

UNIVERSITY OF NORTHERN COLORADO - JAMES A. MICHENER LIBRARY ROOFING PROJECT

2024-080M23 MICHENER LIBRARY ROOF REPLACEMENT - AMTECH PROJECT NO.: DEN.2023.001048

PROJECT:

JAMES A. MICHENER LIBRARY ROOFING PROJECT

1400 22ND STREET,
GREELEY, CO 80631

OWNER:

UNIVERSITY OF NORTHERN COLORADO

501 WEST 20TH STREET,
GREELEY, CO 80639

CONSULTANT:

AMTECH SOLUTIONS, INC.

1720 SOUTH BELLAIRE STREET, SUITE 1200
DENVER, COLORADO 80222
TEL: (303) 738-0823
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APPLICABLE DESIGN CODES:

- 2021 INTERNATIONAL EXISTING BUILDING CODE (IEBC).
 - SECTION(S) 602.1:
 - LEVEL 1 ALTERATION.
 - SECTION(S) 705.1, 705.2, 706.2, AND 706.3.2:
 - REEROOFING GENERAL, ROOF REPLACEMENT DOWN TO ROOF DECK, STRUCTURAL ADDITION OF ROOF, AND ROOF DIAPHRAGMS IN HIGH WIND REGIONS
- 2021 INTERNATIONAL BUILDING CODE (IBC).
 - SECTION(S) 1505.1:
 - CLASSIFICATION OF THE ROOF: CLASS A.
 - SECTION(S) 1504.4 AND 1504.6:
 - WIND AND EDGE METAL REQUIREMENTS.
- 2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC).
 - SECTION(S) C503.2.1:
 - REFER TO ROOFING SCOPE OF WORK NOTES ON SHEET R-101.
- 2021 INTERNATIONAL PLUMBING CODE (IPC).
- 2021 INTERNATIONAL FUEL AND GAS CODE (IFGC).
- 2021 INTERNATIONAL MECHANICAL CODE (IMC).
- 2023 INTERNATIONAL ELECTRIC CODE (IEC).
- AMERICAN NATIONAL STANDARDS INSTITUTE AND SINGLE-PLY ROOFING INDUSTRY (ANSI/SPRI):
 - ES-1 AND GT-1.

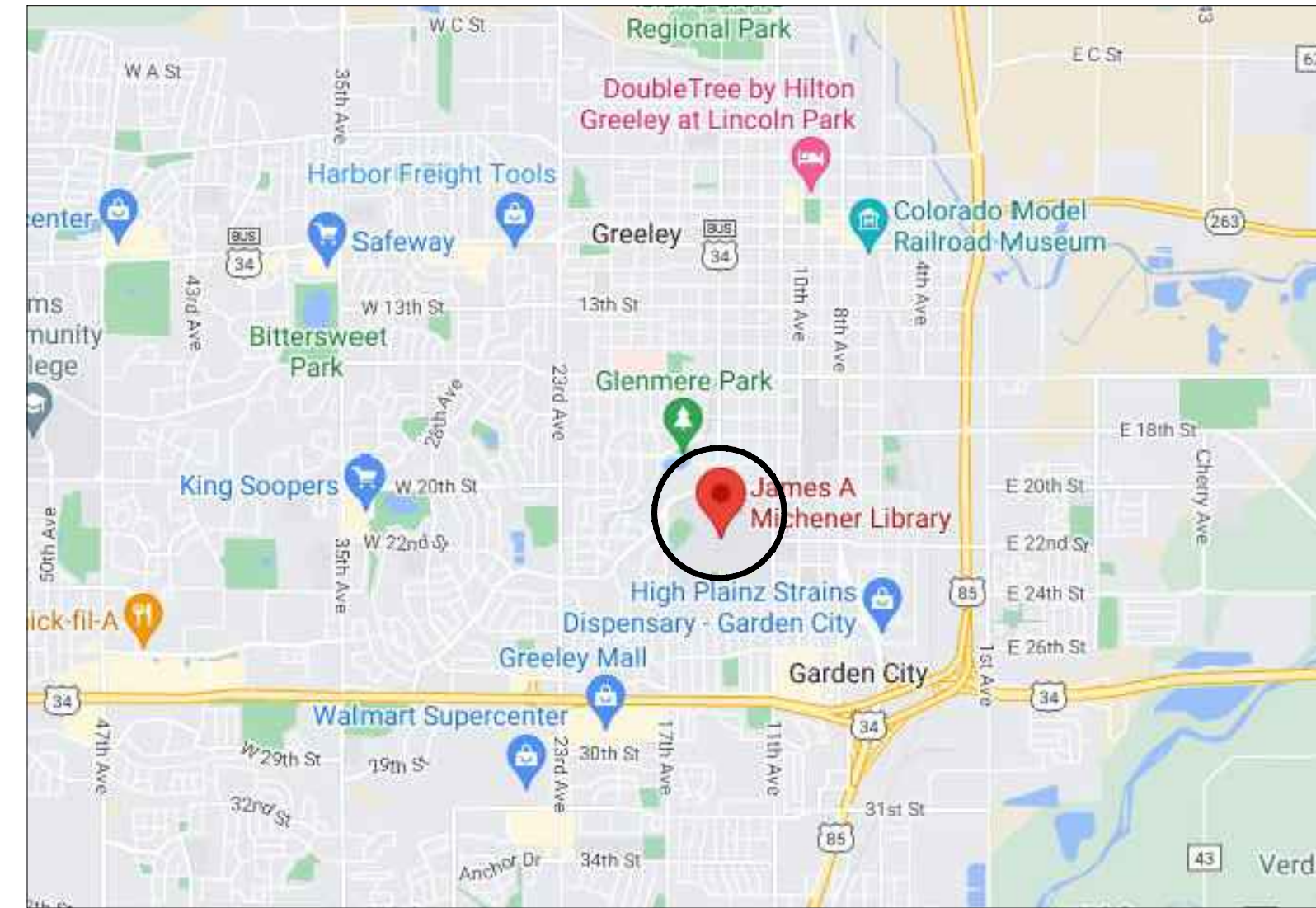
BUILDING DATA:

- FIRE SPRINKLED - MONITORED ALARM.
- CONSTRUCTION TYPE III-B - NON-COMBUSTIBLE:
 - MASONRY AND CONCRETE FRAMING WITH CONCRETE DECKING.
- OCCUPANCY CLASSIFICATION:
 - GROUP B - BUSINESS - EDUCATIONAL OCCUPANCY FOR STUDENTS ABOVE GRADE TWELVE (12).
- CLIMATE ZONE: 5B

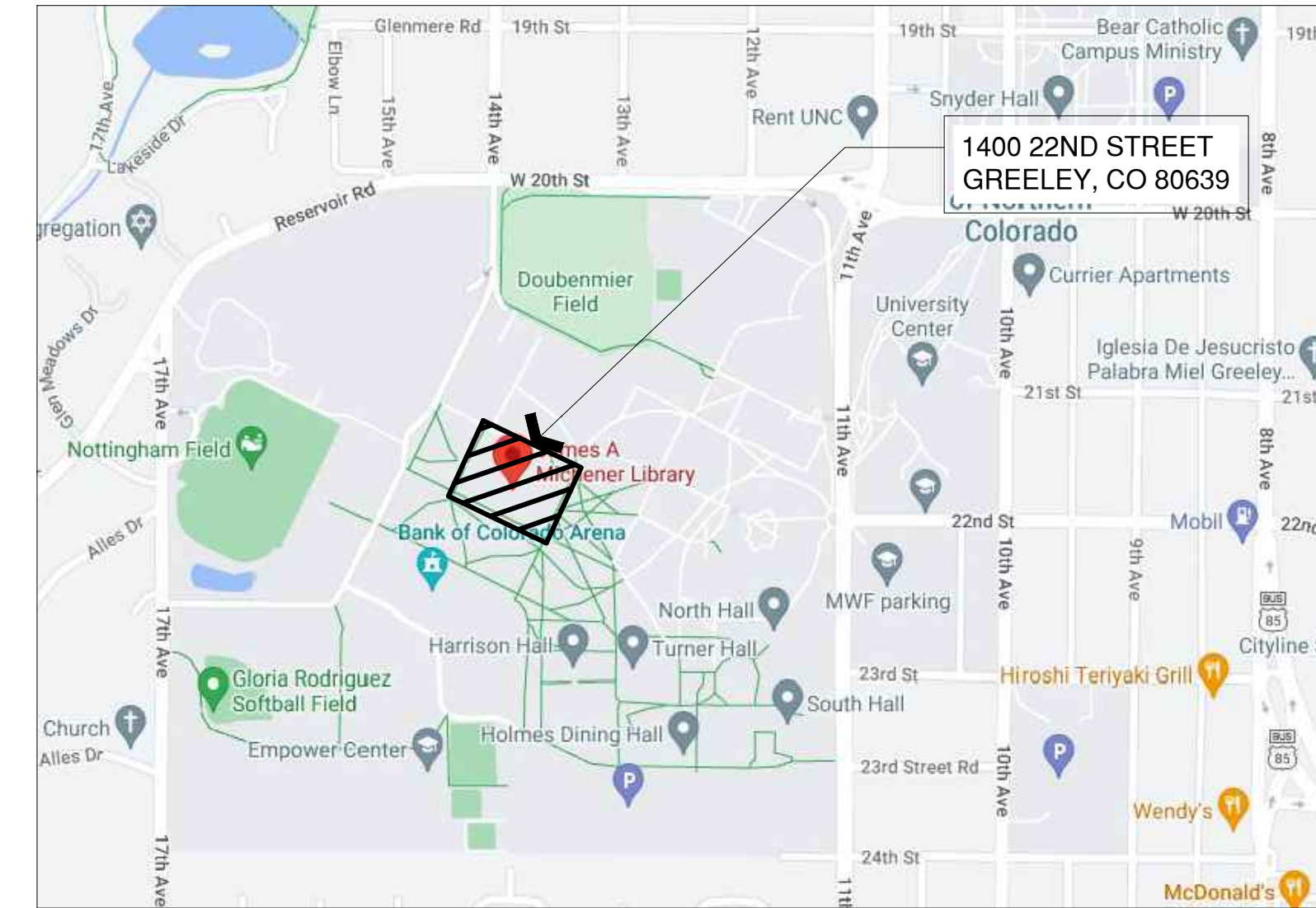
CODE EXCEPTIONS AND CLARIFICATIONS:

- 2021 IEBC - SECTION 705 REROOFING - 705.1 GENERAL:
 - ROOF REPLACEMENT OR ROOF RECOVER OF EXISTING LOW-SLOPE ROOF COVERINGS SHALL NOT BE REQUIRED TO MEET THE MINIMUM DESIGN SLOPE REQUIREMENTS OF 1/4 UNIT VERTICAL IN 12 UNITS HORIZONTAL (2-PERCENT SLOPE) IN SECTION 1507 OF THE INTERNATIONAL BUILDING CODE FOR ROOFS THAT PROVIDE POSITIVE ROOF DRAINAGE. RECOVERING OR REPLACING AN EXISTING ROOF COVERING SHALL NOT BE REQUIRED TO MEET THE REQUIREMENTS FOR SECONDARY (EMERGENCY OVERFLOW) DRAINS OR SCUPPERS IN SECTION 1502 OF THE INTERNATIONAL BUILDING CODE FOR ROOFS THAT PROVIDE FOR POSITIVE ROOF DRAINAGE. FOR THE PURPOSES OF THIS EXCEPTION, EXISTING SECONDARY DRAINAGE OR SCUPPER SYSTEM REQUIRED IN ACCORDANCE WITH THIS CODE SHALL NOT BE REMOVED UNLESS THEY ARE REPLACED BY SECONDARY DRAINS OR SCUPPERS DESIGNED AND INSTALLED IN ACCORDANCE WITH SECTION 1502 OF THE INTERNATIONAL BUILDING CODE.
- 2021 IEBC - SECTION 708 ENERGY CONSERVATION - 708.1 MINIMUM REQUIREMENTS:
 - LEVEL 1 ALTERATIONS TO EXISTING BUILDINGS OR STRUCTURES DO NOT REQUIRE THE ENTIRE BUILDING OR STRUCTURE TO COMPLY WITH THE ENERGY REQUIREMENTS OF THE INTERNATIONAL ENERGY CONSERVATION CODE OR INTERNATIONAL RESIDENTIAL CODE. THE ALTERATIONS SHALL CONFORM TO THE ENERGY REQUIREMENTS OF THE INTERNATIONAL ENERGY CONSERVATION CODE OR INTERNATIONAL RESIDENTIAL CODE AS THEY RELATE TO NEW CONSTRUCTION ONLY.
- 2021 IECC - CHAPTER 4 COMMERCIAL ENERGY EFFICIENCY
 - SECTION C402 BUILDING ENVELOPE REQUIREMENTS - SUBSECTION C402.2.1.1 TAPERED, ABOVE-DECK INSULATION BASED ON THICKNESS:
 - WHERE USED AS A COMPONENT OF A ROOF/CEILING ASSEMBLY R-VALUE CALCULATION, THE SLOPED ROOF INSULATION R-VALUE CONTRIBUTION TO THAT CALCULATION SHALL USE THE AVERAGE THICKNESS IN INCHES ALONG WITH THE MATERIAL R-VALUE-PER-INCH SOLELY FOR R-VALUE COMPLIANCE AS PRESCRIBED IN SECTION 402.1.3.
 - SECTION C402 BUILDING ENVELOPE REQUIREMENTS - SUBSECTION C402.2.1.2 MINIMUM THICKNESS, LOWEST POINT:
 - THE MINIMUM THICKNESS OF ABOVE-DECK ROOF INSULATION AT ITS LOWEST POINT, GUTTER EDGE, ROOF DRAIN OR SCUPPER, SHALL BE NOT LESS THAN 1-INCH.
- 2021 INTERNATIONAL PLUMBING CODE
 - SECTION 1105 ROOF DRAINS
 - SECTION 1108.1 SECONDARY (EMERGENCY OVERFLOW) DRAINS OR SCUPPERS
 - WHERE ROOF DRAINS ARE REQUIRED, SECONDARY (EMERGENCY OVERFLOW) ROOF DRAINS OR SCUPPERS SHALL BE PROVIDED WHERE THE ROOF PERIMETER CONSTRUCTION EXTENDS ABOVE THE ROOF IN SUCH A MANNER THAT WATER WILL BE ENTRAPPED IF THE PRIMARY DRAINS ALLOW BUILDUP FOR ANY REASON.
 - DESCRIPTION:
 - THE PIT ROOF (ROOF AREA C) WAS CONSTRUCTED WITHOUT A ROOF DRAIN AND CURRENTLY HAS A SUMP PUMP IN THE SOUTHWEST CORNER THAT PUMPS WATER ONTO THE ADJACENT MAIN ROOF AREA. THE SUMP PUMP HAS AN ALARM THAT IS INTEGRATED WITH THE BUILDING AUTOMATION SYSTEM TO ALERT FACILITY MAINTENANCE OF OPERATION FAILURES.
 - NEW PRIMARY AND OVERFLOW ROOF DRAINS WILL BE INSTALLED INTO THE CONCRETE PIT ROOF DECK AND SEPARATE DRAIN LINES WILL BE PIPED THROUGH THE INTERIOR OF THE BUILDING TO THE 2ND FLOOR AND OUT THROUGH AN EXTERIOR WALL TO DRAIN INTO A CONDUCTOR HEAD AND OPEN FACED DOWNSPOUT FOR THE PRIMARY LINE AND A DOWNSPOUT NOZZLE FOR THE OVERFLOW DRAIN LINE. RE: PLUMBING.

REGION MAP:



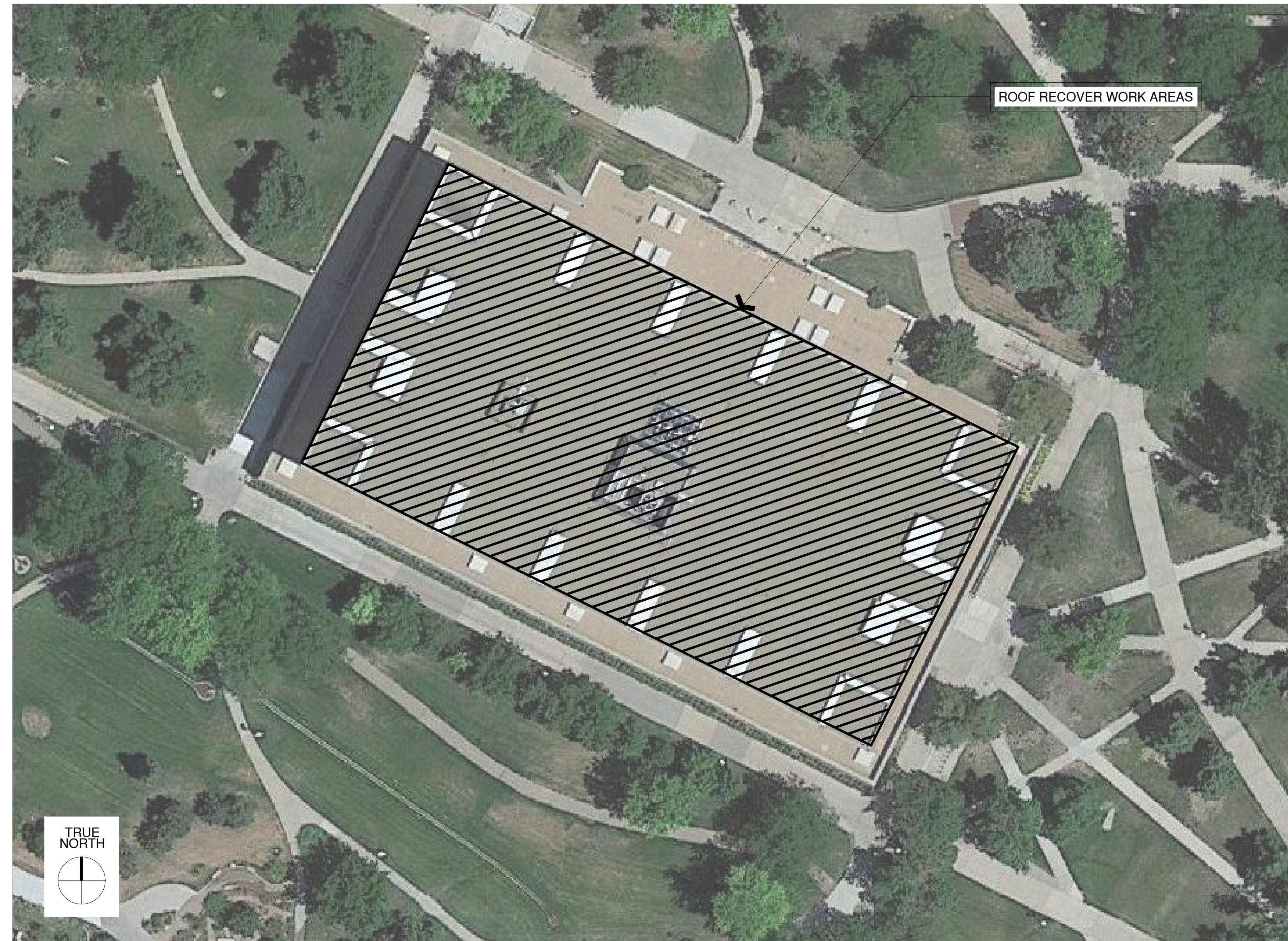
VICINITY MAP:



SHEET INDEX:

- R-100 COVER SHEET
- R-101 ROOF ASSEMBLIES AND SCOPE OF WORK NOTES
- R-200 DESIGN NOTES AND FASTENING SCHEDULES
- R-201 STAGING PLAN
- R-300 ROOF PLAN
- R-301 CONCRETE COATING - ALTERNATES #2 & #3
- R-400 PARTIAL SECTIONS
- R-500 ROOFING DETAILS
- R-501 ROOFING DETAILS
- P0.01 PLUMBING GENERAL INFORMATION
- P0.02 PLUMBING SPECIFICATIONS
- P0.03 PLUMBING SPECIFICATIONS
- P2.03 LEVEL 1 AND MEZZ. PLUMBING PLANS
- P2.04 LEVEL 2 PLUMBING PLAN
- P2.05 LEVEL 3 PLUMBING PLAN
- P2.06 ROOF LEVEL PLUMBING PLAN

AERIAL MAP:



ABBREVIATIONS:

APVD.	APPROVED	MTL.	METAL
CONT.	CONTINUOUS	MIN.	MINIMUM
(E)	EXISTING	(N)	NEW
(ETR)	EXISTING TO REMAIN	O.C.	ON CENTER
EXP.	EXPANSION	PENE.	PENETRATION
(FA)	FULLY ADHERED	REQ.	REQUIREMENT
G.A.	GAUGE	R.T.S.	REINFORCED TERMINATION STRIP
GALV.	GALVANIZED	SHT.	SHEET
GYP.	GYPSUM	SIM.	SIMILAR
JT.	JOINT.	TYP.	TYPICAL
MANU.	MANUFACTURER	U.O.N.	UNLESS OTHERWISE NOTED
MAX.	MAXIMUM	V.I.F.	VERIFY IN FIELD
(MA)	MECHANICALLY ATTACHED		

MATERIALS

	2x BLOCKING		SUBSTRATE - GENERAL
	ADHESIVE/PRIMER		SUBSTRATE - WOOD
	BACKER-ROD		SUBSTRATE - CONCRETE
	BONDING ADHESIVE		STEEL
	GYPSUM BOARD		URETHANE SEALANT
	LOW-RISE FOAM		VAPOR RETARDER
	PLYWOOD		WATER CUT-OFF MASTIC
	RIGID INSULATION		



KEY PLAN LEGEND

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DATE 09/2024

DRAWN BY DJD

CHECKED BY RKP & SAP

DATE	REVISION



SHEET TITLE
COVER SHEET

SHEET NO.
R-100

TABLE 1.0 - ROOF ASSEMBLY ATTACHMENT SCHEDULE:

ROOF MATERIAL	ATTACHMENT TYPE	ATTACHMENT MATERIAL	ZONE 1 ATTACHMENT RATE	ZONE 2 ATTACHMENT RATE	ZONE 3 ATTACHMENT RATE
MEMBRANE	ADHESIVE	BONDING ADHESIVE	FULL COVERAGE	FULL COVERAGE	FULL COVERAGE
INSULATION BOARDS	ADHESIVE	LOW RISE FOAM - CONTINUOUS RIBBONS (NOTE 1)	4" O.C.	4" O.C.	4" O.C.

