

## **ADDENDUM #001**

Date: November 17, 2021

This Addendum applicable to work designated herein shall be understood to be and is an Addendum and as such shall be part of and included in the Contract.

To all bidders for furnishing all labor and materials necessary for:

**Harwood Elementary School Reroof  
Jefferson School District No. 251  
Rigby, Idaho  
NBW Project #21008**

Failure to acknowledge receipt of this Addendum on the bid proposal form may result in rejection of your bid.

### **GENERAL**

1. The Pre-bid Conference Agenda Notes have been included for reference.

### **SPECIFICATIONS**

2. Project Manual Cover Sheet has been replaced with the DBS approved and stamped cover sheet.
3. Specification Section 07 7200 Roof Accessories has been added for the gravity ventilators that are to replace the existing attic vents.

### **ARCHITECTURAL**

1. Sheet G1.0 – Code Analysis has been added.
2. Sheet A7.1 – Keynote 2 has been changed to note that the attic vents are to be replaced.
3. Sheet A7.2 – Keynote 10 has been added for the replacement to the attic vents.
4. Sheet A7.2 – Detail 3 has been revised to place the substrate board below the roof membrane.
5. Sheet A7.3 – Insulation has been added to complete the thermal barrier.
6. Sheet A7.3 – Detail E has been revised to include fastening at the changes in plane.
7. Sheet ME1.1 – DBS review notes have been added.
8. Sheet ME1.2 – DBS approval stamp has been added.

**END OF ADDENDUM NO. 001**

**Pre-bid Conference**  
**November 16, 2021**  
**JJSD #251 Harwood Elementary School**  
**Re-Roof**

<b>Architect's Project Manager:</b> Geoff Nielson Nick Hansen ph - 208-522-8779 fax - 208-522-8785	<b>Project description:</b> Removal of existing roof, installing new PVC roof and flashings, and replacing roof top mechanical equipment.	
<b>Roof square footage:</b> 34,000 s.f.	<b>Bid submission date and time:</b> November 30, 2021 2pm	<b>Bid submission location:</b> NBW Architects 990 John Adams Parkway Idaho Falls, ID 83403
<b>Building permit issued by:</b> TBD	<b>Construction Time:</b> Summer/2022	<b>Liquidated damages/ day:</b> \$500
<b>Unusual conditions:</b>		
<b>Addendum items:</b>		

1. **Bidders List:**
  - a. Briggs Roofing
  - b. Robison Roofing
  - c. Smith Roofing
  
2. **Bidding Information:**
  - a. The successful bidder must supply:
    - 1) Workers Compensation Insurance\*
    - 2) Commercial Liability Insurance\*
    - 3) Automobile Liability Insurance\*
    - 4) Bid Bonds\* (5%)
    - 5) Performance and Payment Bonds (100%) (as requested by Owner and handled by Change Order)

\* The cost of the above to be included in the contractor's bid.
  
3. **Addenda:**
  - a. All addenda will be issued by the Architect, by email if possible, at least 48 hours prior to bid opening.
  - b. All verbal agreements or instructions must be confirmed by written addenda.
  - c. Contractors are to bid the contract documents. Review documents carefully. Additional payments to the Contractor will not be made for items shown or specified in documents.

- d. Requests for clarification shall be in writing and received by the architect seven (7) working days minimum prior to bid opening.

4. **Bid Opening:**

- a. Sealed bids will be accepted up to the specified time. Bidding will be closed at the exact specified time. Any or all Bids may be rejected by the Owner without cause. Bids will be opened and reviewed in a meeting following the time for receipt of bids.
- b. Bids are to be submitted as outlined in the Project Manual.
- c. The bid form used will be the form provided. Faxed bids are not acceptable.
- d. The Owner reserves the right to reject any or all bids and to waive any irregularity therein.
- e. If all addenda are not acknowledged by number (1,2,3, etc.), on the bid form or if the bid form is not signed, all blanks not filled in or otherwise improperly filled out, the bid will be considered non-responsive.
- f. The bid amount is to be listed in both written and numerical form. If there is a discrepancy between the two, the written amount will be used.

5. **Additional Items of Discussion:**

- a. No substitutions of materials or products not authorized by addendum.
- b. Review drawings and specs.
- c. Polyisocyanurate insulation is to be bid per the specifications.
- d. Work is not to commence until school is out for the Summer next year. Work is to be completed prior to the start of school in Fall 2022.
- e. Materials are to be ordered as soon as possible once contracts are in place. If materials are to show up before work can commence, they are to be stored by the contractor.

6. **Questions**

7. **Notes**

- a. Performance and Payment Bonds are not requested at this time. If they are to be requested, that information will be issued by addendum.
- b. Funds for this project are available now. The contractor will be paid for any materials received and properly stored prior to the start of construction.
- c. DBS has reviewed and approved plans for this project. Those approved plans will be issued as part of Addendum #1. DBS has requested insulation be installed between the exterior and the ceiling space as discussed. Those details have been updated and will be issued in Addendum #1.
- d. We are requesting a unit price per 4'x8' sheet for replacing damaged or deteriorated existing 5/8" wood sheathing. Please reference the Unit Price in the project manual for further information.
- e. There are existing openings to vent air from the soffit space to the attic space. These will need to be closed off when adding insulation per DBS request.
- f. Anyone who has interest in walking the roof may do so by contacting Eric Jensen to schedule a time - (208) 351-2714

Approved

State of Idaho  
Division of Building Safety

PA# 81D2105-00099

Date: 06/21/21

These Documents are approved contingent on the compliance with the mark-ups and notes applied.

This approval shall not be construed to be an approval of any violation of, or variance from, Idaho's adopted codes, standards, laws or rules applicable to this project.

This is not a building permit

# PROJECT MANUAL

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For the Construction of:

Re-Roof  
Harwood Elementary School  
Jefferson School District No. 251  
Rigby, Idaho

May 2021

Set No.

 **nbw**architects p.a.  
ARCHITECTURE / PLANNING / INTERIORS

990 John Adams Parkway, P.O. Box 2212, Idaho Falls, Idaho 83403-2212  
Telephone: (208)522-8779 / Fax: (208)522-8785 / Email: nbw@nbwarchitects.com

## **SECTION 07 7200 - ROOF ACCESSORIES**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

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

#### **1.2 SUMMARY**

- A. Section Includes:
  - 1. Roof curbs.
  - 2. Gravity ventilators.
- B. Related Requirements:
  - 1. Section 07 6200 "Sheet Metal Flashing and Trim" for shop- and field-formed metal flashing, roof-drainage systems, roof expansion-joint covers, and miscellaneous sheet metal trim and accessories.

#### **1.3 COORDINATION**

- A. Coordinate layout and installation of roof accessories with roofing membrane and base flashing and interfacing and adjoining construction to provide a leakproof, weathertight, secure, and noncorrosive installation.
- B. Coordinate dimensions with rough-in information or Shop Drawings of equipment to be supported.

#### **1.4 ACTION SUBMITTALS**

- A. Product Data: For each type of roof accessory.
  - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Shop Drawings: For roof accessories.
  - 1. Include plans, elevations, keyed details, and attachments to other work. Indicate dimensions, loadings, and special conditions. Distinguish between plant- and field-assembled work.

#### **1.5 CLOSEOUT SUBMITTALS**

- A. Operation and Maintenance Data: For roof accessories to include in operation and maintenance manuals.

### **PART 2 - PRODUCTS**

#### **2.1 PERFORMANCE REQUIREMENTS**

- A. General Performance: Roof accessories shall withstand exposure to weather and resist thermally induced movement without failure, rattling, leaking, or fastener disengagement due to defective manufacture, fabrication, installation, or other defects in construction.

## 2.2 ROOF CURBS

- A. Roof Curbs: Internally reinforced roof-curb units capable of supporting superimposed live and dead loads, including equipment loads and other construction indicated on Drawings, bearing continuously on roof structure, and capable of meeting performance requirements; with welded or mechanically fastened and sealed corner joints, stepped integral metal cant raised the thickness of roof insulation, and integrally formed deck-mounting flange at perimeter bottom.
1. **Manufacturers:** Subject to compliance with requirements, provide products by one of the following:
    - a. AES Industries, Inc.
    - b. Curbs Plus, Inc.
    - c. Custom Solution Roof and Metal Products.
    - d. Greenheck Fan Corporation.
    - e. Kingspan Light + Air, North America.
    - f. LMCurbs.
    - g. Metallic Products Corp.
    - h. Pate Company (The).
    - i. Roof Products, Inc.
    - j. Vent Products Co., Inc.
  - B. Size: Coordinate dimensions with roughing-in information or Shop Drawings of equipment to be supported.
  - C. Supported Load Capacity: Coordinate load capacity with information on Shop Drawings of equipment to be supported.
  - D. Material: Zinc-coated (galvanized) steel sheet, 0.079 inch thick.
    1. Finish: Factory prime coating .
    2. Color: As indicated by manufacturer's designations .
  - E. Construction:
    1. Curb Profile: Manufacturer's standard compatible with roofing system.
    2. On ribbed or fluted metal roofs, form deck-mounting flange at perimeter bottom to conform to roof profile.
    3. Fabricate curbs to minimum height of 12 inches above roofing surface unless otherwise indicated.
    4. Top Surface: Level top of curb, with roof slope accommodated by sloping deck-mounting flange or by use of leveler frame.
    5. Insulation: Factory insulated with 1-1/2-inch-thick glass-fiber board insulation.
    6. Liner: Same material as curb, of manufacturer's standard thickness and finish.
    7. Nailers: Factory-installed wood nailer along top flange of curb , continuous around curb perimeter.

## 2.3 GRAVITY VENTILATORS

- A. Low-Profile, Cylindrical-Style Gravity Ventilators: Manufacturer's standard, fabricated as indicated, with manufacturer's standard welded or sealed mechanical joints.
- B. **Manufacturers:** Subject to compliance with requirements, provide product as listed below, or equivalent manufacturer, submitted for substitution and approved, prior to bid.
1. Basis-of-Design: Active Ventilation Products, Inc. Pop Vent with Curb Mount Flange Model Number: PV-24-C8-CMF
    - a. Vent Cylinder, Base Flange, and Hood Material: Aluminum sheet, of manufacturer's standard thickness.
    - b. Finish: As indicated by manufacturer's designations.

## 2.4 METAL MATERIALS

- A. Zinc-Coated (Galvanized) Steel Sheet: ASTM A653/A653M, G90 coating designation.
1. Mill-Phosphatized Finish: Manufacturer's standard for field painting.

2. Factory Prime Coating: Where field painting is indicated, apply pretreatment and white or light-colored, factory-applied, baked-on epoxy primer coat, with a minimum dry film thickness of 0.2 mil.
  3. Exposed Coil-Coated Finish: Prepainted by the coil-coating process to comply with ASTM A755/A755M. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
    - a. Two-Coat Fluoropolymer Finish: AAMA 621. System consisting of primer and fluoropolymer color topcoat containing not less than 70 percent polyvinylidene fluoride (PVDF) resin by weight.
  4. Baked-Enamel or Powder-Coat Finish: After cleaning and pretreating, apply manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat to a minimum dry film thickness of 2 mils.
  5. Concealed Finish: Pretreat with manufacturer's standard white or light-colored acrylic or polyester-backer finish consisting of prime coat and wash coat, with a minimum total dry film thickness of 0.5 mil.
- B. Aluminum-Zinc Alloy-Coated Steel Sheet: ASTM A792/A792M, AZ50 coated.
1. Factory Prime Coating: Where field painting is indicated, apply pretreatment and white or light-colored, factory-applied, baked-on epoxy primer coat, with a minimum dry film thickness of 0.2 mil.
  2. Exposed Coil-Coated Finish: Prepainted by the coil-coating process to comply with ASTM A755/A755M. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
    - a. Two-Coat Fluoropolymer Finish: AAMA 621. System consisting of primer and fluoropolymer color topcoat containing not less than 70 percent polyvinylidene fluoride (PVDF) resin by weight.
  3. Baked-Enamel or Powder-Coat Finish: After cleaning and pretreating, apply manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat to a minimum dry film thickness of 2 mils.
  4. Concealed Finish: Pretreat with manufacturer's standard white or light-colored acrylic or polyester-backer finish consisting of prime coat and wash coat, with a minimum total dry film thickness of 0.5 mil.
- C. Aluminum Sheet: ASTM B209, manufacturer's standard alloy for finish required, with temper to suit forming operations and performance required.
1. Mill Finish: As manufactured.
  2. Factory Prime Coating: Where field painting is indicated, apply pretreatment and white or light-colored, factory-applied, baked-on epoxy primer coat, with a minimum dry film thickness of 0.2 mil.
  3. Clear Anodic Finish: AAMA 611, AA-M12C22A31, Class II, 0.010 mm or thicker.
  4. Color Anodic Finish: AAMA 611, AA-M12C22A32/A34, Class II, 0.010 mm or thicker.
  5. Exposed Coil-Coated Finish: Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
    - a. Two-Coat Fluoropolymer Finish: AAMA 2605. System consisting of primer and fluoropolymer color topcoat containing not less than 70 percent polyvinylidene fluoride (PVDF) resin by weight.
  6. Baked-Enamel or Powder-Coat Finish: AAMA 2603 except with a minimum dry film thickness of 1.5 mils. Comply with coating manufacturer's written instructions for cleaning, conversion coating, and applying and baking finish.
  7. Concealed Finish: Pretreat with manufacturer's standard white or light-colored acrylic or polyester-backer finish consisting of prime coat and wash coat, with a minimum total dry film thickness of 0.5 mil.
- D. Aluminum Extrusions and Tubes: ASTM B221, manufacturer's standard alloy and temper for type of use, finished to match assembly where used; otherwise mill finished.
- E. Stainless Steel Sheet and Shapes: ASTM A240/A240M or ASTM A666, Type 304.
- F. Steel Shapes: ASTM A36/A36M, hot-dip galvanized according to ASTM A123/A123M unless otherwise indicated.
- G. Steel Tube: ASTM A500/A500M, round tube.
- H. Galvanized-Steel Tube: ASTM A500/A500M, round tube, hot-dip galvanized according to ASTM A123/A123M.
- I. Steel Pipe: ASTM A53/A53M, galvanized.

