ADDENDUM NO. 1

Issue date 05-29-25

Project:
Fort Coombs Armory
and Convention Center Renovations
Franklin County, Florida

Issued by:

413 All Saints Street
Tallahassee, FL 32301 ph: 850-222-8100
GRC 24326 CA/Bid
Project Number 24324

Florida State University

Distribution to:
Kimberly Raffield, Franklin County
Erin Griffith, Franklin County

This Addendum forms a part of and modifies the Contract Document Drawings dated April 11, 2025, by reference below and any prior addenda. This addendum consists of full size drawings sheets and the narrative. Revised sheets are listed below and enumerated in the enclosures and attachments. Please notify the Architect promptly if any information is missing or requires further clarification.

IN THE SPECIFICATIONS:

ITEM A1-1.0 Refer Specification 075416 Ketone Ethylene Ester (KEE) Roofing noted changes:

075416 Ketone Ethylene Ester (KEE) Roofing Rev 5-29-25

A1-1.1 Add Paragraph 075416-3 paragraph 2.2 Ketone Ethylene Ester (KEE) Roofing

2.2B Alternate manufacturers

1. SOPREMA Sentinal KEE 150 felt back
2. Sarnafil G410-60 Feltback Energy smart

ITEM A1-2.0 Replace Specification 095500 WOOD FLOORING RESTORATION:

095500 WOOD FLOORING RESTORATION Rev 5-29-25

A1-2.1 Add specified scope.

Part 1 Paragraph 1.2 Scope

1. Removal of exterior finish systems at areas of wood restoration or repair
2. Installation of wood repair compound materials
3. Sanding, staining and refinishing existing flooring.

ITEM A1-3.0 Add Specification 095500 Sheet Metal Flashing and Trim:

095500 Sheet Metal Flashing and Trim issued 5-29-25

A1-3.1 Add specified scope.

Part 1 Paragraph 1.2 Scope

1. Removal of exterior finish systems at areas of wood restoration or repair
2. Installation of wood repair compound materials
3. Sanding, staining and refinishing existing flooring.

IN THE DRAWINGS:

ITEM A1-4.0 Refer to drawing A1.1 First Floor Plan - Renovation for noted changes:

A 1.1 First Floor Plan - renovation, Revision 1 dated 5-29-25

A1-4.1 Add wood floor restoration notes

ITEM A1-5.0 Refer to drawing D1.3 Roof Floor Plan - Demolition for noted changes:

D 1.3 Roof Plan - Demolition, Revision 1 dated 5-29-25

A1-5.1 Revise clouded notes

ITEM A1-6.0 Refer to drawing A1.3 Roof Floor Plan - Renovation for noted changes:

A 1.3 Roof Plan - Renovation, Revision 1 dated 5-29-25

A1-6.1 Revise Detail 5 / A1.3 -Revision adds step flashing at gable end parapets

ITEM A1-7.0 Refer to the following structural drawings for wind-loading requirements:

S S101 Structural Notes, Issue date 5-29-25

S111 Roof Wind Diagrams, Issue date 5-29-25

A1-7.1 Add wind-loading requirements for roof and window anchorage

ITEM A1-8.0 Refer to drawing RFI 2 for noted responses

ITEM A1-9.0 Refer to drawing Shaffield RFI for noted responses

ITEM A1-10.0 Refer to drawing D1.2 Second Floor Plan and include the following change:

A1-10.1 Delete note D6 from the tower as this window is not in the scope.

End of Addenda

Issued by Gilchrist Ross Crowe Architects:

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Connor Ross, AIA

ENCLOSURES AND ATTACHMENTS:

SPECIFCATIONS
075416 Ketone Ethylene Ester (KEE) Roofing Rev 5-30-25
095500 WOOD FLOORING RESTORATION Rev 5-30-25
095500 Sheet Metal Flashing and Trim issued 5-29-25

DRAWINGS
A 1.1 First Floor Plan - renovation, Revision 1 dated 5-29-25
D 1.3 Roof Plan - Demolition, Revision 1 dated 5-29-25
A 1.3 Roof Plan - Renovation, Revision 1 dated 5-29-25
S S101 Structural Notes, Issue date 5-29-25
S111 Roof Wind Diagrams, Issue date 5-29-25

RFI
Southland Contracting RFI 2
Shaffiled RFI

SECTION 075416 – KETONE ETHYLENE ESTER (KEE) ROOFING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Adhered ketone ethylene ester (KEE) roofing system.
2. Mechanically fastened, ketone ethylene ester (KEE) roofing system.
3. Substrate board.
4. Roof insulation.
5. Cover board.
6. Walkways.

1.2 PREINSTALLATION MEETINGS

A. Preliminary Roofing Conference: Conduct conference at [**Project site**] <**Insert location**>.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. For insulation and roof system component fasteners, include copy of FM Approvals' RoofNav listing.

B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work, including the following:

1. Layout and thickness of insulation.
2. Base flashings and membrane terminations.
3. Flashing details at penetrations.
4. Tapered insulation, including slopes.
5. Roof plan showing orientation of steel roof deck and orientation of roof membrane, fastening spacings, and patterns for mechanically fastened roofing system.
6. Insulation fastening patterns for corner, perimeter, and field-of-roof locations.
7. Tie-in with air barrier.

C. Samples: For the following products:

1. Roof membrane and flashing, of color required.
2. Aggregate surfacing material in gradation[**and color**] required.
3. Roof paver[**, full sized,**] in each color and texture required.
4. Walkway pads or rolls, of color required.

D. Wind Uplift Resistance Submittal: For roofing system, indicating compliance with wind uplift performance requirements.

1.4 INFORMATIONAL SUBMITTALS

A. Manufacturer Certificates:

1. Performance Requirement Certificate: Signed by roof membrane manufacturer, certifying that roofing system complies with requirements specified in "Performance Requirements" Article.

a. Submit evidence of compliance with performance requirements.

2. Special Warranty Certificate: Signed by roof membrane manufacturer, certifying that all materials supplied under this Section are acceptable for special warranty.

B. Product Test Reports: For roof membrane and insulation, for tests performed by a qualified testing agency, indicating compliance with specified requirements.

C. Research reports.

D. Field Test Reports:

1. Concrete internal relative humidity test reports.
2. Fastener-pullout test results and manufacturer's revised requirements for fastener patterns.

E. Field quality-control reports.

F. Sample warranties.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance data.

B. Certified statement from existing roof membrane manufacturer stating that existing roof warranty has not been affected by Work performed under this Section.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by roofing system manufacturer to install manufacturer's product and that is eligible to receive manufacturer's special warranty.

1.7 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within specified warranty period.

1. Warranty Period: [**20**] years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Accelerated Weathering: Roof membrane shall withstand 2000 hours of exposure when tested according to ASTM G 152, ASTM G 154, or ASTM G 155.

B. Impact Resistance: Roof membrane shall resist impact damage when tested according to ASTM D 3746 or ASTM D 4272/D 4272M, or the "Resistance to Foot Traffic Test" in FM Approvals 4470.

C. Wind Uplift Resistance: Design roofing system to resist the wind uplift pressures based on the Florida Building code when tested according to FM Approvals 4474, UL 580, or UL 1897:

D. FM Approvals' RoofNav Listing: Roof membrane, base flashings, and component materials shall comply with requirements in FM Approvals 4450 or FM Approvals 4470 as part of a roofing system, and shall be listed in FM Approvals' RoofNav for Class 1 or noncombustible construction, as applicable. Identify materials with FM Approvals Certification markings.

1. Fire/Windstorm Classification: [**Class 1A-60**] [**Class 1A-75**] [**Class 1A-90**] [**Class 1A-105**] [**Class 1A-120**] <**Insert class**>.
2. Hail-Resistance Rating: [**MH**] [**SH**].

E. Exterior Fire-Test Exposure: ASTM E 108 or UL 790, [**Class A**] [**Class B**] [**Class C**]; for application and roof slopes indicated; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

F. Fire-Resistance Ratings: Comply with fire-resistance-rated assembly designs indicated. Identify products with appropriate markings of applicable testing agency.

2.2 KETONE ETHYLENE ESTER (KEE) ROOFING

A. KEE Sheet: ASTM D 6754/D 6754M, fabric reinforced Rhino Bond. **Basis of design**

1. Siplast - Parasolo KEE Fleece -back
2. Thickness: [**60 mils (1.5 mm), nominal**.
3. Weight .386lb/ft2
4. Exposed Face Color: [**White**].
5. Product Approval: FL 30935 R3 HVHZ System C2 W-7 with (-90) uplift

B. Alternate Manufacturers: The following manufacturers are approved for the project providing all roofing products meet the basis of design specifications.

1. SOPREMA Sentinal KEE 150 felt back
2. Sarnafil G410-60 Feltback Energy smart
3. IB PVC Singl-Ply ChemGuard FB-60

2.3 AUXILIARY ROOFING MATERIALS

A. General: Auxiliary materials recommended by roofing system manufacturer with the use of and compatible with other roofing components.

1. Adhesives and Sealants: Comply with VOC limits of authorities having jurisdiction.

B. Sheet Flashing: Manufacturer's standard sheet flashing of same material, type, reinforcement, thickness, and color as KEE sheet.

C. Prefabricated Pipe Flashings: As recommended by roof membrane manufacturer.

D. Bonding Adhesive: Manufacturer's standard[**, water based**].

E. Slip Sheet: ASTM D 2178/D 2178M, Type IV, glass fiber, asphalt-impregnated felt.

F. Slip Sheet: Manufacturer's standard, of thickness required for application.

G. Metal Termination Bars: Manufacturer's standard, predrilled stainless steel or aluminum bars, approximately 1 by 1/8 inch (25 by 3 mm) thick; with anchors.

H. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening roofing components to substrate, and acceptable to roofing system manufacturer.

I. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, preformed inside and outside corner sheet flashings, T-joint covers, lap sealants, termination reglets, and other accessories.

2.4 ROOF INSULATION

A. Polyisocyanurate Board Insulation: ASTM C 1289, [**Type II, Class 1, Grade 2**] [**Type II, Class 2, Grade 2**], felt or glass-fiber mat facer on both major surfaces.

1. Atlas AC Foam III
2. Size: [**48 by 48 inches (1219 by 1219 mm)**] [**48 by 96 inches (1219 by 2438 mm)**].
3. Thickness:

a. Base Layer: [**1-1/2 inches (38.1 mm)**]

B. Tapered Insulation: Provide factory-tapered insulation boards.

1. Material: [**Match roof insulation**].
2. Minimum Thickness: 1/4 inch (6.35 mm).
3. Slope:

a. Roof Field: [**1/4 inch per foot (1:48)**] unless otherwise indicated on Drawings.
b. Saddles and Crickets: [**1/2 inch per foot (1:24)**] unless otherwise indicated on Drawings.

2.5 INSULATION ACCESSORIES

A. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening roof insulation[**and cover boards**] to substrate, and acceptable to roofing system manufacturer.

B. Insulation Adhesive: Insulation manufacturer's recommended adhesive formulated to attach roof insulation to substrate or to another insulation layer as follows:

1. Modified asphaltic, asbestos-free, cold-applied adhesive.
2. Bead-applied, low-rise, one-component or multicomponent urethane adhesive.
3. Full-spread, spray-applied, low-rise, two-component urethane adhesive.

2.6 ASPHALT MATERIALS

A. Roofing Asphalt: [**ASTM D 312/D 312M, Type III or Type IV**] [**ASTM D 6152/D 6152M, SEBS modified**].

B. Asphalt Primer: ASTM D 41/D 41M.

2.7 WALKWAYS

A. Flexible Walkways: Factory-formed, nonporous, heavy-duty, slip-resisting, surface-textured walkway [**pads**] [**or**] [**rolls**], approximately 3/16 inch (5 mm) thick and acceptable to roofing system manufacturer.

1. Size: Approximately 36 by 60 inches (914 by 1524 mm).
2. Color: Contrasting with roof membrane.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.

1. Verify that minimum concrete drying period recommended by roofing system manufacturer has passed.
2. Verify that concrete substrate is visibly dry and free of moisture, and that minimum concrete internal relative humidity is not more than [**75**] <**Insert number**> percent, or as recommended by roofing system manufacturer, when tested according to ASTM F 2170.

a. Test Frequency: One test probe per each [**1000 sq. ft. (93 sq. m)**] <**Insert area**>, or portion thereof,of roof deck, with no fewer than three test probes.
b. Submit test reports within 24 hours of performing tests.

3. Verify that concrete-curing compounds that will impair adhesion of roofing components to roof deck have been removed.

4. Verify that joints in precast concrete roof decks have been grouted flush with top of concrete.

3.2 PREPARATION

A. Perform fastener-pullout tests according to roof system manufacturer's written instructions.

1. Submit test result within 24 hours of performing tests.

a. Include manufacturer's requirements for any revision to previously submitted fastener patterns required to achieve specified wind uplift requirements.

3.3 ROOFING INSTALLATION, GENERAL

A. Install roofing system according to roofing system manufacturer's written instructions, FM Approvals' RoofNav assembly requirements, and FM Global Property Loss Prevention Data Sheet 1-29.

B. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at the end of workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.

C. Install roof membrane and auxiliary materials to tie in to existing roofing to maintain weathertightness of transition[**and to not void warranty for existing roofing system**].

D. Coordinate installation and transition of roofing system component serving as an air barrier with air barrier specified under [**Section 072713 "Modified Bituminous Sheet Air Barriers."**] [**Section 072715 "Nonbituminous Self-Adhering Sheet Air Barriers."**] [**Section 072726 "Fluid-Applied Membrane Air Barriers."**]

3.4 INSULATION INSTALLATION

A. Coordinate installing roofing system components so insulation is not exposed to precipitation or left exposed at the end of the workday.

B. Comply with roofing system and insulation manufacturer's written instructions for installing roof insulation.

C. Installation Over Metal Decking:

1. Install base layer of insulation with [**joints staggered not less than 24 inches (610 mm) in adjacent rows**] [**end joints staggered not less than 12 inches (305 mm) in adjacent rows**] [**and with long joints continuous at right angle to flutes of decking**].

a. Locate end joints over crests of decking.
b. Where installing composite and noncomposite insulation in two or more layers, install noncomposite board insulation for bottom layer and intermediate layers, if applicable, and install composite board insulation for top layer.

c. Trim insulation neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
d. Make joints between adjacent insulation boards not more than 1/4 inch (6 mm) in width.
e. At internal roof drains, slope insulation to create a square drain sump with each side equal to the diameter of the drain bowl plus 24 inches (610 mm).

1) Trim insulation so that water flow is unrestricted.

f. Fill gaps exceeding 1/4 inch (6 mm) with insulation.
g. Cut and fit insulation within 1/4 inch (6 mm) of nailers, projections, and penetrations.
h. Loosely lay base layer of insulation units over substrate.
i. Mechanically attach base layer of insulation[**and substrate board**] using mechanical fasteners specifically designed and sized for fastening specified board-type roof insulation to metal decks.

1) Fasten insulation according to requirements in FM Approvals' RoofNav for specified Windstorm Resistance Classification.
2) Fasten insulation to resist specified uplift pressure at corners, perimeter, and field of roof.

2. Install upper layers of insulation[**and tapered insulation**] with joints of each layer offset not less than 12 inches (305 mm) from previous layer of insulation.

a. Staggered end joints within each layer not less than 24 inches (610 mm) in adjacent rows.
b. Install with long joints continuous and with end joints staggered not less than 12 inches (305 mm) in adjacent rows.
c. Trim insulation neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
d. Make joints between adjacent insulation boards not more than 1/4 inch (6 mm) in width.
e. At internal roof drains, slope insulation to create a square drain sump with each side equal to the diameter of the drain bowl plus 24 inches (610 mm).
f. Trim insulation so that water flow is unrestricted.
g. Fill gaps exceeding 1/4 inch (6 mm) with insulation.
h. Cut and fit insulation within 1/4 inch (6 mm) of nailers, projections, and penetrations.
i. Loosely lay each layer of insulation units over substrate.
j. Adhere each layer of insulation to substrate using adhesive according to FM Approvals' RoofNav assembly requirements and FM Global Property Loss Prevention Data Sheet 1-29 for specified Windstorm Resistance Classification, as follows:

1) Set each layer of insulation in a solid mopping of hot roofing asphalt, applied within plus or minus 25 deg F (14 deg C) of equiviscous temperature.
2) Set each layer of insulation in ribbons of bead-applied insulation adhesive, firmly pressing and maintaining insulation in place.

3) Set each layer of insulation in a uniform coverage of full-spread insulation adhesive, firmly pressing and maintaining insulation in place.

D. Installation Over [**Wood**] [**Wood Panel**] Decking:

1. Mechanically fasten slip sheet to roof deck using mechanical fasteners specifically designed and sized for fastening slip sheet to [**wood**] [**wood panel**] decks.

   a. Fasten slip sheet according to requirements in FM Approvals' RoofNav for specified Windstorm Resistance Classification.
   b. Fasten slip sheet to resist specified uplift pressure at corners, perimeter, and field of roof.

