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ADDENDUM # 001
August 3, 2005

To: Plans and Specifications For:

Missouri Department of Transportation – " District 4 - Replacement of Overhead Doors, Various Locations"

Section 08360 – SECTIONAL OVERHEAD DOOR is replaced in its entirety as follows. All other terms and conditions remain unchanged.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Electric overhead sectional door.
- B. Operating hardware, supports and controls.

1.2 RELATED SECTIONS

- A. Section 05500 - Metal Fabrications: Steel channel opening frame.
- B. Section 08710 - Door Hardware: Cylinder locks.
- D. Section 16100 – Electrical: Wiring.

1.3 REFERENCES

- A. ANSI A216.1 - Sectional Overhead Type Door (NAGDM 102).
- B. ASTM A526/A526M - Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Commercial Quality.
- C. NEMA MG 1 - Motors and Generators.
- D. NFPA 70 - National Electrical Code. Conform to BOCA code for motor and motor control requirements. Listed and classified by Underwriters Laboratories, Inc.

1.4 SYSTEM DESCRIPTION

- A. Panels: Insulated with glazed panels.
- B. Lift Type: Standard lift or High lift operating style with track and hardware as detailed on plans.
- C. Operation: Electric.
- D. Loads: Design and size components to withstand dead and live loads caused by pressure and suction of wind acting normal to plane of wall as calculated in accordance with ANSI/DASMA 102-1996.

1.5 SUBMITTALS FOR REVIEW

- A. Section 01300 - Submittals: Procedures for submittals.
- B. Shop Drawings: Indicate opening dimensions and required tolerances, connection details, anchorage spacing, hardware locations and installation details.
- C. Product Data: Provide component construction, anchorage method and hardware.
- D. Samples: Submit two exterior and interior panel finish samples, 18 x 18 inches in size, illustrating color and finish.

1.6 SUBMITTALS AT PROJECT CLOSEOUT

- A. Section 01700 - Operation and Maintenance Data: Procedures for submittals.
- B. Operation Data: Include electrical control adjustments.
- C. Maintenance Data: Include data for motor and transmission, shaft and gearing, lubrication frequency, spare part sources.
- D. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

1.7 QUALITY ASSURANCE

- A. Perform Work in accordance with ANSI A216.1, Application Type: Industrial. Maintain one copy on site.
- B. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with minimum three years experience.
- C. Installer: Company specializing in performing the work of this section and approved by manufacturer.

1.8 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials and products in labeled protective packages. Store and handle in strict compliance with manufacturer's instructions and recommendations. Protect from damage from weather, excessive temperatures and construction operations.

1.9 WARRANTY

- A. Section 01700 - Warranties.
- B. Correct defective Work within a one-year period after Date of Substantial Completion.
- C. Warranty: Include coverage for electric motor and transmission.
- D. Provide a one-year manufacturer warranty for electric operating equipment.

