

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

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.00 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, 2007.

DESIGN LOADING:

HL-93  
FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS PER SQUARE FOOT

DESIGN DATA:

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)  
CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)

REINFORCING STEEL - ASTM A615 OR A996, GRADE 60, MINIMUM YIELD STRENGTH  
DESIGN LOADING: 60,000 PSI

CONCRETE FOR PRESTRESSED BEAMS:  
COMPRESSIVE STRENGTH (FINAL) = 7.0 KSI  
COMPRESSIVE STRENGTH (RELEASE) = 5.0 KSI  
DESIGN DATA:  
PRESTRESSING STRAND:  
AREA = 0.167 SQ. IN. PER STRAND  
ULTIMATE STRENGTH = 270 KSI  
INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

DECK PROTECTION METHOD: SEAL THE DECK USING SRS (SOLUBLE REACTIVE SILICATE) ACCORDING TO C&MS 512.05  
52 ft x 24 ft / 9 = 139 SY CARRIED TO THE GENERAL SUMMARY.

EPOXY COATED REINFORCING STEEL  
2" CONCRETE COVER  
STEEL DRIP STRIP

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

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED 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 AND 105.02.

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

RIGHT-OF-WAY

ALL WORK IS TO BE PERFORMED WITHIN THE EXISTING 60' RIGHT-OF-WAY. CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN OR ADJACENT TO THE PROJECT CONSTRUCTION LIMITS, TOGETHER WITH THEIR RESPECTIVE OWNERS:

BUCKEYE RURAL ELECTRIC COOPERATIVE  
4848 SR 325 SOUTH  
RIO GRANDE, OH 45674-0200  
CONTACT: KENNETH KREBS  
PHONE: 614-381-9938 CELL / 740-379-9659 OFFICE

FRONTIER  
241 S. NELSON AVENUE  
WILMINGTON, OH 45177  
CONTACT: ROB LATHAM  
PHONE: 937-708-9671 (CELL)

LEADING CREEK CONSERVANCY DISTRICT ADDRESS  
34481 CORN HOLLOW ROAD  
CONTACT: ROCKY JOHNSON  
PHONE: 740-416-3213 CELL / 740-742-2411 OFFICE

CALL OHIO UTILITIES PROTECTION SERVICE TWO (2) WORKING DAYS BEFORE YOU DIG, TOLL FREE NO. 1-800-362-2764 (NON-MEMBERS MUST BE CALLED DIRECTLY).

ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN  
THE ROAD CLOSURE WILL HAVE A DESIGNATED DETOUR ROUTE. THE MEIGS COUNTY ENGINEER'S OFFICE SHALL ADEQUATELY SIGN THE DETOUR ROUTE AND MAINTAIN ALL DETOUR SIGNAGE AND ADVANCE WARNING SIGNAGE THROUGHOUT THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48"x30" ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES, GATES AND LIGHTS AS DETAILED IN SCD MT-101.60 AT BOTH ENDS OF THE PROJECT DURING THE PERIOD IN WHICH THE ROAD IS CLOSED TO TRAFFIC. THE CONTRACTOR SHALL ALSO PLACE THE THREE SIGNS LEADING IN TO BOTH ENDS OF THE PROJECT PER SCD MT-101.60. THE CONTRACTOR SHALL ADVISE THE MEIGS COUNTY ENGINEER'S OFFICE A MINIMUM OF TWENTY (20) CALENDAR DAYS IN ADVANCE OF WHEN THE DETOUR ROUTE SHOULD BE IN EFFECT. THE DURATION OF THE ROAD CLOSURE IS NOT TO EXCEED SIXTY (60) CALENDAR DAYS AND IS NOT TO BEGIN BEFORE JUNE 1. LIQUIDATED DAMAGES WILL BE ASSESSED AS PER CMS 108.07.

ALL WORK AND TRAFFIC DEVICES SHALL BE IN ACCORDANCE WITH CMS 614, OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD).

ASBESTOS SURVEY

AN ASBESTOS SURVEY FOR THE MEG-CR1-9.04 (PID 109305) BRIDGE SCHEDULED FOR DEMOLITION WORK WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. A COPY OF THE ASBESTOS SURVEY FORM HAS BEEN INCLUDED IN THE PLAN PACKAGE FOR THIS PROJECT. THE ASBESTOS SURVEY DID NOT IDENTIFY THE PRESENCE OF ANY ASBESTOS CONTAINING MATERIAL. THE REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL MUST COMPLY WITH THE ADMINISTRATIVE CODE (OAC) REGULATIONS AND THE NATIONAL EMISSION STANDARD FOR HAZARDOUS AIR POLLUTANTS (NESHAP) STANDARD FOR ASBESTOS.

