

THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 706, 723, AND 112 FOR MEASUREMENT AND OTHER DETAILS. SEE SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING.

THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS. SUBMISSIONS OF A BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PICKING UP MATERIALS FOR INSTALL ITEMS AT KYTC'S DIVISION OF EQUIPMENT WAREHOUSE (1239 WILKINSON BOULEVARD, FRANKFORT, KY 40622). THE FOLLOWING PROCEDURES SHALL BE FOLLOWED FOR MATERIAL RELEASE. FAILURE TO FOLLOW THESE PROCEDURES MAY RESULT IN LONG DELAYS OR REFUSAL TO DISTRIBUTE MATERIALS UPON ARRIVAL.

1. CONTRACTOR SHALL SECURE THE SIGNATURES OF KYTC'S PROJECT ENGINEER AND THE ELECTRICAL CONTRACTOR'S FOREMAN ON THE PROJECT MATERIALS RELEASE FORM. IF THE RELEASE FORM IS NOT IN THE PROPOSAL, CONTACT KIM STAMPER OR KERRY DECKER WITH THE DIVISION OF TRAFFIC OPERATIONS BY PHONE (502-782-8994/502-782-5536) OR EMAIL (KIM.STAMPER@KY.GOV/KERRY.DECKER@KY.GOV).  
2. CONTRACTOR SHALL CONTACT THE WAREHOUSE TO PREARRANGE PICK UP OF MATERIALS. CONTRACTOR SHALL EMAIL THE PROJECT MATERIALS RELEASE FORM WITH REQUIRED SIGNATURES TO THE WAREHOUSE AT KIM.STAMPER@KY.GOV AND SHALL NOTIFY THE WAREHOUSE BY PHONE (502-782-8994/502-330-8153) OR EMAIL KIM.STAMPER@KY.GOV AT LEAST TWO (2) WORKING DAYS PRIOR TO ARRIVAL.  
3. CONTRACTOR SHALL ALSO CONTACT THE SYSTEM OPERATIONS BRANCH OF THE DIVISION OF TRAFFIC OPERATIONS BY PHONE (502-782-5543/502-782-5547) OR EMAIL (JOE.THOMPSON@KY.GOV/LARRY.IRISH@KY.GOV) AT LEAST TWO (2) WORKING DAYS PRIOR TO ARRIVAL TO FACILITATE PROGRAMMING OF ROUTERS.  
4. CONTRACTOR SHALL ARRIVE AT THE KYTC'S DIVISION OF EQUIPMENT WAREHOUSE (1239 WILKINSON BOULEVARD, FRANKFORT, KY 40622) AT THE PREARRANGED DATE/TIME FOR MATERIAL PICK UP, TO FACILITATE THIS PROCESS. ENSURE CONTRACTOR'S DELIVERY DRIVER HAS A COPY OF THE PROJECT MATERIALS RELEASE FORM WITH THE REQUIRED SIGNATURES.

ADD SENTENCE TO SECTION 835.17: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES : " PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501".

MEASUREMENT NOTES THAT ARE IN ADDITION TO SECTION 723

BLANKOUT SIGN - DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT FURNISHED AND INSTALLED. THE DEPARTMENT WILL NOT MEASURE CONNECTION TO SIGNAL CONDUCTORS OR SPAN WIRE HANGER ASSEMBLY (PELCO SE-3019 OR APPROVED EQUAL) AND WILL CONSIDER THESE INCIDENTAL TO THIS ITEM OF WORK.

ADVANCE WARNING FLASHER - DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT FURNISHED AND INSTALLED. THE DEPARTMENT WILL NOT MEASURE 48X48 INCH SIGN WITH CHANNEL POSTS, 72X44 INCH SPAN MOUNTED SIGN, CONDUIT FROM STEEL STRAIN POLE TO SIGNAL HEADS ON SIDE MOUNTED SIGN, CONDUIT FITTINGS AND STRAPS, OR ANY ASSOCIATED SIGN MOUNTING HARDWARE AND WILL CONSIDER THESE INCIDENTAL TO THIS ITEM OF WORK.

