

## **SECTION 522**

### **DISPOSAL OR SALVAGE OF CULVERT OR PIPE**

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#### **522.01 SCOPE**

This specification covers the requirements for the excavation and removal of culvert, sanitary sewer, storm sewer, or other pipe followed with the backfilling and compaction of the excavated material together with either; the salvage, or the disposal of the pipe, as specified in the Contract item.

Excavation above and around the pipe shall be compensated for under Section 403 but any additional hand work excavation required to remove the pipe shall be considered part of Section 522.

#### **522.02 EXCAVATION AND DISPOSAL OR SALVAGE**

After Excavation for Foundations operations have been carried out to expose the pipe the Contractor shall dispose of, or salvage the pipe, as designated, within the limits as required by the Owner's Representative.

The excavation of material abutting the top and sides of the pipe shall be performed in such a manner as to leave undisturbed, adjacent structure or other work to be left in place, and so that no damage occurs to pipe designated to be salvaged.

All excavated material shall be piled in a manner that will not endanger the work, and that will avoid obstructing sidewalks, driveways, and gutters.

Where pipe is designated to be salvaged, the Contractor shall carefully disassemble the couplers and joints and carefully remove the pipe from the trench in such a way as not to cause damage to the pipe. The salvaged pipe together with couplers shall be stored at a safe place on the job site prior to reinstallation or transported to the nearest Department Depot.

Should any pipe lengths, designated for salvage, be damaged or lost by the Contractor, then the Contractor shall not receive payment for pipe salvage for the damaged lengths. Damaged material shall become the property of the Contractor and shall be disposed of by the Contractor at their own expense. Any damaged pipe will be replaced at the Contractor's expense.

Where pipe is designated for disposal, the Contractor shall remove and dispose of the pipe and couplers.

Pipe for disposal shall be removed and disposed of in an approved waste disposal area provided by the Contractor at their own expense.

The Contractor shall be aware of Section 825.

### **522.03 BACKFILLING AND COMPACTION**

Where concrete is placed in the excavation under another specification, such as concrete plugs in the ends of pipes left in place, then backfilling shall not take place until the concrete has reached at least the specified strength at 28 days.

Material excavated as part of the removal or salvage operations shall be used as backfill in the trench.

Backfill shall be placed in layers not exceeding 200 millimetres in un-compacted depth. Each layer shall then be compacted to not less than 95% of the Standard Proctor density (ASTM D698) before a further layer is placed.

**522.04 MEASUREMENT FOR PAYMENT****522.04.01 Measurement for Payment for Disposal of Pipe**

Measurement for payment for disposal of pipe of a particular diameter and material type shall be the length in metres, to one decimal place, of that length of pipe required to be disposed of as measured along the centreline of the pipe before excavation.

**522.04.02 Measurement for Payment for Salvage of Pipe**

Measurement for payment for the salvage of pipe of a particular diameter and material type shall be the length in metres, to one decimal place, of the pipe of that size and type, when measured after being removed from the ground.

Pipes that are damaged to the extent that they will be unsuitable for re-use, will not be included in measurement for payment for pipe salvage.

**522.05 BASIS OF PAYMENT****522.05.01 Basis of Payment for Disposal of Pipe**

Payment at the contract price for the disposal of pipe of a particular material and size shall be compensation in full for all materials, labour, and use of equipment to: provide any hand work excavation necessary to complete the pipe disposal operation, remove the pipe and couplers, provide any dewatering necessary to carry out the work, provide an approved waste disposal site, transport pipes and couplers to the waste disposal site, dispose of the pipes and couplers, and backfill and compact the excavated material.

Excavation above and around the pipe shall be compensated for under Section 403, but any additional hand work excavation required to remove the pipe shall be considered compensated for as part of payment for Section 522.

**522.05.02 Basis of Payment for Salvage of Pipe**

Payment at the contract price for the salvage of pipe of a particular material and size shall be compensation in full for all materials, labour, and use of equipment to: provide any hand work excavation necessary to complete the pipe salvage operation, remove and salvage the pipe and couplers, provide any dewatering necessary to carry out the work, transport pipes and couplers to the storage site, store the salvaged pipes and couplers, and backfill and compact the excavated material including the temporary stockpiling of the excavated material for reuse in the backfilling process. In the case of driveway culverts excavation and backfill of the driveway culvert will be included in the price of disposal or salvage and reinstallation of culvert or pipe.

Excavation above and around the pipe, in roadways, shall be compensated for under Section 403, but any additional hand work excavation required to salvage the pipe shall be compensated for as part of payment for Section 522.

Any damaged pipe will be replaced at the Contractor's expense, where it is deemed the pipe was salvageable.