### RANCOCAS VALLEY REGIONAL HIGH SCHOOL DISTRICT

Renovations at the Rancocas Valley Regional High School District Annex Addendum #1 January 13, 2020

### **Bid Package Clarification and Changes**

THIS ADDENDUM CONSISTS OF (15 PAGES).

This Addendum dated January 13, 2020 for the **Renovations at the Rancocas Valley Regional High School District Annex** shall be included as part of the Contract Bid Documents. This Addendum shall supplement and clarify the current Contract Bid Documents.

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unclear, please call (856) 396-6200. If you a	re not bidding this project, please write "No Bid" and fax this
	<b>56) 396-6205</b> . <b>THIS IS MANDATORY!!</b> If this fax is
PLEASE ACKNOWLEDGE RECEIPT OF	F THIS ADDENDUM BY SIGNING BELOW AND

1. In Specification Section "AIA Document A201 – 2017 General Conditions of the Contract for Construction," add the following to paragraph 11.1.1.2 Schedule of Insurance Coverages:

Umbrella or Excess Liability Coverage in the amount of \$5,000,000.00 each occurrence. Excess/Umbrella liability terms must comport with Insurance Requirements as outlined in Section 11.1, for additional insureds and must be primary to any insurance of the District.

Contractors Pollution Liability Insurance including limits of \$1,000,000 Each Incident/\$1,000,000 Aggregate and including full coverage for Mold, Legionella, Asbestos, and Lead (no exclusions for microorganisms). The Owner, Garrison Architects, the State of New Jersey, the New Jersey Department of Education and the Construction Manager are to be included as additional insureds on a primary and non-contributory basis.

- 2. Add the **attached** Specification Section 07500 "Membrane Roofing Cutting and Patching" (8 pages). All modifications to the existing roof assembly shall comply with this specification.
- 3. In Specification Section 15930 "Facility Management Control System", Delete all references to ATC "Automatic Temperature Control" throughout this spec section and Replace with FMCS "Facility Management Control System".
- 4. On Drawing A1.1, Existing/Demolition Plan;
  - a. At rooms B112 & B112a, Add the following text at note # 21 "At rooms B112 & B112a, the ceiling tile and grid will be removed by others. This contract shall include all other requirements indicated in demolition note #21."

- b. At Room B108, As Clarification at the "Exposed Pipe" note next to the single leaf exterior door, this piping is to remain. Provide two new metal chase enclosures (one on either side of the double door) to conceal existing vertical piping to remain. Coordinate new vertical enclosure to the right of the double door with the new radiation assembly shown on the mechanical drawings.
- 5. On Drawing A1.2, Existing/Demolition Plan; include the following changes:
  - a. Add demolition notes #1, #2, #3 and #4 to room B102 (CORRIDOR) at the B Wing classrooms.
  - b. Add demolition notes #1, #2 and #3 to room A103 (CONF.).
- 6. On Drawing A2.1, New Work Floor Plan; Add the following text at B100 (VESTIBULE) "PROVIDE 7'X7' SURFACE APPLIED FLOOR MAT. INCLUDE SCHOOL DISTRICT LOGO GRAPHICS WITH MULTIPLE COLOR OPTIONS. SEE SPECS FOR REQ'MNTS."
- 7. On Drawing A2.3, Roof Plan; As Clarification, EF-1 is to be installed where an existing exhaust fan is being removed. No new structural reinforcement is required at this location (indicated on detail 7/A2.4).
- 8. On Drawing A2.2, Detail 2/A2.2; As Clarification, this detail is not required.
- 9. On Drawings A2.3 & A2.4, New Work Roof Plans; Add the following text note to the drawing:
  - "Scope for Patching, Repair and New HVAC unit flashings:
  - 1) Remove existing roof membrane, recovery board and insulation down to tecum decking where new equipment will be set.
  - 2) Burn off the aluminum surface coating 12" beyond demolished roof area.
  - 3) Prime existing roof 12" beyond demolished roof area with asphaltic primer at 1 gal/100 sf.
  - 4) Follow the roof system manufacturer detail for new installation on 2-ply modified roof system (See Spec Section 07500).
  - 5) All vertical seams and leading edge onto the roof shall receive a 3-course application of aluminized mastic and 6" fiberglass mesh.
  - 6) As required, install .040 aluminum slip flashing where new flashings cannot be secured to the top of the curb. Secure at 8" oc with neoprene gasketed screws.
  - 7) Where crickets are required for drainage at new curbs, remove existing roof system down to the existing roof insulation. Install new in-kind recovery board set in insulation adhesive, and install new 2-ply roof system per specifications."
- 10. On Drawing A2.5, New Work Alternate Floor Plan; As Clarification at Classrooms B105, B107 & B109, the Full Height Blocking note at the exterior wall is to be provided above the new insulated wall assembly shown in the details on this sheet. This is required to provide an unobstructed vertical plane to attach the accordion partition. The accordion partition must be removed and reinstalled as required to provide the new insulated wall assembly and wood blocking. The accordion partition itself does not need to be modified except as required to reinstall. New wood blocking shall be wrapped with .050 aluminum and painted to match the wall surface.

