

\\PROJECTS\Aug\116\116-197\93189\

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**UTILITIES**

THERE ARE NO KNOWN UNDERGROUND OR OVERHEAD UTILITIES  
WITHIN THE PROJECT CONSTRUCTION LIMITS.

**EXISTING PLANS**

EXISTING PLANS ENTITLED AUG-116-7.78 AND AUG-197-(5.00-5.16)  
MAY BE INSPECTED IN THE ODOT DISTRICT 7 OFFICE IN  
SIDNEY, OHIO.

**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.

**NOTIFICATION**

THE CONTRACTOR SHALL NOTIFY THE OHIO DEPARTMENT OF  
TRANSPORTATION DISTRICT 7 CONSTRUCTION ENGINEER TWO (2)  
WEEKS PRIOR TO BEGINNING WORK.  
PHONE: 937-497-6722

**SEEDING AND MULCHING**

AS DETERMINED BY THE ENGINEER, ANY SEEDED AREA FOUND TO  
BE DISTURBED (DISTURBED IS DEFINED AS EXPOSED SOIL) DUE TO  
THE CONTRACTOR'S EQUIPMENT, LOCATED WITHIN THE STATES  
RIGHT OF WAY WITHIN 100 FEET OF EACH STRUCTURE, WILL BE  
SEEDED AS PER THE ESTIMATED QUANTITIES PROVIDED BELOW:

- ITEM 659 SEEDING AND MULCHING.....80 SQ. YD.
- ITEM 659 WATER.....0.3 M GAL.

CALCULATED	DDS	GENERAL NOTES	AUG-116 / 197 - 8.22 / 5.10	<div>232</div>
	CHECKED CWW			

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ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 45 CONSECUTIVE CALENDAR DAYS FOR EACH STRUCTURE, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEETS 4 & 6. A DISINCENTIVE SHALL BE ASSESSED IN ACCORDANCE WITH CMS 108.07 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. THE CONTRACTOR SHALL NOT CLOSE BOTH BRIDGES AT THE SAME TIME AS THE DETOURS WOULD CONFLICT. WHERE POSSIBLE, REUSE EXISTING SIGN POSTS FOR BOTH DETOURS.

THE CONTRACTOR SHALL NOTIFY THE ROADWAY SERVICE MANAGER 21 DAYS PRIOR TO THE CLOSING OF THE ROADWAY AT 937-497-6834.

NOTICE OF CLOSURE SIGNS, AS DETAILED IN THESE PLANS, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE WEEK IN ADVANCE OF THE SCHEDULED ROAD CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT THE POINT OF CLOSURE.

SR 116 WILL BE  
CLOSED  
FOR 45 DAYS  
INFO: 1-800-200-9919

W20-H13-60

SR 197 WILL BE  
CLOSED  
FOR 45 DAYS  
INFO: 1-800-200-9919

W20-H13-60

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AND ADVANCE SIGNING AS DETAILED IN SCD MT-101.60 AS PER THE DETOUR MAP DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 0.5 M. GAL

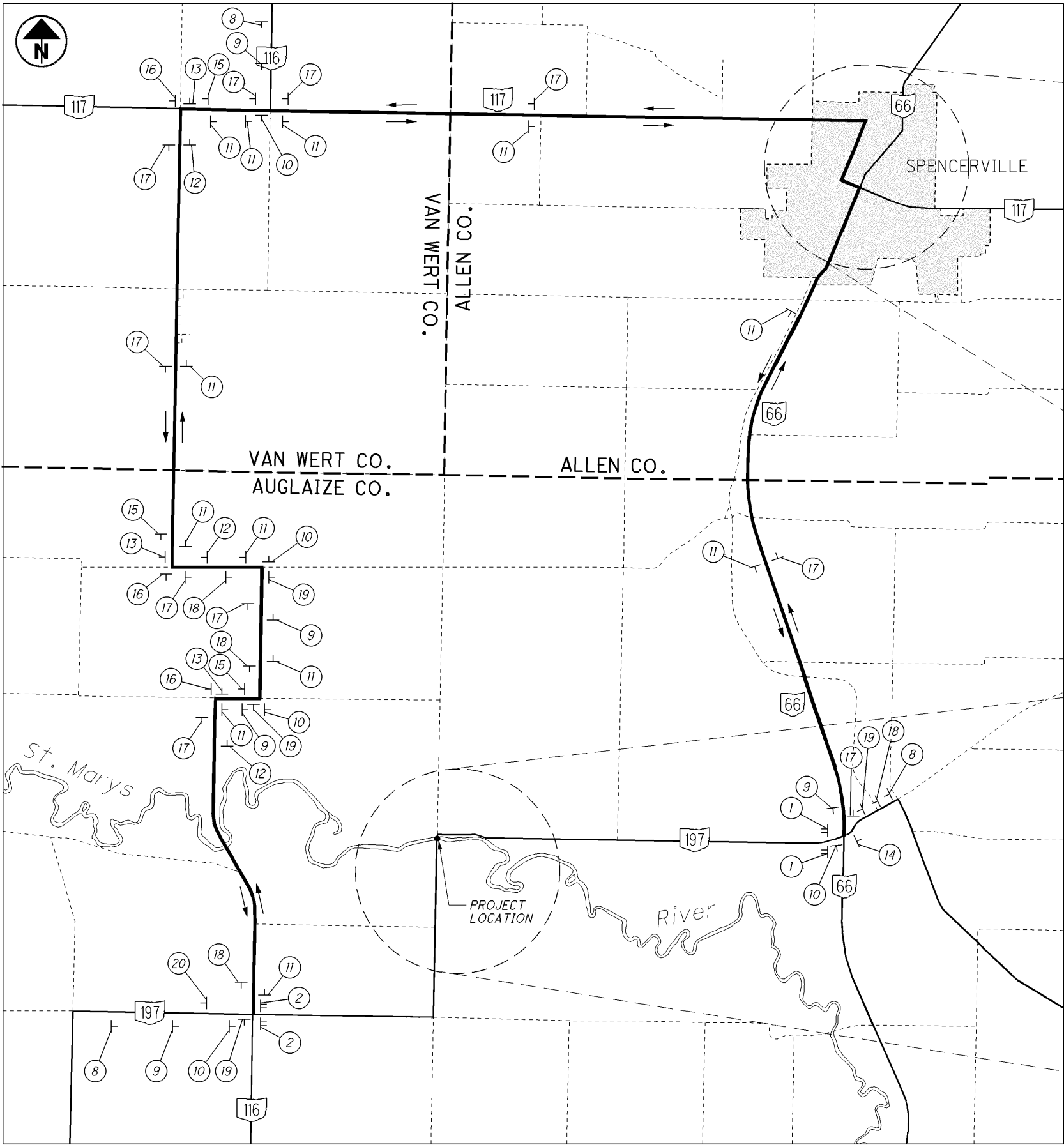
ITEM 614, REPLACEMENT SIGN

FLATSHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

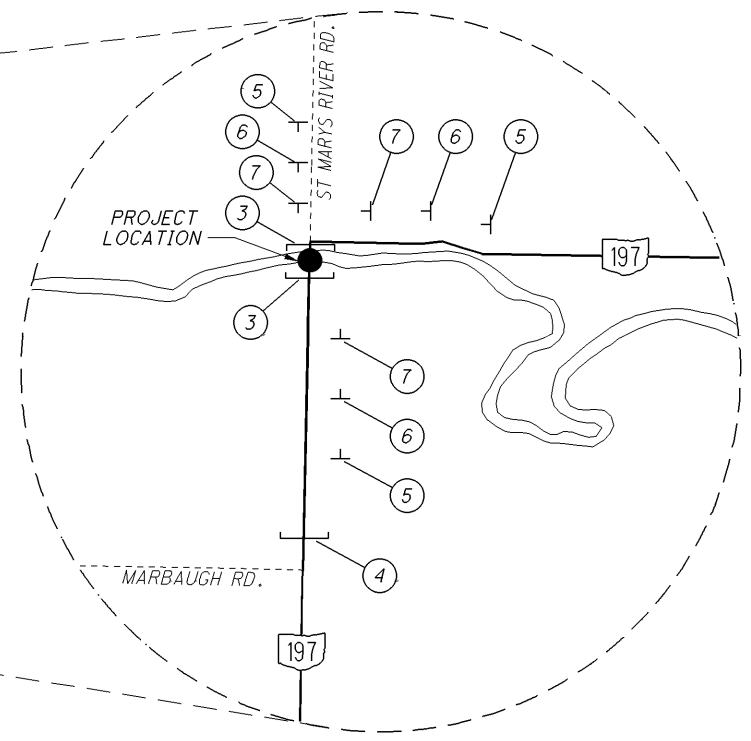
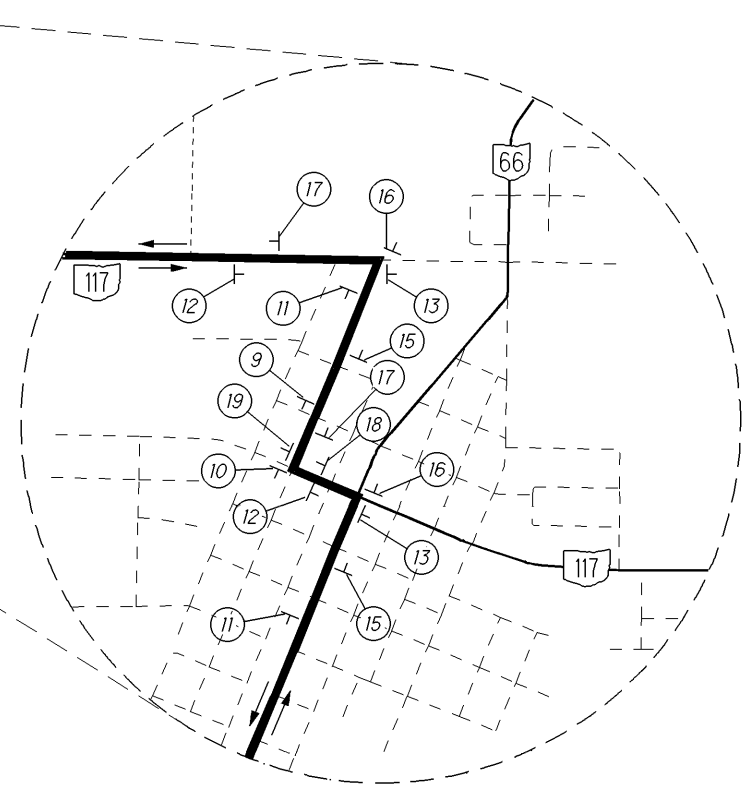
PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF 4 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

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DETOUR PLAN



FOR SIGNING LEGEND AND REFERENCES SEE SHEET 7.

