ITEM 622 - PORTABLE BARRIER, 50', AS PER PLAN

THIS WORK SHALL CONSIST OF FURNISHING, MAINTAINING, AND SUBSEQUENTLY REMOVING A 50-INCH PORTABLE BARRIER AT THE LOCATIONS SHOWN ON THE PLANS. FOR DETAILS SEE, SCD RM-4.1.

PORTABLE STEEL BARRIER IS AN APPROVED ALTERNATIVE TO PORTABLE CONCRETE BARRIER. FOR INFORMATION ON APPROVED VENDORS, SEE THE APPROVED PRODUCTS LIST MAINTAINED BY THE OFFICE OF ROADWAY ENGINEERING.

PORTABLE BARRIER, 32 INCHES HIGH WITH AN 18-INCH MINIMUM HEIGHT GLARE SCREEN MAY BE USED AT THE OPTION OF THE CONTRACTOR. THE GLARE SCREEN SHALL BE CONSTRUCTED USING ONE OF THE SCREENS PROVIDED ON THE APPROVED LIST, AVAILABLE ON THE OFFICE OF ROADWAY ENGINEERING WEBSITE.

PADDLE OR INTERMITTENT TYPE GLARE SCREENS SHALL BE DESIGNED USING A 20 DEGREE CUT-OFF ANGLE BASED ON TANGENT ALIGNMENT. THAT SPACING SHALL BE USED THROUGHOUT THE BARRIER LENGTH WITHOUT REGARD TO BARRIER CURVATURE.

THE GLARE SCREEN SYSTEM SHALL BE SECURELY FASTENED TO THE 32-INCH PORTABLE BARRIER USING THE HARDWARE AND PROCEDURES SPECIFIED BY THE MANUFACTURER.

FOR DIRECTIONS ON HOW TO INSTALL THE GLARE SCREEN AND THE BARRIER, SEE THE MANUFACTURER'S INSTRUCTIONS.

PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND SHALL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR ITEM 622, PORTABLE BARRIER, 50", AS PER PLAN.

WORK ZONE EGRESS WARNING SYSTEM

THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN AN APPROVED WORK ZONE EGRESS WARNING SYSTEM (WZEWS) AS PER SUPPLEMENTAL SPECIFICATION 829.

THE PROBABLE INITIAL LOCATIONS OF THE WZEWS DEVICES ARE SHOWN ON P. 19-20 OF THE PLAN. IT IS EXPECTED THAT THESE LOCATIONS WILL VARY BASED ON PLANNED OR UNPLANNED PHASE AND TRAFFIC PATTERN CHANGES. PLACEMENT, OPERATION, AND MAINTENANCE AND ALL ACTIVATION OF THE DEVICES BY THE CONTRACTOR SHALL BE DIRECTED BY THE ENGINEEER.

WZEWS SHALL BE USED IN ACCORDANCE WITH MT-103.10. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 829, WORK ZONE EGRESS WARNING SYSTEM 40 SIGN MONTH
ASSUMING 4 WORK ZONE EGRESS WARING SYSTEM(S) FOR 10 MONTH(S).

SEQUENCE OF CONSTRUCTION

PRE-PHASE 1:

PRIOR TO THE START OF PHASE 1, THE SOUTHTHBOUND OUTSIDE SHOULDER AND PORTIONS OF THE SOUTHBOUND INSIDE SHOULDERS MUST BE RECONSTRUCTED IN ORDER TO CARRY SHIFTED PHASE 1 AND PHASE 2 TRAFFIC.

ANY PRE-PHASE 1 WORK THAT IMPACTS TRAVEL LANES SHALL BE COMPLETED BY UTILIZING NIGHTTIME LANE CLOSURES PER ODOT SCD MT-95.30. THE LANE CLOSURES MAY ONLY BE IMPLEMENTED DURING HOURS ALLOWED AS LISTED IN THIS PLAN.

PHASE 1:

SHIFT SOUTHBOUND LANES ONTO OUTSIDE SHOULDER AND OUTSIDE LANE MATCHING THE PART 1 PLANS.

I-71 NORTHBOUND SHALL REMAIN IN EXISTING CONFIGURATION.

CONSTRUCT PROPOSED AREA OF SOUTHBOUND I-71 ALONG WITH TEMPORARY PAVEMENT REQUIRED FOR PHASE 2 SHIFTED TRAFFIC AS SHOWN IN THE PLANS.

