

MOT-4-(17.79)(18.03)

MODEL: Sheet PAPER SIZE: 34x22 (in.) DATE: 1/30/2023 TIME: 3:54:27 PM USER: CMT006
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REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED	7-17-2015
AS-2-15	REVISED	1-18-2019
GSD-1-19	DATED	1-15-2021
PCB-91	REVISED	7-17-2020
SBR-1-20	REVISED	7-17-2020
SICD-1-21	REVISED	1-21-2022
SICD-2-14	REVISED	1-15-2021
VPF-1-90	REVISED	7-20-2018

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

840	DATED	4-15-2022
844	DATED	4-20-2018
863	DATED	7-16-2021
869	DATED	10-17-2014

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.

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING:

DESIGN LOADING INCLUDES:
VEHICULAR LIVE LOAD: HL-93 (PROPOSED WORK);
C.F. 2000(57) (EXISTING SUBSTRUCTURES)
FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SQ.FT

DESIGN DATA:

CONCRETE CLASS QC2 WITH QC/QA;
COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1;
COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

CONCRETE REINFORCEMENT - MINIMUM YIELD STRENGTH 60 KSI
GLASS FIBER REINFORCED POLYMER (GFRP) - C&MS 705.01 & ASTM D7957

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

DECK PROTECTION METHOD:

2 1/2" CONCRETE COVER
GFRP REINFORCEMENT (MOT-4-1779L)
GALVANIZED STEEL REINFORCEMENT (MOT-4-1779R)

MONOLITHIC WEARING SURFACE:

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

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

THIS WORK CONSISTS OF THE REMOVAL OF CONCRETE DECKS INCLUDING CONCRETE BRIDGE RAILINGS, DECK JOINTS, ABANDONED ELECTRICAL BOXES, CONDUITS, UTILITY RACEWAYS AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, GIRDERS, CROSSFRAMES, ETC.). THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE OF EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING IS PERMITTED, 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 DECK SLAB CONCRETE REINFORCEMENT. 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 CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS (I-BEAM, STEEL BEAM STEEL GIRDER, ETC.), 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 MEMBERS 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 SUPPORTS FOR SCUPPERS AND BULB ANGLES WHICH ARE TO BE REMOVED) LOCATED IN THE DESIGNATED TENSION PORTIONS OF THE TOP FLANGES OF EXISTING STEEL MEMBERS AND GRIND THE FLANGE SURFACES SMOOTH. CAREFULLY GRIND PARALLEL TO THE FLANGES.

CUT LINE CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING CONCRETE REINFORCEMENT, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING CONCRETE REINFORCEMENT DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

SUBSTRUCTURE CONCRETE REMOVAL: REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH CONCRETE REINFORCEMENT THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

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 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

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 C&MS, 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 ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, 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 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: CROSSFRAMES, BOTTOM FLANGE PLATES, AND MOMENT PLATE FATIGUE RETROFITS.

THIS ITEM INCLUDES ALL MATERIAL AND WORK TO INSTALL THE PROPOSED CROSSFRAMES, TOP FLANGE COVERPLATE RETROFITS, AND THE BOTTOM FLANGE MOMENT PLATES.

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. 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 - CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE. 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.

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 2.25 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 FACIA BEAM TO THE FACE OF THE SAFETY HANDRAIL OF 65 INCHES.

ITEM 509 - GALVANIZED STEEL REINFORCEMENT

ALL CONCRETE REINFORCEMENT DESIGNATED AS GALVANIZED SHALL BE GALVANIZED STEEL CONFORMING TO ASTM A767, CLASS 1 OR ASTM A1094. THE GALVANIZED COATED CONCRETE REINFORCEMENT WILL MEET ALL OTHER REQUIREMENTS OF 509. THE GALVANIZED COATING WILL BE APPLIED AFTER THE REINFORCING HAS BEEN FABRICATED. IF THE GALVANIZED SURFACE BECOMES DAMAGED DURING HANDLING IN THE FIELD, REPAIRS WILL CONFORM TO ASTM A780. USE BAR SUPPORTS AND TIE WIRES WHICH ARE PLASTIC COATED OR EPOXY COATED. ONLY SUPPLIERS CERTIFIED UNDER S1068 MAY PROVIDE THIS REINFORCING.