INSTALL VIDEO CAMERA - DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT INSTALLED. THE DEPARTMENT WILL NOT MEASURE INSTALLATION OF SPECIFIED VIDEO CAMERA, VIDEO MODULES, OR MOUNTING BRACKET AS SHOWN ON THE DETAIL SHEET AND WILL CONSIDER THESE INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL NOT MEASURE FURNISHING AND INSTALLING TRUSS TYPE ARM (IF NECESSARY), POWER CABLE, COAXIAL CABLE, OR ANY HARDWARE NECESSARY FOR PROPER INSTALLATION AND WILL CONSIDER THESE INCIDENTAL TO THIS ITEM OF WORK. CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER WHEN INSTALLATION IS COMPLETE FOR PLACEMENT OF LOOPS.

INSTALL TEMPORARY VIDEO CAMERA - DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT INSTALLED. THE DEPARTMENT WILL NOT MEASURE INSTALLING AND MAINTAINING SPECIFIED VIDEO CAMERA, VIDEO MODULES, OR MOUNTING BRACKET AS SHOWN ON THE DETAIL SHEET AND WILL CONSIDER THESE INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL NOT MEASURE FURNISHING AND INSTALLING TRUSS TYPE ARM (IF NECESSARY), POWER CABLE, COAXIAL CABLE, OR ANY HARDWARE NECESSARY FOR PROPER INSTALLATION AND WILL CONSIDER THESE INCIDENTAL TO THIS ITEM OF WORK. UP TO TWO RELOCATIONS OF THE VIDEO CAMERA TO A TRAFFIC POLE AND ANY CAMERA MODIFICATIONS DUE TO LANE SHIFTS OR CLOSURES WILL NOT BE MEASURED BY THE DEPARTMENT AND WILL BE CONSIDERED INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL NOT MEASURE THE REMOVAL OF VIDEO CAMERA EQUIPMENT, MOUNTING BRACKET, WIRES, OR ANY OTHER ASSOCIATED HARDWARE AND WILL CONSIDER THEIR REMOVAL INCIDENTAL TO THIS ITEM OF WORK. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER WHEN VIDEO LOOPS ARE TO BE INSTALLED, UPON COMPLETION OF SIGNAL WORK ALL UNUSED EQUIPMENT SHALL BE RETURNED TO THE DIVISION OF TRAFFIC OPERATIONS IN FRANKFORT, KY. THE CONTRACTOR SHALL NOTIFY DISTRICT TRAFFIC TWO WEEKS IN ADVANCE OF ANY MODIFICATIONS OR RELOCATIONS OF VIDEO CAMERAS.

INSTALL SIGNAL CONTROLLER TYPE ATC. THE DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT INSTALLED. THE DEPARTMENT WILL NOT MEASURE THE CONCRETE BASE, MOUNTING THE CABINET, CONNECTING THE SIGNAL AND DETECTORS, EXCAVATION, BACKFILLING, RESTORATION, ANY NECESSARY POLE MOUNTING HARDWARE, ELECTRIC SERVICE, ELECTRICAL INSPECTION FEES, AND REQUIRED BUILDING FEES INVOLVING UTILITY SECONDARY/PRIMARY SERVICE FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL ALSO NOT MEASURE CONNECTING THE INDUCTION LOOP AMPLIFIERS, PEDESTRIAN ISOLATORS, LOAD SWITCHES, MODEL 400 MODEM CARD FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL ALSO NOT MEASURE FURNISHING AND INSTALLING ELECTRICAL SERVICE CONDUCTORS, CONDUITS, ANCHORS, METER BASE, FUSED CUTOUT, FUSES, GROUND RODS, AND GROUND LUGS, AND GROUND WIRES FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK.

