

# GEORGE BROWN COLLEGE CASA LOMA CAMPUS

## ROOF REPAIR AND REPLACEMENT

160 KENDAL AVE., TORONTO, ON

### LIST OF DRAWINGS

DRAWING NO.	DRAWING TITLE
R000	TITLE PAGE
R100	CONTEXT PLAN
R101	ROOF PLAN (ROOF C, REPAIR AREA 1)
R102	ROOF PLAN (ROOF C, REPAIR AREA 2)
R103	ROOF PLAN (ROOF C, REPAIR AREA 3)
R104	ROOF PLAN (ROOF E, REPAIR AREA 4)
R500	ROOF ASSEMBLIES
R501	DETAILS (ROOF C, REPAIR AREA 1)
R502	DETAILS (ROOF C, REPAIR AREA 2)
R503	DETAILS (ROOF C, REPAIR AREA 3)
R504	DETAILS (ROOF E, REPAIR AREA 4)
R505	TYPICAL ROOFING DETAILS
R600	PHOTOGRAPHS (ROOF C, REPAIR AREA 1)
R601	PHOTOGRAPHS (ROOF C, REPAIR AREAS 2 AND 3)
R602	PHOTOGRAPHS (ROOF E, REPAIR AREA 4)

Project Title:

GEORGE BROWN COLLEGE CASA  
LOMA CAMPUS  
ROOF REPAIR AND REPLACEMENT

160 KENDAL AVE., TORONTO, ON

Designed By: D.W. Scale: AS NOTED

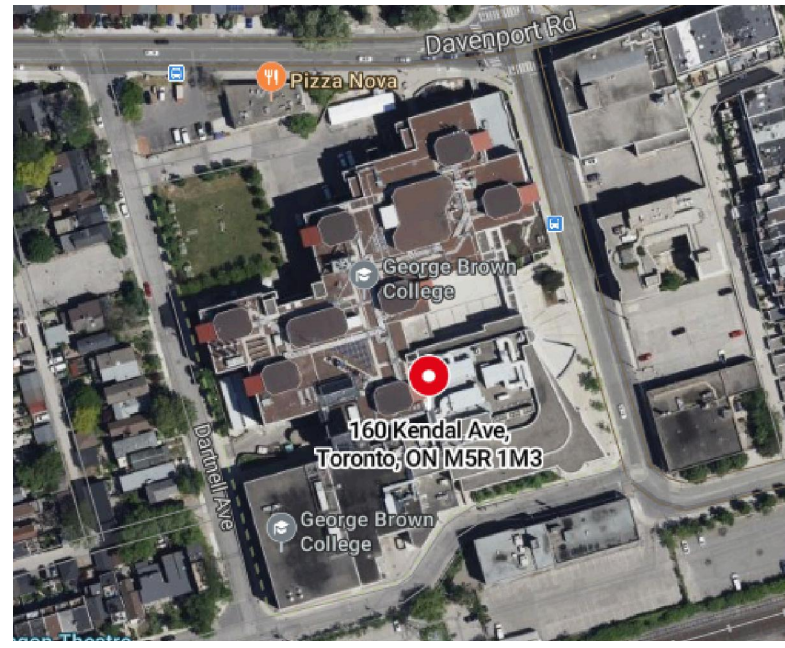
Drawn By: S.R. Date: 2024-10-17

Drawing Title

TITLE PAGE

Drawing Number

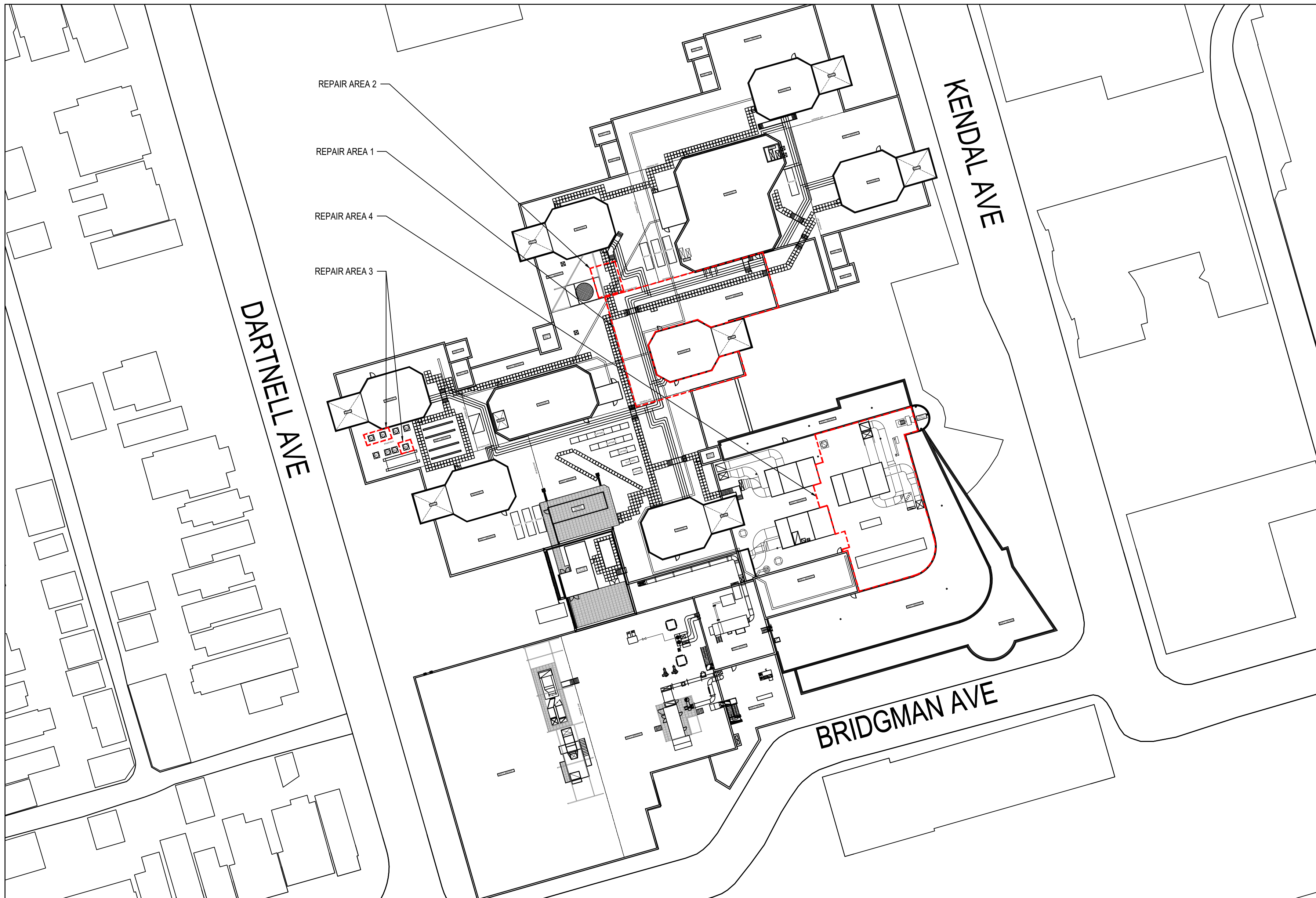
R000



1 CONTEXT PLAN  
R100

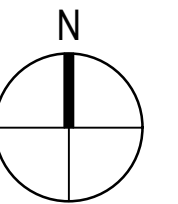
ROOF COMPOSITION				
REPAIR AREA	AREA (SQ. FT) <small>* CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO BIDDING</small>	EXISTING ASSEMBLY	NEW ASSEMBLY	ALTERNATE NEW ASSEMBLY
1	4,900	<ul style="list-style-type: none"> <li>EXISTING MODIFIED BITUMEN CAP SHEET (TORCH APPLIED)</li> <li>EXISTING MODIFIED BITUMEN BASE SHEET (TORCH APPLIED)</li> <li>EXISTING VENTED BASE SHEET (MECHANICALLY FASTENED)</li> <li>EXISTING LIGHTWEIGHT INSULATING CONCRETE MADE UP OF 2" CONCRETE ON 2" TAPERED EPS INSULATION (2% SLOPE)</li> <li>EXISTING RUBBERIZED ASPHALT FLOOD COAT</li> <li>EXISTING 2-PLY BUILT-UP ASPHALT VAPOUR BARRIER</li> <li>EXISTING CONCRETE DECK</li> </ul>	<ul style="list-style-type: none"> <li>NEW MODIFIED BITUMEN CAP SHEET (COLD APPLIED)</li> <li>NEW MODIFIED BITUMEN BASE SHEET (COLD APPLIED)</li> <li>NEW 1/2" FIBREBOARD COVER BOARD (ADHERED)</li> <li>NEW TAPERED POLYISOCYANURATE INSULATION (ADHERED, 1% SLOPE)</li> <li>NEW 2" POLYISOCYANURATE INSULATION (ADHERED)</li> <li>NEW SELF-ADHERED VAPOUR RETARDER</li> <li>EXISTING CONCRETE DECK</li> </ul>	<ul style="list-style-type: none"> <li>NEW MODIFIED BITUMEN CAP SHEET (COLD APPLIED)</li> <li>NEW MODIFIED BITUMEN BASE SHEET (COLD APPLIED)</li> <li>NEW VENTED BASE SHEET (MECHANICALLY FASTENED)</li> <li>NEW TAPERED LIGHTWEIGHT INSULATING CONCRETE (1% SLOPE)</li> <li>NEW SELF-ADHERED VAPOUR RETARDER</li> <li>EXISTING CONCRETE DECK</li> </ul>
2	300	<ul style="list-style-type: none"> <li>EXISTING MODIFIED BITUMEN CAP SHEET (TORCH APPLIED)</li> <li>EXISTING MODIFIED BITUMEN BASE SHEET (TORCH APPLIED)</li> <li>EXISTING VENTED BASE SHEET (MECHANICALLY FASTENED)</li> <li>EXISTING LIGHTWEIGHT INSULATING CONCRETE MADE UP OF 2" CONCRETE ON 2" TAPERED EPS INSULATION (2% SLOPE)</li> <li>EXISTING RUBBERIZED ASPHALT FLOOD COAT</li> <li>EXISTING 2-PLY BUILT-UP ASPHALT VAPOUR BARRIER</li> <li>EXISTING CONCRETE DECK</li> </ul>	<ul style="list-style-type: none"> <li>NEW MODIFIED BITUMEN CAP SHEET (COLD APPLIED)</li> <li>NEW MODIFIED BITUMEN BASE SHEET (COLD APPLIED)</li> <li>NEW VENTED BASE SHEET (MECHANICALLY FASTENED)</li> <li>NEW LIGHTWEIGHT INSULATING CONCRETE SLOPED TO MATCH EXISTING ROOF SLOPE</li> <li>NEW COLD-APPLIED WATERPROOFING (LOCALIZED AS REQUIRED)</li> <li>EXISTING RUBBERIZED ASPHALT</li> <li>EXISTING 2-PLY BUILT-UP ASPHALT VAPOUR BARRIER</li> <li>EXISTING CONCRETE DECK</li> </ul>	N/A
4	6,100	<ul style="list-style-type: none"> <li>EXISTING FLOOD COAT AND PEA GRAVEL</li> <li>EXISTING 4-PLY BUILT-UP ASPHALT MEMBRANE</li> <li>EXISTING 1/2" FIBREBOARD (MOPPED WITH ASPHALT)</li> <li>EXISTING 4" POLYISOCYANURATE INSULATION</li> <li>EXISTING 2-PLY BUILT-UP ASPHALT VAPOUR BARRIER</li> <li>EXISTING COMPOSITE ROOF DECK (STRUCTURALLY SLOPED DECK)</li> </ul>	<ul style="list-style-type: none"> <li>NEW MODIFIED BITUMEN CAP SHEET (COLD APPLIED)</li> <li>NEW MODIFIED BITUMEN BASE SHEET (COLD APPLIED)</li> <li>NEW 1/2" FIBREBOARD COVER BOARD (ADHERED)</li> <li>NEW 4" POLYISOCYANURATE INSULATION (ADHERED, 2 LAYERS OF 2", STAGGERED JOINTS)</li> <li>NEW SELF-ADHERED VAPOUR RETARDER</li> <li>EXISTING COMPOSITE ROOF DECK (STRUCTURALLY SLOPED DECK)</li> </ul>	N/A

\* ROOF COMPOSITION TABLE IS INTENDED AS A QUICK REFERENCE GUIDE REFER TO THE DRAWINGS AND SPECIFICATIONS FOR FULL SCOPE OF WORK AND REQUIREMENTS.



2 SITE PLAN  
R100

No.	Issue Description	YYYY-MM-DD
0	ISSUED FOR CLIENT REVIEW	2024-11-14
1	ISSUED FOR TENDER	2024-12-13



Project Title:

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ROOF REPAIR AND REPLACEMENT

160 KENDAL AVE., TORONTO, ON

Designed By:	D.W.	Scale:	AS NOTED
Drawn By:	S.R.	Date:	2024-10-17

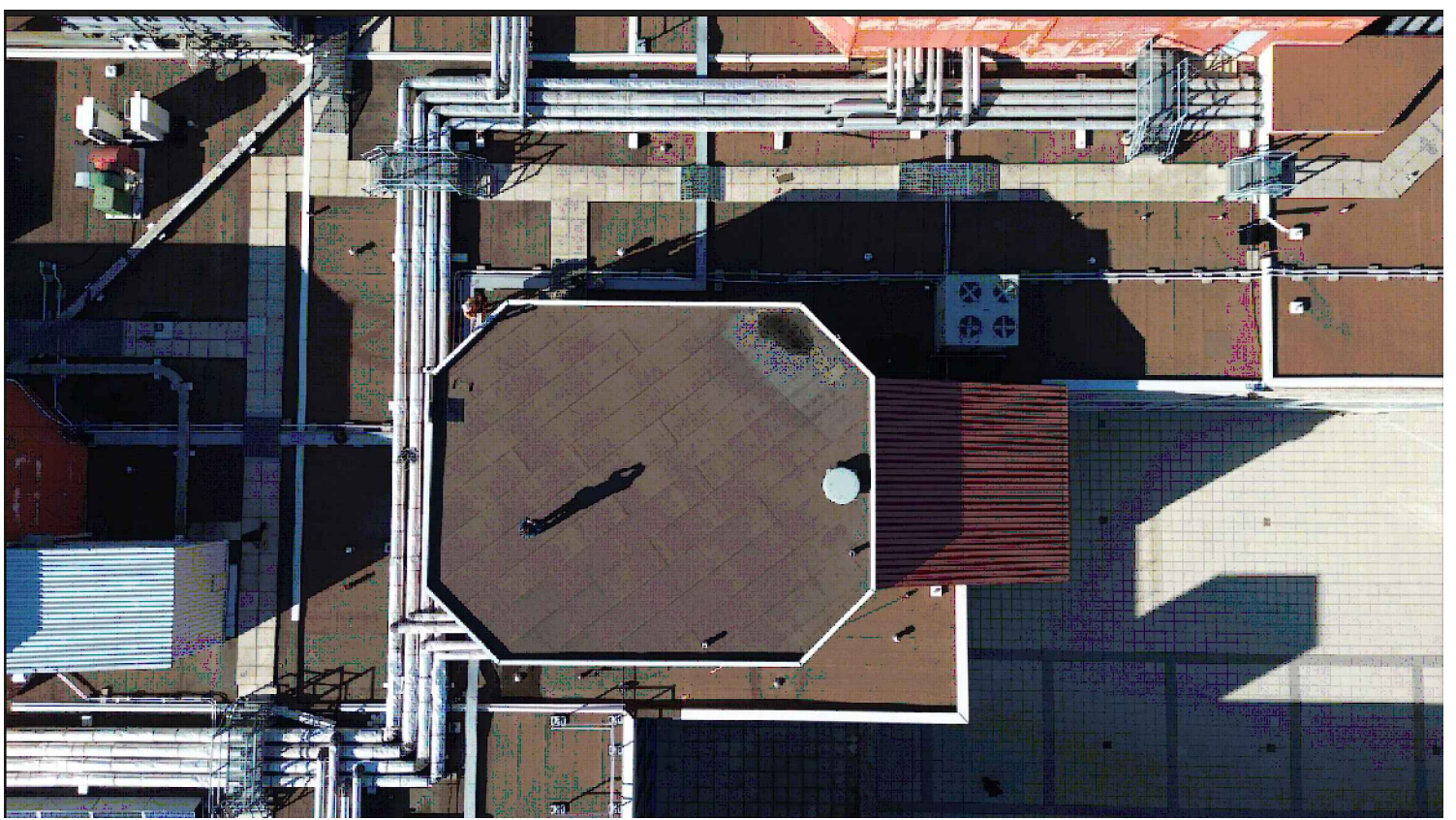
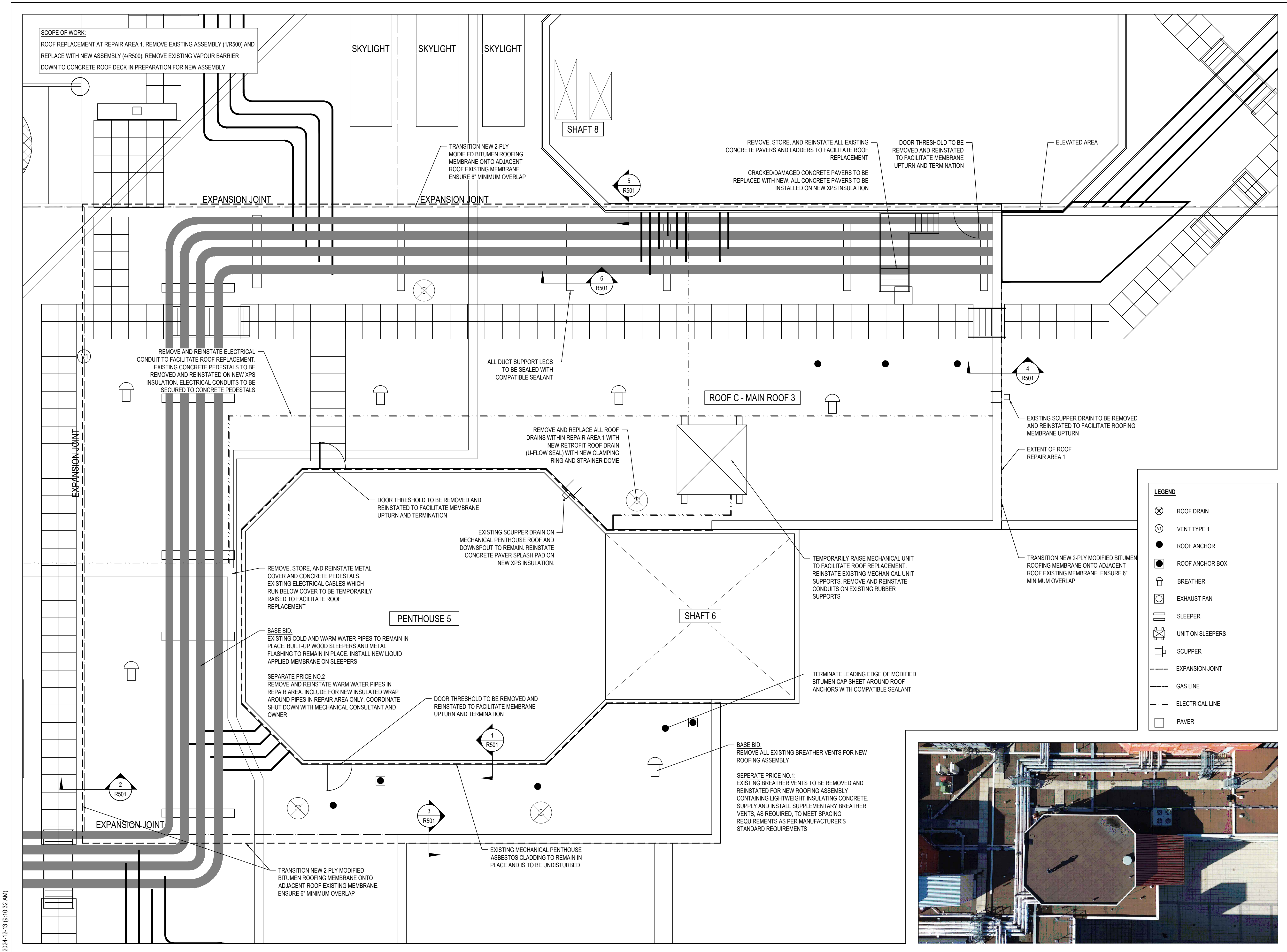
Drawing Title

CONTEXT PLAN

Drawing Number

**R100**

No.	Issue Description	YYYY-MM-DD
0	ISSUED FOR CLIENT REVIEW	2024-11-14
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160 KENDAL AVE., TORONTO, ON

Designed By: D.W. Scale: AS NOTED

Drawn By: S.R. Date: 2024-10-17

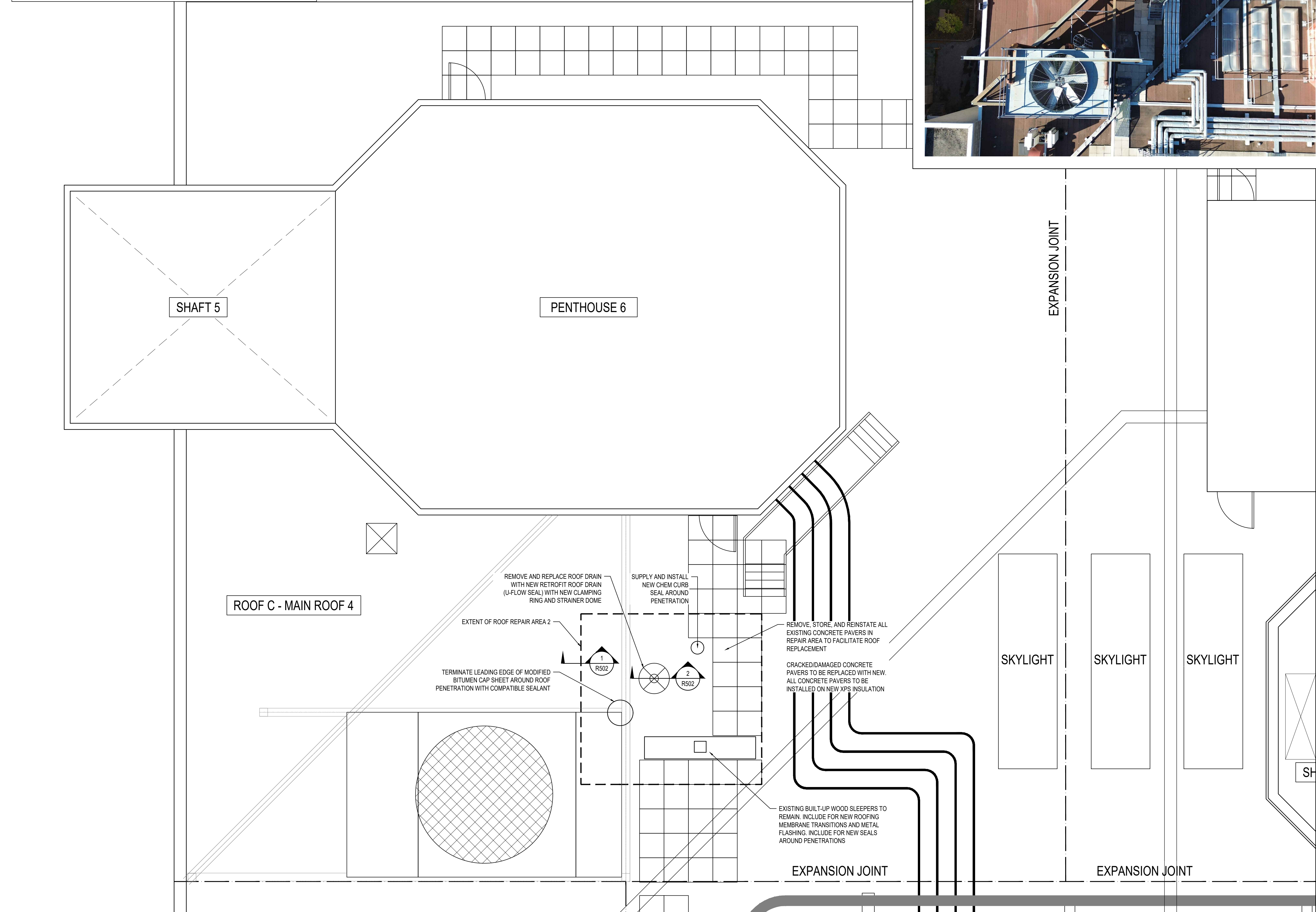
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**ROOF PLAN (ROOF C, REPAIR AREA 1)**

