

Matthew G. Bevin Governor COMMONWEALTH OF KENTUCKY TRANSPORTATION CABINET Frankfort, Kentucky 40622 www.transportation.ky.gov/

Greg Thomas Secretary

July 10, 2017

CALL NO. 307 CONTRACT ID NO. 171233 ADDENDUM # 1

Subject: Knott County, FD04 060 0899 PEDBRID Letting July 28, 2017

(1)Revised - Proposal - Pages 1-54 of 54

Proposal revisions are available at <a href="http://transportation.ky.gov/Construction-Procurement/">http://transportation.ky.gov/Construction-Procurement/</a>.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

Kachel Mille

Rachel Mills, P.E. Director Division of Construction Procurement

RM:ks Enclosures



An Equal Opportunity Employer M/F/D



CALL NO. <u>307</u> CONTRACT ID. <u>171233</u> <u>KNOTT COUNTY</u> FED/STATE PROJECT NUMBER <u>FD04 060 0899 PEDBRID</u> DESCRIPTION <u>ALICE LLOYD COLLEGE PEDESTRIAN BRIDGE (KY 899)</u> WORK TYPE <u>BRIDGE</u> PRIMARY COMPLETION DATE <u>48 WORKING DAYS</u>

# LETTING DATE: July 28,2017

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME July 28,2017. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

## NO PLANS ASSOCIATED WITH THIS PROJECT.

**REQUIRED BID PROPOSAL GUARANTY:** Not less than 5% of the total bid.

Contract ID: 171233 Page 2 of 54

REVISED ADDENDUM #1: 7-10-17

# TABLE OF CONTENTS

### PART I SCOPE OF WORK

- PROJECT(S), COMPLETION DATE(S), & LIQUIDATED DAMAGES
- CONTRACT NOTES
- STATE CONTRACT NOTES
- SPECIAL NOTE(S) APPLICABLE TO PROJECT
- RIGHT OF WAY NOTES
- UTILITY IMPACT & RAIL CERTIFICATION NOTES
- COMMUNICATING ALL PROMISES

### PART II SPECIFICATIONS AND STANDARD DRAWINGS

- SPECIFICATIONS REFERENCE
- SUPPLEMENTAL SPECIFICATION
- [SN-11C] DRILLED SHAFTS

### PART III EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

- LABOR AND WAGE REQUIREMENTS
- EXECUTIVE BRANCH CODE OF ETHICS
- KENTUCKY EQUAL EMPLOYMENT OPPORTUNITY ACT OF 1978 LOCALITY / STATE
- PROJECT WAGE RATES / STATE
- PART IV INSURANCE
- PART V BID ITEMS

REVISED ADDENDUM #1: 7-10-17

# PART I

# **SCOPE OF WORK**

# ADMINISTRATIVE DISTRICT - 12

Contract ID: 171233

Page 4 of 54

#### CONTRACT ID - 171233

FD04 060 0899 PEDBRID

**COUNTY - KNOTT** 

#### PCN - DE06008991733 FD04 060 0899 PEDBRID

ALICE LLOYD COLLEGE PEDESTRIAN BRIDGE (KY 899) PEDESTRIAN BRIDGE OVER KY 899 FROM THE ENTRANCE OF ALICE LLOYD COLLEGE TO THE PARKING LOTSBRIDGE SYP NO. 12-08802.00. GEOGRAPHIC COORDINATES LATITUDE 37:20:18.00 LONGITUDE 82:52:15.00

#### COMPLETION DATE(S):

48 WORKING Days

APPLIES TO ENTIRE CONTRACT

# **CONTRACT NOTES**

### PROPOSAL ADDENDA

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

### **BID SUBMITTAL**

Bidder must use the Department's Expedite Bidding Program available on the Internet web site of the Department of Highways, Division of Construction Procurement. (www.transportation.ky.gov/construction-procurement)

The Bidder must download the bid file located on the Bid Express website (www.bidx.com) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

### JOINT VENTURE BIDDING

Joint venture bidding is permissible. All companies in the joint venture must be prequalified in one of the work types in the Qualifications for Bidders for the project. The bidders must get a vendor ID for the joint venture from the Division of Construction Procurement and register the joint venture as a bidder on the project. Also, the joint venture must obtain a digital ID from Bid Express to submit a bid. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

## **UNDERGROUND FACILITY DAMAGE PROTECTION**

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. When prescribed in said directives, the contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom shall be contacted through their individual Protection Notification Center. Non-compliance with these directives can result in the enforcement of penalties.

### SPECIAL NOTE FOR COMPOSITE OFFSET BLOCKS

Contrary to the Standard Drawings (2016 edition) the Cabinet will allow 6" composite offset blocks in lieu of wooden offset blocks, except as specified on proprietary end treatments and crash cushions. The composite blocks shall be selected from the Cabinet's List of Approved Materials.

# **REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY**

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by <u>KRS 14A.9-010</u> to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under <u>KRS 14A.9-030</u> unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in <u>KRS 14A.9-010</u>, the foreign entity should identify the applicable exception. Foreign entity is defined within <u>KRS 14A.1-070</u>.

For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity's solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.

Businesses can register with the Secretary of State at <u>https://secure.kentucky.gov/sos/ftbr/welcome.aspx</u>.

## SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by fax (502) 564-7299 or email to <u>kytc.projectquestions@ky.gov</u>. The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

The deadline for posting answers will be 3:00 pm Eastern Daylight Time, the day preceding the Letting. Questions may be submitted until this deadline with the understanding that the later a question is submitted, the less likely an answer will be able to be provided.

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website (<u>www.transportation.ky.gov/contract</u>). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

### HARDWOOD REMOVAL RESTRICTIONS

The US Department of Agriculture has imposed a quarantine in Kentucky and several surrounding states, to prevent the spread of an invasive insect, the emerald ash borer. Hardwood cut in conjunction with the project may not be removed from the state. Chipping or burning on site is the preferred method of disposal.

### **INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES**

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

### ACCESS TO RECORDS

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

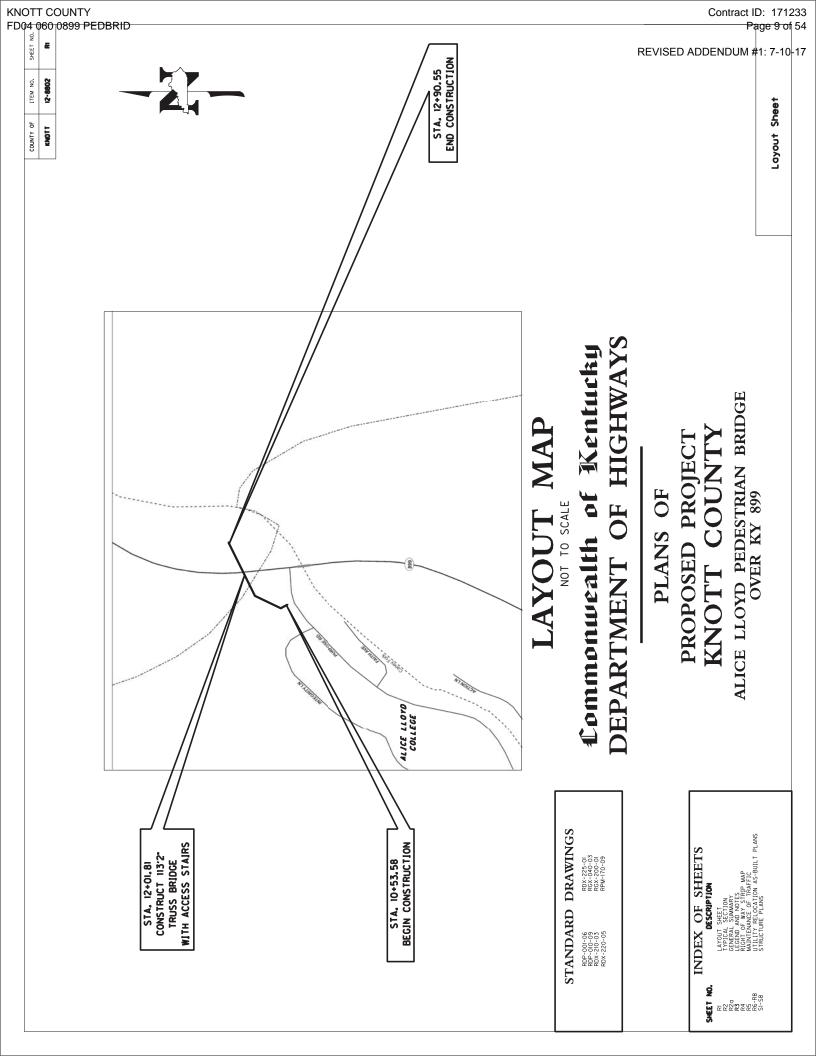
In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004.

06/01/16

### SPECIAL NOTE FOR RECIPROCAL PREFERENCE

### Reciprocal preference to be given by public agencies to resident bidders

By reference, KRS 45A.490 to 45A.494 are incorporated herein and in compliance regarding the bidders residency. Bidders who want to claim resident bidder status should complete the Affidavit for Claiming Resident Bidder Status along with their bid in the Expedite Bidding Program. Submittal of the Affidavit should be done along with the bid in Bid Express.



	COUNTY 60 0899 PEDBRID			Contract II	D: 1712 je 10 of	233 54
 SHEET NO.			REVISE	ED ADDENDUM #		
ITEM NO.	12-8802				SUG	
COUNTY OF 1	-		т		Typical Sections	
COUL	2		4 <b>-</b> DEPTH	HE LIMITS	Typico	
				OUTSIDE TI		
	נין			R SLOPES		
	GE		- CONCRETE	NOTESA •SEE CROSS SECTIONS FOR SLOPES OUTSIDE THE LIMITS OF THE SHOULDERS.		
	Â		PATH - C	TES: CROSS SE THE SHOU		
	BRI		PA	OFER BO		
	<sup>m</sup> Z					
	2 S	3,-6.				
			T.	0.65 0.55		
		PROFILE CARDERAM FLOORBEAM FLOORBEAM FLOORBEAM FLOORBEAM FLOORBEAM FLOORBEAM FLOORBEAM FLOORBEAM FLOORBEAM FLOORBEAM	-	PATH STA. 10 + 53.58 TO STA. 11 + 00.65 Sta. 12 + 85.56 TO STA. 12 + 90.55		
	SIS	TOP CHORD TOP CHORD BO' RAILING CONCRETE CONCRETE FROFIL FROFIL		PATH 8 T0 ST/ T0 ST/		
		TOP CHORD RAILING SLAB TYPICAL PEDESTRIAN TYPICAL		F + 53.58 + 85.56		
	PEDESTRIAN TYPICAI		m <u></u>	STA. 10 - Sta. 12 ⊣		
	M	SI DIAGONAL	Ĩ.	0, 0,		
	N.K.					
	LS	FENCE MESH (TYP.)				
	Ē	<u>0 H</u>				
	d					

KNOT				Y PEDBF																																	Cor		t ID: 17 <sup>°</sup> <del>≥age 11 °</del>	
SHEET NO.		R2A NOC	1000																													F	2EV	ISE	ΠA		) EN		1	
	-	~																														•			μ.		· <b>_</b>		1: <b>7-1</b> N #1: 7	
ITEM NO.	11.6%	12-8802		S																																			SUMMARY	
, 0F	5	E		0.1 acre																																				
COUNTY OF		KNOTT		Approx. 0.1 acres																																			PIPE	
				- Ap																					ſ	1		-11							гт		<del>, ,</del>		RAL &	
				~																																			GENERAL	
																										RKS														
																										REMARKS														
								Τ		Τ	Π													]					+	$\left  \right $		+	$\left  \right $	+	$\left  \right $	_	$\left  \right $	+		
						+	$\left  \right $	+	$\left  \right $	+	+	+		$\parallel$	+	+	$\left  \right $		+	$\left  \right $		+	$\left  \right $	-																
										$\downarrow$	$\parallel$																										Ħ	$\top$		
						1	88	1 239	-	- 118		_	47	: -	0.02	239	0.02	96						1																
															_	_			+	$\left  \right $	+	+	$\left  \right $	ARV			+	$\parallel$	+	$\left  \right $	+	+	+	+	$\left  \right $	+	$\left  \right $	+		
		۲	:   _	UNIT		cu. YD. LS	S0.F	S0. Y	٢S	LIN.F	EACH	EAC	SO. Y	- rs	TON	S0. Y	TON	S0. FT.																						
		MAF																																						
		SUMMARY																						DRAINAGE		"8 – 1- 9q1	A 1		+	$\left  \right $		+	$\left  \right $	+	$\left  \right $	+	$\parallel$	+		
																										edi9 .h9 <sup>0</sup> IlswbseH "8" 1.90"	034	ΕA	~									2		
		GENERAL																							I	"8 – sqi9	01002	1	44				$\uparrow$	+				44		
		GEľ	;	TION		E																		DIPF		Perforated	JIO	<u> </u>						_			$\square$	ļ		
				DESCRIPTION		0		PE III	<b>FRAFFIC</b>			A	E E			2	SN S																							
				DE		EMBANKMENT IN PLACE CLEARING AND GRUBBING	SNS	DEMOBILIZATION GEOTEXTILE FABRIC TYPE III	MAINTAIN & CONTROL TRAFFIC	TEMPORARY SILT FENCE	SILT TRAP TYPE B	AP TYPE	IN CONC		IZER	RDTECTI	LIMESTO	RNINGS										$\parallel$	+	$\left  \right $		-	+	+	$\left  \right $	-	$\left  \right $	+		
						EMBANKMENT IN PLACE CLEARING AND GRUBBIN	ARY SIG	TILE FA	ÍN & CO	ARY SIL	AP TYP	SILT TR.	21L   1K		FERTIL	AND P	TURAL	DETECTABLE WARNINGS																						
						CLEARIN	TEMPOR	DEMOBIL GEOTEX	MAINTAI	STI T TI	SILT TF	CLEAN S	SIDF WAI	STAKING	INITIAL	SEFDING	AGRICUI	DE TECT/												$\left[ \right]$			T				$\left  \right $			
								+					_		_	+			_					-		2			+	$\left  \right $		_	$\left  \right $	_	$\left  \right $	_	$\left  \right $	+		
				ITEM		02230 02545	02562	02569 02598	02650	02703	02704	02706	02720	02726	05963	05985	05992	23158ES505								SKEW												С1		
																		12									ITEM CODE		10+65									TOTAL PROJECT		
																											TEM		of Sta.									TAL I		
																										HEET NO.		-										- 2		
.																									l	HEET NO	<b>3</b>													

