

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

Greg Thomas Secretary

October 17, 2018

CALL NO. 105 CONTRACT ID NO. 181234 ADDENDUM # 1

Subject: CARTER COUNTY, STP BRZ 0903 (213)
Letting October 26, 2018
(1)Revised - General Utility Notes - Pages 37-41 of 176
(2)Revised - Proposal Bid Items - Pages 173-176 of 176
(3)Revised - Plan Sheet - R2b

Proposal revisions are available at http://transportation.ky.gov/Construction-Procurement/.

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:mr Enclosures



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GENERAL UTILITY NOTES AND INSTRUCTIONS APPLICABLE TO ALL UTILITY WORK MADE A PART OF THE ROAD CONSTRUCTION CONTRACT

The contractor should be aware the following utility notes and KYTC Utility Bid Item Descriptions shall supersede, replace and take precedence over any and all conflicting information that may be contained in utility owner supplied specifications contained in the contract, on plans supplied by the utility owner, or any utility owner specifications or information externally referenced in this contract.

Where information may have been omitted from these notes, bid item descriptions, utility owner supplied specifications or plans; the KYTC Standard Specifications for Road and Bridge Construction shall be referenced.

PROTECTION OF EXISTING UTILITIES

The existing utilities shown on the plans are shown as best known at the time the plans were developed and are to be used as a guide only by the Contractor. The Contractor shall use all means at his disposal to accurately locate all existing utilities, whether shown on the plans or not, prior to excavation. The contractor shall protect these utilities during construction. Any damage to existing utilities during construction that are shown or not shown on the plans shall be repaired at the Contractor's expense.

PREQUALIFIED UTILITY CONTRACTORS

Some utility owners may require contractors that perform relocation work on their respective facilities as a part of the road contract be prequalified or preapproved by the utility owner. Those utility owners with a prequalification or preapproval requirement are as follows:

ConnHurst, LLC – Freddie Conn Opell Excavating – Steve Opell Southern Ohio Trenching – Mark Bamer NorthEast Excavating – Gene Wilburn G&W Construction – Darrell Alderman BearTraxx Inc. – Dwight Keeton Swartz Pipeline Contracting – Norman Swartz

The bidding contractor needs to review the above list and choose from the list of approved subcontractors at the end of these general notes as identified above before bidding. When the list of approved

subcontractors is provided, only subcontractors shown on the following list(s) will be allowed to work on that utility as a part of this contract.

When the list of approved subcontractors for the utility work is <u>not</u> provided in these general notes, the utility work can be completed by the prime contractor. If the prime contractor chooses to subcontract the work, the subcontractor shall be prequalified with the KYTC Division of Construction Procurement in the work type of "Utilities" (I33). Those who would like to become prequalified may contact the Division of Construction Procurement at (502) 564-3500. Please note: it could take up to 30 calendar days for prequalification to be approved. The prequalification does not have to be approved prior to the bid, but must be approved before the subcontract will be approved by KYTC and the work can be performed.

CONTRACT ADMINISTRATION RELATIVE TO UTILITY WORK

All utility work is being performed as a part of a contract administered by KYTC; there is not a direct contract between the utility contractor and utility owner. The KYTC Section Engineer is ultimately responsible for the administration of the road contract and any utility work included in the contract.

SUBMITTALS AND CORRESPONDENCE

All submittals and correspondence of any kind relative to utility work included in the road contract shall be directed to the KYTC Section Engineer, a copy of which may also be supplied to the utility owner by the contractor to expedite handling of items like material approvals and shop drawings. All approvals and correspondence generated by the utility owner shall be directed to the KYTC Section Engineer. The KYTC Section Engineer will relay any approvals or correspondence to the utility contractor as appropriate. At no time shall any direct communication between the utility owner and utility contractor without the communication flowing through the KYTC Section Engineer be considered official and binding under the contract.

<u>ENGINEER</u>

Where the word "Engineer" appears in any utility owner specifications included in this proposal, utility owner specifications included as a part of this contract by reference or on the utility relocation plans, it shall be understood the "Engineer" is the Kentucky Transportation Cabinet (KYTC) Section Engineer or designated representative and the utility owner engineer or designated representative jointly. Both engineers must mutually agree upon all decisions made with regard to the utility construction. The Transportation Cabinet, Section Engineer shall make all final decisions in all disputes.