- 11. On Drawing A3.0, Room & Finish Schedule; include the following changes:
  - a. B103 Serving Kitchen; ADD ceiling height +/- 9'-3" & ceiling type 'A'.
  - b. B104 Nurses Suite; In the Remarks column, DELETE note #1, ADD note #6.
  - c. B112 Faculty; ADD ceiling height +/- 9'-6".
  - d. B112a Storage; ADD ceiling height +/- 9'-6".
  - e. C100 Corridor; ADD ceiling height +/- 8'-0" & ceiling type 'A' ONLY if contractor opts to replace entire ceiling as noted on Detail 1/A3.1 Partial Reflected Ceiling Plan.
- 12. On Drawing A3.1, Partial Reflected Ceiling Plan; As Clarification at the shaded area of corridor C100, Options 1 or 2 (indicated by text note) shall be selected by the contractor as the most economical means to provide access for electrical and mechanical system installation. Only one option is required and either is acceptable.
- 13. On Drawing M1.1, Mechanical Demolition Plan; At the left side of the floor plan, Delete the note "NO WORK TYPICAL AT HATCHED ARE" and Replace with "NO WORK EXCEPT INTERFACE EXISTING CONTROL TO NEW DDC SYSTEM". As Clarification, refer to drawing M-2.3 and the specifications for new control system requirements at existing equipment.
- 14. On Drawing M2.1, Mechanical Floor Plan; include the following changes:
  - a. As Clarification, all pipe feeding radiation for a single room shall be <sup>3</sup>/<sub>4</sub>" dia. (unless noted otherwise).
  - b. As Clarification, provide typical radiation piping at all new unit ventilators and PTACs as detailed in **attached sketch SKM-01**.
  - c. Room B112; Revise DSS-3 to read DSS-3A. Add thermostat for DSS-3A. Provide <sup>3</sup>/<sub>4</sub>" dia. condensate piping and connect to condensate line in corridor.
  - d. Room B112a; Revise DSS-4 to read DSS-3B. Add thermostat for DSS-3B. Provide <sup>3</sup>/<sub>4</sub>" dia. condensate piping and connect to condensate line in corridor.
  - e. Room B105; Add H Symbol at room thermostat (Similar to adjacent classrooms).
  - f. Rooms B105, B107 & B109; Add new piping detail per attached sketch SKM-02.
  - g. Room C102; Revise DSS-5 to read DSS-4.
  - h. Room B102; Add Note 12 at pipe chase next to DCU-2.
  - i. Rooms B104 & B108; Add Note 6 to Radiation symbols at exterior wall.
  - j. Room B103; As Clarification, the new thermostat is for existing radiation. Provide new control valve on existing pipe feeding radiation.

