GENERAL NOTES

REMOVAL OF EXISTING STRUCTURE: The Contractor shall remove the existing bridge (530400870000AR40) consisting of 48'-0" Roadway & 2-5.5' Sidewalks & 43.5'-57.5'-3@64.0'-57.5'-43.5' Continuous Steel Beams, Bridge Deck, Pedestal & Pile Bent Type Piers, and Pile Bent Type Abutments. Existing pier and abutment piling along with remaining Existing Structure is to be cut 2' below finished streambed. Removal of the existing structure is included in the bid item "Removal of Existing Structures", Lump Sum. All material removed shall become the property of the Contractor. Existing beams may contain Lead. The Contractor shall take this into consideration for the beam disposal. Existing gasline removal is included in the bid item "Removal of Existing Structures".

EXISTING STRUCTURE: Plans of the existing structure are on file and available for inspeciton by qualified bidders at the City of Wichita City Hall, 455 N Main St, Wichita, KS.

BRIDGE EXCAVATION: Elevation 1273.19 shall designate the Excavation Boundary Plane of Class I and Class II Excavation; Class I above the plane, Class II below the plane. See the "Bridge Excavation" sheet for the limits of pay excavation.

PILING: Drive all piling to penetrate or bear upon the shale formation. Driving shall stop when in the opinion of the Engineer additional driving may damage the piling. Drive all piling to the Pile Driving Formula Load of:

Abutments ..... 65 Tons/Pile
Piers ..... 90 Tons/Pile

As a minimum drive each pile to the load and penetration, but in no case shall the pile be driven to more than 110% of the Pile Driving Formula Driving Load. At any location where problems are experienced, pile damage is suspected, or the max driving value occurs significantly above the design pile tip elevation, the Engineer may request that the Pile Driving Analyzer (PDA) equipment be used.

PILING SPLICE LOCATION: Integral pile splice locations and weld testing criteria for Abutments will follow the "Standard Pile Details" Sheet (BRI10).

TEST PILING: Drive test piling at the locations shown on the plans or as directed by the Engineer. The test piling shall remain in place as permanent piling.

STEEL SHEET PILING: Structural steel for sheet piling shall meet ASTM A 328 (Gr. 36 min.) and shall be a "hot rolled" shape. Cold bent shapes will not be accepted. Corner connections are subsidiary to the bid item "Piles (Steel Sheet)". Welded or mechanical piling splices are only allowed with the Engineer's approval. Variation in the sheet pile alignment may be allowed with the approval of the Engineer. Use 8'-0" sections (7 ga.).

COLUMN CONSTRUCTION: Cure the column footing as required by the KDOT Specifications before beginning the column construction (placing resteel or formwork). Do not place cast in place shear bolts, coil inserts or other devices used as falsework support in the column without the approval of the Engineer. Do not remove column formwork without the approval of the Engineer. Curing shall continue after the formwork is removed as required by the KDOT Specifications.

ABUTMENT AGGREGATE DRAIN: See the General Notes on the "Abutment Aggregate Drain" sheet.

BRIDGE BACKWALL PROTECTION SYSTEM: See the General Notes on the "Abutment Aggregate Drain" Sheet.

PIER BEAM CONSTRUCTION: Cure the columns as required by the KDOT Specifications before beginning the pier beam construction (placing resteel or formwork). Do not drill and grout bolts or other devices into the columns used for falsework support unless shown on the plans. Cure the columns as required by the KDOT Specifications before placing pier beam concrete. Do not remove falsework used to support the pier beam until the pier beam concrete has cured as required by the KDOT Specifications. Do not set girders or beams on the pier beam until after the falsework is removed or the pier beam concrete has 0.75f'c strength as tested.

ERECTION ELEVATION CHECKS: After the abutment and pier concrete has cured and before setting any prestressed beams, present verification to the Engineer that the elevations at the bearings match plan elevation (±¼").

EMBANKMENT: Complete the embankment at the abutments as shown on the "Bridge Excavation" sheet prior to driving the abutment piling or commencing with the abutment footing excavation.

FALSEWORK PLANS: A licensed Professional Engineer shall design the falsework details. Details shall bear the seal of a licensed Professional Engineer. See the Bridge Design Manual, Section 16.1 "Review and Approval of Falsework Plans", for a listing of items to be included on the falsework plan. Submit electronic plans conforming to Section 105 of the Standard Specification with details in compliance with KDOT Specifications to the Field Engineer for review.

FALSEWORK INSPECTION: This project has falsework plan requirements which are considered "Category I" by KDOT specifications. The falsework designer of record will conduct an inspection of the as-built falsework. The bid item, "Falsework Inspection" is full compensation for all materials, labor and equipment. See KDOT specifications.

FALSEWORK PLANS AND SHOP DRAWINGS: Use the U.S. Customary system of units on falsework plans and shop drawing details.

