GENERAL NOTES

STANDARD BRIDGE DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:
REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	*REVISED 7-17-15*
AS-2-15	*REVISED 1-18-19*
SBR-1-20	*DATED 1-17-20*
SICD-1-96	*REVISED 7-18-14*
SICD-2-14	*DATED 7-18-14*
VPF-1-90	*REVISED 7-20-18*

REFER TO THE FOLLOWING HIGHWAY LIGHTING STANDARD DRAWINGS:

HL-50.21	*DATED 4-17-2020*

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

800	*DATED 1-15-21*
844	*DATED 4-20-18*

DESIGN SPECIFICATIONS
THIS STRUCTURE CONFORMS TO THE 8TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

OPERATIONAL IMPORTANCE
A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN LOADING
DESIGN LOADING INCLUDES:
VEHICULAR LIVE LOAD: HL-93 (PROPOSED DECK)
0.82 OPERATING LOAD RATING (HL-93) (EXISTING BEAMS)
CF130(57) (EXISTING SUBSTRUCTURE)
FUTURE WEARING SURFACE (FWS) OF 0.0 KIPS/SQ FT
THIS BRIDGE RECEIVED AN APPROVED DESIGN EXCEPTION FOR THE DESIGN LOADING STRUCTURAL CAPACITY.

DESIGN DATA
CONCRETE CLASS QC2 WITH QC/QA - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (ABUTMENT)
REINFORCING STEEL - MINIMUM YIELD STRENGTH OF 60 KSI
GLASS FIBER REINFORCED POLYMER (GFRP) - C&MS 705.01 & ASTM D7957

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

MAINTENANCE OF TRAFFIC
FOR MAINTENANCE OF TRAFFIC NOTES AND DETAILS, SEE ROADWAY PLANS.

PLANS OF EXISTING BRIDGE
CONSTRUCTION PLANS FOR THE EXISTING BRIDGE ARE AVAILABLE FOR REFERENCE BY CONTACTING THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 2 OFFICE.

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 CMS 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 UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

DECK PLACEMENT DESIGN 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 2.21 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103 INCHES.

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 INCHES.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65 INCHES.

INSPECTION OF EXISTING STRUCTURAL STEEL
THE ENGINEER WILL VISUALLY INSPECT ALL EXISTING BUTT-WELDED SPLICES TO ENSURE THE WELDS, PLATES AND 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, CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK. 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
THIS WORK CONSISTS OF THE REMOVAL OF CONCRETE DECKS INCLUDING PARAPETS, DECK JOINTS AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, CROSSFRAMES, ETC.). 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 SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCODING TO CMS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

REMOVAL METHODS: THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS (STEEL GIRDER), THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER STRUCTURAL MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING PRIMARY STRUCTURAL MEMBERS. DUE TO THE POSSIBLE PRESENCE OF ATTACHMENTS (FINISHING MACHINE, FORM SUPPORT, ETC.) TO EXISTING STRUCTURAL MEMBERS, PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRUCTURAL MEMBERS THAT ARE TO REMAIN. REPLACE OR REPAIR STRUCTURAL MEMBERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

EXISTING WELDED ATTACHMENTS: REMOVE EXISTING WELDED ATTACHMENTS (FINISHING MACHINE AND FORM SUPPORTS; AND SUPPORTS FOR SCUPPERS AND BULB ANGLES WHICH ARE TO BE REMOVED) LOCATED IN THE DESIGNATED TENSION PORTIONS OF THE TOP FLANGE OF EXISTING STEEL MEMBERS AND GRIND THE FLANGE SURFACES SMOOTH. CAREFULLY GRIND PARALLEL TO THE FLANGES.

CUT LINE CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. 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 SUFRACE 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 CONCRETE.

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.

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 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN
UNCLASSIFIED EXCAVATION SHALL BE IN ACCORDANCE WITH 503 EXCEPT THAT BACKFILL MATERIAL PLACED BEHIND THE ABUTMENTS SHALL BE 703.17 MATERIAL PLACED IN 6 INCH LIFTS AS PER 304.05.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN
ALL EXPOSED SURFACES OF THE ABUTMENTS, PIERS, DECK OVERHANG, AND BRIDGE RAILING SHALL BE SEALED WITH EPOXY-URETHANE SEALER AS SHOWN IN THE PLANS. THE COLOR SHALL BE FEDERAL COLOR NUMBER 17778 (LIGHT NEUTRAL). THE SURFACE TO BE SEALED SHALL HAVE SURFACE PREPARATION PER CMS 512.03(F) INCLUDING THE REMOVAL OF ANY EXISTING COATINGS.

ITEM 512 - SPECIAL - URETHANE TOP COAT SEALER
THE URETHANE TOP COAT SEALER APPLIED TO THE FIBER WRAP SYSTEM SHALL BE AS PER ITEM 512 - EPOXY-URETHANE SEALER. COLOR SHALL BE FEDERAL COLOR NUMBER 17778 (LIGHT NUETRAL).

ITEM 513 - STRUCTURAL STEEL, MISC.: DRILLED HOLES
THE CONTRACTOR SHALL DRILL 2½" DIAMETER HOLES IN THE EXISTING GIRDER WEB PLATES (AT BOTH ABUTMENTS), AS DIMENSIONED IN THE PLANS FOR THE #8 DIAPHRAGM REINFORCING BARS.

ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL
EXISTING STEEL SHALL BE CLEANED AND PAINTED WITH A PRIME, INTERMEDIATE AND FINISH COAT OF PAINT IN THE FIELD USING OZEU. THE COLOR OF THE FINISHED COAT SHALL BE LIGHT BROWN (FS-595C-10324).

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCUTRE, AS PER PLAN
THIS WORK CONSISTS OF TEMPORARY SUPPORT OR RE-POSITIONING OF THE EXISTING STRUCTURE TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.

IF, DURING THE JACKING OPERATIONS, DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. THE DEPARTMENT WILL NOT PAY FOR THE COST OF 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 SUPERSTRUCUTRE, AS PER PLAN.

ITEM 607 - VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC, AS PER PLAN
THIS ITEM CONSISTS OF FURNISHING AND INSTALLING VANDAL FENCING PER ODOT STANDARD DRAWING VPF-1-90 ON NEW CONCRETE BRIDGE RAILINGS, EXCEPT AS NOTED. THE GALVANIZED CHAIN-LINK 1 INCH DIAMOND MESH SHALL HAVE A BLACK PVC COATING. THE POSTS, RAILING, AND ALL HARDWARE SHALL BE PAINTED BLACK.

ITEM 844 - CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, AS PER PLAN
PATCHING HAS BEEN ESTIMATED FOR THE PIERS. EXACT DIMENSIONS AND LOCATIONS OF PATCHES SHALL BE DETERMINED AND MARKED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITY.

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND 844.03, 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 THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

GENERAL NOTES (1 OF 2)
BRIDGE NO. WOO-75-1332
GYPSY LANE ROAD OVER I.R. 75

SFN 8703752

DESIGN AGENCY
BARGE DESIGN SOLUTIONS

DESIGNER	CHECKER
BMG	AMM

REVIEWER
KSM 09/04/20

PROJECT ID
102930

SUBSET	TOTAL
2	19

SHEET	TOTAL
51	86

WOO-75-13.32/15.34

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MADE BY: AMM DATE: 8/31/2020
CHECKED BY: KNS DATE: 9/2/2020

ESTIMATED QUANTITIES (01/IMS/BR)

STRUCTURAL FILE NUMBER: 8703752

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	2
202	22900	150	SY	APPROACH SLAB REMOVED				150	
503	21301	LUMP		UNCLASSIFIED EXCAVATION, AS PER PLAN				LUMP	2
509	10000	35,508	LB	EPOXY COATED REINFORCING STEEL	9,076		26,432		
509	30020	14,765	FT	NO. 4 GFRP DEFORMED BARS			14,765		
509	30030	58,827	FT	NO. 5 GFRP DEFORMED BARS			58,827		
509	30040	16,686	FT	NO. 6 GFRP DEFORMED BARS			16,686		
510	10000	328	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	328				
511	33501	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE, AS PER PLAN	2				19
511	34447	307	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN			307		14
511	34450	102	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			102		
511	45710	52	CY	CLASS QC1 CONCRETE, ABUTMENT	52				
512	10101	878	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN	85	100	645	48	2
512	44400	13	SY	TYPE B WATERPROOFING	13				
512	71500	135	SY	SPECIAL - URETHANE TOP COAT SEALER		135			
513	20000	4,200	EACH	WELDED STUD SHEAR CONNECTORS			4,200		
513	95030	32	EACH	STRUCTURAL STEEL, MISC.: (DRILLED HOLES)			32		
514	00050	16,500	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL			12,600		
514	00056	16,500	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT			12,600		
514	00060	16,500	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			12,600		
514	00066	16,500	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			12,600		
514	00504	21	MNHR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			21		
514	10000	13	EACH	FINAL INSPECTION REPAIR			13		
516	10010	57	FT	ARMORLESS PREFORMED JOINT SEAL				57	
516	13600	17	SF	1" PREFORMED EXPANSION JOINT FILLER	17				
516	13900	222	SF	2" PREFORMED EXPANSION JOINT FILLER	222				
516	14020	90	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	90				
516	44301	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (13"x18"x4.336" WITH 14"x19"x1.5" LOAD PLATE)			8		10
516	44301	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (16"x23"x4.336" WITH 17"x24"x2" LOAD PLATE)			12		10
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN				LUMP	2
518	21200	38	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	38				
518	40000	75	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	75				
518	40011	35	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN	35				7
526	25000	163	SY	REINFORCED CONCRETE APPROACH SLABS (T=15")				163	
526	90030	57	FT	TYPE C INSTALLATION				57	
530	00600	1,175	SF	SPECIAL - STRUCTURES (GLASS FIBER REINFORCED WRAP SYSTEM)		1,175			3
530	13000	2,325	SF	SPECIAL - FORM LINER			2,325		3
607	39901	490	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC, AS PER PLAN			490		2
625	33000	1	EACH	STRUCTURE GROUNDING SYSTEM				1	
844	10001	183	SF	CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, AS PER PLAN		183			2

