

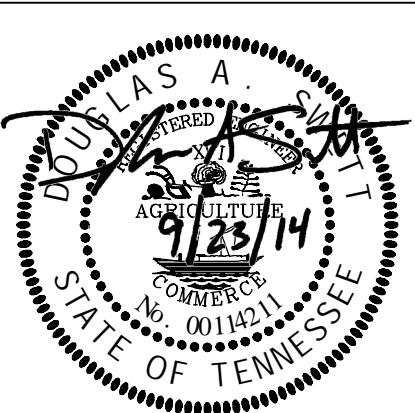
DRAWING NAME: K:\WEM\_TPTO\115087002 - Shelby County CMP 2\Design\Level 4 - Signal System\Bld Set 1\Plans\BldSet 1-04-Quantities.dwg      Layout1      Oct 22, 2014    10:53AM    BY: blaine.lynn

CONGESTION MANAGEMENT PROGRAM (SIGNAL SYSTEM SET #1)			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
105-01	CONSTRUCTION STAKES, LINES AND GRADES	L.S.	1
202-03	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.Y.	165
209-05	SEDIMENT REMOVAL	C.Y.	12
209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	200
209-09.43	CURB INLET PROTECTION (TYPE 4)	EACH	50
24	701-01.01 CONCRETE SIDEWALK (4 ")	S.F.	1160
3	712-01 TRAFFIC CONTROL	L.S.	1
4	714-25.09 ELECTRICAL CONNECTION (FOR MLGW COST ONLY)	EACH	2
	717-01 MOBILIZATION	L.S.	1
5	725-02.79 FIBER SPLICE ENCLOSURE (WEATHER PROOF)	EACH	10
6	725-03.09 ETHERNET SWITCH (TYPE A)	EACH	10
7	725-03.10 ETHERNET SWITCH (TYPE B)	EACH	1
8	725-10.45 VIDEO DETECTION REMOTE MANAGEMENT CARD	EACH	4
9	725-21.22 TERMINAL SERVER (SERIAL DEVICE SERVER)	EACH	1
10	725-21.88 BLUETOOTH DETECTION SYSTEM	EACH	3
11	725-21.91 RADAR DETECTION SYSTEM	EACH	2
	725-21.96 RDS COMM CABLE	EACH	2
12	725-24.01 CABINET (TYPE A)	EACH	2
13	725-24.51 SYSTEM INTEGRATION	LS	1
	730-03.21 INSTALL PULL BOX (TYPE B)	EACH	16
14	730-03.23 INSTALL PULL BOX (FIBER OPTIC-TYPE A)	EACH	27
	730-03.24 INSTALL PULL BOX (FIBER OPTIC-TYPE B)	EACH	18
	730-03.31 FIBER DISTRIBUTION BOX	EACH	5
15	730-05.01 ELECTRICAL SERVICE CONNECTION	EACH	2
16	730-08.40 INTERCONNECT CABLE - FIBER OPTIC (36-FIBER, SINGLE MODE)	L.F.	18865
	730-08.41 INTERCONNECT CABLE - FIBER OPTIC (DROP CABLE, 6-FIBER, SINGLE MODE)	L.F.	1240
	730-11.12 RISER ASSEMBLY (3" WITH WEATHERHEAD)	EACH	1
	730-12.02 CONDUIT 2" DIAMETER (PVC)	L.F.	505
	730-12.03 CONDUIT 3" DIAMETER (PVC)	L.F.	275
	730-12.13 CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	13615
	730-12.14 CONDUIT 3" DIAMETER (JACK AND BORE)	L.F.	685
	730-12.42 CURB MARKER (CURB MOUNTED CABLE MARKER)	EACH	142
17	730-13.02 VEHICLE DETECTOR (VIDEO)	EACH	4
18	730-13.03 VEHICLE DETECTOR (4-CHANNEL, RACK-MOUNT)	EACH	2
19	730-13.06 VEHICLE DETECTOR (OPTICALLY ACTIVATED PRIORITY CONTROL)	EACH	4
	730-14.01 SHIELDED DETECTOR CABLE	L.F.	1310
	730-14.02 SAW SLOT	L.F.	240
	730-14.03 LOOP WIRE	L.F.	720
20	730-15.11 MODIFY CABINET (POLE-MOUNT ENTRANCE)	EACH	1
	730-15.13 MODIFY CABINET (BASE-MOUNT ENTRANCE)	EACH	4
21	730-16.02 EIGHT PHASE ACTUATED CONTROLLER	EACH	3
22	730-23.30 PEDESTAL POLE (ALUMINUM, 20' LENGTH)	EACH	2
23	730-30.02 COMPUTER FOR SIGNAL SYSTEM (RACK MOUNTED)	LS	1
1	801-03 WATER (SEEDING & SODDING)	M.G.	2
	803-01 SODDING (NEW SOD)	S.Y.	350