SEE TABLE BELOW FOR REINFORCING TYPE AND LOCATION.

REINFORCING ALLOCATION:

	MOT-4-1779L	MOT-4-1779R
SUBSTRUCTURE	EPOXY COATED	EPOXY COATED
SUPERSTRUCTURE	GFRP	GALVANIZED
DIAPHRAGM	GALVANIZED	GALVANIZED
APPROACH SLAB	EPOXY COATED	EPOXY COATED

REVISIONS	NUMBER	DATE	DESCRIPTION
	2	1-31-23	UPDATE NOTE

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

PRIOR TO ENCASING THE BEAM ENDS, PREPARE THE ENDS PER SSPC SP11, POWER TOOL CLEANING TO BARE METAL, AND PAINT BEAM ENDS WITH INORGANIC ZINC PRIME COAT PER C&MS 514. EXTEND THE LIMITS OF THE BEAM PREPARATION AND PAINTING 1-FT BEYOND THE LIMITS OF THE END DIAPHRAGM CONCRETE.

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

PAYMENT FOR ALL THE ABOVE LABOR AND MATERIALS WILL BE MADE FOR THE CONTRACT BID PRICE FOR ITEM 514 - FIELD PAINTING, MISC.: COATING OF BEAM ENDS.

ITEM 516 - ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS, AS PER PLAN:

THIS WORK SHALL CONSIST OF REPLACING THE EXISTING GLAND WITH A NEW GLAND AT THE ABUTMENT EXPANSION JOINTS FOR BRIDGE NO. MOT-00004-18.030. THE CONTRACTOR SHALL FIELD VERIFY THE SHAPE AND SIZE OF THE GLAND AND THE DIMENSION OF THE JOINT OPENING BEFORE ORDERING THE NEW GLAND.

THIS BRIDGE MAY HAVE AN EXISTING STRIP SEAL THAT IS NOT READILY AVAILABLE ON THE SHELF. A SPECIAL RUN BY THE MANUFACTURER FROM THE OLD MOLDS MAY BE NEEDED WHICH MAY REQUIRE ADDITIONAL LEAD TIME. THE CONTRACTOR IS TO SCHEDULE ACTIVITIES ACCORDINGLY.

PAYMENT FOR THIS WORK SHALL INCLUDE ALL EQUIPMENT, MATERIAL, AND LABOR NECESSARY TO PERFORM THIS TASK. PAYMENT SHALL BE MADE AT THE UNIT BID PRICE PER FOOT OF ITEM 516. ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS, AS PER PLAN.

POST-CONSTRUCTION BRIDGE INSPECTION:

AT LEAST TWO WEEKS PRIOR TO OPENING THE BRIDGE TO TRAFFIC, THE CONTRACTOR SHALL NOTIFY THE ODOT DISTRICT 7 BRIDGE INSPECTION ENGINEER (937-497-6884) TO ALLOW FOR THE NATIONAL BRIDGE INSPECTION STANDARDS (NBIS) REQUIRED POST-CONSTRUCTION INITIAL INSPECTION OF THE BRIDGE.

ITEM 512 - SEALING OF CONCRETE SURFACES:

CONCRETE SHALL BE SEALED WITH AN EPOXY-URETHANE SYSTEM PER THE ODOT C&MS 512. THE COLOR SHALL BE FEDERAL STANDARD NO. AMS-595A-17778, LIGHT NEUTRAL.

AREAS HAVING FORMLINED TEXTURE TYPE A OR TEXTURE TYPE B SHALL BE SEALED WITH AN EPOXY-URETHANE SYSTEM PER THE ODOT C&MS 512, WITH FEDERAL STANDARD NO. AMS-595A-36415, MEDIUM NEUTRAL.

ITEM 514 - PAINTING OF STRUCTURAL STEEL:

ALL STRUCTURAL STEEL SHALL BE PAINTED IN ACCORDANCE WITH SECTION 514 OF THE ODOT C&MS. THE FINISH COAT COLOR SHALL BE DARK BLUE AMS-595A-15102.

ITEM 526 - REINFORCED CONCRETE APPROACH SLAB (T=15"), AS PER PLAN:

APPROACH SLAB CONCRETE SHALL BE PLACED SEPARATELY FROM THE SUPERSTRUCTURE CONCRETE.