PART 2 PRODUCTS

2.1 SECTIONAL OVERHEAD DOORS

- A. Provide standard sectional overhead doors of the dimensions and arrangements shown on the drawings, and with the following attributes
1. Design wind load: Comply with ANSI/DASMA 102-1996, the minimum wind load shall be 80 mph (20 lb/sq. ft.) acting inward or outward. Deflection of door in the horizontal position will not exceed 1/120 of the door width.
 2. Door sections: Steel sandwich construction, 1-3/4" minimum thick. Exterior section skin to be constructed of 25 gauge (.018 minimum steel thickness) and interior skin to be 26 gauge (.013 minimum steel thickness) hot-dipped galvanized (G60) steel in compliance with ASTM A 924 and ASTM A 653, with urethane foam insulated core. Hinge reinforcement strips shall be minimum 20 gauge galvanized steel, located within section interior at every hinge location. End stiles to be 16 gauge galvanized steel.
 3. Glass openings: Locations to comply with door schedule drawings. 34" x 16" +/- square window encased in a two-piece black interior and exterior frame. Glass consisting of two panes of 1/8 inch thick DSB glass.
 4. Track and Hardware:
 - a. Tracks shall be 2" wide Hot-dipped galvanized steel (ASTM A-653), mounted by continuous galvanized steel angle fully adjustable for adequate sealing of door to jamb or weather seal.
 - b. Aircraft-type, galvanized steel lift cables shall have a safety factor of 8 to 1.
 - c. Roller shall be full-floating ball bearings with hardened steel racers.
 - d. Hinges and fixtures will be G60 galvanized steel complying with ASTM A 36 and ASTM A 123.
 - e. Counterbalance shall be oil-tempered helical wound torsion springs complying with ASTM A 229, mounted on a ball bearing cross header shaft engineered to comply with ANSI/DASMA 102-1996.
 - f. Provide interior side locking device, which with a slide bar extends through the left and right side tracks.
 - g. Springs: Springs will be 25,000 cycles.
 5. Finish: Provide the manufacturer's standard pre-finish system in color as selected below.
 6. Insulation: Injected or form-in-place minimum 1 3/4" urethane free of CFCs and HCFCs. The insulation will have a minimum R-Value of 14.0, U-Value of .071, complying with ASTM E 84 flame-spread and smoke-developed.
 7. Electric Sensing Edge: Provide for each door. Provide safety edges equal to Air Wave, Miller Edge, Model number AW14K500 with coil cord, extending the full width of the door. Upon contact with an obstruction the downward travel of the door shall be stopped or reversed.
 8. Weather strip
 - a. Between sections will be PVC or EPDM rubber tube seals fitted every joint to resist infiltration and provide a tight fit, complying with ASTM E 283. Bottom weather strip will be U-shaped astragal fastened to the bottom of the door with an extruded aluminum holder for an effective seal at the sill.
 - b. Perimeter Seal: Provide complete weather stripping system to reduce air infiltration. Weather stripping shall be replaceable without removal of track, mounting hardware, or door hardware.
 - c. Header seal on top section to prevent airflow above header.

2.2 OTHER MATERIALS

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.
- B. Sheet Steel: ASTM A526/A526M galvanized to G60, pre-coated with silicone polyester finish, plain surface.
- C. Exterior Surfaces: Factory painted. (White)
- D. Interior Surfaces: Factory painted. (White)

PART 3 EXECUTION

3.1 EXAMINATION

- A. Section 01039 - Coordination and Meetings: Verification of existing conditions before starting work.
- B. Verify that wall openings are ready to receive work and opening dimensions and tolerances are within specified limits.
- C. Verify that electric power is available and of the correct characteristics.

3.2 PREPARATION

- A. Prepare opening to permit correct installation of door unit to perimeter air and vapor barrier seal.

3.3 INSTALLATION

- A. Install door unit assembly in accordance with manufacturer's instructions.
- B. Anchor assembly to wall construction and building framing without distortion or stress.
- C. Securely brace door tracks suspended from structure. Secure tracks to structural members only.
- D. Fit and align door assembly including hardware.
- E. Coordinate installation of electrical service, power and control wiring by electrical contractor from disconnect to unit components.
- F. Coordinate installation of sealants and backing materials at frame perimeter as specified in Section 07900.
- G. Install perimeter trim and closures.

3.4 ERECTION TOLERANCES

- A. Section 01400 - Quality Assurance: Tolerances.
- B. Maximum Variation from Plumb: 1/16 inch.
- C. Maximum Variation from Level: 1/16 inch.
- D. Longitudinal or Diagonal Warp: Plus or minus 1/8 inch from 10 ft straight edge.
- E. Maintain dimensional tolerances and alignment with adjacent work.

3.5 MANUFACTURER'S FIELD SERVICES

- A. Section 01650 - Starting of Systems: Prepare and start systems.
- B. Ensure the operation and adjustments to door assembly for specified operation.

3.6 ADJUSTING

- A. Section 01650 - Starting of Systems: Adjusting installed work.
- B. Adjust door assembly to smooth operation and in full contact with weather stripping.

3.7 CLEANING

- A. Section 01700 - Contract Closeout: Cleaning installed work.
- B. Clean doors, frames and glass.
- C. Remove temporary labels and visible markings.

3.8 PROTECTION OF FINISHED WORK

- A. Section 01700 - Contract Closeout: Protecting installed work.
- B. Do not permit construction traffic through overhead door openings after adjustment and cleaning.

END OF SECTION