



**TOWN OF CLAREMONT
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ACOUSTIC REPORT DEVELOPMENT APPLICATION

REVISION 3

**ST LOUIS ESTATE, ALBERT ST
INDEPENDENT LIVING UNITS**

6th July 2026



For

**CHC (ST LOUIS) PTY LTD
P.O BOX 1593
WEST PERTH WA 6872**

EXECUTIVE SUMMARY

Gabriels Hearne Farrell Pty Ltd were commissioned to undertake an acoustic assessment of the proposed Independent Living Units at Lot 100, 15 Dean St Claremont. The acoustic assessment confirms that the proposed development is compliant with the relevant acoustic planning policies and regulations:

State Planning Policy 5.4 'Road and Rail Noise'

A traffic noise assessment has been undertaken in accordance with State Planning Policy 5.4. The assessment indicates that the forecast traffic noise level (Year 2046) at the proposed Independent Living Units will be below the *Outdoor Noise Target* of SPP 5.4, therefore the façades of the buildings do not need to be acoustically upgraded to address traffic noise.

The proposed buildings are located outside the trigger zone of the Fremantle Rail Line.

Environmental Protection (Noise) Regulations 1997

A preliminary review of the environmental noise emissions suggests that compliance with the 'Assigned Levels' of the Environmental Protection (Noise) Regulations 1997 is possible. At this early stage of the project the recommended noise control strategies are as follows:

Mechanical services

- 1) Selection of condensing units and exhaust fans with the lowest Sound Power Level available;
- 2) The condensing units to incorporate a 'night mode' or similar to achieve lower noise emissions between 10 pm and 7 am;
- 3) Selection of kitchen and toilet exhaust fans with variable speed fans;
- 4) In-line attenuators on the basement carpark supply and exhaust fans; and,
- 5) An attenuated fire-pump shall be specified, with a radiated noise level of <88 dB(A) at 1 metre from the engine (eg Allied Pumps Enviropac System with Class 1 attenuation).
- 6) Solid acoustic screening (without gaps or slots) will likely be required around portions roof plant areas, as illustrated in Figure 5 on page 10 of this report. This screening is to be constructed of a material with a minimum surface density of 10 kg/m², and shall be taller than the condensing units.

Part F7 'Sound transmission and Insulation' of NCC 2025

The report provides the preliminary acoustic requirements of NCC 2025 applicable to the sole-occupancy units of the Independent Living Units.

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Report Version	Author	Comment	Date
3	Benjamin Farrell	Final update for the DA	6 th July 2026



Gabriels Hearne Farrell Pty Ltd is a Member Firm of the Association of Australian Acoustical Consultants. The report author is a full member of the Australian Acoustical Society.

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- APPENDIX B - Acoustic marked-up plans (requirements of Part F7 of NCC 2025)

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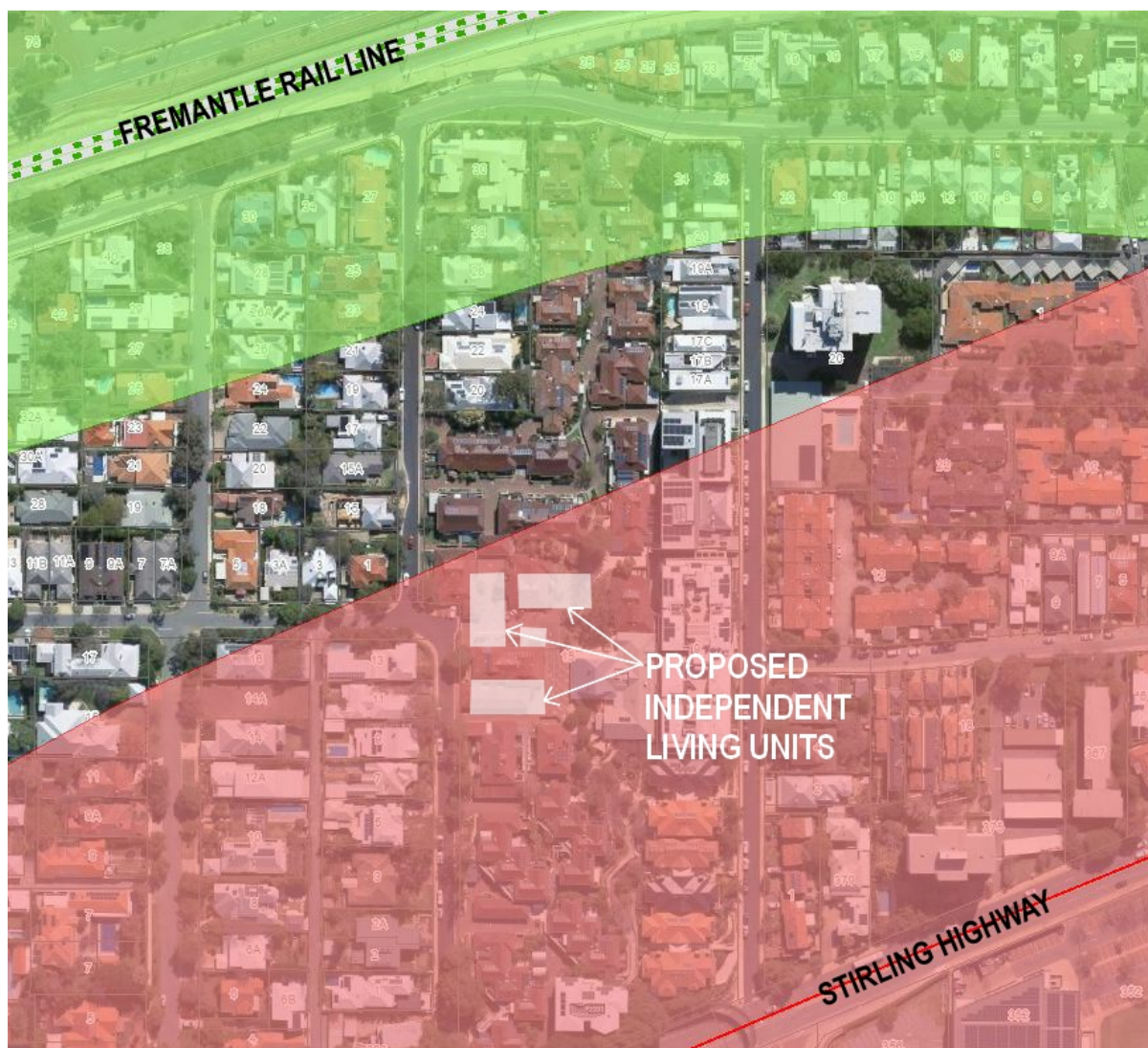


Figure 2 – Excerpt from PlanWA mapping tool (State Planning Policy 5.4 layer)

