

Appleton International Airport
Request for Bid – Elevator Modernization
Exhibit A – Scope of Work

Existing Elevator Specifications

- Manufacturer: Dover
- Capacity - 2,000 lbs
- Speed – 95 feet per minute
- Stops – 2, with 13' 4" between floors and one opening per landing

Elevator Operation Upgrade Requirements

- New automatic self-leveling, which will bring the elevator car level with the flooring landings + ¼" regardless of direction of travel.
- New Special Emergency Service operation in compliance with the latest applicable revision of the ASME/ANSI A17.1 Code. Special Emergency Service Phase I to return the elevator non-stop to a designated floor shall be initiated by an elevator smoke detector system. The smoke detector system shall be furnished by the Airport and the elevator vendor will provide contacts on the elevator controller to receive signals from the smoke detector system.
- New independent service. When the switch is actuated, it shall cancel previously registered car calls, disconnect the elevator from the hall buttons, and allow operation from the car buttons only. Door operation shall occur only after actuation of the "Door Close" button.
- New inspection operation, which will have an enabling keyswitch in the car operating panel to permit operation of the elevator from on top of the car and to make car and hall buttons inoperative.
- Hoistway Access Switch will be provided in the car operating panel to render all car and hall buttons inoperative and to permit operation of the elevator by means of an access keyswitch adjacent to the hoistway entrance at the access landing.

Elevator Machine Room Upgrade Requirements

- The existing power supply is 208V 60HZ and will be retained with the new equipment.
- New controller based on HydroAcces control system shall be used to perform all the functions of safe elevator motion and elevator door control. This shall include all the hardware required to connect, transfer and interrupt power, and protect the motor against overloading. The system shall also perform group operational control.
- New solid state-soft starter which is the same power requirement and starting configuration as existing.
- New pump motor which is the same power characteristics and starting configuration as existing.

- New submersible power unit which consists of a positive displacement pump, motor, integral 4-coil control valve, oil tank and muffler. The pump and motor are submerged and are mounted to the tank with rubber isolators to reduce vibration and noise.
- New integral 4-coil valve to replace existing. The valve consists of up, up leveling, down and down leveling controls along with manual lowering and a pressure relief valve.

Elevator Door Equipment Upgrades

- New closed loop door operator. This system shall continually monitor door speed and position and adjusts it accordingly to match the pre-determined profile.
- New solid state, infrared passenger protection device on the car door. Elevator doors shall be provided with a reopening device that will stop and reopen the car doors and hoistway doors automatically should the doors become obstructed by an object or person.
- Inspect current car door tracks and hangers for proper alignment. Adjust if necessary.
- New hoistway door restrictors.

Elevator Hoistway Equipment Upgrades

- New emergency spot switch which shall be located in the pit accessible from the pit access door.
- New Access Alert system which will be installed so the elevator can be controlled in a safe manner when an authorized person access the elevator hoistway. This provides a constant, noticeable reminder to anyone accessing the hoistway that they need to engage the stop switch before starting work.

Elevator Car Fixture Upgrades

- New applied car operating panel which features mechanical illuminated buttons marked to correspond with the landings served, an emergency call button, emergency stop button, door open and door close buttons and a light switch. All buttons shall be long life LED illumination. The panel shall also have a button that will initiate two-way communication between the car and a location inside the building, switching over to another location if the call is unanswered.
- New emergency car lighting which also provides the current to the alarm bell in the event of a normal power failure. This equipment shall comply with the requirements of the latest applicable revision of the ASME/ANSI A17.1 code.
- New audible announcement which will announce the name of the next selected landing at which the elevator will stop and the committed direction of travel. Several advisory messages shall also be available to indicate the need for elevator on special service or passenger delay of elevator.
- New “in car” direction lanterns which shall be mounted in the car entrance jamb, visible from the corridor, which when the car stops and the doors are opening shall indicate the direction the car is traveling. Also a chime shall sound once if the car is going up and twice if the car is going down.

Hall Fixture Upgrades

- New hall button shall be installed at each landing. An up button and a down button at each intermediate landing and a single button at each terminal landing shall be installed. All buttons shall be long life LED illumination.