## 2.5 MISCELLANEOUS MATERIALS

- A. Provide materials and types of fasteners, protective coatings, sealants, and other miscellaneous items required by manufacturer for a complete installation.
- B. Cellulosic-Fiber Board Insulation: ASTM C208, Type II, Grade 1, thickness as indicated.
- C. Glass-Fiber Board Insulation: ASTM C726, nominal density of 3 lb/cu. ft., thermal resistivity of 4.3 deg F x h x sq. ft./Btu x in. at 75 deg F, thickness as indicated.
- D. Wood Nailers: Softwood lumber, pressure treated with waterborne preservatives for aboveground use, acceptable to authorities having jurisdiction, and complying with AWWA C2; not less than 1-1/2 inches thick.
- E. Bituminous Coating: Cold-applied asphalt emulsion complying with ASTM D1187/D1187M.
- F. Underlayment:
  - 1. Felt: ASTM D226/D226M, Type II (No. 30), asphalt-saturated organic felt, nonperforated.
  - 2. Polyethylene Sheet: 6-mil-thick polyethylene sheet complying with ASTM D4397.
  - 3. Slip Sheet: Building paper, 3 lb/100 sq. ft. minimum, rosin sized.
  - 4. Self-Adhering, High-Temperature Sheet: Minimum 30 to 40 mils thick, consisting of slip-resisting polyethylene-film top surface laminated to layer of butyl or SBS-modified asphalt adhesive, with release-paper backing; cold applied. Provide primer when recommended by underlayment manufacturer.
- G. Fasteners: Roof accessory manufacturer's recommended fasteners suitable for application and metals being fastened. Match finish of exposed fasteners with finish of material being fastened. Provide nonremovable fastener heads to exterior exposed fasteners. Furnish the following unless otherwise indicated:
  - 1. Fasteners for Zinc-Coated or Aluminum-Zinc Alloy-Coated Steel: Series 300 stainless steel or hot-dip zinc-coated steel according to ASTM A153/A153M or ASTM F2329.
  - 2. Fasteners for Aluminum Sheet: Aluminum or Series 300 stainless steel.
  - 3. Fasteners for Stainless Steel Sheet: Series 300 stainless steel.
- H. Gaskets: Manufacturer's standard tubular or fingered design of neoprene, EPDM, PVC, or silicone or a flat design of foam rubber, sponge neoprene, or cork.
- I. Sealants: As recommended by roof accessory manufacturer for installation indicated.
- J. Asphalt Roofing Cement: ASTM D4586/D4586M, asbestos free, of consistency required for application.

## 2.6 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, to verify actual locations, dimensions, and other conditions affecting performance of the Work.
- B. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored.



- C. Verify dimensions of roof openings for roof accessories.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

### **3.2 INSTALLATION**

- A. Install roof accessories according to manufacturer's written instructions.
  - 1. Install roof accessories level; plumb; true to line and elevation; and without warping, jogs in alignment, buckling, or tool marks.
  - 2. Anchor roof accessories securely in place so they are capable of resisting indicated loads.
  - 3. Use fasteners, separators, sealants, and other miscellaneous items as required to complete installation of roof accessories and fit them to substrates.
  - 4. Install roof accessories to resist exposure to weather without failing, rattling, leaking, or loosening of fasteners and seals.
- B. Metal Protection: Protect metals against galvanic action by separating dissimilar metals from contact with each other or with corrosive substrates by painting contact surfaces with bituminous coating or by other permanent separation as recommended by manufacturer.
  - 1. Coat concealed side of uncoated aluminum roof accessories with bituminous coating where in contact with wood, ferrous metal, or cementitious construction.
  - 2. Underlayment: Where installing roof accessories directly on cementitious or wood substrates, install a course of underlayment and cover with manufacturer's recommended slip sheet.
  - 3. Bed flanges in thick coat of asphalt roofing cement where required by manufacturers of roof accessories for waterproof performance.
- C. Roof Curb Installation: Install each roof curb so top surface is level.
- D. Equipment Support Installation: Install equipment supports so top surfaces are level with each other.
- E. Gravity Ventilator Installation: Verify that gravity ventilators operate properly and have unrestricted airflow. Clean, lubricate, and adjust operating mechanisms.
- F. Preformed Flashing-Sleeve Installation: Secure flashing sleeve to roof membrane according to flashing-sleeve manufacturer's written instructions; flash sleeve flange to surrounding roof membrane according to roof membrane manufacturer's instructions.
- G. Seal joints with elastomeric sealant as required by roof accessory manufacturer.

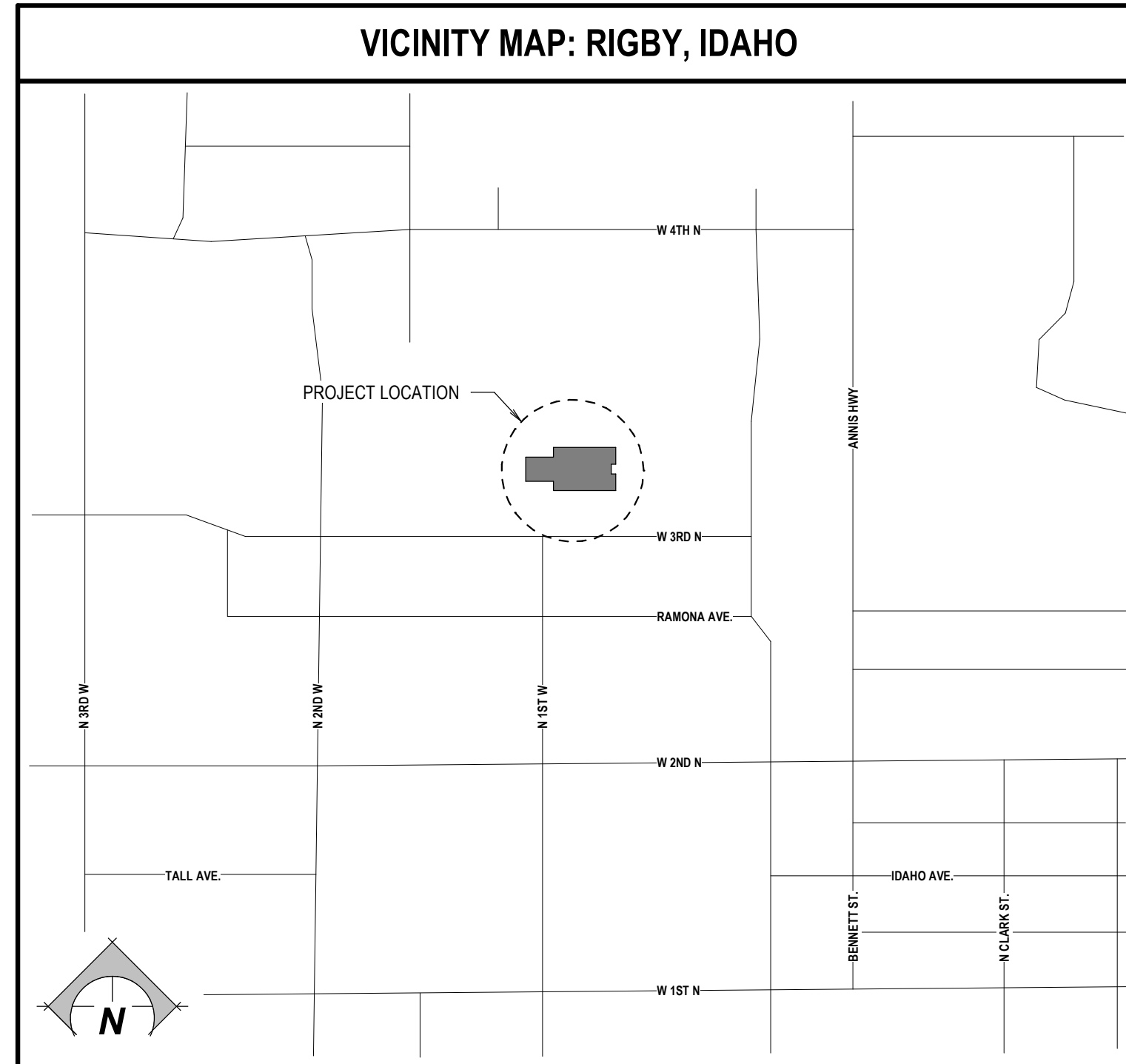
### **3.3 REPAIR AND CLEANING**

- A. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing according to ASTM A780/A780M.
- B. Touch up factory-primed surfaces with compatible primer ready for field painting according to Section 09 9113 "Exterior Painting."
- C. Clean exposed surfaces according to manufacturer's written instructions.
- D. Clean off excess sealants.
- E. Replace roof accessories that have been damaged or that cannot be successfully repaired by finish touchup or similar minor repair procedures.

**END OF SECTION 07 7200**

# RE-ROOF FOR: HARWOOD ELEMENTARY

JEFFERSON JOINT SCHOOL DISTRICT NO. 251  
200 W 3RD N, RIGBY, IDAHO 83442



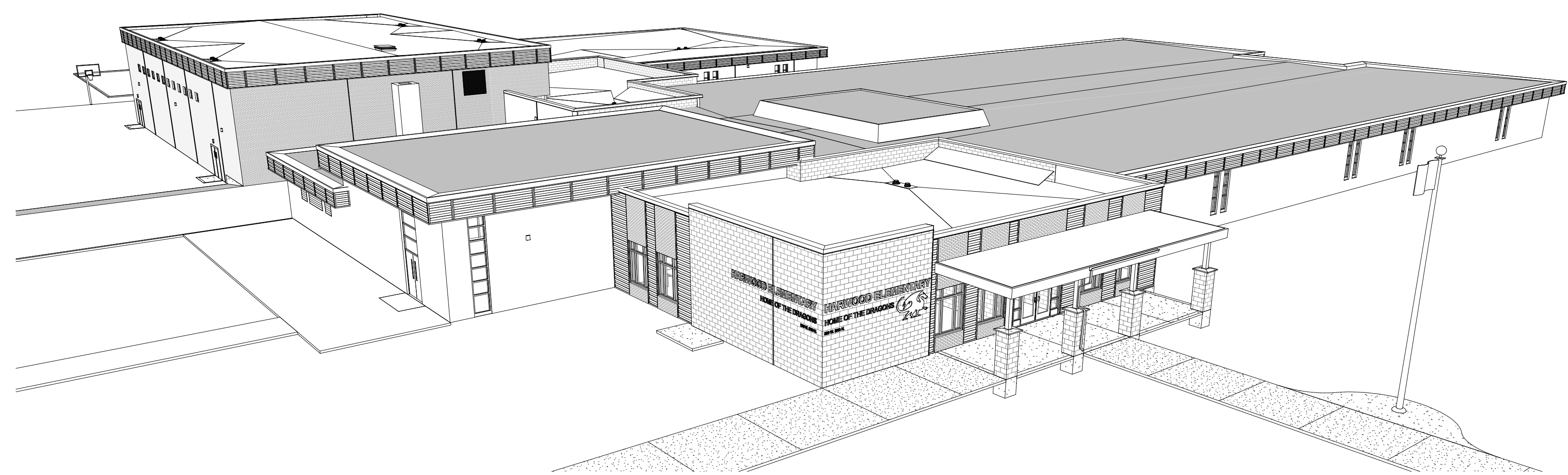
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<p><b>BREAK LINE</b></p>	<p><b>REVISION TAG</b></p>
<p><b>SECTION NUMBER</b></p> <p>SECTION TAG PAGE NUMBER</p>	<p><b>ROOM NAME TAG</b></p> <p>ROOM NAME TAG ROOM NAME TAG ROOM NUMBER</p>
<p><b>CEILING TYPE</b></p> <p>CEILING TAG CEILING HEIGHT</p>	<p><b>DETAIL NUMBER</b></p> <p>INTERIOR ELEV. TAG PAGE NUMBER</p>
<p><b>DOOR TYPE TAG</b></p>	<p><b>NORTH ARROW</b></p>
<p><b>WINDOW TYPE TAG</b></p>	<p><b>WALL TYPE TAG</b></p>
<p><b>PLAN WEST WALL FINISH</b></p>	<p><b>FLOOR FINISH</b></p>
<p><b>WALL BASE MATERIAL</b></p>	<p><b>ADDITIONAL FINISH NOTES</b></p>
<p><b>PLAN SOUTH WALL FINISH</b></p>	<p><b>ADDITIONAL FINISH NOTES</b></p>
<p><b>ADDITIONAL FINISH NOTES</b></p>	<p><b>PLAN EAST WALL FINISH</b></p>

CONSULTANTS	
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ABBREVIATIONS	
#	- NUMBER OR POUND
&	- AND
A.F.F.	- ABOVE FINISH FLOOR
AL	- ALUMINUM
ALUM.	- ALUMINUM
B.O.	- BOTTOM OF
CMU	- CONCRETE MASONRY UNIT
CONC.	- CONCRETE
CONT.	- CONTINUOUS
DEMO.	- DEMOLITION OR DEMOLISH
DIA.	- DIAMETER
DN	- DOWN
EA.	- EACH
EIFS	- EXTERIOR INSULATION & FINISHING SYSTEM
ELEV.	- ELEVATION
EQ.	- EQUAL
EQUIP.	- EQUIPMENT
EXT.	- EXTERIOR
F.F.	- FINISH FLOOR
FRP	- FIBERGLASS REINFORCED PLASTIC
GA.	- GAUGE
GYP.	- GYPSUM
H.M.	- HOLLOW METAL
HR	- HOUR
HVAC	- HEATING, VENTILATING, & AIR CONDITION
I.D.	- INSIDE DIAMETER
I.M.P.	- INSULATED METAL PANEL
INSUL.	- INSULATION
INT.	- INTERIOR
MAX.	- MAXIMUM
MECH.	- MECHANICAL
MFR	- MANUFACTURER
MIN.	- MINIMUM
N.I.C.	- NOT IN CONTRACT
NO.	- NUMBER
O.C.	- ON CENTER
O.D.	- OUTSIDE DIAMETER
PLY.	- PLYWOOD
PLUM.	- PLUMBING
PVC	- POLYVINYL CHLORIDE
RCP	- REFLECTED CEILING PLAN
REQ'D	- REQUIRED
SIM.	- SIMILAR
SPM	- SINGLE PLY MEMBRANE
STOR.	- STORAGE
STRUCT.	- STRUCTURAL
T.O.	- TOP OF
TYP.	- TYPICAL
U.N.O.	- UNLESS NOTED OTHERWISE
W.	- WITH
W.C.	- WATER CLOSET
WD	- WOOD