As per Section 6.1 of State Planning Policy 5.4, the following Noise Targets are applicable to the residential components of the development:

Time of day	Outdoor Noise Target	Indoor Noise Target (Design Sound Level of AS 2107:2016)
Day (6 am – 10 pm)	Leq(Day) 55 dB(A)	Leq(Day) 40 dB(A)
Night (10 pm – 6 am)	Leq(Night) 50 dB(A)	Leq(Night) 35 dB(A)

Table 1 – Noise level criteria from State Planning Policy 5.4

3.1 Screening assessment in accordance with the Implementation Guidelines of State Planning Policy 5.4
 A Screening Assessment of traffic noise from Stirling Highway has been undertaken in accordance with Table 2 of the *Implementation Guidelines* of State Planning Policy 5.4. The Screening Assessment has been undertaken based on the following parameters for Stirling Highway:

- Average weekday traffic counts (2025/2026) – 40,271 vehicles per day.
- Percentage of heavy vehicles – 6.7%.
- Speed limit – 60 km/hr
- Road surface – Dense Graded Asphalt.
- Distance from nearside curb to southern façade of the proposed building – 132 metres.

As per Figure 3 on the following page, the Screening Assessment indicates a resultant *Noise Exposure Forecast* of L_{eq} 55 dB(A), which suggests that the traffic noise levels on site do not require any further

consideration. It is worth also noting that the Screening Assessment does not take into account any acoustic screening provided by other buildings located between the road and the development. It is likely that the traffic noise levels will be at least 2 dB quieter than what the Screening Assessment indicates, given there are buildings located between Stirling Highway and the proposed development site which will provide attenuation of traffic noise.

Transport Corridor Classification	Number of lanes (both directions), including bus/priority lanes and entrance/exit ramps	Forecast noise exposure category based on lot distance(m) from edge of nearest main road carriageway (not entrance/exit ramps)																
		adjacent	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	175
Strategic freight/major traffic route • 500 or more Class 7-12 Austroads vehicles per day, or • 50,000+ vehicles per day	2 to 4 lanes	72	68	66	65	63	62	61	61	60	59	59	58	57	57	56	55	
	5 to 6 lanes	74	70	68	66	65	64	63	62	61	61	60	59	59	58	58	57	
	7 to 8 lanes	76	72	69	68	66	65	64	64	63	62	62	61	60	60	59	58	
	9 to 10 lanes	77	73	70	69	67	66	65	64	63	62	61	61	60	59	58	57	
Other significant freight / traffic routes • Any actual or planned future State Administered Road • Local Government Roads Carrying 100 or more Class 7 – 12 Austroads vehicles/day • 25,000+ vehicles per days vehicles/day	Urban Region Scheme areas 60-80 km/hr	1 to 2 lanes	67	64	62	61	60	59	58	57	56	56	55	54	54	53	52	
	Urban Region Scheme areas 60-80 km/hr	3 to 6 lanes	69	66	64	63	62	61	60	59	58	58	57	56	56	55	54	
	Urban Region Scheme areas 100+ km/hr	1 to 2 lanes	70	67	65	64	63	62	61	60	59	59	58	57	57	56	55	
	Urban Region Scheme areas 100+ km/hr	3 to 6 lanes	74	70	68	66	65	64	63	62	61	61	60	60	59	58	57	
	Rural areas 60-80 km/hr	1 to 2 lanes	62	59	57	56	55	54	53	52	51	51	50	49	49	48	46	
	Rural areas 60-80 km/hr	3 to 4 lanes	66	63	61	60	59	58	56	56	55	54	53	53	52	51	50	
	Rural areas 100+ km/hr	1 to 2 lanes	67	64	62	61	60	59	58	57	56	55	54	54	53	52	51	
	Rural areas 100+ km/hr	3 to 4 lanes	69	66	64	63	62	61	60	59	58	57	56	55	55	54	53	

Figure 3 – Screening assessment as per Table 2 of the Implementation Guidelines of SPP 5.4

Notwithstanding the above, in the interest of due diligence traffic noise measurements have been undertaken on site to confirm that the traffic noise levels are below the Noise Targets of State Planning Policy 5.4. This is discussed further in Section 3.2.

3.2 Traffic noise level measurements

Noise level measurements were conducted on site using a NATA calibrated Cirrus Optimus CR199B (serial number G061705). Calibration certificates are available upon request. The sound level meter was field calibrated prior to and following the measurements. In order to ascertain the noise levels at the upper levels of the proposed buildings, a 7.5 metre extension pole was used in conjunction with a microphone extension cable, resulting in the microphone being positioned approximately 7.5 metres above ground level.

The noise measurement was undertaken on the eastern verge of Albert St, 132 metres from Stirling Highway. The measurement location is shown in Figure 4 below.



Figure 4 – Measurement location

Attended measurements were undertaken on Tuesday May 26, 2026, during the afternoon peak traffic flow (4 pm to 5 pm). Unfortunately long term noise monitoring was not possible with use of the 7.5 metre extending pole which has to be manually held in a vertical position. Extraneous noise sources were excluded from the measurements, were possible (ie local traffic on Albert St, dogs barking, etc).

3.2.1 Measured traffic noise levels

The measured octave-band traffic noise levels during the peak afternoon traffic counts are provided in Table 2.

Measurement location	Time of day	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	L _{eq} dB(A)
Albert St verge, 132 metres from curb of Stirling Highway	4:00 pm to 4:30 pm	57.3	55.0	48.2	44.0	45.9	44.1	39.6	50.6

Table 2 – Measured octave-band traffic noise levels (132 metres from Stirling Highway)

3.2.2 Current L_{Aeq}(Day) and L_{Aeq}(Night) levels

Using the attended noise level measurements in Table 2, it is possible to determine the current L_{Aeq}(Day) and L_{Aeq}(Night) levels by correlating the data with the hourly traffic volumes obtained from the Main Roads Traffic Map. A relationship was determined between the traffic volume between 4 pm and 5 pm and the measured traffic noise level at this time, then the current L_{Aeq}(Day) figure was calculated by using the logarithmic correlation for the traffic flow volumes between 6 am and 10 pm. The L_{Aeq}(Night) level was also determined using the correlation.. The hourly traffic volumes for Stirling Highway west of Queenslea Drive are provided in Appendix A (taken from the Main Roads Traffic Map).

The current L_{Aeq}(Day) and L_{Aeq}(Night) levels are provided in Table 3 below.

