

18 July 2026

Townsville City Council
PO Box 1268
TOWNSVILLE QLD 4810

Via email: developmentassessment@townsville.qld.gov.au



USC Reference: USC119
Council Reference: MCU26/0031

Attention: Estelle Trueman

INFORMATION REQUEST RESPONSE 177-179 FRANCIS STREET WEST END

The following correspondence provides a response to the Townsville City Council's (Council) Information Request dated 15 May 2026. The correspondence has extracted each part of Council's request and provides a subsequent response below with attached correspondence.

The project team have undertaken a detailed review of the Information Request letter to deliver an amended development outcome, that is considered and seeks to address each item raised by Council.

Request Item 1 – Vehicle Parking Layout

The applicant is requested to provide a revised parking layout that relocates and/or alters proposed spaces 4, 5, 10 and 11 so that all parking spaces are situated in accordance with the relevant standards.

Reason

To demonstrate compliance with the Transport impact, access, and parking code of the Townsville City Plan and AS2890.01 - Off street parking.

Advice

The applicant is advised that the four spaces mentioned above are currently located at the end of blind aisles, requiring an unsafe and inconvenient lengthy reversing manoeuvre to enter and/or exit the spaces.

Response

The amended suite of plans have redesigned the development, and resulted in a net loss of two carparking spaces, refer **Attachment 1**. A swept path analysis has been provided for carparking spaces 4 and 5, refer **Attachment 2**.



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The proposed development should be supported despite being two carparking spaces below the Townsville City Plan requirement because it has been deliberately designed to meet residents' needs. Each unit includes a garage configured to accommodate either one or two on-site parking spaces, and the landscaped outdoor areas have been planned to provide visitor bays and additional resident parking. This flexible arrangement ensures that peak demand can be absorbed on-site without relying on kerbside parking, while the mix of single- and double-garage options responds to different household needs and vehicle ownership patterns. By providing a clear, practical parking layout integrated with the building design, the development will be adequately serviced and will minimise spillover impacts on the surrounding streets, support efficient land use, and contribute to a well-managed, liveable residential outcome.

Request Item 2 – Proximity to Trunk Sewer

The applicant is requested to provide an amended layout such that all new buildings and/or structures (including roof overhangs) will be located with a minimum 2m horizontal separation to the outer edge of the trunk sewer pipe that runs diagonally through the site.

Reason

To demonstrate compliance with the clearance requirement from trunk sewer main listed in SC6.4.14.4(5)(f) of the Development Manual Planning Scheme Policy from the Townsville City Plan.

Response

The amended suite of plans have been prepared and are provided in **Attachment 1**, addressing all matters raised and to meet compliance with Item 2.

Request Item 3 – Stormwater Quantity Management

The applicant is requested to provide an updated Engineering Services Report addressing the following stormwater matters:

- a) Provide updated analyses assuming the pre-development situation as the actual predevelopment condition (fully pervious), rather than using an assumed pervious percentage applicable to a fully developed low density residential site; or*
- b) Provide an analysis demonstrating the downstream receiving stormwater system has sufficient spare capacity for minor and major events to receive the increase in runoff due to the development whilst achieving QUDM requirements.*
- c) If necessary based on results from a) or b) above, update the analyses, conclusions and recommendations. If detention is required to mitigate runoff to pre-development*

rates, conceptual design/layout of the proposed detention storage and discharge control(s) must also be supplied. Similarly, if any external stormwater conveyance upgrades are required, conceptual design/layout of the improvements must be supplied.

Reason

To demonstrate compliance with the Healthy waters code of the Townsville City Plan, associated Policy guidelines, and the relevant benchmarks of the State Planning Policy.

Advice

This site has historically been vacant (no previous impervious coverage), and it is unclear if the downstream stormwater and road networks were constructed to cater for minor and major flows up to the 1% AEP event. Policy guidelines referenced in Section 5.3 of the supplied Engineering Services Report indicate that developments should mitigate stormwater flow increases to pre-development rates, unless discharging to a constructed stormwater system with suitable capacity. It is noted that this matter is likely to also be a concern of DTMR as the stormwater discharged from this site must immediately cross Percy Street (a State roadway).

Response

A Response to TCC Information Request letter, prepared by an RPEQ is provided to provide a full and final response to the stormwater quantity management, refer **Attachment 3**. Furthermore, this was further discussed with Council 4 June 2026, where this response was talked through and agreed upon, in principle.

Request Item 4 – Franci Street Upgrades

The applicant is requested to provide an updated layout indicating the proposed improvements to Francis Street along the frontage of the property. At a minimum this must include provision of a public turnaround suitable for a waste collection vehicle that does not rely upon use of a driveway crossover.

Reason

To demonstrate compliance with the Transport impact, access and parking code and the Works code of the Townsville City Plan, and their associated Policy guidelines.

Advice

Provision must be made for cars and trucks on the public street to turn around with no more than a 3-point turn and without having to utilise the development's crossover or

entering the development site. This would preferably be a standard cul-de-sac with a 9m radius, though other turn-around options may be considered.

Road upgrades including provision of kerb, channel and underground drainage on the development side of the roadway must be supplied between the existing end of Francis Street and the development's driveway access point. As there are no other properties being serviced, consideration may be given to providing the required turn-around near the existing end of formed Francis Street, and extending a longer private driveway within the road reserve to the development.

Consideration should also be given to supplying a reasonable quantity of on-street car parking, as availability would be anticipated with a typical Access Place along the frontage of the site.

Response

A Recommended Cul-de-sac Design plan, prepared by Modus Transport and Traffic Engineering has been designed to meet Council's requirements and to appropriately service the development, refer Attachment 4.

Request Item 5 – Active Transport Provisions

The applicant is requested to provide an updated layout and supporting information indicating proposed improvements within the Francis Street and Percy Street reserves to provide a shared pathway footpath connection along the site frontage, between the terminating point of Francis Street and the existing footpath along Percy Street.

Reason

To demonstrate compliance with the Transport impact, access and parking code and the Works code of the Townsville City Plan, and their associated Policy guidelines.

Advice

Due to the level changes and/or the necessary crossing of an existing open drain, supporting concept details of the footpath alignment/design should be supplied by a qualified RPEQ.

Response

The amended suite of plans have been prepared and are provided in **Attachment 1**, providing a pathway along the entire Francis Street frontage and a connection to Percy Street. At this stage, RPEQ certified drawings and detailed engineering design have not been completed; these documents can be required as a condition of approval, with certification by a Registered Professional Engineer of Queensland can meet relevant standards prior to construction.

Response to SARA Information Request and Advice Notice

A full and final response to the SARA Information Request has been submitted to SARA on 18 July 2026. All matters raised have been addressed comprehensively through the amended plans and supporting documentation. A copy of this response is provided in **Attachment 5**, for completeness.

Conclusion

We trust that the information provided above, along with the attached supporting documentation, sufficiently addresses the items raised in the Council Information Request, to enable Council to make a decision on the development. Public Notification will commence shortly, and further details of this will be provided under separate cover.

Yours sincerely,

URBAN SPACE CONSULTING

Attachments:

1. Amended Architectural Plans
2. Swept Path analysis
3. Stormwater Response
4. Francis Street Design
5. SARA Information Request Response

ATTACHMENT 1

NOTES: * THIS DRAWING IS ONLY INTENDED TO OBTAIN A LOCAL AUTHORITY BUILDING PERMIT. * COMPLY WITH ALL RELEVANT AUTHORITY REG. & BSA. * USE FIGURED DIMENSIONS ONLY. DO NOT USE SCALED MEASUREMENTS. * VERIFY ALL ON SITE DIMENSIONS & LEVELS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.		
Revision Schedule		
No	Description	Date
1	revised site layout r1f1	26.05.20



1 francis street - view 1



3 francis street - view 3



5 francis street - view aerial



4 percy street - view -1

Sheet List		
Count	Sheet Number	Sheet Name
1	sk_01	title page
1	sk_02	site plan
1	sk_03	site area breakdown
1	sk_04	services & detail survey plan
1	sk_05	Building - A
1	sk_06	Building - B
1	sk_07	Gazebo

Grand total: 7



Preliminary
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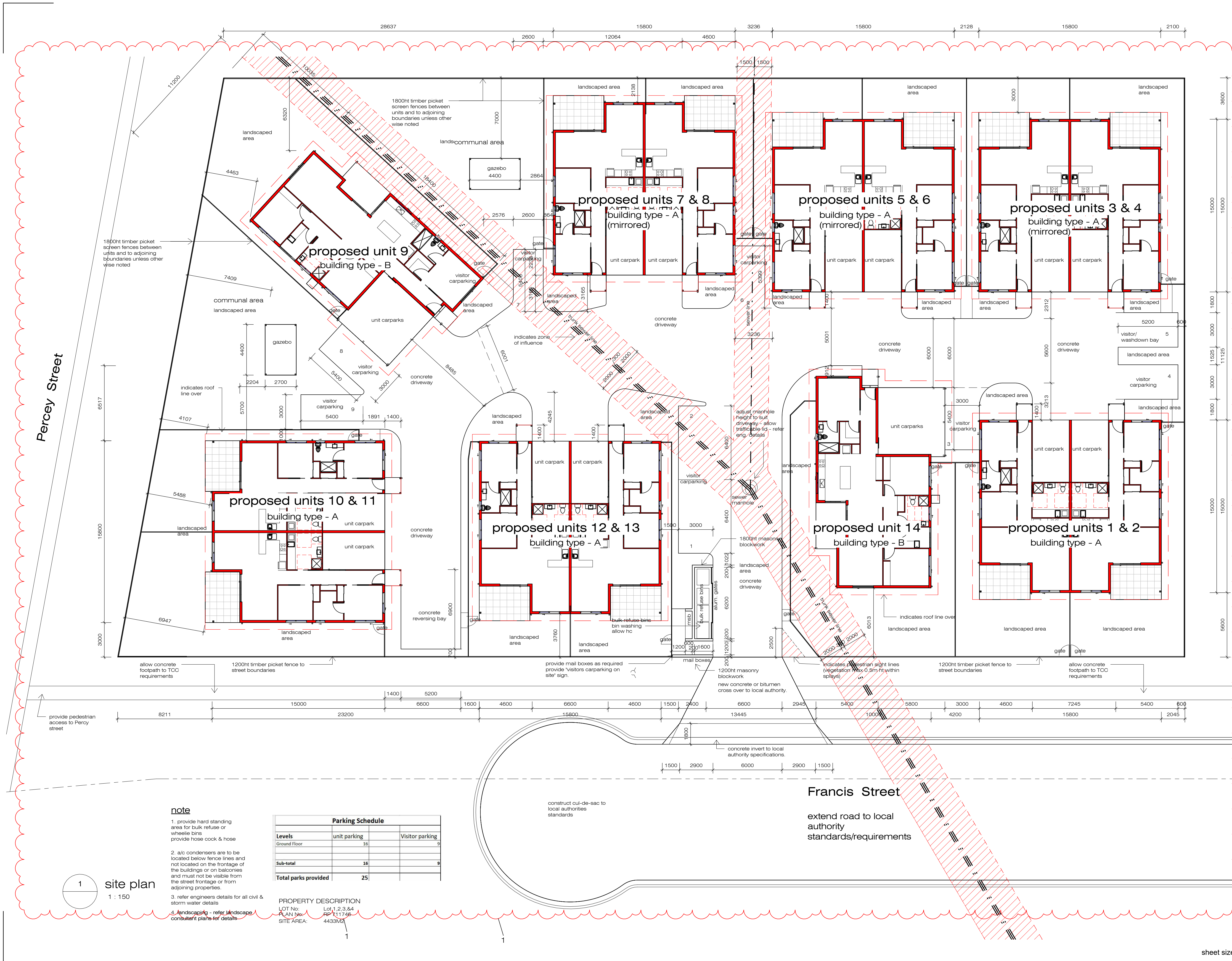
project:
Proposed Multiple Dwellings

for:
Kaenetto Investments P/L

at:
177-179 Francis Street
Westend

Issue Date	dec 2026	25-051
Drawn	Author	
scale		
sheet	sk_01	printed 20/05/2026 8:34:48 AM

sheet size = A1



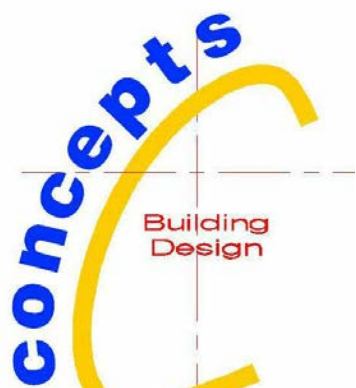
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Revision Schedule		
No	Description	Date
1	revised site layout rfi	26.05.20



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project:
Proposed Multiple Dwellings

for:
Kaenetto Investments P/L

at:
177-179 Francis Street
Westend

Issue Date	dec 2025	25-051
Drawn	Author	
scale	As indicated	
sheet	sk 02	printed 20/05/2026 8:34:49 AM

sheet size = A1

note

1. provide hard standing area for bulk refuse or wheelie bins provide hose cock & hose
2. a/c condensers are to be located below fence lines and not located on the frontage of the buildings or on balconies and must not be visible from the street frontage or from adjoining properties.
3. refer engineers details for all civil & storm water details
4. landscaping - refer landscape consultant plans for details

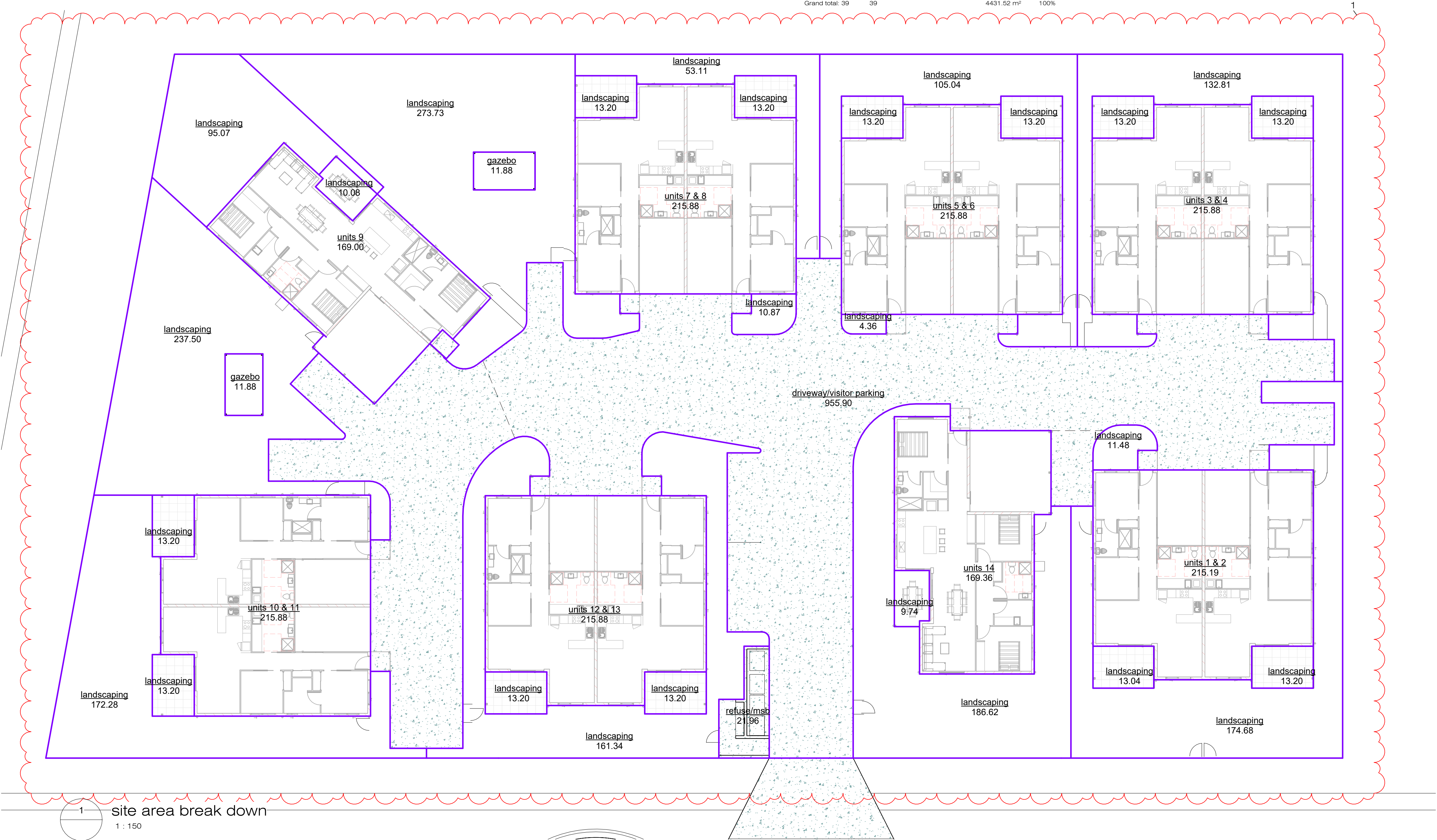
Parking Schedule		
Levels	unit parking	Visitor parking
Ground Floor	16	9
Sub-total	16	9
Total parks provided	25	

PROPERTY DESCRIPTION
LOT No: Lot 1, 2, 3, & 4
PLAN No: RP 11746
SITE AREA: 4433M²

1 site plan
1 : 150

Gross Area Schedule				
number	Count	Name	Area	percentage
building				
1	1	units 1 & 2	215.19 m²	5%
2	1	units 3 & 4	215.88 m²	5%
3	1	units 5 & 6	215.88 m²	5%
4	1	units 7 & 8	215.88 m²	5%
5	1	units 9	169.00 m²	4%
6	1	units 10 & 11	215.88 m²	5%
46	1	units 12 & 13	215.88 m²	5%
47	1	units 14	169.00 m²	4%
building: 8	8		1632.59 m²	37%
driveway/parking				
7	1	driveway/visitor parking	957.27 m²	22%
51	1	refuse/msb	21.96 m²	0%
driveway/parking: 2	2		979.23 m²	22%
landscape				
48	1	gazebo	11.88 m²	0%
49	1	gazebo	11.88 m²	0%
13	1	landscaping	13.20 m²	0%
16	1	landscaping	11.99 m²	0%
17	1	landscaping	179.83 m²	4%
24	1	landscaping	174.03 m²	4%

Gross Area Schedule				
number	Count	Name	Area	percentage
25	1	landscaping	134.45 m²	3%
26	1	landscaping	106.58 m²	2%
27	1	landscaping	53.11 m²	1%
28	1	landscaping	273.73 m²	6%
29	1	landscaping	161.34 m²	4%
30	1	landscaping	172.28 m²	4%
31	1	landscaping	10.87 m²	0%
32	1	landscaping	4.36 m²	0%
33	1	landscaping	13.04 m²	0%
34	1	landscaping	12.48 m²	0%
35	1	landscaping	13.20 m²	0%
36	1	landscaping	13.20 m²	0%
37	1	landscaping	13.20 m²	0%
38	1	landscaping	13.20 m²	0%
39	1	landscaping	10.08 m²	0%
40	1	landscaping	13.20 m²	0%
41	1	landscaping	13.20 m²	0%
42	1	landscaping	13.20 m²	0%
43	1	landscaping	13.20 m²	0%
44	1	landscaping	13.20 m²	0%
45	1	landscaping	13.20 m²	0%
50	1	landscaping	237.50 m²	5%
52	1	landscaping	95.07 m²	2%
landscape: 29	29		1819.70 m²	41%
Grand total: 39	39		4431.52 m²	100%



NOTES:		
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Revision Schedule		
No	Description	Date
1	revised site layout rfi	26.05.20



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tel: 07 4728 3228

project:
Proposed Multiple Dwellings

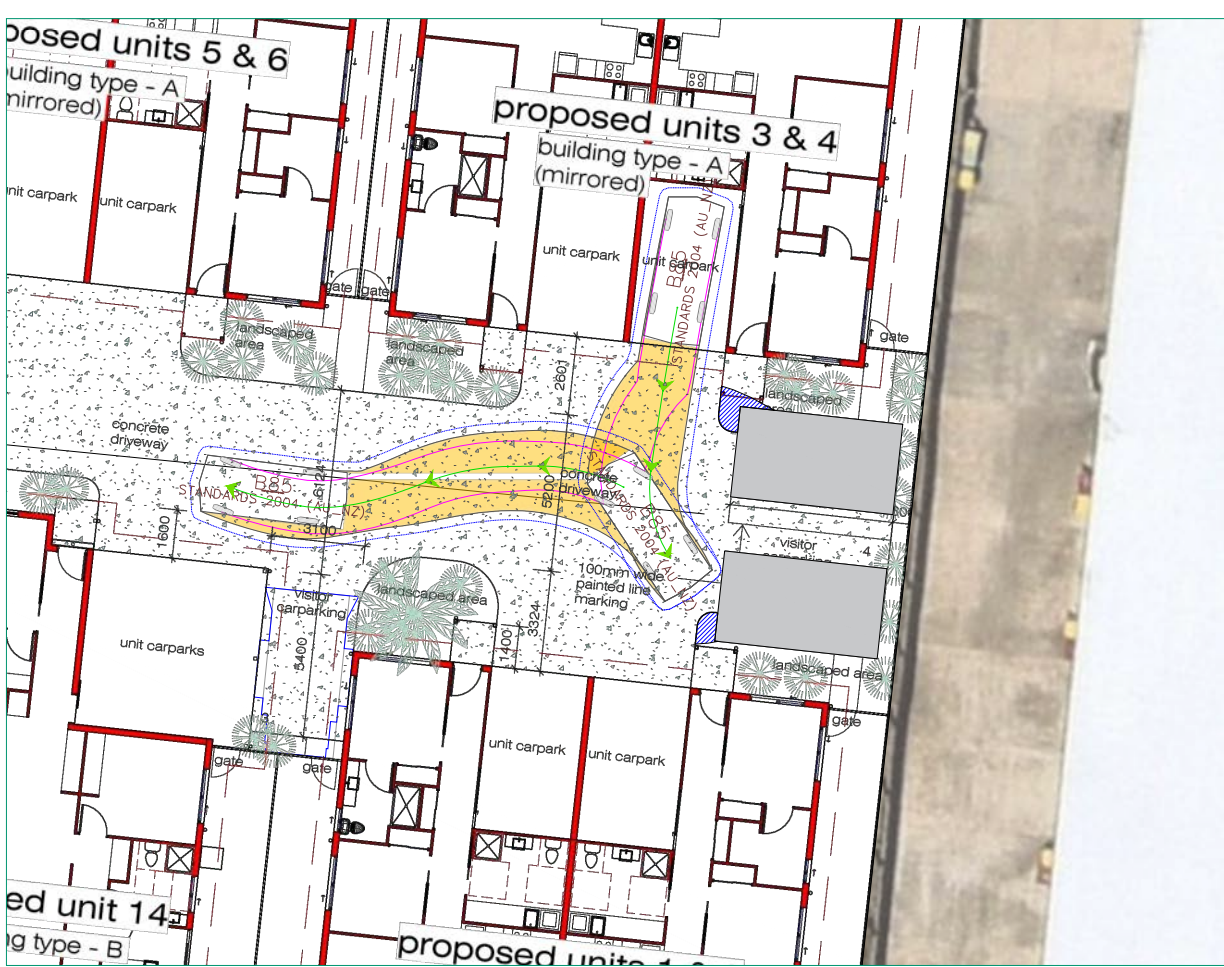
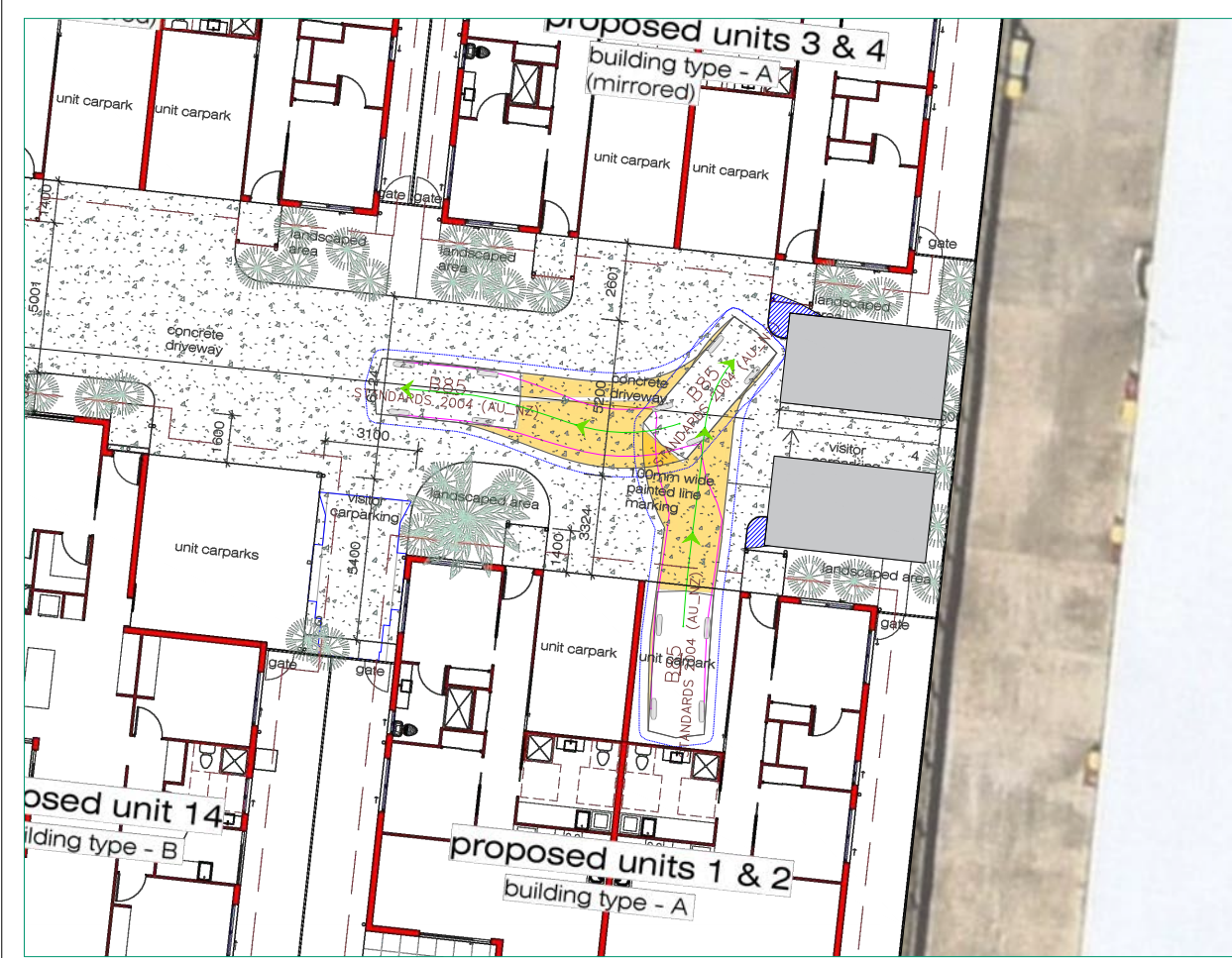
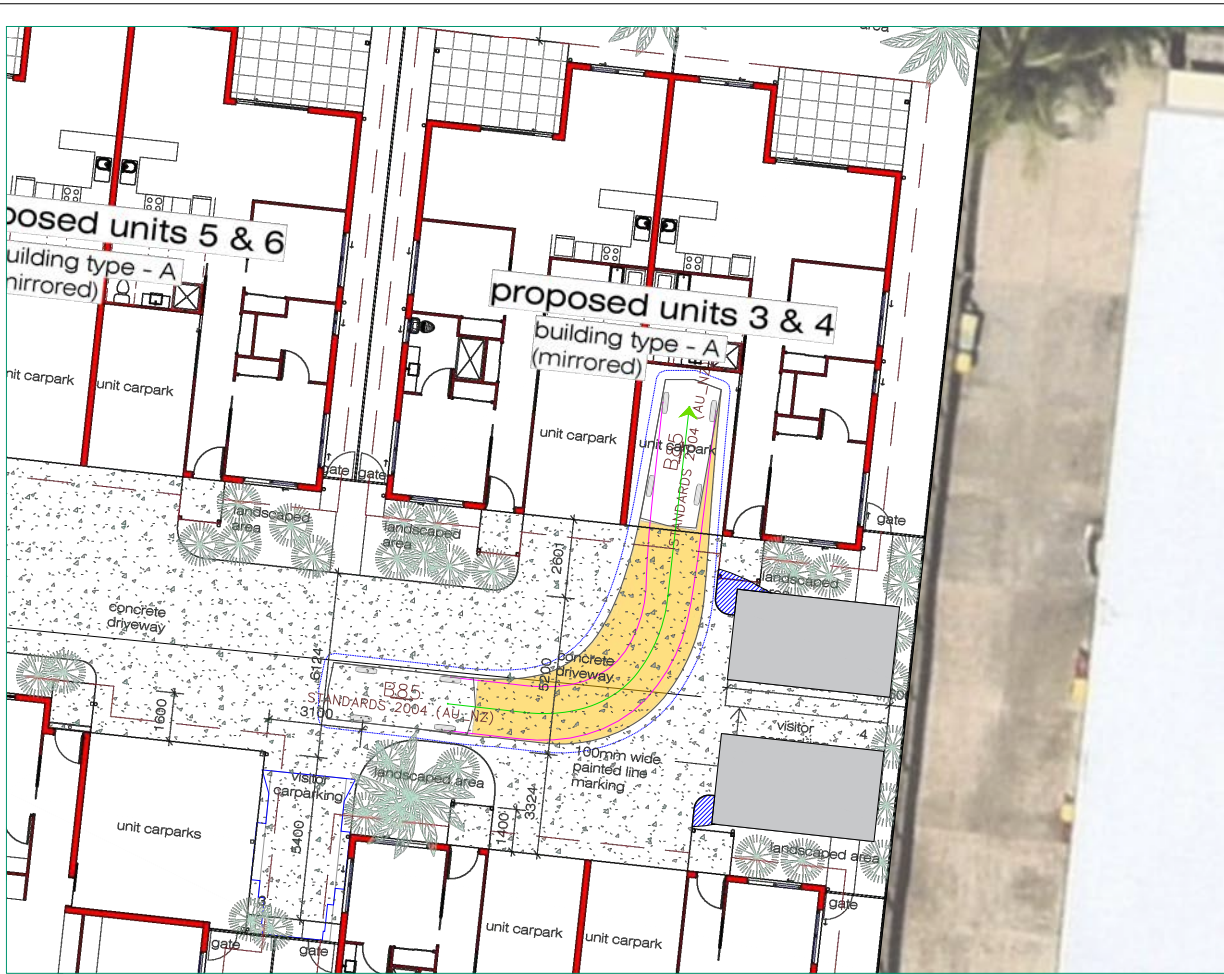
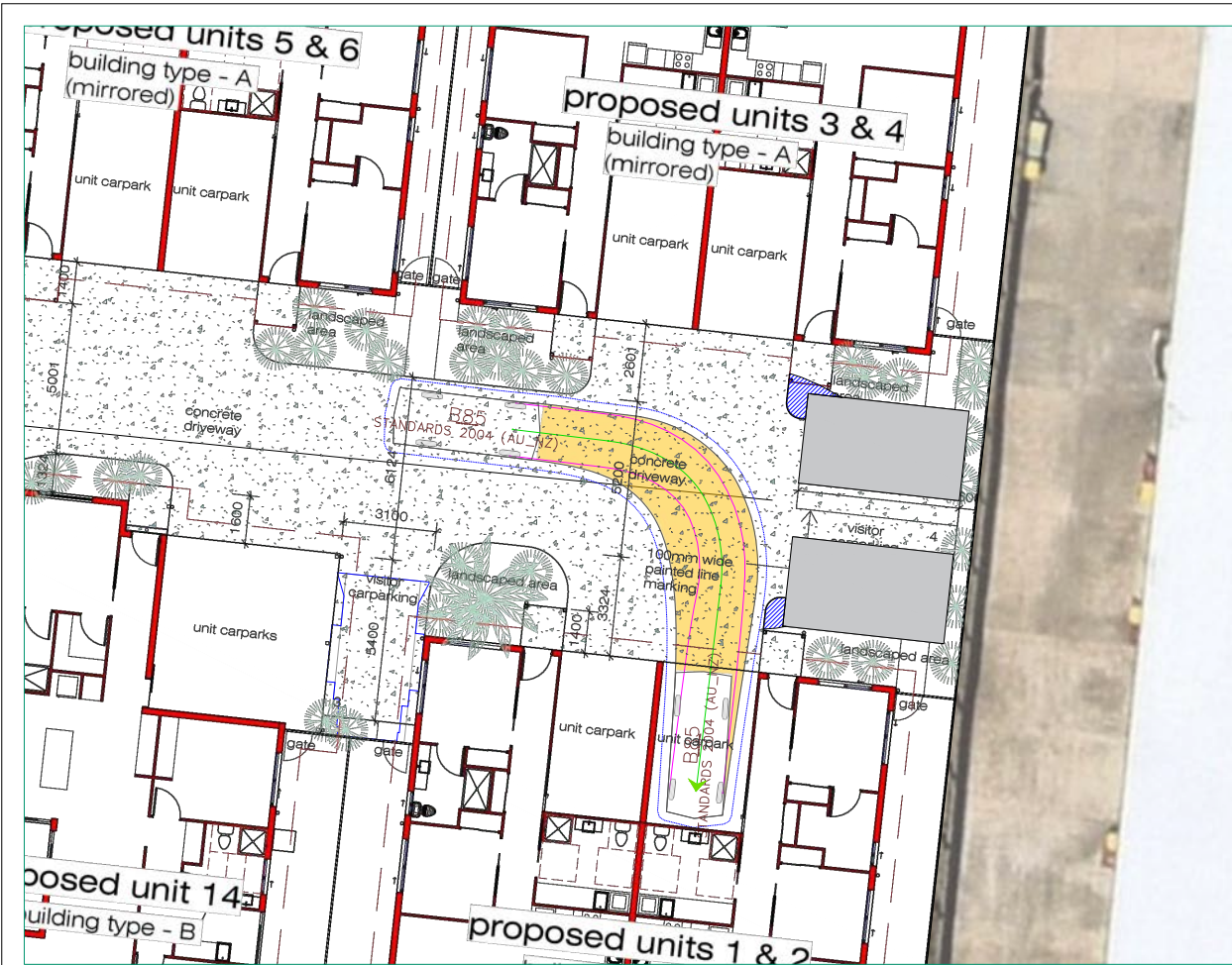
for:
Kaenetto Investments P/L

