

**SECTION 11 12 00
VEHICLE BARRIER GATES, GUARDRAILS AND PARKING GUARDS**

PART 1 GENERAL

1.01 REFERENCE STANDARDS

- A. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.

1.02 SECTION INCLUDES

- A. Parking gate access and exit devices.
- B. Guardrails
- C. Parking Guards

1.03 RELATED REQUIREMENTS

- A. Section 03 30 00 - Cast-in-Place Concrete, Control Joints and Reinforcing: Placement of anchors and components to be embedded in concrete.

1.04 REFERENCE STANDARDS

- A. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2013.

1.05 SUBMITTALS

- A. See Section 01 33 00 – Submittal Procedures, for submittal procedures.
- B. Shop Drawings: Indicate plan layout of equipment access lanes.
- C. Warranty: Submit manufacturer warranty and ensure forms have been completed in NYCHA's name and registered with manufacturer.

1.06 REGULATORY REQUIREMENTS

- A. Conform to applicable code for emergency vehicle access.

1.07 WARRANTY

- A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Parking Control Equipment:
 - 1. Vehicular Barrier Gate shall be Model # CFBA 005-01 Barrier Gate, as manufactured by - Custom Fabricators Inc., P.O. Box 431, Harpursville, N.Y. 13787, Phone # 607.693.3223, Fax # 607.693.3226 or equal.
- B. Guardrails:
 - 1. Guardrail shall be as supplied by Boundary Fence and Railing, 131-02 Jamaica Ave., Richmond Hill, NY 11418, Telephone (718) 847-3400, or equal. Posts shall be steel "I" beams. Rails and posts shall be galvanized to meet Specifications of ASTM A-525 Class 2.5 coating.
 - 2. Substitutions: See Section 01 60 00 - Product Requirements.
- C. Parking Guards:
 - 1. Parking Guards shall be as manufactured by C & F Steel Corporation, 14 North Payne Street, Elmsford, NY 10523 tel. (914) 592-3928 or equal, attn: Artur Boino.

2.02 MANUAL GATE

- A. Vehicular Barrier Gates shall be installed as per manufacturer's specifications, in locations as shown on the Drawings. Contractor shall install footings for Vehicular Barrier Gate(s) as shown on the Drawings.

- B. All steel pieces shall be phosphate washed, primed with zinc-rich primer and painted with exterior grade polyester powder coat. Color shown on Drawings/Detail. In addition, 2" wide permanent silver reflective tape shall be applied; 2 Applications on the Posts and 5 Applications on the Horizontal member, all equally spaced.
- C. Each gate shall be supplied with a weatherproof padlock and three keys for each lock.

2.03 GUARDRAIL

- A. Steel guardrails shall be installed at location(s) as shown on the Contract Drawings in concrete footings of the dimensions shown. Concrete shall conform to the Concrete Section of these Specifications. Top of footings shall be flush with adjoining pavement and given a 1/2" wash. Top of post shall be 2'-1" above pavement. Posts shall be spaced 12'-6" on center maximum. Top of rail shall be 2'-0" above and parallel to pavement. Rails shall be fastened to posts with 5/8" diameter bolts. Bolts shall not protrude more than 1/8" beyond fully tightened nuts and shall be peened. Rails shall be spliced and fastened to posts in accordance with manufacturer's directions. Posts shall be placed vertical to line and grade and held securely in place during the pouring of the concrete footings until the concrete has thoroughly hardened. Any guard rail that is not set plumb and true to line and grade shall be removed and replaced at the Contractor's expense.
- B. Guardrail shall be equipped with a terminal section at each end of the run as well as at both sides of pedestrian or vehicular openings.
- C. Guardrail shall be bent to conform to radii of curving sections as shown on the Drawings.

2.04 PARKING GUARDS

- A. The Contractor shall furnish and install Parking Guards as specified and indicated on the Drawings. Parking standards shall be modular units which can provide both single or double arm guards. Module standards shall be fabricated from W6x15 I beams with a 1/2" square solid steel bar welded onto the inner edge of each side of the W6 beam. Parking guard arms shall be constructed of 2 inch square steel tubing, w/ 3/16" wall, capped at the outside ends. Each module shall include arm supports and hasp for padlock. Stanchion caps shall be constructed of 3/16" thick steel plate bent over the edge of the beam and welded into place. Arms shall be hinged to stanchion with a 3/4" bolt that passes through two (2) 1-1/4" x 1-1/4" x 3/16" angle braces (arm supports).
- B. Standards and stanchions shall be set in a 16" diameter, 3'-0" deep concrete footing, set plumb true to line and grade. Concrete shall conform to Concrete Section of these Specifications.
- C. The Contractor shall furnish an American Lock Co. #701 DL or approved equal. The padlock shall have a two and one half inch body diameter, five-pin tumbler, cadmium plated hardened steel shackles, 1/4 inch diameter, one inch clearance. The Contractor shall supply one padlock for each parking guard arm, and two keys for each padlock.

END OF SECTION 11 12 00