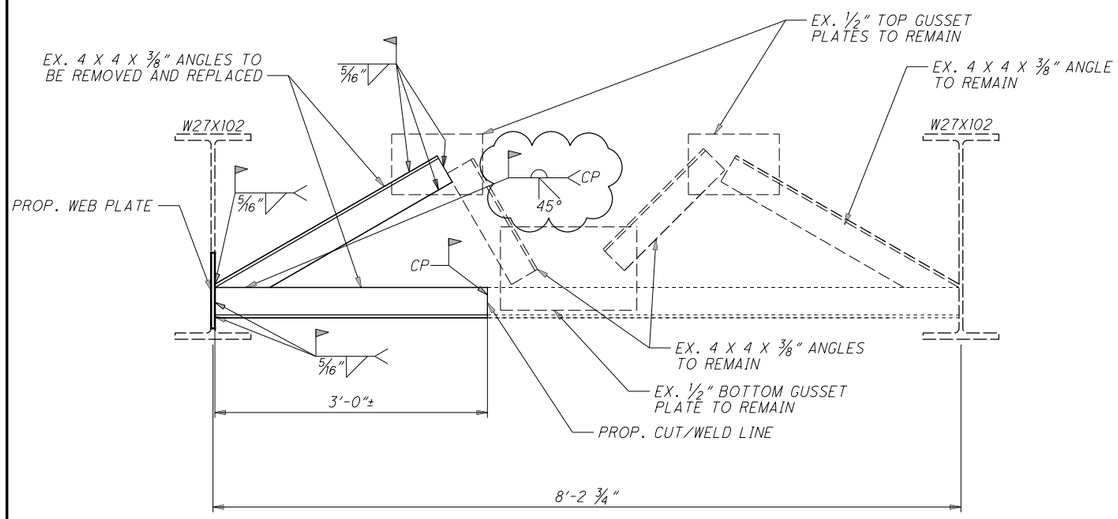
SHEET NUM.										PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
6	9	10	11	12	15	17	18	20	21	01/STR/BR	02/NHS/BR						
																EROSION CONTROL	
										3,000	4,000	832	30000	7,000	EACH	EROSION CONTROL	
																TRAFFIC CONTROL	
								0.14		0.14		642	00104	0.14	MILE	EDGE LINE, 6", TYPE 1	
		0.28						0.3		0.58		642	00300	0.58	MILE	CENTER LINE, TYPE 1	
																STRUCTURE REPAIR (ASD-89-4.31)	
	LS									LS		202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	4
	53									53		513	10201	53	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN	4
	2									2		513	95030	2	EACH	STRUCTURAL STEEL, MISC.: DRILLING STRUCTURAL STEEL, GRINDING, AND NDT	4
	LS									LS		516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	4
																STRUCTURE REPAIR (ERI-2-24.03R)	
			7								7	516	31000	7	FT	JOINT SEALER	
			2								2	519	11100	2	SF	PATCHING CONCRETE STRUCTURE	
			8								8	SPECIAL	51912510	8	SY	PATCHING CONCRETE BRIDGE DECK, TYPE B	5
																STRUCTURE REPAIR (ERI-13-3.67)	
				LS						LS		202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	4
				12.5						12.5		202	38603	12.5	FT	BRIDGE RAILING REMOVED FOR REUSE, AS PER PLAN	4
				71						71		513	10201	71	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN	4
				LS						LS		513	95020	LS		STRUCTURAL STEEL, MISC.: CROSSFRAME REMOVAL AND REPLACEMENT	4
				2						2		516	31000	2	FT	JOINT SEALER	
				4						4		516	45305	4	EACH	REFURBISH BEARING DEVICE, AS PER PLAN	5
				LS						LS		516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	4
				3						3		519	11100	3	SF	PATCHING CONCRETE STRUCTURE	
				1						1		SPECIAL	51912510	1	SY	PATCHING CONCRETE BRIDGE DECK, TYPE B	5
																STRUCTURE REPAIR (ERI-101-6.20)	
					120						120	202	98200	120	FT	REMOVAL MISC.: JOINT SEALER	4
					30						30	513	10201	30	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN	4
					240						240	516	31000	240	FT	JOINT SEALER	
					4						4	516	46700	4	EACH	RESET BEARING	
					LS						LS	516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	4
					1						1	517	76302	1	EACH	RAILING, MISC.: ALUMINUM RAILING AND POST	5
					5						5	519	11100	5	SF	PATCHING CONCRETE STRUCTURE	
					2						2	SPECIAL	51912510	2	SY	PATCHING CONCRETE BRIDGE DECK, TYPE B	5
																STRUCTURE REPAIR (HUR-250-4.92)	
						132					132	202	98200	132	FT	REMOVAL MISC.: JOINT SEALER	4
						6					6	202	98200	6	FT	REMOVAL MISC.: STEEL BAR	4
						51					51	513	10201	51	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN	4
						132					132	516	31000	132	FT	JOINT SEALER	
						1					1	SPECIAL	51912510	1	SY	PATCHING CONCRETE BRIDGE DECK, TYPE B	5
						LS					LS	SPECIAL	53000200	LS		STRUCTURES, MISC.: GRIND EXPANSION JOINT STEEL	5
																STRUCTURE REPAIR (HUR-303-1.97)	
							LS 265 LS				LS 265 LS	202 / 513 / 516	11203 / 10201 / 47001	LS 265 LS	LB	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN / STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN / JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	4 / 4 / 4
																STRUCTURE REPAIR (LOR-2-3.33L)	
									4		4	516	46700	4	EACH	RESET BEARING	
									LS		LS	516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	4