at:
177-179 Francis Street
Westend

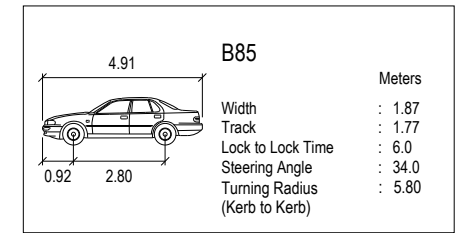
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Drawn	Author	
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ATTACHMENT 2

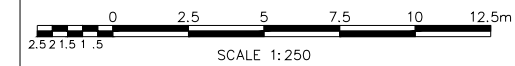


DESIGN VEHICLE ADOPTED



SWEPT PATH LEGEND

- VEHICLE BODY
- FRONT TIRES
- VEHICLE PATH
- VEHICLE CLEARANCE (300mm)
- VEHICLE CLEARANCE (600mm)
- VEHICLE
- 5KM/H DESIGN SPEED



PROJECT

177 FRANCIS STREET, WEST END

CLIENT

QCWS

DRAWING TITLE

B85 SWEPT PATH ASSESSMENT

DRAWING NUMBER

MOD25529QLD - SK05

DATE

17 FEB 2026

REVISION

B

REV	DATE	DESIGNER	APPROVED BY
A	19 JAN 2026	LH	BF
B	17 FEB 2026	LH	BF
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

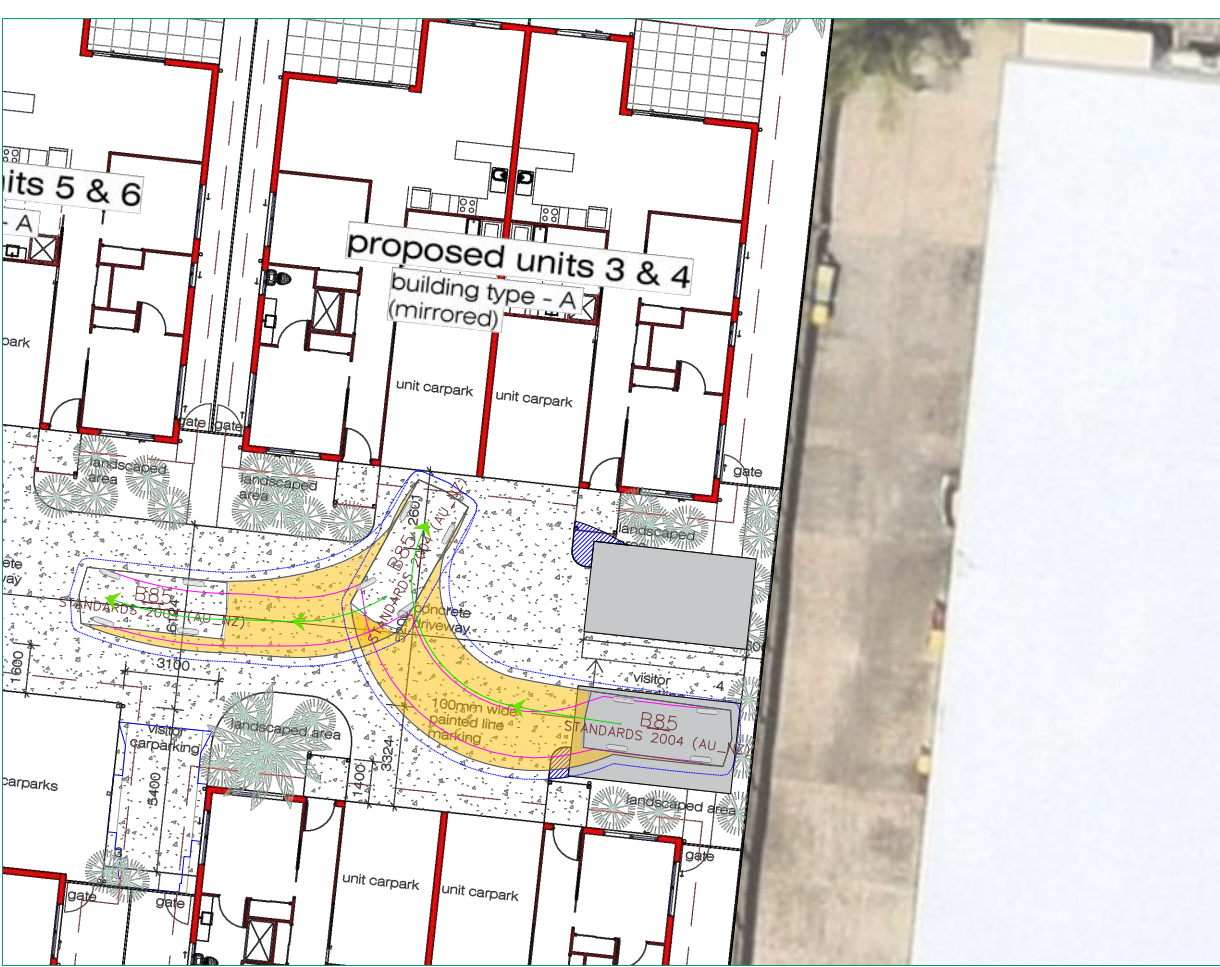
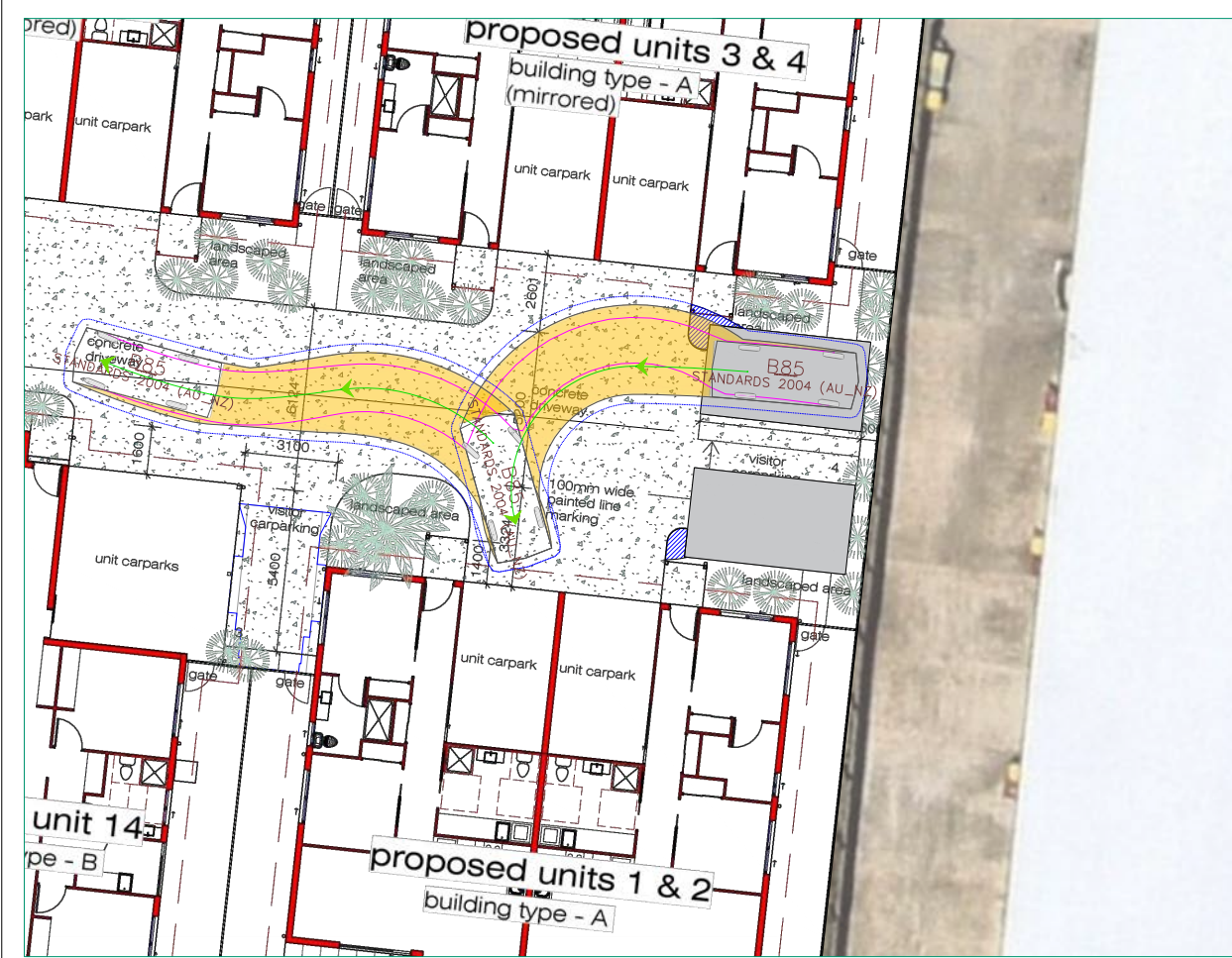
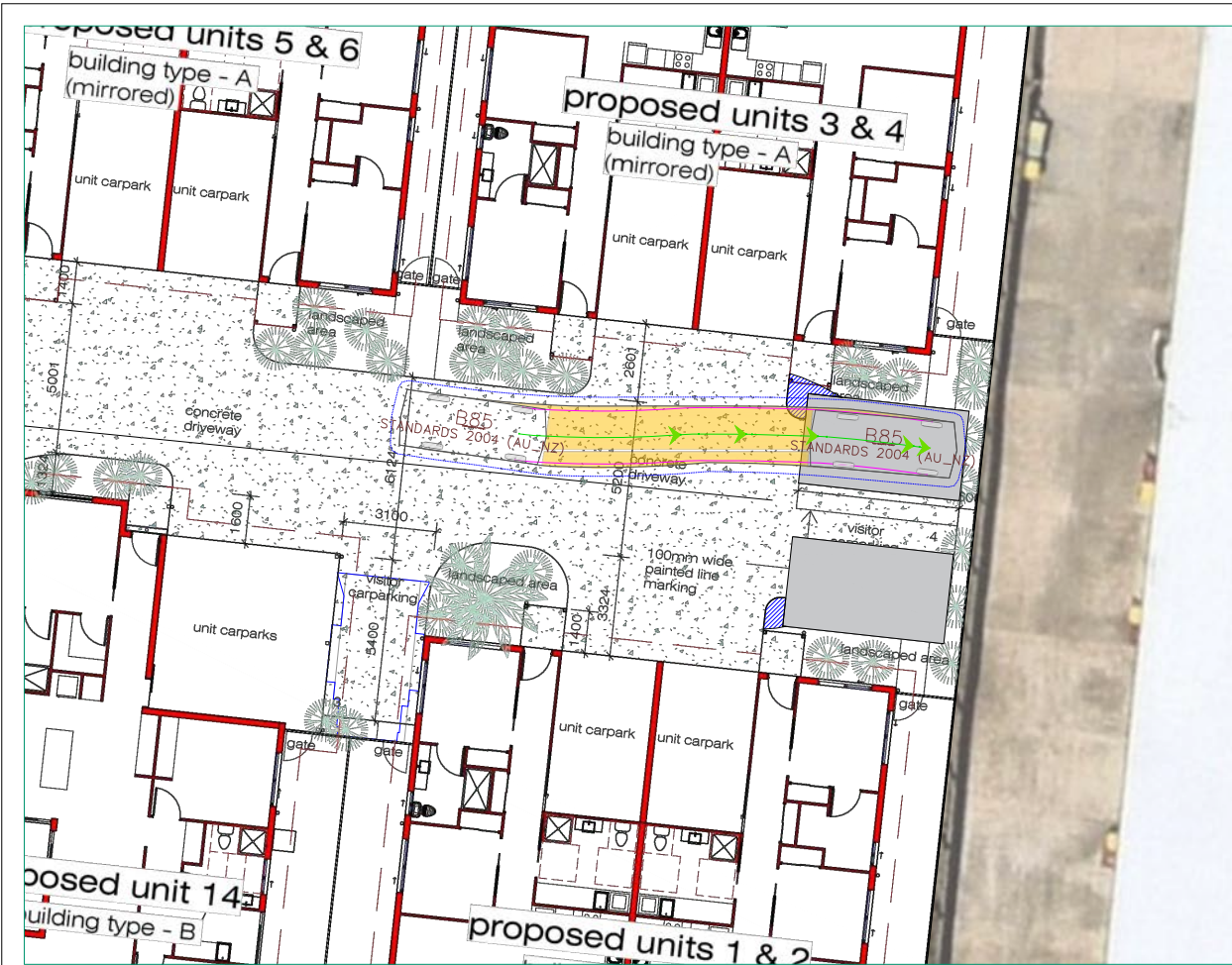
MODUS
Transport and Traffic Engineering

ABN 49 668 863 269
310 Edward Street, BRISBANE CITY QLD 4000

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RPEQ CERTIFICATION

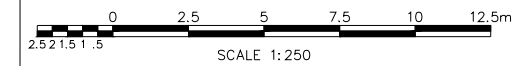


DESIGN VEHICLE ADOPTED

	B85	Meters
	Width	: 1.87
	Track	: 1.77
	Lock to Lock Time	: 6.0
	Steering Angle	: 34.0
	Turning Radius (Kerb to Kerb)	: 5.80

SWEPT PATH LEGEND

	VEHICLE BODY
	FRONT TIRES
	VEHICLE PATH
	VEHICLE CLEARANCE (300mm)
	VEHICLE CLEARANCE (600mm)
	VEHICLE
	5KM/H DESIGN SPEED



PROJECT

177 FRANCIS STREET, WEST END

CLIENT

QCWS

DRAWING TITLE

B85 SWEPT PATH ASSESSMENT

DRAWING NUMBER

MOD25529QLD - SK06

DATE

17 FEB 2026

REVISION

B

REV	DATE	DESIGNER	APPROVED BY
A	19 JAN 2026	LH	BF
B	17 FEB 2026	LH	BF
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-	-	-	-
-	-	-	-
-	-	-	-

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RPEQ CERTIFICATION

ATTACHMENT 3

PARTNERS

TREVOR SLOGROVE
MATT WHITTERING
ANTHONY FLORENCE
BRIAN MAYER
JEREMY LINDSAY
CRAIG TURNER
LEIGH STEGEMAN
TRENT GRAHAM
BEN MADSEN
GIL GRIFFITHS

STRUCTURAL
CIVIL
MECHANICAL
ELECTRICAL
HYDRAULIC
FIRE
SEISMIC
SECTION J
ENGINEERS



10 June 2026
Ref: STP25-1272-L02

Townsville City Council – Planning and Development
PO Box 1268
Townsville, QLD 4810

Attention: Estelle Trueman

Dear Madam,

RESPONSE TO TCC INFORMATION REQUEST 177 FRANCIS STREET, WEST END TCC APPLICATION NO: MCU26/0031

We acknowledge receipt of the Sara Advice Notice, dated 15 May 2026 and provide the following additional information to clarify the matters raised: -

Request Item 3 – Stormwater Quantity Management

a) Provide updated analyses assuming the pre-development situation as the actual predevelopment condition (fully pervious), rather than using an assumed pervious percentage applicable to a fully developed low density residential site; or

The four subject allotments are zoned 'low density residential' in accordance with the Townsville City Council Planning Scheme.

Acceptable development for these allotments under the Townsville City Council Planning Scheme is 50% building coverage with a 65% fraction impervious for each allotment.

The above parameters are the pre-development conditions for calculating the stormwater runoff for the subject allotments prior to the current proposed works.

To direct that the predevelopment condition of the subject allotments is 'fully pervious' rather than in accordance with the Planning Scheme is incorrect.

These allotments were fully pervious before the subject allotments were created and registered. The design and creation of these allotments required the fraction impervious for all designs to be in accordance with the Planning Scheme, for both Council and DTMR designs.

b) Provide an analysis demonstrating the downstream receiving stormwater system has sufficient spare capacity for minor and major events to receive the increase in runoff due to the development whilst achieving QUDM requirements.

The DTMR Road Planning and Design Manual references QUDM (Queensland Urban Drainage Manual) for the stormwater design in urban catchments. The SBSMP has extensively referenced QUDM and the Townsville City Council for all the drainage design parameters adopted in the report including the extent of development which is considered acceptable development under the Townsville Planning Scheme.

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STP CONSULTANTS ACN 668 668 086 ABN 55 668 668 086 www.stpconsultants.com.au

The Department of Transport and Main Roads upgraded Percy Street to dual lanes approximately 16 years ago. The subject allotments already existed and were zoned 'neighbourhood residential' allotments at that time (and well before) of the upgrade roadworks. Therefore, the DTMR stormwater design for Percy Street would have adopted the low density urban residential coefficient of runoff for the subject allotments in accordance with QUDM's requirements and the DTMR design guideline.

The SBSMP demonstrates that there cannot be a worsening on the state-controlled road as the coefficient of runoff for the proposed development is less than that attributed to the subject allotments for the DTMR design of Percy Street based on the Townsville City Council zoning and the fraction impervious allocated.

Figure 2.1 below is the TCC historical aerial image (2005) when Percy Street was in use as a two lane, two-way road with 3/1050mm culvert pipes under the road. Please note the subject allotments existed, were zoned neighbourhood residential and therefore the coefficient of runoff for these allotments in the DTMR design would have been allocated in accordance with the Townsville City Council Planning Scheme.



Figure 2.1 - Historical Aerial Image 2005 (TCC Mapping)

Further, it is noted during the upgrade of Percy Street to a 4-lane dual carriageway, DTMR increased the number of 1050mm culverts under the road from 3 to 4 cells.



Figure 2.2 – Existing culvert under Percy Street (Site Photo)

The Townsville Flood Mapping confirms that the 1% AEP rain event is contained in the Percy and Francis Street road reserves, confirming the DTMR designed culverts have sufficient capacity to convey flows up to the 1% AEP event.

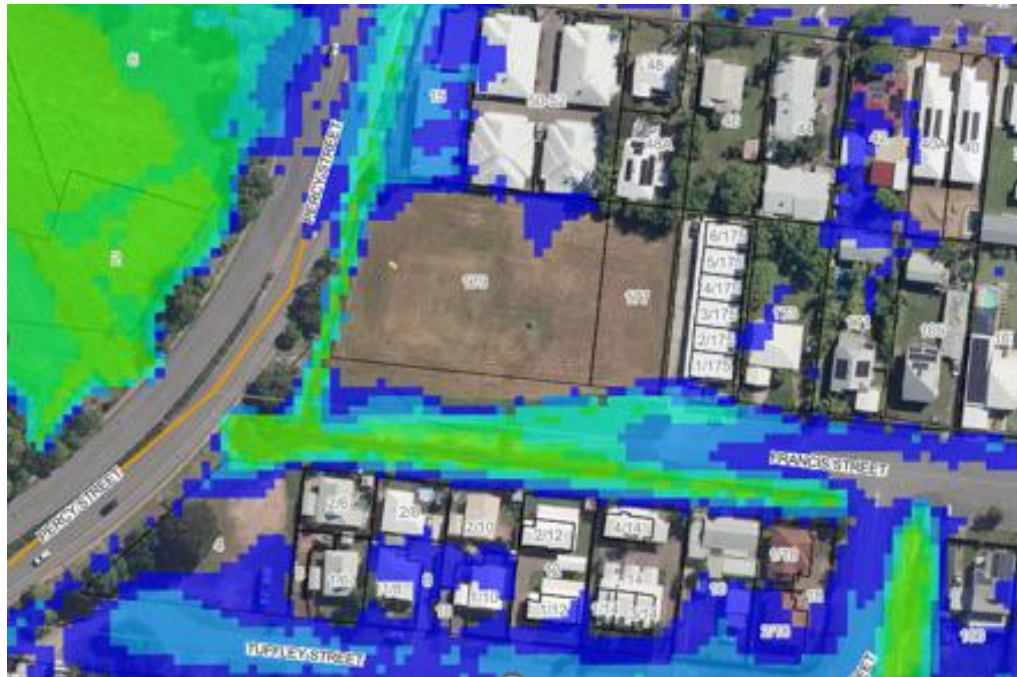


Figure 2.4 – TCC Flood Modelling 1% AEP

The culverts under Percy Street discharge stormwater runoff from a catchment that contributes to Munday Creek. To further demonstrate that the proposed development will not have an impact on the Percy Street culverts, we have provided (Attachment A) the catchment plan, time of concentration and hydraulic inputs for the culvert to demonstrate the culvert has sufficient capacity to cater for all rainfall events up to and including the 1% AEP.

The calculations conservatively adopted a time of concentration of 20 minutes for the catchment and applied the urban residential runoff coefficient to the entire catchment including Cutheringa Park.

The Legal Points of Discharge for the subject site remain the Francis Street and Percy Street road reserves as indicated in the SBSMP.

c) If necessary based on results from a) or b) above, update the analyses, conclusions and recommendations. If detention is required to mitigate runoff to pre-development rates, conceptual design/layout of the proposed detention storage and discharge control(s) must also be supplied. Similarly, if any external stormwater conveyance upgrades are required, conceptual design/layout of the improvements must be supplied.

The response from a) and b) above provides sufficient information and evidence that the existing drainage system has capacity to accept the runoff from the proposed development and on-site detention is not required.

Should you require any further information in respect to this matter please do not hesitate to contact Manuel Flores by email manuel@stpconsultants.com.au or phone 0423 586 052.

