STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

DBR-2-73 DATE/REVISED 7/19/02
DBR-3-11 DATE/REVISED 7/15/11
DS-1-92 DATE/REVISED 7/18/2003
EXJ-4-87 DATE/REVISED 1/19/2018
HL-50.21 DATE/REVISED 1/15/21

IN ADDITION TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS

848 DATE/REVISED 1/15/2021

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17TH EDITION 2002, AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DECK PROTECTION METHOD:

NEW SDC OVERLAY OF 1.75" THICKNESS
DRIP STRIP

EXISTING STRUCTURE VERIFICATION:

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 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 BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

DOCUMENTATION OF VARIABLE DEPTH:

PRIOR TO POURING PROPOSED SDC OVERLAYS, THE PROJECT ENGINEER MUST DOCUMENT THE APPROXIMATE VARIABLE DEPTH LOCATIONS ON THE DECK AND TAKE PICTURES OF THESE LOCATIONS AND OTHER SIGNIFICANT FINDINGS. ADDITIONALLY, DOCUMENT THE AS BUILT OVERLAY THICKNESS AND TOTAL AMOUNT OF VARIABLE DEPTH USED. PROVIDE THIS DOCUMENTATION TO THE ODOT BRIDGE ENGINEER TO BE KEPT ON FILE FOR FUTURE POSSIBLE OVERLAYS.

ITEM 513 - REPLACEMENT OF DETERIORATED END CROSSFRAMES, AS PER PLAN

ALL REQUIREMENTS OF C&MS 513 APPLY TO SHOP FABRICATED MEMBERS. PERFORM WORK FOR FIELD FABRICATED MEMBERS ACCORDING TO ITEM 513, EXCEPT AS MODIFIED HEREIN. THE DEPARTMENT WILL NOT REQUIRE THE CONTRACTOR PERFORMING FIELD FABRICATION TO BE PRE-QUALIFIED AS SPECIFIED IN S1078. SUBMIT A WRITTEN LETTER OF MATERIAL ACCEPTANCE IN ACCORDANCE WITH C&MS 501.06, TO THE ENGINEER. PROVIDE THE ENGINEER "AS-BUILT" DRAWINGS ACCORDING TO C&MS 513.06, EXCEPT C&MS 501.04 DOES NOT APPLY. UPON RECEIPT OF THE ENGINEER'S ACCEPTANCE, SUPPLY A COPY OF THE DRAWINGS, ACCORDING TO S1002, TO THE OFFICE OF

ITEM 513 - REPLACEMENT OF DETERIORATED END CROSSFRAMES, AS PER PLAN, CONT'D

MATERIAL MANAGEMENT FOR RECORD PURPOSES. THE NEW CROSSFRAME MEMBERS SHALL BE FABRICATED USING THE EXISTING CROSSFRAME MEMBERS AS A TEMPLATE AS PER PLAN DETAILS ROVIDED. ANY EXISTING MEMBERS THAT ARE TOO DETERIORATED TO BE SALVAGED AS A TEMPLATE SHALL HAVE FIELD MEASUREMENTS PERFORMED BY CONTRACTOR TO INSURE APPROPRIATE FABRICATION AND FIT-UP OF THE NEW CROSS-FRAME MEMBERS. ALL REPLACEMENT MEMBERS SHALL BE SHOP PRIMED IN ACCORDANCE WITH ITEM 514 (SHOP PRIMING TO BE PAID SEPARATELY UNDER ITEM 514 SHOP PAINTING AND FIELD TOUCH-UP OF STRUCTURAL STEEL). ALL CONNECTION HARDWARE AS NOTED ON PLAN DETAILS IS TO BE PROVIDED AS PART OF THIS ITEM.

ITEM 514 - PAINTING

THE INTENT OF ALL 514 ITEMS IS TO PREP AND PAINT THE END 13'-6" MEASURED FROM ℄ OF BEARING) OF EACH GIRDER AT EACH END OF THE STRUCTURE IN ACCORDANCE WITH CMS 514 REQUIREMENTS. THIS IS TO INCLUDE ALL EXPOSED STEEL INCLUDING GIRDER ELEMENTS, STIFFENERS, AND NEW END CROSS FRAME MEMBERS. THE NEW END CROSSFRAME MATERIAL IS TO BE SHOP PRIMED AND SHALL ALSO INCLUDE ANY NECESSARY PRIME COAT TOUCH-UP UNDER THE ITEM 514 SHOP PAINTING AND FIELD TOUCH-UP ITEM.

THE FINISH COAT COLOR SHALL BE EITHER FEDERAL COLOR# 20045 OR 20059 (TO CLOSELY MATCH THE COLOR OF WEATHERING STEEL).

