BILL OF MATERIALS

ITEM	UNIT	QTY
POLE MOUNTED CONTROLLER & CABINET	EACH	1
PEDESTAL MOUNTED CONTROLLER & CABINET	EACH	–
PAD MOUNTED CONTROLLER & CABINET	EACH	1
TRAFFIC SIGNAL HEAD (SEE CHART A) W/ MOUNTING HARDWARE	EACH	27
TRAFFIC SIGNAL POLE (SEE CHART B) STEEL	EACH	8
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	8
CONDUIT ELBOW 90°	EACH	As Req'd
CONDUIT ELBOW 90° 3"	EACH	As Req'd
BACK PLATE 5" – 3 SECTION	EACH	12
BACK PLATE 5" – 4 SECTION	EACH	–
BACK PLATE 5" – 5 SECTION	EACH	2
SERVICE BOX	EACH	10
JUNCTION BOX	EACH	7
GROUND ROD & CLAMP	EACH	9
CONDUIT CLAMP	EACH	As Req'd
TRAFFIC SIGNAL LAMP 135 WATT	EACH	80
TRAFFIC SIGNAL LAMP 60 WATT	EACH	–
CLASS 4 – WOOD POLE	EACH	–
ENTRANCE HEAD	EACH	–
CIRCUIT BREAKER & BOX	EACH	2
GUY WIRE GUARD	EACH	–
GUY WIRE CLAMP	EACH	–
THIMBLE EYE ANCHOR ROD	EACH	–
PEDESTRIAN PUSHBUTTON W/SIGN	EACH	10
DETECTOR LOOP WIRE No. 14 A.W.G. 1/C (TYPE THHN)	LIN. m	1081
LEAD-IN WIRE No. 4 A.W.G. 1/C (TYPE THHN)	LIN. m	180
STANDARD 1C #8 (GROUND)	LIN. m	163
MULTI-CONDUCTOR CABLE No. 14 A.W.G. 5/C	LIN. m	663
MULTI-CONDUCTOR CABLE No. 14 A.W.G. 7/C	LIN. m	488
MULTI-CONDUCTOR CABLE No. 14 A.W.G. 2/C	LIN. m	–
SHIELDED DETECTOR LEAD-IN No. 14 A.W.G. 2/C	LIN. m	1002
6 Pr #19 AWG COMM CABLE (Interconnect)	LIN. m	125
CONDUIT 20mm	LIN. m	40
CONDUIT 30mm	LIN. m	72
CONDUIT 50mm	LIN. m	94
CONDUIT 75mm	LIN. m	206
CONDUIT 50mm PVC – KG&E LIGHTING (J.U. Poles)	LIN. m	189
CONDUIT 50mm PVC – KG&E LIGHTING (Light Columns)	LIN. m	316
TETHER WIRE 1/4" ASTM A475 SIEMENS-MARTIN GRADE MIN.	LIN. m	–
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT **	L.S.	–
STREET NAME SIGNS	EACH	4
LEFT TURN YIELD ON GREEN W/MOUNTING	EACH	4
HARDWARE (R10-12)	EACH	2
HARDWARE (R10-10)	EACH	2
SPLICE KIT (TRAFFIC INTERCONNECT)	EACH	1

