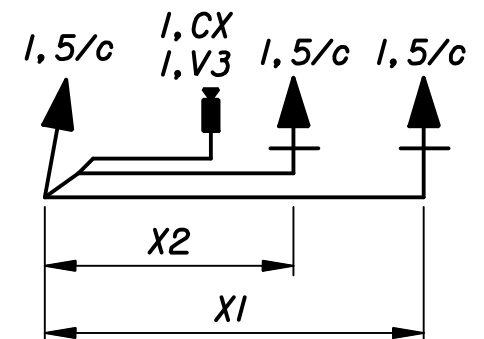
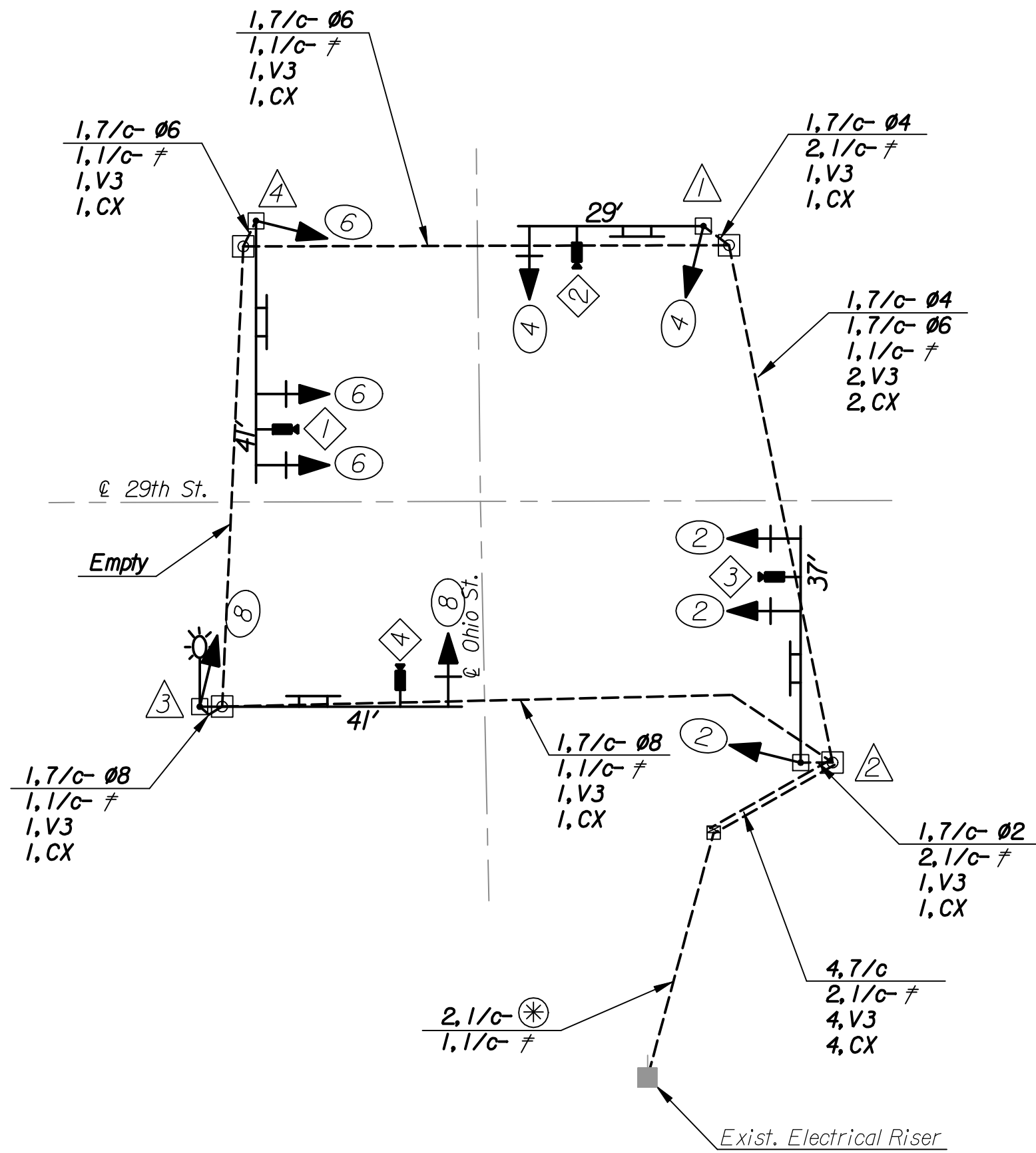


