**POWER SERVICE, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF CMS 632 AND 732, THIS ITEM SHALL ALSO INCLUDE THE MODIFICATION OF AN EXISTING POWER SERVICE WHEN SPECIFIED IN THE PLANS.

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

AMERICAN ELECTRIC POWER
SOLUTION CENTER
PHONE: 1-800-672-2231

A POLE MOUNTED POWER SERVICE SHALL BE INSTALLED OR MODIFIED AS SPECIFIED IN CMS 632.24, 732.20, AND SCD TC-83.10 AT EACH LOCATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL SUPPLY POWER AS SPECIFIED BELOW:

1. THE CONTRACTOR SHALL SUPPLY 120 VOLTS, SINGLE PHASE, 3-WIRE POWER SERVICE FOR EACH TRAFFIC SIGNAL SHOWN IN THE PLANS.

2. THE CONTRACTOR SHALL SUPPLY A 30 AMP WATERPROOF DISCONNECT SWITCH FOR EACH TRAFFIC SIGNAL LOCATION SHOWN IN THE PLANS, AS NECESSARY.

THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING THE POWER COMPANY FOR THE ELECTRICAL SERVICE CONNECTION. A MINIMUM OF THREE (3) MONTHS NOTICE SHALL BE GIVEN TO THE POWER COMPANY FOR NEW INSTALLATIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR REQUESTING AND SCHEDULING ANY INSPECTIONS THE POWER COMPANY MAY REQUIRE FOR THE POWER SERVICE HOOK UP. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR SPLICE SERVICE CABLE INTO THE POWER COMPANY'S CIRCUITS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS AND THE PAYING OF ALL FEES ASSOCIATED WITH THE SERVICE. THE CONTRACTOR SHALL PAY ALL POWER CHARGES UNTIL THE SIGNAL SERVICE IS ACCEPTED BY THE MAINTAINING AGENCY. AFTER ACCEPTANCE OF THE SERVICE, THE MAINTAINING AGENCY WILL PAY ALL INCURRED CHARGES SENT TO THE CONTRACTOR FROM THE POWER COMPANY.

POWER CABLE AND CONDUIT QUANTITIES FOR UNDERGROUND SERVICE HAVE BEEN ITEMIZED SEPARATELY IN THE PLANS FOR CONNECTION BETWEEN POLE MOUNTED DISCONNECT SWITCH AND THE CONTROLLER CABINET. IF THE PROPOSED POWER SERVICE LOCATION SHOWN IN THE PLANS IS NOT FEASIBLE THEN THE CONTRACTOR SHALL MOVE THE POWER SERVICE LOCATION AT APPROVAL OF THE ENGINEER. ITEMIZED QUANTITIES SHALL BE ADJUSTED.

DISCONNECT SWITCH ENCLOSURES SHALL BE PER CMS 732.21 AND INCLUDE A PADLOCK EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNON 660, WITH LOCK BODY OF BRONZE OR BRASS AND KEYING SHALL BE TO THE CITY OF NEWARK MASTER. EACH ENCLOSURE SHALL HAVE A SAFETY SWITCH DISCONNECT.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID FOR EACH POWER SERVICE, COMPLETE IN PLACE, INCLUDING WEATHERHEAD, CONDUIT RISER, FITTINGS, CLAMPS, DISCONNECT SWITCH WITH ENCLOSURE, METER BASE, GROUND RODS, PADLOCK AND KEY, AND ALL OTHER INCIDENTALS (UNLESS ITEMIZED SEPARATELY) NECESSARY FOR COMPLETE SERVICE, ALL CONNECTIONS TESTED AND ACCEPTED.