ESTIMATED QUANTITIES
BRIDGE NO. WOO-75-1332
GYPSY LANE ROAD OVER I.R. 75

SFN 8703752

DESIGN AGENCY

BARGE DESIGN SOLUTIONS

DESIGNER	CHECKER
BMG	AMM

REVIEWER
KSM 09/04/20

PROJECT ID 102930

SUBSET	TOTAL
4	19

SHEET	TOTAL
53	86

WOO-75-13.32/15.34

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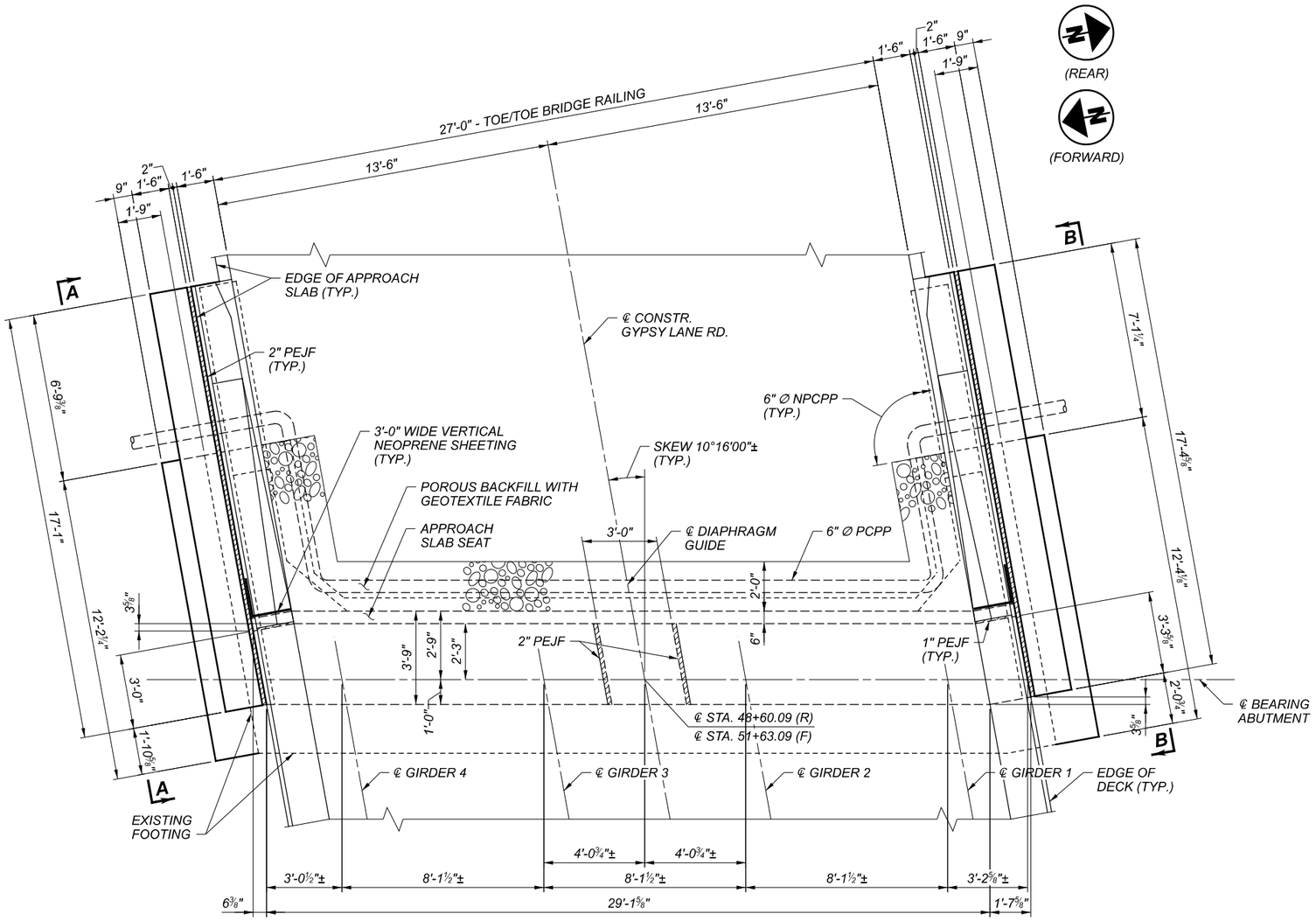
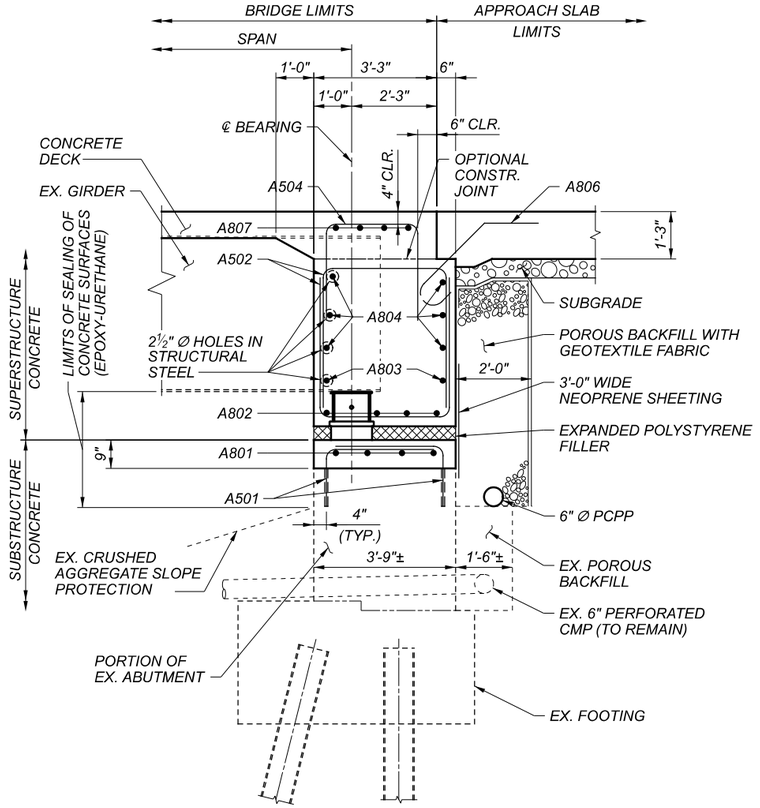


PLAN

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)



SECTION A-A

LEGEND:

***** - DOWEL 12" INTO EXISTING CONCRETE.

NOTES:

1. FOR ABUTMENT ELEVATION, DIAPHRAGM GUIDE DETAILS, AND PIPE OUTLET DETAILS, SEE SHEET 7 / 19.
2. FOR VIEWS A-A AND B-B, SEE SHEET 8 / 19.
3. FOR LOCATION OF SECTION A-A, SEE SHEET 7 / 19.
4. FOR BRIDGE RAILING DETAILS, SEE SHEET 17 / 19.
5. FOR BEARING DETAILS, SEE SHEET 10 / 19.
6. FOR REINFORCING STEEL LIST, SEE SHEET 19 / 19.
7. ABUTMENT DIAPHRAGM CONCRETE: PLACE THE DIAPHRAGM CONCRETE ENCASING THE STRUCTURAL MEMBER ENDS WITH THE DECK CONCRETE OR AT LEAST 48 HOURS BEFORE PLACEMENT OF THE DECK CONCRETE. IF PLACED SEPERATELY, LOCATE A HORIZONTAL CONSTRUCTION JOINT IN THE DIAPHRAGM AS SHOWN IN SECTION A-A, THIS SHEET AND PLACE REMAINING DIAPHRAGM CONCRETE WITH THE DECK.
8. FOR ADDITIONAL SEMI-INTEGRAL ABUTMENT DETAILS, SEE ODOT STD. DWG. SICD-1-96 AND SICD-2-14.
9. DRILL HOLES IN BEAM ENDS ACCORDING TO DETAIL ON SHEET 11 / 19 TO ALLOW FOR PLACEMENT OF REINFORCING STEEL AT FACE OF ABUTMENT DIAPHRAGM.

