

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 LANES UNDER EITHER OF THE FOLLOWING CONDITION: 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 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.

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING DELINEATION OF PORTABLE AND PERMANENT BARRIER.

ALONG RUNS OF INCREASED BARRIER DELINEATION WHERE THIS ITEM IS PROVIDED, THE QUANTITY SHALL BE MEASURED AS THE ENTIRE LENGTH OF THE RUN OF INCREASED BARRIER DELINEATION, INCLUDING THE SPACES BETWEEN THE INDIVIDUAL DELINEATION PANELS OR STACKS OF BARRIERS REFLECTORS.

ACCESS TO PROPERTIES

THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES WITHIN THE CONSTRUCTION LIMITS AT ALL TIMES DURING ALL PHASES OF CONSTRUCTION IN ACCORDANCE WITH ODOT C&MS 614.02.

NOTIFICATIONS 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 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO CLOSURE

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

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL)

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 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 DEMANDING 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 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.

LANE VALUE CONTRACT (PN 127)

THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES AS DESIGNATED IN THE LANE VALUE CONTRACT TABLE FOR EACH UNIT OF TIME THE DESCRIBED CRITICAL LANE/RAMP IS RESTRICTED FROM FULL USE BY THE TRAVELING PUBLIC WITHIN THE RESTRICTED TIME PERIOD. THE LANE VALUE CONTRACT TABLE IS LOCATED IN THE PLAN GENERAL NOTES. THE DISINCENTIVES WILL BE ASSESSED FOR ALL RESTRICTIONS OF THE CRITICAL WORK.

CRITICAL WORK IS SHOWN IN THE LANE VALUE CONTRACT TABLE.

CRITICAL WORK IS DEFINED AS HAVING THE DESIGNATED SECTIONS OPEN TO UNRESTRICTED TRAFFIC AS SHOWN IN THE TABLE, OR THE ENTIRE PROJECT IF NOT OTHERWISE LISTED.

UNRESTRICTED TRAFFIC IS DEFINED AS ALL TRAFFIC LANES BEING AVAILABLE FOR USE WITH SPECIFIED STRIPING AND SAFETY FEATURES IN PLACE

LANE VALUE CONTRACT			
DESCRIPTION OF CRITICAL LANE/ RAMP TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME PERIOD
SR 4	PER PLC NOTE SHEET 10	PER LANE/ PER MINUTE	\$125

DISINCENTIVE CONTRACT (PN 121)

THE CONTRACTOR SHALL COMPLETE ALL CRITICAL WORK AND SAFETY ITEMS ACCORDING TO THE DISINCENTIVE CONTRACT TABLE. THE DISINCENTIVE CONTRACT TABLE IS LOCATED IN THE PLAN GENERAL NOTES. IN THE EVENT THE CONTRACTOR IMPEDES THE FLOW OF TRAFFIC SUBSEQUENT TO THE OPENING TO UNRESTRICTED TRAFFIC, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE ACCORDING TO THE DISINCENTIVE CONTRACT TABLE.

CRITICAL WORK IS SHOWN IN THE DISINCENTIVE CONTRACT TABLE.

CRITICAL WORK IS DEFINED AS HAVING THE DESIGNATED SECTION OF WORK OPEN TO UNRESTRICTED TRAFFIC AS SHOWN IN THE TABLE, OR THE ENTIRE PROJECT IF NOT OTHERWISE LISTED. U

UNRESTRICTED TRAFFIC IS DEFINED AS ALL TRAFFIC LANES BEING AVAILABLE FOR USE AT THEIR FINAL DESIGN WIDTH WITH ALL MARKINGS, RPM'S, AND SAFETY FEATURES INSTALLED, ALONG WITH NO RESTRICTIONS WITHIN 2 FEET OF THE EDGE LINE ON THE SHOULDERS.

DISINCENTIVE CONTRACT TABLE			
DESCRIPTION OR LOCATION OF CRITICAL WORK	COMPLETION DATE OR TIME DURATION	TIME PERIOD	DISINCENTIVE \$ PER TIME PERIOD
SR 235/ CHAMBERSBURG RD	150 DAYS SEE NOTE SHEET 10	DAY	\$3,000
RAMP A	60 DAYS SEE NOTE SHEET 10	DAY	\$1,500
RAMP B	60 DAYS SEE NOTE SHEET 10	DAY	\$1,500
RAMP C	45 DAYS SEE NOTE SHEET 10	DAY	\$2,000
RAMP D	45 DAYS SEE NOTE SHEET 10	DAY	\$5,000
RAMP E	150 DAYS SEE NOTE SHEET 10	DAY	\$400
RAMP F	150 DAYS SEE NOTE SHEET 10	DAY	\$365
INTERIM COMPLETION DATE	8/15/2021	DAY	\$3,000

COMPLETION DATE

THE INTERIM COMPLETION DATE FOR THIS PROJECT SHALL BE 8/15/2021. THE CONTRACTOR SHALL HAVE THE BRIDGE AND ROADWAY OPEN TO TRAFFIC WITH ALL REQUIRED ITEMS OF WORK COMPLETED BY THE INTERIM COMPLETION DATE EXCEPT FOR THE WORK AND ITEMS LISTED BELOW:

PHASE 4 (REFER TO SEQUENCE OF CONSTRUCTION SHEET 10)

FAILURE TO COMPLETE THE REQUIRED WORK BY THE INTERIM COMPLETION DATE WILL RESULT IN LIQUIDATED DAMAGES TO THE CONTRACTOR PER TABLE PN 121 DISINCENTIVE CONTRACT (PN121).

