SECTION 10 14 00 SIGNAGE - ELECTRONIC MESSAGE BOARD

PART 1 - GENERAL

1.1 DESCRIPTION

A. This section specifies exterior medical center identification signs, building identification sign.

1.2 RELATED WORK

1.3 MANUFACTURER'S QUALIFICATIONS

Sign manufacturer shall provide evidence that they regularly and presently manufactures signs similar to those specified in this section as one of their principal products.

1.4 SUBMITTALS

- A. Submit in accordance with Section 01 33 00, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.
- B. Manufacturer's Literature:
 - 1. Showing the methods and procedures proposed for the concealed anchorage of the signage system to each surface type.
 - Manufacturer's printed specifications, anchorage details, installation and maintenance instructions.
- C. Shop Drawings: Scaled for manufacture and fabrication of sign types. Identify materials, show joints, welds, anchorage, accessory items, mounting and finishes.

1.5 DELIVERY AND STORAGE

- A. Deliver materials to job in manufacturer's original sealed containers with brand name marked thereon. Protect materials from damage.
- B. Package to prevent damage or deterioration during shipment, handling, storage and installation. Maintain protective covering in place and in good repair until removal is necessary.
- C. Deliver signs only when the site and mounting services are ready for installation work to proceed.
- D. Store products in dry condition inside enclosed facilities.

1.6 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. American Society for Testing and Materials (ASTM):

B209-07......Aluminum and Aluminum-Alloy Sheet and Plate
B221-08.....Aluminum and Aluminum-Alloy Extruded Bars,
Rods, Wire, Shapes, and tubes.

C. Federal Specifications (Fed Spec):

MIL-PRF-8184F......Plastic Sheet, Acrylic, Modified.

MIL-P-46144C.....Plastic Sheet, Polycarbonate

PART 2 - PRODUCTS

2.1 PRODUCTS

- A. Basis of Design: Watch Fire 12 mm color LED sign.
- B. Fully encapsulated modules provide high durability and weather resistance.
- C. Through-hole LED construction to maximize image clarity and lengthen LED life.
- D. Tight pixel pitch for superior image quality and high resolution for close-range viewing and slower traffic speeds.
- E. High-efficiency components to deliver eye-catching brightness while reducing operating costs to maximize return on investment.
- F. Vivid colors to produce true-to-life images on every XVS and W series sign.
- G. XVS advantage is an available option, providing live video capability, multi-channel data, whole-sign calibration and Automated Sign Diagnostics.
- H. Beveled module edges offer near-seamless installation, even around curves.
- I. Unit encapsulates every LED module in a bed of silicone gel for superior weather resistance.
- J. Cabinets are rated for temperatures ranging from $-40^{\circ}F$ to $185^{\circ}F$. The electronics are rated from $-40^{\circ}F$ to $185^{\circ}F$.
- K. Extruded aluminum, precision-mitered corners, solid welds and stainless steel fasteners.
- L. Average energy use shall equal about 1/3 of the maximum amperage requirement.
- ${\tt M.}$ UL48 and CUL 48 listed and UL energy efficiency Certified.
- N. Provide following features:
 - 1. Pixel Pitch is 12.7 mm
 - 2. Pixel Configuration is true pixel, 1R, 1G, 1B
 - 3. Character Height is 3.5" or larger.

- 4. Module Dimensions (HxW) are 12" x 12"
- 5. Matrix Configuration is 24x24 pixels
- 6. LED lifetime (50% brightness) is 100,000 hours.
- 7. Color Capability is 73.7 quintillion
- 8. Viewing Angle is 140° horizontal x 70° vertical.
- 9. Video Frame Rate is up to 60/frames second
- 10. Field-Adjustable Brightness is up to 10,000 NITS.
- 11. Power is 120 or 240 volt single phase 60Hz
- 12. Communications Options: RWF, High Security Radio, broadband wireless & DSL, FiberCom, phone control, XVS fiber

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Protect products against damage during field handling and installation. Protect adjacent existing and newly placed construction, landscaping and finishes as necessary to prevent damage during installation. Paint and touch up any exposed fasteners and connecting hardware to match color and finish of surrounding surface.
- B. Mount signs in proper alignment, level and plumb according to the sign location plan and the dimensions given on elevation and sign location drawings. Where otherwise not dimensioned, signs shall be installed where best suited to provide a consistent appearance throughout the project. When exact position, angle, height or location is in doubt, contact Resident Engineer for clarification.
- C. Contractor shall be responsible for all signs that are damaged, lost or stolen while materials are on the job site and up until the completion and final acceptance of the job.
- D. Remove or correct signs or installation work Resident Engineer determines as unsafe or as an unsafe condition.
- E. At completion of sign installation, clean exposed sign surfaces. Clean and repair any adjoining surfaces and landscaping that became soiled or damaged as a result of installation of signs.
- F. Locate signs as shown on the Plans.
- G. Furnish inserts and anchoring devices which must be set in concrete or other material for installation of signs. Provide setting drawings, templates, instructions and directions for installation of anchorage devices which may involve other trades.