WINTER 2023:

TRAFFIC SHALL BE SHIFTED INTO PHASE 2 CONFIGURATION BY OCTOBER 1, 2023 WHICH SHALL CONSTITUTE AN INTERIM COMPLETION DATE. TO PROVIDE ADDITIONAL SPACE FOR MOTORIST DURING THE WINTER, THE PHASE 2 PORTABLE BARRIER SHALL NOT BE SET IN THE FOLLOWING LOCATIONS UNTIL APRIL 1, 2024 UNLESS APPROVED BY THE ENGINEER:

STA. 425+00 TO STA. 444+85

IN LEUI OF PORTABLE BARRIER IN THESE LOCATIONS, DRUMS SHALL BE PLACED ALONG THE EDGE OF TRAVEL WAY. TEMPORARY IMPACT ATTENUATORS SHALL BE USED TO PROTECT THE ENDS OF THE PORTABLE BARRIER. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY AS PAYMENT FOR THIS WORK:

ITEM 614 - WORK ZONE IMPACT ATTENUATOR, 24" WIDE - 1 EA

WORK ON PHASE 2 MAY CONTINUE IN AREAS ADEQUATELY PROTECTED BY PORTABLE BARRIER.

EMERGENCY PULL-OFF SHOWN IN THE PLANS SHALL REMAIN OPEN OVER THE WINTER. ADDITIONALLY, A TEMPORARY PULL-OFF SHALL BE CREATED USING EXISTING PAVEMENT ON THE WEST SIDE OF THE SOUTHBOUND LANES AT STA. 425+00 TO 438+20 PER THE DETAILS SHOWN ON SHEET P.20A. THE LOCATION OF THE TEMPORARY PULL-OFF MAY BE ADJUSTED AT THE DIRECTION OF THE ENGINEER. THE COSTS FOR ALL SIGNING, MATERIALS, AND EQUIPMENT NECESSARY TO PLACE THE TEMPORARY PULL-OFF SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

PHASE 2:

SHIFT I-71 SOUTHBOUND LANES ONTO COMPLETED INSIDE LANE AND SHOULDER OF SOUTHBOUND I-71 CONSTRUCTED DURING PHASE 1 MATCHING PART 1 PLANS.

DYER ROAD SHALL BE CLOSED TO TRAFFIC AND DETOURED AS SHOWN IN THE PLANS FOR THE DURATION OF PHASES 1 AND 2.

I-71 NORTHBOUND SHALL REMAIN IN EXISTING CONFIGURATION.

CONSTRUCT PROPOSED AREA OF I-71 SOUTHBOUND AS SHOWN IN THE PLANS.

WINTER 2024:

THE PROJECT SHALL ENTER A WINTERIZATION PHASE BY OCTOBER 1, 2024 WHICH SHALL CONSTITUTE AN INTERIM COMPLETION DATE. NORTHBOUND TRAFFIC SHALL REMAIN IN EXISTING CONFIGURATION. SOUTHBOUND TRAFFIC SHALL BE RECONFIGURED TO THE PROPOSED THREE LANE CONFIGURATION. NORTHBOUND RAMPS SHALL REMAIN IN EXISTING CONFIGURATION. SOUTHBOUND RAMPS SHALL BE OPENED IN FINAL CONFIGURATION.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY IN ORDER TO COMPLETE THIS WORK:

ITEM 614 - WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN - 264 EACH
ITEM 648 - EDGE LINE, WHITE, 6" - 3.00 MILES
ITEM 648 - EDGE LINE, YELLOW, 6" - 3.00 MILES
ITEM 648 - LANE LINE, 6" - 6.00 MILES

PRE-PHASE 3:

PRIOR TO THE START OF PHASE 3, THE NORTHBOUND MEDIAN CROSSOVERS AND NORTHBOUND INSIDE SHOULDER RECONSTRUCTION MUST BE COMPLETE IF NOT PREVIOUSLY COMPLETED.

ANY PRE-PHASE 3 WORK THAT IMPACTS TRAVEL LANES SHALL BE COMPLETED BY UTILIZING NIGHTTIME LANE CLOSURES PER ODOT SCD MT-95.30. THE LANE CLOSURES MAY ONLY BE IMPLEMENTED DURING HOURS ALLOWED AS LISTED IN THIS PLAN.

PHASE 3:

I-71 SOUTHBOUND LANES SHALL BE SHIFTED ONTO THE OUTSIDE SHOULDER AND LANE MATCHING PART 1 PLANS.

