

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Fixed bollards for traffic control.

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product literature, including color charts and installation details.
- B. USGBC LEED Materials and Resources Credit MR 4 - Recycled Content: For projects seeking LEED certification, submit manufacturer's documentation of recycled content for steel for products provided under this specification section.
- C. Buy American Requirements: For projects subject to Buy American 49 CFR Part 661 requirements, submit manufacturer's documentation that iron, steel, and manufactured products provided under this specification section are produced in the United States.
- D. ARRA Requirements: For projects subject to the US American Recovery and Reinvestment Act (ARRA), submit manufacturer's documentation that products provided under this specification section are produced in the United States.

1.3 QUALITY ASSURANCE

- A. Performance: Provide bollards which install as a single unit in a pier footing or as an array in a continuous footer installation with specified dimensions and is secured in the ground.
- B. Manufacturer: Bollard units of all types must be supplied by a single manufacturer having the resources to provide consistent quality in appearance and physical properties.
- C. Materials: Steel shall be US domestic mill certified steel. The main body of the product must be constructed from ASTM A500 steel and be accompanied with steel mill certifications/test reports for the steel being used to ensure the durability and performance of the product. Secondary and non-ASTM steel may not be substituted.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Package units appropriately to protect finish. Inspect materials to ensure that specified materials have been received.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Acceptable Manufacturer: Blue Ember Technologies, LLC MaxiForce Bollards line of products, Sykesville, MD 21784, Tel 410-552-9888, Fax 410-552-9939, Website: <http://www.maxiforcebollards.com>

2.2 FIXED BOLLARDS

- A. Fixed Bollards: Provide MaxiForce Fixed Bollards by Blue Ember Technologies.
 - 1. Body Style: MFS Standard (rectangular) Style.
 - a. SS1 - Standard Style 1 Head for Standard Body.
 - b. SS2 - Standard Style 2 Head for Standard Body.
 - c. SS3 - Standard Style 3 Head for Standard Body.
 - 2. Body Style: MFR Round Style.
 - a. RS1 - Round Style 1 Head for Round Body.
 - b. RS2 - Round Style 2 Head for Round Body.
 - 3. Materials: Free from surface blemishes and defects where exposed to view in the finished installation.
 - a. Steel Plate: A36; ASTM A36/A36M.
 - b. Steel Tube: A500; ASTM A500.
 - c. Fasteners: Series 300 Stainless Steel.

To learn more about our products visit www.maxiforcebollards.com

MaxiForce Bollards | Blue Ember Technologies - 7560 Main Street - Sykesville, MD 21784

Phone: 410-552-9888 Fax: 410-552-9939 Email: sales@maxiforcebollards.com



4. Finish: Factory applied after surface imperfections removed and exposed faces of welded joints dressed smooth.
 - a. Powder Coat Finish (Standard): Factory applied TIGER Drylac Powder Coatings Essentials Chart color or equivalent.
 - b. Powder Coat Finish (Option): DRYZINC zinc rich undercoated primer and factory applied TIGER Drylac Powder Coatings Essentials Chart color or equivalent.
 - c. Galvanizing (Option): Hot Dipped galvanized.
 - d. Galvanizing and Powder Coat Finish (Option): Hot Dipped galvanized and powder coated.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Comply with manufacturer's recommendations for installation and approved submittals. Install bollards level and true and in proper relation to adjacent surfaces.
- B. Protect bollards from damage during construction operations.