ABUTMENT DETAILS
BRIDGE NO. WOO-75-1332
GYPSY LANE ROAD OVER I.R. 75

SFN	8703752
DESIGN AGENCY	BARGE DESIGN SOLUTIONS
DESIGNER	BMG
CHECKER	AMM
REVIEWER	KSM 09/04/20
PROJECT ID	102930
SUBSET	6
TOTAL	19
SHEET	55
TOTAL	86

WOO-75-13.32/15.34

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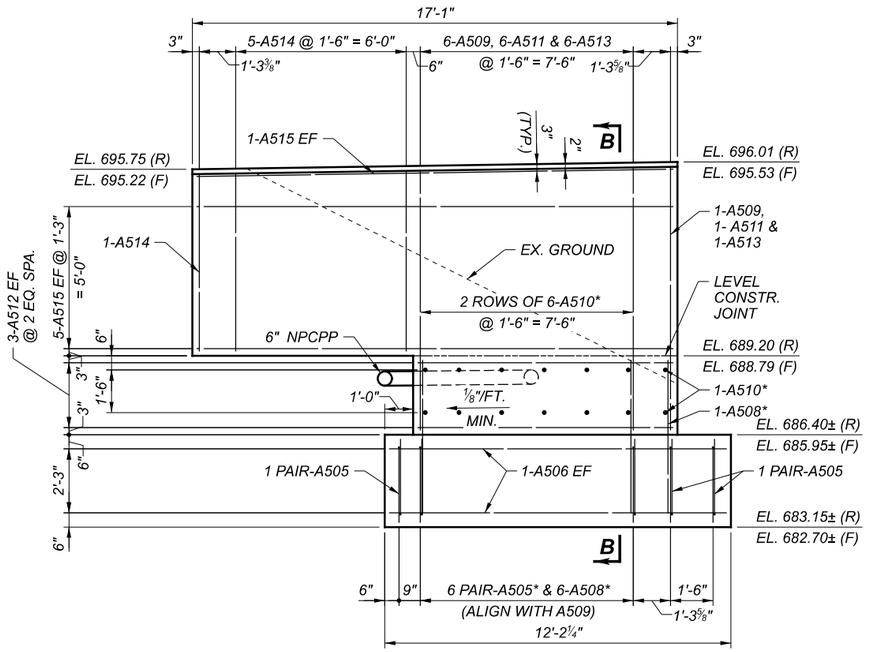
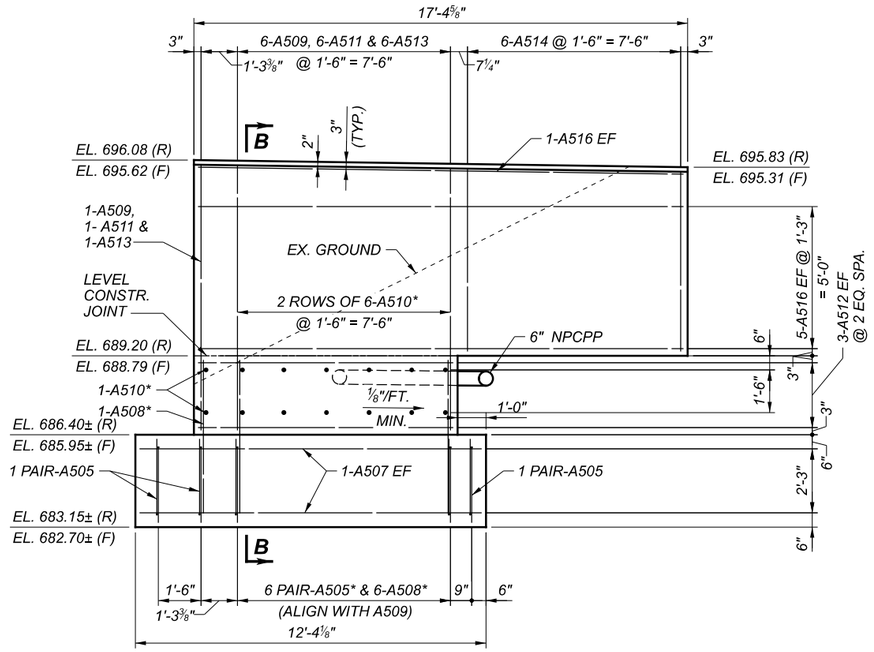


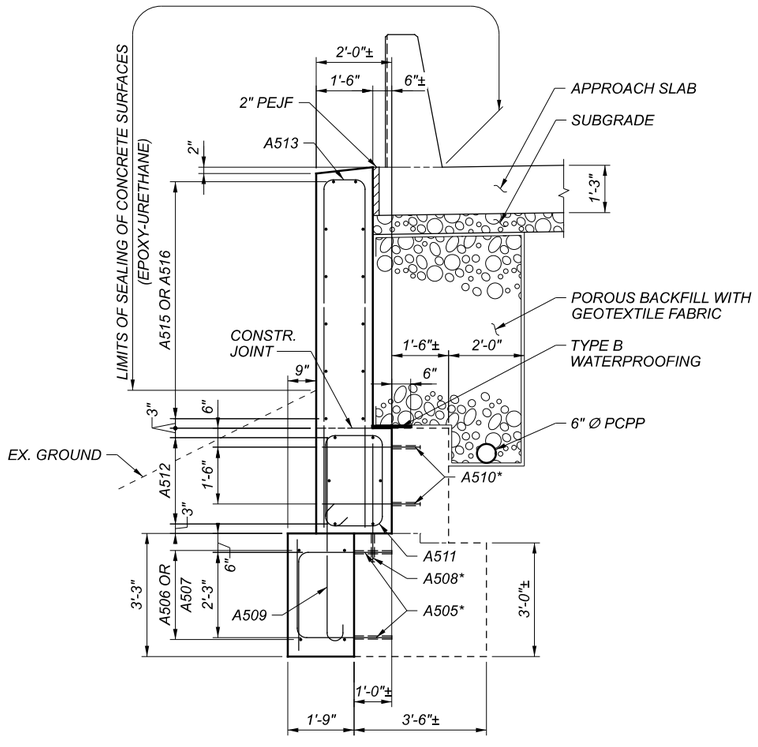
VIEW A-A

(DOWEL BARS A510 SHALL CLEAR EXISTING VERTICAL WINGWALL EDGES BY 4" MIN.)
(BRIDGE RAILING NOT SHOWN FOR CLARITY)



VIEW B-B

(DOWEL BARS A510 SHALL CLEAR EXISTING VERTICAL WINGWALL EDGES BY 4" MIN.)
(BRIDGE RAILING NOT SHOWN FOR CLARITY)



SECTION B-B

LEGEND:

***** - *DOWEL 12" INTO EXISTING CONCRETE.*

NOTES:

1. *FOR LOCATIONS OF VIEWS A-A AND B-B, SEE SHEET* 6 / 19.
2. *FOR PIPE OUTLET DETAIL, SEE SHEET* 7 / 19.
3. *EXISTING PILES NOT SHOWN FOR CLARITY.*
4. *FOR REINFORCING STEEL LIST, SEE SHEET* 19 / 19

ABUTMENT DETAILS
BRIDGE NO. WOO-75-1332
GYPSY LANE ROAD OVER I.R. 75

SFN	8703752
DESIGN AGENCY	BARGE DESIGN SOLUTIONS
DESIGNER	BMG
CHECKER	AMM
REVIEWER	KSM 09/04/20
PROJECT ID	102930
SUBSET	8
TOTAL	19
SHEET	57
TOTAL	86

