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POWER SERVICE COORDINATION

NEW AND REUSED POWER SERVICES ARE PROPOSED AS PART OF THE PROJECT. CONTRACTOR TO COORDINATE NEW AND REUSED POWER SERVICE WITH THE UTILITY COMPANY (AEP) AT (800)672-2231 PRIOR TO BEGINNING WORK.

ACCESSING EXISTING FIBER PULLBOXES

EXISTING FIBER PULLBOXES MAY CONTAIN FIBER OPTIC CABLE SLACK. CONTRACTOR SHALL USE CAUTION WHEN ENTERING FIBER PULLBOXES. EXISTING FIBER OPTIC CABLES SHALL BE MAINTAINED AT ALL TIMES.

ITEM 625 CONDUIT, 2", 725.04, AS PER PLAN

IN ADDITION TO ITEM 625, THE CONTRACTOR SHALL FURNISH AND INSTALL A SUPPORT FOR CABLES ON THE I-670 AT SCIOTO RIVER BRIDGE STRUCTURE. SEE BRIDGE DETAIL FOR MOUNTING OF CONDUIT. THE CONDUIT IS TO BE MOUNTED IN A WAY TO MINIMIZE DAMAGE DUE TO VANDALISM OR DEBRIS.

PAYMENT FOR ITEM 625 CONDUIT, 2", 725.04, AS PER PLAN SHALL BE MADE FOR THE LINEAR FEET OF CONDUIT INSTALLED, INCLUDING ALL LABOR, EQUIPMENT, MATERIALS AND NEW HANGER ASSEMBLY HARDWARE.

ITEM 625 CONDUIT CLEANED AND CABLES REMOVED, AS PER PLAN

THIS ITEM SHALL CONSIST OF CLEANING AN EXISTING CONDUIT BY REMOVING EXISTING UNUSED CABLES, MUD AND DEBRIS, AND MAINTAIN ALL ACTIVE CABLES PRIOR TO BEING REUSED. INCIDENTAL TO THE CLEANING IS THE INSTALLATION OF BUSHINGS AND/OR COUPLINGS ON THE ENDS OF EXISTING CONDUIT AS REQUIRED. MATERIALS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR FOR PROPER DISPOSAL OFF OF THE PROJECT SITE. DISTURBED AREAS SHALL BE PROPERLY RESTORED.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER C&MS ITEM 625 CONDUIT CLEANED AND CABLES REMOVED, AS PER PLAN PER FOOT OF CONDUIT CLEANED WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 625 ARC FLASH CALCULATIONS AND LABEL, BY TYPE

THIS ITEM SHALL INCLUDE PROGRAMMING ARC FLASH HAZARD CALCULATIONS AND LABELS PER SUPPLEMENTAL SPECIFICATION 825. A SINGLE ARC FLASH HAZARD STUDY SHALL BE PERFORMED FOR EACH SITE FROM UTILITY INTERCONNECTION TO ALL DOWNSTREAM DEVICES. LABELS FOR SITES SHALL BE APPLIED TO THE OUTSIDE OF EACH ITS CABINET ON BOTH DOORS AND ALL DISCONNECTS/SAFETY SWITCHES. LABELS SHALL NOT COVER ANY EXISTING NAMEPLATES OR LABELS ON DISCONNECTS/SAFETY SWITCHES WHEN APPLIED. LABELS SHALL BE PROVIDED BY THE CONTRACTOR. CALCULATIONS SHALL BE GIVEN TO THE PROJECT ENGINEER AND ITS ENGINEER AS DESCRIBED IN THE SUPPLEMENTAL.

USE LABEL 825.08.A, ODOT VERSION "A".

PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR EACH ITEM 625 ARC FLASH CALCULATIONS AND LABEL, BY TYPE FOR EACH SITE INCLUDING ALL LABOR, MATERIALS AND INCIDENTALS NECESSARY.

ITEM 625 - LIGHTING, MISC.: POWER SERVICE, ITS & LIGHTING, 480V, SINGLE-PHASE

THIS ITEM OF WORK SHALL INCLUDE THE FURNISHING AND INSTALLATION OF A GROUND MOUNTED POWER SERVICE INCLUDING CONTROL EQUIPMENT, CONDUITS, FITTINGS, CABLES, AND CONNECTORS. THE POWER SERVICE WILL BE A COMBINED SERVICE PROVIDING POWER FOR ITS EQUIPMENT AND HIGHWAY LIGHTING EQUIPMENT.

