BILL OF MATERIALS

ITEM	UNIT	QTY
POLE MOUNTED CONTROLLER & CABINET	EACH	–
PEDESTAL MOUNTED CONTROLLER & CABINET	EACH	–
PAD MOUNTED CONTROLLER & CABINET	EACH	1
TRAFFIC SIGNAL HEAD (SEE CHART A) W/ MOUNTING HARDWARE	EACH	13
TRAFFIC SIGNAL POLE (SEE CHART B) STEEL	EACH	4
TRAFFIC SIGNAL POLE (SEE CHART B) ALUMINUM	EACH	–
TRAFFIC SIGNAL PEDESTAL ALUMINUM 10'	EACH	–
CONCRETE CONTROLLER PAD	EACH	1
CONCRETE FOOTING – PEDESTAL	EACH	–
CONCRETE FOOTING – POLE	EACH	4
CONDUIT ELBOW 90°	EACH	As Req'd
CONDUIT ELBOW 90° 3"	EACH	As Req'd
BACK PLATE 5" – 3 SECTION	EACH	10
BACK PLATE 5" – 4 SECTION	EACH	2
BACK PLATE 5" – 5 SECTION	EACH	1
SERVICE BOX	EACH	8
JUNCTION BOX	EACH	6
GROUND ROD & CLAMP	EACH	4
CONDUIT CLAMP	EACH	As Req'd
TRAFFIC SIGNAL LAMP 135 WATT	EACH	43
TRAFFIC SIGNAL LAMP 60 WATT	EACH	–
CLASS 4 – WOOD POLE	EACH	–
ENTRANCE HEAD	EACH	1
CIRCUIT BREAKER & BOX	EACH	1
GUY WIRE GUARD	EACH	–
GUY WIRE CLAMP	EACH	–
THIMBLE EYE ANCHOR ROD	EACH	–
PEDESTRIAN PUSHBUTTON W/SIGN	EACH	2
DETECTOR LOOP WIRE No. 14 A.W.G. 1/C (TYPE THHN)	L.F.	2125
LEAD–IN WIRE No. 4 A.W.G. 1/C (TYPE THNN)	L.F.	430
STANDARD 1C #8 (GROUND)	L.F.	425
MULTI–CONDUCTOR CABLE No. 14 A.W.G. 5/C	L.F.	1795
MULTI–CONDUCTOR CABLE No. 14 A.W.G. 7/C	L.F.	155
MULTI–CONDUCTOR CABLE No. 14 A.W.G. 2/C	L.F.	–
SHIELDED DETECTOR LEAD–IN No. 14 A.W.G. 2/C	L.F.	4050
6 Pr #19 AWG COMM CABLE (Interconnect)	L.F.	–
CONDUIT 3/4" RGC	L.F.	135
CONDUIT 1 1/4" RGC	L.F.	915
CONDUIT 2" RGC	L.F.	30
CONDUIT 3" RGC	L.F.	565
CONDUIT 50mm PVC – KG&E LIGHTING (J.U. Poles)	L.F.	–
CONDUIT 50mm PVC – (Light Columns)	L.F.	–
TETHER WIRE 1/4" ASTM A475 SIEMENS–MARTIN GRADE MIN.	L.F.	–
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT **	L.S.	–
STREET NAME SIGNS	EACH	4
LEFT TURN YIELD ON GREEN W/MOUNTING HARDWARE (R10–12)	EACH	-
HARDWARE (R10–10)	EACH	2
SPLICE KIT (TRAFFIC INTERCONNECT)	EACH	–

CHART 'A' - SIGNAL INVENTORY

NO. WAYS	NO. SECTIONS (Per Face)	SIGNAL FACE ARRANGEMENT	MOUNTING TYPE	QTY
1	3	A	RIGID MAST ARM	5
1	3	C	RIGID MAST ARM	2
1	4	E	RIGID MAST ARM	2
1	3	A	VERTICAL BRACKET	3
1	5	J	VERTICAL BRACKET	1

CHART 'B' - TRAFFIC SIGNAL POLES

STATION	DIST.	SIDE	ARM LENGTH	NO. OF SIGNALS ON ARM	SIGNAL SPACING	TYPE	
259+24.60	69.93'	Rt	32'	2	30	STL	JU
259+30.69	50.19'	Lt	40'	3	16–12–12	STL	JU
260+20.98	44.45'	Lt	34'	2	20–12	STL	JU
260+59.79	46.09'	Rt	40'	4	14–12–12	STL	JU

