

Robert W. Depke Juvenile Justice Complex Roof Replacement

24647 North Milwaukee Avenue
Vernon Hills, Illinois 60061

JUNE 18, 2018

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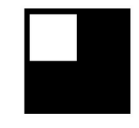
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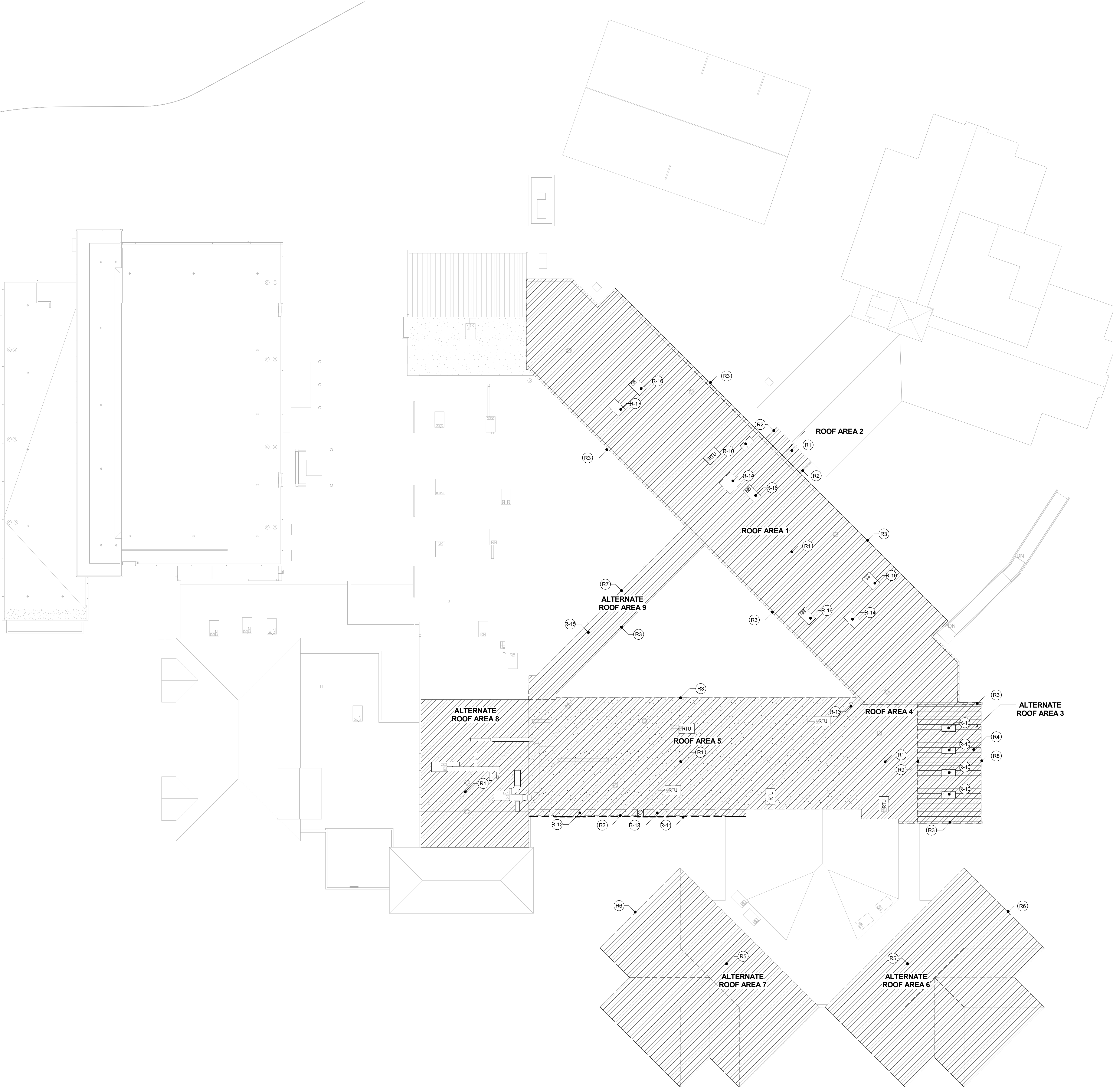
G0.0
22-17132-00
06/18/2018
Revision
A001 06/20/18 AC0500041

COVER SHEET / INDEX OF DRAWINGS
DEPKE JUVENILE JUSTICE COMPLEX
ROOF REPLACEMENT

24647 North Milwaukee Avenue
Vernon Hills, Illinois 60061

 **DLR Group**
Architecture Engineering Planning Interiors
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ISSUED FOR BID



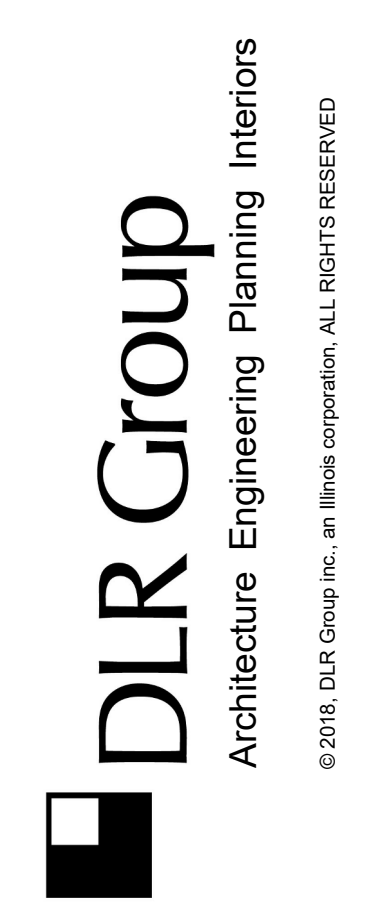
LEGEND NOTES

- LEGEND NOTES ARE COMMON TO ALL SHEETS. SOME NOTES MAY NOT APPLY TO THIS SHEET.
- DEMOLITION NOTES**
- A. DEMOLITION GENERAL NOTES APPLY TO ALL DEMOLITION SHEETS.
 - B. COORDINATE DEMOLITION AND PHASING EFFORTS WITH ARCHITECT AND OWNER'S REPRESENTATIVES. EVERY EFFORT SHALL BE MADE TO MINIMIZE DISRUPTION OF OWNER'S OPERATIONS AND TO PROVIDE BUILDING USERS SAFETY. EXCESSIVE NOISE OR VIBRATION SHALL BE PRE-APPROVED AND COORDINATED WITH OWNER'S REPRESENTATIVE.
 - C. COORDINATE DISRUPTION OF UTILITY SERVICES WITH OWNER AND AS SPECIFIED.
 - D. MAINTAIN A SECURE AND WEATHER-TIGHT ENCLOSURE.
 - E. VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS AND NOTIFY ARCHITECT OF DISCREPANCIES.
 - F. THE OWNER SHALL RESERVE THE RIGHT TO SALVAGE ANY MATERIALS.
 - G. PROVIDE PROTECTION FOR EXISTING BUILDING MATERIALS AND EQUIPMENT FROM DAMAGE DUE TO DEMOLITION OR CONSTRUCTION-RELATED INCIDENT PERFORMED UNDER THIS CONTRACT.
 - H. REPAIR OR REPLACE ITEMS DAMAGED AS A RESULT OF DEMOLITION OR CONSTRUCTION TO MATCH EXISTING FINISH AND/OR CONDITION.
 - I. EXISTING MATERIALS SHALL NOT BE REUSED UNLESS NOTED OTHERWISE OR AS AUTHORIZED BY ARCHITECT.
 - J. SEE MECHANICAL AND ELECTRICAL DRAWINGS AND NOTES FOR FURTHER SEQUENCING AND SCOPE OF WORK.

KEYNOTES - ARCHITECTURAL DEMOLITION

R1	REMOVE EXISTING ASPHALT BUILT-UP ROOF SYSTEM DOWN TO ROOF STRUCTURE SUBSTRATE.
R2	REMOVE EXISTING METAL COPING AT ROOF PARAPET.
R3	REMOVE EXISTING COPING/GRAVEL EDGE AS REQUIRED FOR NEW WORK.
R4	REMOVE EXISTING METAL ROOF SYSTEM DOWN TO EXISTING ROOF STRUCTURE SUBSTRATE.
R5	REMOVE EXISTING ASPHALT SHINGLES AND FELT DOWN TO EXISTING ROOF STRUCTURE SUBSTRATE.
R6	REMOVE EXISTING PREFINISHED ALUM. FASCIA, GUTTER, SOFFIT PANEL, AND DOWNSPOUTS.
R7	REMOVE EXISTING SLOTTED BAR GRAVEL STOP, GUTTER AND DOWNSPOUTS.
R8	REMOVE EXISTING METAL FASCIA.
R9	REMOVE EXISTING STUCCO DOWN TO CONCRETE BLOCK WALL.
R10	REMOVE EXISTING DOUBLE ACRYLIC SKY DOME.
R11	REMOVE EXISTING EIFS AT SOFFIT.
R12	REMOVE CANTED SHEATHING AND EXISTING ROOF SYSTEM ON BACK SIDE OF PARAPET.
R13	REMOVE EXISTING ROOF DRAIN. REFER TO MECH.
R14	REMOVE EXISTING PREMANUFACTURED ROOF CURB.
R15	REMOVE EXISTING MEMBRANE ROOF SYSTEM.
R16	REMOVE EXISTING RTU. REFERENCE MECHANICAL.
R17	REMOVE EXISTING METAL DECK IN PREPARATION FOR NEW DUCT PENETRATION. REFERENCE MECHANICAL FOR LOCATION AND DIMENSIONS.

ISSUED FOR BID



**ARCHITECTURAL DEMO ROOF PLAN
DEPKE JUVENILE JUSTICE COMPLEX
ROOF REPLACEMENT**

PLAN NORTH

ARCHITECTURAL DEMOLITION ROOF PLAN

SCALE: 1/16" = 1'-0"

AD4.0
22-17132-00
06/18/2018
AD3 10.21.18 ADDENDUM1

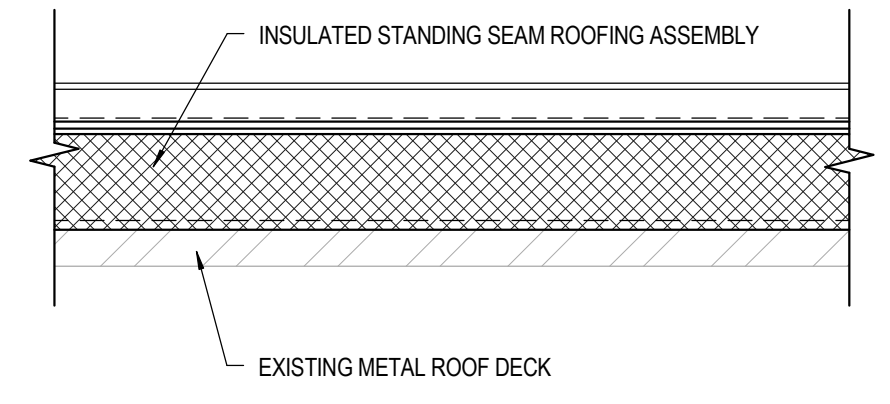
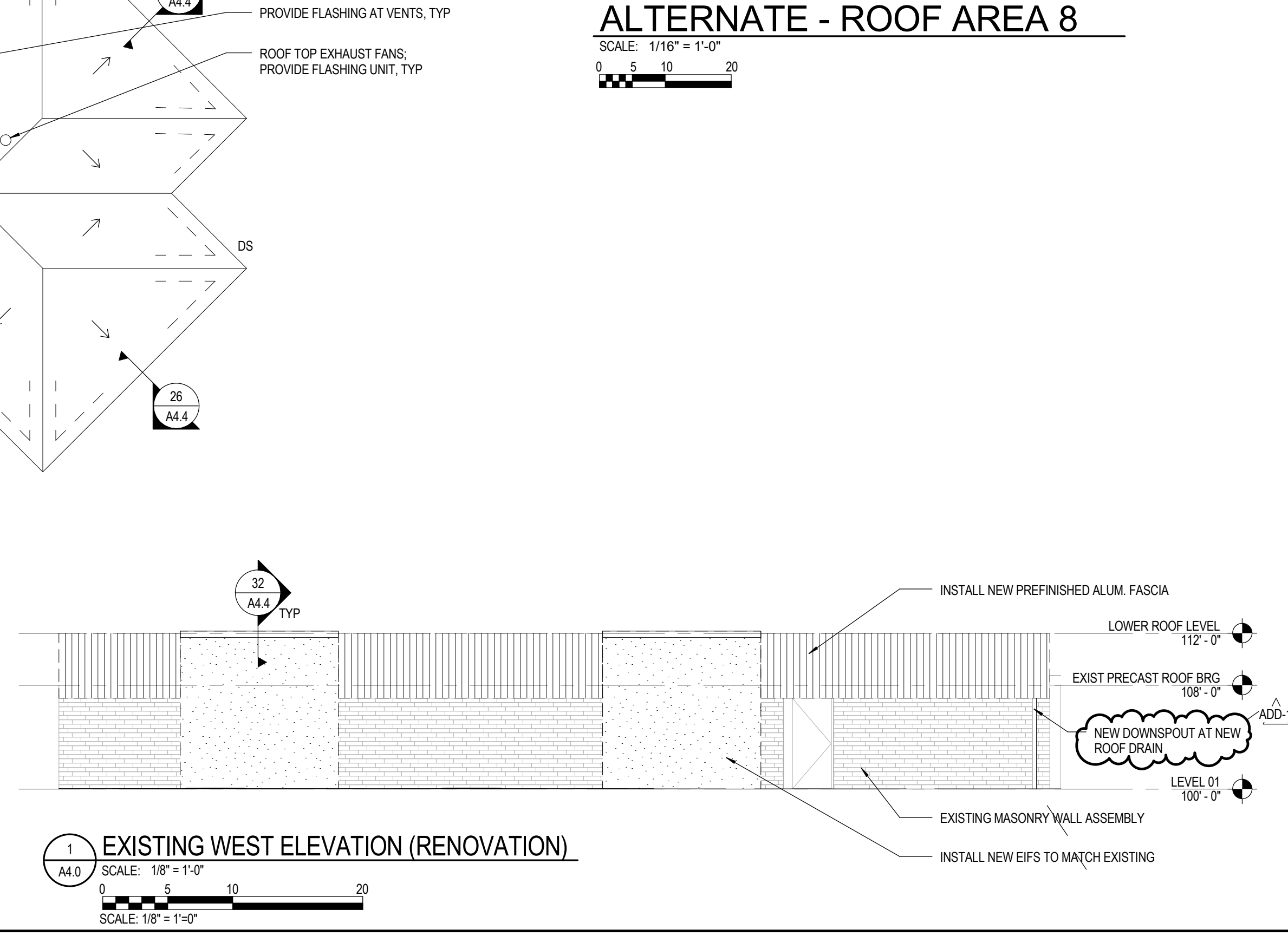
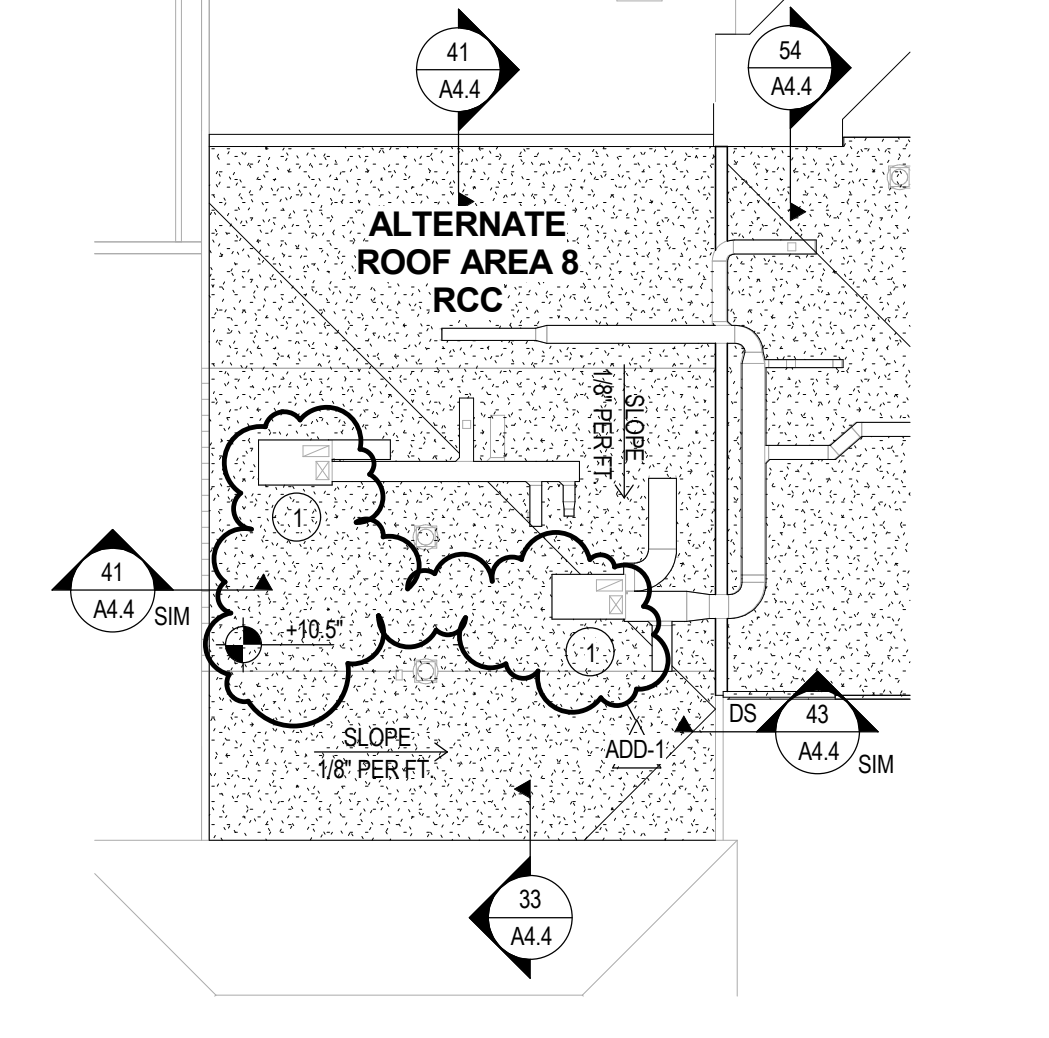
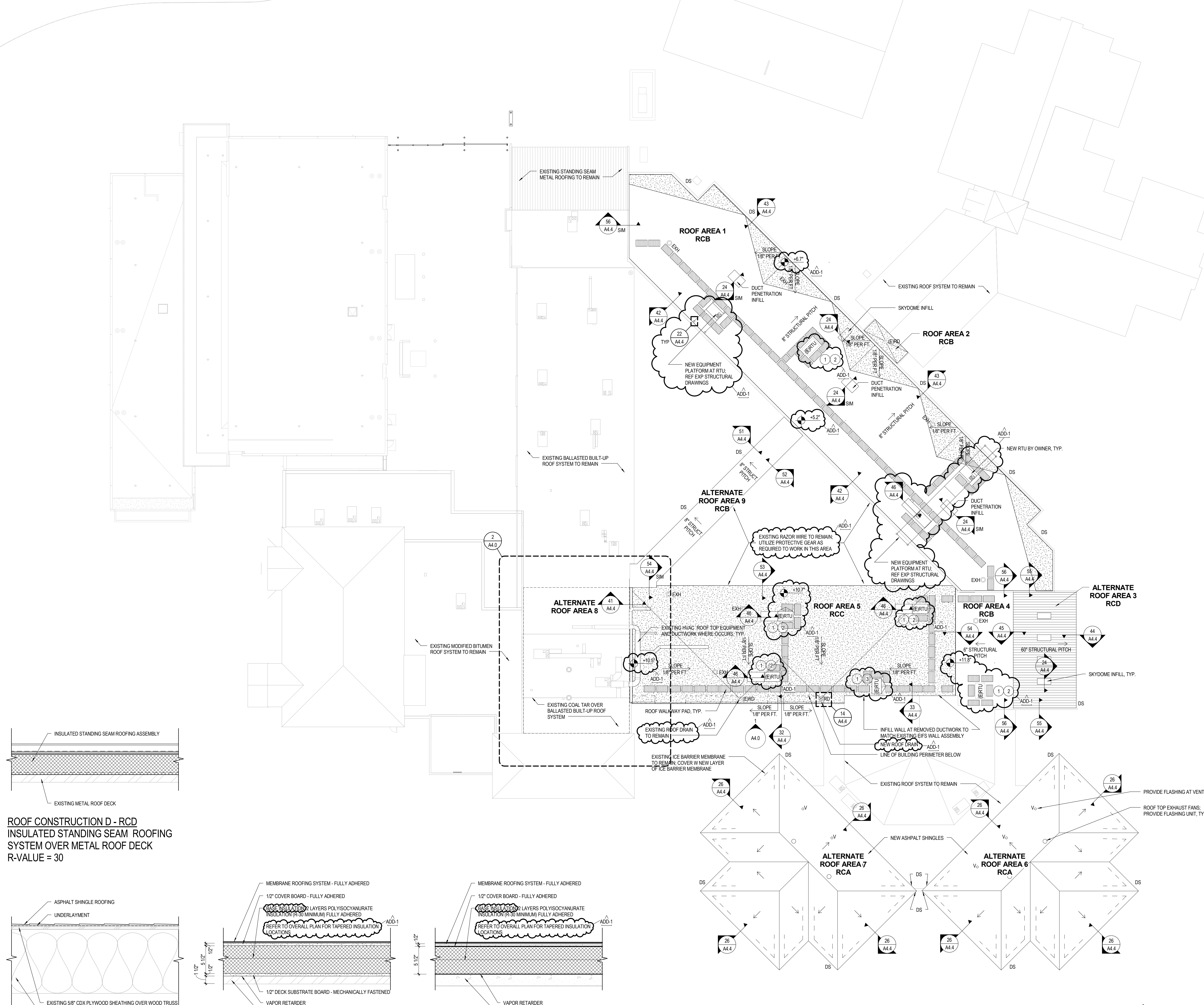
LEGEND NOTES ARE COMMON TO ALL SOME NOTES MAY NOT APPLY TO THIS SHEET