ALL CONCRETE REINFORCEMENT IS TO BE PAID SEPARATELY UNDER ITEM 509 - EPOXY COATED STEEL REINFORCEMENT.

ITEM 607 - VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC:

VANDAL PROTECTION FENCE AND FABRIC SHALL HAVE A PVC COATING, POWDER COATED BLACK. THE COLOR SHALL CLOSELY MATCH MATERIAL SPECIFICATION STANDARD NO. AMS-595A-17038.

HEADED REINFORCEMENT TERMINATORS:

DIAPHRAGM TRANSVERSE REINFORCING SHALL UTILIZE GALVANIZED HEADED TERMINATORS AT THE CLOSURE POUR AS DETAILED IN THE PLANS.

GALVANIZED HEADED TERMINATORS SHALL BE LENTON TERMINATOR D6 OR D16 AS MANUFACTURED BY nVent, OR AN APPROVED EQUAL.

PAYMENT FOR GALVANIZED HEADED TERMINATORS SHALL INCLUDE ALL EQUIPMENT, MATERIAL, AND LABOR NECESSARY TO PERFORM THIS TASK. PAYMENT IS INCIDENTAL TO THE PRICE BID FOR ITEM 509 - GALVANIZED STEEL REINFORCEMENT.

STRUCTURE GENERAL NOTES
BRIDGE NO. VARIES

SFN VARIES

DESIGN AGENCY

CARPENTER
MARKY

DESIGNER CHECKER

LWG STK

REVIEWER

WHM 8-9-22

PROJECT ID

101849

SUBSET TOTAL

1 2

SHEET TOTAL

73 170

MOT-4-(17.79)(18.03)

MODEL: Sheet PAPER: 34x22 (in.) DATE: 1/31/2023 TIME: 7:18:42 AM USER: CMT006
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ESTIMATED QUANTITIES					DESIGN: AMR DATE: 8-10-22			CHECK: BWR DATE: 8-10-22		
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET #	
202	11203	LS	-	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS	73, 95	△
202	22900	267	SY	APPROACH SLAB REMOVED				267		
202	23500	1492	SY	WEARING COURSE REMOVED				1492		
202	32800	211	SY	CONCRETE SLOPE PROTECTION REMOVED				211		
203	10000	499	CY	EXCAVATION				499		
204	30010	60	CY	GRANULAR MATERIAL, TYPE B				60		
204	50001	683	SY	GEOTEXTILE FABRIC, AS PER PLAN				683	111	△
503	11100	LS	-	COFFERDAMS AND EXCAVATION BRACING	LS					
503	21300	LS	-	UNCLASSIFIED EXCAVATION	LS					
509	10000	44799	LB	EPOXY COATED STEEL REINFORCEMENT	7616		725	36458		
509	26000	18697	LB	GALVANIZED STEEL REINFORCEMENT			18697	△		
509	30020	35418	FT	NO. 4 DEFORMED GFRP REINFORCEMENT			35418	△		
509	30030	50940	FT	NO. 5 DEFORMED GFRP REINFORCEMENT			50940			
509	30040	29379	FT	NO. 6 DEFORMED GFRP REINFORCEMENT			29379			
510	10000	506	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	506					
511	33501	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE, AS PER PLAN	2				74, 92	△
511	34446	408	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			408			
511	34450	71	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			71	△		
511	44110	59	CY	CLASS QC1 CONCRETE, ABUTMENT NOT INCLUDING FOOTING	59	△				
511	81300	2	EACH	CONCRETE, MISC.: AESTHETIC TEST PANEL					74	△
512	10100	945	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	80	316	490	59		
512	33000	6	SY	TYPE 2 WATERPROOFING	6					
512	74000	341	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	25	316				
513	10201	5906	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN			5906		73	△
513	20000	6720	EACH	WELDED STUD SHEAR CONNECTORS			6720			
514	00050	13984	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			13984			
514	00056	13984	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT			13984			
514	00060	14499	SF	FIELD PAINTING OF STRUCTURAL STEEL, INTERMEDIATE COAT			14499			
514	00066	14499	SF	FIELD PAINTING OF STRUCTURAL STEEL, FINISH COAT			14499			
514	00504	22	MNHR	GRINDING FINES, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			22			
514	10000	13	EACH	FINAL INSPECTION REPAIR			13			
514	27700	381	SF	FIELD PAINTING, MISC.: COATING OF BEAM ENDS			381		73	△
516	13600	110	SF	1" PREFORMED EXPANSION JOINT FILLER			110			
516	13900	220	SF	2" PREFORMED EXPANSION JOINT FILLER			220			
516	14020	166	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL			166			
516	44100	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (11" X 17" X 2.049" WITH A 12" X 18" X 1 1/2" LOAD PLATE)			16			
516	44100	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (12" X 18.5" X 2.049" WITH A 13" X 26" X VARIES LOAD PLATE)			8			
516	44100	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (12" X 18.5" X 2.499" WITH A 13" X 19 1/2" X VARIES LOAD PLATE)			8			
516	47001	LS	-	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN			LS		73	△
518	12200	1	EACH	SCUPPERS, INCLUDING SUPPORTS			1			
518	21200	17	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	17					
518	40000	150	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	150					
518	40010	86	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	86					
526	25011	375	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15"), AS PER PLAN			375		73, 105-108	△
526	90020	74	SY	TYPE B INSTALLATION			74			
SPECIAL	53013000	1423	SF	FORM LINER	259		1164	△	74	△
601	21000	211	SY	CONCRETE SLOPE PROTECTION	211					
607	39900	330	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC			330		73	△
840	23000	329	CY	SELECT GRANULAR BACKFILL	329					
844	10001	59	SF	CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, AS PER PLAN	50	9			74	△
863	00100	1377	SY	GEOGRID, TYPE P1	1377					

