SECTION 129300
SITE FURNISHINGS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:
   1. Benches.
   2. Tables and Seating.
   3. Bicycle racks.
   4. Trash receptacles and Ash Urns.
   5. Planters.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.
B. Samples: For each exposed finish.
C. Material Certificates: For site furnishings, signed by manufacturers.
D. Maintenance Data.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Aluminum: Alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated; free of surface blemishes.
B. Steel and Iron: Free of surface blemishes.
C. Stainless Steel: Free of surface blemishes.
D. Wood: Surfaced smooth on four sides with eased edges; kiln dried, free of knots.
E. Fiberglass: Multiple laminations of glass-fiber-reinforced polyester resin with UV-light stable, colorfast, non-fading, weather- and stain-resistant, colored polyester gel coat, and manufacturer's standard finish.
F. Plastic: Color impregnated, color and UV-light stabilized, and mold resistant.
G. Anchors, Fasteners, Fittings, and Hardware: Manufacturer's standard, corrosion-resistant-coated or non-corrodible materials; commercial quality, tamperproof, vandal and theft resistant, concealed, recessed, and capped or plugged.

H. Non-shrink, Non-metallic Grout: Premixed, factory-packaged, non-staining, noncorrosive, nongaseous grout complying with ASTM C 1107; recommended in writing by manufacturer, for exterior applications.

I. Erosion-Resistant Anchoring Cement: Factory-packaged, non-shrink, non-staining, hydraulic-controlled expansion cement formulation for mixing with potable water at Project site to create pourable anchoring, patching, and grouting compound; resistant to erosion from water exposure without needing protection by a sealer or waterproof coating; recommended in writing by manufacturer, for exterior applications.

J. Galvanizing:
   1. Zinc-Coated Tubing: External, zinc with organic overcoat, consisting of a minimum of 0.9 oz./sq. ft. of zinc after welding, a chromate conversion coating, and a clear, polymer film. Internal, same as external or consisting of 81 percent zinc pigmented coating, not less than 0.3 mil thick.
   2. Hot-Dip Galvanizing: According to ASTM A 123/A 123M, ASTM A 153/A 153M, or ASTM A 924/A 924M.

2.2 Benches

A. Manufacturers:
   1. Landscape Forms.

B. Model:
   1. Austin Bench

C. Mounting:
   1. Anchor to paving with manufacturers recommended anchoring devices.

2.3 SEATING AND TABLES

A. Manufacturers:
   1. Landscape Forms.

B. Table Model:
   1. Carousel Table with attached Seating
2.4 BICYCLE RACKS

1. Frame: Galvanized steel.
   a. Tubing OD: Not less than 1-5/8 inches.

2. Style: “Ribbon Style” double-side parking.

3. Security: Designed to lock wheel or frame.


B. Steel Finish: Galvanized with powder-coated finish.

   1. Color: As selected by Landscape Architect from manufacturer’s full range of Standard color options.

2.5 TRASH RECEPTACLES AND ASH URNS (IN DEVELOPMENT—contact Landscape Manager for current requirements)

A. Manufacturers: Subject to compliance with requirements of the FP&C Landscape Project Manager, provide products by one of the following:

1. BCI Burke Company, LLC.
2. BRP Enterprises, Inc.
6. Creative Pipe, Inc.
7. DuMor Inc.
8. FairWeather Site Furnishings.
10. Fibrex Group Inc. (The).
11. Forms+Surfaces.
12. GameTime; a PlayCore, Inc. Company.
13. Gardenside Ltd.
15. Huntsco Supply, LLC.
18. Landscape Forms.
19. Landscape Structures Inc.
20. L. A. Steelcraft.
22. Miracle Recreation Equipment Co.; a division of PlayPower, Inc.
23. Playworld Systems, Inc.
24. Recreation Creations, Inc.
25. RPI Designs.
27. Smith & Hawken.
28. Urban Accessories, Inc.
29. Victor Stanley, Inc.
30. Wausau Tile, Inc.; Metal-Form Division.

