

STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION

# WAR-73-14.58 / 14.62

## WAYNE TOWNSHIP WARREN COUNTY

**PROJECT DESCRIPTION**

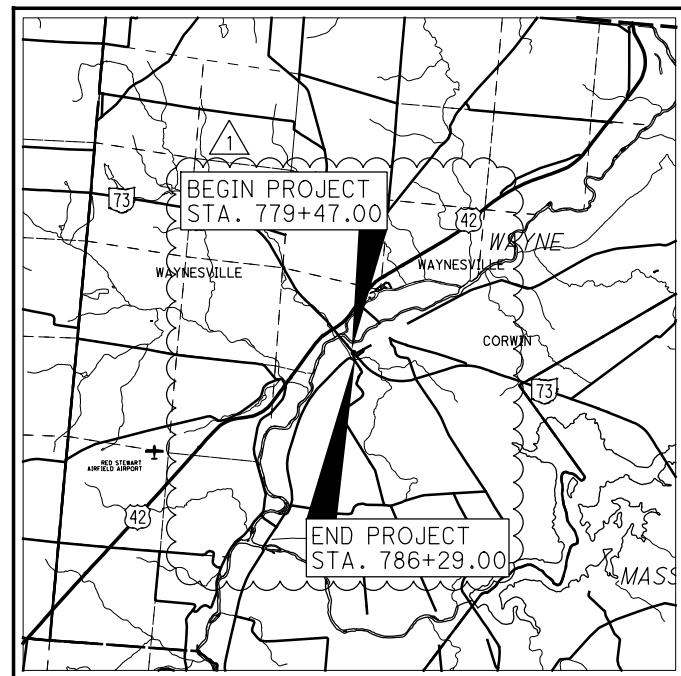
BRIDGE DECK OVERLAY OF WAR-73-1458 OVER THE LITTLE MIAMI RIVER, REPLACEMENT OF WAR-73-1462 OVER CORWIN ROAD AND RECONSTRUCTION OF APPROACH ROADWAY.

**EARTH DISTURBED AREAS**

PROJECT EARTH DISTURBED AREA: 0.70 ACRES  
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A ACRES  
NOTICE OF INTENT EARTH DISTURBED AREA: N/A

**2019 SPECIFICATIONS**

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.



LOCATION MAP

LATITUDE: 39° 31' 25" N LONGITUDE: 84° 05' 10" W



PORTION TO BE IMPROVED	-----	=====
INTERSTATE HIGHWAY	-----	=====
FEDERAL ROUTES	-----	=====
STATE ROUTES	-----	=====
COUNTY & TOWNSHIP ROADS	-----	=====
OTHER ROADS	-----	=====

**DESIGN DESIGNATION**

CURRENT ADT (2022)	-----	8,000
DESIGN YEAR ADT (2042)	-----	12,000
DESIGN HOURLY VOLUME (2042)	-----	1,200
DIRECTIONAL DISTRIBUTION	-----	60%
TRUCKS (24 HOUR B&C)	-----	6%
DESIGN SPEED	-----	55 MPH
LEGAL SPEED	-----	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	04 MINOR ARTERIAL ROADS (RURAL)	
NHS PROJECT	-----	NO

**DESIGN EXCEPTIONS**

NONE REQUIRED

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DISTRICT DEPUTY DIRECTOR

*Tammy K Campbell*  
DIRECTOR, DEPARTMENT OF TRANSPORTATION  
*Jack M. ...*

**ENGINEERS SEAL:**

FOR STRUCTURES OVER 20 FOOT SPAN



**ENGINEERS SEAL:**

FOR ENTIRE PLAN EXCEPT STRUCTURES OVER 20 FOOT SPAN



**UNDERGROUND UTILITIES**

Contact Two Working Days Before You Dig



OHIO811, 8-1-1, or 1-800-362-2764 (Non-members must be called directly)

PLAN PREPARED BY:



100 East Campus View Boulevard, Suite 250 • Columbus, Ohio 43235

**STANDARD CONSTRUCTION DRAWINGS**

**SUPPLEMENTAL SPECIFICATIONS**

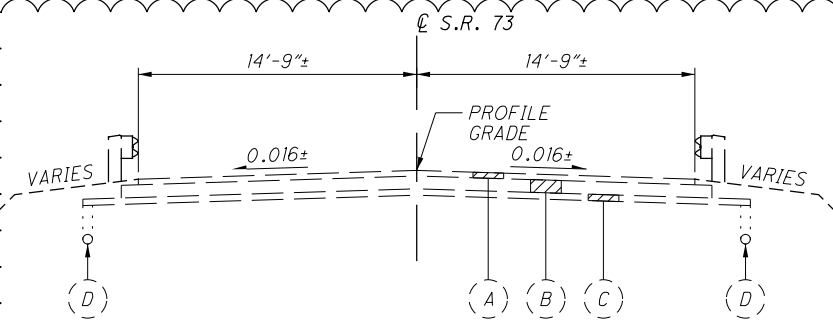
**SPECIAL PROVISIONS**

BP-3.1	1/21/22	HW-2.1	7/20/18	AS-1-15	1/20/23	MT-96.11	4/16/21	TC-41.20	10/18/13	800	4/21/23
BP-5.1	7/15/22			AS-2-15	1/20/23	MT-96.20	7/15/16	TC-52.20	1/15/21	809	4/21/23
		I-3D	7/15/22	PCB-91	7/17/20	MT-96.26	1/18/19	TC-61.30	7/19/19	821	4/20/12
DM-1.1	7/17/20			PSID-1-13	1/20/23	MT-97.10	4/19/19	TC-65.10	1/17/14	832	7/15/22
DM-1.2	7/16/21	RM-1.1	1/20/23	SICD-1-96	7/18/14	MT-101.60	1/17/20	TC-65.11	7/15/22	840	4/15/22
DM-4.1	7/17/20	RM-4.2	4/17/20	SICD-2-14	1/15/21	MT-101.70	1/17/20			848	1/15/21
DM-4.3	1/15/16	RM-4.5	7/21/17	VPF-1-90	1/20/23	MT-101.75	1/17/20			867	4/15/22
DM-4.4	1/15/16					MT-101.90	7/17/20			874	4/17/20
						MT-105.10	1/17/20			878	1/21/22
MGS-1.1	7/16/21					MT-110.10	7/19/13				
MGS-2.1	1/19/18										
MGS-3.1	1/19/18										
MGS-4.2	7/19/13										
MGS-4.3	1/18/13										
MGS-5.3	7/15/16										
MGS-6.1	1/19/18										

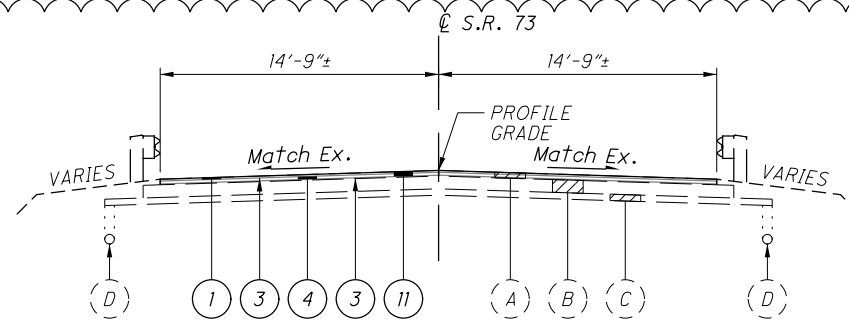
FEDERAL PROJECT NO. E161 (444)  
PID NO. 100827  
CONSTRUCTION PROJECT NO.  
RAILROAD INVOLVEMENT NONE  
WAR-73-14.58 / 14.62  
1/81

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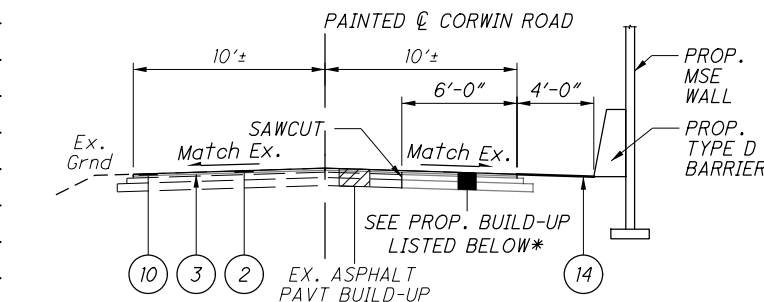
ISSUE RECORD	NO.	DATE	DESCRIPTION
	1	7/12/23	REVISED PROJECT LIMITS



**S.R. 73 - EXISTING SECTION**  
 STA. 772+37.00 TO STA. 782+30.84 (SEE NOTE 1)  
 STA. 784+59.58 TO STA. 788+18.00 (SEE NOTE 2)

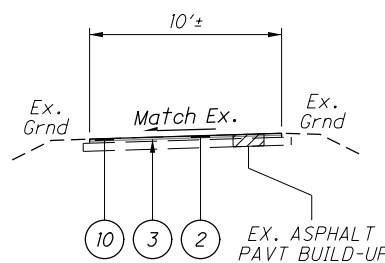


**S.R. 73 - RESURFACING SECTION**  
 LEFT STA. 772+37.00 TO STA. 779+47.00  
 STA. 785+37.00 TO STA. 788+18.00  
 RIGHT STA. 772+37.00 TO STA. 781+41.00  
 STA. 786+29.00 TO STA. 788+18.00

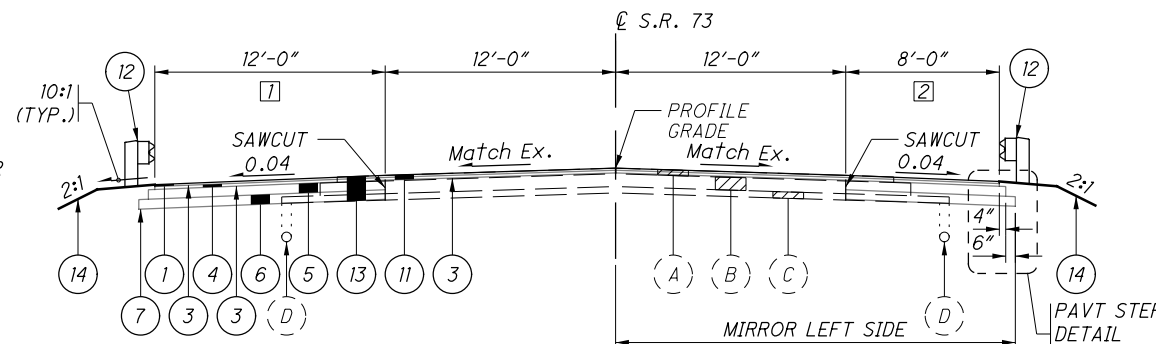


**CORWIN RD - RESURFACING & REPAIR SECTION**

LIMITS OF FULL-WIDTH RESURFACING: APPX. 145 LF  
 LIMITS OF FULL-DEPTH REPAIR: APPX. 65 LF  
 (RESURFACING ASSUMED TO BE 50' PAST THE OUTSIDE BEAMS OF PROPOSED BRIDGE AND PARTIAL-WIDTH, FULL-DEPTH REPAIR ASSUMED TO BE 10' OUTSIDE THE BEAMS)  
 PROP. REPAIR BUILD-UP: 3" - 441 AC Surface, Type 1, (449), PG64-22  
 4" - Asphalt Concrete Base, (449), PG64-22  
 6" - Aggregate Base  
 Subgrade Compaction  
 \* ENSURE CONTINUITY OF AGGREGATE BASE DRAINAGE.

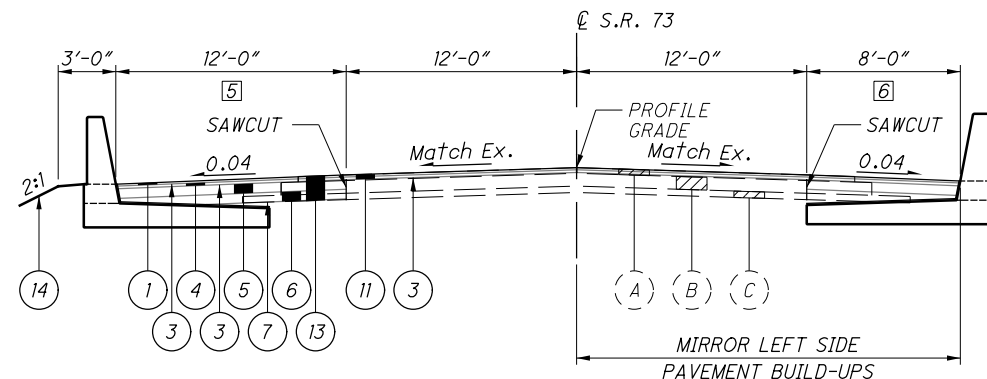


**SCENIC TRAIL - RESURFACING SECTION**  
 SAME LIMITS AS CORWIN ROAD RESURFACING



**S.R. 73 - SHOULDER WIDENING & RESURFACING SECTION - GUARDRAIL**

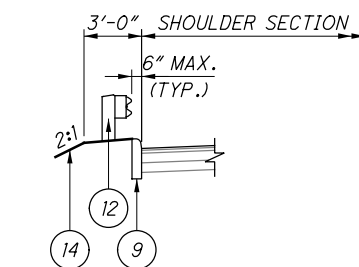
LEFT STA. 779+47.00 TO STA. 780+86.00  
 STA. 784+83.23 TO STA. 785+20.00  
 RIGHT STA. 781+41.00 TO STA. 781+49.00  
 STA. 784+50.00 TO STA. 786+29.00



**S.R. 73 - SHOULDER WIDENING & RESURFACING SECTION - MOMENT SLAB**

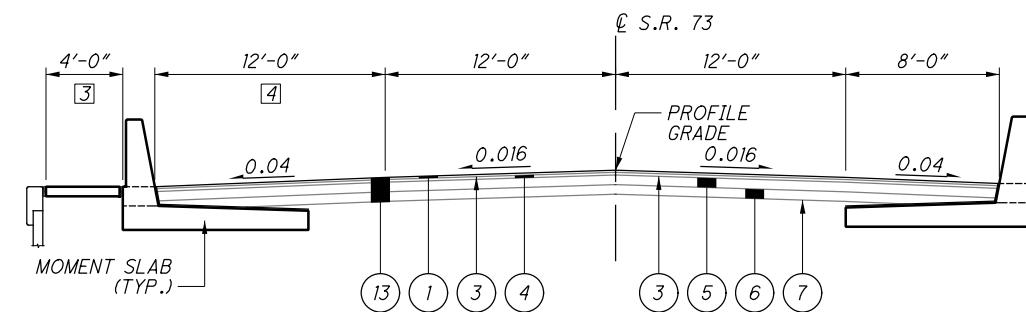
FOR MOMENT SLAB & MSE WALL DETAILS, SEE STRUCTURE PLANS

LEFT STA. 780+86.00 TO STA. 781+49.00  
 RIGHT STA. 784+83.23 TO STA. 785+50.00



**CURB & GUARDRAIL DETAIL**  
 MIRROR FOR RIGHT

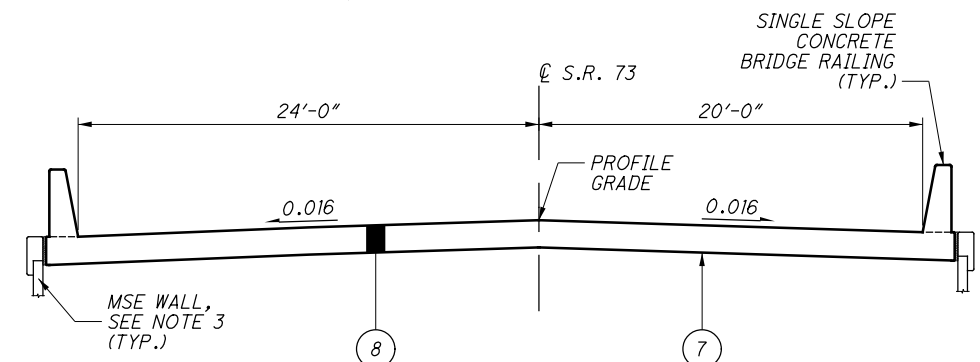
LEFT STA. 780+67.85 TO STA. 780+86.00  
 STA. 784+83.23 TO STA. 785+37.00  
 RIGHT STA. 781+67.85 TO STA. 781+86.00  
 STA. 785+50.00 TO STA. 785+68.13



**S.R. 73 - MOMENT SLAB FULL-DEPTH SECTION**

FOR MOMENT SLAB & MSE WALL DETAILS, SEE STRUCTURE PLANS

LEFT STA. 781+49.00 TO STA. 782+82.83  
 STA. 784+39.54 TO STA. 784+83.23  
 RIGHT STA. 781+86.00 TO STA. 782+82.83  
 STA. 784+39.54 TO STA. 784+83.23



**S.R. 73 - APPROACH SLAB SECTION**

STA. 782+82.83 TO STA. 783+14.85  
 STA. 784+07.53 TO STA. 784+39.54

**LEGEND**

- (A) EXISTING 3 1/2"± ASPHALT CONCRETE
- (B) EXISTING 8"± REINFORCED CONCRETE
- (C) EXISTING 4"± SUBBASE
- (D) EXISTING UNDERDRAIN
- ① ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22 (T=1.25")
- ② ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22 (T=1.5")
- ③ ITEM 407 - NON-TRACKING TACK COAT
- ④ ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448) (T=1.75")
- ⑤ ITEM 301 - ASPHALT CONCRETE BASE, PG64-22, (449) (T=6")
- ⑥ ITEM 304 - AGGREGATE BASE (T=6")
- ⑦ ITEM 204 - SUBGRADE COMPACTION
- ⑧ ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=17")
- ⑨ ITEM 609 - CURB, TYPE 4-C
- ⑩ ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (T=1.5")
- ⑪ ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (T=3")
- ⑫ ITEM 606 - GUARDRAIL, TYPE MGS OR WITH LONG POSTS PER PLANS
- ⑬ ITEM 202 - PAVEMENT REMOVED
- ⑭ ITEM 659 - SEEDING AND MULCHING

**NOTES**

1. STA. 772+37.00 IS EQUAL TO STA. 109+60.25 SHOWN ON SHEET 30.
2. STA. 788+18.00 MARKS MAINTENANCE OF TRAFFIC STOP BAR LOCATION.
3. FOR MSE WALL LIMITS, SEE STRUCTURE PLANS.
4. INCLUDES RETURNS & LENGTH OF SMITH ROAD. SEE LIMITS SHOWN ON SHEET 18.
- ① FROM 2'-9" TO 8'-0", STA. 779+47.00 TO STA. 780+86.00  
 WIDTH VARIES AROUND RETURN & ALONG SMITH ROAD, SEE PLANS.
- ② FROM 2'-9"± TO 4'-3", STA. 781+41.00 TO STA. 781+49.00  
 FROM 4'-3" TO 8'-0", STA. 781+49.00 TO STA. 784+68.00  
 8'-0", STA. 781+68.00 TO STA. 781+86.00  
 FROM 6'-6" TO 3'-4"±, STA. 785+50.00 TO STA. 786+29.00  
 FULL-DEPTH REPLACEMENT TO CL
- ③ FROM 4'-0" TO 0'-0", STA. 781+86.00 TO STA. 782+82.83  
 0'-0", STA. 784+39.54 TO 784+83.23
- ④ 8'-0", STA. 781+49.00 TO STA. 781+86.00  
 FROM 8'-0" TO 12'-0", STA. 781+86.00 TO STA. 782+82.83
- ⑤ 8'-0", STA. 780+86.00 TO STA. 781+49.00
- ⑥ FROM 8'-0" TO 6'-6", STA. 785+11.00 TO STA. 785+50.00

ISSUE RECORD		DESCRIPTION
NO.	DATE	REVISED DISINCENTIVE TABLE
1	7/12/23	

**INTERIM DATE REQUIREMENTS**

THE PROJECT HAS AN INTERIM COMPLETION DATE OF OCTOBER 1, 2024. ON OR BEFORE THE INTERIM COMPLETION DATE, THE CONTRACTOR SHALL COMPLETE ALL MAJOR BRIDGE WORK AND HAVE ALL LANES OPEN TO TRAFFIC.

THE CONTRACT WILL BE SUBJECT TO DAILY DISINCENTIVES FOR FAILURE TO COMPLETE ALL THE REQUIRED WORK, AND ASSOCIATED INCIDENTALS RELATED TO THE WORK, AS OUTLINED IN THE TABLE INCLUDED IN THIS NOTE. DAILY DISINCENTIVES ARE APPLICABLE TO THE WORK REQUIRED TO THE INTERIM COMPLETION DATE ONLY. THE CONTRACT IS STILL SUBJECT TO LIQUIDATED DAMAGES AS OUTLINE IN CMS 108.07 FOR THE REMAINDER OF THE CONTRACT.

DESCRIPTION OR LOCATION OF CRITICAL WORK	INTERIM COMPLETION DATE	TIME PERIOD	DISINCENTIVE \$ PER TIME PERIOD
COMPLETION OF MAJOR BRIDGE WORK AND ALL LANES OPEN TO TRAFFIC	10/01/2024	DAY	\$2,100

**CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL**

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

**ITEM 606 ANCHOR ASSEMBLY, MGS TYPE E**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

**ITEM 645 - EDGE LINE, 6", TYPE A3, AS PER PLAN**

PAYMENT FOR GROOVING SHALL BE INCLUDED FOR PAVEMENT MARKINGS TO BE INLAID ON CONCRETE BRIDGE DECK.

**ITEM 645 - CENTERLINE LINE, TYPE A3, AS PER PLAN**

PAYMENT FOR GROOVING SHALL BE INCLUDED FOR PAVEMENT MARKINGS TO BE INLAID ON CONCRETE BRIDGE DECK.

**EXISTING SUBSURFACE DRAINAGE**

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE. UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 605, AGGREGATE DRAINS 43 FT

**EARTHWORK CALCULATIONS**

THE EARTHWORK QUANTITIES GENERATED BY THE CROSS SECTIONS AND THE CALCULATED QUANTITIES FOR THE MSE WALL INSTALLATION IN THE STRUCTURES PLANS ARE SUMMARIZED BELOW.

ITEM 203, EXCAVATION 2241 CY  
 ITEM 840, WALL EXCAVATION 1892 CY

ITEM 203, EMBANKMENT 2295 CY  
 ITEM 203, GRANULAR MATERIAL, TYPE B, AS PER PLAN 723 CY

ITEM 840, WALL EXCAVATION AND ITEM 203, GRANULAR MATERIAL, TYPE B, AS PER PLAN QUANTITIES HAVE BEEN DEDUCTED FROM THE CORRESPONDING EARTHWORK QUANTITIES GENERATED BY THE CROSS SECTIONS.

THE FOLLOWING DIFFERENCE IN QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 203, EXCAVATION 349 CY  
 ITEM 203, EMBANKMENT 1572 CY

**ITEM 623 - REFERENCE MONUMENT, AS PER PLAN**

CONTRACTOR SHALL SUPPLY THE NEW BENCHMARK POSITION INFORMATION TO THE ENGINEER FOR SUBMISSION TO THE DISTRICT SURVEY OPERATIONS MANAGER. PAYMENT FOR THE ITEM WILL NOT BE PROVIDED UNTIL THE NEW BENCHMARK IS INSTALLED AND THE REFERENCE INFORMATION IS PROVIDED AND ACCEPTED BY THE DISTRICT SURVEY OPERATION MANAGER.

THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY:

ITEM 623, REFERENCE MONUMENT, AS PER PLAN 1 EACH

ISSUE RECORD:

NO.	DATE	DESCRIPTION
1	7/12/23	REVISED PROJECT LIMITS & ADDITIONS

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SHEET NO.	PHASE	REF NO.	STATION TO STATION	614				622	
				WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL) EACH	WORK ZONE CENTER LINE, CLASS I MILE	WORK ZONE EDGE LINE, CLASS I, 6" MILE	WORK ZONE STOP LINE, CLASS I FT	PORTABLE BARRIER, UNANCHORED FT	PORTABLE BARRIER, ANCHORED (NCHRP 350) FT
			TO						
11	1	CLY-1	772+39.00		0.09				
11	1	SLW-1	777+39.00				12		
11	1	ELW-1	777+39.00			0.18			
11	1	ELW-2	777+89.00			0.17			
11	1	PB-1	778+97.00	1				350	
11	1	PB-2	782+44.00						200
11	1	PB-3	784+44.00	1				150	
11	1	SLW-2	788+18.00				12		
11	1	CLY-2	788+18.00		0.09				
12	2	ELW-3	777+88.00			0.19			
12	2	ELW-4	780+37.00			0.11			
12	2	PB-4	780+58.00	2				250	
12	2	PB-5	783+08.00						110
12	2	PB-6	784+18.00					250	
11-12	1-2								
CORWIN RD				2	0.07	20		290.00	
TOTALS CARRIED TO GENERAL SUMMARY				6	0.18	0.72	44	1290	310

WAR-73-14.58 / 14.62	MAINTENANCE OF TRAFFIC SUBSUMMARY	CALCULATED GF CHECKED JFM
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ISSUE RECORD NO.	DATE	DESCRIPTION
1	7/12/23	REVISED LANE VALUE CONTRACT TABLE

**ITEM 614, MAINTAINING TRAFFIC**

TRAFFIC ON S.R. 73 WILL BE DETOURED FOR 10 DAYS DURING THE OVERLAY AND PATCHING OF WAR-73-1458. TRAFFIC WILL BE MAINTAINED BY A ONE LANE, TWO-WAY TEMPORARY TRAFFIC SIGNAL SYSTEM THROUGHOUT THE CONSTRUCTION OF WAR-73-1462 AND APPROACH WORK. SMITH ROAD WILL BE DETOUR THROUGHOUT THE DURATION CONSTRUCTION.

ALL WORK REQUIRED TO MAINTAIN THE ROADWAYS AND DETOURS, UNLESS OTHERWISE PROVIDED IN THESE PLANS, SHALL BE INCLUDED IN ITEM 614 MAINTAINING TRAFFIC. PAYMENT FOR THIS ITEM SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM 614, MAINTAINING TRAFFIC (LUMP) AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK TO THE SATISFACTION OF THE ENGINEER.

COMPLETE CLOSURES OF S.R. 73, CORWIN ROAD, AND SMITH ROAD SHALL NOT OCCUR DURING THESE SPECIFIED TIME FRAMES AND THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS. THE TEMPORARY SIGNALIZED LANE CLOSURE MAY REMAIN IN PLACE ONCE CONSTRUCTED.

HOLIDAYS

CHRISTMAS	FOURTH OF JULY	MEMORIAL DAY
NEW YEAR'S EVE	LABOR DAY	THANKSGIVING
SAUERKRAUT FESTIVAL	RENAISSANCE FESTIVAL	

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

**DAY OF HOLIDAY TIME ALL LANES MUST BE OPEN TO TRAFFIC**

SUNDAY	12:00 NOON	FRIDAY	THROUGH	6:00 AM	MONDAY
MONDAY	12:00 NOON	FRIDAY	THROUGH	6:00 AM	TUESDAY
TUESDAY	12:00 NOON	TUESDAY	THROUGH	6:00 AM	WEDNESDAY
WEDNESDAY	12:00 NOON	WEDNESDAY	THROUGH	6:00 AM	THURSDAY
THURSDAY	12:00 NOON	WEDNESDAY	THROUGH	6:00 AM	FRIDAY
THANKSGIVING	6:00 AM	WEDNESDAY	THROUGH	6:00 AM	MONDAY
FRIDAY	12:00 NOON	THURSDAY	THROUGH	6:00 AM	MONDAY
SATURDAY	12:00 NOON	FRIDAY	THROUGH	6:00 AM	MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

NOTICE OF CLOSURE SIGNS (W20-H13), SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. [AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.]

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO

AVOID DISTRACTING MOTORISTS.

NOTIFICATION TIME FRAME TABLE		
ITEM	DURATION OF CLOSURE	SIGN DISPLAY TO PUBLIC
RAMP & ROAD CLOSURES	>=2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	>12 HOURS & <2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	<12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND TYPE III BARRICADES OF THE TYPE AND LOCATION AS SHOWN IN THE PLANS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

**PLACEMENT OF ASPHALT CONCRETE**

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

**DUST CONTROL**

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:  
 ITEM 616, WATER 4 MGAL

**ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS UNIDIRECTIONAL)**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

**FULLY-ACTUATED OPERATION OF WORK ZONE TRAFFIC SIGNAL**

THE WORK ZONE SIGNAL CONTROL REQUIRED FOR THIS PROJECT AND SHOWN ON MAINTENANCE OF TRAFFIC PLAN SHEETS AND TRAFFIC SCDS MT- 96.11, 96.20 AND 96.26 SHALL BE FULLY TRAFFIC-ACTUATED AND OPERATE IN A MANNER SIMILAR TO THAT DESCRIBED IN SECTION 733.02 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE INITIAL CONTROLLER TIMING SHALL BE AS FOLLOWS:

	PHASE			
	1 (ALL RED) DUMMY PHASE	2 MAINLINE (WESTBOUND)	3 (ALL RED) DUMMY PHASE	4 MAINLINE (EASTBOUND)
MIN. GREEN		10		10
EXTENSION		4		4
MAX. GREEN		36.5		36.5
YELLOW		3.5		3.5
ALL RED	35		35	
RECALL	ON	OFF	OFF	OFF

THE CONTRACTOR SHALL ALSO DESIGN, FURNISH, INSTALL AND MAINTAIN A TRAFFIC DETECTOR ON EACH TRAFFIC APPROACH WHICH WILL RELIABLY DETECT ALL LEGAL TRAFFIC APPROACHING (BUT NOT LEAVING) THE SIGNAL AS IT PASSES OR WAITS IN THE DESIGNATED DETECTOR ZONE SHOWN IN THE PLANS. DETECTOR DESIGNS WHICH DO NOT PROVIDE RELIABLE DETECTION, FREE FROM FALSE CALLS, SHALL BE IMMEDIATELY REPLACED BY THE CONTRACTOR.

