SECTION 111902 - DETENTION ACCESSORIES

1. GENERAL
   * + 1. RELATED WORK SPECIFIED ELSEWHERE
          1. Miscellaneous Framing and Supports: Section 055000.
          2. Steel Detention Windows: Section 085663.
          3. Detention Equipment: Section 111901.
          4. Steel Detention Screens: Section 111903.
          5. Steel Security Screens: Section 111904.
       2. REFERENCES
          1. Welding Standards: “Structural Welding Code - Steel, AWS D1.1” or “Structural Welding Code - Sheet Steel, AWS D1.3”, as applicable, by the American Welding Society (AWS Codes).
       3. SUBMITTALS
          1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
          2. Manufacturer’s installation instructions shall be provided along with product data.
          3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
          4. Shop Drawings: Show relationship of detention accessories with other Work. Include details of all major components. Include parts list showing manufacturers’ names and parts numbers for the complete installation.
          5. Product Data: Catalog sheets, specifications, and installation instructions.
          6. Quality Control Submittals:

Qualifications Information: If requested, submit to the Director the names and addresses of 5 similar projects where the manufacturer’s accessories have been in operation for 3 years and the names and addresses of 5 similar projects for which the person supervising the Work has supervised the installation of detention accessories.

* + - 1. QUALITY ASSURANCE
         1. Manufacturer’s Qualifications: The manufacturers of detention accessories shall be regularly engaged in the production of such products, shall have furnished such products for 5 similar projects that have been in operation for not less than 3 years, and shall be subject to the approval of the Director. NOTE: The requirements of this paragraph may be waived for products which have been previously approved in writing by the New York State Department of Correctional Services.
         2. Installer’s Qualifications: The person supervising the installation of the Work of this Section shall be experienced in detention accessories Work, and shall have been regularly employed by a company engaged in the assembly and installation of detention accessories for a minimum of 3 years.
         3. Re-Evaluation Fee: In accordance with the General Conditions 07213 Article 4.7. In accordance with Article 4.7 of the General Conditions, a re-evaluation processing fee of $250 will be levied against the Contractor for each re-evaluation of a Submittal or Submittal Package submission that was returned for failure to comply with the submittal requirements relative to completeness, content or format.
      2. DELIVERY
         1. Coordinate delivery of anchors and other accessories to be built into other Work, to avoid delay. Furnish instructions and templates to the affected trades as required for accurate location.

1. PRODUCTS
   * + 1. MATERIALS
          1. Steel Plate: Open-hearth mild steel produced especially for detention use; ASTM A 36.
          2. Steel Sheet:

Hot-Rolled Steel Sheets and Strip: Commercial quality carbon steel, pickled and oiled, complying with ASTM A 569 and ASTM A 568.

Cold-Rolled Steel Sheets: Commercial quality carbon steel, complying with ASTM A 366 and ASTM A 568.

* + - * 1. Stainless Steel: Type 304; ASTM A 666 for plate, sheet and strip; ASTM A 276 for bars and shapes.

Finish: US32D(630) unless otherwise indicated.

* + - * 1. Fasteners:

Bolts and Nuts: ASTM A 307, Grade A.

Concealed Bolts: Standard common bolts with lock washers and nuts. For items requiring servicing or replacement, drill the bolts and equip them with cotter pins and flat washers.

Exposed Bolts: Countersunk flathead security head Torx center pin bolts, with lock washers and nuts, unless otherwise specified.

Machine Screws: ANSI/ASME B18.6.3.

Concealed Machine Screws: Security head Torx center pin screws, unless otherwise specified.

Exposed Machine Screws: Countersunk flat head security head Torx center pin screws, unless otherwise specified.

* + - * 1. Anchors:

Externally Threaded Expansion Bolt Anchors: FS FF-S-325, Group II, Type 4, Class 1.

Internally Threaded Expansion Shield Anchors (For Lag Bolts): FS FF-S-325, Group II, Type 1.

Internally Threaded Expansion Shield Anchors (For Machine Bolts): FS FF-S-325, Group II, Type 2.

* + - * 1. Paint:

Cold Galvanizing Compound: Single component compound giving 93 percent pure zinc in dried film, and meeting requirements of DOD-P-21035A (NAVY).

Ferrous and Galvanized Shop Primer: Zinc rich primer as manufactured by or recommended by the finish paint manufacturer.

Shop Paint for Inside of Control Cabinets: Manufacturer’s standard gray enamel.