Time of day	Measured traffic noise level	Traffic noise level including +2.5 dB façade correction
Day (6 am – 10 pm)	L _{eq} (Day) 49.5 dB(A)	L _{eq} (Day) 52.0 dB(A)
Night (10 pm – 6 am)	L _{eq} (Night) 42.0 dB(A)	L _{eq} (Night) 44.5 dB(A)

Table 3 – Current/existing L_{Aeq}(Day) and L_{Aeq}(Night) levels at measurement location

3.2.3 Forecast noise exposure

State Planning Policy 5.4 requires consideration of forecast traffic volumes, over a 20 year horizon. This information was requested from Main Roads Western Australia (MRWA). MRWA has provided validation/scenario traffic volumes (Year 2026) and the forecast traffic volumes for the Year 2046 (provided by Scott Hazebroek, Transport Modelling Analyst, Reference No. 43741 – May 27, 2026). The full data provided by MRWA is included in Appendix A. Table 4 below summarises the potential increase in traffic noise levels over the 20 year horizon.

Road	Scenario traffic volumes (2026)	Forecast traffic volumes (2046)	Resultant increase in traffic noise levels
Stirling Highway west of Queenslea Drive	East bound – 23,200 West bound – 20,600	East bound – 25,100 West bound – 23,000	+ 0.34 dB + 0.48 dB

Table 4 – Future traffic volumes

Based on the above, the forecast noise exposure levels have been determined (Year 2046), inclusive of the +2.5 dB façade correction:

Time of day	Forecast traffic noise levels
Day (6 am – 10 pm)	L _{eq} (Day) 52.4 dB(A)
Night (10 pm – 6 am)	L _{eq} (Night) 44.9 dB(A)

Table 5 – Forecast noise exposure levels

Given that the above forecast traffic noise levels are below the Outdoor Noise Targets of State Planning Policy 5.4, the façades of the proposed Independent Living Units do not need to be upgraded for controlling traffic noise intrusion.

4. PART F5 'SOUND TRANSMISSION AND INSULATION' OF THE NCC

The sole-occupancy units within the proposed Independent Living Units shall comply with Part F7 'Sound Transmission and Insulation' of NCC 2025.

4.1 Walls around the Class 3 sole-occupancy units

The minimum acoustic requirements for perimeter walls surrounding the *sole-occupancy units* are outlined in Table 6 below. These sound reduction ratings are established in Part F7D6 and F7D7 of NCC 2025.

Please note that the BCA defines a 'habitable room' as including a bed room, living room, lounge room, music room, kitchen, dining room, sewing room, study, playroom, family room, home theatre, and sunroom. The definition of a 'habitable room' specifically excludes a bathroom, laundry, WC, pantry, walk-in robe, corridor, hallway, lobby, clothes-drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods.

Situation	NCC Part F7 requirement
Walls separating the sole-occupancy units	$R_w + C_{tr}$ 50
Walls separating a bathroom, WC, laundry, or kitchen of one sole-occupancy unit from a habitable room of another sole-occupancy unit	$R_w + C_{tr}$ 50 + <i>Discontinuous</i> construction
Walls to public corridors, lobbies, stairs, or parts of a different classification	R_w 50
Walls to lifts and plant rooms (inclusive of risers incorporating major ductwork)	$R_w + C_{tr}$ 50 + <i>Discontinuous</i> construction
Walls between ducts/risers and habitable rooms of the sole-occupancy unit	$R_w + C_{tr}$ 40
Walls between ducts/risers and non-habitable rooms of the sole-occupancy unit	$R_w + C_{tr}$ 25

Table 6 – NCC Part F7 requirements for walls around the Independent Living Units

The marked-up plans in Appendix B identifies where the various acoustic ratings apply, and provides examples of compliant constructions.

The walls around the *sole-occupancy units* must extend full-height to the underside of the concrete slab. On the top floor, if it is not practical to extend the walls to the underside of the roof sheeting then the ceilings shall be upgraded to two layers of 13 mm fire-rated plasterboard with minimum R2.0 90 mm glasswool insulation over.

Please note the following additional requirements that are outlined in Specification 28 of NCC 2025:

- Services must not be chased into concrete or masonry elements. Note – This statement does not apply to fully grouted electrical conduits.
- Electrical outlets – Within masonry/concrete walls electrical outlets must be offset by more than 100 mm. In stud framed walls electrical outlets must be offset by at least 300 mm, or a vertical stud must be positioned between the electrical outlets of adjacent rooms.
- Sheeting of stud walls – If one layer of plasterboard is required on each side of the studs, then it must be fastened to the studs with joints staggered on opposite sides. Where two layers of plasterboard are required on one side of a stud then the second layer must be fastened over the first layers so the joints do not coincide with those of the first layer. Joints between sheets and between sheets and adjoining construction must be taped and sealed.
- Steel framed construction – Perimeter framing members must be securely fixed to the adjoining structure, and bedded in resilient compound, or the joints must be caulked so that there are no voids between the framing members and the adjoining structure.

- The glasswool insulation shall have a minimum density of 14 kg/m³ (eg Bradford Acoustigard). If polyester insulation is to be used then it must achieve a minimum Noise Reduction Coefficient (NRC) of 0.9 at 75 mm thickness.

4.2 Floors of the Independent Living Units

The BCA Part F7D5 sets out the acoustic requirement for the floors of the *sole occupancy units* in terms of both air-borne and structure-borne (impact) noise transmission. The requirements are:

- Airborne sound insulation rating $R_w + C_{tr}$ 50; and,
- Impact sound insulation rating $L'_{nT,w}$ not greater than 62 dB(A).

These requirements also apply to the floors of the *sole-occupancy units* located above parts of another classification (ie the floor separating the ground floor apartments from the carparking below, due to lateral/horizontal impact noise transmission).

The BCA establishes the following *deemed-to-satisfy* floor constructions for achieving the above requirements:

- 200 mm solid concrete slab with carpet on underlay; and,
- Minimum 150 mm concrete slab + 28 mm furring channels on resilient mounts + 65 mm fibrous insulation (density > 8 kg/m³) + 13 mm plasterboard ceiling.

Specification S28C3 of NCC 2025 does not allow services to be chased into concrete or masonry elements. As such, soil, waste, and water supply pipes must not be embedded or encased in the concrete slab. These pipes are permitted to penetrate through the concrete slab provided appropriate collars and flexible sealant are used.

NOTE – An impact noise rating of $L'_{nT,w}$ 62 represents a basic level of impact noise control, and therefore footfall noise and movement of furniture will still be clearly audible within the apartments. Where possible, an impact noise rating of $L'_{nT,w} < 55$ should be aimed for in order to achieve a greater degree of amenity. The Association of Australasian Acoustical Consultants has also recently prepared a 'Position Statement' recommending that an impact noise criteria of $L'_{nT,w}$ 55 be adopted for all Class 2 and 3 project in Australia.

In our experience it is easier to achieve lower impact noise transmission with floating timber floors compared to tiled flooring. Options for achieving the impact noise target of $L'_{nT,w} < 55$ design target includes:

- Tiled or floating timber floor with a 5 mm resilient acoustic underlay, such as Embleton Impactamat or Regupol 4519;
- Use an acoustic vinyl floor such as Tarkett Tapiflex Excellence 80 or IQ Granit Acoustic; or,
- 6 mm Cork flooring.