ROOF PLAN GENERAL NOTES:

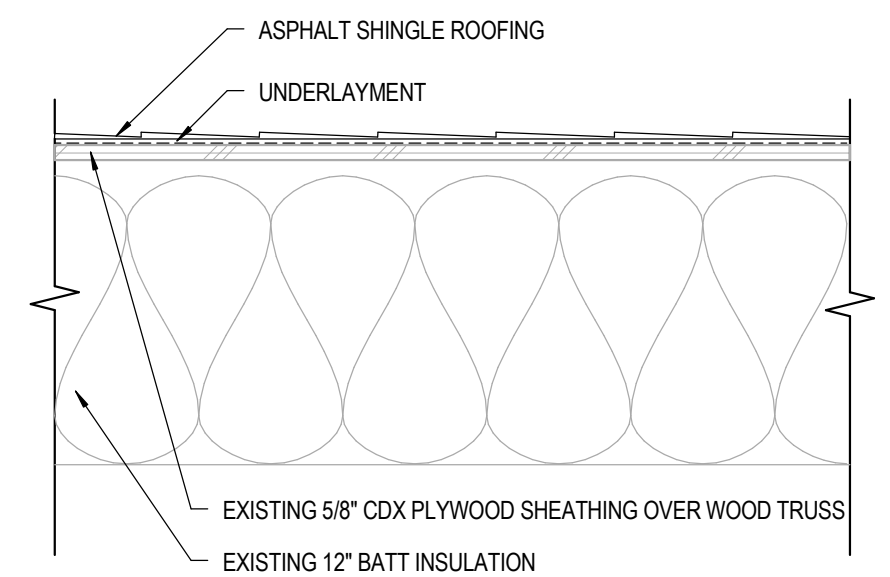
- ROOF PLAN NOTES APPLY TO ALL ROOF PLAN SHEETS.
- MOST ROOF SLOPES ARE CREATED BY SLOPED ROOF STRUCTURE. SEE STRUCTURAL. SLOPES NOTED TO DETERMINE PROPER TAPER IN INSULATION. SHADED AREAS INDICATE TAPERED INSULATION. TAPERED INSULATION SHALL PROVIDE A MINIMUM OF 1/8" PER FOOT OF SLOPE TO ROOF DRAINS, UNLESS NOTED OTHERWISE.
- ASPHALT SHINGLE ROOFING SYSTEM ROOF SLOPES ARE CREATED BY SLOPING THE ROOF STRUCTURE. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL DIMENSIONS AND FIELD CONDITIONS PRIOR TO ORDERING OR INSTALLING MATERIALS OR EQUIPMENT. COORDINATE THE SIZE AND LOCATION OF ROOF PENETRATIONS FOR MECHANICAL AND ELECTRICAL EQUIPMENT.
- FLASH DRAINS, CURBS, VENTS AND STACKS PER MANUFACTURER'S RECOMMENDATIONS IF DETAIL NOT SHOWN ON PLANS.
- PROVIDE TAPERED INSULATION CRICKETS AT HIGH SIDE OF ALL ROOF OBSTRUCTIONS AS REQUIRED FOR POSITIVE DRAINAGE.
- CONSTRUCTION STAGING AREA TO BE COORDINATED WITH AND APPROVED BY OWNER.
- SCHEDULE WORK HOURS W/ OWNER. DO NOT DISRUPT BUILDING ACTIVITIES UNLESS PREVIOUSLY DISCUSSED & APPROVED BY OWNER.

ROOF PLAN KEYED NOTES:

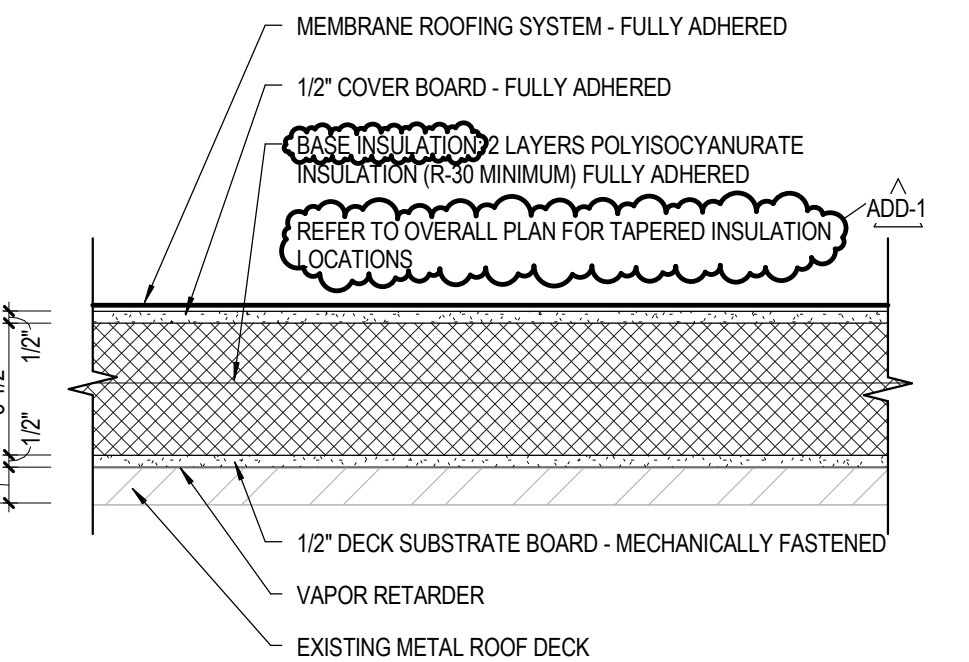
- FURNISH AND INSTALL NEW RTU CURB FOR EXISTING RTU. CONTRACTOR IS RESPONSIBLE FOR LIFTING EXISTING UNITS & COORDINATING WITH OWNER REGARDING DOWN TIME. REFERENCE DETAIL 15A4.4 FOR HEIGHT AND FLASHING REQUIREMENTS. REFERENCE MECHANICAL DRAWINGS FOR CONNECTIONS.
- APPROXIMATE ROOF CURB DIMENSION: 4'-8" X 7'-0". CONTRACTOR RESPONSIBLE FOR VERIFYING DIMENSIONS IN FIELD.
- APPROXIMATE ROOF CURB DIMENSION: 4'-8" X 7'-0". CONTRACTOR RESPONSIBLE FOR VERIFYING DIMENSIONS IN FIELD.



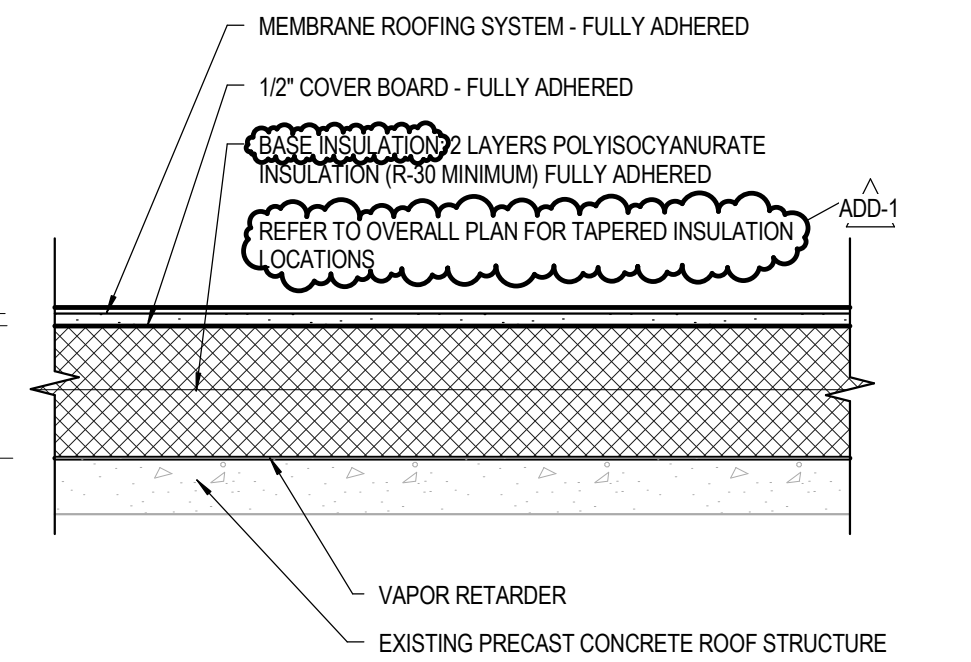
ROOF CONSTRUCTION D - RCD
INSULATED STANDING SEAM ROOFING SYSTEM OVER METAL ROOF DECK
R-VALUE = 30



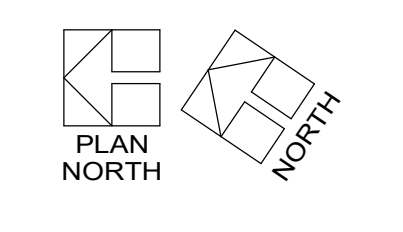
ROOF CONSTRUCTION A - RCA
NEW ASPHALT SHINGLE ROOF SYSTEM OVER PLYWOOD SHEATHING 12" BATT INSULATION BELOW
R-VALUE = 38

