

SECTION 16620  
ELECTRICAL CONDUCTORS

## PART 1 DESCRIPTION

- A. Furnish and place electrical conductors, except conductors specifically covered by other Items.

## PART 2 MATERIALS

- A. Provide new materials that comply with the details shown on the plans and the requirements of this Item. Use stranded insulated conductors that are rated for 600 volts; approved for wet locations; and marked in accordance with UL, NEC, and CSA requirements.
- B. Ensure that all grounding conductors size AWG No. 8 and larger are stranded, except for the grounding electrode conductor, which will be a solid conductor.
- C. Use white insulation for grounded (neutral) conductors, except that grounded conductors AWG No. 8 and larger may be black with white tape marking at every accessible location. Do not use white insulation or marking for any other conductor except control wiring specifically shown on the plans.
- D. Ensure that insulated grounding conductors are green except that insulated grounding conductors AWG No. 8 and larger may be black with green tape marking at every accessible location. Do not use green insulation or marking for any other conductor except control wiring specifically shown on the plans.

## PART 3 CONSTRUCTION

- A. Splice conductors only in junction boxes, ground boxes, and transformer bases, and in poles and structures at the hand holes. Splice as shown on the plans. Do not exceed the manufacturer's recommended pulling tension. Use lubricant as recommended by the manufacturer. Install conductors in accordance with the NEC.
- B. Make insulation resistance tests on the conductors prior to making final connections, and ensure that each continuous run of insulated conductor has a minimum DC resistance of 5 megohms when tested at 1,000 volts DC. The Owner's Representative may require verification testing of all or part of the conductor system. The Owner's Representative will witness these verification tests. Replace conductors exhibiting an insulation resistance of less than 5 megohms.

## PART 4 MEASUREMENT

- A. This Item will be measured by the foot of each single conductor.

- B. This is a plans quantity measurement Item. The quantity to be paid is the quantity shown in the proposal.” Additional measurements or calculations will be made if adjustments of quantities are required.

PART 5 PAYMENT

- A. The work performed and materials furnished in accordance with this Item and measured as provided under “Measurement” will be paid for at the unit price bid for “Electrical Conductors” of the types and sizes specified. This price is full compensation for furnishing, installing, and testing electrical conductors and for equipment, labor, tools, and incidentals, except that:
  - 1. conductors used in connecting the components of electrical services will be paid for under Item 16628, “Electrical Services”;
  - 2. conductors inside roadway illumination assemblies will be paid for under Item 16610, “Roadway Illumination Assemblies”; and
  - 3. conductors used for internal wiring of equipment will not be paid for directly but will be subsidiary to pertinent Items.

END OF SECTION