

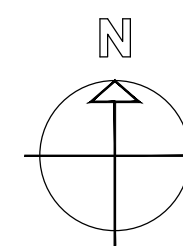
# ROOF REPLACEMENTS VARIOUS BUILDINGS HIGGINSVILLE HABILITATION CENTER HIGGINSVILLE, MISSOURI



MAINTENANCE  
BLDG

EDUCATION  
BLDG

KITCHEN &  
LAUNDRY BLDG



SHEET LIST:	
G-001	- COVER SHEET
A-101	- EDUCATION BUILDING ROOF PLAN
A-102	- KITCHEN & LAUNDRY MAINTENANCE BLDG. ROOF PLAN
A-501	- DETAILS
A-502	- DETAILS

OWNER: STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR  
  
DEPARTMENT OF  
MENTAL HEALTH

DESIGNER: STATE OF MISSOURI - OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES MANAGEMENT  
DESIGN AND CONSTRUCTION:  
301 W. HIGH STREET  
JEFFERSON CITY, MO 65102

PROJECT MANAGEMENT: OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES MANAGEMENT,  
DESIGN AND CONSTRUCTION

PROJECT NUMBER: M2315-01  
  
ASSET NUMBER: 6517357023 - KITCHEN & LAUNDRY BLDG  
6517357024 - MAINTENANCE BLDG  
6517357027 - EDUCATION BLDG

CONSTRUCTION  
DOCUMENTS

SHEET NUMBER:

**G-001**

1 OF 5 SHEETS  
1/26/2023



**EDUCATION BUILDING  
EXISTING ROOF CONDITIONS:**

**ROOF "A" UPPER ROOF:**

EPDM MEMBRANE  
1/2" WOOD FIBERBOARD  
BASE SHEET (ASBESTOS)  
TAPERED LIGHTWEIGHT CONCRETE  
TECTUM DECK

**ROOF "B" LOWER ROOF:**

EPDM MEMBRANE  
3/4" WOOD FIBERBOARD  
1" WOOD FIBERBOARD  
BUILT-UP ROOF (ASBESTOS)  
1/2" WOOD FIBERBOARD  
TAPERED EXPANDED POLYSTYRENE (3/4" TO  
3 1/4")  
BUILT-UP ROOF (ASBESTOS)  
TECTUM DECK

**NEW ROOF SYSTEM SHALL BE  
AS FOLLOWS:**

**ROOF "A" UPPER ROOF:**

CONTRACTOR SHALL REMOVE ROOF  
MATERIALS TO TECTUM DECK AND REPLACE  
AND  
REPLACE WITH 2" RIGID INSULATION, 1/2"  
COVERBOARD, AND TPO MEMBRANE.

**ROOF "B" LOWER ROOF:**

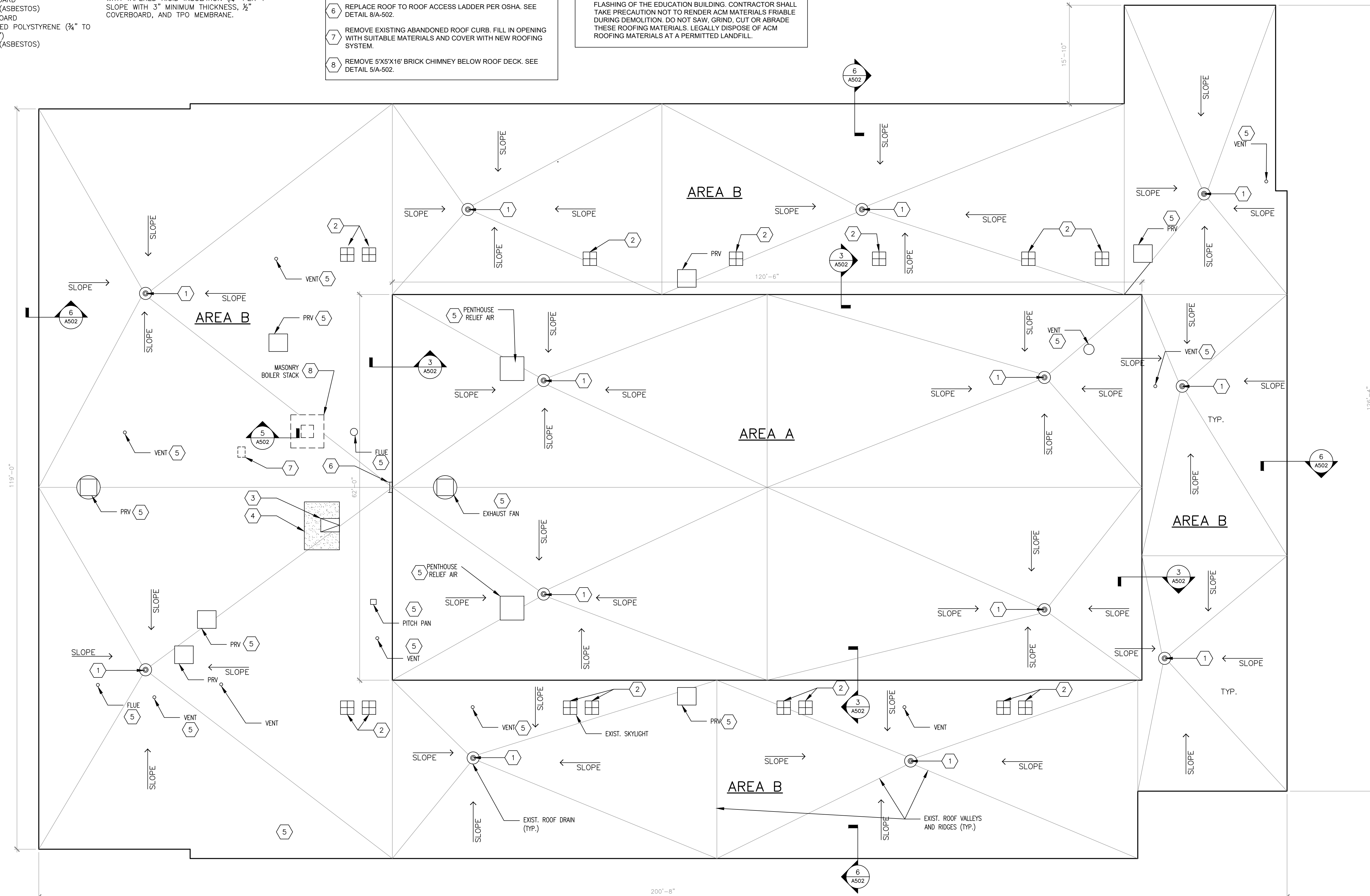
CONTRACTOR SHALL REMOVE ROOF  
MATERIALS TO TECTUM DECK AND REPLACE  
WITH TAPERED RIGID INSULATION (1/4" PER 1'  
SLOPE WITH 3" MINIMUM THICKNESS, 1/2"  
COVERBOARD, AND TPO MEMBRANE.

- KEYED NOTES:**
- EXISTING ROOF DRAIN TO REMAIN. PROVIDE 2" MINIMUM SUMP AROUND DRAIN AND FLASH PER ROOF MANUFACTURER. SEE DETAIL 4/A-501.
  - EXISTING SKYLIGHT TO REMAIN. FLASH PER ROOF MANUFACTURER. SEE DETAIL 7/A-502.
  - EXISTING ROOF HATCH TO REMAIN. FLASH PER ROOF MANUFACTURER. INSTALL SAFETY HANDRAIL FASTENING TO THE EXISTING HATCH LADDER. SEE DETAIL 4/A-502.
  - INSTALL 36" WIDE TPO WALKWAY PAD.
  - USE MANUFACTURER STANDARD DETAILS FOR FLASHING AROUND PLUMBING VENTS, VENT STACKS, AND ELECTRICAL CONDUITS, ETC., WHETHER SPECIFICALLY SHOWN OR NOT.
  - REPLACE ROOF TO ROOF ACCESS LADDER PER OSHA. SEE DETAIL 8/A-502.
  - REMOVE EXISTING ABANDONED ROOF CURB. FILL IN OPENING WITH SUITABLE MATERIALS AND COVER WITH NEW ROOFING SYSTEM.
  - REMOVE 5'X5'X16" BRICK CHIMNEY BELOW ROOF DECK. SEE DETAIL 5/A-502.

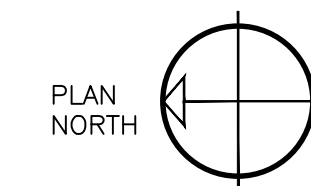
- GENERAL NOTES:**
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS.
  - CONTRACTOR SHALL USE CARE DURING CONSTRUCTION SO AS NOT TO DAMAGE EXISTING ADJACENT FACILITIES.
  - CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM SITE ON A DAILY BASIS. COORDINATE DUMPSTER/DUMP TRUCK LOCATION AND ACCESS WITH THE OWNER.
  - CONTRACTOR IS RESPONSIBLE FOR WATER TIGHTENING THE ROOF AT THE END OF EACH DAY REGARDLESS OF THE WEATHER FORECAST.
  - ALL MATERIALS AND EQUIPMENT NOT REQUIRED TO BE REMOVED FOR THE EXECUTION OF THE PROJECT SHALL BE LEFT IN PLACE AND PROTECTED FROM DAMAGE DURING CONSTRUCTION.
  - ASBESTOS WAS IDENTIFIED IN THE BUILT-UP ROOFING MATERIALS (BLACK ROLLED ROOFING) AND BLACK FOR FLASHING OF THE EDUCATION BUILDING. CONTRACTOR SHALL TAKE PRECAUTION NOT TO RENDER ACM MATERIALS FRIABLE DURING DEMOLITION. DO NOT SAW, GRIND, CUT OR ABRASIVE THESE ROOFING MATERIALS. LEGALLY DISPOSE OF ACM ROOFING MATERIALS AT A PERMITTED LANDFILL.

