ADDENDUM NO. 1

Sedgwick County Project: 797-O-520; Bridge on 183rd St. West between between Central & 13th Street North (B470)

The items contained herein now become a part of the referenced plans and specifications. Please read the following items and acknowledge receipt of this addendum on the Proposal Page Number P-1. NOTE: THIS ADDENDUM MUST BE ACKNOWLEDGED TO CONSTITUTE A VALID BID.

PLANS:

The Object Markers (Type III) shall be mounted on telescoping posts meeting the specifications noted on sheet 37.

Replace sheet 11 with sheet 11R.

By: _____
David C. Spears, P.E.
Director of Public Works/County Engineer

Date: March 11, 2015

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	B-470	2015	11R	45

SUMMARY OF QUANTITIES

Items / Location	Excavation		Concrete		Reinforcing Steel		Piles (Steel) (HP12X53)	Test Pile (Steel) (HP12X53)	Slope Protection (Riprap Stone)
	Class I	Class II	Grade 4.0 (AE)	Grade 4.0 (AE)(SA)	(Grade 60)	(Grade 60) Epoxy Coated			
	Cu. Yds.	Cu. Yds.	Cu. Yds.	Cu. Yds.	Lbs.	Lbs.	Lin. Ft.	Lin. Ft.	Cu. Yds.
Abutment No. 1	87						90	35	245
Pier No. 1		59	26.55		1,055		180	35	
Pier No. 2		58	26.55		1,055		180	35	
Abutment No. 2	87						90	35	205
Total Substructure	174	117	53.1		2,110		540	140	450
Total Superstructure				282.3		71,660			
Grand Total	174	117	53.1	282.3	2,110	71,660	* 540	140	450

1 * Includes: ~~22~~ 18 @ 30'

Note: Only Steel Piles HP12X53 shall be used on this structure.

INDEX TO BRIDGE DRAWINGS

LRFR RATING FACTORS

Design Load / Rating Level	Inventory	Operating
HL-93 Loading	1.449	1.880
2008 Manual for Bridge Evaluation		

LFD RATING FACTORS

Truck / Rating Level	Inventory	Operating
HS-20 (36T)	1.763	2.938
Type HET (110T)		1.221
2002 LFD Rating, 17th Edition AASHTO		

GENERAL BRIDGE NOTES

CHANNEL IMPROVEMENT AND EXCAVATION: THE CONTRACTOR SHALL EXCAVATE THE CHANNEL AND COMPLETE THE EMBANKMENTS IN THE VICINITY OF THE NEW BRIDGE, PRIOR TO THE DRIVING OF THE PILES.

BRIDGE EXCAVATION: ELEVATION 1395.50 SHALL DESIGNATE THE EXCAVATION BOUNDARY PLANE OF CLASS I AND CLASS II EXCAVATION; CLASS I ABOVE THE PLANE, CLASS II BELOW THE PLANE. SEE BRIDGE EXCAVATION SHEET FOR THE LIMITS OF PAY EXCAVATION.

SOUNDINGS: THE SOUNDINGS SHOWN ON THESE PLANS ARE TAKEN FROM NOTES OBTAINED IN THE FIELD AND REPRESENT THE BEST INFORMATION AVAILABLE TO SEDGWICK COUNTY.

PILING: DRIVE ALL PILING TO PENETRATE OR BEAR UPON THE HARD 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:

ABUTMENT NO. 1	54.8 TONS
PIER NO. 1	69.9 TONS
PIER NO. 2	69.9 TONS
ABUTMENT NO. 2	54.8 TONS

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 PILE DRIVING FORMULA LOAD. AT ANY LOCATION WHERE PROBLEMS ARE EXPERIENCED, PILE DAMAGE IS SUSPECTED, OR THE PILE DRIVING FORMULA LOAD 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 BOTH ABUTMENTS WILL FOLLOW THE "STANDARD PILE DETAILS SHEET (BR110).

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.

BACKFILL COMPACTION: COMPACT BACKFILL AT THE ABUTMENTS.

PIER BACKFILL: THE BACKFILL OF PIERS SHALL BE PLACED IN SUCH A MANNER AS TO PREVENT MOVEMENT OF THE WEBWALLS. SEE NOTE ON PIER DETAIL SHEET.

PIER BEAM CONSTRUCTION: CURE THE COLUMNS/WEBWALL AS REQUIRED BY THE KDOT SPECIFICATIONS BEFORE BEGINNING THE PIER BEAM CONSTRUCTION (PLACING RESTEEL OR FORMWORK). DO NOT DRILL OR GROUT BOLTS OR OTHER DEVICES INTO THE COLUMNS/WEBWALL USED FOR FALSEWORK SUPPORT UNLESS APPROVED BY THE ENGINEER. CURE THE COLUMNS/WEBWALL AS REQUIRED BY THE THE KDOT SPECIFICATIONS BEFORE BEGINNING TO PLACE THE SUPERSTRUCTURE CONCRETE.