**MAINTENANCE OF LITTLE MIAMI SCENIC TRAIL TRAFFIC**

TRAIL TRAFFIC SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION OF THE PROJECT EITHER THROUGH EXISTING TRAIL OR THROUGH AN ALTERNATE ROUTE APPROVED BY THE ENGINEER.

ADEQUATE SIGNING BOTH BEFORE AND AFTER WORK ZONE SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR. THE FOLLOWING TYPE SIGNS ARE CONSIDERED TO BE MINIMUM TREATMENT:

1. ADVANCED WARNING TYPE SIGNS FOR TRAIL USERS APPROXIMATELY ONE-QUARTER MILE BEFORE WORK ZONE ON BOTH APPROACHES;
2. SIGNS SPECIFYING ACTIONS REQUIRED OF TRAIL USERS APPROXIMATELY 300 FEET BEFORE WORK ZONE ON BOTH APPROACHES.

THE ABOVE SIGNING SHALL BE MOUNTED IN SUCH A WAY AS TO BE UNOBSTRUCTED BY TREE BRANCHES, AND PROPERLY ANGLED FOR MAXIMUM VISIBILITY FROM THE TRAIL. THE METHOD OF SUPPORTING THE SIGNS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. UPON COMPLETION OF THE PROJECT, THE SIGNS AND SUPPORT SYSTEMS SHALL BE COMPLETELY REMOVED FROM THE TRAIL. TEMPORARY TRAILS IF USED SHALL BE CONSTRUCTED AND MAINTAINED BY THE CONTRACTOR WITH THE LEAST POSSIBLE DISTURBANCE TO THE SURROUNDING AREA.

THE TRAIL SHALL BE ADEQUATELY MARKED IN BOTH DIRECTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE RIGHT-OF-WAY FOR THE TEMPORARY TRAILS IF REQUIRED.

**LANE VALUE CONTRACT**

THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES AS DESIGNATED IN THE LANE VALUE CONTRACT TABLE BELOW. THE DISINCENTIVES WILL BE ASSESSED FOR EACH HOUR THE CRITICAL LANES ARE RESTRICTED FROM FULL USE BY THE TRAVELING PUBLIC WITHIN THE RESTRICTED TIME PERIOD.

DESCRIPTION OF CRITICAL LANE TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME UNIT
S.R. 73 (BRIDGE WAR-73-1458)	10-DAY CLOSURE	DAY	\$1,900
PHASE 1 MOT - CORWIN RD (O'NEALL RD TO SMITH RD)	10- & 3-DAY CLOSURES	DAY	\$260
PHASE 2 MOT - CORWIN RD (O'NEALL RD TO SMITH RD)	10- & 3-DAY CLOSURES	DAY	\$260

**ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN**

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) OF THE PLAN. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER.

THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

PARSONS  
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ISSUE RECORD		DESCRIPTION
NO.	DATE	NOTE DELETION & NOTE REVISIONS
1	7/12/23	

**ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, APP CONT.**  
 THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN (ASSUMING 3 PCMS SIGNS FOR 1 MONTH) 3 SNMT

**DELINEATION OF PORTABLE AND PERMANENT BARRIER**  
 BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND PERMANENT CONCRETE BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE UNDER EITHER OF THE FOLLOWING CONDITIONS: ALONG TAPERS AND TRANSITION AREAS; OR ALONG CURVES (OUTSIDE ONLY) WITH DEGREE OF CURVATURE GREATER THAN OR EQUAL TO 3 DEGREES.

THE INCREASED BARRIER DELINEATION SHALL CONSIST OF EITHER DELINEATION PANELS OR THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.

DELINEATION PANELS SHALL CONSIST OF PANELS OF DELINEATION, APPROXIMATELY 34 INCHES LONG AND 6 INCHES WIDE AND SHALL BE "CRIMPED." PANELS SHALL BE INSTALLED AND SPACED PER TRAFFIC SCD MT-101.70.

TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLE-STACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT- 101.70.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL) 91 EACH  
 ITEM 614, OBJECT MARKER, TWO-WAY 91 EACH  
 ITEM 614, INCREASED BARRIER DELINEATION 475 FEET

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

**OVERHEAD-MOUNTED WORK ZONE SIGNALS**  
 SIGNALS SHALL BE OVERHEAD MOUNTED IN ACCORDANCE WITH THE DETAILS SHOWN ON TRAFFIC SCD MT-96.20.

**DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL**  
 BARRIER REFLECTORS SHALL BE INSTALLED ON ALL TEMPORARY GUARDRAIL USED FOR TRAFFIC CONTROL; AND, ON ALL PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. BARRIER REFLECTORS SHALL CONFORM TO C&MS 626 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET.

OBJECT MARKERS SHALL BE INSTALLED ON ALL TEMPORARY AND PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. GUARDRAIL-MOUNTING OF OBJECT MARKERS SHALL BE MADE BY INSTALLING THE OBJECT MARKERS ON THE EXTENSION BLOCKS RATHER THAN DIRECTLY ONTO THE GUARDRAIL ITSELF. OBJECT MARKERS SHALL CONFORM TO C&MS 614.03 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET WITH A 25 FOOT OFFSET FROM THE BARRIER REFLECTORS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 2 (BIDIRECTIONAL) 8 EACH  
 ITEM 614, OBJECT MARKER, TWO-WAY 8 EACH

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE ABOVE ITEM(S).

**SEQUENCE OF CONSTRUCTION**

S.R. 73 DETOUR PHASE  
 FOR CLOSURE DETAILS SEE S.R. 73 DETOUR PLAN. DURING A 10-DAY CLOSURE, PERFORM OVERLAY WORK AND BEGIN SUBSTRUCTURE PATCHING ON WAR-73-1458. ANY REMAINING PATCHING MAY BE COMPLETED AFTER S.R. 73 HAS BEEN REOPENED. SET UP TEMPORARY SIGNAL SYSTEM FOR PHASE 1 INCLUDING CONTROLLER TIMING. ESTABLISH MOT PHASE 1 TRAFFIC CONFIGURATION INCLUDING STRIPING, PORTABLE BARRIER PLACEMENT, SMITH ROAD DETOUR SIGNING, AND S.R. 73 ADVANCED WORK ZONE SIGNING TO ENABLE DEMOLITION AND RECONSTRUCTION OF NORTH SIDE OF WAR-73-1462.

WAR-73-1462 PHASE 1  
 DETOUR CORWIN ROAD TRAFFIC ONLY AFTER S.R. 73 HAS BEEN REOPENED TO THROUGH TRAFFIC (FOR CLOSURE DETAILS SEE CORWIN ROAD DETOUR PLAN). DURING A 10-DAY CLOSURE, PERFORM ALL PHASE 1 DEMOLITION ACTIVITIES FOR APPLICABLE PORTION OF WAR-73-1462. FOLLOWING THE 10-DAY CLOSURE, TRAFFIC MAY BE MAINTAINED ON CORWIN ROAD PER MT-96.11 TO FACILITATE CONSTRUCTION OF AND AROUND THE FORWARD ABUTMENT. TEMPORARY PORTABLE SIGNALS ARE ACCEPTABLE DUE TO OVERHEAD CONSTRUCTION CONSTRAINTS. THE CONTRACTOR IS TO USE REMOVABLE TAPE (CMS 740.06, TYPE 1) IN LIEU OF WORK ZONE PAINT OPTIONS ON CORWIN ROAD. THE STOP BAR FOR THE SOUTHBOUND DIRECTION ON CORWIN ROAD SHALL BE PLACED 160 FEET OFF THE LEFT OUTSIDE BEAM OF THE PROPOSED BRIDGE. THE STOP BAR FOR THE NORTHBOUND DIRECTION ON CORWIN ROAD SHALL BE PLACED BEFORE THE INTERSECTION WITH O'NEALL ROAD. O'NEALL ROAD'S TRAFFIC MOVEMENTS SHALL BE INCLUDED IN THE TEMPORARY SIGNAL'S TIMING AND APPROVED BY THE ENGINEER. THE PORTABLE SIGNAL FOR O'NEALL ROAD SHALL BE PLACED ON A STABLE AGGREGATE PAD CREATED ON THE FAR SIDE OF THE INTERSECTION FROM O'NEALL ROAD.

AN ADDITIONAL 3-DAY CLOSURE (WITH THE SAME SET-UP CONDITIONS AS THE 10-DAY CLOSURE) IS PERMITTED TO ERECT PHASE 1 BEAMS.

CONTINUING PHASE 1 WORK, CONSTRUCT REMAINING STRUCTURE COMPONENTS, ROADWAY APPROACH AND SHOULDER PAVEMENT, GUARDRAIL, PERMANENT SIGNING, CONCRETE BARRIER, DRAINAGE AND GRADING ON THE NORTH SIDE OF STRUCTURE. DO NOT PAVE FINAL SURFACE COURSE ON APPROACHES AND SHOULDERS.

UPON COMPLETION OF ALL PHASE 1 CONSTRUCTION ACTIVITIES, USE SHORT TERM WEEKEND CLOSURES PER MT-97.10 TO SET UP PHASE 2 MOT LAYOUT. SHIFT TRAFFIC ONTO THE NEWLY CONSTRUCTED NORTH SIDE OF THE BRIDGE.

WAR-73-1462 PHASE 2  
 DETOUR CORWIN ROAD TRAFFIC (FOR CLOSURE DETAILS SEE CORWIN ROAD DETOUR PLAN). DURING ANOTHER 10-DAY CLOSURE, PERFORM ALL PHASE 2 DEMOLITION ACTIVITIES FOR THE REMAINING PORTION OF WAR-73-1462. FOLLOWING THE 10-DAY CLOSURE, TRAFFIC MAY AGAIN BE MAINTAINED PER MT-96.11 TO FACILITATE CONSTRUCTION OF AND AROUND FORWARD ABUTMENT. THE CONTRACTOR IS TO USE THE SAME SET UP AS DESCRIBED IN PHASE 1.

AN ADDITIONAL 3-DAY CLOSURE IS ALLOWED TO ERECT THE REMAINING BEAMS. CONTINUING PHASE 2 WORK, CONSTRUCT REMAINING STRUCTURE COMPONENTS, ALL LAYERS OF ROADWAY APPROACH AND SHOULDER PAVEMENT, GUARDRAIL, PERMANENT SIGNING, CONCRETE BARRIER, DRAINAGE, GRADING AND FINAL PAVEMENT MARKINGS ON THE SOUTH SIDE OF STRUCTURE.

UPON COMPLETION OF ALL PHASE 2 CONSTRUCTION ACTIVITIES, USE SHORT TERM WEEKEND CLOSURES PER MT-97.10 TO REMOVE THE PHASE 2 MOT SCHEME. REMOVE TEMPORARY PAVEMENT MARKINGS, PORTABLE CONCRETE BARRIER, ADVANCED WORK ZONE SIGNING, AND TEMPORARY TRAFFIC SIGNALS. UPON REMOVAL OF ALL PHASE 2 MOT ITEMS, USE SHORT TERM WEEKEND CLOSURES PER MT-97.11 TO PAVE THE REMAINING FINAL SURFACE COURSE AND PLACE PERMANENT PAVEMENT MARKINGS ON THE NORTH SIDE OF WAR-73-1462.

**ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS**

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMTUCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMTUCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.
- DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMTUCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

- FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).
- FOR OPERATIONS WITHOUT POSITIVE PROTECTION OCCURRING WITHIN 10 FEET OF AN OPEN TRAVELED LANE THAT MEET ALL OF THE FOLLOWING CRITERIA:
  - ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND
  - AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER

THAT IS IN EFFECT AT THE TIME OF THE OPERATION; AND,  
 - AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS)

"WITHOUT POSITIVE PROTECTION" MEANS USE OF DRUMS, CONES, SHADOW VEHICLE, ETC, WITHOUT PROTECTION FROM PORTABLE BARRIER OR OTHER RIGID BARRIER ALONG THE WORK AREA. THIS PHRASE DOES NOT APPLY TO CASES WHERE POSITIVE PROTECTION IS REQUIRED. MOBILE OPERATIONS ARE REGARDED AS "WITHOUT POSITIVE PROTECTION". FOR WORK ZONES USING A COMBINATION OF BARRIER AND TEMPORARY TRAFFIC CONTROL DEVICES (CONES, DRUMS, ETC), THE DESIGNATION SHALL BE BASED UPON THE TYPE OF DEVICES USED IN THE AREA THAT WORKERS ARE LOCATED.

IF MULTIPLE ACTIVE LOCALIZED QUALIFYING WORK AREAS OCCUR WITHOUT POSITIVE PROTECTION, PER MAINLINE TRAFFIC DIRECTION, PROVIDE A UNIFORMED LEO AND OFFICIAL PATROL CAR IN ADVANCE OF:

- THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER; OR
- THE ACTIVE WORK AREA LATERALLY CLOSEST TO THE OPEN TRAVELED LANE; OR
- OTHER LOCATION AS APPROVED BY THE ENGINEER.

THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE AS THE OPERATIONS PROCEED IN THE LOCALIZED QUALIFYING WORK AREAS.

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION (OR AT THE POINT OF ROAD CLOSURE), AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

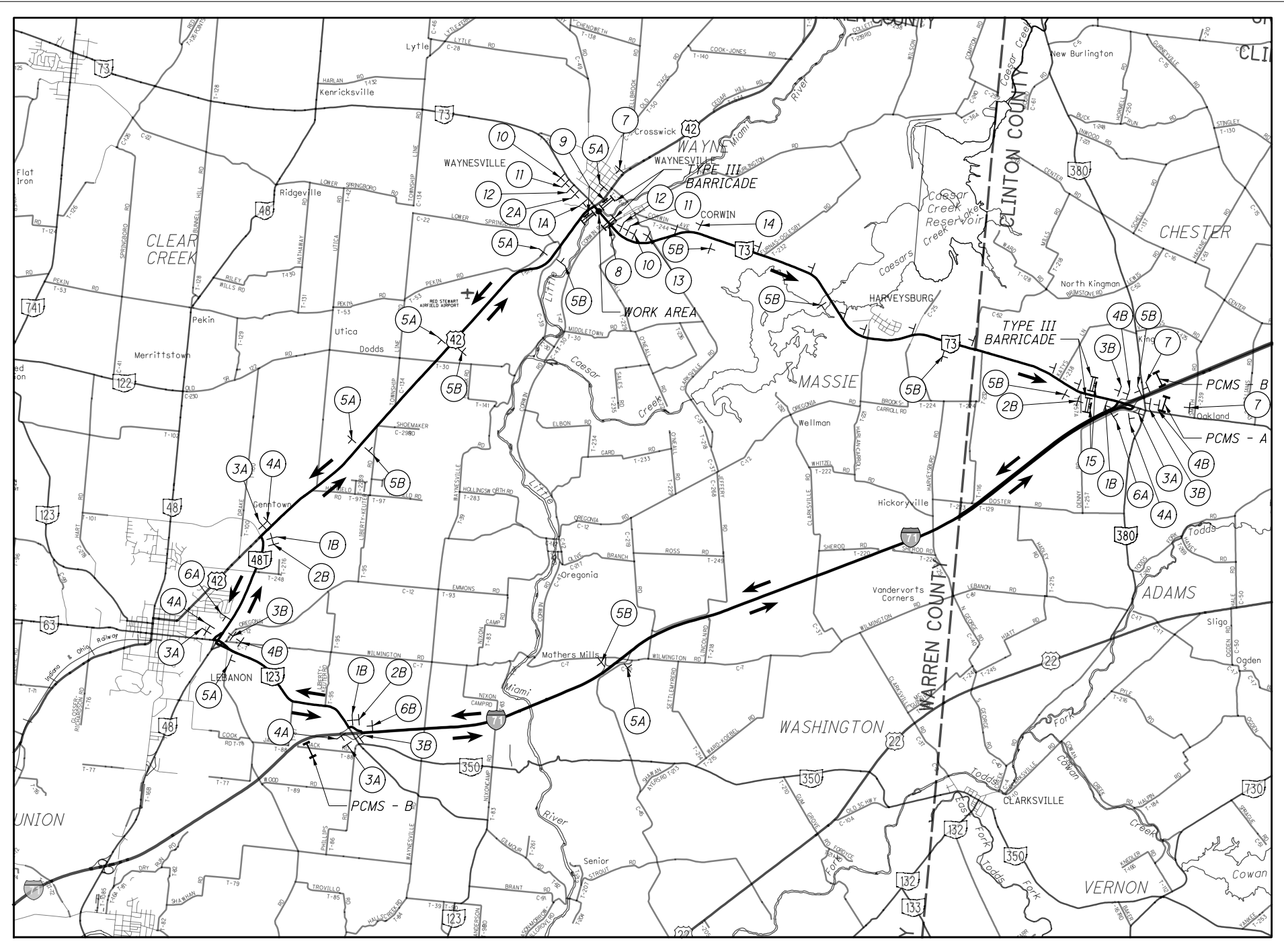
LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 100 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED. ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.



ISSUE RECORD	NO.	DATE	DESCRIPTION
	1	7/12/23	REVISED MILEAGE FORMAT



- DETOUR M4-8-24
- M3 SIGN (A) OR (B)
- 73 MI-5-24-2
- M5 OR M6 SIGN (1), (2), (3), (4), (5), OR (6)

- |                        |              |              |              |
|------------------------|--------------|--------------|--------------|
| EAST<br>M3-2-24<br>(A) | →            | ↗            | ←            |
|                        | M6-1R-21 (1) | M5-1R-21 (2) | M6-1L-21 (3) |
| WEST<br>M3-4-24<br>(B) | ←            | ↑            | ↘            |
|                        | M5-1L-21 (4) | M6-3-21 (5)  | M6-2R-21 (6) |

- TYPE B WARNING LIGHT
- ROAD CLOSED R11-2-48
- DETOUR M4-10R-48
- DETOUR 1500 FT W20-2-36 (7)
- TYPE A WARNING LIGHT
- ROAD WORK AHEAD W20-1-36 (10)
- ROAD CLOSED 1000 FT W20-3-36 (11)
- ROAD CLOSED 500 FT W20-3-36 (12)
- ROAD CLOSED 3/4 MILES AHEAD LOCAL TRAFFIC ONLY R11-3A-60 (13)
- ROAD CLOSED 1 1/4 MILES AHEAD LOCAL TRAFFIC ONLY R11-3A-60 (14)
- ROAD CLOSED 8 1/4 MILES AHEAD LOCAL TRAFFIC ONLY R11-3A-60 (15)

SR-73 CLOSED AT CORWIN  
DETOUR VIA I-71 SB

PHASE 1 PHASE 2  
PORTABLE CHANGEABLE MESSAGE SIGN - A

SR-73 WB CLOSED AT CORWIN  
DETOUR VIA EXIT 32 SR 123 WB

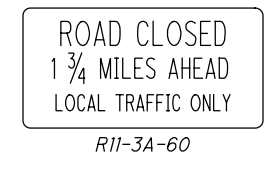
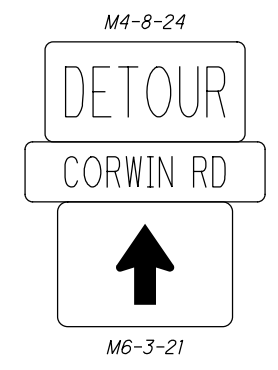
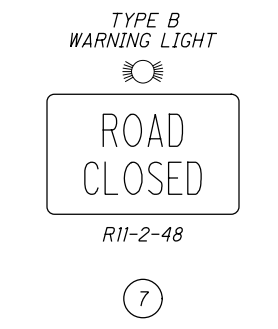
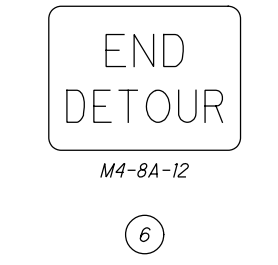
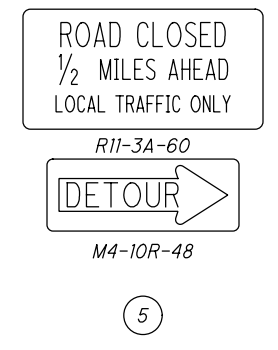
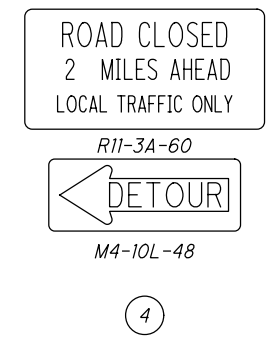
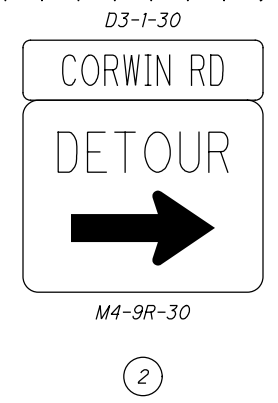
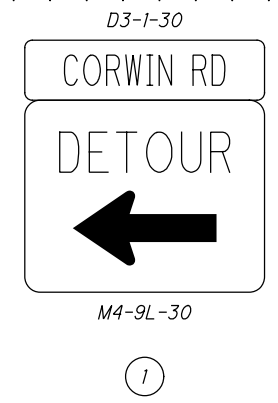
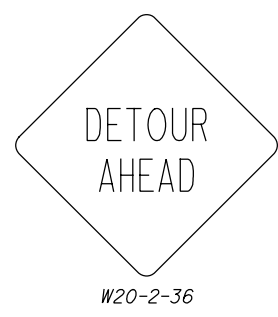
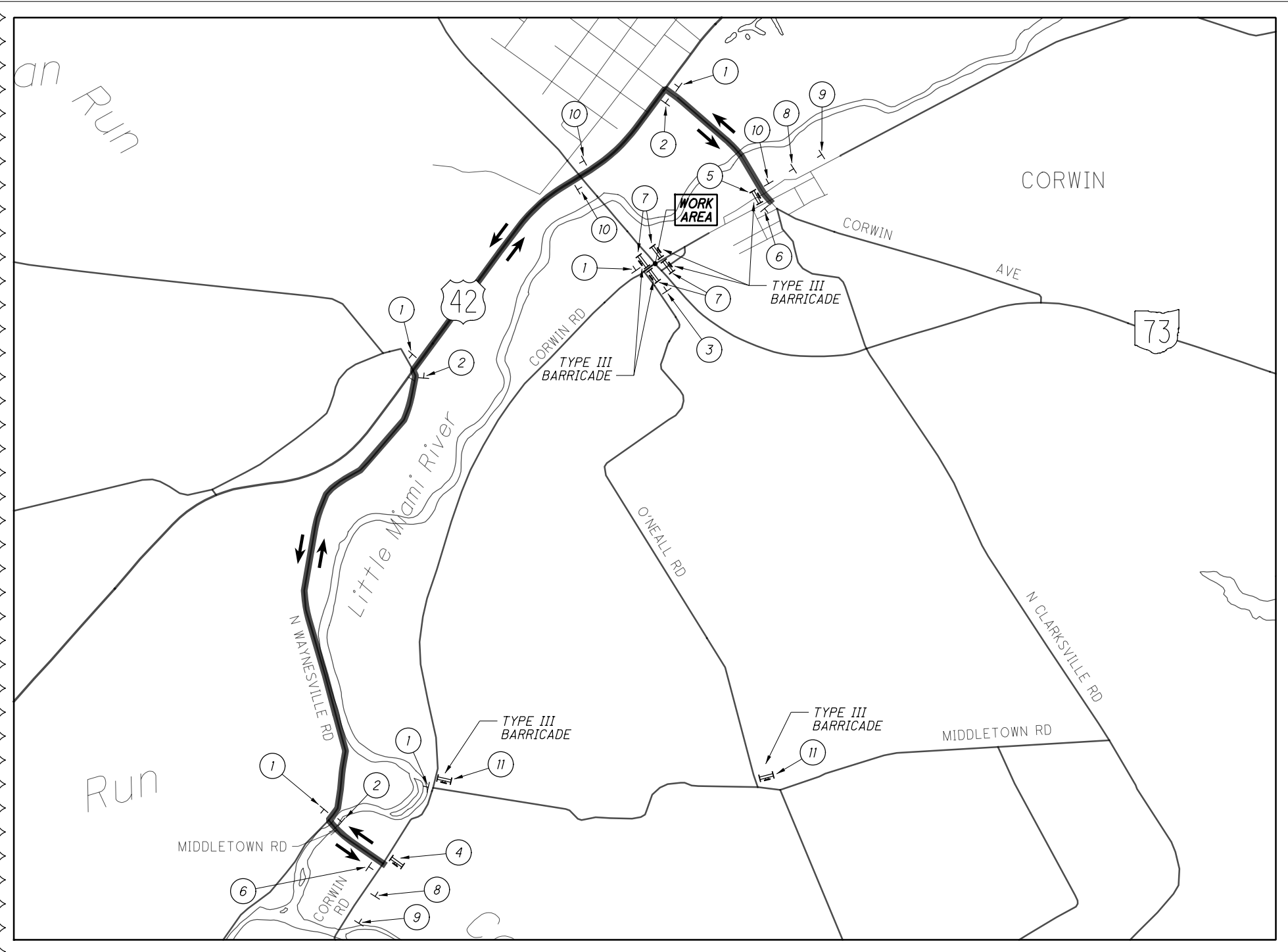
PHASE 1 PHASE 2  
PORTABLE CHANGEABLE MESSAGE SIGN - B

NOTES

- EASTBOUND S.R. 73 THRU LANE & SOUTHBOUND U.S. 42 LEFT-TURN LANE SHALL BE CLOSED AT THE S.R. 73/U.S. 42 INTERSECTION.
- PLACE ROAD CLOSED SIGN (R11-3A-60) AT EACH OF THE FOLLOWING INTERSECTIONS. PROVIDE CORRESPONDING MILES AHEAD:
 