DRAWING INDEX	
GENERAL	G1.0 GENERAL INFORMATION
ARCHITECTURAL	A7.1 DEMOLITION ROOF PLAN
	A7.2 ROOF PLAN
	A7.3 ROOF DETAILS
	A7.4 ROOF DETAILS ALTERNATE #1
MECHANICAL	ME1.1 MECHANICAL ROOF PLAN AND DETAILS
	ME1.2 MECHANICAL SCHEDULES AND DETAILS

CODE ANALYSIS	
<b>CODE ANALYSIS</b>	
BUILDING/STRUCTURAL:	2018 IBC
ELECTRICAL:	2017 NEC
PLUMBING:	2017 IPC
MECHANICAL:	2018 IMC
<b>CONSTRUCTION TYPE:</b>	
TYPE V-B, NON FIRE SPRINKLED	
<b>BUILDING OCCUPANCY:</b>	
E- EDUCATIONAL	
<b>AREA BY OCCUPANCY GROUP:</b>	
EXISTING BUILDING	33,897 FT <sup>2</sup>
<b>BUILDING INFORMATION:</b>	
HEIGHT OF BUILDING:	27'-0"
NUMBER OF STORIES:	SINGLE LEVEL
<b>ATTIC VENTILATION:</b>	
PER 2018 IBC SECTION 1202.2.1 VENTILATION REQUIRED TO BE 1/150 OF VENTILATED SPACE.	
TOTAL VENTILATED SPACE:	34,000 FT <sup>2</sup>
TOTAL REQUIRED VENTILATION:	227 FT <sup>2</sup>
TOTAL VENTILATION:	22 ATTIC VENTS @ 4 FT <sup>2</sup> EACH: 88 FT <sup>2</sup>
	SOFFIT VENTS @ 360 FT <sup>2</sup>
TOTAL VENTILATION > TOTAL REQUIRED VENTILATION	



**nbwarchitects p.a.**  
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RE-ROOF FOR:  
**HARWOOD ELEMENTARY**  
JEFFERSON JOINT SCHOOL DISTRICT NO. 251  
200 W 3RD N, RIGBY, IDAHO 83442

PROJECT:  
SHEET TITLE:  
GENERAL INFORMATION

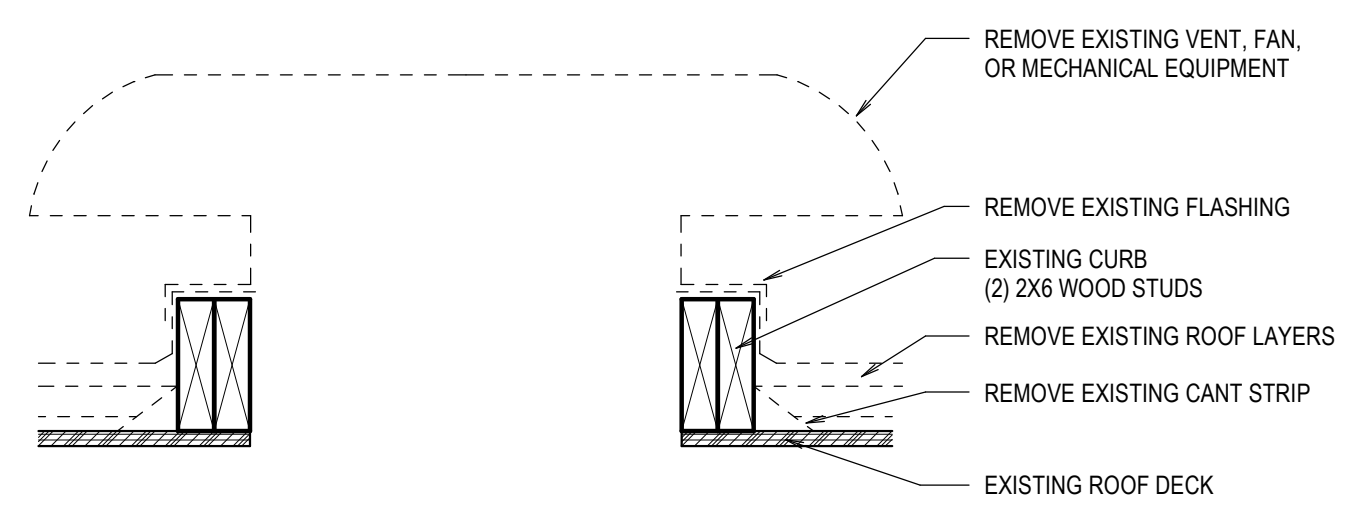
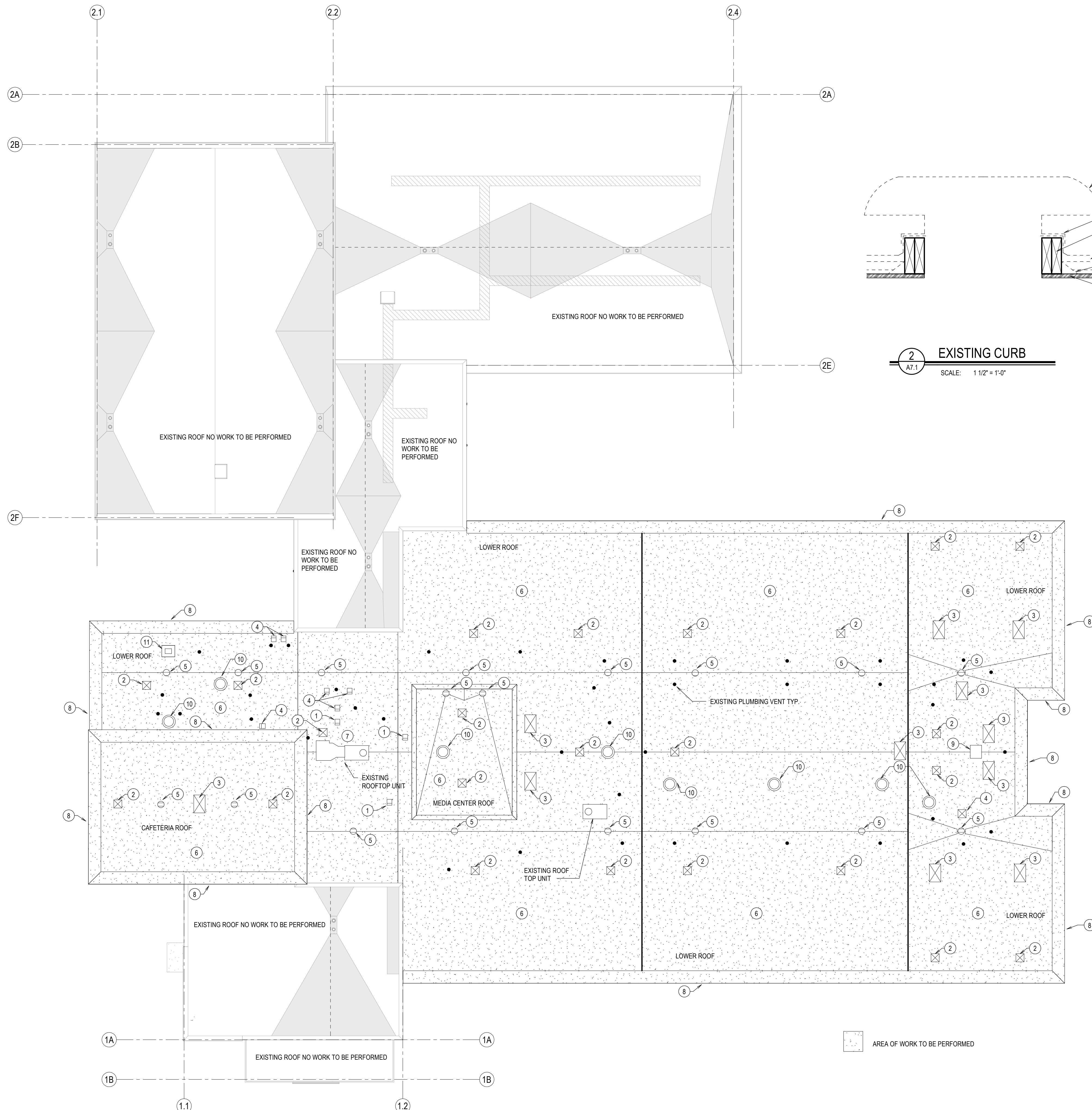
REVISIONS		
1	Addendum #1	2021-11-17

PROJECT NO.  
21008  
DATE:  
MAY 2021  
DRAWN BY:  
NRH  
CHECKED BY:  
NBW

DRAWING NO.: AD #1

**G1.0**  
REVISED 11-17-2021

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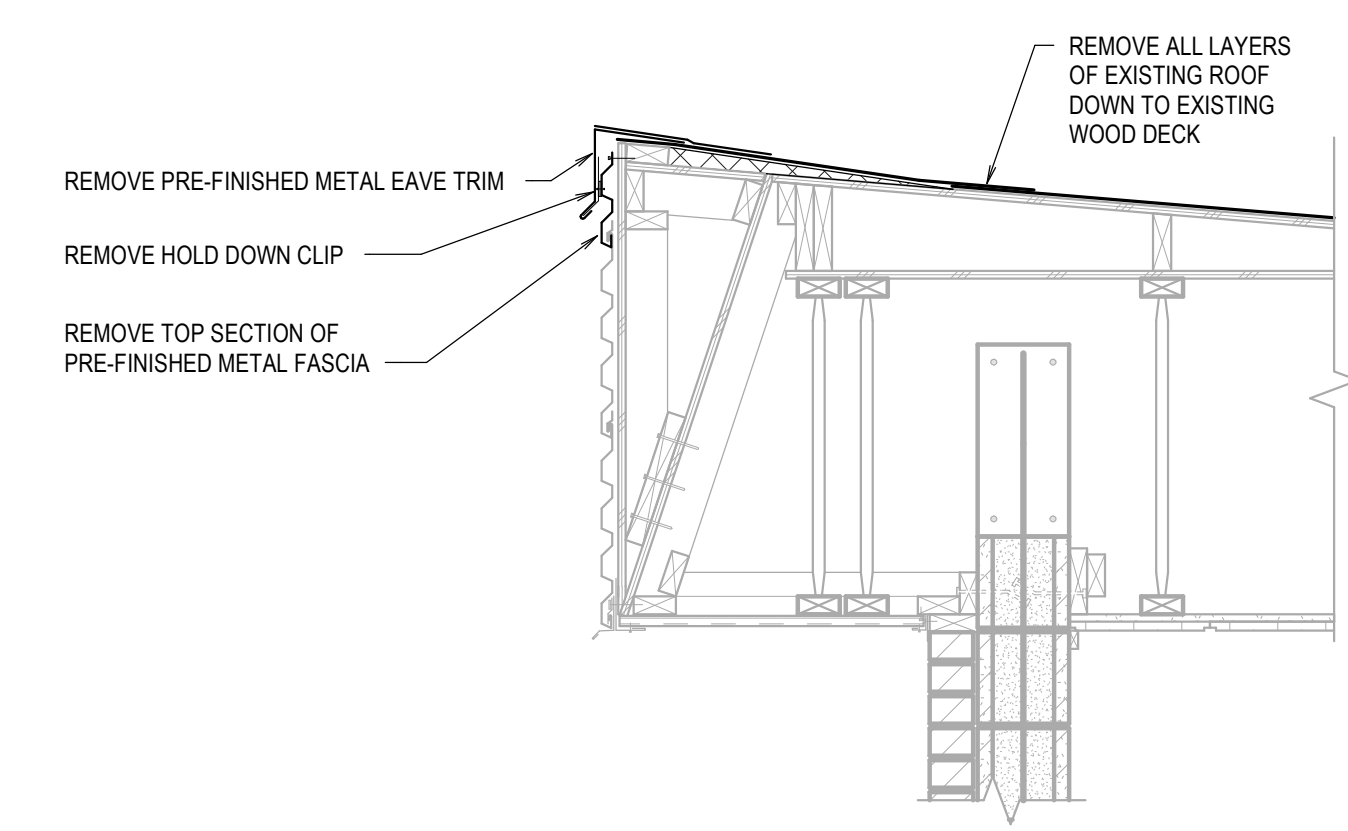


### GENERAL DEMOLITION NOTES

1. RESOLVE ALL DISCREPANCIES WITH CONTRACTOR AND/OR ARCHITECT PRIOR TO DEMOLITION.
2. CONTRACTOR TO VERIFY EXISTING CONDITIONS AND DIMENSIONS AND QUANTITIES IN FIELD PRIOR TO DEMOLITION AND CONSTRUCTION.
3. DEMOLITION AND/OR REMOVAL OF ITEMS SHOWN ON THESE PLANS ARE FOR GENERAL INFORMATION ONLY AND IS NOT INTENDED TO REFLECT THE FULL SCOPE OF DEMOLITION REQUIRED FOR COMPLETION OF THE WORK.
4. CONTRACTOR TO PROPERLY DISPOSE OF REMOVED OR DEMOLISHED MATERIAL U.N.O.
5. REMOVE AND FILL IN EXISTING ATTIC VENTS WITH 5/8" WOOD SHEATHING TO MATCH ELEVATION OF EXISTING SHEATHING.
6. ANY ANTENNAS, GUIDE WIRES, ETC. TO BE REMOVED BY THE OWNER PRIOR TO DEMOLITION. COORDINATE WITH THE OWNER.
7. REMOVE ALL MECHANICAL UNITS, EXHAUST FAN VENTS AND THE EXHAUST FAN TO RAISE THE CURBS. REMOVE AND REPLACE CURBS AS NECESSARY - SEE DETAIL 2/A7.1
8. REMOVE ROOF EDGE CAPS/D RIP EDGES ON THE ENTIRE LOWER ROOF AND CAFETERIA - SEE DETAIL 3/A7.1
9. THE ELECTRICAL FOR THE MECHANICAL EQUIPMENT ON THE ROOF IS TO BE DISCONNECTED BY A LICENSED ELECTRICAL CONTRACTOR.

