

**ADDENDUM #3 – May 31, 2016**

**WEST VIRGINIA PARKWAYS AUTHORITY**

**PLANS, SPECIFICATIONS, AND CONTRACT DOCUMENTS  
FOR**

**CONTRACT NO: SA-1-16  
REST AREA FACILITIES MILEPOST 69**

**Please incorporate the attached Addendum #3, dated May 31, 2016 as part of the contract documents.**

WEST VIRGINIA PARKWAYS AUTHORITY

A handwritten signature in blue ink that reads "Gregory C. Barr". The signature is written in a cursive style with a large initial 'G'.

Gregory C. Barr  
General Manager

May 31, 2016

## ADDENDUM NO. 3

RE: Mile Marker Sixty Nine Rest Area  
For The West Virginia Parkway Authority I-64 East  
Architect's Project No. 1547

TO: Prospective Bidders

FROM: ZMM, Inc. Architects and Engineers

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents.

**ATTACH THIS ADDENDUM TO THE FRONT COVER OF THE PROJECT MANUAL AND ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE BID FORM.**

### PART 1 - CLARIFICATIONS

A. Refer to the following documents as attached to this Addendum:

1. Request for Information and Responses dated 05/31/16

### PART 2 - CHANGE TO SPECIFICATIONS:

A. Section 074646 "Fiber Cement Siding" - Make the following revisions:

1. REVISE Line 1.1.A.1 to read: "Lap siding for 30 years.
2. REVISE Line 2.2.G to read: "Primer and finish coatings are to be factory-applied. Reference Section 099113 'Exterior Painting' for coating requirements.

B. ADD Section 087113 "Automatic Door Operators" as attached to this Addendum.

C. Section 099123 "Interior Painting" - Make the following revisions:

1. ADD Paragraph 1.2.B to read as follows:

"Paint exposed surfaces, except where these Specifications indicate that the surface or material is not to be painted or is to remain natural. If an item or a surface is not specifically mentioned, paint the item or surface the same as similar adjacent materials or surfaces. If a color of finish is not indicated, Architect will select from standard colors and finishes available."

2. ADD paragraph 3.3.E to read as follows:

Painting Fire Suppression, Plumbing, HVAC, Electrical, Communication, and Electronic Safety and Security Work: Paint the following work where exposed in equipment rooms:

- a. Equipment, including panel boards
- b. Uninsulated metal piping.
- c. Uninsulated plastic piping.
- d. Pipe hangers and supports.
- e. Metal conduit.
- f. Plastic conduit.
- g. Tanks that do not have factory-applied final finishes.
- h. Duct, equipment, and pipe insulation having cotton or canvas insulation covering or other paintable jacket material.
- i. Other items as directed by Architect.
- j. Paint portions of internal surfaces of metal ducts, without liner, behind air inlets and outlets that are visible from occupied spaces.

**PART 3 - CHANGES TO DRAWINGS**

A. Drawing No. A510 - Door Schedule: Door Hardware Sets are assigned to numbered doors as follows:

1	A1	
2	A1	Include Automatic Door Operator This Opening Only
3	4	
4	5	
5	4	
6	1	
7	1	
8	2	
9	1	
10	6	
11	2	
12	3	
13	5	
14	4	

B. Drawing No. E151: Make the following revisions:

1. ADD an ADA automated door operator and pushbutton stations to door #2 located in Lobby 101 to control the left hand door facing the building.
2. Install an exterior wall mounted ADA pushbutton station right of door #2 mounted on the face of Vending 107 exterior wall.
3. Install the interior wall mounted ADA pushbutton on the wall separating the Women’s Restroom 102 and the interior Lobby 101.
4. Provide 120V circuit to power ADA operator and pushbutton stations.

Attachments: Section 087113 “Automatic Door Operators” ..... 8 pages  
 Request for Information and Responses dated 05/31/16 ..... 1 page

**END OF ADDENDUM**

## SECTION 087113 - AUTOMATIC DOOR OPERATORS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Power door operators for swinging doors.
- B. Related Requirements:
  - 1. Section 084113 "Aluminum Framed Entrances and Storefronts".