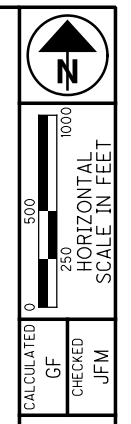
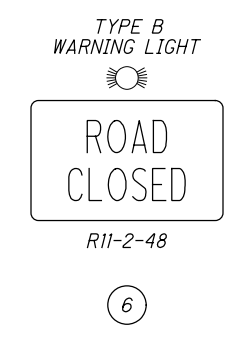
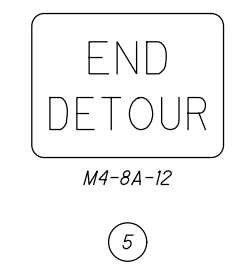
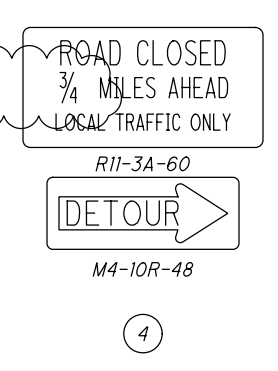
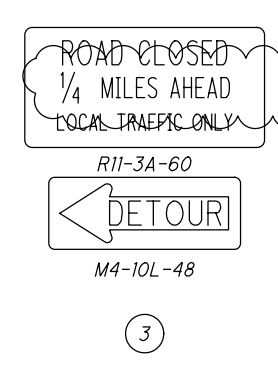
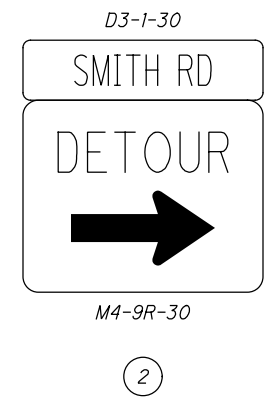
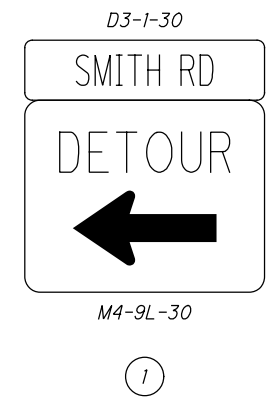
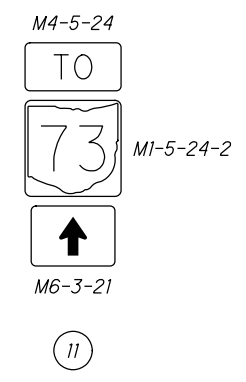
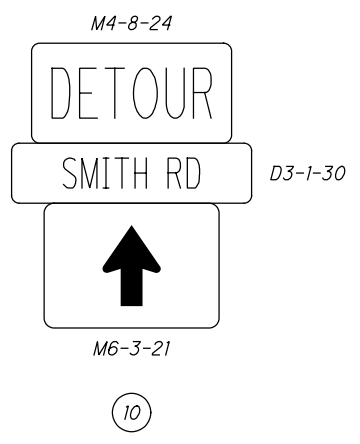
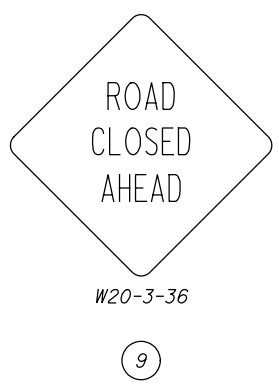
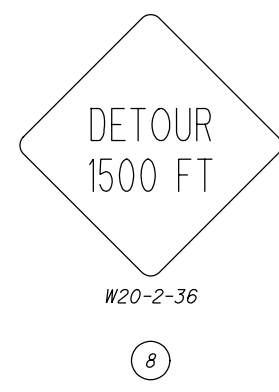
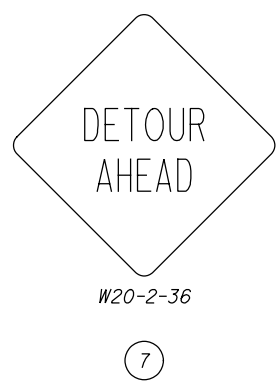
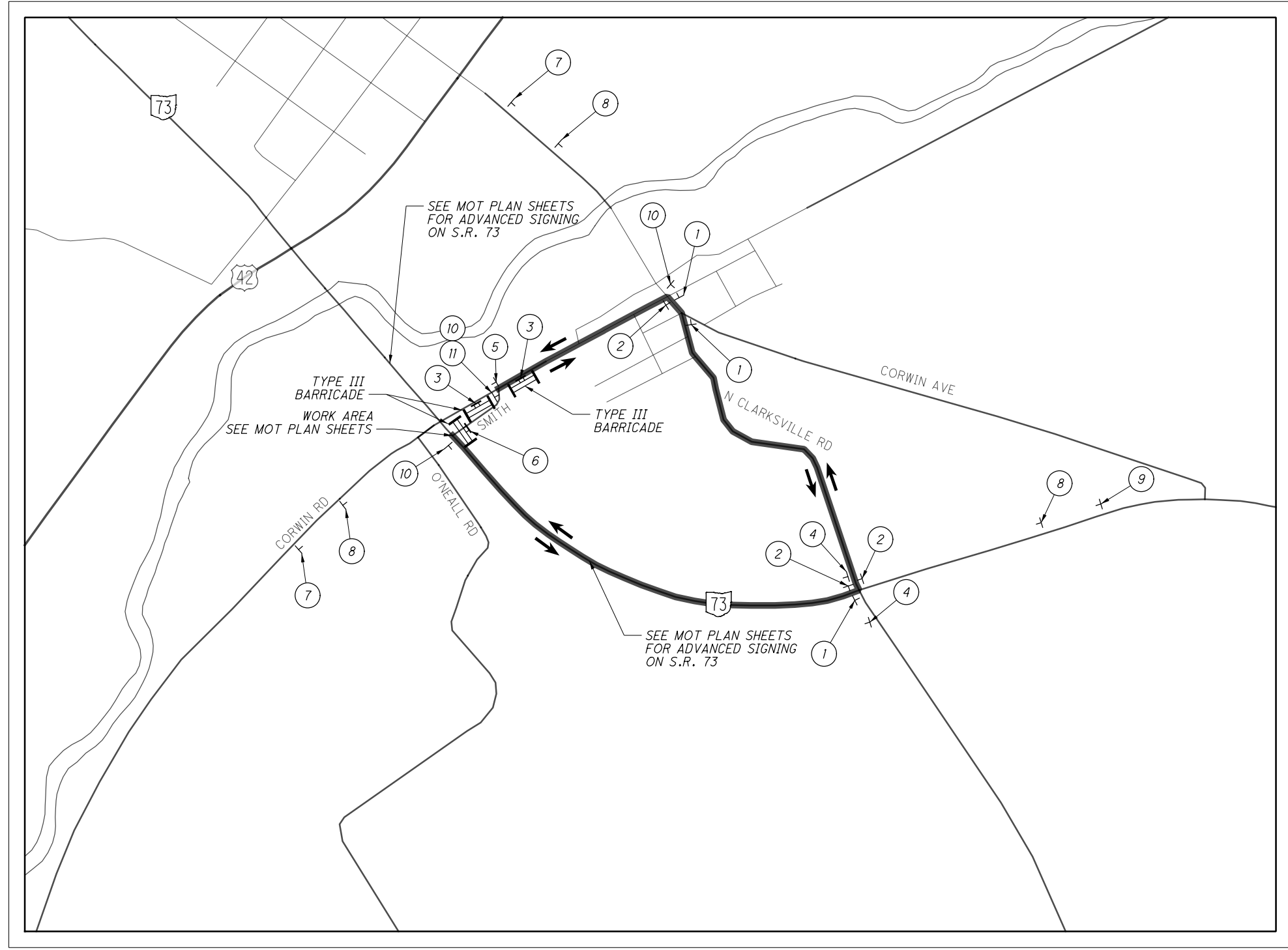
7 3/4 MILES - CR-257 (OLD DENNY RD)	6 MILES - CR-52 (BRIMSTONE RD)	4 1/4 MILES - CAESAR CREEK STATE PARK 1	1 1/4 MILES - CR-244 (CORWIN AVE)
7 1/2 MILES - CR-238 (KATYS LN)	5 1/4 MILES - HARVEYSBURG RD	3 MILES - CAESAR CREEK STATE PARK 2	3/4 MILES - CR-37 (IN CLARKSVILLE RD)
6 1/4 MILES - CR-232 (COLLETT RD)	4 1/2 MILES - MAPLE ST/OREGONIA RD	2 1/2 MILES - CR-232 (FURNAS-OGLESBY RD)	

ISSUE RECORD		
NO.	DATE	DESCRIPTION
1	7/12/23	REVISED DETOUR ROUTE



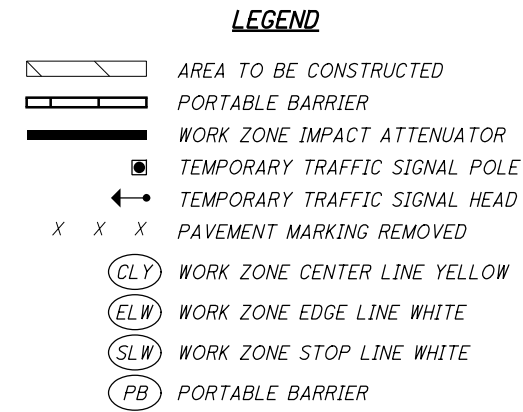
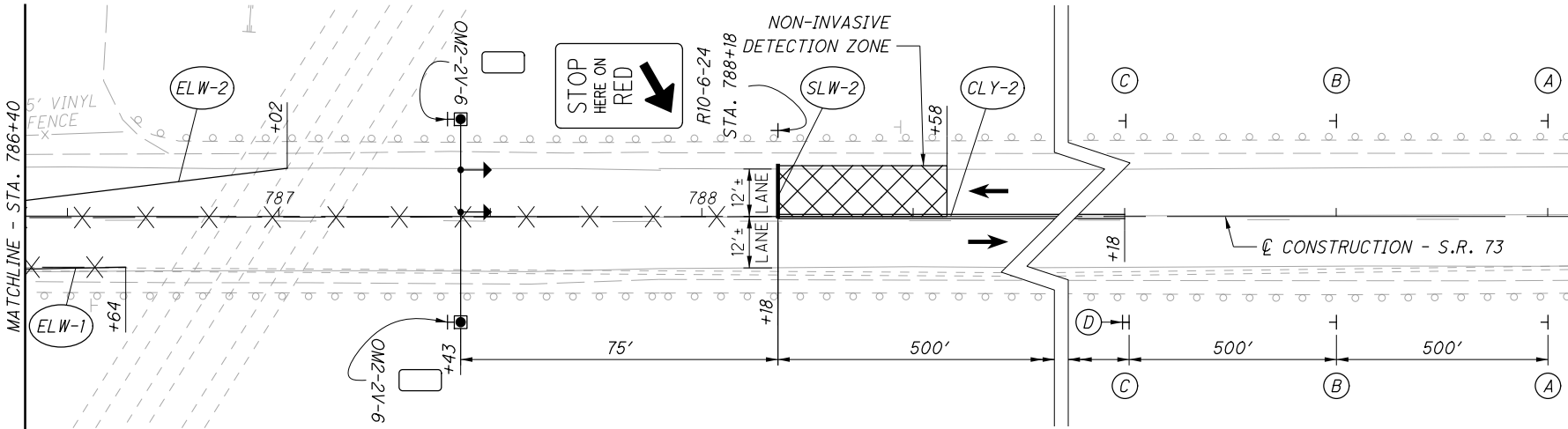
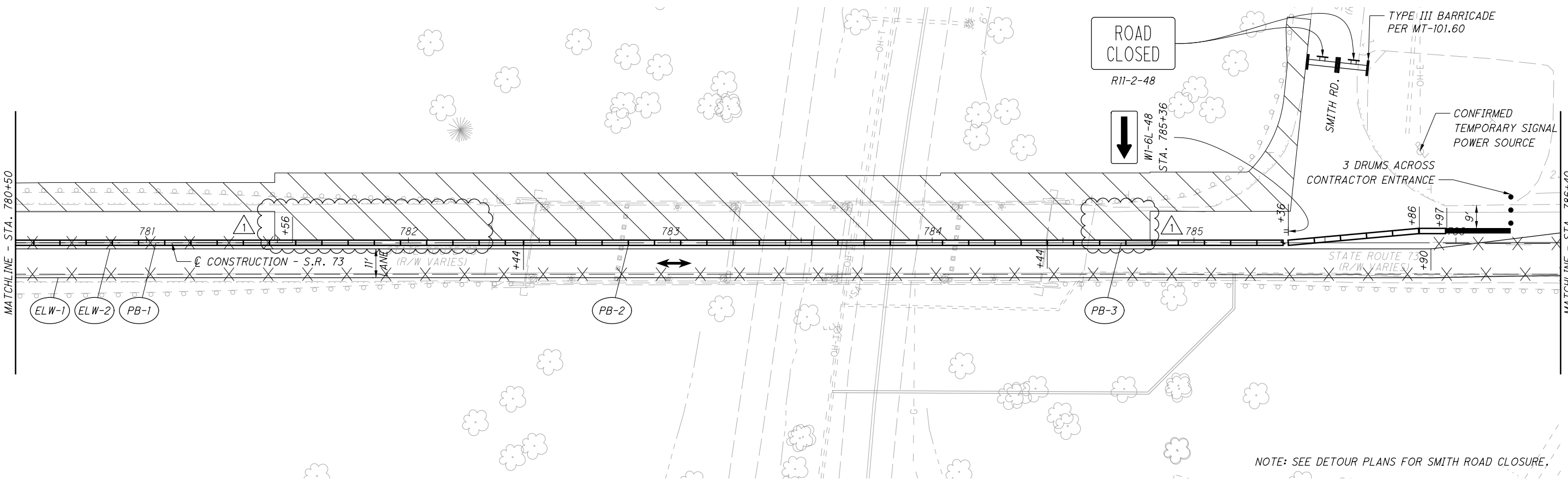
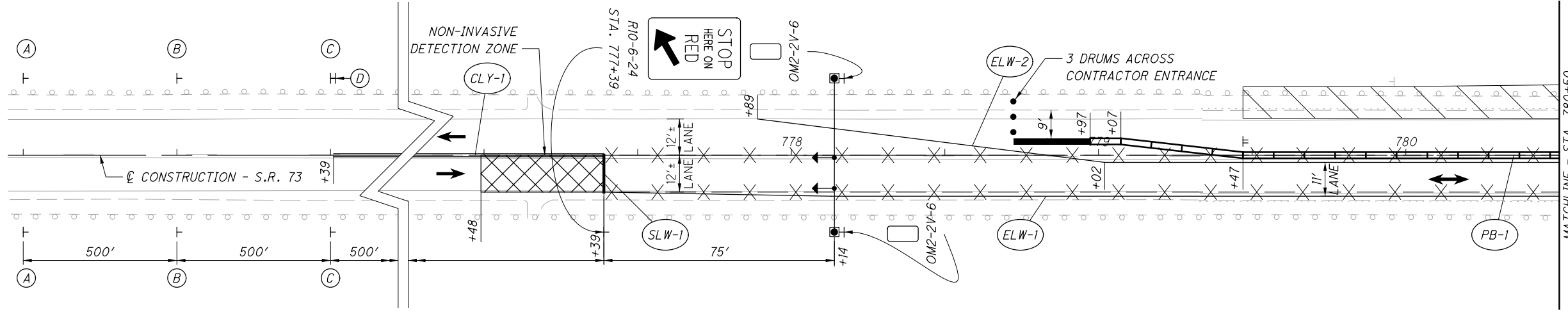
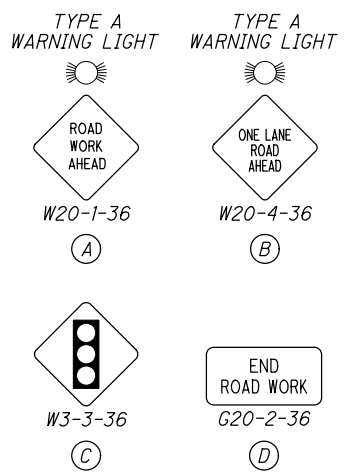


ISSUE RECORD	
NO.	DATE
1	7/12/23
DESCRIPTION	
REVISED MILEAGE FORMAT	



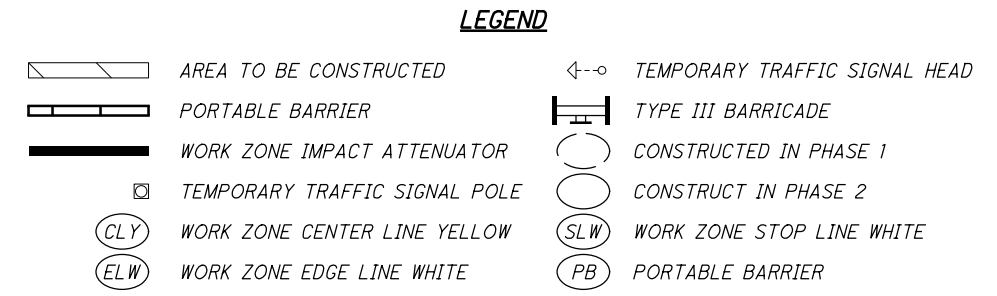
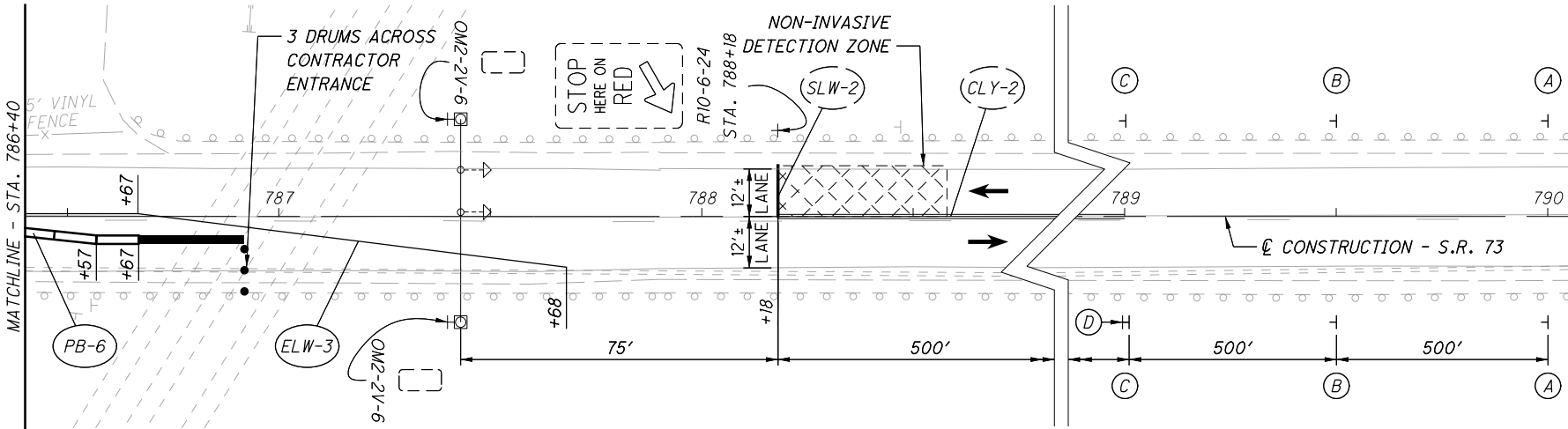
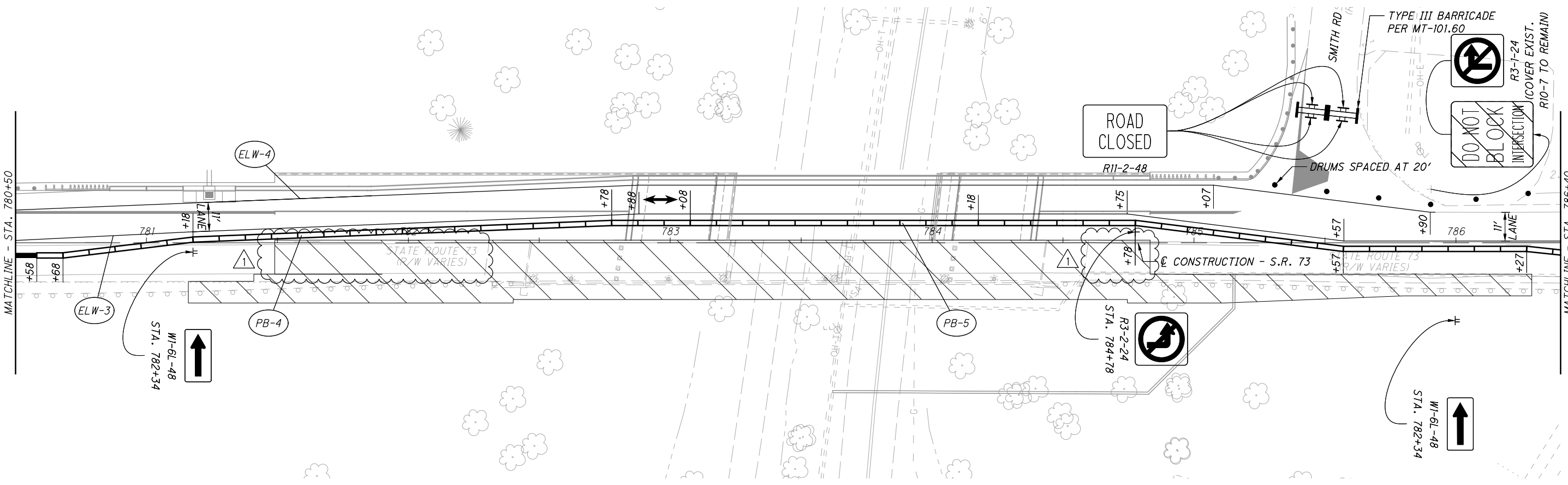
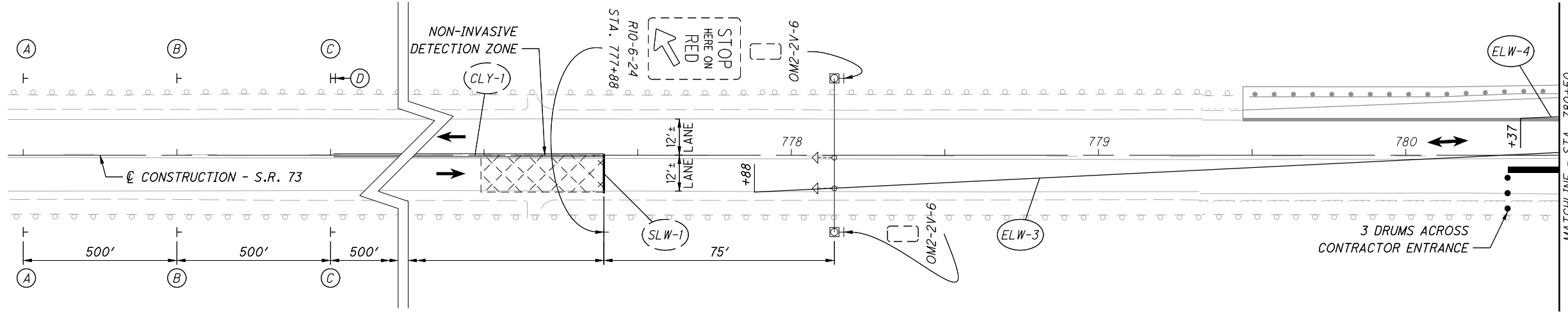
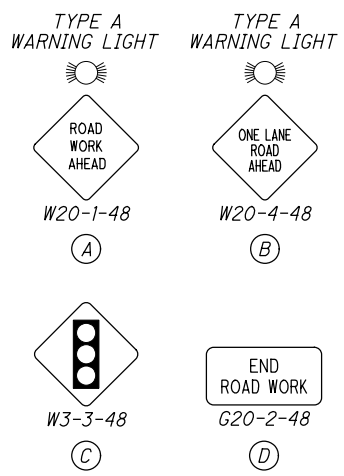
**MAINTENANCE OF TRAFFIC  
 DETOUR PLAN - SMITH ROAD**

ISSUE RECORD	
NO.	DATE
1	7/12/23
PROJECT LIMITS REVISION	



**MAINTENANCE OF TRAFFIC PHASE 1**

ISSUE RECORD	
NO.	DATE
1	7/12/23
	PROJECT LIMITS REVISION



**MAINTENANCE OF TRAFFIC PHASE 2**

ISSUE RECORD		DESCRIPTION
NO.	DATE	REVISED QUANTITIES & ADDITIONS
1	7/12/23	

PARSONS  
 p:\V\ANVA01P\WINT01\Parsons.com:Ohio\_State\Documents\WAR-73-1458&slash:1462\05 - Design\CAD\100827\Roadway\Sheets\General Summary, Sheet - 7/13/2023 6:08:59 AM - p007870A

SHEET NUM.			PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	3	4	01/NHS/10	02/NHS/13						
									<b>ROADWAY</b>	
			LS		201	11000	LS		CLEARING AND GRUBBING	
			43	43	202	32000	43	FT	CURB REMOVED	
			665	665	202	38000	665	FT	GUARDRAIL REMOVED	
			4	4	202	47000	4	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
		349		349	203	10000	349	CY	EXCAVATION	
		1,572		1,572	203	20000	1,572	CY	EMBANKMENT	
			889	889	204	10000	889	SY	SUBGRADE COMPACTION	
			250	250	606	15050	250	FT	GUARDRAIL, TYPE MGS	
			37.5	37.5	606	15100	37.5	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
			1	1	606	26150	1	EACH	ANCHOR ASSEMBLY, MGS TYPE E (NCHRP 350 OR MASH 2016)	
			2	2	606	26550	2	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
			5	5	606	35002	5	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
			38	38	622	24000	38	FT	CONCRETE BARRIER, TYPE D	
			1	1	622	25000	1	EACH	CONCRETE BARRIER END SECTION, TYPE D	
			1	1	622	25050	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D	
		1		1	623	40501	1	EACH	REFERENCE MONUMENT, TYPE A, AS PER PLAN	4
				LS	878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	
									<b>EROSION CONTROL</b>	
			3	3	601	32000	3	CY	ROCK CHANNEL PROTECTION, TYPE A WITH FILTER	
		2		2	659	00100	2	EACH	SOIL ANALYSIS TEST	
		51		51	659	00300	51	CY	TOPSOIL	
		459		459	659	10000	459	SY	SEEDING AND MULCHING	
		23		23	659	14000	23	SY	REPAIR SEEDING AND MULCHING	
		23		23	659	15000	23	SY	INTER-SEEDING	
		0.08		0.08	659	20000	0.08	TON	COMMERCIAL FERTILIZER	
		0.1		0.1	659	31000	0.1	ACRE	LIME	
		4		4	659	35000	4	MGAL	WATER	
		2		2	659	40000	2	MSF	MOWING	
				5,000	832	30000	5,000	EACH	EROSION CONTROL	
									<b>DRAINAGE</b>	
			1	1	511	46610	1	CY	CLASS QC1 CONCRETE, HEADWALL	
		43		43	605	31100	43	FT	AGGREGATE DRAINS	
			161	161	611	06700	161	FT	15" CONDUIT, TYPE F, 707.05 TYPE C	
			2	2	611	99114	2	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D	
									<b>PAVEMENT</b>	
			498	498	202	23000	498	SY	PAVEMENT REMOVED	
			484	484	254	01000	484	SY	PAVEMENT PLANING, ASPHALT CONCRETE (T=1.5')	
			4,184	4,184	254	01000	4,184	SY	PAVEMENT PLANING, ASPHALT CONCRETE (T=3')	
			204	204	301	56000	204	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
			209	209	304	20000	209	CY	AGGREGATE BASE	
			1,807	1,807	407	20000	1,807	GAL	NON-TRACKING TACK COAT	
			232	232	441	50000	232	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
			261	261	441	50300	261	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
			4	4	441	70000	4	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	
			146	146	609	24510	146	FT	CURB, TYPE 4-C	

CALCULATED GF  
 CHECKED JFM  
**GENERAL SUMMARY**  
**WAR-73-14.58 / 14.62**  
 13  
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ISSUE RECORD		DESCRIPTION
NO.	DATE	REVISED QUANTITIES & ADDITIONS
1	7/12/23	

PARSONS  
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SHEET NUM.					PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
16	28	30	31	42	01/NHS/10	02/NHS/13						
<b>TRAFFIC CONTROL</b>												
	26				26		621	00100	26	EACH	RPM	
	26				26		621	54000	26	EACH	RAISED PAVEMENT MARKER REMOVED	
	3				3		626	00102	3	EACH	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	
	14				14		626	00110	14	EACH	BARRIER REFLECTOR, TYPE 2 (BIDIRECTIONAL)	
	73				73		630	03100	73	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
	35				35		630	04100	35	FT	GROUND MOUNTED SUPPORT, NO. 4 POST	
	1				1		630	08600	1	EACH	SIGN POST REFLECTOR	
	6				6		630	80100	6	SF	SIGN, FLAT SHEET	
	2				2		630	84900	2	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
	7				7		630	85100	7	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
	8				8		630	86002	8	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
	0.16				0.16		644	00104	0.16	MILE	EDGE LINE, 6"	
	0.34				0.34		644	00300	0.34	MILE	CENTER LINE (BROKEN & SOLID, DOUBLE)	
	0.05				0.05		644	00300	0.05	MILE	CENTER LINE (SOLID, DOUBLE)	
	21				21		644	00500	21	FT	STOP LINE	
	0.06				0.06		645	00117	0.06	MILE	EDGE LINE, 6", TYPE A3, AS PER PLAN (WHITE)	4
	0.03				0.03		645	00311	0.03	MILE	CENTER LINE, TYPE A3, AS PER PLAN	4
					0.11		646	10010	0.11	MILE	EDGE LINE, 6" (WHITE)	
					0.06		646	10200	0.06	MILE	CENTER LINE	
					6		646	10600	6	FT	TRANSVERSE/DIAGONAL LINE (YELLOW)	
<b>STRUCTURE OVER 20 FOOT SPAN (SFN 8302855)</b>												
					29		512	10100	29	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
					29		512	74000	29	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	
					6		513	95030	6	EACH	STRUCTURAL STEEL, MISC.:JACKING FRAME	31
					10		516	44101	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN	37
					LS		516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	31
					254		519	11101	254	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	31
					112		848	10201	112	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (THICKNESS 1.75" APPR. SLAB)	31
					960		848	10201	960	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (THICKNESS 3.5" DECK)	31
					1,072		848	20000	1,072	SY	SURFACE PREPARATION USING HYDRODEMOLITION	
					48		848	50000	48	SY	HAND CHIPPING	
					LS		848	50100	LS		TEST SLAB	
					960		848	50320	960	SY	EXISTING CONCRETE OVERLAY REMOVED (THICKNESS 1.75")	
<b>STRUCTURE OVER 20 FOOT SPAN (SFN 8302945)</b>												
					LS	LS	202	11202	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN	
					97	97	202	22900	97	SY	APPROACH SLAB REMOVED	
					97	97	202	23500	97	SY	WEARING COURSE REMOVED	
					723	723	203	35111	723	CY	GRANULAR MATERIAL, TYPE B, AS PER PLAN	41
					LS	LS	503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	40
					LS	LS	505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION	
					1,190	1,190	507	00600	1,190	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	
					1,330	1,330	507	00650	1,330	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	
					90,968	90,968	509	10000	90,968	LB	EPOXY COATED STEEL REINFORCEMENT	
					2	2	511	33500	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	
					104	104	511	43510	104	CY	CLASS QC1 CONCRETE, ABUTMENT INCLUDING FOOTING	
					252	252	511	53012	252	CY	CLASS QC2 CONCRETE, MISC.:MOMENT SLAB/PARAPET WITH QC/QA	41
					213	213	511	53014	213	CY	CLASS QC3 CONCRETE, MISC.:WITH QC/QA, BRIDGE DECK, AS PER PLAN	41
					29	29	511	53014	29	CY	CLASS QC3 CONCRETE, MISC.:WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN	41