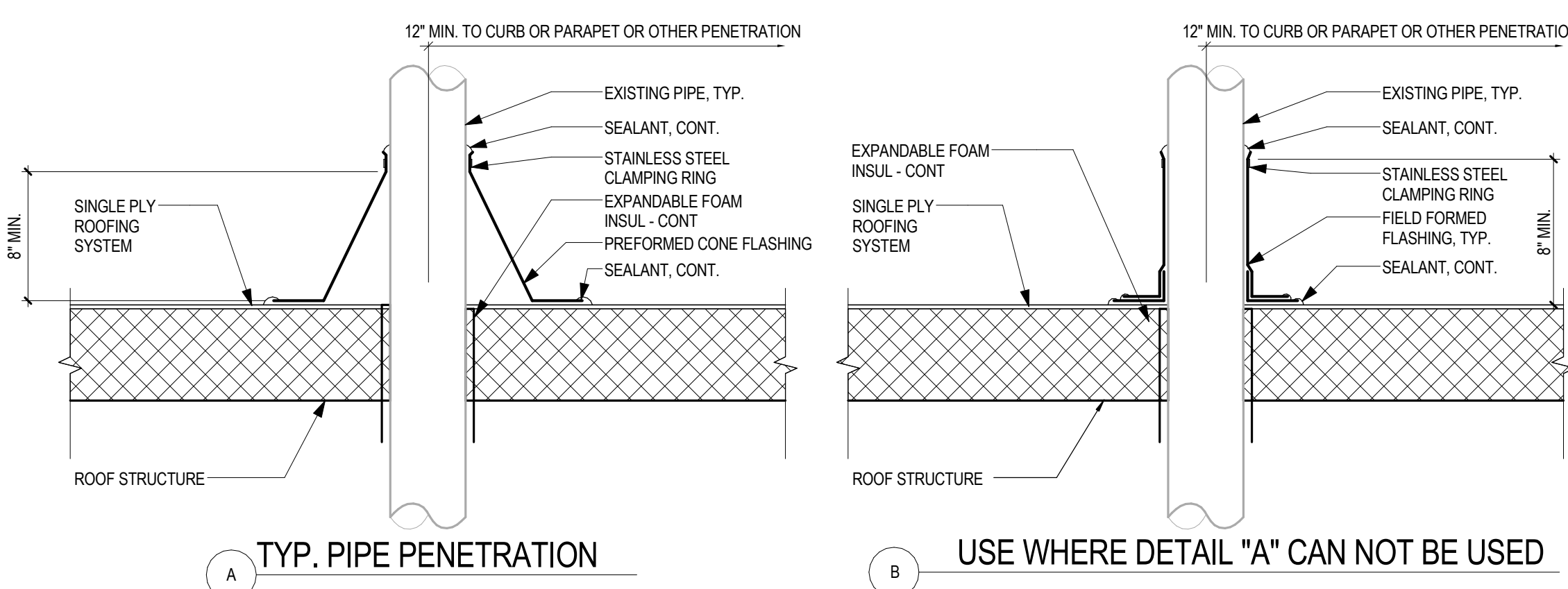


ROOF CONSTRUCTION B - RCB
NEW MEMBRANE ROOFING SYSTEM OVER METAL ROOF DECK
R-VALUE = 30

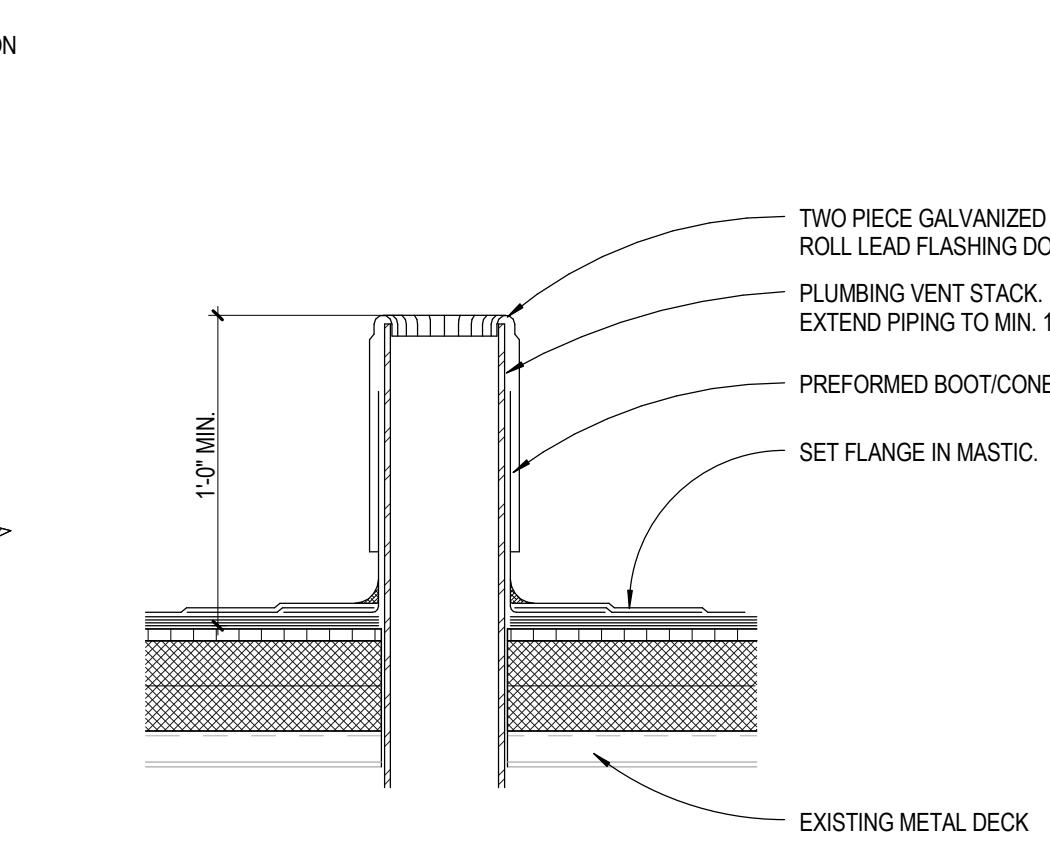


ROOF CONSTRUCTION C - RCC
NEW MEMBRANE ROOFING SYSTEM OVER EXISTING PRECAST STRUCTURE
R-VALUE = 30

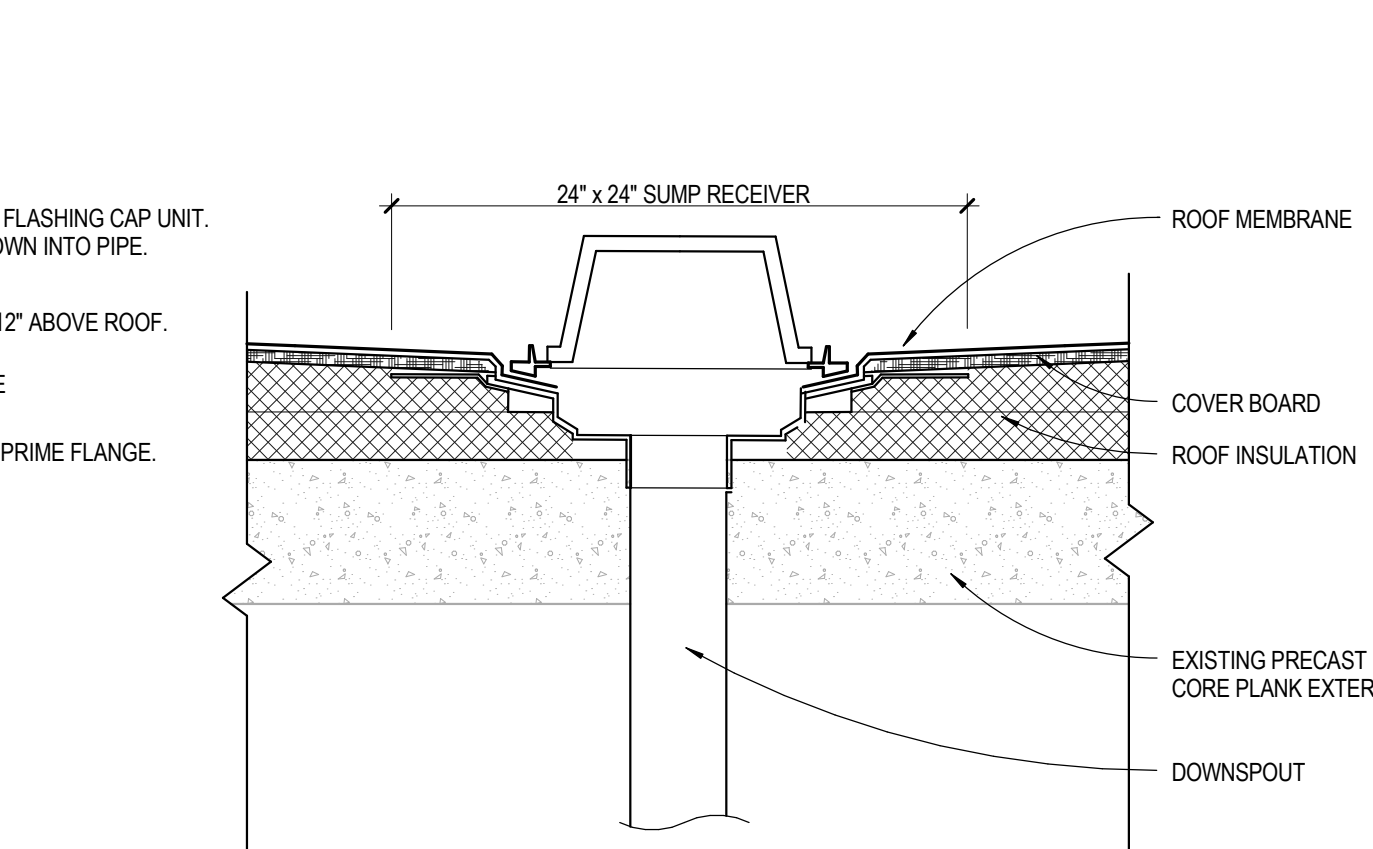




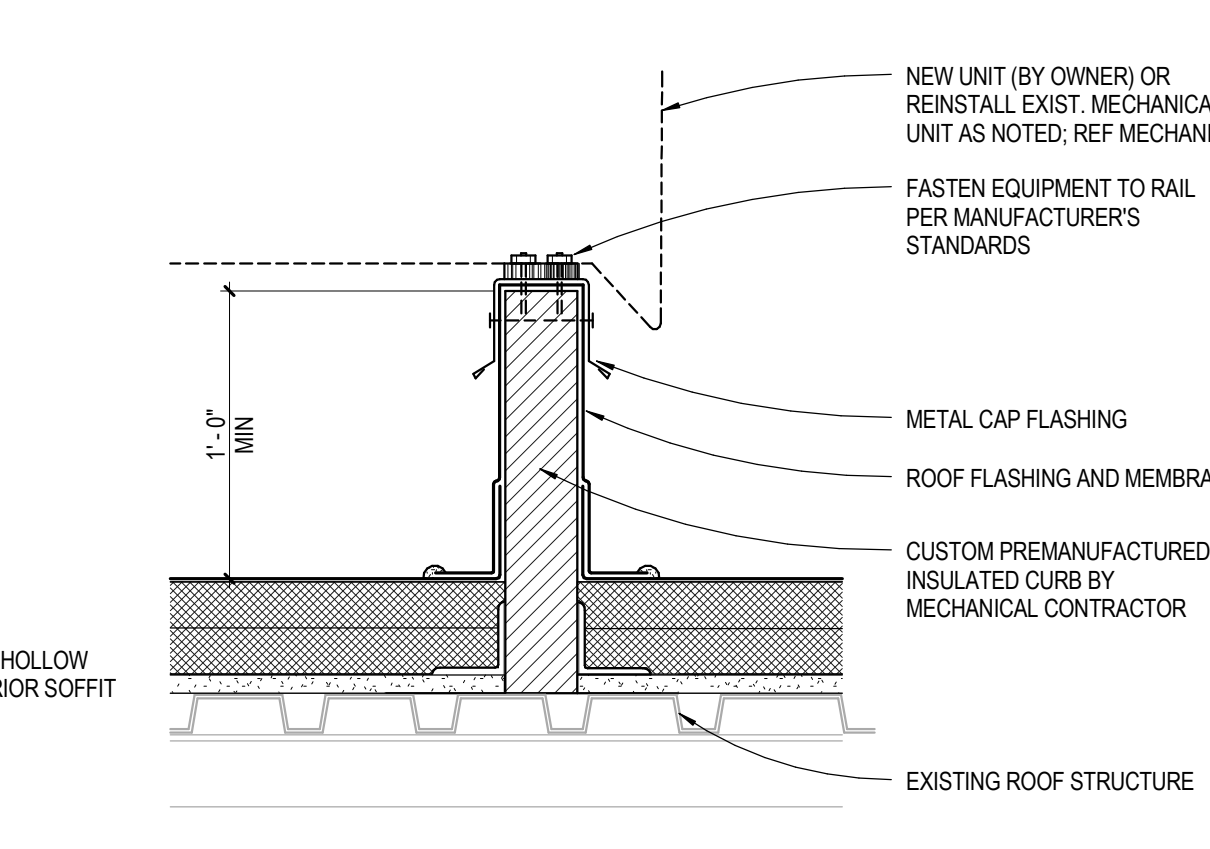
11 TYPICAL PIPE PENETRATION DETAILS
SCALE: 1 1/2" = 1'-0"



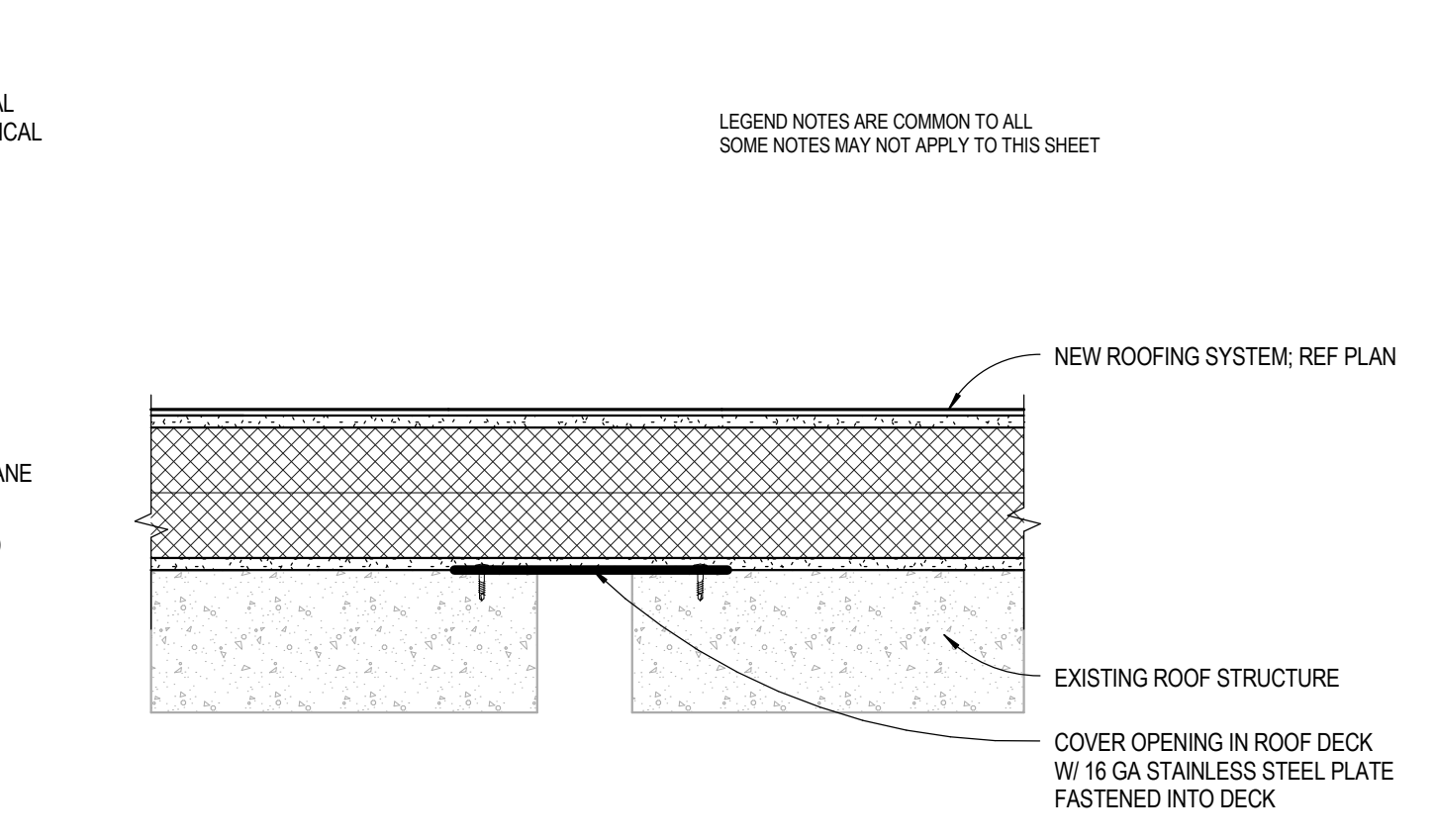
13 TYP. VENT STACK DETAIL
SCALE: 1 1/2" = 1'-0"



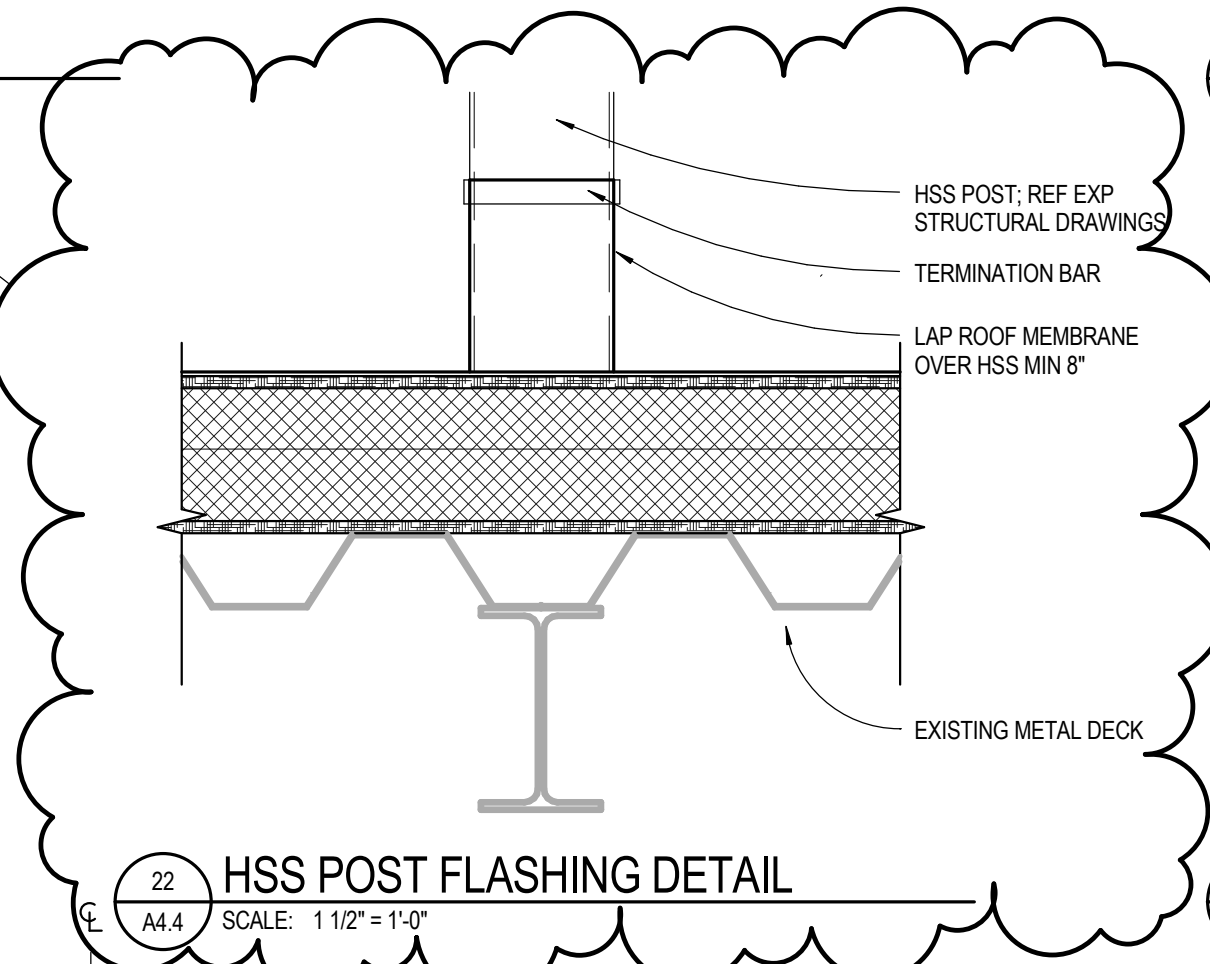
14 ROOF DRAIN DETAIL
NO SCALE



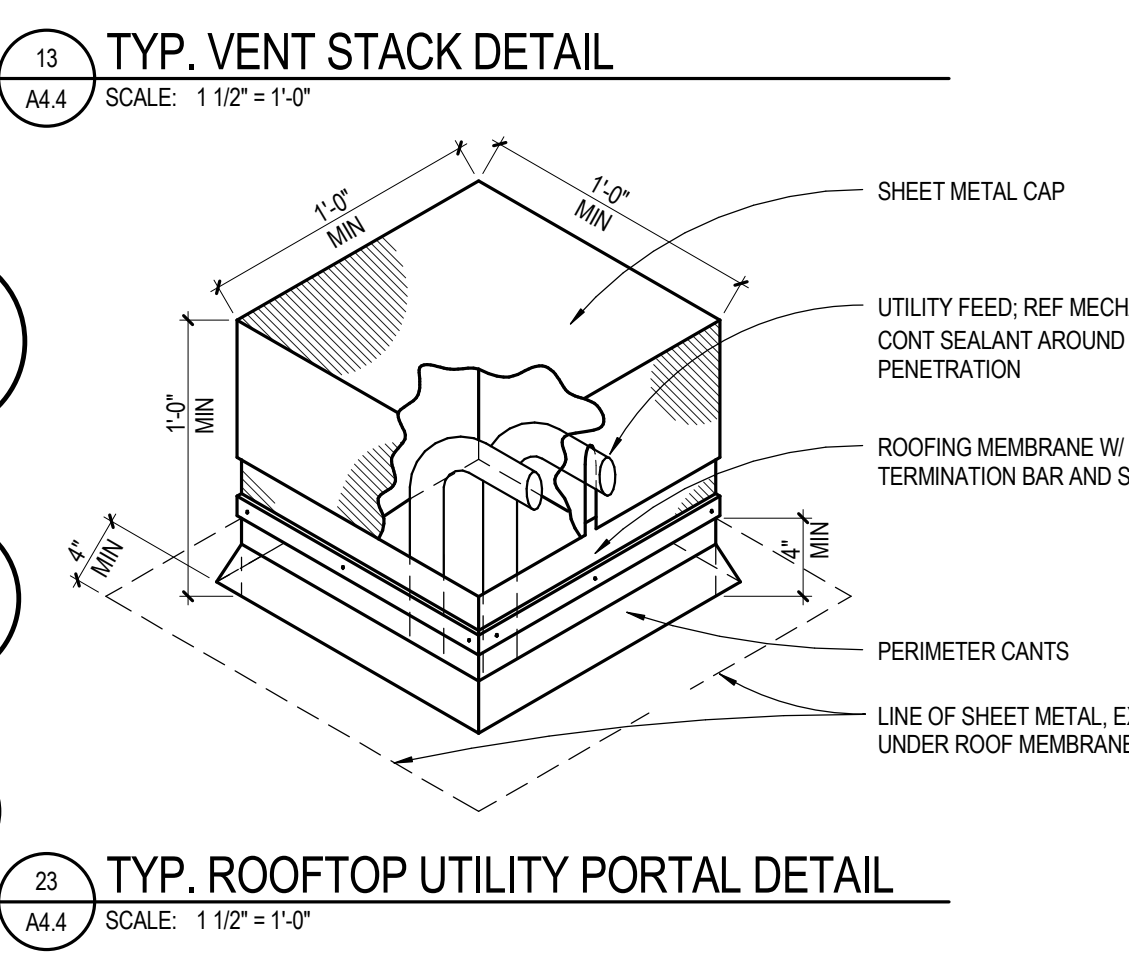
15 TYP. MECHANICAL CURB DETAIL
SCALE: 1 1/2" = 1'-0"



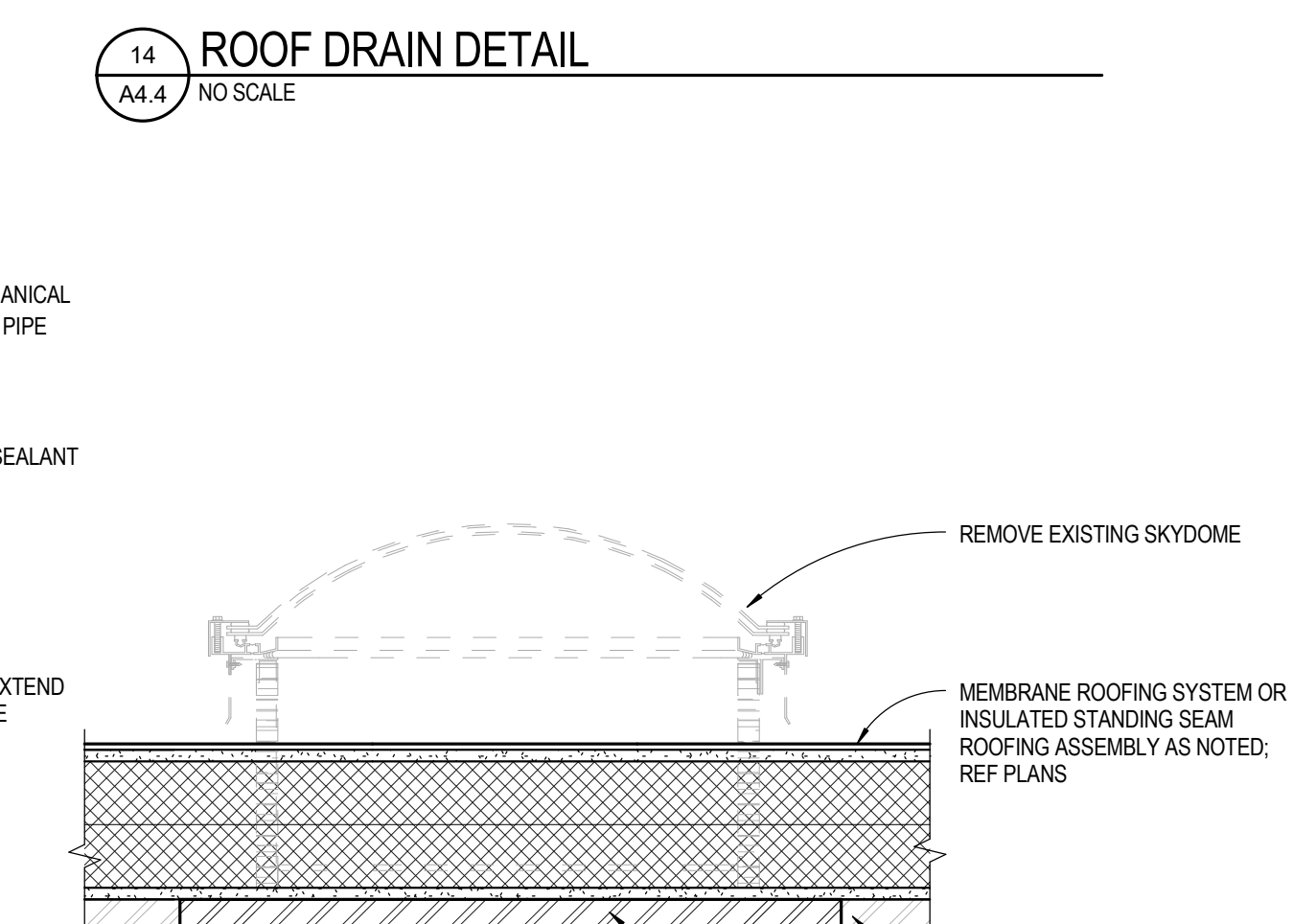
16 EXIST. PIPE PENETRATION INFILL DETAIL
SCALE: 1 1/2" = 1'-0"



