#### PIEDMONT TRIAD AIRPORT AUTHORITY

# RESIDENTIAL SOUND INSULATION PROGRAM (RSIP)

#### PHASE 7

#### ADDENDUM NO. 3

#### A. Product Substitution.

In response to a submittal by a prospective bidder, the Authority has agreed that bidders may obtain acoustical storm windows, hinged storm doors and sliding patio storm doors manufactured by Larson Manufacturing Company for use in Phase 7 of the RSIP. If a bidder elects to use the Larson products, the appropriate Larson model numbers should be chosen to match the existing window and door types on the various houses.

Bidders may also obtain acoustical storm windows and doors from Mon-Ray, Inc. having the Mon-Ray model numbers listed in Section IX-B of the General Specifications and previously approved by the Authority for the RSIP.

Use of the designated Larson and Mon-Ray windows and doors is subject to compliance with all of the specifications set forth in ARTICLE IX of the General Specifications, as amended in Item B-1 below. The acoustical storm windows and doors supplied by the contractor must meet the applicable STC ratings in ARTICLE IX, must have 1/4" inch laminated safety glass and must comply with all of the other ARTICLE IX specifications in full.

#### B. Revisions to the Contract Documents.

- Delete ARTICLE IX of the General Specifications, ACCOUSTICAL WINDOWS AND DOORS (GP-19 through GP-23) and substitute the revised ARTICLE IX attached to this Addendum. Changes from the previous specifications are marked on the attachment (items that are deleted are struck through in blue, additions are in red).
- 2. For houses on which new cement fiber siding is being installed over existing non-vinyl siding, a 1/4" cement fiber backer board will be required between the old and new siding. The following houses are in this group:

- 8112 Renfrew Road, Greensboro, N.C.
- 8122 Thorndike Road, Greensboro, N.C.
- 7912 Tam O'Shanter Drive, Greensboro, N.C.
- 8217 Tyner Road, Colfax, N.C.

On the Site Specific Specifications (SSS) for these houses, delete "Install Cement Fiber Clapboards Over Existing Siding" and substitute "Install Cement Fiber Backer Board and Cement Fiber Clapboards Over Existing Siding."

- 3. The house at 8046 Thorndike Road, Greensboro, N.C. has both vinyl siding, which was previously reflected on the SSS for that house, and non-vinyl siding, which was not. All the siding on that house, both vinyl and non-vinyl alike, should be removed and replaced with new cement fiber backer board and siding. Delete "Replace Vinyl Siding with Cement Fiber Backer Board and Cement Fiber Clapboards" on the SSS for that house and substitute "Replace All Existing Siding with Cement Fiber Backer Board and Cement Fiber Clapboards."
- 4. On the SSS for 705 Yeoman Land, Greensboro, N.C., delete "Replace Vinyl Siding with Cement Fiber Backer Board and Cement Fiber Clapboards" and substitute "Replace Existing Siding with Cement Fiber Backer Board and Cement Fiber Clapboards."
- 5. The SSS in the Project Manual called for central air conditioning to be installed in three houses. Central air conditioning will not be required for two of three: 604 O'Rourke Drive, Greensboro, N.C. and 8217 Tyner Road, Colfax, N.C. Delete "Install Central Air Conditioning System" of the SSS for each of those houses.
- 6. Installation of a central air conditioning system will still be required for the houses at 554 Pegg Road, Greensboro, N.C. The central air conditioning specifications for that house are attached to this Addendum and should be added to the SSS for that house.
- 7. The homeowners at 8012 Tam O'Shanter Drive, Greensboro, N.C., have made their color choices, as indicated on the revised SSS for that house attached to this Addendum. Substitute the attached SSS for the SSS that were originally provided for that house in the Project Manual.

8. Delete the definition of "Site Specific Specifications" in the Construction Contract and substitute the following new definition:

"The specifications designated as such in the Phase 7 Project Manual, as revised by the Addenda issued by the Authority prior to the bid date, describing improvements and Homeowner color choices for each House."

9. Add the following at the end of ARTICLE VII of the Construction Contract:

"7.17 Before ordering the materials or beginning the work for a House, the Contractor shall review with the Homeowner the Site Specific Specifications for the House and shall promptly inform the Authority in writing if the Homeowner does not agree with the Site Specific Specifications. The Contractor shall also discuss with the Homeowner the Contractor's plans and schedule for carrying out the work."

