



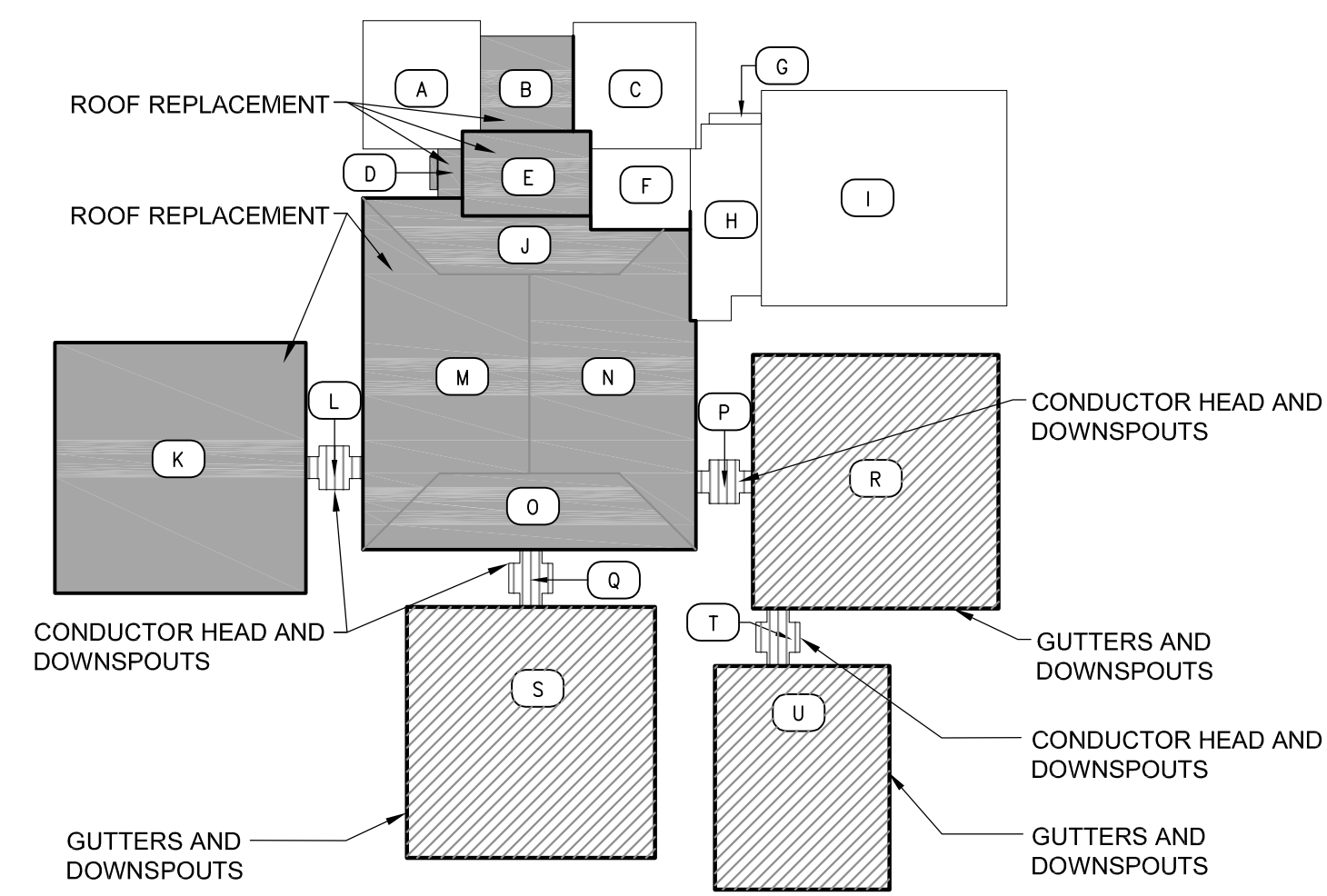
2020 ROOF IMPROVEMENTS BOWMAN WOODS ELEMENTARY LINN-MAR COMMUNITY SCHOOL DISTRICT

ARCHITECT

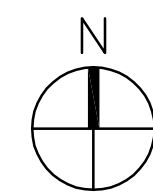
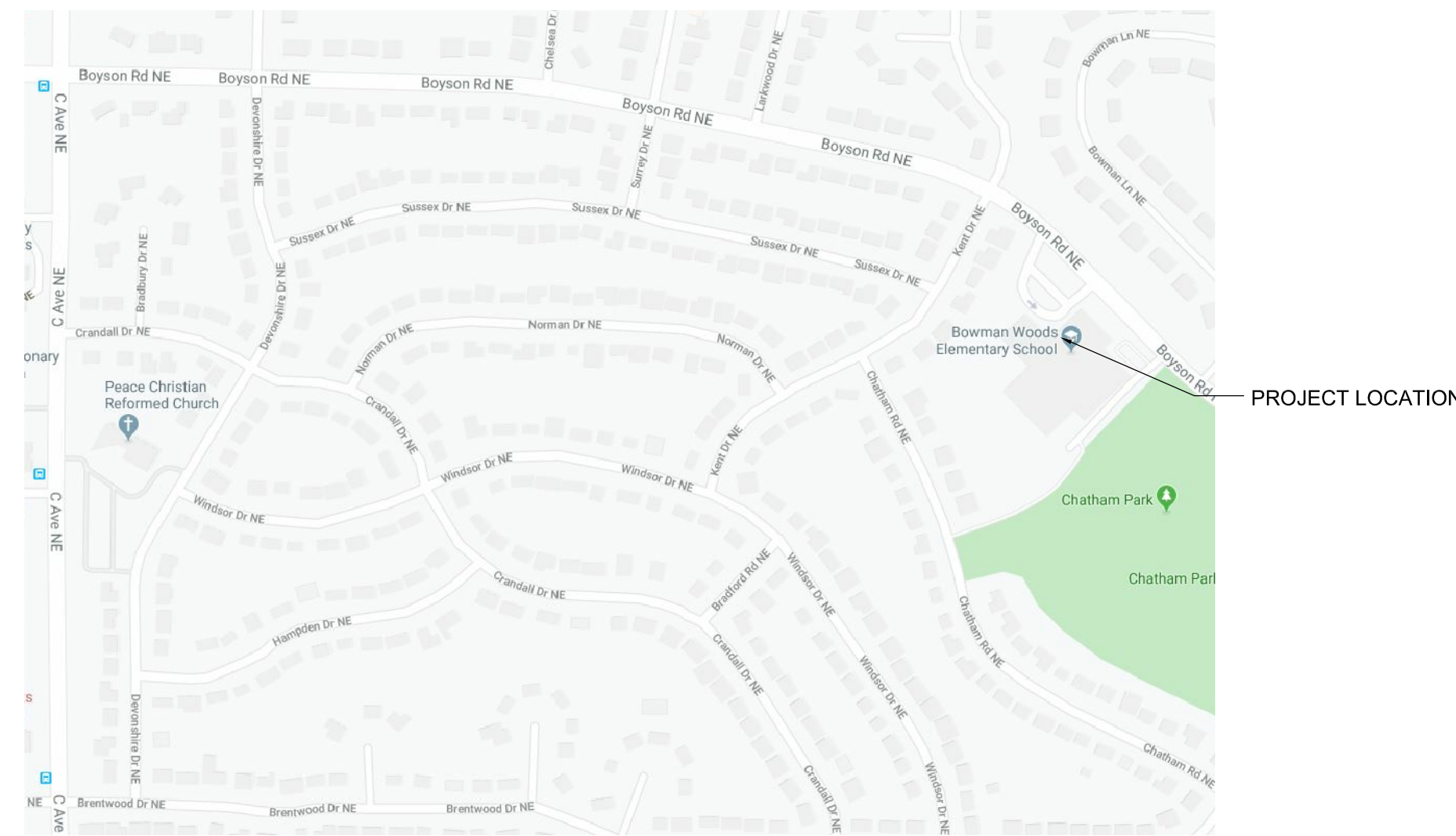
I HEREBY CERTIFY THAT THE PORTION OF THIS TECHNICAL SUBMISSION DESCRIBED BELOW WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND RESPONSIBLE CHARGE. I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF IOWA.	
NATALIE A. OPPEDAL Printed or typed name	
Signature	1/22/20 Date
6/30/2021 Registration expires	2/6/2017 Date issued
PAGES, SHEETS OR DIVISIONS COVERED BY THIS SEAL: ALL	

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Illinois Firm Number: 194-00214

KEY PLAN



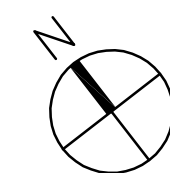
PROJECT LOCATION



SHEET INDEX

G0.01	COVER SHEET
A1.01	ROOF PLAN BOWMAN WOODS
A5.01	DETAILS
A5.02	DETAILS

STAGING



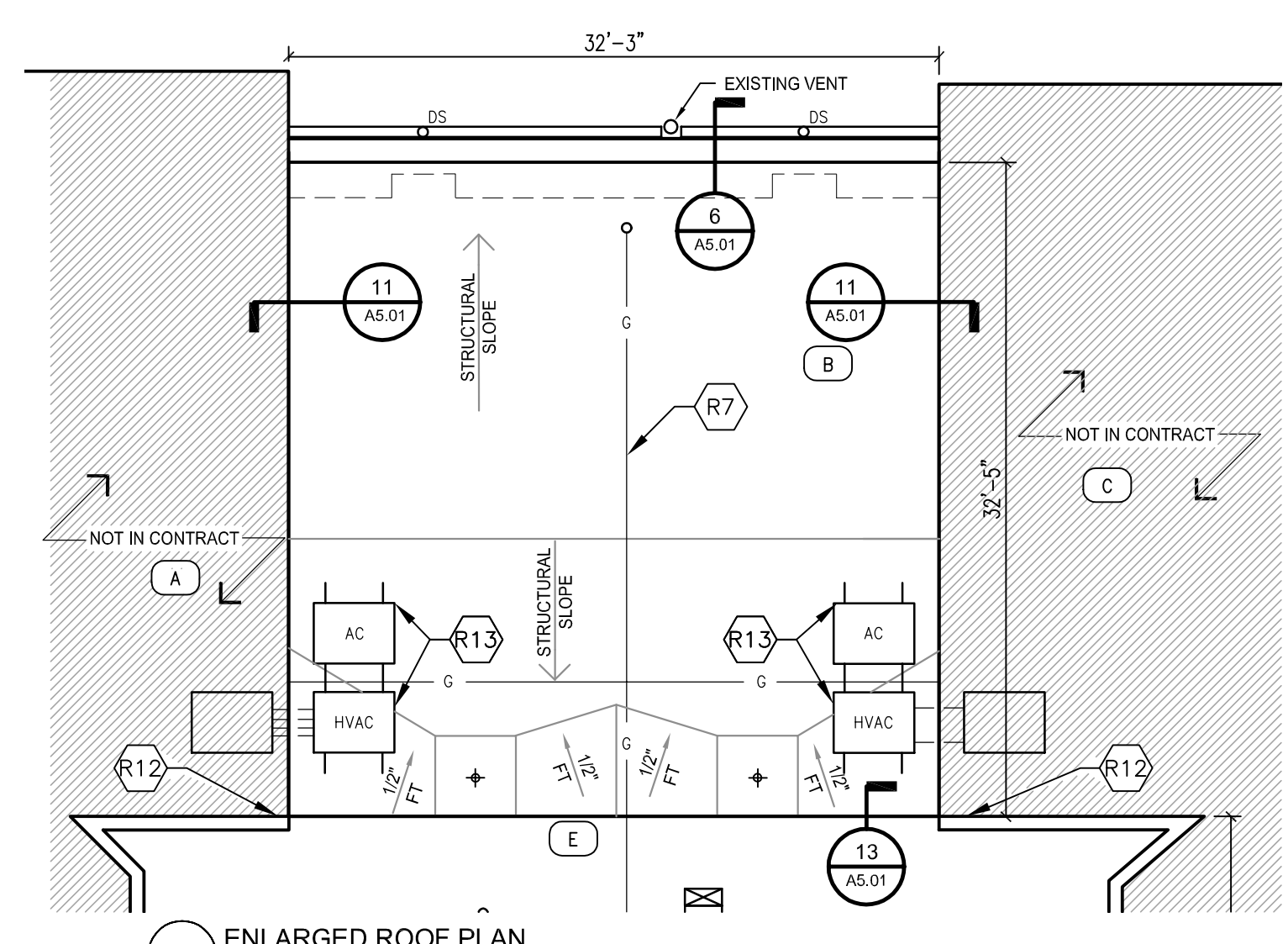
- NOTE:
- GROUND STAGING AND TRAFFIC OVER ANY AND ALL GRASS AND LAWN AREAS WILL REQUIRE NEW SOD TO BE INSTALLED AFTER FINAL COMPLETION OF THE ROOF AND PRIOR TO RELEASE OF RETENTION PAYMENT.
 - ANY DAMAGE TO SIDEWALK(S) WILL REQUIRE DEMOLITION AND REPLACEMENT TO MATCH EXISTING. DEMOLITION TO CONTINUE PAST DAMAGED AREA TO NEXT CONSTRUCTION JOINT OF SIDEWALK.
 - THE VERIFICATION OF EXISTENCE OF, AND THE DETERMINATION OF THE EXACT LOCATION OF, UTILITY MAINS, STRUCTURES AND SERVICE CONNECTIONS SHALL BE THE RESPONSIBILITY OF THE CONSTRUCTION CONTRACTOR(S).

2020 ROOF IMPROVEMENTS
BOWMAN WOODS ELEMENTARY

LINN-MAR COMMUNITY SCHOOL DISTRICT
2999 NORTH TENTH STREET
MARION, IOWA 52602

01/27/2020
BID
PROJECT NO: 2192710
CLIENT NO:

