MICHIGAN

DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

FOR

**ORNAMENTAL ALUMINUM FENCE**

BRG:KAH 1 of 2 APPR:REL:DMG:02-06-23

**a. Description.** This work consists of furnishing, manufacturing, and installing an ornamental aluminum fence at the locations shown on the plans. Complete all work in accordance with the standard specifications, except as modified herein.

Furnish fence from one of the following manufacturers or approved equal:

Ultra Aluminum Mfg., Inc. Alumi-Guard, Inc. Ameristar Fence Products

2124 Grand Commerce Drive 2401 Corporate Blvd. 1555 North Mingo Road

Howell, MI 48855 Brooksville, FL 34604 Tulsa, OK 74116

(800) 656-4420 (877) 258-6448 (888) 333-3422

[www.ultrafence.com](http://www.ultrafence.com) [www.alumi-guard.com](http://www.alumi-guard.com) [www.ameristarfence.com](http://www.ameristarfence.com)

Ensure the furnished fence and all components are from one manufacturer.

**b. Materials.** Aluminum material for fence framework (i.e., tubular pickets, rails, and posts) must be in accordance with the requirements of *ASTM B221*. Ensure the aluminum extrusions for posts and rails (outer channels) are Alloy and Temper Designation 6005-T5. Ensure the aluminum extrusions for pickets and rail inner slide channels are Alloy and Temper Designation 6063-T5.

Elastomeric sheet. Use elastomeric bound fabric pad in accordance with subsection 914.12 of the Standard Specifications for Construction.

Anchor studs and hardware. Use stainless steel anchor studs, bolts, screws, and washers in accordance with *ASTM A320/A320M, Class 1, Grade B8*. Ensure nuts are self-locking nylon insert type in accordance with *ASTM A320/A320M, Grade 8F*.

The various fence components must meet the following dimensions listed it Table 1:

**Table 1: Physical Dimensions**

|  |  |
| --- | --- |
| Component | Dimension (in inches)/Feature |
| Pickets | 1 by 1 by 0.062 thick |
| Rails: Top Walls  Side Walls | 1⅝ by 1⅝ by 0.1 thick  1⅝ by 1⅝ by 0.08 thick |
|  | Three per section |
| Cantilever sections  (All rail and upright intersections and all picket  and rail intersections must be joined by welding)  Aluminum Base Plates | 1 by 1 by 0.125 thick pickets  3 by 3 by 0.25 posts  1⅝ by 1⅝ by 0.125 thick rails  8 by 8 by 1/2 thick |
| Standard Posts (End and Line Posts) | 3 by 3 by 0.125 thick |
| Spacing Between Pickets | 4 Maximum |
| Post Spacing | 72 on center (or as shown on the plans) |
| Height of Fencing | 36 – 42 - 48 - 60 - 72 |
| Color (Federal Standard 595, color # 14109) | Dark Green |
| Finish | Powder Coated |

**c. Construction.** Construct the ornamental aluminum fence in accordance with subsection 808.03 of the Standard Specifications for Construction, as specified herein and as shown on the plans.

Assemble and install fence components in accordance with the manufacturer’s recommendations.

Ensure fence posts, both end and line, are shop welded to the base plates. Ensure the U-bolts for fencing base plates are accurately positioned in accordance with the plans and firmly held by means of a template. Paint the bolt heads to match the finish of the fence.

Shop weld aluminum in accordance with *AWS D1.2* and as specified in the contract. Field welding is prohibited.

Repair any painted surface that has been damaged during shipping or assembly in accordance with the manufacturer’s recommendations.

Submit working drawings to the Engineer for review and approval, not less than 14 calendar days prior to fabrication.

**d. Measurement and Payment.** The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

**Pay Item Pay Unit**

Fence, Ornamental Aluminum, \_\_ inch Foot

**Fence, Ornamental Aluminum, \_\_ inch** will be measured along the centerline of the fence. The price includes all appurtenances for furnishing, fabricating and installing the **Fence, Ornamental Aluminum, \_\_ inch** complete and in place including aluminum base plates, bolts, nuts, washers, elastomeric pads and all hardware required for erection. This work also includes furnishing and installing handrails when shown on the plans.