### DEMOLITION KEYNOTES

- 1 REMOVE EXHAUST FAN AND VENT. FILL IN OPENING WITH 5/8" WOOD SHEATHING.
- 2 REMOVE ATTIC VENT - TO BE REPLACED.
- 3 EXISTING MECHANICAL VENT. RETAIN AND PROTECT.
- 4 EXISTING EXHAUST FAN - SEE MECHANICAL.
- 5 EXISTING ROOF DRAIN. RETAIN AND PROTECT.
- 6 REMOVE AND DISPOSE OF EXISTING ROOF LAYERS DOWN TO EXISTING 5/8" WOOD DECK. REPLACE DAMAGED OR DETERIORATED DECK AS NEEDED. CLEAN AND PREPARE WOOD DECK TO RECEIVE NEW ROOF MATERIALS.
- 7 REMOVE EXISTING WEATHER STATION.
- 8 REMOVE THE TOP SECTION OF METAL FASCIA - SEE 3/A7.1
- 9 EXISTING OUTSIDE AIR INTAKE. RETAIN AND PROTECT.
- 10 REMOVE EXISTING EXHAUST FAN - TO BE REPLACED - SEE MECHANICAL.
- 11 EXISTING CHIMNEY. RETAIN AND PROTECT.



**DEMOLITION ROOF PLAN**  
SCALE: 1/16" = 1'-0"



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RE-ROOF FOR:  
**HARWOOD ELEMENTARY**  
JEFFERSON JOINT SCHOOL DISTRICT NO. 251  
200 W 3RD N, RIGBY, IDAHO 83442

PROJECT:  
SHEET TITLE:  
DEMOLITION ROOF PLAN

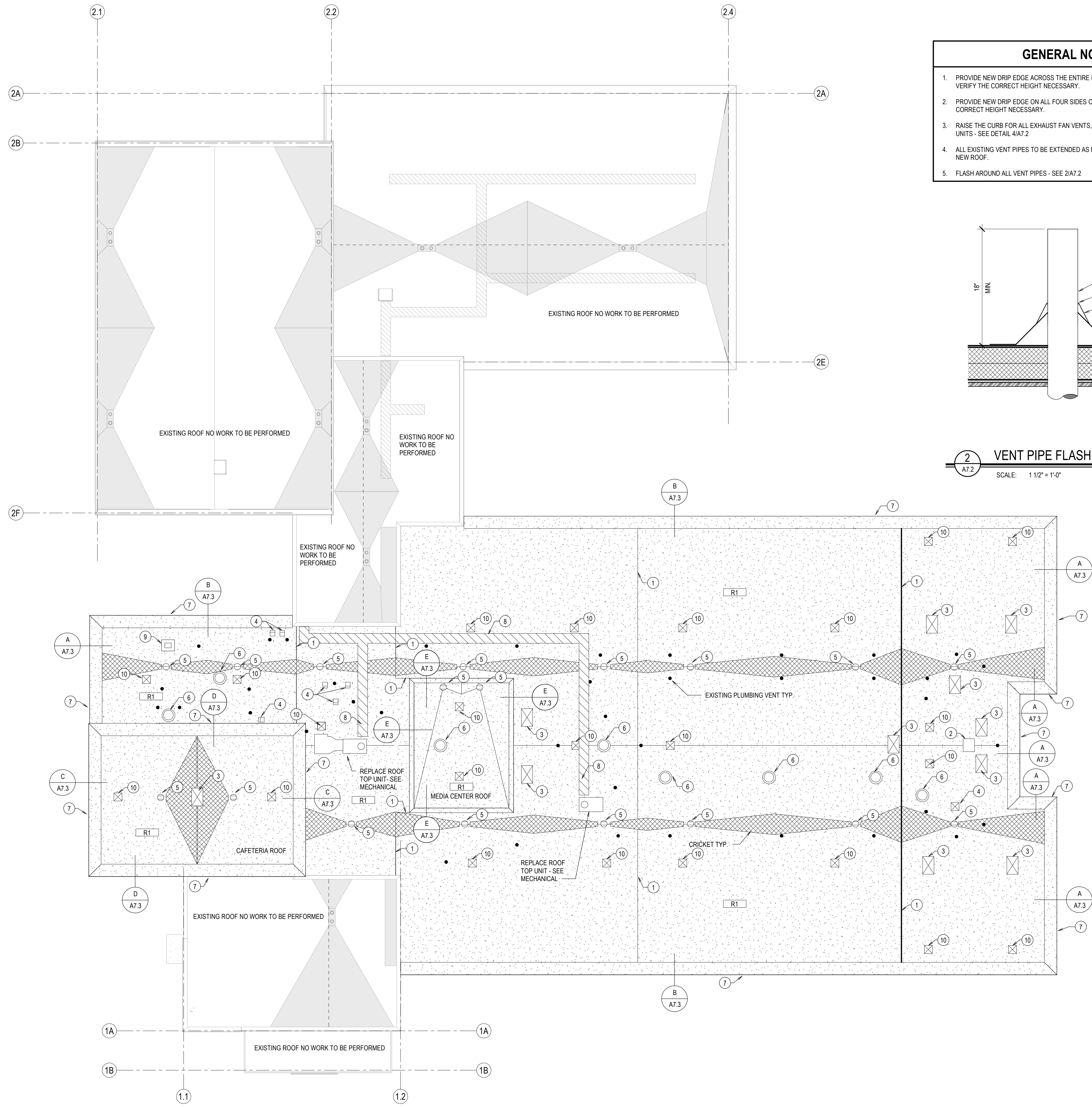
REVISIONS		
1	Addendum #1	2021-11-17

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21008  
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DRAWING NO.: AD #1

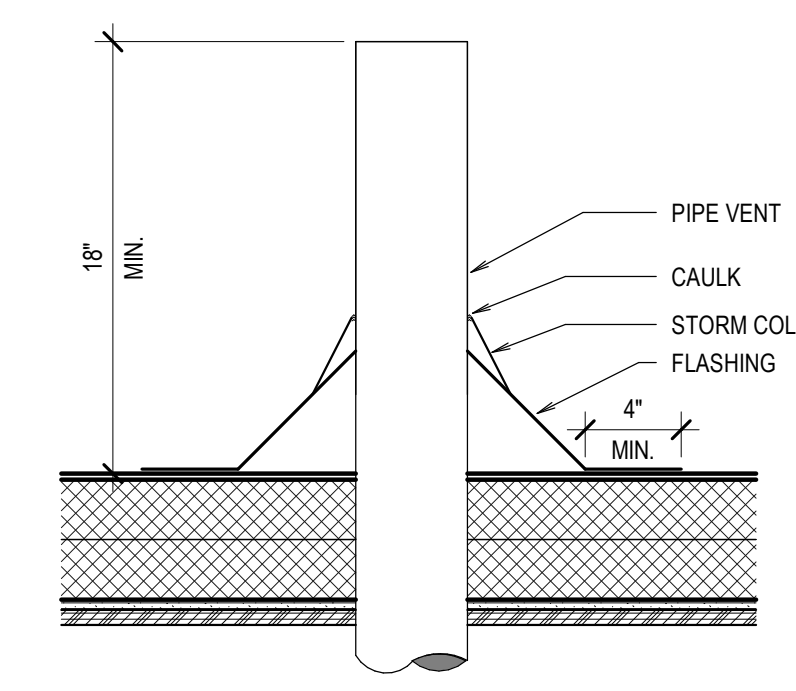
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REVISED 11-17-2021

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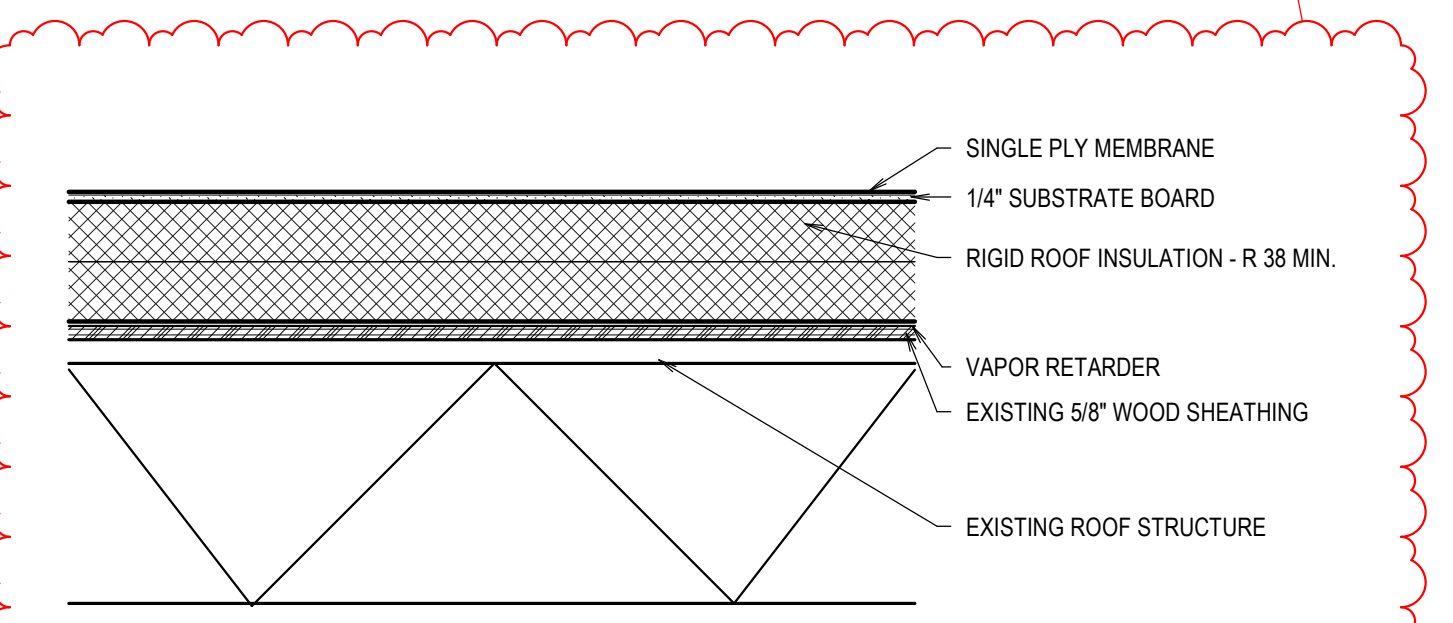


- ### GENERAL NOTES
1. PROVIDE NEW DRIP EDGE ACROSS THE ENTIRE LENGTH OF THE LOWER ROOF. FIELD VERIFY THE CORRECT HEIGHT NECESSARY.
  2. PROVIDE NEW DRIP EDGE ON ALL FOUR SIDES OF THE CAFETERIA. FIELD VERIFY THE CORRECT HEIGHT NECESSARY.
  3. RAISE THE CURB FOR ALL EXHAUST FAN VENTS, EXHAUST FANS AND MECHANICAL UNITS - SEE DETAIL 4/A7.2
  4. ALL EXISTING VENT PIPES TO BE EXTENDED AS NEEDED FOR PROPER HEIGHT ABOVE NEW ROOF.
  5. FLASH AROUND ALL VENT PIPES - SEE 2/A7.2

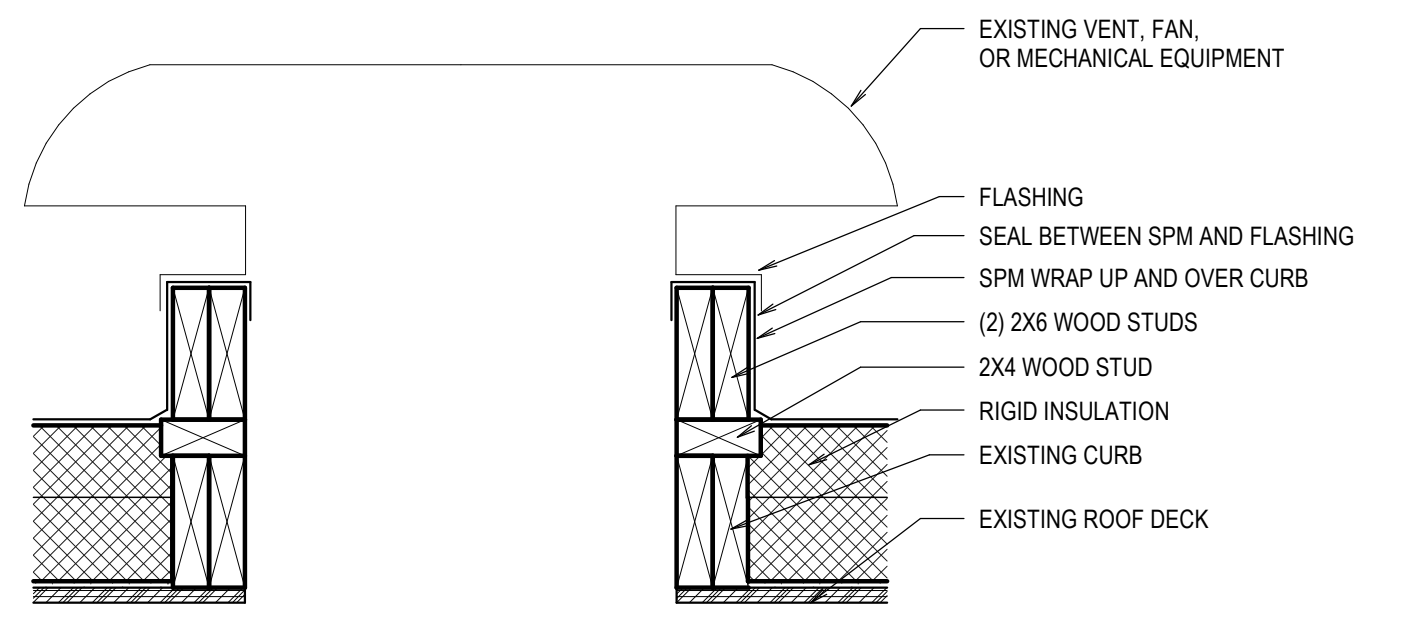
- ### KEYNOTES
- 1 EXISTING EXPANSION JOINT, RETAIN AND PROTECT.
  - 2 EXISTING OUTSIDE AIR INTAKE, RETAIN AND PROTECT.
  - 3 EXISTING MECHANICAL VENT, RETAIN AND PROTECT.
  - 4 EXISTING EXHAUST FAN - SEE MECHANICAL.
  - 5 EXISTING ROOF DRAIN - RAISE AS NECESSARY FOR NEW ROOF HEIGHT.
  - 6 REPLACE EXHAUST FAN - SEE MECHANICAL.
  - 7 PROVIDE AND INSTALL NEW DRIP EDGE AND TOP SECTION OF METAL FASCIA TO MATCH EXISTING. CUT FASCIA TO FIT BELOW NEW DRIP EDGE.
  - 8 WALKWAY MEMBRANE
  - 9 EXISTING CHIMNEY, FLASH AROUND ALL SIDES WITH NEW SINGLE PLY MEMBRANE ROOF.
  - 10 GRAVITY VENTILATOR



