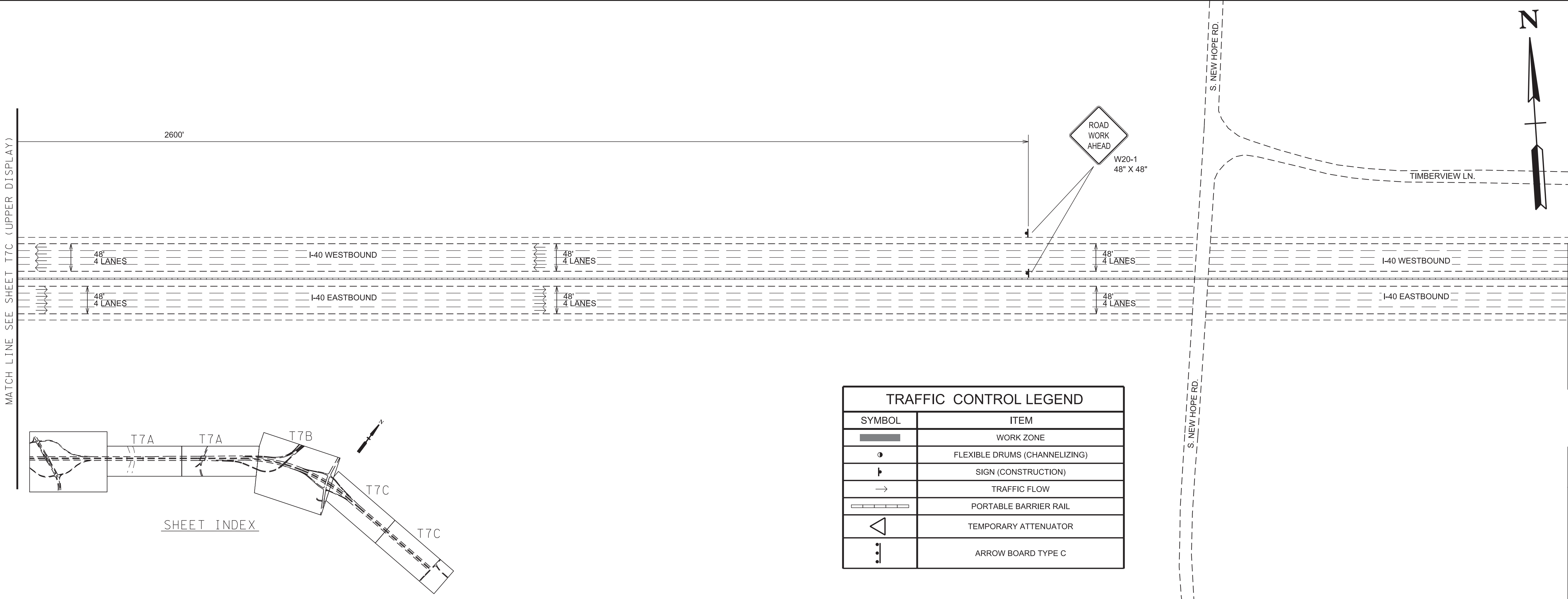
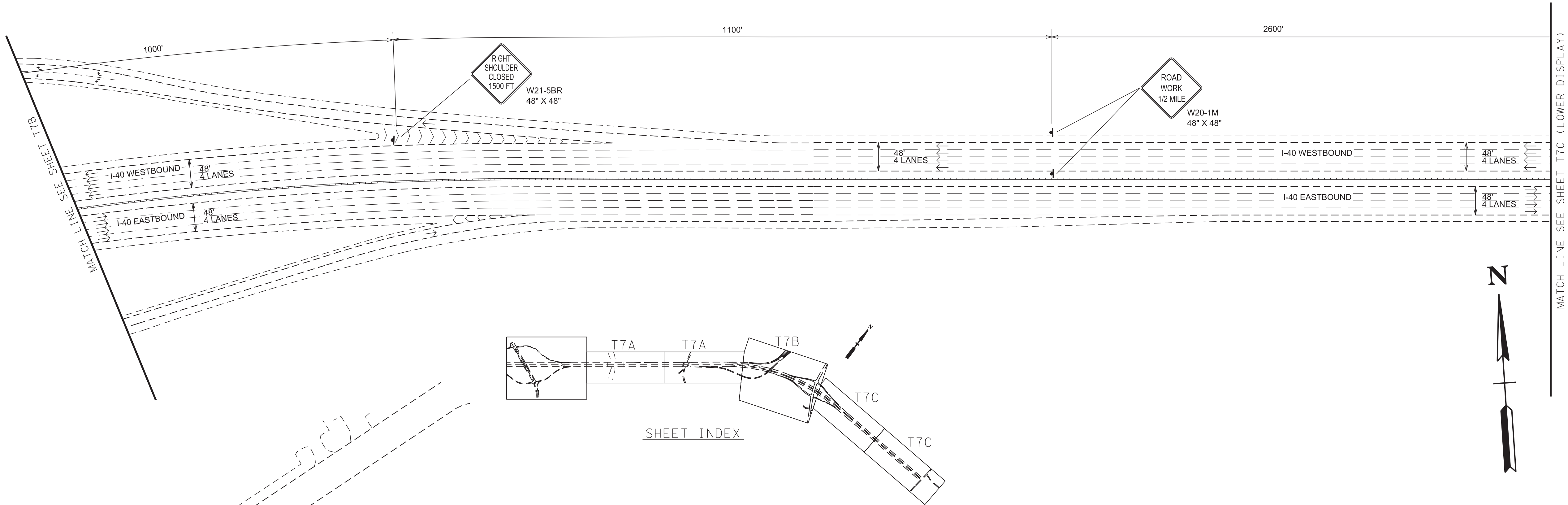
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DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL  
PLANS-PHASE 4  
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T7C



TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
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[Symbol]	FLEXIBLE DRUMS (CHANNELIZING)
[Symbol]	SIGN (CONSTRUCTION)
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[Symbol]	PORTABLE BARRIER RAIL
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[Symbol]	ARROW BOARD TYPE C

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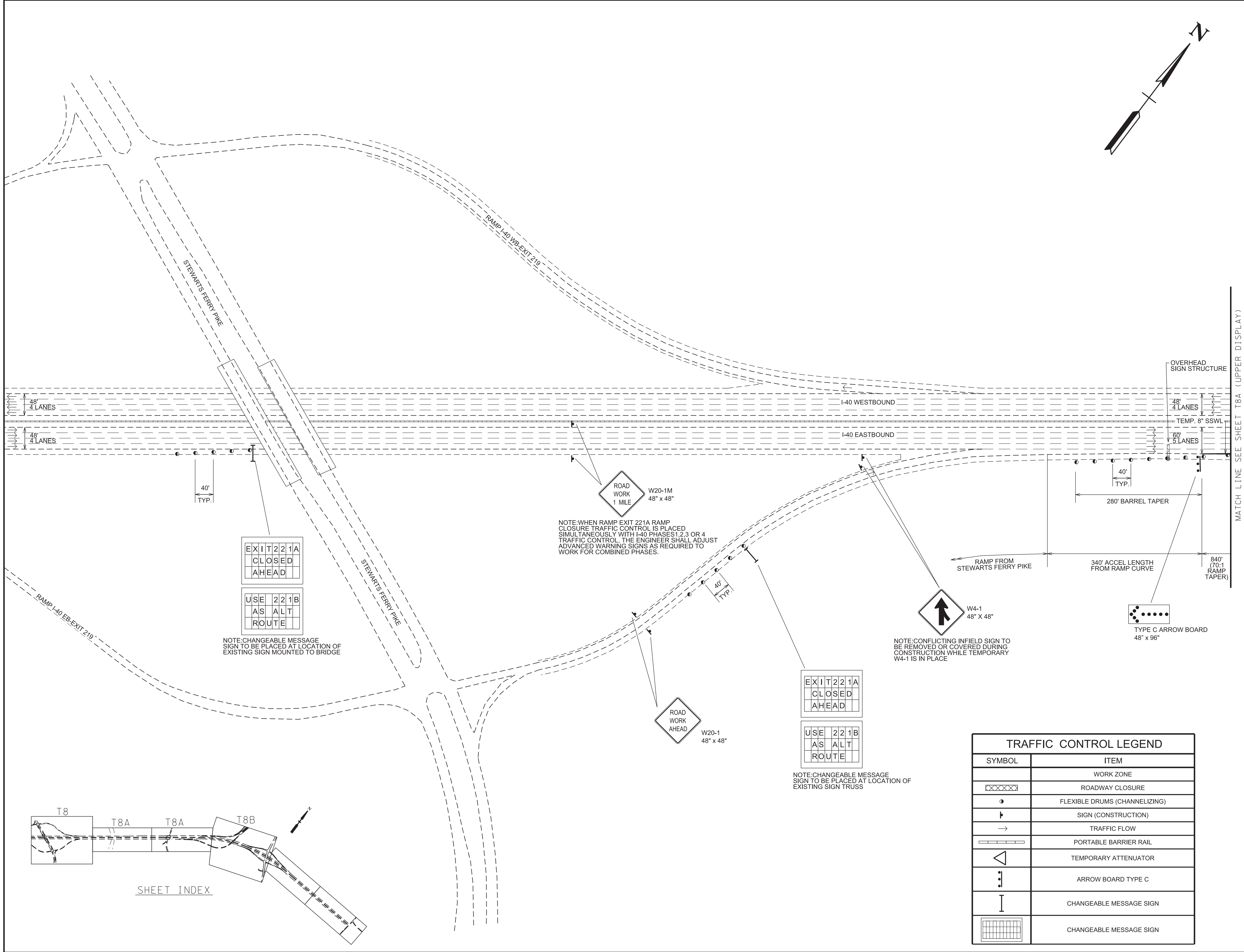
MATTHEW D. NEWMAN  
REGISTERED ENGINEER  
AGRICULTURE  
COMMERCIAL  
No. 124100  
STATE OF TENNESSEE  
7/31/2025

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL  
PLANS-PHASE 4  
EXIT 221A RAMP OVER I-40  
SCALE: 1"=100'



TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T8



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MATTHEW D. NEWMAN

REGISTERED ENGINEER

AGRICULTURE

COMMERCIAL

NO. 124100

STATE OF TENNESSEE

7/3/2025

STATE OF TENNESSEE

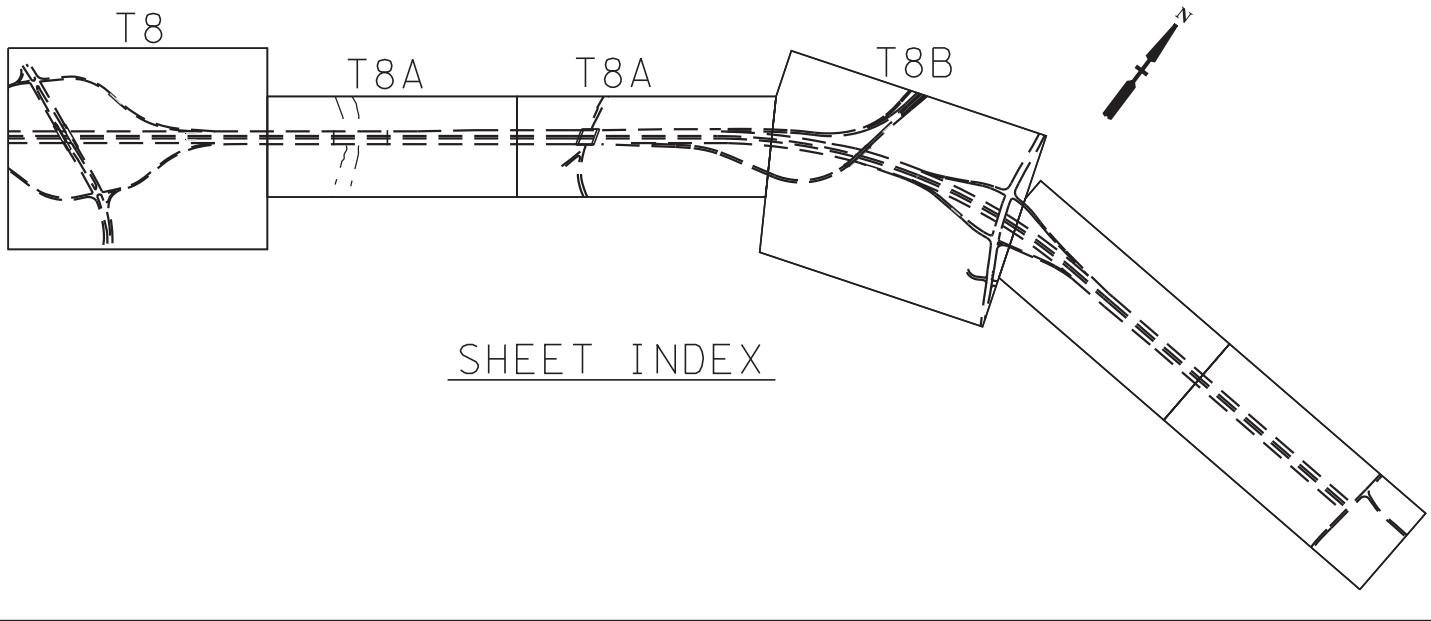
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TRAFFIC CONTROL

PLANS-RAMP CLOSURE

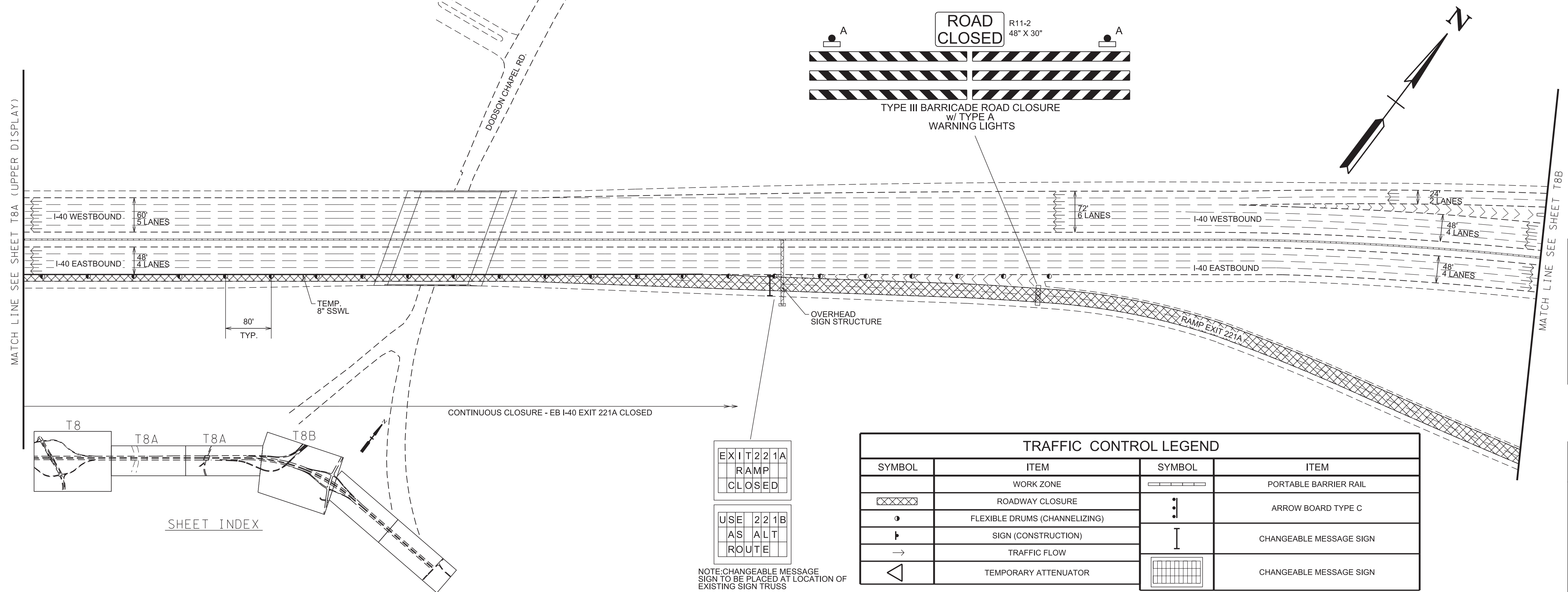
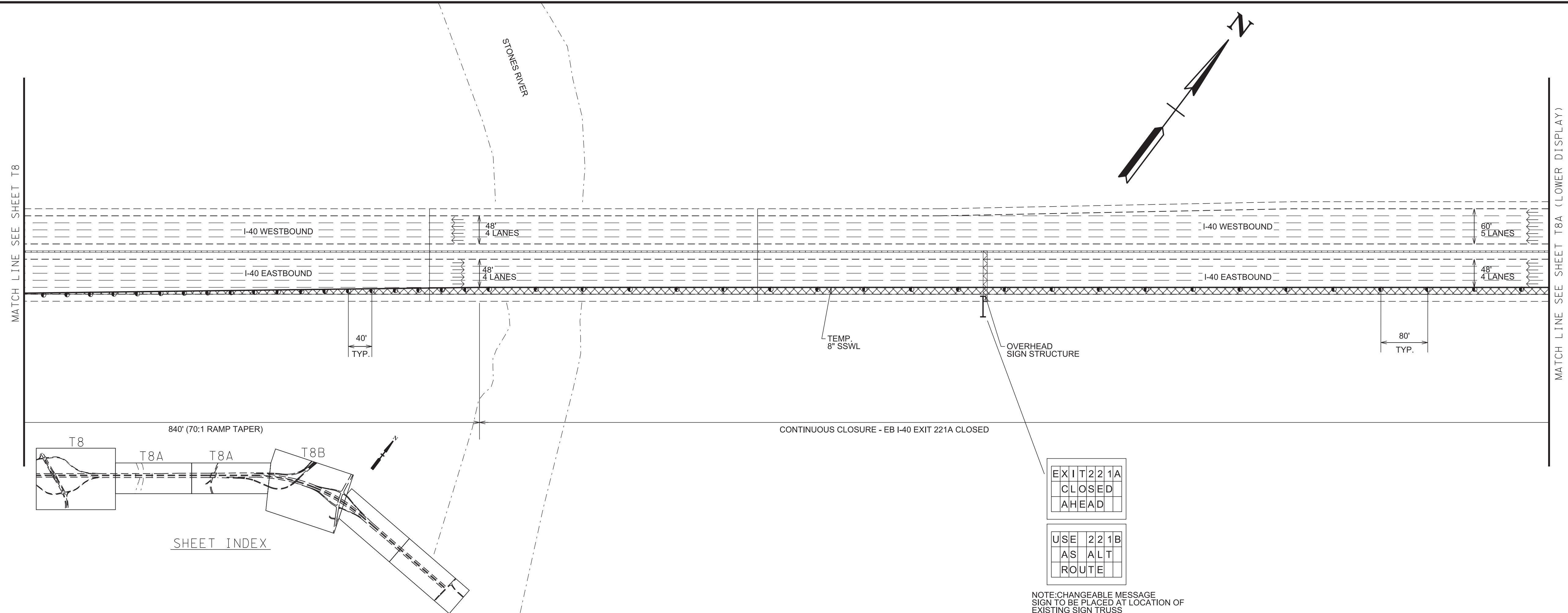
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SCALE: 1"=100'






TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T8A



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 <p>STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION MATTHEW D. NEWMAN REGISTERED ENGINEER EXPIRATION DATE 12/31/2024 NO. 124703 7/3/2025</p>	
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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

TRAFFIC  
CONTROL  
PLANS-RAMP CLOSURE  
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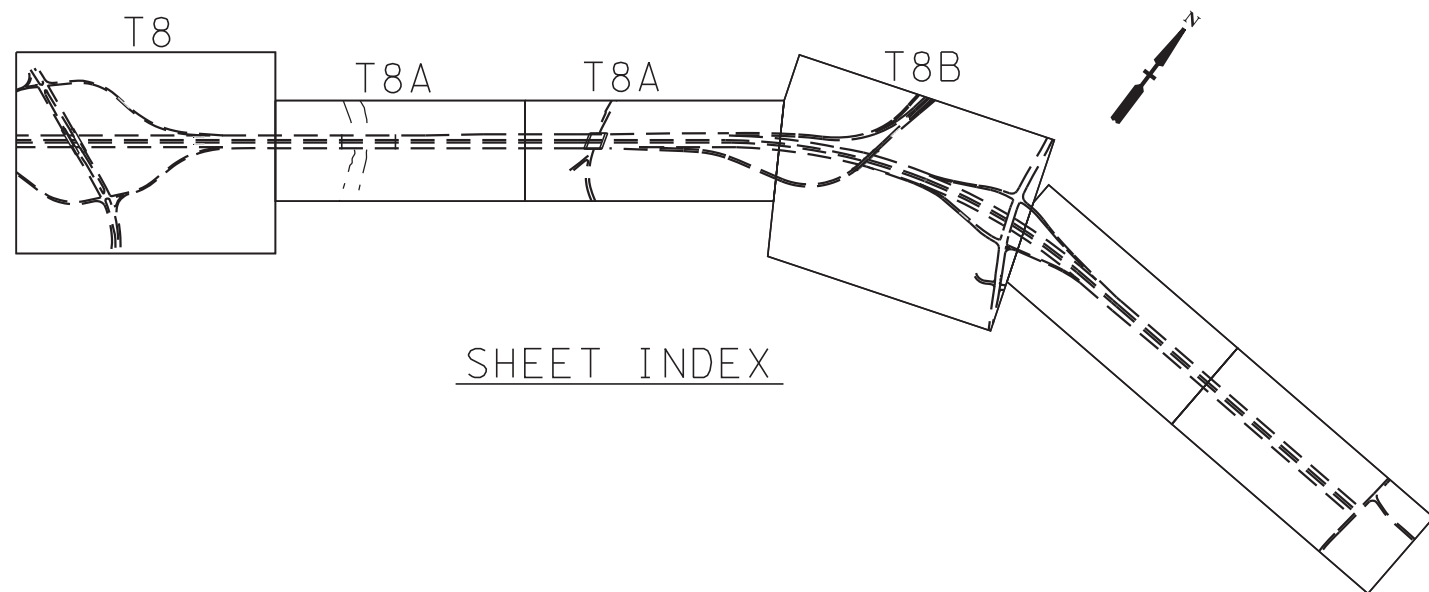
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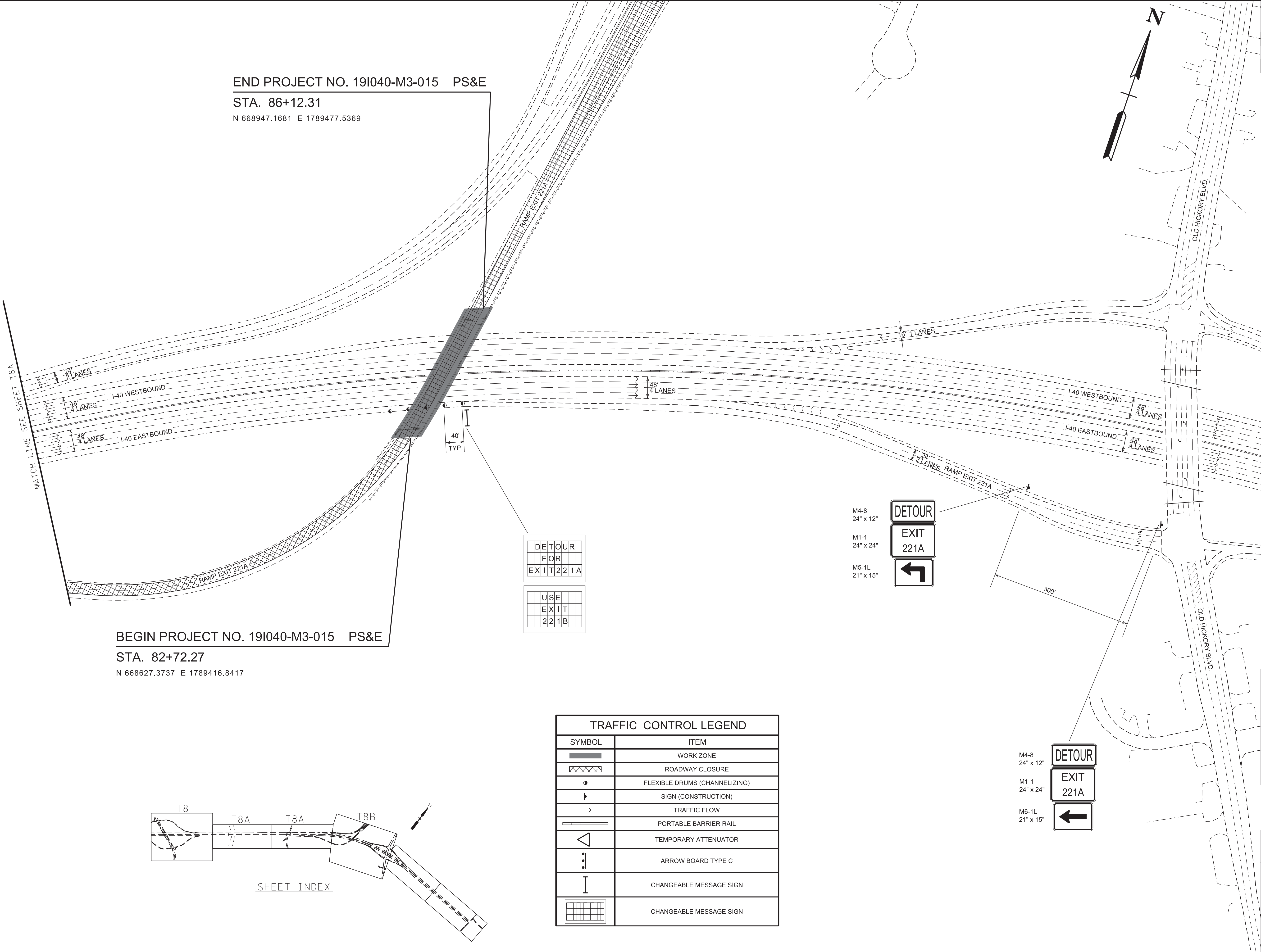
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TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	WORK ZONE
	ROADWAY CLOSURE
	FLEXIBLE DRUMS (CHANNELIZING)
	SIGN (CONSTRUCTION)
	TRAFFIC FLOW
	PORTABLE BARRIER RAIL
	TEMPORARY ATTENUATOR
	ARROW BOARD TYPE C
	CHANGEABLE MESSAGE SIGN
	CHANGEABLE MESSAGE SIGN

TYPE	YEAR	PROJECT NO.	SHEET NO.
PS&E	2025	19I040-M3-015	T8B



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MATTHEW D. NEWMAN  
REGISTERED ENGINEER  
AGRICULTURE  
COMMERCIAL  
NO. 124100  
STATE OF TENNESSEE  
7/3/2025

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL  
PLANS-RAMP CLOSURE  
EXIT 221A RAMP OVER I-40  
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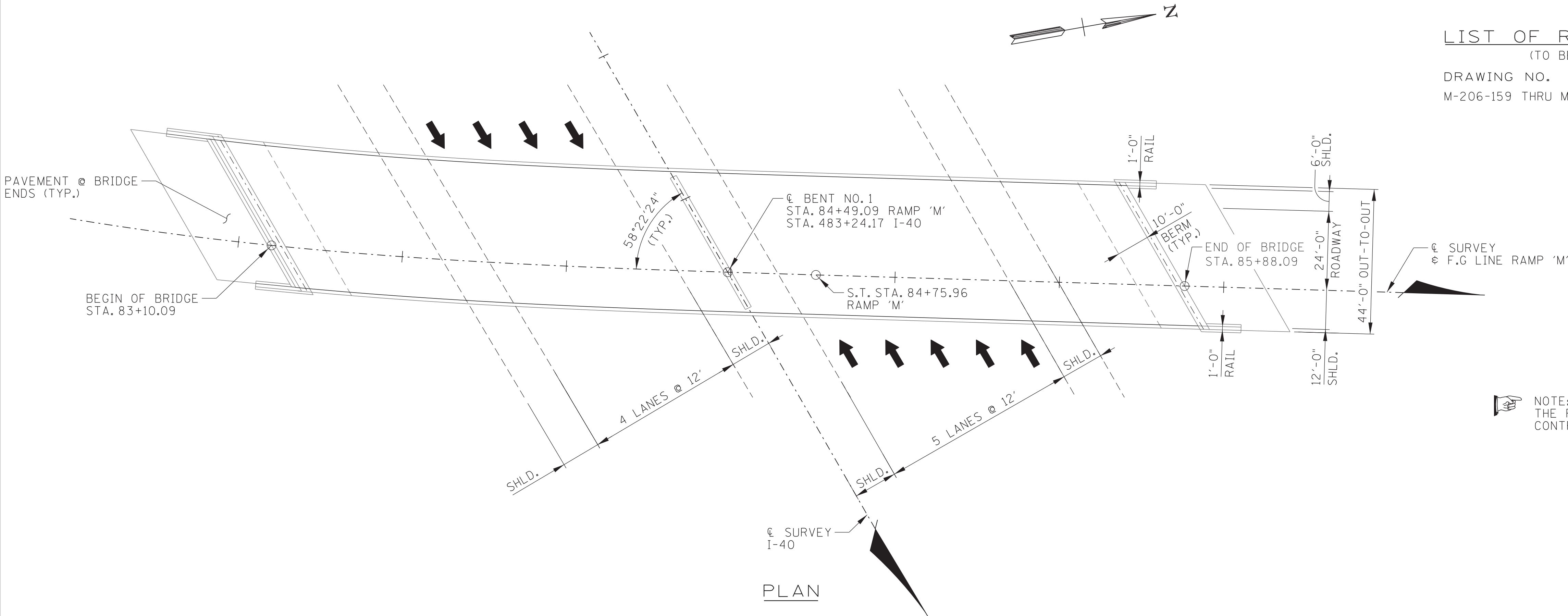
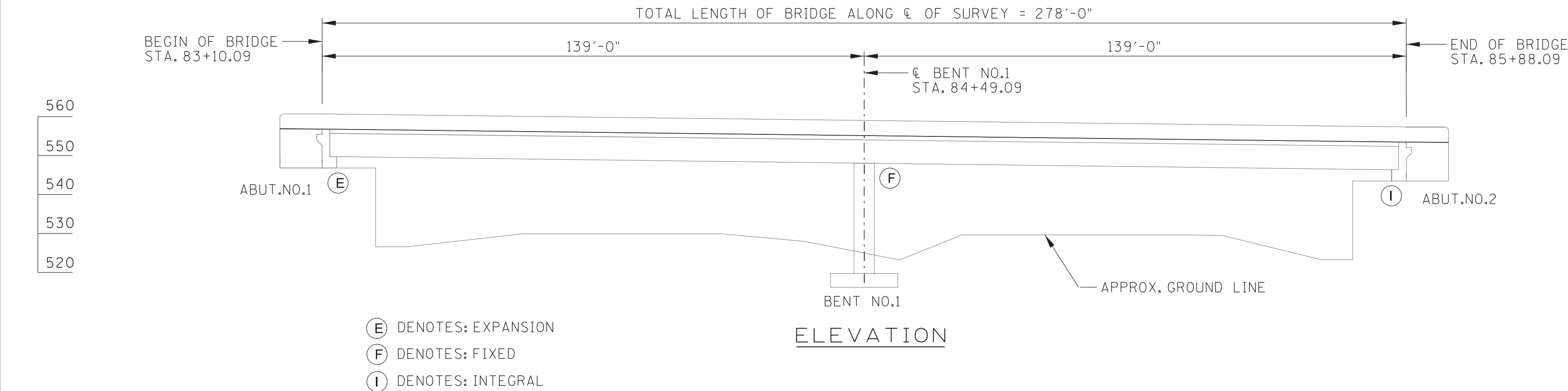


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DESIGN BY: R. PARK DATE: 07/2025  
DRAWN BY: L. MENDEZ DATE: 07/2025  
SUPERVISED BY: D. MCCRARY DATE: 07/2025  
CHECKED BY: A. ALLSBROOK DATE: 07/2025



CONST. NO.:			
PROJECT NO.		YEAR	SHEET NO.
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### SCOPE OF WORK

1. PROVIDE REQUIRED TRAFFIC CONTROL FOR A FULL CLOSURE ON THE EXISTING BRIDGE AND A MINIMUM OF TWO LANES OF TRAFFIC IN EACH DIRECTION ON INTERSTATE 40 DURING CLOSURE PERIODS AS DETAILED IN THE ROADWAY PLANS.
2. DURING CLOSURE PERIOD, THE CONTRACTOR SHALL WORK CONTINUOUSLY UNTIL TRAFFIC CAN BE RESTORED TO ALL LANES.
3. INSTALL NEW STEEL TRANSVERSE INTERMEDIATE STIFFENERS ON THE WEBS OF THE EXISTING STEEL GIRDERS. SEE DETAILS AND NOTES ON DWG. NO. BR-132-835.
4. REPAIR CONCRETE SURFACE DEFECTS ON THE EXISTING BENT NO. 1 BY CHIPPING TO SOUND CONCRETE AND PATCHING BACK TO ORIGINAL LINES WITH OPTION OF POLYMER MODIFIED CEMENTITIOUS PATCHING MATERIAL OR HIGH EARLY STRENGTH DEPENDING ON THE DEPTH OF DETERIORATION. SEE DETAILS ON DWG. NOS. BR-132-836 AND BR-132-838.
5. RECONSTRUCT PORTIONS OF THE EXISTING CONCRETE SLAB IN AREAS OF PARTIAL DEPTH DECK REPAIRS WITHIN THE PHASED CONSTRUCTION LIMITS AND WITHIN THE LIMITS AS DESIGNATED BY THE ENGINEER. SEE DETAILS AND NOTES ON DRAWING NO. BR-132-837.
6. CONSTRUCT NEW THIN EPOXY OVERLAY (PER MANUFACTURERS REQUIREMENTS) AS SHOWN IN THE DETAILS ON DWG. NO. BR-132-834.