NOT TO SCALE

CALCULATED RPH	CHECKED BAB	AUG-197-0510 DETOUR MAP	AUG-116 / 197-8.22 / 5.10	6 32

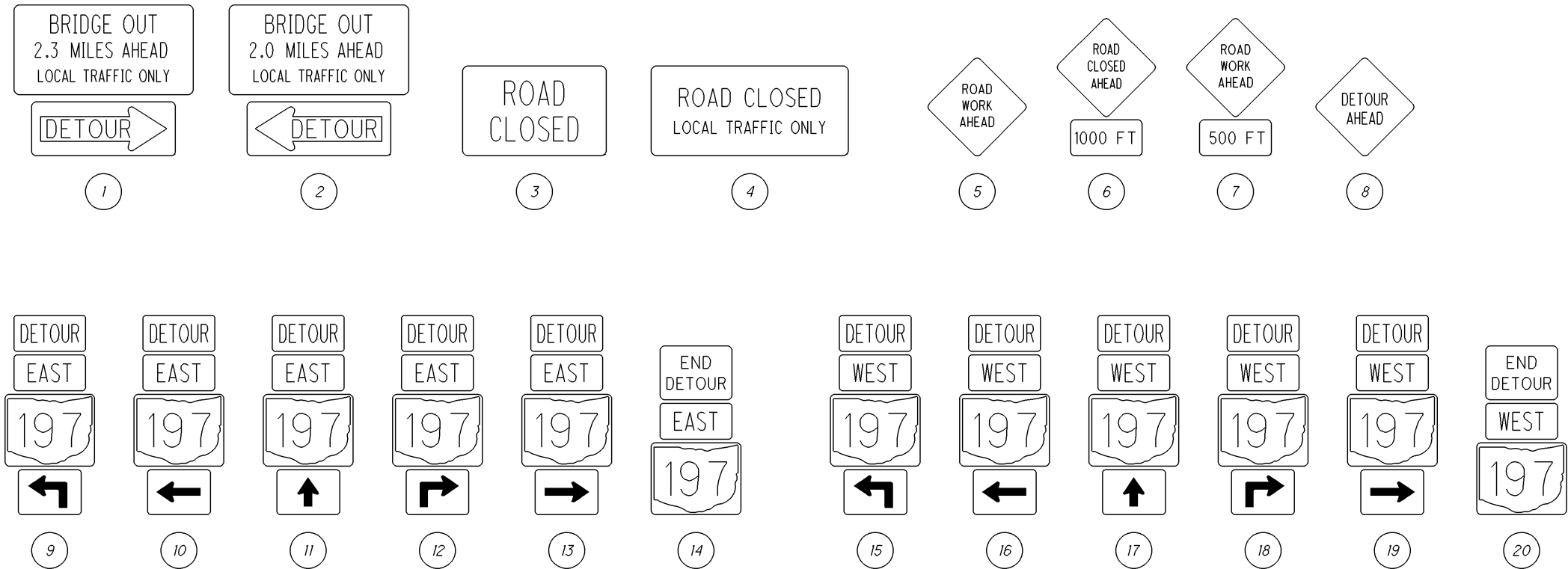
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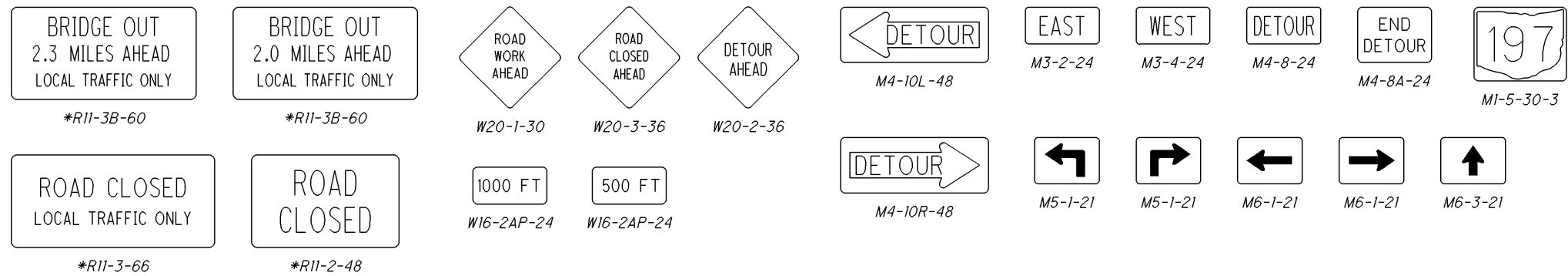
CALCULATED	RPH
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AUG-197-5.10  
DETOUR SIGNING

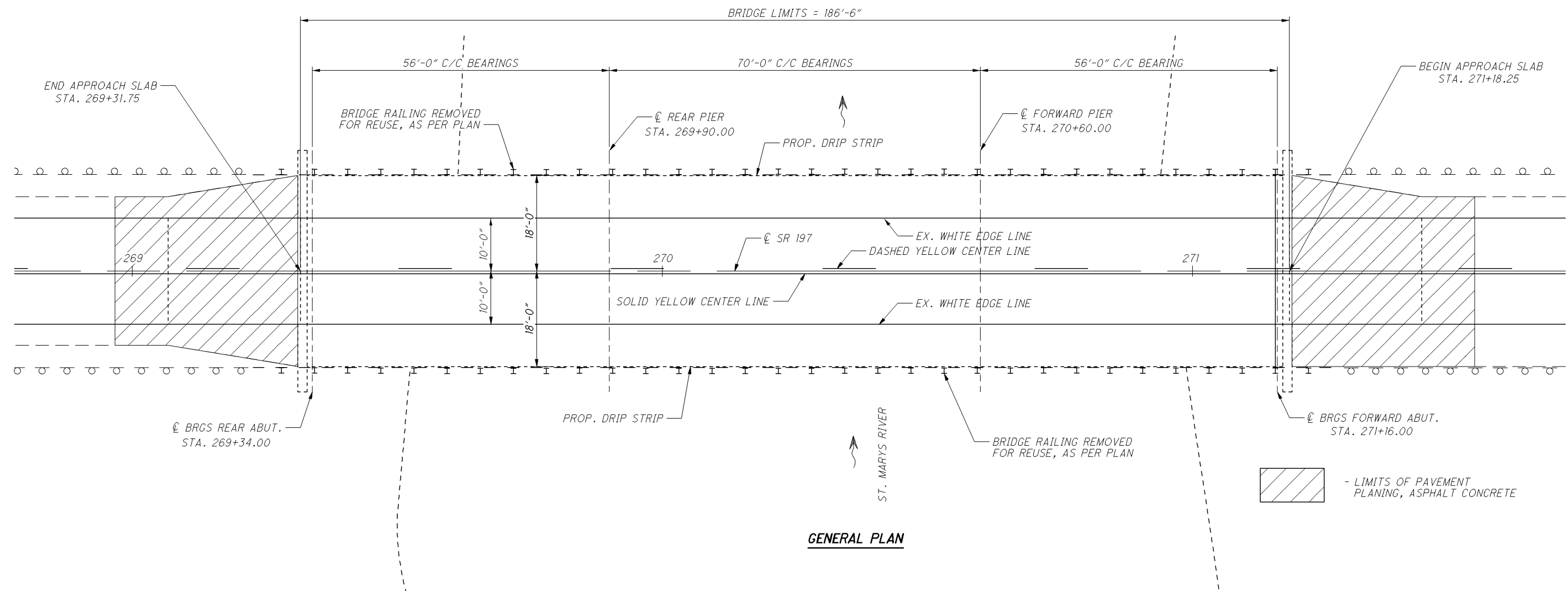
AUG-116 / 197 - 8.22 / 5.10



SIGN LEGEND



\*INCLUDES TYPE 3 BARRICADES

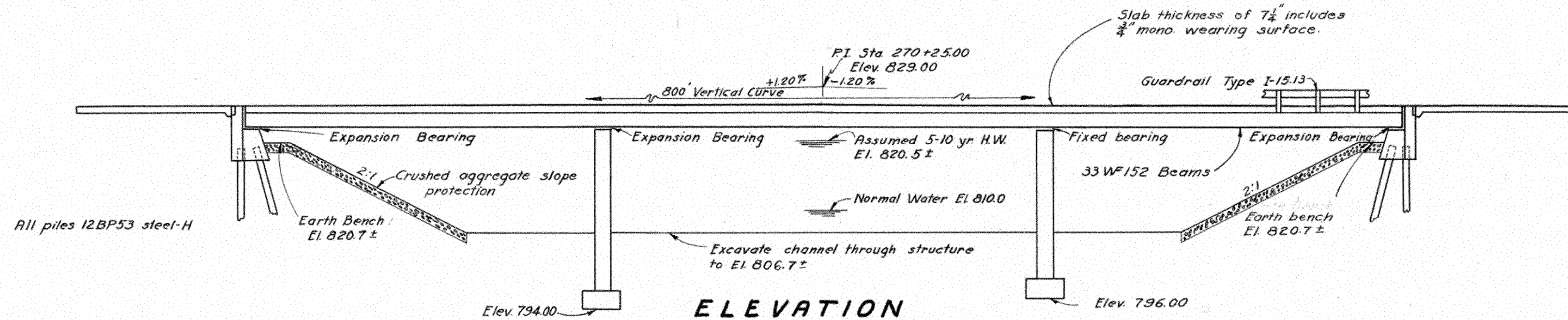
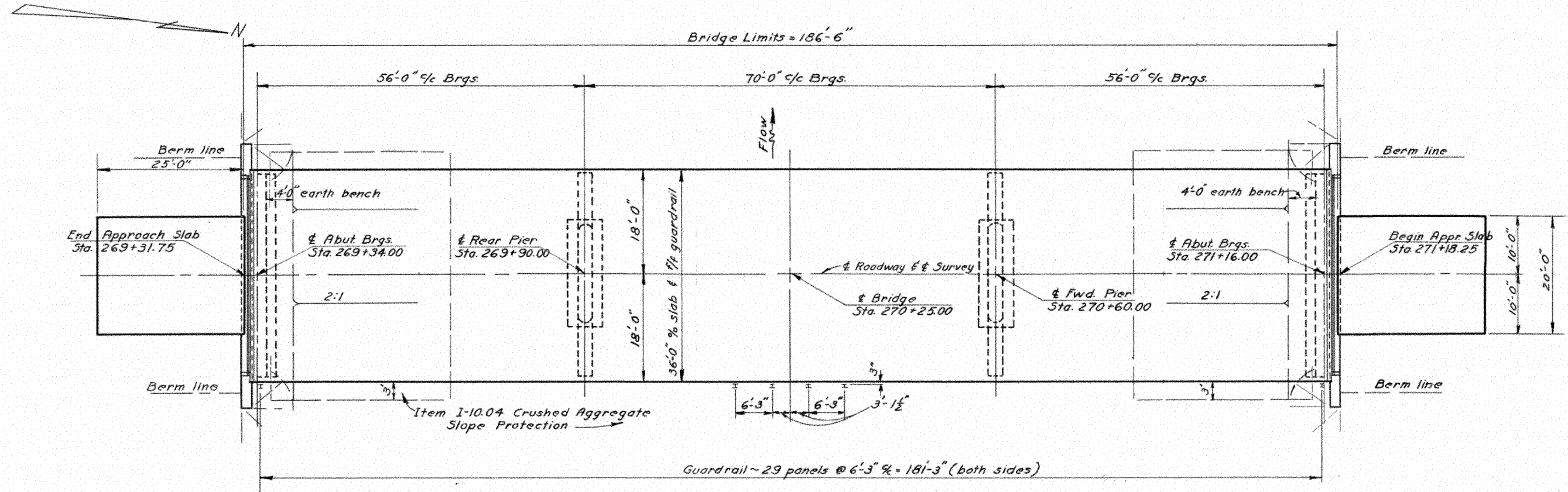


## GENERAL PLAN

REF. NO.	SHEET NO.	STATION TO STATION	202	254	407	448		621	621		
			BRIDGE RAILING REMOVED FOR REUSE, AS PER PLAN	PAVEMENT PLANING, ASPHALT CONCRETE	TACK COAT	ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG64-22		EDGE LINE, 4"	CENTERLINE		
		FROM TO	FT	SQ YD	GAL	CU YD		MILE	MILE		
		269+31.75 271+18.25 RT and LT	371								
		268+96.75 269+31.75		118	9	3					
		271+18.25 271+53.25		128	10	4					
		268+75.00 271+75.00						0.12	0.06		
TOTALS CARRIED TO GENERAL SUMMARY			371	246	19	7		0.12	0.06		

$$\frac{10}{32}$$

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#### EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE  
SPAN: 56.0' - 70.0' - 56.0' C/C BEARINGS  
ROADWAY: 36' f/f GUARD RAIL  
LOADING: CF-130 (57)  
SKEW: NONE  
WEARING SURFACE: 1 1/4" LATEX MODIFIED CONCRETE OVERLAY  
APPROCH SLABS: AS-1-54 (25' LONG)  
ALIGNMENT: TANGENT  
DISPOSITION: REHABILITATED

ALL DETAILS ARE TO BE CONSIDERED EXISTING UNLESS LABELED PROPOSED. ALL EXISTING DIMENSIONS TO BE CONSIDERED ±

#### PROPOSED WORK

1. REMOVE EXISTING WEARING SURFACE BY HYDRODEMOLITION AND RESURFACE DECK WITH SUPERPLASTICIZED DENSE CONCRETE.
2. REMOVE AND REPLACE ASPHALT OVERLAY ON THE APPROACH SLABS.
3. REPLACE ABUTMENT BEARINGS WITH ELASTOMERIC BEARINGS
4. REMOVE AND REERECT EXISTING GUARDRAIL POSTS AND EXISTING GUARDRAIL TO THE NEW DECK EDGES.
5. REMOVE EXPANSION JOINTS AND REPLACE WITH STRIP SEAL EXPANSION JOINT SYSTEM.
6. REPLACE DECK EDGES AND PATCH ABUTMENTS.
7. PAINT BEAM ENDS.
8. SEAL DECK EDGES AND ABUTMENTS.

