



Environment and Climate
Change Canada

Real Property Management Division
Technical Services

Environnement et Changement
Climatique Canada

Division Gestion des Biens Immobilier
Services Techniques

BURLINGTON, ONTARIO
CANADA CENTRE FOR INLAND WATERS (CCIW)
WATER TREATMENT CENTRE (WTC) BUILDING
867 LAKESHORE ROAD

ROOF REPLACEMENT
ECCC Proj. No.: CCIW-092



LIST OF DRAWINGS

ARCHITECTURAL

- A-1 SITE PLAN, ROOF DETAIL PLAN & TAPERED INSULATION PLAN
- A-2 NEW ROOF ASSEMBLIES R1, R2 & R3
- A-3 ROOF ASSEMBLY R1 - DETAILS
- A-4 ROOF ASSEMBLY R1 - DETAILS
- A-5 ROOF ASSEMBLY R1 - DETAILS
- A-6 ROOF ASSEMBLY R2 - DETAILS
- A-7 ROOF ASSEMBLY R3 - DETAILS

ELECTRICAL

- E-1 ROOF ELECTRICAL LAYOUTS

MECHANICAL

- M-1 MECHANICAL LAYOUT & DETAILS

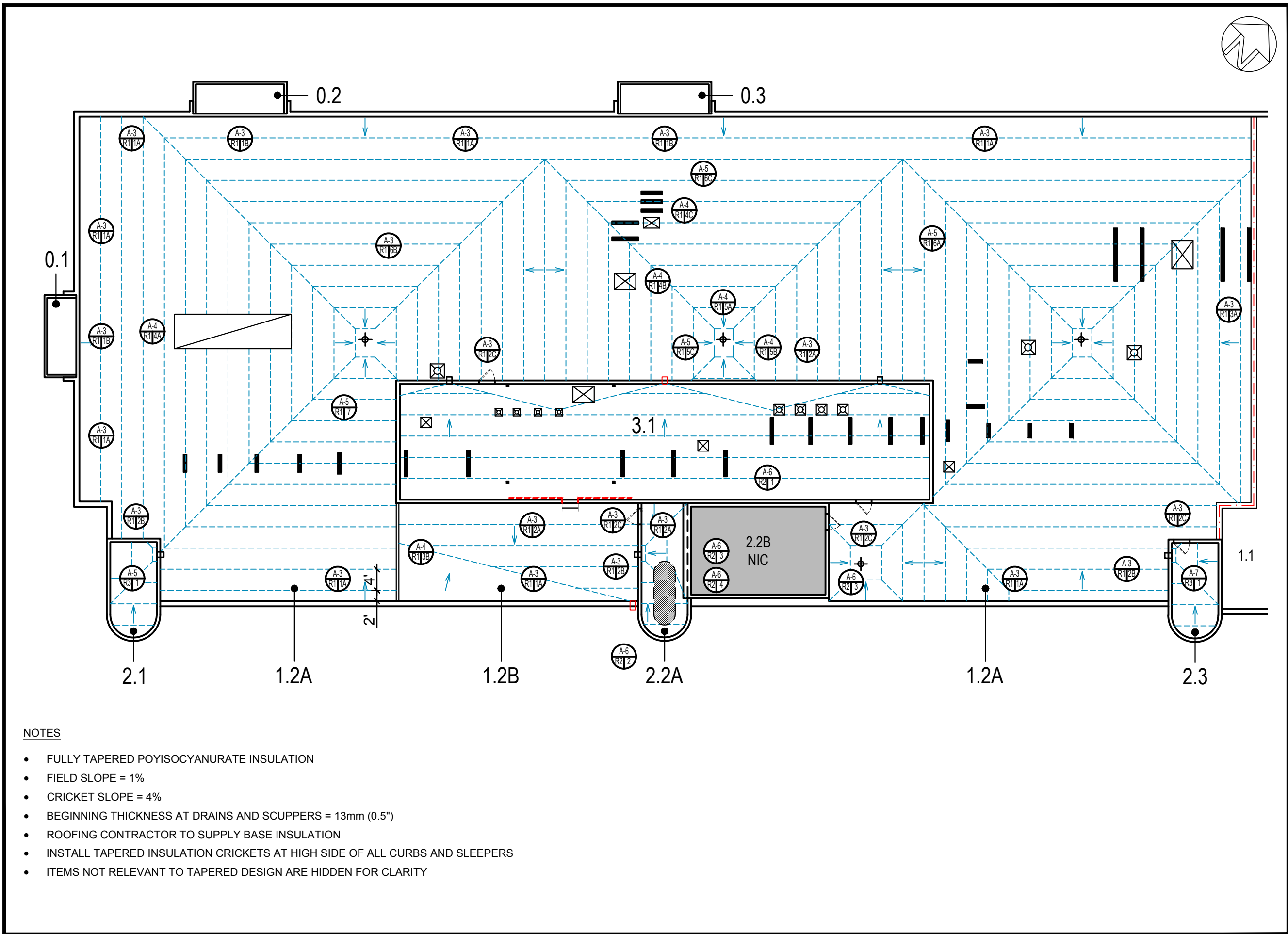
ARCHITECTURE | 49

582 LANCASTER STREET
KITCHENER, ON, N2K 1M3
TEL: 519-904-1829 | ARCHITECTURE49.COM

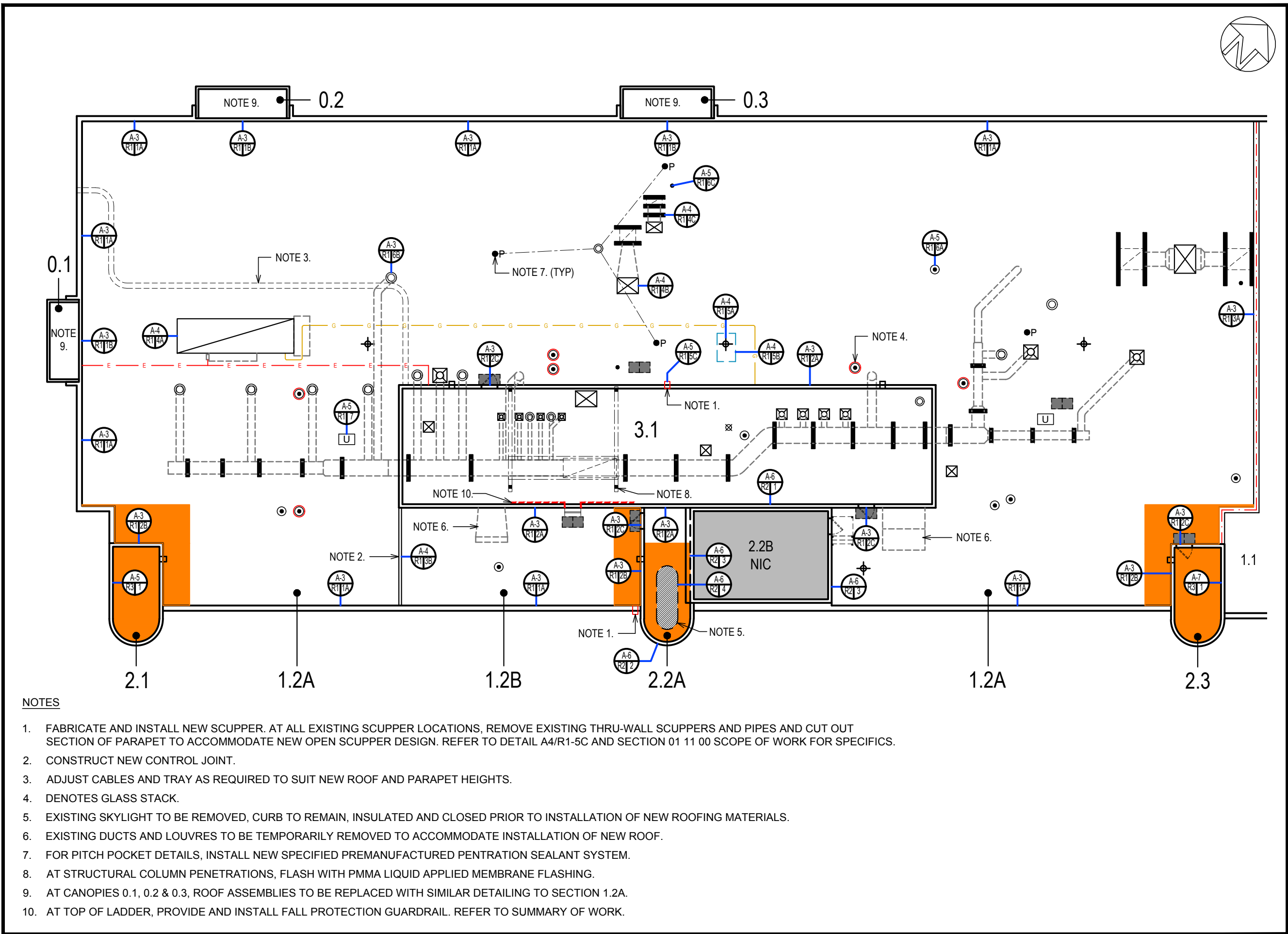
WSP

582 LANCASTER STREET W
KITCHENER, ON, CANADA
N2K 1M3

T: 519.743.8777
F: 519.743.8778
WSP.COM



3 TAPERED INSULATION PLAN
SCALE: NTS



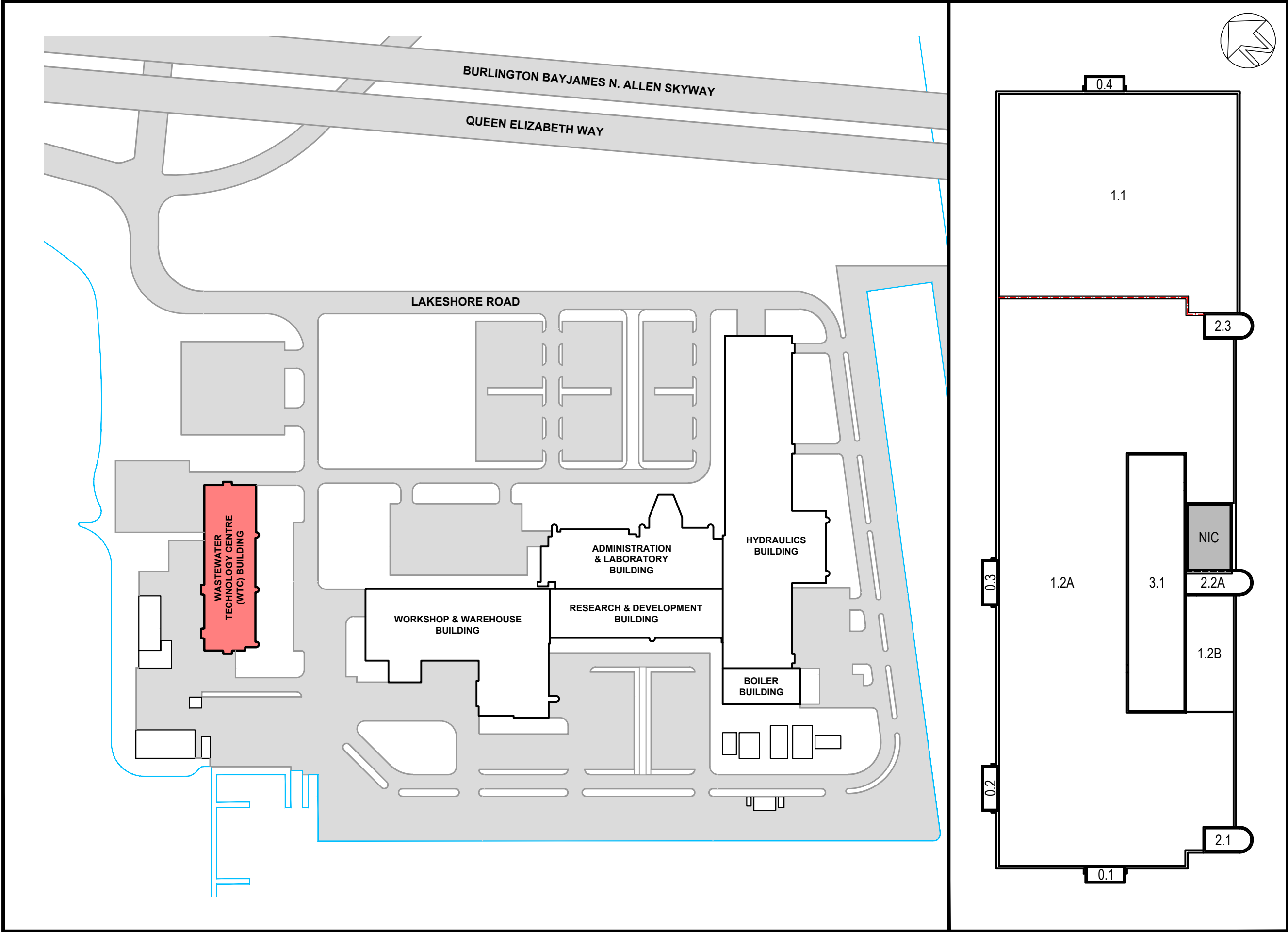
2 ROOF DETAIL PLAN
SCALE: NTS

LEGEND	
	HVAC CURB
	SKYLIGHT
	ROOF HATCH
	CONDUIT BOX
	B-VENT
	SOIL PIPE
	SLEEVE/COLLAR
	POST
	DRAIN (EXISTING)
	SCUPPER (EXISTING)
	GAS LINE
	LADDER
	PAVER
	PITCH PAN
	CONTROL JOINT
	MECHANICAL CURB
	HVAC ON SLEEPERS
	UNIT ON SLEEPERS
	SLEEPER
	EXHAUST VENT
	GAS PIPE FLASHING
	CONDUIT
	ROOF ANCHOR
	DRAIN (NEW)
	SCUPPER (NEW)
	ELEC. LINE
	SATELLITE DISH
	ANTENNA BASE
	UNUSED
	EXPANSION JOINT

APPROXIMATE ROOF AREAS	
2018 ROOF REPLACEMENT	
0.1	9.3 m ² (100 ft ²)
0.2	9.3 m ² (100 ft ²)
0.3	9.3 m ² (100 ft ²)
0.4	9.3 m ² (100 ft ²)
1.2A	1523.6 m ² (16,400 ft ²)
1.2B	92.9 m ² (1,000 ft ²)
2.1	18.6 m ² (200 ft ²)
2.2A	18.6 m ² (200 ft ²)
2.3	18.6 m ² (200 ft ²)
3.1	218.3 m ² (2,350 ft ²)
TOTAL:	1927.7 m ² (20,750 ft ²)

EXISTING ROOF ASSEMBLIES*	
SECTIONS 1.2A, 1.2B, 2.1, 2.2, 2.3 & 3.1	
• 2-PLY MODIFIED BITUMEN MEMBRANE	
• 13MM (0.5") OVERLAY BOARD	
• 51MM (2") POLYISO INSULATION	
• FELT/ASPHALT VAPOUR RETARDER	
• GYPSUM PANELS (ON STEEL DECK)	
• STEEL/CONCRETE DECKS (REFER TO ROOF PLAN RP2 FOR CONCRETE DECK LOCATIONS)	

* IT IS THE BIDDER'S CHOICE TO VERIFY EXISTING DIMENSIONS & ASSEMBLIES PRIOR TO BID SUBMISSION OR TO BASE THEIR BID ON THE INFORMATION PROVIDED. EXTRAS WILL NOT BE ALLOWED IF THE INFORMATION PROVIDED IS NOT ACCURATE.



1 SITE PLAN
SCALE: NTS

04		
03		
02		
01	ISSUED FOR CONSTRUCTION	2019/02/20
revision		date

Do not scale drawings.
Verify all dimensions and conditions on site and immediately notify the engineer of all discrepancies.

A	Detail No.
B	No. du détail
B	drawing no. - where detail required
B	dessin no. - où détail exigé
C	drawing no. - where detailed
C	dessin no. - où détaillé

project title
titre du projet
Ontario
WTC BUILDING ROOF REPLACEMENT
61-00325-01
BURLINGTON

drawing title
titre du dessin
SITE PLAN, ROOF DETAIL PLAN
AND TAPERED INSULATION
PLAN

