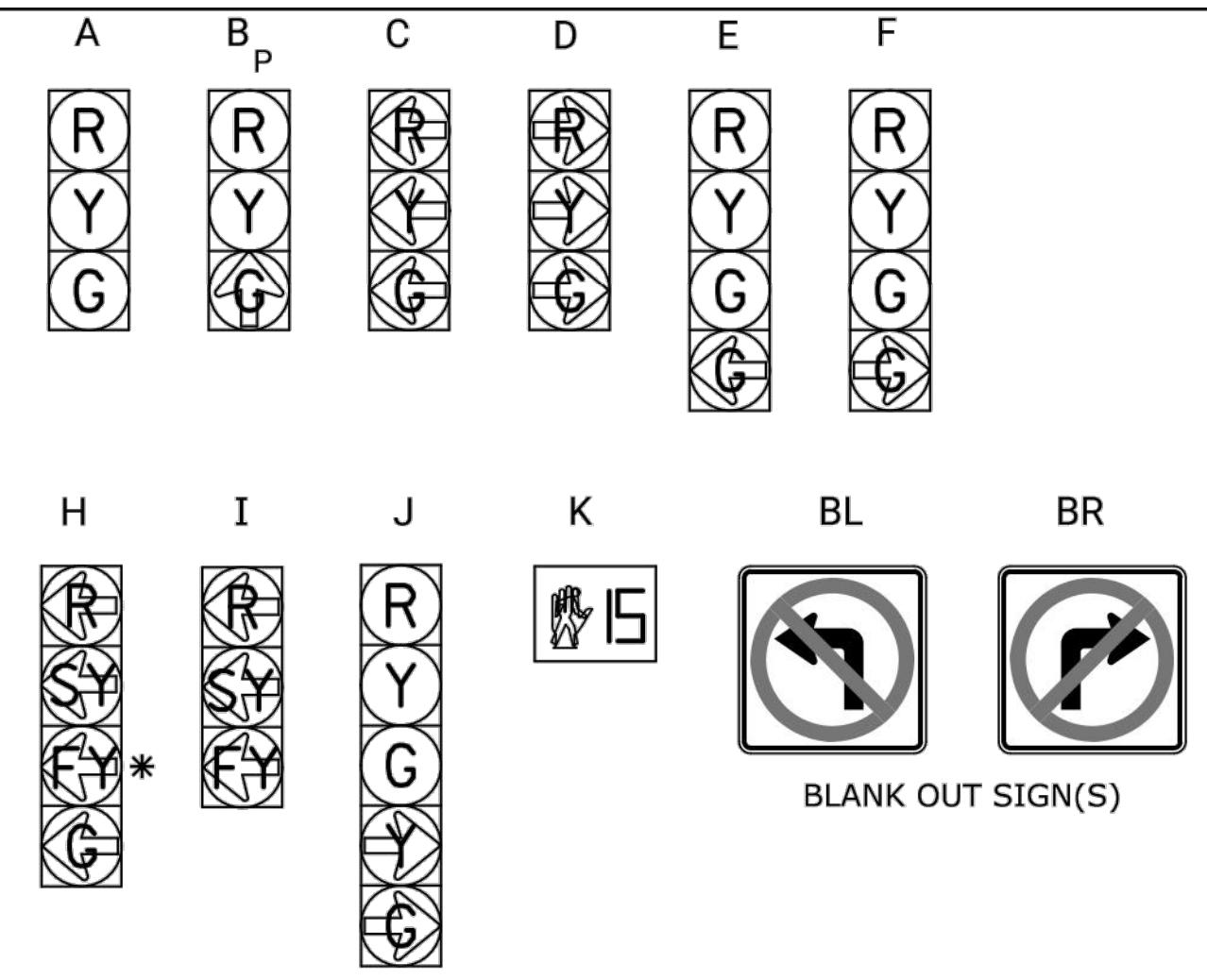


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### CHART A SIGNAL SUMMARY

Signal Face Arrangement	No. Sections (Per Face)	Signal Mounting Type	Quantity
H	4	Mast Arm w/ Backplate	4
A	3	Mast Arm w/ Backplate	8
A	3	Side-of-Pole	4
K	1	Side-of-Pole	8



