GENERAL NOTES:

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFERENCE SHALL BE MADE TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

GSD-1-19	DATED	1/15/21
BR-2-15	DATED	1/21/22
RB-1-55	DATED	7/19/13
VPF-1-90	REVISED	7/20/18
EXJ-4-87	REVISED	1/19/18

DESIGN SPECIFICATIONS:

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

DESIGN LOADING:

PEDESTRIAN LIVE LOAD: 90 POUNDS PER SQUARE FOOT.

DESIGN DATA:

CONCRETE, QC/QA CLASS QC2 - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)
CONCRETE, QC/QA CLASS QC2 - COMPRESSIVE STRENGTH 4500 PSI (PARAPET)
CONCRETE, CLASS QC1 - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)
REINFORCING STEEL - ASTM A615 OR A996, GRADE 60, MINIMUM YIELD STRENGTH 60000 PSI
STRUCTURAL STEEL - ALL NEW STEEL, ASTM A709 GRADE 50, YIELD STRENGTH 50000 PSI.
EXISTING STEEL, ASTM A570, YIELD STRENGTH 33000 PSI

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL
2½" CONCRETE COVER
2½" MICRO-SILICA MODIFIED CONCRETE OVERLAY (OVER EXISTING)

MONOLITHIC WEARING SURFACE:

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

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.

EXISTING BRIDGE PLANS:

EXISTING BRIDGE PLANS CAN BE VIEWED AT ODOT DISTRICT 8 OFFICE.

PROPOSED WORK:

THE FOLLOWING IS A GENERAL SUMMARY OF THE PROPOSED WORK FOR THIS STRUCTURE; INCIDENTAL ITEMS ARE NOT INCLUDED.

1. WIDEN EXISTING ABUTMENTS TO ACCOMODATE A 7'-0" PEDESTRIAN WALKWAY ON THE WEST SIDE.
2. ADD NEW CAP AND COLUMN PIERS TO ACCOMODATE ONE ADDITIONAL BEAM LINE.
3. ADD NEW ROCKER AND BOLSTER BEARINGS TO SUPPORT NEW BEAM LINE.
4. ADD ONE CONTINUOUS STEEL BEAM LINE. PAINT NEW STRUCTURAL STEEL THE SAME COLOR AS THE EXISTING STEEL.
5. DOWEL INTO EXISTING DECK ON THE WEST SIDE AND WIDEN DECK FOR NEW PEDESTRIAN WALKWAY.
6. INSTALL NEW BRIDGE SIDEWALK RAILING AND 12' CURVED VANDAL PROTECTION FENCE.
7. REMOVE EXISTING VANDAL PROTECTION FENCE ON THE WEST SIDE OF THE BRIDGE.
8. SEAL ABUTMENTS, NEW PIER COLUMNS, NEW PIER CAP EXTENSION, NEW BRIDGE PARAPET, EDGE OF DECK WITH AN EPOXY-URETHANE.
9. SEAL AND SIDEWALK WITH NON-EPOXY SEALER.

INSPECTION OF EXISTING STRUCTURAL STEEL:

THE ENGINEER WILL VISUALLY INSPECT ALL EXISTING BUTT-WELDED SPLICES AND/OR TOP FLANGE MOMENT 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 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, BRIDGE DECK 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.

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

A. THIS WORK CONSISTS OF THE REMOVAL OF PORTIONS OF THE CONCRETE PIER CAPS, ABUTMENT CURTAIN WALLS, AND VANDAL PROTECTION FENCE ON THE WIDENED SIDE OF THE BRIDGE. 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 CMS 501.05. ANY STRUCTURAL MEMBERS THAT ARE DAMAGED DURING CONCRETE REMOVAL WILL BE SPOT PAINTED THE SAME COLOR AS THE EXISTING AT NO COST TO THE PROJECT.

B. 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 REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

C. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL, 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 REINFORCING STEEL 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 NEW CONCRETE.

