

ITEM 633-CONTROLLER ITEM, MISC.:MANAGED ETHERNET SWITCH WITH GIGABIT UPLINK PORTS [A] CONT.

THE FIBER OPTIC SWITCH SHALL INTERFACE TO SINGLE-MODE FIBER OPTIC CABLE WITH AN OPTICAL WAVELENGTH OF 1310 NM USING SC CONNECTORS. IT SHALL BE CAPABLE OF OPERATING OVER A DISTANCE OF AT LEAST 10KM WITH AN OPTICAL POWER BUDGE OF 17 DB. THE UNIT SHALL BE CAPABLE OF OPERATING IN A FAULT TOLERANT FIBER OPTIC LOOP.

PROVIDE A TRANSCEIVER THAT IS FULLY COMPLIANT WITH IEEE 802.3, 802.3U, & 802.3Z. THE TRANSCEIVER SHALL PROVIDE FULL-DUPLEX OPERATION AND FLOW CONTROL.

PROVIDE A SIMPLE INTUITIVE USER INTERFACE FOR CONFIGURATION AND MONITORING OF THE TRANSCEIVER VIA STANDARD HTML GRAPHICAL WEB BROWSER, INCLUDING DETAILED ON-LINE HELP. EVENT LOGGING AND RECORDING SHALL BE INCLUDED. ALL SIGNIFICANT EVENTS SHALL BE SORTED IN A NON-VOLATILE SYSTEM LOG.

THE OPTICAL ETHERNET SWITCH SHALL CONNECT TO ALL ETHERNET DEVICES IN THE CONTROLLER CABINET INCLUDING THE CONTROLLER, VIDEO DETECTION COMMUNICATIONS INTERFACE PANEL AND VIDEO SERVERS (IF APPLICABLE). AND ANY OTHER ETHERNET DEVICES USING PROPERLY RATED CAT5 CABLE CONNECTORS.

IN ADDITION TO ODOT SS 809 AND 909, THIS WORK SHALL INCLUDE ALL TIME, LABOR, AND MATERIAL TO SET UP CAMERAS AND COMPLETE ANY NECESSARY WORK (NETWORKING, ETC.) TO MAKE THE SWITCHES REMOTELY ACCESSIBLE OVER THE MARIETTA TRAFFIC SIGNAL FIBER OPTIC NETWORK.

THE COST FOR THIS ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIAL, AND INCIDENTALS REQUIRED TO ASSEMBLE A FUNCTIONAL, FIBER OPTIC ETHERNET SYSTEM INCLUDING CONNECTIONS, TESTED AND ACCEPTED.

ITEM 633-CONTROLLER ITEM, MISC.:MANAGED ETHERNET SWITCH WITH GIGABIT UPLINK PORTS [B]  
THIS ITEM SHALL MEET ALL REQUIREMENTS OF ITEM 633-CONTROLLER ITEM, MISC.:MANAGED ETHERNET SWITCH WITH GIGABIT UPLINK PORTS, EXCEPT THAT THIS ITEM SHALL BE FOR PROVISION ONLY TO THE CITY OF MARIETTA ENGINEER.

ITEM 633-CONTROLLER ITEM, MISC.: GENERATOR PANEL WITH 3 PRONG, 120 VOLT RECEPTACLE  
THIS ITEM SHALL INCLUDE ALL EQUIPMENT, LABOR AND MATERIALS TO MOUNT A PANEL FOR POWER GENERATION ON EXISTING CABINETS.

THE GENERATOR PANEL SHALL CONSIST OF A MANUAL TRANSFER SWITCH, OR AN AUTOMATIC TRANSFER SWITCH WHERE REQUIRED, AND A TWIST-LOCK CONNECTOR FOR GENERATOR HOOKUP. THE TRANSFER SWITCH KNOB AND TWIST-LOCK CONNECTOR SHALL BE LOCATED AND LABELED ON A PANEL EASILY ACCESSIBLE BEHIND A SEPARATE LOCKABLE DOOR. THE DOOR SHALL BE EQUIPPED

ITEM 633-CONTROLLER ITEM, MISC.: GENERATOR PANEL WITH 3 PRONG, 120 VOLT RECEPTACLE, CONT.

WITH A TAMPER RESISTANT HINGE. THE DOOR ASSEMBLY SHALL BE WEATHERPROOF AND DUST-PROOF. THE DOOR SHALL HAVE A MOVABLE PLATE TO COVER AN OPENING FOR THE GENERATOR CABLE.

