



**SPECIAL PROVISIONS
FOR
COLLAPSIBLE BOLLARD**

**Scott County
IM-NHS-074-1(206)5--03-82**

**Effective Date
October 16, 2018**

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

150412.01 DESCRIPTION.

Collapsible bollards shall consist of welded steel tubing with a manufactured hinge that allows the bollard to collapse and painted safety yellow constructed as shown on the contract documents.

150412.02 MATERIALS.

- A.** For a rectangular posts use ASTM A500 bollard post of 6 inch by 3 inch by 3/8 inch steel tube or 6 inch by 4 inch by 3/8 inch steel tube; for a round post use ASTM A513 Type 1 bollard post.
- B.** ASTM A 36 bollard base plate. Use 12 inch by 12 inch base plate for rectangular bollard and a 10 inch by 10 inch base plate for round post bollard.
- C.** 8-18 Stainless Steel – 1 inch by 5 inch lock and hinge pins.
- D. Performance Requirements.**
 - 1. Bollard will collapse to a 5 inch or lower clearance allowing vehicle traffic to pass.
 - 2. Bollard locks in upright position with stainless steel lock pin and padlock.

150412.03 CONSTRUCTION.

- A.** Contractor shall clear all vegetation required to install collapsible bollards.
- B.** Collapsible bollards shall be installed on true alignment, grade and to dimensions shown on the plans.
- C.** Posts shall be set in a vertical position, plumb and in line.

- D. Installation shall comply with manufacturer provided instructions and drawings.
- E. Provide anchor system of contractor's choice.
- F. Install base true and level on selected anchor system to comply with manufacturer provided instructions and drawings.
- G. Install post to base using hinge bolt, flat washer, and hex nut. Tack weld hex nut to hinge bolt so it cannot be easily removed.
- H. Install locking pin thru up position bollard post and install padlock.
- I. If touch up painting in the field, be careful not to paint moving parts which may restrict the bollard's proper function.
- J. Surfaces to be painted shall be prepared and paint applied as follows:
 - 1. Exposed surfaces shall be clean of all grease, oil, mill scale, dirt, concrete, rust, old paint or any other contaminants.
 - 2. Prime coat shall be applied at 3.0 to 4.0 mils Dry Film Thickness (DFT).
 - 3. Two top coats shall be applied each at 1.5 mils DFT. A minimum of 24 hours shall be allowed between coats for the preceding coat to dry completely.
 - 4. Application shall be by brush or spraying. Adjacent surfaces shall be protected. Contractor shall be responsible for damage by overspray and airborne paint particles.
 - 5. Paint shall not be applied when the air temperature in the shade is below 40°F or when the surface is wet. Paint shall not be applied when inclement weather conditions are pending.
 - 6. Contractor shall repaint if weather affects drying.

150412.04 METHOD OF MEASUREMENT.

The Collapsible Bollards shall be measured per each post installed complete.

150412.05 BASIS OF PAYMENT.

The Collapsible Bollards will be paid for at the contract unit bid price per each post installed, which shall include all necessary material, labor and equipment.