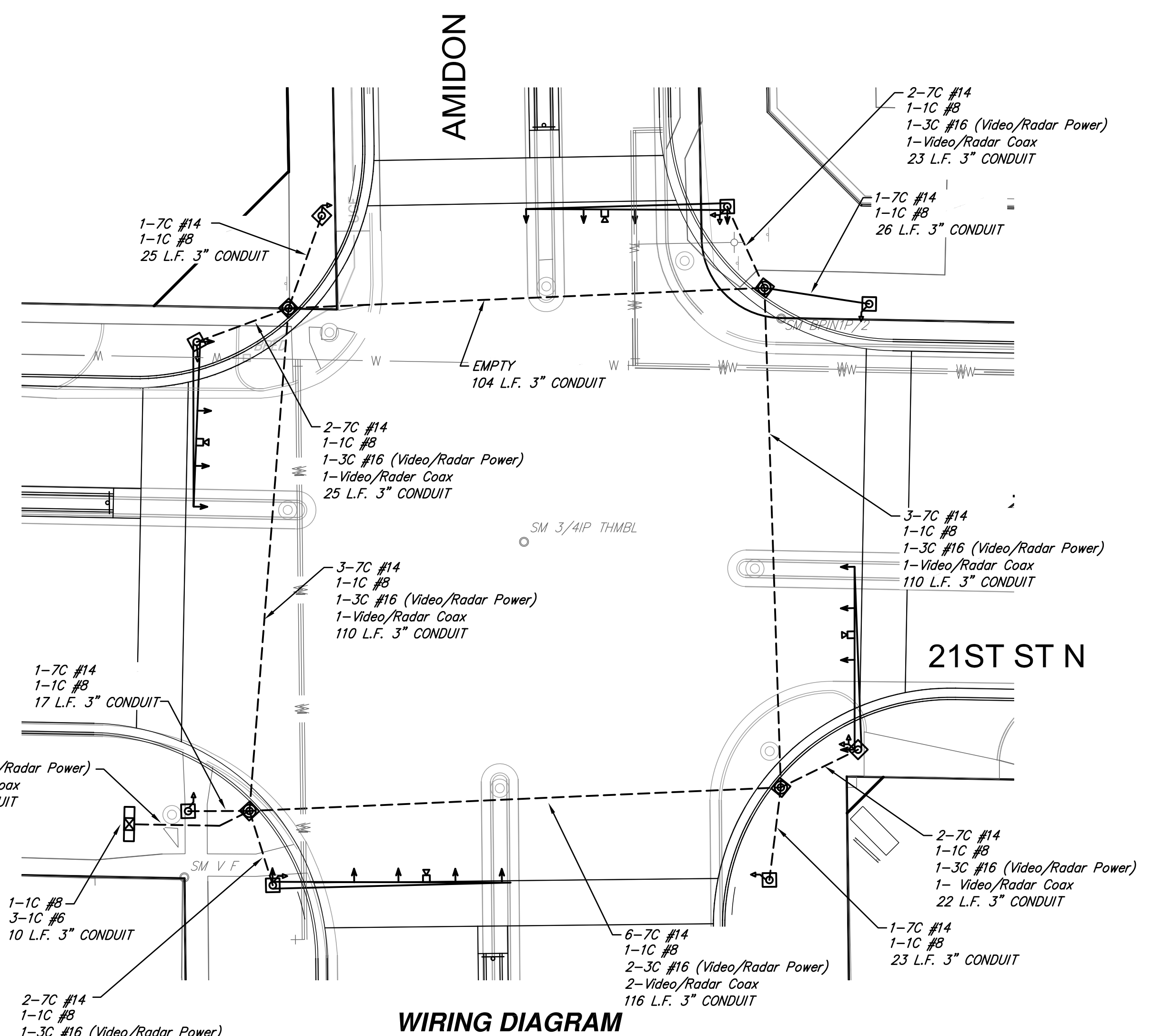


**TEMPORARY SIGNAL NOTES:**

- 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.

**EQUIPMENT SPECIFICATIONS  
2070 CONTROLLER**

- A. Controller Units: The 2070L controllers supplied shall meet requirements outlined in CalTrans TEES 2002 (latest revision), and the following requirements:
- The 2070L controllers shall have a 19" EIA rack mountable chassis (mated to the 170 cabinet). Controllers shall be Eagle or Econolite
  - 2070-1B CPU module with RJ-45 Ethernet port.
  - 2070-2A C1 field I/O module for compatibility with CalTrans style C1 connector.
  - 2070-3B 8X40 front panel with LCD display.
  - 2070-4A 10 amp power supply
  - 2070-7A asynchronous serial communications module (RS-232)
  - Any unused slot position shall have a cover plate.



