

NOTES FOR TEMPORARY TRAFFIC SIGNALS:

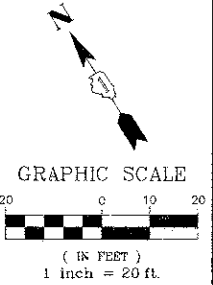
- ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
- ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROLLER EQUIPMENT.
- THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
- UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL. TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
- TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
- DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF THE DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
- WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.

NOTE:
THE EXISTING CONTROLLER IS AN EAGLE MODEL M-52 WITH VERSION 3.33 E SOFTWARE IN A TYPE IV CABINET.

VIDEO DETECTION CAMERA AIMING NOTES:

- NW QUADRANT AIMED AT NB RANDALL ROAD
 - NE QUADRANT AIMED AT EB BIG TIMBER ROAD
 - SE QUADRANT AIMED AT SB RANDALL ROAD
 - SW QUADRANT AIMED AT WB BIG TIMBER ROAD
- ALL VIDEO CAMERAS SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 45 FEET.

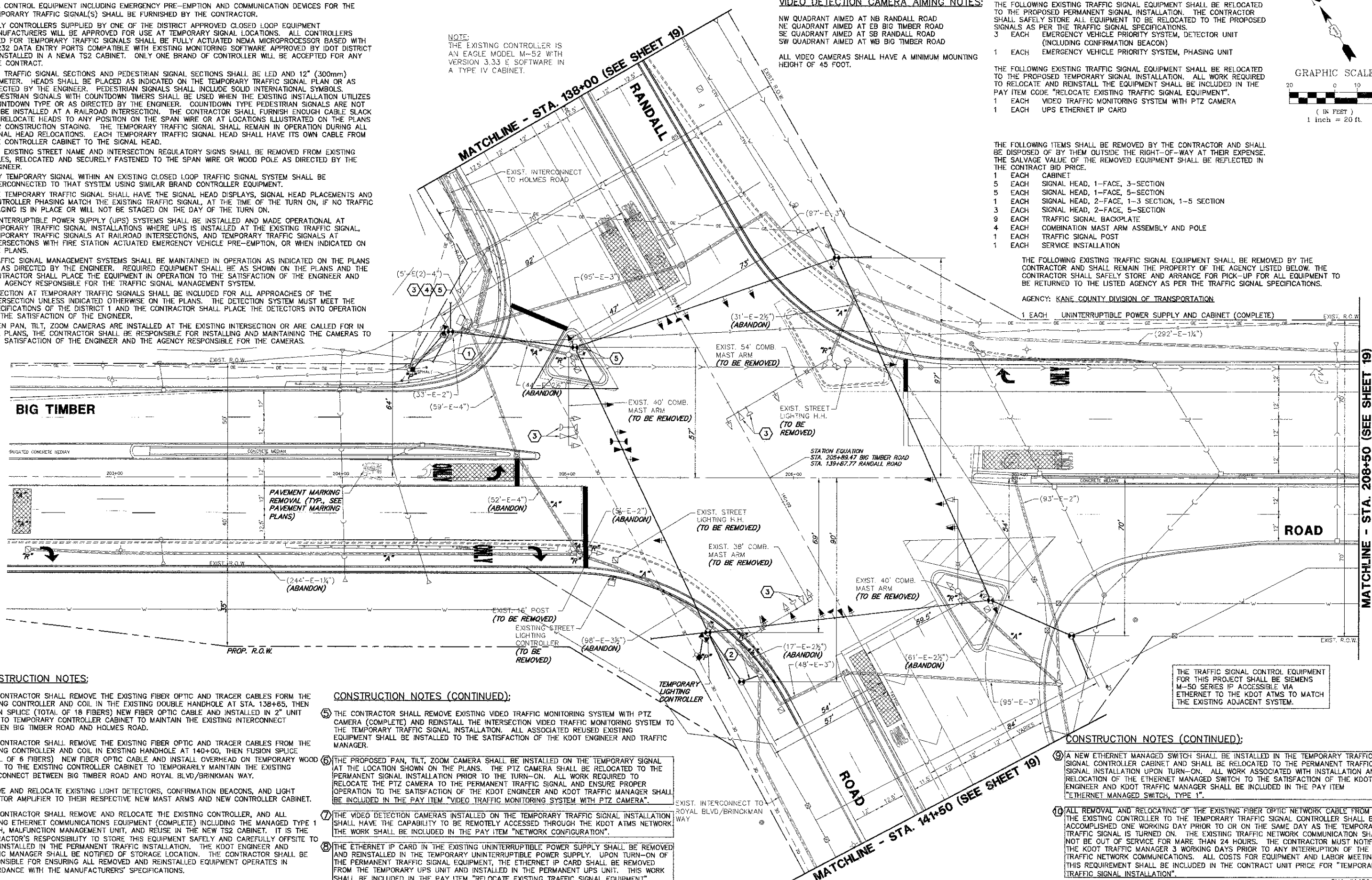
- THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE RELOCATED TO THE PROPOSED PERMANENT SIGNAL INSTALLATION. THE CONTRACTOR SHALL SAFELY STORE ALL EQUIPMENT TO BE RELOCATED TO THE PROPOSED SIGNALS AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.
- 3 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT (INCLUDING CONFIRMATION BEACON)
 - 1 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
- THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE RELOCATED TO THE PROPOSED TEMPORARY SIGNAL INSTALLATION. ALL WORK REQUIRED TO RELOCATE AND REINSTALL THE EQUIPMENT SHALL BE INCLUDED IN THE PAY ITEM CODE "RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT".
- 1 EACH VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA
 - 1 EACH UPS ETHERNET IP CARD



- THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.
- 1 EACH CABINET
 - 5 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
 - 5 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
 - 1 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
 - 3 EACH SIGNAL HEAD, 2-FACE, 5-SECTION
 - 9 EACH TRAFFIC SIGNAL BACKPLATE
 - 4 EACH COMBINATION MAST ARM ASSEMBLY AND POLE
 - 1 EACH TRAFFIC SIGNAL POST
 - 1 EACH SERVICE INSTALLATION

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK-UP FOR ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- AGENCY: KANE COUNTY DIVISION OF TRANSPORTATION
- 1 EACH UNINTERRUPTIBLE POWER SUPPLY AND CABINET (COMPLETE)



CONSTRUCTION NOTES:

- THE CONTRACTOR SHALL REMOVE THE EXISTING FIBER OPTIC AND TRACER CABLES FROM THE EXISTING CONTROLLER AND COIL IN THE EXISTING DOUBLE HANDHOLE AT STA. 138+85, THEN FUSION SPlice (TOTAL OF 18 FIBERS) NEW FIBER OPTIC CABLE AND INSTALLED IN 2" UNIT DUCT TO TEMPORARY CONTROLLER CABINET TO MAINTAIN THE EXISTING INTERCONNECT BETWEEN BIG TIMBER ROAD AND HOLMES ROAD.
- THE CONTRACTOR SHALL REMOVE THE EXISTING FIBER OPTIC AND TRACER CABLES FROM THE EXISTING CONTROLLER AND COIL IN EXISTING HANDHOLE AT 140+00, THEN FUSION SPlice (TOTAL OF 6 FIBERS) NEW FIBER OPTIC CABLE AND INSTALL OVERHEAD ON TEMPORARY WOOD POLES TO THE EXISTING CONTROLLER CABINET TO TEMPORARILY MAINTAIN THE EXISTING INTERCONNECT BETWEEN BIG TIMBER ROAD AND ROYAL BLVD/BRINKMAN WAY.
- REMOVE AND RELOCATE EXISTING LIGHT DETECTORS, CONFIRMATION BEACONS, AND LIGHT DETECTOR AMPLIFIER TO THEIR RESPECTIVE NEW MAST ARMS AND NEW CONTROLLER CABINET.
- THE CONTRACTOR SHALL REMOVE AND RELOCATE THE EXISTING CONTROLLER, AND ALL EXISTING ETHERNET COMMUNICATIONS EQUIPMENT (COMPLETE) INCLUDING THE MANAGED TYPE 1 SWITCH, MALFUNCTION MANAGEMENT UNIT, AND REUSE IN THE NEW TS2 CABINET. IT IS THE CONTRACTOR'S RESPONSIBILITY TO STORE THIS EQUIPMENT SAFELY AND CAREFULLY OFFSITE TO BE REINSTALLED IN THE PERMANENT TRAFFIC INSTALLATION. THE KDOT ENGINEER AND TRAFFIC MANAGER SHALL BE NOTIFIED OF STORAGE LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL REMOVED AND REINSTALLED EQUIPMENT OPERATES IN ACCORDANCE WITH THE MANUFACTURERS' SPECIFICATIONS.

