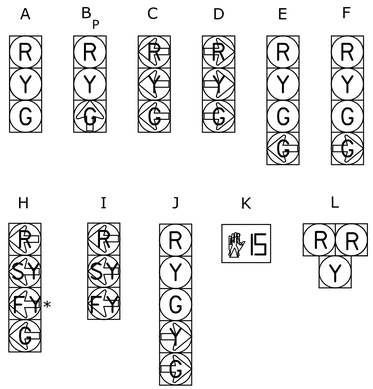
CHART A SIGNAL SUMMARY

SIGNAL FACE ARRANGEMENT	NO. SECTIONS (PER FACE)	SIGNAL MOUNTING TYPE	QUANTITY
A	3	MAST ARM W/BACKPLATE	8
C	3	MAST ARM W/BACKPLATE	5
K	1	SIDE-OF-POLE	2
A	3	SIDE-OF-POLE	4



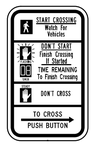
NOTES:
1) * SHALL NOT BE DISPLAYED WHEN OPERATING IN THE PROTECTED ONLY MODE.
2) ALL LENSES ARE L.E.D. UNLESS OTHERWISE NOTED.
3) ALL LENSES ARE 12" UNLESS OTHERWISE NOTED.
4) ALL PEDESTRIAN SIGNAL HEADS SHALL BE COUNTDOWN.
5) SUBSCRIPT "P" INDICATES PROGRAMMED SIGNALS.

CHART B TRAFFIC SIGNAL POLES

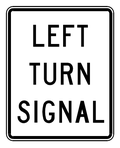
	POLE HEIGHT	SIGNAL ARM LENGTH	SIGNAL ARM MOUNTING HEIGHT	NO. OF SIGNALS ON ARM	SIGNAL SPACING	LUMINAIRE ARM LENGTH	LUMINAIRE MOUNTING HEIGHT	QUANT.
(1)	35.0'	56.0'	20.0'	4	24.0', 35.0', 46.7', 56.0'	15.0'	34.5'	1
(2)	35.0'	54.0'	20.0'	3	31.3', 43.3', 53.6'	15.0'	34.5'	1
(3)	35.0'	50.0'	20.0'	3	26.8', 37.8', 48.8'	15.0'	34.5'	1
(4)	35.0'	54.0'	20.0'	3	30.9', 42.9', 53.9'	15.0'	34.5'	1

CHART C OVERHEAD STREET NAME SIGNS

SIGN	LEGEND	LENGTH	QUANTITY
1	Kellogg	78"	2
2	E. 143rd St.	78"	2



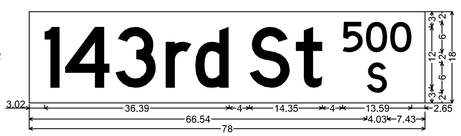
R10-3E



R10-10L

No border, White on Green;
[Kellogg] D 50% spacing; [14400] D 50% spacing; [E] D 50% spacing;
Table of widths and spaces.

K	e	l	l	o	g	g	l	4	4	0	0
8.24	6.69	1.87	1.87	6.95	6.69	6.69	4.01	1.45	4.41	4.40	4.22	4.22	2.78
									63.10	E 3.65	11.25		



No border, White on Green;
[143rd] D 50% spacing; [St] D 50% spacing; [500] D 50% spacing; [S] D 50% spacing;
Table of widths and spaces.

1	4	3	r	d	S	t	5	0	0
3.02	2.91	8.82	8.06	5.08	6.69	4.00	8.06	5.22	4.00	5.03	4.22	4.21	2.65
									66.54	S 4.03	7.43		