**EXAMPLES OF NONFRIABLE MATERIALS AND ACCEPTABLE REMOVAL TECHNIQUES**

CATEGORY I ASPHALT ROOFING MATERIAL IS NOT REGULATED AS LONG AS THE MATERIAL IS IN GOOD CONDITION AND IT IS NOT MADE FRIABLE DURING REMOVAL AND DEMOLITION. THIS MATERIAL CAN GENERALLY BE LEFT IN PLACE DURING DEMOLITION ACTIVITIES, BUT STILL MUST BE DISPOSED OF AT A PERMITTED LANDFILL OR TRANSFER STATION. YOU SHOULD CONTACT YOUR DISPOSAL FACILITY TO DETERMINE HOW THEY WILL REQUIRE THIS MATERIAL TO BE PACKAGED AND DELIVERED. ROOFING MATERIAL MAY BE SLICED BY A MANUAL CUTTER OR KNIFE, HOWEVER, THE USE OF MECHANICAL DEVICES, SUCH AS A ROTATING BLADE ROOF CUTTER OR OTHER EQUIPMENT WILL RENDER ROOFING PRODUCTS FRIABLE. THE U.S. ENVIRONMENTAL PROTECTION AGENCY HAS DETERMINED THAT USE OF THIS KIND OF EQUIPMENT ON MORE THAN 5,580 SQUARE FEET OF ROOFING WILL MAKE THE PROJECT SUBJECT TO REGULATION. IF THIS IS THE CASE, THEN THE PROJECT MUST BE PERFORMED BY A REGISTERED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH ALL APPLICABLE ASBESTOS WORK PRACTICE REQUIREMENTS.



**1 EDUCATION BUILDING ROOF PLAN**  
SCALE: 1/8" = 1'-0"



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DEPARTMENT OF  
MENTAL HEALTH

ROOF REPLACEMENTS  
VARIOUS BUILDINGS

HIGGINSVILLE HABILITATION  
CENTER  
100 W 1ST STREET  
HIGGINSVILLE, MISSOURI

PROJECT # M2315-01  
SITE # 7357  
ASSET #  
6517357027 - EDUCATION BLDG

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_

ISSUE DATE: 1/26/2023

CAD DWG FILE:  
DRAWN BY: MICHAEL BUECHLER  
CHECKED BY:  
DESIGNED BY: LARRY BLOCK

SHEET TITLE:  
**EDUCATION  
BUILDING  
ROOF PLAN**

SHEET NUMBER:

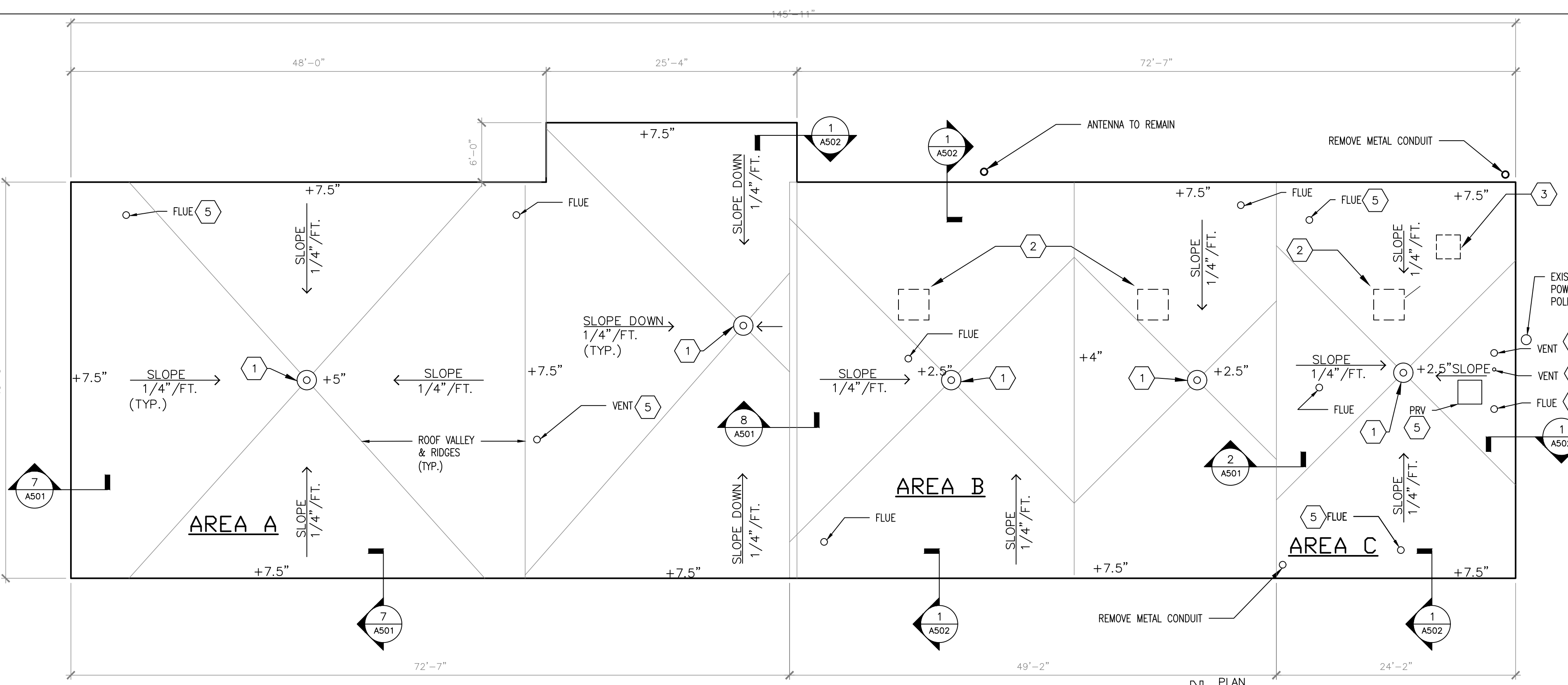
**A-101**

2 OF 5 SHEETS  
1/26/2023

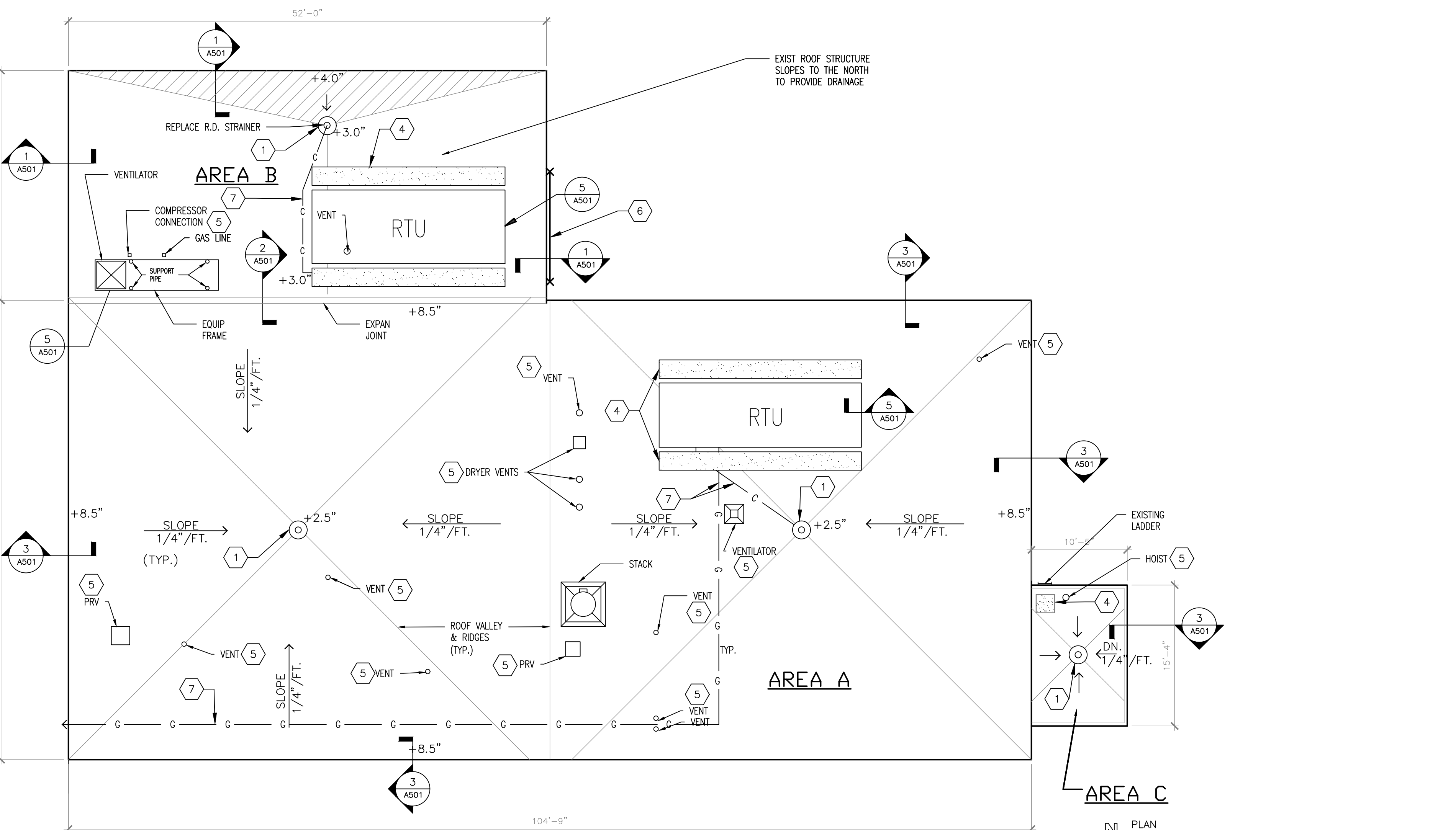


SYMBOLS

ROOF INSULATION THICKNESS	+2.5
SECTION IDENTIFICATION	
DRAWING TYPE	SECTION NUMBER
	SEQUENCE NO. WITHIN THE DRAWING CATEGORY
DETAIL IDENTIFICATION	
DRAWING TYPE	DETAIL NUMBER
	SEQUENCE NO. WITHIN THE DRAWING CATEGORY
ELEVATION OR VIEWPOINT IDENTIFICATION	
DRAWING TYPE	SEQUENCE NO. WITHIN THE DRAWING CATEGORY
ARCHITECTURAL LEGEND	
	WOOD (ROUGH)
	LIGHTWEIGHT CONCRETE
	RIGID INSULATION
	COVERBOARD



1 ALTERNATE NO. 1  
MAINTENANCE BUILDING ROOF PLAN  
SCALE: 1/8" = 1'-0"



2 KITCHEN AND LAUNDRY BUILDING ROOF PLAN  
SCALE: 1/8" = 1'-0"

- KEYED NOTES:**
- EXISTING ROOF DRAIN TO REMAIN. PROVIDE 2" MINIMUM SUMP AROUND DRAIN AND FLASH PER ROOF MANUFACTURER. SEE DETAIL 4/A-501.
  - REMOVE EXISTING SKYLIGHT. FILL IN OPENING WITH SUITABLE MATERIALS AND COVER WITH NEW ROOFING SYSTEM.
  - REMOVE EXISTING ROOF VENT. FILL IN OPENING WITH SUITABLE MATERIALS AND COVER WITH NEW ROOFING SYSTEM.
  - INSTALL 36" WIDE TPO WALKWAY PAD.
  - USE MANUFACTURER'S STANDARD DETAILS FOR FLASHING AROUND PLUMBING VENTS, VENT STACKS, AND ELECTRICAL CONDUITS, ETC., WHETHER SPECIFICALLY SHOWN OR NOT.
  - REMOVE METAL GUARD RAIL, PAINT, AND REINSTALL AFTER INSTALLATION OF METAL ROOF EDGE.
  - INSTALL PRE-FABRICATED PIPE SUPPORTS 6" O.C. UNDER GAS AND CONDENSATE LINES.