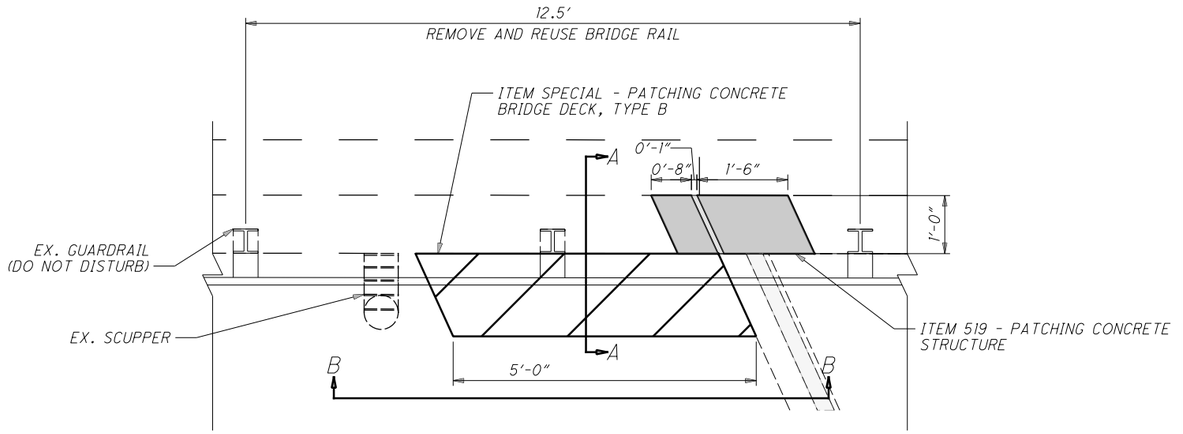
CALCULATED JLL
CHECKED KRB

GENERAL SUMMARY

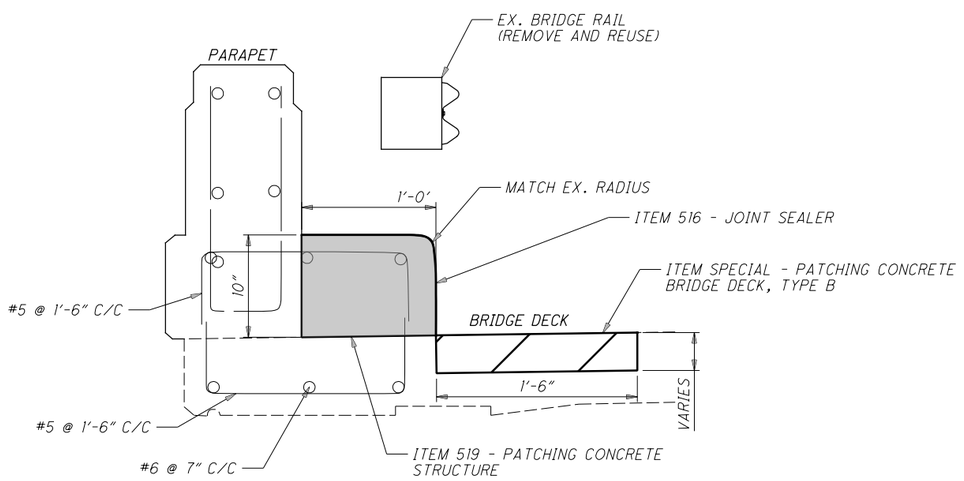
D03-BH-FY2021(B)



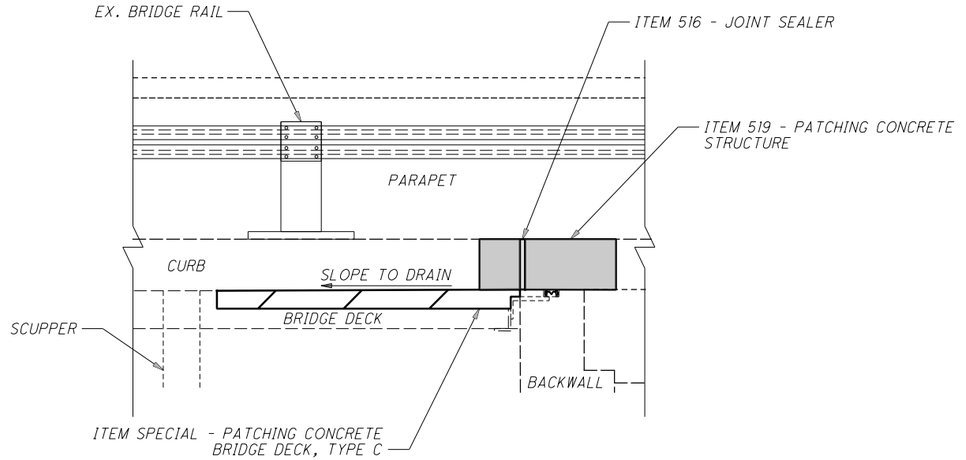
END CROSSFRAME DETAIL



CURB DETAIL



SECTION A-A



SECTION B-B

NOTES:

1.) EXISTING REINFORCING STEEL SHALL BE PRESERVED.

2.) FOR ADDITIONAL CROSSFRAME DETAILS, SEE STANDARD DRAWING GSD-1-96.

DESIGN AGENCY
ODOT DISTRICT THREE
OFFICE OF ENGINEERING

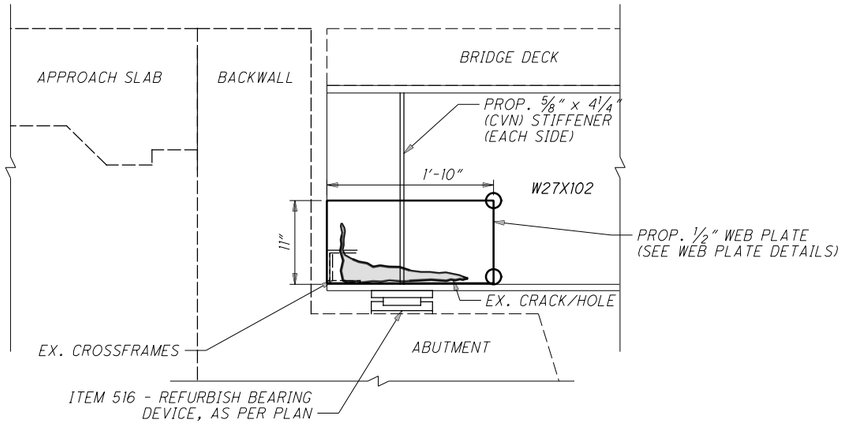
DESIGNED JLL | CHECKED KRB
DRAWN JLL | REVIEWED KAK | DATE 11/2020
REVISED | STRUCTURE FILE NUMBER 2202409