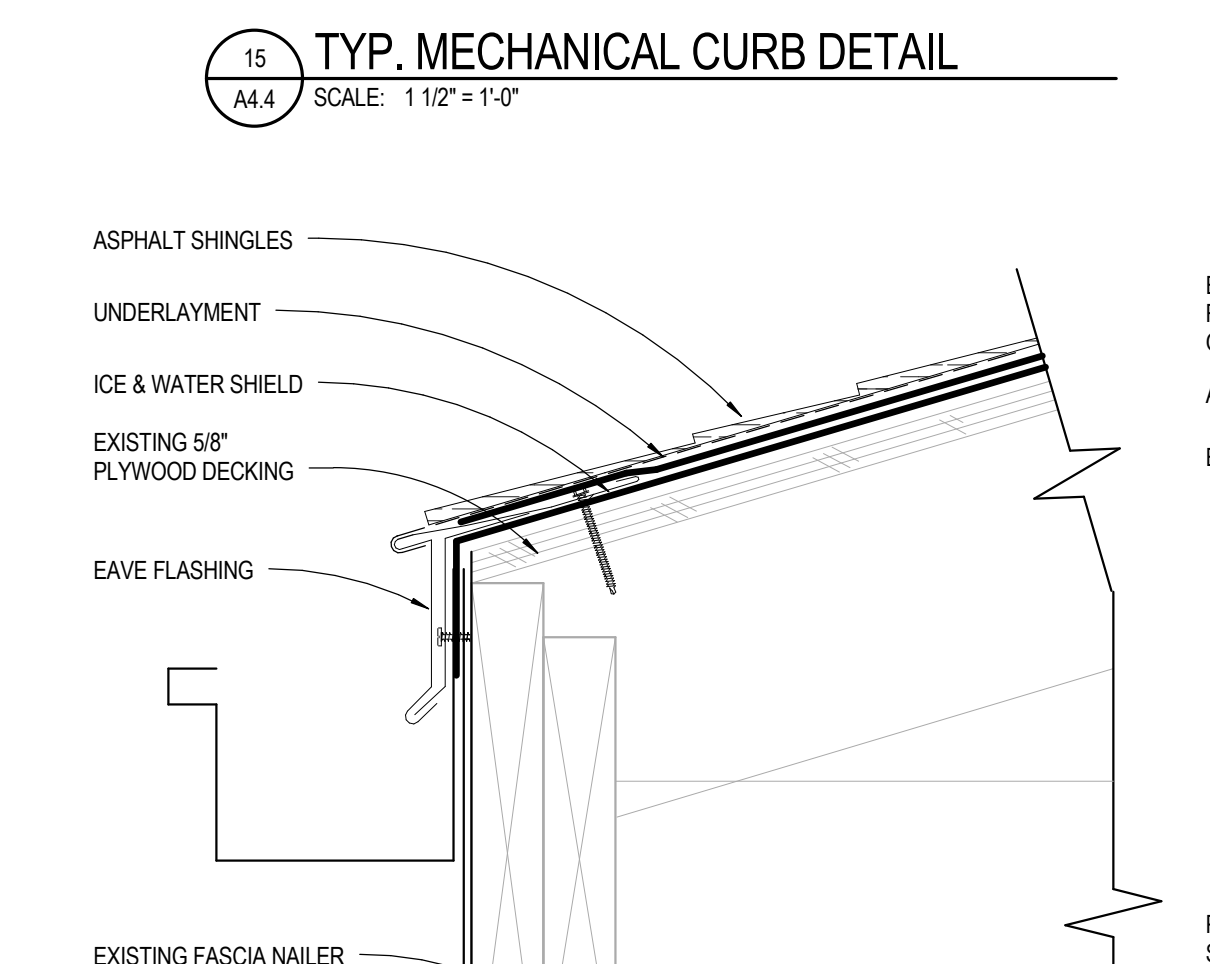
22 HSS POST FLASHING DETAIL
SCALE: 1 1/2" = 1'-0"



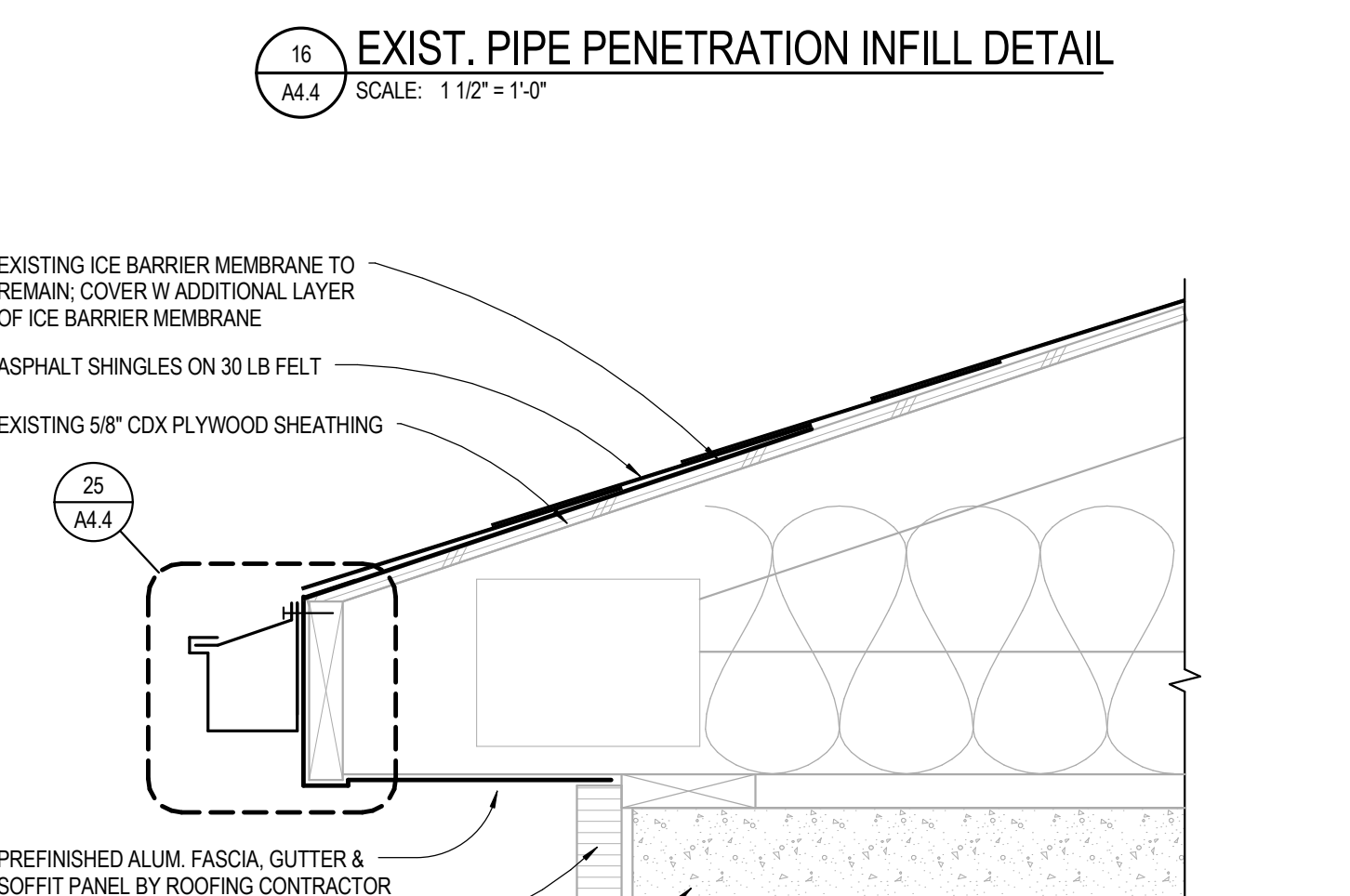
23 TYP. ROOFTOP UTILITY PORTAL DETAIL
SCALE: 1 1/2" = 1'-0"



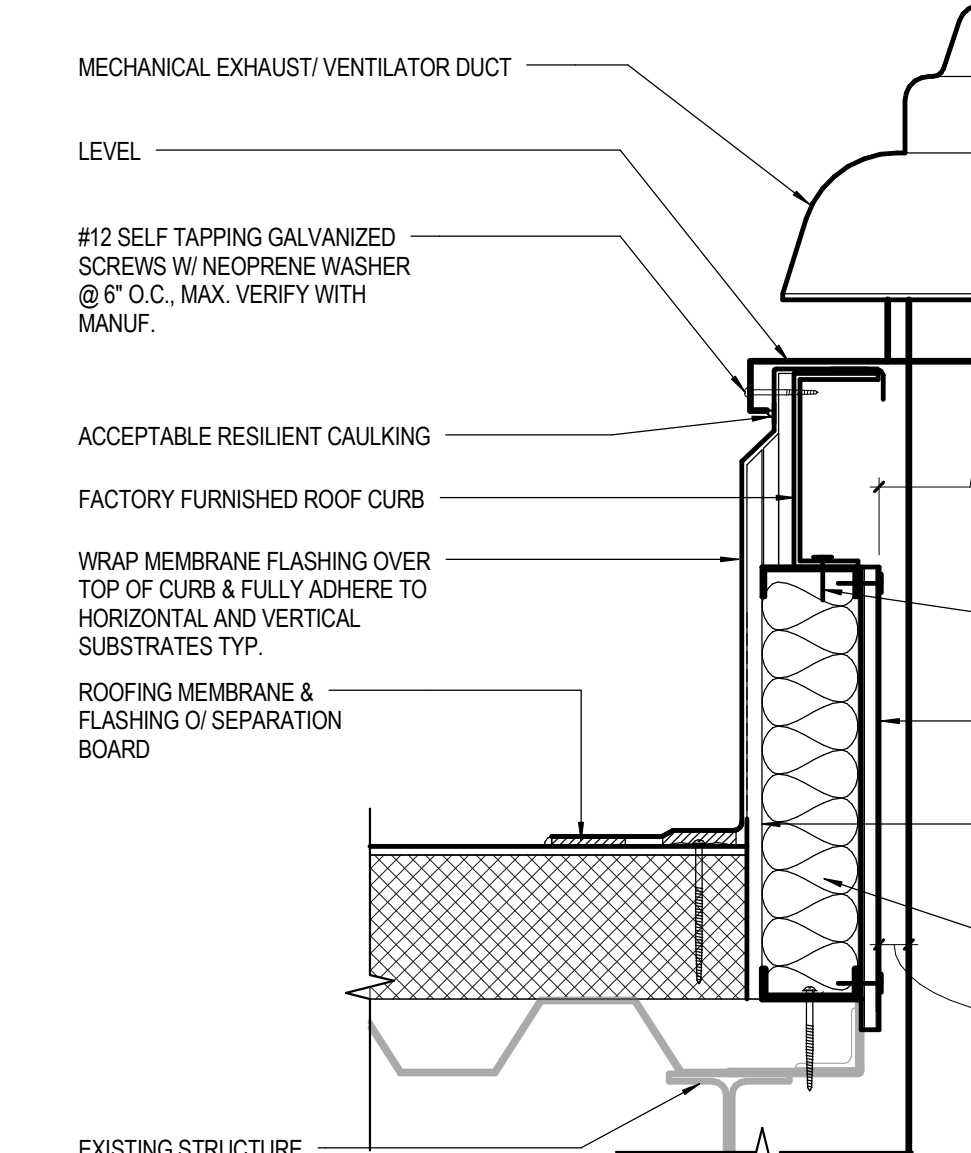
24 EXISTING SKYDOME DETAIL
SCALE: 1 1/2" = 1'-0"



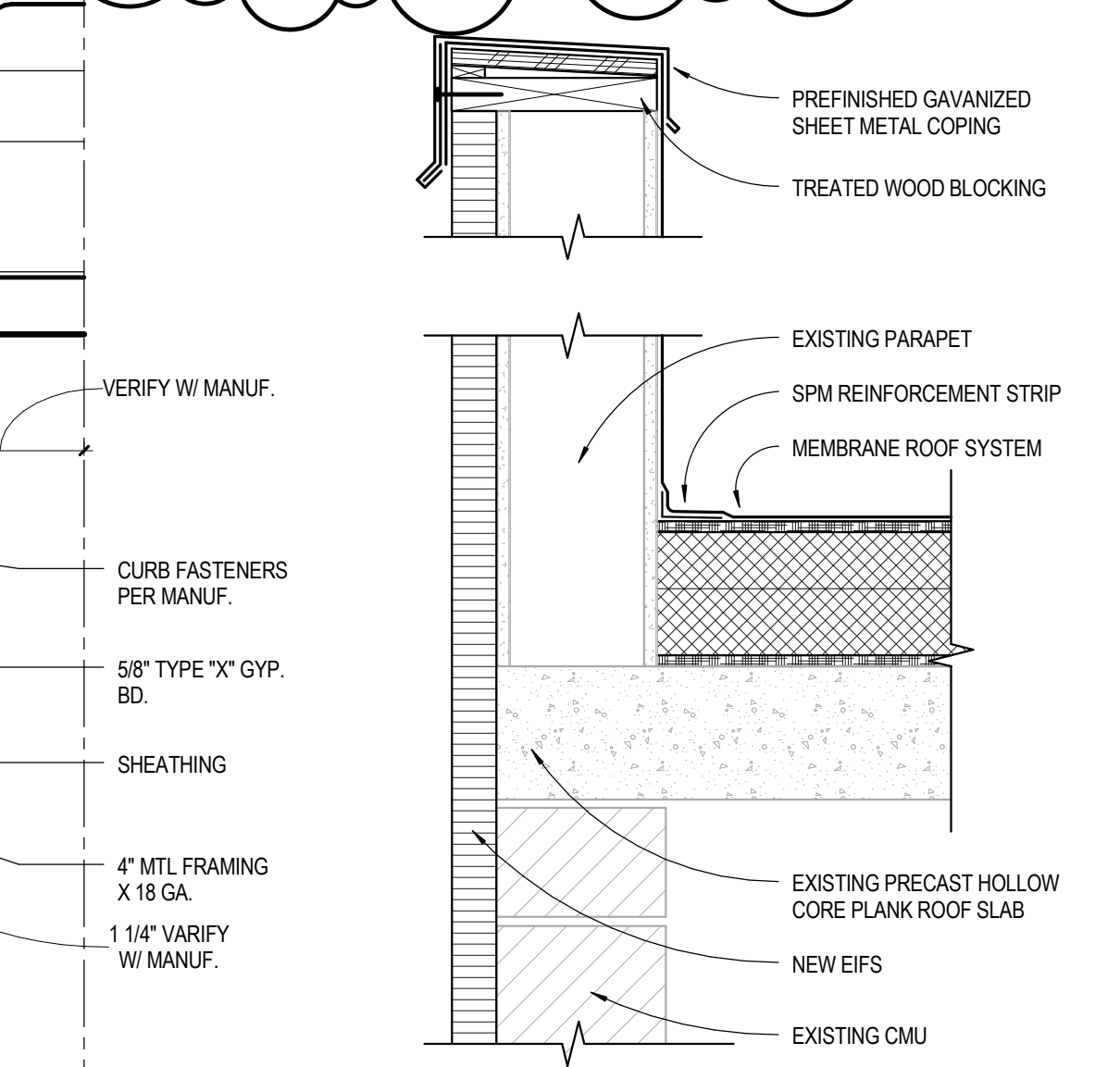
25 EAVE DETAIL
SCALE: 3" = 1'-0"



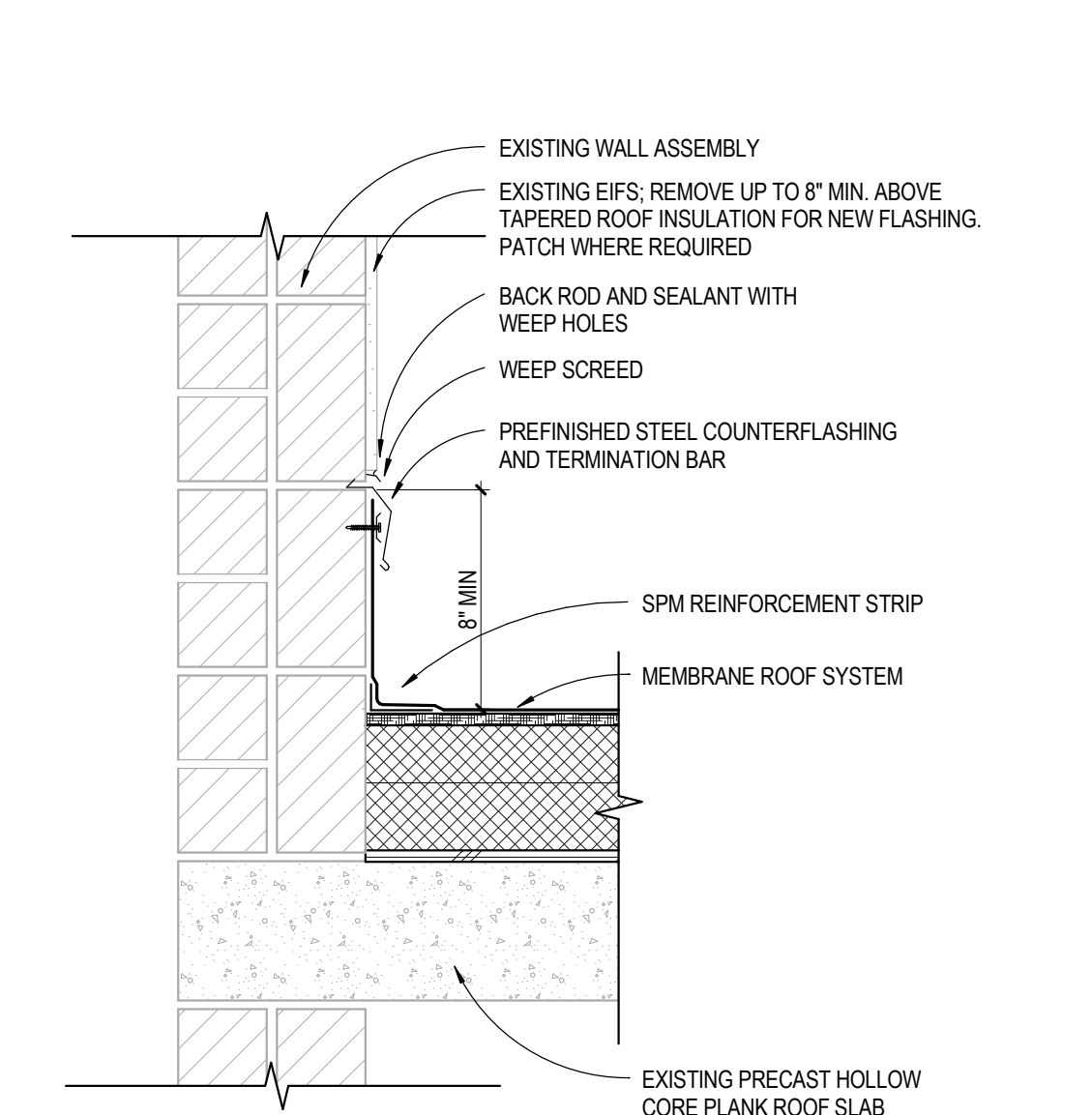
26 ASPHALT SHINGLES
SCALE: 1 1/2" = 1'-0"