10. Add the following at the end of ARTICLE XI of the Construction Contract:

"11.5 In addition to any other changes authorized by this ARTICLE XI and to the rights of the Authority under Section 17.2, the Authority may, any time before the Contractor has ordered the materials for a particular House, delete the House from the Project by giving written notice to the Contractor that the House is being deleted, provided that the total of the Base House Prices for all of the deleted houses, as itemized on Schedule 1, shall not exceed 25% of the total Base House Prices for all of the houses on Schedule 1. In the event of any such deletion, the term "Project" as used herein shall be deemed thereafter to refer only to the Houses on Schedule 1 that have not been deleted, the total of the Base House Prices specified in Section 3.1 shall be reduced by the Base House Price for each House that has been deleted, and no progress payments shall be owed for any deleted house under ARTICLE IV hereof."

Issued: 3/4/19

PIEDMONT TRIAD AIRPORT AUTHORITY

# IX. ACOUSTICAL WINDOWS AND DOORS

# A. General

#### <u>Summary</u>

- 1. Extent of each type of acoustical window and door unit required is indicated on the drawings and schedules.
- 2. Types of Acoustical units required include the following:
  - a. Storm windows.
  - b. Storm doors (hinged).
  - c. Sliding acoustical patio storm door.

# System Description

- 1. Performance Requirements: Comply with performance requirements indicated.
- 2. STC Rating of 30 (minimum) for acoustical storm windows and 44 (minimum) for replacement window units.
- 3. STC Rating 32 (minimum) for acoustical storm doors <u>when tested alone</u> <u>orand 446</u> (minimum) when tested in tandem with a <u>typical wood n</u> <u>approved acoustical prime</u> door.
- 4. STC rating of sliding patio storm doors shall be 32 (minimum).

# **Submittals**

- 1. Shop Drawings: Submit shop drawings for each type of window including information not fully detailed in manufacturer's standard product data.
- 2. Product Data: Submit manufacturer's product specifications, technical product data, recommendations and standard details for each type window unit required.
- 3. Laboratory Test Reports: Provide test reports from a testing laboratory certifying acoustical performance of storm window and storm door units required.

# Project Conditions

Field Measurements: Check actual window openings in construction work by accurate field measurement before fabrication; show recorded measurement on order details for each home.

# B. Products

#### Manufacturers

Subject to compliance with these specifications, products of the following manufacturers will be considered:

- a. Mon-Ray, Inc., <u>www.monray.com</u> (800) 544-3646.
  - i. Series 500 Secondary Storm Window System.
  - ii. Series 600 Secondary Storm Window System.
  - iii. Series 800 Secondary Hinged Storm Door and Sliding Patio Storm Door.
- b. Airport-approved equivalent systems.

#### **Materials**

- 1. Fasteners: Provide aluminum, non-magnetic stainless steel, or other materials warranted by the manufacturer to be non-corrosive and compatible with window member, trim, hardware, anchors and other components of window units.
- 2. Anchors, Clips and Window Accessories: Depending on strength and corrosion-inhibiting requirements, fabricate anchors, clips and window accessories of aluminum or non-magnetic stainless steel.
- 3. Sealant: For sealants required within fabricated window units, provide type recommended by the window manufacturer for joint size and movement. Sealant shall remain permanently elastic, non-shrinking and non-migrating. Sealant shall be Class "A" meeting Federal Specification TT-S-00230.
- 4. Aluminum: All frame, sash and screen main members shall be aluminum prime alloy 6063-T6. Minimum wall thickness for main members shall be 0.050" for windows and swinging doors. Minimum wall thickness for main members shall be 0.062" for Acoustical Sliding Patio Storm doors.

- 5. Glazing: Glazing shall be in accordance with DD-G-451 and the Type 1, Class 1, Quality Q5. Glazing shall be clear 1/4" laminated safety glass.
- 6. Finishes: Finishes for all windows and doors shall be pre-finished with colors selected by Owner from manufacturer's standard colors.

# Hardware

General: Except to the extent that more specific or stringent requirements are indicated, provide the manufacturer's standard hardware fabricated from aluminum, stainless steel, or other corrosion-resistant material compatible with aluminum and of sufficient strength to perform its intended function. All units shall be provided with positive locking mechanism that prevents entry from exterior.

1. Sash Assist Balances: Overhead mounted block and tackle balances to assist in reducing the operating force when lifting the lower sash. Balance cords shall be removable from sash without the use of special tools. Provide sash assist balances for double-hung storm windows with lower sash weight exceeding 18 lbs. and a sash width greater than 27" wide.