CONCRETE: SUPERSTRUCTURE CONCRETE IS BID AS CONCRETE (GRADE 4.0) (AE)(SA). SUBSTRUCTURE CONCRETE IS BID AS CONCRETE (GRADE 4.0)(AE). BEVEL ALL EXPOSED EDGES OF ALL CONCRETE WITH A 3/4" TRIANGULAR MOLDING, EXCEPT AS OTHERWISE NOTED ON THE PLANS. CONSTRUCTION JOINTS ARE OPTIONAL WITH THE CONTRACTOR, BUT IF USED, PLACE ONLY AT LOCATIONS SHOWN, OR AT LOCATIONS APPROVED BY THE ENGINEER.

REINFORCING STEEL: ALL DIMENSIONS RELATIVE TO THE PLACING OF REINFORCING STEEL ARE TO CENTERLINE OF BARS UNLESS OTHERWISE NOTED. ALL DIMENSIONS SHOWN IN THE BENDING DIAGRAMS ARE OUT TO OUT OF BARS UNLESS OTHERWISE NOTED. ALL REINFORCING STEEL, EXCEPT SPIRAL BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615, GRADE 60.

EPOXY COATED REINFORCING: ALL REINFORCING BARS DESIGNATED "EPOXY COATED" SHALL BE COATED WITH EPOXY AS SET FORTH IN THE KDOT STANDARD SPECIFICATIONS. ALL BAR SUPPORTS SHALL BE COATED.

FALSEWORK: FALSEWORK SHALL BE LEFT IN PLACE FOR THE ENTIRE UNIT UNTIL 15 DAYS AFTER THE LAST CONCRETE POUR FOR THE UNIT OR LONGER AS DIRECTED BY THE ENGINEER.

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 5.1 "REVIEW AND APPROVAL OF FALSEWORK PLANS". FOR A COMPLETE LISTING OF ITEMS TO BE INCLUDED ON THE FALSEWORK PLAN. SUBMIT 3 SETS OF DETAILS IN COMPLIANCE WITH KDOT SPECIFICATIONS TO THE ENGINEER FOR REVIEW AND DISTRIBUTION.

FALSEWORK INSPECTION: THIS PROJECT HAS FALSEWORK PLAN REQUIREMENTS WHICH ARE CONSIDERED "CATEGORY 2" BY KDOT SPECIFICATIONS. IF FALSEWORK DEFICIENCIES OR VARIATIONS FROM THE APPROVED AND SEALED PLANS ARE FOUND, THE FALSEWORK DESIGN ENGINEER OF RECORD WILL PROVIDE WRITTEN APPROVAL OF THE CHANGES. IF FOR THE CONVENIENCE OF THE CONTRACTOR THE FALSEWORK BECOMES "CATEGORY 1" BY THE USE OF NON-TYPICAL SUPPORTS, THEN THE INSPECTION AND REVIEW REQUIREMENT OF "CATEGORY 1" WILL BE FULLY ENFORCED, BUT AT NO COST TO THE COUNTY. "CATEGORY 2" FALSEWORK INSPECTION IS NOT PAID FOR DIRECTLY, BUT IS SUBSIDIARY TO OTHER BID ITEMS.

CORRAL RAIL: BUILD THE CORRAL AFTER THE FALSEWORK IS STRUCK.

CAMBER: CAMBER SHALL BE PROVIDED AS SHOWN IN THE CAMBER DIAGRAM UNLESS THE CONTRACTOR USES LONG SPAN STEEL BEAM FALSEWORK (CONCRETE DEAD LOAD DEFLECTION GREATER THAN 1/4") OR TIMBER FALSEWORK WITH GREATER THAN 12'-0" CLEAR SPAN, IN WHICH CASE THE CONTRACTOR SHALL SUBMIT FALSEWORK PLANS WHICH SHOW THE ADDITIONAL REQUIRED CAMBER.

DECK FINISHING: SET THE FINISHING MACHINE PARALLEL TO THE SKEW FOR STRIKING OFF AND SCREEDING THE CONCRETE. SCREEDING NORMAL TO THE CENTERLINE OF THE BRIDGE WILL NOT BE ALLOWED. USE DECK TINING AS PER KDOT SPECIAL PROVISION 07-07011. DECK FINISHING SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE SUBSIDIARY TO THE BID ITEM CONCRETE GRADE 4.0 (AE) (SA).

CONCRETE PLACING SEQUENCE: THE SEQUENCE OF PLACING CONCRETE IN THE SLAB SHALL BE AS SHOWN ON THE PLANS, OR THE CONTRACTOR SHALL SUBMIT AN ALTERNATE PLACING SEQUENCE FOR REVIEW. THE ALTERNATE PLACING SEQUENCE SHALL BE GIVEN TO THE ENGINEER AT THE PRECONSTRUCTION CONFERENCE. THE ALTERNATE PLACING SEQUENCE SHALL INCLUDE THE PROPOSED RATE OF CONCRETE PLACEMENT IN CUBIC YARDS PER HOUR, THE PLANT CAPACITY, PLACEMENT DIRECTION, CONSTRUCTION JOINT LOCATION, A DESCRIPTION OF THE EQUIPMENT BEING USED IN PLACING THE CONCRETE, PROPOSED ADMIXTURES, AND THE QUANTITY OF CONCRETE IN EACH PLACING SEGMENT. ANY ADDITIONAL COST FOR THE CONTRACTOR'S ALTERNATE PLAN OF PLACING CONCRETE, INCLUDING ADMIXTURES, SHALL BE AT THE CONTRACTOR'S EXPENSE AND SHALL BE CONSIDERED SUBSIDIARY TO THE BID ITEM "CONCRETE (GRADE 4.0) (AE) (SA)". APPROVAL OF THE CONTRACTOR'S ALTERNATE SEQUENCE IS REQUIRED PRIOR TO PLACEMENT OF CONCRETE IN THE DECK.

