

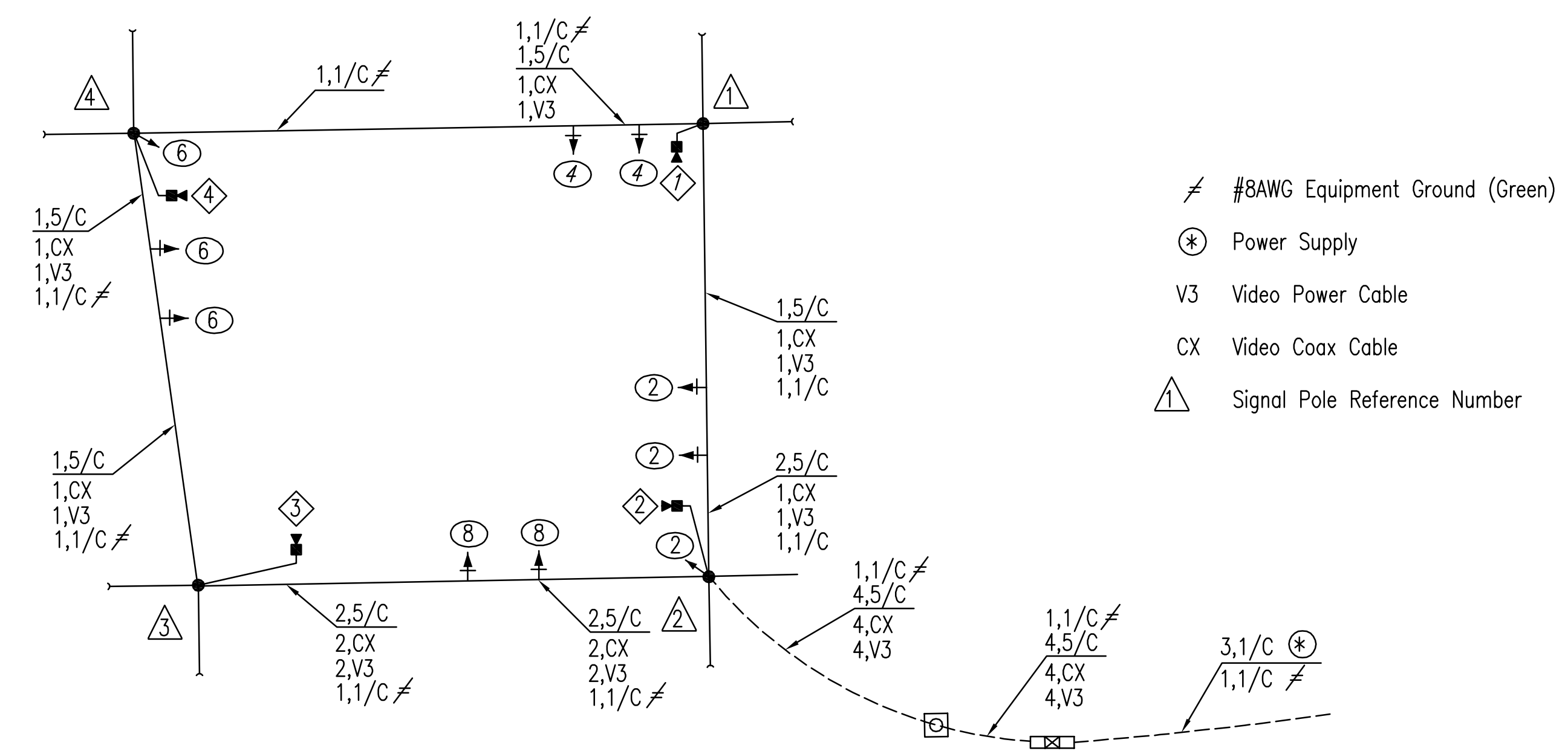
**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
PAD MOUNTED CONTROLLER & CABINET	EACH	1
TRAFFIC SIGNAL HEAD W/MOUNTING HARDWARE	EACH	-
TRAFFIC SIGNAL POLE STEEL (20')	EACH	-
TRAFFIC SIGNAL POLE (JOINT USE) STEEL (35')	EACH	-
TRAFFIC SIGNAL PEDESTAL (15')	EACH	-
35' WOOD POLE	EACH	4
CONCRETE CONTROLLER PAD	EACH	1
CONCRETE FOOTING - PEDESTAL	EACH	-
CONCRETE FOOTING - POLE	EACH	-
CONDUIT ELBOW 90° 2"	EACH	AS REQ'D
CONDUIT ELBOW 90° 3"	EACH	AS REQ'D
BACK PLATE 5" 3 SECTION	EACH	8
BACK PLATE 5" 5 SECTION	EACH	0
10' LUMINAIRE ARM	EACH	4
TERMINAL BLOCK	EACH	-
SERVICE BOX	EACH	1
JUNCTION BOX (PRE-FAB)	EACH	-
GROUND ROD & CLAMP	EACH	3
PEDESTRIAN INDICATIONS LED (12" COMBINATION)	EACH	0
TRAFFIC SIGNAL HEADS (LED LENS)	EACH	10
ENTRANCE HEAD	EACH	2
CIRCUIT BREAKER & BOX 50 AMP.	EACH	1
SURGE ARRESTOR - A.C. SERVICE	EACH	1
SURGE ARRESTOR - DETECTOR	EACH	-
GUY ANCHORS	EACH	8
7/16" STRAIN WIRE	L.F.	344