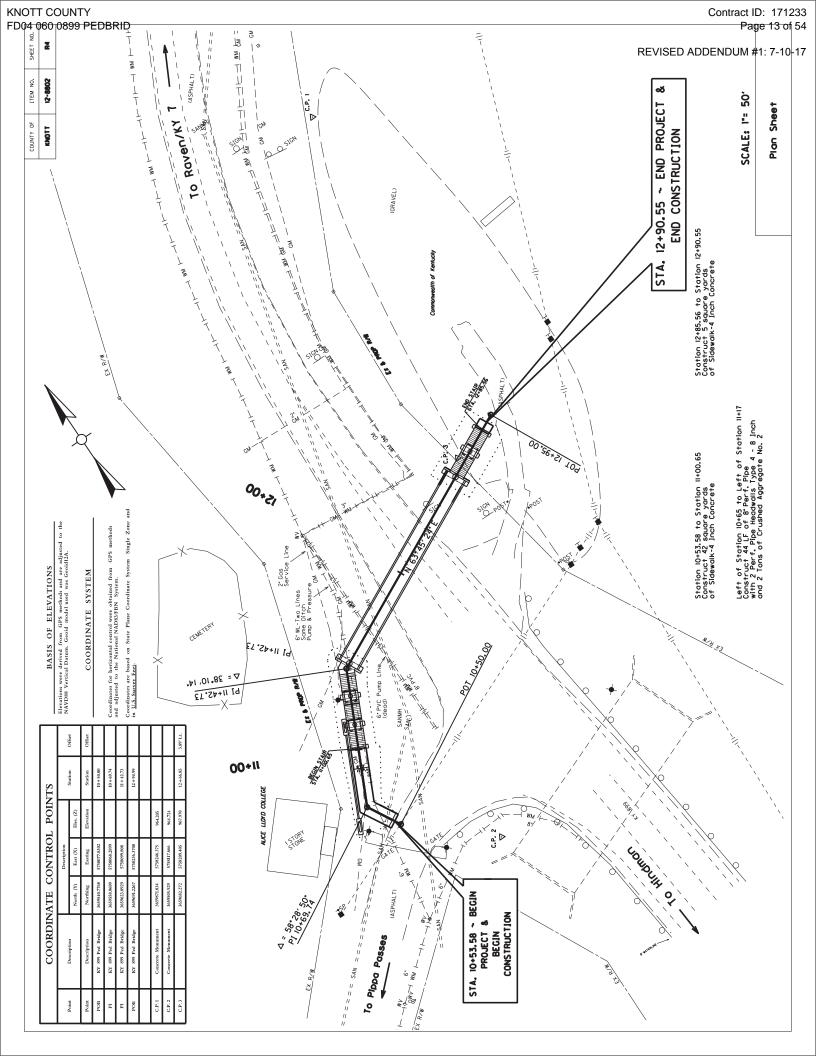
SPECIAL NOTES and the second of the second o	WING BOOK AND THE BRANCH OF THE DEPARTMENT	re one-call system call is o bel system call is o by Preci to excavation. The to excavation. The carbo what k to determine what
GENERAL & GENERAL & Instructed to call 1-800-752-6007 to reach the location of existing underground utili ftw (2) days and no more than ten (10) BUG utractor should be amare than towners of u o be members of the ky bilone-call before- orddinate excavation with the utility owner ribe to ky bil. It may be necessary for th ller to determine what utility companies 1 ller to determine what utility companies 1	STANDARD DRAWINGS ARE NOT ATTACHED TO THESE PLANS. A STANDARD DRAWING BOOK AND THE STANDARD DRAWINGS ARE NOT ATTACHED TO THESE PLANS. A STANDARD DRAWING BOOK AND THE FEADWALL SUPPLEMENTAL BOOK MAY BE OBTAINED FROM THE POLICY SUPPORT BRANCH OF THE DEPARTMENT OF ADMINISTRATIVE SERVICES IN FRANKFORT, KY AT (502)564-3670.	The contractor is instructed to call 1.800-752-6007 to reach K 811, the one-call system for information on the location of existing underground adultities. The call is to be preed a minimum 1 km (2) and more than the full (2) business days profit excavation. The contractor should be aware that the eleven-bug (BUD) service. The call restare to the members of the KN 311 one-call fedore-bug (BUD) service. The call restare to the members of the KN 311 one-call fedore-bug (BUD) service. The contractor must conditate the utility owners, including those whom do not subscribe to KN 311. It may be researed to the contractor to contract the county Court Clerk to determine what utility companies have facilities in the area.
CONVENTIONAL SAME LIK CARLINE CARL LIK CARL LIK CONVELLE CONVEL CONVELLE CONVELLE CONVELLE CONVELLE CO	LIGNING PAL PAMER PAL PAMER PAL PAMER PAL PALPHONG & TLLEPHONG PAL PLLEPHONG & TLLEPHONG PAL PLLEPHONG OF TLLEPHONG STUB TLLEPHONG OF TLLEPHONG AND TLLEPHONG OF TLLEPHONG CAS WAN CAS WAN CAS WAN CLLEPHONG AND TLLEPHONG CALL DIRECT BANAL TLLEPHONG CALL DIRECT BANA TLLEPHONG CALL DIRECT BANA TLLEPHONG CALL DIRECT BANA TLLEPHONG CALL DIREC	near a foodbar

