

BILL OF MATERIALS		
ITEM	UNIT	QTY
PEDESTRIAN SIGNAL POLE & BASE - STEEL	EACH	4
VIDEO DETECTION CAMERA & MOUNTING HARDWARE (RISER BRACKET)	EACH	4
CAMERA HOUSING	EACH	4
VIDEO CABLE 75 OHM COAXIAL (BELDON 8281) (CX)	LIN. FT.	976
STANDARD 1/C #8 (Ground)	LIN. FT.	976
CONDUIT 2" RGC	LIN. FT.	47
VIDEO MONITOR	EACH	1
PEDESTRIAN PUSHBUTTON W/SIGN	EACH	8
GROUND ROD & CLAMP	EACH	4
TRAFFIC MANHOLE LID REPLACEMENT (See Sheet 20)	EACH	2

TRAFFIC CONDUIT		
CONDUIT SIZE	TRENCHED	PUSHED
1.5" RGC	-	-
2" RGC	27.2'	19.3'
3" RGC	-	-

GENERAL NOTES

- 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.
- Lengths given are to the centerline of pole/box and do not include lengths for elbows and risers.
- Signal heads, pedestrian signals, traffic signs, etc. shall include all brackets, hardware, & other incidentals necessary for installation.
- See City of Wichita Standard Specifications for additional wiring notes.
- Quantities are for Information Only.

PEDESTRIAN SIGNAL POLE 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.

The Contractor shall upgrade the existing signal system at the intersection of 21st Street North & Tyler Road to include Video Detection capabilities in all 4 directions. All cost associated with this work, including cameras, mounting hardware, software upgrades, changes to the controller, etc. shall be **SUBSIDIARY** to the Lump Sum Bid Item "Traffic Signalization Upgrades".

Install Video Detection Camera on North Bound Traffic Signal Arm.

Sta. 10+75.4, 61.4' Rt. Remove Ex. Pedestrian Signals from Ex. Traffic Signal Poles and Install on New Pedestrian Signal Pole w/ Pedestrian Pushbuttons.

Install 9.5 L.F 2" RGC. Re-Pull Ex. Pedestrian Signal Conductor to New Pedestrian Signal Pole.

Sta. 10+69.0, 62.9' Lt. Remove Ex. Pedestrian Signals from Ex. Traffic Signal Poles and Install on New Pedestrian Signal Pole w/ Pedestrian Pushbuttons.

Install 19.3 L.F 2" RGC by Pushing Under Ex. Bike Path. Re-Pull Ex. Pedestrian Signal Conductor to New Pedestrian Signal Pole.

Install Video Detection Camera on West Bound Traffic Signal Arm.

Install Video Detection Camera on East Bound Traffic Signal Arm.