drawn by
dessiné par
JRT

designed by
conc par

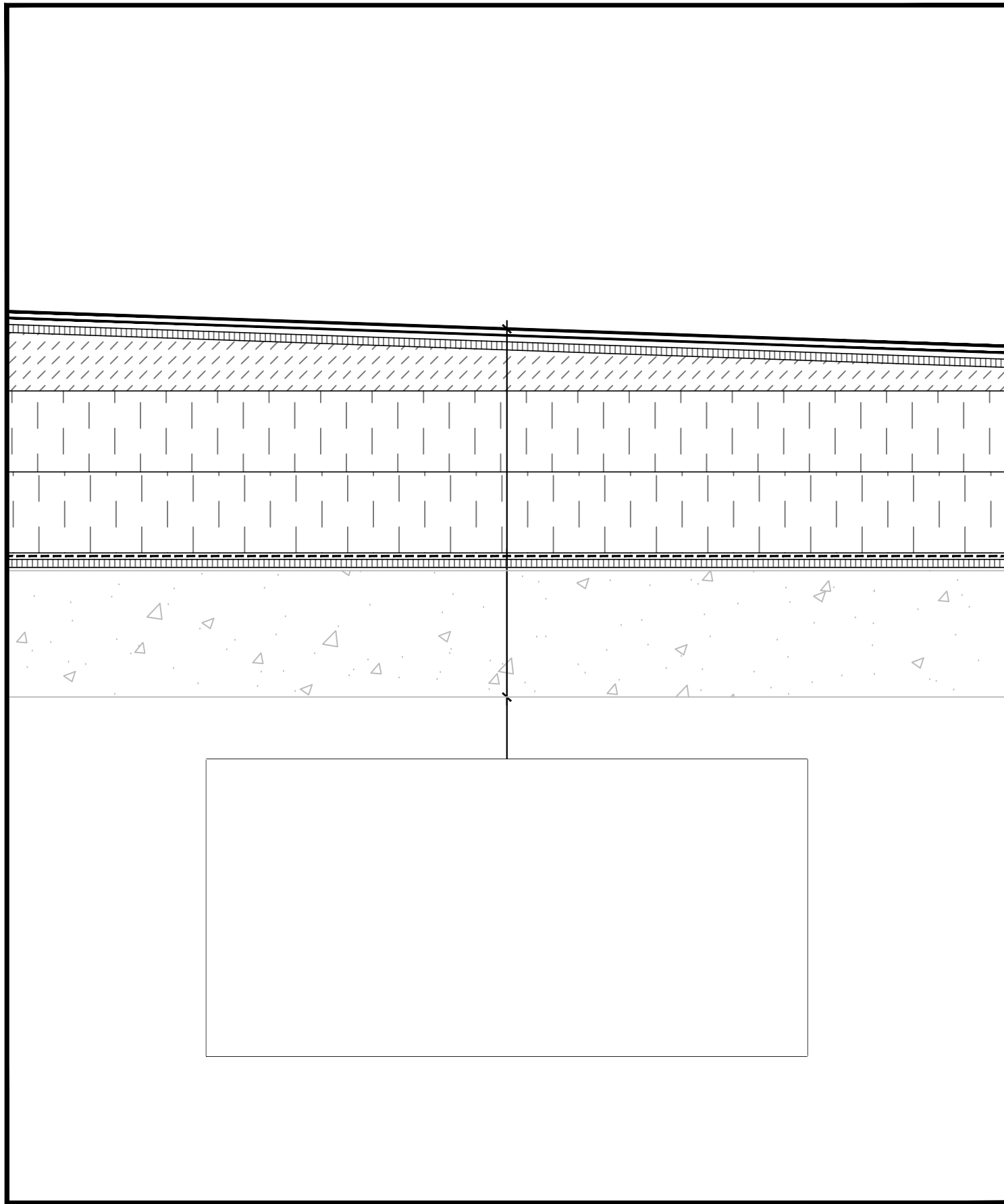
approved by
approuvé par
DAA

tender
soumission
project manager
administrateur de projets

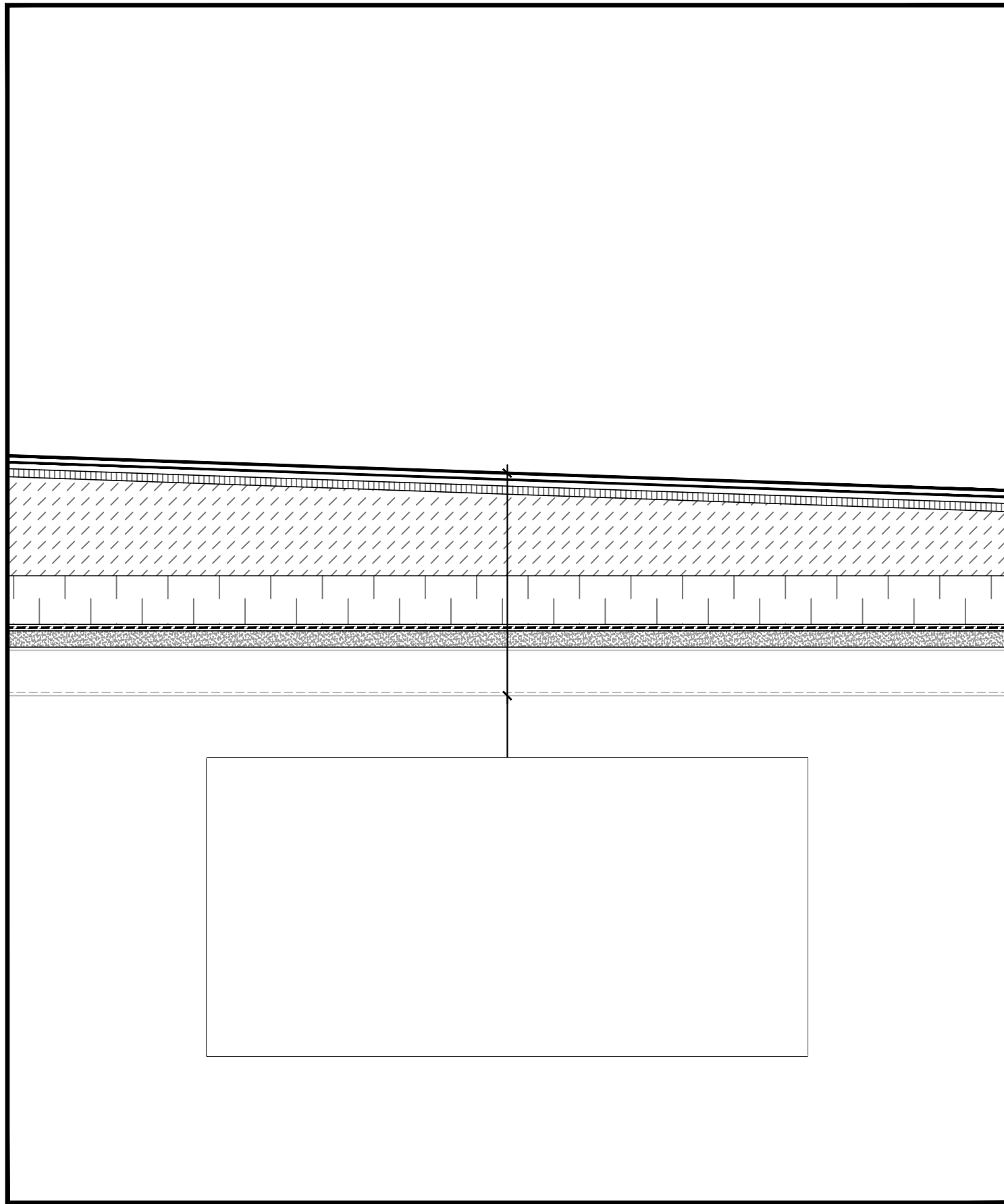
project date
date du projet
2019/02/20

project no.
no. du projet
161-00325-01

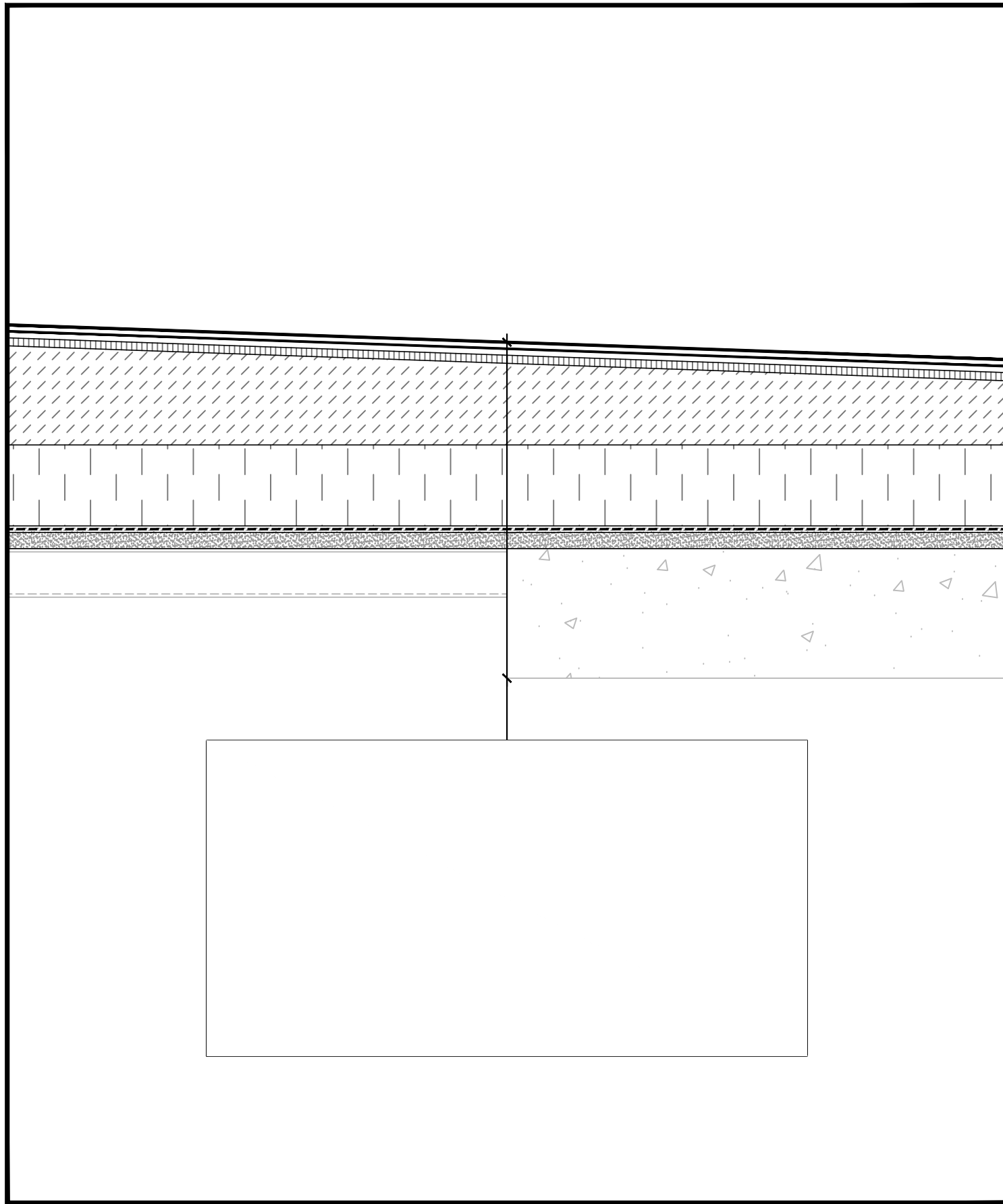
drawing no.
dessiné no.
A-1



R3 NEW ROOF ASSEMBLY R3
SCALE: NTS



R2 NEW ROOF ASSEMBLY R2
SCALE: NTS



R1 NEW ROOF ASSEMBLY R1
SCALE: NTS

ORIENTATION

SEAL



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Ontario
WTC BUILDING ROOF REPLACEMENT
867 LAKESHORE ROAD
BURLINGTON

drawing title
titre du dessin
NEW ROOF ASSEMBLIES
R1, R2 AND R3

drawn by
dessine par JRT

designed by
conc par

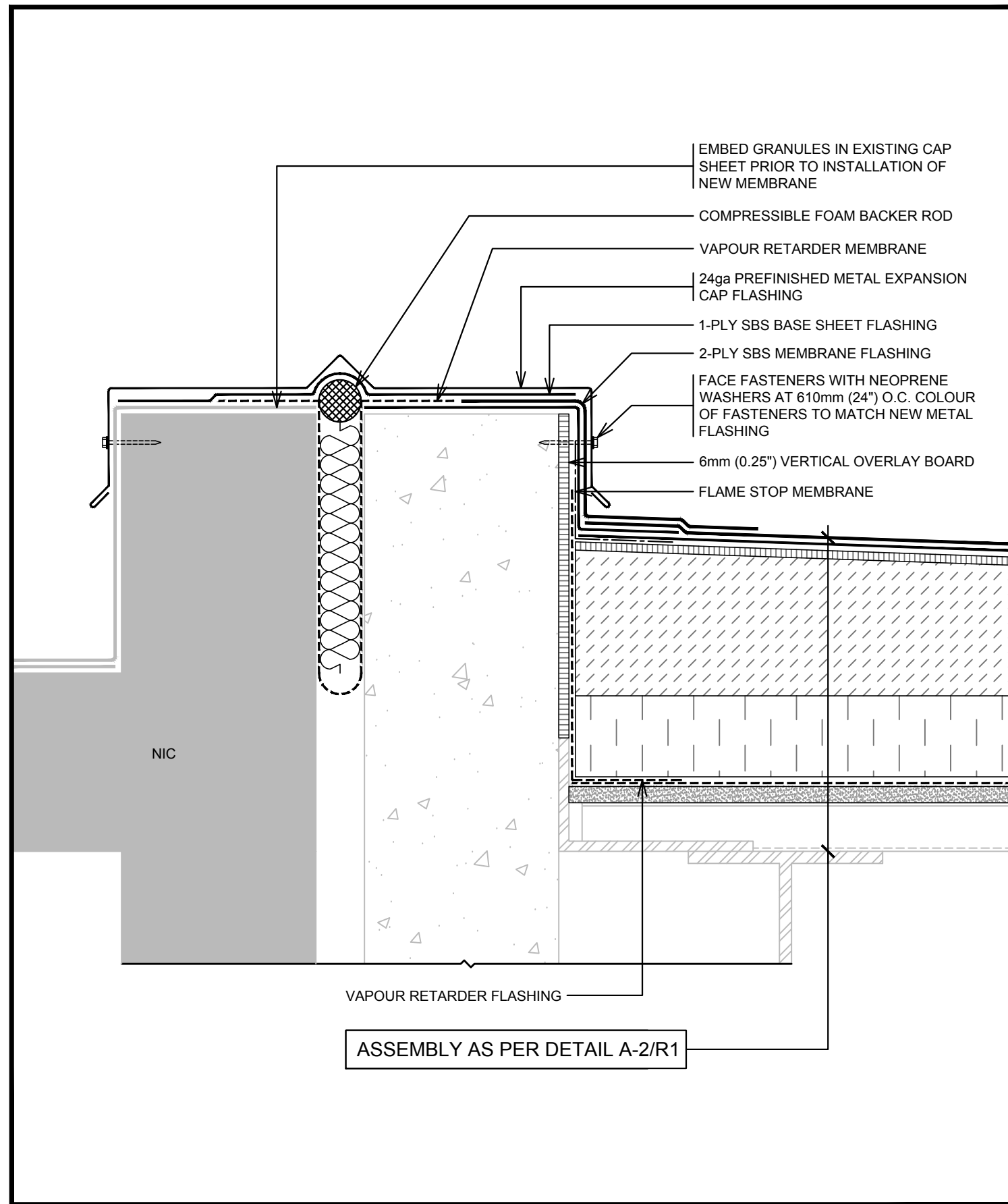
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soumission project manager
administrateur de projets

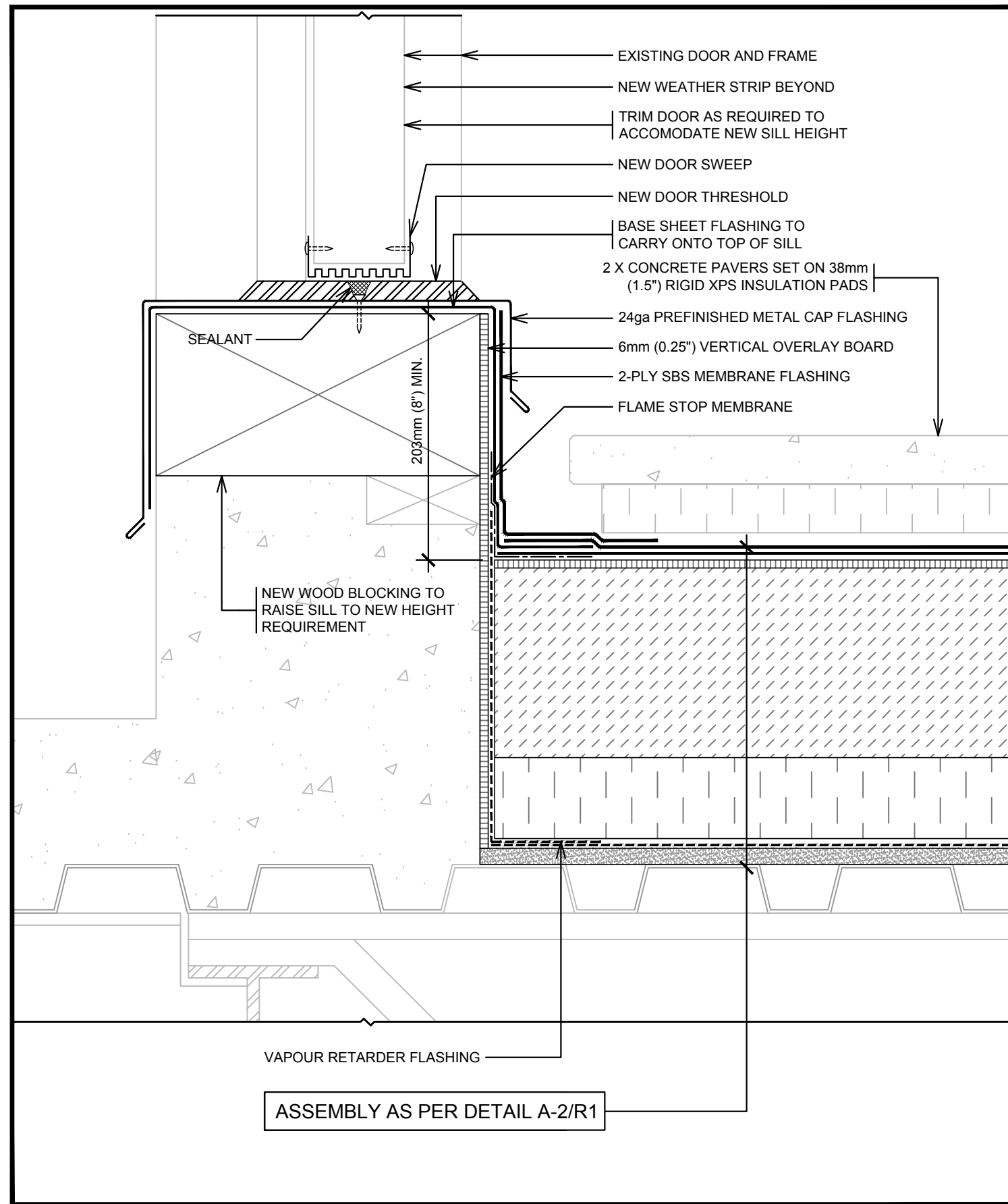
project date
date du projet 2019/02/20

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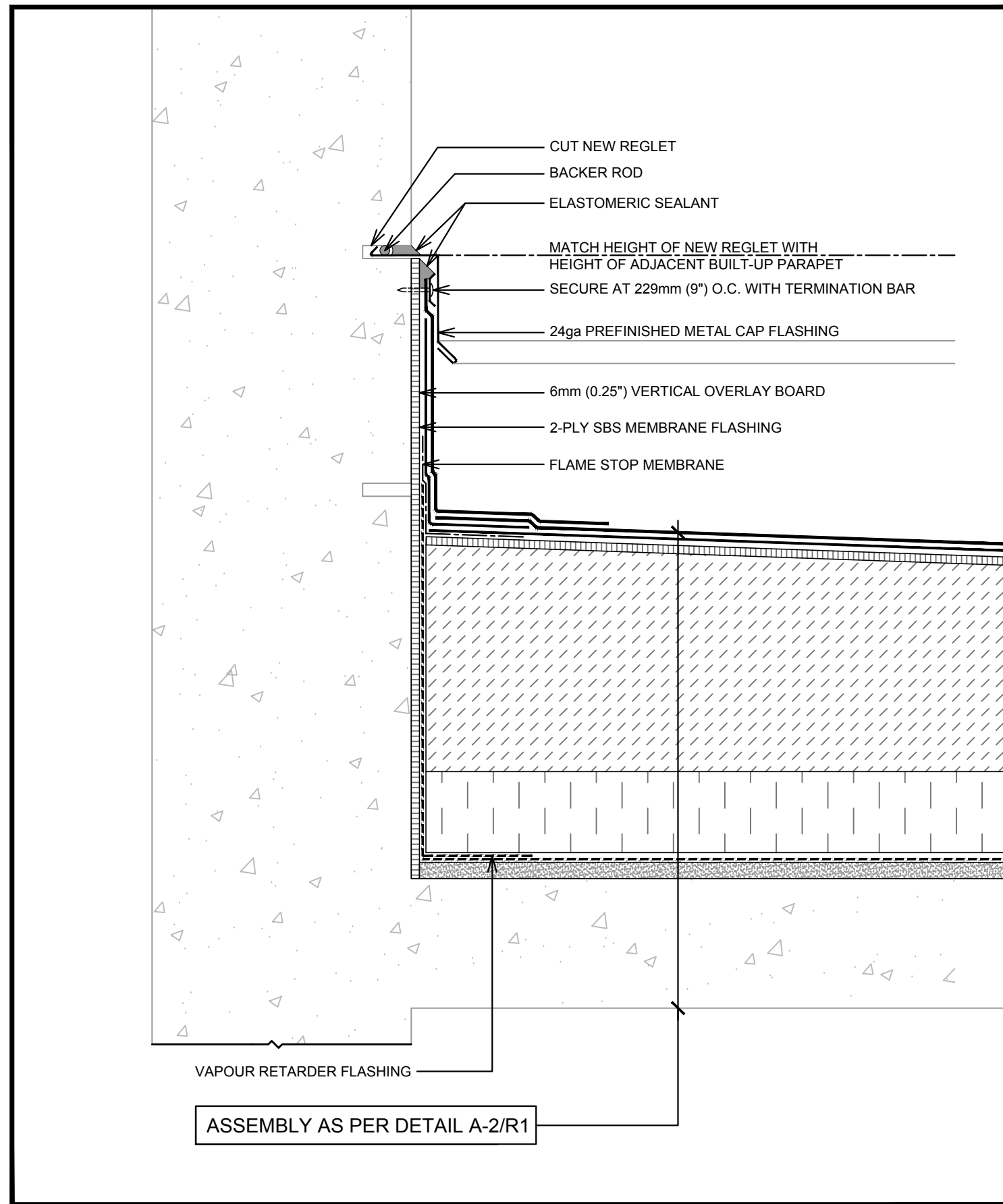
drawing no.
dessine no. A-2