**ITEM 633 CONTROLLER WORK PAD, AS PER PLAN**

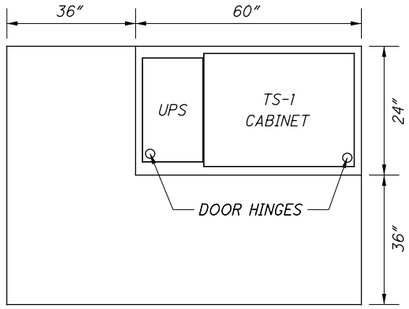
THIS ITEM SHALL INCLUDE THE ADDITIONAL EXCAVATION, EMBANKMENT, AND CONCRETE NECESSARY TO EXTEND THE CONTROLLER WORK PAD TO THE DIMENSIONS SHOWN BELOW AND PROVIDE A LEVEL WORK PAD.

THE CONTROLLER WORK PAD SHALL BE IN ACCORDANCE WITH CMS 633.11, TC-83.20, PIS 208320, AND THE DETAILS ON THIS SHEET.

THE CONTRACTOR SHALL CONSTRUCT THE WORK PAD AS FOLLOWS:
- EXCAVATE A MINIMUM OF 9" BELOW GRADE
- PLACE AND COMPACT 6" OF MATERIAL CONFORMING TO CMS 304.02
- INSTALL A CAST-IN-PLACE WORK PAD THAT IS A MINIMUM OF 4" THICK

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID AND INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO CONSTRUCT THE CONCRETE WORK PAD.

CONTROLLER WORK PAD DETAIL




PLAN VIEW

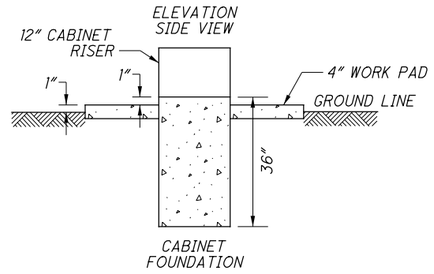
**ITEM 633 CABINET FOUNDATION, AS PER PLAN**

THIS ITEM SHALL INCLUDE THE ADDITIONAL EXCAVATION AND CONCRETE NECESSARY TO EXTEND THE CONTROLLER CABINET FOUNDATION IN ORDER TO SUPPORT THE UNINTERRUPTIBLE POWER SUPPLY (UPS) CABINET.

THE CONTROLLER AND UPS CABINET FOUNDATION SHALL BE IN ACCORDANCE WITH CMS 633.10, TC-83.20, PIS 208320, AND THE DETAILS SHOWN BELOW. SEE PIS 208320 FOR CONCRETE FOUNDATION QUANTITY.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID AND INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO CONSTRUCT THE FOUNDATION, INCLUDING CONDUIT ELLS AND ANCHOR BOLTS, RESTORATION OF DISTURBED AREA AND DISPOSAL OF SURPLUS MATERIAL AS PER CMS 104.04.

CABINET FOUNDATION DETAIL




NOTES:

1. THE SIZE OF THE UPS FOUNDATION MAY VARY BASED ON THE CABINET SIZE PROVIDED.

2. UPS FOUNDATION ELEVATION SHOULD MATCH CABINET FOUNDATION ELEVATION.

3. THE UPS CABINET SHALL BE MOUNTED FLUSH UP AGAINST THE SIGNAL CABINET AND SEALED.

4. CONDUIT AND WIRING FROM THE SIGNAL CABINET TO THE UPS SHALL BE INSTALLED THROUGH THE CABINET RISER.

5. 1/2" PREFORMED EXPANSION JOINT FILLER SHALL BE INSTALLED BETWEEN CABINET/UPS FOUNDATION AND WORK PAD PER CMS 705.03

**ITEM 815 SPREAD SPECTRUM RADIO, AS PER PLAN**

THIS ITEM SHALL INCLUDE THE REMOVAL AND REINSTALLATION OF THE EXISTING SPREAD SPECTRUM SYSTEM AT A SIGNALIZED INTERSECTION.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID FOR EACH SPREAD SPECTRUM RADIO SYSTEM RELOCATED, COMPLETE IN PLACE, INCLUDING ALL MATERIALS AND MOUNTING HARDWARE, REPLACEMENT CABLING, LABOR, EQUIPMENT, AND ALL OTHER INCIDENTALS NECESSARY FOR A FULLY OPERATIONAL SYSTEM, ALL CONNECTIONS AND OPERATION TESTED AND ACCEPTED.

