

SECTION-J REPORT

Proposed mixed use development

**Project: 1 & 3 Careel Head Road AVALON BEACH
NSW 2107 (Lot 1/-/SP32656)**

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LGA : NORTHERN BEACHES COUNCIL

DESIGN STATEMENT

Pursuant to NCC BCA A5G3; this report relies on supplied documentation for assessment in regards to adopting measures contributing to deemed-to-satisfy of designed and built deliverables. It is our opinion that the project can be constructed to satisfy the requirements of the NCC 2022.

This report prepared from supplied materials for DA and CC purposes according to <http://tinyurl.com/p4s7df6>.

Lighting and a/c designs have not been sighted for review.



Ved Baheti B. Arch, M. Arch(UNSW)

JP

Managing director

ABSA Assessor # 20901 | BDAV Assessor # 131521 | ACTPLA Assessor # 2011248

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A	30/07/2024	Sec-J report prepared as per architectural drawings

Reference Document:

Issue	Date	Description
A	15/07/2024	Architectural Drawing by: CD Architects Project # J23587D Date: July 2024 Drawing status: DA

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COMPLIANCE CERTIFICATE TO THIS REPORT



SECTION J COMPLIANCE CERTIFICATE

We certify that the design calculations contained in this report complies with NCC BCA E2.2.

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EXECUTIVE SUMMARY

Preamble

Note

Summaries are never exhaustive.

Serves to highlight matters for attention.

Always refer Detailed Assessment for full information.`

Assessment

This assessment report was prepared from supplied materials.

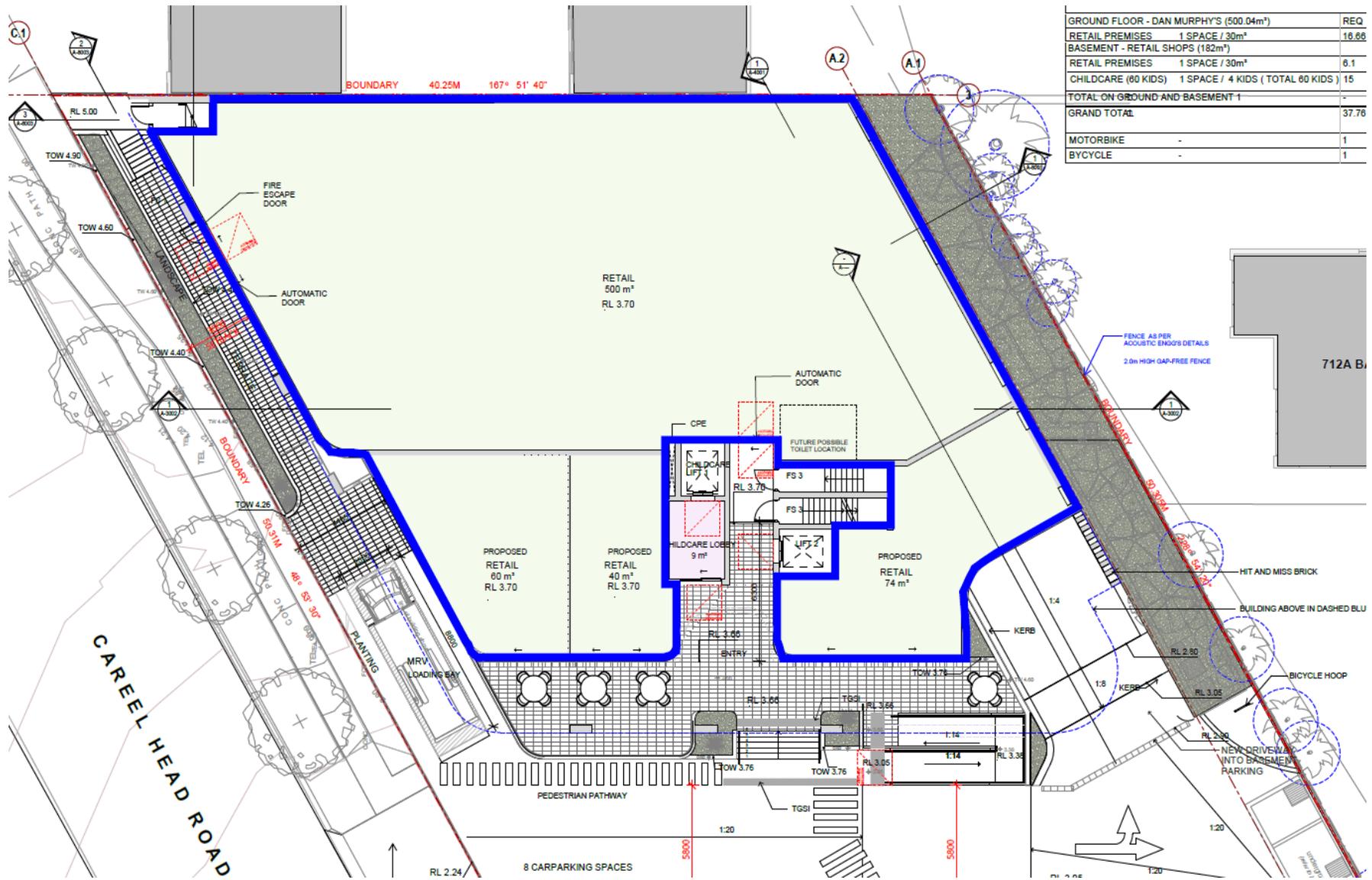
NCC BCA

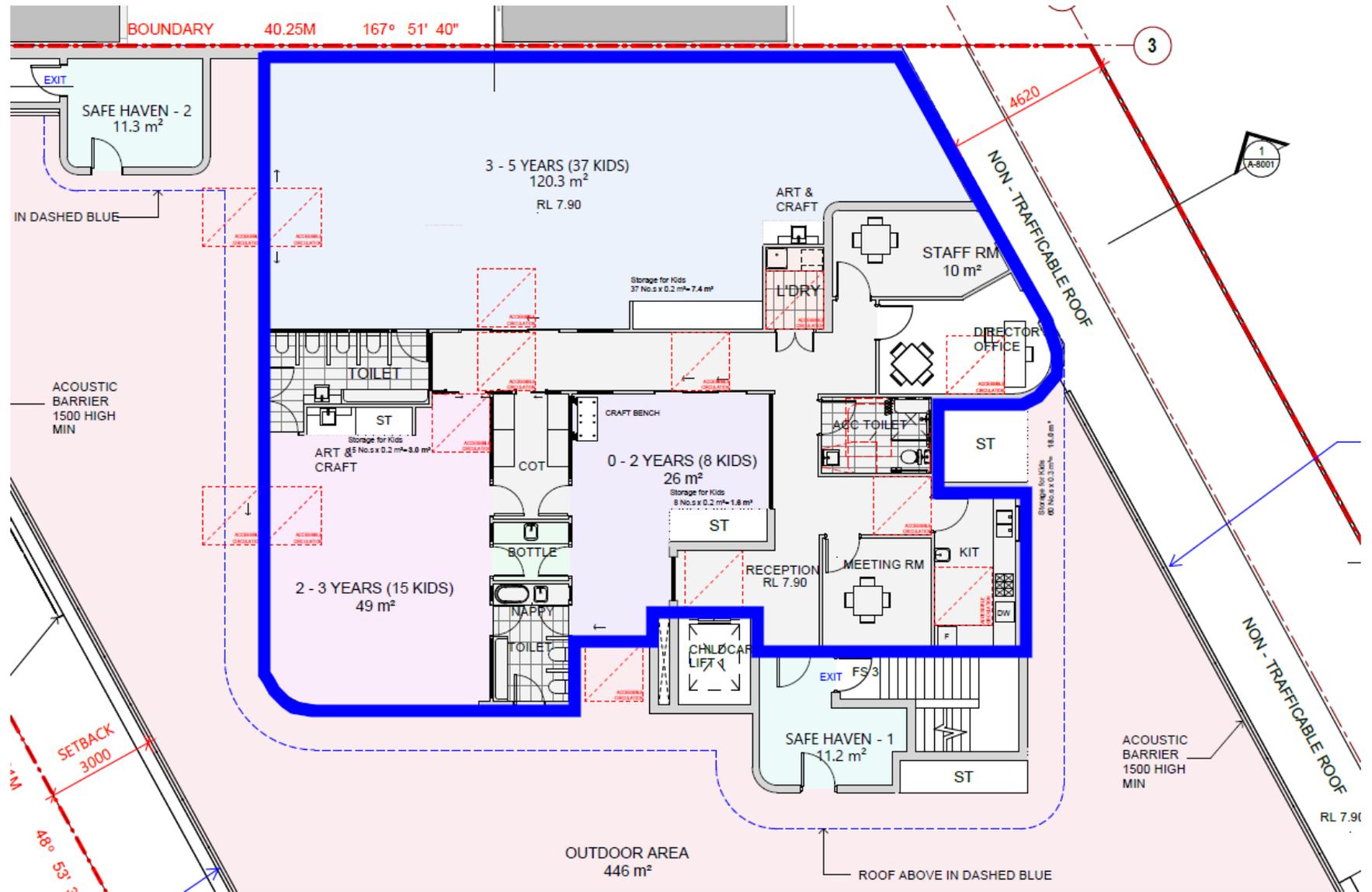
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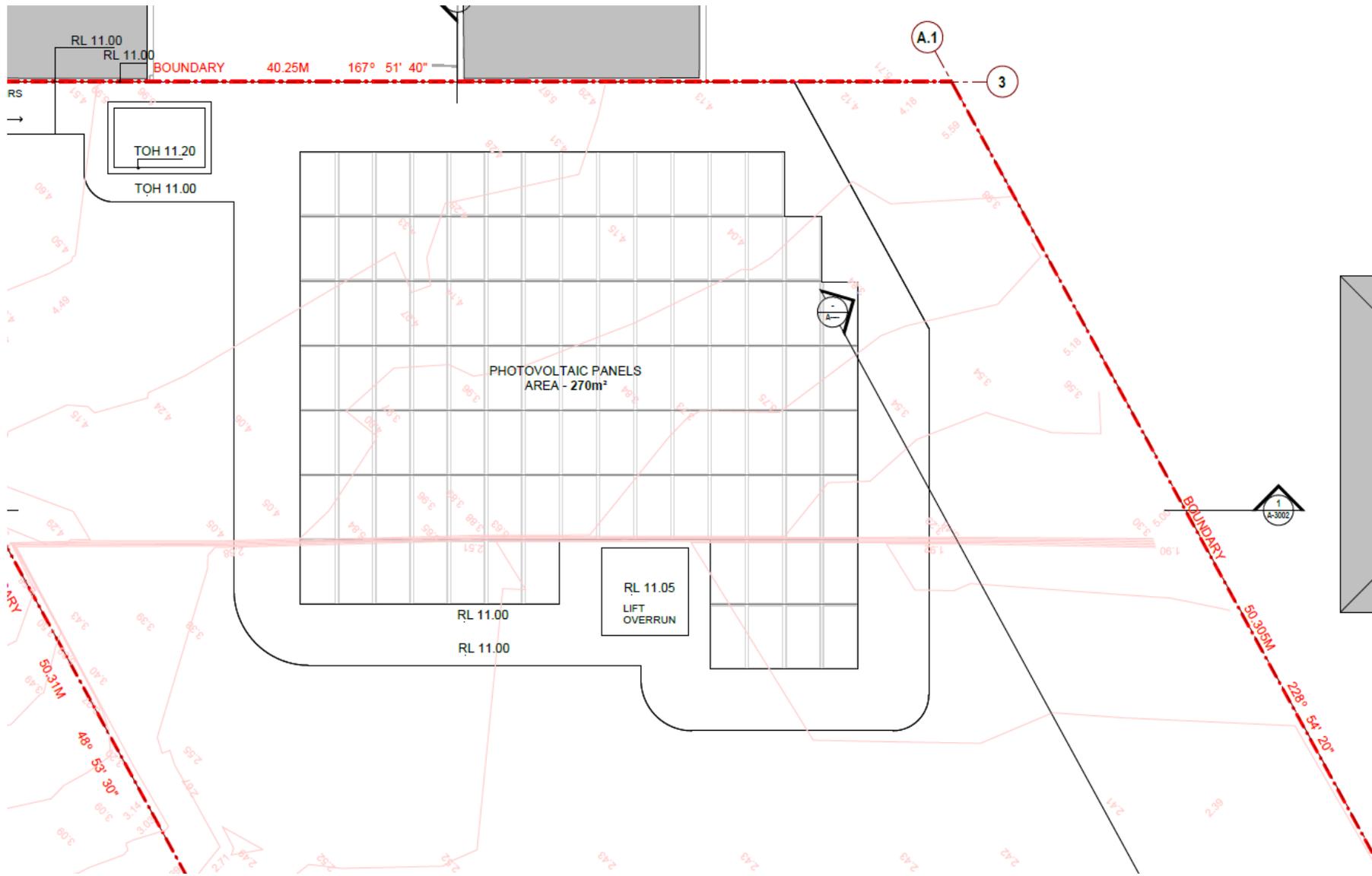
<https://ncc.abcb.gov.au/editions/ncc-2022/preview/volume-one/preface/copyright-and-licence-notice>

J4 Building fabric

Item	Requirements	Applicant action	Remarks (if any)
J2D2 Application of Section J 2019: J0.1 J4D3 Thermal construction — general 2019: J1.2	Satisfy requirements to the building fabric.	Show in construction detailing and execution of the Works.	Indicative conditioned area marked on images below.