NOTES:

1. LOW-RISE FOAM BEADS ARE TO BE APPLIED WET WITH A MINIMUM THICKNESS OF 3/4-INCH. LOW-RISE FOAM MUST BE ALLOWED TO RISE AND DEVELOP STRING/BODY (APPROXIMATELY 1 1/2 - 2 MIN.). STRING TIME WILL VARY BASED ON ENVIRONMENTAL CONDITIONS LIKE TEMPERATURE AND HUMIDITY. DO NOT ALLOW THE ADHESIVE TO OVER-CURE PRIOR TO SETTING MATERIALS. DO NOT INSTALL MATERIALS IN WET BEADS.

DESIGN NOTES:

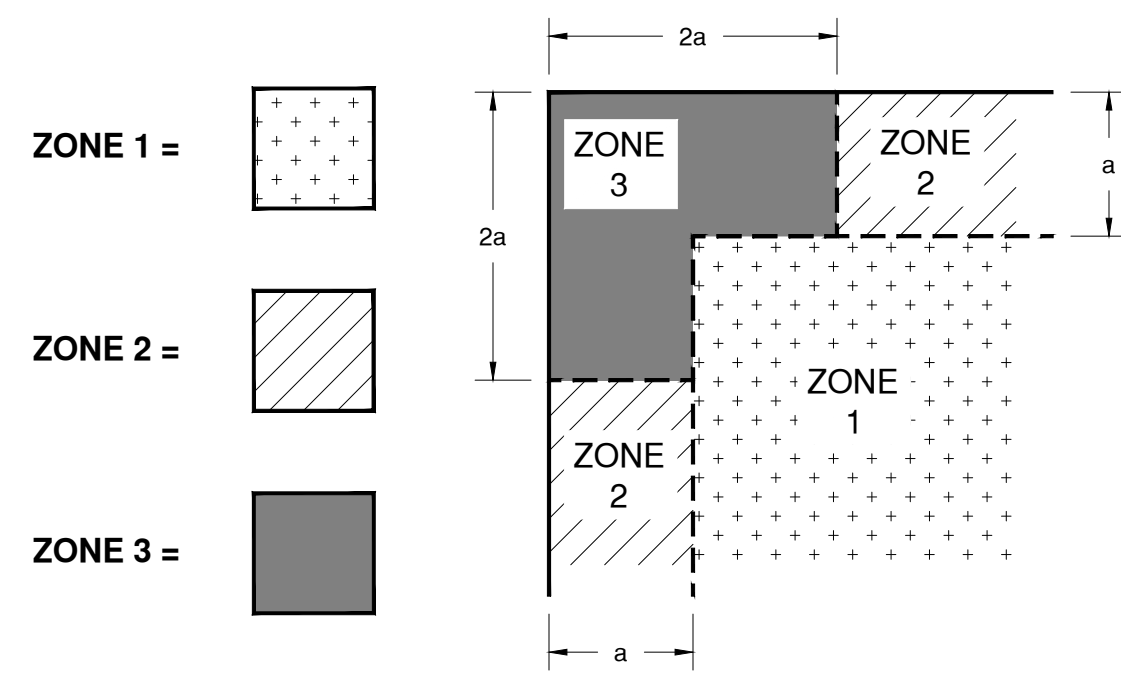
- 2021 INTERNATIONAL BUILDING CODE.
- 2021 INTERNATIONAL EXISTING BUILDING CODE - CHAPTER 7 - ALTERATION LEVEL 1 - REMOVE AND REPLACE WITH LIKE.
 - SECTION 706.2 - ADDITION OR REPLACEMENT OF ROOFING:
 - EXCEPTION 2: THE INCREASED DEAD LOAD IS DUE ENTIRELY TO THE ADDITION OF A SECOND LAYER OF ROOF COVERING WEIGHING 3 POUNDS PER SQUARE FOOT OR LESS OVER AN EXISTING SINGLE LAYER OF ROOF COVERING.
- ESTIMATED INCREASE OF DEAD LOAD DUE TO ROOF RECOVER:
 - 2.1.1.0.1. ROOF AREAS A AND B: 1.5 PSF.
 - 2.1.1.0.2. ROOF AREAS A1-A4: 1.5 PSF.
 - 2.1.1.0.3. ROOF AREA C: 1.0 PSF.

ASCE 7-16 - WIND DESIGN NOTES:

- 3-SECOND PEAK GUST: 115 MPH
- EXPOSURE: C
- CONFIGURATION: ENCLOSED
- RISK CATEGORY: III

ASCE 7-16 - STRENGTH DESIGN VALUES:

- ALL ROOF AREAS:
 - DESIGN HEIGHT (h): 70- FEET
 - 1.1.1. a: 18.0- FEET
 - ZONE 1 FIELD: -53.4 PSF
 - ZONE 2 EDGE: -83.8 PSF
 - ZONE 3 CORNER: -114.2 PSF
 - ZONE 4 WALL FIELD: -43.2 PSF
 - ZONE 5 WALL CORNER: -66.9 PSF



PLYWOOD SHEATHING FASTENING ILLUSTRATION:

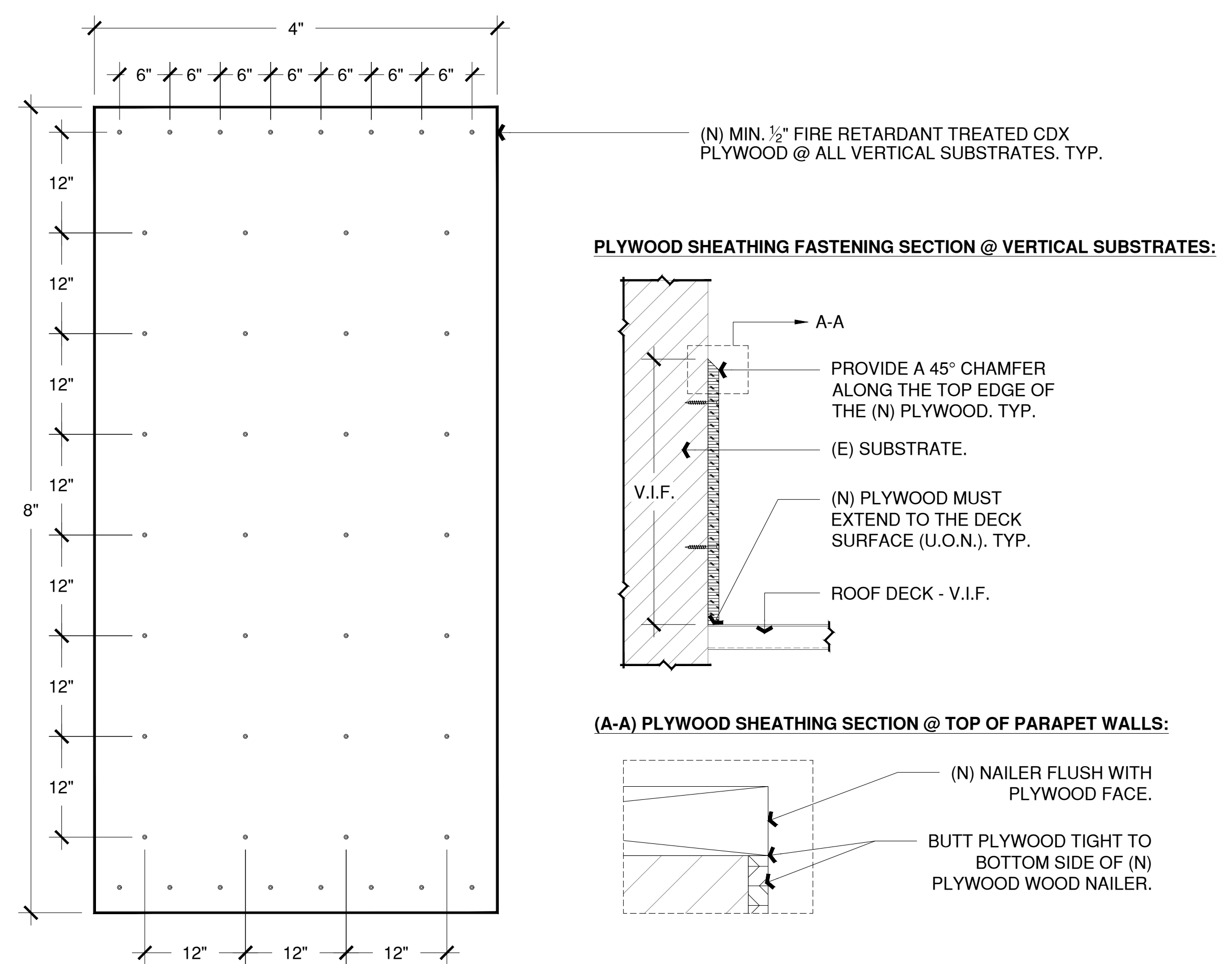
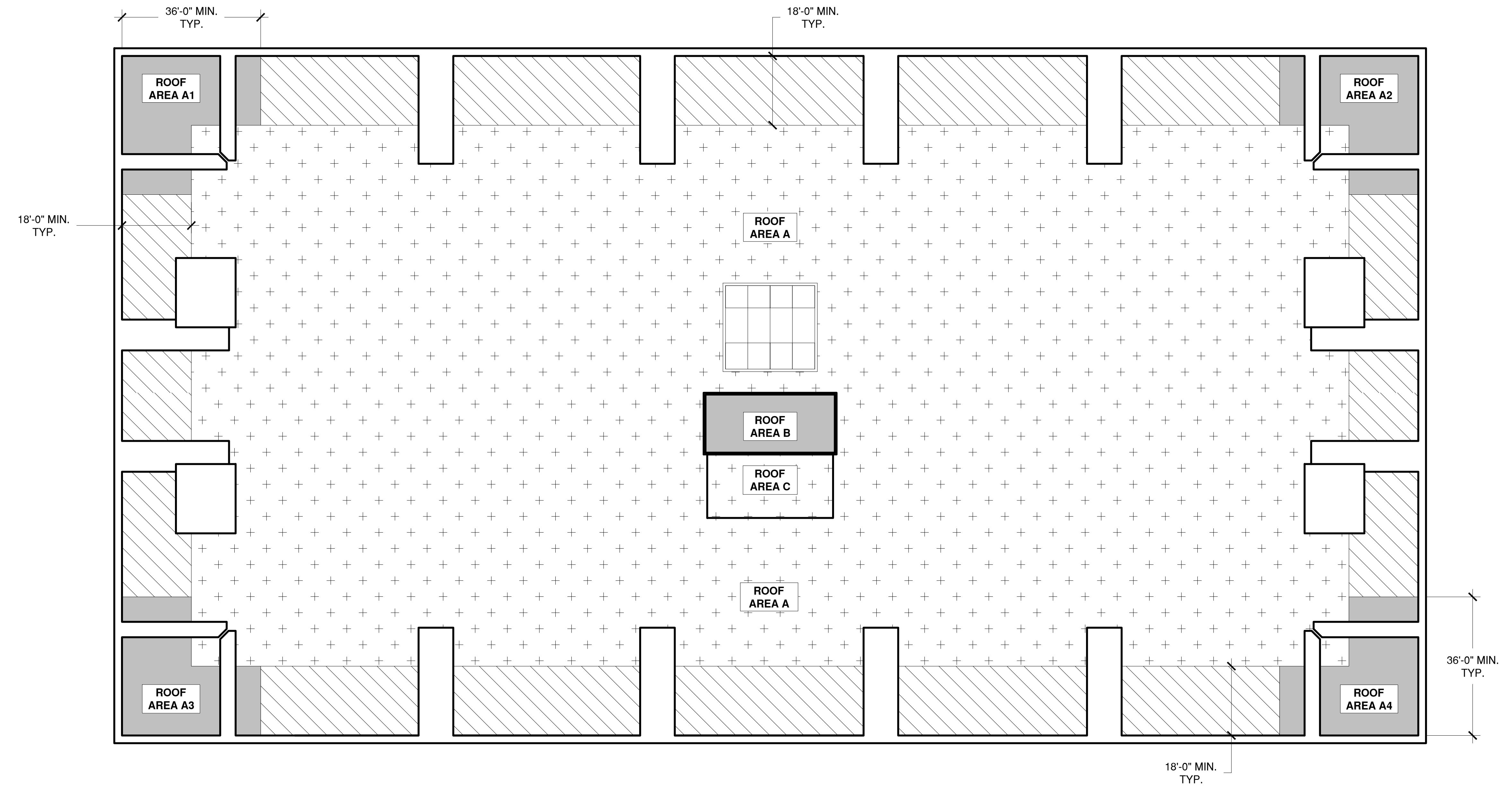


TABLE 2.0 - FASTENER SCHEDULE:

ELEMENT	SUBSTRATE	FASTENER	NUMBER AND SPACING
WOOD NAILER/ BLOCKING	CONCRETE BLOCK OR MASONRY WALL	1/2" STAINLESS STEEL CONCRETE SCREWS	12" O.C. MAX. STAGGERED (NOTE 1) 1.0" PENET., MIN. PULL-OUT RESISTANCE OF 1,000 POUNDS
	HORIZONTAL WOOD NAILER	#12 MIN. WOOD/STEEL SELF-DRILLING SCREWS	2 ROWS/12" O.C. EACH ROW, MIN. (NOTE 1) 3/4" PENET., MIN. PULL-OUT RESISTANCE OF 100 POUNDS
	VERTICAL WOOD NAILER	#12 MIN. WOOD/STEEL SELF-DRILLING SCREWS	2 ROWS/12" O.C. EACH ROW, MIN. (NOTE 1) 3/4" PENET., MIN. PULL-OUT RESISTANCE OF 100 POUNDS
WOOD DECK	WOOD DECKING	#15 CORROSION RESISTANT STEEL SCREWS	PER SPECIFICATIONS
HOOK STRIP (CLEAT METAL)	WOOD	#8 WOOD SCREWS	6" O.C. MAX. (NOTE 1)
	CONCRETE	3/16" STAINLESS STEEL NAIL-IN EXPANSION FASTENER	6" O.C. MAX. (NOTE 1)
DRIP EDGE	WOOD	4D RING SHANK NAILS.	SEE HOOK STRIP 2 ROWS/3"-4" O.C. MAX. STAGGERED (NOTE 1)
	WOOD	4D RING SHANK NAILS.	SEE HOOK STRIP 2 ROWS/3"-4" O.C. MAX. STAGGERED (NOTE 1)
GRAVEL STOP	CONCRETE BLOCK OR MASONRY WALL	OUTSIDE-CONTINUOUS HOOK STRIP, INSIDE EDGE GALVANIZED ROOFING NAILS	SEE HOOK STRIP 12" O.C. MAX. STAGGERED (NOTE 1)
	CONCRETE BLOCK OR MASONRY WALL	3/16" STAINLESS STEEL NAIL-IN EXPANSION FASTENERS	6" O.C. MAX. (NOTE 1)
RTS/SEAM FASTENING PLATES	CONCRETE BLOCK OR MASONRY WALL	3/16" STAINLESS STEEL NAIL-IN EXPANSION FASTENERS	6" O.C. MAX. (NOTE 1)
	PLYWOOD/STEEL STUDS	#15 CORROSION RESISTANT STEEL SCREWS	
METAL FLASHING RECEIVER	CONCRETE BLOCK OR MASONRY WALL	3/16" STAINLESS STEEL NAIL-IN EXPANSION FASTENERS	12" O.C. MAX. (NOTE 1)
METAL COUNTER FLASHING	METAL FLASHING RECEIVER	#15 NEOPRENE WASHERED SELF-DRILLING SCREWS	8" O.C. MAX. (NOTE 1)
PLYWOOD SHEATHING (ILLUSTRATION ON R-200)	METAL STUD FRAMING	#15 CORROSION RESISTANT STEEL SCREWS	6" O.C. MAX. @ EDGES AND 12" O.C. MAX. IN THE FIELD @ EACH STUD LOCATION (NOTE 1)
	CONCRETE BLOCK OR MASONRY WALL	3/16" STAINLESS STEEL NAIL-IN EXPANSION FASTENERS	
METAL WALL PANELS	CONCRETE BLOCK OR MASONRY WALL	CLAD WALL WITH PLYWOOD PRIOR TO PANEL INSTALL	SEE PLYWOOD SHEATHING
	PLYWOOD/STEEL STUDS	#10 CORROSION RESISTANT SELF-TAPPING TEK SCREWS	12" O.C. MAX. ALONG PANEL LEG (NOTE 1)
WALL PANEL CLOSURE METALS	CONCRETE BLOCK OR MASONRY WALL	CLAD WALL WITH PLYWOOD PRIOR TO PANEL INSTALL	SEE PLYWOOD SHEATHING
	PLYWOOD/STEEL STUDS	#10 CORROSION RESISTANT SELF-TAPPING TEK SCREWS	8" O.C. MAX. (NOTE 1)
STEEL MECHANICAL CURB	WOOD	#12 METAL TO WOOD FASTENER	6" O.C. MAX. AROUND FULL CURB PERIMETER

NOTES:

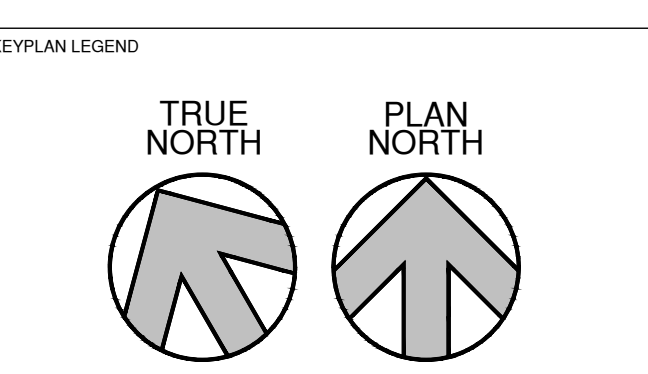
1. FASTENER FREQUENCY SHALL BE DOUBLED WITHIN 10 FEET OF CORNERS.



WIND ZONE ROOF PLAN

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)

LEGEND



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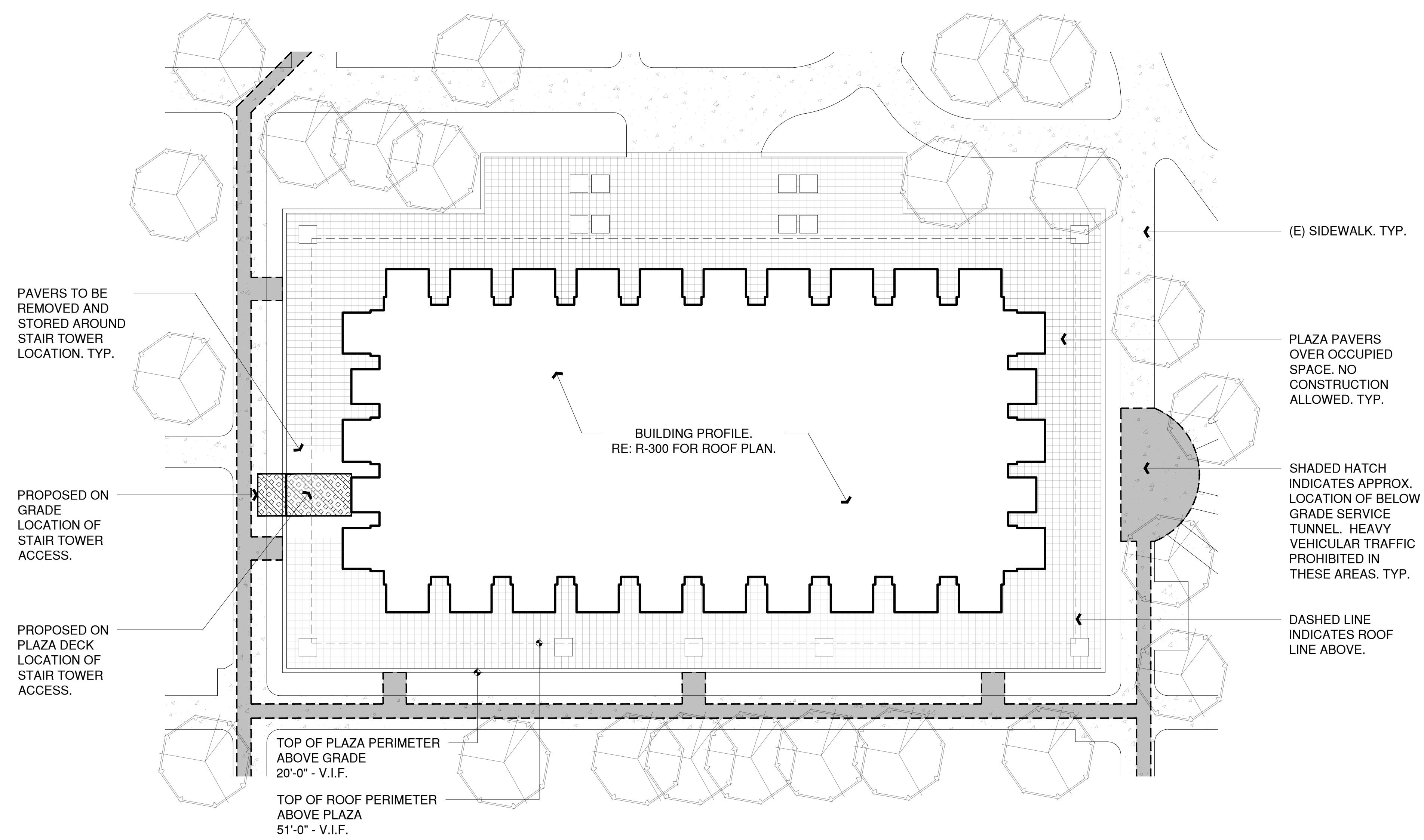
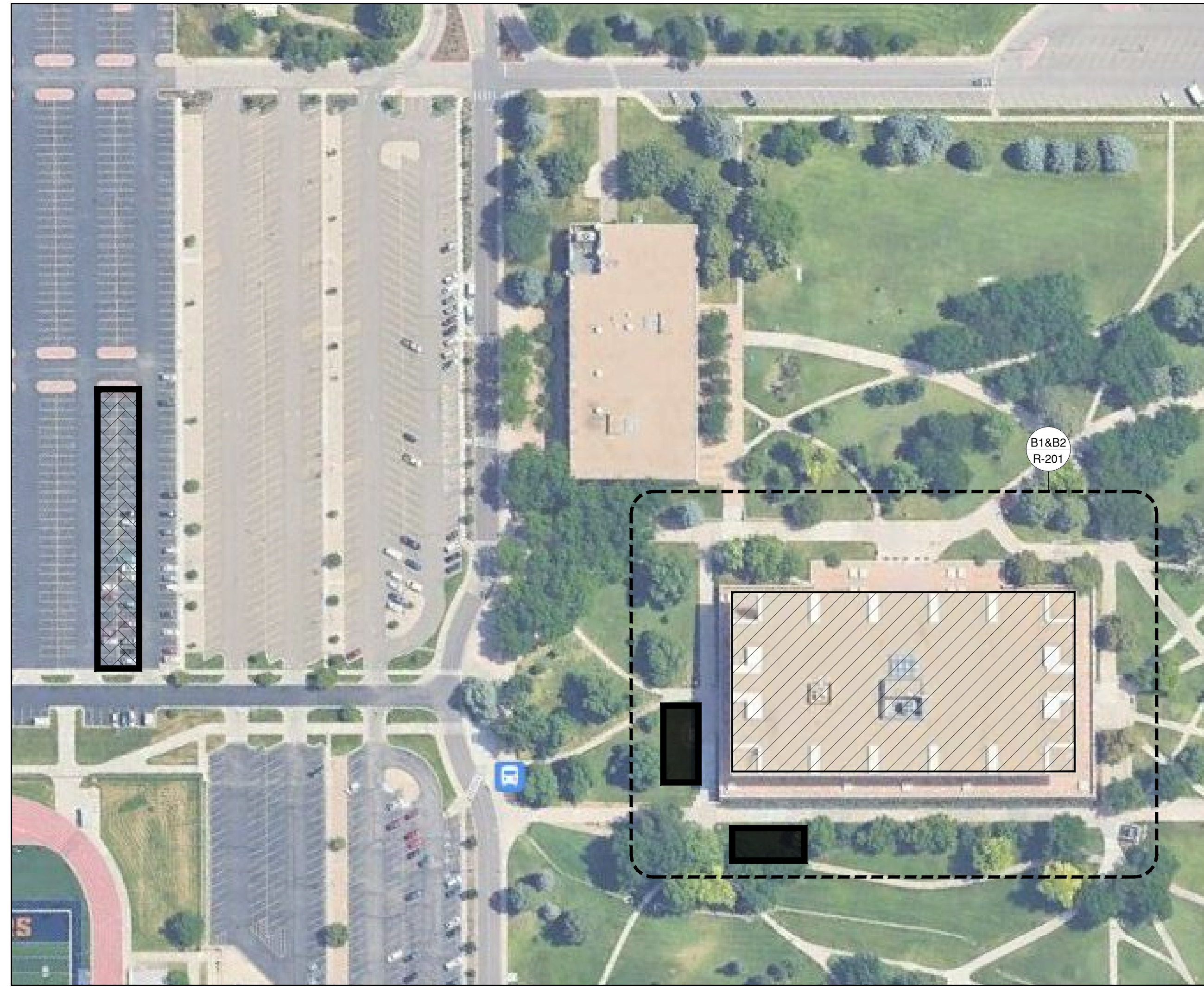
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SHEET TITLE
DESIGN NOTES AND FASTENING SCHEDULES