WOO-75-13.32/15.34

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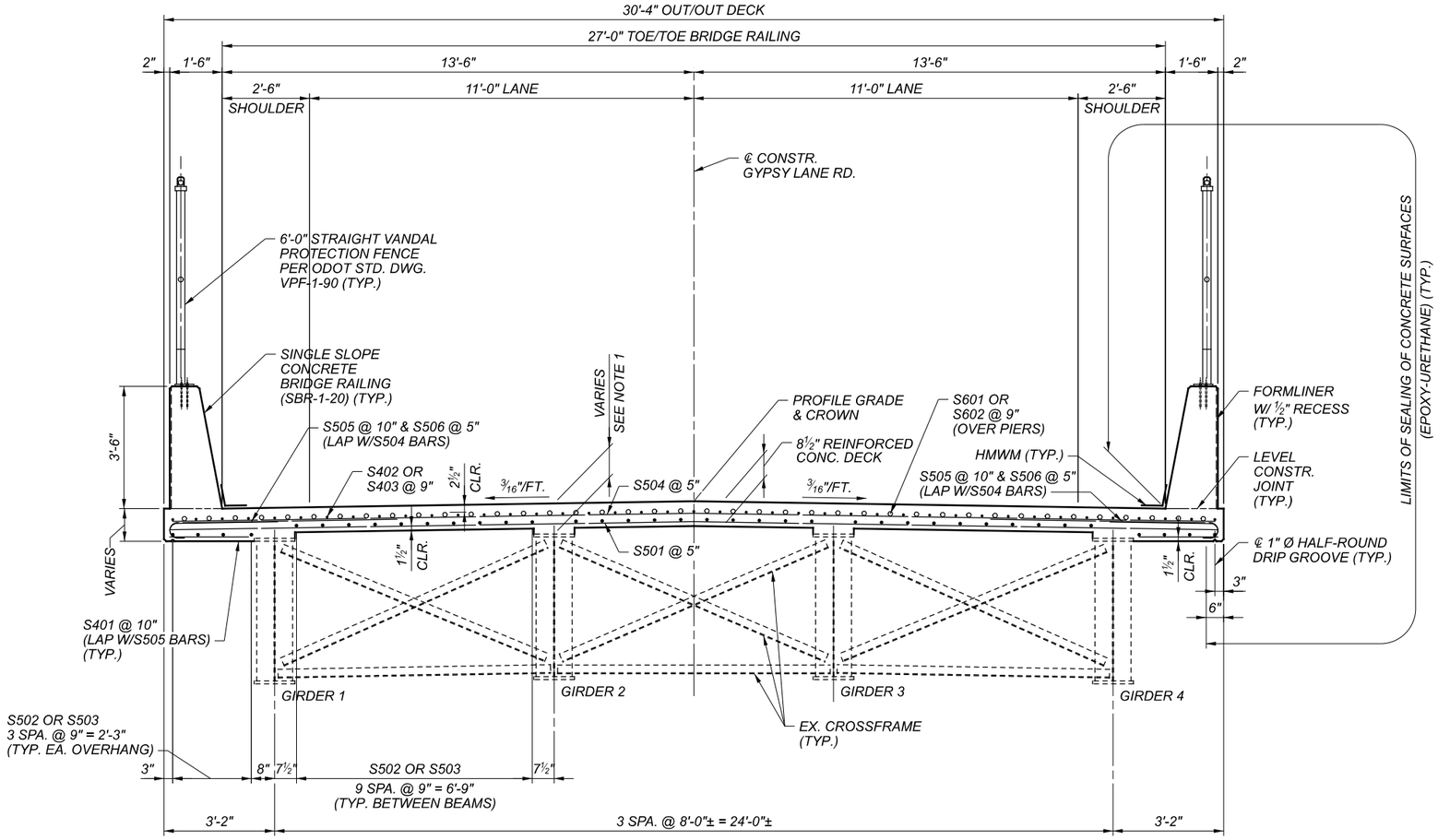
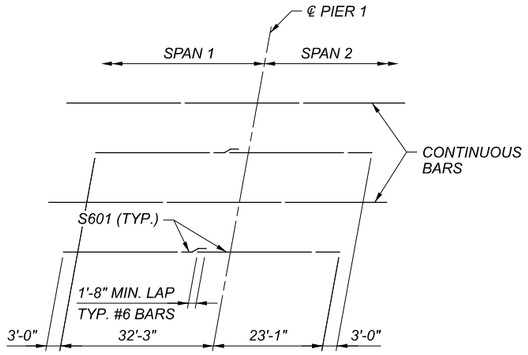
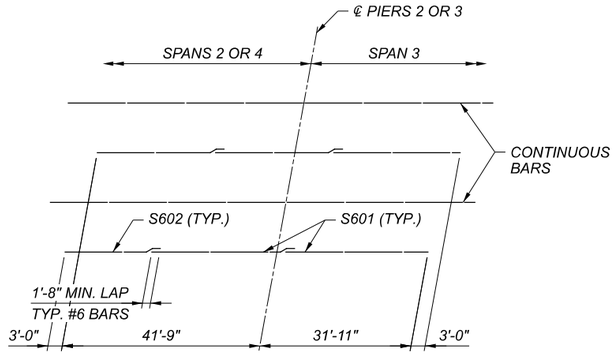


SECTION D-D



LAYOUT OF ADDITIONAL BARS OVER PIER 1



LAYOUT OF ADDITIONAL BARS OVER PIERS 2 & 3

NOTES:

1. 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 AN AVERAGE HAUNCH THICKNESS OF 2.53 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.
2. FOR DECK PLANS, SEE SHEETS 12 / 19 AND 13 / 19.
3. FOR BRIDGE RAILING DETAILS, SEE SHEET 17 / 19.
4. FOR SCREED, TOP OF HAUNCH AND FINAL DECK ELEVATIONS, SEE SHEETS 15 / 19 AND 16 / 19.
5. FOR REINFORCING STEEL LIST, SEE SHEET 19 / 19.
6. ALL REINFORCING STEEL BARS IN THE DECK SHALL BE GLASS FIBER REINFORCED POLYMER (GFRP).
7. FOR AESTHETIC TREATMENT OF BRIDGE RAILING, SEE GENERAL NOTES, SHEET 3 / 19.
8. THE HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM) SEALER AT THE LONGITUDINAL JOINT BETWEEN THE DECK AND THE BRIDGE RAILING SHALL BE INCLUDED WITH ITEM 511, CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN FOR PAYMENT.

DECK DETAILS
BRIDGE NO. WOO-75-1332
GYPSY LANE ROAD OVER I.R. 75

SFN	8703752
DESIGN AGENCY	BARGE DESIGN SOLUTIONS
DESIGNER	AMM
CHECKER	BMG
REVIEWER	KSM 09/04/20
PROJECT ID	102930
SUBSET	14
TOTAL	19
SHEET	63
TOTAL	86

WOO-75-13.32/15.34

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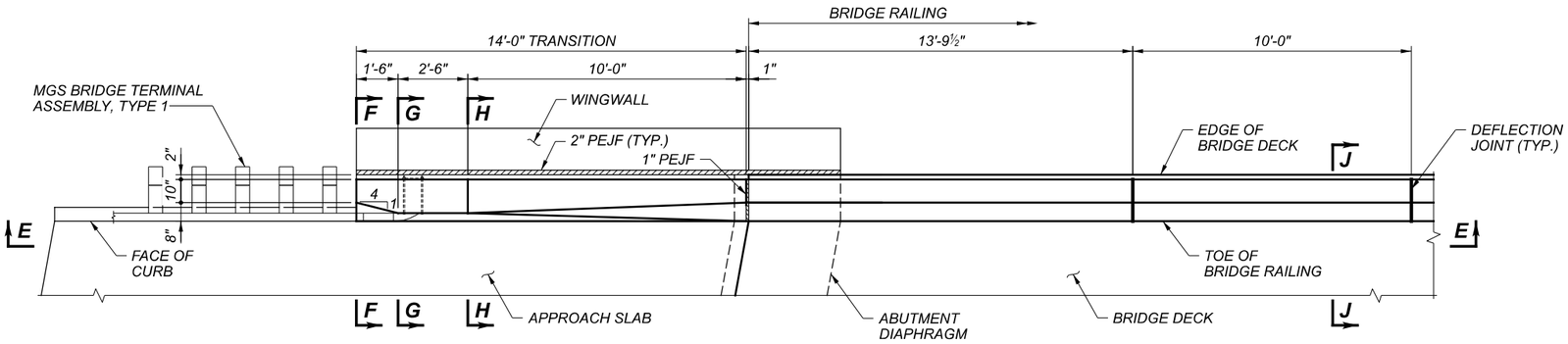


NOTES:

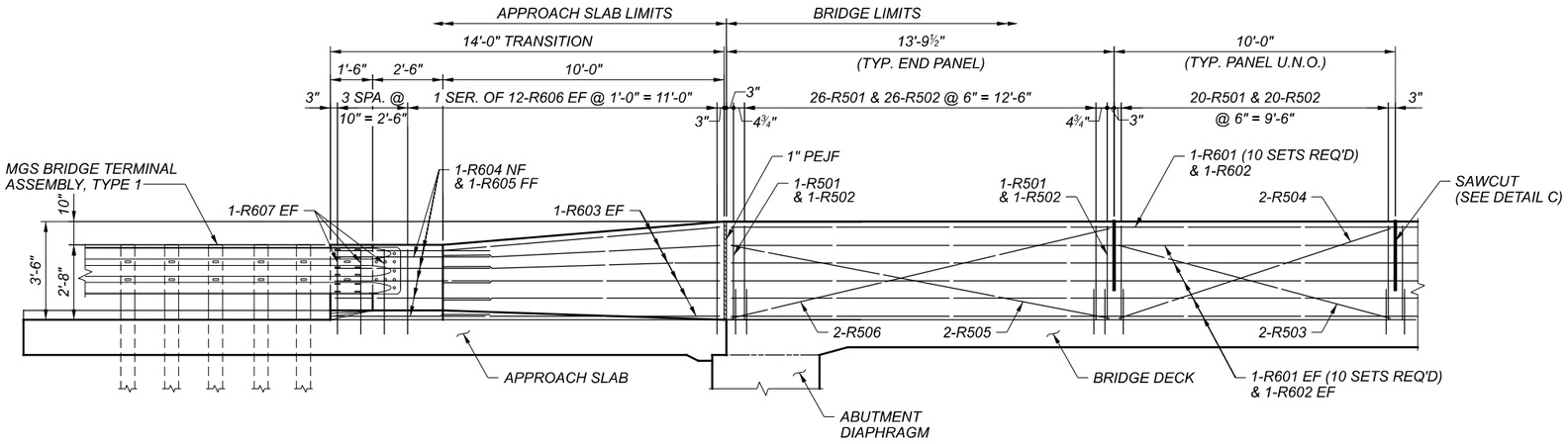
1. BRIDGE RAILING CONCRETE TO BE INCLUDED WITH ITEM 511 - CLASS QC2 CONCRETE, WITH QA/QC, BRIDGE DECK (PARAPET) FOR PAYMENT. BRIDGE RAILING REINFORCING TO BE INCLUDED WITH ITEM 509 - EPOXY COATED REINFORCING STEEL, FOR PAYMENT. ITEM 509 - NO. 5 GFRP DEFORMED BARS AND ITEM 509 - NO. 6 GFRP DEFORMED BARS, AS NOTED IN PLANS AND ODOT STD. DWG. SBR-1-20.
2. FOR ADDITIONAL BRIDGE RAILING DETAILS NOT SHOWN, SEE ODOT STD. DWG. SBR-1-20.
3. FOR DEFLECTION JOINT LAYOUT AND VANDAL PROTECTION FENCE POST SPACING, SEE SHEET 12 / 19 .
4. FOR APPROACH SLAB DETAILS, SEE SHEET 18 / 19 .
5. FOR BRIDGE TERMINAL ASSEMBLY, SEE ROADWAY PLANS AND ODOT STD. CONSTRUCTION DWG MGS-3.1.
6. FOR AESTHETIC TREATMENT OF BRIDGE RAILING, SEE GENERAL NOTES SHEET 3 / 19 .
7. FOR REINFORCING STEEL LIST, SEE SHEET 19 / 19 .