G1.01



2 ENLARGED ROOF PLAN
1/8" = 1'-0"

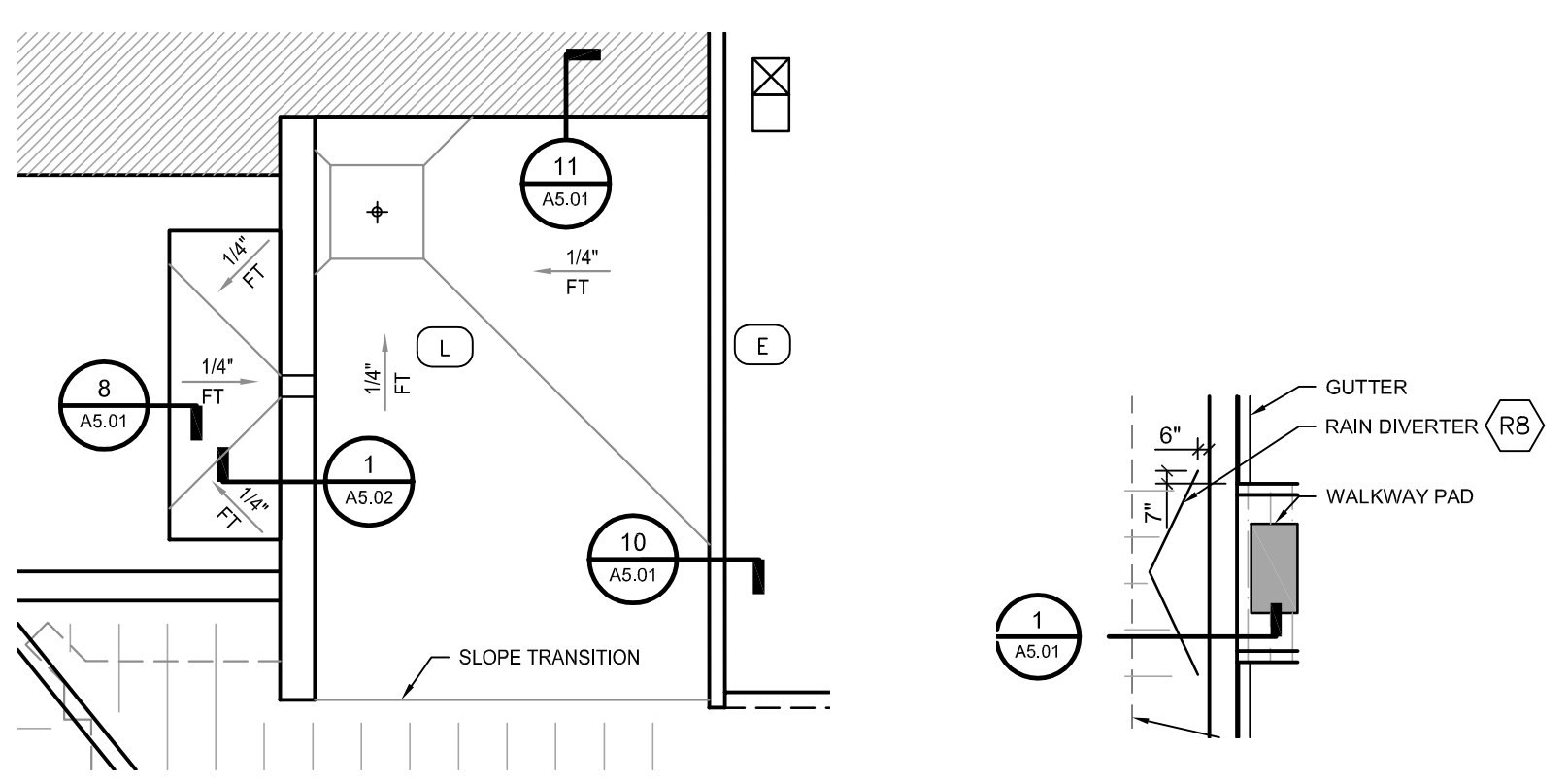


SEE DETAIL 4 SHEET A5.02

4 REFERENCE PHOTO - WALL VENT
NOT TO SCALE

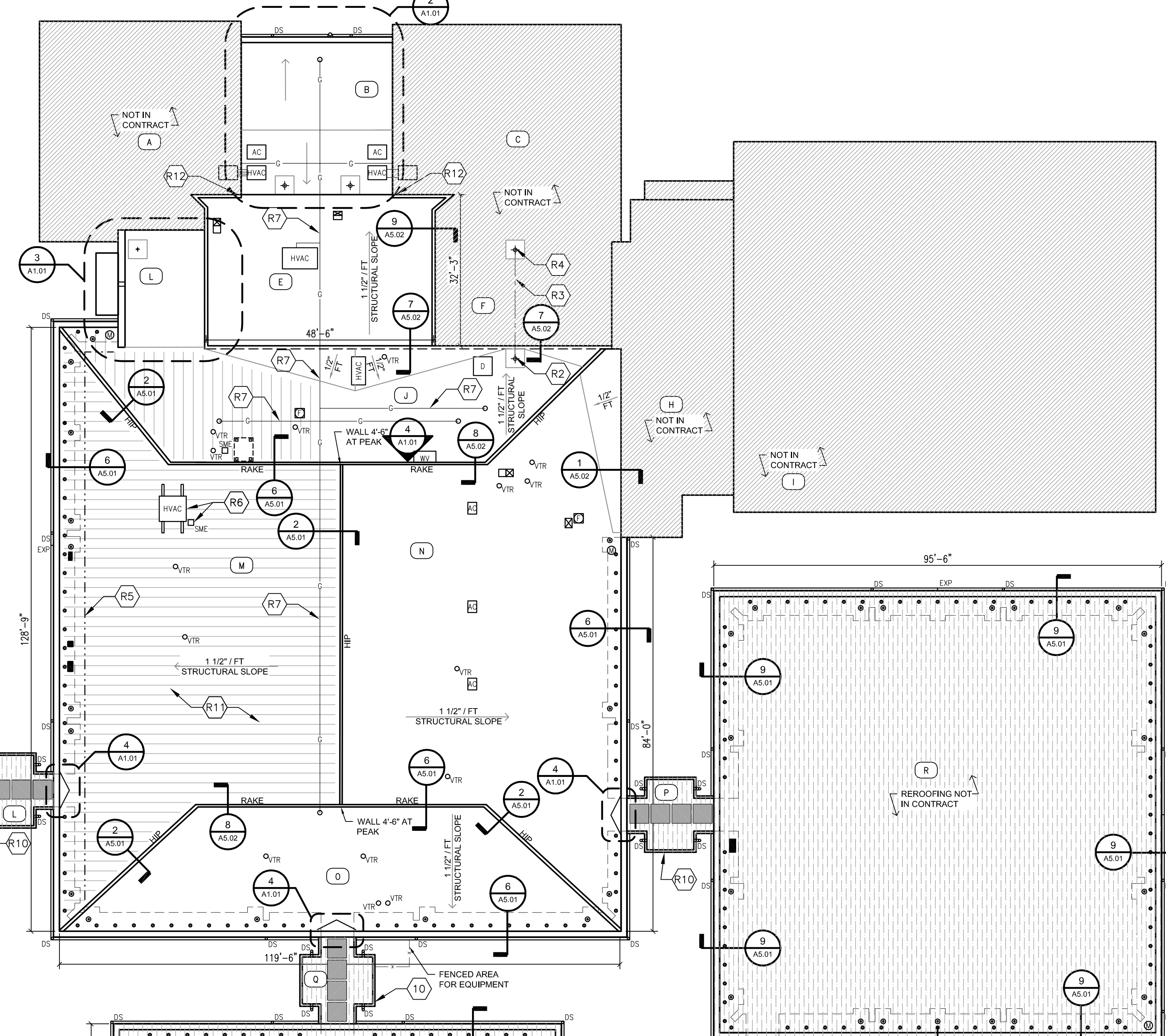


5 REFERENCE PHOTO - ROOF FLASHING
NOT TO SCALE



3 ENLARGED ROOF PLAN
1/8" = 1'-0"

4 RAIN DIVERTER
1/8" = 1'-0"



1 ROOF PLAN
1/16" = 1'-0"

KEY NOTES

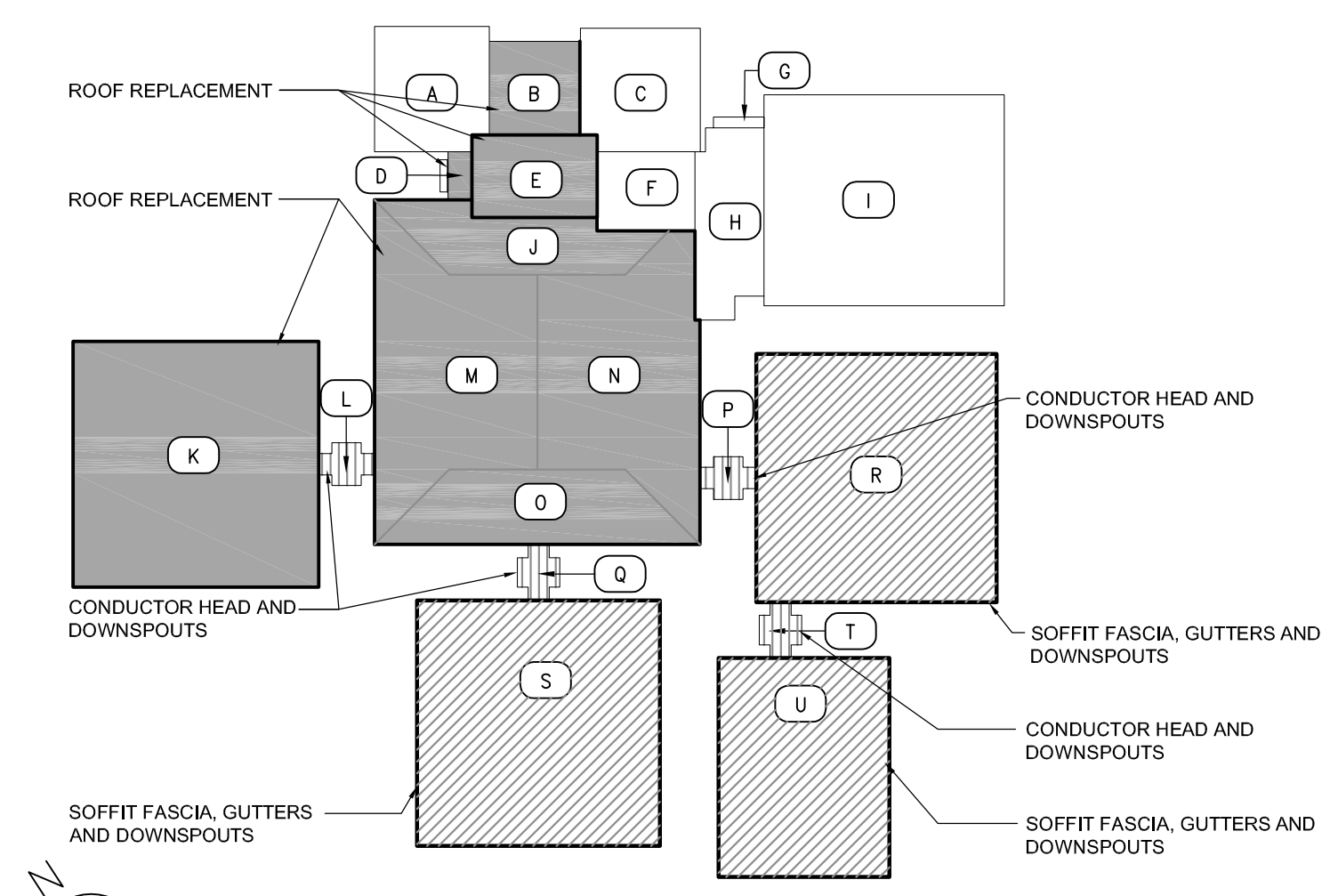
- (R1) AT EXISTING CAP PROVIDE NEW TAPERED INSULATION 1/4" FT MECHANICALLY FASTENED TO EXISTING STRUCTURE. ADHERE COVER BOARD AND PVC ROOFING.
- (R2) PROVIDE AND INSTALL NEW 4" ROOF DRAIN AND NO HUB CONNECTION.
- (R3) TIE-IN DRAIN TO EXISTING ROOF DRAIN PIPING INDICATED. INSULATE ALL PIPE AND DRAIN CONNECTIONS.
- (R4) LOCATION OF EXISTING ROOF DRAIN.
- (R5) PROVIDE SNOW GUARD, ALPINE SNOW GUARD, SNOW MAX-MEMBRANE WITH WHITE INSERT AND MILL FINISH ALUMINUM. INSTALL PER ROOFING MANUFACTURER'S RECOMMENDED STANDARD.
- (R6) REMOVE EXISTING OBSOLETE HVAC UNIT. RELATED SLEEPERS AND SHEET METAL ENCLOSURE. PROVIDE 3/16" STEEL PLATE FOR DECK REPAIR. INSTALL 6" BEYOND SUPPORT SCREW INTO TRUSSES 12" O.C.
- (R7) PROVIDE DISCHARGE OF EXISTING GAS PIPING. DISCONNECT AND RISE GAS PIPING TO A MINIMUM OF 6" ABOVE FINISHED ROOF SURFACE. RECONNECT, RECHARGE AND TEST GAS PIPING. CLEAN PRIME AND PAINT GAS PIPING SAFETY YELLOW. PROVIDE NEW PIPE SUPPORT STANDS 10' O.C.
- (R8) INSTALL HEAT WELDED DECORATIVE RIB PVC RAIN DIVERSERS ABOVE BREEZEWAY CONNECTOR ROOF.
- (R9) OWNER TO PROVIDE AND INSTALL ROCK BASINS ON GRADE AT DOWNSPOUT OUTLET LOCATIONS WHERE PAVEMENT DOES NOT EXIST.
- (R10) BREEZEWAY ROOFS L, P AND Q ARE UNDER WARRANTY. SNA-SARAWAPIL 15-YEAR WARRANTY EXPIRES OCTOBER 27, 2025.
- (R11) PROVIDE AND INSTALL PVC DECORATIVE RIBS. SEE SPECIFICATIONS.
- (R12) REMOVE EXISTING STANDING SEAM PANELS AND BATTENS IN AREAS INDICATED. CONSTRUCT STANDING SEAM TIE-IN FLASHING FROM PVC COATED METAL AND STRIP IN FLASHING UTILIZING EXISTING BATTENS. SEE REFERENCE PHOTO SHEET A1.01.
- (R13) CONSTRUCT NEW SLEEPER FOR EXISTING ROOF TOP UNITS. SEE DETAIL 16 SHEET A5.01.
- (R14) REMOVE OBSOLETE UNIT. PROVIDE 1/8" STEEL PLATE FOR DECK REPAIR. INSTALL 6" BEYOND SUPPORT SCREW INTO TRUSSES 12" O.C.
- (R15) REMOVE AND RESET ALL SOFFIT-MOUNTED LIGHT BEZELS. WATERPROOF ALL SOFFIT PENETRATIONS AND EXPOSED EDGES AS REQUIRED.

GENERAL NOTES

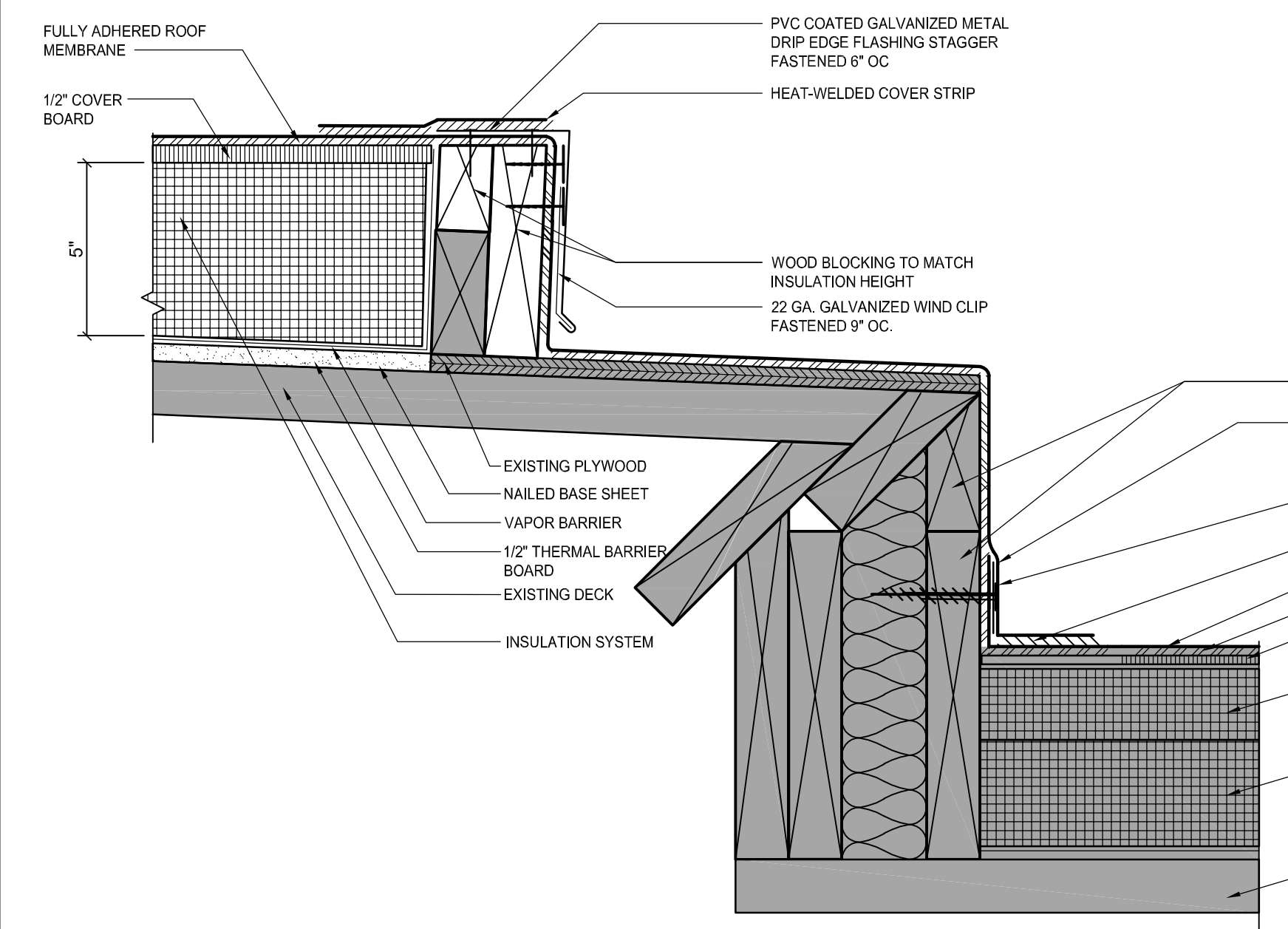
1. ROOF PLAN LAYOUT, LOCATION AND SECTIONS WERE TAKEN FROM EXISTING BUILDING PLANS AND FIELD CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CORRE THE ROOF. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS OF THE EXISTING ROOF SYSTEM INCLUDING INSULATION TYPE AND THICKNESS. FAILURE TO VERIFY CONDITIONS WILL BE AT THE CONTRACTOR'S OWN RISK.
2. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL UTILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.
3. NEW ROOFING ASSEMBLY CONSISTS OF:
 ROOF LEVELS J, K, M, N, O FULL-ADHERED PVC 1/2" COVER BOARD
 FULL-ADHERED PVC 1/2" COVER BOARD
 2 LAYERS 2.5" POLYISOCYANURATE TAPERED INSULATION SYSTEM VAPOR BARRIER
 1/2" THERMAL BARRIER BOARD 1/2" THERMAL BARRIER BOARD EXISTING WOOD DECK
 EXISTING WOOD DECK
4. REMOVE EXISTING SHEET METAL, UNLESS NOTED OTHERWISE AND REPLACE WITH NEW AS PER PLAN SHOW. ALL PERIMETER WOOD BLOCKING SHALL BE OF UNIFORM HEIGHT AND OF A MINIMUM HEIGHT TO MATCH THE THICKNESS OF THE NEW INSULATION SYSTEM. THE CONTRACTOR SHALL VERIFY HEIGHT OF ALL WOOD BLOCKING.
5. ARROWS ON THE PLAN INDICATE DIRECTION OF DRAINAGE FOR TAPERED INSULATION SYSTEM. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS OF BUILDING AND DRAIN LOCATIONS BEFORE ORDERING TAPERED INSULATION MATERIALS. SUBMIT TAPERED INSULATION LAYOUT PLAN. SEE SPECIFICATION SYSTEM DESCRIPTION.
6. ALL EXISTING METAL, WOODS, VENTS, CAPS, ETC. REMOVED AND REINSTALLED DURING CONSTRUCTION SHALL BE PROPERLY REFASTENED TO PROVIDE WATER TIGHT CONDITIONS.
7. RAISE ALL CURBS AND VENTS WHICH DO NOT MEET THE #1 MINIMUM FLASHING HEIGHT REQUIREMENT. INSTALL TAPERED CRICKET ON UP-SLOPE SIDE OF CURBS 24" OR MORE WIDE. CRICKETS SHALL HAVE A 1/2" PER FOOT MINIMUM FINISHED SLOPE AWAY FROM CURBS AND WALLS DIRECTING WATER TO THE CURBS SIDES.
8. FLASH ALL DRAINS, CURBS, VENTS, AND STACKS AS SHOWN IN PLANS. REFER TO MANUFACTURER'S STANDARD DETAILS AND RECOMMENDATIONS FOR ANY MISCELLANEOUS DETAILS NOT SHOWN IN THE PLANS.
9. USE OF MANUFACTURER-APPROVED PENETRATION POCKET WILL NOT BE PERMITTED UNLESS APPROVAL IS OBTAINED IN WRITING FROM SHIVE-HATTERY, INC. PRIOR TO INSTALLATION.
10. PROVIDE DISCONNECT AND RECONNECT OF MECHANICAL AND ELECTRICAL EQUIPMENT AS REQUIRED TO ACCOMMODATE INSTALLATION OF NEW ROOF SYSTEM AND INCREASE IN HEIGHT OF CURB. VERIFY EQUIPMENT IS OPERATIONAL WHEN WORK IS COMPLETE. COORDINATE THIS WORK WITH THE OWNER.
11. CONTRACTOR TO REVIEW AND LOCATE THROUGH SOFFIT PENETRATIONS. SOFFIT TO BE INSTALLED WITHOUT DISTURBING EXISTING CONNECTIONS WHERE POSSIBLE.
12. ALL PERIMETER WOOD BLOCKING SHALL BE OF UNIFORM HEIGHT AND OF A MINIMUM HEIGHT TO MATCH THE MAXIMUM THICKNESS OF THE NEW INSULATION SYSTEM. THE CONTRACTOR SHALL VERIFY HEIGHT OF ALL WOOD BLOCKING. CONTRACTOR SHALL FASTEN UNSECURED EXISTING WOOD BLOCKING AND NEW WOOD BLOCKING ACCORDING TO THE FOLLOWING REQUIREMENTS:
 WOOD TO WOOD CONNECTIONS SHALL BE FASTENED WITH #12-16x7" SENTRY PLUS FIVE TRUSS HEAD FASTENERS BY TTC (OR APPROVED EQUIVALENT) 2 ROWS STAGGERED 24" OC AND AT 12" OC WITH 8'-0" OF OUTSIDE CORNERS. FASTENER MUST MEET MINIMUM OF 100# PULL-OUT VALUE.
 WOOD TO MASONRY CONNECTIONS SHALL BE FASTENED WITH 1/4"x4" TRIMBLE TAPCON BY TTC (OR APPROVED EQUIVALENT), AT 24" OC MAX AND 12" OC WITHIN 8'-0" OF OUTSIDE CORNERS.
 WOOD TO STEEL CONNECTIONS SHALL BE FASTENED WITH 1/4" x4x4" BLAZER SELF DRILLING FASTENER BY TTC (OR APPROVED EQUIVALENT), AT 4'-0" OC MAX AND AT 2'-0" OC WITHIN 8'-0" OF OUTSIDE CORNERS.
 WOOD TO PLATE STEEL CONNECTIONS SHALL BE FASTENED WITH 1/2" HOT DIPPED GALVANIZED THRU BOLTS AT 4'-0" OC MAX AND AT 2'-0" OC WITHIN 8'-0" OF OUTSIDE CORNERS.

