VCU Maintenance Reserve Project #: 236-12708-00700
DEB Project #: 236-B1236-030
Work Order #: 2022-585392

Project Title: Founders Hall Building Envelope Rehabilitation
Project Location: 827 West Franklin Street, Richmond VA 23284

VCU Project Manager: Jesús Najar
Client: Maintenance Reserve
A/E: Raymond Engineering – Georgia, Inc.

ADDENDUM #: 002

Date Issued: 05/10/2023

THIS IS SENT TO ALL INVITED CONTRACTORS WHO ATTENDED PRE-BID CONFERENCE:

SCOPE CLARIFICATIONS:

1 New bid deadline:

Sealed bids will be received by Erika Crews, VCA, VCO, VCCO at Virginia Commonwealth University, Construction Management, 700 West Grace Street, Suite 1600, VCU Monroe Park Campus, Richmond, Virginia 23284. The deadline for submitting bids is 2:00 P.M. sharp, as determined by the Bid Officer, on May 23, 2023. The bids will be opened publicly and read aloud beginning at 2:00 P.M. on May 24, 2023, at the same location.

2 Responses to Pre-Bid Questions. See attached 2 pages.

3 Revised Specification Section 01 11 00 Summary of Work, Updates to paragraphs 1.5.1.8 and 1.8. Updates are bold and italicized. Updated section attached.

4 Revised Specification Section 07 22 20 Ventilated Nailbase Insulation Panels, Update includes the removal of “Bid Additive 3” language on the Page 1 Title. Specification section should be included in the base bid.

All other work as defined by the IFB remains unchanged

This addendum DOES affect the bid due date and time.
Questions shall only be directed to Jason Mobraten by email at jason.mobraten@raymondllc.com. All questions must be submitted on the VCUHECO Pre-Bid Question Form.

Receipt of this addendum must be acknowledged on the Request for Bid Form and all information contained herein shall be included in the Proposal Base Bid.

Jesús Najar
VCU Project Manager
Addendum #002
Founders Hall – Building Envelope Rehabilitation
Project Code: 236-12708-00700
DEB No.: 236-B1236-031
May 10, 2023

This section consists of the following Responses to Pre-Bid Questions:

1. Can a window schedule or opening size be provided for the “new clerestory windows” referenced in A103 & Detail 4/A508?

   Response: There are 14 clerestory windows at the attic/roof level that are approximately 24”x24”, however, the new window sills will be raised decreasing the height of the new windows. Additionally, there are 3 clerestory windows at the attic/roof level that are approximately 24”x54”, however, the new window sills will be raised decreasing the height of the new windows. Dimensions should be field verified and.

2. Can a basis of design or spec section be provided for the “polycarbonate window well covers” shown on elevation drawings?

   Response: Covers should support 40 lbs per square foot live load (min) with UV-Resistant Polycarbonate and aluminum bracing. Custom fabricated for existing openings with continuous hinge, prop-up bar, and lock. Fastened to existing window well masonry. Basis of design: Window Well Supply, 1405 1790 16th St. Building 5, Racine WI 53404.

3. In the summary of work spec section, bid additive #3 is titled “Interior Removable Storm Windows of Building A” and another spec section 07 22 00 “Ventilated Nailbase Insulation Panels” is titled as bid additive #3. Please clarify where interior storm windows are to be located on the bid form.

   Response: Interior Removable Storm Windows should be bid additive #3.

4. In the summary of work spec section, bid additive #3 is titled “Interior Removable Storm Windows of Building A” and another spec section 07 22 00 “Ventilated Nailbase Insulation Panels” is titled as bid additive #3. Please clarify where ventilated nailbase panels are to be located on the bid form.

   Response: Ventilated Nailbase panels should be included in the Base Bid.

5. Note 4 on drawing A-101 (base bid) reads “100% masonry joint repointing and non-penetrating coating at all chimneys. Note 10 on A-201.1 (Additive #1) reads “100% masonry joint repointing and non-penetrating coating at all chimneys”.

   Response: All masonry joint repointing and non-penetrating coating should be included in Bid Additive #1.
6. There is a basement door shown on elevations A201 with D1 written. Is the replacement of this door, frame, and hardware supposed to be included in the base bid?

Response: Replacement of this door, frame, and hardware should be included with Bid Additive #1.

7. Can a basis of design or spec section be provided for the new zinc coated copper canopy on A508?

Response: Canopy to be fully replaced to match existing. Zinc coated copper to match new assembly as specified for Roof Area A.

8. A201.1 contains elevation drawings for masonry repair work and it’s notes as Bid Additive #1 on the bottom of the page. There a detail 6/A-505 with is a waterproofing detail for the balcony/balustrade. A505 is noted as Base id at the bottom of the page. Can you clarify if this waterproofing work is meant to be base bid or bid additive #1.

