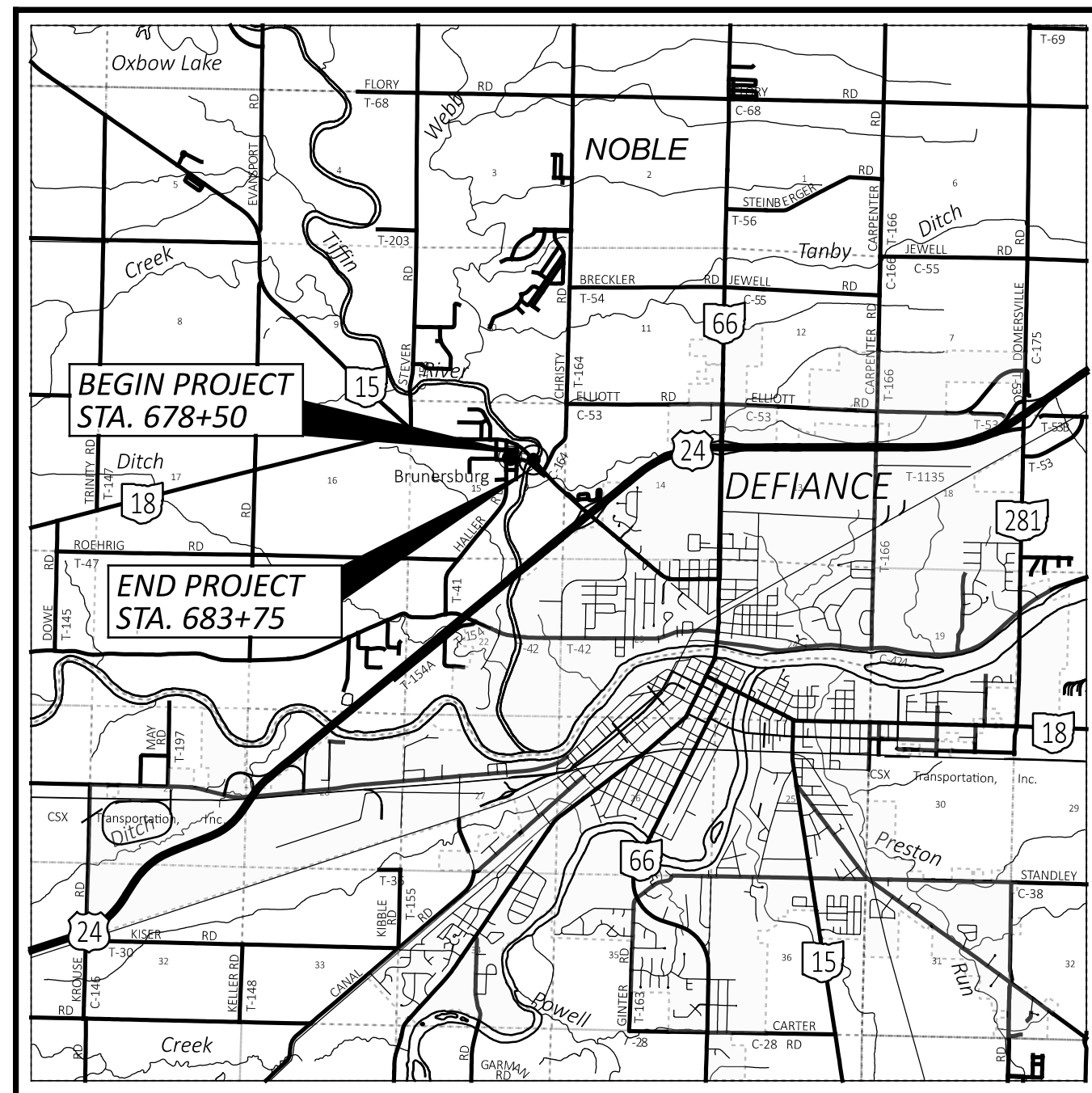


STATE OF OHIO DEPARTMENT OF TRANSPORTATION

DEF-15-12.86

NOBLE TOWNSHIP
DEFIANCE COUNTY



LOCATION MAP

LATITUDE: 41°18'24" N LONGITUDE: 84°23'03" W



PORTION TO BE IMPROVED	●
INTERSTATE HIGHWAY	▬
FEDERAL ROUTES	▬
STATE ROUTES	▬
COUNTY & TOWNSHIP ROADS	▬
OTHER ROADS	▬

DESIGN DESIGNATION

CURRENT ADT (2024)	9,000
DESIGN YEAR ADT (2044)	9,200
DESIGN HOURLY VOLUME (2024)	900
DIRECTIONAL DISTRIBUTION	50%
TRUCKS (24 HOUR B&C)	9%
DESIGN SPEED	45 MPH
LEGAL SPEED	45 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
05 MAJOR COLLECTOR (RURAL)	
NHS PROJECT	NO

DESIGN EXCEPTIONS

DESIGN FEATURE	APPROVAL DATE	SHEET NO.
DESIGN LOADING	8/23/2023	20, 21
STRUCTURAL CAPACITY		

ADA DESIGN WAIVERS

NONE REQUIRED

UNDERGROUND UTILITIES
Contact Two Working Days
Before You Dig

OHIO811.org
Before You Dig

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

PLAN PREPARED BY:
OHIO DEPT. OF TRANSPORTATION, DISTRICT 1
1885 N. MCCULLOUGH ST.
LIMA, OHIO 45801

INDEX OF SHEETS:

TITLE SHEET	1
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CROSS SECTIONS	14-18
TRAFFIC CONTROL	19
STRUCTURE (OVER 20 FOOT SPAN)	20-33, 31A

FEDERAL PROJECT NUMBER

E200 (091)

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

REHABILITATION OF A STRUCTURE LOCATED OVER THE TIFFIN RIVER IN DEFIANCE COUNTY. THE WORK INCLUDES REPLACEMENT OF THE EXISTING BRIDGE DECK, SEALING CONCRETE SURFACES, REBUILDING ABUTMENTS AND CONVERTING TO SEMI-INTEGRAL. ARMOR SLOPES TO ORDINARY HIGH WATER MARK, INSTALL NEW TST-2-21 RAILING AND NEW BRIDGE TERMINAL ASSEMBLIES. REMOVE AND REPLACE EXISTING GUARDRAIL, PAINT STRUCTURAL STEEL. PROJECT LENGTH IS 0.10 MILES.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.30 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.20 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOI NOT REQUIRED)

2023 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.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEET 7.