CROSSOVER EXISTING I-71 NORTHBOUND LANES ONTO NEWLY CONSTRUCTED I-71 SOUTHBOUND INSIDE SHOULDER AND LANES.

DYER ROAD SHALL BE CLOSED TO TRAFFIC AND DETOURED AS SHOWN IN THE PLANS FOR THE DURATION OF PHASE 3.

CONSTRUCT PROPOSED AREAS OF I-71 NORTHBOUND AS SHOWN IN THE PLANS.

WINTER 2025:

THE PROJECT SHALL ENTER A WINTERIZATION PHASE BY OCTOBER 1, 2025 WHICH SHALL CONSTITUTE AN INTERIM COMPLETION DATE. ALL TRAFFIC SHALL BE OPENED IN FINAL CONFIGURATION AND MAINTAINED ON INTERMEDIATE COURSE. PAVEMENT MARKINGS SHALL BE PLACED IN THEIR FINAL LOCATIONS PER THE TRAFFIC CONTROL PLAN.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY IN ORDER TO COMPLETE THIS WORK:

ITEM 614 - WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN - 536 EACH
ITEM 648 - EDGE LINE, WHITE, 6" - 6.10 MILES
ITEM 648 - EDGE LINE, YELLOW, 6" - 6.10 MILES
ITEM 648 - LANE LINE, 6" - 12.20 MILES

SHOULD WORK DELAY AND FULL COMPLETION OF PHASE 3 WORK FOR PART 1 AND PART 2 NOT BE ACHIEVABLE, THE CONTRACTOR MAY IMPLEMENT A CROSSOVER NEAR THE SOUTHERN LIMIT OF PART 1 AT THE APPROVAL OF THE ENGINEER. THE CROSSOVER WILL RETURN NORTHBOUND TRAFFIC FROM PHASE 3 TO THE COMPLETED NORTHBOUND PAVEMENT. SEE PART 1 FOR DETAILS.

PHASE 4:

AT THE CONCLUSION OF THE 2025 WINTER PHASE, COMPLETE ANY REMAINING FULL DEPTH RECONSTRUCTION WORK. THE REMAINING EXISTING I-71 PAVEMENT THAT IS TO BE RESURFACED (OUTSIDE THE FULL DEPTH LIMITS) SHALL BE MILLED TO THE DEPTH SPECIFIED IN THE PLANS. THE FINAL WEARING COURSE OF BOTH NEWLY CONSTRUCTED AND EXISTING MILLED PAVEMENTS SHALL THEN BE INSTALLED. ONCE COMPLETED, FINAL PAVEMENT MARKINGS SHALL BE APPLIED PER THE TRAFFIC CONTROL PLANS. THIS WORK SHALL BE COMPLETED BY UTILIZING ODOT SCD MT-97.11. IN ADDITION TO THIS WORK, THE MEDIAN CABLE BARRIER SHALL BE INSTALLED PER THE ROADWAY PLANS AND TEMPORARY PAVEMENT SHALL BE REMOVED BY UTILIZING ODOT SCD MT-95.45 EXCEPT DRUMS MAY BE USED IN THE PLACE OF PCB AS LONG AS DROP-OFF REQUIREMENTS ARE MET (PER ODOT SCD MT-101.90).

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY IN ORDER TO COMPLETE THIS WORK:

ITEM 614 - WORK ZONE EDGE LINE, WHITE, 6", CLASS III, 642 PAINT - 6.10 MILES
ITEM 614 - WORK ZONE EDGE LINE, YELLOW, 6", CLASS III, 642 PAINT - 6.10 MILES
ITEM 614 - WORK ZONE LANE LINE, 6" , CLASS III, 642 PAINT - 12.20 MILES

OVERHEAD STRUCTURE CONSTRUCTION:

OVERHEAD BRIDGE CONSTRUCTION SHALL OCCUR AT ANY TIME DURING THE PROJECT. SIDE ROADS SHALL BE CLOSED AND DETOURED AS SHOWN IN THE PLANS. THE CONTRACTOR SHALL COORDINATE MAINTENANCE OF TRAFFIC NEEDS ALONG I-71 WITH THE RESPECTIVE PHASE OF I-71 MAINTENANCE OF TRAFFIC.