INSTALL RADAR PRESENCE DETECTOR TYPE A SHALL CONSIST OF INSTALLATION OF A POLE MOUNTED RADAR PRESENCE SENSOR, SENSOR MOUNTING BRACKET, SENSOR CABLES, INTERFACE BOXES, LEAD-IN CABLE, CONNECTORS (FURNISHED BY CONTRACTOR), AND CONTROLLER INTERFACE ASSEMBLY. RADAR PRESENCE DETECTOR TYPE A BID ITEM SHALL INCLUDE ALL LABOR REQUIRED TO PROVIDE A FUNCTIONAL DETECTION SYSTEM. RADAR PRESENCE DETECTOR TYPE A SHALL BE INSTALLED AND WIRED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. AFTER THE DETECTOR IS INSTALLED AND BEFORE THE DETECTOR IS POWERED ON, THE CONTRACTOR SHALL COORDINATE WITH DISTRICT TRAFFIC DIVISION'S REPRESENTATIVES TO SCHEDULE A TIME TO PERFORM THE DETECTOR SETUP. THE CONTRACTOR SHALL DOUBLE CHECK TO VERIFY THAT ALL WIRING IS CORRECTLY INSTALLED AND CONNECTED BEFORE SCHEDULING THE SETUP WORK. REPRESENTATIVES FROM KYTC AND/OR THE MANUFACTURER OR SALES REPRESENTATIVE WILL ASSIST WITH SETUP AND CALIBRATION. THE CONTRACTOR SHALL PROVIDE A BUCKET TRUCK AND OPERATORS AT THIS TIME FOR FINAL AIMING OF THE SENSORS. THE CONTRACTOR SHALL PROVIDE INDIVIDUALS CAPABLE OF OPERATING THE SETUP SOFTWARE AND LEARNING THE SETUP PROCESS SO THAT FUTURE INSTALLATIONS MAY BE COMPLETED WITHOUT ASSISTANCE FROM OTHERS.

INSTALL RADAR ADVANCE DETECTOR TYPE B SHALL CONSIST OF INSTALLATION OF A POLE MOUNTED RADAR PRESENCE SENSOR, SENSOR MOUNTING BRACKET, SENSOR CABLES, INTERFACE BOXES, LEAD-IN CABLE, CONNECTORS (FURNISHED BY CONTRACTOR), AND CONTROLLER INTERFACE ASSEMBLY. RADAR ADVANCE DETECTOR TYPE B BID ITEM SHALL INCLUDE ALL LABOR REQUIRED TO PROVIDE A FUNCTIONAL DETECTION SYSTEM. RADAR ADVANCE DETECTOR TYPE B SHALL BE INSTALLED AND WIRED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. AFTER THE DETECTOR IS INSTALLED AND BEFORE THE DETECTOR IS POWERED ON, THE CONTRACTOR SHALL COORDINATE WITH DISTRICT TRAFFIC DIVISION'S REPRESENTATIVES TO SCHEDULE A TIME TO PERFORM THE DETECTOR SETUP. THE CONTRACTOR SHALL DOUBLE CHECK TO VERIFY THAT ALL WIRING IS CORRECTLY INSTALLED AND CONNECTED BEFORE SCHEDULING THE SETUP WORK. REPRESENTATIVES FROM KYTC AND/OR THE MANUFACTURER OR SALES REPRESENTATIVE.

INSTALL SOLAR SCHOOL FLASHER ASSEMBLY- THE DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT INSTALLED. THE DEPARTMENT WILL NOT MEASURE THE FURNISHING ASSEMBLIES FOR MOUNTING EQUIPMENT, INSTALLING SOLAR PANEL, INSTALLING BATTERY CABINET, FURNISHING WIRE CONNECTIONS AND GROUNDING OF CABINET INCLUDING GROUND RODS/GROUND LUGS/GROUND WIRE, ELECTRICAL INSPECTION FEES, AND REQUIRED BUILDING FEES FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK.