IN ADDITION TO THE REQUIREMENTS OF ODOT CMS SECTIONS 625, 725, SS809, AND SS909, THE FOLLOWING SHALL APPLY.

THE POWER SERVICE SHALL BE A 480V, SINGLE-PHASE, 2-WIRE SERVICE.

THE POWER SERVICE SHALL BE A GROUND-MOUNTED SERVICE WITH CT-METERING, IF REQUIRED, PER ODOT STANDARD DRAWING HL-40.20 EXCEPT SEPARATE ITS RACK SHALL ALSO BE INCLUDED. SEE DETAIL "C" ON POWER SERVICE DETAILS SHEET.

THE LIGHTING ENCLOSURE SHALL BE SIZED TO HOUSE THE CONTROL EQUIPMENT INCLUDING THE PANEL BOARD(S) WITH INDIVIDUAL CIRCUIT OVERCURRENT PROTECTION DEVICES, MAGNETICALLY HELD LIGHTING CONTACTOR, PHOTOELECTRIC CELL AND HAND-OFF-AUTOMATIC SWITCH FOR CONTROL OF CONTACTOR. SEE DETAIL "A" ON POWER SERVICE DETAILS SHEET FOR SPECIFIC INFORMATION ON INDIVIDUAL CIRCUIT SIZES.

THE ITS RACK SHALL BE PER SS809.03.A AND SS909 EXCEPT AN ADDITIONAL DISCONNECT PER SS809.03.B SHALL BE INCLUDED AS SHOWN IN DETAIL "C" ON THE POWER SERVICE DETAILS SHEET. THE RACK SHOULD INCLUDE A 480V TO 120V STEP-DOWN TRANSFORMER FOR THE IDENTIFIED ITS CAMERA SITE CIRCUIT.

THE FUSED DISCONNECT SWITCH SHALL BE MOUNTED PER STANDARD DRAWING (OR ELECTRIC COMPANY STANDARD). THE DISCONNECT ENCLOSURES SHALL BE NEMA 3R RATED AND SHALL HAVE AN INTERLOCK TO PREVENT ACCESS WHEN THE SWITCH IS IN THE "ON" POSITION. DISCONNECT SWITCH LUGS SHALL BE SET SCREW TYPE AND SHALL BE SIZED TO ACCOMMODATE THE UTILITY SUPPLIED 1/0 TO 350KCM AWG COPPER SERVICE ENTRANCE CABLE.

ALL TRENCHING, CONDUIT, SERVICE CABLES, AND CONNECTIONS NECESSARY TO CONNECT THE PROPOSED POWER SERVICE TO THE POWER COMPANY SERVICE POINT, AND TO RECONNECT TO THE EXISTING ITS AND HIGHWAY LIGHTING CIRCUITS, SHALL BE INCIDENTAL TO THIS BID ITEM.

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS: COLUMBUS DIVISION OF POWER

THE CONTRACTOR SHALL COORDINATE RELATED WORK WITH THE POWER SUPPLYING AGENCY WHO WILL MAKE THE FINAL ELECTRICAL CONNECTION. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR SPLICE THE POWER CABLE INTO ELECTRIC COMPANY CIRCUITRY.

THE CONTRACTOR SHALL ENSURE THAT EACH POWER SERVICE ELECTRICAL ENERGY ACCOUNT IS IN THE NAME OF AND THAT THE BILLING ADDRESS IS TO THE MAINTAINING AGENCY.

PRIOR TO ORDERING, FABRICATION, OR INSTALLATION OF ANY NEW ELECTRICAL EQUIPMENT OR MATERIALS, THE CONTRACTOR SHALL FIELD-VERIFY ALL EXISTING ELECTRICAL CONDITIONS. VERIFICATION SHALL INCLUDE, AT A MINIMUM, EXISTING SERVICE AND FEEDER VOLTAGES, PHASE CONFIGURATION, CIRCUIT SIZES, CONDUCTOR SIZES, AVAILABLE FAULT CURRENT (WHERE APPLICABLE), AND BREAKER OR OVERCURRENT PROTECTIVE DEVICE RATINGS.

ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE CONTRACT DOCUMENTS SHALL BE PROMPTLY REPORTED TO THE ENGINEER IN WRITING PRIOR TO PROCUREMENT. THE CONTRACTOR SHALL NOT PROCEED WITH ORDERING EQUIPMENT OR MATERIALS UNTIL DISCREPANCIES HAVE BEEN RESOLVED AND WRITTEN DIRECTION HAS BEEN RECEIVED.