Yours faithfully,
STP Consultants



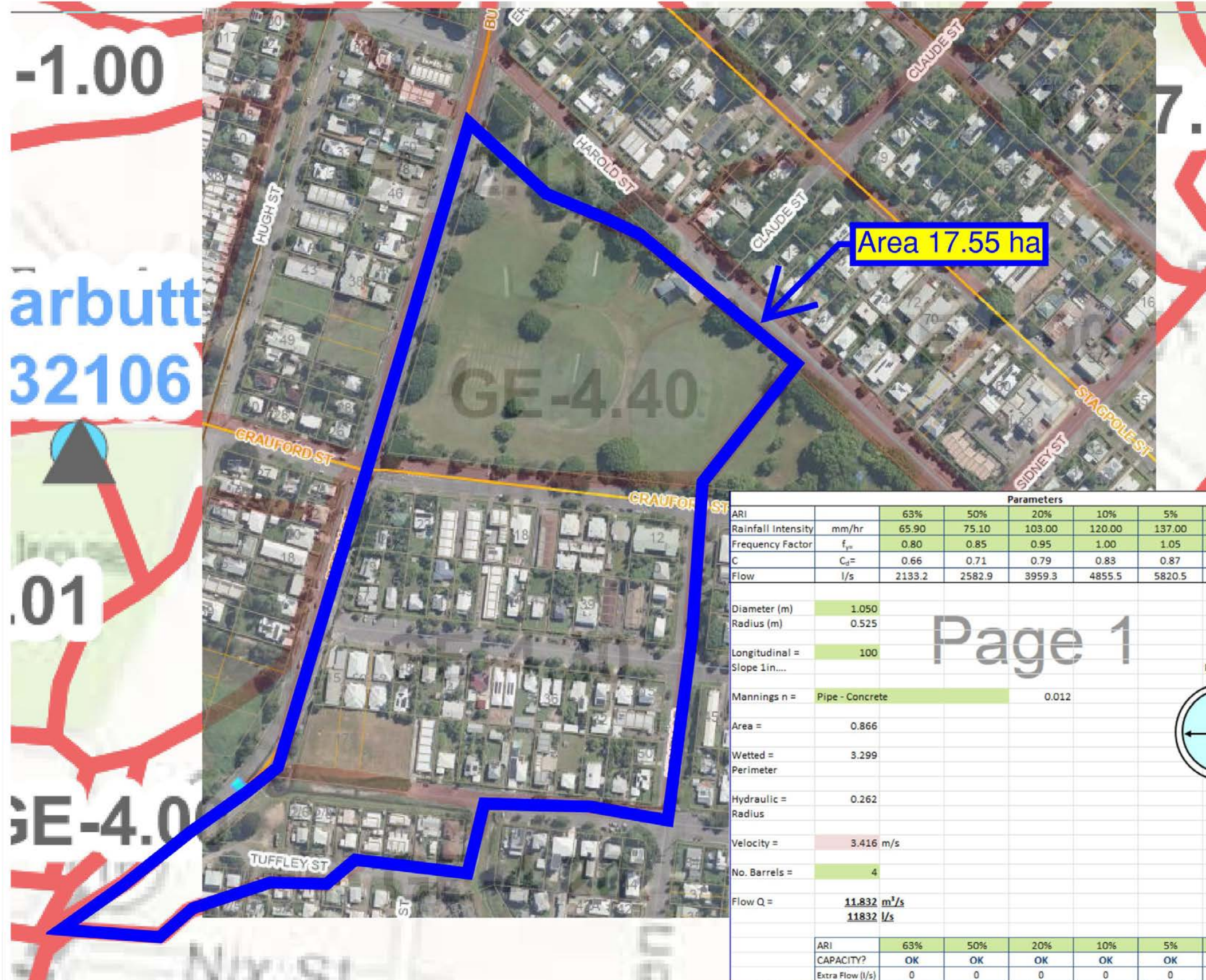
PAUL PETERSEN MTech, MIEAust, RPEQ 13231

Senior Civil Engineer

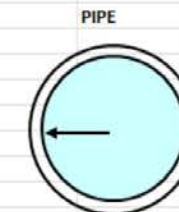
P. 0432 285 867 E. paulpl@stpconsultants.com.au

Cc Mr Will Cruze, Urban Space Consulting

Attachment A



		Parameters						
ARI		63%	50%	20%	10%	5%	2%	1%
Rainfall Intensity	mm/hr	65.90	75.10	103.00	120.00	137.00	157.00	173.00
Frequency Factor	f_p	0.80	0.85	0.95	1.00	1.05	1.15	1.20
C	C_d	0.66	0.71	0.79	0.83	0.87	0.95	1.00
Flow	l/s	2133.2	2582.9	3959.3	4855.5	5820.5	7305.5	8400.0
Diameter (m)		1.050						
Radius (m)		0.525						
Longitudinal =		100						
Slope 1 in....								
Mannings n =	Pipe - Concrete	0.012						
Area =		0.866						
Wetted =		3.299						
Perimeter								
Hydraulic =		0.262						
Radius								
Velocity =		3.416 m/s						
No. Barrels =		4						
Flow Q =		11.832 m ³ /s						
		11832 l/s						
ARI		63%	50%	20%	10%	5%	2%	1%
CAPACITY?		OK	OK	OK	OK	OK	OK	OK
Extra Flow (l/s)		0	0	0	0	0	0	0





7.4 minutes using
figure 4.6

$$t = 0.025 L / S^{0.5} \text{ (minutes)}$$

Total: 671.54 m

0.4 minutes
figure 4.8

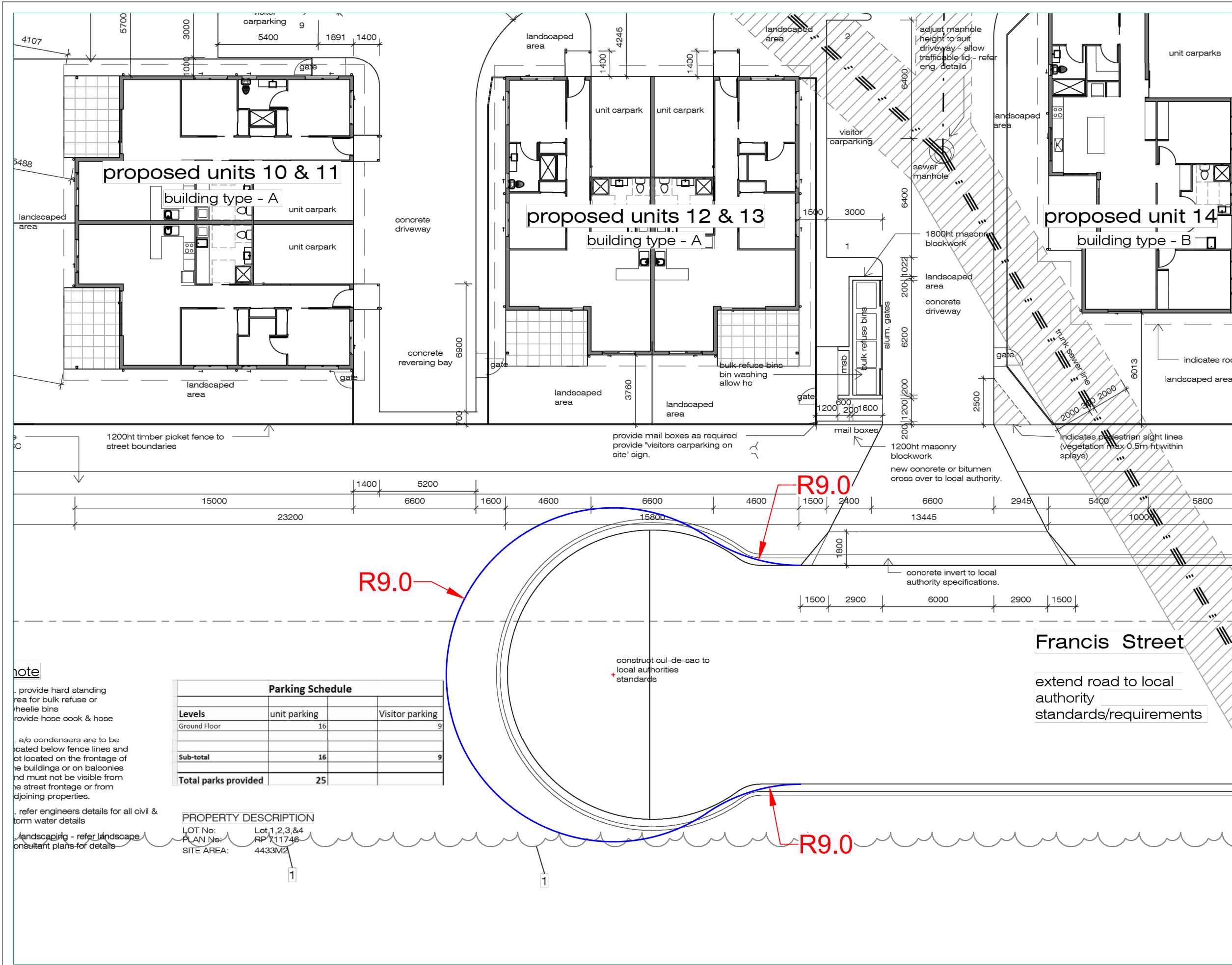
$$V = (1/n) \cdot R^{2/3} \cdot S^{1/2}$$

$$t = L / (60 \cdot V) = n \cdot L / (60 \cdot R^{2/3} \cdot S^{1/2})$$

$$\text{Total Time} = 15 + 7.4 + 0.4 = 23 \text{ minutes}$$

Therefore adopt 20 minutes

ATTACHMENT 4



PROJECT

177 FRANCIS STREET, WEST END

CLIENT

QCWS

DRAWING TITLE

RECOMMENDED CUL DE SAC DESIGN

DRAWING NUMBER

MOD25529QLD - SK15

DATE		REVISION	
26 05 2026		A	

REV	DATE	DESIGNER	APPROVED BY

Transport and Traffic Engineering

ABN 49 668 863 269
310 Edward Street, BRISBANE CITY QLD 4000

ATTACHMENT 5

18 July 2026

North and North West Queensland
PO Box 5666
TOWNSVILLE QLD 4810
Via email: NQSARA@dsdilqp.qld.gov.au



USC Reference: USC119
Council Reference: MCU26/0031
SARA Reference: 2605-52145 SRA

Attention: Bronwyn Bignoux – Principal Planning Officer

INFORMATION REQUEST AND FURTHER ADVICE RESPONSE 500-502 ROSS RIVER ROAD, CRANBROOK

The following correspondence provides a response to the SARA Information Request dated 18 May 2026. The correspondence has extracted each part of SARA's request and provides a subsequent response below with attached correspondence.

The project team have undertaken a detailed review of the Information Request letter to deliver an amended development outcome, that is considered and seeks to address each item raised by SARA. A revised suite of development plans are provided in **Attachment 1**, which include minor modifications in response to Council's Information Request.

SARA Information Request

Item 1 – Stormwater

In reviewing the application material, it is noted that, under pre-development conditions, stormwater runoff from the site discharges via overland flow toward the southern and western boundaries into existing open drains running parallel to these boundaries. These drains represent the lawful points of discharge (LPDs) and discharge directly into the existing drainage culverts beneath the state-controlled road.

Under post-development conditions, the Engineering Report (ER) (by STP Consultants dated 1 April 2026, reference STP25-1272, revision A) proposes to retain these existing LPDs. It is noted that the site is currently vacant and consists of grassed land. As such, the proposed development will increase the impervious area compared to existing conditions. The ER states that the post-development impervious fraction of the site will be 59%, which is below the allowable threshold of 65% for the Low density residential zone under the Townsville City Plan. As the proposed impervious fraction complies with this limit, the ER concludes that on-site detention is not required.

However, given that the development site abuts the state-controlled road and proposes to discharge post-development stormwater without mitigation to the existing culverts beneath the state-controlled road, the applicant must demonstrate that the post-development discharges



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0404 539 291

will not result in any worsening impacts on the state-controlled road compared to pre-development conditions.

The SDAP Supporting Guideline for Development in a state-controlled road environment requires a stormwater assessment demonstrating design peak discharges for the site and surrounding area, for both pre- and post-development conditions, across all main storm events (i.e. 63%, 50%, 20%, 10%, 5%, 2%, and 1% AEP).

Response requested:

Please provide a Stormwater Management Plan (SMP) that includes the following:

- a) Identification of all lawful point(s) of discharge (LPDs).*
- b) Peak runoff calculations for the above storm events for both pre- and post-development conditions, along with a tabulated comparison of the two scenarios to demonstrate no worsening impact on the state-controlled road. The calculations and comparison are required for each point of discharge.*
- c) Where the comparison identifies increased peak flow rates under post-development conditions, appropriate mitigation measures must be proposed. These measures should include detailed design information (e.g. on-site detention volumes and outlet specifications) to ensure peak discharges are equal to or less than pre-development conditions.*
- d) Drawings showing catchment areas, contour plans, drainage layouts, and flow path directions for both pre- and post-development conditions.*

Response

A full and final response prepared by STP Consultants is provided in **Attachment 2**.

Item 2 – Noise Report

In reviewing the Acoustic Report prepared by Acousticworks, dated 25 March 2026 (reference 2026025, revision R01B), it has been identified that the report does not adequately demonstrate compliance with the applicable free-field noise criteria for private open space areas associated with the proposed development.

In particular, the report identifies exceedances of the 60 dB(A) free-field noise criterion within the ground level private open space areas of Units 9, 10 and 11, and the information provided is insufficient to verify compliance across all exclusive use outdoor areas.

Response requested:

Please provide an amended Acoustic Report that addresses the following matters:

- a) Review and validate the monitoring data used within the assessment. In particular, Section 5.2 of the report indicates that a number of monitoring days may have been affected by adverse weather conditions (including rainfall). Any exclusion of data due to adverse weather is to be undertaken in accordance with the requirements of the Transport Noise Management Code of Practice.*
- b) Revise the assessment contained in Section 7.3 and Figure 4 (of the Acoustic Report, prepared by Acousticworks, dated 25 March 2026) to address the predicted exceedances of the 60 dB(A) free-field noise criterion within the ground level private open space areas of Units 9, 10 and 11.*

- c) *Provide revised noise contour plots that clearly identify the 60 dB(A) free-field noise contour line, as the current contour plots do not enable clear verification of compliance with the applicable criterion.*
- d) *Provide detailed and zoomed-in noise contour plots for Units 9, 10 and 11, including any proposed acoustic mitigation measures such as noise barriers, to clearly demonstrate compliance with the 60 dB(A) free-field noise criterion across all private open space areas.*
- e) *Demonstrate that all areas intended for the exclusive use of residents, including yards and landscaped areas associated with the proposed units, comply with the applicable free-field noise criterion.*

Response

An updated Acoustic Report is provided in **Attachment 3**, and a detailed item specific response is provided in **Attachment 4**.

Conclusion

We trust that the information provided above, along with the attached supporting documentation, sufficiently addresses the items raised in the SARA Information Request, to enable SARA to make a decision on the development.

Yours sincerely,

URBAN SPACE CONSULTING

Attachments:

1. Amended Architectural Plans
2. Stormwater Response
3. Amended Acoustic Report
4. Response to Noise Report items

ATTACHMENT 1

NOTES: * THIS DRAWING IS ONLY INTENDED TO OBTAIN A LOCAL AUTHORITY BUILDING PERMIT. * COMPLY WITH ALL RELEVANT AUTHORITY REG. & BSA. * USE FIGURED DIMENSIONS ONLY. DO NOT USE SCALED MEASUREMENTS. * VERIFY ALL ON SITE DIMENSIONS & LEVELS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.		
Revision Schedule		
No	Description	Date
1	revised site layout r1f1	26.05.20



1 francis street - view 1



3 francis street - view 3



5 francis street - view aerial



4 percy street - view -1

Sheet List		
Count	Sheet Number	Sheet Name
1	sk_01	title page
1	sk_02	site plan
1	sk_03	site area breakdown
1	sk_04	services & detail survey plan
1	sk_05	Building - A
1	sk_06	Building - B
1	sk_07	Gazebo

Grand total: 7



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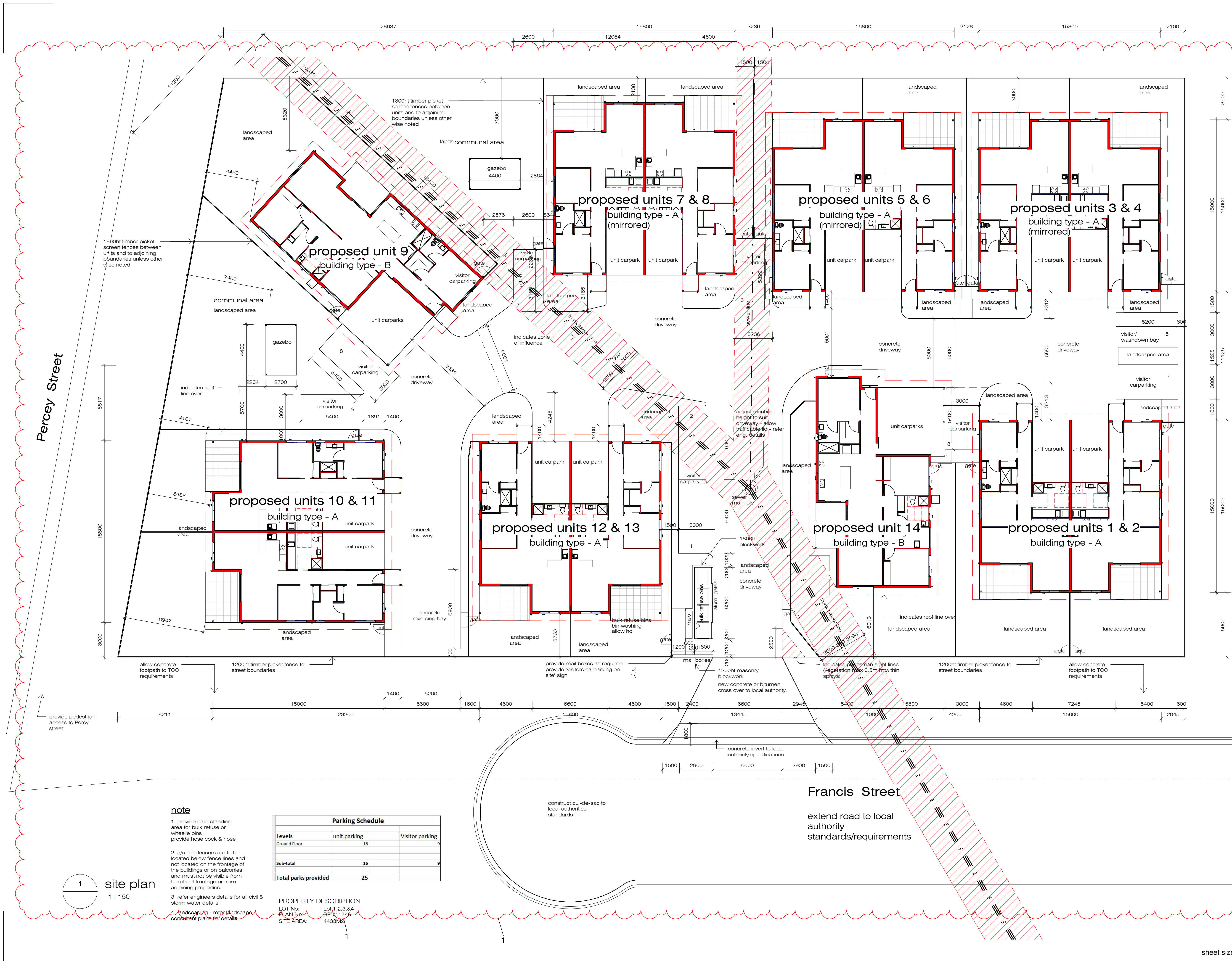
project:
Proposed Multiple Dwellings

for:
Kaenetto Investments P/L

at:
177-179 Francis Street
Westend

Issue Date	dec 2026	25-051
Drawn	Author	
scale		
sheet	sk_01	printed 20/05/2026 8:34:48 AM

sheet size = A1



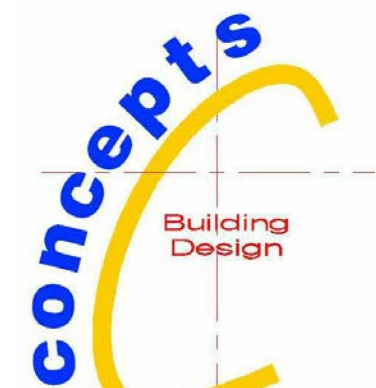
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Revision Schedule		
No	Description	Date
1	revised site layout rfi	26.05.20



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Proposed Multiple Dwellings

for:
Kaenetto Investments P/L

at:
177-179 Francis Street
Westend

Issue Date	dec 2025	25-051
Drawn	Author	
scale	As indicated	
sheet	sk 02	printed 20/05/2026 8:34:49 AM

sheet size = A1

note

1. provide hard standing area for bulk refuse or wheeler bins provide hose cock & hose
2. a/c condensers are to be located below fence lines and not located on the frontage of the buildings or on balconies and must not be visible from the street frontage or from adjoining properties.
3. refer engineers details for all civil & storm water details
4. landscaping - refer landscape consultant plans for details

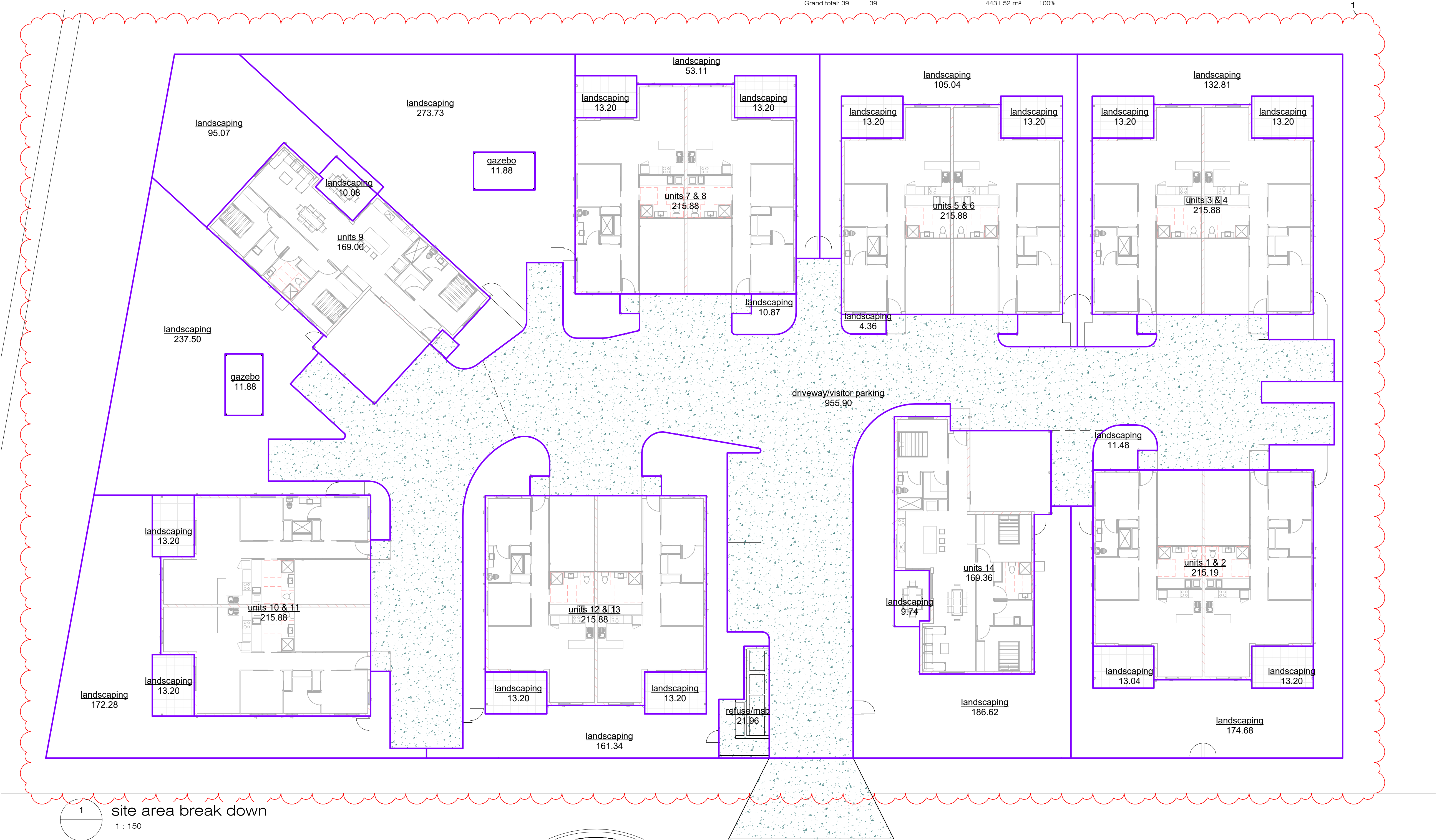
Parking Schedule		
Levels	unit parking	Visitor parking
Ground Floor	16	9
Sub-total	16	9
Total parks provided	25	

PROPERTY DESCRIPTION
LOT No: Lot 1, 2, 3, & 4
PLAN No: RP 11746
SITE AREA: 4433M²

1 site plan
1 : 150

Gross Area Schedule				
number	Count	Name	Area	percentage
building				
1	1	units 1 & 2	215.19 m²	5%
2	1	units 3 & 4	215.88 m²	5%
3	1	units 5 & 6	215.88 m²	5%
4	1	units 7 & 8	215.88 m²	5%
5	1	units 9	169.00 m²	4%
6	1	units 10 & 11	215.88 m²	5%
46	1	units 12 & 13	215.88 m²	5%
47	1	units 14	169.00 m²	4%
building: 8	8		1632.59 m²	37%
driveway/parking				
7	1	driveway/visitor parking	957.27 m²	22%
51	1	refuse/msb	21.96 m²	0%
driveway/parking: 2	2		979.23 m²	22%
landscape				
48	1	gazebo	11.88 m²	0%
49	1	gazebo	11.88 m²	0%
13	1	landscaping	13.20 m²	0%
16	1	landscaping	11.99 m²	0%
17	1	landscaping	179.83 m²	4%
24	1	landscaping	174.03 m²	4%

Gross Area Schedule				
number	Count	Name	Area	percentage
25	1	landscaping	134.45 m²	3%
26	1	landscaping	106.58 m²	2%
27	1	landscaping	53.11 m²	1%
28	1	landscaping	273.73 m²	6%
29	1	landscaping	161.34 m²	4%
30	1	landscaping	172.28 m²	4%
31	1	landscaping	10.87 m²	0%
32	1	landscaping	4.36 m²	0%
33	1	landscaping	13.04 m²	0%
34	1	landscaping	12.48 m²	0%
35	1	landscaping	13.20 m²	0%
36	1	landscaping	13.20 m²	0%
37	1	landscaping	13.20 m²	0%
38	1	landscaping	13.20 m²	0%
39	1	landscaping	10.08 m²	0%
40	1	landscaping	13.20 m²	0%
41	1	landscaping	13.20 m²	0%
42	1	landscaping	13.20 m²	0%
43	1	landscaping	13.20 m²	0%
44	1	landscaping	13.20 m²	0%
45	1	landscaping	13.20 m²	0%
50	1	landscaping	237.50 m²	5%
52	1	landscaping	95.07 m²	2%
landscape: 29	29		1819.70 m²	41%
Grand total: 39	39		4431.52 m²	100%



NOTES:		
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* VERIFY ALL ON SITE DIMENSIONS & LEVELS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.		
Revision Schedule		
No	Description	Date
1	revised site layout rfi	26.05.20



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project:
Proposed Multiple Dwellings

for:
Kaenetto Investments P/L

at:
177-179 Francis Street
Westend

Issue Date	dec 2025	25-051
Drawn	Author	
scale	1 : 150	
sheet	sk 03	printed 20/05/2026 8:34:49 AM

sheet size = A1

ATTACHMENT 2

PARTNERS

TREVOR SLOGROVE
MATT WHITTERING
ANTHONY FLORENCE
BRIAN MAYER
JEREMY LINDSAY
CRAIG TURNER
LEIGH STEGEMAN
TRENT GRAHAM
BEN MADSEN
GIL GRIFFITHS

STRUCTURAL

CIVIL

MECHANICAL

ELECTRICAL

HYDRAULIC

FIRE

SEISMIC

SECTION J

ENGINEERS



10 June 2026
Ref: STP25-1272

Department of State Development - Infrastructure and Planning
North and North West Queensland Office
PO Box 5666
Townsville, QLD 4810

Attention: Bronwyn Bignoux

Dear Madam,

**RESPONSE TO SARA ADVICE NOTICE – 177 FRANCIS STREET, WEST END
QUEENSLAND
SARA Reference: 2605-52145 SRA**

We acknowledge receipt of the Sara Advice Notice, dated 18 May 2026 and provide the following additional information to clarify the matters raised: -

Stormwater Management

a) Identification of all lawful point(s) of discharge (LPDs).

