DUCT CABLE & HDPE CONDUIT NOTES

1. Provide duct cable in accordance with Departmental Material Specification (DMS) 11060. "Duct Cable" and Item 622. "Duct Cable." Provide duct cable as listed on the Material Producer List (MPL) on the Department web site under "Roadway Illumination and Electrical Supplies" Item 622.

2. Provide high-density polyethylene (HDPE) conduit in accordance with DMS 11060 and Item 622, "Conduit." Provide HDPE as listed on the MPL on the Department web site under "Roadway Illumination and Electrical Supplies," Item 618.

3. Supply duct cable with a minimum 2 in. diameter, unless otherwise shown in the plans. Provide duct cable and HDPE conduit as shown by descriptive code or on the plans. Bend duct cable and HDPE conduit as recommended by the manufacturer, with a minimum bending radius of 20 ft. For 2 in. duct, follow manufacturer’s recommendations when handling duct cable and HDPE conduit reels and during installation of duct cable and HDPE conduit.

4. Do not splice conductors within duct cable or HDPE conduit. Couple duct cable and HDPE entering a ground box or foundation to a PVC elbow. When galvanized steel RMC elbows are called for in the plans and any portion of the RMC elbow is buried less than 18 inches from possible contact, ground the RMC elbow.

5. Furnish and install duct cable with factory-installed conductors, sized as shown in the plans and as required by the National Electrical Code (NEC). The NEC contains specific requirements for duct cable in Article, "Nonmetallic Underground Conduit with Conductors: Type NUCC."

6. When conduit casing is called for in the plans, extend duct cable or HDPE conduit through the conduit casing in one continuous length without connection to the casing. Seal the ends of duct cable or HDPE conduit with duct seal, expandable foam, or other approved method after completing the pull tests required by Item 622.

7. Provide minimum cover of 24 in. under roadways, 18 in. in other locations, or as shown on the plans.

8. Provide and install listed fittings to couple duct cable or HDPE conduit to other types of conduits. Do not splice conductors within duct cable or HDPE conduit. Couple duct cable and HDPE conduit with listed flexible or rigid coupling. Use listed flexible coupling to connect duct cable and HDPE conduit. Use listed rigid coupling to connect duct cable and HDPE conduit. Use listed rigid couplings with stainless steel external banding clamps and locking rings connected with approved electrofusion coupling or connected using an approved chemical fusion method using an epoxy or adhesive specifically designed for HDPE couplings and connectors as described in Article, "Nonmetallic Underground Conduit with Conductors: Type NUCC."

9. Furnish and install listed fittings to couple duct cable or HDPE conduit to other types of conduits. Do not splice conductors within duct cable or HDPE conduit. Couple duct cable and HDPE conduit with listed flexible or rigid coupling. Use listed flexible coupling to connect duct cable and HDPE conduit. Use listed rigid coupling to connect duct cable and HDPE conduit. Use listed rigid couplings with stainless steel external banding clamps and locking rings connected with approved electrofusion coupling or connected using an approved chemical fusion method using an epoxy or adhesive specifically designed for HDPE couplings and connectors as described in Article, "Nonmetallic Underground Conduit with Conductors: Type NUCC."

When the upper end of an RMC elbow does not enter the ground box, it may be extended with a 3⁄4 in. PVC conduit nipple and bell end, if not, a rigid extension and bell end are required. Aggregate bed is to be a minimum of 4 inches deep, placed under and over the ground box. Ensure the aggregate does not encroach into the interior of the box.