AUG SR 116/197 8-22/5.10  
PID No. 93189

BRIDGE NO. AUG-197-0510  
SR 197 OVER THE ST. MARYS RIVER

#### SITE PLAN

CLARK COUNTY  
STA. 434+36.50  
STA. 436+33.75

DESIGNED  
DDS  
CHECKED  
CWW

DRAWN  
DDS

REVIEWED  
MRB

DATE  
12-16-13

STRUCTURE FILE NUMBER  
0602736

DESIGN AGENCY  
ODOT DISTRICT 7  
PLANNING & ENGINEERING

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ITEM 511 CONCRETE, MISC.: EMBEDDED GALVANIC ANODE (EGA)

PART 1 GENERAL

1.01 SUMMARY

- A. THIS SECTION INCLUDES FURNISHING ALL LABOR, TOOLS, MATERIALS, EQUIPMENT AND SERVICES NECESSARY TO PROPERLY INSTALL EMBEDDED GALVANIC ANODES.

1.02 REFERENCES

- A. ACI/ICRI 1999 CONCRETE REPAIR MANUAL  
B. ACI GUIDELINE NO. 222 - CORROSION OF METALS IN CONCRETE  
C. ICRI GUIDELINE NO. 03730 GUIDE FOR SURFACE PREPARATION FOR THE REPAIR OF DETERIORATED CONCRETE RESULTING FROM REINFORCING STEEL CORROSION  
D. ASTM A82-97A SPECIFICATION FOR PLAIN STEEL WIRE FOR CONCRETE REINFORCEMENT  
E. ASTM B418-95A STANDARD SPECIFICATION FOR CAST AND WROUGHT GALVANIC ZINC ANODES

2.01 MATERIAL DETAILS

- A. EMBEDDED GALVANIC ANODES SHALL BE PUCK-SHAPED APPROXIMATELY 2 1/2 INCHES IN DIAMETER BY 1 INCH HIGH, PREMANUFACTURED, AND CONTAINING MORE THAN 100g OF ZINC METAL IN COMPLIANCE WITH ASTM B418-95A TYPE 1 CAST AROUND A PAIR OF STEEL TIE WIRES IN COMPLIANCE WITH BRIGHT ANNEALED ASTM A82-97A AND ENCASED IN A HIGHLY ALKALINE CEMENTITIOUS SHELL WITH A PH OF 14 OR GREATER. THE CEMENTITIOUS SHELL SHALL CONTAIN NO CHLORIDES OR OTHER CORROSIVE CONSTITUENTS AS PER ACI GUIDELINE NO. 222. ANODES SHALL BE SUPPLIED WITH INTEGRAL TIE WIRES FOR TYING TO THE REINFORCING STEEL. EMBEDDED GALVANIC ANODES SHALL BE GALVASHIELD XP+ AVAILABLE FROM VECTOR CORROSION TECHNOLOGIES (204)489-6300, OR APPROVED EQUAL.

APPLICATIONS FOR EQUALS INCLUDE:

1. A HIGHLY ALKALINE CEMENTITIOUS SHELL WITH A PH OF 14 OR GREATER.  
2. PROVIDE A MINIMUM OF 10 YEARS SERVICE LIFE (IN SIMILAR ENVIRONMENT).  
3. CONTAIN NO CORROSIVE CONSTITUENTS DETRIMENTAL TO REINFORCING STEEL, E.G. CHLORIDE, ETC.  
4. PROVEN TRACK RECORD WITH BRIDGE WORK SHOWING A MINIMUM OF THREE YEARS SATISFACTORY FIELD PERFORMANCE.  
5. A MINIMUM OF THREE PROJECTS OF SIMILAR SIZE AND APPLICATION.  
6. ANODES SHALL BE SUPPLIED WITH INTEGRAL TIE WIRES FOR TYING TO THE REINFORCING STEEL.  
7. PRODUCT EVALUATION BY AN INDEPENDENT LABORATORY.

- B. REPAIR MORTARS, CONCRETE AND BONDING AGENTS SHALL BE PORTLAND CEMENT-BASED MATERIALS WITH SUITABLE ELECTRICAL CONDUCTIVITY. REPAIR MATERIAL SHALL HAVE A RESISTIVITY BELOW 15,000 OHM - CM. NON-CONDUCTIVE REPAIR MATERIALS SUCH AS EPOXY, URETHANE, OR MAGNESIUM PHOSPHATE SHALL NOT BE PERMITTED.

- C. DELIVER, STORE, AND HANDLE ALL MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

PART 3

EXECUTION

3.01 CONCRETE REMOVAL

- A. REMOVE LOOSE OR DELAMINATED CONCRETE.  
B. UNDERCUT ALL EXPOSED REINFORCING BY REMOVING CONCRETE FROM THE FULL CIRCUMFERENCE OF THE STEEL. THE MINIMUM CLEARANCE BETWEEN THE CONCRETE SUBSTRATE AND REINFORCING STEEL SHALL BE 3/4 INCH (19 MM) OR 1/4 INCH (6 MM) LARGER THAN THE TOP SIZE AGGREGATE IN THE REPAIR MATERIAL, WHICHEVER IS GREATER.  
C. CONCRETE REMOVAL SHALL CONTINUE ALONG THE REINFORCING STEEL UNTIL THERE ARE NO VISIBLE SIGNS OF CORROSION.

3.02 CLEANING AND REPAIR OF REINFORCING STEEL

- A. CLEAN EXPOSED REINFORCING STEEL OF RUST, MORTAR, ETC. USING WATER OR AIR, UNDER PRESSURE, TO PROVIDE SUFFICIENT ELECTRICAL CONNECTION AND MECHANICAL BOND.  
B. IF SIGNIFICANT REDUCTION IN THE CROSS SECTION OF THE REINFORCING STEEL HAS OCCURRED, REPLACE OR INSTALL SUPPLEMENTAL REINFORCEMENT AS DIRECTED BY THE ENGINEER.  
C. SECURE LOOSE REINFORCING STEEL BY TYING TIGHTLY TO OTHER BARS WITH STEEL TIE WIRE.

3.03 GALVANIC ANODE INSTALLATION

- A. GALVANIC ANODES SHALL BE INSTALLED ALONG THE PERIMETER OF THE REPAIR WITH RECOMMENDED SPACING AS SPECIFIED ON THE DRAWINGS. THE ACTUAL SPACING OF THE ANODES WILL VARY WITH THE PATCH SIZE. IN NO CASE SHALL THE DISTANCE BETWEEN THE ANODES EXCEED 24 INCHES.  
B. PROVIDE SUFFICIENT CLEARANCE (3/4 INCH MINIMUM) BETWEEN ANODES AND SUBSTRATE TO ALLOW REPAIR MATERIAL TO ENCASE ANODES.  
C. SECURE THE GALVANIC ANODES AS CLOSE AS POSSIBLE TO THE PATCH EDGE (WITHIN 6 INCHES) USING THE ANODE TIE WIRES. THE TIE WIRES SHALL BE WRAPPED AROUND THE CLEANED REINFORCING STEEL AND TWISTED TIGHT TO ALLOW LITTLE OR NO FREE MOVEMENT.

1. IF THE ANODE IS TO BE TIED ONTO A SINGLE BAR, OR IF LESS THAN 1 INCH OF CONCRETE COVER IS EXPECTED, PLACE ANODE BENEATH THE BAR AND SECURE TO CLEAN REINFORCING STEEL.  
2. IF SUFFICIENT CONCRETE COVER EXISTS (AT LEAST 1 INCH), THE ANODE MAY BE PLACED AT THE INTERSECTION BETWEEN TWO BARS AND SECURED TO EACH CLEAN BAR.

D. ELECTRICAL CONTINUITY

1. CONFIRM ELECTRICAL CONNECTION BETWEEN ANODE TIE WIRE AND REINFORCING STEEL BY MEASURING DC RESISTANCE (OHM) WITH A MULTIMETER.  
2. CONFIRM ELECTRICAL CONTINUITY OF THE EXPOSED REINFORCING STEEL WITHIN THE REPAIR AREA. IF NECESSARY, ELECTRICAL CONTINUITY SHALL BE ESTABLISHED WITH STEEL TIE WIRE.  
3. ELECTRICAL CONTINUITY IS ACCEPTABLE IF THE DC RESISTANCE MEASURED WITH MULTI-METER IS LESS THAN 1 OHMS.

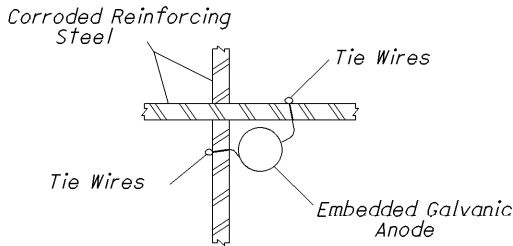
3.04 CONCRETE REPLACEMENT

- A. COMPLETE THE REPAIR FOLLOWING NORMAL CONCRETE REPAIR PROCEDURES, TAKING CARE NOT TO CREATE ANY AIR VOIDS AROUND THE EMBEDDED GALVANIC ANODE.

EACH EMBEDDED GALVANIC ANODE PROVIDED AND INSTALLED WITH ALL INCIDENTALS INCLUDED SHALL BE PAID FOR AT THE PRICE BID FOR:

ITEM	DESCRIPTION	UNIT
511E81300	CONCRETE MISCELLANEOUS: EMBEDDED GALVANIC ANODE (EGA)	184 EACH

TYPICAL EMBEDDED GALVANIC ANODE TO REINFORCING STEEL ATTACHMENT DETAIL



GENERAL NOTES

BRIDGE NO.: AUG-197-0510  
SR 197 OVER THE ST. MARYS RIVER

AUG-116/197 -  
8.22/5.10  
PID No. 93189

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DESIGN AGENCY  
ODOT DISTRICT 7  
PLANNING & ENGINEERING

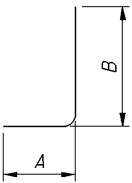
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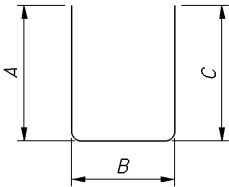
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ESTIMATED QUANTITIES										
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET #	
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN			LUMP		2/11	
202	38603	373	FT	BRIDGE RAILING REMOVED FOR REUSE, AS PER PLAN			373		2/11	
509	10001	5448	POUND	EPOXY COATED REINFORCING STEEL, AS PER PLAN	624		4824		2/11	
509	20001	250	POUND	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN	50		200		2/11	
510	10000	144	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	144		144			
511	34410	5	CU YD	CLASS QC2 CONCRETE, SUPERSTRUCTURE	5					
511	34444	38	CU YD	CLASS QC2 CONCRETE, BRIDGE DECK			38			
511	81300	184	EACH	CONCRETE, MISC.: EMBEDDED GALVANIC ANODE (EGA)			184			
512	10100	111	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	37		74			
513	10201	1336	POUND	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN			1336		2/11	
514	00050	1070	SQ FT	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			1070			
514	00056	1070	SQ FT	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT			1070			
514	00060	1070	SQ FT	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			1070			
514	00067	1070	SQ FT	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT, AS PER PLAN			1070			
514	00504	5	MAN HOUR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			5			
514	10000	2	EACH	FINAL INSPECTION REPAIR			2			
516	11211	72	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN			72		2/11	
516	31011	72	FT	2" DEEP JOINT SEALER, AS PER PLAN				72	2/11	
516	44101	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (BEARING: 8.5"x11"x2", LOAD PLATE: 9.5"x1'-1 3/4"x5/8")			10		2/11	
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN			LUMP		2/11	
SPECIAL	51822300	457	FT	STEEL DRIP STRIP			457			
519	11101	32	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN	32				2/11	
848	10200	734	SQ YD	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION			734			
848	20000	734	SQ YD	SURFACE PREPARATION USING HYDRODEMOLITION			734			
848	30200	22	CU YD	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY			22			
848	50000	35	SQ YD	HAND CHIPPING			35			
848	50100	LUMP		TEST SLAB			LUMP			
848	50200	1	CU YD	FULL-DEPTH REPAIR			1			
848	50320	734	SQ YD	EXISTING CONCRETE OVERLAY REMOVED, 1 1/4"			734			
848	50340	174	SQ YD	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY			174			