CONSTRUCTION LOADS: LIMITED TRAFFIC IS PERMITTED ON THE NEW SUBDECK, ONE-COURSE DECK OR ANY CONCRETE OVERLAY DURING THE CURING PERIOD. KEEP ANY EXPOSED DECK WET DURING THE CURING PERIOD. SEE KDOT SPECIFICATIONS SECTION 710 TABLE 710-2 FOR ADDITIONAL INFORMATION.

QUANTITIES: ITEMS NOT LISTED SEPARATELY IN THE SUMMARY OF QUANTITIES ARE SUBSIDIARY TO OTHER ITEMS IN THE PROPOSAL.

DIMENSIONS: ALL DIMENSIONS SHOWN ON THE DESIGN PLANS ARE HORIZONTAL DIMENSIONS UNLESS OTHERWISE NOTED. MAKE NECESSARY ALLOWANCES FOR ROADWAY GRADE AND CROSS SLOPE.

CONTRACTOR CONSTRUCTION STAKING: CONSTRUCTION STAKING FOR CLEAR SPAN BRIDGES REQUIRES TWO INDEPENDENT SURVEYS. SEE KDOT SPECIFICATIONS.

SLOPE PROTECTION: PLACE SLOPE PROTECTION (RIPRAP STONE) (24") TO THE LIMITS AND THICKNESSES SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

PLACE A 10 FOOT WIDE MAT OF GEOTEXTILE UNDER THE SLOPE ROCK/RUBBLE EMBANKMENT ON THE BERM SLOPES AND CENTERED ON THE DRIP LINES OF THE SLAB.

DEMOLITION PLANS: THIS IS A CATEGORY A DEMOLITION. SUBMIT DETAILED DEMOLITION PLANS TO THE ENGINEER FOR REVIEW AND DISTRIBUTION PER KDOT SPECIFICATIONS. NO DEMOLITION WORK WILL BEGIN WITHOUT APPROVED DEMOLITION PLANS. A LICENSED PROFESSIONAL ENGINEER IS NOT REQUIRED. THIS WORK IS NOT BID SEPARATELY, BUT IS SUBSIDIARY TO THE BID ITEM "REMOVAL OF THE EXISTING STRUCTURE".

REMOVAL OF EXISTING STRUCTURES: REMOVAL OF EXISTING STRUCTURE IS INCLUDED IN THE BID ITEM "REMOVAL OF EXISTING STRUCTURES", LUMP SUM, ON THE PROJECT SUMMARY OF QUANTITIES SHEET.

DESIGN DATA

DESIGN SPECIFICATIONS: AASHTO BRIDGE DESIGN SPECIFICATIONS, 2007 EDITION WITH APPROPRIATE INTERIM SPECIFICATIONS. LOAD RESISTANCE FACTOR DESIGN.

CONSTRUCTION SPECIFICATIONS: KANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR STATE ROAD AND BRIDGE CONSTRUCTION, 2007 AND SPECIAL PROVISIONS.

DESIGN LOADING:
LIVE LOAD -- HL-93
DEAD LOAD -- INCLUDES AN ALLOWANCE OF 25 LBS. PER SQ. FT. FOR A FUTURE WEARING SURFACE.

UNIT STRESSES:

CONCRETE (GRADE 4.0) (AE) (SA)	f'c =	4,000 psi
	fc =	1,600 psi
CONCRETE (GRADE 4.0) (AE)	f'c =	4,000 psi
	fc =	1,600 psi
CONCRETE (GRADE 4.0)	f'c =	4,000 psi
	fc =	1,600 psi
REINFORCING STEEL (GRADE 60)	fs =	24,000 psi
	fy =	60,000 psi

LRFD DESIGN PILE LOAD:

DESIGN LOADING (TONS PER PILE)	STRENGTH I	SERVICE I	PHI
ABUTMENT NO. 1	54.8	38.1	0.45
PIER NO. 1	69.9	50.0	0.45
PIER NO. 2	69.9	50.0	0.45
ABUTMENT NO. 2	54.8	38.1	0.45

1 Revised Callout for Steel Piles 3/2/2015

BRIDGE NO. B-470

BRIDGE NOTES AND QUANTITES

BRIDGE OVER TRIB. DRY CREEK

STA. 25+30 SEDGWICK COUNTY

CFS ENGINEERS
cfse.com

DESIGNED RSC	SCALE
DETAILED	DATE
QUANTITIES	SHEET OF

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