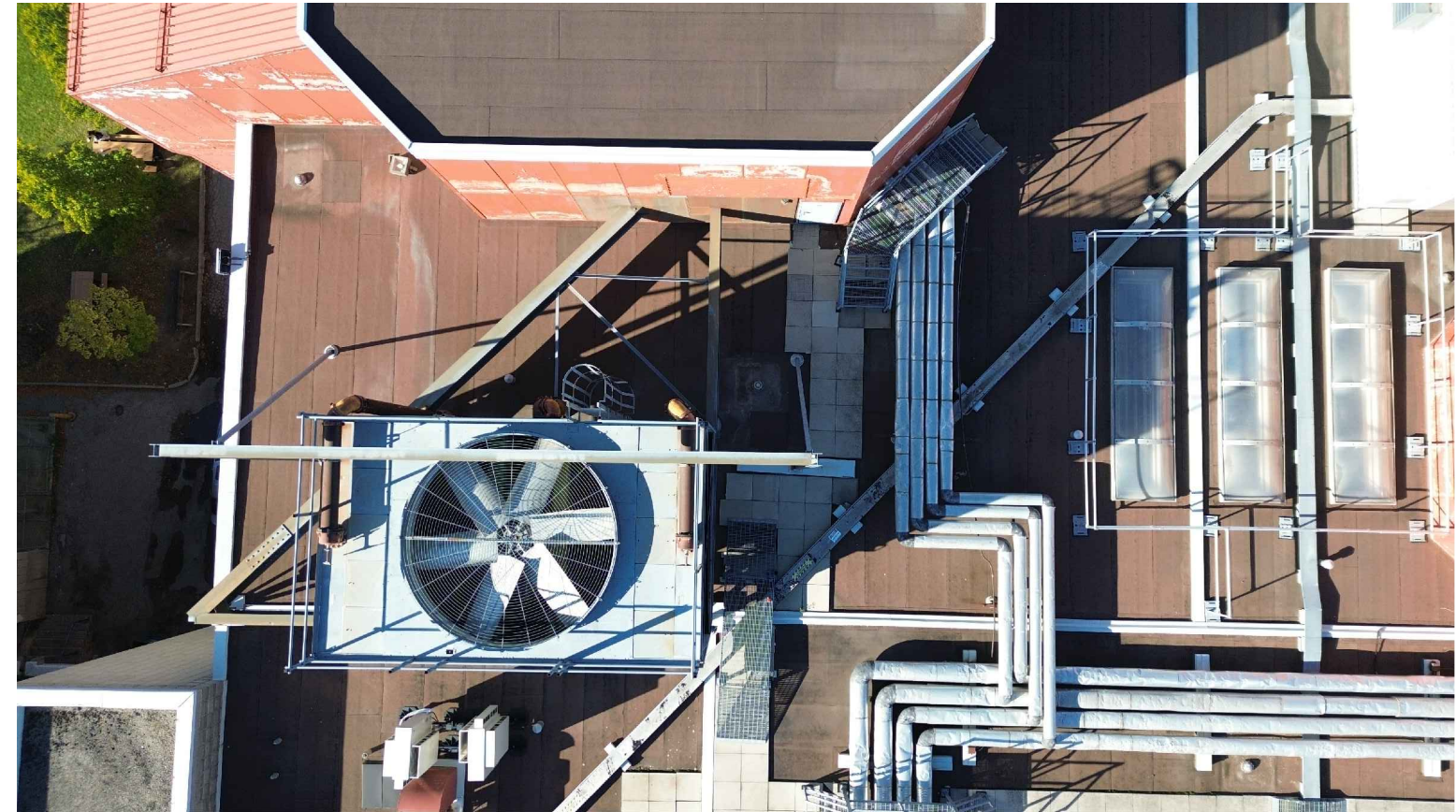
Drawing Number

**R101**

**SCOPE OF WORK:**  
 LOCALIZED ROOF REPLACEMENT AT REPAIR AREA 2. REMOVE EXISTING ASSEMBLY (1/R500) AND REPLACE WITH NEW ASSEMBLY (3/R500). REMOVE EXISTING LIGHTWEIGHT INSULATING CONCRETE DOWN TO VAPOUR BARRIER. LOCALLY INSTALL NEW COLD-APPLIED WATERPROOFING, AS REQUIRED.



2024-12-13 (9:10:53 AM)  
 Original drawing sheet is 22 x 34.



Professional Seal

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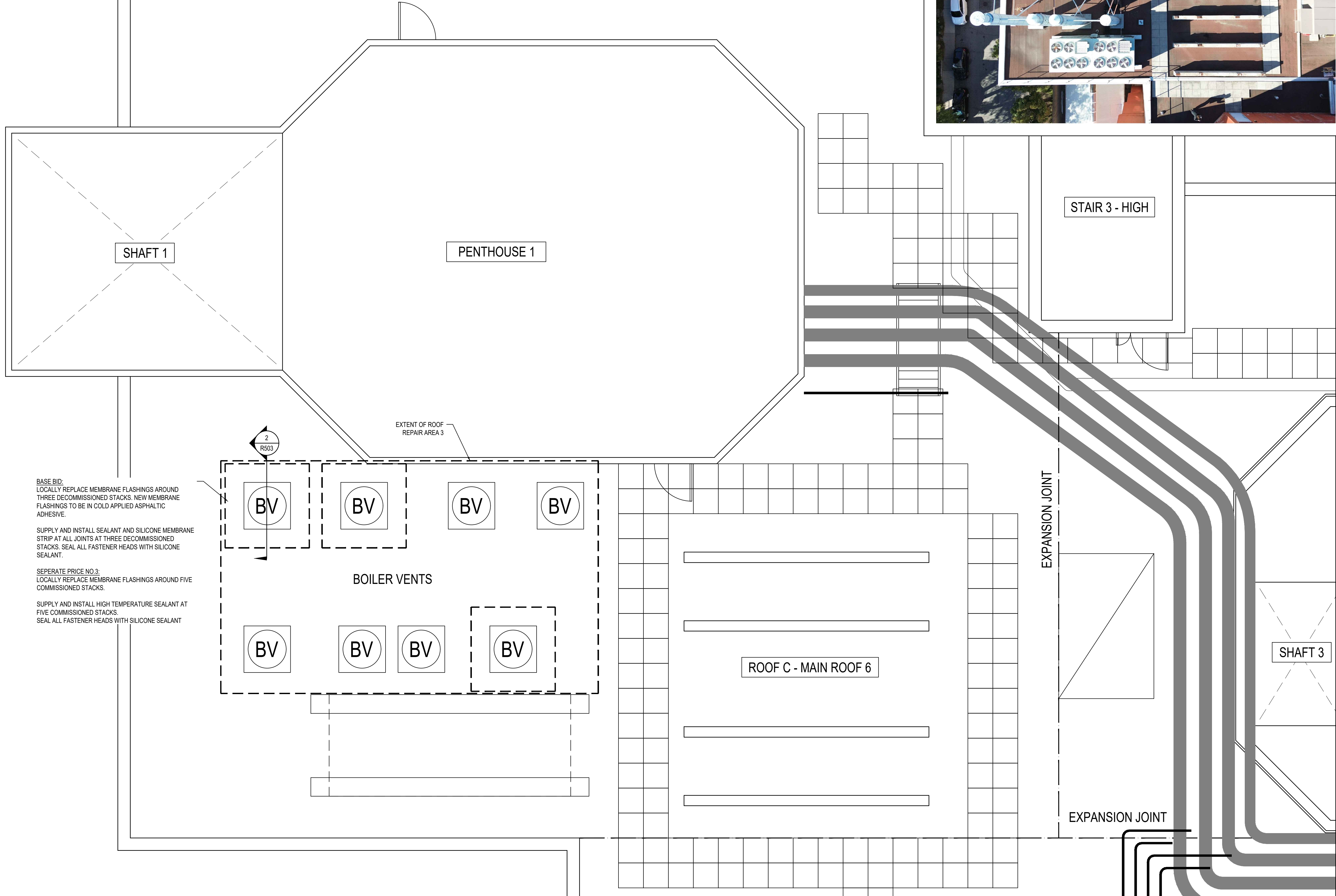
Drawing Title

**ROOF PLAN (ROOF C, REPAIR AREA 2)**

Drawing Number



SCOPE OF WORK:  
 MEMBRANE FLASHING REPLACEMENT AT REPAIR AREA 3 AROUND THREE BOILER VENT STACKS.  
 SUPPLY AND INSTALL SUPPLEMENTARY SEALANT AND SILICONE MEMBRANE STRIP AT BOILER VENT STACK JOINTS. SEAL ALL FASTENER HEADS WITH SILICONE SEALANT.



BASE BID:  
 LOCALLY REPLACE MEMBRANE FLASHINGS AROUND THREE DECOMMISSIONED STACKS. NEW MEMBRANE FLASHINGS TO BE IN COLD APPLIED ASPHALTIC ADHESIVE.  
 SUPPLY AND INSTALL SEALANT AND SILICONE MEMBRANE STRIP AT ALL JOINTS AT THREE DECOMMISSIONED STACKS. SEAL ALL FASTENER HEADS WITH SILICONE SEALANT.

SEPERATE PRICE NO.3:  
 LOCALLY REPLACE MEMBRANE FLASHINGS AROUND FIVE COMMISSIONED STACKS.  
 SUPPLY AND INSTALL HIGH TEMPERATURE SEALANT AT FIVE COMMISSIONED STACKS.  
 SEAL ALL FASTENER HEADS WITH SILICONE SEALANT

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0	ISSUED FOR CLIENT REVIEW	2024-11-14
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**ROOF REPAIR AND REPLACEMENT**

160 KENDAL AVE., TORONTO, ON

Designed By:	D.W.	Scale:	AS NOTED
Drawn By:	S.R.	Date:	2024-10-17

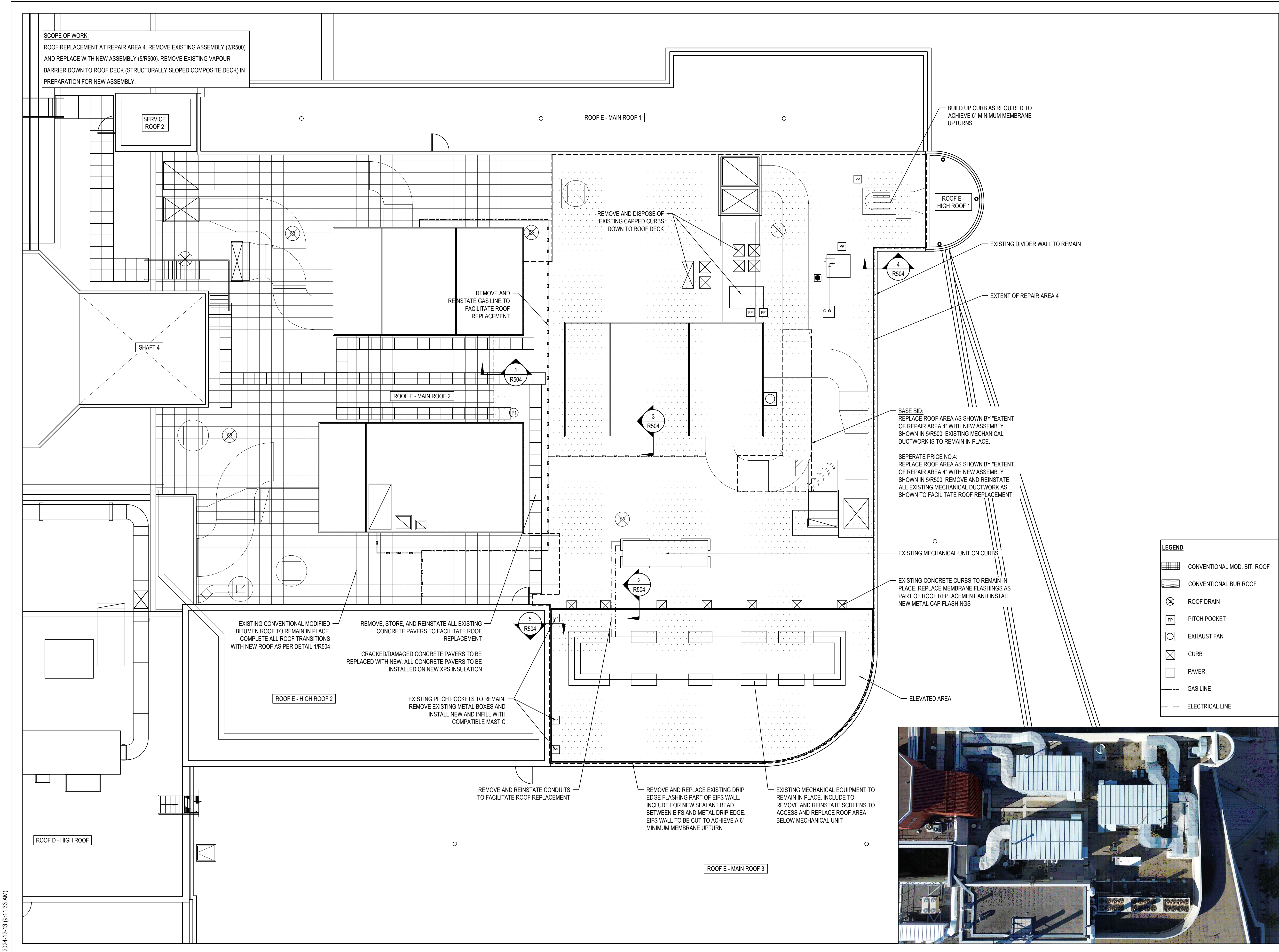
Drawing Title

**ROOF PLAN (ROOF C, REPAIR AREA 3)**

Drawing Number

**R103**

No.	Issue Description	YYYY-MM-DD
0	ISSUED FOR CLIENT REVIEW	2024-11-14
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160 KENDAL AVE., TORONTO, ON

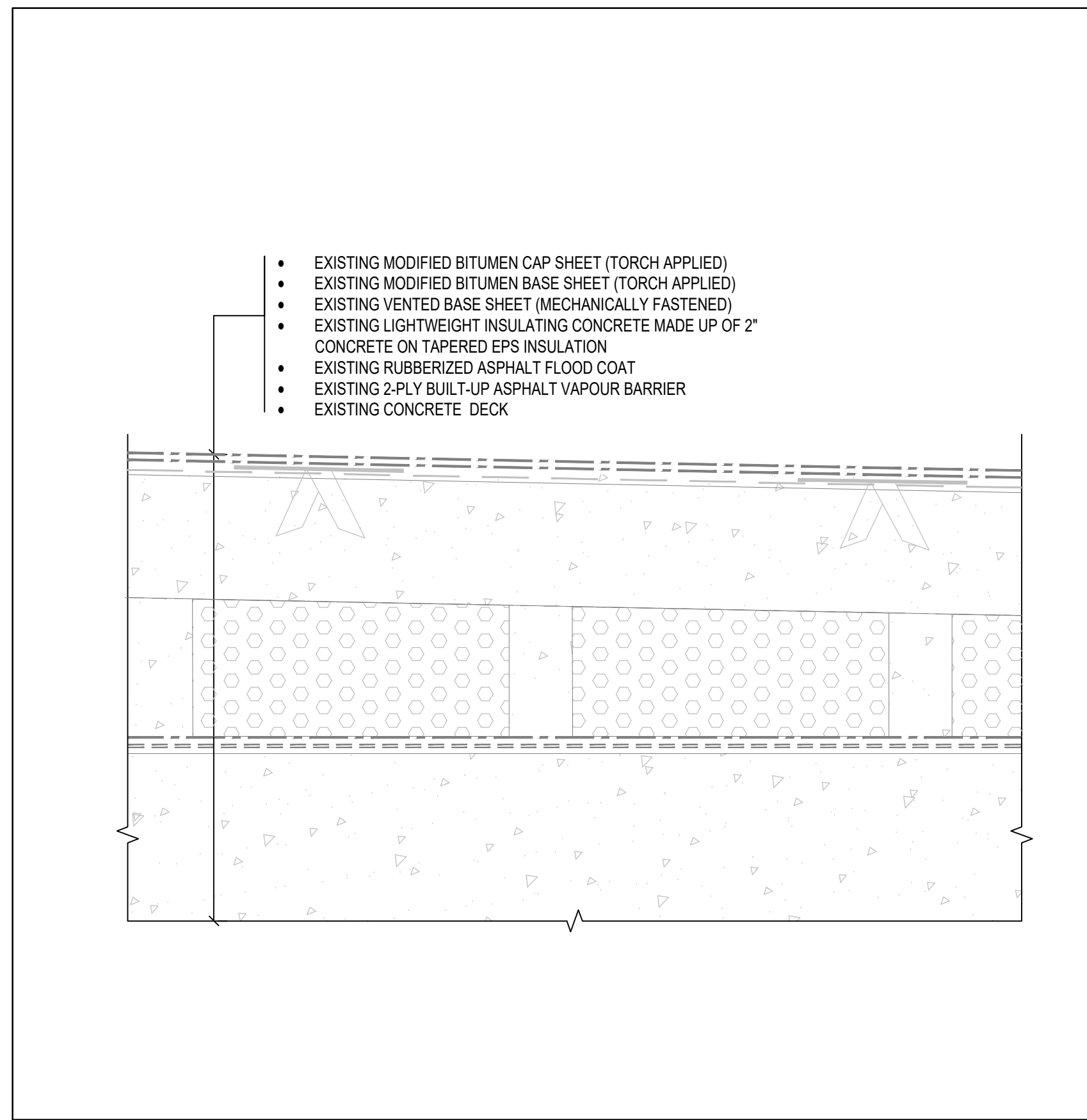
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Drawn By:	S.R.	Date:	2024-10-17