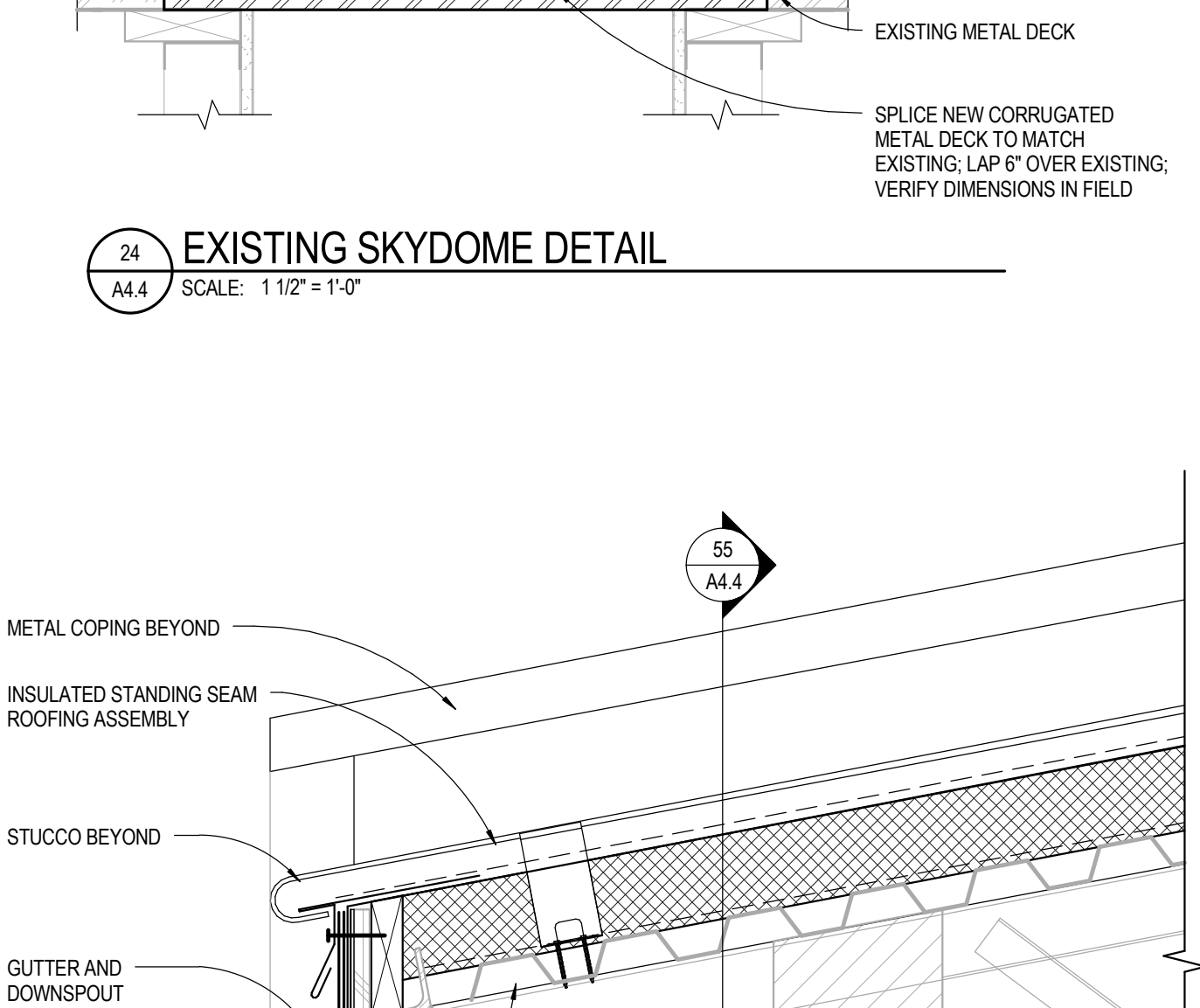
31 EXHAUST FAN
SCALE: 1 1/2" = 1'-0"



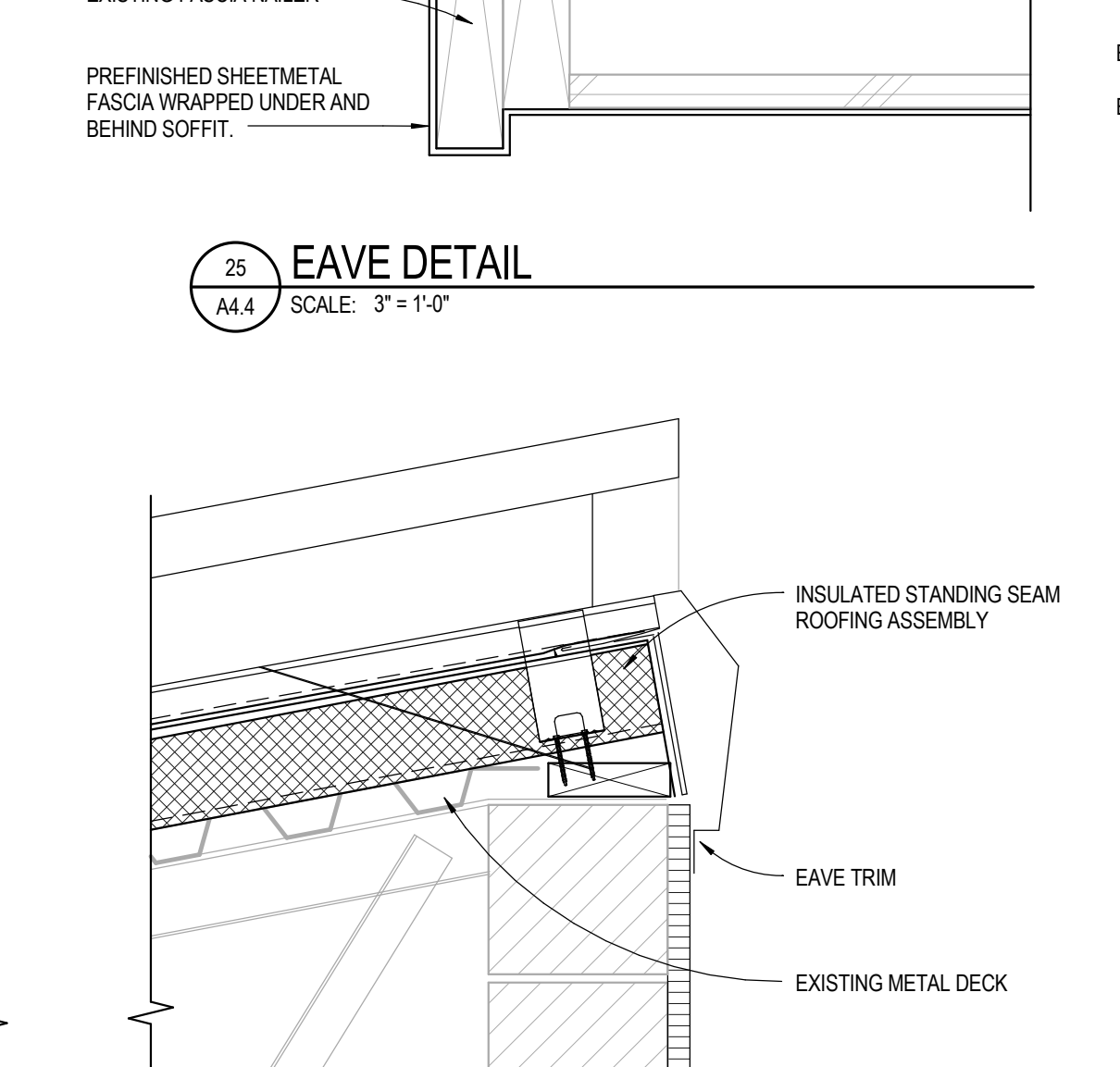
32 METAL COPING DETAIL
SCALE: 1 1/2" = 1'-0"



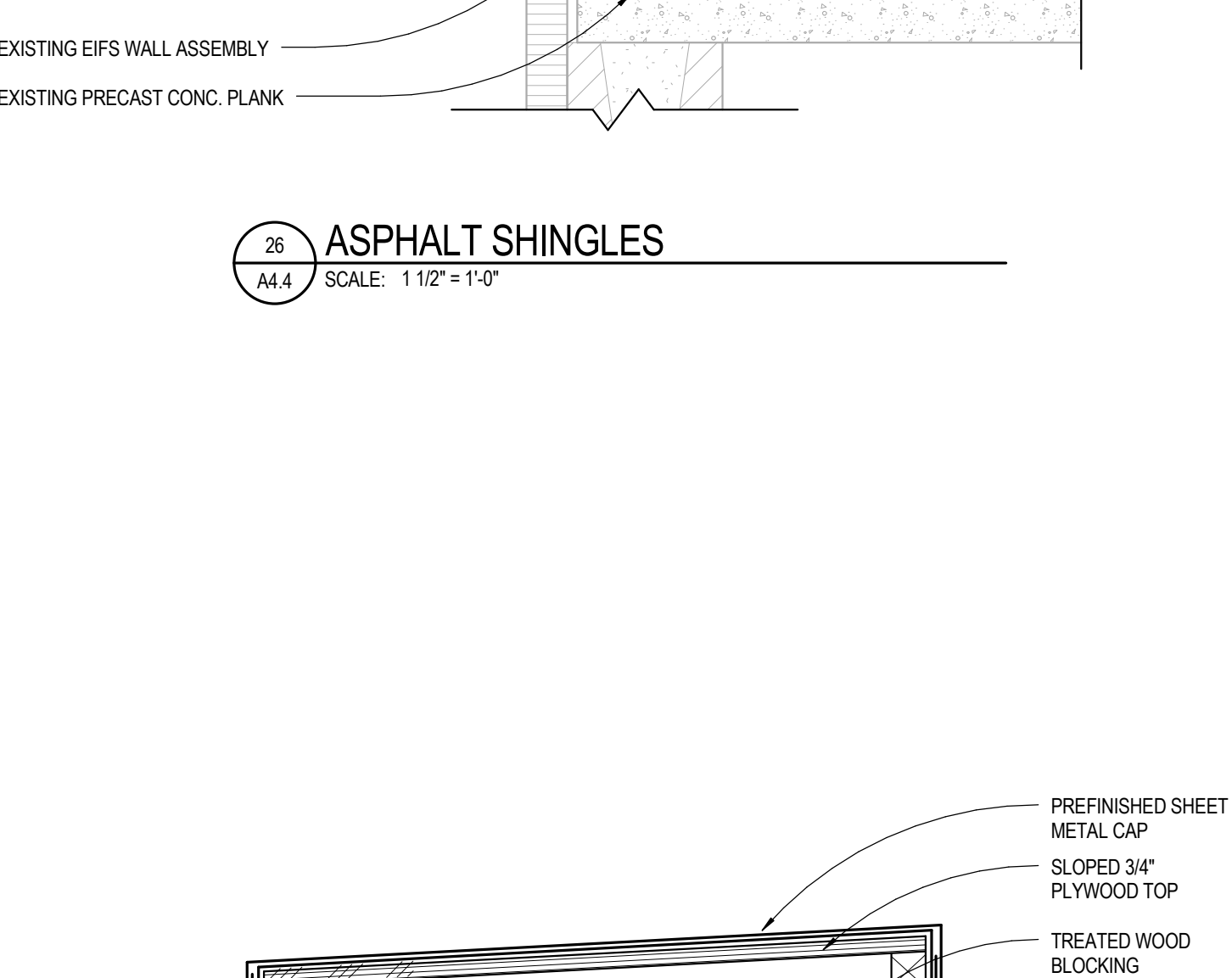
33 METAL ROOFING DETAIL
SCALE: 1 1/2" = 1'-0"



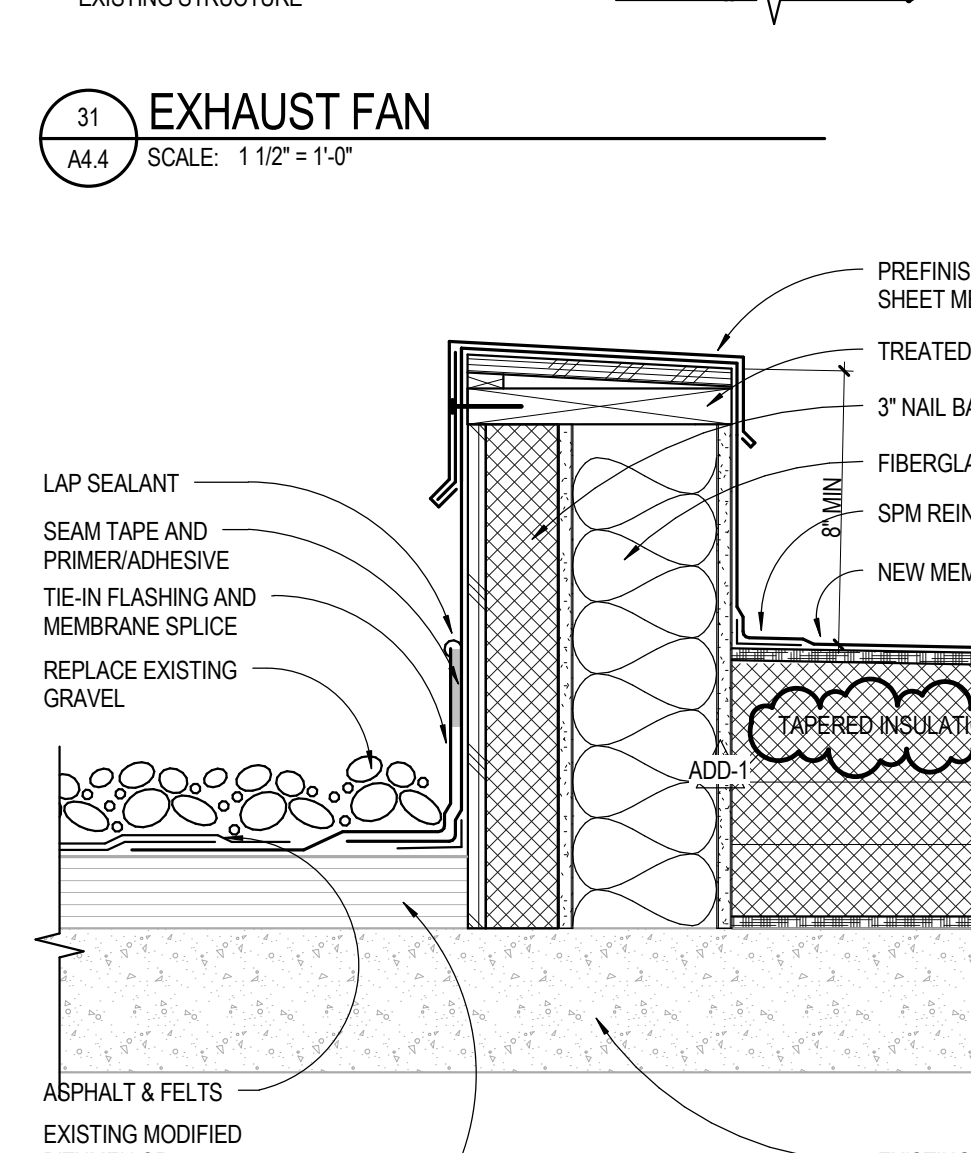
34 METAL ROOFING DETAIL
SCALE: 1 1/2" = 1'-0"



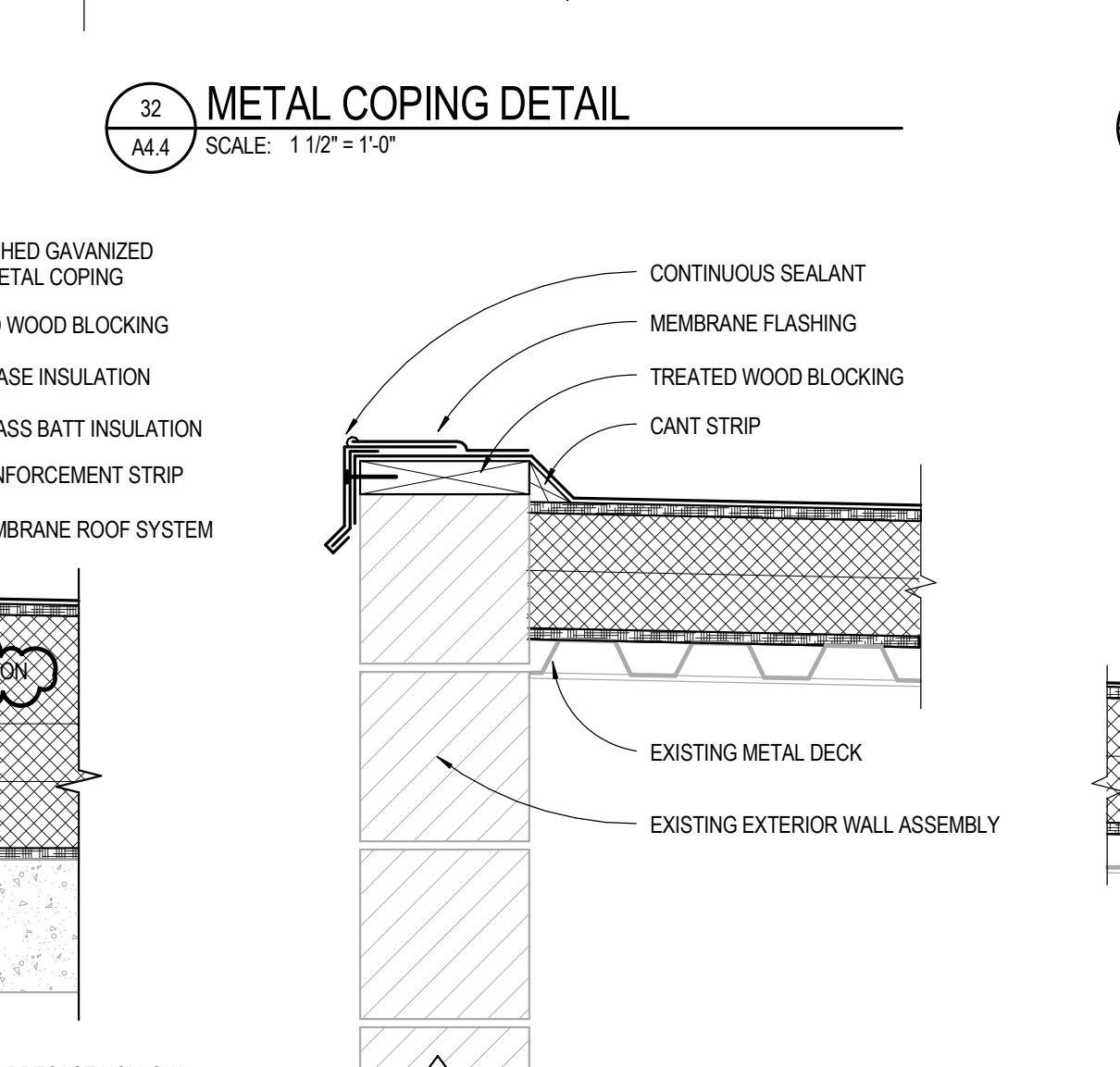
35 METAL ROOFING DETAIL
SCALE: 1 1/2" = 1'-0"



