



**COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET**

Frankfort, Kentucky 40622
www.transportation.ky.gov/

Matthew G. Bevin
Governor

Greg Thomas
Secretary

November 13, 2019

CALL NO. 102
CONTRACT ID NO. 191069
ADDENDUM # 1

Subject: BOURBON COUNTY, STP 7054 (001)
Letting November 22, 2019

- (1) Revised - Proposal Bid Items - Pages 434-436 of 436
- (2) Added - Traffic Signal Plans - Pages 1-10 of 10

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

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

Sincerely,

A handwritten signature in black ink that reads "Rachel Mills".

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

RM:mr
Enclosures



An Equal Opportunity Employer M/F/D

PROPOSAL BID ITEMS

Report Date 11/13/19

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00003		CRUSHED STONE BASE	17,447.00	TON		\$	
0020	00005		GEOGRID REINFORCEMENT FOR SUBGRADE	33,548.00	SQYD		\$	
0030	00190		LEVELING & WEDGING PG64-22	283.00	TON		\$	
0040	00214		CL3 ASPH BASE 1.00D PG64-22	12,915.00	TON		\$	
0050	00356		ASPHALT MATERIAL FOR TACK	15.00	TON		\$	
0060	02602		FABRIC-GEOTEXTILE CLASS 1 FOR PAVING	33,548.00	SQYD		\$	
0070	24942EC		CEM CONC ENT PAVEMENT-9 IN	12,521.00	SQYD		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0080	00020		TRAFFIC BOUND BASE	2,000.00	TON		\$	
0090	00078		CRUSHED AGGREGATE SIZE NO 2	200.00	TON		\$	
0100	01000		PERFORATED PIPE-4 IN	1,100.00	LF		\$	
0110	01740		CORED HOLE DRAINAGE BOX CON-4 IN	2.00	EACH		\$	
0120	01741		CORED HOLE DRAINAGE BOX CON-6 IN	2.00	EACH		\$	
0130	01742		CORED HOLE DRAINAGE BOX CON-8 IN	2.00	EACH		\$	
0140	01792		ADJUST MANHOLE	40.00	EACH		\$	
0150	01811		STANDARD CURB AND GUTTER MOD	9,548.00	LF		\$	
0160	01875		STANDARD HEADER CURB	135.00	LF		\$	
0170	02014		BARRICADE-TYPE III	20.00	EACH		\$	
0180	02200		ROADWAY EXCAVATION	21,999.00	CUYD		\$	
0190	02242		WATER	5.00	MGAL		\$	
0200	02367		GUARDRAIL END TREATMENT TYPE 1	1.00	EACH		\$	
0210	02381		REMOVE GUARDRAIL	50.00	LF		\$	
0220	02484		CHANNEL LINING CLASS III	200.00	TON		\$	
0230	02545		CLEARING AND GRUBBING 5 ACRES	1.00	LS		\$	
0240	02562		TEMPORARY SIGNS	1,200.00	SQFT		\$	
0250	02575		DITCHING AND SHOULDERING (REVISED: 11-13-19)	1,660.00	LF		\$	
0260	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0270	02671		PORTABLE CHANGEABLE MESSAGE SIGN	8.00	EACH		\$	
0280	02690		SAFELOADING	100.00	CUYD		\$	
0290	02705		SILT TRAP TYPE C	20.00	EACH		\$	
0300	02708		CLEAN SILT TRAP TYPE C	20.00	EACH		\$	
0310	02720		SIDEWALK-4 IN CONCRETE	5,426.00	SQYD		\$	
0320	02721		REMOVE CONCRETE SIDEWALK	641.00	SQYD		\$	
0330	02726		STAKING	1.00	LS		\$	
0340	02775		ARROW PANEL	2.00	EACH		\$	
0350	03383		PVC PIPE-4 IN	100.00	LF		\$	
0360	03385		PVC PIPE-6 IN	100.00	LF		\$	
0370	03387		PVC PIPE-8 IN	100.00	LF		\$	
0380	04953		TEMP RELOCATION OF SIGNAL HEAD	28.00	EACH		\$	
0390	05952		TEMP MULCH	6,453.00	SQYD		\$	

PROPOSAL BID ITEMS

Report Date 11/13/19

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0400	05963		INITIAL FERTILIZER	.30	TON		\$	
0410	05964		MAINTENANCE FERTILIZER	.60	TON		\$	
0420	05985		SEEDING AND PROTECTION	3,865.00	SQYD		\$	
0430	05990		SODDING	2,433.00	SQYD		\$	
0440	05992		AGRICULTURAL LIMESTONE	6.00	TON		\$	
0450	06511		PAVE STRIPING-TEMP PAINT-6 IN	64,050.00	LF		\$	
0460	06545		PAVE STRIPING-THERMO-8 IN Y	1,795.00	LF		\$	
0470	10020NS		FUEL ADJUSTMENT	34,953.00	DOLL	\$1.00	\$	\$34,953.00
0480	10030NS		ASPHALT ADJUSTMENT	51,599.00	DOLL	\$1.00	\$	\$51,599.00
0490	23158ES505		DETECTABLE WARNINGS	900.00	SQFT		\$	
0500	24110EC		PERM PAINT-BARRIER CURB	3,170.00	LF		\$	
0510	24781EC		INTELLIGENT COMPACTION FOR ASPHALT	13,198.00	TON		\$	
0520	24891EC		PAVE MOUNT INFRARED TEMP EQUIPMENT	423,288.00	SF		\$	
0530	40030		TEMPORARY SILT FENCE	4,348.00	LF		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0540	00521		STORM SEWER PIPE-15 IN	3,234.00	LF		\$	
0550	00522		STORM SEWER PIPE-18 IN	3,394.00	LF		\$	
0560	00524		STORM SEWER PIPE-24 IN	997.00	LF		\$	
0570	00526		STORM SEWER PIPE-30 IN	877.00	LF		\$	
0580	00528		STORM SEWER PIPE-36 IN	675.00	LF		\$	
0590	01456		CURB BOX INLET TYPE A	73.00	EACH		\$	
0600	01459		CURB BOX INLET TYPE A MOD	12.00	EACH		\$	
0610	01480		CURB BOX INLET TYPE B	1.00	EACH		\$	
0620	01493		DROP BOX INLET TYPE 2	1.00	EACH		\$	
0630	01544		DROP BOX INLET TYPE 11	1.00	EACH		\$	
0640	01559		DROP BOX INLET TYPE 13G	34.00	EACH		\$	
0650	01568		DROP BOX INLET TYPE 13S	3.00	EACH		\$	
0660	01650		JUNCTION BOX	4.00	EACH		\$	
0670	01651		JUNCTION BOX-MOD	1.00	EACH		\$	
0680	01756		MANHOLE TYPE A	33.00	EACH		\$	
0690	01767		MANHOLE TYPE C	16.00	EACH		\$	
0700	01768		MANHOLE TYPE C MOD	1.00	EACH		\$	
0710	02602		FABRIC-GEOTEXTILE CLASS 1 FOR DRAINAGE	11,430.00	SQYD		\$	
0720	08100		CONCRETE-CLASS A	71.10	CUYD		\$	
0730	20569ES710		DROP BOX INLET TY 13G(MOD)	1.00	EACH		\$	
0740	20570ES710		DROP BOX INLET TY 13S(MOD)	1.00	EACH		\$	
0750	24814EC		PIPELINE INSPECTION	9,177.00	LF		\$	

Section: 0004 - TRAFFIC LOOPS

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0760	04780		FUSED CONNECTOR KIT (ADDED: 11-13-19)	18.00	EACH		\$	