Drawing Title

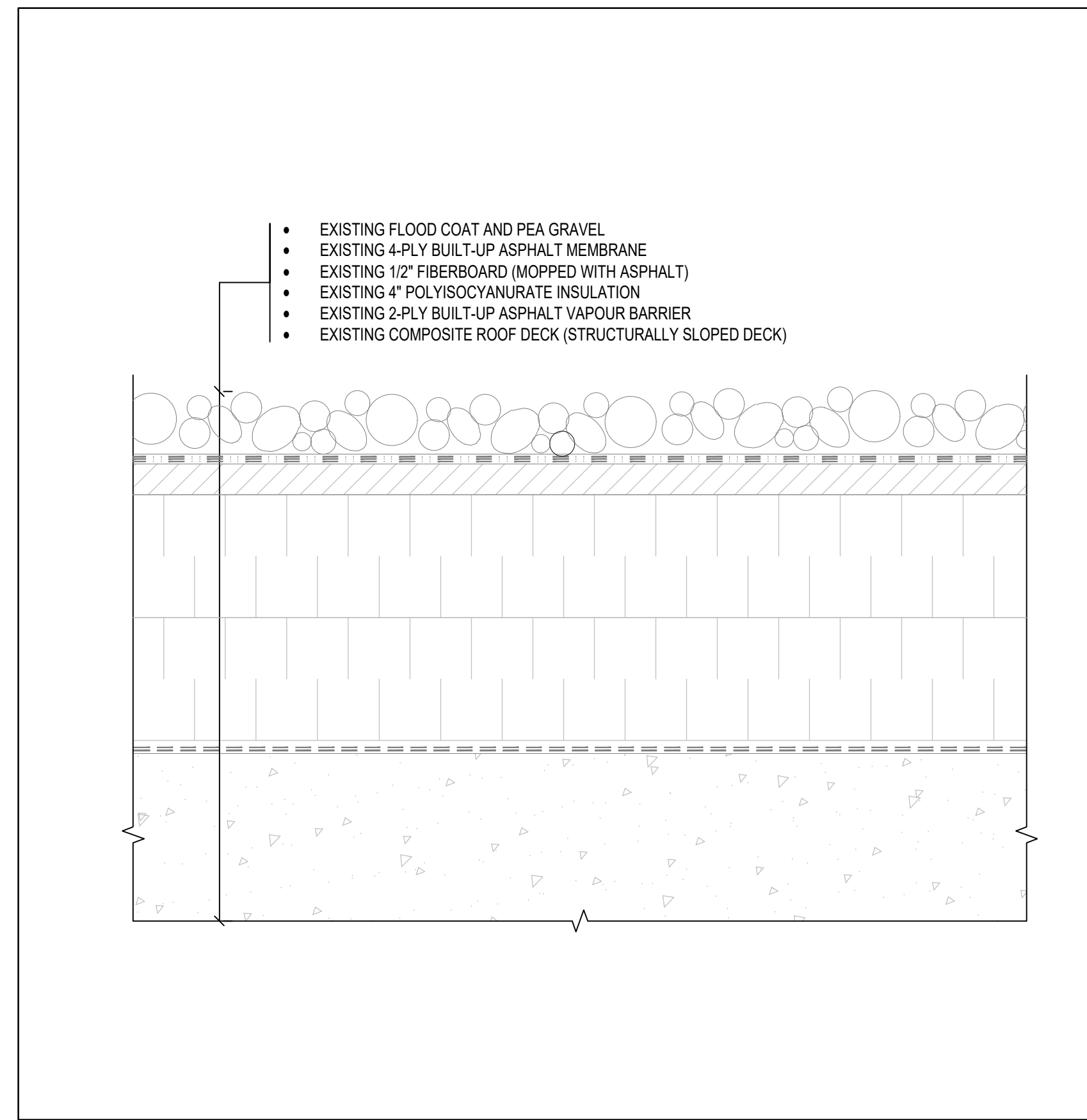
**ROOF PLAN (ROOF E, REPAIR AREA 4)**

Drawing Number  
**R104**

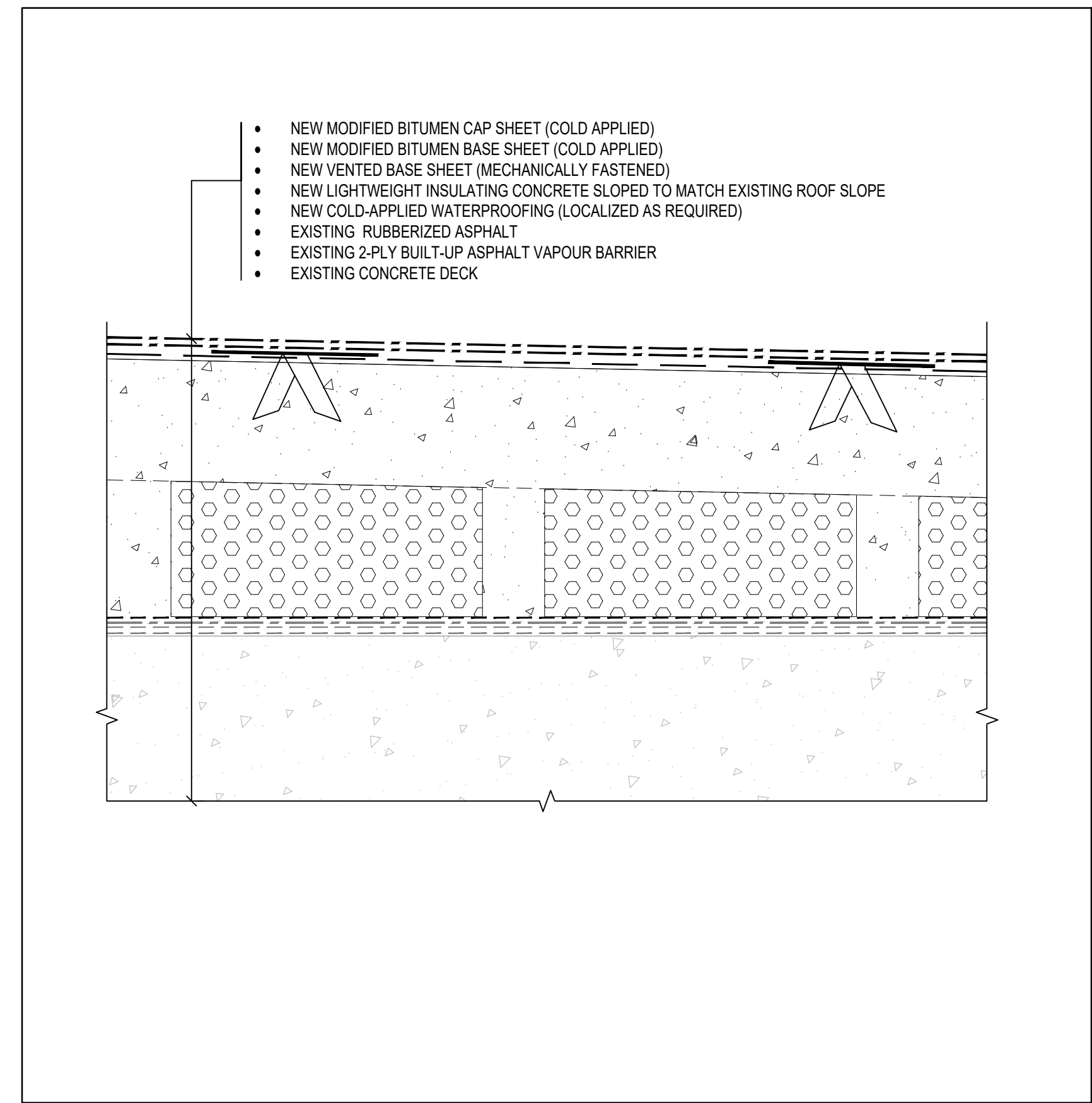
No.	Issue Description	YYYY-MM-DD
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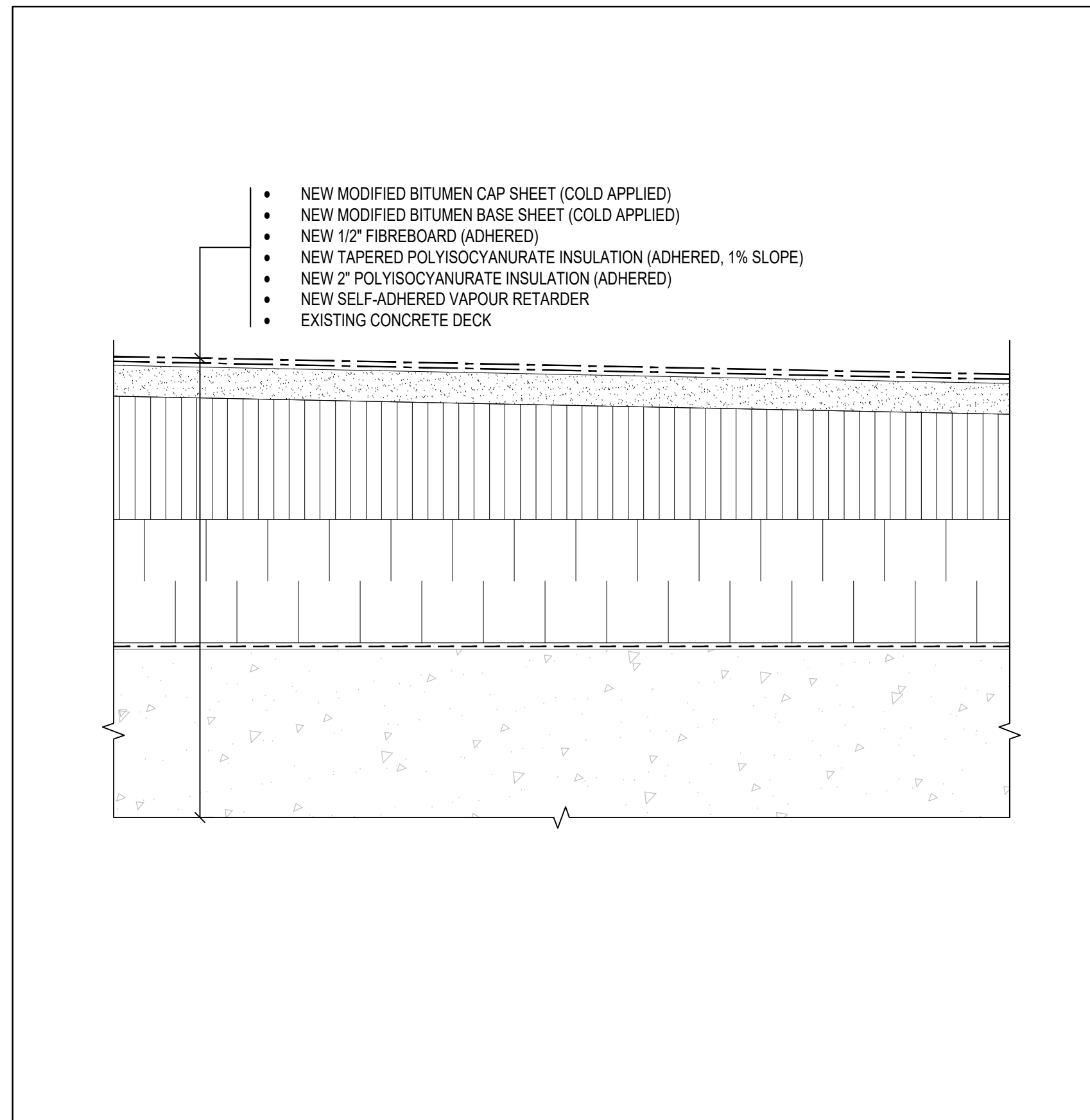
1 EXISTING MODIFIED BITUMEN ROOF ASSEMBLY (ROOF C)  
R500 SCALE: N.T.S.



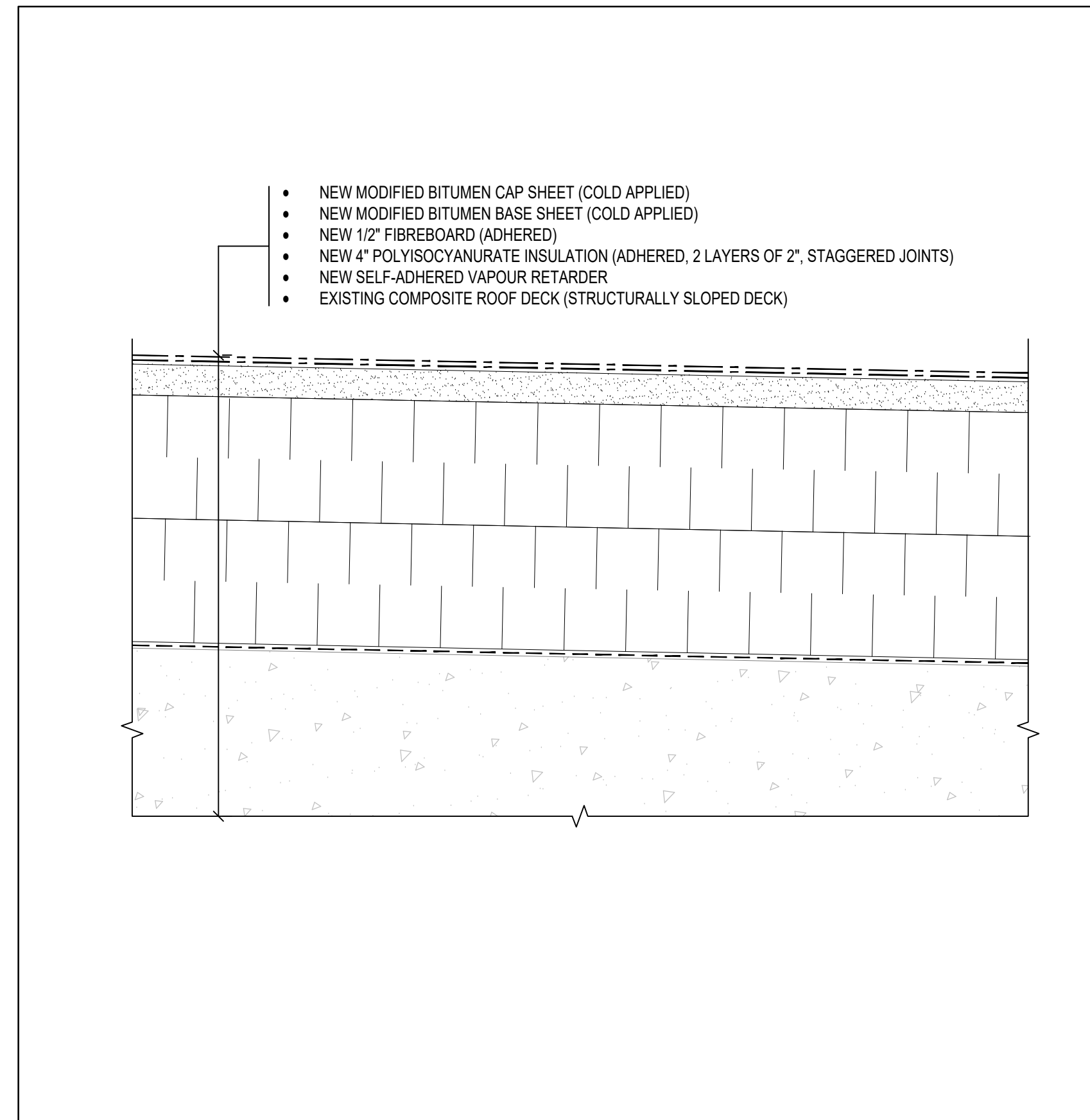
2 EXISTING BUILT UP ROOF ASSEMBLY (ROOF E)  
R500 SCALE: N.T.S.



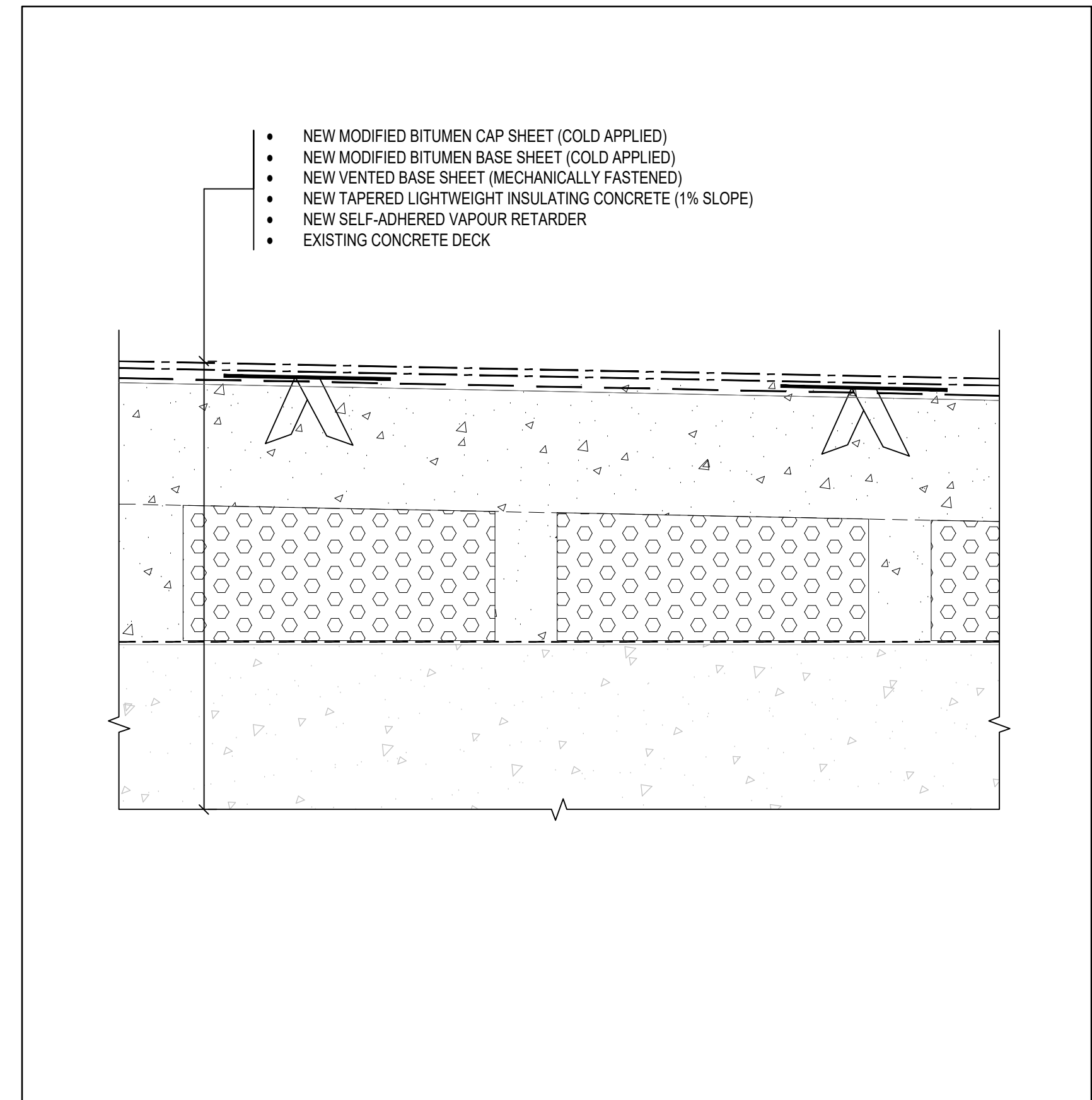
3 NEW MODIFIED BITUMEN ROOF ASSEMBLY (ROOF C, REPAIR AREAS 2)  
R500 SCALE: N.T.S.



4 NEW MODIFIED BITUMEN ROOF ASSEMBLY (ROOF C, REPAIR AREA 1)  
R500 SCALE: N.T.S.



5 NEW MODIFIED BITUMEN ROOF ASSEMBLY (ROOF E, REPAIR AREA 4)  
R500 SCALE: N.T.S.



6 ALTERNATE PRICE - NEW MODIFIED BITUMEN ROOF ASSEMBLY (ROOF C, REPAIR AREA 1)  
R500 SCALE: N.T.S.

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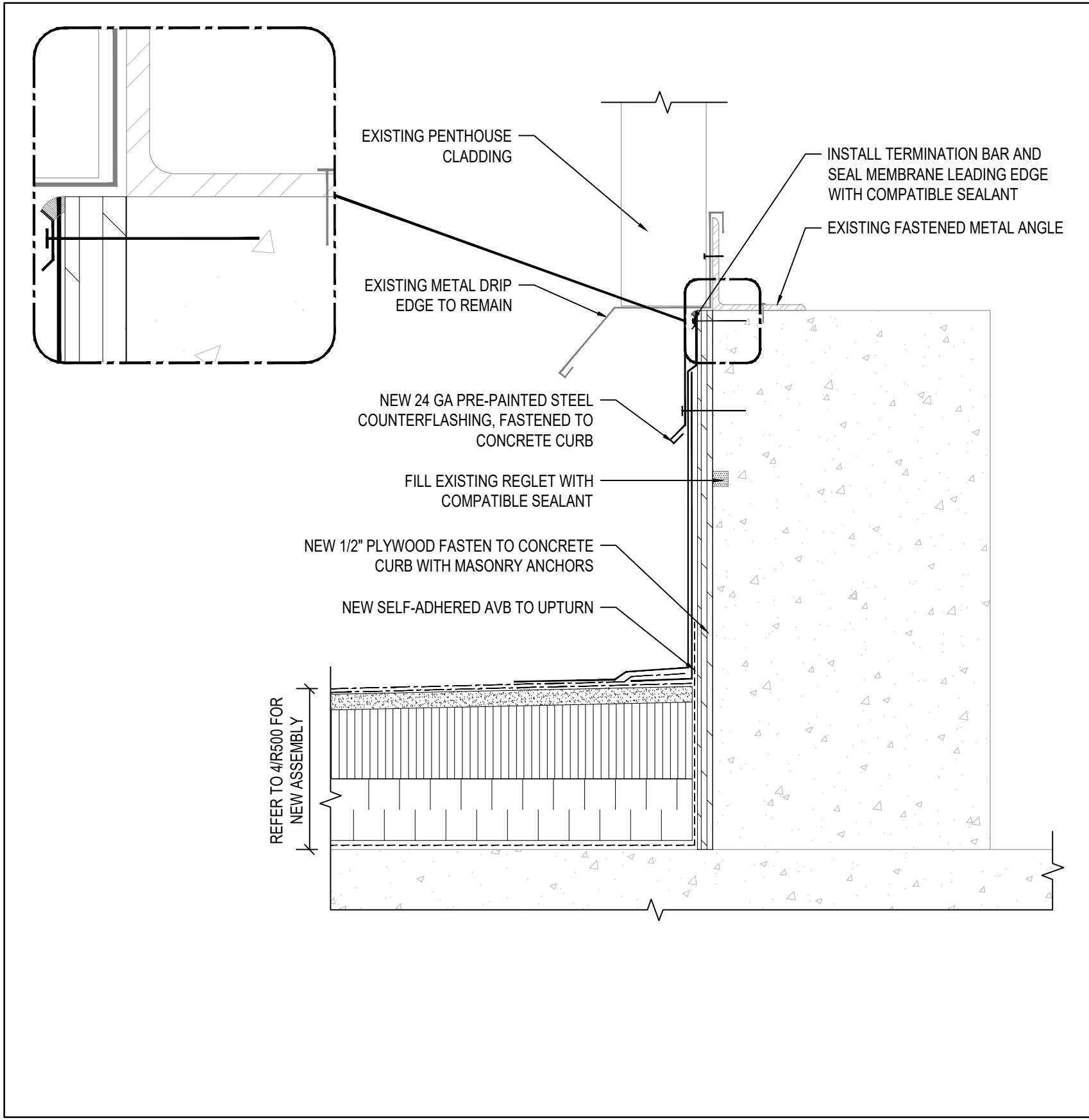
Drawing Title