LEGEND:

* - LIMITS OF SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

PLAN VIEW

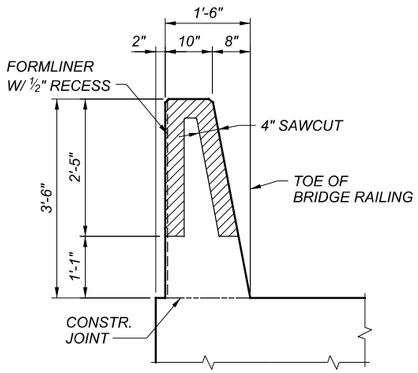
(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)



SECTION E-E

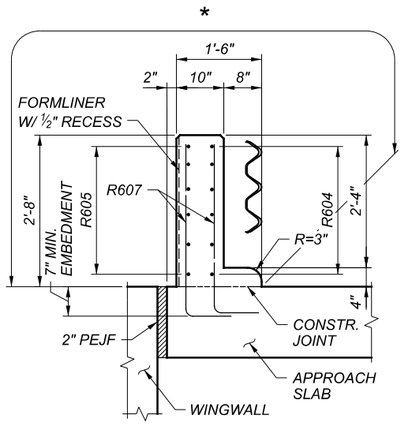
MINIMUM LAP LENGTH

#6 LONGITUDINAL	1'-8" MIN.

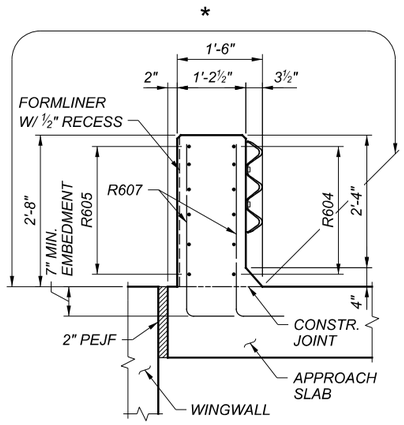


DETAIL C

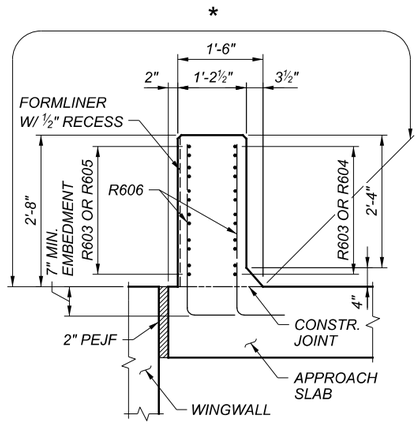
(REINFORCING STEEL NOT SHOWN FOR CLARITY)



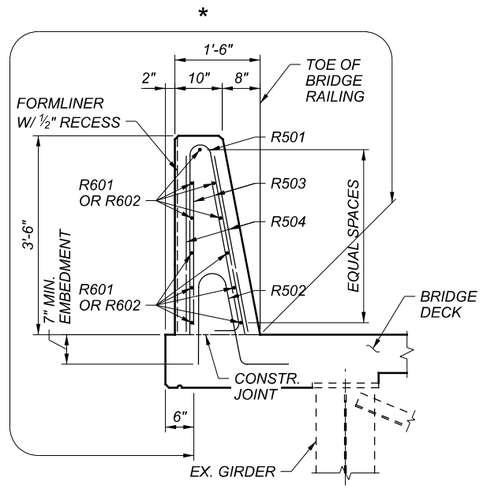
SECTION F-F



SECTION G-G



SECTION H-H



SECTION J-J

BRIDGE RAILING DETAILS
BRIDGE NO. WOO-75-1332
GYPSY LANE ROAD OVER I.R. 75

SFN	8703752
DESIGN AGENCY	BARGE DESIGN SOLUTIONS
DESIGNER	BMG
CHECKER	AMM
REVIEWER	KSM 09/04/20
PROJECT ID	102930
SUBSET	17
TOTAL	19
SHEET	66
TOTAL	86

WOO-75-13.32/15.34

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GENERAL NOTES

STANDARD BRIDGE DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:
REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	*REVISED 7-17-15*
AS-2-15	*REVISED 1-18-19*
SBR-1-20	*DATED 1-17-20*
SICD-1-96	*REVISED 7-18-14*
SICD-2-14	*DATED 7-18-14*
VPF-1-90	*REVISED 7-20-18*

REFER TO THE FOLLOWING HIGHWAY LIGHTING STANDARD DRAWINGS:

HL-50.21	*DATED 4-17-2020*

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

800	*DATED 1-15-21*
844	*DATED 4-20-18*

DESIGN SPECIFICATIONS
THIS STRUCTURE CONFORMS TO THE 8TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

OPERATIONAL IMPORTANCE
A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN LOADING
DESIGN LOADING INCLUDES:
VEHICULAR LIVE LOAD: HL-93 (PROPOSED DECK)
0.87 OPERATING LOAD RATING (HL-93) (EXISTING BEAMS)
CF= 400 (EXISTING SUBSTRUCTURE)
FUTURE WEARING SURFACE (FWS) OF 0.0 KIPS/SQ FT
THIS BRIDGE RECEIVED AN APPROVED DESIGN EXCEPTION FOR THE DESIGN LOADING STRUCTURAL CAPACITY.

DESIGN DATA
CONCRETE CLASS QC2 WITH QC/QA - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (ABUTMENT)
REINFORCING STEEL - MINIMUM YIELD STRENGTH OF 60 KSI
GLASS FIBER REINFORCED POLYMER (GFRP) - C&MS 705.01 & ASTM D7957

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

MAINTENANCE OF TRAFFIC
FOR MAINTENANCE OF TRAFFIC NOTES AND DETAILS, SEE ROADWAY PLANS.

PLANS OF EXISTING BRIDGE
CONSTRUCTION PLANS FOR THE EXISTING BRIDGE ARE AVAILABLE FOR REFERENCE BY CONTACTING THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 2 OFFICE.

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 CMS 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 UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

UTILITY LINES
THE UTILITY(IES) SHALL BORE ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COORPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

SEE ROADWAY PLANS FOR ADDITIONAL UTILITY COORDINATION NOTES.

DECK PLACEMENT DESIGN 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 2.21 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103 INCHES.

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 INCHES.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65 INCHES.

INSPECTION OF EXISTING STRUCTURAL STEEL
THE ENGINEER WILL VISUALLY INSPECT ALL EXISTING TOP FLANGE MOMENT PLATE FILLET WELDS TO ENSURE THE WELDS, PLATES AND BEAMS 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, CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK. 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
THIS WORK CONSISTS OF THE REMOVAL OF CONCRETE DECKS INCLUDING PARAPETS AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, CROSSFRAMES, ETC.). 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 SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCODING TO CMS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

REMOVAL METHODS: THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS (STEEL GIRDER), THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER STRUCTURAL MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING PRIMARY STRUCTURAL MEMBERS. DUE TO THE POSSIBLE PRESENCE OF ATTACHMENTS (FINISHING MACHINE, FORM SUPPORT, ETC.) TO EXISTING STRUCTURAL MEMBERS, PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRUCTURAL MEMBERS THAT ARE TO REMAIN. REPLACE OR REPAIR STRUCTURAL MEMBERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER'S APPROVAL BEFORE PERFORMING REPAIR.

EXISTING WELDED ATTACHMENTS: REMOVE EXISTING WELDED ATTACHMENTS (FINISHING MACHINE AND FORM SUPPORTS; AND SUPPORTS FOR SCUPPERS AND BULB ANGLES WHICH ARE TO BE REMOVED) LOCATED IN THE DESIGNATED TENSION PORTIONS OF THE TOP FLANGE OF EXISTING STEEL MEMBERS AND GRIND THE FLANGE SURFACES SMOOTH. CAREFULLY GRIND PARALLEL TO THE FLANGES.

CUT LINE CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. 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 SUFRACE 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 CONCRETE.

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.

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 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN
UNCLASSIFIED EXCAVATION SHALL BE IN ACCORDANCE WITH 503 EXCEPT THAT BACKFILL MATERIAL PLACED BEHIND THE ABUTMENTS SHALL BE 703.17 MATERIAL PLACED IN 6 INCH LIFTS AS PER 304.05.

ITEM 509 REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN
REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE DEPARTMENT.