- GENERAL NOTES:**
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS.
  - CONTRACTOR SHALL USE CARE DURING CONSTRUCTION SO AS NOT TO DAMAGE EXISTING ADJACENT FACILITIES.
  - CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM SITE ON A DAILY BASIS. COORDINATE DUMPSTER/DUMP TRUCK LOCATION AND ACCESS WITH THE OWNER.
  - CONTRACTOR IS RESPONSIBLE FOR WATER TIGHTENING THE ROOF AT THE END OF EACH DAY REGARDLESS OF THE WEATHER FORECAST.
  - ALL MATERIALS AND EQUIPMENT NOT REQUIRED TO BE REMOVED FOR THE EXECUTION OF THE PROJECT SHALL BE LEFT IN PLACE AND PROTECTED FROM DAMAGE DURING CONSTRUCTION.

**KITCHEN & LAUNDRY BUILDING EXISTING ROOF CONDITIONS:**

**ROOF "A":**  
EPDM MEMBRANE  
3/4" WOOD FIBERBOARD  
TAPERED RIGID INSULATION  
METAL DECK

**ROOF "B":**  
EPDM MEMBRANE  
3/4" WOOD FIBERBOARD  
RIGID INSULATION  
METAL DECK

**NEW ROOF SYSTEM SHALL BE AS FOLLOWS:**

**ROOF "A":**  
CONTRACTOR SHALL REMOVE ROOF MATERIALS TO METAL DECK AND REPLACE WITH TPERED RIGID INSULATION (1/2" PER 1' SLOPE WITH 2 1/2" MINIMUM THICKNESS), 3/4" COVERBOARD, AND TPO MEMBRANE

**ROOF "B":**  
CONTRACTOR SHALL REMOVE ROOF MATERIALS TO METAL DECK AND REPLACE WITH 3" RIGID INSULATION, 3/4" COVERBOARD, AND TPO MEMBRANE.

**MAINTENANCE BUILDING EXISTING ROOF CONDITIONS:**

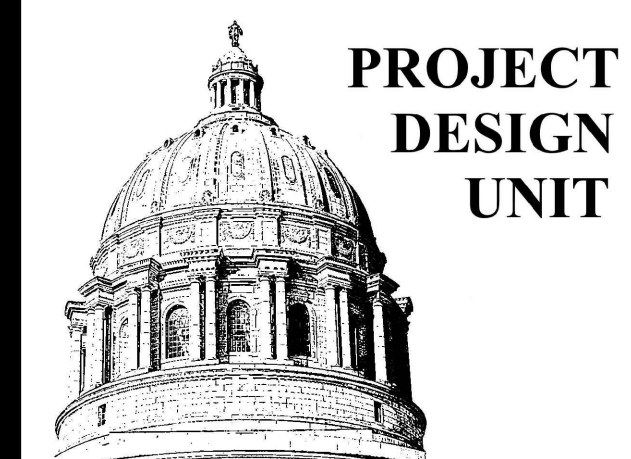
**ROOF "A" UPPER ROOF:**  
EPDM MEMBRANE  
1/2" WOOD FIBERBOARD  
TAPERED RIGID INSULATION  
TECTUM DECK

**ROOFS "B" & "C":**  
EPDM MEMBRANE  
1/2" WOOD FIBERBOARD  
TAPERED RIGID INSULATION  
TAPERED LIGHTWEIGHT CONCRETE  
TECTUM DECK

**ALTERNATE NO. 1 NEW ROOF SYSTEM SHALL BE AS FOLLOWS:**

**ROOF "A":**  
CONTRACTOR SHALL REMOVE ROOF MATERIALS TO TECTUM DECK AND REPLACE WITH TAPERED RIGID INSULATION (1/2" PER 1' SLOPE WITH 2 1/2" MINIMUM THICKNESS), 3/4" COVERBOARD, AND TPO MEMBRANE.

**ROOF "B" & "C":**  
CONTRACTOR SHALL REMOVE ROOF MATERIALS TO TAPERED LIGHTWEIGHT CONCRETE AND REPLACE WITH TAPERED RIGID INSULATION (1/2" PER 1' SLOPE WITH 2 1/2" MINIMUM THICKNESS), 3/4" COVERBOARD, AND TPO MEMBRANE.



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VARIOUS BUILDINGS

HIGGINSVILLE HABILITATION  
CENTER  
100 W 1ST STREET  
HIGGINSVILLE, MISSOURI

PROJECT # M2315-01  
SITE # 7357  
ASSET # 6517357027  
6517357024, 6517357023

REVISION: \_\_\_\_\_  
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ISSUE DATE: 1/26/2023

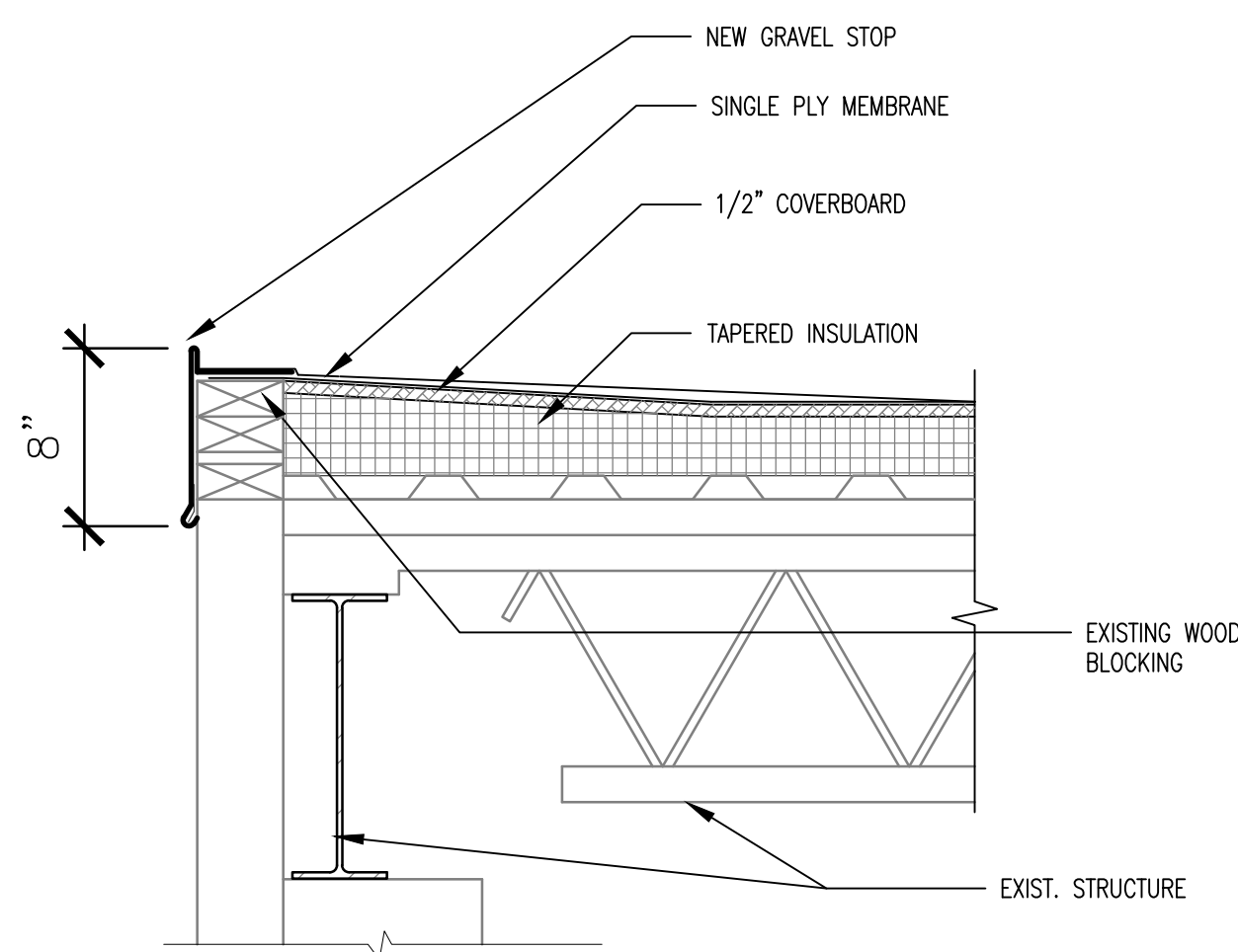
CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: MICHAEL BUECHLER  
CHECKED BY: LARRY BLOCK  
DESIGNED BY: LARRY BLOCK

