

DRAWING NAME: K:\WEM_TPTD\115087002 - Shelby County C&P 2\Design\Level 4 - Signal System\Bld Set 3\Plans\BldSet 3-04-Quantities.dwg Layout1 Nov 10, 2014 2:46PM BY: bliamel.lynch

ESTIMATED ROADWAY QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
106-01	CONSTRUCTION STAKES, LINES AND GRADES	L.S.	1
202-03	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.Y.	330
208-05	SEDIMENT REMOVAL	C.Y.	15
209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	300
209-09.43	CURB INLET PROTECTION (TYPE 4)	EACH	100
701-01.01	CONCRETE SIDEWALK (4 ")	S.F.	2360
701-01.02	CONCRETE SIDEWALK (6 ")	S.F.	1470
701-02.03	CONCRETE CURB RAMP	S.F.	660
712-01	TRAFFIC CONTROL	L.S.	1
713-13.03	FLAT SHEET ALUMINUM SIGNS (0.100" THICK)	S.F.	18
713-15.07	SUSPENDED FLAT SHEET ALUMINUM SIGN (0.080" THICK)	EACH	3
713-15.40	SIGN INSTALLATION (MAST ARM MOUNTED STREET NAME SIGN)	L.S.	1
714-25.09	ELECTRICAL CONNECTION (FOR MLGW COST ONLY)	EACH	4
716-02.01	PLASTIC PAVEMENT MARKING (LINE)	L.M.	1.1
716-02.03	PLASTIC PAVEMENT MARKING (CROSS-WALK)	L.F.	730
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	330
716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	7
716-03.02	PLASTIC WORD PAVEMENT MARKING (RXR)	EACH	4
716-04.01	PLASTIC PAVEMENT MARKING (STRAIGHT-TURN ARROW)	EACH	1
716-04.06	PLASTIC PAVEMENT MARKING (STRAIGHT ARROW)	EACH	1
717-01	MOBILIZATION	L.S.	1
725-02.79	FIBER SPLICE ENCLOSURE(WEATHER PROOF)	EACH	20
725-03.09	ETHERNET SWITCH (TYPE A)	EACH	18
725-03.10	ETHERNET SWITCH (TYPE B)	EACH	1
725-03.28	RAILROAD FLAGMAN	DAY	20
725-21.22	TERMINAL SERVER (SERIAL DEVICE SERVER)	EACH	9
725-21.91	RADAR DETECTION SYSTEM	EACH	5
725-21.96	RDS COMM CABLE	EACH	5
725-24.01	CABINET (TYPE A)	EACH	4
725-24.04	CABINET (TYPE D)	EACH	1
725-24.51	SYSTEM INTEGRATION	L.S.	1
730-01.02	REMOVAL OF SIGNAL EQUIPMENT	EACH	1
730-02.08	SIGNAL HEAD ASSEMBLY (130 POLE MOUNTED)	EACH	2
730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	5
730-02.10	SIGNAL HEAD ASSEMBLY (130 A2 WITH BACKPLATE)	EACH	2
730-02.13	SIGNAL HEAD ASSEMBLY (140 A1 WITH BACKPLATE)	EACH	1
730-02.17	SIGNAL HEAD ASSEMBLY (150 A2H WITH BACKPLATE)	EACH	1
730-02.18	SIGNAL HEAD ASSEMBLY (150 A2V)	EACH	1
