

## SECTION 02611

# DIVERSION BOX GATE AND FRAME

### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Materials and procedures for constructing gate and frame for hand slide gates or for screw gates and frames.

#### 1.2 RELATED SECTIONS

- A. Section 03055: Portland Cement Concrete.
- B. Section 03211: Reinforcing Steel and Welded Wire.
- C. Section 03310: Structural Concrete.

#### 1.3 REFERENCES

- A. AASHTO M 218: Steel Sheet, Zinc-Coated (Galvanized) for Corrugated Steel Pipe.
- B. ASTM A 36: Carbon Structural Steel.
- C. ASTM A 123: Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- D. ASTM A 307: Carbon Steel Bolts and Studs, 60 000 PSI Tensile Strength.
- E. ASTM A 575: Steel Bars, Carbon, Merchant Quality, M-Grades.
- F. ASTM D 2000: Rubber Products in Automotive Applications.

#### 1.4 SUBMITTALS

- A. Submit for approval two weeks in advance of fabrication:
  - 1. Diversion box screw gate and frame shop drawings
  - 2. Installation procedures
  - 3. Fabrication methods

## **PART 2 PRODUCTS**

### **2.1 BLADES AND METAL FRAMES FOR HAND-SLIDE GATES**

- A. Zinc coated steel. Comply with AASHTO M 218, as specified.

### **2.2 CONCRETE**

- A. Class AA(AE) concrete per Section 03055.

### **2.3 REINFORCING STEEL**

- A. Refer to Section 03211, Part 2.

### **2.4 FRAME AND FLUSH BOTTOM CLOSURE**

- A. Carbon steel for frame and flush bottom meeting ASTM A 36, as specified.
- B. Galvanizing frame and flush bottom meeting ASTM A 123, as specified.
- C. Galvanized fastener meeting ASTM A 307, as specified.
- D. Threaded carbon steel meeting ASTM A 575, as specified.
- E. Rubber seal for flush bottom: as specified, ASTM D 2000, Grade AA 625 or BC 610 to 615.

## **PART 3 EXECUTION**

### **3.1 INSTALLATION**

- A. Hand-Slide Gate: Finish the concrete frame following Section 03310.
- B. Install the screw gate and frame conforming with shop drawings, and such that the gate opens and closes smoothly.

END OF SECTION