4.2.1 Balcony / terrace floors above sole-occupancy units

Where balconies and external terraces are directly located above the *sole-occupancy units*, the separating floor system must comply with the acoustic criteria outlined in Part F7D5 of NCC 2025.

In relation to impact noise control, one of the following approaches is recommended:

- Utilise external grade tiles, installed on a 5 mm acoustic underlay (eg Regupol Sonus Multi 4.5); or,
- Utilise pedestals, with Embleton Shearflex installed between the pedestal and the concrete slab; or,
- Specify pedestals that incorporate a neoprene/rubber isolation shim.

4.3 Doors to the sole-occupancy units

As per Clause F7D6(2) of NCC 2025, the entry doors to each sole-occupancy unit shall achieve a minimum sound reduction of R_w 30. This can be achieved by specifying 50 mm solid core doors with full-perimeter heavy duty acoustic seals (eg Raven Rp 24 and Rp38 seals). Door grilles are not permitted in these doors.

5. ENVIRONMENTAL NOISE EMISSIONS

The noise emissions from the proposed development to the surrounding premises must comply with the Environmental Protection (Noise) Regulations 1997. These regulations establish the 'Assigned Levels' which are the noise levels that shall not be exceeded at the neighbouring residences.

The nearest residences are located across Albert St to the west.

5.1 Assigned Levels

The following 'Assigned Levels' are applicable at the residences surrounding the proposed development. This is based on an *Influencing Factor* of 2 dB:

- Major Road within the 450 m circle (Stirling Highway with over 40,000 vpd) = 2 dB

Part of premises receiving noise	Time of day	Assigned Level (dB)		
		L _{A10}	L _{A1}	L _{A max}
Noise Sensitive Premises: highly sensitive area (eg within 15 metres of a house)	7 am to 7 pm Monday to Saturday	47	57	67
	9 am to 7 pm Sunday and public holidays	42	52	67
	7 pm to 10 pm all days	42	52	57
	10 pm to 7 am Monday to Saturday and 10 pm to 9 am on Sundays and public holidays	37	47	57

Table 7- Assigned Levels for the surrounding residences

The above table refers to three types of 'Assigned Levels':

L_{Amax} - the noise level which is not to be exceeded at any time.

L_{A1} - the noise level which is not to be exceeded for more than 1% of the time (eg for more than 36 seconds in 1 hour).

L_{A10} - the noise level which is not to be exceed for more than 10% of the time (eg for more than 6 minutes in 1 hour).

5.1.1 Noise Character

Regulation 7(b) requires that the noise emission must be 'free' of annoying characteristics, namely tonality (eg whining, droning), modulation (like a siren), and impulsiveness (eg thumping). Where noise emissions do exhibit the above noise characteristics, an adjustment is made to the measured/calculated noise level (in accordance with Regulation 9):

- Tonality** 5 dB is added to the measured/calculated level
- Modulation** 5 dB is added to the measured/calculated level
- Impulsiveness** 10 dB is added to the measured/calculated level

5.2 Noise emissions from mechanical services

At this early stage of the project the mechanical services have not been selected or specified. Therefore it is not possible to undertake detailed noise modelling of the mechanical plant at this stage.

We confirm that the mechanical plant will be designed and specified to achieve compliance with the Environmental Protection (Noise) Regulations 1997. In our experience of previous similar projects, it may be necessary to implement the following noise control strategies:

- Selection of condensing units and exhaust fans with the lowest Sound Power Level available.;
- The condensing units to incorporate a 'night mode' or similar to achieve lower noise emissions between 10 pm and 7 am;
- Selection of kitchen and toilet exhaust fans with variable speed fans;
- In-line attenuators on the basement carpark supply and exhaust fans; and,
- Solid acoustic screening (without gaps or slots) will likely be required around the roof plant areas, as illustrated in Figure 5 below. The acoustic screening shall be as tall as the condensing units.

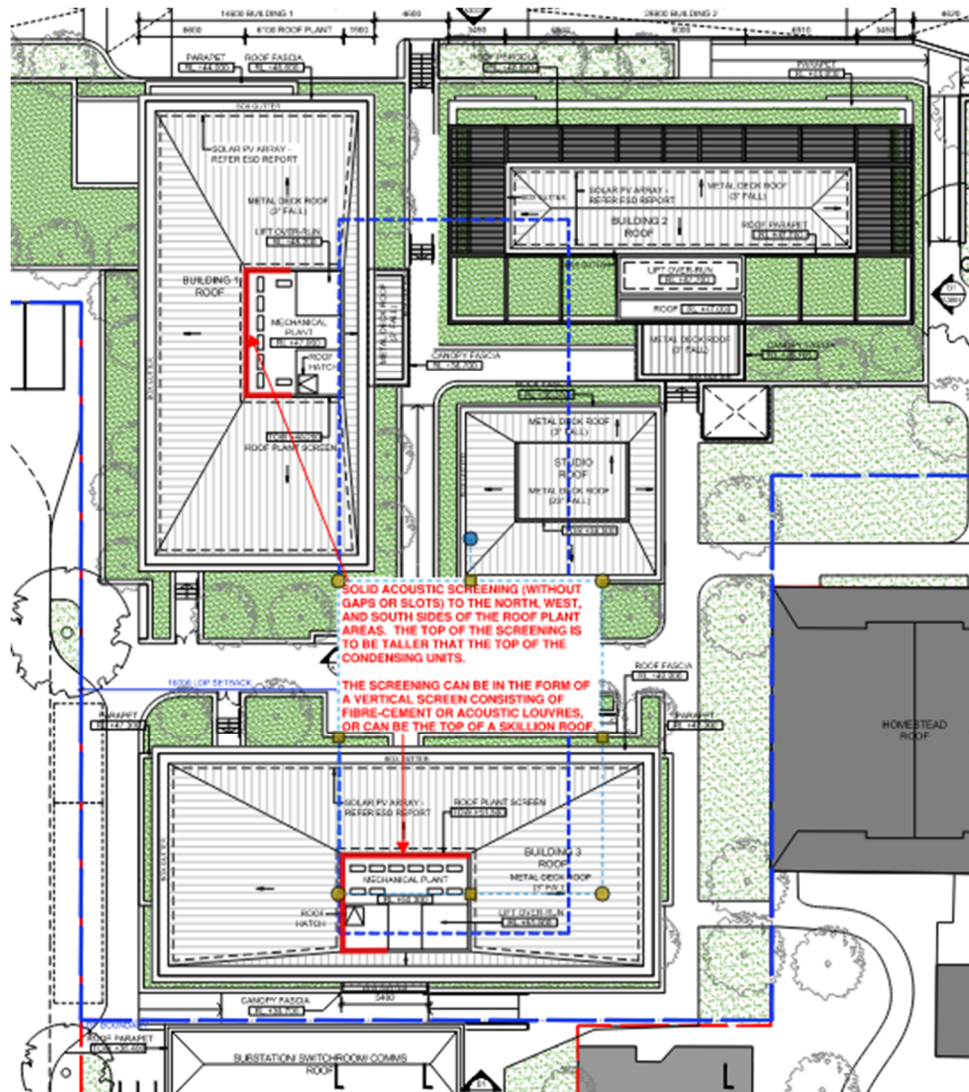


Figure 5 - Acoustic screening of roof plant areas

Detailed noise modelling of the mechanical plant will need to be undertaken prior to the lodgement of the building permit to verify compliance with the Environmental Protection (Noise) Regulations 1997.