1 NORTH ELEVATION 1 - CAREEL HEAD ROAD
 1 : 100 at A1 1:200 at A3



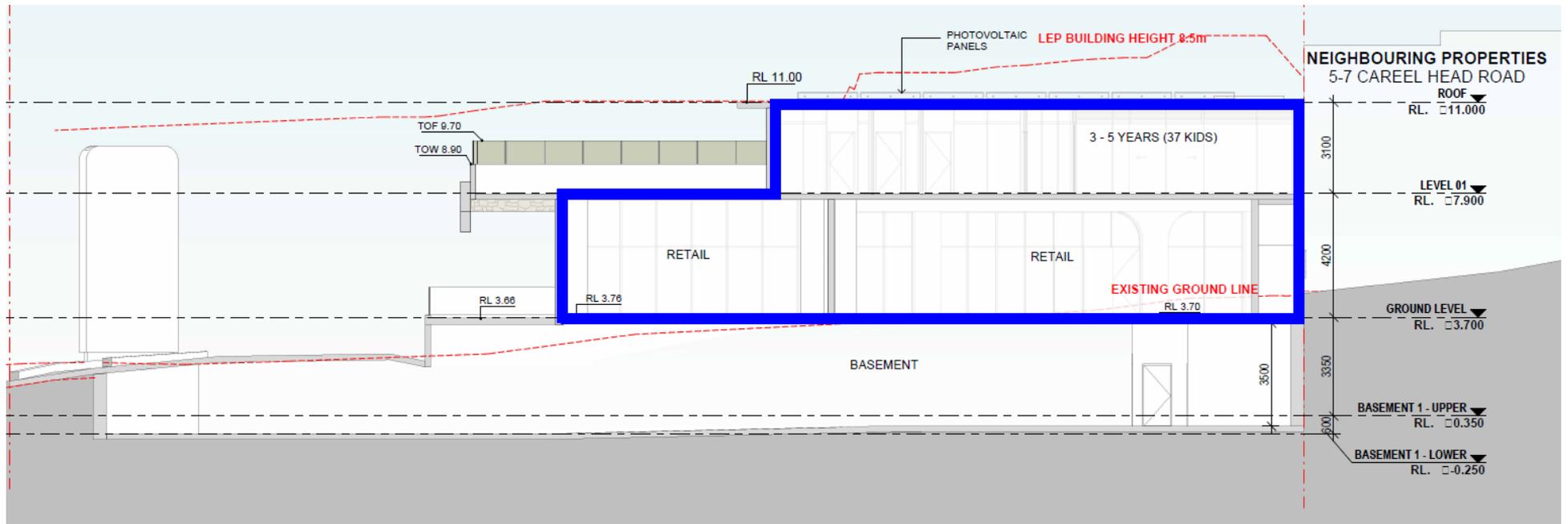
2 NORTH ELEVATION 2 - CAREEL HEAD ROAD
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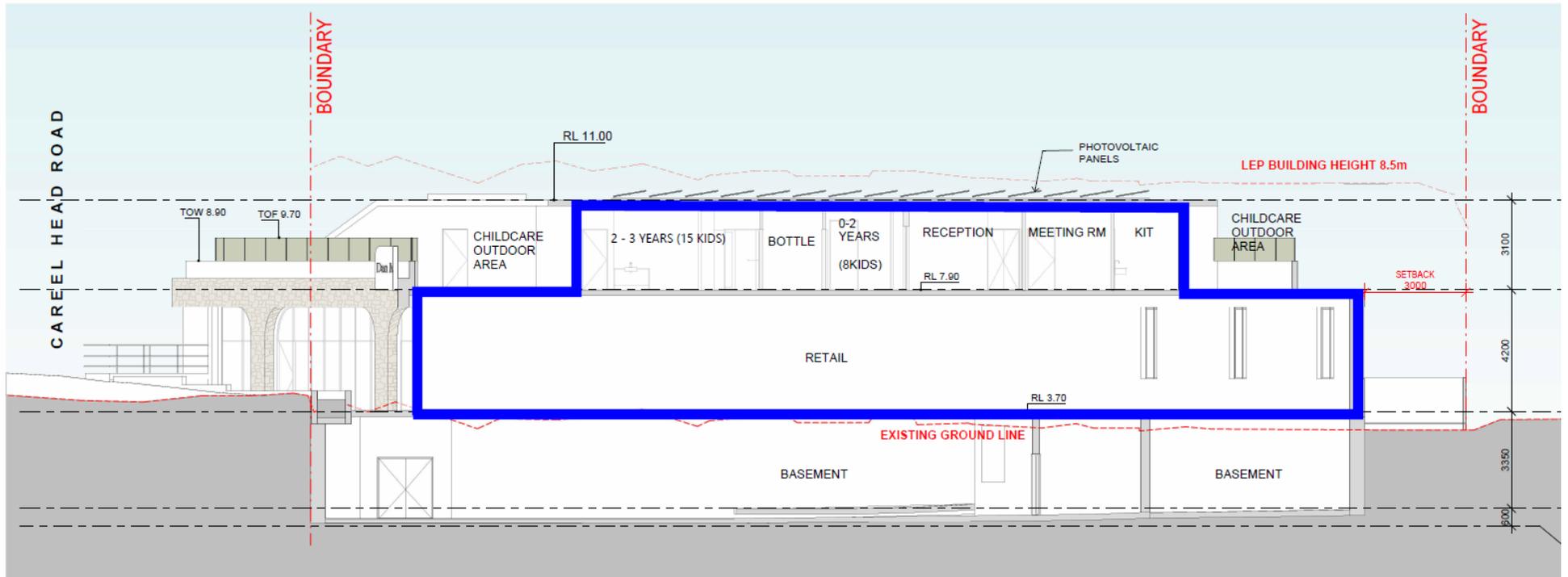
1 SOUTH ELEVATION A
 1 : 100 at A1 1:200 at A3