The Legal Points of Discharge for the subject site remain the Francis Street and Percy Street road reserves as indicated in the SBSMP.

As per the Concept Civil Works drawing provided in Appendix D of the SBSMP the stormwater drainage system proposed for the site will discharge concentrated flows (up to 39% ARI) into the existing open drain in Francis Street.

In rainfall greater than the 39% ARI event the surcharge from the two units closest to Percy Street will surcharge as overland flow and into the Percy Street drain. The remainder of the subject site will surcharge down the proposed internal road and into the Francis Street open drain.

Therefore, we note that the stormwater runoff and size of the catchment contributing to the Percy Street drain is reduced based on the proposed layout.

b) Peak runoff calculations for the above storm events for both pre- and post-development conditions, along with a tabulated comparison of the two scenarios to demonstrate no worsening impact on the state-controlled road. The calculations and comparison are required for each point of discharge.

The four subject allotments are zoned 'low density residential' in accordance with the Townsville City Council Planning Scheme.

Acceptable development for these allotments under the Townsville City Council Planning Scheme is 50% building coverage with a 65% fraction impervious for each allotment.

The above parameters are the pre-development conditions for the subject allotments prior to the current proposed works.

BRISBANE
P. 07 3539 8300

TOWNSVILLE
P. 07 3539 8350

CAIRNS
P. 07 3539 8380

MACKAY
P. 07 3539 8390

ROCKHAMPTON
P. 07 3539 8344

WHITSUNDAYS
P. 07 3539 8399

STP CONSULTANTS ACN 668 668 086 ABN 55 668 668 086 www.stpconsultants.com.au

The DTMR Road Planning and Design Manual references QUDM (Queensland Urban Drainage Manual) for the stormwater design in urban catchments. The SBSMP has extensively referenced QUDM and the Townsville City Council for all the drainage design parameters adopted in the report including the extent of development which is considered acceptable development under the Townsville Planning Scheme.

The Department of Transport and Main Roads upgraded Percy Street to dual lanes approximately 16 years ago. The subject allotments already existed and were zoned 'neighbourhood residential' allotments at that time (and well before) of the upgrade roadworks. Therefore, the DTMR stormwater design for Percy Street would have adopted the low density urban residential coefficient of runoff for the subject allotments in accordance with QUDM's requirements and the DTMR design guideline.

The SBSMP demonstrates that there cannot be a worsening on the state-controlled road as the coefficient of runoff for the proposed development is less than that attributed to the subject allotments for the DTMR design of Percy Street based on the Townsville City Council zoning and the fraction impervious allocated.

Figure 2.1 below is the TCC historical aerial image (2005) when Percy Street was in use as a two lane, two-way road with 3/1050mm culvert pipes under the road. Please note the allotments existed, were zoned neighbourhood residential and therefore the coefficient of runoff for these allotments in the DTMR design would have been allocated in accordance with the Townsville City Council Planning Scheme.



Figure 2.1 - Historical Aerial Image 2005 (TCC Mapping)

Further, it is noted during the upgrade of Percy Street to a 4-lane dual carriageway, DTMR increased the number of 1050mm culverts under the road from 3 to 4 cells.



Figure 2.2 – Existing culvert under Percy Street (Site Photo)

The Townsville Flood Mapping confirms that the 1% AEP rain event is contained in the Percy and Francis Street road reserves, confirming the DTMR designed culverts have sufficient capacity to convey flows up to the 1% AEP event.

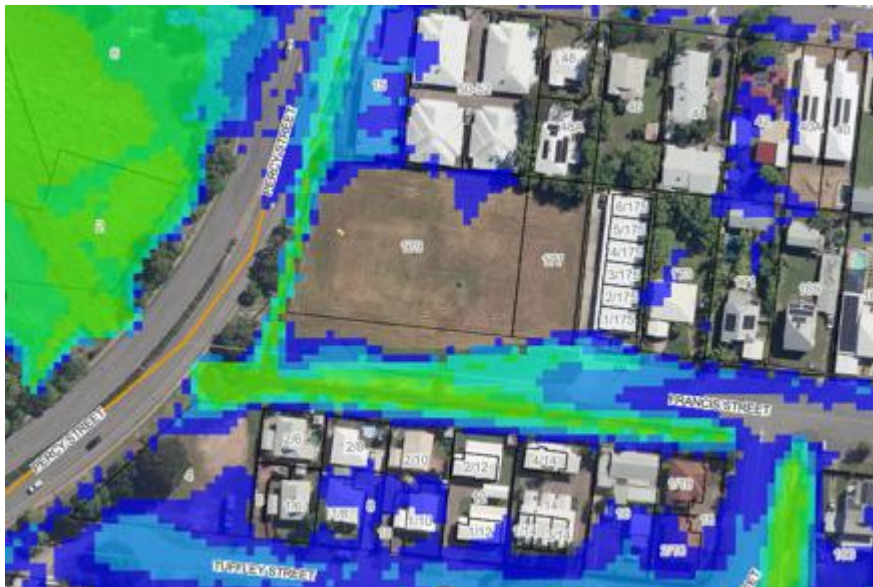


Figure 2.4 – TCC Flood Modelling 1% AEP

The culverts under Percy Street discharge stormwater runoff from a catchment that contributes to Munday Creek. To further demonstrate that the proposed development will not have an impact on the Percy Street culverts, we have provided (Attachment A) the catchment plan, time of concentration and hydraulic inputs for the culvert to demonstrate the culvert has sufficient capacity to cater for all rainfall events up to and including the 1% AEP.

The calculations conservatively adopted a time of concentration of 20 minutes for the catchment and applied the urban residential runoff coefficient to the entire catchment including Cutheringa Park.

- c) Where the comparison identifies increased peak flow rates under post-development conditions, appropriate mitigation measures must be proposed. These measures should include detailed design information (e.g. on-site detention volumes and outlet specifications) to ensure peak discharges are equal to or less than pre-development conditions.

As explained in the above additional information and within the SBSMP, the proposed development's SBSMP does not identify any increase in the expected post development peak flow rates and therefore mitigation measures are not required.

- d) Drawings showing catchment areas, contour plans, drainage layouts, and flow path directions for both pre- and post-development conditions.

Appendix A of the SBSMP provides a copy of the existing levels and contours for the site from which the extents of the existing catchment draining to Percy Street can be determined.

Appendix D of the SBSMP provides a copy of the Concept Civil Works detailing the proposed drainage system, roads and buildings.

The additional information provided above and in Attachment A demonstrate that the State Development Assessment Provisions are met: -

- PO8 – Stormwater run-off or overland flow from the development site does not create or exacerbate a safety hazard for users of the state-controlled road.
- PO9 – Stormwater run-off or overland flow from the development site does not result in a material worsening of the operating performance of the state-controlled road.
- PO10 – Stormwater runoff or overland flow from the development does not adversely impact the structural integrity of the state-controlled road.
- PO11 – The development ensures that stormwater is lawfully discharged by not creating any new points of discharge, by not concentrating discharge to a state-controlled road, discharging stormwater to a lawful point of discharge and does not worsen the condition of the existing lawful point of discharge to the state-controlled road.

Should you require any further information in respect to this matter please do not hesitate to contact Manuel Flores by email manuel@stpconsultants.com.au or phone 0423 586 052.

Yours faithfully,
STP Consultants



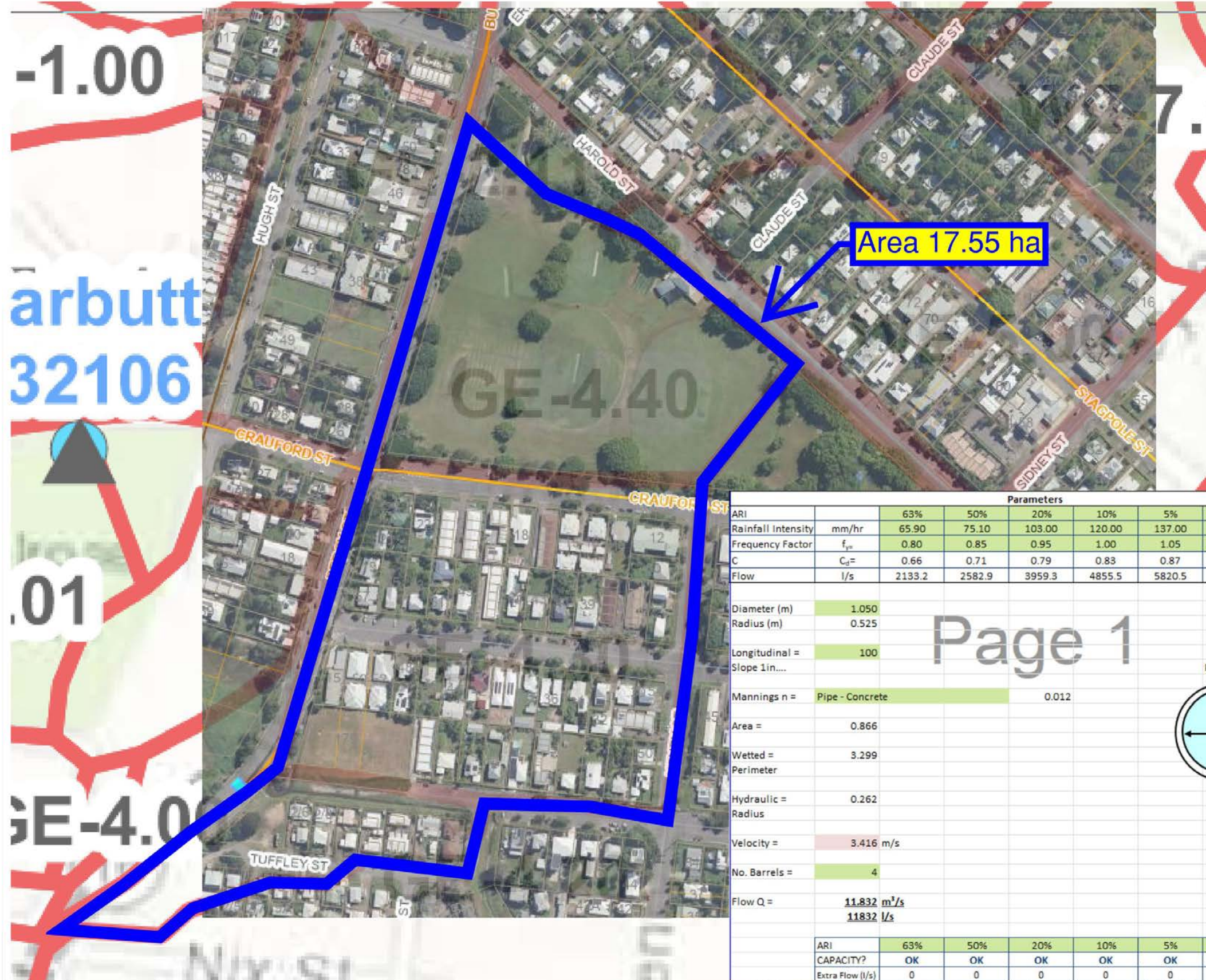
PAUL PETERSEN MTech, MIEAust, RPEQ 13231

Senior Civil Engineer

P. 0432 285 867 E. paulpl@stpconsultants.com.au

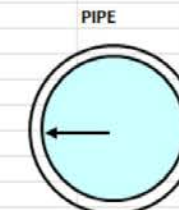
Cc Mr Will Cruze, Urban Space Consulting

Attachment A



		Parameters						
ARI		63%	50%	20%	10%	5%	2%	1%
Rainfall Intensity	mm/hr	65.90	75.10	103.00	120.00	137.00	157.00	173.00
Frequency Factor	f_p	0.80	0.85	0.95	1.00	1.05	1.15	1.20
C	C_d	0.66	0.71	0.79	0.83	0.87	0.95	1.00
Flow	l/s	2133.2	2582.9	3959.3	4855.5	5820.5	7305.5	8400.0
Diameter (m)		1.050						
Radius (m)		0.525						
Longitudinal =		100						
Slope 1 in....								
Mannings n =	Pipe - Concrete	0.012						
Area =		0.866						
Wetted =		3.299						
Perimeter								
Hydraulic =		0.262						
Radius								
Velocity =		3.416 m/s						
No. Barrels =		4						
Flow Q =		11.832 m ³ /s						
		11832 l/s						
ARI		63%	50%	20%	10%	5%	2%	1%
CAPACITY?		OK	OK	OK	OK	OK	OK	OK
Extra Flow (l/s)		0	0	0	0	0	0	0

Page 1





0.4 minutes
figure 4.8

$$V = (1/n) \cdot R^{2/3} \cdot S^{1/2}$$

$$t = L / (60 \cdot V) = n \cdot L / (60 \cdot R^{2/3} \cdot S^{1/2})$$

Total Time = 15 + 7.4 + 0.4
= 23 minutes

Therefore adopt 20 minutes

ATTACHMENT 3



Proposed Residential Development
Material Change of Use
179 Francis Street
West End

ACOUSTIC REPORT



Client:
Kaenetto Investments Pty Ltd

Reference:
2026025 R01D 179 Francis Street, West End RTN.docx

Date Issued:
29 June 2026

Document Information

Contact Details

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Report Register

Date	Revision	Author	Reviewer	Manager
25/03/26	R01A (DRAFT)	Kaitlyn Meldrum	Kayleigh Styles	ME
25/03/26	R01B	Kaitlyn Meldrum	Kayleigh Styles	ME
29/06/26	R01D	Kaitlyn Meldrum	Kayleigh Styles	ME

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1. Introduction

This report is in response to a request by Kaenetto Investments Pty Ltd for a road traffic noise assessment of a proposed residential development to be located at 179 Francis Street, West End. To facilitate the assessment, unattended noise monitoring was conducted to establish existing road traffic impacts from Percy Street to the proposed development. Based on the results of the assessment, recommendations for acoustic treatments are specified in this report.

This report (ref: 2026025 R01D) has been revised and has been re-issued in June 2026 in response to SARA's information request dated 18 May 2026 (ref. 2605-52145 SRA).

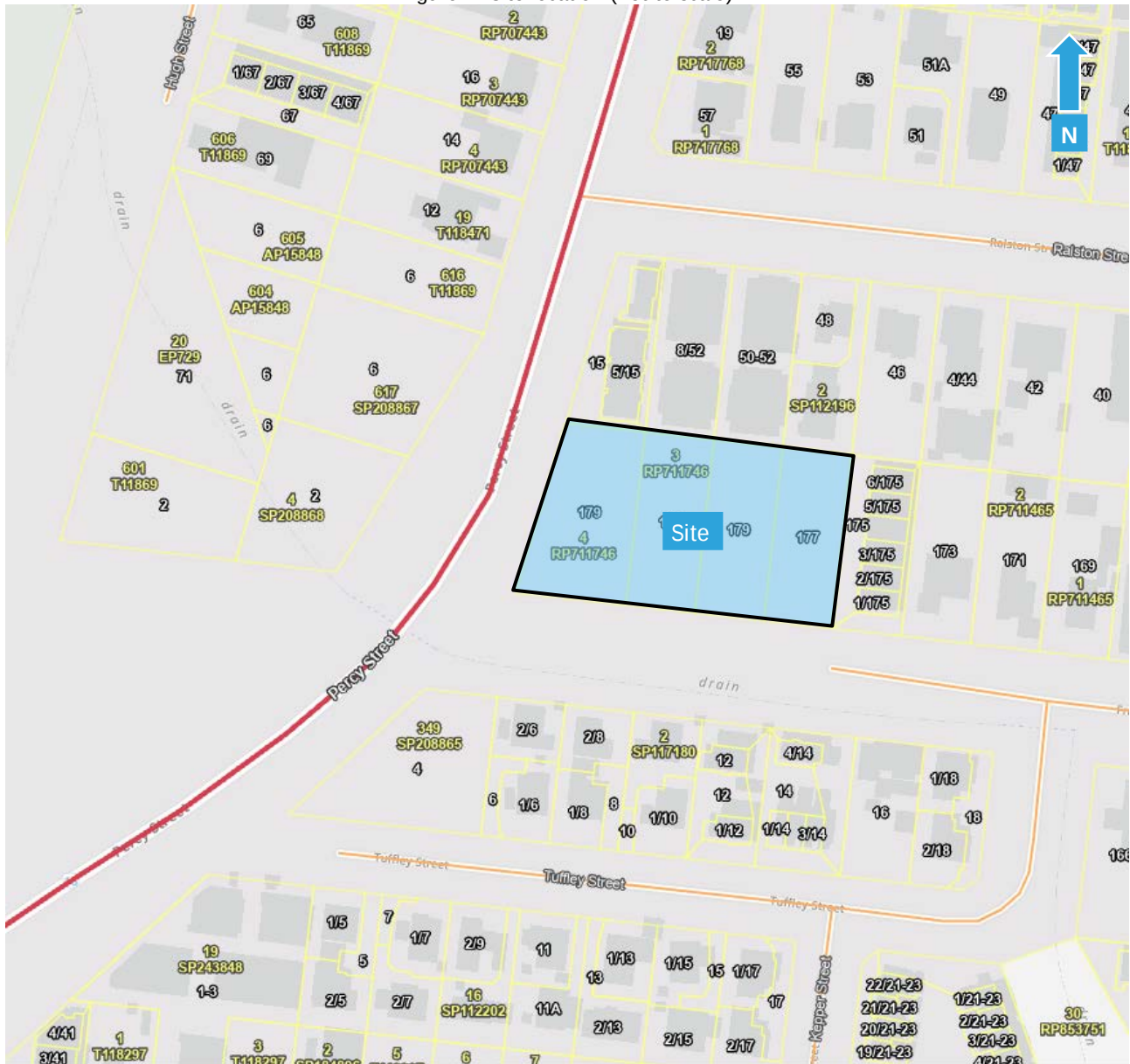
2. Site Description

2.1 Site Location

The site is described by the following;

177-179 Francis Street, West End
Lots 1-4 on RP711746

Figure 1: Site location (not to scale)



A site survey was conducted on 17 February 2026 which identified the following in relation to the site;

- a) The site is currently vacant and ready for construction.
- b) Residential land uses bound the site to the north and east.
- c) Francis Street is located to the southeast of the site, separating it from residential dwellings.
- d) Percy Street bounds the site to the west, separating it from vacant land.

2.2 Proposal

The proposal is to construct 14 single residential units comprised of the following;

- Total site area: 4,433m².
- 6 duplex and 2 villas.
- 11 visitor carparking spaces
- Site access via Francis Street.

2.3 Acoustic Environment

The ambient noise environment at the site is primarily affected by road traffic noise from Percy Street.

3. Equipment

The following equipment was used to record noise levels:

- 2xRion NL42 Environmental Noise Monitor
- Pulsar Model 105 Sound Calibrator

The sound measuring equipment holds current NATA Laboratory Certification and was field calibrated before and after the monitoring period with no significant drift from the reference signal recorded.

4. Noise Monitoring

4.1 Road Traffic Unattended Noise Monitoring

4.1.1 Monitor 1 (February and March 2026)

A Rion NL42 road traffic noise monitor was placed at 21 Percy Street approximately 8m from the nearest lane of the Percy Street to measure road traffic noise levels. The monitor was located in a free field position with the microphone approximately 1.4 metres above ground surface level. The monitor was set to record noise levels between 17 February and 11 March 2026.

The road traffic noise monitor was set to record noise levels in "A" weighting, fast response using 1-hour statistical intervals. Road traffic noise monitoring was conducted in accordance with Australian Standard *AS2702:1984 'Acoustics - Methods for the measurement of road traffic noise'*.

Refer to Figure 2 for noise monitoring location.

4.1.2 Monitor 2 (June 2026)

A Rion NL42 road traffic noise monitor was placed at 6 Percy Street approximately 8m from the nearest lane of the Percy Street to measure road traffic noise levels. The monitor was located in a free field position with the microphone approximately 2 metres above ground surface level. The monitor was set to record noise levels between 9 and 17 June 2026.

The road traffic noise monitor was set to record noise levels in "A" weighting, fast response using 1-hour statistical intervals. Road traffic noise monitoring was conducted in accordance with Australian Standard *AS2702:1984 'Acoustics - Methods for the measurement of road traffic noise'*.

Refer to Figure 2 for noise monitoring location.

Figure 2: Site and Noise Monitoring Locations



5. Measured Noise Levels

The following tables present the measured traffic noise levels from the unattended noise surveys. Any periods of inclement weather or extraneous noise were omitted from the measured data prior to determining the results.

5.1 Meteorological Conditions

Meteorological observations during the unattended noise monitoring survey were obtained from the Bureau of Meteorology website (<http://www.bom.gov.au/climate/data>), shown in Table 1 below.

Table 1: Meteorological Conditions – Townsville (February and March 2026)

Day	Date	Rainfall (mm)	Wind			
			9am		3pm	
			Direction	Speed (km/h)	Direction	Speed (km/h)
Tuesday	17/02/2026	7.2	ESE	11	ENE	30
Wednesday	18/02/2026	31.6	SSE	17	E	13
Thursday	19/02/2026	66.8	-	Calm	NNE	17
Friday	20/02/2026	73.8	ENE	9	WNW	11
Saturday	21/02/2026	11.6	E	6	ENE	20
Sunday	22/02/2026	18	SE	13	ENE	22
Monday	23/02/2026	0	SSW	6	NE	26
Tuesday	24/02/2026	1.6	SE	15	E	26
Wednesday	25/02/2026	0	S	13	ENE	28
Thursday	26/02/2026	0	ESE	17	ESE	9
Friday	27/02/2026	0.8	SW	6	NE	19
Saturday	28/02/2026	0.6	SE	17	ENE	26
Sunday	1/03/2026	1	SSE	11	E	33
Monday	2/03/2026	12	ESE	24	ESE	24
Tuesday	3/03/2026	0.4	SSE	19	E	31
Wednesday	4/03/2026	4.8	SSE	17	E	24
Thursday	5/03/2026	0	SSE	20	SE	24
Friday	6/03/2026	5.8	S	13	E	19
Saturday	7/03/2026	27.2	N	26	N	26
Sunday	8/03/2026	23	N	20	N	22
Monday	9/03/2026	7	NNW	17	S	N
Tuesday	10/03/2026	10.8	NW	17	NW	8

Table 2: Meteorological Conditions – Townsville (June 2026)

Day	Date	Rainfall (mm)	Wind			
			9am		3pm	
			Direction	Speed (km/h)	Direction	Speed (km/h)
Tuesday	9/06/2026	0	-	Calm	E	28
Wednesday	10/06/2026	3	SE	17	ESE	31
Thursday	11/06/2026	0	SE	28	ENE	28
Friday	12/06/2026	0	SE	19	ENE	26
Saturday	13/06/2026	0	SSE	22	ENE	31
Sunday	14/06/2026	0	SSW	15	ENE	22
Monday	15/06/2026	0	SE	6	ENE	31
Tuesday	16/06/2026	0	SE	11	E	26
Wednesday	17/06/2026	0	SSW	13	ESE	31

5.2 Road Traffic Noise Levels

5.2.1 Monitor 1

The measured road traffic noise levels at the monitoring locations were as follows:

Table 3: Measured ambient and road noise levels – all time periods (February and March 2026)

Day	Date	L10(18h) 06:00 to 24:00	Leq(1h) Day	Leq(1h) Night	L90(8h) 22:00 to 06:00	L90(18h) 06:00- 24:00
Tuesday	17/02/2026	69.7*	69.5*	61.3*	43.0*	49.0*
Wednesday	18/02/2026	71.4*	72.6*	67.4*	46.6*	52.8*
Thursday	19/02/2026	70.1*	72.7*	74.4*	49.8*	50.9*
Friday	20/02/2026	72.1*	72.0*	70.6*	47.6*	54.5*
Saturday^	21/02/2026	70.5	69.2	65.6	44.8	50.7
Sunday^	22/02/2026	69.5	73.3	65.2	45.8	48.7
Monday	23/02/2026	69.2*	69.6*	65.7*	45.0*	49.8*
Tuesday	24/02/2026	69.5	72.5	65.7	45.8	50.5
Wednesday	25/02/2026	69.5*	69.9*	68.6*	43.9*	50.4*
Thursday	26/02/2026	69.7	67.8	65.6	43.1	50.3
Friday	27/02/2026	70.5	69.3	67.4	43.8	50.2
Saturday^	28/02/2026	69.9	72.1	65.7	41.1	48.2
Sunday^	1/03/2026	69.0	69.7	62.7	40.0	49.0
Monday	2/03/2026	70.0	72.4	67.0	40.7	50.0
Tuesday	3/03/2026	70.3	71.0	67.6	41.2	50.0
Wednesday	4/03/2026	69.9	70.5	66.6	40.6	49.3
Thursday	5/03/2026	69.9	72.3	66.5	40.1	50.5
Friday	6/03/2026	71.4	70.9	65.9	41.2	51.5
Saturday^	7/03/2026	70.8	70.4	66.6	46.5	50.0
Sunday^	8/03/2026	69.9	70.7	63.8	46.8	50.8
Monday	9/03/2026	70.0*	69.0*	66.9*	43.9*	51.3*
Tuesday	10/03/2026	71.9	69.8	66.9	45.7	52.3
Overall value		70.1	70.5	66.2	42.8	50.3

*Note rainfall 18-20 February and 9 March for all time periods was found to affect the measurements, therefore the data was omitted for the affected time periods.

^The proposed development is located within a state-controlled transport noise corridor overlay. To be consistent with the advice in Section 4.3.1.2 of the Transport Noise Management Code of Practice, road traffic data for weekend periods and public holidays was not utilised in the assessment. The code specifies that measurements of traffic noise shall not be conducted during periods of atypical traffic flows. Periods of atypical traffic flows and patterns generally include weekends, school and public holidays.

Refer to the appendix for a graphical representation of the noise monitoring.

5.2.2 Monitor 2

The measured road traffic noise levels at the monitoring locations were as follows:

Table 4: Measured ambient and road noise levels – all time periods (June 2026)

Day	Date	L10(18h) 06:00 to 24:00	Leq(1h) Day	Leq(1h) Night	L90(8h) 22:00 to 06:00	L90(18h) 06:00- 24:00
Tuesday	9/06/2026	71.8	73.1	62.0	42.7	49.6
Wednesday	10/06/2026	72.7	73.4	69.5	41.2	51.4
Thursday	11/06/2026	72.8	72.6	68.7	39.5	50.9
Friday	12/06/2026	73.4	72.0	68.5	41.7	52.2
Saturday^	13/06/2026	73.2	72.1	67.0	42.7	51.6
Sunday^	14/06/2026	71.8	71.7	65.5	41.7	49.5
Monday	15/06/2026	72.1	71.6	68.5	39.2	50.7
Tuesday	16/06/2026	72.4	71.9	68.6	41.0	51.0
Wednesday	17/06/2026	74.5	71.1	68.4	36.9	54.7
Overall value		72.8	72.1	67.5	40.2	51.5

*Note rainfall 10 June was found to not have affected the measurements, therefore the data was utilised.