#### 1.3 DEFINITIONS

- A. AAADM: American Association of Automatic Door Manufacturers.
- B. Activation Device: A control that, when actuated, sends an electrical signal to the door operator to open the door.
- C. Double-Egress (Doors): A pair of doors that simultaneously swing with the two doors moving in opposite directions with no mullion between them.
- D. Double-Swing (Doors): A pair of doors that swing with the two doors moving in opposite directions with a mullion between them; each door functioning as a single-swing door.
- E. Safety Device: A control that, to avoid injury, prevents a door from opening or closing.
- F. For automatic door terminology, see BHMA A156.10 and BHMA A156.19 for definitions of terms.

#### 1.4 COORDINATION

- A. Coordinate sizes and locations of recesses in concrete floors for recessed control mats that control automatic door operators. Concrete, reinforcement, and formwork requirements are specified elsewhere.
- B. Templates: Distribute for doors, frames, and other work specified to be factory prepared and reinforced for installing automatic door operators.

- C. Coordinate hardware for doors with operators to ensure proper size, thickness, hand, function, and finish.
- D. Electrical System Roughing-in: Coordinate layout and installation of automatic door operators with connections to power supplies.

#### 1.5 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site .

#### 1.6 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for automatic door operators.
  - 2. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties and accessories.
- B. Shop Drawings: For automatic door operators.
  - 1. Include plans, elevations, sections, hardware mounting heights, and attachment details.
  - 2. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
  - 3. Indicate locations of activation and safety devices.
  - 4. Include diagrams for power, signal, and control wiring.

#### 1.7 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer .
- B. Field quality-control reports.
- C. Sample Warranties: For manufacturer's special warranties.

#### 1.8 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For automatic door operators, safety devices, and control systems, to include in maintenance manuals.

#### 1.9 QUALITY ASSURANCE

- A. Installer Qualifications: An authorized representative who is trained and approved by manufacturer for installation and maintenance of units required for this Project.
  - 1. Maintenance Proximity: Not more than two hours' normal travel time from Installer's place of business to Project site.

- B. Certified Inspector Qualifications: Certified by AAADM.

#### 1.10 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of automatic door operators that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Faulty or sporadic operation of automatic door operator, including controls.
    - b. Deterioration of metals, metal finishes, and other materials beyond normal weathering or use.
  - 2. Warranty Period: Two years from date of Substantial Completion.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Besam Entrance Solutions; ASSA ABLOY.
  - 2. DORMA USA, Inc.
  - 3. Horton Automatics; a division of Overhead Door Corporation.
  - 4. LCN; an Allegion brand.
  - 5. SARGENT Manufacturing Company; ASSA ABLOY.
- B. Source Limitations: Obtain automatic door operators, including activation and safety devices, from single source from single manufacturer.

#### 2.2 AUTOMATIC DOOR OPERATORS, GENERAL

- A. General: Provide operators of size recommended by manufacturer for door size, weight, and movement; for condition of exposure; and for long-term, maintenance-free operation under normal traffic load for occupancy type indicated; and according to UL 325. Coordinate operator mechanisms with door operation, hinges, and activation and safety devices.
  - 1. Emergency Breakaway: Where indicated for center-pivoted doors, provide emergency breakaway feature for reverse swing of doors. Equip system to discontinue power to automatic door operator when door is in emergency breakaway position, to return door to closed position after breakaway, and to automatically reset.
  - 2. Wind Load: Provide door operators on exterior doors that will open and close doors and maintain them in fully closed position when subjected to wind load of 90 miles per hour.
- B. Electro hydraulic Operating System: Self-contained, low-pressure unit; with separate cylinders for power and checking, connections for power and activation- and safety-device wiring, and manual operation including spring closing when power is off.