SHEET TITLE:  
DETAILS

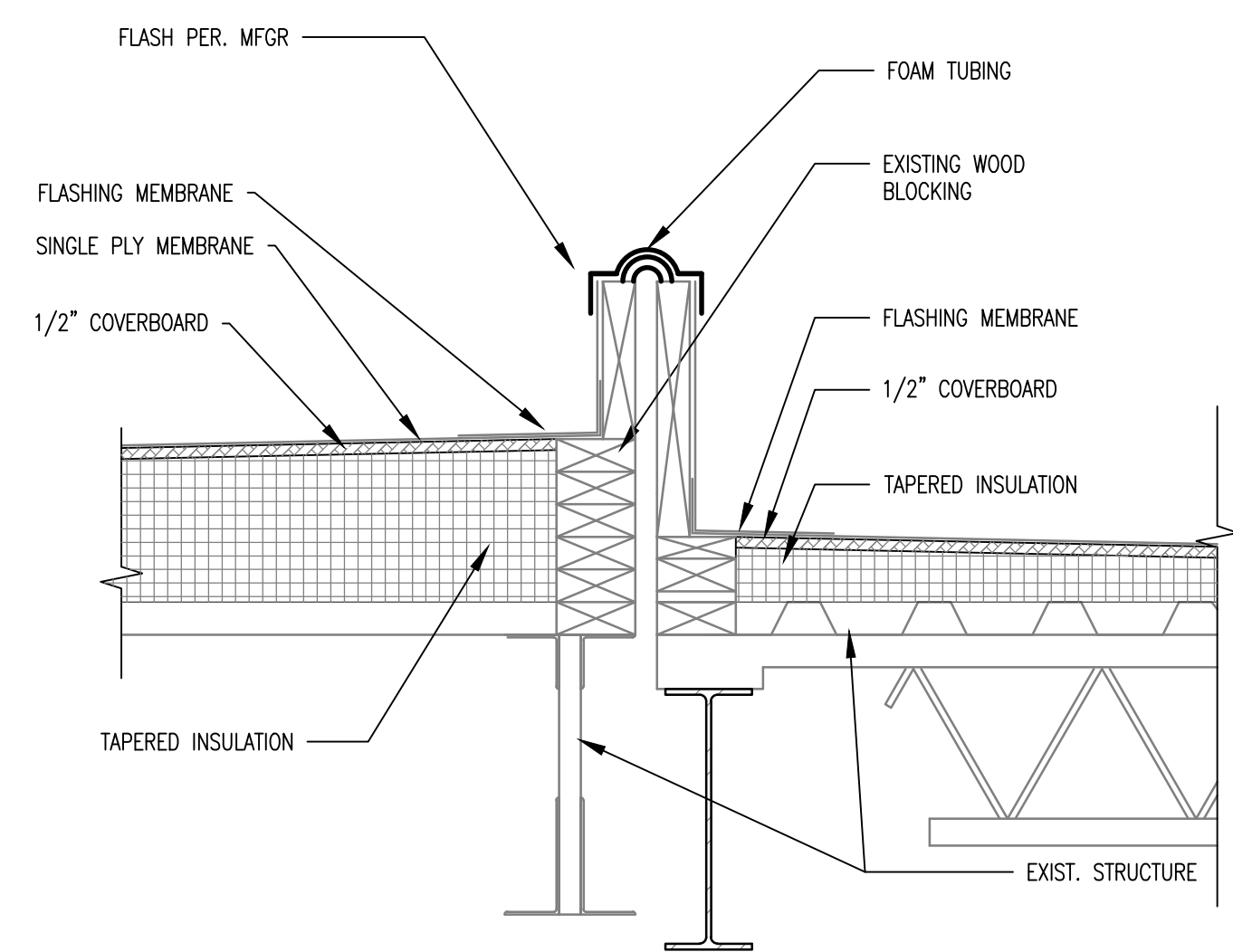
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A-501

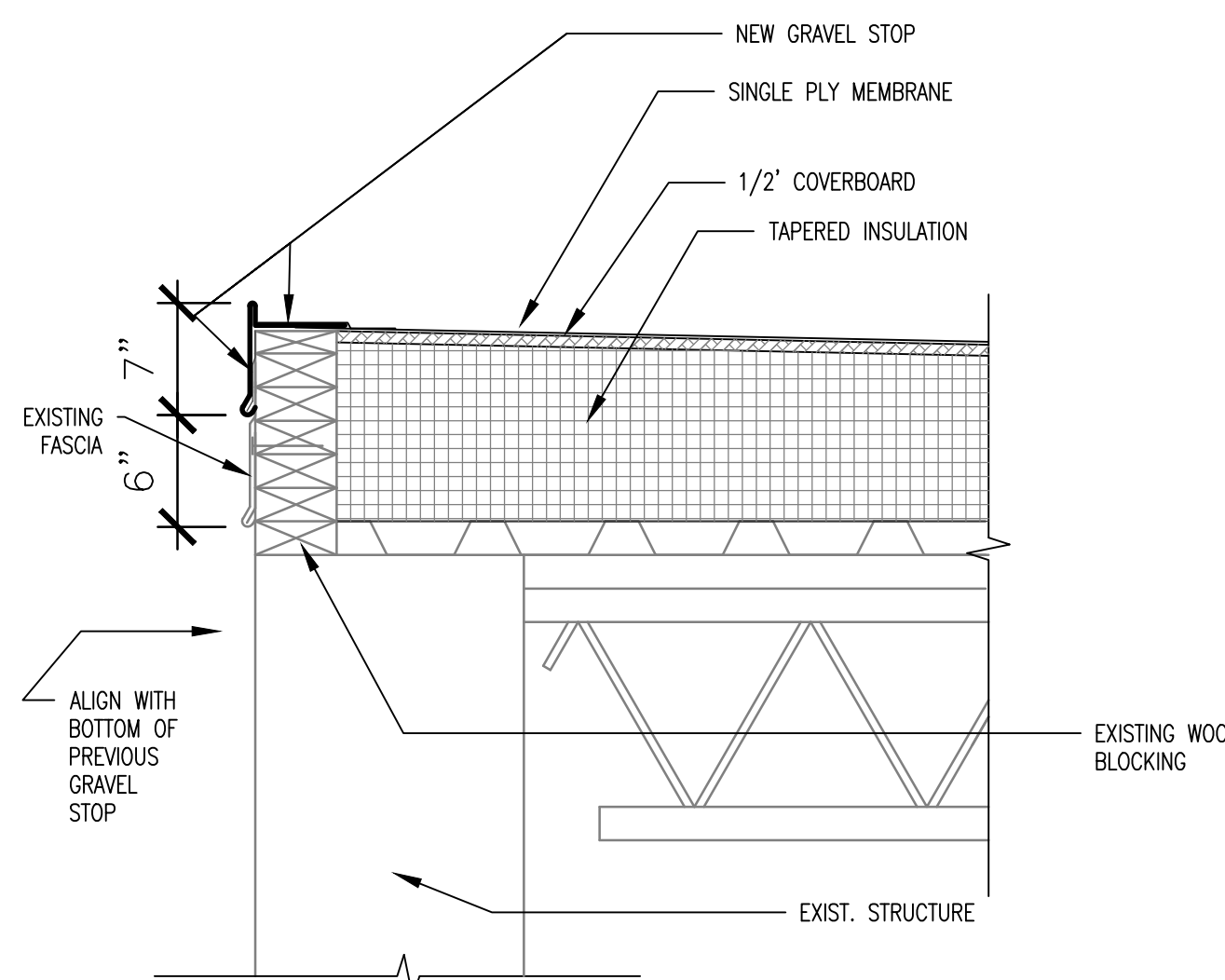
4 OF 5 SHEETS  
1/26/2023



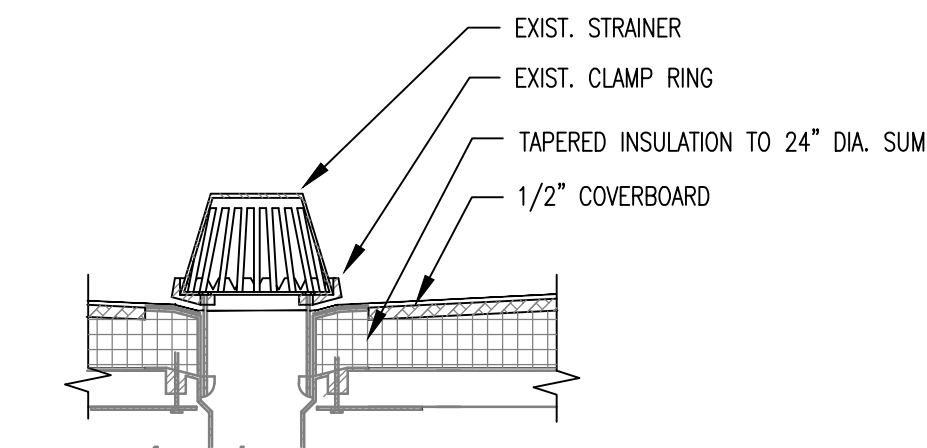
1 ROOF & FLASHING DETAIL KITCHEN  
& LAUNDRY BUILDING ADDITION  
SCALE: 1 1/2" = 1'-0"



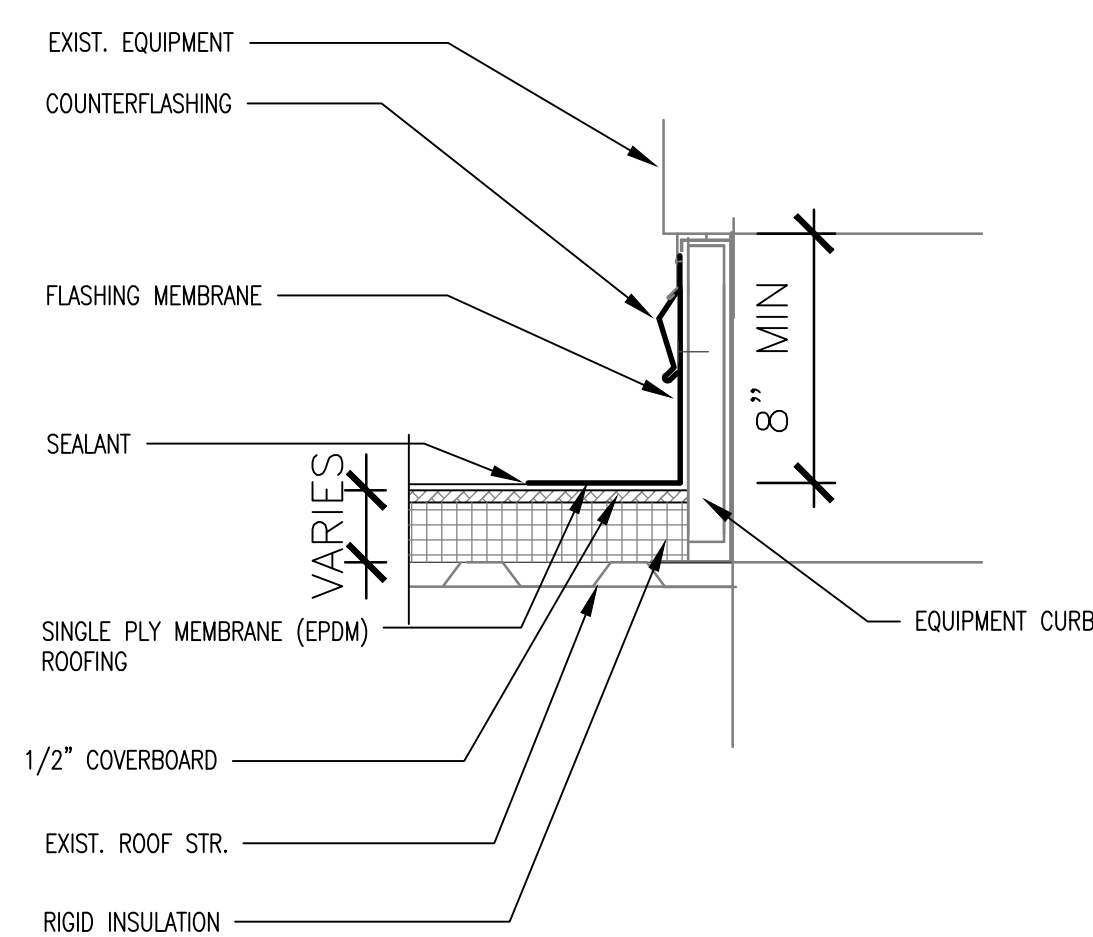
2 EXPANSION JOINT DETAIL KITCHEN  
& LAUNDRY BUILDING  
SCALE: 1 1/2" = 1'-0"