5.3 Fire-Pumps

Fire-pumps are proposed at the south-western corner of the basement carpark. The fire-pumps will be tested monthly in accordance with AS 1851. The testing will be undertaken between the hours of 7 am and 7 pm, Monday to Saturday, and the duration of the test will be less than 20 minutes per test. The relevant Assigned Level is L_1 57 dB(A), given that the test duration is less than 10% of the representative assessment period of 4 hours.

The preliminary noise emissions indicates that the following noise control will be required in order to comply with the Assigned Level of L_1 57 dB(A) at the surrounding residences, and also the apartments above the fire-pump room:

- A packaged/attenuated fire pump shall be specified, that achieves a radiated noise level of 88 dB(A) at 1 metre from the engine (eg Allied Pumps Enviropac System with Class 1 attenuation).
- Mufflers/silencers to be installed on the exhaust, achieving a noise level of 78 dB(A) at 1 metre.
- A ceiling is required within the fire-pump room, consisting of 13 mm Fyrchek plasterboard or 9 mm fibre-cement suspended on resilient mounts, with minimum 75 mm glasswool insulation over.
- The perimeter walls of the fire-pump room shall achieve a minimum sound reduction of R_w 50 (eg core-filled concrete blockwork)
- The supply and relief air into the fire-pump room shall incorporate attenuation. The extent of attenuation will be determined once the ventilation of the room has been designed.

5.4 Waste collection vehicles

Regulation 14A of the Environmental Protection (Noise) Regulations 1997 addresses the noise emissions associated with waste collection. Fundamentally, waste collection activities are exempt from complying with the 'Assigned Levels', provided the collection only occurs between the hours of 7 am and 7 pm Monday to Saturday, and between 9 am and 7 pm on Sundays and Public Holidays. This is on the basis that:

- The works are carried out in the quietest reasonable and practicable manner; and,
- The equipment used to carry out the works is the quietest reasonably available.

The proposed waste management strategy is outlined within the Waste Management Plan prepared by Encycle. The waste bins for the independent living units will be stored in the basement, but will be transferred up to a collection point on Albert St on collection day. The waste will be collected by the Town of Claremont's own waste trucks. This is similar to the existing scenario, where waste is collected from bins along Albert St.

5.5 Service / Delivery vehicles

As the proposed development consists of Independent Living Units without commercial grade kitchens, laundries, and the like, the extent of service and delivery vehicles serving the development will be minimal. Notwithstanding this, a dedicated 'Service Bay' is proposed on Albert St. Service/delivery vehicles using a street bay such as the proposed 'Service Bay' are not required to comply with the 'Assigned Levels' given that street bays are considered a part of the road network.

In order to maintain amenity for the residences across Albert St, it is recommended that any deliveries are scheduled such that they only occur:

- Between 7 am and 7 pm, Monday to Saturday; and,
- Between 9 am and 7 pm on Sundays and Public Holidays.

If you have any queries regarding this information please call the undersigned on 9474 5966.

Regards,

Benjamin Farrell

Director M.A.A.S.

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ATTACHMENTS

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Hourly Volume

Stirling Hwy (H014)

West of Queenslea Dr (SLK 8.55)

	All Vehicles		
	 EB	 WB	 Both
00:00	60	62	122
01:00	34	33	67
02:00	20	22	42
03:00	38	26	64
04:00	91	63	154
05:00	404	349	753
06:00	936	801	1737
07:00	1610	1130	2740
08:00	1598	1218	2816
09:00	1471	1130	2601
10:00	1357	1213	2570
11:00	1347	1298	2645
12:00	1320	1338	2658
13:00	1260	1265	2525
14:00	1257	1435	2692
15:00	1322	1561	2883
16:00	1296	1745	3041
17:00	1237	1826	3063
18:00	1031	1275	2306
19:00	768	789	1557
20:00	627	609	1236
21:00	479	524	1003
22:00	314	337	651
23:00	177	168	345
TOTAL	20054	20217	40271

	Heavy Vehicles				%
	 EB	 WB	 Both		
00:00	2	2	4		3.3
01:00	2	2	4		6.0
02:00	1	1	2		4.8
03:00	3	2	5		7.8
04:00	9	7	16		10.4
05:00	33	33	66		8.8
06:00	83	88	171		9.8
07:00	96	103	199		7.3
08:00	90	99	189		6.7
09:00	115	116	231		8.9
10:00	113	125	238		9.3
11:00	112	118	230		8.7
12:00	106	110	216		8.1
13:00	103	104	207		8.2
14:00	96	101	197		7.3
15:00	82	97	179		6.2
16:00	73	80	153		5.0
17:00	56	67	123		4.0
18:00	46	48	94		4.1
19:00	34	34	68		4.4
20:00	22	23	45		3.6
21:00	16	18	34		3.4
22:00	9	11	20		3.1
23:00	6	5	11		3.2
TOTAL	1308	1394	2702		6.7