Response: Waterproofing work should be included in Base Bid.

9. Is the allowance of 600 lf of repointing the only masonry work in the base bid.

Response: Yes, with the exception to roofing and waterproofing work details that require terminations, reglets, flashing, etc.

10. Since nailbase insulation is included with base bid, is the removal of the attic ceilings to install batt insulation within the roof rafters applicable?

Response: Ceiling will be required to be removed to install mineral wool insulation at sloped ceilings and to provide and thermal overlap of the mineral wool insulation and nailbase insulation at roof perimeters as shown in section 1/A-503 and 4/A-504

End of Responses to Pre-Bid Questions
SECTION 01 11 00
SUMMARY OF WORK

PART 1 - GENERAL

1.1 Drawings and general provisions of the contract, including General and Supplementary Conditions, and other Division 1 specification sections apply to work of this section.

1.2 Work under this Contract consists of furnishing all labor, materials and equipment necessary to perform the work.

1.2.1 Perform Mock-ups and provide submittals as listed in the specifications.

1.3 Base Bid and Additive Bid List:

1.3.1 Base Bid:

1.3.1.1 Reroofing of Building A – Roof Areas A.1, A.2, A.3, and A.4.

1.3.1.2 Roof Replacement of Roof Area B.

1.3.1.3 Window Repairs of Building A.

1.3.2 Bid Additive 1: Masonry Repairs of Building A.

1.3.3 Bid Additive 2: Roof Replacement of Roof Areas C and D.

1.3.4 Bid Additive 3: Interior Removable Storm Windows of Building A.

1.3.5 Bid Additive 4: Window Glazing Replacement of Building A.

1.4 Refer to drawings and applicable specification sections for the requirements associated with the Base Bid and Bid Additives. The intent of this specification section it to provide a brief description of the work.

1.5 Base Bid Summary of Work:

1.5.1 Reroofing of Building A – Roof Areas A.1, A.2, A.3, and A.4:

1.5.1.1 Remove and palletize existing slate, intact and serviceable existing slate shall be salvaged are reused. New slate being incorporated into existing slate roofs shall match existing as closely as possible, new slate to be installed at the back of the building adjacent to Roof Area B, assume 25% new slate. Existing slate not suitable for reuse shall be palletized and removed from site.

1.5.1.2 Remove and dispose of existing underlayment and coated copper roofing.

1.5.1.3 Remove and dispose of existing sheet metal flashing and accessories.
1.5.1.4 Remove existing skylight and provide new decking and framing.

1.5.1.5 Repair or replace damaged or deteriorated deck.

1.5.1.6 Furnish and install new copper gutters, external downspouts, downspout basket strainers and custom fabricated clean-outs.

1.5.1.7 Furnish and install new downspout cleanouts to connect to existing underground piping.

1.5.1.8 **Furnish and install new Vented-Insulated Nail Base Assembly:**

A. *New fully adhered vapor barrier membrane*

B. *New polyisocyanurate insulation.*

C. *Vented airspace with wood spacers.*

D. *New plywood nail base*

E. *New self-adhering, high temperature waterproof membrane.*

1.5.1.9 Furnish and install new zinc copper roof and internal gutter assembly.

1.5.1.10 Reinstall existing salvaged slate. Furnish and install new slate assembly with mineral wool insulation.

1.5.1.11 Furnish and install new sheet metal flashings, step flashings, and accessories.

1.5.2 Roof Replacement of Roof Area B - Low-Slope Reroofing:

1.5.2.1 Remove and dispose of existing roofing assembly.

1.5.2.2 Remove all existing flashings, metal flashings, and miscellaneous items as specified herein, and discard.

1.5.2.3 Remove and dispose of existing mechanical shed and equipment.

1.5.2.4 Remove and dispose of existing abandoned mechanical ductwork.

1.5.2.5 Remove and dispose of existing skylights.

1.5.2.6 Remove and dispose of existing access doors and frames.

1.5.2.7 Remove and dispose of existing access ships ladder, and stairs.

1.5.2.8 Remove and dispose of existing fall protection railings.

1.5.2.9 Repair or replace damaged or deteriorated wood deck.
1.5.2.10 Install new wood blocking to achieve 8” minimum flashing heights at existing to remain equipment curbs.

1.5.2.11 Furnish and install new gypsum thermal barrier.

1.5.2.12 Furnish and install new adhered vapor barrier.

1.5.2.13 Furnish and install new fully adhered flat polyisocyanurate insulation boards to provide an R-15 (minimum) insulating.