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS							DOWELS
	TOTAL				A	B	C	D	E	R	INC	
ABUTMENT REINFORCING STEEL												
A510	2	35'-8"	74	STR								
A611	80	2'-3"	270	1	0'-8"	1'-9"						80
A613	64	2'-11"	280	1	1'-2"	1'-11"						64
SLAB REINFORCING STEEL												
S411	314	4'-4"	909	2	1'-10"	11"	1'-10"					
S511	30	39'-5"	1233	STR								
S512	6	35'-8"	223	STR								
S611	30	40'-0"	1802	STR								
S612	8	28'-0"	336	STR								
S613	6	35'-8"	321	STR								
SUB-TOTAL			5448	SUB-TOTAL							144	



TYPE-1



TYPE-2

DESIGN AGENCY  
ODOT DISTRICT 7  
PLANNING & ENGINEERING

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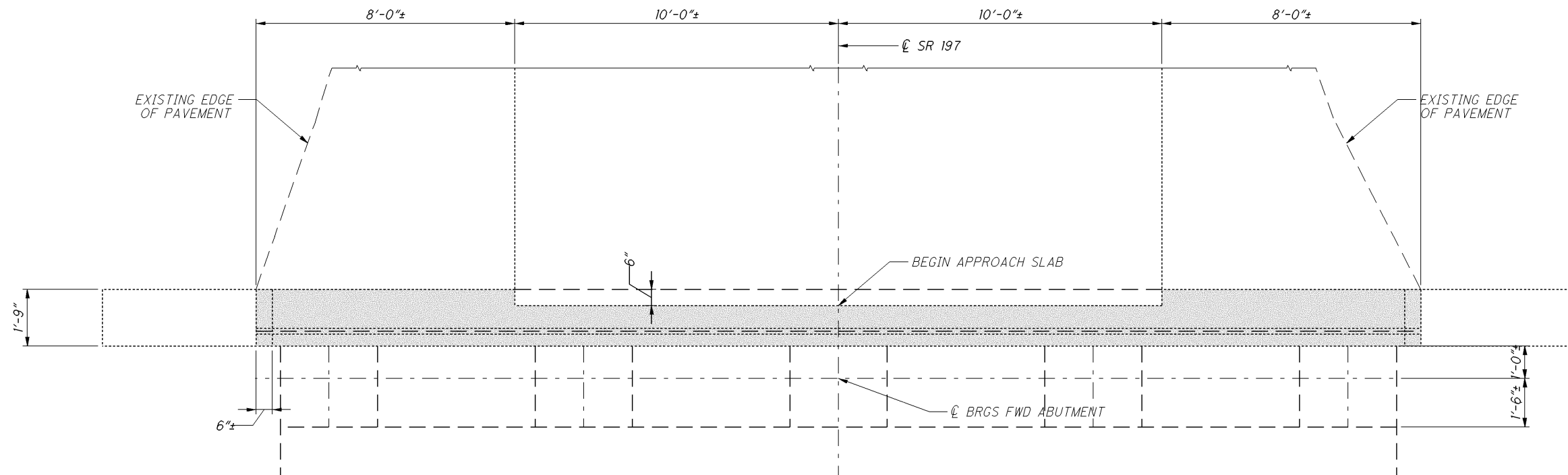
ESTIMATED QUANTITIES & REINFORCEMENT LIST  
BRIDGE NO. AUG-197-0510  
SR 197 OVER THE ST. MARYS RIVER

AUG-116/197-  
8.22/5.10  
PID No. 93189

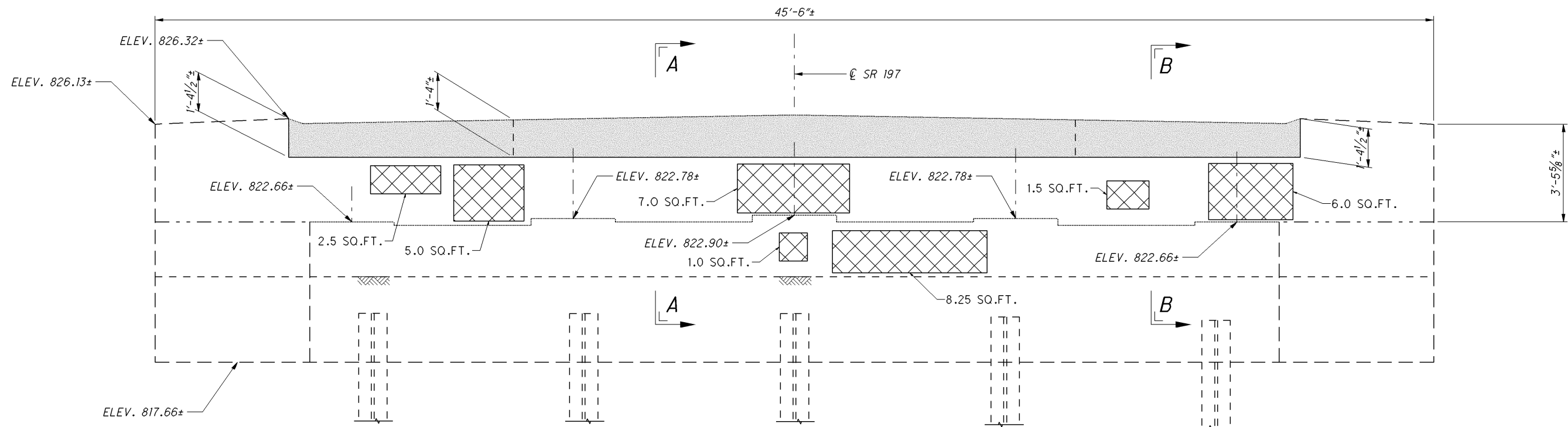
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**FORWARD ABUTMENT REMOVAL AND PATCHING PLAN**  
REAR ABUTMENT OPPOSITE HAND



**FORWARD ABUTMENT REMOVAL AND PATCHING ELEVATION**  
REAR ABUTMENT OPPOSITE HAND

**NOTE**

- 1.) FOR SECTION A-A & B-B SEE SHEET **6/11**
- 2.) DIMENSIONS AND ELEVATIONS GIVEN ARE FROM THE ORIGINAL PLANS AND ARE FOR REFERENCE PURPOSES ONLY.

**LEGEND**

- EXISTING GROUND LINE
- ITEM 202 PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN
- AREAS OF CONCRETE PATCHING REAR ABUTMENT

**ABUTMENT REMOVAL DETAILS**  
BRIDGE NO.: AUG-197-0510  
S.R. 197 OVER THE ST. MARYS RIVER

**AUG-116/197-  
8.22/5.10  
PID No. 93189**

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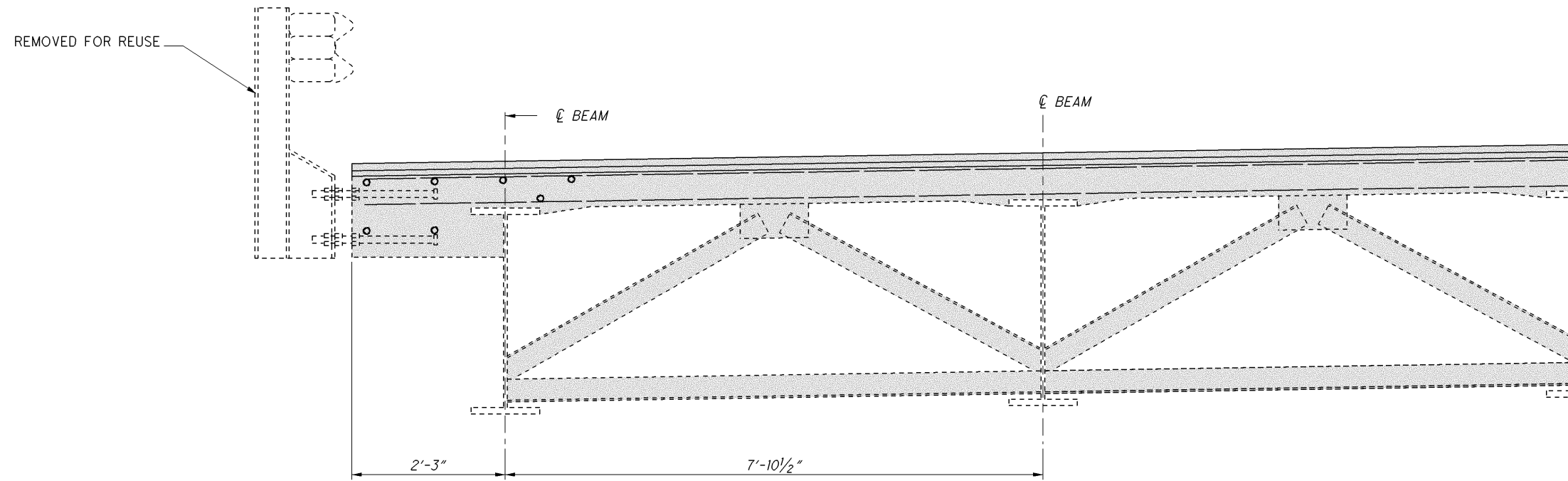
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DESIGN AGENCY  
ODOT DISTRICT 7  
PLANNING & ENGINEERING

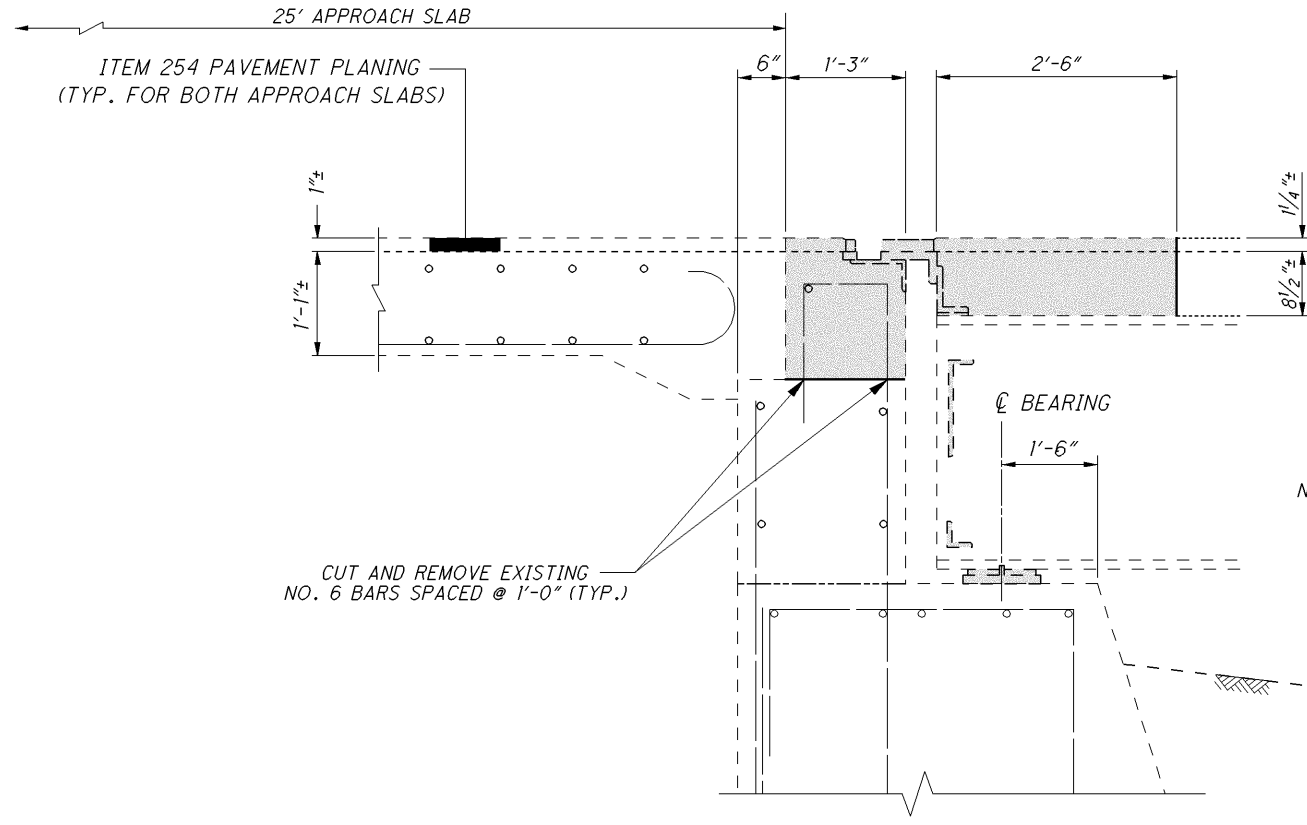
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DATE  
12-16-13  
STRUCTURE FILE NUMBER  
0602736

