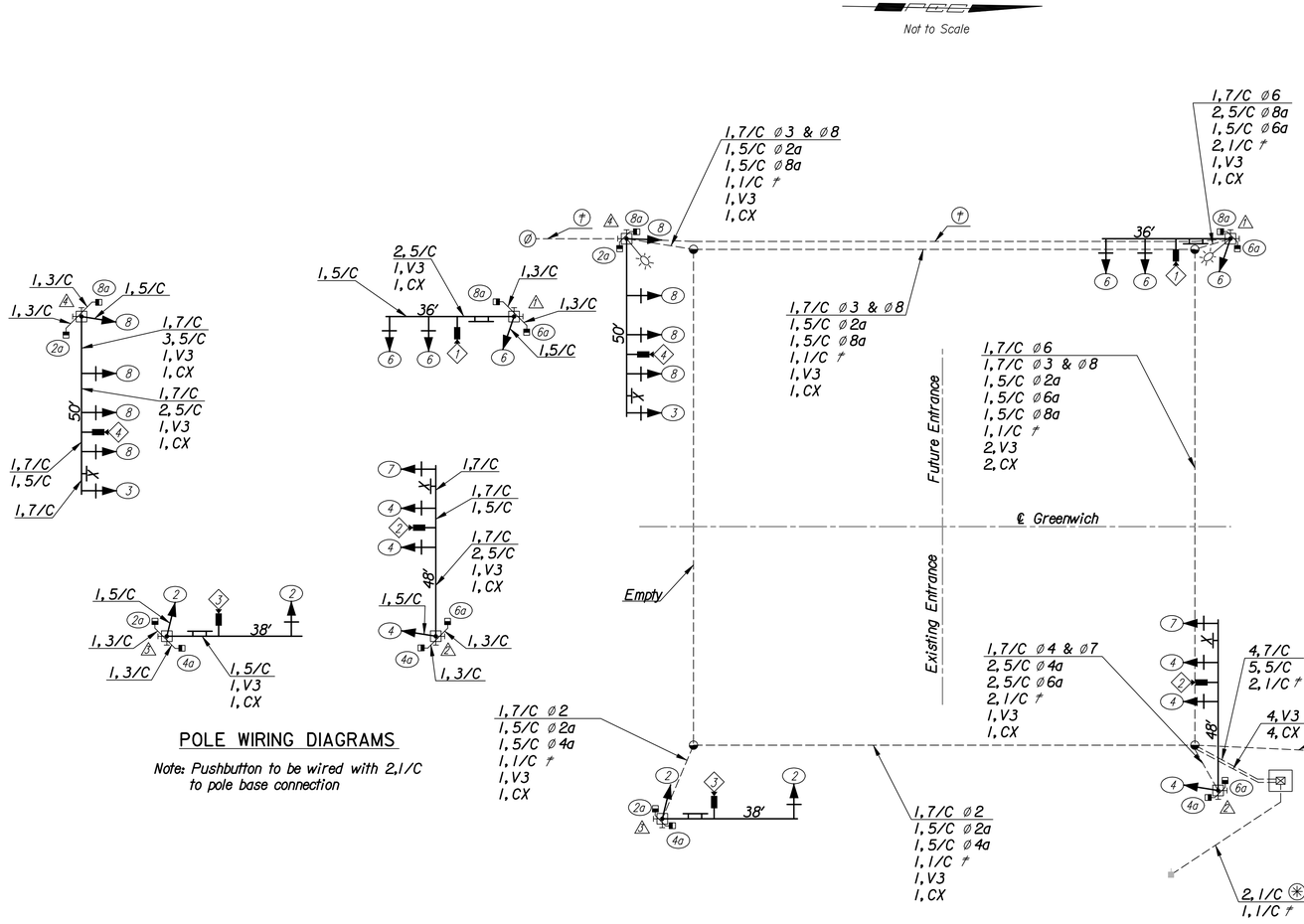
Not to Scale



POLE WIRING DIAGRAMS

Note: Pushbutton to be wired with 2,1/C to pole base connection

JUNCTION BOX SUMMARY ②	
STATION	DIST.-SIDE
140+00	45' Rt.
143+00	45' Rt.

SUMMARY OF TRAFFIC SIGNAL HEADS			
NUMBER	TYPE	SIZE	QUANTITY
2, 4, 6, 8	A	12"	12
3, 7	I	12"	2
2a, 4a, 6a, 8a	K	12"	8
TOTAL			22

SERVICE BOX SUMMARY	
STATION	DIST.-SIDE
137+03	52' Lt.
137+03	41' Rt.
136+09	41' Rt.
136+09	52' Lt.

Greenwich — Pole 1 & 3

Street Name Sign Legends use 6" series EM lettering

Ⓐ *Street Light Power Supply*

⏚ *2" PVC Conduit with Pull Rope for Street Light Circuit*

⏚ *#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 servce box.