CAMBER: Construct the finished deck to plan grade by varying the depth of the fillet over the beam to provide for prestress camber, concrete dead load deflection and vertical curvature. After the prestressed beams are erected measure the camber in the field by taking a profile of each beam. Correct any variation between the actual camber and concrete dead load deflection shown in the plans by varying the depth of the concrete fillets over the beam so that the finished floor is constructed to the theoretical grade. The minimum depth of the deck over the beam shall be 8½" @ ℄ beam (not including fillets). Prior to shipping, the camber shall be no greater than the design camber +½". The design camber is equal to the 50 day camber shown in the plans.

The theoretical amount of concrete required for the fillets is 69.30 C.Y. This amount of concrete is included in the Summary of Quantities. Any additional concrete required to construct the fillets will be subsidiary.

PRESTRESSED BEAM CONCRETE: Use air entrained concrete with select coarse aggregate as specified in the Special Provisions. The release strength and 28 day strength requirements shall be as noted on the plans. Submit mix designs to the Bureau of Materials and Research for approval.

BACKFILL COMPACTION: Compact backfill at the abutments.

FORMLINER PATTERNING: The pattern for the Retaining Wall and the Abutment Wall shall be the Fitzgerald #17941. The portion of the formliner patterning on the Abutment Wall shall be included in the bid item "Concrete (Grade 4.0)(AE)". See Sh. #39 for payment on the Retaining Walls.

TEMPORARY BRACING: Use timber and steel for temporary bracing in accordance with KDOT Standard Specifications for "Falsework & Form Construction" as well as "Field Erection". Show on the shop drawings the intended materials to be used. All bolts, nuts, and washers for fasteners shall conform to the heavy hex structural requirements of ASTM A325, Type I. Install the Temporary Diagonal Bracing with the first girder that is erected in each span. Install the Temporary Erection Bracing immediately after the erection of each additional girder. Install the Temporary Slab Placement Bracing, as shown in the details, prior to placing any superstructure concrete. Leave the midspan temporary erection bracing in place until the permanent midspan concrete intermediate diaphragms are constructed. Alternatively, the midspan temporary erection bracing may be placed 4' away from the permanent intermediate diaphragm locations and left in place until the deck concrete is poured. Leave all other temporary bracing in place until the deck has cured. Remove connecting hardware and fill the holes in the abutment and pier caps with an approved epoxy grout. The temporary bracing material shall remain the property of the Contractor. Submit shop drawings of the temporary bracing according to Section 105 of the Standard Specifications to the Engineer for review and approval. The material, equipment, and labor necessary for the installation and removal of the temporary bracing, including filling the bolt holes, shall not be paid for directly, but shall be subsidiary to the bid item "Prestressed Concrete Beam (NU 35+I)".

ERECTION PLANS: This is a Category B Structure. Submit detailed Erection Plans to the Engineer at least 4 weeks before beginning the erection process. Portions of the submitted details shall bear the seal of a licensed Professional Engineer. Identify, on the Erection Plans, the Erection Supervisor required by KDOT Specifications. No structural erection work will begin without approved erection plans.

CONCRETE: Superstructure concrete is bid as Concrete (Grade 4.0)(AE)(SA). Substructure concrete is bid as Concrete (Grade 4.0)(AE). If desired, the Contractor may use Concrete (Grade 4.0) in the footings and in the abutments below the construction joint. Bevel all exposed edges of all concrete with a ¾ inch triangular molding, except where noted on the plans. Construction joints are optional, but if used, place only at locations shown, or at locations approved by the Engineer.

REINFORCING STEEL: All reinforcing steel dimensions are to the centerline of bars unless otherwise noted. All reinforcing steel, except the spiral bars, shall conform to the requirements of ASTM A615, Grade 60. Spiral bars may meet the requirements of either ASTM A615 (Grade 40 or 60) or AASHTO M32, and are included in the bid item "Reinforcing Steel (Grade 60)".

Where non-coated bars come in contact with epoxy coated bars, they need not be coated.

AESTHETIC METAL TOWER: The bid item "Aesthetic Metal Tower (Each)" includes all labor, materials and any incidentals needed to install and attach the Aesthetic Metal Tower to the bridge piers as detailed in the plans. See Project Special Provisions for more information. The approximate weight of each Aesthetic Metal Tower is 3,000 lb. The General Contractor is responsible for installing the Aesthetic Metal Tower provided by the Artist. The Artist shall coordinate all work associated with the Aesthetic Metal Tower fabrication and details with the Engineer for approval, prior to finalizing the fabrication of the Aesthetic Metal Tower.

CITY OF WICHITA

wsp

HARRY STREET BRIDGE
OVER ARKANSAS RIVER

GENERAL NOTES I

STRUCTURE NO. 430400876300AR40

REVISIONS

NO.	DATE	DESCRIPTION

PROJ NO:	35838B
SCALE:	AS NOTED
DATE:	.
DESIGNED BY:	--
DRAWN BY:	--
CHECKED BY:	
YEAR:	2019

SHEET NO
44
SHEET 44 OF 135

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