PROPOSAL BID ITEMS

Report Date 11/13/19

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0770	04792		CONDUIT-1 IN (ADDED: 11-13-19)	22.00	LF		\$	
0780	04793		CONDUIT-1 1/4 IN (REVISED: 11-13-19)	284.00	LF		\$	
0790	04811		ELECTRICAL JUNCTION BOX TYPE B (REVISED: 11-13-19)	14.00	EACH		\$	
0800	04820		TRENCHING AND BACKFILLING	220.00	LF		\$	
0810	04821		OPEN CUT ROADWAY (ADDED: 11-13-19)	110.00	LF		\$	
0820	04830		LOOP WIRE (REVISED: 11-13-19)	4,712.00	LF		\$	
0830	04844		CABLE-NO. 14/5C (ADDED: 11-13-19)	1,166.00	LF		\$	
0840	04850		CABLE-NO. 14/1 PAIR (REVISED: 11-13-19)	2,942.00	LF		\$	
0850	04881		MAST ARM POLE (ADDED: 11-13-19)	2.00	EACH		\$	
0860	04895		LOOP SAW SLOT AND FILL (REVISED: 11-13-19)	1,593.00	LF		\$	
0870	20093NS835		INSTALL PEDESTRIAN HEAD-LED (ADDED: 11-13-19)	8.00	EACH		\$	
0880	20094ES835		TEMP RELOCATION OF SIGNAL HEAD (ADDED: 11-13-19)	6.00	EACH		\$	
0890	20188NS835		INSTALL LED SIGNAL-3 SECTION (ADDED: 11-13-19)	6.00	EACH		\$	
0900	20392NS835		ELECTRICAL JUNCTION BOX TYPE C (ADDED: 11-13-19)	2.00	EACH		\$	
0910	21543EN		BORE AND JACK CONDUIT (ADDED: 11-13-19)	150.00	LF		\$	
0920	21659NN		RELOCATE SIGNAL HEAD	10.00	EACH		\$	
0930	21743NN		INSTALL PEDESTRIAN DETECTOR (ADDED: 11-13-19)	8.00	EACH		\$	
0940	23052NN		SPAN MOUNTED SIGN (ADDED: 11-13-19)	1.00	EACH		\$	
0950	23157EN		TRAFFIC SIGNAL POLE BASE (ADDED: 11-13-19)	5.50	CUYD		\$	
0960	23222EC		INSTALL SIGNAL PEDESTAL (ADDED: 11-13-19)	6.00	EACH		\$	
0970	23982EC		INSTALL ANTENNA (ADDED: 11-13-19)	1.00	EACH		\$	
0980	24908EC		INSTALL SIGNAL CONTROLLER-TY ATC (ADDED: 11-13-19)	1.00	EACH		\$	
0990	24955ED		REMOVE SIGNAL EQUIPMENT (ADDED: 11-13-19)	1.00	EACH		\$	
1000	24963ED		LOOP TEST	13.00	EACH		\$	

Section: 0005 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1010	02568		MOBILIZATION	1.00	LS		\$	
1020	02569		DEMOBILIZATION	1.00	LS		\$	

COUNTY OF	ITEM NO.	SHEET NO.
BOURBON		11

Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS

PLANS OF PROPOSED PROJECT DISTRICT 7 - BOURBON COUNTY TRAFFIC SIGNAL PLANS



SHEET NO.	DESCRIPTION
12	LAYOUT SHEET
13	CONTROLLER CABINET DETAIL (CA)
14	PEDESTRIAN DETECTOR DETAIL (PD)
15	PEDESTRIAN DETECTOR DETAIL (PD)
16	ARM POLE DETAILS
17	ARM POLE DETAILS
18	HIGH STREET AND 8TH STREET SIGNAL PLAN
19	HIGH STREET AND 8TH STREET SIGNAL PLAN

SHEETS NOT INCLUDED IN TOTAL SHEETS

STANDARD DRAWINGS



DESIGN CRITERIA	
CLASS OF HIGHWAY	_____
TYPE OF TERRAIN	_____
DESIGN SPEED	_____
REQUIRED NFSD	_____
REQUIRED SD	_____
LEVEL OF SERVICE	_____
ADT PRESENT ()	_____
ADT FUTURE ()	_____
DIV	_____
D %	_____
T %	_____
GEOGRAPHIC COORDINATES	
LATITUDE	DEGREES _____ MINUTES _____ SECONDS NORTH
LONGITUDE	DEGREES _____ MINUTES _____ SECONDS WEST
DESIGNED	
% RESTRICTED SD	_____
LEVEL OF SERVICE	_____
MAX. DISTANCE W/O PASSING	_____

LAYOUT MAP

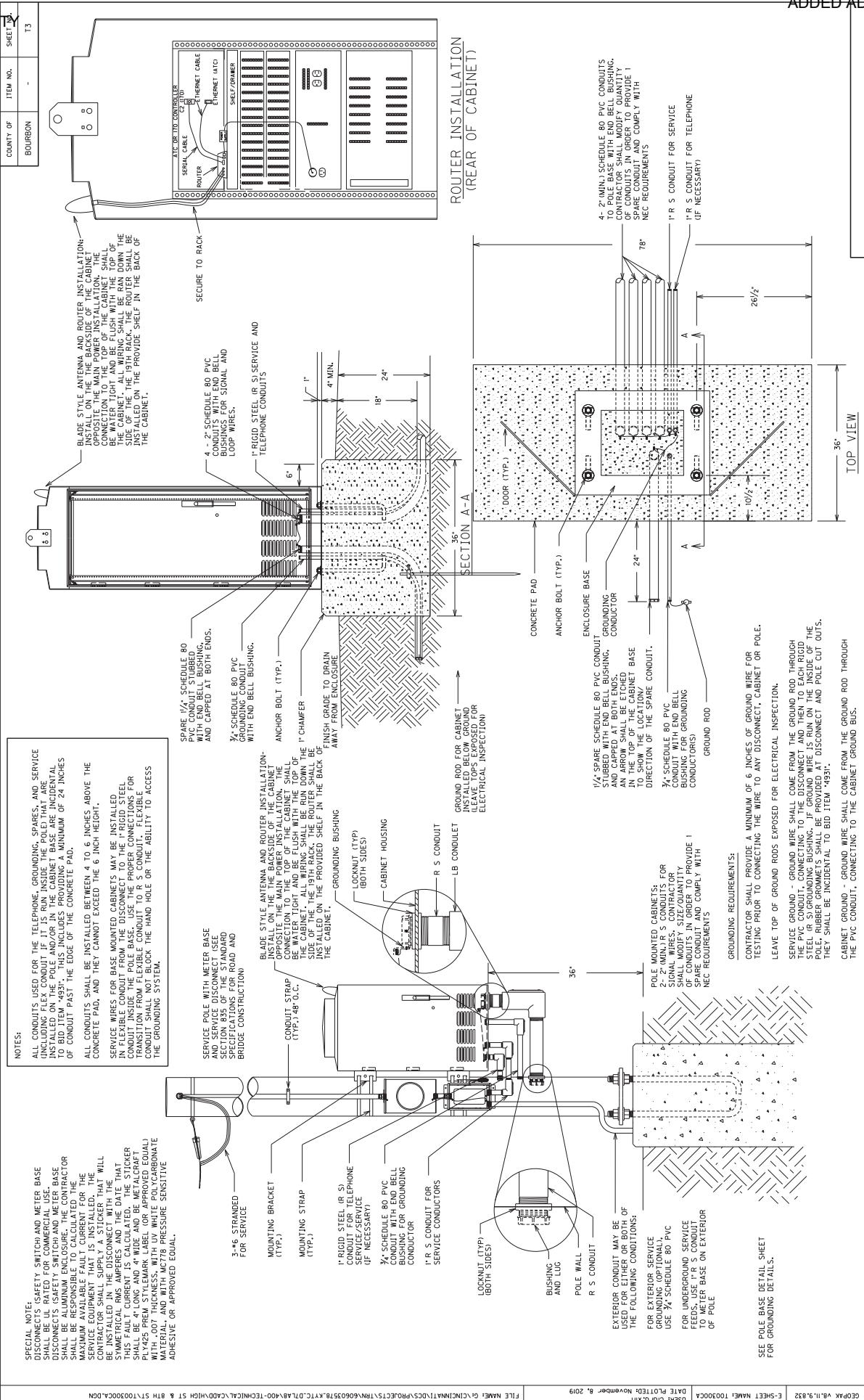
Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
COUNTY OF
BOURBON