1.5.2.14 Furnish and install new fully adhered tapered polyisocyanurate insulation board.

1.5.2.15 Furnish and install new fully adhered coverboard.

1.5.2.16 Furnish and install new PVC membrane (adhered to the coverboard).

1.5.2.17 Furnish and install new membrane flashings and metal flashings, as specified herein.

1.5.2.18 Furnish and install new doors and frames.

1.5.2.19 Furnish and install new skylights.

1.5.2.20 Furnish and install new fall protection railings.

1.5.2.21 Furnish and install new access ladder and stairs.

1.5.2.22 Furnish and install new gutter liners, coatings, and downspouts.

1.5.2.23 Furnish and install miscellaneous items not specifically listed here.

1.5.3 Window Repairs of Building A:

1.5.3.1 Repair work shall be performed with windows in place.

1.5.3.2 It is the intent that all windows and doors are repaired to be weathertight and fully repainted and sealed, See paragraph 1.5.3.6 for additional sealant work.

1.5.3.3 Restore small areas of rotted wood with wood restoration epoxy.

1.5.3.4 Prime and paint all exterior and interior wood surfaces.

1.5.3.5 Remove and replace the perimeter sealant from each window and door.

1.5.3.6 Furnish and provide sealants to make windows non-operable except at fire escape locations.
1.5.4 Painting:
1.5.4.1 At all existing and new wood components.
1.5.4.2 At existing fire escape.
1.5.4.3 At existing window well railings.

1.5.5 Drainage:
1.5.5.1 Furnish and install new roof drainage as indicated on drawings.
1.5.5.2 Furnish and install new drain cleanouts at grade.
1.5.5.3 Furnish and install new polycarbonate window well covers.
1.5.5.4 Camera below grade drain lines and inspect for blockages and breaks.

1.5.6 All additional work not specifically listed above but included in the drawings and specifications.

1.6 Bid Additive 1 – Masonry Repairs of Building A:
1.6.1 Repoint all brick and stone mortar joints.
1.6.2 Remove parge coat at base of building and install new coating.
1.6.3 Remove and replace broken and cracked brick units.
1.6.4 Patch spalled stone units.
1.6.5 Crack repairs at stone units.
1.6.6 Clean entire façade.
1.6.7 Provide non-penetrating sealer at all masonry surfaces.
1.6.8 Remove all misc. abandoned conduits and equipment from the building and patch masonry.
1.6.9 All active equipment and conduits shall be temporarily removed in order to perform restoration work. Coordinate with the University prior to any shutdowns.

1.7 Bid Additive 2 - Roof Replacement of Roof Areas C and D:
1.7.1 Remove and dispose of existing roofing assembly.
1.7.2 Remove all existing flashings, metal flashings, and miscellaneous items as specified herein, and discard.
1.7.3 Repair or replace damaged or deteriorated wood deck.

1.7.4 Install new wood blocking to achieve 8” minimum flashing heights at existing to remain equipment curbs.

1.7.5 Furnish and install new gypsum thermal barrier – Area C.

1.7.6 Furnish and install new adhered vapor barrier.

1.7.7 Furnish and install new fully adhered flat polyisocyanurate insulation boards to provide an R-15 (minimum) insulating value.

1.7.8 Furnish and install new fully adhered tapered polyisocyanurate insulation board.

1.7.9 Furnish and install new fully adhered coverboard.

1.7.10 Furnish and install new PVC membrane (adhered to the coverboard).

1.7.11 Furnish and install new membrane flashings and metal flashings, as specified herein.

1.7.12 Furnish and install new gutter liners, scuppers, coatings, and downspouts.

1.8 Bid Additive 3 – Interior Removable Storm Windows of Building A:

1.8.1 Refer to specification section 08 58 81.

1.9 Bid Additive 4: Window Glazing Replacement of Building A

1.9.1 Remove existing glazing and glazing compound.

1.9.2 Install new vacuum glazing with new glazing compound.

1.10 Furnish and install miscellaneous items not specifically listed here.

1.11 All work shall comply with the National Parks Service (NPS) Preservation Briefs:

1.11.1 Preservation Brief Number 1: Cleaning and Water-Repellent Treatments.

1.11.2 Preservation Brief Number 2: Repointing Mortar Joints in Historic Buildings.

1.11.3 Preservation Brief Number 3: Improving Energy Efficiency in Historic Buildings.

1.11.4 Preservation Brief Number 4: Roofing for Historic Buildings.

1.11.5 Preservation Brief Number 6: Dangers of Abrasive Cleaning.

1.11.6 Preservation Brief Number 9: The Repair of Historic Wooden Windows.

1.11.7 Preservation Brief Number 16: The Use of Substitute Materials on Historic Buildings Exterior.
1.11.8 Preservation Brief Number 29: The Repair, Replacement, and Maintenance of Historic Slate Roofs.

