PHASE TIMING

FUNCTION	PHASE 1	2	3	4	5	6	7	8
MINIMUM GREEN	--	--	--	--	--	--	--	--
MAXIMUM GREEN	--	26.5	8.0	26.5	--	26.5	8.0	26.5
YELLOW CHANGE	--	3.7	3.7	3.7	--	3.7	3.7	3.7
RED CLEAR	--	1.1	--	1.8	--	1.1	–	1.8
ADDED INITIAL	--	--	--	--	--	–	–	–
MAXIMUM INITIAL	--	--	--	--	--	–	–	–

SERVICE/JUNCTION BOX SUMMARY

STATION	DIST.-SIDE	BASELINE
109+80.1	53.0' Lt.	Waco
109+55.1	29.7' Lt.	Waco
109+55.3	30.4' Rt.	Waco

DETECTOR SUMMARY

DETECTOR NO.	DETECTION ZONE	MODE	SIZE (LxW)	PHASE CALLED	PHASE EXTENDED	DELAY/ STRETCH TIMER	INITIAL SETTING (SEC.)

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
PAD MOUNTED CABINET	EACH	1
SIGNAL CONTROLLER (2070)	EACH	1
CONFLICT MONITOR (MODEL 2010 ECLip)	EACH	1
BATTERY BACKUP SYSTEM	EACH	1
TRAFFIC SIGNAL HEAD W/MOUNTING HARDWARE	EACH	4
TRAFFIC SIGNAL POLE, STEEL (SEE POLE SUMMARY)	EACH	----
TRAFFIC SIGNAL PEDESTAL ALUM. (5')	EACH	----
TRAFFIC SIGNAL PEDESTAL ALUM. (15')	EACH	5
TRAFFIC SIGNAL PEDESTAL (JOINT USE) ALUM. (35')	EACH	----
LUMINAIRE POLE W/15' ARM (SEE POLE SUMMARY)	EACH	---
CONCRETE CONTROLLER PAD	EACH	1
SCREW-IN FOUNDATION – PEDESTAL (5')	EACH	----
CONCRETE FOOTING – PEDESTAL (15')	EACH	5
CONCRETE FOOTING – PEDESTAL (35')	EACH	----
CONCRETE FOOTING – POLE	EACH	----
CONDUIT ELBOW 90° – 2"	EACH	AS REQ'D
CONDUIT ELBOW 90° – 3"	EACH	AS REQ'D
BACK PLATE 5" 3 SECTION (2" RETROREFLECTIVE)	EACH	----
BACK PLATE 5" 5 SECTION (2" RETROREFLECTIVE)	EACH	2
TERMINAL BLOCK	EACH	5
SERVICE BOX	EACH	3
JUNCTION BOX (PRE-FAB)	EACH	----
GROUND ROD & CLAMP	EACH	6
PEDESTRIAN PUSHBUTTON W/SIGN ◕	EACH	10
PEDESTRIAN INDICATIONS LED (16"x18" COMBINATION) (COUNTDOWN)	EACH	2
LED TRAFFIC SIGNAL LENS (12")	EACH	10
ENTRANCE HEAD	EACH	1
CIRCUIT BREAKER & BOX 50 AMP.	EACH	1
SURGE ARRESTOR – A.C. SERVICE	EACH	1
SURGE ARRESTOR – DETECTOR	EACH	1
ANTENNA COMMUNICATION CABLE	LIN.FT.	130
DETECTOR LOOP WIRE NO. 14 AWG 1/c	LIN.FT.	----
SHIELDED DETECTOR LEAD-IN NO.14 AWG 2/c	LIN.FT.	----
MULTI-CONDUCTOR CABLE NO.14 AWG 15/c	LIN.FT.	----
MULTI-CONDUCTOR CABLE NO.14 AWG 7/c	LIN.FT.	440
MULTI-CONDUCTOR CABLE NO.14 AWG 5/c	LIN.FT.	2,030
MULTI-CONDUCTOR CABLE NO.14 AWG 3/c	LIN.FT.	490
#8 AWG GROUND (GREEN)	LIN.FT.	620
CONDUIT 1"(RGC)	LIN.FT.	AS REQ'D
CONDUIT 1 1/2"(RGC)	LIN.FT.	----
CONDUIT 2"(PVC)	LIN.FT.	----
CONDUIT 2"(RGC)	LIN.FT.	52
CONDUIT 3"(RGC)	LIN.FT.	126
STREET NAME SIGN	EACH	----
LEFT TURN SIGNAL (R10-10) SIGN	EACH	----
LEFT TURN SIGNAL (R10-12) SIGN	EACH	2
LEFT TURN ONLY (R3-5L) SIGN	EACH	---
RIGHT TURN ONLY (R3-5R) SIGN	EACH	---
RADAR DETECTOR UNIT	EACH	----
RADAR DETECTOR CABLE	LIN.FT.	----
R3-2 BLANKOUT SIGN	EACH	2

-QUANTITIES FOR INFORMATION ONLY-

NOTES: ◕ *The traffic signal pushbuttons shall be Accessible Pedestrian Signals (APS) units per City Standard Specifications.*

** = Equipment to be provided by City of Wichita.

POLE AND EQUIPMENT FINISH:

Surface preparation
The exterior steel surface shall be blasted clean in accordance with the requirements outlined in the Steel Structures Painting Council Surface Preparation Specification No. 6, (SSPCSP60) utilizing a dry abrasive, closed cycle, recirculating system with centrifugal wheels and abrasive. The abrasive used shall be steel shot conforming to the Society of Automotive Engineers (SAE) Recommended Practice No. J827 with particle size meeting SAE Shot No. S280.

