COSHOCTON COUNTY ENGINEER



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Coshocton County Engineer's Office COS-CR 365-00.08 PID #108777

Addendum Number 1 – June 11, 2025

Issue Date

Wednesday, June 11, 2025

Issued By:

Joshua D. Kempf

Deputy County Engineer

Bid Date:

Monday, June 16, 2025

Bid Time:

9:00 a.m. Local Time

Addendum 1

- 1. The use of Stay-In-Place forms or approved equal will be permitted for this project.
- 2. The use of a vibratory screed will be permitted for deck placement.
- 3. Revision of Page 11 note "ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN"

Replace plan and bid document sheets with corresponding sheets attached.

All other materials contained within the original bid documents remain the same and unchanged unless noted in subsequent addendums.

As per the bidding requirements, all addendums must be acknowledged on page 14 of the contract document.

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GENERAL

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

DS-1-92 DATED (REVISED) 7/15/22 EXJ-4-87 DATED (REVISED) 7/15/22 GSD-1-99 DATED (REVISED) 1/15/21 TST-1-99 DATED (REVISED) 1/15/21

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S): 800 DATED 4/21/23 832 DATED 7/15/22

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 9TH 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.

DESIGN LOADING

DESIGN LOADING INCLUDES: VEHICULAR LIVE LOAD: HL-93 FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SQ.FT.

DESIGN DATA

CONCRETE CLASS QC2: COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QCI: COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

REINFORCING STEEL MINIMUM YIELD STRENGTH 60 KSI

STRUCTURAL STEEL - ASTM A709 GRADE 50 GALVANIZED PER CMS 711.02, YIELD STRENGTH = 50 KSI

MONOLITHIC WEARING SURFACE

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

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS
PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN
OBTAINED FROM PLANS OF THE EXISTING STRUCTURE
AND FROM FIELD OBSERVATIONS AND MEASUREMENTS.
CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING
STRUCTURE AND THE PROPOSED WORK BUT THEY
SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE.
THE CONTRACTOR IS REFERRED TO C&MS, SECTIONS
102.05, 105.02, AND 513.04. BASE CONTRACT
BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES
DESCRIBED ABOVE AND UPON A PREBID EXAMINATION
OF THE EXISTING STRUCTURE. HOWEVER,
THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK
BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT
HAVE BEEN VERIFIED IN THE FIELD.

ITEM 503, UNCLASSIFIED EXCAVATION, AS PER PLAN

THE BACKFILL MATERIAL BEHIND THE ABUTMENTS SHALL BE ITEM 613 LOW STRENGTH MORTAR BACKFILL, AND GRANULAR MATERIAL, TYPE B, AS SHOWN ON SHEETS 16 AND 17. THIS COST SHALL BE INCLUDED IN THIS PAY ITEM.

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

THE ENTIRE SUPERSTRUCTURE TO BE REMOVED. REAR ABUTMENT TO BE REMOVED TO ELEVATION 851.62 AND FORWARD ABUTMENT TO BE REMOVED TO ELEVATION 852.53.

THE TRUSSES, TRUSS FLOOR BEAMS, AND STRINGERS SHALL BE SALVAGED AND BECOME PROPERTY OF THE COSHOCTON (COUNTY ENGINEER. THEY SHALL BE UNBOLTED AND STORED) ON SITE TO BE HAULED AWAY BY COUNTY CREWS.

ADDENDUM 3

ITEM 513, STRUCTURAL STEEL MEMBERS, LEVEL 6, AS PER PLAN

THIS ITEM SHALL CONSIST OF DESIGNING, FURNISHING, GALVANIZING, TRANSPORTING, ERECTING, AND INSTALLING IN PLACE THE COMPLETE TRUSS SUPERSTRUCTURE, INCLUDING ALL FRAMING, RAILINGS, BEARINGS, AND ALL INCIDENTALS, IN ACCORDANCE WITH THE DETAILS SHOWN IN THE PLANS AND THESE SPECIFICATIONS.

SEPARATE PAYMENT WILL BE MADE FOR DECK CONCRETE, EXPANSION JOINT, TST RAIL, AND SUBSTRUCTURE ITEMS LISTED ON THE ESTIMATED OUANTITIES SHEET. HOWEVER, ALL OTHER WORK OR ITEMS NECESSARY TO PROVIDE THE COMPLETED IN-PLACE TRUSS SUPERSTRUCTURE ARE INCIDENTAL TO AND INCLUDED FOR PAYMENT WITH THIS ITEM.

