

CONSTRUCTION STANDARD SPECIFICATION

SECTION 12930

SITE FURNISHINGS

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SITE FURNISHINGS

PART 1 - GENERAL

1.01 REFERENCES

- ASTM B-633 Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel
- ASTM A500 Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes

1.02 SUMMARY

- A. This Section includes the following:
 - 1. Ash receptacles
 - 2. Bicycle racks
 - 3. Bollards
 - 4. Planters
 - 5. Seating
 - 6. Tables
 - 7. Trash receptacles
 - 8. Tree grates
 - 9. Shade Structures (in process, contact SNL Systems Architects)
- B. Section includes installation and disassembly of site furnishings
- C. Work includes, but is not limited to the following:
 - 1. Labor, equipment, and material to install site furnishings.
 - 2. Labor and equipment to install or disassemble site furnishings.
 - 3. Labor, equipment and material to:
 - a. Protect and transport components from Sandia National Laboratories (SNL) warehouse, Vendor's warehouse, or other location specified by Sandia Delegated Representative (SDR) to final installation location.
 - b. Dismantle, package, protect and transport components to SNL's warehouse.
- D. New site furnishings shall be contractor provided and installed, complete in place.

1.03 SUBMITTALS

- A. Submit in accordance with Section 01330, "Submittal Procedures":
1. Product Data: For each site furnishing, including function descriptions, materials, finish, dimensions and installation and interface requirements.
 2. Shop drawings: Illustrating special installation requirements.
 3. Product Schedule: For site furnishings. Use same designations indicated on Drawings.
 4. Maintenance Data: For site furnishings to include in maintenance manuals.

1.04 WARRANTY

- A. Provide under provisions of Section 01700, "Contract Closeout":
1. All structural elements of the site furnishings: One (1) year warranty.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following: *****Only approved products may be substituted*****
1. Barco Products; 11 North Batavia Ave., Batavia, IL 60510
(www.barcoproducts.com).
 2. Forms+Surfaces; 6395 Cindy Lane, Carpinteria, CA, 93013, (www.forms-surfaces.com).
 3. Huntco Supply; P.O. Box 10385, Portland, OR, 97296, (www.huntco.com).
 4. Ironsmith; P.O. Box 10868, Palm Desert, CA, 92255,
(<http://www.ironsmith.cc/index.htm>).
 5. P.W. Athletic Mfg. Co.
140 N. Gilbert Road, MESA, AZ 85203 • (www.pwathletic.com)

2.02 BENCHES

- A. Type: Smooth curved seat, formed from single perforated metal mesh. Vista Bench model, 6'-foot or as manufactured by Forms+Surfaces, or an approved equivalent with the following characteristics:
1. Metal: Steel frames are to be constructed of bench frames, armrests and handrails are constructed of 7/8"-inch diameter heavy wall steel tubing. All connection points are fully welded for maximum durability. Finish shall be as noted below. Provide and install with a surface mount option.
 2. Perforated Steel: Seats are formed from 14-gauge steel sheet with an overall pattern of .25"-inch diameter perforations. Each perforated seat is welded to the bench frame.
 3. Finish: Metal Finishing
 4. Color: Powder-coat is to be provided in standard color "Bright Silver" that

includes all finishes and textures. Submit color samples for approval by SNL Architect.

5. Undercoat: The bench's steel finishing system will have an electrodeposited zinc coating per ASTM B-633 with an additional Type II conversion coating. To enhance durability and protection even further, a zinc-rich primer powder-coat based on epoxy resin is then applied and pre-baked in preparation for final color coating. Color coat: TGIC polyester powder is applied by electrostatic or tribo-charged spraying. When baked in a curing oven the deposited powder melts and fuses together to form a continuous, cross-linked coating.
6. Length: 6'-feet.

2.03 TABLES AND CHAIRS

- A. Type: 45"-inch perforated metal top table with quad-leg. Vista Ensemble model #SEVIS-L5PAD. Five seat ensemble, backless perforated seats, ADA and ABA Accessibility Guidelines for Buildings and Facilities, Part II: ABA Application and Scoping. with umbrella hole and cover (color to match finish), freestanding version, as manufactured by Forms+Surfaces, or an approved equivalent with the following characteristics:
 1. Metal: Ensemble Frame: 2.25"-inch diameter tubular steel; Seat Frame: 7/8"-inch diameter tubular steel; Center Hub: 2"-inch diameter tubular steel; Hardware: Stainless steel.
 2. Perforated Seats and Table top: Seats are formed from 14-gauge steel sheet with an overall pattern of .25"-inch diameter perforations. Each perforated seat is to be welded to a tubular frame.
 3. Finish: Metal Finishing – “Bright Silver”

2.04 BIKE RACKS

- A. Bike Racks shall be the BR-100 in weathered wood color as manufactured by Barco Products, or an approved equivalent with the following characteristics:
 1. Metal: Stainless steel connectors.
 2. Recycled plastic: Remaining parts
- B. Bike Racks shall be the Model # 1607-16 Heavy-Duty Standard Bike rack in galvanized steel as manufactured by Patterson Williams Athletic Mfg. Co., or an approved equivalent

2.05 TRASH RECEPTACLE

- A. Trash receptacle shall be Universal Receptacle model #SLUNS-36SOD, 36 gal round side opening receptacle, or #SLUNI -36TOT, 36 gal round top opening receptacle, with powder coat finish, powder-coated aluminum exposed, sand ash lid with liner painted black and lid tether as manufactured by Forms+Surfaces, or an approved equivalent with the following characteristics:
 1. Perforated Steel: Shall be .25"-inch round type perforated steel. Lid shall be designated per manufacturer's recommendation.