730-02.30	SIGNAL HEAD ASSEMBLY (140 A1 POLE MOUNTED)	EACH	1
730-03.21	INSTALL PULL BOX (TRAFFIC SIGNAL TYPE B)	EACH	27
730-03.23	INSTALL PULL BOX (FIBER OPTIC-TYPE A)	EACH	69
730-03.24	INSTALL PULL BOX (FIBER OPTIC-TYPE B)	EACH	20
730-03.31	FIBER DISTRIBUTION BOX	EACH	16
730-05.01	ELECTRICAL SERVICE CONNECTION	EACH	1
730-08.01	SIGNAL CABLE - 3 CONDUCTOR	L.F.	140
730-08.02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	630
730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	2240
730-08.40	INTERCONNECT CABLE - FIBER OPTIC (36-FIBER, SINGLE MODE)	L.F.	45715
730-08.41	INTERCONNECT CABLE - FIBER OPTIC (DROP CABLE, 6-FIBER, SINGLE MODE)	L.F.	2380
730-09.01	SPAN WIRE ASSEMBLY (9000 LBS MIN BRK STRENGTH)	L.F.	150
730-11.10	RISER ASSEMBLY (2" WEATHERHEAD ONLY)	EACH	6
730-11.11	RISER ASSEMBLY (2")	EACH	12
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	18565
730-12.09	CONDUIT 3" DIAMETER (RGS)	L.F.	320
730-12.13	CONDUIT 3" DIAMETER (JACK AND BORE)	L.F.	26870
730-12.14	CONDUIT 3" DIAMETER (JACK AND BORE)	L.F.	750
730-12.42	CURB MARKER (CURB MOUNTED CABLE MARKER)	EACH	220
730-13.02	VEHICLE DETECTOR (VIDEO)	EACH	12
730-13.03	VEHICLE DETECTOR (4-CHANNEL, RACK-MOUNT)	EACH	7
730-14.01	SHIELDED DETECTOR CABLE	L.F.	6735
730-14.02	SAW SLOT	L.F.	1055
730-14.03	LOOP WIRE	L.F.	3155
730-15.11	MODIFY CABINET (BASE-MOUNT ENTRANCE)	EACH	8
730-15.12	MODIFY CABINET (POLE-MOUNT ENTRANCE)	EACH	3
730-15.32	CABINET (EIGHT PHASE BASE MOUNTED)	EACH	2
730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	7
730-23.30	PEDESTAL POLE (@ 14')	EACH	1
730-23.31	PEDESTAL POLE (ALUMINUM, 20' LENGTH)	EACH	5
730-23.96	CANTILEVER SIGNAL SUPPORT (1 @ 50')	EACH	1
730-23.97	CANTILEVER SIGNAL SUPPORT (1 @ 27')	EACH	1
730-23.98	CANTILEVER SIGNAL SUPPORT (2 @ 31' & 49')	EACH	1
730-26.05	COUNTDOWN PEDESTRIAN SIGNAL	EACH	8
730-30.02	COMPUTER FOR SIGNAL SYSTEM (RACK MOUNTED)	EACH	1
801-03	WATER (SEEDING & SODDING)	M.G.	2
803-01	SODDING (NEW SOD)	S.Y.	155
920-02.08	BRICK PAVING	S.F.	500
920-10.01	RAILROAD PROTECTIVE INSURANCE	EACH	1
920-13.04	VIDEO DETECTION REMOTE MANAGEMENT CARD	EACH	1
920-14.04	SOFTWARE AND HARDWARE INTEGRATION BY CITY OF MILLINGTON STAFF	L.S.	1