5/16" TETHER WIRE	L.F.	344
PEDESTRIAN PUSHBUTTON W/SIGN	EACH	-
6 PR. COMMUNICATION CABLE	LIN.FT.	-
DETECTOR LOOP WIRE NO. 14 AWG 1/c	LIN.FT.	-
LEAD-IN WIRE NO.6 AWG 1/c	LIN.FT.	300
MULTI-CONDUCTOR CABLE NO.14 AWG 7/c	LIN.FT.	-
MULTI-CONDUCTOR CABLE NO.14 AWG 5/c	LIN.FT.	800
MULTI-CONDUCTOR CABLE NO.14 AWG 3/c	LIN.FT.	-
SHIELDED DETECTOR LEAD-IN NO.14 AWG 2/c	LIN.FT.	-
CONDUIT 1"(PVC)	LIN.FT.	-
CONDUIT 1 1/2"(RGC)	LIN.FT.	175
CONDUIT 2"(PVC)	LIN.FT.	-
CONDUIT 2"(RGC)	LIN.FT.	80
CONDUIT 3"(RGC)	LIN.FT.	85
#8 AWG GROUND (GREEN)	LIN.FT.	404
STREET NAME SIGN W/ MOUNTING HARDWARE	EACH	4
R10-12 SIGN	EACH	0
VIDEO DETECTION CAMERA (VANTAGE OZ2), MOUNTING HARDWARE	EACH	4
VIDEO DETECTION UNIT (VANTAGE EDGE MODULE)	EACH	1 $\phi$
VIDEO POWER CABLE #16 A.W.G. 3/C	LIN.FT.	900
VIDEO CABLE 75 OHM COAXIAL (BELDON #8281 OR APPROVED EQUAL)	LIN.FT.	900
TV MONITOR	EACH	1
ITERIS LENS ADJUSTMENT UNIT	EACH	-
VIDEO SYSTEM PROGRAMMING UNIT	EACH	-