ITEM NO.	_____
PROJECT NUMBER	_____
LETTING DATE	_____
RECOMMENDED BY	PROJECT MANAGER
DATE	_____
PLAN APPROVED BY	STATE PROJECT ENGINEER
DATE	_____

LENGTH	FOR EQUALITIES	FOR EQUALITIES	FOR EQUALITIES	LENGTH	FOR EQUALITIES	FOR EQUALITIES	FOR EQUALITIES
(BRIDGES)	(BRIDGES)	(BRIDGES)	(BRIDGES)	(BRIDGES)	(BRIDGES)	(BRIDGES)	(BRIDGES)
UN. FT.	UN. FT.	UN. FT.	UN. FT.	UN. FT.	UN. FT.	UN. FT.	UN. FT.
RAILROAD CROSSINGS NO.	RAILROAD CROSSINGS NO.	RAILROAD CROSSINGS NO.	RAILROAD CROSSINGS NO.	RAILROAD CROSSINGS NO.	RAILROAD CROSSINGS NO.	RAILROAD CROSSINGS NO.	RAILROAD CROSSINGS NO.
BRIDGES	BRIDGES	BRIDGES	BRIDGES	BRIDGES	BRIDGES	BRIDGES	BRIDGES
MILES	MILES	MILES	MILES	MILES	MILES	MILES	MILES
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

COUNTY OF	BOURBON
ITEM NO.	-
SHEET	13

POWER	GEPAK v8.11.9.832	E-SHEET NAME: 100300CA	USER: gcr4.m	DATE PLOTTED: November 8, 2019	FILE NAME: G:\CNC\MT1\003\PROJECTS\TRN\6690578_A.YTC.DTL\48V-00-TECHNICAL\CADD\WHS1 & 8TH ST\17100300CA.DWG
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NOTES:

ALL CONDUITS USED FOR THE TELEPHONE, GROUNDING, SPARES, AND SERVICE SHALL BE UL RATED FOR COMMERCIAL USE. ALL CONDUITS SHALL BE INSTALLED ON THE POLE AND/OR IN THE CABINET BASE ARE INCIDENTAL TO BID ITEM '4931'. THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CONCRETE PAD.

ALL CONDUITS SHALL BE INSTALLED BETWEEN 4 TO 6 INCHES ABOVE THE CONCRETE PAD, AND THEY CANNOT EXCEED THE 6 INCH HEIGHT.

SERVICE WIRES FOR BASE MOUNTED CABINETS MAY BE INSTALLED IN FLEXIBLE CONDUIT FROM THE DISCONNECT TO THE RIGID STEEL TRANSITION FROM FLEXIBLE CONDUIT TO R/S CONDUIT. FLEXIBLE CONDUIT SHALL BE INSTALLED TO THE HOLE ON THE BACK OF THE GROUNDING SYSTEM.

SERVICE POLE WITH METER BASE AND SERVICE DISCONNECT (SEE SECTION 835 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION)

BLADE STYLE ANTENNA AND ROUTER INSTALLATION- INSTALL ON THE BACKSIDE OF THE CABINET OPPOSITE THE MAIN POWER INSTALLATION. THE CONNECTION TO THE TOP OF THE CABINET SHALL BE WATER TIGHT AND BE FLUSH WITH THE TOP OF THE CABINET. ALL WIRING SHALL BE RUN DOWN THE SIDE OF THE 19TH RACK. THE ROUTER SHALL BE MOUNTED ON THE PROVIDED SHELF IN THE BACK OF THE CABINET.

GROUNDING BUSHING (LOCKOUT (TYP.) (BOTH SIDES))

CABINET HOUSING

LB CONDULET

R/S CONDUIT

LOCKOUT (TYP.) (BOTH SIDES)

3-#6 STRANDED WIRE FOR SERVICE

MOUNTING BRACKET (TYP.)

MOUNTING STRAP (TYP.)

1" RIGID STEEL (R/S) CONDUIT FOR TELEPHONE SERVICE (IF NECESSARY)

3/4" SCHEDULE 80 PVC CONDUIT WITH END BELL BUSHING FOR GROUNDING

1" R/S CONDUIT FOR SERVICE CONDUITS

LOCKOUT (TYP.) (BOTH SIDES)

BUSHING AND LUG

POLE WALL

R/S CONDUIT

EXTERIOR CONDUIT MAY BE OF THE FOLLOWING CONDITIONS: FOR EXTERIOR SERVICE USE 3/4" SCHEDULE 80 PVC CONDUIT. FOR UNDERGROUND SERVICE TO METER BASE ON EXTERIOR OF POLE.