THESE SPECIFICATIONS ARE FOR A TRUSS STRUCTURE OF BOLTED STEEL CONSTRUCTION AND SHALL BE REGARDED AS MINIMUM STANDARDS FOR DESIGN AND CONSTRUCTION. ALL STEEL WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF ODOT CMS SECTION 513.

DESIGNER

- 1. THE DESIGN FIRM SHALL BE AN ODOT PREQUALIFIED LEVEL 2 CONSULTANT WITH TRUSS DESIGN EXPERIENCE OF SIMILAR OR LARGER SIZE OR THE DESIGN FIRM SHALL HAVE EXPERIENCE OF THE DESIGNING AT LEAST 5 TRUSS BRIDGES OF SIMILAR SIZE OR LARGER.
- 2. THE DESIGNER SHALL PROVIDE THE ENGINEER WITH SHOP DRAWINGS AS PER SECTION 501.04 OF THE CMS AND LOAD RATING REPORT WITH BRIOD PER LATEST ODOT BRIDGE DESIGN MANUAL. INCLUDE PROOF OF CONSULTANT PREQUALIFICATION AND TRUSS DESIGN EXPERIENCE WITH THE SHOP DRAWINGS SUBMITTAL.
- 3. THE DESIGNER SHALL DESIGNATE THE TENSION AND COMPRESSION ZONE IN THE NON-REDUNDANT STEEL TENSION MEMBERS.

DIMENSIONS

- 1. WIDTH: INSIDE CLEAR WIDTH OF BRIDGE SHALL BE 24'-0".
- 2. LENGTH: BRIDGE CENTER TO CENTER BEARING LENGTH IS
- 3. HEIGHT: INSIDE HEIGHT SHALL BE 17'-5"

DESIGN

- 1. DESIGN TRUSS IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL WITH AN ALLOWANCE FOR 0.060 KSF FUTURE WEARING SURFACE.
- 2. BRIDGE TYPE: THE BRIDGE SHALL BE A BOLTED THROUGH-TRUSS BRACED USING PORTAL AND SWAY BRACES BETWEEN THE MAIN TRUSSES.
- 3. GUSSET PLATES TO BE DESIGNED TO ADEQUATELY TRANSFER MEMBER STRESSES AT PANEL POINTS.
 4. CLEARLY IDENTIFY MEMBERS OR THEIR COMPONENTS
- THAT ARE NON-REDUNDANT STEEL TENSION MEMBER (NSTM) IN THE PLANS.

 5. ALL SHOP AND FIELD BOLTED CONNECTIONS SHALL
- UTILIZE ZINC COATED ASTM A-325 TYPE 1 HIGH STRENGTH BOLTS.

 6. BEARING DEVICES SHALL BE ELASTOMERIC BEARING IN
- ACCORDANCE WITH ODOT SPECIFICATION SECTION 516.
 7. RAILING SHALL BE IN ACCORDANCE WITH ODOT
- SPECIFICATION SECTION 517.

FABRICATOR

- 1. FABRICATOR SHALL BE AN ODOT LEVEL 6 QUALIFIED FABRICATOR AS PER ODOT CMS 513.
- 2. WORKMANSHIP, FABRICATION, AND SHOP DESIGN SHALL BE IN ACCORDANCE WITH AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS SPECIFICATIONS (AASHTO).
- 3. THE DESIGN OF THE TRUSS SUPERSTRUCTURE, INCLUDING ALL FRAMING, RAILINGS, FLOOR SYSTEM, BEARINGS, AND ALL INCIDENTALS, IN ACCORDANCE WITH THE DETAILS SHOWN IN THE PLANS IS THE RESPONSIBILITY OF MANUFACTURER OF THE TRUSS SUPERSTRUCTURE UNIT.
- 4. TRUSS, STRINGERS AND FLOOR BEAMS SHALL MEET CHARPY V-NOTCH REQUIREMENTS PER CMS 711.01 15 FT-LBS @ 40° F

FABRICATOR (CONTINUED)