STRUCTURE DETAILS
STRUCTURE ERI-13-3.67
OVER N&S RR

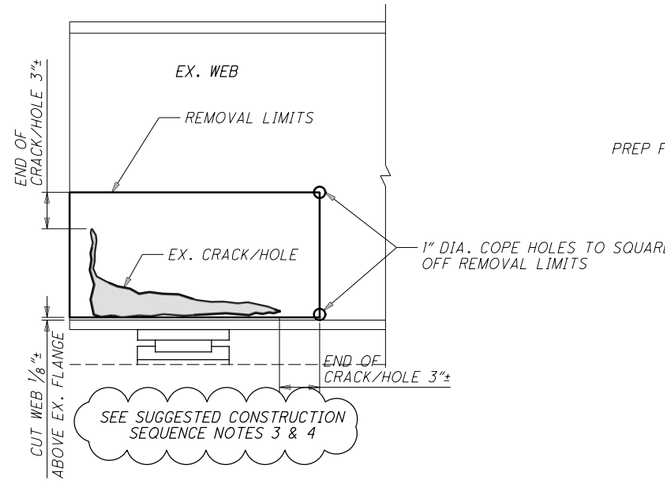
D03-BH-FY2021(B)
PID No. 100081

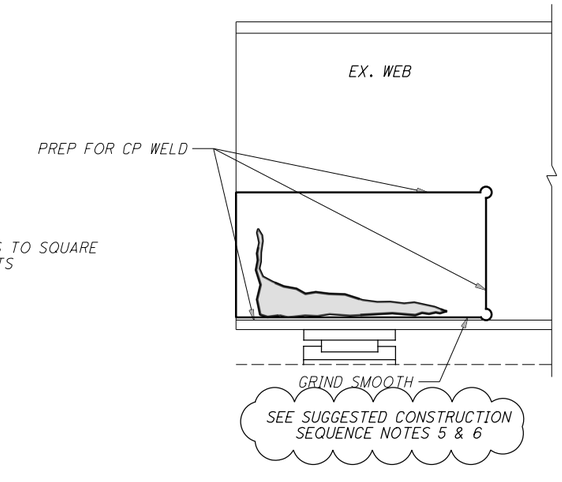
2 / 3

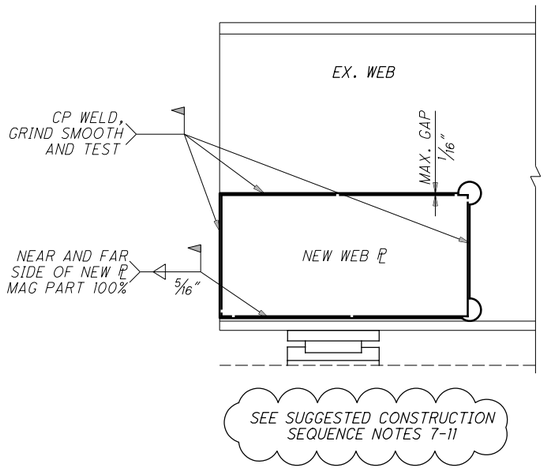
13
21

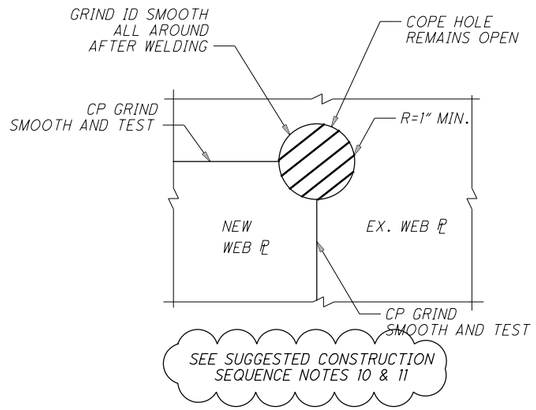


FORWARD ABUTMENT DETAIL









SUGGESTED CONSTRUCTION SEQUENCE

1.) SET UP TEMPORARY SUPPORT.

2.) REMOVE PORTIONS OF END CROSSFRAME FOR ACCESS.

3.) MARK REMOVAL AREA - DETERMINE LIMITS USING MAGNETIC PARTICLE TESTING.

4.) DRILL 2 CORNER HOLES 1" DIAMETER.

5.) SAW OR FLAME CUT TO REMOVED DAMAGED WEB PLATE USING A MECHANICAL GUIDE.

6.) PREP EXISTING MEMBER, BEVEL EDGES FOR COMPLETE PENETRATION AND FILLET WELDS.

7.) CUT AND BEVEL NEW PLATE, FOR COMPLETE PENETRATION AND FILLET WELDS.

8.) CHECK FIT OF NEW PLATE, NO GAPS EXCEEDING 1/16".

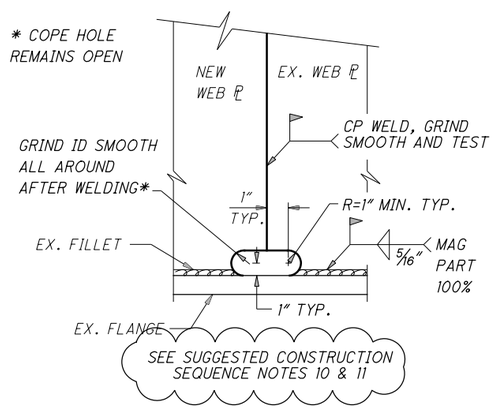
9.) PERFORM WELDING - COORDINATE WITH TEMPORARY SUPPORT OF BEAM AS NEEDED.

10.) GRIND WELDS SMOOTH AND PROVIDE A SURFACE FINISH ACCORDING TO ANSI B46.1 OF 250 MIL.

11.) GRIND THE INSIDE SURFACE OF ALL DRILLED CORNER HOLES TO A 1" RADIUS AND PROVIDE A SURFACE FINISH ACCORDING TO ANSI B46.1 OF 250 MIL.

12.) INSTALL NEW STIFFENER PLATES AND PROPERLY TEST FILLET WELDS.

13.) REMOVE TEMPORARY SUPPORT.



WEB PLATE DETAILS

SEE SUGGESTED CONSTRUCTION SEQUENCE

DESIGN AGENCY
ODOT DISTRICT THREE
OFFICE OF ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
JLL	JLL	KAK	11/2020
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KRB		2202409	

