

PROJECT NAME: \_\_\_\_\_

PARTIAL ROOF REPLACEMENT AT:

# BEECHER ROAD ELEMENTARY SCHOOL

40 BEECHER ROAD.

WOODBIDGE, CONNECTICUT 06525

PROJECT LOCATION: \_\_\_\_\_



## DRAWING LIST

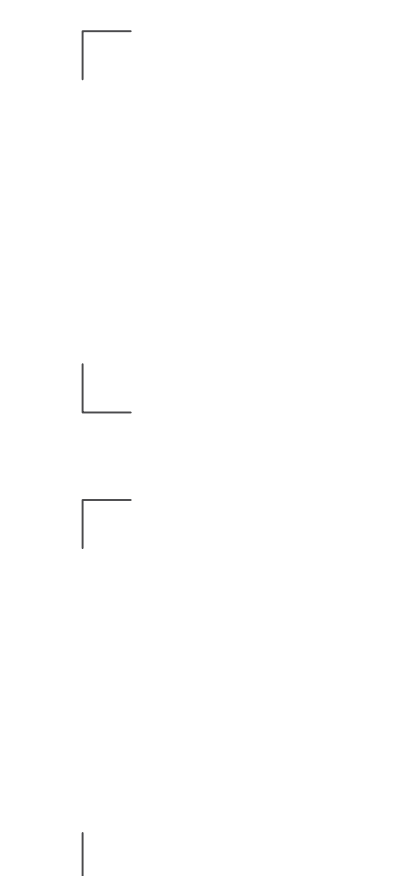
COVER SHEET

### ARCHITECTURAL:

- C1 CODE INFORMATION
- A1 OVERALL ROOF PLAN
- A2 ROOF PLAN PART "1"
- A3 ROOF DETAILS

### ARCHITECT

SILVER PETRUCELLI & ASSOC.  
3190 WHITNEY AVENUE, HAMDEN CT 06518  
311 STATE STREET NEW LONDON, CT 06320  
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CONSTRUCTION DOCUMENT SUBMISSION: 10/19/2023

**CODE INFORMATION**

DATE OF ORIGINAL CONSTRUCTION 1963  
 DATE OF ADDITION \_\_\_\_\_

1. GROUP CLASSIFICATION (CHAPTER 3)  
 (PRIMARY) E-EDUCATIONAL  
 (INCIDENTAL) A3-ASSEMBLY

2. CONSTRUCTION TYPE (CHAPTER 6)  
 MINIMUM TYPE REQUIRED 2B  
 ACTUAL TYPE PROVIDED (EXISTING) --  
 (NEW) 2B

3. BUILDING HEIGHT (CHAPTER 5)  
 ALLOWABLE HEIGHT (STORY/FEET) 3/75'-0"  
 ACTUAL HEIGHT (STORY/FEET) 1/50'-0"  
 (STORIES ABOVE GRADE) 2

4. BUILDING AREA (CHAPTER 5)  
 A) BUILDING AREA (FIRST)  
 EXISTING CONSTRUCTION 152,355 sq.ft.  
 NEW CONSTRUCTION 0 sq.ft.  
 TOTAL FLOOR 152,355 sq.ft.  
 B) BUILDING AREA (SECOND)  
 EXISTING CONSTRUCTION 0 sq.ft.  
 NEW CONSTRUCTION 0 sq.ft.  
 TOTAL FLOOR 0 sq.ft.  
 TOTAL (ALL FLOORS) 152,355 sq.ft.

5. AREA MODIFICATIONS TO TABLE 503 (FOR EACH SEPARATE BUILDING AS DEFINED BY FIRE WALLS AND/OR EXTERIOR WALLS)  
NA

6. CASE 1 - SINGLE OCCUPANCY OR NONSEPARATED USES (302.3.1) (ALLOWABLE AREA 506.4)  
NA

7. CASE 2 - MIXED OCCUPANCY SEPARATED USES (302.3.2) (ALLOWABLE AREA 506.4)  
NA

8. FIRE-RESISTANCE RATED REQUIREMENTS FOR BUILDING ELEMENTS (TABLE 601, SEE CODE PLANS FOR SPECIFIC DESIGNATIONS)

1. STRUCTURAL FRAME, INCLUDING COLUMNS, GIRDERS, TRUSSES	<u>0</u>	Hr(s)
2. BEARING WALLS: EXTERIOR (TABLE 602)	<u>0/1</u>	Hr(s)
INTERIOR	<u>0</u>	Hr(s)
3. NONBEARING WALLS & PARTITIONS EXTERIOR (TABLE 602)	<u>0/1</u>	Hr(s)
4. NONBEARING WALLS & PARTITIONS INTERIOR	<u>0</u>	Hr(s)
5. FLOOR CONSTRUCTION (INCLUDING SUPPORTING BEAMS & JOISTS)	<u>0</u>	Hr(s)
6. ROOF CONSTRUCTION (INCLUDING SUPPORTING BEAMS & JOISTS)	<u>0</u>	Hr(s)

9. OCCUPANCY LOAD

DESIGN TOTAL FOR BASEMENT	<u>NA</u>
TOTAL EXIT CAPACITY FOR BASEMENT	<u>NA</u>
DESIGN TOTAL FOR FIRST FLOOR	<u>NA</u>
TOTAL EXIT CAPACITY FOR FIRST FLOOR	<u>NA</u>
DESIGN TOTAL FOR BUILDING	<u>NA</u>
TOTAL EXIT CAPACITY FOR BUILDING	<u>NA</u>

10. MODIFICATIONS

	APPROVED	NOT APPROVED
	<input type="checkbox"/>	<input type="checkbox"/>
	APPROVED	NOT APPROVED
	<input type="checkbox"/>	<input type="checkbox"/>
	APPROVED	NOT APPROVED
	<input type="checkbox"/>	<input type="checkbox"/>

11. ACCESSIBLE BUILDING X DESIGNATED  
 \_\_\_\_\_ NON DESIGNATED

12. MINIMUM PLUMBING FIXTURE COUNT (I.P.C. CHAPTER 4) FOR EACH TYPE OF OCCUPANCY PER ENTIRE FACILITY

GROUP "A3" OCCUPANCY (DESIGN LOAD = NA)		
	REQUIRED	PROVIDED
W/C MALE	NA	NA
W/C FEMALE	NA	NA
LAVS	NA	NA
D/F	NA	NA
W/C UNISEX	NA	NA
LAVS UNISEX	NA	NA

GROUP "E" OCCUPANCY (DESIGN LOAD = NA)		
	REQUIRED	PROVIDED
W/C	NA	NA
LAVS	NA	NA
D/F	NA	NA

(TOTAL DESIGN LOAD FOR ENTIRE FACILITY = NA)

13. ENTIRE BUILDINGS SPRINKLERED  
 YES  NO

14. THRESHOLD BUILDING CONDITIONS  
 YES  NO

15. CODES TO WHICH THIS PROJECT WAS DESIGNED

State Building Code	<u>2021 IBC CTSBC/2022 AMEND.</u>
State Mechanical Code	<u>2017 ICC</u>
State Plumbing Code	<u>2015 IPC</u>
State Energy Conservation Code	<u>2015 IECC</u>
State Electrical Code	<u>2020 NFPA 70</u>
State Health Code	<u>MOST CURRENT</u>
OSHA	<u>MOST CURRENT</u>
Section 504	<u>CURRENT</u>
ADA	<u>MOST CURRENT</u>
ANSI 117.1	<u>MOST CURRENT</u>

16. BUILDING AREAS FOR GRANT CALCULATION (ENTIRE FACILITY) (MEASURED TO INSIDE FACE OF EXTERIOR WALLS)

EXISTING UNRENOVATED CONSTRUCTION	<u>0</u>	SQ.FT.
EXISTING RENOVATED CONSTRUCTION	<u>0</u>	SQ.FT.
EXISTING BEING DEMOLISHED	<u>0</u>	SQ.FT.
TOTAL EXISTING CONSTRUCTION	<u>34,860</u>	SQ.FT.
TOTAL NEW CONSTRUCTION	<u>0</u>	SQ.FT.
TOTAL FACILITY	<u>152,355</u>	SQ.FT.

OPEN AREAS (NOT INCLUDED IN TOTAL FACILITY)  
 NA NA SQ.FT.

17. TOTAL CONSTRUCTED BUILDING AREA (OUTSIDE FACE OF EXTERIOR WALLS INCLUDING OPEN AREAS ABOVE)  
NA SQ.FT.

**FIRE SAFETY CODE DATA:**

1. CLASSIFICATION OF OCCUPANCY	<u>EDUCATIONAL/ASSEMBLY</u>
2. MINIMUM CONSTRUCTION REQUIRED	<u>2B</u>
ACTUAL CONSTRUCTION PROVIDED	<u>2A</u>
3. NOTIFICATION /ALARMS (CFSC 2005, NFPA 72, NATIONAL FIRE ALARM CODE 2002)	<u>YES X NO</u>
4. DETECTION (CFSC 2005, NFPA 72, NATIONAL FIRE ALARM CODE 2002)	<u>YES X NO</u>
5. EXTINGUISHMENT REQUIREMENTS (NFPA 13, 2002)	<u>YES X NO</u>

**MEANS OF EGRESS**

MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT IBC TABLE 1004.1.2

USE	FLOOR AREA IN S.F. PER OCCUPANT
1. CLASSROOMS	<u>20 S.F. NET</u>
2. SHOPS & VOCATIONAL	<u>50 S.F. NET</u>
3. ASSEMBLY WITHOUT FIXED SEATS	<u>7 S.F. NET</u>
TABLES AND CHAIRS	<u>15 S.F. NET</u>
4. PLATFORMS	<u>15 S.F. NET</u>
5. LIBRARY	
READING ROOMS	<u>50 S.F. NET</u>
STACK AREA	<u>100 S.F. GROSS</u>
6. LOCKER ROOMS	<u>50 S.F. GROSS</u>
7. MECHANICAL AREAS	<u>300 S.F. GROSS</u>
8. STORAGE	<u>300 S.F. GROSS</u>
9. BUSINESS AREAS	<u>100 S.F. GROSS</u>
10. Courtyards	<u>15 S.F. NET</u>

MAXIMUM LENGTH OF EXIT TRAVEL  
 1. I.B.C. TABLE 1015.1 250 feet

**SYMBOL LEGEND**

- PLAN SECTION DETAIL OR ELEVATION-SHEET NUMBER
- INDICATES SLOPE DIRECTION OF SLOPED STRUCTURAL DECK.
- TAPERED INSULATION CRICKET SLOPED @ 3/4" PER FOOT
- INDICATES SLOPE DIRECTION & INDICATES EXISTING ROOF PITCH.
- NOT IN CONTRACT SCOPE
- WALKWAY PADS. SEE CONSTRUCTION NOTE #2
- EXISTING ROOF DRAIN TO BE REMOVED. SEE DEMOLITION NOTES.
- NEW ROOF DRAIN TO BE INSTALLED. SEE DETAIL A/A3
- SECONDARY OVERFLOW ROOF DRAIN. SEE DETAIL B/A3
- METAL SCUPPER W/ COLLECTION BOX. SEE DETAIL C/A3
- EXISTING VENT STACK. SEE DETAIL E/A3
- PITCH POCKET. SEE DETAIL F/A3
- ROOF HATCH. SEE DETAIL G & H/A3
- SKYLIGHT. SEE DETAIL J/A3
- NEW METAL STAIRCASE. SEE DETAIL K/A3
- EXISTING ROOF TOP FAN UNIT. SEE DETAIL L/A3
- EXISTING MECHANICAL UNIT. SEE DETAIL M/A3
- EXISTING ROOF TOP MECHANICAL UNIT. SEE DETAIL N/A3
- EXISTING ROOF TOP MECHANICAL UNIT. SEE CONSTRUCTION NOTE #3
- METAL DOWNSPOUT. SEE CONSTRUCTION NOTE #4
- EXISTING ROOF TOP DUCT WORK. SEE CONSTRUCTION NOTE #5
- EXISTING GAS PIPING. SEE CONSTRUCTION NOTE #6
- EXISTING ELECTRICAL CONDUIT. SEE CONSTRUCTION NOTE #7
- ABANDONED METAL DUNNAGE. SEE DEMOLITION NOTE #5
- ABANDONED MECHANICAL CURB. SEE DEMOLITION NOTE #6

**GENERAL NOTES**

- ALL FLAT ROOFS TO RECEIVE 3/4" PER FOOT TAPERED RIGID INSULATION MINIMUM UNLESS OTHERWISE NOTED.
- FIELD VERIFY ALL DIMENSIONS & PERFORM TEST CUTS AT EACH ROOF PRIOR TO THE BID.
- ALL MATERIALS ARE NEW UNLESS OTHERWISE NOTED "EXISTING".
- ALL WOOD BLOCKING, PLYWOOD & NAILERS TO BE PRESSURE TREATED. (P.T.)
- ALL WOOD BLOCKING INDICATED IN DETAILS ARE TO BE ANCHORED TO THE EXISTING STRUCTURE.
- ALL MEMBRANE FLASHING INDICATED IS TO EXTEND A MINIMUM OF 8". (VERTICAL OR HORIZONTAL)
- CONTRACTOR IS TO SURVEY THE EXISTING ROOF DECKS W/A LEVEL (AFTER DEMOLITION) TO VERIFY THE SLOPES INDICATED ON PLAN ARE ACCURATE. NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY ADDITIONAL ROOFING OPERATIONS.
- CONTRACTOR IS TO INSPECT THE UNDERSIDE OF ALL ROOF DECKS PRIOR TO ROOFING OPERATIONS TO ENSURE THAT NO INTERIOR MATERIALS, EQUIPMENT, FINISHES OR OBJECTS WILL BE PIERCED OR DAMAGED.
- CONTRACTOR ASSUMES ALL RESPONSIBILITY DURING PROJECT & WILL REPLACE ANY & ALL DAMAGED EQUIPMENT W/NO ADDITIONAL COST TO OWNER.
- SITE AREAS DISTURBED SHALL BE CLEANED & RE-LEVELLED. W/LAWN AREAS MAGNETICALLY RAKED TO REMOVE ANY METAL DEBRIS & RE-SEED AS REQUIRED TO MATCH ADJACENT CONDITIONS.
- CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR CLEAN UP OF ROOFING MATERIALS & DEBRIS THAT PENETRATES THE INTERIOR ENVELOPE OF THE BUILDING W/NO ADDITIONAL COST TO THE OWNER.
- SNAKE/CLEAN OUT ALL EXISTING VERTICAL & HORIZONTAL LEADERS OUT TO NEAREST CRANHOLE OUTSIDE OF BUILDING.
- ALL CRICKETS ARE TO BE SLOPED @ A MINIMUM OF 3/4" PER FOOT & COORDINATE CRICKETS AROUND EXIST. HVAC UNITS AS REQUIRED TO AVOID PONDING.
- CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL & RE-INSTALLATION OF ALL HVAC UNITS INCLUDING ANY ELECTRICAL OR MECHANICAL CONNECTIONS. THIS MAY INCLUDE THE EXTENSION OF EXISTING ELECTRICAL & DUCTWORK SYSTEMS TO ACCOMMODATE NEW MECHANICAL UNIT CURBING & NEW ROOFING SYSTEM.
- SNAKE/CLEAN OUT ALL EXISTING VENT STACKS BEFORE THE INSTALLATION OF METAL SLEEVE.
- ALL DRAIN PIPING IS INSULATED ABOVE THE CEILINGS. THE EXACT ROUTE WILL BE DETERMINED IN THE FIELD. MAKE MINOR ADJUSTMENT IN THE ROUTE AT NO ADDITIONAL COST TO OWNER.
- NEW ROOF INSULATION TO BE A MINIMUM OF R-30 AT ALL NEW ROOF DRAINS AND/OR THE LOW POINTS OF THE ROOF AREAS.
- ALL ANTENNAE, CONDUITS & ANY OTHER OBJECTS TO REMAIN AFFECTED BY SCOPE OF WORK, TO BE REMOVED & REINSTALLED.

**DEMOLITION NOTES**

- REMOVE EXISTING ROOFING MEMBRANE, 1-1/2" OF RIGID INSULATION DOWN TO EXISTING METAL DECK.
- REMOVE EXISTING ROOFING MEMBRANE, 1-1/2" BASE LAYER OF POLYISO & 3/4" TAPERED INSULATION SYSTEM DOWN TO EXISTING METAL DECK.
- REMOVE ALL PERIMETER METAL FLASHING WITHIN SCOPE OF WORK.
- REMOVE EXISTING ROOF DRAINS & SUMP.
- REMOVE & DISPOSE OF EXISTING METAL DUNNAGE.
- REMOVE EXISTING ABANDONED MECHANICAL UNIT CURB. PATCH EXISTING METAL DECK TO MATCH EXISTING. SEE DETAIL Z/A3

**CONSTRUCTION NOTES**

- CONTRACTOR TO PROVIDE A SPECIFIED QUANTITY OF EXISTING DECK REPAIR & REPLACEMENT. SEE PROJECT MANUAL.
- WALKWAY PADS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATION. SEE PROJECT MANUAL FOR ADDITIONAL INFORMATION. COORDINATE & FINALIZE EXACT ROUTE W/ OWNER & ARCHITECT.
- EXISTING ROOFTOP MECHANICAL UNIT. RAISE ENTIRE UNIT MIN. 8" ABOVE HIGH POINT OF NEW ROOF INSULATION. EXTEND ALL DUCTWORK & ELECTRICAL WIRING. SEE DETAIL P/A3 & PROJECT MANUAL.
- NEW METAL DOWNSPOUT LOCATION. CONNECT TO EXIST UNDERGROUND PIPING, OR PROVIDE NEW CONCRETE SPLASH BLOCK IF NO UNDERGROUND PIPING EXISTS.
- EXISTING MECHANICAL UNIT DUCT WORK TO REMAIN. MODIFY ALL STAND-OFFS TO ACCOMMODATE NEW ROOF INSULATION HEIGHT. SEE DETAIL Q/A3 & PROJECT MANUAL.
- EXISTING GAS PIPING TO BE DISCONNECTED & PURGED. RAISE EXISTING GAS PIPING AS REQUIRED TO ACCOMMODATE NEW ROOFING INSULATION HEIGHTS. PROVIDE NEW PIPING EXTENSIONS, JOINTS, FITTINGS & RECONNECT TO EXISTING GAS MAIN. INSTALL ALL EXIST. & NEW GAS PIPING ON NEW PIPE CURBS 24" O.C. PRIME & PAINT ALL EXISTING & NEW GAS PIPING. SEE DETAIL W/A3 & PROJECT MANUAL.
- EXISTING ELECTRICAL CONDUIT TO BE DISCONNECTED & RAISED TO ACCOMMODATE NEW ROOF INSULATION HEIGHTS. REMOVE WIRE/CONDUIT & DISPOSE OF. INSTALL NEW CONDUIT & WIRING IN EXIST LOCATIONS & REPLACE ALL EXISTING JUNCTION BOXES TO MATCH EXISTING. EXTEND CONDUIT & WIRING AS REQUIRED TO ACCOMMODATE NEW ROOF HEIGHTS & ADD NEW JUNCTION BOXES AS REQUIRED. SEE DETAIL W/A3 & PROJECT MANUAL.