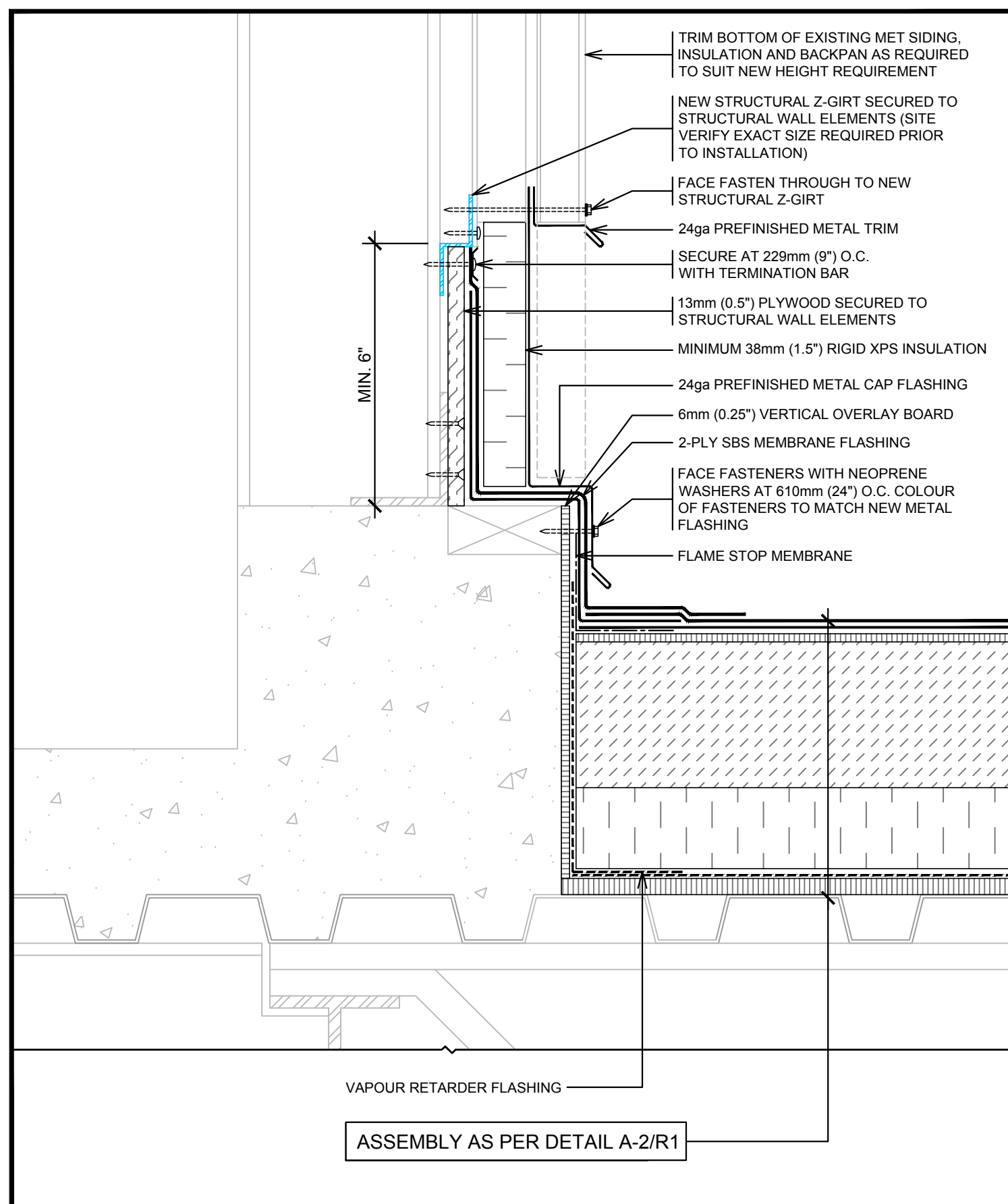
R1 EXPANSION JOINT
3A SCALE: NTS



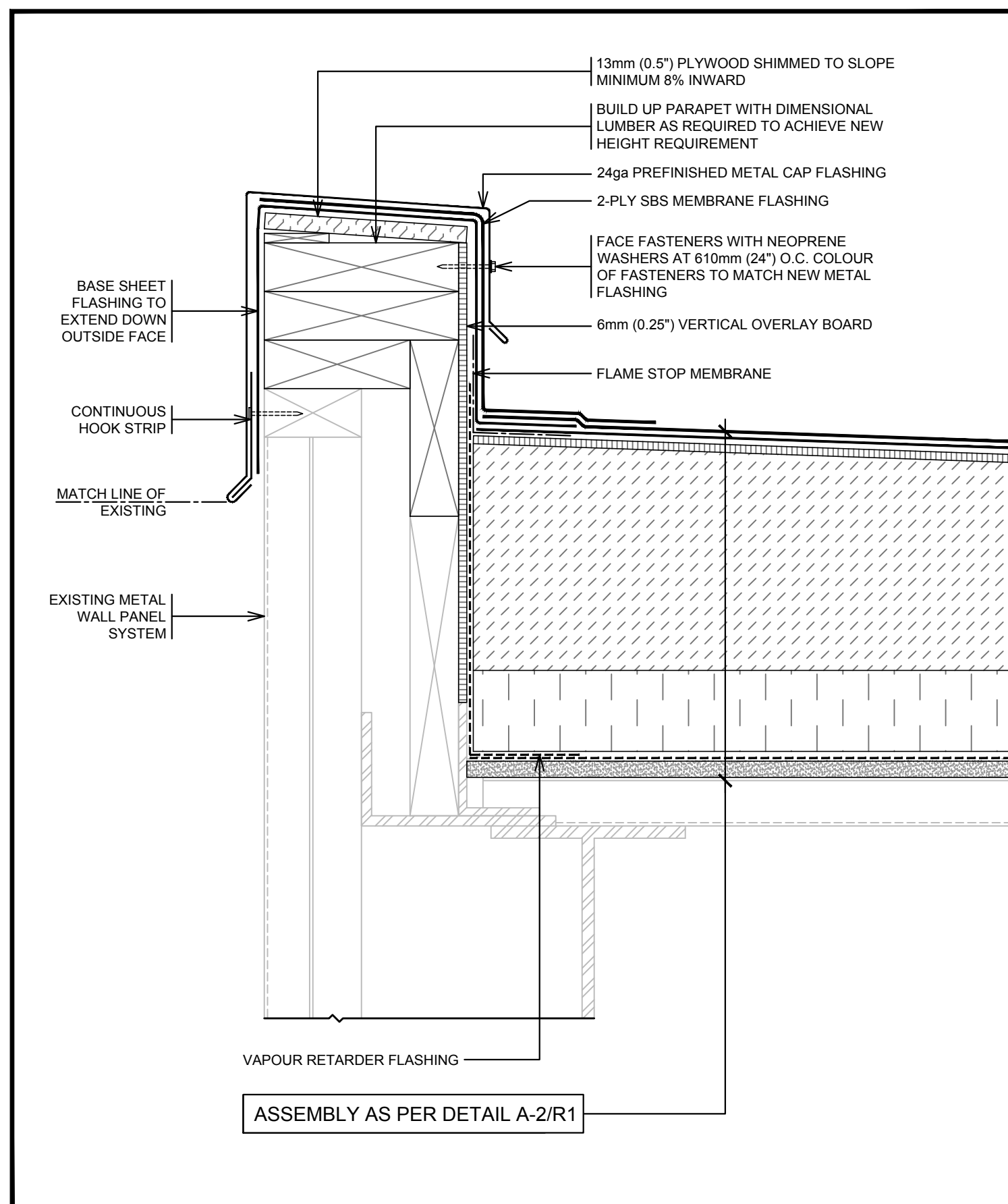
R1 DOOR SILL
2C SCALE: NTS



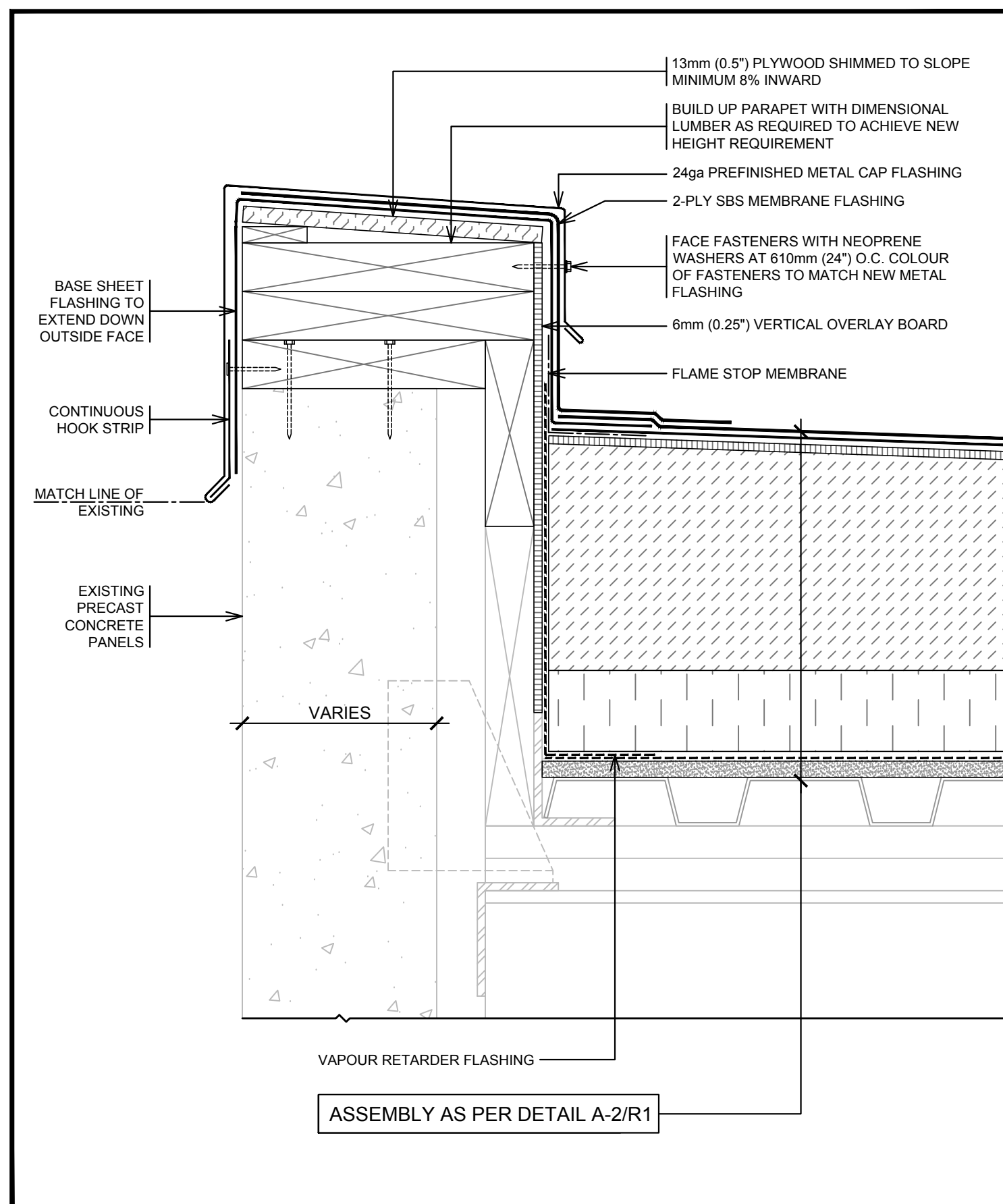
R1 WALL REGLET
2B SCALE: NTS



R1 WALL
2A SCALE: NTS



R1 PARAPET AT METAL WALL
1B SCALE: NTS



R1 PARAPET AT CONCRETE WALL
1A SCALE: NTS

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Ontario
WTC BUILDING ROOF REPLACEMENT
867 LAKESHORE ROAD
BURLINGTON

drawing title
titre du dessin
ROOF ASSEMBLY R1
DETAILS

drawn by
dessiné par JRT

designed by
conc par

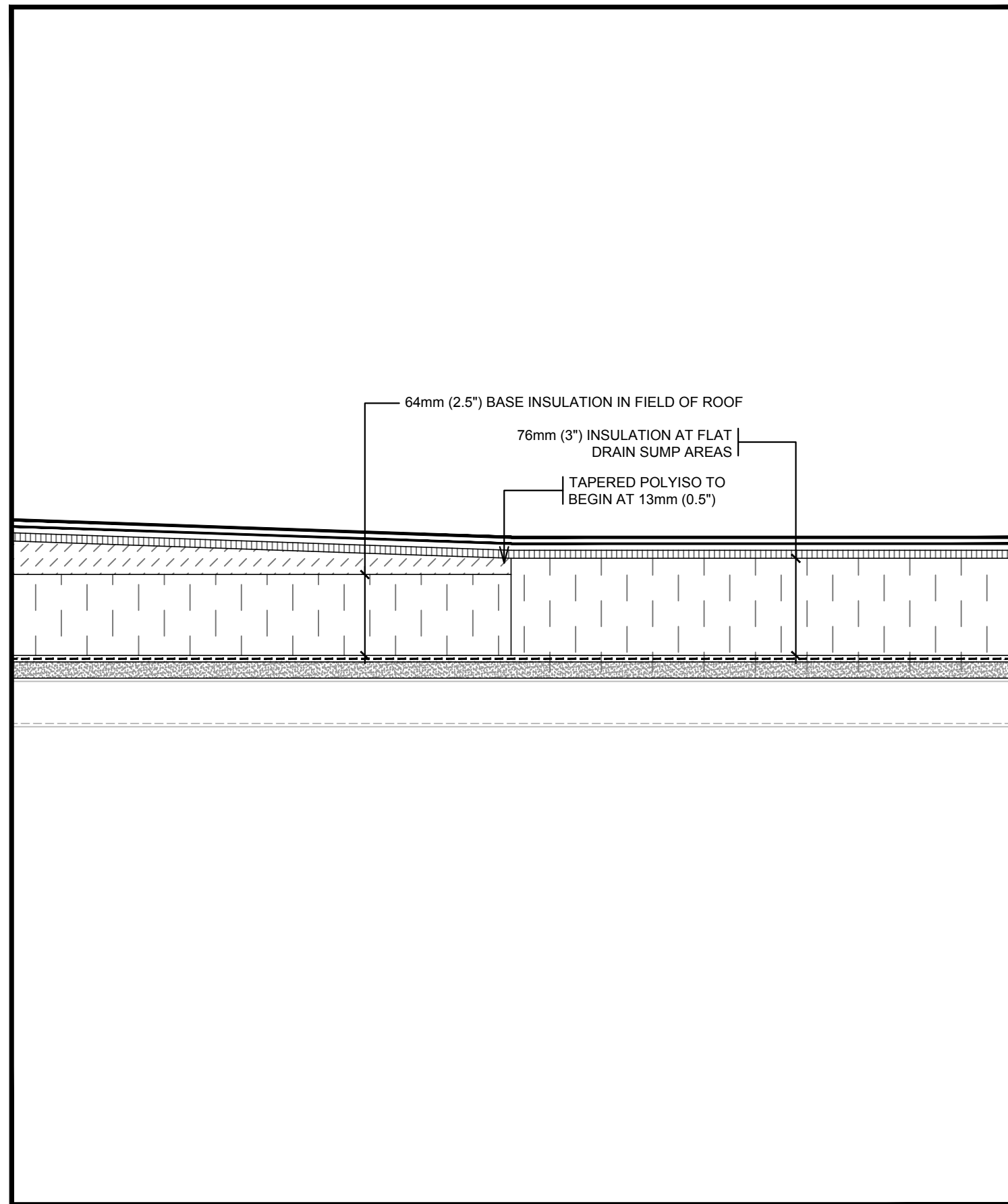
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approuvé par DAA