STRUCTURE DETAILS
STRUCTURE ERI-13-3.67
OVER N&S RR

D03-BH-FY2021(B)
PID No. 100081

3 / 3

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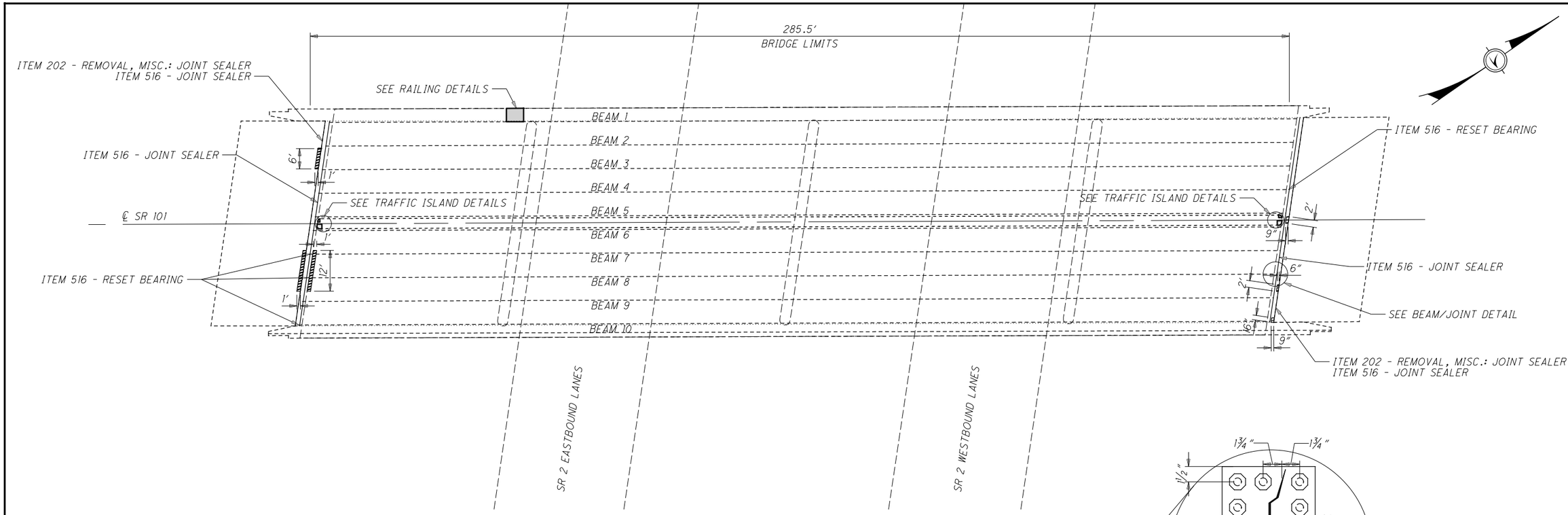


PLAN VIEW

ITEM 517 - RAILING, MISC.: ALUMINUM RAILING AND POST (SEE SHEET 16)

ITEM SPECIAL - PATCHING CONCRETE BRIDGE DECK, TYPE B

NOTES

1.) RESET BEARING #4 ON THE FORWARD ABUTMENT, AND BEARINGS #7, #8 AND #10 ON THE REAR ABUTMENT. SHIM AS NECESSARY TO ALLOW ELEVATION OF EXPANSION JOINT ARMOR ON DECK SIDE TO MATCH ELEVATION OF JOINT ARMOR ON BACKWALL SIDE.

2.) THE WORK AT THE ARMORED DECK JOINTS CONSISTS OF THE PLACEMENT OF HOT APPLIED JOINT SEALER OVER THE EXISTING ELASTOMERIC STRIP SEAL USING ITEM 516 - JOINT SEALER. EXISTING JOINT STEEL IS NOT TO BE REPLACED OR MODIFIED.

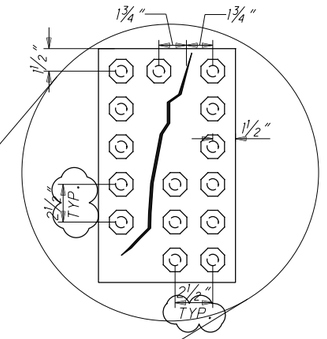
3.) CONCRETE REPAIR LOCATIONS ARE FOR REFERENCE USE ONLY. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.

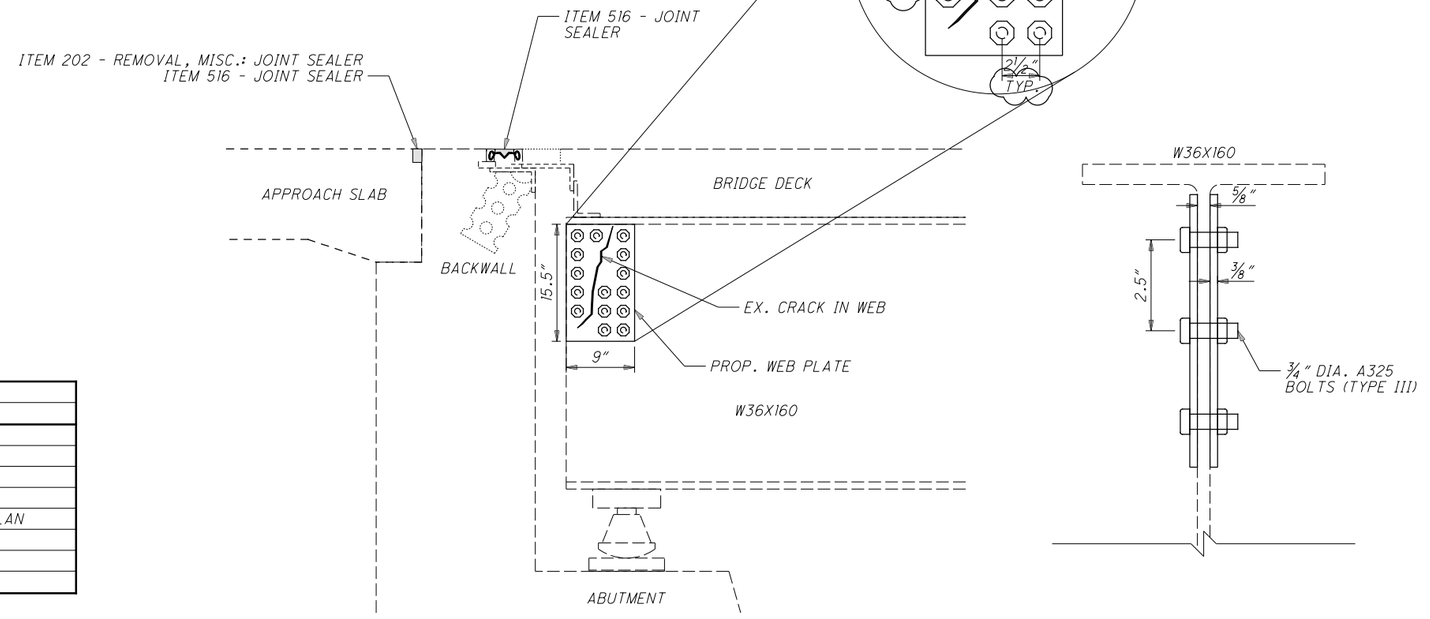
4.) EXISTING REINFORCING STEEL SHALL BE PRESERVED.

5.) SEE SHEET 16 FOR TRAFFIC ISLAND AND RAIL DETAILS.