MAINTENANCE OF TRAFFIC GENERAL NOTES

MAD-71-4.56
MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 2/12/2023 TIME: 12:04:44 AM USER: mcornett
P:_OHDOT_Worksets\107630\400-Engineering\MOT\Sheets\107630_MN206.dgn

DESIGN AGENCY
E.L. ROBINSON ENGINEERING
1468 West 9th St. Suite 800 Cleveland, Ohio
950 Goodale Blvd. Suite 180 Grandview Heights, Ohio
DESIGNER TDP
REVIEWER MJC 04/26/22
PROJECT ID 107630

SHEET NUM.										PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
287	312	313								08/IMS/11	09/IMS/10						
																STRUCTURE OVER 20 FOOT SPAN (MAD-71-0631R) CONT.	
153										105	48	516	13600	153	SF	1" PREFORMED EXPANSION JOINT FILLER	
392										267	125	518	21200	392	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
362										247	115	518	40000	362	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
68										47	21	611	70001	68	FT	CONDUIT, TYPE A, PRECAST REINFORCED CONCRETE THREE SIDED FLAT TOPPED CULVERT, AS PER PLAN (33'-4" SPAN X 10'-0" RISE)	285
4										3	1	623	38501	4	EACH	MONUMENT ASSEMBLY, TYPE C, AS PER PLAN	286
																STRUCTURE OVER 20 FOOT SPAN (MAD-71-0668L)	
	LS									LS	LS	202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	310, 314, 315, 317-320
	247									168	79	202	22900	247	SY	APPROACH SLAB REMOVED	
	LS									LS	LS	503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	310, 317
	624									425	199	503	21100	624	CY	UNCLASSIFIED EXCAVATION	
	1,337									910	427	504	11101	1,337	SF	STEEL SHEET PILING LEFT IN PLACE, AS PER PLAN	317
	LS									LS	LS	505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION	
	3,100									2,108	992	507	00200	3,100	FT	STEEL PILES HP12X53, FURNISHED	
	2,780									1,891	889	507	00250	2,780	FT	STEEL PILES HP12X53, DRIVEN	
	112,592									76,563	36,029	509	10000	112,592	LB	EPOXY COATED STEEL REINFORCEMENT	
	38,262									26,019	12,243	509	10001	38,262	LB	EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN	331, 344
	6,711									4,564	2,147	509	30020	6,711	FT	NO. 4 DEFORMED GFRP REINFORCEMENT	
	335									228	107	511	34446	335	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK	
	66									45	21	511	34451	66	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN	353
	159									109	50	511	40513	159	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS, AS PER PLAN	331
	140									96	44	511	43512	140	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING	
	134									92	42	511	46512	134	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	
	1,090									742	348	512	10100	1,090	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
	30									21	9	512	33000	30	SY	TYPE 2 WATERPROOFING	
	222,000									150,960	71,040	513	10241	222,000	LB	STRUCTURAL STEEL MEMBERS, LEVEL 2, AS PER PLAN	345
	8,120									4,102	1958	513	20000	8,120	EACH	WELDED STUD SHEAR CONNECTORS	
	970									660	310	514	00061	970	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT, AS PER PLAN	338
	970									660	310	514	00067	970	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT, AS PER PLAN	338
	114									78	36	516	10010	114	FT	ARMORLESS PREFORMED JOINT SEAL	
	100									68	32	516	13200	100	SF	½" PREFORMED EXPANSION JOINT FILLER	
	117									80	37	516	13600	117	SF	1" PREFORMED EXPANSION JOINT FILLER	
	45									31	14	516	13900	45	SF	2" PREFORMED EXPANSION JOINT FILLER	
	138									94	44	516	14014	138	FT	INTEGRAL ABUTMENT EXPANSION JOINT SEAL	
	16									11	5	516	44100	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (11.5"x17"x2.049")	
	16									11	5	516	44101	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (10"x14"x2.499" W/LOAD PLATE ASSEMBLY)	335
	10									7	3	518	12301	10	EACH	SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN	344, 345
	117									80	37	518	21200	117	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
	164									112	52	518	40000	164	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
	80									55	25	518	40011	80	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN	324, 328
	2									2		523	20000	2	EACH	DYNAMIC LOAD TESTING	
	330									225	105	526	25011	330	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15"), AS PER PLAN	353
	114									78	36	526	90031	114	FT	TYPE C INSTALLATION, AS PER PLAN	353
	283									193	90	601	32100	283	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
																STRUCTURE OVER 20 FOOT SPAN (MAD-71-0668R)	
		LS								LS	LS	202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	310, 314, 315, 317-320
		247								168	79	202	22900	247	SY	APPROACH SLAB REMOVED	
		LS								LS	LS	503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	310, 317
		633								431	202	503	21100	633	CY	UNCLASSIFIED EXCAVATION	
		LS								LS	LS	505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION	
		3,100								2,108	992	507	00200	3,100	FT	STEEL PILES HP12X53, FURNISHED	
		2,780								1,891	889	507	00250	2,780	FT	STEEL PILES HP12X53, DRIVEN	
		140,733								95,699	45,034	509	10000	140,733	LB	EPOXY COATED STEEL REINFORCEMENT	
		9,592								6,523	3,069	509	10001	9,592	LB	EPOXY COATED STEEL REINFORCEMENT, AS PER PLAN	333
		6,711								4,564	2,147	509	30020	6,711	FT	NO. 4 DEFORMED GFRP REINFORCEMENT	