- k. Room B108; As Clarification, existing vertical hot water piping between the single and double leaf exterior doors and to the right of the double exterior door (two locations) is to remain. Provide two new metal chase enclosures to conceal existing vertical piping to remain. Coordinate new vertical enclosure to the right of the double door with the new radiation assembly as shown.
- 1. Room C110a; Add Note 12 at AHU-1 to provide refrigerant lines up thru roof to condensing unit SCU-1 on roof. Exact route to be verified in field.
- 15. On Drawing M2.2, Mechanical Floor Plan; include the following changes:
  - a. As Clarification, provide typical radiation piping at all new unit ventilators as detailed in attached sketch SKM-01.
  - b. Rooms B114, B116 & B118; Add new piping detail per **attached sketch SKM-02** (Similar).
- 16. On Drawing M4.1, Mechanical Schedules; include the following changes:
  - a. Ductless Split System A/C Schedule; At DSS units #1A, 1B & 1C, Delete the DCU unit model number in the Remarks column "MODEL SUZ-KA24NA" and Replace with "MODEL SUZ-KA36NA".
  - b. Ductless Split System A/C Schedule; At DSS unit #3, Revise the unit number to be 3A. Also revise the unit number in the Remarks column.
  - c. Ductless Split System A/C Schedule; At DSS unit #4, Revise the unit number to be 3B. Also revise the unit number in the Remarks column.
  - d. Ductless Split System A/C Schedule; At DSS unit #5, Revise the unit number to be 4. Also revise the unit number in the Remarks column.
  - e. Perimeter Radiation Schedule; Radiation Type R-2 shall be Type JVBS-20B rated @ 1,470 BTU/LF at 180° F.
  - f. Perimeter Radiation Schedule; Radiation Type R-3 shall be Type JVBS-24B rated @ 1,570 BTU/LF at 180° F.
  - g. Mechanical Sheet Note #9, Add the following text at the end of the note "PROVIDE LOCKABLE COVERS IN ALL AREAS ACCESSIBLE TO THE PUBLIC".
  - h. Mechanical Sheet Note #52, Delete the text "NEW STUDS AND DRYWALL" at the end of the note and replace with "PROVIDE NEW INFILL PER ARCH DETAIL."
- 17. As Clarification on the Fire Alarm scope of work, demolition includes completely removing the existing fire alarm system throughout the building in its entirety (being replaced by completely new fire alarm system). Visit the project site to verify exact quantities. Refer to Electrical Note #10 on drawing E6 for requirements (See revised note 10 below).

- 18. Drawing #1/E3, First Floor Power Plan; At new switchboard "MSS", run new incoming secondary lines underground, then up from grade at exterior wall to "LB" conduit bodies, then through exterior wall into back bottom of switchboard metering compartment (incoming line). Ceiling deck height is approximately 9'-6" AFF and bottom of roof bar joists is approximately 8'-0" AFF in #C113 (Storage room). Lights are mounted at bottom joist elevation. Route new conduits leaving top of switchboard "MSS" in order to avoid all existing obstructions at open ceiling in this room, include any applicable junction boxes and/or switchboard "top hat" compartments.
- 19. Drawing #1/E5, Single Line Diagram; For the existing incoming electrical service feeder being removed, remove all feeder conductors. Underground conduits may be abandoned in place.
- 20. Drawing #E6, Electrical Note #10; Add the following text at the end of the note "Removals include completely removing the existing fire alarm system throughout the building in its entirety (being replaced by complete new fire alarm system). Existing Fire Alarm system must remain in operation until the new Fire Alarm system is functional."
- 21. Paint all exposed visible conduits (color as per owner). Painting is not required in #C102a boiler room

# <u>SECTION 07500 - MEMBRANE ROOFING CUTTING AND PATCHING - ADDED PER ADDENDUM #1</u>

### PART 1 - GENERAL

### 1.1 SUMMARY

- A. Section Includes:
  - 1. General requirements for cutting and patching roofing membranes.
  - B. Related Sections:
    - 1. Division 01 Section "Cutting and Patching" for other requirements related to cutting and patching.
    - 2. Division 15 Mechanical Systems

### 1.2 DEFINITIONS

A. OEM: Original manufacturer for installed roofing systems.

### 1.3 PERFORMANCE REQUIREMENTS

- A. Weatherproof Integrity: Cutting and patching of membrane roofing for new curbs and other roof penetrations shall maintain the weather integrity of the existing roofs and shall not permit concealed or visible leaks into the building interior.
  - 1. Comply with the current published requirements of the OEM for roof penetrations of the type necessary for the work.

### 1.4 SUBMITTALS

- A. Product Data: For each type of product employed in the Work.
- B. Shop Drawings: For roofing penetrations. Provide OEM standard details and modified details where required for the conditions of the work.
- C. Compliance certificates.
- D. Field quality-control reports.

### 1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An employer of workers trained and approved by OEM.
- B. Manufacturer's Representative Qualifications: OEM's authorized representative who is trained and knowledgeable in the installation of units required for this Project.
- C. Preinstallation Conference: Conduct conference at Project site.