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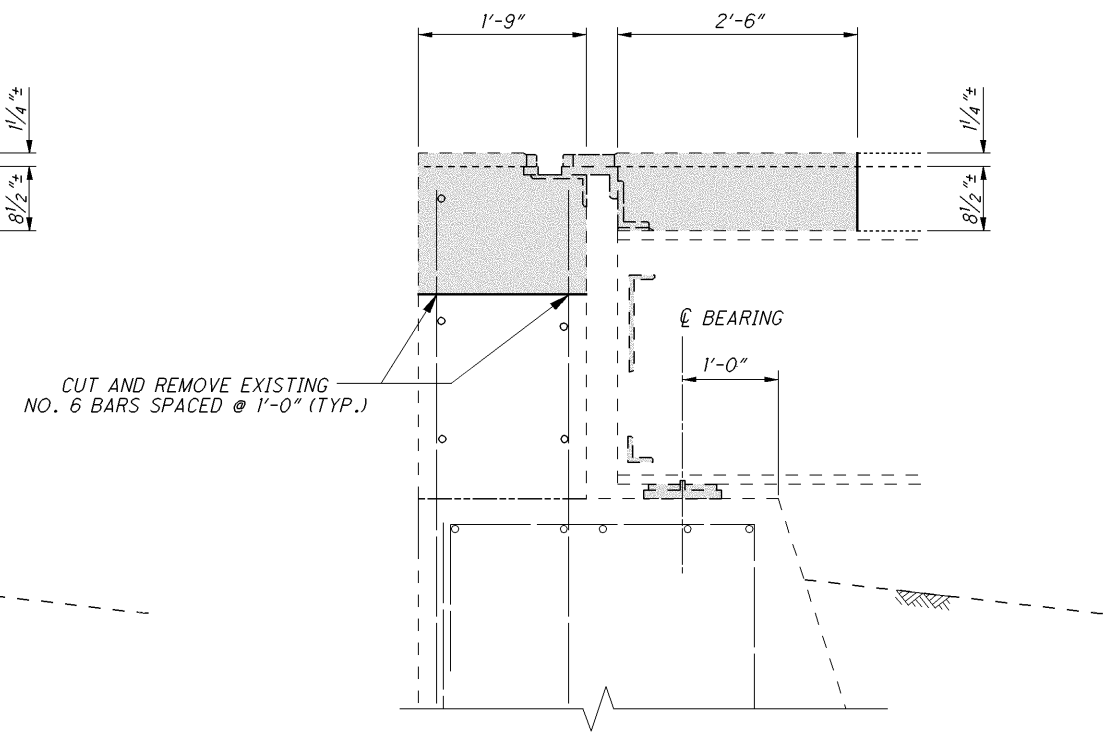
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PARTIAL TRANSVERSE SECTION  
SHOWING REMOVAL LIMITS  
ACROSS THE DECK AND PARAPET



SECTION A-A  
(REAR ABUTMENT SIMILAR)

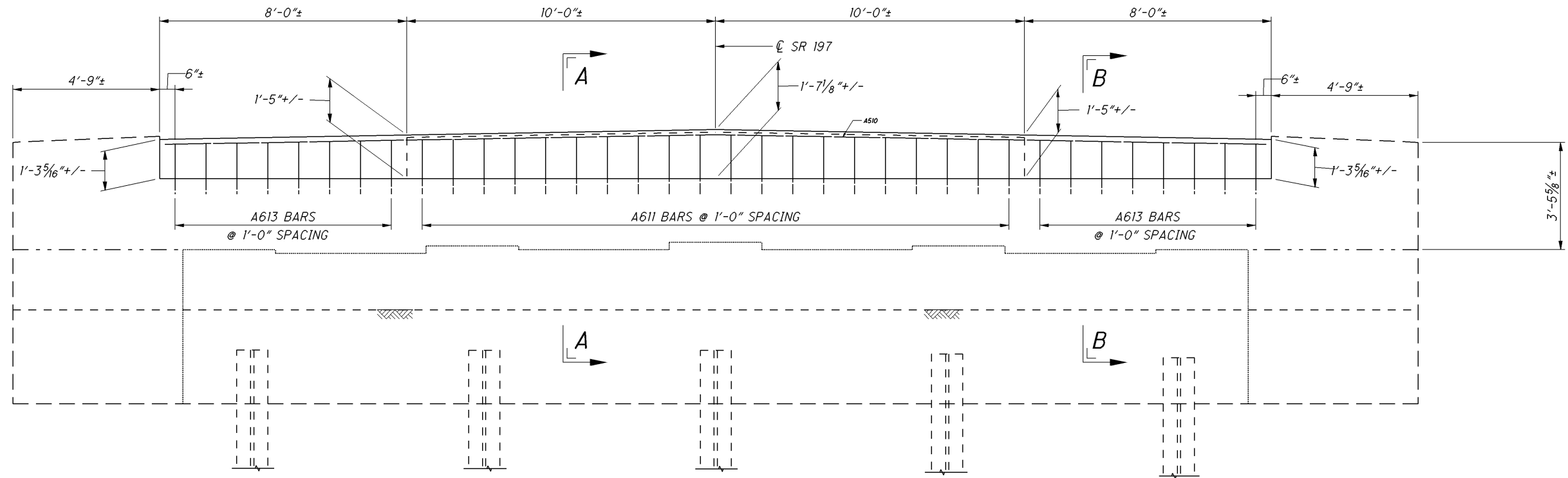


SECTION B-B  
(REAR ABUTMENT SIMILAR)

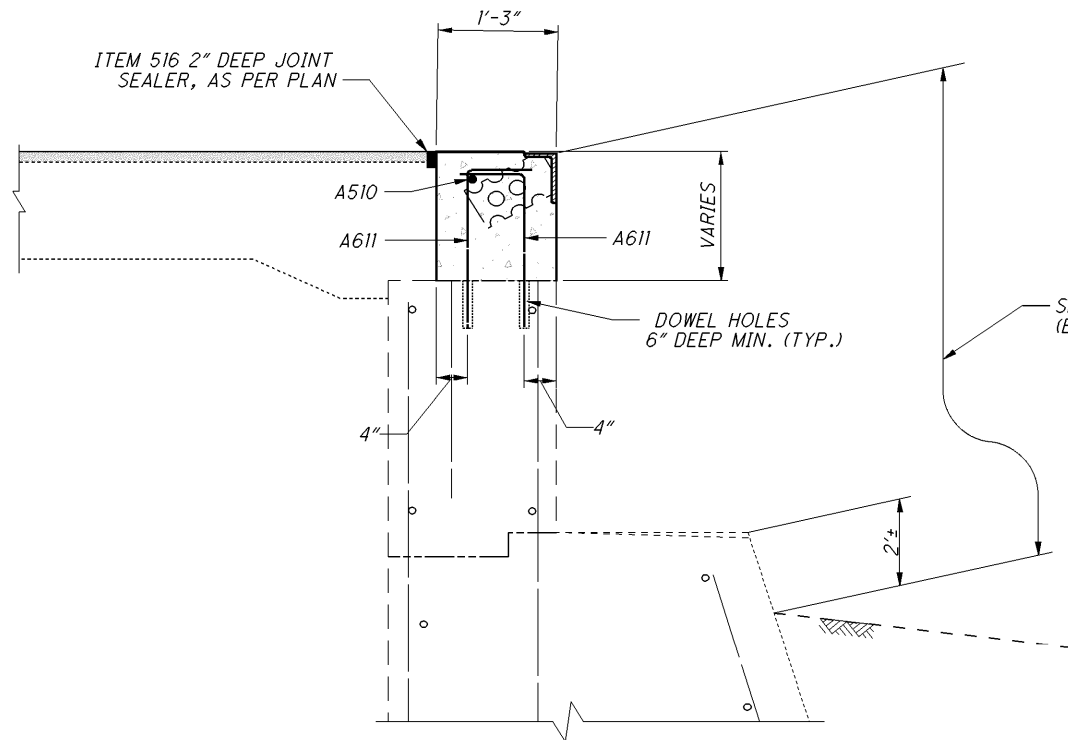
LEGEND:

ITEM 202 PORTIONS OF STRUCTURE REMOVED

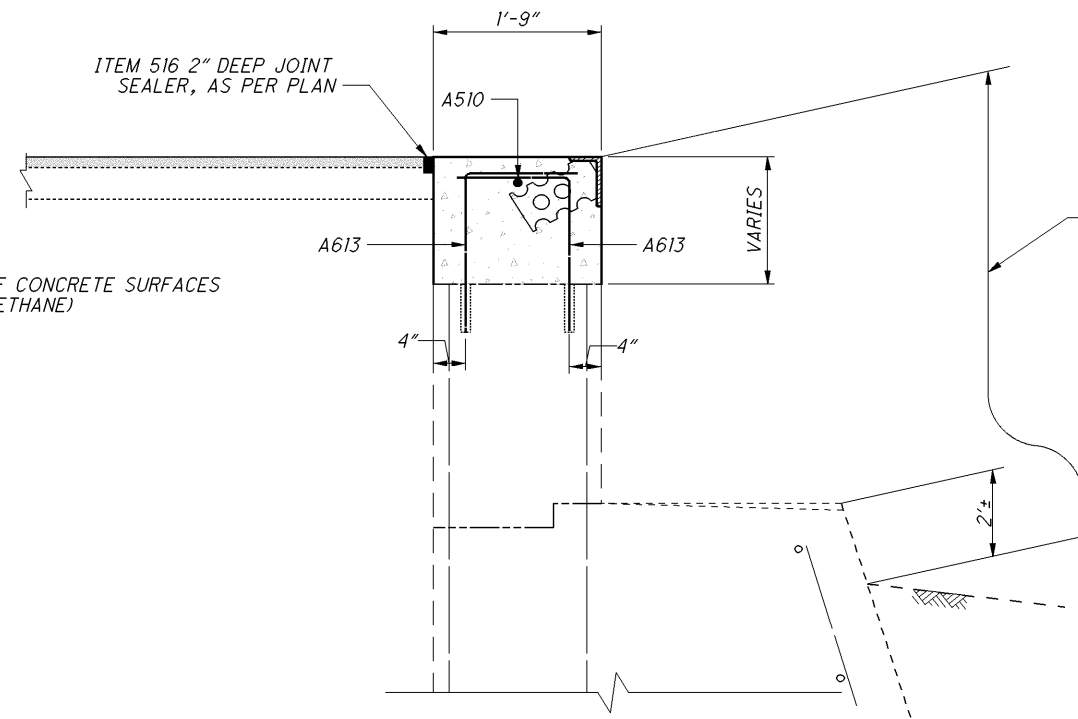
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**FORWARD ABUTMENT REMOVAL AND PATCHING ELEVATION**  
(REAR ABUTMENT OPPOSITE HAND)