FOOTNOTES

- 1
- TO BE USED AS DIRECTED BY THE ENGINEER.
- 2
- SEE SUBSECTION 209.07 OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
- 3
- TO INCLUDE ALL MATERIALS NECESSARY TO PROVIDE TRAFFIC CONTROL IN ACCORDANCE WITH TDOT STANDARD DRAWINGS.
- 4
- ALLOWANCE TO COVER THE COST ASSOCIATED WITH POWER CONNECTION FOR THE TRAFFIC SIGNAL OR RDS UNIT FROM THE TRANSFORMER TO THE DEMARCATION POINT.
- 5
- SEE THE LATEST "CITY OF MEMPHIS - STANDARD CONSTRUCTION SPECIFICATIONS" FOR TECHNICAL REQUIREMENTS.
- 6
- SEE CITY OF MEMPHIS STANDARD SPECIFICATIONS FOR "RUGGEDIZED ETHERNET CABINET SWITCH."
- 7
- SEE CITY OF MEMPHIS STANDARD SPECIFICATIONS FOR "RUGGEDIZED ETHERNET HUB SWITCH."
- 8
- TO BE INSTALLED AT INTERSECTIONS WHERE NO VIDEO DETECTION IS BEING INSTALLED. QUANTITY IS SEPARATE FROM ITEM NO. 730-13.02
- 9
- SEE CITY OF MEMPHIS STANDARD SPECIFICATIONS FOR "SERIAL DEVICE SERVER."
- 10
- THE INSTALLATION AT EACH LOCATION SHALL INCLUDE BLUETOOTH SENSOR, NEMA ENCLOSURE, CONDUIT AND RISER FROM CONTROLLER CABINET TO SIGNAL POLE, CELLULAR COMMUNICATION SYSTEM, POWER OVER ETHERNET SUBSYSTEM, ANTENNA, ETHERNET CABLE, AND ALL OTHER CABLING, CONNECTIONS AND HARWARE TO COMPLETE THE INSTALLATION OF A FULLY FUNCTIONAL BLUETOOTH DETECTION SYSTEM. THIS LUMP SUM ITEM ALSO INCLUDES THE BLUETOOTH SOFTWARE LICENSE FEE AND 24-MONTH BLUETOOTH CELLULAR SERVICE FEE FOR ALL INSTALLED UNITS. THE LUMP SUM PRICE INCLUDES ALL SOFTWARE AND HARDWARE INSTALLATION AND INTEGRATION WORK PROVIDE A FULLY FUNCTIONAL BLUETOOTH SYSTEM THAT ALLOWS THE CITY TO MONITOR AND RETRIEVE TRAVEL TIME AND SPEED DATA REMOTELY.
- 11
- SEE PROJECT SPECIAL PROVISIONS FOR RADAR DETECTION EQUIPMENT.
- 12
- SEE PROJECT SPECIAL PROVISIONS FOR UTILITY CABINETS. TYPE A CABINETS ARE FOR PRIMARY CABINETS. TYPE D CABINETS ARE FOR SECONDARY CABINETS.
- 13
- SEE PROJECT SPECIAL PROVISIONS FOR SYSTEM INTEGRATION.
- 14
- COST INCLUDES ALL LABOR AND MATERIALS (REPAIR LANDSCAPING, REMOVING EXISTING PULL BOX, AND OTHER MISCELLANEOUS MATERIALS) TO COMPLETE PULL BOX INSTALLATION.
- 15
- CONTRACTOR RESPONSIBLE FOR ALL COST ASSOCIATED WITH POWER CONNECTION FOR TRAFFIC SIGNAL OR RDS UNIT FROM THE DEMARCATION POINT TO THE CABINET.
- 16
