

ROADWAY LIGHTING ESTIMATE OF QUANTITIES

| ITEM CODE  | ITEM                                    | UNIT   |  |  |  |  | TOTAL |
|------------|---|--------|--|--|--|--|-------|
| 2562       | SIGNS                                   | SO FT  |  |  |  |  | -     |
| 2569       | DEMobilIZATION (1.5%)                   | LP SUM |  |  |  |  | -     |
| 2650       | MAINTAIN & CONTROL TRAFFIC (5%)         | LP SUM |  |  |  |  | -     |
| 2775       | FLASHING ARROW                          | EACH   |  |  |  |  | -     |
| 4700       | POLE 30' MTG HT                         | EACH   |  |  |  |  | -     |
| 4701       | POLE 40' MTG HT                         | EACH   |  |  |  |  | -     |
| 4710       | POLE 80' MTG HT HIGH MAST               | EACH   |  |  |  |  | -     |
| 4711       | POLE 90' MTG HT HIGH MAST               | EAST   |  |  |  |  | -     |
| 4712       | POLE 100' MTG HT HIGH MAST              | EACH   |  |  |  |  | -     |
| 4713       | POLE 110' MTG HT HIGH MAST              | EACH   |  |  |  |  | -     |
| 4714       | POLE 120' MT HT HIGH MAST               | EACH   |  |  |  |  | -     |
| 4720       | BRACKET 4'                              | EACH   |  |  |  |  | -     |
| 4721       | BRACKET 6'                              | EACH   |  |  |  |  | -     |
| 4722       | BRACKET 8'                              | EACH   |  |  |  |  | -     |
| 4723       | BRACKET 10'                             | EACH   |  |  |  |  | -     |
| 4724       | BRACKET 12'                             | EACH   |  |  |  |  | -     |
| 4725       | BRACKET 15'                             | EACH   |  |  |  |  | -     |
| 4730       | BRACKET 'C'                             | EACH   |  |  |  |  | -     |
| 4740       | POLE BASE                               | EACH   |  |  |  |  | -     |
| 4741       | POLE BASE IN MED WALL                   | EACH   |  |  |  |  | -     |
| 4742       | POLE BASE - HIGH MAST                   | CU YD  |  |  |  |  | -     |
| 4750       | TRANSFORMER BASE                        | EACH   |  |  |  |  | -     |
| 4760       | POLE W/SECONDARY CONTROL EQUIP          | EACH   |  |  |  |  | -     |
| 4761       | LIGHTING CONTROL EQUIPMENT              | EACH   |  |  |  |  | -     |
| 4770       | HPS LUMINAIRE                           | EACH   |  |  |  |  | -     |
| 4771       | HPS LUMINAIRE WALL PACK                 | EACH   |  |  |  |  | -     |
| 4772       | HPS LUMINAIRE OFFSET                    | EACH   |  |  |  |  | -     |
| 4773       | HPS LUMINAIRE HIGH MAST                 | EACH   |  |  |  |  | -     |
| 4775       | NAVIGATION LIGHT 360 DEG GREEN - LED    | EACH   |  |  |  |  | -     |
| 4776       | NAVIGATION LIGHT 180 DEG RED - LED      | EACH   |  |  |  |  | -     |
| 4780       | FUSED CONNECTOR KIT                     | EACH   |  |  |  |  | -     |
| 4790       | CONDUIT - 1/2 INCH                      | LIN FT |  |  |  |  | -     |
| 4791       | CONDUIT - 3/4 INCH                      | LIN FT |  |  |  |  | -     |
| 4792       | CONDUIT - 1 INCH                        | LIN FT |  |  |  |  | -     |
| 4793       | CONDUIT - 1 1/4 INCH                    | LIN FT |  |  |  |  | -     |
| 4794       | CONDUIT - 1 1/2 INCH                    | LIN FT |  |  |  |  | -     |
| 4795       | CONDUIT - 2 INCH                        | LIN FT |  |  |  |  | -     |
| 4796       | CONDUIT - 2 1/2 INCH                    | LIN FT |  |  |  |  | -     |
| 4797       | CONDUIT - 3 INCH                        | LIN FT |  |  |  |  | -     |
| 4798       | CONDUIT - 3 1/2 INCH                    | LIN FT |  |  |  |  | -     |