CALCULATED	GF
CHECKED	JFM
<b>GENERAL SUMMARY</b>	
<b>WAR-73-14.58 / 14.62</b>	
14	81

ISSUE RECORD		DESCRIPTION
NO.	DATE	REVISED QUANTITIES & ADDITIONS
1	7/12/23	

PARSONS  
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SHEET NUM.				PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
5	6	7	42	01/NHS/10	02/NHS/13							
<b>STRUCTURE OVER 20 FOOT SPAN (SFN 8302945)</b>												
			1,553	1,553		512	10050	1,553	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)		
			6	6		512	33000	6	SY	TYPE 2 WATERPROOFING		
			6	6		515	15020	6	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 4 (91'-8" BEAM LENGTH)		
			15	15		515	20000	15	EACH	INTERMEDIATE DIAPHRAGMS		
			92	92		516	10010	92	FT	ARMORLESS PREFORMED JOINT SEAL		
			16	16		516	13900	16	SF	2" PREFORMED EXPANSION JOINT FILLER		
			96	96		516	14020	96	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL		
			12	12		516	44101	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN	55	
			4	4		523	20000	4	EACH	DYNAMIC LOAD TESTING		
			316	316		526	30001	316	SY	REINFORCED CONCRETE APPROACH SLABS (T=17"), AS PER PLAN	40	
			96	96		526	90030	96	FT	TYPE C INSTALLATION		
			65	65		601	21001	65	SY	CONCRETE SLOPE PROTECTION, AS PER PLAN	70	
			174	174		607	39900	174	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC		
			7,547	7,547		840	20000	7,547	SF	MECHANICALLY STABILIZED EARTH WALL		
			1,892	1,892		840	21000	1,892	CY	WALL EXCAVATION		
			914	914		840	22000	914	SY	FOUNDATION PREPARATION		
			3,782	3,782		840	23000	3,782	CY	SELECT GRANULAR BACKFILL		
			578	578		840	25010	578	FT	6" DRAINAGE PIPE, PERFORATED		
			78	78		840	25020	78	FT	6" DRAINAGE PIPE, NON-PERFORATED		
			555	555		840	26000	555	FT	CONCRETE COPING		
			5	5		840	27000	5	DAY	ON-SITE ASSISTANCE		
			LS	LS		867	00100	LS		TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL		
<b>MAINTENANCE OF TRAFFIC</b>												
						614	1110	100	HR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE		
						614	11630	475	FT	INCREASED BARRIER DELINEATION		
						614	12384	6	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)		
						614	12420	6	EACH	DETOUR SIGNING		
						614	13310	91	EACH	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)		
						614	13312	8	EACH	BARRIER REFLECTOR, TYPE 2 (BIDIRECTIONAL)		
						614	13360	99	EACH	OBJECT MARKER, TWO WAY		
						614	18600	3	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN		
						614	21000	0.18	MILE	WORK ZONE CENTER LINE, CLASS I (DOUBLE SOLID)		
						614	22010	0.72	MILE	WORK ZONE EDGE LINE, CLASS I, 6" (WHITE)		
						614	26000	44	FT	WORK ZONE STOP LINE, CLASS I		
						616	10000	4	MGAL	WATER		
						622	41100	1,290	FT	PORTABLE BARRIER, UNANCHORED		
						622	41100	310	FT	PORTABLE BARRIER, ANCHORED		
<b>INCIDENTALS</b>												
						LS	LS	614	11000	LS	MAINTAINING TRAFFIC	
						11	1	619	16010	12	MNTH	FIELD OFFICE, TYPE B
						LS	LS	623	10000	LS	CONSTRUCTION LAYOUT STAKES AND SURVEYING	
						LS	LS	624	10000	LS	MOBILIZATION	

CALCULATED GF  
 CHECKED JFM  
**GENERAL SUMMARY**  
 WAR-73-14.58 / 14.62  
 15  
 81



ISSUE RECORD		DESCRIPTION
NO.	DATE	REVISD PROJECT LIMITS & ADDITIONS
1	7/12/23	

REF NO.	SHEET NO.	STATION TO STATION						202	202	202	511	601	606	606	606	606	606	609	611	611	622	622	622	626	626
								CURB REMOVED FT	GUARDRAIL REMOVED FT	BRIDGE TERMINAL ASSEMBLY REMOVED EACH	CLASS OCI CONCRETE, HEADWALL CY	ROCK CHANNEL PROTECTION, TYPE A WITH FILTER CY	GUARDRAIL, TYPE MGS FT	GUARDRAIL, TYPE MGS WITH LONG POSTS FT	ANCHOR ASSEMBLY, MGS TYPE E (NCHRP 350 OR MASH 2016) EACH	ANCHOR ASSEMBLY, MGS TYPE T EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 EACH	CURB, TYPE 4-C FT	15" CONDUIT, TYPE F, 707.05 TYPE C FT	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D, 707.05 TYPE C EACH	CONCRETE BARRIER, TYPE D FT	CONCRETE BARRIER END SECTION, TYPE D EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D EACH	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL) EACH	BARRIER REFLECTOR, TYPE 2 (BIDIRECTIONAL) EACH
S.R. 73																									
GR-1	17	779+49	LT	TO	781+14	LT							112.50			1	18.15								3
D-1	17	781+14	LT	TO	781+34	LT				0.27	1.11							82	1						
GR-2	17	781+24	RT	TO	782+05	RT								37.50		1	18.15								2
D-2	18	782+05	RT	TO	782+25	RT				0.27	1.11							79	1						
GR-3	18	784+74	RT	TO	786+37	RT							62.50			1	18.15								3
GR-4	18	784+83	LT	TO	785+39	LT							62.50		2	1	73.15								3
R-1	18	779+49	LT	TO	782+86	LT		273	1																
R-2	18	781+24	RT	TO	782+80	RT		92	1																
R-3	18	784+46	RT	TO	786+29	RT		166	1																
R-4	18	784+50	LT	TO	785+45	LT	43	134	1																
GR-5	18	CORWIN												12.50		1	18.15				37.94	1	1	3	3
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>							43	665	4	1	3	250	37.50	1	2	5	146	161	2	38	1	1	3	14	

STATION TO STATION	SIDE	CADD GENERATED AREA					202	204	254	254	301	301	304	407	441	441	441	441										
		FOR PAVEMENT REMOVAL SF	AT SURFACE SF	FOR ASPHALT CONC BASE SF	FOR AGGREGATE BASE SF	FOR SUBGRADE COMPACTION SF	PAVEMENT REMOVED SY	SUBGRADE COMPACTION SY	PAVEMENT PLANING, ASPHALT CONCRETE (T=1.5') SY	PAVEMENT PLANING, ASPHALT CONCRETE (T=3') SY	ASPHALT CONCRETE BASE, PG64-22, (449) (T=4') CY	ASPHALT CONCRETE BASE, PG64-22, (449) (T=6') CY	AGGREGATE BASE CY	NON-TRACKING TACK COAT GAL	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22 CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22 CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448) CY	ASPHALT CONCRETESURFACE COURSE, TYPE 1, (449), PG64-22 (T=3') CY										
<b>S. R. 73</b>																												
772+37.00	TO	781+49.00	L & R	--	26422.19	--	--	--	--										2935.80				411.01	101.94			142.71	
779+47.00	TO	781+49.00	L	526.18	1254.23	1300.52	1370.02	958.73	58.46	106.53										24.08	25.37	137.97	4.84				6.77	
781+41.00	TO	781+49.00	R	22.64	27.96	30.64	34.64	39.98	2.52	4.44										0.57	0.64	3.08	0.11				0.15	
781+49.00	TO	782+82.83	L & R	2409.54	5516.56	5528.88	5547.38	3722.19	267.73	413.58													606.82	21.28			29.80	
784+39.54	TO	784+83.23	L & R	659.70	1911.47	1911.47	1911.47	1216.32	73.30	135.15													210.26	7.37			10.32	
784+83.23	TO	785+43	L	437.53	927.35	958.62	1005.16	1066.62	48.61	118.51													102.01	3.58			5.01	
784+83.23	TO	786+29.00	R	419.14	890.61	916.93	956.43	505.45	46.57	56.16													97.97	3.44			4.81	
784+83.23	TO	788+18.00	L & R	--	11232.26	--	--	--															174.72	43.33			60.67	
<b>CORWIN RD</b>																												
50' OFF NORTHERN BEAM	TO	50' OFF SOUTHERN BEAM	L & R	--	2900.00	--	--	--																				30.21
10' OFF NORTHERN BEAM	TO	10' OFF SOUTHERN BEAM	R	--	390.00	411.67	444.17	487.50		54.17													8.23	21.45				3.61
<b>LITTLE MIAMI SCENIC TRAIL</b>																												
50' OFF NORTHERN BEAM	TO	50' OFF SOUTHERN BEAM	L & R	--	1450.00	--	--	--																13.69				15.10
<b>SUBTOTALS</b>							497.19	888.53	483.33	4183.83	5.08	197.17	208.69	1806.37	185.89	45.31	260.25	3.61										
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>							498	889	484	4184	6	198	209	1807	186	46	261	4										

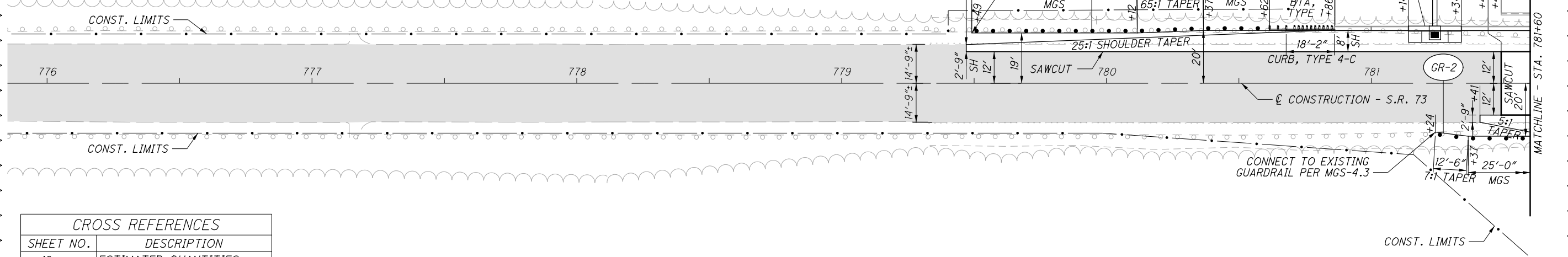
ISSUE RECORD	
NO.	DATE
1	7/12/23
REVISED PROJECT LIMITS & ADDITIONS	

D-1 INLET NO. 3, TYPE D  
 GRATE ELEV. = 747.89  
 15" INV. ELEV. = 742.89  
 82' - 15", TYPE F, 707.05 TYPE C

BEGIN WORK  
 STA. 772+37.00  
 S.L.M. 13.20

BEGIN RESURFACING AT END OF FORWARD APPROACH  
 SLAB OF WAR-73-1458 OVER LITTLE MIAMI RIVER.  
 NOTE STA. 772+37.00 IS EQUAL TO STA. 109+60.25  
 SHOWN ON SHEET 30.

BEGIN PROJECT  
 STA. 779+47.00  
 S.L.M. 13.33

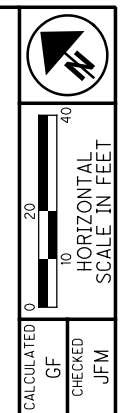
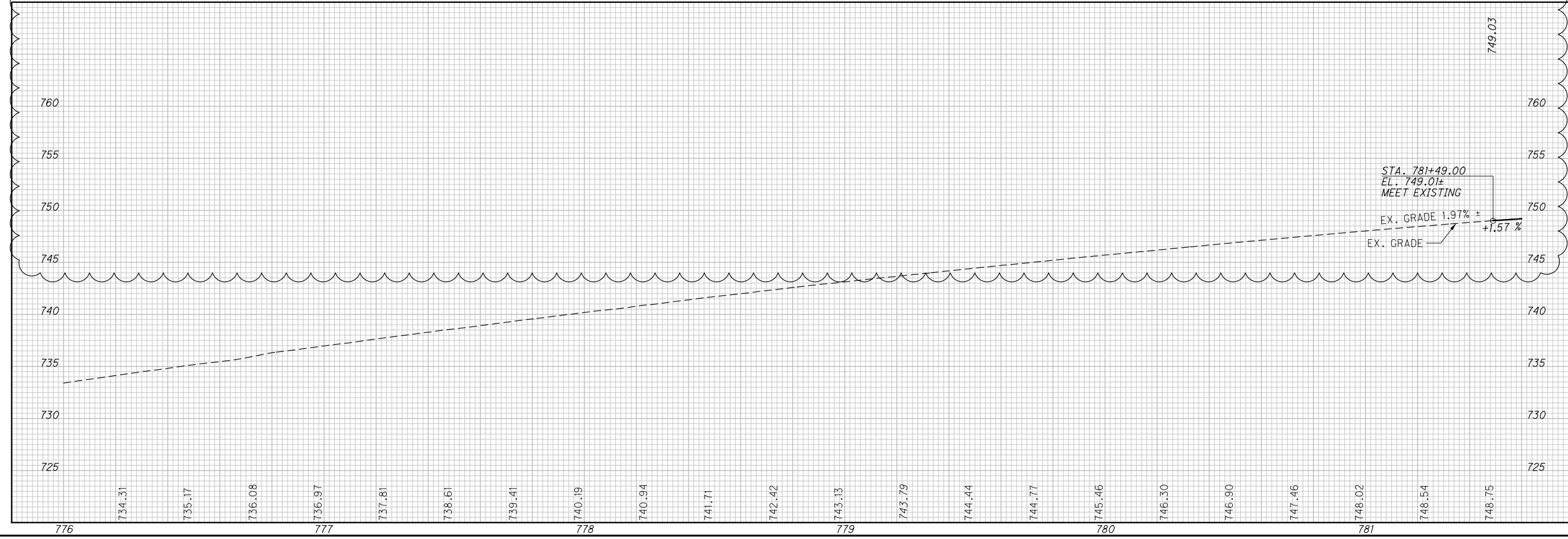


CROSS REFERENCES

SHEET NO.	DESCRIPTION
16	ESTIMATED QUANTITIES
19 - 27	CROSS SECTIONS

RESURFACING AREA

NOTE  
 SAWCUTS SHOWN IN PLANS SHALL BE TO A SOUND EDGE.



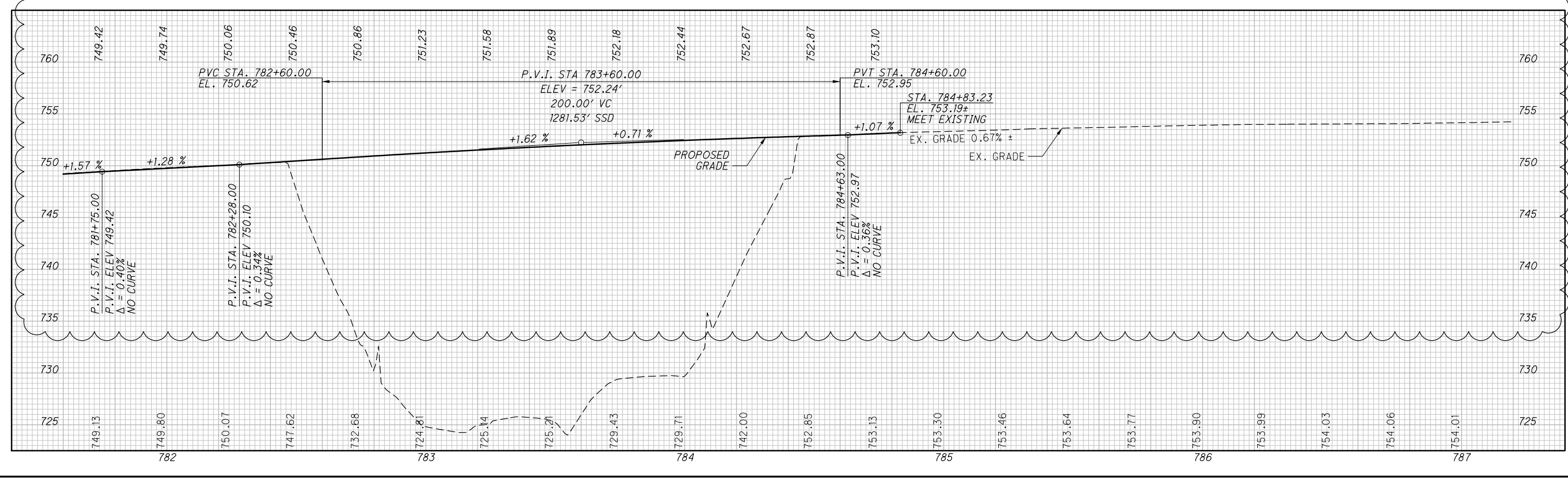
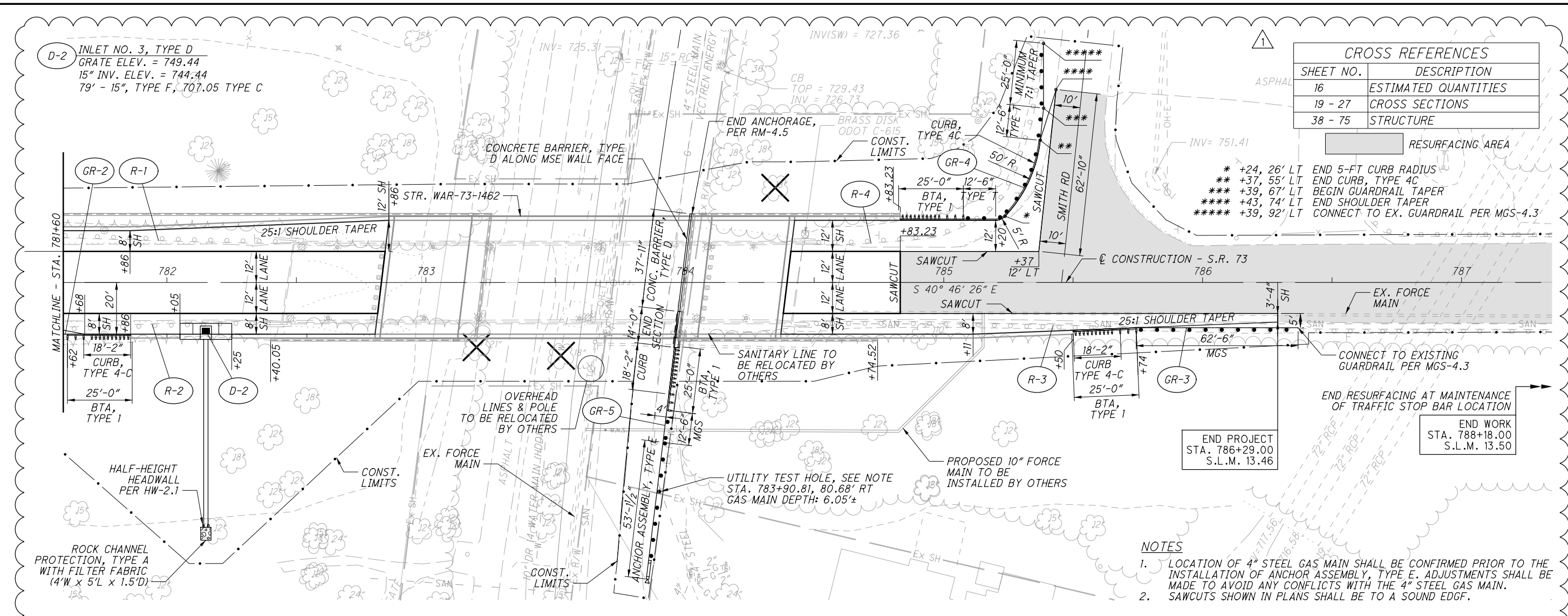
CALCULATED GF CHECKED JFM

PLAN AND PROFILE  
 STA. 776+00.00 TO STA. 781+60.00

WAR-73-14.58 / 14.62

17  
 81

ISSUE RECORD		
NO.	DATE	DESCRIPTION
1	7/12/23	REVISED PROJECT LIMITS & ADDITIONS

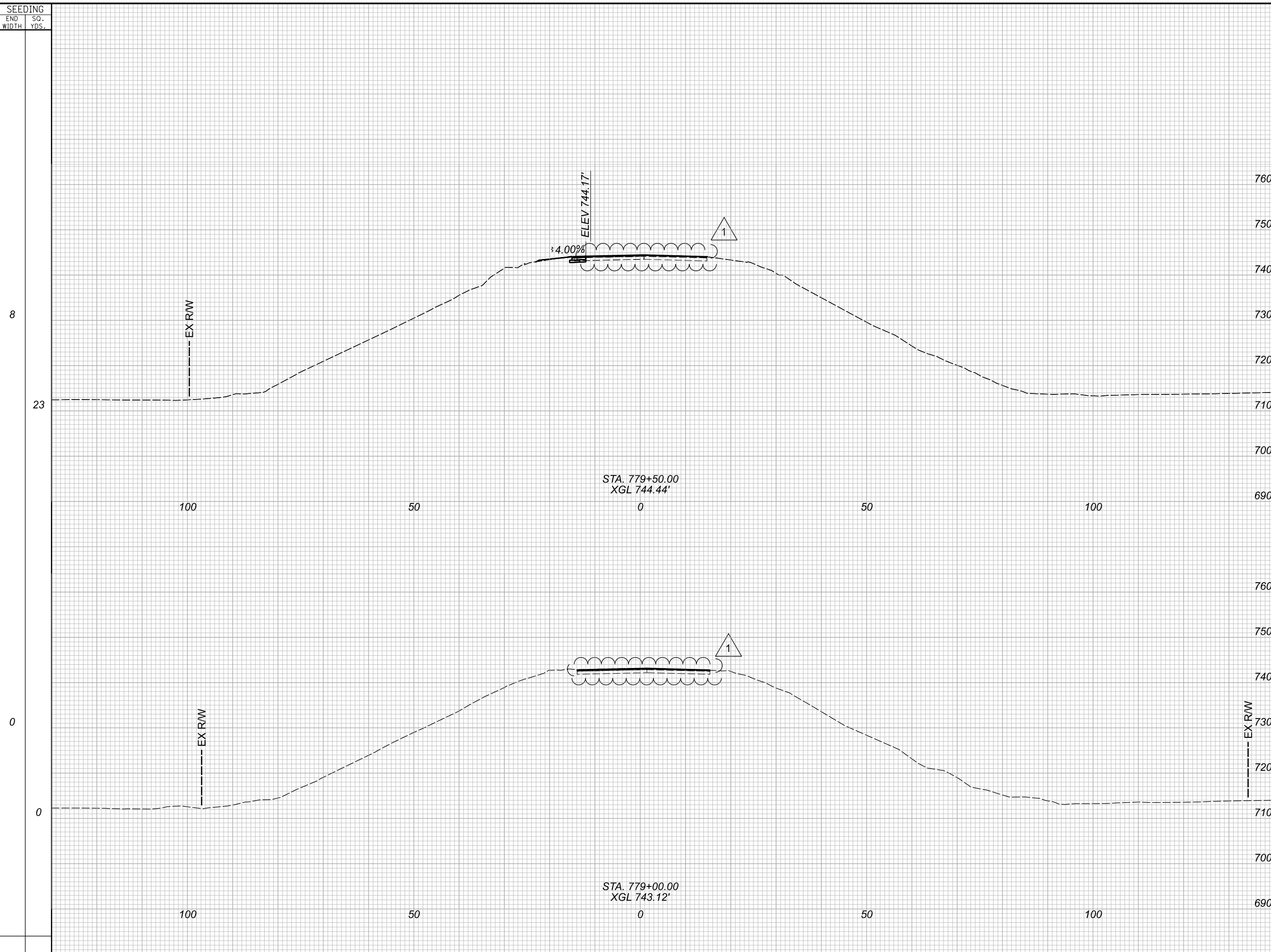


**ISSUE RECORD:**

NO.	DATE	DESCRIPTION
1	7/12/2023	PROJECT LIMIT REVISIONS AND ADDITIONS

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SEEDING	END AREA		VOLUME		CALCULATED GF	CHECKED JFM
	CUT	FILL	CUT	FILL		
END WIDTH						
SO. YDS.						



END AREA	VOLUME		CALCULATED GF	CHECKED JFM
	CUT	FILL		
2	1	2	1	
0	0	0	0	

**CROSS SECTIONS**  
**WAR-73-14.58 / 14.62**  
**STA. 779+00.00 TO STA. 779+50.00**

ISSUE RECORD:

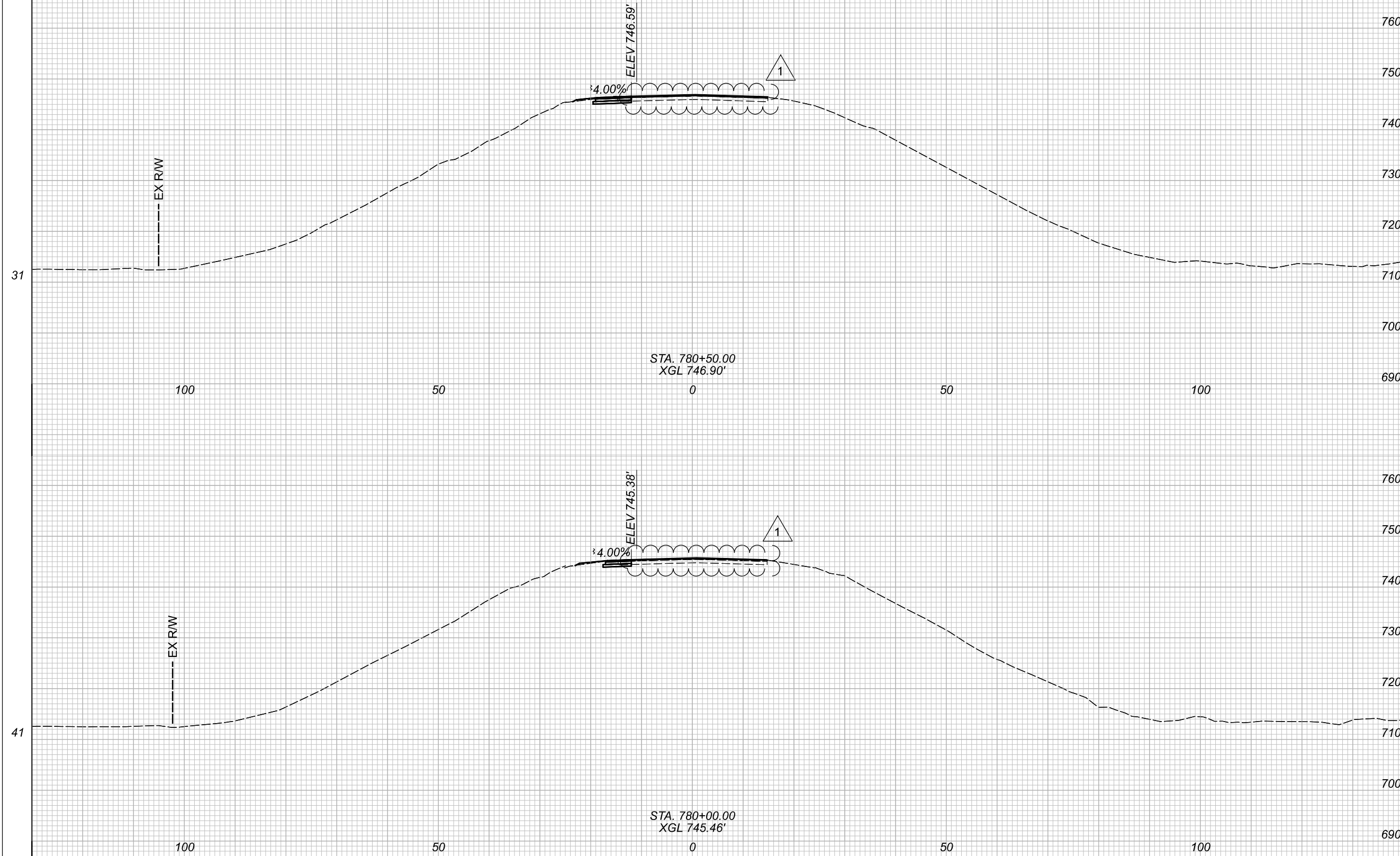
NO.	DATE	DESCRIPTION
1	7/12/2023	PROJECT LIMIT REVISIONS AND ADDITIONS

pw: \\VANVAOPWINT01.Parsons.com:Ohio State\Documents\WAR-73-14.58-14.62\05 - Design\CAE\Corridors\00027-X\003.dgn; 780+00:00 [Sheet] - 7/12/2023 12:04:34 PM - p000324G

SEEDING	END		SO.
	WIDTH	YDS.	
	31	5	
	41	6	

END	AREA		VOLUME		CALCULATED	CHECKED
	CUT	FILL	CUT	FILL		
31	7	1	10	3		
41	4	1	6	2		

**CROSS SECTIONS**  
**WAR-73-14.58 / 14.62**  
**STA. 780+00.00 TO STA. 780+50.00**

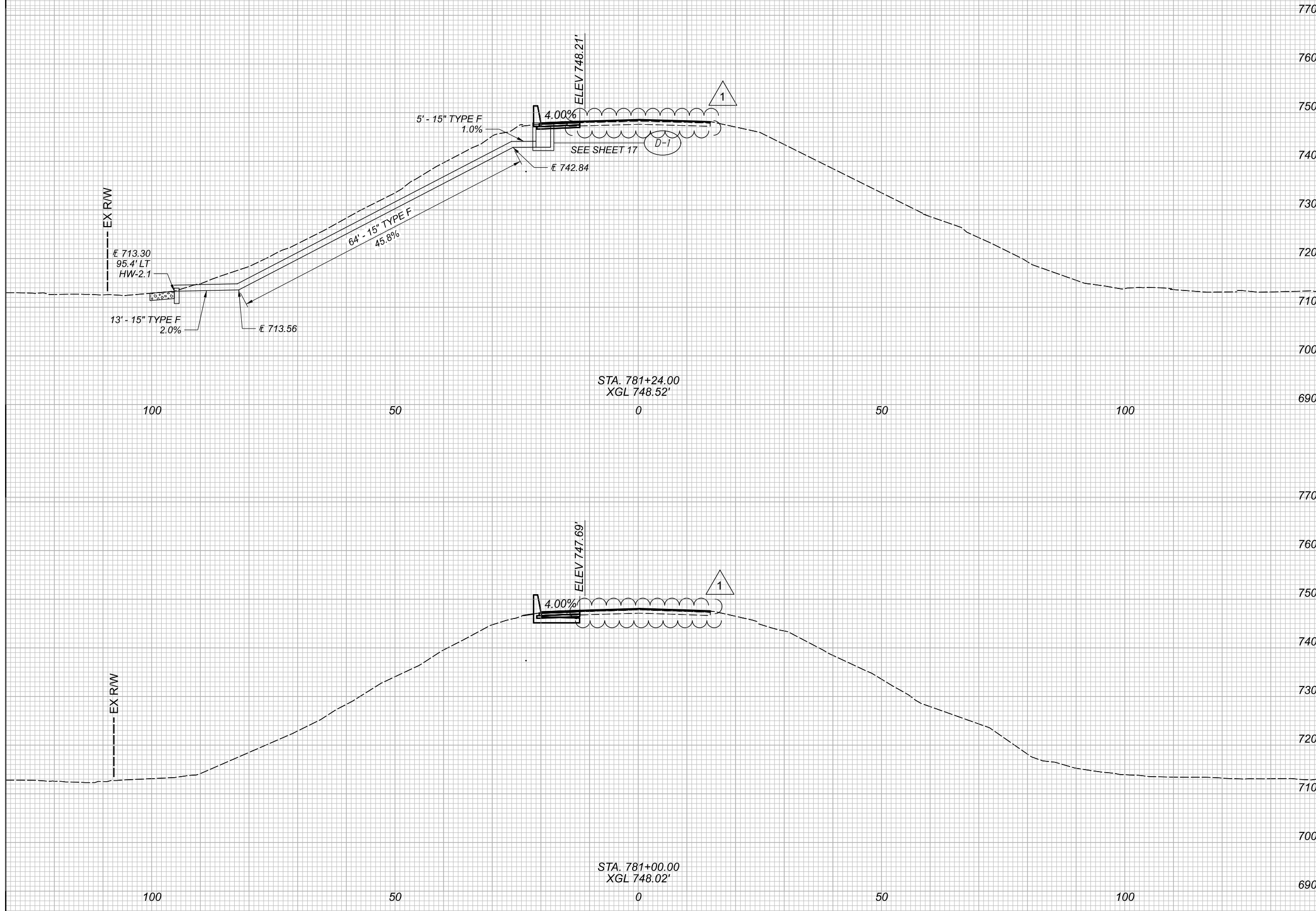


ISSUE RECORD:

NO.	DATE	DESCRIPTION
1	7/12/2023	PROJECT LIMIT REVISIONS AND ADDITIONS

pw: \\VANVAOPWINT01.Parsons.com:Ohio State\Documents\WAR-73-14.58-14.62\05 - Design\CAE\Corridors\00027-X5003.dgn; 781+00.00 (Sheet) - 7/12/2023 12:04:38 PM - p000324G

SEEDING	END AREA		VOLUME		CALCULATED GF	CHECKED JFM
	CUT	FILL	CUT	FILL		
END WIDTH						
SO. YDS.						