DSNR: DRM OPER: DRP SCALE: I:/2008/08521/PLAN/08521-29thSigQty.dgn LAST REV: 9-12-2008 BY: drp



TYPICAL POLE WIRING

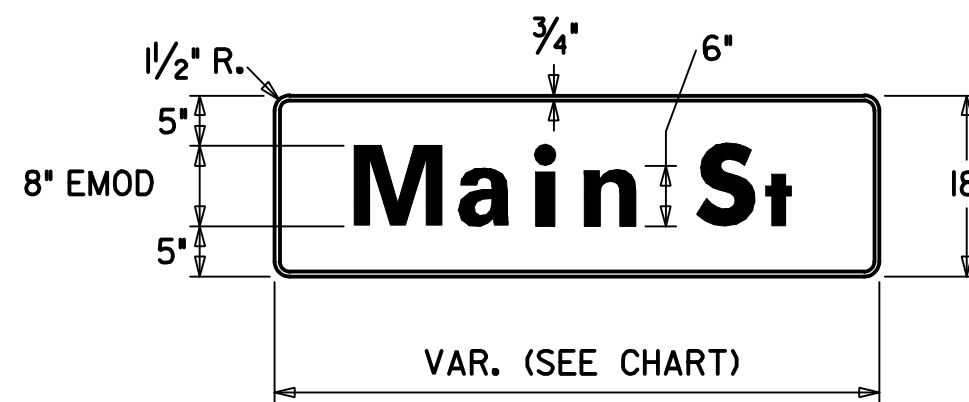
#8AWG Equipment Ground (Green)
 * Power Supply
 V3 Video Power Cable
 CX Video Coax Cable
 △ Signal Pole Reference Number
 All splices to be in pole base, no splices permitted within service box.

WIRING DIAGRAM

SUMMARY OF TRAFFIC SIGNAL HEADS			
NUMBER	TYPE	SIZE	QUANTITY
2, 4, 6, 8	A	12"	10
TOTAL			10

SERVICE BOX SUMMARY	
STATION	DIST.-SIDE
99+63	40' Lt.
99+71	58' Rt.
100+39	43' Lt.
100+55	41' Rt.

OVERHEAD STREET NAME SIGNS		
LEGEND	LENGTH	QUANTITY
29th St	5'-0"	2
Ohio	5'-0"	2



SUMMARY OF PAVEMENT MARKINGS			
ITEM DESCRIPTION	QUANTITY	STATION	DIST.-SIDE
24" Solid White Stop Line- EB	23 L.F.	99+46	RT
24" Solid White Stop Line- SB	17 L.F.	99+83, 100+00	58' LT
24" Solid White Stop Line- NB	18 L.F.	100+00, 100+18	58' RT
24" Solid White Stop Line- WB	23 L.F.	100+51	LT
TOTAL (24" SOLID WHITE STOP LINE)		81 L.F.	

TRAFFIC SIGNAL POLE SUMMARY												
POLE NO.	TYPE	ARM LENGTH	NO. OF SIGNALS ON ARM	BRACKET TYPE	X1	X2	X3	X4	NO. OF SIGNALS ON POLE	BRACKET TYPE	NO. OF PUSH BUTTONS ON POLE	REMARKS
1	B	29'	1	I	27'	-	-	-	1	III	-	
2	B	37'	2	I	35'	24'	-	-	1	III	-	
3	C	41'	1	I	39'	-	-	-	1	III	-	
4	B	41'	2	I	38'	27'	-	-	1	III	-	

① A-15' Pedestal (Alum.)
 B-20' Steel with Mast Arm(s)
 C-35' Steel (Joint Use) with Mast Arm(s)
 D-40' Steel with Mast Arm

RECAPITULATION OF TRAFFIC SIGNAL QUANTITIES		
ITEM	UNIT	QUANTITY
TRAFFIC SIGNAL INSTALLATION 29th & Ohio	LUMP SUM	1
PAVEMENT MARKING 29th & Ohio	LUMP SUM	1

POLE AND EQUIPMENT FINISH:

Surface preparation
 The exterior steel surface shall be blasted clean in accordance with the requirements outlined in the Steel Structures Painting Council Surface Preparation Specification No. 6, (SSPCSP60) utilizing a dry abrasive, closed cycle, recirculating system with centrifugal wheels and abrasive. The abrasive used shall be steel shot conforming to the Society of Automotive Engineers (SAE) Recommended Practice No. J827 with particle size meeting SAE Shot No. S280.