CALCULATED ACW CHECKED TQD

TRAFFIC SIGNAL GENERAL NOTES

LIC-THORNWOOD CROSSING

**ITEM 625, POWER SERVICE, AS PER PLAN, (THORNWOOD DRIVE)**
**ITEM 625, POWER SERVICE, AS PER PLAN, (CHERRY VALLEY ROAD)**

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

AMERICAN ELECTRIC POWER
SOLUTION CENTER
PHONE: 1-800-672-2231

A POLE MOUNTED POWER SERVICE SHALL BE INSTALLED AS SPECIFIED IN CMS 625.15, 725.19, SCD HL-40.10 AND SCD HL-40.20 AT THE LOCATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL SUPPLY POWER AS SHOWN IN THE TABLE SHOWN ON SHEET 24. THE POWER SERVICE SHALL INCLUDE A CONNECTED CIRCUIT BREAKER FOR A FUTURE USE CIRCUIT AS SPECIFIED IN THE PLANS. THE POWER SERVICE SHALL ALSO INCLUDE A 120V CIRCUIT WITH 10 AMP BREAKER OR FUSE FOR USE WITH A PROPOSED LIGHTING SYSTEM TO BE MOUNTED NEAR THE TOP OF THE POLE FOR FUTURE USE.

THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING THE POWER COMPANY FOR THE ELECTRICAL SERVICE CONNECTION. A MINIMUM OF THREE (3) MONTHS NOTICE SHALL BE GIVEN TO THE POWER COMPANY FOR NEW INSTALLATIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR REQUESTING AND SCHEDULING ANY INSPECTIONS THE POWER COMPANY MAY REQUIRE FOR THE POWER SERVICE HOOK UP. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR SPLICE SERVICE CABLE INTO THE POWER COMPANY'S CIRCUITS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS AND THE PAYING OF ALL FEES ASSOCIATED WITH THE SERVICE. THE CONTRACTOR SHALL PAY ALL POWER CHARGES UNTIL THE LIGHTING SERVICE IS ACCEPTED BY THE MAINTAINING AGENCY. AFTER ACCEPTANCE OF THE SERVICE, THE MAINTAINING AGENCY WILL PAY ALL INCURRED CHARGES SENT TO THE CONTRACTOR FROM THE POWER COMPANY.

THE CONTRACTOR WILL BE RESPONSIBLE FOR SUPPLYING OR REQUESTING FROM THE POWER COMPANY A WOOD POLE (CONFORMING TO CMS 632.17 & 732.13) BE INSTALLED AT EACH LOCATION SHOWN IN THE PLANS FOR OVERHEAD POWER CONNECTION AND MOUNTING OF METER BASE AND DISCONNECT SWITCH ENCLOSURE. SERVICE WILL THEN RUN FROM POLE MOUNTED METER BASE AND DISCONNECT SWITCH ENCLOSURE INTO 2" CONDUIT (CONFORMING TO CMS 725.04) DOWN POLE INTO ADJACENT PULL BOX WITH ALL INCLUDED IN PAYMENT FOR SERVICE PER CMS 625.22. THE WOOD POLE SHALL HAVE AN EXPOSED HEIGHT OF AT LEAST 30 FEET FOR MOUNTING A LIGHTING SYSTEM FOR FUTURE USE.

IF THE PROPOSED POWER SERVICE LOCATION SHOWN IN THE PLANS IS NOT FEASIBLE THEN THE CONTRACTOR SHALL MOVE THE POWER SERVICE LOCATION TO A MORE SUITABLE LOCATION AT THE APPROVAL OF THE ENGINEER. THE ASSOCIATED ITEMIZED QUANTITIES SHALL BE ADJUSTED.