- CONTRACTOR SHALL INSTALL A TRACER WIRE WITH THE FIBER OPTIC CABLE FOR ALL CONDUIT ROUTING. TRACER WIRE SHALL BE 10 AWG STRANDED COPPER CONDUCTOR CABLE WITH BOTH THWN AND THWN RATINGS AND YELLOW IN COLOR.
- 17
- TO BE ITERIS VANTAGE SYSTEM OR APPROVED EQUIVALENT. INCLUDES DETECTION CAMERAS, PROCESSOR UNIT, CARD RACK, VIDEO REMOTE MANAGEMENT CARD, POWER SUPPLY UNIT, SERIES SURGE PROTECTION EQUIPMENT, 10" LCD COLOR MONITOR, MOUSE AND ALL OTHER CABLING, CONNECTIONS AND HARDWARE TO COMPLETE THE INSTALLATION OF A FULLY FUNCTIONAL VIDEO DETECTION SYSTEM.
- 18
- INSTALL ONE (1) DETECTOR CARD PER INTERSECTION APPROACH WHERE ADVANCE DETECTION LOOPS ARE TO BE REPAIRED OR REPLACED. SEE INTERSECTION LAYOUT SHEETS.
- 19
- TO BE GTT OPTICOM SYSTEM OR APPROVED EQUIVALENT. INCLUDES OPTICAL DETECTORS, CONFIRMATION LAMPS (PAR 90), POLE-MOUNTED BEACONS, FOUR-CHANNEL PHASE SELECTOR, CARD RACK (OPTICOM 760) AND ALL OTHER CABLING, CONNECTIONS AND HARDWARE TO COMPLETE THE INSTALLATION OF A FULLY-FUNCTIONAL PREEMPTION SYSTEM, INCLUDING FIELD FINE-TUNING.
- 20
- SEE INTERSECTION LAYOUT SHEET FOR CABINET MODIFICATION DETAILS.
- 21
- THE TRAFFIC SIGNAL CONTROLLER SHALL BE AN EAGLE EPAC M52 KEYBOARD UNIT OR APPROVED EQUIVALENT WITH NTCIP COMPLIANT SOFTWARE AND SEPAC, BUILT-IN ETHERNET PORT, AND BUILT-IN STRETCH AND DELAY FEATURES FOR EACH PHASE. THE TRAFFIC CONTROLLER INSTALLATION ALONG WITH ALL AUXILIARY EQUIPMENT TO BE INSTALLED IN THE CABINET SHALL BE MANUFACTURED, SUPPLIED AND INSTALLED IN ACCORDANCE WITH THE LATEST CITY OF MEMPHIS TRAFFIC SIGNAL CONTROLLER AND CABINET SPECIFICATIONS. THE INSTALLATION SHALL HAVE A 12-CHANNEL MALFUNCTION MONITOR UNIT INSTALLED AS MODEL EDI SSM12LE-P. EACH NEW CONTROLLER CABINET SHALL INCLUDE 4 VEHICLE DETECTOR CARDS (4-CHANNEL) SEPARATE FROM THE QUANTITIES OF ITEM NUMBER 730-13.03.
- 22
- INCLUDES CONCRETE FOUNDATION OR SCREW DOWN ANCHOR FOUNDATION AS APPROVED BY THE ENGINEER.
- 23
- SEE PROJECT SPECIAL PROVISIONS FOR SPECIFICATIONS.
- 24
- TO BE USED FOR THE INSTALLATION OF PULL BOXES.

REVISIONS		
DATE	DESCRIPTIONS	APPROVED
10/2014	ADDED ITEMS AND FOOTNOTES	



Kimley»Horn

DIVISION OF PUBLIC WORKS  
CONGESTION MANEGEMENT PROGRAM  
SIGNAL SYSTEM PROJECT SET #1  
SHELBY COUNTY, TN.

QUANTITIES

SURVEY: N/A      DATE: N/A      BOOK: N/A  
DRAFTED: KHA      DATE: 08/12      SCALE: N.T.S.  
DESIGNED: KHA      DATE: 08/12      CHECKED: DAS      DATE: 09/14