GENERAL SUMMARY

MAD-71-4.56

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 2/12/2023 TIME: 10:46:19 PM USER: mconnett
P:_OHDOT_Worksets\107630\400-Engineering\Roadway\Sheets\107630_GG206.dgn

DESIGN AGENCY
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1468 West 9th St, Suite 800 Cleveland, Ohio
950 Goodale Blvd, Suite 180 Grandview Heights, Ohio

DESIGNER KRF
REVIEWER MJC 04/26/22
PROJECT ID 107630
SHEET P.59 TOTAL 458

SHEET NUM.								PART.				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
9	10	11	12	13	14	23	313	06/IMS/04	07/IMS/03	08/IMS/11	09/IMS/10						
																STRUCTURE OVER 20 FOOT SPAN (MAD-71-0668R) CONT.	
							335			228	107	511	34446	335	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK	
							66			45	21	511	34451	66	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN	353
							159			109	50	511	40513	159	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS, AS PER PLAN	333
							140			96	44	511	43512	140	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING	
							134			92	42	511	46512	134	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	
							1,090			742	348	512	10100	1,090	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
							20			14	6	512	33000	20	SY	TYPE 2 WATERPROOFING	
							222,000			150,960	71,040	513	10241	222,000	LB	STRUCTURAL STEEL MEMBERS, LEVEL 2, AS PER PLAN	345
							6,120			4,162	1,958	513	20000	6,120	EACH	WELDED STUD SHEAR CONNECTORS	
							970			660	310	514	00061	970	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT, AS PER PLAN	338
							970			660	310	514	00067	970	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT, AS PER PLAN	338
							114			78	36	516	10010	114	FT	ARMORLESS PREFORMED JOINT SEAL	
							100			68	32	516	13200	100	SF	½" PREFORMED EXPANSION JOINT FILLER	
							117			80	37	516	13600	117	SF	1" PREFORMED EXPANSION JOINT FILLER	
							45			31	14	516	13900	45	SF	2" PREFORMED EXPANSION JOINT FILLER	
							138			94	44	516	14014	138	FT	INTEGRAL ABUTMENT EXPANSION JOINT SEAL	
							16			11	5	516	44100	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (11.5"x17"x2.049" W/LOAD PLATE)	
							16			11	5	516	44101	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (10"x14"x2.499" W/LOAD PLATE ASSEMBLY)	335
							117			80	37	518	21200	117	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
							164			112	52	518	40000	164	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
							50			34	16	518	40011	50	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN	326, 330
							330			225	105	526	25011	330	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15"), AS PER PLAN	353
							114			78	36	526	90031	114	FT	TYPE C INSTALLATION, AS PER PLAN	353
							283			193	90	601	32100	283	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
																MAINTENANCE OF TRAFFIC	
						1,238		842	396			411	10000	1,238	CY	STABILIZED CRUSHED AGGREGATE	
				750				510	240			614	11110	750	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
			500					340	160			614	11630	500	FT	INCREASED BARRIER DELINEATION	
						275		187	88			SPECIAL	61412200	275	FT	WORK ZONE GUARDRAIL	13
					1	1		2				614	12380	2	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
								LS	LS			614	12420	LS		DETOUR SIGNING	
	21							15	6			614	12484	21	EACH	WORK ZONE INCREASED PENALTIES SIGN	
		5						4	1			614	12500	5	EACH	REPLACEMENT SIGN	
		150						102	48			614	12600	150	EACH	REPLACEMENT DRUM	
	1							1				614	12756	1	EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM	
		1,392			800			1,491	701			614	12801	2,192	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	11
			1,238					842	396			614	13310	1,238	EACH	BARRIER REFLECTOR, TYPE 1, (ONE WAY)	
		52						36	16			614	13312	52	EACH	BARRIER REFLECTOR, TYPE 2, (ONE WAY)	
		52	604					447	209			614	13350	656	EACH	OBJECT MARKER, ONE WAY	
			314					214	100			614	13360	314	EACH	OBJECT MARKER, TWO WAY	
		72						49	23			614	18601	72	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	11
						24.4		17	7.4			614	22056	24.4	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT	
						11.3		8	3.3			614	20056	11.3	MILE	WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	
					12.2			9	3.2			614	20560	12.2	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
					12.2			9	3.2			614	22360	12.2	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
						4,112		2,797	1,315			614	23110	4,112	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	
						1,115		759	356			614	24102	1,115	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT	
15								11	4			614	32658	15	EACH	WORK ZONE SPEED MEASUREMENT MARKING, CLASS I, 642 PAINT	
								LS	LS			615	10000	LS		ROADS FOR MAINTAINING TRAFFIC	
						11,892		8,087	3,805			615	20000	11,892	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	
						19,617		13,340	6,277			615	20001	19,617	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	9
	254							173	81			616	10000	254	MGAL	WATER	
						12.1		9	3.1			618	41000	12.1	MILE	RUMBLE STRIPES, EDGE LINE (ASPHALT CONCRETE)	
						45,382		30,860	14,522			622	41011	45,382	FT	PORTABLE BARRIER, 50", AS PER PLAN	14
						607		413	194			622	41110	607	FT	PORTABLE BARRIER, ANCHORED	
	152							104	48			808	18700	152	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
					40			28	12			829	00100	40	SNMT	WORK ZONE EGRESS WARNING SYSTEM	
																INCIDENTALS	
LS								LS	LS	LS	LS	614	11000	LS		MAINTAINING TRAFFIC	
								LS	LS	LS	LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
								LS	LS	LS	LS	624	10000	LS		MOBILIZATION	
												878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	