2 SOUTH ELEVATION B
 1 : 100 at A1 1:200 at A3

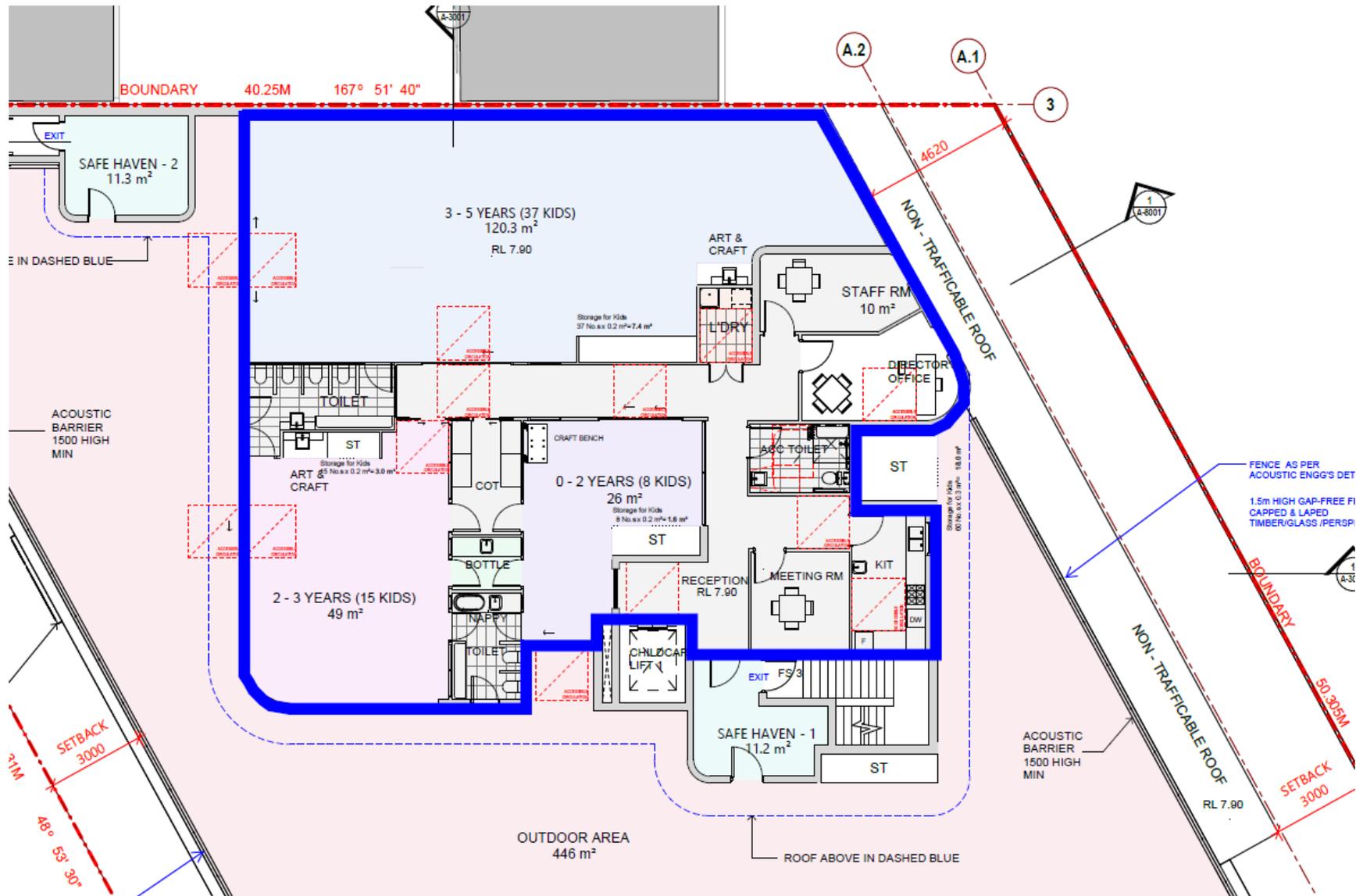


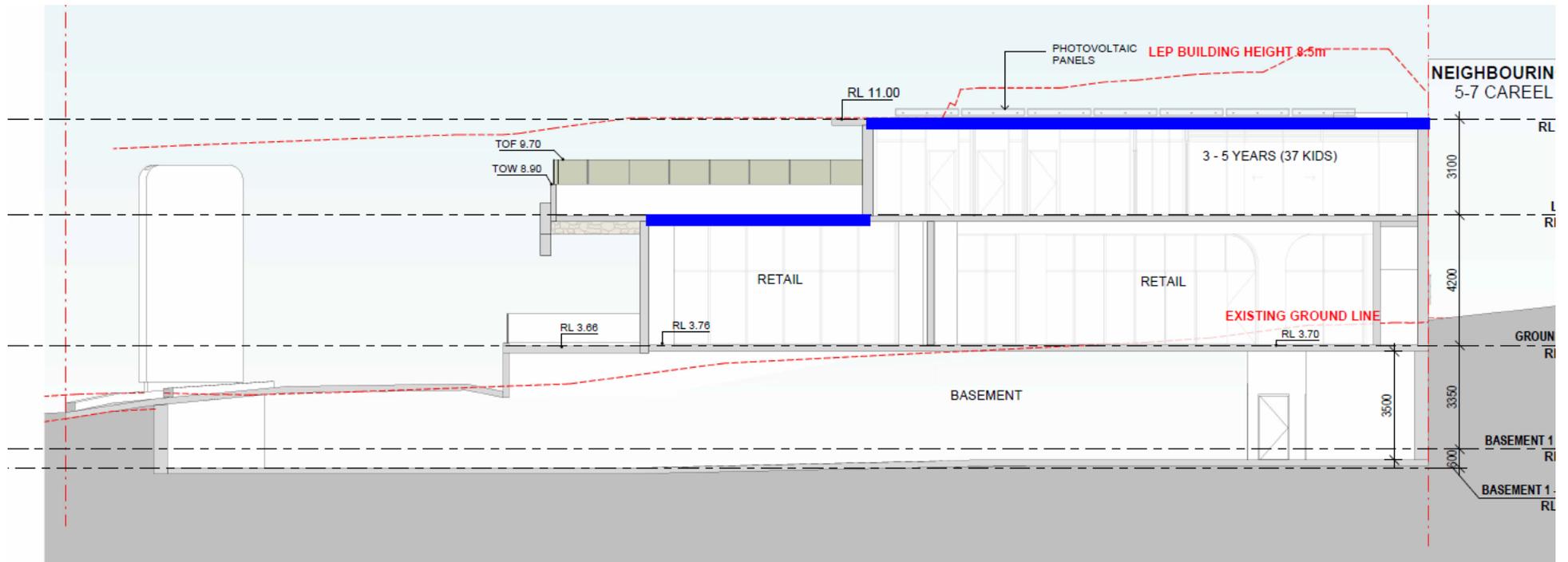
1 SECTION A
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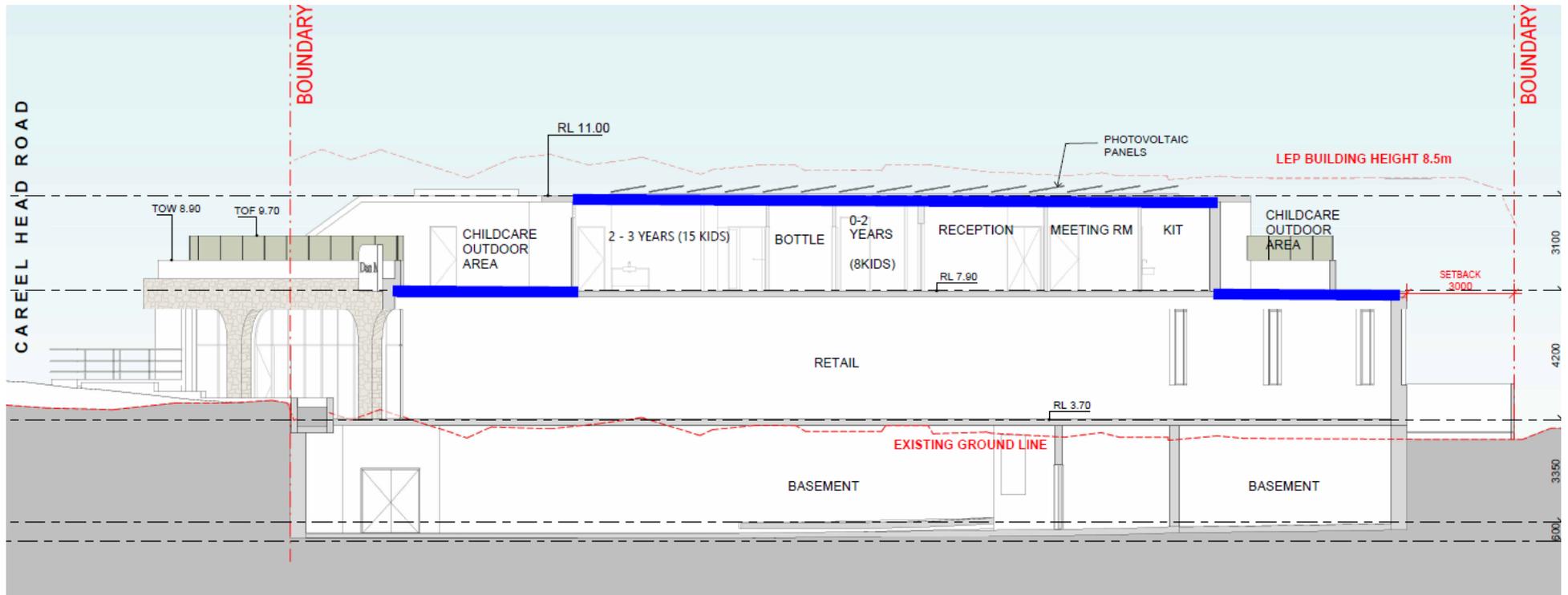

SECTION B
 1 : 100 at A1 1:200 at A3

Item	Requirements	Applicant action	Remarks (if any)
J4D4Roof and ceiling construction 2019: J1.3	Provide insulation as prescribed.	Provide R 3.0 between roofing and ceiling. Show in construction detailing and execution of the Works.	Indicative ceiling area requiring insulation marked on images below.






1 SECTION A
 1: 100 at A1 1:200 at A3



1 SECTION B
 1:100 at A1 1:200 at A3

tem	Requirements	Applicant action	Remarks (if any)
J4D6Walls and glazing 2019: J1.5	Provide wall insulation as prescribed.	Show insulation in construction detailing and execution of the Works.	Indicative wall area requiring insulation marked on images below.

CAVITY BRICK WALL + R 1.60 insulation [CB]

Extend to underside floor soffit or roofing.

Variation requires separate calculation for approval.

Allow for any required egress width if affected.

		R	
1	outside air	0.12	
2	110 brick	0.09	Ventilation brick top and bottom
3	Cavity air	0.17	
4	110 brick	0.09	
5	Cavity	0.17	Furring channel for services
6	Insulated plasterboard	1.60	e.g. 40 Kinspan K18 [mechanical fix]
6	Plasterboard	0.00	R 0.06 included in insulated plasterboard
7	Inside air	0.12	
	TOTAL	2.36	

BRICK VENEER WALL + R 2.5 insulation [BV]

Extend to underside floor soffit or roofing.

Variation requires separate calculation for approval.

Allow for any required egress width if affected.

		R	
1	outside air	0.04	
2	110 brick	0.09	
3	Cavity air	0.17	
4	Vapour permeable membrane	0.00	Building wrap sarking to manage condensation
5	Insulation in 90 mm frame		TBA
6	plasterboard	0.06	
7	Inside air	0.15	
	TOTAL	0.18	

STEEL FRAME + R 2.5 insulation [STUD]

Extend to underside floor soffit or roofing.

Variation requires separate calculation for approval.

Allow for any required egress width if affected.

		R	
1	Outside air	0.12	
2	Cladding	0.04	
3	Ventilated cavity air	0.17	To dispel water vapour Furring channel.
4	Vapour permeable membrane	0.00	To manage condensation. Building wrap to manage water vapour.
	Thermal break	0.20	e.g. proprietary thermal break tape
5	Insulation	2.50	e.g. 90 fibreglass in 92 frame
6	Plasterboard	0.00	Not incorporated in calculations as not proposed to install by builder
7	Inside air	0.12	
	TOTAL	3.15	

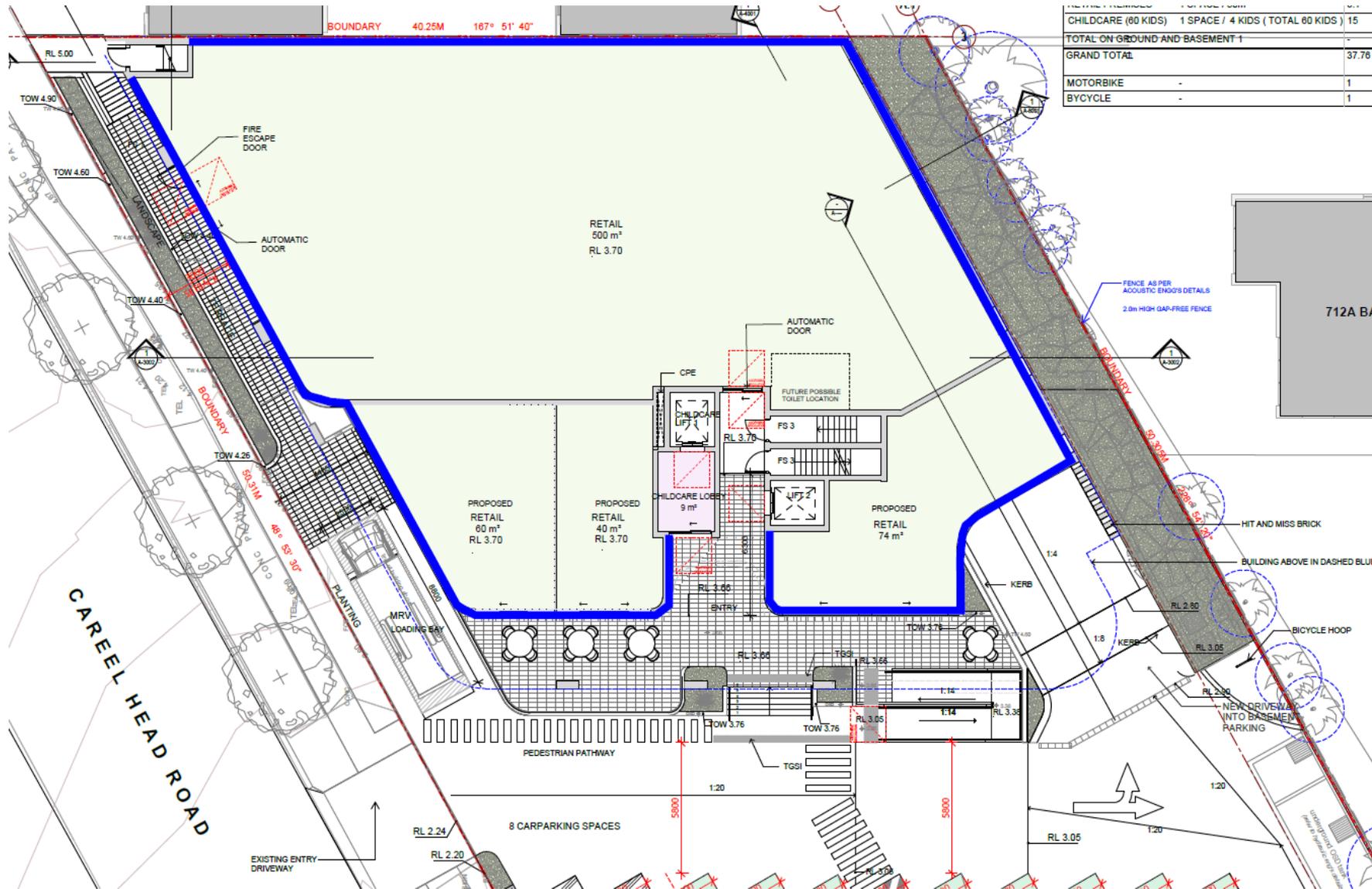
AFS WALL + R 1.81 insulation

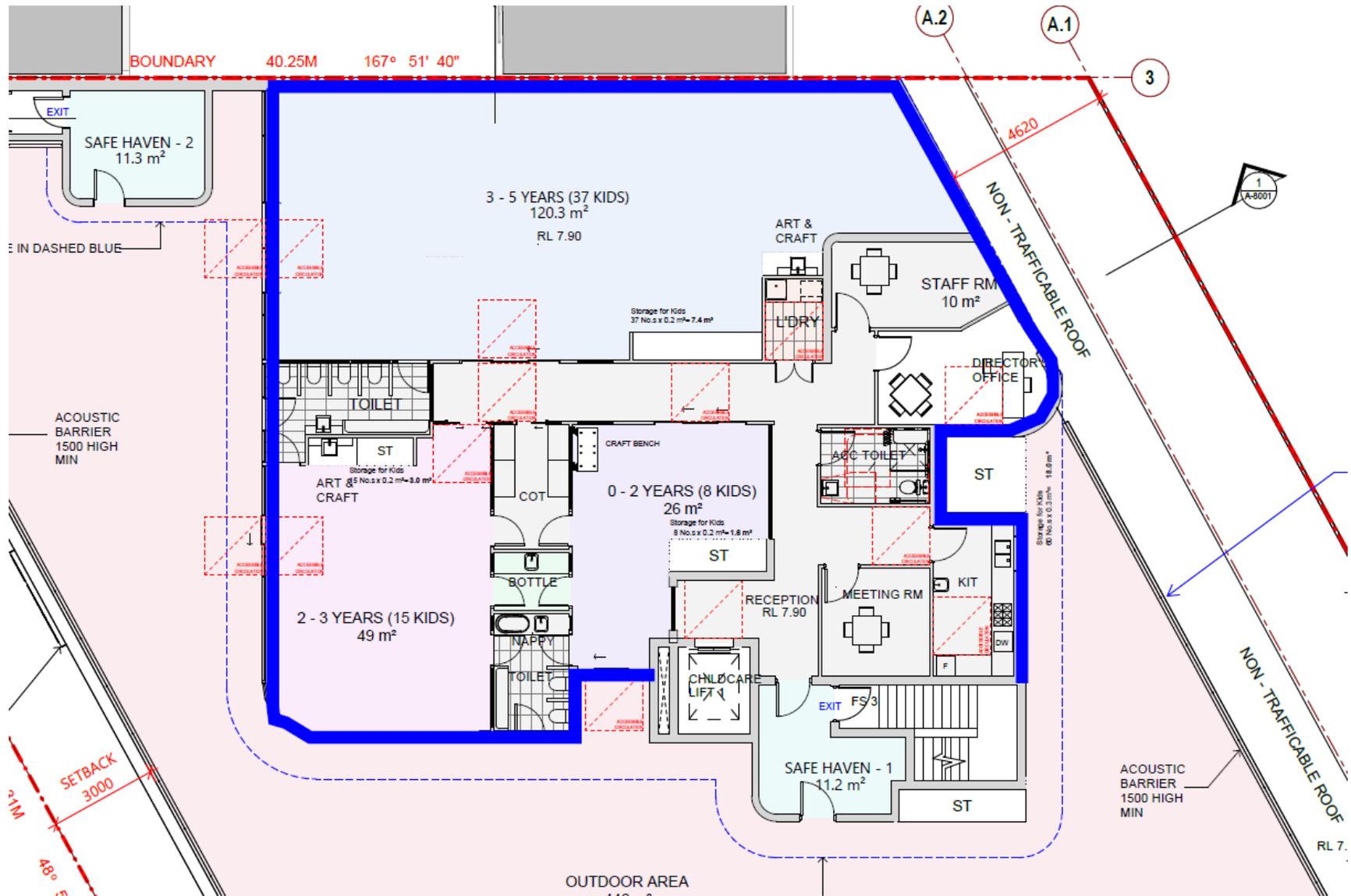
Extend to underside floor soffit or roofing.

