

## **ITEM 665.1002XX12 – PIVOT CASTINGS**

### **1. DESCRIPTION:**

- 1.01 This work shall consist of the removal of existing cast pivots and furnishing and installing new cast steel or cast ductile iron pivots in accordance with the plans and specifications.

### **2. MATERIALS:**

- 2.01 New cast steel pivots shall conform to Material Specification 715.02----25.
- 2.02 New cast ductile iron pivots shall conform to the requirements of Material Specification 715.07----25.
- 2.03 The hardness shall be tested at three random locations in the crowned top surface of each new pivot in accordance with Material Specification 715.02----25 or 715.07----25. Any casting that has a Brinell hardness number that is 5% greater or 5% lower than average for the mating casting shall be rejected.
- 2.04 When indicated on the plans, patterns for forming the pivots will be made available to the Contractor by the Canal Corporation per Material Specification 715.02----25, or 715.07----25.
- 2.05 When indicated on the plans, the Contractor shall furnish the pattern for cast pivots in accordance with Material Specification 715.02----25, or 715.07----25.
- 2.06 Mortar and grouting material shall conform to the requirements of §701-05, Concrete Grouting Material.
- 2.07 Anchor bolts shall conform to the requirements of §723-60, Anchor Bolts.

### **3. CONSTRUCTION DETAILS:**

- 3.01 The Contractor shall chip concrete to remove the existing pivots and to allow for setting the new pivots on a bed of cement grout. Existing anchor bolts shall be cut flush with the chipped concrete surface. Holes shall be drilled in the new pivots and concrete to allow for new anchor bolts. The anchor bolts shall be drilled and grouted into position in accordance with §586-3.02.
- 3.02 The center of rotation shall be permanently machined or cast into the top surface of the pivot by the pivot manufacturer.

### **4. METHOD OF MEASUREMENT:**

- 4.01 The work shall be measured as the number of pivots removed and subsequently replaced with new pivots.

### **5. BASIS OF PAYMENT:**

- 5.01 The unit price bid for each pivot shall include the cost of all labor, equipment, and materials including anchor bolts and core boxes required to complete the work, except that the drilling and grouting of the anchor bolts will be paid for separately.
- 5.02 25% of the unit price bid will be paid on the accepted removal of each existing pivot casting. The remainder of the unit price bid will be paid upon completion and acceptance of the work on each pivot casting.

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**5. BASIS OF PAYMENT:** (cont'd)

5.03 Payment will be made under:

<b><u>ITEM NO.</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>PAY UNIT</u></b>
665.10020112	Pivot Castings, Miter Gate (pattern by Canal Corp.)	Each
665.10020212	Pivot Castings, Miter Gate (pattern by Contractor)	Each
665.10020312	Pivot Castings, Buffer Beam (pattern by Canal Corp.)	Each
665.10020412	Pivot Castings, Buffer Beam (pattern by Contractor)	Each
665.10020512	Install Furnished New Pivot Castings	Each