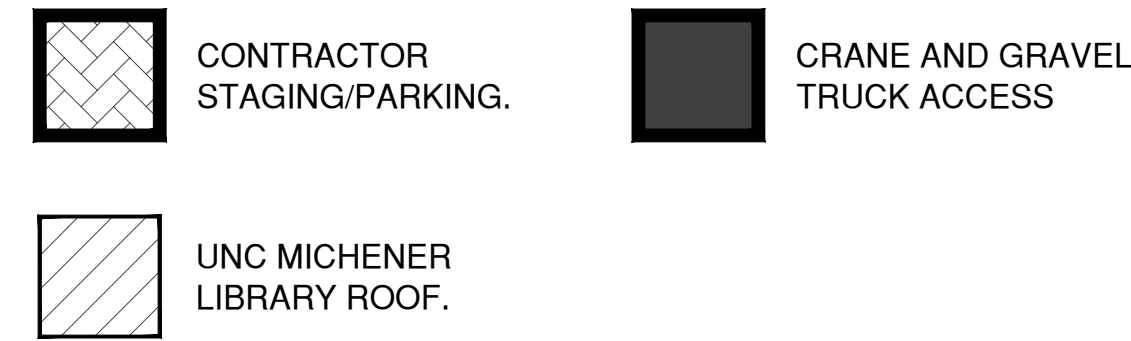
SHEET NO.
R-200



B0 CONTRACTOR STAGING AND ACCESS LOCATION(S) PLAN

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)

CONTRACTOR STAGING REQUIREMENTS:



STAGING AND ACCESS NOTES:

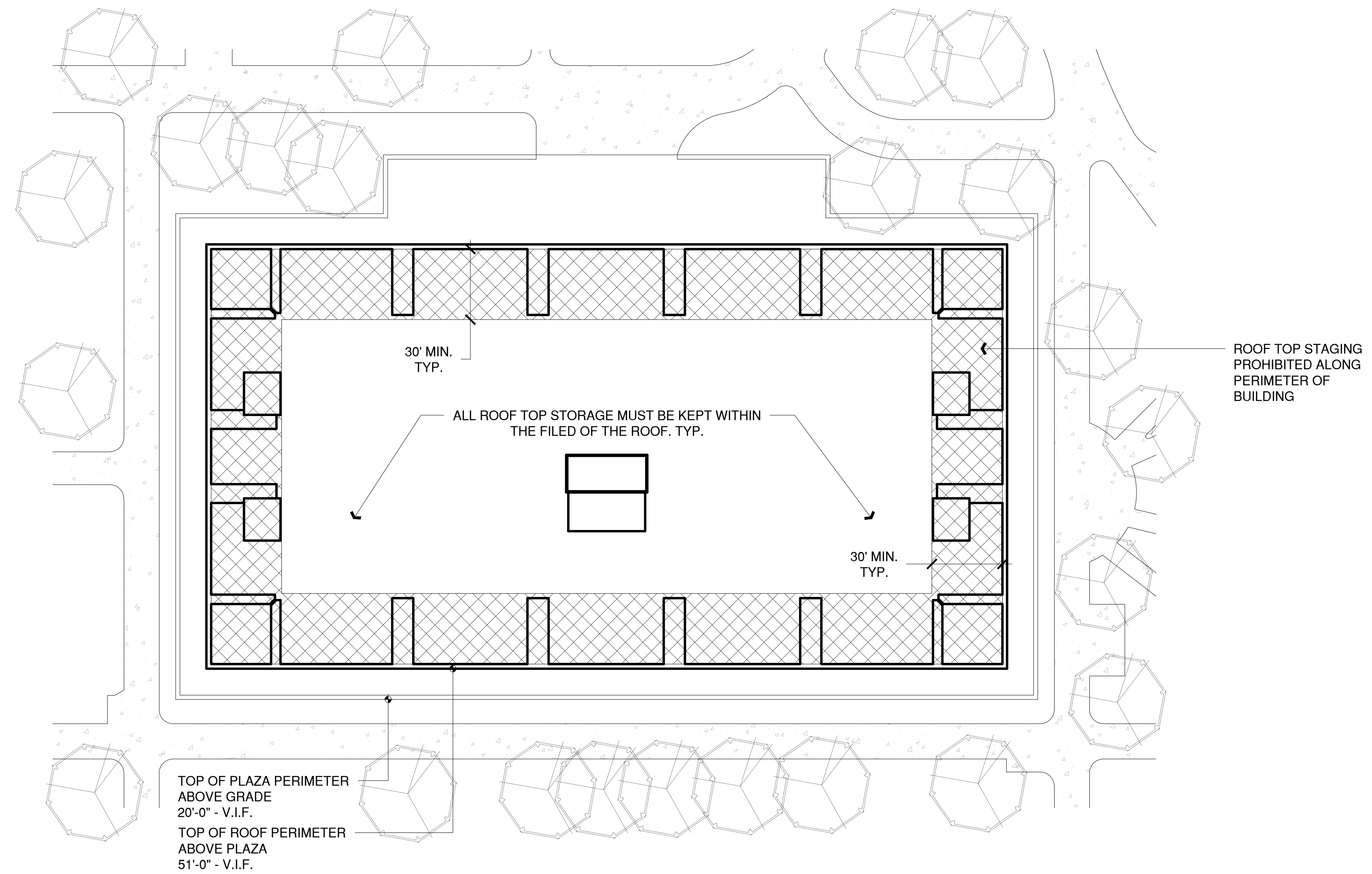
1. CONTRACTOR TO COORDINATE ALL STAGING, PARKING, CRANE, AND TRUCK ACCESS WITH UNC.
2. CONTRACTOR TO PROTECT SUBSTRATE AND ADJACENT SURFACES FOR ALL ACCESS POINTS.
3. NO EQUIPMENT IS TO BE PLACED ON TOP OF PLAZA PAVERS.
4. CONTRACTOR TO PHOTO DOCUMENT ALL STAGING, PARKING, CRANE, AND TRUCK LOCATION CONDITIONS PRIOR TO THE START OF MOBILIZATION/ CONSTRUCTION
5. MAX LOAD OVER TUNNELS: = 250 PSF.
6. ROOF TOP ACCESS BY EXTERIOR MEANS. INTERIOR ACCESS PER OWNER APPROVAL ONLY.
7. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL BUILDING FIRE EGRESS EXIST, PATHS, AND LOCATIONS AS REQUIRED BY LOCAL AHJ.

STAIR TOWER SCAFFOLDING NOTES

1. **GENERAL**
 - 1.1. EXTERIOR STAIR TOWER INSTALLATION AND PROJECT DURATION PERFORMANCE THROUGH PROJECT DURATION TO ADHERE TO THE REQUIREMENTS OF THE LOCAL AHJ, OSHA REGULATIONS, AND ANSI STANDARDS.
 - 1.2. STAIR TOWER ERECTION, ASSEMBLY, AND SAFETY REGULATIONS ARE THE RESPONSIBILITY OF THE STAIR TOWER CONTRACTOR/ENGINEER AND SHALL BE DESIGNATED AS A DEFERRED SUBMITTAL AND DELEGATED DESIGN THROUGH THE ROOFING CONTRACTOR.
 - 1.3. INSTALLATION PLAN, LOCATION, AND ASSEMBLY TO BE REVIEWED BY BOTH THE OWNER AND OWNER'S ROOFING CONSULTANT FOR REVIEW AND APPROVAL, PRIOR TO MOBILIZATION AND INSTALLATION.
2. **PLANNING AND PREPARATION**
 - 2.1. REFER TO STAGING PLAN B1 ON R-201 FOR PROPOSED INSTALLATION LOCATION.
 - 2.2. CONTRACTOR TO COORDINATE WITH SCAFFOLDING CONTRACTOR/ENGINEER AND PROJECT TEAM TO CONDUCT A SITE ASSESSMENT TO DETERMINE THE SCAFFOLDING LOCATION AND HEIGHT REQUIREMENTS.
 - 2.3. CONTRACTOR TO ENSURE COMPLIANCE WITH LOCAL REGULATIONS AND SAFETY STANDARDS AND ACQUIRE NECESSARY PERMITTING FOR SCAFFOLDING ERECTION.
3. **TESTING**
 - 3.1. **LOAD TESTING:**
 - 3.1.1. CONTRACTOR TO COORDINATE WITH SCAFFOLDING CONTRACTOR TO ENSURE LOAD TESTING IS PERFORMED ON THE BUILDING PRIOR TO INSTALLATION.
 - 3.1.2. TESTING METHODS, DURATION, AND INSPECTIONS TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER AND SCAFFOLDING CONTRACTOR/ENGINEER.
 - 3.2. **ANCHOR TESTING:**
 - 3.2.1. PULL-OUT TESTING, EMBEDMENT DEPTH, AND TORQUE TESTING TO BE PERFORMED PRIOR TO STAIR TOWER INSTALLATION AND IN ACCORDANCE WITH MANUFACTURER AND SCAFFOLDING CONTRACTOR/ENGINEER.
 - 3.3. **VISUAL INSPECTION**
 - 3.3.1. CONDUCT A THOROUGH VISUAL INSPECTION OF ALL ANCHORS, CONNECTIONS, AND SCAFFOLD COMPONENTS TO CHECK FOR ANY SIGNS OF DAMAGE OR IMPROPER INSTALLATION.
 - 3.4. **ALIGNMENT AND PLUMBNESS:**
 - 3.4.1. ENSURE THAT VERTICAL POSTS ARE PLUMB AND THAT THE SCAFFOLD STRUCTURE IS CORRECTLY ALIGNED.
 - 3.5. **LOAD DISTRIBUTION** - CHECK THAT THE LOAD IS EVENLY DISTRIBUTED ACROSS THE SCAFFOLD BASE AND THAT THE ANCHORING POINTS ARE ADEQUATELY SUPPORTING THE LOAD.
 - 3.6. **MOVEMENT TESTING** - ENSURE THAT THERE IS NO EXCESSIVE MOVEMENT OR SWAYING OF THE SCAFFOLD UNDER LOAD CONDITIONS.
4. **DOCUMENTATION AND REPORTING**
 - 4.1. RECORD KEEPING - MAINTAIN DETAILED RECORDS OF ALL TESTING PROCEDURES, RESULTS, AND INSPECTIONS.
 - 4.2. REPORTING - PROVIDE REPORTS ON TEST RESULTS AND ANY CORRECTIVE ACTIONS TAKEN TO RELEVANT STAKEHOLDERS OR REGULATORY BODIES AS REQUIRED.
5. **MATERIAL AND EQUIPMENT CHECK**
 - 5.1. SCAFFOLDING CONTRACTOR/ENGINEER TO VERIFY THAT ALL SCAFFOLDING COMPONENTS (TOWERS, STAIRS, PLATFORMS, GUARDRAILS, ETC.) ARE IN GOOD CONDITION, PRIOR TO INSTALLATION.
 - 5.2. CHECK FOR ANY MISSING OR DAMAGED PARTS.
6. **FOUNDATION SETUP**
 - 6.1. THE UNIVERSITY OF NORTHERN COLORADO (UNC) HAS INDICATED THAT A PORTION OF THE PAVER PLAZA TERRACE CAN BE UTILIZED FOR STAIR TOWER PLACEMENT AND PARTIAL SUPPORT.
 - 6.1.1. PAVERS AND ASSOCIATED PEDESTALS MUST BE REMOVED AND STORED ONSITE WITH AMPLE PROTECTION TO ENSURE DAMAGES DO NOT OCCUR TO THE PAVERS THROUGH THE CONSTRUCTION DURATION UNTIL THEY CAN BE REINSTALLED.
 - 6.2. STAIR TOWER BASE PLATE SUPPORTS CAN BE SET ON THE THE ABOVE DECK (BELOW PLAZA PAVERS) MONOLITHIC WATERPROOFING MEMBRANE.
 - 6.2.1. CONTRACTOR TO DOCUMENT THE EXISTING MEMBRANE CONDITIONS PRIOR TO INSTALLATION OF THE NEW STAIR TOWER.
 - 6.2.2. THE MEMBRANE AND ADJACENT AREAS MUST BE PROTECTED DURING THE FULL DURATION OF CONSTRUCTION.
 - 6.2.3. ANY DAMAGES THAT OCCUR DURING CONSTRUCTION TO THE MEMBRANE, PAVERS, AND ADJACENT AREAS, ARE THE SOLE RESPONSIBILITY OF THE ROOFING CONTRACTOR AND THEIR SUBCONTRACTORS TO BRING THESE AREAS THAT HAVE BEEN COMPROMISED BACK TO PRE-CONSTRUCTION CONDITIONS.
 - 6.2.4. CONTRACTORS MUST RESTORE THE BUILDING FACADE TO ITS ORIGINAL CONDITION WHERE SCAFFOLDING IS ANCHORED. ANCHORS SHOULD BE DISCREETLY PLACED IN INCONSPICUOUS AREAS, SUCH AS FACADE CLADDING JOINTS OR MORTAL LINES, TO MINIMIZE VISIBLE REPAIRS AND PRESERVE THE FACADES APPEARANCE AFTER THE SCAFFOLDING IS REMOVED.
7. **TRAINING AND ACCESS**
 - 7.1. ENSURE THAT ALL PERSONNEL USING THE SCAFFOLD ARE TRAINED IN ITS PROPER USE.
 - 7.2. PROVIDE SAFETY BRIEFINGS AND ENSURE THAT PERSONAL PROTECTIVE EQUIPMENT (PPE) IS USED.
8. **REGULAR INSPECTIONS**
 - 8.1. CONDUCT REGULAR INSPECTIONS DURING THE PROJECT TO ENSURE CONTINUED SAFETY AND COMPLIANCE.
 - 8.2. ADDRESS ANY ISSUES OR ADJUSTMENTS NEEDED PROMPTLY.

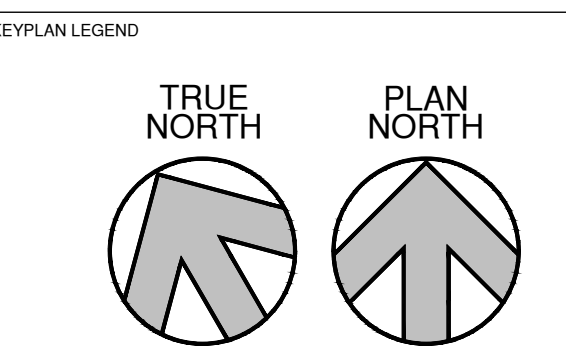
B1 CONTRACTOR STAGING AND ACCESS LOCATION(S) PLAN

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (SCALE: 1/32" = 1'-0")



B2 ROOF TOP STAGING PLAN

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (SCALE: 1/32" = 1'-0")



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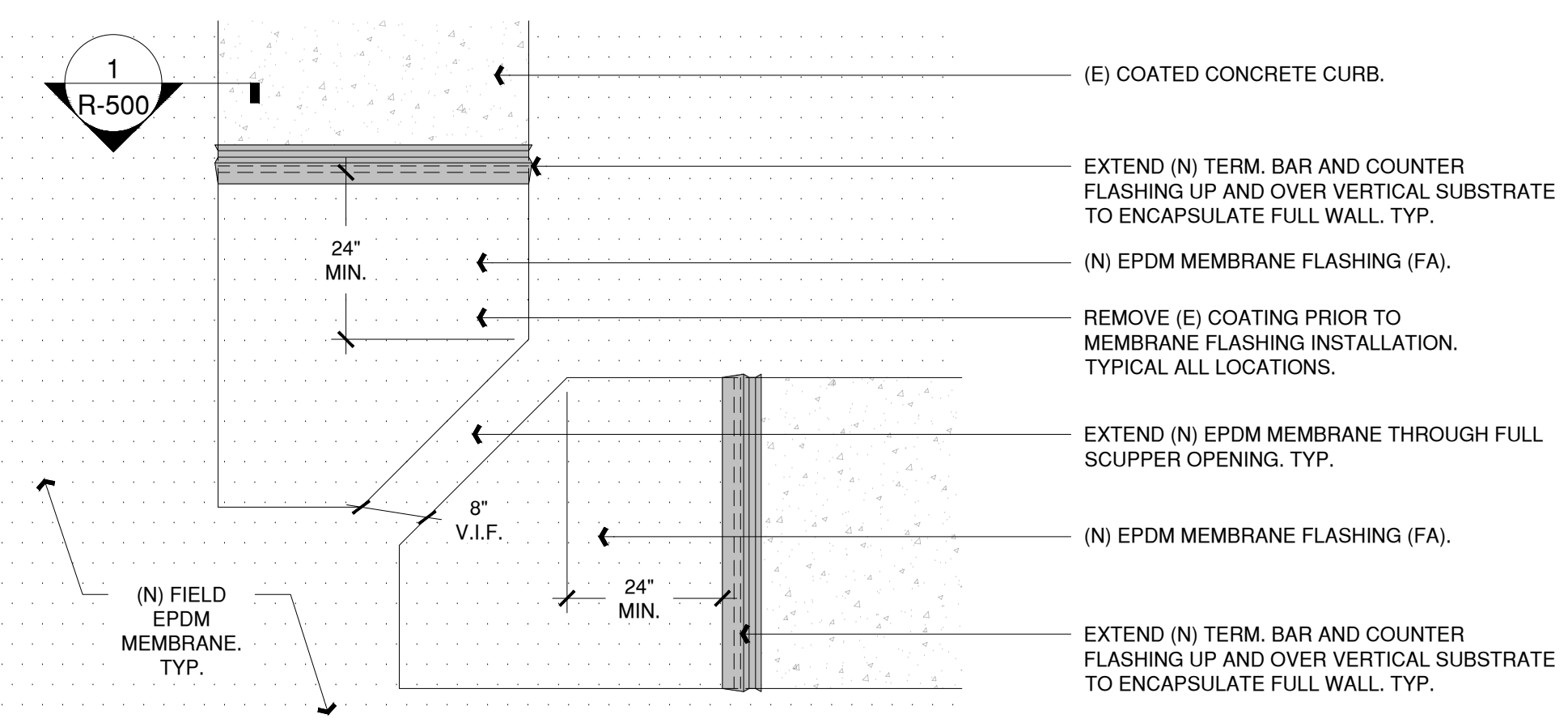
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Denver, Colorado 80222
(303) 738-0823 | www.amtechsls.com

SHEET TITLE
CONTRACTOR STAGING PLAN

SHEET NO.
R-201



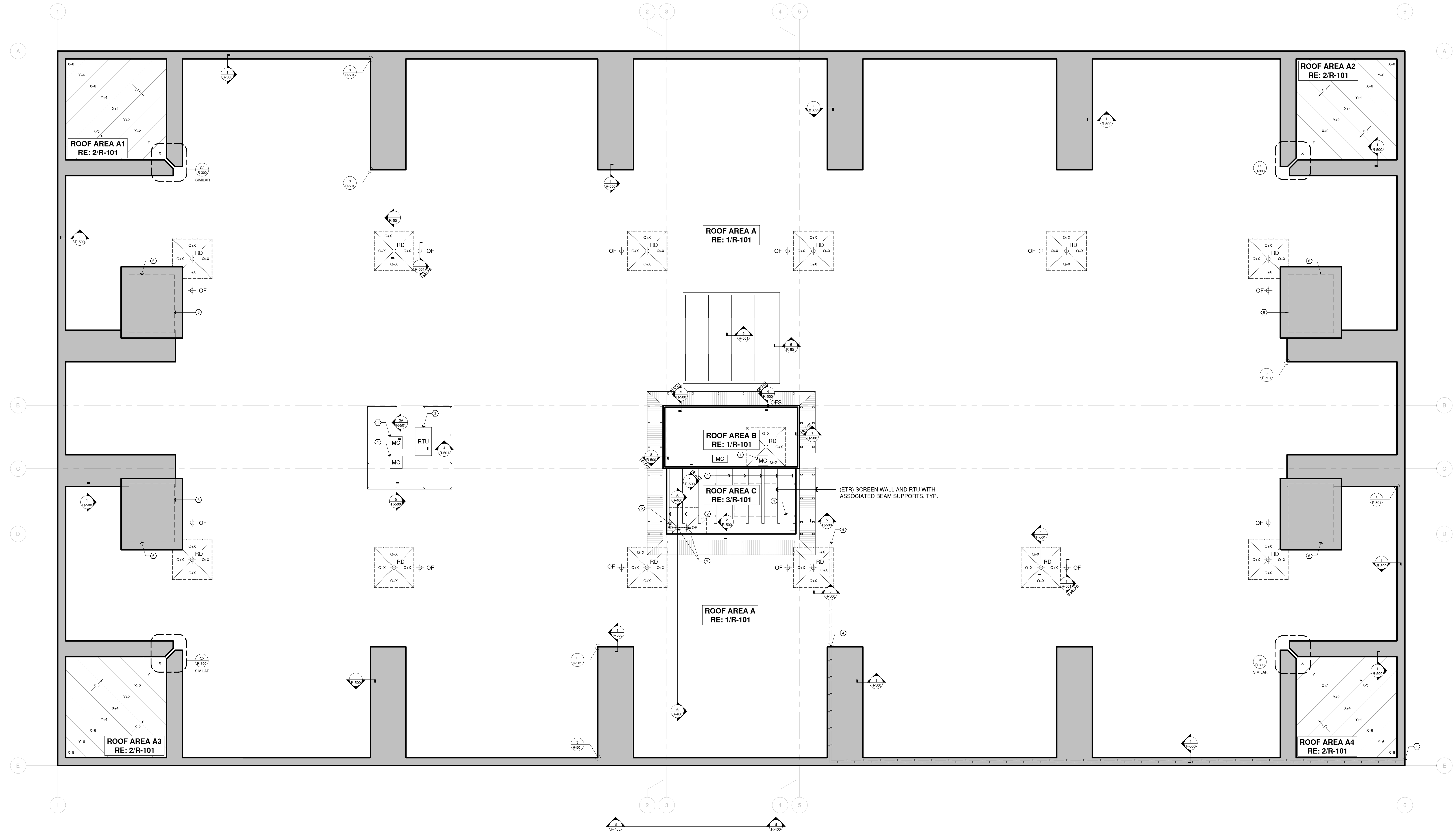
C2 RAISED CURB THRU-WALL CHANNEL FLASHING (TYPICAL)
NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)