END AREA	VOLUME		CALCULATED GF	CHECKED JFM
	CUT	FILL		

**CROSS SECTIONS**  
**STA. 781+00.00 TO STA. 781+24.00**

**WAR-73-14.58 / 14.62**

21  
81



**ISSUE RECORD:**

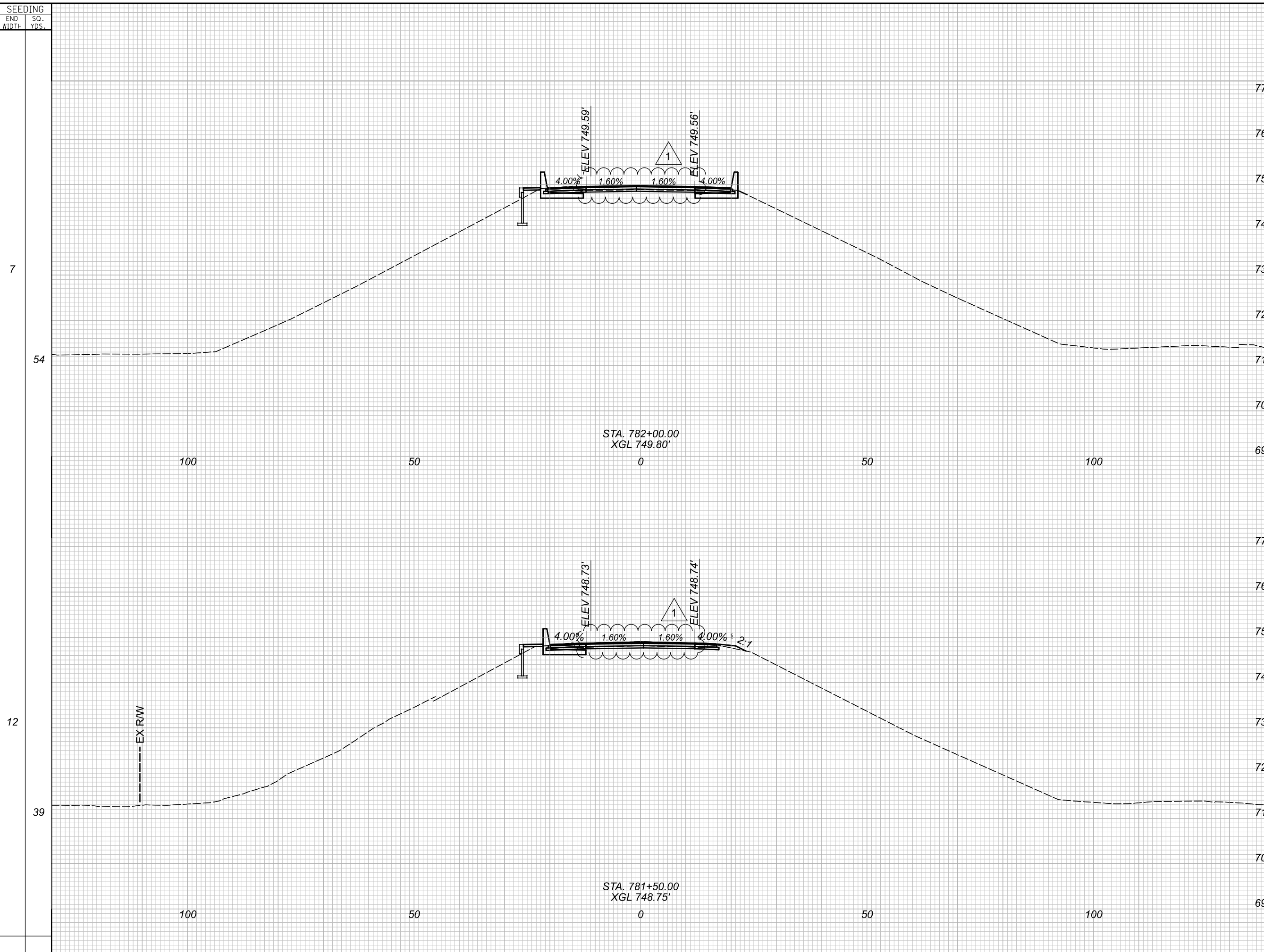
NO.	DATE	DESCRIPTION
1	7/12/2023	PROJECT LIMIT REVISIONS AND ADDITIONS

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SEEDING	END	
	WIDTH	SO. YDS.
	7	54
	12	39

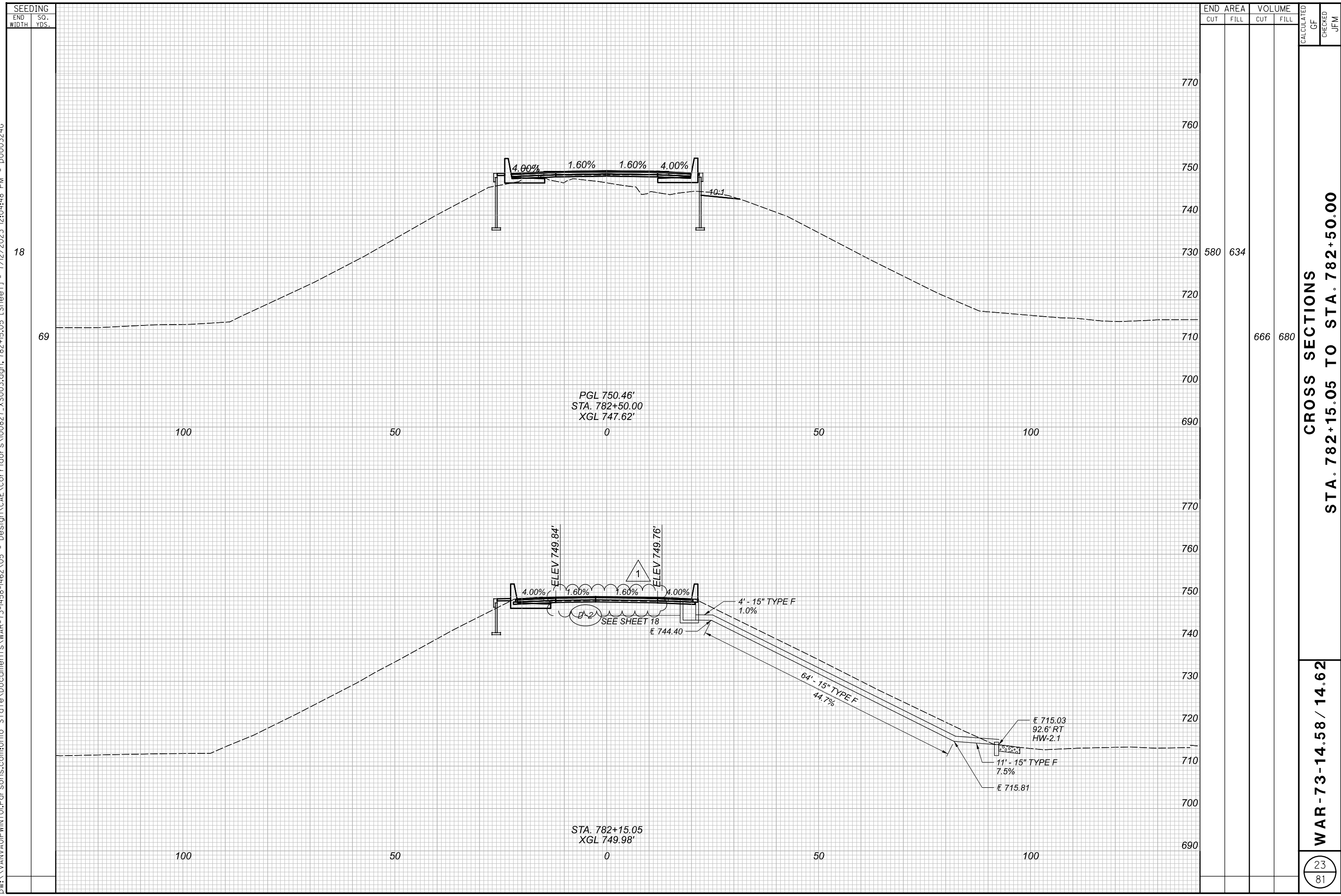
END AREA	VOLUME		CALCULATED GF	CHECKED JFM
	CUT	FILL		
140	100	227	174	
105	87	117	83	

**CROSS SECTIONS**  
**WAR-73-14.58 / 14.62**  
**STA. 781+50.00 TO STA. 782+00.00**



ISSUE RECORD:	
NO.	DATE
1	7/12/2023
PROJECT LIMIT REVISIONS AND ADDITIONS	

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SEEDING	
END WIDTH	SO. YDS.
18	69
100	50
0	0
50	50
100	69

END AREA		VOLUME		CALCULATED GF	CHECKED JFM
CUT	FILL	CUT	FILL		
580	634	666	680		

**CROSS SECTIONS**  
**STA. 782+15.05 TO STA. 782+50.00**

**WAR-73-14.58 / 14.62**

**ISSUE RECORD:**

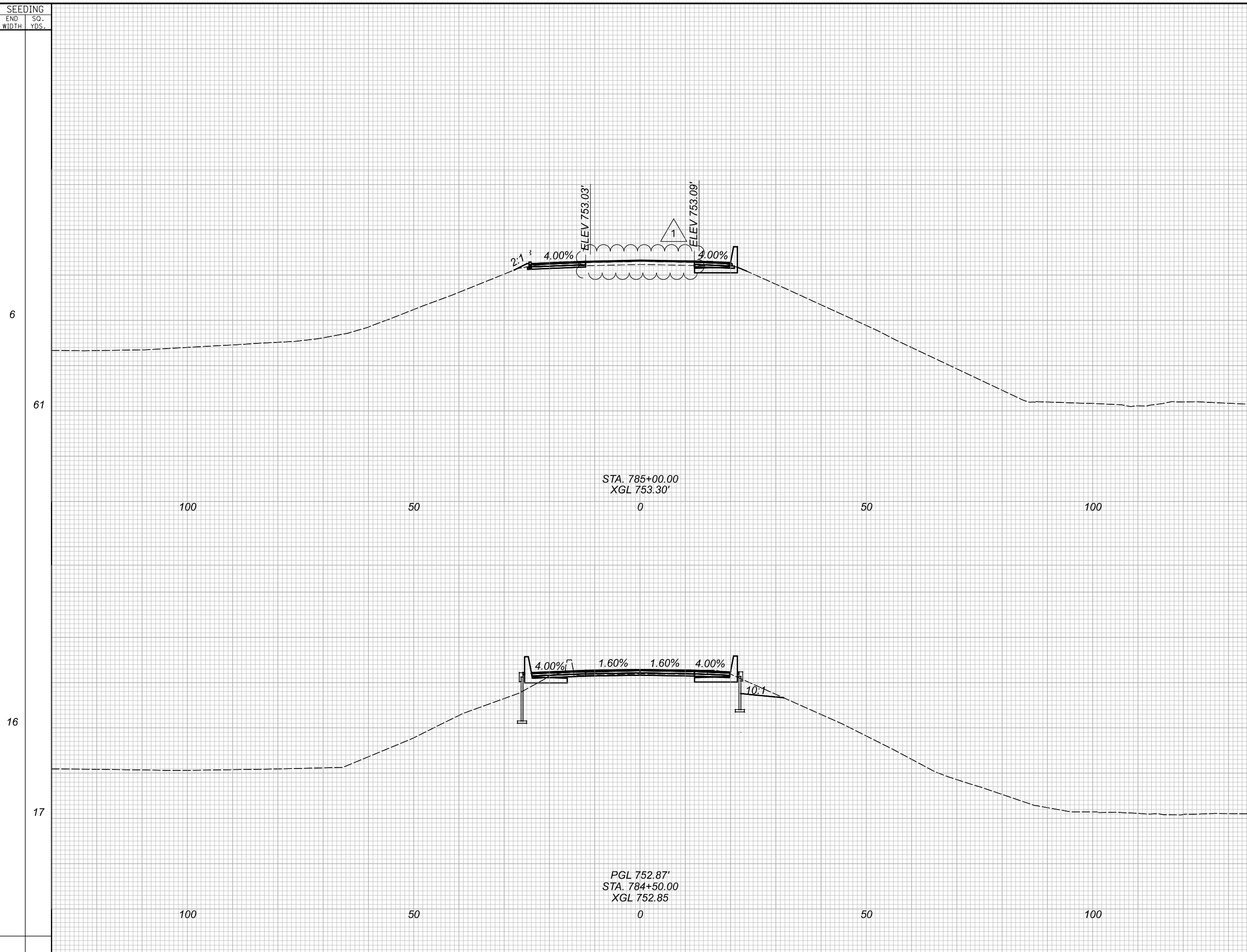
NO.	DATE	DESCRIPTION
1	7/12/2023	PROJECT LIMIT REVISIONS AND ADDITIONS

pw:\VANVAOP\WINTO\Parsons.com\Ohio State\Documents\WAR-73-1458-1462\05 - Design\CAE\Corridors\00027-X5003.dgn; 784+50.00 (Sheet) - 7/12/2023 12:04:57 PM - p000324G

SEEDING	END	
	WIDTH	SO. YDS.
	6	
	61	
	16	
	17	

END	AREA		VOLUME		CALCULATED GF	CHECKED JFM
	CUT	FILL	CUT	FILL		
	33	1				
			495	414		
	502	446				
			147	133		

**CROSS SECTIONS**  
**STA. 784+50.00 TO STA. 785+00.00**  
**WAR-73-14.58 / 14.62**

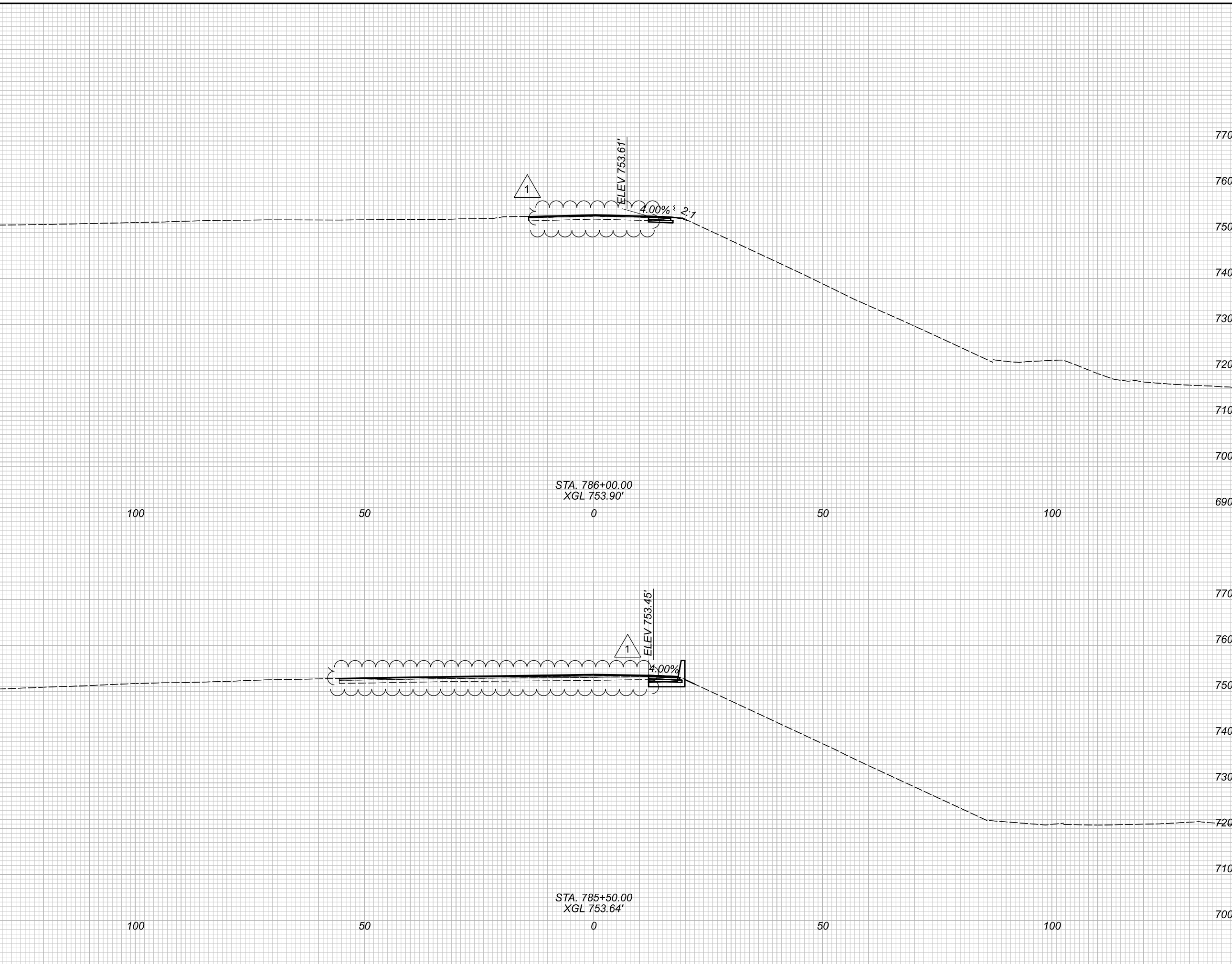


**ISSUE RECORD:**

NO.	DATE	DESCRIPTION
1	7/12/2023	PROJECT LIMIT REVISIONS AND ADDITIONS

pw:\VANVAOIP\WINTO\Parsons.com\Ohio State\Documents\WAR-73-14.58-14.62\05 - Design\CAE\Corridors\00027-X\003.dgn; 785+50.00 (Sheet1) - 7/12/2023 12:05:02 PM - p000324G

SEEDING	END AREA		VOLUME		CALCULATED GF	CHECKED JFM
	CUT	FILL	CUT	FILL		
5			4	1		
20			19	2		
2	17	2				
22			47	3		



END AREA		VOLUME		CALCULATED GF	CHECKED JFM
CUT	FILL	CUT	FILL		
4	1				
19	2				
17	2				
47	3				

**CROSS SECTIONS**  
**STA. 785+50.00 TO STA. 786+00.00**

**WAR-73-14.58 / 14.62**

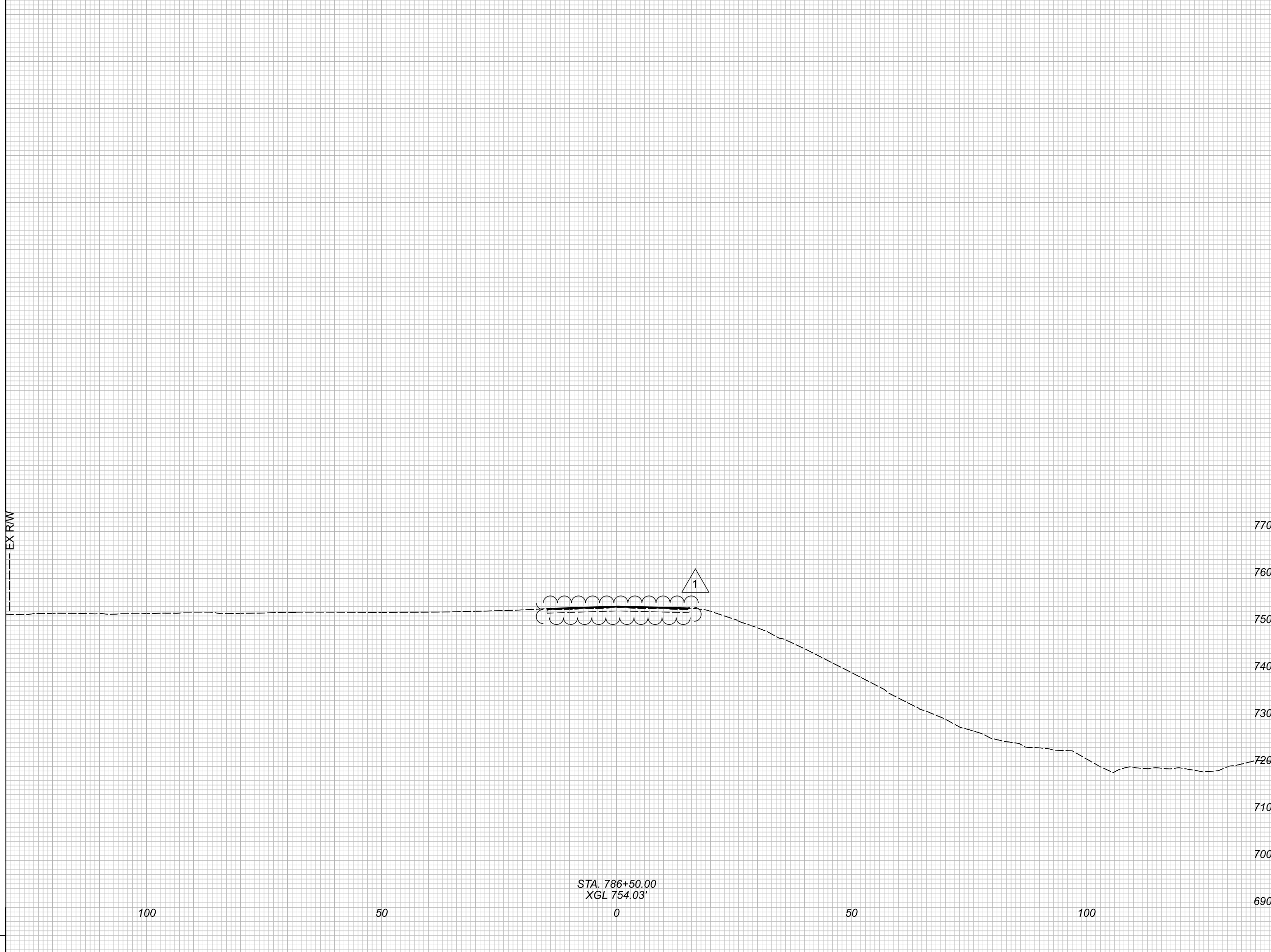
**ISSUE RECORD:**

NO.	DATE	DESCRIPTION
1	7/12/2023	PROJECT LIMIT REVISIONS AND ADDITIONS

pw: \\VANVAOPWINT01.Parsons.com:Ohio\_State\Documents\WAR-73-14.58-14.62\05 - Design\CAE\Corridors\00027-X\5003.dgn; 786+50:00 - tSheet1 - 7/12/2023 12:05:05 PM - p000324G

SEEDING	
END WIDTH	SO. YDS.
14	0

EX RW



STA. 786+50.00  
XGL 754.03'

770  
760  
750  
740  
730  
720  
710  
700  
690

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0	3	1

CALCULATED GF	CHECKED JFM
WAR-73-14.58 / 14.62	27 / 81

**CROSS SECTIONS  
STA. 786+50.00**

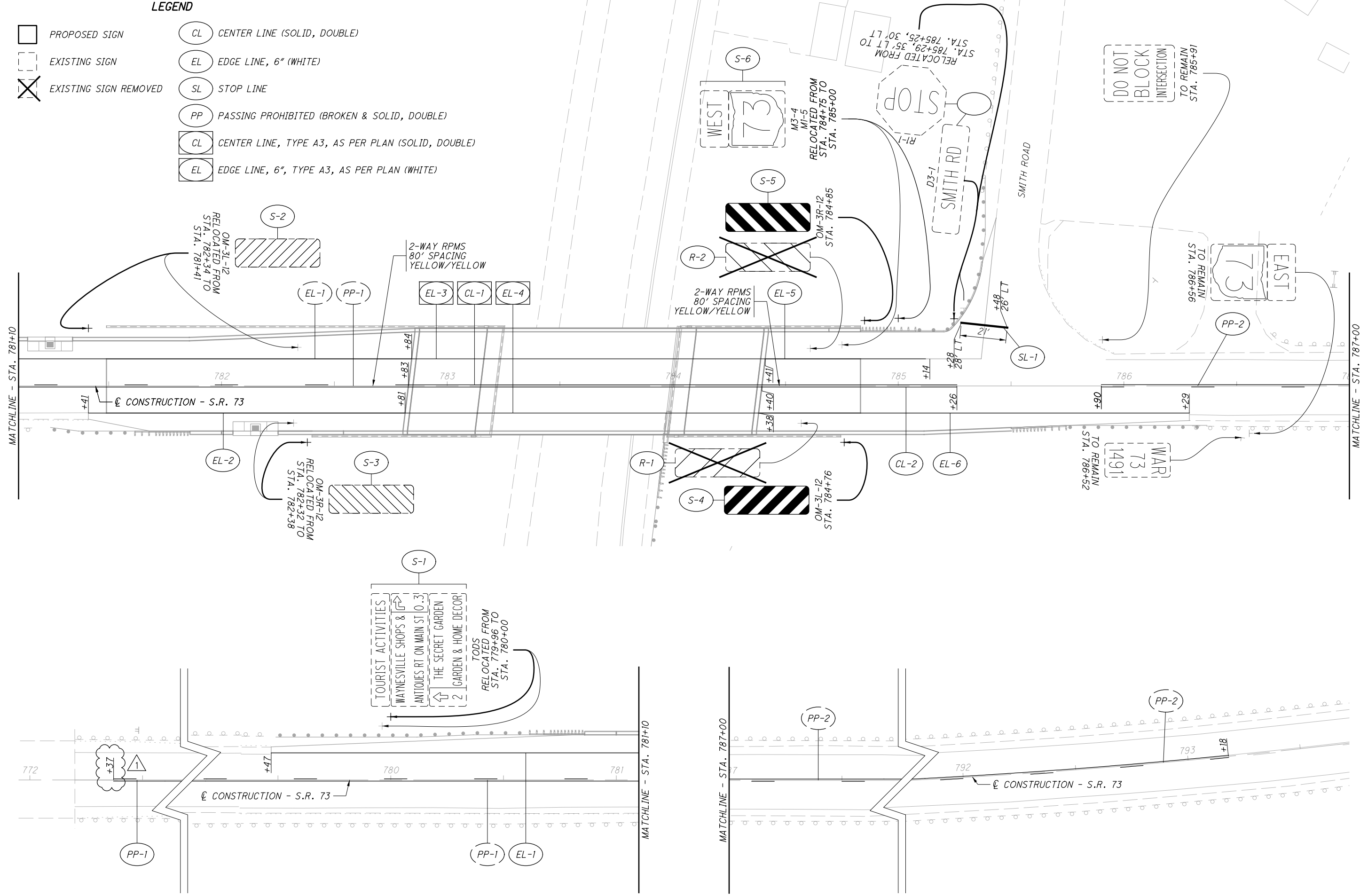
ISSUE RECORD		DESCRIPTION
NO.	DATE	REVISD PROJECT LIMITS & ADDITIONS
1	7/12/23	

PARSONS  
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REF NO.	SHEET NO.	STATION TO STATION		621		621		644		644		644		644		645		645	
		RPM	RAISED PAVEMENT MARKER REMOVED	EACH	EACH	MILE	MILE	MILE	MILE	MILE	MILE	FT	MILE	MILE	MILE	MILE			
				S.R. 73															
PP-1	29	772+37.00	TO	782+83.00															
EL-1	29	<del>779+47.00</del>	TO	782+84.00															
EL-2	29	781+41.00	TO	782+81.00															
EL-4	29	782+81.00	TO	784+38.00															
CL-1	29	782+83.00	TO	784+40.00															
EL-3	29	782+84.00	TO	784+41.00															
EL-6	29	784+38.00	TO	786+29.00															
CL-2	29	784+40.00	TO	785+26.00															
EL-5	29	784+41.00	TO	785+14.00															
SL-1	29	785+28.00	TO	785+48.00															
PP-2	29	785+90.00	TO	793+18.00															
		CORWIN RD																	
TOTALS CARRIED TO GENERAL SUMMARY							26	26	0.16	0.05	0.34	21	0.06	0.03					
REF NO.	SHEET NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	GROUND MOUNTED SUPPORT, NO. 3 POST		GROUND MOUNTED SUPPORT, NO. 4 POST		SIGN POST REFLECTOR	SIGN, FLAT SHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL		REMOVAL OF GROUND MOUNTED SIGN AND REERECTION		REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL		
							FT	FT	EACH	SF			EACH	EACH	EACH	EACH			
S-1	29	S.R. 73	780+00.00	LT	TODS	-		35					1		2				
S-2	29	S.R. 73	781+41.00	LT	OM-3L-12	-	11						1		1				
S-3	29	S.R. 73	782+32.00	RT	OM-3R-12	-	11						1		1				
S-4	29	S.R. 73	784+76.00	RT	OM-3L-12	12 x 36	11				3								
S-5	29	S.R. 73	784+85.00	LT	OM-3R-12	12 x 36	11				3								
S-6	29	S.R. 73	785+00.00	LT	M3-4	-	15						1		1				
					M1-5	-							1						
S-7	29	S.R. 73	785+25.00	LT	R1-1	-	14			1			1		1				
					D3-1	-							1						
R-1	29	S.R. 73	784+57.00	RT	-	-							1		1				
R-2	29	S.R. 73	784+61.00	LT	-	-							1		1				
TOTALS CARRIED TO GENERAL SUMMARY									73	35	1	6	2	7	8				



ISSUE RECORD	
NO.	DATE
1	7/12/23
PROJECT LIMIT REVISION	



**LEGEND**

- PROPOSED SIGN
- EXISTING SIGN
- EXISTING SIGN REMOVED
- CL CENTER LINE (SOLID, DOUBLE)
- EL EDGE LINE, 6" (WHITE)
- SL STOP LINE
- PP PASSING PROHIBITED (BROKEN & SOLID, DOUBLE)
- CL CENTER LINE, TYPE A3, AS PER PLAN (SOLID, DOUBLE)
- EL EDGE LINE, 6", TYPE A3, AS PER PLAN (WHITE)

CALCULATED 0 GF CHECKED JFM

0 20 40  
10 HORIZONTAL SCALE IN FEET

**SIGNING & PAVEMENT MARKING PLAN**

**WAR-73-14.58 / 14.62**

**GENERAL NOTES**

**STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:**

REFERENCE SHALL BE MADE TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:  
 800 DATED 04-21-23  
 848 DATED 01-15-21

**DESIGN SPECIFICATIONS**

THIS STRUCTURE CONFORMS TO THE 8TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2017 AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

**DESIGN LOADING (ABUTMENT BEARINGS)**

DESIGN LOADING: HL-93  
 FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SF

**DECK PROTECTION METHOD**

SUPERPLASTICIZED DENSE CONCRETE OVERLAY

**ITEM 516. JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN:**

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH C&MS 501.05. IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER.

ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH C&MS 512.07. THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

**ITEM 519. PATCHING CONCRETE STRUCTURES, AS PER PLAN:**

PRIOR TO THE SURFACE CLEANING SPECIFIED IN C&MS 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

**ITEM 848 SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN:**

THIS ITEM SHALL CONFORM TO SS 848 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

THE OVERLAY MATERIAL SHALL MEET THE FOLLOWING CRITERIA:  
 MINIMUM 4 LBS/CY MACRO-SYNTHETIC FIBERS (1.5 IN. MIN. TO 2.25 IN. MAX.) MEETING ASTM C1116 TYPE III SHALL BE ADDED TO THE MIX.

THE MACRO-SYNTHETIC FIBERS SHALL BE INCORPORATED INTO THE MIX IN SUCH A WAY THAT NO 'BALLING' OCCURS. UPON INSPECTION OF THE MIX AT THE TIME OF PLACEMENT, IF ANY 'BALLING' OCCURS, THE ENGINEER SHALL REJECT THE REMAINDER OF THE LOAD AT ANY TIME DURING THE POUR. IT IS IMPORTANT TO FOLLOW INDUSTRY STANDARDS AND ASTM SPECIFICATIONS ON THE PREMIXING OF THE CEMENT, AGGREGATE, AND MACRO-SYNTHETIC FIBERS PRIOR TO THE ADDITION OF WATER AND ADMIXTURES. PROVIDE MACRO-SYNTHETIC FIBERS THAT ARE MONOFILAMENT FIBERS MADE FROM VIRGIN POLYPROPYLENE, POLYETHYLENE, OR CO-POLYMERS THAT ARE INERT TO ALKALI ATTACK. ENSURE THE MACRO-SYNTHETIC FIBERS HAVE A MINIMUM TENSILE STRENGTH OF 70 KSI, A MINIMUM MODULUS OF ELASTICITY OF 800 KSI, A MINIMUM FILAMENT DIAMETER OF 0.012 INCHES, AND ASPECT RATIO BETWEEN 60 AND 100, AND ARE BETWEEN 1.5 AND 2.25 INCHES IN LENGTH. FIBERS WITH AN ASPECT RATIO GREATER THAN 60 REQUIRES A BLOWER TO INHIBIT BALLING AND MATTING OF FIBERS (ACI 544.3R-08). STORE THE MACRO-SYNTHETIC FIBERS ACCORDING TO THE MANUFACTURE'S RECOMMENDATION AND KEEP THE MATERIAL FREE FROM DUST, DIRT AND MOISTURE.

USE A MINIMUM DOSAGE RATE OF MACRO-SYNTHETIC FIBERS OF 4.0 LBS/CY OF CONCRETE. DETERMINE THE FINAL PROPOSED DOSAGE RATE THROUGH MIX TESTING. ENSURE THE FIBER REINFORCED CONCRETE MEETS OR EXCEEDS A MINIMUM EQUIVALENT FLEXURAL STRENGTH RATIO OF 25% ACCORDING TO ASTM C 1609. MACRO-SYNTHETIC FIBERS IS TO BE USED AS AN ADMIXTURE TO CONTROL CRACKING AND IS NOT TO BE USED TO SUPPLEMENT OR REPLACE REINFORCING STEEL IN THE DESIGN. ENSURE THE FINAL PROPOSED MIX IS WORKABLE AND ABLE TO BE PRODUCED SUCH THAT BALLING OR CLUMPING OF THE FIBERS IS NOT A PROBLEM AS DETERMINED BY THE ENGINEER. UTILIZE A LABORATORY REGULARLY INSPECTED BY THE CEMENT AND CONCRETE REFERENCE LABORATORY (CCRL) OF THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, OR OTHER APPROVED REFERENCE LABORATORY, TO PERFORM THE TESTING. BEFORE USE, SUBMIT DOCUMENTATION TO THE PROJECT ENGINEER CERTIFYING BOTH THE MACRO-SYNTHETIC FIBERS AND THE MIX MEET OR EXCEED THE REQUIRED PROPERTIES. SAMPLING WILL BE ALLOWED FOR TESTING PURPOSES. A DEMONSTRATION OF THE MIX PRODUCTION OR TRIAL MIX, MAY BE REQUIRED BY THE ENGINEER PRIOR TO PLACING ANY OF THE MIX ON THE PROJECT.

THE BATCH WEIGHTS SHALL BE CORRECTED TO COMPENSATE FOR THE MOISTURE CONTAINED IN THE AGGREGATE AT THE TIME OF USE.

CONCRETE SUPPLIERS SHOULD RECOGNIZE THAT ADMIXTURES MAY HAVE AN EFFECT ON STRENGTH, ENTRAINED AIR CONTENT, WORKABILITY, ETC. OF THEIR CONCRETE MIXES. THE CONCRETE SUPPLIERS CHOICE OF ONE OF THESE ADMIXTURES DOES NOT ALLEVIATE MEETING DESIGN REQUIREMENTS.

**ISSUE RECORD:**

NO.	DATE	DESCRIPTION
1	7/12/23	UPDATED QUANTITIES

ESTIMATED QUANTITIES (02/NHS/13)										
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SEE SHEET	
512	10100	29	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	8	21				
512	74000	29	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	8	21				
513	95030	6	EACH	STRUCTURAL STEEL, MISC.:JACKING FRAME		6				
516	44101	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (12" x 12" x 2.02" WITH 16.5" x 14.5" x 1.0" PLATE)			10		8/8	
516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN				LUMP	2/8	
519	11101	254	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	69	185			2/8	
848	10201	960	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (THICKNESS 3.5" DECK)			960		2/8	
848	10201	112	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (THICKNESS 1.75" APPR. SLAB)				112	2/8	
848	20000	1072	SY	SURFACE PREPARATION USING HYDRODEMOLITION			960	112		
848	50000	48	SY	HAND CHIPPING			48			
848	50100	LS		TEST SLAB				LUMP		
848	50320	960	SY	EXISTING CONCRETE OVERLAY REMOVED (THICKNESS 1.75")			960			

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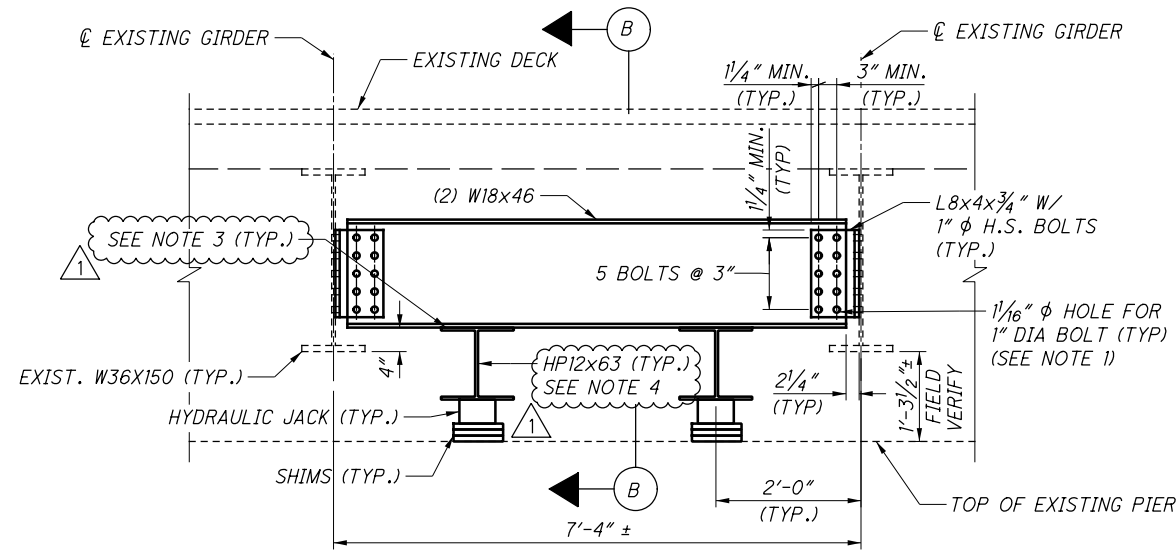
DATE: 7-20  
 REVIEWED: RWB  
 DRAWN: MTW  
 DESIGNED: JRE  
 CHECKED: JLW

STRUCTURE FILE NUMBER: 8302855

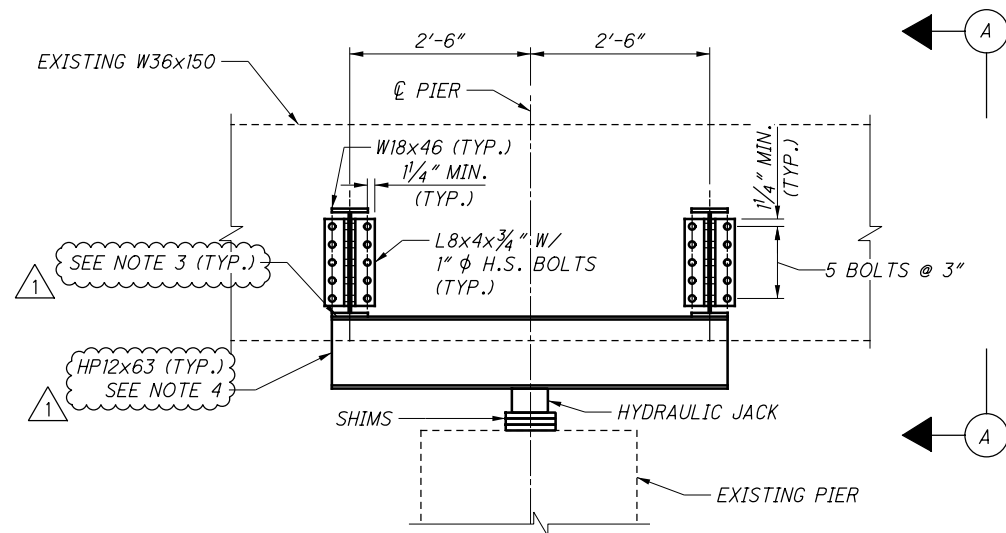
**GENERAL NOTES & ESTIMATED QUANTITIES**  
 BRIDGE NO. WAR-73-1458  
 S.R. 73 OVER LITTLE MIAMI RIVER

WAR-73-14.58 / 14.62  
 PID No. 100827

2 / 8  
 31 / 81



**(A) JACKING FRAME ELEVATION**  
 (EXTERIOR BAY SHOWN, INTERIOR BAYS SIMILAR)



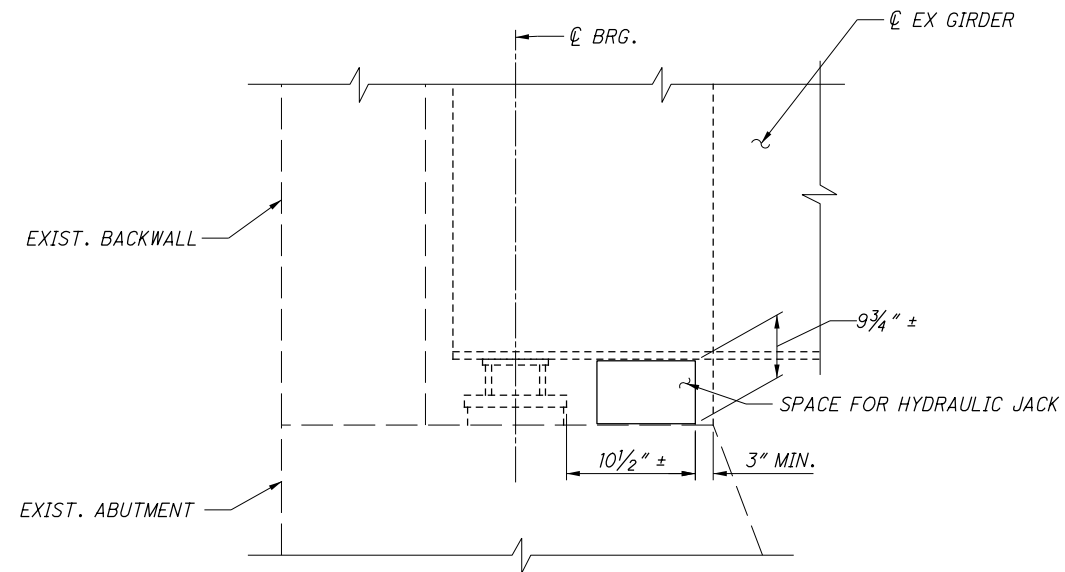
**(B) SECTION**

ISSUE RECORD:		
NO.	DATE	DESCRIPTION
1	7/12/23	ADDED BOLT LOCATIONS AND NOTES

DESIGN LOAD		WEIGHT OF STEEL PER JACKING FRAME (LBS)
DL (KIPS)	LL+I (KIPS)	
57	57	1,467

NOTE: DESIGN LOADS ARE UNFACTORED AT EACH JACKING POINT.

- NOTES:**
- MATCH FIELD DRILL HOLES ARE REQUIRED ON ONE END OF THE W18x46 WEB TO ACCOUNT FOR FIELD CONDITIONS.
  - SEE SHEET **7/8**, FOR NOTES.
  - THE CONTRACTOR SHALL USE C CLAMPS TO TEMPORARILY FASTEN THE HP12x63 SUPPORTS TO THE W18x46 FRAME.
  - THE HP12x63 SHALL BE REMOVED AT THE COMPLETION OF JACKING FRAME INSTALLATION. HP12x63 SHALL BE REMOVED BY AND REMAIN PROPERTY OF THE CONTRACTOR.



**HYDRAULIC JACK AT ABUTMENTS**  
 CAPACITY OF JACK SHALL BE A MIN. OF 30 TONS

ISSUE RECORD:		
NO.	DATE	DESCRIPTION
1	7/12/23	UPDATED NOTES

**NOTES:**

- ALL STEEL FOR JACKING FRAMES AND CONNECTIONS SHALL BE 50 KSI STEEL AND SHALL BE GALVANIZED PER C&MS 711.02.
- CONTRACTOR MAY USE SHIM PLATES AS NEEDED TO MAKE CONNECTION FIT UP.
- EXISTING CROSSFRAMES AT ALL PIERS MUST BE REMOVED AND REPLACED PRIOR TO BEGINNING JACKING PROCEDURE FOR PATCHING REPAIRS.
- ALL BOLTS SHALL BE 1" DIA A325, TYPE 1, HIGH STRENGTH. PROVIDE PER C&M 513.20. ALL HOLES SHALL BE 1 1/16" DIA. ALL BOLTS SHALL BE GALVANIZED PER C&MS 711.02.
- THE CONTRACTOR IS TO SUBMIT A JACKING PLAN TO THE ENGINEER PER C&MS 501.05. THE CONTRACTOR MAY SUBMIT AN ALTERNATE SEQUENCE OF CONSTRUCTION FOR APPROVAL.
- ALTERNATIVE PERMANENT JACKING FRAME DESIGNS CAN BE SUBMITTED AFTER SALE AND WILL FOLLOW THE VALUE ENGINEERING PROCESS.

**SEQUENCE OF CONSTRUCTION:**

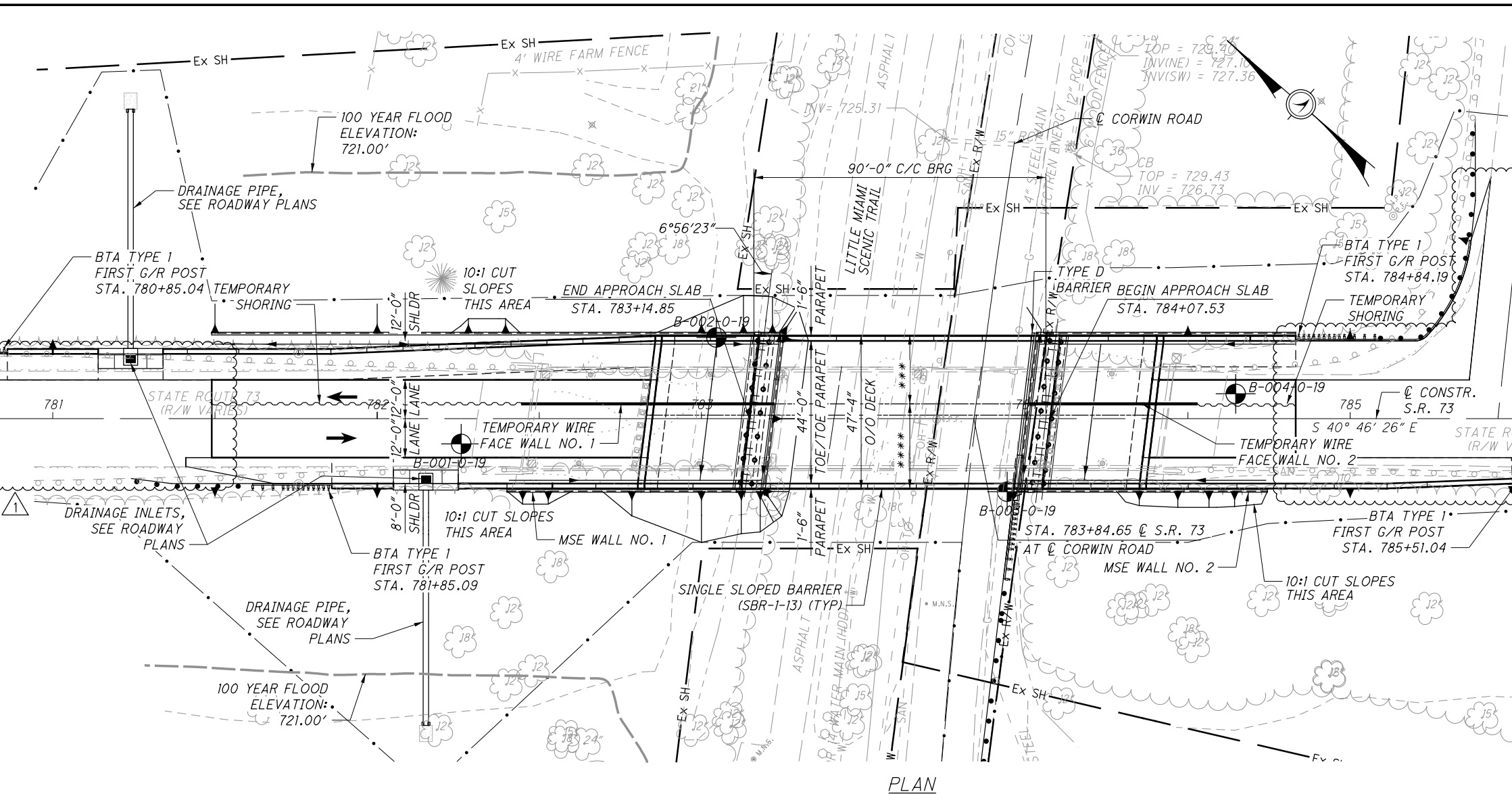
WORKING ONE PIER AT A TIME:

- REMOVE EXISTING CROSSFRAMES.
- PREPARE SURFACE OF EXISTING BEAMS AT BOLTED CONNECTIONS TO PROVIDE CLASS A SLIP RESISTANCE (FAYING SURFACE).
- INSTALL PERMANENT JACKING FRAMES IN THE INTERIOR BAYS (1 AND 4) PER JACKING FRAME DETAILS.
- REPEAT STEPS 1-3 AT OTHER PIERS, ONE PIER AT A TIME, PRIOR TO PERFORMING ANY JACKING PROCEDURES.

<b>PARSONS</b> 445 Hutchinsan Avenue, Suite 950 Columbus, OH 43235	DATE 1-20
	REVIEWED RWB
DRAWN MTW	STRUCTURE FILE NUMBER 8302855
DESIGNED JRE	CHECKED JLW
<b>JACKING FRAME DETAILS - 2</b> BRIDGE NO. WAR-73-1458 OVER S.R. 73 OVER LITTLE MIAMI RIVER	
WAR-73-14.58 / 14.62 PID No. 100827	7 / 8
SEE SHEET <span style="border: 1px solid black; padding: 2px;">6/8</span> , FOR JACKING FRAME DETAILS.	
36 81	

PARSONS  
 p:\ANV\A01PW\T01\Parsons.com\Ohio State Documents\WAR-73-1458-1462\05 - Design\CAD\100827\Structures\WAR073-1462\Sheets\073-1462-SP\000001.dwg, Sheet - 7/12/2023 9:42:30 AM - p002694C

ISSUE RECORD	NO.	DATE	DESCRIPTION
	1	7/12/23	CORWIN RD HORIZ. CLR. & PAVEMENT LIMITS



BENCHMARK DATA	
BM #1 STA. 784+46.45, ELEV. 753.11	OFFSET 18.61' LT, BRASS DISK-ODOT C-615

**NOTES**

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS. ALL SLOPES ARE 2:1 UNLESS OTHERWISE NOTED

DESIGN TRAFFIC SR73:  
 2022 ADT = 8,000     2022 ADTT = 480  
 2042 ADT = 12,000    2042 ADTT = 720  
 DIRECTIONAL DISTRIBUTION = 60%  
 CORWIN RD. ADT = 191

**LEGEND**

- ◆ BORING LOCATION
- \* 14'-6" REQUIRED MINIMUM VERTICAL CLEARANCE - CORWIN ROAD  
 17'-2" ACTUAL MINIMUM VERTICAL CLEARANCE - CORWIN ROAD
- \*\* 10'-0" REQUIRED MINIMUM VERTICAL CLEARANCE - TRAIL  
 20'-7" ACTUAL MINIMUM VERTICAL CLEARANCE - TRAIL
- \*\*\* STAGE 1 CONSTRUCTION
- \*\*\*\* STAGE 2 CONSTRUCTION

**EXISTING STRUCTURE**

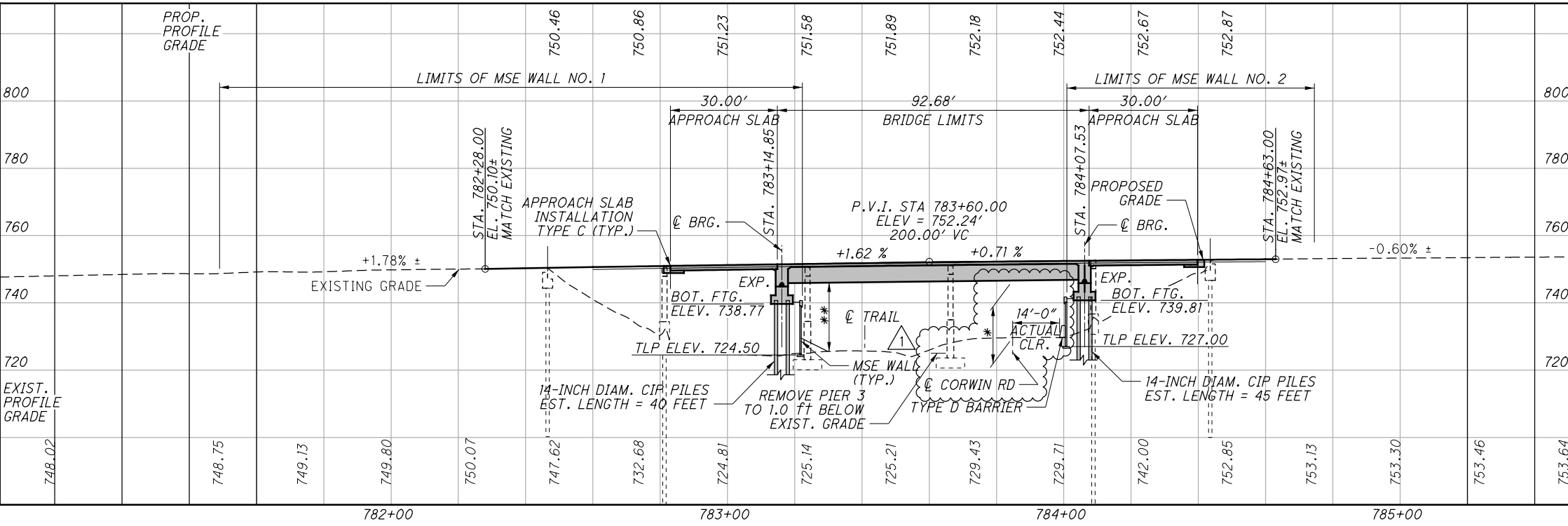
TYPE: 5-SPAN CONTINUOUS REINFORCED CONCRETE SLAB WITH WITH REINFORCED CONCRETE SUBSTRUCTURE.