- C. Hinges: See Section 087111 "Door Hardware for hinge type for each door that door operator shall accommodate.
- D. Cover for Surface-Mounted Operators: Fabricated from 0.125-inch- (3.2-mm-) thick, extruded or formed aluminum; manufacturer's standard width ; with enclosed end caps, provision for maintenance access, and fasteners concealed when door is in closed position.
- E. Brackets and Reinforcements: Fabricated from aluminum with nonstaining, nonferrous shims for aligning system components.
- F. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

### 2.3 POWER DOOR OPERATORS

- A. Standard: BHMA A156.10.
- B. Performance Requirements:
  - 1. Opening Force:
    - a. Power-Operated Swinging Doors: Not more than 30 lbf (133 N) required to manually open door if power fails.
  - 2. Entrapment-Prevention Force: Not more than 40 lbf (178 N) required to prevent stopped door in the last 10 degrees of opening from moving in the direction of opening; not more than 30 lbf (133 N) required to prevent stopped door from moving in direction of closing.
- C. Configuration: Operator to control single swinging door.
  - 1. Traffic Pattern: Two way.
  - 2. Operator Mounting: Surface.
- D. Operation: Power opening and power-assisted spring closing. Provide time delay for door to remain open before initiating closing cycle as required by BHMA A156.10.
- E. Operating System: Electro hydraulic.
- F. Microprocessor Control Unit: Solid-state controller.
- G. Features:
  - 1. Adjustable opening and closing speed.
  - 2. Adjustable opening and closing force.
  - 3. Adjustable backcheck.
  - 4. Adjustable hold-open time from zero to 30 seconds.
  - 5. Adjustable time delay.
  - 6. Adjustable acceleration.
  - 7. Adjustable limit switch.
  - 8. Obstruction recycle.
  - 9. Automatic door re-open if stopped while closing.

10. On-off/hold-open switch to control electric power to operator; key operated.

H. Controls: Activation and safety devices according to BHMA standards.

1. Activation Device: Wall surface-mounted push-plate switch on each side of door to activate door operator.
2. Safety Device: Presence sensor mounted on door header to detect pedestrians in presence zone and to prevent door from closing.

I. Exposed Finish: Clear anodic finish matching door and frame.

## 2.4 MATERIALS

A. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.

1. Extrusions: ASTM B 221 (ASTM B 221M).
2. Sheet: ASTM B 209 (ASTM B 209M).

B. Fasteners and Accessories: Corrosion-resistant, nonstaining, nonbleeding fasteners and accessories compatible with adjacent materials.

## 2.5 CONTROLS

A. General: Provide controls, including activation and safety devices, according to BHMA standards; for condition of exposure; and for long-term, maintenance-free operation under normal traffic load for occupancy type indicated. Coordinate activation and safety devices with door operation and door operator mechanisms.

B. Presence Sensors: Self-contained, active-infrared scanner units; adjustable to provide detection field sizes and functions required by BHMA A156.10. Sensors shall remain active at all times.

C. Push-Plate Switch: Momentary-contact door control switch with flat push-plate actuator with contrasting-colored, engraved message.

1. Configuration: Round push plate with 4-by-4-inch (100-by-100-mm) junction box.
  - a. Mounting: Surface mounted on wall.
2. Push-Plate Material: Stainless steel as selected by Architect from manufacturer's full range.
3. Message: International symbol of accessibility and "Push to Open."

D. Electrical Interlocks: Unless units are equipped with self-protecting devices or circuits, provide electrical interlocks to prevent activation of operator when door is locked, latched, or bolted.

## 2.6 FABRICATION

A. Factory fabricate automatic door operators to comply with indicated standards.

- B. Form aluminum shapes before finishing.
- C. Fabricate exterior components to drain condensation and water passing joints within operator enclosure to the exterior.
- D. Use concealed fasteners to greatest extent possible. Where exposed fasteners are required, use countersunk Phillips flat-head machine screws, finished to match operator.
- E. Provide metal cladding, completely covering visible surfaces before shipment to Project site. Fabricate cladding with concealed fasteners and connection devices, with accurately fitted joints with ends coped or mitered to produce hairline joints free of burrs and distortion, and with allowance for thermal expansion at exterior doors.

## 2.7 ACCESSORIES

- A. Signage: As required by cited BHMA standard for type of door and its operation.
  - 1. Application Process: Operator manufacturer's standard process .
  - 2. Provide sign materials with instructions for field application when operators are installed.