INSPECTOR OR RESIDENT PROJECT REPRESENTATIVE

Where the word "Inspector" or "Resident Project Representative" appears in the utility specifications included in this proposal, utility owner specifications included as a part of this contract by reference or on the utility relocation plans, it shall be understood the "Inspector" or "Resident Project Representative" is the utility owner inspector and KYTC inspector jointly. The Transportation Cabinet, Section Engineer shall make all final decisions in all disputes.

NOTICE TO UTILITY OWNERS OF THE START OF WORK

One month before construction is to start on a utility, the utility contractor shall make notice to the KYTC Section Engineer and the utility owner of when work on a utility is anticipated to start. The utility contractor shall again make confirmation notice to the KYTC Section Engineer and the utility owner one week before utility work is to actually start.

UTILITY SHUTDOWNS

The Contractor shall not shut down any active and in-service mains, utility lines or services for any reason unless specifically given permission to do so by the utility owner. The opening and closing of valves and operating of other active utility facilities for main, utility line or utility service shut downs are to be performed by the utility owner unless specific permission is given to the contractor by the owner to make shutdowns . If and when the utility owner gives the contractor permission to shutdown mains, utility lines or utility services, the contractor shall do so following the rules, procedures and regulations of the utility owner. Any permission given by the utility owner to the contractor to shutdown active and in-service mains, utility lines or services shall be communicated to the KYTC Section Engineer by the utility owner that such permission has been given.

Notice to customers of utility shut downs is sometimes required to be performed by the utility contractor. The contractor may be required; but, is not limited to, making notice to utility customers in a certain minimum amount of time in advance of the shut down and by whatever means of communication specified by the utility owner. The means of communication to the customer may be; but is not limited to, a door hanger, notice by newspaper ad, telephone contact, or any combination of communication methods deemed necessary, customary and appropriate by the utility owner. The contractor should refer to the utility owner specifications for requirements on customer notice.

Any procedure the utility owner may require the contractor to perform by specification or plan note and any expense the contractor may incur to comply with the utility owner's shut down procedure and notice to customers shall be considered an incidental expense to the utility construction.

<u>CUSTOMER SERVICE AND LATERAL ABANDONMENTS</u> When temporary or permanent abandonment of customer water, gas, or sewer services or laterals are necessary during relocation of utilities included in the contract, the utility contractor shall perform these abandonments as part of the contract as incidental work. No separate payment will be made for service line and lateral abandonments. The contractor shall provide all labor, equipment and materials to accomplish the temporary or permanent abandonment in accordance with the plans, specifications and/or as directed by the engineer. Abandonment may include, but is not limited to, digging down on a water or gas main at the tap to turn off the tap valve

or corporation stop and/or capping or plugging the tap, digging down on a sewer tap at the main and plugging or capping the tap, digging down on a service line or lateral at a location shown on the plans or agreeable to the engineer and capping or plugging, or performing any other work necessary to abandon the service or lateral to satisfactorily accomplish the final utility relocation.

STATIONS AND DISTANCES

All stations and distances, when indicated for utility placement in utility relocation plans or specifications, are approximate; therefore, some minor adjustment may have to be made during construction to fit actual field conditions. Any changes in excess of 6 inches of plan location shall be reviewed and approved jointly by the KYTC Section Engineer or designated representative and utility owner engineer or designated representative. Changes in location without prior approval shall be remedied by the contractor at his own expense if the unauthorized change creates an unacceptable conflict or condition.

RESTORATION

Temporary and permanent restoration of paved or stone areas due to utility construction shall be considered incidental to the utility work. No separate payment will be made for this work. Temporary restoration shall be as directed by the KYTC Section Engineer. Permanent restoration shall be "in-kind" as existing.

Restoration of seed and sod areas will be measured and paid under the appropriate seeding and sodding bid items established in the contract for roadway work.