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administrateur de projets

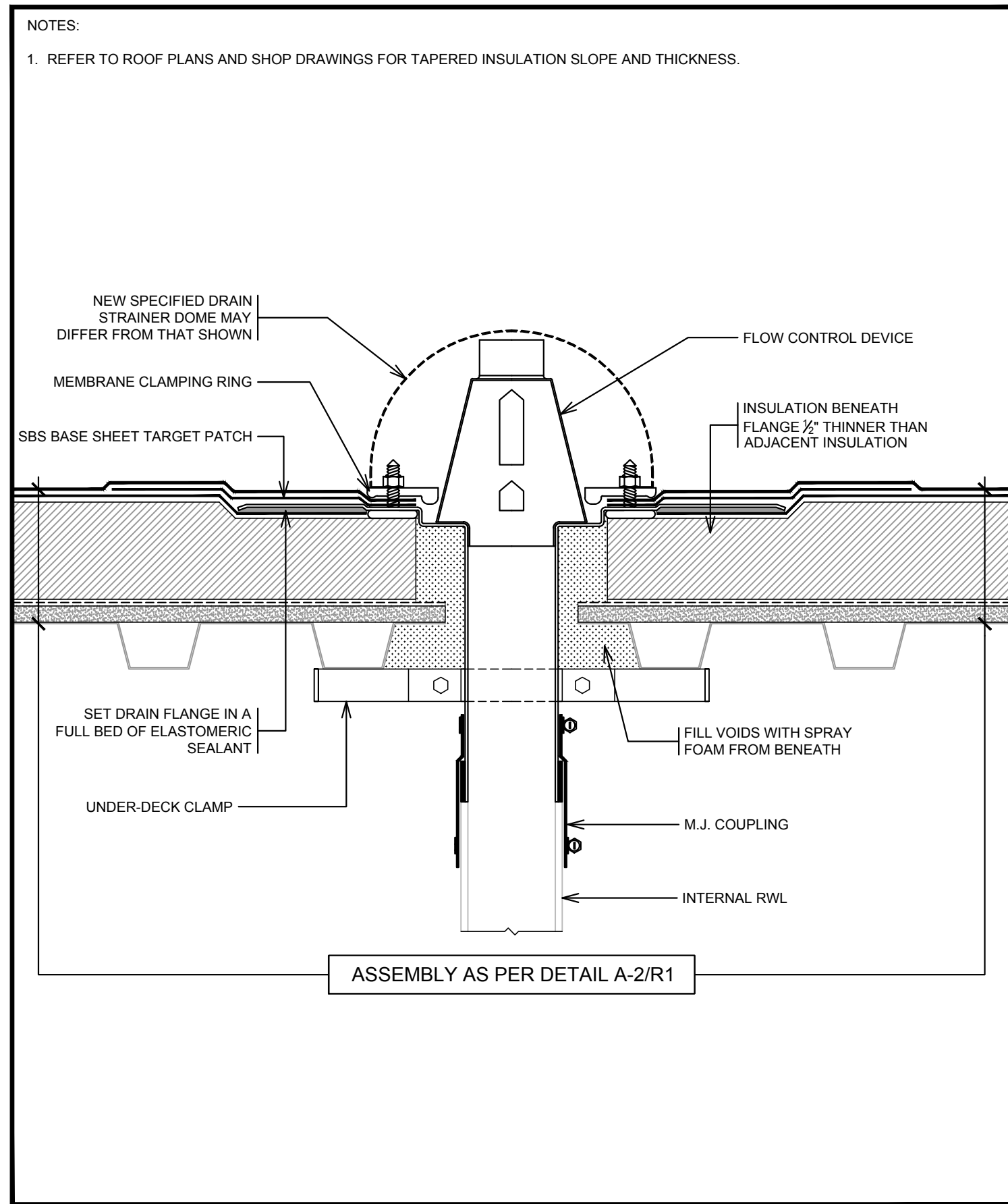
project date
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project no.
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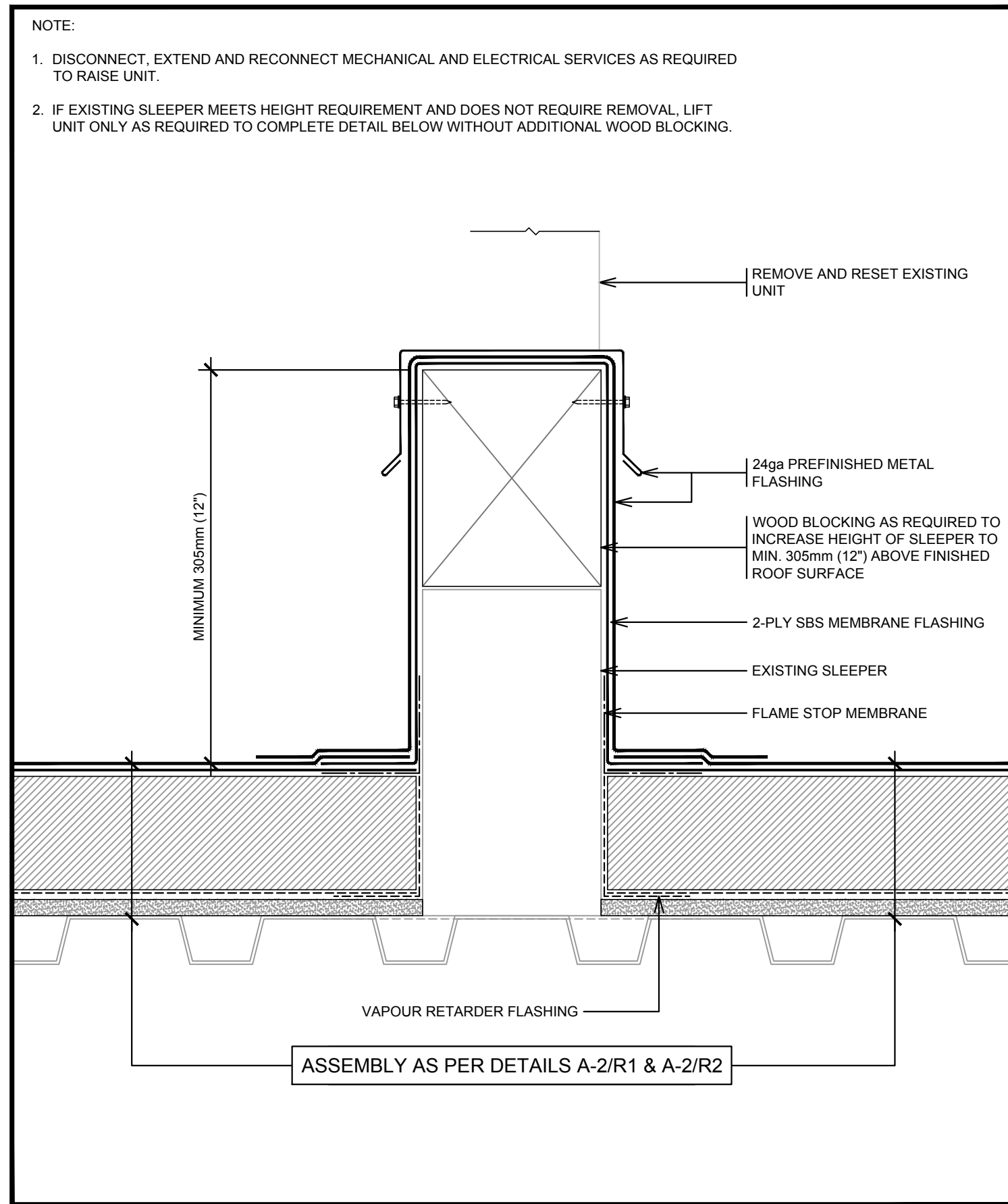
drawing no.
dessiné no. A-3



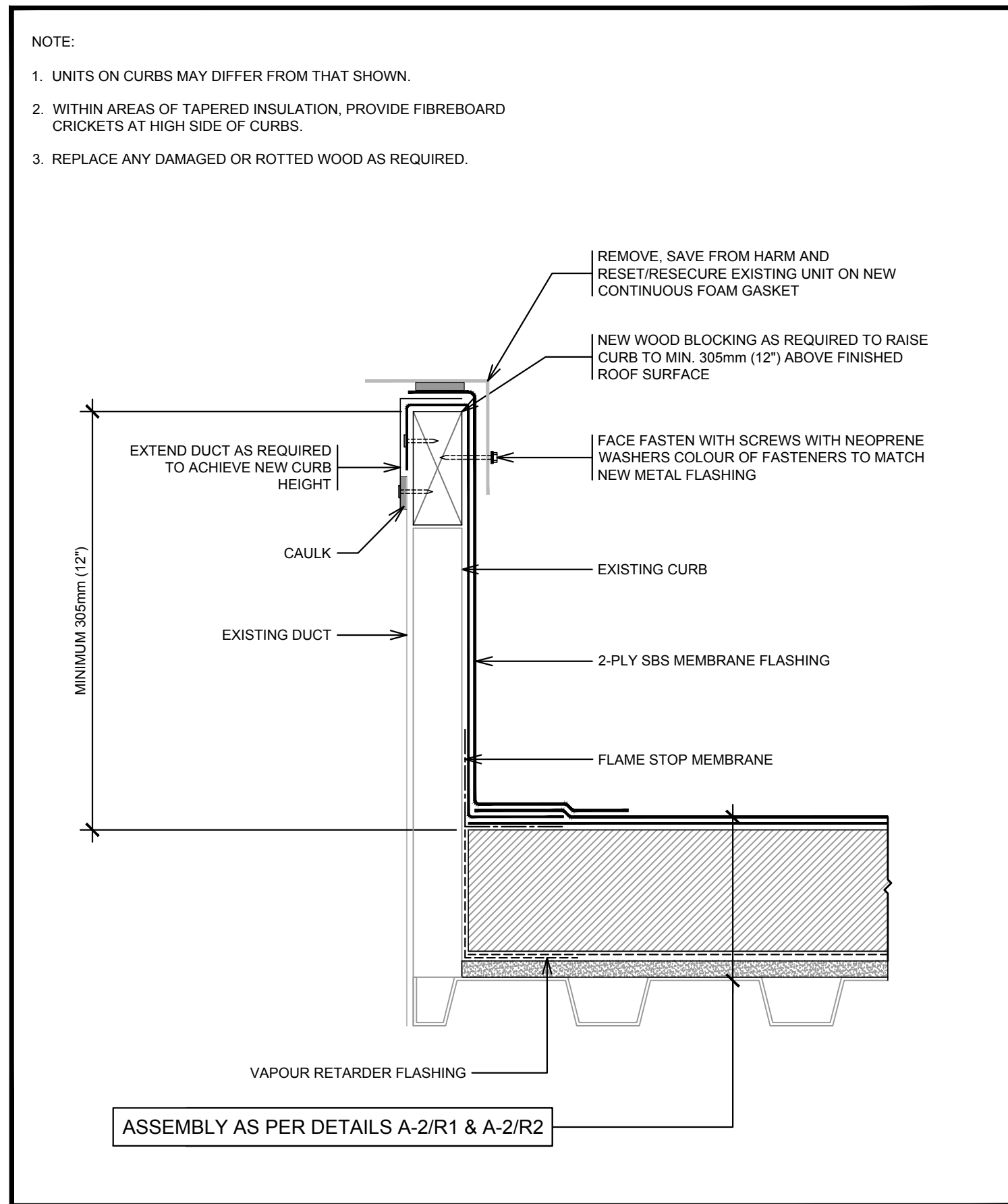
R1 DRAIN SUMP TRANSITION
5B SCALE: NTS



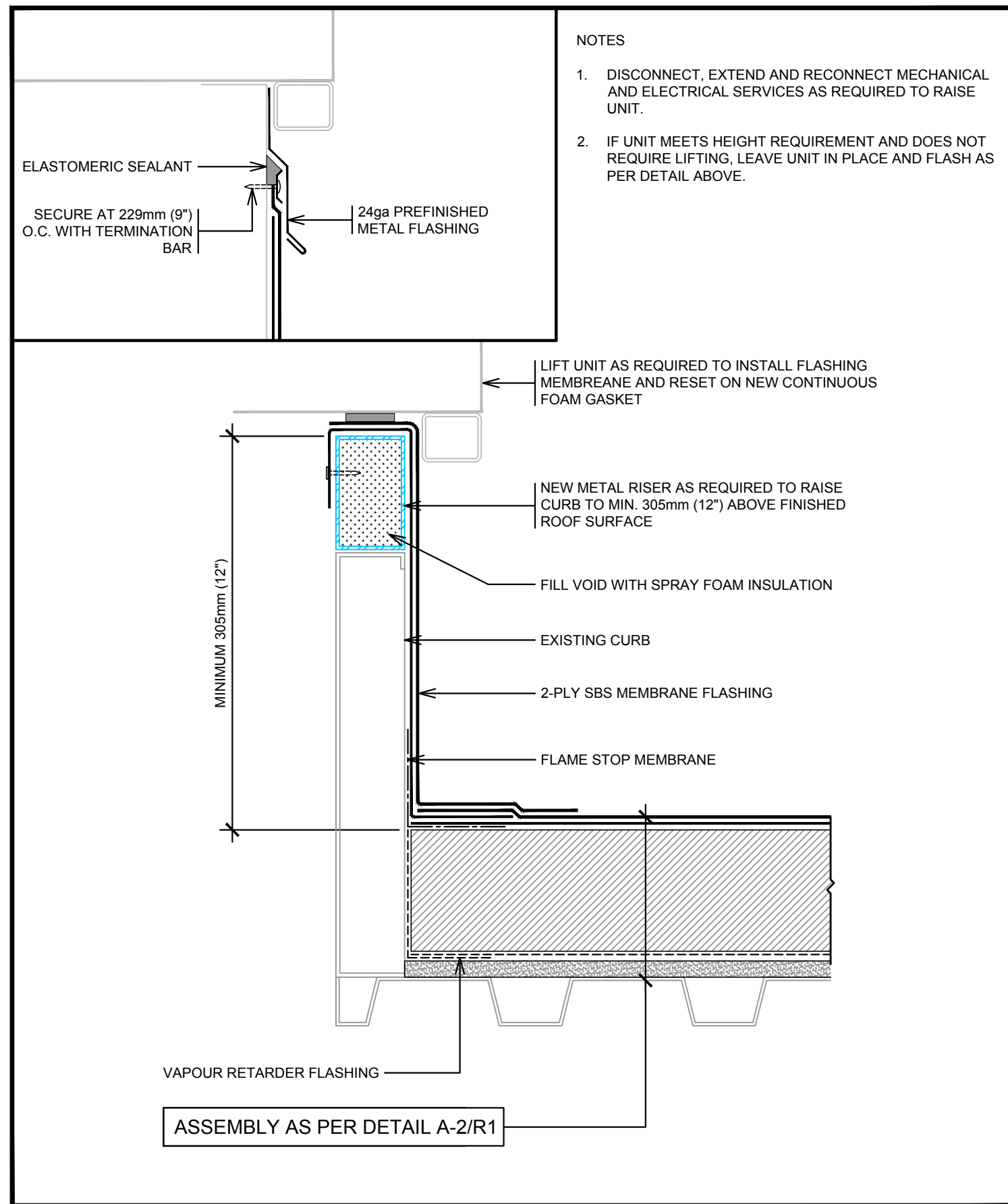
R1 TYPICAL DRAIN
5A SCALE: NTS



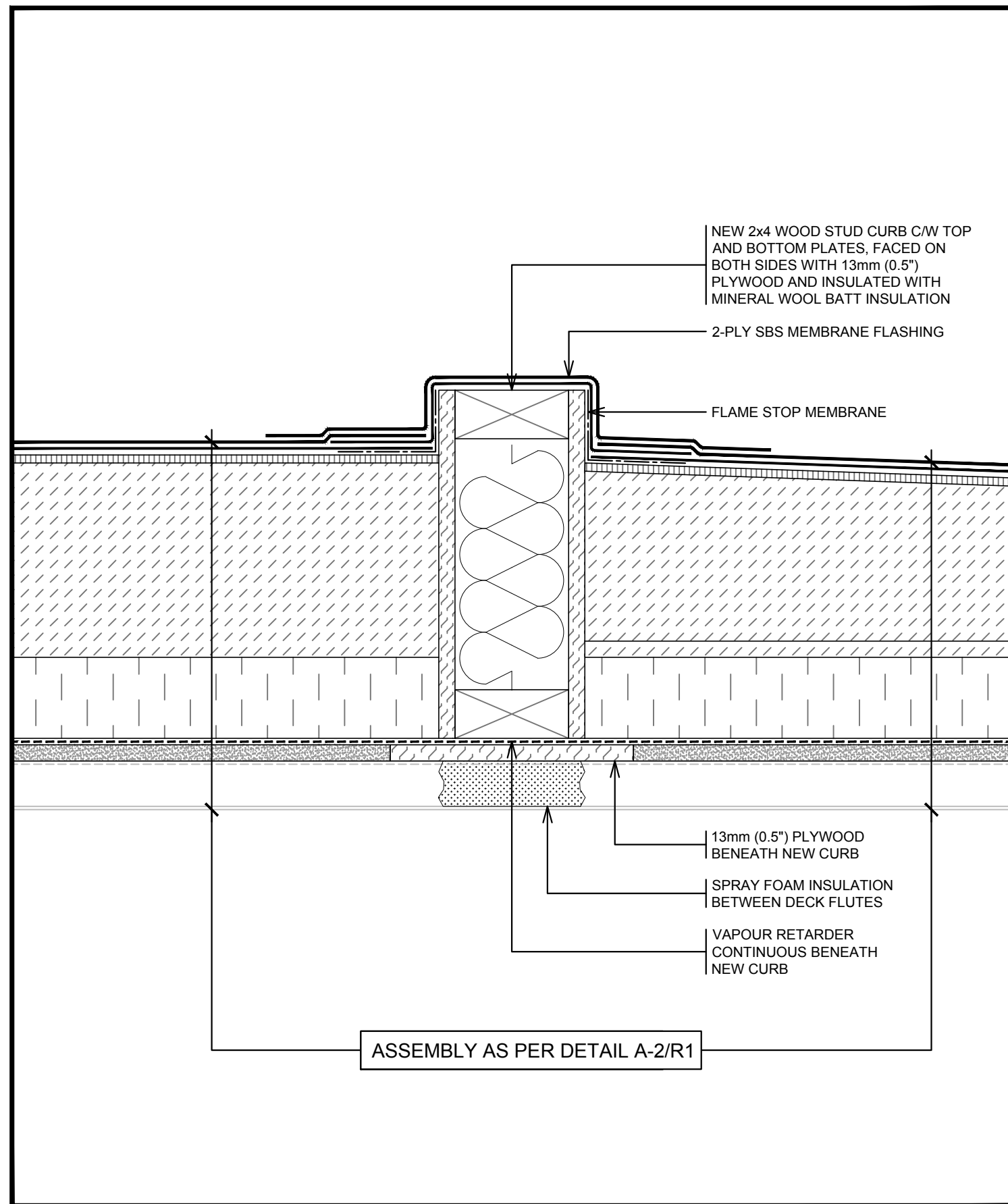
R1 TYPICAL SLEEPER
4C SCALE: NTS



R1 TYPICAL MECHANICAL UNIT CURB
4B SCALE: NTS



R1 TYPICAL RTU CURB
4A SCALE: NTS



R1 NEW CONTROL JOINT
3B SCALE: NTS

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WTC BUILDING ROOF REPLACEMENT
867 LAKESHORE ROAD
BURLINGTON

drawing title
titre du dessin
ROOF ASSEMBLY R1
DETAILS

drawn by
dessiné par
JRT

designed by
conc par

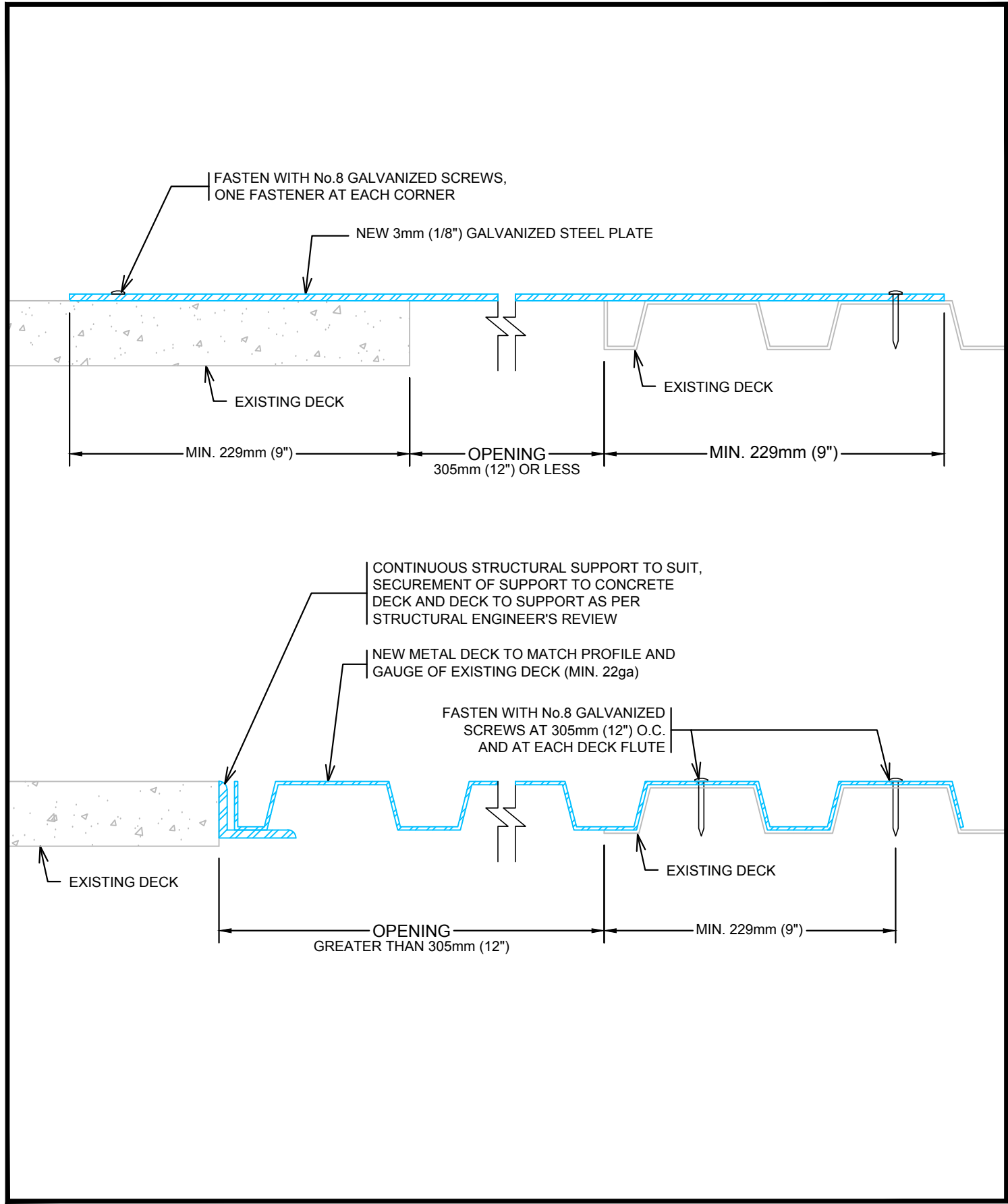
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approuvé par
DAA