2. Liners: Include an independent and replaceable liner designed to be used with or without plastic litter bags. Liners are to be molded from black fire-rated LDPE polyethylene. Bag slots (to prevent litter bags from slipping) and liner drain holes shall be provided.
3. Finish: Powder-coat factory finish to match metal finishing.

2.06 PLANTERS

- A. Planters shall be 30-gallon square/round planter model # SNUNS-30 or # SNUNI-30, with stainless steel finish as manufactured by Forms+Surfaces, or an approved equivalent with the following characteristics:
 1. Metal: Stainless steel or brush aluminum.
 2. Finish: Powder-coat factory finish or stainless steel. Submit color samples for approval by SNL Architect.

2.07 BOLLARDS

- A. Break-away Bollards: Bollards shall be 3'-inch diameter, schedule 40 PVC pipe, 6'-foot in height.
 1. Color: Painted Sherwin Williams, Toque White, SW7003.
 2. Material: PVC plastic pipe.
 3. Height: 6'-foot.
- B. Permanent/Security Bollards, without light fixture: Bollards shall be Huntco 5'-inch square bollard, manufactured by Huntco Supply, or an approved equivalent; typically bollard caps are welded during fabrication, however if security demands additional strength the caps can be removed and the bollard can be filled with concrete for added strength. Standard installation for bollards shall be in-ground; however surface mount and can be utilized upon approval by SNL Architect.
 1. Color: If necessary, paint bollard to match campus surroundings. Submit color samples for approval by SNL Architect.
 2. Material: Manufactured from ASTM A500 steel.
 3. Height: 36'-inch.
- C. Permanent/Security Bollards, with light fixture: Bollards shall be Knight Bollard model #L104 or Light Column Bollard model #L305, manufactured by Forms+Surfaces, (Model #L104 or Model #L305) or an approved equivalent.
 1. Color: If necessary, paint bollard to match campus surroundings. Submit color samples for approval by SNL Architect.
 2. Height: Minimum of 40'-inches.

2.08 TREE GRATES

The use of tree gates should be avoided; however, if necessary, use the following tree grates or an approved equivalent.

- A. Tree grate shall be Parkway Model, 48'-inch or 60'-inch square/round grate, manufactured by Ironsmith.

2.09 FABRICATION

- A. Metal Components: Form to required shapes and sizes with true, consistent curves, lines and angles. Separate metals from dissimilar materials to prevent electrolytic action.
- B. Welded Connections: Weld connections continuously. Weld solid members with full-length, full-penetration welds and hollow members with full-circumference welds. At exposed connections, finish surfaces smooth and blended so no roughness or unevenness shows after finishing and welded surface matches contours of adjoining surfaces.
- C. Exposed Surfaces: Polished, sanded or otherwise finished; all surfaces smooth, free of burrs, barbs, splinters, and sharpness; all edges and ends rolled, rounded or capped.

2.10 FINISHES

- A. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- B. Aluminum Finishes: Manufacturer's standard, baked, polyester, powder-coat finish complying with finish manufacturer's written instructions for surface preparation, included pretreatment, application, baking and minimum dry film thickness.
- C. Steel and Galvanized Steel Finishes:
 - 1. Baked-enamel, Powder-coat Finish: Manufacturer's standard, baked, polyester, powder-coat finish complying with finish manufacturer's written instructions for surface preparation, including pretreatment, application, baking and minimum dry film thickness.
 - 2. PVC Finish: Manufacturer's standard, UV-light stabilized, mold-resistant, slip-resistant, matte-textured, dipped or sprayed-on, PVC-plastisol finish, with flame retardant added; complying with coating manufacturer's written instructions for pretreatment, application and minimum dry film thickness.
- D. Stainless-Steel Finishes:
 - 1. Remove tool and die marks and stretch lines or blend into finish
 - 2. Grind and polish surfaces to produce uniform, directionally textured, polished finish indicated, free of cross scratches. Run grain with long dimension of each piece.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine areas and conditions, for compliance with requirements for correct and

level finished grade, mounting surfaces, installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Install furnishing in accordance with manufacturer's installation instructions, requirements of this specification, and Contract Drawings. Complete field assembly of site furnishings where required.
- B. Unless otherwise indicated, install site furnishings after landscaping and paving have been completed.
- C. Install site furnishings level, plumb, true and positioned at locations indicated on Drawings.

CLEANING

- A. After completion of construction, inspect components. Remove spots, dirt and debris. Repair damaged finishes to match original finish or replace component at the Contractor's expense.

END OF SECTION