LEGEND

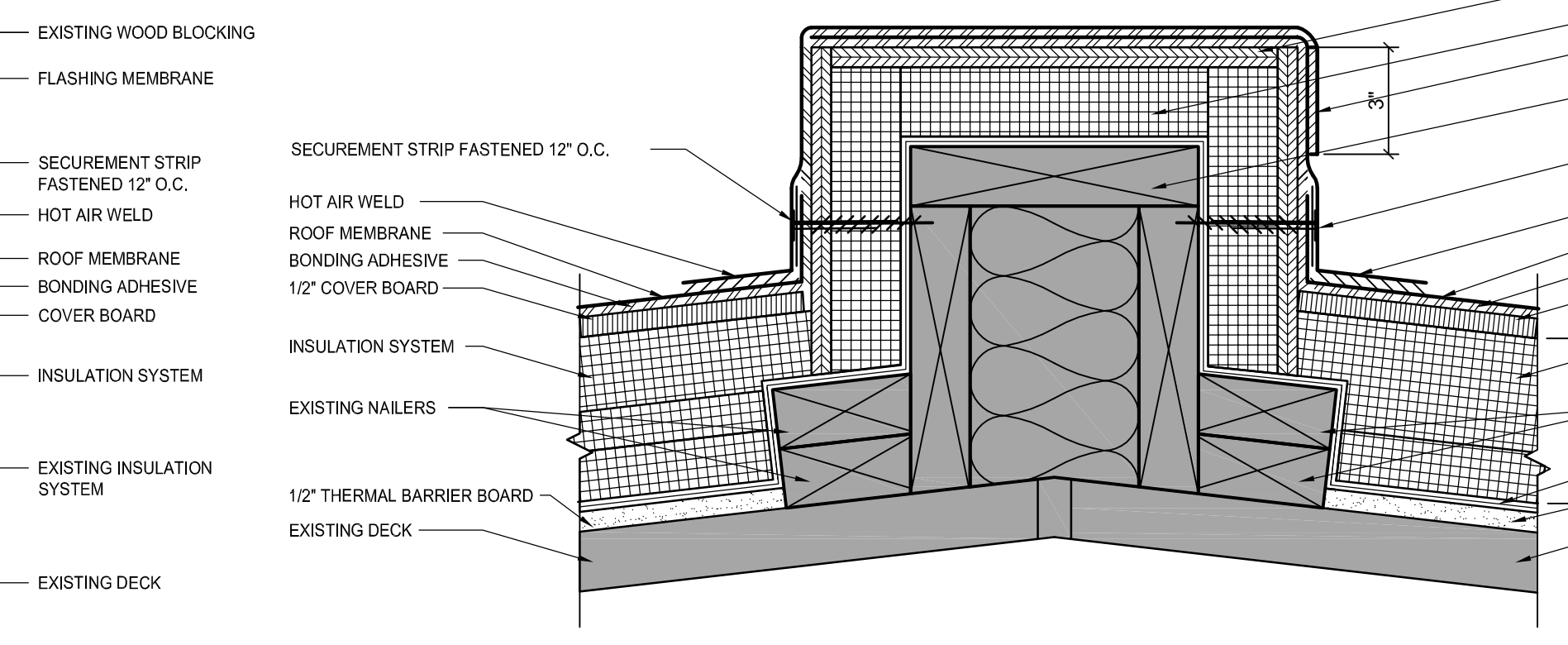
ROOFING			
PLAN MARK	DESCRIPTION	REFERENCE	REMARKS
⊗	OBSOLETE UNIT	(R14)	REMOVE CURB AND INFILL DECK
AC	AC UNIT ON EQUIPMENT SUPPORTS	DETAIL 16 SHEET A5.01	
⊗	DUCT GOOSENECK (SQUARE)	DETAIL 3 SHEET A5.01	
⊙	EXHAUST FAN	DETAIL 3 SHEET A5.01	
HVAC	MECHANICAL UNIT	DETAIL 3 SHEET A5.01	
⊠	MECHANICAL UNIT SUPPORT FRAME	N/A	REUSE EXISTING SUPPORT FRAME
—	ROOF EDGE OR WALL	SEE PLAN	
—	PARAPET WALL	SEE PLAN	
---	OVERHANG	N/A	
—	GAS PIPING	DETAIL 5 SHEET A5.01	
+	ROOF DRAIN	DETAIL 12 SHEET A5.01	
—	SCUPPER	DETAIL 2 SHEET A5.02	
DS	DOWNSPOUT	DETAIL 6 SHEET A5.02	
—	GUTTER AND ROOF EDGE	SEE PLAN	
SME	SHEET METAL ENCLOSURE	DETAIL 14 SHEET A5.01	
⊙	VENT THROUGH ROOF	DETAIL 4 SHEET A5.01	
1/4" FT	TAPERED INSULATION SLOPE	N/A	
A	ROOF LEVEL DESIGNATION	N/A	
—	WALKWAY PAD	N/A	
EVD	GUTTER EXPANSION JOINT	DETAIL 5 SHEET A5.02	
DS	SCUPPER WITH CONDUCTOR HEAD AND DOWNSPOUT	DETAIL 3 SHEET A5.02	(R9)
WV	WALL VENT	DETAIL 4 SHEET A5.02	
---	EXISTING FENCE	N/A	
●	SOFFIT VENT	(R15)	
⊙	SOFFIT LIGHTS	(R15)	
M	MOTION DETECTOR UNDER SOFFIT	(R15)	



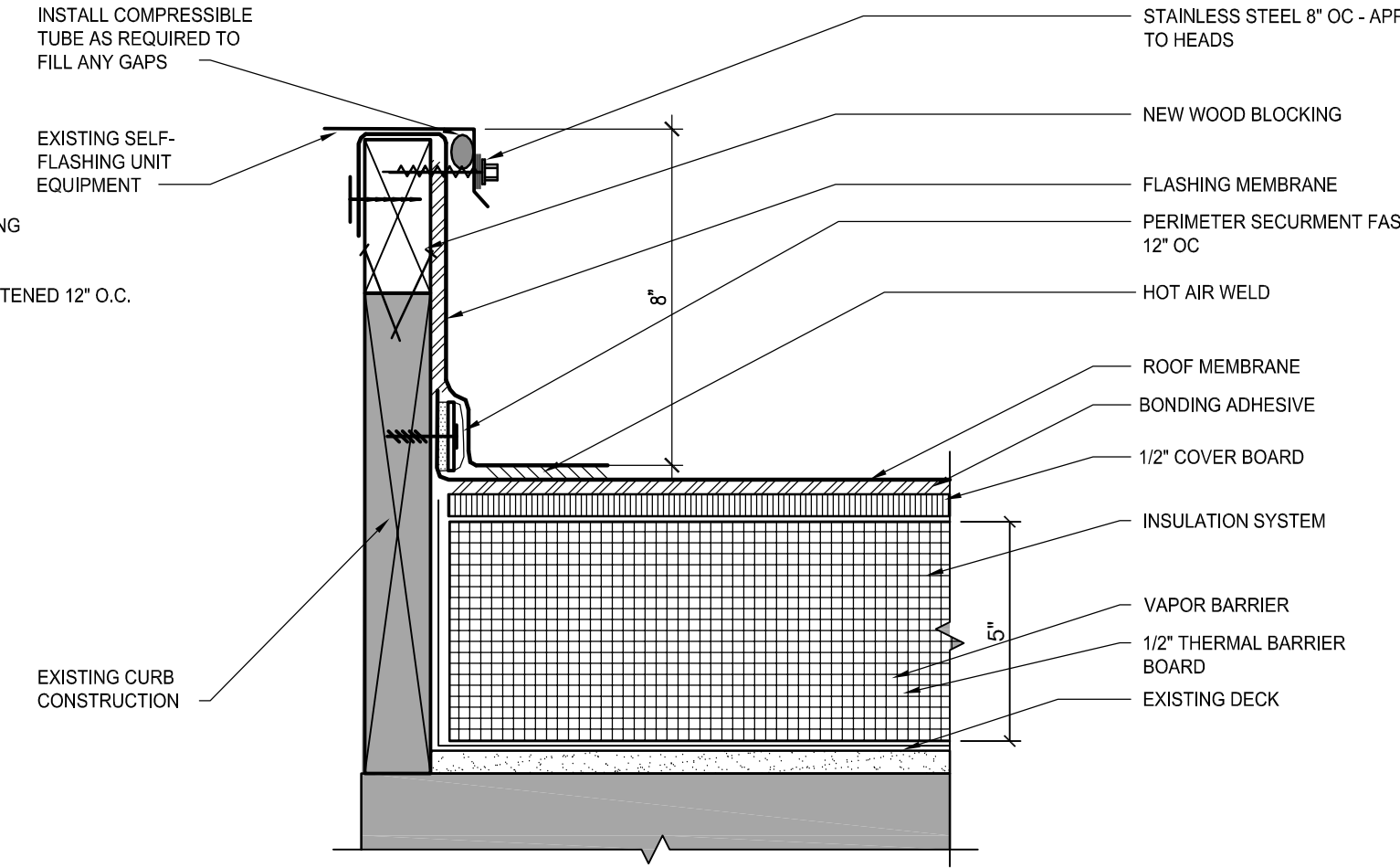
KEY PLAN
NOT TO SCALE



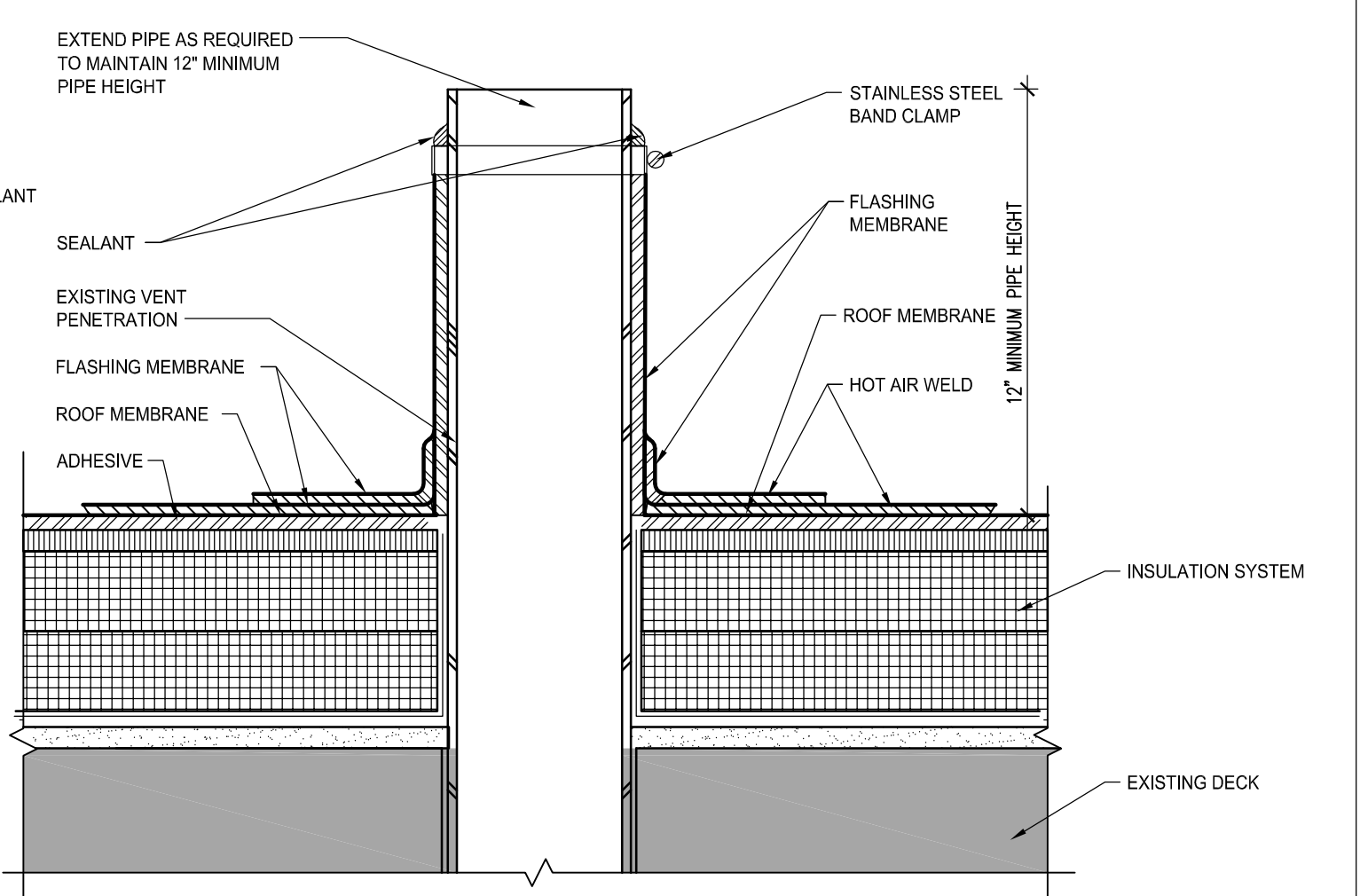
1 ROOF TRANSITION
3" x 1'-0"