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soumission
project manager
administrateur de projets

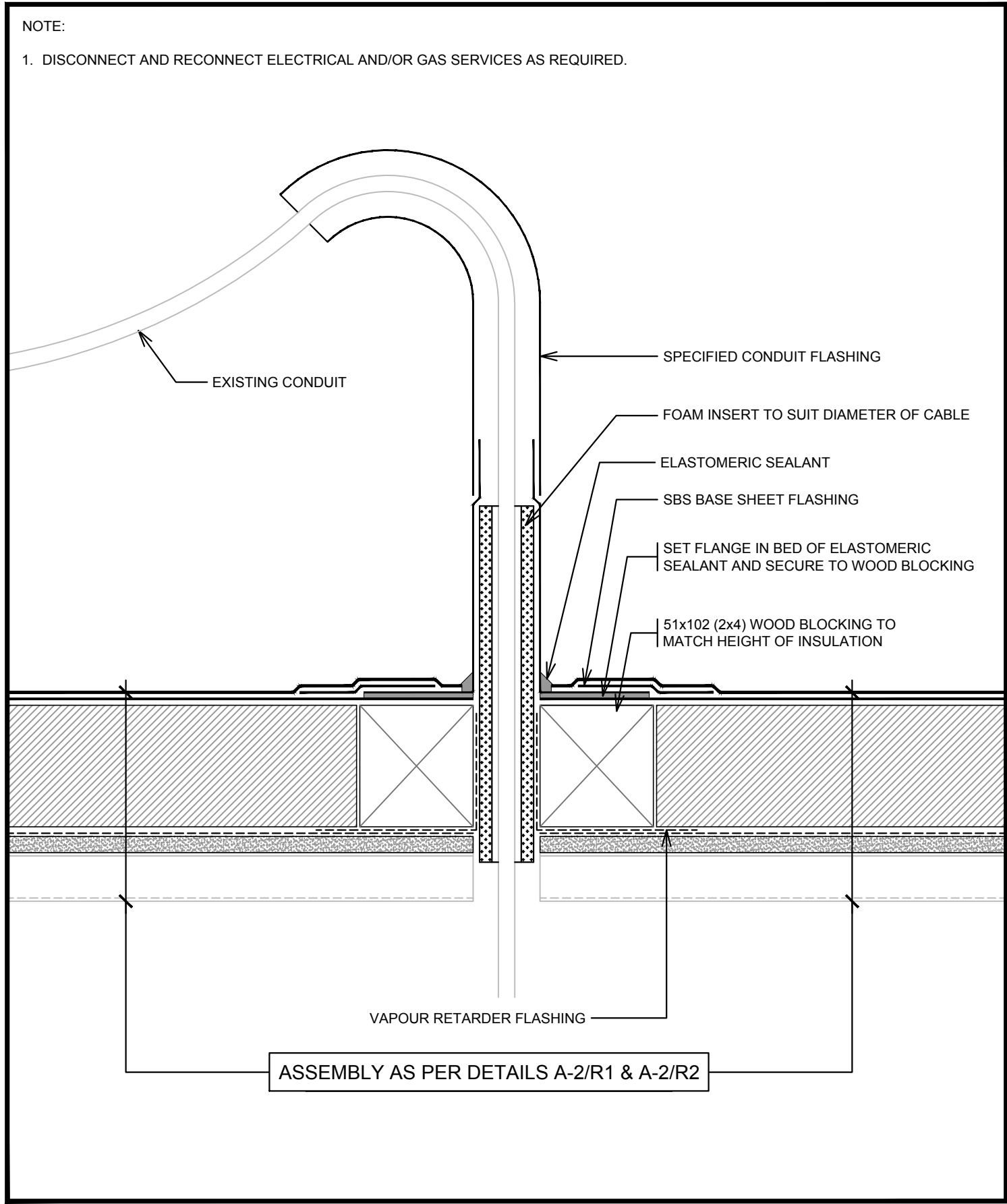
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2019/02/20

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161-00325-01

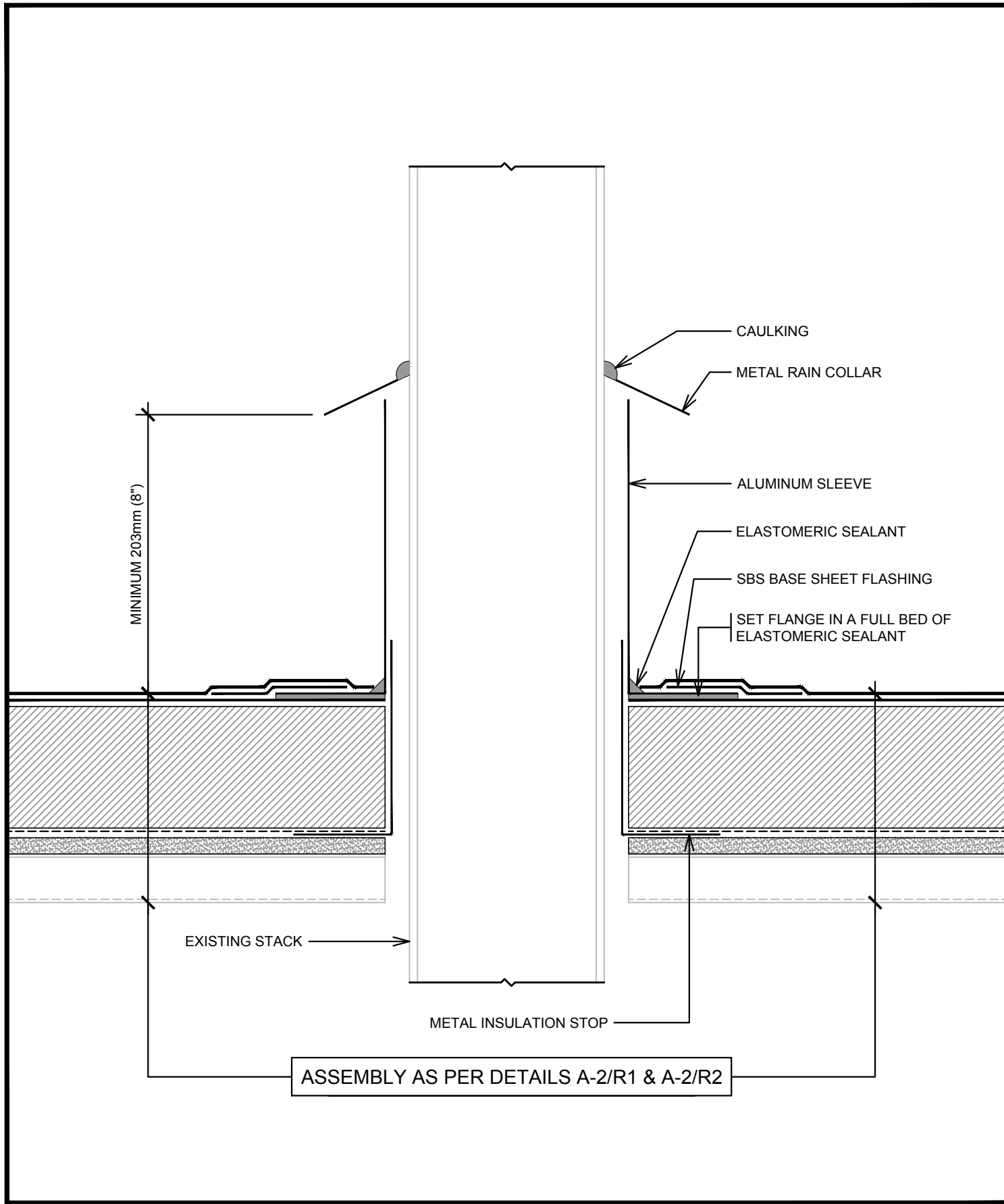
drawing no.
dessiné no.
A-4



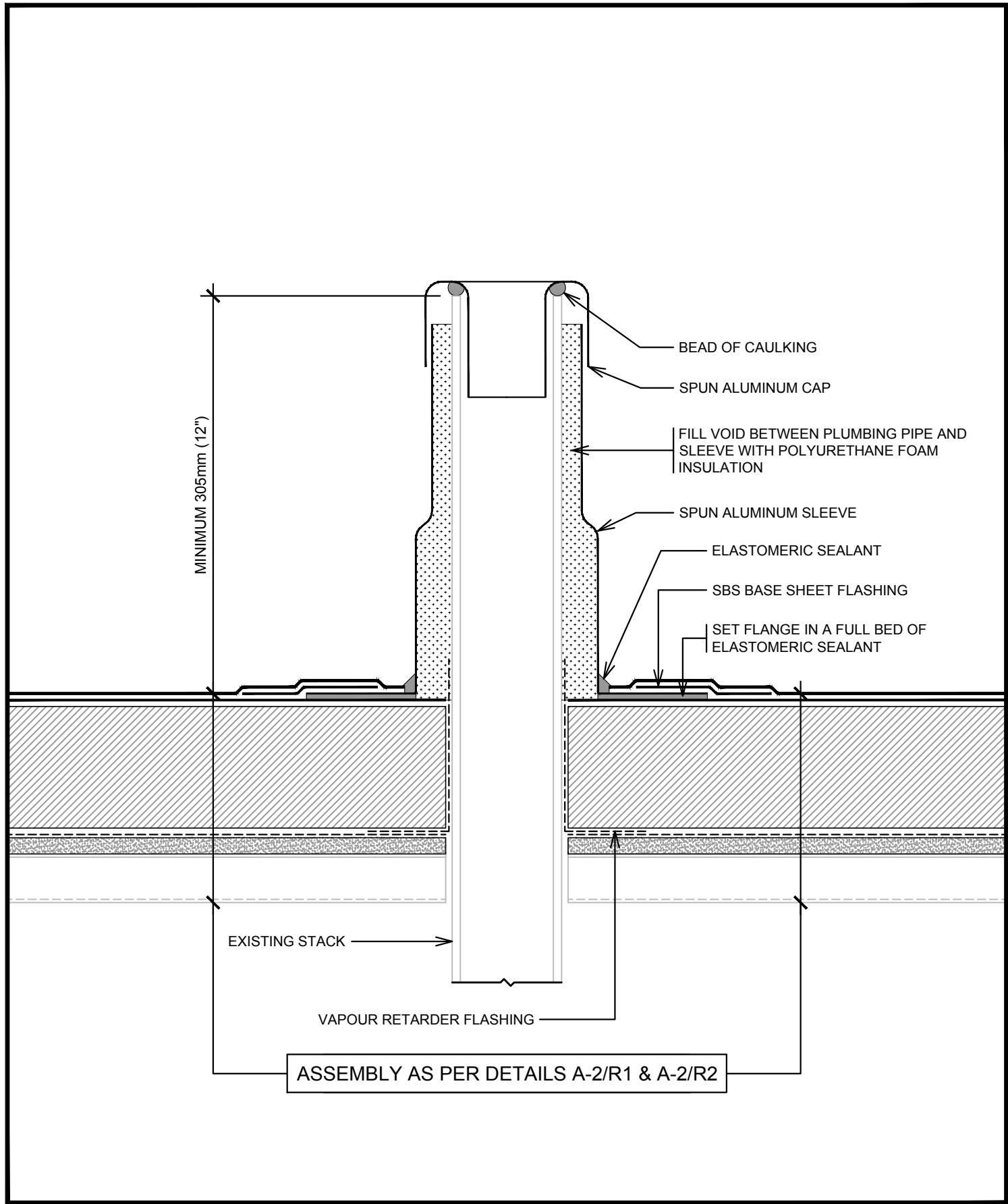
R1
7
TYPICAL DECK CLOSURE
SCALE: NTS



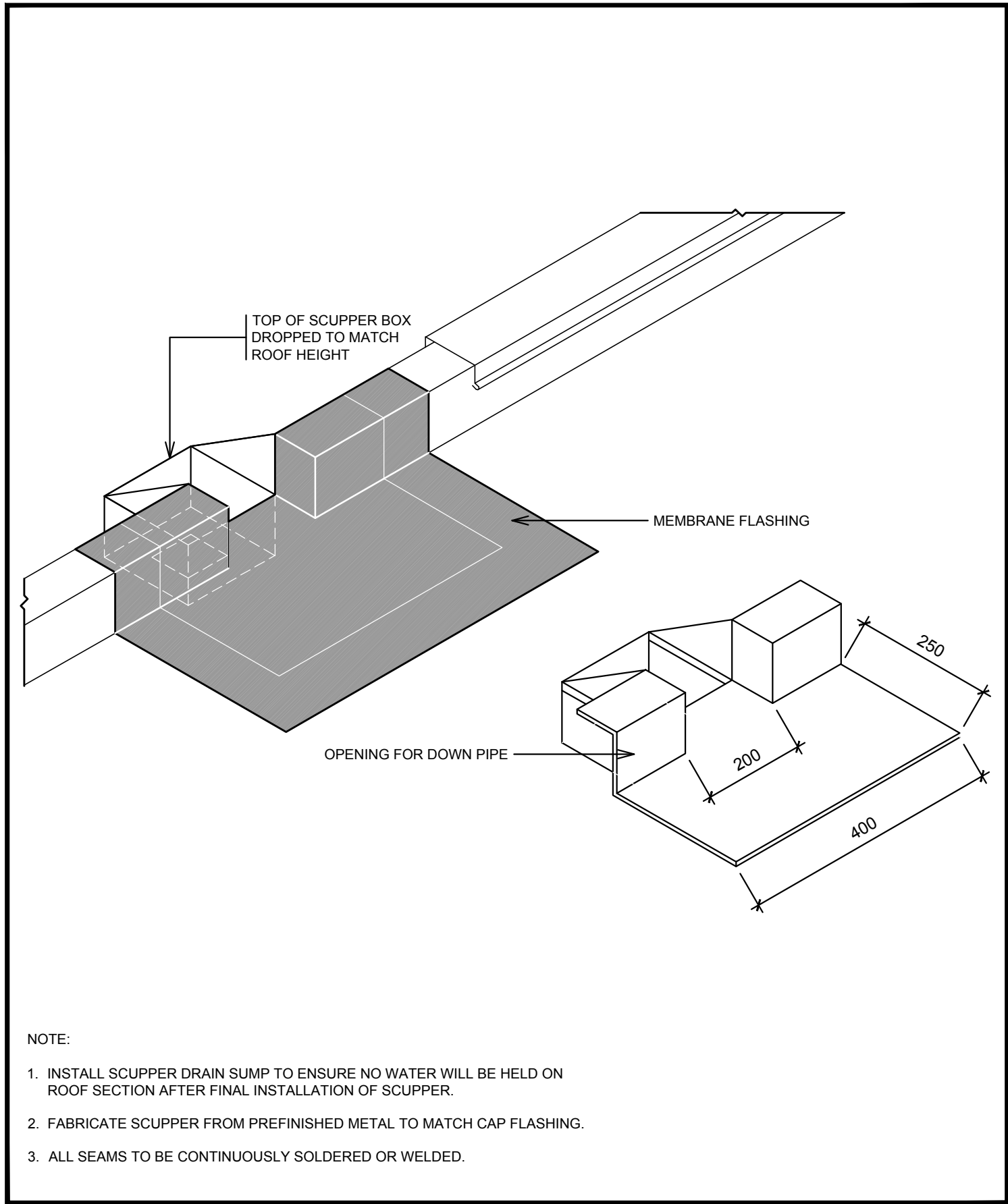
R1
6C
TYPICAL CONDUIT FLASHING
SCALE: NTS



R1
6B
TYPICAL B-VENT FLASHING
SCALE: NTS



R1
6A
TYPICAL SOIL PIPE FLASHING
SCALE: NTS



R1
5C
TYPICAL SCUPPER
SCALE: NTS

ORIENTATION

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WTC BUILDING ROOF REPLACEMENT
867 LAKESHORE ROAD
BURLINGTON

drawing title
titre du dessin
ROOF ASSEMBLY R1
DETAILS

drawn by
dessiné par

JRT

designed by
conçue par

approved by
approuvé par

DAA

tender
soumission

project manager
administrateur de projets

project date
date du projet

2019/02/20

project no.
no. du projet

161-00325-01

drawing no.
dessiné no.

A-5

ORIENTATION

SEAL



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project title
titre du projet

