

SECTION 32 30 00 SITE FURNISHINGS

PART 1 – GENERAL

1.1 GENERAL PROVISIONS

Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 1 – GENERAL REQUIREMENTS, which are hereby made part of this Section of the Specifications.

1.2 DESCRIPTION

- A. Work Included: Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:
1. Furnish and install the Gravesite Layout Markers at the specified locations.
 2. Furnish and install the Flower-watering stations, including trash receptacles, water spigot, and flower vase container and complete any required work necessary to make the water supply equipment operate using the water supply source indicated.

1.3 RELATED WORK

- A. The following items are not included in this Section and will be performed under the designated Sections:
1. Section 03 30 53: CAST-IN-PLACE-CONCRETE

1.4 SUBMITTALS

- A. Submit the following in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES:
1. General: For each item specified in description of work or Part 2 - Products, provide information showing complete detail, location in the project, material and size of components, method of joining various components and assemblies, finish, and location, size and type of anchors. Mark items requiring field assembly for erection identification and furnish erection drawings and instruction.
 2. Provide templates and rough-in measurements as required.
 3. Provide samples of full range of colors and finishes available for review and approval, prior to ordering.

1.5 REFERENCE STANDARDS

The publications listed below form a part of this specification and the work shall comply with pertinent standards of the latest editions as specified below or by industry standards unless designated otherwise herein.

- A. American Society for Testing and Materials (ASTM):
B221-08 Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire,
Shapes, and Tubes
- B. American Welding Society (AWS):
D1.2-97 Structural Welding Code Aluminum
- C. National Association of Architectural Metal Manufacturers (NAAMM)

PART 2 – PRODUCTS

2.1 GRAVESITE LAYOUT MARKERS

- A. General: Gravesite layout markers for this project shall consist of both Gravesite Grid Monuments and Gravesite Grid Markers.
 - 1. Gravesite grid monuments shall be comprised of a bronze survey marker (monument marker) set into a cast-in-place concrete base.
 - a. Materials:
 - 1) Monument Base: Cast-in-place concrete monument base shall be a minimum of 24.1 MPa (3,500 psi) @ 28 days, reinforced as shown on details; dimensions as shown on Contract Documents.
 - 2) Monument Marker: Domed-top, 89 mm (3 1/2") diameter, domed bronze concrete survey marker with integral locator magnet, and flared anchor post for securing to concrete.
 - 2. Gravesite Grid Markers shall be comprised of a bronze survey rebar cap (Grid Marker) set onto a No. 10 soft metric (No. 6) rebar.
 - a. Materials:
 - 1) Rebar: No. 10 soft metric (No. 6) rebar with dimension as shown on Contract Drawings.
 - 2) Grid Marker: Domed-top, 81 mm (3 1/4") diameter, forged aluminum concrete marker with plastic insulator that receives and secures, with a non-wobbly attachment, the No.10 soft metric (No. 6) rebar and isolates the bronze from the steel.
- B. Text and Cross-hairs: Text of top as shown on Contract Drawings; text all caps with height to be 4.75 mm (3/16"). Cross hairs shall be field engraved as shown on the Contract Drawings, aligned with the gravesite grid and engraved based upon Contractor-surveyed location data.

- C. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the work include, those manufacturer's that can demonstrate, during the submittal process, that they have provided these products as part of successful installations matching the specifications and drawings, at a minimum of three VA National Cemeteries.

2.2 FLOWER WATERING STATIONS: GENERAL

- A. Flower watering station materials, finishes and colors shall //match existing//fully comply with the specifications and Contract Drawings// or be deemed as approved equal.

2.3 TRASH RECEPTACLE

- A. Trash receptacles shall //match existing// completely meet the specifications and Contract Drawings or be approved as an equal//. To achieve approval as an equal, submittal of a point by point comparison of the proposed equal product to the //existing product//specifications and Contract Drawings// is required by the Contractor during the submittal process. If the product being submitted for approval as an equal has any features that are different than the //existing product//specifications and Contract Drawings//, they must be identified in the submittal. If the differences result in a product that is deemed less than //the existing//that specified and shown in the Contract Drawings//, then the process for attempting approval as an equal shall NOT be performed during submittals. The product should be submitted with a variance request along with explanation of the differences, why they should be accepted and any cost or project completion factors shall be included.