- 1. FAYING SURFACES OF THE BOLTED SPLICES SHALL BE ROUGHENED IN THE SHOP AFTER GALVANIZING BY HAND WIRE BRUSH. POWER WIRE BRUSHING IS NOT PERMITTED. ALL FIELD SPLICE BOLT HOLES SHALL BE FREE OF ZINC BUILDUP AND EACH HOLE SHALL BE CHECKED IN THE SHOP AFTER GALVANIZING TO RECEIVE A 7 JUDIAMETER DRIFT PIN.
- 2. AREAS OF FIELD CONNECTIONS SHALL HAVE A UNIFORM GALVANIZED COATING THICKNESS FREE OF LOCAL EXCESSIVE ROUGHNESS WHICH WOULD PREVENT SPLICE PLATES, BEARINGS, OR OTHER FIELD CONNECTIONS FROM MAKING INTIMATE CONTACT.
- 3. AFTER GALVANIZING, MATERIAL SHALL BE PLACED IN SHOP ASSEMBLY PER SECTION 513.24 OF THE SPECIFICATION 513 TO CHECK ALIGNMENT OF HOLES, SWEEP, AND CAMBER AGAINST THE FABRICATORS ORIGINAL RECORDED LAY DOWN DIMENSIONS.
- 4. ROLLED, SHEARED, AND FLAME CUT SURFACES SHALL BE FINISHED IN ACCORDANCE WITH ODOT CMS 513.12. WHERE STEEL BEAM SURFACES ARE TO RECEIVE A COATING OR GALVANIZING, ALL FOUR ROLLED EDGES OF THE TOP FLANGE SHALL BE GROUND TO 1/8" RADUIS±1/6" IN ACCORDANCE WITH ODOT 514.13 B.
- 5. BEAM HOLES SHALL BE DRILLED FULL SIZE IN ASSEMBLY USING A TEMPLATE AND ROTO-BROACH, SHELL DRILL OR OTHER SIMILAR TOOL AS PER 513.19.
- 6. CAMBER TOLERANCE: -0" TO +3/4"
- 7. ALL WELDING SHALL BE IN ACCORDANCE WITH AASHTO/AWS DI.5 BRIDGE WELDING CODE AS AMENDED BY SUPPLEMENT 1011 PER 513.21.
- 8. SUBMIT ERECTION PLANS ACCORDING TO CMS 501.05
- 9. IN ADDITION TO THE REQUIREMENTS OF CMS 513 & 711.02, GALVANIZED COATING SYSTEM SHALL MEET THE REQUIREMENTS OF THE NOTE "GALVANIZED COATING SYSTEM FOR STRUCTURAL STEEL BRIDGES" ON SHEETS 11, 12, AND 13.

GALVANIZED COATING SYSTEM FOR STRUCTURAL STEEL BRIDGES

1.1.1 DESCRIPTION

IN ADDITION TO THE REQUIREMENTS OF CMS ITEM 513, THIS ITEM SHALL CONSIST OF FURNISHING ALL NECESSARY LABOR, MATERIALS AND EQUIPMENT TO CLEAN AND GALVANIZE ALL STRUCTURAL STEEL SURFACES, AS SPECIFIED HEREIN. THE GALVANIZED COATING SYSTEM MAY BE APPLIED BY A GALVANIZER NOT QUALIFIED AS A FABRICATION SHOP UNDER CMS ITEM 513, BUT THE APPROVED FABRICATOR OF THE STRUCTURAL STEEL SHALL BE RESPONSIBLE FOR THE QUALITY OF THE APPLIED GALVANIZED COATING SYSTEM AND ANY REPAIRS, RE-FABRICATING, ADDITIONAL LAYDOWNS REQUIRED TO ASSURE THE FABRICATED STEEL MEETS ALL REQUIREMENTS OF THIS SPECIFICATION. CMS SECTIONS 513.27 AND 513.28 SHALL NOT APPLY.

THIS ITEM SHALL ALSO INCLUDE GALVANIZING, PER 711.02, OF ALL NUTS, WASHERS, BOLTS, ANCHOR BOLTS.

GRIND THE GALVANIZED COATING OFF THE TOP FLANGE AT EACH SHEAR STUD PRIOR TO FIELD WELDING IT.

1.1.2 PRE-FABRICATION MEETING

IN ADDITION TO THE PRE-FABRICATION MEETING REQUIREMENTS UNDER CMS SECTION 513.07, BOTH THE FABRICATOR'S QUALITY CONTROL PAINT SPECIALIST, (QCPS) AND GALVANIZED COATING APPLICATOR SHALL BE PRESENT AND DISCUSS METHODS OF OPERATION, QUALITY CONTROL, INCLUDING REPAIRS, TRANSPORTATION, ERECTION METHODS TO ACCOMPLISH ALL PHASES OF THE PREPARATION AND COATING WORK REQUIRED BY THIS SPECIFICATION.

1.1.3 QUALITY CONTROL

1.1.3.1 QUALITY CONTROL SPECIALIST

THE OCPS (QUALITY CONTROL PAINT SPECIALIST) REQUIRED UNDER CMS SECTION 514.04A, IS RESPONSIBLE FOR ALL QUALITY CONTROL REQUIREMENTS OF THIS SPECIFICATION. THE OCPS SHALL HAVE THE TESTING EQUIPMENT SPECIFIED IN CMS SECTION 514.05.