**ROOF AREAS**

ROOF "A"	6,400 SF.
ROOF "B"	6,960 SF.
ROOF "C"	21,500 SF.

TOTAL ROOF AREAS: 34,860 SF.  
 THIS AREA IS APPROXIMATE-V.I.F.  
 IECC CODE REQUIREMENT R-VALUE MIN. R-30  
 CONNECTICUT ZONE 2B  
 CBSC REQUIREMENT : R-30 -U.0333

**ROOF ASSEMBLY**

OUTSIDE AIR	0.17
ROOF MEMBRANE	0.33
COVERBOARD	2.20
5" POLYISO INSUL.	29.7
EXISTING DECK	1.23
INSIDE AIR	0.61
R-VALUE TOTAL	34.24

**CODE INFORMATION**

USE GROUP: E  
 CONSTRUCTION CLASS: 2B  
 RISK CATEGORY #5  
 ULTIMATE DESIGN WIND SPEED: 135 MPH  
 NOMINAL DESIGN WIND SPEED: 105 MPH

FACTORY MUTUAL ENGINEERING & RESEARCH CORPORATION (FM): ROOF ASSEMBLY CLASSIFICATION OF NON-COMBUSTIBLE CONSTRUCTION. WIND UPLIFT REQUIREMENT OF 160 FOR FIELD, 175 FOR PERIMETER AND 1110 FOR CORNERS. IN ACCORDANCE WITH FM PROPERTY LOSS PREVENTION DATA SHEETS 1-28.

Project Title:  
 PARTIAL ROOF REPLACEMENT AT:  
**BEECHER ROAD ELEMENTARY SCHOOL**  
 40 BEECHER ROAD.  
 WOODBRIDGE, CONNECTICUT 06525

SILVER PETRUCELLI + ASSOCIATES  
 3190 WHITNEY AVENUE HAMDEN CT 06518  
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Revision	Description	Date	Revised By

Project Title:  
**CODE INFORMATION**

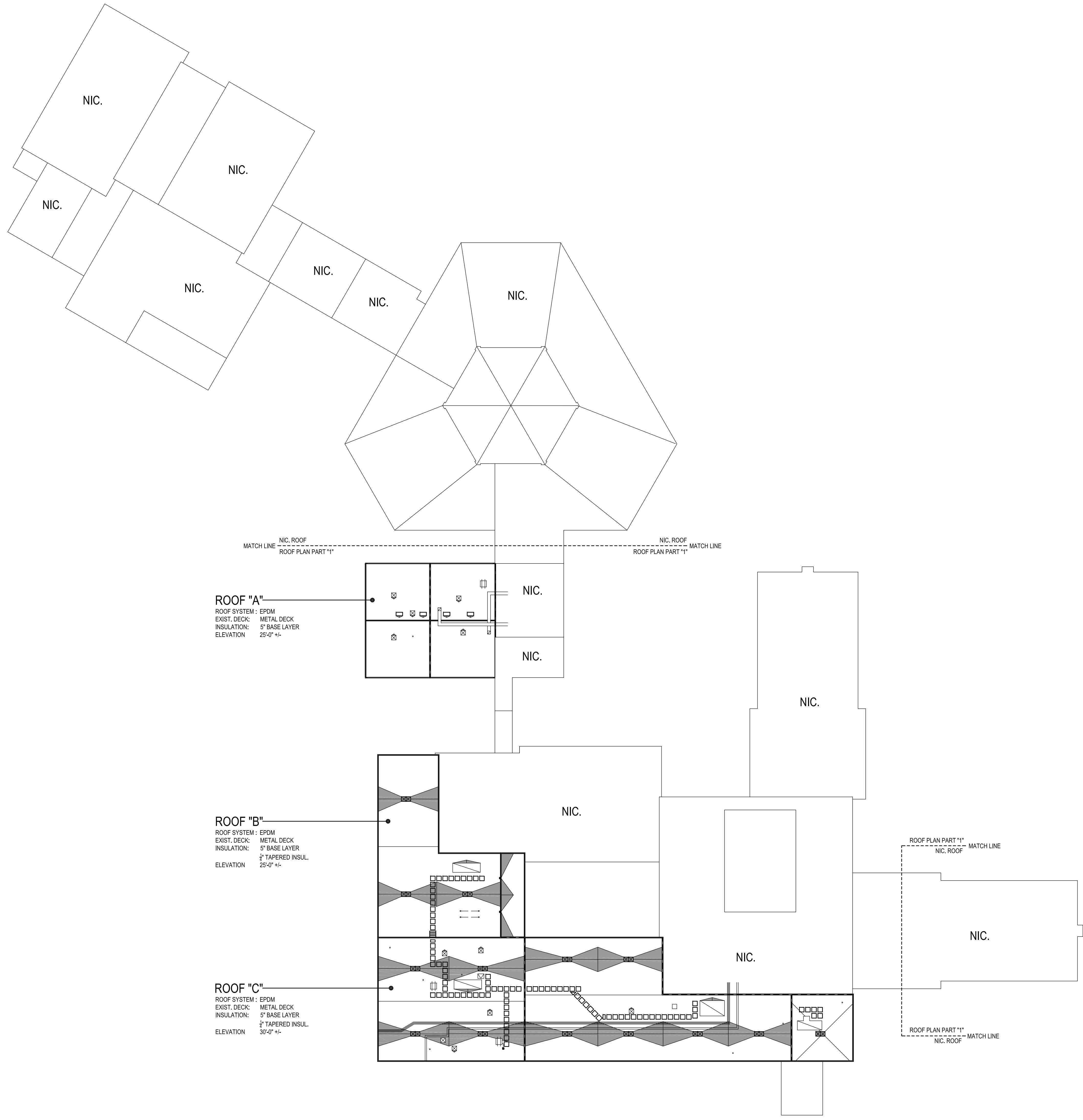
Date:  
 10/19/2023

Scale:  
 NONE

Drawn By:  
 K.LINSLEY

Project Number:  
 23.108

Drawing Number:  
**C1**



**ROOF "A"**  
 ROOF SYSTEM: EPDM  
 EXIST. DECK: METAL DECK  
 INSULATION: 5" BASE LAYER  
 ELEVATION: 25'-0" +/-

**ROOF "B"**  
 ROOF SYSTEM: EPDM  
 EXIST. DECK: METAL DECK  
 INSULATION: 5" BASE LAYER  
 1/2" TAPERED INSUL.  
 ELEVATION: 25'-0" +/-

**ROOF "C"**  
 ROOF SYSTEM: EPDM  
 EXIST. DECK: METAL DECK  
 INSULATION: 5" BASE LAYER  
 1/2" TAPERED INSUL.  
 ELEVATION: 30'-0" +/-

**A1 OVERALL ROOF PLAN**  
 1/32"=1'-0"

SYMBOL LEGEND	
	PLAN SECTION DETAIL OR ELEVATION-SHEET NUMBER
	INDICATES SLOPE DIRECTION OF SLOPED STRUCTURAL DECK.
	TAPERED INSULATION CRICKET SLOPED @ 1/2" PER FOOT
	INDICATES SLOPE DIRECTION & INDICATES EXISTING ROOF PITCH.
	NIC. - NOT IN CONTRACT SCOPE
	WALKWAY PADS, SEE CONSTRUCTION NOTE #2
	EXISTING ROOF DRAIN TO BE REMOVED, SEE DEMOLITION NOTES.
	NEW ROOF DRAIN TO BE INSTALLED, SEE DETAIL A/A3
	SECONDARY OVERFLOW ROOF DRAIN, SEE DETAIL B/A3
	METAL SCUPPER W/ COLLECTION BOX, SEE DETAIL C/A3
	EXISTING VENT STACK, SEE DETAIL E/A3
	PITCH POCKET, SEE DETAIL F/A3
	ROOF HATCH, SEE DETAIL G & H/A3
	SKYLIGHT, SEE DETAIL J/A3
	NEW METAL STAIRCASE, SEE DETAIL K/A3
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	EXISTING MECHANICAL UNIT, SEE DETAIL M/A3
	EXISTING ROOF TOP MECHANICAL UNIT, SEE DETAIL N/A3
	EXISTING ROOF TOP MECHANICAL UNIT, SEE CONSTRUCTION NOTE #3
	METAL DOWNSPOUT, SEE CONSTRUCTION NOTE #4
	EXISTING ROOF TOP DUCT WORK, SEE CONSTRUCTION NOTE #5
	EXISTING GAS PIPING, SEE CONSTRUCTION NOTE #6
	EXISTING ELECTRICAL CONDUIT, SEE CONSTRUCTION NOTE #7
	ABANDONED METAL DUNNAGE, SEE DEMOLITION NOTE #5
	ABANDONED MECHANICAL CURB, SEE DEMOLITION NOTE #6

- GENERAL NOTES**
- ALL FLAT ROOFS TO RECEIVE 1/2" PER FOOT TAPERED RIGID INSULATION MINIMUM UNLESS OTHERWISE NOTED.
  - FIELD VERIFY ALL DIMENSIONS & PERFORM TEST CUTS AT EACH ROOF PRIOR TO THE BID.
  - ALL MATERIALS ARE NEW UNLESS OTHERWISE NOTED "EXISTING".
  - ALL WOOD BLOCKING, PLYWOOD & NAILERS TO BE PRESSURE TREATED, (P.T.)
  - ALL WOOD BLOCKING INDICATED IN DETAILS ARE TO BE ANCHORED TO THE EXISTING STRUCTURE.
  - ALL MEMBRANE FLASHING INDICATED IS TO EXTEND A MINIMUM OF 8", (VERTICAL OR HORIZONTAL)
  - CONTRACTOR IS TO SURVEY THE EXISTING ROOF DECKS W/A LEVEL (AFTER DEMOLITION) TO VERIFY THE SLOPES INDICATED ON PLAN ARE ACCURATE, NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY ADDITIONAL ROOFING OPERATIONS.
  - CONTRACTOR IS TO INSPECT THE UNDERSIDE OF ALL ROOF DECKS PRIOR TO ROOFING OPERATIONS TO ENSURE THAT NO INTERIOR MATERIALS, EQUIPMENT, FINISHES OR OBJECTS WILL BE PIERCED OR DAMAGED.
  - CONTRACTOR ASSUMES ALL RESPONSIBILITY DURING PROJECT & WILL REPLACE ANY & ALL DAMAGED EQUIPMENT W/NO ADDITIONAL COST TO OWNER.
  - SITE AREAS DISTURBED SHALL BE CLEANED & RE-LEVELLED, W/LAWN AREAS MAGNETICALLY RAKED TO REMOVE ANY METAL DEBRIS & RE-SEED AS REQUIRED TO MATCH ADJACENT CONDITIONS.
  - CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR CLEAN UP OF ROOFING MATERIALS & DEBRIS THAT PENETRATES THE INTERIOR ENVELOPE OF THE BUILDING W/NO ADDITIONAL COST TO THE OWNER.
  - SNAKE/CLEAN OUT ALL EXISTING VERTICAL & HORIZONTAL LEADERS OUT TO NEAREST MANHOLE OUTSIDE OF BUILDING.
  - ALL CRICKETS ARE TO BE SLOPED @ A MINIMUM OF 1/2" PER FOOT & COORDINATE CRICKETS AROUND EXIST. HVAC UNITS AS REQUIRED TO AVOID PONDING.
  - CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL & RE-INSTALLATION OF ALL HVAC UNITS INCLUDING ANY ELECTRICAL OR MECHANICAL CONNECTIONS. THIS MAY INCLUDE THE EXTENSION OF EXISTING ELECTRICAL & DUCTWORK SYSTEMS TO ACCOMMODATE NEW MECHANICAL UNIT CURBING & NEW ROOFING SYSTEM.
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  - NEW ROOF INSULATION TO BE A MINIMUM OF R-30 AT ALL NEW ROOF DRAINS AND/OR THE LOW POINTS OF THE ROOF AREAS.
  - ALL ANTENNAE, CONDUITS & ANY OTHER OBJECTS TO REMAIN AFFECTED BY SCOPE OF WORK, TO BE REMOVED & REINSTALLED.

- DEMOLITION NOTES** (X)→
- REMOVE EXISTING ROOFING MEMBRANE, 1-1/2" OF RIGID INSULATION DOWN TO EXISTING METAL DECK.
  - REMOVE EXISTING ROOFING MEMBRANE, 1-1/2" BASE LAYER OF POLYISO & 1/2" TAPERED INSULATION SYSTEM DOWN TO EXISTING METAL DECK.
  - REMOVE ALL PERIMETER METAL FLASHING WITHIN SCOPE OF WORK.
  - REMOVE EXISTING ROOF DRAINS & SUMP.
  - REMOVE & DISPOSE OF EXISTING METAL DUNNAGE.
  - REMOVE EXISTING ABANDONED MECHANICAL UNIT CURB, PATCH EXISTING METAL DECK TO MATCH EXISTING, SEE DETAIL Z/A3

- CONSTRUCTION NOTES** (X)→
- CONTRACTOR TO PROVIDE A SPECIFIED QUANTITY OF EXISTING DECK REPAIR & REPLACEMENT, SEE PROJECT MANUAL.
  - WALKWAY PADS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATION, SEE PROJECT MANUAL FOR ADDITIONAL INFORMATION, COORDINATE & FINALIZE EXACT ROUTE W/ OWNER & ARCHITECT.
  - EXISTING ROOFTOP MECHANICAL UNIT, RAISE ENTIRE UNIT MIN. 8" ABOVE HIGH POINT OF NEW ROOF INSULATION, EXTEND ALL DUCTWORK & ELECTRICAL WIRING, SEE DETAIL P/A3 & PROJECT MANUAL.
  - NEW METAL DOWNSPOUT LOCATION, CONNECT TO EXIST UNDERGROUND PIPING, OR PROVIDE NEW CONCRETE SPLASH BLOCK IF NO UNDERGROUND PIPING EXISTS.
  - EXISTING MECHANICAL UNIT DUCT WORK TO REMAIN, MODIFY ALL STAND-OFFS TO ACCOMMODATE NEW ROOF INSULATION HEIGHT, SEE DETAIL Q/A3 & PROJECT MANUAL.
  - EXISTING GAS PIPING TO BE DISCONNECTED & PURGED, RAISE EXISTING GAS PIPING AS REQUIRED TO ACCOMMODATE NEW ROOFING INSULATION HEIGHTS, PROVIDE NEW PIPING EXTENSIONS, JOINTS, FITTINGS & RECONNECT TO EXISTING GAS MAIN, INSTALL ALL EXIST. & NEW GAS PIPING ON NEW PIPE CURBS 24" O.C. PRIME & PAINT ALL EXISTING & NEW GAS PIPING, SEE DETAIL W/A3 & PROJECT MANUAL.
  - EXISTING ELECTRICAL CONDUIT TO BE DISCONNECTED & RAISED TO ACCOMMODATE NEW ROOF INSULATION HEIGHTS, REMOVE WIRE/CONDUIT & DISPOSE OF, INSTALL NEW CONDUIT & WIRING IN EXIST LOCATIONS & REPLACE ALL EXISTING JUNCTION BOXES TO MATCH EXISTING, EXTEND CONDUIT & WIRING AS REQUIRED TO ACCOMMODATE NEW ROOF HEIGHTS & ADD NEW JUNCTION BOXES AS REQUIRED, SEE DETAIL W/A3 & PROJECT MANUAL.

ROOF AREAS	ROOF ASSEMBLY
ROOF "A" 6,450 SF.	OUTSIDE AIR 0.17
ROOF "B" 6,960 SF.	ROOF MEMBRANE 0.33
ROOF "C" 21,500 SF.	COVERBOARD 2.20
	5" POLYISO INSUL. 28.7
	EXISTING DECK 1.23
	INSIDE AIR 0.61
<b>TOTAL ROOF AREAS: 34,910 SF.</b>	<b>R-VALUE TOTAL 34.24</b>
THIS AREA IS APPROXIMATE - V.I.F.	
IECC CODE REQUIREMENT R-VALUE MIN. R-30	
CONNECTICUT ZONE 2B	
CBSC REQUIREMENT : R-30-UJ.0333	

**CODE INFORMATION**

USE GROUP : E  
 CONSTRUCTION CLASS: 2B  
 RISK CATEGORY #3  
 ULTIMATE DESIGN WIND SPEED: 135 MPH  
 NOMINAL DESIGN WIND SPEED: 105 MPH

FACTORY MUTUAL ENGINEERING & RESEARCH CORPORATION (FM): ROOF ASSEMBLY CLASSIFICATION OF NON-COMBUSTIBLE CONSTRUCTION, WIND UPLIFT REQUIREMENT OF 140 FOR FIELD, 175 FOR PERIMETER AND 1410 FOR CORNERS, IN ACCORDANCE WITH FM PROPERTY LOSS PREVENTION DATA SHEETS 1-28.