2. Install base layer of insulation with [**joints staggered not less than 24 inches (610 mm) in adjacent rows**] [**end joints staggered not less than 12 inches (305 mm) in adjacent rows**].

   a. Where installing composite and noncomposite insulation in two or more layers, install noncomposite board insulation for bottom layer and intermediate layers, if applicable, and install composite board insulation for top layer.
   b. Trim insulation neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
   c. Make joints between adjacent insulation boards not more than 1/4 inch (6 mm) in width.
   d. At internal roof drains, slope insulation to create a square drain sump with each side equal to the diameter of the drain bowl plus 24 inches (610 mm).

      1) Trim insulation so that water flow is unrestricted.

   e. Fill gaps exceeding 1/4 inch (6 mm) with insulation.
   f. Cut and fit insulation within 1/4 inch (6 mm) of nailers, projections, and penetrations.
   g. Loosely lay base layer of insulation units over substrate.
   h. Mechanically attach base layer of insulation[**and substrate board**] using mechanical fasteners specifically designed and sized for fastening specified board-type roof insulation to [**wood**] [**wood panel**] decks.

      1) Fasten insulation according to requirements in FM Approvals' RoofNav for specified Windstorm Resistance Classification.
      2) Fasten insulation to resist specified uplift pressure at corners, perimeter, and field of roof.

3. Install upper layers of insulation[**and tapered insulation**] with joints of each layer offset not less than 12 inches (305 mm) from previous layer of insulation.

   a. Staggered end joints within each layer not less than 24 inches (610 mm) in adjacent rows.
   b. Install with long joints continuous and with end joints staggered not less than 12 inches (305 mm) in adjacent rows.
   c. Trim insulation neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.

d. Make joints between adjacent insulation boards not more than 1/4 inch (6 mm) in width.
e. At internal roof drains, slope insulation to create a square drain sump with each side equal to the diameter of the drain bowl plus 24 inches (610 mm).

1) Trim insulation so that water flow is unrestricted.

f. Fill gaps exceeding 1/4 inch (6 mm) with insulation.
g. Cut and fit insulation within 1/4 inch (6 mm) of nailers, projections, and penetrations.
h. Loosely lay each layer of insulation units over substrate.
i. Adhere each layer of insulation to substrate using adhesive according to FM Approvals' RoofNav assembly requirements and FM Global Property Loss Prevention Data Sheet 1-29 for specified Windstorm Resistance Classification, as follows:

1) Set each layer of insulation in a solid mopping of hot roofing asphalt, applied within plus or minus 25 deg F (14 deg C) of equiviscous temperature.
2) Set each layer of insulation in ribbons of bead-applied insulation adhesive, firmly pressing and maintaining insulation in place.
3) Set each layer of insulation in a uniform coverage of full-spread insulation adhesive, firmly pressing and maintaining insulation in place.

3.5 INSTALLATION OF COVER BOARDS

A. Install cover boards over insulation with long joints in continuous straight lines with end joints staggered between rows. Offset joints of insulation below a minimum of 6 inches (150 mm) in each direction.

1. Trim cover board neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
2. At internal roof drains, conform to slope of drain sump.

a. Trim cover board so that water flow is unrestricted.

3. Cut and fit cover board tight to nailers, projections, and penetrations.
4. Adhere cover board to substrate using adhesive according to FM Approvals' RoofNav assembly requirements and FM Global Property Loss Prevention Data Sheet 1-29 for specified Windstorm Resistance Classification, as follows:

a. Set cover board in a solid mopping of hot roofing asphalt, applied within plus or minus 25 deg F (14 deg C) of equiviscous temperature.
b. Set cover board in ribbons of bead-applied insulation adhesive, firmly pressing and maintaining insulation in place.
c. Set cover board in a uniform coverage of full-spread insulation adhesive, firmly pressing and maintaining insulation in place.

B. Install slip sheet over cover board and immediately beneath roof membrane.

3.6 ADHERED ROOFING INSTALLATION

A. Adhere roof membrane over area to receive roofing according to roofing system manufacturer's written instructions. Unroll roof membrane and allow to relax before installing.

B. Start installation of roofing in presence of roofing system manufacturer's technical personnel[**and Owner's testing and inspection agency**].

C. Accurately align roof membrane, and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.

D. Bonding Adhesive: Apply to substrate and underside of roof membrane at rate required by manufacturer, and allow to partially dry before installing roof membrane. Do not apply to splice area of roof membrane.

E. Fabric-Backed Roof Membrane Adhesive: Apply to substrate at rate required by manufacturer, and install fabric-backed roof membrane.

F. In addition to adhering, mechanically fasten roof membrane securely at terminations, penetrations, and perimeter of roofing.

G. Apply roof membrane with side laps shingled with slope of roof deck where possible.

H. Seams: Clean seam areas, overlap roofing, and hot-air weld side and end laps of roof membrane and sheet flashings to ensure a watertight seam installation.

1. Test lap edges with probe to verify seam weld continuity. Apply lap sealant to seal cut edges of roof membrane and sheet flashings.
2. Verify field strength of seams a minimum of twice daily, and repair seam sample areas.
3. Repair tears, voids, and lapped seams in roof membrane that do not comply with requirements.

I. Spread sealant bed over deck-drain flange at roof drains, and securely seal roof membrane in place with clamping ring.

3.7 MECHANICALLY FASTENED ROOFING INSTALLATION

A. Mechanically fasten roof membrane over area to receive roofing according to roofing system manufacturer's written instructions.

B. Unroll roof membrane and allow to relax before installing.

C. For in-splice attachment, install roof membrane with long dimension perpendicular to steel roof deck flutes.

D. Start installation of roofing in presence of roofing system manufacturer's technical personnel[**and Owner's testing and inspection agency**].

E. Accurately align roof membrane, and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.

F. Mechanically fasten or adhere roof membrane securely at terminations, penetrations, and perimeter of roofing.

G. Apply roof membrane with side laps shingled with slope of roof deck where possible.

H. In-Seam Attachment: Secure one edge of KEE sheet using fastening plates or metal battens centered within seam, and mechanically fasten KEE sheet to roof deck.

I. Seams: Clean seam areas, overlap roof membrane, and hot-air weld side and end laps of roof membrane and sheet flashings to ensure a watertight seam installation.

1. Test lap edges with probe to verify seam weld continuity.
2. Apply lap sealant to seal cut edges of roof membrane and sheet flashings.
3. Verify field strength of seams a minimum of twice daily, and repair seam sample areas.
4. Repair tears, voids, and lapped seams in roof membrane that do not comply with requirements.

J. Spread sealant bed over deck-drain flange at roof drains, and securely seal roof membrane in place with clamping ring.

3.8 LOOSELY LAID AND BALLASTED ROOFING INSTALLATION

A. Loosely lay roof membrane over area to receive roofing according to roofing system manufacturer's written instructions.

B. Unroll roof membrane and allow to relax before installing.

C. Comply with requirements in SPRI RP-4 for [**System 1**] [**System 2**] [**System 3**].

D. Start installation of roofing in presence of roofing system manufacturer's technical personnel[**and Owner's testing and inspection agency**].

E. Accurately align roof membrane, without stretching, and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.

F. Mechanically fasten or adhere perimeter of roofing according to requirements in SPRI RP-4.

G. [**Mechanically fasten**] [**or**] [**adhere**] roof membrane at corners, perimeters, and transitions according to requirements in SPRI RP-4.

1. At corners and perimeters, omit aggregate ballast leaving roof membrane exposed.
2. At corners and perimeters, adhere a second layer of roof membrane.

H. Apply roof membrane with side laps shingled with slope of deck where possible.

I. Seams: Clean seam areas, overlap roof membrane, and hot-air weld side and end laps of roof membrane and sheet flashings to ensure a watertight seam installation.

1. Test lap edges with probe to verify seam weld continuity.
2. Apply lap sealant to seal cut edges of roof membrane and sheet flashings.

3. Verify field strength of seams a minimum of twice daily, and repair seam sample areas.
4. Repair tears, voids, and lapped seams in roof membrane that do not comply with requirements.

J. Spread sealant bed over deck-drain flange at roof drains, and securely seal roof membrane in place with clamping ring.

K. Install protection mat over roof membrane, overlapping a minimum of 6 inches (150 mm). Install an additional protection mat layer at projections, pipes, vents, and drains, overlapping a minimum of 12 inches (300 mm).

L. Aggregate Ballast: Apply uniformly over roof membrane at the rate required by roofing system manufacturer, but not less than the following, spreading with care to minimize possibility of damage to roofing system. Lay ballast as roof membrane is installed, leaving roofing ballasted at the end of the workday.

1. Ballast Weight: Size 4 aggregate, 10 lb/sq. ft. (50 kg/sq. m).
2. Ballast Weight: Size 2 aggregate, 13 lb/sq. ft. (65 kg/sq. m), at corners and perimeter; Size 4 aggregate, 10 lb/sq. ft. (50 kg/sq. m), elsewhere.
3. Ballast Weight: Size 2 aggregate, 13 lb/sq. ft. (65 kg/sq. m).
4. Ballast Weight: Size 3 aggregate, <**Insert weight**>, at corners, <**Insert weight**> at perimeter, and <**Insert weight**>, elsewhere.

M. Roof-Paver Ballast: Install [**lightweight**] [**heavyweight**] roof-paver ballast according to manufacturer's written instructions.

N. Roof-Paver and Aggregate Ballast: Install heavyweight roof pavers according to manufacturer's written instructions on roof corners and perimeter.

1. Install Size 4 aggregate ballast elsewhere on roof membrane at a minimum rate of 10 lb/sq. ft. (50 kg/sq. m).
2. Install Size 2 aggregate ballast elsewhere on roof membrane at a minimum rate of 13 lb/sq. ft. (65 kg/sq. m).

3.9 BASE FLASHING INSTALLATION

A. Install sheet flashings and preformed flashing accessories, and adhere to substrates according to roofing system manufacturer's written instructions.

B. Apply bonding adhesive to substrate and underside of sheet flashing at required rate, and allow to partially dry. Do not apply to seam area of flashing.

C. Flash penetrations and field-formed inside and outside corners with cured or uncured sheet flashing.

D. Clean seam areas, overlap, and firmly roll sheet flashings into the adhesive. Hot-air weld side and end laps to ensure a watertight seam installation.

E. Terminate and seal top of sheet flashings and mechanically anchor to substrate through termination bars.

3.10 WALKWAY INSTALLATION

A. Flexible Walkways: Install walkway products according to manufacturer's written instructions.

1. Install flexible walkways at the following locations:

   a. Perimeter of each rooftop unit.
   b. Between each rooftop unit location, creating a continuous path connecting rooftop unit locations.
   c. Between each roof hatch and each rooftop unit location or path connecting rooftop unit locations.
   d. Top and bottom of each roof access ladder.
   e. Between each roof access ladder and each rooftop unit location or path connecting rooftop unit locations.
   f. Locations indicated on Drawings.
   g. As required by roof membrane manufacturer's warranty requirements.

2. Provide 6-inch (76-mm) clearance between adjoining pads.
3. Heat weld to substrate or adhere walkway products to substrate with compatible adhesive according to roofing system manufacturer's written instructions.

B. Roof-Paver Walkways: Install walkway roof pavers according to manufacturer's written instructions.

1. Install roof paver walkways at the following locations:

   a. Perimeter of each rooftop unit.
   b. Between each rooftop unit location, creating a continuous path connecting rooftop unit locations.
   c. Between each roof hatch and each rooftop unit location or path connecting rooftop unit locations.
   d. Top and bottom of each roof access ladder.
   e. Between each roof access ladder and each rooftop unit location or path connecting rooftop unit locations.
   f. Locations indicated on Drawings.
   g. As required by roof membrane manufacturer's warranty requirements.

2. Provide 3 inches (75 mm) of space between adjacent roof pavers.

3.11 PROTECTING AND CLEANING

A. Protect roofing system from damage and wear during remainder of construction period. When remaining construction does not affect or endanger roofing, inspect roofing system for deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner.

B. Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.

C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION 075416

SECTION 076200 - SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Manufactured reglets [**with counterflashing**].
2. Formed roof-drainage sheet metal fabrications.
3. Formed low-slope roof sheet metal fabrications.

1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at [**Project site**] .

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: For sheet metal flashing and trim.

1. Include plans, elevations, sections, and attachment details.
2. Distinguish between shop- and field-assembled work.
3. Include identification of finish for each item.
4. Include pattern of seams and details of termination points, expansion joints and expansion-joint covers, direction of expansion, roof-penetration flashing, and connections to adjoining work.

C. Samples: For each exposed product and for each color and texture specified.

1.4 INFORMATIONAL SUBMITTALS

A. Product certificates.

B. Product test reports.

C. Sample warranty.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance data.

1.6 QUALITY ASSURANCE

A. Fabricator Qualifications: Employs skilled workers who custom fabricate sheet metal flashing and trim similar to that required for this Project and whose products have a record of successful in-service performance.

1. For copings and roof edge flashings that are SPRI ES-1 tested, shop shall be listed as able to fabricate required details as tested and approved.

B. Mockups: Build mockups to verify selections made under Sample submittals to demonstrate aesthetic effects and to set quality standards for fabrication and installation.

1. Build mockup of typical roof coping, including [[**fascia**] [**fascia trim**] [**apron flashing**] , approximately [**10 feet (3.0 m**.

1.7 WARRANTY

A. Special Warranty on Finishes: Manufacturer agrees to repair finish or replace sheet metal flashing and trim that shows evidence of deterioration of factory-applied finishes within specified warranty period.

1. Finish Warranty Period: [**20**] years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. General: Sheet metal flashing and trim assemblies shall withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Completed sheet metal flashing and trim shall not rattle, leak, or loosen, and shall remain watertight.

B. Sheet Metal Standard for Flashing and Trim: Comply with [**NRCA's "The NRCA Roofing Manual"**] [**and**] [**SMACNA's "Architectural Sheet Metal Manual"**] requirements for dimensions and profiles shown unless more stringent requirements are indicated.

C. SPRI Wind Design Standard: Manufacture and install [**copings**] [**roof edge flashings**] tested according to SPRI ES-1 and capable of resisting the following design pressure:

1. Design Pressure: [**As indicated on Drawings**] .

D. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.

1. Temperature Change: [**120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces**] .

2.2 SHEET METALS

A. General: Protect mechanical and other finishes on exposed surfaces from damage by applying strippable, temporary protective film before shipping.

B. Aluminum Sheet: ASTM B 209 (ASTM B 209M), alloy as standard with manufacturer for finish required, with temper as required to suit forming operations and performance required.
   1. Color Anodic Finish, Coil Coated: AAMA 611, AA-M12C22A42/A44, Class I, 0.018 mm or thicker.
      a. Use at expose fascia and trim
      b. Color: [**Match Existing**].
   2. Exposed Coil-Coated Finish:
      a. Two-Coat Fluoropolymer: AAMA 2605. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
   3. Color: [**Match Existing**] .

2.3 UNDERLAYMENT MATERIALS

A. Self-Adhering, High-Temperature Sheet: Minimum 30 mils (0.76 mm) thick, consisting of a slip-resistant polyethylene- or polypropylene-film top surface laminated to a layer of butyl- or SBS-modified asphalt adhesive, with release-paper backing; specifically designed to withstand high metal temperatures beneath metal roofing. Provide primer according to written recommendations of underlayment manufacturer.
   1. Thermal Stability: ASTM D 1970; stable after testing at 240 deg F (116 deg C) or higher.
   2. Low-Temperature Flexibility: ASTM D 1970; passes after testing at minus 20 deg F (29 deg C) or lower.

B. Slip Sheet: Rosin-sized building paper, 3 lb/100 sq. ft. (0.16 kg/sq. m)minimum.

2.4 MISCELLANEOUS MATERIALS

A. General: Provide materials and types of fasteners, solder, protective coatings, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation and as recommended by manufacturer of primary sheet metal[**or manufactured item**] unless otherwise indicated.

B. Fasteners: Wood screws, annular threaded nails, self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads and recommended by manufacturer of primary sheet metal[**or manufactured item**].
   1. General: Blind fasteners or self-drilling screws, gasketed, with hex-washer head.

a. Exposed Fasteners: Heads matching color of sheet metal using plastic caps or factory-applied coating. Provide metal-backed EPDM or PVC sealing washers under heads of exposed fasteners bearing on weather side of metal.
b. Blind Fasteners: High-strength aluminum or stainless-steel rivets suitable for metal being fastened.
c. Spikes and Ferrules: Same material as gutter; with spike with ferrule matching internal gutter width.

C. Sealant Tape: Pressure-sensitive, 100 percent solids, polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape 1/2 inch (13 mm) wide and 1/8 inch (3 mm) thick.

D. Elastomeric Sealant: ASTM C 920, elastomeric [**polyurethane**] [**polysulfide**] [**silicone**] polymer sealant; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.

E. Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied for hooked-type expansion joints with limited movement.

F. Epoxy Seam Sealer: Two-part, noncorrosive, aluminum seam-cementing compound, recommended by aluminum manufacturer for exterior nonmoving joints, including riveted joints.