Ontario
WTC BUILDING ROOF REPLACEMENT
867 LAKESHORE ROAD
BURLINGTON

drawing title
titre du dessin

ROOF ASSEMBLY R2
DETAILS

drawn by
dessine par

JRT

designed by
conc par

approved by
approuve par

DAA

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soumission

project manager
administrateur de projets

project date
date du projet

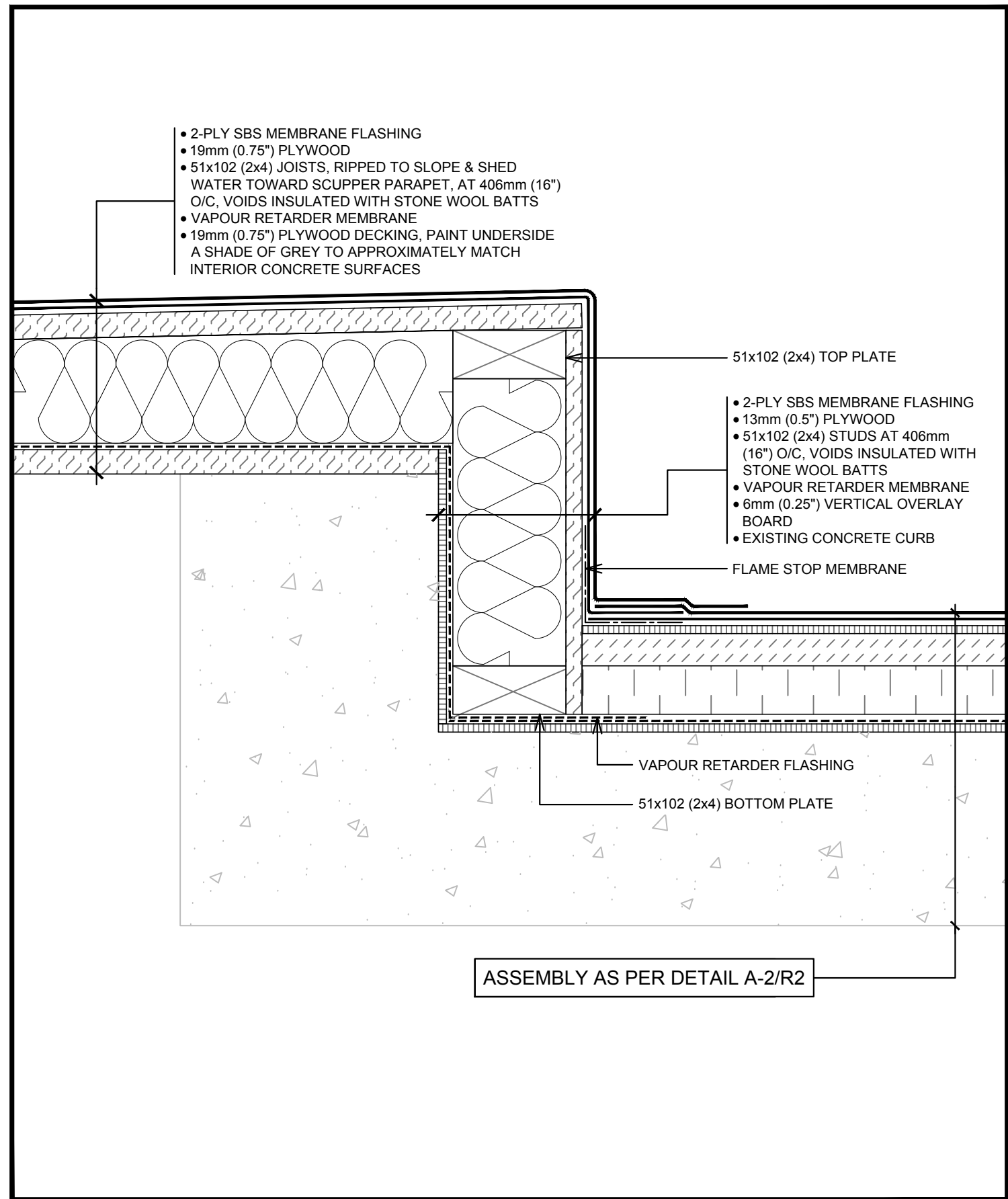
2019/02/20

project no.
no. du projet

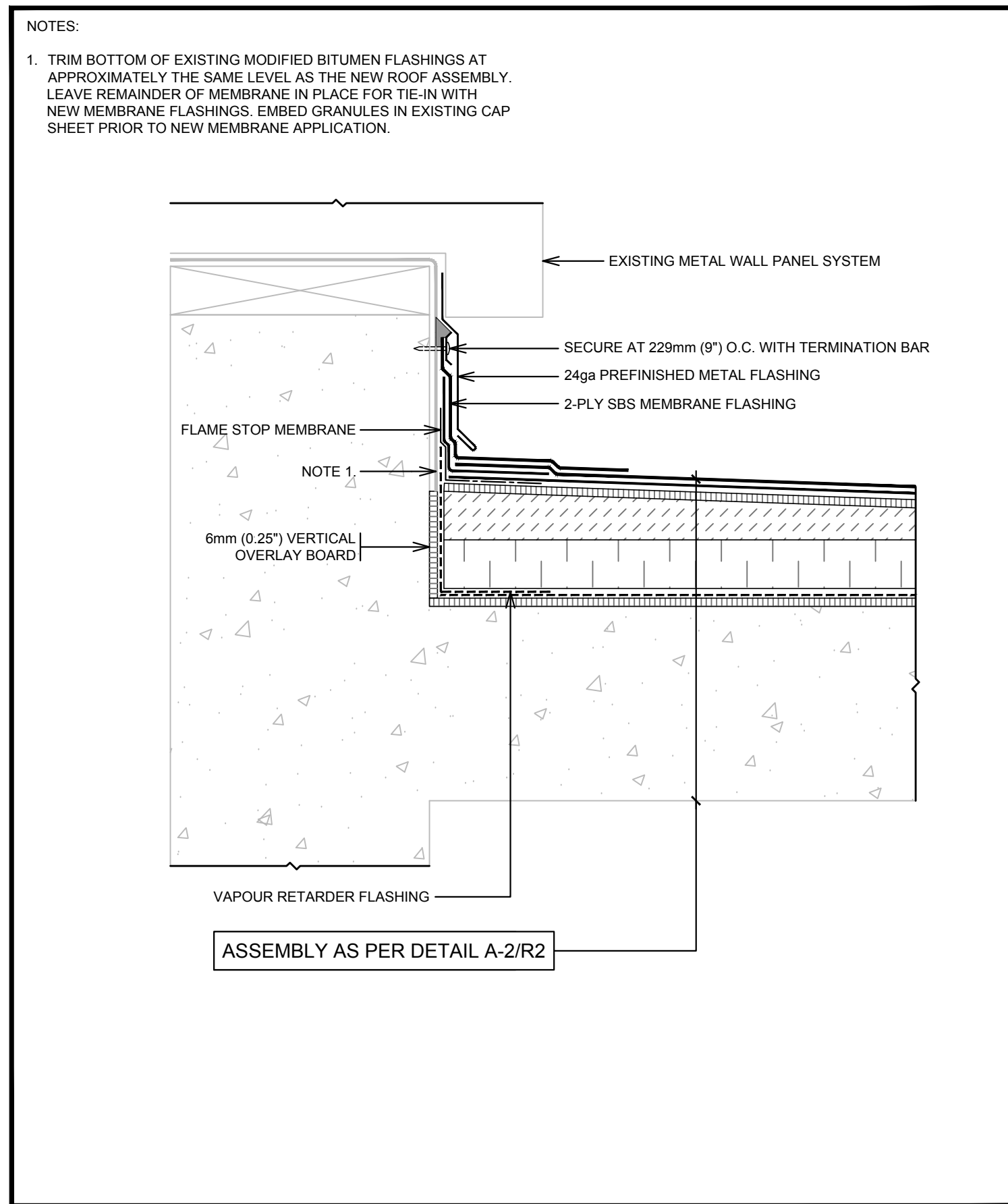
161-00325-01

drawing no.
dessine no.

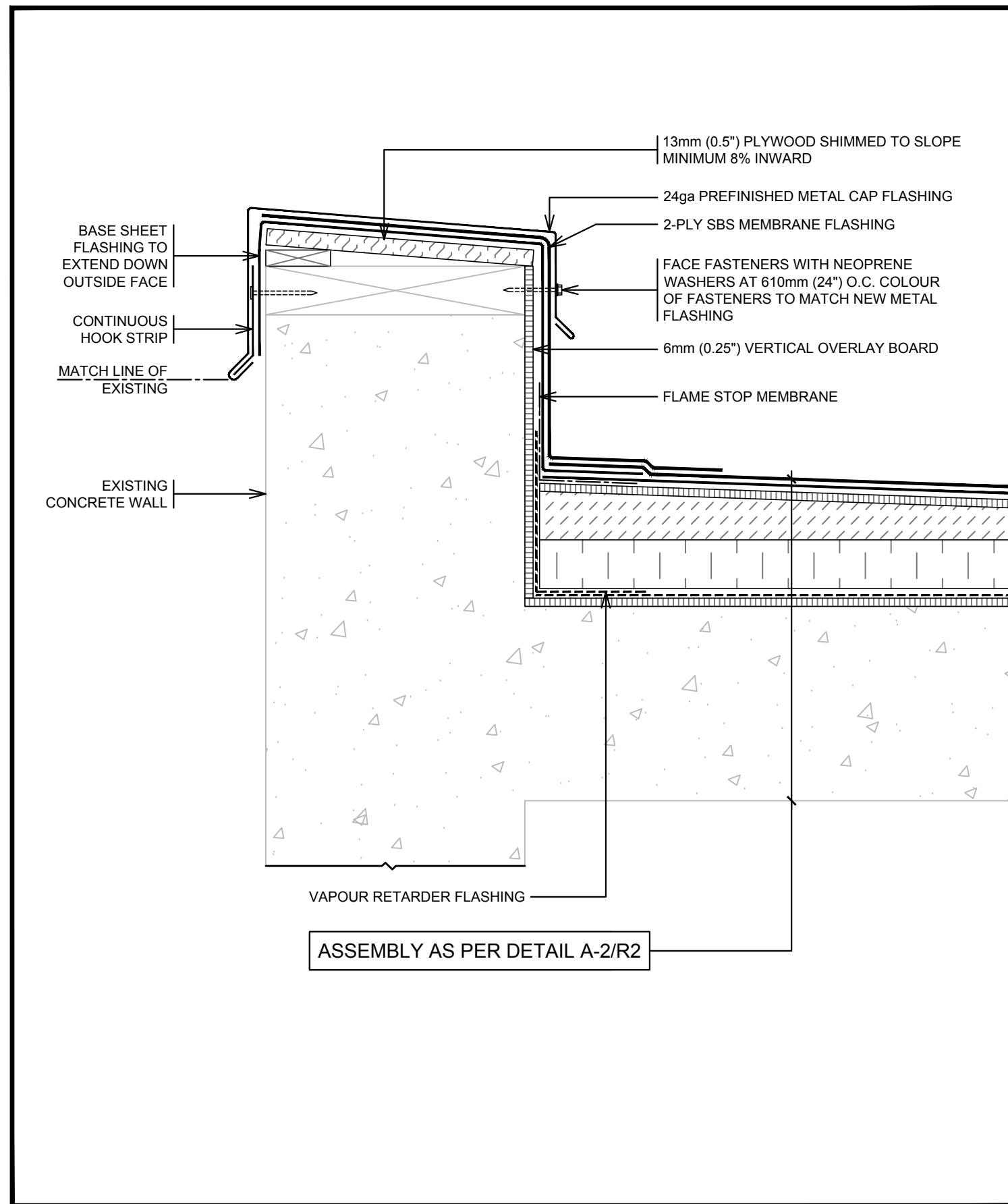
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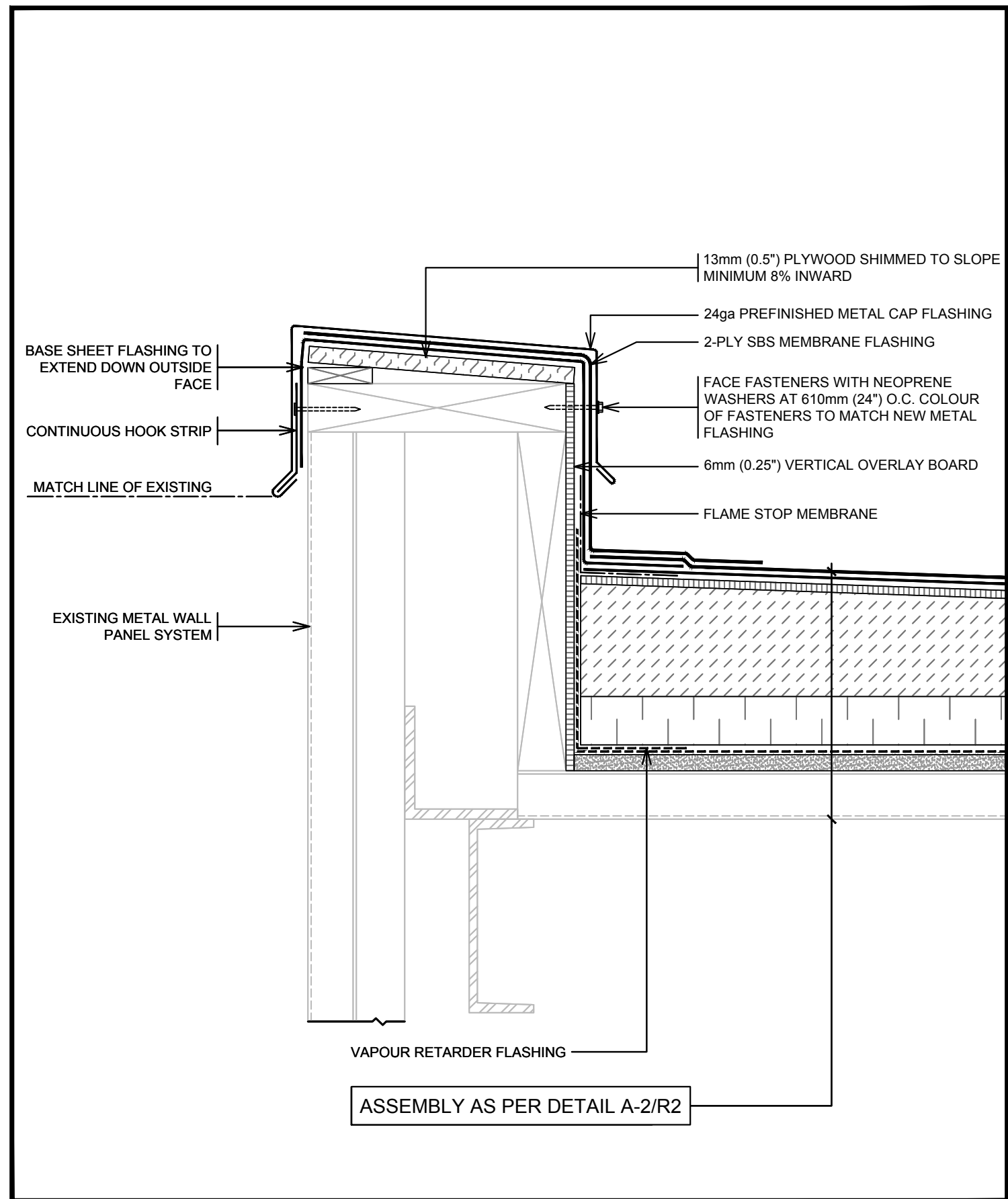
R2 FORMER SKYLIGHT CURB
4 SCALE: NTS



R2 WALL
3 SCALE: NTS



R2 PARAPET AT CONCRETE WALL
2 SCALE: NTS



R2 PARAPET AT METAL WALL
1 SCALE: NTS

ORIENTATION

SEAL



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- A

B

C

A

B

C

A

B

C
- Detail No.
No. du détail

drawing no. – where detail required
dessin no. – où détail exigé

drawing no. – where detailed
dessin no. – où détaillé

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Ontario
WTC BUILDING ROOF REPLACEMENT
867 LAKESHORE ROAD
BURLINGTON

drawing title
titre du dessin

ROOF ASSEMBLY R3
DETAILS

drawn by
dessine par

JRT

designed by
conc par

approved by
approuve par

DAA

tender
soumission

project manager
administrateur
de projets

project date
date du projet

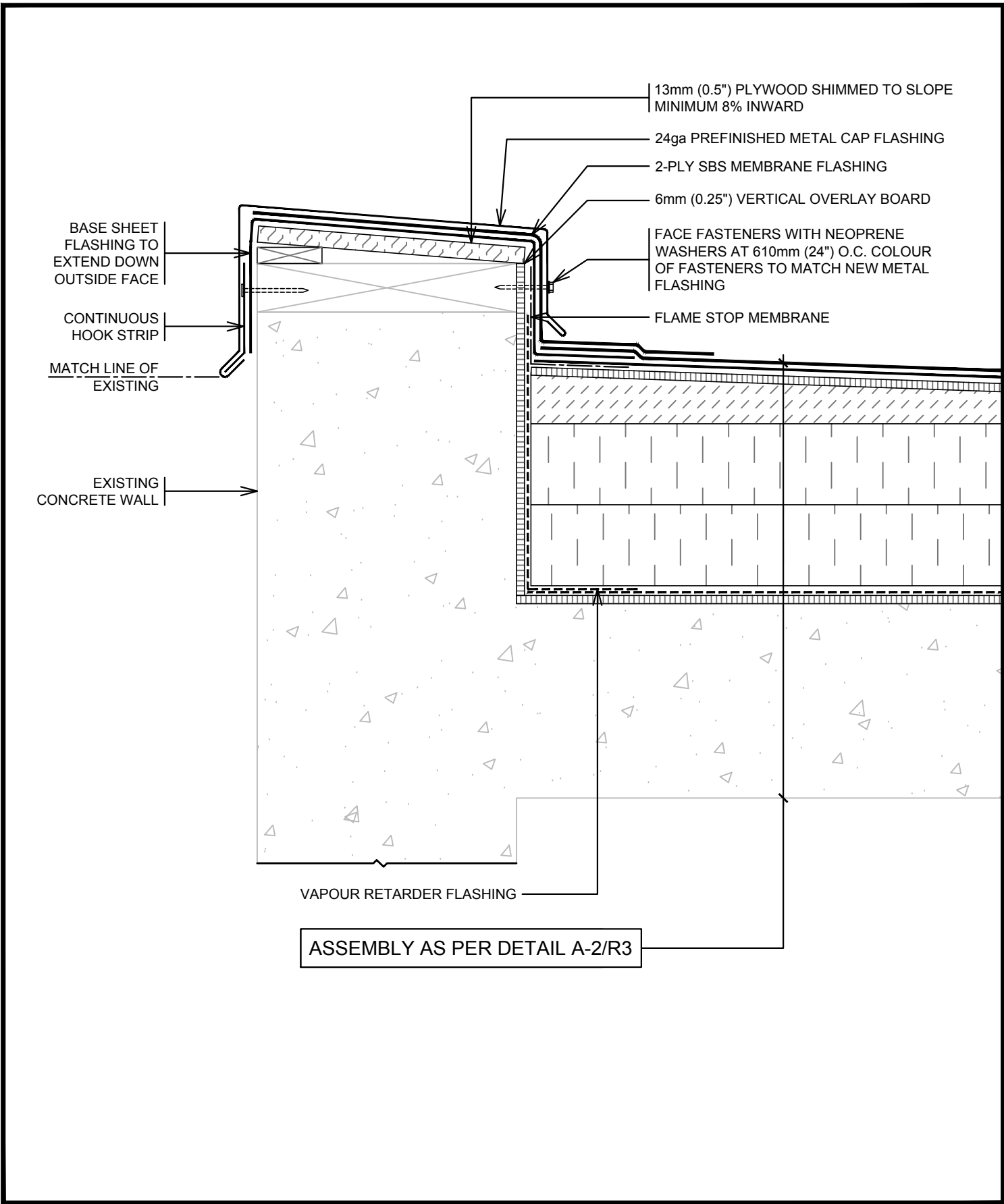
2019/02/20

project no.
no. du projet

161-00325-01

drawing no.
dessine no.