**SECTION A-A**  
(REAR ABUTMENT OPP. HAND)



**SECTION B-B**  
(REAR ABUTMENT OPP. HAND)

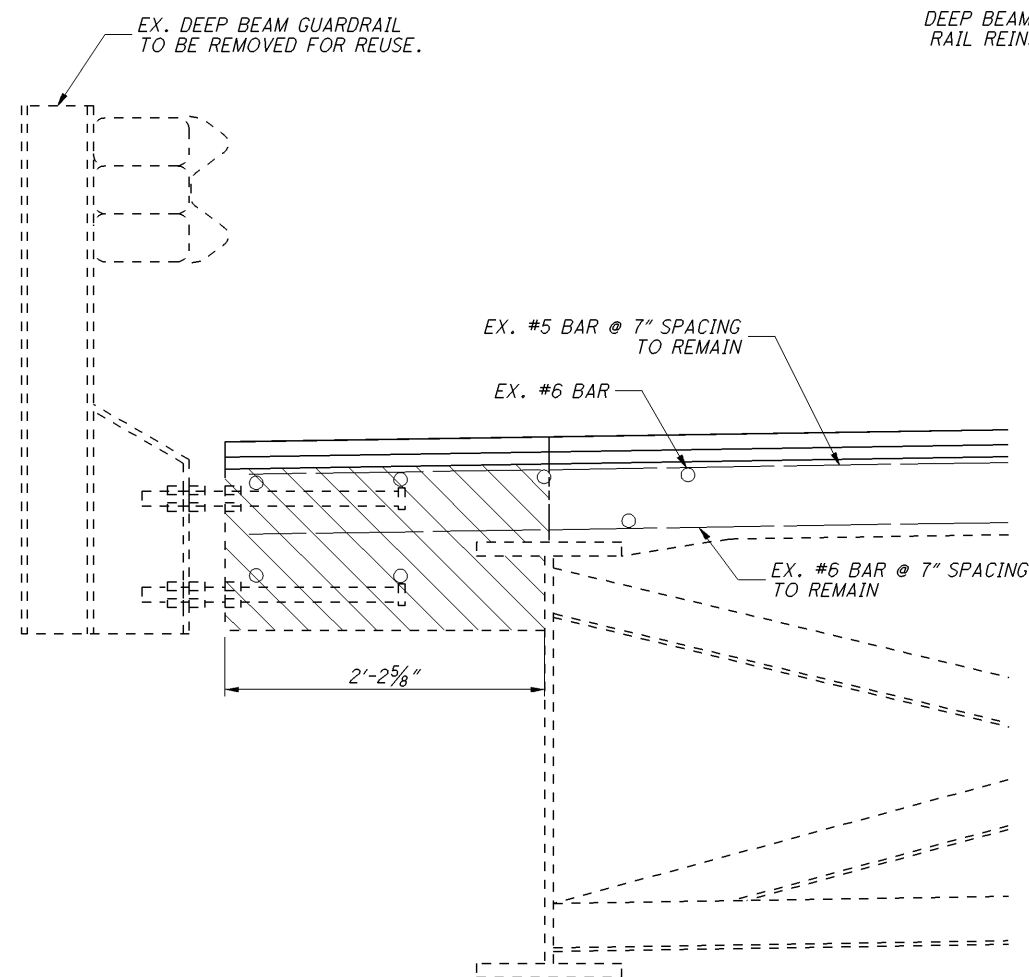
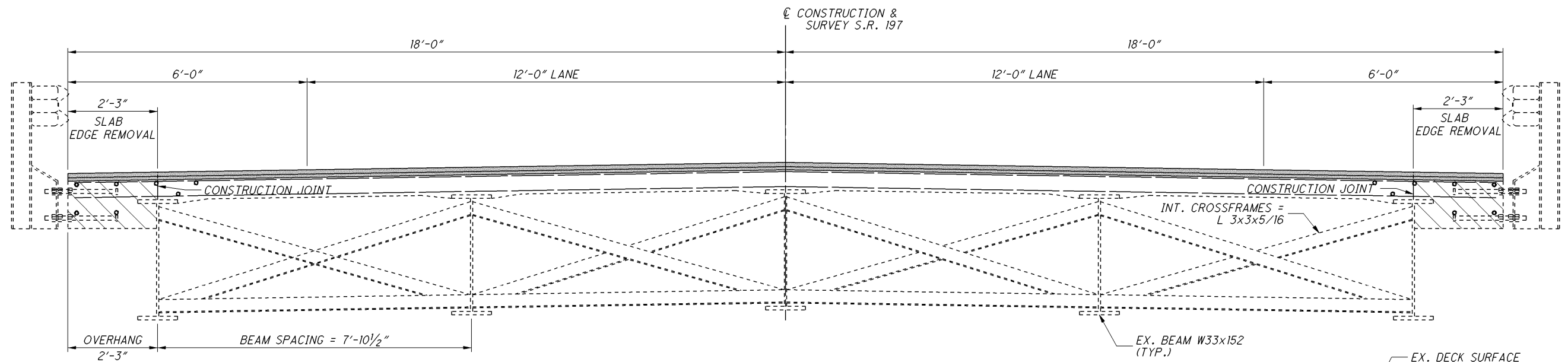
**NOTES**

1) ALL EXPOSED CONCRETE SURFACES TO BE SEALED WITH EPOXY-URETHANE

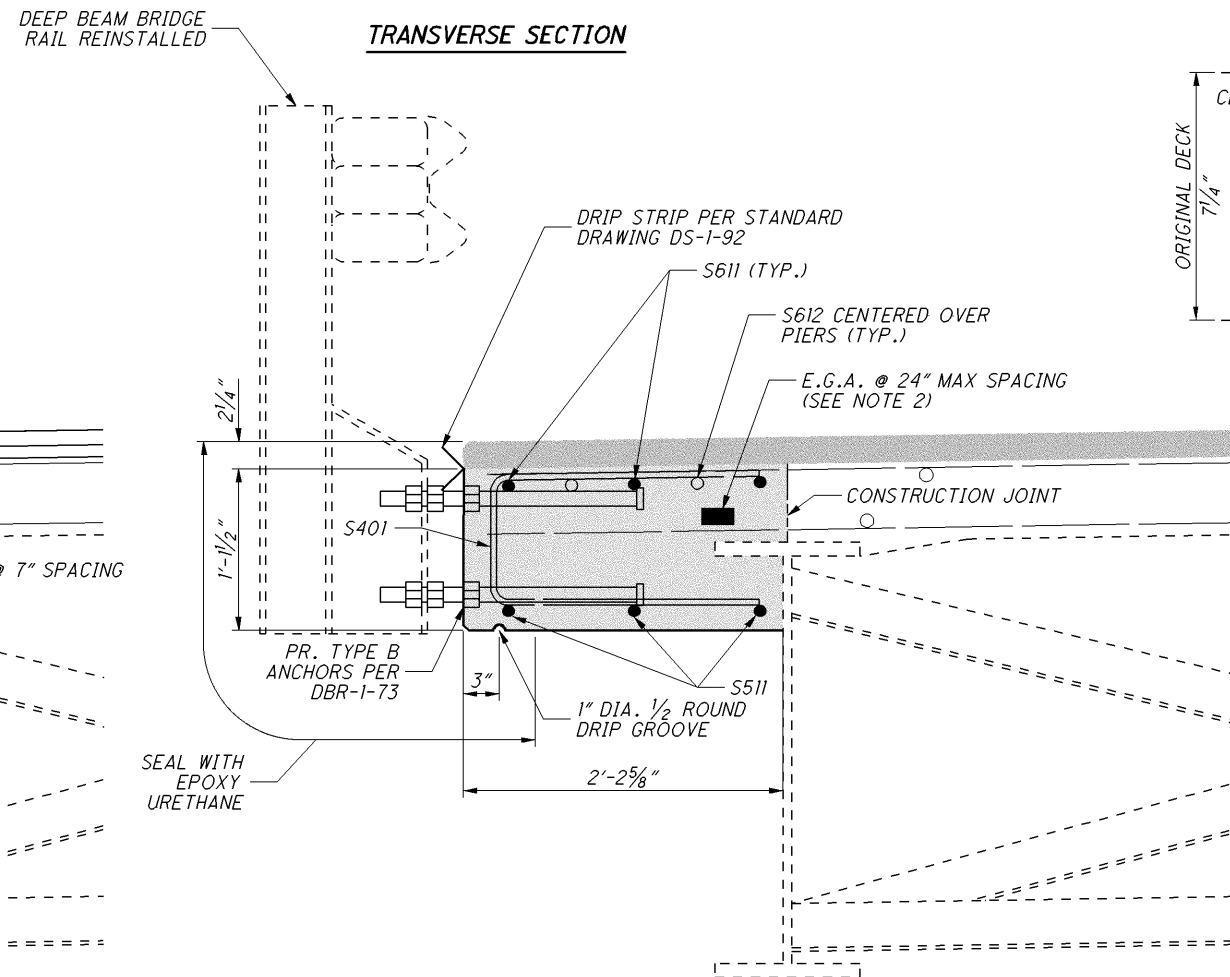
**LEGEND**

- ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
- ITEM 511 OSC2 CONCRETE, SUPERSTRUCTURE
- EXISTING GROUND LINE

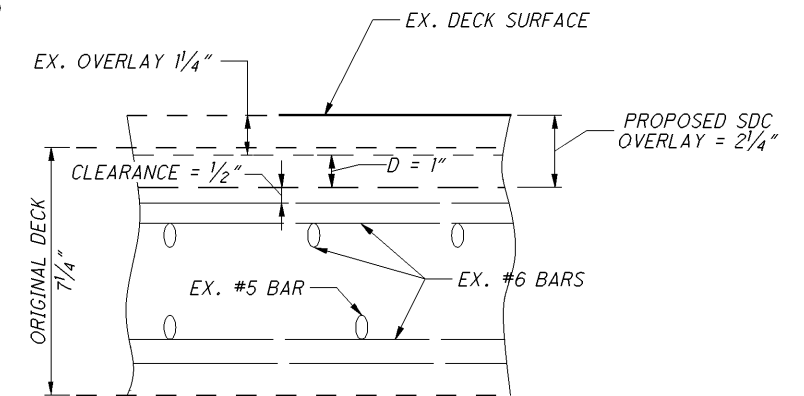
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OVERHANG REMOVAL



OVERHANG CONSTRUCTION



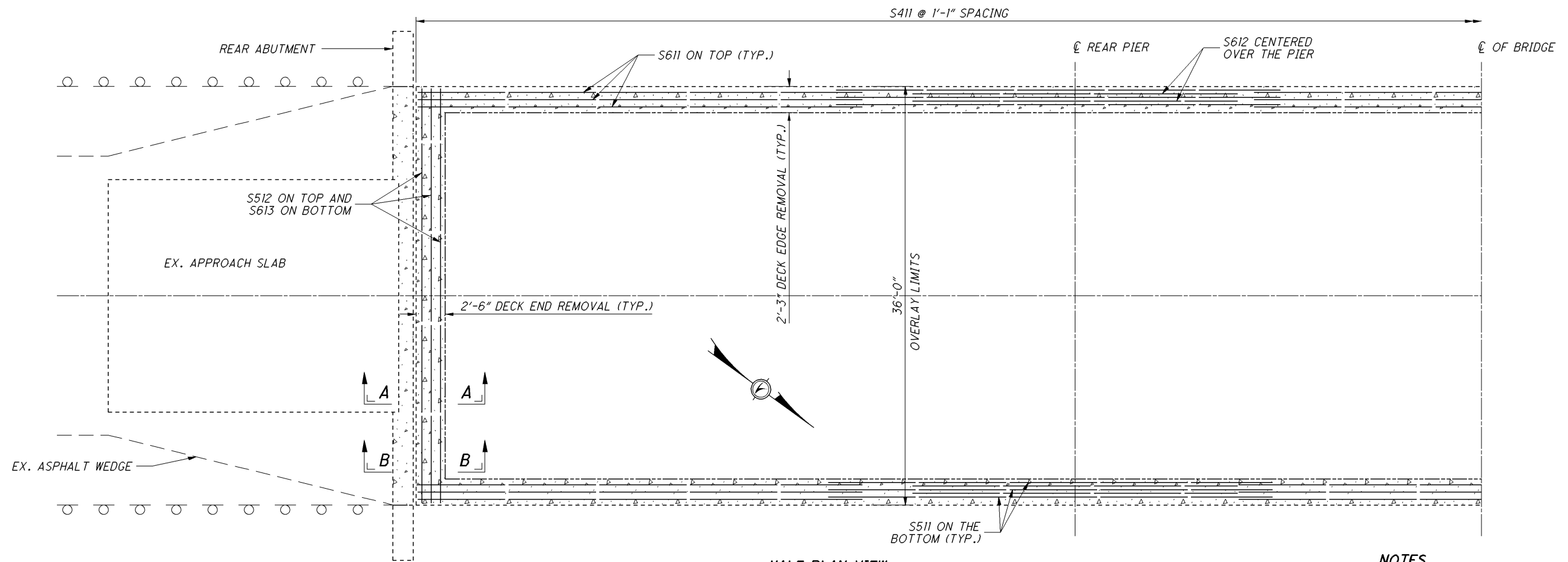
OVERLAY DETAIL

**NOTES & LEGEND**

- EX. TRANSVERSE BAR TO REMAIN AND SHALL NOT BE CUT.
- THE PLACEMENT OF ANODES SHALL ALTERNATE FROM THE TOP HALF TO BOTTOM HALF OF THE DECK