ITEM 511 CONCRETE, MISC.: EMBEDDED GALVANIC ANODE
THIS PAY ITEM IS TO BE USED AS DIRECTED BY THE ENGINEER. THIS PAY ITEM SHALL INCLUDE ALL LABOR, TOOLS, MATERIALS, EQUIPMENT AND SERVICES NECESSARY TO PROPERLY INSTALL EMBEDDED GALVANIC ANODES. SUPPLY AND INSTALL ANODES ACCORDING TO SUPPLEMENT SPECIFICATION 844. WINGWALL CONCRETE MATERIAL SHALL BE SUPPLIED, PLACED AND PAID FOR UNDER ITEM 511, CLASS QC1 CONCRETE, ABUTMENT.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN
ALL EXPOSED SURFACES OF THE ABUTMENTS, PIERS, DECK OVERHANG, AND BRIDGE RAILINGS SHALL BE SEALED WITH EPOXY-URETHANE SEALER AS SHOWN IN THE PLANS. SEAL THE ENDS, SIDES, AND BOTTOM OF EXISTING PIER CAPS BUT NOT THE TIOP. THE COLOR SHALL BE FEDERAL COLOR NUMBER 17778 (LIGHT NEUTRAL). THE SURFACE TO BE SEALED SHALL HAVE SURFACE PREPARATION PER CMS 512.03(F) INCLUDING THE REMOVAL OF ANY EXISTING COATINGS.

ITEM 514 FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN
EXISTING STRUCTURAL STEEL PAINT AREAS DAMAGED DURING THE PROCESS OF INSTALLING THE PROPOSED ABUTMENT AND PIER BEARINGS SHALL BE CLEANED AND PAINTED WITH A PRIME, INTERMEDIATE AND FINISH COAT OF PAINT IN THE FIELD USING SYSTEM OZEU. MATCH THE PAINT COLOR AS CLOSE AS POSSIBLE TO THE EXISTING PAINT SYSTEM.

ITEM 514, FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN, SHALL INCLUDE ALL LABOR, MATERIAL AND INCIDENTALS REQUIRED TO REPAIR THE PAINT SYSTEM. ALL FIELD PREPARATION OF THE EXISTING BEAM SURFACE TO PREPAIR THE PAINT SYSTEM APPLICATION SHALL BE INCLUDED IN THIS ITEM. THE PRIME, INTERMEDIATE AND FINISH COAT OF PAINT USING AN OZEU SYSTEM SHALL BE INCLUDED IN THIS ITEM, AS WELL AS THE FINAL INSPECTION AND REPAIR.

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCUTRE, AS PER PLAN
THIS WORK CONSISTS OF TEMPORARY SUPPORT OR RE-POSITIONING OF THE EXISTING STRUCTURE TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.

IF, DURING THE JACKING OPERATIONS, DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. THE DEPARTMENT WILL NOT PAY FOR THE COST OF 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 SUPERSTRUCUTRE, AS PER PLAN.

GENERAL NOTES (1 OF 2)
BRIDGE NO. WOO-75-1534
POE ROAD OVER I.R. 75

SFN 8703906
DESIGN AGENCY
BARGE DESIGN SOLUTIONS
DESIGNER BMG | CHECKER AMM
REVIEWER KSM 09/04/20
PROJECT ID 102930
SUBSET 2 | TOTAL 18
SHEET 70 | TOTAL 86

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MADE BY: AMM DATE: 9/1/2020
CHECKED BY: JRL DATE: 9/2/2020

ESTIMATED QUANTITIES (01/IMS/BR)

STRUCTURAL FILE NUMBER: 8703906

ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	REFERENCE SHEET NO.
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LUMP	2
202	22900	110	SY	APPROACH SLAB REMOVED				110	
202	23500	110	SY	WEARING COURSE REMOVED				110	
503	21301	LUMP		UNCLASSIFIED EXCAVATION, AS PER PLAN				LUMP	2
509	10000	30,253	LB	EPOXY COATED REINFORCING STEEL	4,840		25,413		
509	20001	100	LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN	100				2
509	30020	16,327	FT	NO. 4 GFRP DEFORMED BARS			16,327		
509	30030	63,528	FT	NO. 5 GFRP DEFORMED BARS			63,528		
509	30040	17,749	FT	NO. 6 GFRP DEFORMED BARS			17,749		
510	10000	52	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	52				
511	33501	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE, AS PER PLAN	2				
511	34447	339	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN			339		13
511	34450	94	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			94		
511	45710	4	CY	CLASS QC1 CONCRETE, ABUTMENT	4				
511	81300	20	EACH	CONCRETE, MISC.: (EMBEDDED GALVANIC ANODE)	20				
512	10101	945	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN	68	230	595	52	2
513	20000	6,075	EACH	WELDED STUD SHEAR CONNECTORS			6,075		
514	21001	LUMP		FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN			LUMP		2, 7, 10
516	10010	69	FT	ARMORLESS PREFORMED JOINT SEAL				69	
516	13600	70	SF	1" PREFORMED EXPANSION JOINT FILLER				70	
516	13900	103	SF	2" PREFORMED EXPANSION JOINT FILLER	85			18	
516	14020	93	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	93				
516	44201	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN(12"x16"x3.761" WITH 13"x17"x1.5" LOAD PLATE)			10		8
516	44201	5	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (14"x21"x3.187" WITH 15"x22"x2" LOAD PLATE)			5		8
516	44201	10	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (14"x21"x3.187" WITH 15"x22"xVARIES LOAD PLATE)			10		9
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN				LUMP	2
518	21200	18	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	18				
526	25000	187	SY	REINFORCED CONCRETE APPROACH SLABS (T=15")				187	
526	90030	69	FT	TYPE C INSTALLATION				69	
530	13000	2,150	SF	SPECIAL - FORM LINER			2,150		3
607	39901	450	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC, AS PER PLAN			450		2
625	33000	1	EACH	STRUCTURE GROUNDING SYSTEM				1	

ESTIMATED QUANTITIES
BRIDGE NO. WOO-75-1534
POE ROAD OVER I.R. 75

SFN 8703906

DESIGN AGENCY
BARGE DESIGN SOLUTIONS

DESIGNER	CHECKER
BMG	AMM

REVIEWER
KSM 09/04/20

PROJECT ID 102930

SUBSET	TOTAL
4	18

SHEET	TOTAL
72	86

WOO-75-13.32/15.34

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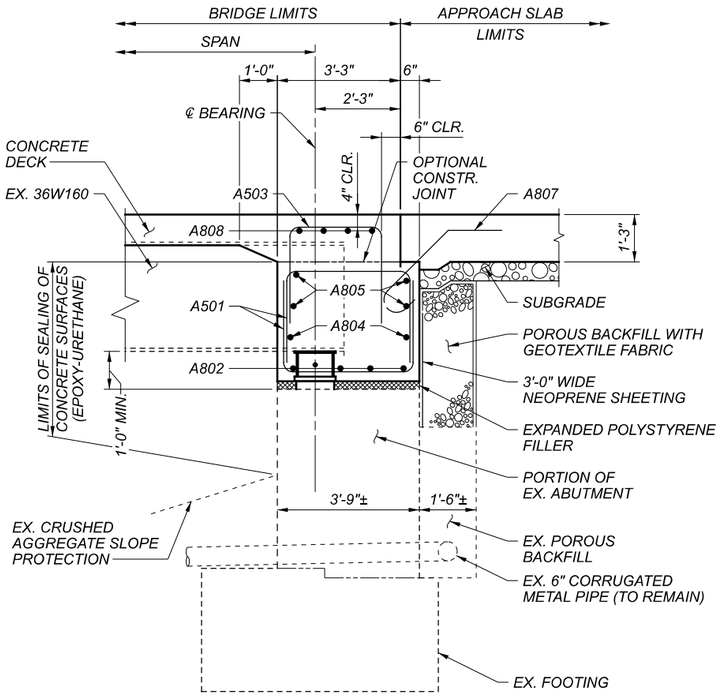
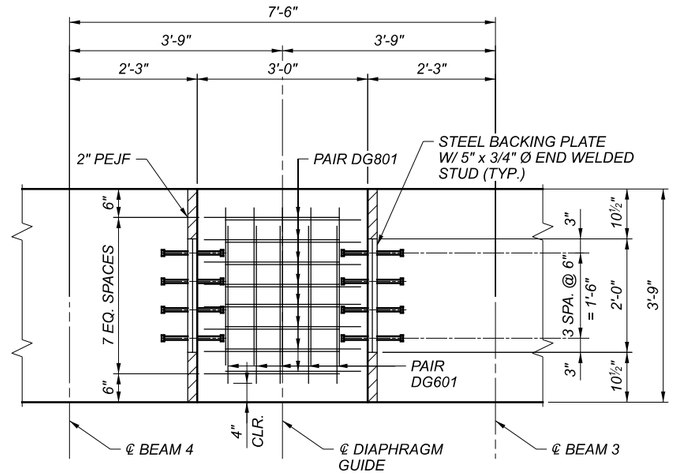
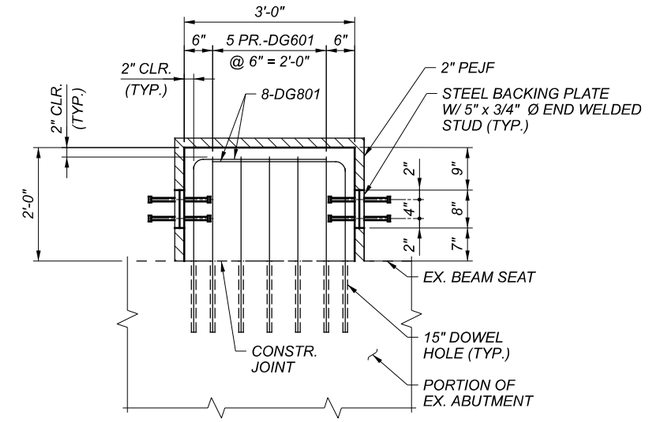