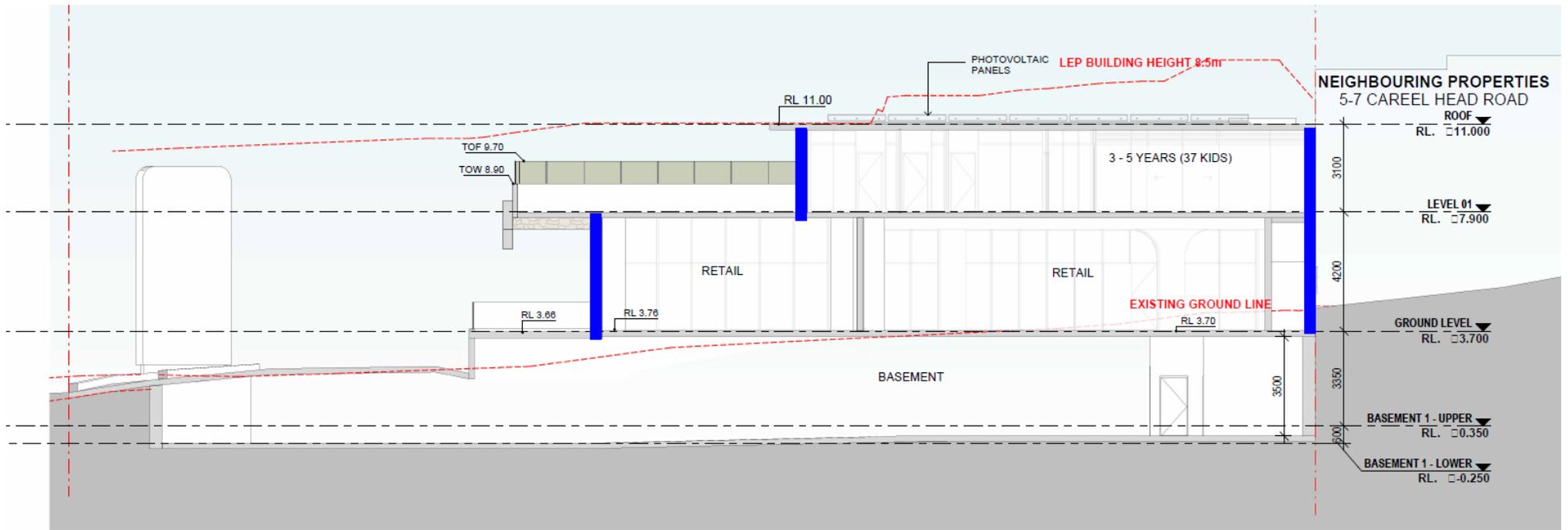
Variation requires separate calculation for approval.

Allow for any required egress width if affected.

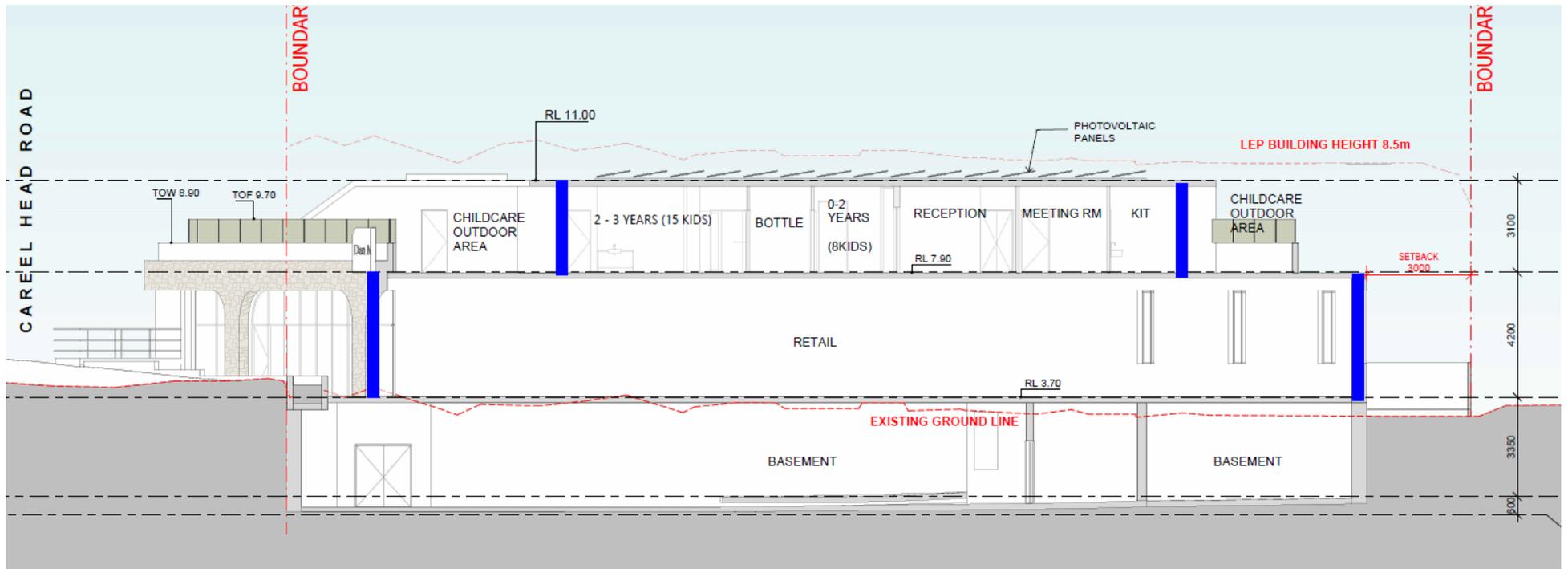
		R	Remarks
1	Basement	0.12	
2	Insulated plasterboard	1.81	e.g. 50 Kingspan K17 [direct stick]
3	200 RC	0.13	$0.2 / 1.44 =$
4	plasterboard	0.00	R 0.06 included in insulated plasterboard
5	stair	0.12	
	TOTAL WALL R-VALUE	2.18	







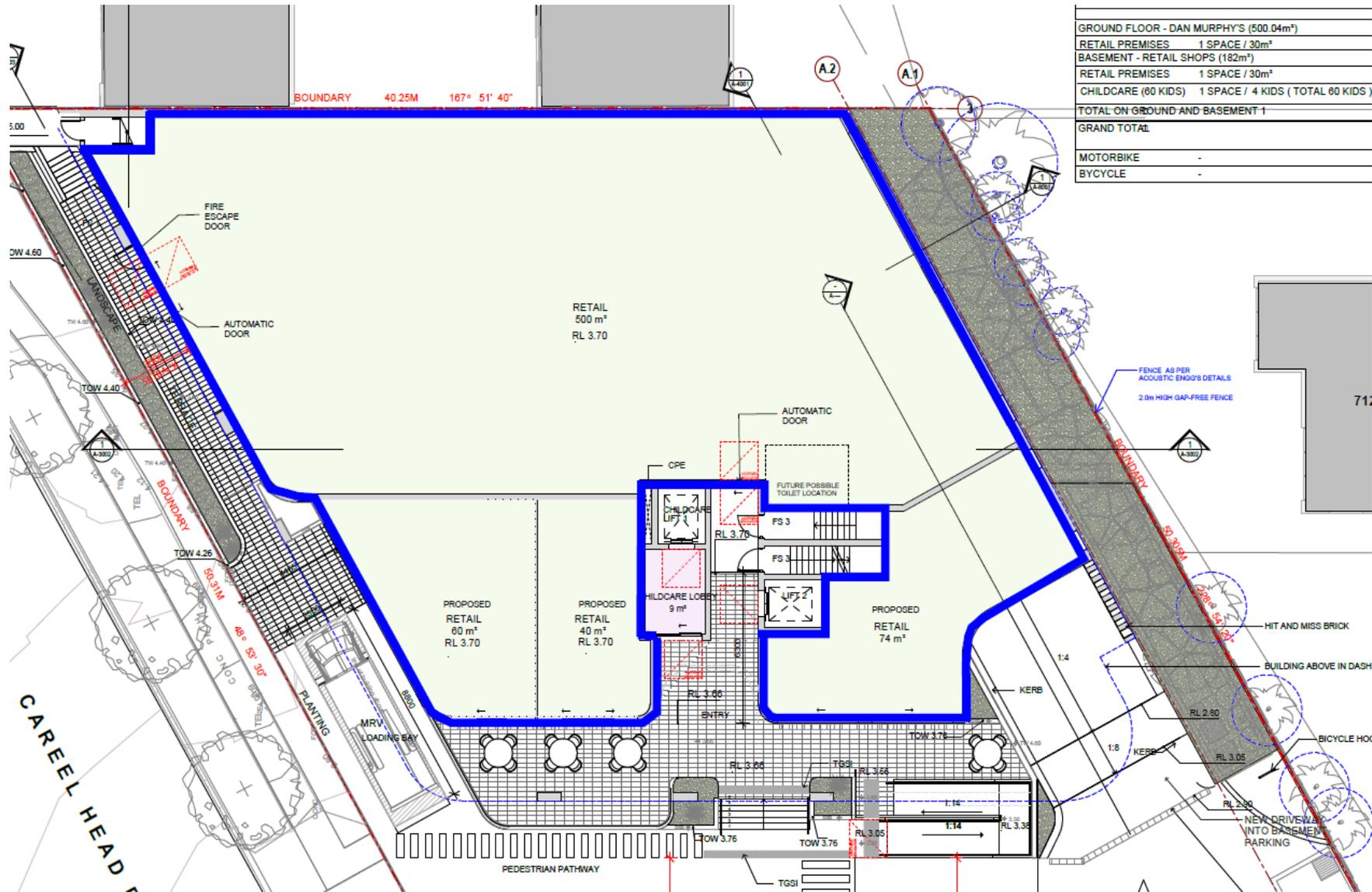

1 SECTION A
 1 : 100 at A1 1:200 at A3

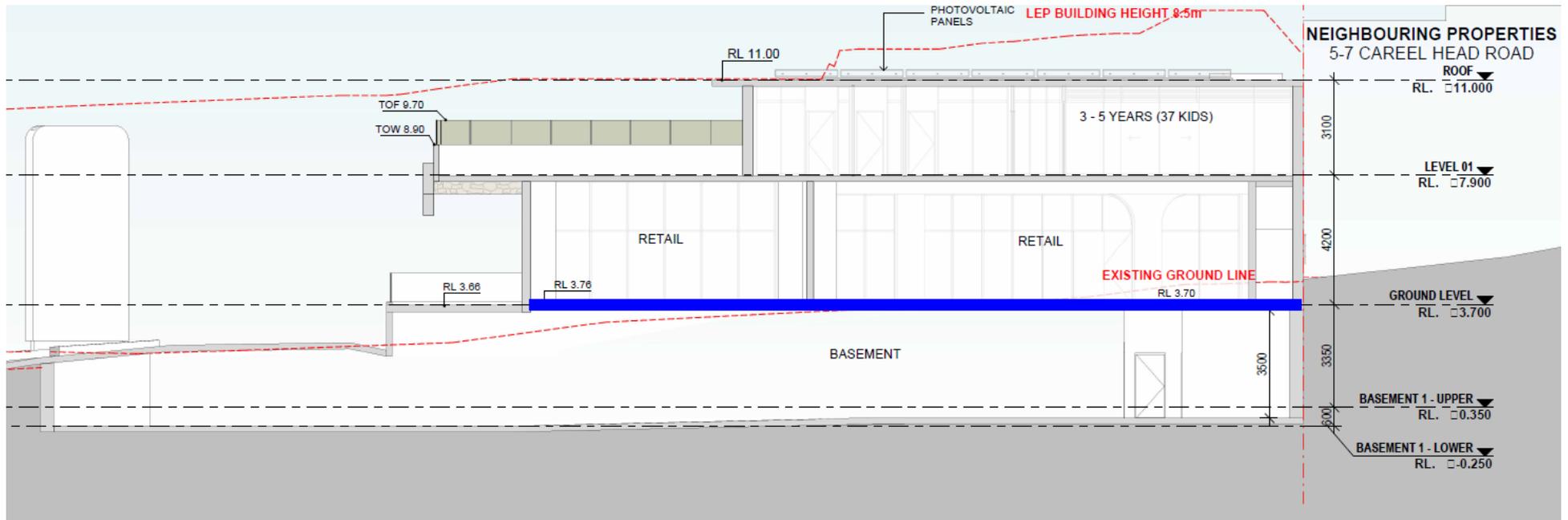


1 SECTION B
 1:100 at A1 1:200 at A3

Item	Requirements	Applicant action	Remarks (if any)
Windows requirements	<p>WINDOW SELECTION TO SATISFY PCA Always select from https://awawers.net/res or https://awawers.net/en/commercial</p> <p>OR use their search engine https://awawers.net/ressearch/search/nsw or https://awawers.net/comsearch/search/nsw</p> <p>+/- 10% RULE TO WINDOW SELECTIONS Does not apply to Section J</p>	<p>U-5.58 maximum figure SHGC- 0.50 maximum figure</p>	