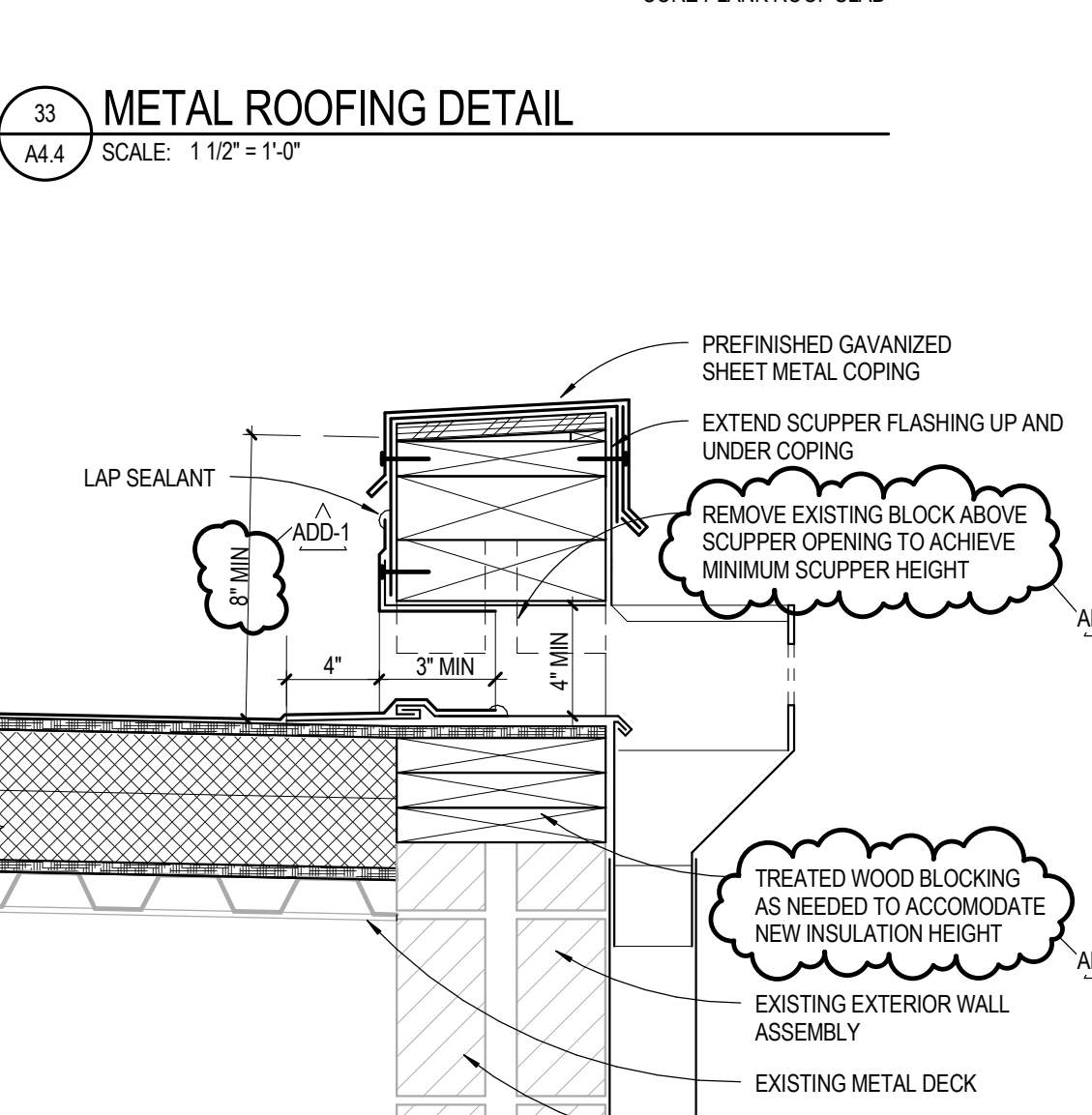
36 DUCT ENCLOSURE
SCALE: 1 1/2" = 1'-0"



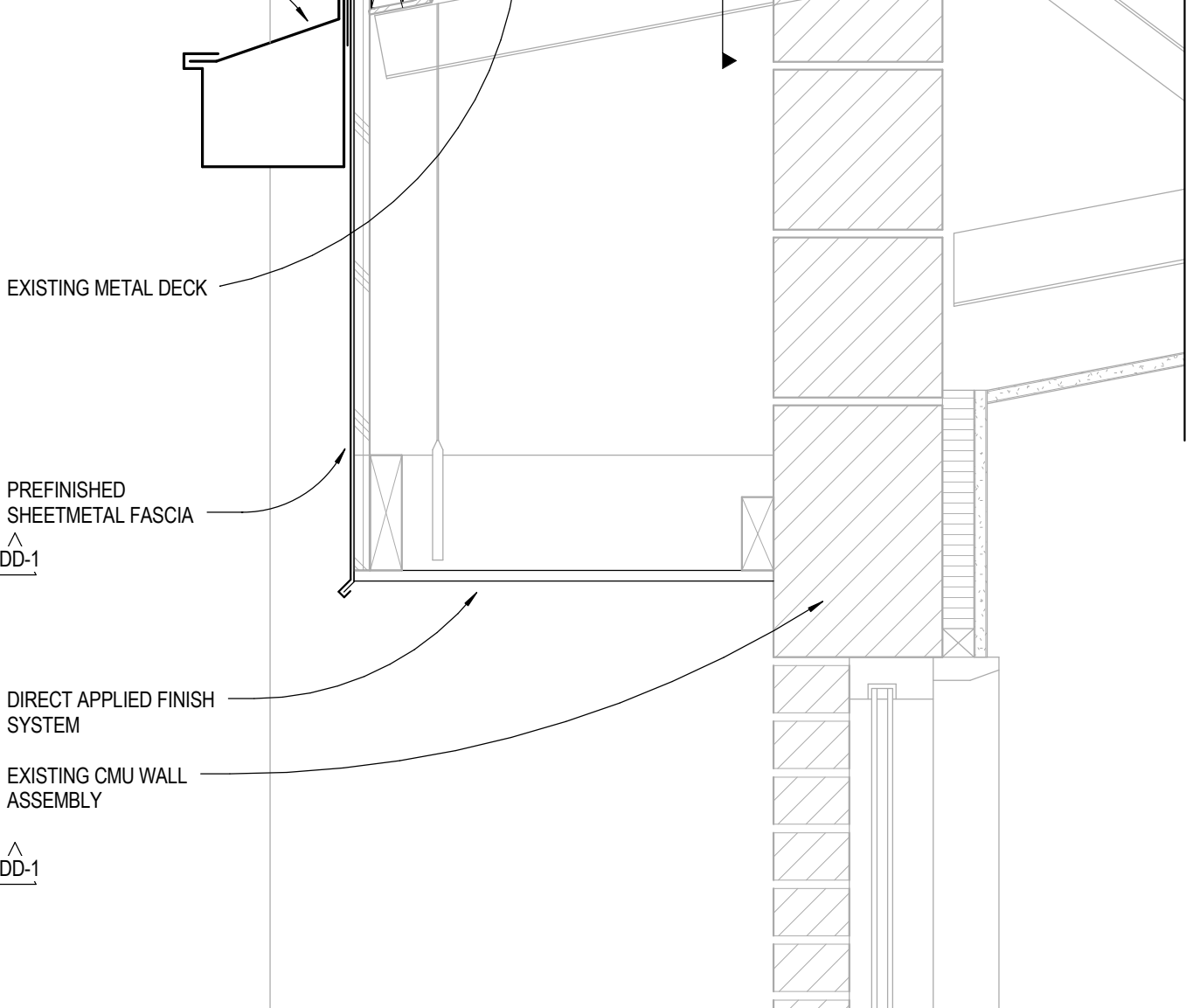
41 ROOF CURB DETAIL
SCALE: 1 1/2" = 1'-0"