^The proposed development is located within a state-controlled transport noise corridor overlay. To be consistent with the advice in Section 4.3.1.2 of the Transport Noise Management Code of Practice, road traffic data for weekend periods and public holidays was not utilised in the assessment. The code specifies that measurements of traffic noise shall not be conducted during periods of atypical traffic flows. Periods of atypical traffic flows and patterns generally include weekends, school and public holidays.

Refer to the appendix for a graphical representation of the noise monitoring.

6. Noise Criteria

6.1 Road Traffic Noise Criteria

As the development is located near a state-controlled road (Percy Street), the *State Development Assessment Provisions (SDAP)* criteria detailed in Section 6.1.1 applies.

6.1.1 State Development Assessment Provisions (SDAP)

The criteria applied are in accordance with the *SDAP* Version 3.6 dated 1 May 2026 by the Department of State Development, Manufacturing, Infrastructure and Planning. The *SDAP State Code 1: Development in a state-controlled road environment* sets out matters of interest for the assessment of developments near state-controlled roads or multi-modal corridors. The applicable criteria for the development in the year 2036 (ten-year planning horizon) requires road traffic noise to be assessed in accordance with Table 1.5 of the policy statement as follows;

Table 5: SDAP Road Traffic Noise Criteria

Material change of use (accommodation activity)	
Ground floor level requirements adjacent to a state-controlled road or type 1 multi-modal corridor	
PO39 Development minimises noise intrusion from a state-controlled road in private open space.	AO39.1 Development provides a noise barrier or earth mound which is designed, sited and constructed: 1. to achieve the maximum free field acoustic levels in reference table 2 (item 2.2) for private open space at the ground floor level; 2. in accordance with: a. Chapter 7 integrated noise barrier design of the Transport Noise Management Code of Practice: Volume 1 (Road Traffic Noise), Department of Transport and Main Roads, 2013; b. Technical Specification-MRTS15 Noise Fences, Transport and Main Roads, 2019; c. Technical Specification-MRTS04 General Earthworks, Transport and Main Roads, 2020. OR AO39.2 Development achieves the maximum free field acoustic level in reference table 2 (item 2.2) for private open space by alternative noise attenuation measures where it is not practical to provide a noise barrier or earth mound.
PO40 Development (excluding a relevant residential building or relocated building) minimises noise intrusion from a state controlled road in habitable rooms at the facade.	AO40.1 Development (excluding a relevant residential building or relocated building) provides a noise barrier or earth mound which is designed, sited and constructed: 1. to achieve the maximum building façade acoustic level in reference table 1 (item 1.1) for habitable rooms; 2. in accordance with: a. Chapter 7 integrated noise barrier design of the Transport Noise Management Code of Practice: Volume 1 (Road Traffic Noise), Department of Transport and Main Roads, 2013; b. Technical Specification-MRTS15 Noise Fences, Transport and Main Roads, 2019; c. Technical Specification-MRTS04 General Earthworks, Transport and Main Roads, 2020. OR AO40.2 Development (excluding a relevant residential building or relocated building) achieves the maximum building façade acoustic level in reference table 1 (item 1.1) for habitable rooms by alternative noise attenuation measures where it is not practical to provide a noise barrier or earth mound.

PO41 Habitable rooms (excluding a relevant residential building or relocated building) are designed and constructed using materials to achieve the maximum internal acoustic level in reference table 3 (item 3.1).	No acceptable outcome is provided.
Above ground floor level requirements (accommodation activity) adjacent to a state-controlled road or type 1 multi-modal corridor	
PO42 Balconies, podiums, and roof decks include: 1. a continuous solid gap-free structure or balustrade (excluding gaps required for drainage purposes to comply with the Building Code of Australia); 2. highly acoustically absorbent material treatment for the total area of the soffit above balconies, podiums, and roof decks.	No acceptable outcome is provided.
PO43 Habitable rooms (excluding a relevant residential building or relocated building) are designed and constructed using materials to achieve the maximum internal acoustic level in reference table 3 (item 3.1).	No acceptable outcome is provided.

Table 6: Table 1 of SDAP Maximum Building Façade Acoustic Levels

Applicable use	Acoustic levels
1.1: Accommodation activity	a. ≤ 60 dB(A) L10 (18 hour) façade corrected (measured L90 (8 hour) free field between 10pm and 6am ≤ 40 dB(A)) OR b. ≤ 63 dB(A) L10 (18 hour) façade corrected (measured L90 (8 hour) free field between 10pm and 6am > 40 dB(A))

Table 7: Table 2 of SDAP Maximum Free Field Acoustic Levels

Applicable use	Acoustic levels
2.2: Private open space for an accommodation activity (including lots created for a future accommodation activity)	a. ≤ 57 dB(A) L10 (18 hour) free field (measured L90 (18 hour) free field between 6am and 12 midnight ≤ 45 dB(A)) OR b. ≤ 60 dB(A) L10 (18 hour) free field (measured L90 (18 hour) free field between 6am and 12 midnight > 45 dB(A))

Table 8: Table 3 of SDAP Maximum Internal Acoustic Levels

Applicable use	Acoustic levels
3.1: Habitable rooms in an accommodation activity (excluding uses addressed in QDC MP4.4)	≤ 35 dB(A) Leq (1 hour) (maximum hour over 24 hours)

6.1.2 Queensland Design Code MP4.4

To determine the minimum design requirements for any new residential buildings located in a transport noise corridor, the Queensland Development Code Part 4.4 may be applied if no alternative solutions are provided. In accordance with MP4.4, the noise categories are stated in Table 9.

Table 9: Queensland Development Code Noise Categories

Category	Noise level L10 (18hr) dBA (including façade correction)
Category 4	≥ 73
Category 3	68-72
Category 2	63-67
Category 1	58-62
Category 0	≤ 57

The building treatment for any future development onsite shall be determined at Building Approval stage, in general accordance with the Queensland Development Code. Alternative solution may be provided on request.

7. Road Traffic Assessment

Road traffic noise associated with Percy Street for a ten-year planning horizon was assessed at the development to determine compliance with SDAP criteria (refer to Section 6.1.1) and any requirements for acoustic treatments.

7.1 Traffic Volumes

Updated traffic volumes for Francis Street were obtained from Transport and Main Roads Traffic Census based on 2025 data. The updated volumes are provided in Table 10, with a growth rate of 1% used to predict the future AADT.

Table 10: Traffic Volumes

Location	2025 AADT	2026 Predicted AADT	2036 Predicted AADT	Percentage of Heavy Vehicles
Francis Street	20,115	20,519	22,666	4.43%

7.2 Road Traffic Noise Verification

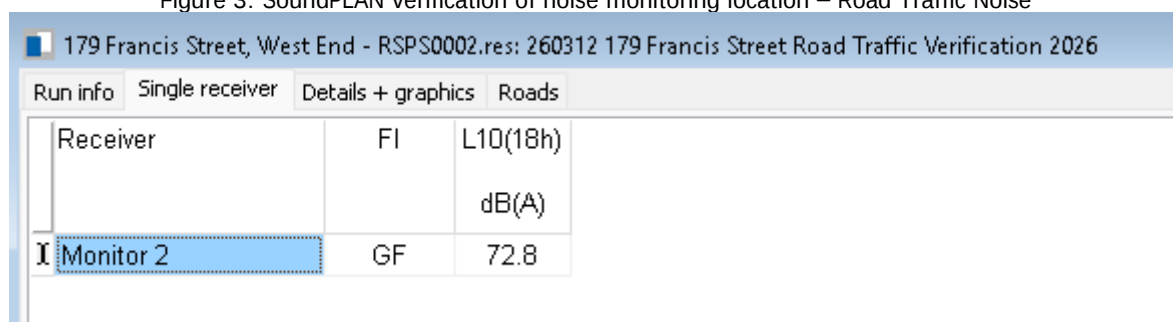
To ensure the CoRTN noise model is accurate, a verification model of the predicted $L_{A10(18hr)}$ was created and compared to the measured noise level. The CoRTN method allows a 2dB(A) variation from the predicted and measured level, if the variation exceeds 2dB(A) a correction to the predicted level is required.

Table 11: Comparison of measured and predicted noise levels

Location	Measured $L_{A10(18hr)}$ dB(A)	Predicted $L_{A10(18hr)}$ dB(A)	Correction
Francis Street	72.8	72.8	0

Figure 3: SoundPLAN verification of noise monitoring location – Road Traffic Noise

Figure 3: SoundPLAN verification of noise monitoring location - Road Traffic Noise



179 Francis Street, West End - RSPS0002.res: 260312 179 Francis Street Road Traffic Verification 2026			
Run info	Single receiver	Details + graphics	Roads
Receiver	FI	L10(18h)	
		dB(A)	
Monitor 2	GF	72.8	

Inputs applied in the verification of the noise modelling are as follows:

- Speed: 60km/hr
- Road Surface correction: 0dBA, as per the Transport Noise Code of Practice the road surface was identified as Bitumen Dense Graded Asphalt.
- Width of each Lane: 3.5m.
- -0.7 free field correction.

7.3 Predicted Road Traffic Noise Levels - 2036

Road traffic noise modelling for the proposed development was based on the following information:

- Site layout provided by Concepts Building Design, project number 25-051, dated December 2025.
- Percy Street speed limit of 60km/h.
- Receiver heights were based on 1.5m above finished level.
- +2.5dB(A) Façade correction.
- -0.7dBA free field correction and -1.7dBA façade correction for Queensland conditions.

Table 12: Predicted Road Traffic Noise Impacts 2036 – with acoustic barrier

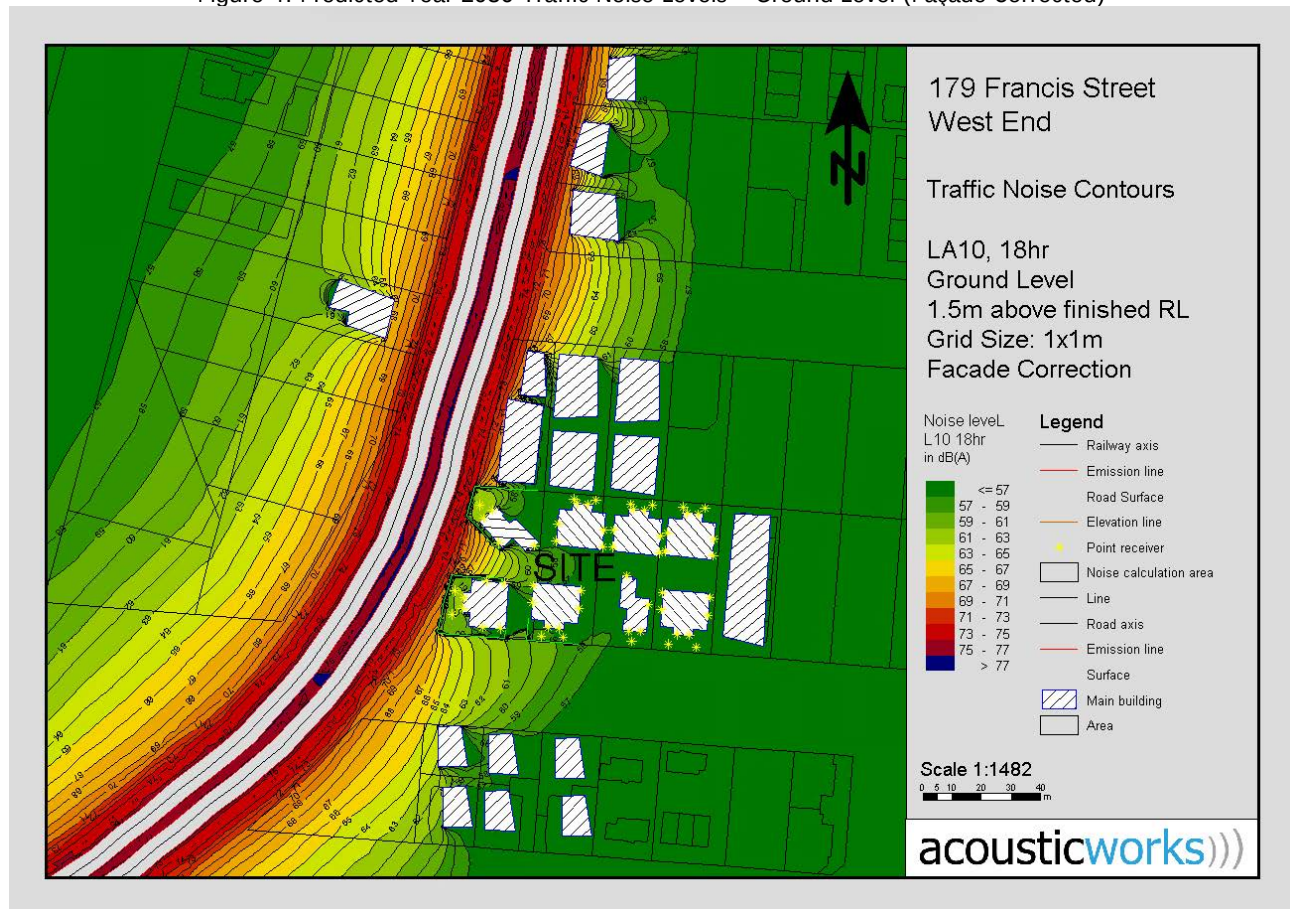
Unit	Floor	Room	Predicted Road Traffic Noise Levels	
			L10 (18h) dB(A)	QDC Noise Category
U1	Bed 1	GF	51	0
U1	Bed 2	GF	51	0
U1	Living/kitchen/dining	GF	53	0
U2	Bed 1	GF	46	0
U2	Bed 2	GF	46	0
U2	Living/kitchen/dining	GF	53	0
U3	Bed 1	GF	50	0
U3	Bed 2	GF	50	0
U3	Living/kitchen/dining	GF	50	0
U4	Bed 1	GF	46	0
U4	Bed 2	GF	46	0
U4	Living/kitchen/dining	GF	50	0
U5	Bed 1	GF	53	0
U5	Bed 2	GF	52	0
U5	Living/kitchen/dining	GF	51	0
U6	Bed 1	GF	48	0
U6	Bed 2	GF	48	0
U6	Living/kitchen/dining	GF	50	0
U7	Bed 1	GF	55	0
U7	Bed 2	GF	55	0
U7	Living/kitchen/dining	GF	52	0
U8	Bed 1	GF	49	0
U8	Bed 2	GF	49	0
U8	Living/kitchen/dining	GF	52	0
U9	Bed 1	GF	51	0
U9	Bed 2	GF	58	1
U9	Bed 3	GF	61	1
U9	Living/kitchen/dining	GF	61	1
U10	Bed 1	GF	55	0
U10	Bed 2	GF	57	0
U10	Living/kitchen/dining	GF	61	1
U11	Bed 1	GF	56	0
U11	Bed 2	GF	56	0
U11	Living/kitchen/dining	GF	61	1
U12	Bed 1	GF	59	1
U12	Bed 2	GF	57	0
U12	Living/kitchen/dining	GF	56	0
U13	Bed 1	GF	49	0
U13	Bed 2	GF	49	0
U13	Living/kitchen/dining	GF	56	0
U14	Bed 1	GF	53	0

Unit	Floor	Room	Predicted Road Traffic Noise Levels	
			L10 (18h) dB(A)	QDC Noise Category
U14	Bed 2	GF	47	0
U14	Bed 3	GF	55	0
U14	Living/kitchen/dining	GF	56	0

Based on the predicted noise impacts, additional facade treatments are required in accordance with QDC MP4.4. Refer to Section 8 for further recommendations.

The 3D SoundPLAN CoRTN noise model predicts $L_{A10,18\text{hour}}$ levels as shown Figure 4.

Figure 4: Predicted Year 2036 Traffic Noise Levels – Ground Level (Façade Corrected)



Noise impacts to passive recreation areas are presented in the following table:

Table 13: Road Traffic Noise Impacts to Passive Recreation Areas – with acoustic barrier

Location			Predicted Road Traffic Noise Impacts (Free Field) 2036	Compliance to SDAP Criteria <60dB(A) (yes/no)
Unit	Floor	Area	L _{A10(18hr)} dB(A)	
U1	GF	Yard	53	yes
U2	GF	Yard	52	yes
U3	GF	Yard	52	yes
U4	GF	Yard	51	yes
U5	GF	Yard	52	yes
U6	GF	Yard	51	yes
U7	GF	Yard	53	yes
U8	GF	Yard	52	yes
U9	GF	Yard	60	yes
U10	GF	Yard	59	yes
U11	GF	Yard	59	yes
U12	GF	Yard	55	yes
U13	GF	Yard	55	yes
U14	GF	Yard	54	yes

The 3D SoundPLAN CoRTN noise model predicts L_{A10,18hour} levels as shown Figure 5.

Figure 5: Predicted Year 2036 Traffic Noise Levels – Ground Level (Free Field)

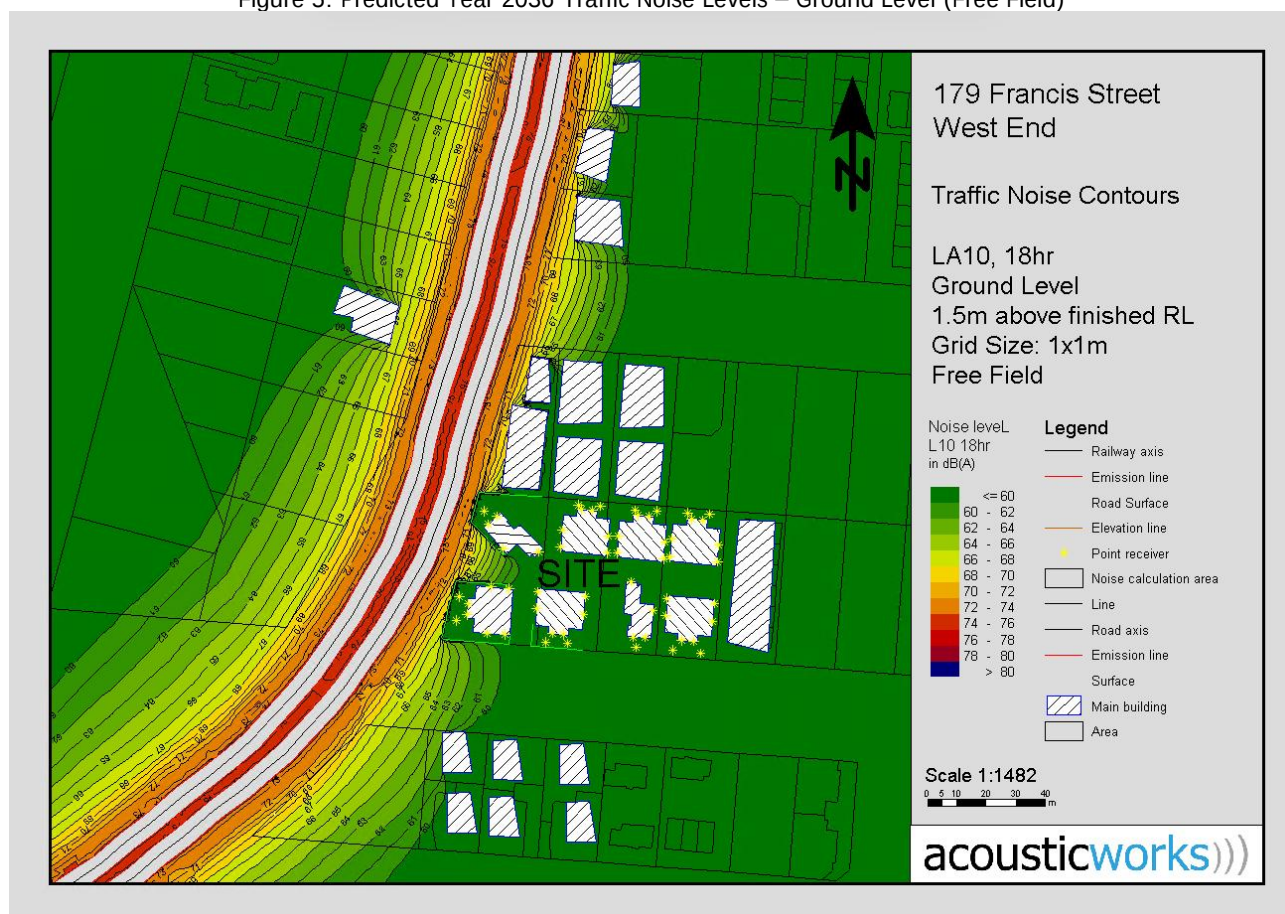
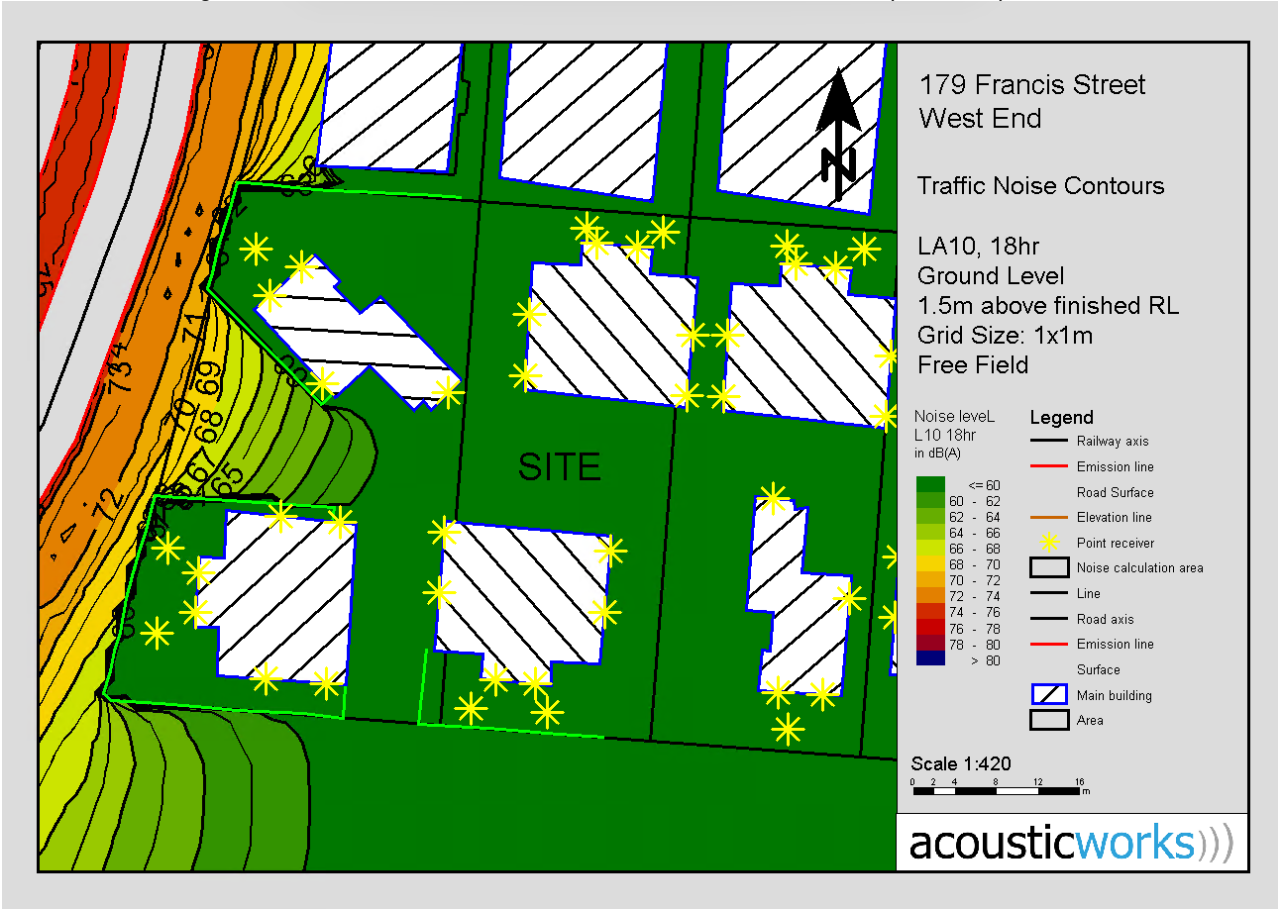


Figure 6: Predicted Year 2036 Traffic Noise Levels – Ground Level (Free Field) lots 9-11



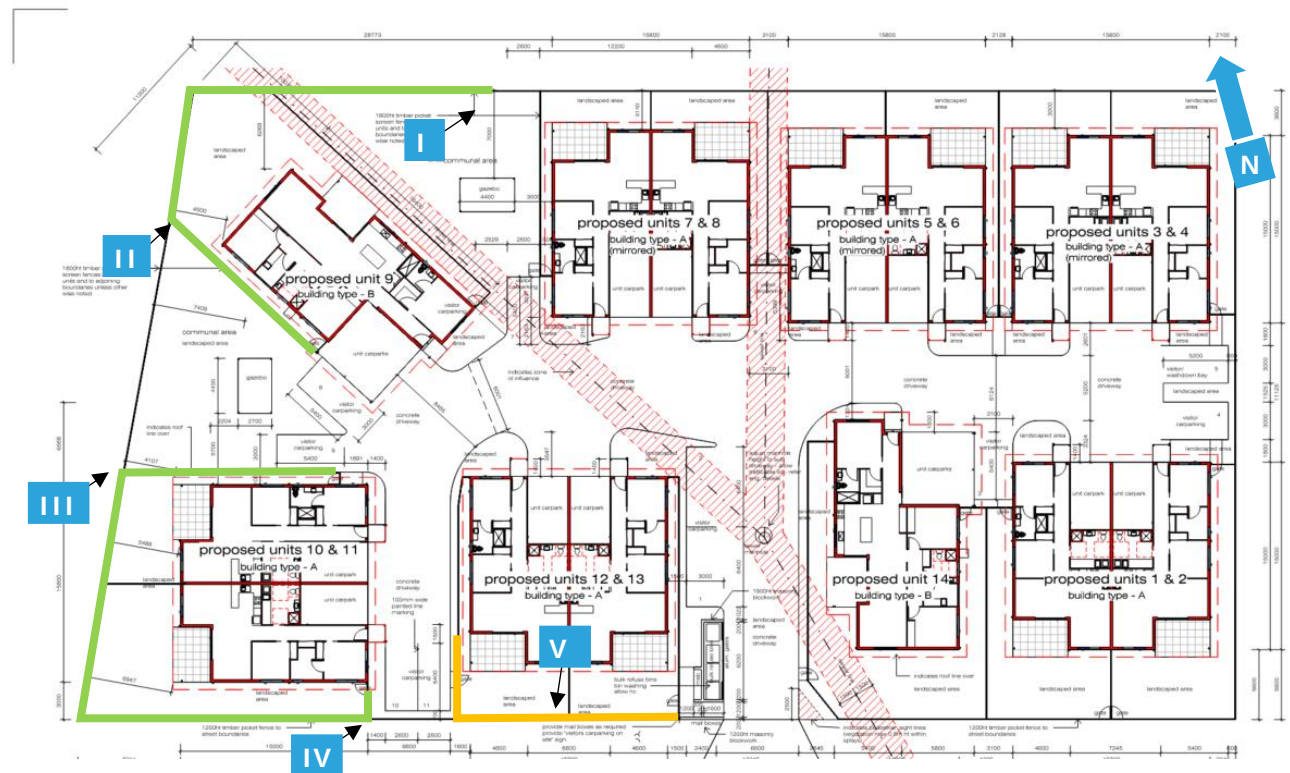
8. Recommendations

8.1 Acoustic Barriers

Acoustic barriers are recommended to be constructed along the passive recreational boundaries of units 9-13 as shown in Figure 7. The barriers are recommended to be built to a height of 2.4 metres for units 9-11 and 1.8m for units 12 and 13 above the finished recreational level or boundary level (whichever is higher).

The barrier shall be constructed using materials that achieve a minimum surface density of 15kg/m². The barriers shall be constructed in accordance with Main Roads Standard Specification MRTS15 "Noise Fences". The barrier shall be free of gaps and holes.