### LIST OF DRAWINGS

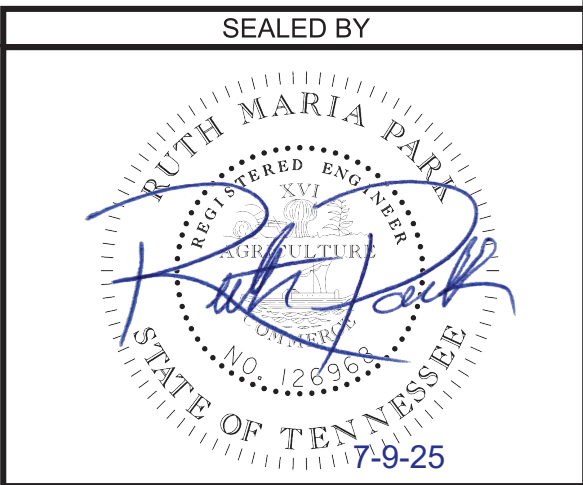
LAYOUT OF BRIDGE TO BE REPAIRED	BR-132-831
ESTIMATED BRIDGE QUANTITIES	BR-132-832
BRIDGE GENERAL NOTES	BR-132-833
SUPERSTRUCTURE REPAIR DETAILS	BR-132-834
SUPERSTRUCTURE REPAIR DETAILS	BR-132-835
BENT DETAILS	BR-132-836
MISCELLANEOUS REPAIR DETAILS	BR-132-837
MISCELLANEOUS REPAIR DETAILS	BR-132-838

### LIST OF REFERENCE DRAWINGS

(TO BE PRINTED WITH PLANS)

DRAWING NO.	ORIGINAL BRIDGE DRAWINGS
M-206-159 THRU M-206-172	EXISTING BRIDGE PLANS

NOTE: IF ANY EXISTING FACILITIES ARE DAMAGED, IT IS THE RESPONSIBILITY AND AT THE COST OF THE CONTRACTOR TO REPLACE/REPAIR THESE FACILITIES.



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
LAYOUT OF BRIDGE  
TO BE REPAIRED  
RAMP M OVER  
INTERSTATE 40  
BR. NO. 19-I0040-29.02  
FED. ID. NO. 19I00400161  
DAVIDSON COUNTY  
2025

BR-132-831



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DESIGN BY:R. PARK

DRAWN BY:R. PARK

SUPERVISED BY:D. MCCRARY

CHECKED BY:A. ALLSBROOK

DATE:07/2025

DATE:07/2025

DATE:07/2025

DATE:07/2025



ESTIMATED BRIDGE QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY
(1) 602-10.32	STRUCTURAL STEEL (REPAIRS)	LB.	7473
(2) 604-10.05*	CONCRETE	S.F.	6
(3) 604-10.50*	BRIDGE DECK REPAIRS (PARTIAL DEPTH OF SLAB)	S.Y.	35
(4) 604-10.54*	CONCRETE REPAIRS	S.F.	6
(5) 617-04.01	TYPE 1 THIN EPOXY OVERLAY (EPOXY-URETHANE)	S.Y.	417

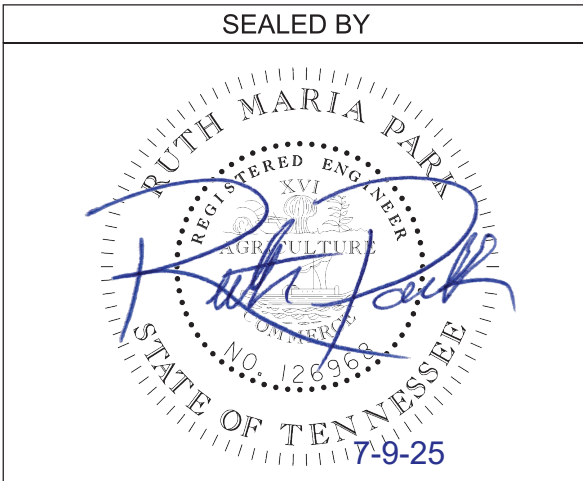
\* DENOTES: ITEM CAN BE INCREASED, DECREASED, OR ELIMINATED AS DIRECTED BY THE ENGINEER.

FOOTNOTES:

- (1) INCLUDES ALL LABOR AND MATERIALS FOR INSTALLATION AND PAINTING OF NEW STRUCTURAL STEEL STIFFENERS AS SHOWN ON THE PLANS. PREPARATION OF EXISTING STEEL SURFACE REPAIR LOCATIONS TO BE INCLUDED IN ITEM NO. 602-10.32. REPAIR AREAS SHALL BE MARKED AND QUANTIFIED FOR APPROVAL BY THE ENGINEER PRIOR TO BEGINNING OF THE WORK. SEE DWG. NO. BR-132-835
- (2) INCLUDES ALL LABOR AND MATERIALS TO PLACE HIGH EARLY STRENGTH CONCRETE FOR REPAIR AREAS AS NOTED IN THE PLANS. SEE DWG. NOS. BR-132-836 AND BR-132-838 FOR DETAILS.
- (3) INCLUDES ALL COSTS FOR PARTIAL DEPTH CONCRETE DECK REPAIRS AT LOCATIONS DESIGNATED BY THE ENGINEER. FOR DETAILS, SEE DWG. NO. BR-132-837.
- (4) INCLUDES ALL LABOR AND MATERIALS TO PLACE A POLYMER MODIFIED CEMENTITIOUS STRUCTURAL PATCHING MATERIAL FOR REPAIR AREAS AS NOTED IN THE PLANS. SEE DWG. NOS. BR-132-836 AND BR-132-838 FOR DETAILS.
- (5) INCLUDES COST OF ALL LABOR AND MATERIALS NECESSARY TO PLACE A TYPE I THIN OVERLAY (EPOXY-URETHANE) TO THE BRIDGE DECK FOR THE FULL LENGTH OF THE BRIDGE. FOR DETAILS, SEE DWG. NO. BR-132-834 AND THE TDOT QUALIFIED PRODUCTS LIST 23 SECTION 02.

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PROJECT NO.		YEAR	SHEET NO.
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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
ESTIMATED BRIDGE  
QUANTITIES  
RAMP M OVER  
INTERSTATE 40  
BR. NO. 19-I0040-29.02  
FED. ID. NO. 19I00400161  
DAVIDSON COUNTY  
2025

BR-132-832



## GENERAL NOTES

## SPECIFICATIONS & LOADING

- (1) **CONSTRUCTION SPECIFICATIONS:** STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION (JANUARY 1, 2021 EDITION), AND THE 4<sup>TH</sup> EDITION (2017) AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS WITH INTERIMS.
- (2) **DESIGN SPECIFICATIONS:** 9<sup>TH</sup> EDITION (2020) AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS WITH INTERIMS, AND THE 2<sup>ND</sup> EDITION (2011) AASHTO GUIDE SPECIFICATIONS FOR LRFD SEISMIC BRIDGE DESIGN WITH INTERIMS.

## STEEL, CONCRETE, REINFORCING, AND FORMING

- (3) **STRUCTURAL STEEL:** SHALL CONFORM TO ASTM A709 GRADE 50 UNLESS OTHERWISE NOTED.
- (4) **BOLTS:** SHALL BE HIGH TENSILE STRENGTH BOLTS ASTM-F3125, GRADE A325, TYPE 1, UNLESS OTHERWISE NOTED. BOLT SIZE TO BE AS NOTED ON PLANS. SEE SECTION 602 OF THE STANDARD SPECIFICATIONS. EXISTING CONTACT SURFACES SHALL BE CLEANED OF ALL EXISTING PAINT AND RUST TO BARE METAL PRIOR TO ATTACHMENT OF NEW MEMBERS. UNCOATED (BLACK) BOLTS MAY BE USED INSTEAD OF GALVANIZED BOLTS.
- (5) **CONCRETE:** TO BE CLASS A FC = 3000 PSI EXCEPT AS NOTED OTHERWISE.
- (6) **HIGH EARLY STRENGTH CONCRETE:** THE MIX IS TO MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, CLASS X. THE CEMENT CONTENT SHALL BE A MINIMUM OF 714 LBS. THE WATER-CEMENT RATIO SHALL BE A MAXIMUM OF 0.40. DESIGN AIR CONTENT SHALL BE 6% WITH  $\pm 2\%$  ACCEPTANCE RANGE IN THE FIELD. SLUMP SHALL BE  $\geq 1$  INCHES. IF USING A TYPE A, F, OR G WATER REDUCER, THE SLUMP SHALL BE MAXIMUM OF 8 INCHES. NO FLY ASH REPLACEMENT WILL BE PERMITTED. THE MINIMUM 28 DAY COMPRESSIVE STRENGTH SHALL BE 3,500 PSI. TRAFFIC SHALL NOT BE PERMITTED ON ANY OF THE REPAIRED AREAS UNTIL TEST SPECIMENS ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AND THE CONCRETE HAS BEEN IN PLACE A MINIMUM OF TEN (10) DAYS.
- (7) **CONCRETE CURING:** ALL CONCRETE IN REPAIR AREAS SHALL BE CURED ACCORDING TO THE STANDARD SPECIFICATIONS.

## MISCELLANEOUS GENERAL NOTES

- (8) **SHOP DRAWINGS:** REFER TO SECTION 105.02 OF THE STANDARD SPECIFICATIONS. IF USING PAPER COPIES, SHOP DRAWINGS ARE TO BE SENT TO THE BRIDGE REPAIR OFFICE IN THE DIVISION OF STRUCTURES, FOR ELECTRONIC SUBMITTALS, SEE SECTION 105.02 OF THE STANDARD SPECIFICATIONS. EACH SHOP DRAWING SHALL CONTAIN IN THE TITLE BLOCK THE FOLLOWING: THE STATE PROJECT NUMBER, COUNTY, BRIDGE NAME, BRIDGE NUMBER (OR STRUCTURE TYPE AND NUMBER), STATION, AND CONTRACT NUMBER. SHOP DRAWINGS WITH TITLE BLOCKS NOT INCLUDING THE FOREGOING IDENTIFICATION WILL BE RETURNED FOR CORRECTION BEFORE ANY REVIEWS FOR APPROVAL ARE CONDUCTED.
- (9) **DEMOLITION:** THE CONTRACTOR SHALL TAKE SPECIAL CARE TO PROTECT ANY PARTS OF THE STRUCTURE THAT ARE NOT TO BE REMOVED SPECIFICALLY. FOR FULL DEPTH SLAB REMOVAL, EXCEPT OVER BEAMS, THE MAXIMUM HAMMER SIZE IS 90 POUND CLASS. FOR PARTIAL DEPTH SLAB REMOVAL AND ANY WORK OVER THE BEAMS, THE MAXIMUM HAMMER SIZE IS 60 POUND CLASS; CHIPPING HAMMERS OF THE 15 POUND CLASS SHALL BE USED TO REMOVE CONCRETE FROM BENEATH ANY REINFORCING STEEL. SAWING OR CUTTING OF THE CONCRETE IS ACCEPTABLE AS LONG AS ANY SPECIFIED PROJECTION OF THE EXISTING REINFORCING STEEL IS MAINTAINED. EXPANSION JOINT REMOVAL SHALL FOLLOW THE SAME RESTRICTIONS AS FULL DEPTH SLAB REMOVAL. ALL DEVICES PROPOSED FOR CONCRETE DEMOLITION SHALL MEET THE APPROVAL OF THE ENGINEER.
- (10) THE CONTRACTOR IS NOT ALLOWED TO USE A HYDRAULIC RAM MOUNTED ON A BACKHOE (COMMONLY CALLED A HOE RAM), MINI EXCAVATOR, OR OTHER EQUIPMENT FOR ANY CONCRETE REMOVAL.

- (11) **GRAOUTED BARS IN DRILLED HOLES:** HORIZONTALLY DRILLED HOLES SHALL BE DRILLED ½" IN DIAMETER LARGER THAN THE BAR, CLEANED, PACKED WITH NON-SHRINK GROUT, AND THE BAR ROTATED (NOT DRIVEN) TO ITS SEAT. VERTICALLY DRILLED HOLES SHALL BE DRILLED ¼" IN DIAMETER LARGER THAN THE BAR, CLEANED, PACKED WITH EPOXY GROUT, AND THE BAR DRIVEN TO ITS SEAT. ALL GROUTING MATERIAL SHALL BE APPROVED BY TDOT MATERIALS AND TESTS.
- (12) **QUICK-SET PATCHING MATERIAL:** QUICK-SET PATCHING MATERIAL SHALL BE A POLYMER MODIFIED CEMENTITIOUS PATCHING MATERIAL. SEE TDOT QUALIFIED PRODUCTS LIST 13.009 POLY MOD CEMENT STRUCT PATCH VERT & OVER FOR ACCEPTABLE PATCHING MATERIALS.

## PAINTING NEW STEEL NOTES

- (13) **PAINTING OF NEW STEEL:** ALL STRUCTURAL STEEL SHALL BE BLAST CLEANED AND SHOP PRIMED. BLAST CLEANING SHALL BE IN ACCORDANCE WITH 603.05(B.2) OF THE STANDARD SPECIFICATIONS. PAINT SHALL BE SYSTEM "A", INORGANIC ZINC SYSTEM (QPL 3.001), AS STATED IN SECTION 603.06(A) OF THE STANDARD SPECIFICATIONS. COLOR OF THE URETHANE FINISH COAT SHALL COMPLY WITH AMS-STD-595A, FEDERAL STANDARD NO. 30059, BROWN. SEE SECTIONS 603 AND 910 OF THE STANDARD SPECIFICATIONS. COST OF SHOP PRIMECOAT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR STRUCTURAL STEEL. THE CONTRACTOR SHALL ALSO HAVE THE OPTION TO USE ORGANIC ZINC WHEN USING A PAINT SYSTEM FROM QPL 3.002. ORGANIC ZINC SYSTEMS SHALL BE FROM QPL 3.002.
- (14) SEE THE TDOT QUALIFIED PRODUCTS LIST 3.001 OR 3.002 FOR ACCEPTABLE COATINGS FOR THE PAINT SYSTEM. THE SAME MANUFACTURER SHALL SUPPLY ALL PRODUCTS USED, INCLUDING THINNERS.

## SPECIAL NOTES

- (15) NOTE: CONTRACTOR IS RESPONSIBLE FOR AND SHALL TAKE ALL PRECAUTIONS TO ENSURE THE STABILITY OF THE STRUCTURE DURING THE REPAIR.
- (16) NOTE: THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND QUANTITIES PRIOR TO ORDERING ANY MATERIALS.
- (17) **REQUIREMENTS AND RESTRICTIONS FOR PHASE CONSTRUCTION:** TWO (2) 11'-0" TRAFFIC LANES SHALL BE MAINTAINED AT ALL TIMES DURING PHASE CONSTRUCTION ON I-40. SEE TRAFFIC CONTROL PLANS FOR FURTHER DETAILS.

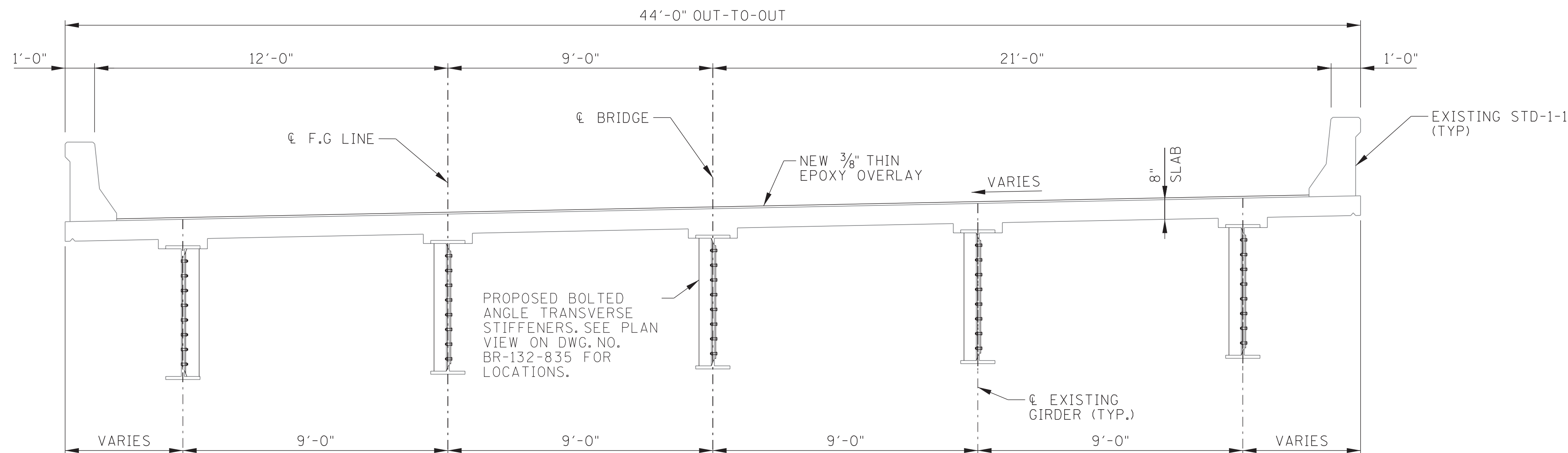
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TYPICAL CROSS-SECTION  
(LOOKING FORWARD ON SURVEY)

### THIN EPOXY OVERLAY NOTES:

THE TOP OF THE NEW OVERLAY SHALL CONFORM TO THE CROSS SLOPE AND GRADE OF THE BRIDGE.

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

THIN OVERLAY SYSTEM SHALL BE FROM THE QUALIFIED PRODUCTS LIST 23, SECTION 02.  
MINIMUM OVERLAY THICKNESS SHALL BE  $\frac{3}{8}$ ".

APPLICATION EQUIPMENT SHOULD:

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

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

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

FOR THE CLOSURE POUR MATERIAL, SEE MANUFACTURER'S RECOMMENDATION ON CURE TIME AND STRENGTH BEFORE THE OVERLAY IS PLACED.

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

THE CONCRETE DECK SURFACE SHALL BE CLEANED BY SHOTBLASTING TO REMOVE ANY OIL, DIRT, RUBBER, TRAFFIC STRIPPING, AND ANY OTHER POTENTIAL DETRIMENTAL MATERIAL SUCH AS CURING COMPOUND AND LAITANCES, WHICH THE MANUFACTURER AND ENGINEER'S OPINION WOULD PREVENT PROPER BONDING AND CURING OF THE MATERIAL. IN AREAS WHERE SHOTBLASTING EQUIPMENT CAN NOT REACH (I.E., ALONG BRIDGE RAILS) SANDBLASTING IS PERMITTED TO AN EXTENT TO THE ENGINEER'S AND MANUFACTURER'S APPROVAL. IMMEDIATELY BEFORE APPLICATION, ALL PREPARED SURFACES SHALL BE CLEANED WITH COMPRESSED AIR OR VACUUMED TO REMOVE DUST AND DEBRIS.

THE CONTRACTOR IS TO PREVENT THE TRACKING OF TACKCOAT AND CONSTRUCTION DEBRIS ACROSS THE BRIDGE DECK PRIOR TO APPLICATION OF THIN EPOXY OVERLAY. MILLING THE BRIDGE DECK WILL NOT BE AN OPTION FOR TACKCOAT AND DEBRIS REMOVAL.

ALL SURFACES THAT ARE TREATED SHALL BE DRY AT THE TIME OF APPLICATION. THE OVERLAY SHALL NOT BE APPLIED WHEN IT HAS RAINED 24 HOURS PRIOR TO, OR RAIN IS FORECAST WITHIN 8 HOURS AFTER, APPLICATION. THE MOISTURE CONTENT IN THE DECK SUBSTRATE SHALL BE TESTED. MOISTURE IS NOT TO EXCEED 4.5 PERCENT WHEN MEASURED BY ELECTRONIC METER OR BY TAPING A 4 FT X 4 FT POLYETHYLENE SHEET TO THE CONCRETE DECK, IF MOISTURE COLLECTS UNDER THE PLASTIC IN LESS TIME THAN IT WOULD TAKE FOR THE EPOXY TO CURE. IF EITHER TEST SHOWS EXCESS MOISTURE, THE DECK SHALL CONTINUE TO DRY BEFORE APPLICATION PROCEEDS.

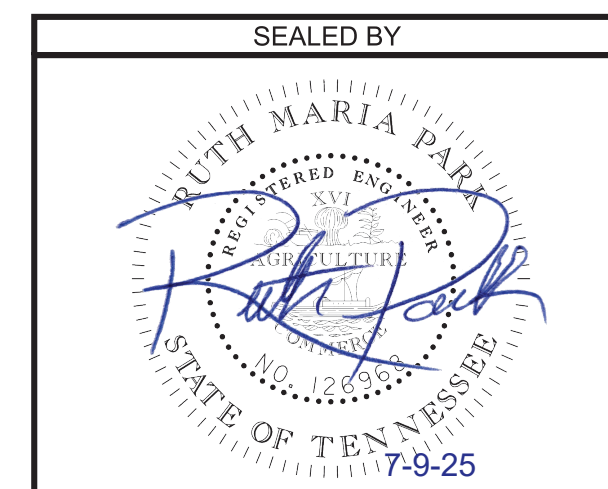
BLUSHING (A WAXY SURFACE COATING ON THE EPOXY) IS CAUSED BY THE REACTION OF MOISTURE WITH THE HARDENING AGENT. BLUSHING CREATES A SURFACE THAT MAKES FUTURE LAYERS DIFFICULT TO ADHERE. LIFTS THAT SHOW SIGNS OF BLUSHING SHALL BE REMOVED AND REPLACED PRIOR TO APPLICATION OF THE NEXT LAYER. THE COST TO REMOVE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

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

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

THICKNESS VERIFICATION THE PROJECT ENGINEER SHALL BE NOTIFIED OF THE NUMBER OF GALLONS USED ON THE PROJECT WITH NOTARIZED QUANTITY STATEMENTS FROM THE CONTRACTOR AND THE MANUFACTURER. THE CONTRACTOR SHALL VERIFY TO TDOT THAT THE OVERLAY IS AN AVERAGE OF AT LEAST  $\frac{3}{8}$  INCH THICK AT THREE RANDOM LOCATIONS AGREED UPON BY THE PROJECT ENGINEER AND THE MATERIAL MANUFACTURER REPRESENTATIVE. IF  $\frac{3}{8}$  INCH THICK AVERAGE IS NOT ACHIEVED, A RE-TEST SHALL BE PERFORMED IN ADJOINING AREAS. THIN AREAS SHALL BE RE-COATED AS DESCRIBED ABOVE BY THE CONTRACTOR AND REVERIFIED AT NO ADDITIONAL COST TO TDOT. THIS VERIFICATION MAY CONSIST OF CORES, HOLES, ETC., BUT IN ALL CASES ANY DESTRUCTIVELY TESTED AREAS SHALL BE REPAIRED BY THE CONTRACTOR BEFORE FINAL ACCEPTANCE BY THE PROJECT ENGINEER. SEE MANUFACTURER'S RECOMMENDATIONS FOR REQUIRED AMBIENT AND SURFACE TEMPERATURES AND HUMIDITY LIMITS FOR APPLICATION.

