

## **1 GENERAL**

### **1.01 RELATED WORK**

- .1 Refer to Section 01 33 00 for Shop Drawing and Submissions requirements.

### **1.02 DESCRIPTION OF WORK**

- .1 This section specifies requirements for the following items:
  - .1 Machine Bolts
  - .2 Buoyancy Billets

### **1.03 REFERENCE STANDARDS**

- .1 American Society for Testing Materials (ASTM)
  - .1 ASTM 123/123M-17, Specification for Zinc (Hot-Dip Galvanized) Coating on Iron and Steel Products
  - .2 ASTM A307-10, Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile.

### **1.04 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 Submissions
  - .1 Provide submissions in accordance with Section 01 33 00.

### **1.05 MEASUREMENT FOR PAYMENT**

- .1 Floatation billets, and fasteners, will be measured in accordance with Section 01 29 00.

## **2 PRODUCTS**

### **2.01 MATERIALS**

- .1 Timber: Any timber supplied by Contractor must conform to Section 06 05 73 - Dimension Timber.
- .2 Hardware and miscellaneous items must meet the following specifications:
  - .1 Machine bolts, lag bolts, drift bolts, nuts, washers to ASTM A307.
  - .2 Do not use items manufactured or fabricated from scrap steel of unknown

- chemical composition or physical properties.
- .3 Hot dip galvanize bolts, anchor bolts, nuts, washers, pip sleeves, steel plates, rungs, holdfasts, U-bolts and any other miscellaneous steel to ASTM A123/A123M with minimum zinc coating of 610 g/m<sup>2</sup>. All sharp corners, edges and weld splatter to be ground smooth prior to galvanizing.

### **3 EXECUTION**

#### **3.01 BUOYANCY BILLETS**

- .1 Float Billets formed from expanded Polystyrene Type II foam.
- .2 Billets to be coated with Poly Urethane Plastic Coating 1.27mm (50 mil) thickness.

#### **3.02 INSTALLATION GENERAL**

- .1 Boreholes for drift bolts to be 1.5mm smaller in diameter than bolt and for full length of bolt. Boreholes for machine bolts to be same diameter as bolts. Boreholes for lag bolts to be same diameter as shank for unthreaded portion and 0.70 times the shank diameter for the threaded portion. Threaded portion of lag bolts will be installed using a wrench, not by driving.
- .2 Contain all debris and leachates (films on water surface) within the area of the work by using containment facilities such as floating booms or screens.

END OF SECTION