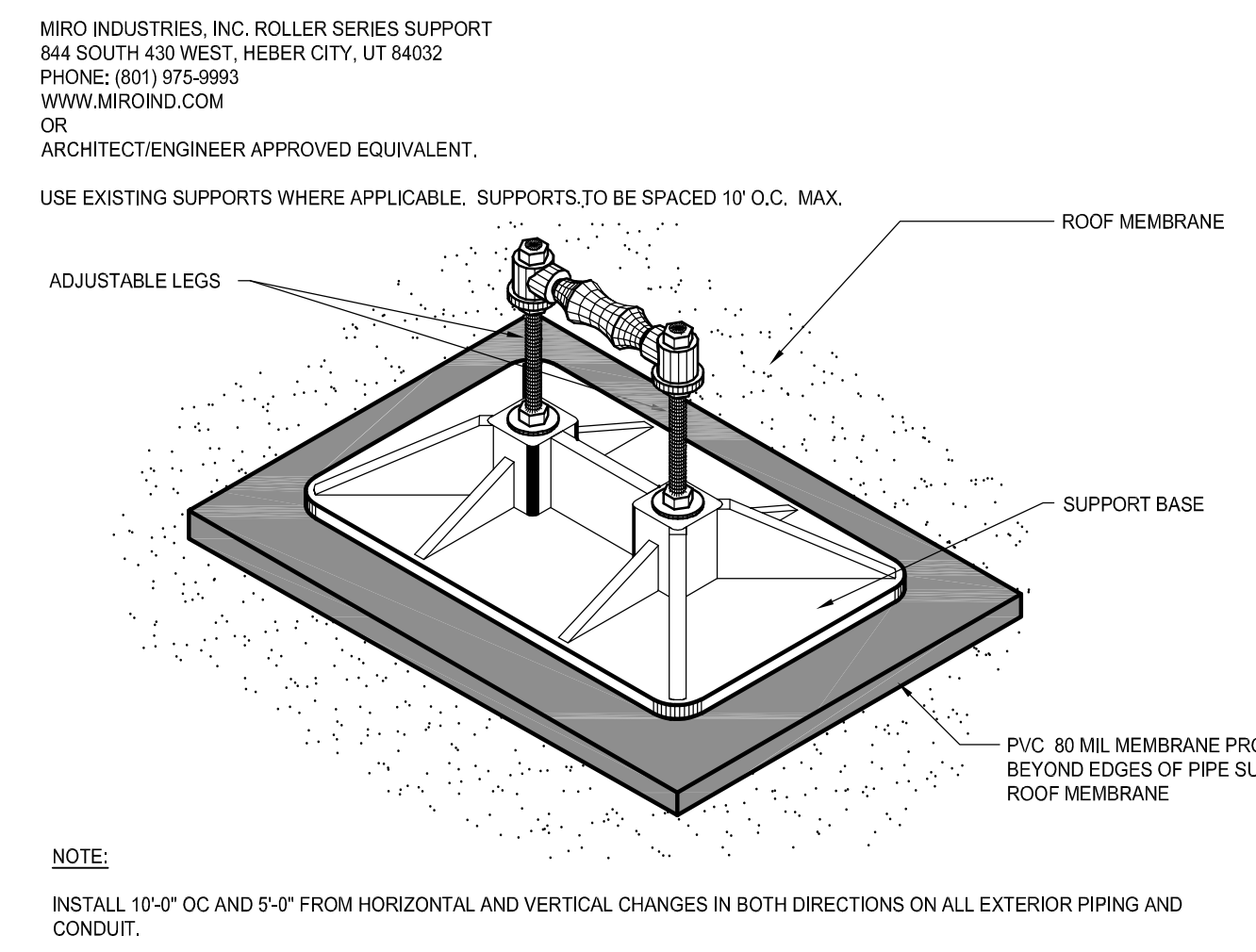
2 HIP RIDGE DETAIL
3" x 1'-0"



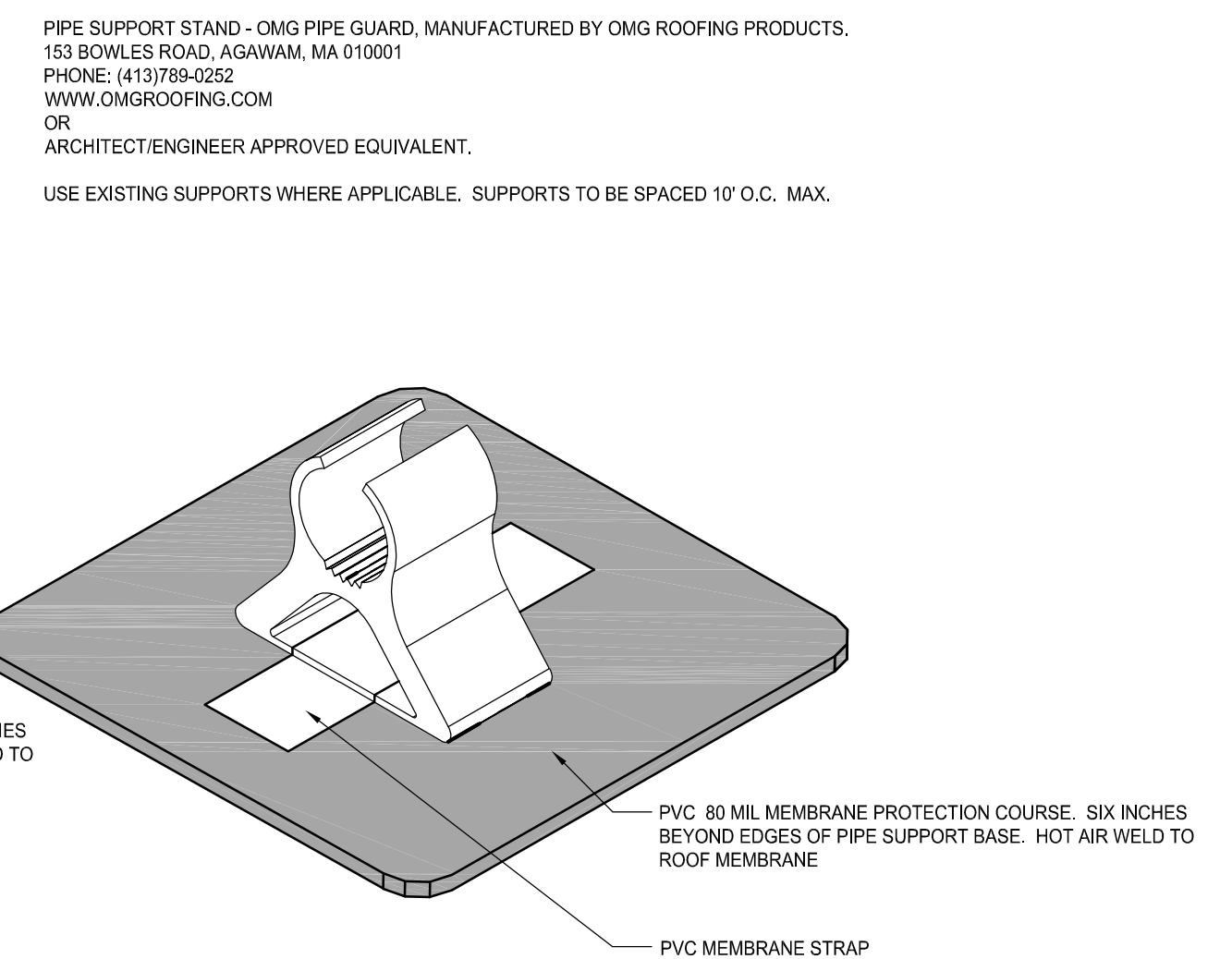
3 CURB DETAIL
3" x 1'-0"



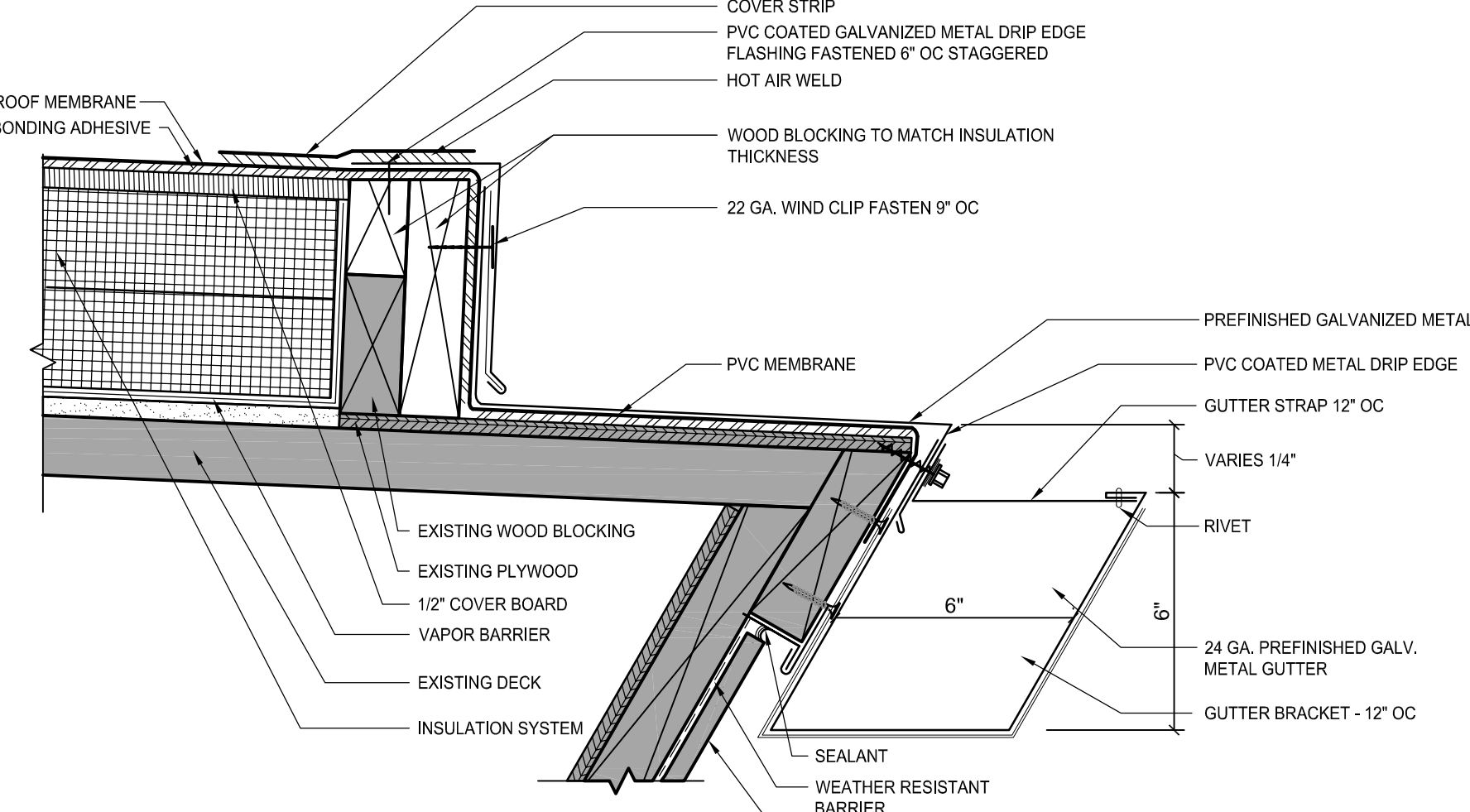
4 VENT FLASHING
3" x 1'-0"



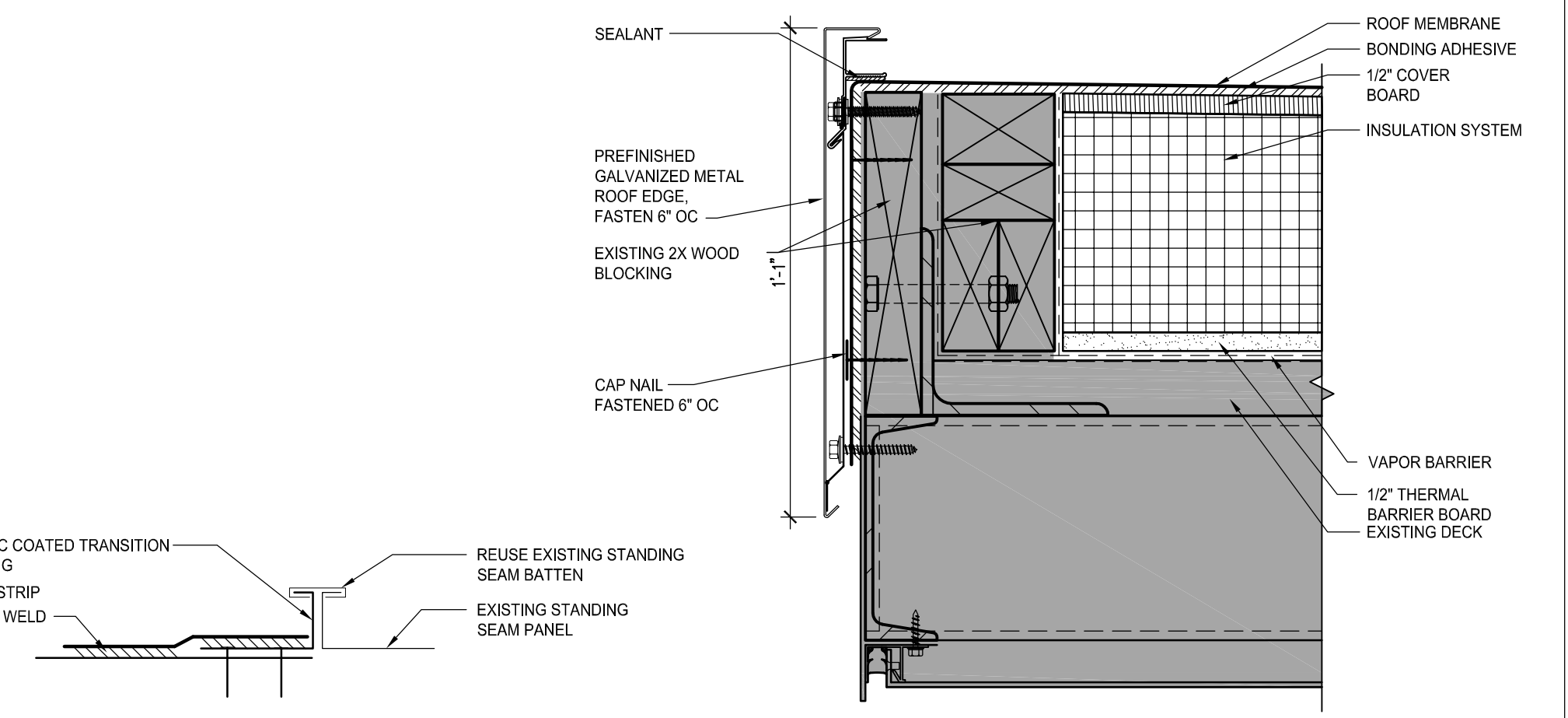
5 PIPE SUPPORT
3" x 1'-0"



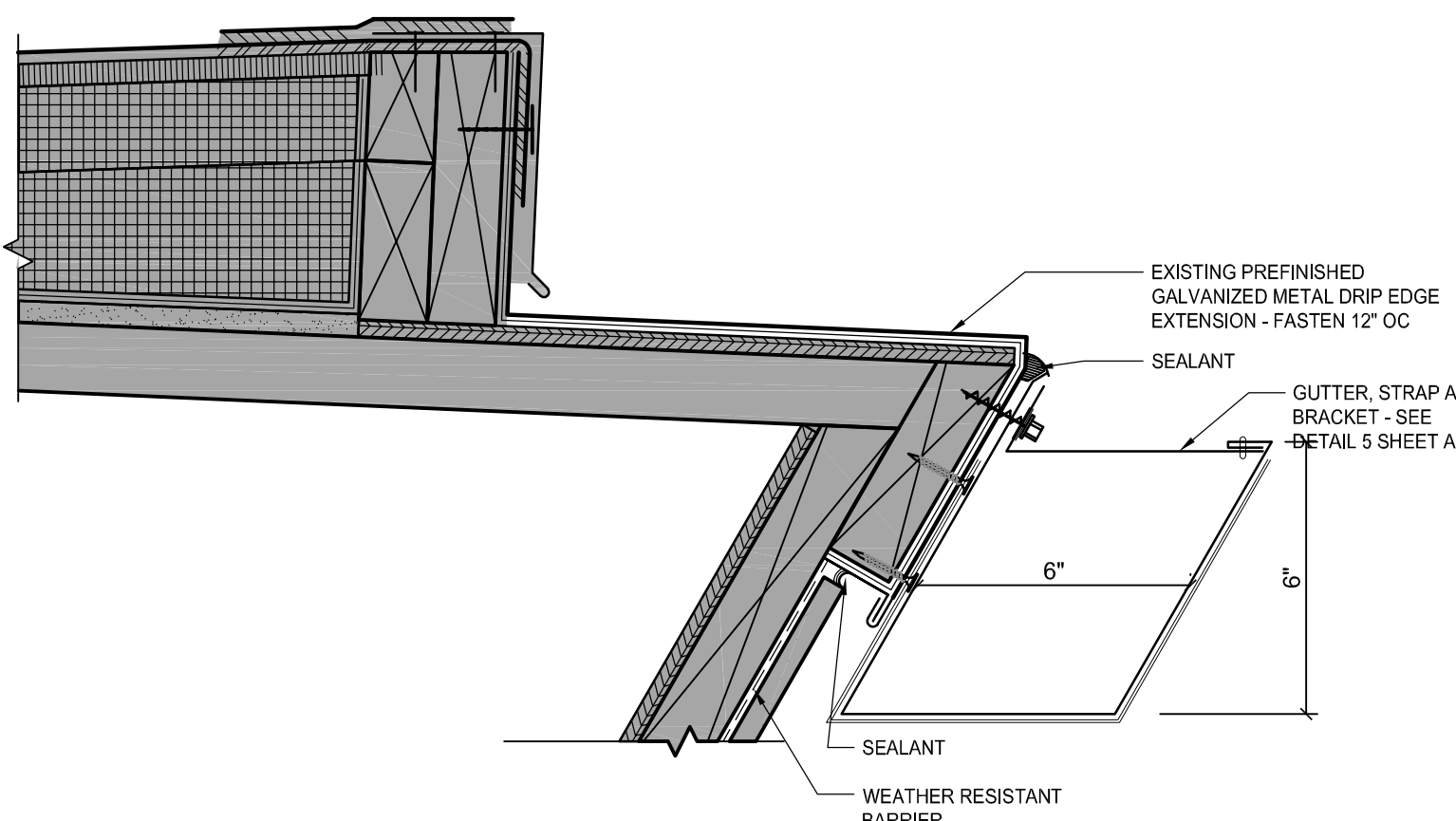
6 GUTTER DETAIL-ROOF LEVELS B, J, K, M, N, O AND S
3" x 1'-0"