**ROOF ASSEMBLIES**

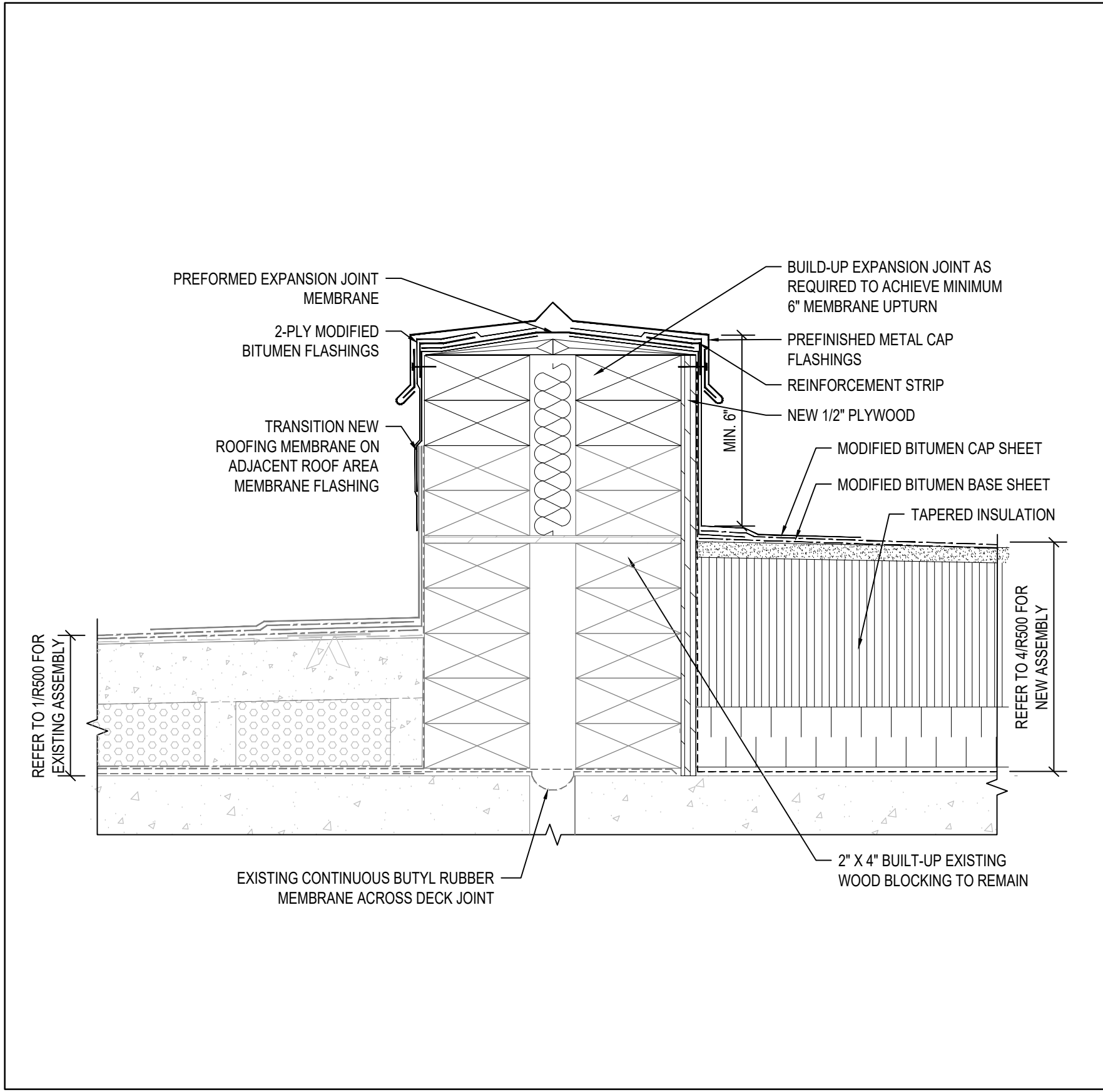
Drawing Number

**R500**

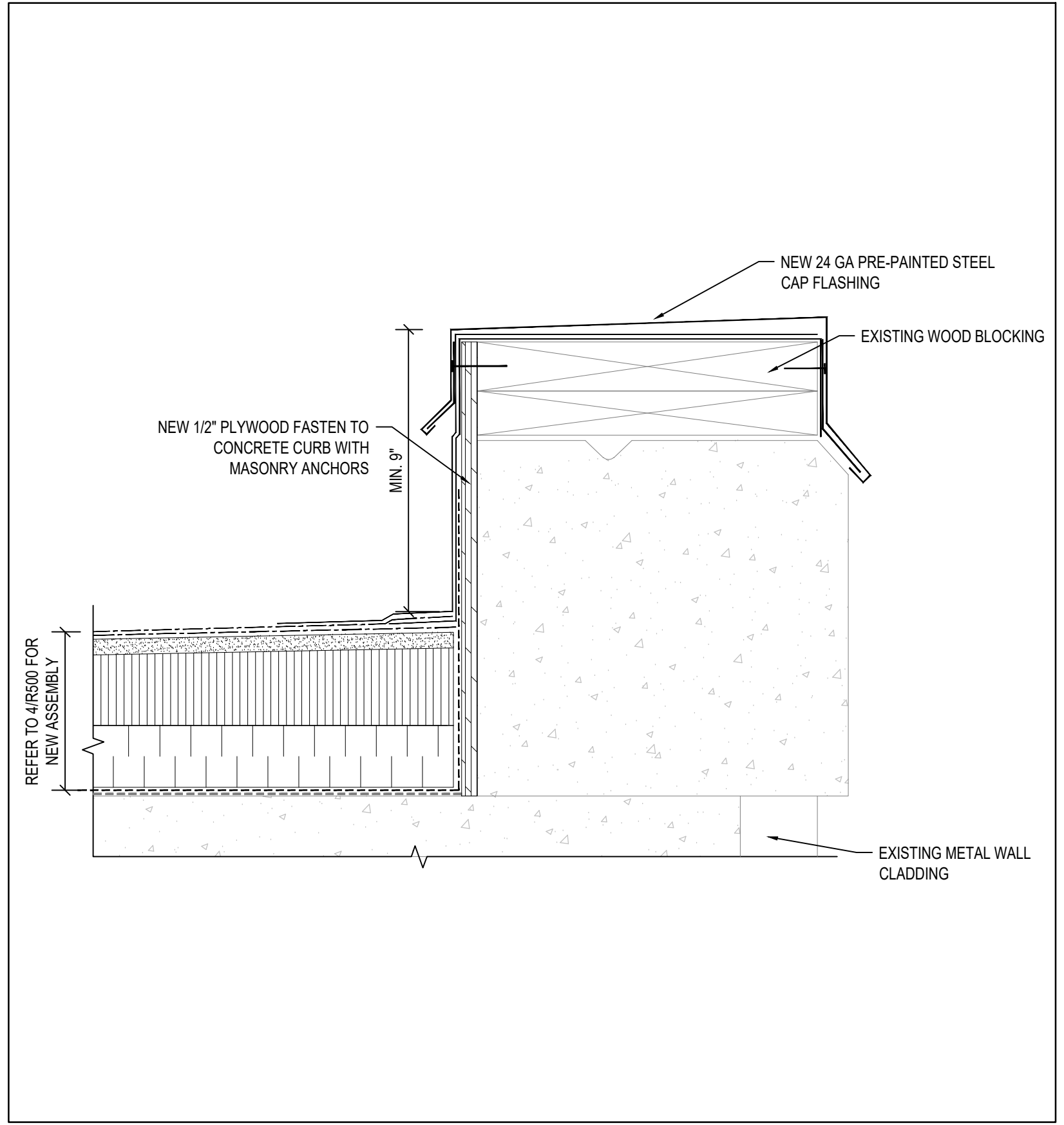
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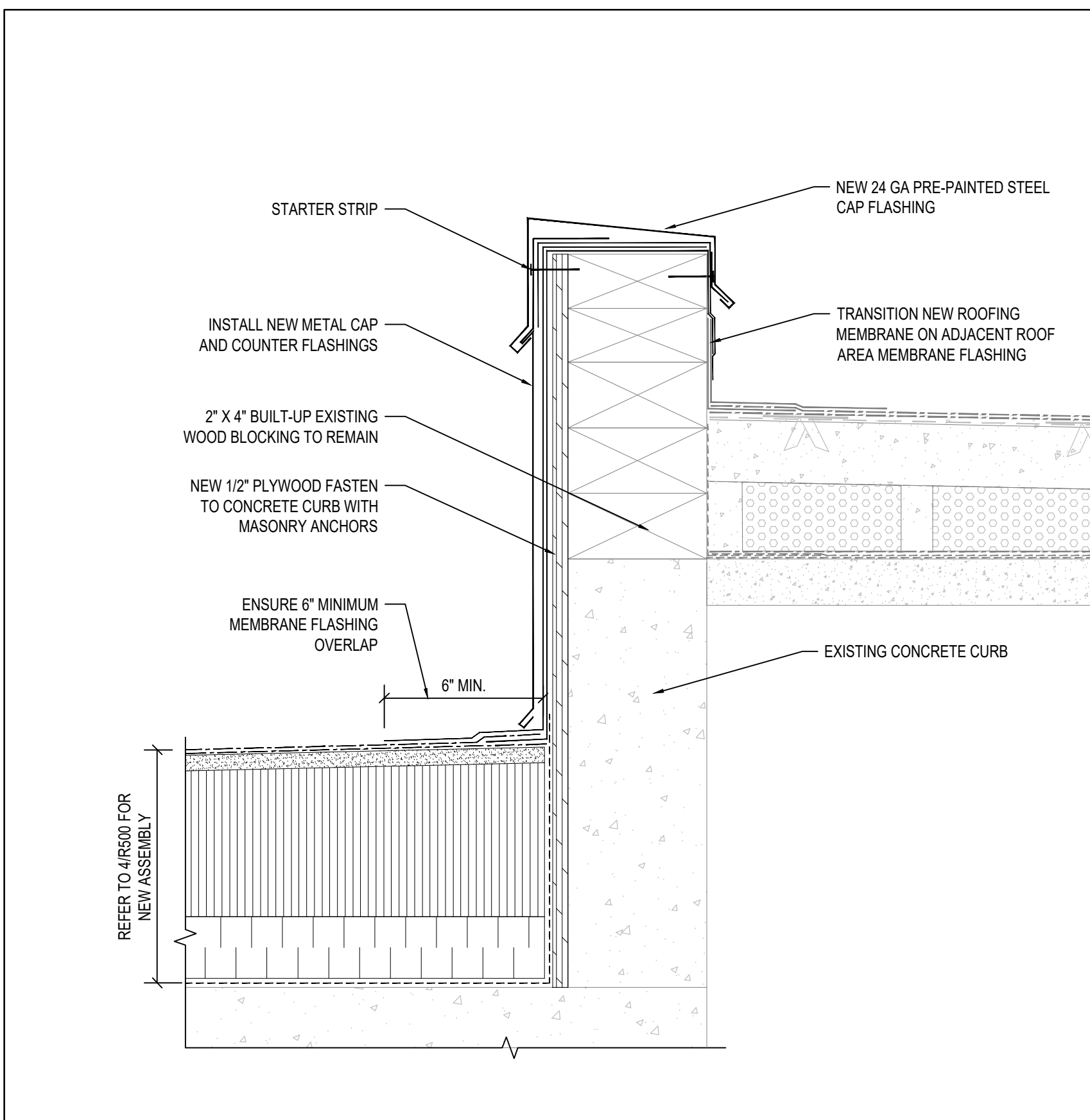
1 MECHANICAL PENTHOUSE UPTURN  
R501 SCALE: N.T.S.



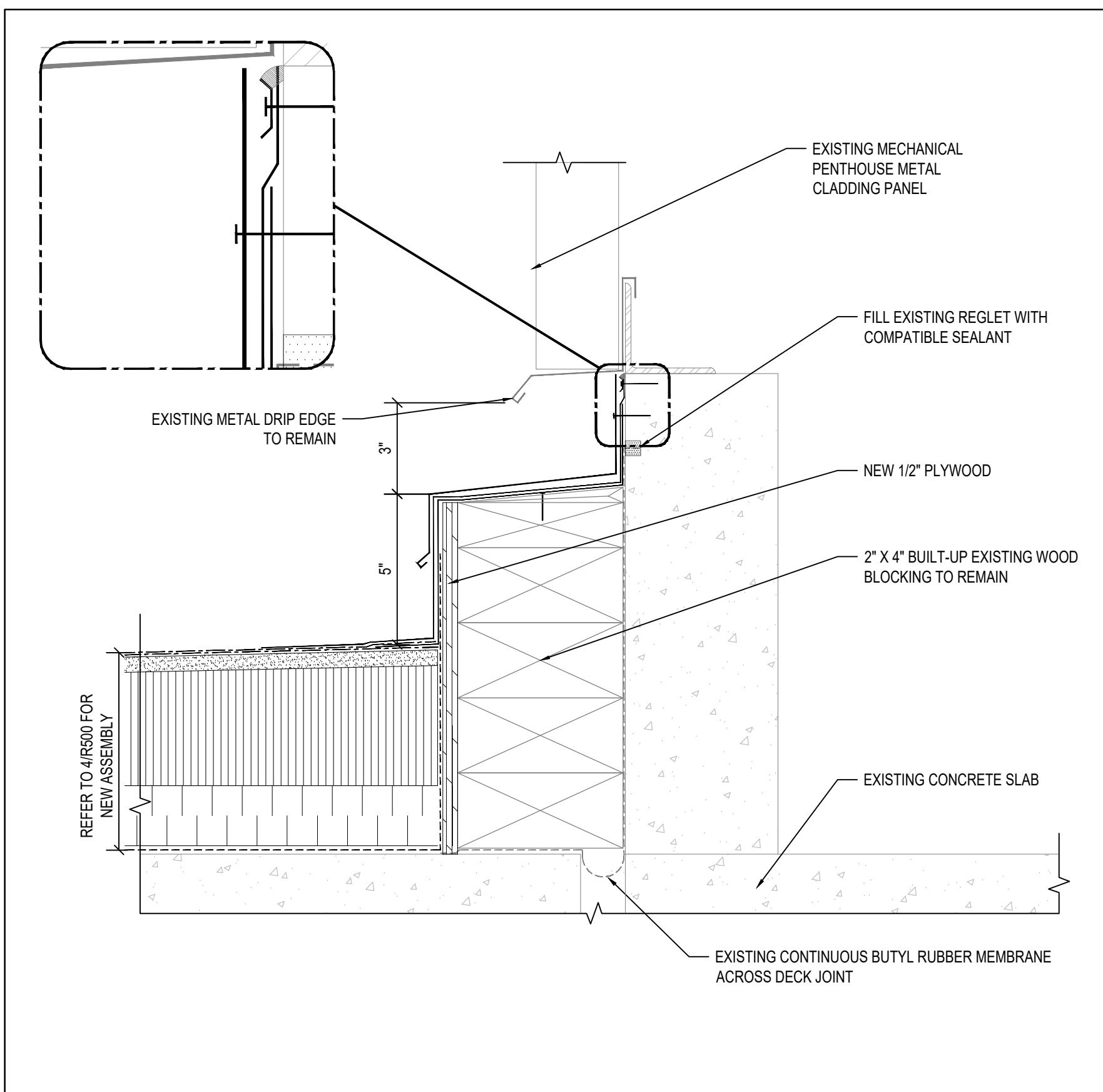
2 EXPANSION JOINT DETAIL  
R501 SCALE: N.T.S.



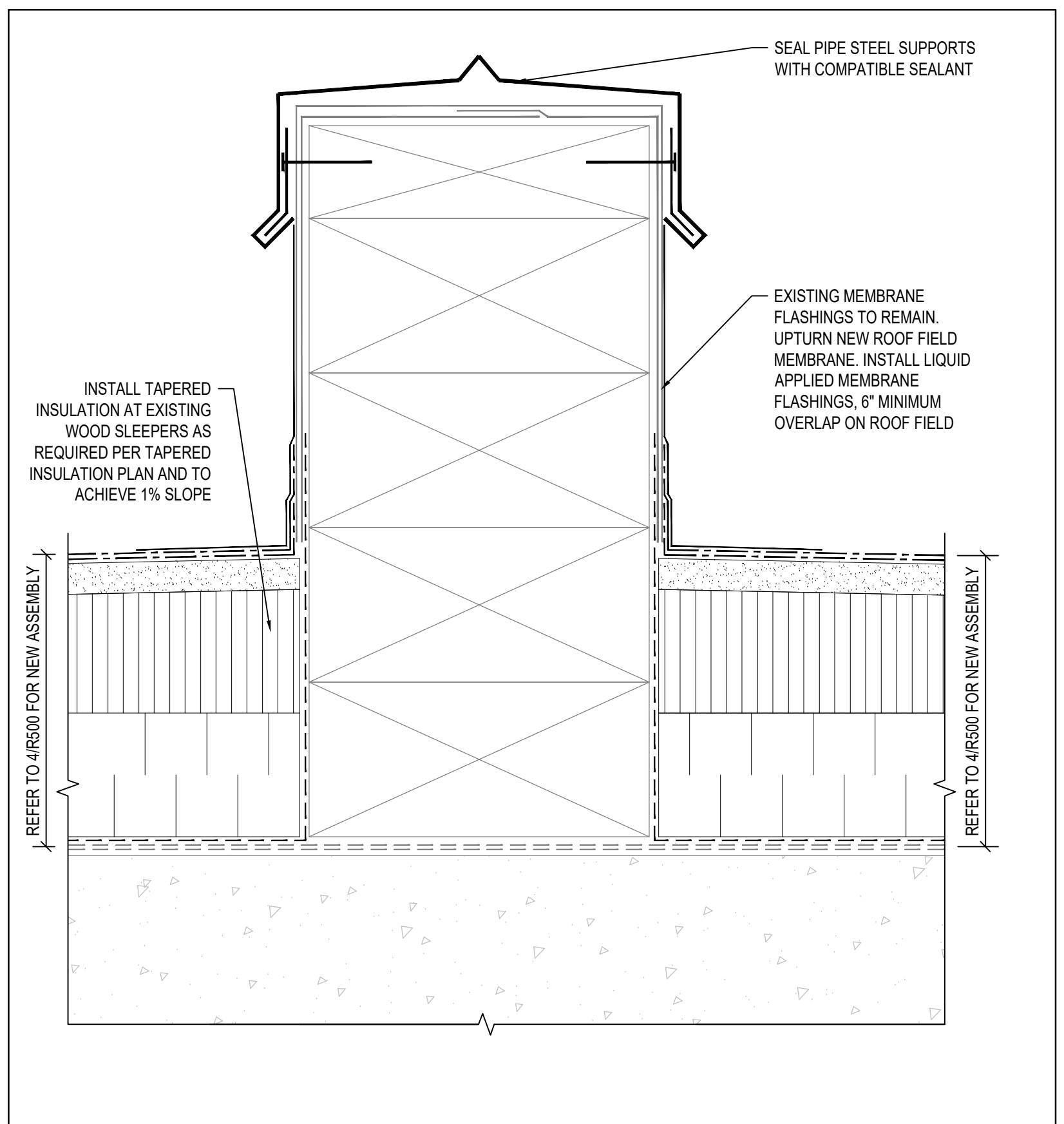
3 PARAPET DETAIL  
R501 SCALE: N.T.S.



4 ADJACENT ROOF UPTURN  
R501 SCALE: N.T.S.



5 MECHANICAL PENTHOUSE UPTURN W/ EXPANSION JOINT  
R501 SCALE: N.T.S.



6 CURB DETAIL  
R501 SCALE: N.T.S.

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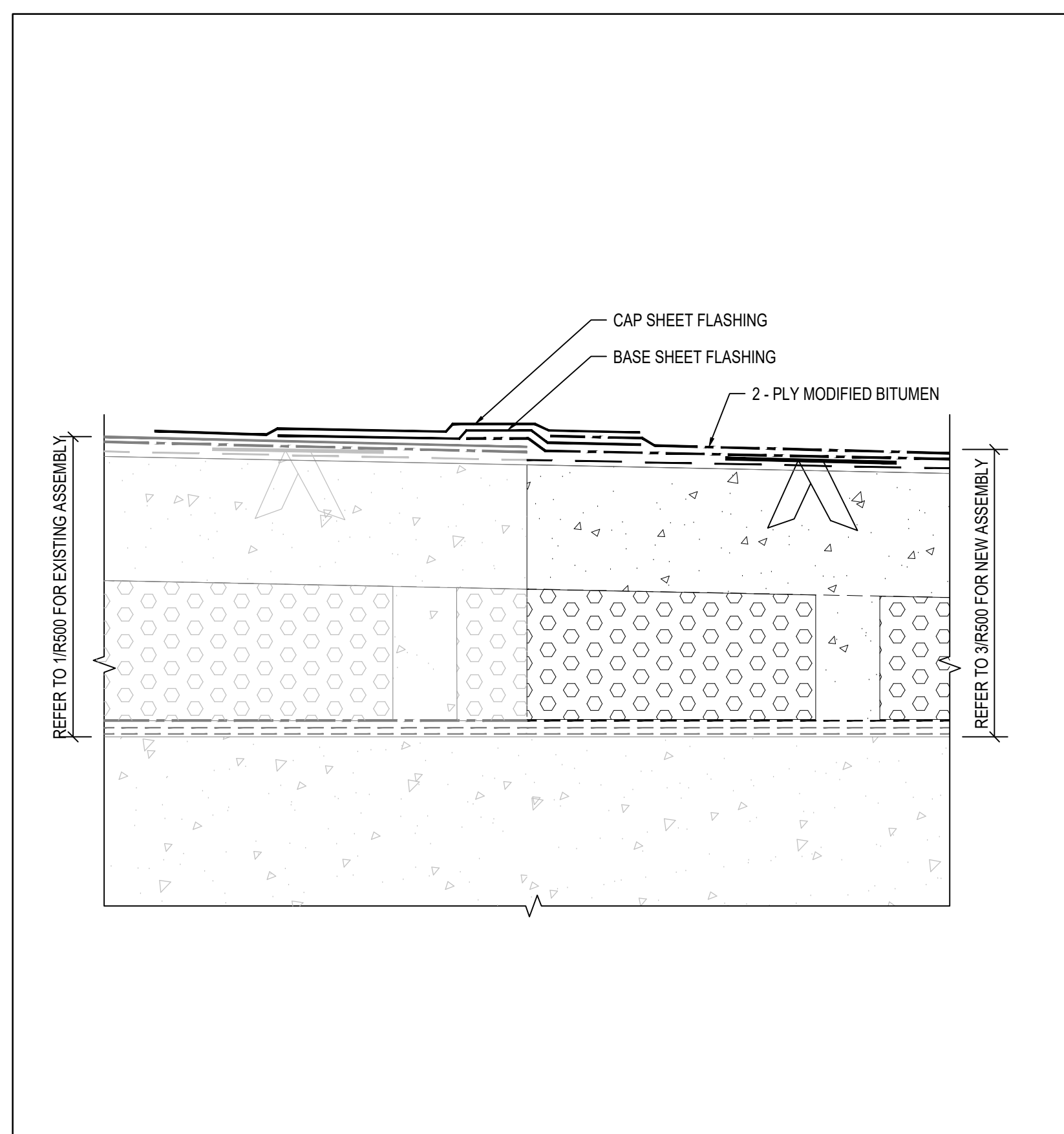
Drawing Title