BILL OF MATERIALS
- FOR INFORMATION ONLY -

ITEM	QUANT.	UNIT	NOTE
CONTROLLER UNIT	1	EACH	CITY PROVIDED - CONTRACTOR INSTALLED
MALFUNCTION MANAGEMENT UNIT	1	EACH	CITY PROVIDED - CONTRACTOR INSTALLED
SURGE PROTECTOR	1	EACH	
LOAD SWITCH	9	EACH	
FLASHER	2	EACH	
FLASH TRANSFER RELAY	4	EACH	
DETECTOR, 2-CHANNEL	13	EACH	
DETECTOR, 4-CHANNEL	-	EACH	
POLE MOUNTED CABINET (336)	-	EACH	
PAD MOUNTED CABINET (332)	1	EACH	
TRAFFIC SIGNAL HEAD	CHART A	EACH	
SIGNAL HEAD MOUNTING BRACKET	CHART A	EACH	
BACK PLATE	CHART A	EACH	SEE NOTE 7
VEHICLE TRAFFIC SIGNAL LAMP	51	EACH	
PEDESTRIAN TRAFFIC SIGNAL LAMP	2	EACH	
L.E.D. LENS	CHART A	EACH	
PEDESTRIAN PUSHBUTTON & SIGN (R10-3E; 9"x15")	2	EACH	
TRAFFIC SIGNAL POLE	CHART B	EACH	
TRAFFIC SIGNAL PEDESTAL ALUMINUM	2	EACH	
TERMINAL BLOCK	6	EACH	
JUNCTION BOX	-	EACH	
SERVICE BOX	5	EACH	
LUMINAIRE ARM	4	EACH	
LUMINAIRE LED WESTAR 250 WATT EQUIVALENT	-	EACH	WESTAR PROVIDED & INSTALLED
PHOTOCELL	-	EACH	WESTAR PROVIDED & INSTALLED
UNFUSED STREET LIGHT CONNECTOR KIT	4	EACH	
FUSED STREET LIGHT CONNECTOR KIT	4	EACH	
OVERHEAD STREET NAME SIGN	CHART C	EACH	
R10-10 SIGN (24" X 30")	5	EACH	
R10-12 SIGN (24" X 30")	-	EACH	
BLANK OUT SIGN	-	EACH	
ENTRANCE HEAD	1	EACH	
SERVICE ENCLOSURE, 125 AMP. COMMERCIAL	1	EACH	
CIRCUIT BREAKER, TRAFFIC SIGNAL, 50 AMP.	1	EACH	
CIRCUIT BREAKER, AUXILIARY, 15 AMP.	1	EACH	LOCATE IN SERVICE BOX #5
SURGE ARRESTOR CA 302R	1	EACH	
GROUND ROD & CLAMP	13	EACH	
SERVICE WIRE NO. 6 AWG 1/C	270	LIN FT	
LIGHTING DISTRIBUTION WIRE NO. 8 AWG 1/C	1955	LIN FT	
POLE & BRACKET WIRE NO. 10 AWG 1/C	420	LIN FT	
GROUND WIRE NO. 6 AWG 1/C	2595	LIN FT	
MULTI-CONDUCTOR CABLE NO. 14 AWG 5/C	2000	LIN FT	
MULTI-CONDUCTOR CABLE NO. 14 AWG 7/C	1145	LIN FT	
MULTI-CONDUCTOR CABLE NO. 14 AWG 2/C	25	LIN FT	
VIDEO	1100	LIN FT	
SHIELDED DETECTOR LEAD-IN CABLE NO. 14 AWG 2/C	-	LIN FT	
DETECTOR LOOP WIRE NO. 14 AWG 1/C	-	LIN FT	
LOOP SEALANT	AS REQ'D		
PRE-FORMED LOOP	-	EACH	
CONDUIT, 1" & FITTINGS	-	LIN FT	
CONDUIT, 2" & FITTINGS	676	LIN FT	
CONDUIT, 3" & FITTINGS	656	LIN FT	
CONDUIT, 4" & FITTINGS	-	LIN FT	
VIDEO DETECTION SYSTEM	1	LSUM	

NOTES:

1. QUANTITIES SHOWN ARE FOR US-54 (KELLOGG AVE.) AND 143RD STREET SIGNAL.
2. CONDUIT SHALL BE BORED UNDER EXISTING PAVEMENT.
3. 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.
4. THE CONFLICT MONITORS SUPPLIED BY THE CITY OF WICHITA SHALL BE 2010 ECL-IP CONFLICT MONITORS AND SHALL MEET THE REQUIREMENTS OUTLINED IN CALTRANS TEES 2002 (LATEST VERSION).
5. ALL POLES AND EQUIPMENT SHALL BE PAINTED BLACK.
6. ACCESSIBLE PEDESTRIAN SIGNALS (APS) SHALL BE UTILIZED AND INCLUDE ALL MOUNTING ASSEMBLY AND HARDWARE. UNITS SHALL MEET STANDARDS FOUND IN THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND INCLUDE BOTH AUDIBLE AND VIBROTACTILE WALK INDICATIONS. SEE TRAFFIC SIGNAL SPECIFICATIONS FOR ADDITIONAL DETAILS.
7. ALL BACK PLATES SHALL BE EQUIPPED WITH A 2" RETRO-REFLECTIVE YELLOW BORDER MEETING ASTM D-4956 TYPE IX SHEETING SPECIFICATIONS.
8. TWO COMPLETE SPARE VIDEO DETECTION CAMERAS AND PROCESSORS SHALL BE PROVIDED IN ADDITION TO THE UNITS LISTED ON THE PLANS.
9. CONTRACTOR SHALL UTILIZE TWO (2) EXISTING ITERIS VANTAGE VECTOR HYBRID CAMERAS AND DETECTOR CARDS FROM THE EXISTING TRAFFIC SIGNAL. THE NEW LOCATIONS WILL BE AT ENGINEERS DISCRETION.
10. SEE SHEET 159 FOR SPECIAL FOUNDATION DETAILS AT POLE 1.

BID ITEM

ITEM	UNIT	QUANTITY
TRAFFIC SIGNALIZATION	L.S.	L.S.

- FOR INFORMATION ONLY -

TranSystems
245 NORTH WACO
SUITE 222
WICHITA, KANSAS 67202
PHONE: 316-303-3000
FAX: 316-462-5629

CONSULTANTS:

143RD STREET IMPROVEMENTS
WICHITA, KANSAS
CITY OF WICHITA

REVISIONS:

MARK	DATE	DESCRIPTION

PROJ NO: 87 N-0614-01
SCALE: 1" = 20'
DATE: 5/26/2017
DESIGNED BY: CCB
DRAWN BY: CCB
CHECKED BY: SGE

SHEET TITLE:
TRAFFIC SIGNAL QUANTITIES
143RD STREET & US-54 (KELLOGG)

SHEET NO.
154
SHEET 154 OF 236

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IF THIS DRAWING IS LESS THAN 22" X 36" IT IS A REDUCED SIZE DRAWING