CHART C - CONDUIT SUMMARY

CONDUIT SIZE (Trade Size)		TRENCHED (Feet)	PUSHED (Feet)	BORED (Feet)
3/4"	RIGID GALVANIZED	131.2	-	-
1 1/4"	RIGID GALVANIZED	911.3	-	-
2-0"	RIGID GALVANIZED	25.1	-	-
3-0"	RIGID GALVANIZED	2615	-	302.6

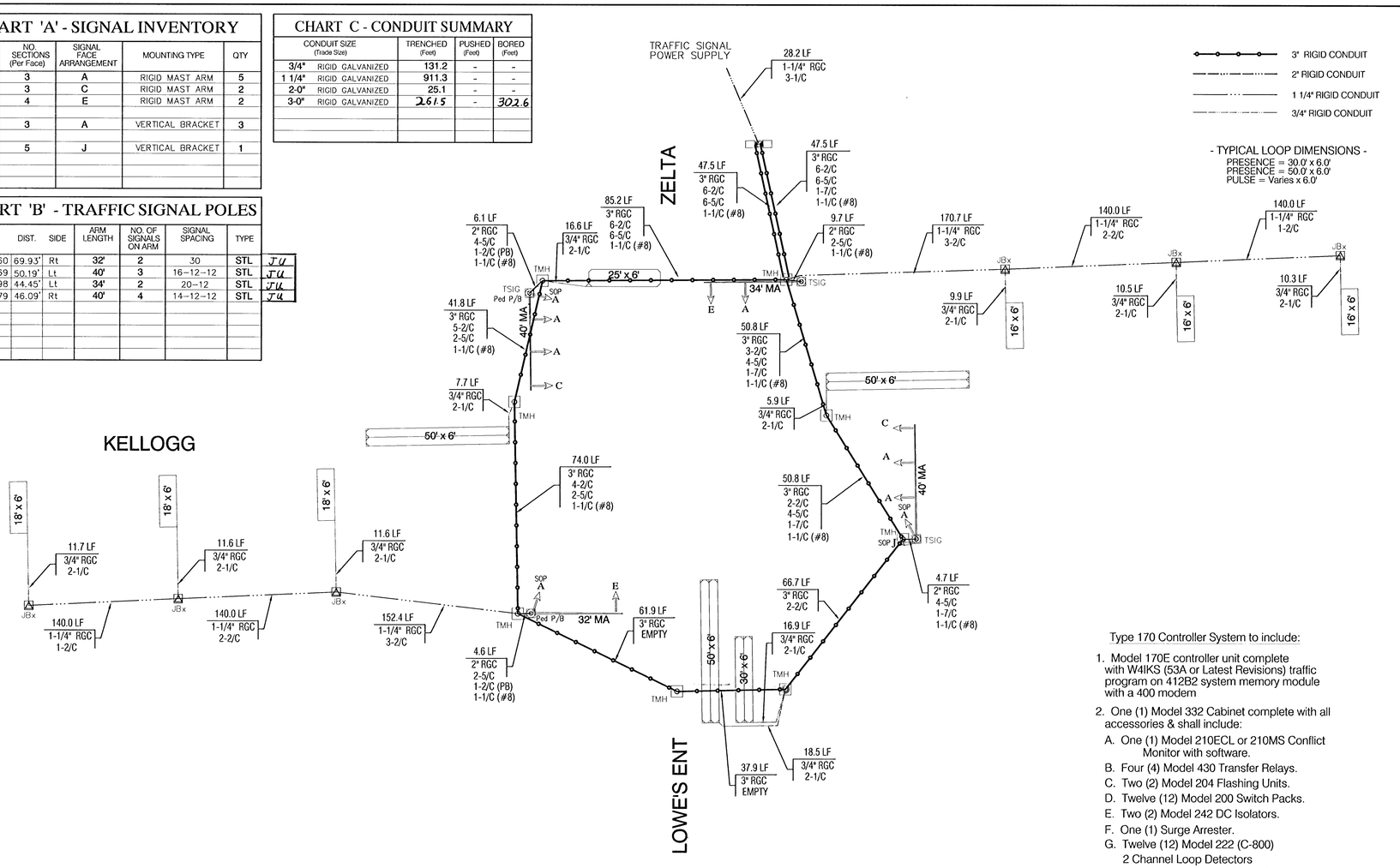
TRAFFIC MANHOLE SUMMARY

STATION	DISTANCE	SIDE
259+20.0	4.0'	Lt
259+26.16	45.42'	Lt
260+11.33	45.16'	Lt
260+29.0	2.5'	Rt
260+55.05	46.09	Rt
260+13.0	98.0'	Rt
259+75.0	98.0'	Rt
259+20.0	70.0'	Rt

