

# **WINDSOR DISTRICT ENERGY**

## **Procedure for excavation around District Energy Piping**

1. Follow normal procedure for digging around sensitive utilities in downtown locations:
  - a. Obtain utility locates
  - b. Arrange for appropriate municipal approvals and road cut permits.
  - c. Do not dig within 900 mm of the DE piping with mechanical equipment until the piping has been exposed using hand digging methods to find the pipe.
2. Windsor District Energy is to be notified 48 hours prior to commencing excavation work around their District Energy pipes.
3. Contractor is to limit the size of the trench underneath the district energy piping. Any exposed piping is to be supported if the exposed span is greater than 2.0 metres.
  - a. Contractor is to have the design of the support structure/ method approved by the district energy company before undermining the pipes. Unusual or very large support structures may require certification by a structural engineer.
  - b. The support mechanism around the DE piping must be designed so that the insulation material around the DE piping is not damaged during the construction operation.
4. The minimum vertical clearance between the district energy pipes and any crossing utility infrastructure to be installed is 300 mm.
5. Upon completion of the new utility installation the sand backfill around the pipes is to be replaced in the presence of the District Energy company representative.
  - a. Compaction testing results are to be provided to the City and the District Energy representative before restoration of the Roadway. Compaction is to be completed to a 98% standard Proctor density.
  - b. The sand backfill material is to be installed with a thickness of 150mm below the DE pipes and 200 mm above the pipes.
  - c. Sand backfill is to be free of lumps, construction, frozen or organic material.