



**WIRING DIAGRAM**

**TEMPORARY SIGNAL NOTES:**

- CONTRACTOR SHALL INSTALL AND MAINTAIN A TEMPORARY SIGNAL SYSTEM DURING CONSTRUCTION, TO INCLUDE (3) 4-WAY 3-SECTION HEADS, MOUNTED ON A SPAN WIRE CABLE.
- THE CONTRACTOR TO NOTIFY SIGNAL SUPERVISOR, 268-4033, 24 HOURS IN ADVANCE TO COORDINATE REMOVAL OF EXISTING CABINET AND CONTROLLER AND INSTALLATION OF CONTRACTOR'S CABINET AND CONTROLLER.
- ALL WIRING INSTALLED SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE AS WELL AS LOCAL ORDINANCES AND REQUIREMENTS.
- THE OPERATION AND MAINTENANCE OF THE SIGNAL SYSTEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL SIGNAL INDICATIONS, CLEARANCES, AND SEQUENCES SHALL BE IN ACCORDANCE WITH THE CURRENT M.U.T.C.D.
- THE TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED IN THE BID ITEM "TRAFFIC CONTROL LUMP SUM".
- THE TEMPORARY TRAFFIC SIGNAL SHALL BE SWITCHED ON DURING AN OFF-PEAK HOUR. WHEN SWITCHING SIGNALS, FLAG MEN WILL BE REQUIRED.
- THE TERMINAL BLOCKS SHALL BE IN A WEATHERPROOF ENCLOSURE.
- ALL NECESSARY SIGNAL HEAD, CONTROLLER AND POLE RELOCATIONS, WHETHER SPECIFICALLY MENTIONED OR NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- TRAFFIC SIGNAL HEADS WHICH ARE IN PLACE AND NOT IN USE DURING A SPECIFIC STEP SHALL BE REMOVED, OR COVERED WITH A OPAQUE MATERIAL.
- SIGNAL PHASING AND TIMING SHALL BE SET AS DIRECTED AND APPROVED BY THE ENGINEER-IN-CHARGE OF CONSTRUCTION.
- EACH INTERSECTION SHALL HAVE A SIGNAL CONTROLLER CAPABLE OF A STANDARD EIGHT OPERATION, WITH GREEN INTERVALS SETABLE FROM 0 TO 255 SECONDS.
- THE TRAFFIC SIGNAL CONTROLLER MUST BE CAPABLE OF STORING A MINIMUM OF THREE SEPARATE PHASING/TIMING PLANS, WHICH CAN BE SELECTED ON A TIME-OF-DAY BASIS
- IN CASE OF SIGNAL MALFUNCTION, THE CONTRACTOR MUST RESPOND WITHIN ONE HOUR.

**NOTES:**

CONTRACTOR SHALL INSTALL AND MAINTAIN TEMPORARY SIGNALS DURING CONSTRUCTION, TO INCLUDE (3) 4-WAY 3-SECTION HEADS, MOUNTED ON A SPAN WIRE CABLE. ALL COST OF TEMPORARY SIGNALIZATION SHALL BE INCLUDED IN THE LUMP SUM BID ITEM FOR TEMPORARY TRAFFIC SIGNALIZATION.

ALL TRAFFIC SIGNAL EQUIPMENT AND WIRING SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF WICHITA SPECIFICATIONS.

ALL EXISTING TRAFFIC CONTROL EQUIPMENT SHALL BE REMOVED AND REPLACED. ALL EXISTING EQUIPMENT SHALL BE STOCK PILED AT THE CENTRAL MAINTENANCE FACILITY, 1801 S. McLEAN.