END OF SECTION
SECTON 07 22 20
VENTILATED NAILBASE INSULATION PANELS

PART 1 - GENERAL

1.1 Drawings and general provisions of the contract, including General and Supplementary Conditions, and other Division 1 specification sections apply to work of this section.

1.2 Work Included - Installation of new ventilated nailbase insulation panel system at copper pyramids.

1.3 Related Work

1.3.1 Miscellaneous Rough Carpentry - Section 06 10 53.

1.3.2 Copper Roofing – Section 07 61 00

1.4 Submittals - Refer to Section 01 33 00 of this Specification.

1.5 Environmental Conditions - Materials installation shall proceed only when weather conditions are in compliance with the applicable manufacturer’s recommendations for installation and no precipitation is imminent. Materials installed during adverse weather conditions shall be subject to removal and replacement with new materials at no additional cost to Owner.

1.6 Warranty - Refer to Section 01 78 36 of this Specification.

PART 2 - PRODUCTS

2.1 Ventilated nailbase insulation panels shall be 4’x8’ and consist of a top layer of Plywood, a middle layer of vented air space consisting of 2-inch-thick wood spacers, and a bottom layer of black fiber reinforced faced polyisocyanurate foam insulation.

2.1.1 Polyisocyanurate foam insulation shall conform to ASTM C 1269, Type II.

2.1.1.1 Thickness: 3-1/2”

2.1.1.2 Compressive Strength: 25 pounds per square inch Grade 3.

2.1.2 Multiple top layer substrate shall conform to PS2 and shall be CDX Plywood as follows:

2.1.2.1 Type:

i Standard sheathing grade.

ii Fire-treated.

iii Thickness of 5/8”. Five Plies.

2.1.3 Wood spacers shall be solid wood. Spacers shall not be more than 12 inches apart in both the horizontal and vertical direction.

2.2 Vented airspace shall be 2 inches in depth and provide not less than 92 percent overall free air movement through the panel. It shall have a 55 percent or greater lateral free air movement. Panels shall be manufactured to provide cross directional ventilation without material being incorporating into the construction.

Ventilated Nailbase Insulation Panels 07 22 20
2.3 Nailable surface as specified shall be factory rabbeted 1/8 inch on all sides to provide for expansion of substrate.

2.4 Fasteners shall be FM Approved panel fasteners for plywood deck applications. Fasteners have a 3/16 inch shank, and are corrosion resistant with oversized heads. Length of fasteners shall be as recommended by the panel manufacturer. Fasteners shall penetrate existing plywood substrate.

2.1 Vapor Barrier / Temporary Roof: Cold applied, self-adhering membrane composed of a high density, cross laminated polyethylene film coated on one side with a layer of butyl rubber or high temperature asphalt adhesive. Provide primer when recommended by water barrier manufacturer.

2.1.1 Minimum thickness: 30 mil.
2.1.2 Tensile Strength: ASTM D 412; 250 psi.
2.1.3 Membrane Elongation: ASTM D412; 250%
2.1.4 Permeance: ASTM E96; 0.05 Perms.
2.1.5 Acceptable Products:
2.1.5.1 Blueskin PE 200 HT, Henry.
2.1.5.2 Ultra, W.R. Grace Company.
2.1.5.3 CCW MiraDRI WIP 300 High Temperature, Carlisle Coatings and Waterproofing
2.1.5.4 Or approved equal.

PART 3 - EXECUTION

3.1 Examination
3.1.1 Do not begin installation until deck has been properly prepared.
3.1.2 Verify deck, adjacent materials, and backing materials are dry and ready to receive insulation.
3.1.3 Verify deck surface is flat, free of fins or protrusions and irregularities.

3.2 Preparation
3.2.1 Apply vapor barrier / temporary membrane over existing wood deck prior to panel installation. Vapor barrier shall be installed continuously to provide a water and vapor tight assembly.
3.2.2 Apply proper soffit and hip vents to create an effective venting system.

3.3 Installation
3.3.1 Install panels with Plywood side face up. Place panels in the manufacturer’s recommended pattern. Only factory assembled panels will be accepted. Fasten panels through the top nailable surface and also through the wood block panel spacers using the manufacturer’s approved threaded fasteners
3.3.2 The minimum number of fasteners shall be 24 per 4 foot by 8-foot panel. Secure to provide FM 1-90 wind uplift resistance.
3.4 Protection

3.4.1 Protect products until completion of the project.

3.4.2 Cover the top and edges of unfinished roof panel work to protect it from the weather and to prevent entry of water in the cores of the panels.

3.4.3 Do not leave panels exposed to moisture. Wet panels shall be removed or allowed to completely dry prior to application of waterproof membrane and copper panels.

3.4.4 Apply only enough insulation panels per day that can be covered the same day by a completed roof covering material.

END OF SECTION