Christopher A. Hughes, P.E.
District 01 Deputy Director

Jack Marchbanks, PhD
Director, Department of Transportation

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS
BP-3.1	1/21/22	MT-101.60	4/21/23	800-2023	7/21/23	ASBESTOS SURVEY
BP-3.2	1/18/19	MT-101.90	7/17/20	832	7/21/23	10-04-21
		MT-105.10	1/17/20	843	10/18/19	
MGS-1.1	7/16/21					
MGS-2.1	1/19/18	TC-61.30	7/19/19			
MGS-3.3	7/16/21	TC-65.10	1/17/14			
MGS-6.1	1/19/18	TC-65.11	7/15/22			
		TC-71.10	4/21/23			
AS-1-15	1/20/23					
AS-2-15	7/21/23	HL-50.21	7/15/22			
TST-2-21	7/21/23					
		DM-4.3	1/15/16			
SICD-1-21	1/21/22	DM-4.4	1/15/16			
SICD-2-14	1/15/21					
DS-1-92	7/15/22					

ENGINEER'S SEAL	ENGINEER'S SEAL
ROADWAY	BRIDGE

TITLE SHEET

DESIGN AGENCY



DESIGNER
MJS
REVIEWER
MJM 07-17-23
PROJECT ID
105148
SHEET TOTAL
P.1 33

DEF-15-12.86

MODEL: Sheet PAPER: 34x22 (in.) DATE: 11/3/2023 TIME: 2:25:07 PM USER: msiefer p:\ohio\dot-pw-bentley.com\ohio\dot-pw-02\Documents\01 Active Projects\District 01\Defiance\105148\400-Engineering\Roadway\Sheets\105148_GT001.dgn

ITEM 614, MAINTAINING TRAFFIC

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 100 CONSECUTIVE CALENDAR DAYS THAT THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 7. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$5,000 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. DETOURS SHALL BE ESTABLISHED, MAINTAINED AND SUBSEQUENTLY REMOVED BY THE STATE OF OHIO.

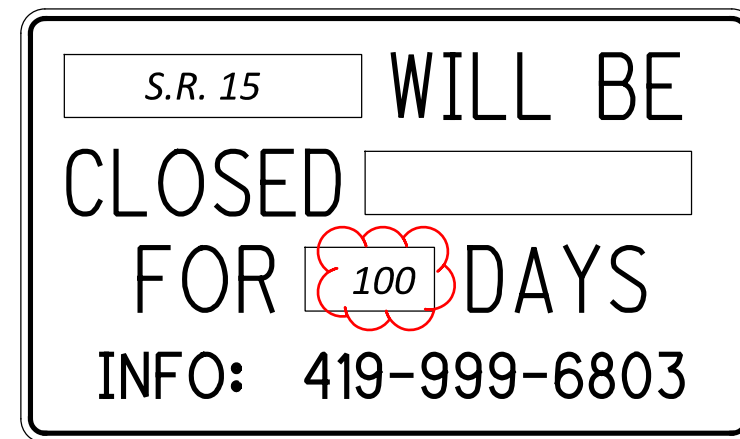
THE FIRST DAY THAT THE DETOUR IS IN EFFECT SHALL BE CONSIDERED THE STARTING DATE OF THE 100 DAY DETOUR/CLOSURE LIMITATION. THE 100th DAY OF THE 100 DAY DETOUR/CLOSURE LIMITATION SHALL BE CONSIDERED AS AN INTERIM COMPLETION DATE. ON OR BEFORE THE 100th DAY, THE ROADWAY SHALL BE OPENED TO THE SAFE AND CONVENIENT USE OF THE TRAVELING PUBLIC. IF THE ROADWAY IS NOT OPENED BY THIS INTERIM COMPLETION DATE, DISINCENTIVES SHALL BE ASSESSED AS PER THE ABOVE SPECIFICATION.

ACCESS TO ADJACENT PROPERTY WITH THE WORK LIMITS SHALL BE MAINTAINED BY THE CONTRACTOR AT ALL TIMES AS PER 614.02(a).

NOTICE OF CLOSURE SIGNS (W20-H13), SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED CLOSURES. THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD 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.

NOTICE OF CLOSURE SIGN TIME TABLE		
ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
RAMP & ROAD CLOSURES	>= 2 WKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HRS & < 2 WKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HRS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MM-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.



NOTE: THE CONTRACTOR IS TO SUPPLY THE DATE

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.

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE		
ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	>= 2 WKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HRS & < 2 WKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HRS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES AND RESTRICTIONS	>= 2 WKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

DESIGNATED LOCAL DETOUR ROUTE

IN ADDITION TO THE OFFICIAL, SIGNED DETOUR ROUTE, A LOCAL ROUTE HAS BEEN DETERMINED TO BE THE SECONDARY, UNSIGNED DETOUR ROUTE OR "DESIGNATED LOCAL DETOUR ROUTE." THIS ROUTE SHOWN ON THE DETOUR SHEET. DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST, AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DETERMINED BY THE ENGINEER. THE REPLACEMENT PAVEMENT FOR ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 AND ITEM 407, TACK COAT PLACED ON 5" OF ITEM 301, ASPHALT CONCRETE BASE, PG64-22

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR USE AS DETERMINED BY THE ENGINEER TO MAINTAIN AND SUBSEQUENTLY RESTORE THE DESIGNATED LOCAL DETOUR ROUTE.