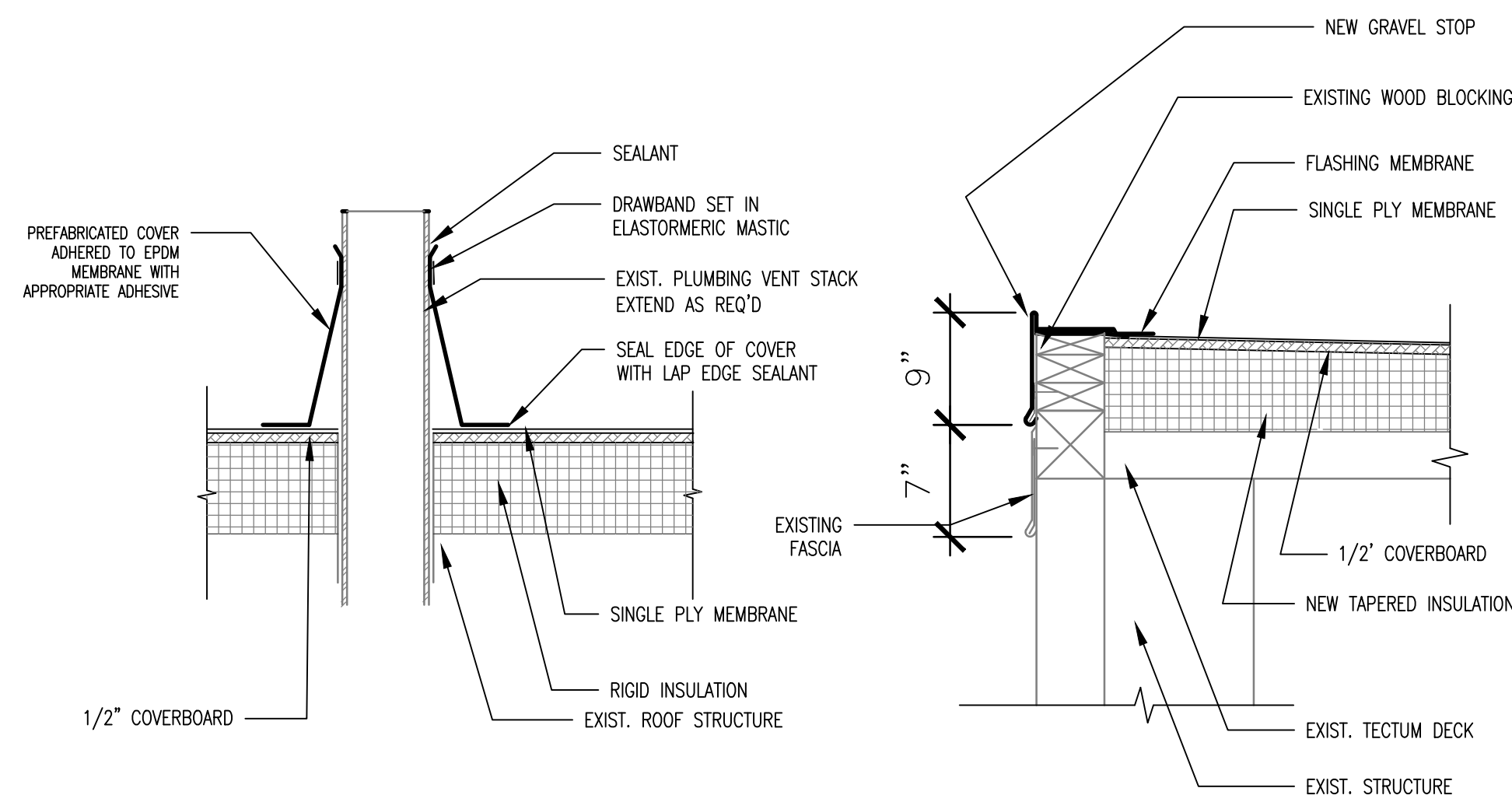
3 ROOF & FLASHING DETAIL KITCHEN  
& LAUNDRY BUILDING  
SCALE: 1 1/2" = 1'-0"



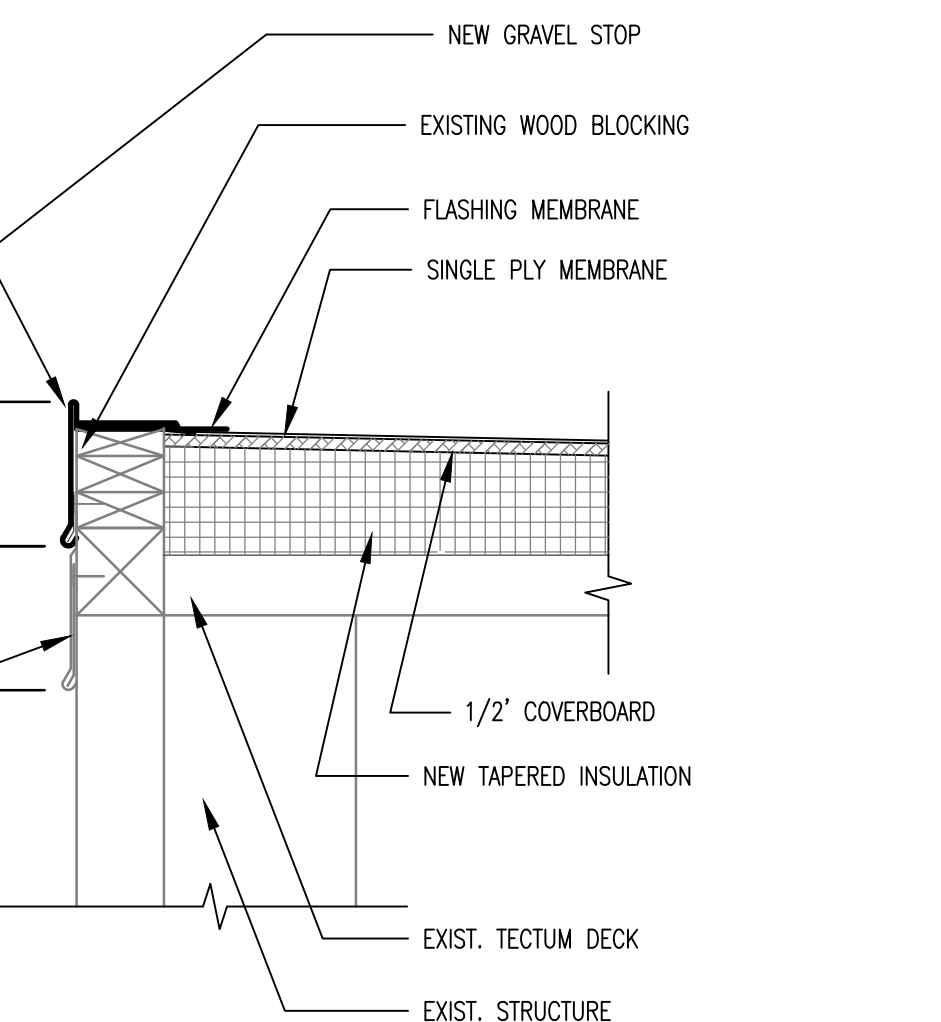
4 ROOF DRAIN DETAIL KITCHEN &  
LAUNDRY BUILDING AND  
MAINTENANCE BUILDING  
SCALE: 1 1/2" = 1'-0"



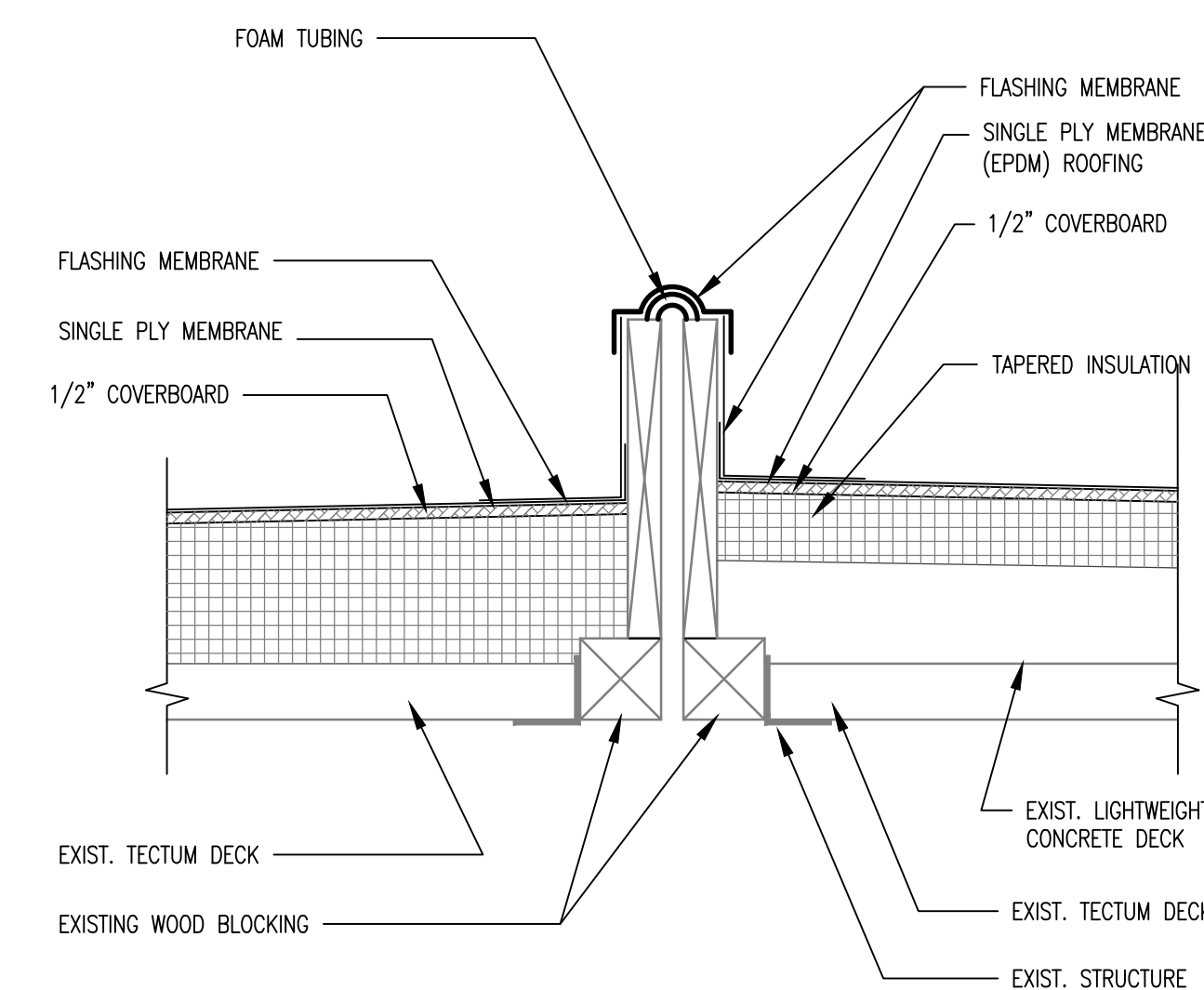
5 ROOF EQUIPMENT SUPPORT TYPICAL  
SCALE: 1 1/2" = 1'-0"