* + - 1. MANUFACTURED UNITS
         1. Cell Mirrors: Polished chrome plated steel mirror, satin chrome plated frame; Folger Adam’s No. 408, Southern Steel’s No. 430, or equal.
         2. Cell Beds: Wall mounted steel bunk; Folger Adam’s No. 501, Southern Steel’s 535, or equal.
         3. Collapsible Hooks: 10 gage cadmium plated or electro-galvanized steel safety hooks; Folger Adam’s No. 525, Southern Steel’s No. 405, or equal.
         4. Key Cabinet: Folger Adam’s No. 505F with No. 12 lock and escutcheon, or equal.

Furnish 3 keys and ship as specified in Section 111901.

* + - * 1. Security Curtain Rods: Aluminum tubing, brackets, and non-removable curtain hooks; Folger Adam’s No. 513, or equal.
      1. FABRICATION
         1. Gun Passes: 10 gage stainless steel, fabricated to shape, size, and configuration shown.
         2. Key Passes: 12 gage stainless steel, fabricated to shape, size, and configuration shown with spring hinged doors and thumb turn snap lock inside. Fill cavity with urethane foam, foamed in place.
         3. Fabricate members straight, true, and free from dents, buckle, twist or rough edges. Where exposed in finished spaces, fit joints to provide tight metal-to-metal fit. Make connections by riveting, welding, or by equally secured and approved method that will rigidly hold the members in position so that their full strength will be utilized; use the approved detention equipment manufacturer’s standard shapes and methods, unless otherwise indicated. Reinforce, cut, drill and tap members as required to receive hardware and accessories.

Where twist-off head security bolts or screws are used, remove projecting heads and grind fastener flush with adjoining metal.

Welding: Welds shall show uniform section and deep penetration. Grind welds smooth and clean spatter off so that surfaces are easily cleaned.

Riveting: Unless otherwise indicated, rivets shall be 3/8 inch diameter, countersunk flush type, and spaced 4 to 6 inches on center as the nature of the Work requires. Diameter of holes for rivets shall not exceed rivet diameter by more than 1/16 inch. Holes not in true alignment shall be reamed; drifting or gouging will not be permitted. Drive rivets down to completely fill holes. Replace loose rivets and those with imperfect heads or without firm bearing on metal with good rivets.

Bolting: Use only where indicated or approved, and only where nuts are not accessible to inmates or exposed to public view. Draw nuts up tight and batter threads.

Gun Passes: 10 gage stainless steel, fabricated to shape, size, and configuration shown.

Key Passes: 12 gage stainless steel, fabricated to shape, size, and configuration shown. Fill cavity with urethane foam, foamed in place.

Key Drop: 1/4 inch steel plate and 12 gage stainless steel, fabricated to shape, size, and configuration shown.

* + - * 1. Galvanizing:

In addition to specific items specified or noted to be galvanized, galvanize items attached to, embedded in, or supporting exterior masonry (including interior wythe of exterior masonry walls) and concrete Work.

Unless otherwise specified or noted, items indicated to be galvanized shall receive a zinc coating by the hot-dip process, after fabrication, complying with the following:

ASTM A l23 for plain and fabricated material, and assembled products.

ASTM A 153 for iron and steel hardware.

* + - * 1. Shop Painting:

Cleaning Steel: Thoroughly clean all steel surfaces. Remove oil, grease, and similar contaminants in accordance with SSPC SP-1 “Solvent Cleaning”. Remove loose mill scale, loose rust, weld slag and spatter, and other detrimental material in accordance with SSPC SP-2 “Hand Tool Cleaning”, SSPC SP-3 “Power Tool Cleaning”, or SSPC SP-7 “Brush-Off Blast Cleaning”.

Galvanized Items:

Welded and abraded areas of galvanized surfaces shall be wire brushed and repaired with a coating of cold galvanizing compound.

Apply one coat of shop paint to all steel surfaces except as follows:

Do not shop paint steel surfaces to be field welded.

Apply 2 coats of shop paint, before assembly, to steel surfaces inaccessible after assembly or erection, except surfaces in contact.

Apply paint and compound on dry surfaces in accordance with the manufacturer’s printed instructions, and to the following minimum thickness per coat:

Shop Paint (General): 4.0 mils wet film.

Shop Paint for Galvanized Steel: 3.0 mils wet film.

Cold Galvanizing Compound: 2.0 mils dry film.

1. EXECUTION
   * + 1. PREPARATION
          1. Temporarily brace and secure items which are to be built into concrete, masonry, or similar construction.
       2. INSTALLATION
          1. Install the Work of this Section in its designed position and in accordance with the manufacturer’s approved shop drawings.
          2. Where masonry or concrete is required to be drilled, use only rotary power drills. Drill holes to exact size required.
          3. Perform welding in accordance with the AWS Codes.
          4. Neatly install and securely fasten accessories. Keep polished accessories free from scratches and defacement with temporary protective covers.

END OF SECTION 111902