THE GENERATOR PANEL SHALL BE LOCATED AS CLOSE AS POSSIBLE TO THE AC MAIN CIRCUIT BREAKER. THE GENERATOR PANEL SHALL NOT BE LOCATED ON MAIN CABINET DOORS OR BACK DOORS. THE CONNECTION TO A GENERATOR OR OTHER EXTERNAL POWER SOURCE SHALL BE A WATERPROOF, SECURE CONNECTION. THE CONNECTION SHALL ALLOW AUTHORIZED PERSONNEL TO ACCESS, CONNECT, AND SECURE AN EXTERNAL POWER SOURCE TO THE CABINET FOR POWER RESTORATION WITHIN 5 MINUTES OF ARRIVAL AT THE LOCATION. AN INDICATOR LIGHT SHALL ALSO BE PRESENT TO IDENTIFY WHEN THE GENERATOR IS ACTIVE.

ITEM 633- CABINET, TYPE TS-2, AS PER PLAN

THE CABINET SHALL BE FURNISHED AND INSTALLED ACCORDING TO CMS 633 AND 733 AND BE LISTED ON THE TRAFFIC AUTHORIZED PRODUCTS LIST (TAP) OR APPROVED EQUAL.

EACH CABINET SHALL COME EQUIPPED WITH TWO 16-CHANNEL CABINET DETECTOR RACKS (CDR) INCLUDING BUS INTERFACE UNITS (BIU). NEW MOUNTING HARDWARE AND CONDUIT FITTINGS SHALL BE INCLUDED IN THIS ITEM.

ALL CABINETS SHALL BE A REPLACEMENT OF AN EXISTING SIGNAL CABINET. ALL EXISTING EQUIPMENT AND PHASING FROM THE EXISTING CABINET SHALL BE MAINTAINED AND FURNISHED WITHIN THE NEW CABINET INSTALLATION.

THE CONTRACTOR SHALL MAKE EVERY EFFORT TO MAINTAIN TO THE EXISTING CABINET ATTACHMENT HEIGHT.

PAYMENT FOR ITEM 633 CABINET, TYPE TS-2, AS PER PLAN SHALL BE AT THE CONTRACT BID PRICE PER EACH COMPLETE AND IN PLACE INCLUDING ALL CONNECTIONS TESTED AND ACCEPTED.

804 - FIBER OPTIC CABLE, 72 FIBER, AS PER PLAN (AERIAL AND UNDERGROUND)  
IN ADDITION TO THE REQUIREMENTS OF SUPPLEMENTAL SPECIFICATIONS 804 AND 904, TRACER WIRE SHALL BE INSTALLED IN BOTH PROPOSED AND EXISTING CONDUIT WHERE ANY NEW FIBER OPTIC CABLE IS INSTALLED. TIME AND MATERIAL FOR TRACER WIRE SHALL BE INCIDENTAL TO THE PAY ITEM FIBER OPTIC CABLE, 72 FIBER, AS PER PLAN, UNDERGROUND.

THE PAY ITEM FOR FIBER OPTIC CABLE, 72 FIBER, AS PER PLAN, AERIAL SHALL BE EITHER SELF SUPPORTING, OR SHALL INCLUDE MESSENGER WIRE. ALL AERIAL MOUNTING EQUIPMENT (POLE ATTACHMENT EQUIPMENT, SLACK INSTALLATION EQUIPMENT, ETC.) SHALL BE INCIDENTAL TO TO THE AERIAL FIBER PAY ITEM.

804 - FIBER OPTIC CABLE, 72 FIBER, AS PER PLAN (AERIAL AND UNDERGROUND) (CONT.)

FIBER OPTIC CABLE USED FOR AERIAL APPLICATIONS MAY ALSO BE USED FOR ITEM 804 - FIBER OPTIC CABLE - UNDERGROUND, BUT AT NO ADDITIONAL COST TO THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY SPLICING AND SPLICE ENCLOSURES, NOT CALLED OUT IN THE PLANS, IF THE CABLE TYPE CHANGES BETWEEN AERIAL AND UNDERGROUND APPLICATIONS.

WHERE AERIAL INTERCONNECT EXISTS AND PROPOSED FIBER OVERLAPS, REMOVAL OF THE EXISTING INTERCONNECT SHALL BE INCIDENTAL TO INSTALLATION OF THE NEW AERIAL FIBER (ALLEY BETWEEN PUTNAM AND WASHINGTON).