COSTS ASSOCIATED WITH FAILURE TO VERIFY EXISTING CONDITIONS PRIOR TO PROCUREMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

ITEM 630 REMOVAL OF STRUCTURE MOUNTED SIGN AND REERECTION, AS PER PLAN

THE EXISTING E5-H1A SIGN WAS STRUCK DURING THE DESIGN PERIOD. IN THE EVENT WHERE THE SIGN HAS NOT BEEN REERECTED PRIOR TO THE BEGINNING OF CONSTRUCTION, THIS ITEM OF WORK IS FOR THE CONTRACTOR TO REERECT THE EXISTING SIGN ON NEW SUPPORT AND USING THE EXISTING FOUNDATION. REMOVED MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR.

THE CONTRACTOR SHALL FIELD MEASURE EXISTING ELEVATIONS TO ENSURE THE REERECTED SIGN MEETS TC-41.10 AND TC-42.10 REQUIREMENTS.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR EACH ITEM 630 REMOVAL OF STRUCTURE MOUNTED SIGN AND REERECTION, AS PER PLAN INCLUDING ALL LABOR, MATERIALS AND INCIDENTALS NECESSARY. THE BEAM SUPPORT IS INCLUDED AS PART OF THIS PAY ITEM.

ITEM 632 REUSE OF TRAFFIC CONTROL ITEM: COMMUNICATIONS PULLBOX

EXISTING FIBER PULLBOXES THAT ARE NOTED AS BEING REUSED IN THE PLANS ARE EXPECTED TO BE DISTURBED DUE TO NEW CABLE OR CONDUIT INSTALLATION. WHEN CONDUIT IS INSTALLED INTO EXISTING PULL BOXES, THE CONTRACTOR SHALL ENSURE ALL KNOCKOUTS ARE FULLY MORTARED AND SEALED.

IN ADDITION TO THE REQUIREMENTS OF ODOT C&MS 632.27, THE CONTRACTOR SHALL PROVIDE A WORK PAD SURROUNDING THE REUSED PULLBOX CONSISTENT WITH ITS-14.11.

COSTS ASSOCIATED WITH THESE REQUIREMENTS SHALL BE INCLUDED IN UNIT PRICE BID OF EACH ITEM 632 REUSE TRAFFIC CONTROL ITEM: COMMUNICATIONS PULLBOX.

ITEM 632 REUSE OF TRAFFIC CONTROL ITEM: ELECTRIC PULLBOX

EXISTING ELECTRIC PULLBOXES THAT ARE NOTED AS BEING REUSED IN THE PLANS ARE EXPECTED TO BE DISTURBED DUE TO NEW CABLE OR CONDUIT INSTALLATION. WHEN CONDUIT IS INSTALLED INTO EXISTING PULL BOXES, THE CONTRACTOR SHALL ENSURE ALL KNOCKOUTS ARE FULLY MORTARED AND SEALED.

IN ADDITION TO THE REQUIREMENTS OF ODOT C&MS 632.27, THIS ITEM OF WORK SHALL CONSIST OF CLEANING AN EXISTING PULL BOX BY REMOVING ANY EXISTING UNUSED CABLES, MUD AND DEBRIS, AND MAINTAIN ALL ACTIVE CABLES INSIDE THE EXISTING PULLBOX AS NEEDED PRIOR TO BEING REUSED. ANY UNUSED OPENINGS SHALL BE CLOSED. DISTURBED AREAS NEAR THE PULL BOX SHALL BE CLEARED OF WEEDS OR DEBRIS AND SHALL BE FULLY RESTORED. MATERIAL REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF OF THE PROJECT SITE.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID OF EACH ITEM 632 REUSE OF TRAFFIC CONTROL ITEM: ELECTRIC PULLBOX WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 633 CABINET FOUNDATION, AS PER PLAN

THE CONTRACTOR SHALL INSTALL A CABINET FOUNDATION FOR EACH ITS GROUND MOUNTED CABINET. SEE SUPPLEMENTAL SPECIFICATION 809 FOR CONDUIT REQUIREMENTS ENTERING THE ITS GROUND MOUNTED CABINET.