### SECTION 07500 - MEMBRANE ROOFING CUTTING AND PATCHING - ADDED PER ADDENDUM #1

### 1.6 **PROJECT CONDITIONS**

A. Do not install roofing products on roofs that are wet.

### 1.7 WARRANTY

Where existing roof is still under OEM warranty, comply with the requirements of the A. OEM to maintain such warranty:

### **PART 2 - PRODUCTS**

- Modified Built Up Roof System: 2.1
  - Manufacturers: Subject to compliance with requirements, provide products by the A. following or approved equal:
    - 1. SBS Modified Bituminous Base Sheet: Garland Co., Inc. Basis of Design
    - 2. No other manufactures approved based on requirement to maintain warrantry
- Modified Built Up Roof System Base Sheet (Field Infill) 2.2
  - Base Ply of Field System: SBS modified bituminous sheet (Styrene-Butadiene-Styrene) A. 80 mil, smooth surfaced rubber modified roofing membrane reinforced with a dual fiberglass and polyester scrim mat.
    - Use: Base ply of 2-ply, modified bituminous membrane roofing system. 1.
    - Reinforcing: Polyester and fiberglass. 2.
    - 3. Finish: smooth
  - Physical Properties: Provide SBS -modified bituminous membrane materials with the B. following properties when tested according to ASTM D 5147:
    - Thickness: 80 mils minimum. 1.
    - 2. Tensile Strength: 215 bf/in. at 73.4 deg F (MD). 215 lbf/in. at 73.4deg F (CMD).
    - 3. Elongation at Maximum Load: 4.5 percent minimum at 73.4 deg F in each direction.
    - 4. Tear Strength: 275 lbf. at 73.4 deg. F (MD). 275 lbf. at 73.4 deg. F (CMD).
    - Low-Temperature Flexibility: Pass at minus 30 deg F. 5.
  - Base Ply of Flashing System: SBS modified bituminous sheet (Styrene-Butadiene-C. Styrene) 40 mil, smooth surfaced rubber modified roofing membrane reinforced with a dual fiberglass mat.
    - Use: Base ply of 2-ply, modified bituminous membrane flashing system. 1.
    - Reinforcing: fiberglass. 2.
    - Finish: smooth 3.

# SECTION 07500 - MEMBRANE ROOFING CUTTING AND PATCHING -- ADDED PER ADDENDUM #1

- D. Physical Properties: Provide SBS -modified bituminous membrane materials with the following properties when tested according to ASTM D 5147:
  - 1. Thickness: 40 mils minimum.
  - 2. Tensile Strength: 225 bf/in. at 73.4 deg F (MD). 225 lbf/in. at 73.4deg F (CMD).
  - 3. Elongation at Maximum Load: 4.0 percent minimum at 73.4 deg F in each direction.
  - 4. Tear Strength: 300 lbf. at 73.4 deg. F (MD). 300 lbf. at 73.4 deg. F (CMD).
  - 5. Low-Temperature Flexibility: Pass at minus 30 deg F.

### 2.3 Modified Built Up Roof System

- A. SBS modified bituminous sheet (Styrene-Butadiene- Styrene) 160 mil, mineral surfaced rubber modified roofing membrane with Kevlar fiber and reinforced with a dual fiberglass and polyester scrim mat.
  - 1. Use: Roof membrane.
  - 2. Use: Finish ply of 2-ply, modified bituminous membrane roofing system.
  - 3. Reinforcing: Polyester and fiberglass.
  - 4. Finish: light grey mineral
- B. Physical Properties: Provide SBS -modified bituminous membrane materials with the following properties when tested according to ASTM D 5147:
  - 1. Thickness: 160 mils minimum.
  - 2. Tensile Strength: 500 lbf/in. at 73.4 deg F (MD). 550 lbf/in. at 73.4deg F (CMD).
  - 3. Elongation at Maximum Load: 6.0 percent minimum at 73.4 deg F in each direction.
  - 4. Tear Strength: 900 lbf. at 73.4 deg. F (MD). 950 lbf. at 73.4 deg. F (CMD).
  - 5. Water Absorption: Less than .8 percent mass change.
  - 6. Low-Temperature Flexibility: Pass at minus 30 deg F.