ITEM 253 - PAVEMENT REPAIR = 20 CY

ITEM 407 - TACK COAT = 20 GAL

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22 = 10 CY

ITEM 617 - COMPACTED AGGREGATE = 50 CY

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.

PORTABLE CHANGEABLE MESSAGE SIGN TO BE LOCATED AT THE INTERSECTION OF U.S. 127 AND S.R. 15 SOUTHBOUND IN ADVANCE TO THE OFFICIAL STATE DETOUR TO ALERT DRIVERS TO TAKE U.S. 127 AS A DETOUR. IN ORDER TO AVOID SOUTHBOUND DRIVERS FROM TRAVELING TO THE S.R. 15 AND S.R. 18 INTERSECTION AND HAVING TO TRAVEL BACK TO U.S. 127 ON THE STATE DETOUR.

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.

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 3 SIGN MONTH ASSUMING 1 PCMS SIGN FOR 4 MONTHS

DESIGN AGENCY



DESIGNER
MJS

REVIEWER
MJM 07-17-23

PROJECT ID
105148

SHEET TOTAL
P.6 | 33


DEF-15-12.86

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SHEET NUM.			PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
6	10	23	01/BRO/13		EXT	TOTAL			
ROADWAY									
			LS	201	11000	LS		CLEARING AND GRUBBING	4
1,170			1,170	202	23000	1,170	SY	PAVEMENT REMOVED	
649			649	202	38000	649	FT	GUARDRAIL REMOVED	
			LS	202	98000	LS		REMOVAL MISC.: (DEBRIS CAUGHT ON BRIDGE PIERS)	5
250			250	203	10000	250	CY	EXCAVATION	
142			142	203	20000	142	CY	EMBANKMENT	
1,541			1,541	204	10000	1,541	SY	SUBGRADE COMPACTION	
0.12			0.12	209	15050	0.12	MILE	RESHAPING UNDER GUARDRAIL	
450			450	606	15051	450	FT	GUARDRAIL, TYPE MGS, AS PER PLAN	4
4			4	606	26150	4	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	
4			4	606	34601	4	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE TST-2, AS PER PLAN	4
			LS	623	50000	LS		PRECONSTRUCTION SURVEY MONUMENT VERIFICATION AND REPORT	
			LS	623	51000	LS		POST CONSTRUCTION SURVEY MONUMENT VERIFICATION AND REPORT	
1			1	SPECIAL	69050000	1	EACH	MAILBOX SUPPORT	5
1			1	SPECIAL	69050350	1	EACH	MAILBOX REMOVED AND RESET	5
EROSION CONTROL									
363			363	601	34200	363	CY	ROCK CHANNEL PROTECTION, TYPE C WITHOUT FILTER	
665			665	659	10000	665	SY	SEEDING AND MULCHING	
0.09			0.09	659	20000	0.09	TON	COMMERCIAL FERTILIZER	
3.59			3.59	659	35000	3.59	MGAL	WATER	
			10,000	832	30000	10,000	EACH	EROSION CONTROL	4
DRAINAGE									
90.4			90.4	605	31100	90.4	FT	AGGREGATE DRAINS	
PAVEMENT									
352			352	302	56000	352	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
288			288	304	20000	288	CY	AGGREGATE BASE	
221			221	407	20000	221	GAL	NON-TRACKING TACK COAT	
119			119	441	70000	119	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	
ELECTRICAL									
			1	625	33000	1	EACH	STRUCTURE GROUNDING SYSTEM	21
TRAFFIC CONTROL									
5			5	621	00100	5	EACH	RPM	
5			5	621	54000	5	EACH	RAISED PAVEMENT MARKER REMOVED	
20			20	626	00102	20	EACH	BARRIER REFLECTOR, TYPE 1 (BIDIRECTIONAL)	
12			12	626	00110	12	EACH	BARRIER REFLECTOR, TYPE 2 (BIDIRECTIONAL)	
76.5			76.5	630	03100	76.5	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
6			6	630	85100	6	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
6			6	630	86002	6	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
0.24			0.24	642	00104	0.24	MILE	EDGE LINE, 6", TYPE 1	
0.16			0.16	642	00300	0.16	MILE	CENTER LINE, TYPE 1	
118			118	642	00700	118	FT	TRANSVERSE/DIAGONAL LINE, TYPE 1	5
STRUCTURE OVER 20 FOOT SPAN (DEF-15-12.86)									
			LS	LS	202	11203	LS	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	22
134	134	202	134	202	22900	134	SY	APPROACH SLAB REMOVED	
			LS	LS	503	21300	LS	UNCLASSIFIED EXCAVATION	
76,642	76,642	509	76,642	10001	10001	76,642	LB	EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN	21
128			128	510	10000	128	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	
2			2	511	33500	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	
291			291	511	34446	291	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK	
23			23	511	45710	23	CY	CLASS QC1 CONCRETE, ABUTMENT	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER
MJS