G. Bituminous Coating: Cold-applied asphalt emulsion according to ASTM D 1187.

H. Asphalt Roofing Cement: ASTM D 4586, asbestos free, of consistency required for application.

2.5 MANUFACTURED REGLETS

A. Reglets: Units of type, material, and profile required, formed to provide secure interlocking of separate reglet and counterflashing pieces, and compatible with flashing indicated [with interlocking counterflashing on exterior face, of same metal as reglet].
1. Material: [Aluminum, 0.024 inch (0.61 mm) thick]
2. Finish: [Mill]

2.6 FABRICATION, GENERAL

A. General: Custom fabricate sheet metal flashing and trim to comply with details shown and recommendations in cited sheet metal standard that apply to design, dimensions, geometry, metal thickness, and other characteristics of item required. Fabricate sheet metal flashing and trim in shop to greatest extent possible.

1. Obtain field measurements for accurate fit before shop fabrication.
2. Form sheet metal flashing and trim to fit substrates without excessive oil canning, buckling, and tool marks; true to line, levels, and slopes; and with exposed edges folded back to form hems.
3. Conceal fasteners and expansion provisions where possible. Do not use exposed fasteners on faces exposed to view.

B. Expansion Provisions: Form metal for thermal expansion of exposed flashing and trim.

1. Form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with butyl sealant concealed within joints.
2. Use lapped expansion joints only where indicated on Drawings.

C. Sealant Joints: Where movable, nonexpansion-type joints are required, form metal to provide for proper installation of elastomeric sealant according to cited sheet metal standard.

D. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal.

E. Fabricate cleats and attachment devices of sizes as recommended by cited sheet metal standard for application, but not less than thickness of metal being secured.

F. Seams: Fabricate nonmoving seams with flat-lock seams. Tin edges to be seamed, form seams, and solder.

G. Seams: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with elastomeric sealant unless otherwise recommended by sealant manufacturer for intended use.[**Rivet joints where necessary for strength.**]

H. Seams for Aluminum: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with epoxy seam sealer.[**Rivet joints where necessary for strength.**]

2.7 ROOF-DRAINAGE SHEET METAL FABRICATIONS

A. Parapet Scuppers: Fabricate scuppers to dimensions required, with closure flange trim to exterior, 4-inch- (100-mm-) wide wall flanges to interior, and base extending 4 inches (100 mm) beyond cant or tapered strip into field of roof. Fabricate from the following materials:
1. Aluminum: [**0.040 inch (0.81 mm)**] thick.

B. Conductor Heads: Fabricate conductor heads with flanged back and stiffened top edge and of dimensions and shape required, complete with outlet tubes. Fabricate from the following materials:
1. Aluminum: [**0.040 inch (0.81 mm)**].

C. Splash Pans: Fabricate to dimensions and shape required and from the following materials:
1. Aluminum: [**0.040 inch (1.02 mm)**] thick.

2.8 LOW-SLOPE ROOF SHEET METAL FABRICATIONS

A. Copings: Fabricate in minimum 96-inch- (2400-mm-) long, but not exceeding 12-foot- (3.6-m-) long, sections. Fabricate joint plates of same thickness as copings. Furnish with continuous cleats to support edge of external leg and interior leg. Miter corners, [**fasten and seal**] [**solder or weld**] watertight.[**Shop fabricate interior and exterior corners.**]

1. Fabricate from the Following Materials:
   a. Aluminum-Zinc Alloy-Coated Steel: [**0.040 inch (1.02 mm)**] color to match wall panels

B. Base Flashing: [**Shop fabricate interior and exterior corners.**] Fabricate from the following materials:

1. Copper: [**20 oz./sq. ft. (0.68 mm thick weight (thickness)**>.
2. Aluminum: [**0.040 inch (1.02 mm)**] thick.

C. Counterflashing[**and Flashing Receivers**]: Fabricate from the following materials:

1. Copper: [**16 oz./sq. ft. (0.55 mm thick)**] <**Insert weight (thickness)**>.
2. Aluminum: [**0.032 inch (0.81 mm)**] <**Insert dimension**> thick.

D. Roof-Penetration Flashing: Fabricate from the following materials:
1. Aluminum-Zinc Alloy-Coated Steel: [**0.028 inch (0.71 mm)**] <.

E. Roof-Drain Flashing: Fabricate from the following materials:

1. Copper: [**12 oz./sq. ft. (0.41 mm thick)**] <**Insert weight (thickness)**>.

PART 3 - EXECUTION

3.1 UNDERLAYMENT INSTALLATION

A. Self-Adhering Sheet Underlayment: Install self-adhering sheet underlayment, wrinkle free. Prime substrate if recommended by underlayment manufacturer. Comply with temperature restrictions of underlayment manufacturer for installation; use primer for installing underlayment at low temperatures. Apply in shingle fashion to shed water, with end laps of not less than 6 inches (150 mm) staggered 24 inches (600 mm) between courses. Overlap side edges not less than 3-1/2 inches (90 mm). Roll laps and edges with roller. Cover underlayment within 14 days.

3.2 INSTALLATION, GENERAL

A. General: Anchor sheet metal flashing and trim and other components of the Work securely in place, with provisions for thermal and structural movement. Use fasteners, solder, protective coatings, separators, sealants, and other miscellaneous items as required to complete sheet metal flashing and trim system.

1. Install sheet metal flashing and trim true to line, levels, and slopes. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant.
2. Install sheet metal flashing and trim to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.
3. Space cleats not more than 12 inches (300 mm) apart. Attach each cleat with at least two fasteners. Bend tabs over fasteners.
4. Install exposed sheet metal flashing and trim with limited oil canning, and free of buckling and tool marks.
5. Torch cutting of sheet metal flashing and trim is not permitted.

B. Metal Protection: Where dissimilar metals contact each other, or where metal contacts pressure-treated wood or other corrosive substrates, protect against galvanic action or corrosion by painting contact surfaces with bituminous coating or by other permanent separation as recommended by sheet metal manufacturer or cited sheet metal standard.

1. Coat concealed side of [**uncoated-aluminum**] [**and**] [**stainless-steel**] sheet metal flashing and trim with bituminous coating where flashing and trim contact wood, ferrous metal, or cementitious construction.
2. Underlayment: Where installing sheet metal flashing and trim directly on cementitious or wood substrates, install underlayment and cover with slip sheet.

C. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at maximum of [**10 feet (3 m)**] <**Insert dimension**> with no joints within 24 inches (600 mm) of corner or intersection.

1. Form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with sealant concealed within joints.
2. Use lapped expansion joints only where indicated on Drawings.

D. Fasteners: Use fastener sizes that penetrate [**wood blocking or sheathing not less than 1-1/4 inches (32 mm) for nails and not less than 3/4 inch (19 mm) for wood screws**] [**substrate not less than recommended by fastener manufacturer to achieve maximum pull-out resistance**] .

E. Conceal fasteners and expansion provisions where possible in exposed work and locate to minimize possibility of leakage. Cover and seal fasteners and anchors as required for a tight installation.

F. Seal joints as required for watertight construction. Prepare joints and apply sealants to comply with requirements in Section 079200 "Joint Sealants."

G. Rivets: Rivet joints in uncoated aluminum where necessary for strength.

3.3 ROOF-DRAINAGE SYSTEM INSTALLATION

A. General: Install sheet metal roof-drainage items to produce complete roof-drainage system according to cited sheet metal standard unless otherwise indicated. Coordinate installation of roof perimeter flashing with installation of roof-drainage system.

B. Splash Pans: Install where downspouts discharge on [**low-slope roofs**] <**Insert surface**>. Set in asphalt roofing cement or elastomeric sealant compatible with the substrate.

C. Parapet Scuppers: Continuously support scupper, set to correct elevation, and seal flanges to interior wall face, over cants or tapered edge strips, and under roofing membrane.

D. Conductor Heads: Anchor securely to wall, with elevation of conductor head rim at minimum of 1 inch (25 mm) below [**scupper**] [**or**] [**gutter**] discharge.

3.4 ROOF FLASHING INSTALLATION

A. General: Install sheet metal flashing and trim to comply with performance requirements[**, sheet metal manufacturer's written installation instructions,**] and cited sheet metal standard. Provide concealed fasteners where possible, and set units true to line, levels, and slopes. Install work with laps, joints, and seams that are permanently watertight and weather resistant.

B. Copings: Anchor to resist uplift and outward forces according to recommendations in cited sheet metal standard unless otherwise indicated.

C. Pipe or Post Counterflashing: Install counterflashing umbrella with close-fitting collar with top edge flared for elastomeric sealant, extending minimum of 4 inches (100 mm) over base flashing. Install stainless-steel draw band and tighten.

D. Counterflashing: Coordinate installation of counterflashing with installation of base flashing. Insert counterflashing in reglets or receivers and fit tightly to base flashing. Extend counterflashing 4 inches (100 mm) over base flashing. Lap counterflashing joints minimum of 4 inches (100 mm).

E. Roof-Penetration Flashing: Coordinate installation of roof-penetration flashing with installation of roofing and other items penetrating roof. Seal with [**elastomeric**] [**butyl**] sealant and clamp flashing to pipes that penetrate roof.

3.5 WALL FLASHING INSTALLATION

A. General: Install sheet metal wall flashing to intercept and exclude penetrating moisture according to cited sheet metal standard unless otherwise indicated. Coordinate installation of wall flashing with installation of wall-opening components such as windows, doors, and louvers.

3.6 CLEANING AND PROTECTION

A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.

B. Clean and neutralize flux materials. Clean off excess solder.

C. Clean off excess sealants.

D. Remove temporary protective coverings and strippable films as sheet metal flashing and trim are installed unless otherwise indicated in manufacturer's written installation instructions.

END OF SECTION 076200

SECTION 095500 – WOOD FLOORING RESTORATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

A. Drawings and general provisions of Contract, including Division 01 General Requirements apply to this Specification.

1.2. SCOPE:

A. Removal of exterior finish systems at areas of wood restoration or repair
B. Installation of wood repair compound materials
C. Sanding, staining and refinishing of existing flooring.

1.3 QUALITY ASSURANCE:

A. Material supplier shall be a firm established in the industry.

B. Flooring contractor shall be a company with a minimum of three (3) years continuous experience in the athletic flooring field. A list of at least three completed projects of similar magnitude and complexity where this work has been performed shall be submitted all with submittals/proposals. For each completed project owner references including contact information of a person with direct knowledge of the work shall be included.

Manufacturers wishing to gain prior approval shall request, in writing, the owner's qualification criteria.

1.4 SUBMITTALS:

A. Submit three copies of manufacturer's product data.

B. Maintenance Literature: Three copies of MFMA Care and Maintenance of wood floors.

D. Certification: Manufacturer shall provide certification that all materials meet grade, quality and treatment if applicable.

1.5 DELIVERY, STORAGE AND HANDLING:

Materials shall not be delivered to the jobsite until all masonry, painting, plastering, tile work, work is complete. Where other trades are involved, all overhead mechanical work, lighting, backstops, and scoreboards shall be installed. Room temperature shall be 55-80 degrees and a consistent relative humidity maintained.

1.6 JOB CONDITIONS/SEQUENCE:

A. Do not commence work until requirements listed in the previous paragraph are obtained.

B. Permanent heat, light, and ventilation shall be operating and maintained during and following installation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS: The following manufacturers' products have been used to establish minimum standards for materials, workmanship and function:

1. Pre stain sealer Minwax or approved equal.
2. H&C - Aqua-Pro Pro Coat Acrylic Urethane Wood finish
3. Clear protect 2-part Polyurethane Clear Coating
4. Fiddes USA – Premier HPX Floor Water Based Polyurethane
5. Advantage top Notch satin 2-component Water Borne Wood Floor Finish

2.2 Equal products from other manufacturers may be used in the work provided such products have been approved, by the Architect of record, not less than ten (10) days prior to scheduled bid opening.

2.3 Materials:

A. SEALER/CONDITIONER: Acrylic Water-Based Urethanes
B. FLOOR STAIN: Water based stained compatible with floor finish
C. FLOOR FINISH: Water-Based Urethanes

1) Physical Characteristics:
2) Gloss Level: Satin
3) Solids: 33 +/- 2%
4) VOC: Does not exceed 300 grams per liter (3.8 pounds per gallon)

PART 3 - EXECUTION

3.1 FLOOR INSPECTION:

A. Inspect existing subfloor floor for proper dryness and tolerance and report any discrepancies to the owner’s representative in writing. It is the intent of the owner to make necessary repairs where deficient materials are discovered. Any floor repair will be approved by the owner’s representative prior to performance of the work. Additional cost associated with this floor repair shall be addressed with the flooring contractor via a Change Order using “unit cost” provided on the original bid form proposal.

B. All floor repairs must be performed and complete prior to the refinishing of the maple flooring.

3.2 REFINISHING - Make sure floor is free of moisture.

A.
I. Scrape and hand-sand corners and other areas not reached by machine.
J. Clean floor to remove all dust and debris prior to sealing wood. Floor shall be smooth and free of shiners.

3.3 **Removal of Finishes:**

1. **Sweep floors clean.**
2. **Strip all wood surface to bare wood, taking care not to damage sound wood and profiles by the application of stripping paste or by the use of a heat gun or plate.**
3. **Remove all tape and gum with a putty knife or scraper**
4. **Sand with heavy, power driven type sander. Use dust accumulator on machine.**
5. **Sand with No. 40 or 36 grit sandpaper if boards are uneven heights. First pass shall be on a diagonal angle to the direction of the floor.**
6. **Make sure floor is sanded smooth and level before sanding with medium grit (50 or 60 grit) sandpaper. This cut and all subsequent cuts shall be sanded in the direction of the grain of the floor.**
7. **Sand edges with No. 60 or 80 grit spinner paper.**
8. **Sand entire floor with No. 80 grit sandpaper.**
9. **Disk sand entire floor with No. 100 disk paper.**
10. **Repair or replace all defective work at no additional cost to the owner.**
11. **Remove stripper and finishes as directed by manufacturer.**
12. **Dispose of debris in accordance with approved methods.**
13. **Wash all surfaces with recommended neutralizing agents to remove any foreign particle, dust and chemical**
14. **Sand bare wood to remove all loose fibers, paint, compounds. Remove all sawdust and dirt.**

3.4 Wood Floor Repair; Preservation and Sealing of seams and joints. Repair of wood checking" due to wear.

1. **Remove all decayed soft and dmaged wood, to sound bright unaffected material and replace with in-kind.**
2. **Check area of removal to determine the complete elimination of decayed material. The remaining wood should be even color without discoloration.**
3. **Pre-treat bare and sanded wood thoroughly with low viscosity epoxy coupling/bonding agent.**
4. **Allow coupling agent to penetrate wood surface for a minimum of 10 minutes and maximum of 30 minutes, or as recommended by the manufacturer. Avoid applying in direct sunlight**
5. **Remove any excess bonding agent with absorbing paper 8. Apply epoxy repair compound over epoxy bonding agent while still tacky.**
6. **Epoxy compound shall have optimal contact with wood**
7. **Fill joints full, even and smooth in one application**
8. **Allow full cure time as specified by manufacturer before application of paint or varnish.**
9. **13. After curing, sand surface even and smooth. Transitions and irregularities between wood and epoxy shall not be visible after standing**

FINISHING:

A. Apply two coats of floor sealer.

C. Apply First Coat of Floor Finish with a light weight T-bar applicator going with the grain. Do Not Puddle Finish

H. Apply Second Coat of Floor Finish (Arena 300) with lightweight T-bar applicator going with the grain. Do Not Puddle finish.

I. Let Floor dry approximately 2 hours to tack free. Then allow at least 4 hours but not more than 16 hours after tack free before recoating

J. Apply Third & Final Coat of Floor Finish (Arena 300).

K. Close doors and windows, turn off vent fans and Air Conditioning to avoid excess and direct air while coating.

3.4 PERIMETER MOLDING:

A. Install wood base (where missing) at all walls with adhesive.

3.5 CLEAN UP:

A. Remove all sanding dust from job site.

B. Clean and dust off doors and base trim before finish coats are applied.

END OF SECTION

TO: GRC Architects; cross@architects-gca.com

FROM: Southland Contracting, Inc.

REFERENCE: Fort Coombs Armory & Convention Center Renovations – Phase II; GRC PROJECT #: 24324

RFI #2

Below are the questions for this RFI which are all specific to the roofing scope of the project as well as an approval request for an approved alternate manufacturer for roofing material –

1. Sheet Metal Flashing and Trim (Flashing, Coping, etc.) – Specification Section 076200 "Sheet Metal Flashing and Trim", referenced in Roofing Specification does not appear in Specification Manual. Please provide. GRC: REFER TO SPEC SECTION 075416, ADDENDA 1
2. Shingle Roof Area, Rake Wall Flashing – Detail provided for Rake Wall Flashing on shingle roof is 3: A1.3. This Detail is the PVC Wall Flashing Detail. Please provide Rake Wall Flashing Detail for Shingle Roof Area. GRC: REFER TO ADDENDA 1 FOR CLARIFICATION
3. Shingle Roof Area, Wall Cap Flashing – Demo Plan (D1.3) East Wall: Existing Alum. Cap Flashing to Remain – Please Confirm. North Wall (Shingle Area and Low Slope Area): Existing Cap Flashing to Remain – Please Confirm. South Wall (Shingle Roof Area and Low Slope Roof Area) – Demo Cap Flashing, Use New – Please Confirm and Provide Cap Flashing Detail including Metal Type/Thickness, as well as wall width. GRC: REFER TO ADDENDA 1 FOR CLARIFICATION
4. Clarification: Demo Plan D1.3 states Existing Low Slope Roofing Membrane to Remain, East Wall and Center West Wall (Shingle Roof/Low Slope Roof Intersection). Detail for this Condition is 2: A3.1. Is this Low Slope Roofing Membrane to remain in gutter, and are the metal flashings shown on exterior of wall existing and to also remain in place? GRC: REFER TO ADDENDA 1 FOR CLARIFICATION

Sincerely,

Jason A. Bullock, V.P.