KEYNOTES:

1. **EXISTING SHEET METAL CURB CAPS AND STEEL BEAMS:**
 - 1.1. CLEAN/GRIND METAL OF ALL CONTAMINATES TO BARE STEEL.
 - 1.2. TREAT AREAS OF STEEL FOUND TO HAVE SIGNS OF RUSTING WITH RUST INHIBITING COATING.
 - 1.3. INSTALL A NEW LIQUID REINFORCED FLASHING OVER ALL HORIZONTAL AND VERTICAL SURFACES OF THE EXISTING SHEET METAL AND STEEL BEAMS PER MANUFACTURER INSTALLATION REQUIREMENTS.
2. EXISTING PIT ROOF CURB SHEET METAL CAPS TO BE REMOVED WITH THE INSTALLATION OF NEW EPDM UP AND OVER, TO FULLY ENCAPSULATE ALL CURBS, TYPICAL.
3. EXISTING ROOF TOP UNIT TO BE RAISED AS NECESSARY TO MEET THE MINIMUM 8-INCH FLASHING REQUIREMENTS. EXTEND ALL DUCT WORK AND ELECTRICAL AS REQUIRED.
4. CONTRACTOR TO COORDINATE WITH OWNER REGARDING ALL WALL MOUNTED ELECTRICAL UNITS, CAMERAS, AND UNISTRUT SUPPORTS WHERE INTERFERENCE WITH ROOFING WORK MAY OCCUR. ELECTRICAL TO ONLY BE REMOVED AND REINSTALLED.
5. CONTRACTOR TO COORDINATE WITH OWNER REGARDING REMOVAL AND DISPOSAL OF THE EXISTING PIT ROOF SUMP PUMP.
6. CONTRACTOR TO ENSURE EXISTING TO REMAIN LOUVERS ARE NOT COVERED BY NEW ROOFING MATERIALS. TYPICAL.
7. EXISTING BALLASTED/FREESTANDING EQUIPMENT TO BE DISCONNECTED, STORED, AND REINSTALLED BY CONTRACTOR PER OWNER DIRECTION. COORDINATE WITH OWNER PRIOR TO ANY WORK AROUND UNIT.
8. CONTRACTOR TO COORDINATE WITH OWNER PRIOR TO ABANDONED CURB/PENETRATION REMOVAL. ALL ABANDONED CURBS MARKED FOR REMOVAL WILL NEED TO HAVE THE ROOF DECK OPENINGS PATCHED AND REPAIRED WITH NEW ROOFING INSTALLED OVER THESE LOCATIONS. OVERLAY DECK WITH NEW MINIMUM 3'X3' 16-GA. SHEET METAL FLAT STOCK FOR OPENINGS THAT ARE 2'X2' OR LESS. FASTEN NEW FLAT STOCK SHEET METAL AT 6-INCHES ON CENTER AT 3-INCHES FROM THE EDGE OF THE DECK OPENING. TYPICAL.
9. INSTALL NEW PRIMARY AND OVERFLOW ROOF DRAINS, SUMPS, AND ACCESSORIES. RE: PLUMBING AND DETAIL 1 ON R-501 FOR SIM. DRAINAGE FLASHING CONDITIONS. DESIGN INTENT IS TO INSTALL NEW DRAINS IN DIFFERENT CELL OF THE CONCRETE SLAB.

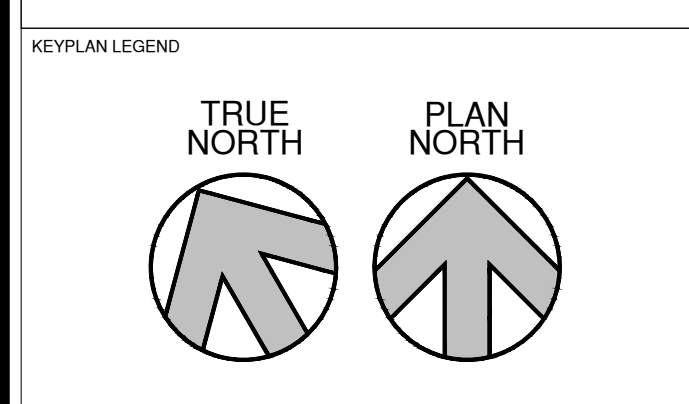
LEGEND

	SECTION AND DETAIL REFERENCE
	ROOFING KEY NOTE
	STRUCTURAL ROOF SLOPE
	1/2" TAPERED ROOF SLOPE
	RIIDGE LINE
	VALLEY LINE
	PRIMARY ROOF DRAIN
	OVERFLOW ROOF DRAIN
	THRU-WALL ROOF DRAIN
	THRU-WALL SCUPPER
	OVERFLOW SCUPPER
	ROOF HATCH
	WALL-TO-ROOF EXPANSION JOINT
	ROOF-TO-ROOF EXPANSION JOINT
	CONTROL JOINT
	EXISTING GAS LINE
	EXISTING CONDUIT LINE
	EXISTING LIGHTNING PROTECTION
	HOT STACK PENETRATION
	VENT PIPE PENETRATION
	SOIL PIPE PENETRATION
	DAVIT ARM PENETRATION
	TIE-BACK ANCHOR PENETRATION
	ELECTRICAL LINE PENETRATION
	GAS LINE PENETRATION
	PIPE PENETRATION
	ROOF TOP UNIT
	EXHAUST HOOD
	EXHAUST FAN
	MECHANICAL EQUIPMENT CURB
	FREE STANDING MECHANICAL EQUIPMENT
	ABANDONED EQUIPMENT CURB TO BE REMOVED AT OWNER'S DIRECTION
	NEW 1/2" TAPERED CURBETS WITH 1/2" TAPERED EDGE STRIP
	NEW 1/2" TAPERED CURBETS WITH 1/2" TAPERED EDGE STRIP
	NEW WALKWAY PAD
	SKYLIGHT
	SPLASH BLOCK
	ROOF AREA ELEVATION OFFSET
	ELEVATION TAG



C1 ROOF PLAN
NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)

1. CONTRACTOR TO REMOVE ONLY AS MUCH ROOFING PER DAY AS THEY ARE ABLE TO MAKE WATERTIGHT AND SECURE AT THE END OF THEIR WORK DAY. ANY DAMAGE CAUSED BY WEATHER OR OTHER ELEMENTS AS A RESULT OF UNFINISHED ROOFING WILL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL REPLACE/REPAIR ALL INTERIOR AND EXTERIOR DAMAGE, RESULTING FROM UNFINISHED/UNPROTECTED ROOF CONSTRUCTION AT THEIR OWN EXPENSE.
2. ALL CONDITIONS OR PENETRATIONS MAY NOT BE SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING CONDITIONS AND MEASUREMENTS.
3. DETAIL CALL OUTS AND KEY NOTES MAY ONLY BE REFERENCED ONCE ON THE DRAWINGS. ONCE A PARTICULAR CALL OUT OR KEY NOTE HAS BEEN REFERENCED OR INDICATED BY LEGEND, IT MAY NOT BE REFERENCED AGAIN ON THE DRAWINGS, BUT ITS USE SHALL BE TYPICAL.
4. ROOF TAPER PLANS ARE PRELIMINARY. ROOFING CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND COORDINATE WITH ROOF MEMBRANE MANUFACTURER AND/ OR SUPPLIER FOR FINAL DRAINAGE TAPER PLANS TO BE REVIEWED AND APPROVED BY AMTECH PRIOR TO CONSTRUCTION.
5. GRID LINES ARE FOR REFERENCE ONLY.



CLIENT
UNIVERSITY OF NORTHERN COLORADO
501 WEST 20TH STREET
GREELEY, CO 80639

PROJECT
JAMES A. MICHENER LIBRARY
ROOFING PROJECT
1400 22ND STREET
GREELEY, CO 80631

PROJECT NO.	DEN.2023.001048
DATE	09/2024
DRAWN BY	DJD
CHECKED BY	RKP & SAP
DATE	REVISION

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SHEET TITLE
ROOF PLAN

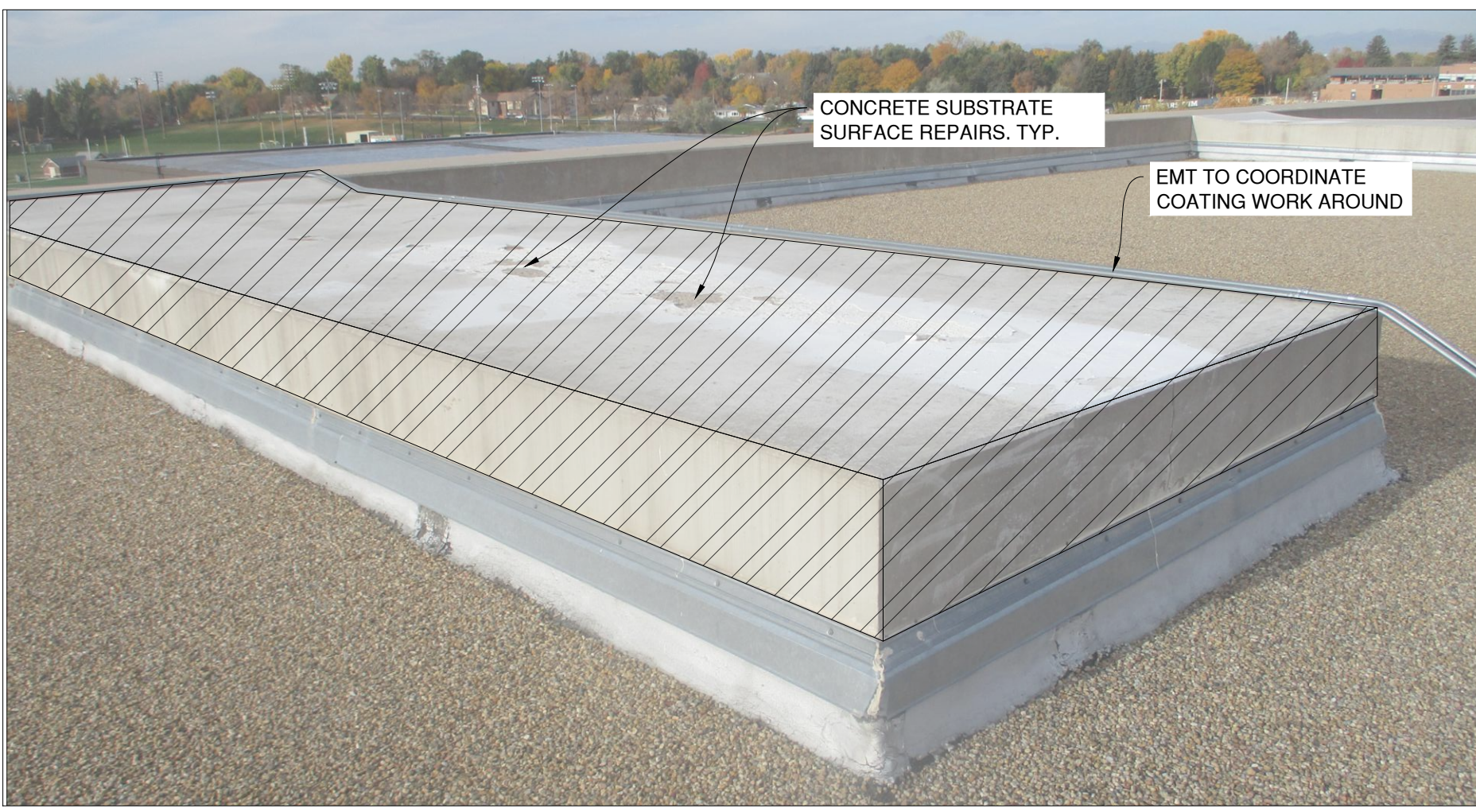
SHEET NO.
R-300

CONCRETE COATING KEYNOTES:

1. AT RAISED CURB THRU-WALL CHANNEL FLASHING, TERMINATE COATING AT TERMINATION BAR THAT WILL EXTEND UP AND OVER THE VERTICAL SUBSTRATE OF THE WALL TO ENCAPSULATE FULL WALL. TYPICAL ALL LOCATIONS. RE: C2/R-300.
2. COORDINATE TEMPORARY REMOVAL, STORAGE, AND REINSTALLATION OF THE ELECTRICAL CONDUITS WITH UNC TO COMPLETE CONCRETE COATING WORK. TYPICAL ALL LOCATIONS.
3. NEW COATING TO BE APPLIED AFTER THE EPDM TERMINATION BAR, COUNTER FLASHING, AND SEALANT HAS BEEN INSTALLED TO PROVIDE DETAILING THAT PROMOTES DRAINAGE ONT THE ROOF. TYPICAL AT ALL LOCATIONS.

LEGEND:

- (E) CONCRETE COATING AREAS (INCLUDING INTERIOR VERTICAL WALL FACES TO TOP OF (E) ROOF TERMINATION - NOT SHOWN) TO REMOVE COATING AND APPLY SILICONE COATING SYSTEM (ADDITIVE ALTERNATE #2).
- (N) SILICONE COATING APPLIED AT EXPOSED CONCRETE PARAPET WALLS THAT ARE NOT CURRENTLY COATED (INCLUDING INTERIOR VERTICAL WALL FACES TO NEW ROOF TERMINATION - NOT SHOWN) (ADDITIVE ALTERNATE #3).



D COATED CONCRETE CURB - TYPICAL
NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



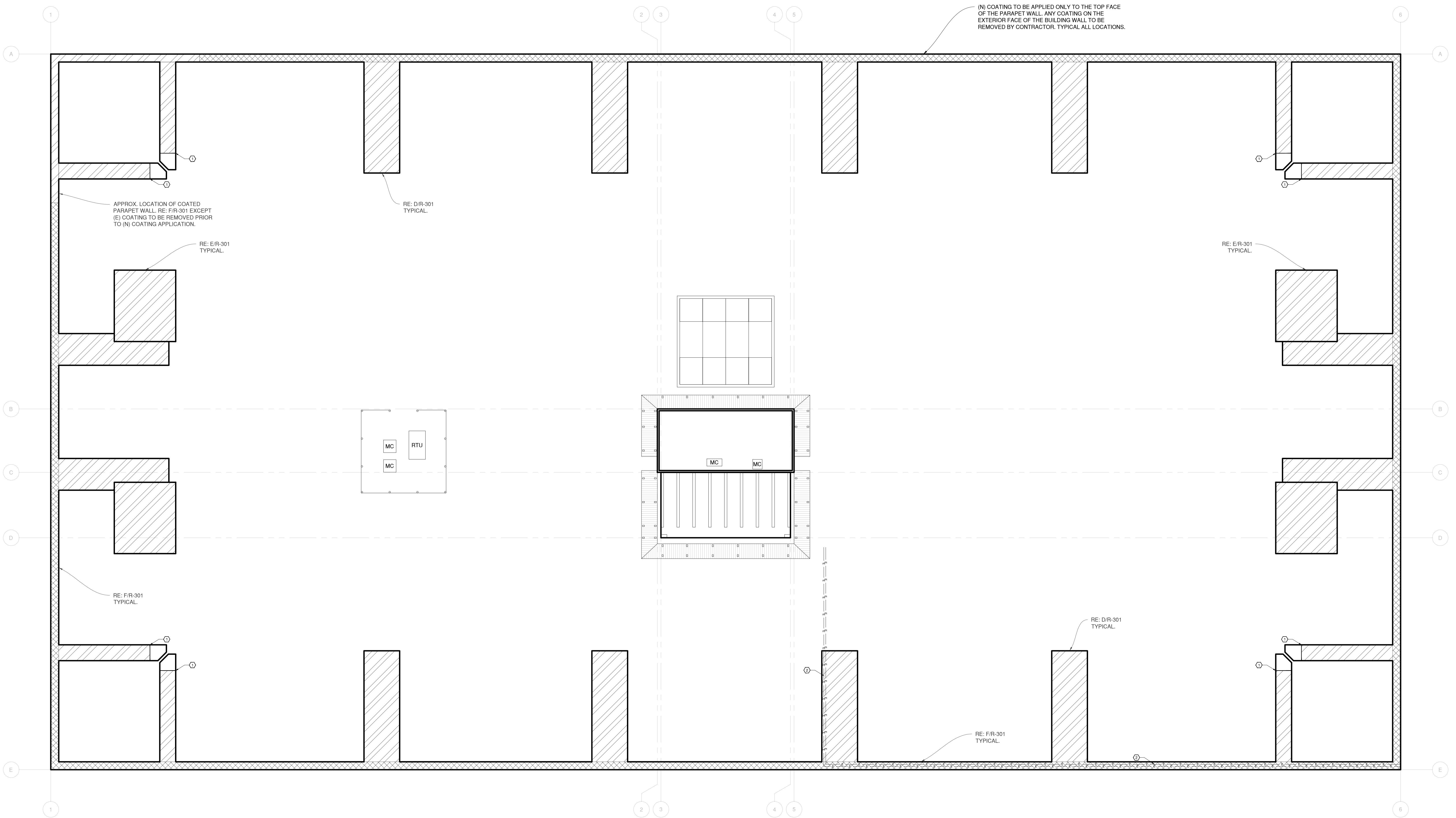
E COATED CONCRETE LOUVER VENT CAP & CURB - TYPICAL
NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



F UNCOATED PARAPET WALL - TYPICAL
NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)

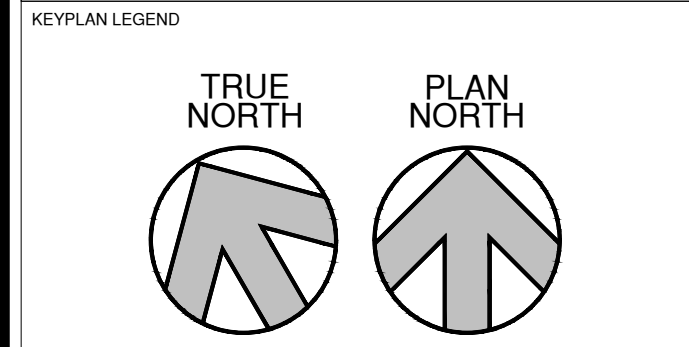
LEGEND

	SECTION AND DETAIL REFERENCE
	ROOFING KEY NOTE
	STRUCTURAL ROOF SLOPE
	1/2" TAPERED ROOF SLOPE
	RIDGE LINE
	VALLEY LINE
	PRIMARY ROOF DRAIN
	OVERFLOW ROOF DRAIN
	THRU-WALL ROOF DRAIN
	THRU-WALL SCUPPER
	OVERFLOW SCUPPER
	ROOF HATCH
	WALL-TO-ROOF EXPANSION JOINT
	ROOF-TO-ROOF EXPANSION JOINT
	CONTROL JOINT
	EXISTING GAS LINE
	EXISTING CONDUIT LINE
	EXISTING LIGHTNING PROTECTION
	HOT STACK PENETRATION
	VENT PIPE PENETRATION
	SOIL PIPE PENETRATION
	DAVIT ARM PENETRATION
	TIE-BACK ANCHOR PENETRATION
	ELECTRICAL LINE PENETRATION
	GAS LINE PENETRATION
	PIPE PENETRATION
	ROOF TOP UNIT
	EXHAUST HOOD
	EXHAUST FAN
	MECHANICAL EQUIPMENT CURB
	FREE STANDING MECHANICAL EQUIPMENT
	ABANDONED EQUIPMENT CURB TO BE REMOVED AT OWNERS DIRECTION
	NEW 1/2" TAPERED CONCRETE WITH 1/2" TAPERED EDGE STRIP
	NEW 1/2" TAPERED CONCRETE WITH 1/2" TAPERED EDGE STRIP
	NEW WALKWAY PAD
	SKYLIGHT
	SPLASH BLOCK
	ROOF AREA ELEVATION OFFSET
	ELEVATION TAG



C3 ROOF PLAN - CONCRETE COATING NOTES
NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)

1. CONTRACTOR TO ENSURE ALL WORK AREAS ARE WATERTIGHT AND SECURE AT THE END OF THEIR WORK DAY. ANY DAMAGE CAUSED BY WEATHER OR OTHER ELEMENTS AS A RESULT OF UNFINISHED WORK WILL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL REPLACE/REPAIR ALL INTERIOR AND EXTERIOR DAMAGE, RESULTING FROM UNFINISHED/UNPROTECTED ROOF CONSTRUCTION AT THEIR OWN EXPENSE.
2. ALL CONDITIONS OR PENETRATIONS MAY NOT BE SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING CONDITIONS AND MEASUREMENTS.
3. DETAIL CALL OUTS AND KEY NOTES MAY ONLY BE REFERENCED ONCE ON THE DRAWINGS. ONCE A PARTICULAR CALL OUT OR KEY NOTE HAS BEEN REFERENCED OR INDICATED BY LEGEND, IT MAY NOT BE REFERENCED AGAIN ON THE DRAWINGS, BUT ITS USE SHALL BE TYPICAL.
4. GRID LINES ARE FOR REFERENCE ONLY.