- LIMITS OF ITEM 202, PORTIONS OF STRUCTURE REMOVED
- LIMITS OF ITEM 511, CLASS QC2 CONCRETE, SUPERSTRUCTURE
- LIMITS OF ITEM 848, PROPOSED 2 1/4" SDC OVERLAY

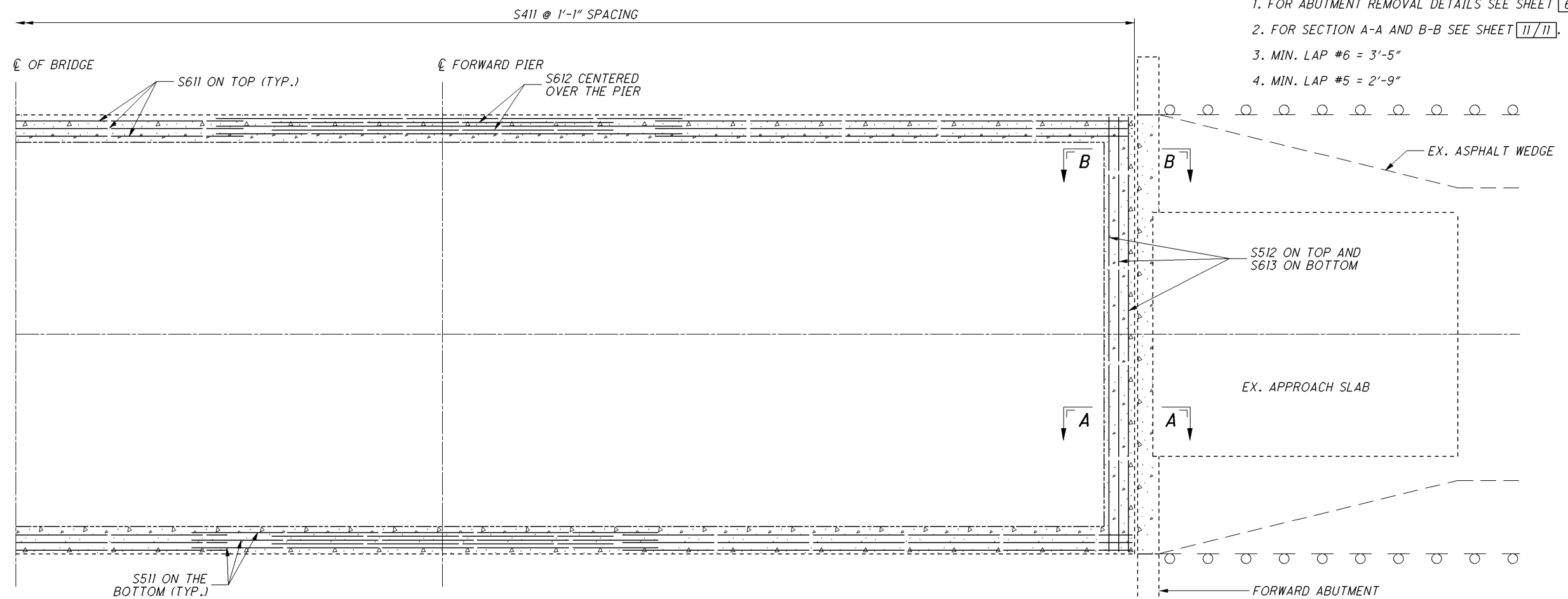
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HALF PLAN VIEW

NOTES

1. FOR ABUTMENT REMOVAL DETAILS SEE SHEET **6/11**.
2. FOR SECTION A-A AND B-B SEE SHEET **11/11**.
3. MIN. LAP #6 = 3'-5"
4. MIN. LAP #5 = 2'-9"



HALF PLAN VIEW

DESIGN AGENCY  
ODOT DISTRICT 7  
PLANNING & ENGINEERING

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DECK PLAN  
BRIDGE NO. AUG-197-0510  
SR 197 OVER THE ST. MARY'S RIVER

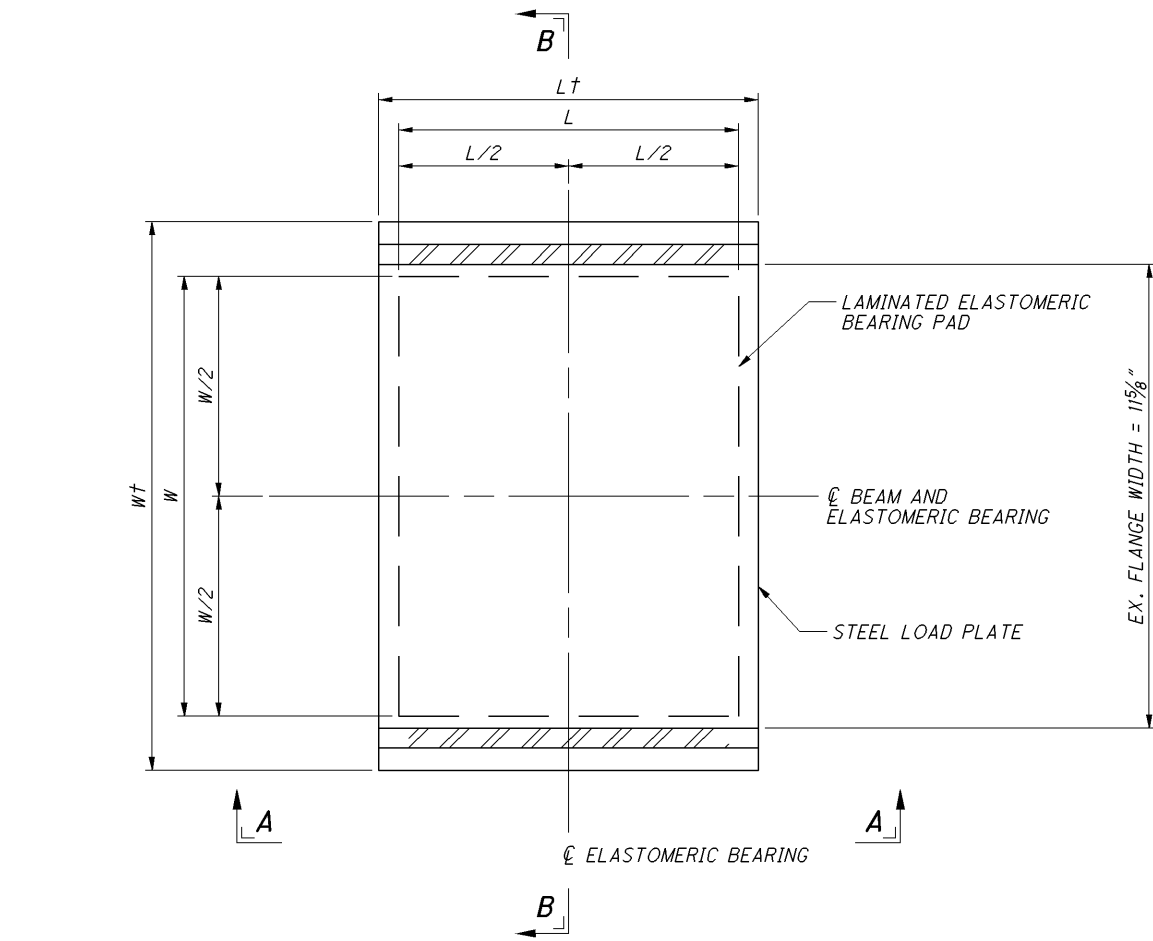
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8.22/5.10  
PID No. 93189

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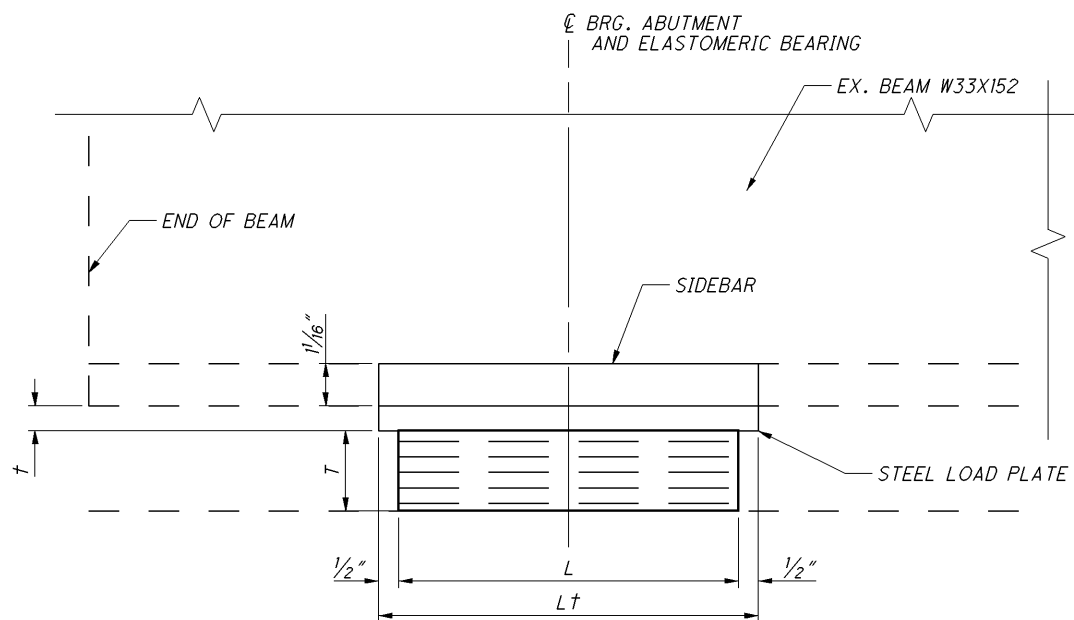
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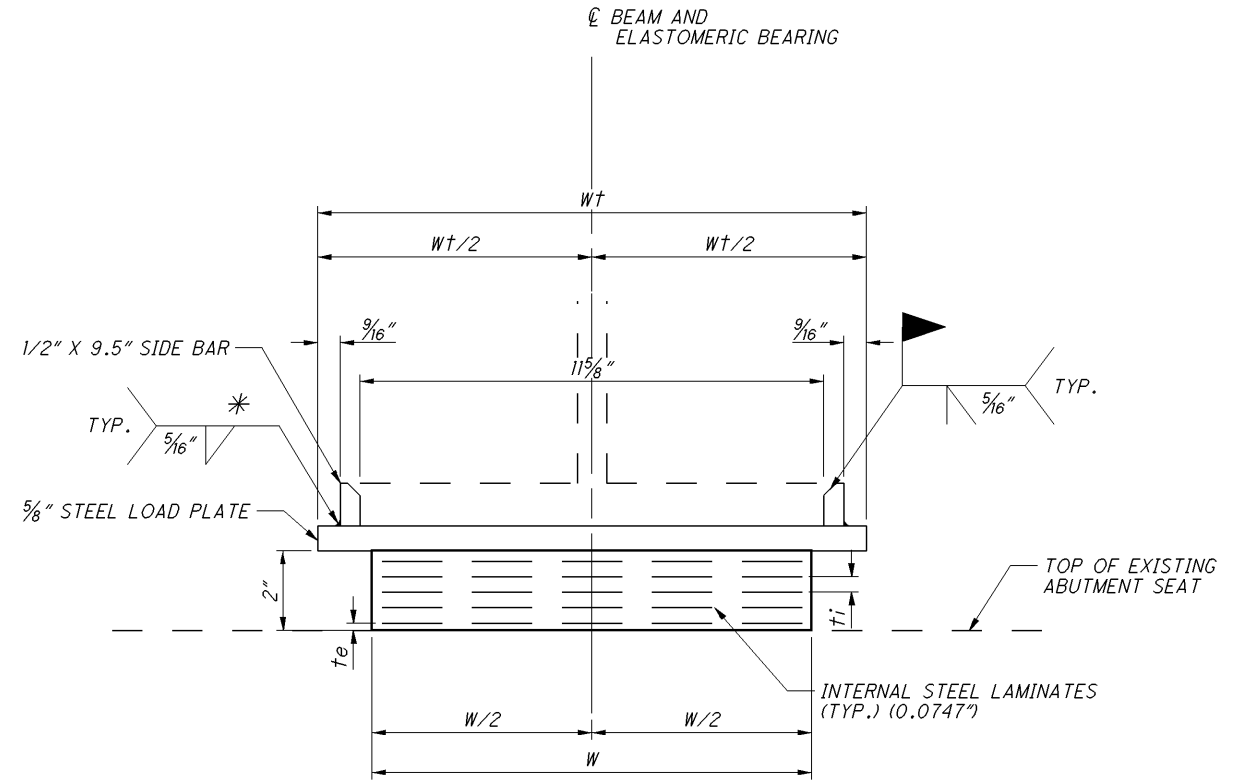
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LAMINATED ELASTOMERIC EXPANSION BEARING  
REAR AND FORWARD ABUTMENT



VIEW A-A



SECTION B-B

NOTES

- ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION 1, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
- STEEL PLATE: PLATES SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.
- BASIS OF PAYMENT: PAYMENT FOR ALL MATERIALS, LABOR, TESTING, AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL THE ELASTOMERIC BEARINGS FOR THE BEAMS WILL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 516, ELASTOMERIC BEARINGS WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN, EACH.
- ALL COST ASSOCIATED WITH THE LOAD PLATES, SIDEBARS AND WELDING TO THE BEAM FLANGES SHALL BE CONSIDERED INCIDENTAL TO ITEM 516.
- WELDING: CONTROL WELDING SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 185 DEGREES F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.