BELOW ARE NOTES FOR WHEN "INST" ITEMS ARE IN THE CONTRACT MEANING THE UTILITY COMPANY IS PROVIDING CERTAIN MATERIALS FOR UTILITY RELOCATION

MATERIAL

Contrary to Utility Bid Item Descriptions, those bid items that have the text "**Inst**" at the end of the bid item will have the major components of the bid item provided by the utility owner. No direct payment will be made for the major material component(s) supplied by the utility company. All remaining materials required to construct the bid item as detailed in utility bid item descriptions, in utility specifications and utility plans that are made a part of this contract will be supplied by the contractor. The contractor's bid price should reflect the difference in cost due to the provided materials.

The following utility owners have elected to provide the following materials for work under this contract:

No materials are being supplied by the utility owner(s). All materials are to be supplied by the contractor per bid item descriptions, utility specifications and utility plans.

SECURITY OF SUPPLIED MATERIALS

If any utility materials are to be supplied by the utility owner, it will be the responsibility of the utility contractor to secure all utility owner supplied materials after delivery to the project site. The utility

contractor shall coordinate directly with the utility owner and their suppliers for delivery and security of the supplied materials. Any materials supplied by the utility owner and delivered to the construction site that are subsequently stolen, damaged or vandalized and deemed unusable shall be replaced with like materials at the contractor's expense.

181234

PROPOSAL BID ITEMS

REVISED ADDENDUM #1: 10-17-18 Contract ID: 181234 Page 173 of 176

Page 1 of 4

Report Date 10/17/18

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00003		CRUSHED STONE BASE	5,232.00	TON		\$	
0020	00100		ASPHALT SEAL AGGREGATE	161.00	TON		\$	
0030	00103		ASPHALT SEAL COAT	19.00	TON		\$	
0040	00214		CL3 ASPH BASE 1.00D PG64-22	5,540.00	TON		\$	
0050	00339		CL3 ASPH SURF 0.38D PG64-22	932.00	TON		\$	
0060	00356		ASPHALT MATERIAL FOR TACK	12.00	TON		\$	
0070	02098		CEM CONC ENT PAVEMENT-4 IN	187.00	SQYD		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0800	00078	CRUSHED AGGREGATE SIZE NO 2	7,187.00	TON		\$	
0090	00190	LEVELING & WEDGING PG64-22	200.00	TON		\$	
0100	01000	PERFORATED PIPE-4 IN	67.50	LF		\$	
0110	01010	NON-PERFORATED PIPE-4 IN	20.00	LF		\$	
0120	01028	PERF PIPE HEADWALL TY 3-4 IN	2.00	EACH		\$	
0130	01825	ISLAND CURB AND GUTTER	200.00	LF		\$	
0140	02014	BARRICADE-TYPE III	4.00	EACH		\$	
0150	02159	TEMP DITCH	1,825.00	LF		\$	
0160	02160	CLEAN TEMP DITCH	912.50	LF		\$	
0170	02230	EMBANKMENT IN PLACE (REVISED: 10-17-18)	59,013.00	CUYD		\$	
0180	02242	WATER (FOR DUST CONTROL)	36.00	MGAL		\$	
0190	02351	GUARDRAIL-STEEL W BEAM-S FACE	2,087.50	LF		\$	
0200	02360	GUARDRAIL TERMINAL SECTION NO 1	3.00	EACH		\$	
		GUARDRAIL CONNECTOR TO BRIDGE END					
0210	02363	ΤΥΑ	8.00	EACH		\$	
0220	02371	GUARDRAIL END TREATMENT TYPE 7	1.00	EACH		\$	
0230	02391	GUARDRAIL END TREATMENT TYPE 4A	5.00	EACH		\$	
0240	02429	RIGHT-OF-WAY MONUMENT TYPE 1	30.00	EACH		\$	
0250	02431	WITNESS R/W MONUMENT TYPE 2	9.00	EACH		\$	
0260	02432	WITNESS POST	31.00	EACH		\$	
0270	02483	CHANNEL LINING CLASS II	36.00	TON		\$	
0280	02484	CHANNEL LINING CLASS III	41.00	TON		\$	
0290	02545	CLEARING AND GRUBBING (APPROXIMATELY 18.4 ACRES)	1.00	LS		\$	
0300	02562	TEMPORARY SIGNS	510.00	SQFT		\$	
0310	02599	FABRIC-GEOTEXTILE TYPE IV	1,556.00	SQYD		\$	
0320	02600	FABRIC GEOTEXTILE TY IV FOR PIPE	606.00	SQYD	\$2.00	\$	\$1,212.00
0330	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0340	02676	MOBILIZATION FOR MILL & TEXT	1.00	LS		\$	
0350	02677	ASPHALT PAVE MILLING & TEXTURING	14.00	TON		\$	
0360	02697	EDGELINE RUMBLE STRIPS	7,300.00	LF		\$	
0370	02701	TEMP SILT FENCE	1,825.00	LF		\$	
0380	02703	SILT TRAP TYPE A	19.00	EACH		\$	
0390	02704	SILT TRAP TYPE B	19.00	EACH		\$	