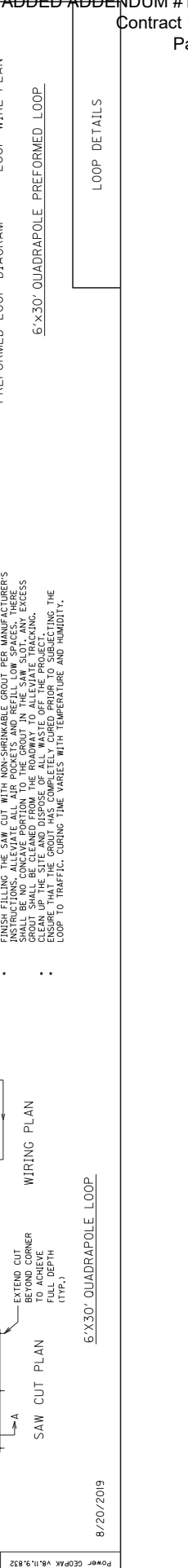
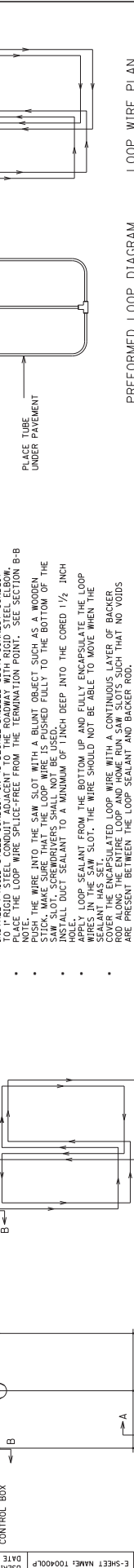
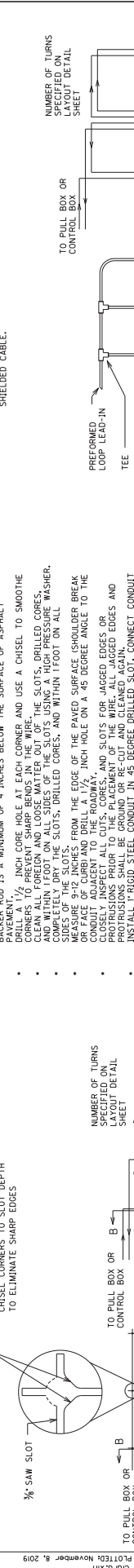
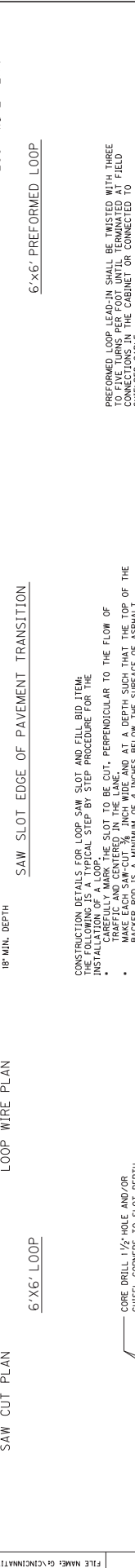
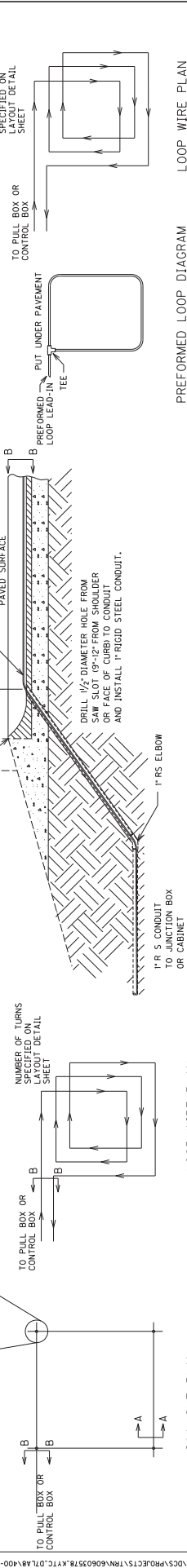
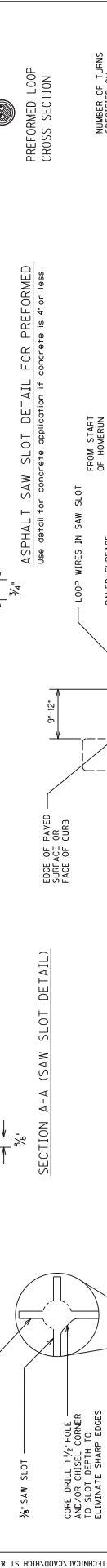
SEE POLE BASE DETAIL SHEET FOR GROUNDING DETAILS.

6/2/2019

STEEL POLE MOUNT ENCLOSURE

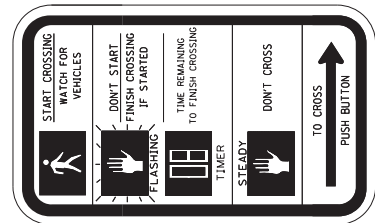
ITEM NO.	-
SHEET	14

COUNTY OF	BOURBON
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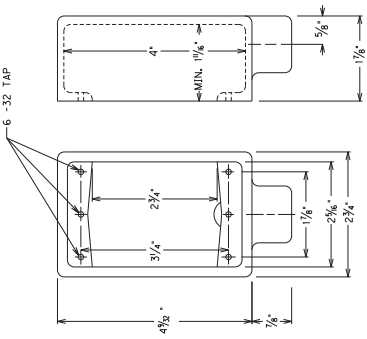


FILE NAME:	G:\CINCINNATI\DCS\PROJECTS\TRN\60603578.XR\TE.DTL
DATE PLOTTED:	November 8, 2019
E-SHEET NAME:	1004001P
E-SHEET NAME:	9.1.832
DATE PLOTTED:	November 8, 2019

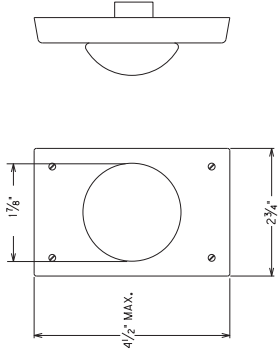
COUNTY OF	BOURBON
ITEM NO.	-
SHEET NO.	15



RIO-3e SIGN (9' X 15')
 FOR COUNTDOWN ONLY

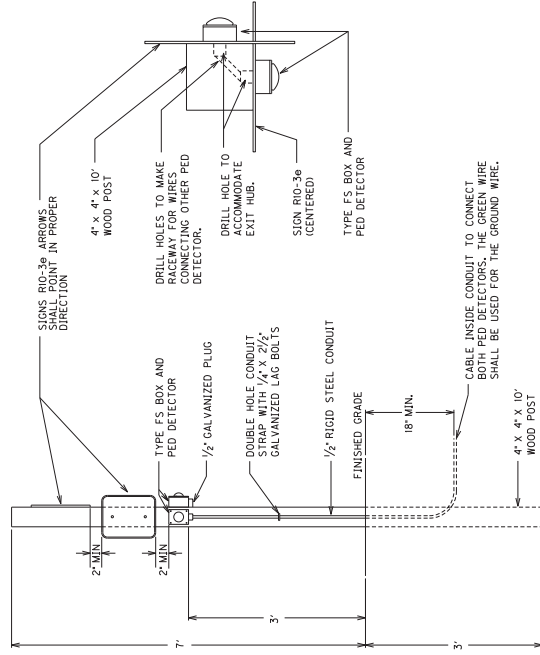


TYPE FS BOX FOR PED DETECTOR FOR USE WITH STEEL STRAIN POLE, WOOD POST, PEDESTAL, AND WOOD POLE

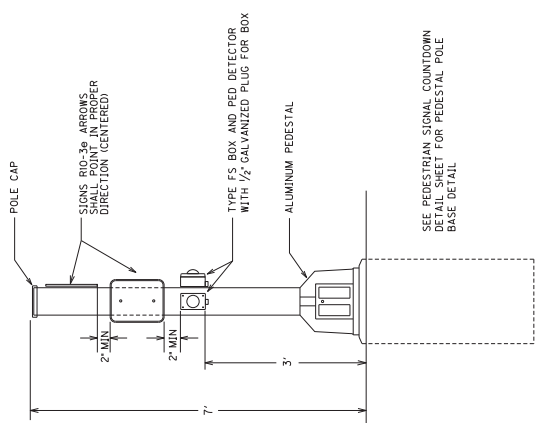


PED DETECTOR

1/2" X 1/2" PIN HEAD OR ROUND HEAD WOOD SCREWS SHALL BE USED TO SECURE THE SIGN TO THE WOOD POST. MINIMUM OF 2 SCREWS FOR EACH BOX. SCREWS SHALL BE INSTALLED DIAGONALLY.