REVIEWER
MJM 07-17-23

PROJECT ID
105148

SHEET TOTAL
P.8 | 33

SHEET NUM.			PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
6	10	23	01/BRO/13		EXT	TOTAL			
STRUCTURE OVER 20 FOOT SPAN (DEF-15-12.86)									
				512	10100	384	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
				513	10201	2,005	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN	21
				513	20000	3,405	EACH	WELDED STUD SHEAR CONNECTORS	
				514	00050	11,456	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL	
				514	00056	11,456	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT	
				514	00060	11,456	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT	
				514	00066	11,456	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT	
				514	00504	18	MNHR	GRINDING FINES, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL	
				514	10000	10	EACH	FINAL INSPECTION REPAIR	
				514	27702	10	EACH	FIELD PAINTING, MISC.: COATING OF BEAM ENDS	21
				516	10000	72	FT	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL	
				516	10010	72	FT	ARMORLESS PREFORMED JOINT SEAL	
				516	13900	21	SF	2" PREFORMED EXPANSION JOINT FILLER	
				516	44101	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (10"X16"X2.043")	31
				516	44101	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (16"X17"X3.0")	31
				516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	21
				517	70100	468	FT	RAILING (THREE STEEL TUBE BRIDGE RAILING)	
				518	21230	LS		POROUS BACKFILL WITH GEOTEXTILE FABRIC	
				SPECIAL	51822300	442	FT	STEEL DRIP STRIP	29
				518	40000	72	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
				518	40010	52	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
				519	11101	4	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	22
				526	25011	216	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15"), AS PER PLAN	21
				526	90030	72	FT	TYPE C INSTALLATION	
				843	50000	8	SF	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR	
MAINTENANCE OF TRAFFIC									
				253	02000	20	CY	PAVEMENT REPAIR	
				407	10000	20	GAL	TACK COAT	
				441	70000	10	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	
				614	18601	4	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	6
				617	10100	50	CY	COMPACTED AGGREGATE	
INCIDENTALS									
				614	11000	LS		MAINTAINING TRAFFIC	
				619	16010	3	MNTH	FIELD OFFICE, TYPE B	
				623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	22
				624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