COUNTY OF

ITEM NO.

SHEET NO.

CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 723

SUBSECTION: 03.02 POLES AND BASES INSTALLATION, B)  
REVISION: REPLACE ENTIRE TABLE WITH THE FOLLOWING:

MAXIMUM SERVICE FORCES		DRILLED SHAFT DATA							
MAX SERVICE MOMENT (FT.-KIPS)	DIAMETER (IN.)	DEPTH (FEET)				VERTICAL BARS		TIES OR SPIRAL	
		< 2:1 GROUND SLOPE		2:1 GROUND SLOPE				BAR SIZE	SPACING OR PITCH (IN.)
		SOIL	ROCK	SOIL	ROCK	SIZE	TOTAL		
0-9.9	36	6	6	6.5	6	13	#8	#4	12
10-19.9	36	7	6	8	6	13	#8	#4	12
20-29.9	36	8	6	9	6	13	#8	#4	12
30-39.9	36	9	6	10	6	13	#8	#4	12
40-49.9	36	9.5	6	10.5	6	13	#8	#4	12
50-59.9	36	10	6	11	6	13	#8	#4	12
60-69.9	36	11	6	12	6	13	#8	#4	12
70-79.9	36	11.5	6	12.5	6	13	#8	#4	12
80-89.9	36	12	6	13	6	13	#8	#4	12
90-99.9	36	12.5	6	13.5	6	13	#8	#4	12
100-149.9	36	14.5	6	16	6	13	#8	#4	12
150-199.9	36	15	6	17.5	6	13	#8	#4	12
200-249.9	36	17	6	19.5	6	13	#8	#4	12
250-299.9	36	18.5	6.5	21	6.5	13	#8	#4	12
300-399.9	42	21	7.5	25	7.5	18	#8	#4	6
400-499.9	42	21.5	7.5	25	7.5	18	#8	#4	6
500-599.9	48	22.5	7.5	26.5	7.5	19	#8	#4	12

SUBSECTION: 03.13 LOOP INSTALLATION.  
REVISION: REPLACE FIRST SENTENCE NOTE WITH THE FOLLOWING:  
TWIST UNSHIELDED LOOP WIRES (MSA 51-7) WITH 3 TO 5 TURNS PER FOOT FROM THE START OF THE HOMERUN TO THE JUNCTION BOX, CABINET, OR POLE. SLOT CAN BE WIDEN TO 1/2" to 5/8" TO HELP WITH THE INSTALLATION OF THE TWISTED WIRE.

SUBSECTION: 03.17 A) TESTING.  
REVISION: REPLACE FIFTH SENTENCE WITH THE FOLLOWING:  
THE CONTRACTOR SHALL VERIFY THAT THE LOOPS (BOTH EXISTING AND REPLACEMENT LOOPS) MEETS THE REQUIREMENTS BEFORE THE FINAL SURFACE IS LAID. ADD FOLLOWING SENTENCE AT END OF PARAGRAPH:  
IF THE ENGINEER DECIDES TO REPLACE ANY LOOPS BEFORE TESTING, BID ITEM LOOP TEST WILL NOT BE USED FOR THAT LOOP LOCATION.

SUBSECTION: 03.12 WIRING INSTALLATION.  
REVISION: SEE TRAFFIC OPERATIONS WEBSITE FOR WORD DOCUMENT TO REPLACE ALL CHARTS FOR WIRING TO SHOW CHANGES FOR EQUIPMENT GROUNDING.