**WIRING DIAGRAM**

**NOTES:**

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. McCLEAN.

TRAFFIC SIGNAL EQUIPMENT (POLES, PEDESTALS & CABINET) SHALL BE BLACK PER CITY OF WICHITA SPECIFICATIONS.

**MATERIALS TABLE**

ITEM	UNIT	QUANTITY
CONCRETE CONTROLLER PAD	EA.	1
CONCRETE FOOTING - POLE	EA.	8
TRAFFIC SIGNAL POLE	EA.	4
TRAFFIC SIGNAL PEDESTAL	EA.	4
SERVICE BOX	EA.	4
GROUND ROD & CLAMP	EA.	9
TRAFFIC SIGNAL MAST ARM (36')	EA.	1
TRAFFIC SIGNAL MAST ARM (40')	EA.	1
TRAFFIC SIGNAL MAST ARM (44')	EA.	1
TRAFFIC SIGNAL MAST ARM (52')	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	EA.	8
PEDESTRIAN PUSHBUTTON W/SIGN	EA.	8
L.E.D. UNIT	EA.	64
ENTRANCE HEAD	EA.	1
CIRCUIT BREAKER & BOX	EA.	1
BACK PLATE FOR SIGNAL HEAD (TYPE A)	EA.	8
BACK PLATE FOR SIGNAL HEAD (TYPE I)	EA.	4
PAD MOUNTED CABINET & CONTROLLER SYSTEM-TYPE 2070 (SEE NOTE)		
MODEL 2070 CONTROLLER	EA.	CITY
MODEL 336A CABINET W/ALL ACCESSORIES	EA.	1
MODEL 430 TRANSFER RELAYS	EA.	1
MODEL 204 FLASHER UNIT	EA.	4
SURGE PROTECTOR	EA.	2
MODEL 242 TWO CHANNEL ISOLATOR	EA.	1
MODEL 200 SWITCH PACK	EA.	1
MULTI-CONDUCTOR CABLE NO. 14 AWG 2/c (Pedestrian Pushbuttons)	LF	80
MULTI-CONDUCTOR CABLE NO. 14 AWG 5/c	LF	536
MULTI-CONDUCTOR CABLE NO. 14 AWG 7/c	LF	2282
STANDARD NO. 8 AWG 1/c (TYPE THHN) (GROUND)	LF	560
STANDARD NO. 6 AWG 1/c (TYPE THHN) (POWER)	LF	50
CONDUIT 3"	LF	631
CONDUIT 4"	LF	33
STREET NAME SIGN W/MOUNTING HARDWARE	EA.	4
CAMERA/RADAR HOUSING (4 PLUS 2 SPARES)	EA.	6
VIDEO DETECTION CAMERA/RADAR AND MOUNTING HARDWARE (RISER BRACKET)	EA.	6
VIDEO/RADAR DETECTION PROCESSOR UNIT (SINGLE INPUT) (2 SPARES)	EA.	3
VIDEO/RADAR POWER CABLE NO. 16 AWG 3/c	LF	765
VIDEO/RADAR CABLE 75 OHM COAXIAL (BELDON #B281)	LF	765
T.V. MONITOR	EA.	1
CAMERA CHARGED COUPLING DEVICE (ITERIS VANTAGE OR APPROVED EQUAL)	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.

**AMIDON - 21ST TO 29TH PAVING IMPROVEMENTS  
21ST STREET NORTH  
SIGNAL WIRING PLAN**

	<b>RUGGLES &amp; BOHM</b>	DATE Oct. 22, 2014
	ENGINEERING   SURVEYING   LANDSCAPE ARCHITECTURE   GOVERNMENT 924 NORTH MAIN WICHITA, KANSAS 67203 P (316) 264-8008 F (316) 264-4621 WWW.RUGGLESANDBOHM.COM	DESIGN KWL
PROJECT NUMBER 472-84914	RB JOB NO. 3647T	DWG. SCALE 1" = 10'
DRAWING FILE TRAFFIC SIGNAL schematics {21ST ST WIRING}		SHEET <b>67</b> OF 133