## 3" RIGID CONDUIT AUGERED OR JACKED UNDER TREES

### I. Quanity

The base bid shall include the indicated number of feet of 3" rigid conduit augered or jacked under trees at locations shown on the drawings.

#### II. Material

Conduit Rigid - The 3" rigid steel conduit shall be hot dipped galvanized and secondary coated, produced to ANSI Specifications C-80.1 and meet requirements of Underwriters Laboratories UL-6. Both ends shall be threaded. The conduit shall be Omega Tube & Conduit Corp., Republic Conduit or approved equal.

Conduit Non-Metallic - The 2" conduit shall be schedule 40 PVC type EPC- 40-PVC and meet the requirements of NEMA Standards Publication TC-2-1983.

Couplings - The couplings shall be the same material as the conduit.

## III. <u>Installation</u>

The intent of this specification is to describe a method of augering or jacking under trees to permit the installation of conduit by a method which will protect street trees from unnecessary damage. The contractor shall provide a passageway for the conduit beneath the tree at a depth compatible with the adjacent trench. The passageway shall be of the size required to permit the conduit to be pulled or pushed through the passageway. The passageway may be provided by augering or jacking.

The length of the auger or push shall be determined by caliper of the tree at breast height (approx. 4.5' above ground). The ratio shall be one foot of auger or push per one inch of tree caliper. An example: A tree with a 4" caliper would require a 4' auger or push starting 2' either side of the center line of the tree.

Trees with 2" caliper or less may be trenched beside the tree using care not to damage the tree trunk. Trench shall be a minimum of 12" away from the tree trunk.

The contractor shall place the push pit at a location causing the lease amount of disturbance to the existing pavement, berm pavement or shoulders of the roadway. The surface area over the push pit, after backfill, shall be graded and seeded.

The contractor shall exercise care not to damage the rigid conduit during installation. Damaged sections of conduit are not acceptable and shall have new conduit installed in the hole or be re-pushed.

The 2" non-metallic conduit Carlon, Heritage or Cantex shall be carefully inserted through the full length of the 3" conduit and be continuous through the passageway.

The cost for jacking, drilling or pushing conduit under trees shall be quoted in a per foot basis. Include in the unit price cost of both rigid and non-metallic conduits, excavation for push pits, granular and other backfill materials, compaction, disposal of surplus materials and restoration of disturbed surface area to equal or better condition than existed prior to the work.

# IV. Quotation

The 3" rigid conduit augered or pushed under trees herein specified shall be quoted on as a unit price per foot in the appropriate place of this document.