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CHAIN LINK FENCES AND GATES

PART 1 - GENERAL

1.1 SUMMARY

- A. Provide chain link fences and gates as shown on the Drawings, as specified herein, and as needed for a complete and proper installation.
- B. Related work:
 - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Division 1 - General Requirements of these Specifications.

1.2 SUBMITTALS

- A. Submit shop drawings and product data in compliance with pertinent provisions of Section 01 33 01 including general dimensions, manufacturer's specifications, recommended installation procedures, and concrete footing details.

1.3 QUALITY ASSURANCE

- A. Fence framework, fabric, and related accessories to be a complete system as specified herein.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Comply with pertinent provisions of Section 01 66 11.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Provide fencing and gates with overall height of 72 inches above grade.

2.2 FABRIC

- A. Two-inch diamond weave mesh of extruded 9-gauge vinyl (PVC) coated steel wire conforming to Standard Specifications ASTM A-491.

2.3 FRAMEWORK

- A. Roll formed steel sections with 2.0 ounces of hot-dipped zinc coating conforming to ASTM A-123, or Type I steel pipe, or Type II steel pipe.
 - 1. Type I: Schedule 40 steel pipe with 2.0 ounces of hot-dipped zinc coating conforming to ASTM A-120.
 - 2. Type II: Pipe manufactured from steel conforming to ASTM A-569, cold-formed, high frequency welded, and having a minimum yield strength of 50,000 psi. External surface triple coated with 1.0 ounce \pm 0.1 ounce of zinc per square foot, 30 \pm 15 micrograms of chromate per square inch and 0.5 \pm 0.2 mils of clear cross linked polyurethane. Internal surface coated, after welding, with a zinc-rich based organic coating having a 91

- percent zinc powder loading capable of providing galvanic protection.
- B. Line Posts:
 1. 1- 5/8-inch x 1- 7/8-inch roll formed steel C-section weighing 2.28 pounds per foot, or 2-1/2-inch O.D. Type I steel pipe weighing 3.65 pounds per foot, or 2-1/2-inch O.D. Type II steel pipe weighing 3.12 pounds per foot.
- C. Top and brace rails:
 1. 1- 5/8-inch x 1-1/4- inch roll formed steel C-section weighing 1.37 pounds per foot, or 1-5/8-inch O.D. Type I steel pipe weighing 2.27 pounds per foot, or 1- 5/8-inch O.D. Type II steel pipe weighing 1.84 pounds per foot.
- D. Terminal posts and gate posts for single swing gates or one leaf of double gates up to 6 feet leaf width:
 1. 3-1/2-inch x 3-1/2-inch roll formed steel section weighing 4.85 pounds per foot, or 3-inch O.D. Type I steel pipe weighing 5.79 pounds per foot, or 3-inch O.D. Type II steel pipe weighing 4.64 pounds per foot.
- E. Gate posts for single swing gates or one leaf of double gates with leaf width over 6 feet to 13 feet:
 1. 4-inch O.D. Type I steel pipe weighing 9.11 pounds per foot, or 3-1/2-inch O.D. Type II steel pipe weighing 5.71 pounds per foot.
- F. Gate posts for single swing gates or one leaf of double gates with leaf width over 13 feet to 18 feet:
 1. 6-5/8-inch O.D. Type I steel pipe weighing 18.97 pounds per foot.
- G. Gate posts for single swing gates or one leaf of double gates with leaf width over 18 feet.
 1. 8-5/8-inch O.D. Type I steel pipe weighing 28.55 pounds per foot.

2.4 GATES

- A. Frame assembly of 2-inch O.D. Type I or Type II steel pipe with welded or steel fitted corners. Provide braces and trusses where necessary.
- B. Heavy duty hinges and positive type latching device suitable for padlocking.
- C. Center plunger rod with double latch and catch, and semi-automatic outer catches for drive gates.
- D. Fabric to match fence.

2.5 FITTINGS

- A. Pressed steel, cast iron or cast aluminum post caps to exclude moisture.
- B. Pressed steel, cast iron or cast aluminum rail and brace ends.
- C. 6-inch minimum length top rail couplings at maximum 20 feet on centers.
- D. Steel tension bars, tension bands, and brace bands.
- E. 3/8-inch steel truss rods with turnbuckles.
 1. End, corner, pull and gate posts braced and trussed to line posts.
- F. 7-gauge aluminum coated steel tension wire conforming to Standard Specification ASTM A-824.
- G. 9-gauge aluminum tie wires spaced at maximum of 24 inches.
- H. 11-gauge steel wire hog rings with minimum zinc coating of 0.80 ounces per square feet of wire surface.
- I. Pressed steel, cast iron or cast aluminum barbed wire arms with clips or slots for attaching three strands of barbed wire.
 1. Arms set outward at 45 degrees and capable of supporting a 250-pound load at outer barbed wire connecting point without causing permanent

deflection.

2.6 ACCEPTABLE MANUFACTURERS

- A. Allied Tube & Conduit Fence Division/Grinnell
- B. Century Fence Company
- C. Cyclone Fence/United States Steel Corp.
- D. Anchor Fence, Inc.
- E. Or equal.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Installation by experienced fence erectors.
- B. Conform to ASTM F-567.
- C. Space line posts at even intervals not exceeding 10 feet.
- D. Set all posts to a minimum depth of 36 inches in a concrete foundation.
 - 1. 10-inch diameter foundation for line posts.
 - 2. 12-inch diameter foundation for terminal posts.
- E. Cast steel pipe sleeve recessed in 18-inch by 18-inch by 6-inch thick concrete pad for retaining gate in closed position.

END OF SECTION