Southland Contracting, Inc

jason@southlandcontracting.com

Connor

To: All Bidders
Subject: RE: Ft Coombs Project - Apalachicola

Addenda item A1.9.0 Shaffield RFI

From: Don Horne <dhorne@shaffieldbuilding.com>
Sent: Thursday, May 29, 2025 9:50 AM
To: Connor <CRoss@architects-gca.com>; John Jackson <jjackson@architects-gca.com>
Subject: Ft Coombs Project - Apalachicola

Good Morning John and Connor,

We have the following questions regarding the Ft Coombs Bid:

1. Drawing D1.1 detail reference D6 at the wood windows ... having revied the site and exiting conditions, it looks like there are wood windows that are in need of repair but are not designated D6.
   Are they to be included for rebuilding or just the ones designated D6 ?

GRC: The scope of windows is correctly shown on D1.1 and Sheets A3.2 and A3.3. Sheet D1.2 note D6 at tower is incorrect and added to Addenda 1

2. A1.1 and M1.0 ... wood bench and duct work ... having removed the access panel in the bench, it looks like the ductwork will not fit in the bench without reconstructing the wood support framing. Please confirm this is the intent ?

GRC: The intent is to modify the bench as needed to install the daywork. This modification is a means and methods issue and not specifically addressed in the drawings.

3. A2.1, D2.1 and LS 1.1, regarding the Meeting room ... the photograph on LS 1.1 shows what appears to be acoustic ceiling. A2.1 shows a different ceiling (maybe newer photograph ?) Please confirm ?

GRC: There is not ceiling scope in the meeting room. The ceiling was replaced in the last project. The photo with the APC ceiling is old.

4. Where the new door is installed from the corridor to the meeting room, what is the detail required at the flooring infill in the doorway where the existing wall is to be removed ?

GRC: The flooring to be patched where the old wall is deleted. Install the patch as you would a threshold.

5. One of our wood window carpentry subcontractors has suggested that cypress , in his opinion, is not the best wood for rebuilding the window sashes. Is the requirement firm or will you entertain other wood products ?

GRC: We are open to review alternative wood species if it is moisture and insect resistant.

6. There are existing round wood louvers on the exterior of the building that appear to need repairs. These louvers do not appear to be in the drawings. Are they excluded or should they be included for rebuilding ?

GRC: The round louvers for now are to remain. We can address replacing them, if require, once work begins.

7. The balcony wood flooring is in much worse shape than the first floor. To what extent should the damaged or missing wood be replaced ? Will the balcony remain off limits to the public, after this phase II restoration ?

GRC: The mezzanine is closed to pubic due to insuficnet exiting. As such, there is no floorings scope in this project.

Thank you in advance for your reply,

Don Horne, LEED AP BD+C

Shaffield Building Specialties, Inc.

1515-2 Henway Court
Tallahassee, Florida 32303

cell phone # 850-528-6560
email dhorne@shaffieldbuilding.com

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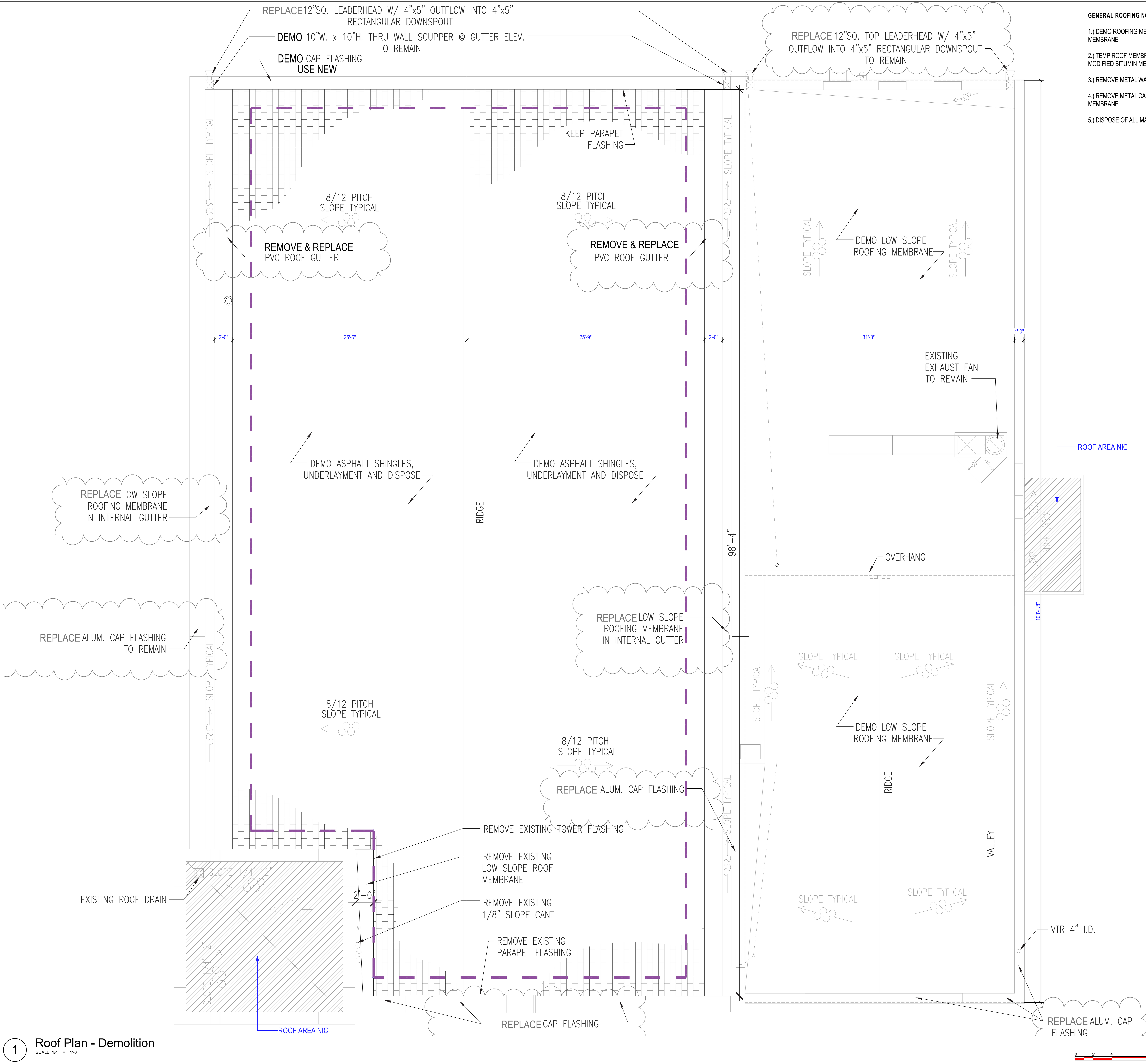


1 Roof Plan - Demolition
SCALE: 1/4" = 1'-0"

NORTH

GENERAL ROOFING NOTES:

1.) DEMO ROOFING MEMBRANE AND INSTALL TEMPORARY ROOF MEMBRANE

2.) TEMP ROOF MEMBRANE SHALL BE 40 MIL SELF ADHESIVE MODIFIED BITUMIN MEMBRANE

3.) REMOVE METAL WALL FLAHSING AND PREPARE WALL FOR NEW

4.) REMOVE METAL CAP FLASHING AND INSTALL TEMP ROOF MEMBRANE

5.) DISPOSE OF ALL MATERIALS IN APPROVED DUMPING SITE

D8 DEMOLISH EXISTING ROOF SHINGLES, REPLACE DAMAGED SHEATHING

D9 DEMOLISH EXISTING PVC GUTTER LINER, REPLACE DAMAGED SHEATHING

D10 DEMOLISH EXISTING PVC ROOFING AND INSULATION, REPLACE DAMAGED SHEATHING

Consultants:

Seal:

PHASE:	DRAWN BY:	REVIEWED BY	DATE:
50% CONSTR DOCUMENTS	MK	CR	07-08-24
100% CONSTR DOCUMENTS	MK	CR	11-1-24
CONTRACT DOCUMENTS	JE	CR	04-11-25
PERMIT DOCUMENTS			
ADDENDA 1	CR	CR	5-29-25

Fort Coombs Armory and Convention Center Renovations - Phase 2

APALACHICOLA, FL
GRC Project Number 24324

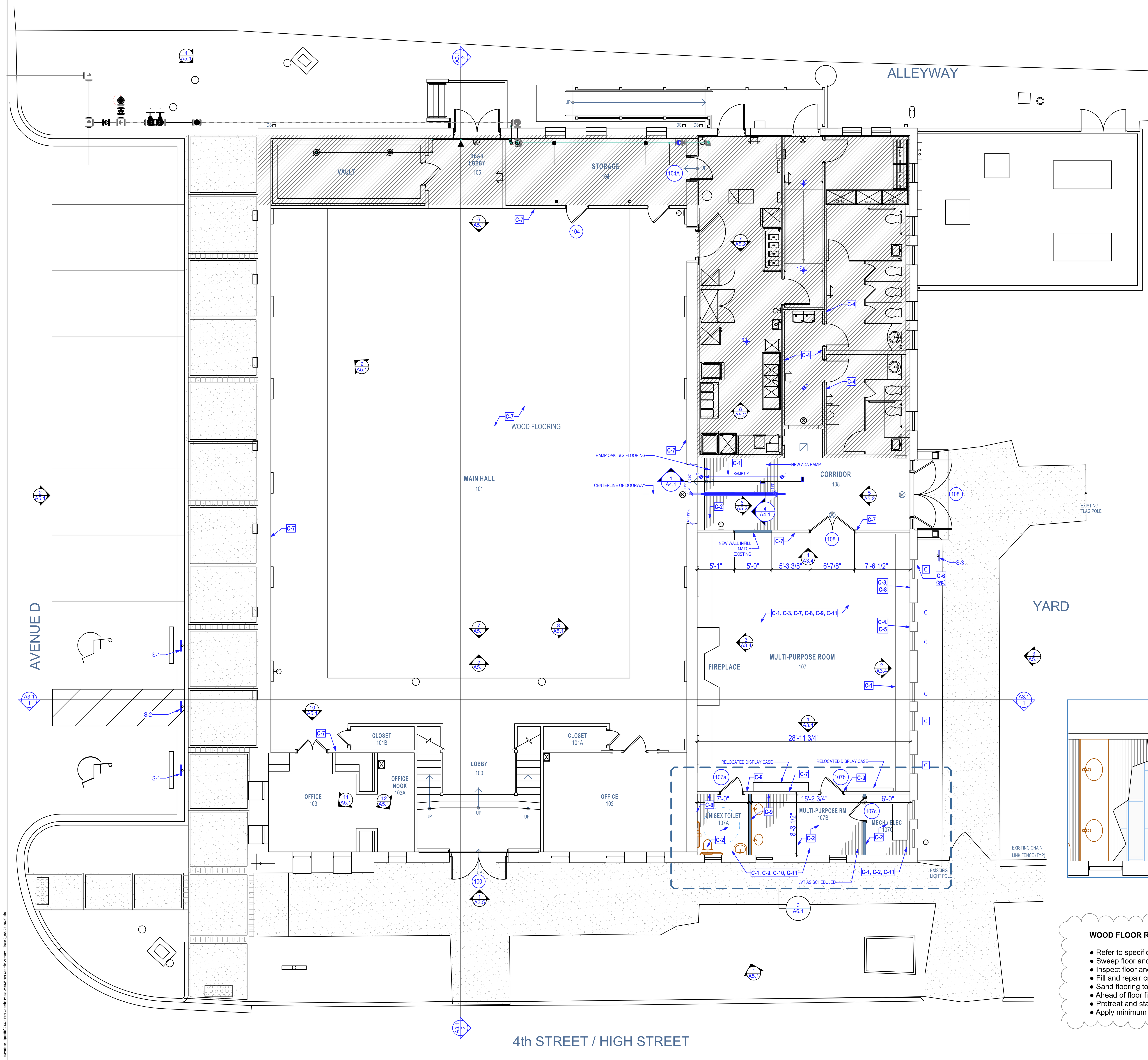
architecture
interior design
planning
gilchrist ross crowe architects

413 ALL SAINTS STREET TALLAHASSEE, FLORIDA 32301
(850) 222-8100 www.architects-gca.com

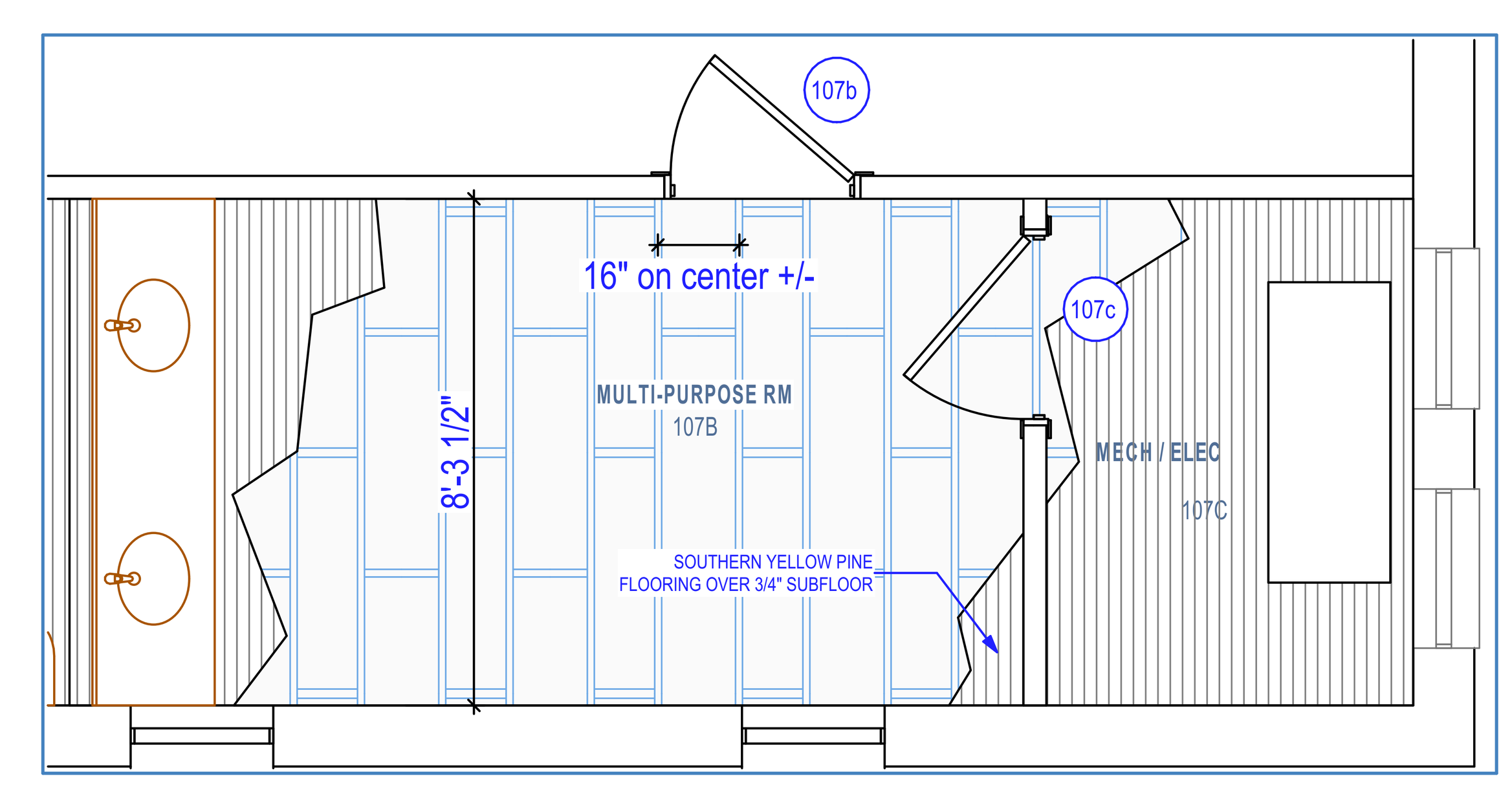
SIGNATURE

ARCHITECTURAL
DRAWING NAME
Roof Plan - Demolition

SHEET
D1.3



1 First Floor Plan Renovation
SCALE: 3/16" = 1'-0"



6 Flooring / Sub-Floor Detail
SCALE: 3/8" = 1'-0"

WOOD FLOOR RESTORATION

- Refer to specification Section 095500 Wood Floor Restoration.
- Sweep floor and remove floor sealers to bare wood.
- Inspect floor and remove and replace damage flooring with similar tight grain boards.
- Fill and repair cracked boards with epoxy as specified.
- Sand flooring to consistent bare wood.
- Ahead of floor finishing, provide mockup of stained and finished floor.
- Pretreat and stain wood flooring after receiving an approved mockup.
- Apply minimum two coats of sealer as specified.