**NOTES:**

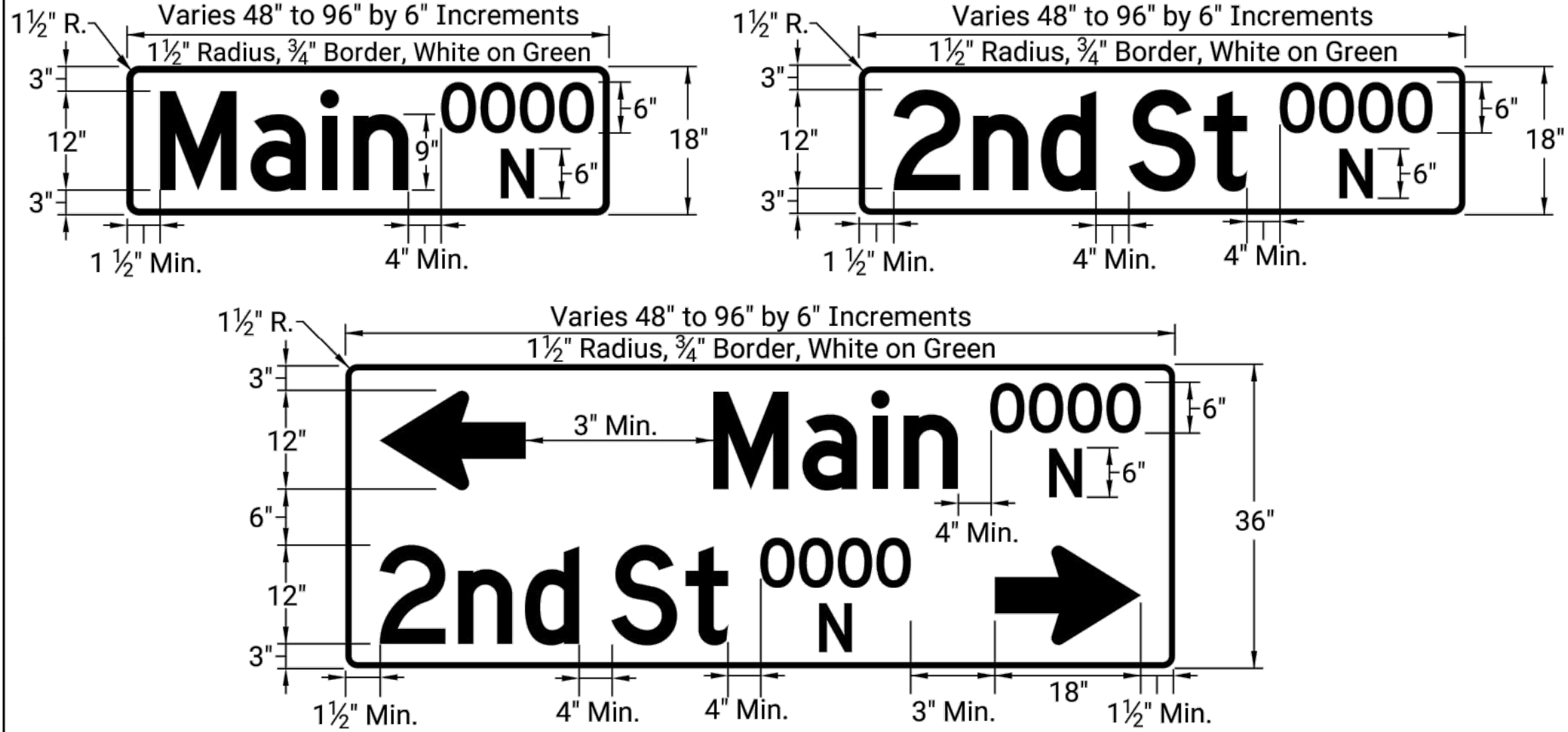
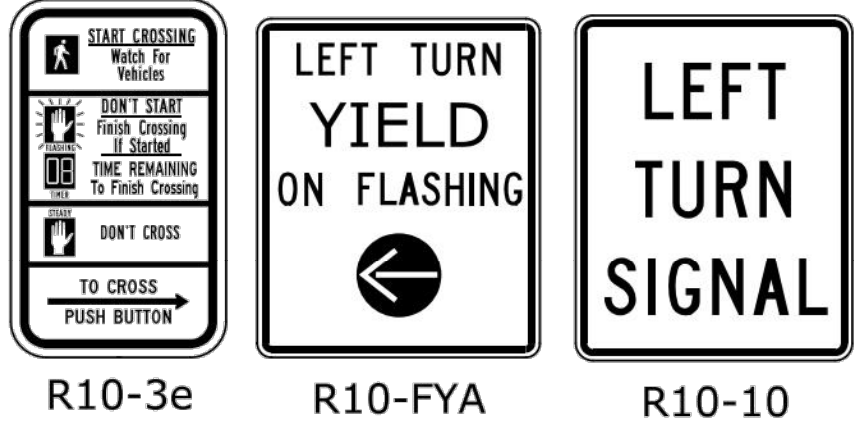
- \*SHALL NOT BE DISPLAYED WHEN OPERATING IN THE PROTECTED ONLY MODE.
- ALL LENSES ARE L.E.D. UNLESS OTHERWISE NOTED.
- SUBSCRIPT "P" INDICATED PROGRAMMED SIGNALS.
- ALL LENSES SHALL BE 12" DIA. UNLESS OTHERWISE NOTED. PEDESTRIAN DISPLAY (K) SHALL BE RECTANGULAR WITH A WIDTH OF 18" AND HEIGHT OF 16".
- BLANK OUT SIGN SIZE SHALL MEET MUTCD REQUIREMENTS FOR APPLICABLE STATIC VERSION OF THE SIGN.