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 TO INCLUDE ALL HARDWARE, MATERIALS, AND SUPPORTS TO INSTALL SIGN. TO BE THREE (3) TOTAL SIGNS. SEE SHEET CL-10 FOR SIGN DETAILS AND PLACEMENT.

1 - "GRADE CROSSING ADVANCE WARNING" W10-1
2 - "GRADE CROSSING ADVANCE WARNING" W10-2L
3 - "GRADE CROSSING ADVANCE WARNING" W10-2R
- 5 TO INCLUDE ALL HARDWARE AND MATERIALS NECESSARY TO ATTACH SIGNS TO PROPOSED MAST ARM. TO BE THREE (3) TOTAL SIGNS. SEE SHEET IL-05 FOR SIGN DETAILS AND PLACEMENT.

1 - "THRU-LEFT TURN OPTIONAL MOVEMENT LANE CONTROL" R3-6
2 - "LEFT TURN ONLY" R3-5L
- 6 TO INCLUDE ALL HARDWARE AND MATERIALS NECESSARY TO ATTACH STREET NAME SIGNS TO PROPOSED MAST ARM. TO BE SIX (6) TOTAL SIGNS. SEE SHEETS IL-05 FOR SIGN DETAILS AND PLACEMENT.

2 - "US HWY 51."
2 - "NAVY RD."
2 - "MARTHA ST."
- 7 ALLOWANCE TO COVER THE COST ASSOCIATED WITH POWER CONNECTION FOR THE TRAFFIC SIGNAL OR RDS UNIT FROM THE TRANSFORMER TO THE DEMARCATION POINT.
- 8 SEE CITY OF MEMPHIS STANDARD SPECIFICATIONS FOR "RUGGEDIZED ETHERNET CABINET SWITCH."
- 9 SEE PROJECT SPECIAL PROVISIONS FOR SPECIFICATIONS.
- 10 SEE CITY OF MEMPHIS STANDARD SPECIFICATIONS FOR "SERIAL DEVICE SERVER."
- 11 SEE PROJECT SPECIAL PROVISIONS FOR RADAR DETECTION EQUIPMENT. ITEM TO INCLUDE RDS POWER CABLE AT LOCATIONS WHERE SECONDARY RDS CABINET IS PRESENT.
- 12 SEE PROJECT SPECIAL PROVISIONS FOR UTILITY CABINETS. TYPE A CABINETS ARE FOR PRIMARY CABINETS. TYPE D CABINETS ARE FOR SECONDARY CABINETS. TYPE D CABINET TO INCLUDE ALL NECESSARY CABLING TO CONNECT TO TYPE A CABINET.
- 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 SHALL BE RESPONSIBLE FOR ALL COSTS 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 THHN AND THWN RATINGS AND YELLOW IN COLOR.
- 17 TO INCLUDE ALL MATERIALS NECESSARY TO ATTACH SPAN WIRE TO EXISTING POLE AND CITY HALL BUILDING AND MATERIALS NECESSARY IN ROUTING CABLES TO CITY HALL BUILDING.
- 18 SEE CONSTRUCTION DETAIL SHEETS FOR BRIDGE ATTACHEMENT DETAILS. ITEM TO INCLUDE ALL MATERIALS NECESSARY TO ATTACH CONDUIT TO BRIDGE.
- 19 TO BE ITERIS VANTAGE SYSTEM OR APPROVED EQUIVALENT. INCLUDES DETECTION CAMERAS, PROCESSOR UNIT, CARD RACK, VIDEO DETECTION REMOTE MANAGEMENT CARD WITH ETHERNET INTERFACE, POWER SUPPLY UNIT, SURGE PROTECTION EQUIPMENT (AN EDCO HSP-121BT1RU SERIES SURGE PROTECTION), 10" LCD COLOR MONITOR, MOUSE AND ALL CABLING, CONNECTIONS AND HARDWARE TO COMPLETE THE INSTALLATION OF A FULLY FUNCTIONAL VIDEO DETECTION SYSTEM. (TO BE VANTAGE VECTOR SYSTEM FOR MAST ARM MOUNTED CAMERAS WITH ADVANCE DETECTION. SEE TABULATED QUANTITIES SHEET FOR MOUNT TYPE.)
- 20 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
- 21 INCLUDES CONCRETE FOUNDATION OR SCREW DOWN ANCHOR FOUNDATION AS APPROVED BY THE ENGINEER.
- 22 INCLUDES CONCRETE FOUNDATION AS APPROVED BY THE ENGINEER.
- 23 TO INCLUDE SIGNS AND PUSHBUTTONS.
- 24 FOR REPAIR OF EXISTING BRICK PAVING DAMAGED BY THE REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT OR THE INSTALLATION OF NEW TRAFFIC SIGNAL EQUIPMENT.
- 25 QUANTITY IS IN ADDITION TO THE VIDEO DETECTION REMOTE MANAGEMENT CARDS REQUIRED IN ITEM NO. 730-13.02.
- 26 TO BE USED FOR THE INSTALLATION OF PULL BOXES.

REVISIONS		
DATE	DESCRIPTIONS	APPROVED
10/2014	ADDED ITEMS AND FOOTNOTES	
11/2014	ADDED ITEMS AND QUANTITIES	

DOUGLAS A. JOHNSON
MAYOR
9/23/14
COMMISSIONER
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STATE OF TENNESSEE

Kimley»Horn

DIVISION OF PUBLIC WORKS
CONGESTION MANAGEMENT PROGRAM
SIGNAL SYSTEM PROJECT SET #3
SHELBY COUNTY, TN.

QUANTITIES

SURVEY: N/A DATE: N/A BOOK: N/A
DRAFTED: KHA DATE: 08/13 SCALE: N.T.S.
DESIGNED: KHA DATE: 08/13 CHECKED: DAS DATE: 09/14
JURISDICTION: _____ SHEET 4 OF 67