GRAPHIC SCALE: 1/8" = 1'-0"

Project Title:  
 PARTIAL ROOF REPLACEMENT AT:  
**BEECHER ROAD ELEMENTARY SCHOOL**  
 40 BEECHER ROAD,  
 WOODBRIDGE, CONNECTICUT 06525

**SILVER PETRUCELLI + ASSOCIATES**

3190 WHITNEY AVENUE HAMDEN CT 06518  
 311 STATE STREET NEW LONDON CT 06320  
 203 230 9007 silverpetrucelli.com

Revision	Description	Date	Revised By

Drawing Title:  
**OVERALL ROOF PLAN**

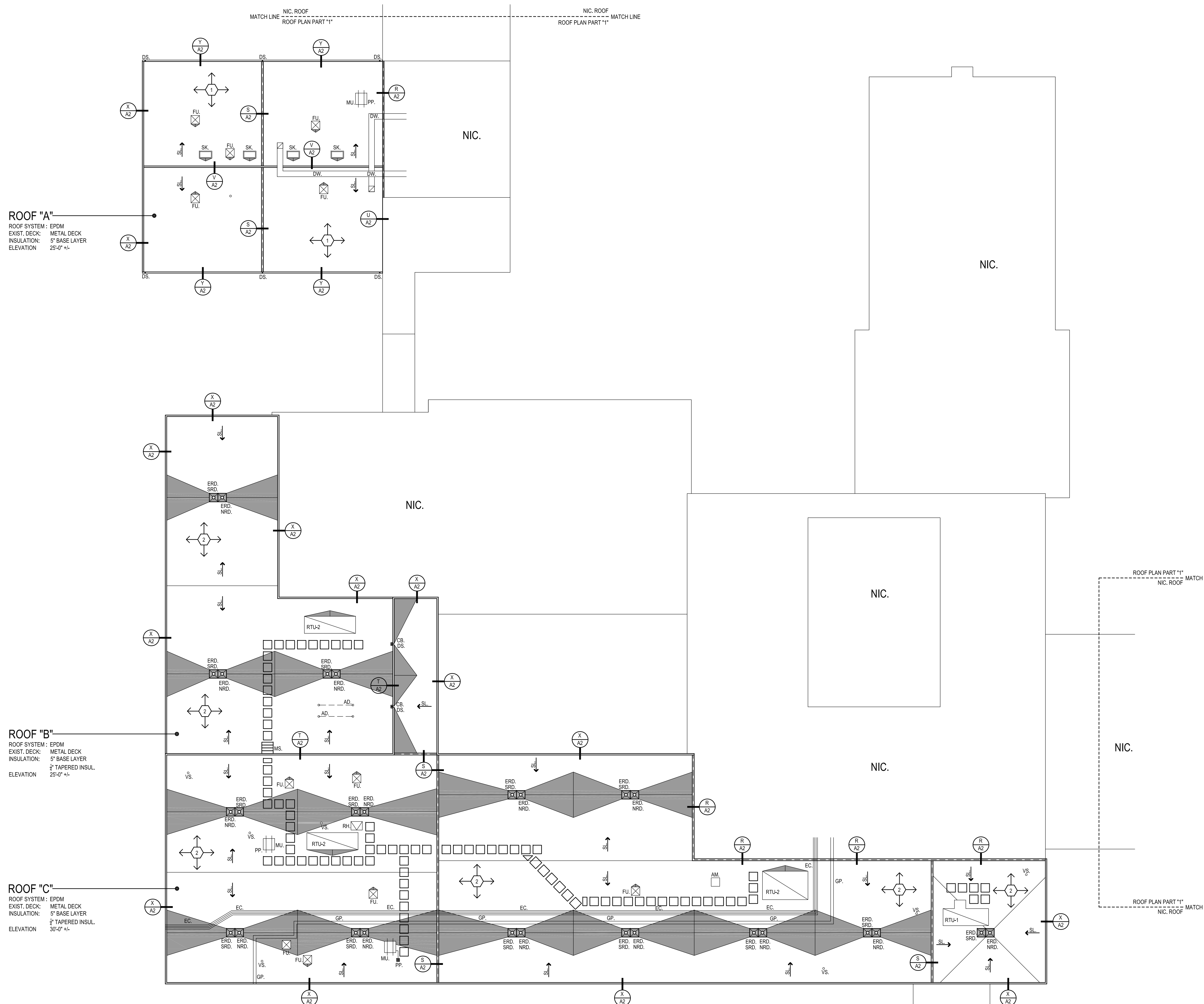
Date:  
 10/19/2023

Scale:  
 1/32"=1'-0"

Drawn By:  
 K.LINSLEY

Project Number:  
 23.108

Drawing Number:  
**A1**



**ROOF "A"**  
 ROOF SYSTEM: EPDM  
 EXIST. DECK: METAL DECK  
 INSULATION: 5" BASE LAYER  
 ELEVATION: 25'-0" +/-

**ROOF "B"**  
 ROOF SYSTEM: EPDM  
 EXIST. DECK: METAL DECK  
 INSULATION: 5" BASE LAYER  
 ELEVATION: 25'-0" +/-

**ROOF "C"**  
 ROOF SYSTEM: EPDM  
 EXIST. DECK: METAL DECK  
 INSULATION: 5" BASE LAYER  
 ELEVATION: 30'-0" +/-

**A2** ROOF PLAN PART "1"  
 1/16"=1'-0"

SYMBOL LEGEND	
	PLAN SECTION DETAIL OR ELEVATION-SHEET NUMBER
	INDICATES SLOPE DIRECTION OF SLOPED STRUCTURAL DECK.
	TAPERED INSULATION CRICKET SLOPED @ 1/2" PER FOOT
	INDICATES SLOPE DIRECTION & INDICATES EXISTING ROOF PITCH.
	NIC. - NOT IN CONTRACT SCOPE
	WALKWAY PADS. SEE CONSTRUCTION NOTE #2
	ERD. - EXISTING ROOF DRAIN TO BE REMOVED. SEE DEMOLITION NOTES.
	NRD. - NEW ROOF DRAIN TO BE INSTALLED. SEE DETAIL A/A3
	SRD. - SECONDARY OVERFLOW ROOF DRAIN. SEE DETAIL B/A3
	CB. - METAL SCUPPER W/ COLLECTION BOX. SEE DETAIL C/A3
	VS. - EXISTING VENT STACK. SEE DETAIL E/A3
	PP. - PITCH POCKET. SEE DETAIL F/A3
	RH. - ROOF HATCH. SEE DETAIL G & H/A3
	SK. - SKYLIGHT. SEE DETAIL J/A3
	MS. - NEW METAL STAIRCASE. SEE DETAIL K/A3
	FU. - EXISTING ROOF TOP FAN UNIT. SEE DETAIL L/A3
	MU. - EXISTING MECHANICAL UNIT. SEE DETAIL M/A3
	RTU-1. - EXISTING ROOF TOP MECHANICAL UNIT. SEE DETAIL N/A3
	RTU-2. - EXISTING ROOF TOP MECHANICAL UNIT. SEE CONSTRUCTION NOTE #3
	DS. - METAL DOWNSPOUT. SEE CONSTRUCTION NOTE #4
	DW. - EXISTING ROOF TOP DUCT WORK. SEE CONSTRUCTION NOTE #5
	GP. - EXISTING GAS PIPING. SEE CONSTRUCTION NOTE #6
	EC. - EXISTING ELECTRICAL CONDUIT. SEE CONSTRUCTION NOTE #7
	AD. - ABANDONED METAL DUNNAGE. SEE DEMOLITION NOTE #5
	AM. - ABANDONED MECHANICAL CURB. SEE DEMOLITION NOTE #6

- GENERAL NOTES**
- ALL FLAT ROOFS TO RECEIVE 1/2" PER FOOT TAPERED RIGID INSULATION MINIMUM UNLESS OTHERWISE NOTED.
  - FIELD VERIFY ALL DIMENSIONS & PERFORM TEST CUTS AT EACH ROOF PRIOR TO THE BID.
  - ALL MATERIALS ARE NEW UNLESS OTHERWISE NOTED "EXISTING".
  - ALL WOOD BLOCKING, PLYWOOD & NAILERS TO BE PRESSURE TREATED, (P.T.)
  - ALL WOOD BLOCKING INDICATED IN DETAILS ARE TO BE ANCHORED TO THE EXISTING STRUCTURE.
  - ALL MEMBRANE FLASHING INDICATED IS TO EXTEND A MINIMUM OF 8". (VERTICAL OR HORIZONTAL)
  - CONTRACTOR IS TO SURVEY THE EXISTING ROOF DECKS W/ A LEVEL (AFTER DEMOLITION) TO VERIFY THE SLOPES INDICATED ON PLAN ARE ACCURATE. NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY ADDITIONAL ROOFING OPERATIONS.
  - CONTRACTOR IS TO INSPECT THE UNDERSIDE OF ALL ROOF DECKS PRIOR TO ROOFING OPERATIONS TO ENSURE THAT NO INTERIOR MATERIALS, EQUIPMENT, FINISHES OR OBJECTS WILL BE PIERCED OR DAMAGED.
  - CONTRACTOR ASSUMES ALL RESPONSIBILITY DURING PROJECT & WILL REPLACE ANY & ALL DAMAGED EQUIPMENT W/ ADDITIONAL COST TO OWNER.
  - SITE AREAS DISTURBED SHALL BE CLEANED & RE-LEVELLED. W/ LAWN AREAS MAGNETICALLY RAKED TO REMOVE ANY METAL DEBRIS & RE-SEED AS REQUIRED TO MATCH ADJACENT CONDITIONS.
  - CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR CLEAN UP OF ROOFING MATERIALS & DEBRIS THAT PENETRATES THE INTERIOR ENVELOPE OF THE BUILDING W/ ADDITIONAL COST TO THE OWNER.
  - SNAKE/CLEAN OUT ALL EXISTING VERTICAL & HORIZONTAL LEADERS OUT TO NEAREST MANHOLE OUTSIDE OF BUILDING.
  - ALL CRICKETS ARE TO BE SLOPED @ A MINIMUM OF 1/2" PER FOOT & COORDINATE CRICKETS AROUND EXIST. HVAC UNITS AS REQUIRED TO AVOID PONDING.
  - CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL & RE-INSTALLATION OF ALL HVAC UNITS INCLUDING ANY ELECTRICAL OR MECHANICAL CONNECTIONS. THIS MAY INCLUDE THE EXTENSION OF EXISTING ELECTRICAL & DUCTWORK SYSTEMS TO ACCOMMODATE NEW MECHANICAL UNIT CURBING & NEW ROOFING SYSTEM.
  - SNAKE/CLEAN OUT ALL EXISTING VENT STACKS BEFORE THE INSTALLATION OF METAL SLEEVE.
  - ALL DRAIN PIPING IS INSULATED ABOVE THE CEILING. THE EXACT ROUTE WILL BE DETERMINED IN THE FIELD. MAKE MINOR ADJUSTMENT IN THE ROUTE AT NO ADDITIONAL COST TO OWNER.
  - NEW ROOF INSULATION TO BE A MINIMUM OF R-30 AT ALL NEW ROOF DRAINS AND/OR THE LOW POINTS OF THE ROOF AREAS.
  - ALL ANTENNAE, CONDUITS & ANY OTHER OBJECTS TO REMAIN AFFECTED BY SCOPE OF WORK, TO BE REMOVED & RE-INSTALLED.

- DEMOLITION NOTES** (X) →
- REMOVE EXISTING ROOFING MEMBRANE, 1-1/2" OF RIGID INSULATION DOWN TO EXISTING METAL DECK.
  - REMOVE EXISTING ROOFING MEMBRANE, 1-1/2" BASE LAYER OF POLYISO & 1/2" TAPERED INSULATION SYSTEM DOWN TO EXISTING METAL DECK.
  - REMOVE ALL PERIMETER METAL FLASHING WITHIN SCOPE OF WORK.
  - REMOVE EXISTING ROOF DRAINS & SUMP.
  - REMOVE & DISPOSE OF EXISTING METAL DUNNAGE.
  - REMOVE EXISTING ABANDONED MECHANICAL UNIT CURB. PATCH EXISTING METAL DECK TO MATCH EXISTING. SEE DETAIL Z/A3

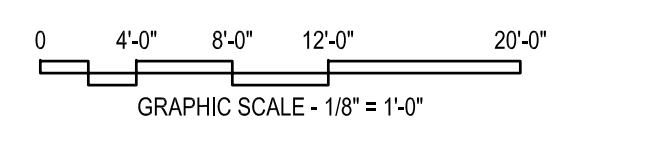
- CONSTRUCTION NOTES** (X) →
- CONTRACTOR TO PROVIDE A SPECIFIED QUANTITY OF EXISTING DECK REPAIR & REPLACEMENT. SEE PROJECT MANUAL.
  - WALKWAY PADS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATION. SEE PROJECT MANUAL FOR ADDITIONAL INFORMATION. COORDINATE & FINALIZE EXACT ROUTE W/ OWNER & ARCHITECT.
  - EXISTING ROOFTOP MECHANICAL UNIT. RAISE ENTIRE UNIT MIN. 8" ABOVE HIGH POINT OF NEW ROOF INSULATION. EXTEND ALL DUCTWORK & ELECTRICAL WIRING. SEE DETAIL P/A3 & PROJECT MANUAL.
  - NEW METAL DOWNSPOUT LOCATION. CONNECT TO EXIST UNDERGROUND PIPING, OR PROVIDE NEW CONCRETE SPLASH BLOCK IF NO UNDERGROUND PIPING EXISTS.
  - EXISTING MECHANICAL UNIT DUCT WORK TO REMAIN. MODIFY ALL STAND-OFFS TO ACCOMMODATE NEW ROOF INSULATION HEIGHT. SEE DETAIL Q/A3 & PROJECT MANUAL.
  - EXISTING GAS PIPING TO BE DISCONNECTED & PURGED. RAISE EXISTING GAS PIPING AS REQUIRED TO ACCOMMODATE NEW ROOFING INSULATION HEIGHTS. PROVIDE NEW PIPING EXTENSIONS, JOINTS, FITTINGS & RECONNECT TO EXISTING GAS MAIN. INSTALL ALL EXIST. & NEW GAS PIPING ON NEW PIPE CURBS 24" O.C. PRIME & PAINT ALL EXISTING & NEW GAS PIPING. SEE DETAIL W/A3 & PROJECT MANUAL.
  - EXISTING ELECTRICAL CONDUIT TO BE DISCONNECTED & RAISED TO ACCOMMODATE NEW ROOF INSULATION HEIGHTS. REMOVE WIRE/CONDUIT & DISPOSE OF. INSTALL NEW CONDUIT & WIRING IN EXIST LOCATIONS & REPLACE ALL EXISTING JUNCTION BOXES TO MATCH EXISTING. EXTEND CONDUIT & WIRING AS REQUIRED TO ACCOMMODATE NEW ROOF HEIGHTS & ADD NEW JUNCTION BOXES AS REQUIRED. SEE DETAIL W/A3 & PROJECT MANUAL.

ROOF AREAS	ROOF ASSEMBLY
ROOF "A" 6,430 SF.	OUTSIDE AIR 0.17
ROOF "B" 6,960 SF.	ROOF MEMBRANE 0.33
ROOF "C" 21,500 SF.	COVERBOARD 2.20
	5" POLYISO INSUL. 28.7
	EXISTING DECK 1.23
	INSIDE AIR 0.61
<b>TOTAL ROOF AREAS: 34,890 SF.</b> THIS AREA IS APPROXIMATE - V.I.F.	<b>R-VALUE TOTAL 34.24</b>

**CODE INFORMATION**

USE GROUP: E  
 CONSTRUCTION CLASS: 2B  
 RISK CATEGORY #3  
 ULTIMATE DESIGN WIND SPEED: 135 MPH  
 NOMINAL DESIGN WIND SPEED: 105 MPH

FACTORY MUTUAL ENGINEERING & RESEARCH CORPORATION (FM): ROOF ASSEMBLY CLASSIFICATION OF NON-COMBUSTIBLE CONSTRUCTION, WIND UPLIFT REQUIREMENT OF 140 FOR FIELD, 175 FOR PERIMETER AND 1-110 FOR CORNERS. IN ACCORDANCE WITH FM PROPERTY LOSS PREVENTION DATA SHEETS 1-28.