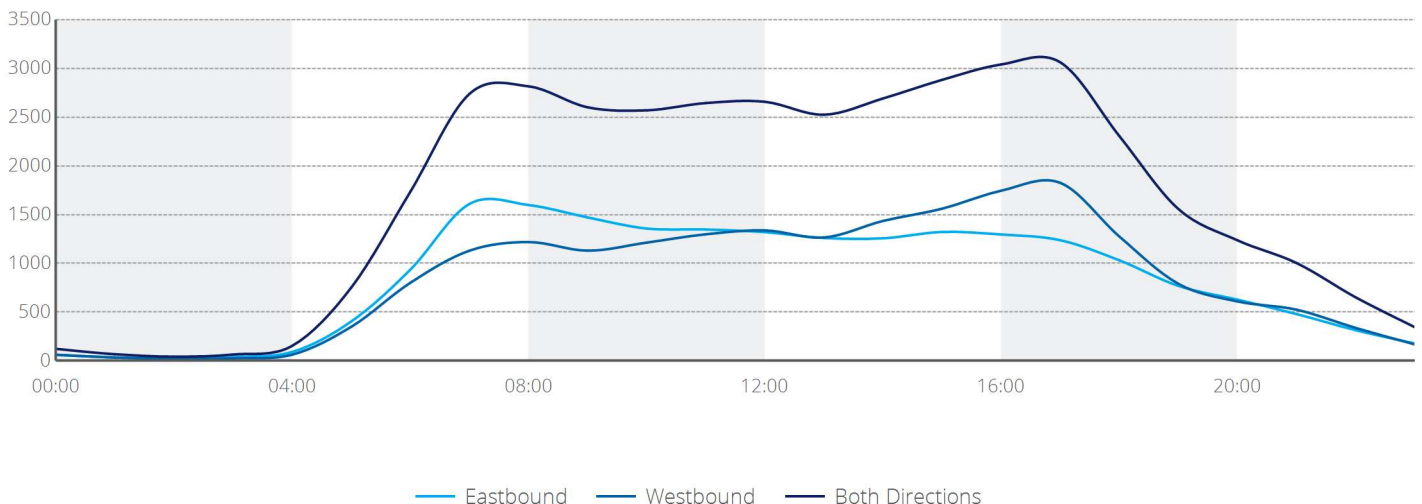


Peak Statistics

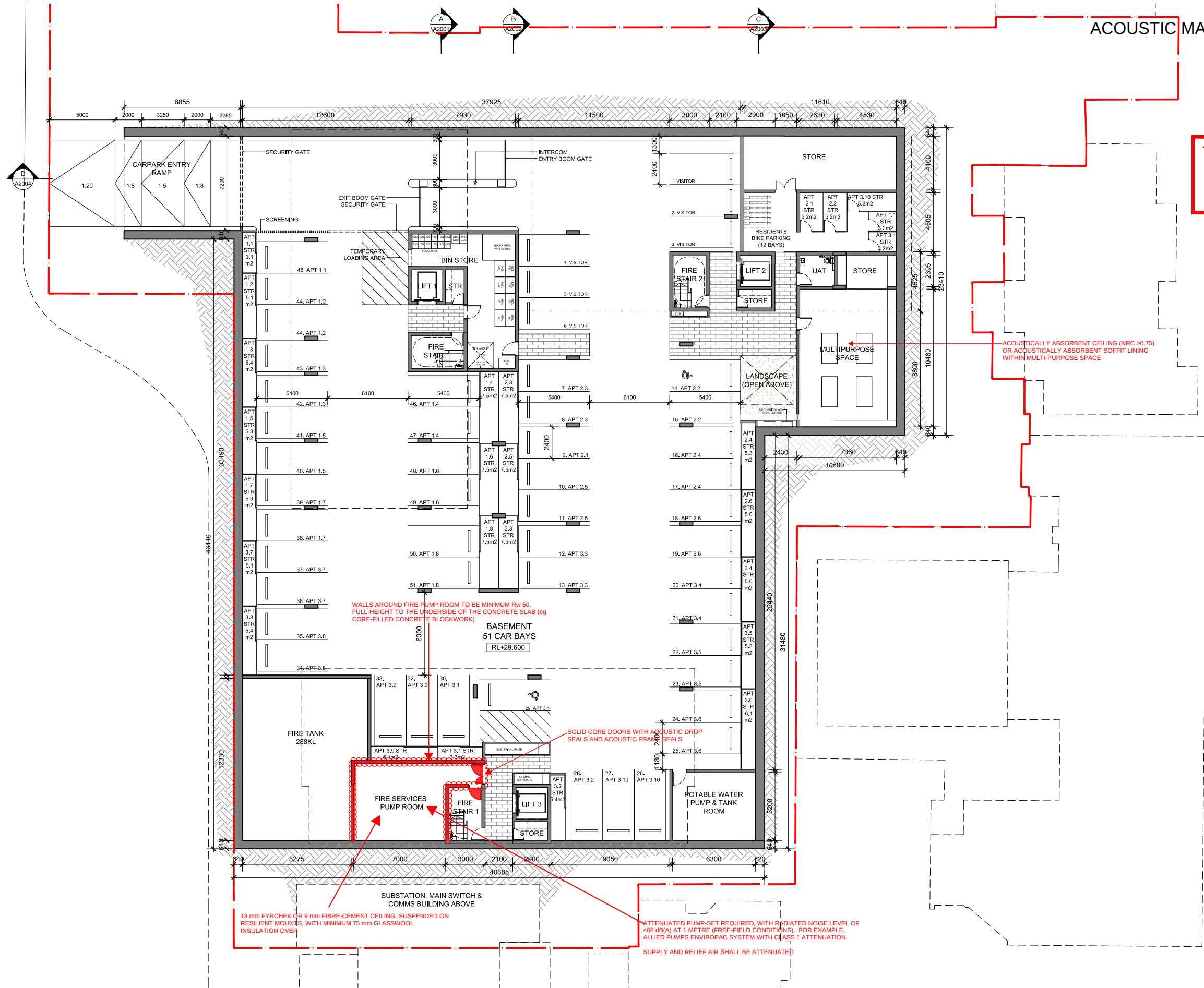
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	VOL	1653	1342	2904
PM	TIME	15:15	16:45	16:45
	VOL	1333	1838	3092