# **Accessories**

- 1. Screens: Provide insect screens <u>for each to the exterior of the operable</u> sash. Screens shall be removable to the interior for cleaning and repair without special tools.
- 2. Weatherstripping: Provide weatherstripping at locations where sash rails slide horizontally or vertically along the unit frame. Provide double compression-type weatherstripping at the perimeter of each operating sash where sliding-type weatherstripping is not appropriate.
- 3. Sub-Sill: Supply and install (if required) extruded aluminum sub-sills, <u>thermally broken</u>, for windows and doors, matching the finish of the window <u>and door</u> framing.
- 4. Head & Jamb Sub-Frame: Manufacturer's standard, thermally broken, head and jamb sub-frames may be used to facilitate installation of replacement windows. Exposed portions of sub-frames shall match the finish of window and door framing.

#### Fabrication

- 1. General: Fabricate aluminum window and door units to comply with indicated standards. Include a complete system for assembly of components and anchorage.
- 2. Glazing Stops: Provide screw-applied or snap-on glazing stops. Finish glazing stops to match window units.
- 3. Pre-glazed Fabrication: Pre-glaze units at the factory.

# Acoustical Storm Window Units

General: Provide pre-assembled units.

- a. Glazing shall be clear 1/4" laminated safety glass. All vertical sliding sashes shall be equipped with two spring-loaded stainless steel pin-lock assemblies. Sashes shall be adjustable and removable for cleaning without special tools. Adjustment to include multiple ventilation settings for each sash.
- b. Windows must be equipped with a sash assist mechanism or constructed in a manner that allows for easy lifting of the lower sash.

# Acoustical Storm Doors (Hinged Doors)

General: Provide pre-assembled units with integral frames.

- a. Fixed Glazing shall be clear 1/4" laminated safety glass.
- b. Hinges shall be three (3) stainless steel, double-leaf hinges with selflubricating oil-lite bushing or continuous piano type stainless steel with nylon thrust bearing.
- c. Latch shall be cast aluminum with thumb push on exterior and lever on interior.
- d. Closer shall be adjustable spring-loaded, heavy duty hydraulic cylinder with hold-open feature adequate for the weight of the door. Equip with check chain with spring safety cushion.
- e. Weatherstripping to be full perimeter set in frame slot. Sill sweep to be adjustable and extend full width of door.

#### Acoustical Sliding Patio Storm Door

General: Provide pre-assembled sashes.

- a. All fasteners incorporated in the product shall be non-magnetic stainless steel.
- b. Weatherstrip shall be of materials compatible with aluminum and resistant to weathering. Weatherstripping shall be polypropylene pile with a fin barrier running through the entire length of the weatherstripping.
- c. All hardware shall be of aluminum, stainless steel or other non-corrosive material compatible with aluminum. White metal or plastic hardware is not acceptable.
- d. Operating sash surfaces shall be separated from metal-to-metal contact. Operating sash shall operate smoothly and quietly on zinc plated, galvanized, adjustable 1-1/2" wheels. Each wheel shall roll on its own extruded track rail. Operating and non-operating sash shall be easily removable from the inside for cleaning.
- e. <u>A method shall be provided to easily remove</u> Integrated sill frame trackshall be removable from the main sill frame of the Patio Storm Door toallow door sash to remove to the exterior for cleaning, maintenance or repair.

# C. Execution

# Installation

- Comply with manufacturer's specifications and recommendations for installation of window units, hardware, operators, sealants and other components of the work. See Figs. 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20 showing additional installation details for Mon-Ray windows and doors. Contractor using other airport approved windows and doors shall provide detailed installation drawings with Contractor's submittals under Subsection IX-A.
- 2. Set units plumb, level and true to line, without warp or rack of frames or sash. Provide proper support and anchor securely in place.

#### Adjusting and Cleaning

1. Adjust operating sash and hardware to provide a tight fit at contact points and at weatherstripping, smooth operation and a weathertight closure.

2. Clean aluminum and glass surfaces promptly after installation. Lubricate hardware and other moving parts.

#### Central Air Conditioning Specifications

New Coleman 15 Heat Pump Condenser, M#TH4B3021S or equal

Indoor Air Handler M#AE36BX21 or equal with 8-Kw supplemental heat

Ductwork in attic.

Honeywell thermostat or equal and low voltage wiring.

Include refrigerant piping as per manufacturer's instructions.

Include all permits and inspections.

All equipment warranties will apply.

Include electrical panel upgrade as required to provide power to the new HVAC unit.