CHART 'A' - SIGNAL INVENTORY

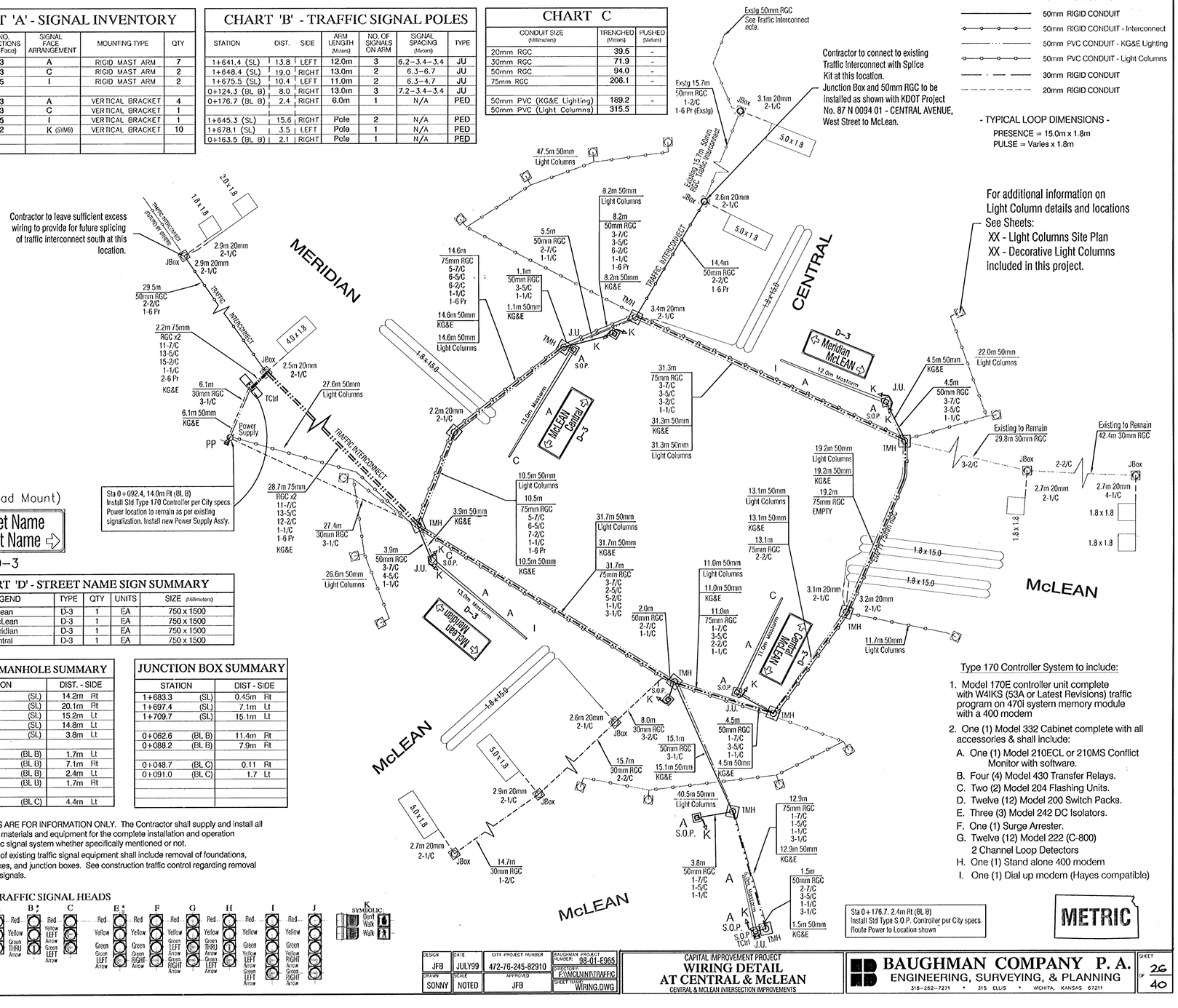
NO. WAYS	NO. SECTIONS (Per Face)	SIGNAL FACE ARRANGEMENT	MOUNTING TYPE	QTY
1	3	A	RIGID MAST ARM	7
1	3	C	RIGID MAST ARM	2
1	5	I	RIGID MAST ARM	2
1	3	A	VERTICAL BRACKET	4
1	3	C	VERTICAL BRACKET	1
1	5	I	VERTICAL BRACKET	1
1	2	K (SYM6)	VERTICAL BRACKET	10

CHART 'B' - TRAFFIC SIGNAL POLES

STATION	DIST.	SIDE	ARM LENGTH (Meters)	NO. OF SIGNALS ON ARM	SIGNAL SPACING (Meters)	TYPE
1+641.4 (SL)	13.8	LEFT	12.0m	3	6.2–3.4–3.4	JU
1+648.4 (SL)	19.0	RIGHT	13.0m	2	6.3–6.7	JU
1+675.5 (SL)	10.4	LEFT	11.0m	2	6.3–4.7	JU
0+124.3 (BL B)	8.0	RIGHT	13.0m	3	7.2–3.4–3.4	JU
0+176.7 (BL B)	2.4	RIGHT	6.0m	1	N/A	PED
1+645.3 (SL)	15.6	RIGHT	Pole	2	N/A	PED
1+678.1 (SL)	3.5	LEFT	Pole	1	N/A	PED
0+163.5 (BL B)	2.1	RIGHT	Pole	1	N/A	PED