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



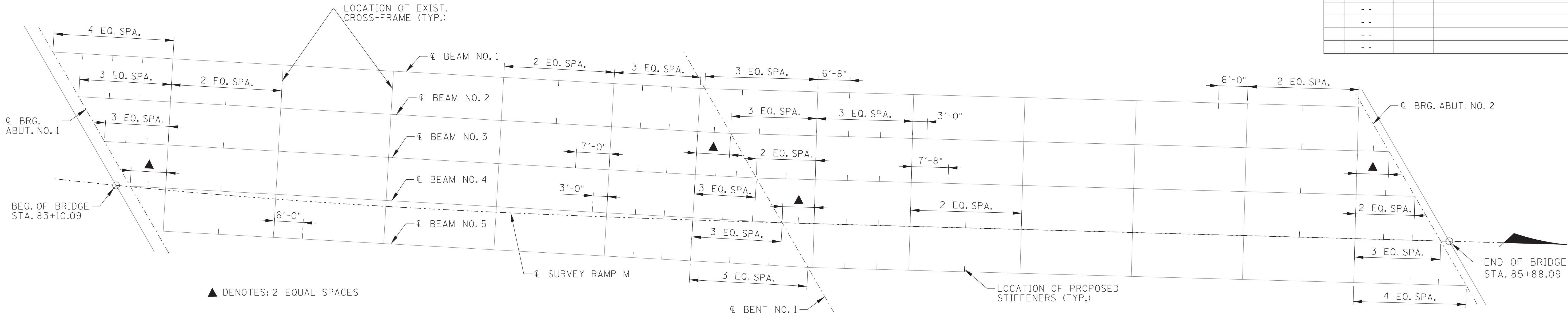
STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
SUPERSTRUCTURE  
REPAIR DETAILS  
RAMP M OVER  
INTERSTATE 40  
BR. NO. 19-10040-29.02  
FED. ID. NO. 19I00400161  
DAVIDSON COUNTY  
2025

BR-132-834



CONST. NO.:

PROJECT NO.		YEAR	SHEET NO.
19I040- M3 -015		2025	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
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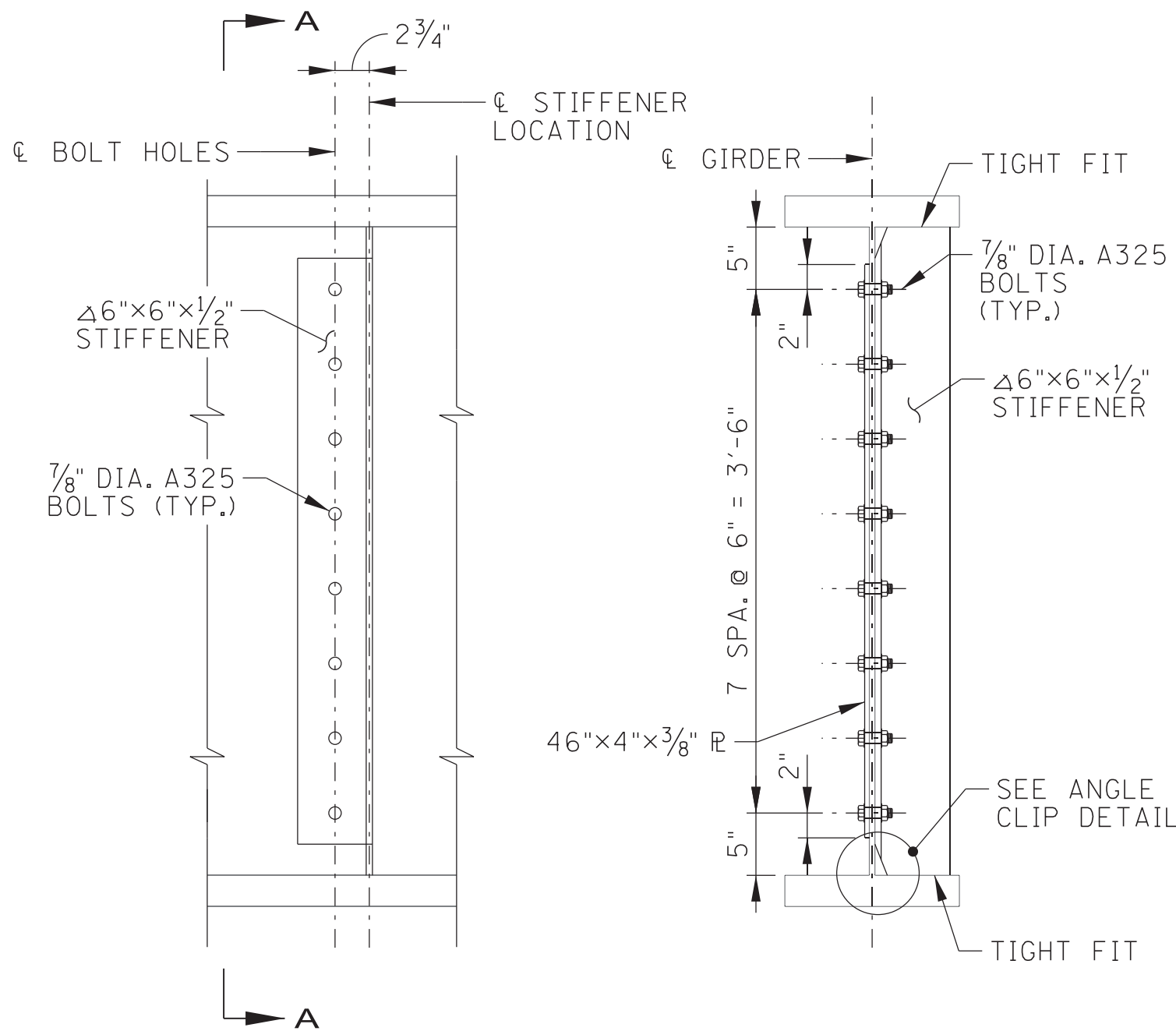
▲ DENOTES: 2 EQUAL SPACES

FRAMING PLAN

NOTE: SEE TRAFFIC CONTROL PLANS FOR SEQUENCE OF STIFFENER INSTALLATION

NOTES:

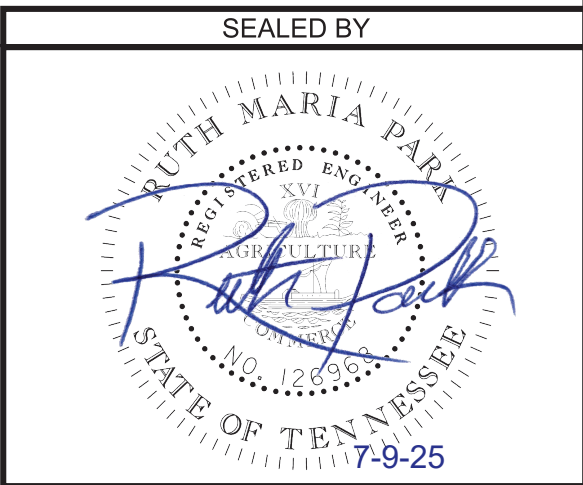
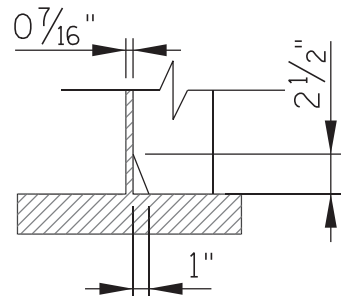
- ALL STEEL TO BE ASTM A709 GRADE 50 UNLESS OTHERWISE NOTED
- ALL BOLTS TO BE FIELD BOLTED.
- USE 7/8" Ø ASTM F3125 GRADE A325 TYPE 1 BOLTS
- ALL BOLTS SHALL BE TORQUED TO AASHTO SPECIFICATIONS.
- ALL NEW STRUCTURAL STEEL COMPONENTS SHALL BE PAINTED IN ACCORDANCE WITH SECTION 603.05(B.2) OF THE STANDARD SPECIFICATION AND ACCORDING TO PAINTING REQUIREMENTS. COLOR OF THE TOP COAT SHALL COMPLY WITH AMS-STD-595A, FEDERAL STANDARD NO. 30059, BROWN. COST OF PAINTING NEW STRUCTURAL STEEL TO BE INCLUDED IN ITEM NO. 602-10.32, STRUCTURAL STEEL (REPAIRS) (LB.).
- THE CONTACT SURFACES OF THE PROPOSED ANGLE STIFFENERS AND THE EXISTING STEEL SHALL BE CLEANED OF DEBRIS AND SURFACE CONTAMINANTS BEFORE THE STIFFENERS ARE ASSEMBLED AND BOLTED. COST OF CLEANING CONTACT SURFACES PRIOR TO BOLTING TO BE PAID UNDER ITEM NO. 602-10.32, STRUCTURAL STEEL (REPAIRS) (LB.).



PARTIAL GIRDER ELEVATION (STIFFENER ANGLE)

SECTION A-A

ANGLE CLIP DETAIL (TOP & BOTTOM)



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
SUPERSTRUCTURE  
REPAIR DETAILS  
RAMP M OVER  
INTERSTATE 40  
BR. NO. 19-I0040-29.02  
FED. ID. NO. 19I00400161  
DAVIDSON COUNTY  
2025

BR-132-835

PIN NO.: 133533.00  
DESIGN BY: R. PARK DATE: 07/2025  
DRAWN BY: R. PARK DATE: 07/2025  
SUPERVISED BY: D. MCCRARY DATE: 07/2025  
CHECKED BY: A. ALLSBROOK DATE: 07/2025





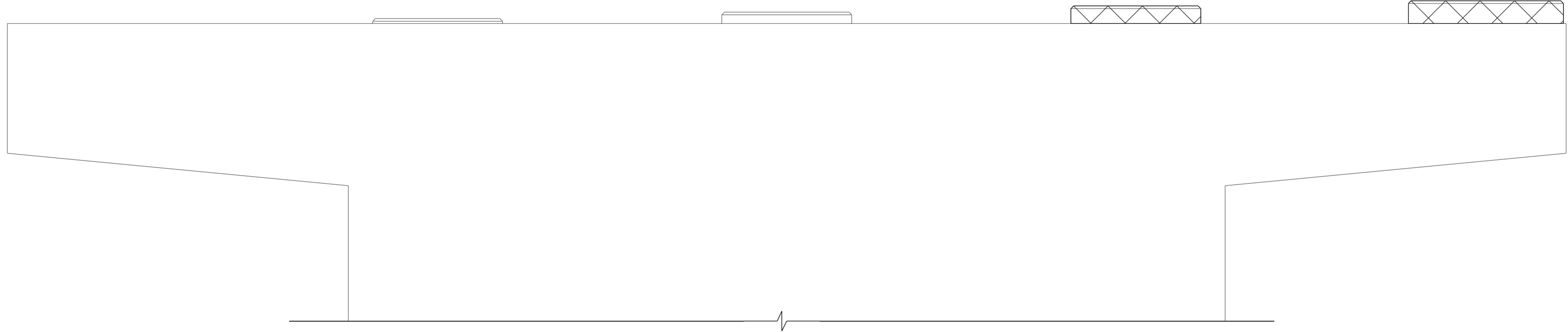
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PIN NO.: 133533.00  
DESIGN BY: R. PARK DATE: 07/2025  
DRAWN BY: R. PARK DATE: 07/2025  
SUPERVISED BY: D. MCCRARY DATE: 07/2025  
CHECKED BY: A. ALLSBROOK DATE: 07/2025

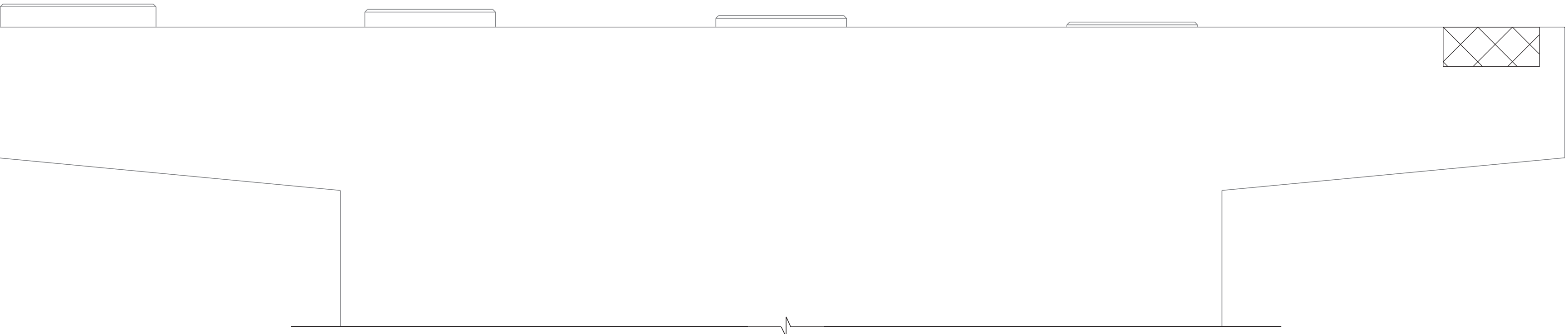


EST. REPAIR QUANTITIES

LOCATION	ITEM NO. 604-10.05 OR 604-10.54 APPROX. REPAIR AREAS (S.F.)
BENT NO. 1	10



ELEVATION  
(LOOKING FORWARD ON SURVEY)

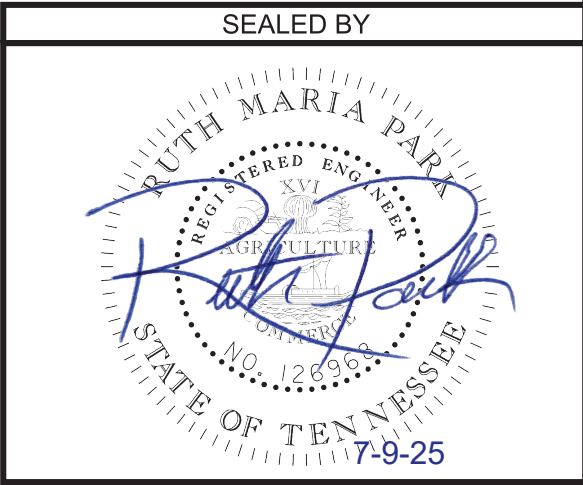


ELEVATION  
(LOOKING BACK ON SURVEY)

☒ DENOTES: APPROXIMATE AREA TO BE  
REPAIRED UNDER ITEM NO.  
604-10.05 AND/OR 604-10.54. SEE  
MISCELLANEOUS BRIDGE REPAIR  
DETAILS ON DWG. NO. BR-132-838.

CONST. NO.:

PROJECT NO.		YEAR	SHEET NO.
19I040- M3 -015		2025	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
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	- -		
	- -		
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STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BENT DETAILS

RAMP M OVER  
INTERSTATE 40  
BR. NO. 19-I0040-29.02  
FED. ID. NO. 19I00400161  
DAVIDSON COUNTY  
2025

BR-132-836



PROJECT NO.	YEAR	SHEET NO.
19I040- M3 -015	2025	

NO.	DATE	BY	BRIEF DESCRIPTION
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1. (PARTIAL DEPTH REPAIRS) PNEUMATIC HAMMERS HEAVIER THAN NOMINAL 60 POUND CLASS SHALL NOT BE USED.
2. (FULL DEPTH REPAIRS) PNEUMATIC HAMMERS HEAVIER THAN NOMINAL 90 POUND CLASS SHALL NOT BE USED. ALSO ALL DECK REPAIR OVER BEAMS WILL BE RESTRICTED TO 60 POUND PNEUMATIC HAMMERS.
3. CHIPPING HAMMERS OF THE 15 POUND CLASS SHALL BE USED TO REMOVE CONCRETE FROM BENEATH ANY REINFORCING STEEL.

NOTE: ITEM NO. 604-10.30 AND ITEM NO. 604-10.50 SHALL BE BID WITH THE CONTINGENCY THAT THESE ITEMS MAY BE INCREASED, DECREASED, OR ELIMINATED AS DIRECTED BY THE ENGINEER.

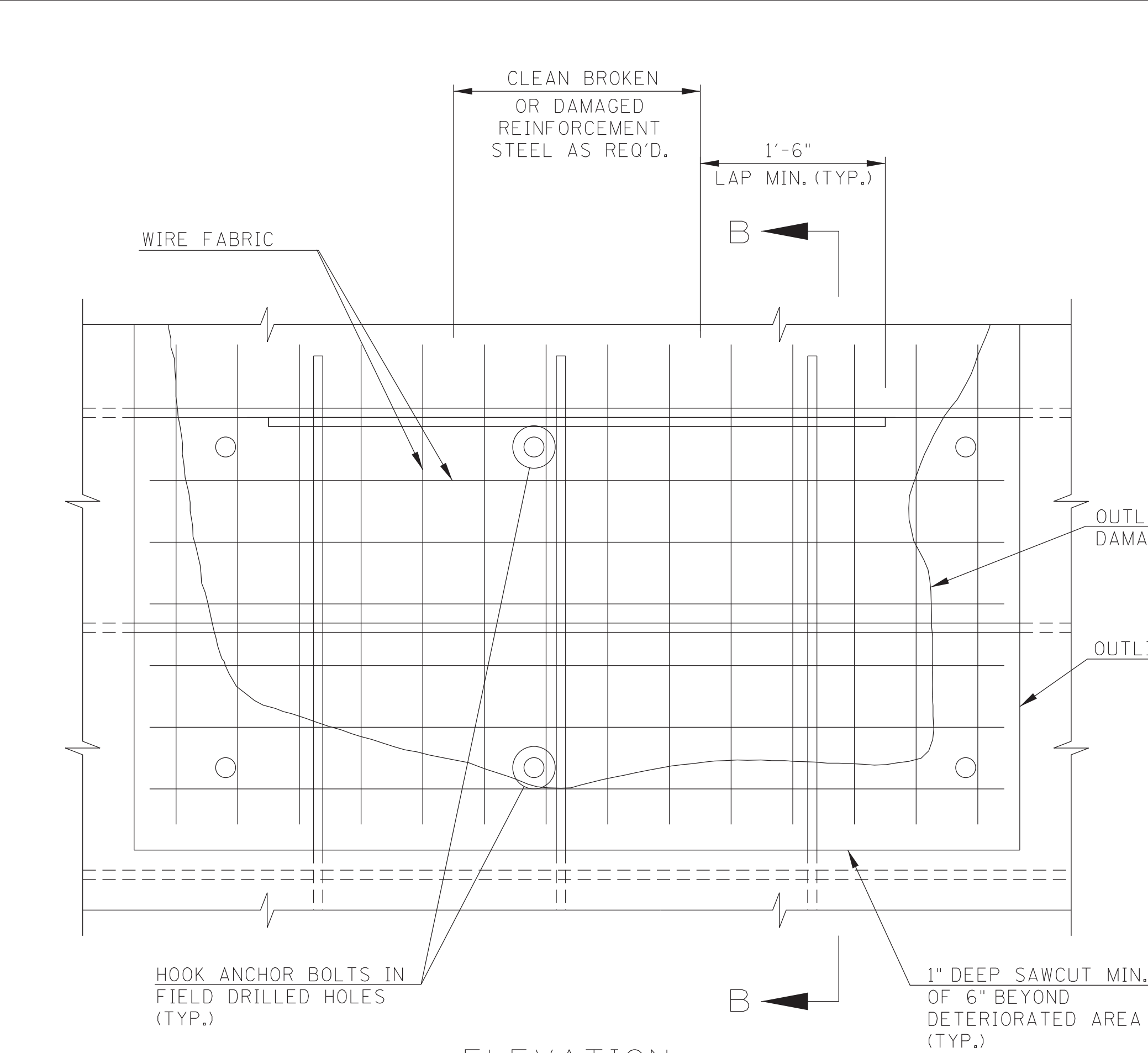


**Gresham  
Smith**

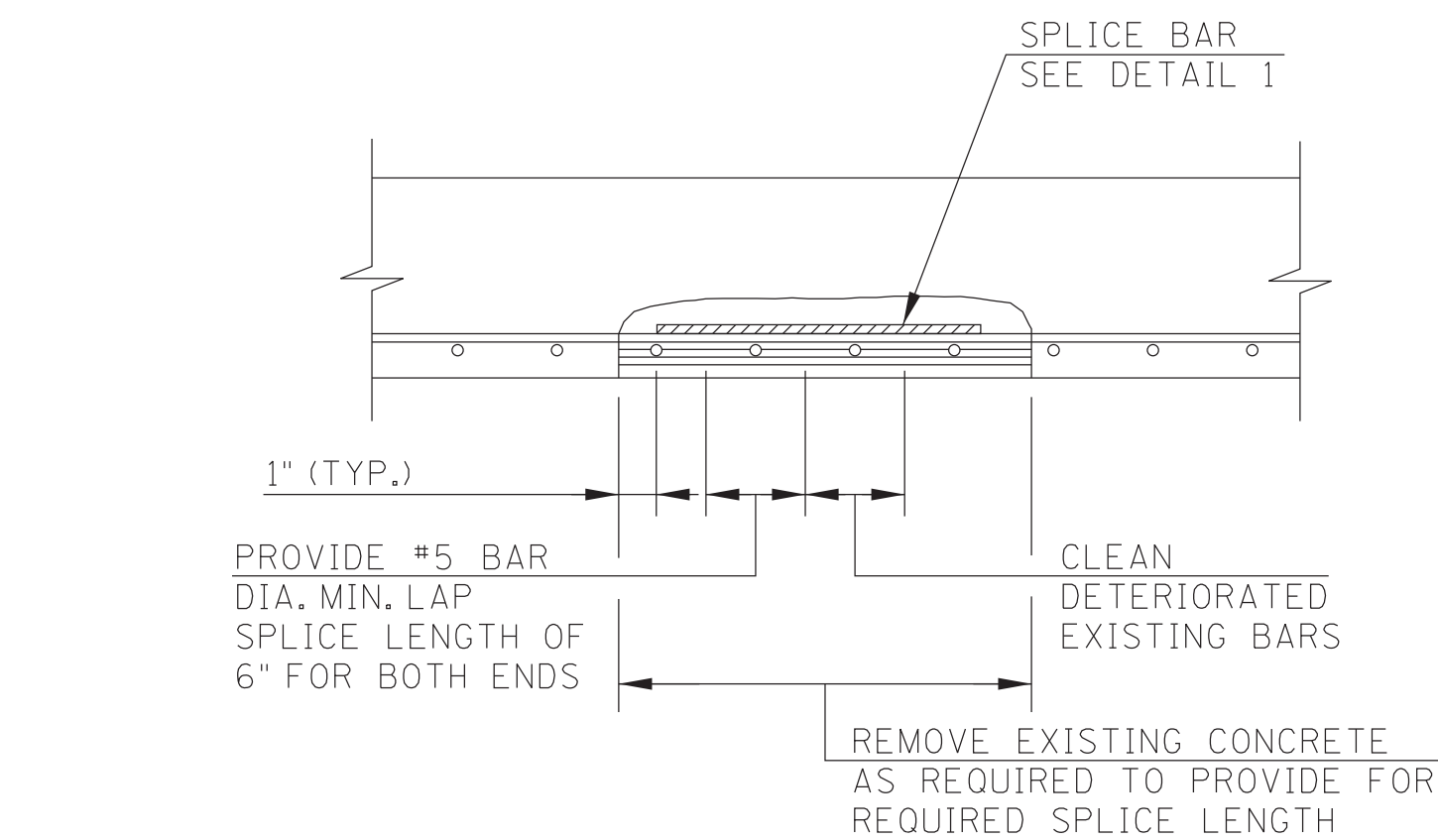
BR-132-837



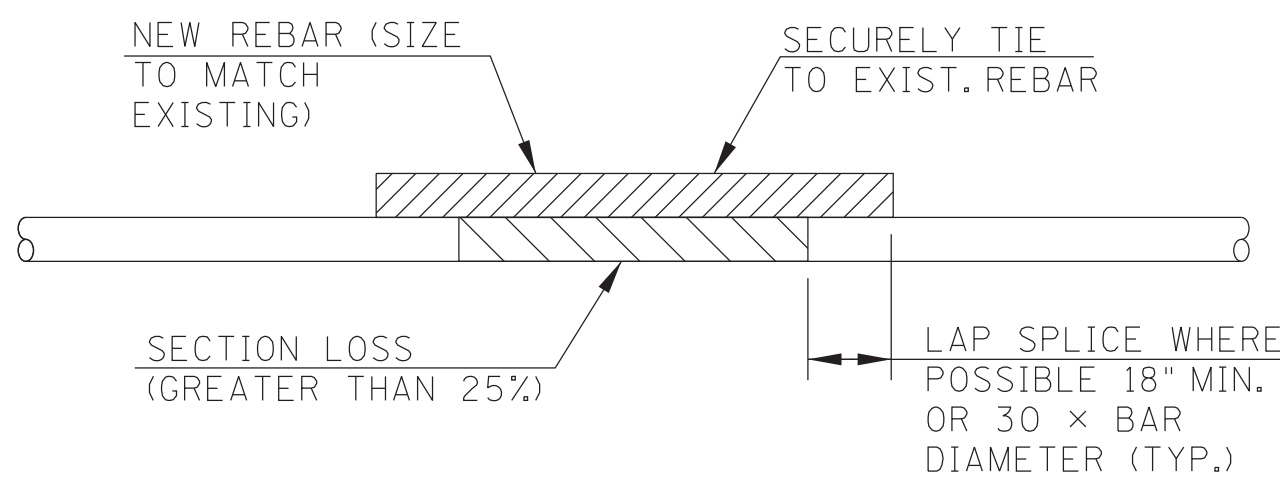
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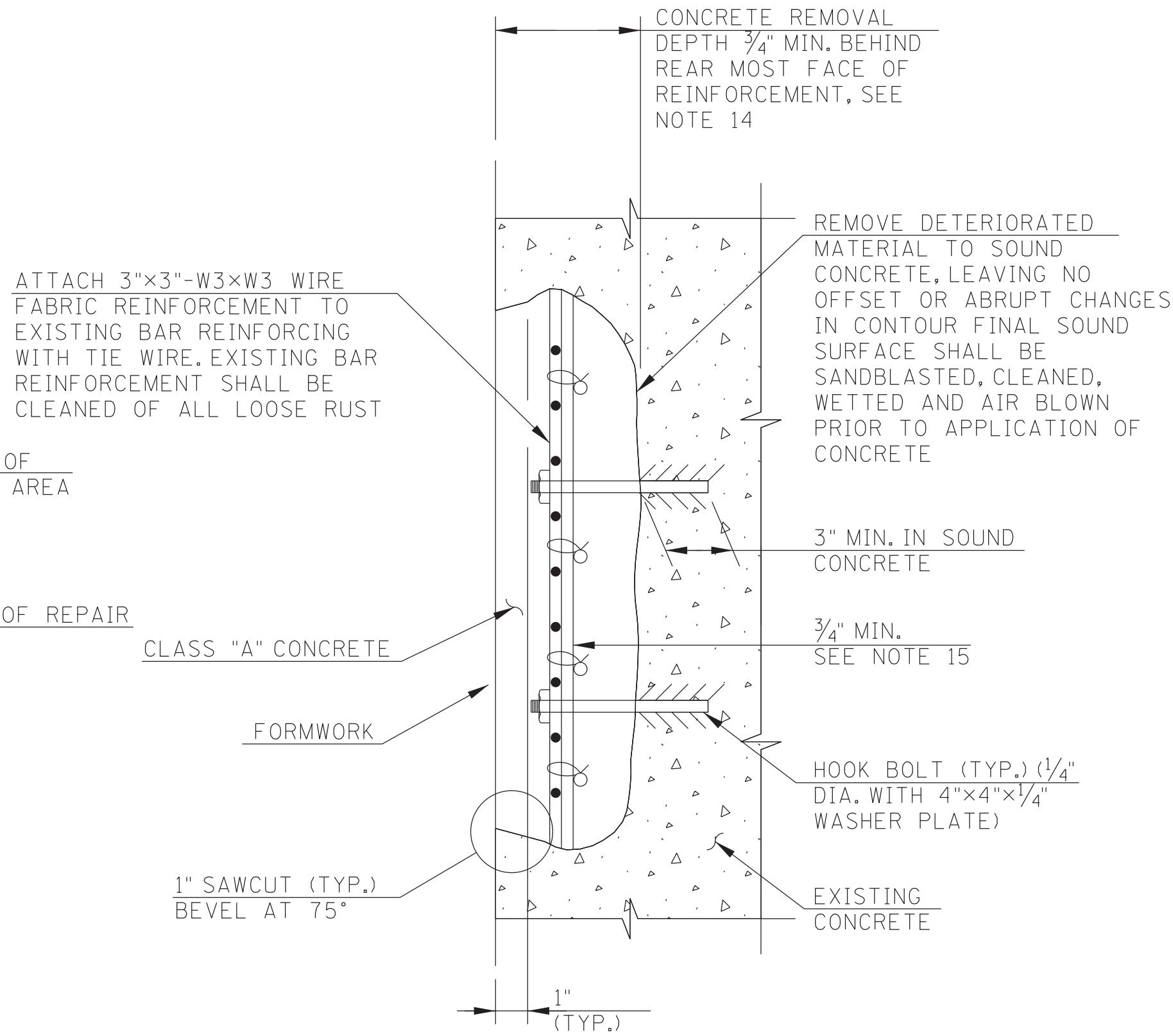
ELEVATION



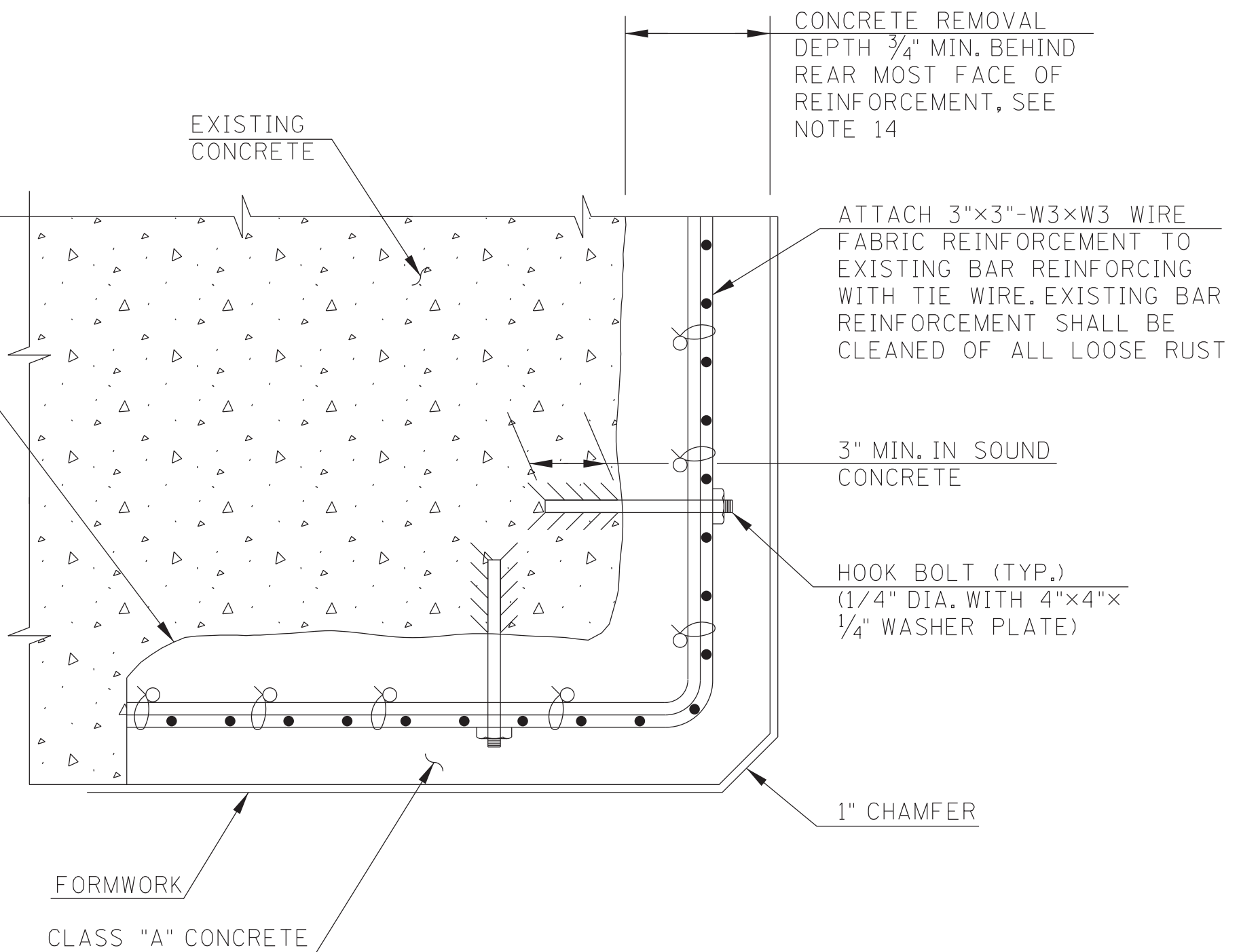
REINFORCEMENT REPAIR  
N.T.S.