$\phi$  4 Modules required

-QUANTITIES FOR INFORMATION ONLY-

NOTE: The traffic signal system shall be complete and the contractor shall furnish and install all equipment and materials necessary for the satisfactory operation of electrical apparatus and for the complete operation of the traffic signal system whether specifically mentioned or not.



Note: #6 bare copper shall be run between strain wires & connected to #8 AWG green equipment ground at each pole & from strain wire to ground at pole #4.

**Top Coat Finish for Traffic Signal Controller Cabinet**  
 All visually exposed exterior surfaces shall be coated with a urethane or triglycidyl isocyanurate (TGIC) polyester powder to a minimum dry film thickness (DFT) of 2.0 mils. Prior to application of the top coat, the surface shall be mechanically etched and pre-heated to 450 degrees F for a minimum of one hour. The coating shall be electro-statically applied and cured at a minimum temperature of 400 degrees F. The finished color for the poles shall be black and approved by the Engineer prior to application on the basis of color chip submittals.

NOTE:  
 The contractor shall supply and install all necessary materials and equipment for the complete installation and operation of the traffic signal system whether specifically mentioned or not.

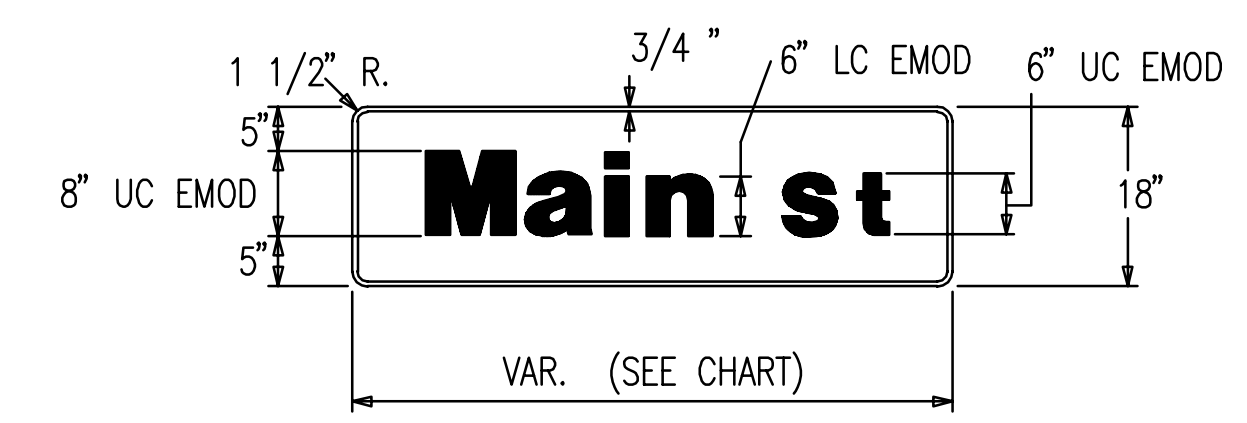
NUMBER	TYPE	SIZE	QUANTITY
2, 4, 6, 8	A	12"	10
TOTAL		12"	10

ITEM	UNIT	QUANTITY
24" WHITE (THERMO-PLASTIC) STOP BAR	LIN. FT.	84

NOTE: PAVEMENT MARKING TO BE SUBSIDIARY TO TRAFFIC SIGNAL INSTALLATION

SIGN	LEGEND	LENGTH	QUANTITY
A	21st St	5'-6"	2
B	127th St	5'-6"	2

ITEM	UNIT	QUANTITY
TRAFFIC SIGNAL INSTALLATION (21st St. & 127th St.)	LUMP SUM	1



NOTE:  
 THE TRAFFIC SIGNAL SYSTEM SHALL BE COMPLETE AND THE CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS NECESSARY FOR THE SATISFACTORY OPERATION OF ELECTRICAL APPARATUS AND FOR COMPLETE OPERATION OF THE TRAFFIC SIGNAL SYSTEM WHETHER SPECIFICALLY MENTIONED OR NOT.

CENTRAL PARK AND MAIZE ROAD

**TRAFFIC SIGNAL WIRING AND QUANTITIES**

**Professional Engineering Consultants, P.A.**  
 303 S. TOPEKA • WICHITA, KANSAS 67202  
 316-262-2691 • FAX 316-262-3003

Designed by	BER	Checked by	
Drawn by	SDM	Date	JUNE 2004
		Job No.	04286

DSNR: BER OPER: SDM SCALE: 1"=40'00"  
 Q:\2004\04286\TSWIRING 08-31-2004 10:55:09 am