BILL OF MATERIALS			
ITEM	UNIT	QUANTITY	③ QUANTITY
PAD MOUNTED CONTROLLER & CABINET	EACH	1	
TRAFFIC SIGNAL HEAD W/MOUNTING HARDWARE	EACH	22	
TRAFFIC SIGNAL POLE STEEL (20')	EACH	2	
TRAFFIC SIGNAL POLE (JOINT USE) STEEL (35')	EACH	2	
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	8	
BACK PLATE 5" 5 SECTION	EACH	2	
TERMINAL BLOCK	EACH	-	
SERVICE BOX	EACH	4	
JUNCTION BOX (PRE-FAB)	EACH	2 ②	
GROUND ROD & CLAMP	EACH	6	
PEDESTRIAN INDICATIONS LED (12" COMBINATION)	EACH	8	
LED TRAFFIC SIGNAL LENS	EACH	46	
ENTRANCE HEAD	EACH	3	
CIRCUIT BREAKER & BOX 50 AMP.	EACH	1	
SURGE ARRESTOR - A.C.SERVICE	EACH	1	
SURGE ARRESTOR - DETECTOR	EACH	-	
PEDESTRIAN PUSHBUTTON W/SIGN	EACH	8	
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.	50	
MULTI-CONDUCTOR CABLE NO.14 AWG 7/c	LIN.FT.	750	
MULTI-CONDUCTOR CABLE NO.14 AWG 5/c	LIN.FT.	1200	
MULTI-CONDUCTOR CABLE NO.14 AWG 3/c	LIN.FT.	60	
SHEILDED DETECTOR LEAD-IN NO.14 AWG 2/c	LIN.FT.	-	
CONDUIT 1"(PVC)	LIN.FT.	105	
CONDUIT 1 1/2"(RGC)	LIN.FT.		
CONDUIT 2"(PVC)	LIN.FT.	150	
CONDUIT 2"(RGC)	LIN.FT.	50	
CONDUIT 2"(RGC)	LIN.FT.	920 ②	
CONDUIT 3"(RGC)	LIN.FT.	450	
#8 AWG GROUND (GREEN)	LIN.FT.	500	
STREET NAME SIGN	EACH	2	
LEFT-TURN YIELD ON GREEN (R10-12) SIGN	EACH	2	
VIDEO DETECTION CAMERA (VANTAGE OZ2), MOUNTING HARDWARE	EACH	4	2
VIDEO DETECTION UNIT (VANTAGE EDGE MODULE)	EACH	1Ø	1[Ø]
VIDEO POWER CABLE #16 A.W.G. 3/C	LIN.FT.	850	600
VIDEO CABLE 75 OHM COAXIAL (BELDON #8281 OR APPROVED EQUAL)	LIN.FT.	850	600
TV MONITOR	EACH	1	1
ITERIS LENS ADJUSTMENT UNIT	EACH	1	1
VIDEO SYSTEM PROGRAMMING UNIT	EACH	1	1

Ø *4 Modules required*

[Ø] *2 Modules required*

② *Quantities for "Traffic Signal Interconnect"*

-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.

TRAFFIC SIGNAL POLE SUMMARY											
POLE NO.	TYPE①	ARM LENGTH	NO. OF SIGNALS ON ARM	BRACKET TYPE	XI	X2	X3	X4	NO. OF SIGNALS ON POLE	BRACKET TYPE	NO.OF PUSH BUTTONS ON POLE	REMARKS
1	C	36'	2	1	35'	24'	-	-	2	II/III	2	
2	B	48'	3	1	47'	36'	25'	-	2	II/III	2	
3	B	38'	1	1	37'	-	-	-	2	II/III	2	
4	C	50'	4	1	49'	38'	27'	16'	2	II/III	2	

① *A-10'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 (Sta. 136+56)	LUMP SUM	LUMP SUM
	1	1
TRAFFIC SIGNAL INTERCONNECT	1	1
TRAFFIC SIGNAL ③ VIDEO DETECTION (13th & Greenwich)	1	1

Top Coat Finish for Traffic Signal Poles & 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.

Special Finish for Traffic Signal Equipment
The traffic signal, mounting brackets, signal head backs, sign backs, meter box, disconnect box, and miscellaneous hardware shall be shop painted with an aerosol lacquor celulose ester to match the traffic signal pole color. The Contractor shall submit two copies of the proposed coating system to the Engineer for approval prior to application. In addition to the requirements stipulated in the Standard Specifications, banding material shall be coated with ethylene-vinly-alcohol (EVA) copolymer. The color shall be black.

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.

③ *The contractor shall supply and install video detection system for Northbound & Southbound lanes of Greenwich Road at 13th Street. Equipment to be housed in existing cabinet located at the Northwest corner of the intersection. The contractor shall supply and install all necessary materials and equipment for the complete installation and operation of the "Video Detection System" whether specifically mentioned or not.*

No.	Revision	By	Date

GREENWICH ROAD

TRAFFIC SIGNAL WIRING & QUANTITIES

JAMES L. ARMOUR, P.E.-CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-84435

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303 S. TOPEKA • WICHITA, KANSAS 67202
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Designed by	WDH	Job No.	06471	Sht. 68 of 97
Drawn by	SVB	Date	June, 2007	

DSNR: WDH OPER: SVB SCALE:
I:/2006/06471/Signal/06471-Signal Qty.DGN 4-17-2007 16:00:00 LAST REV: 6-5-2007 BY: svb