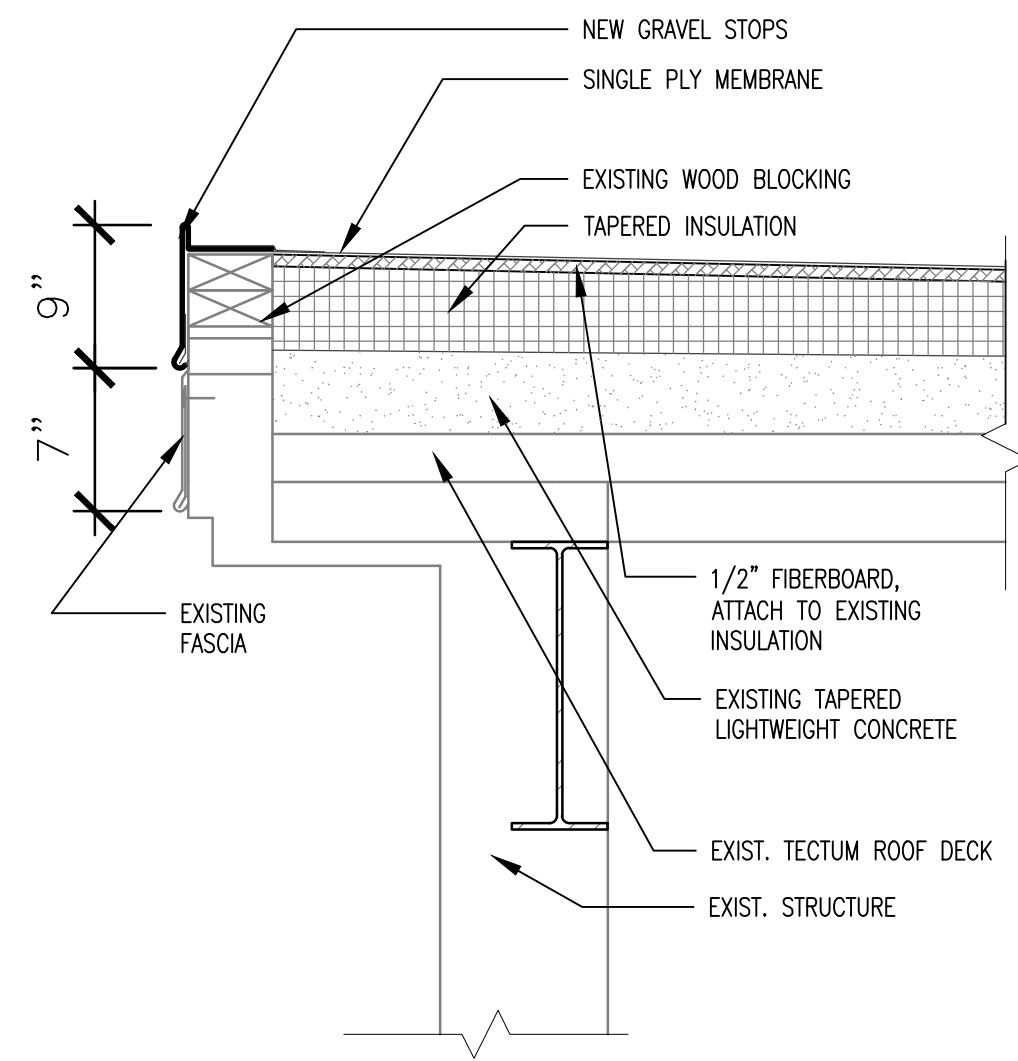
6 TYPICAL DETAIL PLUMBING VENT  
SCALE: 1 1/2" = 1'-0"



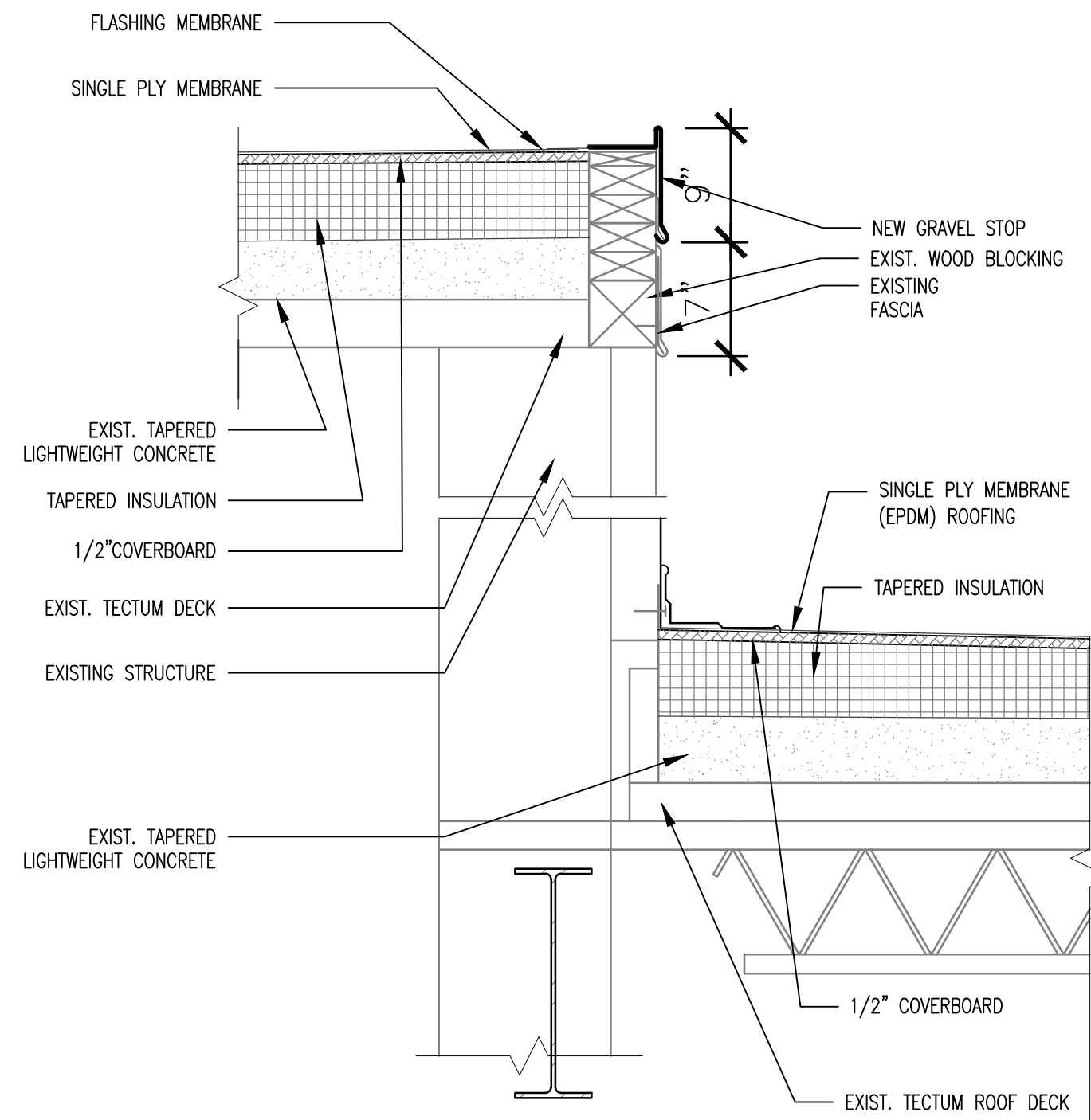
7 ROOF EDGE MAINTENANCE BUILDING  
SCALE: 1 1/2" = 1'-0"



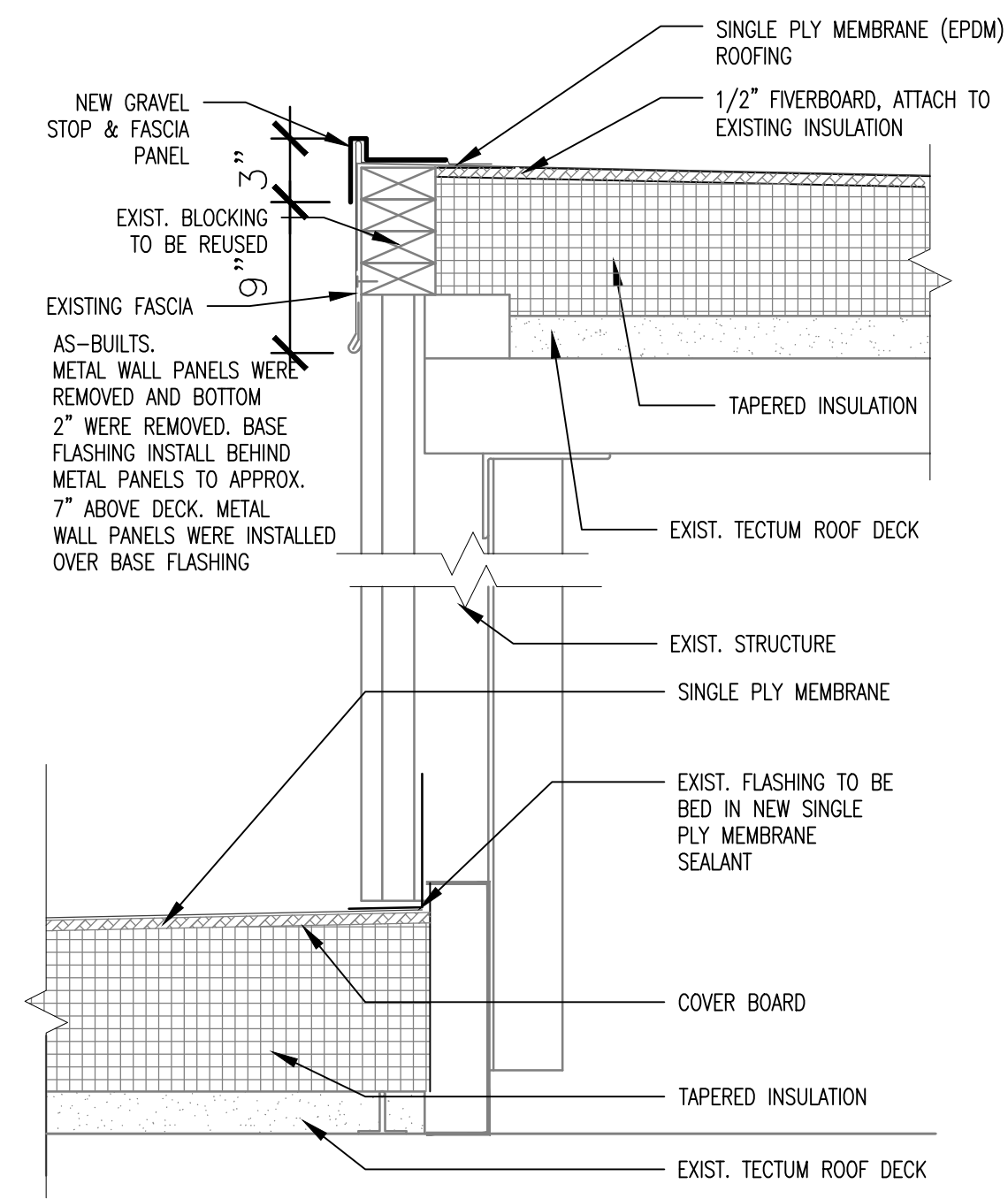
8 EXPANSION DETAIL MAINTENANCE  
BUILDING  
SCALE: 1 1/2" = 1'-0"