Figure 7: TMR Acoustic Barriers



- Acoustic barrier 2.4m high above finished recreational level or ground level (whichever is higher)
- Acoustic barrier 1.8m high above finished recreational level or ground level (whichever is higher)

Table 14: Recommended Acoustic Barrier Height

Reference Point	Approximate Finished Recreational Level RL	Recommended Barrier Height (m)	Approximate Finished Top Barrier Level RL
I	3.27	2.4	5.7
II	3.00	2.4	5.4
III	3.00	2.4	5.4
IV	3.00	2.4	5.4
V	3.00	1.8	4.8

8.1.1 Glazing

The minimum glazing treatments are required to comply with the following:

- The minimum glass thickness specified shall not be reduced regardless of the R_w performance of the glass unless the glazier can provide a specific (non-generic) NATA Test report proving the proposed glazing system complies (the test report must be based on the same configuration proposed for the development). Note an estimation or calculated performance will not be accepted.
- If compliance cannot be achieved with the minimum R_w ratings, the glazing system shall be upgraded until compliance is achieved.
- Glazing specified with acoustic seals requires a seal that has been tested with a glazing system or door to achieve an R_w rating in accordance with AS/NZS ISO 717.1 (Q-Ion seals or an equivalent product), mohair seals are not acceptable.
- The glazier shall provide NATA test reports on request to verify compliance with the minimum R_w ratings. Generic reports are not acceptable.
- Living areas are defined as habitable rooms other than bedrooms (excluding garages, kitchens, bathrooms & hallways).

Table 15: Required façade acoustic ratings

Unit	Floor	Room	QDC Noise Category	QDC R_w Ratings			QDC Glazing Minimum Construction Requirements	Acoustic seals
				Wall	Roof	Glazing		
U1	GF	Bed 1	0	-	-	-	Standard	no
U1	GF	Bed 2	0	-	-	-	Standard	no
U1	GF	Living/kitchen/dining	0	-	-	-	Standard	no
U2	GF	Bed 1	0	-	-	-	Standard	no
U2	GF	Bed 2	0	-	-	-	Standard	no
U2	GF	Living/kitchen/dining	0	-	-	-	Standard	no
U3	GF	Bed 1	0	-	-	-	Standard	no
U3	GF	Bed 2	0	-	-	-	Standard	no
U3	GF	Living/kitchen/dining	0	-	-	-	Standard	no
U4	GF	Bed 1	0	-	-	-	Standard	no
U4	GF	Bed 2	0	-	-	-	Standard	no
U4	GF	Living/kitchen/dining	0	-	-	-	Standard	no
U5	GF	Bed 1	0	-	-	-	Standard	no
U5	GF	Bed 2	0	-	-	-	Standard	no
U5	GF	Living/kitchen/dining	0	-	-	-	Standard	no
U6	GF	Bed 1	0	-	-	-	Standard	no
U6	GF	Bed 2	0	-	-	-	Standard	no
U6	GF	Living/kitchen/dining	0	-	-	-	Standard	no
U7	GF	Bed 1	0	-	-	-	Standard	no
U7	GF	Bed 2	0	-	-	-	Standard	no
U7	GF	Living/kitchen/dining	0	-	-	-	Standard	no
U8	GF	Bed 1	0	-	-	-	Standard	no
U8	GF	Bed 2	0	-	-	-	Standard	no
U8	GF	Living/kitchen/dining	0	-	-	-	Standard	no
U9	GF	Bed 1	0	-	-	-	Standard	no
U9	GF	Bed 2	1	-	-	-	Standard	no
U9	GF	Bed 3	1	35	35	27	4mm float	yes
U9	GF	Living/kitchen/dining	1	35	35	27	4mm float	yes
U10	GF	Bed 1	0	-	-	-	Standard	no
U10	GF	Bed 2	0	-	-	-	Standard	no

Unit	Floor	Room	QDC Noise Category	QDC Rw Ratings			QDC Glazing	Acoustic seals
				Wall	Roof	Glazing	Minimum Construction Requirements	
U10	GF	Living/kitchen/dining	1	35	35	27	4mm float	yes
U11	GF	Bed 1	0	-	-	-	Standard	no
U11	GF	Bed 2	0	-	-	-	Standard	no
U11	GF	Living/kitchen/dining	1	35	35	27	4mm float	yes
U12	GF	Bed 1	1	35	35	27	4mm float	yes
U12	GF	Bed 2	0	-	-	-	Standard	no
U12	GF	Living/kitchen/dining	0	-	-	-	Standard	no
U13	GF	Bed 1	0	-	-	-	Standard	no
U13	GF	Bed 2	0	-	-	-	Standard	no
U13	GF	Living/kitchen/dining	0	-	-	-	Standard	no
U14	GF	Bed 1	0	-	-	-	Standard	no
U14	GF	Bed 2	0	-	-	-	Standard	no
U14	GF	Bed 3	0	-	-	-	Standard	no
U14	GF	Living/kitchen/dining	0	-	-	-	Standard	no

Any locations not identified in Table 15 shall require standard construction, with minimum 4mm float for windows (minimum Rw 22) and 4mm toughened for sliding doors (minimum Rw 23).

8.1.2 Alternative Ventilation

To achieve the required internal noise levels, it would be necessary to close the façade doors and windows. Therefore, all areas nominated in Table 15 may require the provision for ventilation. To achieve this, mechanically assisted ventilation or air conditioning can be used provided that the system is acceptable to a qualified mechanical engineer or contractor.

Penetrations through the wall or ceiling shall not reduce the overall acoustic performance of the installed system.

8.1.3 Wall Construction

The wall construction recommendations from QDC MP4.4 are included in the table below. Note that these are not the only allowable methods of construction for the development, and alternative constructions to achieve the required Rw ratings may also be provided.

Table 16: QDC typical wall construction

QDC Noise Category	Wall Rw	QDC Acceptable forms of construction
1	35	Single leaf of clay brick masonry at least 110mm thick with: (i) a row of at least 70mm x 35mm timber studs or 64mm steel studs at 600mm centres, spaced at least 20mm from the masonry wall; and (ii) One layer of plasterboard at least 10mm thick fixed to outside face of studs OR Minimum 6mm thick fibre cement sheeting or weatherboards or plank cladding externally, minimum 90mm deep timber stud or 92mm metal stud, standard plasterboard at least 13mm thick internally.
0	N/A	Standard Construction

8.1.4 Roof/ceiling Construction

The roof/ceiling construction recommendations from QDC MP4.4 are included in the table below. Note that these are not the only allowable methods of construction for the development, and alternative constructions to achieve the required Rw ratings may also be provided.

Table 17: QDC typical roof construction

QDC Noise Category	Roof Rw	QDC Acceptable forms of construction
1	35	Concrete or terracotta tile or metal sheet roof with sarking, plasterboard ceiling at least 10mm thick fixed to ceiling cavity.
0	n/a	Standard Construction

9. Conclusion

A traffic noise assessment has been conducted for the proposed residential development to be located at 179 Francis Street, West End. On condition the recommendations in Section 8 are implemented, compliance is predicted with SDAP MP4.4 criteria.

If you should have any queries please do not hesitate to contact us.

Report Prepared by:



Kaitlyn Dawn

Acoustic Consultant

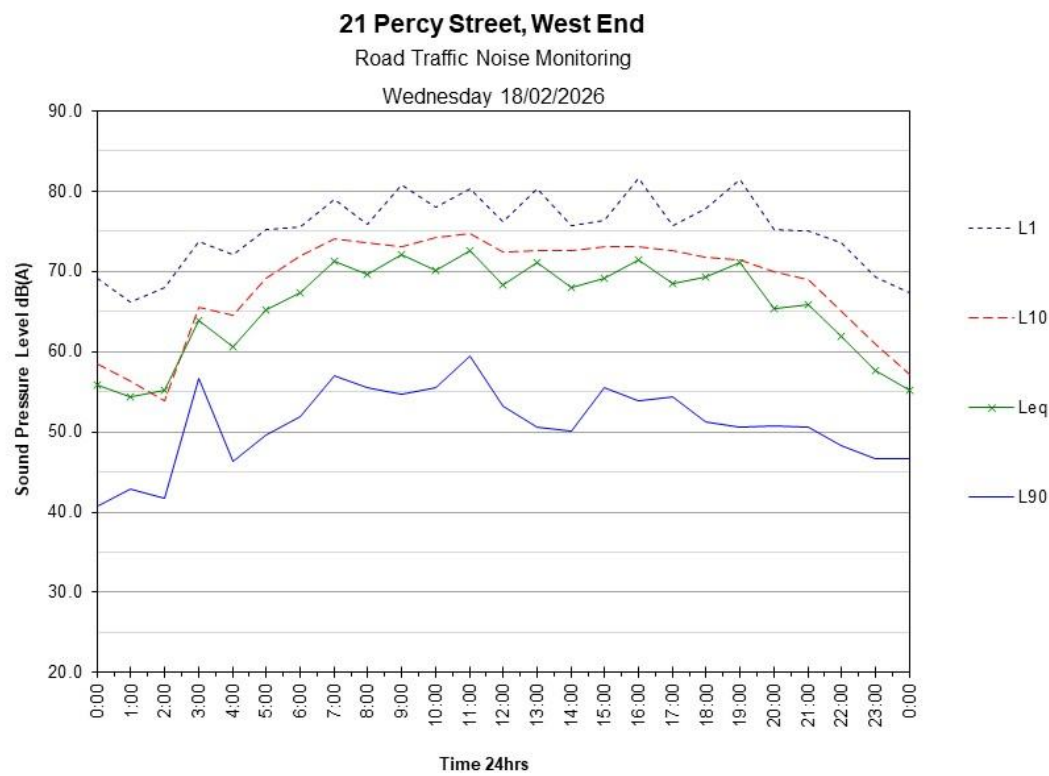
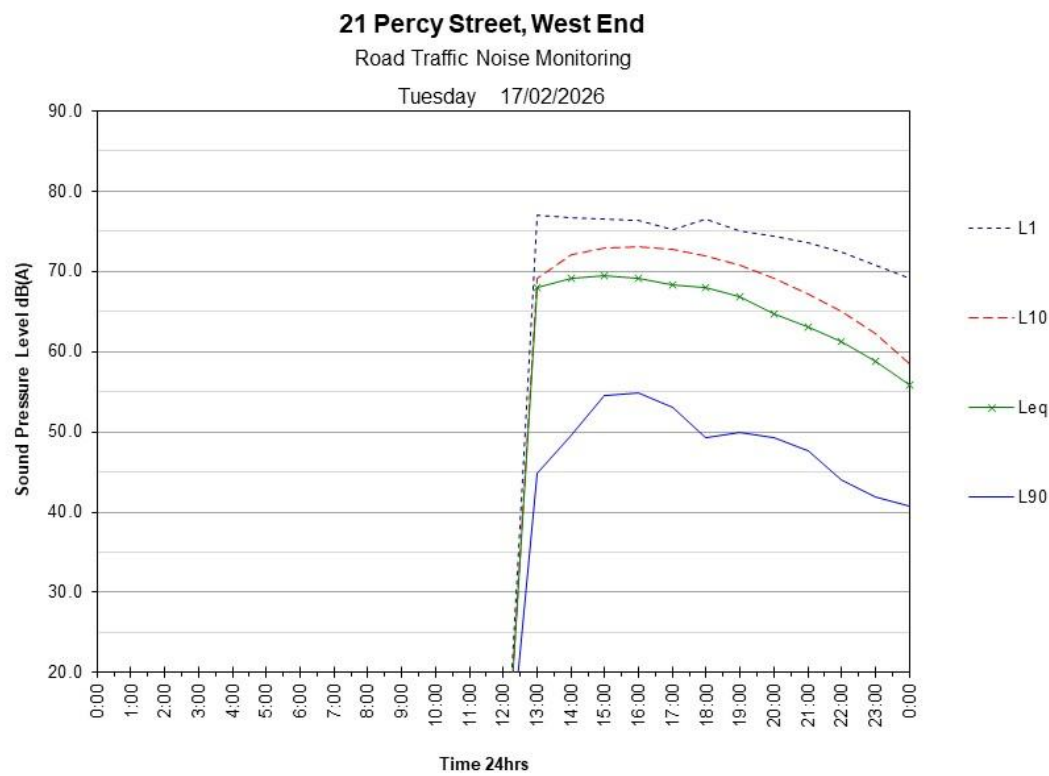
acousticworks)))

10. Appendices

10.1 Development Plans

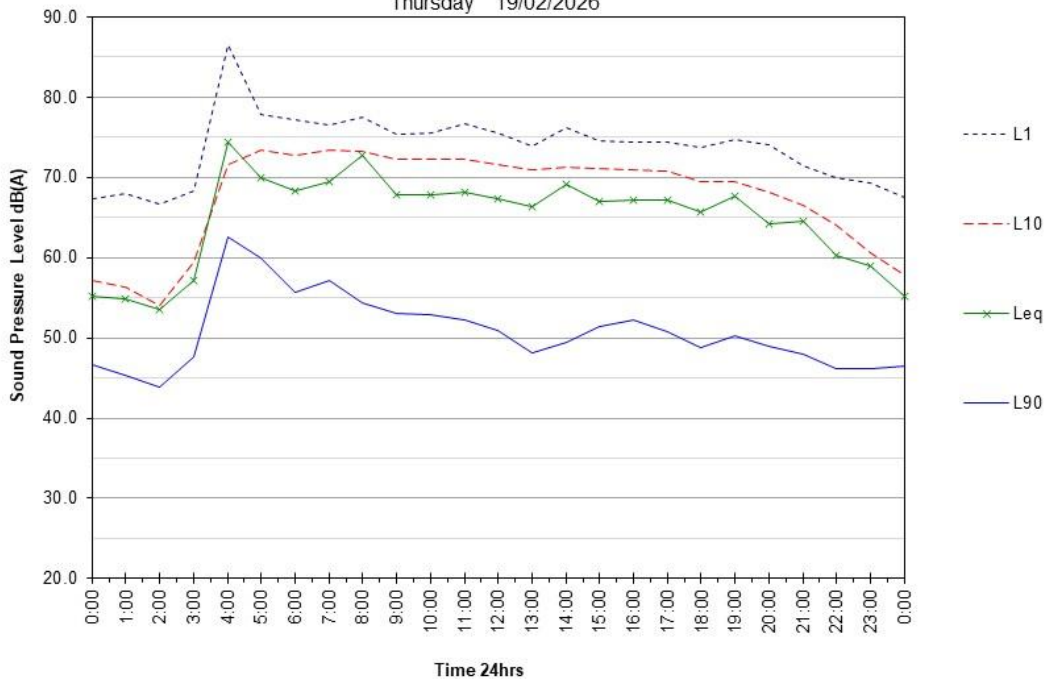


10.2 Noise Monitoring Charts
10.2.1 Road Traffic Noise Monitoring
10.2.1.1 Monitor 1



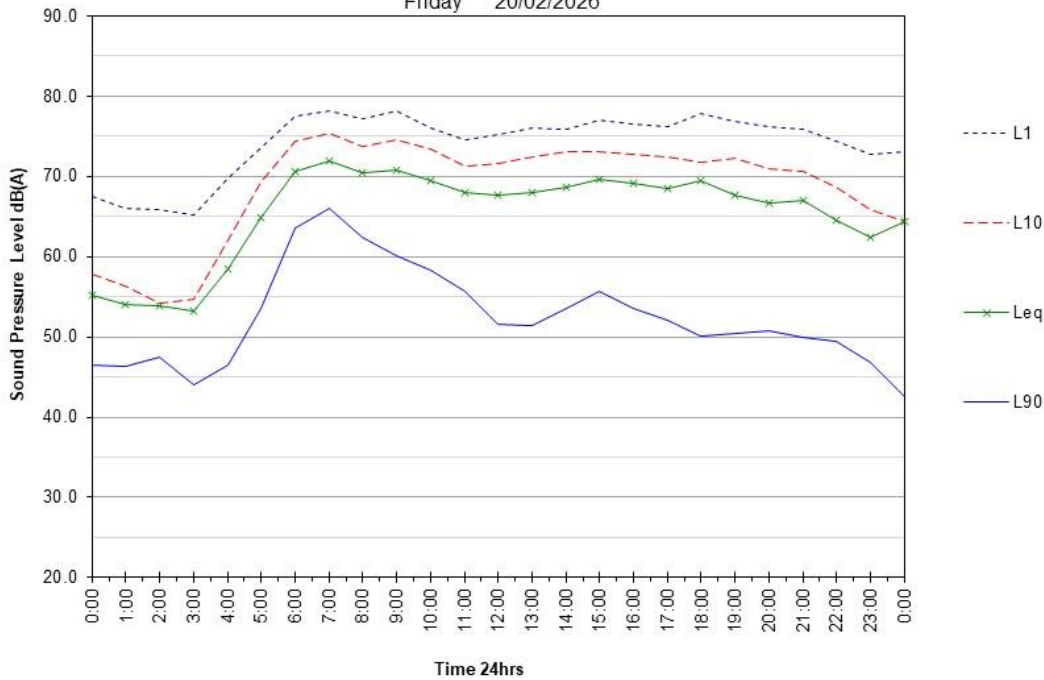
21 Percy Street, West End
Road Traffic Noise Monitoring

Thursday 19/02/2026



21 Percy Street, West End
Road Traffic Noise Monitoring

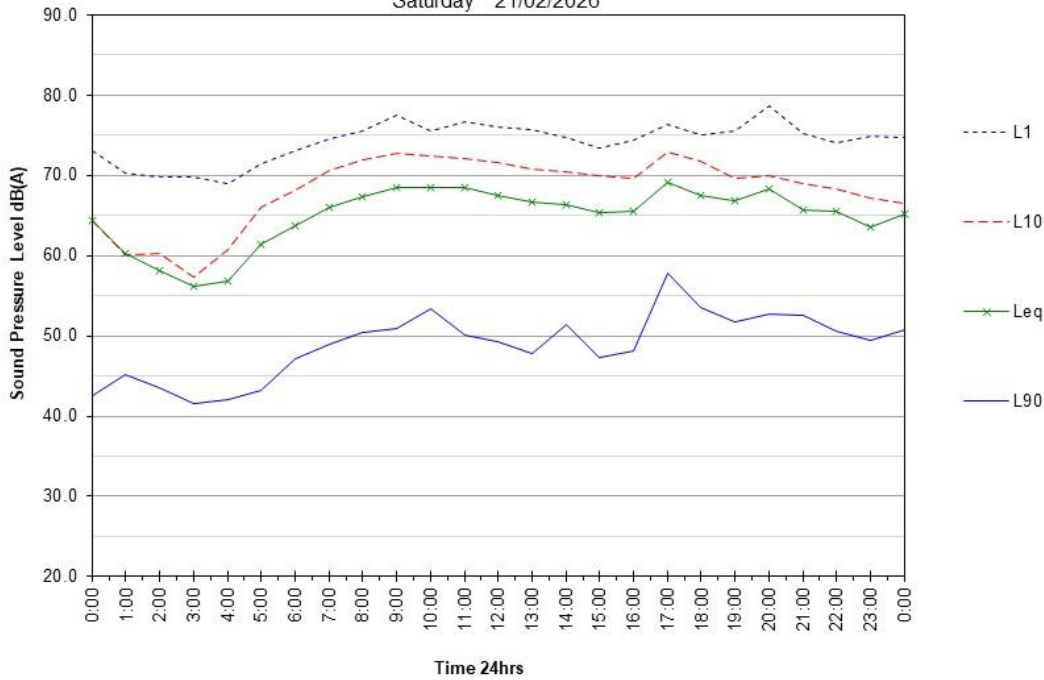
Friday 20/02/2026



21 Percy Street, West End

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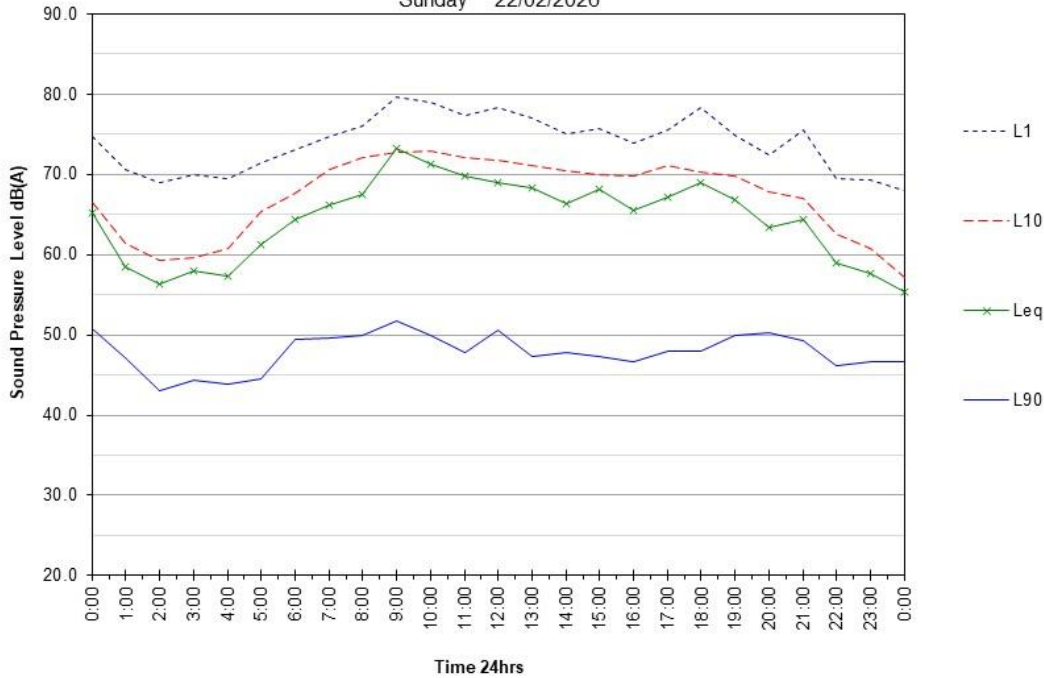
Saturday 21/02/2026



21 Percy Street, West End

Road Traffic Noise Monitoring

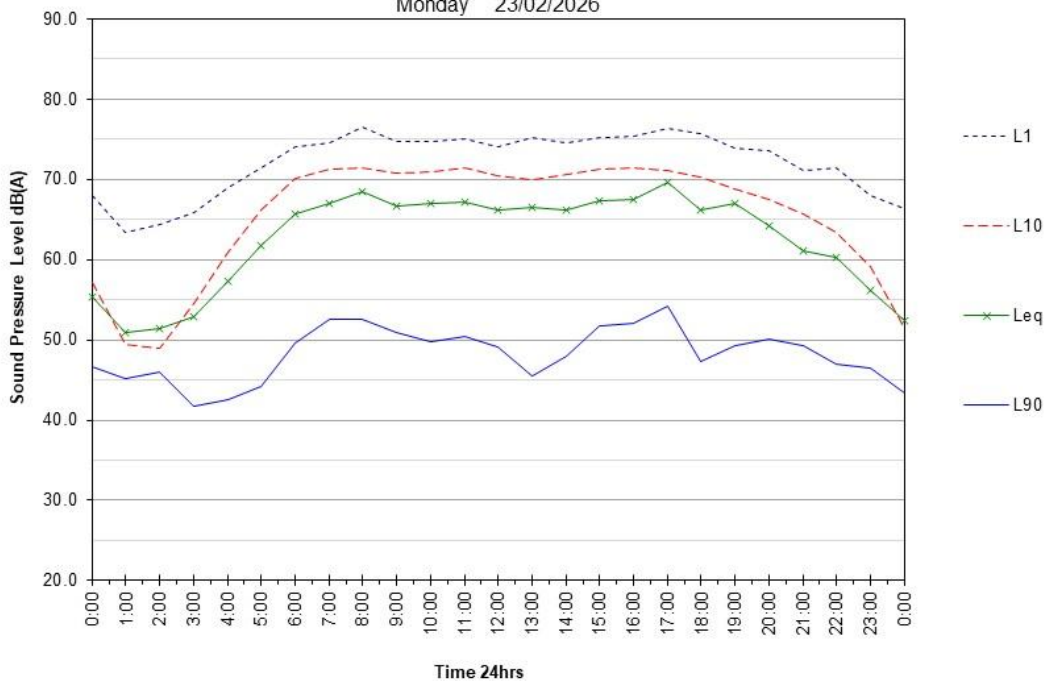
Sunday 22/02/2026



21 Percy Street, West End

Road Traffic Noise Monitoring

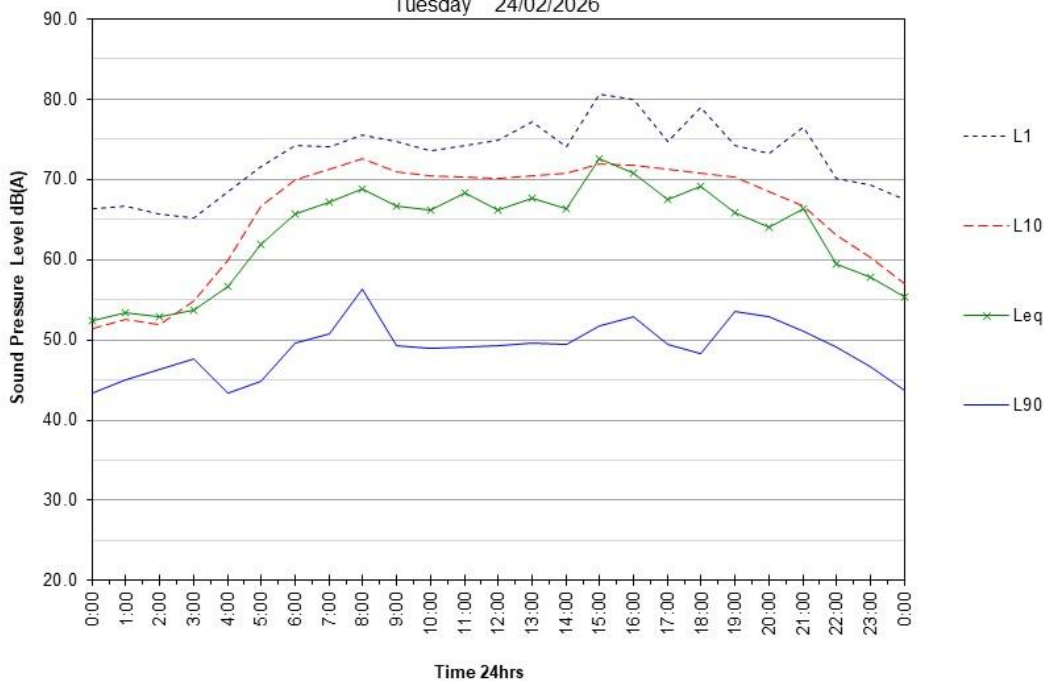
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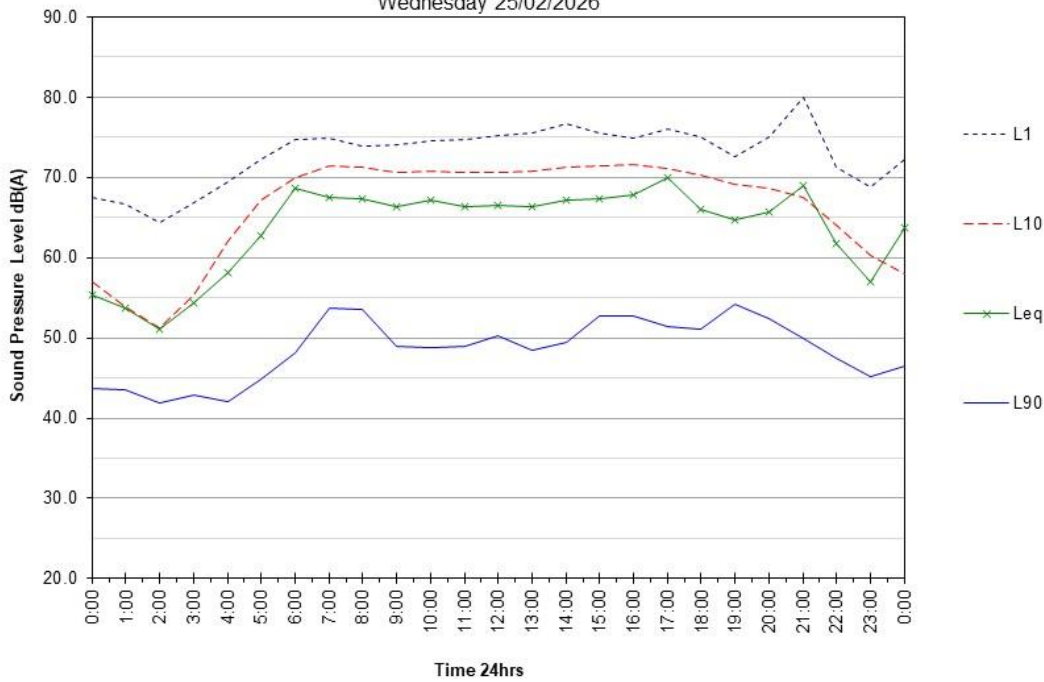
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Road Traffic Noise Monitoring

