

**Part 1 - General**

**1.01 Description**

- .1 This Section specifies requirements for submission of proposed products, working and shop drawings.

**1.02 Related Specification**

- .1 Construction Specification Section 01201 - Substitutions
- .2 Region of Durham's Approved Manufacturers' Products List

**1.03 Proposed Manufacturers and Suppliers List**

- .1 Submit a list of proposed manufacturers' products to be used and the name of the supplier no later than the Pre-Construction meeting. List shall include:
  - .1 Sewer Pipe and Appurtenances
  - .2 Watermain Pipe and Appurtenances
  - .3 Maintenance Hole Components, including frames and covers
  - .4 Other items as requested by Contract Administrator

**1.04 Shop Drawings**

- .1 Shop drawings shall be required for the following:
  - .1 Concrete Pressure Pipe
  - .2 Tunnel liners, casing spacers, shafts and shoring
  - .3 Trench shoring
  - .4 Structural Steel Girders
  - .5 CPCI or NU Girders
  - .6 Reinforcing Steel Bars (black, stainless steel or GFRP bars)
  - .7 Bridge bearings
  - .8 Pedestrian railing systems

- 
- .9 Expansion joint assemblies
  - .10 Bridge deck drains
  - .11 Precast concrete culverts
  - .12 Other items as requested by the Contract Administrator or as required in Contract documents.
  - .2 Shop drawings submission process shall commence within 14 days of receiving contract award. Check and initial all shop drawings before submission to Contract Administrator.
  - .3 Identify each shop drawing giving references such as:
    - .1 Section of Specification where specified
    - .2 Location where equipment or material is to be installed
    - .3 Name of manufacturer
    - .4 Other relevant information
  - .4 Shop drawings for tunnel liners shall indicate method of tunnelling, polings, wedges, jacks, grout holes, other relevant information with assembly and erection instructions for the tunnel liner.
  - .5 Structural shop drawings shall be stamped and sealed by a Professional Engineer licensed/registered by the Professional Engineers of Ontario.
  - .6 Shop Drawings shall not be reviewed by Contract Administrator unless they have been previously checked and initialled by Contractor for compliance with the contract.
  - .7 For revisions to shop drawings, make corrections or changes required by Contract Administrator, and resubmit revised drawings for review.
  - .8 Do not make any changes to shop drawings after final review without written permission of Contract Administrator.
  - .9 Review of shop drawings and product data shall not relieve the Contractor of their responsibilities. Failure to submit shop drawings within specified time period shall not affect the construction schedule.

### **1.05 Review of Working Drawings**

- .1 The Contractor shall submit to the Contract Administrator all working or setting drawings required in order to make clear the work proposed. The

---

Contractor shall make all changes to such drawings that the Region of Durham may require.

- .2 Include in submission all respects in which such drawings differ from the requirements of the Contract or from previously notified requirements of the Region of Durham. The Contract Administrator's review of such drawings shall not be construed as approval of such differences unless the Contractor has complied with the preceding sentence hereof and unless the Contract Administrator has specifically approved such differences in writing. The Contract Administrator's review of such drawings shall not relieve the Contractor from responsibility for the correctness of the drawings or the adequacy of the details shown on the drawings.
- .3 Work shall not be carried out before the Contract Administrator's review of the shop, working or setting drawings relating to such work has been completed.
- .4 Working drawings shall be required for work/access platforms, structure demolition plans, temporary protection systems, bridge jacking operations, tunnelling operations and as required by the Contract Administrator or the Contract Documents.
- .5 Working drawings shall bear the seal of a Professional Engineer licensed to practice in the Province of Ontario, who shall be responsible for the plan, procedure and design as shown on the Working Drawings. The Work shall proceed in accordance with the Working Drawings and at least one approved copy of the Working Drawings shall be kept on site at all times.

#### **1.06 Falsework, Shoring or Bracing Drawings**

- .1 Prepare and submit all drawings of all falsework, shoring and bracing to the Contract Administrator for review when required. All falsework, shoring and bracing drawings shall bear the seal of a Professional Engineer licensed to practice in the Province of Ontario, who shall be responsible for the entire falsework design and drawings. The falsework, shoring or bracing shall be constructed in accordance with the reviewed drawings and at least one approved copy of all falsework, shoring and bracing drawings shall be kept at the site at all times while the falsework, shoring and bracing is being constructed or used.

**1.07 Proceeding with Work**

- .1 Work shall not proceed until shop and/or working drawings have been reviewed and accepted by the Contract Administrator unless otherwise directed.

END OF SECTION