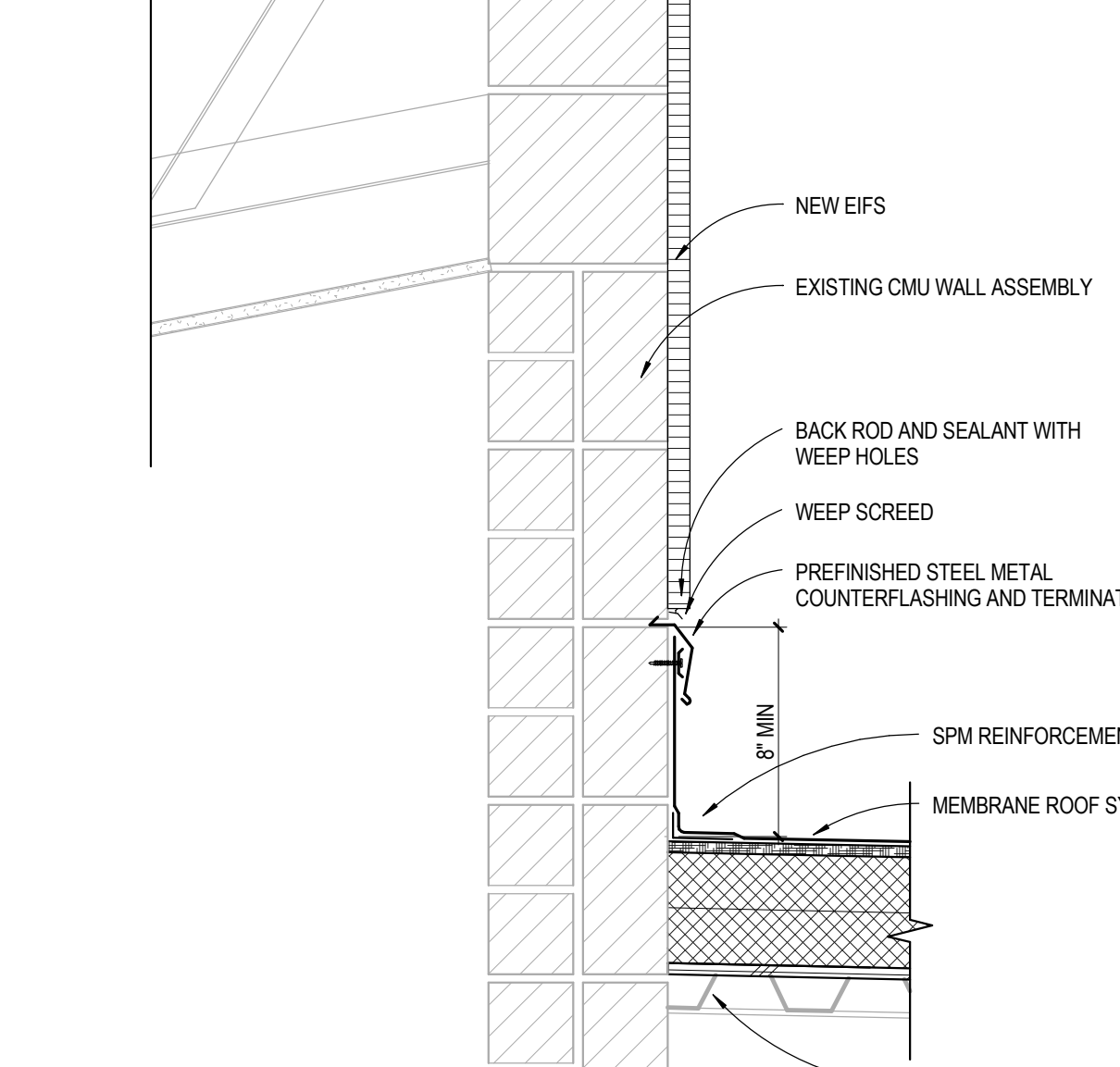
42 METAL COPING DETAIL
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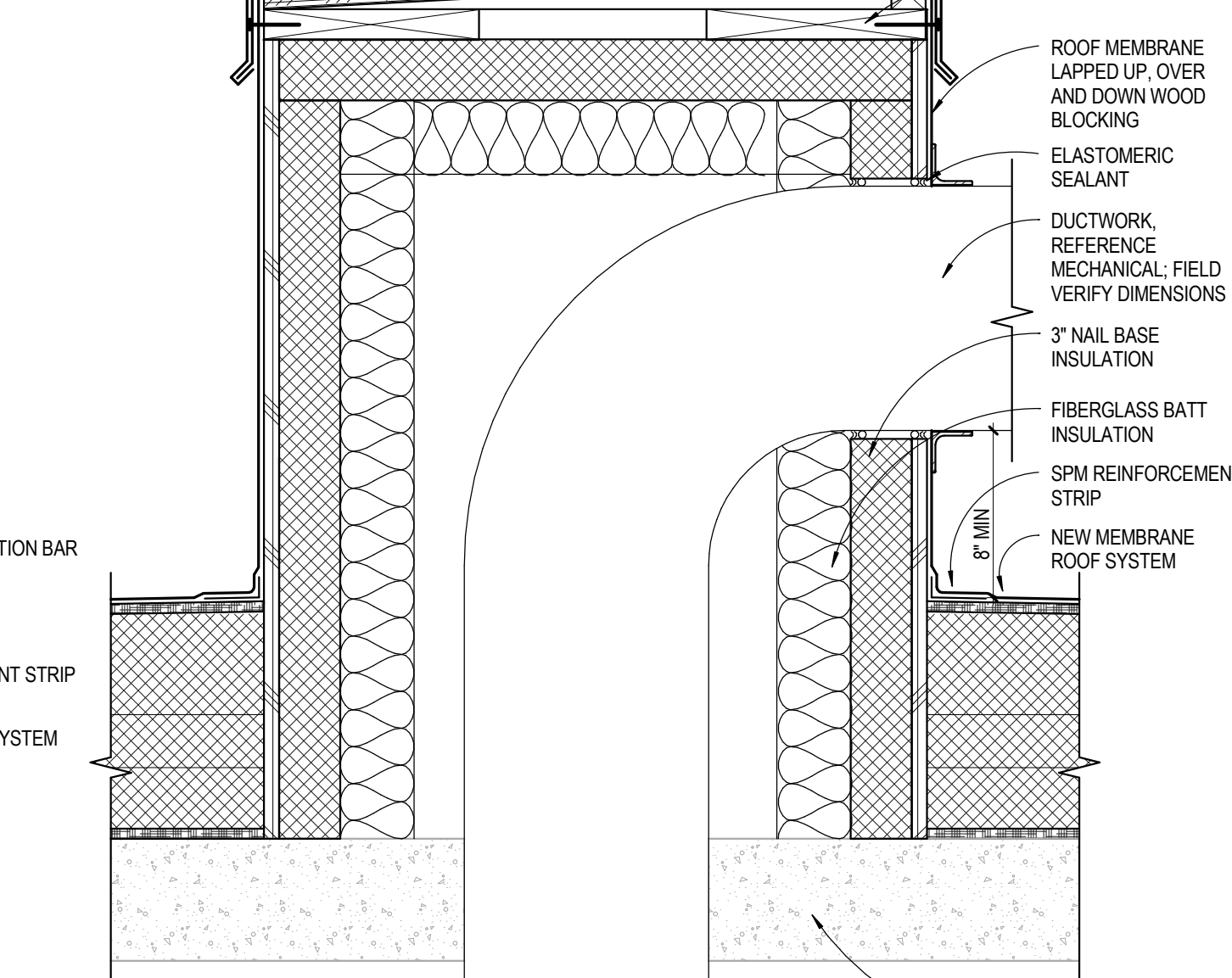
43 SCUPPER DETAIL
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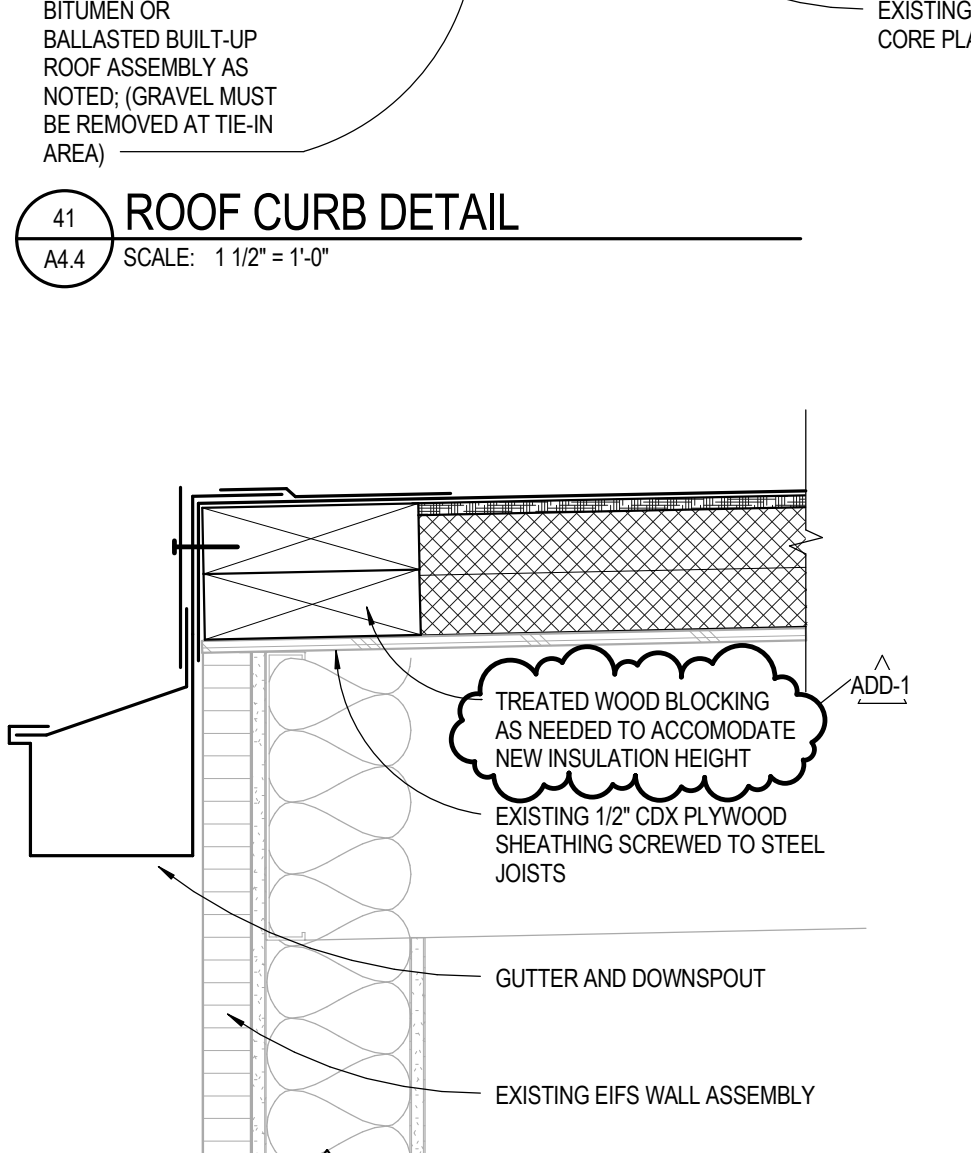
44 METAL ROOFING DETAIL
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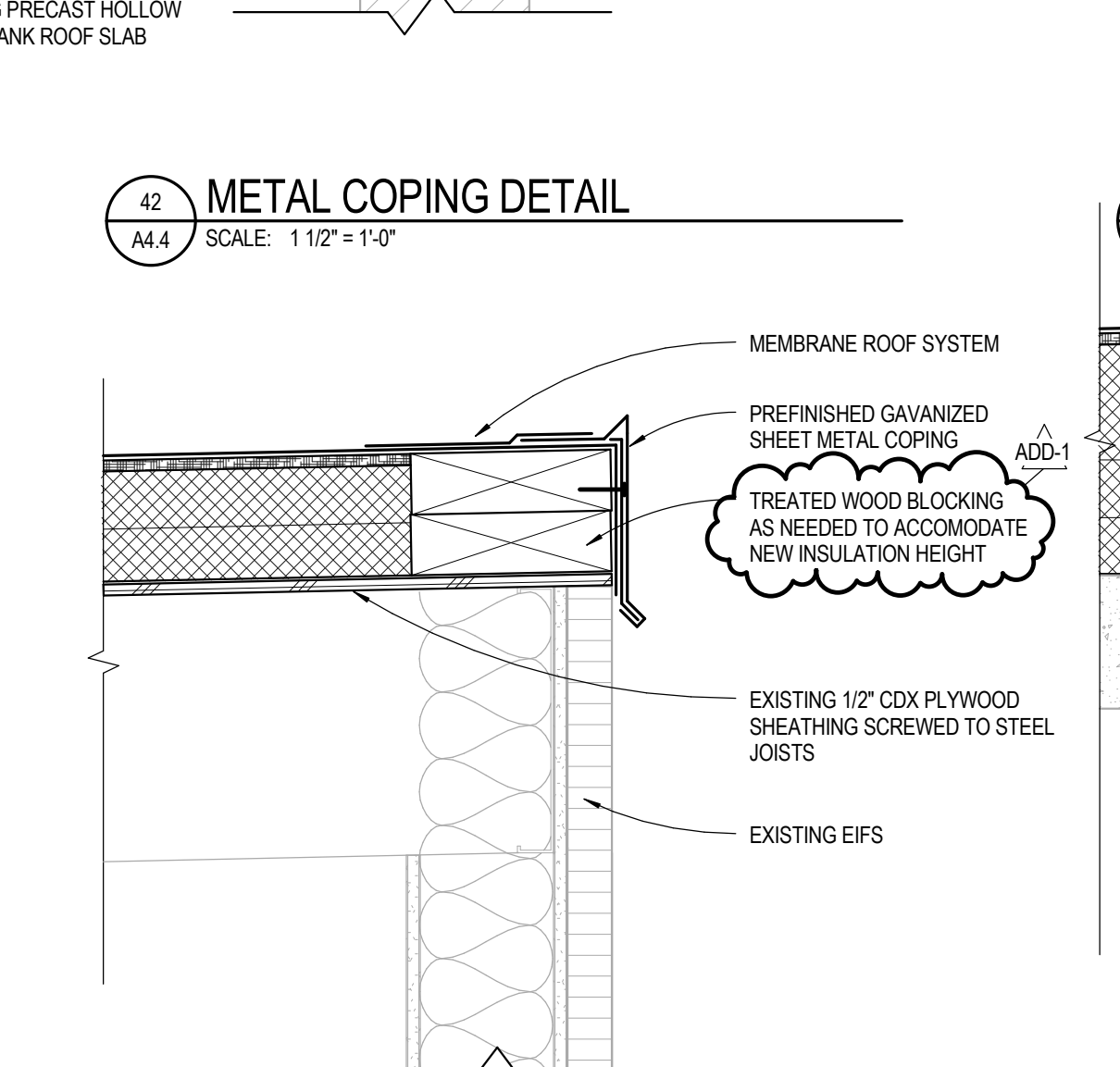
45 METAL ROOFING DETAIL
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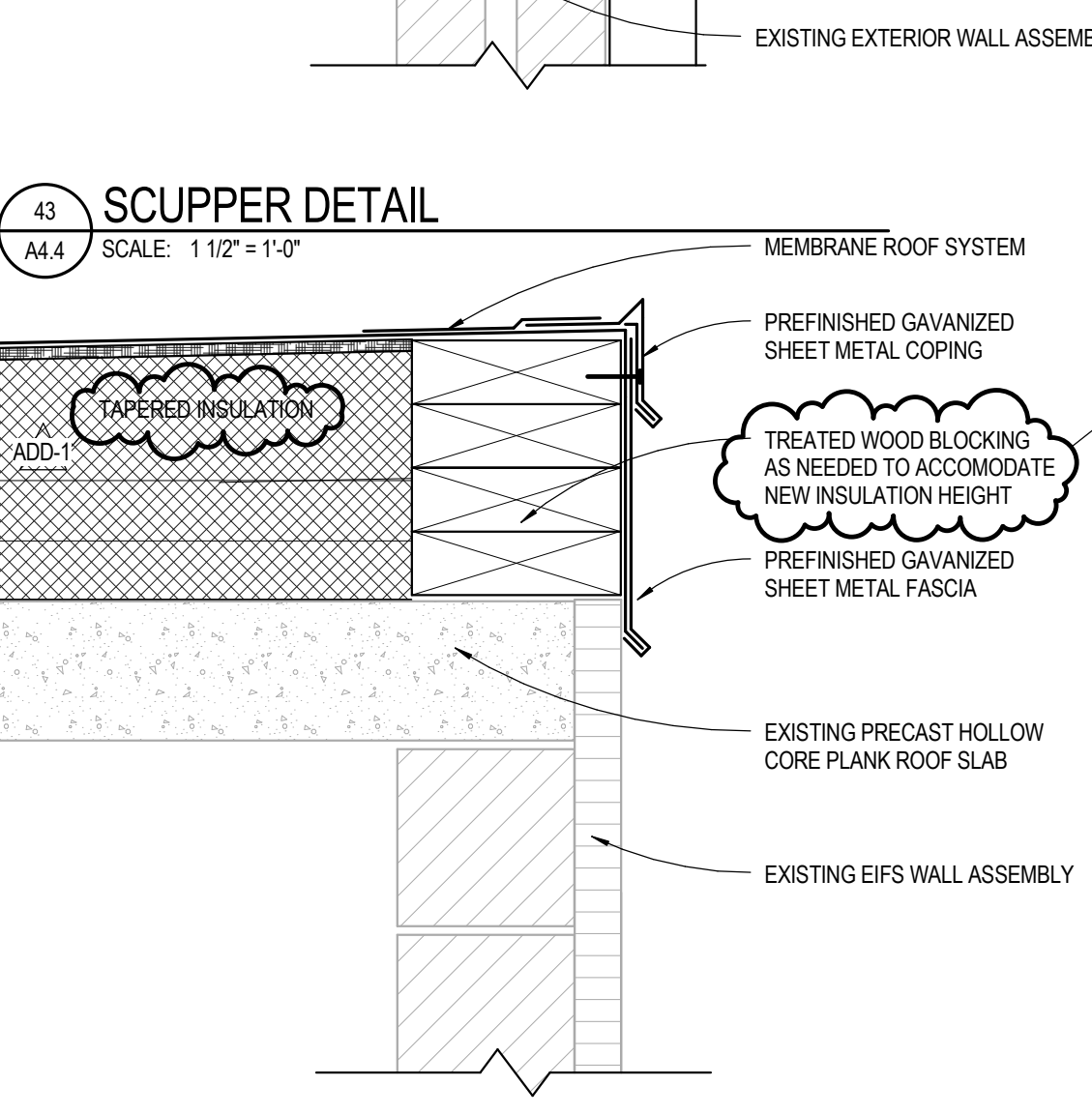
46 METAL COPING DETAIL
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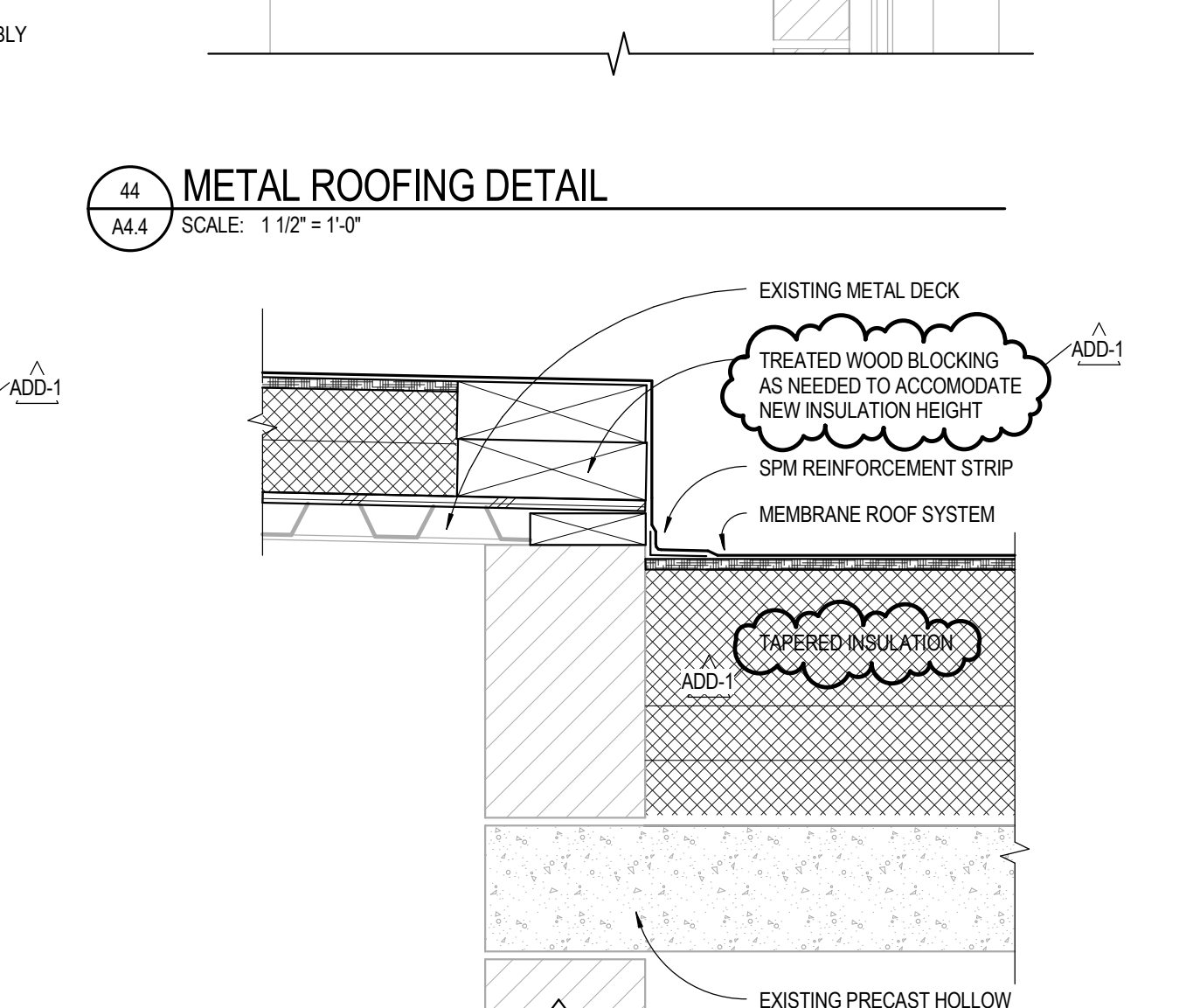
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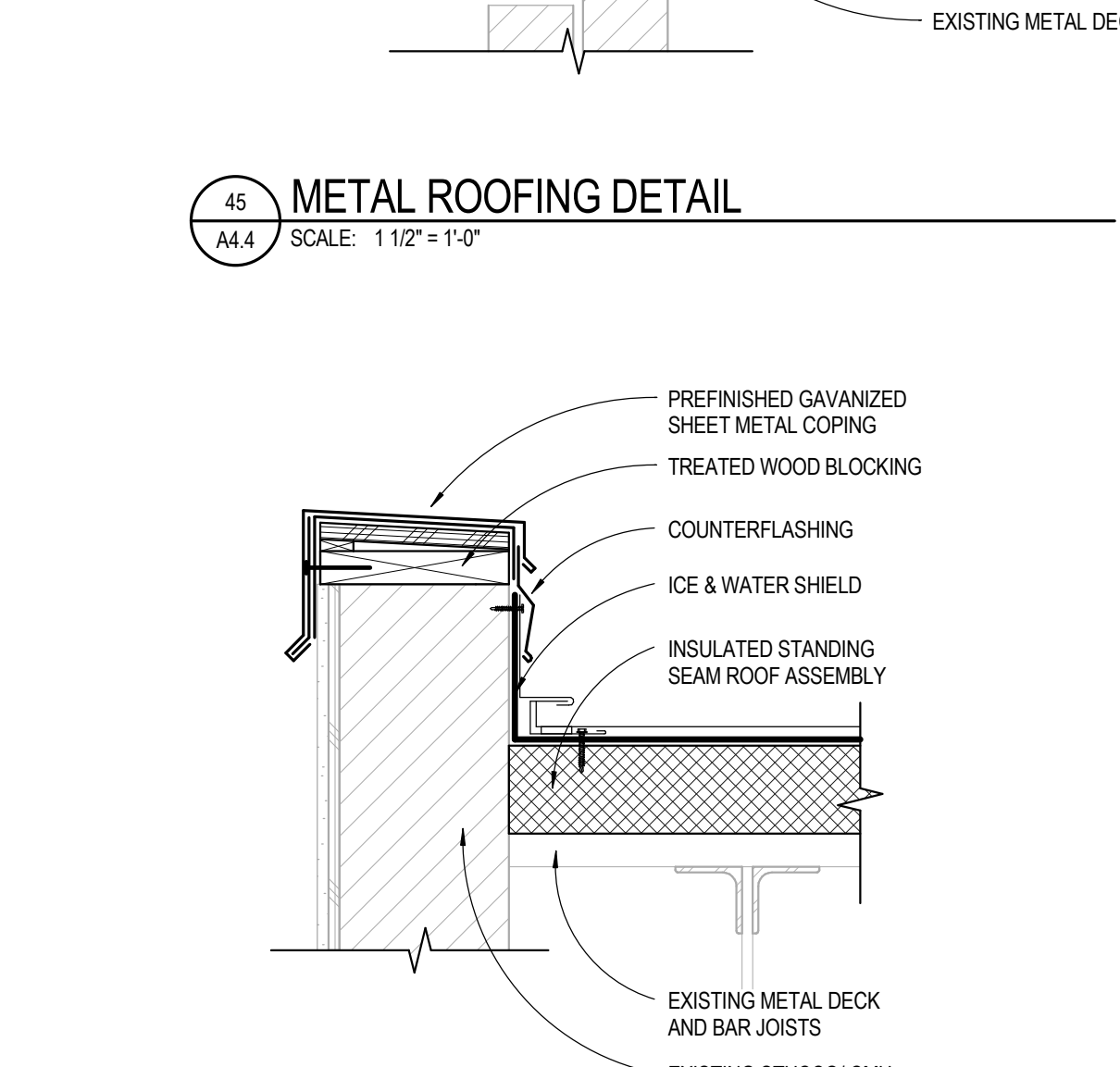
52 METAL COPING DETAIL
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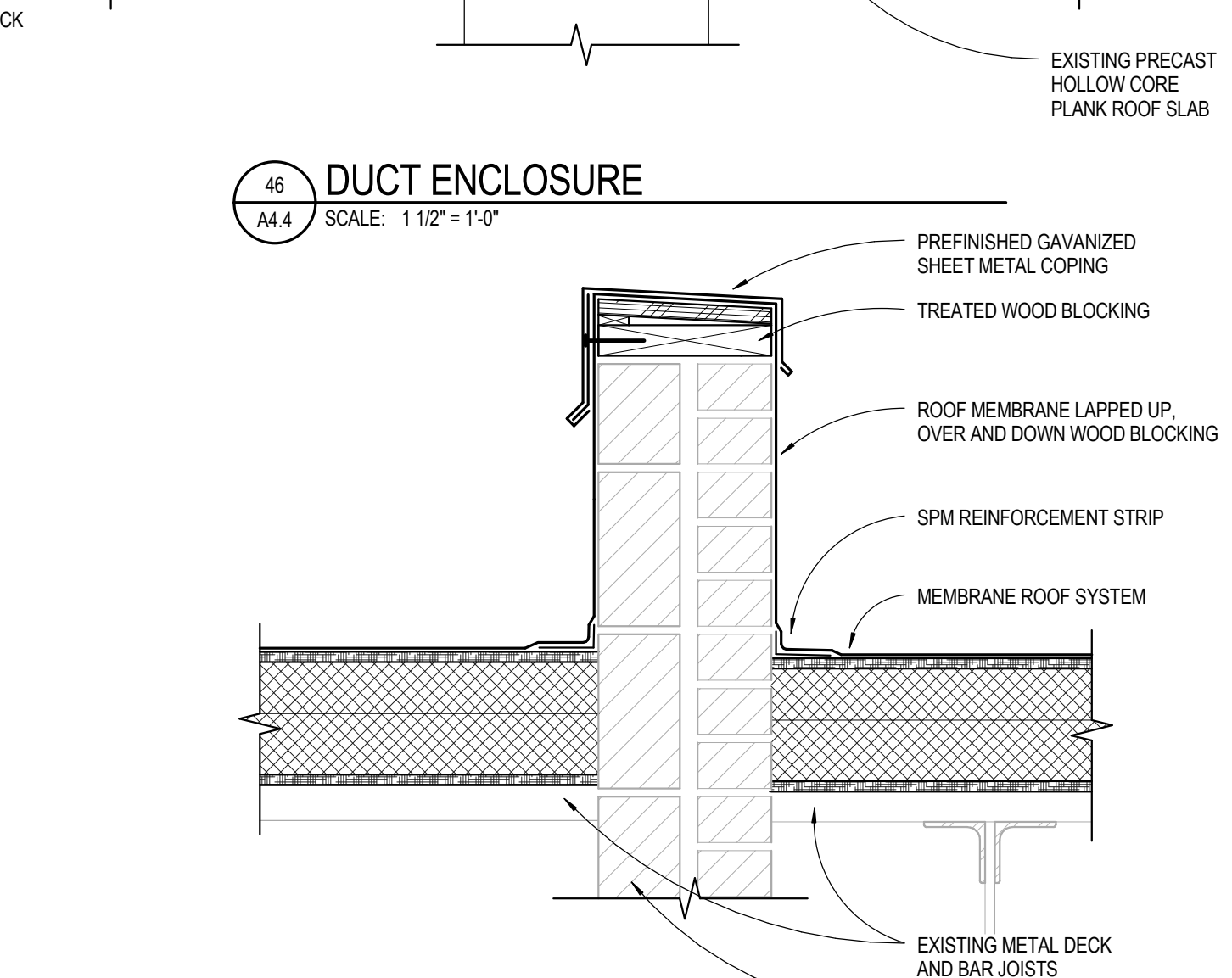
53 METAL COPING DETAIL
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54 METAL COPING DETAIL
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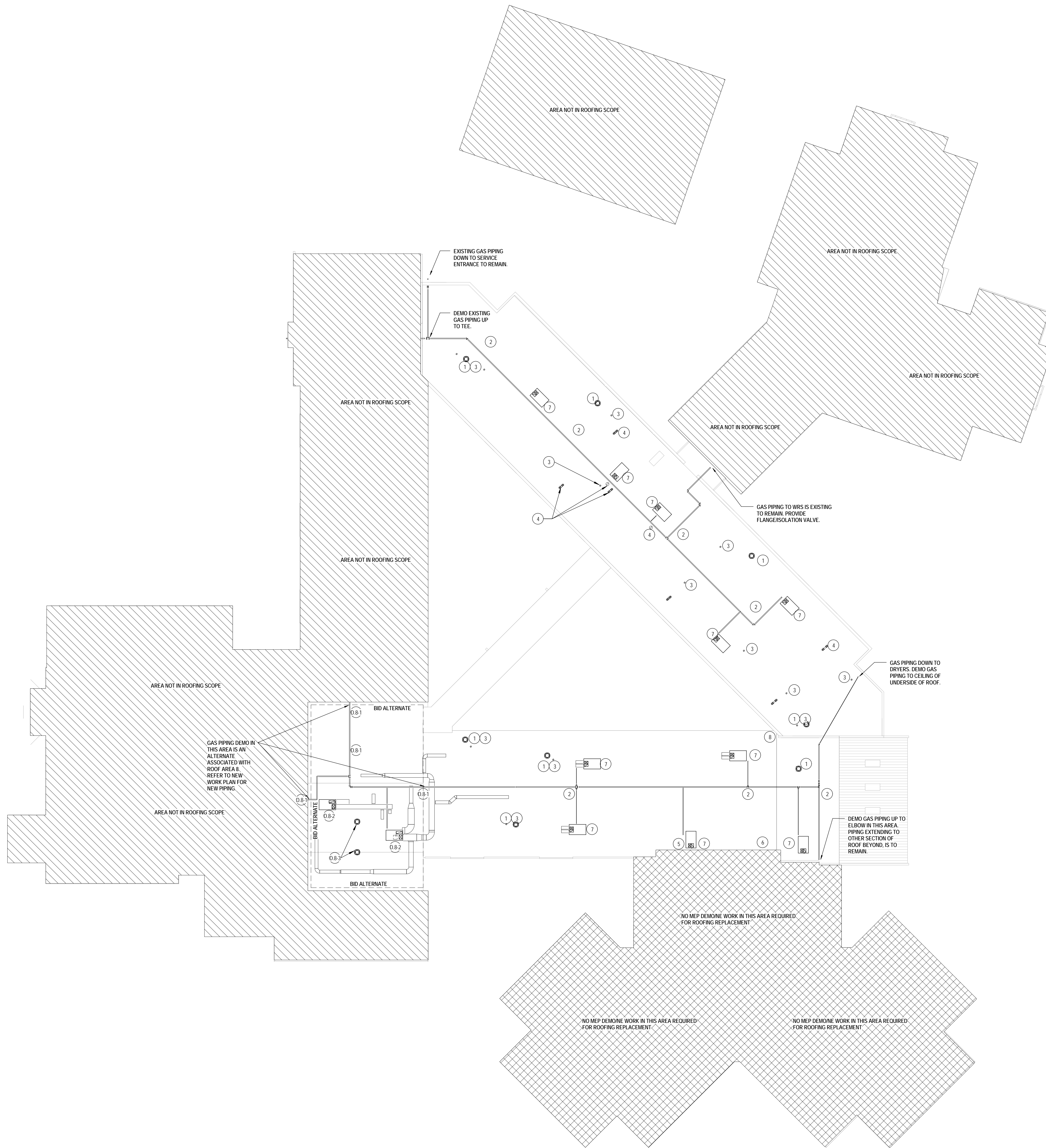