ITEM 809 AS-BUILT CONSTRUCTION PLANS AND GPS COORDINATES

PRIOR TO THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL PROVIDE AS-BUILT PLANS AND GPS COORDINATES PER THE REQUIREMENTS IN SUPPLEMENTAL SPECIFICATION 809.

ITEM 809 CONDUIT, 4", MULTICELL, HDPE WITH 4 - 1" INNERDUCTS

THE CONTRACTOR SHALL FURNISH AND INSTALL THIS ITEM ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATION 809, AS WELL AS ANY STANDARD CONSTRUCTION DRAWINGS NOTED ON THE PLANS.

ITEM 809 CONDUIT, MULTICELL, MISC.: CONDUIT, 4", MULTICELL, GRC WITH 4 - 1" HDPE INNERDUCTS

THIS ITEM OF WORK SHALL FOLLOW THE REQUIREMENTS OF ITEM 625 CONDUIT, 2", 725.04, AS PER PLAN EXCEPT THAT THE CONDUIT TO BE ATTACHED TO THE BRIDGE IS A 4" GALV. CONDUIT, MULTICELL, WITH 4 - 1" HDPE INNERDUCTS CONSISTENT WITH THE REQUIREMENTS OF SUPPLEMENTAL SPECIFICATIONS 809 AND STANDARD CONSTRUCTION DRAWINGS NOTED ON THE PLANS.

ITEM 809 CONDUIT, JACKED OR DRILLED, 4", MULTICELL, HDPE WITH 4 - 1" INNERDUCTS

THIS ITEM OF WORK SHALL FOLLOW THE REQUIREMENTS OF ITEM 809 CONDUIT, 4", MULTICELL, HDPE WITH 4-1" INNERDUCTS, EXCEPT THAT THE CONDUIT IS JACKED OR DRILLED AS SHOWN IN THE PLANS.

ITEM 809 CCTV POLE, 50' TALL

THE CONTRACTOR SHALL FURNISH AND INSTALL THIS ITEM ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATION 809, AS WELL AS ANY STANDARD CONSTRUCTION DRAWINGS NOTED ON THE PLANS. THE CONTRACTOR SHALL DETERMINE WHICH TYPE OF POLE TO FURNISH AND INSTALL (CONCRETE OR STEEL) WHEN BIDDING ON THIS ITEM. THE POLE AND FOUNDATION/ EMBEDMENT ARE INCIDENTAL TO THIS ITEM REGARDLESS OF MATERIAL TYPE.



THE CONTRACTOR SHALL FURNISH/INSTALL POLES WITH THE CORRECT LENGTH/EMBEDMENT AND ALL COUPLINGS, HANDHOLES, ETC., IN THE APPROPRIATE LOCATION ABOVE GROUND ACCORDING TO SCD ITS-12.10 OR ITS-12.11.

FOR SITE QWS-GRND-D6-I670 EB, LOCATED AT I-670 EB SLM 3.18, THE POLE HEIGHT SHALL BE 50 FT ABOVE GROUND. THE EMBEDMENT DEPTH FOR A CONCRETE POLE SHALL BE A MINIMUM OF 12 FT. A SPECIAL FOUNDATION DESIGN IS NOT REQUIRED FOR A STEEL POLE.

THE CONTRACTOR MAY FURNISH/INSTALL LONGER OVERALL LENGTH CONCRETE POLES AT A DEEPER EMBEDMENT DEPTH IF IT IS MORE BENEFICIAL FOR MANUFACTURING, SHIPPING, ETC., AS LONG AS ALL ABOVE GROUND COMPONENTS MAINTAIN APPROPRIATE HEIGHT LEVEL.

THE CONTRACTOR SHALL SUBMIT ALL POLE MANUFACTURER FABRICATION DRAWING SUBMITTALS, AS WELL AS INSTALLATION PROCEDURES AND BACKFILL MATERIAL, TO THE ENGINEER FOR ACCEPTANCE BEFORE ORDERING.

PAYMENT FOR EACH POLE COMPLETE, INSTALLED, AND ACCEPTED SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM 809 CCTV POLE, 50' TALL.

ITEM 809 DYNAMIC MESSAGE SIGN (DMS), FRONT-ACCESS

THE CONTRACTOR SHALL FURNISH AND INSTALL THIS ITEM ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATION 809, AS WELL AS ANY STANDARD CONSTRUCTION DRAWINGS NOTED ON THE PLANS.