DETAIL I



SECTION B-B



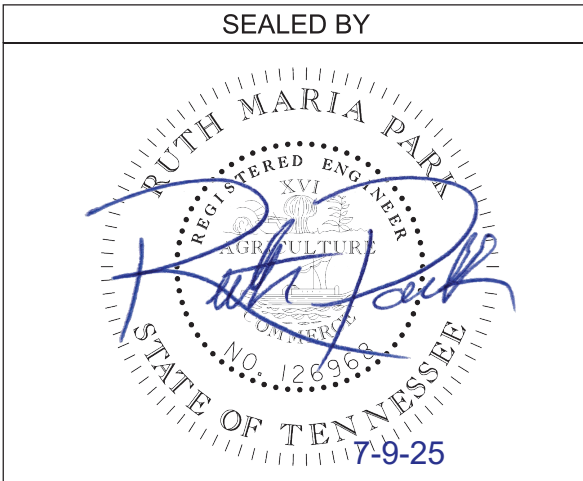
DETAIL AT CORNERS

CONST. NO.:

PROJECT NO.		YEAR	SHEET NO.
19I040- M3 -015		2025	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
	- -		
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NOTES:

1. THE CONTRACTOR SHALL VERIFY IN THE FIELD THE EXTENT OF ALL SPALL AND/OR DELAMINATED DAMAGE. ALL SPALLED OR DELAMINATED AREAS NOT INDICATED ON THESE DRAWINGS SHALL BE REPAIRED AS DIRECTED AND APPROVED BY THE ENGINEER.
2. REPAIR DETAILS APPLY TO ALL HOLLOW AREAS AND SPALLS IN EITHER PIERS OR ABUTMENTS AND OTHER AREAS DESIGNATED IN THE PLANS.
3. SURFACE PREPARATION, PROPORTION AND MIXING OF MATERIALS, APPLICATION OF MATERIALS, AND REPAIR PROCEDURES SHALL BE IN ACCORDANCE WITH SPECIFICATIONS.
4. NEW CONCRETE PATCHES SHALL MATCH SHAPE OF EXISTING CONCRETE SURFACES UNLESS NOTED OTHERWISE.
5. ALL EXPOSED REINFORCEMENT WITHIN REPAIR AREA SHALL BE CLEANED, AND SAND BLASTED. BROKEN PORTION OF REBARS SHALL BE REMOVED AND LAP SPLICED WITH NEW REBARS.
6. IF CORRODED REINFORCING BARS HAVE SECTION LOSSES EXCEEDING 25% THE CORRODED BARS SHALL BE REPLACED IN ACCORDANCE WITH THE REINFORCEMENT REPAIR DETAIL SHOWN ON THIS SHEET.
7. ALL CRACKS WHICH ARE ASSOCIATED WITH DELAMINATION SHALL BE CUT OUT TOGETHER WITH THE DELAMINATED CONCRETE.
8. TO THE EXTENT REASONABLE LIMITS OF ALL PATCHES IN ELEVATION SHALL MAINTAIN HORIZONTAL AND VERTICAL LINES UNLESS NOTED OTHERWISE.
9. IF REPAIR AREA EXTENDS NEAR EDGE OF MEMBER, DO NOT REMOVE DAMAGED REINFORCEMENT NEAR EDGE WITHIN MINIMUM LAP SPLICE LENGTH.
10. HOOK BOLTS SHALL BE SPACED AT 1'-0" CENTERS FOR REPAIRS LESS THAN 3" THICK AND 1'-6" FOR GREATER DEPTH.
11. IF REPAIR INCLUDES A CORNER OF MEMBER, PROVIDE HOOK BOLTS IN BOTH SURFACES.
12. WHERE NEW REINFORCING BAR HAS BEEN DETERMINED TO BE REQUIRED, BILL OF STEEL IS SHOWN ON THE REPAIR DRAWING. ADDITIONAL BAR NOT INDICATED ON THE DRAWINGS SHALL BE PROVIDED AS ORDERED BY THE ENGINEER.
13. NOTIFY THE ENGINEER IF DEPTH OF DETERIORATED CONCRETE FOUND EXCEEDS THE MINIMUM LIMIT SPECIFIED.
14. FOR AREAS WITH ONLY SURFACE DETERIORATION, THE ENGINEER MAY ELECT TO USE ITEM 604-10.05 WHICH DOES NOT REQUIRE THE REMOVAL OF CONCRETE BEHIND THE EXISTING REBAR.
15. HOOK BOLTS, WIRE FABRIC, AND REINFORCING STEEL SHALL BE INCLUDED IN PRICE BID FOR CONCRETE REPAIRS, ITEM NO. 604-10.54, OR CONCRETE, ITEM NO. 604-10.05 AS DESIGNATED BY THE ENGINEER.

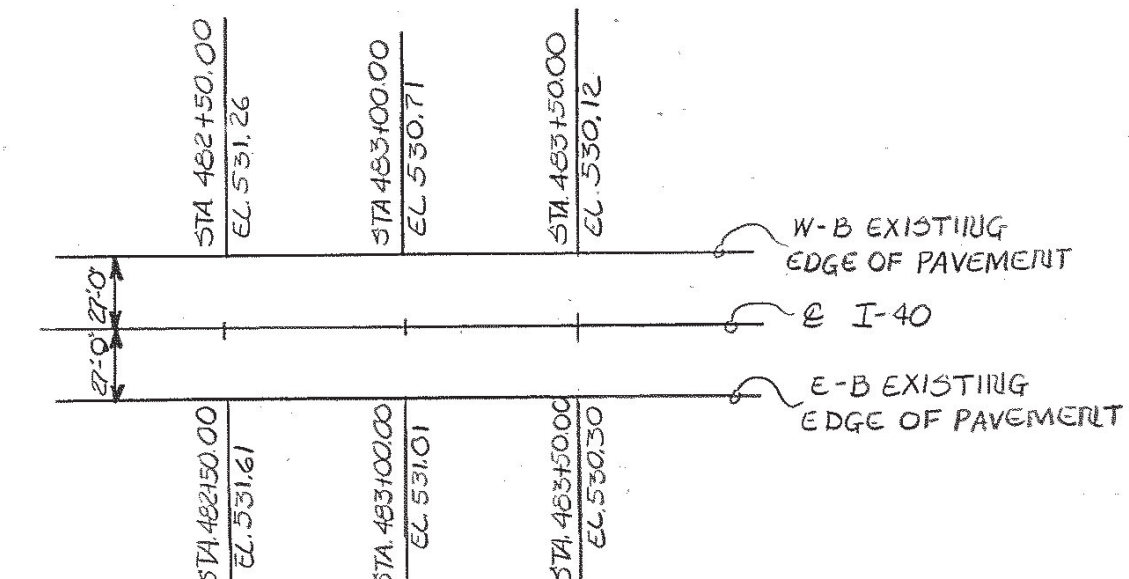


STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
MISCELLANEOUS  
REPAIR DETAILS  
RAMP M OVER  
INTERSTATE 40  
BR. NO. 19-10040-29.02  
FED. ID. NO. 19100400161  
DAVIDSON COUNTY  
2025

PIN NO.: 133533.00  
DESIGN BY: R. PARK DATE: 07/2025  
DRAWN BY: R. PARK DATE: 07/2025  
SUPERVISED BY: D. MCCRARY DATE: 07/2025  
CHECKED BY: A. ALLSBROOK DATE: 07/2025

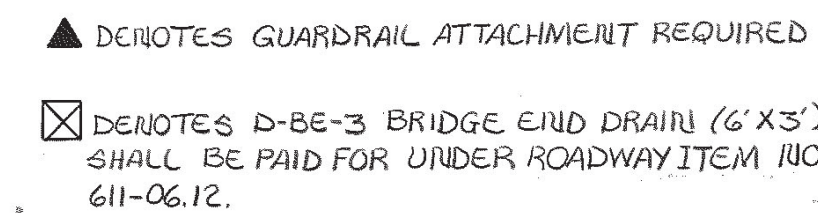






(SEE ROADWAY PLANS FOR FINAL PROFILE)

PI STA 489+38.28	Cc = 3995.98'
N 647,957.2771	Ex = 383.74'
E 1,821,437.7012	MO. = 359.65'
$\Delta C = 40^{\circ} 49' 03''$	$\Delta E = 0.039 \frac{1}{2}$
Dc = $01^{\circ} 00' 00''$	V = 55 M.P.H
Rc = 5729.578'	PC. = 468+06.47
Lc = 4081.75'	P.T. = 508+88.22
Tc = 2131.81	



### TRANSITION SKETCH

<u>TITLE</u>	<u>DWG. NO.</u>	<u>LATEST REV. DATE</u>
LAYOUT OF BRIDGE	M-206-159	
GENERAL NOTES & ESTIMATED QUANTITIES	M-206-160	
FOUNDATION DATA	M-206-161	
SUPERSTRUCTURE	M-206-162	
SUPERSTRUCTURE DETAILS	M-206-163	
SUPERSTRUCTURE STEEL DETAILS	M-206-164	
BEARING DEVICE	M-206-164.A	
BRIDGE SCREED	M-206-165	
BRIDGE APPROACH ELEVATIONS	M-206-166	
ABUTMENT NO.1	M-206-167	
ABUTMENT NO.1 DETAILS	M-206-168	
ABUTMENT NO.2	M-206-169	
ABUTMENT NO.2 DETAILS	M-206-170	
BENT NO.1	M-206-171	
BILL OF MATERIALS	M-206-172	

<u>TITLE</u>	<u>DWG. NO.</u>	<u>LATEST REV. DATE</u>
REINFORCING BAR SUPPORT		
DETAIL FOR CONCRETE SLABS	K-20-14	8-27-86
MISCELLANEOUS ABOUTMENT AND DRAINAGE DETAILS	K-25-150	6-25-87
REINFORCED CONCRETE PAVEMENT		
@ BRIDGE ENDS	K-26-144	7-17-81
* BRIDGE RAILING - CONCRETE PARAPET	M-28-1	5-18-88
STANDARD PRECAST, PRESTRESSED		
BRIDGE DECK PANELS	M-164-24, 25	1-11-88
* STRIP SEAL EXPANSION JOINT	M-156-108	8-25-86

\* THIS STANDARD IS TO BE PRINTED WITH PLANS.

<u>TITLE</u>	<u>DWG. NO.</u>	<u>LATEST REV. DATE</u>
APPROVAL OF SHOP DRAWINGS	103A	7-2-87
CONCRETE STRUCTURES	604	11-6-87
STRUCTURAL CONCRETE	604C	1-26-88
PRECAST PRESTRESSED BRIDGE DECK PANELS	604P	11-11-85
RIDGEBILITY OF BRIDGE DECKS AND ROADWAY APPROACHES	604R	9-8-87
EPOXY COATED REINFORCING STEEL	607A	3-25-85
SECTION 602- STEEL STRUCTURES	602	9-30-85
PAINTING	603A	9-22-86

STRIP SEAL EXPANSION JOINTS \_\_\_\_\_ 6045 \_\_\_\_\_ 3-14-88  
ESTIMATED 2,008 ADT = 49,400  
42'-0" ROADWAY WITH M-28-1 BRIDGE RAIL

LAYOUT OF BRIDGE --  
BRIDGE NO. 2  
RAMP 'M' OVER INTERSTATE 40  
BRIDGE I.D. No. 19IC00400/161  
STATION 84+49.09  
DAVIDSON COUNTY  
1988

M-206-159

DESIGNED BY	J.C. MATHIS	DATE	7-88
DRAWN BY	GEORGE KOKNIKOSKI	DATE	7-88
SUPERVISED BY	HARRISON / BROOKS	DATE	7-88
CHECKED BY	J.C. MATHIS	DATE	7-88

CLASS 'A' GRADING 'D' 7 C.Y.



## GENERAL NOTES

SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION. (MARCH 1981 EDITION).  
LOADING: HS 20-44  
DESIGN SPECIFICATIONS: AASHTO 1983 EDITION WITH ADDENDA.  
CONCRETE: TO BE CLASS 'A' (CAST-IN-PLACE) F'c = 3000 PSI.

EXCEPT, DECK SLAB TO BE F'c=4,500 PSI. CLASS 'A' CONCRETE FOR BRIDGE DECKS SHALL BE IN ACCORDANCE WITH SECTION 604 OF THE STANDARD SPECIFICATIONS EXCEPT AS MODIFIED BY SPECIAL PROVISION 604-C.

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. WHEN THE WIDTH OF THE OVERHANG EXCEEDS THE DEPTH OF THE EXTERIOR GIRDER, DETAILS AND DESIGN CALCULATIONS FOR THE CANTILEVER SUPPORT SYSTEM SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

BEARING DEVICES SHALL BE IN ACCORDANCE WITH THE DETAILS AND DIMENSIONS SHOWN ON DRAWING M-206-164A. THE CONTRACTOR MAY ALSO SUBMIT ALTERNATE DETAILS FOR APPROVAL.

REINFORCING STEEL: TO BE ASTM A615 GRADE 60. STANDARD CRSI HOOK DETAILS APPLY UNLESS OTHERWISE NOTED ON BILL OF STEEL. SPACING DIMENSIONS ARE CENTER TO CENTER UNLESS OTHERWISE NOTED ON DETAIL DRAWINGS. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, REINFORCEMENT SHALL BE PLACED WITHIN A TOLERANCE OF  $\pm 1/2$ ". THE SUFFIX E, FOR BARS SO MARKED, DENOTES EPOXY COATED REINFORCEMENT. SEE SPECIAL PROVISION 907A.

BRIDGE RAIL SYSTEM: BUILD PARAPETS ACCORDING TO STANDARD DRAWING M-28-1.

SHOP DRAWINGS: SEE SPECIAL PROVISION NO. 105A.

CONCRETE SEAL: TO BE EITHER:

A. SONNIEBORN HIM 5000 S.B. OR R (SPRAY BRUSH OR ROLL ON)

B. 3M SCOTCH CLAD, COLD APPLIED, SINGLE COMPONENT MOISTURE CURING POLYURETHANE ELASTOMER.

C. HOPPER'S 300M

CONCRETE SEAL TO BE APPLIED TO THE FRONT VERTICAL FACE OF THE ABUTMENT BACKWALL, THE FRONT AND TOP OF ABUTMENT BEAMS OR ANY OTHER FACES THAT ARE DEEMED NECESSARY) BEFORE PLACEMENT OF BEARING DEVICES AND APPLYING TEXTURED COATING. CONCRETE SHALL BE CLEAN AND DRY BEFORE APPLYING THE CONCRETE SEAL AND THE THICKNESS OF THE SEAL SHALL NOT BE LESS THAN 50 MILS. THE COST SHALL BE INCLUDED IN THE UNIT PRICE OF THE EXPANSION DEVICE.

STRUCTURAL STEEL: SEE NOTES ON DRAWING NO. M-206-162.

WELDING: SEE SPECIAL PROVISION NO. 602 AND NOTES ON DRAWING NO. M-206-164.

RADIOGRAPHIC, ULTRASONIC, AND MAGNETIC INSPECTION: SEE SPECIAL PROVISION NO. 602. NOTES ON DRAWING NO. M-206-162.

STEEL STRUCTURES: SEE TENNESSEE STANDARD SPECIFICATIONS SECTION 602 AND NOTES ON DRAWING NO. M-206-162.

PAINT: SYSTEM B - INORGANIC ZINC - URETHANE FINISH *BROWN* TOP COAT SEE TENNESSEE STANDARD SPECIFICATION 603.05(b) AND SPECIAL PROVISION 603A.

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.

## ESTIMATED QUANTITIES

\*

ITEM NO.	DESCRIPTION	UNIT	TOTAL	SUPERSTRUCTURE	ABUTMENT NO.1	BENT NO.1	ABUTMENT NO.2
② 204-02.01	DRY EXCAVATION (BRIDGES)	C.Y.	96		50		46
② 204-04.01	ROCK EXCAVATION (BRIDGES)	C.Y.	48		12		36
204-05	ROCK DRILLING (BRIDGES)	L.F.	24		12		12
③ 602-03	STEEL STRUCTURES	L.S.	1				
④ 604-01.12	CLASS 'A' CONCRETE (BRIDGE DECK)	C.Y.	317	315	2		
④ 604-02.03	EPOXY COATED REINFORCING STEEL	LB.	87,573	87,573			
④ 604-03.01	CLASS 'A' CONCRETE (BRIDGES)	C.Y.	107	65	24		18
④ 604-03.02	STEEL BAR REINFORCEMENT (BRIDGES)	LB.	15,703	5,796	5,083		4,824
① 604-03.04	PAVEMENT AT BRIDGE ENDS	S.Y.	220				
604-04.01	APPLIED TEXTURE FINISH (NEW STRUCTURES)	S.Y.	958				
⑩ ⑦ 604-11.01	EXPANSION DEVICE @ ABUTMENT NO.1	L.F.	52		52		
⑤ ⑥ 620-03	CONCRETE PARAPET (M-28-1)	L.F.	601				
④ 710-09.01	6" PERF. PIPE WITH VERTICAL DRAIN SYSTEM	L.F.	122		61		61
710-09.02	6" PIPE UNDERDRAIN	L.F.	33		17		16
④ 908-21.02	BEARINGS (ABUTMENT No.1)	EA.	5		5		
④ 908-21.03	BEARINGS (BENT No.1)	EA.	5			5	

① NOTE: SQUARE YARD FOR PAVEMENT AT BRIDGE ENDS SHALL BE MEASURED AS ROAD SURFACE AREA AND SHALL INCLUDE ALL CONCRETE, REINFORCING STEEL, PILES, JOINT MATERIAL, NOTCH FOR ROADWAY DRAIN, SURFACE FINISH AS PER SP604 AND ANY OTHER INCIDENTALS NECESSARY FOR COMPLETE INSTALLATION.

② EXCAVATION BASED ON EXISTING GROUND AND FINAL PROFILE.

④ ⑤ NOTE: LUMP SUM: TOTAL ESTIMATED WEIGHT OF 515,070 LBS. OF (A&B) STRUCTURAL STEEL INCLUDES SHEAR CONNECTORS, BOLTS, ETC. ALSO SEE TENNESSEE STANDARD SPECIFICATIONS SECTION 602.53 AND 602.54.

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

⑤ NOTE: THE COST OF 8 INSERT ASSEMBLIES AND 32 7/8" DIA. X 4" HEX HEAD BOLTS, (A307), TO BE INCLUDED IN ITEM 620-03.

⑥ NOTE: ALL REINFORCING STEEL IN THE PARAPETS SHALL BE EPOXY COATED. PRICE TO BE INCLUDED IN THE PRICE BID FOR ITEM 620-03.

⑦ THE EXPANSION JOINT AT ABUT. NO.1 SHALL BE IN ACCORDANCE WITH SPECIAL PROVISION 604S AND STANDARD DRAWING M-156-108. THE TOTAL REQUIRED MOVEMENT IS 4". SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF STRUCTURES FOR APPROVAL.

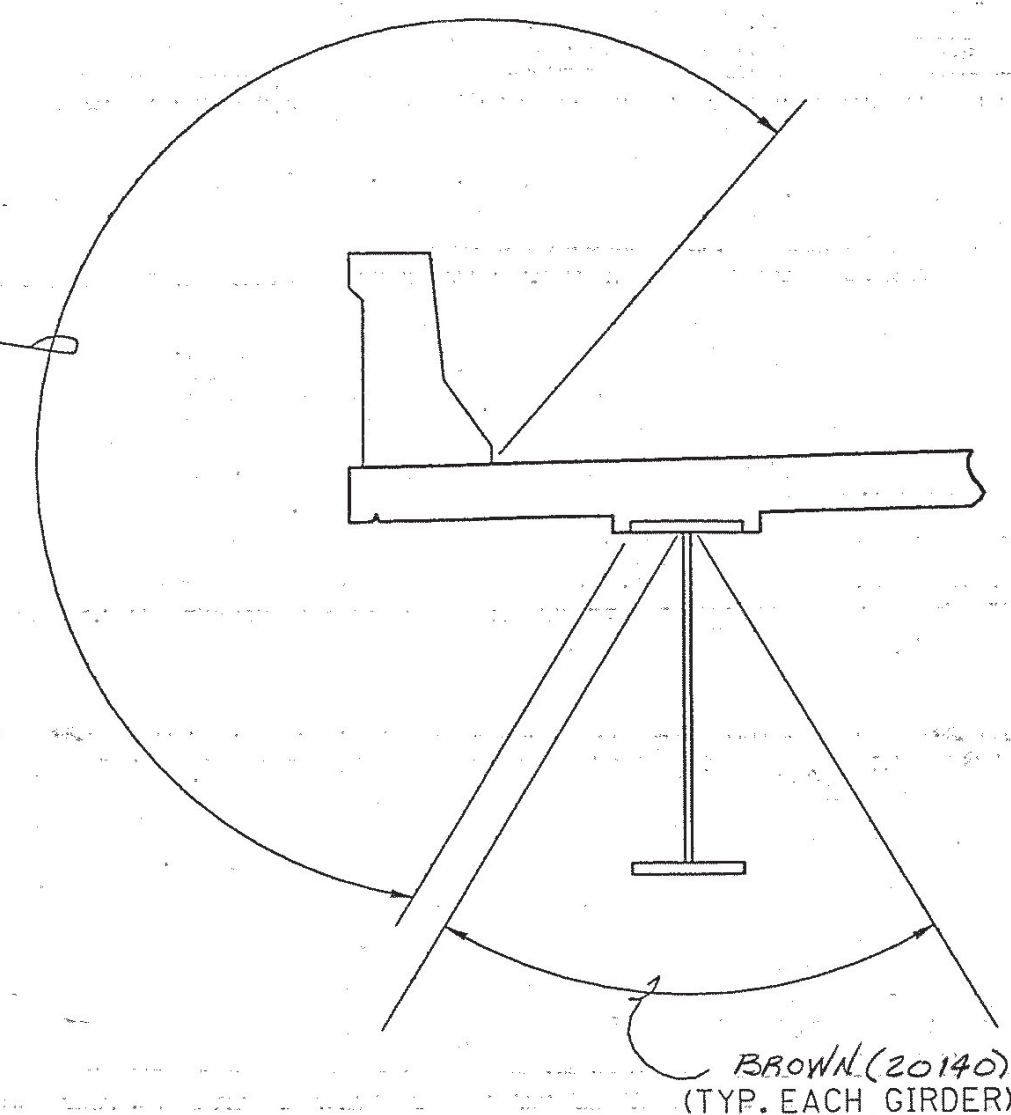
⑧ NOTES: COST OF RUBBER BONDING CEMENT AND ELASTOMERIC BEARING PADS TO BE INCLUDED IN UNIT PRICE BID FOR CLASS 'A' CONCRETE.

⑨ NOTE: THE COST OF BITUMINOUS-FIBERBOARD, ETC., AND ALL MISCELLANEOUS JOINT MATERIAL TO BE INCLUDED IN BRIDGE ITEMS BID ON.

⑩ THE PRICE BID FOR ROADWAY EXPANSION DEVICES TO INCLUDE THE COST OF 62 S.Y. OF CONCRETE SEAL REQUIRED. SEE GENERAL NOTES FOR DESCRIPTION OF CONCRETE SEAL.

APPLIED TEXTURE FINISH  
MOUNTAIN GRAY  
NO. 36440

\* NOTE : CONSTRUCTION OF BENT FOR THIS STRUCTURE WAS INCLUDED IN A PREVIOUS CONTRACT.



## APPLIED TEXTURE FINISH SKETCH

FINISHING CONCRETE SURFACES: CONCRETE FINISHING SHALL BE IN ACCORDANCE WITH SECTION 604.22 OF THE TENNESSEE STANDARD SPECIFICATION. AN APPLIED TEXTURE FINISH SHALL BE USED IN LIEU OF A CLASS 2 FINISH. THE COLOR OF THE FINISH SHALL BE SIMILAR TO MOUNTAIN GRAY, FEDERAL SPECIFICATION NO. 36440, FEDERAL COLOR STANDARD NO. 595A, AND 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 604-04.01.

NOTE: IN ADDITION TO AREAS SHOWN IN THE ABOVE SKETCH, THE FOLLOWING EXPOSED AREAS SHALL RECEIVE AN APPLIED TEXTURE FINISH: WINGWALLS, EXTERIOR PORTIONS OF ENDWALLS, ABUTMENT, AND BENT.

BRIDGE No. 2

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

GENERAL NOTES AND  
ESTIMATED QUANTITIES  
RAMP 'M' OVER INTERSTATE 40  
STATION 84+49.09  
DAVIDSON COUNTY  
1988

DESIGNED BY J.C. MATHIS DATE 5-88  
DRAWN BY GEORGE KORNIKOSKI DATE 5-88  
SUPERVISED BY HARBISON/BROOKS DATE 6-88  
CHECKED BY J.C. MATHIS DATE 8-88

CORRECT *Edward P. Wasserman*  
ENGINEER OF STRUCTURES  
APPROVED *David Evans*  
DIRECTOR OF HIGHWAYS

M-206-160



P.E. NO. 19008-5144-44

B.M. EL. 520.87  
0.4' RT. STA. 486+63.00  
I-40 CENTER OF MAN-  
HOLE IN MEDIAN.

NOTE: THIS DRAWING IS FOR FOUNDATION INFORMATION ONLY AND IS NOT TO BE USED AS A LAYOUT.

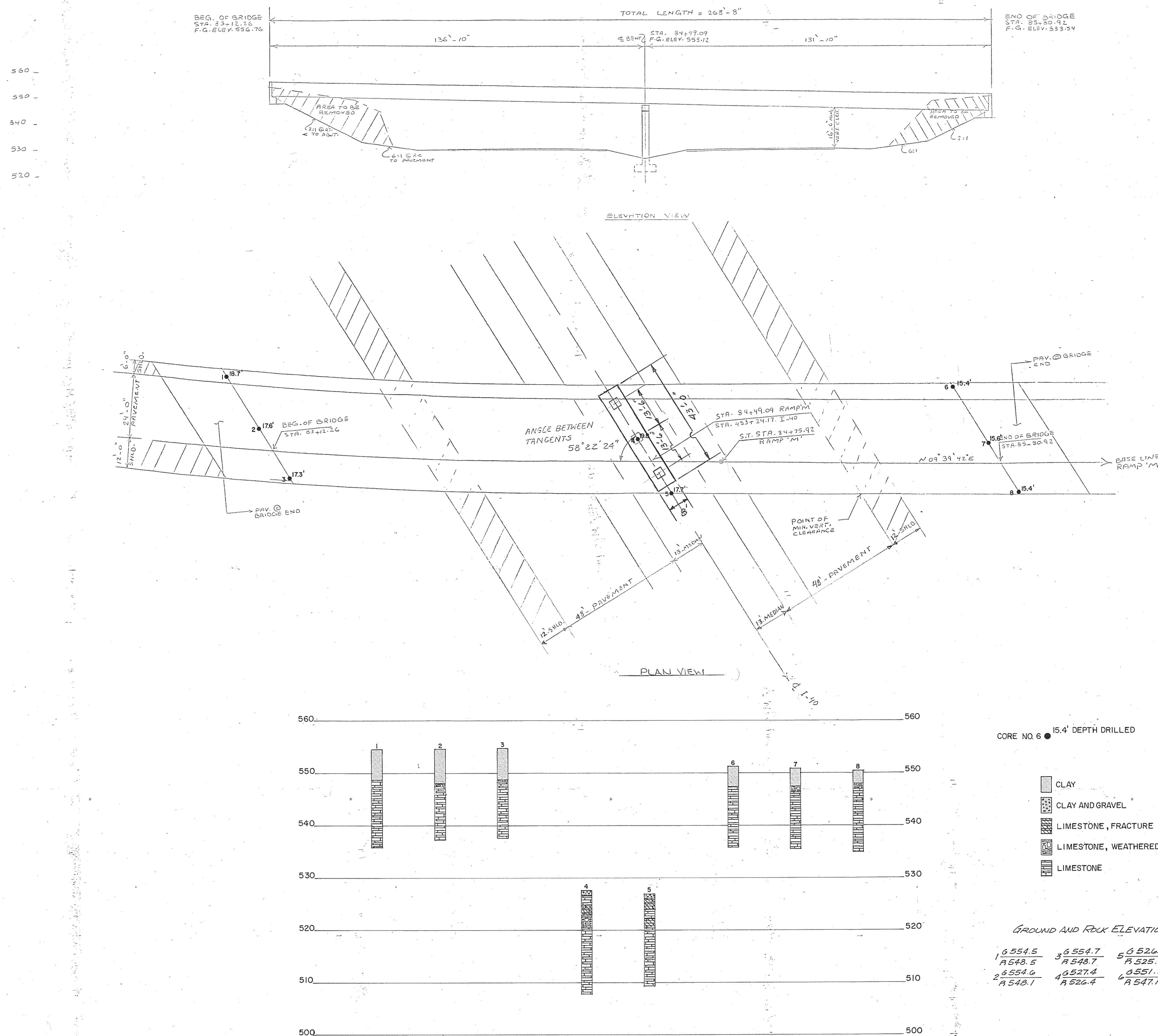
BRIDGE No. 2

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

FOUNDATION DATA  
RAMP "M" over  
INTERSTATE 40  
STATION 84+49.09  
DAVIDSON COUNTY  
1988

CORRECT Edward P. Wasserman  
ENGINEER OF STRUCTURES  
APPROVED Lewis Evans  
DIRECTOR OF HIGHWAYS

4-206-161



DESIGNED BY BF & MBN DATE 87  
DRAWN BY Donna Douglas DATE 12-87  
SUPERVISED BY BL Harbison DATE 12-87  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_



Const.No.19008-3160-44

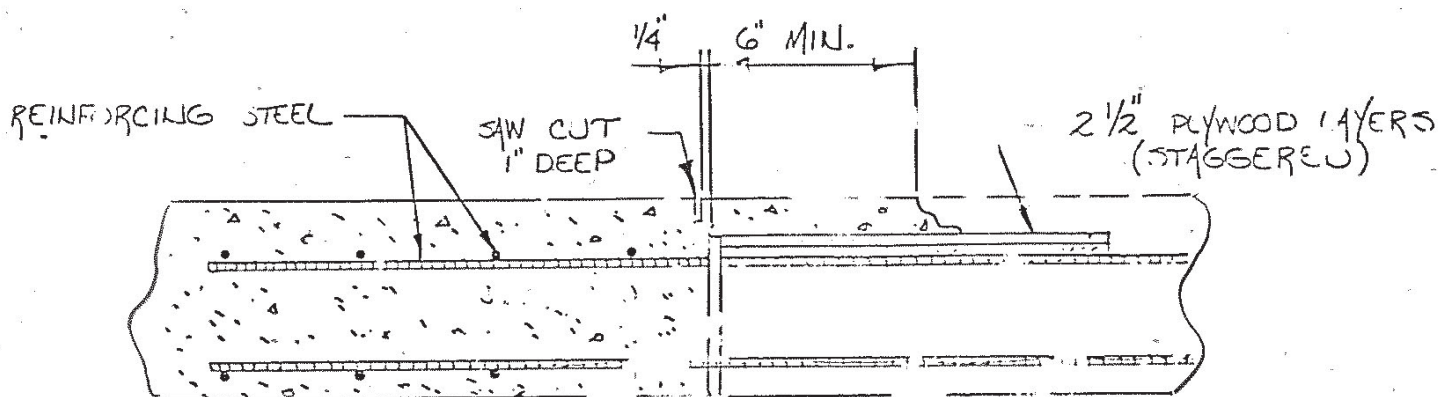
PROJECT NO.		YEAR	SHEET NO.
IR-40-5(01)221		1988	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	11-22-88	JCM	KEY TYPICAL CROSS-SECTION, SLAB PLAN AND ESTIMATED QUANTITIES
2	6-9-89	JCM	REV. EPOXY-COATED REINF. AND STEEL BAR REINF. QTY.
3	10-11-89	JCM	REV. SLAB PLAN AND ESTIMATED QUANTITIES.