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Revision	Description	Date	Revised By

Drawing Title:  
**ROOF PLAN PART "1"**

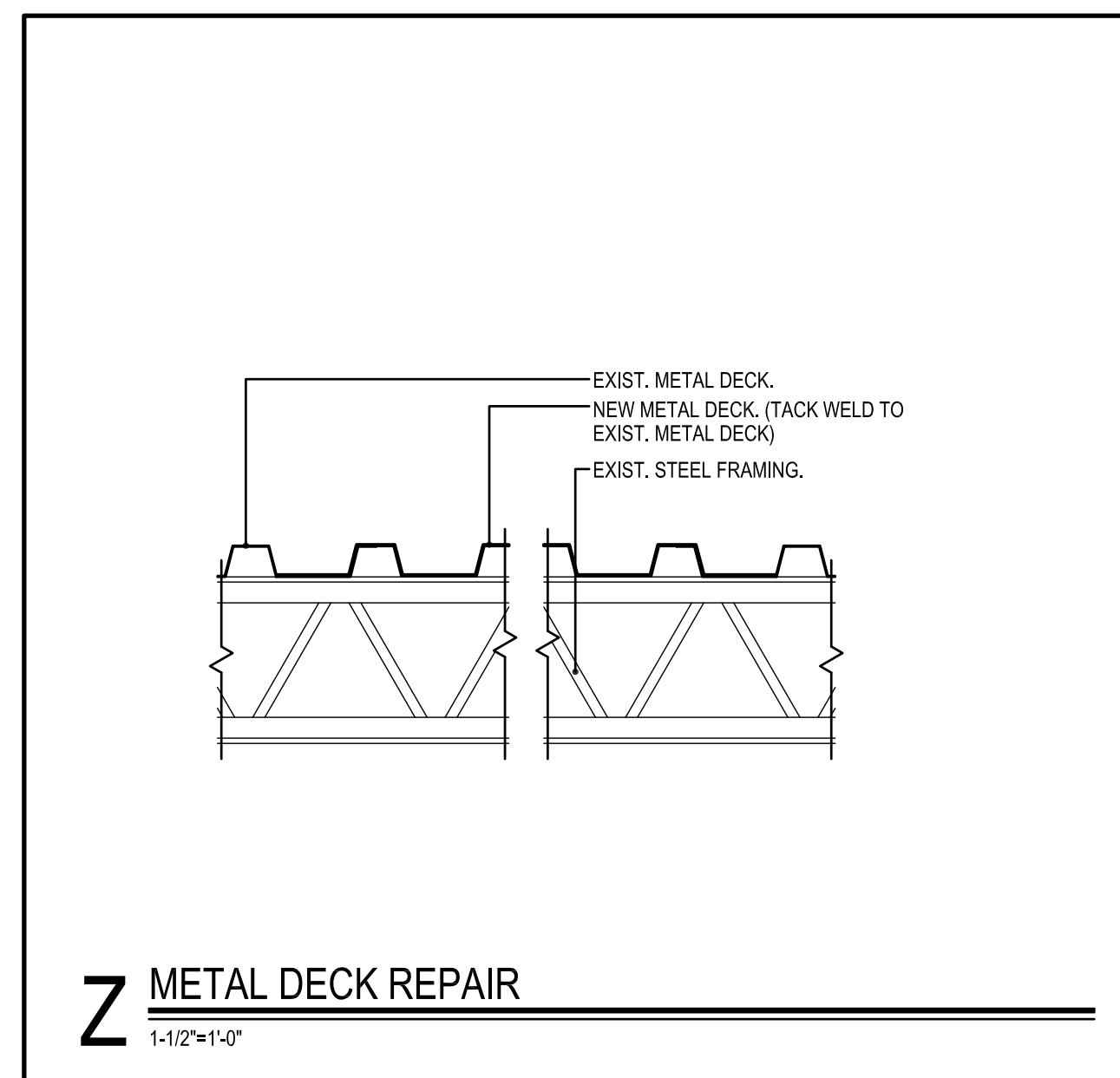
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 10/19/2023

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

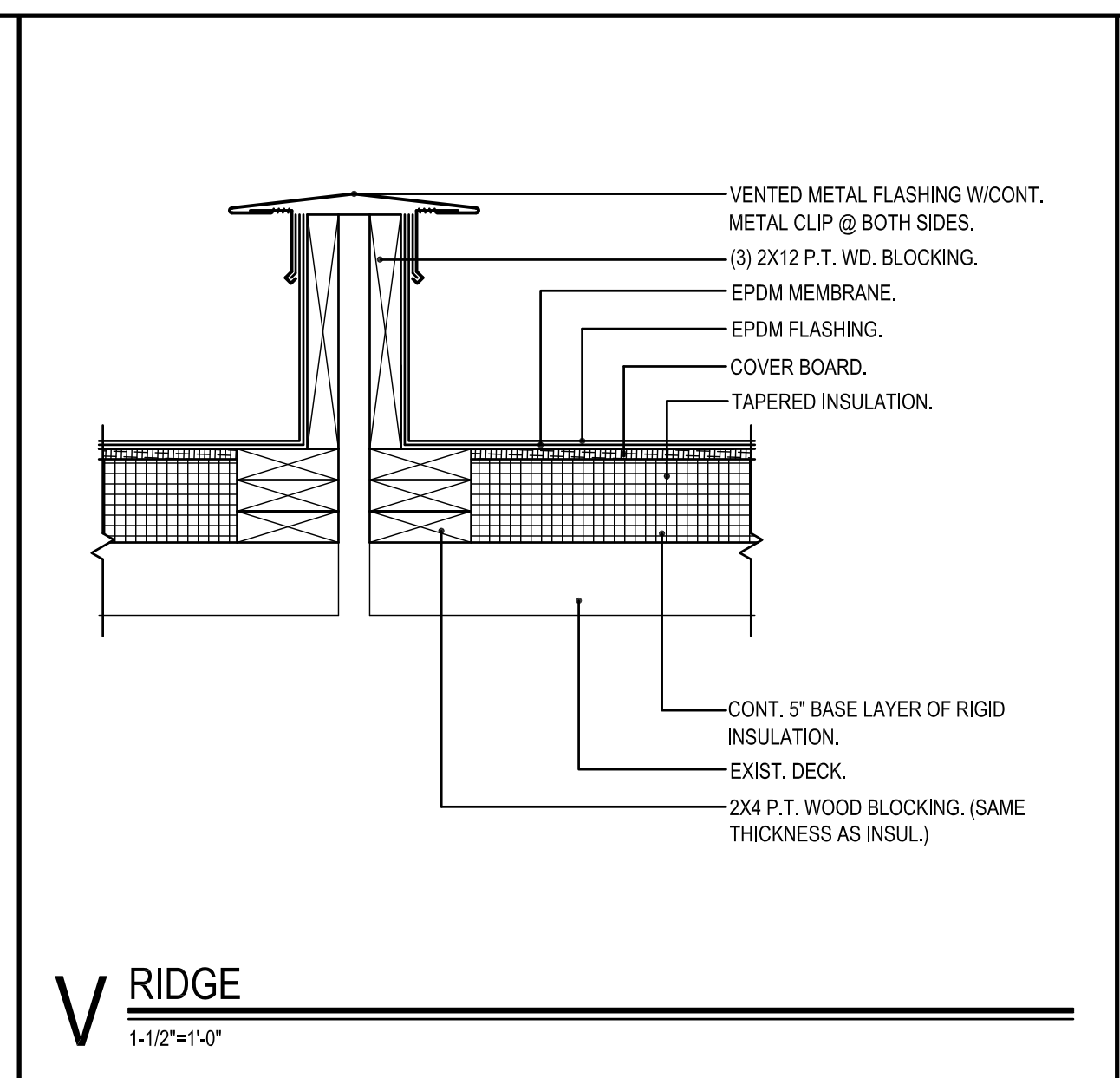
Drawn By:  
 K.LINSLEY

Project Number:  
 23.108

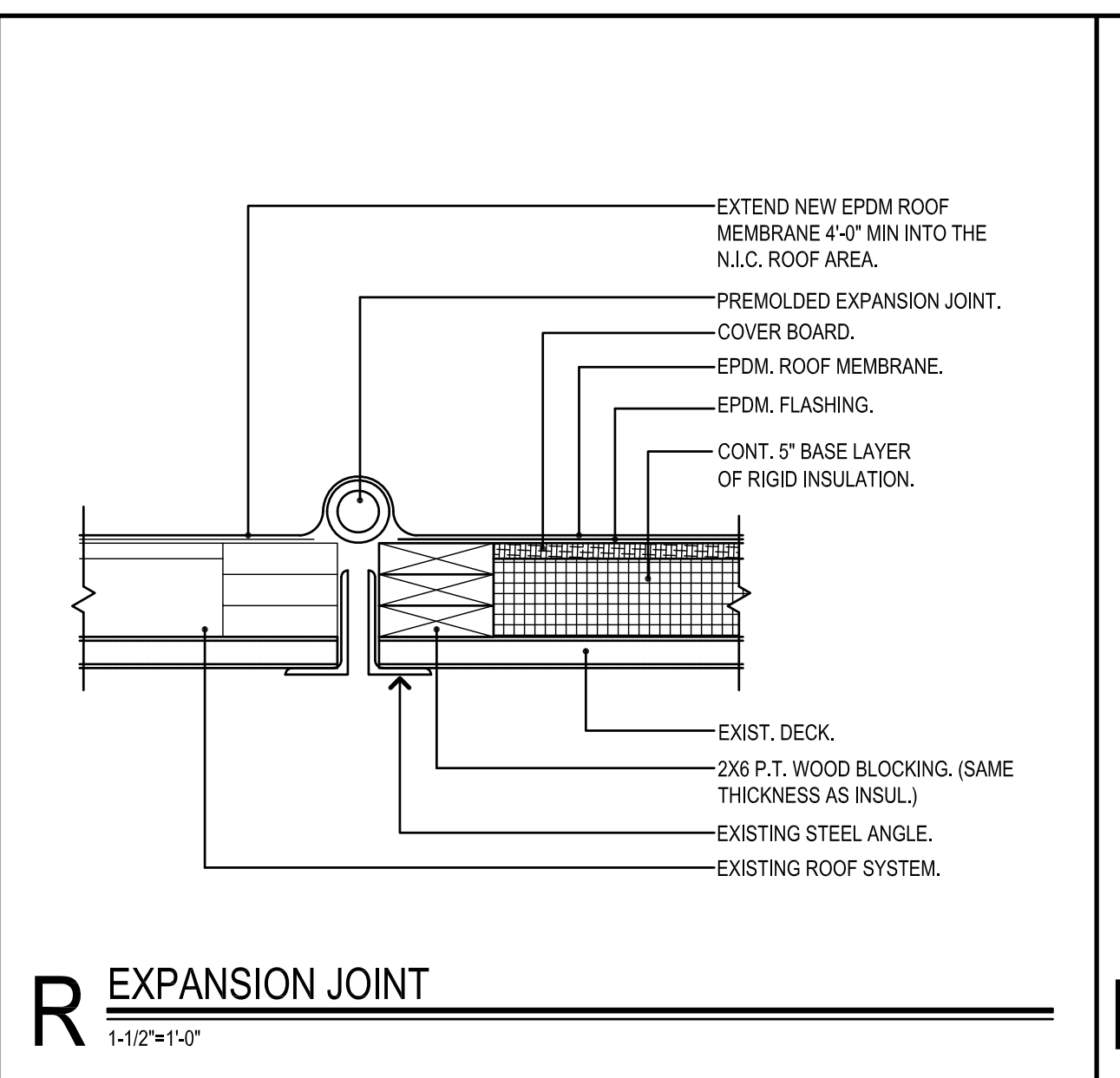
Drawing Number:  
**A2**



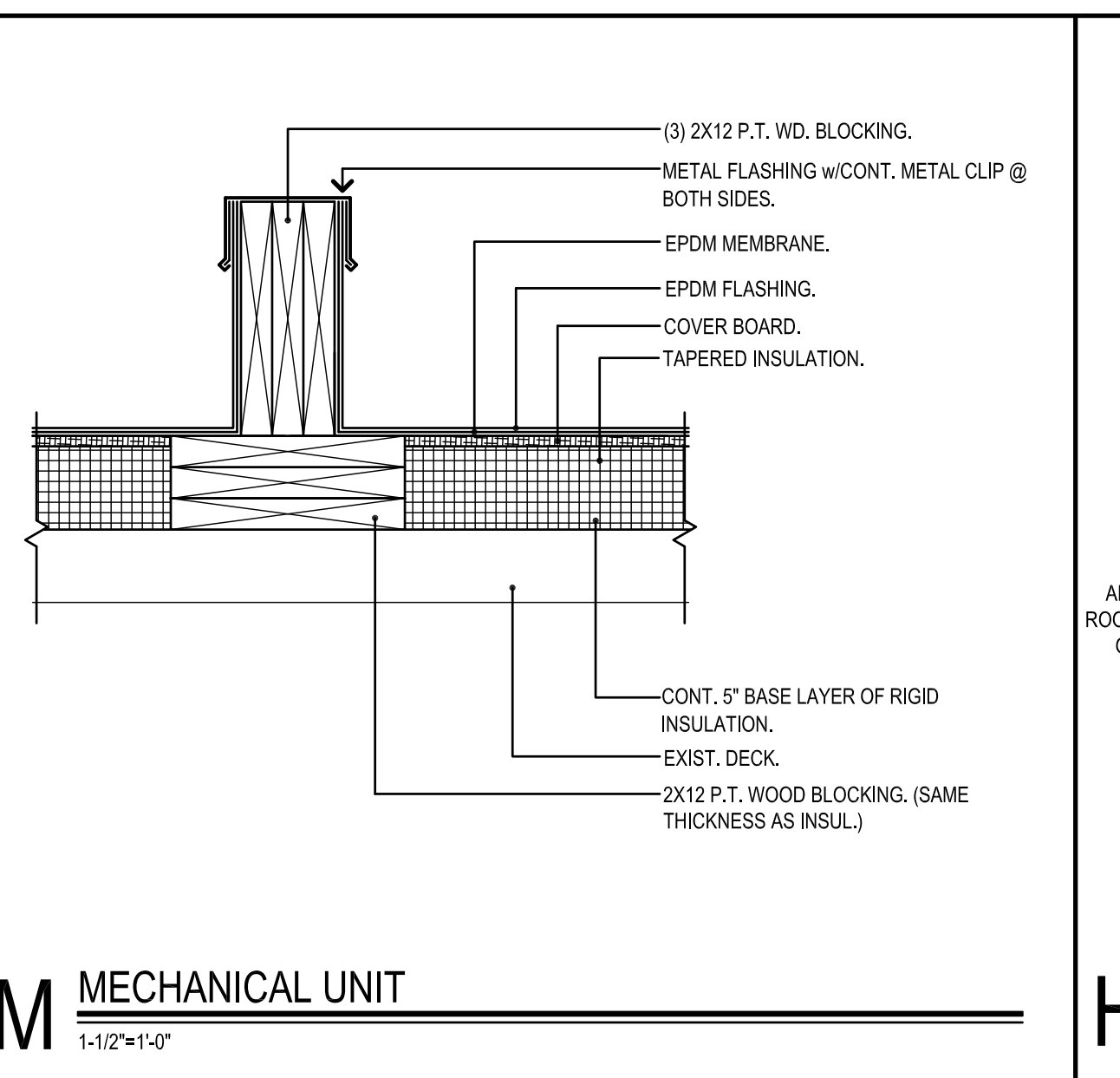
**Z METAL DECK REPAIR**  
1-1/2" x 1'-0"



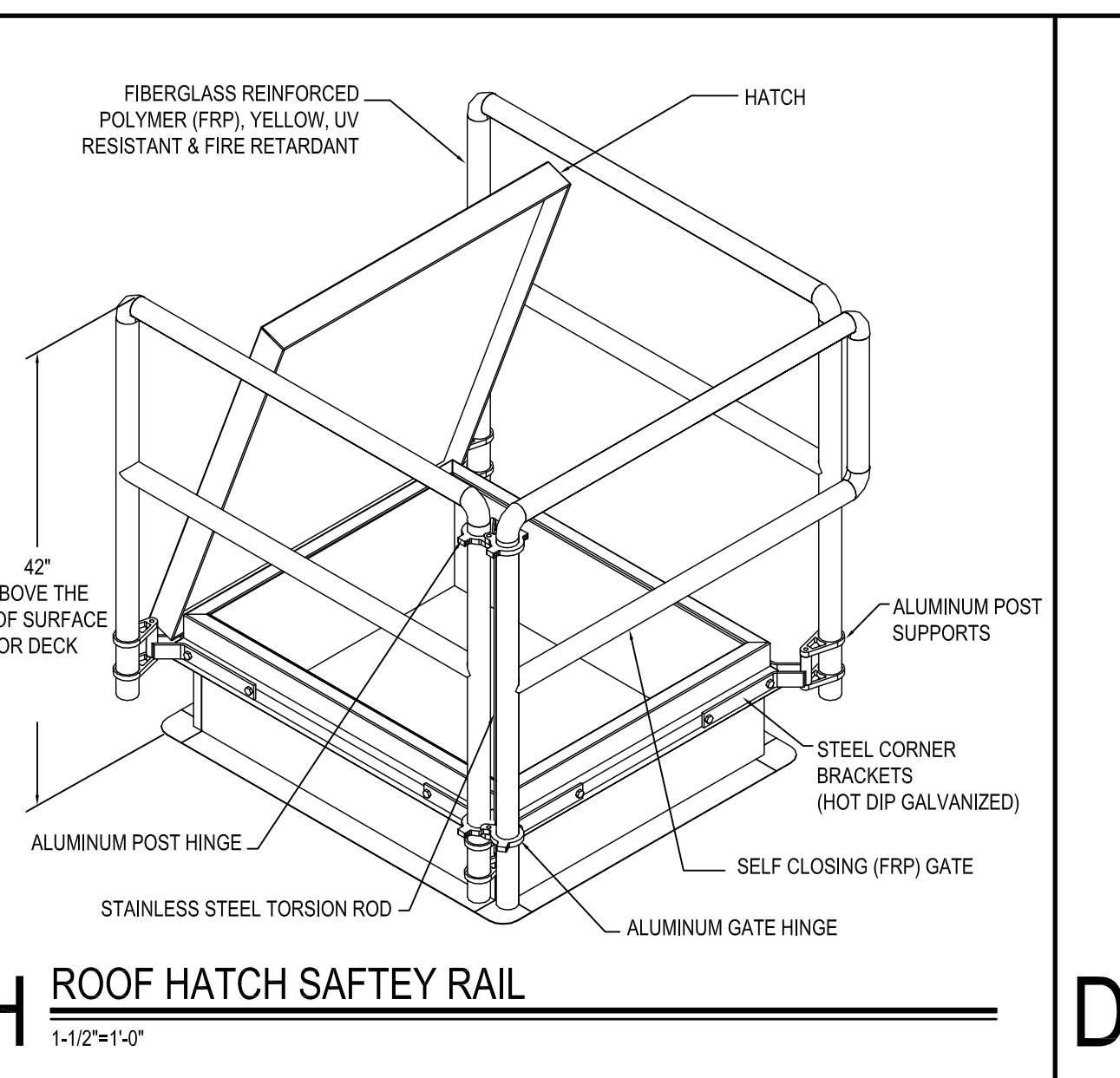
**V RIDGE**  
1-1/2" x 1'-0"