GALVANIZED COATING SYSTEM FOR STRUCTURAL STEEL BRIDGES (CONTINUED)

1.1.3.2 QUALITY CONTROL POINTS (QCP)

QUALITY CONTROL POINTS (QCP) ARE POINTS IN TIME WHEN ONE PHASE OF THE WORK IS COMPLETE AND READY FOR INSPECTION BY THE FABRICATOR'S QCPS AND THE OWNERS'S QA REPRESENTATIVE. THE NEXT OPERATIONAL STEP MUST NOT PROCEED UNLESS THE QCP HAS BEEN ACCEPTED OR QA INSPECTION WAIVED BY THE OWNER'S QA REPRESENTATIVE. AT THESE POINTS THE FABRICATOR MUST AFFORD ACCESS TO INSPECT ALL AFFECTED SURFACES. IF INSPECTION INDICATES A DEFICIENCY, THAT PHASE OF THE WORK MUST BE CORRECTED IN ACCORDANCE WITH THESE SPECIFICATIONS PRIOR TO BEGINNING THE NEXT PHASE OF WORK, DISCOVERY OF DEFECTIVE WORK OR MATERIAL AFTER A QUALITY CONTROL POINT IS PAST OR FAILURE OF THE FINAL PRODUCT BEFORE FINAL ACCEPTANCE, MUST NOT IN ANY WAY PREVENT REJECTION OR OBLIGATE THE OWNER TO FINAL ACCEPTANCE.

1.1.3.2.1 SOLVENT CLEANING (QCP #1)
THE STEEL MUST BE SOLVENT CLEANED WHERE NECESSARY TO REMOVE ALL TRACES OF ASPHALTIC CEMENT, OIL, GREASE, DIESEL FUEL DEPOSITS, AND OTHER SOLUBLE CONTAMINANTS PER SSPC-SP I SOLVENT CLEANING. UNDER NO CIRCUMSTANCES MUST ANY ABRASIVE BLASTING BE DONE TO AREAS WITH ASPHALTIC CEMENT, OIL, GREASE, OR DIESEL FUEL DEPOSITS. STEEL MUST BE ALLOWED TO DRY BEFORE BLAST CLEANING BEGINS. THE QCPS SHALL INSPECT AND DOCUMENT THAT THE CLEANING CONFORMS TO SSPC-SPI AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

1.1.3.2.2 GRINDING EDGES (QCP #2)

ALL CORNERS OF THERMALLY CUT OR SHEARED EDGES MUST HAVE A & INCH [1.6 MM] RADIUS OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE. THERMALLY CUT MATERIAL THICKER THAN 1 & INCH [40 MM] MUST HAVE THE SIDES GROUND TO REMOVE THE HEAT EFFECTED ZONE, AS NECESSARY TO ACHIEVE THE SPECIFIED SURFACE CLEANING. THE OCPS MUST VISUALLY INSPECT AND DOCUMENT THAT THE GRINDING CONFORMS TO THIS SPECIFICATION AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.

1.1.3.2.3 ABRASIVE BLASTING (QCP #3)

BEAMS AND GIRDERS MUST BE PREPARED BY THE FABRICATOR TO STEEL STRUCTURES PAINTING COUNCIL (SSPC) GRADE SIX (6) COMMERCIAL BLAST CLEANING PRIOR TO GALVANIZING. ALL MATERIAL MUST BE FREE OF PAINT MARKS. SECONDARY ANGLE, PLATES, BARS AND SHAPES NEED NOT BE BLAST CLEANED.

ABRASIVES MUST ALSO BE CHECKED FOR OIL CONTAMINATION BEFORE USE. A SMALL SAMPLE OF ABRASIVES MUST BE ADDED TO ORDINARY TAP WATER. ANY DETECTION OF AN OIL FILM ON THE SURFACE OF THE WATER MUST BE CAUSE FOR REJECTION. THE OCPS MUST PERFORM AND RECORD THIS TEST AT THE START OF EACH SHIFT.

ALL FINS, TEARS, SLIVERS AND BURRED OR SHARP EDGES THAT ARE PRESENT ON ANY STEEL MEMBER OR THAT APPEAR AFTER THE BLASTING OPERATION MUST BE CONDITIONED PER ASTM A6. WELDING REPAIRS MUST ONLY BE PERFORMED BY THE ITEM 513 FABRICATOR.

THE OCPS MUST VISUALLY INSPECT AND DOCUMENT THAT THE BLAST CONFORMS TO SSPC-SP6, THAT ALL CONDITIONING IS PERFORMED PER ASTM A6, AND PROVIDE A COVER LETTER LISTING EACH MAIN MEMBER INSPECTED.