CABLE TAG

INTERCONNECT CABLE ATTACHED TO UTILITY POLES SHALL BE TAGGED AT EACH POLE ATTACHMENT POINT. TAGS SHALL BE PLASTIC APPROXIMATELY 4"x6", OF COLOR GREEN, WITH THE LEGEND "CITY OF MARIETTA/PHONE 740-373-5495", TAGS SHALL BE ATTACHED BY ZIP TIE OR OTHER SUITABLE PERMANENT METHOD. CONTRACTOR SHALL SUBMIT PROPOSED TAG DESIGN AND ATTACHMENT METHOD TO THE ENGINEER FOR APPROVAL.

COST OF TAGS AND INSTALLATION IS INCIDENTAL TO FIBER OPTIC CABLE INSTALLATION.

ITEM 804- FIBER TERMINATION PANEL, 24 FIBER, AS PER PLAN

THIS ITEM SHALL MEET ALL SPECIFICATION OF ITEM 804 - FIBER TERMINATION PANEL, 24 FIBER, EXCEPT THAT THIS ITEM SHALL BE ONLY FOR PROVISION TO THE CITY OF MARIETTA ENGINEER.

ITEM 809-ITS DEVICE, MISC.: INTEGRATE TRAFFIC SIGNAL CONTROLLER TO SIGNAL SYSTEM

THIS ITEM OF WORK SHALL INCLUDE ALL TIME, LABOR, AND MATERIAL TO BRING AN EXISTING TRAFFIC SIGNAL CONTROLLER ONLINE IN THE CITY OF MARIETTA'S SIGNAL SYSTEM (MAXVIEW). THIS WORK MAY INCLUDE BUT IS NOT LIMITED, NETWORKING, ADDRESSING THE CONTROLLER, MODIFYING COMMUNICATION SETTINGS, AND WORK TO UPLOAD THE CONTROLLER TO AN ONLINE DATABASE FOR THE CENTRALIZED SIGNAL SYSTEM SOFTWARE.

THIS WORK IS ANTICIPATED FOR THE CONTROLLERS AT 3RD & MARION, WASHINGTON & 2ND, WASHINGTON & 3RD, WASHINGTON & 4TH, WASHINGTON & 5TH, AND 3RD & SCAMMEL. PAYMENT WILL BE FOR EACH CONTROLLER COMPLETELY BROUGHT ONLINE WITH ESTABLISHED AND CONSISTENT COMMUNICATIONS TO THE SIGNAL SYSTEM.

ITEM 809-CCTV IP-CAMERA SYSTEM, DOME-TYPE

THE ITEM "CCTV IP-CAMERA SYSTEM, DOME-TYPE" SHALL BE INSTALLED AT THE FOLLOWING INTERSECTIONS:

PIKE ST & COGSWELL LN, PIKE ST & ACME ST, PIKE ST/GREENE ST & SEVENTH ST, GREENE ST & THIRD ST, PUTNAM ST & THIRD ST, WASHINGTON ST & THIRD ST.

IN ADDITION TO ODOT SS 809 AND 909, THIS WORK SHALL INCLUDE ALL TIME, LABOR, AND MATERIAL TO SET UP CAMERAS AND COMPLETE ANY NECESSARY WORK TO MAKE THE CAMERAS REMOTELY ACCESSIBLE OVER THE MARIETTA TRAFFIC SIGNAL FIBER OPTIC NETWORK.

ADDITIVE ALTERNATE BIDDING

ADDITIVE ALTERNATES FOR THIS PROJECT ARE PROVIDED AS DESCRIBED BELOW. THE DEPARTMENT HAS A BID BUDGET NOT TO EXCEED THE VALUE LISTED ON THE FRONT OF THE PROPOSAL AND WILL AWARD THE MAXIMUM AMOUNT OF WORK WITHIN THE BID BUDGET. THE SEGMENTS OF THE PROPOSAL CONSIST OF:

- 1: BASE BID
- 2: ADDITIVE ALTERNATE #1: PRIORITY 1
- 3: ADDITIVE ALTERNATE #2: PRIORITY 2

ITEM 809-CCTV IP-CAMERA SYSTEM, DOME-TYPE, ADD ALTERNATE 1

THIS ADD ALTERNATE INCLUDES CAMERAS INSTALLED AT THE FOLLOWING INTERSECTIONS:

7TH & PUTNAM ST, GREENE ST & WILLIAMSTOWN BRIDGE, PUTNAM ST & GILMAN AVE

ITEM 809-CCTV IP-CAMERA SYSTEM, DOME-TYPE, ADD ALTERNATE 2

THIS ADD ALTERNATE INCLUDES CAMERAS INSTALLED AT THE FOLLOWING INTERSECTIONS:

PIKE ST & COUNTY HOUSE, PIKE ST & I-77NB, PUTNAM ST & FRONT ST, WAYNE ST & PIKE ST