D. 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.

ITEM 601 - CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN:

THE THICKNESS FOR CRUSHED AGGREGATE SLOPE PROTECTION SHALL BE 1'-0" MINIMUM. S1, S15
THE EXISTING STONE MATERIAL SHALL BE REUSED AND PLACED AS SHOWN ON SHEET ACCORDING TO 601.06 AND PLACED ONLY IN AREAS WHERE NEEDED OR AS DIRECTED BY THE ENGINEER. ADDITIONAL MATERIAL AND FILTER FABRIC WILL BE NECESSARY. THE ESTIMATED QUANTITY IS PER SQUARE YARD AND IS CALCULATED BASED ON AN ESTIMATED REPAIR AREA OF 48 SQUARE YARDS.

PILE DRIVING:

THE MINIMUM RATED ENERGY OF THE HAMMER USED TO INSTALL THE PILES SHALL BE (1) FOOT-POUNDS. ENSURE THAT STRESSES IN THE PILES DURING DRIVING DO NOT EXCEED (2) POUNDS PER SQUARE INCH.

DECK PLACEMENT 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". A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 IN. A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

THE DESIGN SHOWN ON THE PLANS FOR TEMPORARY SUPPORT OF EXCAVATION IS ONE REPRESENTATIVE DESIGN THAT MAY BE USED TO CONSTRUCT THE PROJECT. THE CONTRACTOR MAY CONSTRUCT THE DESIGN SHOWN ON THE PLANS OR PREPARE AN ALTERNATE DESIGN TO SUPPORT THE SIDES OF EXCAVATION. IF CONSTRUCTING AN ALTERNATE DESIGN FOR TEMPORARY SUPPORT OF EXCAVATION, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH C&MS 501.05. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION AT THE CONTRACT LUMP SUM PRICE FOR COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN. THE DEPARTMENT WILL NOT MAKE ADDITIONAL PAYMENT FOR PROVIDING AN ALTERNATE DESIGN.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE):

THE ULTIMATE BEARING VALUE IS 59.0 KIPS PER PILE FOR THE REAR ABUTMENT AND FORWARD ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 146 KIPS PER PILE FOR THE PIER 1, PIER 2 AND PIER 3 PILES.

REAR AND FORWARD ABUTMENT, 12" DIA. CIP PILES
10 PILES 25 FEET LONG, ORDER LENGTH PER ABUTMENT
1 DYNAMIC LOAD TESTING FOR REAR ABUTMENT

PIER 1 AND 3, 12" DIA. CIP PILES
8 PILES 20 FEET LONG, ORDER LENGTH PER PIER

PIER 2, 12" DIA. CIP PILES
4 PILES 15 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING FOR PIER 2

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

ALL REQUIREMENTS OF 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 SUPPLEMENT 1078. SUBMIT A WRITTEN LETTER OF MATERIAL ACCEPTANCE, 501.06, TO THE ENGINEER. PROVIDE SHOP DRAWINGS ACCORDING TO 513.06 OR SUPPLY THE ENGINEER WITH "AS-BUILT" DRAWINGS MEETING 513.06 AFTER COMPLETION OF FIELD FABRICATION. THE ENGINEER WILL REVIEW THE SUBMITTED DRAWINGS FOR CONCURRENCE WITH THE FINAL AS-BUILT CONDITION. IF NECESSARY, THE ENGINEER MAY CONTACT THE OFFICE OF STRUCTURAL ENGINEERING FOR TECHNICAL ASSISTANCE. IF THE ENGINEER IS SATISFIED WITH THE "AS-BUILT" DRAWINGS AND THE DELIVERED MATERIALS, SUPPLY A COPY OF THE DRAWINGS, STAMPED AND DATED, ALONG WITH MICROFILM, TO THE OFFICE OF STRUCTURAL ENGINEERING FOR RECORD PURPOSES.

THE FOLLOWING MEMBERS ARE INCLUDED IN THIS ITEM: PROPOSED EXPANSION JOINT MOUNTING ARMOR, AND PROPOSED END CROSS FRAMES, AND INTERMEDIATE CROSSFRAMES.

THE PROPOSED STRUCTURAL STEEL WILL BE PAINTED THE SAME COLOR AS THE EXISTING STRUCTURAL STEEL.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN:

PRIOR TO THE SURFACE CLEANING SPECIFIED IN C&MS 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 WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

THE PATCH IS BEING MADE TO SMOOTH THE SURFACE OF THE BARRIER. EVEN THOUGH THE EXISTING CONCRETE IS NOT DISINTEGRATED, REMOVE THE FACE OF THE EXISTING BARRIER TO BELOW THE EXISTING REINFORCING STEEL (4" MIN.). REINFORCE WITH WIRE AND BLAST CLEAN PER ITEM 519 BEFORE POURING THE CLASS QC5 CONCRETE.