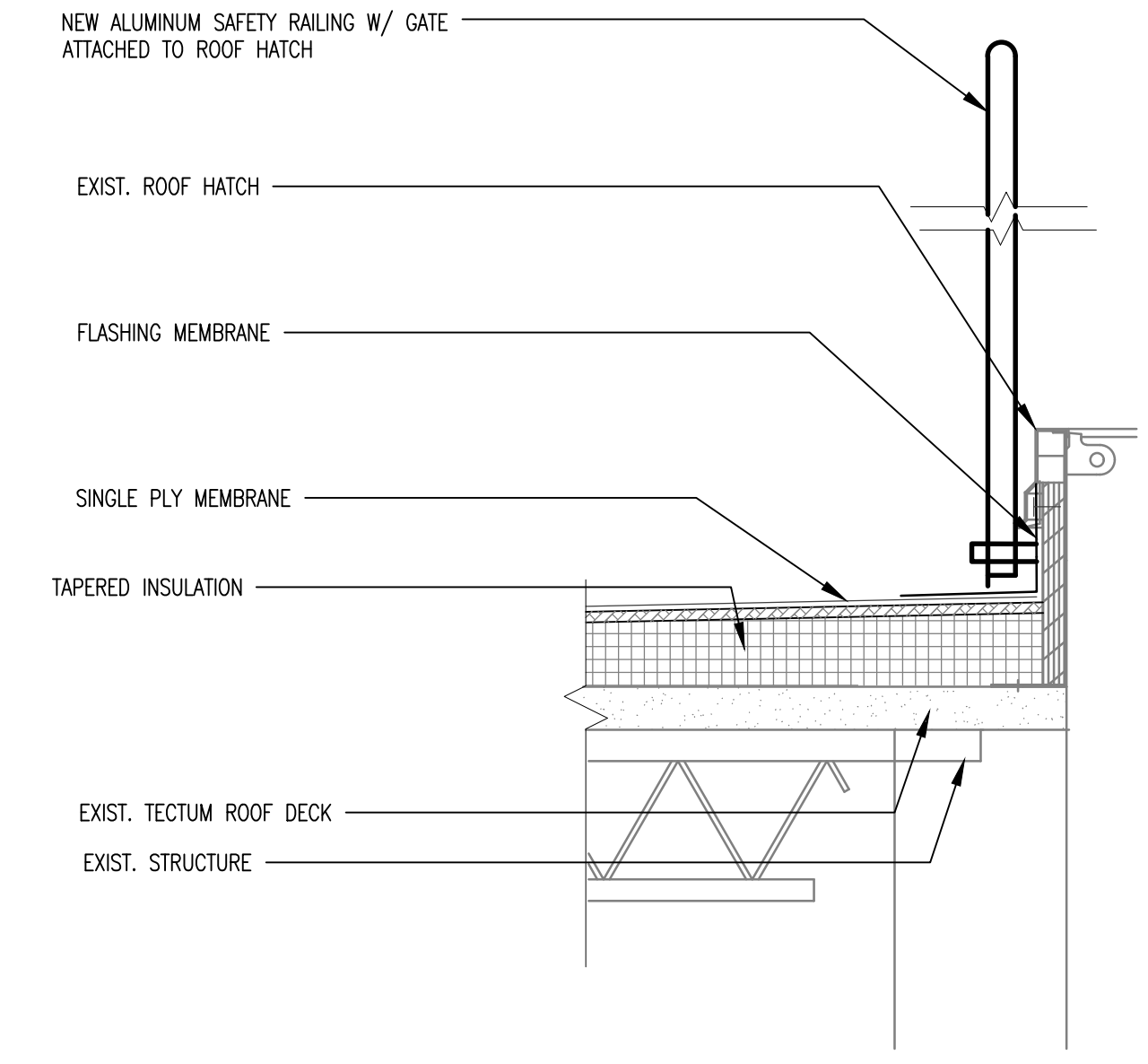
**1** ROOF & FLASHING DETAIL MAINT. BLDG.  
SCALE: 1 1/2" = 1'-0"



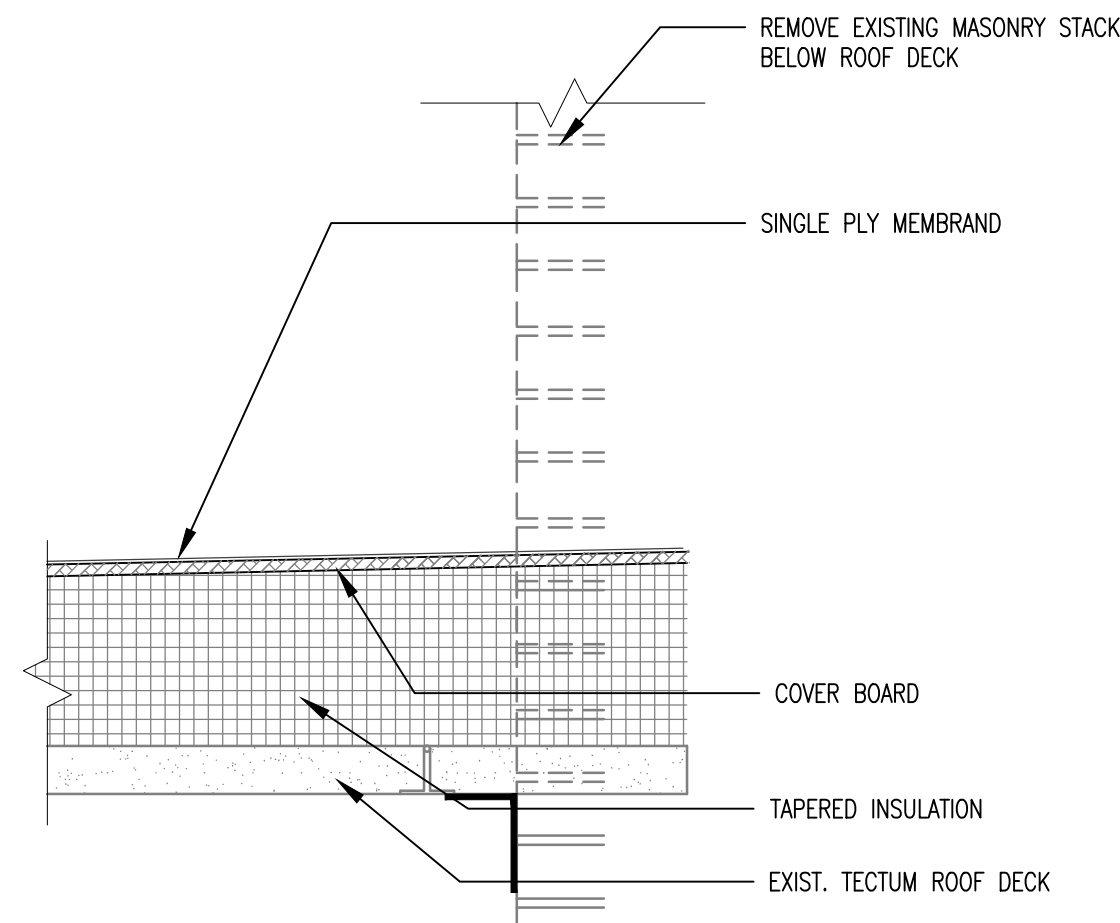
**2** ROOF & FLASHING DETAIL MAINT. BLDG.  
SCALE: 1 1/2" = 1'-0"