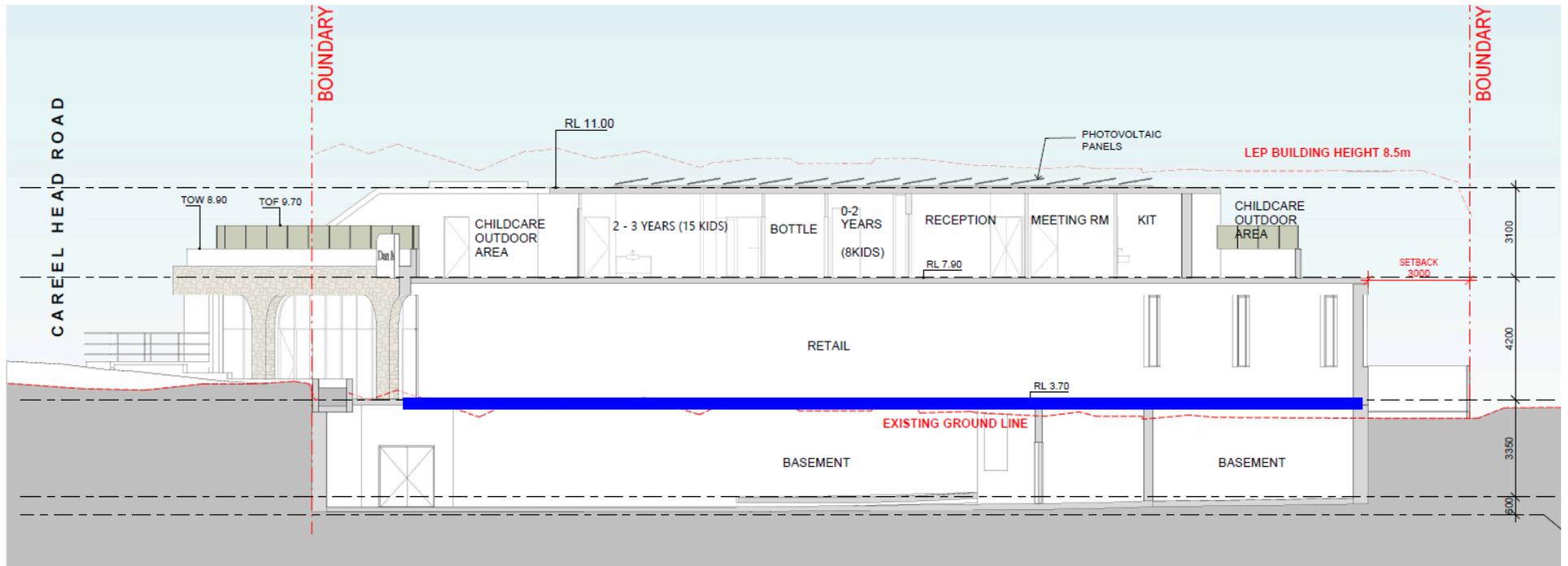
Item	Requirements	Applicant action	Remarks (if any)
J4D7Floors 2019: J1.6	Provide R 1.7 insulation to elevated floors	Provide R 1.7 for basement soffit or ground floor. Show in construction detailing and execution of the Works.	Indicative floor area requiring insulation marked on images below.





SECTION A

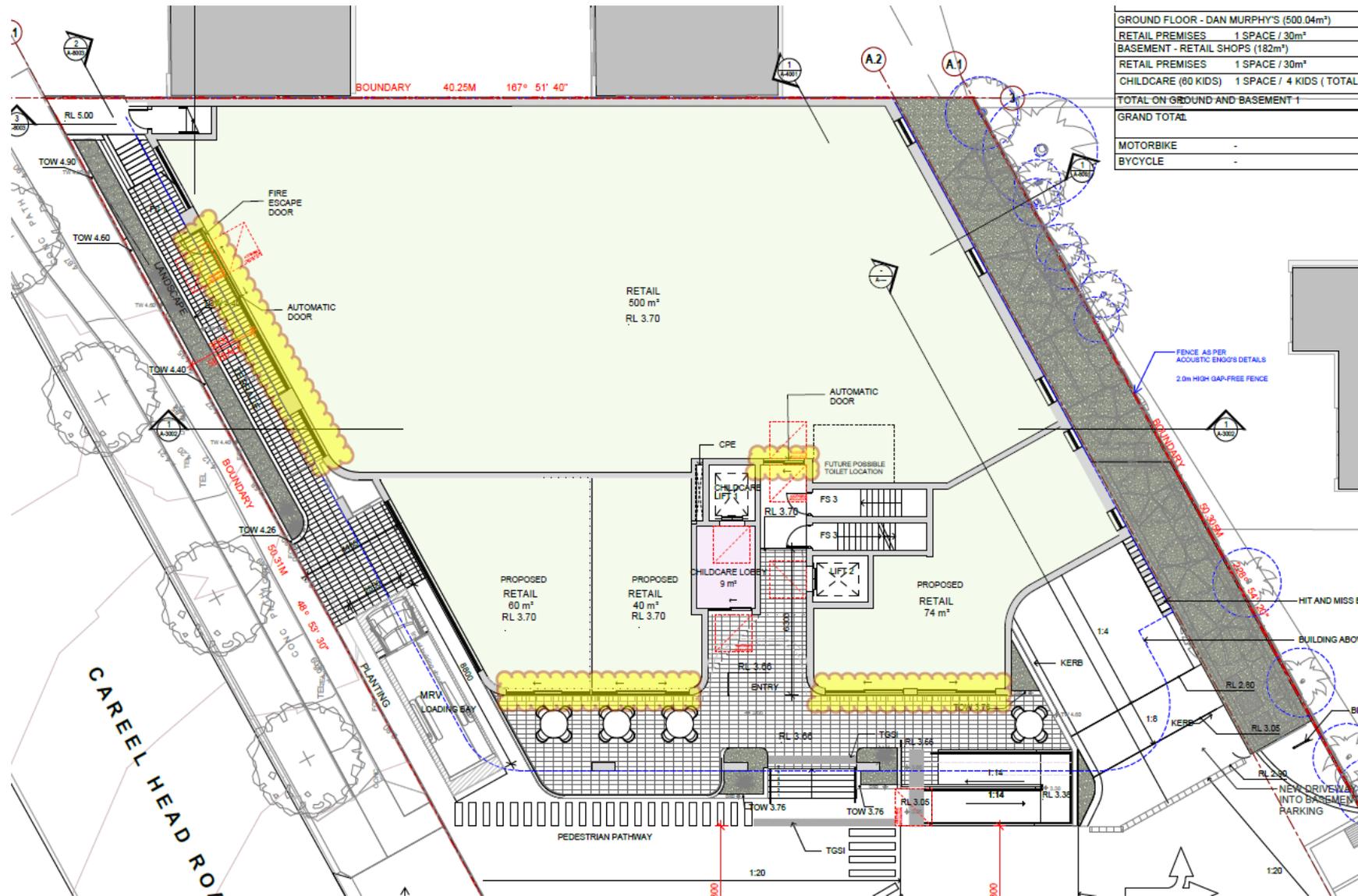
1:100 at A1 1:200 at A3

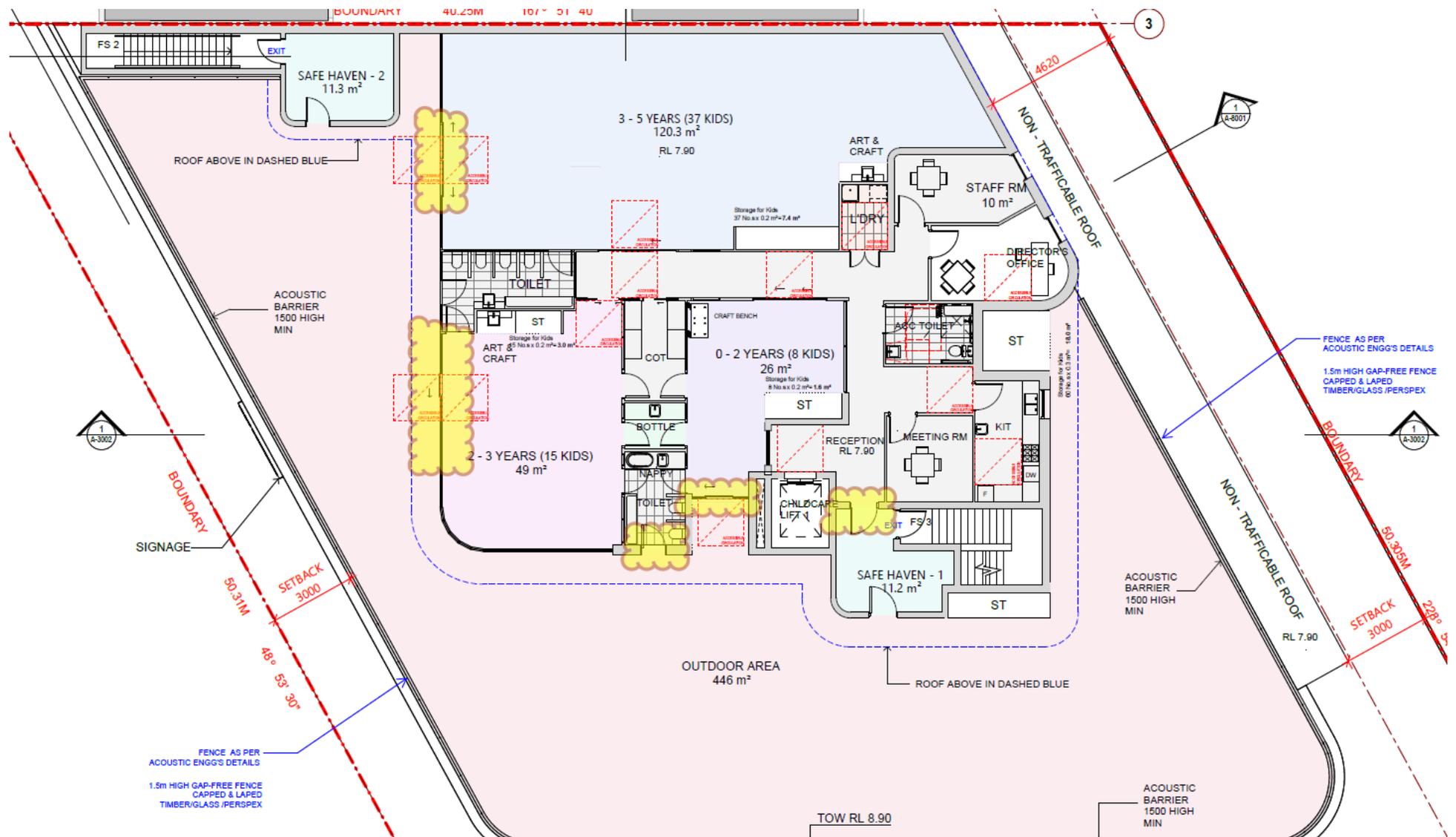



SECTION B
 1:100 at A1 1:200 at A3

Part J5 Building sealing

Item	Requirements	Applicant action	Remarks (if any)
J5D5 Windows and doors 2019: J3.4	Air seals all around including threshold.	Show in construction detailing and execution of the Works.	
J5D6 Exhaust fans 2019: J3.5	Fit with a sealing device such as a self-closing damper or the like	Show in construction detailing and execution of the Works.	
J5D7 Construction of ceilings, walls and floors 2019: J3.6	Construct to minimise air leakage.	Show in construction detailing and execution of the Works.	





J6 Air-conditioning and ventilation

Present the completed calculator <https://ncc.abcb.gov.au/sites/default/files/resources/2022/Calculator-Fan-system-Volume-One-2019.xlsm> to the PCA for certification.

Refer consultant documentation.

J7 Artificial lighting and power

Present the completed calculator https://ncc.abcb.gov.au/sites/default/files/resources/2023/Calculator-Lighting-NCC-Volume-One_0.xlsx to the PCA for certification.

Refer consultant documentation.

J8 Heated water supply and swimming pool and spa pool plant

Refer consultant documentation.

J9 Energy monitoring and on-site distributed energy resources

Refer consultant documentation.

DETAILED ASSESSMENT

Application

Child Care Centre Section J affected [lighting and ventilation].