### 2.4 Modified Adhesives and Mastics

- A. Cold Applied Membrane Adhesive: V.O.C. compliant ASTM D3019. Performance Requirements:
  - 1. Non-Volatile Content ASTM D4479 70%
  - 2. Density ASTM D1475 7.89 lbs./gal. (0.9kg/l)
  - 3. Viscosity Stormer ASTM D562 16-20 sec.
  - 4. Flash Point ASTM D93 100°F min. (37°C)
  - 5. Slope: up to 3:12
- B. Brush Grade Flashing Adhesive
  - 1. Performance Requirements:
  - 2. Non-Volatile Content ASTM D4479 70 min.
  - 3. Density ASTM D1475 8.6 lbs./gal. (1kg/l)
  - 4. Flash Point ASTM D93 100°F (37°C)

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- C. Silver Asphalt Roofing Mastic: V.O.C. compliant,
  - 1. Flash Point ASTM D93 > 100 °F.
  - 2. Density @ 77°F 8.3 lbs. /gal
  - 3. Non-Volatile 70% min.
  - 4. Viscosity @ 77 °F 9-11 seconds
  - 5. Reflectivity ASTM C 1549 > 60%
  - 6. Post Industrial Recycled Content 5.19%

### 2.5 AUXILIARY MEMBRANE MATERIALS

- A. General: Furnish auxiliary materials recommended by roofing system manufacturer for intended use and compatible with SBS-modified bituminous roofing.
  - 1. Furnish liquid-type auxiliary materials that meet VOC limits of authorities having jurisdiction.
- B. Asphalt Primer: ASTM D 41 VOC compliant.
- C. Asphalt Roofing Cement: ASTM D 2822, asbestos free, VOC compliant as provided by the Membrane manufacturer and silver in color throughout the thickness
- D. Mastic Sealant: Polyisobutylene, plain or modified bituminous, nonhardening, nonmigrating, nonskinning, and nondrying.
- E. Fasteners: Factory-coated steel fasteners and metal plates complying with corrosion-resistance provisions of FM 4470; designed for fastening base sheets, base-ply felts, and base flashings and for backnailing modified bituminous membrane to substrate; tested by manufacturer for required pullout strength; and acceptable to roofing system manufacturer.
- F. Wood Nailer Strips: Furnish wood nailer strips complying with requirements of Division 6 Section "Rough Carpentry."
- G. Cants: Wood Fiber Cants
- H. Urethane Sealant: One part, non-sag sealant as recommended and furnished by the membrane manufacturer for moving joints.

1.	Tensile Strength (ASTM D412)	250 psi
2.	Elongation (ASM D412)	950%
3.	Hardness, Shore A (ASTM C920)	35
4	Adhesion-in-Peel (ASTM C920)	30 pli

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- I. Pitch Pocket Sealer: Two part, 100% solids, self-leveling, polyurethane sealant for filling pitch pans as recommended and furnished by the membrane manufacturer.
  - 1. Durometer (ASTM D2240)

40-50 Shore

- 2. Elongation (ASTM D 412)
- 250%
- 3. Tensile Strength (ASTM D 412)
- 200 @ 100 mil
- J. Pitch pans, Rain Collar 24 gauge stainless or 20oz (567gram) copper. All joints should be welded/soldered watertight. See details for design
- K. Drain Flashings should be 4lb (1.8kg) sheet lead formed and rolled
- L. Plumbing stacks should be 4lb (1.8kg) sheet lead formed and rolled.
- M. Miscellaneous Accessories: Provide miscellaneous accessories recommended by roofing system manufacturer for intended use.

### 2.6 INSULATION MATERIALS

- A. General: Provide preformed, roofing insulation boards that comply with requirements, selected from manufacturer's standard sizes and of thicknesses indicated.
  - 1. Provide preformed, tapered or uniform thickness insulation boards where required to match existing slope.
    - a. 1/4" per foot (1:48) field of roof.
    - b. 1/8" per foot (1:24) field of roof
    - c. 1/2" per foot (1:96) crickets
    - d. Uniform thickness
  - 2. Provide preformed saddles, crickets, tapered edge strips, and other insulation shapes where indicated for sloping to drain. Fabricate to slopes indicated but a minimum finished slope of 1/4:12 is required.
- B. Polyisocyanurate Board Insulation: Rigid, cellular Polyisocyanurate thermal insulation with core formed by using HCFCs as blowing agents complying with ASTM C 1289, classified by facer type as follows:
  - 1. Facer Type: Type II, felt or glass-fiber mat on both major surfaces.
  - 2. Minimum thickness Polyisocyanurate insulation shall be 1.0" thick at drain line with 1" tapered on top.
- C. High density fiberboard roof insulation.
  - 1. Qualities: Rigid, composed of interlocking fibers factory blended treated with asphalt on the top side.
    - a. Board size: 4' x 4'
    - b. Thickness: Minimum ½".