NORTH

Architectural Key Notes

C1	Modify bench seat and install HVAC duct & diffusers.
C2	Install 3/4" plywood + subfloor, insulation, and LVT
C3	Install wall insulation, geoboard, wood trim
C4	Clean and Paint existing Grey wainscot
C5	Install suspended gypboard ceiling and trim
C6	Install refurbish windows with new casings and restore sills - Paint as noted
C7	Refinish wood flooring and base
C8	Clean / seal existing STAINED WOOD wainscot, trim, stair railing, coffer ceiling
C9	Install new wood trim, Paint as noted
C10	Install new light fixtures
C11	Prep and paint walls, ceilings, and trim
C12	New self-adhered underlayment, Shingles and flashings
C13	Install KEE Gutter Liner and flashings. Extend beneath shingles
C14	New Kee Roof, Insulation and flashings

EXTERIOR SCOPE

C15	Clean building with low pressure washer, remove all loose material, patch stucco and Paint
C16	Refinish existing Doors as indicated
C17	Base Bid -Re-furbish main doors. Add Altenate replace

Consultants:

Seal:

PHASE:	DRAWN BY:	REVIEWED BY	DATE:
50% CONSTR DOCUMENTS	MK	CR	07-08-24
100% CONSTR DOCUMENTS	MK	CR	11-1-24
CONTRACT DOCUMENTS	JE	CR	04-11-25
PERMIT DOCUMENTS			
ADDENDA 1	JE		05-29-2025

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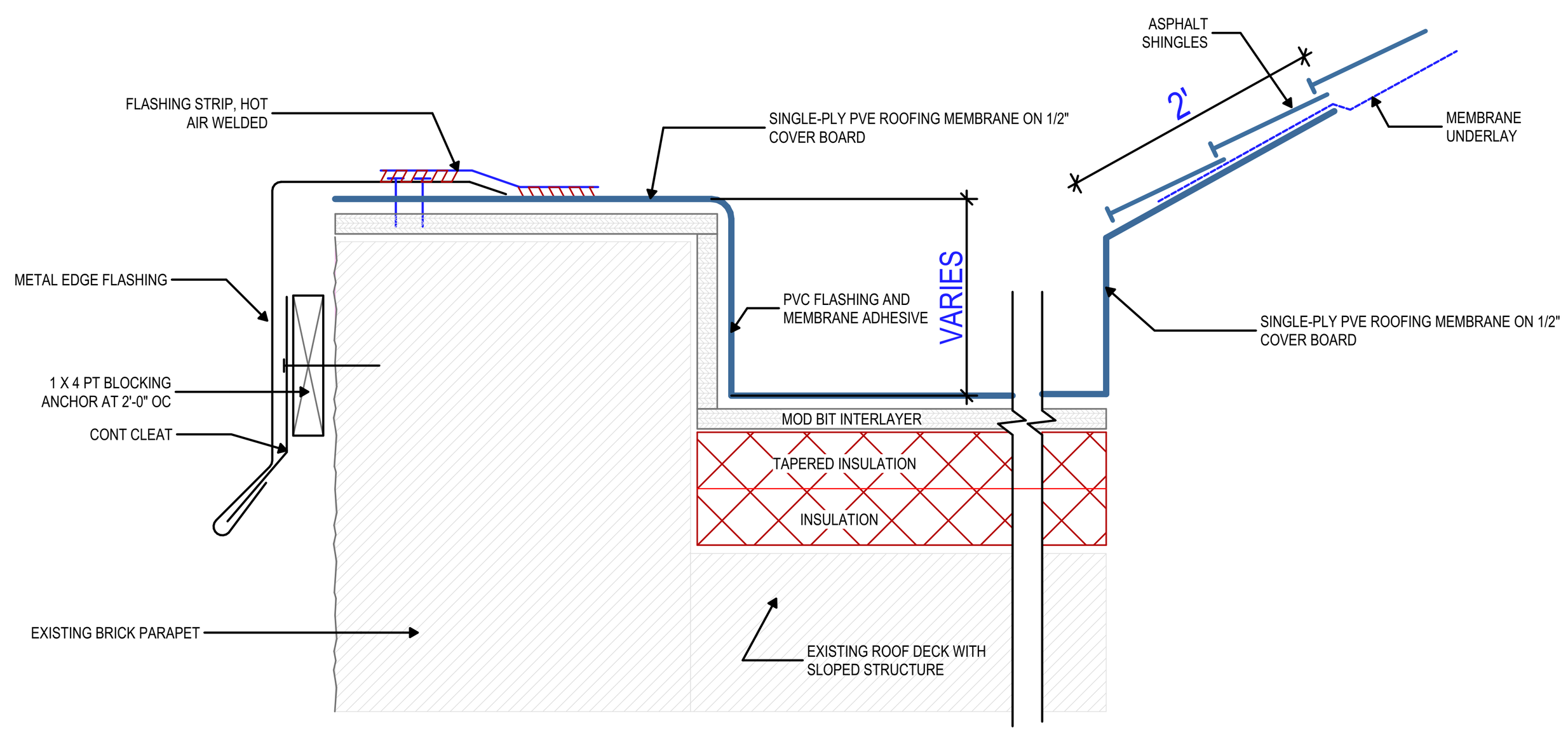
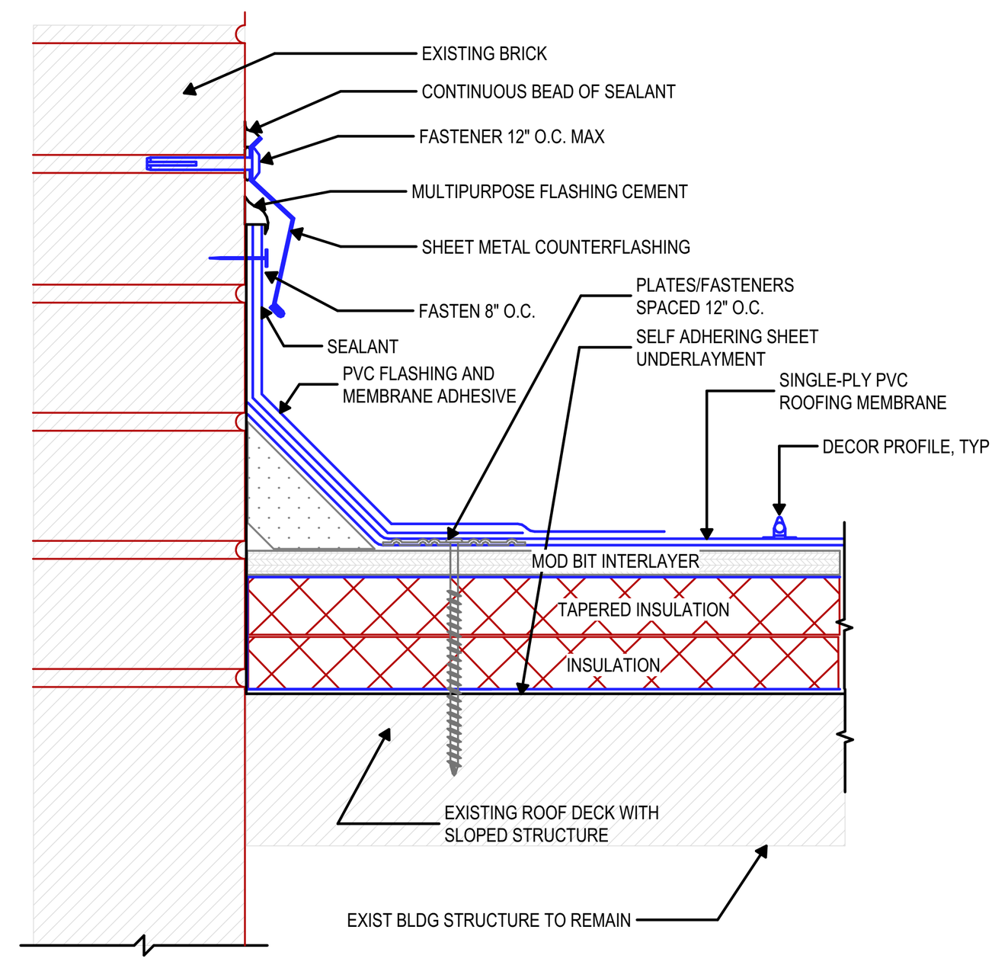
SIGNATURE

ARCHITECTURAL
DRAWING NAME
First Floor Plan - Renovation

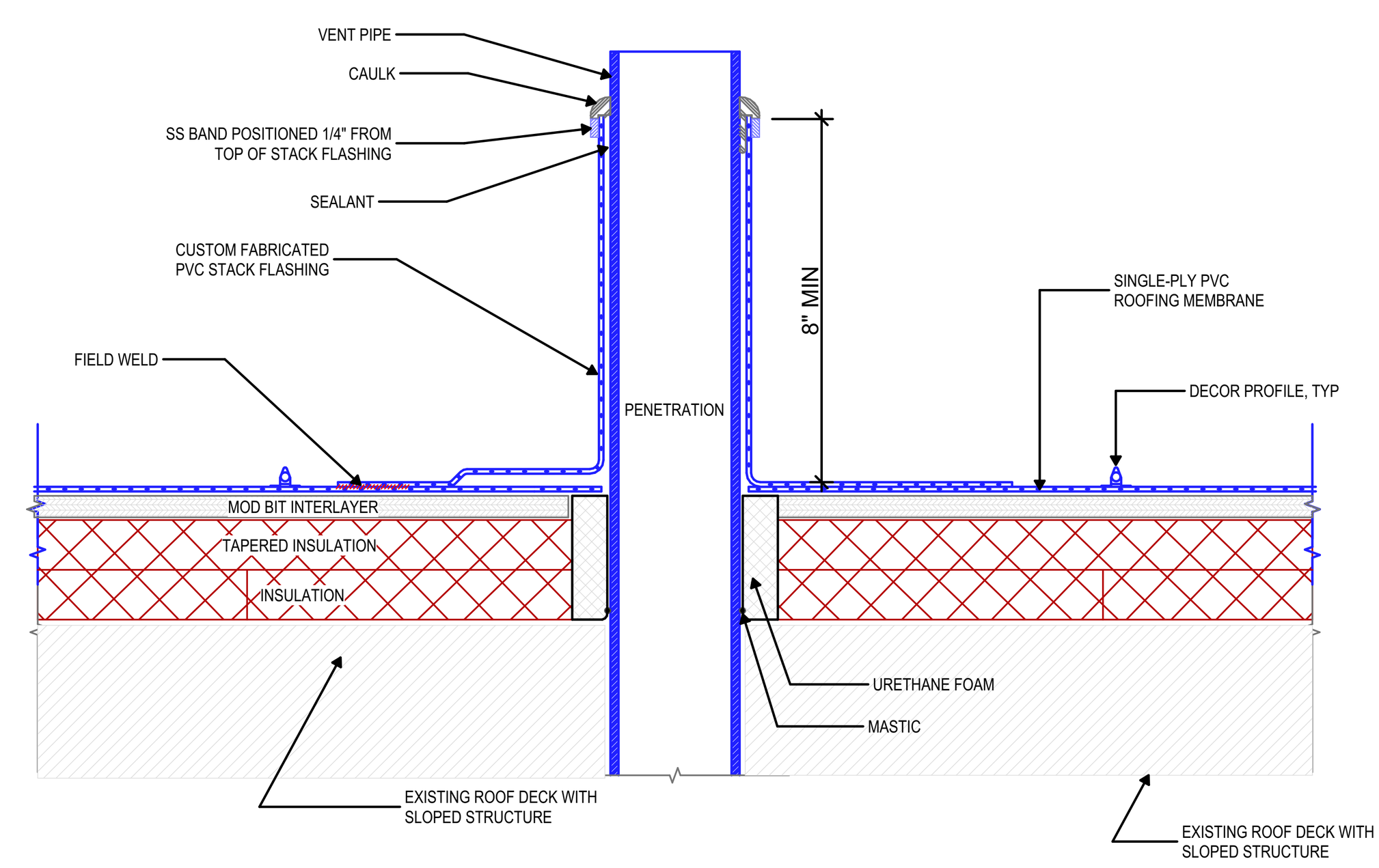
SHEET
A1.1



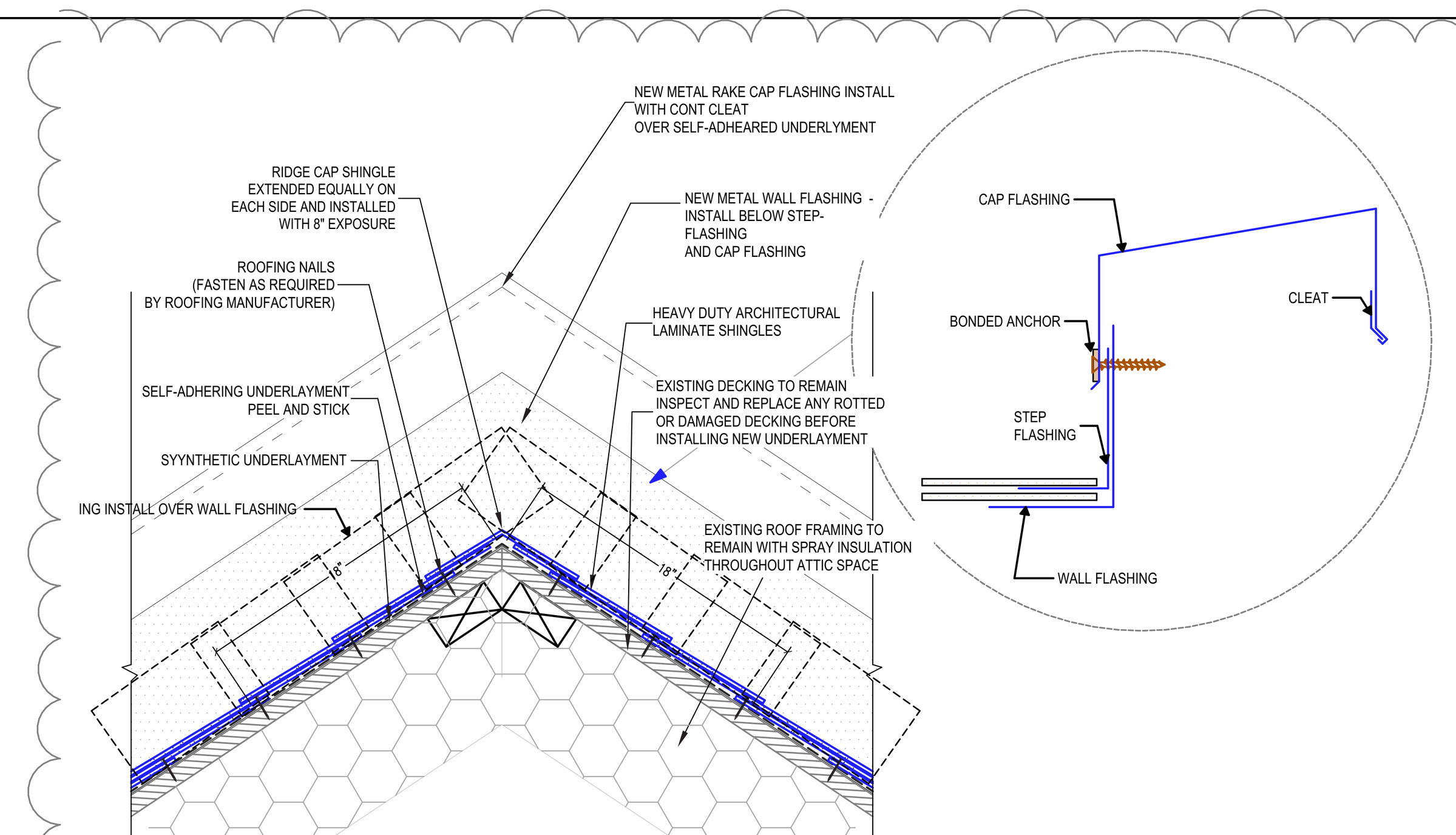
2 PVC & Metal Coping Parapet Detail
SCALE: 3" = 1'-0"