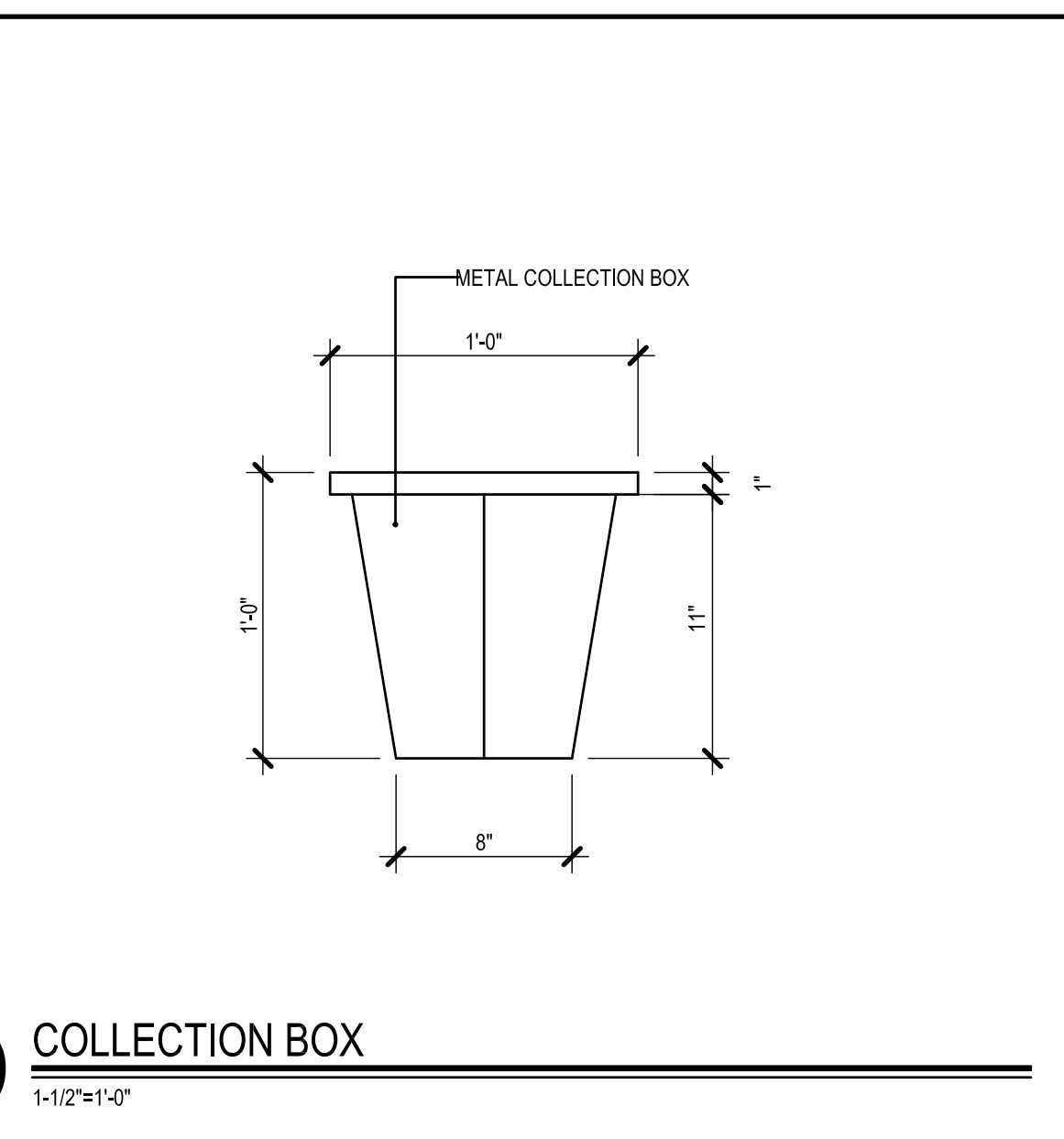
**R EXPANSION JOINT**  
1-1/2" x 1'-0"



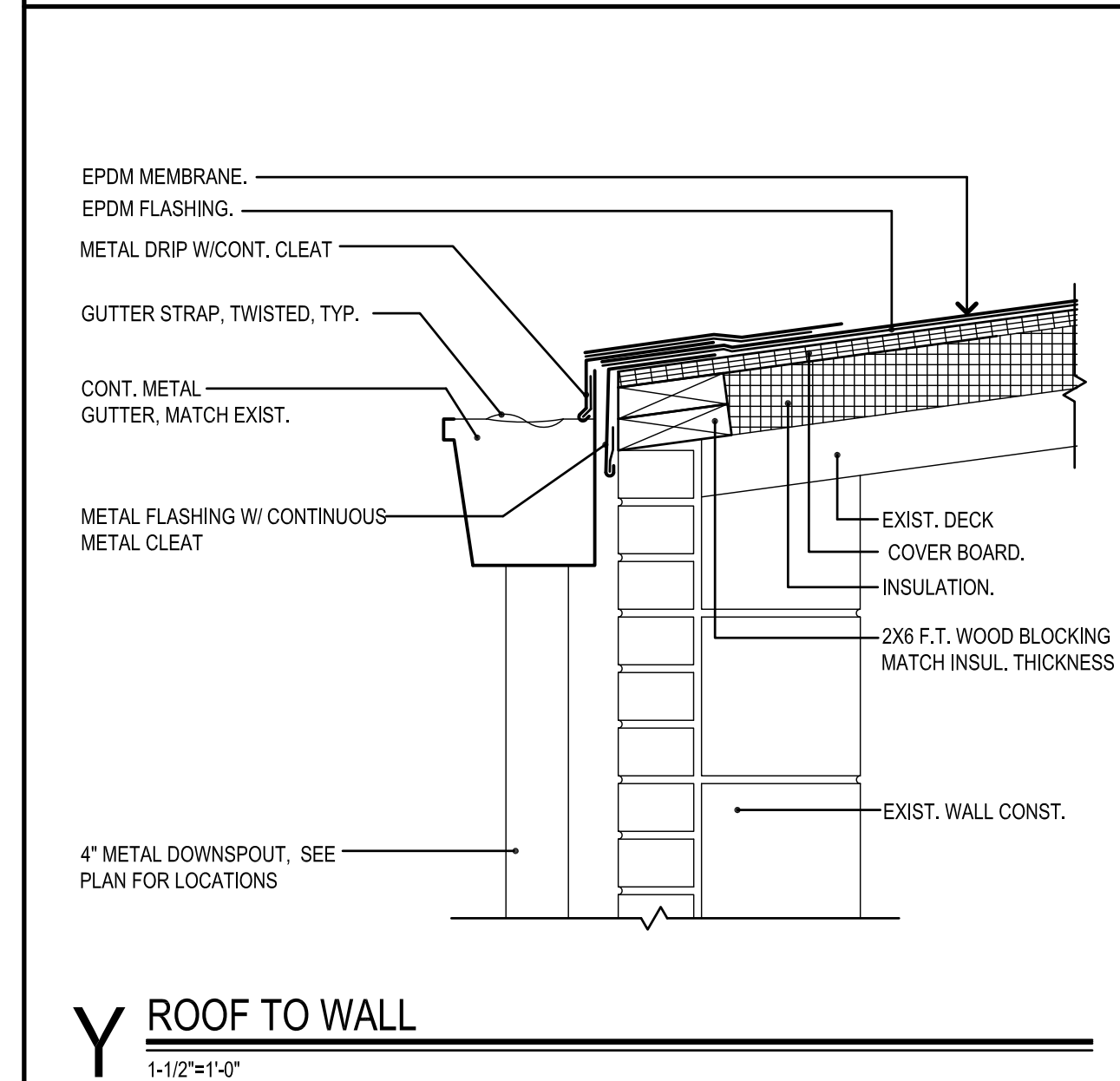
**M MECHANICAL UNIT**  
1-1/2" x 1'-0"



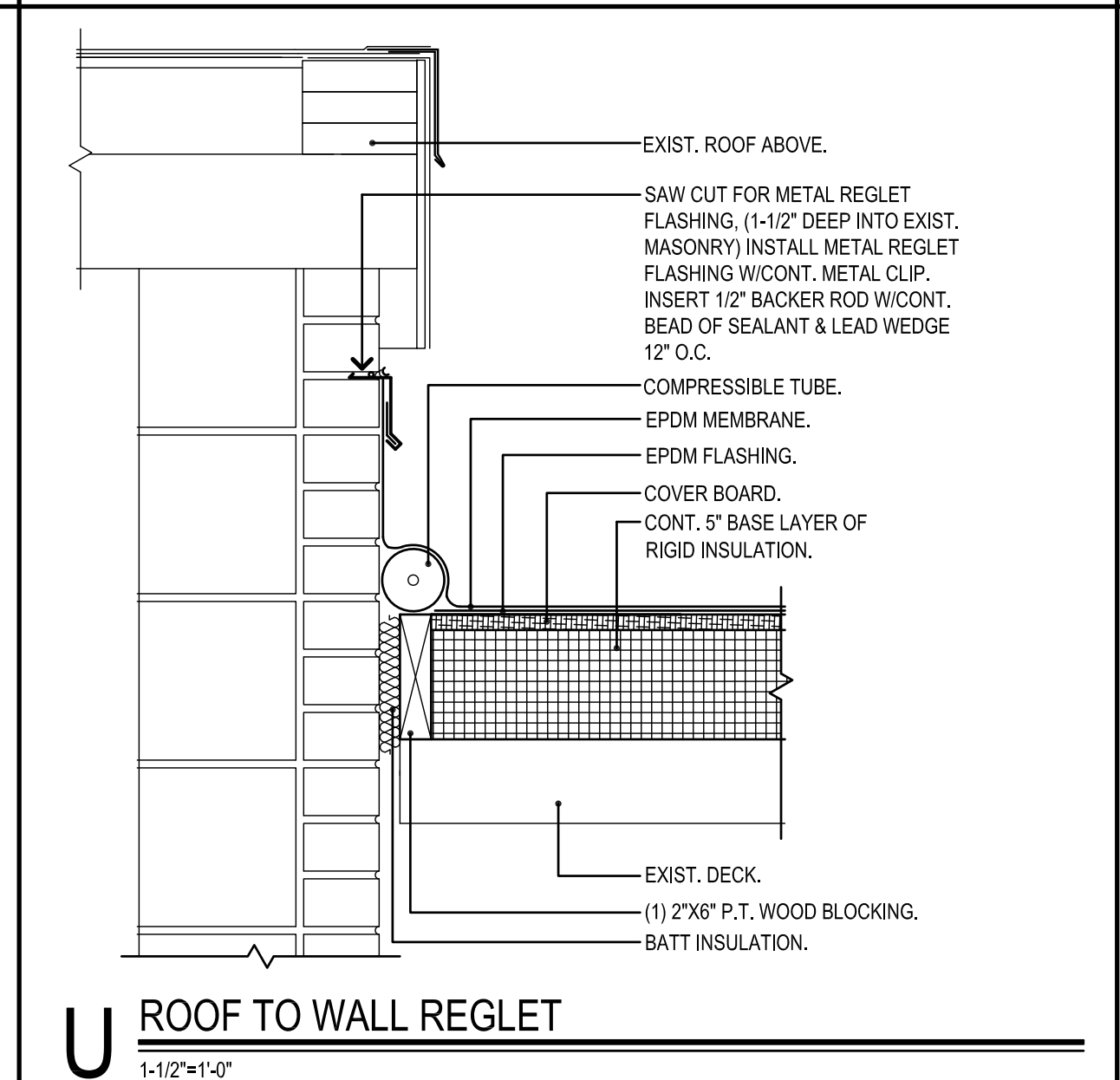
**H ROOF HATCH SAFETY RAIL**  
1-1/2" x 1'-0"



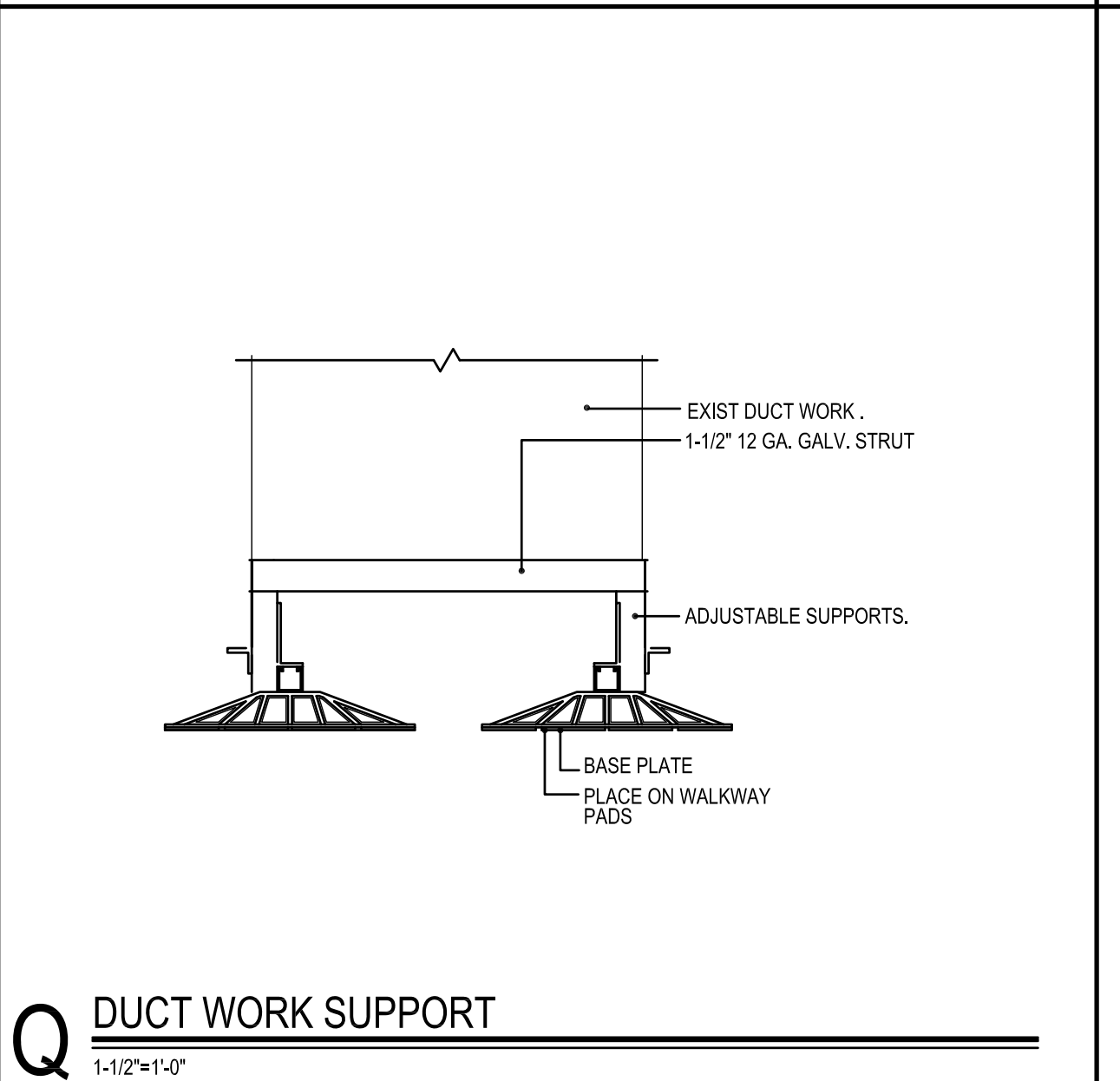
**D COLLECTION BOX**  
1-1/2" x 1'-0"



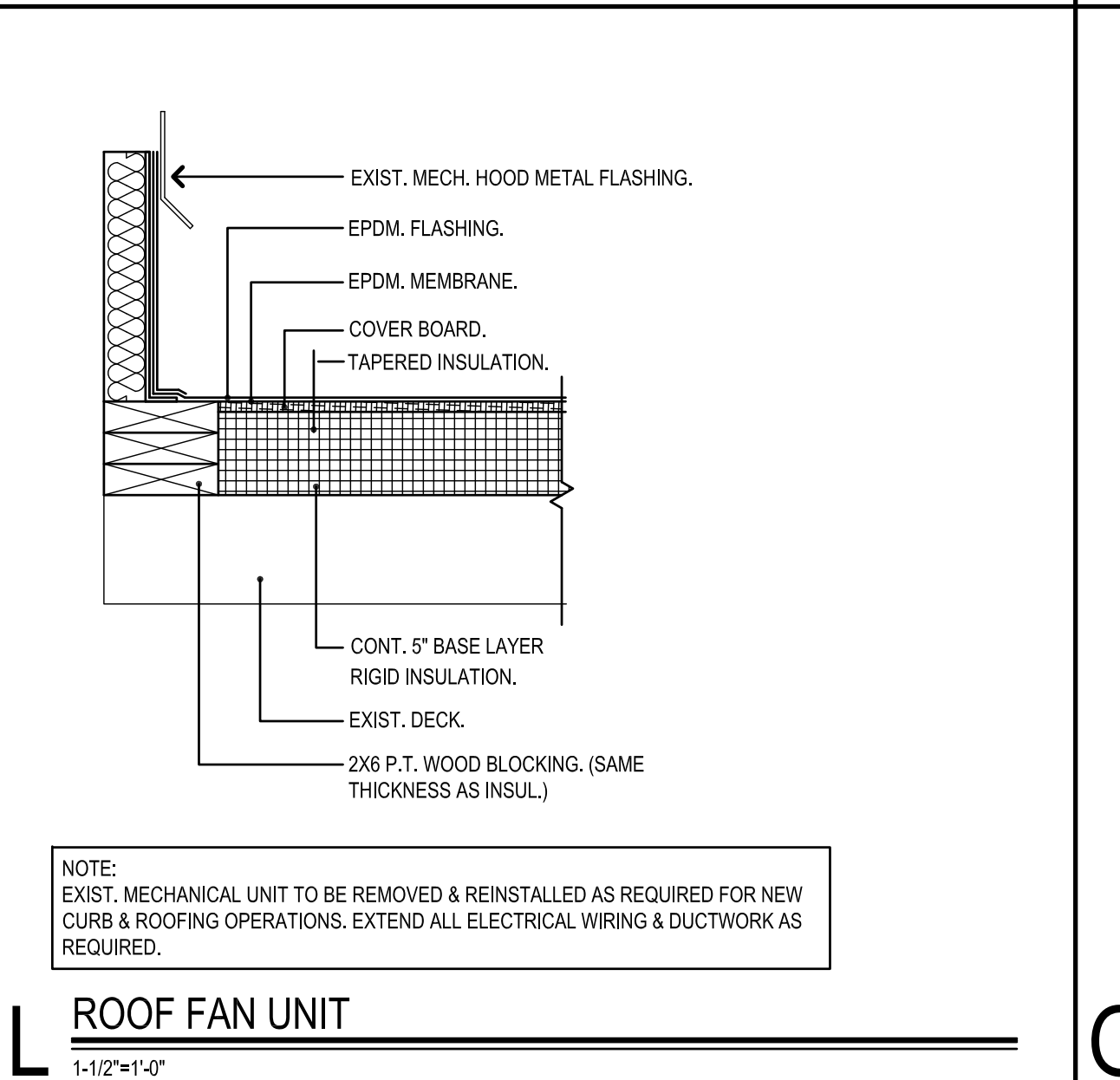
**Y ROOF TO WALL**  
1-1/2" x 1'-0"