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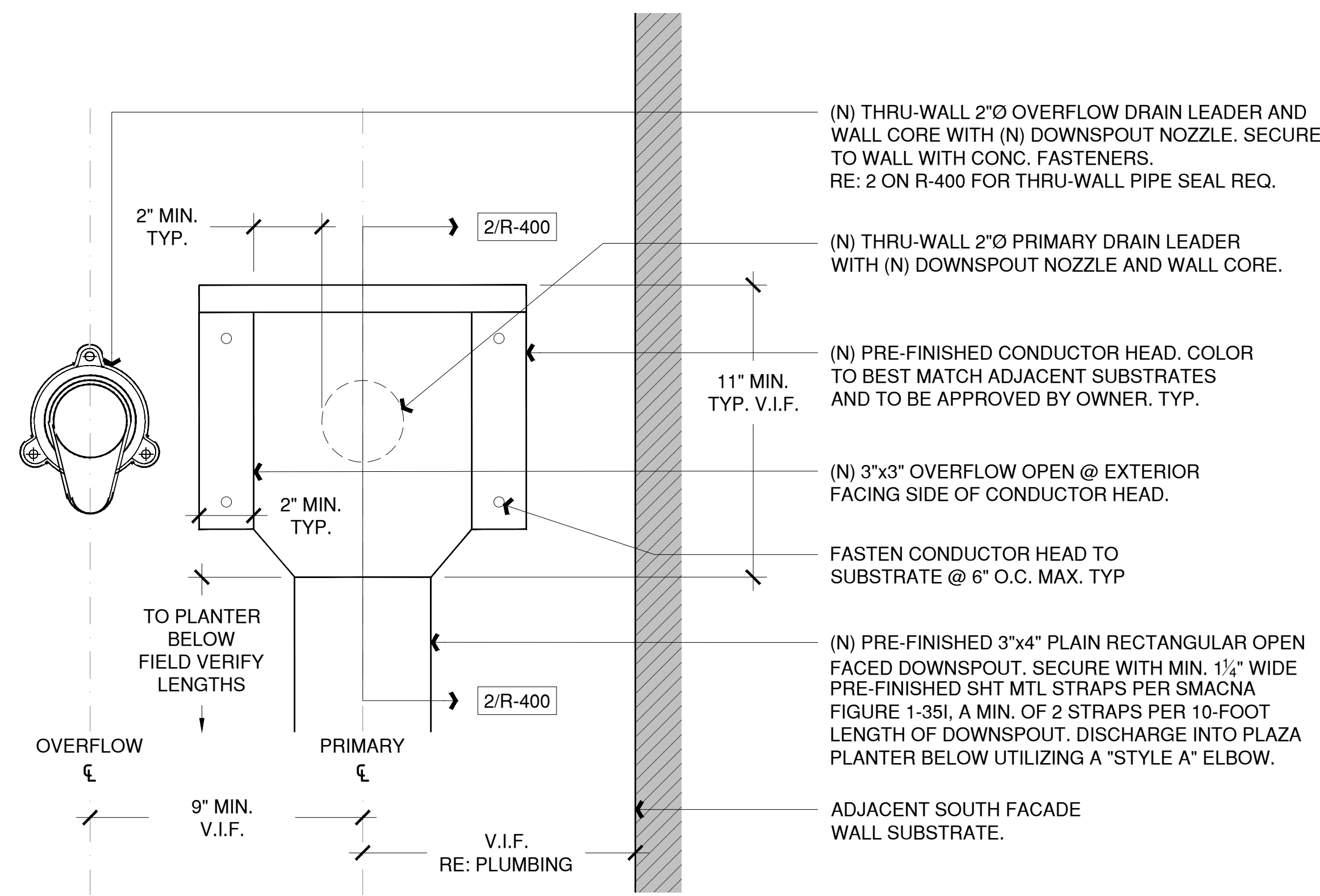
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SHEET TITLE
ROOF PLAN - CONCRETE COATING ALTERNATES #2 & #3

SHEET NO.
R-301

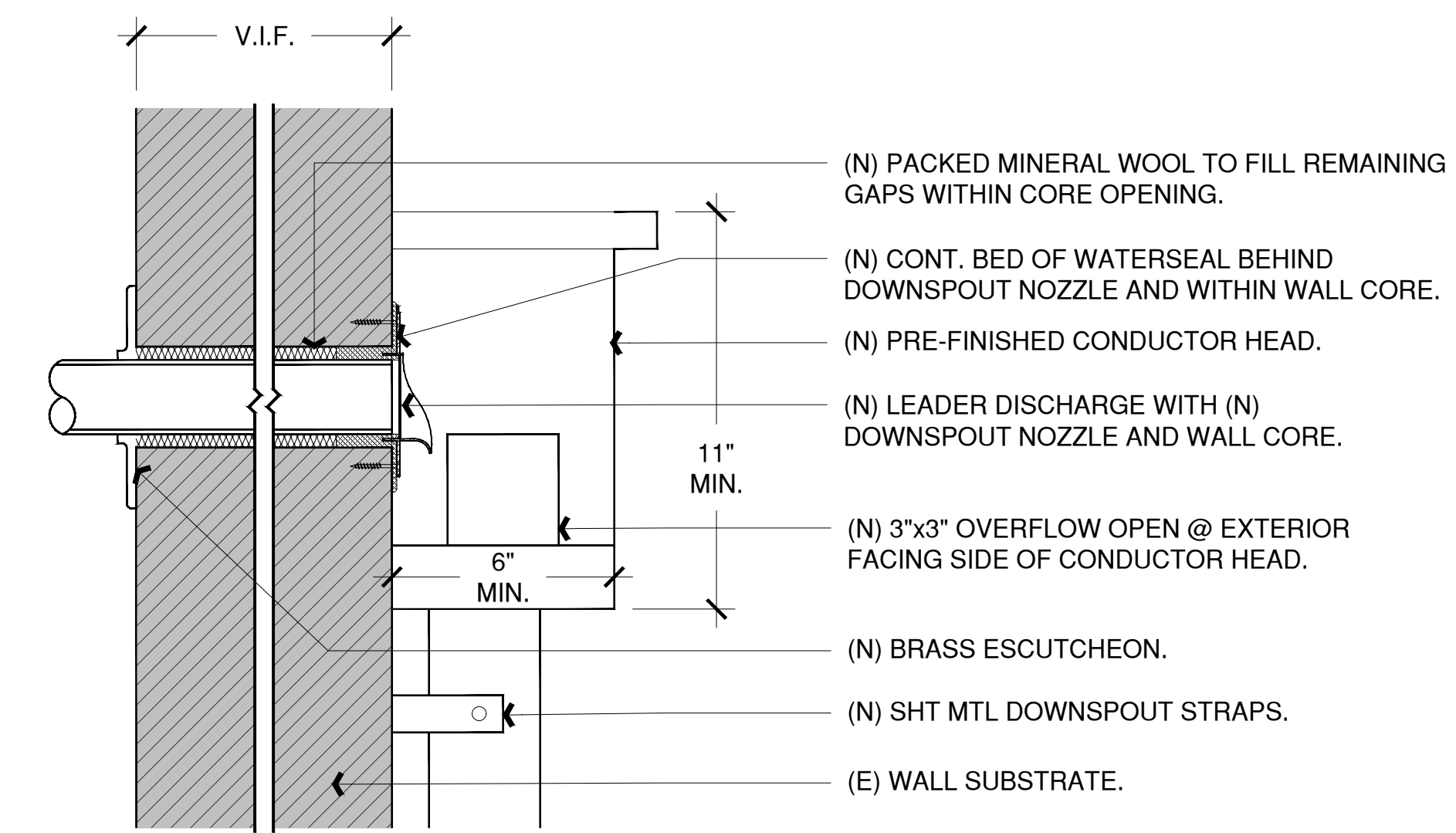
NOTES:

- CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF ACCESS FOR PLUMBING MODIFICATIONS AT INTERIOR AREAS AND PROTECTION OF OWNER'S ASSETS (E.G. LIBRARY STACKS). ALL INTERIOR FINISHES TO BE RETURNED TO PRE-CONSTRUCTION CONDITION AS APPROVED BY UNC.
- CONTRACTOR TO TAKE EXTREME CARE TO PROTECT ADJACENT CONSTRUCTION AND SYSTEMS (E.G. STRUCTURAL CONCRETE, GLAZING, MEP, FIRE AND LIFE SAFETY) DURING PLUMBING MODIFICATIONS AND INSTALLATION. ANY DAMAGE TO ADJACENT CONSTRUCTION SYSTEMS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CORRECT AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING ALL INTERIOR FINISHES AT THE PLUMBING PIPE PENETRATIONS OF INTERIOR WALLS AND PLENUM SPACES INCLUDING BUT NOT LIMITED TO GYPSUM/PLASTER AND PAINT REPAIRS ONCE PLUMBING MODIFICATIONS HAVE BEEN COMPLETED..
- REFER TO PROJECT SPECIFICATIONS FOR CONDUCTOR HEAD AND DOWNSPOUT MATERIALS AND INSTALLATION REQUIREMENTS.
- NEW EXTERIOR WALL MOUNTED CONDUCTOR HEAD AND OPEN FACE DOWNSPOUTS TO BEST MATCH EXISTING ADJACENT METAL OR SUBSTRATE COLORS. ALL COLORS TO BE SELECTED AND APPROVED BY OWNER.
- INSTALL NEW SPLASH BLOCKS PER SPECIFICATION REQUIREMENTS AT EXTERIOR DOWNSPOUT DISCHARGE LOCATIONS.
- CONCRETE PENETRATION REQUIREMENTS:
 - LOCATE & AVOID ALL IMBEDDED CONCRETE STEEL REINFORCEMENT OR STRUCTURAL MEMBERS PRIOR TO ANY CUTTING OR CORING. NO FLOOR, WALL, OR FOUNDATION/GRADE BEAM PENETRATIONS MAY BE INSTALLED WITHOUT PRIOR REVIEW AND APPROVAL OF THE ENGINEER.
 - PROVIDE THE LOCATIONS OF THE PROPOSED PENETRATIONS TO THE ENGINEER TO REVIEW AND ASSESS WHETHER FURTHER STRUCTURAL EVALUATION IS REQUIRED.
 - PRIOR TO PENETRATING A FLOOR OR WALL, SCAN THE EXISTING STRUCTURE WITH A PACOMETER, GROUND PENETRATING RADAR (GPR) OR OTHER SUITABLE METHOD TO LOCATE EXISTING IMBEDDED CONCRETE STEEL REINFORCEMENT IN THE VICINITY OF THE PROPOSED OPENING. IDENTIFY THE PROPOSED LOCATION OF THE PENETRATION TO DETERMINE IF THE PROPOSED LOCATION IS ACCEPTABLE OR IF THE PENETRATION WILL NEED TO BE SHIFTED TO CLEAR CRITICAL REINFORCING OR STRUCTURAL MEMBERS.
 - THE CUTTING OF ANY EXISTING REINFORCEMENT IS NOT ACCEPTABLE WITHOUT REVIEW AND APPROVAL BY A STRUCTURAL ENGINEER. INDISCRIMINATELY CUTTING THROUGH REINFORCING TO INSTALL PENETRATIONS WITHOUT PRIOR STRUCTURAL CONSIDERATION IS NOT ACCEPTABLE AS IT COULD CAUSE STRUCTURAL FAILURE OF THE FLOOR, ROOF OR WALL.
- VERIFY NEW ROOF DRAINS AND DRAIN PIPING ARE CLEAR OF DEBRIS, OPEN AND FUNCTIONAL, THAT PIPING IS PROPERLY CONNECTED AND SEALED TO DRAIN BOWLS AND ALL DRAIN COMPONENTS ARE IN SERVICEABLE CONDITION.
- ALL NEW ROOF DRAINS ARE TO BE WATER TESTED FOR POTENTIAL LEAKS/BLOCKAGES AFTER INSTALLATION. ALL FINDINGS SHALL BE DOCUMENTED AND REPORTED TO THE OWNER AND OWNER'S CONSULTANT. ANY LEAKS/BLOCKAGES WILL FALL UNDER THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND/OR REPLACE ANY PARTS AS NECESSARY AT NO EXPENSE TO THE OWNER. RE: PLUMBING.



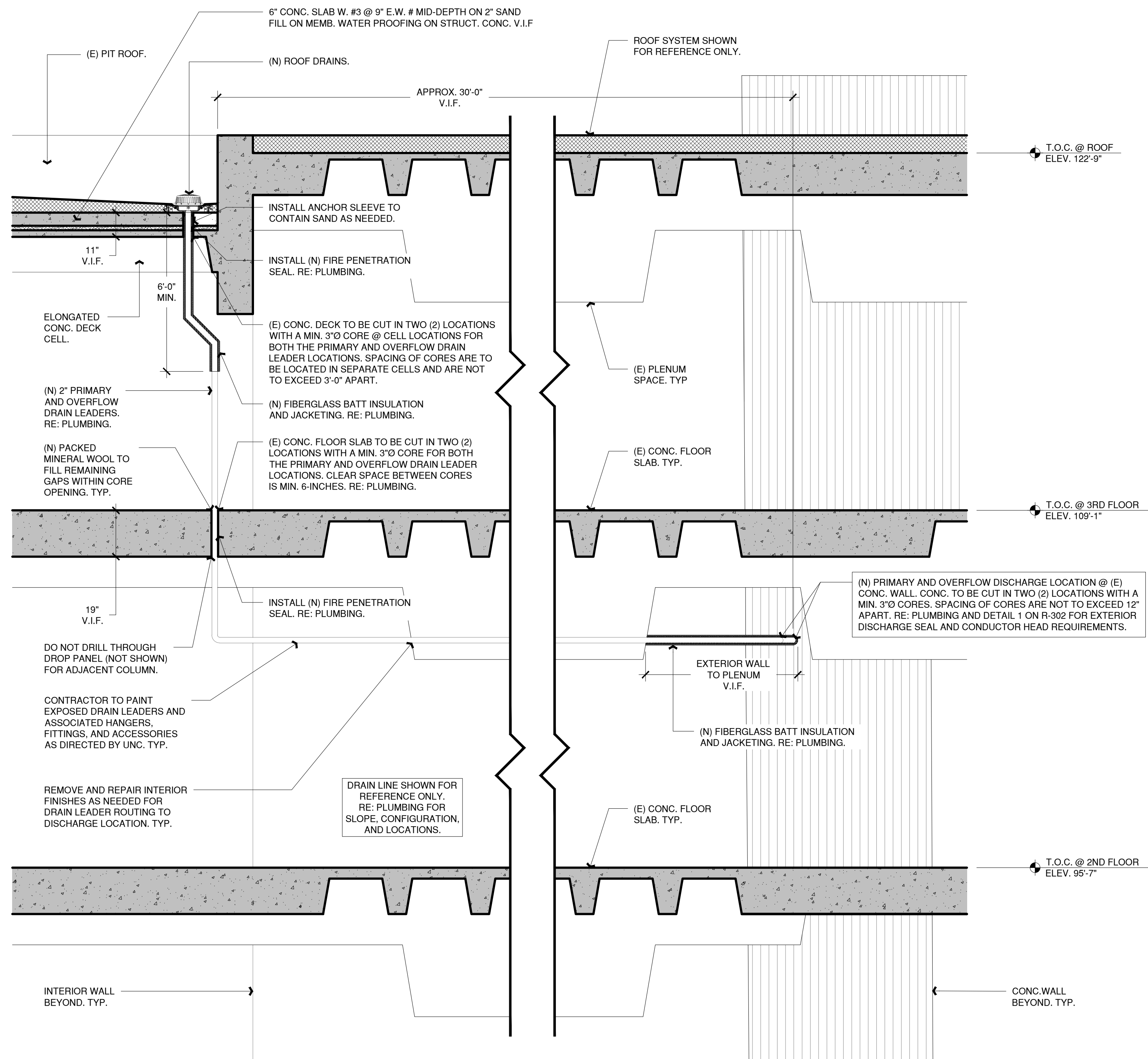
1 EXTERIOR WALL MOUNTED CONDUCTOR HEAD AND LAMBS TONGUE @ NEW PIT DRAIN DISCHARGE LOCATION

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



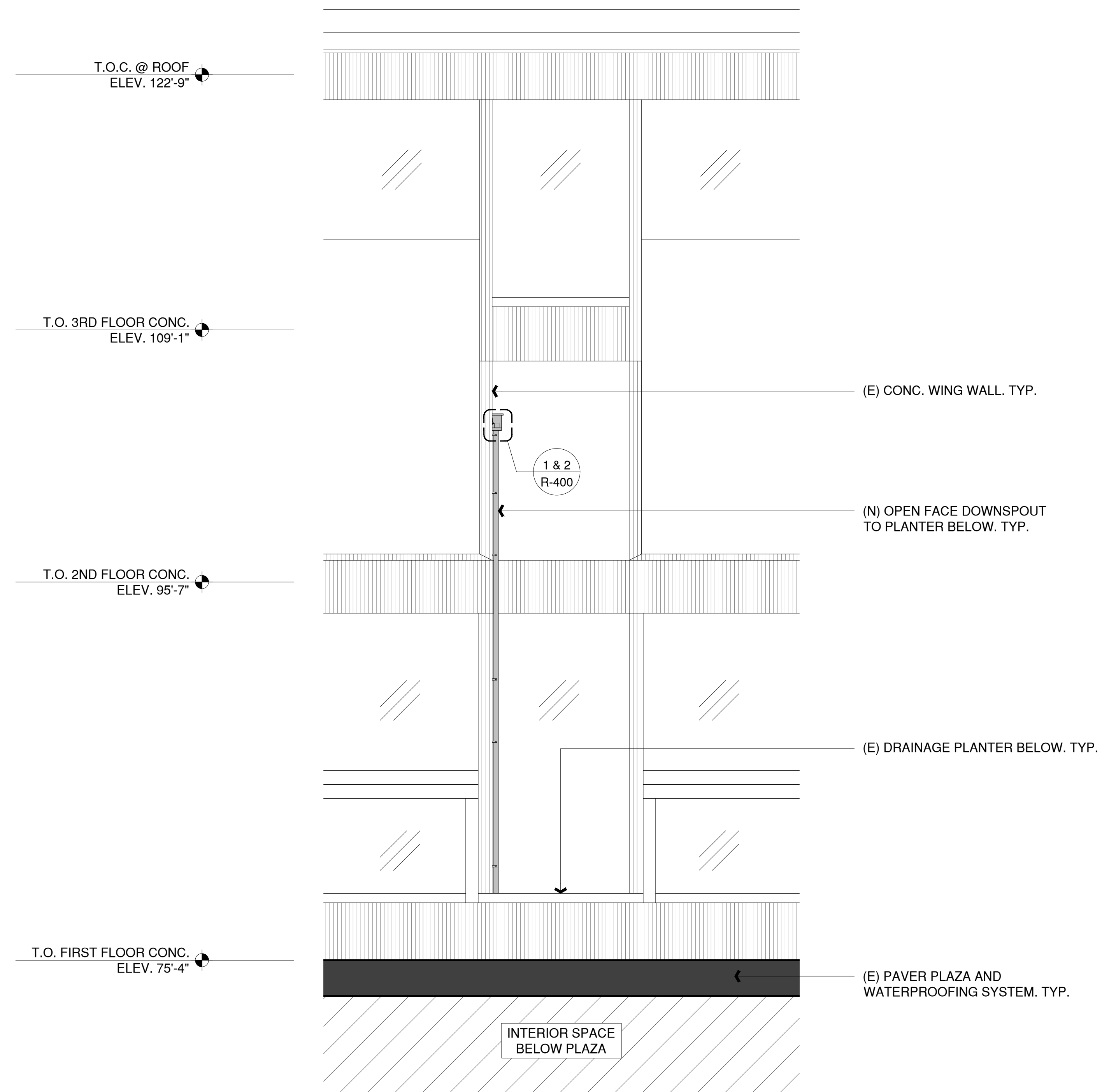
2 CONDUCTOR HEAD @ NEW PRIMARY PIT DRAIN DISCHARGE LOCATION

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



A PARTIAL BUILDING SECTION @ ROOF PIT, 3RD FLOOR, AND 2ND FLOOR

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



B PARTIAL SOUTH ELEVATION @ NEW DOWNSPOUT NOZZLE, OVERFLOW, AND DOWNSPOUT LOCATION

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)

ISSUED FOR:
100% CONSTRUCTION DOCUMENTS

LEGEND

- SECTION AND DETAIL REFERENCE
- ROOFING DETAIL NUMBER
- ROOFING PAGE NUMBER
- NOT IN CONTRACT
- ROOFING KEY NOTE
- STRUCTURAL ROOF SLOPE
- 1/2" TAPERED ROOF SLOPE
- RIDGE LINE
- VALLEY LINE
- PRIMARY ROOF DRAIN
- OVERFLOW ROOF DRAIN
- THRU-WALL ROOF DRAIN
- THRU-WALL SCUPPER
- OVERFLOW SCUPPER
- ROOF HATCH
- WALL TO ROOF EXPANSION JOINT
- ROOF TO ROOF EXPANSION JOINT
- CONTROL JOINT
- EXISTING GAS LINE
- EXISTING CONDUIT LINE
- EXISTING LIGHTNING PROTECTION
- SHS HOT STACK PENETRATION
- SVP VENT PIPE PENETRATION
- SQP SOIL PIPE PENETRATION
- DAV DAVIT ARM PENETRATION
- GTA TIE-BACK ANCHOR PENETRATION
- GEP ELECTRICAL LINE PENETRATION
- GSP GAS LINE PENETRATION
- GPP PIPE PENETRATION
- RTU ROOF TOP UNIT
- EH EXHAUST HOOD
- EF EXHAUST FAN
- MEC MECHANICAL EQUIPMENT CURB
- ACCU FREE STANDING MECHANICAL EQUIPMENT
- AB ABANDONED EQUIPMENT CURBS TO BE REMOVED AT OWNER'S DIRECTION
- NEW 1/2" TAPERED CONCRETES WITH 1/2" TAPERED EDGE STRIP
- NEW WALKWAY PAD
- SKL SKYLIGHT
- SB SPLASH BLOCK
- RA ROOF AREA ELEVATION OFFSET
- ELEVATION TAG