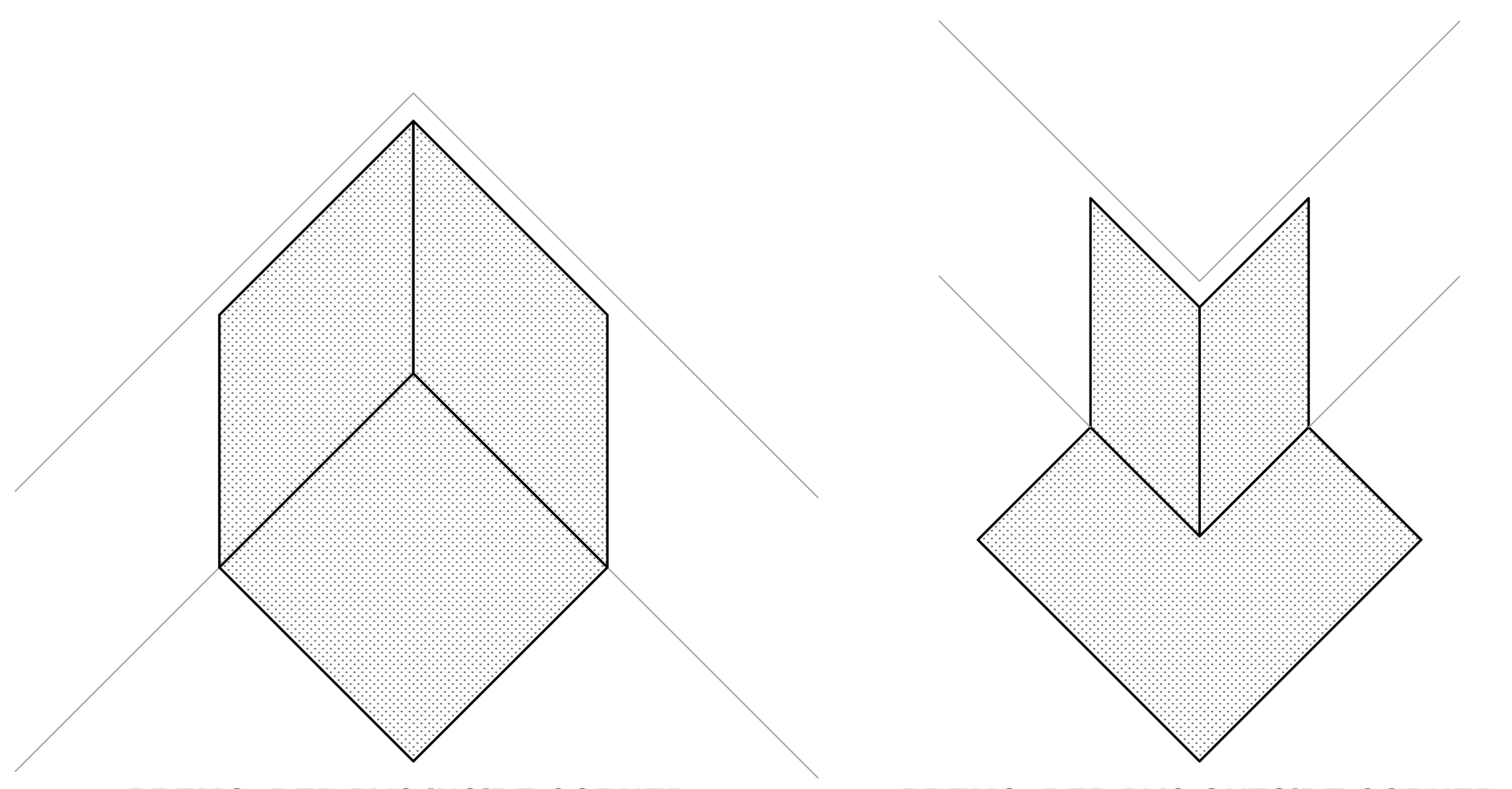
3 PVC Wall Flashing Detail
SCALE: 3" = 1'-0"



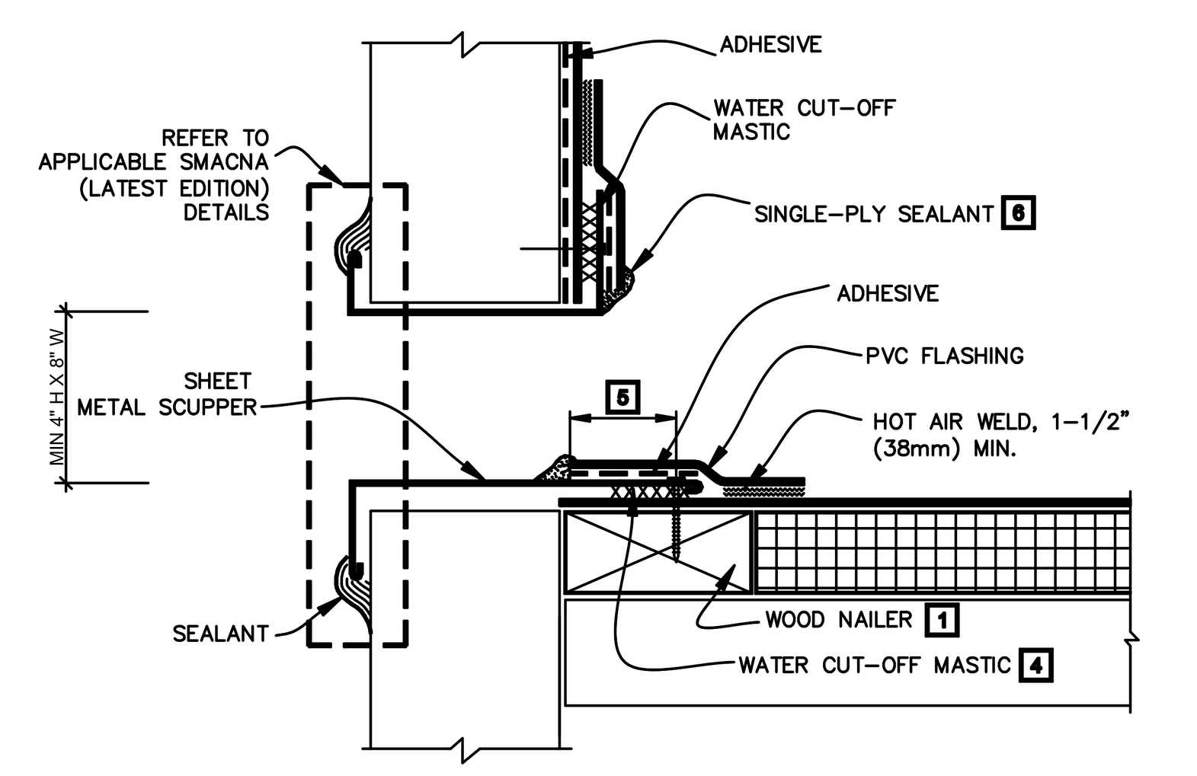
4 PVC VTR Detail
SCALE: 3" = 1'-0"



5 Ridge Detail
SCALE: 3" = 1'-0"

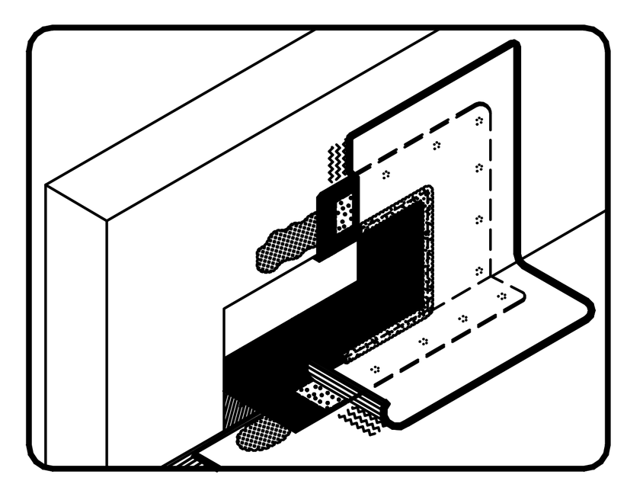


6 Typical PVC Corner Flashing
SCALE: 1.5:11

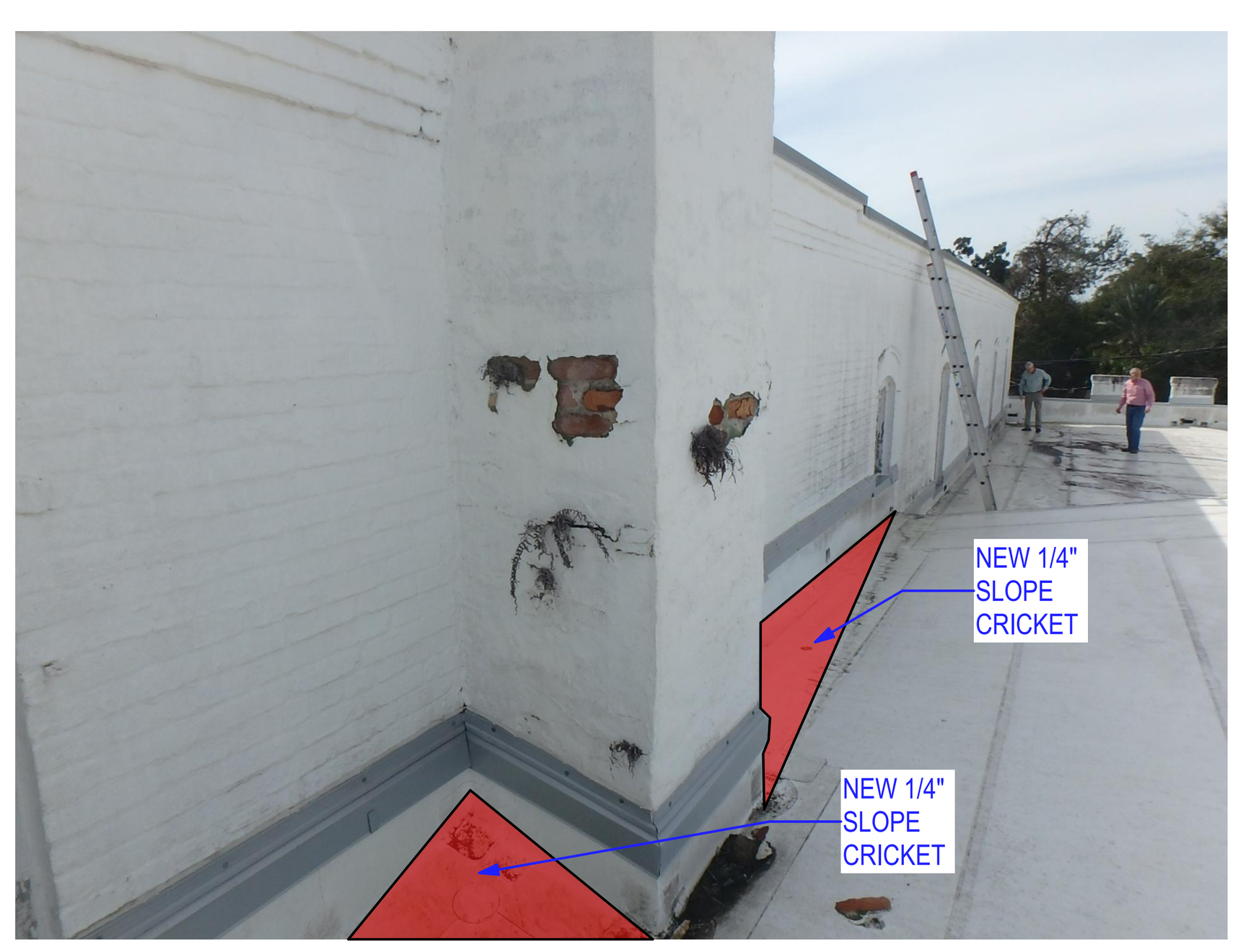


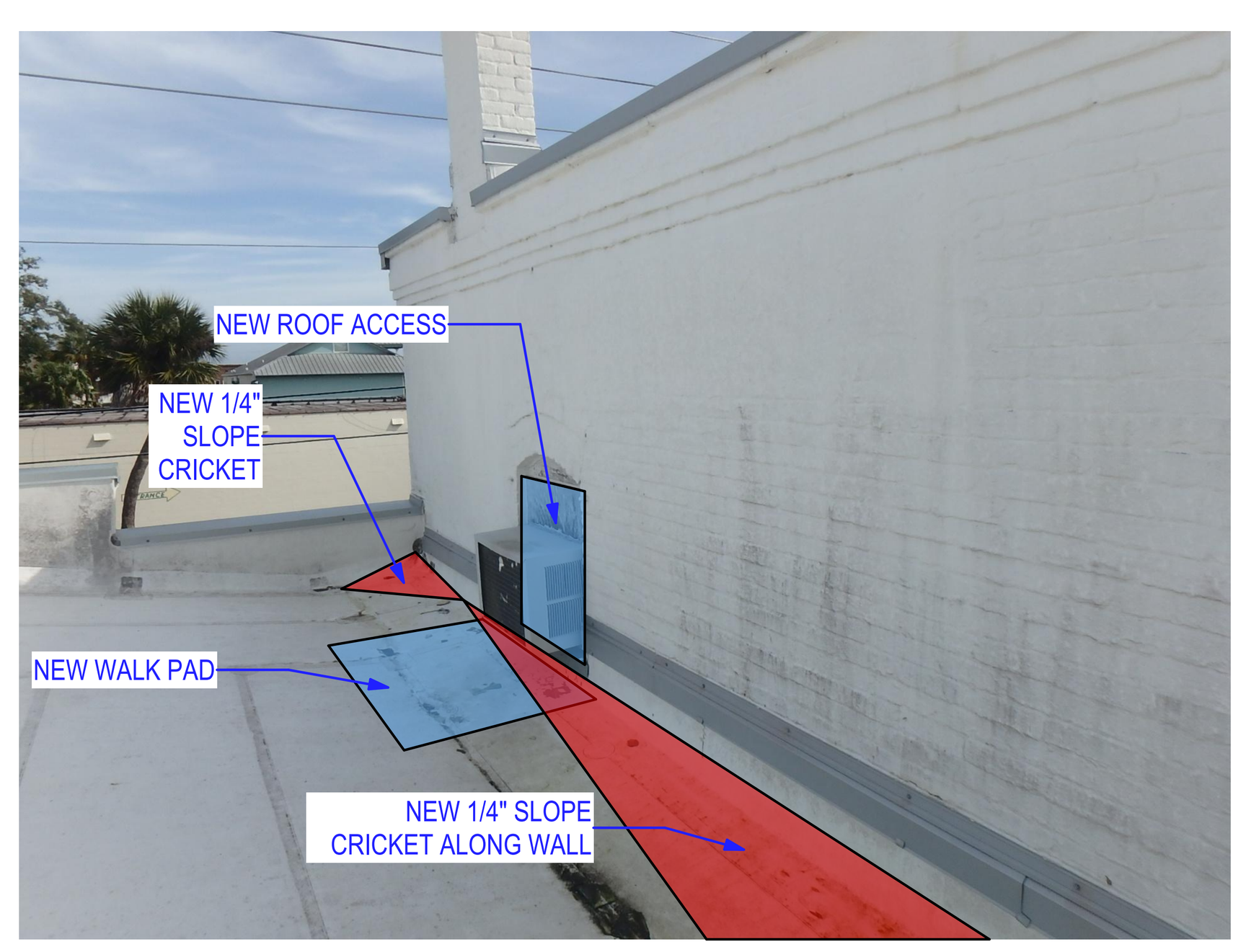
NOTES:

1. WOOD NAILERS ARE INSTALLED ONLY AT SCUPPERS TO SECURE METAL SLEEVE AND MUST EXTEND PAST THE WIDTH OF METAL SLEEVE FLANGE.
2. INSTALL WALL FLASHING PRIOR TO SCUPPER INSTALLATION.
3. METAL SCUPPER BOX MUST HAVE CONTINUOUS FLANGES WITH ROUNDED CORNERS, SOLDER ALL SCUPPER SEAMS WATER-TIGHT.
4. WATER CUT-OFF MASTIC UNDER SCUPPER FLANGE MUST BE UNDER CONSTANT COMPRESSION.
5. SCUPPER FLANGES MUST BE TOTALLY COVERED BY NON-REINFORCED PVC FLASHING WITH MINIMUM 2" (51mm) COVERAGE PAST NAIL HEAD.
6. UNIVERSAL SINGLE-PLY SEALANT IS REQUIRED AT FLASHING EDGES ON SCUPPER EDGE.