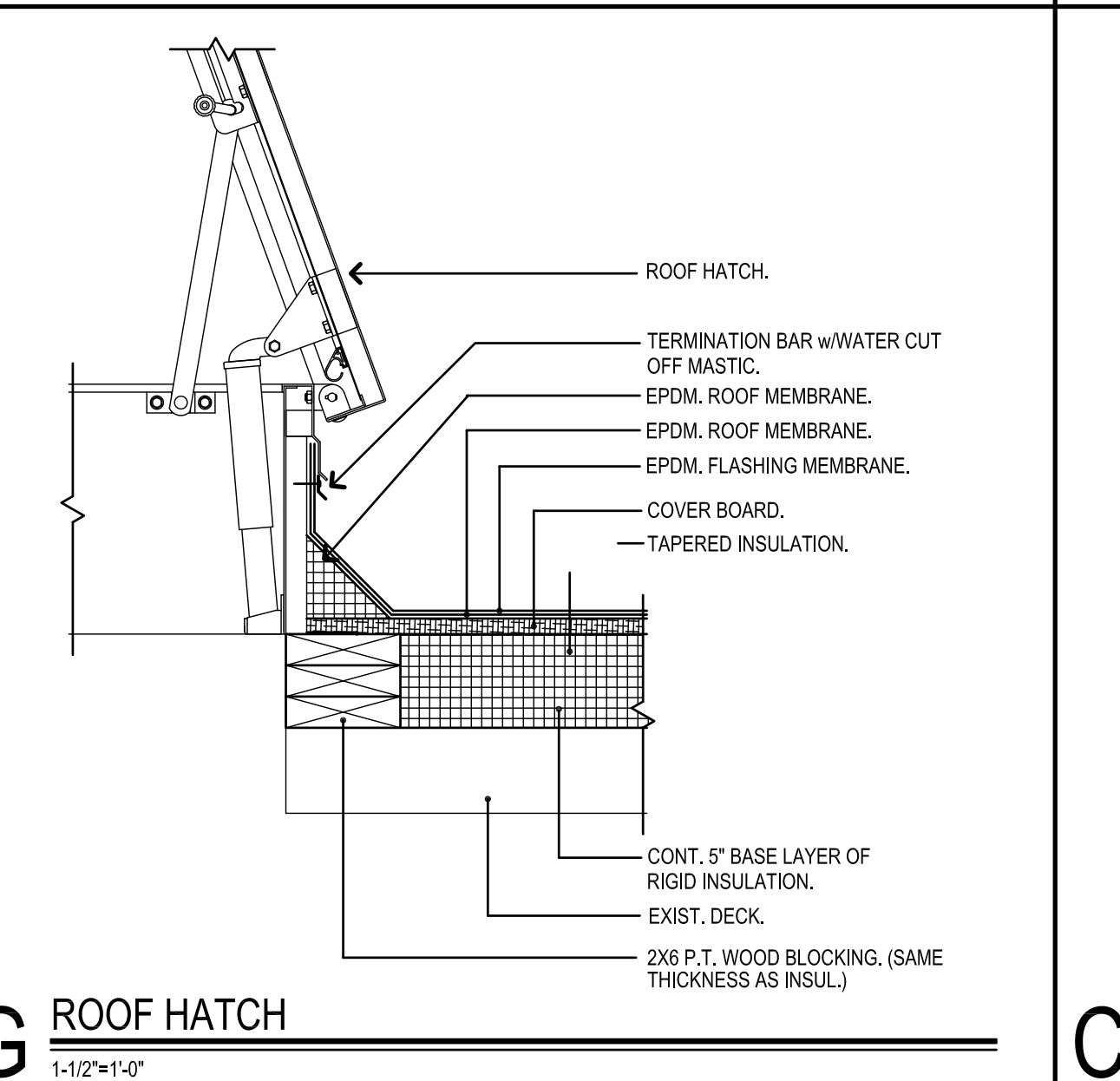
**U ROOF TO WALL REGLET**  
1-1/2" x 1'-0"



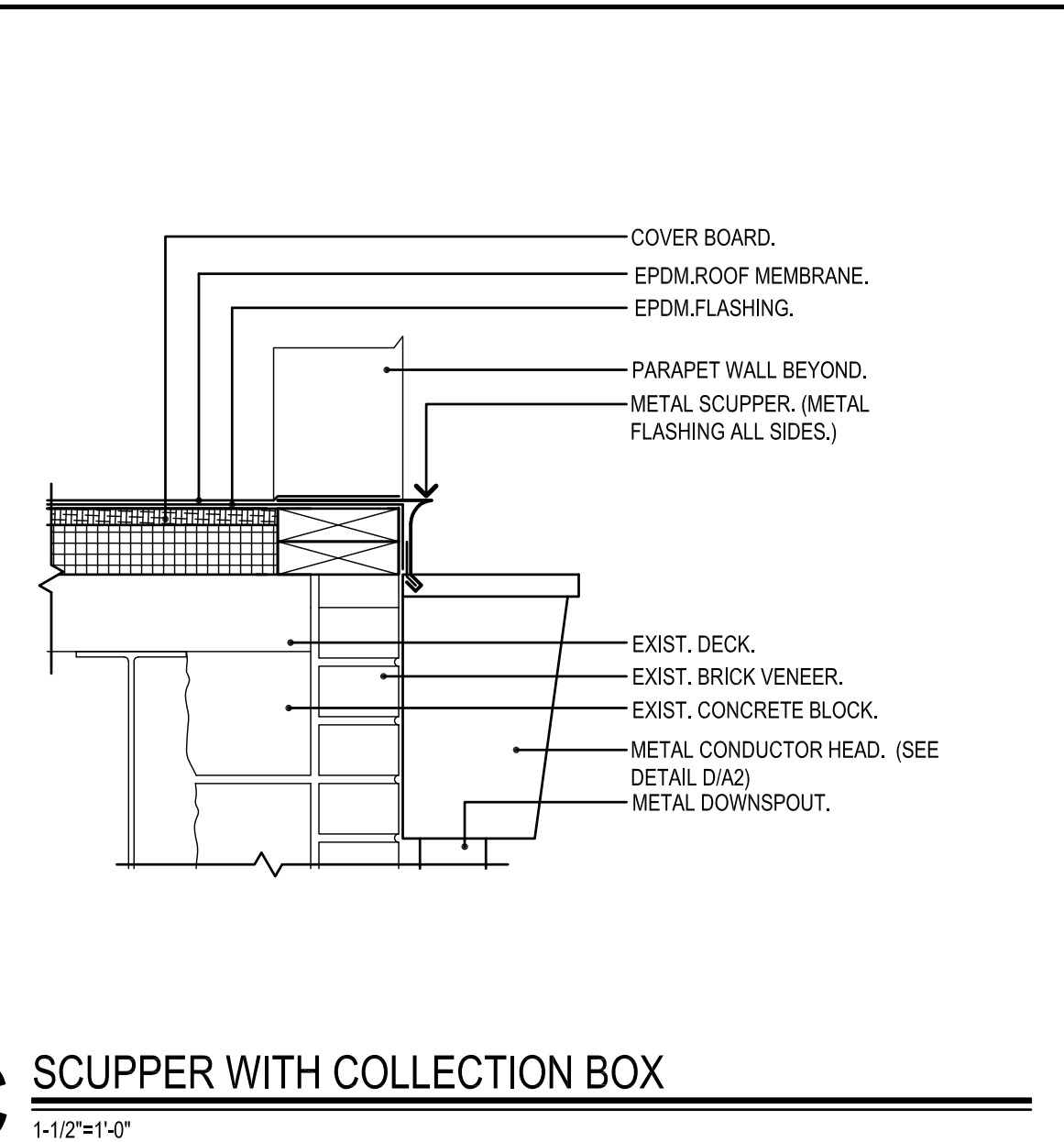
**Q DUCT WORK SUPPORT**  
1-1/2" x 1'-0"



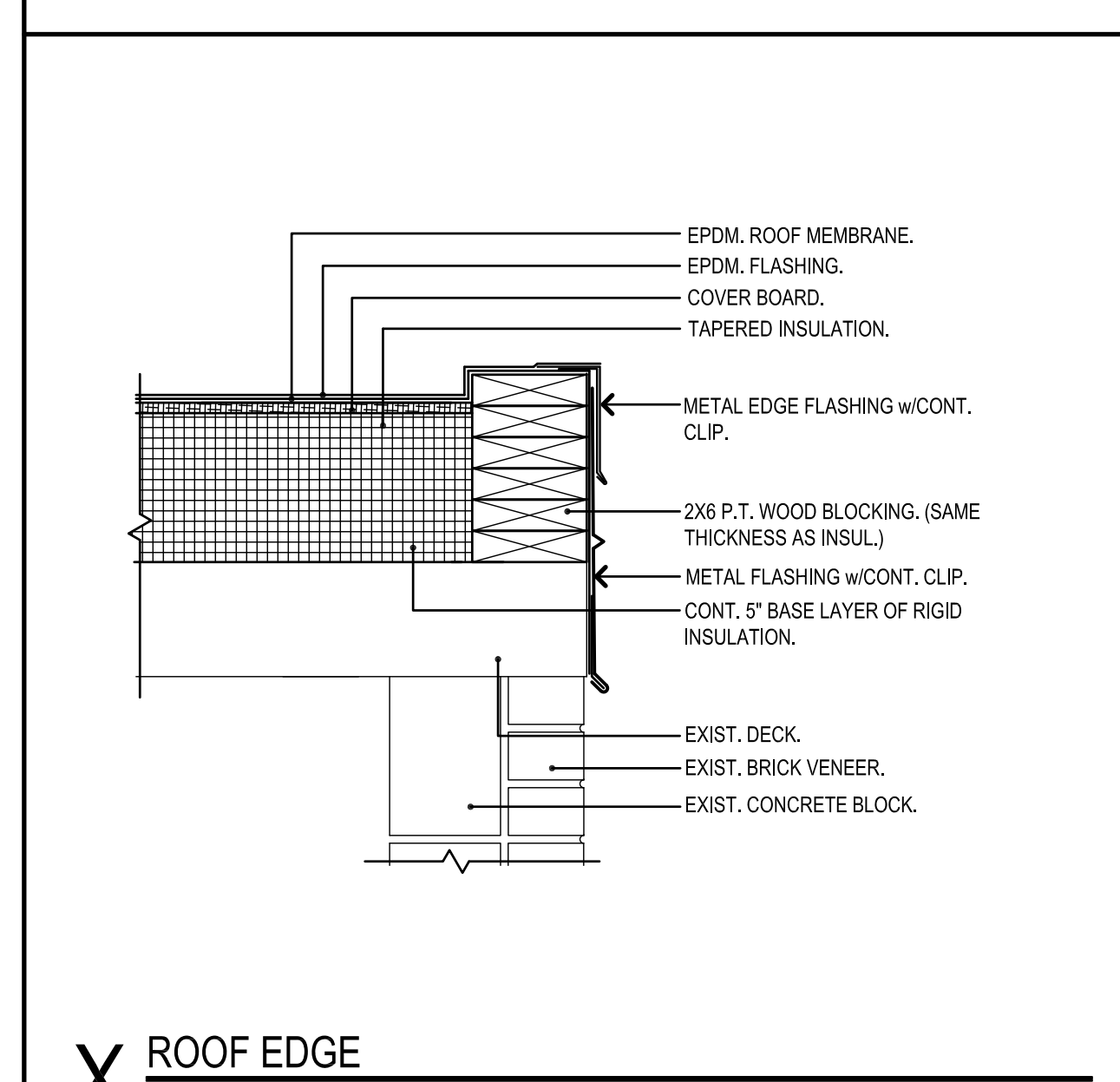
**L ROOF FAN UNIT**  
1-1/2" x 1'-0"



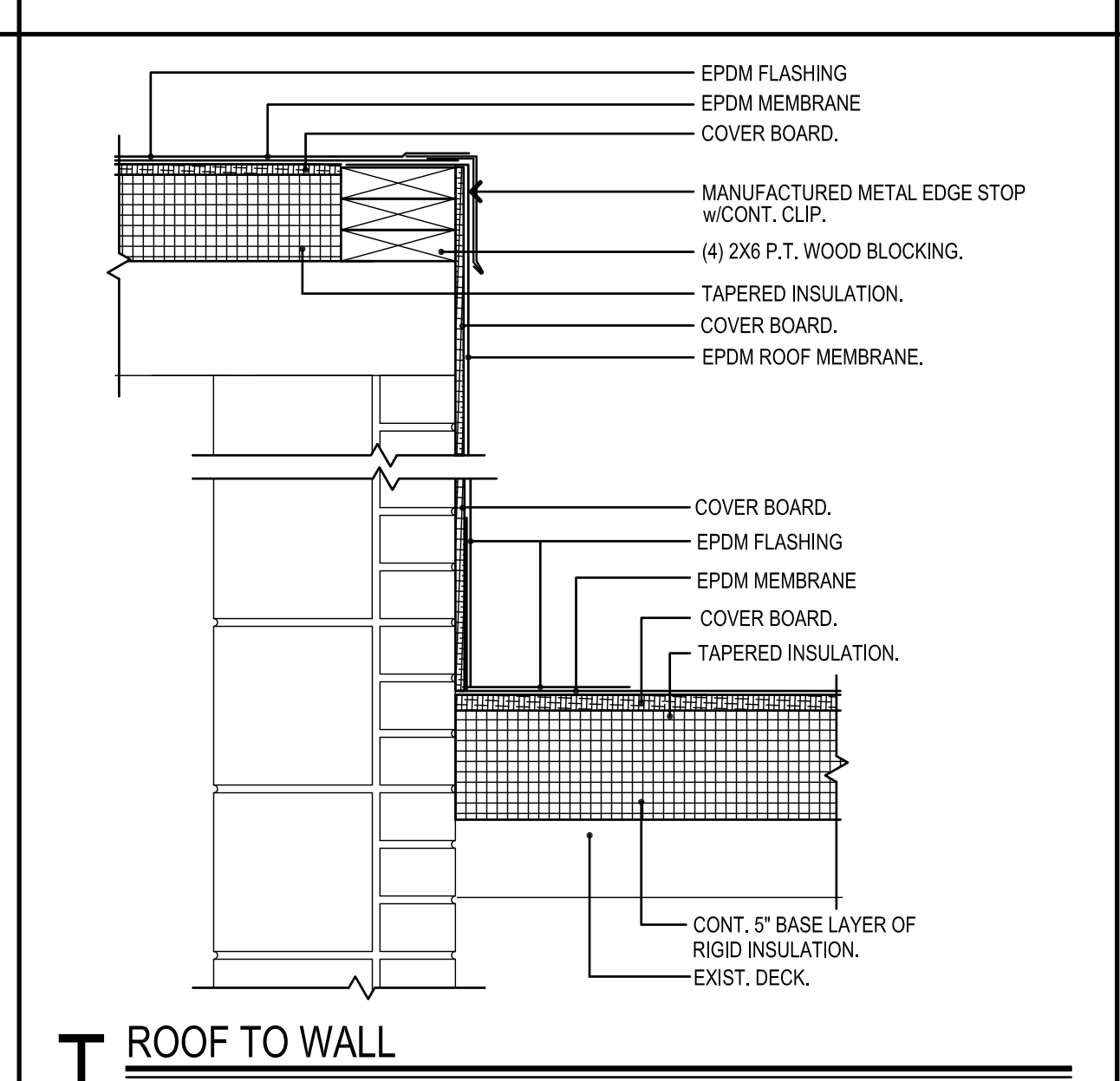
**G ROOF HATCH**  
1-1/2" x 1'-0"



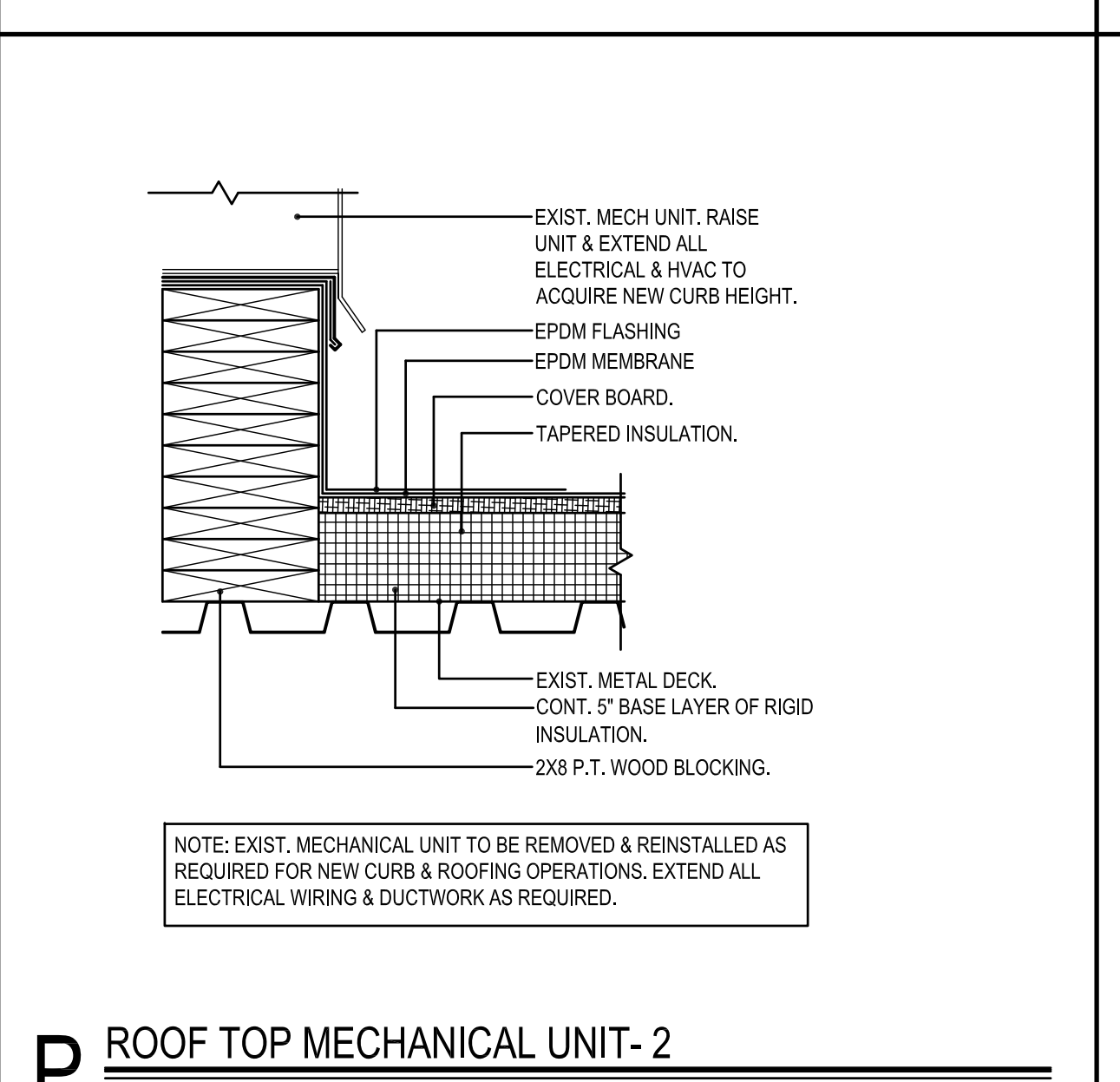
**C SCUPPER WITH COLLECTION BOX**  
1-1/2" x 1'-0"



