

Part 1 General

1.1 RELATED SECTIONS

- .1 Section 03 30 00 - Cast-in-place concrete
- .2 Section 03 20 00 - Concrete Reinforcing
- .3 Section 05 55 00 - Metal Fabrications

1.2 REFERENCES

- .1 American Iron and Steel Institute (AISI)
- .2 American Society for Testing and Materials (ASTM)
 - .1 ASTM A53/A53M, Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless.
- .3 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-1.40, Anti-corrosive Structural Steel Alkyd Primer.
 - .2 CAN/CGSB-1.108, Bituminous Solvent Type Paint.
 - .3 CAN/CGSB-1.181, Ready-Mixed, Organic Zinc-Rich Coating.
- .4 Canadian Standards Association (CSA)
 - .1 CAN/CSA-G40.20/G40.21, General Requirements for Rolled or Welded Structural Quality Steel.
 - .2 CAN/CSA-G164, Hot Dip Galvanizing of Irregularly Shaped Articles.
 - .3 CAN/CSA-S16.1, Limit States Design of Steel Structures.
 - .4 CSA W59, Welded Steel Construction (Metal Arc Welding).
- .5 The Society for Protective Coatings (SSPC)
 - .1 SSPC Painting Manual, Volume 2, Systems and Specifications.

Part 2 Products

2.1 MATERIALS

- .1 Steel pipe: 200 diameter SCH 40 STD.

2.2 SHOP PAINTING

- .1 Clean surfaces in accordance with SSPC Painting Manual, Volume 2, minimum SP3.
- .2 Apply one shop coat of primer to bollards prior to painting.
- .3 Clean surfaces before painting. Do not paint when temperature is lower than 7°C. Apply approved yellow epoxy paint as final finish.

Part 3 Execution

3.1 ERECTION

- .1 Set pipe level and plumb into reinforced concrete footing as indicated on drawings. Fill pipe with concrete and round over concrete at top of bollard.

- .2 Concrete 30 MPa. Reinforcing to Section 03 20 00 - Concrete Reinforcing.
- .3 Attach 4 strips of white 25 mm wide reflective tape around diameter after installation as illustrated on drawings.

END OF SECTION

Part 1 General

1.1 SUMMARY

- .1 Section Includes:
 - .1 Materials and installation for relocation of trees at the North End Water Pollution Control Centre.
- .2 Related Sections:
 - .1 Section CW3540 Topsoil and Finish Grading for Establishment of Turf Areas.

1.2 QUALITY ASSURANCE

- .1 Tree relocations must be completed by a contractor who is pre-qualified to perform arboricultural services on trees under the control of Urban Forestry Branch.

Part 2 Products

2.1 PLANT MATERIAL

- .1 Individual trees to be relocated as indicated on the drawings.

2.2 WATER

- .1 Free of impurities that would inhibit plant growth.

Part 3 Execution

3.1 RELOCATION

- .1 Confirm planting location of each tree with Contract Administrator 48 hours in advance of excavation.
- .2 Dig tree hole with same hydraulic tree spade as used to transplant each tree.
- .3 Scarify wall of planting holes before relocating and remove any water from planting hole before placing tree.
- .4 Using hydraulic tree spade, dig tree with a firm natural cone of root system of sufficient diameter and depth to ensure full recovery of the tree.
- .5 Install tree plumb and with tree supports.

- .6 Water immediately after planting and at regular intervals for a duration of one full growing season.

END OF SECTION