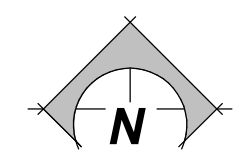
**2 VENT PIPE FLASHING**  
SCALE: 1 1/2" = 1'-0"



**3 ROOF TYPE**  
SCALE: 1 1/2" = 1'-0"



**4 MECHANICAL CURB**  
SCALE: 1 1/2" = 1'-0"



**ROOF PLAN**  
SCALE: 1/16" = 1'-0"



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**HARWOOD ELEMENTARY**  
JEFFERSON JOINT SCHOOL DISTRICT NO. 251  
200 W 3RD N, RIGBY, IDAHO 83442

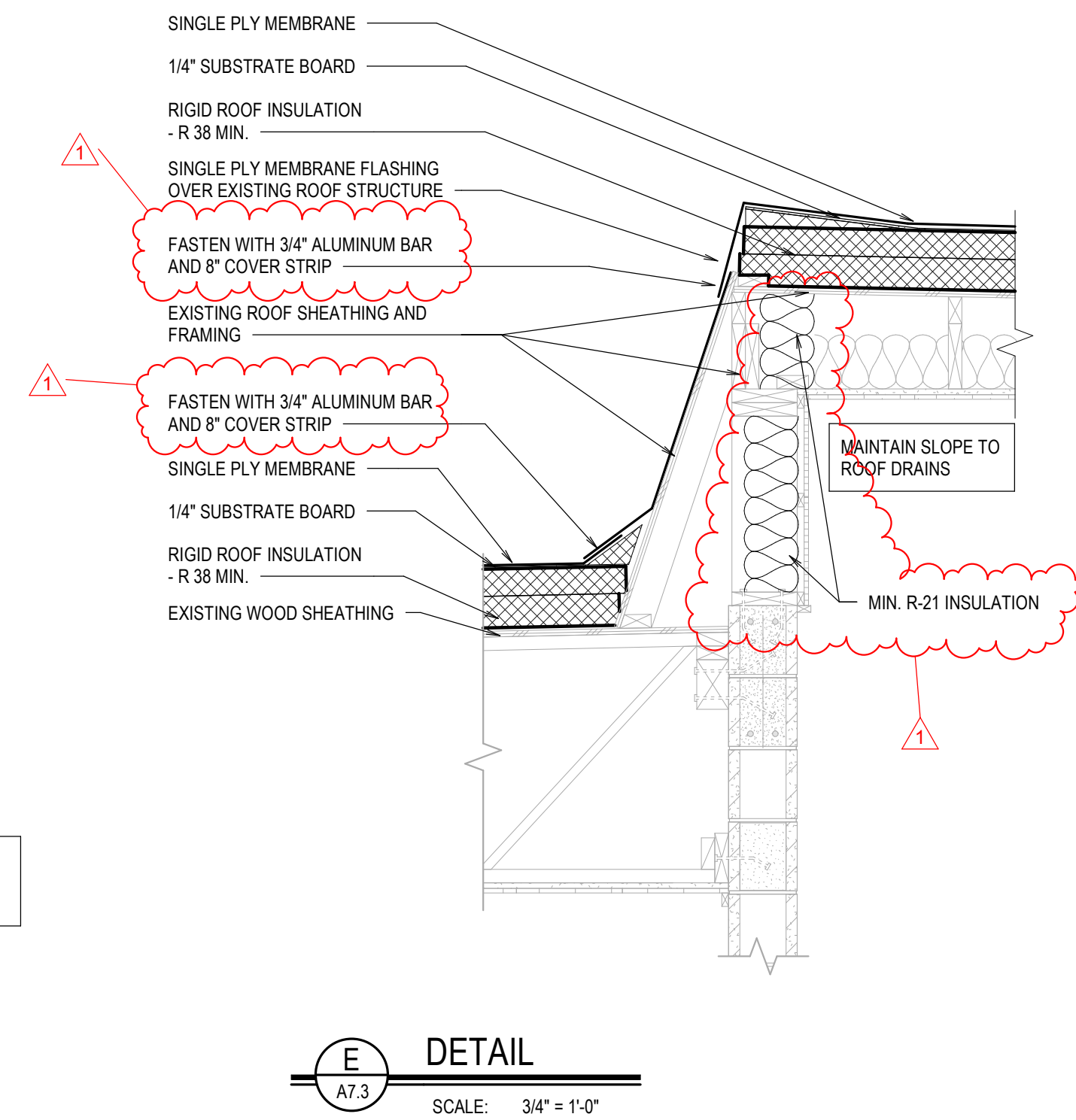
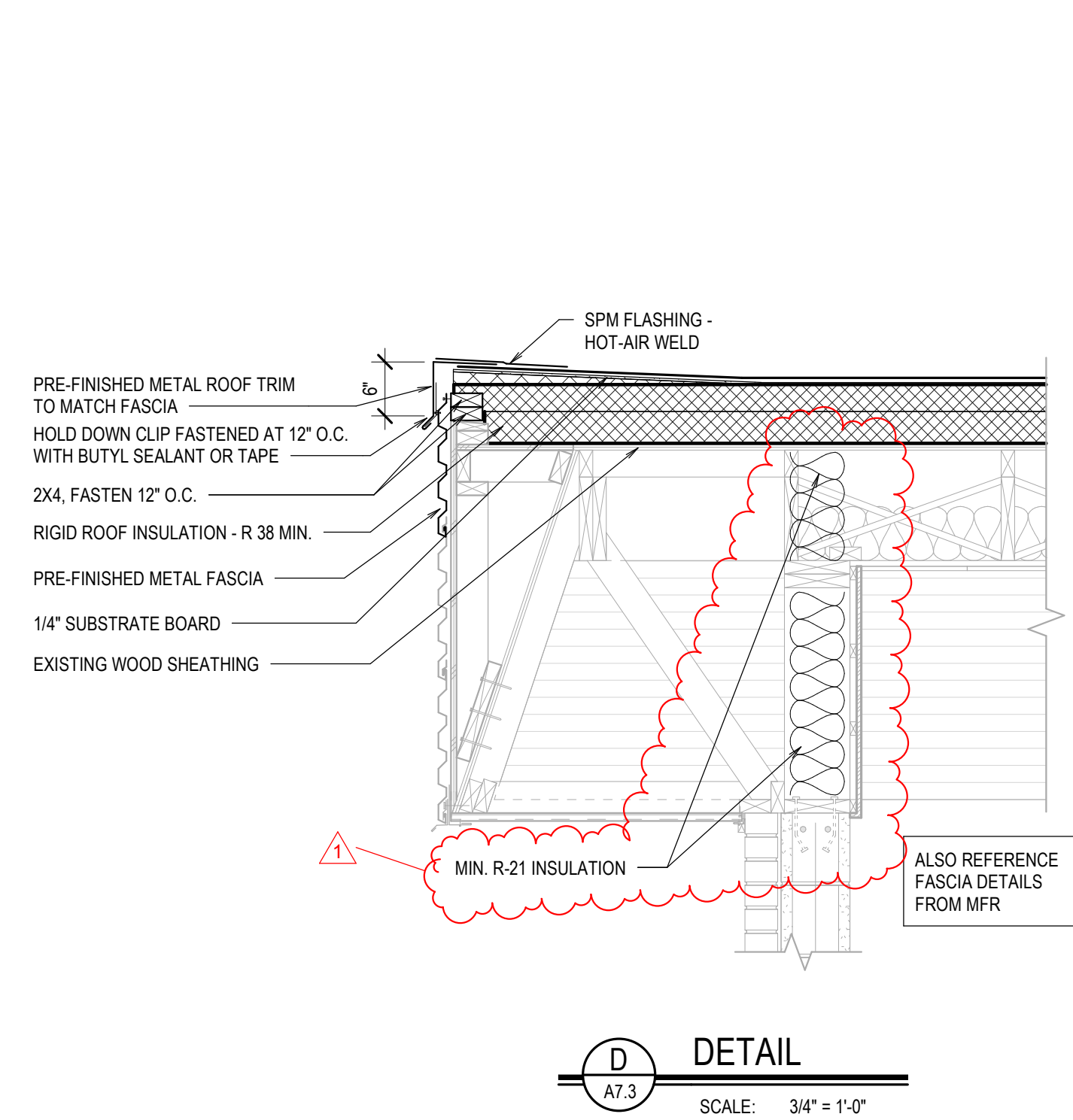
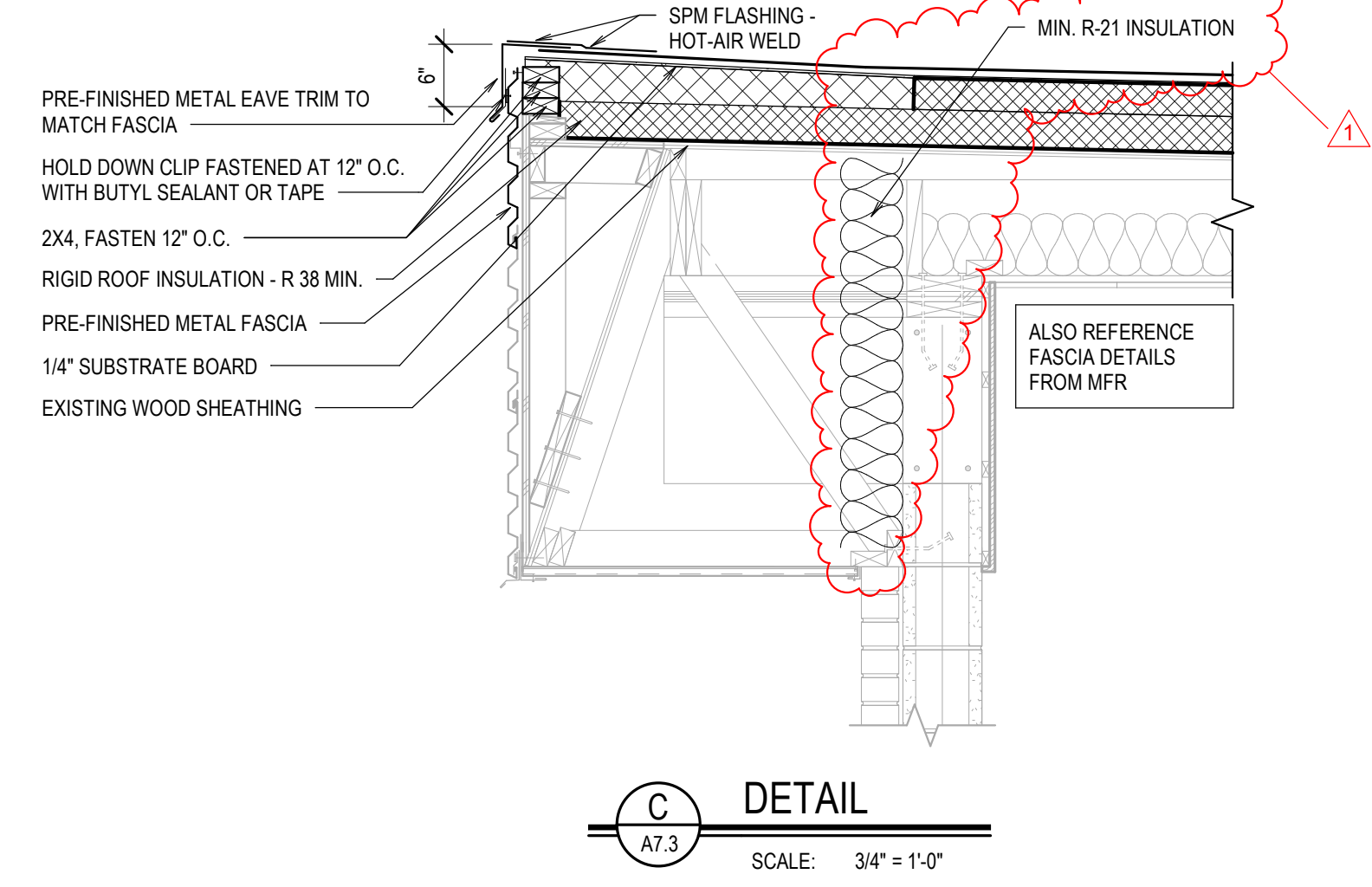
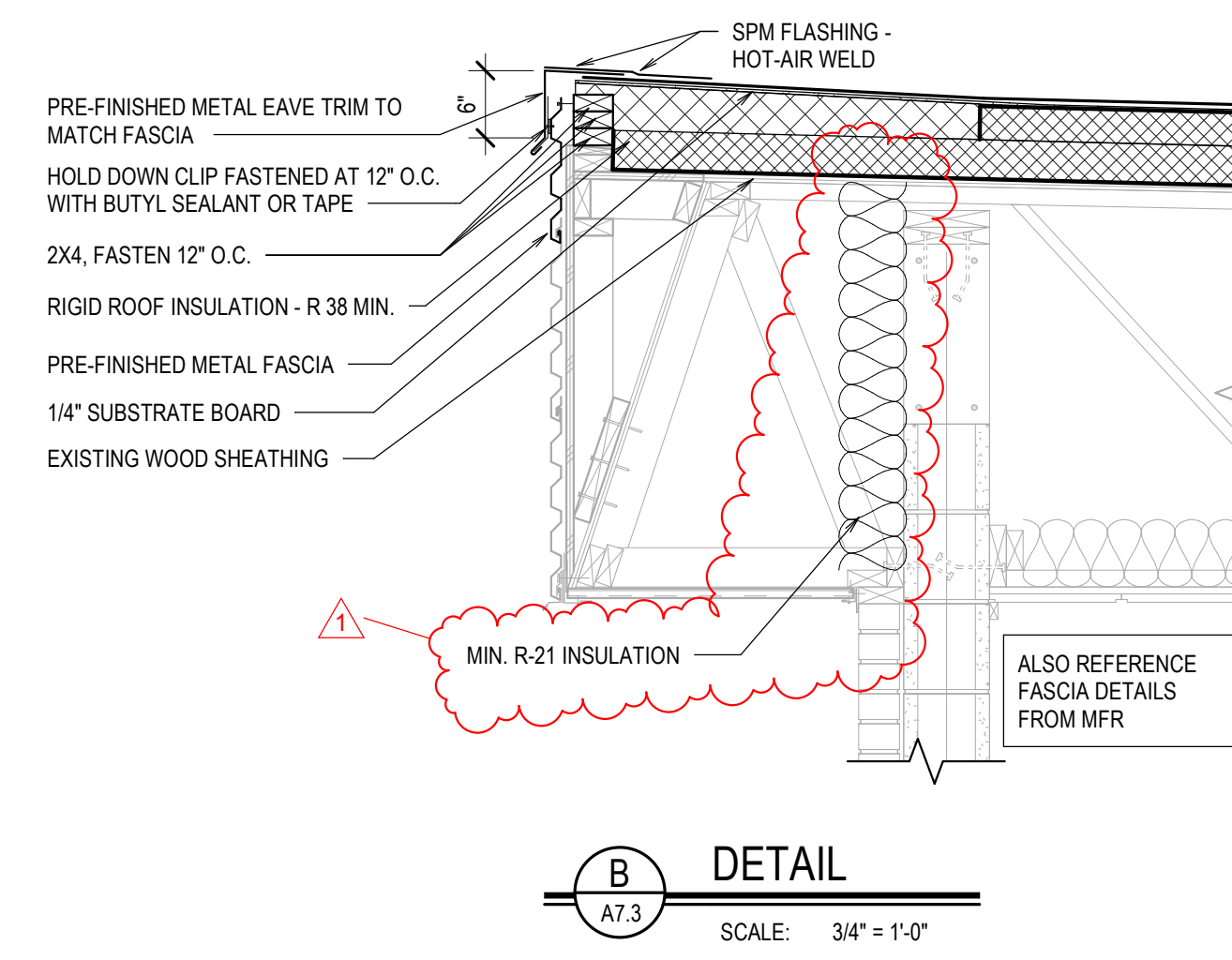
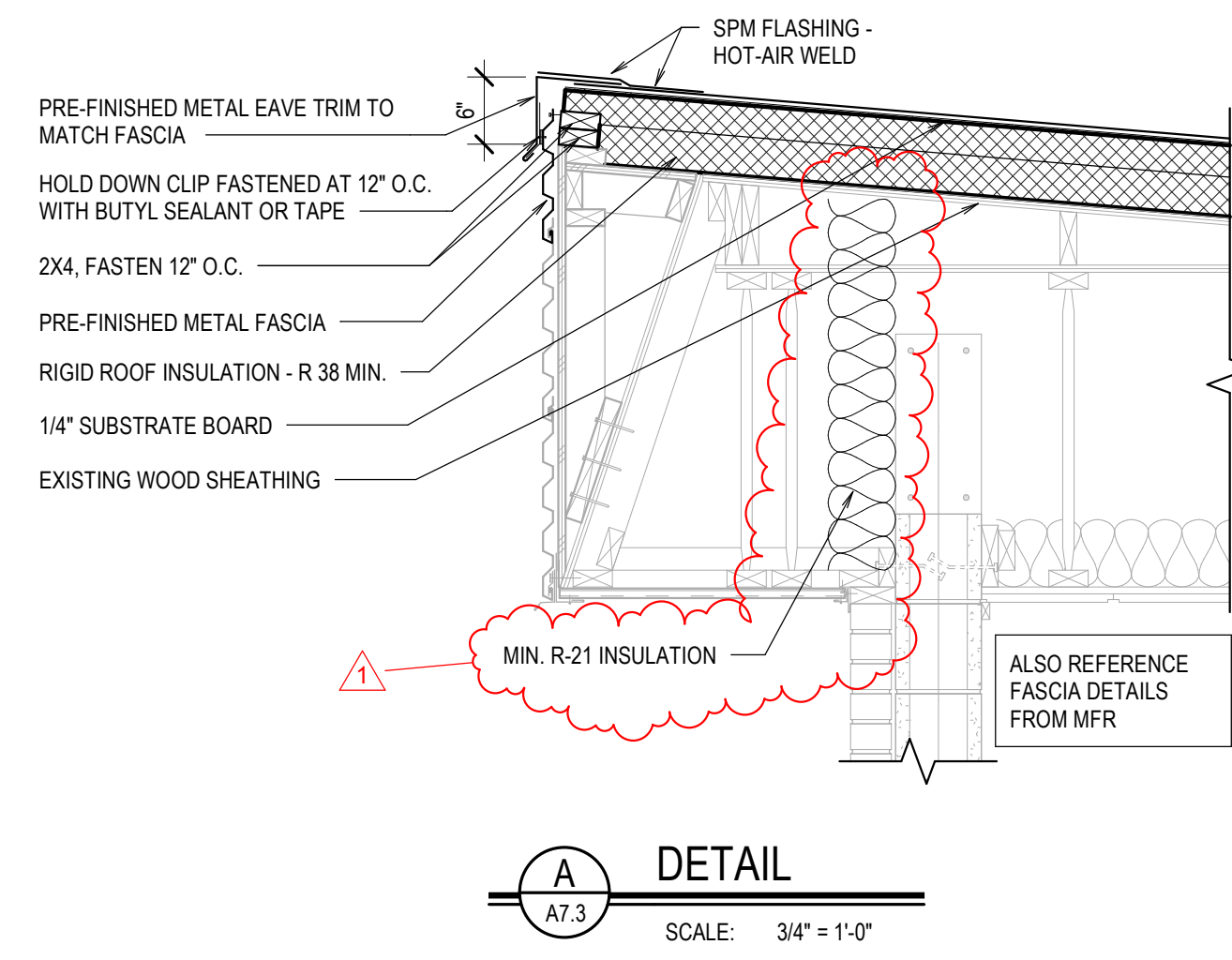
PROJECT:  
SHEET TITLE:  
ROOF PLAN