MJS

REVIEWER

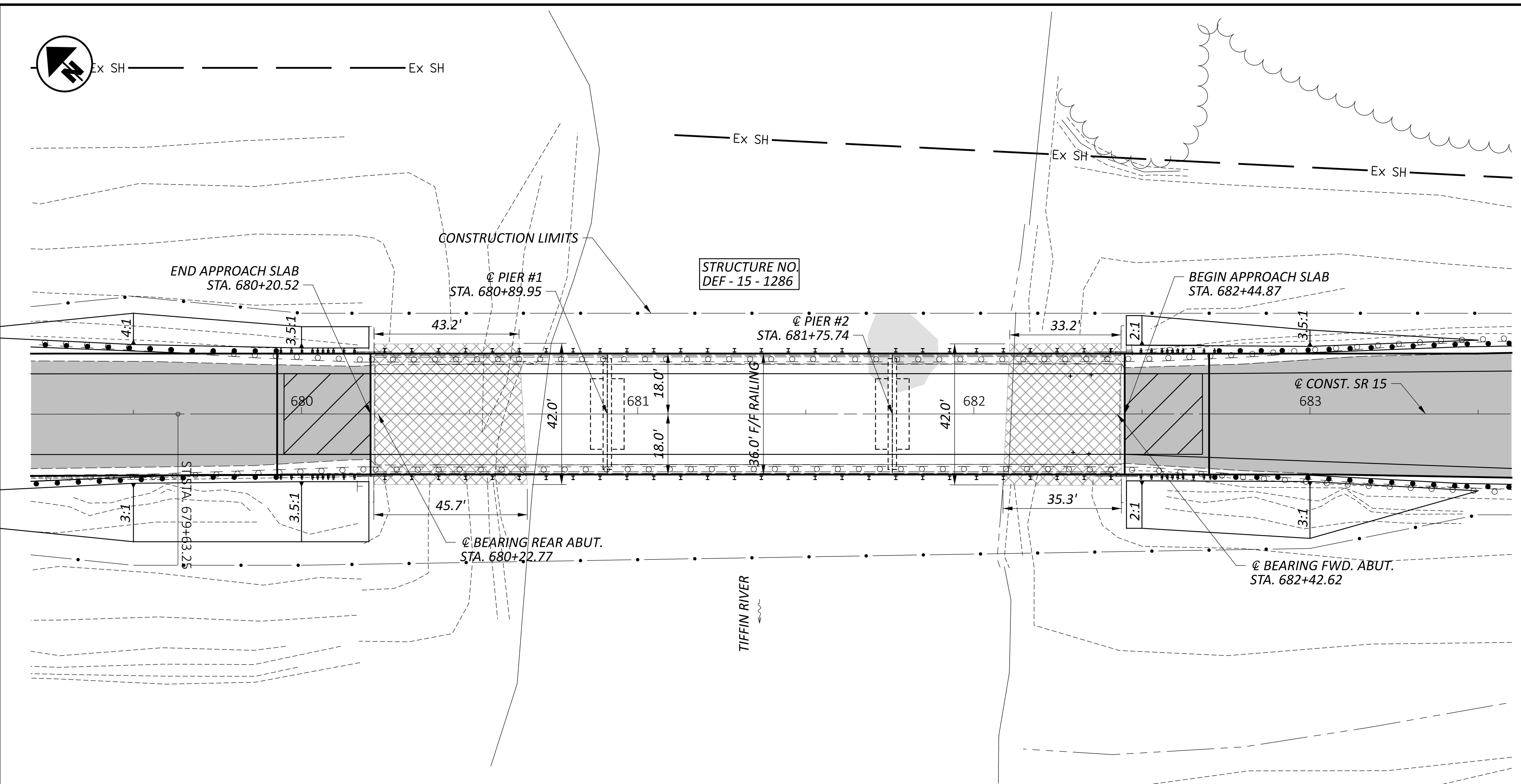
MJM 07-17-23

PROJECT ID

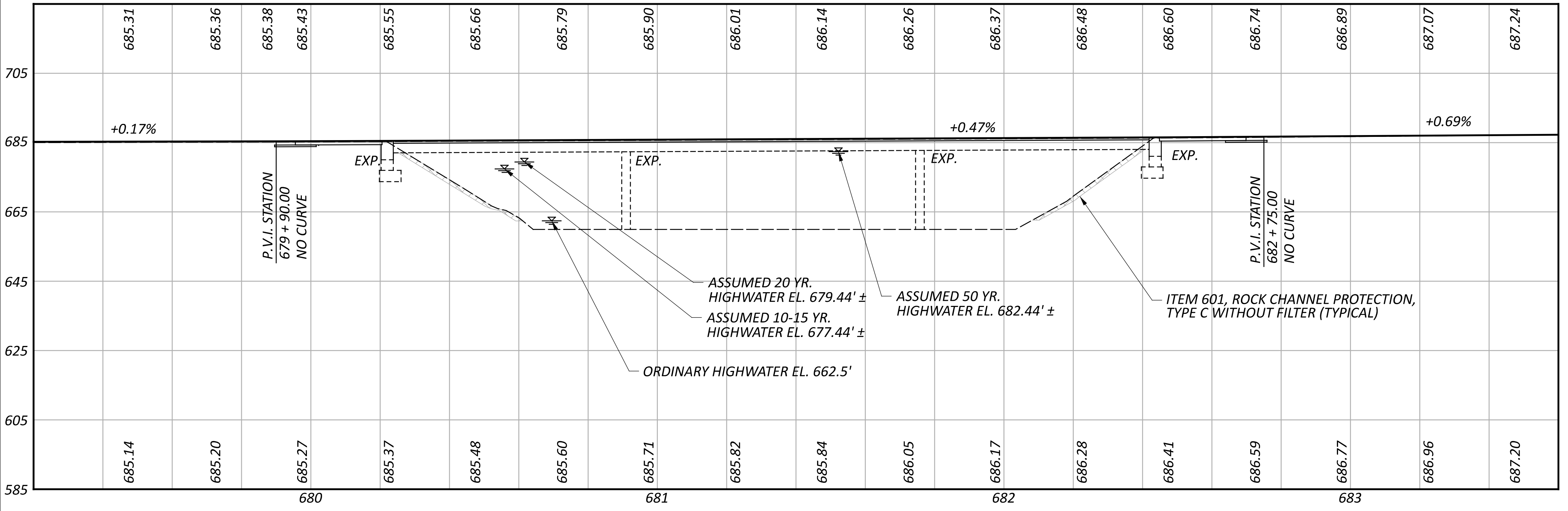
105148

SHEET TOTAL

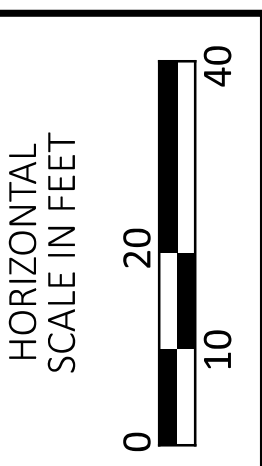
P.9 | 33



- ITEM 202 - PAVEMENT REMOVED
 - ITEM 202 - APPROACH SLAB REMOVED
 - ITEM 601 - ROCK CHANNEL PROTECTION TYPE C (ARMOR SLOPES DOWN TO OHWM)
 - AREA OF DEBRIS REMOVAL, ITEM 202, REMOVAL MISC.: DEBRIS CAUGHT ON BRIDGE PIER



BENCHMARK DATA				
BM #1 STA.	685+57	ELEV.	687.51	OFFSET 45.0' RT.
BM #2 STA.	686+36	ELEV.	690.17	OFFSET 41.7' LT.
BM #3 STA.	682+45	ELEV.	686.00	OFFSET 19.6' RT.



NOTES
 EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

DESIGN TRAFFIC:
 2024 ADT = 9,000 2024 ADTT = 810
 2044 ADT = 9,200 2044 ADTT = 828
 DIRECTIONAL DISTRIBUTION = 50%

HYDRAULIC DATA
 DRAINAGE AREA = 798 SQ. MI.

STATIONING OF CENTER OF FIRST RAILING POST OFF THE BRIDGE	
LOCATION:	STATION:
LT. REAR	680+15.77
RT. REAR	680+15.77
LT. FORWARD	682+49.71
RT. FORWARD	682+49.71

EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 67.2'±-85.8'±-66.9'± C/C BEARINGS
 ROADWAY: 30'-0" ± F/F 2'-3"± SAFETY CURB
 LOADING: CF=400 (57)
 SKEW: NONE
 WEARING SURFACE: 1.25" +/- MICRO SILICA MODIFIED CONCRETE OVERLAY
 APPROACH SLABS: AS-1-54, 25'± LONG
 ALIGNMENT: TANGENT
 CROWN: 0.016± FT/FT
 STRUCTURE FILE NUMBER: 2000482
 DATE BUILT: 1963
 DISPOSITION: TO BE REHABILITATED

PROPOSED STRUCTURE

TYPE: REPLACE BRIDGE DECK WITH COMPOSITE DECK. REPLACE APPROACH SLABS. REBUILD PORTIONS OF ABUTMENTS AND CONVERT TO SEMI-INTEGRAL.

SPANS: 67.2'±-85.8'±-66.9'± C/C BEARINGS
 ROADWAY: 36' F/F TST-2-21 GUARDRAIL
 LOADING: ACTUAL DESIGN: 83.4% HL-93 AND FUTURE WEARING SURFACE OF 0.000 KIPS/SF (NORMAL DESIGN CRITERIA: HL-93)
 SKEW: NONE
 WEARING SURFACE: 1" MONOLITHIC CONCRETE
 APPROACH SLABS: 25' LONG (AS-1-15, AS-2-15)
 ALIGNMENT: TANGENT
 CROWN: 0.016 FT/FT
 DECK AREA: 8118 SF
 COORDINATES: LATITUDE 41° 18' 24.03" N
 LONGITUDE 84° 23' 03.31" W

SITE PLAN
 BRIDGE NO. DEF-15-12.86
 SR 15 OVER TIFFIN RIVER

SFN	2000482
DESIGN AGENCY	
DESIGNER	CHECKER
MJS	XXX
REVIEWER	
XXX	MM-DD-YY
PROJECT ID	105148
SUBSET	TOTAL
1	14
SHEET	TOTAL
P.20	33