PED DETECTOR ON WOOD POST DETAIL

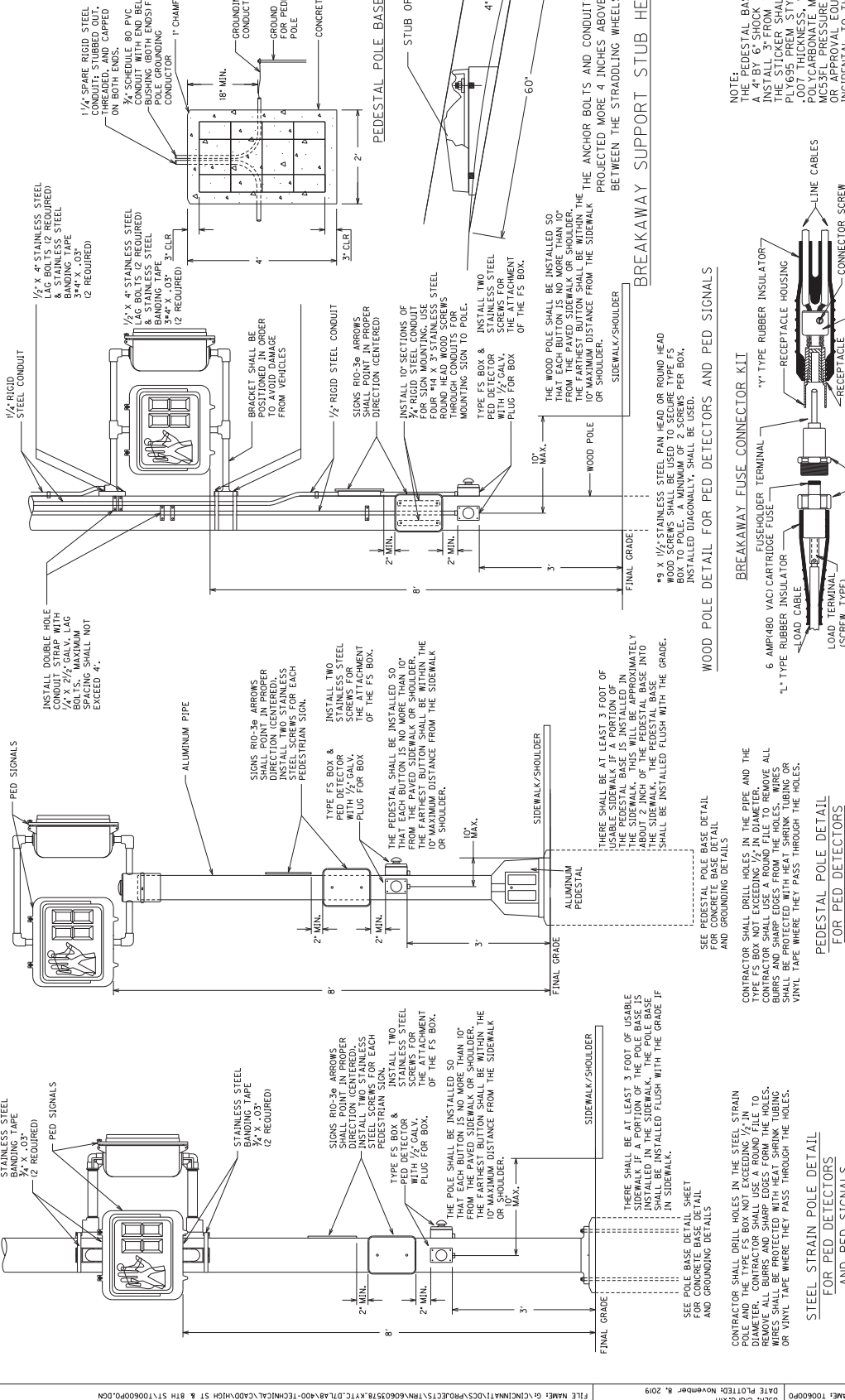


PEDESTAL POST DETAIL FOR PED DETECTORS & SIGNS

6/22/2012

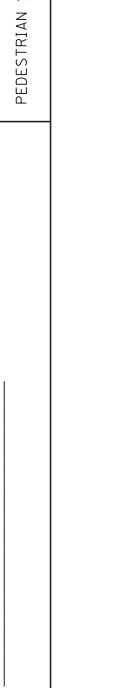
PEDESTRIAN DETECTOR DETAIL

COUNTY OF	BOURBON
ITEM NO.	-
SHEET NO.	16



FILE NAME	G:\CINCINNATI\DCS\PROJETS\717M\606095\8.KAT.DTL
DATE PLOTTED	November 8, 2019
USER	grr.q.xm
DESIGNER	grr.q.xm
E-SHEET NAME	1006090
GEOK	8/19/2018

NOTE:	ALL GROUNDING AND SPARE CONDUITS THAT ARE INSTALLED IN THE CONCRETE PEDESTAL POLE BASE ARE INCIDENTAL TO BID ITEM 23222EC. THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CONCRETE BASE. AN ARROW SHALL BE ETCHED INTO THE TOP OF THE PEDESTAL BASE TO SHOW LOCATION AND DIRECTION OF THE SPARE CONDUIT.
CONTRACTOR SHALL DRILL HOLES IN THE STEEL STRAIN DIAMETER. CONTRACTOR SHALL USE A ROUND FILE TO REMOVE ALL BURRS AND SHARP EDGES FROM THE HOLES. WIRES SHALL BE PROTECTED WITH HEAT SHRINK TUBING OR VINYL TAPE WHERE THEY PASS THROUGH THE HOLES.	
CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO THE TRANSFORMER BASE.	
LEAVE TOP OF GROUND RODS EXPOSED FOR ELECTRICAL INSPECTION. PEDESTAL POLE GROUND - GROUND WIRE SHALL COME FROM THE TRANSFORMER BASE TO THE PEDESTAL POLE AND BE CONNECTED TO THE STEEL GROUND LUG ON THE TRANSFORMER BASE AND THEN TO EACH RIGID STEEL GROUNDING BUSHING.	
ALL GROUND RODS SHALL BE 24" FROM THE CONCRETE POLE BASE.	



BREAKAWAY FUSE CONNECTOR KIT

6 AMP/60 VACI CARTRIDGE FUSE
L-TYPE RUBBER INSULATOR
FUSE HOLDER
FUSE HOLES
RECEPTACLE HOUSING
LINE CABLE
RECEPTACLE TERMINAL
LINE CONNECTOR SCREW
LINE SIDE ASSEMBLY

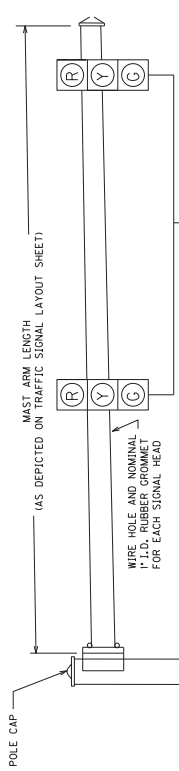
DETAILS OF TYPE HEB-JW-RYC CONNECTOR

BREAKAWAY POINT
LOAD SIDE ASSEMBLY

TYPE HEB-JW-RYC CONNECTOR SHOWN
BREAKAWAY POINT
LOAD SIDE ASSEMBLY

4/10/2018

COUNTY OF	BOURBON
ITEM NO.	-
SHEET NO.	17



17' - 19' & CONFORM TO LATEST EDITION

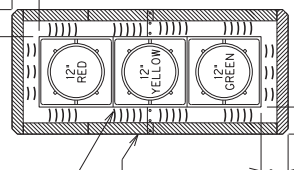
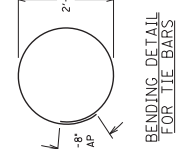
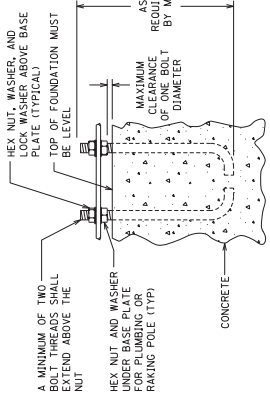
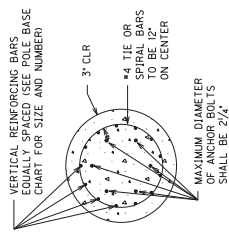
NOTE: STEEL STRAIN DOOR SHALL HAVE A 4" BY 6" SHOCK HAZARD WARNING STICKER INSTALLED 3" FROM THE TOP OF THE DOOR. PLUS 695 PREM STYLE MARK LABEL WITH .007" THICKNESS, WITH UV WHITE INK. ALL PRESSURE SENSITIVE ADHESIVE OR APPROVAL EQUAL TO THIS SHALL BE INCIDENTAL TO THE PROJECT.

CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE CABINET OR POLE.
 LEAVE TOP OF GROUND RODS EXPOSED FOR ELECTRICAL INSPECTION.
 POLE GROUND WIRE SHALL COME FROM THE CONCRETE BASE AND BE CONNECTED TO THE POLE AND THEN TO EACH RIGID STEEL GROUNDING BUSHING.

SEE MAST ARM POLE BASE DETAIL FOR MATERIALS AND INSTALLATION REQUIREMENTS

MONOTUBE MAST ARM POLE DETAIL

NOTES:
 ALL CONDUITS USED FOR THE TELEPHONE, GROUNDING, SPARE, AND SERVICE THAT ARE INSTALLED IN THE POLE BASE ARE INCIDENTAL TO BID ITEM '23157EN'. THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CONCRETE POLE BASE.
 ALL CONDUITS SHALL BE INSTALLED 6 INCHES ABOVE THE CONCRETE POLE BASE.
 FOR POLE BASE DEPTH SEE CHART IN SECTION 223 OF THE KENTUCKY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.
 OVERHEAD SERVICE WIRES SHALL BE INSTALLED ON THE EXTERIOR OF THE POLE IN A 3/4" RIGID STEEL CONDUIT WITH WEATHERHEAD, OR ON THE INSIDE THE STEEL STRAIN POLE IN FLEXIBLE CONDUIT.
 UNDERGROUND SERVICE WIRES SHALL BE INSTALLED IN 3/4" RIGID STEEL CONDUIT AS SHOWN ON THE CONTROLLER CABINET DETAIL SHEET.



BENDING DETAIL FOR TIE BARS

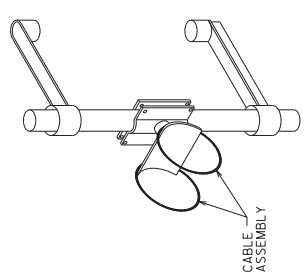
BACKPLATE DETAIL

A MINIMUM OF TWO HEX NUTS AND WASHERS SHALL EXTEND ABOVE THE NUT.
 HEX NUT AND WASHER UNDER BASE PLATE FOR PLUMBING OR RAKING POLE (TYP). MAXIMUM CLEARANCE BY MFR REQUIRED BY MFR.
 CONCRETE
 OUTSIDE OF FOUNDATION
 ANCHOR BOLTS, QUANTITY AS BY POLE MANUFACTURER (MIN. OF 6)
 CURB SIDE

HEX NUT, WASHER, AND LOCK WASHER ABOVE BASE PLATE (TYPICAL). TOP OF FOUNDATION MUST BE LEVEL.
 MAXIMUM CLEARANCE BY MFR REQUIRED BY MFR.
 CONCRETE
 OUTSIDE OF FOUNDATION
 ANCHOR BOLTS, QUANTITY AS BY POLE MANUFACTURER (MIN. OF 6)
 CURB SIDE

1'-8" LAP
 2'-6"

LOUVERS (TYP.)
 2" REFLECTIVE TAPE (IF SPECIFIED)

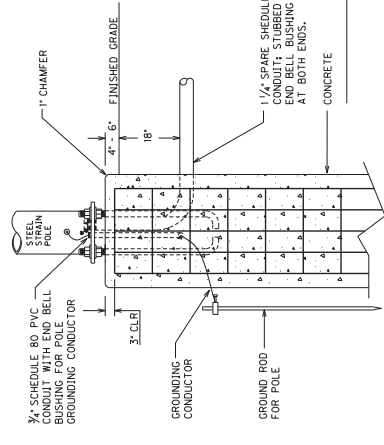


SIGNAL HEADS ON MAST ARMS

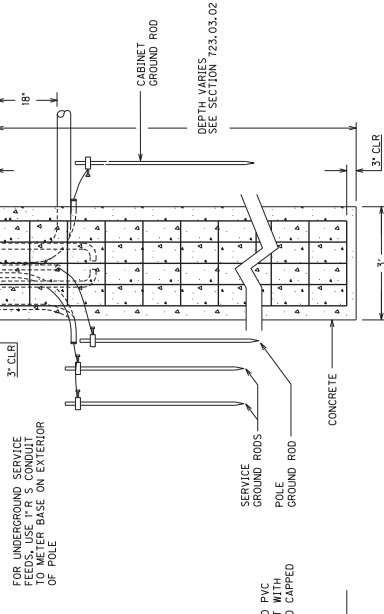
1/4" SPARE SCHEDULE 80 PVC CONDUIT SHALL BE INSTALLED WITH END BELL BUSHING AND CAPPED AT BOTH ENDS. AN ARROW SHALL BE ETCHED ON THE TOP OF THE BASE ON THE SIDE OF THE SPARE CONDUIT.
 1" CHAMFER

3/4" SCHEDULE 80 PVC CONDUIT FOR SERVICE GROUND REQUIRED AT SERVICE LOCATION ONLY.

EXTERIOR CONDUIT MAY BE USED FOR EITHER OR BOTH OF THE FOLLOWING CONDITIONS:
 FOR EXTERIOR SERVICE GROUNDING (OPTIONAL), USE 3/4" SCHEDULE 80 PVC FOR UNDERGROUND SERVICE FEEDS. USE 1" RIGID STEEL CONDUIT TO ENTER BASE ON EXTERIOR OF POLE.



MAST ARM POLE BASE WITH POLE GROUND DETAIL

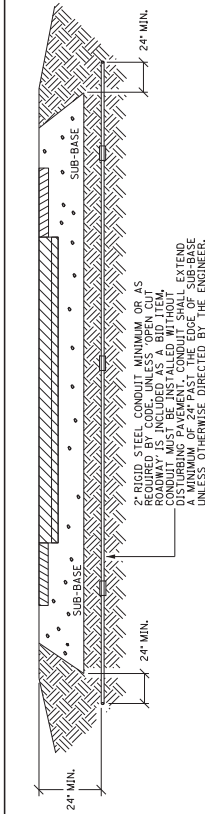
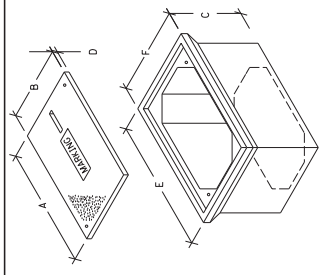


MAST ARM POLE BASE WITH SERVICE, POLE, AND POLE MOUNTED CABINET GROUNDING DETAILS

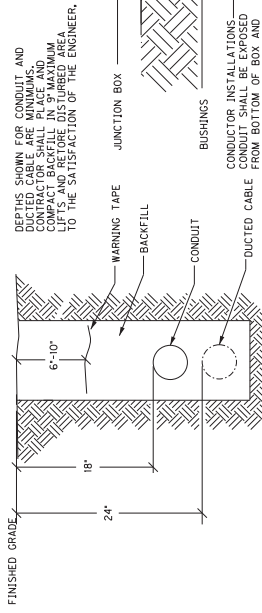
SHEET NO.	18
COUNTY OF	BOURBON
ITEM NO.	-

JUNCTION BOX DIMENSIONS (NOMINAL)						
	A	B	C	D	E	F
TYPE A	23"	14"	27"	2"	25"	15"
TYPE B	18"	11"	12"	1 1/4"	20"	13"
TYPE C	36"	24"	30"	3"	38"	26"