7 Typical PVC Thru Wall Scupper Detail
NOT TO SCALE



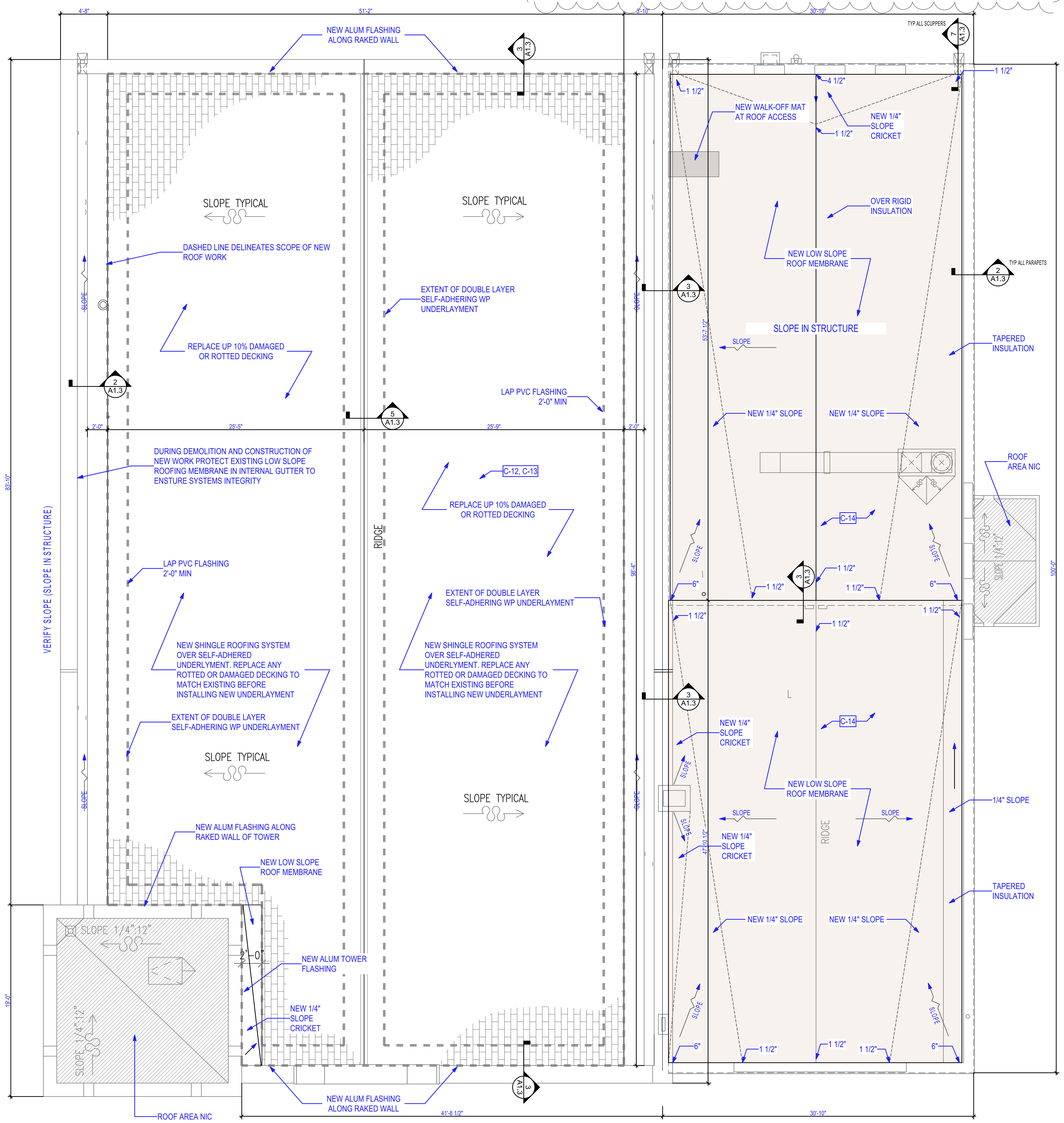


NEMO | etc.

TABLE 1c: WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-2: INDUCTION WELDED ROOF COVER						
System No.	Deck (Note 1)	Insulation Layer (Note 3, Note 13)	Attachment		Roof Cover (Note 15B)	MDP (psf)
			Fasteners (Note 11)	Density		
W-6.	Min. 19/32-inch (new) or min. 15/32-inch (existing) APA rated plywood or 1-inch wood plank; 2 ft span; 8d ring shank nails, 6" o.c.	(Optional) One or more layers, any combination (Tread Safe = min. 2-inch thick insulation)	Parafast XHD and Parafast RB PVC XHD Plate or Parafast Tread Safe Plate	24 x 32-inch grid	Parasolo PVC Smooth induction welded with RhinoBond magnetic induction welding tool, per manufacturer's published instructions.	-60.0
W-7.	Min. 19/32-inch plywood over nominal No. 2 wood trusses spaced max. 24-inch o.c.; 8d ring shank nails, 3" o.c.	(Optional) One or more layers, any combination (Tread Safe = min. 2" thick insulation)	Parafast HD (min. 1-inch embedment) and Parafast RB PVC XHD Plate or Parafast Tread Safe Plate through to wood supports	9-inch o.c. along wood supports, 24-inch o.c.	Parasolo PVC Smooth or Parasolo PVC KEE Smooth induction welded using RhinoBond Installation Tool	-90.0
W-8.	Min. 19/32-inch plywood over nominal No. 2 wood trusses spaced max. 24-inch o.c.; 8d ring shank nails, 3" o.c.	One or more layers, any combination, min. 1-inch (Tread Safe = min. 2" thick insulation)	Parafast HD (min. 1.4-inch embedment) and Parafast RB PVC XHD Plate or Parafast Tread Safe Plate through to wood supports	9-inch o.c. along wood supports, 24-inch o.c.	Parasolo PVC Smooth or Parasolo PVC KEE Smooth induction welded using RhinoBond Installation Tool	-105.0

FL PRODUCT APPROVAL

NORTH



1 Roof Plan - Renovation
SCALE: 3/16" = 1'-0"

Architectural Key Notes

C1	Modify bench seat and install HVAC duct & diffusers.
C2	Install 3/4" plywood + subfloor, insulation, and LVT
C3	Install wall insulation, geoboard, wood trim
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EXTERIOR SCOPE

C15	Clean building with low pressure washer, remove all loose material, patch stucco and Paint
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Consultants:

Seal:

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100% CONSTR DOCUMENTS	MK	CR	11-1-24
CONTRACT DOCUMENTS	JE	CR	04-11-25
PERMIT DOCUMENTS			
ADDENDA 1	CR	CR	5-29-25

Fort Coombs Armory and Convention Center Renovations - Phase 2

APALACHICOLA, FL
GRC Project Number 24324

architecture interior design planning
gilchrist ross crowe architects
413 ALL SAINTS STREET TALLAHASSEE, FLORIDA 32301
(850) 222-8100 www.architects-gca.com

SIGNATURE

ARCHITECTURAL DRAWING NAME
Roof Plan - Renovation

SHEET
A1.3

STRUCTURAL NOTES

GENERAL NOTES

GN-1 The governing Code for this Project is the Florida Building Code, 8th Edition (2023). This Code prescribes which edition of each referenced standard applies to this Project.

GN-2 To the best of our knowledge, the Structural Drawings and Specifications comply with the applicable requirements of the governing Building Code.

GN-3 Construction is to comply with the requirements of the governing Building Code and all other applicable Federal, State, and Local Codes, Standards, Regulations and Laws.

GENERAL NOTES - CONTRACTOR REQUIREMENTS

GN-4 Contractor refers to the General Contractor, Construction Manager, or the organization that is assigned to have overall responsibility and supervision of the Project.

GN-5 The Contractor shall be solely responsible for, and have control over, the means, methods, supervision, techniques, sequences, procedures of construction, quality, and correctness of the work. The Contractor is solely responsible for jobsite safety including all OSHA requirements.

GN-6 The Contractor shall coordinate all Contract Documents with field conditions and dimensions and Project Shop Drawings prior to construction. Do not scale drawings; use only printed dimensions. Report any discrepancies in writing to the Architect prior to proceeding with work. Do not change size or location of structural members without written instructions from the Structural Engineer of Record.

GN-7 Contractors who discover discrepancies, omissions or variations in the Contract Documents during bidding shall immediately notify the Architect. The Architect will resolve the condition and issue a written clarification.

GN-8 The Contractor shall protect adjacent property, his own work and the public from harm. The Contractor is advised to document the condition of adjacent property with a photographic survey and other documentation, including crack monitoring, prior to and during construction.

GENERAL NOTES - DRAWINGS

GN-9 The Structural drawings shall be used in conjunction with the architectural drawings and all other drawings and documents, including shop drawings prepared by equipment suppliers and delegated engineers.

GN-10 Openings shown on Structural Drawings are only pictorial. See the Architectural for complete information such as slab depressions, slopes, curbs, finishes, and opening locations in structural members as required by MEP systems and architectural elements.

GN-11 See Architectural drawings for waterproofing details and requirements.

GENERAL NOTES - DESIGN LOADS

GN-12 Design Superimposed Loads:

OCCUPANCY	LIVE LOAD	DEAD LOAD	CONCENTRATED LOAD
Roof	20 psf	10 psf	

GN-13 Design Rain Loads: N/A

GN-14 Design Wind Loads:

Governing Code	FBC 8th Edition (2023) / ASCE 7-22
Building Risk Category	III
Ultimate Wind Speed	Vult = 142 mph
Allowable Stress Design Wind Speed	Vasd = 110 mph
Mean Roof Height	33 feet
Directionality Factor	Kd = 0.85
Gust-Effect Factor	G = 0.85
Exposure	B
Internal Pressure Coefficient	GCpi = +/-0.18
Project is not in the wind-borne debris region.	

SHOP DRAWINGS AND OTHER SUBMITTALS

SD-1 Refer to the applicable Plan Specifications or Project Specifications for technical content requirements. Incomplete submittals will be returned without review.

SD-2 Submit specific components, such as columns, footings, etc., in a single package. Submit similar floors together.

SD-3 On first submittal, clearly flag and cloud all differences from the Contract Documents. On resubmittals, flag and cloud all changes and additions to previous submittal; only clouded items will be reviewed.

SD-4 Submittals for special structural, load-bearing items that are required by Codes or Standards to resist forces must be prepared by, or under the direct supervision of, a Delegated Engineer. Examples include Structural Cold-Formed Steel Framing, and Exterior Enclosure Systems.

SD-5 A Delegated Engineer is defined as a Florida Licensed Engineer who specializes in and undertakes the design of Structural Components or Structural Systems included in a specific submittal prepared for this Project and is an employee or officer of, or consultant to, the Contractor, Subcontractor, Fabricator, or Erector responsible for the submittal. The Delegated Engineer shall sign, seal and date the submittal, including calculations and drawings. See Plan Specifications or Project Specifications for more specific criteria.

SD-6 The Trade Contractor is responsible for confirming and correlating dimensions at the job sites, for tolerances, clearances, quantities, fabrication processes and techniques of construction, coordination of the work with other trades and full compliance with the Contract Documents.

SD-7 The Contractor shall review and approve submittals, including substitution requests and shop drawings, and shall sign and date each drawing prior to submitting to the Architect. This approval is to confirm that the submittal is complete, complies with the submittal requirements and is coordinated with field dimensions, other trades, erection sequencing and constructability. Submittals not reviewed by the Contractor will be returned without review.

SD-8 Bliss & Nyitray (BNI) reviews submittals to confirm that the submittal is in general conformance with the design concept presented in the Contract Documents. Quantities and dimensions are not checked. Notations on submittals do not authorize changes to the contract sum. Checking of the submittal by BNI shall not relieve the Contractor of responsibility for deviations from the Contract Documents and from errors or omissions in the submittal.

SD-9 BNI's review of Delegated Engineer submittals is limited to verifying that the specified structural submittal has been furnished, signed and sealed by the Delegated Engineer and that the Delegated Engineer has understood the design intent and used the specified structural criteria. No detailed check of calculations is made. The Delegated Engineer is solely responsible for his/her design, including but not limited to the accuracy of his/her calculations and compliance with the applicable codes and standards.

BLISS & NYITRAY, INC.
STRUCTURAL ENGINEERS
Certificate of Authorization No. 674
www.bnieningineers.com
BNI Project No. 24T19

Digitally signed by Christopher S Childers
Date: 2025.05.28 10:40:28-04'00'

CHRISTOPHER S. CHILDERS LICENSE NO. 50812 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Christopher S. Childers, PE on 5/28/2025. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Christopher S. Childers, P.E. Fla. Reg. No. 50812

TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES.

Design Consultants:

Structural
Bliss & Nyitray Inc
227 N. Bronough Street, Ste. 7300
Tallahassee, FL 32301
(850) 222-4454

PHASE:	DRAWN BY:	REVIEWED BY:	DATE
50% CONSTR DOCUMENTS			
100% CONSTR DOCUMENTS	TLC	CSC	5/29/2025
CONTRACT DOCUMENTS			
PERMIT DOCUMENTS			
REV 1 ADDENDUM NO1			5/29/2025
REV			
REV			

Fort Coombs Armory and Convention Center Renovations - Phase 2

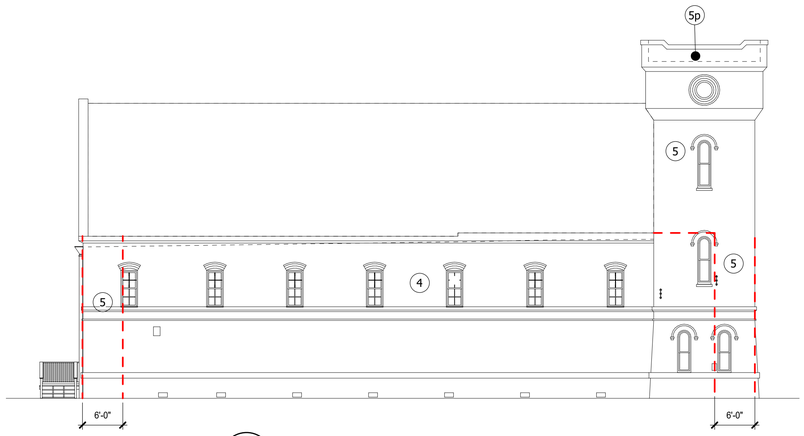
APALACHICOLA, FL
GRC Project Number 34324

architecture
interior design
planning
gilchrist ross crowe
architects
SIGNATURE

413 ALL SAINTS STREET TALLAHASSEE, FLORIDA 32301
(850) 222-8100 FAX (850) 681-9149 www.architects-gca.com

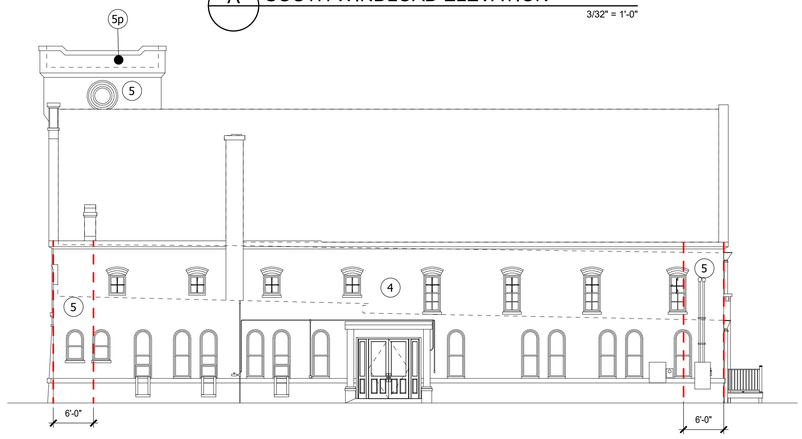
DRAWING NAME
STRUCTURAL NOTES

SHEET
S101
1



A SOUTH WINDLOAD ELEVATION

3/32" = 1'-0"



B NORTH WINDLOAD ELEVATION

3/32" = 1'-0"

WIND PRESSURE NOTES

1. Numbers on this sheet are the components and cladding gross allowable pressures perpendicular to the surface (in P.S.F.) based on tributary area. Multiply service pressures by 1.67 to obtain W pressures for factored loads using strength design (ASCE 7-22 2.3).
2. Pressures are derived from ASCE 7-22.
3. Directionality factor Kd = .85
4. Negative pressures act away from surface, positive pressures act toward surface.
5. Dimensions shown on the skewed or radial elevations are measured parallel to surface.