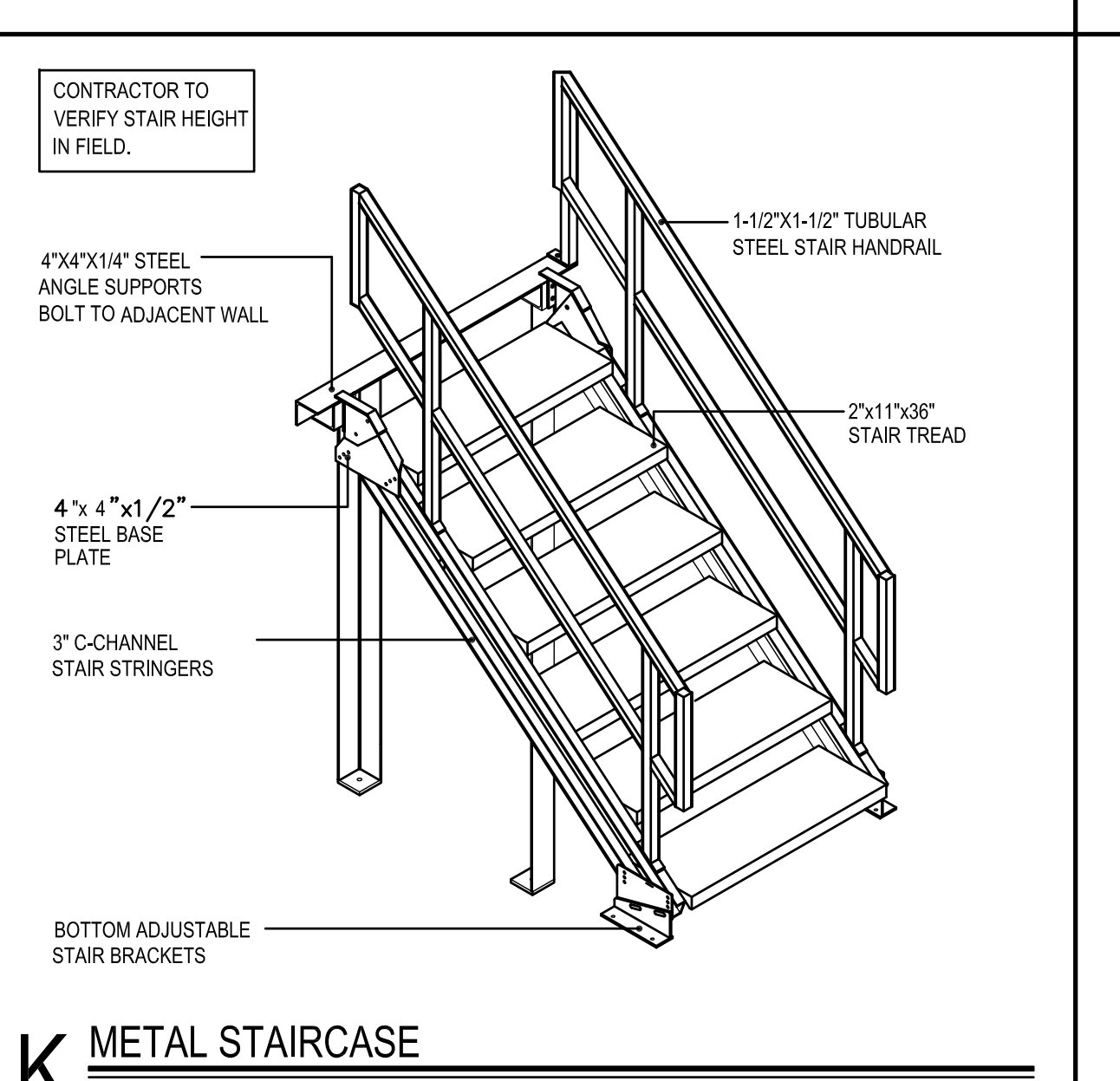
**X ROOF EDGE**  
1-1/2" x 1'-0"



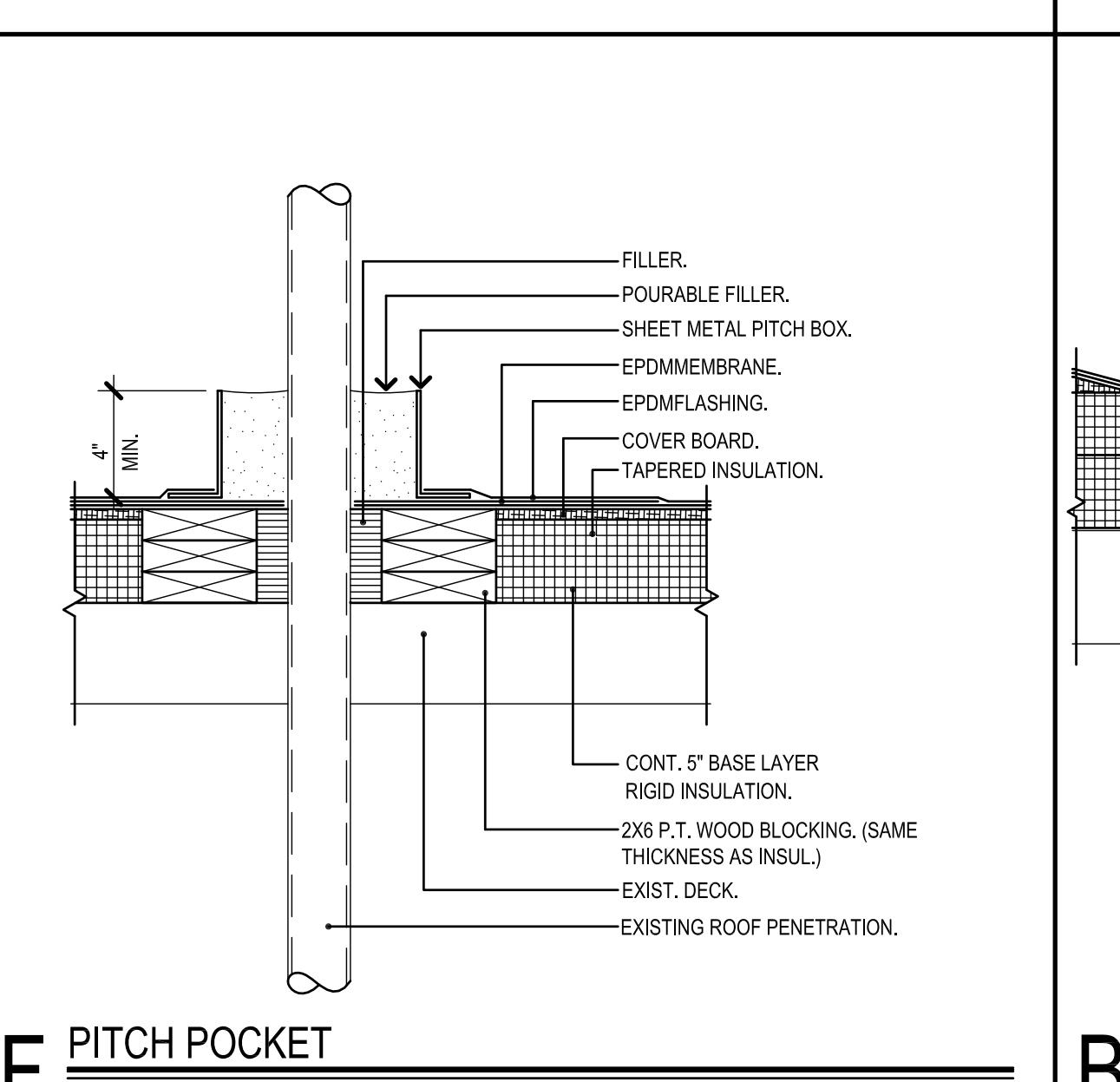
**T ROOF TO WALL**  
1-1/2" x 1'-0"



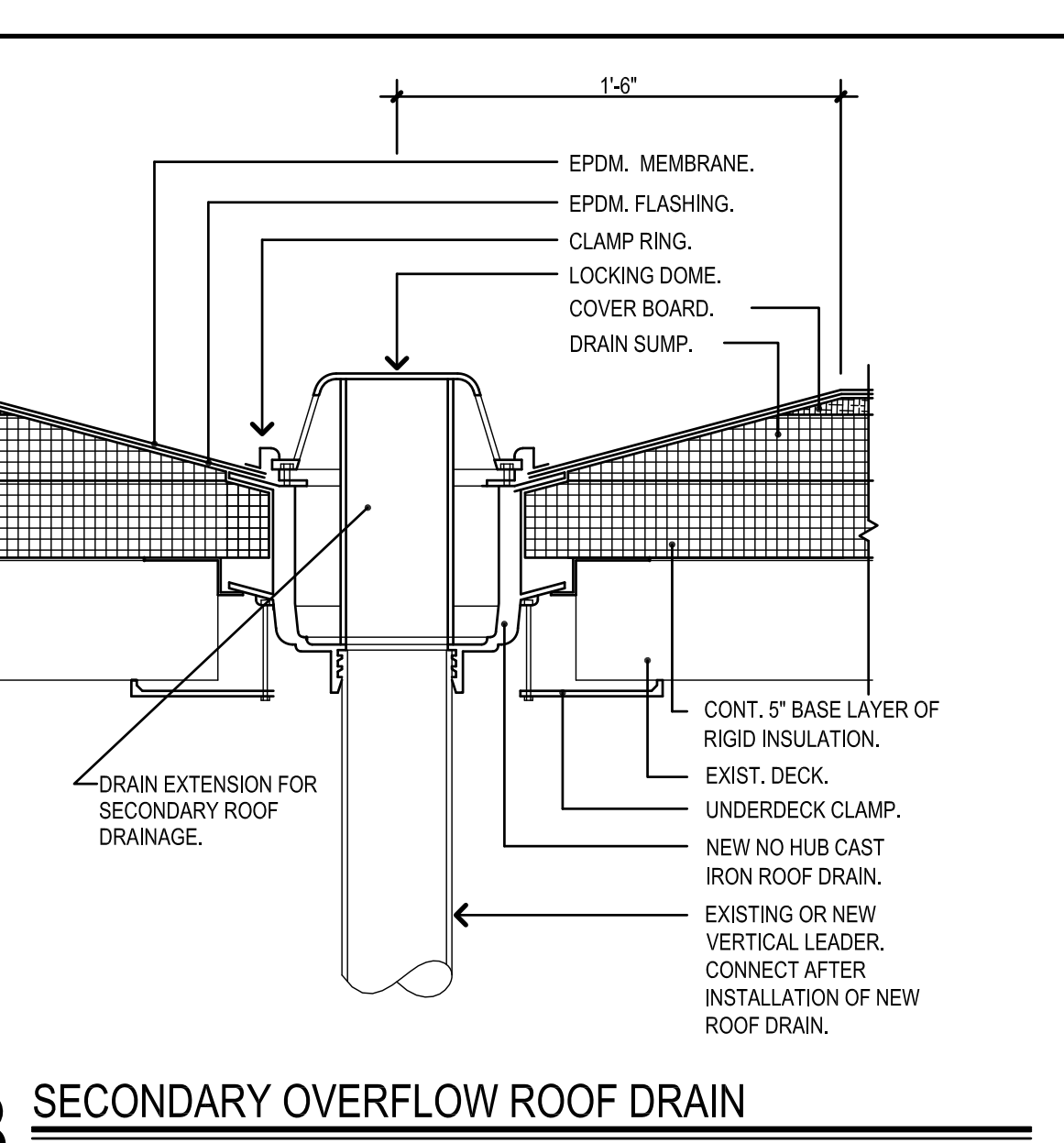
**P ROOF TOP MECHANICAL UNIT - 2**  
1-1/2" x 1'-0"



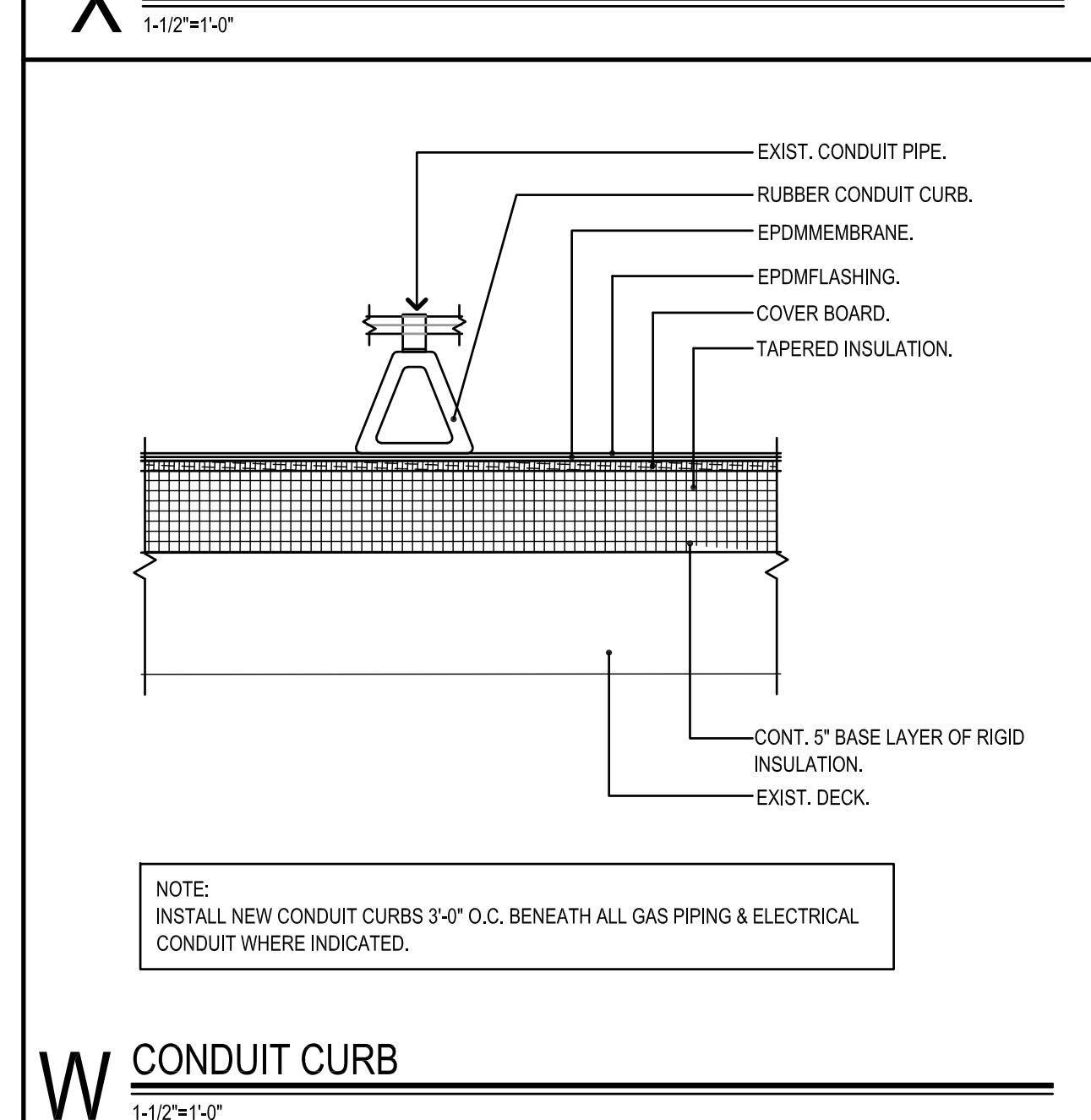
**K METAL STAIRCASE**  
1-1/2" x 1'-0"