PADLOCKS FURNISHED SHALL BE EITHER BRASS OR BRONZE, EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNAN 660A, AND KEYING SHALL BE TO THE CITY OF NEWARK MASTER.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID FOR EACH POWER SERVICE, COMPLETE IN PLACE, INCLUDING PHOTOELECTRIC CELL AND RELAY, CONDUIT RISER, ALL CABLE, CONDUIT, FITTINGS, CLAMPS, DISCONNECT SWITCH WITH ENCLOSURE, METER BASE, GROUND RODS, PADLOCK AND KEY, PULL BOX, AND ALL OTHER INCIDENTALS NECESSARY FOR COMPLETE SERVICE, ALL CONNECTIONS TESTED AND ACCEPTED.

**CONDUIT EXPANSION AND DEFLECTION**

EXPANSION FITTINGS SHALL BE OZ TYPE AX, CROUSE HINDS TYPE XJG, OR EQUAL APPROVED BY THE ENGINEER. EACH EXPANSION FITTING SHALL PROVIDE 4 INCHES TOTAL MOVEMENT AND SHALL HAVE AN EXTERNAL COPPER BONDING JUMPER.

DEFLECTION COUPLINGS SHALL BE OZ TYPE DX, CROUSE HINDS TYPE XD, OR EQUAL APPROVED BY THE ENGINEER. EACH DEFLECTION COUPLING SHALL HAVE AN EXTERNAL COPPER BONDING JUMPER. MINIMUM DEFLECTION CAPABILITY: 25°

THE FITTING/COUPLE SHALL BE INSTALLED IN BETWEEN THE ROADWAY BARRIER AND BRIDGE PARAPET LOCATED AT THE END OF THE BRIDGE APPROACH SLABS. SEE SCD HL-30.31 & HL-30.32 FOR DETAILS.

EXPANSION AND DEFLECTION FITTINGS FULLY OR PARTIALLY EMBEDDED IN CONCRETE, SOIL, OR SIMILAR MATERIAL SHALL BE COMPLETELY WRAPPED IN A NEOPRENE SLEEVE OR SHEET OF 1/2-INCH MINIMUM THICKNESS. SECURE NEOPRENE WRAP WITH TIE-WRAPS PRIOR TO EMBEDMENT OF THE FITTING.

THE COST OF FITTINGS AND COUPLINGS SHALL BE INCIDENTAL TO AND INCLUDED IN THE UNIT PRICE BID FOR THE CONDUIT BEING INSTALLED PER CMS 625.22.

**ITEM 625, DUCT CABLE MISC.: 1-1/2" DUCT CABLE WITH FOUR NO. 2 AWG 5000 VOLT CABLES**

THE DUCT CABLE FOR THIS ITEM SHALL BE A 4-WIRE, 3-CONDUCTOR, WITH GROUND SYSTEM AND ADHERE TO THE REQUIREMENTS OF CMS 725.03.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID AND INCLUDE FURNISHING AND INSTALLING THE DUCT CABLE AND ANY INCIDENTALS NECESSARY TO COMPLETE THE ITEM.

**ITEM 625, DUCT CABLE MISC.: 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES**

THE DUCT CABLE FOR THIS ITEM SHALL BE A 3-WIRE, 2 -CONDUCTOR, WITH GROUND SYSTEM AND ADHERE TO THE REQUIREMENTS OF CMS 725.03.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID AND INCLUDE FURNISHING AND INSTALLING THE DUCT CABLE AND ANY INCIDENTALS NECESSARY TO COMPLETE THE ITEM.

**HIGH VOLTAGE TEST WAIVED**

THE HIGH VOLTAGE TEST SHALL NOT BE PERFORMED ON THE CIRCUITS CONSTRUCTED BY THIS PROJECT INVOLVING THE EXISTING LIGHTING CIRCUITS, SINCE THE TEST COULD DAMAGE THE PORTION OF THE COMPLETED CIRCUIT WHICH HAS BEEN IN SERVICE PRIOR TO THIS PROJECT.