09:15	09:45	09:30
116	127	242
12:00	12:00	12:00
106	110	216

Volume



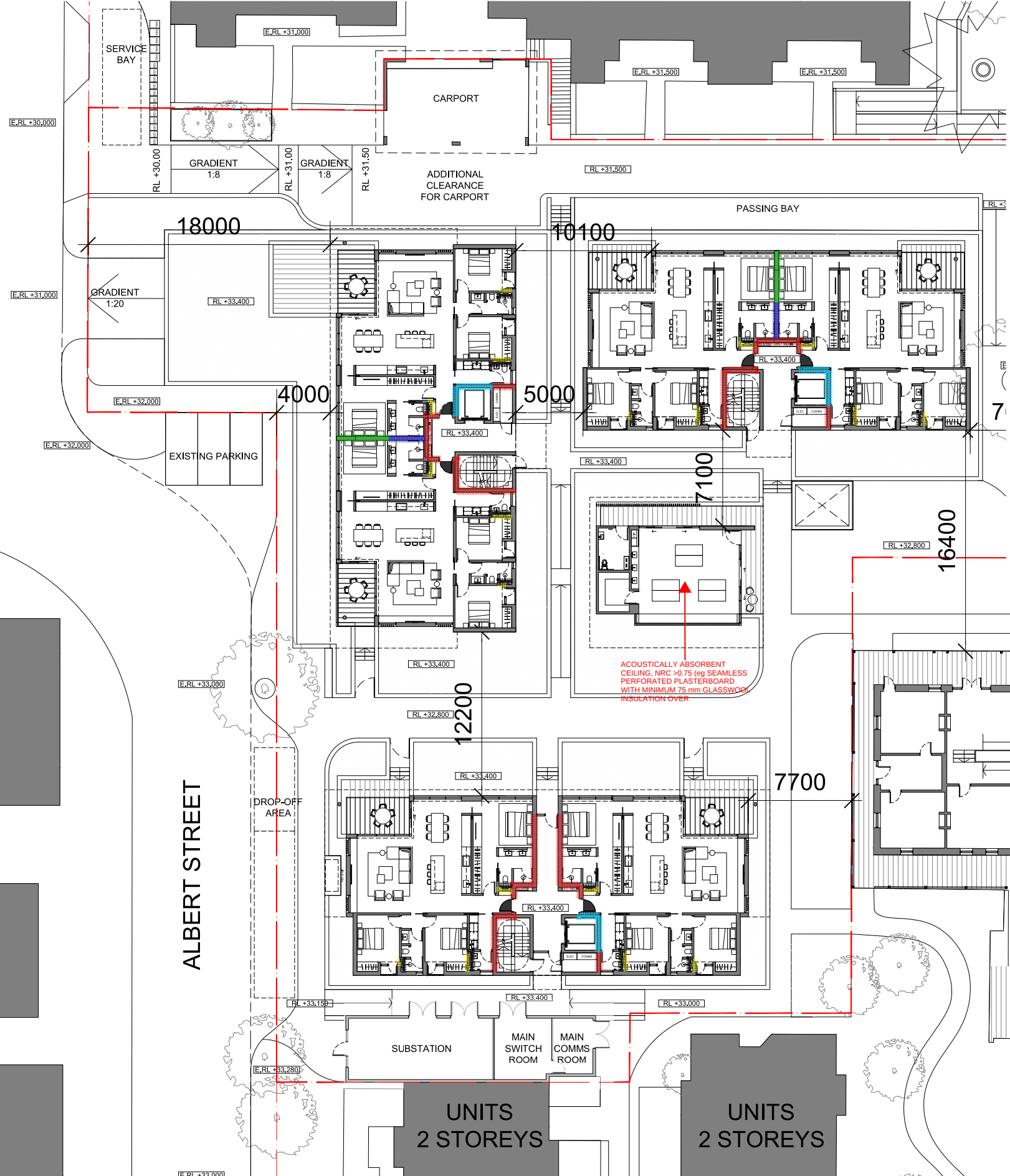
TOWN OF CLAREMONT
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TOWN OF CLAREMONT
RECEIVED
9/07/2026

KINGSMILL STREET

ALBERT STREET



Rw 50 WALL SEPARATING SOUs FROM PUBLIC CORRIDOR OR OTHER CLASSIFICATIONS. OPTIONS INCLUDE:

- 2 LAYERS OF 13 mm PLASTERBOARD + 76 mm STUDS WITH 75 mm GLASSWOOL + 2 LAYERS OF 13 mm PLASTERBOARD.
- 2 LAYERS OF 13 mm FYRCHEK + 92 mm STUDS WITH 75 mm 14 kg/m3 GLASSWOOL + 1 LAYER OF 13 mm FYRCHEK.
- CONCRETE PANEL WALL (>125 mm).

Rw + Ctr 50 DISCONTINUOUS WALL CONSTRUCTION. OPTIONS INCLUDE:

- 2 LAYERS OF 13 mm FYRCHEK + 64 mm STUDS WITH 75 mm GLASSWOOL + 20 mm GAP + 64 mm STUDS + 2 LAYERS OF 13 mm FYRCHEK.
- >150 mm CONCRETE PANEL WALL + 20 mm GAP + 64 mm STUDS WITH 75 mm GLASSWOOL + 13 mm PLASTERBOARD. NOTE - WATER SUPPLY MUST ONLY BE MOUNTED TO THE STUDS AND MUST NOT CROSS THE 20 mm GAP.

Rw + Ctr 50 WALL CONSTRUCTIONS. OPTIONS INCLUDE:

- THE DISCONTINUOUS CONSTRUCTIONS OUTLINED ABOVE.
- 2 LAYERS OF 13 mm EC08 COMPLETE + 92 mm RONDO QUIETSTUDS WITH 75 mm 14 kg/3 GLASSWOOL + 2 LAYERS OF 13 mm EC08 COMPLETE.
- 200 mm CONCRETE PANEL, DRY-LINED EACH SIDE WITH PLASTERBOARD.
- 13 mm PLASTERBOARD + 28 mm FURRING CHANNEL + 150 mm CONCRETE PANEL + 28 mm FURRING CHANNEL + 13 mm PLASTERBOARD.

Rw + Ctr 50 DISCONTINUOUS WALL BETWEEN LIFT AND SOU:

- CONCRETE PANEL WALL (OR CORE-FILLED CONCRETE BLOCK WALL) + 20 mm GAP + MINIMUM 64 mm STUDS + 2 LAYERS OF 13 mm PLASTERBOARD

Rw + Ctr 40 DUCT/RISER ONTO HABITABLE ROOM. OPTIONS INCLUDE:

- PVC PIPE LAGGED WITH PYROTEK SOUNDLAG 4525 + 64 mm STUDS WITH 75 mm GLASSWOOL + 13 mm PLASTERBOARD; OR,
- ACOUSTIC PIPE (RAHAU RAUPIANO) + 64 mm STUDS WITH 75 mm GLASSWOOL + 13 mm PLASTERBOARD.

Rw + Ctr 25 DUCT/RISER ONTO WET AREA. OPTIONS INCLUDE:

- PVC PIPE LAGGED WITH PYROTEK SOUNDLAG 4525 + 64 mm STUDS + 13 mm PLASTERBOARD; OR,
- ACOUSTIC PIPE (RAHAU RAUPIANO) + 64 mm STUDS + 13 mm PLASTERBOARD; OR,
- UNLAGGED PIPE + 64 mm STUDS WITH 75 mm GLASSWOOL + 13 mm PLASTERBOARD.

NOTE - ALL WALLS AROUND SOLE-OCCUPANCY UNITS TO EFFECTIVELY SEAL TO THE UNDERSIDE OF THE CONCRETE SLAB OR ROOF SHEETING ABOVE

Rw 30 DOOR SYSTEM - MINIMUM 40 mm SOLID CORE DOOR WITH ACOUSTIC DROP SEAL AND ACOUSTIC FRAME SEALS.