POURING SEQUENCE:

THE SLAB SHALL NOT BE POURED UNTIL ALL STRUCTURAL STEEL IS ERECTED AND WELDING AND BOLTING COMPLETE. ALL JOINTS ARE TO BE MADE IN NUMERICAL SEQUENCE. POUR NO. 1 SHALL PROCEED IN A DIRECTION FROM MIDSPAN TO THE ABUTMENT JOINTS WITH THE SAME NUMERICAL DESIGNATION MAY BE MADE SIMULTANEOUSLY. THE CONTRACTOR SHALL MAKE ADEQUATE PROVISIONS DURING PLACEMENT OF SLAB TO PREVENT THE EXTERIOR BEAM FROM TWISTING. NO PORTION OF THE PARAPET SHALL BE POURED UNTIL THE ENTIRE SLAB IS IN PLACE.

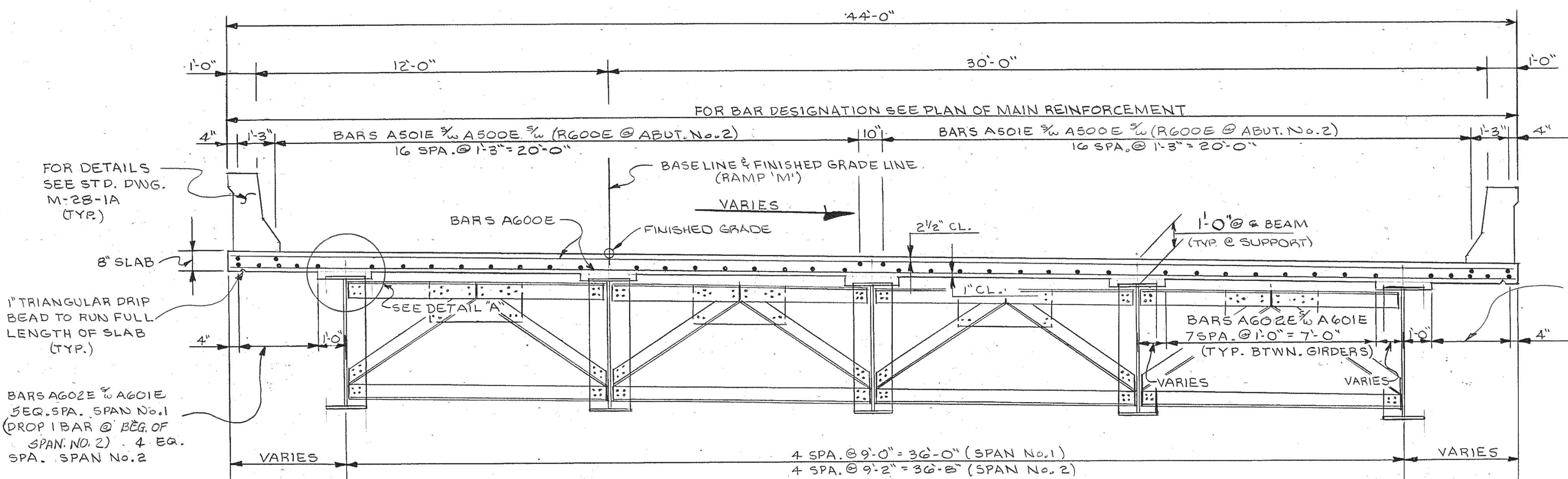
CONSTRUCTION JOINTS SHALL BE IN ACCORDANCE WITH THE DETAIL SHOWN ON THIS SHEET.

ALL SLAB



SLAB CONSTRUCTION JOINT

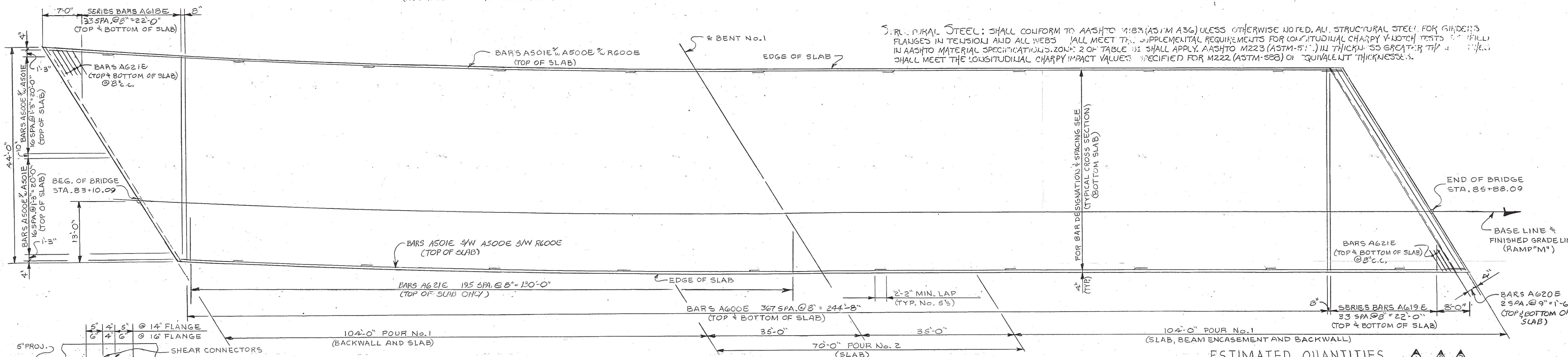
STRUCTURAL STEEL: SHALL CONFORM TO AASHTO M183 (ASTM A36) UNLESS OTHERWISE NOTED. ALL STRUCTURAL STEEL FOR GIRDERS (FLANGES IN TENSION) AND ALL WEBS SHALL MEET THE SUPPLEMENTAL REQUIREMENTS FOR LONGITUDINAL CHARTER V-NOTCH TESTS AS FILL IN AASHTO MATERIAL SPECIFICATIONS, 2011, 2 OF TABLE 31. SHALL APPLY. AASHTO M223 (ASTM-A571) 111 THICKNESS GREATER THAN 1/2 IN. SHALL MEET THE LONGITUDINAL CHARTER IMPACT VALUES SPECIFIED FOR M223 (ASTM-A571) OF EQUIVALENT THICKNESSES.



TYPICAL AT SUPPORT

TYPICAL CROSS SECTION

TYPICAL AT MID-SPAN



SLAB PLAN (SHOWING MAIN REINFORCEMENT & POURING SEQUENCE)

ESTIMATED QUANTITIES

ITEM	CLASS 'A' CONCRETE (BRIDGE DECK) C.Y.	CLASS 'A' CONCRETE (BRIDGES) C.Y.	EPOXY COATED REINFORCING STEEL LBS.	STEEL BAR REINFORCEMENT LBS.
SUPERSTRUCTURE	315	65	87,573	5,796

STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

SUPERSTRUCTURE  
BRIDGE No. 2  
RAMP 'M' OVER INTERSTATE 40  
STATION 84+49.09  
DAVIDSON COUNTY  
1988

CORRECTED *Edward J. Wosserman*  
ENGINEER OF STRUCTURES  
APPROVED *Louis Evans*  
DIRECTOR OF HIGHWAYS

M-206-162

SUPERSTRUCTURE GENERAL NOTES:

NOTE: NO PORTION OF THE PARAPET SHALL BE POURED UNTIL THE ENTIRE DECK SLAB IS IN PLACE.  
NOTE: OUTSIDE EDGE OF SLAB AND BRIDGE RAIL TO CONFORM TO HORIZONTAL CURVE.  
NOTE: THE CONCRETE DECK SHALL BE POURED UNTIL ALL STRUCTURAL STEEL IS ERECTED AND ALL WELDING AND BOLTING COMPLETE.  
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 Nos. M-28-1 AND M-206-162.

APPROVAL OF MATERIALS: NO FABRICATION SHALL BE STARTED UNTIL THE MATERIALS INVOLVED HAVE BEEN APPROVED BY THE TENNESSEE DEPARTMENT OF TRANSPORTATION, DIVISION OF MATERIALS AND TESTS, WITH A COPY OF THE TEST REPORTS ALSO GOING TO THE TENNESSEE DEPARTMENT OF TRANSPORTATION, DIVISION OF

MATERIALS AND TESTS:

IDENTITY OF MAIN MATERIALS: SEE SPEC. 10.14.4.2 DIVISION II.  
WELDING: AWS D1.1-80 STRUCTURAL WELDING CODE, AASHTO STANDARD SPECIFICATIONS FOR WELDING OF STRUCTURAL STEEL HIGHWAY BRIDGES, THIRD EDITION, 1981, AND SPECIAL PROVISION No. 602.

FIELD CONNECTIONS: SHALL BE 7/8" HIGH TENSILE STRENGTH BOLTS ASTM-A325 UNLESS OTHERWISE SHOWN. SEE AASHTO SPECIFICATIONS ART. 10.11 DIVISION II. ALL HIGH STRENGTH BOLTED CONNECTIONS ARE FRICTION TYPE.

ADDITIONAL SHOP SPICE NOTE: SHOP SPICES NECESSARY DUE TO LENGTHS OR SIZE OF MATERIAL INVOLVED MAY BE LOCATED BY THE FABRICATOR SUBJECT TO APPROVAL BY THE ENGINEER AT NO ADDITIONAL COST TO PROJECT.

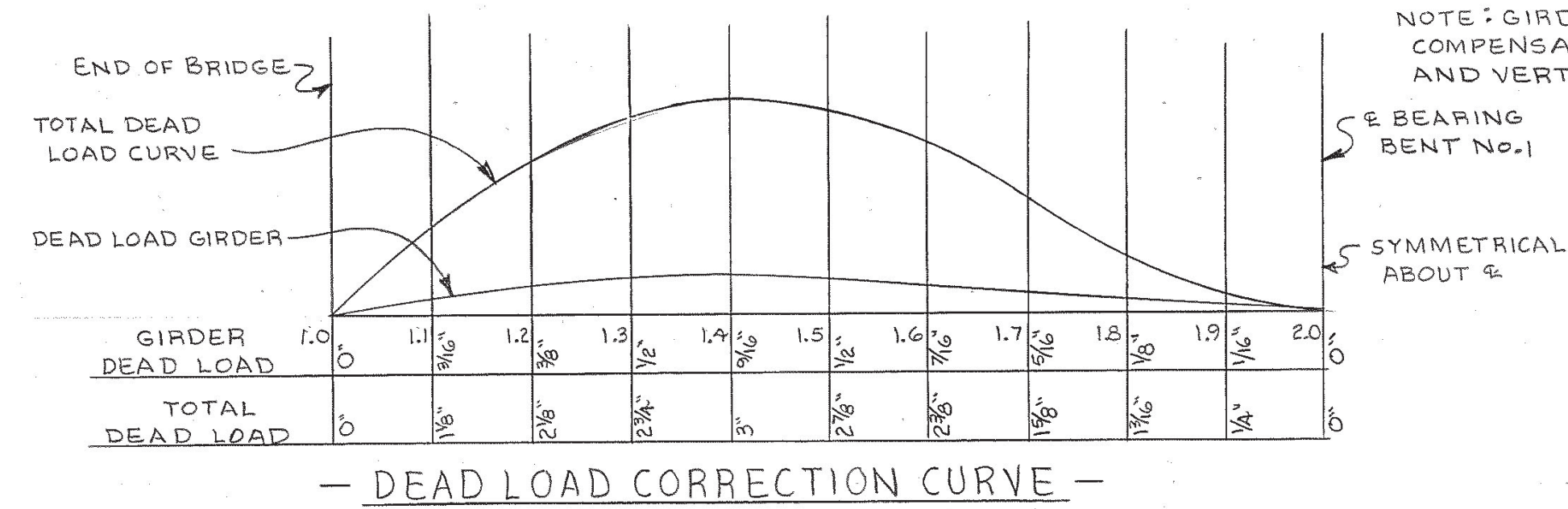
SHOP ASSEMBLY: PROGRESSIVE SHOP ASSEMBLY WILL BE ALLOWED, SEE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, ART.

10.14.4.2 DIVISION II.

ADDITIONAL FIELD SPICE NOTE: FIELD SPICES NECESSARY DUE TO LENGTHS INVOLVED MAY BE LOCATED BY THE FABRICATOR SUBJECT TO APPROVAL BY THE ENGINEER AT NO ADDITIONAL COST TO PROJECT.

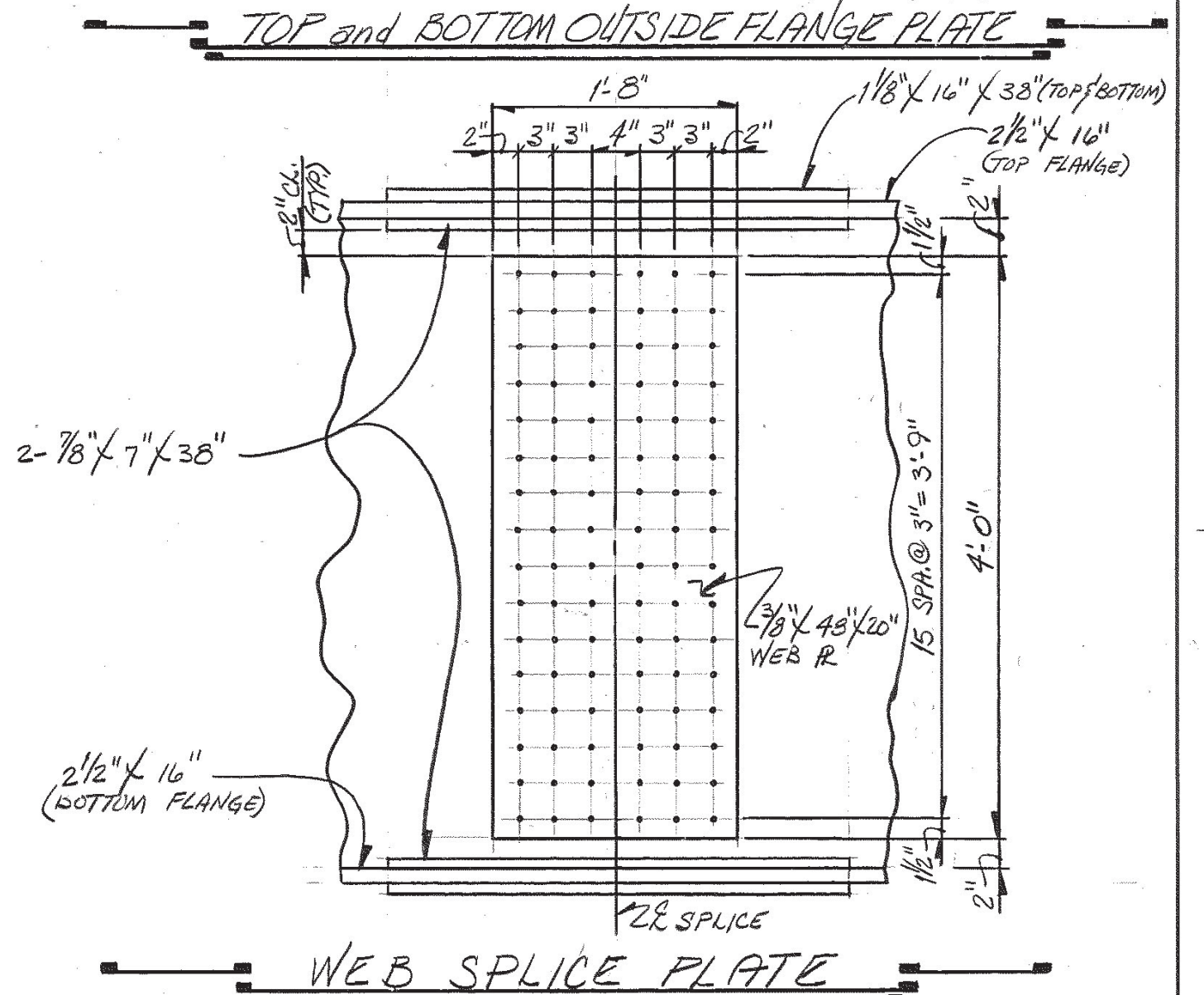
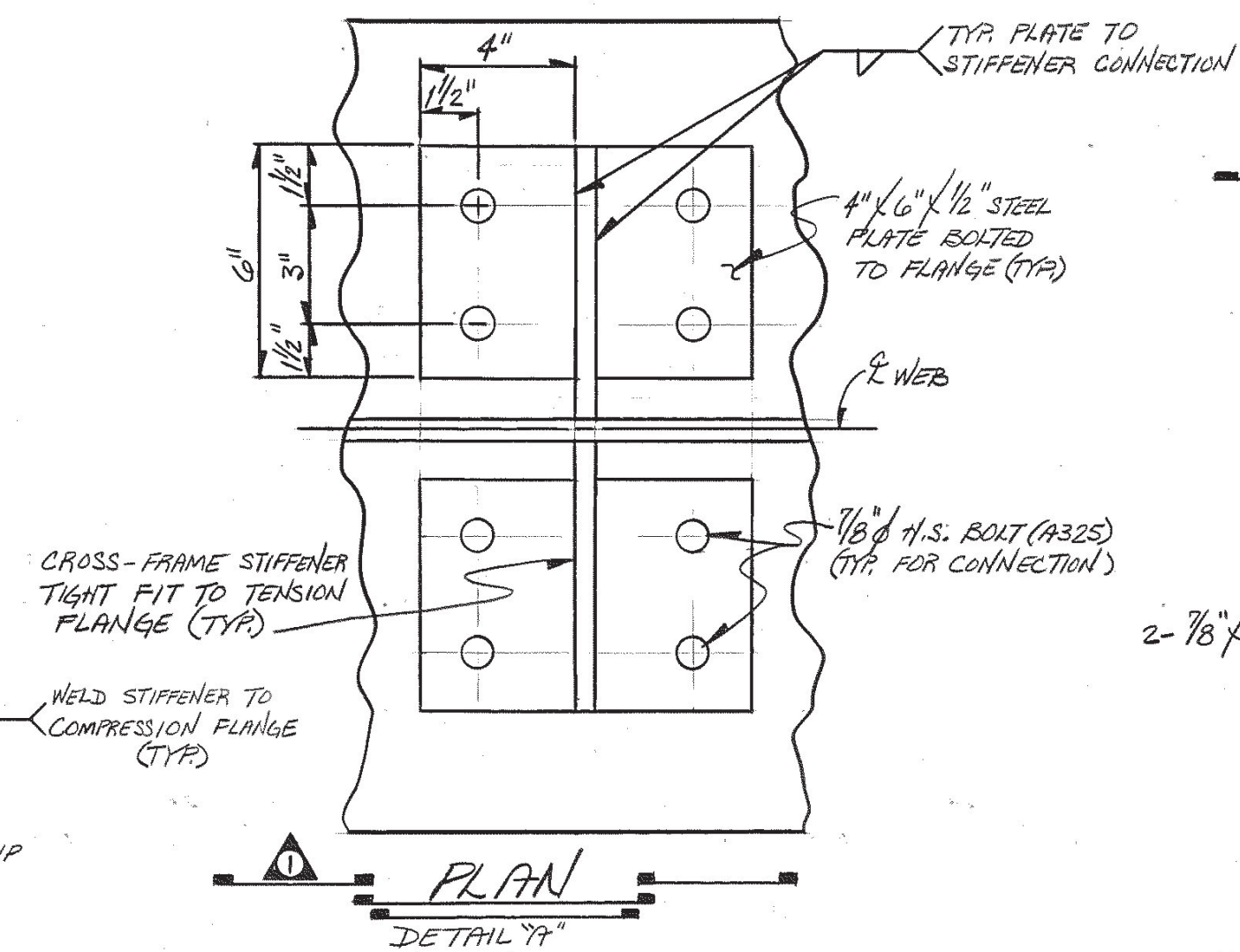
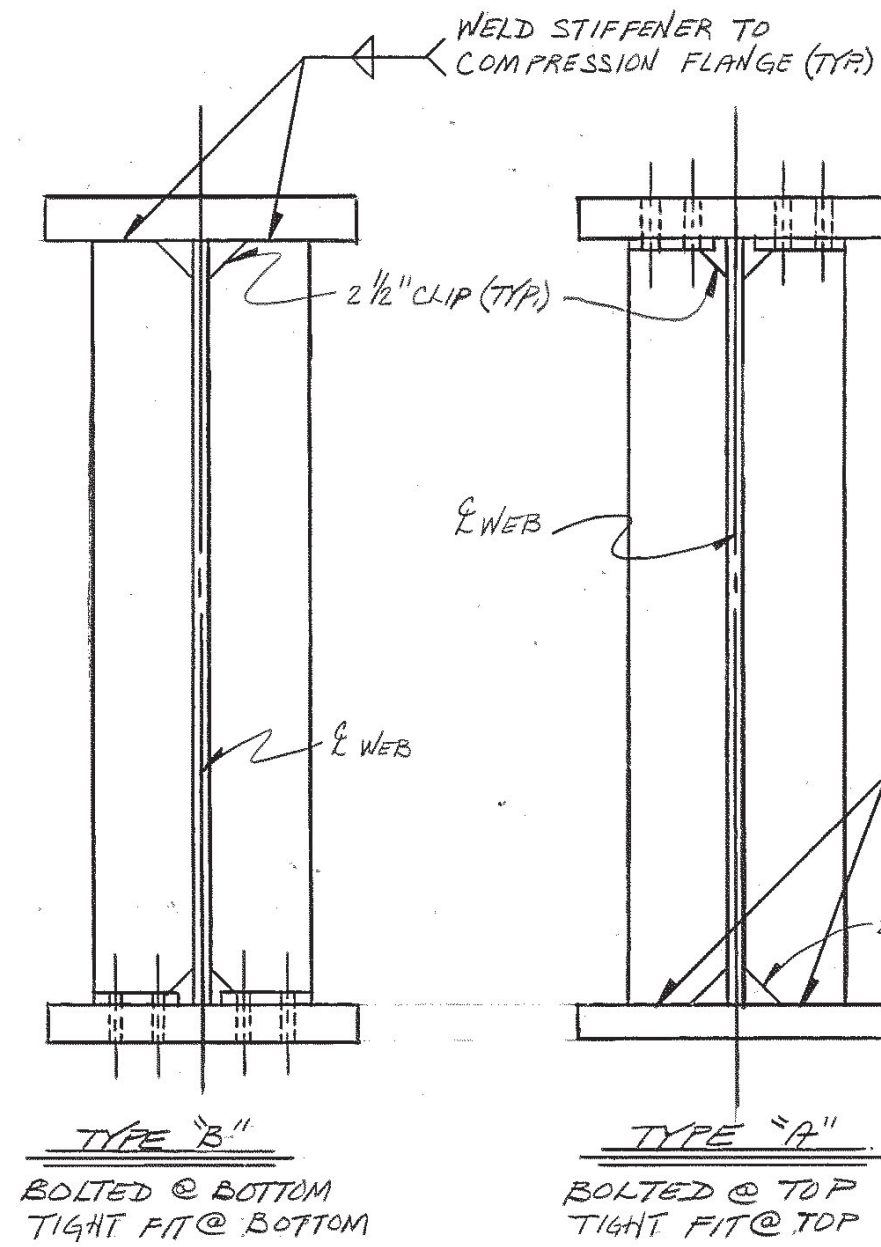
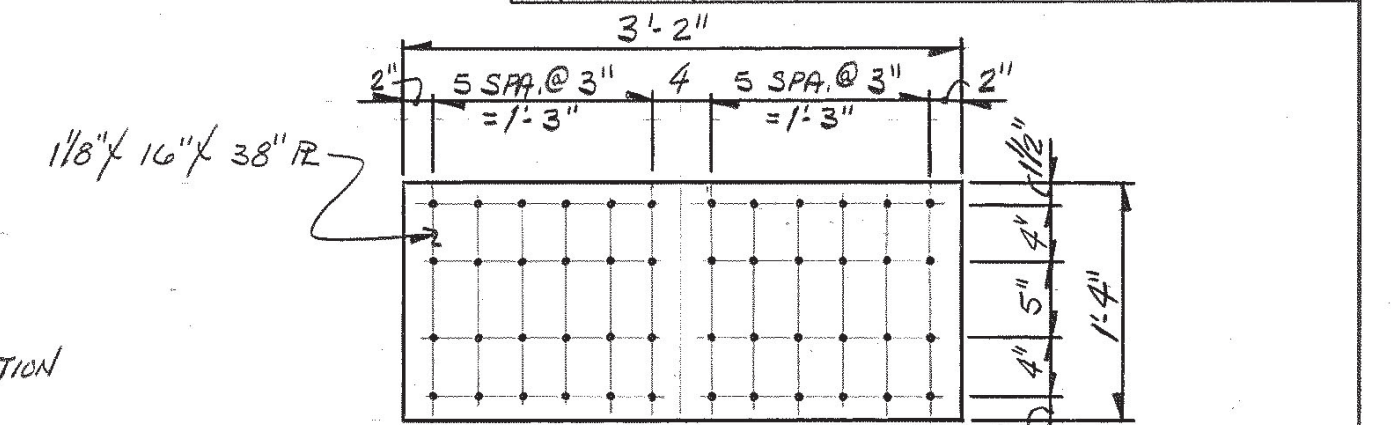
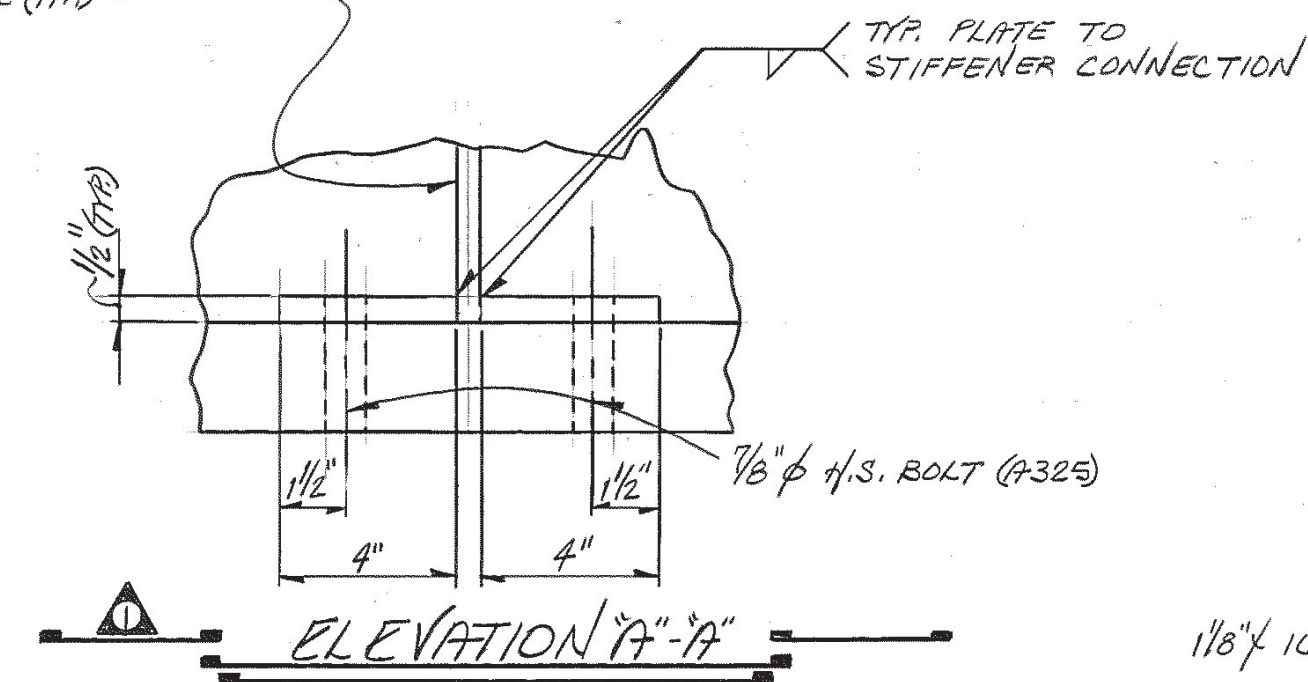
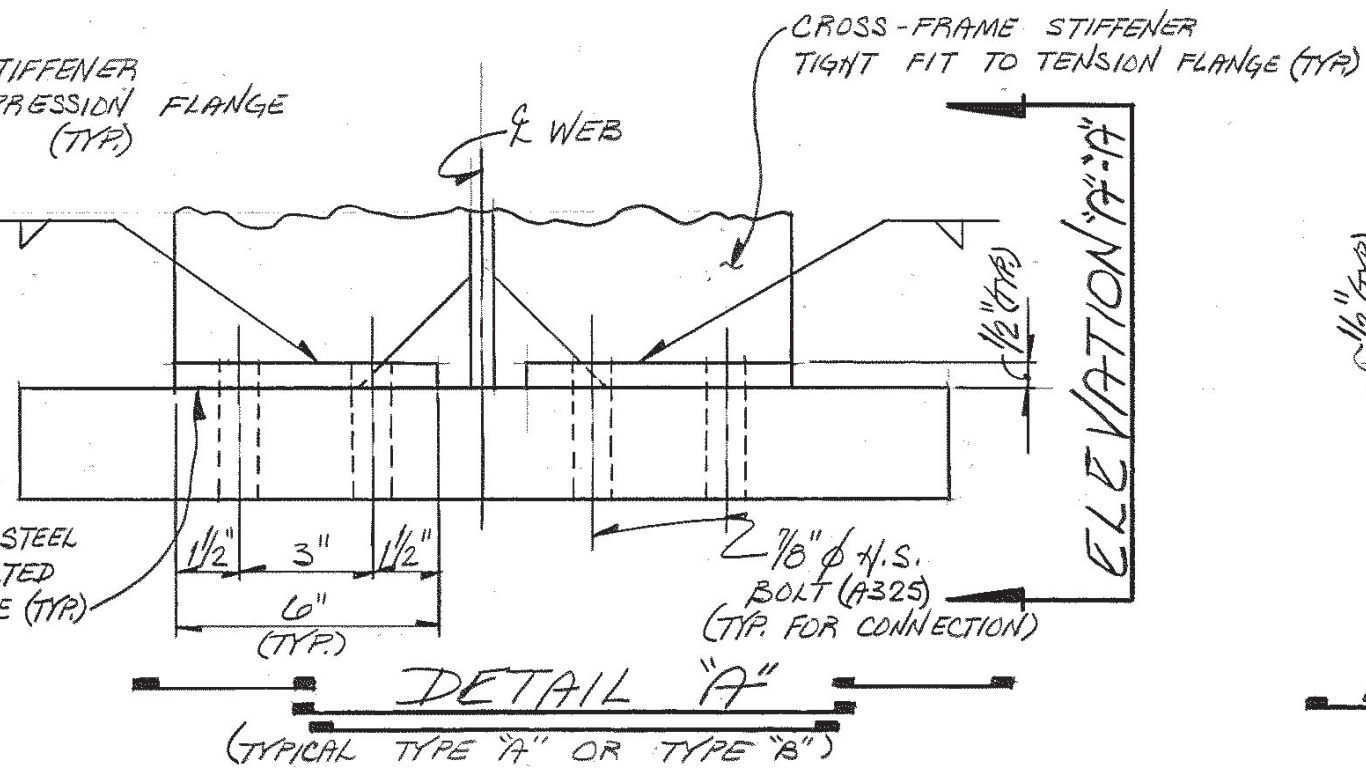
DESIGNED BY J.C. MATHIS DATE 7-88  
DRAWN BY FRANK FROST DATE 7-88  
SUPERVISED BY HARRISON & BROOKS DATE 7-88  
CHECKED BY J.C. MATHIS DATE 8-88