181234

PROPOSAL BID ITEMS

REVISED ADDENDUM #1: 10-17-18 Contract ID: 181234 Page 174 of 176

Page 2 of 4

Report Date 10/17/18

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0400	02705	SILT TRAP TYPE C	19.00	EACH		\$	
0410	02706	CLEAN SILT TRAP TYPE A	19.00	EACH		\$	
0420	02707	CLEAN SILT TRAP TYPE B	19.00	EACH		\$	
0430	02708	CLEAN SILT TRAP TYPE C	19.00	EACH		\$	
0440	02726	STAKING	1.00	LS		\$	
0450	02731	REMOVE STRUCTURE (STEEL TRUSS BRIDGE AT APPROX. STA. 214+74)	1.00	LS		\$	
0460	02731	REMOVE STRUCTURE (STEEL TRUSS BRIDGE AT APPROX. STA. 223+65)	1.00	LS		\$	
0470	05950	EROSION CONTROL BLANKET	5,206.00	SQYD		\$	
0480	05952	TEMP MULCH	59,202.00	SQYD		\$	
0490	05953	TEMP SEEDING AND PROTECTION	44,402.00	SQYD		\$	
0500	05963	INITIAL FERTILIZER	2.10	TON		\$	
0510	05964	20-10-10 FERTILIZER	3.50	TON		\$	
0520	05985	SEEDING AND PROTECTION	67,894.00	SQYD		\$	
0530	05992	AGRICULTURAL LIMESTONE	42.00	TON		\$	
0540	06510	PAVE STRIPING-TEMP PAINT-4 IN	28,400.00	LF		\$	
0550	06514	PAVE STRIPING-PERM PAINT-4 IN	14,200.00	LF		\$	
0560	06550	PAVE STRIPING-TEMP REM TAPE-W	800.00	LF		\$	
0570	06551	PAVE STRIPING-TEMP REM TAPE-Y	800.00	LF		\$	
0580	10020NS	FUEL ADJUSTMENT	36,455.00	DOLL	\$1.00	\$	\$36,455.00
0590	10030NS	ASPHALT ADJUSTMENT	25,291.00	DOLL	\$1.00	\$	\$25,291.00
0600	20209EP69	GRANULAR PILE CORE	2,307.00	CUYD		\$	
0610	23274EN11F	TURF REINFORCEMENT MAT 1	1,009.00	SQYD		\$	
0620	23276EN11F	TURF REINFORCEMENT MAT 3	218.00	SQYD		\$	
0630	24540	R/W MONUMENT TYPE 3	6.00	EACH		\$	
0640	24814EC	PIPELINE INSPECTION	148.00	LF		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0650	00440	ENTRANCE PIPE-15 IN	62.00	LF		\$	
0660	00454	ENTRANCE PIPE-30 IN EQUIV	52.00	LF		\$	
0670	00461	CULVERT PIPE-15 IN	3.00	LF		\$	
0680	00526	STORM SEWER PIPE-30 IN	148.00	LF		\$	
0690	01394	METAL END SECTION TY 3-30 IN	2.00	EACH		\$	
0700	01493	DROP BOX INLET TYPE 2	1.00	EACH		\$	
0710	01559	DROP BOX INLET TYPE 13G	1.00	EACH		\$	
0720	01691	FLUME INLET TYPE 2	2.00	EACH		\$	