REVISIONS	NUMBER	DATE	DESCRIPTION
△	1	11-30-22	REVISED QUANTITY

REVISIONS	NUMBER	DATE	DESCRIPTION
△	2	1-31-23	REVISED QUANTITY AND SHEET REFERENCE

ESTIMATED QUANTITIES
 BRIDGE NO. MOT-00004-17.790L
 S.R. 4 OVER WEBSTER STREET

SFN	5760518
DESIGNER	STK
CHECKER	BWR
REVIEWER	WHM
PROJECT ID	101849
SUBSET	3
TOTAL	39
SHEET	77
TOTAL	170

MOT-4-(17.79)(18.03)

MODEL: Sheet PAPER: 34x22 (in.) DATE: 1/31/2023 TIME: 8:42:03 AM USER: CMT006
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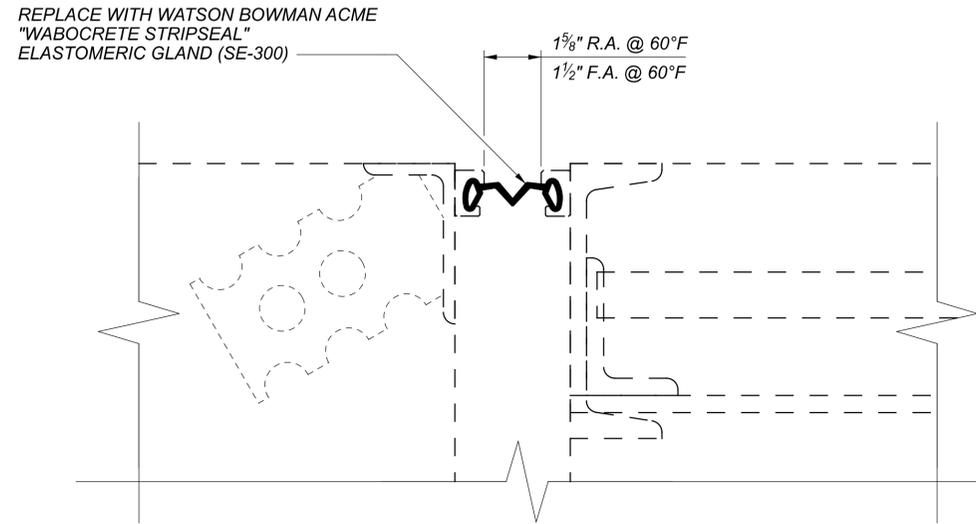
ESTIMATED QUANTITIES					DESIGN: STK DATE: 8-11-22	CHECK: BWR DATE: 8-11-22			
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET #
202	11203	LS	-	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS	(73, 134) 2
202	22900	267	SY	APPROACH SLAB REMOVED				267	
202	23500	267	SY	WEARING COURSE REMOVED				267	
202	32800	182	SY	CONCRETE SLOPE PROTECTION REMOVED				182	
203	10000	543	CY	EXCAVATION				543	
204	30010	42	CY	GRANULAR MATERIAL, TYPE B				42	(150) 2
204	50001	629	SY	GEOTEXTILE FABRIC, AS PER PLAN				629	
503	11100	LS	-	COFFERDAMS AND EXCAVATION BRACING	LS				
503	21300	LS	-	UNCLASSIFIED EXCAVATION	LS				
509	10000	43560	LB	EPOXY COATED STEEL REINFORCEMENT	7250			36310	
509	26000	113474	LB	GALVANIZED STEEL REINFORCEMENT			113474		
509	30020	5957	FT	NO. 4 DEFORMED GFRP REINFORCEMENT			5957		
510	10000	368	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	368				
511	33501	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE, AS PER PLAN	2				(74, 131) 2
511	34446	401	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			401		
511	34450	72	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			72		
511	44110	50	CY	CLASS QC1 CONCRETE, ABUTMENT NOT INCLUDING FOOTING	(50) 2				
511	81300	2	EACH	CONCRETE, MISC.: AESTHETIC TEST PANEL				2	(74) 2
512	10100	903	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	59	350	448	46	
512	33000	6	SY	TYPE 2 WATERPROOFING	6				
512	74000	364	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	14	350			
513	10201	5914	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN			5914		(73) 2