GENERAL SUMMARY

MAD-71-4.56

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 2/12/2023 TIME: 10:47:40 PM USER: mconnett
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DESIGN AGENCY
E.L. ROBINSON ENGINEERING
1468 West 9th St, Suite 800 Cleveland, Ohio
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DESIGNER KRF
REVIEWER MJC 04/26/22
PROJECT ID 107630
SHEET P.60 TOTAL 458

MADE BY: DTA/GA DATE: 10/6/2022
CHECKED BY: BCW/MRV DATE: 10/6/2022

ESTIMATED QUANTITIES - LEFT BRIDGE

STRUCTURAL FILE NUMBER: 4903332

ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIER	SUPER.	GEN.	REFERENCE SHEET NO.
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LUMP	4, 8, 9, 11, 12, 13, AND 14 OF 52
202	22900	247	SY	APPROACH SLAB REMOVED				247	
503	11101	LUMP		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN				LUMP	4 AND 11 OF 52
503	21100	624	CY	UNCLASSIFIED EXCAVATION	187	437			
504	11101	1,337	SF	STEEL SHEET PILING LEFT IN PLACE, AS PER PLAN (ELASTIC SECTION MODULUS = 18.1 CU IN/FT)				1,337	11 OF 52
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP	
507	00200	3,100	FT	STEEL PILES HP12X53, FURNISHED	900	2,200			
507	00250	2,780	FT	STEEL PILES HP12X53, DRIVEN	800	1,980			
509	10000	112,592	LB	EPOXY COATED REINFORCING STEEL	14,934	28,336	69,322		
509	10001	38,262	LB	EPOXY COATED REINFORCING STEEL, AS PER PLAN		9,592	28,670		25 AND 38 OF 52
509	30020	6,711	FT	NO. 4 GFRP DEFORMED BARS			6,711		
511	34446	335	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			335		
511	34451	66	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN			66		47 OF 52
511	40513	159	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS, AS PER PLAN		159			25 OF 52
511	43512	140	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING	140				
511	46512	134	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING		134			
512	10100	1,090	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	86	501	409	94	
512	33000	30	SY	TYPE 2 WATERPROOFING	30				
513	10241	222,000	LB	STRUCTURAL STEEL MEMBERS, LEVEL 2, AS PER PLAN			222,000		39 OF 52
513	20000	6,120	EACH	WELDED STUD SHEAR CONNECTORS			6,120		
514	00061	970	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT, AS PER PLAN			970		32 OF 52
514	00067	970	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT, AS PER PLAN			970		32 OF 52
516	10010	114	FT	ARMORLESS PREFORMED JOINT SEAL				114	
516	13200	100	SF	1/2" PREFORMED EXPANSION JOINT FILLER	100				
516	13600	117	SF	1" PREFORMED EXPANSION JOINT FILLER	100		17		
516	13900	45	SF	2" PREFORMED EXPANSION JOINT FILLER	45				
516	14014	138	FT	INTEGRAL ABUTMENT EXPANSION JOINT SEAL	138				
516	44100	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (11.5"x17"x2.049")		16			
516	44101	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (10"x14"x2.499" W/LOAD PLATE ASSEMBLY)	16				29 OF 52
518	12301	10	EACH	SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN			10		38 AND 39 OF 52
518	21200	117	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	117				
518	40000	164	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	164				
518	40011	80	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN	80				18 AND 22 OF 52
523	20000	2	EACH	DYNAMIC LOAD TESTING				2	
526	25011	330	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15"), AS PER PLAN				330	47 OF 52
526	90031	114	FT	TYPE C INSTALLATION, AS PER PLAN				114	47 OF 52
601	32100	283	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	283				