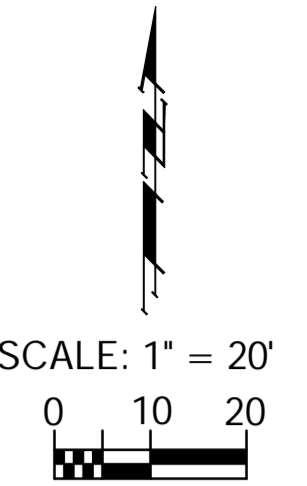
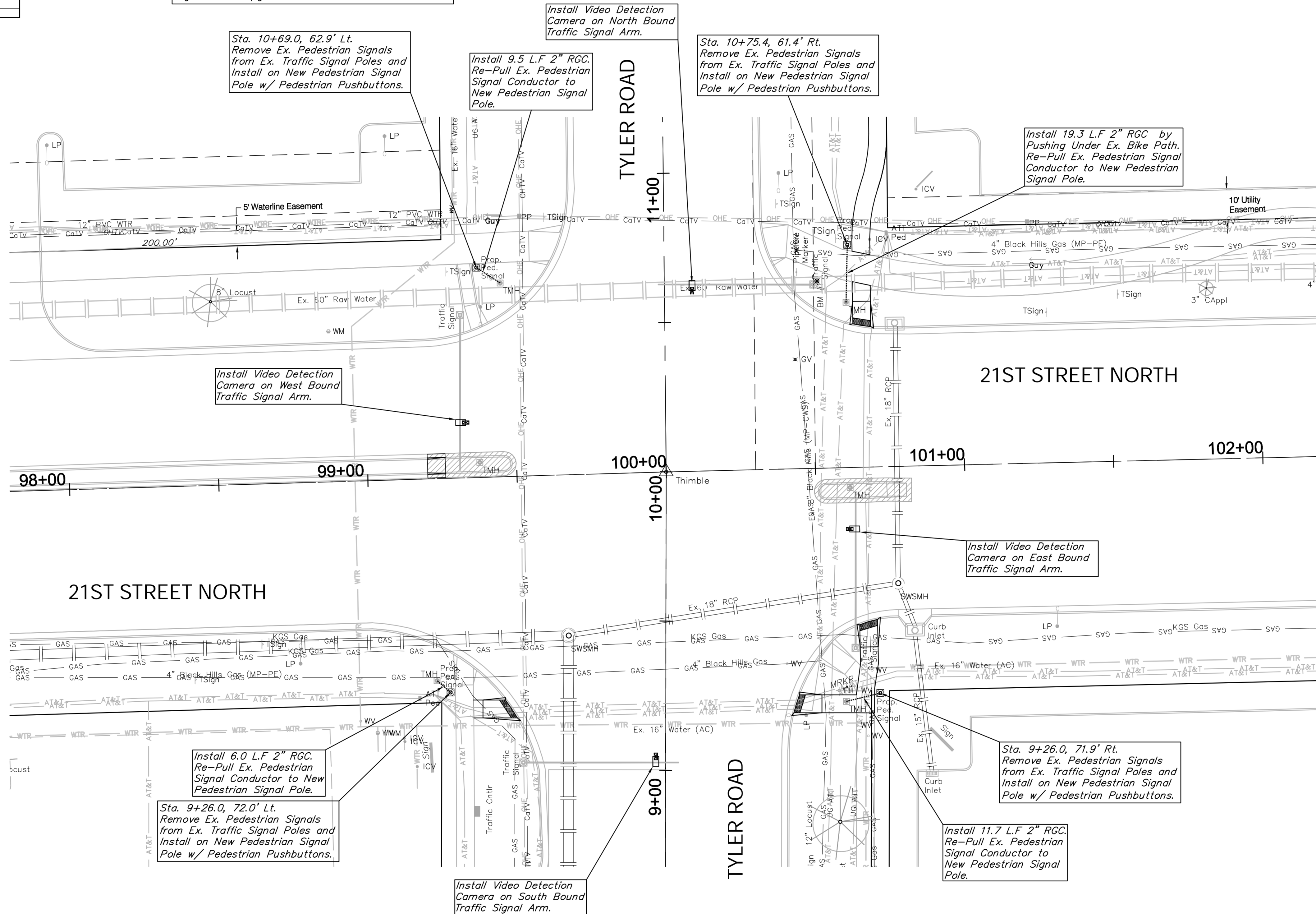
Install 6.0 L.F 2" RGC. Re-Pull Ex. Pedestrian Signal Conductor to New Pedestrian Signal Pole.

Sta. 9+26.0, 72.0' Lt. Remove Ex. Pedestrian Signals from Ex. Traffic Signal Poles and Install on New Pedestrian Signal Pole w/ Pedestrian Pushbuttons.

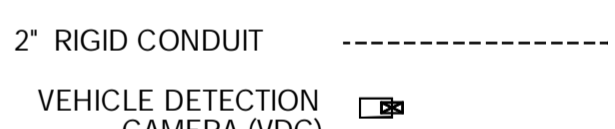
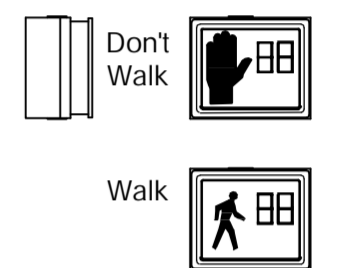
Sta. 9+26.0, 71.9' Rt. Remove Ex. Pedestrian Signals from Ex. Traffic Signal Poles and Install on New Pedestrian Signal Pole w/ Pedestrian Pushbuttons.

Install 11.7 L.F 2" RGC. Re-Pull Ex. Pedestrian Signal Conductor to New Pedestrian Signal Pole.

Install Video Detection Camera on South Bound Traffic Signal Arm.



PEDESTRIAN SIGNAL HEADS



EQUIPMENT SPECIFICATIONS
2070 CONTROLLER

- A. Controller Units: The 2070L controllers supplied shall meet the requirements outlined in CaTrans TEES 2002 (latest revision), and the following requirements:
- The 2070L controller shall have a 19" EIA rack mountable chassis (mated to the 170 cabinet).
 - 2070-1B CPU module with RJ-45 Ethernet port.
 - 2070-2A C1 field I/O module for compatibility with CaTrans 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.
- B. Conflict Monitors: The Conflict Monitors supplied shall be Model 2010 ECL conflict monitors.
- C. Kyland 3170 Traffic Switch & corresponding cables
- D. Alvarion Radio - SU-A-5.8-3-BD-VL

Drawing File: E:\Projects\Tyler - 21st to 29th\Civil 3d\Tyler Base.dwg (Traffic)

Design: TPV
Drawn: STAFF
Approved: TPV
Scale: NOTED

Project No. 10-12-ES75 CAPITAL IMPROVEMENT PROJECT

21st STREET NORTH & TYLER ROAD
TRAFFIC SIGNALIZATION UPGRADES

TYLER ROAD - 21ST STREET NORTH TO 29TH STREET NORTH

July 2011
SHEET 58 OF 100