**CITY OF NEWARK TRAFFIC OPERATIONS MANAGER**

THE CONTRACTOR SHALL COORDINATE LIGHTING WORK WITH THE CITY OF NEWARK TRAFFIC OPERATIONS MANAGER.

B.J. VARNER
TRAFFIC OPERATIONS MANAGER
(740) 670-7739
1195 E. MAIN ST.
NEWARK, OH 43055

THE COORDINATION IS INCIDENTAL TO THE ASSOCIATED WORK BEING PERFORMED.

**ITEM 625, DISCONNECT CIRCUIT, AS PER PLAN**

THIS ITEM OF WORK SHALL CONSIST OF THE DISCONNECTION OF AN EXISTING LIGHT CIRCUIT AT A PULL BOX OR TRANSFORMER BASE.

DISCONNECTION AT A PULL BOX SHALL INVOLVE CUTTING THE EXISTING CIRCUIT AND REMOVING ALL SPLICE KITS. ANY CABLE THAT IS TO BE ABANDONED SHALL BE TERMINATED FROM THE PULL BOX SO THAT NO CABLE IS LEFT IN THE BOX.

DISCONNECTION AT A TRANSFORMER BASE SHALL INVOLVE CUTTING THE EXISTING CIRCUIT AND REMOVING ALL CONNECTOR KITS. ALL DUCT CABLE NOT TO BE REUSED SHALL BE REMOVED FROM THE TRANSFORMER BASE AND THE EXISTING CONDUIT IN THE FOUNDATION SHALL BE CLEANED OF ALL CABLE AND DEBRIS SO THAT THE NEW DUCT CABLE CAN BE INSTALLED. ALL EXISTING CABLES THAT ARE TO REMAIN ACTIVE SHALL BE CUT IN A MANNER SO THAT THERE IS SUFFICIENT CABLE LEFT FOR RE-CONNECTION.

THOSE WIRES THAT ARE TO REMAIN ON ACTIVE CIRCUITS SHALL HAVE A WATER-RESISTANT SEAL AT THE CUT END. THE WATER-RESISTANT SEAL SHALL BE ACCOMPLISHED BY PLUGGING THE DEACTIVATED PORT OF AN EXISTING CONNECTOR KIT OR BY INSTALLING A CABLE SPLICE KIT ON THE CUT END OF THE CABLE.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID FOR EACH LOCATION WHERE DISCONNECTION IS REQUIRED, AND INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM.

**ITEM 625, DISTRIBUTION CABLE REMOVED, AS PER PLAN**

THIS ITEM SHALL CONSIST OF REMOVING EXISTING BURIED DUCT CABLE FROM THE EXISTING LIGHTING SYSTEM. ALL MATERIALS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR FOR PROPER DISPOSAL OFF OF THE PROJECT SITE.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID AND INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM.

**ITEM 625, CONDUIT CLEANED AND CABLES REMOVED**

THIS ITEM SHALL CONSIST OF CLEANING AN EXISTING CONDUIT BY REMOVING EXISTING CABLES, MUD AND DEBRIS SO THAT NEW CABLE CAN BE INSTALLED. 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" 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.

**WIRE DAMAGED DURING CONSTRUCTION**

IF EXISTING WIRE IS DAMAGED DURING CONSTRUCTION, THE CONTRACTOR MAY NOT USE COUPLINGS, FITTINGS, OR ANY EQUIVALENT TO REPAIR THE EXISTING WIRE. CONTRACTOR SHALL INSTEAD REPLACE THE DAMAGED WIRE IN KIND FROM CONNECTION TO CONNECTION IN THE DAMAGED SECTION. WIRE REPLACEMENT SHALL CONFORM TO ODOT AND CITY OF NEWARK STANDARDS.