SECTION A-A



DIAPHRAGM GUIDE PLAN

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)
(SEE NOTE 4)



DIAPHRAGM GUIDE ELEVATION

(SEE NOTE 4)

NOTES:

1. FOR LOCATION OF SECTION A-A, SEE SHEET 6 / 18.
2. FOR BEARING DETAILS, SEE SHEET 8 / 18.
3. FOR REINFORCING STEEL LIST, SEE SHEET 18 / 18.
4. SEE STD. DWG. SICD-2-14 FOR ADDITIONAL NOTES AND DETAILS. DG601 AND DG801 BARS MUST BE DOWELLED INTO EXISTING CONCRETE AS SHOWN. DOWEL HOLES SHALL BE PAID FOR WITH ITEM 510.
5. BLAST AND PRIME 1'-9"± OF THE EXISTING 36WF160 BEAM ENDS THAT WILL BE ENCASED IN THE CONCRETE DIAPHRAGM. THE BLAST AND PRIME SHALL BE PAID FOR AS A LUMP SUM PER ITEM 514, FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN.

ABUTMENT DETAILS
BRIDGE NO. WOO-75-1534
POE ROAD OVER I.R. 75

SFN	8703906
DESIGN AGENCY	BARGE DESIGN SOLUTIONS
DESIGNER	BMG
CHECKER	AMM
REVIEWER	KSM 09/04/20
PROJECT ID	102930
SUBSET	7
TOTAL	18
SHEET	75
TOTAL	86

WOO-75-13.32/15.34

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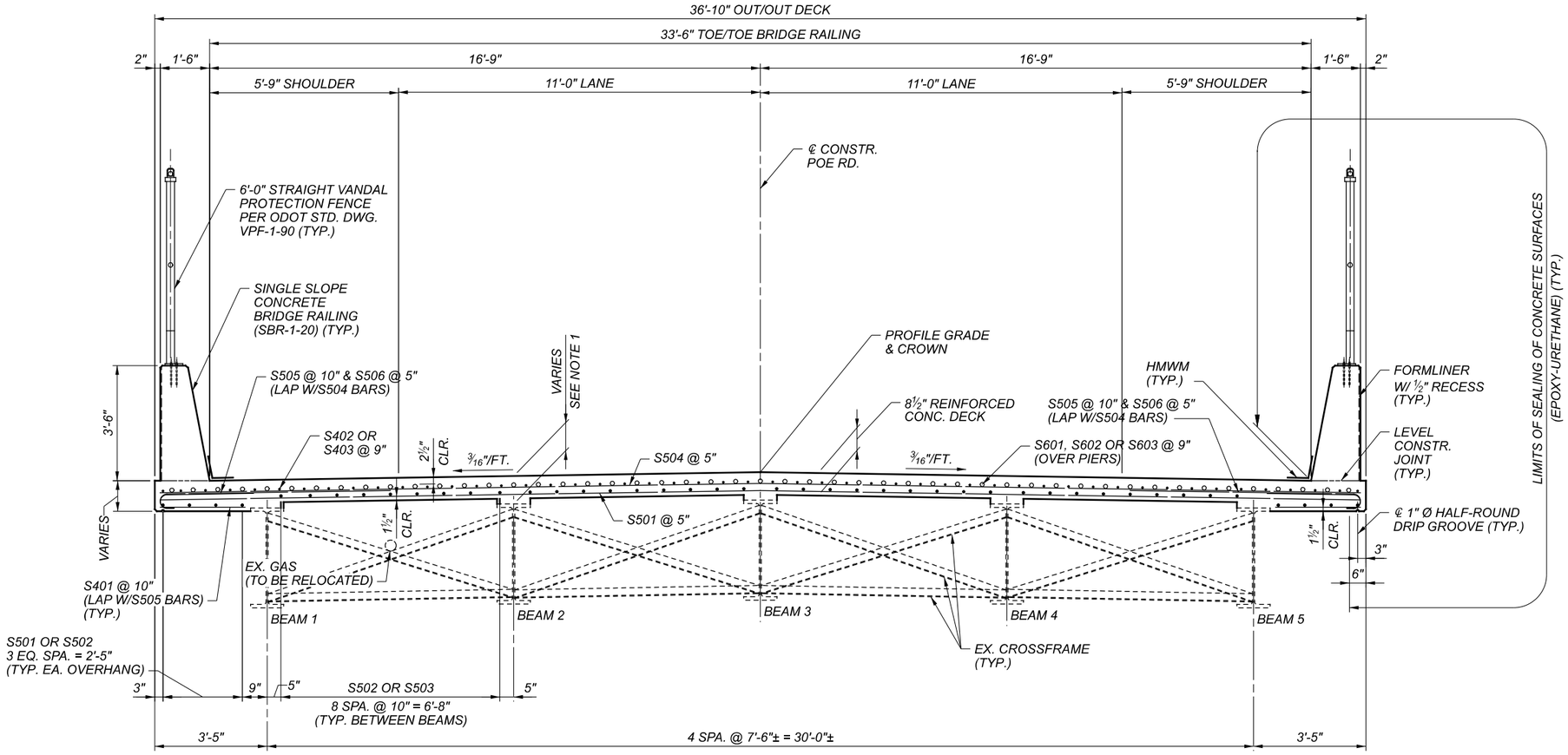
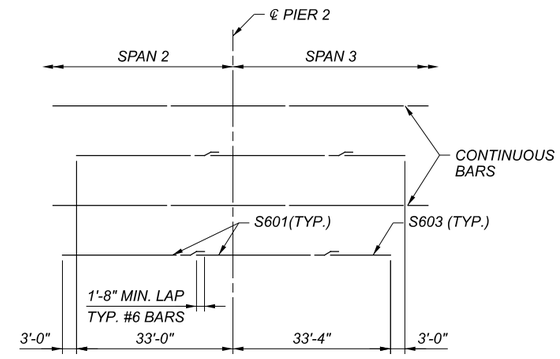
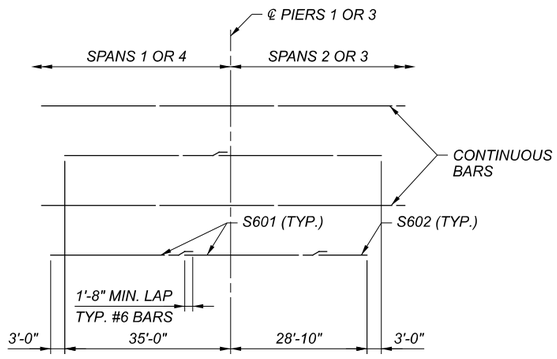


SECTION D-D



LAYOUT OF ADDITIONAL BARS OVER PIER 2



LAYOUT OF ADDITIONAL BARS OVER PIERS 1 AND 3

NOTES:

1. 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 HAUNCH. THE ESTIMATE ASSUMES AN AVERAGE HAUNCH THICKNESS OF 3.5 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, 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.
2. FOR DECK PLANS, SEE SHEETS 11 / 18 AND 12 / 18 .
3. FOR BRIDGE RAILING DETAILS, SEE SHEET 16 / 18 .
4. FOR SCREED, TOP OF HAUNCH AND FINAL DECK ELEVATIONS, SEE SHEETS 14 / 18 AND 15 / 18 .
5. FOR REINFORCING STEEL LIST, SEE SHEET 18 / 18 .
6. ALL REINFORCING STEEL BARS IN THE DECK SHALL BE GLASS FIBER REINFORCED POLYMER (GFRP).
7. FOR AESTHETIC TREATMENT OF BRIDGE RAILING, SEE GENERAL NOTES, SHEET 3 / 18 .
   THE HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM) SEALER AT THE LONGITUDINAL JOINT BETWEEN THE DECK AND THE BRIDGE RAILING SHALL BE INCLUDED WITH ITEM 511, CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN FOR PAYMENT.