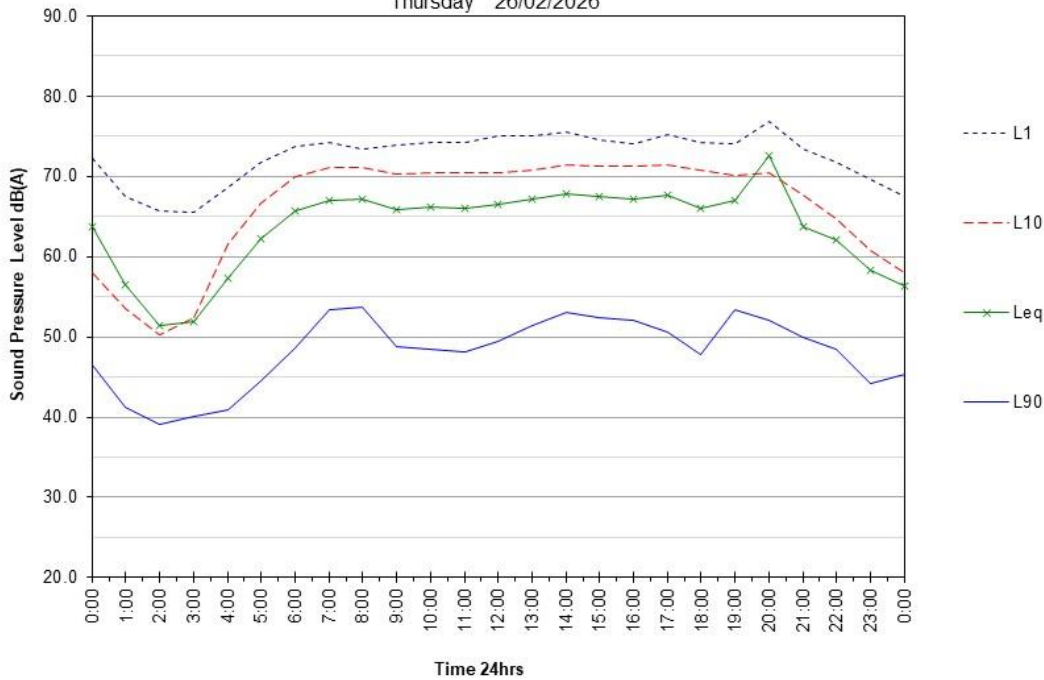
Tuesday 24/02/2026



21 Percy Street, West End
Road Traffic Noise Monitoring
Wednesday 25/02/2026



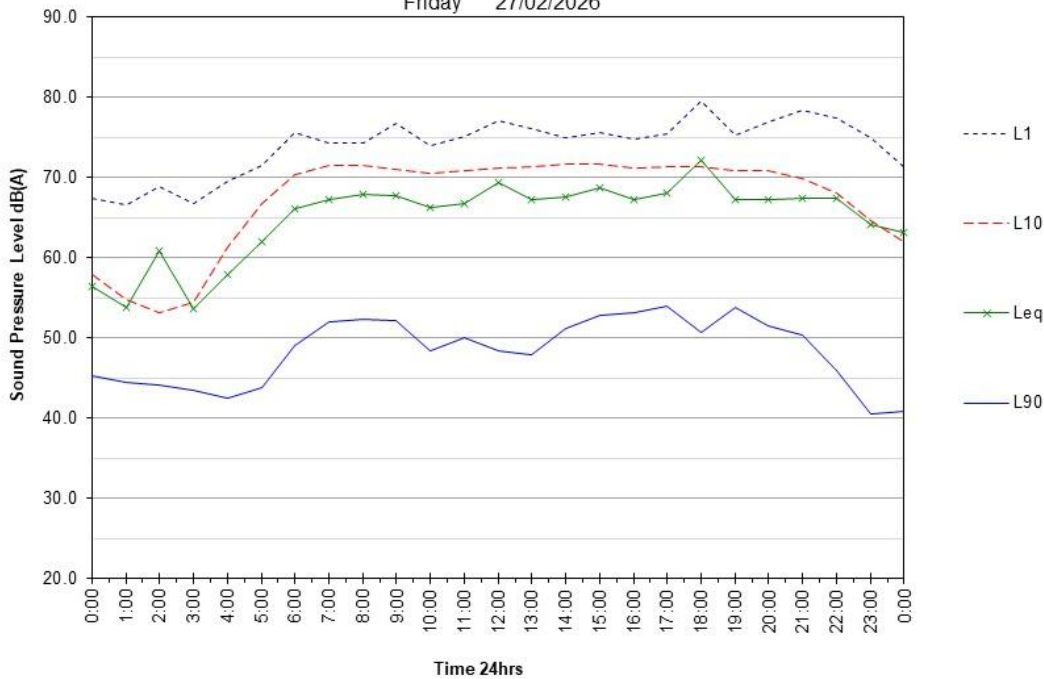
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Road Traffic Noise Monitoring
Thursday 26/02/2026



21 Percy Street, West End

Road Traffic Noise Monitoring

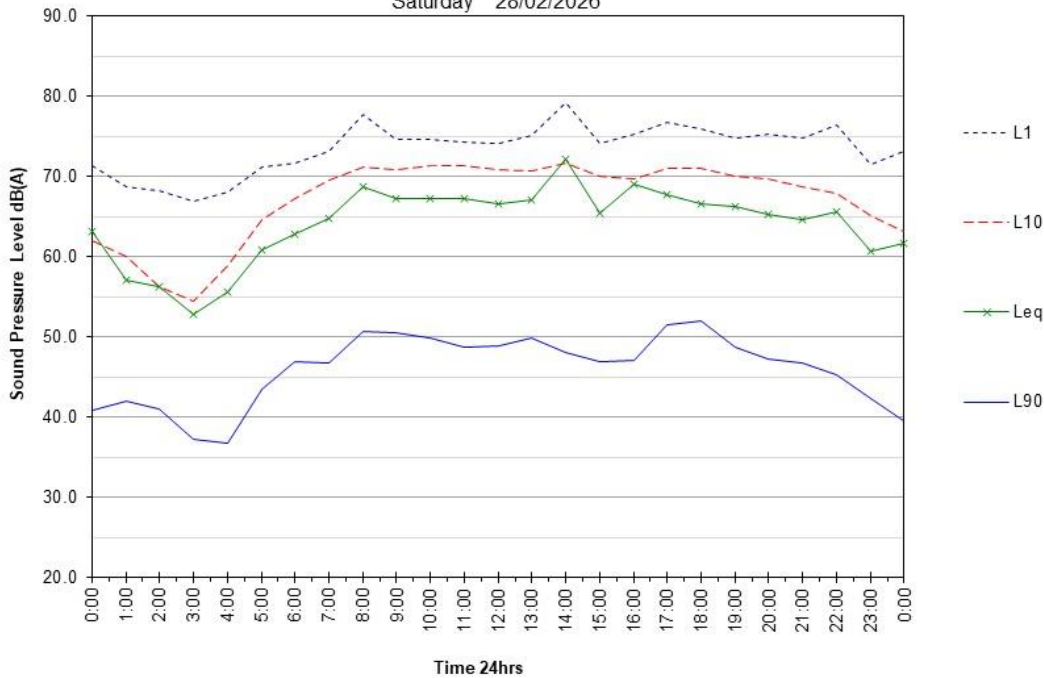
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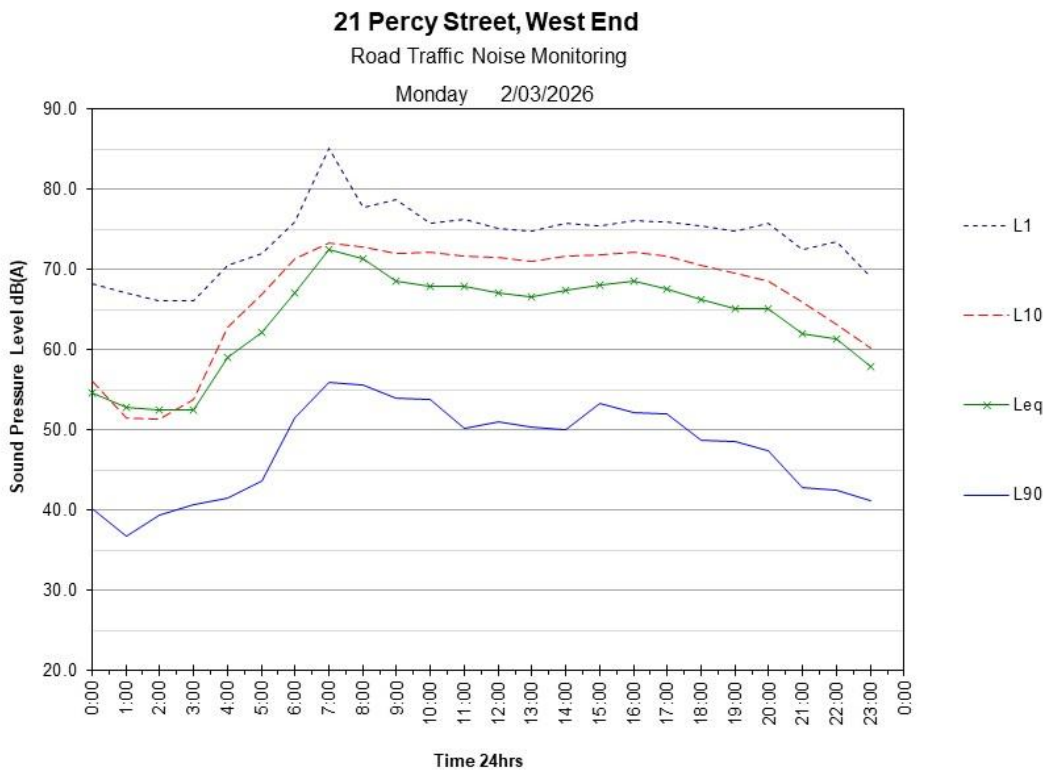
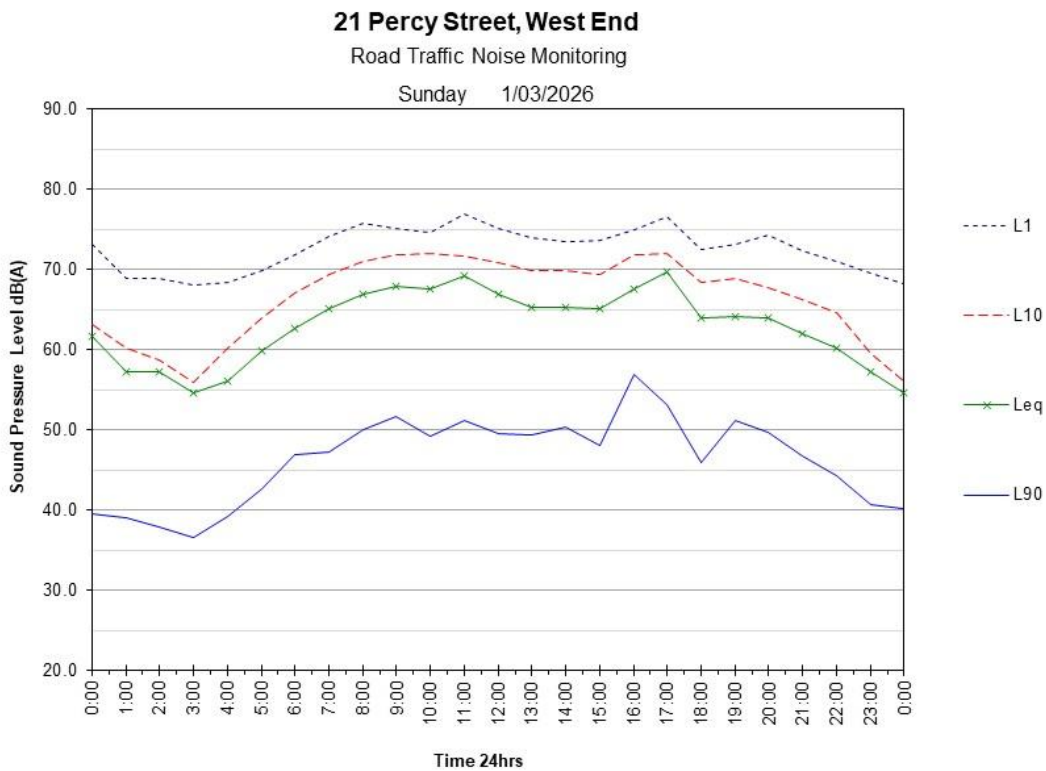


21 Percy Street, West End

Road Traffic Noise Monitoring

Saturday 28/02/2026

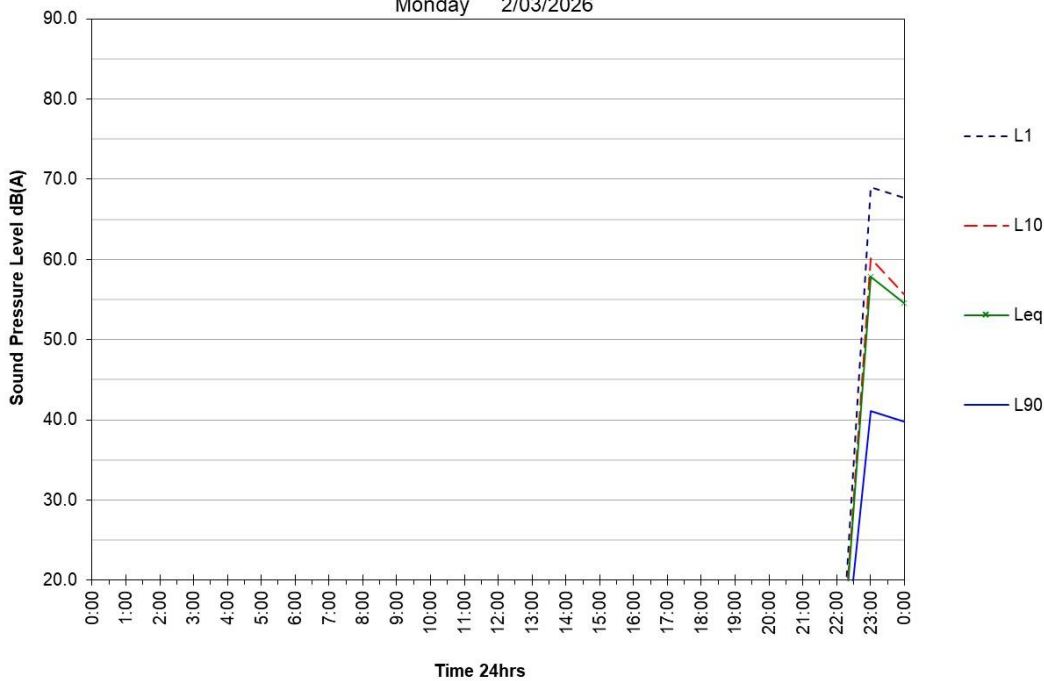




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Road Traffic Noise Monitoring

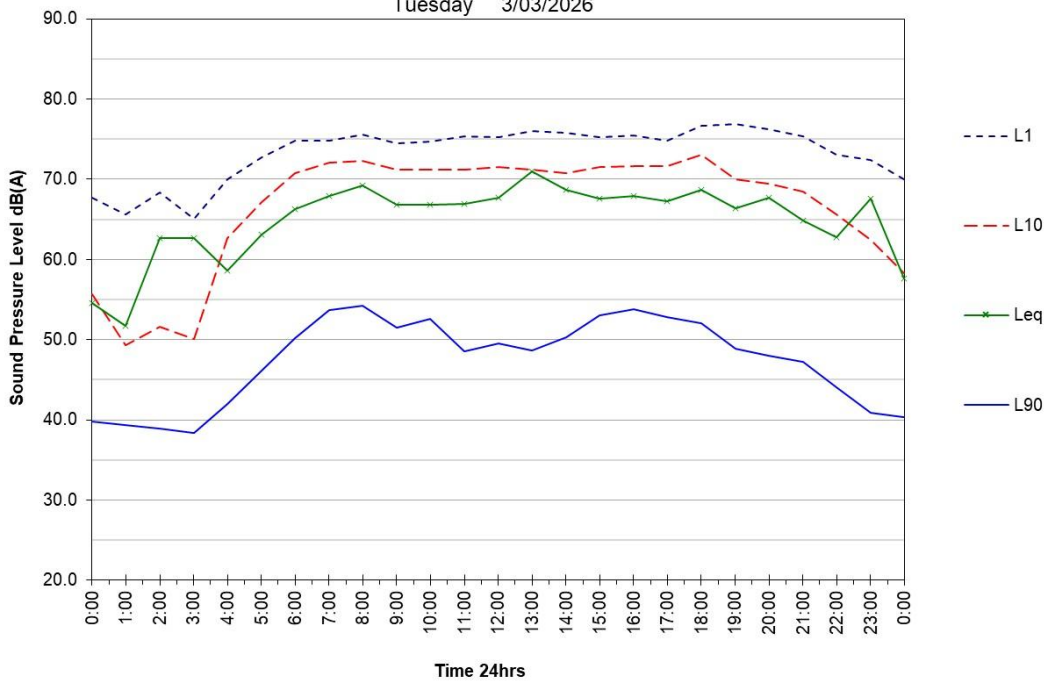
Monday 2/03/2026



21 Percy Street, West End

Road Traffic Noise Monitoring

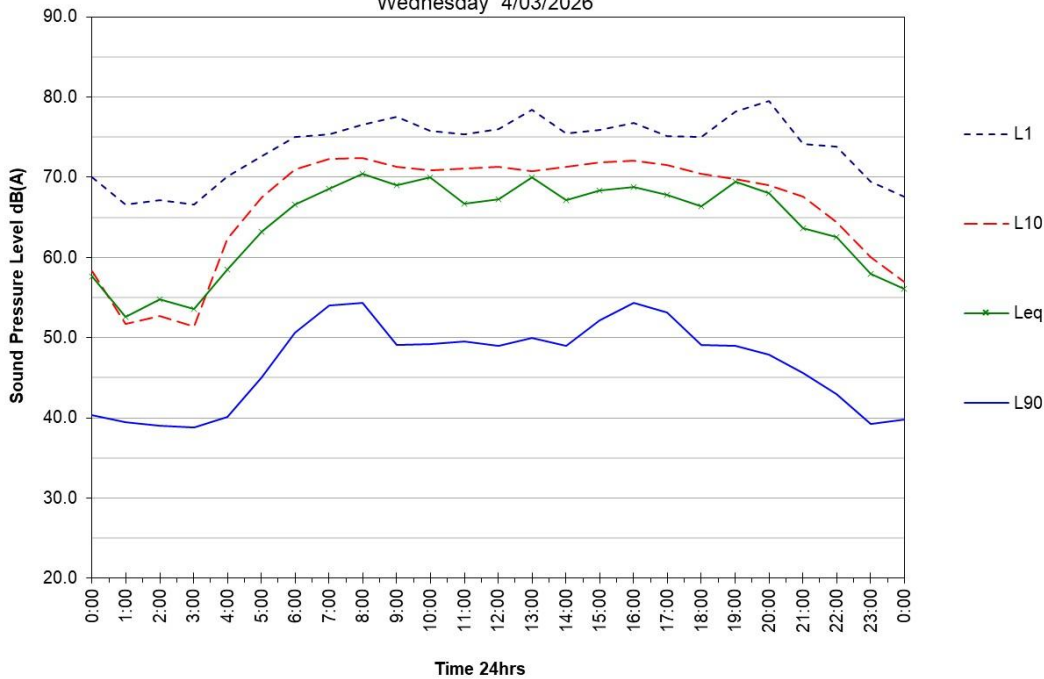
Tuesday 3/03/2026



21 Percy Street, West End

Road Traffic Noise Monitoring

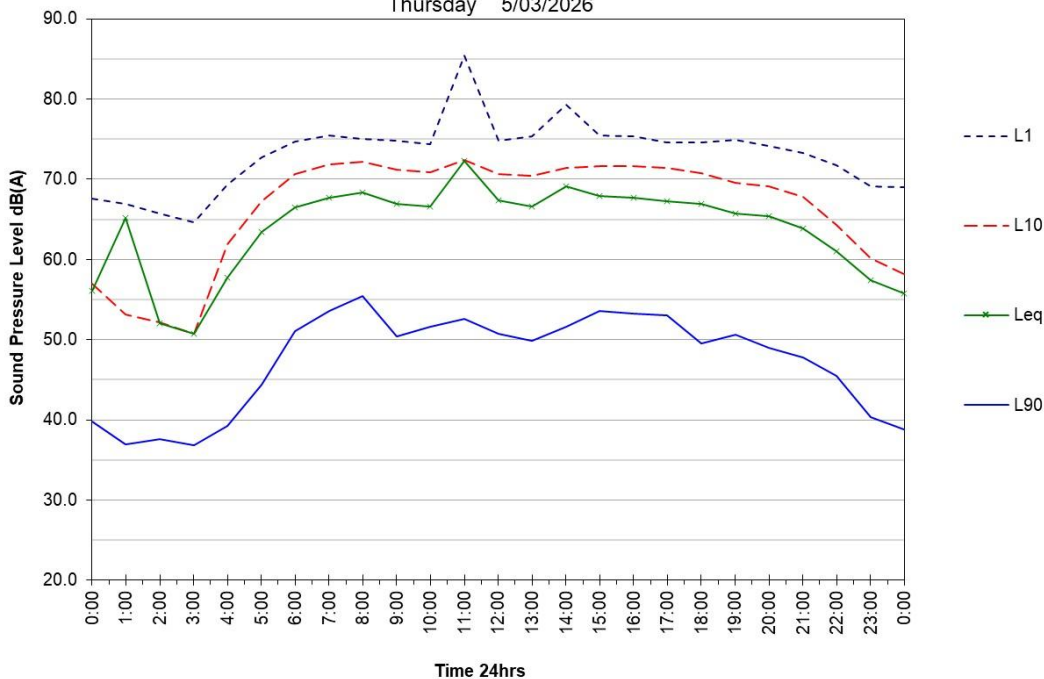
Wednesday 4/03/2026



21 Percy Street, West End

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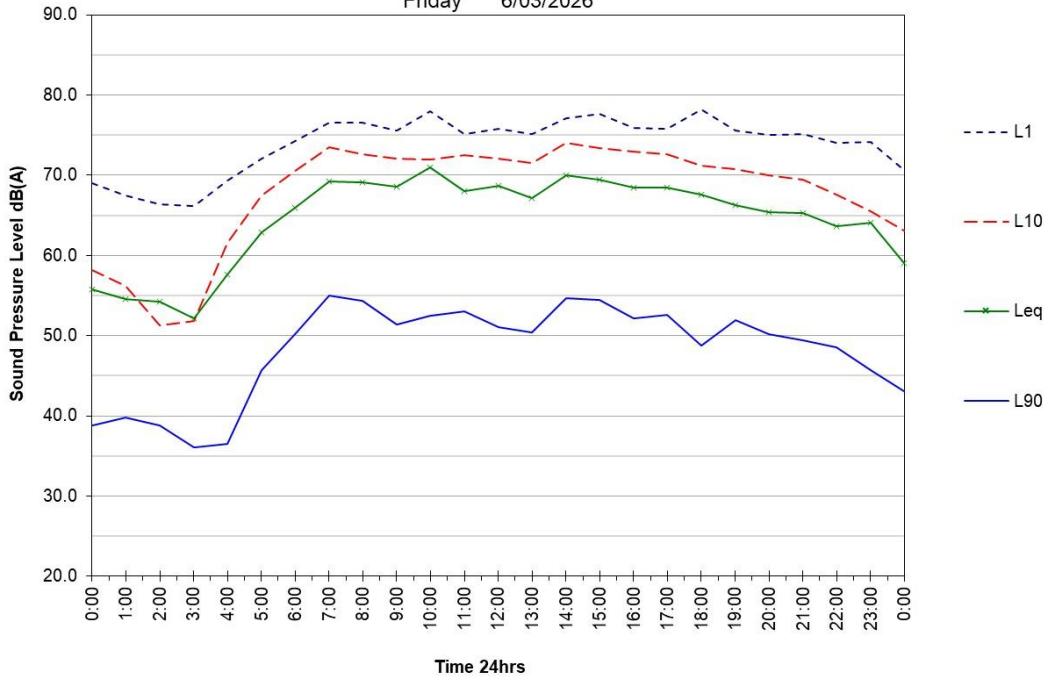
Thursday 5/03/2026



21 Percy Street, West End

Road Traffic Noise Monitoring

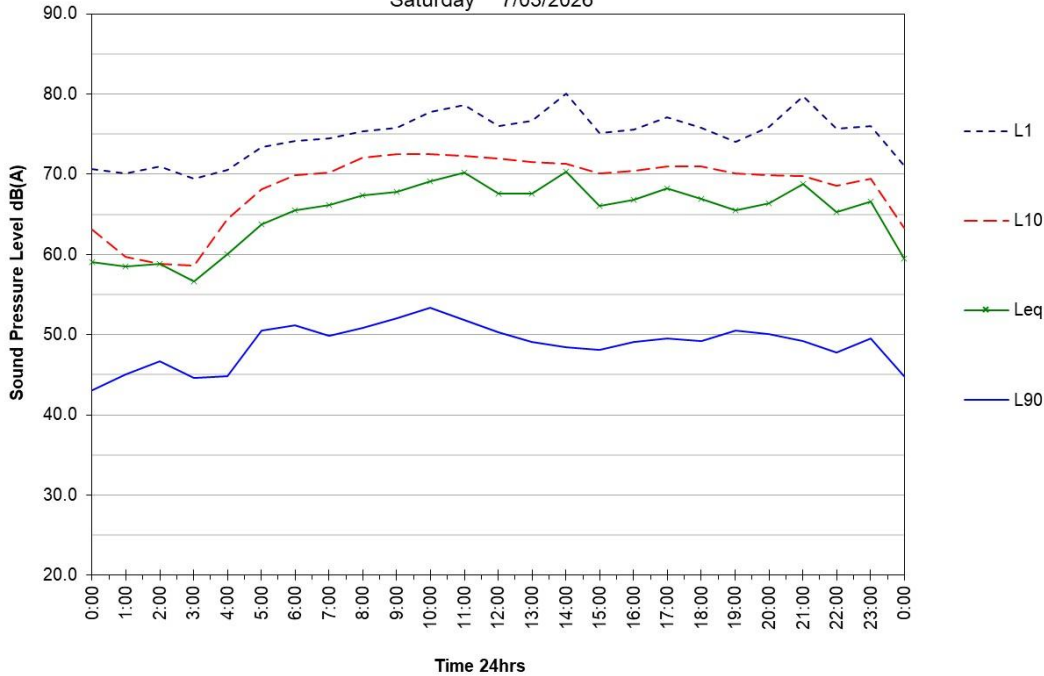
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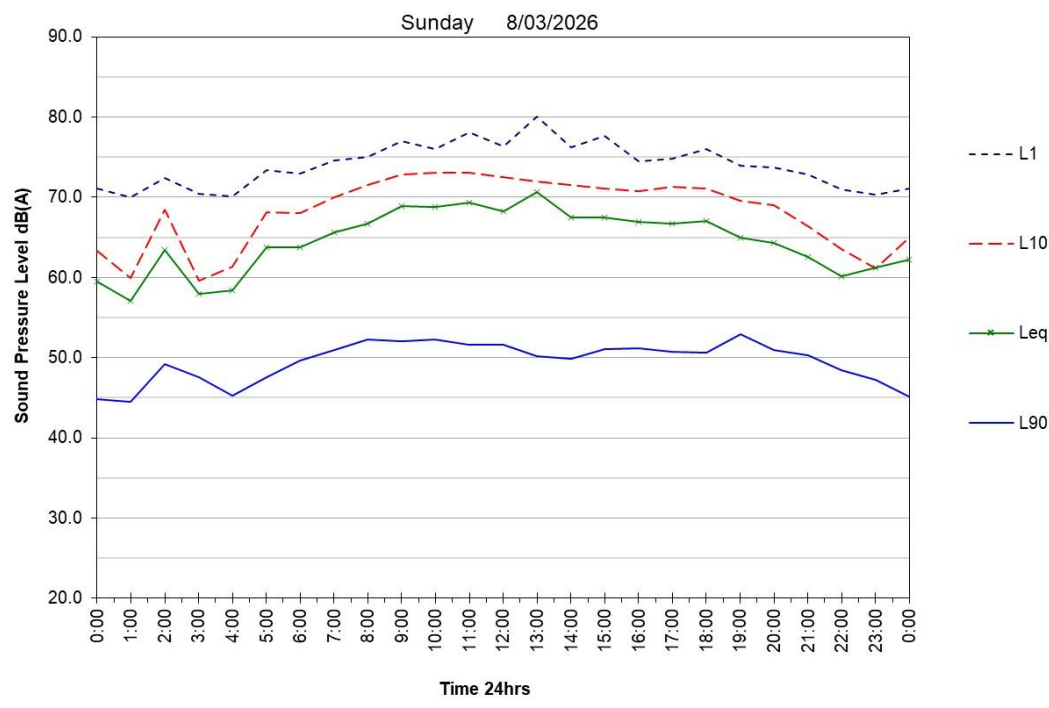
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Road Traffic Noise Monitoring