### TRAFFIC SIGNAL POLE SUMMARY (CHART B)

Pole No.	Pole Height	Signal Arm Length	Signal Arm Mounting Height	No. of Signals on Arm	Signal Spacing	Luminarire Arm Length	Luminaire Mounting Height	Quantity
1	20'-6"	54'	19'	3	11.5', 11'			1
3	20'-6"	60'	19'	3	10.2', 11'			1
5	20'-6"	54'	19'	3	11.5', 11'			1
6	20'-6"	54'	19'	3	11.5', 11'			1

### CHART C OVERHEAD STREET NAME SIGNS

Sign	Legend	Length	Quantity
2	Central	54"	2
2	135th St	72"	2



USE FONT SERIES D. SHEETING SHALL BE ASTM TYPE XI SHEETING. SEE SPECIFICATION 703.8

### BILL OF MATERIALS (For Information Only)

ITEM	QUANTITY	UNIT	SPEC. NO.	NOTE
CONTROLLER UNIT	1	EACH	703.2.1	
CONFLICT MONITOR	1	EACH	703.2.2	
LOAD SWITCH	16	EACH	703.2.3	
FLASHER	2	EACH	703.2.4	
FLASH TRANSFER RELAY	6	EACH	703.2.5	
SURGE PROTECTOR	1	EACH	703.2.6	
DC ISOLATOR	3	EACH	703.2.7	
AC ISOLATOR		EACH	703.2.8	
GPS CLOCK	1	EACH	703.2.9	
POWER STRIP	1	EACH	703.2.11	
PAD MOUNTED CABINET (332L)	1	EACH	703.2.11	
BATTERY BACKUP (BB/UPS)	1	EACH	703.2.14	
RADAR DETECTION DEVICE & HARDWARE	8	EACH	703.3.2	
TRAFFIC SIGNAL HEAD	CHART A	EACH	703.4.1	
SIGNAL HEAD MOUNTING BRACKET	CHART A	EACH	703.4.2	
RETROREFLECTIVE BACKPLATE	CHART A	EACH	703.4.3	
VEHICLE TRAFFIC SIGNAL LED MODULES	52	EACH	703.4.4	
PEDESTRIAN TRAFFIC SIGNAL LED MODULES	8	EACH	703.4.5	
APS PUSHBUTTON SYSTEM & SIGN (R10-3E, 9"x15")	8	EACH	703.4.6	
TRAFFIC SIGNAL POLE	CHART B	EACH	703.5.1	
TRAFFIC SIGNAL PEDESTAL (ALUMINUM)	2	EACH	703.5.2	SEE NOTE 7
SERVICE BOX	1	EACH	704	
LUMINAIRE ARM	0	EACH	703.7.1	POWER COMPANY PROVIDED & INSTALLED
LED LUMINAIRE	0	EACH	703.7.2	POWER COMPANY PROVIDED & INSTALLED
PHOTOCELL	1	EACH	703.7.3	POWER COMPANY PROVIDED & INSTALLED
UNFUSED STREET LIGHT CONNECTOR KIT	0	EACH	703.7.4	
FUSED STREET LIGHT CONNECTOR KIT	0	EACH	703.7.5	
OVERHEAD STREET NAME SIGN	CHART C	EACH	703.8.1	
R10-10 SIGN (30"x36")		EACH	703.8.2	
R10-FYA SIGN (30"x36")	4	EACH	703.8.2	
ENTRANCE HEAD	1	EACH	703.9.2	
SERVICE ENCLOSURE, 200 AMP.	1	EACH	703.9.3	
CIRCUIT BREAKER, TRAFFIC SIGNAL, AMP.	1	EACH	703.9.4	
CIRCUIT BREAKER, LUMINAIRE, AMP		EACH	703.9.4	
SURGE ARRESTER CA 302R		EACH	703.9.5	
POWER SERVICE CONTROLLER CABINET (16")	1	EACH	703.9.6	
GROUND ROD & CLAMP (12")	4	EACH	703.10	
GROUND ROD & CLAMP (20")	4	EACH	703.10	
SERVICE WIRE NO. 6 AWG 1/C	133	LIN. FT.	703.11.1	
LIGHTING DISTRIBUTION WIRE NO. 8 AWG 1/C		LIN. FT.	703.11.2	
POLE & BRACKET WIRE NO. 10 AWG 1/C		LIN. FT.	703.11.3	
GROUND WIRE NO. 6 AWG 1/C BARE SOLID	1075	LIN. FT.	703.11.4	
TRACER WIRE NO 12 AWG (BLUE)	735	LIN. FT.	703.11.5	
TRACER WIRE CONNECTOR	1	EACH	703.11.6	
MULTICONDUCTOR CABLE NO. 14 AWG 7/C	3530	LIN. FT.	703.11.7	
MULTICONDUCTOR CABLE NO. 14 AWG 2/C	150	LIN. FT.	703.11.7	
DETECTION CABLE		LIN. FT.	703.11.9	
ETHERNET CABLE (CAT6)	5	LIN. FT.	703.11.11	
CONDUIT, 2" & FITTINGS	60	LIN. FT.	703.12	
CONDUIT, 3" & FITTINGS	190	LIN. FT.	703.12	
CONDUIT, 1.5" & FITTINGS	6	LIN. FT.	703.12	
CONDUIT, 1" & FITTINGS	30	LIN. FT.	703.12	