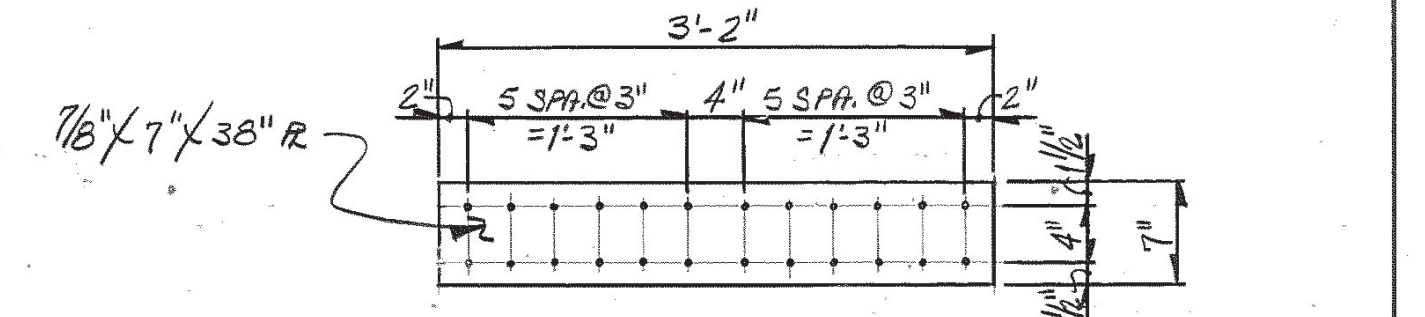
[illegible]

1-206-163



[illegible]

## GENERAL DETAILS - CROSS-FRAME STIFFENER CONNECTION



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS  
STRUCTURAL STEEL DETAILS  
BRIDGE No. 2  
RAMP 'M' Over INTERSTATE 40  
STATION 89+49.09  
1988

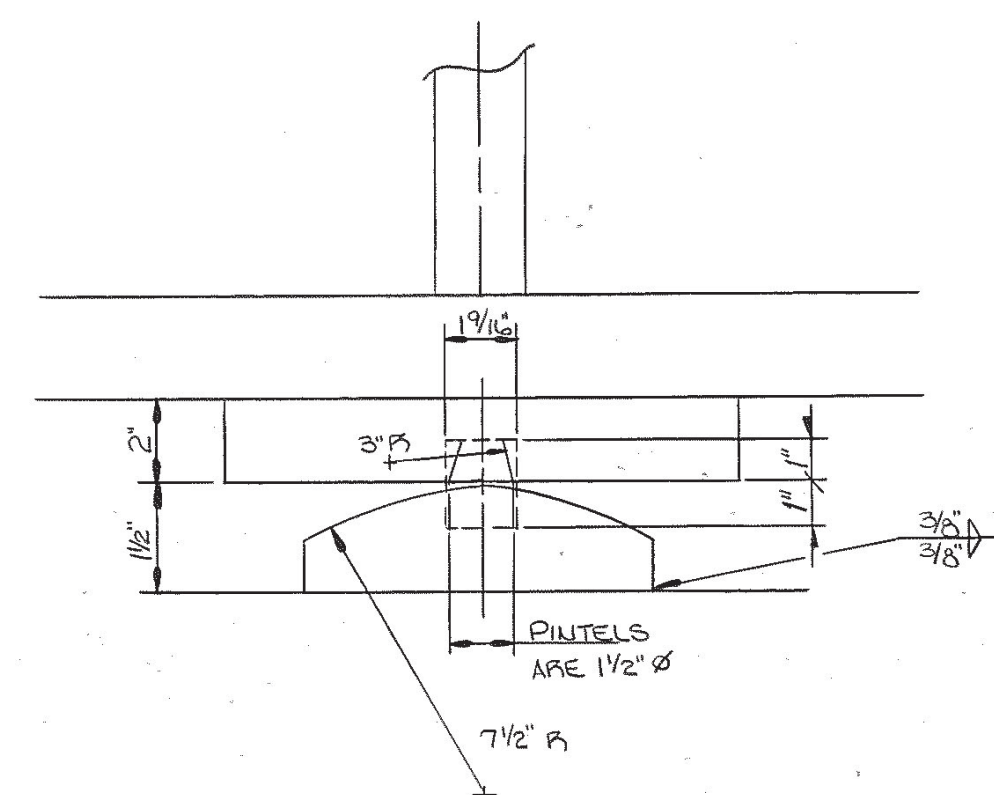
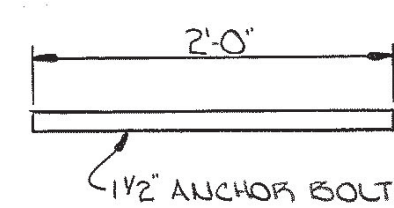
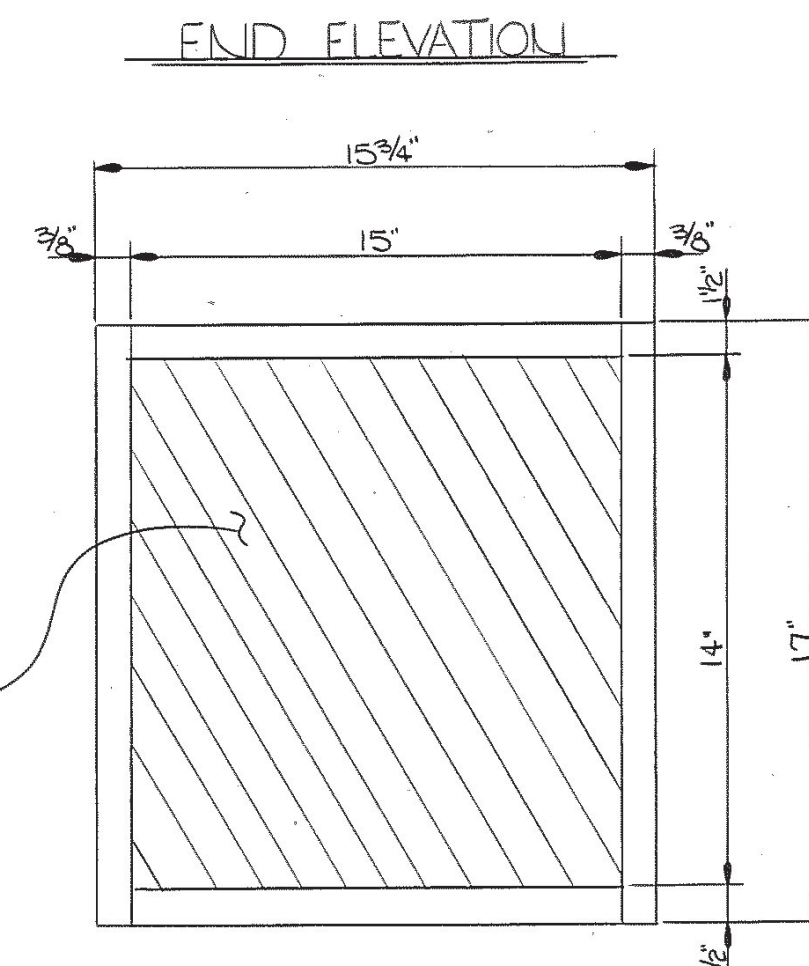
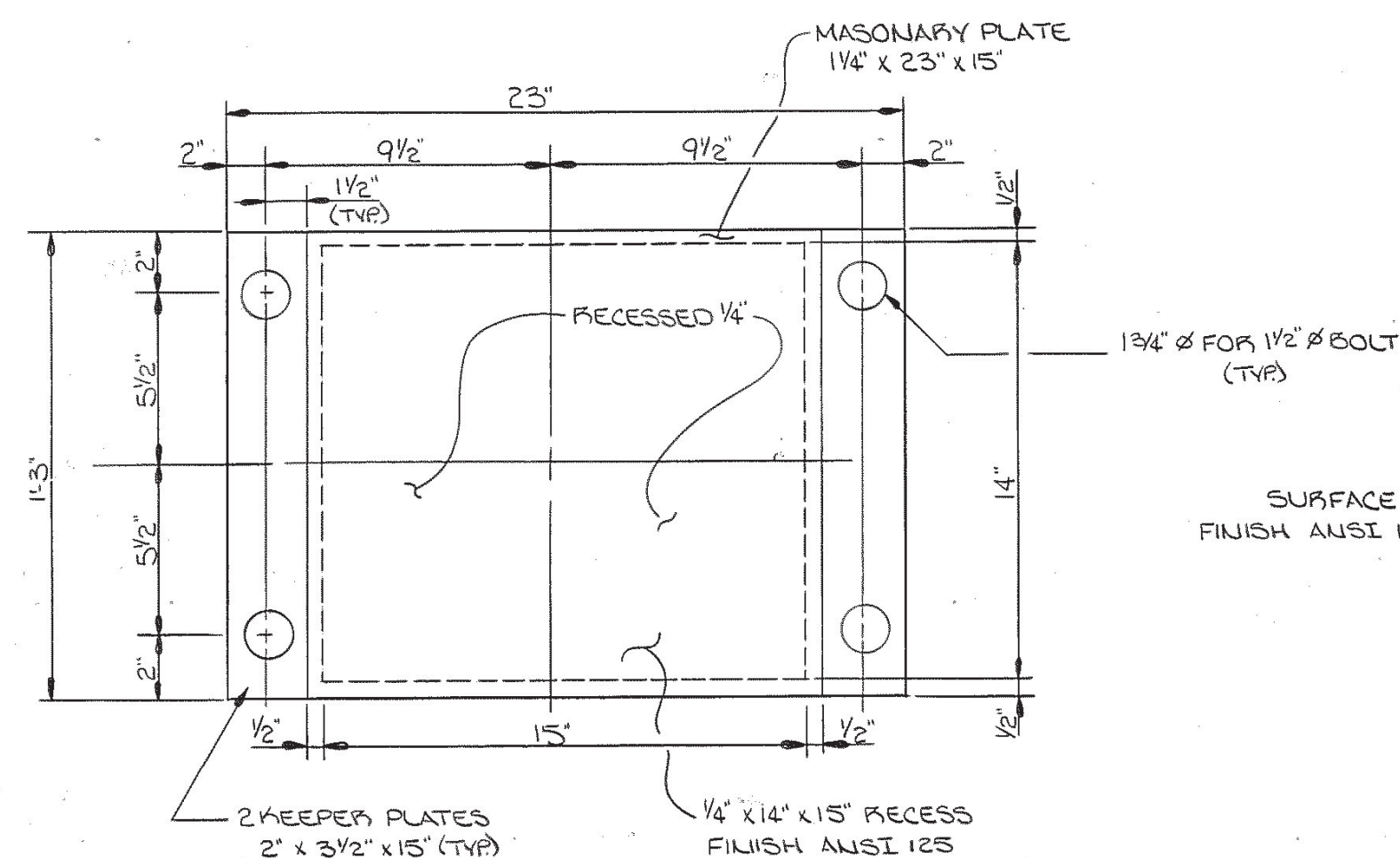
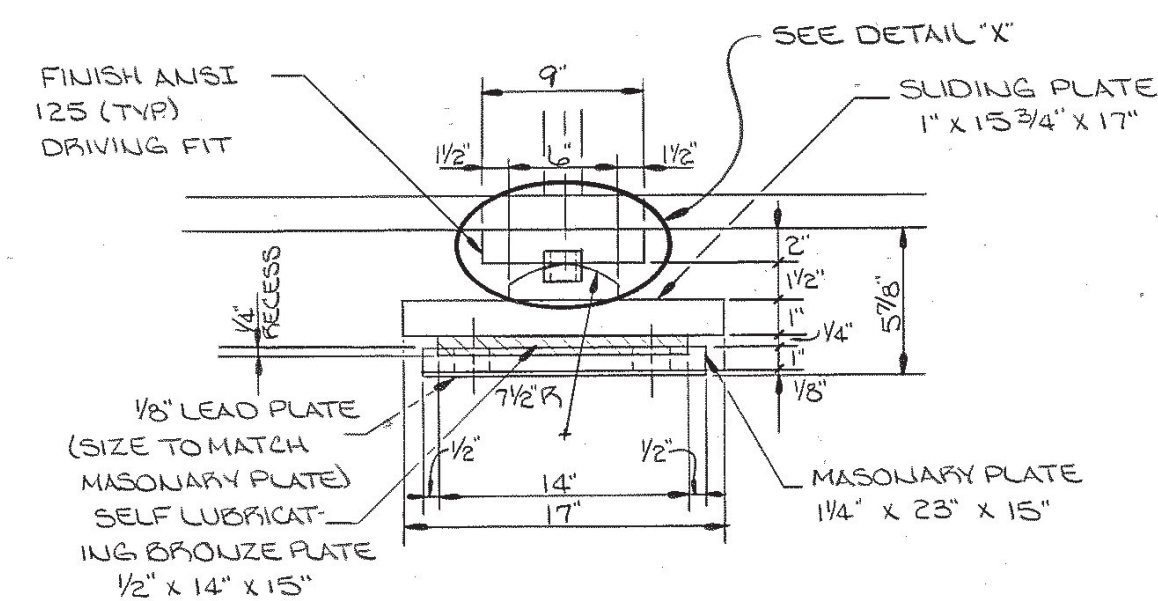
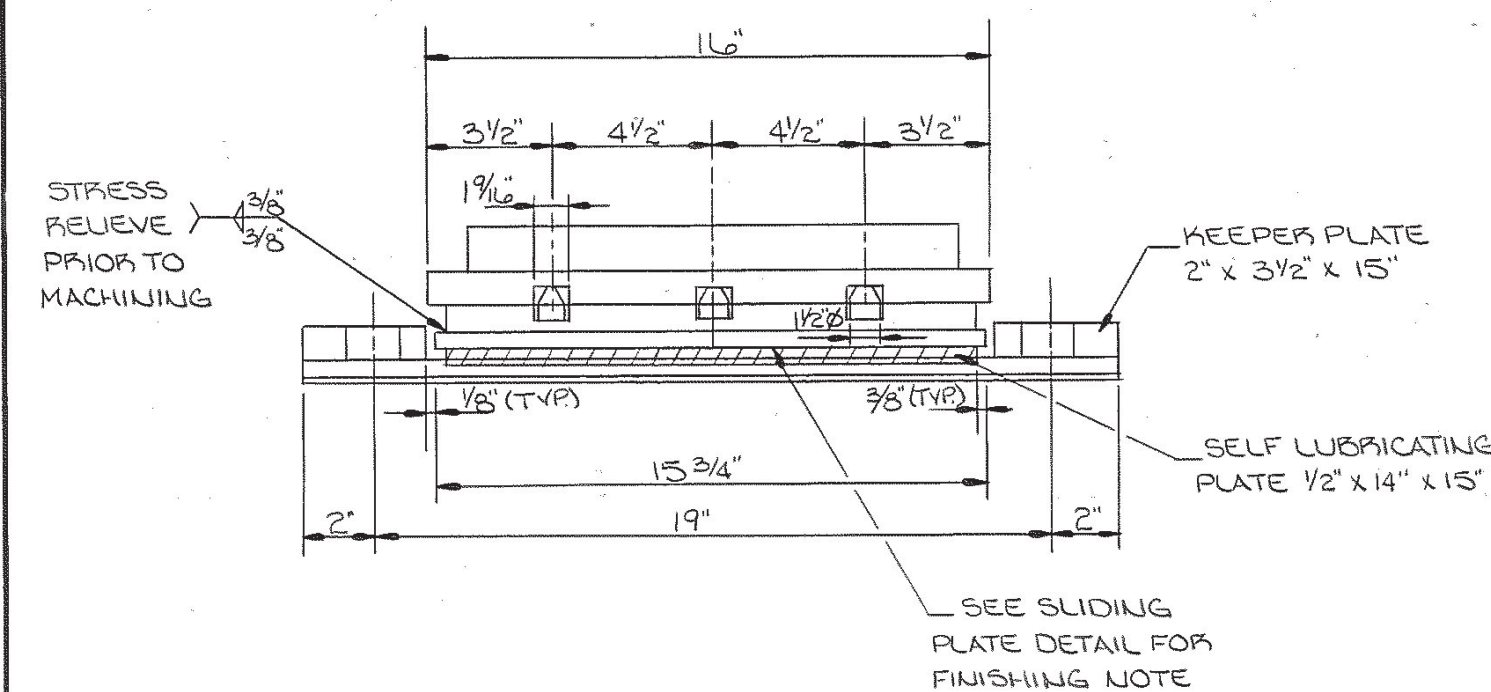
CORRECT Edward P. Wessman  
ENGINEER OF STRUCTURES  
APPROVED James Evans  
DIRECTOR OF HIGHWAYS

M-206-164

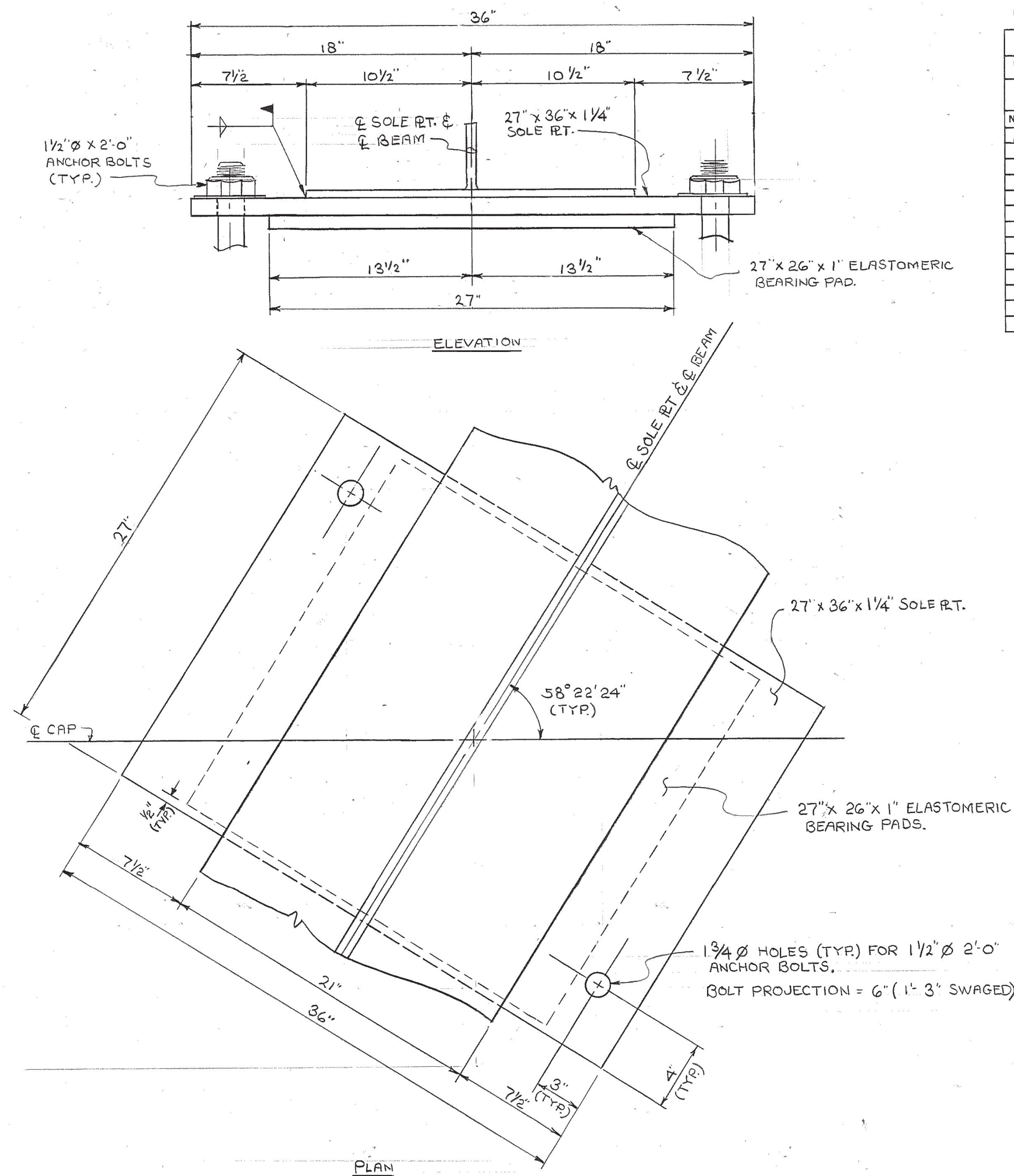


Const. No. 19008-3/60-44

PROJECT NO.	YEAR	SHEET NO.	
1A-40-5(10)221	1988		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	9/26/88	J.C.M.	ADD BEARING DETAIL @ BENT.



BEARING DEVICE DETAIL  
(@ ABUTMENT NO. 1)



BRIDGE No. 2

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

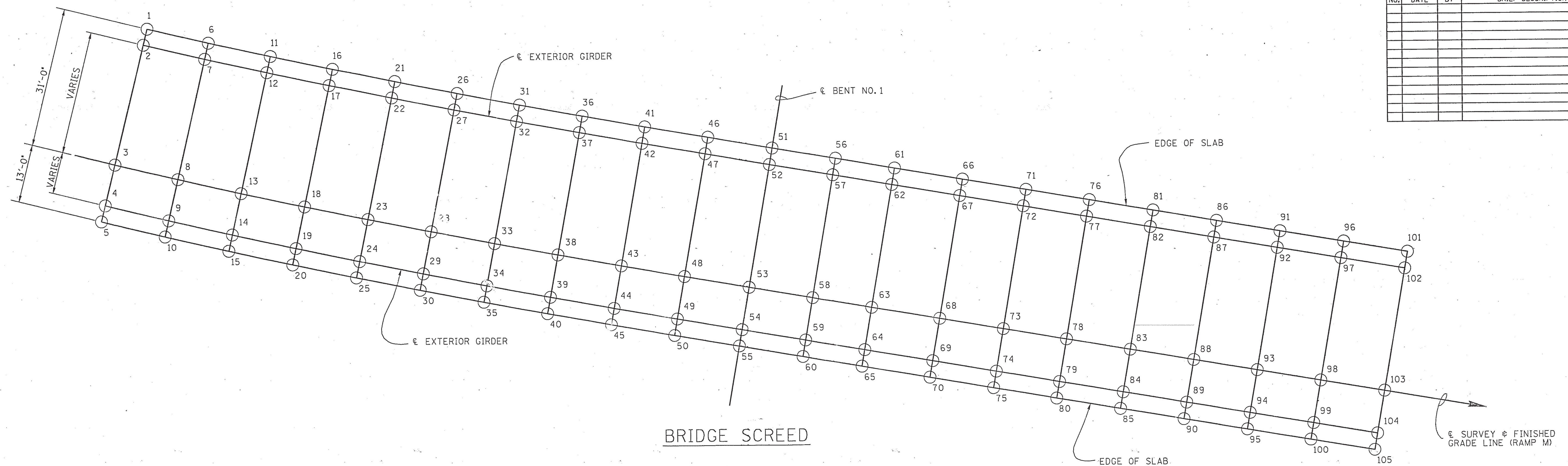
BEARING DEVICE  
RAMP M over  
INTERSTATE 40  
STATION 89+49.09  
DAVIDSON COUNTY  
1988

DESIGNED BY J. MATHIS DATE 6-88  
DRAWN BY Donna Douglas DATE 6-88  
SUPERVISED BY R. L. Harrison DATE 6-88  
CHECKED BY J. MATHIS DATE 8-88

CORRECT Edward P. Wasserman  
ENGINEER OF STRUCTURES  
APPROVED Lewis Evans  
DIRECTOR OF HIGHWAYS

M-206-16AA





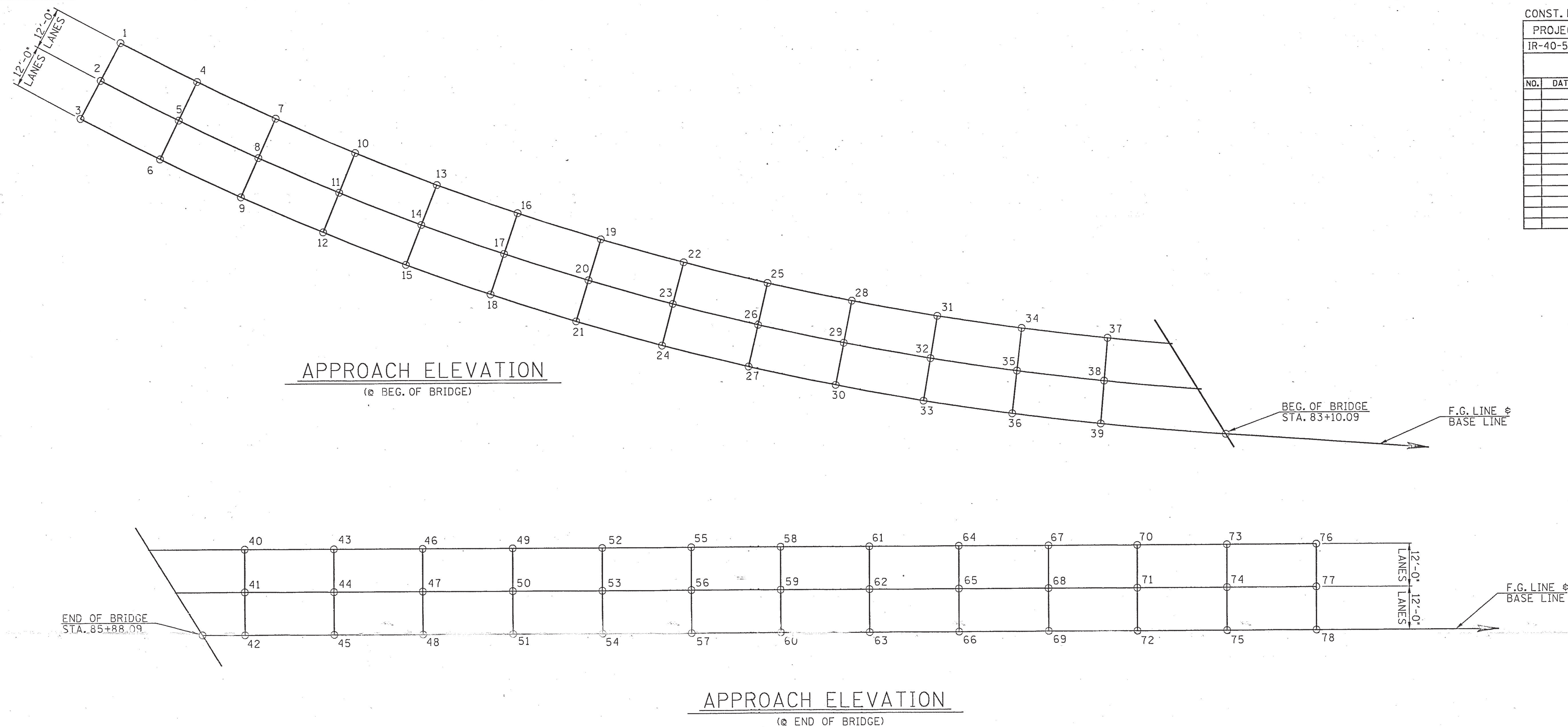
PT.	STATION	ELEVATION	PT.	STATION	ELEVATION	PT.	STATION	ELEVATION	PT.	STATION	ELEVATION	PT.	STATION	ELEVATION
1	83+10.09	555.00	26	83+79.59	554.80	51	84+49.09	554.50	76	85+18.59	553.67	101	85+88.09	552.83
2		555.23	27		554.92	52		554.57	77		553.74	102		552.90
3		556.79	28		555.96	53		555.12	78		554.29	103		553.45
4		557.31	29		556.26	54		555.30	79		554.47	104		553.63
5		557.54	30		556.47	55		555.38	80		554.55	105		553.71
6	83+23.99	554.95	31	83+93.49	554.75	56	84+62.99	554.33	81	85+32.49	553.50			
7		555.14	32		554.86	57		554.40	82		553.57			
8		556.62	33		555.79	58		554.95	83		554.12			
9		557.08	34		556.07	59		555.13	84		554.30			
10		557.32	35		556.25	60		555.21	85		554.38			
11	83+37.98	554.91	36	84+07.39	554.64	61	84+76.89	554.17	86	85+46.39	553.33			
12		555.07	37		554.74	62		554.24	87		553.40			
13		556.46	38		555.62	63		554.79	88		553.95			
14		556.87	39		555.87	64		554.97	89		554.13			
15		557.11	40		556.03	65		555.05	90		554.21			
16	83+51.79	554.85	41	84+21.29	554.60	66	84+90.79	554.00	91	85+60.29	553.17			
17		554.99	42		554.69	67		554.07	92		553.24			
18		556.29	43		555.46	68		554.62	93		553.79			
19		556.65	44		555.69	69		554.80	94		553.97			
20		556.89	45		555.82	70		554.88	95		554.05			
21	83+65.69	554.80	46	84+35.19	554.54	71	85+04.69	553.83	96	85+74.19	553.00			
22		554.92	47		554.62	72		553.90	97		553.07			
23		556.12	48		555.28	73		554.45	98		553.62			
24		556.45	49		555.49	74		554.63	99		553.80			
25		556.67	50		555.59	75		554.71	100		553.88			