UNIVERSITY OF NORTHERN COLORADO

TRUE NORTH PLAN NORTH

CLIENT: UNIVERSITY OF NORTHERN COLORADO
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GREELEY, CO 80639

PROJECT: JAMES A. MICHENER LIBRARY ROOFING PROJECT
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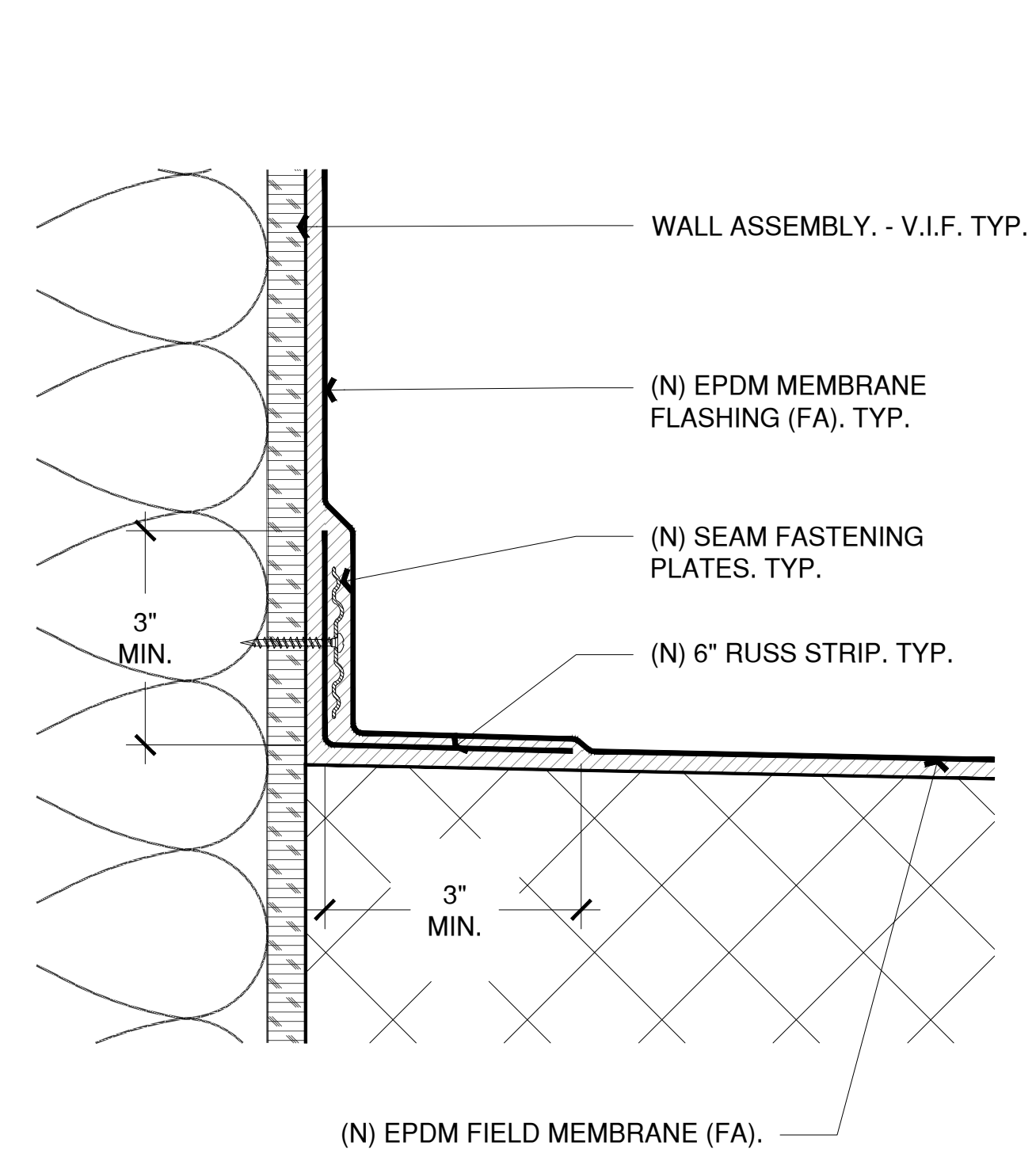
PROJECT NO: DEN.2023.001048
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CHECKED BY: RKP & SAP

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SHEET TITLE: PARTIAL SECTIONS

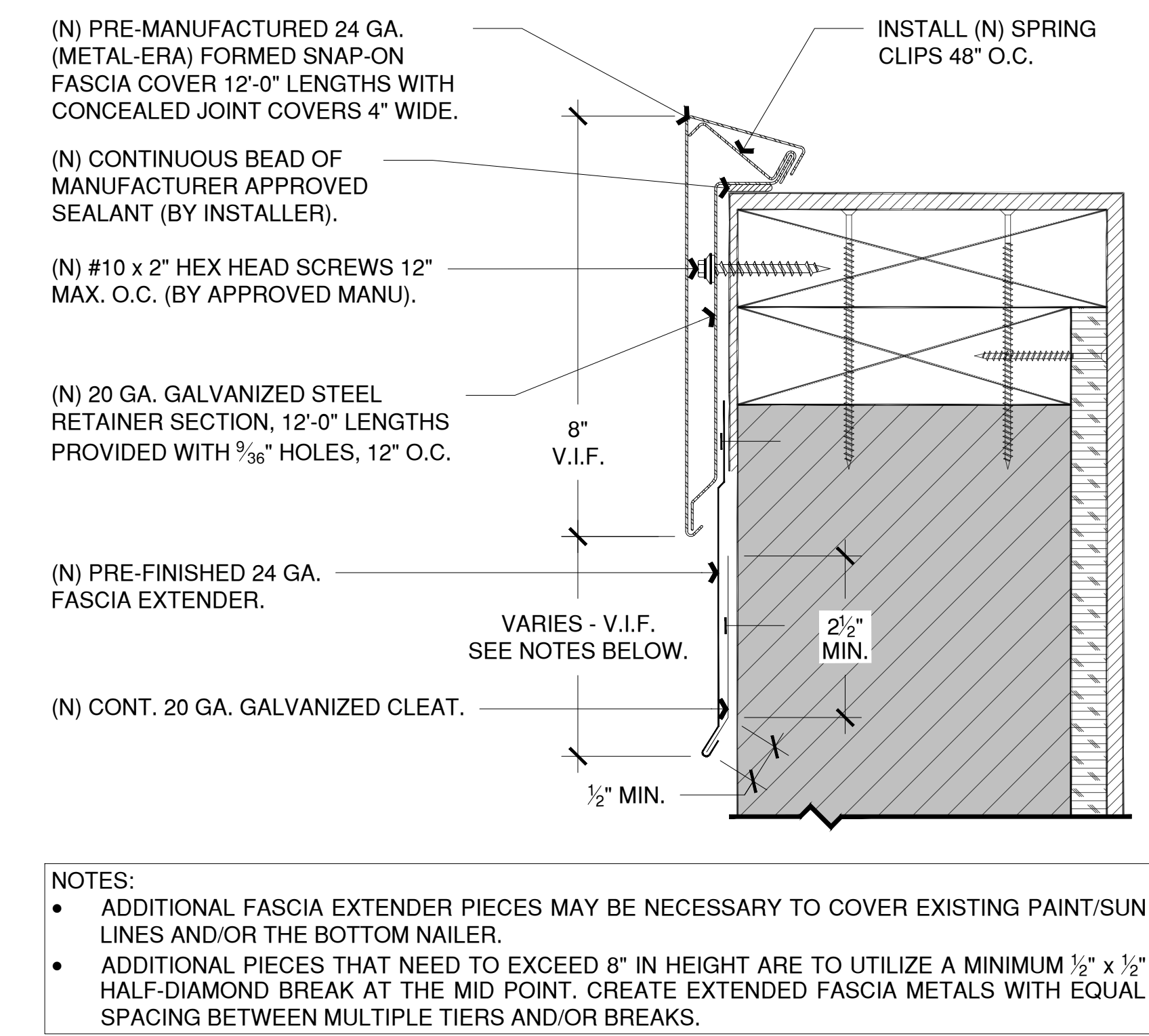
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LEGEND



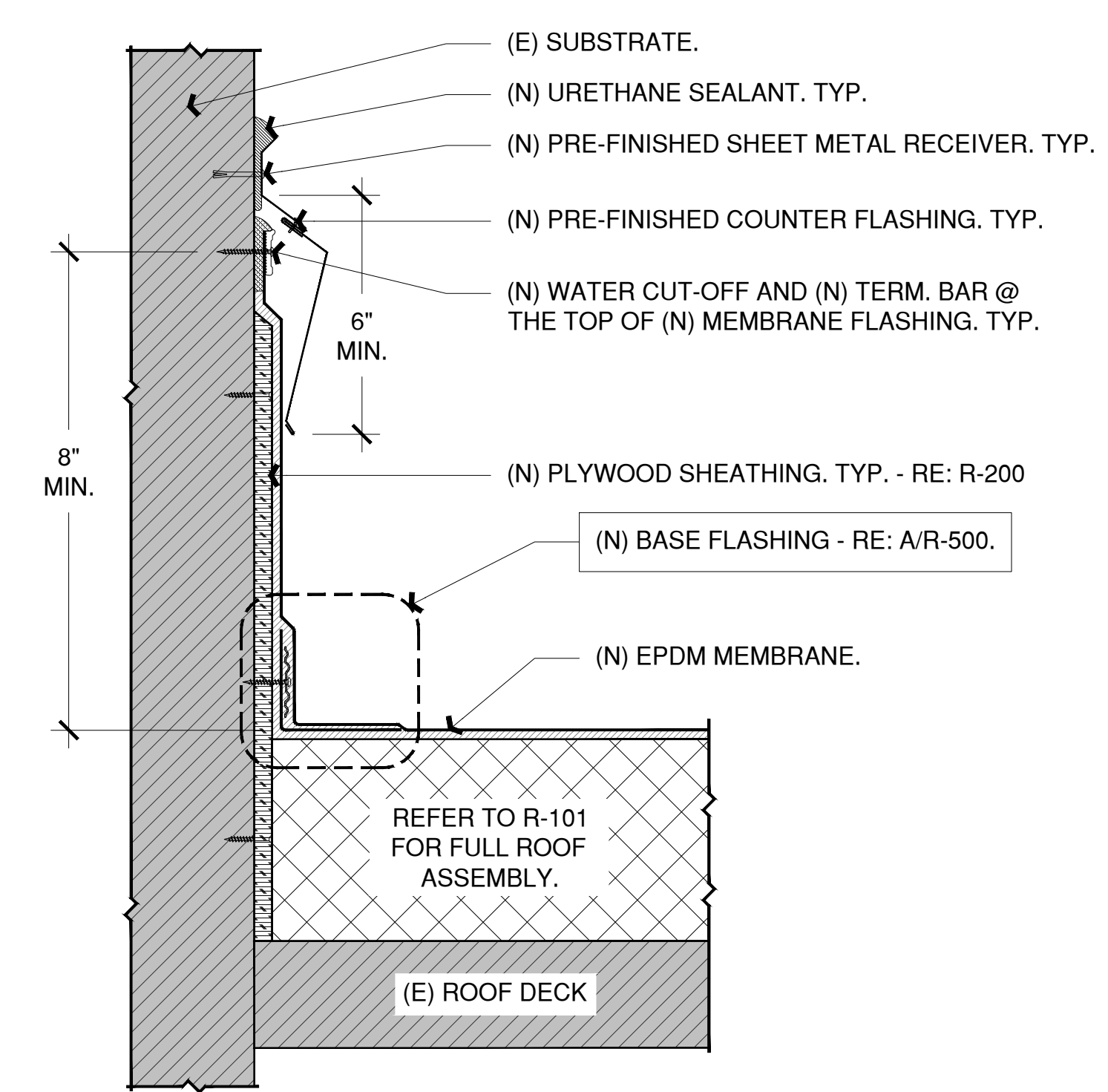
A EPDM BASE FLASHING (TYPICAL)

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



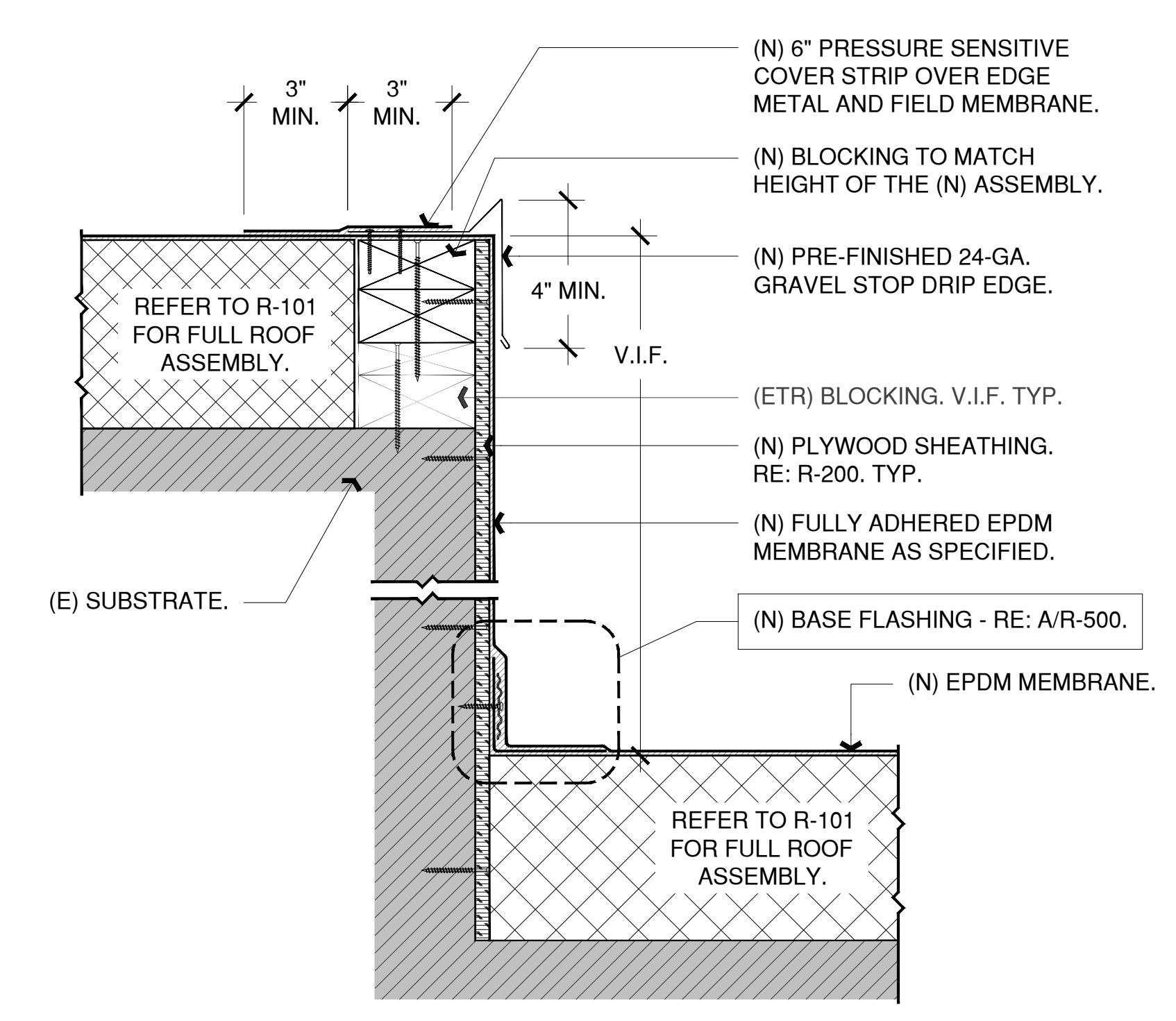
B PERIMETER METAL ASSEMBLY (TYPICAL)

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



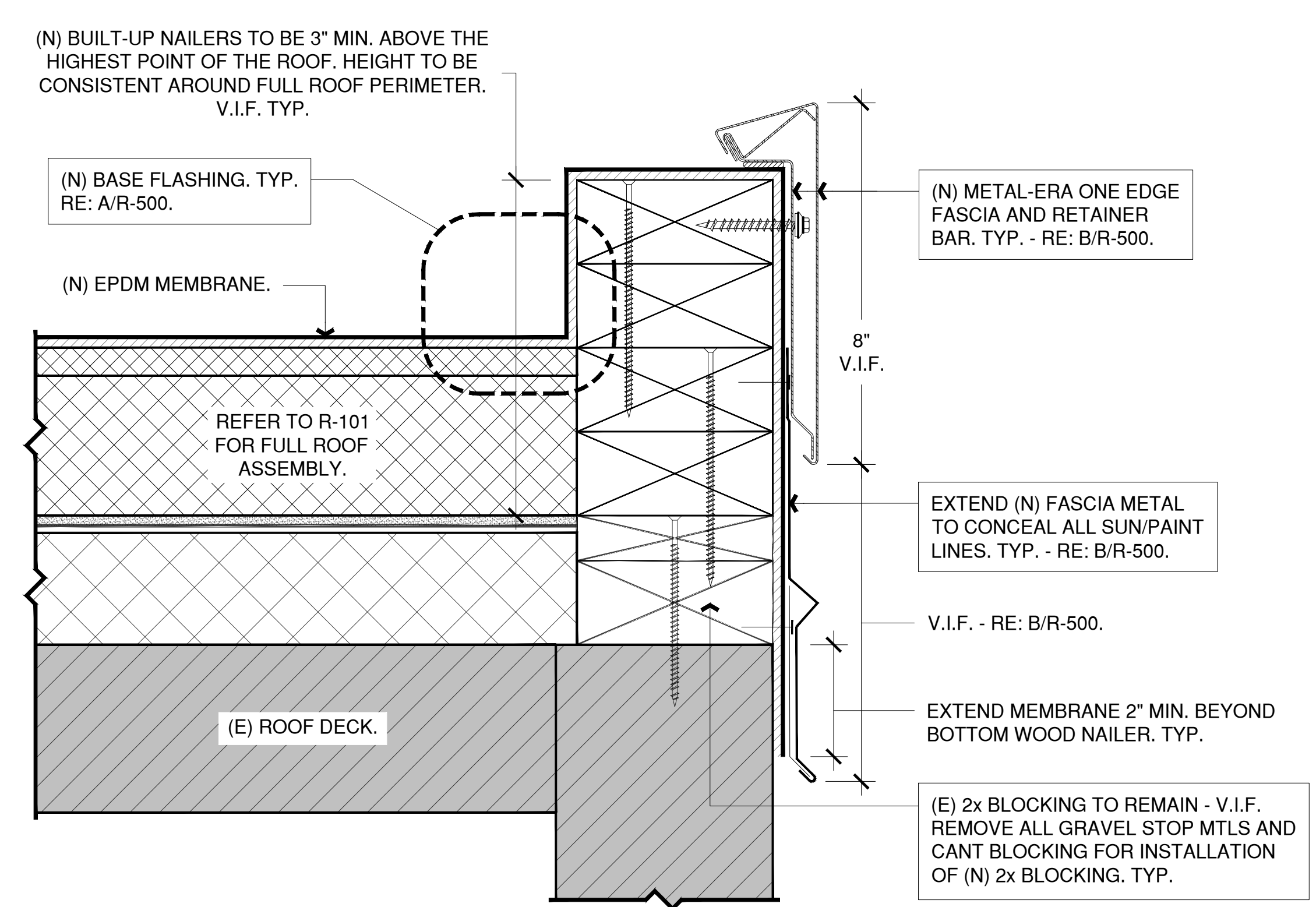
1 SURFACE MOUNTED COUNTER FLASHING (TYPICAL)

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



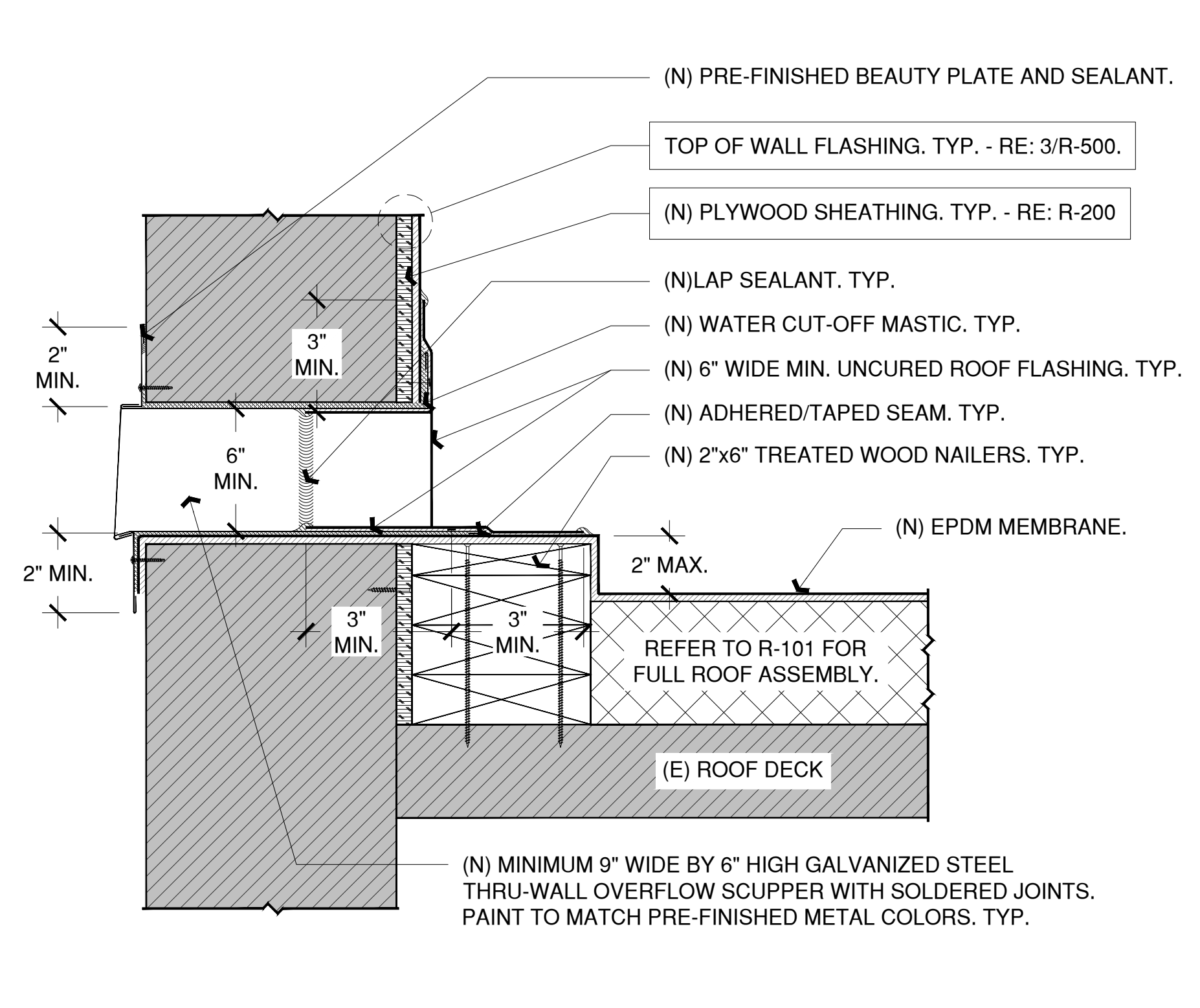
2 ROOF-TO-ROOF CURB FLASHING (TYPICAL)