| 4799       | CONDUIT - 4 INCH                        | LIN FT |  |  |  |  | -     |
| 4800       | MARKER                                  | EACH   |  |  |  |  | -     |
| 4810       | ELECTRICAL JUNCTION BOX                 | EACH   |  |  |  |  | -     |
| 4811       | ELECTRICAL JUNCTION BOX TYPE B          | EACH   |  |  |  |  | -     |
| 4820       | TRENCHING AND BACKFILLING               | LIN FT |  |  |  |  | -     |
| 4821       | OPEN CUT ROADWAY                        | LIN FT |  |  |  |  | -     |
| 4832       | WIRE - NO. 12                           | LIN FT |  |  |  |  | -     |
| 4833       | WIRE - NO. 8                            | LIN FT |  |  |  |  | -     |
| 4834       | WIRE - NO. 6                            | LIN FT |  |  |  |  | -     |
| 4835       | WIRE - NO. 4                            | LIN FT |  |  |  |  | -     |
| 4836       | WIRE - NO. 2                            | LIN FT |  |  |  |  | -     |
| 4837       | WIRE - NO. 0                            | LIN FT |  |  |  |  | -     |
| 4860       | CABLE - NO. 8/3C DUCTED                 | LIN FT |  |  |  |  | -     |
| 4861       | CABLE - NO. 6/3C DUCTED                 | LIN FT |  |  |  |  | -     |
| 4862       | CABLE - NO. 4/3C DUCTED                 | LIN FT |  |  |  |  | -     |
| 4863       | CABLE - NO. 2/3C DUCTED                 | LIN FT |  |  |  |  | -     |
| 4864       | CABLE - NO. 0/3C DUCTED                 | LIN FT |  |  |  |  | -     |
| 4871       | POLE 35' WOODEN                         | EACH   |  |  |  |  | -     |
| 4872       | POLE 40' WOODEN                         | EACH   |  |  |  |  | -     |
| 4873       | POLE 45' WOODEN                         | EACH   |  |  |  |  | -     |
| 4939       | REMOVE POLE                             | EACH   |  |  |  |  | -     |
| 4940       | REMOVE LIGHTING                         | LP SUM |  |  |  |  | -     |
| 4941       | REMOVE POLE BASE                        | EACH   |  |  |  |  | -     |
| 4942       | REMOVE, STORE, AND REINSTALL POLE       | EACH   |  |  |  |  | -     |
| 4943       | REMOVE, STORE REINST CONTROL EQ         | EACH   |  |  |  |  | -     |
| 20391NS835 | ELECTRICAL JUNCTION BOX TYPE A          | EACH   |  |  |  |  | -     |
| 20392NS835 | ELECTRICAL JUNCTION BOX TYPE C          | EACH   |  |  |  |  | -     |
| 20394NS835 | PVC CONDUIT - 3" IN MEDIAN BARRIER WALL | LIN FT |  |  |  |  | -     |
| 20454NS835 | TEMPORARY LIGHTING                      | LP SUM |  |  |  |  | -     |
| 20630ND    | JUNCTION BOX 6"x6"x6"                   | EACH   |  |  |  |  | -     |
| 20993ND    | HPS LUMINAIRE 400 WATT                  | EACH   |  |  |  |  | -     |
| 21543EN    | BORE AND JACK CONDUIT                   | LIN FT |  |  |  |  | -     |
| 21563NN    | SPLICE BOX - 8"x6"x4"                   | EACH   |  |  |  |  | -     |
| 21564NN    | REMOVE AESTHETIC LIGHTING               | LP SUM |  |  |  |  | -     |
| 21565NN    | WIRELESS LIGHTING MONITORING SYSTEM     | LP SUM |  |  |  |  | -     |
| 21568NN    | HIGH MAST LOWERING DEVICE               | EACH   |  |  |  |  | -     |
| 21579EN    | FLEX CONDUIT - 1 1/4 INCH               | LIN FT |  |  |  |  | -     |
| 21734NN    | PEDESTAL CONTROL EQUIPMENT              | LP SUM |  |  |  |  | -     |
| 21742NN    | TEMPORARY SERVICE                       | LP SUM |  |  |  |  | -     |
| 22939ND    | INSTALL LUMINAIRE POLE                  | EACH   |  |  |  |  | -     |
| 23161NN    | POLE BASE - HIGH MAST                   | CU YD  |  |  |  |  | -     |
| 23675EC    | WIRE - NO. 12-INSTALL                   | LIN FT |  |  |  |  | -     |
| 24474ED    | WIRE - NO. 8-INSTALL                    | LIN FT |  |  |  |  | -     |