ESTIMATED QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
202	120	FT	REMOVAL, MISC.: JOINT SEALER
513	30	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN
516	240	FT	JOINT SEALER
516	4	EACH	RESET BEARING
516	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN
517	1	EACH	RAILING, MISC.: ALUMINUM RAILING AND POST
519	5	SF	PATCHING CONCRETE STRUCTURE
SPECIAL	2	SY	PATCHING CONCRETE BRIDGE DECK, TYPE B

ALL QUANTITIES CARRIED TO THE GENERAL SUMMARY





BEAM/JOINT DETAIL

DESIGN AGENCY
ODOT DISTRICT THREE
OFFICE OF ENGINEERING

DESIGNED JLL | DRAWN JLL | REVIEWED KAK | DATE 11/2020 | STRUCTURE FILE NUMBER 2202824 | CHECKED KRB | REVISED

STRUCTURE DETAILS
STRUCTURE ERI-101-6.20
OVER ERI-2-6.24

D03-BH-FY2021(B)
PID No. 100081

1 / 2

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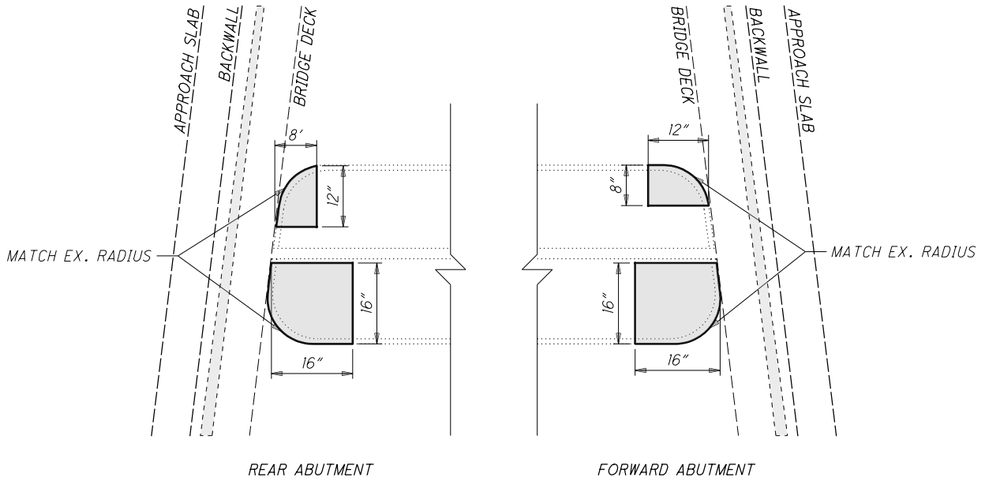
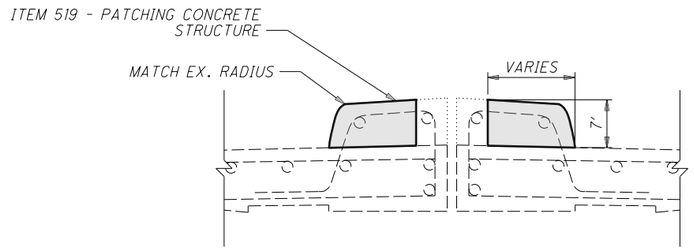
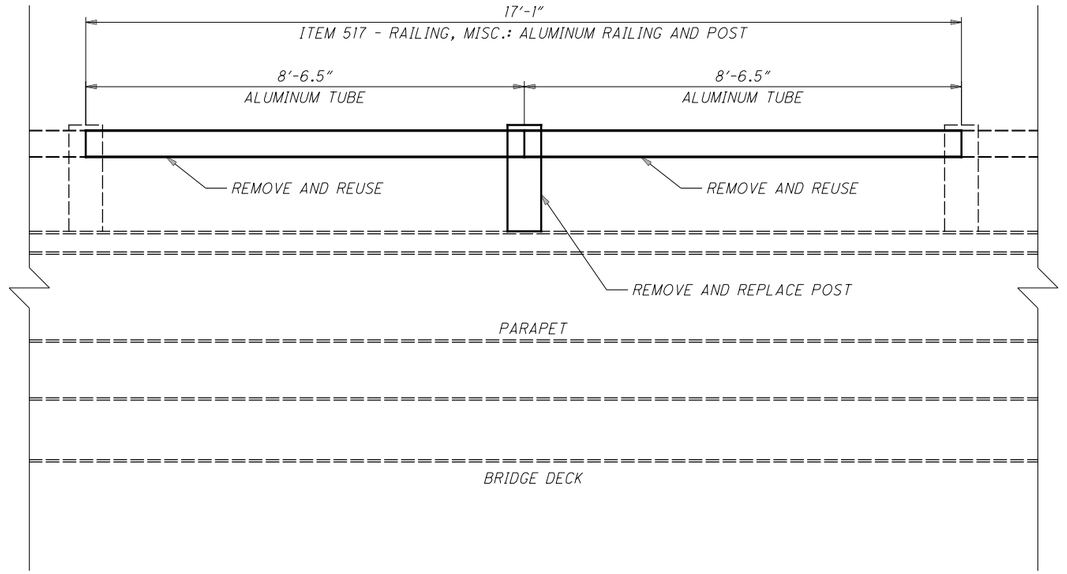
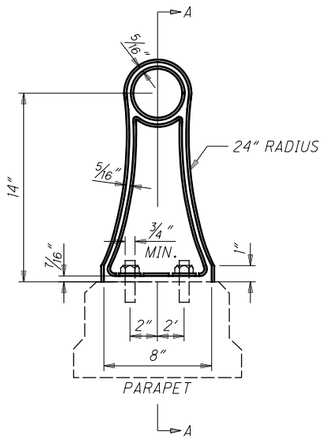
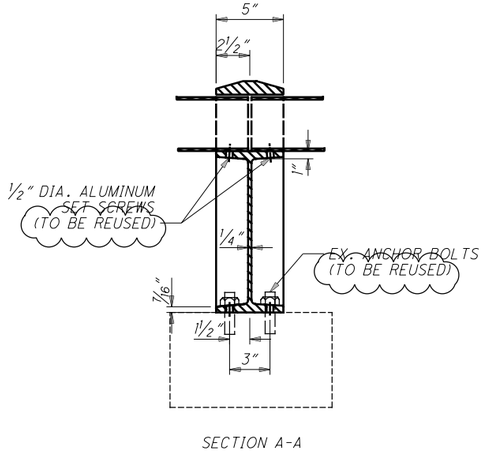




TRAFFIC ISLAND DETAILS







RAIL DETAIL

NOTES:

1.) CONCRETE REPAIR LOCATIONS ARE FOR REFERENCE USE ONLY. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.

2.) EXISTING REINFORCING STEEL SHALL BE PRESERVED.