SPANS: 34'-0"±, 42'-6"±, 42'-6"±, 42'-6"±, 34'-0"± C/C BRG.  
 ROADWAY: 28'-11"± F/F PARAPETS  
 LOADING: HS-15  
 SKEW: 08° 19' 30" LEFT FORWARD  
 APPROACH SLABS: 15'-0" LONG  
 ALIGNMENT: TANGENT  
 WEARING SURFACE: 2 1/4" CONCRETE OVERLAY  
 STRUCTURAL FILE NUMBER: 8302944  
 DATE BUILT: 1952  
 DISPOSITION: TO BE REPLACED

**PROPOSED STRUCTURE**

TYPE: SINGLE SPAN PRESTRESSED CONCRETE I-BEAMS WITH COMPOSITE REINFORCED CONCRETE DECK ON REINFORCED CONCRETE SEMI-INTEGRAL MSE ABUTMENTS ON PILE FOUNDATION

SPANS: 90'-0" C/C BRG.  
 ROADWAY: 44'-0" TOE/TOE PARAPET  
 LOADING: HL-93 AND 60PSF FUTURE WEARING SURFACE  
 SKEW: 06° 56' 23" LEFT FORWARD  
 WEARING SURFACE: 1" MONOLITHIC CONCRETE (MACRO-FIBERS)  
 APPROACH SLABS: 30'-0" LONG (AS-1-15)  
 ALIGNMENT: TANGENT  
 CROWN: 0.16 FT/FT  
 COORDINATES: LATITUDE 39° 31' 21.00"  
 LONGITUDE 84° 05' 05.68"



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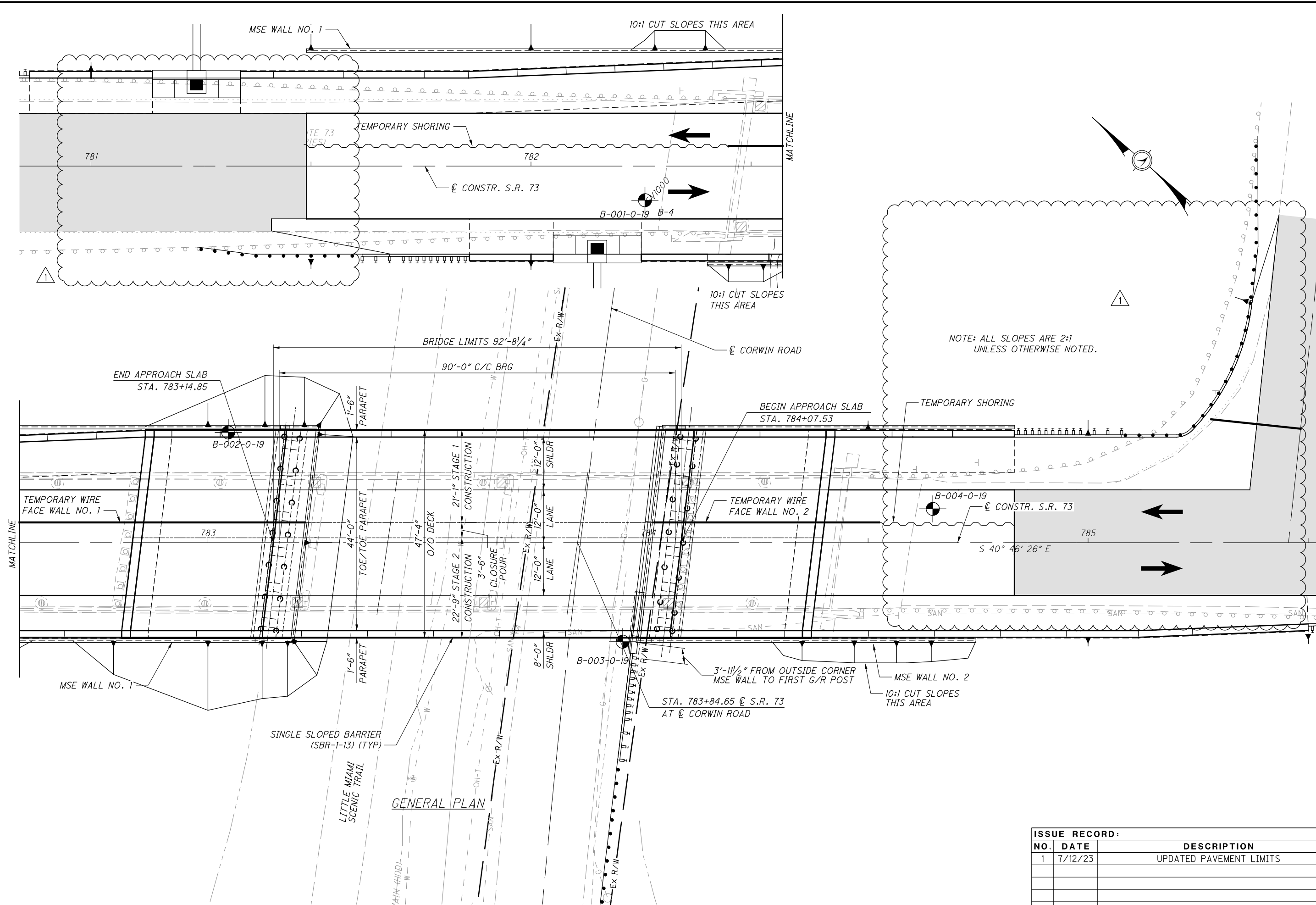
DATE: 1-20  
 REVIEWED: RWB  
 DRAWN: MTW  
 DESIGNED: JRE  
 CHECKED: JLW

WARREN COUNTY  
 STA. 783+14.85  
 STA. 784+07.53

**SITE PLAN**  
 BRIDGE NO. WAR-73-1462  
 S.R. 73 OVER CORWIN ROAD

WAR-73-14.58  
 /14.62  
 PID No. 100827

1/38  
 38  
 81



NOTE: ALL SLOPES ARE 2:1 UNLESS OTHERWISE NOTED.

GENERAL PLAN

ISSUE RECORD:		
NO.	DATE	DESCRIPTION
1	7/12/23	UPDATED PAVEMENT LIMITS



**CLASS QC3 CONCRETE WITH QC/QA, SUPERSTRUCTURE, AS PER PLAN**

THIS ITEM MODIFIES THE STANDARD 511 CONCRETE FOR STRUCTURES SPECIFICATION TO INCLUDE MACRO-SYNTHETIC AND CORROSION INHIBITORS INTO THE SUPERSTRUCTURE CONCRETE. THIS ITEM SHALL CONFORM TO CMS 511 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

ROVIDE MATERIALS CONFORMING TO 511.02 EXCEPT AS MODIFIED BELOW:

PORTLAND CEMENT CONCRETE	499.03, CLASS QC 3 MEETING A DESIGN STRENGTH OF 4,500 PSI, WITH MACRO-SYNTHETIC FIBERS WITH MODIFICATION PER 511.02
FIBERS FOR CONCRETE	ASTM C 1116, TYPE III
CORROSION INHIBITOR	515.15

THE CLASS QC3 CONCRETE FOR THE SUPERSTRUCTURE SHALL MEET THE FOLLOWING CRITERIA:

WATER/CEMENT RATIO = 0.40 MAXIMUM; MINIMUM 4 LBS/CY MACRO-SYNTHETIC FIBERS (1.5 IN. MIN. TO 2.5 IN. MAX.) MEETING ASTM C1116 TYPE III SHALL BE ADDED TO THE MIX.

MIX SHALL INCLUDE A MIGRATING CORROSION INHIBITOR AS MANUFACTURED BY AN APPROVED SUPPLIER LISTED ON ODOT'S QUALIFIED APPROVED SUPPLIERS, ITEM 515.15. THE DOSAGE RATE LISTED ON THE ODOT QUALIFIED APPROVED SUPPLIERS LIST WILL APPLY.

THE MACRO-SYNTHETIC FIBERS SHALL BE INCORPORATED INTO THE MIX IN SUCH A WAY THAT NO 'BALLING' OCCURS. UPON INSPECTION OF THE MIX AT THE TIME OF PLACEMENT, IF ANY 'BALLING' OCCURS, THE ENGINEER SHALL REJECT THE REMAINDER OF THE LOAD AT ANY TIME DURING THE POUR. IT IS IMPORTANT TO FOLLOW INDUSTRY STANDARDS AND ASTM SPECIFICATIONS ON THE PREMIXING OF THE CEMENT, AGGREGATE, AND MACRO-SYNTHETIC FIBERS PRIOR TO THE ADDITION OF WATER AND ADMIXTURES. PROVIDE MACRO-SYNTHETIC-FIBERS THAT ARE MONOFILAMENT FIBERS MADE FROM VIRGIN POLYPROPYLENE, POLYETHYLENE, OR CO-POLYMERS THAT ARE INERT TO ALKALI ATTACK. ENSURE THE MACRO-SYNTHETIC FIBERS HAVE A MINIMUM TENSILE STRENGTH OF 70 KSI, A MINIMUM MODULUS OF ELASTICITY OF 800 KSI, A MINIMUM FILAMENT DIAMETER OF 0.012 INCHES, AND ASPECT RATIO BETWEEN 60 AND 100, AND ARE BETWEEN 1.0 AND 2.5 INCHES IN LENGTH. STORE THE MACRO-SYNTHETIC FIBERS ACCORDING TO THE MANUFACTURE'S RECOMMENDATION AND KEEP THE MATERIAL FREE FROM DUST, DIRT AND MOISTURE. PLACING THE BAG THAT THE FIBERS COME IN INTO THE CONCRETE MIX IS NOT PERMITTED.

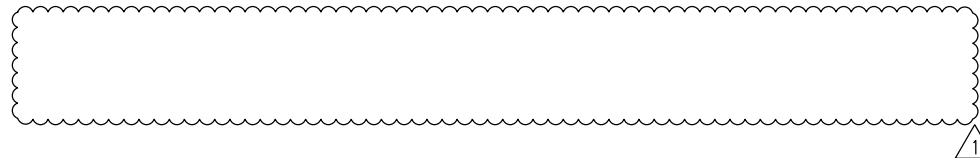
USE A MINIMUM DOSAGE RATE OF MACRO-SYNTHETIC FIBERS OF 4.0 LBS/CY OF CONCRETE, DETERMINE THE FINAL PROPOSED DOSAGE RATE THROUGH MIX TESTING. ENSURE THE FIBER REINFORCED CONCRETE MEETS OR EXCEEDS A MINIMUM EQUIVALENT FLEXURAL STRENGTH RATIO OF 25% ACCORDING TO ASTM C 1609. ENSURE THE FINAL PROPOSED MIX IS WORKABLE AND ABLE TO BE PRODUCED SUCH THAT BALLING OR CLUMPING OF THE FIBERS IS NOT A PROBLEM AS DETERMINED BY THE ENGINEER. UTILIZE A LABORATORY REGULARLY INSPECTED BY THE CEMENT AND CONCRETE REFERENCE LABORATORY (CCRL) OF THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, OR OTHER APPROVED REFERENCE LABORATORY, TO PERFORM THE TESTING. BEFORE USE, SUBMIT DOCUMENTATION TO THE PROJECT ENGINEER CERTIFYING BOTH THE MACRO-SYNTHETIC FIBERS AND THE MIX MEET OR EXCEED THE REQUIRED PROPERTIES. SAMPLING WILL BE ALLOWED FOR TESTING PURPOSES. A DEMONSTRATION OF THE MIX PRODUCTION OR TRIAL MIX, MAY BE REQUIRED BY THE ENGINEER PRIOR TO PLACING ANY OF THE MIX ON THE PROJECT.

THE BATCH WEIGHTS SHALL BE CORRECTED TO COMPENSATE FOR THE MOISTURE CONTAINED IN THE AGGREGATE AT THE TIME OF USE. A CHEMICAL ADMIXTURE (705.12, TYPE A OR D) SHALL BE USED. THE TRANSIT MIXER CHARGE SHALL BE LIMITED TO 3/4 OF ITS RATED CAPACITY OR 6 CUBIC YARDS, WHICHEVER IS SMALLER. THE FIRST THREE TRANSIT MIXER LOADS ARE REQUIRED TO BE AT THE MINIMUM YARDAGE LISTED ABOVE TO SHOW PROOF OF THE SUCCESSFUL BATCHING OPERATION. AFTER CONSISTENCY IN THE DELIVERED MATERIAL HAS BEEN ESTABLISHED, THE CONCRETE SUPPLIER MAY INCREASE THE BATCH DELIVERED QUANTITIES AS LONG AS THE QUALITY REMAINS ACCEPTABLE TO THE ENGINEER. THE ENGINEER CAN REDUCE THE BATCH LOAD SIZE AT ANY TIME AS NEEDED TO CORRECT/IMPROVE CONCRETE QUALITY.

CONCRETE SUPPLIERS SHOULD RECOGNIZE THAT THE CORROSION INHIBITOR AND ADMIXTURES MAY HAVE AN EFFECT ON STRENGTH, ENTRAINED AIR CONTENT, WORKABILITY, ETC. OF THEIR CONCRETE MIXES. THE CORROSION INHIBITOR IS SUGGESTED TO BE A MCI PRODUCT BY CORTEC OR AN APPROVED EQUAL FROM THE QUALIFIED PRODUCTS LIST. THE CONCRETE SUPPLIER'S CHOICE OF ONE OF THESE CORROSION INHIBITORS DOES NOT ALLEVIATE MEETING DESIGN REQUIREMENTS. PLEASE BE ADVISED THAT SOME PRODUCTS ON THE LIST EFFECT THE DELIVERED MIX PROPERTIES GREATLY WHILE OTHER PRODUCTS DO NOT.

APPROACH SLABS, DIAPHRAGMS, AND BRIDGE RAILING CONCRETE (WHEN APPLICABLE) ARE TO USE THE SAME MIX DESIGN AS THE BRIDGE DECK. THE CONTRACTOR SHOULD BE ADVISED THAT CONCRETE RETARDING AGENTS MAY NEED TO BE ADDED TO OFFSET THE EFFECTS OF THE MIGRATING CORROSION INHIBITOR SELECTED. USE SELF-COMPACTING CONCRETE ON DECORATIVE RAILING SIMILAR TO TEXAS RAILING AND MACRO-SYNTHETIC CONCRETE PER THIS SPECIFICATION ON TRADITIONAL CONCRETE RAILING WHEN APPLICABLE.

THE CONTRACTOR SHALL PROVIDE TRADITIONAL BRIDGE DECK FORMS CONFORMING TO CMS 508. PERMANENT STAY-IN-PLACE (SIP) FORMS ARE NOT ALLOWED. THE PLACING OF THE DECK AND THE APPROACH SLABS IN THE SAME CONCRETE POUR IS NOT PERMITTED.



ISSUE RECORD:		
NO.	DATE	DESCRIPTION
1	7/12/23	UPDATED NOTES

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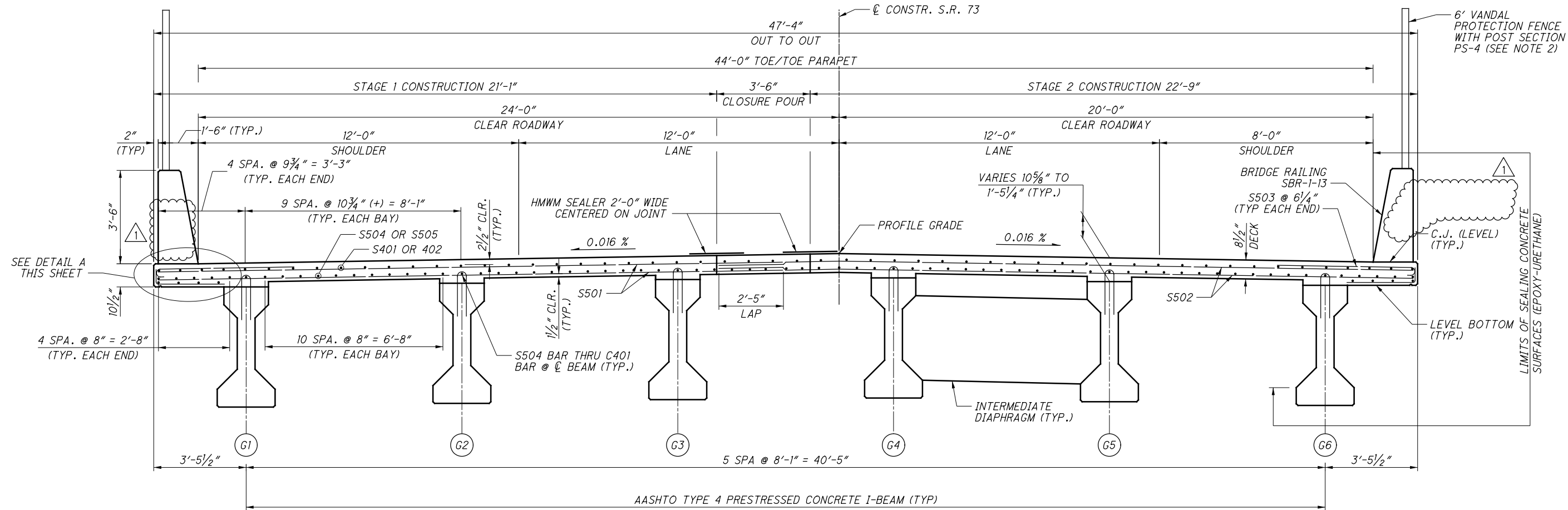
DESIGNED JRE	CHECKED JLW	DRAWN DJC	REVISED	DATE 1-20
				STRUCTURE FILE NUMBER 8302945

**GENERAL NOTES**  
 BRIDGE NO. WAR-73-1462  
 S.R. 73 OVER CORWIN ROAD

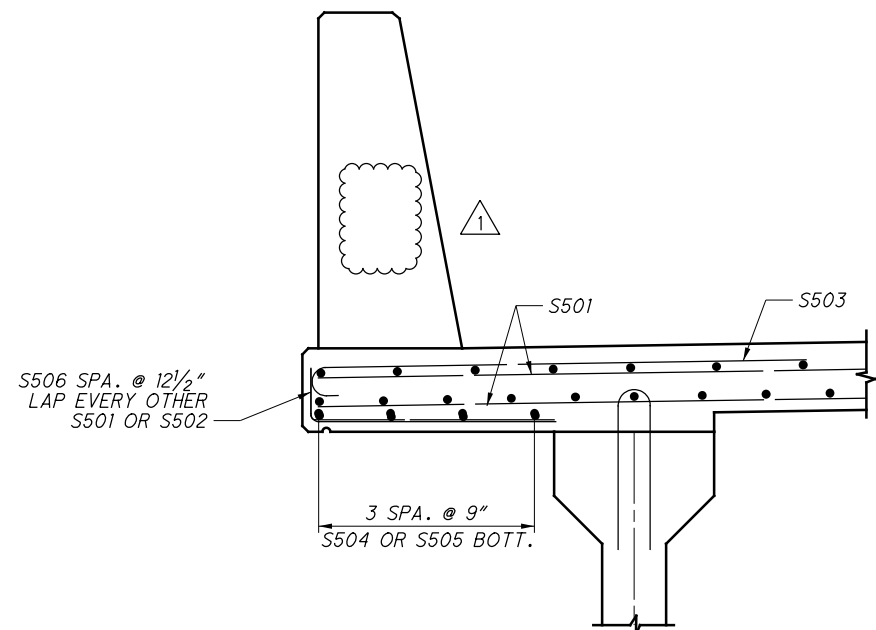
**WAR-73-14.58**  
 / **14.62**  
 PID No. 100827

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41  
 81



**TRANSVERSE SECTION**  
 (LOOKING UPSTATION)



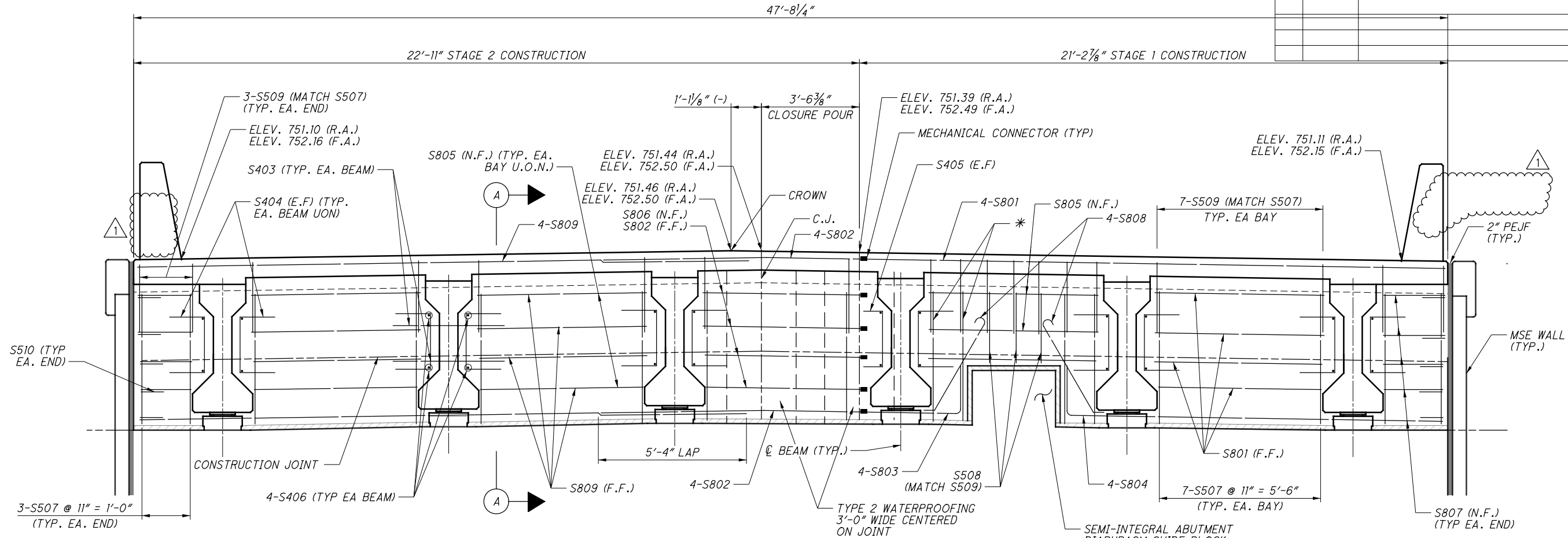
**DETAIL A**  
 (LEFT OVERHANG SHOWN, RIGHT OVERHANG SIMILAR)

**NOTES:**

- FOR ADDITIONAL PARAPET DETAILS, SEE SHEET [19/38](#).
- FOR ADDITIONAL VANDAL PROTECTION FENCE DETAILS, SEE STD. DWG. VPF-1-90.
- DECK SLAB THICKNESS FOR CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK CONCRETE IS MEASURED ACCORDING TO C&MS 511. IN ADDITION TO THE DESIGN SLAB THICKNESS, THE QUANTITY INCLUDES A VARIABLE HAUNCH THICKNESS THAT PROVIDES AN ALLOWANCE FOR VERTICAL GRADE ADJUSTMENT, BEAM CAMBER AND ADDITIONAL SACRIFICIAL HAUNCH THICKNESS.
- FOR ABBREVIATION DETAILS, SEE STRUCTURAL GENERAL NOTES SHEET [3/38](#).
- FOR BEAM DETAILS, SEE SHEET [12/38](#).
- FOR DECK PLAN, SEE SHEET [14/38](#).

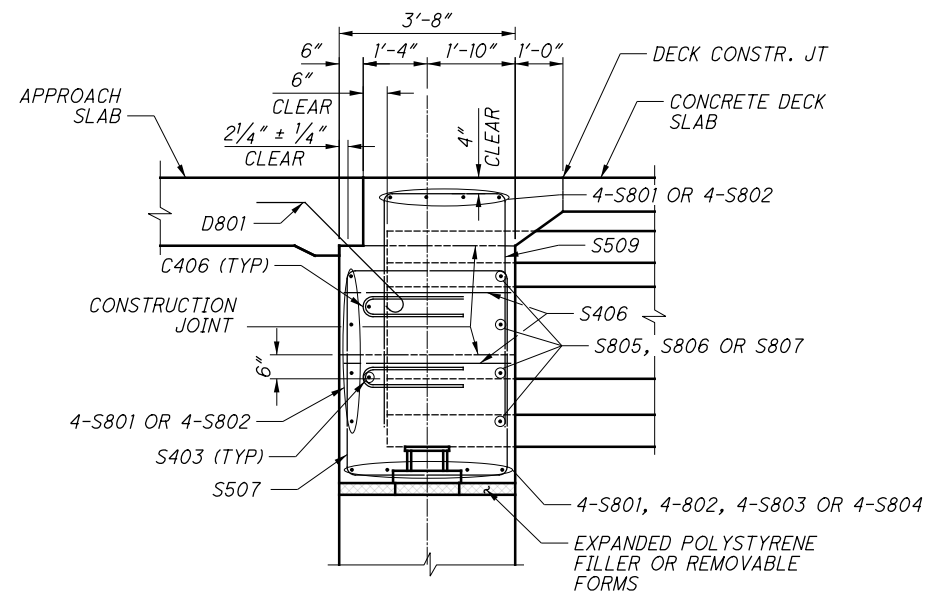
ISSUE RECORD:		
NO.	DATE	DESCRIPTION
1	7/12/23	REMOVED CONDUIT

ISSUE RECORD:		
NO.	DATE	DESCRIPTION
1	7/12/23	REMOVED CONDUIT



**END DIAPHRAGM ELEVATION**  
 (REAR ABUTMENT SHOWN, FORWARD ABUTMENT  
 SIMILAR BUT OPPOSITE HAND)

\* S507 EACH SIDE OF DIAPHRAGM  
 GUIDE BLOCK



**SECTION A-A**

**NOTES:**

1. SEE STD. DWG. SICD-1-96 FOR ADDITIONAL DETAILS.
2. ALL DIMENSIONS ARE GIVEN ALONG  $\bar{C}$  BEARING.
3. PLACE REINFORCING PARALLEL TO GIRDERS.
4. ABUTMENT DIAPHRAGM CONCRETE, PHASED CONSTRUCTION: PLACE THE DIAPHRAGM CONCRETE ENCASEING THE STRUCTURAL MEMBER ENDS OF AN INDIVIDUAL PHASE WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPERATELY, LOCATE A HORIZONTAL CONSTRUCTION JOINT IN THE DIAPHRAGM AS SHOWN ON PSID-1-13, SHEET 7 OF 10 FOR PRESTRESSED I-BEAM SUPERSTRUCTURES OR AS SHOWN ON SICD-1-96 FOR STEEL SUPERSTRUCTURES AND PLACE REMAINING DIAPHRAGM CONCRETE WITH THE DECK. PLACE CLOSURE POUR IN THE DIAPHRAGM AND DECK CONCURRENTLY.
5. SEE STD. DWG. PSID-1-13 FOR GIRDER DETAILS.
6. ELEVATIONS GIVEN AT  $\bar{C}$  BEARING.

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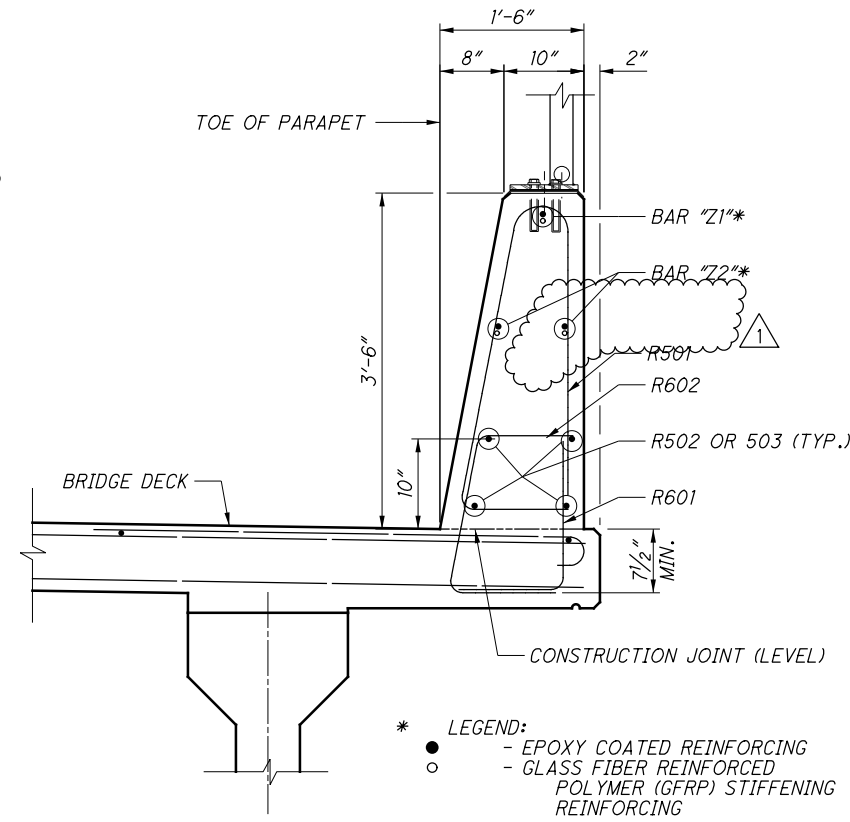
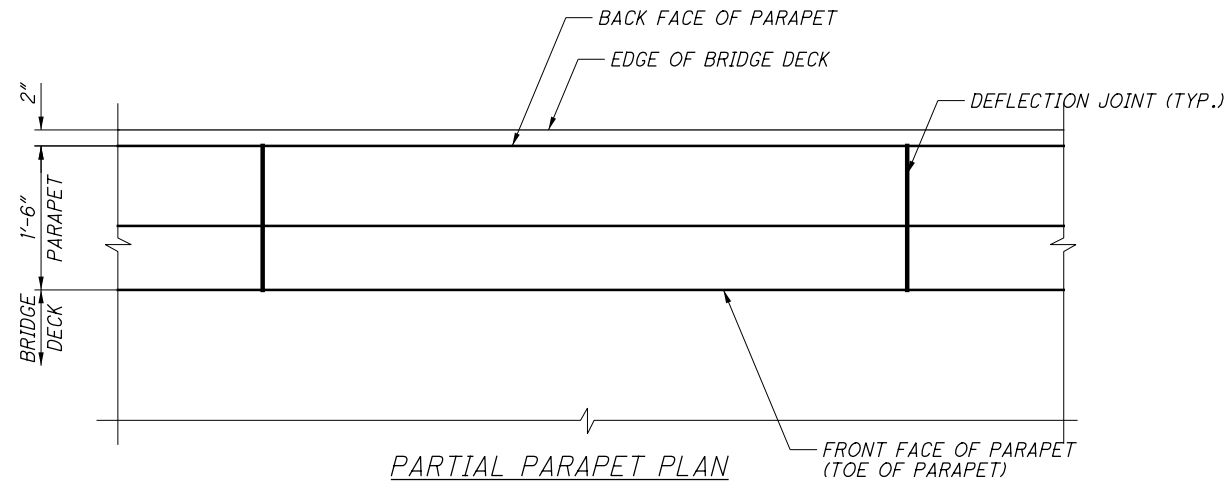
DATE: 1-20  
 REVIEWED: RWB  
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 CHECKED: JLW  
 STRUCTURE FILE NUMBER: 8302945

**END DIAPHRAGM DETAILS**  
 BRIDGE NO. WAR-73-1462  
 S.R. 73 OVER CORWIN ROAD

WAR-73-14-58  
 / 14.62  
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 81



\* LEGEND:  
 ● - EPOXY COATED REINFORCING  
 ○ - GLASS FIBER REINFORCED POLYMER (GFRP) STIFFENING REINFORCING

TYPICAL PARAPET SECTION  
 (DECK REINFORCING NOT SHOWN FOR CLARITY)

**DEFLECTION JOINT NOTES:**

SAWCUT 1/4" DEEP DEFLECTION JOINTS ALONG THE PERIMETER OF THE PARAPET WHEN THE CONCRETE IS STILL GREEN OR AS SOON AS THE SAW CAN BE OPERATED WITHOUT DAMAGING THE CONCRETE.