DESIGNED BY	<u>JOHN MATHIS</u>	DATE	<u>7 - 88</u>
DRAWN BY	<u>CHRIS PLOTT</u>	DATE	<u>7 - 88</u>
SUPERVISED BY	<u>R.L.H. &amp; H.M.B.</u>	DATE	<u>7 - 88</u>
CHECKED BY	<u>JOHN MATHIS</u>	DATE	<u>7 - 88</u>

CORRECT Edward P. Wasserman  
ENGINEER OF STRUCTURES  
APPROVED Lewis Evans  
DIRECTOR OF HIGHWAYS

M-206-165





## TABLES OF STATIONS AND ELEVATIONS

@ BEG. OF BRIDGE

PT.	STATION	ELEVATION
1	79+75.0	556.59
2		557.55
3		558.51
4	80+00.0	556.69
5		557.65
6		558.61
7	80+25.0	556.75
8		557.71
9		558.67
10	80+50.0	556.77
11		557.73
12		558.69
13	80+75.0	556.76
14		557.72
15		558.68
16	81+00.0	556.71
17		557.67
18		558.63

@ END OF BRIDGE

PT.	STATION	ELEVATION
19		556.62
20	81+25.0	557.58
21		558.54
22		556.49
23	81+50.0	557.45
24		558.41
25		556.32
26	81+75.0	557.28
27		558.24
28		556.11
29	82+00.0	557.07
30		558.03
31		555.87
32	82+25.0	556.83
33		557.79
34		555.76
35	82+50.0	556.63
36		557.51
37		555.60
38	82+75.0	556.41
39		557.21

PT.	STATION	ELEVATION
40		552.83
41	86+00.0	553.07
42		553.31
43		552.53
44	86+25.0	552.77
45		553.01
46		552.23
47	86+50.0	552.47
48		552.71
49		551.93
50	86+75.0	552.17
51		552.41
52		551.63
53	87+00.0	551.87
54		552.11
55		551.45
56	87+25.0	551.63
57		551.81
58		551.27
59	87+50.0	551.39
60		551.51

PT.	STATION	ELEVATION
61		551.09
62	87+75.0	551.15
63		551.21
64		550.91
65	88+00.0	550.91
66		550.91
67		550.73
68	88+25.0	550.67
69		550.61
70		550.55
71	88+50.0	550.43
72		550.31
73		550.37
74	88+75.0	550.19
75		550.01
76		550.19
77	89+00.0	549.95
78		549.71

DESIGNED BY JOHN MATHIS DATE 6-88  
DRAWN BY STEVEN STEELE DATE 6-88  
SUPERVISED BY DON HARBISON DATE 6-88  
CHECKED BY JOHN MATHIS DATE 7-88

CORRECT Edward P. Wasserman  
ENGINEER OF STRUCTURES  
APPROVED Levis Evans  
DIRECTOR OF HIGHWAYS

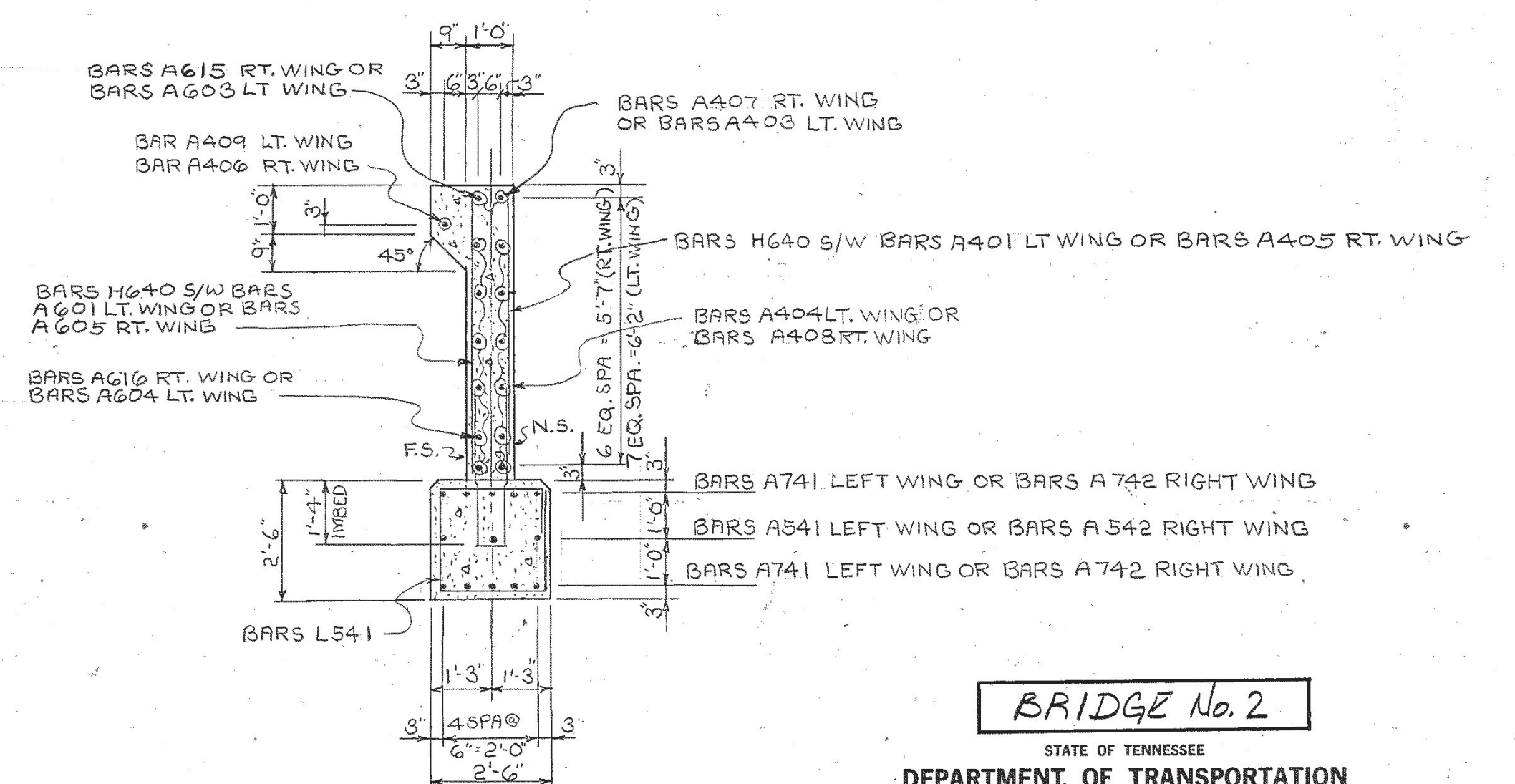
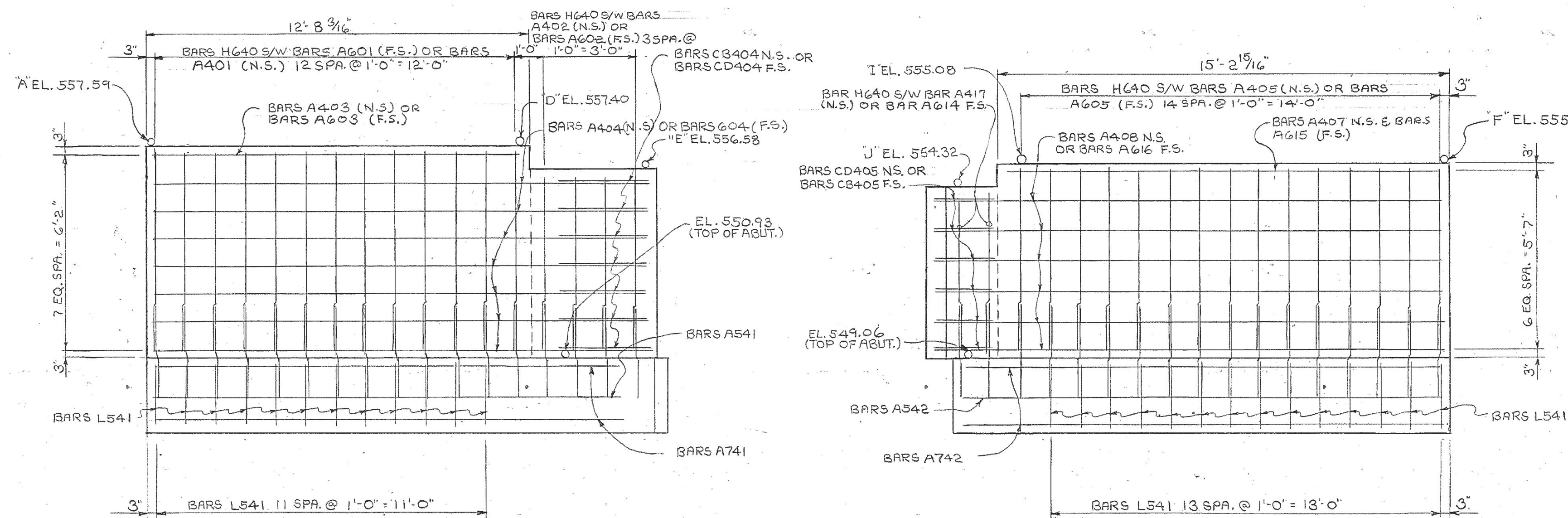
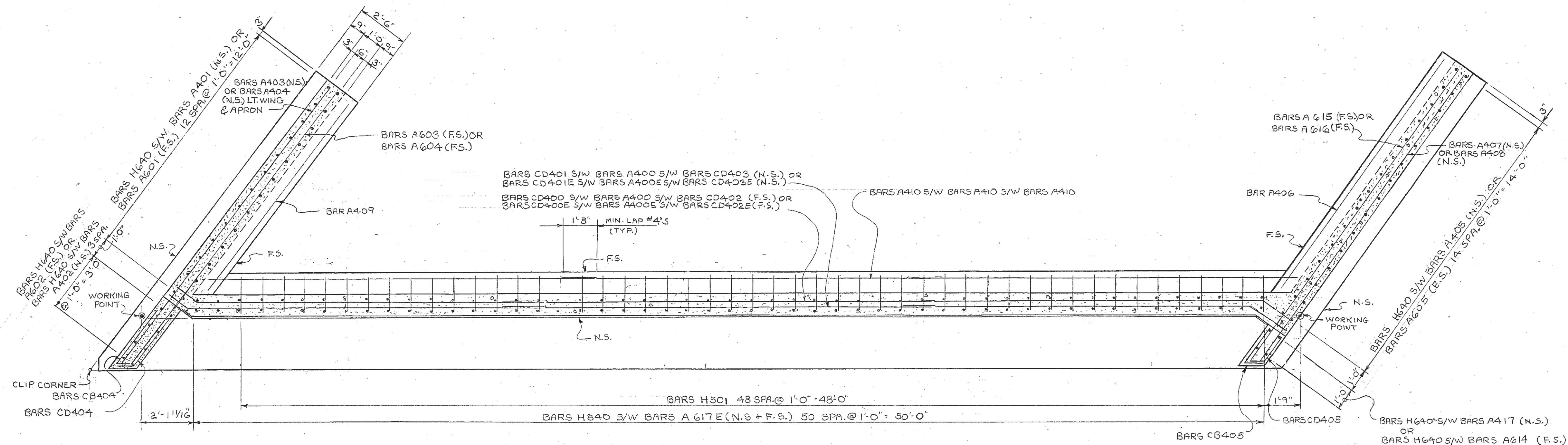
M-206-166







PROJECT NO.	YEAR	SHEET NO.
IR-40-5(101)221	1988	

[illegible]

BRIDGE No. 2

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

ABUTMENT 1  
SECTION & ELEVATION DETAILS  
RAMP 'M' OVER INTERSTATE 40  
STATION 84+49.09

DAVIDSON Co.  
1988

NOTE: WHEN POURING WINGWALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR WINGPOST AND PARAPET.  
FOR DETAILS OF WINGPOST AND PARAPET, SEE STANDARD DRAWING NO. M-28-1.

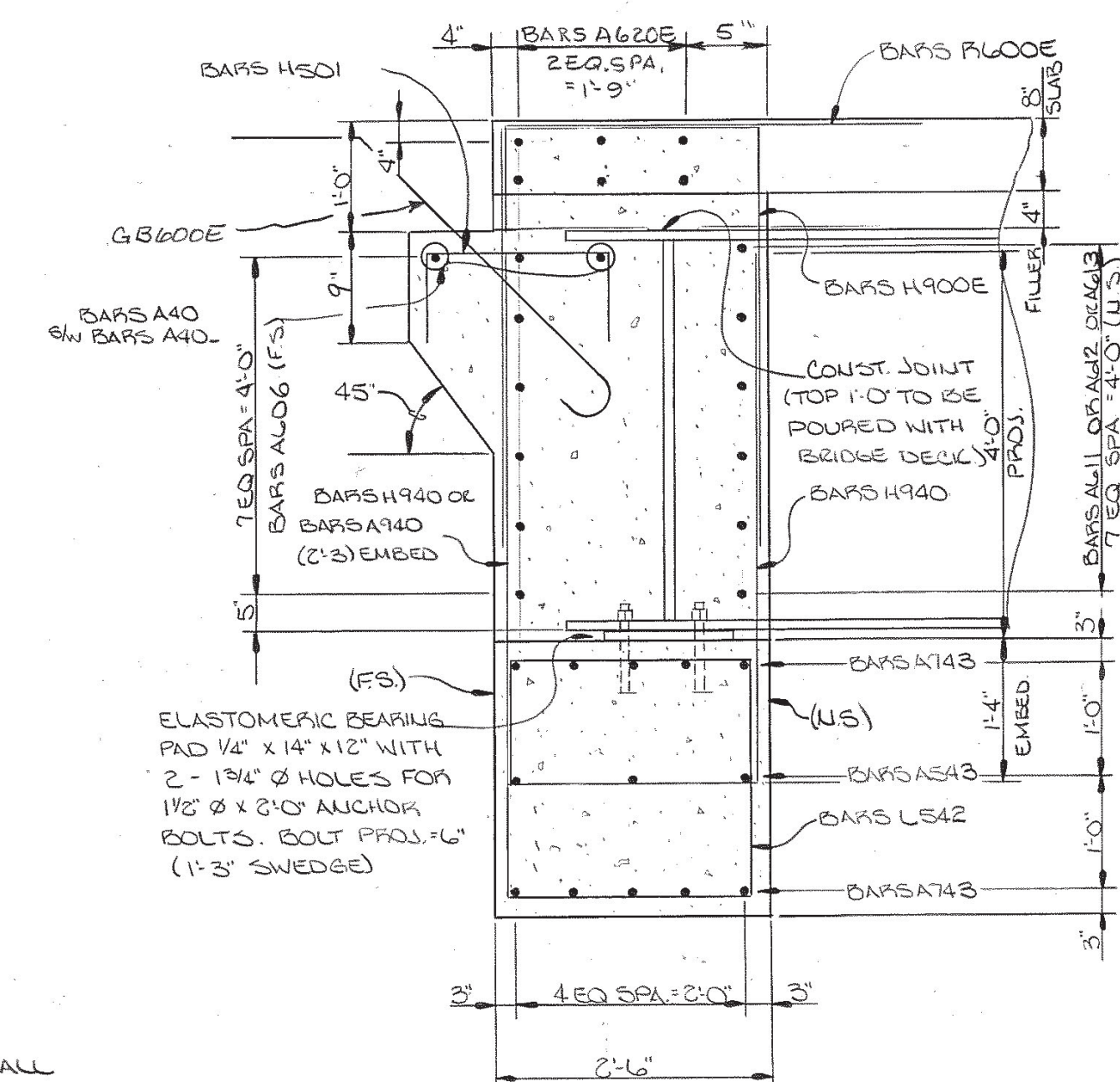
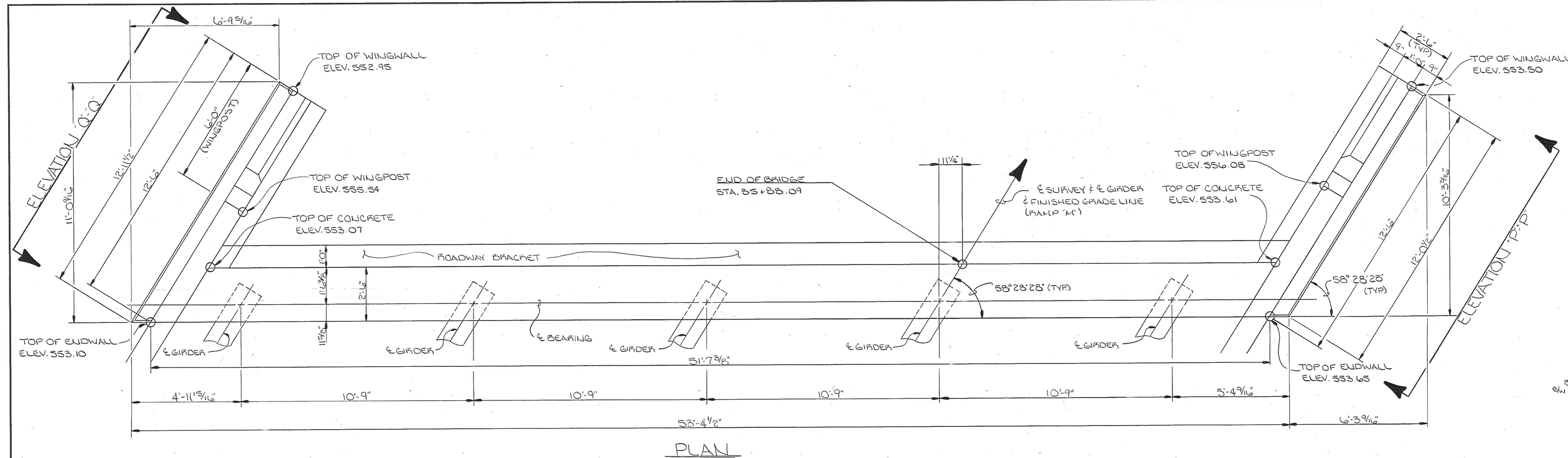
DESIGNED BY JOHN MATHIS DATE 7-20-88  
DRAWN BY M. R. MANNCHEN DATE 7-20-88  
SUPERVISED BY DON HARRISON DATE 7-20-88  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

CORRECT Edward P. Wasserman  
ENGINEER OF STRUCTURES

APPROVED Lewis Evans  
DIRECTOR OF HIGHWAYS

1-206-168



[illegible]

SEE SECTION "A-A" SHEET M-194-93

SECTION 1 "A"- "A"

NOTE: THE BACKWALL AND BEAM ENCASEMENT SHALL NOT TO BE POURED UNTIL THE GIRDERS ARE IN PLACE.

### ESTIMATED QUANTITIES

ITEM	CLASS "A" CONCRETE CY.	STEEL BAR REINFORCING LBS.
ABUTMENT 2	18	4824

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

ABUTMENT NO. 2  
BRIDGE No. 2  
RAMP M' Over INTERSTATE 40  
STATION 84+49.09  
DAVIDSON COUNTY  
1988

CORRECT Edward P. Wasserman  
ENGINEER OF STRUCTURES  
APPROVED Lewis Evans  
DIRECTOR OF HIGHWAYS

M-206-169

DESIGNED BY J.C. Mathis DATE 7-88  
DRAWN BY Donna Douglas DATE 7-88  
SUPERVISED BY AL Harrison DATE 7-88  
CHECKED BY J.C. MATHIS DATE 7-88

NOTE: WHEN POURING ABUTMENT BEAM PROVISIONS SHALL BE MADE FOR SETTING ANCHOR BOLTS. IF THE CONTRACTOR ELECTS TO DRILL THE HOLES FOR THE ANCHOR BOLTS, THE REINFORCING STEEL SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE DRILLING. BOLT PROJECTION 6".

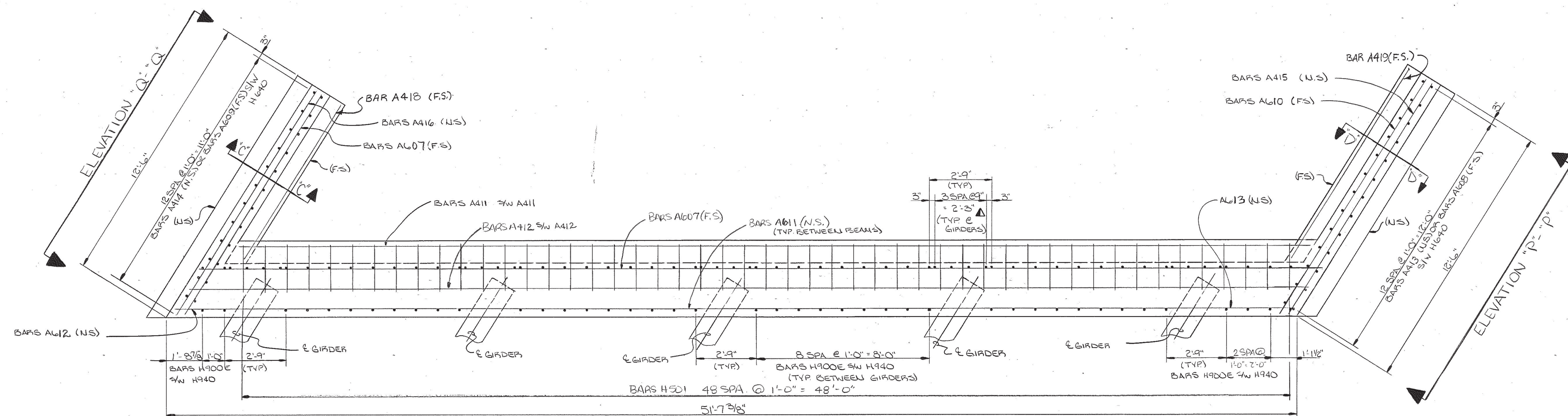
NOTE: COST OF BRIDGE RAIL AND POST IS TO BE INCLUDED IN THE COST OF BRIDGE RAIL SYSTEM.

NOTE: THE BACKWALL SHALL NOT BE POURED UNTIL THE GIRDERS ARE IN PLACE. THE TOP 1'-0" OF THE BACKWALL SHALL BE POURED CONCURRENTLY WITH THE END OF SLAB.

DYNE POST N25951



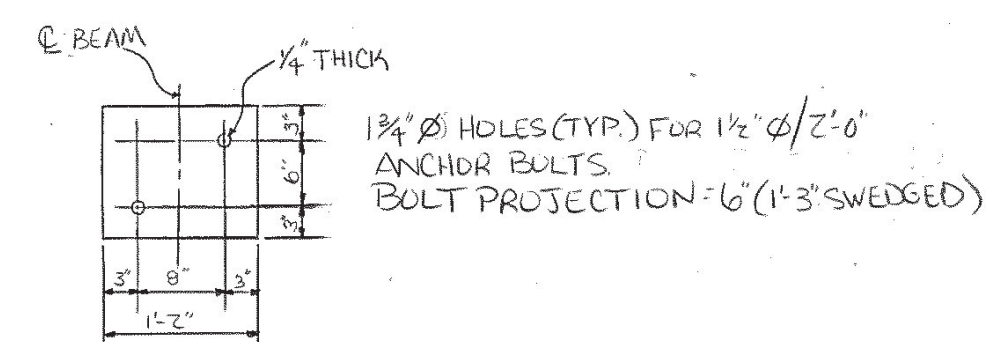
PROJECT NO.	YEAR	SHEET NO.
1R-40-5(101)221	1988	

[illegible]

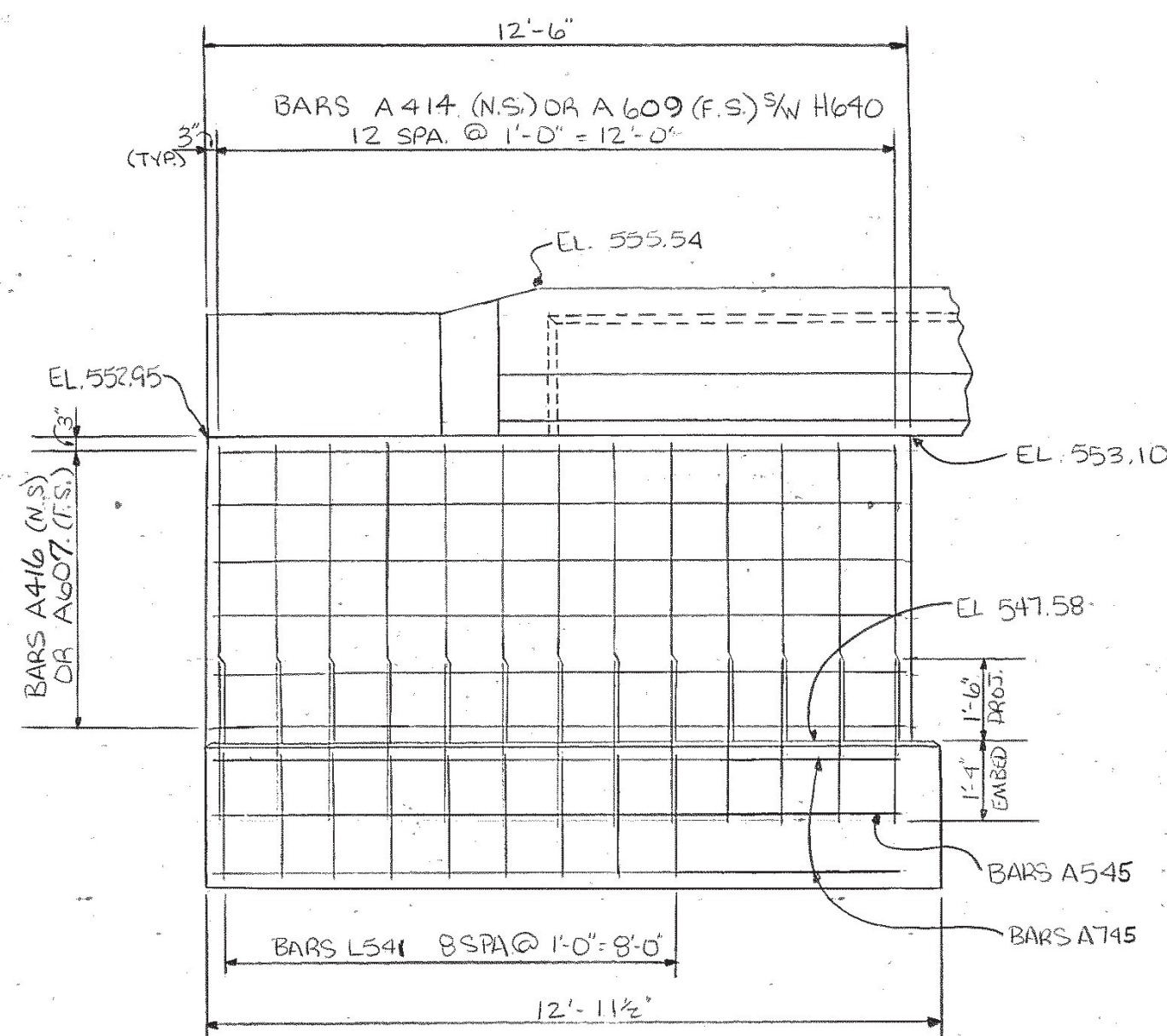
N.S. DENOTES NEAR SIDE  
F.S. DENOTES FAR SIDE

▲ DENOTES BARS A940 (TYP. @ GIRDERS) (F.S.)

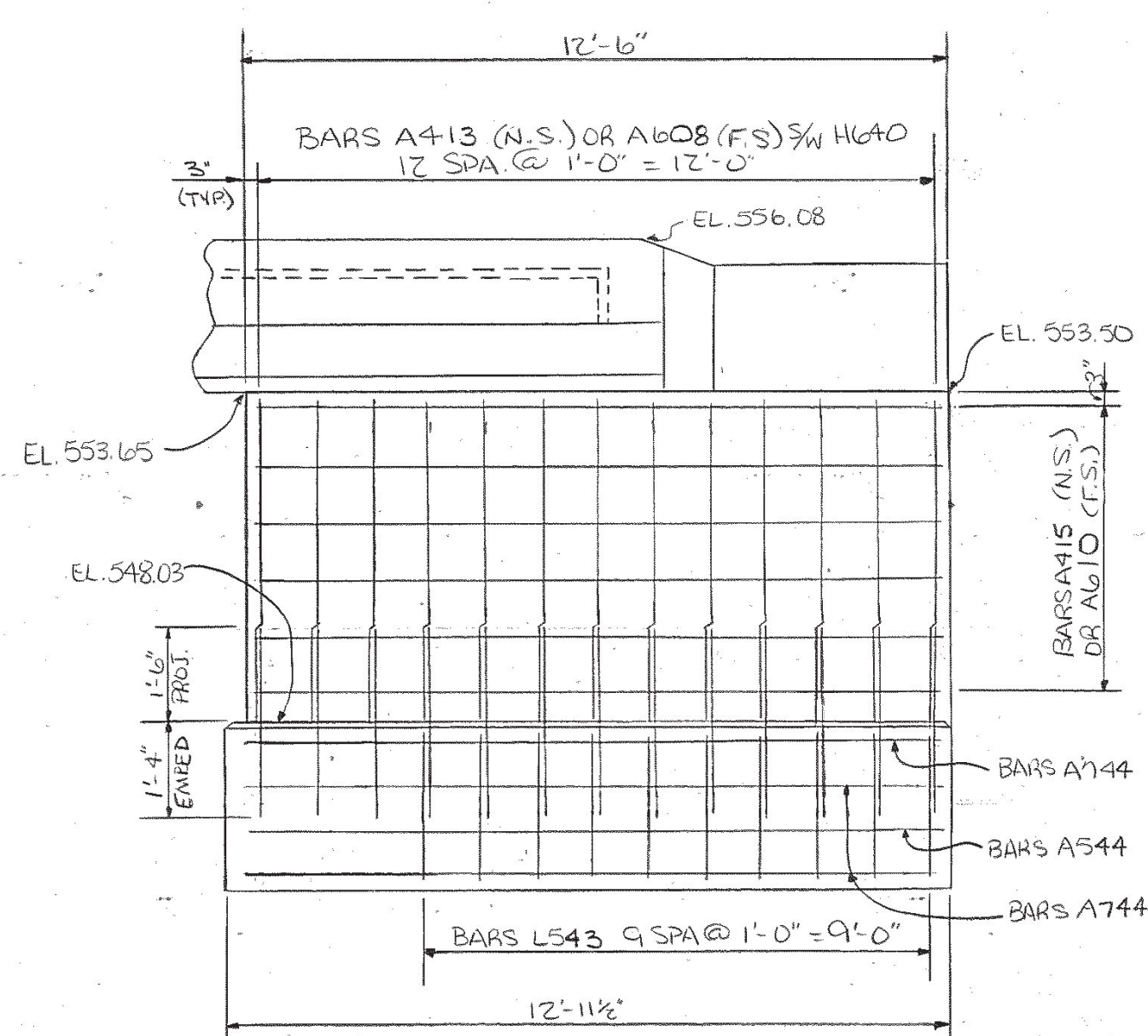
NOTE: WHEN POURING WINGWALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR WINGPOST AND PARAPET. FOR DETAILS OF WINGPOST AND PARAPET, SEE STANDARD DRAWING NO. M-78-1.