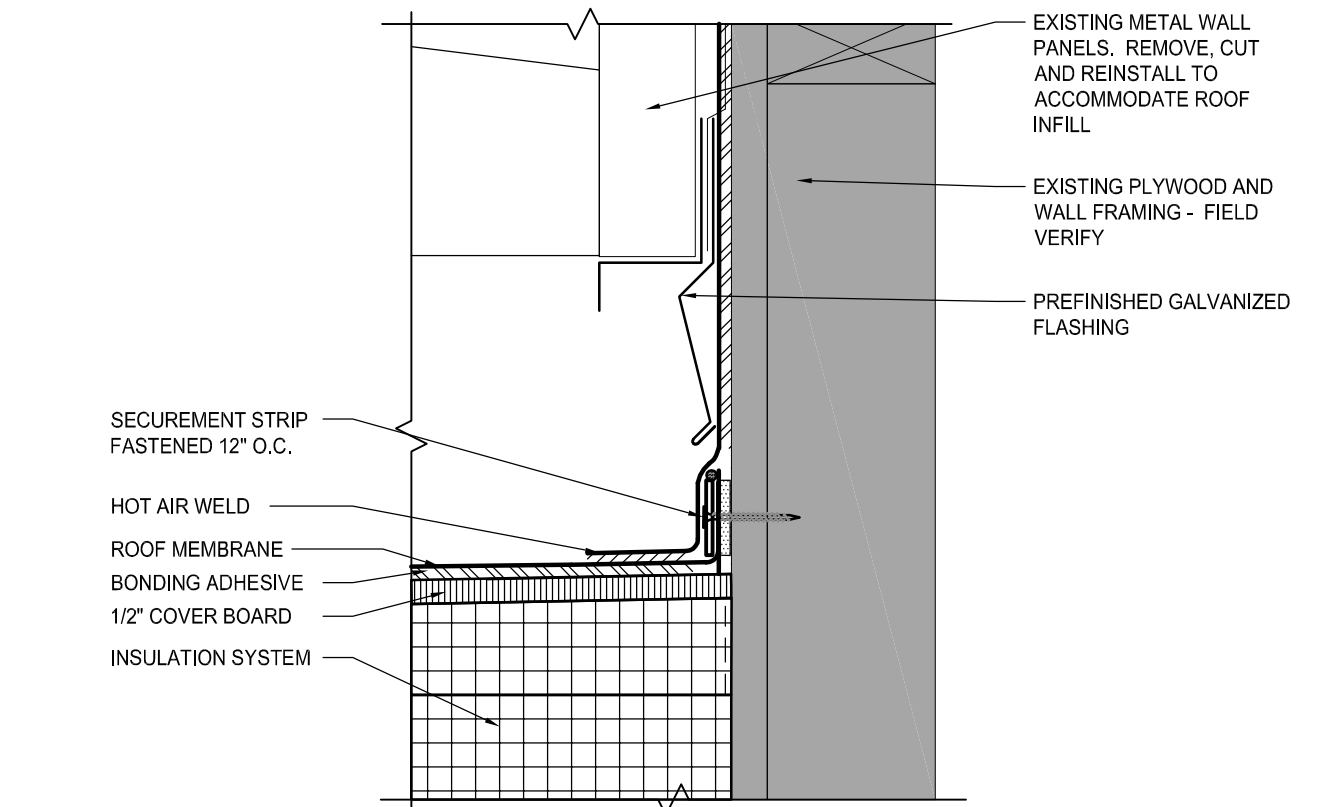
7 FLASHING AT STANDING SEAM METAL PANEL
3" x 1'-0"



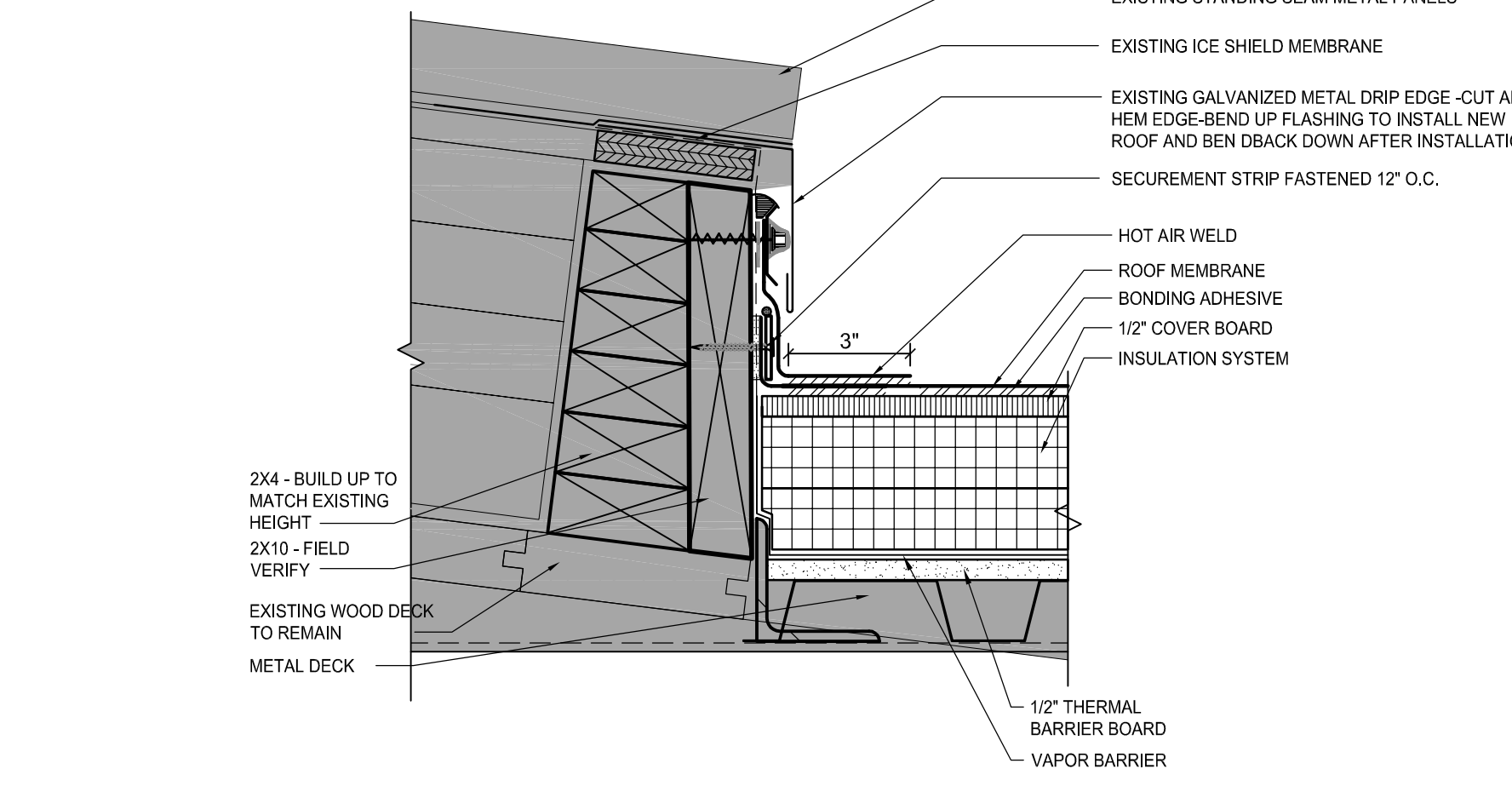
8 CANOPY FLASHING
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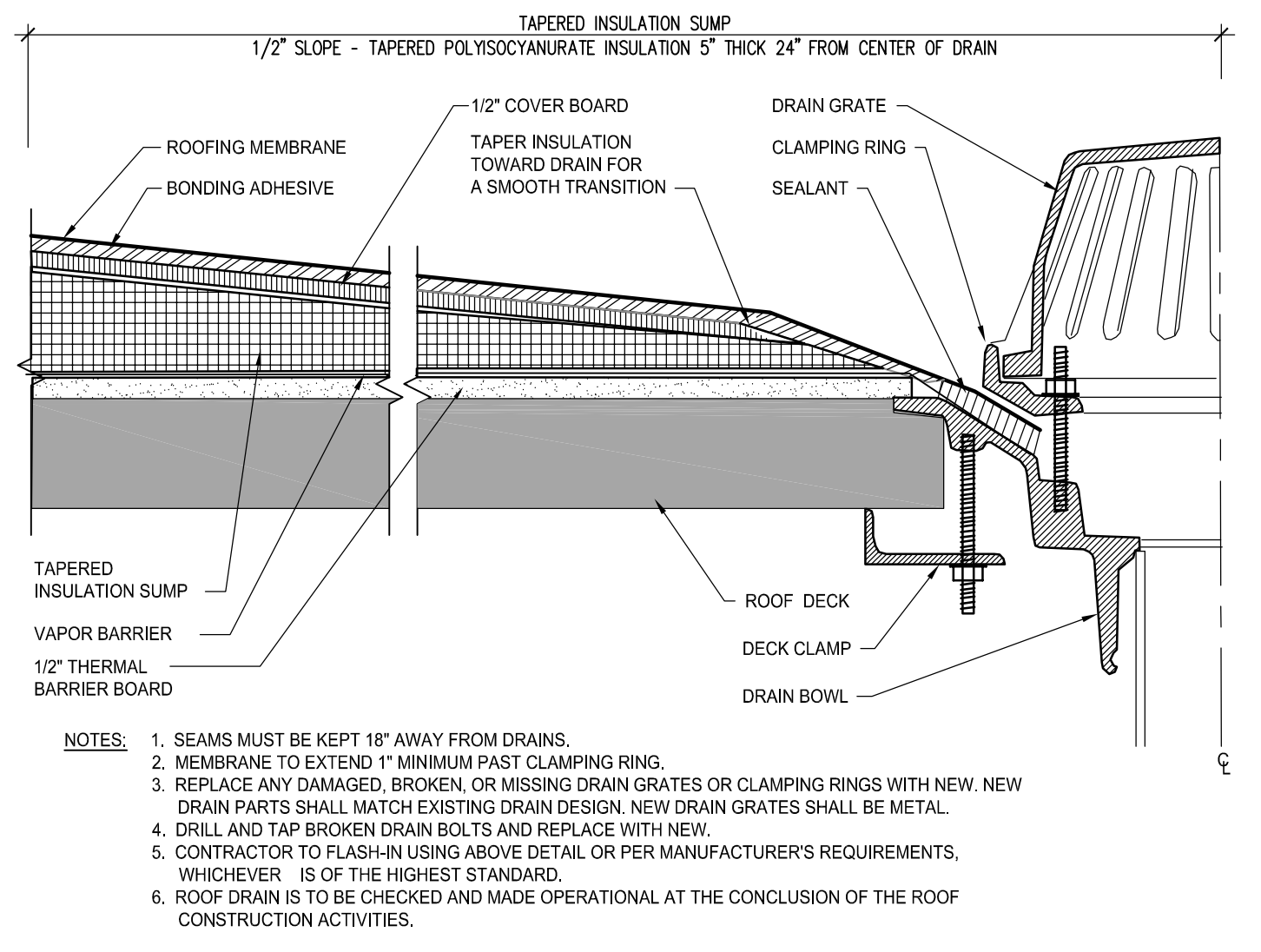
9 GUTTER DETAIL-ROOF LEVELS R, S, U
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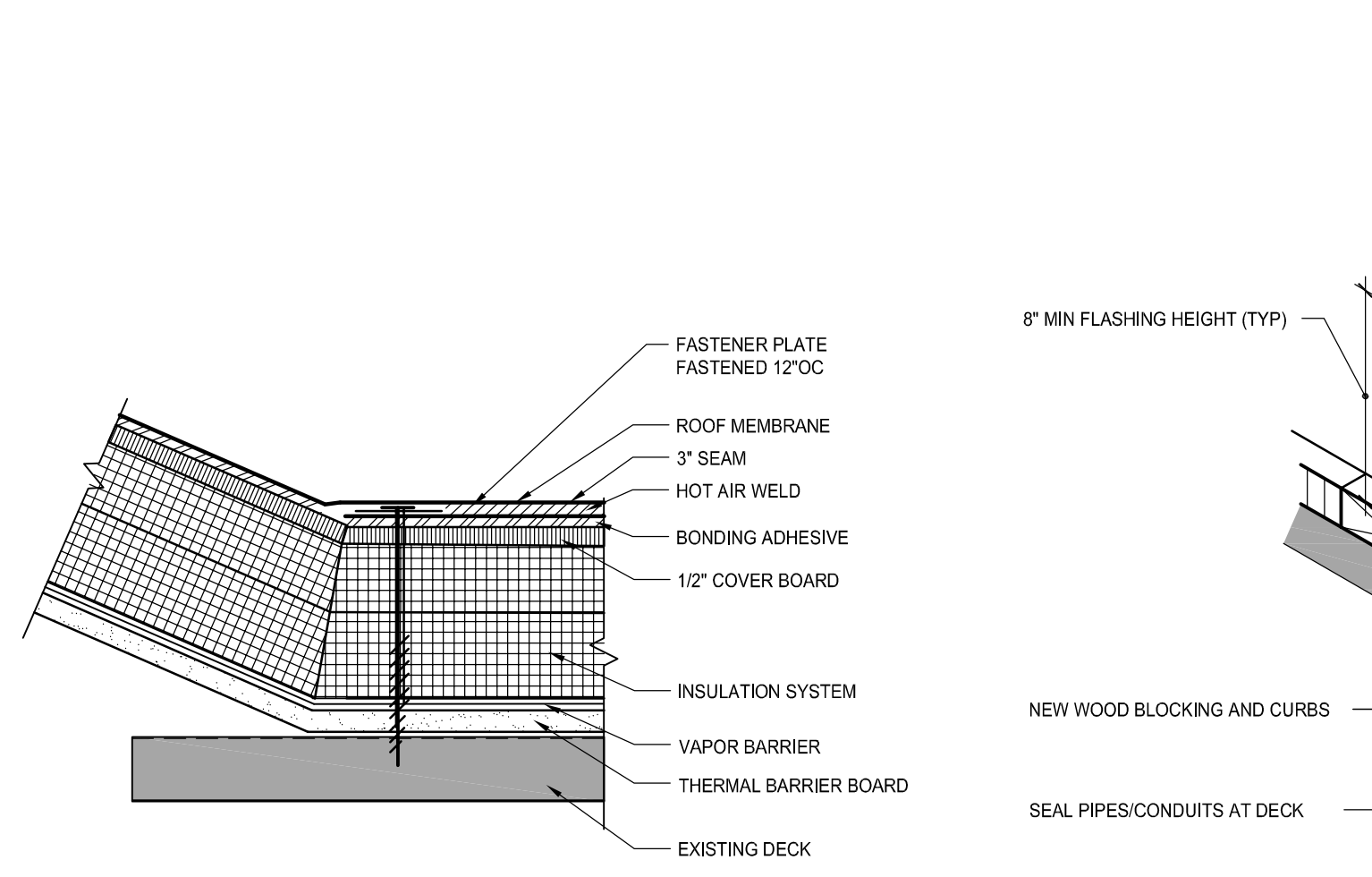
10 FLASHING DETAIL
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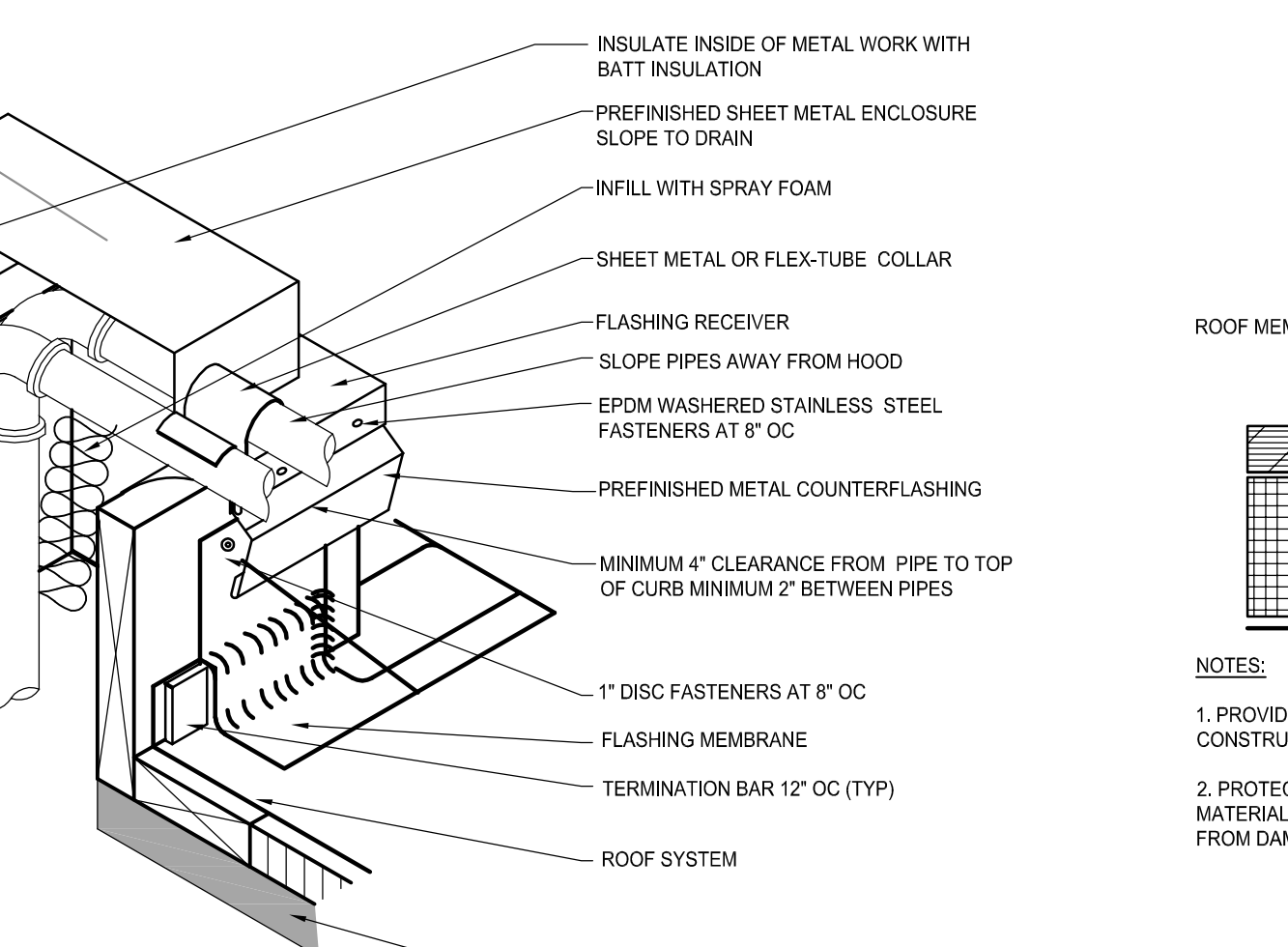
11 FLASHING DETAIL
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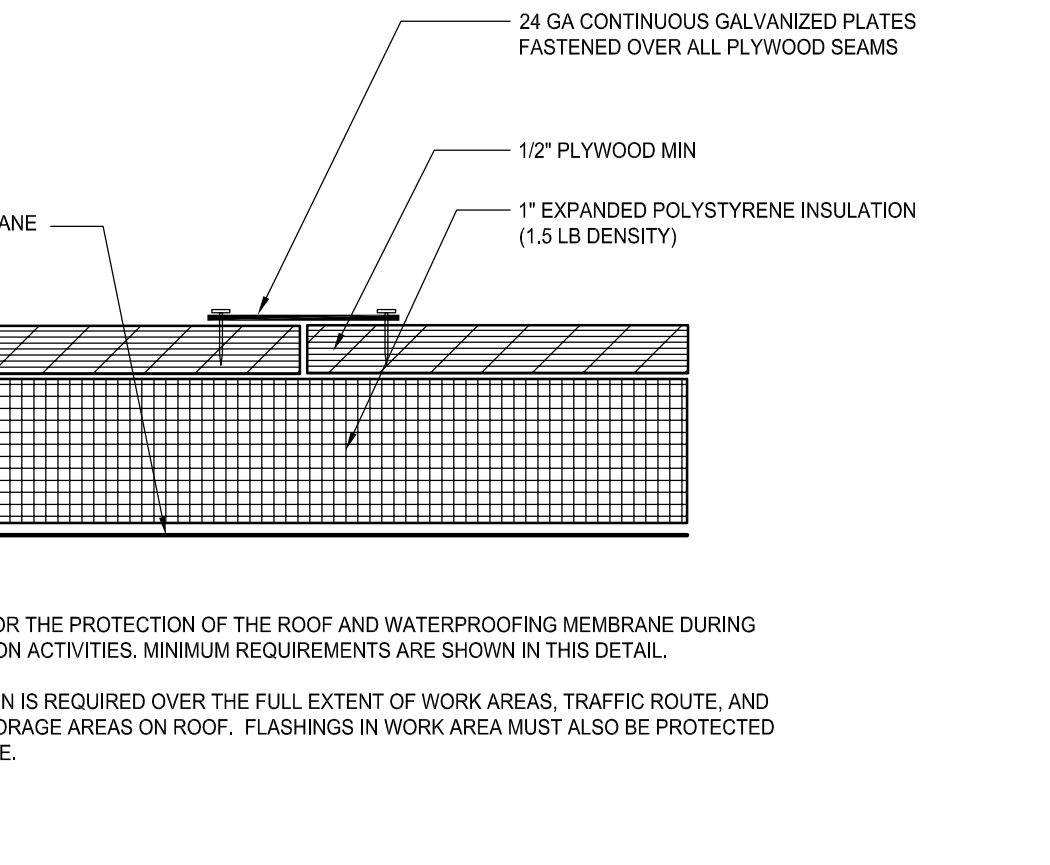
12 ROOF DRAIN DETAIL
3" x 1'-0"