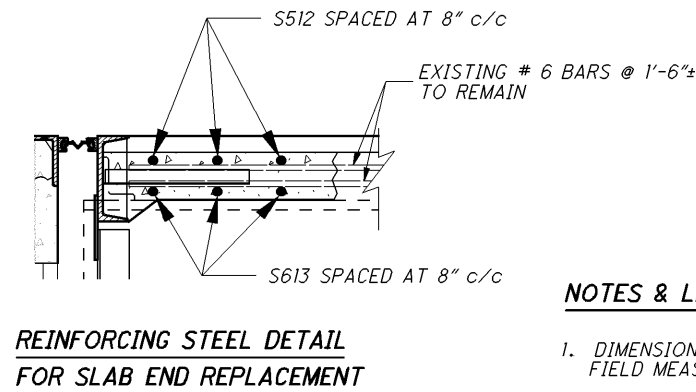
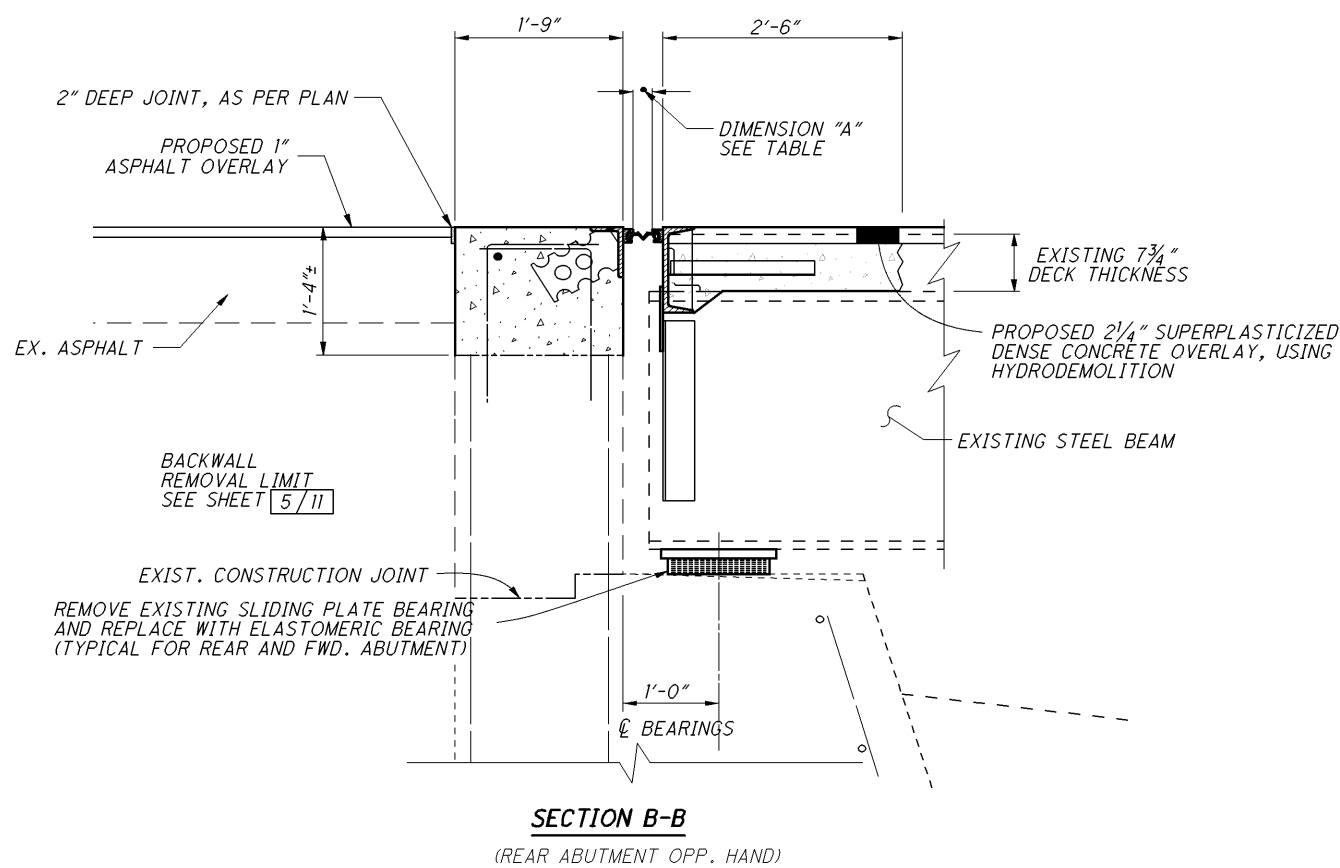
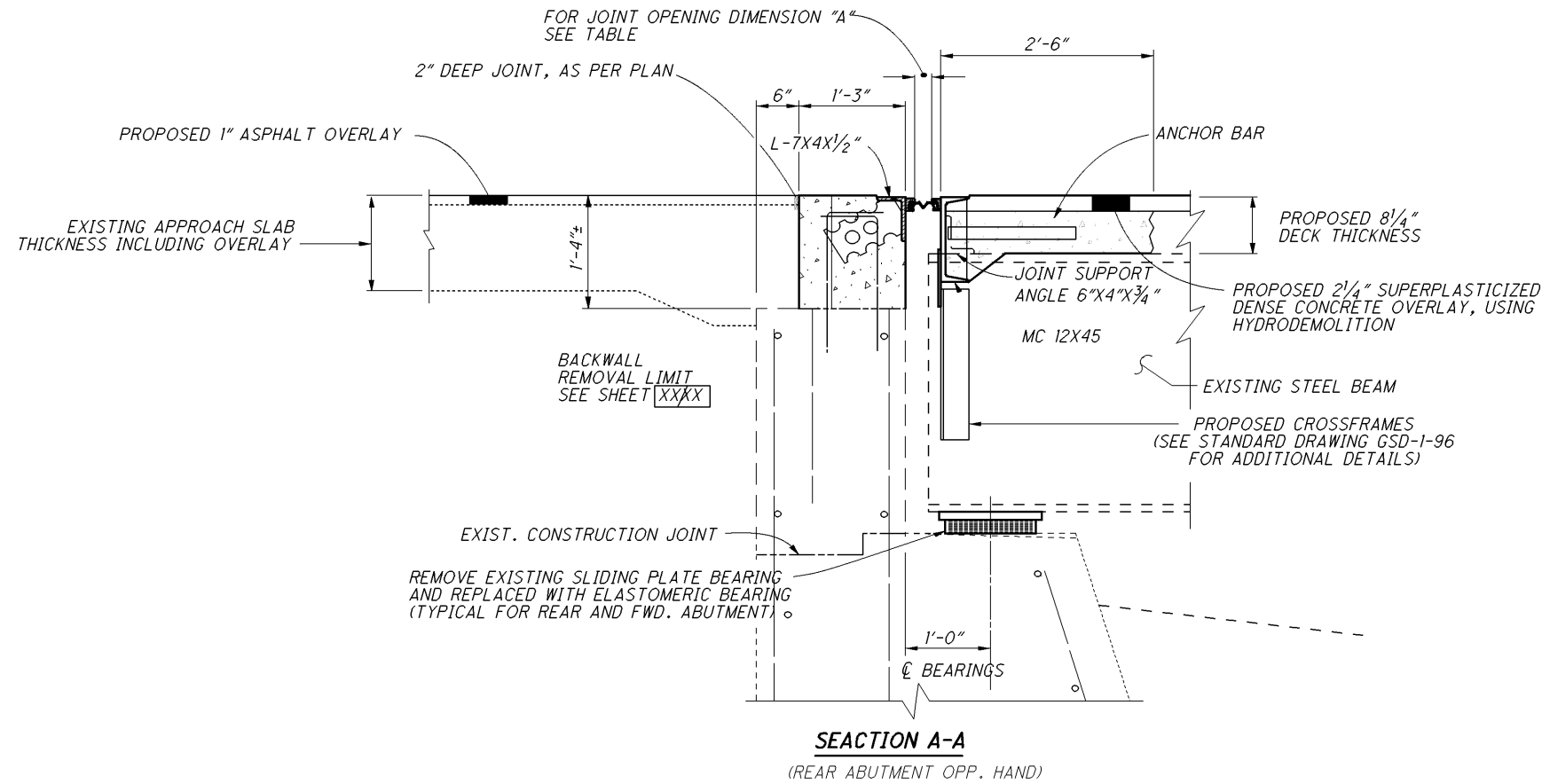
\* - FIELD WELD ONE SIDEBAR TO ENSURE PROPER FIT.

LEGEND

ti = THICKNESS OF INTERNAL LAYERS  
te = THICKNESS OF EXTERNAL LAYERS  
T = TOTAL THICKNESS OF ELASTOMERIC BEARING  
t = THICKNESS OF LOAD PLATE  
N = NUMBER OF STEEL LAMINATES  
INTERNAL STEEL LAMINATE THICKNESS = 0.0747" (14 GAGE)  
N-1 = NUMBER OF INTERNAL LAYERS

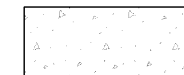
ELASTOMERIC BEARINGS													
LOCATION	BEARING DIMENSIONS							STEEL LOAD PLATE			REACTIONS*		MAXIMUM TOTAL LOAD
	L	W	ti	te	T	N	N-1	Lt	Wt	THICKNESS (t)	DL	LL	
ALL BEAMS	8.5"	11"	0.3125"	.1875"	2"	5	4	9.5"	1'-1 3/4"	5/8"	30.9 k	41.2 k	72.0 k

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#### NOTES & LEGEND

1. DIMENSIONS SHOWN ARE FROM EXISTING PLANS AND FIELD MEASUREMENTS.
2. FOR ADDITIONAL EXPANSION JOINT DETAILS SEE STD. DWG. EXJ-4-87.
3. THE STRIP SEAL GLAND MUST BE INSTALLED CONTINUOUS AND IN ONE PIECE.
4. 10' OF EACH BEAM END, FORWARD AND REAR ABUTMENTS, SHALL BE PAINTED. FOR ADDITIONAL PAINTING NOTES SEE SHEET 2/11.
5. EXISTING LONGITUDINAL REINFORCING STEEL TO REMAIN AND SHALL NOT BE CUT.



ITEM 511 - CLASS QC2 CONCRETE, SUPERSTRUCTURE

3" STRIP SEAL GLAND	
AMBIENT TEMPERATURE °F	DIMENSION "A"
30	1 3/16"
40	1 3/4"
50	1 1/16"
60	1 1/16"
70	1 5/8"
80	1 9/16"
90	1 9/16"

#### FORWARD ABUTMENTS

3" STRIP SEAL GLAND	
AMBIENT TEMPERATURE °F	DIMENSION "A"
30	1 7/8"
40	1 3/16"
50	1 1/16"
60	1 5/8"
70	1 1/2"
80	1 3/8"
90	1 5/16"

#### REAR ABUTMENT

#### ABUTMENT AND SLAB DETAILS

BRIDGE NO.: AUG-197-0510  
SR-197 OVER THE ST. MARYS RIVER

AUG-116/197-  
8.22/5.10  
PID No. 93189

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DESIGN AGENCY  
ODOT DISTRICT 7  
PLANNING & ENGINEERING

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