

SECTION 11 12 00 - PARKING CONTROL EQUIPMENT

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Parking access controls.
 - 1. Barrier gate operators.
 - 2. Access control.

1.02 REFERENCE STANDARDS

- A. ASTM F2200 - Standard Specification for Automated Vehicular Gate Construction; 2020.
- B. IEC 60950-1 - Information Technology Equipment – Safety - Part 1: General Requirements; 2005, with Amendments (2013).
- C. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum); 2018.
- D. UL 325 - Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems; Current Edition, Including All Revisions.

1.03 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on operating equipment, characteristics, limitations, and temperature range of operation.
- C. Shop Drawings: Indicate plan layout of equipment access lanes, curbing, mounting bolt dimensions, conduit and outlet locations, power requirements, and wiring diagrams.
- D. Warranty Documentation: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

1.04 QUALITY ASSURANCE

1.05 WARRANTY

- A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a five year period after Date of Substantial Completion.
- C. Provide five year manufacturer warranty for operating equipment.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Parking Control Equipment:
 - 1. LifMaster; HDSW24UL; www.liftmaster.com.
 - 2. Substitutions: See Section 01 60 00 - Product Requirements.

2.02 DESCRIPTION

- A. Parking Control System: Automatic operation at entrance.
- B. Provide protection against interference or damage by lightning or other electrical influences; include fuse, over-voltage protection, flash-over protection, and line filter.
- C. Entry: Automatic parking access control system is activated upon use of web-base application or remote operator..

2.03 PERFORMANCE CRITERIA

- A. Operating Temperature: Minus 20 to 140 degrees F (Minus 29 to 60 degrees C).
- B. Rating: IEC 60950-1 under NEMA 250.

2.04 PARKING ENTRY/EXIT COMPONENTS

- A. Barrier Gate - Entry Control: Provide equipment listed and labeled in compliance with UL 325 safety standards of gate operators and ASTM F2200 construction standards.

1. Classification: Class II - Commercial/General Access, for vehicular gate operators with barrier gate access controls complying with UL 325.
2. Type of Gate: Vehicular horizontal swing gates.
3. Operation: Gear driven.
4. Controls: Mechanism in compliance with UL 325 safety standards of gate operators, with cadmium coated steel components to move gate by instant reversing electric motor, enclosed speed reducer operated by self contained, plug-in replaceable controller with slip clutch, and to permit manual operation and gate movement to stop and start at reduced speed if required.
 - a. Activate automatic gate reversing switch if an obstacle is sensed while gate is in motion.
 - b. Maintain gate in open position until vehicle clears control area.
 - c. Internet connectivity: MyQ technology with 50 channel FHSS.
 - d. Radio receiver: Security+ 2.0 technology.
 - e. Monitored retro reflective photo eye.
5. Control Cabinets: Steel, at least 14 gauge, 0.075 inch (1.9 mm) thick, with weather-tight seams and gaskets; thermally insulated to permit heater to maintain cabinet temperature to equipment operating minimum, flush access doors and panels, tamper proof hardware, master keyed locks, and concealed mounting bolts located inside of units.
6. Barrier Gate Material: As indicated on drawings with smooth bottom edge free of protrusions and openings of 2-1/4 inch (57 mm) or less in size.
7. Control Mounting:
 - a. Provide concrete mounting pad per manufacturer's recommendation.
8. Fail-Safe Operation: Upon loss of primary electrical power, system automatically transfers to fail-safe mode allowing barrier gate to be manually pushed open without special knowledge, keys or releasing mechanisms.

2.05 VEHICLE DETECTION

- A. Vehicle Detection: For use in temperature range of minus 40 to 160 degrees F (minus 40 to 71 degrees C); consisting of detection unit in conjunction with sensing loop to activate access control device when vehicle enters or exits.
- B. Sensing Loop: 14 gauge, 0.064 inch (1.63 mm) insulated wire; loop size of 48 by 72 inches (1219 by 1829 mm), with loop extension cable and detector.
 1. Loop Groove Fill: Cold poured rubberized asphalt emulsion.

2.06 ACCESSORIES

PART 3 EXECUTION

3.01 EXAMINATION

3.02 INSTALLATION

- A. Install parking control system and components in accordance with manufacturer's instructions and in compliance with requirements.
- B. Cut grooves in pavement surface, install vehicle detection loops and lead-in wires, and fill grooves with loop filler.
- C. Install internal electrical wiring, conduit, junction boxes, transformers, circuit breakers, and auxiliary components as required.

3.03 ADJUSTING

- A. Adjust system components for smooth operation.

END OF SECTION 11 12 00

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