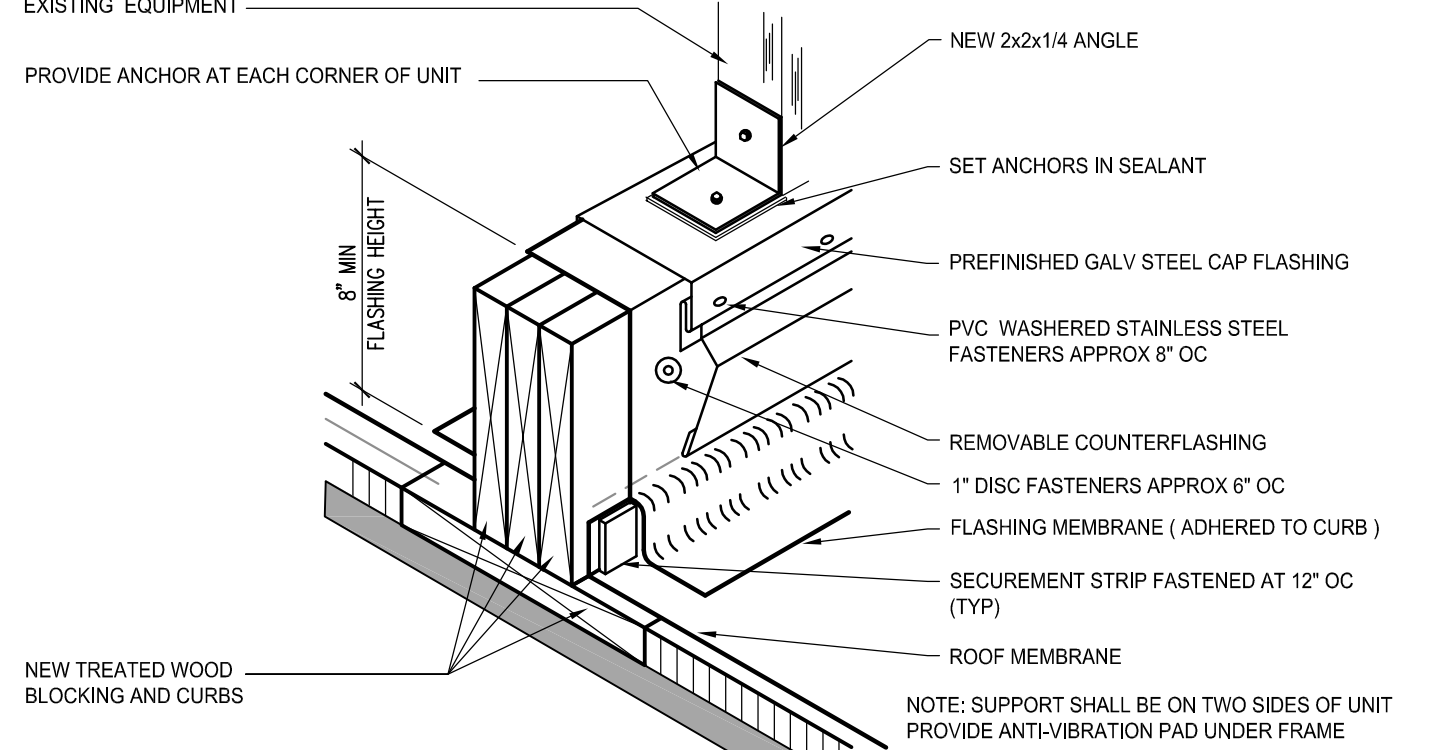
13 ROOF TRANSITION DETAIL
NOT TO SCALE



14 SHEET METAL ENCLOSURE
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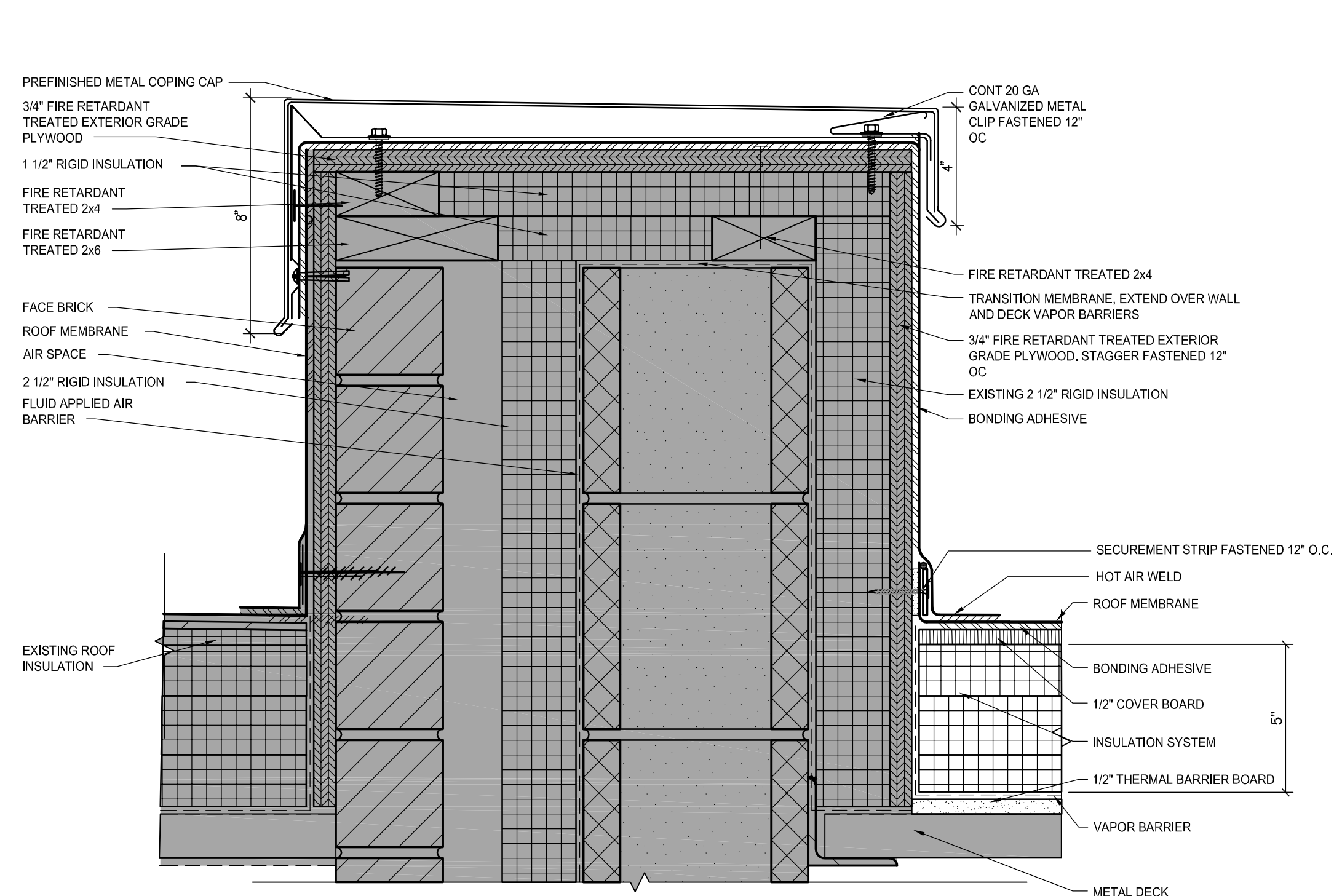


15 PROTECTION DETAIL
3" x 1'-0"

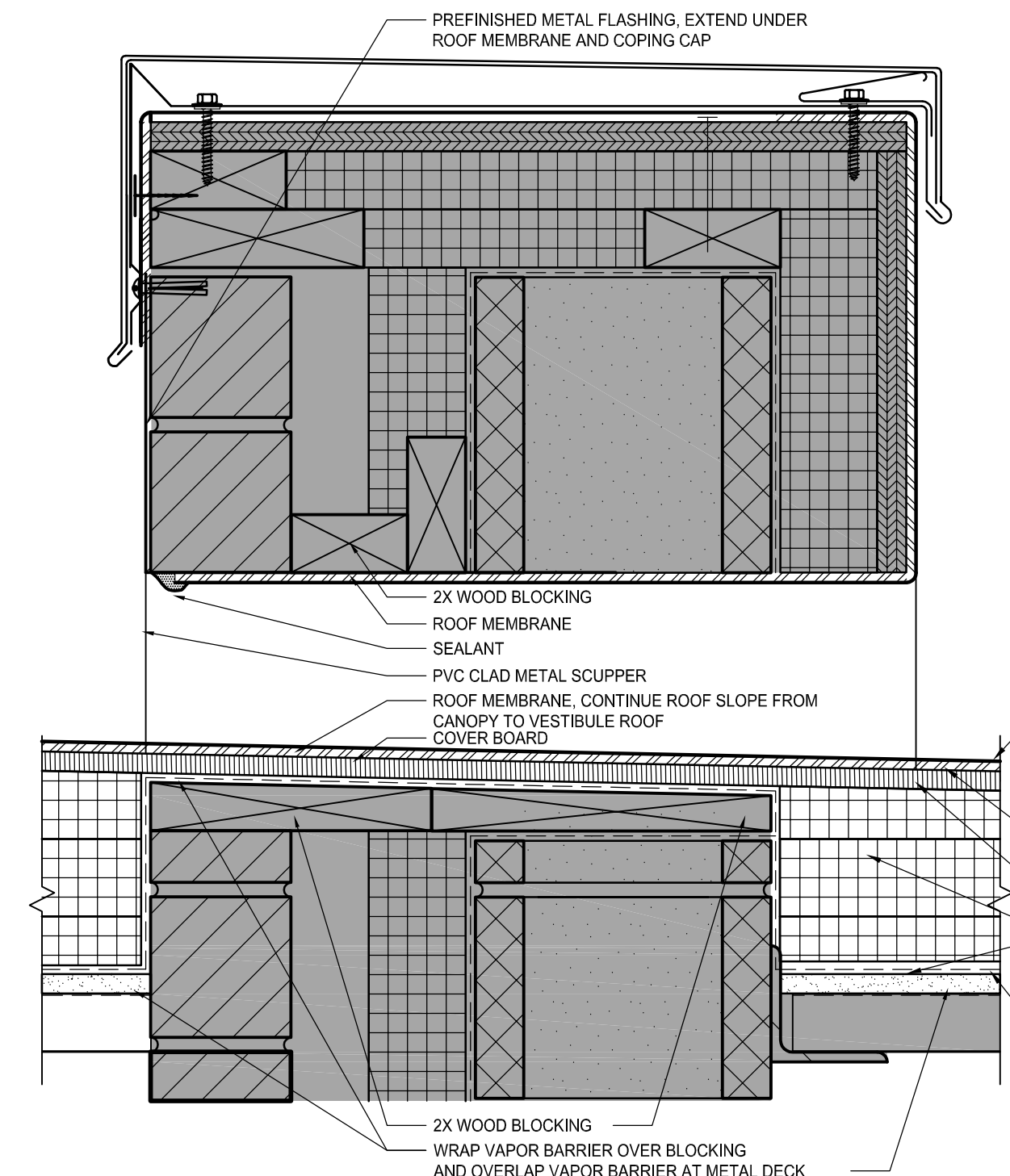


16 CURB FLASHING
3" x 1'-0"

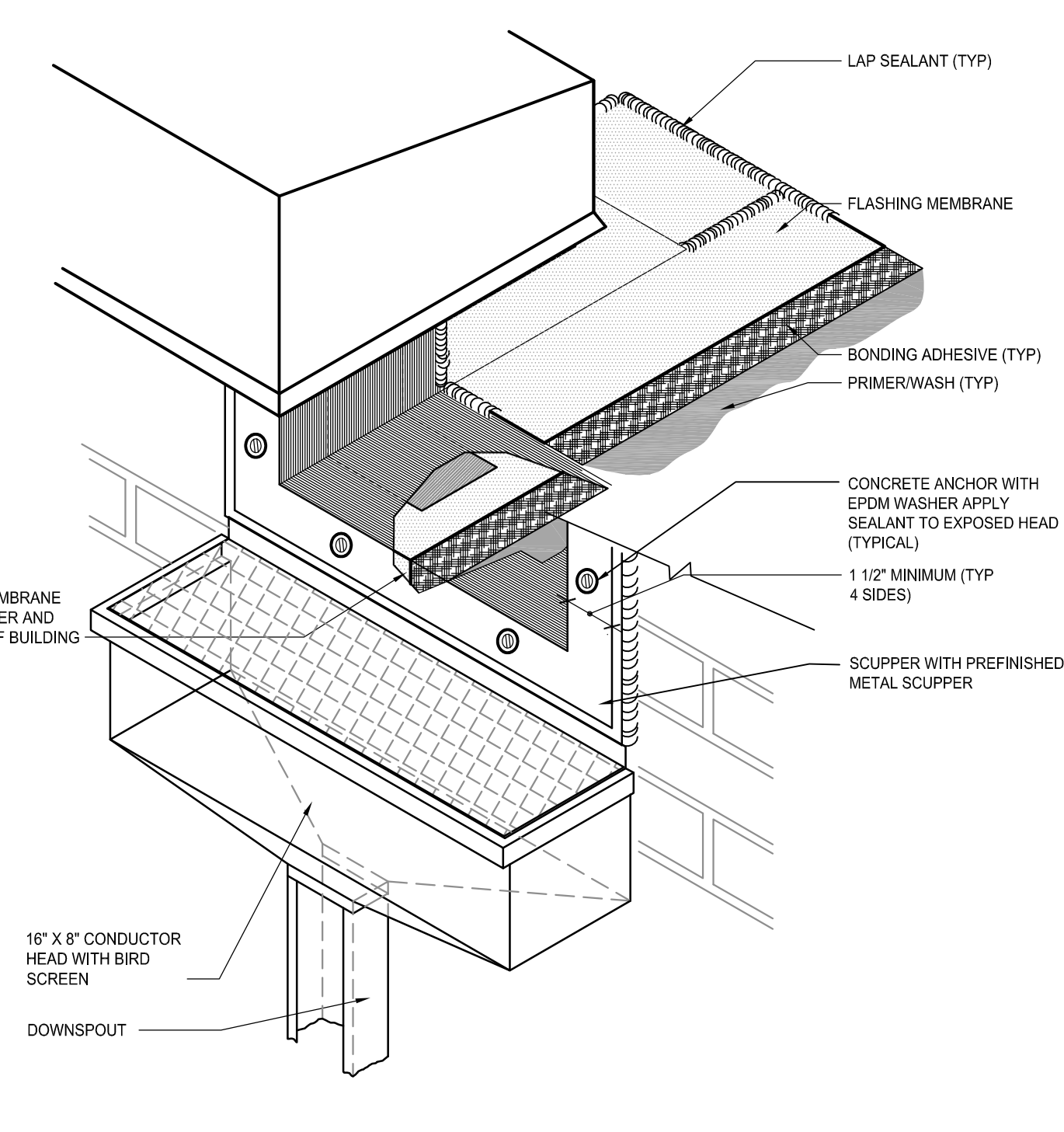