B. Aluminum Facing Surrounds: [Aluminum sheet] [Perforated aluminum sheet] [Grid in tubular frame] [Evenly patterned, parallel flat aluminum straps, bars, or tubular shapes] [Match benches] <Insert material and description>.

C. Steel Facing Surrounds: [Steel sheet] [Perforated-steel sheet] [Evenly patterned, parallel flat steel straps, bars, or tubular shapes] [Evenly patterned, parallel round steel rods, bars, or tubular shapes] [Grid in tubular frame] [Match benches] <Insert material and description>.

D. Stainless-Steel Facing Surrounds: [Steel sheet] [Perforated-steel sheet] [Evenly patterned, parallel flat steel straps, bars, or tubular shapes] [Evenly patterned, parallel round steel rods, bars, or tubular shapes] [Grid in tubular frame] [Match benches] <Insert material and description>.

E. Wood Facing Surrounds: [Evenly spaced, Douglas fir slats] [Evenly spaced pine slats] [Evenly spaced cedar slats] [Redwood panels] [Evenly spaced redwood slats] [Teak panels] [Evenly spaced teak slats] [Match benches] <Insert wood type and description>.

F. Fiberglass Facing Surrounds: Molded fiberglass shape.

G. Plastic Facing Surrounds: [Molded HDPE shape] [Evenly spaced HDPE slats] [Evenly spaced, recycled HDPE slats] [Match benches] <Insert plastic type and description>.

H. Support Frames: [Steel] [Galvanized steel]; welded.

I. Trash Receptacles:
1. Receptacle Shape and Form: [Round cylinder] [Round cylinder with tapered funnel top] [Round, tapered column] [Square column] [Rectangular column] [As indicated] <Insert shape and form>; with opening for depositing trash in [lid or top] [side of lid or top] [receptacle side].
2. Lids and Tops: [Matching facing panels] [Aluminum] [Steel] [HDPE] [Recycled HDPE] <Insert material and description> secured by cable or chain, hinged, swiveled, or permanently secured.
3. Inner Container: [Aluminum] [Galvanized steel sheet] [Perforated-metal] [Fiberglass] [Rigid plastic] container with [drain holes] [lift-out handles]; designed to be removable and reusable.

J. Aluminum Finish: [Mill finish] [Color coated].
   
1. Color: [As indicated by manufacturer's designation] [Match Architect's samples] [As selected by Architect from manufacturer's full range] [As indicated on a site furnishing schedule] <Insert description>.

K. Steel Finish: [Galvanized and] [color] [PVC-color] coated.
   
1. Color: [As indicated by manufacturer's designation] [Match Architect's samples] [As selected by Architect from manufacturer's full range] [As indicated on a site furnishing schedule] <Insert description>.

L. Stainless-Steel Finish: [Dull Satin No. 6] <Insert description>.

M. Wood Finish: [Unfinished] [Factory-applied transparent finish] [Factory-applied stain and transparent finish] [Factory-applied opaque finish] [Manufacturer's standard finish].
   
1. Stain: [Manufacturer's standard] <Insert stain type and color>.

N. [Fiberglass] [HDPE] Color: [As indicated by manufacturer's designation] [Match Architect's samples] [As selected by Architect from manufacturer's full range] [As indicated on a site furnishing schedule] <Insert description>.

2.6 PLANTERS

A. Manufacturers: Subject to compliance with requirements of the FP&C Landscape Project Manager, provide products by one of the following:
   
1. FairWeather Site Furnishings.
2. Fiberglass Engineering Company.
3. Fibrex Group Inc. (The).
4. Gardenside Ltd.
5. Huntco Supply, LLC.
7. Sitecraft.

B. Aluminum Facing Surrounds: [Aluminum sheet] [Perforated aluminum sheet] [Grid in tubular frame] [Evenly patterned, parallel flat aluminum straps, bars, or tubular shapes] [Match benches] <Insert material and description>.