ITEM 516 - STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN

THIS ITEM IS INTENDED TO PROVIDE A NEW EXJ-4-87 JOINT USING A 5" STRIP SEAL GLAND AS PER CURRENT STANDARD DRAWING REQUIREMENTS. THE FOLLOWING ADDITIONAL WORK IS ALSO INCLUDED WITH THIS AS PER PLAN ITEM:

1. COMPLETE REMOVAL OF EXISTING EXPANSION JOINT AND ADJACENT CONCRETE AS PER PLAN DETAILS.
2. PLACEMENT OF NEW CONCRETE (BACKWALL AND FULL DEPTH DECK) IN ACCORDANCE WITH PLAN DETAILS UP TO WITHIN ± 1-¾" OF FINISHED GRADE.
3. FLARING OF EXJ-4-87 JOINT ARMOR STEEL TO MATCH EXISTING JOINT DECK EDGE FLARE. SEE PLAN DETAILS AND EXISTING PLANS FOR ADDITIONAL INFORMATION.

ITEM 517 - DEEP BEAM RETROFIT RAILING, AS PER PLAN

THE INTENT OF THIS ITEM IS TO PROVIDE COMPLETELY RETROFITTED RAILING FOR ENTIRE LENGTH OF BRIDGE AS PER DETAILS PROVIDED. RETROFITTED RAIL IS TO BE BUILT AS PER STANDARD CONSTRUCTION DRAWING DBR-3-11. IN ADDITION TO THE DBR-3-11 REQUIREMENTS THE FOLLOWING IS REQUIRED:

1. REMOVE AND SALVAGE THE EXISTING W-BEAM RAIL. 200 FT OF NEW W-BEAM RAIL IS TO BE PROVIDED BY THE CONTRACTOR WITH THIS ITEM TO BE USED TO REPLACE EXISTING RAIL SEGMENTS THAT ARE DAMAGED. THE SALVAGED AND NEW W-BEAM RAILS TO BE REINSTALLED USING NEW HARDWARE.
2. THE EXISTING TUBING IS RUSTED/DETERIORATED AT SEVERAL LOCATIONS ALONG LENGTH OF THE BRIDGE AND IS TO BE REMOVED. NEW 8x4x3/16" TUBING IS TO BE PROVIDED AND INSTALLED IN ACCORDANCE WITH

ITEM 517 - DEEP BEAM RETROFIT RAILING, AS PER PLAN, CONT'D

DBR-2-73 AND PLAN DETAILS USING NEW HARDWARE TO ATTACH TO EXISTING POSTS.
3. THE RETROFITTED RAIL SHALL ALSO INCLUDE RE-ESTABLISHING THE EXPANSION/CONTRACTION SLEEVING AT EACH END OF BRIDGE AS NOTED ON PLAN DETAILS.

IT IS THE INTENT OF THIS ITEM TO RETAIN AND REUSE ALL EXISTING POSTS AND ANCHORS INTO EXISTING DECK.

ITEM 517 - DEEP BEAM RETROFIT RAILING, AS PER PLAN, CONT'D

ALL LABOR, MATERIALS (INCLUDING NEW HARDWARE), EQUIPMENT, TOOLS AND INCIDENTALS REQUIRED TO COMPLETE THIS WORK AS DESCRIBED AND DETAILED IN THE PLANS IS TO BE INCLUDED WITH ITEM 517 - DEEP BEAM RETROFIT RAILING, AS PER PLAN.

ITEM 530 - STRUCTURES, DEBRIS CONTAINMENT UNDERNEATH STRUCTURE

THIS ITEM IS BEING PROVIDED TO MEET PROJECT ENVIRONMENTAL COMMITMENTS. THE DEBRIS CONTAINMENT SYSTEM MUST BE PROVIDED UNDER ALL ANTICIPATED FULL DEPTH REPAIR AREAS. THE LIMITS OF CONTAINMENT ARE DEFINED AS THE ENTIRE WIDTH OF THE BRIDGE 30 FT, THE LENGTH OF THE FULL DEPTH AREA ALONG ℄ OF BRIDGE PLUS 3 FT ADDITIONAL BEYOND THE IDENTIFIED FULL DEPTH AREA ON BOTH ENDS (TOTAL OF 6 FT EXTRA LENGTH).