Zinc Coating
 The pole assembly shall be hot-dip galvanized to the requirements of either ASTM A123 (Fabricated items) or ASTM A153 (Hardware items) by immersion in a molten bath of prime western grade zinc maintained between 810°F and 850°F. Maximum aluminum content of the bath shall not exceed 0.01%.

Top Coat
 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 0.05mm (2.0 mils). Prior to application of the topcoat, the surface shall be mechanically etched and pre-heated to 450°F for a minimum of one hour. The coating shall be electrostatically applied and cured at a minimum temperature of 400°F and the color shall be black.

BILL OF MATERIALS		
ITEM	UNIT	QUANTITY
PAD MOUNTED CONTROLLER & CABINET	EACH	1
TRAFFIC SIGNAL HEAD W/MOUNTING HARDWARE	EACH	10
TRAFFIC SIGNAL POLE (JOINT USE) STEEL (35')	EACH	1
TRAFFIC SIGNAL POLE STEEL (20')	EACH	3
TRAFFIC SIGNAL PEDESTAL (15')	EACH	-
CONCRETE CONTROLLER PAD	EACH	1
CONCRETE FOOTING - PEDESTAL	EACH	-
CONCRETE FOOTING - POLE	EACH	4
CONDUIT ELBOW 90°2"	EACH	AS REQ'D
CONDUIT ELBOW 90°3"	EACH	AS REQ'D
BACK PLATE 5' 3 SECTION	EACH	6
BACK PLATE 5' 5 SECTION	EACH	-
TERMINAL BLOCK	EACH	-
SERVICE BOX	EACH	4
JUNCTION BOX (PRE-FAB)	EACH	-
GROUND ROD & CLAMP	EACH	5
PED. INDICATIONS LED (16"x18" COMBINATION w/ COUNTDOWN)	EACH	-
LED TRAFFIC SIGNAL LENS	EACH	30
ENTRANCE HEAD	EACH	1
CIRCUIT BREAKER & BOX 50 AMP.	EACH	1
SURGE ARRESTOR - A.C.SERVICE	EACH	1
SURGE ARRESTOR - DETECTOR	EACH	-
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.	AS REQ'D
MULTI-CONDUCTOR CABLE NO.14 AWG 7/c	LIN.FT.	760
MULTI-CONDUCTOR CABLE NO.14 AWG 5/c	LIN.FT.	360
MULTI-CONDUCTOR CABLE NO.14 AWG 3/c	LIN.FT.	-
SHEILDED DETECTOR LEAD-IN NO.14 AWG 2/c	LIN.FT.	-
CONDUIT 1"(RGC)	LIN.FT.	AS REQ'D
CONDUIT 1 1/2"(RGC)	LIN.FT.	-
CONDUIT 2"(PVC)	LIN.FT.	-
CONDUIT 2"(RGC)	LIN.FT.	25
CONDUIT 3"(RGC)	LIN.FT.	430
*8 AWG GROUND (GREEN)	LIN.FT.	1160
STREET NAME SIGN	EACH	4
LEFT-TURN YIELD ON GREEN (R10-I2) SIGN	EACH	-
VIDEO DETECTION CAMERA, MOUNTING HARDWARE AND SUNSHIELD	EACH	4
VIDEO DETECTION UNIT	EACH	1
VIDEO POWER CABLE #16 A.W.G. 3/C	LIN.FT.	930
VIDEO CABLE 75 OHM COAXIAL (BELDON #8281OR APPROVED EQUAL)	LIN.FT.	930
TV MONITOR	EACH	1
MAST ARM CAMERA RISER BRACKETS	EACH	4

0 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.

Revision		By	Date
29TH STREET & OHIO STREET			
TRAFFIC SIGNAL WIRING & QUANTITIES			
JAMES L. ARMOUR, P.E.-CITY ENGINEER CITY OF WICHITA PROJECT NO. 472-84720 PHASE I			
Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	DRM	Job No.	08521
Drawn by	DRP	Date	Dec. 2008
			Sht. 5 of 8