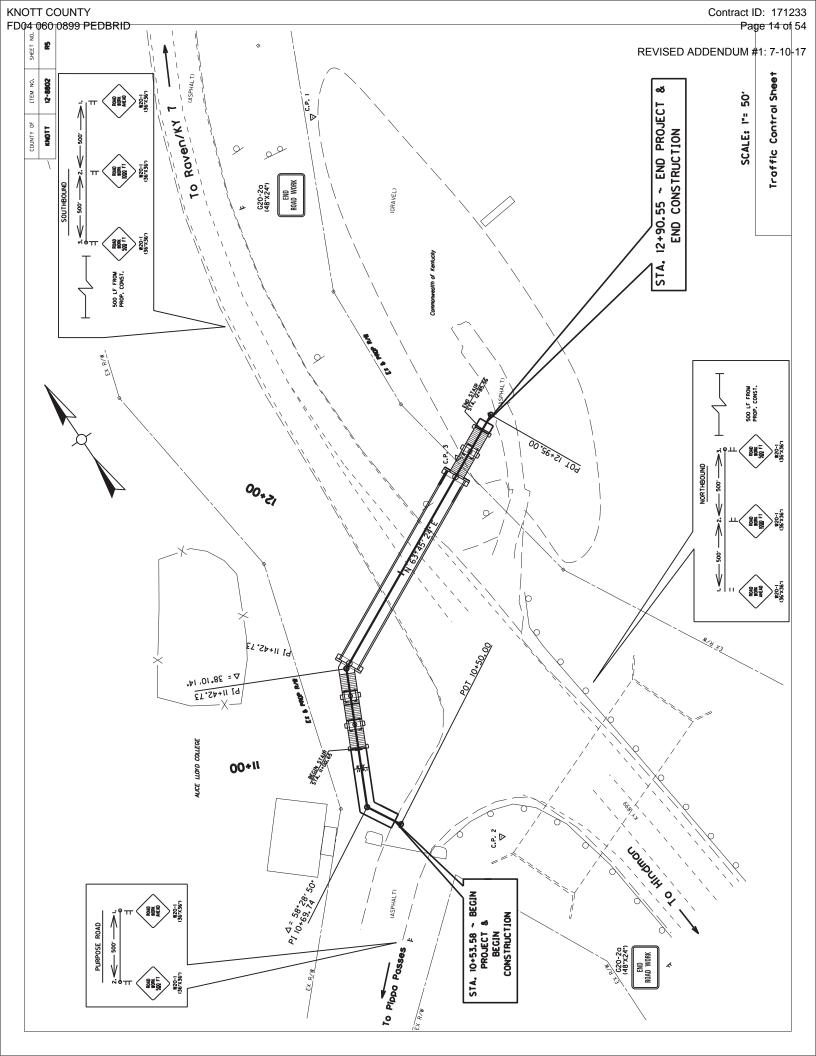
LEGEND WITH NOTES

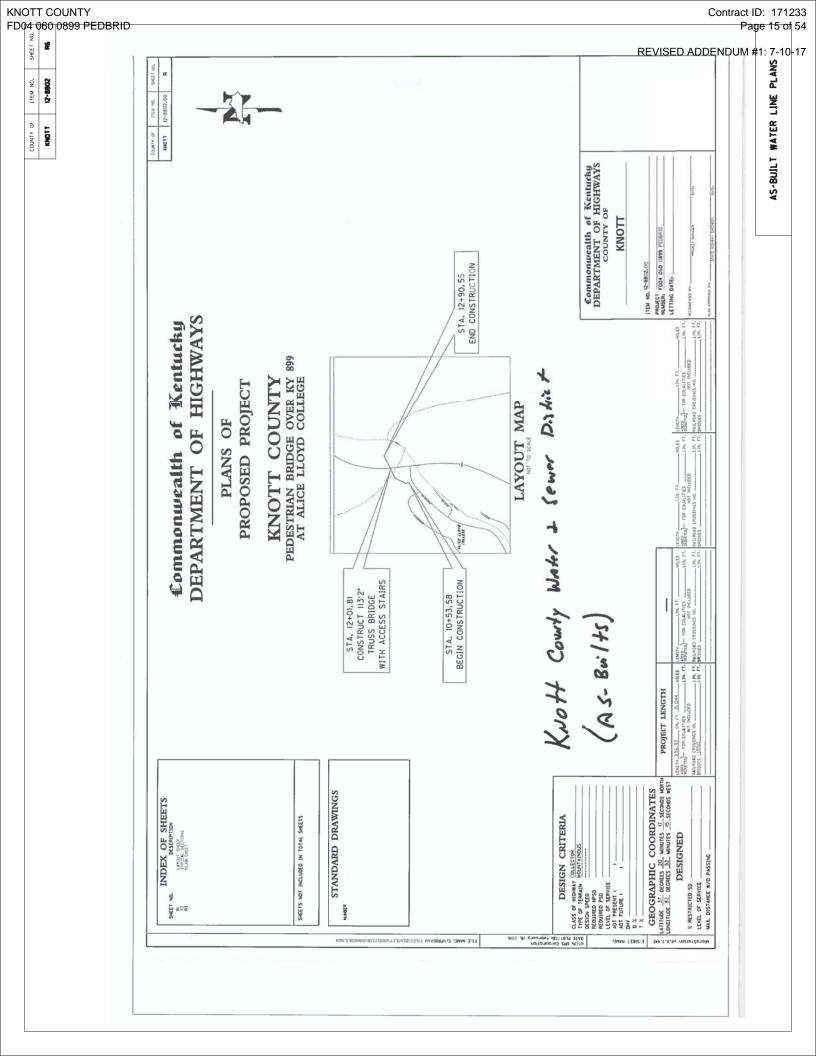
NORTH POINT

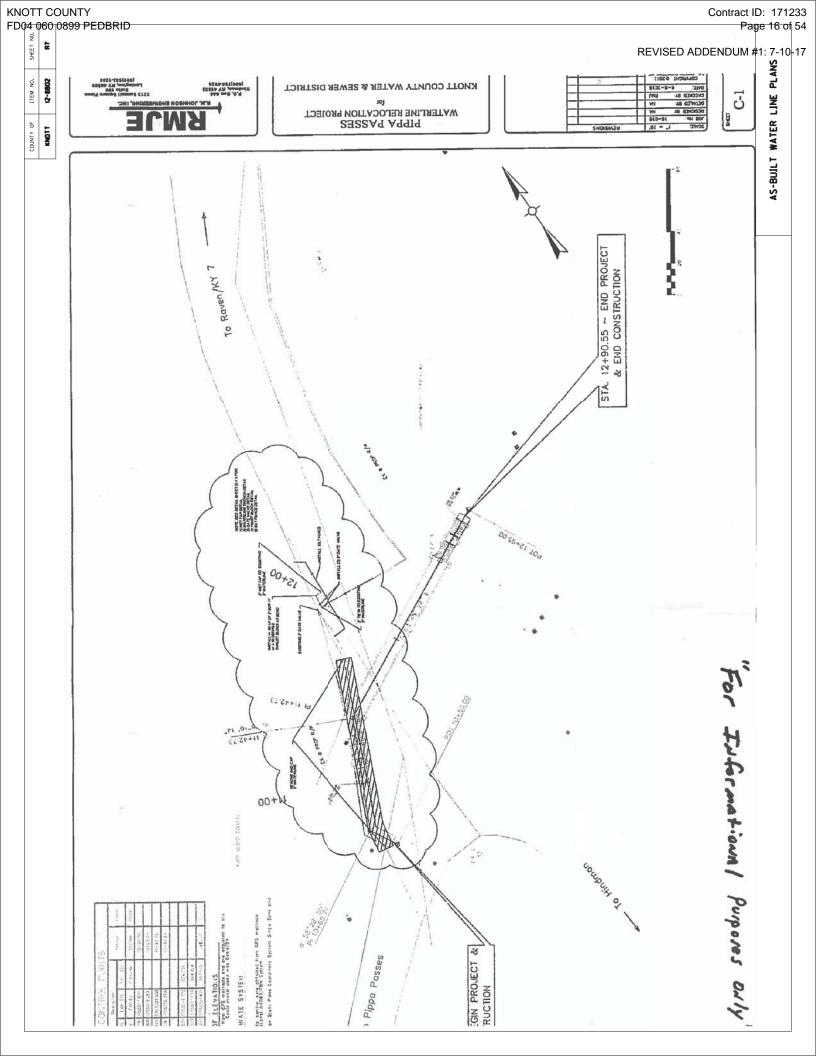
REVISED ADDENDUM #1: 7-10-17

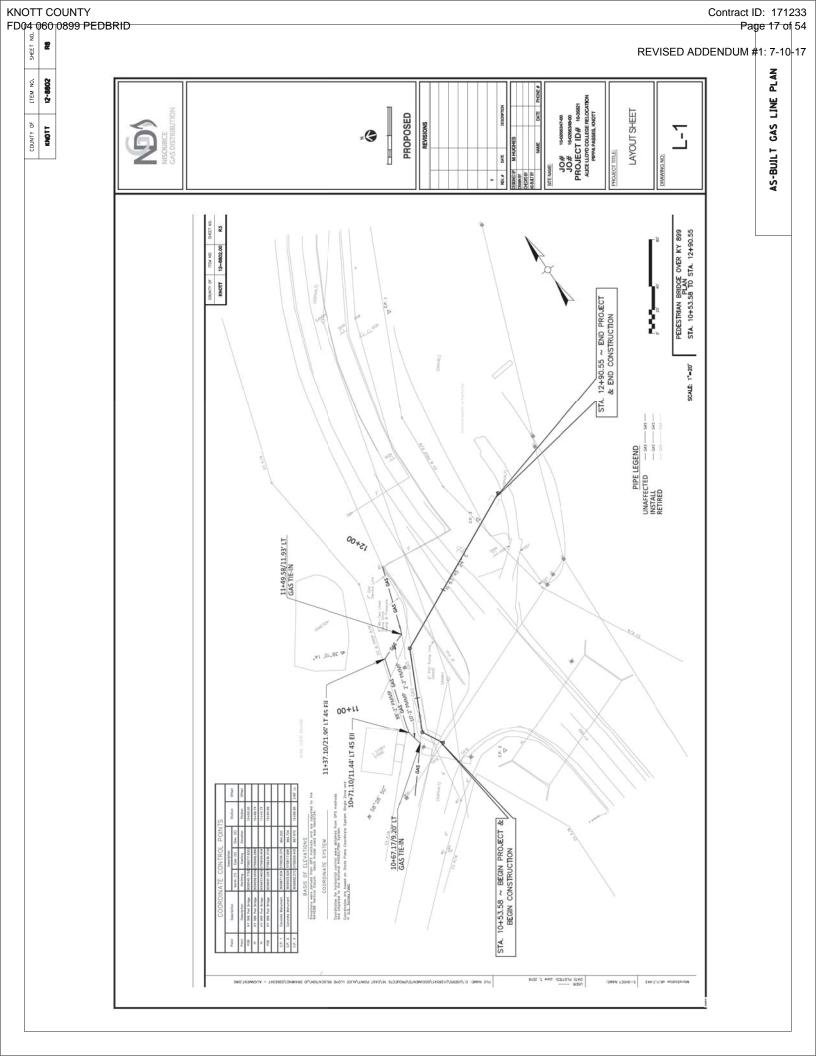
ITEM NO. 1**2-8802** 









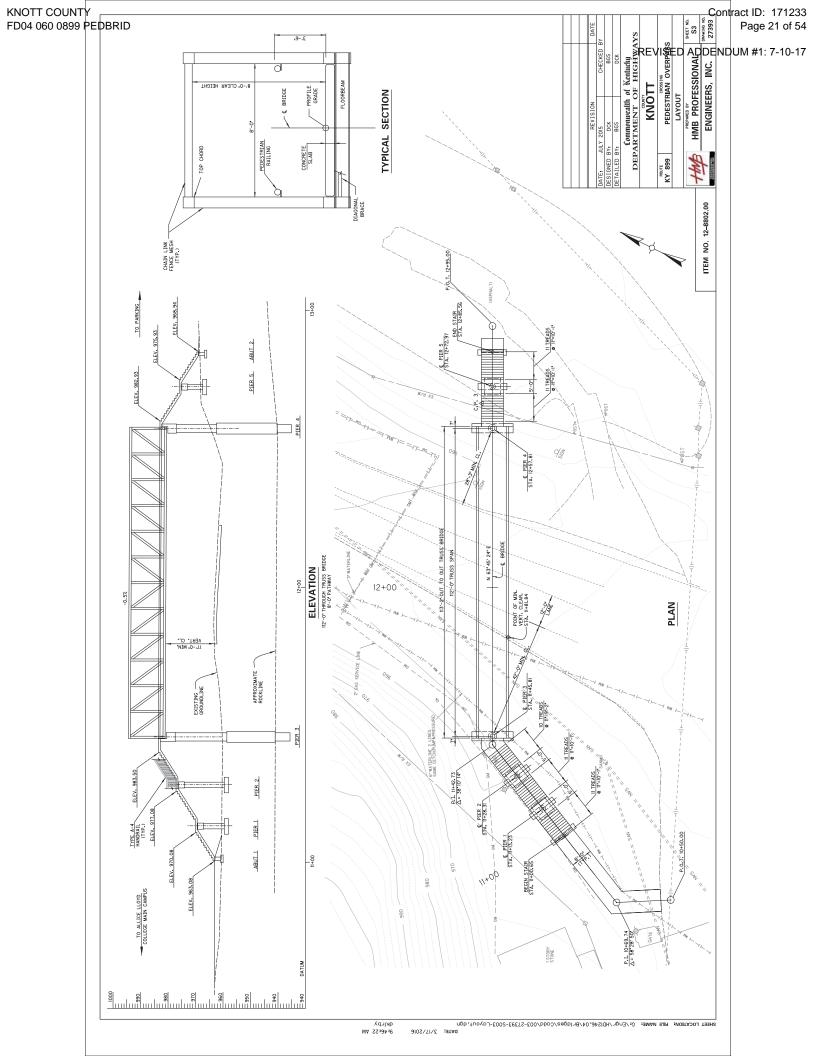


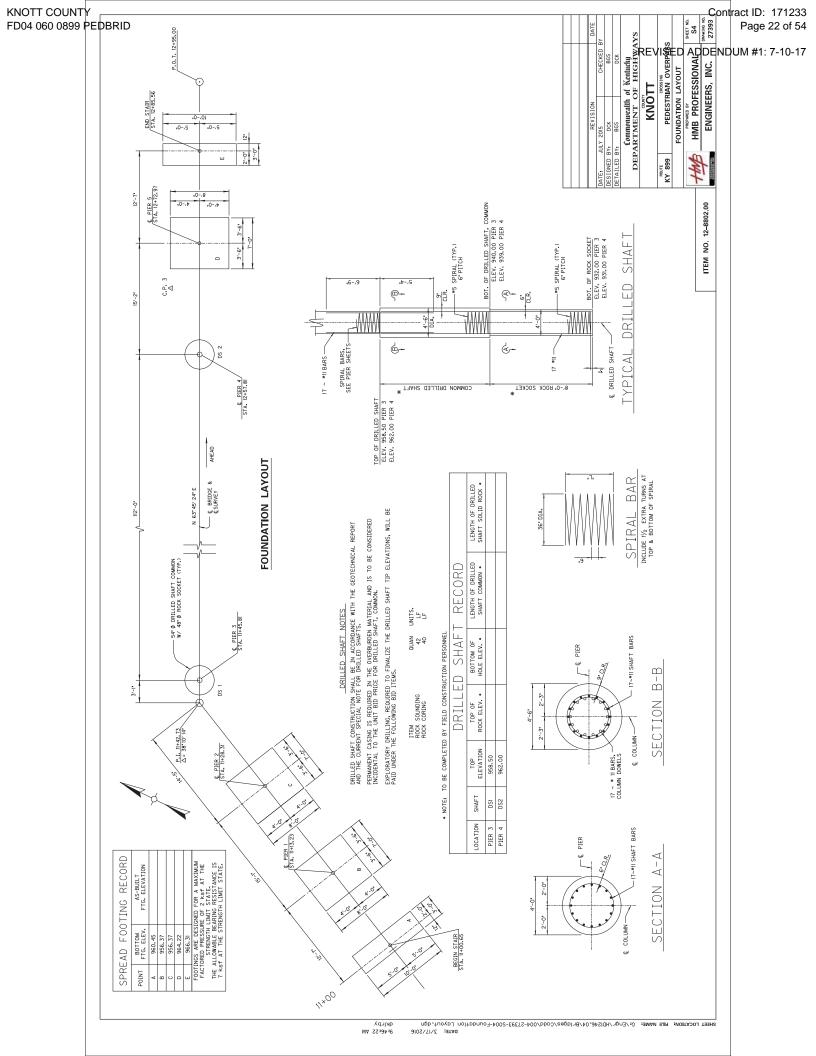
A half size set of plans for this project may be viewed at the following link.

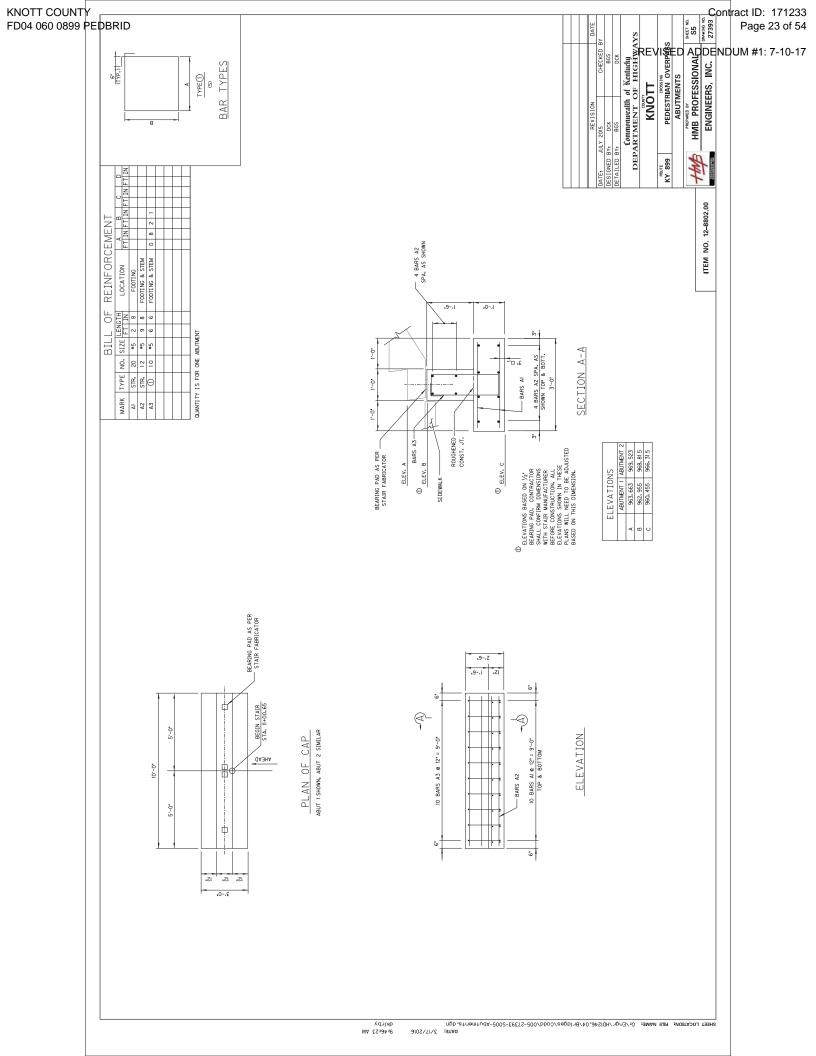
http://transportation.ky.gov/Construction-Procurement/Pages/projectinformation.aspx?letting=7/28/2017

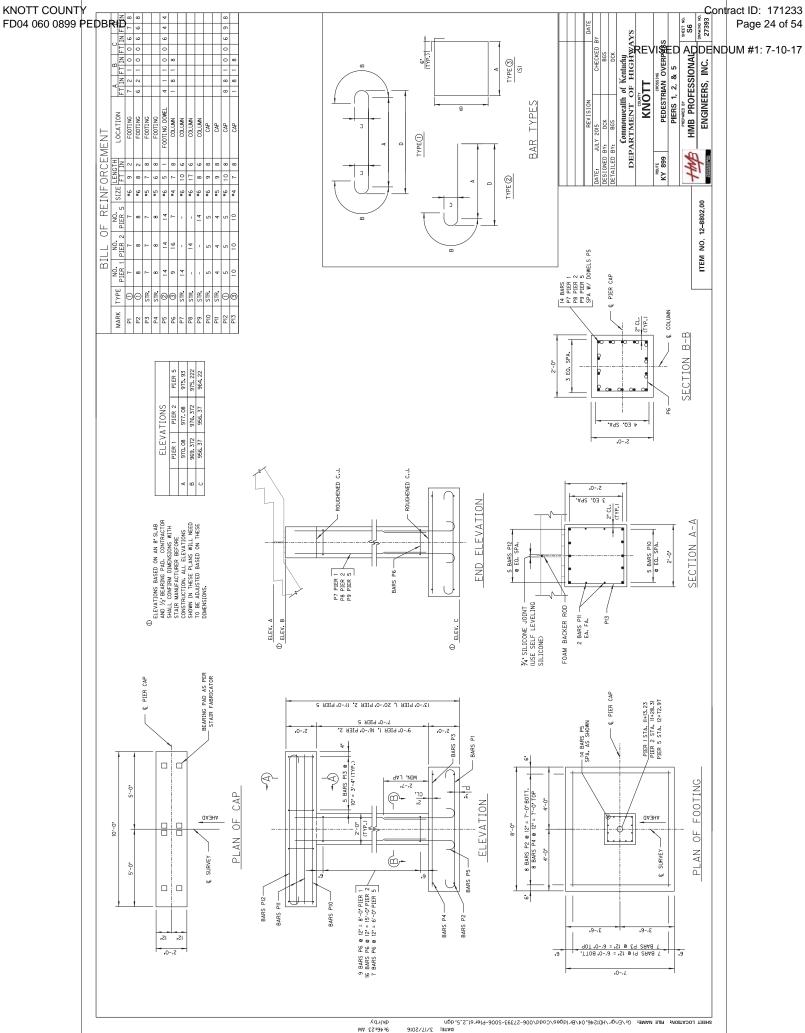
ST Plers J. S8 Sounding	
	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>