CONSTRUCTION NOTES (CONTINUED):

- THE CONTRACTOR SHALL REMOVE EXISTING VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA (COMPLETE) AND REINSTALL THE INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM TO THE TEMPORARY TRAFFIC SIGNAL INSTALLATION. ALL ASSOCIATED REUSED EXISTING EQUIPMENT SHALL BE INSTALLED TO THE SATISFACTION OF THE KDOT ENGINEER AND TRAFFIC MANAGER.
- THE PROPOSED PAN, TILT, ZOOM CAMERA SHALL BE INSTALLED ON THE TEMPORARY SIGNAL AT THE LOCATION SHOWN ON THE PLANS. THE PTZ CAMERA SHALL BE RELOCATED TO THE PERMANENT SIGNAL INSTALLATION PRIOR TO THE TURN-ON. ALL WORK REQUIRED TO RELOCATE THE PTZ CAMERA TO THE PERMANENT TRAFFIC SIGNAL AND ENSURE PROPER OPERATION TO THE SATISFACTION OF THE KDOT ENGINEER AND KDOT TRAFFIC MANAGER SHALL BE INCLUDED IN THE PAY ITEM "VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA".
- THE VIDEO DETECTION CAMERAS INSTALLED ON THE TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL HAVE THE CAPABILITY TO BE REMOTELY ACCESSED THROUGH THE KDOT ATMS NETWORK. THE WORK SHALL BE INCLUDED IN THE PAY ITEM "NETWORK CONFIGURATION".
- THE ETHERNET IP CARD IN THE EXISTING UNINTERRUPTIBLE POWER SUPPLY SHALL BE REMOVED AND REINSTALLED IN THE TEMPORARY UNINTERRUPTIBLE POWER SUPPLY, UPON TURN-ON OF THE PERMANENT TRAFFIC SIGNAL EQUIPMENT. THE ETHERNET IP CARD SHALL BE REMOVED FROM THE TEMPORARY UPS UNIT AND INSTALLED IN THE PERMANENT UPS UNIT. THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT".

CONSTRUCTION NOTES (CONTINUED):

- A NEW ETHERNET MANAGED SWITCH SHALL BE INSTALLED IN THE TEMPORARY TRAFFIC SIGNAL CONTROLLER CABINET AND SHALL BE RELOCATED TO THE PERMANENT TRAFFIC SIGNAL INSTALLATION UPON TURN-ON. ALL WORK ASSOCIATED WITH INSTALLATION AND RELOCATION OF THE ETHERNET MANAGED SWITCH TO THE SATISFACTION OF THE KDOT ENGINEER AND KDOT TRAFFIC MANAGER SHALL BE INCLUDED IN THE PAY ITEM "ETHERNET MANAGED SWITCH, TYPE 1".
- ALL REMOVAL AND RELOCATING OF THE EXISTING FIBER OPTIC NETWORK CABLE FROM THE EXISTING CONTROLLER TO THE TEMPORARY TRAFFIC SIGNAL CONTROLLER SHALL BE ACCOMPLISHED ONE WORKING DAY PRIOR TO OR ON THE SAME DAY AS THE TEMPORARY TRAFFIC SIGNAL IS TURNED ON. THE EXISTING TRAFFIC NETWORK COMMUNICATION SHALL NOT BE OUT OF SERVICE FOR MORE THAN 24 HOURS. THE CONTRACTOR MUST NOTIFY THE KDOT TRAFFIC MANAGER 3 WORKING DAYS PRIOR TO ANY INTERRUPTION OF THE TRAFFIC NETWORK COMMUNICATIONS. ALL COSTS FOR EQUIPMENT AND LABOR MEETING THIS REQUIREMENT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR "TEMPORARY TRAFFIC SIGNAL INSTALLATION".

FILE NAME = 4459.000-1R1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION & REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT BIG TIMBER ROAD (CH 21) AT RANDALL ROAD (CH 34)	FAP RITE = 527	SECTION = 08-00369-00-SP	COUNTY = KANE	TOTAL SHEETS = 67	SHEET NO. = 18	GHA #4459.000
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	SCALE = 1"=20'			SHEET NO. OF SHEETS =	STA. TO STA.	ILLINOIS FED. AID PROJECT			
PLOT DATE = 3/21/2012	DATE = 3/21/2012	REVISED -						CONTRACT # = 63669			