CHART C

CONDUIT SIZE (Millimeters)	TRENCHED (Meters)	PUSHED (Meters)
20mm RGC	39.5	-
30mm RGC	71.9	-
50mm RGC	94.0	-
75mm RGC	206.1	-
50mm PVC (KG&E Lighting)	189.2	-
50mm PVC (Light Columns)	315.5	-



(Overhead Mount)

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.

SPECIAL FINISH FOR TRAFFIC SIGNAL EQUIPMENT:

The traffic signal controller cabinet, brackets, sign blank backs, signal backs and other exposed surfaces shall be shop painted with an aerosol lacquer cellulose ester to match the traffic signal pole color. The contractor shall submit two copies of the proposed coating system to the City for approval to application.

TRAFFIC SIGNAL POLE & PEDESTAL EXTERIOR COATING:

In addition to being galvanized, all exterior surfaces shall be coated with a zinc rich epoxy powder to a minimum dry film thickness of 2.0 mils. The coating shall be electrostatically applied and partially cured in a gas fired convection oven by heating the steel substrate to a minimum of 250 degrees Fahrenheit.

The powder primed surface shall be coated with an intermediate coat of polyester powder to a minimum dry film thickness of 2.0 mils. The coating shall be electrostatically applied and cured by heating the steel substrate in a convection oven to minimum of 350 degrees and a maximum of 400 degrees Fahrenheit.

The intermediate coat shall be top coated with one coat of high-build acrylic polyurethane enamel to a minimum dry film thickness of 2.0 mils. The coating shall be electrostatically applied and cured by heating the substrate in a convection oven to a minimum of 225 degrees Fahrenheit. The final top coating color shall be BLACK

CHART 'D' - STREET NAME SIGN SUMMARY

LEGEND	TYPE	QTY	UNITS	SIZE (Millimeters)
Central - McLean	D-3	1	EA	750 x 1500
Meridian - McLean	D-3	1	EA	750 x 1500
McLean - Meridian	D-3	1	EA	750 x 1500
McLean - Central	D-3	1	EA	750 x 1500

TRAFFIC MANHOLE SUMMARY

STATION		DIST. - SIDE	
1+642.9	(SL)	14.2m	Rt
1+648.6	(SL)	20.1m	Rt
1+664.0	(SL)	15.2m	Lt
1+676.1	(SL)	14.8m	Lt
1+676.9	(SL)	3.8m	Lt
0+114.8	(BL B)	1.7m	Lt
0+120.5	(BL B)	7.1m	Rt
0+166.1	(BL B)	2.4m	Lt
0+175.4	(BL B)	1.7m	Rt
0+019.2	(BL C)	4.4m	Lt

JUNCTION BOX SUMMARY

STATION		DIST - SIDE	
1+683.3	(SL)	0.45m	Rt
1+697.4	(SL)	7.1m	Lt
1+709.7	(SL)	15.1m	Lt
0+062.6	(BL B)	11.4m	Rt
0+088.2	(BL B)	7.9m	Rt
0+048.7	(BL C)	0.11	Rt
0+091.0	(BL C)	1.7	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.

TYPICAL TRAFFIC SIGNAL HEADS

DESIGN	DATE	CITY PROJECT NUMBER	BAUGHMAN PROJECT NUMBER
JFB	JULY99	472-76-245-82910	98-01-E965
DRAWN	SCALE	APPROVED	DIRECTORY
SONNY	NOTED	JFB	F:\WC\LINT\TRAFFIC
			SHEET NAME: WIRING.DWG

CAPITAL IMPROVEMENT PROJECT
WIRING DETAIL AT CENTRAL & McLEAN
CENTRAL & MCLEAN INTERSECTION IMPROVEMENTS

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

SHEET 26 OF 40