3.) REMOVE AND REPLACE BROKEN RAILING POST USING ITEM 517 - RAILING, MISC.: ALUMINUM RAILING AND POST. IN ORDER TO REMOVE THE EXISTING RAILING POST, REMOVE AND REUSE TWO ADJACENT ALUMINUM TUBING PANELS. FABRICATE A REPLACEMENT ALUMINUM POST AS SHOWN ON THIS SHEET AND IN ACCORDANCE WITH C&MS 517.

DESIGN AGENCY
ODOT DISTRICT THREE
OFFICE OF ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
JLL	JLL	KAK	11/2020
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KRB		2202824	

STRUCTURE DETAILS
STRUCTURE ERI-101-6.20
OVER ERI-2-6.24

D03-BH-FY2021(B)
PID No. 100081

2 / 2

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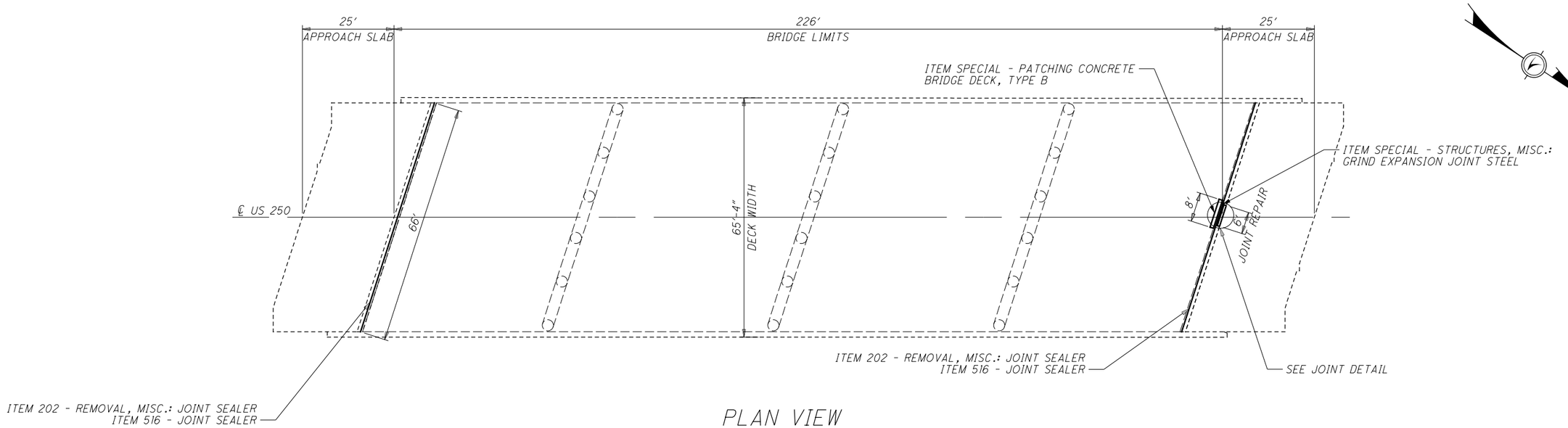
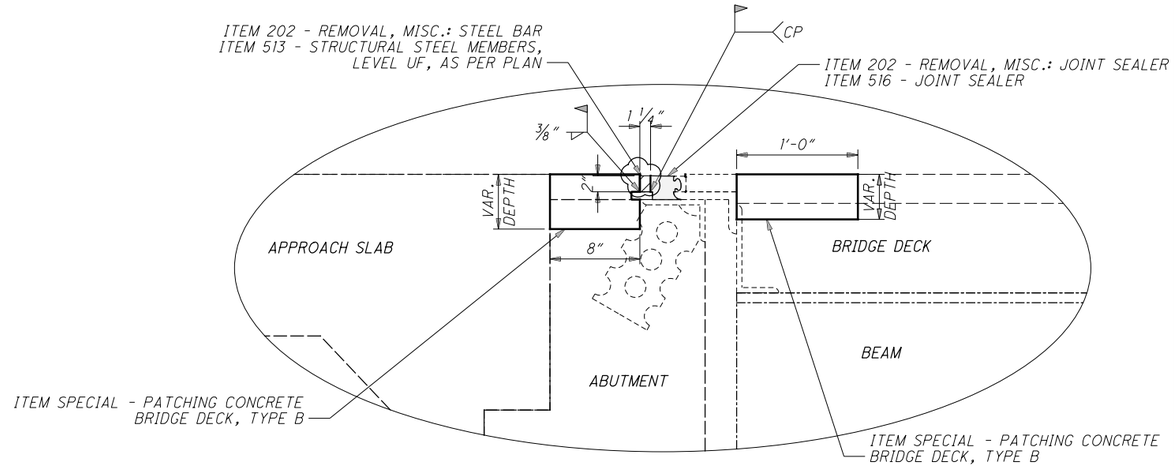
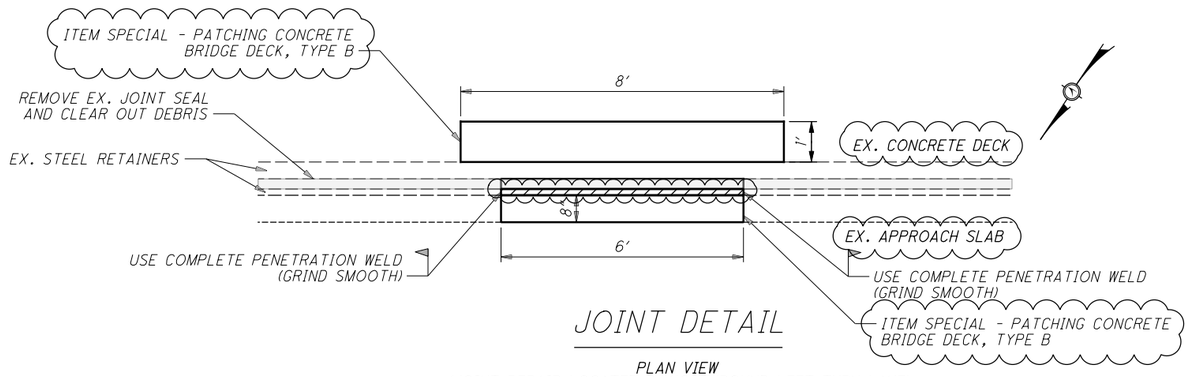


PLAN VIEW



JOINT DETAIL



JOINT DETAIL

PLAN VIEW
(JOINT REPAIR LOCATED IN NORTHBOUND LEFT TURN LANE)

NOTES

1.) REMOVE AND REPLACE THE EXISTING EXPANSION JOINT STEEL BAR OF THE SAME SQUARE DIMENSIONS. APPROXIMATE DIMENSIONS ARE SHOWN ON THIS PLAN. VERIFY THESE DIMENSIONS IN THE FIELD AND ADJUST ACCORDINGLY IF NECESSARY. PERFORM ALL STEEL WORK ON THE APPROACH SLAB SIDE OF THE JOINT ONLY.