### <u>SECTION 07500 - MEMBRANE ROOFING CUTTING AND PATCHING – ADDED PER</u> ADDENDUM #1

### 2.7 INSULATION ACCESSORIES

- A. General: Furnish roofing insulation accessories recommended by insulation manufacturer for intended use and compatible with sheet roofing material.
- B. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions of FM 4470, designed for fastening roofing insulation to substrate, tested by manufacturer for required pullout strength, and acceptable to roofing system manufacturer.
- C. Tapered Edge Strips: Rigid, cellulosic-fiber insulation board, complying with ASTM C 208, Type 2.

### 2.8 ROOF WALKWAYS

- A. Walkway Pads: Factory formed recycled rubber, nonporous, with a slip-resisting surface texture, manufactured specifically for adhering to modified bituminous membrane roofing as a protection course for foot traffic, of the following thickness:
  - 1. 3/4" thick for use under equipment supports.
  - 2. Products: Supplied by membrane manufacturer.

### **PART 3 - EXECUTION**

### 3.1 EXAMINATION

A. Examine roofing membranes and affected flashings before installation. Inform Owner of existing conditions that could cause leaks that may be misconstrued as the result of the new work.

### 3.2 ROOFING MEMBRANE CUTTING AND PATCHING

- A. General: Provide the highest quality roof patches that comply with the OEM requirements. Provide redundancy in weather proof membrane where possible.
- B. Provide positive drainage so that no detail or part of roof is required to resist ponded water.
- C. Provide overlaps at counter flashings of minimum dimension to resist wind-blown rain.
- D. Do not use pitch pockets without secondary sheet metal hood.

# <u>SECTION 07500 - MEMBRANE ROOFING CUTTING AND PATCHING – ADDED PER ADDENDUM #1</u>

## 3.3 PROCEDURES FOR STANDARD EQUIPMENT ADDITIONS ON MINERAL-SURFACED ROOFS

### A. Preparation for New Curbs

- 1. Identify the location of each new curb to be installed, coordinating with the mechanical contractor.
- 2. Broom away loose minerals or debris from the location of the future projection. Make sure the roof membrane is smooth and clean. Clean area greater than the size of the new curb by approximately 12" on all sides.
- 3. Cut out and remove the roof system and all insulation layers down to the structural deck. Use a stiff bristled broom and blower to clear away all dirt and debris from the work area.

### B. Flashing New Wood Curbs

- 1. New curb height should be 8" or greater above finished roof height. Add wood blocking as needed to increase height of curb. Install cant strip to the base of the curb with specified adhesive.
- 2. Prime the existing roof surface around the curb with Garla-Prime or approved equal to ensure proper adhesion.
- 3. Install the base flashing ply, followed by the cap ply to the curb with a solid mopping of specified flashing adhesive.
  - a. For cold adhesives, apply 2-3 gal/100 sq. ft.
- 4. Both flashing plies should extend up and over the curb. Fasten flashing plies to the top of the curb with cap nails. The base ply should extend onto the field a minimum of 6", with the cap ply extending 3" beyond the base ply.
- 5. Match surfaces:
  - a. On white mineral surfaced roofs, ensure loose minerals are broadcast into the bleed out of flashing adhesive.
- 6. Install new equipment and securely fasten to the curb.
- 7. Tie new flashings into the existing roof with a three course application of cement and fabric

### C. Flashing New Metal Curbs, Pitch Pockets, Lead Sleeves, and Equipment Stands

- 1. Prime surface of existing roof with Garla-Prime or approved equal.
- 2. Set the flange of the flashing or the lead pan into an application of Flashing Bond asphalt mastic. Nail the flange 3" O.C. into the wood blocking.
- 3. Flash the flange with base and cap modified membrane stripping set in specified adhesive. Install the base ply to extend beyond the flange a minimum of 6". The second ply should extend beyond the first a minimum of 3".
  - a. For cold adhesives, apply 2-3 gal/100 sq. ft.
- 4. Match surfaces:
  - a. On white mineral surfaced roofs, ensure loose minerals are broadcast into the bleed out of flashing adhesive.
- 5. All pitch pockets shall be filled with pourable sealer.
- 6. A hood or storm collar will be fabricated to cover all pitch pockets and sleeves as shown in the detail drawing.