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APPROVED:	MTK
ISSUED FOR:	BD
DATE:	1/27/2020
PROJECT NO.:	218270
FIELD BOOK:	
CLIENT NO.:	



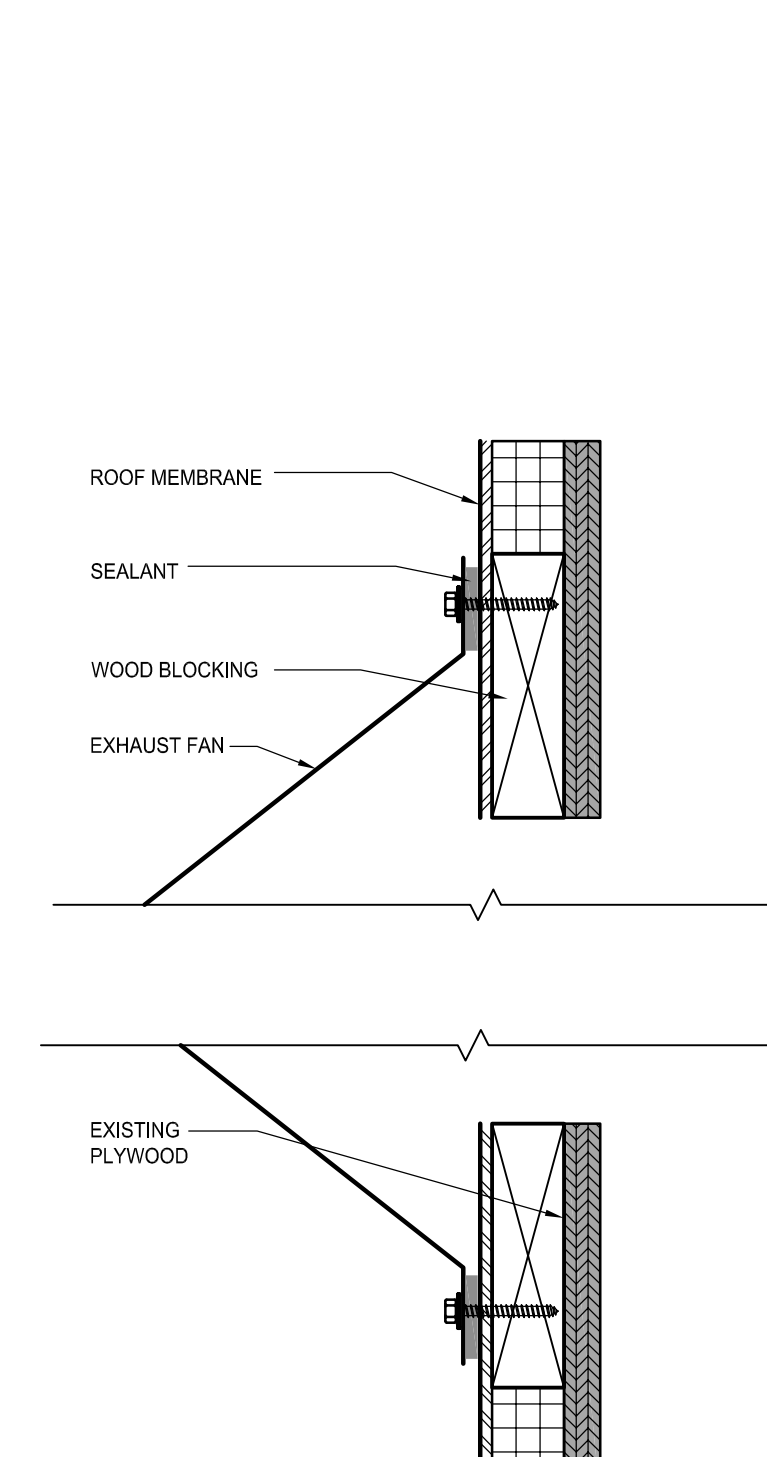
1 PARAPET DETAIL
3" = 1'-0"



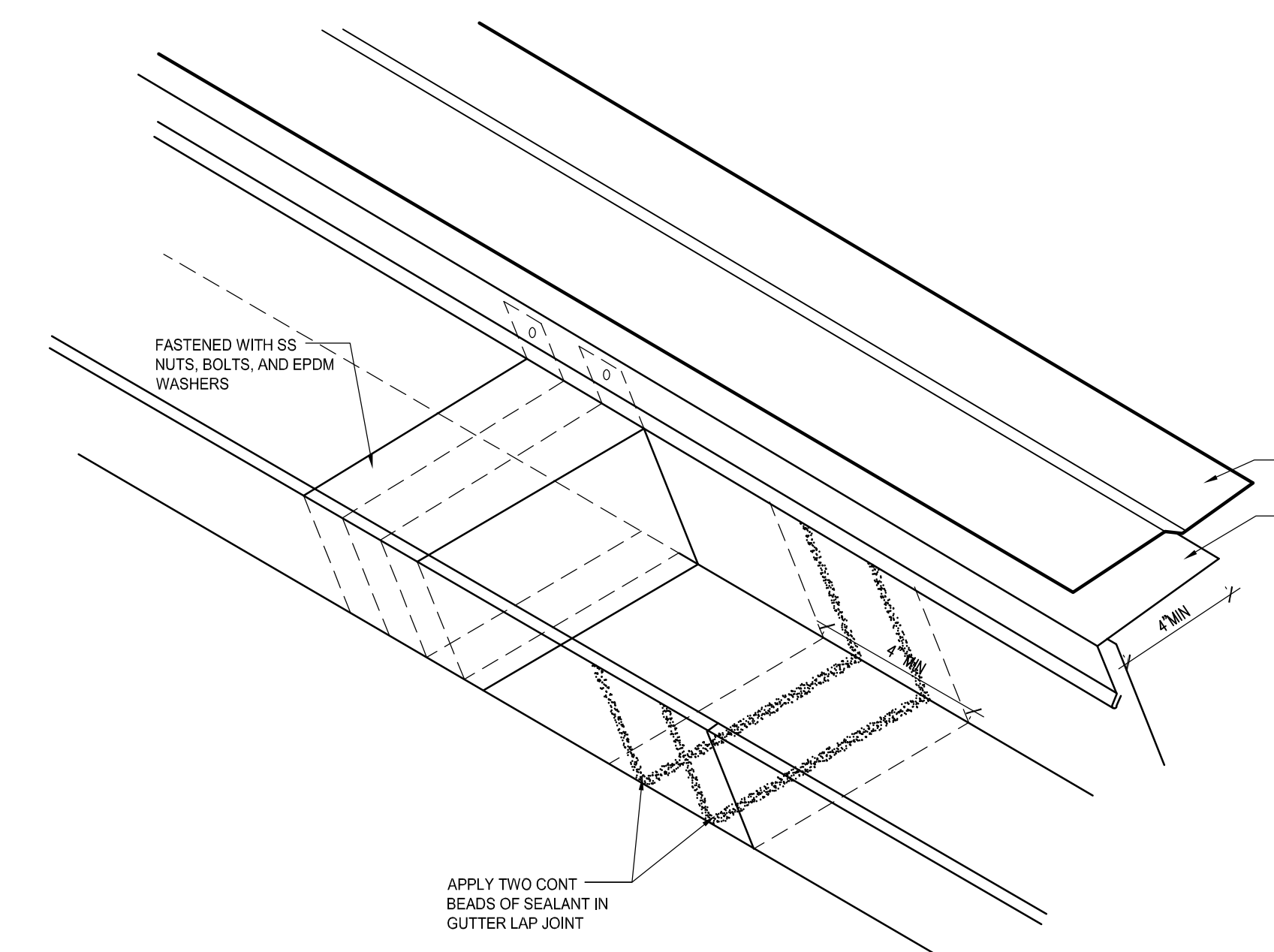
2 SCUPPER DETAIL
3" = 1'-0"



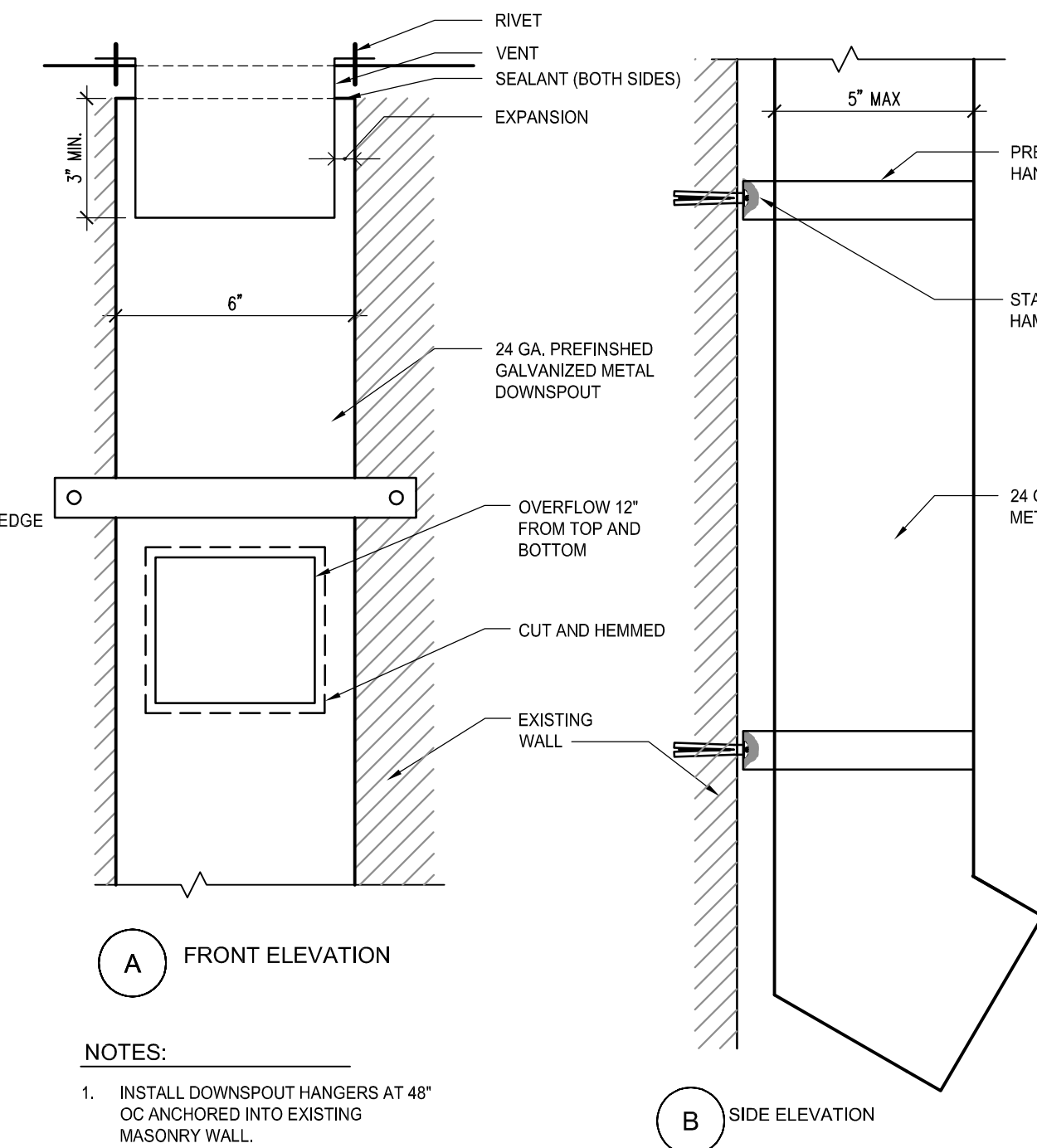
3 CONDUCTOR HEAD AND DOWNSPOUT
3" = 1'-0"