**NOTES:**

- QUANTITIES SHOWN ARE FOR CENTRAL AVE. AND 135TH ST. W. SIGNAL.
- REFER TO CITY OF WICHITA PART 700 TRAFFIC SIGNALIZATION SPECIFICATIONS.
- ALL TRAFFIC SIGNAL POLES SHALL BE PAINTED BLACK PER LATEST EDITION OF PART 700 SPECIFICATIONS. SIGNAL CABINET SHALL BE NATURAL ALUMINUM.
- CONFLICT MONITOR SHALL BE A 2010 ECL-IP UNIT WITH ETHERNET PORT.
- A SEPARATE DETECTION CARD SHALL BE USED FOR EACH INTERSECTION LEG. THE DETECTION SYSTEM INCLUDES DETECTOR UNIT, PROCESSOR, CARD, AND INCIDENTAL ITEMS NECESSARY FOR THE SUCCESSFUL OPERATION OF THE DETECTION SYSTEM.
- CONTRACTOR TO VERIFY SIGNAL POLE HEIGHTS AND TOPS OF POLE FOOTING ELEVATIONS PRIOR TO CONSTRUCTION.
- THERE IS ONE APS PUSHBUTTON STATION IN THE NORTHWEST QUADRANT OF THE INTERSECTION AND ONE PEDESTRIAN SIGNAL POLE IN THE NORTHEAST QUADRANT.

### BID ITEM

ITEM	QUANTITY	UNIT
CONCRETE C & G REMOVED & REPLACED	7	L.F.
CONCRETE SIDEWALK PROTECTION CURB	16	L.F.
CONCRETE SIDEWALK REMOVED & REPLACED	13	S.F.
CONCRETE SIDEWALK 5"	28	S.F.
SIDEWALK THICKENING	7	L.F.
TRAFFIC SIGNAL	LSUM	LSUM
TRAFFIC SIGNAL CONTROLLER	1	EACH
DETECTION SYSTEM	LSUM	LSUM

- TRAFFIC SIGNAL CONTROLLER ITEM INCLUDES THE UNIT COST FOR PERMANENT CONTROLLER ONLY. COST FOR INSTALLATION, PROGRAMMING, ETC. SHALL BE INCLUDED IN THE "TRAFFIC SIGNAL" QUANTITY.
- CONTROLLERS FOR TEMPORARY SIGNAL(S) IS SUBSIDIARY TO THE BID ITEM "TEMPORARY TRAFFIC SIGNAL".
- FOR MULTIPLE PROJECT INTERSECTIONS, QUANTITIES SHOULD BID SEPARATELY FOR EACH SIGNALIZED INTERSECTION (EXCLUDING CONTROLLERS).
- 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.



**TRAFFIC SIGNAL QUANTITY SHEET**

TRAFFIC ENGINEER APP'D 01/27/22  
**MIKE ARMOUR, P.E.**

PROJECT NUMBER 472-2024-086048	ORG NUMBER 40106822	DATE 7/16/2024
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET <b>3 OF 15</b> <b>TR-102</b>

NO.	REVISION	DATE