AFTER THE CONCRETE CURING PERIOD SPECIFIED IN CMS 511.14 HAS BEEN REACHED, PERFORM 4" SAWCUT THROUGH THE GFRP AS SHOWN IN THE TYPICAL SAWCUT SECTION.

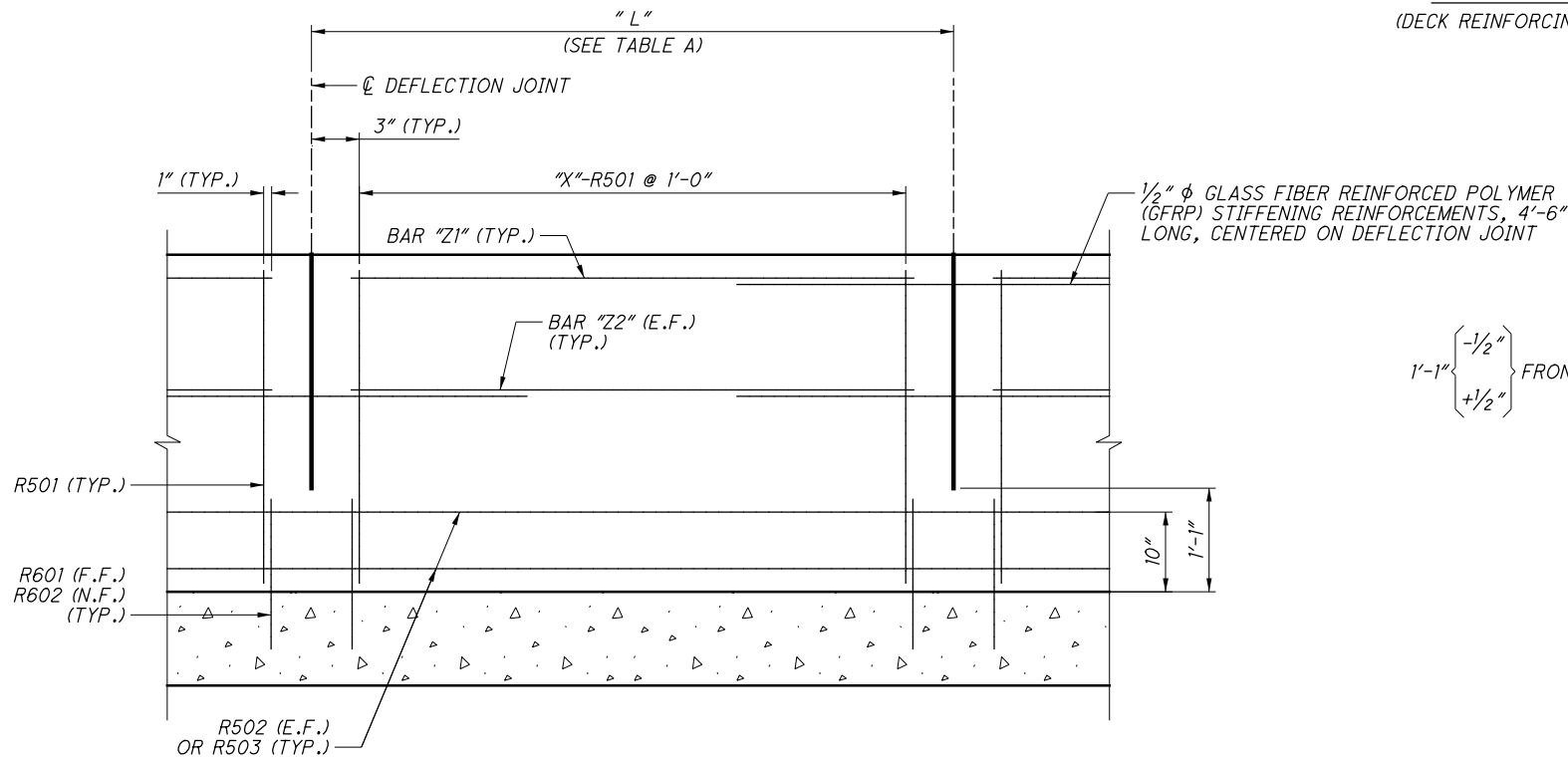
THE CONTRACTOR HAS THE OPTION TO PERFORM A FULL DEPTH SAWCUT. HOWEVER, THE SAWCUT SHALL NOT BE LESS THAN 1'-0 1/2" FROM THE TOP OF THE CONCRETE DECK.

USE AN EDGE GUIDE, FENCE, OR JIG TO ENSURE THAT THE CUT JOINT IS STRAIGHT, TRUE, AND ALIGNED ON ALL FACES OF THE PARAPET. THE JOINT WIDTH SHALL BE THE WIDTH OF THE SAW BLADE, A NOMINAL WIDTH OF 1/4".

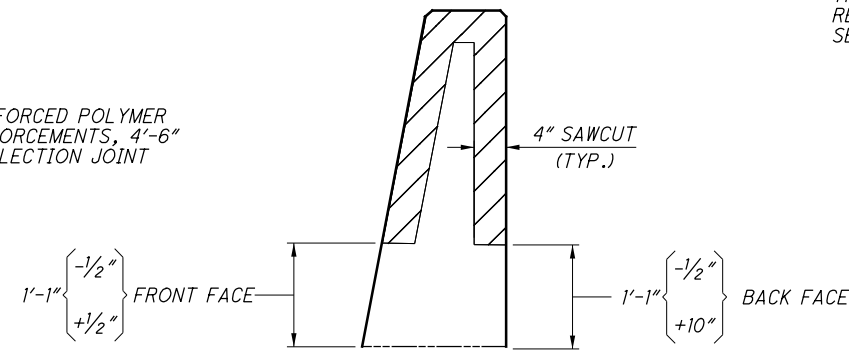
SEAL THE PERIMETER OF THE DEFLECTION JOINTS TO A MINIMUM DEPTH OF ONE INCH WITH A POLYURETHANE OR POLYMERIC MATERIAL CONFORMING TO ASTM C920, TYPE S. LEAVE THE BOTTOM 1/2 INCH OF BOTH THE INSIDE AND OUTSIDE FACES OF THE PARAPET UNSEALED TO ALLOW ANY WATER WHICH MAY ENTER THE JOINT TO ESCAPE.

AT EACH DEFLECTION JOINT LOCATION, USE GFRP TO MAINTAIN THE RIGIDITY OF THE CAGE ACROSS THE PROPOSED JOINTS AT THOSE LONGITUDINAL BARS AS SHOWN IN THE PARTIAL PARAPET ELEVATION AND TYPICAL PARAPET SECTION VIEWS ON THIS SHEET. OTHER NON-FERROUS REINFORCEMENT MAY BE PROPOSED FOR USE, SUBJECT TO APPROVAL BY THE ENGINEER.

FOR TRANSITION SECTION, PLACE A DEFLECTION JOINT AT THE BEGINNING OF THE 14'-0" TRANSITION. DEFLECTION JOINTS ARE NOT REQUIRED WITHIN THE 14'-0" TRANSITION SECTION. SEE SHEET [34/38]



PARTIAL PARAPET ELEVATION  
 (DECK REINFORCING AND VANDAL PROTECTION FENCE NOT SHOWN FOR CLARITY)



TYPICAL SAWCUT SECTION

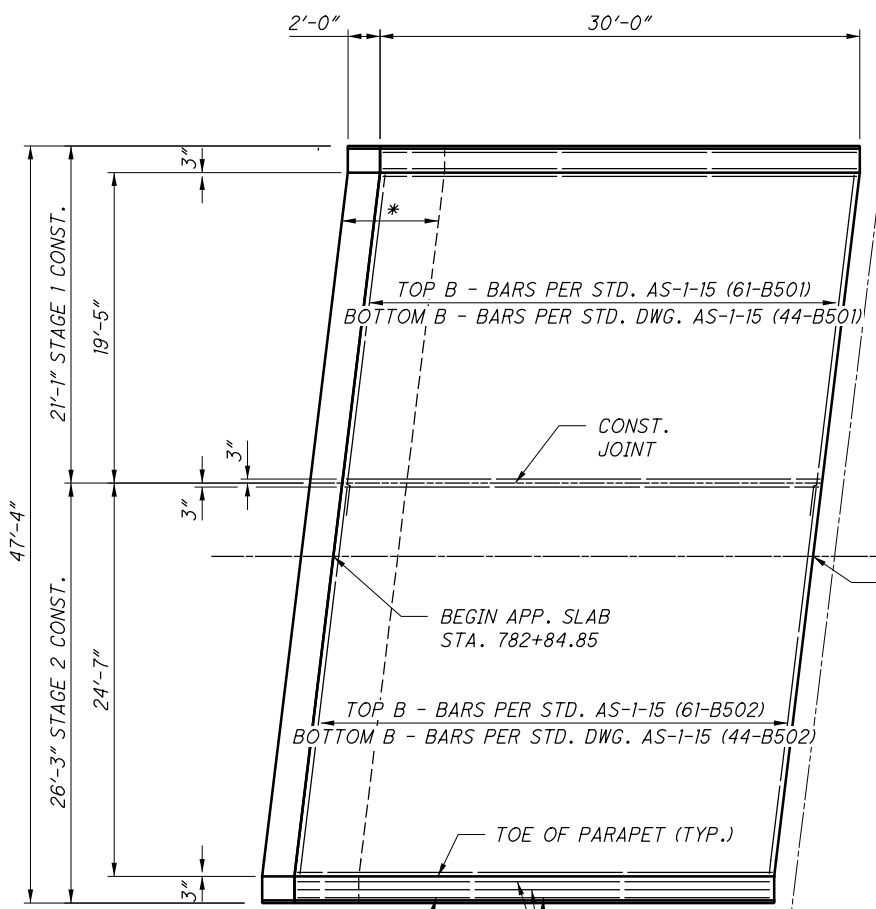
LEGEND  
 E.F. - EACH FACE  
 N.F. - NEAR FACE  
 F.F. - FAR FACE

**NOTES**

- FOR DECK PLAN INCLUDING DEFLECTION JOINT LOCATIONS, SEE SHEET [14/38].
- FOR TRANSVERSE SECTION, SEE SHEET [13/38].
- FOR REINFORCING STEEL LIST, SEE SHEETS [37/38] - [38/38].
- FOR ADDITIONAL PARAPET DETAILS, SEE STD. DWG. SBR-1-13.
- FOR VANDAL PROTECTION FENCE POST LOCATIONS, SEE SHEET [14/38]. FOR ADDITIONAL VANDAL PROTECTION FENCE DETAILS, SEE STD. DWG. VPF-1-90.

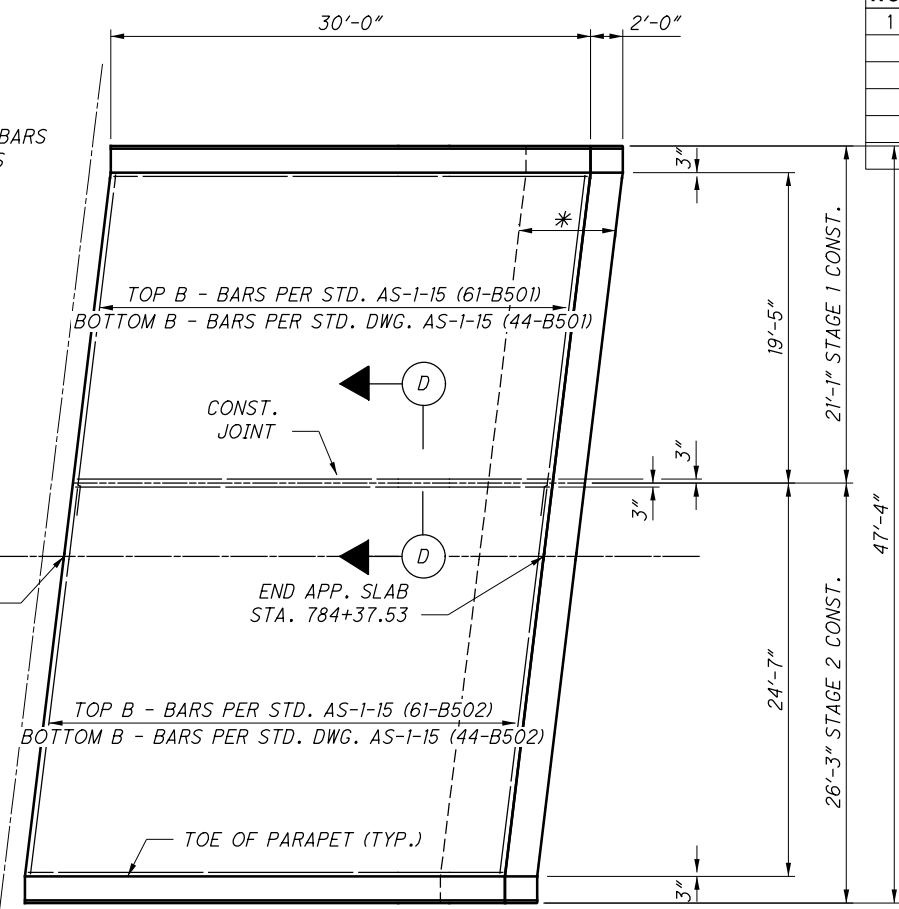
TABLE A				
NO. OF PANELS	"L"	"X"	"Z1"	"Z2"
4	8'-10 1/8"	10	R603	R504
10	15'-0"	16	R604	R505

ISSUE RECORD:		
NO.	DATE	DESCRIPTION
1	7/12/23	REMOVED CONDUIT



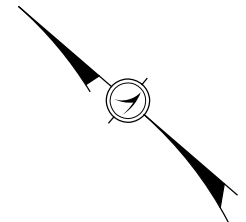
REAR APPROACH SLAB PLAN

\* APPROACH SLAB INSTALLATION, TYPE C. (SEE STD. DWG. AS-2-15)  
 PROVIDE 2'-5" LAP SPLICE FOR SS501 BARS SIMILAR TO B501 APPROACH SLAB BARS (SECTION D-D THIS SHEET).



FORWARD APPROACH SLAB PLAN

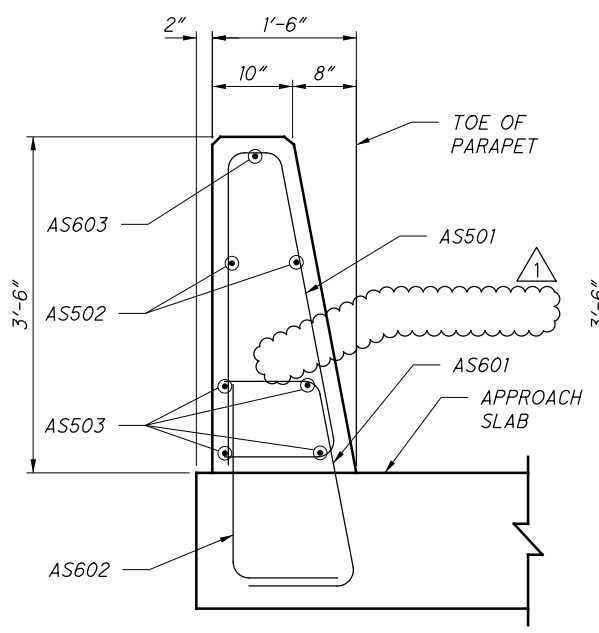
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NO.	DATE	DESCRIPTION
1	7/12/23	REMOVED CONDUIT



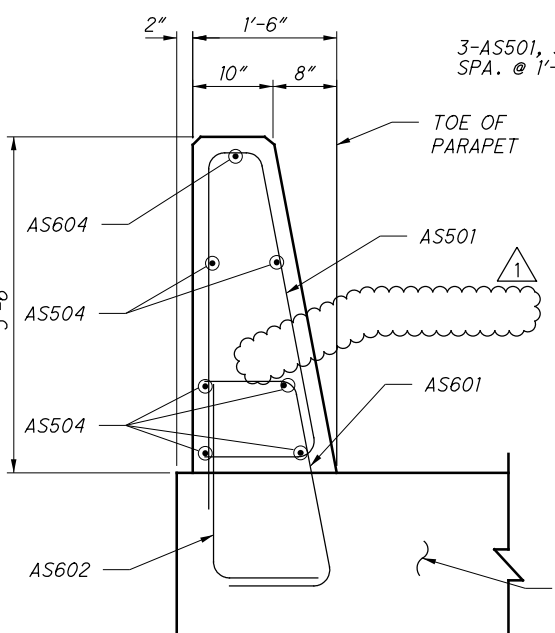
STAGE 1: TOP C-BARS PER STD. AS-1-15 (39-C504)  
 BOTTOM A-BARS PER STD. AS-1-15 (39-A1004)  
 21 - SS502 @ 1'-0" MAX. (BOTTOM, SLEEPER SLAB)

STAGE 2: TOP C-BARS PER STD. AS-1-15 (50-C504)  
 BOTTOM A-BARS PER STD. AS-1-15 (48-A1004)  
 26 - SS502 @ 1'-0" MAX. (BOTTOM, SLEEPER SLAB)

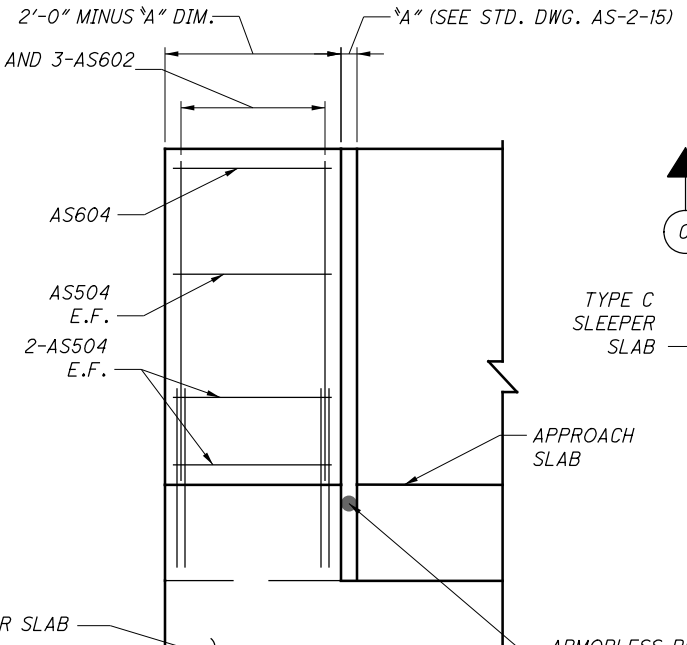
NOTE:  
 ALL LABOR, MATERIALS, AND INCIDENTALS REQUIRED TO CONSTRUCT THE APPROACH SLAB AS SHOWN ON THIS SHEET AND AS-1-81 SHALL BE INCLUDED WITH ITEM 526 FOR PAYMENT.



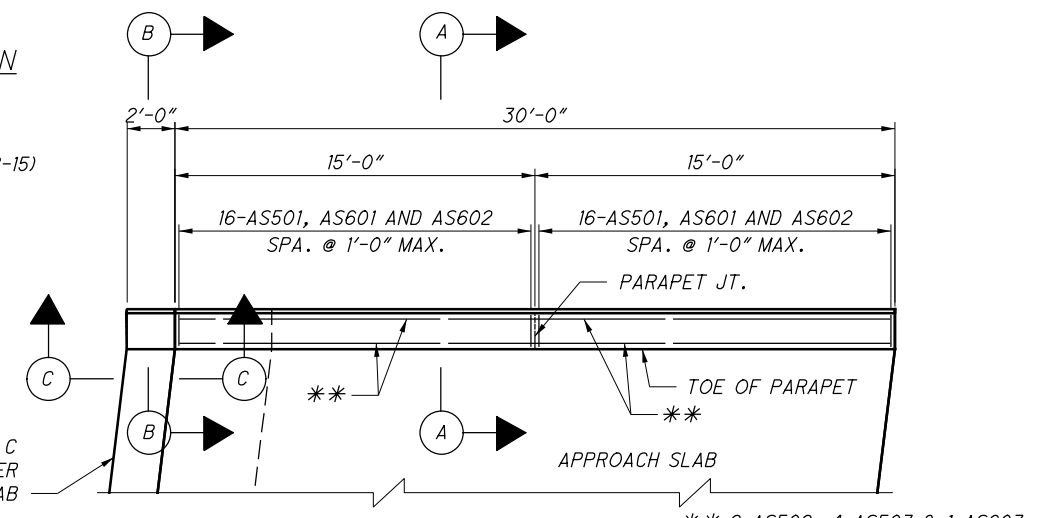
SECTION A-A  
 APPROACH SLAB REINF. NOT SHOWN FOR CLARITY



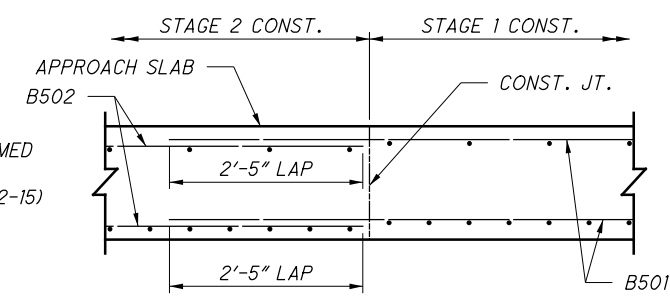
SECTION B-B  
 SLEEPER SLAB REINF. NOT SHOWN FOR CLARITY



SECTION C-C  
 ADJACENT MOMENT SLAB AND PARAPET NOT SHOWN FOR CLARITY



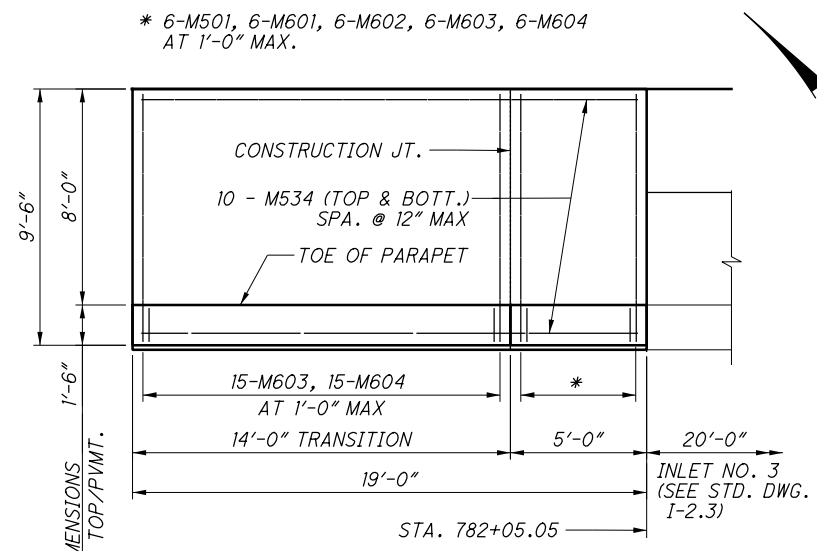
PARAPET PLAN  
 NORTH SIDE OF REAR APPROACH SLAB SHOWN, SOUTH SIDE SIMILAR. FORWARD APPROACH SLAB SIMILAR



SECTION D-D  
 SEE STD. DWG. AS-1-15 FOR DETAILS

PARSONS  
 p:\V\ANVA01PWINT01.Parsons.com:Ohio State\Documents\WAR-73-1458-1462\05 - Design\CAD\100827\Structures\WAR073\_1462\Sheets\073\_1462\_Sheets\073\_1462\_WD004.dgn, Design - 7/12/2023 2:08:28 PM - p002694C

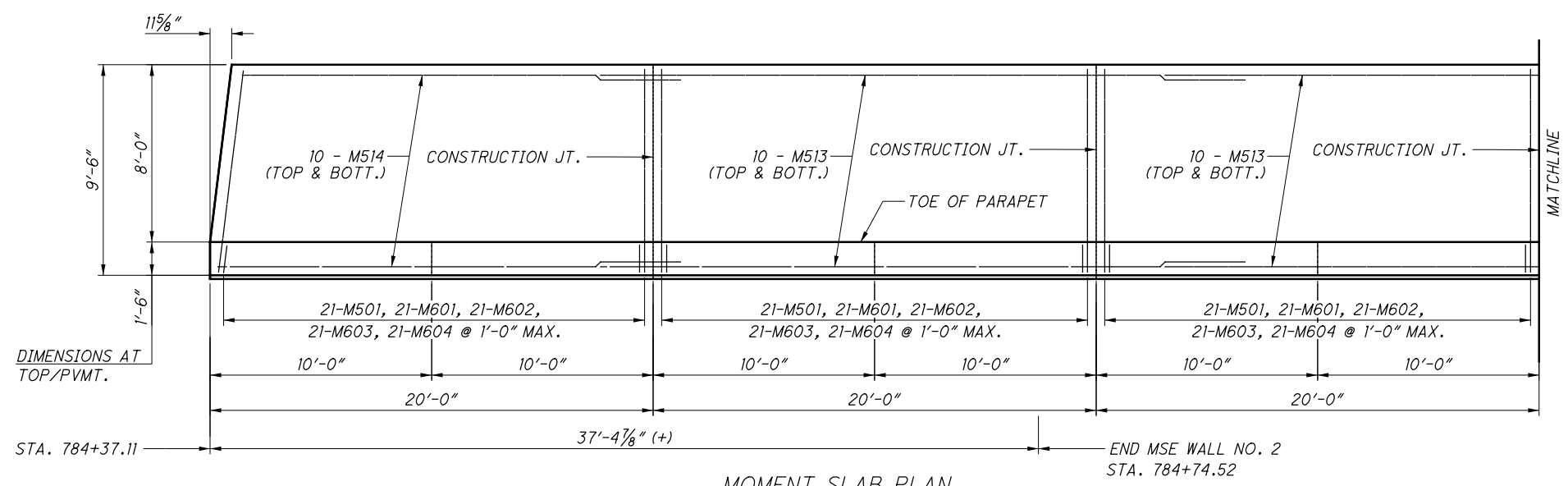
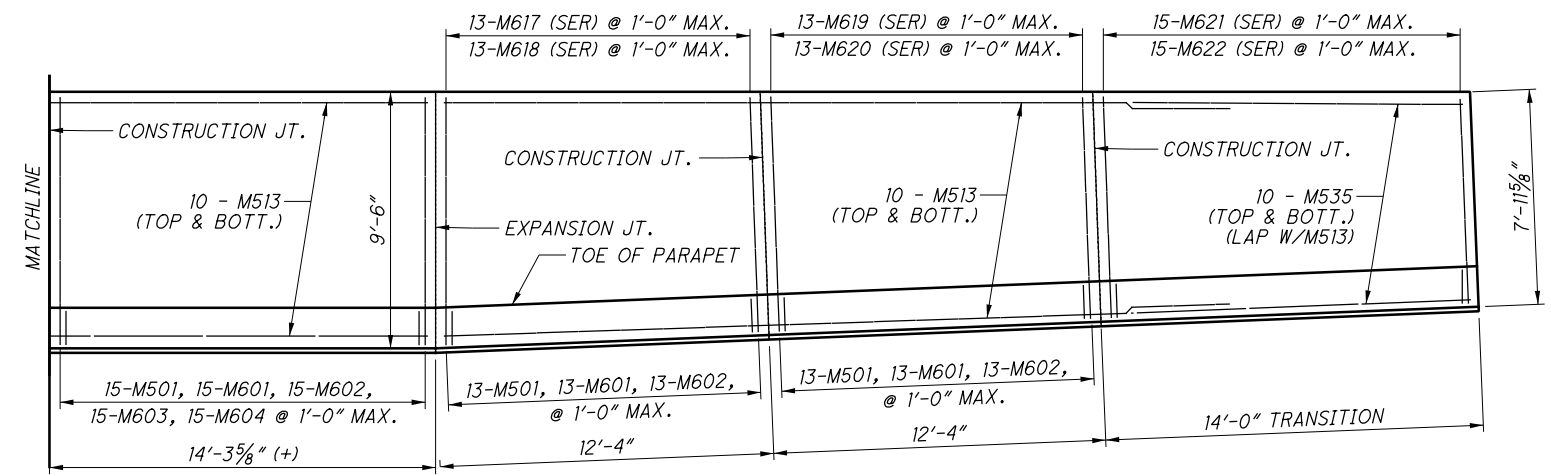
ISSUE RECORD:		
NO.	DATE	DESCRIPTION
1	7/12/23	REMOVED DETAIL



REQUIRED MIN. LAP LENGTHS	
NO. 5 BARS	3'-7"
NO. 6 BARS	4'-3"

PARAPET BARS THIS SHEET				
PANEL LENGTHS	NO. PANELS	BAR MARKS		
		**	***	****
5'-0"	1	M608	M504	M504
10'-0"	6	M613	M524	M528
12'-4"	2	M623	M509	M509
14'-3 5/8"	1	M624	M536	M536

\*\*\*\* BARS EXTEND BETWEEN CONSTR. AND/OR EXP. JOINTS  
 NOTE: SEE PARAPET ELEVATION, SHEET 34/38 FOR BAR MARK LOCATIONS.



**PARSONS**  
 100 East Campus View Boulevard, Suite 250  
 Columbus, OH 43235

DATE 1-20  
 REVIEWED RWB  
 STRUCTURE FILE NUMBER 8302945

DESIGNED JRE  
 CHECKED JLW

**MSE WALL MOMENT SLAB DETAILS - 4**  
 BRIDGE NO. WAR-73-1462  
 S.R. 73 OVER CORWIN ROAD

WAR-73-14.58 / 14.62  
 PID No. 100827

34 / 38

73  
 81