2.) EXISTING REINFORCING STEEL SHALL BE PRESERVED.

3.) USING ITEM 530 - SPECIAL - STRUCTURES, MISC.: GRIND EXPANSION JOINT STEEL, GRIND DOWN SHARP EDGES AT SECTIONS OF THE EXISTING EXPANSION JOINT STEEL TO SMOOTHEN SURFACE. EXACT LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER.

ESTIMATED QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
202	132	FT	REMOVAL, MISC.: JOINT SEALER
202	6	FT	REMOVAL, MISC.: STEEL BAR
513	51	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN
516	132	FT	JOINT SEALER
SPECIAL	LS		STRUCTURES, MISC.: GRIND EXPANSION JOINT STEEL
SPECIAL	1	SY	PATCHING CONCRETE BRIDGE DECK, TYPE B

ALL QUANTITIES CARRIED TO THE GENERAL SUMMARY

DESIGN AGENCY
ODOT DISTRICT THREE
OFFICE OF ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
JLL	JLL	KAK	11/2020
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KRB		3901149	

STRUCTURE DETAILS
STRUCTURE HUR-250-4.92
OVER HUR-20-13.49

D03-BH-FY2021(B)
PID No. 100081

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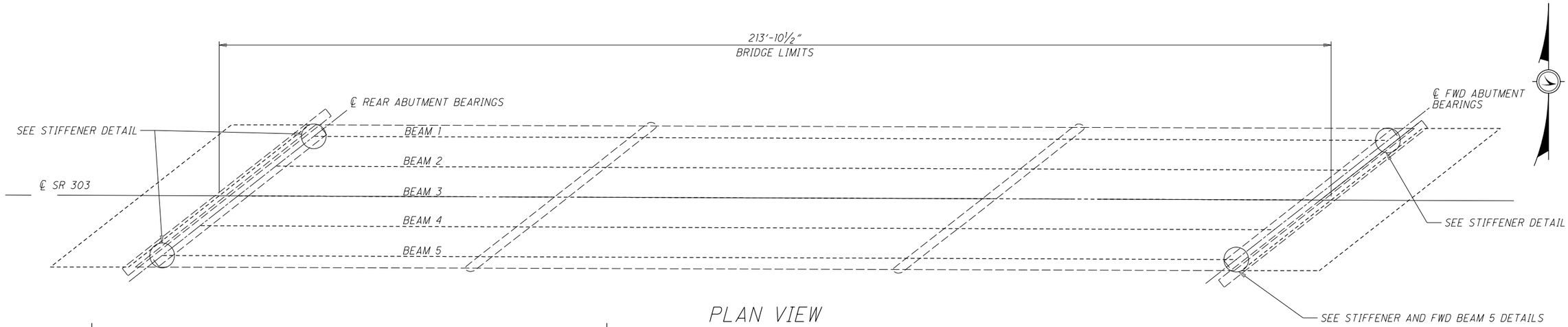
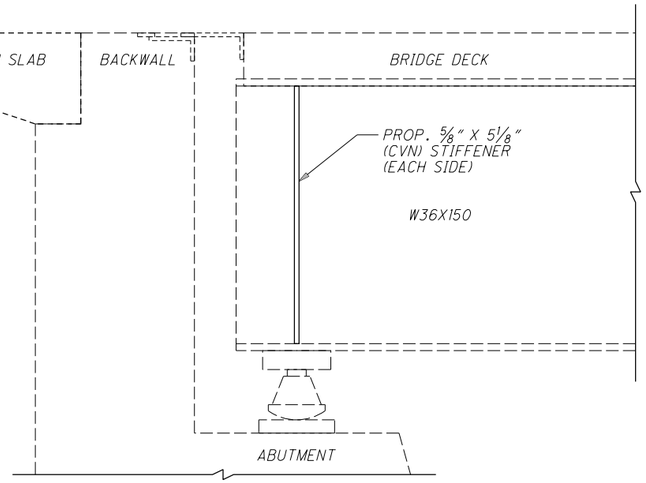


PLAN VIEW



BEAM DETAIL

BOTH ABUTMENTS SIMILAR

NOTES

1.) USING ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN, REMOVE PORTIONS OF THE UNDERSIDE OF THE EXISTING BRIDGE DECK AS NEEDED TO EXPOSE THE TOP BEAM FLANGE.

2.) EXISTING REINFORCING STEEL SHALL BE PRESERVED.

3.) THE CONTRACTOR SHALL FIELD FABRICATE STIFFENER PLATES TO MATCH THE CONTOURS OF THE EXISTING BEAM WEB, WHERE APPLICABLE.

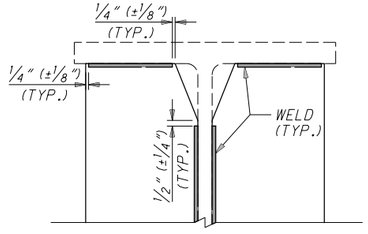
4.) CVN: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN C&MS 711.01.

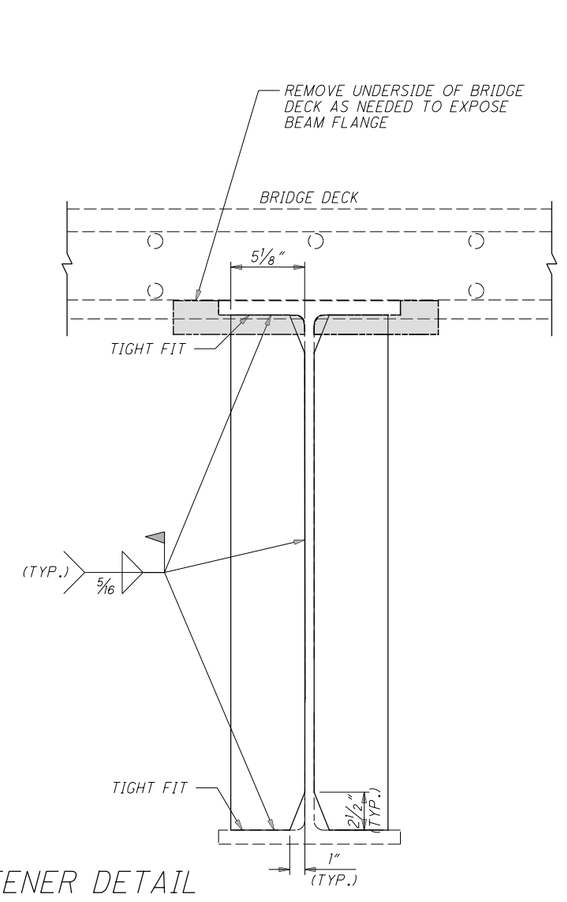
5.) SEE SHEET 19 FOR FORWARD BEAM 5 WEB AND STIFFENER DETAILS.