REVISIONS		
1	Addendum #1	2021-11-17

PROJECT NO.  
21008  
DATE:  
MAY 2021  
DRAWN BY:  
NRH  
CHECKED BY:  
NBW

DRAWING NO.: **AD #1**

**A7.2**  
REVISED 11-17-2021



Minimum prescriptive wall insulation is R-21. Final approval and code compliance will be determined through on-site inspections.



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RE-ROOF FOR:  
**HARWOOD ELEMENTARY**  
JEFFERSON JOINT SCHOOL DISTRICT NO. 251  
200 W 3RD N, RIGBY, IDAHO 83442

PROJECT TITLE:  
ROOF DETAILS

PROJECT:  
SHEET TITLE:

REVISIONS
1 Addendum #1 2021-11-17

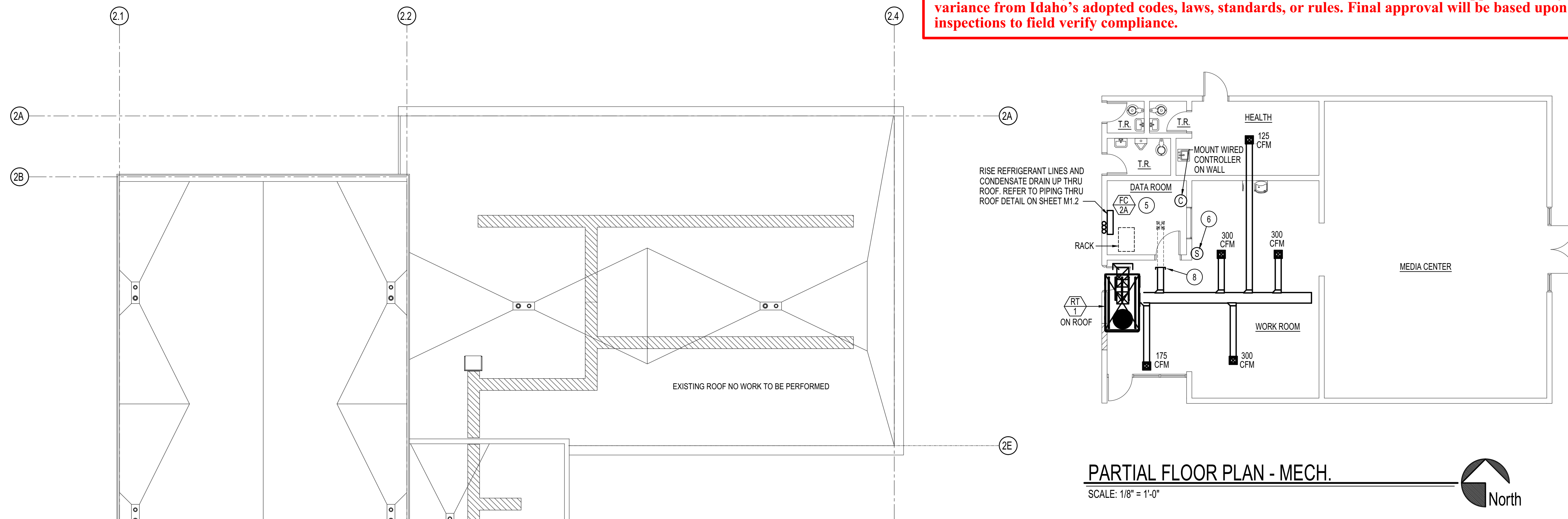
PROJECT NO.  
21008  
DATE:  
MAY 2021  
DRAWN BY:  
NRH  
CHECKED BY:  
NBW

DRAWING NO.: AD #1

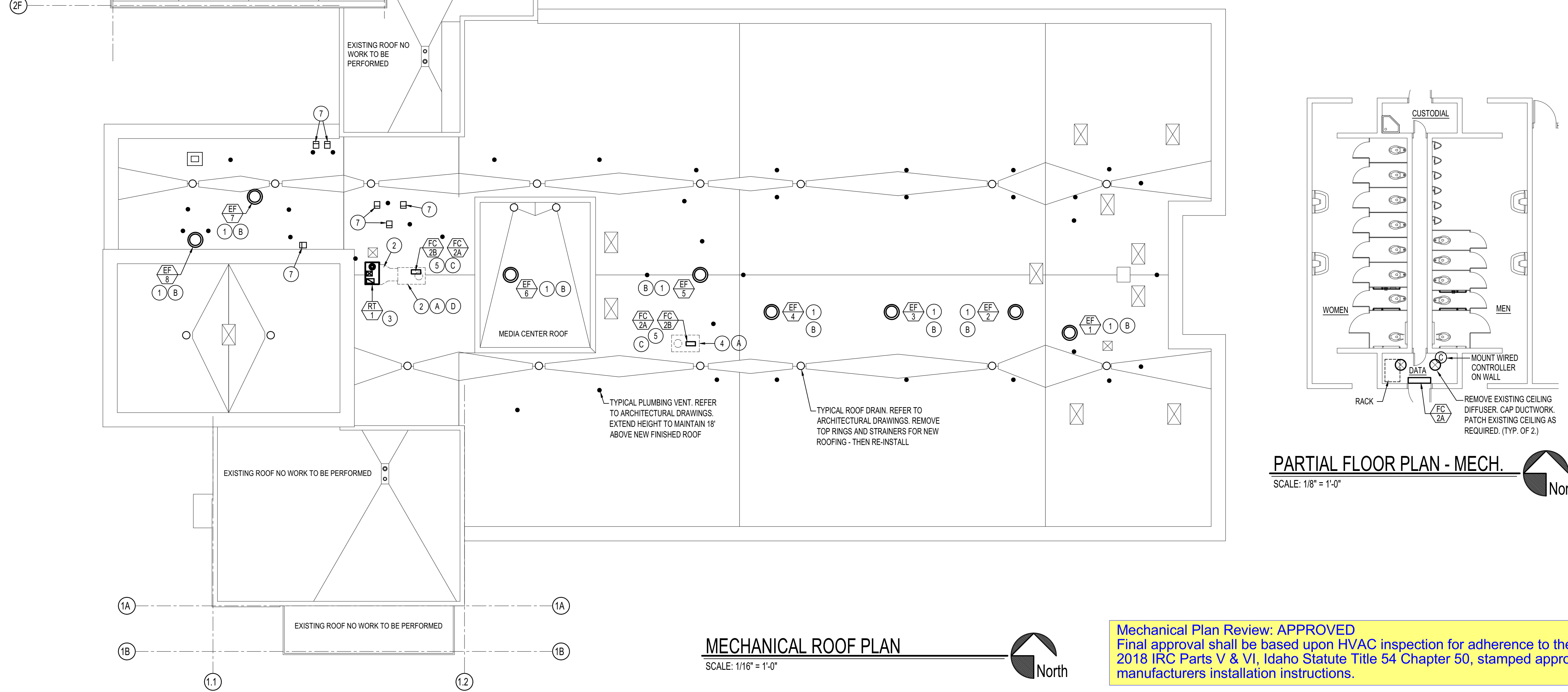
**A7.3**  
REVISED 11-17-2021

5/21/2021 10:45:59 AM P:\21\21040 Harwood Elementary Re-roof\21040-M1.1.dwg  
 Statewide Seal  
 Registered Professional Engineer  
 State of Idaho  
 License No. 52162  
 Name: C. SUDWEEKS  
 Harwood Elementary School District No. 251  
 200W 3RD N, RIGBY, IDAHO 83442  
 Mechanical Roof Plan and Details  
 ME1.1  
 Revised 11-17-2021