SUBSECTION: 04.22 REMOVE SIGNAL EQUIPMENT. (PERMIT ONLY)  
REVISION: REPLACE ENTIRE NOTE WITH THE FOLLOWING:  
THE DEPARTMENT WILL MEASURE THE QUANTITY AS A EACH REMOVAL OF SIGNAL EQUIPMENT. THE CONTRACTOR SHALL DISPOSE ALL MATERIALS REMOVED FROM THE PROJECT IN ACCORDANCE WITH CABINET POLICY. THE CONTRACTOR SHALL TAKE ALL STEEL AND ALUMINUM POLES TO THE EQUIPMENT WAREHOUSE IN FRANKFORT, KENTUCKY. ALL OTHER MATERIALS (WITH EXCEPTION OF PLASTIC ITEMS AND WOOD POLES) SHALL BE TAKEN TO LOCATIONS IDENTIFIED BY THE DISTRICT TRAFFIC ENGINEER. THE CONTRACTOR SHALL CONTACT THE DIVISION OF EQUIPMENT (502-564-3916) TO SCHEDULE A TIME TO DELIVER STEEL AND ALUMINUM POLES TO THE EQUIPMENT WAREHOUSE. THE TRANSPORTATION OF THE MATERIALS WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK.

SUBSECTION: 04.22 REMOVE SIGNAL EQUIPMENT. (CONSTRUCTION ONLY)  
REVISION: REPLACE THE PARAGRAPH WITH THE FOLLOWING:  
THE DEPARTMENT WILL MEASURE THE QUANTITY BY EACH. THE DEPARTMENT WILL NOT MEASURE BACKFILLING AND THE DISPOSAL OR TRANSPORTATION OF EQUIPMENT AND MATERIALS ASSOCIATED WITH ANY STRUCTURAL OR ELECTRICAL COMPONENT OF THE SIGNAL SYSTEM INCLUDING, BUT NOT LIMITED TO POLE BASES, POLES, JUNCTION BOXES, CABINETS, AND WOOD POLES FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK.

DESIGNED BY:	
DATE SUBMITTED:	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS COUNTY OF	
PROJECT	
NUMBERS:	
TRAFFIC SIGNAL ESTIMATE OF QUANTITIES MEASUREMENT, CONST, AND MISC NOTES	

MATERIAL NOTES THAT ARE CONTRARY TO SECTION 835

SUBSECTION: 07.02 MAST ARM POLES  
REVISION: REPLACE ENTIRE 9) NOTE FOR "THE DETAIL ANALYSIS SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING CALCULATIONS:" WITH THE FOLLOWING:  
LIMIT VERTICAL DEFLECTION TO 8 INCHES FOR GALLOPING FOR ALL ARMS.

SUBSECTION: .21 WARNING TAPE.  
REVISION: REPLACE FIRST SENTENCE WITH THE FOLLOWING IN 834.33:  
PROVIDE DETECTABLE TYPE TAPE THAT IS 6 INCHES WIDE AND 7.0 MILS (NOMINAL) THICK.

MATERIAL NOTES IN ADDITION TO SECTION 835

SUBSECTION: 16.07 SIGNAL TETHER CABLE  
ADDITION: PROVIDE TETHER CABLE THAT CONSISTS OF "CLASS A" ZINC-COATED, COMMON GRADE STEEL AND EXTRA GALVANIZED PER ASTM 457-03. PROVIDE A MINIMUM 1/4 INCH DIAMETER WITH 7 STRANDS AND MINIMUM BREAKING STRENGTH OF 1,900 POUNDS.

SUBSECTION: 16.08 SIGNAL TETHER STRANDVISE  
ADDITION: PROVIDE A STRANDVISE THAT HAS AN AUTOMATIC JAW TYPE DEAD-END FOR 1/4 INCH GALVANIZED STEEL MESSENGER. USE HUBBELL GDE5200L OR APPROVED EQUAL.

SUBSECTION: 16.09 SIGNAL TETHER STRANDLINK  
ADDITION: PROVIDE A STRANDLINK THAT IS A SPLICE FOR 1/4 INCH GALVANIZED STEEL MESSENGER. USE HUBBELL GLS5000 OR APPROVED EQUAL.