

DIVISION 2 - SITE WORK

Conditions of Use/ Responsibility of Data

These “guideline” specifications are to be used by the A/E as a base document in the development of project/site-specific Division 2 – SITE WORK specifications for Montgomery County Public Schools Construction Projects. They may or may not be complete, correct and/or appropriate for use for any given project. It is the responsibility of the A/E to review these “guideline” specifications and to edit and/or supplement them as required to ensure that they represent the full, complete, correct and code-compliant specifications required for all construction of the project to which they apply. The use of these “guideline” specifications, and/or any information herein, in no way releases the A/E from their contractual responsibility to prepare and provide the full, complete and correct code-compliant contract documents, plans and/or specifications required for construction.

Review and editing of these “guideline” specifications shall be performed by appropriately licensed Maryland professional engineer. Specifications are to be prepared in Microsoft Word, edited using the “Track Changes” feature of that software and submitted to MCPS electronically on a compact Disk for review.

SECTION 02870 - SITE AND STREET FURNISHINGS

PART 1 - GENERAL:

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following site and street furnishings:
 - 1. Bike Racks
 - 2. Benches.
 - 3. Trash receptacles.
- B. Related Sections include the following:
 - 1. Division 2 Section "Earthwork" for excavation for installation of concrete footings.
 - 2. Division 3 Section "Cast-in-Place Concrete" for formed voids in concrete footings.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, finishes, field-assembly requirements, and installation details.
 - 1. Submit location of product manufacture

2. Submit recycled-content data, designating percentages of post-consumer and post-industrial recycled material.
- B. Samples for Verification: For each type of exposed finish required, prepared on Samples of size indicated below.
 1. Size: Not less than 6-inch- long linear components and 4-inch- square sheet components.
 - C. Product Schedule: For site furnishings. Use same designations indicated on Drawings.
 - D. Material Certificates: For site furnishings, signed by manufacturers.
 1. Recycled plastic.
 - E. Maintenance Data: For site furnishings to include in maintenance manuals.
- 1.4 QUALITY ASSURANCE
- A. Source Limitations: Obtain each type of site and street furnishings through one source from a single manufacturer.
- 1.5 EXTRA MATERIALS
- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 1. Bench Replacement Slats: Not less than two full-size units for each size indicated.
 2. Trash Receptacle Inner Containers: 1 full-size unit.

PART 2 - PRODUCTS:

2.1 MANUFACTURERS

- A. Basis-of-Design Products: Subject to compliance with requirements, provide the following products by or a comparable product by another manufacturer approved by Architect prior to bid, giving preference to products manufactured within a 500-mile radius of the Project Site.
 1. Bike Racks: Columbia Cascade Company; Model 2170-11-P-C.
 2. Bench: Victor Stanley, Inc.; Homestead Series Model 32.
 3. Trash Receptacles: Victor Stanley, Inc.; Model ES-342.

2.2 MATERIALS

- A. Steel: Free from surface blemishes and complying with the following:
 1. Plates, Shapes, and Bars: ASTM A 36/A 36M.
 2. Steel Pipe: Standard-weight steel pipe complying with ASTM A 53, or electric-resistance-welded pipe complying with ASTM A 135.
 3. Tubing: Cold-formed steel tubing complying with ASTM A 500.
 4. Sheet: Commercial steel sheet complying with ASTM A 569/A 569M.
- B. Plastic: Color impregnated, color and UV-light stabilized, and mold resistant.
 1. Recycled Polyethylene: Fabricated from not less than 96 percent recycled, purified, fractional-melt plastic resin for not less than 90 percent recycled post-consumer waste by weight content HDPE.
- C. 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. Provide as required for site furnishings' assembly, mounting, and secure attachment.

- D. Non-shrink, Nonmetallic Grout: Premixed, factory-packaged, nonstaining, non-corrosive, nongaseous grout complying with ASTM C 1107. Provide grout, recommended in writing by manufacturer, for exterior applications.

2.3 BIKE RACKS:

- A. Frame: Steel.
- B. Table Height: As indicated by basis-of-design product.
- C. Overall Width: As indicated by basis-of-design product.
- D. Overall Depth: As indicated by basis-of-design product.
- E. Weight: As indicated by basis-of-design product.
- F. HDPE Color: As selected by Architect from manufacturer's full range.

2.4 BENCHES:

- A. Frame: Steel.
- B. Seat and Back: Plastic; formed from evenly spaced parallel slats.
- C. Arms: None.
- D. Seat Height: As indicated by basis-of-design product.
- E. Overall Width: 6 feet.
- F. Overall Depth: As indicated by basis-of-design product.
- G. Weight: As indicated by basis-of-design product.
- H. Seat Surface Shape: As indicated by basis-of-design product.
- I. HDPE Color: As selected by Architect from manufacturer's full range.

2.5 TRASH RECEPTACLES

- A. Materials: 3/8" x 1" vertical solid steel bar; 1/4" x 2-1/2" horizontal solid steel bands; 3/8" x 3" steel support bars; 5/8" solid steel top ring; 36 gallon capacity high density plastic liner; leveling feet with a 3/8" diameter threaded steel shaft
- B. Lids and Tops: Formed lid attached to the frame with two vinyl-coated steel aircraft cables.
- C. Style: As indicated by basis-of-design product.
- D. Weight: As indicated by basis-of-design product.
- E. Liners: High-density plastic liner.

- F. Capacity: Not less than 24 gal.
- G. Installation Method: Anchored to cast in place concrete.

2.6 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. 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. Steel and Iron Components: Galvanized, galvanized and color coated, or color coated. Bare metal steel or iron components are not permitted.
- E. Exposed Surfaces: Polished, sanded, or otherwise finished; smooth all surfaces, free from burrs, barbs, splinters, and sharpness; all edges and ends rolled, rounded, or capped.
- F. Factory Assembly: Assemble components in the factory to the greatest extent possible to minimize field assembly. Clearly mark units for assembly in the field.

2.7 FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. 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.

2.8 STEEL AND GALVANIZED STEEL FINISHES

- A. Baked-Enamel, Powder-Coat Finish: Manufacturer's standard, baked, polyester-TGIC, powder-coat finish complying with finish manufacturer's written instructions for surface preparation, including pretreatment, application, baking, and minimum dry film thickness.

PART 3 - EXECUTION:

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

- A. Comply with manufacturer's written installation instructions, unless more stringent requirements are indicated. Complete field assembly of site and street furnishings, where required.
- B. Unless otherwise indicated, install site and street furnishings after landscaping and paving have been completed.
- C. Install site and street furnishings level, plumb, true, and securely anchored or positioned at locations indicated on Drawings.

3.3 CLEANING

- A. After completing site and street furnishing installation, inspect components. Remove spots, dirt, and debris. Repair damaged finishes to match original finish or replace component.

END OF SECTION