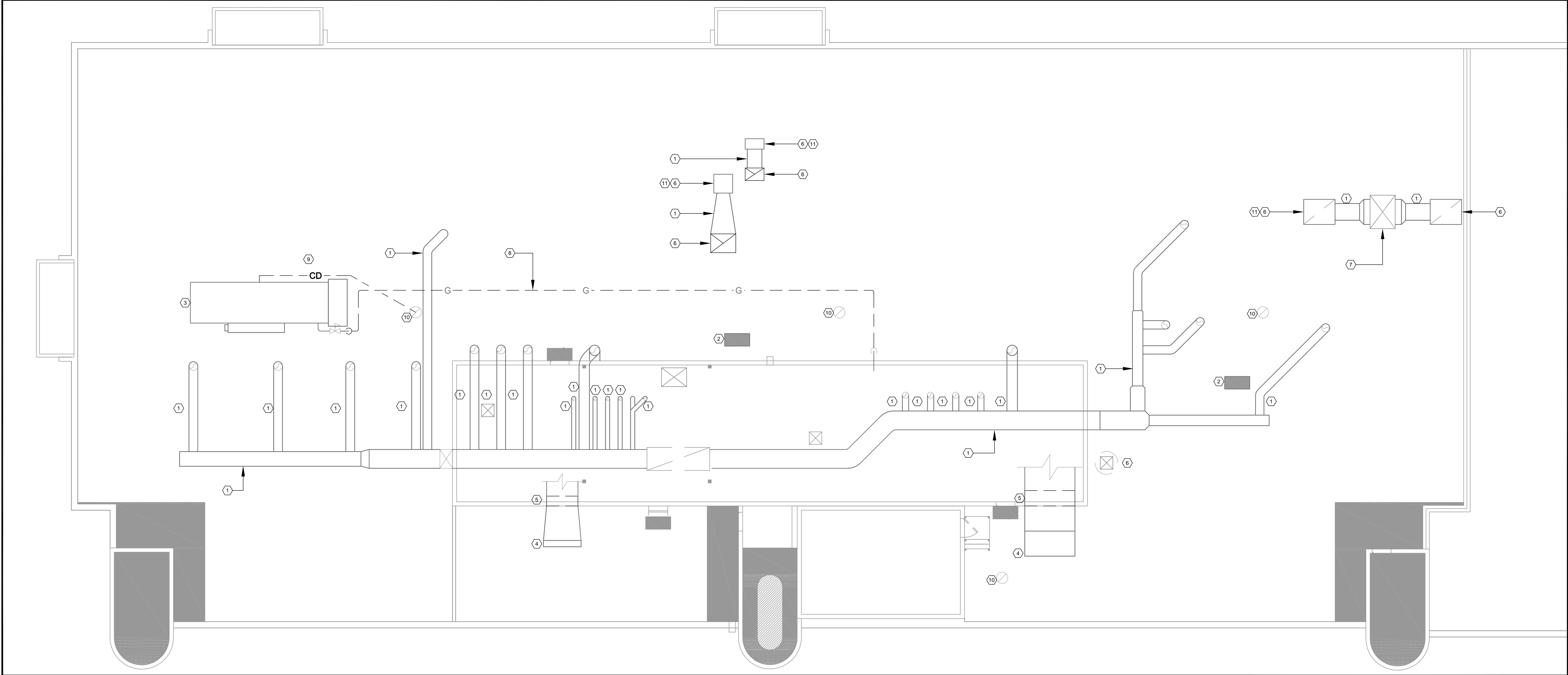
A-7



R3

1

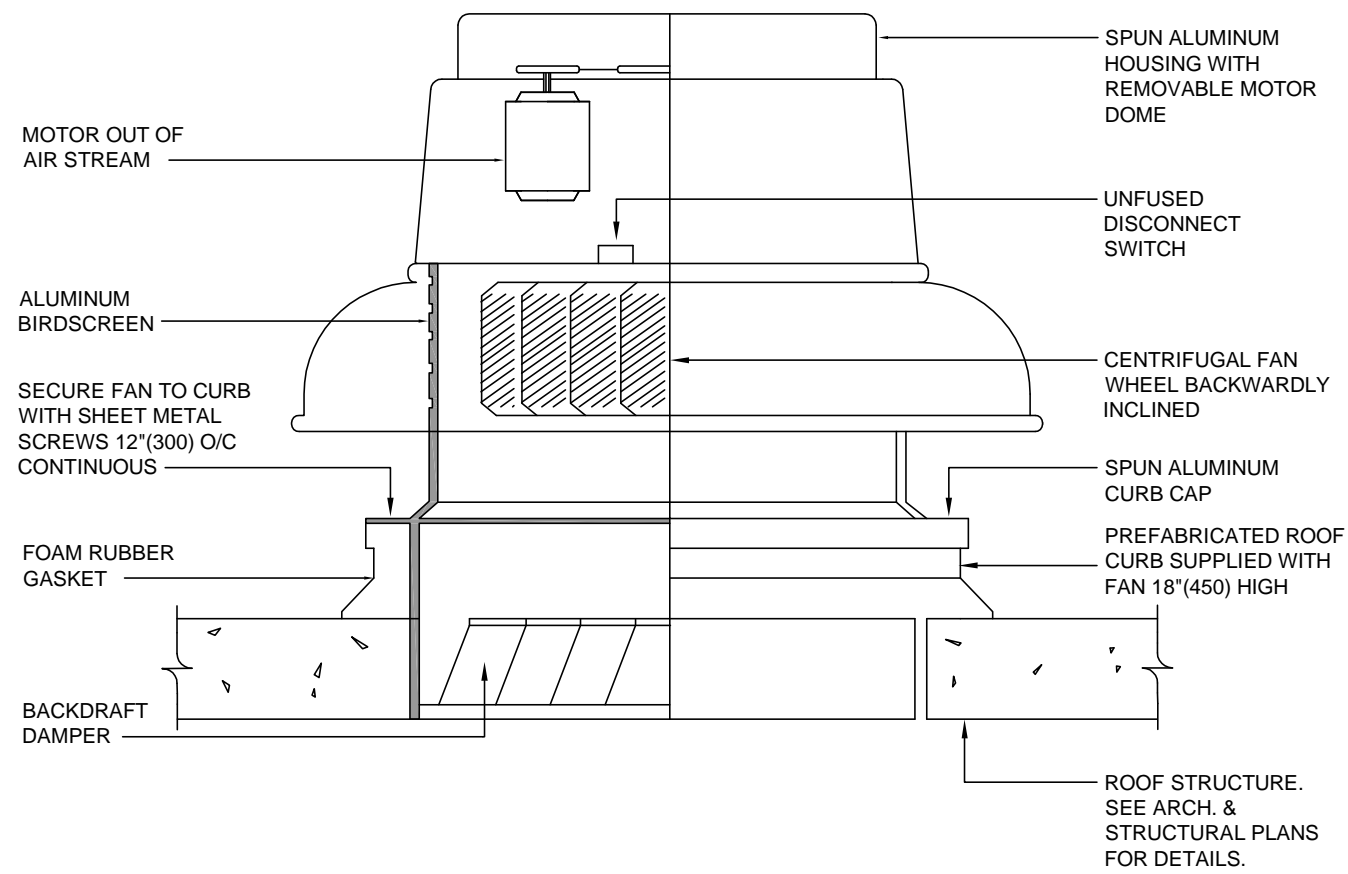
PARAPET AT CONCRETE WALL
SCALE: NTS



1 MECHANICAL LAYOUT
SCALE: NTS

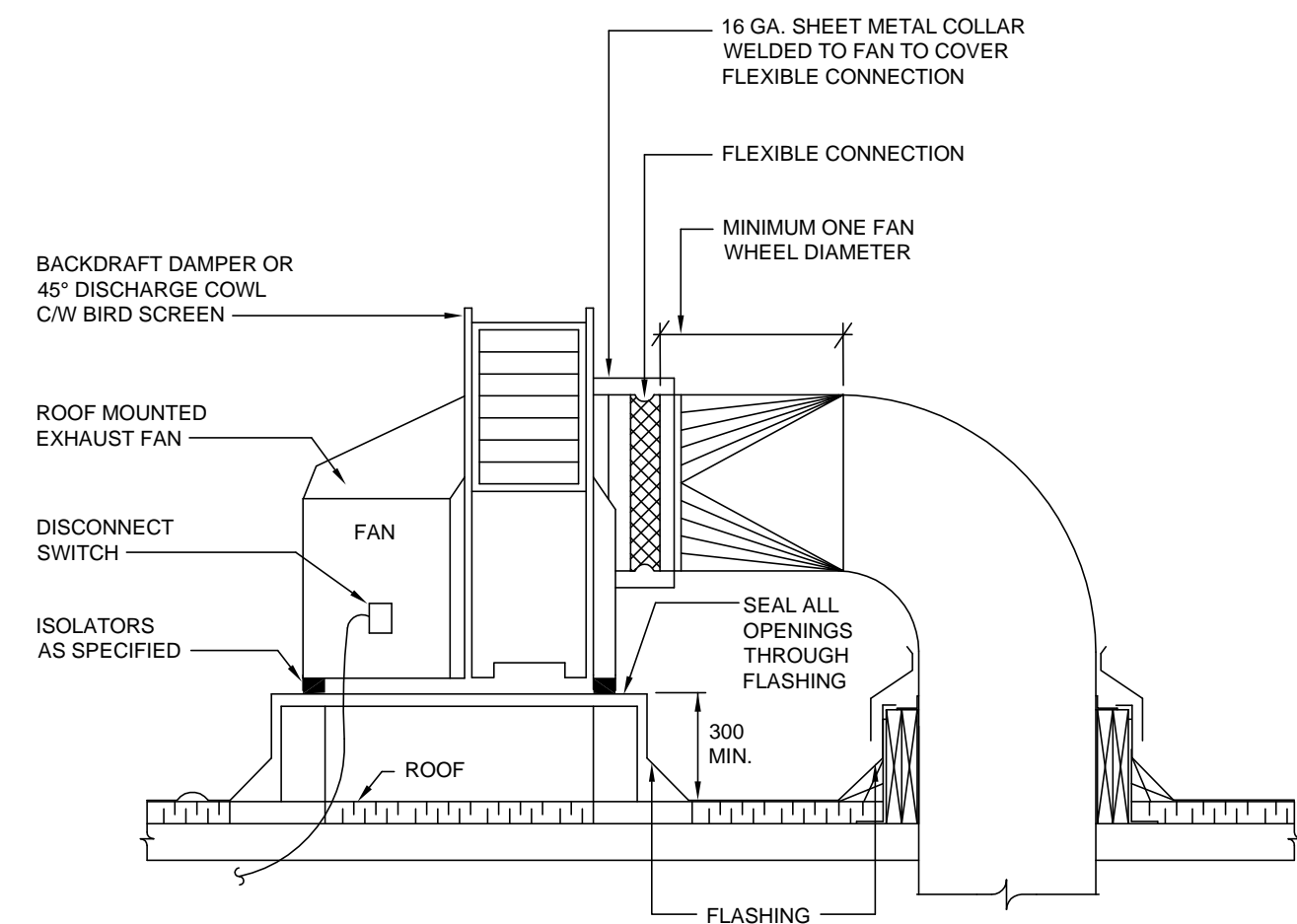
DRAWING NOTES

- 1 EXISTING INSULATION FOR ALL DUCTWORK ON ROOF TO BE REPLACED WITH NEW, C/W A PRE-FABRICATED, SELF-STICKING SHEET WATERPROOFING MEMBRANE. MEMBRANE TO CONSIST OF UV-RESISTANT ALUMINUM SURFACE WITH DOUBLE LAYER OF HIGH-DENSITY POLYETHYLENE REINFORCEMENT, AND INNER LAYER OF RUBBERIZED ASPHALT ADHESIVE. SUITABLE FOR ADHERING TO METAL RIGID INSULATION, OR OTHER CLEAN DRY SURFACES. ACCEPTABLE MATERIAL: FLEX-CLAD 400 AS MANUFACTURED BY MFM BUILDING PRODUCTS CORP C/W WEATHERPROOF INSULATION JACKET. REPLACE EXISTING DUCTWORK SUPPORT ON ROOF WITH DURA-BLOK™ ROOFTOP SUPPORTS OR APPROVED EQUAL. ROOF TOP MOUNTED SUPPORTS SHALL BE MODIFIED BY ARCH. (TYPICAL)
- 2 TEMPORARY DISCONNECT THE EXISTING CONDENSING UNIT FOR ROOF REPLACEMENT INSTALLATION. MODIFY THE REFRIGERANT PIPING AND TEMPORARY CAP REFRIGERANT PIPING FOR ROOF TOP INSTALLATION. KEEP EXISTING UNIT SUPPORT AND RAISE THE CONDENSING UNIT TO SUIT NEW ROOF INSTALLATION. MECHANICAL CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR A/C UNITS RELOCATED POSITION ON THE ROOF TO SUIT THE EXISTING CABLE LENGTH PRIOR TO INSTALLATION.
- 3 EXISTING AHU TO REMAIN.
- 4 EXISTING MAKE UP AIR UNIT 5' x 8' INTAKE LOUVRE AND WEATHER HOOD TO BE TEMPORARILY REMOVE FROM WALL FOR INSTALLATION OF NEW ROOF. RE-INSTALL THE LOUVRE AND WEATHER HOOD AFTER THE INSTALLATION OF NEW ROOF. THE BOTTOM OF THE INTAKE LOUVRE TO BE 12" ABOVE FINISHED ROOF SURFACE. ARCH TO MODIFY EXISTING WALL OPENING TO SUITE NEW LOUVRE ELEVATED POSITION. CONTRACTOR TO VERIFY ON THE FOR EXACT DUCTWORK DIMENSION. REFER TO ARCHITECTURAL DRAWING FOR NEW ROOF SURFACE ELEVATION.
- 5 CONTRACTOR TO MODIFY EXISTING DUCTWORK AND PROVIDE NEW TRANSITION DUCTWORK FOR THE ELEVATED LOUVRE MOUNTING HEIGHT BETWEEN THE AIR HANDLING UNIT AND INTAKE LOUVRE.
- 6 CONTRACTOR TO TEMPORARILY DETACH BOTH FAN AND DUCTWORK FOR THE INSTALLATION OF NEW CURB AND ROOFING C/W ALL CONTROL WIRING, RECORD EXISTING CONTROL. REINSTALL AND RAISE EXISTING FAN AND MODIFY THE DUCTWORK TO SUIT NEW ELEVATED ROOF SURFACE. TEMPORARILY CAP EXISTING DUCTWORK OPENING BEFORE RE-INSTALLATION. CONTRACTOR TO VERIFY EXACT DUCTWORK DIMENSION. REFER TO ARCHITECTURAL DRAWING FOR NEW ROOF SURFACE ELEVATION AND RE-COMMISSION THE UNIT AFTER INSTALLATION
- 7 EXISTING EXHAUST PLENUM BOX TO REMAIN. ONLY MODIFY THE DUCTWORK BETWEEN THE BOX AND THE FAN TO SUIT NEW FAN HEIGHT.
- 8 REMOVE AND REINSTALL THE SECTION OF 2"Ø NATURAL GAS PIPING AS SHOWN BEFORE THE PRV ISOLATION VALVE FOR THE NEW ROOF REPLACEMENT. REINSTALL THE GAS PIPE TO 8" ABOVE FINISHED ROOF SURFACE WITH NEW DURA-BLOK™ ROOFTOP SUPPORTS OR APPROVED EQUAL.
- 9 EXISTING CONDENSATE PIPE TO BE MODIFIED AND RAISED TO SUITE NEW ROOF ELEVATION.
- 10 REPLACE EXISTING ROOF DRAIN WITH NEW ONE MATCHING EXISTING TO SUIT NEW ROOF. REFER TO ARCH DRAWING FOR ROOF DRAIN DETAILS.
- 11 THE CONTRACTOR SHALL COORDINATE TEMPORARY SHUT DOWN AND DISCONNECTION/RECONNECTION OF EQUIPMENT, INCLUDING BUT NOT LIMITED TO MECHANICAL UNITS, DUCTWORK, VENTS, GAS LINES OR ELECTRICAL CONNECTIONS, WITH THE OWNER'S REPRESENTATIVE AS REQUIRED TO COMPLETE THE SPECIFIED WORK. THE CONTRACTOR SHALL ASSUME THAT SHUT DOWN OF THIS EQUIPMENT MAY NEED TO BE COMPLETED AFTER HOURS, ON WEEKENDS OR ON HOLIDAYS DEPENDING ON THE IMPACT TO BUILDING OPERATIONS. TYPICAL FOR ALL.



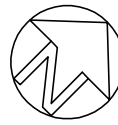
- NOTES:
01. FANS AND CURBS SHALL BE BY THE SAME MANUFACTURER
 02. DIMENSIONS IN BRACKETS IN MILLIMETRES

2 TYPICAL ROOF MOUNTED EXHAUST FAN
SCALE: NTS



3 ROOF MOUNTED UTILITY TYPE EXHAUST FAN
SCALE: NTS

ORIENTATION



SEAL



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Ontario
WTC BUILDING ROOF REPLACEMENT
867 LAKESHORE ROAD
BURLINGTON

drawing title
titre du dessin

MECHANICAL LAYOUT AND
DETAILS

drawn by
dessiné par BK

designed by
conc par FW

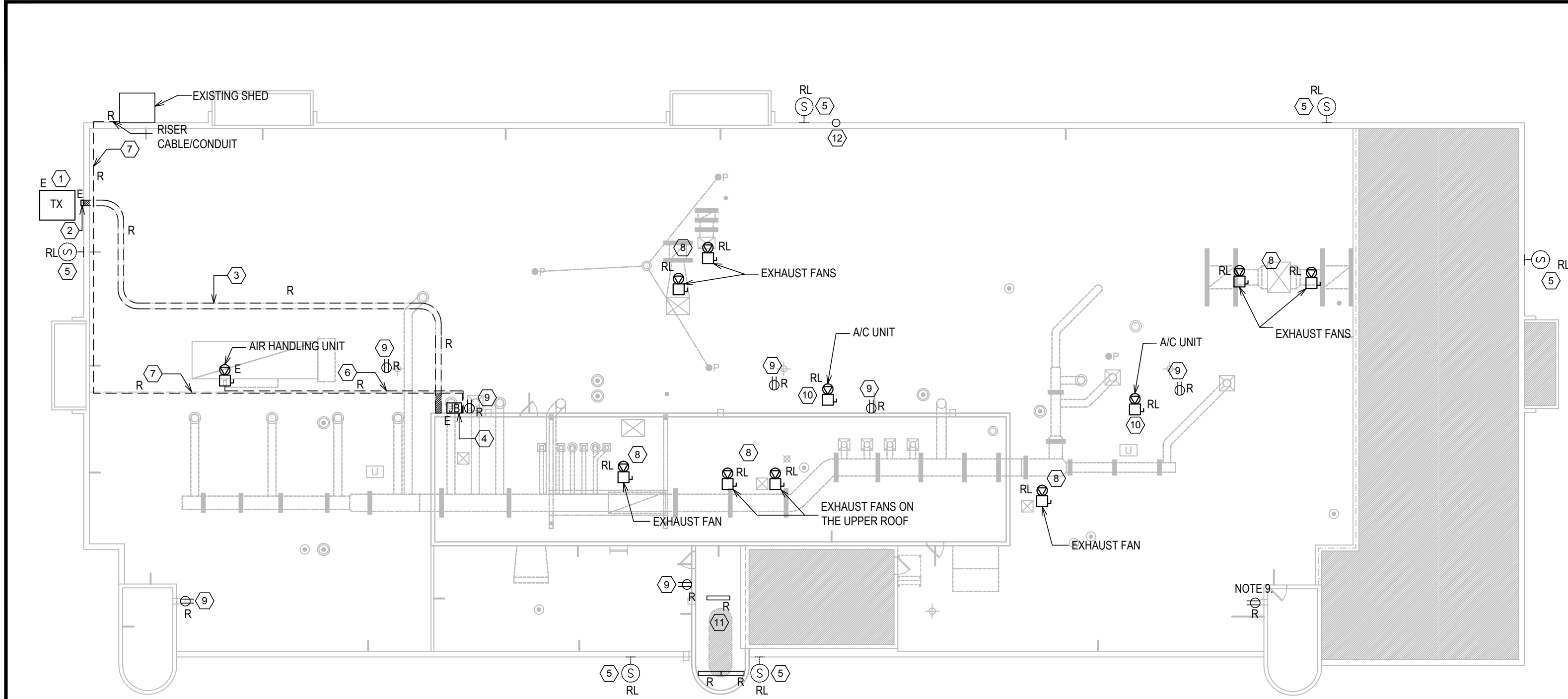
approved by
approuvé par

tender
soumission project manager
administrateur de projets

project date
date du projet 2019/02/20

project no.
no. du projet

drawing no.
dessiné no. M-1



DRAWING NOTES:

- EXISTING 4160/600V POWER TRANSFORMER TO REMAIN.
- RISER CABLE TRAY ON THE BUILDING WALL TO REMAIN.
- DISCONNECT THE EXISTING 5KV AND 600V CABLES. REMOVE THE EXISTING CABLE TRAY ON THE ROOF FROM PENTHOUSE UP TO AND INCLUDING THE BEND ON THE PARAPET. THE EXISTING 5KV AND 600V CABLES RUNNING INSIDE CABLE TRAY TO REMAIN. PROVIDE SUPPORTS FOR CABLES DURING ROOFING TO MAINTAIN THE BUILDING ENERGIZED DURING ROOFING. INCLUDE ALL ASSOCIATED COST IN THE CONTRACT PRICE FOR TEMPORARY CABLES SUPPORTING.
- EXISTING WALL MOUNTED 5KV MEDIUM VOLTAGE PULL BOX TO REMAIN.
- DISCONNECT AND UNINSTALL TEMPORARILY THE EXISTING FIRE ALARM SPEAKERS ON THE ROOF. REFER TO THE NEW PLAN DRAWING FOR NEW TEMPORARY AND PERMANENT INSTALLATION. RECORD THE EXISTING LOCATION AND ZONES. REMOVE EXISTING ROOF FIRE ALARM SPEAKER WIRING AND CONDUITS UP TO THE NEAREST JUNCTION BOX OR FIRE ALARM CONTROL PANEL IN THE BUILDING.
- IDENTIFY AND RECORD AIR HANDLING UNIT BREAKER, CABLE AND CONDUIT SIZE. REMOVE EXISTING CONDUIT AND WIRES UP TO THE MCC PANEL IN THE PENTHOUSE.
- IDENTIFY AND RECORD BREAKER, WIRE AND CONDUIT SIZE FOR EXISTING FEEDER TO SHED ON NORTH-WEST SIDE OF FACILITY. OBTAIN OWNER'S APPROVAL ON ANY SHUT DOWN IN ADVANCE. PROVIDE TEMPORARY POWER SUPPLY WITH CONDUCTORS/CONDUIT TO SHED TO MAINTAIN IT ENERGIZED DURING ROOFING. REMOVE THE EXISTING WIRES AND CONDUIT FROM ELECTRICAL PANEL IN PENTHOUSE TO THE SHED. REMOVE THE TEMPORARY POWER SUPPLY AND CABLING ONCE ROOFING WORKS AND PERMANENT CONDUCTORS /CONDUIT INSTALLATION COMPLETED. INCLUDE ALL ASSOCIATED COST FOR TEMPORARY POWER SUPPLY. REFER TO E02 DRAWING FOR MORE DETAILS.
- IDENTIFY AND RECORD THE ROOF MOUNTED EXHAUST FANS BREAKER, CONDUCTORS AND CONDUIT SIZES. DISCONNECT AND REMOVE THE CABLES AND CONDUITS UP TO THE ELECTRICAL PANEL IN PENTHOUSE.
- IDENTIFY AND RECORD THE BREAKER, CONDUCTORS AND CONDUIT SIZE AND CIRCUIT NUMBERS FOR EACH ROOF MOUNTED RECEPTACLE. REMOVE EXISTING RECEPTACLES ON THE ROOF WITH WIRES AND CONDUITS.
- IDENTIFY AND RECORD BREAKER, WIRE AND CONDUIT SIZE FOR EXISTING A/C UNITS ON THE ROOF. REMOVE THE WIRES AND CONDUITS UP TO THE ELECTRICAL PANEL.
- REMOVE THE EXISTING THREE LIGHTING FIXTURES IN THE STAIRWELL IN ROOF LEVEL.
- IDENTIFY AND RECORD INFORMATION OF EXISTING PHOTOCELL AND THE WIRING ON THE PARAPET AND UN-INSTALL TEMPORARILY WITH WIRING AND STORE IN PROTECTED CONDITION FOR FUTURE INSTALLATION. OBTAIN OWNER APPROVAL ON UN-INSTALLATION AND STORAGE IN ADVANCE.