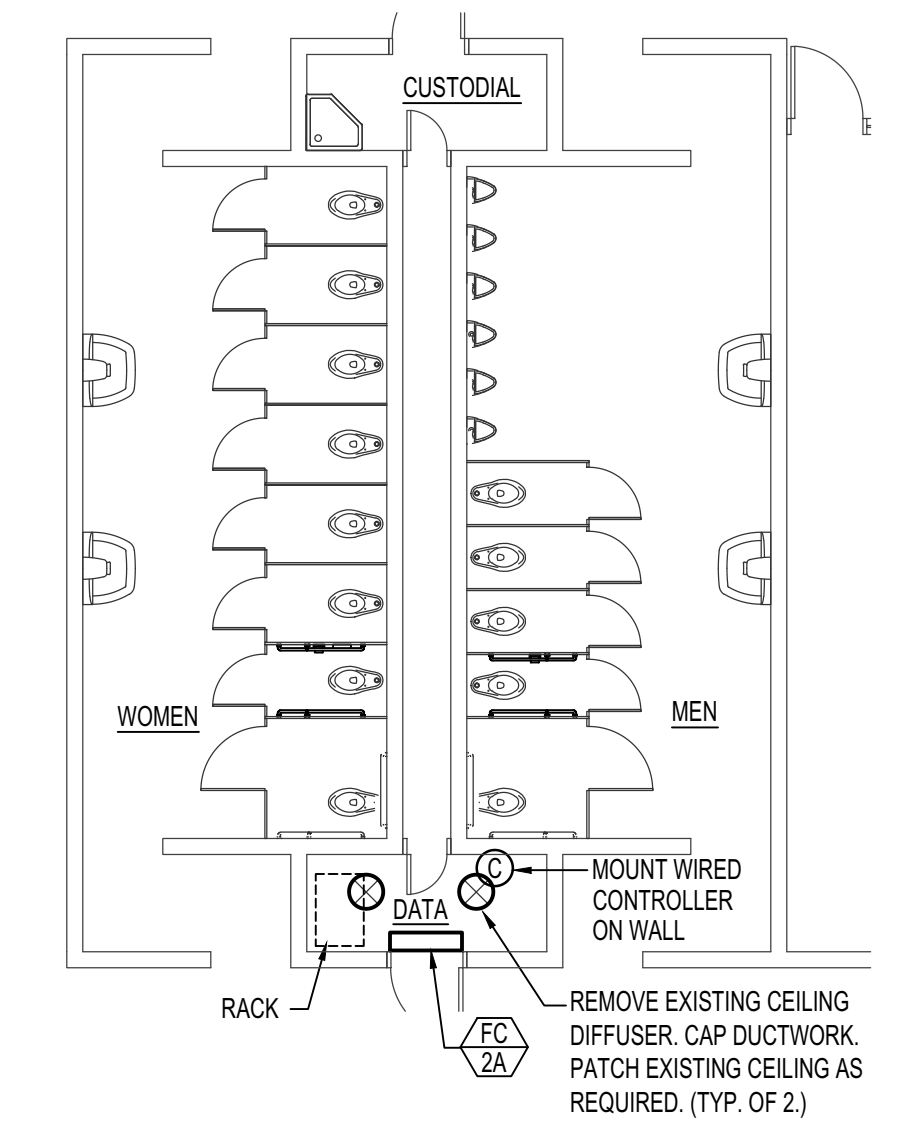
**Electrical Plan Review Note:**  
 The stamped documentation has been Reviewed for Compliance in accordance with the 2017 NEC as adopted by the State of Idaho by an Electrical Plan Review. This shall not be construed as an approval of any violation of, or variance from Idaho's adopted codes, laws, standards, or rules. Final approval will be based upon on-site electrical inspections to field verify compliance.



**PARTIAL FLOOR PLAN - MECH.**  
 SCALE: 1/8" = 1'-0"  
 North



**MECHANICAL ROOF PLAN**  
 SCALE: 1/16" = 1'-0"  
 North



**PARTIAL FLOOR PLAN - MECH.**  
 SCALE: 1/8" = 1'-0"  
 North

- PLAN NOTES:**
- 1 DISCONNECT AND REMOVE EXISTING ROOF MOUNTED EXHAUST FAN. PROVIDE AND INSTALL NEW EXHAUST FAN AS SPECIFIED. MODIFY EXISTING ROOF CURB AS REQUIRED FOR NEW FAN AND SEAL WATER TIGHT.
  - 2 DISCONNECT AND REMOVE EXISTING ROOF TOP HVAC UNIT AND ALL EXPOSED DUCTWORK ABOVE ROOF. EXISTING ROOF CURB TO BE SEALED WATER TIGHT WITH NEW ROOFING MATERIAL.
  - 3 PROVIDE AND INSTALL NEW HVAC ROOF TOP UNIT AS SPECIFIED. CONNECT NEW UNIT TO EXISTING SUPPLY AND RETURN DUCTS UP THRU ROOF. PROVIDE DUCT TRANSITIONS AS REQUIRED FOR CONNECTION. MOUNT NEW UNIT ON NEW ROOF CURB AND SEAL WATER TIGHT. FIELD VERIFY EXACT SIZES AND LOCATIONS OF EXISTING DUCTWORK THRU ROOF.
  - 4 DISCONNECT AND REMOVE EXISTING ROOF MOUNTED HVAC UNIT. CAP EXISTING DUCTWORK BELOW ROOF. SEAL EXISTING ROOF CURB WATER TIGHT WITH NEW ROOFING MATERIAL.
  - 5 PROVIDE AND INSTALL NEW MINI-SPLIT A/C SYSTEM AS SPECIFIED. MOUNT INDOOR UNIT ON WALL OF DATA ROOM AS HIGH AS POSSIBLE. MOUNT OUTDOOR UNIT ON ROOF ABOVE WITH PYRAMID TYPE EQUIPMENT SUPPORTS. CONDENSATE PUMP TO BE PROVIDED WITH INDOOR UNIT. RISE REFRIGERANT LINES AND CONDENSATE DRAIN LINE UP THRU ROOF IN 4" PVC GOOSENECK. TERMINATE DRAIN LINE AT 4" ABOVE ROOF LEVEL. REFER TO DETAILS ON SHEET M1.2 FOR TYPICAL PIPING CONNECTIONS AND PENETRATION THRU ROOF.
  - 6 EXTEND EXISTING HONEYWELL CONTROL SENSOR TO NEW ROOF TOP UNIT AND UPDATE DDC CONTROLS.
  - 7 REPLACE EXISTING ROOF CAP WITH NEW. NEW ROOF TO BE MOUNTED ON ROOF CURB. SEE DETAIL ON SHEET M1.2
  - 8 CAP EXISTING BRANCH DUCT ABOVE CEILING. ABANDON EXISTING DIFFUSER.

- ELECTRICAL NOTES:**
- A DISCONNECT POWER FROM EXISTING ROOF TOP UNIT BEING REPLACED BY MECHANICAL CONTRACTOR. EXTEND TO NEW UNIT AND RE-CONNECT CIRCUIT.
  - B DISCONNECT POWER FROM EXISTING EXHAUST FAN AND RE-CONNECT TO NEW EXHAUST FAN. PROVIDE NEW THERMAL OVERLOAD SWITCH SIZED FOR NEW UNIT AMPS.
  - C PROVIDE NEW CIRCUIT FROM NEAREST PANEL WITH AVAILABLE SPACE FOR NEW MINI SPLIT SYSTEM INSTALLED BY MECHANICAL CONTRACTOR. INSTALL NEMA 3R FUSED DISCONNECT AT UNIT. FUSE TO ACTUAL UNIT AMPS
  - D EXISTING STARTER DISCONNECT IS 30A - 208/100V. STAINLESS STEEL NEMA 3R ENCLOSURE. ELECTRICAL CONTRACTOR MAY RE-USE THIS DISCONNECT / CIRCUIT FOR NEW EQUIPMENT TO CONFORM TO 2017 NEC, OR PROVIDE NEW NEMA 3R DISCONNECT FUSED FOR NEW UNIT AMPS.

**nwarchitects p.a.**  
 ARCHITECTURE / PLANNING / INTERIORS  
 KEVIN R. BODILY, A.I.A. JAMES H. WYATT, A.I.A. GEOFF L. NIELSON, A.I.A.  
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REROOF FOR:  
**HARWOOD ELEMENTARY**  
 JEFFERSON JOINT SCHOOL DISTRICT NO. 251  
 200W 3RD N, RIGBY, IDAHO 83442  
 MECHANICAL ROOF PLAN AND DETAILS

PROJECT NO. 21008  
 DATE: MAY 2021  
 DRAWN BY: M JENSEN  
 CHECKED BY: D SUDWEEKS  
 DRAWING NO.: AD #1

REVISIONS

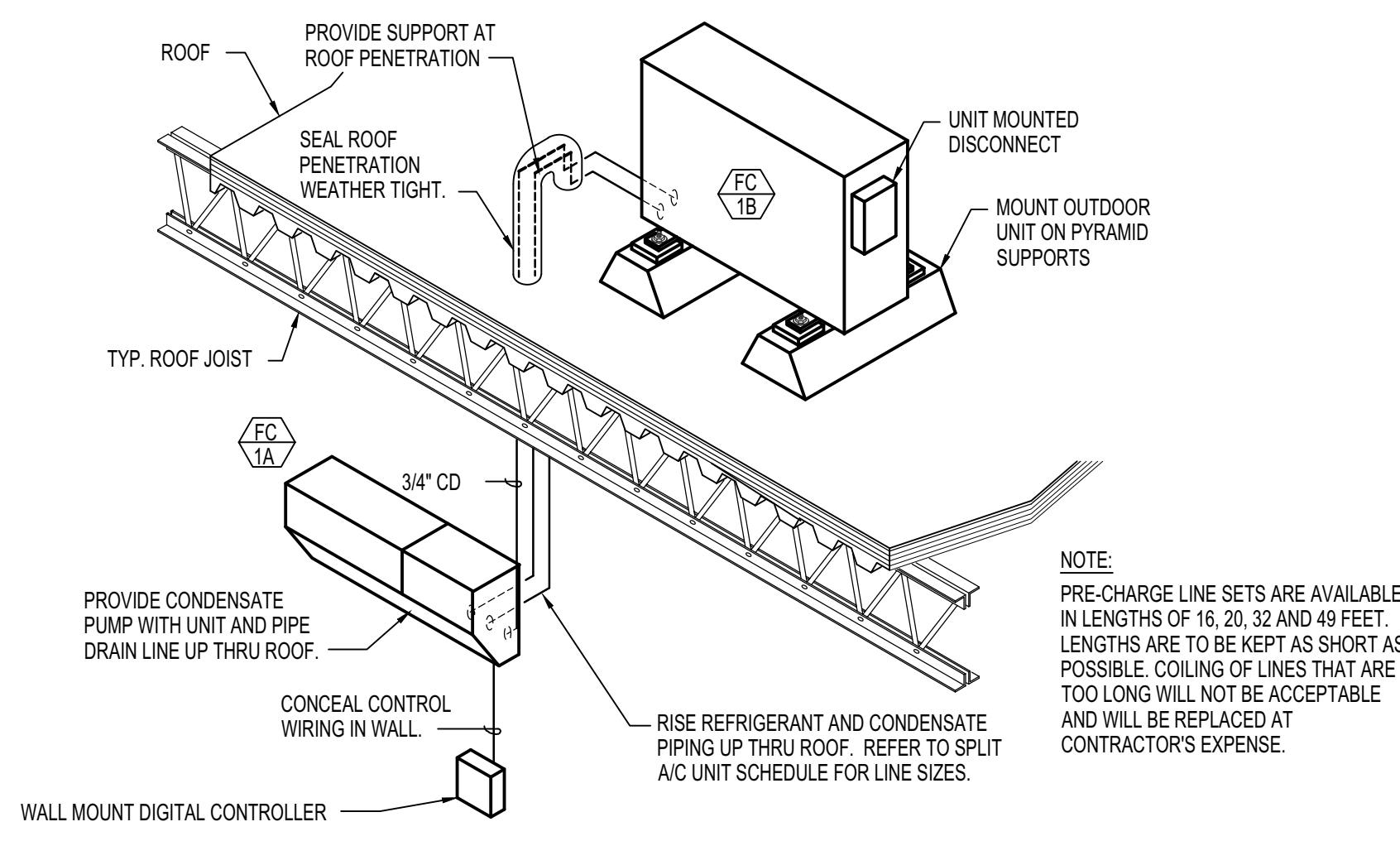
PROFESSIONAL ENGINEER  
 REGISTERED  
 52162  
 STATE OF IDAHO  
 C. SUDWEEKS

**Engineered Systems Associates**  
 1355 EAST CENTER  
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 PHONE: (208) 233-0501  
 FAX: (208) 233-0529  
 EMAIL: esa@engsystems.com  
 ESA JOB NUMBER: 21040