## 2.8 GENERAL FINISH REQUIREMENTS

- A. Protect mechanical finishes on exposed surfaces from damage by applying strippable, temporary protective covering before shipping.
- B. Apply anodic finishes to formed metal after fabrication unless otherwise indicated.
- C. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within range of approved Samples and are assembled or installed to minimize contrast.

## 2.9 ALUMINUM FINISHES

- A. Clear Anodic Finish: AAMA 611, AA-M12C22A41, Class I, 0.018 mm or thicker.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine conditions, with Installer present, for compliance with requirements for installation tolerances, door and frame preparation and reinforcements, and other conditions affecting performance of automatic door operators.
- B. Examine roughing-in for electrical systems to verify actual locations of power connections before automatic door operator installation.

- C. Verify that full-height finger guards are installed at each door with pivot hinges where door has a clearance at hinge side greater than 1/4 inch (6 mm) and less than 3/4 inch (19 mm) with door in any position.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. General: Install automatic door operators according to manufacturer's written instructions and cited BHMA standard for type of door operation and direction of pedestrian travel, including signage, controls, wiring, remote power units if any, and connection to building's power supply.
  - 1. Do not install damaged components. Fit joints to produce hairline joints free of burrs and distortion.
  - 2. Install operators true in alignment with established lines and door geometry without warp or rack. Anchor securely in place.
- B. Controls: Install activation and safety devices according to manufacturer's written instructions and cited BHMA standard for operator type and direction of pedestrian travel. Connect control wiring according to Division 26 electrical Sections.
- C. Signage: Apply on both sides of each door as required by cited BHMA standard for type of door operator and direction of pedestrian travel.

### 3.3 FIELD QUALITY CONTROL

- A. Certified Inspector: Engage a Certified Inspector to test and inspect components, assemblies, and installations, including connections.
- B. Perform the following tests and inspections with the assistance of a factory-authorized service representative:
  - 1. Test and inspect each automatic door operator installation, using AAADM inspection forms, to determine compliance of installed systems with applicable BHMA standards.
- C. Automatic door operators will be considered defective if they do not pass tests and inspections.
- D. Prepare test and inspection reports.

### 3.4 ADJUSTING

- A. Adjust automatic door operators to function smoothly, and lubricate as recommended by manufacturer; comply with requirements of applicable BHMA standards.
  - 1. Adjust operators on exterior doors for weathertight closure.
- B. After completing installation of automatic door operators, inspect exposed finishes on doors and operators. Repair damaged finish to match original finish.

- C. Readjust automatic door operators and controls after repeated operation of completed installation equivalent to three days' use by normal traffic (100 to 300 cycles).
- D. Occupancy Adjustment: When requested within 12 months of date of Substantial Completion, provide on-site assistance in adjusting system to suit actual occupied conditions. Provide up to two visits to Project during other-than-normal occupancy hours for this purpose.

### 3.5 MAINTENANCE SERVICE

- A. Initial Maintenance Service: Beginning at Substantial Completion, maintenance service shall include six months' full maintenance by skilled employees of automatic door operator Installer. Include quarterly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper door operation. Parts and supplies shall be manufacturer's authorized replacement parts and supplies.
  - 1. Engage a Certified Inspector to perform safety inspection after each adjustment or repair and at end of maintenance period. Furnish completed inspection reports to Owner.
  - 2. Perform maintenance, including emergency callback service, during normal working hours.
  - 3. Include 24-hour-per-day, 7-day-per-week, emergency callback service.

### 3.6 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain automatic door operators.

END OF SECTION

QUESTIONS AND RESPONSES MM69 REST AREA. 5/31/16

1.Question: Are there any ADA door operators on this project?

Answer: Yes, see attached information in addendum.

2. Question: I have sent this project to Kawneer for quoting and they sent back a detail that can be used above the doors for the wider sight lines but this mullion can't be used at the doors to have same sight line.

Answer: Modification in mullion configuration will be allowed to meet design. Shop drawings and details will be submitted for approval.

Substitution Request: Englert Metal Roofing

Response: Substitution is not accepted. Typical eve, edge, and gutter details not provided for review.

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