513	20000	6720	EACH	WELDED STUD SHEAR CONNECTORS			6720		
514	00050	13954	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			13954		
514	00056	13954	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT			13954		
514	00060	14471	SF	FIELD PAINTING OF STRUCTURAL STEEL, INTERMEDIATE COAT			14471		
514	00066	14471	SF	FIELD PAINTING OF STRUCTURAL STEEL, FINISH COAT			14471		
514	00504	22	MNHR	GRINDING FINIS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			22		
514	10000	13	EACH	FINAL INSPECTION REPAIR			13		
514	27700	380	SF	FIELD PAINTING, MISC.: COATING OF BEAM ENDS			380		(73) 2
516	13600	124	SF	1" PREFORMED EXPANSION JOINT FILLER	124				
516	13900	199	SF	2" PREFORMED EXPANSION JOINT FILLER	199				
516	14020	162	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	162				
516	44100	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (11" X 17" X 2.049" WITH A 12" X 18" X 1 1/2" LOAD PLATE)			16		
516	44100	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (12" X 18.5" X 2.049" WITH A 13" X 26" X VARIES LOAD PLATE)			8		
516	44100	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (12" X 18.5" X 2.499" WITH A 13" X 19 1/2" X VARIES LOAD PLATE)			8		
516	47001	LS	-	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN			LS		(73) 2
518	21200	17	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC				17	
518	40000	141	FT	6" PERFORATED CORRUGATED PLASTIC PIPE				141	
518	40010	100	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS				100	
526	25011	372	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15"), AS PER PLAN				372	(73, 144-147) 2
526	90020	75	SY	TYPE B INSTALLATION				75	
SPECIAL	53013000	1297	SF	FORM LINER	171		1126		(74) 2
601	21000	182	SY	CONCRETE SLOPE PROTECTION				182	
607	39900	330	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC				330	(73) 2
840	23000	310	CY	SELECT GRANULAR BACKFILL				310	
844	10001	41	SF	CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, AS PER PLAN	21	20			(74) 2
863	00100	1566	SY	GEOGRID, TYPE P1				1566	