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED	1/20/23
AS-2-15	REVISED	7/21/23
SICD-1-21	REVISED	1/21/22
SICD-2-14	REVISED	1/15/21
TST-2-21	REVISED	7/21/23
DS-1-92	REVISED	7/15/22
HL-50.21	REVISED	7/15/22 (TRAFFIC SCD)

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION:

843	DATED	10/18/19
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DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN LOADING

DESIGN LOADING (DECK ONLY) INCLUDES:

VEHICULAR LIVE LOAD: HL-93
 FUTURE WEARING SURFACE OF 0.000 KIPS/SF
 (NORMAL DESIGN CRITERIA)

VEHICULAR LIVE LOAD: 83.4% HL-93
 (ACTUAL DESIGN)

DESIGN DATA

CONCRETE CLASS QC2:
 COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1:
 COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

EPOXY COATED STEEL REINFORCEMENT-MINIMUM YIELD STRENGTH 60 KSI

STRUCTURAL STEEL - ASTM A709 GRADE 50:
 YIELD STRENGTH = 50 KSI

STEEL H-PILES - ASTM A572: YIELD STRENGTH 50 KSI

MONOLITHIC WEARING SURFACE

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

EXISTING BRIDGE PLANS

THE EXISTING BRIDGE PLANS (DEF-15-12.57) MAY BE INSPECTED IN THE OFFICE OF THE STRUCTURAL ENGINEERING IN COLUMBUS, OHIO OR AT THE ODOT DISTRICT OFFICE, 1885 McCULLOUGH STREET, LIMA, OHIO 45801

DECK PROTECTION METHOD

EPOXY COATED REINFORCING STEEL, DRIP STRIPS, AND 2.5" CONCRETE COVER

ITEM 509 - EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN

IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS. REPAIR ALL DAMAGE TO THE EPOXY COATING, AS A RESULT OF THIS WORK, ACCORDING TO C&MS 709.00.

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 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.

THE DEPARTMENT WILL NOT PAY FOR THE COST OF REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS. 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.

INSPECTION OF EXISTING STRUCTURAL STEEL

THE ENGINEER WILL VISUALLY INSPECT ALL EXISTING BUTT-WELDED SPLICES AND/OR TOP FLANGE COVER PLATE FILLET WELDS TO ENSURE THE WELDS, PLATES AND BEAMS OR GIRDERS ARE FREE OF DEFECTS AND CRACKS. IF NECESSARY, REMOVE ALL DECK SLAB HAUNCH FORMS IMMEDIATELY ADJACENT TO SUCH WELDS THAT MAY INTERFERE WITH THE ENGINEER'S INSPECTION. THE INSPECTION WILL NOT TAKE PLACE UNTIL THE TOP FLANGES ARE CLEANED ACCORDING TO C&MS 511.10, BUT IT WILL BE DONE BEFORE THE DECK SLAB REINFORCEMENT IS INSTALLED. THE DEPARTMENT WILL PAY FOR THE COST ASSOCIATED WITH THIS INSPECTION WITH ITEM 511 - SUPERSTRUCTURE CONCRETE. THE ENGINEER WILL REPORT ALL CRACKS FOUND TO THE OFFICE OF CONSTRUCTION ADMINISTRATION, BRIDGE CONSTRUCTION SPECIALIST, ALONG WITH SPECIFIC INFORMATION ON LOCATION OF THE CRACKS, LENGTH, AND DEPTH SO AN EVALUATION AND REPAIR OR REPLACEMENT RECOMMENDATION CAN BE MADE

EXISTING STRUCTURE VERIFICATION

EXISTING STRUCTURE VERIFICATION: DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02, AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON THE ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

DEMOLITION DEBRIS

THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID AND/OR LIMIT DEMOLITION DEBRIS FROM ENTERING THE STREAM, ANY MATERIAL THAT DOES ENTER THE STREAM SHALL BE IMMEDIATELY REMOVED.

DECK PLACEMENT DESIGN ASSUMPTIONS

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.2 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103 INCHES.

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 INCHES.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65 INCHES.

ITEM 503, UNCLASSIFIED EXCAVATION, AS PER PLAN

THE BACKFILL MATERIAL BEHIND THE ABUTMENTS SHALL BE TYPE B GRANULAR MATERIAL, 703.16C, PLACED AND COMPACTED IN 6 INCH LIFTS.

ITEM 526, REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15"), AS PER PLAN

INSTALL APPROACH SLAB PER CURRENT STANDARDS EXCEPT USE HOT APPLIED ITEM 516 JOINT SEALER (705.04) IN A 1/2"X2 1/4" GROOVE WITH WATERPROOFING IN THE JOINT (SEE DETAIL ON SHEET 26).

ITEM 514 - FIELD PAINTING, MISC.: COATING OF BEAM ENDS

PRIOR TO ENCASING THE BEAM ENDS, PREPARE THE ENDS PER SSPC SP10 OR SSPC SP11 TO BARE METAL ACHIEVING A 1.5 TO 3.5 MIL PROFILE. PAINT THE BEAM ENDS WITH ORGANIC ZINC PRIME COAT PER C&MS 514. PROVIDE THE PRIME COAT THICKNESS AS PER C&MS 514.20. EXTEND THE LIMITS OF THE BEAM PREPARATION AND PAINTING 1-FT BEYOND THE LIMITS OF THE DIAPHRAGM CONCRETE.

AFTER THE DIAPHRAGM CONCRETE IS SET, SEAL THE INTERFACE BETWEEN THE BEAM AND CONCRETE WITH CAULK.

THE DEPARTMENT WILL PAY FOR ALL ABOVE LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS REQUIRED FOR COATING BEAM ENDS AT CONTRACT BID PRICE PER EACH ITEM 514 - FIELD PAINTING, MISC.: COATING OF BEAM ENDS.