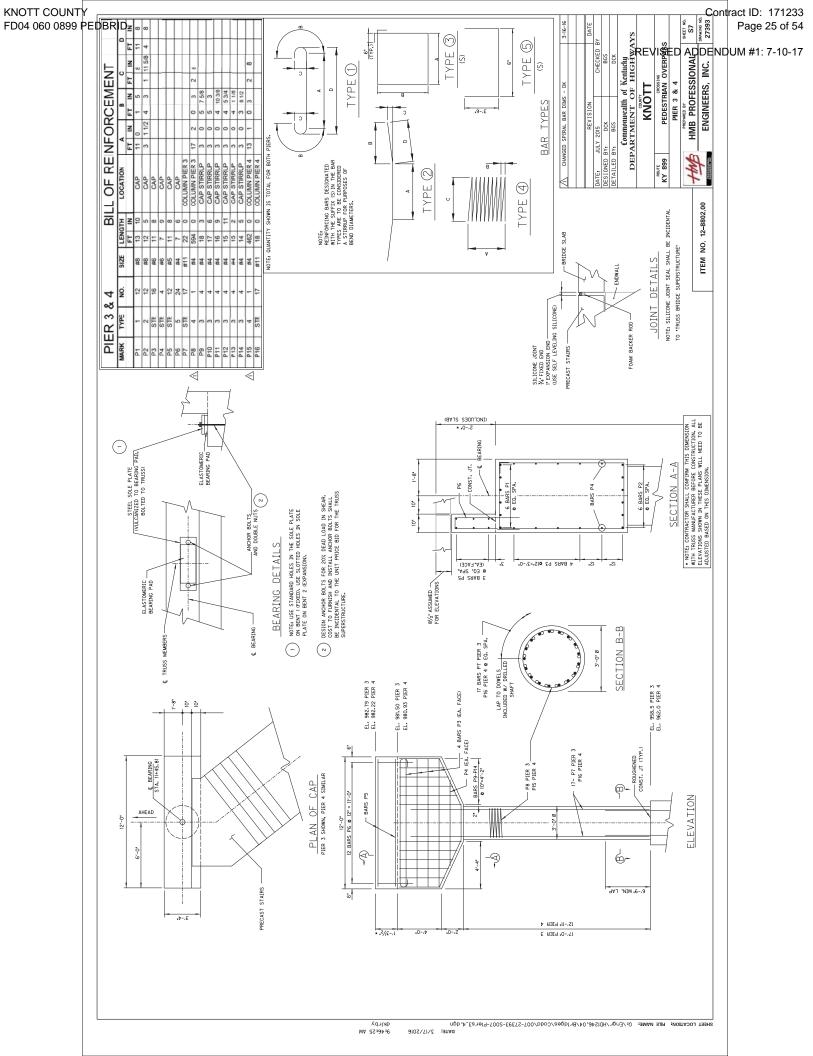
				KNOTT COUNTY FD04 060 0899 PE
		GENERAL NOTES	Prefabricated Bridge	DBRID
	SPECIFCATIONS REFERENCES TO THE SECFICATIONS ARE TO THE CURRENT EDITION OF THE REFERENCES TO THE SECFICATIONS ARE TO THE CURRENT STATIONS FOR PROJ RUITICKY DEPARTMENT OF INFORMATIS STATIONS FOR PROJ AND REFERENCES TO THE ADARTION STATION CORRENT STATIONS AND REFERENCES TO THE ADARTION STATIONS, WITH NUERMANL OF THE ADARTIO LARD BORDE DESIGN SPECIFICATIONS, WITH NUERMAN.	SHOP DRAWING PROCEDURE FABRICATORS SHALL SEND 3 EFTS OF SHOP DRAWINGS THAT ARE REQUIRED BY THE PLANS AND SPECIFICATIONS TO: AMB PROFESSIONAL ENGINEERS, INC. AND SPECIFICATIONS TO: AMB CIRCLE US 440 CEORGETOWN ROAD FRANKEORT, KY 40601	Bridge shall be designed as a straight truss that has one diagonal per panel and plumb end vertical members. Interior vertical members may be either plumb or perpendicular to the chord taces. Bridge shall be designed ultitizing an H=Section configuration where the floor beenss (are ploced in inside trusses and dtached to the truss verticals). The bridge monutocutver shall determine the distance from the top of the dack to the top and bottom truss members based upon structural and/or shipping requirements.	
	DEJORY LOW AND MET THOUD THIS BRIDGE SHALL BE DESIGNED FOR A 90 PSF PEDESTRIAN LOADING WITHOUT IMPACT AS DESCRIBED IN THE AMAIN UNFOLDES SECTEVENTIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES (2009). WHOL OAD SHALL BE A REFERENCE IN THE GUIDE OF ASTIO STANAMON SECTEVENTIONS FOR STRUCTIANL SHOREN'S OF HIGHWAY SIANS, LUMMARLES, AND TRAFFIC STANATS, 2008. DESIGN ISSUES NOT ADDRESSED IN THE GUIDE OF AND TRAFFIC STANATS, 2008. DESIGN ISSUES NOT ADDRESSED IN THE GUIDE SPEC, REFER TO AASHTO LRED BRIDGE DESIGN SPECIFICATIONS, 2000.	THE DESIGNER SHALL REVIEW THE SUBMITTAL AND SEND A SET WITH THEIR COMMENTS BACK TO THE FARRICATOR. IF DESIGNER IS SUBJITTAL AND SEND THE CONSTRUCTION CAN PROCEED. THE DESIGNER SHALL RECOLEST THE FABRICATOR TO SEND THE REQUIRED NUMBER OF SETS TO THE DESIGNER FOR DISTRIBUTION AS SHOWN ON THE DIVISIONS WEB SITE. FI ANY CHANGES IN THE DESION PLANS ARE PROPOSED BY A FABRICATOR OR SUPPLIER, SUBMIT FI ANY CHANGES IN THE DESION PLANS ARE PROPOSED BY A FABRICATOR OR SUPPLIER, SUBMIT	All members of the vartical trusses (top and bottom chords, varticals, and diagonals) shall be fabricated from source and/or restangular structural state structural members and accoing shall be fabricated from structura stelles hopes or square and restangular structural state tubing. Unless the loor and fastenings are specifically designed to provide adequate lateral support to the top flange of open streeges (w-alkapes or finameus) or minimum of one strifters shall be provide adequate strein structural state tubing. Unless the loor and fastenings are specifically designed to provide adequate lateral support to the top flange of open steepes or finamenes) and minimum of one strifters shall be provided in each stringer of a every floor beam location. All steel members shall be Grade 50W (wenthering stee) and prinded a cool or so designed by ALICE LLOYD COLLEGE. Contact Director of Physical Plant (606)388–6130.	e e Moor er
	MATERIALS DESIGN SPECIFICATIONS FC = 3.5 KR PGR ALXS* "RENFORCED CONCRETE FC = 4.0 KR FOR ALXS* "A* RENFORCED CONCRETE FY = 6.0 KR FOR STEL RENFORCEMENT FY = 6.0 KR FOR STEL RENFORCEMENT	PROMIBITED FIELD WELDING EXCEPT AS SHOWN ON THE PLANS, NO WELDING OF ANY MATURE SHALL BE PERFORMED ON THE LOAD COMPANIO MARKES OF THE PROGE WHOUT THE WATTRA CONSENT OF THE DIRECTOR, DIVISION OF COMPANIO MARKES OF THE PROGE WHOUT THE WATTRA CONSENT OF THE DIRECTOR, DIVISION OF	The bridge shall have a vertical camber dimension of midspan equal to 100% of the full dead load deflection plus 1% of the full length of the bridge.	
	LL GOVERN THE MATERIALS FURNISHEE A.S.T.M. AASHTO STON GRADE 36 M-270N GRADE 36	BILGE: DESIGN, AND THEN ONLY IN THE WANNER AND AT THE LOCATIONS DESIGNATED IN THE BILTOPOLIZIONS WELDING SPECIFICATIONS SPECIFICATIONS AND ANTIGALS EXCEPT FOR REINFORCEMENT, SMALL CONFORM TO "JOINT SPECIFICATION THE PLANS AND SPECIAL PROVISION 4(104), CURRENT EDITON, SHALL SUPERSEDE THE STATIED ON THE PLANS AND SPECIAL PROVISION 4(104), CURRENT EDITON, SHALL SUPERSEDE THE STATIED ON THE PLANS AND SPECIAL PROVISION 4(104).	Bridge beerings sholl consist or a resultivation to myore and an elastrametric bearing pot with reselvating if required ploced on the abutment or group page. The elastrametric bearing page sholl be designed in accordance with Method Bin the ALSID LEPD Right Brigge besign structure sholl be 6 as 3 pst. The bridge bearing sole plote with its borted to the bridge structure sholl be 16 as 3 pst. The bridge bearing sole plote with its borted to the bridge structure sholl be unican the bearing back. One end of the bridge will be and structure sholl be unican beits of the bridge bearing sole plote with the and an intervel by the structure sholl be unican the and/one boils of that and an intervel by unic that any rule to allow movement under themal expansion or contraction in softed holes on the sole plote.	pad ig pads ge fully holes
kirby	TERK OWERCENS. UNS : ON GIOIS RENORM RECT. NUTS. AND WARRES RENORM RECT. NUTS. AND WARRES REC AND RECT. RULEN. INCLUDING SPLICE PAILES. IN LONGITUDINAL MEC AND THET MARKEN AND TO TOWNESS TO FAILLED. TO Z FE FOLLOWING TO THE AND TO THE TO A MET MANAGEMENT IN THE AND THE	WELDING PROCEDURE WELDING PROCEDURE OF ALL WELDING PROCEDURES SHALL BE COMPLETED BY THE CONTRACTOR AND APPROVED THE FRANKER OF THE FIRML APPROVEL OF THE SHOP DRAWINGS AND WELDING PROCEDURE AND THE START OF THE FIRMLARDAN.	Epoxy coarted reinforcement shall be used in the concrete deck. The concrete deck and reinforcement shall be included in the lump sum bid for Truss Bridge Superstructure. The bridge manufacturer shall warrant their steel structure(s) to be free of design, insteading and workmanship defects for a period of then years from the date of	
>	GRADE SOMMENTED TO THE AT AD ECC. TH	HIGH STRENGT BOLL CONNECTIONS MILESS OFFICIENT BOLL CONNECTIONS MILESS OFFICIENT BOLL CONNECTIONS SHALL BOLLS CONNECTIONS SHALL BE ASTM A325 7/8 MICH DMETER HIGH STRENGT BOLLS MILES AND WHERE DER MILESS OFFICIENTS ALL BE L'ART DATE THE 3 BOLL HIGH STRENGT BOLLS MILES THEN STREL SHALL BE USED A DESCRIPTED MICLARGE THE ALL HIGH STRENGT BOLLS THEN CONNECTIONS AND ASTM THE VALUE MICLARGE THEN ALL THEN THE DOWNCOMES AND LET MISLING AND ASTM DESCRIPTESION MILLARGE ATTHENDED AND AND ASTM DATE STRELARDAR AND ASTM DESCRIPTESION MILLARGE ATTHENDED AND ASTM DATE STRELARDARD STRELARDAR AND ASTM DESCRIPTESION	varies). Structural design of the bridge structure shall be performed by or under the direct supervision of a Licensed Professional Engineer in the State of Kentucky and done in accordance with recognized engineering practices and principles.	
ngb.setov ib	CONCRETE CONCRETE CASS ANA-CONCRETE 37 DIBLUSED IN THE PROMINY SLAB, BARRERS, AND IN THE PORTONS CASS ANA-CONCRETE 157 DIBLUSED IN THE PROMONY SLAB, BARRETE 157 DIBLUSED IN THE SUBSTRUCTURE BELONT THE BRIDGE SLATS, EXCEPT A MOLEJ. SUBSTRUCTURE BELONT THE BRIDGE SLATS, EXCEPT A MOLEJ. SUBSTRUCTURE BELONT THE BRIDGE SLATS, EXCEPT A MOLEJ.	SHALL BE MECHANICALY ZINC COATED WITH BAKED FPOXY APPLIED OVER THE ZINC COATING. INSTALLATION BETALLS OF THE DTS SHALL BE SHOWN ON THE SHOP PLANS. ANCHOR BOLTS AND HOLTS AND HOLTS AND ANCHOR BUTS. FURNISHING LEAD OR GROUT INSTALL ANCHOR BOLTS IN ACCORDANCE WITH KYTC SPECIFICATIONS BUTSA, FURNISHING LEAD OR GROUT THE COST OF PRILLING ANCHOR BOLT HOLES, HEATING ANCHOR BOLTS, FURNISHING LEAD OR GROUT	The bridge manufacturer shall determine the number and diameter of all anchor builts. The anchor boits suble designed to resist all horizontal and unlift forces to be transferred by the superstructure to the supporting foundations. Engineering design of the bridge supporting foundations (abutment, plet, bridge and the responsibility of the SUNRER.	
1909-2005-26	BARS. UNLESS OTHERNES SHOWN, SPACING OF BARS IS FFOR OF CENTER TO CENTER BARS. LICLER DISTANCE TO FACE OF CONCRFTE IS 2: UNLESS OTHERNISE NOTE. EPOXY COAT BARS DESIGNATED BY SUFFIX (E) IN ACCORDANCE WITH SECTION 81.10 OF THE 51ANDARD SPECIFICATIONS. USE STIRNUP BEND DIAMETERS FOR BARS RESENATED BY SUFFIX (S) IN BILL OF REINFORCEMENT.	AND FILUNG THE HOLES SHALL BE INCIDENTAL TO AND INCLUDED IN THE LUNF SUM BID FOR TRUSS BRIDGE SUFFERTRUCTURE. COMPLETION OF THE STRUCTURE	Submit shop drawings in accordance with the KDOH Standard Specifications. These shop drawings shall show all relative design information such as member sizes, bridge reactions, anchor bolf spacing dimensions, and general mortes shall be clearly specified on the drawings. Drawings shall have cross referenced details and shall numbers. In drawings shall about an dealed by or powordance former who in numbers.	
\$1Z-Z00\PPP	ALL EPPOSED EXPLAN. BE BEVELED 7/8" UNLESS OTHERWISE NOTED. DIMENSIONS DIMENSIONS DEMENSIONS ARE FOR A DOBAL TEMPERATURE OF 60 DEGREES FAHEDHEFT. LAYOUT DIMENSIONS DEMENSIONS	THE CONTRACTOR IS REQUIRED TO COMPLETE THE STRUCTURE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. WATENLL, LEBOR ON CONSTRUCTION REPENTIONS, ON COMENNESS SERVISION, AND COMENNESS SERVISIONS, ON COMENNESS SPECIFICANAS, SPERING, SCANATOR, NE BUD TENA WAST APPROACH. TO THE MONE NOVELYD. THIS MAY INCLUDE COFFERIONAS' SPERING, SCANATIONS, IN WAST APPROACH. OF ALL OR PAYRS OF SUSTING STRUCTIONS, PRASE CONSTRUCTION, INCLDENTIA, MATERIALS, LABOR, OR ANYTHOR LESS REQUIRES TO COMPLETE THE STRUCTURES. PASE CONSTRUCTION, INCLDENTAL MATERIALS, LABOR, OR ANYTHOR LESS REQUIRES TO COMPLETE THE STRUCTURE.	by an increasional programmer who is increased in the order of warranty. Structural adjuditions for the bridge apprestructure shall be submitted by the bridge amputacturer, all adjuditions shall be signed and sealed by a Professional Engineer who is licensed in the State of Kentucky.	
)/S90D178/0.04/2014/	PRECAST STARS Two 4 wide units or one 8 wide unit are acceptable. Reinforcing used in the statrs shall be epoxy coated. The design, detailing of the bearings and corrections to the substructure are to be included in the submittids. The instribution and furnishing of the bearings and corrections are included in the unit price bid for Precast Concrete Stars.	DISCLAIMER ACCEPTANCE OF ANY CONTRACTOR'S SUBMISSION REQUIRED ON THIS PROJECT DOES NOT ACCEPTANCE OF ANY CONTRACTOR'S SUBMISSION REQUIRED ON OF THE CONSTITUTE EDOORSEMENT OF A PROPENDEL, THE ACCEPTANCE DATACHART OF THE STORE PERFORMATION FOR THE CONTRACTOR TO PROCEED. THE OFFARMENT IS NOT BOUND BY ACCEPTANCE OF ANY SUBMISSIONS REQUIRED. FINAL ACCEPTANCE OF APPROVAL WILL BE CONTINGENT ON THE SATISFACTOR TO DATACET.	PREFABRICATED BRIDGE - OTHER SUBMITTALS Welder certifications in compliance with AWS standard qualification tests. Splicing and erection procedures. Splicing and erection procedures. Date: <u>uur 2015</u> CHECKED Inspection and Minimitations proceedures. DESTINE BY: <u>DATE</u> 055	DATE DATE
nu: File NAME: G:∕Engr	These shop drawings in accordance with the kUM strandard speciatorions. These shop drawings and obtainations with elarity design information such as member sizes, reinforcing, reactings, and the drawings. Drawings sholl have greated informs sholl be clearly specified on the drawings. Brain have drawing sholl be clearly specified on the drawings sholl have drawing sholl be clearly specified on the drawings sholl be drawing sholl be clearly specified on the drawings. Brain drawing sholl be clearly specified on the drawings sholl be drawing sholl be clearly specified on the drawing sholl be drawing sholl be clearly specified on the drawing sholl be stored by d Professional Engineer who is licensed in the State of kentucky. Firtururd acloudingtorurer, All calculations shall be signed and seded by d Professional Engineer who is licensed in the State of kentucky.	PEDSTRAN RAI. Mork Includes providing all pedestrian rails, complete, in accordance with standard Drawing RXX.030-60, 1yas Ar.2 on the truss superstructure. All tabor, matriales, equipment, and finishing thems necessary for the placement of pedestrian rail, including but not limited to all stellar clist, posts, fittings, painting, and appurtentructure. Shop drawing shall be submitted for the approval of the EVENERE. The porthon of the railing on the stuffs is a separate bid ifem under Handral Type A-4. All porthons of the railing, both A-2 and A-4, shall be		
SHEET LOCATI	CONSTRUCTION IDENTIFICATION AMERS OF THE REMILE CONTRACTION AND THE SUBCONTRACTION SWALL BE IMPRINTED IN THE CONCRETE WITH I ROH LETTERS AT A LOCATION DESOUNTED FOT THE ENGINEER. THE CONTRACTOR SWALL FORNER MILL BE MUDE.	GEOTECHNICAL INFORMATION Additional notes and information are contained in the geotechnical report for this project (S-072-2015). By reference this report is part of the contract documents.	ITEM NO. 12-8802.00 ENGINEERS, INC.	HEET ND. S2 IAWING ND 27393
			DUM #1: 7-10-17	ntract ID: 171233 Page 20 of 54 DUM #1: 7-10-17

