
PART 1 - GENERAL

1.1 Description
of Work

- .1 This section specifies requirements for the following items:
 - .1 Steel Pipe pile repairs
 - .2 Gangway timber replacement

1.2 Reference
Standards

- .1 ASTM A307-94 (or latest edition), Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile.
- .2 CAN/CSA-G40.21-M92 (or latest edition), Structural Quality Steels.
- .3 CAN/CSA-G164-M92 (or latest edition) - Hot Dip Galvanizing of Irregularly Shaped Articles.
- .4 ASTM A48-94a (or latest edition), Gray Iron Castings

1.3 Related Work

- .1 Refer to other Specification Sections for related information.
- .2 Refer to **Section 01 33 00** for Shop Drawing/Submissions requirements.

1.4 Submissions

- .1 Shop Drawings:
 - .1 Clearly indicate the following items:
 - .1 General arrangements, dimensions, clearance locations and directions of assemblies as installed on structures.
 - .2 Locations, sizes and installation tolerances of anchor bolts, eye bolts and embedded parts.
 - .3 Types of materials used, finishes and core thickness.
 - .4 All other pertinent details and accessories.
- .2 Product Data/Samples:
 - .1 Provide product data and manufacturers brochures for the mooring cleats.
- .3 Test Results:

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- .1 Provide test results for the galvanized items.
 - .4 Submissions
 - .1 Provide submissions in accordance with **Section 01 33 00.**
 - 1.5 Measurement for Payment
 - .1 Pile repairs including the installation of reinforced concrete will be measured in accordance with **Section 01 29 00.**
 - .2 Gangway timber replacement including installation of new galvanized steel hardware, will be measured in accordance with **Section 01 29 00.**

PART 2 - PRODUCTS

- 2.1 Materials
 - .1 Timber: Any timber supplied by Contractor must conform to Section 06 05 73 Dimension Timber.
 - .2 Concrete: To meet the requirements of Section Section 03 10 00
 - .3 Hardware and miscellaneous items must meet the following specifications:
 - .1 Machine bolts, lag bolts, drift bolts, anchor bolts, nuts, washers to ASTM A307.
 - .2 Steel plates, ladder rungs, holdfasts and miscellaneous steel: to CSA G40.21, Grade 300W.
 - .3 Do not use items manufactured or fabricated from scrap steel of unknown chemical composition or physical properties.
 - .5 Hot dip galvanize bolts, anchor bolts, nuts, washers, and any other miscellaneous steel to CSA G164 with minimum zinc coating of 600 g/m².

PART 3 - EXECUTION

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| 3.1 | <u>Steel Pipe Repairs</u> | .1 | Install reinforced concrete splice as detailed on the drawings. |
| 3.2 | <u>Gangway Repairs</u> | .1 | Replace existing timber components on the existing gangway complete with new fastening hardware. |