STRUCTURE GROUNDING SYSTEM

DUE TO THE STEEL BRIDGE RAILING, THIS STRUCTURE REQUIRES A GROUNDING SYSTEM CONFORMING TO SCD NUMBER HL-50.21. ALL COSTS NECESSARY TO CONSTRUCT THIS SYSTEM ARE PAID PER EACH WITH ITEM 625 - STRUCTURE GROUNDING SYSTEM.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UP, AS PER PLAN:

ALL REQUIREMENTS OF C&MS 513 APPLY TO SHOP FABRICATED MEMBERS. PERFORM WORK FOR FIELD FABRICATED MEMBERS ACCORDING TO ITEM 513, EXCEPT AS MODIFIED HEREIN. THE DEPARTMENT WILL NOT REQUIRE THE CONTRACTOR PERFORMING FIELD FABRICATION TO BE PRE-QUALIFIED AS SPECIFIED IN S1078. SUBMIT A WRITTEN LETTER OF MATERIAL ACCEPTANCE IN ACCORDANCE WITH C&MS 501.06, TO THE ENGINEER. PROVIDE THE ENGINEER "AS BUILT" DRAWINGS ACCORDING TO C&MS 513.06, EXCEPT C&MS 501.04 DOES NOT APPLY. UPON RECEIPT OF THE ENGINEER'S ACCEPTANCE, SUPPLY A COPY OF THE DRAWINGS, ACCORDING TO S1002, TO THE OFFICE OF MATERIAL MANAGEMENT FOR RECORD PURPOSES.

THE FOLLOWING MEMBERS ARE INCLUDED IN THIS ITEM: BEARING STIFFENER PLATES AS DETAILED ON SHEET 8.

GENERAL NOTES
 BRIDGE NO. DEF-15-12.86
 SR-15 OVER TIFFIN RIVER

SFN

2000482

DESIGN AGENCY



DESIGNER MJS CHECKER XXX

REVIEWER

XXX MM-DD-YY

PROJECT ID

105148

SUBSET TOTAL

2 14

SHEET TOTAL

P.21 33

PROPOSED WORK:

- REMOVE EXISTING RAILING AND CONCRETE DECK
- JACK EXISTING BEAMS OFF OF PIER AND ABUTMENT SUPPORTS
- REMOVE END CROSS FRAMES REMOVE PORTIONS OF ABUTMENT BACKWALL AND BEAM SEAT, CONVERT TO SEMI-INTEGRAL DESIGN.
- EXCAVATE AND REPLACE EXISTING CHANNEL PROTECTION WITH ROCK CHANNEL PROTECTION TYPE C (ARMOR SLOPES DOWN TO OHWM).
- REPLACE BEARINGS WITH ELASTOMERIC BEARINGS
- REPLACE EXISTING CONCRETE DECK WITH NEW REINFORCED CONCRETE DECK MADE COMPOSITE BY INSTALLATION OF SHEAR CONNECTORS ON EXISTING BEAMS.
- INSTALL NEW APPROACH SLABS
- UPGRADE BRIDGE RAILING TO THREE STEEL TUBE BRIDGE RAILING
- REPLACE APPROACH GUARDRAIL
- PATCH DETERIORATED CONCRETE AND SEAL CONCRETE SURFACES (EPOXY-URETHANE).
- REPAINT BEAMS AND CROSS FRAMES

ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING BEGINS, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF CONCRETE REINFORCEMENT IN THE DECK SLAB. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

REMOVAL METHODS: THE CONTRACTOR MAY REMOVE THE CONCRETE BY CUTTING AN BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER STRUCTURAL SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STRUCTURAL MEMBERS. DUE TO THE POSSIBLE PRESENCE OF ATTACHMENTS (E.G., FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.) TO EXISTING STRUCTURAL MEMBERS, PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRUCTURAL MEMBERS THAT ARE TO REMAIN. REPLACE OR REPAIR STRUCTURAL MEMBERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

EXISTING WELDED ATTACHMENTS: REMOVE EXISTING WELDED ATTACHMENTS (E.G., FINISHING MACHINE AND FORM SUPPORTS; AND FOR SCUPPERS AND BULB ANGLES WHICH ARE TO BE REMOVED) LOCATED IN THE DESIGNATED TENSION PORTIONS OF THE TOP FLANGES OF EXISTING STEEL MEMEBERS AND GRIND THE FLANGE SURFACES SMOOTH. CAREFULLY GRIND PARALLEL TO THE FLANGES.

PORTION TO BE REMOVED, AS PER PLAN
 BACKWALLS, BEAM SEATS, ROCKERS & BOLSTERS, EXPANSION JOINTS, DECK, RAILING, SCUPPERS, BULB ANGLE, GUTTERS, & END CROSS FRAMES

REMOVE REAR ABUTMENT TO ELEV. 678.96'. REMOVE FORWARD ABUTMENT TO ELEV. 680.00'.

MEASUREMENT & PAYMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202-PORCTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY URETHANE)

SEAL ALL CONCRETE SURFACES ABOVE THE SURFACE OF THE GROUND PER ITEM 512 OF THE 2023 C&MS BOOK AS DETAILED IN THE BRIDGE DECK AND ABUTMENT DETAILS.

THE FOLLOWING QUANTITIES ARE INCLUDED IN THE ESTIMATED QUANTITIES TO SEAL ALL SURFACES ABOVE TO ORDINARY HIGH WATER ELEVATION OF 662.5' ON PIERS.

REAR AND FORWARD PIERS: 212 SQ. YD.

PAINTING OF STRUCTURAL STEEL

THE ESTIMATED QUANTITIES FOR THE PAINTING OF STRUCTURAL STEEL ARE BASED UPON THE STRUCTURAL STEEL BEING PAINTED AFTER THE CONCRETE DECK HAS BEEN PLACED.