GENERAL NOTES:

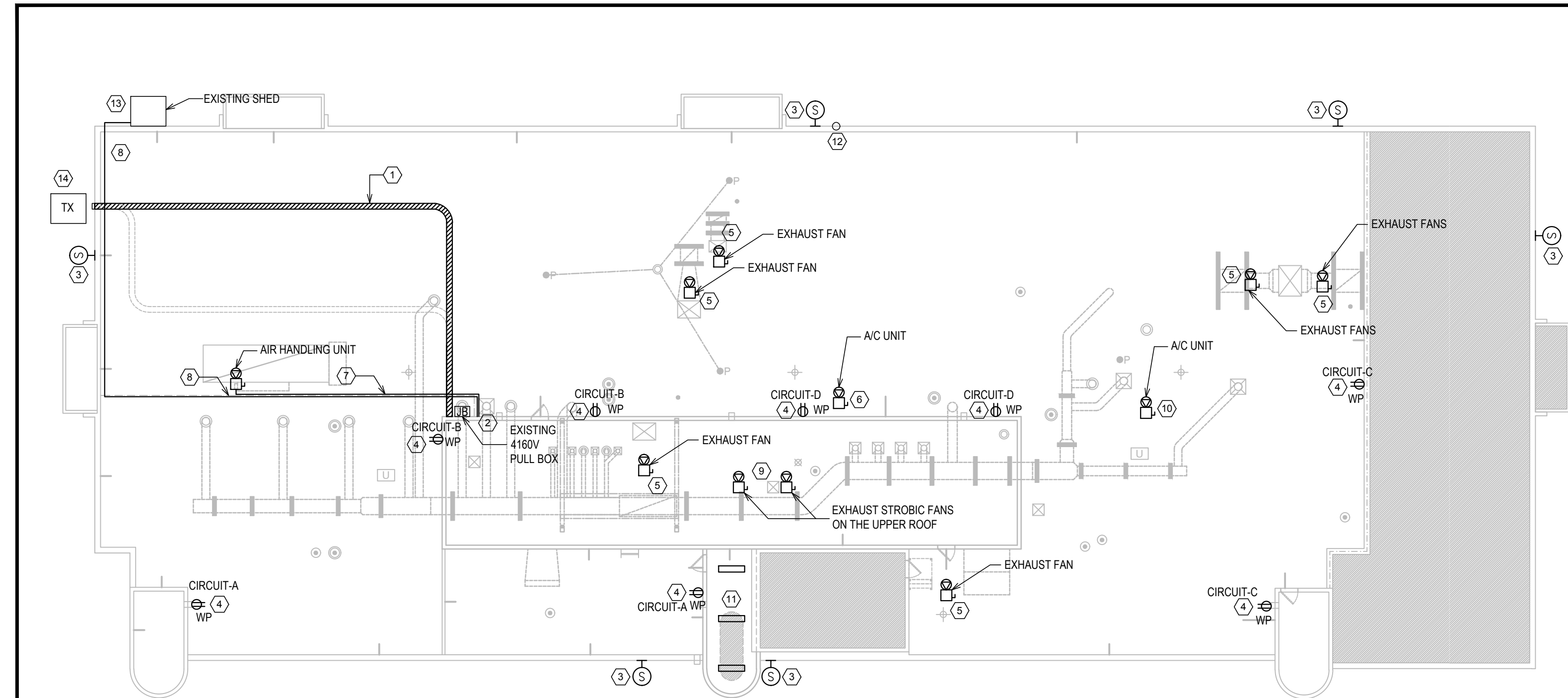
- ELECTRICAL CONTRACTOR TO PERFORM A SITE SURVEY PRIOR TO SUBMIT THE QUOTE TO ENSURE ALL REQUIRED ACTIVITIES INCLUDING SUPPLY, INSTALLATION, TEST AND THE VERIFICATION HAVE BEEN INCLUDED IN THE PRICE.
- IDENTIFY THE PANEL, CIRCUITS AND BREAKERS FEEDING EQUIPMENTS ON THE ROOF OR FEEDING THROUGH ROOF PRIOR TO START THE ELECTRICAL WORKS AND REPORT TO OWNER IMMEDIATELY IF DISCREPANCY DETECTED WITH DRAWINGS.
- ELECTRICAL CONTRACTOR TO COORDINATE WITH ROOFING CONTRACTOR, ARCHITECTURAL AND MECHANICAL DRAWINGS PRIOR TO ANY DEMOLITION OR NEW INSTALLATION.
- COORDINATE WITH ROOFING CONTRACTOR FOR FLASHING CONES LOCATION, SEALING ALL ELECTRICAL PENETRATION AND SUPPORTS FOR ELECTRICAL EQUIPMENT.
- OBTAIN OWNER'S APPROVAL ON POWER SHUTDOWN IN ADVANCE. SCHEDULE SHUT DOWNS FOR WEEKENDS AND AFTER HOURS TO AVOID INTERRUPTION TO THE BUILDING OPERATION.

LEGEND

- FIRE ALARM SPEAKER
- DUPLEX RECEPTACLE
- CABLE TRAY
- MECHANICAL EQUIPMENT, DIRECT CONNECTION WITH OR WITHOUT DISCONNECT SWITCH
- JUNCTION BOX OR TAP BOX
- TRANSFORMER
- EXISTING TO REMAIN
- EXISTING TO RELOCATE
- EXISTING TO REMOVE
- WEATHER PROOF
- GROUND FAULT CIRCUIT INTERRUPTION
- EXISTING TO REMAIN
- EXISTING TO REMOVE OR RELOCATE

DRAWING LIST
E-1 ROOF ELECTRICAL LAYOUT

1 ROOF DEMOLITION PLAN
SCALE: NTS



DRAWING NOTES:

- SUPPLY AND INSTALL NEW POST HOT DIP GALVANIZED STEEL CABLE TRAY ON THE ROOF COMPLETE WITH COVER, BENDS, SUPPORTS, ALL FITTINGS AND DIVIDING BARRIERS. COORDINATE WITH MECHANICAL AND ARCHITECTURAL DRAWINGS AND ROOFING CONTRACTOR FOR INSTALLATION REQUIREMENTS. CONFIRM DIMENSIONS AND LOCATIONS ON SITE. FOR PRICING PURPOSES, IT IS ASSUMED CABLE TRAY DIMENSION IS 300mm WIDTH, 150mm HEIGHT AND LENGTH AS REQUIRED. CONNECT THE NEW CABLE TRAY TO THE EXISTING RISER CABLE TRAY ON THE WALL. INSTALL THE EXISTING 5KV AND 600V CABLES ON THE NEW CABLE TRAY IN SEGREGATED MANNER AND COMPLETE THE TERMINATIONS ON BOTH ENDS. CABLE TRAY MOUNTING HEIGHT TO BE MINIMUM 300mm ABOVE FINISHED ROOF LEVEL. ADJUST THE MOUNTING HEIGHT TO MATCH EXISTING CABLE LENGTH. COORDINATE WITH ROOFING CONTRACTOR AND PROVIDE PROVISIONS INCLUDING SUPPLY AND INSTALLATION OF TEMPORARY CABLE SUPPORTS FOR CONSTRUCTION PRIOR TO AVOID BUILDING POWER INTERRUPTION DURING ROOFING.
- COORDINATE WITH ROOFING CONTRACTOR AND ARCHITECTURAL DRAWING FOR PATCHING THE EXISTING PENTHOUSE WALL PENETRATIONS AND PROVIDE NEW CABLE PENETRATIONS AS REQUIRED. COMPLETE SEALING ON ALL UNUSED AND NEW CABLE PENETRATIONS.
- INSTALL EXISTING FIRE ALARM SPEAKERS TEMPORARILY ON THE BUILDING EXTERIOR WALL AND CONNECT TO THE EXISTING FIRE ALARM ZONE AND SIGNALING CIRCUIT. COORDINATE THE MOUNTING HEIGHT AND INSTALLATION WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN. PROVIDE FIRE ALARM WIRES AND CONDUITS AS REQUIRED TO COMPLETE THE CIRCUITS AND CONNECTION TO BUILDING FIRE ALARM CONTROL PANEL. THE INSTALLATION TO BE LIQUID-TIGHT AND SUN RESISTANT. VERIFY THE FIRE ALARM SPEAKERS AFTER TEMPORARY INSTALLATION COMPLETED. RELOCATE THE FIRE ALARM SPEAKERS TO THEIR PERMANENT LOCATIONS ON THE PARAPET ONCE ROOFING WORKS WERE COMPLETED. PROVIDE FIRE ALARM WIRE AND CONDUITS AS REQUIRED FOR PERMANENT INSTALLATION. PATCH THE TEMPORARY LOCATIONS AND REMOVE ALL TEMPORARY WIRE/CONDUITS. VERIFY THE FIRE ALARM SPEAKERS AFTER PERMANENT INSTALLATIONS COMPLETED. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR INSTALLATION OF SPEAKERS AND WIRE/CONDUIT ON THE PARAPET PRIOR TO ROUGH-IN.
- PROVIDE NEW 5-20R DUPLEX RECEPTACLES COMPLETE WITH IN-USE TYPE WEATHER PROOF COVER. INSTALL RECEPTACLES AT 1000mm ABOVE FINISHED ROOF LEVEL. PROVIDE HOT DIP GALVANIZED STEEL SUPPORTS AS REQUIRED FOR RECEPTACLE MOUNTING. PROVIDE RW90XLPE COPPER 2#10+GND WIRES AND RIGID GALVANIZED STEEL CONDUIT AS REQUIRED TO CONNECT RECEPTACLES TO THE ELECTRICAL PANEL. CONFIRM THE EXISTING BREAKERS
- PROVIDE NEW CONDUCTORS AND CONDUIT AS REQUIRED FOR THE ROOF MOUNTED EXHAUST FANS ON THEIR RELOCATED POSITIONS TO BE FED FROM ELECTRICAL PANEL IN PENTHOUSE. CONFIRM THE CABLE AND CONDUIT SIZE ON SITE PRIOR TO ORDER. FOR PRICING, ASSUME RW90XLPE 1000V COPPER 3#8AWG CONDUCTORS IN 27mm CONDUIT.
- PROVIDE NEW CONDUCTOR AND CONDUITS FROM ELECTRICAL PANEL IN PENTHOUSE UP TO THE ROOF MOUNTED A/C UNIT ON ITS RELOCATED POSITION. CONFIRM CONDUCTORS AND CONDUIT SIZES ON SITE PRIOR TO ORDER. FOR PRICING PURPOSE, ASSUME RW90XLPE 1000V COPPER 3#8AWG+GND CONDUCTORS WIRES IN 53mm CONDUIT.
- PROVIDE NEW CONDUCTORS AND CONDUITS FROM ELECTRICAL PANEL IN PENTHOUSE TO THE EXISTING SHED LOCATED ON NORTH-WEST SIDE OF BUILDING. INSTALL CONDUIT 200mm ABOVE FINISHED ROOF LEVEL. CONFIRM CONDUCTORS AND CONDUIT SIZES ON SITE PRIOR TO ORDER. FOR PRICING, ASSUME RW90XLPE 1000V COPPER 4#8 AWG+GND CONDUCTORS IN 27mm CONDUIT. PROVIDE PROVISIONS TO SUPPLY THE POWER TO THE SHED DURING ROOFING AND MAINTAIN IT ENERGIZED CONTINUOUSLY AND INCLUDE ALL ASSOCIATED COSTS IN THE CONTRACT PRICE. OBTAIN OWNER'S APPROVAL FOR ANY SHUTDOWN IN ADVANCE.
- PROVIDE NEW CONDUCTORS AND CONDUITS FROM ELECTRICAL PANEL IN PENTHOUSE TO THE UPPER ROOF MOUNTED STROBIC FANS ON THEIR RELOCATED POSITIONS. CONFIRM THE CONDUCTORS AND CONDUIT SIZES ON SITE PRIOR TO ORDER. FOR PRICING PURPOSE, ASSUME RW90XLPE 1000V COPPER 3#8AWG+GND IN 35mm CONDUIT FOR EACH EXHAUST FAN.
- PROVIDE CONDUCTORS AND CONDUITS FROM ELECTRICAL PANEL IN THE PENTHOUSE TO THE ROOF MOUNTED A/C UNIT ON ITS RELOCATED POSITION. CONFIRM CONDUCTOR AND CONDUIT SIZES ON SITE PRIOR TO ORDER. FOR PRICING PURPOSE, ASSUME TWO (2) CIRCUITS EACH ONE INCLUDING ONE (1) RUN OF 2#10AWG+GND RW90XLPE COPPER CONDUCTORS IN 27mm

CONDUIT.

- SUPPLY AND INSTALL THREE (3) NEW 1200mm (4"), 40W, 120V, 4000 LUMEN, 4000K LED STRIP LIGHTING FIXTURE COMPLETE WITH FROST LENS AND DRIVERS (SLSTP SERIES (EATON), OR ZL1D (LITHONIA), OR FM4-LED40 (RAB DESIGN) OR APPROVED EQUAL IN STAIRWELL, ROOF LEVEL AND CONNECT TO THE EXISTING LIGHTING CIRCUIT AND CONTROLS. EXTEND THE WIRING AND CONDUITS AS REQUIRED. CONFIRM LOCATIONS ONSITE PRIOR TO ROUGH-IN.
- RE-INSTALL THE EXISTING PHOTOCELL ON THE ROOF AFTER COMPLETION OF ROOFING. EXTEND WIRES AND CONDUITS AS REQUIRE TO SUIT THE NEW POSITION. COORDINATE WITH OWNER FOR CIRCUITS AND LOCATION.
- PROVIDE 30KW, 600V, 3PH, 60#2 TEMPORARY DIESEL GENERATOR, COMPLETE WITH 30A-3P, 600V NEMA-4X DISCONNECT SWITCH, RW90XLPE 1000V COPPER 4#8 AWG+GND CONDUCTOR AND 27mm CONDUIT AND ALL REQUIRED INSTALLATION SUPPORTS FOR SHED TEMPORARY POWER SUPPLY DURING THE ROOFING. INSTALL DIESEL GENERATOR ON THE GROUND AND CLOSE BY SHED. CONFIRM LOCATIONS AND CABLE ROUTE ONSITE WITH OWNER. COORDINATE SHUT DOWN WITH OWNER IN ADVANCE. CONFIRM RATINGS ONSITE PRIOR TO SUPPLY. INCLUDE ALL COSTS IN THE CONTRACT PRICE.
- INCLUDE COST OF EXTENSION OF 5KV AND 600V CABLES TO THE TRANSFORMER SECONDARY AND PRIMARY TERMINALS TO MAINTAIN THE BUILDING ENERGIZED DURING THE ROOFING. CONFIRM SIZES AND LOCATION ON SITE.

GENERAL NOTES:

- ELECTRICAL CONTRACTOR TO PERFORM A SITE VISIT PRIOR TO SUBMIT THE QUOTE TO ENSURE ALL REQUIRED ACTIVITIES INCLUDING SUPPLY, INSTALLATION, TEST AND THE VERIFICATION HAVE BEEN INCLUDED IN THE PRICE.
- IDENTIFY THE PANEL AND BREAKERS FEEDING EQUIPMENTS ON THE ROOF OR FEEDING THROUGH ROOF PRIOR TO START THE ELECTRICAL WORKS AND REPORT TO OWNER IMMEDIATELY IF DISCREPANCY DETECTED WITH DRAWINGS.
- ELECTRICAL CONTRACTOR TO COORDINATE WITH ROOFING CONTRACTOR, ARCHITECTURAL AND MECHANICAL DRAWINGS PRIOR TO ANY DEMOLITION OR NEW INSTALLATION.
- COORDINATE WITH ROOFING CONTRACTOR FOR FLASHING CONES LOCATION, SEALING ALL ELECTRICAL PENETRATION AND SUPPORTS FOR ELECTRICAL EQUIPMENT.
- OBTAIN OWNER'S APPROVAL ON POWER SHUTDOWN IN ADVANCE. SCHEDULE SHUT DOWNS FOR WEEKENDS AND AFTER HOURS TO AVOID INTERRUPTION TO THE BUILDING OPERATION.
- ALL NEW INSTALLATION TO BE LIQUID-TIGHT AND SUN RESISTANT.
- INCLUDE OPTIONAL PRICE FOR ALL ASSOCIATED COST FOR PROVIDING ONE RENTAL 600V/3PH60Hz, 1000KVA EMERGENCY DIESEL GENERATOR FOR 15 DAYS WITH ALL POWER CABLES TO THE PENTHOUSE TO SUPPLY THE BUILDING POWER DURING ROOFING.

2 ROOF NEW PLAN
SCALE: NTS

ORIENTATION

SEAL



04		
03		
02		
01	ISSUED FOR TENDER	2019/02/20
revision		date

Do not scale drawings.
Verify all dimensions and conditions on site and immediately notify the engineer of all discrepancies.

A	Detail No.
B	No. du détail
C	drawing no. - where detail required dessin no. - où détail exigé
	drawing no. - where detailed dessin no. - où détaillé

project title
titre du projet
WTC BUILDING ROOF REPLACEMENT
867 LAKESHORE ROAD
BURLINGTON

drawing title
dessin
ROOF ELECTRICAL
LAYOUTS

drawn by
dessiné par
MH

designed by
conc par
AM

approved by
approuvé par

tender
soumission

project manager
administrateur
de projets

project date
date du projet
2019/02/20

project no.
no. du projet

drawing no.
dessin no.
E-1