**SPECIAL, MAINTAIN EXISTING LIGHTING**

EXISTING ROADWAYS WHICH ARE TO REMAIN OPEN TO TRAFFIC DURING CONSTRUCTION OF THIS PROJECT AND WHICH ARE LIGHTED SHALL HAVE THE LIGHTING MAINTAINED AS DESCRIBED HEREIN.

BEFORE ANY WORK IS STARTED IN THE IMMEDIATE VICINITY OF THE EXISTING LIGHTING CIRCUITS, REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR SHALL MAKE A VISUAL INSPECTION OF THE EXISTING ROADWAY LIGHTING CIRCUITS TO BE MAINTAINED. DURING THIS INSPECTION, A WRITTEN RECORD OF THE CONDITION OF EXISTING LIGHTING SHALL BE MADE BY ODOT'S REPRESENTATIVE. THIS WRITTEN REPORT SHALL NOTE INDIVIDUAL LUMINAIRES WHICH ARE NOT IN WORKING ORDER, INDIVIDUAL POLES WHICH ARE NOT STANDING, AND INDIVIDUAL CIRCUITS WHICH ARE NOT IN WORKING ORDER. THE COMPLETED REPORT SHALL BE SIGNED BY THE REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR.

IF, AS A RESULT OF THIS INSPECTION, IT IS DETERMINED THAT THE CONDITION OF THE EXISTING SYSTEM IS BELOW THAT REQUIRED FOR THE SAFETY OF THE TRAVELING PUBLIC, THEN THE MAINTAINING AGENCY SHALL MAKE THE REPAIRS NECESSARY TO RETURN THE SYSTEM TO AN ACCEPTABLE CONDITION. FOLLOWING THESE REPAIRS, THE SYSTEM SHALL AGAIN BE INSPECTED AND A REPORT SHALL BE MADE AND SIGNED AS OUTLINED HEREIN.

WHEN THE EXISTING SYSTEM IS IN AN ACCEPTABLE CONDITION, IT SHALL BE TURNED OVER TO THE CONTRACTOR WHO SHALL THEN BE REQUIRED TO MAINTAIN THE EXISTING LIGHTING TO THE CONDITION OUTLINED IN THIS REPORT WITH THE EXCEPTION OF KNOCKDOWNS DUE TO TRAFFIC ACCIDENTS.

REPLACEMENT OF KNOCKED DOWNED UNITS SHALL BE DONE ONLY WHEN THE ENGINEER HAS DETERMINED THAT THE REPLACEMENT OF THE KNOCKED DOWN UNIT IS NECESSARY AND SHALL BE PAID SEPARATELY ON A UNIT BASIS.

BETTERMENTS SHALL BE COVERED IN ITEMS OF WORK PERTAINING TO THE CONSTRUCTION OF PERMANENT IMPROVEMENT.

WHEN THE SEQUENCE OF CONSTRUCTION ACTIVITIES REQUIRES, OR SHOULD THE CONTRACTOR DESIRE, THE REMOVAL OF THE EXISTING LIGHTING BEFORE THE NEW LIGHTING IS OPERATIONAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY LIGHTING OF THIS PORTION OF THE ROADWAY.

PRIOR TO INSTALLING SUCH LIGHTING, THE CONTRACTOR SHALL PREPARE AND SUBMIT FOUR SETS OF THE TEMPORARY LIGHTING PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.

THIS PLAN SHALL SHOW LOCATIONS OF POLES, LENGTHS OF BRACKET ARMS, STYLES OF LUMINAIRES, MOUNTING HEIGHTS, WIRING METHODS AND OTHER PERTINENT INFORMATION. THE TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITIAL INTENSITY OF 1.2 FOOTCANDLES WITH AN AVERAGE TO MINIMUM UNIFORMITY NOT TO EXCEED 3:1. MOUNTING HEIGHT OF TEMPORARY LUMINAIRES SHALL NOT BE LESS THAN 30 FEET, AND THE MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE 20 FEET. TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE "B" FOR STRENGTH REQUIREMENTS AS DEFINED BY THE NATIONAL ELECTRIC SAFETY CODE. WOOD POLES WITH OVERHEAD WIRING MAY BE USED. HOWEVER, TEMPORARY LIGHTING SHALL MEET FEDERAL AND STATE SAFETY CRITERIA. IF BREAKAWAY POLES ARE USED TO MEET THESE CRITERIA, THEN UNDERGROUND WIRING SHALL BE USED. RECONDITIONED OR USED MATERIALS MAY BE FURNISHED FOR TEMPORARY LIGHTING.