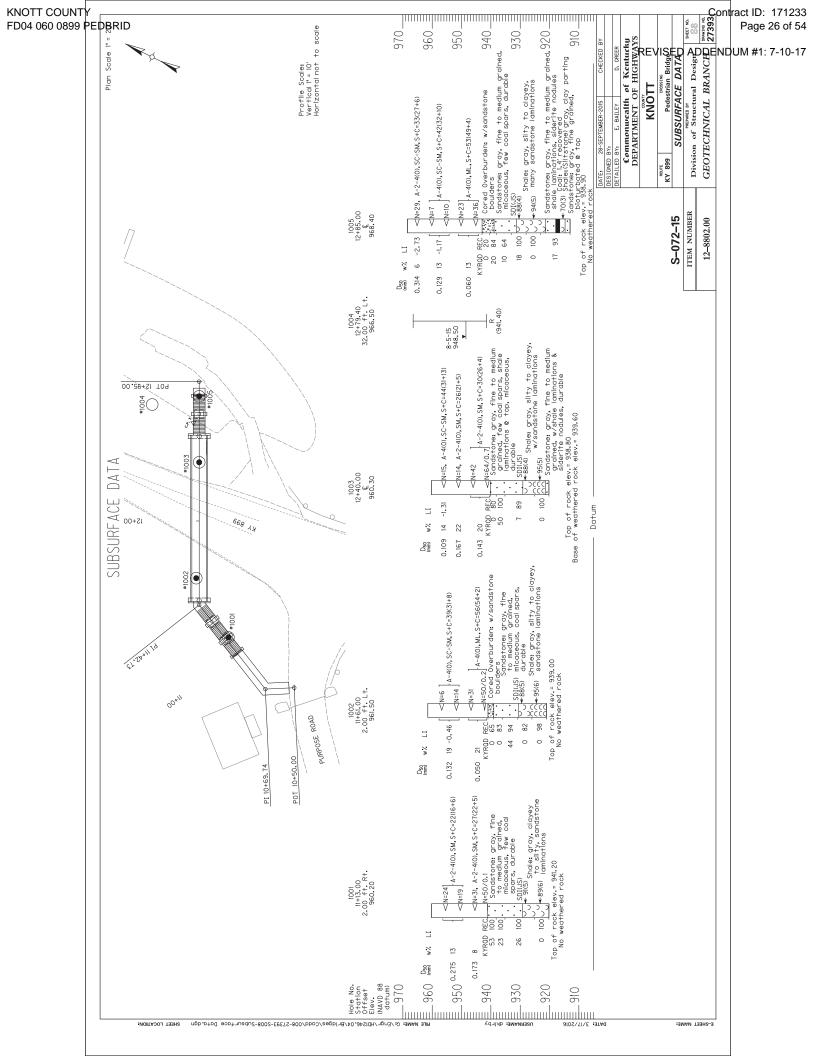












KNOTT COUNTY FD04 060 0899 PEDBRID

REVISED ADDENDUM Rev. 07/201 Page 1 of	Y & UTILITIES	artment of I F RIGHT OF	Dep DIVISION O	- Comp
	IFICATION	F WAY CE	And the second second second	
FEDERAL PROJECT #	PROJECT #		COUNTY	ITEM #
	4 C060 9014401D		Knott	12-8802.00
	e)	Alice Lloyd Co	rian Bridge Over KY 899 (	PROJECT DESCRIPTION Pedes
	WAY REQUIRED			$\boxtimes$
				Construction will be within the li
70, as amended. No additional	uisitions Policy Act of 1			egulations under the Uniform R
ter and the second s		States of the local division of the local di		ights of way or relocation assist
VEMENTS	UIRED AND CLEARED	11 UF WAY I	the second se	LJI FOTAL NUMBER OF PARCELS OF
		Aleren Aleren		NUMBER OF PARCELS THAT HAN
ements within the required righ	of way		E DEEN ALQUIRED BT:	Signed Deed
from an and from the set				Signed Deed
e ben removed from the require	All improvements hav right of way			
				Signed Right of Entry Agreement RELOCATION ASSISTANCE
rently being removed and it is of way will be cleared prior to the				and the second from the fit and the second sec
n way will be cleared prior to th	letting date		quired for this project	Relocation Assistance was not re
will be included in the			accordance with FHWA	All parties have been relocated i
	construction contract			egulations
N	IRED WITH EXCEPTIO	OF WAY RE		
			PROJECT	FOTAL NUMBER OF PARCELS ON
	y Agreement	gned Right of	eed, Condemnation or Si	Number of parcels acquired by D
			DATE OF POSSESSION	EXCEPTION(S) ANTICIPATE
ENTS	IMPROVEN	war mining		application of the company of the second sec
ENTS in the required right of way		There v	and a state of the s	
	no improvements with	All imp		
in the required right of way ved from the required right of	e no improvements with ments have been remo	All imp way		
in the required right of way ved from the required right of removed and it is anticipated	e no improvements with ements have been remo ents are currently being	All imp way		
in the required right of way ved from the required right of removed and it is anticipated for to the letting date	e no improvements with ements have been remo ents are currently being f way will be cleared pa	All imp way		
in the required right of way ved from the required right of removed and it is anticipated	e no improvements with ements have been remo ents are currently being f way will be cleared pa	All imp way		
in the required right of way ved from the required right of removed and it is anticipated for to the letting date	e no improvements with ements have been remo ents are currently being f way will be cleared pa	All imp way	aujured for this project	RELOCATION ASSISTANCE
in the required right of way ved from the required right of removed and it is anticipated for to the letting date	e no improvements with ements have been remo ents are currently being f way will be cleared pa	All imp way Improv that rig		RELOCATION ASSISTANCE Relocation assistance was not re
in the required right of way ved from the required right of removed and it is anticipated for to the letting date	e no improvements with ements have been remo ents are currently being f way will be cleared pa	All imp way Improv that rig		ELOCATION ASSISTANCE
in the required right of way ved from the required right of removed and it is anticipated for to the letting date	e no improvements with ements have been remo ents are currently being f way will be cleared pa	All imp way Improv that rig		RELOCATION ASSISTANCE
in the required right of way ved from the required right of removed and it is anticipated for to the letting date	e no improvements with ements have been remo ents are currently being of way will be cleared po ent removal will be incl ent removal will be incl Right of V	All imp way Improv that rig		RELOCATION ASSISTANCE Relocation assistance was not re All parties have been relocated in Notes/Comments:
in the required right of way ved from the required right of removed and it is anticipated or to the letting date ded in the construction contrac	e no improvements with ements have been remo ents are currently being if way will be cleared pe ent removal will be incl not removal will be incl Right of V Name	All imp way Improv that rig Improv	accordance with FHWA	RELOCATION ASSISTANCE Relocation assistance was not re All parties have been relocated in Notes/Comments:
in the required right of way ved from the required right of removed and it is anticipated or to the letting date ded in the construction contract	e no improvements with ements have been remo- ents are currently being if way will be cleared part ent removal will be incl ent removal will be incl Right of V Name Milly ure Milly	All imp way Improv that rig Improv	accordance with FHWA	RELOCATION ASSISTANCE Relocation assistance was not re All parties have been relocated in Notes/Comments:
In the required right of way ved from the required right of removed and it is anticipated or to the letting date ded in the construction contract □ □ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	e no improvements with ements have been remo- ents are currently being of way will be cleared po- ent removal will be incl ent removal will be incl Right of V Name Name Willy Name Willy Name OBO	All imp way Improv that rig Improv	accordance with FHWA	RELOCATION ASSISTANCE Relocation assistance was not re All parties have been relocated in Notes/Comments:
in the required right of way ved from the required right of removed and it is anticipated or to the letting date ded in the construction contract	e no improvements with ements have been remo- ents are currently being of way will be cleared po- ent removal will be incl ent removal will be incl Right of V Name Name Willy ture e OB O	All imp way Improv that rig Improv	accordance with FHWA	RELOCATION ASSISTANCE Relocation assistance was not re All parties have been relocated in Notes/Comments:
In the required right of way ved from the required right of removed and it is anticipated or to the letting date ded in the construction contract □ □ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	e no improvements with ements have been remo- ents are currently being of way will be cleared po- ent removal will be incl ent removal will be incl Right of V Name Name Willy Name Willy Name OBO	All imp way Improv that rig Improv regulations	accordance with FHWA	RELOCATION ASSISTANCE Relocation assistance was not re All parties have been relocated in Notes/Comments:

# UTILITIES AND RAIL CERTIFICATION NOTE

# KNOTT COUNTY FD04 060 90144 01U PEDESTRIAN BRIDGE OVER KY 899 ITEM NO. – 12-8802.00

### GENERAL PROJECT NOTE ON UTILITY PROTECTION

N/A

#### NOTE: DO NOT DISTURB THE FOLLOWING UTILITIES LOCATED WITHIN THE PROJECT DISTURB LIMITS

COLUMBIA GAS OF KENTUCKY HAS A 2 INCH GAS MAIN LOCATED ON PROJECT. KNOTT COUNTY WATER DISTRICT HAS A THREE (3) AND EIGHT (8) INCH WATER MAIN LOCATED ON THE PROJECT. AS-BUILT PLANS HAVE BEEN PROVIDED AS PART OF THE CONTRACTORS PROPOSAL. KENTUCKY POWER COMPANY HAS A POLE AND WIRES LOCATED NEAR THE PROJECT. CONTRACTOR SHALL USE EXTREEME CARE WHEN WORKING NEAR ALL UTILITIES AND WILL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES.