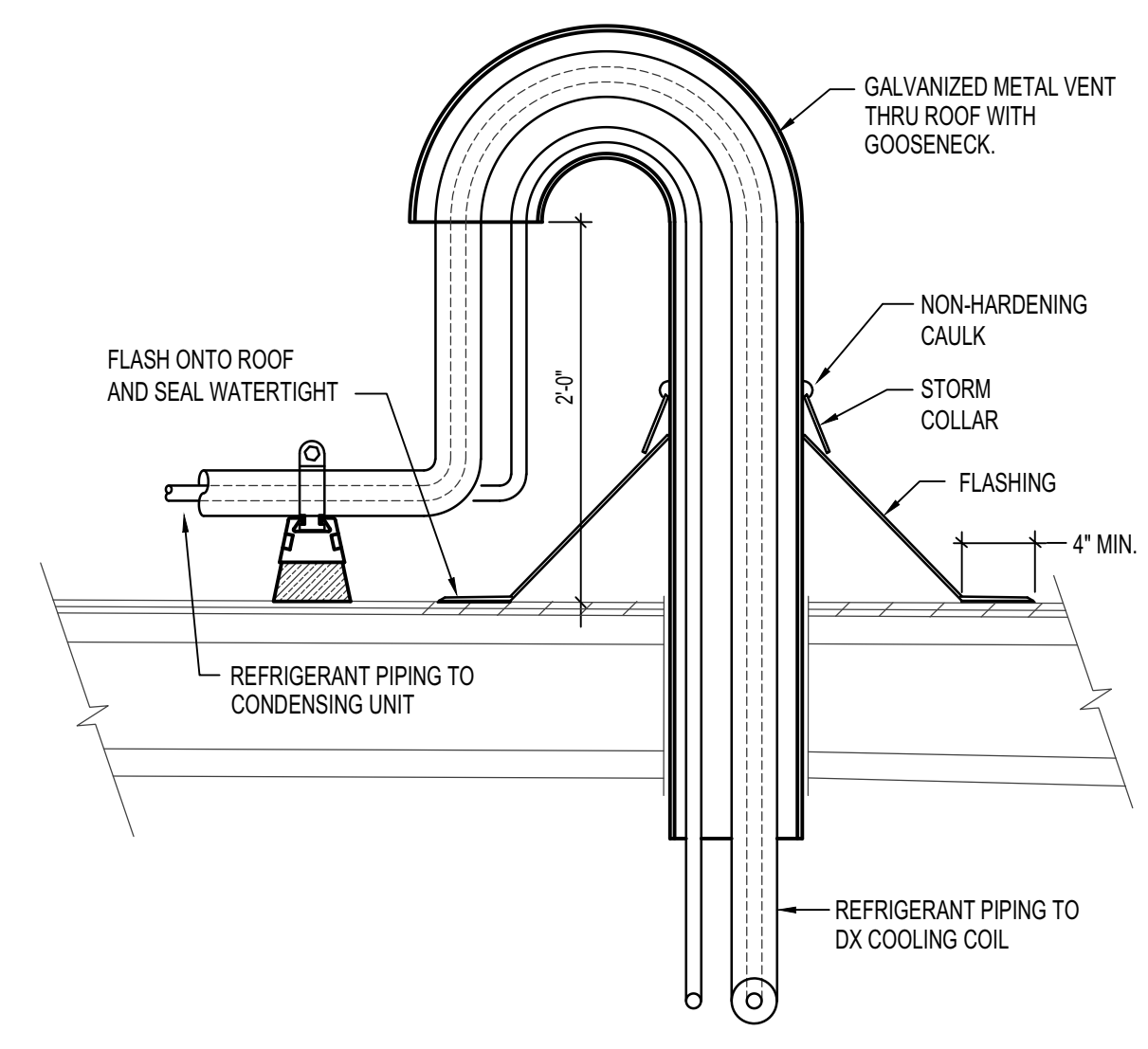
**Mechanical Plan Review: APPROVED**  
 Final approval shall be based upon HVAC inspection for adherence to the 2018 IMC, 2018 IFGC, 2018 IRC Parts V & VI, Idaho Statute Title 54 Chapter 50, stamped approved plans and manufacturers installation instructions.

ME1.1  
 REVISED 11-17-2021

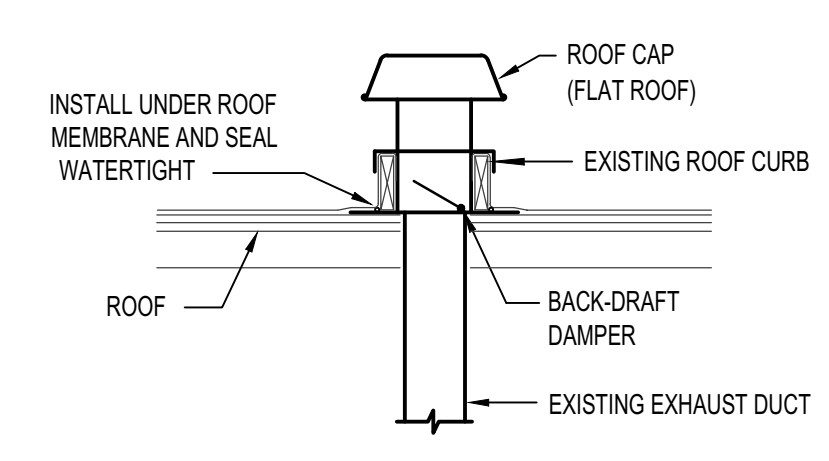
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 Applied Systems  
 Mechanical Engineering  
 930 JOHN BOBBS PARKWAY / P. O. BOX 2212 / IDAHO FALLS, IDAHO 83403-2212  
 (P) 208-522-8719 (F) 208-522-8765 (M) nbowarchitects.com



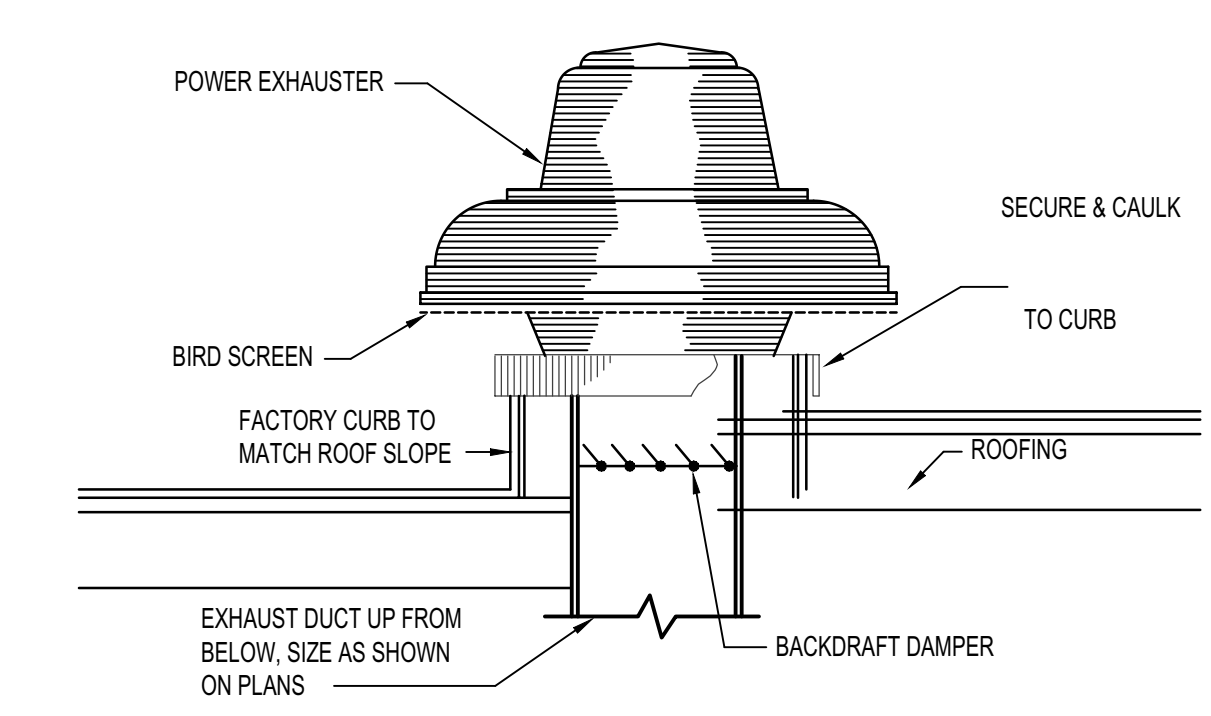
**FAN COIL & REFRIGERANT PIPING DETAIL**  
NO SCALE



**PIPING THRU ROOF DETAIL**  
NO SCALE



**ROOF CURB DETAIL**  
NO SCALE



**ROOF TOP EXHAUST FAN DETAIL**  
NO SCALE

EXHAUST FAN SCHEDULE								
SYM.	TYPE	C.F.M.	S.P.E.	H.P.	CHAR.	R.P.M.	CONTROL	REMARKS
EF 1	ROOF MOUNTED DOWNFLOW	310	.25"	1/6	120/60/1	1150	CONNECT TO EXISTING	TWIN CITY MODEL 085E-DCRD WITH BACK-DRAFT DAMPER. MOUNT ON EXISTING ROOF CURB AND CONNECT TO EXISTING CONTROLS.
EF 2	ROOF MOUNTED DOWNFLOW	1200	.25"	3/4	120/60/1	1050	CONNECT TO EXISTING	TWIN CITY MODEL 130E-DCRD WITH BACK-DRAFT DAMPER. MOUNT ON EXISTING ROOF CURB AND CONNECT TO EXISTING CONTROLS.
EF 3	ROOF MOUNTED DOWNFLOW	1200	.25"	3/4	120/60/1	1050	CONNECT TO EXISTING	TWIN CITY MODEL 130E-DCRD WITH BACK-DRAFT DAMPER. MOUNT ON EXISTING ROOF CURB AND CONNECT TO EXISTING CONTROLS.
EF 4	ROOF MOUNTED DOWNFLOW	1200	.25"	3/4	120/60/1	1050	CONNECT TO EXISTING	TWIN CITY MODEL 130E-DCRD WITH BACK-DRAFT DAMPER. MOUNT ON EXISTING ROOF CURB AND CONNECT TO EXISTING CONTROLS.
EF 5	ROOF MOUNTED DOWNFLOW	1600	.25"	3/4	120/60/1	1100	CONNECT TO EXISTING	TWIN CITY MODEL 140E-DCRD WITH BACK-DRAFT DAMPER. MOUNT ON EXISTING ROOF CURB AND CONNECT TO EXISTING CONTROLS.
EF 6	ROOF MOUNTED DOWNFLOW	1200	.25"	3/4	120/60/1	1050	CONNECT TO EXISTING	TWIN CITY MODEL 130E-DCRD WITH BACK-DRAFT DAMPER. MOUNT ON EXISTING ROOF CURB AND CONNECT TO EXISTING CONTROLS.
EF 7	ROOF MOUNTED UP-FLOW	7000	.50"	1-1/2	208/60/3	600	CONNECT TO EXISTING	TWIN CITY MODEL 300E-BCRU WITH BACK-DRAFT DAMPER. MOUNT ON EXISTING ROOF CURB AND CONNECT TO EXISTING CONTROLS.
EF 8	ROOF MOUNTED DOWNFLOW	1100	.25"	3/4	120/60/1	1000	CONNECT TO EXISTING	TWIN CITY MODEL 130E-DCRD WITH BACK-DRAFT DAMPER. MOUNT ON EXISTING ROOF CURB AND CONNECT TO EXISTING CONTROLS.

ROOF TOP HEATING & AIR CONDITIONING UNIT SCHEDULE																		
SYM.	CFM	MIN. O.A.	SP.	BLOWER H.P.	SEER	CHAR	MCA	MOP	WEIGHT	GAS CONN.	HEATING @ ELEV.			COOLING			REMARKS	
											MBH IN	MBH OUT	EAT	LAT	MBH	EAT	WB	
RT 1	1200	300	50"	1	15.0	208/60/1	28.3	45	1200#	1/2"	80,000	65.6	65°F	107°F	36	95°F	67°F	TRANE MODEL YHC-036-E1 WITH COIL GUARDS. MOUNT ON NEW ROOF CURB.

FAN COIL SPLIT SYSTEM A/C UNIT SCHEDULE														
INDOOR UNIT						OUTDOOR UNIT						REFRIG. LINES		
SYM.	CFM	BTU	CHAR	MCA	FEEDER	MANUFACTURER	SYM.	BTU	MCA	SEER	CHAR	MANUFACTURER	LIQUID	SUCTION
FC 1A	600-700	24,000	208/60/1	1	1/2" C, 2#10 + GROUND	MITSUBISHI MODEL PKA-A24KA7 WITH CONDENSATE PUMP	FC 1B	24,000	18	17	208/60/1	MITSUBISHI PLYA24NH47 WITH LOW AMBIENT 'HARD-START' KIT	3/8"	5/8"
FC 2A	600-700	24,000	208/60/1	1	1/2" C, 2#10 + GROUND	MITSUBISHI MODEL PKA-A24KA7 WITH CONDENSATE PUMP	FC 2B	24,000	18	17	208/60/1	MITSUBISHI PLYA24NH47 WITH LOW AMBIENT 'HARD-START' KIT	3/8"	5/8"

1 PROVIDE AND INSTALL LOCAL DISCONNECT.  
 2 POWER INDOOR UNIT FROM OUTDOOR UNIT.  
 3 PROVIDE A GFCI WEATHERPROOF OUTLET AT ROOF TOP UNIT. CONNECT TO NEAREST UN-SWITCHED POWER SOURCE.  
 4 INSTALL A 1/2" CONDUIT BETWEEN INDOOR UNIT AND OUTDOOR UNIT.

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 ARCHITECTURE / PLANNING / INTERIORS  
 KEVIN R. BODILY, A.I.A. JAMES H. WYATT, A.I.A. GEOFF L. NIELSON, A.I.A.  
 930 JOHN BOBBS PARKWAY / P. O. BOX 2212 / IDAHO FALLS, IDAHO 83403-2212  
 (P) 208-522-8719 (F) 208-522-8765 (M) nbowarchitects.com

REROOF FOR:  
**HARWOOD ELEMENTARY**  
 JEFFERSON JOINT SCHOOL DISTRICT NO. 251  
 200W 3RD N, RIGBY, IDAHO 83442  
 MECHANICAL SCHEDULES AND DETAILS

PROJECT:

SHEET TITLE:

REVISIONS

PROFESSIONAL ENGINEER  
 REGISTERED  
 5712  
 STATE OF IDAHO  
 FIVE C. SUDWEEKS

**Engineered Systems Associates**

1355 EAST CENTER  
POCATELLO, IDAHO 83201

PHONE: (208) 233-0501  
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EMAIL: esa@engsystems.com

ESA JOB NUMBER: 21040

PROJECT NO. 21008  
 DATE: MAY 2021  
 DRAWN BY: M JENSEN  
 CHECKED BY: D SUDWEEKS  
 DRAWING NO.: AD #1

ME1.2

REVISED 11-17-2021