* MINIMUM
NOTE: STACKABLE BOXES ARE PERMITTED
JUNCTION BOX

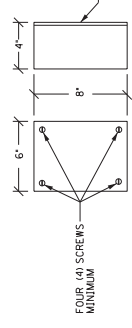


CONDUIT INSTALLATION UNDER EXISTING PAVEMENT DETAIL

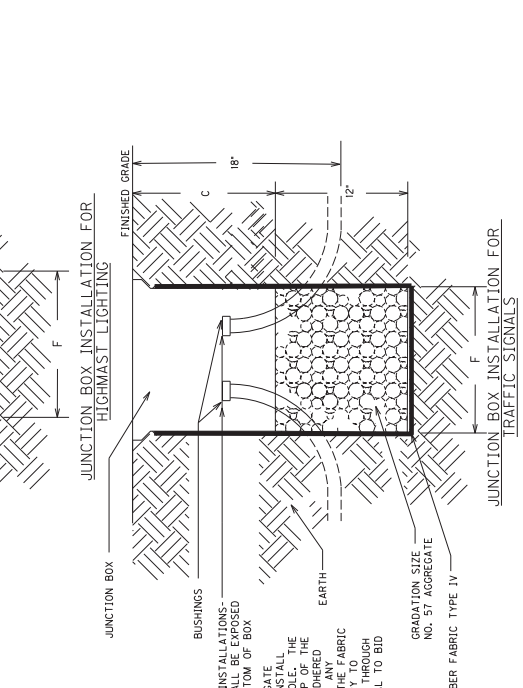
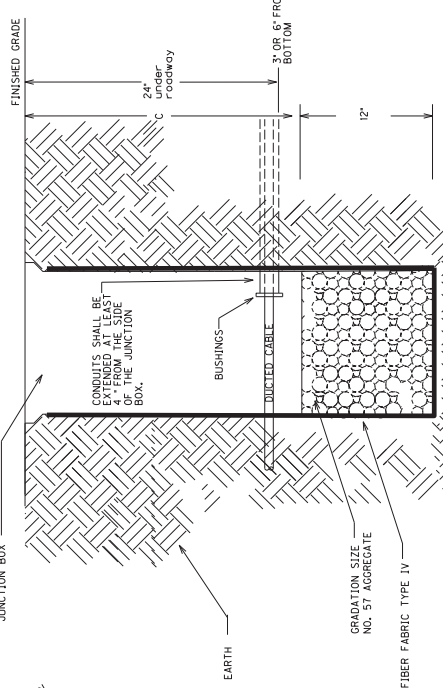
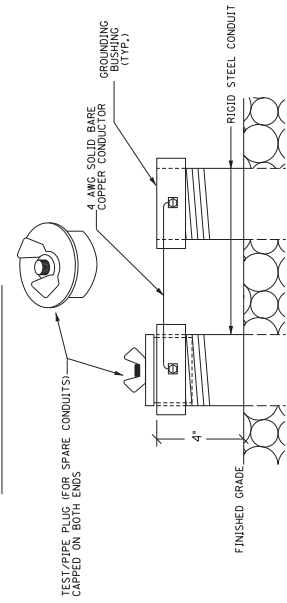


CONDUIT, DUCTED CABLE, AND WARNING TAPE TRENCH

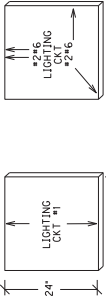
ABOVE GROUND BOX SHALL BE FABRICATED FROM GALVANIZED STEEL. FABRICATION AND FINISHING SHALL BE IN ACCORDANCE WITH THE BOXES SHALL HAVE NO KNOCKOUTS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE BOX SHALL BE COVERED WITH A WEATHER RESISTANT GASKET AND A MINIMUM 1/2" THICK DEBRIS COVER. THE DEBRIS COVER SHALL BE PROVIDED WITH CABLE CLAMPS SHALL BE PROVIDED TO SECURE CABLES ENTERING AND EXITING THE BOX.



ABOVE GROUND BOX



BEFORE THE INSTALLATION OF THE 57 AGGREGATE CONDUIT, THE CONDUIT SHALL BE COVERED WITH A GEOTEXTILE FILTER FABRIC TYPE IV IN THE HOLE. THE FABRIC SHALL EXTEND TO JUST BELOW THE LIP OF THE JUNCTION BOX AND SHALL BE CONTINUOUSLY ADHERED TO THE SURFACE OF THE HOLE. AT ALL LOCATIONS WHERE CONDUITS ENTER THE BOX, THE FABRIC SHALL BE CUT ONLY AS MUCH AS NECESSARY TO ALLOW PASSAGE OF EACH INDIVIDUAL CONDUIT THROUGH THE BOX. THE FABRIC SHALL BE INCIDENTAL TO BID ITEMS: 401, 2033NS035A, OR 2033SR035A.



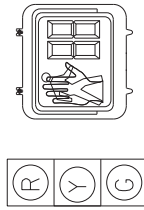
TEST/PIPE PLUG (FOR SPARE CONDUITS) AND GROUNDING DETAIL CONCRETE CABLE MARKERS

3/13/2017

TRAFFIC SIGNAL AND ROADWAY LIGHTING JUNCTION BOX AND CONDUIT DETAILS

COUNTY OF	BOURBON
ITEM NO.	-
SHEET NO.	19

SIGNAL HEADS



ALL COUNTRY
PEDESTRIAN SIGNALS

HEAD 4"
6A, 6B
6E, 8A, 8B

ALL INSTALLATIONS, E.G.,
ALL SIGNAL HEADS SHALL
HAVE BACKPLATES WITH
REFLECTIVE TAPE



INSTALL PEDESTRIAN PEDESTAL D AT STA. 190+47, 24'
INSTALL ONE PED HEAD AND ONE PED DETECTOR ON
PEDESTAL D

INSTALL PEDESTRIAN PEDESTAL E AT STA. 190+56, 40'
INSTALL ONE PED HEAD AND ONE PED DETECTOR ON
PEDESTAL E
SPlice LOOP WIRES TO ONE 1-PAIR LOOP LEAD-INS
INSIDE PEDESTAL E

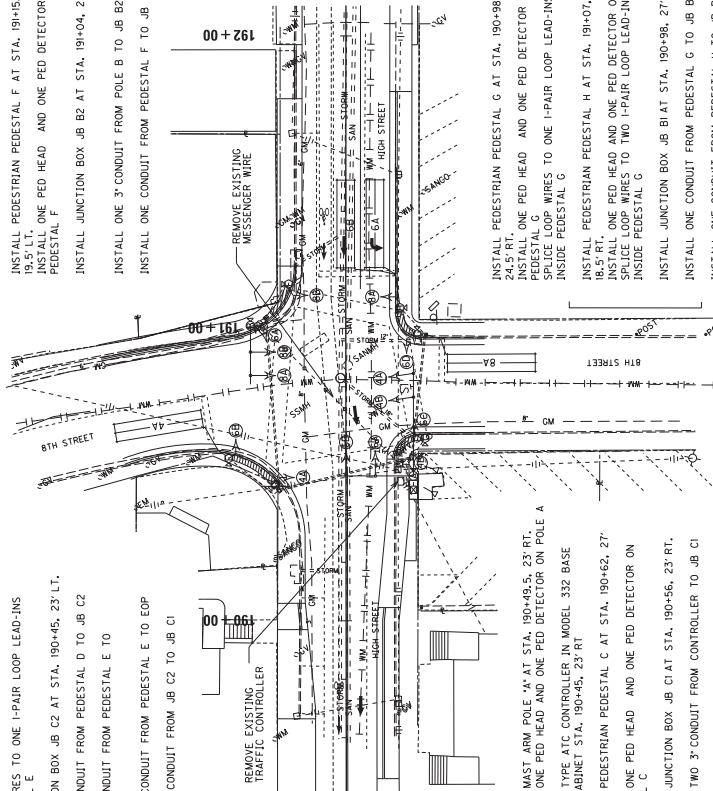
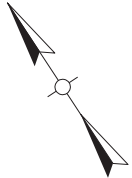
INSTALL JUNCTION BOX JB C2 AT STA. 190+45, 23' LT.
INSTALL ONE CONDUIT FROM PEDESTAL D TO JB C2
INSTALL ONE CONDUIT FROM PEDESTAL E TO
JB B1
INSTALL ONE 1" CONDUIT FROM PEDESTAL E TO EOP
INSTALL TWO 3" CONDUIT FROM JB C2 TO JB C1