ESTIMATED QUANTITIES - LEFT BRIDGE
BRIDGE NO. MAD-00071-06.680L&R
IR 71 OVER BRADFORD CREEK

SFN 4903332
SFN 4903367

DESIGN AGENCY
E.L. ROBINSON ENGINEERING
1468 West 9th St. Suite 800
Cleveland, Ohio
550 Goodale Blvd. Suite 180
Grandview Heights, Ohio

DESIGNER	CHECKER
GA	MRV

REVIEWER
DFT 04/05/22

PROJECT ID
107630

SUBSET	TOTAL
6	52

SHEET	TOTAL
P.312	458

MAD-71-4.56

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 2/12/2023 TIME: 5:44:16 PM USER: tshatton
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MADE BY: DTA/GA DATE: 10/6/2022
CHECKED BY: BCW/MRV DATE: 10/6/2022

ESTIMATED QUANTITIES - RIGHT BRIDGE

STRUCTURAL FILE NUMBER: 4903367

ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIER	SUPER.	GEN.	REFERENCE SHEET NO.
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LUMP	4, 8, 9, 11, 12, 13, AND 14 OF 52
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503	11101	LUMP		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN				LUMP	4 AND 11 OF 52
503	21100	633	CY	UNCLASSIFIED EXCAVATION	196	437			
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP	
507	00200	3,100	FT	STEEL PILES HP12X53, FURNISHED	900	2,200			
507	00250	2,780	FT	STEEL PILES HP12X53, DRIVEN	800	1,980			
509	10000	140,733	LB	EPOXY COATED REINFORCING STEEL	14,924	28,078	97,731		
509	10001	9,592	LB	EPOXY COATED REINFORCING STEEL, AS PER PLAN		9,592			27 OF 52
509	30020	6,711	FT	NO. 4 GFRP DEFORMED BARS			6,711		
511	34446	335	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			335		
511	34451	66	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN			66		47 OF 52
511	40513	159	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS, AS PER PLAN		159			27 OF 52
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512	33000	20	SY	TYPE 2 WATERPROOFING	20				
513	10241	222,000	LB	STRUCTURAL STEEL MEMBERS, LEVEL 2, AS PER PLAN			222,000		39 OF 52
513	20000	6,120	EACH	WELDED STUD SHEAR CONNECTORS			6,120		
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516	44101	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (10"x14"x2.499" W/LOAD PLATE ASSEMBLY)	16				29 OF 52
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518	40011	50	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN	50				20 AND 24 OF 52
526	25011	330	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15"), AS PER PLAN				330	47 OF 52
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DESIGN AGENCY
E.L. ROBINSON ENGINEERING
1468 West 9th St, Suite 800 Cleveland, Ohio
950 Goodale Blvd, Suite 180 Grandview Heights, Ohio
DESIGNER GA | CHECKER MRV
REVIEWER DFT 04/05/22
PROJECT ID 107630
SUBSET 7 | TOTAL 52
SHEET P.313 | TOTAL 458

MAD-71-4.56
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