\*The Contractor is fully responsible for protection of all utilities listed above\*

THE FOLLOWING COMPANIES ARE RELOCATING/ADJUSTING THEIR UTILITIES WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION

N/A

THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE COMPANY OR THE COMPANY'S SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT

N/A

#### THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE ROAD CONTRACTOR AS INCLUDED IN THIS CONTRACT

N/A

THE FOLLOWING RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

☑ No Rail Involved ☐ Minimal Rail Involved (See Below) ☐ Rail Involved (See Below)

# UTILITIES AND RAIL CERTIFICATION NOTE

KNOTT COUNTY FD04 060 90144 01U PEDESTRIAN BRIDGE OVER KY 899 ITEM NO. – 12-8802.00

#### **UNDERGROUND FACILITY DAMAGE PROTECTION – BEFORE YOU DIG**

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. The contractor is instructed to contact KY 811 for the location of existing underground utilities. Contact shall be made a minimum of two (2) and no more than ten (10) business days prior to excavation.

The contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY 811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom are to be contacted through their individual Protection Notification Center. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area. Non-compliance with these directives can result in the enforcement of penalties.

### **SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES**

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs.

The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

Please Note: The information presented in this Utility Note is informational in nature and the information contained herein is not guaranteed.

Page 2 of 3

# UTILITIES AND RAIL CERTIFICATION NOTE

# KNOTT COUNTY FD04 060 90144 01U PEDESTRIAN BRIDGE OVER KY 899 ITEM NO. – 12-8802.00

# **AREA UTILITIES CONTACT LIST**

Utility Company/Agency	Contact Name	Contact Information
KY POWER COMPANY	ELLIS McKNIGHT	606-436-1329
COLUMBIA GAS OF KY	MATT BROWN	859-288-0298
KNOTT COUNTY WATER & SEWER	L.J. TURNER	606-642-3582

REVISED ADDENDUM #1: 7-10-17

<u>Item No.</u>	12 - 8802			Project Mgr.	KYTC\\JOHNM.JOHNS ON
			County K	NOTT	Route KY-899
CAP #	Date of Promise	Promise made to:	Location of Promise		
1	09-JUN-17	KYTC	Overall Project		
CAP Desc	cription				
OF CONS SCHEDUI THIS WIL	TRUCTION ACTIV _E, REQUIRED W _ PROVIDE THE (	CONTACT A REPRESENT /ITIES. THE CONTRACTO ORKING SPACE, AND OTH COLLEGE THE OPPORTUN ACTOR'S ACTIVITIES.	R SHALL COORDINATE TH	HE PROJECT'S CO O THE CONTRAC	ONSTRUCTION TOR'S ACTIVITIES.
THE CON	TACT INFORMAT	ION FOR THE COLLEGE IS	S AS FOLLOWS:		
RYAN GIE	SON DIRECTOR	ESIDENT OF BUSINESS AF OF PHYSICAL PLANT (60 ASSISTANCE FOR MENIFE	06) 368-6130		
2	09-JUN-17	KYTC	Overall Project		
CAP Desc	<u>cription</u>		-		
LLOYD C	OLLEGE. PLEASI FABRICATED BRI	DGE SHALL BE PAINTED A E USE THE PROVIDED CO DGE SECTION OF THE GE	NTACT INFORMATION TO	COORDINATE TH	IIS DECISION. SEE

REVISED ADDENDUM #1: 7-10-17

# PART II

# SPECIFICATIONS AND STANDARD DRAWINGS

## **SPECIFICATIONS REFERENCE**

Any reference in the plans or proposal to previous editions of the *Standard Specifications* for Road and Bridge Construction and Standard Drawings are superseded by Standard Specifications for Road and Bridge Construction, Edition of 2012 and Standard Drawings, Edition of 2016.

# SUPPLEMENTAL SPECIFICATIONS

The contractor shall use the Supplemental Specifications that are effective at the time of letting. The Supplemental Specifications can be found at the following link:

http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx

11C

#### SPECIAL NOTE FOR DRILLED SHAFTS

**1.0 DESCRIPTION.** Furnish all equipment, materials and labor necessary for constructing reinforced concrete drilled shafts in cylindrically excavated holes according to the details shown on the plans or as the Engineer directs. Construct the shaft to the lines and dimensions shown on the plans, or as the Engineer directs. Section references herein are to the Department's 2012 Standard Specifications for Road and Bridge Construction.

#### 2.0 MATERIALS.

**2.1 Concrete.** Use Class A Modified concrete unless otherwise shown on the plans. The slump at the time of placement shall be 6.5 to 9.5 inches, the coarse aggregate shall be size 67, 68, 78, 8 or 9M, and the water/cementitious material ratio shall not exceed 0.45. Include water reducing and retarding admixtures. Type F high range water reducers used in combination with retarding admixtures or Type G high range water reducers fully meeting trial batch requirements are permitted and Class F fly ash is permitted in conformance with Section 601. Design the mix such that the concrete slump exceeds 4 inches at 4 hours after batching. If the estimated concrete transport, plus time to complete placement, exceeds 4 hours, design the concrete to have a slump that exceeds 4 inches or more for the greater time after batching and demonstrate that the slump requirement can be achieved after the extended time period using a trial batch.

Perform trial batches prior to beginning drilled shaft construction in order to demonstrate the adequacy of the proposed concrete mix. Demonstrate that the mix to be used will meet the requirements for temperature, slump, air content, water/cementitious material ratio, and compressive strength. Use the ingredients, proportions and equipment (including batching, mixing, and delivery) to be used on the project. Make at least 2 independent consecutive trial batches of 3 cubic yards each using the same mix proportions and meeting all specification requirements for mix design approval. Submit a report containing these results for slump, air content, water/cement ratio, temperature, and compressive strength and mix proportions for each trial batch to the Engineer for review and approval. Failure to demonstrate the adequacy of the concrete mix, methods, or equipment to the Engineer is cause for the Engineer to require appropriate alterations in concrete mix, equipment, and/or method by the Contractor to eliminate unsatisfactory results. Perform additional trial batches required to demonstrate the adequacy of the concrete mix, method, or equipment.

**2.2 Steel Reinforcement.** Provide Grade 60 deformed bars conforming to Section 811 of the Standard Specifications. Rail steel is permitted for straight bars only. Place according to Section 602 of the Standard Specifications, this Special Note, and the plans. Use non-corrosive centering devices and feet to maintain the specified reinforcement clearances.

**2.3 Casings.** Provide casing meeting the requirements of ASTM A 252 Grade 2 or better unless otherwise specified. Ensure casing is smooth, clean, watertight, true and straight, and of ample strength to withstand handling, installation, and extraction stresses and the pressure of both concrete and the surrounding earth materials. Ensure the outside diameter of casing is not less than the specified diameter of shaft.

Use only continuous casings. Cut off the casing at the prescribed elevation and trim to within tolerances prior to acceptance. Extend casing into bedrock a sufficient distance to stabilize the shaft excavation against collapse, excessive deformation, and/or flow of water if required and/or shown on the plans.

Install from the work platform continuous casing meeting the design thickness requirements, but not less than 3/8 inch, to the elevations shown on the plans. When drilled

11C

shafts are located in open water areas, extend casings above the water elevation to the plan tip elevation to protect the shaft concrete from water action during concrete placement and curing. All casing is permanent unless temporary casing is specified in the contract drawings or documents. Permanent casing is incidental to the applicable drilled shaft unit bid price unless noted otherwise in the contract. Temporary casing may be required for drilled shafts not socketed into bedrock. If temporary surface casings are used, extend each casing up to the work platform. Remove all temporary surface casing prior to final acceptance unless otherwise permitted by the Central Office Construction Engineer.

Ensure casing splices have full penetration butt welds conforming to the current edition of AWS D1.1 with no exterior or interior splice plates and produce true and straight casing.

**2.4 Slurry.** When slurry is to be used for installation of the Drilled Shaft, submit a detailed plan for its use and disposal. The plan should include, but not be limited to the following:

- 1) Material properties
- 2) Mixing requirements and procedures
- 3) Testing requirements
- 4) Placement procedures
- 5) Disposal techniques

Obtain the Central Office Division of Construction's approval for the slurry use and disposal plan before installing drilled shafts.

**2.5 Tremies.** Provide tremies of sufficient length, weight, and diameter to discharge concrete at the shaft base elevation. Ensure the tremie diameter is least 6 times the maximum size coarse aggregate to be used in the concrete mix and no less than 10 inches. Provide adequate wall thickness to prevent crimping or sharp bends that restrict concrete placement. Support tremies used for depositing concrete in a dry drilled shaft excavation so that the free fall of the concrete does not cause the shaft excavation to cave or slough. Maintain a clean and smooth tremie surface to permit both flow of concrete and unimpeded withdrawal during concrete placement. Do not allow any aluminum parts to contact the concrete. Construct tremies used to deposit concrete for wet excavations so that they are watertight and will readily discharge concrete.

**2.6 Concrete Pumps.** Provide pump lines with a minimum diameter of 5 inches and watertight joints.

2.7 Drop Chutes. Do not use aluminum drop chutes.

#### 3.0 CONSTRUCTION.

#### 3.1 Preconstruction.

- **3.1.1 Prequalification.** The Department will require prequalification by the Division of Construction Procurement before accepting a bid for the construction of Drilled Shafts.
- **3.1.2 Pre-Bid Inspection.** Inspect both the project site and all subsurface information, including any soil or rock samples, prior to submitting a bid. Contact the Geotechnical Branch (502-564-2374) to schedule a viewing of the subsurface information. Failure to inspect the project site and view the

subsurface information will result in the forfeiture of the right to file a claim based on site conditions and may result in disqualification from the project.

- **3.1.3 Drilled Shaft Installation Plan.** Upon request, the Department will review a Drilled Shaft Installation Plan. Submit the plan no later than 45 calendar days prior to constructing drilled shafts. Items covered in this plan should include, but not be limited to the following:
  - 1) Name and experience record of jobsite drilled shaft superintendent and foremen in charge of drilled shaft operations for each shift.
  - List and size of proposed equipment including cranes, drills, augers, bailing buckets, final cleaning equipment, de-sanding equipment, slurry pumps, core sampling equipment, tremies or concrete pumps, casings, etc.
  - 3) Details of overall construction operation sequence and the sequence of shaft construction in the bents or groups.
  - Details of shaft excavation methods including methods to over-ream or roughen shaft walls, if necessary.
  - 5) Details of slurry when the use of slurry is anticipated. Include methods to mix, circulate, and de-sand the proposed slurry. Provide details of proposed testing, test methods, sampling methods, and test equipment.
  - 6) Details of proposed methods to clean shaft and inside of casing after initial excavation.
  - 7) Details of reinforcement handling, lifting, and placement including support and method to center in shaft. Also include rebar cage support during concrete placement and temporary casing removal.
  - 8) Details of concrete placement including procedures for concrete tremie or pump. Include initial placement, raising during placement, and overfilling of the shaft to expel contaminated concrete.
  - 9) Required submittals including shop drawings and concrete design mixes.
  - 10) Other information shown in the plans or requested by the Engineer.
  - 11) Special considerations for wet construction.
  - 12) Details of environmental control procedures to protect the environment from discharge of excavation spoil, slurry (natural and mineral), and concrete over-pour.

The Division of Construction will review the submitted procedure and provide comments and recommendations. The Contractor is responsible for satisfactory construction and ultimate performance of the Drilled Shaft.

**3.2 General Construction.** Construct drilled shafts as indicated in the plans or described in this Special Note by either the dry or wet method. When the plans describe a particular method of construction, use this method unless the Engineer permits otherwise. When the plans do not describe a particular method, propose a method on the basis of its suitability to the site conditions. Approval of this proposed method is contingent upon the satisfactory results of the technique shaft.

The construction of the first drilled shaft or technique shaft will be used to determine if the methods and equipment used by the contractor are sufficient to produce a completed shaft meeting the requirements of the plans and specifications. Ability to control dimensions and alignment of excavations within tolerances; to seal the casing into impervious materials; to prevent caving or deterioration of subsurface materials by the use of slurry or other means; to properly clean the completed shaft excavation; to construct excavations in open water areas when required by the plans; to establish methods for belling or over-reaming when required by the plans; to determine the elevation of ground water; to satisfactorily handle, lift, place, and support the reinforcement cage; to satisfactorily place concrete meeting the specifications within the prescribed time frame; and to satisfactorily execute any other necessary construction operations will be evaluated during construction of the first shaft(s). Revise the methods and equipment as necessary at any time during the construction of the first shaft when unable to satisfactorily carry out any of the necessary operations described above or unable to control the dimensions and alignment of the shaft excavation within tolerances. Accurately locate technique so they may be used in the finished structure unless directed otherwise in the contract document or by the Engineer.

If at any time the Contractor fails to satisfactorily demonstrate, to the satisfaction of the Engineer, the adequacy of methods or equipment and alterations are required, additional technique shafts will be required at no additional cost to the Department and with no extension of contract time. Additional technique shafts shall be located as near as possible to the proposed production shafts but in a location as not to interfere with other construction activities. Once approval has been given to construct production shafts, no changes will be permitted in the methods or equipment used to construct the satisfactory shaft without written approval of the Engineer.

Do not make a claim against the Department for costs of construction delays, or any materials, labor, or equipment that may be necessary due to the Contractor's failure to furnish drilled shafts of a length sufficient to obtain the required bearing values, or for variations in length due to subsurface conditions that may be encountered. Soundings, boring logs, soil profiles, or other subsurface data included in the Contract documents are used by the Department for design and making preliminary estimates of quantities and should be used only at the risk of the Contractor for determining equipment, materials, or labor necessary for drilling shafts as required by the contract.