Section: 0004 - BRIDGE - STA. 214+ 50.00 - DWG. 26795

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0730	02223		GRANULAR EMBANKMENT	3,565.00	CUYD		\$	
0740	02231		STRUCTURE GRANULAR BACKFILL	313.00	CUYD		\$	
0750	02599		FABRIC-GEOTEXTILE TYPE IV	2,591.00	SQYD		\$	

181234

PROPOSAL BID ITEMS

REVISED ADDENDUM #1: 10-17-18 Contract ID: 181234 Page 175 of 176

Page 3 of 4

Report Date 10/17/18

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0760	02998		MASONRY COATING	2,027.00	SQYD		\$	
0770	03299		ARMORED EDGE FOR CONCRETE	91.00	LF		\$	
0780	08001		STRUCTURE EXCAVATION-COMMON	2,336.00	CUYD		\$	
0790	08018		RETAINING WALL (#1)	281.00	SQFT		\$	
0800	08018		RETAINING WALL (#2)	9,528.00	SQFT		\$	
0810	08019		CYCLOPEAN STONE RIP RAP	4,951.00	TON		\$	
0820	08033		TEST PILES	136.00	LF		\$	
0830	08046		PILES-STEEL HP12X53	1,640.00	LF		\$	
0840	08094		PILE POINTS-12 IN	72.00	EACH		\$	
0850	08100		CONCRETE-CLASS A	319.40	CUYD		\$	
0860	08104		CONCRETE-CLASS AA	342.40	CUYD		\$	
0870	08150		STEEL REINFORCEMENT	59,824.00	LB		\$	
0880	08151		STEEL REINFORCEMENT-EPOXY COATED	101,986.00	LB		\$	
0890	08634		PRECAST PC I BEAM TYPE 4	1,079.00	LF		\$	
0900	21532ED		RAIL SYSTEM TYPE III	1,064.00	LF		\$	

Section: 0005 - BRIDGE - STA. 223+ 86.00 - DWG. 26796

LINE	BID CODE A	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0910	02231	STRUCTURE GRANULAR BACKFILL	212.00	CUYD		\$	
0920	02599	FABRIC-GEOTEXTILE TYPE IV	264.00	SQYD		\$	
0930	02998	MASONRY COATING	497.00	SQYD		\$	
0940	03299	ARMORED EDGE FOR CONCRETE	67.00	LF		\$	
0950	08001	STRUCTURE EXCAVATION-COMMON	308.00	CUYD		\$	
0960	08019	CYCLOPEAN STONE RIP RAP	3,750.00	TON		\$	
0970	08033	TEST PILES	223.00	LF		\$	
0980	08046	PILES-STEEL HP12X53	2,329.00	LF		\$	
0990	08094	PILE POINTS-12 IN	52.00	EACH		\$	
1000	08100	CONCRETE-CLASS A	227.10	CUYD		\$	
1010	08104	CONCRETE-CLASS AA	275.60	CUYD		\$	
1020	08150	STEEL REINFORCEMENT	47,572.00	LB		\$	
1030	08151	STEEL REINFORCEMENT-EPOXY COATED	78,794.00	LB		\$	
1040	08634	PRECAST PC I BEAM TYPE 4	887.00	LF		\$	
1050	21532ED	RAIL SYSTEM TYPE III	450.00	LF		\$	

Section: 0006 - WATERLINE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1060	05953		TEMP SEEDING AND PROTECTION	13,893.00	SQYD		\$	
1070	14004		W DIRECTIONAL BORE (6-IN HDPE CL-200 W/ 12-IN DR11 HDPE CASING)	483.00	LF		\$	
1080	14007		W ENCASEMENT STEEL BORED RANGE 2 (6-IN STEEL (SCH. 40) BORE & JACK CASING PIPE, W/ END SEALS, 6-IN X 2-IN PIPE SK	315.00	LF		\$	