Climate Zone check



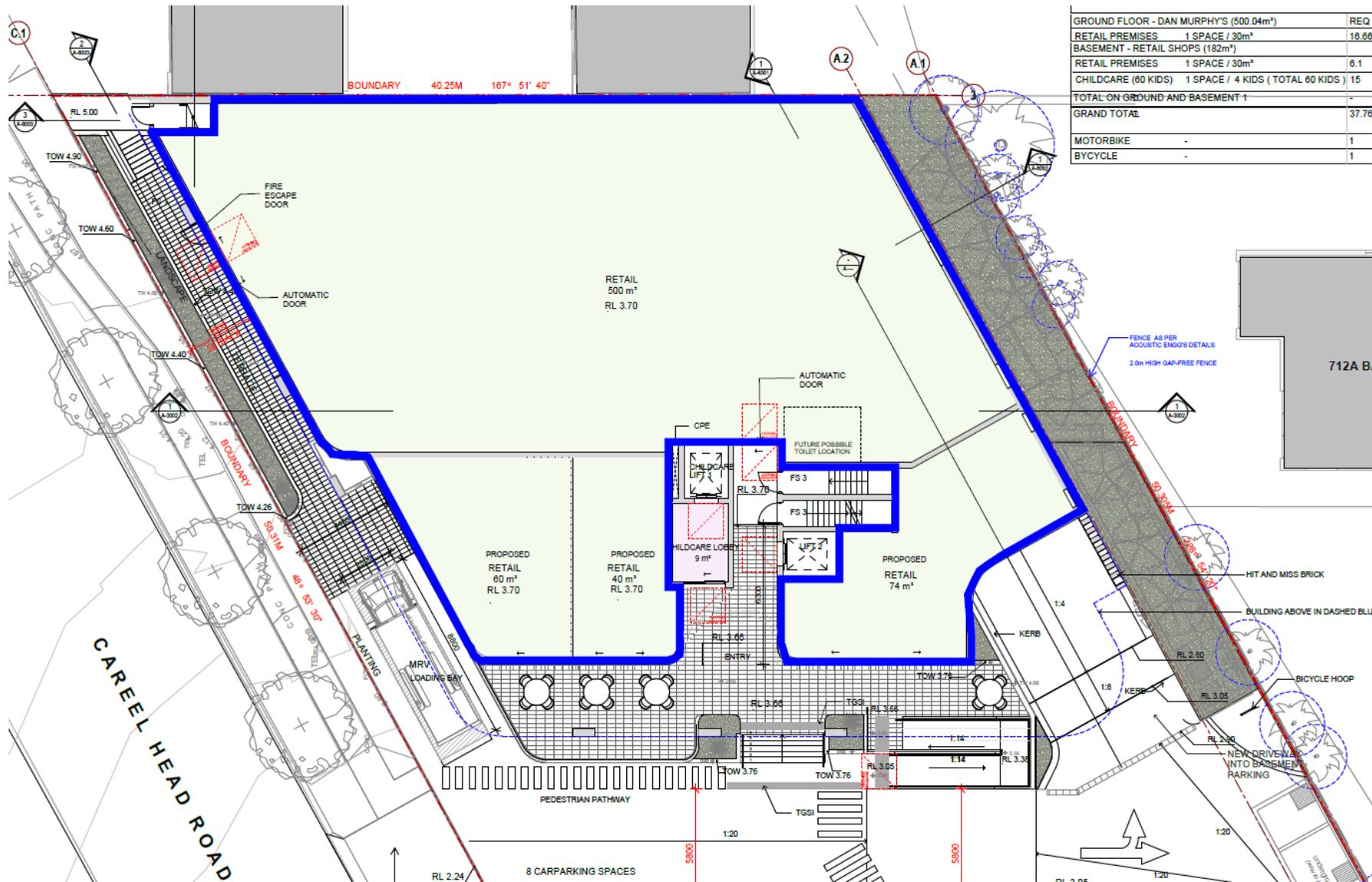
Climate Zones

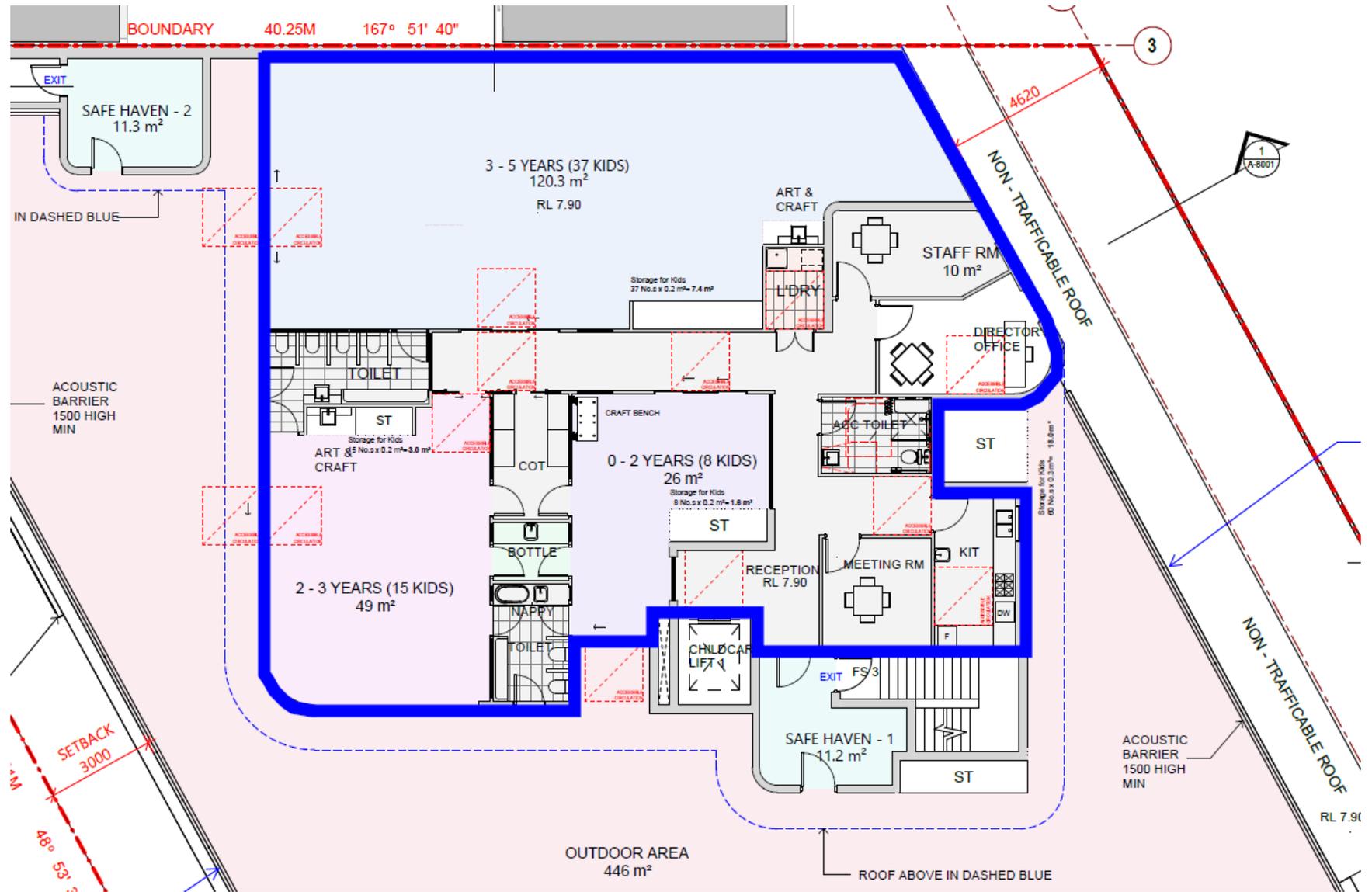


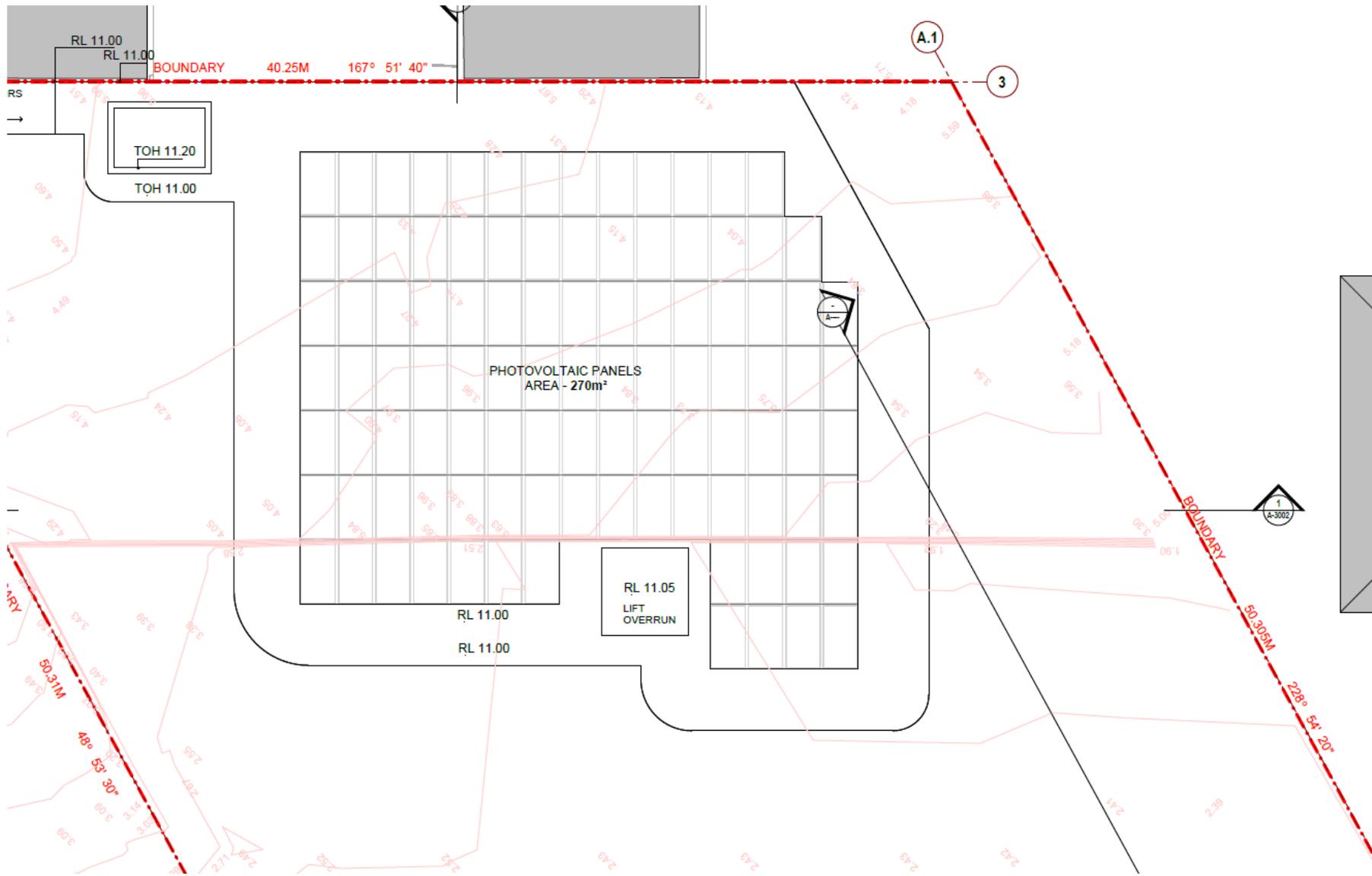
		Remarks
Climate zone:	5	light green

Conditioned spaces (likely to be heated or cooled)