WIND PRESSURE LEGEND

(#) Denotes wind pressure zone

Denotes wind load separation

SLOPED ROOF WIND PRESSURES (PSF)

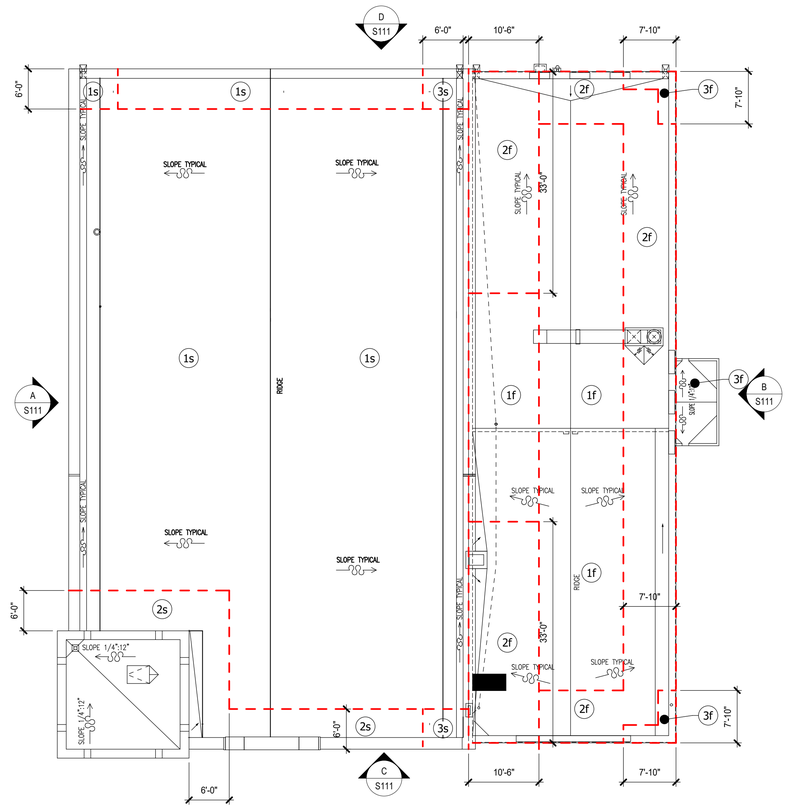
ZONES	TRIBUTARY AREA (SF)			
	10	100	500	1000
1f	-50/+13	-39/+10	-31/+10	-31/+10
2f	-65/+13	-51/+10	-42/+10	-42/+10
3f	-89/+13	-61/+10	-42/+10	-42/+10

FLAT ROOF WIND PRESSURES (PSF)

ZONES	TRIBUTARY AREA (SF)			
	10	100	200	500
1f	-44/+24	-22/+17	-22/+15	-22/+15
2f	-48/+24	-31/+17	-26/+15	-26/+15
3f	-59/+24	-34/+17	-26/+15	-26/+15

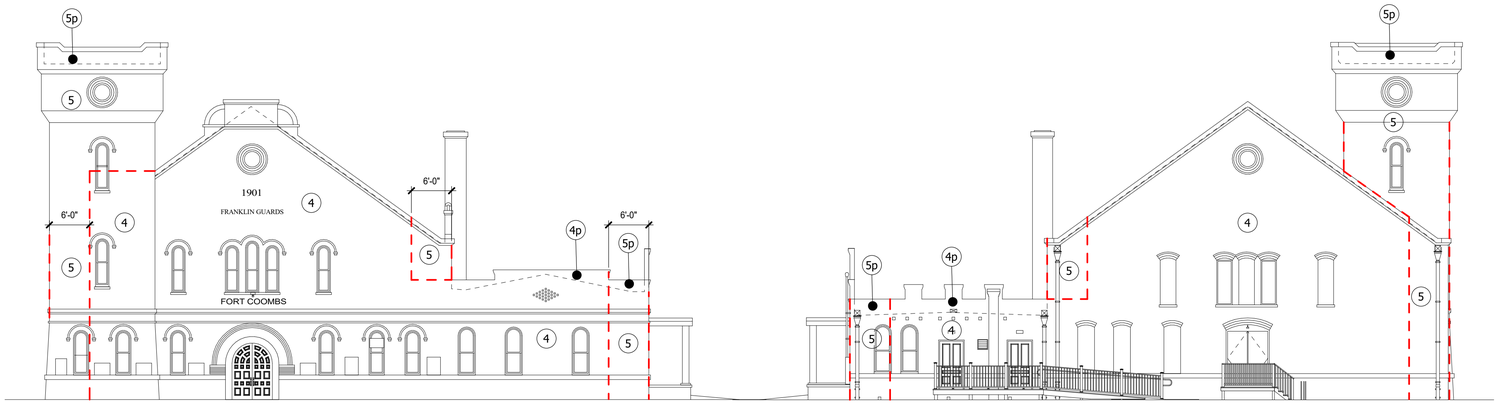
WALL WIND PRESSURES (PSF)

ZONE	TRIBUTARY AREA (SF)			
	10	100	200	500
4	-28/+26	-24/+22	-23/+21	-22/+19
5	-35/+26	-27/+22	-25/+21	-22/+19



ROOF WINDLOAD PLAN

3/32" = 1'-0"



C EAST WINDLOAD ELEVATION

3/32" = 1'-0"

D WEST WINDLOAD ELEVATION

3/32" = 1'-0"

BLISS & NYITRAY, INC.
STRUCTURAL ENGINEERS
Certificate of Authorization No. 674
www.bnieengineers.com
BNI Project No. 24T19

Digitally signed by Christopher S Childers
Date: 2025.05.28 10:41:03-04'00'

CHRISTOPHER S. CHILDERS LICENSE NO. 50812 STATE OF FLORIDA PROFESSIONAL ENGINEER

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REV 1 ADDENDUM NO1			5/29/2025
REV			
REV			

Fort Coombs Armory and Convention Center Renovations - Phase 2

APALACHICOLA, FL
GRC Project Number 34324

architecture
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architects

SIGNATURE

413 ALL SAINTS STREET TALLAHASSEE, FLORIDA 32301
(850) 222-8100 FAX (850) 681-9149 www.architects-gca.com

DRAWING NAME
ROOF WIND DIAGRAM

SHEET
S111
1

STRUCTURAL NOTES

GENERAL NOTES

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GN-11 See Architectural drawings for waterproofing details and requirements.

GENERAL NOTES - DESIGN LOADS

GN-12 Design Superimposed Loads:

OCCUPANCY	LIVE LOAD	DEAD LOAD	CONCENTRATED LOAD
Roof	20 psf	10 psf	

GN-13 Design Rain Loads: N/A

GN-14 Design Wind Loads:

Governing Code	FBC 8th Edition (2023) / ASCE 7-22
Building Risk Category	III
Ultimate Wind Speed	Vult = 142 mph
Allowable Stress Design Wind Speed	Vasd = 110 mph
Mean Roof Height	33 feet
Directionality Factor	Kd = 0.85
Gust-Effect Factor	G = 0.85
Exposure	B
Internal Pressure Coefficient	GCpi = +/-0.18
Project is not in the wind-borne debris region.	

SHOP DRAWINGS AND OTHER SUBMITTALS

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SD-2 Submit specific components, such as columns, footings, etc., in a single package. Submit similar floors together.

SD-3 On first submittal, clearly flag and cloud all differences from the Contract Documents. On resubmittals, flag and cloud all changes and additions to previous submittal; only clouded items will be reviewed.

SD-4 Submittals for special structural, load-bearing items that are required by Codes or Standards to resist forces must be prepared by, or under the direct supervision of, a Delegated Engineer. Examples include Structural Cold-Formed Steel Framing, and Exterior Enclosure Systems.

SD-5 A Delegated Engineer is defined as a Florida Licensed Engineer who specializes in and undertakes the design of Structural Components or Structural Systems included in a specific submittal prepared for this Project and is an employee or officer of, or consultant to, the Contractor, Subcontractor, Fabricator, or Erector responsible for the submittal. The Delegated Engineer shall sign, seal and date the submittal, including calculations and drawings. See Plan Specifications or Project Specifications for more specific criteria.

SD-6 The Trade Contractor is responsible for confirming and correlating dimensions at the job sites, for tolerances, clearances, quantities, fabrication processes and techniques of construction, coordination of the work with other trades and full compliance with the Contract Documents.

SD-7 The Contractor shall review and approve submittals, including substitution requests and shop drawings, and shall sign and date each drawing prior to submitting to the Architect. This approval is to confirm that the submittal is complete, complies with the submittal requirements and is coordinated with field dimensions, other trades, erection sequencing and constructability. Submittals not reviewed by the Contractor will be returned without review.

SD-8 Bliss & Nyitray (BNI) reviews submittals to confirm that the submittal is in general conformance with the design concept presented in the Contract Documents. Quantities and dimensions are not checked. Notations on submittals do not authorize changes to the contract sum. Checking of the submittal by BNI shall not relieve the Contractor of responsibility for deviations from the Contract Documents and from errors or omissions in the submittal.

SD-9 BNI's review of Delegated Engineer submittals is limited to verifying that the specified structural submittal has been furnished, signed and sealed by the Delegated Engineer and that the Delegated Engineer has understood the design intent and used the specified structural criteria. No detailed check of calculations is made. The Delegated Engineer is solely responsible for his/her design, including but not limited to the accuracy of his/her calculations and compliance with the applicable codes and standards.

BLISS & NYITRAY, INC.
STRUCTURAL ENGINEERS
Certificate of Authorization No. 674
www.bnieengineers.com
BNI Project No. 24T19

Christopher S. Childers, P.E. Fla. Reg. No. 50812

TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES.

Design Consultants:

Structural
Bliss & Nyitray Inc
227 N. Bronough Street, Ste. 7300
Tallahassee, FL 32301
(850) 222-4454

PHASE:	DRAWN BY:	REVIEWED BY:	DATE
50% CONSTR DOCUMENTS			
100% CONSTR DOCUMENTS	TLC	CSC	5/29/2025
CONTRACT DOCUMENTS			
PERMIT DOCUMENTS			
REV 1 ADDENDUM NO1			5/29/2025
REV			
REV			

Fort Coombs Armory and Convention Center Renovations - Phase 2

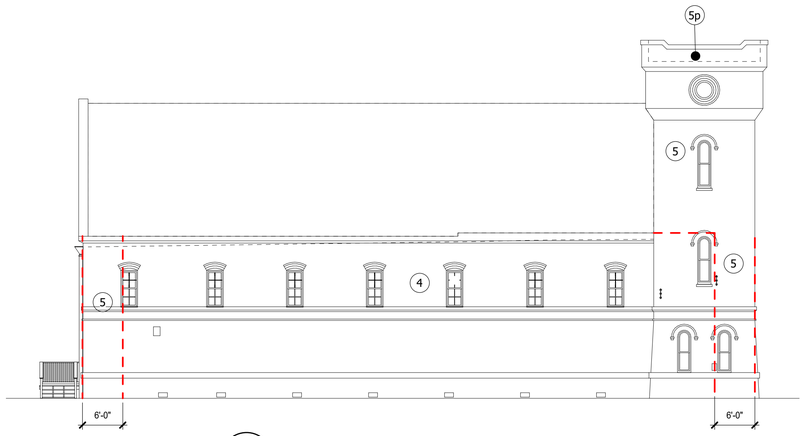
APALACHICOLA, FL
GRC Project Number 34324

architecture
interior design
planning
gilchrist ross crowe
architects
SIGNATURE

413 ALL SAINTS STREET TALLAHASSEE, FLORIDA 32301
(850) 222-8100 FAX (850) 681-9149 www.architects-gca.com

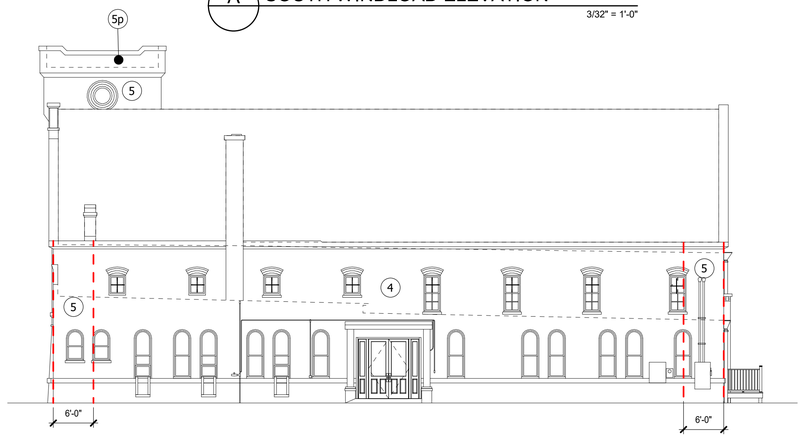
DRAWING NAME
STRUCTURAL NOTES

SHEET
S101
1



A SOUTH WINDLOAD ELEVATION

3/32" = 1'-0"



B NORTH WINDLOAD ELEVATION

3/32" = 1'-0"

WIND PRESSURE NOTES

1. Numbers on this sheet are the components and cladding gross allowable pressures perpendicular to the surface (in P.S.F.) based on tributary area. Multiply service pressures by 1.67 to obtain W pressures for factored loads using strength design (ASCE 7-22 2.3).
2. Pressures are derived from ASCE 7-22.
3. Directionality factor Kd = .85
4. Negative pressures act away from surface, positive pressures act toward surface.
5. Dimensions shown on the skewed or radial elevations are measured parallel to surface.

WIND PRESSURE LEGEND

(#) Denotes wind pressure zone

Denotes wind load separation

SLOPED ROOF WIND PRESSURES (PSF)

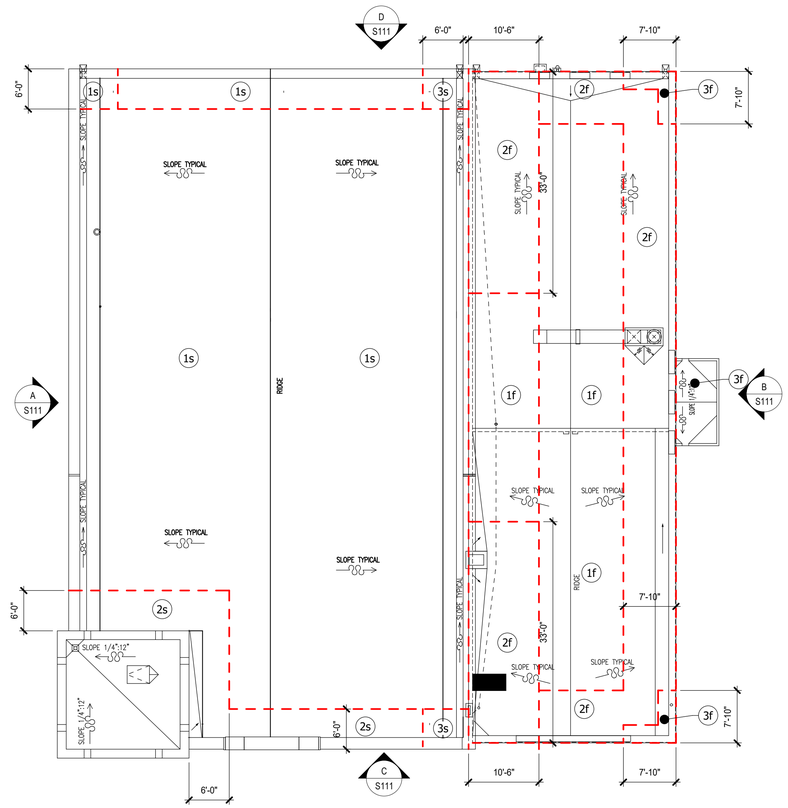
ZONES	TRIBUTARY AREA (SF)			
	10	100	500	1000
1f	-50/+13	-39/+10	-31/+10	-31/+10
2f	-65/+13	-51/+10	-42/+10	-42/+10
3f	-89/+13	-61/+10	-42/+10	-42/+10

FLAT ROOF WIND PRESSURES (PSF)

ZONES	TRIBUTARY AREA (SF)			
	10	100	200	500
1f	-44/+24	-22/+17	-22/+15	-22/+15
2f	-48/+24	-31/+17	-26/+15	-26/+15
3f	-59/+24	-34/+17	-26/+15	-26/+15

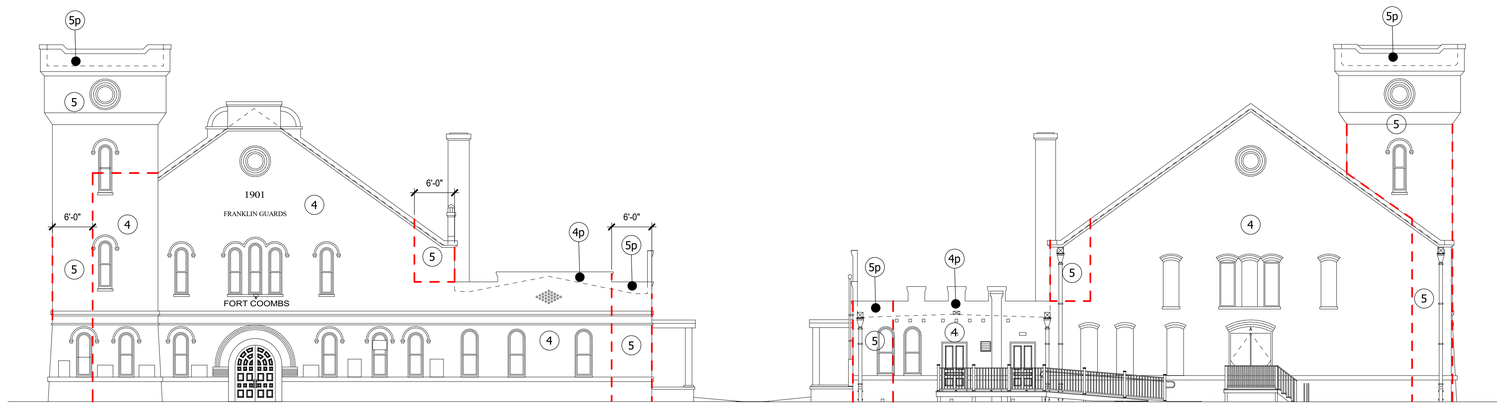
WALL WIND PRESSURES (PSF)

ZONE	TRIBUTARY AREA (SF)			
	10	100	200	500
4	-28/+26	-24/+22	-23/+21	-22/+19
5	-35/+26	-27/+22	-25/+21	-22/+19



ROOF WINDLOAD PLAN

3/32" = 1'-0"



C EAST WINDLOAD ELEVATION

3/32" = 1'-0"

D WEST WINDLOAD ELEVATION

3/32" = 1'-0"

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DRAWING NAME
ROOF WIND DIAGRAM

SHEET
S111
1