ALL MATERIALS NECESSARY TO COMPLETE THE TEMPORARY LIGHTING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. WHEN NO LONGER NEEDED, THE TEMPORARY LIGHTING INSTALLATION SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.

THE MAINTAINING AGENCY WILL PAY FOR ELECTRICAL ENERGY CONSUMED BY EXISTING POWER SERVICES AND BY PROPOSED PERMANENT POWER SERVICES AFTER ACCEPTANCE OF THE LIGHTING WORK. THE CONTRACTOR WILL PAY FOR ELECTRICAL ENERGY, INSTALLATION, REMOVAL AND MAINTENANCE OF ANY TEMPORARY POWER SERVICES.

THE LUMP SUM PRICE BID FOR ITEM SPECIAL "MAINTAIN EXISTING LIGHTING" SHALL INCLUDE PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO MAINTAIN THE EXISTING LIGHTING AS SPECIFIED HEREIN.

THE UNIT PRICE BID FOR ITEM SPECIAL "REPLACEMENT OF EXISTING LIGHTING UNIT" SHALL BE FULL PAYMENT FOR THE REPLACEMENT OF AN EXISTING LIGHTING UNIT WHICH HAS BEEN KNOCKED DOWN AFTER THE AFOREMENTIONED INSPECTION AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PROVIDE A REPLACEMENT FOR SUCH UNIT.