ROADWAY LIGHTING ESTIMATE OF QUANTITIES

| TOTAL     | UNITS  | CODE       | ITEM DESCRIPTION                        |
|-----------|--------|------------|---|
| 60        | SO FT  | 2562       | SIGNS                                   |
| 1         | LP SUM | 2569       | DEMobilIZATION (1.5%)                   |
| 60        | LP SUM | 2650       | MAINTAIN & CONTROL TRAFFIC (5%)         |
| 638       | EACH   | 2775       | FLASHING ARROW                          |
| 775       | EACH   | 4700       | POLE 30' MTG HT                         |
| 70        | EACH   | 4701       | POLE 40' MTG HT                         |
| 470       | EACH   | 4710       | POLE 80' MTG HT HIGH MAST               |
| 40        | EACH   | 4711       | POLE 90' MTG HT HIGH MAST               |
| 259       | EACH   | 4712       | POLE 100' MTG HT HIGH MAST              |
| 3         | EACH   | 4713       | POLE 110' MTG HT HIGH MAST              |
| 7         | EACH   | 4714       | POLE 120' MTG HT HIGH MAST              |
| 4         | EACH   | 4720       | BRACKET 4'                              |
| 2         | EACH   | 4721       | BRACKET 6'                              |
| 10        | EACH   | 4722       | BRACKET 8'                              |
| 2         | EACH   | 4723       | BRACKET 10'                             |
| 28.66     | EACH   | 4724       | BRACKET 12'                             |
| 1         | EACH   | 4725       | BRACKET 15'                             |
| 12        | EACH   | 4730       | BRACKET 'C'                             |
|           | EACH   | 4740       | POLE BASE                               |
|           | EACH   | 4741       | POLE BASE IN MED WALL                   |
|           | CU YD  | 4742       | POLE BASE - HIGH MAST                   |
|           | EACH   | 4750       | TRANSFORMER BASE                        |
|           | EACH   | 4760       | POLE W/SECONDARY CONTROL EQUIP          |
|           | EACH   | 4761       | LIGHTING CONTROL EQUIPMENT              |
|           | EACH   | 4770       | HPS LUMINAIRE                           |
|           | EACH   | 4771       | HPS LUMINAIRE WALL PACK                 |
|           | EACH   | 4772       | HPS LUMINAIRE OFFSET                    |
|           | EACH   | 4773       | HPS LUMINAIRE HIGH MAST                 |
|           | EACH   | 4775       | NAVIGATION LIGHT 360 DEG GREEN - LED    |
|           | EACH   | 4776       | NAVIGATION LIGHT 180 DEG RED - LED      |
|           | EACH   | 4780       | FUSED CONNECTOR KIT                     |
|           | LIN FT | 4790       | CONDUIT 1/2 INCH                        |
|           | LIN FT | 4791       | CONDUIT 3/4 INCH                        |
|           | LIN FT | 4792       | CONDUIT 1 INCH                          |
|           | LIN FT | 4793       | CONDUIT 1 1/4 INCH                      |
|           | LIN FT | 4794       | CONDUIT 1 1/2 INCH                      |
|           | LIN FT | 4795       | CONDUIT 2 INCH                          |
|           | LIN FT | 4796       | CONDUIT 2 1/2 INCH                      |
|           | LIN FT | 4797       | CONDUIT 3 INCH                          |
|           | LIN FT | 4798       | CONDUIT 3 1/2 INCH                      |
|           | LIN FT | 4799       | CONDUIT 4 INCH                          |
| 8-20-2024 | EACH   | 4800       | MARKER                                  |
|           | EACH   | 4810       | ELECTRICAL JUNCTION BOX                 |
|           | EACH   | 4811       | ELECTRICAL JUNCTION BOX TYPE B          |
|           | LIN FT | 4820       | TRENCHING AND BACKFILLING               |
|           | LIN FT | 4821       | OPEN CUT ROADWAY                        |
|           | LIN FT | 4832       | WIRE-NO. 12                             |
|           | LIN FT | 4833       | WIRE-NO. 8                              |
|           | LIN FT | 4834       | WIRE-NO. 6                              |
|           | LIN FT | 4835       | WIRE-NO. 4                              |
|           | LIN FT | 4836       | WIRE-NO. 2                              |
|           | LIN FT | 4837       | WIRE-NO. 0                              |
|           | LIN FT | 4860       | CABLE - NO. 8/3C DUCTED                 |
|           | LIN FT | 4861       | CABLE - NO. 6/3C DUCTED                 |
|           | LIN FT | 4862       | CABLE - NO. 4/3C DUCTED                 |
|           | LIN FT | 4863       | CABLE - NO. 2/3C DUCTED                 |
|           | LIN FT | 4864       | CABLE - NO. 0/3C DUCTED                 |
|           | EACH   | 4871       | POLE 35' WOODEN                         |
|           | EACH   | 4872       | POLE 40' WOODEN                         |
|           | EACH   | 4873       | POLE 45' WOODEN                         |
|           | EACH   | 4884       | ANCHOR                                  |
|           | EACH   | 4939       | REMOVE POLE                             |
|           | LP SUM | 4940       | REMOVE LIGHTING                         |
|           | EACH   | 4941       | REMOVE POLE BASE                        |
|           | EACH   | 4942       | REMOVE, STORE, AND REINSTALL POLE       |
|           | EACH   | 4943       | REMOVE, STORE REINST CONTROL EQ         |
|           | EACH   | 20391NS835 | ELECTRICAL JUNCTION BOX TYPE A          |
|           | EACH   | 20392NS835 | ELECTRICAL JUNCTION BOX TYPE C          |
|           | EACH   | 20394NS835 | PVC CONDUIT - 3" IN MEDIAN BARRIER WALL |
|           | LIN FT | 20454NS835 | TEMPORARY LIGHTING                      |
|           | LP SUM | 20630ND    | JUNCTION BOX 6"x6"x6"                   |
|           | EACH   | 20993ND    | HPS LUMINAIRE 400 WATT                  |
|           | LIN FT | 21543EN    | BORE AND JACK CONDUIT                   |
|           | EACH   | 21563NN    | SPLICE BOX - 8"x6"x4"                   |
|           | LP SUM | 21564NN    | REMOVE AESTHETIC LIGHTING               |
|           | LP SUM | 21565NN    | WIRELESS LIGHTING MONITORING SYSTEM     |
|           | EACH   | 21568NN    | HIGH MAST LOWERING DEVICE               |
|           | LIN FT | 21579EN    | FLEX CONDUIT - 1 1/4 INCH               |
|           | LP SUM | 21742NN    | TEMPORARY SERVICE                       |
|           | EACH   | 22939ND    | INSTALL LUMINAIRE POLE                  |
|           | CU YD  | 23161EN    | POLE BASE - HIGH MAST                   |
|           | EACH   | 23536EC    | HPS LUMINAIRE 250 WATT                  |
|           | LIN FT | 23675EC    | WIRE - NO. 12-INSTALL                   |
|           | LIN FT | 24474ED    | WIRE - NO. 8-INSTALL                    |
|           | EACH   | 24601EC    | INSTALL -                               |

THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 716 FOR MEASUREMENT AND OTHER DETAILS. SEE SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING.

THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS. SUBMISSIONS OF A BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED.

ADD SENTENCE TO SECTION 834.06: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES: "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501".

ADD SENTENCE TO SECTION 834.10: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES: "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501".

CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 716 & 834

SUBSECTION: 716.03.03 TRENCHING.  
REMOVE: REMOVE SENTENCE UNDER B: NO PAYMENT FOR ADDITIONAL JUNCTION BOXES FOR GREATER DEPTHS WILL BE ALLOWED.

SUBSECTION: 716.03.04 CONDUIT INSTALLATION  
ADD TO SECOND SENTENCE WITH THE FOLLOWING: BASES WITH BREAKWAY DEVICES INSTALLED.

REVISION: REPLACE TITLE WITH THE FOLLOWING: BORE AND JACK/OPEN CUT ROADWAY  
ADD SENTENCES AFTER LAST SENTENCE WITH PERMISSION OF THE ENGINEER, ROADWAY MAY BE OPEN CUT IF CONDUIT IS UNDER PAVEMENT. THE CONDUIT IN OPEN CUT CAN BE EITHER 2" RIGID STEEL OR SCHEDULE 80 PVC UNDER PAVEMENT AREAS. IF IT IS THE LOOP TRANSITION FROM THE SAW SLOT, IT SHALL BE RIGID STEEL.

SUBSECTION: 834.15.03 TRANSFORMER BASES.  
REMOVE: REMOVE SENTENCE: CONSTRUCT THE DOOR OF A HIGH DENSITY POLYETHYLENE MATERIAL IN COLOR THAT MATCHES THE BASE.