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



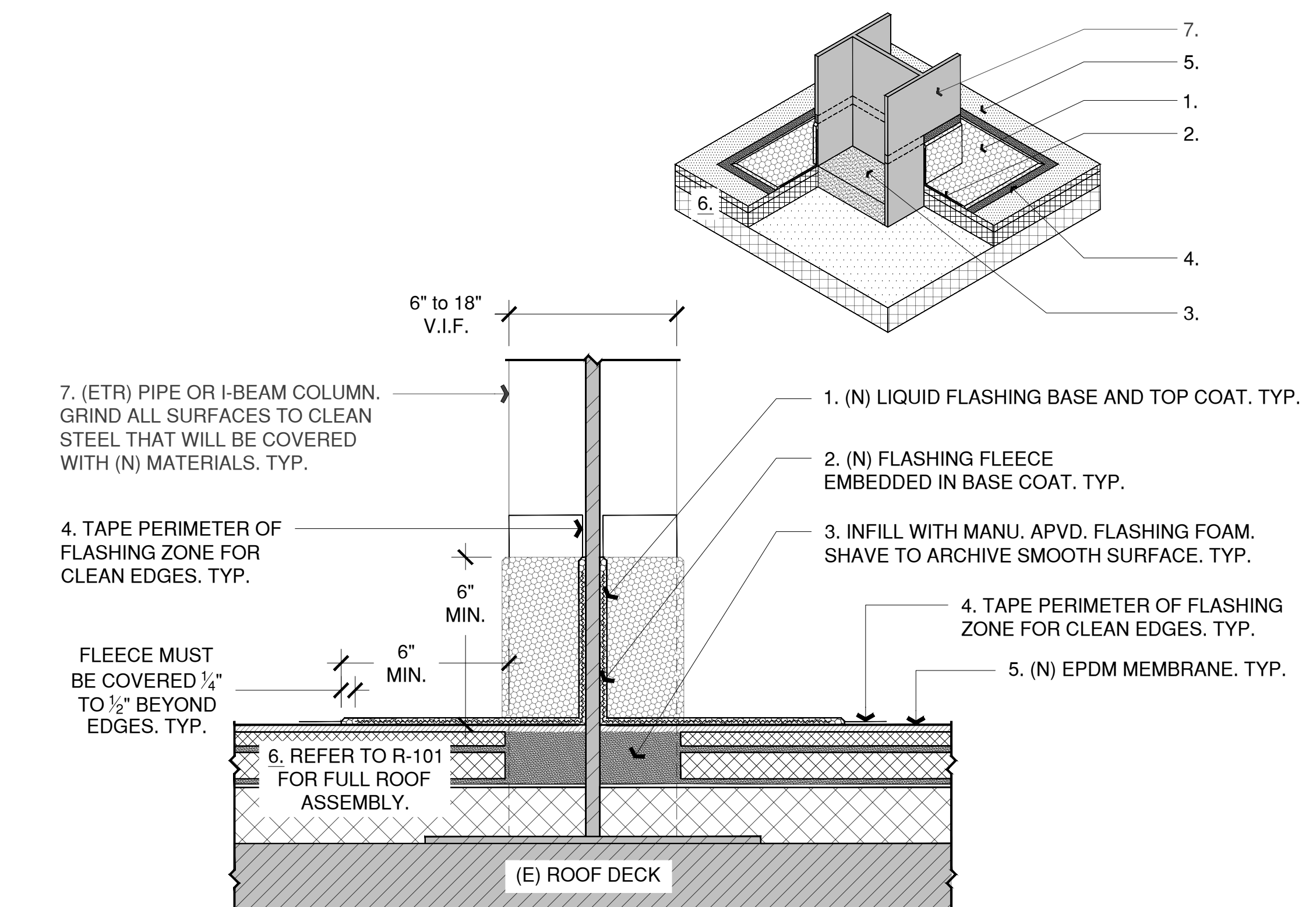
3 PENTHOUSE EDGE METAL FLASHING (TYPICAL)

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



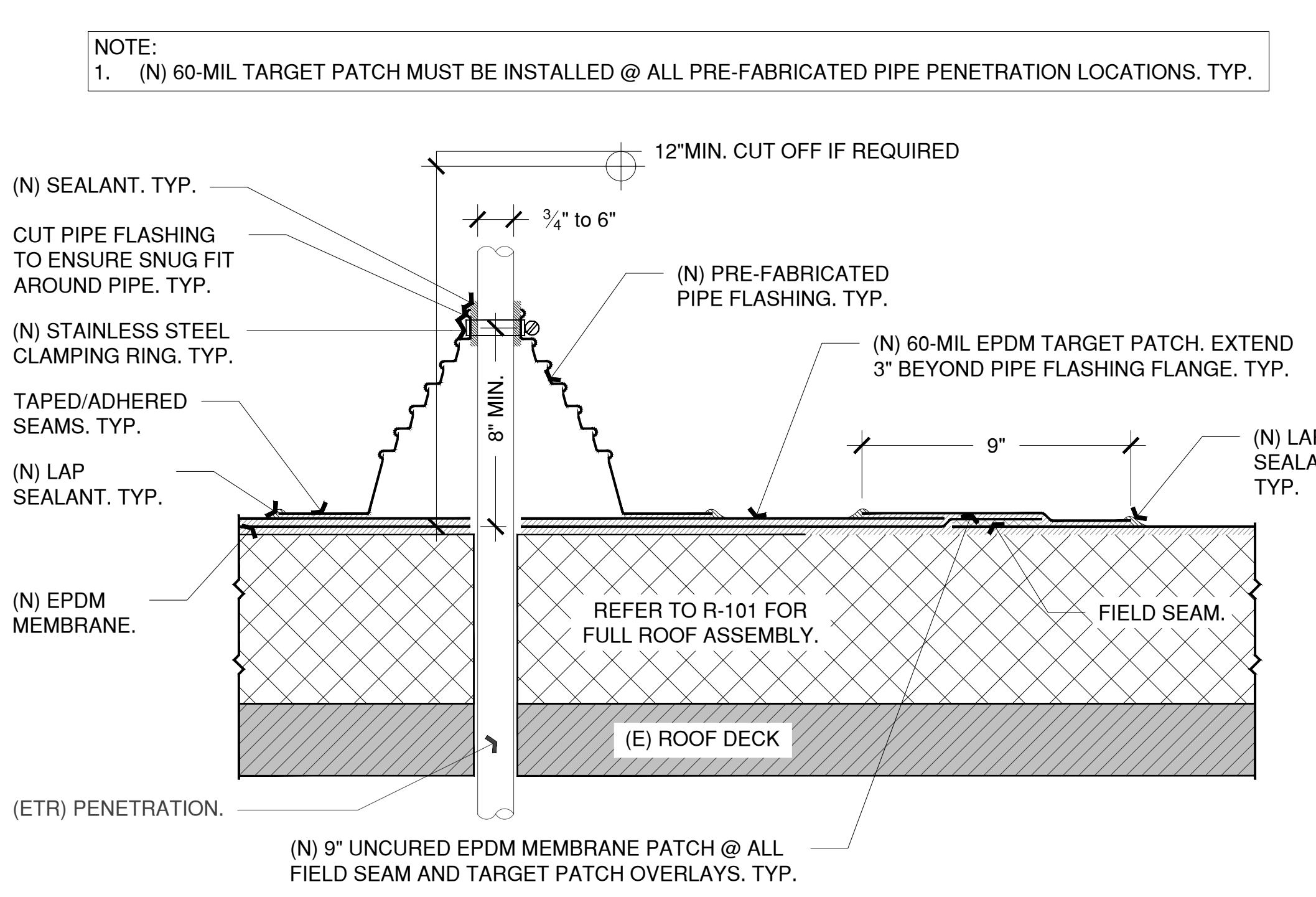
4 OVERFLOW SCUPPER FLASHING (TYPICAL)

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



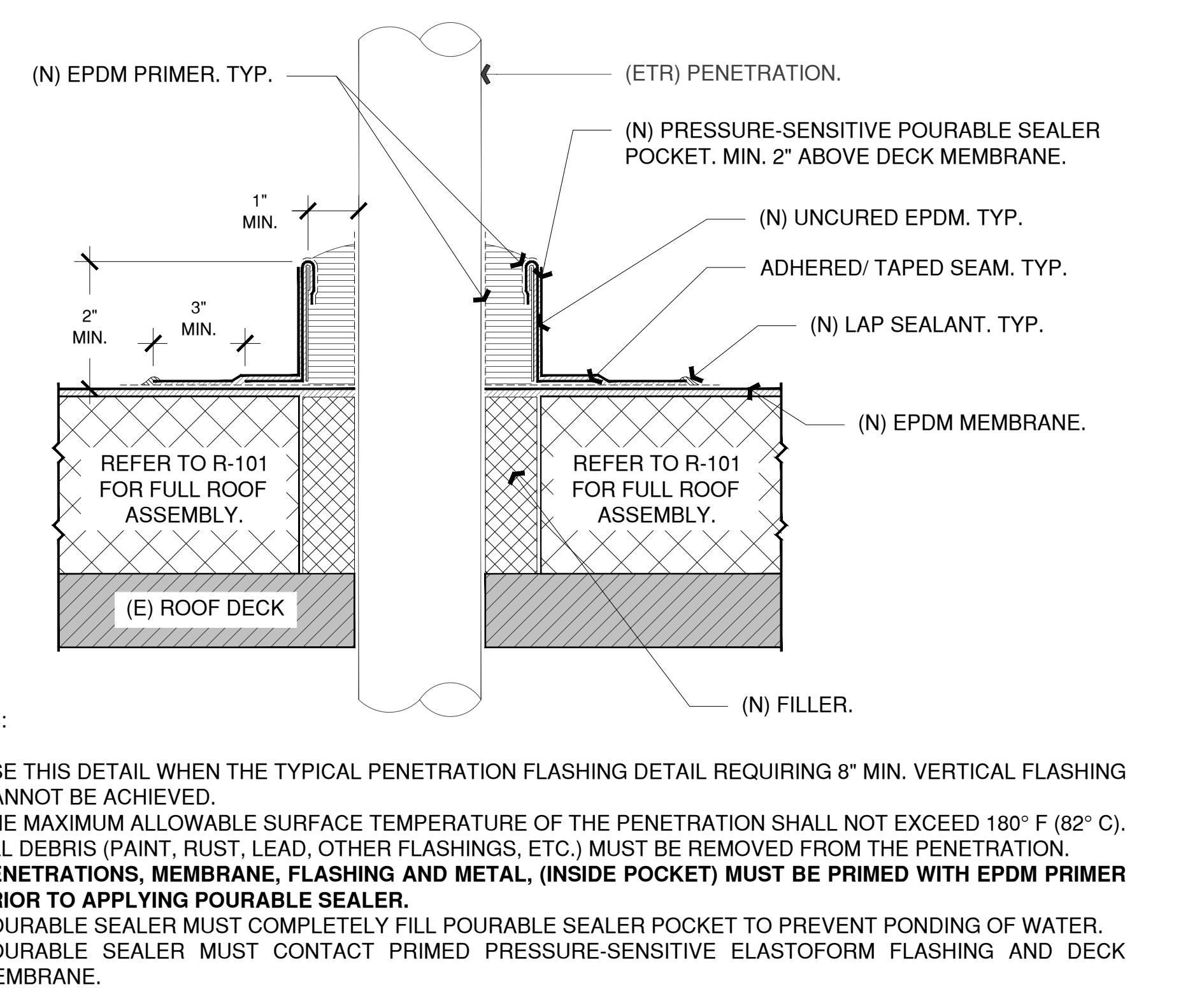
5 LIQUID REINFORCED FIELD PENETRATION FLASHING (TYPICAL)

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



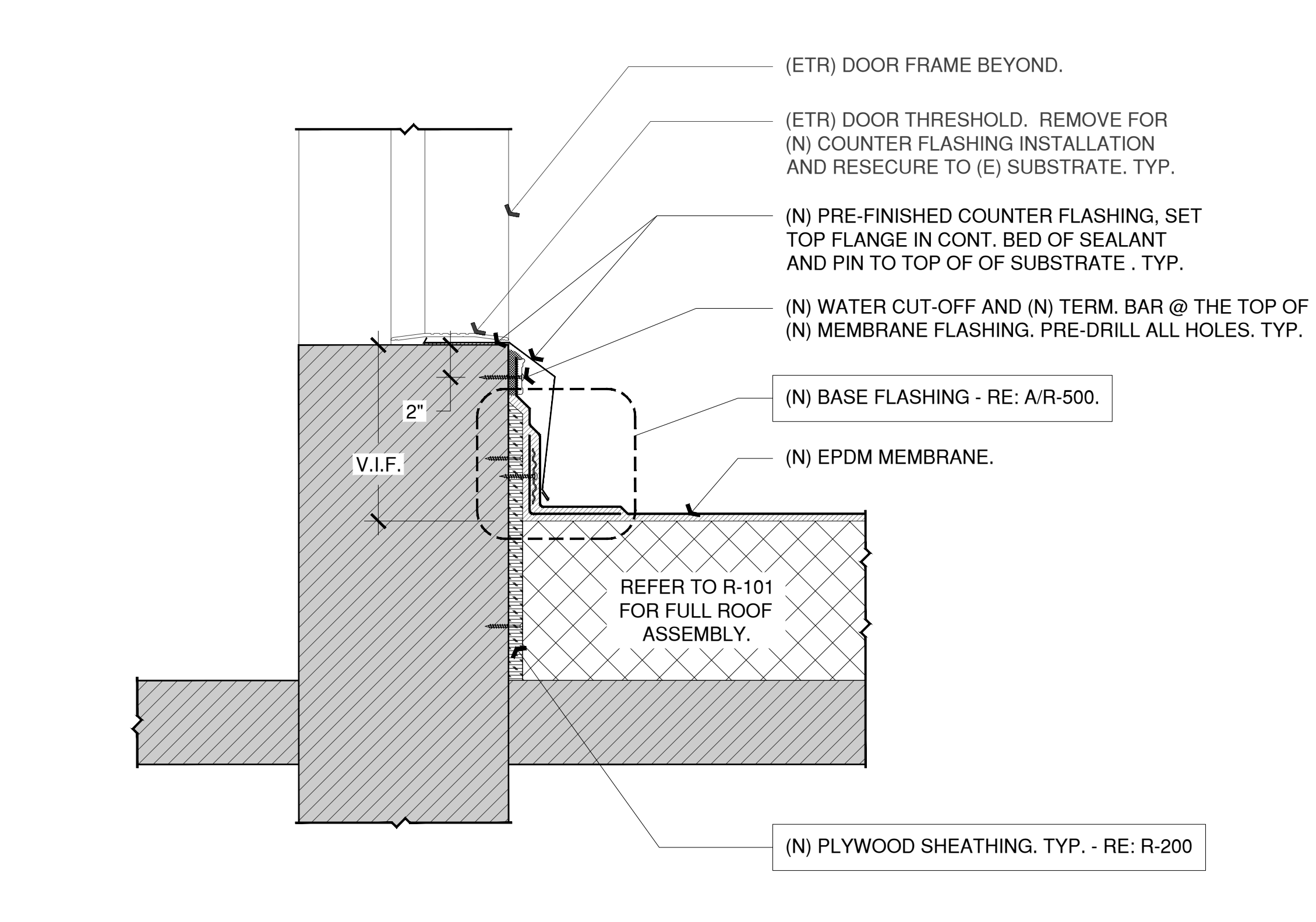
6 PRE-MOLDED PENETRATION FLASHING (TYPICAL)

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



7 POURABLE SEALER FLASHING (TYPICAL)

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



8 DOOR THRESHOLD FLASHING (TYPICAL)

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



KEY PLAN LEGEND

CLIENT
UNIVERSITY OF NORTHERN COLORADO
501 WEST 20TH STREET
GREELEY, CO 80639

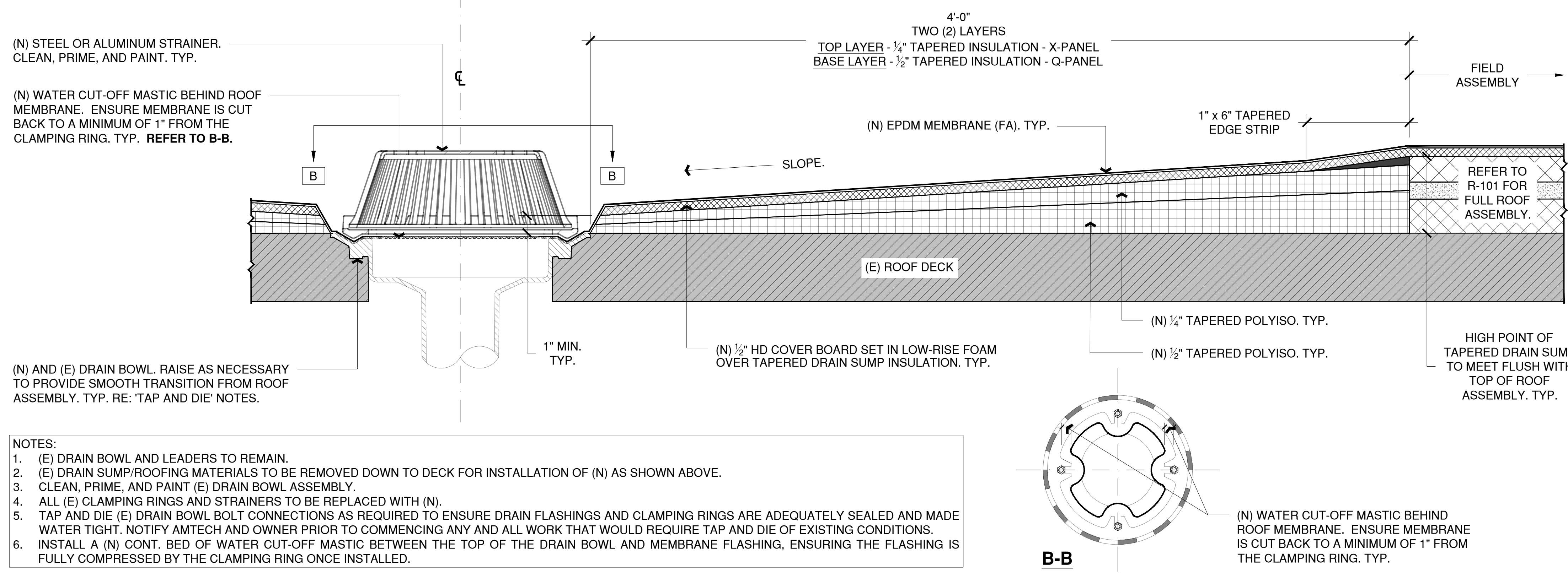
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SHEET TITLE
ROOFING DETAILS

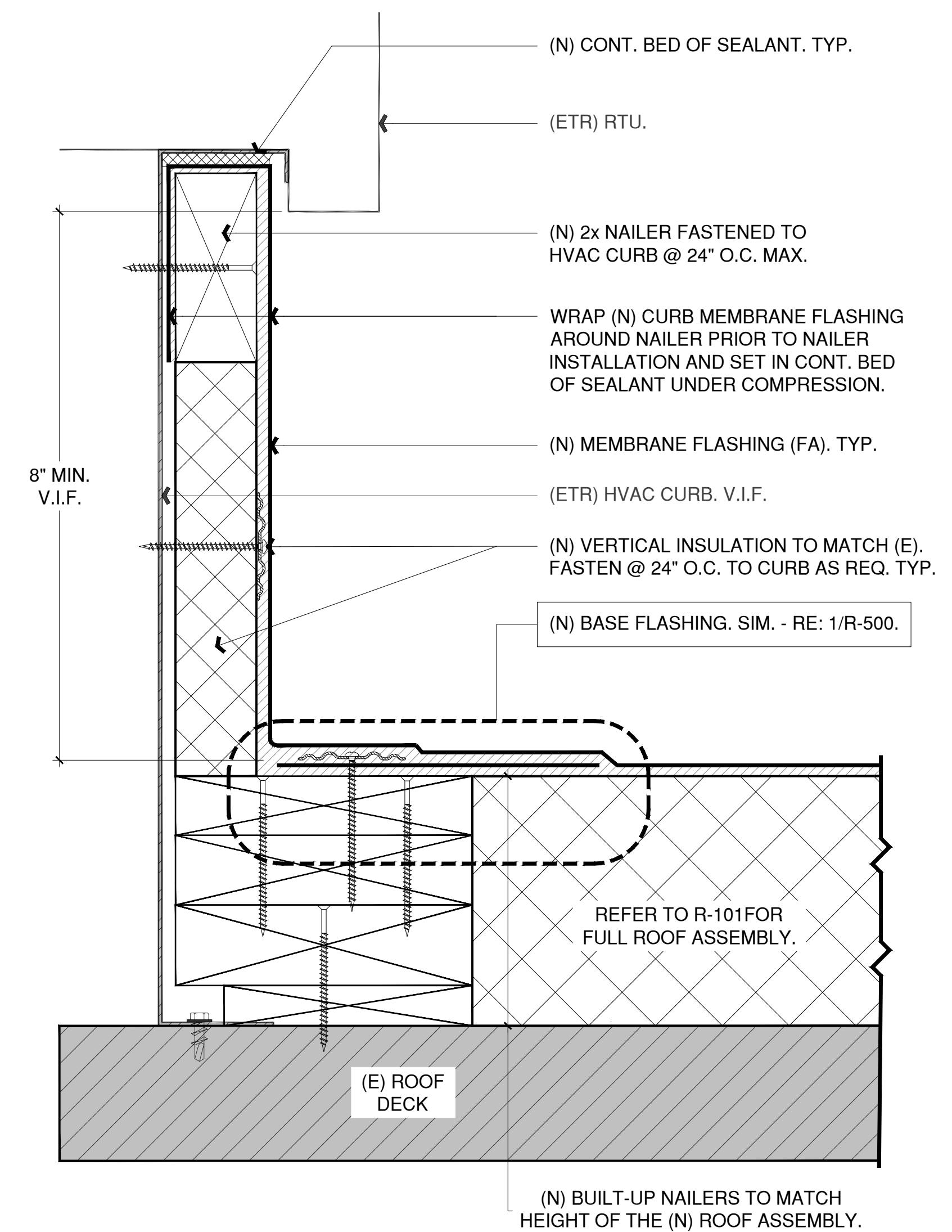
SHEET NO.
R-500



- NOTES:
- (E) DRAIN BOWL AND LEADERS TO REMAIN.
 - (E) DRAIN SUMP/ROOFING MATERIALS TO BE REMOVED DOWN TO DECK FOR INSTALLATION OF (N) AS SHOWN ABOVE.
 - CLEAN, PRIME, AND PAINT (E) DRAIN BOWL ASSEMBLY.
 - ALL (E) CLAMPING RINGS AND STRAINERS TO BE REPLACED WITH (N).
 - TAP AND DIE (E) DRAIN BOWL BOLT CONNECTIONS AS REQUIRED TO ENSURE DRAIN FLASHINGS AND CLAMPING RINGS ARE ADEQUATELY SEALED AND MADE WATER TIGHT. NOTIFY AMTECH AND OWNER PRIOR TO COMMENCING ANY AND ALL WORK THAT WOULD REQUIRE TAP AND DIE OF EXISTING CONDITIONS.
 - INSTALL A (N) CONT. BED OF WATER CUT-OFF MASTIC BETWEEN THE TOP OF THE DRAIN BOWL AND MEMBRANE FLASHING, ENSURING THE FLASHING IS FULLY COMPRESSED BY THE CLAMPING RING ONCE INSTALLED.