**CONTROLLER NOTES:**

THE CONTROLLER AND CABINET SHALL INCLUDE THE FOLLOWING:

- MODEL 170E CONTROLLER UNIT COMPLETE WITH WAKS (57A OR LATEST REVISION) TRAFFIC PROGRAM ON 412B SYSTEM - MEMORY MODULE AND MODEL 400 MODEM.
- ONE MODEL 332A CABINET (MEETING CITY OF WICHITA SPECS.) COMPLETE WITH ALL ACCESSORIES INCLUDING 1 - MODEL 210PC CONFLICT MONITOR (ECL OR MS).
- 3 - MODEL 242 TWO CHANNEL ISOLATORS
- 4 - MODEL 430 TRANSFER RELAYS
- 4 - MODEL 200 SWITCH PACKS
- 2 - MODEL 204 FLASHER UNITS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING THE CONTROLLER, CABINET AND SOFTWARE AND FOR ALL EQUIPMENT NECESSARY FOR THE COMPLETE AND SATISFACTORY OPERATION OF THE TRAFFIC SIGNAL, WHETHER OR NOT SAID EQUIPMENT IS SPECIFICALLY MENTIONED.

**MATERIALS TABLE**

ITEM	UNIT	QUANTITY
CONTROLLER CABINET	EA.	1
CONCRETE CONTROLLER PAD	EA.	1
CONCRETE FOOTING - POLE	EA.	4
TRAFFIC SIGNAL POLE	EA.	4
SERVICE BOX	EA.	4
GROUND ROD & CLAMP	EA.	9
TRAFFIC SIGNAL MAST ARM (55')	EA.	1
TRAFFIC SIGNAL MAST ARM (58')	EA.	1
TRAFFIC SIGNAL MAST ARM (60')	EA.	1
TRAFFIC SIGNAL MAST ARM (64')	EA.	1
TRAFFIC SIGNAL HEAD - 12" (TYPE A) W/MOUNTING BRACKET	EA.	12
TRAFFIC SIGNAL HEAD - 12" (TYPE I) W/MOUNTING BRACKET	EA.	4
PEDESTRIAN SIGNAL - 12" (TYPE K) W/MOUNTING BRACKET (COMBINATION HEAD)	EA.	8
PEDESTRIAN PUSHBUTTON W/SIGN	EA.	8
L.E.D. UNIT	EA.	56
ENTRANCE HEAD	EA.	1
CIRCUIT BREAKER & BOX	EA.	1
BACK PLATE FOR SIGNAL HEAD (TYPE A)	EA.	8
PAD MOUNTED CABINET & CONTROLLER SYSTEM-TYPE 170 (SEE NOTE)		
TYPE 170 E CONTROLLER UNIT	EA.	1
MODEL 332 CABINET W/ALL ACCESSORIES	EA.	1
MODEL 430 TRANSFER RELAYS	EA.	4
MODEL 204 FLASHER UNIT	EA.	2
MODEL 210PC (ECL OR MS) CONFLICT MONITOR	EA.	1
SURGE PROTECTOR	EA.	1
MODEL 242 TWO CHANNEL ISOLATOR	EA.	3
MODEL 200 SWITCH PACK	EA.	12
VIDEO CABLE 75 OHM COAXIAL (BELDON 8281) (CX)	LF	635
MULTI-CONDUCTOR CABLE NO. 16 AWG 3/c (V3)	LF	635
MULTI-CONDUCTOR CABLE NO. 14 AWG 7/c	LF	1496
STANDARD NO. 8 AWG 1/c (TYPE THIN) (GROUND)	LF	632
STANDARD NO. 6 AWG 1/c (TYPE THIN) (POWER)	LF	242
CAMERA HOUSING	EA.	4
VIDEO DETECTION CAMERA & MOUNTING HARDWARE (RISER BRACKET)	EA.	4
VIDEO DETECTION PROCESSOR UNIT	EA.	1
VIDEO MONITOR	EA.	1
CONDUIT 2"	LF	33
CONDUIT 3"	LF	410
CONDUIT 2" ELBOW 90	EA.	As Req'd
CONDUIT 3" ELBOW 90	EA.	As Req'd
STREET NAME SIGN W/MOUNTING HARDWARE	EA.	4
R10-12 SIGNS	EA.	4

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING ALL EQUIPMENT NECESSARY FOR THE COMPLETE AND SATISFACTORY OPERATION OF THE TRAFFIC SIGNAL WHETHER SAID EQUIPMENT IS SPECIFICALLY MENTIONED OR NOT. THE QUANTITIES SHOWN ARE FOR INFORMATION ONLY.

**Traffic Signal Plan  
Pawnee and McLean Improvements**



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31  
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43

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