CALCULATED JXB
CHECKED RSB

# LIGHTING NOTES

LIC-THORNWOOD CROSSING

2 / 24

231
381

| LIC-THWDX-0010 ESTIMATED BRIDGE QUANTITIES - 01/BRO/BR/NEWA | | | | | | | | CALC: | CHECK: |
|---|---|---|---|---|---|---|---|---|---|
| ITEM | ITEM EXT. | TOTAL QUANTITY | UNIT | DESCRIPTION | ABUTMENT | PIERS | SUPER | GENERAL | APP/REF SHEET NO. |
| 503 | 11100 | LS | | COFFERDAMS AND EXCAVATION BRACING | | | | LS | |
| 503 | 21100 | 436 | CY | UNCLASSIFIED EXCAVATION | | 436 | | | |
| 505 | 11100 | LS | | PILE DRIVING EQUIPMENT MOBILIZATION | | | | LS | |
| 507 | 00600 | 6,025 | FT | 14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN | 3,040 | 2,985 | | | |
| 507 | 00651 | 6,630 | FT | 14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN | 3,360 | 3,270 | | | 4 |
| 507 | 92200 | 864 | FT | PREBORED HOLES | 864 | | | | |
| 509 | 10001 | 390,167 | LB | EPOXY COATED REINFORCING STEEL, AS PER PLAN | 22,103 | 89,606 | 278,458 | | 26 |
| 509 | 30020 | 14,945 | FT | NO.4. GFRP DEFORMED BARS | | | 14,945 | | |
| 511 | 33500 | 2 | EACH | SEMI-INTEGRAL DIAPHRAGM GUIDE | 2 | | | | |
| 511 | 34446 | 981 | CY | CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (SEE PROPOSAL NOTE) | | | 981 | | 5 |
| 511 | 34451 | 149 | CY | CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN | | | 149 | | 4 |
| 511 | 40512 | 418 | CY | CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS | | 418 | | | |
| 511 | 44112 | 113 | CY | CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING | 113 | | | | |
| 511 | 46512 | 252 | CY | CLASS QC1 CONCRETE WITH QC/QA, FOOTING | 141 | 111 | | | |
| 512 | 10001 | 575 | SY | SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION) | | 575 | | | 4 |
| 512 | 10050 | 1,056 | SY | SEALING OF CONCRETE SURFACES (NON-EPOXY) | | | 1,056 | | |
| 512 | 10100 | 753 | SY | SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) | 179 | 581 | | | |
| 512 | 33000 | 22 | SY | TYPE 2 WATERPROOFING | 22 | | | | |
| 513 | 10281 | 1,211,925 | LB | STRUCTURAL STEEL MEMBERS, LEVEL 4, AS PER PLAN | | | 1,211,925 | | 21 , 22 |
| 513 | 20000 | 11,520 | EACH | WELDED STUD SHEAR CONNECTORS | | | 11,520 | | |
| 516 | 13601 | 17 | SF | 1" PREFORMED EXPANSION JOINT FILLER, AS PER PLAN | | | 17 | | 4 |
| 516 | 13901 | 132 | SF | 2" PREFORMED EXPANSION JOINT FILLER, AS PER PLAN | 132 | | | | 4 |
| 516 | 14020 | 178 | FT | SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL | 178 | | | | |
| 516 | 14600 | 140 | FT | STRUCTURAL JOINT OR JOINT SEALER, MISC.: EMSEAL WITH SLEEPER SLAB | 140 | | | | 4 |
| 516 | 44200 | 8 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (25"x20"x3.81" BEARING WITH 26"x21" BEVELED LOAD PLATE) | | 8 | | | |
| 516 | 44200 | 8 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (25"x20"x3.81" BEARING WITH 36"x21" BEVELED LOAD PLATE) | | 8 | | | |
| 516 | 44300 | 8 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (18.50"x15.50"x5.00" BEARING WITH 19.50"x16.50" LOAD PLATES AND W12x65 PEDESTAL) | 8 | | | | |
| 516 | 44300 | 8 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (18.50"x15.50"x4.41" BEARING WITH 19.50"x16.50 LOAD PLATES AND W12x65 PEDESTAL) | 8 | | | | |
| 518 | 21200 | 74 | CY | POROUS BACKFILL WITH GEOTEXTILE FABRIC | 74 | | | | |
| 518 | 40000 | 212 | FT | 6" PERFORATED CORRUGATED PLASTIC PIPE | 212 | | | | |
| 518 | 40012 | 60 | FT | 6" NON-PERFORATED CORRUGATED PLASTIC PIPE | 60 | | | | |
| 523 | 20000 | 4 | EACH | DYNAMIC LOAD TESTING | 2 | 2 | | | |
| 526 | 30011 | 476 | SY | REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"), AS PER PLAN (SEE PROPOSAL NOTE) | 476 | | | | 5 39 40 |
| SPECIAL | 53000600 | 2,784 | SF | STRUCTURES: AESTHETIC TREATMENT (CONCRETE FORMLINER/STAIN) | | | 2,784 | | 4 |
| 601 | 32104 | 882 | CY | ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC | 882 | | | | |
| 613 | 41201 | 856 | CY | LOW STRENGTH MORTAR BACKFILL, AS PER PLAN | 856 | | | | 4 |

DESIGN AGENCY
Gannett Fleming
ENGINEERS & ARCHITECTS, P.C.
2560 CORPORATE EXCHANGE DRIVE SUITE 230
COLUMBUS, OHIO 43231

DESIGNED RSN | DRAWN RSN | CHECKED MTO | REVIEWED CTM | DATE 09/2022 | REVISED | STRUCTURE FILE NUMBER 4560100

ESTIMATED BRIDGE QUANTITIES
BRIDGE NO. LIC-THWDX-0010
OVER T.J. EVANS TRAIL AND RACCOON CREEK

LIC-THORNWOOD CROSSING
PID No. 87642