DECK SLAB PAY QUANTITIES:

THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON A CONSTANT DEPTH SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH BEAM HAUNCH. THE ESTIMATE ASSUMES A CONSTANT BEAM HAUNCH DEPTH OF 2" AND A HAUNCH WIDTH EQUAL TO THE TOP FLANGE WIDTH. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT FINISHED GRADE.

THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE BEAM FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.23.

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

THIS WORK CONSISTS OF TEMPORARILY SUPPORTING THE EXISTING STRUCTURES TO CUT THE PIER CAPS UNDER THE EXISTING BEARINGS IN ORDER TO EXTEND THE CAPS AS SHOWN IN THESE PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.

IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER 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. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH CMS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER 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.

STANDARD ABBREVIATIONS:

C/C	-	CENTER TO CENTER
C.J.	-	CONSTRUCTION JOINT
CPP.	-	CORRUGATED PLASTIC PIPE
CLR.	-	CLEAR
DIA.	-	DIAMETER
E.F.	-	EACH FACE
EQ.	-	EQUAL
EXIST.	-	EXISTING
F.F.	-	FAR FACE
F.A.	-	FORWARD ABUTMENT
MAX.	-	MAXIMUM
MIN.	-	MINIMUM
N.F.	-	NEAR FACE
O.D.	-	OUTSIDE DIAMETER
PEJF	-	PREFORMED EXPANSION JOINT FILLER
R.A.	-	REAR ABUTMENT
SPA.	-	SPACING/SPACES
TYP.	-	TYPICAL

DESIGN AGENCY
PRIME AE
7701 Creek Road Suite 270
Cincinnati, Ohio 45242

DESIGNED	DRAWN	REVIEWED	DATE
JAT	JAT	SAN	7/25/21
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KDC		3107957	

GENERAL NOTES
BRIDGE NO. HAM-74-0230
C.R. 23 OVER I-74

HAM-C.R. 23-1.42
PID. 113712

S2 / S15

56
66

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ESTIMATED QUANTITIES

ITEM	ITEM EXT.	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTR.	GENERAL	TOTAL	PART. 01/SAF/OT	PART. 02/SAF/OT	SHEET REF.
								CALC. HM	DATE 01/28/22	CHECKED BTJ	DATE 01/31/22
202	11203	LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS			LS	S2/S15
503	11101	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN				LS			LS	S2/S15
503	21100	CY	UNCLASSIFIED EXCAVATION	42	73			115		115	
507	00500	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	200	160			360		360	
507	00550	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	250	220			470		470	
509	10000	LB	EPOXY COATED REINFORCING STEEL	3904	8185	23221		35310		35310	
510	10000	EA	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	50	42	914		1006		1006	
511	34446	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			57		57		57	
511	34450	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			9		9		9	
511	44012	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		24			24		24	
511	44112	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	19				19		19	
511	46512	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	13	20			33		33	
512	10050	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)			175		175		175	
512	10100	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	46	76	170		292		292	
512	33000	SY	TYPE 2 WATERPROOFING	6				6		6	
513	10201	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN			9586		9586		9586	S2/S15
513	10240	LB	STRUCTURAL STEEL MEMBERS, LEVEL 2			35024		35024		35024	
513	20000	EACH	WELDED STUD SHEAR CONNECTORS			843		843		843	
514	00050	SF	SURFACE PREPERATION OF EXISTING STRUCTURAL STEEL			30		30		30	
514	00056	SF	FIELD PAINTING STRUCTURAL STEEL, PRIME COAT			30		30		30	
514	00060	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			2900		2900		2900	
514	00067	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			2900		2900		2900	
514	00504	MNHR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			1		1		1	
514	10000	EACH	FINAL INSPECTION REPAIR			3		3		3	
516	11211	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN	17				17		17	S10/S15
516	13600	SF	1" PREFORMED EXPANSION JOINT FILLER	20		25		45		45	
516	46000	EACH	BEARING DEVICE, BOLSTER		1			1		1	
516	46200	EACH	BEARING DEVICE, ROCKER	2	2			4		4	
516	47001	LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN				LS			LS	
517	75122	FT	RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING AND VANDAL PROTECTION FENCE)			238		238		238	
518	21200	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	14				14		14	
518	40000	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	23				23		23	
518	40010	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	31				31		31	
519	60000	LS	SPECIAL - PATCHING CONCRETE STRUCTURE			LS				LS	S2/S15
523	20000	EACH	DYNAMIC LOAD TESTING	1	1			2		2	
601	20000	SY	CRUSHED AGGREGATE SLOPE PROTECTION	48				48		48	
607	39930	FT	VANDAL PROTECTION FENCE, 12' CURVED, COATED FABRIC			224		224		224	