DECK DETAILS
BRIDGE NO. WOO-75-1534
POE ROAD OVER I.R. 75

SFN	8703906
DESIGN AGENCY	BARGE DESIGN SOLUTIONS
DESIGNER	AMM
CHECKER	BMG
REVIEWER	KSM 09/04/20
PROJECT ID	102930
SUBSET	13
TOTAL	18
SHEET	81
TOTAL	86

WOO-75-13.32/15.34

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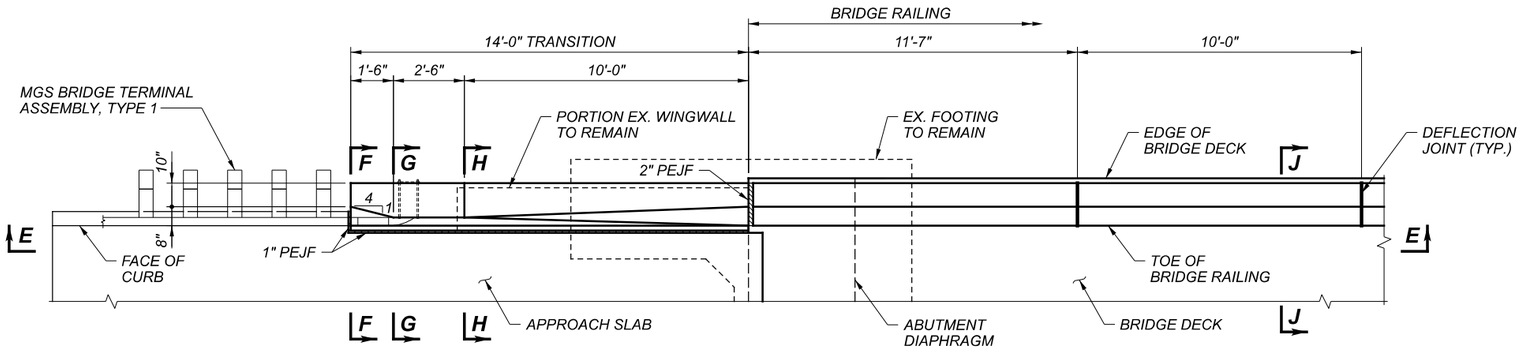
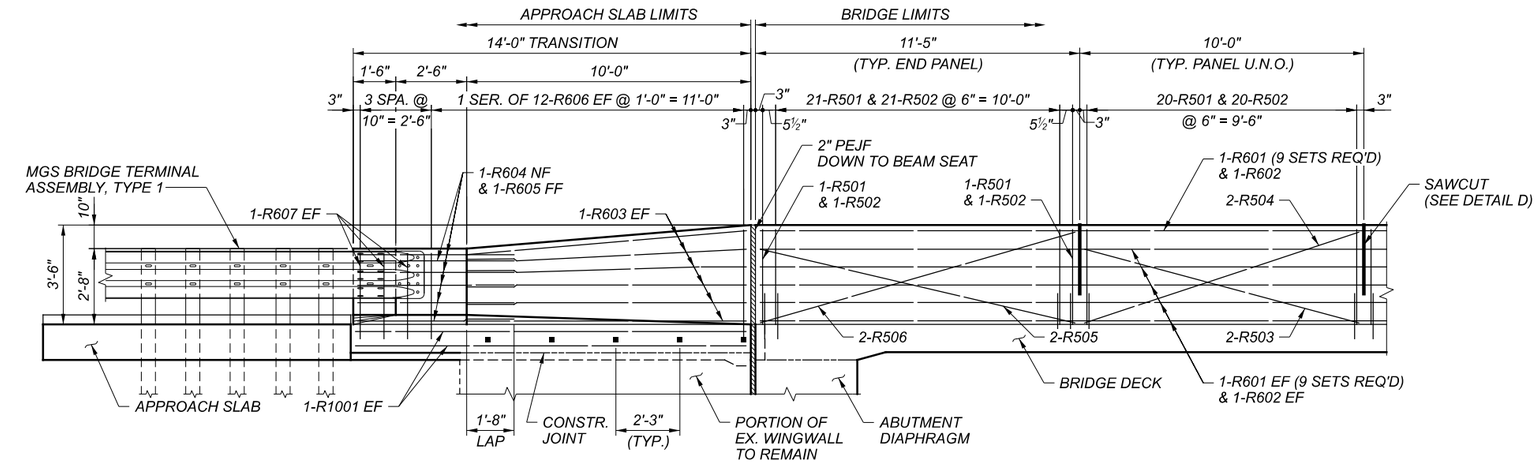


PLAN VIEW

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT OPPOSITE HAND)



SECTION E-E

NOTES:

1. BRIDGE RAILING CONCRETE TO BE INCLUDED WITH ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET) FOR PAYMENT. BRIDGE RAILING REINFORCING TO BE INCLUDED WITH ITEM 509 - EPOXY COATED REINFORCING STEEL, ITEM 509 - NO. 5 GFRP DEFORMED BARS AND ITEM 509 - NO. 6 GFRP DEFORMED BARS, AS NOTED IN PLANS AND ODOT STD. DWG. SBR-1-20.
2. FOR ADDITIONAL BRIDGE RAILING DETAILS NOT SHOWN, SEE ODOT STD. DWG. SBR-1-20.
3. FOR DEFLECTION JOINT LAYOUT AND VANDAL PROTECTION FENCE POST SPACING, SEE SHEET 11 / 18 .
4. FOR APPROACH SLAB DETAILS, SEE SHEET 17 / 18 .
5. FOR BRIDGE TERMINAL ASSEMBLY, SEE ROADWAY PLANS AND ODOT STD. CONSTRUCTION DWG MGS-3.1.
6. FOR AESTHETIC TREATMENT OF BRIDGE RAILING, SEE GENERAL NOTES SHEET 3 / 18 .

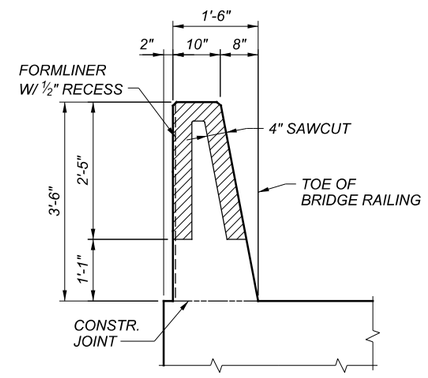
LEGEND:

* - 1" DEEP x 1" WIDE HOT APPLIED JOINT SEALER, CMS 705.04 INCLUDED WITH ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=15") FOR PAYMENT

** - LIMITS OF SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

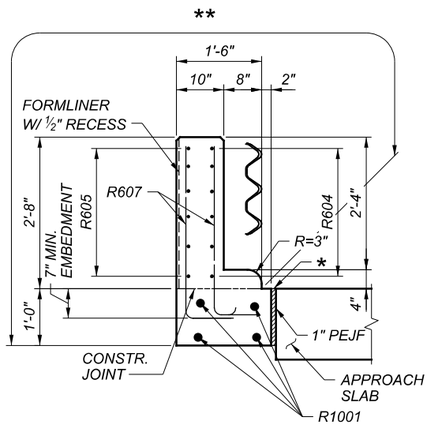
■ - EMBEDDED GALVANIC ANODE (EGA)

MINIMUM LAP LENGTH	
#6 LONGITUDINAL	1'-8" MIN.

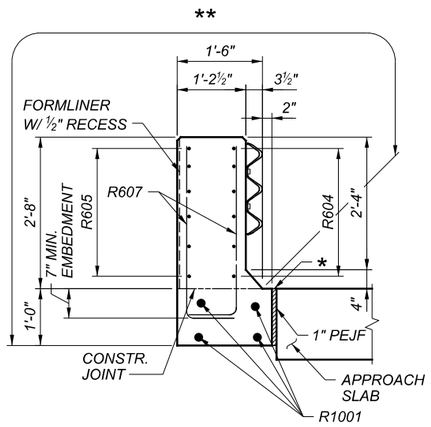


DETAIL D

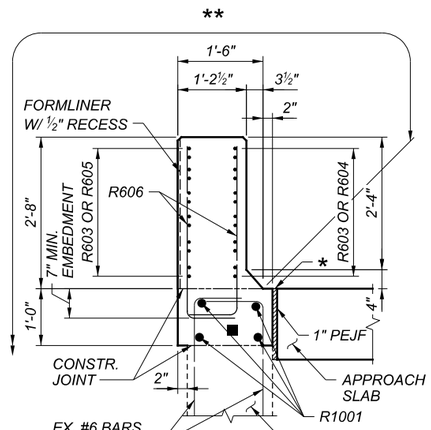
(REINFORCING STEEL NOT SHOWN FOR CLARITY)



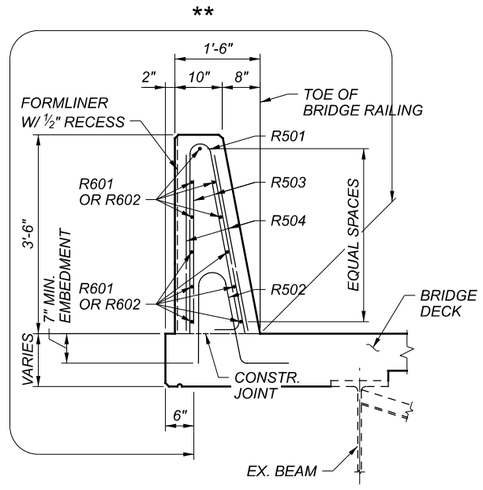
SECTION F-F



SECTION G-G



SECTION H-H



SECTION J-J

BRIDGE RAILING DETAILS
BRIDGE NO. WOO-75-1534
POE ROAD OVER I.R. 75

SFN	8703906
DESIGN AGENCY	BARGE DESIGN SOLUTIONS
DESIGNER	AMM
CHECKER	BMG
REVIEWER	KSM 09/04/20
PROJECT ID	102930
SUBSET	16
TOTAL	18
SHEET	84
TOTAL	86

WOO-75-13.32/15.34

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