REVISION: REPLACE THE FOLLOWING SENTENCE WITH THE FOLLOWING:  
CONSTRUCT THE DOOR OF AN ALUMINUM MATERIAL IN A COLOR THAT MATCHES THE BASE. THE DOOR SHOULD HAVE A THEFT DETERRENT DEVICE THAT IS EQUAL TO THE LOCKDOWN LIGHTLOCK DOOR ASSEMBLY. THE DOOR LOCK WILL HAVE A LOCKING DEVICE WITH A KEY CUSTOM KEY THAT WILL BE SENT TO CENTRAL OFFICE TRAFFIC OPERATIONS FROM THE MANUFACTURER AND BE ISSUED TO THE CONTRACTOR FOR THE INSTALLATION OF THE FINAL DOOR DEVICE. THE KEY FOR THE DOOR SHALL BE RETURNED TO CENTRAL OFFICE TRAFFIC OPERATIONS AFTER THE CLOSURE OF THE CONTRACT. THERE SHALL BE A 4" BY 6" ARC FLASH WARNING STICKER INSTALLED CENTER TOP OF EACH DOOR. THE STICKER SHALL BE METALCRAFT PLYERS PREM STYLE MARK LABEL WITH .007 THICKNESS, WITH UV WHITE POLYCARBONATE MATERIAL, AND WITH MESSRY PRESSURE SENSITIVE ADHESIVE. THE STICKER SHALL HAVE TWO COLORS OF BLACK AND CUSTOM COLOR ORANGE. THE WORDING FOR THE ARC FLASH STICKER SHALL BE THE FOLLOWING: "WARNING: ARC FLASH HAZARD. APPROPRIATE PPE REQUIRED. FAILURE TO COMPLY CAN RESULT IN DEATH OR INJURY. REFER TO NFPA 70E."

SECTION: 834.15 LIGHTING POLES.

REVISION: ADD THE FOLLOWING TO THE FIRST PARAGRAPH:  
THE CABINET WILL WAIVE THE REQUIREMENT STATED IN THE FIRST SENTENCE OF SECTION 5.14.6.2 - REINFORCED HOLES AND CUTOFF FOR HIGH MAST POLES (ONLY).

SECTION: 834.33 WARNING TAPE.

REVISION: REPLACE FIRST SENTENCE WITH THE FOLLOWING:  
PROVIDE DETECTABLE TYPE TAPE THAT IS 6 INCHES WIDE AND 7.0 MILS NOMINAL THICK.

MEASUREMENT NOTE THAT ARE IN ADDITION TO SECTION 716:

REMOVE, STORE AND REINSTALL POLE- DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT REMOVED, STORE AND REINSTALLED. THE DEPARTMENT WILL NOT MEASURE WORK AND MATERIAL NECESSARY TO RELOCATE AN EXISTING LIGHTING STANDARD AND WILL CONSIDERED THIS INCIDENTAL TO THIS ITEM OF WORK.

WOOD POLE- DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT FURNISHED AND INSTALLED. THE DEPARTMENT WILL NOT MEASURE EXCAVATION, BACKFILLING, AND RESTORING DISTURBED AREAS.

ANCHOR- DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT FURNISHED AND INSTALLED. THE DEPARTMENT WILL NOT MEASURE FURNISHING AND INSTALLING SPECIFIED ANCHOR, DOWN-GUY, MESSENGER, CLAMPS, GUY GUARD, AND INSULATORS IF REQUIRED.

WIRE OR CABLE SHALL INCLUDE INSTALLING SPECIFIED WIRE OR CABLE WITHIN CONDUIT AS INDICATED ON THE PLAN SHEETS. INCIDENTAL TO THIS ITEM SHALL BE THE FURNISHING AND INSTALLING OF SPLICE BOOTS OR ANY OTHER HARDWARE REQUIRED FOR INSTALLING CABLE. THE CONTRACTOR SHALL INSTALLED CABLE WITHIN WIRE NEEDS SPLICE-FREE FROM THE CONTROLLER TO EACH POLE THE CABLE OR WIRE IS FEEDING. EXCEPTIONS TO THIS MUST BE APPROVED BY THE ENGINEER OR AS SPECIFIED ON THE PLANS.

EACH RUN OF WIRE FROM POLE TO POLE (UP EACH POLE) SHALL BE THE FOLLOWING COLOR CODE: 2-BLACK (HOT) AND GREEN (GROUND).

DESIGNED BY: \_\_\_\_\_  
DATE SUBMITTED: \_\_\_\_\_  
Commonwealth of Kentucky  
DEPARTMENT OF HIGHWAYS  
COUNTY OF: \_\_\_\_\_  
PROJECT: \_\_\_\_\_  
NUMBER: \_\_\_\_\_  
ROADWAY LIGHTING ESTIMATES  
OF QUANTITIES