C. Steel Facing Surrounds: [Steel sheet] [Perforated-steel sheet] [Evenly patterned, parallel flat steel straps, bars, or tubular shapes] [Evenly patterned, parallel round steel rods, bars, or tubular shapes] [Grid in tubular frame] [Match benches] <Insert material and description>. 
D. Stainless-Steel Facing Surrounds: [Steel sheet] [Perforated-steel sheet] [Evenly patterned, parallel flat steel straps, bars, or tubular shapes] [Evenly patterned, parallel round steel rods, bars, or tubular shapes] [Grid in tubular frame] [Match benches] <Insert material and description>.

E. Wood Facing Surrounds: [Evenly spaced, Douglas fir slats] [Evenly spaced pine slats] [Evenly spaced cedar slats] [Redwood panels] [Evenly spaced redwood slats] [Teak panels] [Evenly spaced teak slats] [Match benches] <Insert wood type and description>.

F. Fiberglass Facing Surrounds: Molded fiberglass shape.

G. Plastic Facing Surrounds: [Molded HDPE shape] [Evenly spaced HDPE slats] [Evenly spaced, recycled HDPE slats] [Match benches] <Insert plastic type and description>.

H. Support Frames: [Steel] [Galvanized steel]; welded.

I. Planter Shape and Form: [Round cylinder] [Round cylinder with tapered funnel top] [Round, tapered column] [Square column] [Rectangular column] [As indicated] <Insert shape and form>.

J. Inner Container: [Aluminum] [Galvanized steel sheet] [Fiberglass] [Rigid plastic] container [with drain holes].


L. Installation Method: [Freestanding] [Freestanding with weighted base] [Anchored to substrate indicated on Drawings] [Wall mounted] [Post mounted] [Mounted on elevated leg angles anchored at finished grade to substrate indicated on Drawings] [Mounted on elevated leg angles anchored below finished grade to substrate indicated on Drawings] [As indicated on Drawings].

M. Aluminum Finish: Color coated.

1. Color: [As indicated by manufacturer's designation] [Match Architect's samples] [As selected by Architect from manufacturer's full range] [As indicated on a site furnishing schedule] <Insert description>.

N. Steel Finish: [Galvanized and] [color] [PVC-color] coated.

1. Color: [As indicated by manufacturer's designation] [Match Architect's samples] [As selected by Architect from manufacturer's full range] [As indicated on a site furnishing schedule] <Insert description>.

O. Stainless-Steel Finish: [Dull Satin No. 6] <Insert description>.

P. Wood Finish: [Unfinished] [Factory-applied transparent finish] [Factory-applied stained and transparent finish].

1. Stain: <Insert stain type and color>.
Q. [Fiberglass] [HDPE] Color: [As indicated by manufacturer's designation] [Match Architect's samples] [As selected by Architect from manufacturer's full range] [As indicated on a site furnishing schedule] <Insert description>.

1. Finish: [Smooth] [Textured].

2.7 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: 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. Pipes and Tubes: Form simple and compound curves by bending members in jigs to produce uniform curvature for each repetitive configuration required; maintain cylindrical cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of handrail and railing components.

D. Preservative-Treated Wood Components: Complete fabrication of treated items before treatment if possible. If cut after treatment, apply field treatment complying with AWPA M4 to cut surfaces.

E. 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.

F. Factory Assembly: Assemble components in the factory to greatest extent possible to minimize field assembly. Clearly mark units for assembly in the field.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Comply with manufacturer’s written installation instructions unless more stringent requirements are indicated. Complete field assembly of site furnishings where required.

B. Post Setting: Set cast-in support posts in concrete footing plumb or at correct angle and aligned and at correct height and spacing.

C. Posts Set into Voids in Concrete: Form or core-drill holes for installing posts in concrete to depth recommended in writing by manufacturer of site furnishings and fill annular space between post and concrete with [non-shrink, nonmetallic grout] [or] [anchoring cement], mixed and placed to comply with anchoring material manufacturer’s written instructions.
D. Pipe Sleeves: Use steel pipe sleeves preset and anchored into concrete for installing posts. After posts have been inserted into sleeves, fill annular space between post and sleeve with [non-shrink, non-metallic grout] [or] [anchoring cement], mixed and placed to comply with anchoring material manufacturer’s written instructions.