A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM, PARTIALLY COMPLETED BY THE ASBESTOS HAZARD EVALUATION SPECIALIST, HAS BEEN INCLUDED IN THE ATTACHED SPECIAL PROVISIONS. THE CONTRACTOR SHALL COMPLETE AND SIGN THE FORMS AND SUBMIT TO:

ASBESTOS PROGRAM  
OHIO EPA, DAPC  
P.O. BOX 1049COLUMBUS, OH 43216-1049

AT LEAST 10 WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION WORK, THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED AND SIGNED FORMS TO THE ENGINEER. INFORMATION REQUIRED ON THE FORMS SHALL INCLUDE AT A MINIMUM 1) THE ODOT PROJECT NUMBER, 2) THE CONTRACTORS NAME, ADDRESS, AND TELEPHONE NUMBER, 3) THE SCHEDULED DATES FOR THE START AND COMPLETION OF BRIDGE DEMOLITIONS.

BASIS FOR PAYMENT: THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENTS FOR THIS WORK SHALL BE INCIDENTAL TO THE ITEM 202 STRUCTURE REMOVAL ITEM(S) IN THE PLAN.

DEMOLITION DEBRIS

THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID AND/OR LIMIT DEMOLITION DEBRIS FROM ENTERING THE STREAM. ANY MATERIAL THAT DOES FALL INTO THE STREAM SHALL BE REMOVED AS SOON AS POSSIBLE.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, ANY POWER-OPERATED CONSTRUCTION-TYPE DEVICE SHALL NOT BE OPERATED BETWEEN THE HOURS OF 9:00 PM AND 7:00 AM. IN ADDITION, ANY SUCH DEVICE SHALL NOT BE OPERATED AT ANY TIME IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

ITEM 201 - CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

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

THIS ITEM SHALL INCLUDE THE REMOVAL OF EXISTING STRUCTURE COMPONENTS AS DETAILED IN THE PLANS AND AS DIRECTED BY THE ENGINEER. THE REMOVALS SHALL INCLUDE BUT NOT NECESSARILY BE LIMITED TO THE FOLLOWING:

1. THE EXISTING SUPERSTRUCTURE IN ITS ENTIRETY, INCLUDING STEEL BEAMS, CORRUGATED METAL DECK, WEARING SURFACE, AND GUARDRAIL.
2. THE EXISTING ABUTMENTS ARE TO BE REMOVED TO BELOW THE NORMAL WATER LEVEL A NEW CAPPED PILE ABUTMENT IS TO BE CONSTRUCTED BEHIND EXISTING CONCRETE AND STONE MASONRY ABUTMENTS. SHEET PILING HAS BEEN INSTALLED IN FRONT OF EXISTING ABUTMENTS AND IS TO BE REMOVED AT LEAST TO THE NORMAL WATER LEVEL. WITH APPROVAL OF THE ENGINEER, RUBBLE FROM ABUTMENT DEMOLITION MAY BE USED FOR TYPE 'B' ROCK CHANNEL PROTECTION (APPROXIMATELY 127 CUBIC YARDS OF TYPE 'B' ROCK CHANNEL PROTECTION WILL BE REQUIRED).

THE USE OF EXPLOSIVES AND/OR HEADACHE BALLS WILL NOT BE PERMITTED.

ITEM 407 - TACK COAT

THE RATE OF APPLICATION OF THE TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.10 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

PILES TO BEDROCK

DRIVE PILES TO REFUSAL ON BEDROCK. THE OWNER WILL CONSIDER REFUSAL TO BE OBTAINED WHEN THE PILE PENETRATION IS AN INCH OR LESS AFTER RECEIVING AT LEAST 20 BLOWS FROM THE PILE HAMMER. SELECT THE HAMMER SIZE TO ACHIEVE THE REQUIRED DEPTH TO BEDROCK AND REFUSAL.

THE TOTAL FACTORED LOAD IS 165 KIPS PER PILE FOR THE ABUTMENT PILES.

ABUTMENT PILES:  
HP10x42 PILES 25 FEET LONG, ORDER LENGTH

ITEM 511 CLASS QC1 CONCRETE, ABUTMENT, AS PER PLAN

FILL THE HORIZONTAL JOINT IN THE BACKWALL CREATED BETWEEN THE EXPANSION SECTION OF THE SEMI-INTEGRAL ABUTMENT AND THE BEAM SEAT WITH EXPANDED POLYSTYRENE SHEET OR SOME EQUAL MATERIAL. COSTS ARE TO BE INCLUDED IN THE UNIT PRICE BID FOR ABUTMENT CONCRETE.