When necessary, set temporary removable surface casing. Use surface casing of sufficient length to prevent caving of the surface soils and to aid in maintaining shaft position and alignment. Pre-drilling with slurry and/or over-reaming to the outside diameter of the casing may be required to install the surface casing at some sites.

Provide equipment capable of constructing shafts to the deepest shaft depth shown in the plans plus 15 feet, 20 percent greater than the longest shaft (measured from the ground or water surface to the tip of the shaft), or 3 times the shaft diameter, whichever is greater. Blasting excavation methods are not permitted.

Use permanent casing unless otherwise noted in the Contract. Place casing as shown on the plans before beginning excavation. If full penetration cannot be attained, the Engineer may direct that excavation through the casing be accomplished and the casing advanced until reaching the plan tip elevation. In some cases, over-reaming to the outside diameter of the casing may be required before placing the casing. Cut off the casing at the prescribed elevation and leave the remainder of the casing in place. Do not use vibratory hammers for casing installation within 50 feet of shafts that have been completed less than 24 hours.

**3.2.1 Dry Construction Method.** Use the dry construction method only at sites where the ground water table and soil conditions (generally stiff to hard clays or rock above the water table) make it feasible to construct the shaft in a relatively dry excavation and where the sides and bottom of the shaft are stable and may be visually inspected by the Engineer prior to placing the concrete. The dry construction method consists of drilling the shaft excavation, removing accumulated seepage water and loose material from the excavation, and placing the shaft concrete in a relatively dry excavation.

**3.2.2 Wet Construction Method.** Use the wet construction method at all sites where it is impractical to excavate by the dry method. The wet construction method consists of drilling the shaft excavation below the water table, keeping the shaft filled with water (including natural slurry formed during the drilling process) or slurry as defined in part 2.4 of this Special Note, desanding and cleaning the slurry as required, final cleaning of the excavation by means of a bailing bucket, air lift, submersible pump or other approved devices and placing the shaft concrete (with a tremie or concrete pump beginning at the shaft bottom) which displaces the water or slurry as concrete is placed.

Where drilled shafts are located in open water areas, construct the shafts by the wet method using casings extending from above water elevation to the plan casing tip elevation to protect the shaft concrete from water action during placement and curing. Install the casing in a manner that will produce a positive seal at the bottom of the casing.

**3.3 Slurry.** When the Contractor elects to use slurry, adjust construction operations so that the slurry is in contact with the bottom 5 feet of the shaft for less than 4 hours unless the Engineer approves otherwise. If the 4-hour limit is exceeded, over-ream the bottom 5 feet of shaft.

**3.4 Cleaning.** Over-reaming, cleaning, or wire brushing the sidewalls of the shaft excavation and permanent casings may be necessary to remove the depth of softening or to remove excessive slurry cake buildup as indicated by sidewall samples or other test methods employed by the Engineer. Over-ream around the perimeter of the excavation a minimum depth of 1/2 inch and maximum depth of 3 inches.

3.5 Subsurface Exploration. Take subsurface exploration borings when shown on the plans or as the Engineer directs to determine the character of the material that the shaft extends through and the material directly below the shaft excavation. Complete subsurface exploration borings prior to beginning excavation for any drilled shaft in a group. Unless directed otherwise, extend subsurface exploration borings a minimum depth of 3 shaft diameters but not less than 10 feet below the bottom of the anticipated tip of drilled shaft excavation as shown on the plans. For subsurface exploration borings where soil sampling is required use thin-wall tube samples and perform standard penetration tests according to the Department's current Geotechnical Manual. When shafts extend into bedrock, soil samples are not required unless otherwise specified. Perform rock core drilling according to the Department's Geotechnical Manual. When the Engineer directs, perform additional subsurface exploration borings prior to drilled shaft construction. Measure soil samples and/or rock cores and visually identify and describe them on the subsurface log according to the Department's current Geotechnical Manual. Subsurface exploration borings must be performed by contractors/consultants prequalified by the Department's Division of Professional Services for Geotechnical Drilling Services at the time that field work begins.

The Engineer or geotechnical branch representative may be on-site during the subsurface exploration process to evaluate the soil and/or rock core samples. The Engineer or geotechnical branch representative will determine the need to extend the borings to depths greater than the depths previously specified. Handle, label, identify, and store soil and/or rock samples according to the Department's current Geotechnical Manual and deliver them with the subsurface logs to the geotechnical branch's rock core lab in Frankfort within 24-hours of completing the borings, unless directed otherwise.

The Engineer will inspect the soil samples and/or cores and determine the final depth of required excavation (final drilled shaft tip elevation) based on evaluation of the material's suitability. The Engineer will establish the final tip elevations for shaft locations, other than

those for which subsurface exploration borings have been performed, based on the results of the subsurface exploration. Within 15 calendar days after completion of the subsurface exploration borings, the Engineer will notify the contractor of the final tip elevations for shaft locations.

**3.6 Excavations.** The plans indicate the expected depths, the top of shaft elevations, and the estimated bottom of shaft elevations between which the drilled shaft are to be constructed. Drilled shafts may be extended deeper when the Engineer determines that the material encountered while drilling the shaft excavation is unsuitable and/or is not the same as anticipated in the design of the drilled shaft. Drilled shafts may be shortened when the Engineer determines the material encountered is better than that anticipated.

Begin drilled shaft excavation the excavation, excavation inspection, reinforcement placement, and concrete placement can be completed as one continuous operation. Do not construct new shafts within 24 hours adjacent to recently completed shafts if the center-to-center spacing is less than 3 shaft diameters.

Dispose of excavated material removed from the shaft according to the Standard Specifications or the contract documents.

Do not allow workmen to enter the shaft excavation for any reason unless both a suitable casing has been installed and adequate safety equipment and procedures have been provided to the workmen entering the excavation. Recommended Procedures for the Entry of Drilled Shaft Foundation Excavations, prepared by ADSC: The International Association of Foundation Drilling provides guideline recommendations for down-hole entry of drilled excavations.

**3.7 Obstructions.** Remove subsurface obstructions at drilled shaft locations. Such obstructions may include man-made materials such as old concrete foundations or natural materials such as boulders. Blasting is not permitted.

**3.8 Inspections of Excavations.** Provide equipment for checking the dimensions and alignment of each shaft excavation. Determine the dimensions and alignment of the shaft excavation under the observation and direction of the Engineer. Provide equipment necessary to verify shaft cleanliness for the method of inspection selected by the Engineer.

Measure final shaft depths with a weighted tape or other approved methods after final cleaning. Ensure the base of each shaft has less than <sup>1</sup>/<sub>2</sub> inch of sediment at the time of concrete placement. For dry excavations, do not allow the depth of water to exceed 3 inches for tremie or pump methods of concrete placement. Verify shaft cleanliness to the Engineer using direct visual inspection or other method the Engineers determines acceptable. Video camera or underwater inspection procedures may be used if specified in the plans. Inspect the side surfaces of rock sockets to ensure they are rough and of such condition to ensure bond between the shaft concrete and the rock. Calipers, bent rods, or other devices may be used to inspect the diameter and roughness of rock sockets. When the Engineer directs, mechanically roughen surfaces found to be smooth.

**3.9 Reinforcing Steel Cage Fabrication and Placement.** Assemble the reinforcing steel cage, consisting of longitudinal bars, ties, spirals, cage stiffener bars, spacers, centering devices, and other necessary appurtenances and place as a prefabricated unit immediately after the shaft excavation is inspected and accepted, and just prior to concrete placement.

Tie the reinforcing steel with 100 percent double-wire ties and provide support so that it will remain within allowable tolerances for position. Locate splices as shown on the plans. Splice no more than 50 percent of the longitudinal reinforcing within 2-lap splice lengths of any location or within 3 feet of the splice location if approved mechanical connectors are used. All splices are to be in accordance with plan details. Use bands, temporary cross ties,

etc. as required to provide a reinforcement cage of sufficient rigidity to prevent racking, permanent deformations, etc. during installation.

Use concrete centering devices or other approved non-corrosive centering devices at sufficient intervals along the length of the reinforcement cage to ensure concentric spacing for the entire cage length. As a minimum, provide a set of non-corrosive centering devices at intervals not exceeding 5 feet throughout the length of the shaft. When the size of the longitudinal reinforcement exceeds one inch in diameter the minimum spacing may be increased to 10 feet. As a minimum, provide a set of centering devices within 2 feet of the top and 2 feet of the bottom of the shaft. In addition provide one set of centering devices 2 feet above and 2 feet below each change in shaft diameter. Provide feet (bottom supports) at the bottom of the shaft on vertical bars. As a minimum, provide non-corrosive centering devices at 60 degree intervals around the circumference of the shaft to maintain the required reinforcement clearances. Ensure the centering devices maintain the specified annular clearance between the outside of the reinforcing cage and the side of the excavated hole or casing.

Concrete centering devices and feet will be constructed of concrete equal in quality and durability to the concrete specified for the shaft. Use epoxy coated centering devices fabricated from reinforcing steel. Use feet (bottom supports) of adequate size and number to assure the rebar cage is the proper distance above the bottom as determined by part 3.11 3) of this Special Note. The feet are not intended to support the weight of the cage. In the event that the shaft has been excavated below the anticipated tip elevation, extend the reinforcing cage at the tip (low) end by lap splices, mechanical connectors, or welded splices conforming to the Standard Specifications. In this instance, splices need not be staggered and 100 percent of the reinforcing bars may be spliced at a given location. The bottom 12 inches of the shaft may not be reinforced when below plan tip elevation.

During concrete placement, support the reinforcing cage at or near the top of shaft such that the concrete feet are positioned approximately one inch above the bottom of shaft excavation. Not sooner than 24 hours after the completion of concrete placement, remove temporary supports. Provide the needed equipment, including extra cranes if necessary, to provide this cage support.

Prior to placing the reinforcement cage, demonstrate to the satisfaction of the Engineer that the fabrication and handling methods to be used will result in a reinforcing cage placed in the proper position, with the proper clearances, and without permanent bending, squashing, or racking of the reinforcement cage. During this demonstration bring the cage to an upright position, lower into a shaft excavation, and support as if for concrete placement.

Check the elevation of the top of the reinforcing cage before and after the concrete is placed. If the reinforcing cage is not maintained within the specified tolerances, correct to the satisfaction of the Engineer. Do not construct additional shafts until the contractor has modified his reinforcing cage support to obtain the required tolerances.

**3.10 Concrete Placement.** Place concrete according to the applicable portions of the Standard Specifications and with the requirements set forth herein. Do not apply the provisions of the Special Note 6U for Structural Mass Concrete.

Place concrete as soon as practical after reinforcing steel placement but no later than 4 hours after completion of the shaft excavation. Place concrete continuously from the bottom to above the top elevation of the shaft. For shafts that extend above ground or water surface, place concrete continuously after the shaft is full until good quality concrete is evident at the top of the shaft. Form any portion of the shaft above ground with a removable form or other approved method to the dimensions shown on the plans.

For shafts constructed in the wet with the top of the shaft below the water surface and below top of casing, place concrete to approximately one shaft diameter but no less than 2 feet above the top of shaft elevation. Remove contaminated concrete and deleterious material, as determined by the Engineer, accumulated above the top of shaft elevation immediately after completing concrete placement. Deleterious material and contaminated concrete may be airlifted under a head of water or slurry provided that the head is maintained at or near the exterior water surface elevation. Carefully remove any concrete remaining above plan top of shaft after curing and excess casing removal.

Place concrete either by free fall, through a tremie, or concrete pump. Use the free fall placement method in dry holes only. The maximum height of free fall placement is 20 feet. Do not allow concrete placed by free fall to contact either the reinforcing cage or hole sidewall. Drop chutes may be used to direct concrete to the base during free fall placement.

Place concrete in the shaft in one continuous operation. Maintain a minimum slump of 4 inches or more throughout the placement for 4 hours after batching. Adjust approved admixtures in the concrete mix for the conditions encountered on the job so that the concrete remains in a workable plastic state throughout the placement. Perform slump loss tests to demonstrate that the concrete will maintain a 4-inch or greater slump for a period of time equal to the estimated transport plus the 2-hour placement time, but not less than 4 hours.

When the Engineer determines the concrete placement methods and/or equipment during construction of any technique and/or production shafts to be inadequate, make appropriate alterations to eliminate unsatisfactory results.

Drilled shafts not meeting the concrete placement requirements of this Special Note or contract plans are unacceptable. Correct all unacceptable completed shafts to the satisfaction of the Engineer.

**3.10.1 Tremie Placement.** Tremies may be used for concrete placement in either wet or dry holes. Extend the tremie to the shaft base elevation before starting underwater placement. Valves, bottom plates, or plugs may be used only if concrete discharge can begin approximately 2 inches above the excavation bottom. Remove plugs from the excavation unless otherwise approved by the Engineer. Maintain tremie discharge at or near the bottom of excavation as long as practical during concrete placement. Immerse tremie discharge end as deep as practical in the concrete but not less than 10 feet.

If at any time during the concrete pour the tremie line orifice is removed from the fluid concrete column and discharges concrete above the rising concrete surface, the entire drilled shaft is considered defective. In such case, remove the reinforcing cage and concrete, complete any necessary sidewall cleaning or overreaming as directed by the Engineer, and repour the shaft.

**3.10.2 Pumped Concrete.** Concrete pumps and lines may be used for concrete placement in either wet or dry excavations. Do not begin concrete placement until the pump line discharge orifice is at the shaft base elevation.

For wet excavations, use a plug or similar device to separate the concrete from the fluid in the hole until pumping begins. Remove the plug unless otherwise approved by the engineer.

Ensure the discharge orifice remains at least 10 feet below the surface of the fluid concrete. When lifting the pump line during concrete placement, reduce the line pressure until the orifice has been repositioned at a higher level in the excavation.

