

**Part 1 General****1.1 RELATED SECTIONS**

- .1 Section 01 33 00 – Submittal Procedures.
- .2 Section 01 74 11 – Cleaning.
- .3 Section 01 74 21 – Construction/Demolition Waste Management and Disposal.
- .4 Section 31 23 33.01 – Excavating, Trenching and Backfilling.

**1.2 MEASUREMENT AND PAYMENT**

- .1 Supply and installation of conduits shall be measured in linear metres of each size of conduit acceptably installed. Trenching, supply and installation of Type 4 Fill and detectable marking tape, fish cord and backfilling shall be incidental to the conduit unit price.
- .2 The relocation of existing conduits shall not be measured for payment, but shall be considered as incidental to the work.

**1.3 REFERENCES**

- .1 Canadian Standards Association (CSA International)
  - .1 CSA C22.2 No. 211.2-M1984(R2003), Rigid PVC (Unplasticized) Conduit.

**1.4 SUBMITTALS**

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product data: submit manufacturer's printed product literature, specifications and datasheets.
  - .1 Submit cable manufacturing data.
- .3 Quality assurance submittals:
  - .1 Test reports: submit certified test reports.
  - .2 Certificates: submit certificates signed by manufacturer certifying that materials comply with specified performance characteristics and physical properties.
  - .3 Instructions: submit manufacturer's installation instructions.

**1.5 WASTE MANAGEMENT AND DISPOSAL**

- .1 Separate waste materials for reuse, recycling and disposal in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
- .2 Place materials defined as hazardous or toxic waste in designated containers.
- .3 Ensure emptied containers are sealed and stored safely for disposal away from children.

**Part 2            Products****2.1                CONDUITS**

- .1        Rigid pvc conduit: to CSA C22.2 No. 211.2.

- .1        50 mm diameter.

**2.2                CONDUIT FITTINGS**

- .1        Fittings: manufactured for use with conduit specified. Coating: same as conduit.

**2.3                EXPANSION FITTINGS FOR RIGID CONDUIT**

- .1        Weatherproof expansion fittings with internal bonding assembly suitable for 100 mm linear expansion.

- .2        Watertight expansion fittings with integral bonding jumper suitable for linear expansion and 19 mm deflection.

**2.4                FISH CORD**

- .1        Polypropylene.

**2.5                DETECTABLE MARKING TAPE**

- .1        Backing material: Aluminum.

- .2        Width: 150 mm.

**Part 3            Execution****3.1                MANUFACTURER'S INSTRUCTIONS**

- .1        Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and datasheets.

**3.2                INSTALLATION**

- .1        Use rigid pvc conduit underground.

- .2        Bend conduit cold:

- .1        Replace conduit if kinked or flattened more than 1/10th of its original diameter.

- .3        Install fish cord in empty conduits.

- .4        Remove and replace blocked conduit sections.

- .1        Do not use liquids to clean out conduits.

**3.3 CONDUITS UNDERGROUND**

- .1 Slope conduits to provide drainage.
- .2 Waterproof joints (pvc excepted) with heavy coat of bituminous paint.
- .3 Pipe surround: Type 4 fill to 95% maximum density to ASTM 1557 in accordance with Section 31 23 33.01 – Excavating, Trenching and Backfilling.

**3.4 CLEANING**

- .1 Proceed in accordance with Section 01 74 11 - Cleaning.
- .2 On completion and verification of performance of installation, remove surplus materials, excess materials, rubbish, tools and equipment.

**END OF SECTION**