

# TURNKEY CONSTRUCTION SPECIFICATIONS

### 1. Trench Excavation and Backfill

The Developer shall employ the use of suitable excavating equipment and shall ensure the required excavation depths are maintained at all times in accordance with standards. The trench bottom shall be level and free of loose soil, rocks, debris, organic material, frozen soil, water, ice or undesirable material which could damage cables.

Under no circumstances shall the Contractor backfill a trench that contains water, snow or ice. Scrap pipe, foreign objects or other debris shall not be buried in trenches or bellholes.

Backfill is to be installed in the trench in such a manner that conduit and cables are not damaged. Backfill must be compacted to avoid settling.

The Contractor will be responsible for all clean-up and disposal of rock or any foreign material not suitable for backfill.

Where slurry is specified cables, and ducts must be shaded with 150mm of sand prior to application of slurry.

# **ELECTRICAL SPECIFICATIONS**

#### 1. <u>Construction and Design</u>

All Work shall be performed in accordance with the SaskPower Construction Standards.

#### 2. <u>Installation Requirements</u>

The Developer shall ensure installation of all SaskPower cables are installed under the supervision of a qualified utility worker.

Cables that require bending shall not exceed the specified bending radius. Electrical cables shall not be compressed.

Cables and ducts shall be installed into energized transformers, switching cubicles and secondary enclosures by SaskPower. Attachments of cable or ducts to overhead poles shall be completed by SaskPower. The Developer will ensure that minimal excavation is required by SaskPower crews to allow the cables or ducts to be installed.

The Contractor shall identify all transformers and cables. Service cables will be identified with lot and block number or civic address. Primary cables shall be identified by direction of feed and if required, the correct phase identification. Signage and marking material will be supplied by SaskPower.



# 3. <u>Cable Loops</u>

The Contractor shall provide a cable loop by extending the ends of the primary cable three (3) meters past the top of each transformer vault. Riser locations require an extra fifteen (15) meters of primary.

The Contractor shall provide a cable loop by extending the ends of the secondary cables 1.5 meters past the top of each transformer vault, 1 meter past the top of the street light foundation and to the top of each pedestal.

The Contractor shall leave a five (5) meter coil of primary cable inside the bases of switch cubicles.

The contractor shall leave a twelve (12) meter coil of primary cable at the base of a take-off pole.

# 4. Work On or Near Energized Facilities

All Work to be performed on, or in close proximity to, energized facilities shall be carried out in accordance with the SaskPower Standard Protection Code.

In cases where the above-mentioned Code is applicable, the Contractor shall make application for authorization to hold the necessary Work Permit, Standoff, etc., through the Region Issuing Authority.

Any accidental contacts made with energized facilities during the construction process shall be reported immediately to SaskPower.

# 5. <u>Personnel Requirements</u>

### Crews

Installation of electrical facilities shall be under the direction of a Qualified Journeyman Powerline Technician. The ratio of Journeyman Powerline Technicians to Apprentice Powerline Technicians shall be in accordance with the Provincial Standard as outlined in the Apprenticeship and Trade Certification Program.

Additional members of the Work crew who are not Journeyman or Apprentice Linemen will have the skills necessary to do the Work and will have been given instructions on the hazards and safety practices necessary when working around or near electrical facilities.

#### Qualifications

### Journeyman Powerline Technician

Journeyman Powerline Technicians shall possess a valid Journeyman Powerline Technician Certificate issued by the Province of Saskatchewan, or a valid Interprovincial Certificate endorsed by the Province of Saskatchewan.

### Apprentice Powerline Technician

Apprentice Powerline Technicians shall be currently indentured in the Powerline Technician Apprenticeship and Trade Certification. Apprentice Powerline Technician Work Rules shall be adhered to when working on a live apparatus.



# Equipment Operators

Equipment Operators shall be certified and competent as required by *The Occupational Health* and Safety Regulations, 1996 (Saskatchewan). Equipment Operators shall be familiar with the limits of approach when working in the vicinity of overhead power lines.

### General

All crew members shall be skilled in their respective trade.

### Approval of Personnel

Journeyman Powerline Technicians must be approved by SaskPower. SaskPower may request written documentation regarding any personnel qualifications.