PROPOSAL BID ITEMS

181234

Report Date 10/17/18

Page 4 of 4

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1090	14008	W ENCASEMENT STEEL BORED RANGE 3 (12-IN STEEL (SCH. 40) BORE & JACK CASING PIPE, W/END SEALS, 12-IN X 6-IN PIPE S	227.00	LF		\$	
1100	14019	W FIRE HYDRANT ASSEMBLY (W/ TEE, 6-IN GC/BOX (KENNEDY K81-D)	1.00	EACH		\$	
1110	14030	W METER RELOCATE (W/ 3/4-IN SERVICE TUBING)	6.00	EACH		\$	
1120	14056	W PIPE PVC 02 INCH (CL-200)	654.00	LF		\$	
1130	14059	W PIPE PVC 06 INCH (CL-200)	3,417.00	LF		\$	
1140	14060	W PIPE PVC 08 INCH (CL-200)	506.00	LF		\$	
1150	14091	W TIE-IN 02 INCH (W 2-IN X 2-IN TAPPING SLEEVE COMPLETE)	1.00	EACH		\$	
1160	14094	W TIE-IN 06 INCH (W/ 6-IN X 2-IN TAPPING SLEEVE COMPLETE)	1.00	EACH		\$	
1170	14094	W TIE-IN 06 INCH (W/ 6-IN X 6-IN TAPPING SLEEVE AND VALVE COMPLETE)	1.00	EACH		\$	
1180	14095	W TIE-IN 08 INCH (W/ 8-IN X 8-IN TAPPING SLEEVEAND VALVE COMPLETE)	2.00	EACH		\$	
1190	14102	W VALVE 02 INCH (W/ BOX/LID COMPLETE)	4.00	EACH		\$	
200	14635	W LEAK DETECTION METER INST	3.00	EACH		\$	

Section: 0007 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1210	02568		MOBILIZATION	1.00	LS		\$	
1220	02569		DEMOBILIZATION	1.00	LS		\$	

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	D ER	Y AR	T CAUS	G IN JUNE OR	4 ACRES.		PE TRENCH BACKFILL. 5 FOR EDGE KEY. BOT	REMOVE STEFI TRUSS BRIDGES AP		М	te no 12. Ic yards.	DRK EMBANK FOUNDA TOTAL	21706 CU YDS TOTAL COMMON NOTE: THE CONTRACTOR IS ADVISED THAT THE EARTHWORK CALCULATIONS SHOWN ARE FOR DESIGN AND INFORMATION ONLY. ASSUMPTIONS FOR SHRINKAGE AND SWELL FACTORS ARE THE	NOTES	Я Г С	SS. UN	115 LBS.	OF DEPTH. Tons for	SK SK		CODE	TO BID		ER ROAD		VCE VCE DRO IECT
	427 T	8780 270N 2007 16ER. 7526	TROLLING	CLEARING	1		WRAPPING PIPE Udes 14 tons f	SITUDINAL Stffi tr	74°.		ICAL NO IN CUE	EARTHW(CU YDS R CU YDS R CU YDS R	CU YDS		ALT MIX	D AT 110 LE Of DEPTH, -	T A	YD. PER INCH Includes 200 Of Traffic.			ITEM	UNIT	KY 773 210+50	ITTLE RIVER		ENTRANCE ENTRANCE TOTAL PF
	INCLUDES	INCLUDES 6/60 INCLUDES 2 70 INCLUDES 200 THE ENGINEER. INCLUDES 7526	ENCHING OR CON ⁻ V MAINI	NO TREE	APPROXIMATEL		FOR WRAF Includes	ND LONG	STA 214+	REMOVE STEEL Sta 223+65.	GEOTECHNICAL QUANTITY IN	TOTAL 51487 0 7526 0 59013 0	21706 NOTE: AND CON AND CON AND CON AND CON AND CON		L ASPH	ESTIMATED AT Der Inch of	ESTIM/	YD. PE INCLUE OF TR.	EET NO.	HS		-	R3	R3 R5	R7	

