SECTION 13 34 23

FABRICATED STRUCTURES (CASHIER BOOTH)

PART 1 - GENERAL

1.1 DESCRIPTION

This section specifies criteria for the pre-fabricated cashier’s booth.

1.2 RELATED WORK

A. Make all connections of electrical wiring: The Electrical Contractor will provide conduit and power wiring that is shown on the reference documents.

B. Coordinate the precise location of stubs and note any changes from the reference drawings.

C. Parking Control Equipment: section 11 12 00

1.3 SUBMITTALS

A. Shop Drawings: Detail the construction and layout of each booth.

B. Samples: Standard color samples for selection of booth color.

C. Record drawings: After booth installation.

D. Maintenance Manuals: One hard copy and one electronic PDF copy.

E. Provide those responsible for related Work with:

1. Installation diagrams and details.
2. Templates for setting booths.
3. Electrical installation requirements.

1.4 QUALITY ASSURANCE

A. Installation Observations: Owner and/or Engineer/Architect may observe booth installation work at any time during progress of Work.

B. Installer Qualifications: Use all journeyman workers experienced in installation of booths.

C. Manufacturer Qualifications: Company that has successfully produced booths for minimum of five years.

D. Comply with all local codes and standards.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver equipment to site packaged to prevent damage and marked for easy identification.

B. Store equipment in original containers in clean, dry location designated by General Contractor and Owner. Replace damaged materials at no cost to Owner.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. The following manufacturers provide booths that meet or exceed the requirements stated in this specification. They are listed to provide a benchmark for other manufacturers that may wish to bid their products.

1. B.I.G. Enterprises.
2. Delta Scientific.
3. Austin Mohawk and Company.
4. Mardan Fabricators.
5. Par-Kut.
6. Porta-King.
7. Steelhut.
8. Starrco (provides aluminum only).
9. Keystone.

2.2 ACCESSIBILITY

A. Type R booths: Meet the requirements of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and the Texas Accessibility Standards, including the following specific references.

1. Meet the requirements of ADA section 203.9 Employee Work Areas including an accessible route for employees with disabilities to approach, enter and exit the booth.
2. Provide one swing door opposite primary work shelf that meets ADA section 404, including 404.2.3 Clear Width, 404.2.4 Maneuvering Clearances, 404.2.5 Thresholds, 404.2.7 Door and Gate Hardware, 404.2.8 Closing Speed, 404.2.9 Opening Force, 404.2.10 and 404.2.11 Vision Lights.
3. Meet the requirements for fully accessible workstation inside the booth, including the following ADA sections:

    a. 304, Turning Space
    b. 305, Clear Floor or Ground Space
    c. 306, Knee and Toe Clearance
    d. 307, Protruding Objects
    e. 308, Reach Ranges
    f. 309, Operable Parts

2.3 STRUCTURE

A. Subject to the project requirements provide booth meeting one of the following systems:

1. Galvanized hot-rolled steel

    a. 14 gage minimum for roof and walls.
    b. 12 gage minimum tread plate for floor.
    c. 18 gage minimum interior trim.
    d. Factory paint all steel surfaces with 1 coat of rust inhibitor primer.
    e. Electrostatically paint all exposed steel surfaces with 1 finish coat of industrial enamel.

2. Aluminum alloy 6063T6, anodized 204R1 with corrosion proof mechanical fasteners. Exterior wall panels shall be anodized diamond embossed aluminum. Interior surfaces shall be simulated wood grain. Floor shall be aluminum tread plate integral to structure.

B. Provide exterior-type roof structure with 3 inch (76mm) overhang.

C. Insulate ceiling to provide a minimum R factor of 17; insulate walls and floors to provide a minimum R factor of 14.

D. Furnish booth with four heavy angle brackets for anchoring booth in place.

E. Equip all doors with key tumbler locks.

2.4 SHELVES

A. Provide a primary work counter for fee computer 24 inches (600mm) deep by booth width and adjustable in height.

B. For type R booths provide an 8 inch (200 mm) deep shelf opposite to cashier window.

C. Mount non-adjustable shelves minimum 27 inches (685mm) clear above finished floor.

D. Provide a laminate (Formica or equal) finish on top surface and exposed side edges.

2.5 WINDOWS AND GLAZING

A. Equip all booths with a sliding glass window on the drive lane side of the booth. Locate cashier windowsill height no less than 3 feet 0 inches (914 mm) and no more than 3 feet 6 inches (1066mm) above drive lane surface.

B. Sliding windows: Lockable anodized aluminum frame with 0.25 inch (6mm) thick safety glass.

C. Fixed windows in flat walls and doors: Mitered and glazed with 0.25 inch (6mm) thick safety insulated glass.

D. Curved windows: Glazed with 0.1875 inch (4.7mm) thick clear polycarbonate, heat formed in places. Provide removable interior glazing stops for replacement glazing.

E. Provide smoke gray tinted glazing with light transmittal rating of 41% for booths located outside the parking structure.

2.6 HEATING AND COOLING UNITS

A. Provide wall mounted air conditioner.

B. Provide heating unit mounted beneath counter.

C. Size heating and air conditioning units to efficiently maintain interior booth temperature between 65 and 75° F (18 and 24° C).

D. Provide a thermostat to control heating and cooling units.

2.7 ELECTRICAL REQUIREMENTS

A. Provide 120/240 volt, single phase, 3 wire, 60 Hz, 100 amp, key-lockable, load center with 2-115 volt convenience outlets. Provide separate dedicated circuit for fee computer. Provide circuit breakers. Provide 4 keys for each load center.

B. Provide enclosed fluorescent fixture that produces 75 fc (800 lux) illuminance on the task surface. Use 0° F (-17°C) electronic ballast and a minimum of two F32-T8 lamps for this fixture. Wire fixture to be controlled by a wall switch.

C. Use thin-wall EMT conduit to contain all wiring.

D. Prewire booth prior to delivery.

E. Use tamperproof screws and bolts for all connections of conduit, electrical boxes, panels, etc.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine the site prior to the manufacture of booth to determine if any field conditions exist which would interfere with the fabrication or installation of booths as specified herein, including but not limited to construction of islands, electrical stubs, anchor bolt locations, ceiling heights, roof structures, and roof mounted equipment.

3.2 INSTALLATION

A. Install booths in accordance with manufacturer's recommendations and approved Shop Drawings.

B. Set booth such that the floor of the booth is at the same elevation as the maneuvering clearance area (also called latch-side landing) immediately outside any door required to meet ADA section 404.

1. For doors that do not open to drive lane, place booth so that interior floor is at same elevation as top of island, with an accessible route meeting ADA Chapter 3 to the door. Conform to ADA section 405 for all curb ramps provided for this purpose.

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