B. MATERIALS

1. Main body construction shall be 9.53mm x 25.4mm (3/8" x 1") vertical solid steel bar; 6.35mm x 63.5mm (1/4" x 2-1/2") horizontal solid steel bands; 9.53mm x 76.2mm (3/8" x 3") steel support bars; 15.88mm (5/8") solid steel top ring; leveling feet with a 9.53mm (3/8") diameter threaded steel shaft. All trash receptacles shall be signed to read "TRASH" as indicated on the details in the Contract Drawings. Sign material, finish, color, font and font size shall be as shown on the Contract Drawings. Mounting of signs shall be as shown on approved Shop Drawings. All joints of steel components shall be fully welded and ground smooth throughout.
2. Unit shall contain one 136 liter (36-gallon) capacity high density plastic inner liner with its weight not to exceed 2.72 kg (6 lbs.). The unit manufacturer shall provide the black plastic inner liners which shall be molded on tooling designed for and owned by the unit manufacturer. They inner liner shall offer maximum capacity and strength

with lightweight construction using critical molded ribs, integral handholds, and high strength materials. This style of inner liner shall minimize handling difficulty and facilitate easy emptying and storage while affording long service life.

C. REQUIRED OPTIONS

1. Lids: Units shall be shipped with manufacturer's standard tapered formed lid with formed dome and with self-closing door. The lids shall be made of the manufacturer's standard high strength plastic material designed to match the selected manufacturer's standard color. Each lid shall be provided with a stainless steel aircraft cable and attachments to secure the lid to the unit.
2. Color shall match existing.
3. Mounting plate: Standard (1) anchor bolt hole.

D. FINISHES

1. Project location has been determined to be a high salt abusive climate. Hot dip galvanizing before powder coating is required. Hot dip galvanizing will provide greater protection in salty climates but yields a slightly less smooth coating finish. All of the fabricated metal components and castings shall be hot dip galvanized.

2.4 FLOWER VASE RECEPTACLE

A. Flower vase receptacles shall match existing.

B. MATERIALS:

1. Flower vase receptacles shall match existing or be regularly produced by the manufacturer for use at VA Cemeteries, with a special light weight hinged lid designed for the VA Cemeteries. Flower vase receptacles shall be of the size indicated on the Contract Drawings, and shall be of the same construction, finish and indicated Victor Stanley color as the trash receptacles, with the following exceptions:
2. All flower vase receptacles shall be signed to read "FLOWER VASES" as indicated on the details in the Contract Drawings.
3. The "Floral Regulations" decal shall be as indicated on the Contract Drawings and be factory applied to the top of the receptacle lid. Decal shall be pressure sensitive vinyl designed for outdoor use. The content of the decal, lettering color and background color of decal shall be as approved during the shop drawing process. The materials for the decal shall be regularly used by the manufacturer for flower vase receptacles at VA National Cemeteries.

2.5 WATER SPIGOT ASSEMBLIES

- A. Water spigots shall be constructed as indicated on the drawings. The water spigot indicated on the drawings shall be an ADA compliant spigot operated with a paddle that allows the water to flow when pushed either right or left, with 2 Kg (5 lbs) of force or less. The assembly shall be installed with a pressure regulating valve and isolation valve installed in the meter box and the assembly is to be (blown out) if located in a region where the temperatures seasonally go below freezing. The spigot assembly shall contain all pipes, fittings, attachments, mounting base, and any other ancillary materials or equipment to produce a fully functional water spigot assembly, as indicated on the drawings, from the connection to the irrigation water system at the isolation valve for the spigot.

PART 3 – EXECUTION

3.1 INSPECTION

- A. Prior to installation of any of the work in this section, contractor shall inspect the planned installation locations to insure that conditions are not significantly different from those indicated on the contract drawings. All materials shall be inspected prior to installation to insure compliance with the contract documents and to insure there is no damage. Should conditions be different from those indicated on the contract documents, contractor should immediately notify the Resident Engineer.

3.2 PREPARATION

- A. Stake alignment and locations for all site furnishings for review and approval by Resident Engineer. Verify that all elements in this section “fit” within location provided.
- B. Install items rigid, plumb and true to lines and levels shown.
- C. Assemble (if required) and install items as per manufacturer’s printed instructions, or approved shop drawings, unless otherwise specified or shown.

3.3 INSTALLATION

- A. Gravesite Grid Monuments and Markers:
 - 1. All material must be checked upon receipt at the job site prior to installation to check for any damage that may have occurred during transport. Units will be installed in complete accordance with manufacturers' recommendations and as shown the Contract Drawings.

2. Cross-hairs on bronze monuments and marker shall be field inscribed, based upon accurate Contractor-survey: refer to Contract Drawings.

B. Flower Watering Stations:

1. Stake location of flower watering stations and obtain approval from Owner's Representative prior to forming concrete pad. Install concrete pad in accordance with 033000 – CAST-IN-PLACE CONCRETE.
2. Anchor trash receptacle and flower vase containers as shown on the Contract Drawings and following the manufacturer's recommended installation instructions. Following installation of water spigot, install washed stone for splash area.
3. Install water spigot assemblies according to manufacturer's recommendations, including pipe, isolation valve, fittings, pressure reducing valve and valve boxes. All anchoring hardware shall be stainless steel. Coordinate all work with other trades.

3.4 CLEAN UP

- A. Clean up area of excess material and debris. Clean above ground portions of all receptacles and other site improvements.

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