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- 7. The hood may be attached to the projection with a draw band or by welding.
- 8. Tie new flashings into the existing roof with a three course application of cement and fabric
- D. Walkpad Installation Under Sleeper Curbs
  - 1. Install one ply of traf guard walk pad under sleeper
  - 2. Cut the protection mat to fit under the sleeper curb, ensuring that it extends out from underneath the curb a minimum of 4" on all sides.

### 3.4 FIELD QUALITY CONTROL

- A. Manufacturer's Representative: Review installed work and determine if work meets the highest OEM standards. Provide field report as to work completed and compliance with OEM requirements, including warranty provisions, where applicable.
- B. Contractor: Notify manufacturer's representative of work before starting to coordinate for inspections by the representative during the installation. Schedule a final inspection once all work is complete. A copy of the final inspection will be provided to the Architect and the Owner.

**END OF SECTION 07500** 

# FOX & ASSOCIATES ENGINEERING INCORPORATED 25 Bala Avenue, Suite 204, PO Box 120

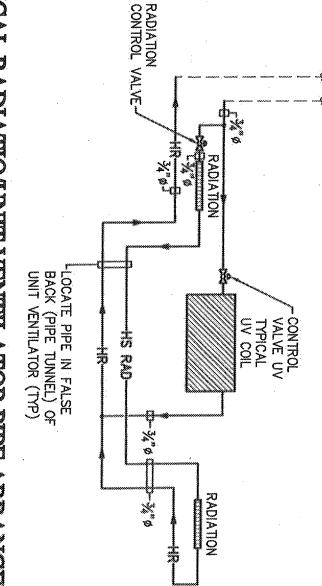
Bala Cynwyd, Pennsylvania 19004 Phone: 610-664-0855 Fax 610-664-7150 web: www.foxhvac.com email: efox@foxhvac.com

RENOVATIONS AT THE RANCOCAS VALLEY
JOB REGIONAL HIGH SCHOOL ANNEX

TITLE TYP. RADIATION UNIT VENTILATOR PIPE ARRANGEMENT
SHEET NO SKM-01

DATE 01/07/2020 JOB NUMBER 5918

SCALE NO SCALE



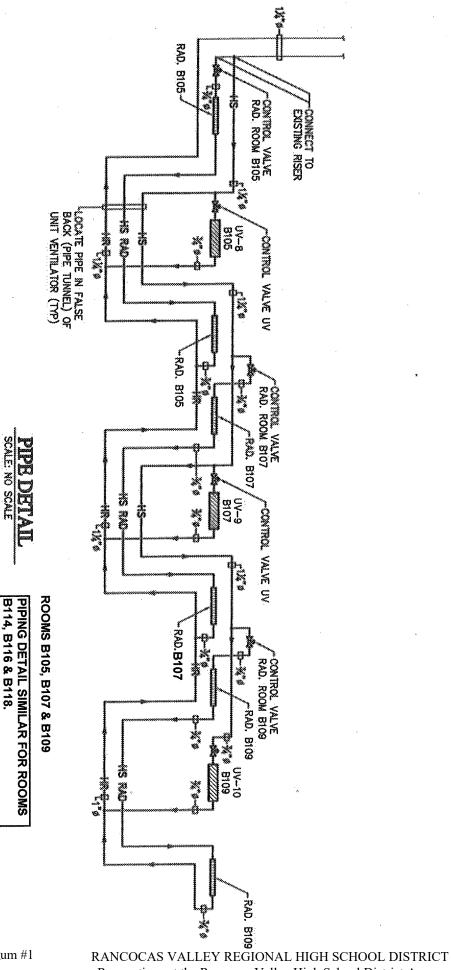
# CAL RADIATIO/UNIT VENTILATOR PIPE ARRANGEMENT

SCALE: NO SCALE

# Bala Cynwyd, Pennsylvania 19004

email: efox@jfoxhvac.com web: www.jfoxhvac.com Phone: 610-664-0855 Fax 610-664-7150 25 Bala Avenue, Suite 204, PO Box 120

SCALE	DATE	SHEET NO.		JOB
NO SCALE	01/07/2020 JOB NUMBER 5918	SKM-02	PIPE DETAIL	REGIONAL HIGH SCHOOL ANNEX



Renovations at the Rancocas Valley High School District Annex