

SPECIAL PROVISIONS FOR GATEWELL ENCLOSURE

Polk County EDP-PA26(001)--7Y-77

Effective Date March 29, 2022

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.

151139.01 **DESCRIPTION.**

A. Related Documents

Section 2408 of the Standard Specifications

B. Summary

Section Includes: Decorative mMetal and chain link fence for gatewell enclosure.

C. Coordination

- 1. Coordinate installation of anchorages for decorative metal items. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- 2. Preinstallation Conference: Conduct conference at the project site.

D. Action Submittals

- 1. Product Data: For each type of product, including finishing materials and chain link fencing.
- 2. Shop Drawings: Show fabrication and installation details for decorative metal.
 - **a.** Include plans, elevations, component details, and attachment details.
 - **b.** Indicate materials and profiles of each decorative metal member, fittings, joinery, finishes, fasteners, anchorages, and accessory items.
- **3.** Samples for Initial Selection: For products involving selection of color, texture, or design including mechanical finishes.
- **4.** Samples for Verification: For each type of exposed finish.

- a. Sections of linear shapes.
- **b.** Samples of welded joints showing quality of workmanship and color matching of materials.

E. Informational Submittals

- 1. Qualification Data:
 - **a.** For fabricator
 - **b.** Galvanized-coating applicator
- 2. Mill Certificates: Signed by manufacturers of stainless-steel certifying that products furnished comply with requirements.
- 3. Welding certificates.

F. Quality Assurance

- 1. Fabricator Qualifications: A firm experienced in producing decorative metal similar to that indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- 2. Installer Qualifications: Fabricator of products.
- 3. Galvanizing Finisher Qualifications: A firm experienced in successfully applying galvanic finishes of type indicated and employing competent control personnel to conduct continuing, effective quality-control program to ensure compliance with requirements.
- 4. Welding Qualifications: Qualify procedures and personnel according to the following:
 - a. AWS D1.1/D1.1M, "Structural Welding Code Steel."
 - b. AWS D1.2/D1.2M, "Structural Welding Code Aluminum."c. AWS D1.3/D1.3M, "Structural Welding Code Sheet Steel."

 - d. AWS D1.6/D1.6M, "Structural Welding Code Stainless Steel."
- 5. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for fabrication and installation.
 - a. Build mockups for the following types of decorative metal:
 - b. Decorative Stacked Metal Panels: One mock-up minimum 4 feet wide and the height of the enclosure showing cut pattern and stacking of at least three layers.
 - c. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

G. Delivery, Storage, And Handling

- 1. Store decorative metal in a well-ventilated area, away from uncured concrete and masonry, and protected from weather, moisture, soiling, abrasion, extreme temperatures, and humidity.
- 2. Deliver and store cast-metal products in wooden crates surrounded by enough packing material to ensure that products are not cracked or otherwise damaged.

H. Field Measurements

Verify actual locations of walls and other construction contiguous with decorative metal by field measurements before fabrication and indicate measurements on Shop Drawings.

151139.02 MATERIALS.

A. Metals, General

1. Metal Surfaces, General: Use materials with smooth, flat surfaces unless otherwise indicated. Use materials without seam marks, roller marks, rolled trade names, stains, discolorations, or blemishes.

2. Stainless Steel

- a. Tubing: ASTM A554, Grade MT 304.
- b. Pipe: ASTM A312/A312M, Grade TP 304.
- c. Plate, Sheet, and Strip: ASTM A240/A240M or ASTM A666, Type 304.
- d. Flat Bar: ASTM A666, Type 304.
- e. Bars and Shapes: ASTM A276, Type 304.
- 3 2. Steel: Section 4152 of the Standard Specifications

B. Chain Link Fence

Galvanized Chain Link Fencing complying with Section 2519 of the Standard Specifications.

B C.Fasteners

- 1. Fastener Materials: Unless otherwise indicated, provide the following:
 - a. Stainless Steel Items: Type 304 stainless steel fasteners.
 - **b.** Galvanized-Steel Items: Plated steel fasteners complying with ASTM B633, Class Fe/Zn 25 for electrodeposited zinc coating.
 - **c.** Dissimilar Metals: Type 304 stainless steel fasteners.
- 2. Fasteners for Anchoring to Other Construction: Unless otherwise indicated, select fasteners of type, grade, and class required to produce connections suitable for anchoring indicated items to other types of construction indicated.
- 3. Provide concealed fasteners for interconnecting components and for attaching decorative metal items to other work unless otherwise indicated.
- **4.** Provide tamper-resistant flat-head machine screws for exposed fasteners unless otherwise indicated.
- **5.** Post-Installed Anchors: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC193 or ICC-ES AC308. Material complying with Article 4153.06 of the Standard Specifications.

C D.Miscellaneous Materials

- 1. Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.
- 2. Etching Cleaner for Galvanized Metal: Complying with MPI#25.
- **3.** Galvanizing Repair Paint: High-zinc-dust-content paint complying with SSPC-Paint 20 and compatible with paints specified to be used over it.

D E.Fabrication, General

- 1. Assemble items in the shop to greatest extent possible to minimize field splicing and assembly.
 - **a.** Disassemble units only as necessary for shipping and handling limitations.
 - b. Clearly mark units for reassembly and coordinated installation.
 - c. Use connections that maintain structural value of joined pieces.

