

**STREET LIGHT CIRCUIT**  
**(2-#4-5KV CABLES)**

I. Quantity

The base bid shall include the indicated number of feet of street light circuit (2-#4 5KV cable) located as shown on the drawings and installed as herein specified.

II. Material

The cable shall be as follows:

- a. The cable shall be Specification FAA-L-824 TYPE C, single conductor and suitable for overhead or direct burial installation.
- b. The insulation shall be rated at 90 degrees Celsius continuous operation, 130 degrees Celsius emergency and 250 degrees Celsius short circuit.
- c. The cable shall consist of No. 4 AWG soft annealed 7 strand bare copper conductor.
- d. The insulation shall not be less than 0.110 inches of light and heat stabilized chemically cross-linked polyethylene and shall meet ICEA S-96-659 specifications for cable voltages 5000 volts. The minimum at point wall thickness shall not be less than .099 inches
- e. The ICEA (3 cables per conduit, 40 degrees Celsius ambient, 90 degrees Celsius conductor temperature) ampacity shall not be less than 107 amperes.
- f. The outside diameter of the cable shall be no less than 0.445 inches.
- g. The cable shall be 5KV 4 AWG - Draka Cableteq USA-(tamaqua)part # 389181 (single conductor) or part#388927(2 conductor paralleled & striped), CME# AIRPTFAA42LPYK77 MT50 cable, Nehring xlp insulated, or approved equal. Identification of conductors shall be accomplished by longitudinally color striping black conductors. Neutral cable shall be identified with white stripe. Date of manufacture shall be included on all cable.

### III. Installation

- a. The cable shall be unreeled from its reel, not allowing same to drag over pavements or sidewalks and carefully pulled into ducts without damaging the insulation. Installation of cable can only be made under the supervision and inspection of a resident or inspecting engineer. No splices will be permitted to be pulled into the ducts.

The contractor shall, in the presence of the inspecting engineer, test all cables in place to see that the circuit is free of shorts and grounds and is properly connected. A minimum of five (5) feet of slack cable shall be required per pole and per pullbox, for each conductor. Neutral cable shall be identified with white stripe .

- b. In-line splices shall not be made between poles.
- c. The contractor shall be responsible for his own measurements and the furnishing and installing of all necessary materials to complete the street lighting circuit.
- d. All splices and connections shall be made in the transformer bases unless otherwise shown on the drawings or instructed in the field by the engineer.
- e. Splices in Pull Box, when permitted, shall be made with compression connectors and 3M scotchcast Product No. 82-F1 electrical splicing kits, or an approved equal.

### IV. Quotation

The street light circuit as herein specified shall be quoted for as a unit price per circuit foot installed in the appropriate section of this document.