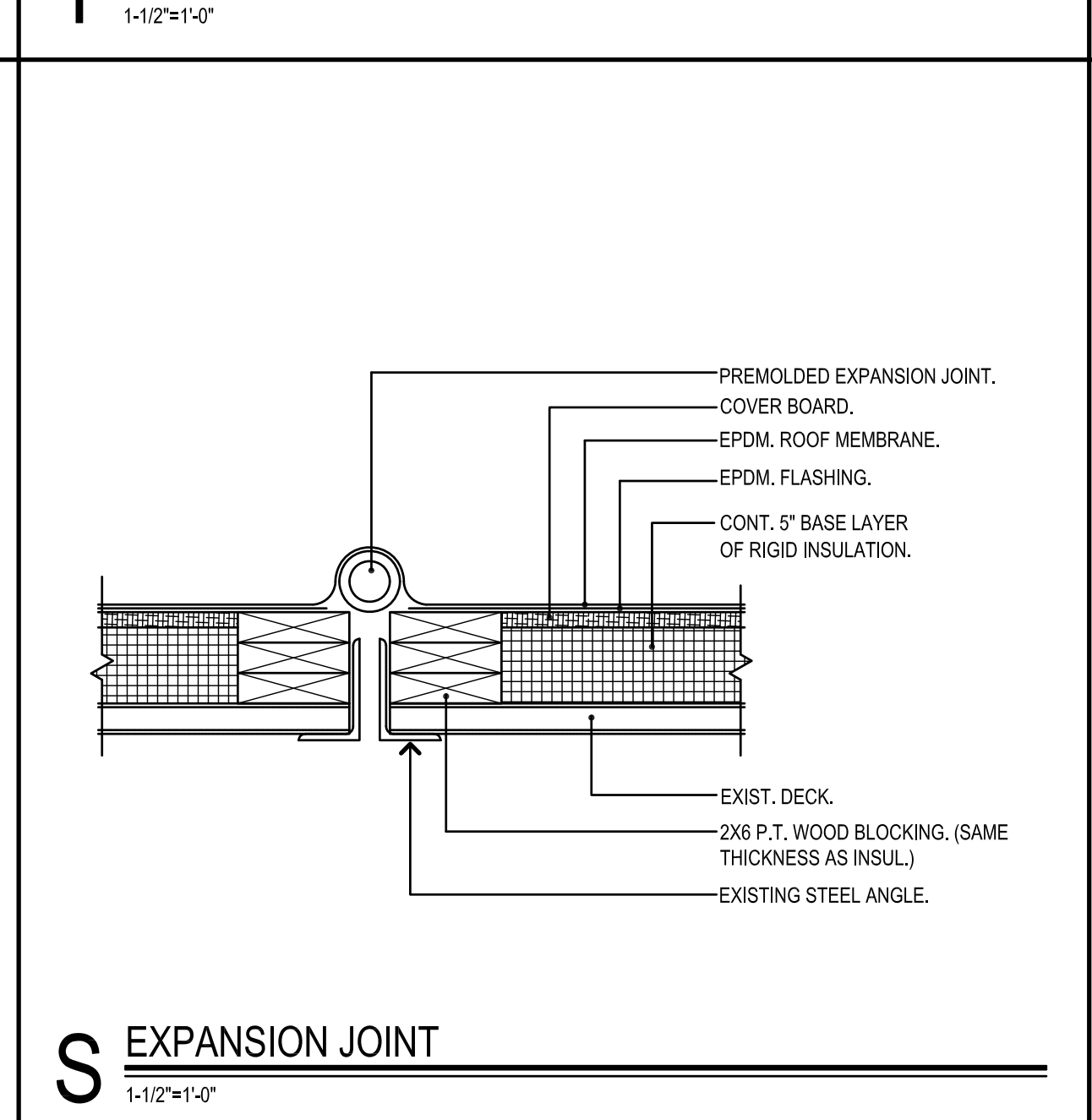
**F PITCH POCKET**  
1-1/2" x 1'-0"



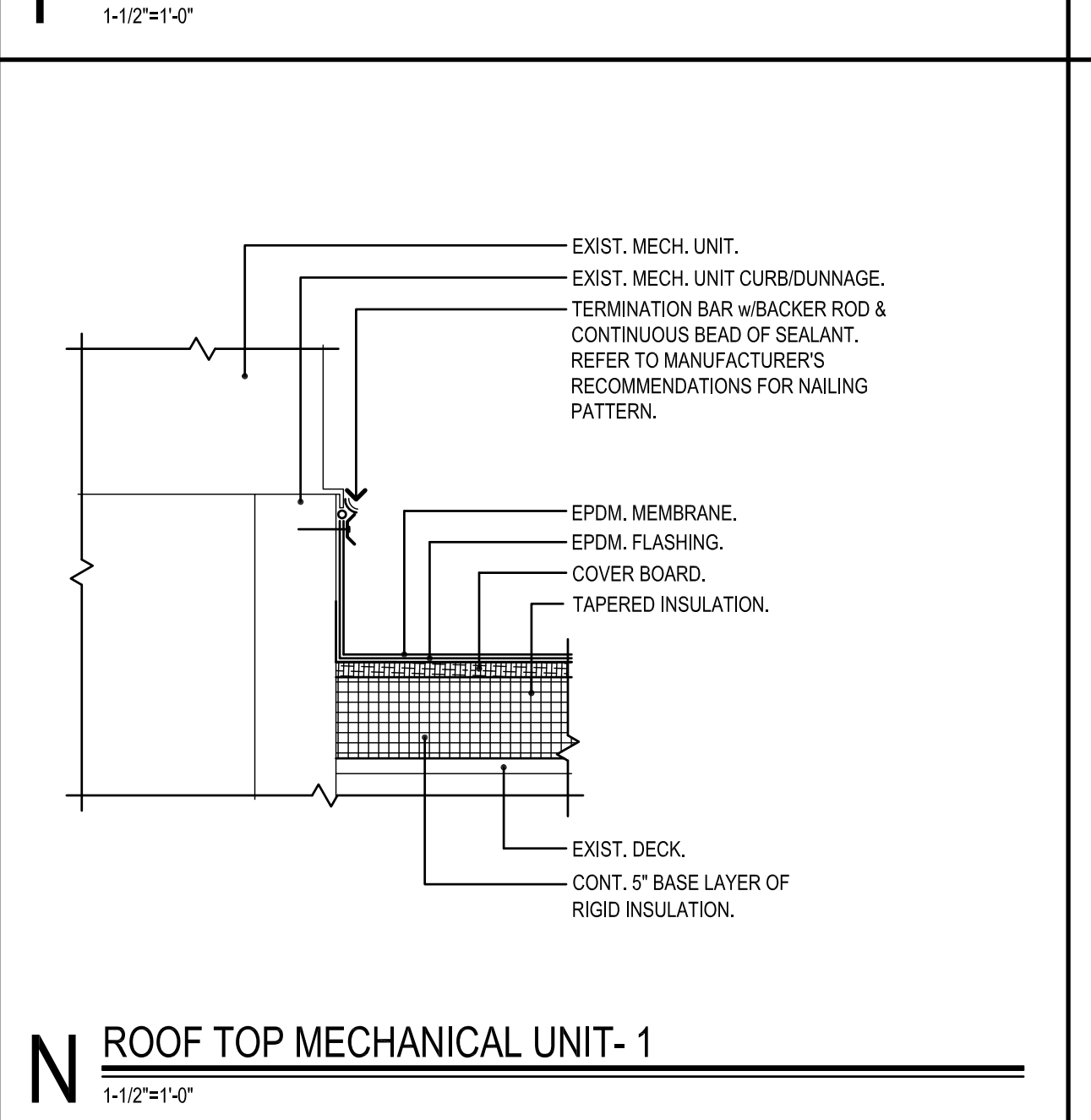
**B SECONDARY OVERFLOW ROOF DRAIN**  
1-1/2" x 1'-0"



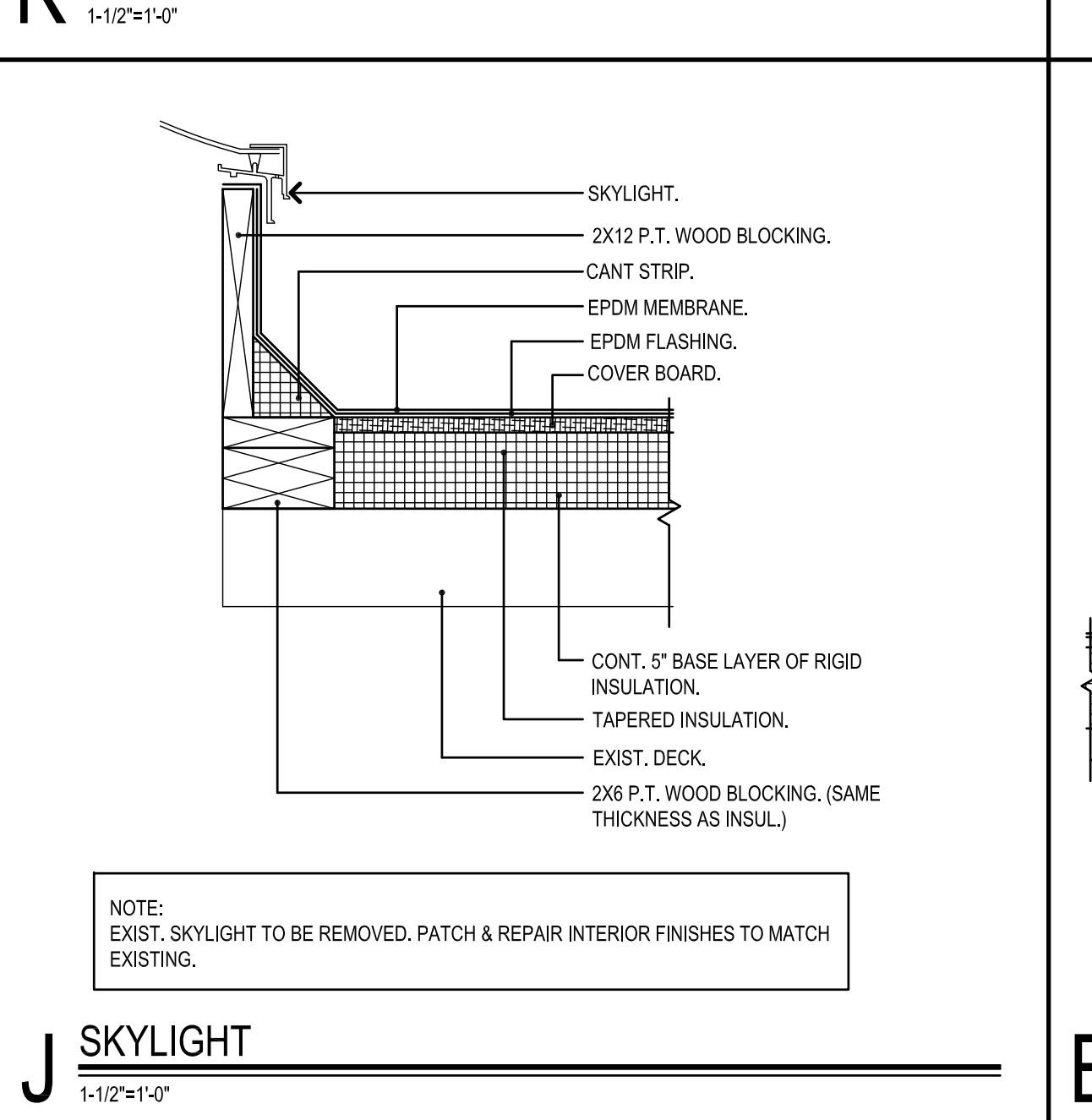
**W CONDUIT CURB**  
1-1/2" x 1'-0"



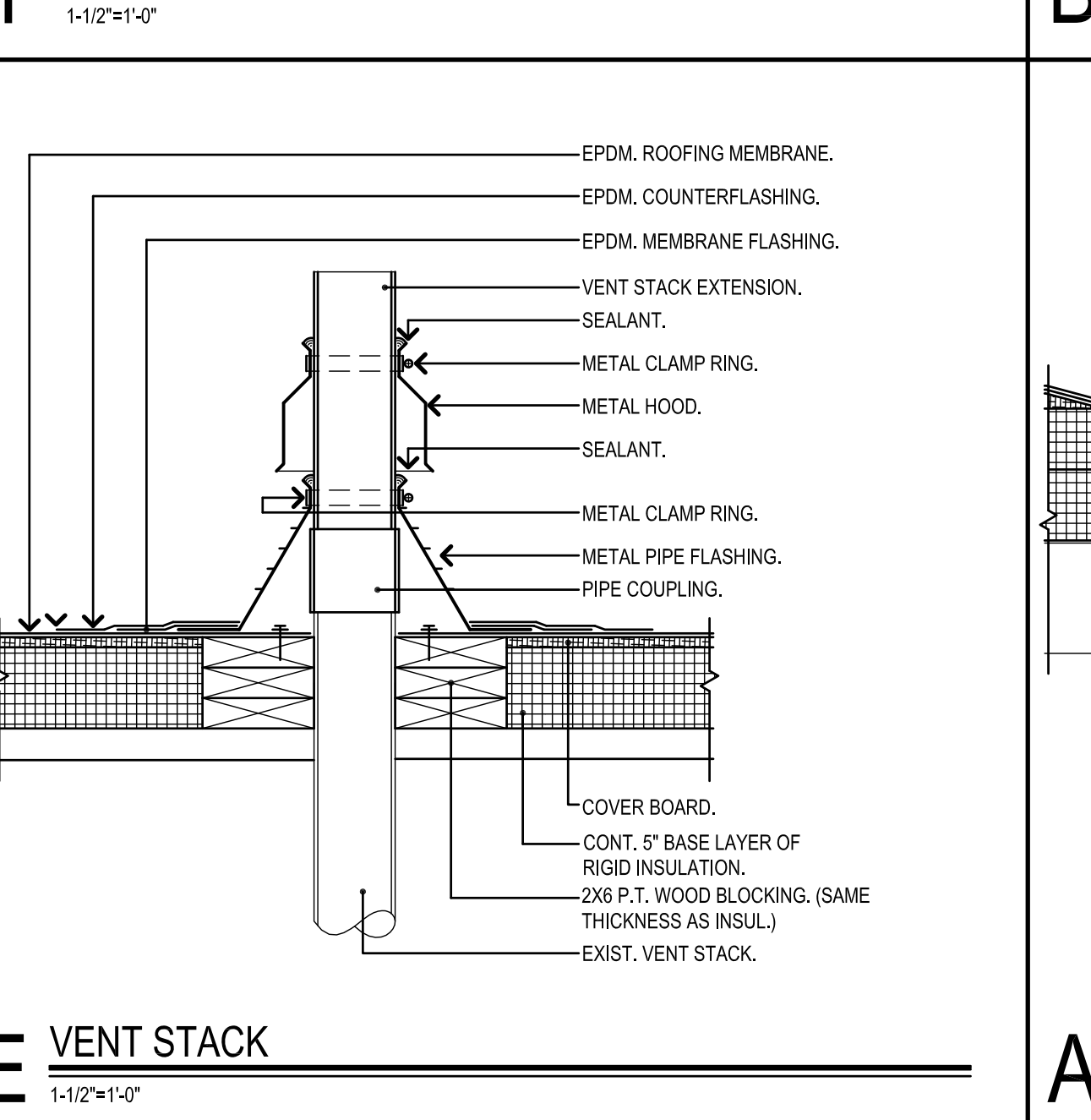
**S EXPANSION JOINT**  
1-1/2" x 1'-0"



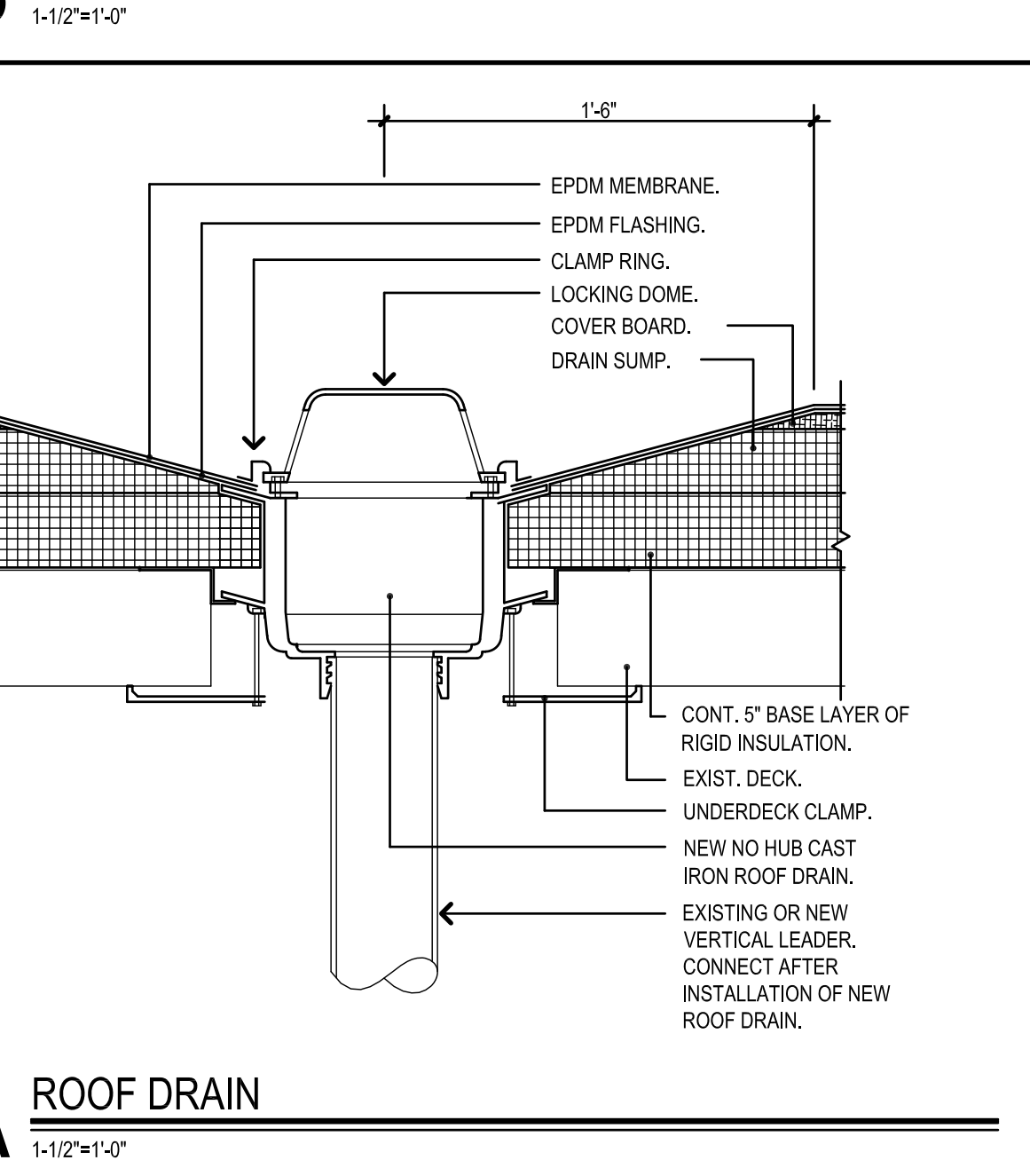
**N ROOF TOP MECHANICAL UNIT - 1**  
1-1/2" x 1'-0"



**J SKYLIGHT**  
1-1/2" x 1'-0"



**E VENT STACK**  
1-1/2" x 1'-0"



**A ROOF DRAIN**  
1-1/2" x 1'-0"

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**ROOF DETAILS**

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**ROOF DETAILS**

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1-1/2" = 1'-0"  
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Project Number:  
23.108

A3