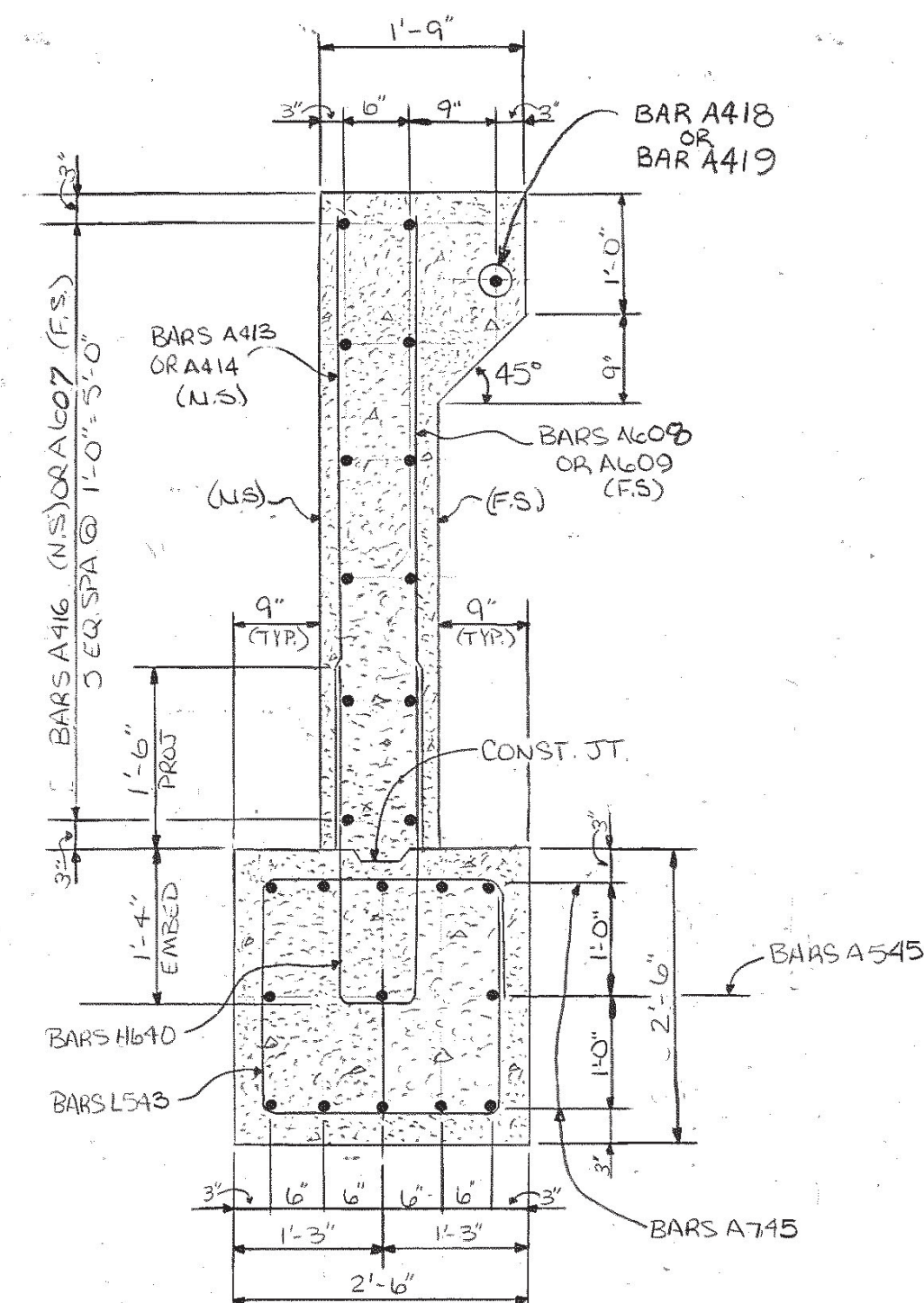
## ELASTOMERIC BEARING PAD DETAILS



ELEVATION "Q"-'Q'

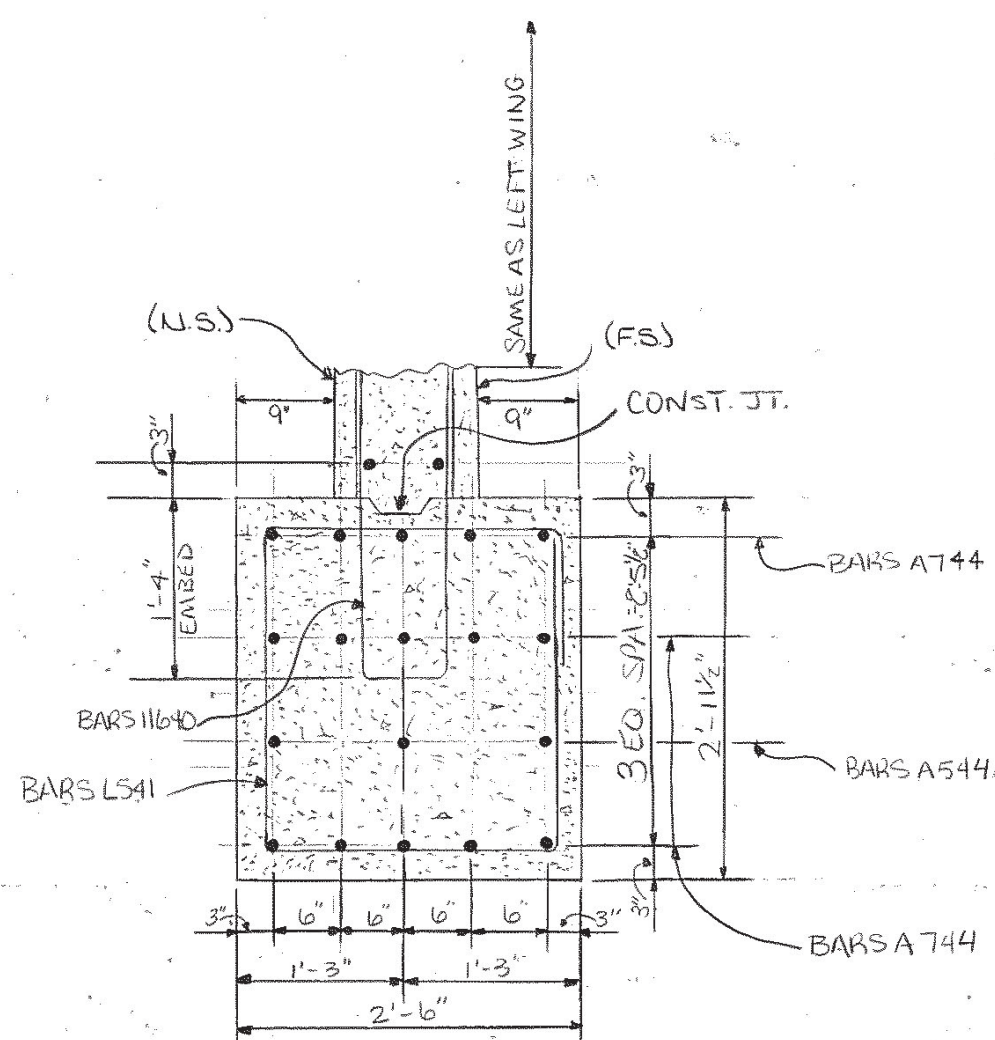


ELEVATION "P" - "P"



SECTION "C" - C

SHOWING LEFT WING



SECTION "D" - "D"  
(SHOWING RIGHT WING)

BRIDGE No. 2

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

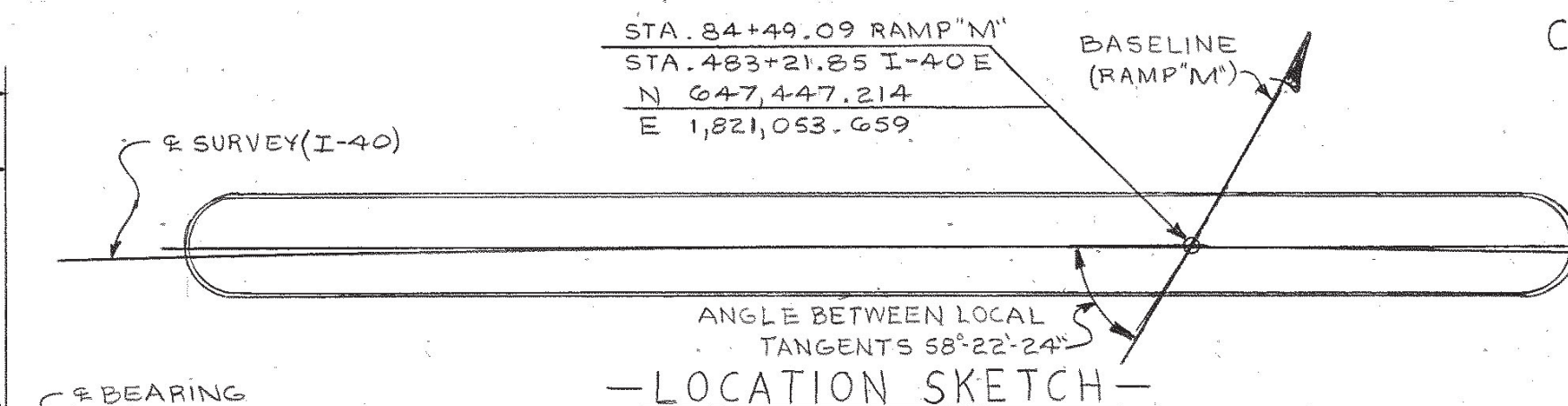
ABUTMENT NO. 2 DETAILS  
RAMP 'M' OVER  
INTERSTATE 40  
STATION 84+49.09  
DAVIDSON COUNTY  
1988

DESIGNED BY J.C. MATHIS DATE 7-88  
DRAWN BY SUZANNE JEFFERS DATE 7-88  
SUPERVISED BY R.L. HARBISON DATE 7-88  
CHECKED BY J.C. MATHIS DATE \_\_\_\_\_

CORRECT Edward P. Wasserman  
ENGINEER OF STRUCTURES  
APPROVED Lewis Frans  
DIRECTOR OF HIGHWAYS

M-206-170

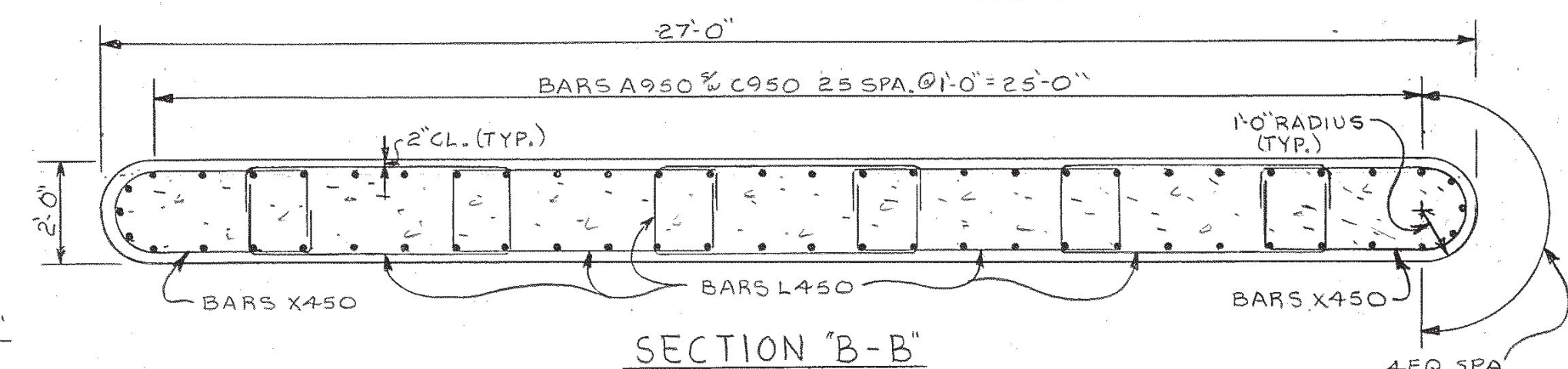




NOTE: SOLE PLATE, BEARING PAD & ANCHOR BOLTS INCLUDED IN PROJECT IR-40-5(101) 221. FOR DETAILS, SEE DWG. M-206-164A. 



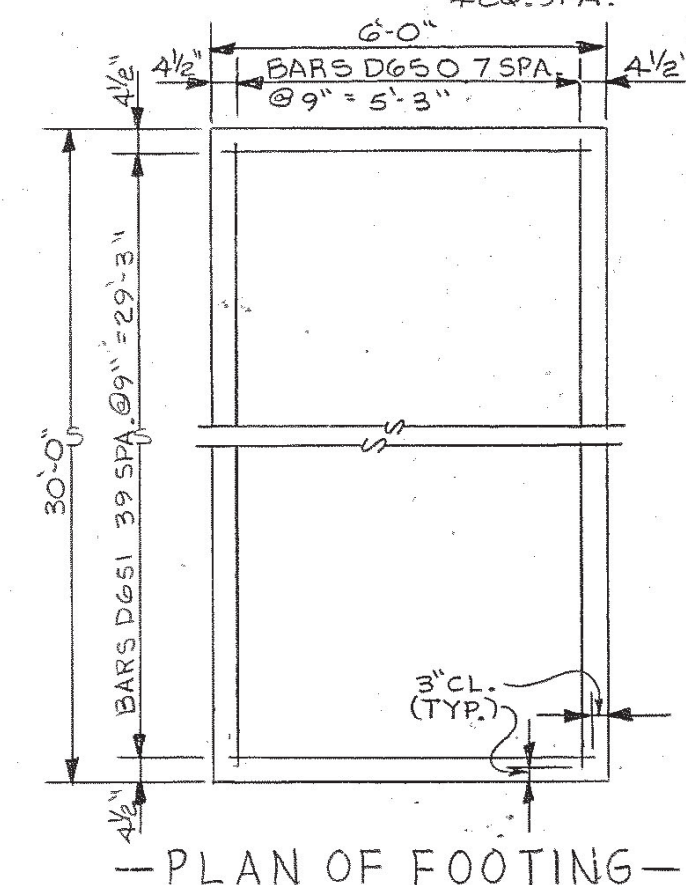
NOTE: BARS H450 TO BE DRILLED AND GROUTED.



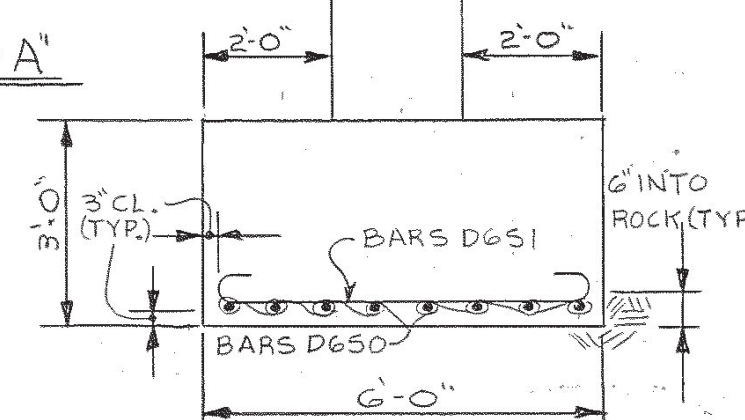
NOTES: RISER BLOCKS TO BE POURED MONOLITHICALLY WITH CAP BEAM.  
RISER BLOCK BEARING PAD SURFACE TO CONFORM TO BOTTOM OF BEAM GRADE.  
COLUMN STEEL TO EXTEND 4'-3" INTO CAP BEAM.

# - BILL OF STEEL -

BARS	LOCATION	SIZE	No. REQD.	BENDING DIMENSIONS				LENGTH
				A	B	C	D	
A750	CAP	7	6					45'-2"
A450	RISER	4	4					3'-0"
A950	COLUMN	9	58					27'-5"
A1050	CAP	10	2					47'-3"
A1051	CAP	10	2					47'-2"
A1052	CAP	10	2					46'-10"
A1053	CAP	10	2					46'-4"
A1054	CAP	10	2					45'-2"
C950	COLUMN	9	58	8'-0 1/2"				10' - 4"
D650	FOOTING	6	8	29'-6"				30'-10"
D651	FOOTING	6	40	5'-6"				6'-0"
D1050	CAP	10	2	47'-3"				50' - 1"
D1051	CAP	10	2	47'-2"				50' - 0"
D1052	CAP	10	2	46'-10"				49' - 8"
D1053	CAP	10	2	46'-4"				49' - 2"
D1054	CAP	10	2	45'-2"				48' - 0"



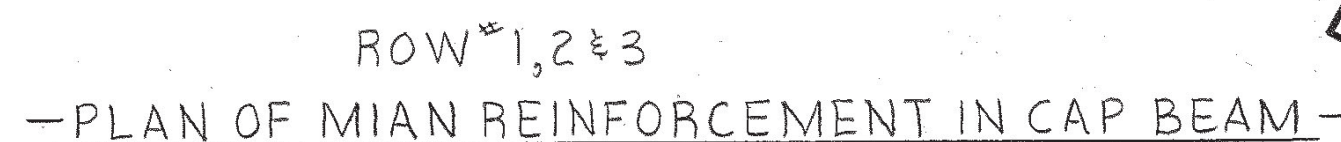
—END ELEVATION—



ESTIMATED QUANTITIES				
ITEM No's.	204-02.01	204-04.01	604-03.01	604-03.02
ITEM	DRY EXCAVATION (BRIDGES) C.Y.	ROCK EXCAVATION (BRIDGES) C.Y.	CLASS "A" CONCRETE (BRIDGES) C.Y.	STEEL BAR REINFORCEMENT (BRIDGES) LBS.
BENT#1	11	99	90	17,694

# -BILL OF STEEL - CONTD.

BARS	LOCATION	SIZE	No. REQD.	ENDING DIMENSIONS				LENGTH	
				A	B	C	D		
E1050	CAP	10	2	27'-0"	104'-11"	1'-0"	10'-2 1/2"	47'-3"	
E1051	CAP	10	2	27'-0"	9'-11"	1'-0"	9'-11 1/2"	14'-10"	
L450	COLUMN	4	115	1'-8"	1'-0"	5'-2"	9'-4 1/2"	14'-8"	
L650	CAP	6	34	1'-0 1/2"	1'-0"	4'-8"		14'-1"	
SERIES	CAP	6	2	1'-0 1/2"	1'-0"	DIM./C VARIES		217'-10"	
L651				FROM 4'-8" TO 4'-1 1/2" IN INC. OF 7/8" (6 BARS)					
SERIES	CAP	6	2	1'-0 1/2"	1'-0"	DIM./C VARIES		175'-6"	
L652				FROM 4'-0 1/2" TO 3'-0 1/4" IN INC. OF 7/8" (4 BARS)					
L653	CAP	6	2	2'-10 1/2"	1'-0"	3'-8"		14'-2"	
L654	CAP	6	2	2'-1"	1'-0"	3'-7 3/4"		12'-6"	
H450	RISER	4	4	3'-0"	1'-6"			6'-0"	
X450	COLUMN	4	46	1'-0"	1'-8"	3'-1 1/2"	10"	11'-6"	
X4750	CAP	7	6	1'-0"	1'-0"			4'-5"	



BENT NOT IN CONTRACT  
BENT HAS BEEN PREVIOUSLY CONSTRUCTED  
PROJ. NO. IR-40-5(94)216 CONTRACT NO. 6741

DESIGNED BY J. MATHIS DATE 2-88  
 DRAWN BY F. FROST DATE 2-88  
 SUPERVISED BY HARBISON & BROOKS DATE 2-88  
 CHECKED BY J. MATHIS DATE 2-88

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS  
BRIDGE No. 2, BENT No. 1  
RAMP 'M' OVER  
INTERSTATE 40  
STATION 84+49.09  
DAVIDSON COUNTY  
1988

CORRECT Edward P. Wasserman  
ENGINEER OF STRUCTURES  
APPROVED Lewis Evans  
DIRECTOR OF HIGHWAYS

M-206-171



# BILL OF STEEL

## SUPERSTRUCTURE

BAR	LOCATION	SIZE	NO.	BENDING DIMENSIONS	LENGTH
A400	BACKWALL	4	12		17'-6"
A401	LT. WING	4	13		6'-4"
A402	LT. APRON WALL	4	4		5'-4"
A403	LT. WING	4	1		12'-4"
A404	LT. WING & APRON	4	7		16'-8"
A405	RT. WING	4	15		5'-9"
A406	RT. WING BRACKET	4	1		13'-4"
A407	RT. WING	4	1		14'-11"
A408	RT. WING & APRON	4	6		16'-7"
A409	LT. WING BRACKET	4	1		11'-1"
A410	ENDWALL BRACKET	4	3		18'-3"
A411	ENDWALL BRACKET	4	2		25'-9"
A412	BACKWALL	4	2		26'-6"
A413	RT. WING	4	13		5'-2"
A414	LT. WING	4	13		5'-3"
A415	RT. WING	4	6		12'-2"
A416	LT. WING	4	6		11'-7"
A417	RT. APRON WALL	4	2		4'-11"
A418	LT. WING BRKT.	4	1		8'-4"
A419	RT. WING BRKT	4	1		10'-4"
A601	LT. WING	6	13		6'-4"
A602	LT. APRON	6	4		5'-4"
A603	LT. WING	6	1		12'-4"
A604	LT. WING & APRON	6	7		15'-10"
A605	RT. WING	6	15		5'-9"
A606	BACKWALL	6	8		49'-10"
A607	LT. WING	6	6		11'-7"
A608	RT. WING	6	13		5'-2"
A609	LT. WING	6	13		5'-3"
A610	RT. WING	6	6		12'-2"
A611	ENDWALL	6	32		10'-5"
A612	ENDWALL LT. END	6	8		3'-9"
A613	ENDWALL RT. END	6	8		4'-2"
A614	RT. APRON WALL	6	2		4'-11"
A615	RT. WING	6	1		14'-11"
A616	RT. WING & APRON	6	1		17'-4"
CB404	LT. APRON	4	7	3'-0" 8"	3'-8"
CB405	RT. APRON	4	6	1'-10" 8"	2'-6"
CD400	ENDWALL	4	6	17'-6" 1'-3"	18'-9"
CD401	ENDWALL	4	6	17'-6" 1'-5"	18'-11"
CD402	ENDWALL	4	6	17'-6" 1'-6"	19'-0"
CD403	ENDWALL	4	6	17'-6" 1'-8"	19'-2"
CD404	LT. APRON	4	7	3'-0" 8"	3'-8"
CD405	RT. APRON	4	6	1'-10" 8"	2'-6"
H501	ROADWAY BRKT	5	98	1'-8" 6"	2'-8"

## SUPERSTRUCTURE

BAR	LOCATION	SIZE	NO.	BENDING DIMENSIONS	LENGTH
A400E	BACKWALL	4	2		17'-6"
A410E	ENDWALL	4	3		18'-0"
A500E	SLAB	5	324		30'-0"
A501E	SLAB	5	36		26'-0"
A600E	SLAB	6	736		43'-8"
A601E	SLAB	6	425		30'-0"
A602E	SLAB	6	43		5'-2"
A617E	ENDWALL	6	102		5'-9"
A620E	SLAB	6	6		51'-3"
A621E	SLAB	6	212		8'-0"
CD400E	ENDWALL	4	1	17'-6" 1'-3"	18'-9"
CD401E	ENDWALL	4	1	17'-6" 1'-5"	18'-11"
CD402E	ENDWALL	4	1	17'-6" 1'-6"	19'-0"
CD403E	ENDWALL	4	1	17'-6" 1'-8"	19'-2"
R600E	SLAB (ABUT. 2)	6	36	3'-0" 1'-10"	4'-10"
H900E	BACKWALL	9	41	2'-2" 4'-9"	11'-8"
SERIES	SLAB	6	2	DIM. VARIES FROM 42'-8" TO 7'-11" IN INCS OF 1'-1/2" (34 BARS)	859'-11"
A618E					
SERIES	SLAB	6	2	DIM. VARIES FROM 42'-8" TO 7'-11" IN INCS OF 1'-1/2" (34 BARS)	859'-11"
A619E					
GB600E	ENDWALL	6	98	2'-2 1/2" 3'-1 1/2"	6'-7"

## ABUTMENTS 1 & 2

BAR	LOCATION	SIZE	NO.	BENDING DIMENSIONS	LENGTH
A540	BEAM (A-1)	5	8		29'-0"
A541	LEFT WING (A-1)	5	3		15'-6"
A542	RIGHT WING (A-1)	5	3		16'-3"
A543	BEAM (A-2)	5	3		53'-1"
A544	RIGHT WING (A-2)	5	3		11'-1"
A545	LEFT WING (A-2)	5	3		11'-9"
A740	BEAM (A-1)	7	14		55'-9"
A741	LEFT WING (A-1)	7	10		15'-6"
A742	RIGHT WING (A-1)	7	10		16'-3"
A743	BEAM (A-2)	7	10		53'-1"
A744	RIGHT WING (A-2)	7	15		11'-9"
A745	LEFT WING (A-2)	7	10		11'-1"
A746	BEAM (A-2)	7	5		16'-0"
A940	ABUT. BACKWALL	9	20	*(A-2)	6'-3"
H640	WINGS (A-1)	6	60	8" 2'-10"	6'-4"
H640	BEAM (A-1)	8	51	8" 4'-4"	9'-4"
H940	ABUT. BACKWALL	9	41	2'-2" 5'-4" *(A-2)	12'-10"
L540	BEAM (A-1+2)	5	53		11'-7"
L541	WINGS (A-1+2)	5	71	2'-2" 1'-0" 2'-2"	9'-8"
L542	ABUT. BEAM (A-2)	5	6	2'-2" 1'-0" 2'-6"	10'-4"
L543	ABUT. LT. WING (A-2)	5	20	2'-2" 1'-0" 2'-7"	10'-6"

## PAVEMENT AT BRIDGE ENDS

BAR	LOCATION	SIZE	NO.	BENDING DIMENSIONS	LENGTH
A490	SLAB ABUT. NO. 2	4	25		47'-2"
A491	SLAB ABUT. NO. 1	4	25		48'-0"
A790	FOOTING	7	16		48'-0"
A990	SLAB	9	162		24'-2"
A1190	SLAB/DRAINS	11	4		6'-0"
L590	FOOTING	5	92	1'-2" 1'-0" 2'-2"	7'-5"
A490E	SLAB ABUT. NO. 2	4	25		47'-2"
A491E	SLAB ABUT. NO. 1	4	25		48'-0"
A690E	SLAB	6	82		24'-2"
A1190E	SLAB/DRAINS	11	4		6'-0"
L590E	FOOTING	5	92	1'-2" 1'-0" 2'-2"	7'-5"

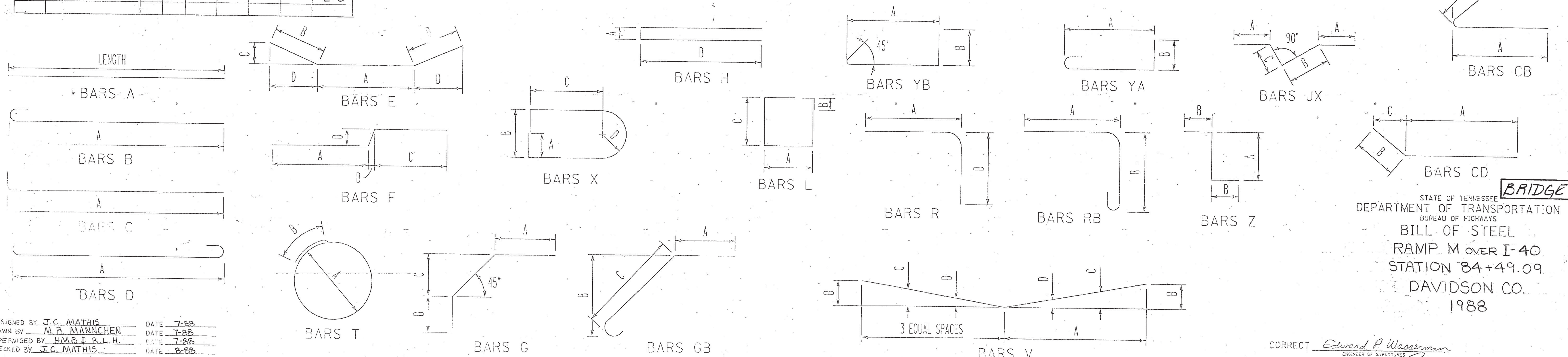
Const. No. 19008-3160-44

PROJECT NO.	YEAR	SHEET NO.
1A-40-5(10) 221	1988	
REVISIONS		
NO.	DATE	BY
1	11-2-88	JCM
2	6-13-89	JCM
3	10-11-89	JCM

## REINFORCING STEEL CODE

TYPE	SIZE	SERIES
A	5	06

NOTE: DIMENSIONS SHOWN ON THIS SHEET ARE OUTSIDE TO OUTSIDE OF BARS. STANDARD C.R.S.I. HOOK DETAILS SHALL APPLY, EXCEPT AS NOTED. NOTE: THE SUFFIX E, FOR BARS SO MARKED, DENOTES EPOXY COATED REINFORCEMENT.



DESIGNED BY: J.C. MATHIS DATE: 7-88  
 DRAWN BY: M.P. MANNCHEN DATE: 7-88  
 SUPERVISED BY: HMB & R.L.H. DATE: 7-88  
 CHECKED BY: J.C. MATHIS DATE: 8-88

CORRECT: Edward P. Wasserman  
 APPROVED: [Signature]

M-206-172