- DYNAMIC MESSAGE SIGN (DMS), FRONT-ACCESS LOCATIONS:
- 1. QWS PANEL AT LOCATION #2: I-70 EB SLM 16.27 (KELTON AVE. ENTRANCE RAMP GORE)
 - 2. QWS PANEL AT LOCATION #4: I-71 SB SLM 24.11 (SOUTH OF MORSE RD RAMPS)
 - 3. QWS PANEL AT LOCATION #8: I-270 SB SLM 44.57 (EAST OF SR-317)
 - 4. QWS PANEL AT LOCATION #9: I-670 EB SLM 2.28 (SOUTH OF SCIOTO RIVER BRIDGE)
 - 5. QWS PANEL AT LOCATION #12: OH-315 SB SLM 2.41 (EXIT RAMP TO I-670 EB)

ITEM 809 ITS DEVICE, MISC.: REMOVAL OF EXISTING ITS CABINET

THE EXISTING CABINET SHALL BE REMOVED IN ACCORDANCE WITH C&MS 632.26 AND AS INDICATED ON THE PLANS.

EXISTING ITS EQUIPMENT IN THE EXISTING ITS CABINET IS TO BE RELOCATED INTO NEW ITS CABINET BY ODOT FORCES. THE CONTRACTOR SHALL COORDINATE WITH ODOT ITS AND ODOT DISTRICT 6 PRIOR TO REMOVING THE EXISTING ITS CABINET. REMOVED ITS CABINET SHALL BE DELIVERED TO ODOT ITS CENTRAL OFFICE.

COST ASSOCIATED WITH THESE REQUIREMENTS SHALL BE INCLUDED IN UNIT PRICE BID OF EACH ITEM 809 ITS DEVICE, MISC.: REMOVAL OF EXISTING ITS CABINET.

ITEM 809 ITS DEVICE, MISC.: ITS POWER SERVICE, POLE MOUNTED, 120/240V, 100 AMP, AS PER PLAN

THIS ITEM OF WORK SHALL FOLLOW THE REQUIREMENTS OF ITEM 809 ITS POWER SERVICE, POLE MOUNTED, 120/240V, 100 AMP EXCEPT THAT A SEPARATE DISCONNECT SWITCH CONSISTENT WITH THE REQUIREMENTS OF SUPPLEMENTAL SPECIFICATIONS 809 SHALL BE PROVIDED FOR THE EXISTING ATR COUNT STATION.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID OF EACH ITEM 809 ITS DEVICE, MISC.: ITS POWER SERVICE, POLE MOUNTED, 120/240V, 100 AMP, AS PER PLAN WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 809 MAINTAINING ITS DURING CONSTRUCTION

THE CONTRACTOR SHALL MAINTAIN ALL PREEXISTING OR NEWLY INSTALLED PERMANENT ITS/TRAFFIC DEVICES AND INFRASTRUCTURE DURING CONSTRUCTION ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATION 809.

ITEM 625 JUNCTION BOX, AS PER PLAN

PROVIDE BRUSHED FINISH 24"H X 24"W X 6"D, 14 GAUGE, TYPE 304 STAINLESS STEEL, NEMA 4X JUNCTION BOX TO ALLOW ACCESS TO FIBER OPTIC OR ELECTRIC CABLE DURING PULLING AND INSTALLATION. ALL SEAMS TO BE CONTINUOUS WELDED AND GROUND SMOOTH. JUNCTION BOX TO HAVE ROLLED LIP AROUND 3 SIDS OF THE DOOR AND STAINLESS STEEL DOOR CLAMPING ASSEMBLY, HASP AND STAPLE FOR PADLOCKING. PROVIDE SEAMLESS FOAM-IN-PLACE GASKET. DOOR REMOVAL MAY BE ACCOMPLISHED BY PULLING A STAINLESS STEEL CONTINUOUS HINGE PIN. STRUCTURE MOUNTING TO BE ACCOMPLISHED VIA 2 MOUNTING EARS, TOP AND BOTTOM. PROVIDE GROUNDING PROVISION ON THE DOOR AND GROUNDING STUD ON THE JUNCTION BOX BODY. JUNCTION BOXES ARE TO BE PLACED AT EACH ABUTMENT OF THE BRIDGE.

DESIGN AGENCY	CMT
DESIGNER	GSH
REVIEWER	SAK
PROJECT ID	122200
SHEET	P.5
TOTAL	36