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

A QUANTITY IS INCLUDED IN THE ESTIMATED QUANTITIES TO REPAIR ANY DETERIORATED AREAS, WHERE THE DEPTH OF PATCH IS GREATER THAN 3", AS DIRECTED BY THE ENGINEER SUCH AS THE BACKWALLS, WINGWALLS, ETC. WITH ITEM 516 - PATCHING CONCRETE STRUCTURE, AS PER PLAN.

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 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.

REAR ABUTMENT AND WINGWALL PATCHING: 2 SQ. FT.
 REAR PIER PATCHING: 0 SQ. FT.
 FORWARD PIER PATCHING: 0 SQ. FT.
 FORWARD ABUTMENT AND WINGWALL PATCHING: 2 SQ. FT.

TOTAL: 4 SQ. FT.

ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR

A QUANTITY IS INCLUDED IN THE ESTIMATED QUANTITIES TO REPAIR ANY DETERIORATED AREAS, WHERE THE DEPTH OF PATCH IS 1 1/2" TO 3", AS DIRECTED BY THE ENGINEER, SUCH AS THE BACKWALLS, WINGWALLS, ETC. WITH ITEM 843-PATCHING CONCTRETE STRUCTURES WITH TROWELABLE MORTAR

AT PORTIONS OF ABUTMENT TO REMAIN AND PIERS: 8 SQ. FT.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQ FT FOR ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR WITH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN (FIELD VERIFICATION OF EXISTING ELEVATIONS):

AS VERIFICATION OF PLAN DETAILS, THE CONTRACTOR OR THEIR SURVEYOR WILL PROVIDE EXISTING ELEVATION SHOTS ALONG THE EXISTING TOPS OF FOOTINGS, ABUTMENT BEAMS SEATS, TOP OF CRUSHED SLOPE PROTECTION, TOP OF PIER CAPS AND AT QUARTER POINTS ALONG THE TOPS OF BEAMS. ONCE THESE LOCATIONS ARE EXPOSED AND NO LONGER OBSTRUCTED, THEY WILL BE TAKEN AND PROVIDED TO THE PROJECT ENGINEER AS SOON AS POSSIBLE. THE PROJECT ENGINEER WILL THEN FORWARD THE SURVEY NOTES TO THE DESIGNERS/PROJECT MANAGER FOR VERIFICATION WITH PLAN DETAILS.

THIS ADDITIONAL SURVEY WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 623, CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN


GENERAL NOTES
 BRIDGE NO. DEF-15-12.86
 SR-15 OVER TIFFIN RIVER

SFN	
2000482	
DESIGN AGENCY	
DESIGNER	CHECKER
MJS	XXX
REVIEWER	
XXX MM-DD-YY	
PROJECT ID	
105148	
SUBSET	TOTAL
3	14
SHEET	TOTAL
P.22	33

ESTIMATED QUANTITIES										
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	APPR. SLAB	ABUT.	PIERS	SUPER.	WING WALL	SEE STRUCTURE SHEET NO.
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN		LUMP		LUMP		3
202	22900	134	SQ YD	APPROACH SLAB REMOVED	134					
503	21300	LUMP		UNCLASSIFIED EXCAVATION		LUMP				
509	10001	76642	POUND	EPOXY COATED STEEL REINFORCING, AS PER PLAN		6320		70322		2
510	10000	128	EACH	DOWEL HOLES WITH NONSHRINK METALLIC GROUT		128				
511	33500	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE		2				
511	34446	291	CU YD	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK		26		265		
511	45710	23	CU YD	CLASS QC1 CONCRETE, ABUTMENT		21			2	
512	10100	384	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		44	212	109	19	
513	10201	2005	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN				2005		2
513	20000	3405	EACH	WELDED STUD SHEAR CONNECTORS				3405		
514	00050	11456	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL				11456		
514	00056	11456	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT				11456		
514	00060	11456	SF	FIELD PAINTING OF STRUCTURAL STEEL, INTERMEDIATE COAT				11456		
514	00066	11456	SF	FIELD PAINTING OF STRUCTURAL STEEL, FINISH COAT				11456		
514	00504	18	MNHR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL				18		
514	10000	10	EACH	FINAL INSPECTION REPAIR				10		
514	27702	10	EACH	FIELD PAINTING, MISC. COATING OF BEAM ENDS		10				
516	10000	72	FT	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL	72					
516	10010	72	FT	ARMORLESS PREFORMED JOINT SEAL	72					
516	13900	21	SQ FT	2" PREFORMED EXPANSION JOINT FILLER		21				
516	44101	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (10"x16"x2.043"), AS PER PLAN		10				12
516	44101	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (16"x17"x3.0"), AS PER PLAN			10			12
516	47011	LUMP		JACKING AND TEMPORARY SUPPPORT OF SUPERSTRUCTURE, AS PER PLAN				LUMP		2
517	70100	468	FT	RAILING (THREE STEEL TUBE BRIDGE RAILING)				468		
518	21230	LUMP		POROUS BACKFILL WITH FILTER FABRIC		LUMP				
SPECIAL	51822300	442	FT	STEEL DRIP STRIP				442		10
518	40000	72	FT	6" PERFORATED CORRUGATED PLASTIC PIPE		72				
518	40010	52	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS		52				
519	11101	4	SQ FT	PATCHING OF CONCRETE STRUCTURE, AS PER PLAN		2			2	3
526	25011	216	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15"), AS PER PLAN	216					
526	90030	72	FT	TYPE C INSTALLATION	72					
843	50000	8	SQ FT	PATCHING OF CONCRETE STRUCTURE WITH TROWELABLE MORTAR		4	4			

ESTIMATED QUANTITIES
 BRIDGE NO. DEF-15-12.86
 SR 15 OVER TIFFIN RIVER

SFN
 2000482
 DESIGN AGENCY



DESIGNER: MJS
 CHECKER: XXX
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 PROJECT ID: 105148
 SUBSET: 4 | TOTAL: 14
 SHEET: P.23 | TOTAL: 33