KHA

Rev. Date Amendment

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Western Australia
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Disclaimer

1. Do not scale drawings. Written dimensions govern.
2. All Dimensions are in millimeters unless otherwise noted.
3. All Dimensions are to be verified on site prior to proceeding with the work.
4. Kerry Hill Architects are to be notified in writing of any discrepancies.
5. This drawing must be read in conjunction with all relevant contracts, reports specification and drawings.
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Project
SLE - ALBERT STREET

Client
ST LOUIS ESTATE

Project No.
660

Drawing Status
SKETCH

Drawing
GROUND PLAN

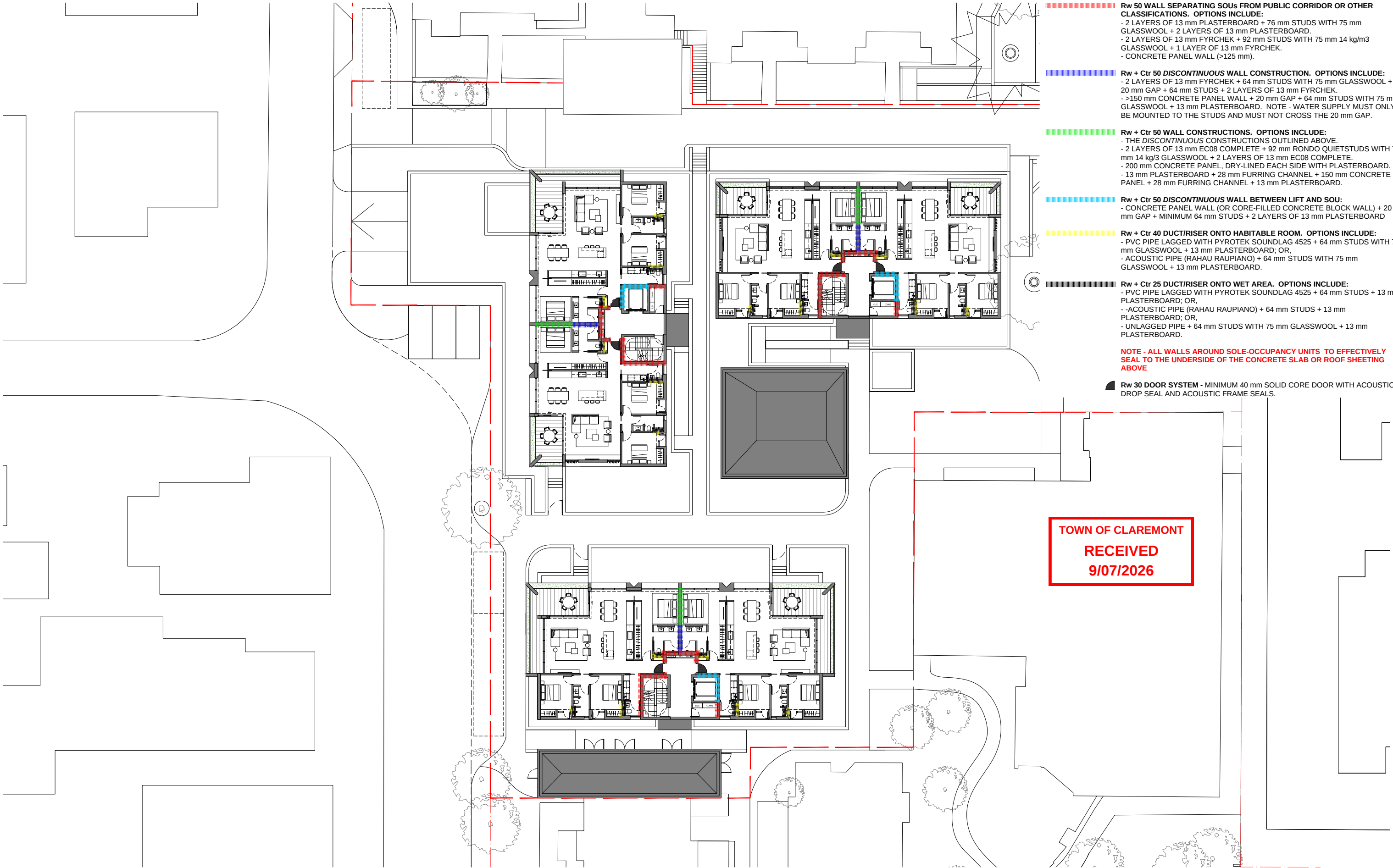


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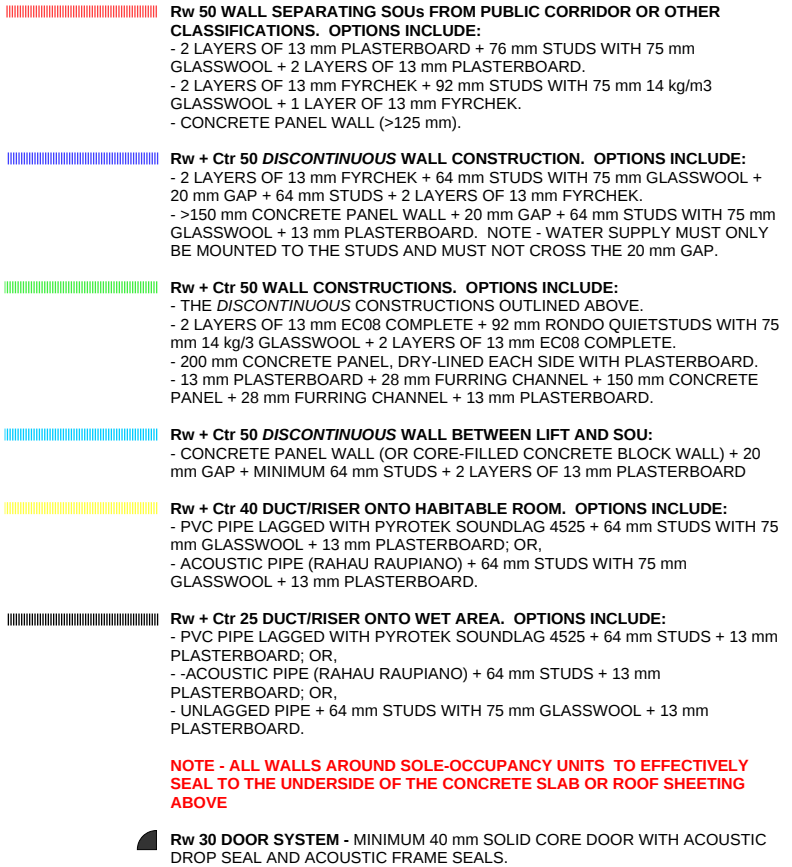
Drawing No.
SKSD_013

Date
16.06.26

Revision
5



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 - CONCRETE PANEL WALL (>125 mm).
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- Rw 30 DOOR SYSTEM - MINIMUM 40 mm SOLID CORE DOOR WITH ACOUSTIC DROP SEAL AND ACOUSTIC FRAME SEALS.**



ACOUSTICALLY ABSORBENT CEILINGS (NRC>0.75) RECOMMENDED WITHIN COMMON AREAS (eg SEAMLESS PERFORATED PLASTERBOARD WITH INSULATION OVER)