THE DEBRIS CONTAINMENT MUST BE CAPABLE OF CONTAINING DEBRIS ALL THE WAY DOWN TO FINE MATERIALS (i.e. NETTING AND/OR FENCING CONTAINMENT ALONE WILL NOT BE PERMITTED). THE DEBRIS CONTAINMENT SYSTEM MUST BE CAPABLE OF SUPPORTING THE ENTIRE LOAD OF ALL DEBRIS GENERATED DURING FULL DEPTH DECK REMOVALS. THE DEBRIS CONTAINMENT MAY BE PROVIDED THRU A HYDRA PLATFORM, SNOOPER PLATFORM, OR AN APPROVED EQUAL MEETING THE REQUIREMENTS SPECIFIED HEREIN.

ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO PROVIDE THE DEBRIS CONTAINMENT AS DESCRIBED AND DETAILED WITHIN PLANS WILL BE PAID FOR AS A LINEAR FOOT MEASURED ALONG ℄ OF BRIDGE UNDER ITEM 530 STRUCTURES, DEBRIS CONTAINMENT UNDERNEATH STRUCTURE.

ITEM 625 - STRUCTURE GROUNDING SYSTEM, AS PER PLAN

THE INTENT OF THIS ITEM IS TO PROVIDE STRUCTURE GROUNDING SYSTEM AS PER HL-50.21 AT EACH ABUTMENT ONLY IN ACCORDANCE WITH THE "DETAIL B" ABUTMENT DETAILS. NO GROUNDING HARDWARE/SYSTEM IS INTENDED AT ANY OF THE PIERS. THE INTENT IS TO PROVIDE (4) ELECTRODES (GROUNDING RODS) WITH ONE ON EACH SIDE OF ROADWAY AT EACH END OF BRIDGE. INSURE THAT GROUNDING CONDUCTOR WIRE IS SECURELY CONNECTED TO RETROFITTED RAIL AS WELL AS THE EXISTING FASCIA GIRDER AND ULTIMATELY TERMINATED AT EACH ELECTRODE. INSURE THAT THREADED GROUNDING STUD IS SECURELY EXOTHERMICALLY WELDED TO EACH FASCIA GIRDER PRIOR TO PREPPING AND PAINTING THE GIRDER ENDS AS PER THE HL-50.21 REQUIREMENTS.

ITEM 625 - STRUCTURE GROUNDING SYSTEM, AS PER PLAN

ALL MATERIAL INCLUDING GROUNDING CONDUCTOR, HARDWARE, CONDUIT, PULL-BOXES, AND GROUND RODS ARE INCIDENTAL TO THIS ITEM.

THE ENTIRE SYSTEM (BOTH ENDS WITH ALL FOUR ELECTRODES) SHALL BE PAID AS ITEM 625 STRUCTURE GROUNDING SYSTEM, AS PER PLAN 1 EACH.

ITEM 848 - SURFACE PREPARATION USING HYDRODEMOLITION

SURFACE PREP SHALL BE PERFORMED IN ACCORDANCE WITH SUPPLEMENTAL SPEC 848.20 WITH A MINIMUM OF FINAL 1" OF EXISTING DECK REMOVED BY HYDRODEMOLITION METHOD. CONTRACTOR SHALL PROVIDE CONTAINMENT AND CAPTURE OF ALL HYDRODEMOLITION WASTEWATER IN ACCORDANCE WITH SS 848. WASTEWATER SHALL BE DISPOSED OF AT A NPDES PERMITTED FACILITY. IN ADDITION CONTRACTOR SHALL TAKE CARE TO AVOID FULL DEPTH BLOW-THROUGHS DURING HYDRO OPERATION.

ITEM 848 - FULL DEPTH REPAIR, AS PER PLAN

FULL DEPTH REPAIR SHALL BE PERFORMED PRIOR TO HYDRODEMOLITION OPERATIONS AND IN ACCORDANCE WITH SUPPLEMENTAL SPEC 848 WITH THE FOLLOWING ADDITIONAL REQUIREMENT: ALL AREAS MARKED FOR FULL DEPTH REPAIR SHALL HAVE DEBRIS CONTAINMENT PROVIDED AS PER ITEM 530 - STRUCTURES, DEBRIS CONTAINMENT UNDERNEATH STRUCTURE PRIOR TO THE REMOVAL OF UNSOUND MATERIAL. COMPENSATION FOR DEBRIS CONTAINMENT SHALL BE PART OF ITEM 530 - STRUCTURES, DEBRIS CONTAINMENT UNDERNEATH STRUCTURE.

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 6

DESIGNED CAB | DRAWN CAB | REVIEWED KRF | DATE 9/3/2021
CHECKED XXX | REVISED XXX | STRUCTURE FILE NUMBER 2517116

STRUCTURE NOTES
BRIDGE NO. FRA-665-14.00
OVER SCIOTO RIVER

FRA-665-14.00
PID No. 104949