**DETAILS (ROOF C, REPAIR AREA 1)**

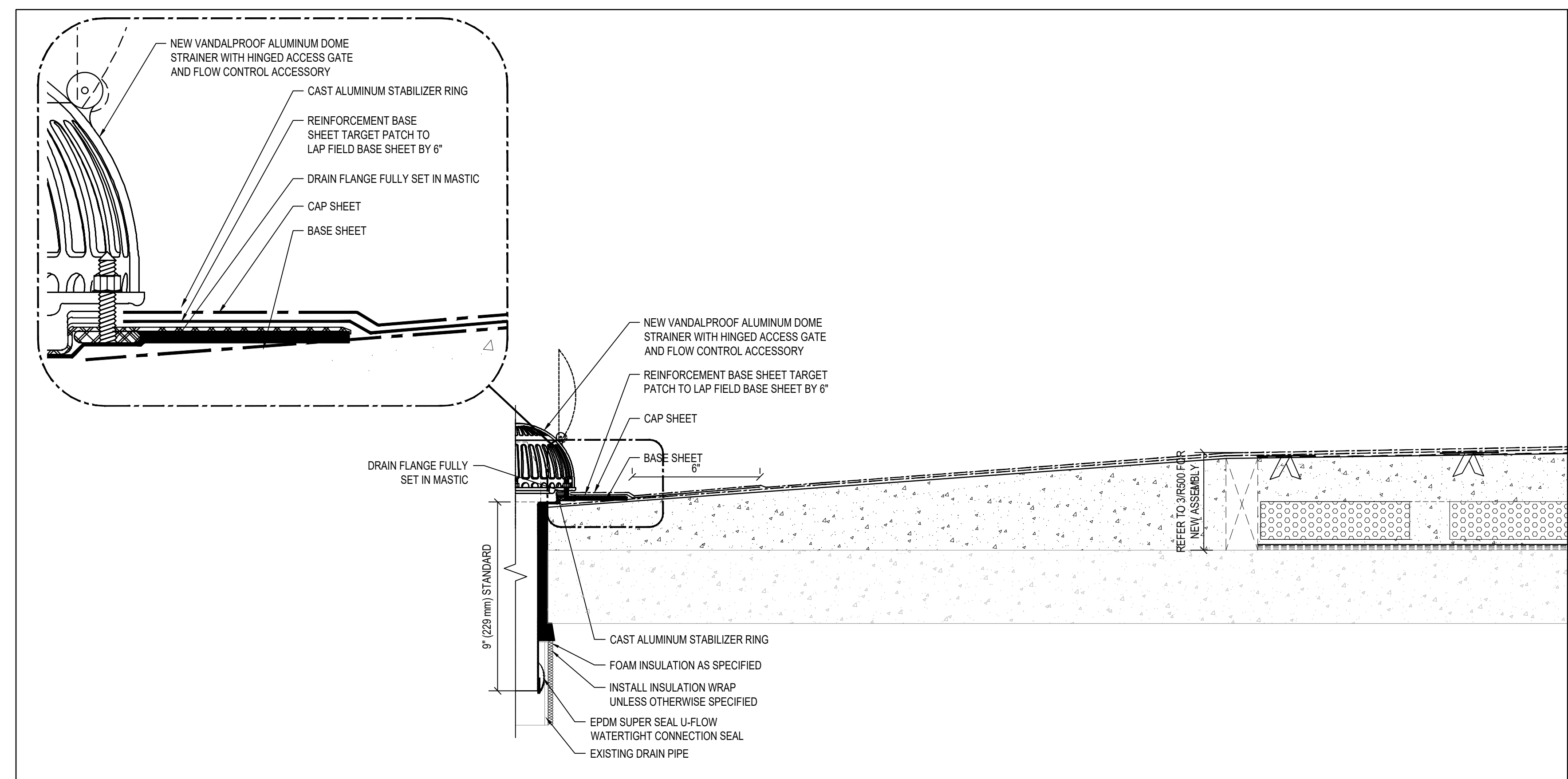
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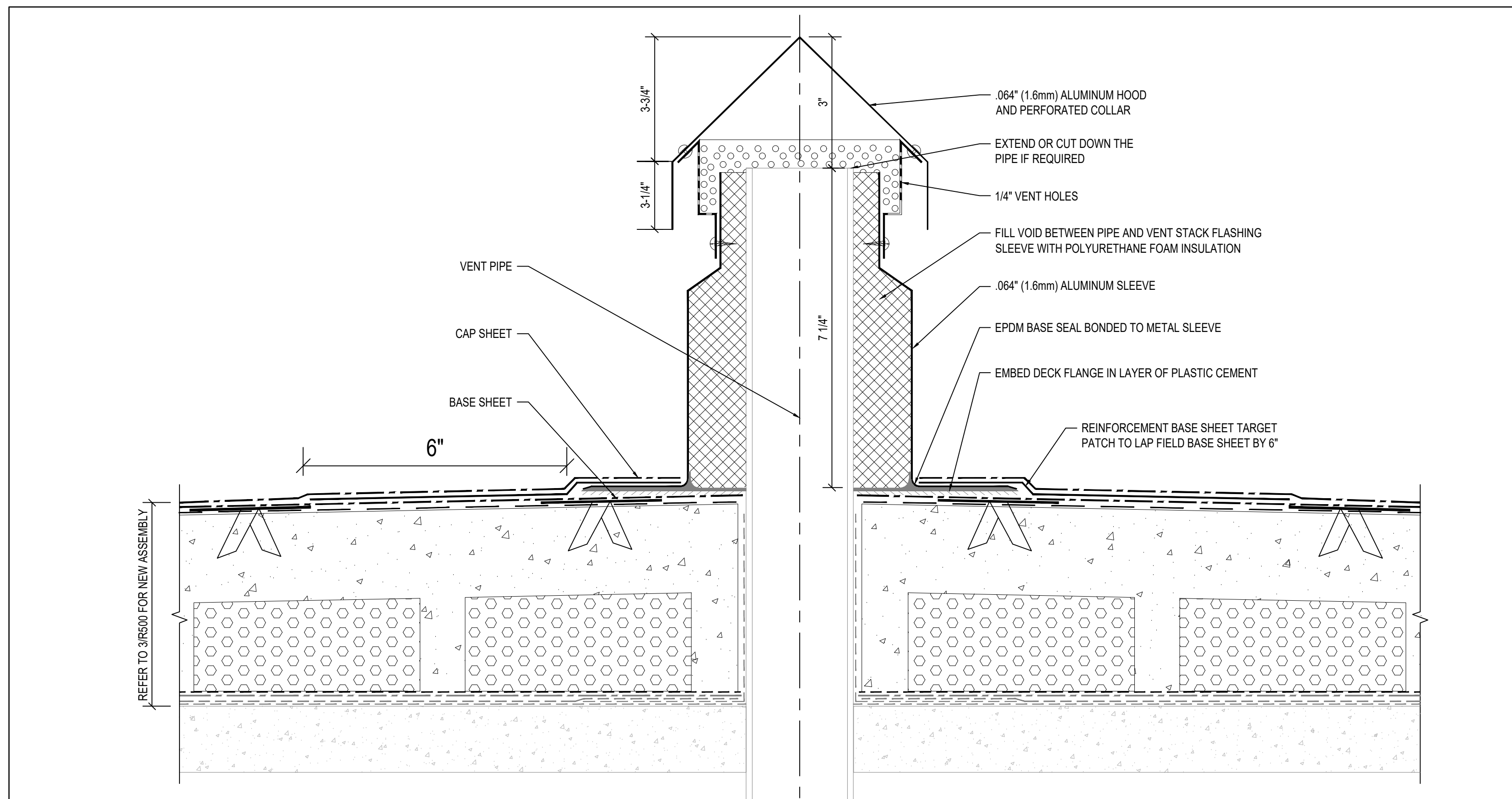
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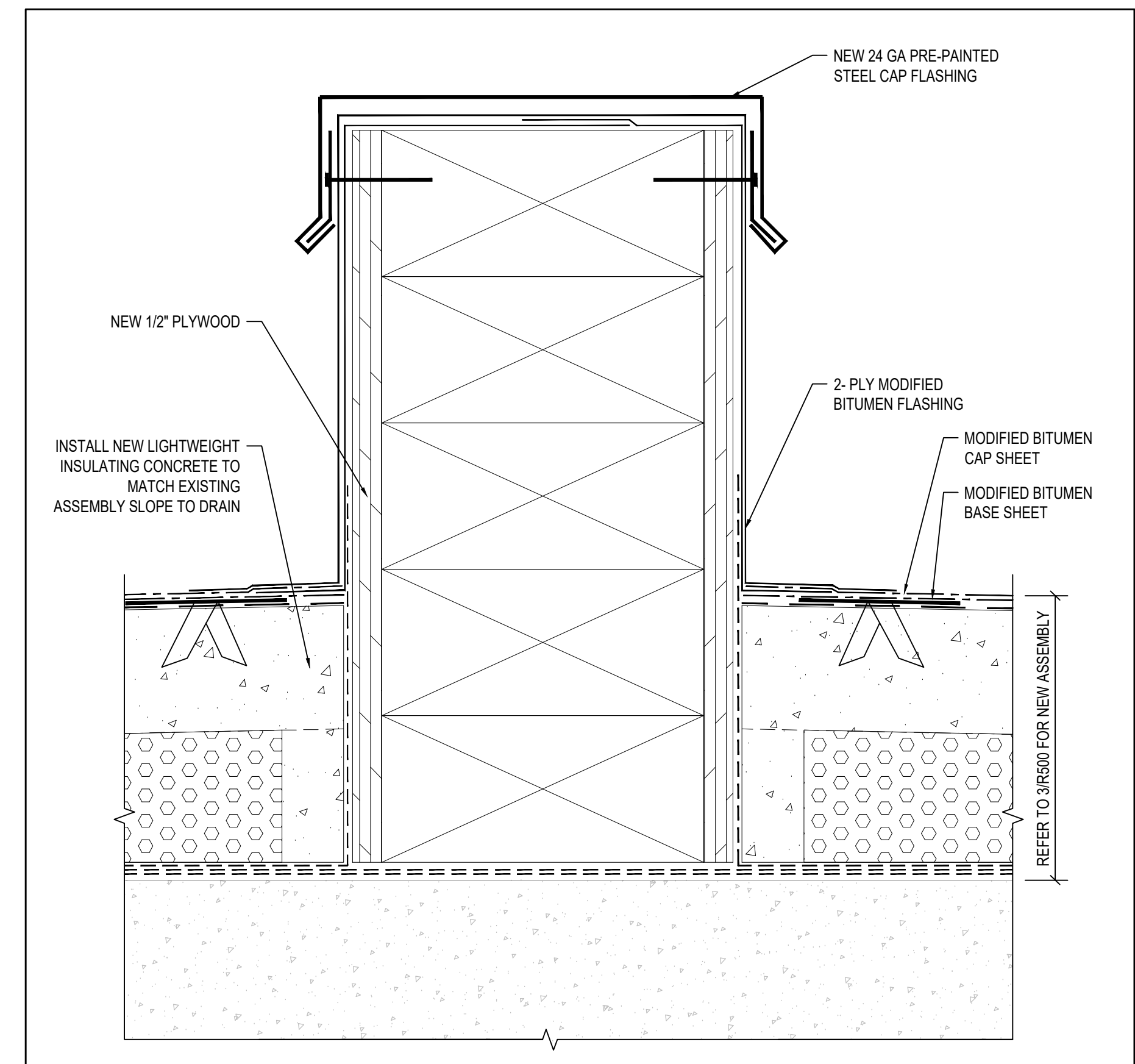
1 ROOF TIE-IN DETAIL  
SCALE: N.T.S.



2 ROOF DRAIN DETAIL  
SCALE: N.T.S.



3 PENETRATION DETAIL  
SCALE: N.T.S.



4 CURB DETAIL  
SCALE: N.T.S.

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Drawing Title

DETAILS (ROOF C, REPAIR AREA 2)

Drawing Number

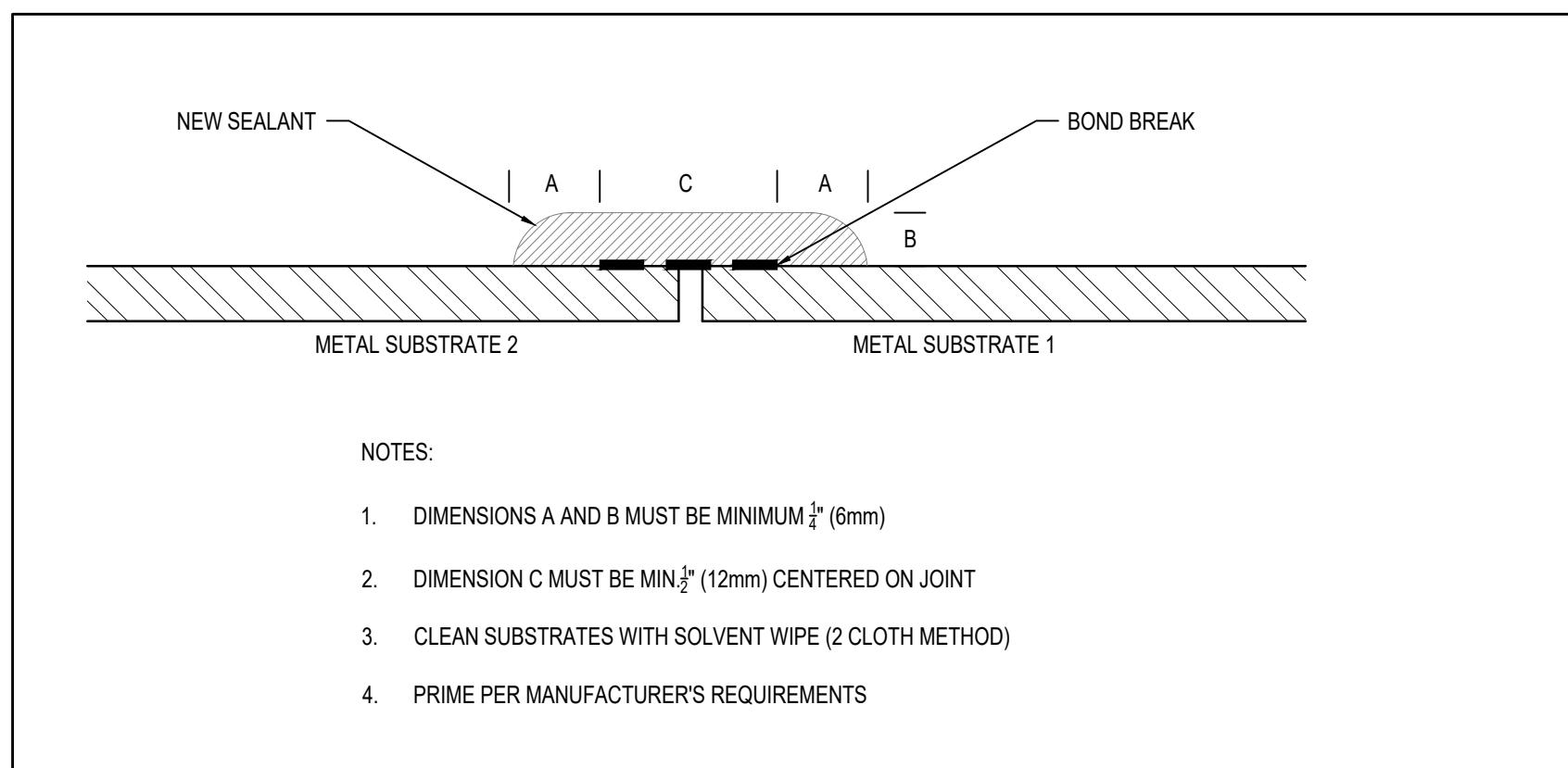
**R502**



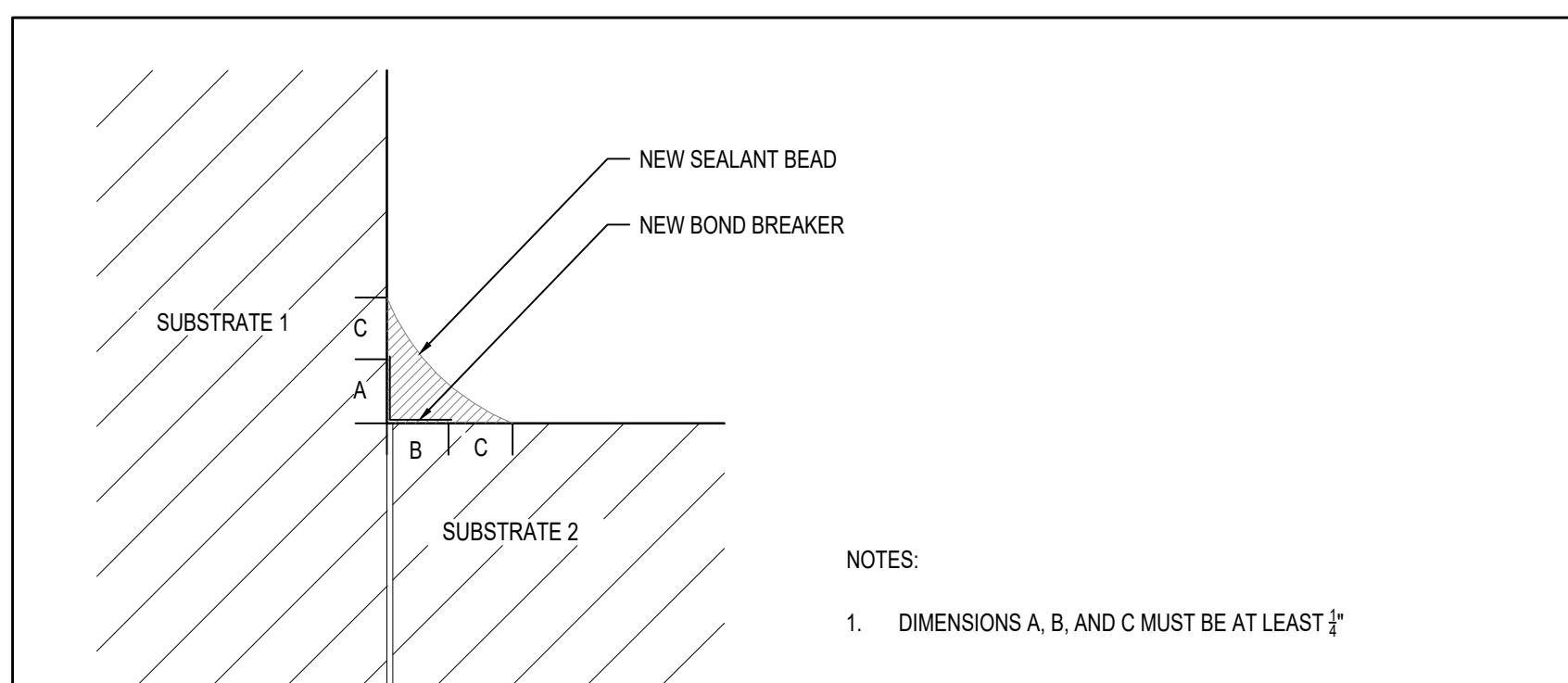
1 PHOTOGRAPH INDICATING BOILER VENTS TO BE REPAIRED (BASE BID)  
 R503 SCALE: N.T.S.



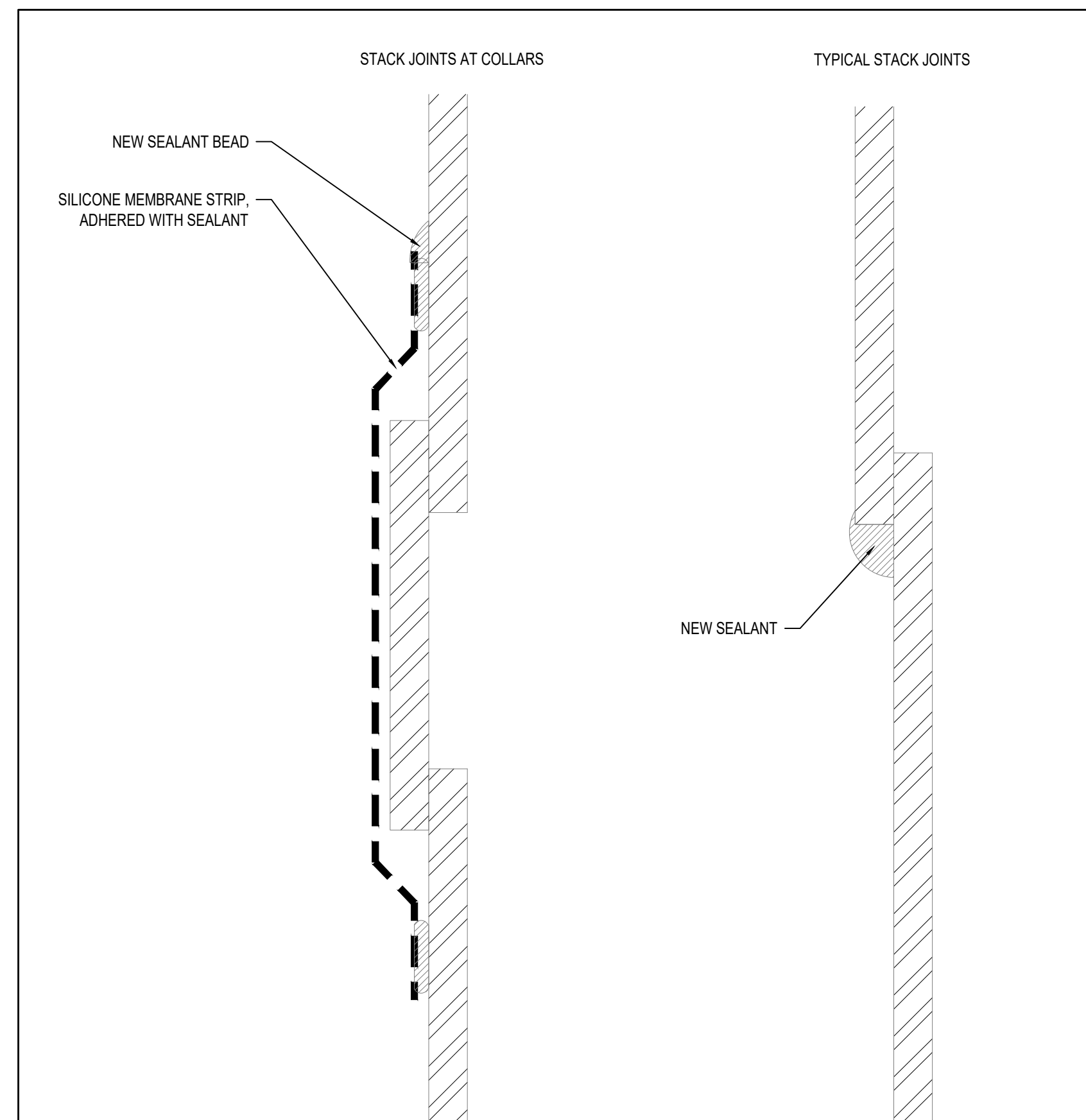
2 MEMBRANE FLASHING REPLACEMENT DETAIL  
 R503 SCALE: N.T.S.