DESIGN AGENCY
PRIME AE
4701 Creek Road Suite 270
Cincinnati Ohio 45242

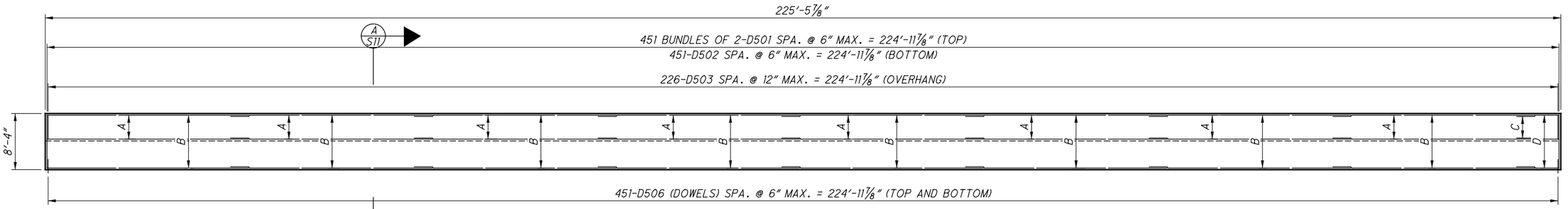
DESIGNED HM
DRAWN HM
CHECKED BTJ
REVIEWED SAN
DATE 7/25/21
REVISED
STRUCTURE FILE NUMBER 3107957

ESTIMATED QUANTITIES
BRIDGE NO. HAM-74-0230
C.R. 23 OVER I-74

HAM-C.R. 23-1.42
PID: 113712

S3/S15

57
66



DECK PLAN

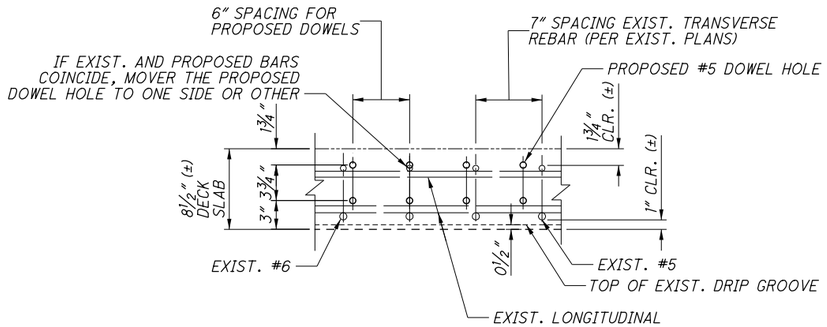
LEGEND:

A - 6-D504 SPA. @ 10¼" MAX. = 3'-6¾" (OVERHANG)