Space	Conditioned	Non-conditioned
Child care centre	X	-
Basement Car Park	-	X









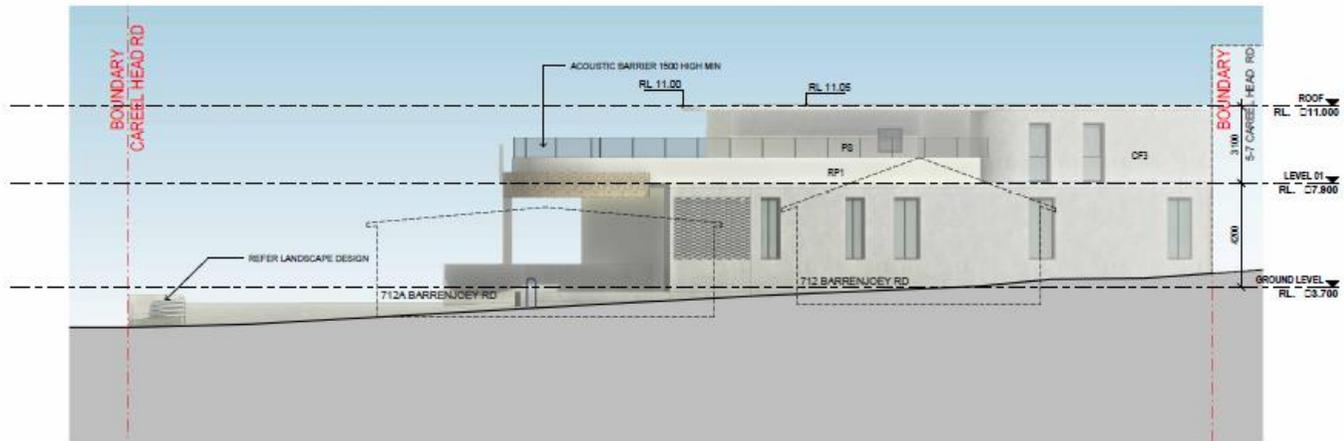
1 NORTH ELEVATION 1 - CAREEL HEAD ROAD
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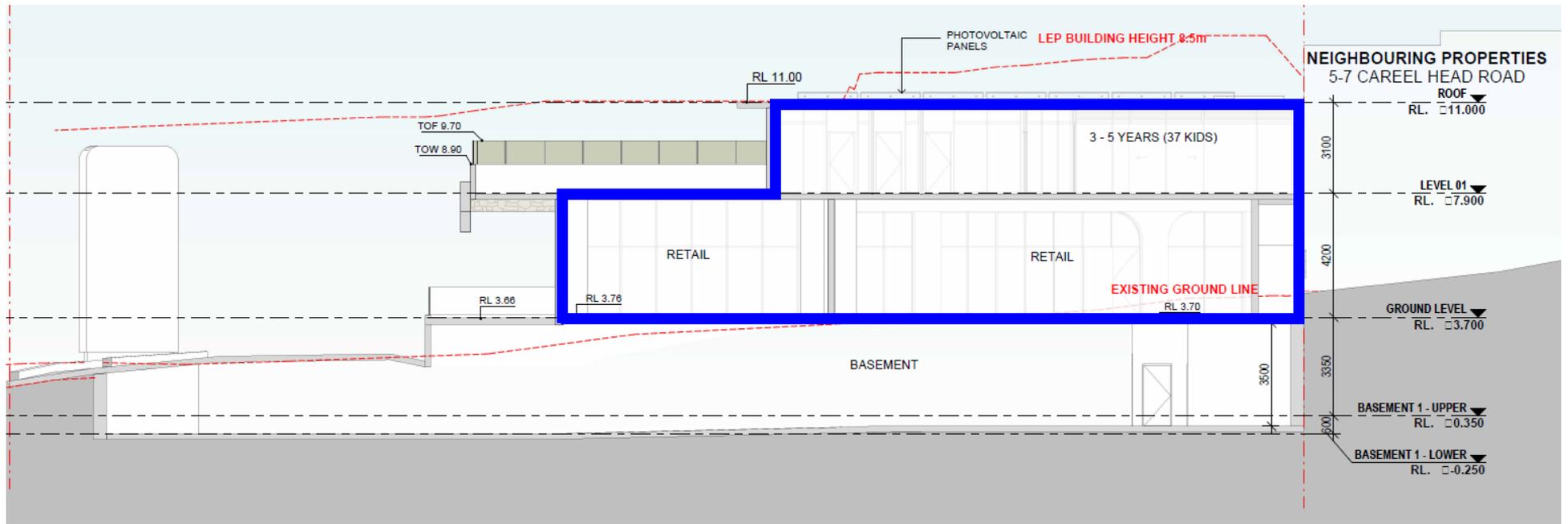
2 NORTH ELEVATION 2 - CAREEL HEAD ROAD
 1 : 100 at A1 1:200 at A3



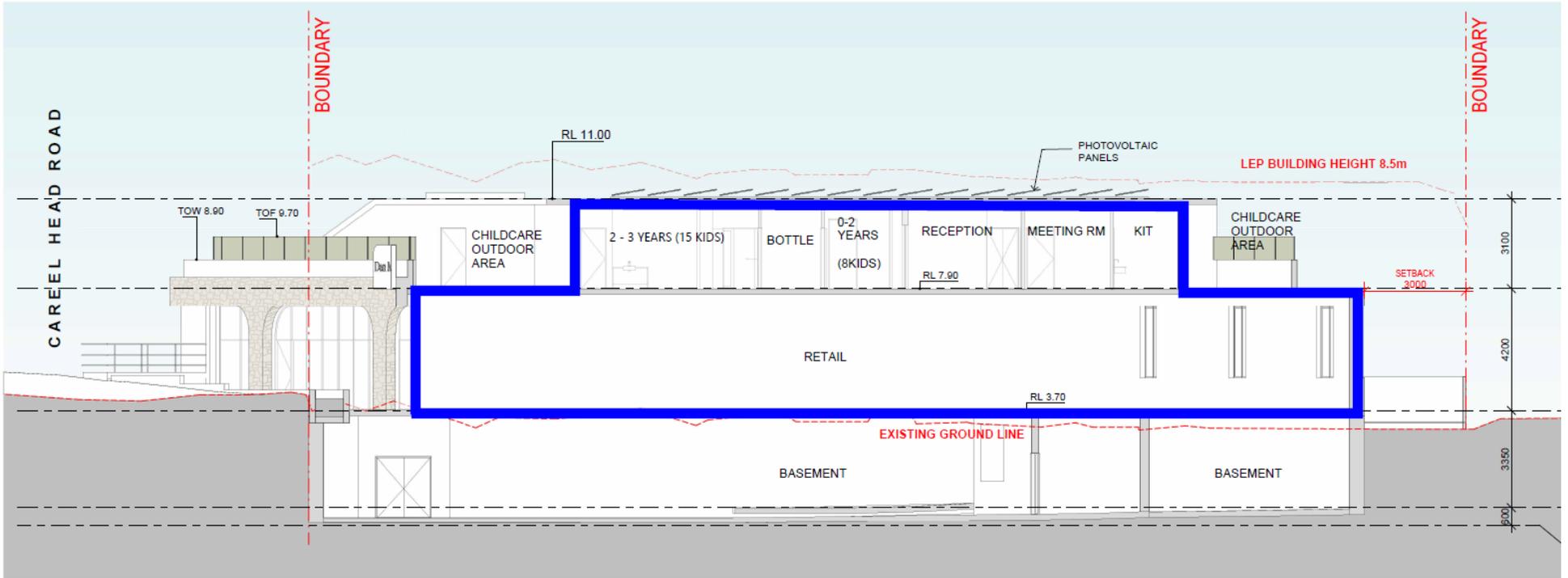
1 SOUTH ELEVATION A
 1 : 100 at A1 1:200 at A3



2 SOUTH ELEVATION B
 1 : 100 at A1 1:200 at A3



1 SECTION A
 1 : 100 at A1 1:200 at A3



1 SECTION B
 1 : 100 at A1 1 : 200 at A3

1. Part J1 Energy efficiency performance requirements

	Requirements	Applicant action	Remarks (if any)
<p>NSW J1O1 Objective</p> <p>1V3Verification using a reference building2019: JV3</p>	<p>(1)For a Class 3, 5, 6, 7, 8 or 9 building or common area of a Class 2 building, compliance with J1P1 is verified when—it is determined that the annual greenhouse gas emissions of the proposed building are not more than the annual greenhouse gas emissions of a reference building when—the proposed building is modelled with the proposed services; and the proposed building is modelled with the same services as the reference building; and in the proposed building, a thermal comfort level of between a Predicted Mean Vote of -1 to +1 is achieved across not less than 95% of the floor area of all occupied zones for not less than 98% of the annual hours of operation of the building; and the building complies with the additional requirements in Specification 33.</p> <p>(2)The annual greenhouse gas emissions of the proposed building may be offset by—renewable energy generated and used on site; and another process such as reclaimed energy, used on site.</p> <p>(3)The calculation method used for (1) and (2) must comply with—ANSI/ASHRAE Standard 140; and Specification 34.</p>	<p>Note</p>	<p>Note</p>
<p>NSW J1P1 Energy use</p>	<p>NA</p>	<p>NA</p>	<p>Note</p>

	Requirements	Applicant action	Remarks (if any)
NSW J1P4 Renewable energy and electric vehicle charging	A building must have features that facilitate the future installation of on-site renewable energy generation and storage and electric vehicle charging equipment.	Applies	Note
NSW J1P5 Building fabric—Class 2 building and Class 4 parts of a building		NA	Note
NSW J1P6 Building sealing—Class 2 building and Class 4 parts of a building		NA	Note
NSW J1P7 Services—Class 2 building and Class 4 parts of a building		NA	Note

2. Part J2 Energy efficiency

	Requirements	Applicant action	Remarks (if any)
J2D1 Deemed-to-Satisfy Provisions 2019: J0.0	(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements J1P1 to J1P4 are satisfied by complying with— J2D2; and J3D2 to J3D15; and J4D2 to J4D7; and J5D2 to J5D8; and J6D2 to J6D13; and J7D2 to J7D9; and J8D2 to J8D4; and J9D2 to J9D5.	Note	Note

	Requirements	Applicant action	Remarks (if any)
	<p>(2)Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2</p> <p>(3) and A2G4(3) as applicable.</p>		
<p>J2D2Application of Section J</p> <p>2019: J0.1</p>	<p>(1)For a Class 2 to 9 building, other than a sole-occupancy unit of a Class 2 building or a Class 4 part of a building, Performance RequirementJ1P1 is satisfied by complying with—Part J4, for the building fabric; and Part J5, for building sealing; and Part J6, for air-conditioning and ventilation; and Part J7, for artificial lighting and power; and Part J8, for heated water supply and swimming pool and spa pool plant; andJ9D3, for facilities for energy monitoring.</p> <p>(2)For a sole-occupancy unit of a Class 2 building or a Class 4 part of a building, Performance RequirementJ1P2 is satisfied by complying with—J3D3, using house energy rating software; orthe following— J3D4, for ceiling fans; andJ3D5, J3D6, J4D3, J4D7(3), J4D7(4) and Part J5, for general thermal construction; andJ3D7, for roofs; andJ3D8 and J3D11 to J3D13, or J3D9, for walls and glazing; andJ3D10, for floors.</p> <p>(3)For a sole-occupancy unit of a Class 2 building or a Class 4 part of a building, Performance RequirementJ1P3 is satisfied by complying with—for the net equivalent energy usage—J3D14, for a sole-occupancy unit of a Class 2 building or a Class 4 part of a building with a total floor area not greater</p>	<p>Note</p>	<p>Note</p>

	Requirements	Applicant action	Remarks (if any)
	<p>than 500 m²; or J3D15, using house energy rating software; and Part J6, for air-conditioning and ventilation; and Part J7, for artificial lighting and power.</p> <p>(4) For a Class 2 to 9 building, Performance Requirement J1P4 is satisfied by complying with J9D4 and J9D5.</p>		

3. Part J3 Elemental provisions for a sole-occupancy unit of a Class 2 building -NA

4. Part J4 Building fabric

	Requirements	Applicant action	Remarks (if any)
<p>J4D1 Deemed-to-Satisfy Provisions 2019: J1.0</p>	<p>(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements J1P1 to J1P4 are satisfied by complying with— J2D2; and J3D2 to J3D15; and J4D2 to J4D7; and J5D2 to J5D8; and J6D2 to J6D13; and J7D2 to J7D9; and J8D2 to J8D4; and J9D2 to J9D5.</p> <p>2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.</p>	Applicant to commit	Note
<p>J4D2 Application of Part 2019: J1.1</p>	<p>The Deemed-to-Satisfy Provisions of this Part apply to building elements forming the envelope of a Class 2 to 9 building other than J4D3(5), J4D4, J4D5, J4D6 and J4D7 which do not apply to a Class 2 sole-occupancy unit or a Class 4 part of a building.</p>	Applicant to commit	Note

	Requirements	Applicant action	Remarks (if any)
J4D3 Thermal construction — general 2019: J1.2	(1)Where required, insulation must comply with AS/NZS 4859.1 and be installed so that it—abuts or overlaps adjoining insulation other than at supporting members such as studs, noggings, joists, furring channels and the like where the insulation must be against the member; and forms a continuous barrier with ceilings, walls, bulkheads, floors or the like that inherently contribute to the thermal barrier; and does not affect the safe or effective operation of a service or fitting.	Show in construction detailing and execution of the Works.	
	(2)Where required, reflective insulation must be installed with—the necessary airspace to achieve the required R-Value between a reflective side of the reflective insulation and a building lining or cladding; and the reflective insulation closely fitted against any penetration, door or window opening; and the reflective insulation adequately supported by framing members; and each adjoining sheet of roll membrane being—overlapped not less than 50 mm; or taped together.	Show in construction detailing and execution of the Works.	
	(3)Where required, bulk insulation must be installed so that—it maintains its position and thickness, other than where it is compressed between cladding and supporting members, water pipes, electrical cabling or the like; and in a ceiling, where there is no bulk insulation or reflective insulation in the wall beneath, it overlaps the wall by not less than 50 mm.	Show in construction detailing and execution of the Works.	

	Requirements	Applicant action	Remarks (if any)
	(4)Roof, ceiling, wall and floor materials, and associated surfaces are deemed to have the thermal properties listed in Specification 36.	Show in construction detailing and execution of the Works.	
	(5)The required Total R-Value and Total System U-Value, including allowance for thermal bridging, must be—calculated in accordance with AS/NZS 4859.2 for a roof or floor; or determined in accordance with Specification 37 for wall-glazing construction; or determined in accordance with Specification 39 or Section 3.5 of CIBSE Guide A for soil or sub-floor spaces.	Show in construction detailing and execution of the Works.	