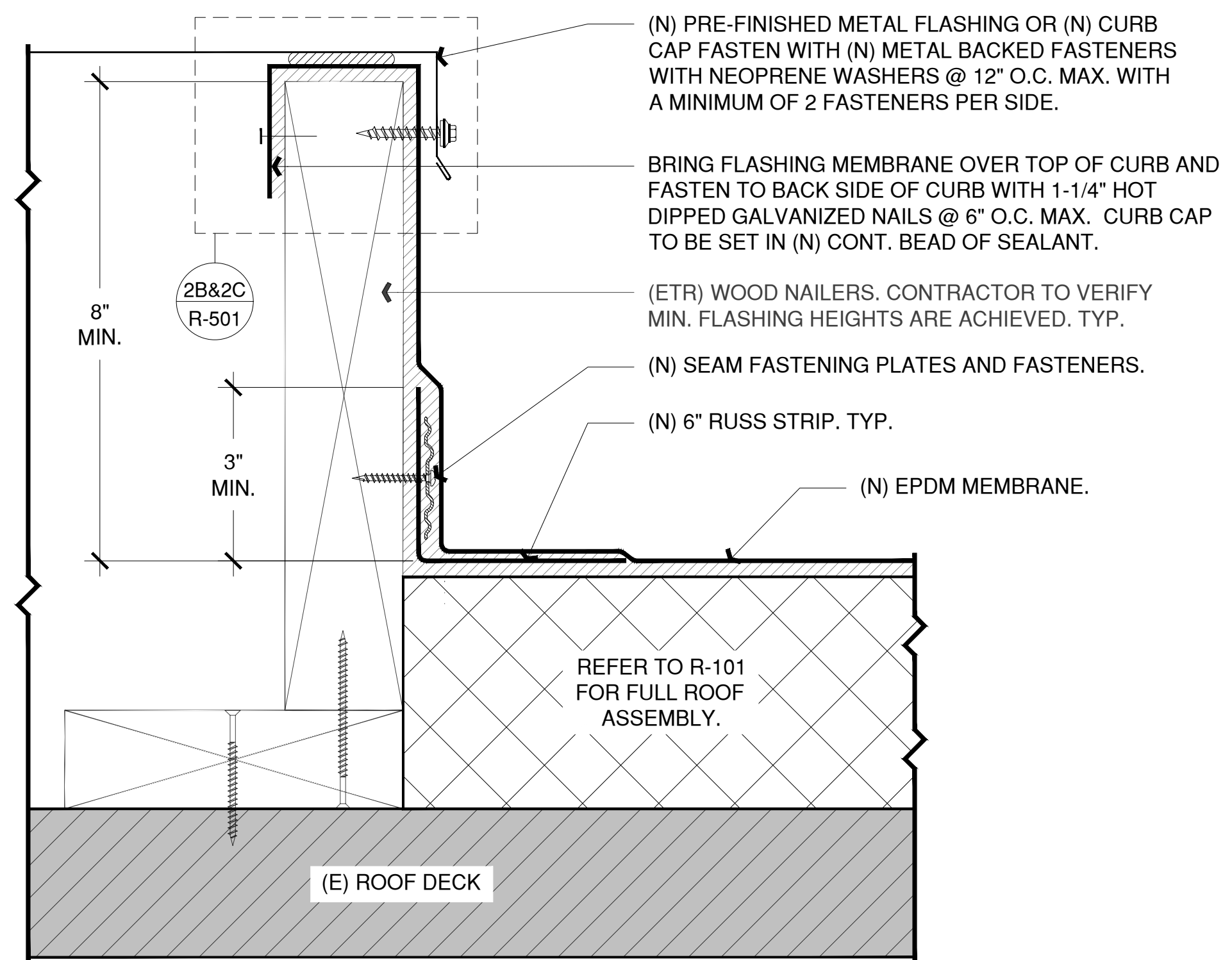
1 TAPERED DRAIN SUMP ASSEMBLY (TYPICAL)

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



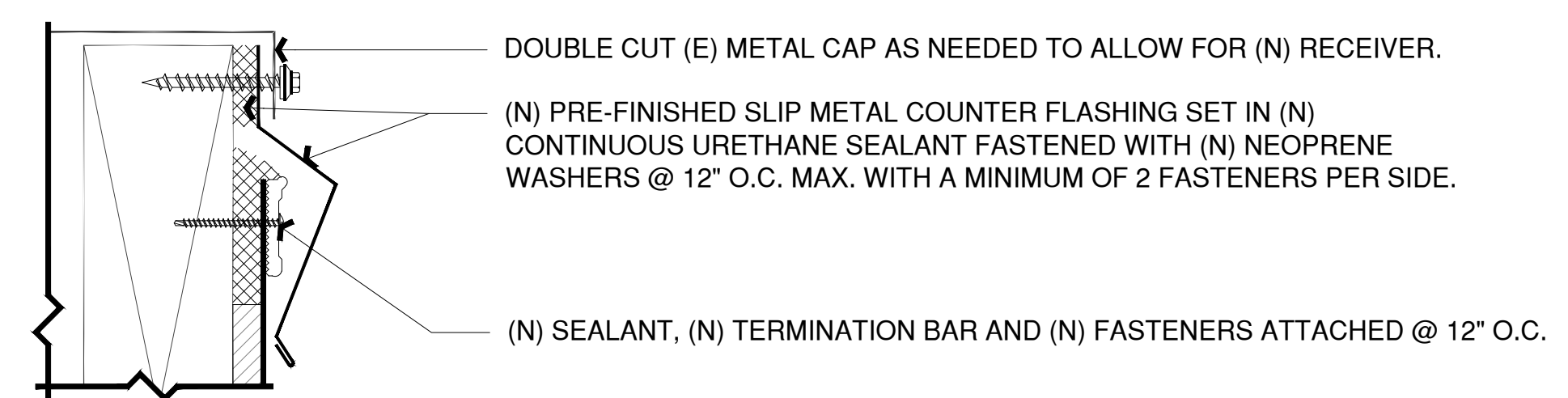
4 LARGE MECHANICAL CURB FLASHING (TYPICAL)

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



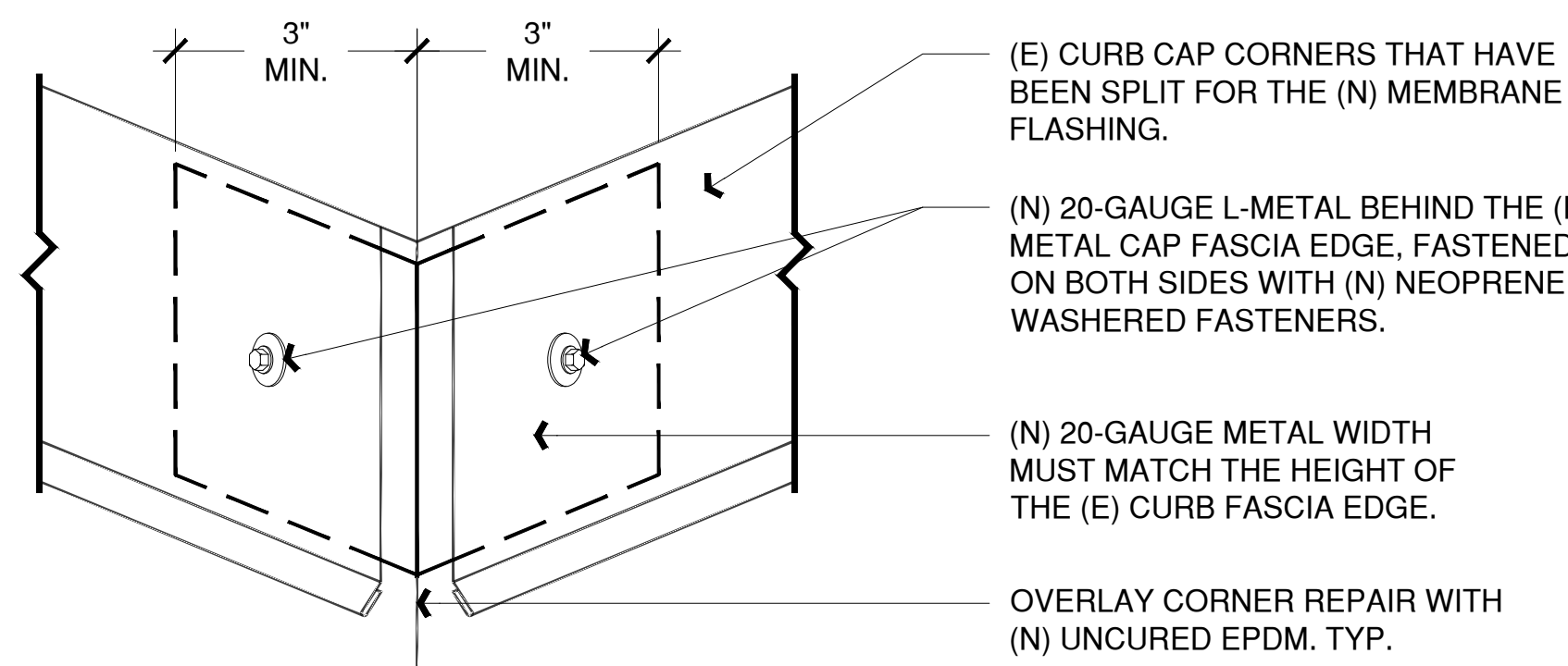
2A MECHANICAL CURB FLASHING (TYPICAL)

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



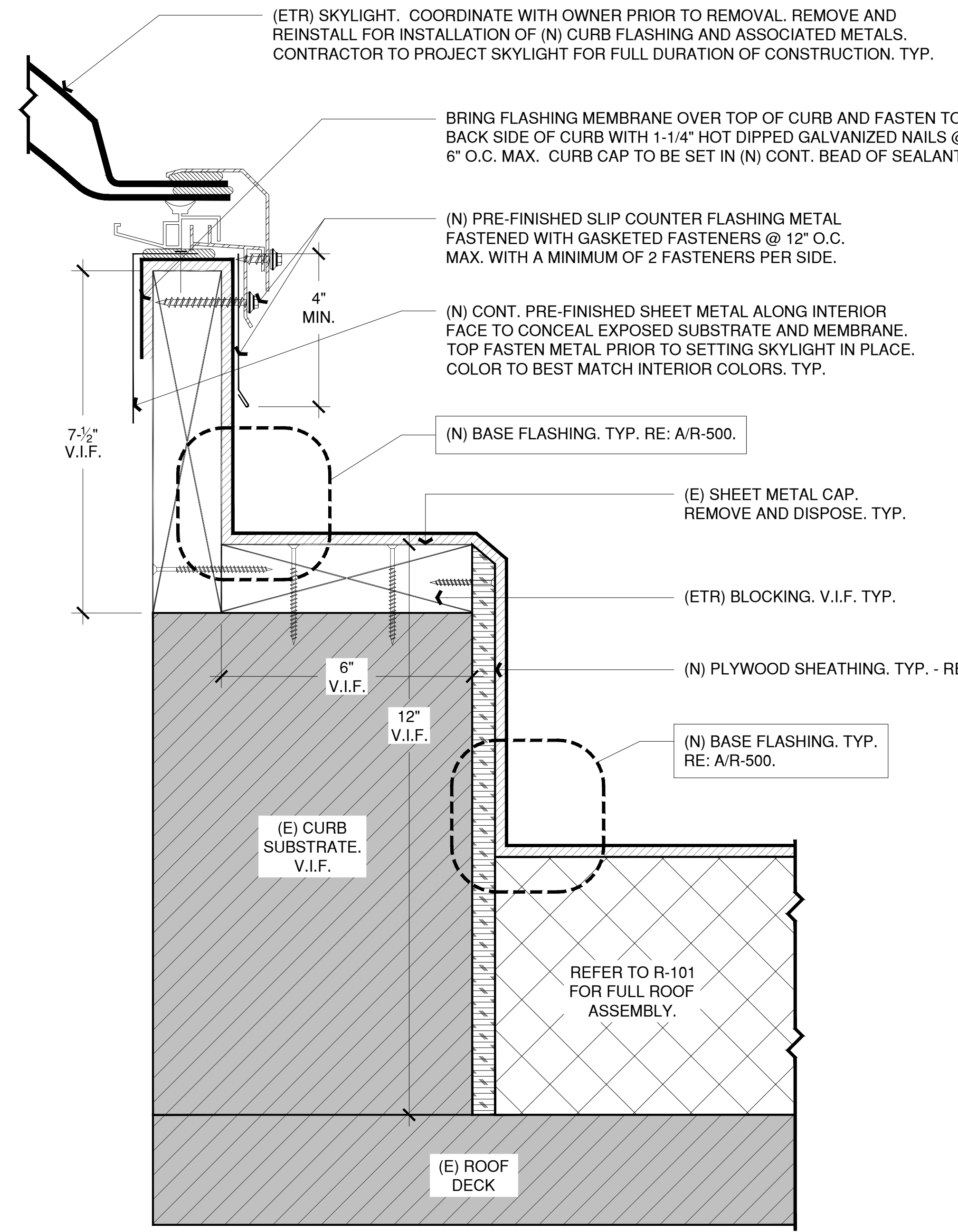
2B ALTERNATE CURB FLASHING

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



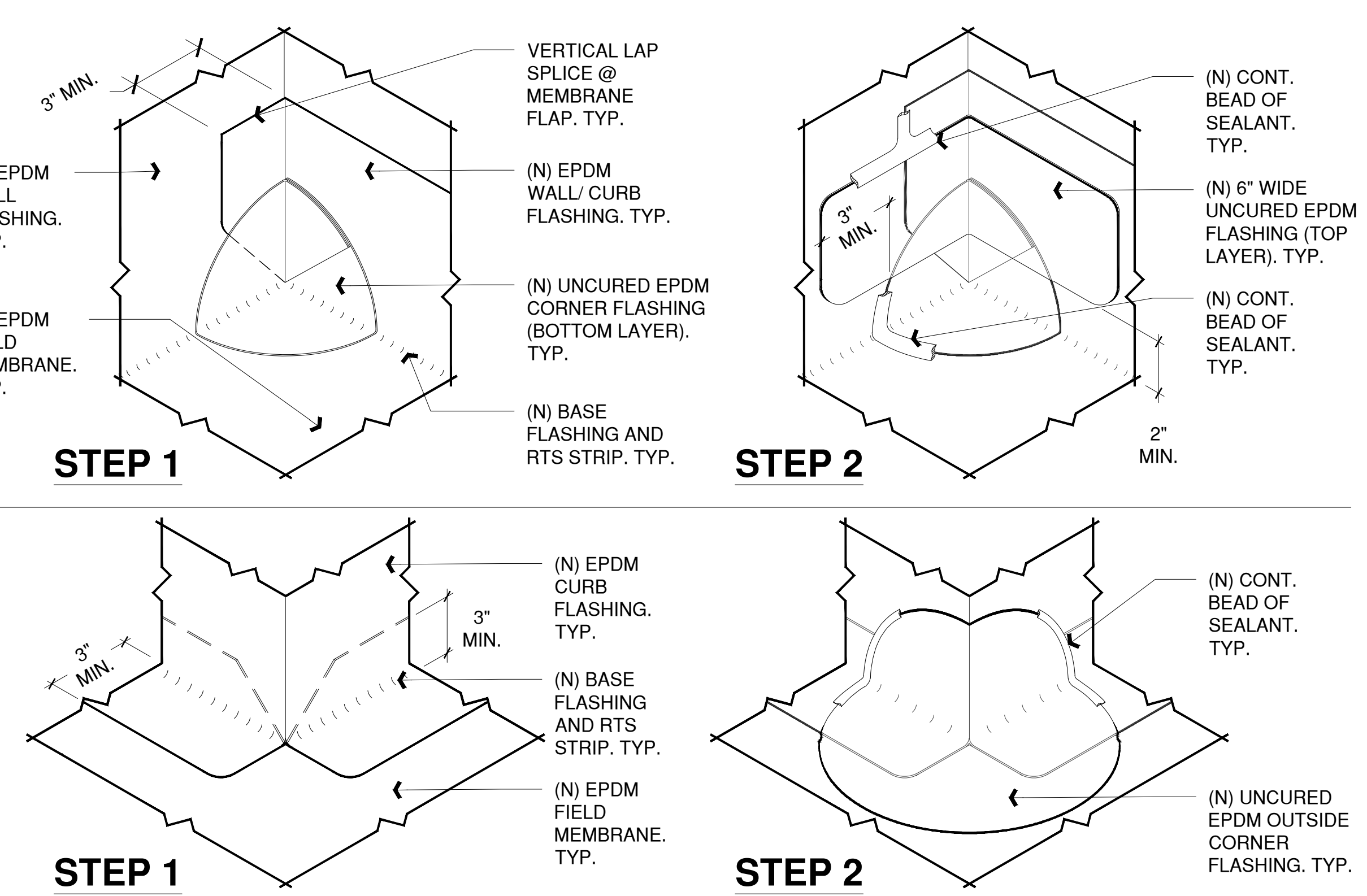
2C EXISTING CURB CAP CORNER REPAIR (TYPICAL)

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



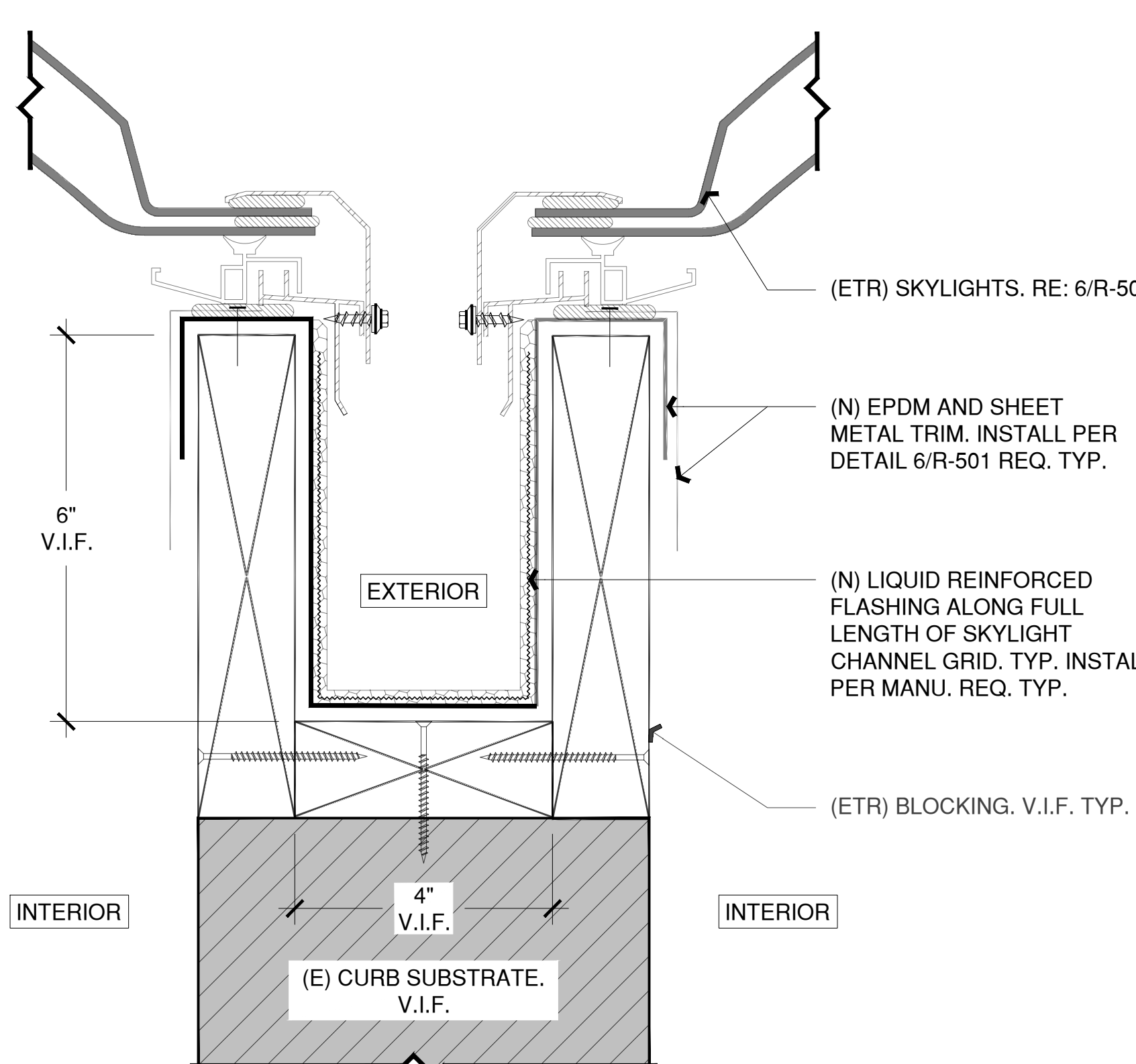
6 SKYLIGHT CURB FLASHING (TYPICAL)

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



3 EPDM INSIDE AND OUTSIDE CORNER DETAILING (TYPICAL)

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



5 SKYLIGHT CHANNEL GRID FLASHING (TYPICAL)

NOTE: SIMILAR - ACTUAL CONDITIONS MAY VARY (N.T.S.)



UNIVERSITY OF NORTHERN COLORADO

CLIENT: UNIVERSITY OF NORTHERN COLORADO
501 WEST 20TH STREET
GREELEY, CO 80639

PROJECT: JAMES A. MICHENER LIBRARY ROOFING PROJECT
1400 22ND STREET
GREELEY, CO 80631

PROJECT NO.	DEN.2023.001048
DATE	09/2024
DRAWN BY	DJD
CHECKED BY	RKP & SAP
DATE	
REVISION	

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SHEET TITLE: ROOFING DETAILS

SHEET NO.: R-501