3 TYPICAL METAL TO METAL SEALANT DETAIL  
 R503 SCALE: N.T.S.



4 TYPICAL SEALANT FILLET BEAD  
 R503 SCALE: N.T.S.



5 FACE SEAL METAL TO METAL JOINTS  
 R503 SCALE: N.T.S.

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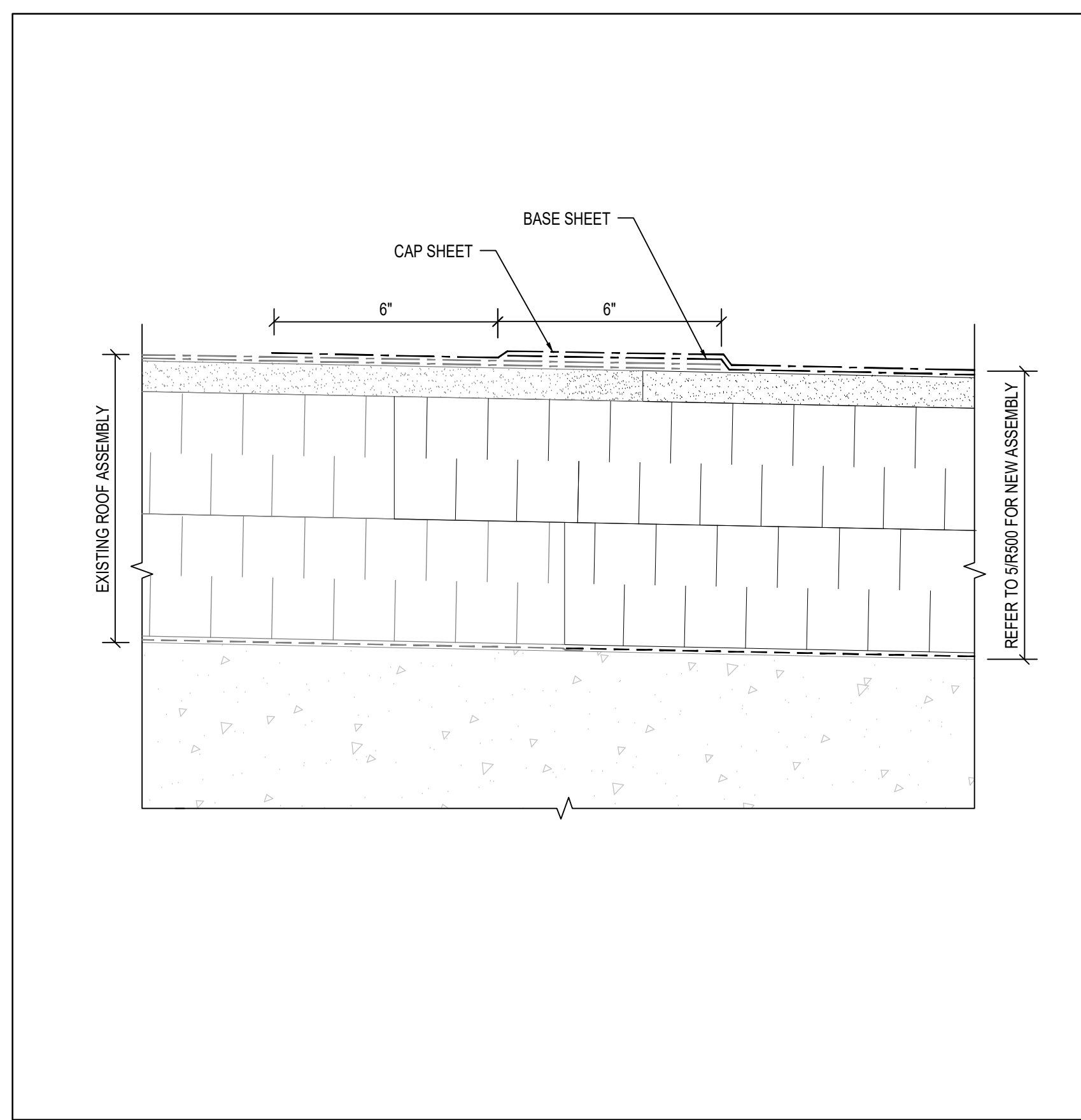
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**DETAILS (ROOF C, REPAIR AREA 3)**

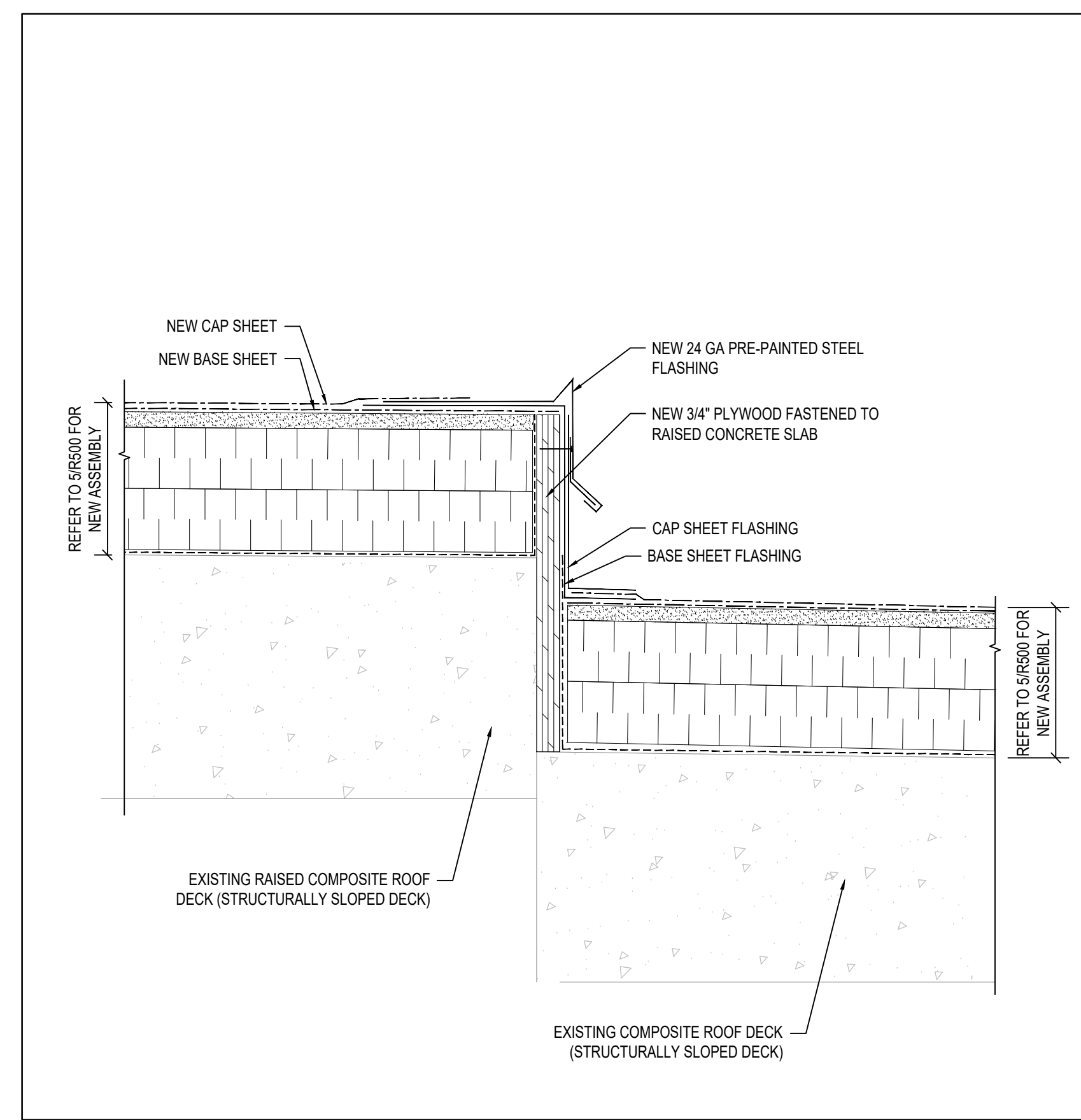
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**R503**

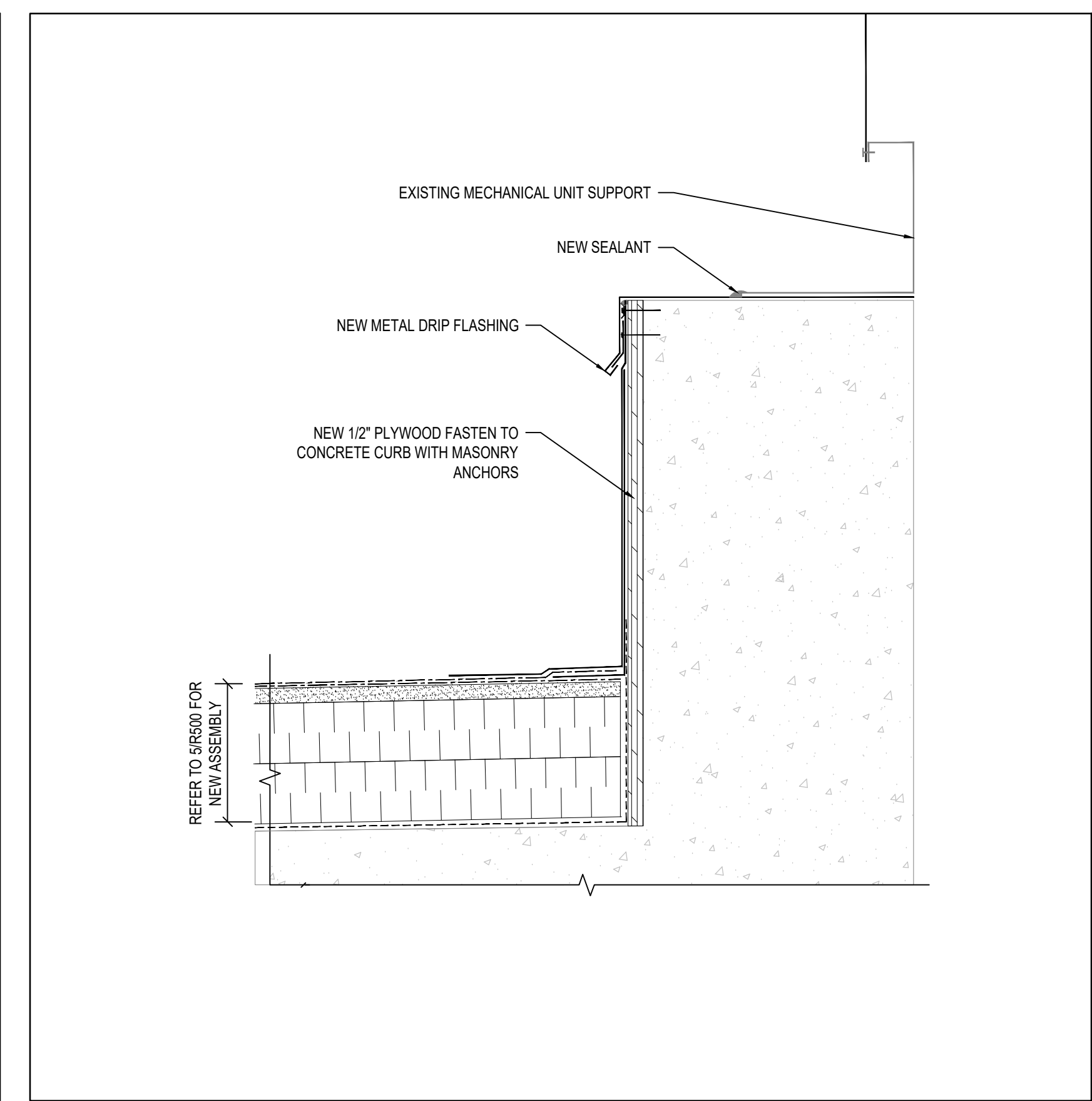
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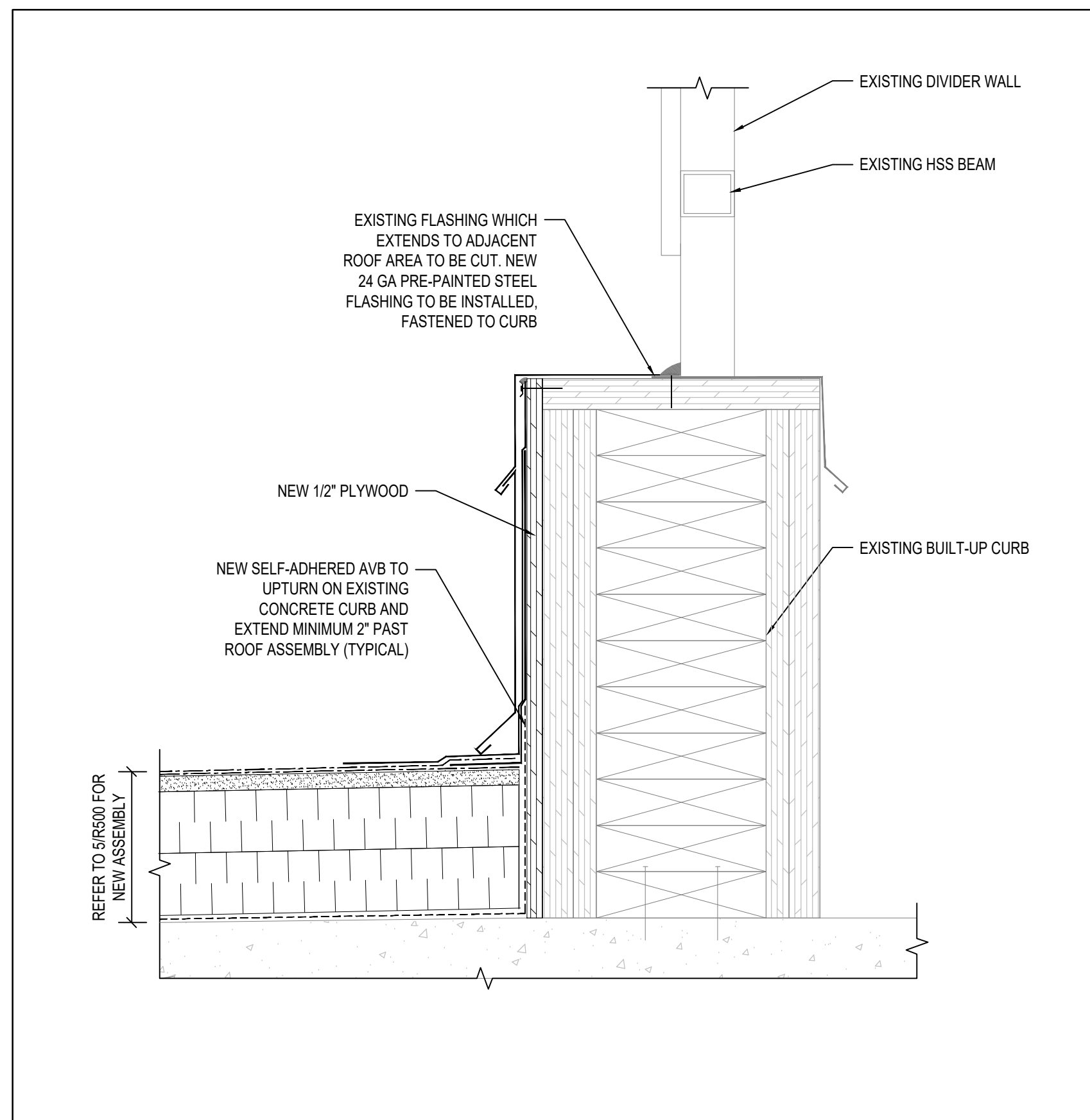
1 TIE-IN DETAIL BETWEEN NEW AND EXISTING ROOF ASSEMBLIES  
R504 SCALE: N.T.S.



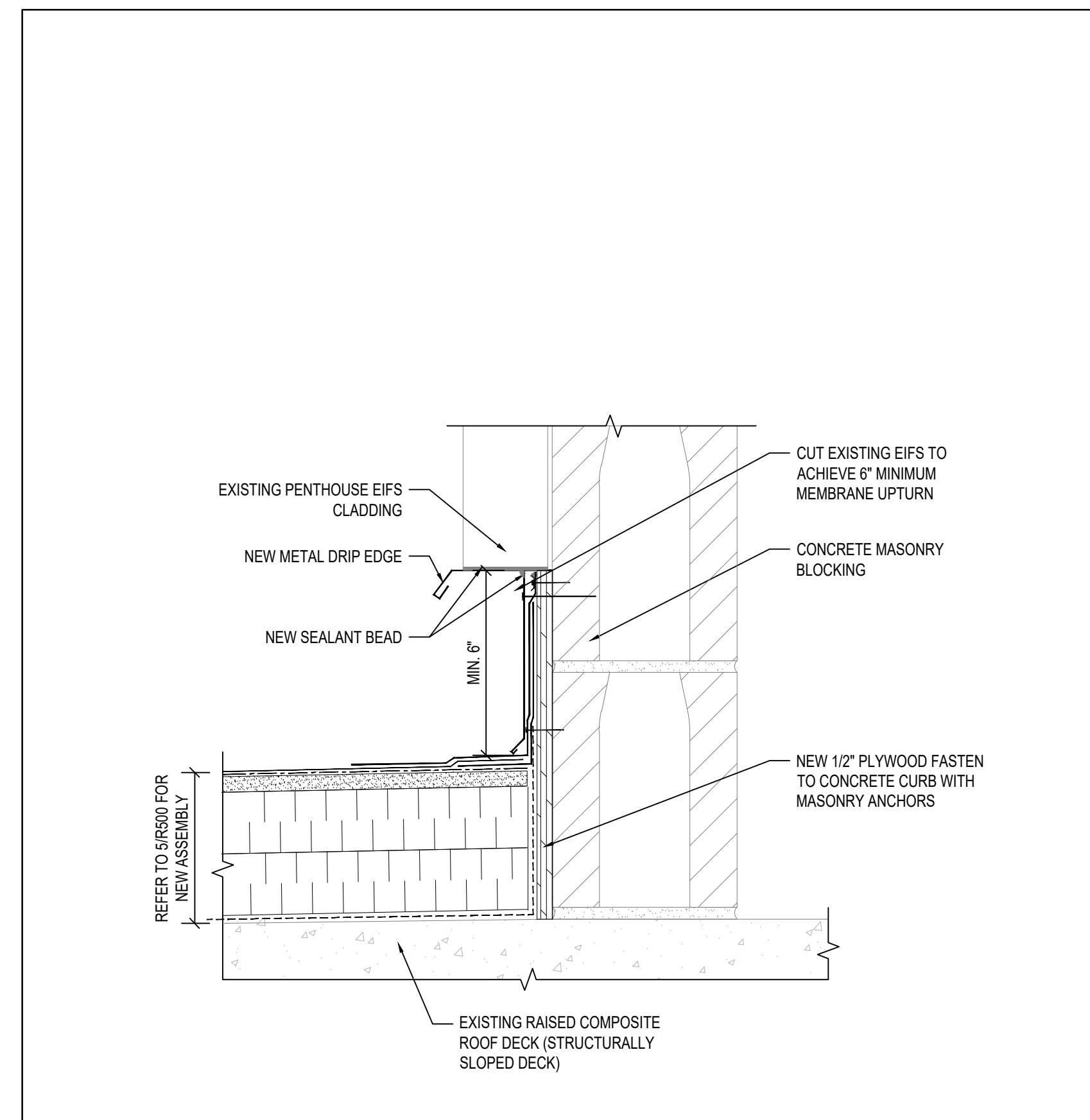
2 UPTURN BETWEEN LOWER AND RAISED SLABS  
R504 SCALE: N.T.S.



3 MECHANICAL UNIT UPTURN  
R504 SCALE: N.T.S.



4 UPTURN AT DIVIDER WALL (ON LOWER SLAB)  
R504 SCALE: N.T.S.



5 MECHANICAL PENTHOUSE UPTURN (ON RAISED SLAB)  
R504 SCALE: N.T.S.

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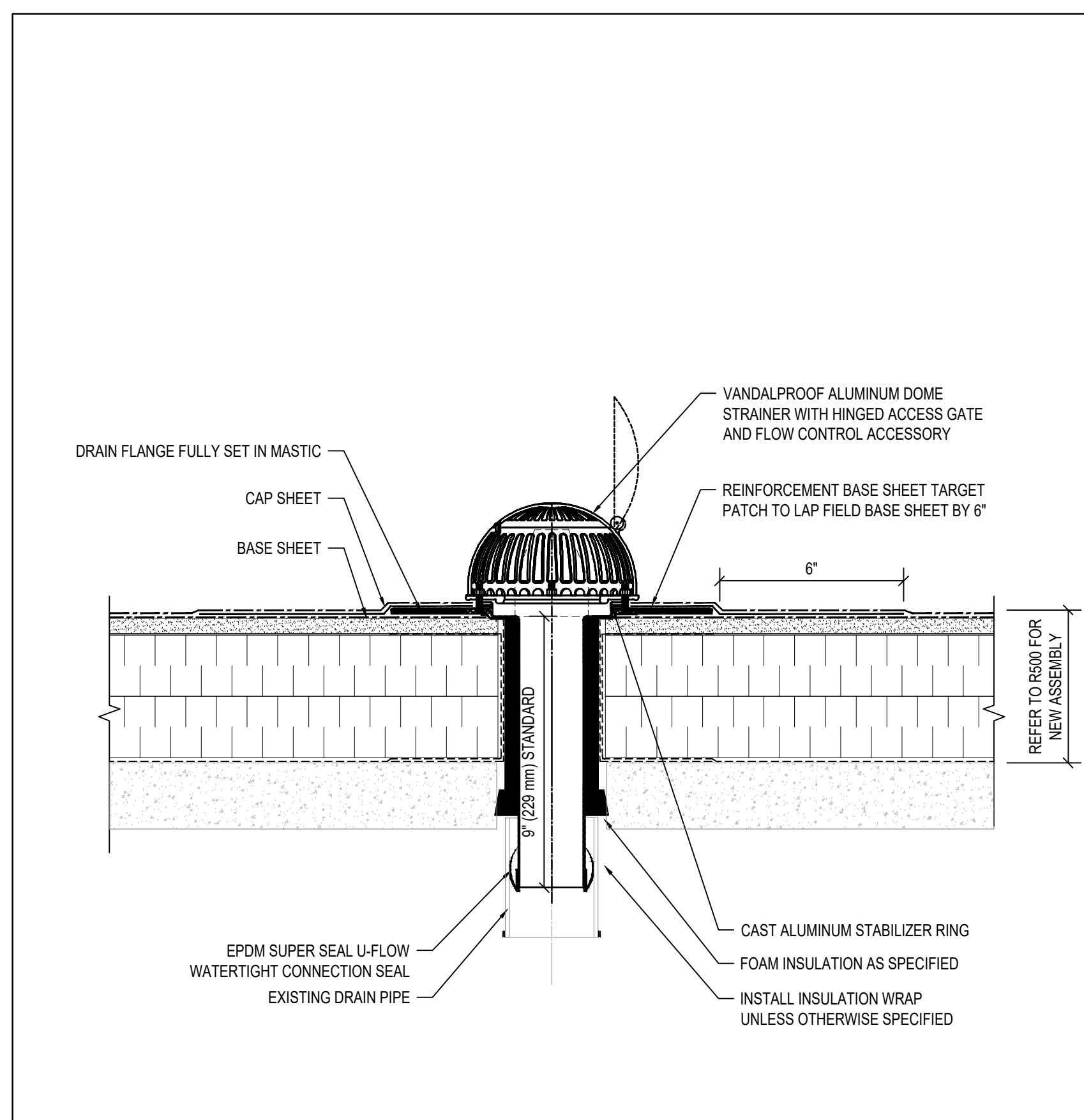
Drawing Title