ITEM 202 PAVEMENT REMOVED AS PER PLAN

IT IS ASSUMED SIX INCHES OF HOT MIX SURFACE MATERIAL OVER CHIP-SEAL. REMOVE TO 0.83 FEET (10 INCHES) BELOW THE PROPOSED FINISH GRADE.

ITEM 606 BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN

IN ADDITION TO THE OTHER REQUIREMENTS FOR A TYPE 4 BRIDGE TERMINAL ASSEMBLY, THE TERMINAL ASSEMBLY TO THE RIGHT IF STATIONS 477+74.21 TO 477+83.10 IS TO BE CONSTRUCTED ON A TEN FOOT RADIUS.

PID NO.  
109305

DATE  
REVIEWED  
STRUCTURE FILE NUMBER

DRAWN  
REVISED  
DESIGNED  
CHECKED

GENERAL NOTES

MEG 0001-0903

3  
19

I:\project\contracts and LPALPA\MEG\County\09305-MEG-CR1-9.04\09305\_cg001.dgn Sheet 12/22/2020 7:30:29 AM ereed

SHEET NUM.										PART.			ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
2	3	3a	4	6	8	9				01/STR/BR			EXT	TOTAL				
	LUMP									LUMP			201	11000	LS		ROADWAY	
352										352			202	23001	352	SY	CLEARING AND GRUBBING	3
321										321			204	10000	321	SY	PAVEMENT REMOVED, AS PER PLAN	
0.04										0.04			209	60500	0.04	MILE	SUBGRADE COMPACTION	
100										100			606	13000	100	FT	LINEAR GRADING	
1										1			606	20000	1	EACH	GUARDRAIL, TYPE 5	
3										3			606	25000	3	EACH	FLARED END SECTION	
3										3			606	35140	3	EACH	ANCHOR ASSEMBLY, TYPE A	
1										1			606	35141	1	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 4	3a
																	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN	
																	EROSION CONTROL	
127										127			601	32100	127	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
		951								951			659	10000	951	SY	SEEDING AND MULCHING	
		0.09								0.09			659	20000	0.09	TON	COMMERCIAL FERTILIZER	
		0.2								0.2			659	31000	0.2	ACRE	LIME	
		8								8			659	35000	8	MGAL	WATER	
										3,000			832	30000	3,000	EACH	EROSION CONTROL	
																	PAVEMENT	
38										38			255	20000	38	FT	FULL DEPTH PAVEMENT SAWING	
72										72			301	46000	72	CY	ASPHALT CONCRETE BASE, PG64-22	
32										32			407	10000	32	GAL	TACK COAT	
18										18			441	50000	18	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
																	TRAFFIC CONTROL	
0.08										0.08			642	00100	0.08	MILE	EDGE LINE, 4", TYPE 1	
0.04										0.04			642	00300	0.04	MILE	CENTER LINE, TYPE 1	
																	STRUCTURE 20 FOOT SPAN AND UNDER (MEG-CR1-9.04)	
										LUMP			202	11003	LS		STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	3a
										58			202	23500	58	SY	WEARING COURSE REMOVED	
										LUMP			503	21300	LS		UNCLASSIFIED EXCAVATION	
										LUMP			505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION	
										250			507	00100	250	FT	STEEL PILES HP10X42, FURNISHED	
										241			507	00150	241	FT	STEEL PILES HP10X42, DRIVEN	
						8,767				8,767			509	10000	8,767	LB	EPOXY COATED REINFORCING STEEL	
		30								30			511	31610	30	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE	
		40								40			511	45710	40	CY	CLASS QC1 CONCRETE, ABUTMENT	
										53			512	10050	53	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	
139										139			512	10400	139	SY	TREATING OF CONCRETE BRIDGE DECK WITH SRS	
										24			512	33000	24	SY	TYPE 2 WATERPROOFING	
										6			515	12050	6	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, CB21-48 (50'-0")	
										8			516	13600	8	SF	1" PREFORMED EXPANSION JOINT FILLER	
										12			516	41100	12	EACH	1/8" PREFORMED BEARING PAD	
										24			516	43100	24	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE) (1.875" x 8" x 12")	
										112.5			517	72300	112.5	FT	RAILING (DEEP BEAM RAIL WITH STEEL TUBULAR BACKUP AND TYPE 2 STEEL POSTS AND ANCHOR BOLTS)	
										124			SPECIAL	51822300	124	FT	STEEL DRIP STRIP	6
		105								105			613	41200	105	CY	LOW STRENGTH MORTAR BACKFILL	
																	INCIDENTALS	
	LUMP									LUMP			614	11001	LS		MAINTAINING TRAFFIC, AS PER PLAN	3
										LUMP			623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
										LUMP			624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

MEG - CR01 - 0903