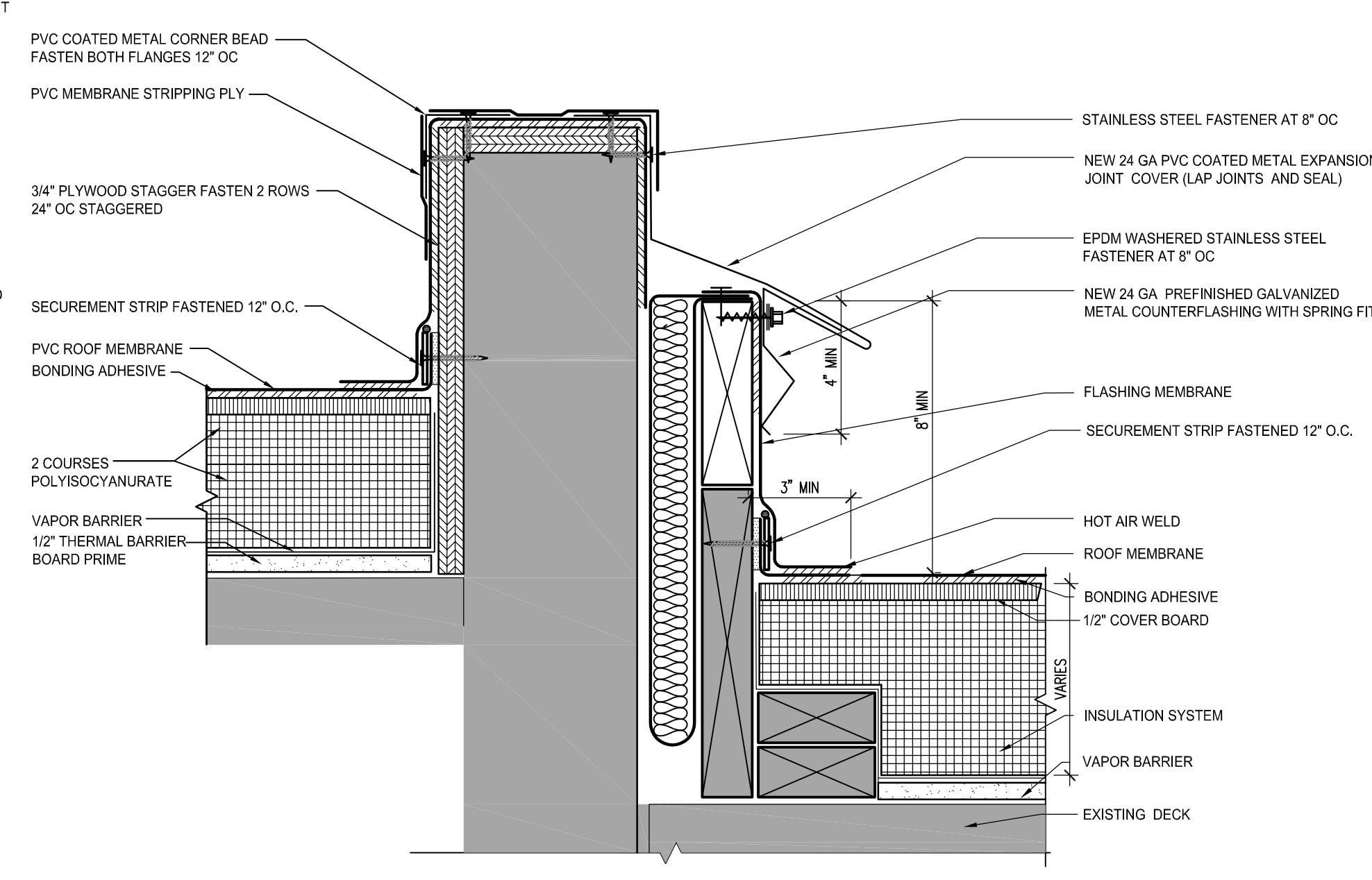
4 WALL UNIT FLASHING
NTS



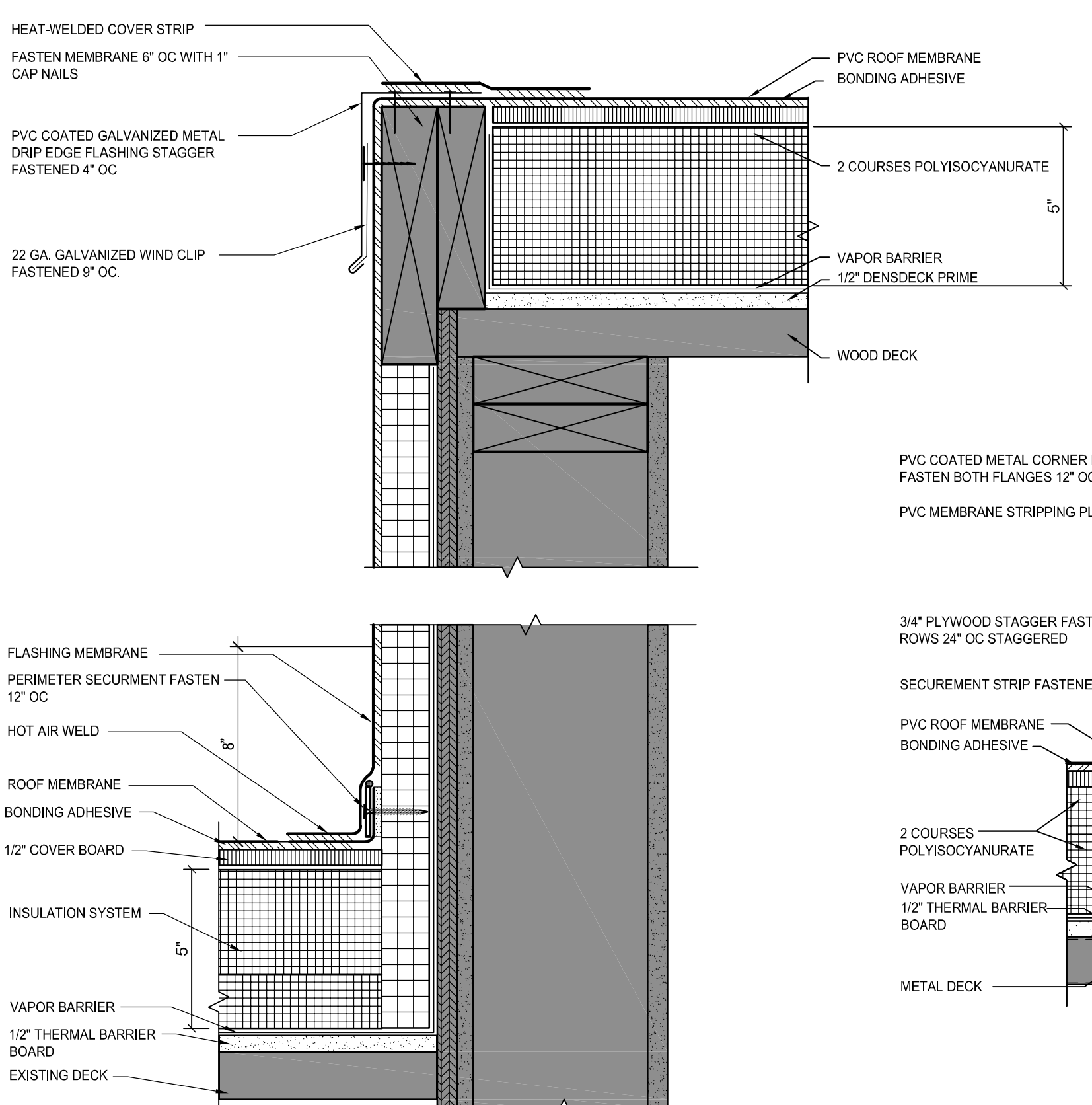
5 GUTTER EXPANSION JOINT DETAIL
NTS



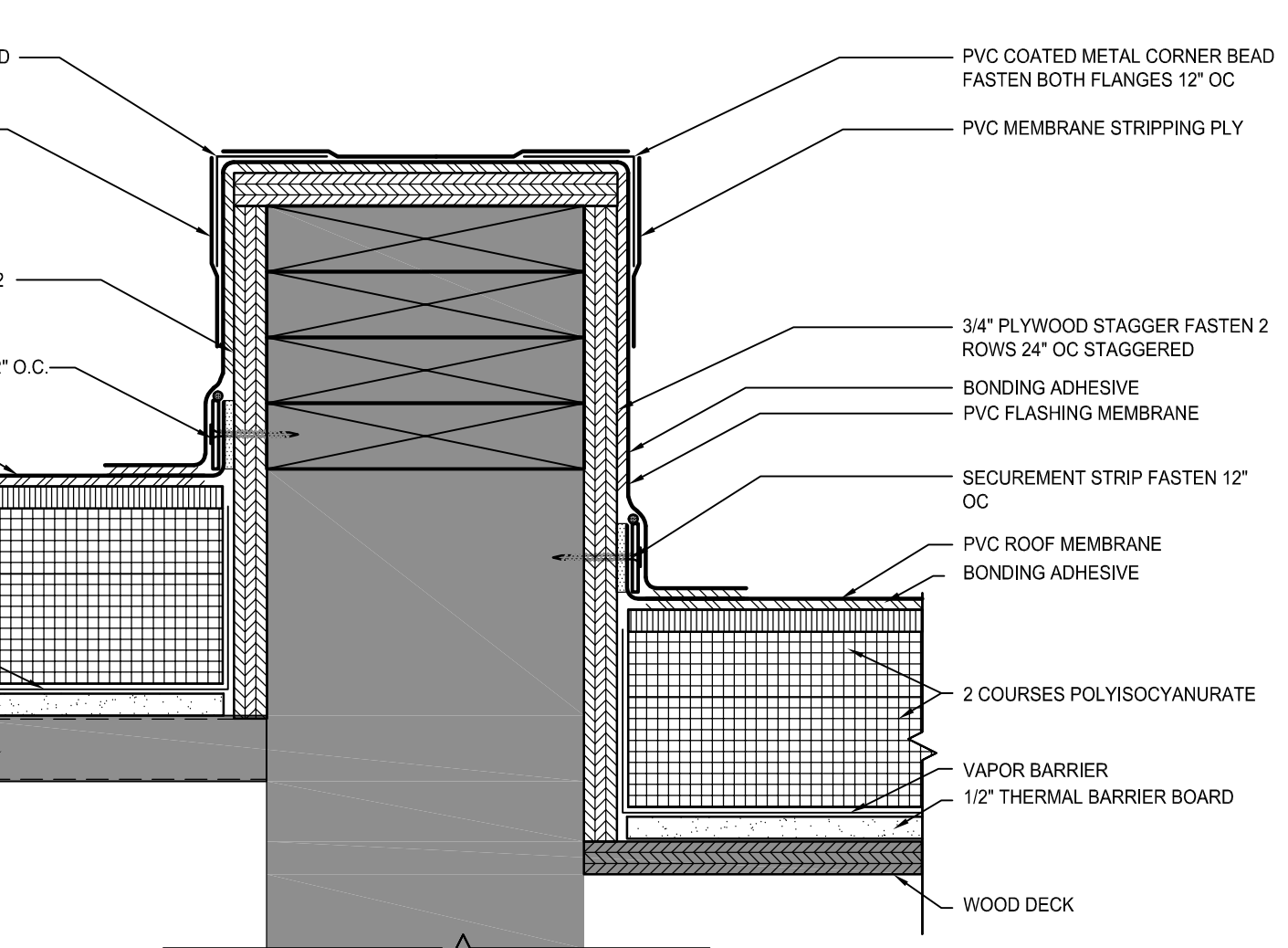
6 DOWNSPOUT ELEVATIONS
NTS



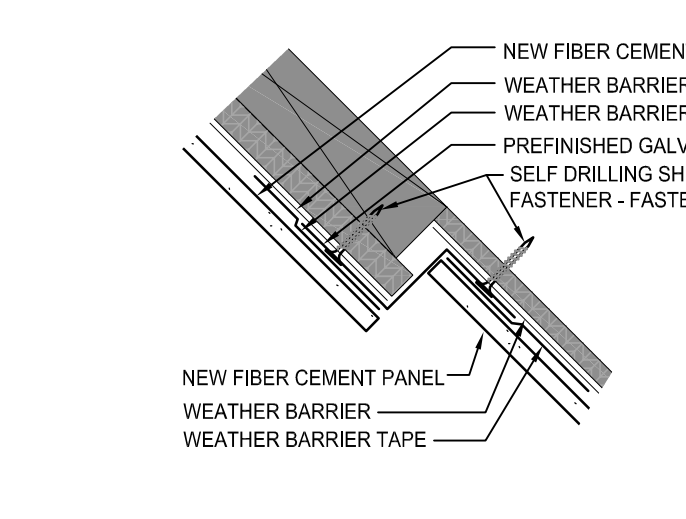
7 ROOF TO WALL EXPANSION JOINT
NOT TO SCALE



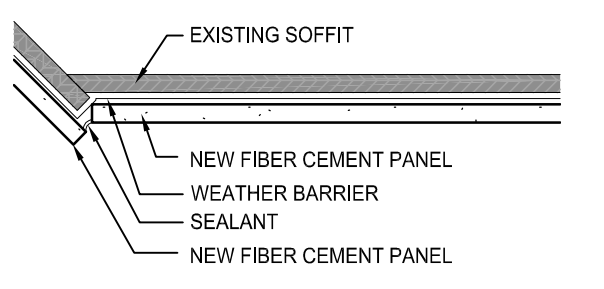
8 WALL FLASHING TRANSITION
3" = 1'-0"



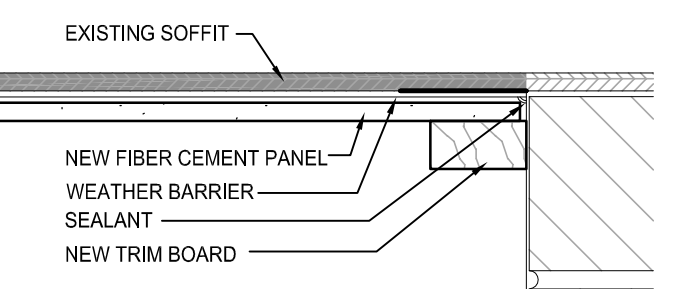
9 AREA DIVIDER FLASHING
3" = 1'-0"



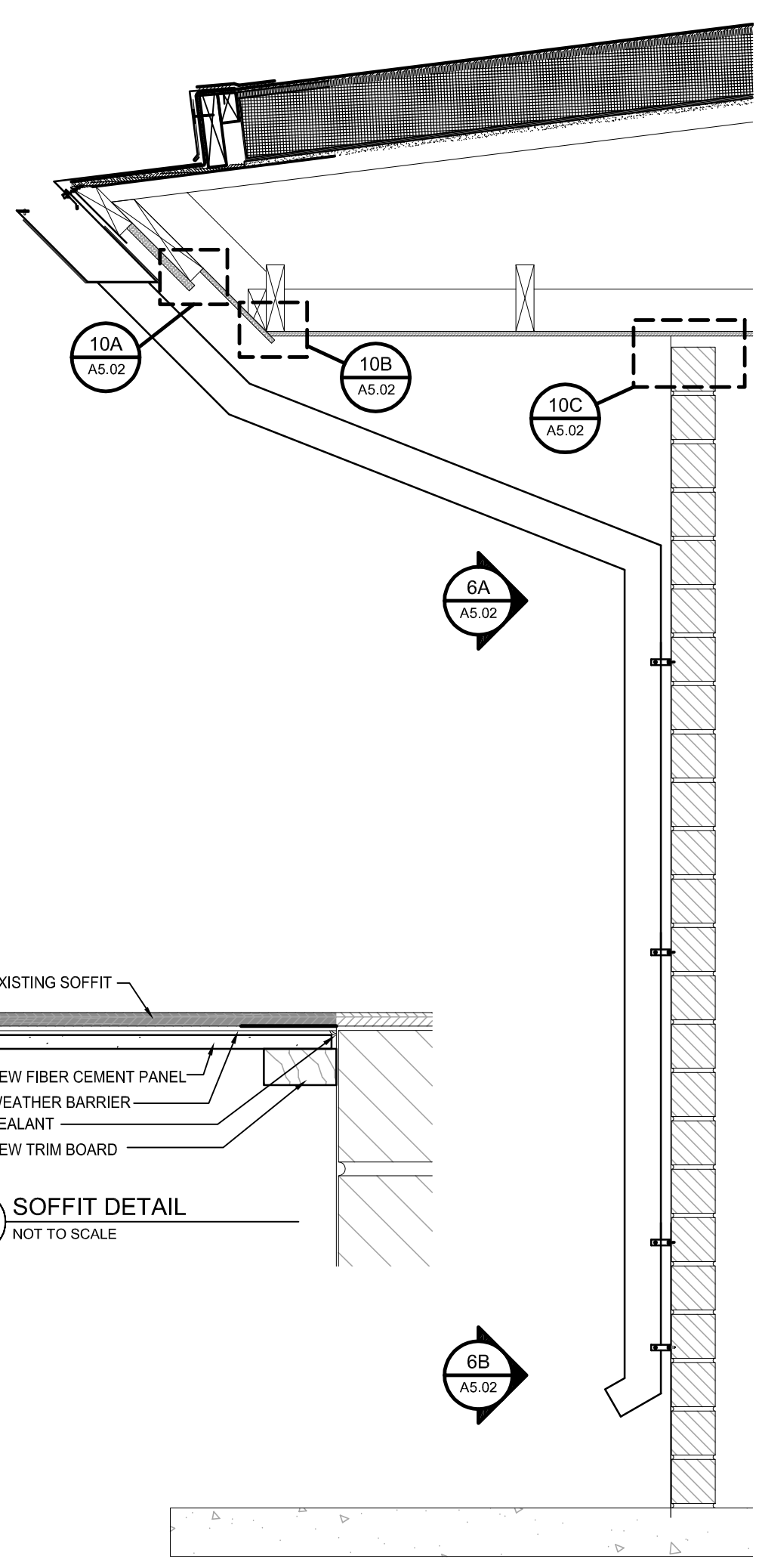
10A SOFFIT DETAIL
NOT TO SCALE



10B SOFFIT DETAIL
NOT TO SCALE



10C SOFFIT DETAIL
NOT TO SCALE



10 TYPICAL WALL SECTION
NOT TO SCALE

DRAWN:	TJG
APPROVED:	MTK
ISSUED FOR:	BID
DATE:	1/27/2020
PROJECT NO.:	218270
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