**DETAILS (ROOF E, REPAIR AREA 4)**

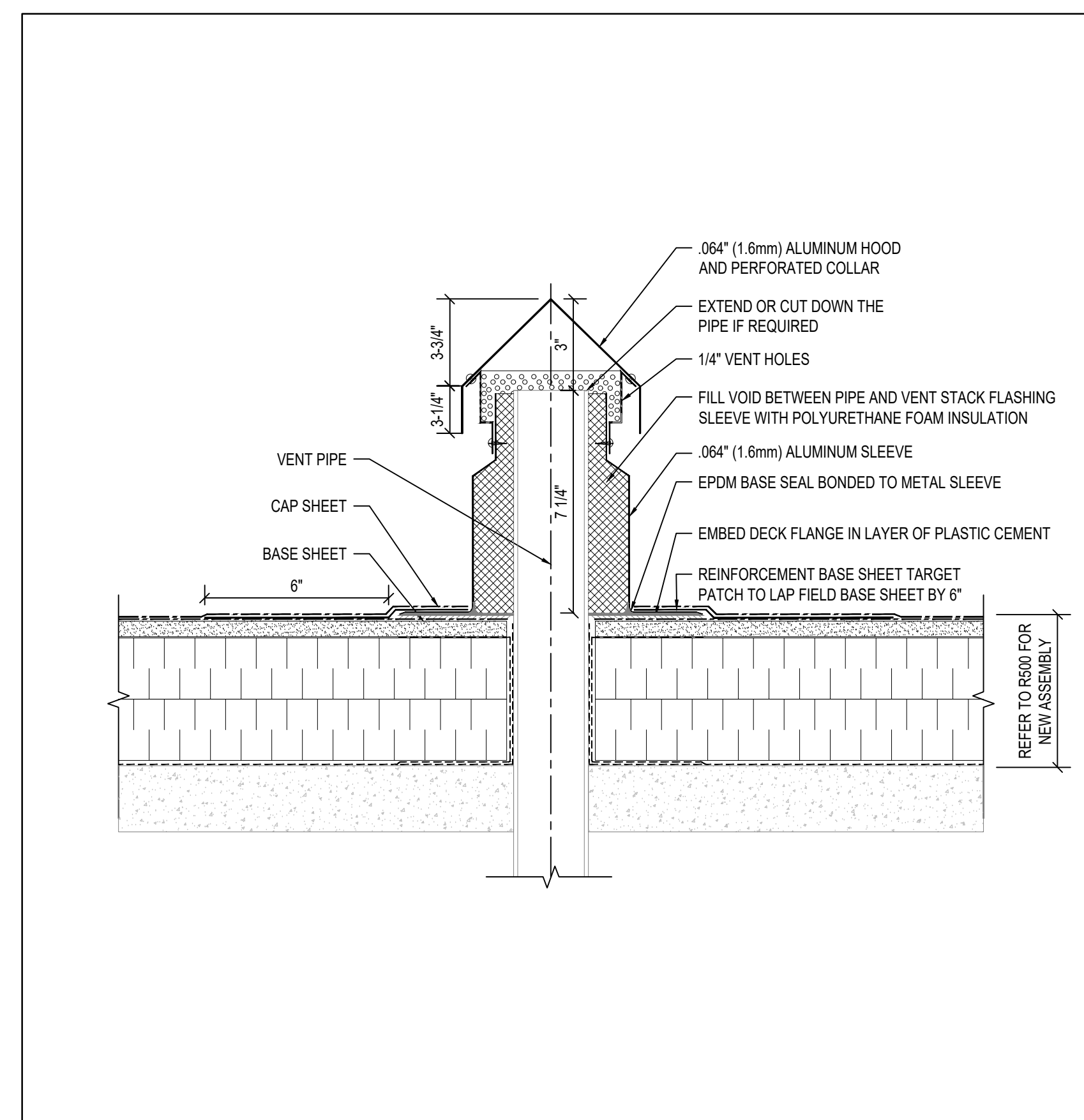
Drawing Number

**R504**

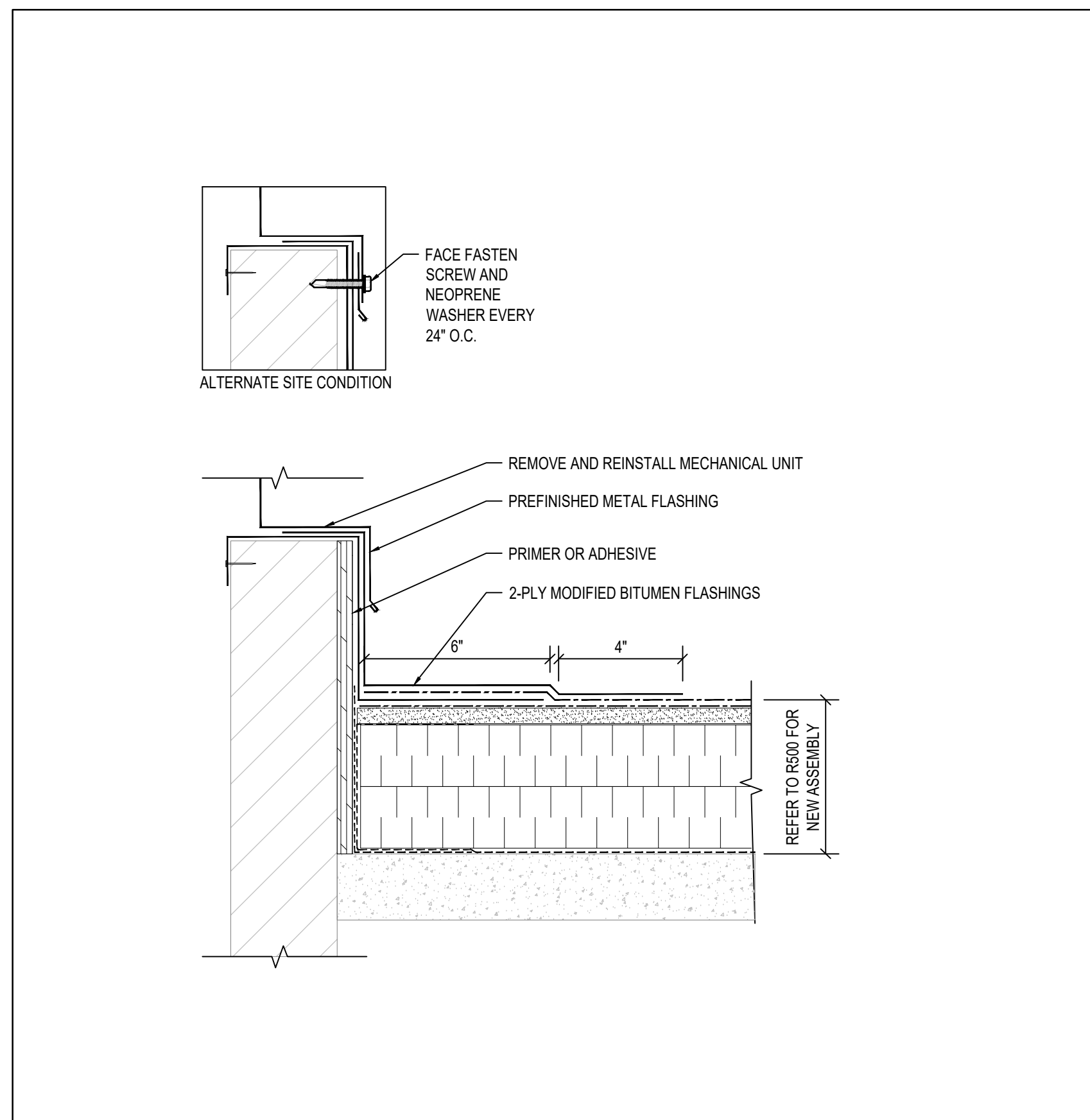
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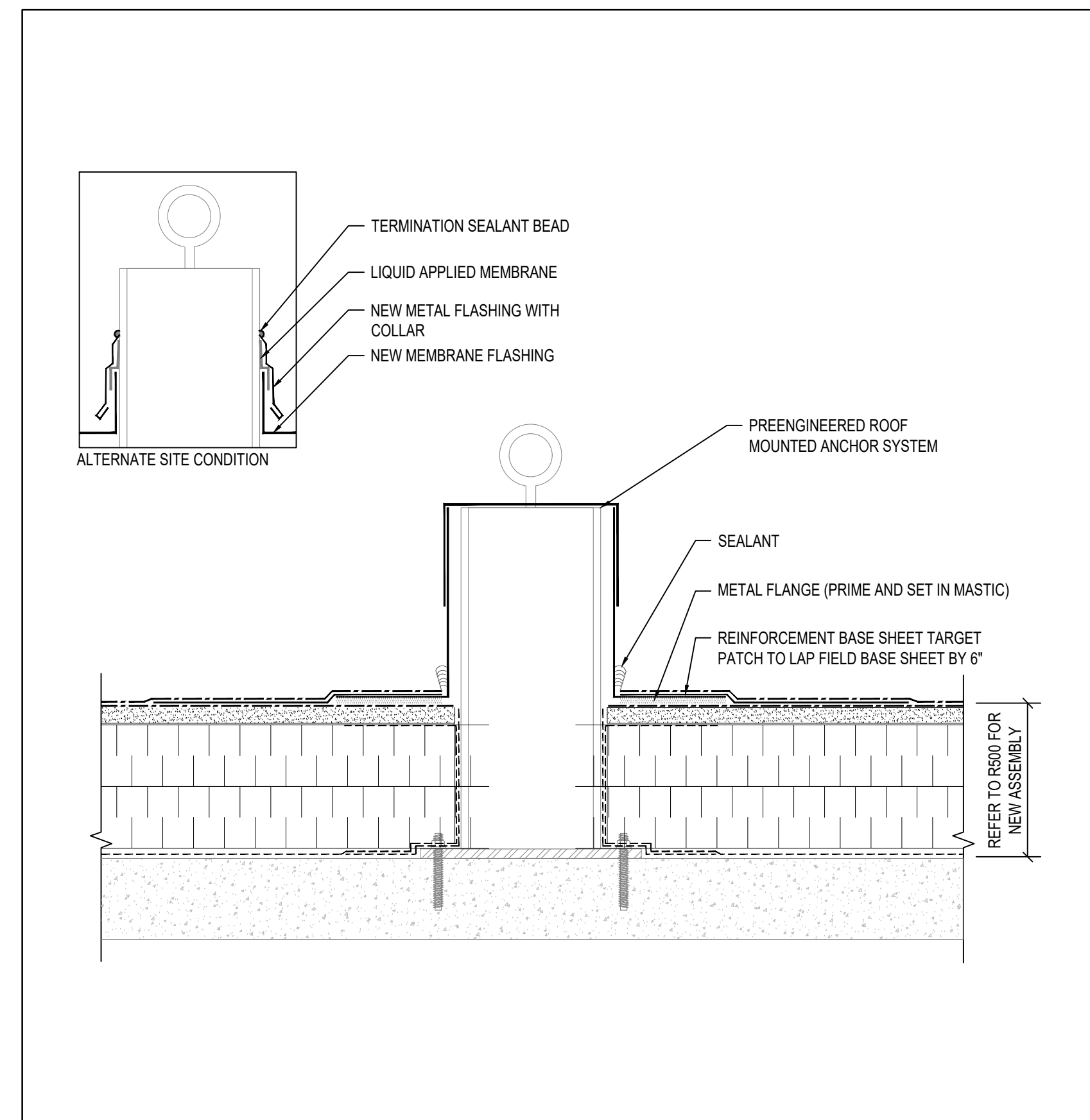
1 TYPICAL ROOF DRAIN DETAIL  
SCALE: N.T.S.



2 TYPICAL PENETRATION DETAIL  
SCALE: N.T.S.



3 TYPICAL MECHANICAL UNIT UPTURN  
SCALE: N.T.S.



4 TYPICAL ROOF ANCHOR DETAIL  
SCALE: N.T.S.

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160 KENDAL AVE., TORONTO, ON

Designed By: D.W. Scale: AS NOTED

Drawn By: S.R. Date: 2024-10-17

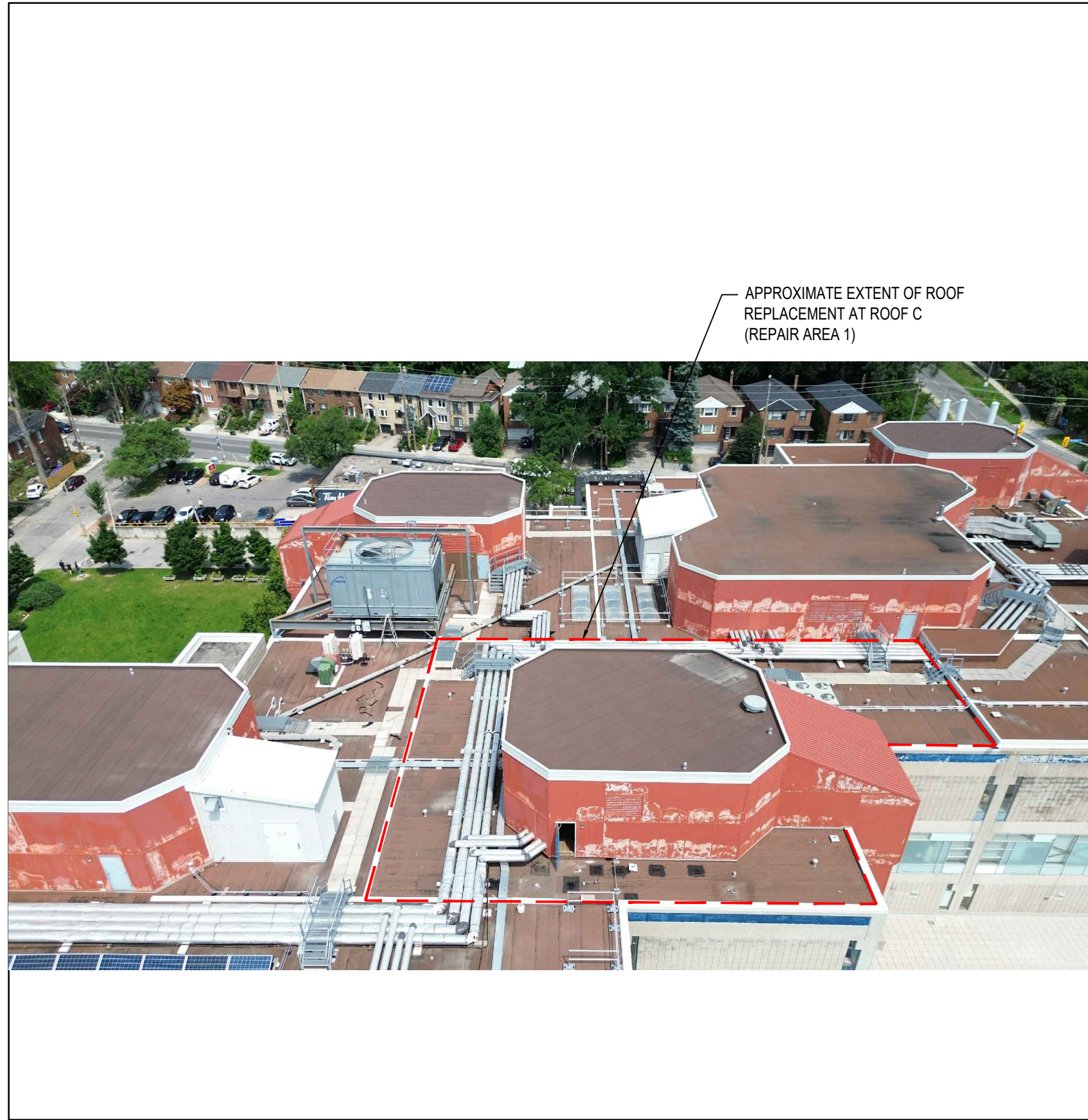
Drawing Title

TYPICAL ROOFING DETAILS

Drawing Number

**R505**

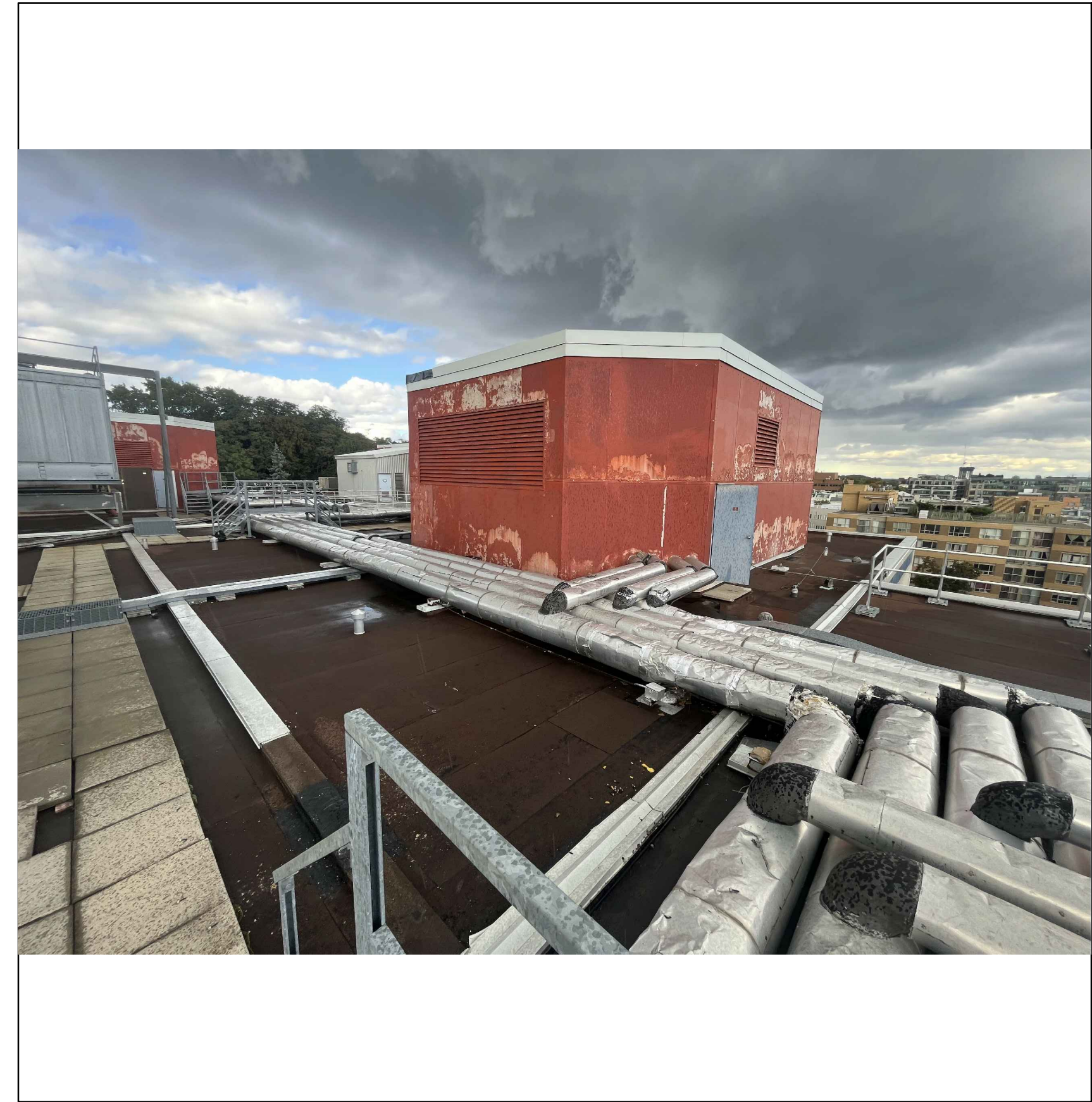
No.	Issue Description	YYYY-MM-DD
0	ISSUED FOR CLIENT REVIEW	2024-11-14
1	ISSUED FOR TENDER	2024-12-13