6.) TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES USING A SIGNALIZED CLOSURE. SEE SHEET 20 FOR MOT DETAILS.

ESTIMATED QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
202	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN
513	265	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN
516	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

ALL QUANTITIES CARRIED TO THE GENERAL SUMMARY





STIFFENER DETAIL

REAR BEAM 1 & 5, FWD BEAM 1

DESIGN AGENCY
ODOT DISTRICT THREE
OFFICE OF ENGINEERING

DESIGNED JLL | DRAWN JLL | REVIEWED KAK | DATE 11/2020
CHECKED KRB | REVISED | STRUCTURE FILE NUMBER 3904083

STRUCTURE DETAILS
STRUCTURE HUR-303-1.97
VERMILION RIVER

D03-BH-FY2021(B)
PID No. 100081

1 / 3

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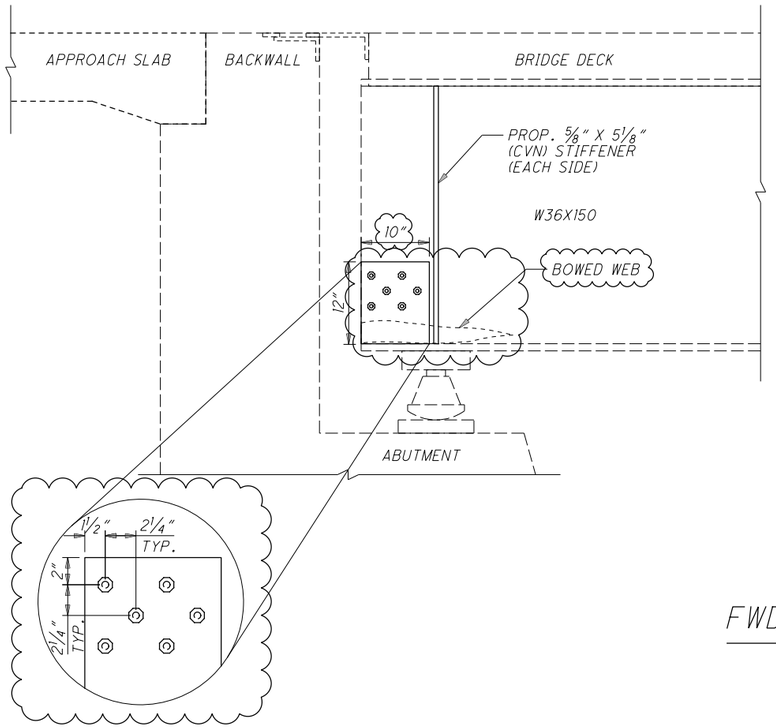
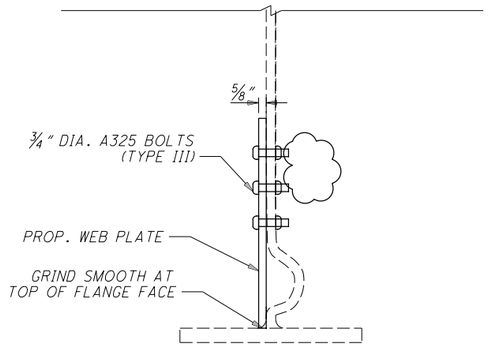
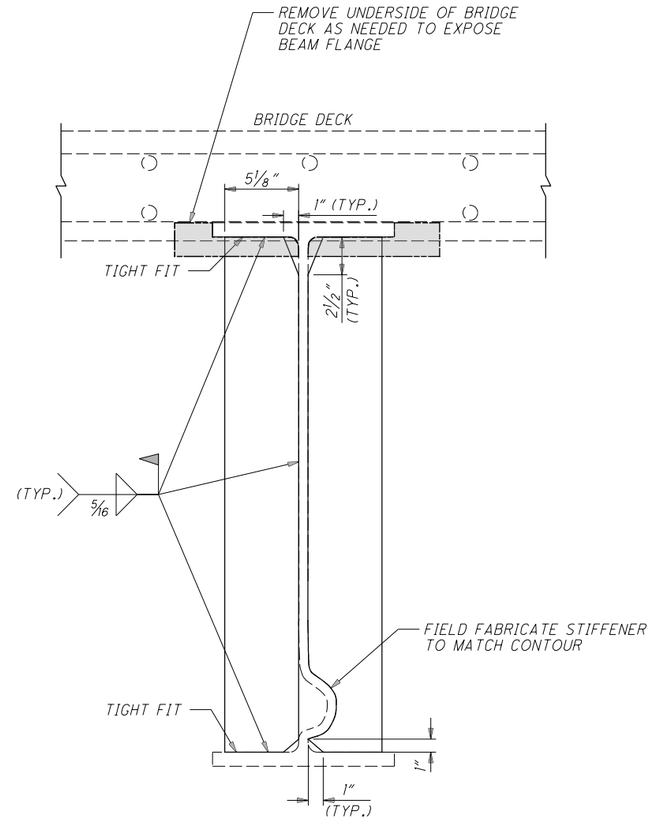




FWD BEAM 5 DETAIL

NOTES

1.) THE CONTRACTOR SHALL FIELD FABRICATE THE OUTSIDE STIFFENER PLATE TO MATCH THE CONTOURS OF THE EXISTING BEAM WEB AS SHOWN IN THE STIFFENER DETAIL. THE INSIDE STIFFENER PLATE AND THE PROPOSED WEB PLATE SHALL NOT MATCH THE BEAM CONTOUR.



STIFFENER DETAIL

FORWARD BEAM 5

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DESIGN AGENCY
ODOT DISTRICT THREE
OFFICE OF ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
JLL	JLL	KAK	11/2020
CHECKED	REVISED	STRUCTURE FILE NUMBER	
KRB		3904083	

STRUCTURE DETAILS
STRUCTURE HUR-303-1.97
VERMILION RIVER

D03-BH-FY2021(B)
PID No. 100081

2 / 3

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