- **2.** Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing the Work.
- **3.** Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.
- **4.** Mill joints to a tight, hairline fit. Cope or miter corner joints. Fabricate connections that will be exposed to weather in a manner to exclude water.
- Provide weep holes where water may accumulate. Locate weep holes in inconspicuous locations.
- **6.** Provide necessary rebates, lugs, and brackets to assemble units and to attach to other work. Cut, reinforce, drill, and tap as needed to receive finish hardware, screws, and similar items unless otherwise indicated.
- **7.** Coordinate openings and pathways for exterior lighting where indicated on the drawings. Verify opening sizes with exterior lighting assemblies.
- 8. Comply with AWS for recommended practices in shop welding. Weld behind finished surfaces without distorting or discoloring exposed side. Clean exposed welded joints of flux, and dress exposed and contact surfaces. Where welding cannot be concealed behind finished surfaces, finish joints to comply with NOMMA's "Voluntary Joint Finish Standards" for Type 1 Welds: no evidence of a welded joint.

E F.Finishes, General

- 1. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- **2.** Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

F. Stainless Steel Finishes

- 1. Surface Preparation: Remove tool and die marks and stretch lines, or blend into finish.
- Polished Finishes: Grind and polish surfaces to produce uniform finish, free of cross scratches.
- 3. Run grain of directional finishes with long dimension of each piece.
- 4. Stainless Steel Tubing Finishes:
 - a. 180-Grit Polished Finish: Uniform, directionally textured finish.
 - b. 320-Grit Polished Finish: Oil-ground, uniform, fine, directionally textured finish.
 - c. Polished and Buffed Finish: 320-grit finish followed by buffing to a high luster finish.
- 5. Stainless Steel Sheet and Plate Finishes:
 - a. Bright, Cold-Rolled, Unpolished Finish: ASTM A480/ASTM A480M, No. 2B.
 - b. Directional Satin Finish: ASTM A480/ASTM A480M, No. 4.
 - c. Dull Satin Finish: ASTM A480/ASTM A480M, No. 6.
 - d. High Luster Finish: ASTM A480/ASTM A480M, No. 7.
 - e. Mirror Finish: ASTM A480/ASTM A480M, No. 8.
 - f. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.

G. Steel Finishes

- 1. Galvanizing: Hot-dip galvanize products made from rolled, pressed, and forged steel shapes, castings, plates, bars, and strips indicated to be galvanized to comply with ASTM A123 and Article 4100.07 of the Standard Specifications.
- 2. Hot-dip galvanize steel and iron hardware indicated to be galvanized to comply with ASTM A153/A153M.
- 3. Do not quench or apply post-galvanizing treatments that might interfere with paint adhesion.
- **4.** Fill vent and drain holes that will be exposed in finished Work, unless indicated to remain as weep holes, by plugging with zinc solder and filing off smooth.
- **5.** Cleaning, Surface Preparation, and Painting of Galvanized Surfaces: Comply with Section 2509 of the Standard Specifications.

151139.03 CONSTRUCTION.

A. Examination

- **1.** Examine substrates and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of decorative metal.
- 2. Proceed with installation only after unsatisfactory conditions have been corrected.

B. Installation, General

- Provide anchorage devices and fasteners where needed to secure decorative metal to inplace construction.
- 2. Perform cutting, drilling, and fitting required to install decorative metal. Set products accurately in location, alignment, and elevation, measured from established lines and levels. Provide temporary bracing or anchors in formwork for items to be built into concrete, masonry, or similar construction.
- 3. Fit exposed connections accurately together to form tight, hairline joints or, where indicated, uniform reveals and spaces for sealants and joint fillers. Where cutting, welding, and grinding are required for proper shop fitting and jointing of decorative metal, restore finishes to eliminate evidence of such corrective work.
- **4.** Do not cut or abrade finishes that cannot be completely restored in the field. Return items with such finishes to the shop for required alterations, followed by complete refinishing, or provide new units as required.
- **5.** Install concealed gaskets, joint fillers, insulation, and flashings as work progresses.
- **6.** Restore protective coverings that have been damaged during shipment or installation. Remove protective coverings only when there is no possibility of damage from other work yet to be performed at same location.
- **7.** Retain protective coverings intact; remove coverings simultaneously from similarly finished items to preclude nonuniform oxidation and discoloration.
- **8.** Field Welding: Comply with applicable AWS specification for procedures of manual shielded metal arc welding and requirements for welding and for finishing welded connections in

- "Fabrication, General" Article. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations.
- **9.** Install intermediate chain link fence posts to galvanized steel structure using galvanized steel strap clamps. Clamps shall be removable without damaging the galvanized steel structure.
- **10.** Tie chain link fabric to structure and intermediate supports with galvanized steel wire ties.

C. Cleaning and Protection

- 1. Unless otherwise indicated, clean metals by washing thoroughly with clean water and soap, rinsing with clean water, and drying with soft cloths.
- 2. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A780/A780M.
- 3. Protect finishes of decorative metal from damage during construction period with temporary protective coverings approved by decorative metal fabricator. Remove protective covering at time of Substantial Completion.
- **4.** Restore finishes damaged during installation and construction period so no evidence remains of correction work. Return items that cannot be refinished in the field to the shop; make required alterations and refinish entire unit, or provide new units.

151139.04 METHOD OF MEASUREMENT.

The Gatewell Enclosure is a lump sum bid item and will not be measured.

151139.05 BASIS OF PAYMENT.

- **A.** The Contractor shall be paid the Contract lump sum price of the Gatewell Enclosure. Payment shall be considered full compensation for all materials, equipment, and labor required to install the Gatewell Enclosure, gatewell structure, and all connections.
- **B.** Gatewell Enclosure bid item includes stacked cut metal plates, spacers, fasteners, steel support structure, and organic coating over galvanized steel surfaces galvanized steel fencing. Mock-up shall be incidental to this bid item.