	Requirements	Applicant action	Remarks (if any)
J4D4Roof and ceiling construction 2019: J1.3	(1)A roof or ceiling must achieve a Total R-Value greater than or equal to—in climate zones 1, 2, 3, 4 and 5, R3.7 for a downward direction of heat flow; and in climate zone 6, R3.2 for a downward direction of heat flow; and in climate zone 7, R3.7 for an upward direction of heat flow; and in climate zone 8, R4.8 for an upward direction of heat flow. (2)In climate zones 1, 2, 3, 4, 5, 6 and 7, the solar absorptance of the upper surface of a roof must be not more than 0.45	Provide R 3.0 between roofing and ceiling. Show in construction detailing and execution of the Works.	
J4D5Roof lights 2019: J1.4	Roof lights must have—a total area of not more than 5% of the floor area of the room or space served; and transparent and translucent elements, including any imperforate ceiling diffuser, with a combined performance of—for Total system SHGC, in	Not in this works	Note

	Requirements	Applicant action	Remarks (if any)
	accordance with Table J4D5; and for Total system U-Value, not more than U3.9.		
J4D6Walls and glazing 2019: J1.5	<p>(1)The Total System U-Value of wall-glazing construction, including wall-glazing construction which wholly or partly forms the envelope internally, must not be greater than—for a Class 2 common area, a Class 5, 6, 7, 8 or 9b building or a Class 9a building other than a ward area, U2.0;</p> <p>and for a Class 3 or 9c building or a Class 9a ward area—in climate zones 1, 3, 4, 6 or 7, U1.1; or in climate zones 2 or 5, U2.0; or in climate zone 8, U0.9.</p> <p>(2)The Total System U-Value of display glazing must not be greater than U5.8.</p> <p>(3)The Total System U-Value of wall-glazing construction must be calculated in accordance with Specification 37.(4)Wall components of a wall-glazing construction must achieve a minimum Total R-Value of—where the wall is less than 80% of the area of the wall-glazing construction, R1.0; or where the wall is 80% or more of the area of the wall-glazing construction, the value specified in Table J4D6a.</p> <p>(5)The solar admittance of externally facing wall-glazing construction, excluding wall-glazing construction which is wholly internal, must not be greater than—for a Class 2 common area, a Class 5, 6, 7, 8 or 9b building or a Class 9a building other than a ward area, the values specified in Table</p>		

	Requirements	Applicant action	Remarks (if any)
	<p>J4D6b; and for a Class 3 or 9c building or a Class 9a ward area, the values specified in Table J4D6c.</p> <p>(6)The solar admittance of a wall-glazing construction must be calculated in accordance with Specification 37.</p> <p>(7)The Total system SHGC of display glazing must not be greater than 0.81 divided by the applicable shading factor specified in S37C7.</p>		

	Requirements	Applicant action	Remarks (if any)
J4D7Floors	(1)A floor must achieve the Total R-Value specified in Table J4D7	Provide R 1.7 under slab.	

	Requirements	Applicant action	Remarks (if any)
2019: J1.6	<p>(2) For the purposes of (1), a slab-on-ground that does not have an in-slab heating or cooling system is considered to achieve a Total R-Value of R2.0, except—in climate zone 8; or a Class 3, Class 9a ward area or Class 9b building in climate zone 7 that has a floor area to floor perimeter ratio of less than or equal to 2.</p> <p>(3) A floor must be insulated around the vertical edge of its perimeter with insulation having an R-Value greater than or equal to 1.0 when the floor—is a concrete slab-on-ground in climate zone 8; or has an in-slab or in-screed heating or cooling system, except where used solely in a bathroom, amenity area or the like.</p> <p>4) Insulation required by</p> <p>(3) for a concrete slab-on-ground must—be water resistant; and be continuous from the adjacent finished ground level—to a depth not less than 300 mm; or for the full depth of the vertical edge of the concrete slab-on-ground.</p>	<p>Show in construction detailing and execution of the Works.</p>	

5. Part J5 Building sealing

	Requirements	Assessment	Remarks (if any)
J5D1 Deemed-to-Satisfy Provisions 2019: J3.0	<p>(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements J1P1 to J1P4 are satisfied by complying with— J2D2; and J3D2 to J3D15; and J4D2 to J4D7; and J5D2 to J5D8; and J6D2 to J6D13; and J7D2 to J7D9; and J8D2 to J8D4; and J9D2 to J9D5.</p> <p>(2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.</p>		
J5D2 Application of Part 2019: J3.1	<p>The Deemed-to-Satisfy Provisions of this Part apply to elements forming the envelope of a Class 2 to 9 building, other than—a building in climate zones 1, 2, 3 and 5 where the only means of air-conditioning is by using an evaporative cooler; or a permanent building opening, in a space where a gas appliance is located, that is necessary for the safe operation of a gas appliance; or a building or space where the mechanical ventilation required by Part F6 provides sufficient pressurisation to prevent infiltration.</p>		
J5D3 Chimneys and flues	<p>The chimney or flue of an open solid-fuel burning appliance must be provided with a damper or flap that can be closed to seal the chimney or flue.</p>	NA	Note

2019: J3.2			
J5D4Roof lights 2019: J3.3	<p>(1) A roof light must be sealed, or capable of being sealed, when serving—a conditioned space; or a habitable room in climate zones 4, 5, 6, 7 or 8.</p> <p>(2)A roof light required by (1) to be sealed, or capable of being sealed, must be constructed with—an imperforate ceiling diffuser or the like installed at the ceiling or internal lining level; or a weatherproof seal; or a shutter system readily operated either manually, mechanically or electronically by the occupant.</p>		
J5D5Windows and doors 2019: J3.4	<p>(1) A door, openable window or the like must be sealed—when forming part of the envelope; or in climate zones 4, 5, 6, 7 or 8.</p> <p>(2)The requirements of (1) do not apply to—a window complying with AS 2047; or a fire door or smoke door; or a roller shutter door, roller shutter grille or other security door or device installed only for out-of-hours security.</p> <p>(3)A seal to restrict air infiltration—for the bottom edge of a door, must be a draft protection device; and for the other edges of a door or the edges of an openable window or other such opening, may be a foam or rubber compression strip, fibrous seal or the like.(</p> <p>4)An entrance to a building, if leading to a conditioned space must have an airlock, self-closing door, rapid roller door, revolving door or the like, other than—where the conditioned space has a floor area of not</p>	<p>Show in construction detailing and execution of the Works.</p>	

	<p>more than 50 m²; or where a café, restaurant, open front shop or the like has—a 3 m deep un-conditioned zone between the main entrance, including an open front, and the conditioned space; and at all other entrances to the café, restaurant, open front shop or the like, self-closing doors.(</p> <p>5)A loading dock entrance, if leading to a conditioned space, must be fitted with a rapid roller door or the like.</p>		
<p>J5D6Exhaust fans 2019: J3.5</p>	<p>An exhaust fan must be fitted with a sealing device such as a self-closing damper or the like when serving—a conditioned space; or a habitable room in climate zones 4, 5, 6, 7 or 8.</p>	<p>Show in construction detailing and execution of the Works.</p>	
<p>J5D7Construction of ceilings, walls and floors 2019: J3.6</p>	<p>(1)Ceilings, walls, floors and any opening such as a window frame, door frame, roof light frame or the like must be constructed to minimise air leakage in accordance with</p> <p>(2)—when forming part of the envelope; or in climate zones 4, 5, 6, 7 or 8.(2)Construction required by (1) must be—enclosed by internal lining systems that are close fitting at ceiling, wall and floor junctions; or sealed at junctions and penetrations with—close fitting architrave, skirting or cornice; or expanding foam, rubber compressible strip, caulking or the like.</p> <p>(3)The requirements of (1) do not apply to openings, grilles or the like required for smoke hazard management.</p>	<p>Show in construction detailing and execution of the Works.</p>	

J5D8Evaporative coolers 2019: J3.7	An evaporative cooler must be fitted with a self-closing damper or the like—when serving a heated space; or in climate zones 4, 5, 6, 7 or 8.	Unlikely to be used in the Works	Note
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6. Part J6 Air-conditioning and ventilation

Present the completed calculator <https://ncc.abcb.gov.au/sites/default/files/resources/2022/Calculator-Fan-system-Volume-One-2019.xlsx> to the PCA for certification.

Refer consultant documentation.

7. Part J7 Artificial lighting and power

Present the completed calculator https://ncc.abcb.gov.au/sites/default/files/resources/2023/Calculator-Lighting-NCC-Volume-One_0.xlsx to the PCA for certification.

Refer consultant documentation.

8. Part J8 Heated water supply and swimming pool and spa pool plant

Refer consultant documentation.

9. Part J9 Energy monitoring and on-site distributed energy resources

Refer consultant documentation.

APPENDIX A – verification by applicant to PCA

FORMS OF EVIDENCE TO CERTIFIER

Refer table below **Acceptable Forms of Evidence**.

Acceptable forms of evidence to PCA to review prior to cover up and completion of works

Show me. Not tell me.

	EVIDENCE			REQUIREMENTS	REMARKS
	INFORMATIVE ONLY	PART	FULL		
A		X		Photo file e.g.jpg must be date stamped originals. Progress photographs <ul style="list-style-type: none"> - Prior to covering up - Products - Installation progress 	Must also show context to identify Project and location in the works – i.e. detail shot together with wide shot. Photographs unclear to the above requirements will be dismissed.
B		X		Product packaging before disposal Evidence by progress photographs in site context [to identify site] e.g. identifiable project sample room. Packaging must be fully labelled	Hold points or reviews if requested by Certifier.
C		X		Detailed invoices All invoices must be fully detailed.	Invoice sum may be redacted.
D		X		Design and calculations E.g, <ul style="list-style-type: none"> • lighting layout showing fixtures and switching • mechanical services 	
E			X	Manufacturer's test certificates. e.g. WERS ID for windows	Certificates other than test certificates are not accepted as evidence.
F	X			Manufacturer's specifications and descriptions	To ascertain deemed to satisfy.
G			X	A+B+C	
H			X	A, or B, or C, or D if sighted by Certifier.	At Certifier discretion. Hold points or review points if requested by Certifier.

APPENDIX B - SECTION J CONSTRUCTION DETAIL DRAWINGS

GENERAL REQUIREMENTS

Where not provided by Architects under his engagement, provide for review and construction sufficient documentation to satisfy Section J requirements to the PCA.

COORDINATION

Requirements

Coordinate between architectural and other consultant Section J requirements.

SETOUT DRAWINGS

Access and fire egress

Allow for critical dimension where impacted by Section J construction requirements e.g.

- egress widths
- fixture heights
- accessibility etc

Scales

Typically 1:10 but not less than 1:20.

1:50 not accepted.

CONSTRUCTION DETAIL DRAWINGS

Requirements

Show all junctions and joints with particular focus on Section J requirements

- Insulation
 - Type
 - Location
 - Installation
- Sealing for prescribed air tightness e.g.
 - Door seals
 - Architrave seals
- thermal breaks
- vented cavities for condensation management e.g.
 - ceiling spaces
 - wall cavities
- vapour permeable membranes
 - type and location
 - taping
- etc.

Scales

Typically 1:5 or 1:2.

1:10, 1:20, and 1:50 not accepted.

STRUCTURAL AND SERVICES DRAWINGS

General

Refer documentation by respective consultants.

APPENDIX C - SECTION J INCLUSIONS TO CONTRACT SPECIFICATIONS

GENERAL

Provide the following clauses to the Contract Specifications.

IDENTIFIED PROPRIETARY ITEMS

Definitions

Identified proprietary items indicate the properties and qualities of the items deemed to satisfy with Section J requirements.

ALTERNATIVES

Notifications

Notify the Contract Administrator for any proposed alternatives.

Allow 15 business days notification.

Requirements

Proposed alternatives must match the properties and qualities of the selected items.

Approvals of alternatives

Do not fabricate nor place purchase order unless approved by the Contract Administrator.

Critical path

Variation in lead times must not be on the critical path.

Contract Sum

Notify variation the Contract Sum.

FIT FOR PURPOSE

Purpose

To deliver the Works fit for purpose.

Requirements

Provide all materials and processes –

1. that satisfy Section J requirements
2. can be certified and verified against statute requirements, contracts, and instructions by the Construction Administrator [traceability]

Determination

Where fit for purpose has not been achieved: the Construction Administrator may instruct in writing for replacement, making good, or rework.

Variations

Contract Sum: Replacement, making good or rework shall not vary the Contract Sum.

Practical completion: Replacement, making good or rework shall not vary the date for completion of the Works or date of Practical Completion.

GOOD PRACTICE

General

Purpose of clause: To ensure good practice throughout the Works.

Requirements

Provide detailing, materials, methods, processes that are considered good practice to every part of the Works, giving due regard to

1. Section J compliance
2. Traceability.

SUBSTANDARD WORKS AND VARIATIONS

Substandard works shall be replaced, rectified or made good without cause to vary Contract Sum and extensions to time of Practical completion.

END OF REPORT
END OF DOCUMENT
END OF FILE