JUNCTION BOX SUMMARY

STATION	DISTANCE	SIDE
254+88.0	60.0'	Rt
256+28.0	60.0'	Rt
257+68.0	60.0'	Rt
261+82.0	46.0'	Lt
263+22.0	46.0'	Lt
264+62.0	46.0'	Lt

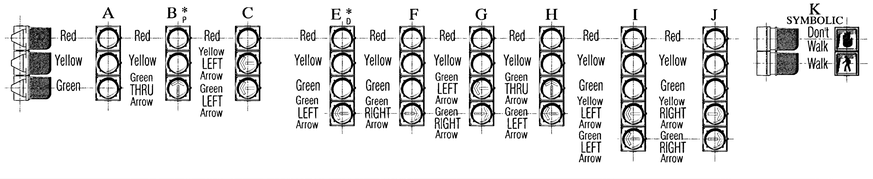
1. QUANTITIES ARE FOR INFORMATION ONLY. The Contractor shall supply and install all necessary materials and equipment for the complete installation and operation of the traffic signal system whether specifically mentioned or not.
2. ** Removal of existing traffic signal equipment shall include removal of foundations, service boxes, and junction boxes. See construction traffic control regarding removal of existing signals.



Type 170 Controller System to include:

1. Model 170E controller unit complete with W4IKS (53A or Latest Revisions) traffic program on 412B2 system memory module with a 400 modem
2. One (1) Model 332 Cabinet complete with all accessories & shall include:
   - A. One (1) Model 210ECL or 210MS Conflict Monitor with software.
   - B. Four (4) Model 430 Transfer Relays.
   - C. Two (2) Model 204 Flashing Units.
   - D. Twelve (12) Model 200 Switch Packs.
   - E. Two (2) Model 242 DC Isolators.
   - F. One (1) Surge Arrester.
   - G. Twelve (12) Model 222 (C-800) 2 Channel Loop Detectors
   - H. One (1) Stand alone 400 modem
   - I. One (1) Dial up modem (Hayes compatible)

TYPICAL TRAFFIC SIGNAL HEADS



(Overhead Mount)

Street Name

D–3

CHART 'D' - STREET NAME SIGN SUMMARY

LEGEND	TYPE	QTY	UNITS	SIZE (inches)
Kellogg	D-3	2	EA	30 x 60
Zelta	D-3	2	EA	30 x 60

GENERAL NOTES

1. SIGNAL TIMING BY THE CITY OF WICHITA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING THE CONTROLLER, CABINET, CONCRETE BASE, AND FOR ALL EQUIPMENT NECESSARY FOR THE COMPLETE AND SATISFACTORY OPERATION OF THE TRAFFIC SIGNAL, WHETHER SAID EQUIPMENT IS SPECIFICALLY MENTIONED OR NOT.
2. LENGTHS GIVEN ARE TO CENTERLINE OF POLE/BOX AND DO NOT INCLUDE LENGTHS FOR ELBOWS AND RISERS.
3. SIGNAL HEADS, PEDESTRIAN SIGNALS, TRAFFIC SIGNS & ETC. INCLUDE ALL BRACKETS, HARDWARE & OTHER INCIDENTALS NECESSARY FOR INSTALLATION.
4. SEE CITY OF WICHITA STANDARD SPECIFICATIONS FOR ADDITIONAL WIRING NOTES.

PROJECT NUMBER	SHEET NAME	ENGINEERING DIRECTORY
472-83372	Wiring	F:\\Kelog_gr\Kellogg\Traffic

DESIGN	DRAWN	APPROVED	DATE	SCALE	BAUGHMAN NO
JFB	STAFF	JFB	MAY 01	NONE	01 01 E914

ONE KELLOGG PLACE 2ND ADDITION
KELLOGG @ ZELTA
INTERSECTION SIGNALIZATION WIRING PLAN
KELLOGG AVE FROM DOWEL TO BRUNDIGE ROAD

BAUGHMAN COMPANY, P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 * 315 ELLIS * WICHITA, KANSAS 67211

SHEET 16 OF 46