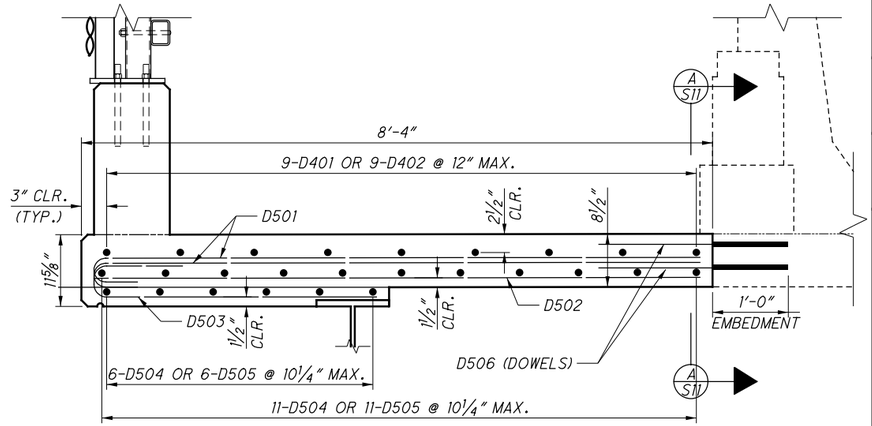
B - 9-D401 SPA. @ 12" MAX. = 7'-10" (TOP)
11-D504 SPA. @ 10¼" MAX. = 7'-10" (BOTTOM)

C - 6-D505 SPA. @ 10¼" MAX. = 3'-6¾" (OVERHANG)

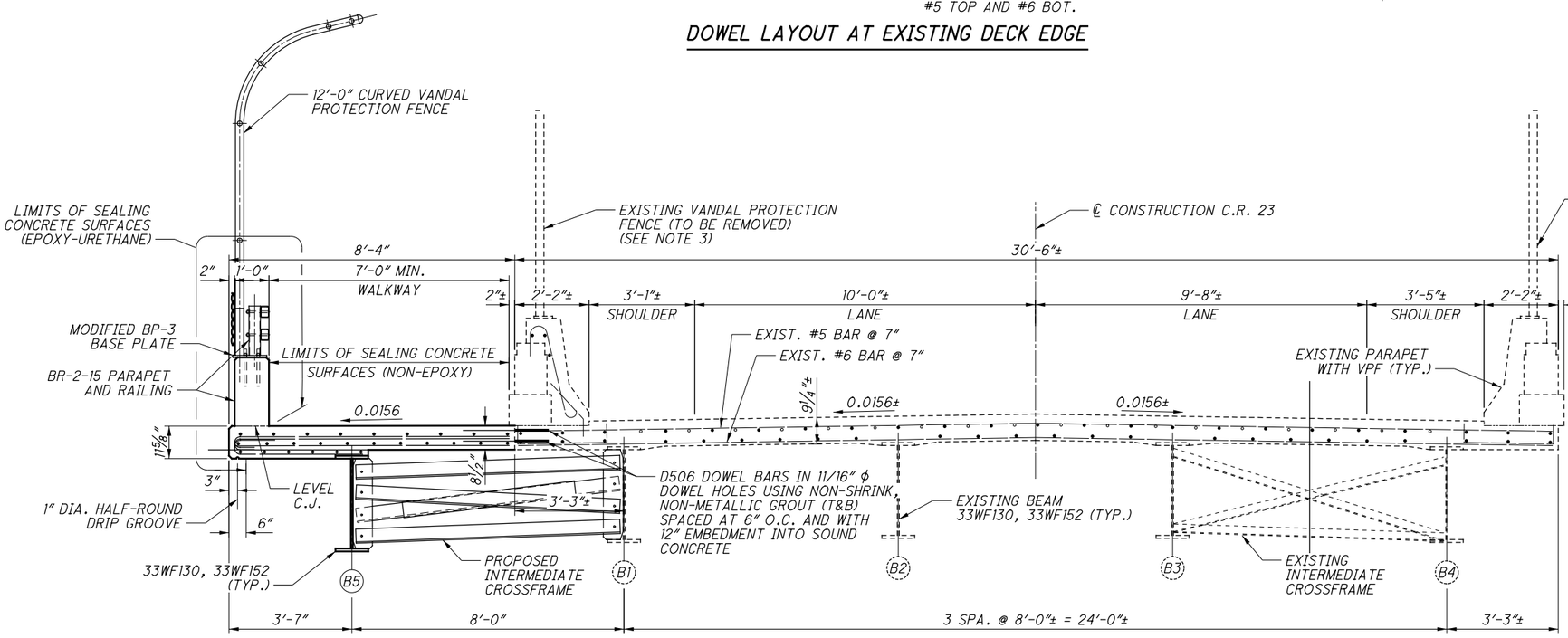
D - 9-D402 SPA. @ 12" MAX. = 7'-10" (TOP)
11-D505 SPA. @ 10¼" MAX. = 7'-10" (BOTTOM)