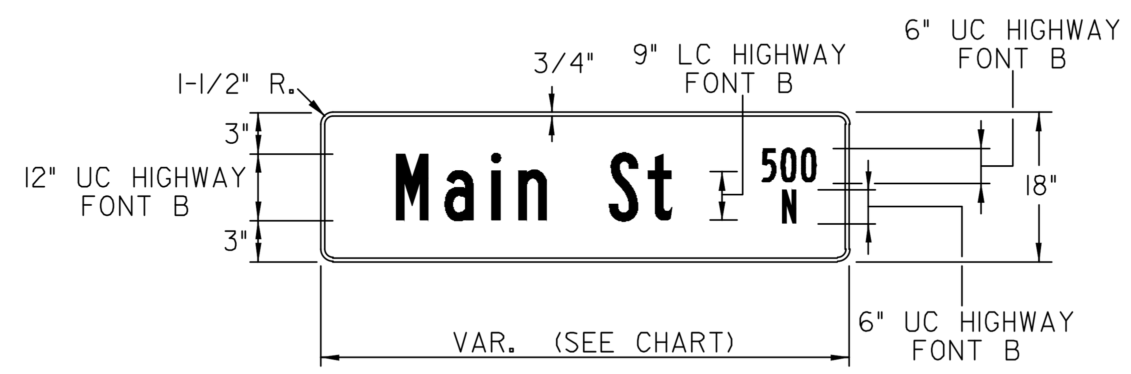
Zinc Coating
The pole assembly shall be hot-dip galvanized to the requirements of either ASTM A123 (Fabricated items) or ASTM A153 (Hardware items) by immersion in a molten bath of prime western grade zinc maintained between 810°F and 850°F. Maximum aluminum content of the bath shall not exceed 0.01%.

Top Coat
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 0.05mm (2.0 mils). Prior to application of the topcoat, the surface shall be mechanically etched and pre-heated to 450°F for a minimum of one hour. The coating shall be electrostatically applied and cured at a minimum temperature of 400°F and the color shall be BLACK.

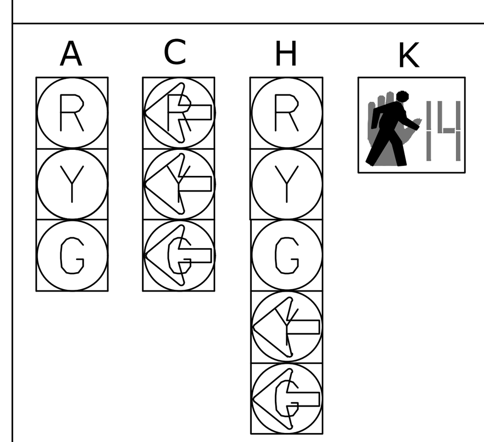
OVERHEAD STREET NAME SIGNS

LEGEND	LENGTH	QUANTITY

See Sh. No. XX for more information



TRAFFIC SIGNAL HEADS



NOTE: ALL LENSES ARE 12" L.E.D. UNLESS OTHERWISE NOTED.

SUMMARY OF TRAFFIC SIGNAL HEADS

SIGNAL FACE NUMBER	SIGNAL FACE ARRANGEMENT	NO. SECTIONS (PER FACE)	SIGNAL MOUNTING TYPE	QUANTITY
3,7	H	5	MAST ARM W/ BACKPLATE	2
6	K	1	SIDE-OF-POLE	2
TOTAL				4

TRAFFIC SIGNAL POLE SUMMARY

POLE NO.	POLE HEIGHT	ARM HEIGHT	ARM LENGTH	NO. OF SIGNALS ON ARM	BRACKET TYPE	X1	X2	X3	X4	NO. OF SIGNALS ON POLE	BRACKET TYPE	NO.OF PUSH BUTTONS ON POLE	LUMINAIRE MOUNTING HEIGHT
2	15	---	---	---	---	---	---	---	---	1	III	1	---
3	15	---	---	---	---	---	---	---	---	1	III	1	---
4	15	---	---	---	---	---	---	---	---	2	III	2	---
6	15	---	---	---	---	---	---	---	---	2	III	2	---
8	15	---	---	---	---	---	---	---	---	2	III	2	---
8	Ex.	Ex.	Ex.	Ex.	---	---	---	---	---	---	---	2	---

MAST ARM LENGTHS FOR FUTURE OPERATION WITH PROTECTED LEFT-TURNS.

RECAPITULATION OF TRAFFIC SIGNAL QUANTITIES

ITEM	UNIT	QUANTITY
TRAFFIC SIGNALIZATION (WACO AVE. & 1ST ST.)	LUMP SUM	1

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.*

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SCOTT ALLAN CANFIELD LICENSED 14369 07/03/2019 KANSAS PROFESSIONAL ENGINEER

PAVING IMPROVEMENTS
WACO AVENUE FROM DOUGLAS TO CENTRAL
GARY JANZEN, P.E. - CITY ENGINEER
CITY OF WICHITA PROJECT NO. 472-85496

Issue:

JOB NO.	187042-006
DATE	JUNE 2019
PM	BMM
DESIGNED BY	RJS, SAC
DRAWN BY	CP, BJS
CHECKED BY	BMM

WACO & FIRST
TRAFFIC SIGNAL
NOTES & QUANTITIES

Saved 6-5-2019 2:26:11 PM by SAC
Plot Scale 1:1 7-3-2019 1:42:32 PM by CARLOS PEREZ
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