REVISIONS	NUMBER	DATE	DESCRIPTION
	2	1-31-23	REVISED QUANTITY AND SHEET REFERENCE

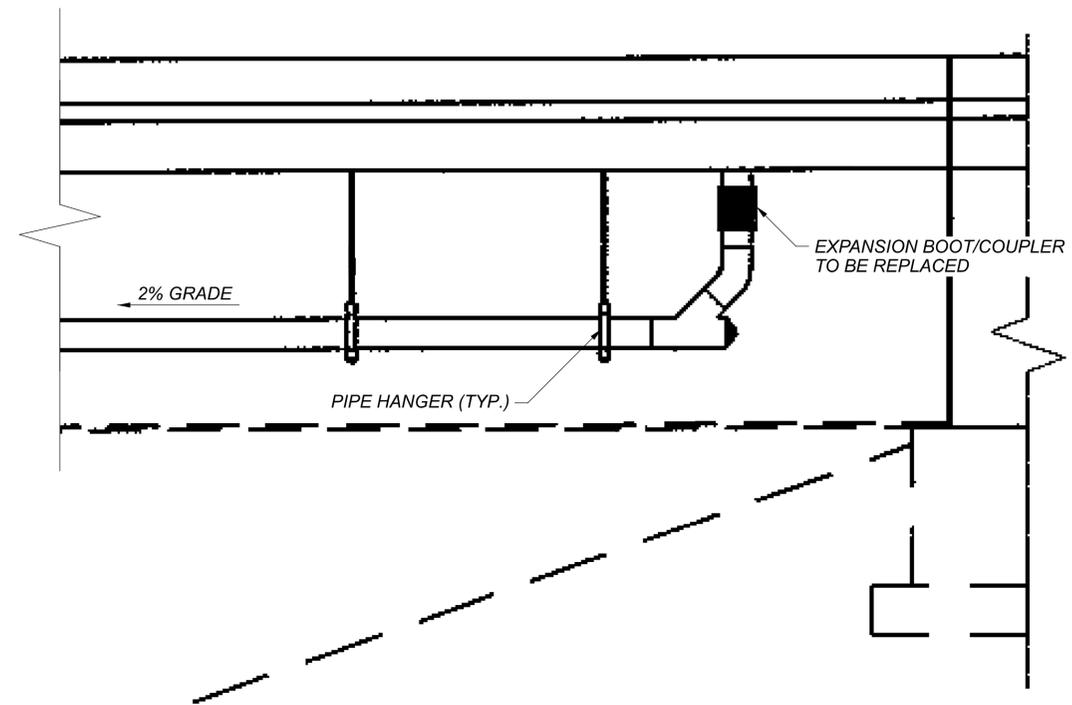
ESTIMATED QUANTITIES
 BRIDGE NO. MOT-00004-17.790R
 S.R. 4 OVER WEBSTER STREET

SFN	5760445
DESIGNER	STK
CHECKER	BWR
REVIEWER	GDJ
PROJECT ID	101849
SUBSET	3
TOTAL	39
SHEET	116
TOTAL	170





EXPANSION JOINT REPAIR



SCUPPER REPAIR DETAIL
 SOUTHWEST CORNER OF BRIDGE

REVISIONS	NUMBER	DATE	DESCRIPTION
	2	1-31-23	REVISED SHEET REFERENCE

ESTIMATED QUANTITIES					DESIGN: MTJ DATE: 4-13-22	CHECK: AMR DATE: 4-13-22		
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	SUPER.	GEN.	SHEET #
516	01301	299	FT	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS, AS PER PLAN		299		73
518	62200	1	EACH	STRUCTURE DRAINAGE, MISC.: FLEXIBLE SCUPPER CONNECTORS		1		
844	10001	30	SF	CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, AS PER PLAN	30			74

NOTES

1. EXPANSION BOOT/COUPLER SHALL BE FERNCO SERIES 1055-66 OR APPROVED EQUAL.
2. DETACH DOWNSPOUT PIPE FROM PIPE HANGERS AS NECESSARY TO REMOVE AND INSTALL EXPANSION PIPE BOOT/COUPLER. ENSURE DOWNSPOUT PIPE IS FULLY RECONNECTED TO PIPE HANGERS FOLLOWING PROPOSED WORK TO ACHIEVE 2% LONGITUDINAL GRADE. ALL LABOR SHALL BE INCLUDED WITH ITEM 518, STRUCTURAL DRAINAGE, MISC.: FLEXIBLE SCUPPER CONNECTORS.

SFN
 5760569
 DESIGN AGENCY

 DESIGNER: MTJ
 CHECKER: AMR
 REVIEWER: STK 8-11-22
 PROJECT ID: 101849
 SUBSET: 2 TOTAL: 3
 SHEET: 154 TOTAL: 170