DOWEL LAYOUT AT EXISTING DECK EDGE



A S11 **SECTION**
(PARAPET REINFORCING NOT SHOWN)



TRANSVERSE SECTION

(RAILING REINFORCING NOT SHOWN)

MINIMUM DECK LAP LENGTHS	
BAR SIZE	LAP LENGTH
#4	2'-4"
#5	2'-10"

NOTES:

1. FOR CROSS-FRAME DETAILS AND NOTES, SEE SHEET S10/S15.
2. FOR FINAL DECK AND SCREED ELEVATIONS AND HANCH DETAILS, SEE SHEET S12/S15.
3. REMOVE EXISTING VANDAL PROTECTION FENCE AFTER INSTALLATION OF NEW VANDAL PROTECTION FENCE. THIS WORK SHALL BE PAID FOR UNDER ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN.
4. DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH BEAM/GIRDER HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 2 INCHES AND A HAUNCH WIDTH EQUAL TO THE TOP FLANGE WIDTH. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE BEAM/GIRDER, FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.23.

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TRANSVERSE SECTION
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S11 / S15

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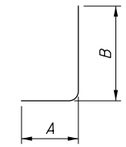
MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
ABUTMENTS											
A501	44	6'-10"	314	STR							
A502	12	14'-0"	175	STR							
A503	24	8'-3"	207	STR							
A504	4	3'-7"	15	13	1'-0"	1'-2"	1'-2"	1'-0"			
A505	50	3'-10"	200	STR							
A601	16	7'-11"	190	2	3'-8"	11"	3'-8"				
A602	28	6'-7"	277	STR							
A603	16	8'-3"	198	2	2'-10"	2'-11"	2'-10"				
A604	28	6'-8"	280	1	1'-0"	5'-10"					
A605	24	1'-6"	54	STR							
A606	20	11'-8"	350	2	5'-6"	1'-0"	5'-6"				
A607	40	8'-7"	516	1	1'-0"	7'-9"					
	SUB-TOTAL		2,776								
FOOTINGS											
F601	20	5'-3"	158	STR							
F602	16	10'-3"	246	STR							
F603	28	11'-6"	484	2	2'-0"	7'-10"	2'-0"				
F604	24	6'-8"	240	2	2'-0"	3'-0"	2'-0"				
F605	36	11'-2"	604	2	2'-6"	6'-6"	2'-6"				
F606	32	7'-6"	360	STR							
F607	26	10'-2"	397	2	2'-6"	5'-6"	2'-6"				
F608	14	11'-0"	231	STR							
	SUB-TOTAL		2,720								
PARAPETS											
R501	4	4'-2"	17	1	10"	3'-5"					
R502	4	6'-1"	25	37	3'-5"	2'-11"	7⅜"				
R503	2	6'-3"	13	19	4'-10"	1'-4"	0'-5"				
R504	22	12'-9"	293	2	6'-2"	8"	6'-2"				
R505	316	7'-10"	2582	30	1'-6"	8"	2'-5"	2'-3"			
R506	24	9'-7"	240	2	4'-7"	0'-8"	4'-7"				
R507	4	9'-3"	39	19	7'-10"	1'-4"	0'-5"				
R508	8	12'-3"	102	19	10'-10"	1'-4"	0'-5"				
R509	8	2'-8"	22	STR							
R510	20	5'-4"	111	STR							
R511	32	30'-0"	1001	STR							
R512	8	2'-11"	24	STR							
R513	8	5'-2"	43	STR							
R514	128	6'-2"	823	STR							
R515	4	7'-3"	30	STR							
R516	4	4'-7"	19	STR							
R517	2	6'-2"	13	STR							
R518	4	9'-2"	38	STR							
R519	8	12'-2"	102	STR							
	SUB-TOTAL		*	* INCLUDED WITH ITEM 517 FOR PAYMENT							
BARRIER EXTENSION PARAPETS											
R520	12	19'-8"	246	STR							
R521	4	17'-11"	75	STR							
R522	4	8'-3"	34	STR							
R523	4	19'-8"	82	STR							
	4 SR	2'-7"				1'-3"					
R524	OF	TO	219	1	1'-6"	TO					0'-1 ½"
	15	4'-4"				3'-0"					
R525	12	2'-7"	32	16	2'-0"						
	SUB-TOTAL		688								

MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC
PIERS											
SP401	2	392'-10"	525	27	0'-4"	2'-6"	15'-11"				
SP402	1	439'-3"	293	27	0'-4"	2'-6"	17'-11"				
P501	12	7'-11"	99	STR							
P502	42	8'-3"	361	2	2'-11"	2'-8"	2'-11"				
P503	48	9'-5"	472	38	2'-8"						
P504	12	4'-7"	57	STR							
P505	12	12'-2"	152	24	2'-8"	4'-0"				2'-8"	
P801	30	11'-4"	908	1	2'-10"	8'-9"					
P802	30	6'-10"	547	STR							
P901	20	20'-2"	1371	16	18'-11"						
P902	30	10'-4"	1054	1	1'-7"	9'-0"					
P903	10	22'-2"	754	16	20'-11"						
	SUB-TOTAL		6,593								
DECK											
D401	72	30'-0"	1443	STR							
D402	9	4'-0"	24	STR							
D501	902	8'-7"	8075	16	8'-0"						
D502	451	8'-0"	3763	STR							
D503	226	4'-4"	1021	16	3'-9"						
D504	136	30'-0"	4255	STR							
D505	17	10'-8"	189	STR							
D506	902	4'-0"	3763	STR							
	SUB-TOTAL		22,533								



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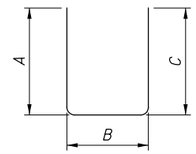

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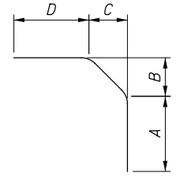


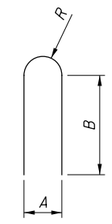
TYPE-13

NOTES:

1. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
2. BAR SIZE: THE BAR SIZE IS INDICATED IN THE BAR MARK. THE MARK BEGINS WITH ONE OR TWO LETTERS THAT IDENTIFY THE BAR LOCATION. THE NEXT ONE OR TWO DIGITS INDICATE THE BAR SIZE, AND THE REMAINING TWO DIGITS ARE THE SEQUENCE NUMBER.

   EXAMPLE: S501

   S = SUPERSTRUCTURE BAR
   5 = #5 BAR
   01 = BAR SEQUENCE NUMBER 1
3. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS NOTED OTHERWISE.
4. "STR" IN THE BAR TYPE COLUMN INDICATES A STRAIGHT BAR.
5. INC INDICATES THE LENGTH INCREMENT FOR SERIES BARS.
6. SR INDICATES A SERIES OF BARS.



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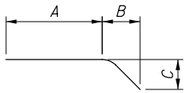

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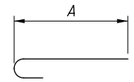

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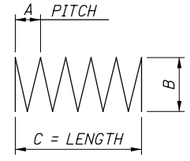

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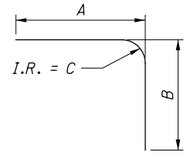

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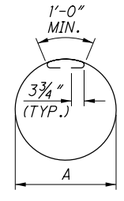
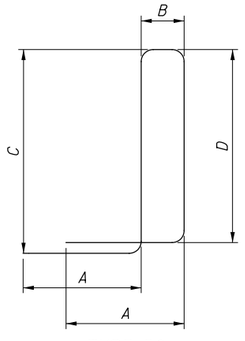


TYPE-38



TYPE-30

DESIGN AGENCY
PRIME AE
4701 Creek Road Suite 270
Cincinnati Ohio 45242

REVIEWED SAN DATE 7/25/21
STRUCTURE FILE NUMBER 3107957

DRAWN EJS REVISED
DESIGNED EJS CHECKED HM

REINFORCING STEEL LIST
BRIDGE NO. HAM-74-0230
C.R. 23 OVER I-74

HAM-C.R. 23-1.42
PID: 113712

S15 / S15

69
66

X:\Projects\2019\20H02TD-19528 JMA West Road Bridge Study\Design\structures\sheets\074_0230_SL001.dgn 2/15/2023 3:08:19 PM adesimone