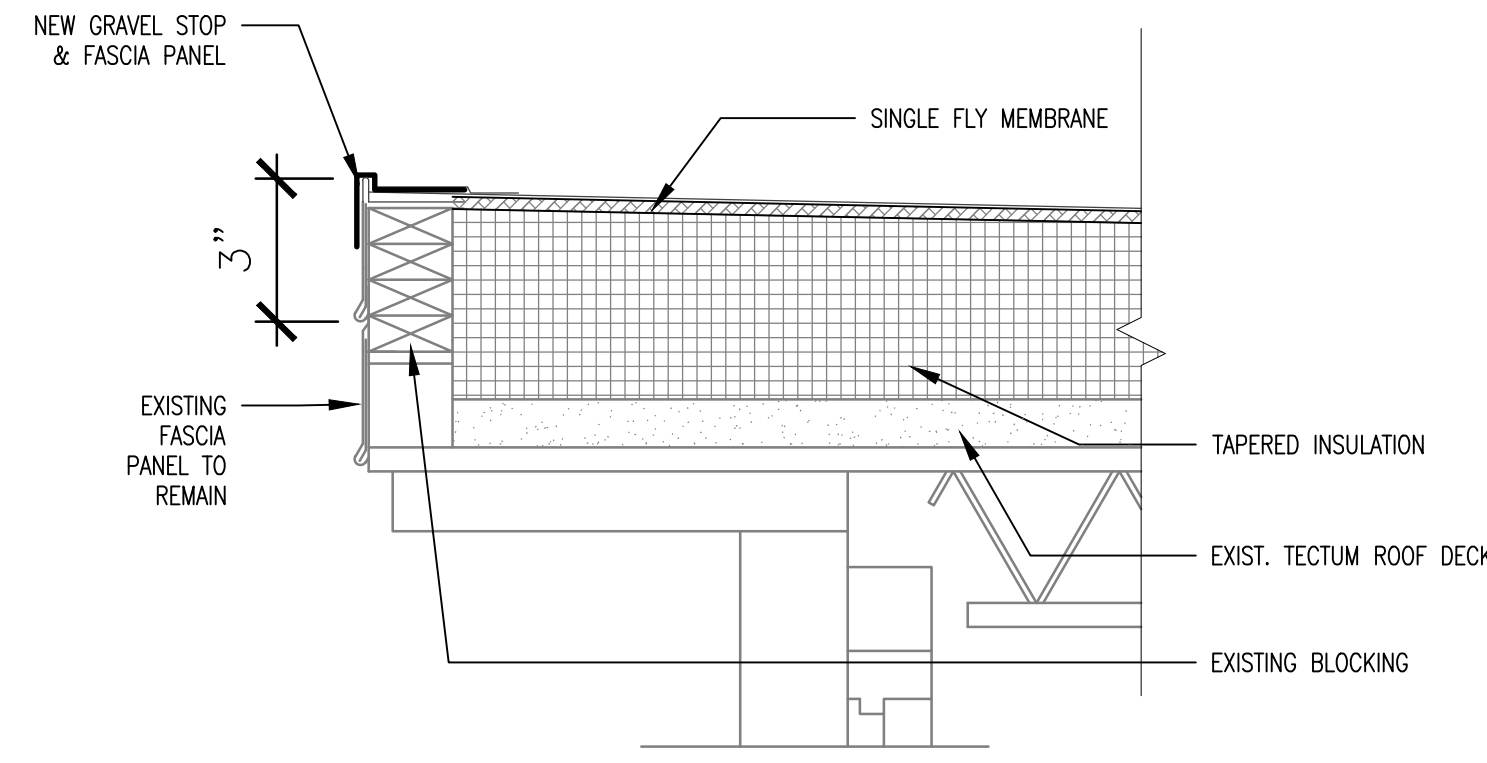
**3** INT. ROOF EDGE DETAIL EDUCATION BLDG.  
SCALE: 1 1/2" = 1'-0"



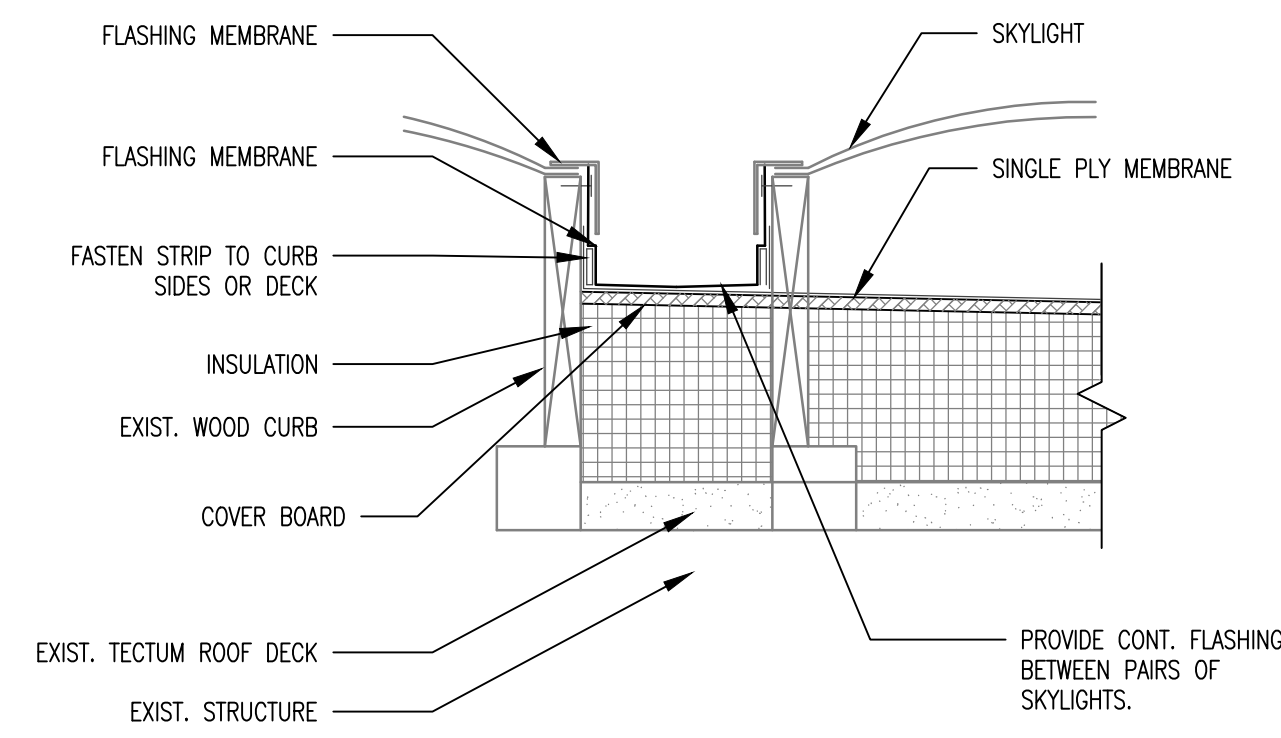
**4** ROOF HATCH DETAIL EDUCATION BLDG.  
SCALE: 1 1/2" = 1'-0"



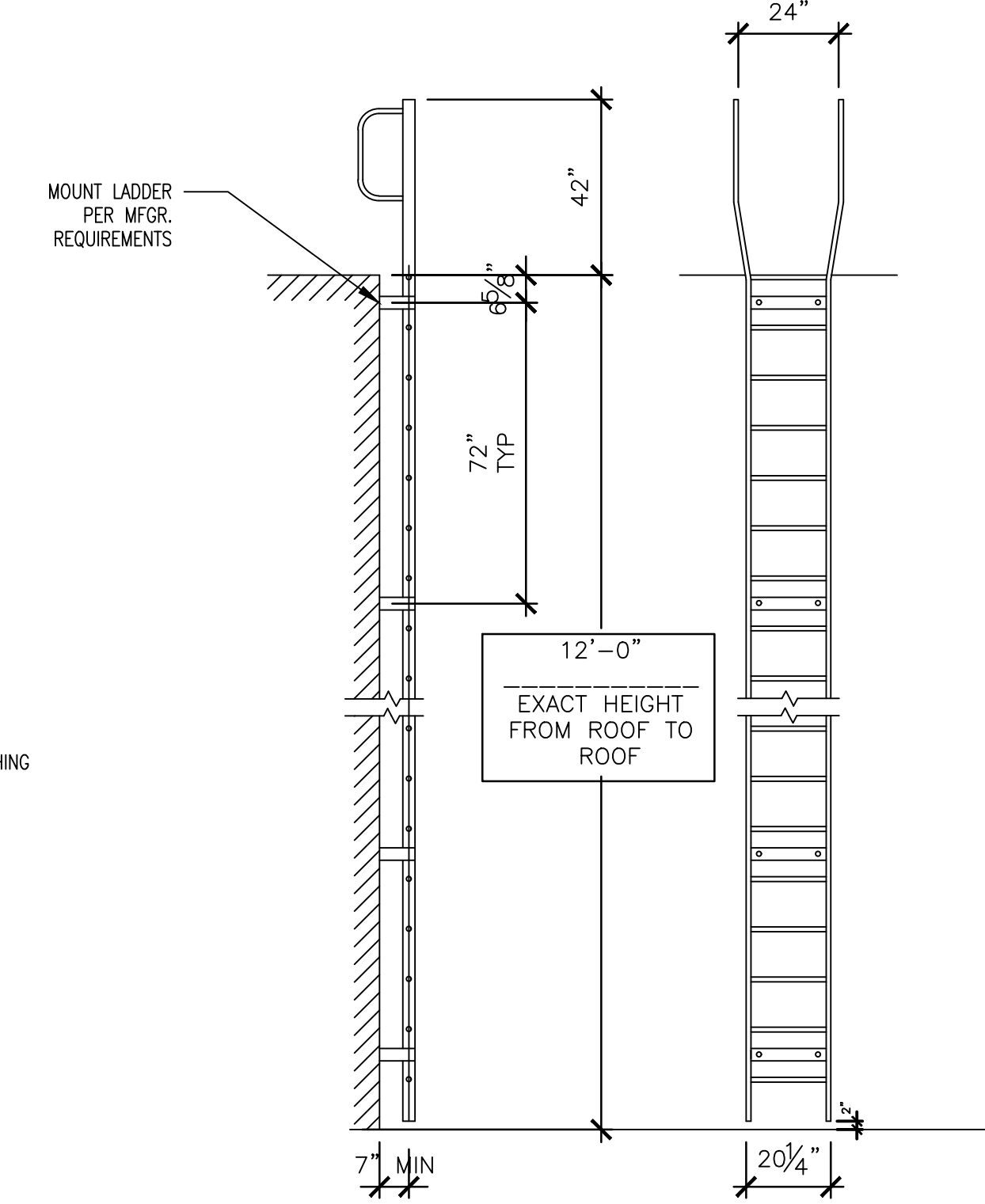
**5** MASONRY STACK EDUCATION BLDG.  
SCALE: 1 1/2" = 1'-0"



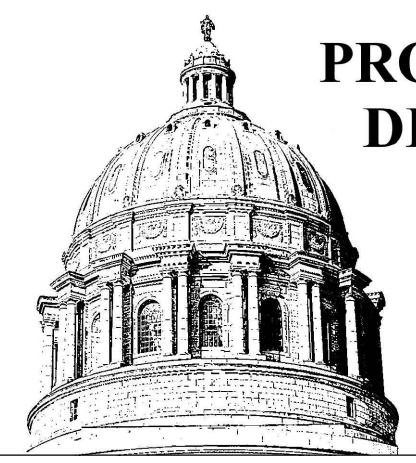
**6** LOWER ROOF EDGE DETAIL EDU. BLDG.  
SCALE: 1 1/2" = 1'-0"



**7** SKYLIGHT DETAIL EDUCATION BUILDING  
SCALE: 1 1/2" = 1'-0"



**8** LADDER DETAIL  
SCALE: N.T.S.



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ISSUE DATE: 1/26/2023

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: MICHAEL BUECHLER  
CHECKED BY: \_\_\_\_\_  
DESIGNED BY: LARRY BLOK

SHEET TITLE:  
DETAILS

SHEET NUMBER:

A-502

5 OF 5 SHEETS  
1/26/2023