55 METAL COPING DETAIL
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56 METAL COPING DETAIL
SCALE: 1 1/2" = 1'-0"

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ROOF PLAN KEYED NOTES (10)

1. EXISTING EXHAUST FAN CURB TO BE DEMOLISHED IN ITS ENTIRETY. EXISTING ELECTRICAL FEEDER, CONDUIT, DISCONNECT, LOW VOLTAGE WIRING & CONDUIT, ETC. SHALL BE DEMOLISHED AS REQUIRED FOR NEW ROOF INSTALLATION. CONTRACTOR SHALL PROVIDE TEMPORARY PROTECTION OF OPENING DURING CONSTRUCTION. REFER TO NEW WORK PLAN AND DETAIL FOR NEW CURB REQUIREMENTS.
2. CONTRACTOR SHALL DEMOLISH EXISTING GAS PIPING, ANCHORS, SUPPORTS, CONNECTIONS TO RTUS, ETC PER THE EXTENTS SHOWN ON THIS SHEET. NEW GAS PIPING SHALL BE INSTALLED AT AN ELEVATION AS REQUIRED FOR HEIGHT OF NEW ROOF. REFER TO NEW WORK PLAN AND DETAILS FOR ADDITIONAL INFORMATION.
3. CONTRACTOR SHALL DEMO ALL EXISTING PLUMBING VENT OPENINGS IN ALL AREAS OF NEW ROOF. CONTRACTOR SHALL INSTALL NEW PLUMBING VENTS AS REQUIRED FOR HEIGHT OF NEW ROOF. REFER TO NEW WORK PLAN AND DETAILS FOR ADDITIONAL INFORMATION.
4. CONTRACTOR SHALL DEMO EXISTING COMBUSTION AIR AND VENT OPENINGS. REFER TO ARCHITECTURAL DETAILS FOR ROOF INFILL.
5. DEMO EXISTING SUPPLY DUCT OFF OF EXISTING RTU THAT PENETRATES THROUGH GYMNASIUM WALL. PREP EXISTING RTU FOR NEW DUCT CONNECTIONS PER NEW WORK DETAIL. REFER TO ARCHITECTURAL NEW WORK PLAN FOR WALL INFILL.
6. DEMO ABANDONED DUCT ON EXTERIOR OF GYMNASIUM WALL. REFER TO ARCHITECTURAL NEW WORK PLAN FOR WALL INFILL.
7. DEMOLISH EXISTING ROOF CURB, GAS CONNECTION, ELECTRICAL CONDUIT & CABLE, & CONTROLS CABLE AND CONDUIT IN PREPARATION FOR NEW ROOF CURB AND CONNECTIONS. FOR RTUS THAT HAVE HORIZONTAL DUCT TAKEOFFS LOCATED ON ROOF. CONTRACTOR SHALL MODIFY DUCT & DEMOLISH DUCT PENETRATION CURBS AS REQUIRED FOR NEW ROOF HEIGHT AND CONNECTION DETAILS. REFER TO NEW WORK PLAN AND DETAILS FOR ADDITIONAL INFORMATION.
8. DEMO EXISTING ROOF DRAIN & DRAIN BODY. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF INFILL DETAIL.

ROOF PLAN KEYED NOTES - BID ALTERNATE

- D-8.1 DEMO GAS PIPING IN THIS AREA AS INDICATED. REFER TO NEW WORK FOR ADDITIONAL INFO.
 D-8.2 DEMOLISH EXISTING ROOF CURB, GAS CONNECTION, ELECTRICAL CONDUIT & CABLE, & CONTROLS CABLE AND CONDUIT IN PREPARATION FOR NEW ROOF CURB AND CONNECTIONS.
 D-8.3 EXISTING EXHAUST FAN CURB TO BE DEMOLISHED IN ITS ENTIRETY. EXISTING ELECTRICAL FEEDER, CONDUIT, DISCONNECT, LOW VOLTAGE WIRING & CONDUIT, ETC. SHALL BE DEMOLISHED AS REQUIRED FOR NEW ROOF INSTALLATION. CONTRACTOR SHALL PROVIDE TEMPORARY PROTECTION OF OPENING DURING CONSTRUCTION. REFER TO NEW WORK PLAN AND DETAIL FOR NEW CURB REQUIREMENTS.

LEGEND NOTES

- LEGEND NOTES ARE COMMON TO ALL SHEETS. SOME NOTES MAY NOT APPLY TO THIS SHEET.
1. THIS SHEET CONTAINS SCOPE OF WORK FOR MULTIPLE TRADES, WHICH WILL REQUIRE CLOSE COORDINATION. IT IS THE RESPONSIBILITY OF EACH TRADE TO REVIEW THIS SHEET TO ENSURE A FULL UNDERSTANDING OF THE SCOPE ITEMS, AS WELL AS THE COORDINATION THAT WILL BE REQUIRED TO SUCCESSFULLY COMPLETE THIS PROJECT.
 2. NOT ALL EXISTING ROOF DRAINS, PLUMBING VENTS, AIR INTAKES & EXHAUSTS, ETC. ARE INDICATED ON THIS PLAN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SURVEY THE SITE & VERIFY EXISTING CONDITIONS. KEYED NOTES ON THIS SHEET ARE INTENDED TO APPLY TO ALL EXISTING ROOF ITEMS REQUIRED TO BE MODIFIED AS PART OF THIS ROOFING PROJECT WITHIN THE AREA OF NEW ROOFING WORK.

LEGEND NOTES

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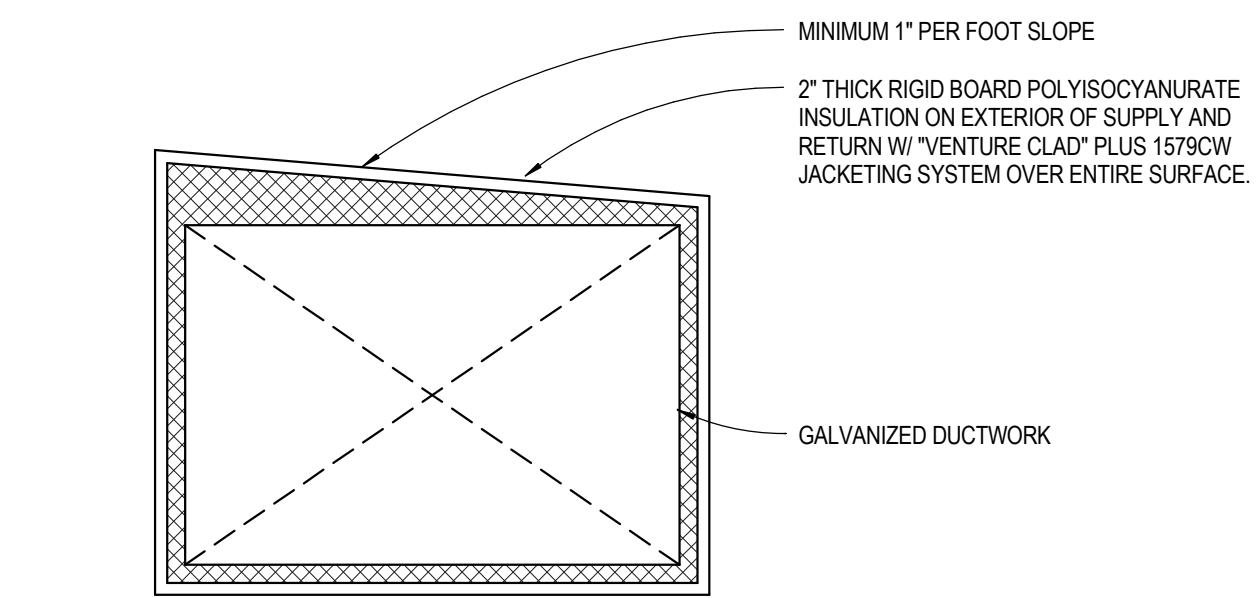
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ROOF PLAN KEYED NOTES (NO)

1. PROVIDE NEW EXHAUST FAN CURB, ELECTRICAL CONDUIT & WIRE, CONTROL CABLE & CONDUIT, ETC. AS REQUIRED FOR NEW ROOF HEIGHT. REFER TO DETAIL 31 ON A4.4.
2. PROVIDE NEW PLUMBING VENT CONNECTION AS REQUIRED FOR NEW ROOF HEIGHT. REFER TO DETAIL 13 ON A4.4 FOR ADDITIONAL INFORMATION.
3. PROVIDE NEW DUCT ENCLOSURE & CURB FOR HORIZONTAL DUCT CONNECTION THROUGH ROOF. CONTRACTOR TO MATCH EXISTING DUCT SIZE. REFER TO DETAIL 46 ON A4.4 & MECHANICAL DETAILS FOR DUCT INSULATION REQUIREMENTS.
4. FURNISH AND INSTALL NEW RTU CURB FOR EXISTING NEW RTU. PROVIDE NEW GAS, DUCT, ELECTRICAL & CONTROLS CONNECTIONS AS REQUIRED FOR NEW ROOF HEIGHT. CONTRACTOR IS RESPONSIBLE FOR LIFTING EXISTING UNITS & COORDINATING WITH OWNER REGARDING DOWNTIME. REFER TO DETAIL 15 ON A4.4.
5. MODIFY EXISTING VENT AND PROVIDE NEW ROOFING PER ARCHITECTURAL DETAILS.
6. NEW HORIZONTAL DUCTWORK CONNECTION THROUGH GYMNASIUM WALL. HEIGHT OF DUCTWORK SHALL BE COORDINATED WITH NEW ROOF ELEVATION, AND SHALL CONNECT TO EXISTING DUCTWORK INSIDE GYMNASIUM.
7. PROVIDE NEW GAS PIPING. COORDINATE INSTALLED ELEVATION WITH NEW ROOF HEIGHTS. GAS PIPING SHALL BE SCHED. 40, THREADED PIPE. PROVIDE 2 COATS WHITE PAINT ALL NEW GAS PIPING. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
8. DUCT DROPS THROUGH ROOF SHALL BE REPLACED WITH NEW DUCT PENETRATION CURB. NEW CURBS SHALL BE COORDINATED WITH NEW ROOF HEIGHT. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
9. REPLACE EXISTING PROVIDE NEW ROOF DRAIN IN THIS LOCATION. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
10. MOUNT NEW EXISTING UNIT ON STEEL STRUCTURE. SECURE PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE NEW GAS, DUCT, ELECTRICAL & CONTROLS CONNECTIONS AS REQUIRED FOR NEW ROOF HEIGHT. CONTRACTOR IS RESPONSIBLE FOR LIFTING EXISTING UNITS & COORDINATING WITH OWNER REGARDING DOWNTIME.

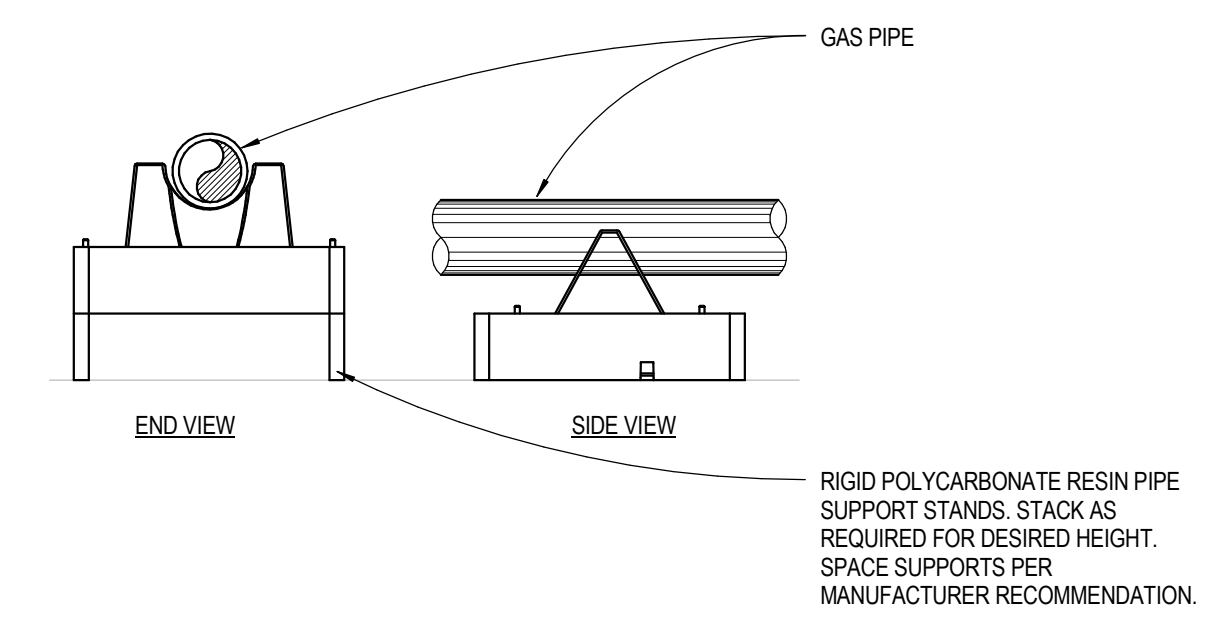
ROOF PLAN KEYED NOTES - BID ALTERNATE

- A1- DUCT DROPS THROUGH ROOF SHALL BE REPLACED WITH NEW DUCT PENETRATION CURB. NEW CURBS SHALL BE COORDINATED WITH NEW ROOF HEIGHT. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
- A2- FURNISH AND INSTALL NEW RTU CURB FOR EXISTING RTU. PROVIDE NEW GAS, DUCT, ELECTRICAL & CONTROLS CONNECTIONS AS REQUIRED FOR NEW ROOF HEIGHT. CONTRACTOR IS RESPONSIBLE FOR LIFTING EXISTING UNITS & COORDINATING WITH OWNER REGARDING DOWNTIME. REFER TO DETAIL 15 ON A4.4.
- A3- PROVIDE NEW GAS PIPING. COORDINATE INSTALLED ELEVATION WITH NEW ROOF HEIGHTS. GAS PIPING SHALL BE SCHED. 40, THREADED PIPE. PROVIDE 2 COATS WHITE PAINT ALL NEW GAS PIPING. REFER TO DETAILS FOR ADDITIONAL INFORMATION.

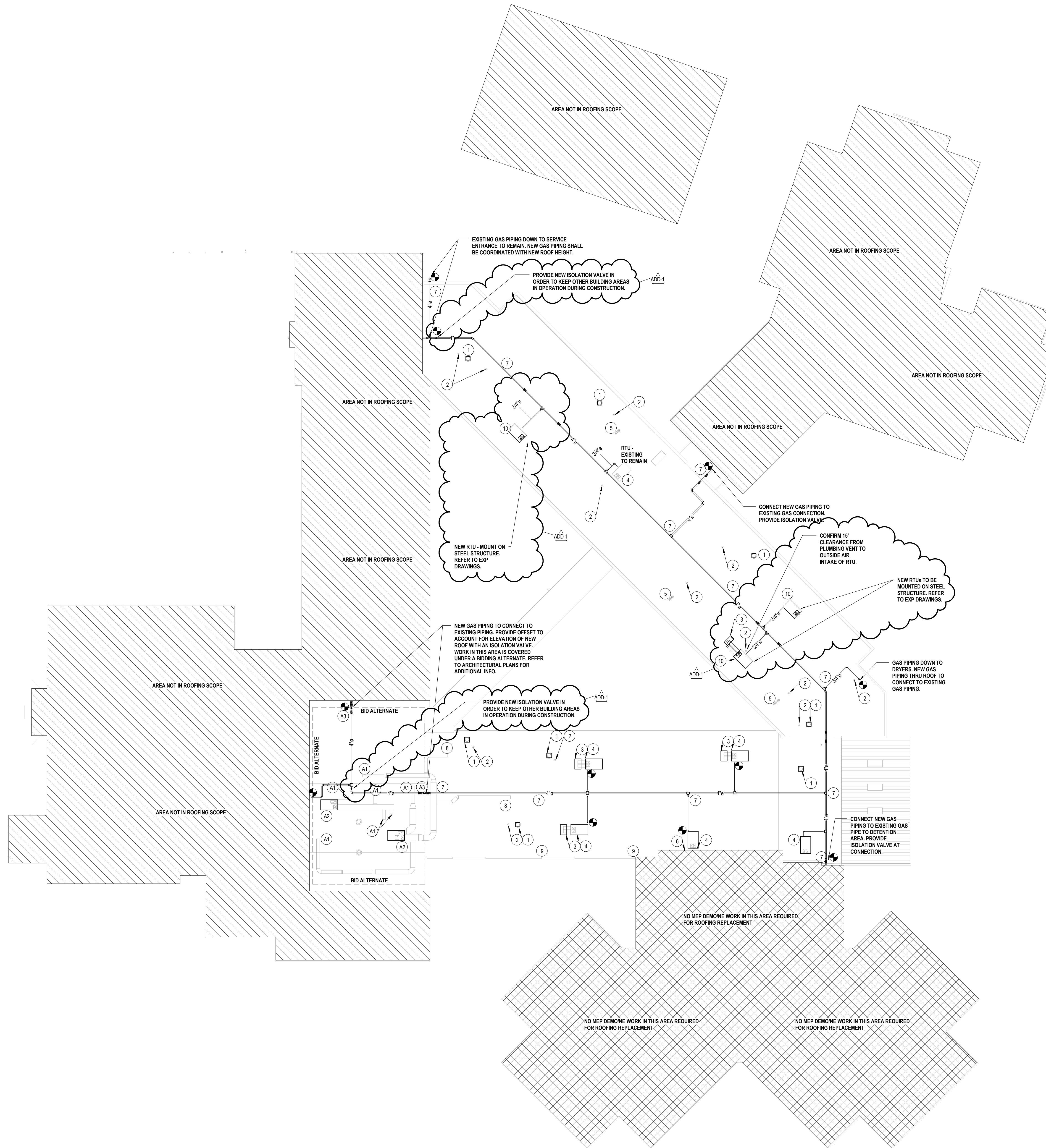


- NOTES:
1. ATTACH INSULATION TO DUCTWORK WITH SUITABLE ADHESIVE.
 2. ATTACH EXTERIOR JACKET TO INSULATION WITH SUITABLE ADHESIVE.
 3. TAPE LONGITUDINAL JOINTS CONTINUOUSLY.
 4. TAPE PERPENDICULAR JOINTS AT SEAMS.
 5. PROVIDE SMOOCH STANDARD DUCT SUPPORTS ON ROOF / VERTICAL WALL / OR GROUND SLAB (AREA WELL).

3 OUTDOOR DUCTWORK INSULATION
RP-1.0 NO SCALE



2 ROOF GAS PIPING SUPPORT - 6"Ø OR LESS
RP-1.0 NO SCALE



1 MEP NEW WORK PLAN - ROOF LEVEL
RP-1.0 SCALE: 1/16" = 1'-0"

ISSUED FOR BID