SUMMARY

TOTAL PROJECT	7187	67.5	20	\sim	500	1 (2) 1 (2)	912.5	59013	36	2087.50		- ∞	- LC) 5 5	31	36	41			-	1556	606			7300	1825	6	6	6		6	-	-		902C	44402	2.1	3.5	67894	42	14200	28400	800	200		CCF9C 197701	16767	-007		Z10
К	7187	67.5	50	2	200	۲ ۲ ۲ ۲ ۲ ۲ ۲	912.5	59013		2087.50	Ϋ́ (- ∞	– ע))))))	31	36	41	- C	<u> </u>	-	1556	606			7300	1825	6	6	<u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>	<u>n</u> <u>n</u>	61	-	-		007G	44402	2.1	3.5	67894	42	14200	28400	800	800	0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	CC40C	16202	- 007	218	012
UNIT				EACH				CU YD	M GAL		EACH	EACH	E ACH		EACH	EACH	TON			, _	LS	SY	SY	L S				EACH	EACH	EACH	EACH	EACH	ΓS	LS			SQ YD	TON	TON	SQ YD	TON					EACH	DUL	CII YD			
DESCRIPTION	CRUSHED AGGREGATE SIZE NO 2 (1) (2) (3)		N-PERFORATED PIPE-4 IN) GUTTER		DITCH	PLACE (5)		ACE		CONNECTOR TO BRIDGE END IY A FND TREATMENT TYDE 7	ц Т Т Т	- - -	TYPE		ASS II					TYPE IV	. TYPE IV FOR PIPE	\Box	MILLING & LEXIURING			A	В		TYPE B				+ L	ERUSIUN CUNIKUL BLANKEI TEMP MIIICH	PROTECTION		-10-10	PROTECTION	ONE	RM PAINT-4 IN	STRIPING-TEMP PAINT-4 IN	AP REM TAPE-W		MUNUMENIITE J	ΤN	PILE CORF (14)	MAT 1		I A I

GENERAL, PIPE & PAVING Summary sheet

SCALE: 1"=5'

SHEET NO.	R2b		TOTAL PROJECT	В D S		903 801	11946	12181	10697	823	2153		ТОТАL ТОЗLОЯЯ	5232 161	5540 932	12 187										
ITEM NO.	-8506.00		ENTRANCE	► 5	- - 	903			921									REMARKS								PAVING
Y OF	RTER 9		НЭАОЯЧЧА	A R E	- -	801				823								RE RE								PIPE &
COUNT	CAR		MAINLINE	S Q U	- - -		11946	12181	9776	1059	2153															ERAL, P Summai
	U	2										>						FLUME INLET	1691						\sim	GENE
												MMARY		NOT NOT	NO L OL	TON Sa YD	≻	TYPE 13C DROP BOX INLET	1559	CH	-				-	
												G SUN					UMMAR	TYPE 2 DROP BOX INLET	1493	EAC			-		-	SCALE: 1"=5'
			ITEM	64-22	J -	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				(12)		PAVING		9	4-22 PG64-22	7	GE SU	METAL END SECTION TYPE 3-30"	1394				2		~	SCA
				CF 0.38D PG6.		00D PG64-2 00D PG64-2	00D PG64-2	00D PG64-2			Ш		ITEM	ш	PG6 38D	AVE	INA	STORM SEWER PIPE	526				148		148	\sim
				SPHALT SURFA	- -	T BASE 1. T BASE 1.	T BASE 1.	T BASE 1.	STONE BASE) SIONE BASE DEPTH CSB	SEAL AGGREGATE			STONE BASE SEAL AGGREGAT	PHALT BASE	MATERIAL FOR TACK Concrete entrance P	IPE DRA	CULVERT PIPE	461	FEET	M				3	
				11/4" CI 2 ASF	1)]]	2" CL2 ASPHAL 3" CL2 ASPHAL	= CL2	" CL2 ASF	CRUSHE	8" CRUSHEU VARIABLE D	ASPHALT SE			CRUSHED STO ASPHALT SE,			Ы	30" EQUIV 30" EQUIV	454	LINEAR				52	22	
		NO 7. NO 9.						/ERSE R.					ITEM CODE	3 100 100				ENTRANCE PIPE	440					62	62	K NOTE
		NOTE	E HEAD SARY B NKMENT)))				H TRANSVERSE ENGINEER.		•			<u> </u>	0 			INTENANCE	MAX COVER HEIGHT			15.1		1 2.8			REMOVED EXTRA EARTHWORK NOTE
		GROTECHNICAL GETECHNICAL	ED NECESS	° ∼⊔	OR JULY.		BACKFILL.	KEY, BOTH D BY THE E	S APPROX	S APPROX		MENT MENT TION BENCHI FMBANKMFNT			PER SQ. YD. Less Noted	PER SQ	MAINTEN	SKE SKE			∑ 0		15°			ED EXTRA I
		PER PER	YARI	FIC ON	JUNE	ACRES. No 9.	TRENCH E	FOR EDGE AS DEEMEI	BRIDGE	BRIDGE	NO 12. Karis) LBS. PER TH, UNLESS	С	FOR		CODE	BID		OAD			PROJECT	REMOV
		427 TONS F 6760 TONS		NING TRAF	CLEARING IN	Y 18.4 NOTE	PIPE	14 TONS FC TUDINAL AS	EL TRUSS	EL TRUSS	NOTE	NHT SO SO		Ż	DEP	Υ	INCH OF DEF 200 TONS FIC.		ITEM C	UNIT TO	KY 773 210+50	e rive	50+79	ENTRANCE	TOTAL PR	
		UDES UDES	INCLUDES 2 INCLUDES 20 THE ENGINEE INCLUDES 75 BENCHING.	CONT Maint	TREE CL	APPROXIMATEL GEOTECHNICAL	RAPPING	INCLUDES 14 AND LONGITU	REMOVE STEEL STA 214+74	REMOVE STEEL STA 223+65.	HNIC, C	AL EA CU CU	06 CU EARTHV FOR DE Swell	ASPHAL	ESTIMATED A PER INCH OF	STIMATE	YD. PER INCH INCLUDES 200 OF TRAFFIC.	SHEET NO.			R3		R7		LO L	
		(1) INCL		\frown	\frown	(9) GEC	() FOR	(1) INC	(12) REN STL	(I) STA	(14) GEO		ž		EST PER											