NOTE: ALL POLES AND PEDESTALS SHALL BE INSTALLED SO
THAT THE PED DETECTOR BUTTONS ARE NO MORE THAN 10"
HORIZONTAL FROM PAVED SURFACE.

INSTALL MAST ARM POLE 'B' AT STA. 191+01, 32.5' LT.
INSTALL ONE PED HEAD AND ONE PED DETECTOR ON POLE B

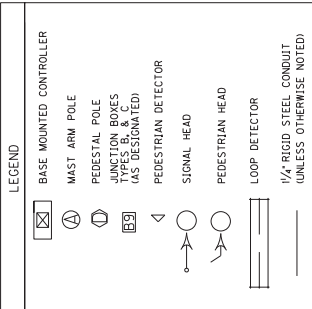
INSTALL PEDESTRIAN PEDESTAL F AT STA. 191+15,
55' LT.
INSTALL ONE PED HEAD AND ONE PED DETECTOR ON
PEDESTAL F
INSTALL JUNCTION BOX JB B2 AT STA. 191+04, 27' LT.
INSTALL ONE 3" CONDUIT FROM POLE B TO JB B2
INSTALL ONE CONDUIT FROM PEDESTAL F TO JB B2

NOTE: THE CONTRACTOR MAY USE OPEN CUT OR BORE AND JACK
TO INSTALL CONDUIT IF OPEN CUT IS USED FOR THE RESIDENT
ENGINEER FOR APPROVAL.



WIRING SCHEDULE

CABLE	ORIGIN	ENDING	CONNECTING
1 - #14/5C	CONTROLLER	SH 4A	SH 4A & 4B
1 - #14/5C	CONTROLLER	SH 6A	SH 6A & 6B
1 - #14/5C	CONTROLLER	SH 8A	SH 8A & 8B
1 - #14/5C	CONTROLLER	POLE A	PB 4B & PH 4B
1 - #14/5C	CONTROLLER	POLE B	PB 6A & PH 6A
1 - #14/5C	CONTROLLER	PEDESTAL C	PB 6C & PH 6C
1 - #14/5C	CONTROLLER	PEDESTAL D	PB 4A & PH 4A
1 - #14/5C	CONTROLLER	PEDESTAL E	PB 6B & PH 6B
1 - #14/5C	CONTROLLER	PEDESTAL F	PB 8B & PH 8B
1 - #14/5C	CONTROLLER	PEDESTAL G	PB 6C & PH 6C
1 - #14/5C	CONTROLLER	PEDESTAL H	PB 8A & PH 8A
2 - #14/1 PAIR	CONTROLLER	PEDESTAL E	LOOP 4A
2 - #14/1 PAIR	CONTROLLER	PEDESTAL H	LOOP 6A & 6B
1 - #14/1 PAIR	CONTROLLER	JCTN BOX B3	LOOP BA



FILE NAME: G:\CINCINNATI\11-13-19\PROJECTS\STP7054\11-13-19-TECHNICAL\CD00\HIGH ST & 8TH\1710909506.DGN

USER: CIRG-KM DATE PLOTTED: November 8, 2019 E-SHEET NAME: PAPER: GEOPAK v8.11.9.832

MAST ARM ATTACHMENT CHART

POLE	ARM	SIGN	SIZE	WEIGHT
A	1	6A	3-SECTION SIGNAL HEAD 24X39X16"	50 LBS
A	1	6B	3-SECTION SIGNAL HEAD 24X39X16"	50 LBS
A	2	4A	3-SECTION SIGNAL HEAD 24X39X16"	50 LBS
A	2	4B	3-SECTION SIGNAL HEAD 24X39X16"	50 LBS
A	2	S1	SIGN 30X36"	16 LBS
B	1	8A	3-SECTION SIGNAL HEAD 24X39X16"	50 LBS
B	1	8B	3-SECTION SIGNAL HEAD 24X39X16"	50 LBS

LOOP SCHEDULE

LOOP	PHASE	SLOT	CHANNEL	SIZE	TURNS	# OF TURNS	DIST. FROM STOP BAR
4A	4	1-6	1	6' X 30"	2	0'	0'
6A	6	J-2	1	6' X 30"	2	0'	0'
6B	6	J-2	2	6' X 30"	2	0'	0'
8A	8	J-6	1	6' X 30"	2	0'	0'

INSTALL ALL POLE BASES, PEDESTAL BASES, AND THE CABINET
BASES TO THE STANDARD SPECIFICATIONS WITH SECTION 723.03.02 OF
THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE
CONSTRUCTION, CURRENT EDITION.

MAST ARM POLES

POLE	HEIGHT	ARM	ALT. HT.	CALC. SERV. MOMENT
A	24.0'	1	19.0'	54.92 K-FT
B	22.0'	1	20.0'	16.59 K-FT



SIGNAL PLAN
HIGH STREET AND 8TH STREET

**RECOMMENDATION FOR PICKUP OF ITEMS TO BE INSTALLED
 ON TRAFFIC SIGNALS/LIGHTING**

Item Number: _____

County: Bourbon

Description: High St & 8th St

Cabinets	Master code	
1	T-01-0020	Base Mounted 332 Cabinet
1	T-01-0105	ATC Controller
1	T-01-0106	1C w/Maxtime (this should go with item ATC controller)
2	T-01-0510	Isolator, Model 242 (for ped detector and railroad)
3	T-01-0600	Loop Detector, Model 222
7	T-01-0700	Load Switches

Signals		
6	T-02-0009	Siemens 3 Section Signal
6	T-02-0032	Siemen 3 section backplate
8	T-02-0090	Pedestrian signal housing
6	T-02-0330	LED Module 12" red ball
6	T-02-0340	LED Module 12" yellow ball
6	T-02-0350	LED Module 12" green ball
8	T-02-0365	LED Countdown Pedestrian Module

Special items		
1	T-02-0504	Router (this includes power supply/antenna/cabling)
6	T-02-0650	Pedstl.top mntg.bkt One-way
6	T-02-0670	Pedestal
8	T-06-0710	Ped Detector Pole Mount FSA Box
8	T-06-0730	Ped Button w/o Plunger
8	T-17-0015	9 X 15 Countdown Ped Sign DBL Sided
6	T-02-0640	Mast arm mount signal bracket (3 section)
1	T-02-0643	Mast arm sign hangers 30"

Electrical Contractor Name _____
 Electrical Contractor Supervisor _____ Contact number for Supervisor _____
 Project Engineer _____ Contact number for Project Engineer _____
 Project Engineer attests that the mentioned contractor is the actual electrical contractor on this project
 Signature of Project Engineer or Designee _____