SECTION 11134

PROJECTION SCREENS

PART 1 - GENERAL

1.01 DESCRIPTION

A. This Section describes the requirements for furnishing and installing the following:

1. Electrically operated front projection screens.

2. Ceiling-mounted projector mounting brackets.

B. Related Sections:

1. Owner-purchased items are specified in Section 11001.

2. Electrical wiring and installation of remote control switches for electrically operated screens is specified in Division 16.

1.02 SUBMITTALS

A. Product Data: Manufacturer's specifications and installation instructions for each type of projection screen.

1. Include wiring diagrams for electrically operated screens.

B. Shop Drawings: Show location of screen centerline, location of wiring connections, seams in viewing surfaces, connections to suspension systems for pendant-mounted and recess-mounted screens, anchorage details, and accessories.

1.03 QUALITY ASSURANCE

A. Provide each type of projection screen as a complete unit produced by a single manufacturer, including necessary mounting brackets, accessories, fitting, and fastenings.

B. Coordinate layout and installation of projection screens with other construction supported by, or penetrating through, ceilings, including light fixtures, HVAC equipment, fire-suppression system, and partitions.

1.04 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Do not deliver projection screens until building is enclosed and ready for screen installation. Protect screens from damage during delivery, handling, storage, and installation.

PART 2 - PRODUCTS

2.01 ELECTRICALLY OPERATED PROJECTION SCREENS

A. Approved Manufacturers: Da-Lite Screen Co., Inc. "Boardroom Electrol", Draper Shade & Screen Co., Inc. "Envoy" or approved equal.

B. General: Provide manufacturer's standard UL-listed and marked units consisting of case,

screen, motor, controls, mounting accessories and other components required.

C. Screen Surface: Matte white with minimum gain characteristics complying with FS GG-S-00172D(1) for Type A screen surface.

D. Screen Size: 10-feet wide x 8-feet high unless otherwise indicated.

E. Edge Treatment: Without black masking borders.

F. Screen Controls: Three position, UL-listed single station control with box and cover plate for flush wall mounting and connection to 120-VAC power supply.

G. Motor: Ball bearings oiled for life, with automatic thermal overload cutout and integral interlocking gears.

1. Power: 120-VAC, 60-Hz, three wire quick reversal motor.

2. Limit Switches: Provide pre-set, accessible limit switches to automatically stop screen fabric in "up" and "down" positions; stop action shall be positive to prevent damage to screen coating.

H. Roller: Rigid metal roller mounted on two cast aluminum brackets equipped with self-aligning bearings.

I. Case: Enclose viewing surface in case with double top for extra rigidity and sound deadening. Line motor compartment with metal. Finish case with prime paint coat.

1. Provide heavy metal brackets for mounting.

2. Design for concealed overhead mounting with automatic closure, mounted to allow closure panel to be adjacent to finished ceiling.

3. Service access shall be provided by a second hinged door with manual operation.

2.02 CEILING MOUNTED PROJECTOR MOUNTING BRACKETS

A. Fabricate from metal fabrication shapes to configurations indicated.

B. Finish brackets with field-applied paint finish specified in Section 09900.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Install projection screens and accessories in accordance with manufacturer's instructions.

B. Install projection screens with screen cases securely anchored to supporting substrate, in a manner that produces a smoothly operating screen with plumb and straight vertical edges and plumb and flat viewing surfaces when lowered. Bottom of screen case doors shall be flush with adjacent ceiling finish.

C. Test electrically-operated units to verify that screen, controls, limit switches, closure and other operating components are functioning properly.

3.02 PROTECTION AND CLEANING

A. Protect projection screens after installation from damage. If damage occurs, remove and replace or restore to original undamaged condition.

END OF SECTION

SECTION 11150

PARKING CONTROL EQUIPMENT

PART 1 - GENERAL

1.01 DESCRIPTION

A. This Section includes the following types of parking control equipment:

1. Vehicle detectors.

B. Related Sections:

1. Gates and gate operators are specified in Section 02827.

2. Overhead coiling doors are specified in Section 08333.

3. Lock boxes are specified in Section 11027.

1.02 SUBMITTALS

A. Product Data: Manufacturer's product data, specifications, installation, and maintenance instructions for each type of parking equipment required.

B. Shop Drawings: Include plans, elevations, and details of typical members and other components. Show layout and installation details, including anchorage details.

C. Maintenance Instructions: Provide manufacturer's instructions for maintenance of parking control equipment. Include recommended methods and frequency for maintaining equipment in optimum operating condition under anticipated traffic and use conditions. Include precautions against materials and methods that may be detrimental to finishes and performance.

1.03 QUALITY ASSURANCE

A. Manufacturer: Regularly providing equipment of the type specified for not less than 5-years, and maintaining repair and emergency services within 48-hours after service is requested.

B. Installer: Authorized representative of equipment manufacturer.

1. Installer shall furnish maintenance and call-back service following installation and for duration of the one-year warranty period.

2. Service shall consist of examination of equipment, adjustments, supplies, and parts required to keep equipment in proper operation, except such adjustments, parts, or repairs made necessary by abuse, misuse, or any other causes beyond manufacturer's or installer's control.

3. Service shall be done by trained employees during regular working hours.

4. Emergency service shall be available when called for, at additional cost, except where attributable to faulty materials or equipment.

C. UL and NEMA Compliance: Provide internal electrical components required as part of parking control equipment that are listed and labeled by UL and comply with NEMA standards.

1.04 COORDINATION

A. Furnish to jobsite wiring diagram and layouts necessary for properly locating service conduit stubouts.

B. Install below-grade and embedded portions of the work in advance of construction of curbs, walks, and pavement.

PART 2 - PRODUCTS

2.01 APPROVED MANUFACTURERS

A. American Parking Equipment, Cincinnati Time, Federal APD, Stanley Parking Systems, Division of the Stanley Works or approved equal.

2.02 VEHICLE DETECTOR

A. Provide solid state, electronic vehicle detector units designed to detect the presence or transit of a vehicle over an embedded loop of wire and emit an electrical pulse to open or close the swinging gate. Provide a 3-position sensitivity switch and detection indicator light on the front control panel.

B. Provide detector loops consisting of multiple strands of wire of the gauge, number of turns, size, and method of placement as recommended by the parking equipment manufacturer.

PART 3 - EXECUTION

3.01 PREPARATION

A. Furnish templates for anchor bolts and other items encased ion concrete or below finished surfaces in sufficient time so as not to delay the work.

3.02 INSTALLATION

A. Install parking equipment in accordance with the manufacturer's instructions and placement drawings.

1. Coordinate placement of anchors and accessories encased in concrete with Division 3 Sections.

3.03 DEMONSTRATION

A. Instruct Owner's personnel in the proper operation and maintenance of parking control equipment. Train the personnel in procedures to follow in the event of operational failures or malfunctions.

3.04 CLEANING

A. After installation, clean finished surfaces. Touch up damaged shop-applied finishes as required to restore damaged areas.

3.05 SCHEDULE OF EQUIPMENT BY LANES

A. Sliding Gates and Overhead Coiling Doors:

1. Ingress: Hand-held transmitter specified in Section 02827 and Section 08333 to open sliding gate and overhead coiling door, and vehicle detector loop to close sliding gate and overhead coiling door. Hand-held transmitters will be on the same frequency.

2. Egress: Vehicle detector loop to open and close sliding gate and overhead coiling door.

END OF SECTION