PROJECT TOTAL	7187 200	67.5	50	200	1825	1912-5-1	54013	2087.50	ω	- LO	30	x ر	36	<u>1</u> –	- 210		1556 606	 7300	821	<u>ה</u>	<u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>		6			5206	44402	л 2. М	C.C 2027A	61034	14200	28400	800	9	36455	25291	2307	
KX 773	7187 200	67.5	20	500	4 1825		<u> </u>	2087.50	ω	- LO	30	31	36	4	510		1556 606		1825	<u>م</u>	6	n <u>o</u>	61			5206	44402	2°1	C.C	6.034	14200	28400	800	0 0	36455	25291	2307	
LINU	TON		EACH		E A C H L F	>	M GAL	E ACH	EACH	EACH	EACH	EACH	TON		S0 FT	L S	S <	T ON		EACH	EACH	EACH	EACH		L S	SQ YD	sa YD	TON		TON				EACH	DOLL		CU YD SO YD	
DESCRIPTION	(4) (5) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4					(1	<u>(</u>)		END TY A					8			9 PIPE (0)	C (1)																			(14)	
DESC	CRUSHED AGGREGATE SIZE NO 2 LEVELING & WEDGING PG64-22	PERFORATED PIPE-4 IN	PERF PIPE HEADWALL TY 3-4 IN) GUTTER	TEMP DITCH	H H	_	GUARDRAIL-STEEL W BEAM-S FACE GUARDRAII TFRMINAI SFCTION NO 1	CONNECTOR TO BRIDGE	GUARDRAIL END TREATMENT TYPE 7 GUARDRAIL END TREATMENT TYPE 4A	AY MONUMENT TY	WITNESS R/W MUNUMENT TYPE 2 WITNESS POST	CHANNEL LINING CLASS II	UL A > > > SUBBIN	TEMPORARY SIGNS	DEMOBILIZATION	IV IV FOR	ASPHALT PAVE MILLING & TEXTURING (1 FDGFLINF RIMBLE STRIPS	TEMP SILT FENCE	SILT TRAP TYPE B	SILT TRAP TYPE C	CLEAN SILT TRAP TYPE B	CLEAN SILT TRAP TYPE C	STAKING REMOVE STRUCTURE	REMOVE STRUCTURE	EROSION CONTROL BLANKET	TEMP SEEDING AND PROTECTION		SFEDING AND PROTECTION	AGRICULTURE LIMESTONE	\geq	AP PAIN	PAVE STRIPING-TEMP REM TAPE-W	UMENT		ASPHALT ADJUS		