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REVISIONS		
NO.	DATE	DESCRIPTION
2	10-20-23	NOTE ADDED AND TABLE REVISED

MOT - 235 - 0.22L

CALCULATED
SLB
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ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF RAISING THE EXISTING BEAMS TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 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 ANY REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT 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.

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

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

ALL REINFORCING STEEL IS TO BE GALVANIZED COATED SIMILAR TO THE REST OF THE STRUCTURE.

TYPE C INSTALLATION, AS PER PLAN

ALL REINFORCING STEEL IS TO BE GALVANIZED COATED SIMILAR TO THE REST OF THE STRUCTURE.

CALCULATED BY: RFV DATE: 3-11-20
CHECKED BY: DJC DATE: 3-12-20

ITEM	EXT.	PARTICIPATION		UNITS	DESCRIPTION	ABUTMENT	PIER	SUPER	GENERAL	A.P.P. REFERENCE SHEET NO.
		01/NHS/BR	02/NHS/BR							
202	11203	LS			PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					2
202	22900	134		SY	APPROACH SLAB REMOVED				134	
202	23500	1096		SY	WEARING COURSE REMOVED				1096	
503	11100	LS			COFFERDAMS AND EXCAVATION BRACING					
503	21300	LS			UNCLASSIFIED EXCAVATION					
509	20001	100		LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN				100	2
509	30030	1752		FT	NO. 5 GFRP DEFORMED BARS			1752		
509	30040	6527		FT	NO. 6 GFRP DEFORMED BARS			6527		
509	40000	109103		LB	REINFORCING STEEL, MISC.: GALVANIZED COATED REINFORCING STEEL	2874	16021	90208		2
510	10000	286		EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	160	126			
511	34446	287		CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			287		
511	34450	73		CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			73		
511	41010	53		CY	CLASS QC1 CONCRETE, PIER ABOVE FOOTINGS		53			
511	43510	31		CY	CLASS QC1 CONCRETE, ABUTMENT INCLUDING FOOTING	31				
512	10100	853		SY	SEALING CONCRETE SURFACES (EPOXY-URETHANE)	59	264	530		
513	10220	1665		LB	STRUCTURAL STEEL MEMBERS, LEVEL 1			1665		
513	20000	4575		EACH	WELDED STUD SHEAR CONNECTORS			4575		
513	90000	1183		LB	STRUCTURAL STEEL, MISC.: NEW CROSSFRAME ASSEMBLIES AT PIER 2			1183		
514	00050	12290		SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			12290		
514	00056	12290		SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT			12290		
514	00060	12490		SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			12490		
514	00066	12490		SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			12490		
514	00504	20		MNHR	GRINDING FINIS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			20		
514	10000	13		EACH	FINAL INSPECTION REPAIR			13		
516	10010	67		FT	ARMORLESS PREFORMED JOINT SEAL				67	
516	13600	5		SF	1" PREFORMED EXPANSION JOINT FILLER	5				
516	13900	34		SF	2" PREFORMED EXPANSION JOINT FILLER	34				
516	14020	93		FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	93				
516	44101	15		EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (1'-0" x 1'-7" x 2.41" BEARING WITH 1'-1" x 1'-8" x VARIABLE THICKNESS LOAD PLATE)		15			11
516	44201	10		EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (10" x 1'-1" x 3.22" BEARING WITH 11" x 1'-2" x 1 1/2" THICK LOAD PLATE)	10				11
516	47001	LS			JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN					4
518	21200	43		CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	43				
518	40000	100		FT	6" PERFORATED CORRUGATED PLASTIC PIPE	100				
518	40010	60		FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	60				
526	25011	190		SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15"), AS PER PLAN				190	4
526	90031	67		FT	TYPE C INSTALLATION, AS PER PLAN				67	4
**	601	20000	137		CRUSHED AGGREGATE SLOPE PROTECTION	137				
	607	39900	434		VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC			434		
	202	11501	1	EACH	STRUCTURE REPAIR - COLLISION DAMAGE / HEAT STRAIGHTENING QUANTITIES PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (MAIN MEMBERS)					3
***	513	10261	15636	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN			15636		3
***	513	90000	297	1041	LB	STRUCTURAL STEEL, MISC.: REPAIR OF DAMAGED SECONDARY MATERIAL BY REPLACEMENT		1338		3
***	849	10001	LS	LS	DAMAGE ASSESSMENT, AS PER PLAN					3
***	849	10500	LS	LS	SURFACE PREPARATION					
***	849	10600	4	2	HOUR	REPAIRING DAMAGED MEMBERS BY GRINDING		6		
***	849	10700	LS	LS	STRAIGHTENING DAMAGED MEMBERS					

** INCLUDED FOR PAYMENT WITH THE ROADWAY QUANTITIES

*** PLAN SPLIT 01 INCLUDES ALL COLLISION REPAIR OVER NB S.R. 4. PLAN SPLIT 02 INCLUDES ALL COLLISION REPAIR OVER SB S.R. 4.

REVISIONS		
NO.	DATE	DESCRIPTION
1	10/20/20	UPDATED ITEMS/NOTES
2	10/23/20	ITEM ADDED

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DESIGN AGENCY
GPD GROUP
1801 Watermark Drive, Suite 210, Columbus, OH 43215 614.210.0751
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DESIGNED
 RFV
 CHECKED
 DJC

DRAWN
 RFV
 REVISED

REVIEWED
 DGN
 STRUCTURE FILE NUMBER
 5709660

DATE
 3-13-20

ESTIMATED QUANTITIES & GENERAL NOTES
 BRIDGE NO. MOT-235-0022L
 S.R. 235 (CHAMBERSBURG ROAD) OVER S.R. 4

MOT - 235 - 0.22L
PID No. 99860

4 / 24

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