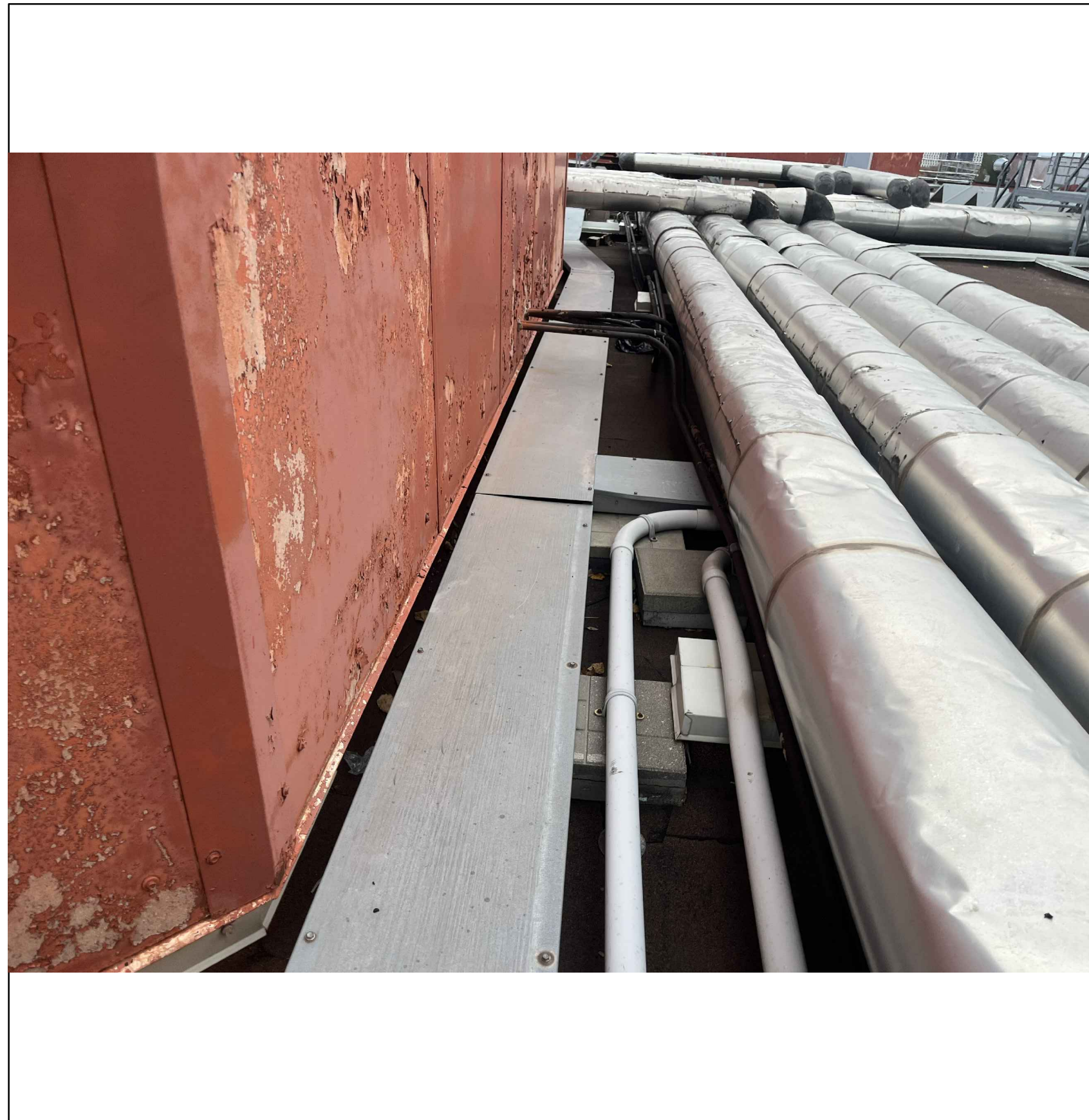
1 VIEW OF ROOF C (REPAIR AREA 1)  
R600



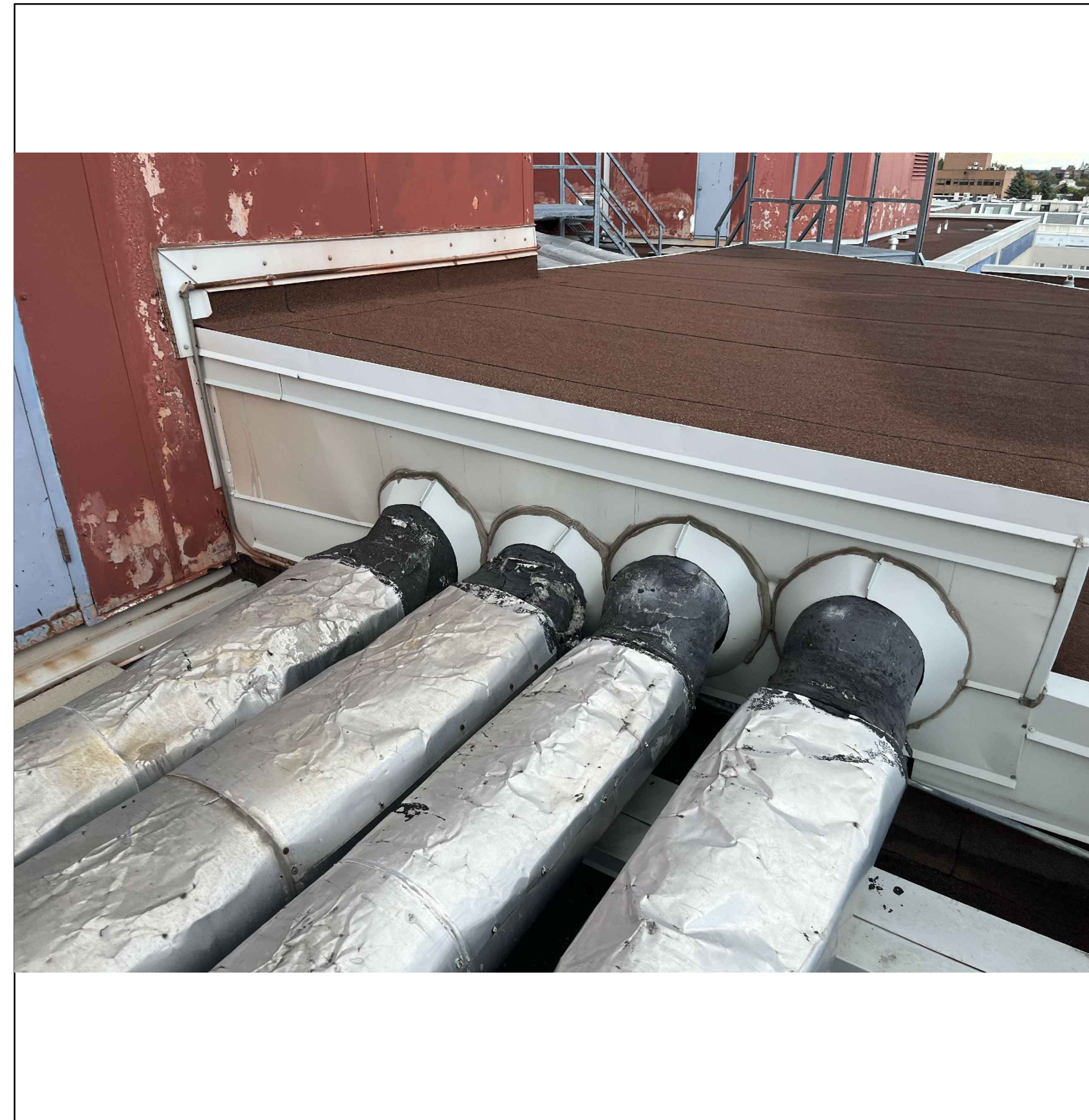
2 VIEW OF ROOF C (REPAIR AREA 1)  
R600



3 VIEW OF ROOF C (REPAIR AREA 1)  
R600



4 VIEW OF DUCTWORK AT ROOF C (REPAIR AREA 1)  
R600



5 NORTH-EAST CORNER OF REPAIR AREA 1 (MEMBRANE UPTURN AT CONCRETE CURB)  
R600

Project Title:  
**GEORGE BROWN COLLEGE CASA LOMA CAMPUS  
ROOF REPAIR AND REPLACEMENT**

160 KENDAL AVE., TORONTO, ON

Designed By: D.W. Scale: AS NOTED

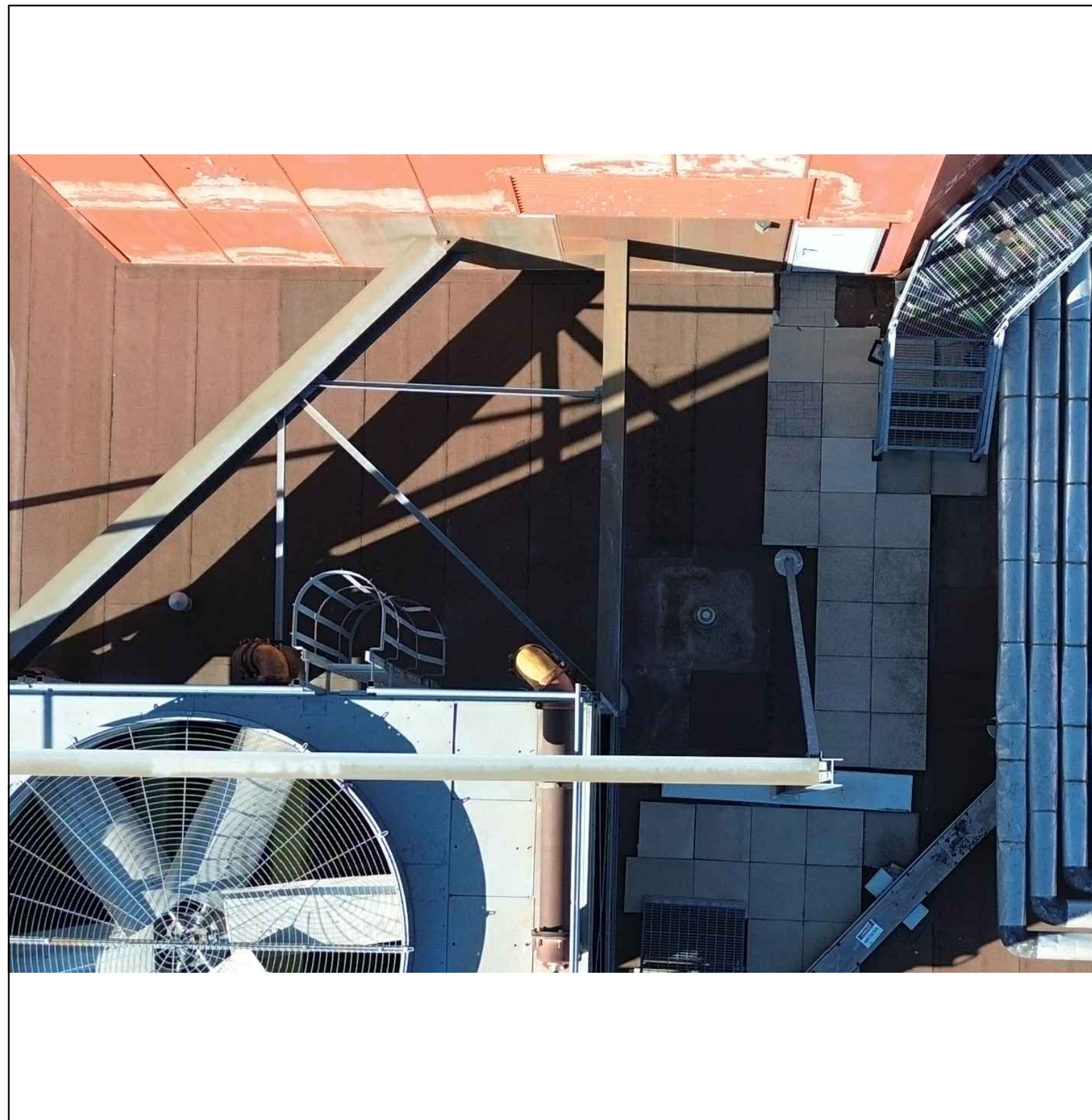
Drawn By: S.R. Date: 2024-10-17

Drawing Title

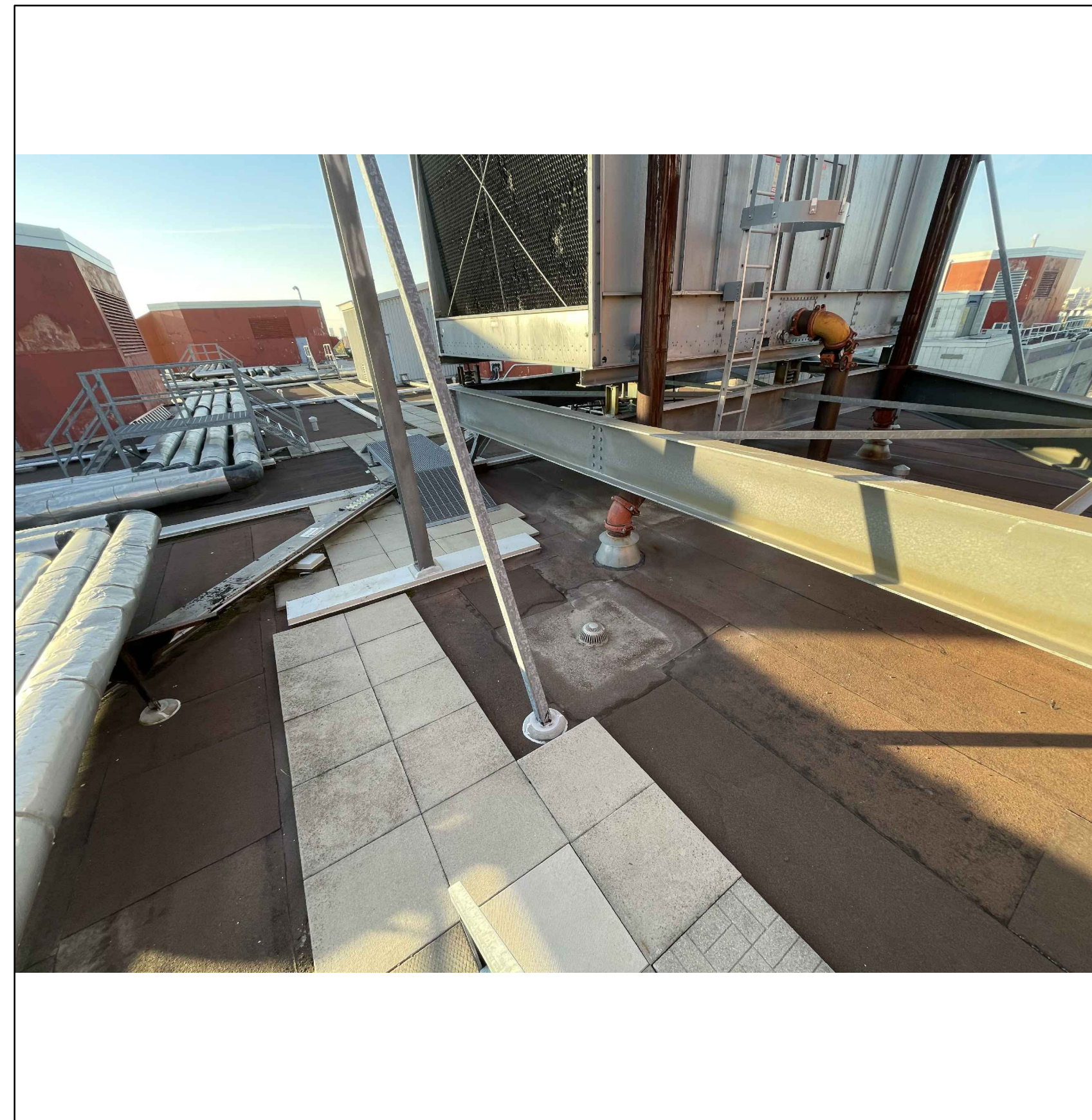
**PHOTOGRAPHS (ROOF C,  
REPAIR AREA 1)**

Drawing Number

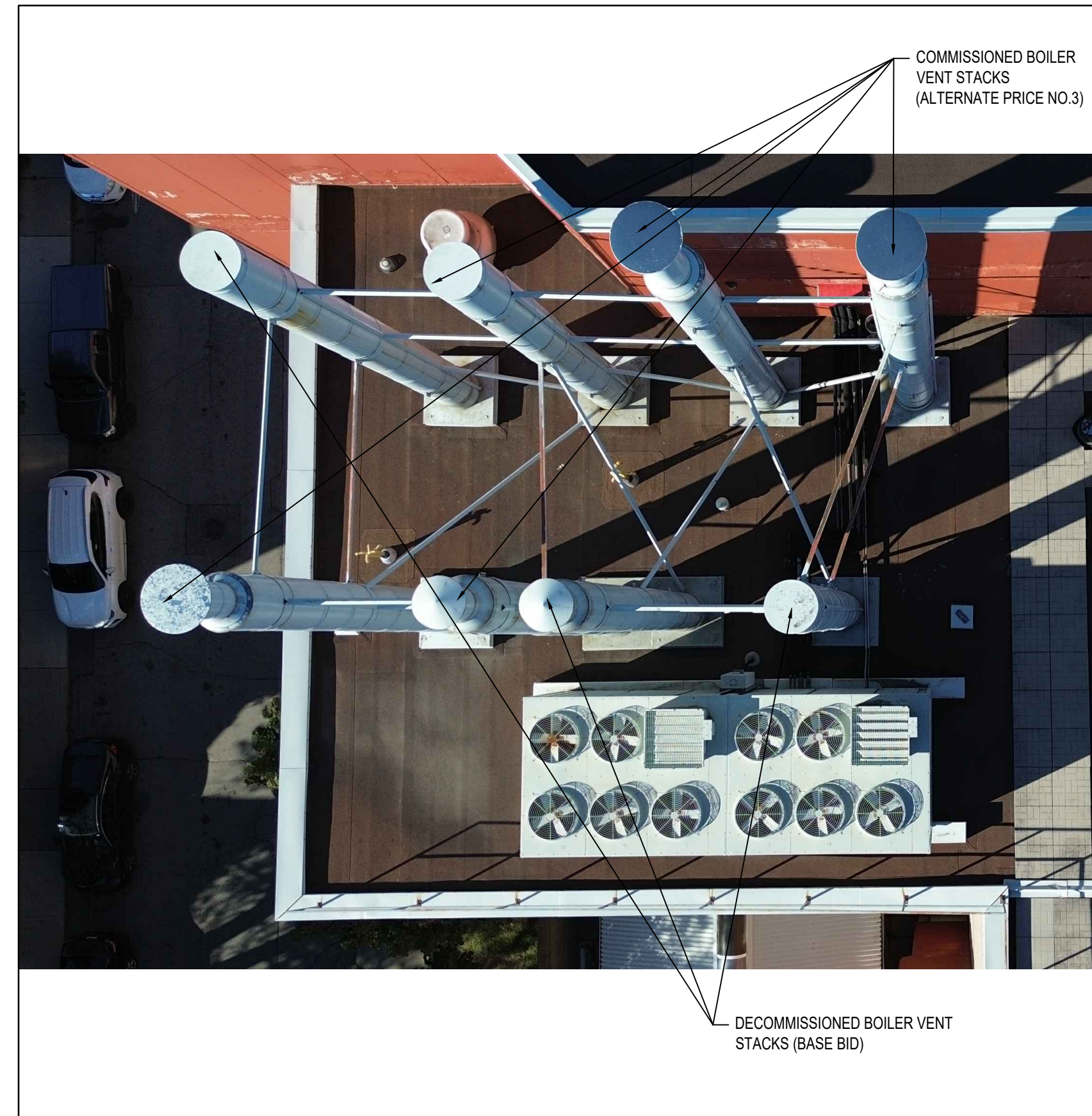
**R600**



1 AERIAL VIEW OF ROOF C (REPAIR AREA 2)  
R601



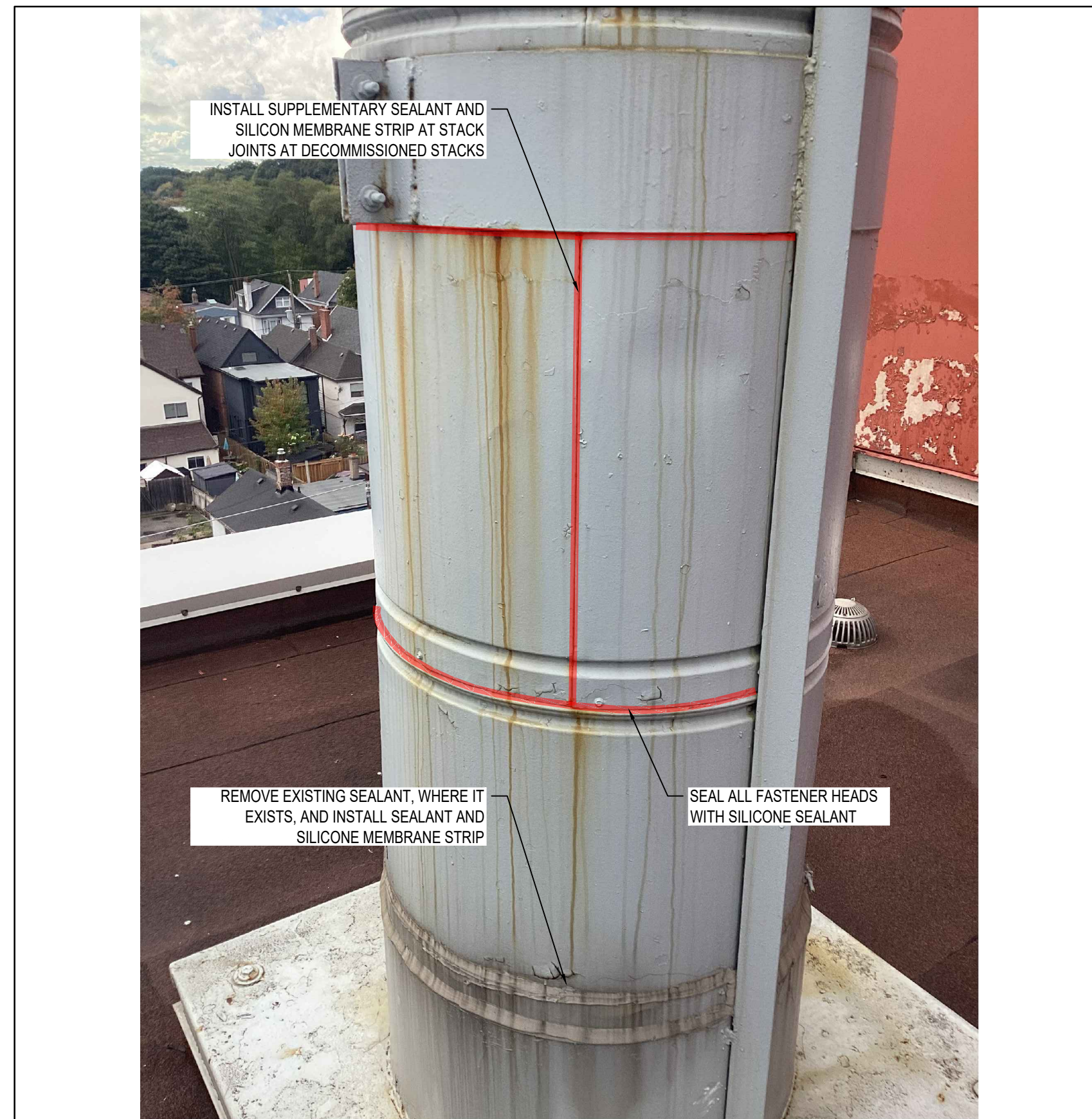
2 VIEW OF ROOF C (REPAIR AREA 2)  
R601



3 VIEW OF ROOF C (REPAIR AREA 3)  
R601



4 BOILER VENT BASE FLASHING  
R601



5 BOILER VENT OPEN JOINTS  
R601

No.	Issue Description	YYYY-MM-DD
0	ISSUED FOR CLIENT REVIEW	2024-11-14
1	ISSUED FOR TENDER	2024-12-13

Project Title:

**GEORGE BROWN COLLEGE CASA  
LOMA CAMPUS  
ROOF REPAIR AND REPLACEMENT**

160 KENDAL AVE., TORONTO, ON

Designed By: D.W. Scale: AS NOTED

Drawn By: S.R. Date: 2024-10-17

Drawing Title

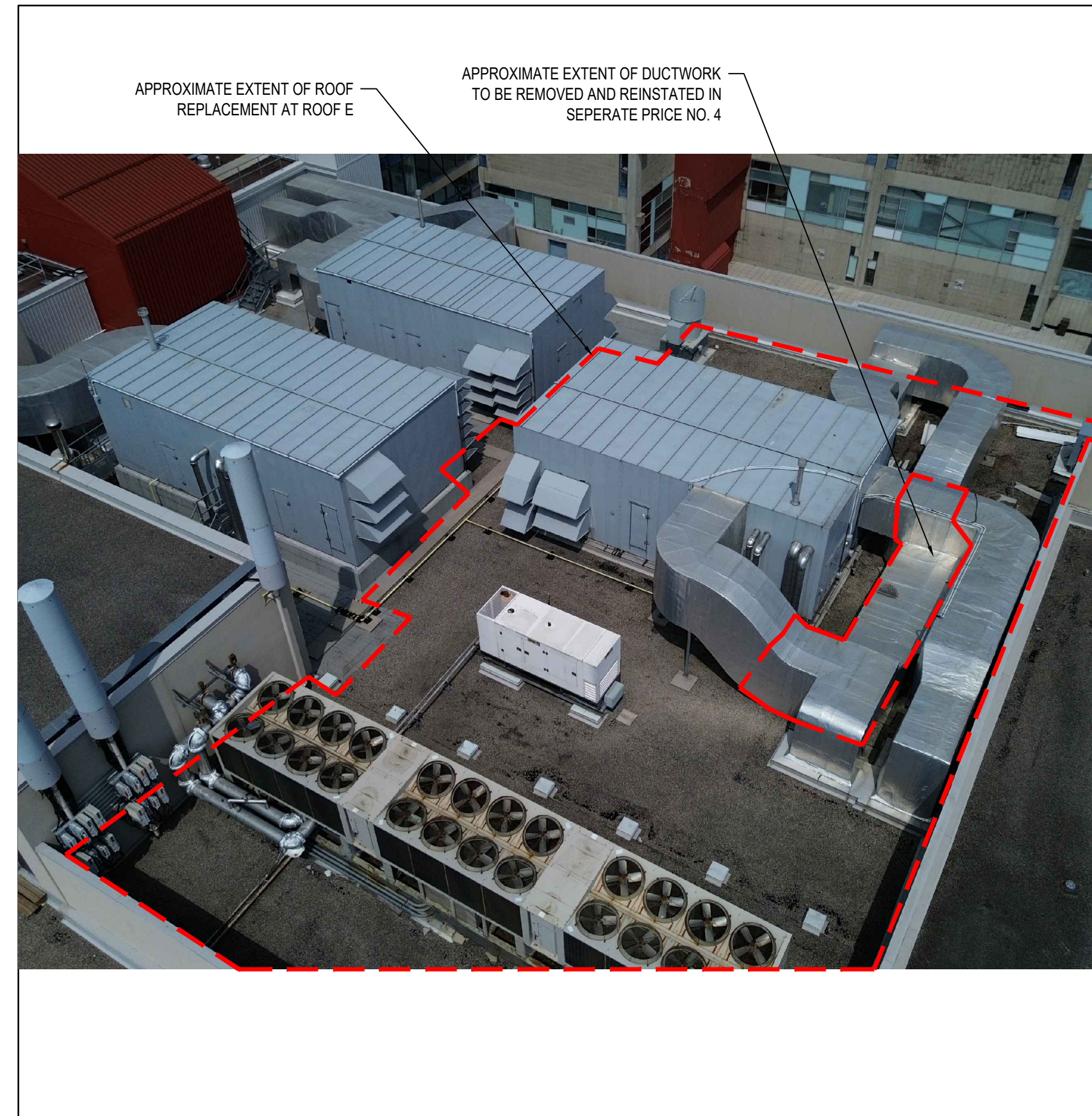
**PHOTOGRAPHS (ROOF C,  
REPAIR AREAS 2 AND 3)**

Drawing Number

**R601**



1 AERIAL VIEW OF ROOF E (REPAIR AREA 4)  
R602



2 AERIAL VIEW OF ROOF E (REPAIR AREA 4)  
R602



3 VIEW OF ELEVATED ROOF AREA  
R602



4 EXISTING CAPPED CURBS  
R602

No.	Issue Description	YYYY-MM-DD
0	ISSUED FOR CLIENT REVIEW	2024-11-14
1	ISSUED FOR TENDER	2024-12-13

Project Title:

GEORGE BROWN COLLEGE CASA  
LOMA CAMPUS  
ROOF REPAIR AND REPLACEMENT

160 KENDAL AVE., TORONTO, ON

Designed By:	D.W.	Scale:	AS NOTED
Drawn By:	S.R.	Date:	2024-10-17

Drawing Title

PHOTOGRAPHS (ROOF E,  
REPAIR AREA 4)

Drawing Number

R602