If at any time during the concrete pour the pump line orifice is removed from the fluid concrete column and discharges concrete above the rising concrete level, the Department will consider the shaft defective. In such case, remove the reinforcing cage and concrete, complete any necessary sidewall cleaning or overreaming as the Engineer directs, and repour the shaft. **3.10.3 Drop Chutes.** Drop chutes may be used to direct placement of free fall concrete in excavations where the maximum depth of water does not exceed one inch. Do not use the free fall method of placement in wet excavations. Concrete may be placed through either a hopper at the top of the tube or side openings as the drop chute is retrieved during concrete placement. Reduce the height of free fall and/or reduce the rate of concrete flow into the excavation if the concrete placement causes the shaft excavation to cave or slough, or if the concrete strikes the reinforcing cage or sidewall. When the Engineer determines free fall placement cannot be accomplished satisfactorily, use either tremie or pumping to accomplish the pour.

**3.11 Construction Tolerances.** The following construction tolerances apply to drilled shafts unless otherwise stated in the contract document:

- 1) Construct drilled shaft within 3 inches of plan position in the horizontal plane at the top of the shaft.
- 2) Do not vary the vertical alignment of a shaft excavation from the plan alignment by more than 1/4 inch per foot of depth or 6 inches total.
- 3) Maintain the top of the reinforcing steel cage no more than 6 inches above and no more than 3 inches below plan position.
- 4) All casing diameters shown on the plans refer to O.D. (outside diameter) dimensions. The casing dimensions are subject to American Pipe Institute tolerances applicable to regular steel pipe. A casing larger in diameter than shown in the plans may be used, at no additional cost, with prior approval by the Department.
- 5) Maintain the top of shaft concrete within  $\pm$  3 inches from the plan top of shaft elevation, measured after excess shaft concrete has been removed.
- 6) Design excavation equipment and methods so that the completed shaft excavation will have a planar bottom. Maintain the cutting edges of excavation equipment normal to the vertical axis of the equipment within a tolerance of  $\pm 3/8$  inch per foot of diameter. The tip elevation of the shaft has a tolerance of  $\pm 6$  inches from final shaft tip elevation unless otherwise specified in the plans.

Drilled shaft excavations and completed shafts not constructed within the required tolerances are unacceptable. Correct all unacceptable shaft excavations and completed shafts to the satisfaction of the Engineer. When a shaft excavation is completed with unacceptable tolerances, present corrective measures designed by a registered Professional Engineer for approval.

### 4.0 MEASUREMENT.

**4.1 Drilled Shafts.** The Department will not measure for payment any trial batches required to demonstrate the adequacy of the concrete mix, method, or equipment; concrete required to fill an oversized casing or oversized excavation; obstruction removal; overreaming or sidewall cleaning; inspection work or inspection equipment; materials or work necessary, including engineering analyses and redesign, to alter unacceptable work methods or to complete corrections for unacceptable work; and will consider them incidental to the Drilled Shaft. Unless noted otherwise in the contract documents, casing is incidental to the drilled shaft.

**4.1.1 Drilled Shaft, Common.** The Department will measure the length, in linear feet, of drilled shaft above the top of rock elevation shown on the plans. The

Department will consider this quantity Drilled Shaft, Common regardless of the character of material actually encountered.

**4.1.2 Drilled Shafts, Solid Rock.** The Department will measure the length, in linear feet, of drilled shaft below the top of rock elevation shown on plans. The Department will consider this quantity Drilled Shafts, Solid Rock regardless of the character of material actually encountered during excavation.

**4.2 Technique Shaft.** The Department will pay for technique shaft at the contract unit price per each as detailed on the plans or as directed by the Engineer. This will constitute full compensation for all costs incurred during installation as described herein for 'Drilled Shaft' or in the contract documents. No additional compensation beyond the number of technique shafts allowed for in the plans will be permitted for additional technique shafts required because of failure to demonstrate adequacy of methods.

**4.3 Rock Coring and Rock Sounding.** The Department will measure Rock Sounding and Rock Coring shown on the plans, as specified in part 3.5 of this Special Note, and as the Engineer directs, in linear feet to the nearest 0.1-foot. If soil samples are specified in the contract documents they will be incidental to the unit price bid for Rock Sounding. The Department will not measure or pay for subsurface exploration performed deeper than the elevations indicated on the plans and/or in this Special Note, unless directed by the Engineer, and will consider it incidental to these items of work. Additionally, the Department will consider all mobilization, equipment, labor, incidental items, and operations necessary to complete the boring operations incidental to these items of work.

**5.0 PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	Pay Unit
	Drilled Shaft, Diameter*, Common	Linear Foot
	Drilled Shaft, Diameter*, Solid Rock	Linear Foot
	Technique Shaft	Each
20745ED	Rock Sounding	Linear Foot
20746ED	Rock Coring	Linear Foot

\* See Plan Sheets for sizes of shafts.

The Department will consider payment as full compensation for all work required in this note.

June 15, 2012

## PART III

# EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

### TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

### LABOR AND WAGE REQUIREMENTS APPLICABLE TO OTHER THAN FEDERAL-AID SYSTEM PROJECTS

I. Application

II. Nondiscrimination of Employees (KRS 344)

### I. APPLICATION

1. These contract provisions shall apply to all work performed on the contract by the contractor with his own organization and with the assistance of workmen under his immediate superintendence and to all work performed on the contract by piecework, station work or by subcontract. The contractor's organization shall be construed to include only workmen employed and paid directly by the contractor and equipment owned or rented by him, with or without operators.

2. The contractor shall insert in each of his subcontracts all of the stipulations contained in these Required Provisions and such other stipulations as may be required.

3. A breach of any of the stipulations contained in these Required Provisions may be grounds for termination of the contract.

### II. NONDISCRIMINATION OF EMPLOYEES

AN ACT OF THE KENTUCKY GENERAL ASSEMBLY TO PREVENT DISCRIMINATION IN EMPLOYMENT KRS CHAPTER 344 EFFECTIVE JUNE 16, 1972

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (forty and above); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age forty (40) and over. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, except that such a notice or advertisement may indicate a preference, limitation, or specification based on religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, when religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, is a bona fide occupational qualification for employment. 3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

### **EXECUTIVE BRANCH CODE OF ETHICS**

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (7) provides:

No present or former public servant shall, within six (6) months following termination of his office or employment, accept employment, compensation, or other economic benefit from any person or business that contracts or does business with, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved during the last thirtysix (36) months of his tenure in state government. This subsection shall not prohibit the performance of ministerial functions, including but not limited to filing tax returns, filing applications for permits or licenses, or filing incorporation papers, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

KRS 11A.040 (9) states:

A former public servant shall not represent a person or business before a state agency in a matter in which the former public servant was directly involved during the last thirty-six (36) months of his tenure, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 3 Fountain Place, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: January 27, 2017

## Kentucky Equal Employment Opportunity Act of 1978

The requirements of the Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) shall apply to this Contract. The apparent low Bidder will be required to submit EEO forms to the Division of Construction Procurement, which will then forward to the Finance and Administration Cabinet for review and approval. No award will become effective until all forms are submitted and EEO/CC has certified compliance. The required EEO forms are as follows:

- EEO-1: Employer Information Report
- Affidavit of Intent to Comply
- Employee Data Sheet
- Subcontractor Report

These forms are available on the Finance and Administration's web page under *Vendor Information, Standard Attachments and General Terms* at the following address: <u>https://www.eProcurement.ky.gov</u>.

Bidders currently certified as being in compliance by the Finance and Administration Cabinet may submit a copy of their approval letter in lieu of the referenced EEO forms.

For questions or assistance please contact the Finance and Administration Cabinet by email at **finance.contractcompliance@ky.gov** or by phone at 502-564-2874.

# EVPLOYEE RIGHTS **UNDER THE FAIR LABOR STANDARDS ACT** THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

# FEDERAL MINIMUM WAGE **\$7.25** PER HOUR **BEGINNING JULY 24, 2009**

OVERTIME PAY	At least $1^{1/2}_{2}$ times your regular rate of pay for all hours worked over 40 in a workweek.
CHILD LABOR	An employee must be at least <b>16</b> years old to work in most non-farm jobs and at least <b>18</b> to work in non-farm jobs declared hazardous by the Secretary of Labor.
Y PEDBRID	Youths 14 and 15 years old may work outside school hours in various non-manufactur- ing, non-mining, non-hazardous jobs under the following conditions: Contract ID: 171233 No more than • 3 hours on a school day or 18 hours in a school week; • 8 hours on a non-school day or 40 hours in a non-school week. Also, work may not begin before 7 a.m. or end after 7 p.m., except from June 1 through Labor Day, when evening hours are extended to 9 p.m. Different rules apply in agricultural employment.
TIP CREDIT	Employers of "tipped employees" must pay a cash wage of at least \$2.13 per hour if they claim a tip credit against their minimum wage obligation. If an employee's tips combined with the employer's cash wage of at least \$2.13 per hour do not equal the minimum hourly wage, the employer must make up the difference. Certain other conditions must also be met.
ENFORCEMENT	The Department of Labor may recover back wages either administratively or through court action, for the employees that have been underpaid in violation of the law. Violations may result in civil or criminal action.
	Employers may be assessed civil money penalties of up to \$1,100 for each willful or repeated violation of the minimum wage or overtime pay provisions of the law and up to \$11,000 for each employee who is the subject of a violation of the Act's child labor provisions. In addition, a civil money penalty of up to \$50,000 may be assessed for each child labor violation that causes the death or serious injury of any minor employee, and such assessments may be doubled, up to \$100,000, when the violations are determined to be willful or repeated. The law also prohibits discriminating against or discharging workers who file a complaint or participate in any proceeding under the Act.
ADDITIONAL INFORMATION	<ul> <li>Certain occupations and establishments are exempt from the minimum wage and/or overtime pay provisions.</li> </ul>

- Special provisions apply to workers in American Samoa and the Commonwealth of the Northern Mariana Islands.
- Some state laws provide greater employee protections; employers must comply with both.
- The law requires employers to display this poster where employees can readily see it.
- Employees under 20 years of age may be paid \$4.25 per hour during their first 90 consecutive calendar days of employment with an employer.
- Certain full-time students, student learners, apprentices, and workers with disabilities may be paid less than the minimum wage under special certificates issued by the Department of Labor.



U.S. Department of Labor | Wage and Hour Division

# PART IV

# **INSURANCE**

## INSURANCE

The Contractor shall procure and maintain the following insurance in addition to the insurance required by law:

- Commercial General Liability-Occurrence form not less than \$2,000,000 General aggregate, \$2,000,000 Products & Completed Aggregate, \$1,000,000 Personal & Advertising, \$1,000,000 each occurrence.
- 2) Automobile Liability- \$1,000,000 per accident
- 3) Employers Liability:
  - a) \$100,000 Each Accident Bodily Injury
  - b) \$500,000 Policy limit Bodily Injury by Disease
  - c) \$100,000 Each Employee Bodily Injury by Disease
- 4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
  - a) "policy contains no deductible clauses."
  - b) "policy contains \_\_\_\_\_\_ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
- 5) KENTUCKY WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

The cost of insurance is incidental to all contract items. All subcontractors must meet the same minimum insurance requirements.

# PART V

# **BID ITEMS**

Report Date 6/30/17

171233

REVISED ADDENDUM #1: 7-10-17 Page 1 of 2

## Section: 0001 - ROADWAY

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	02230	EMBANKMENT IN PLACE	25.00	CUYD		\$	
0020	02545	CLEARING AND GRUBBING (APPROXIMATELY 0.1 ACRES)	1.00	LS		\$	
0030	02562	TEMPORARY SIGNS	88.00	SQFT		\$	
0040	02598	FABRIC-GEOTEXTILE TYPE III	239.00	SQYD		\$	
0050	02650	<b>MAINTAIN &amp; CONTROL TRAFFIC</b>	1.00	LS		\$	
0060	02701	TEMP SILT FENCE	118.00	LF		\$	
0070	02703	SILT TRAP TYPE A	1.00	EACH		\$	
0800	02704	SILT TRAP TYPE B	1.00	EACH		\$	
0090	02706	CLEAN SILT TRAP TYPE A	1.00	EACH		\$	
0100	02707	CLEAN SILT TRAP TYPE B	1.00	EACH		\$	
0110	02720	SIDEWALK-4 IN CONCRETE	47.00	SQYD		\$	
0120	02726	STAKING	1.00	LS		\$	
0130	05963	INITIAL FERTILIZER	.02	TON		\$	
0140	05964	20-10-10 FERTILIZER	.02	TON		\$	
0150	05985	SEEDING AND PROTECTION	239.00	SQYD		\$	
0160	05992	AGRICULTURAL LIMESTONE	.02	TON		\$	
0170	23158ES505	DETECTABLE WARNINGS	96.00	SQFT		\$	

## Section: 0002 - DRAINAGE

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0180	01002	PERFORATED PIPE-8 IN	44.00	LF		\$	
0190	01034	PERF PIPE HEADWALL TY 4-8 IN	2.00	EACH		\$	

### Section: 0003 - BRIDGE - PEDESTRIAN BRIDGE - DWG. 27393

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0200	02614	HANDRAIL-TYPE A-4	170.00	LF		\$	
0210	02998	MASONRY COATING	147.00	SQYD		\$	
0220	08001	STRUCTURE EXCAVATION-COMMON	58.00	CUYD		\$	
0230	08100	CONCRETE-CLASS A	49.50	CUYD		\$	
0240	08150	STEEL REINFORCEMENT	9,405.00	LB		\$	
0250	20637ED	DRILLED SHAFT-ROCK 48 IN	16.00	LF		\$	
0260	20745ED	ROCK SOUNDINGS	42.00	LF		\$	
0270	20746ED	ROCK CORINGS	40.00	LF		\$	
0280	21777EN	DRILLED SHAFT COMMON-54 IN	41.50	LF		\$	
0290	23541EC	ACCESS STAIRS (PRECAST CONCRETE)	1.00	LS		\$	
0300	24567ED	TRUSS BRIDGE SUPERSTRUCTURE	1.00	LS		\$	

## Section: 0004 - DEMOBILIZATION &/OR MOBILIZATION

171233

## **PROPOSAL BID ITEMS**

REVISED ADDENDUM #1: 7-10-17 Page 2 of 2

Report Date 6/30/17

LINE E	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0310	02569	DEMOBILIZATION	1.00	LS		\$	