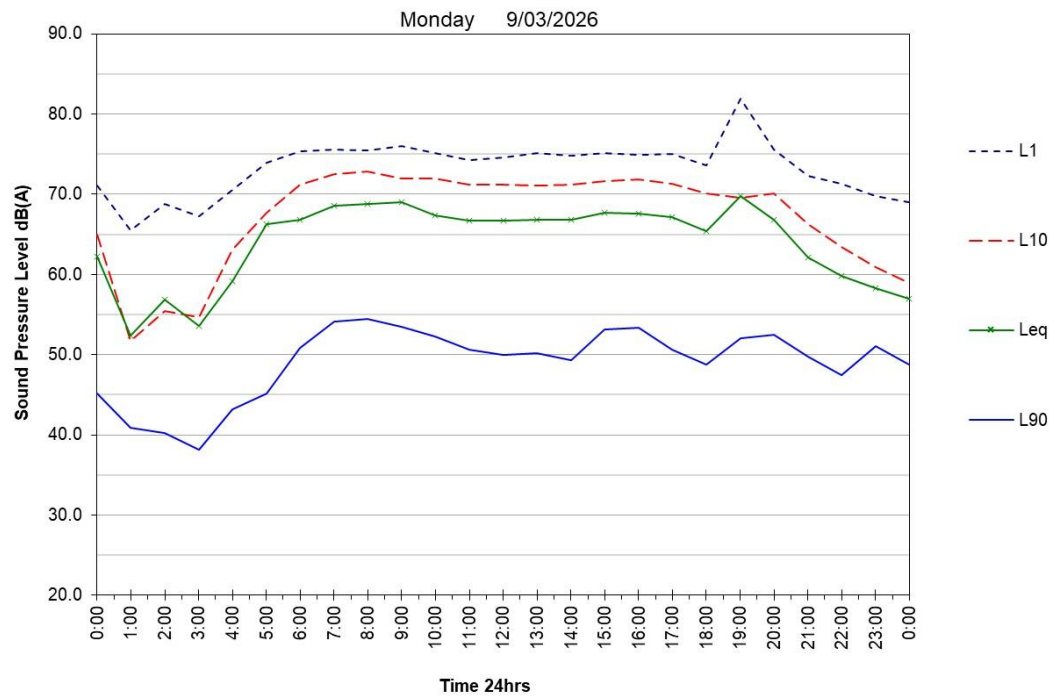
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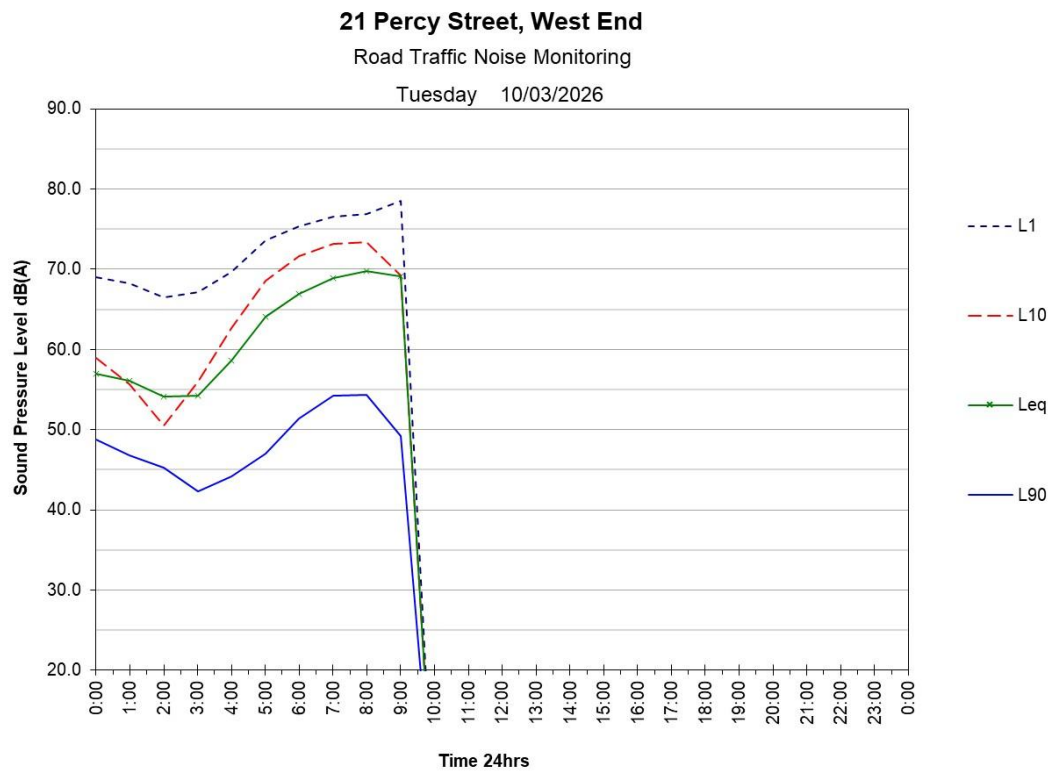


21 Percy Street, West End
Road Traffic Noise Monitoring

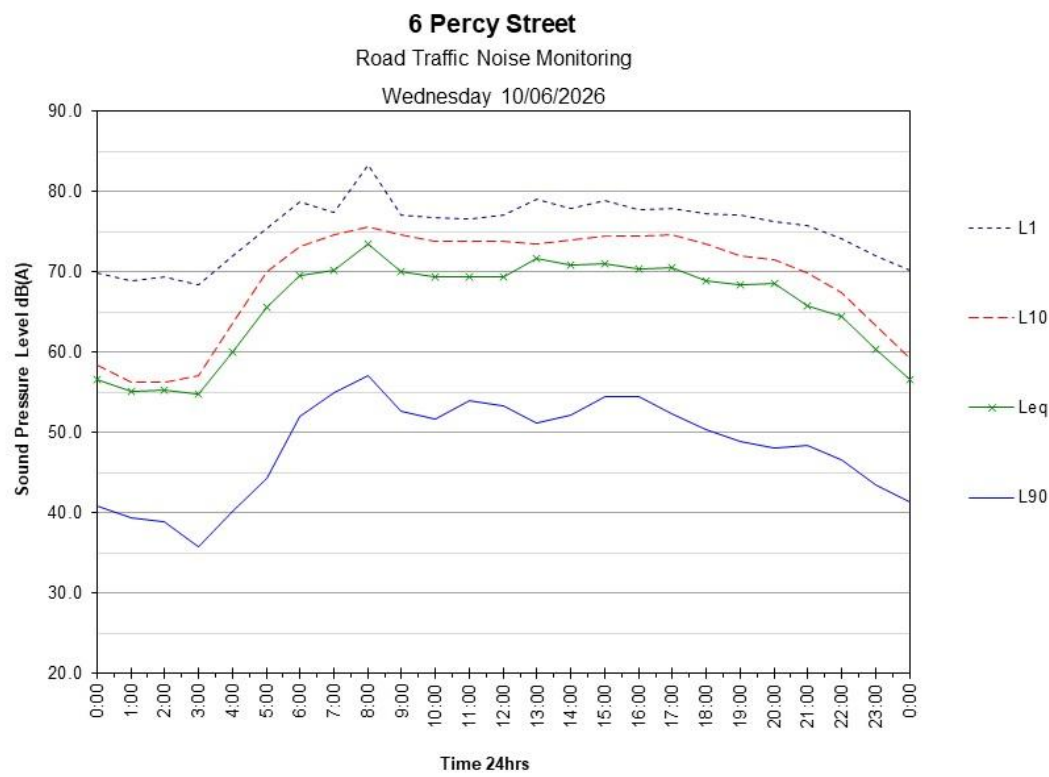
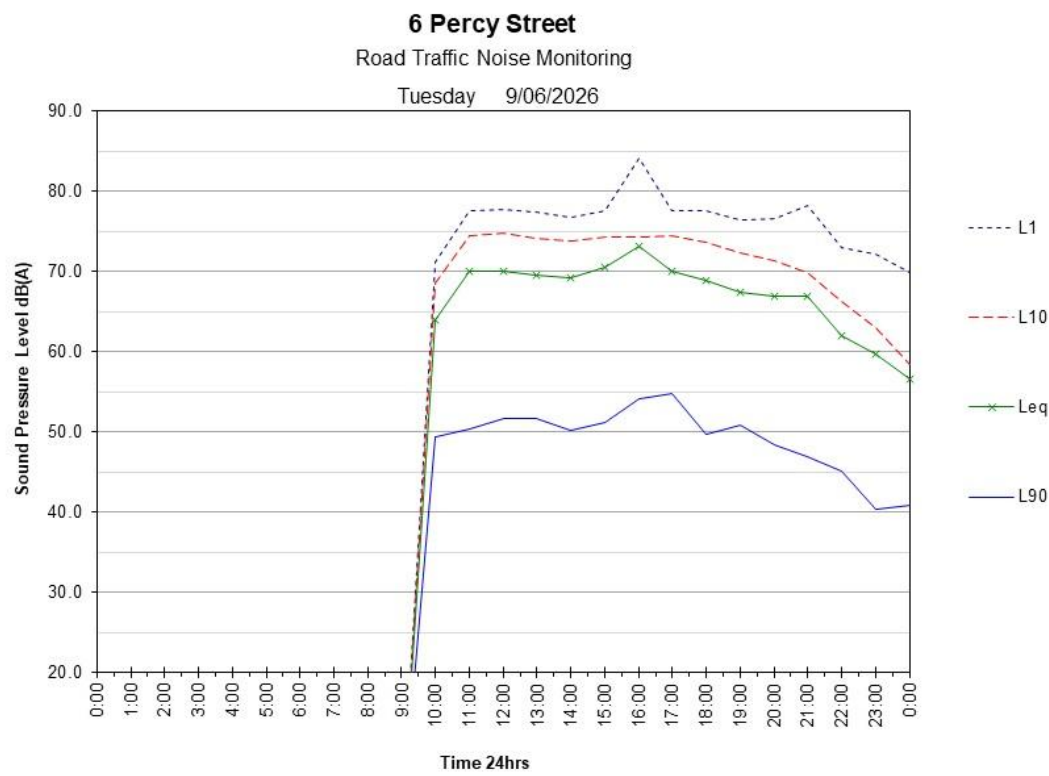


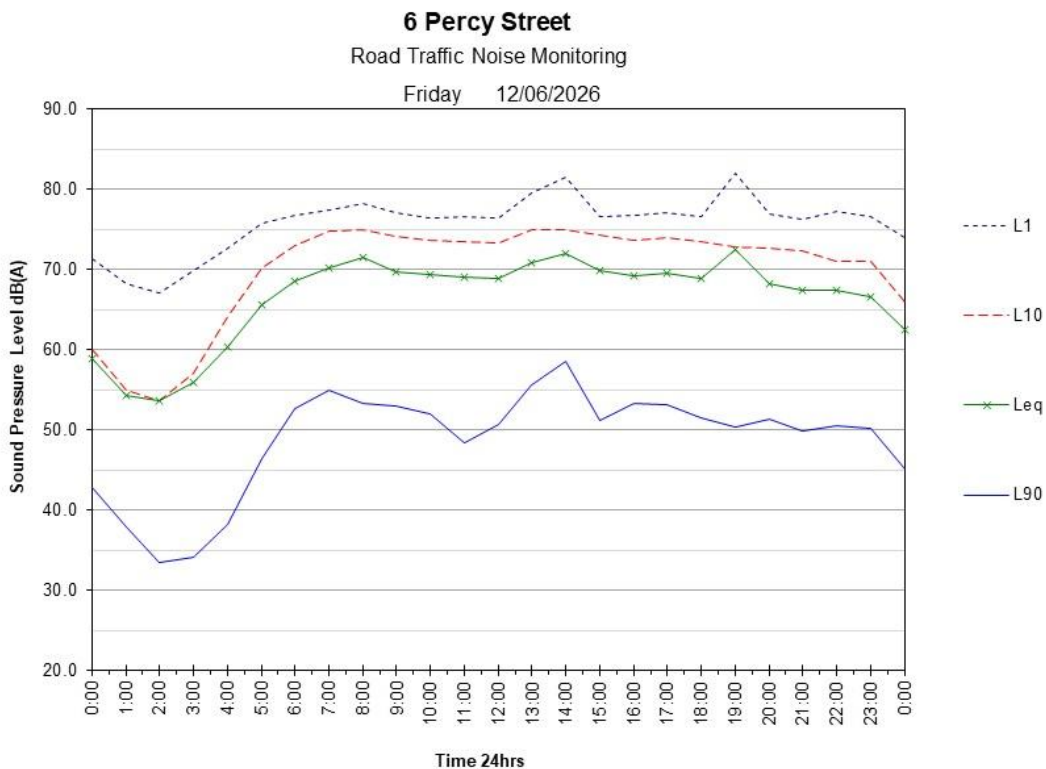
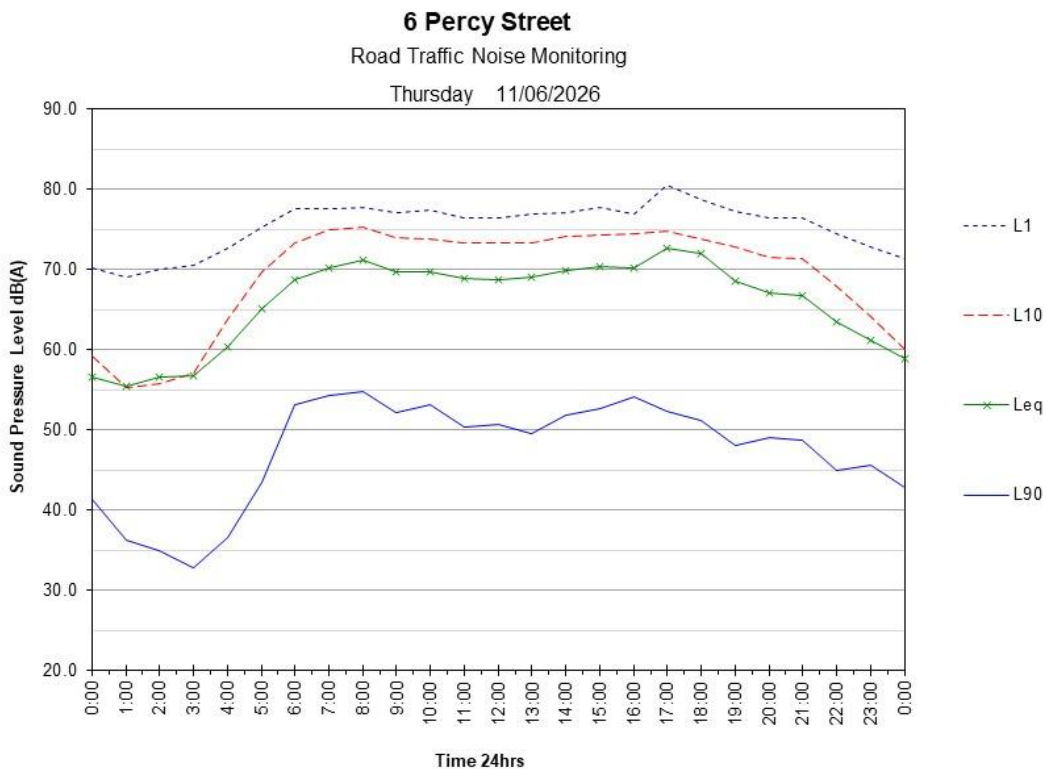
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Road Traffic Noise Monitoring

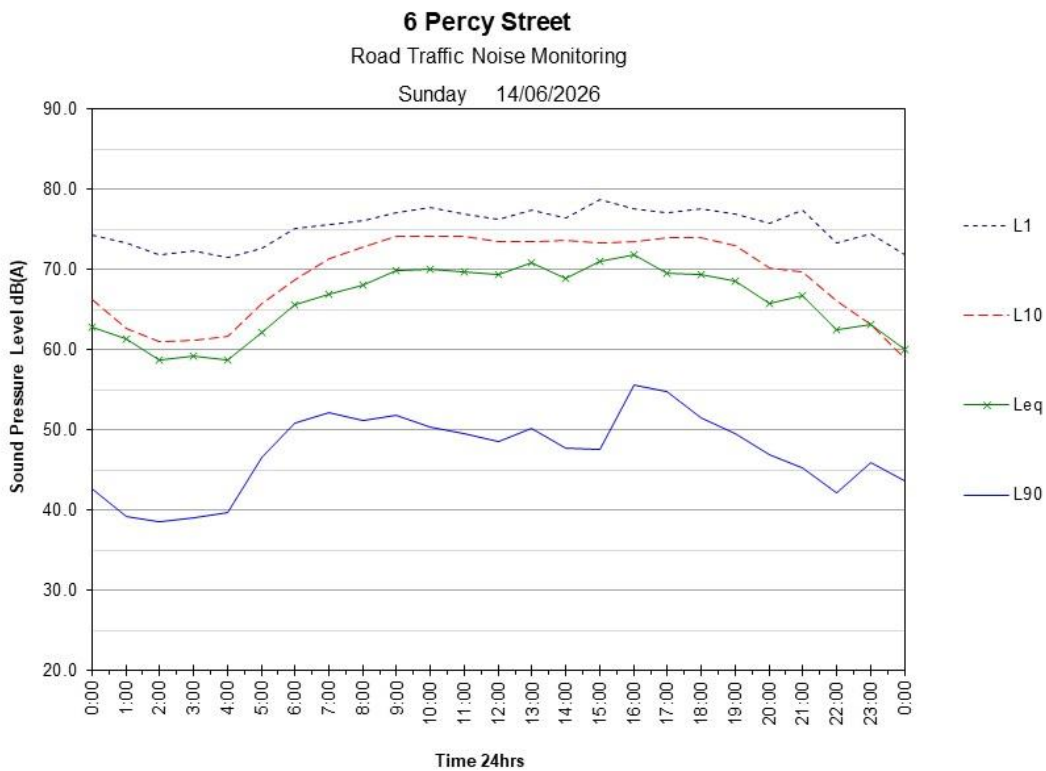
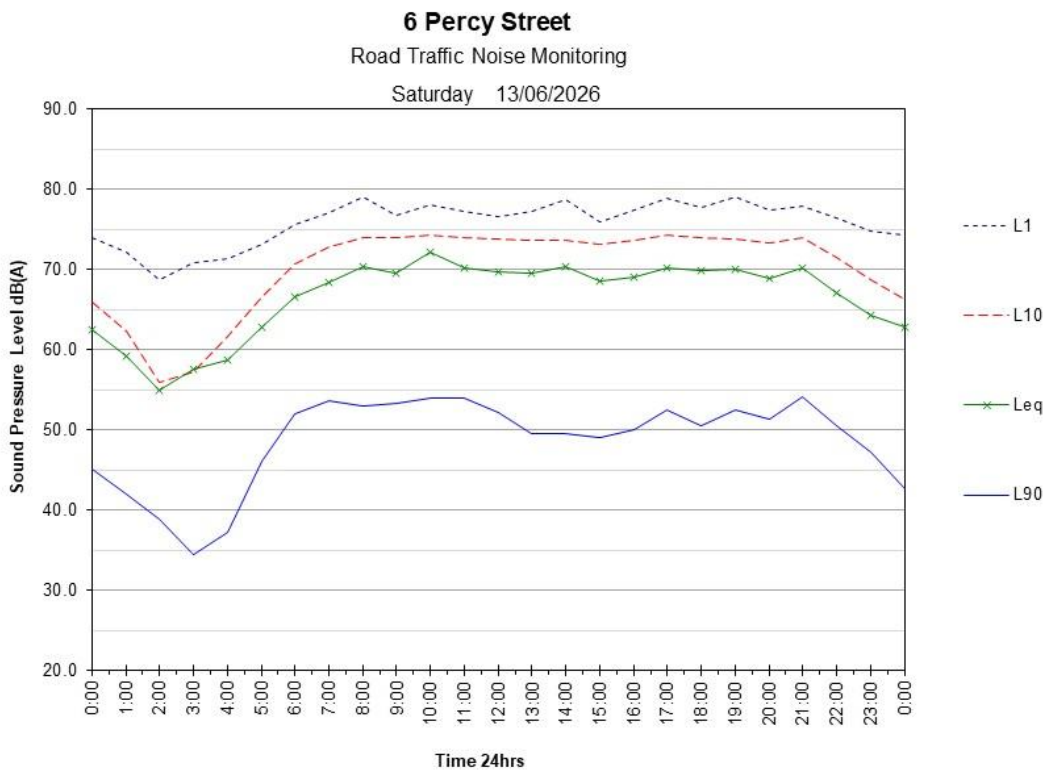


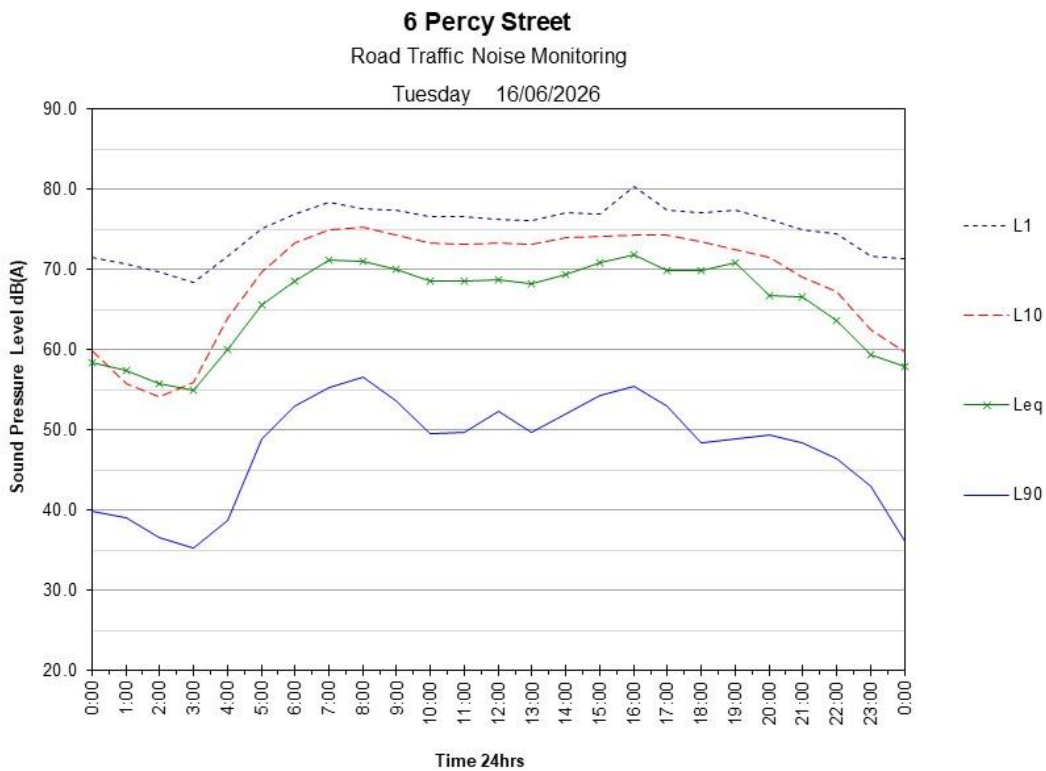
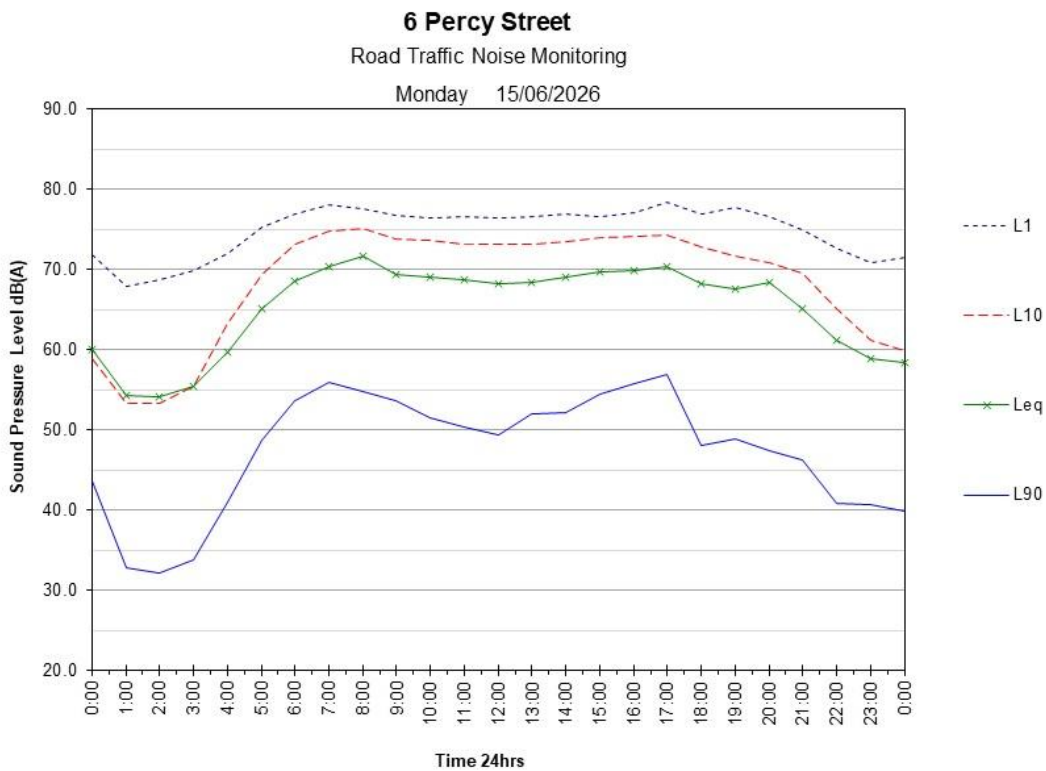


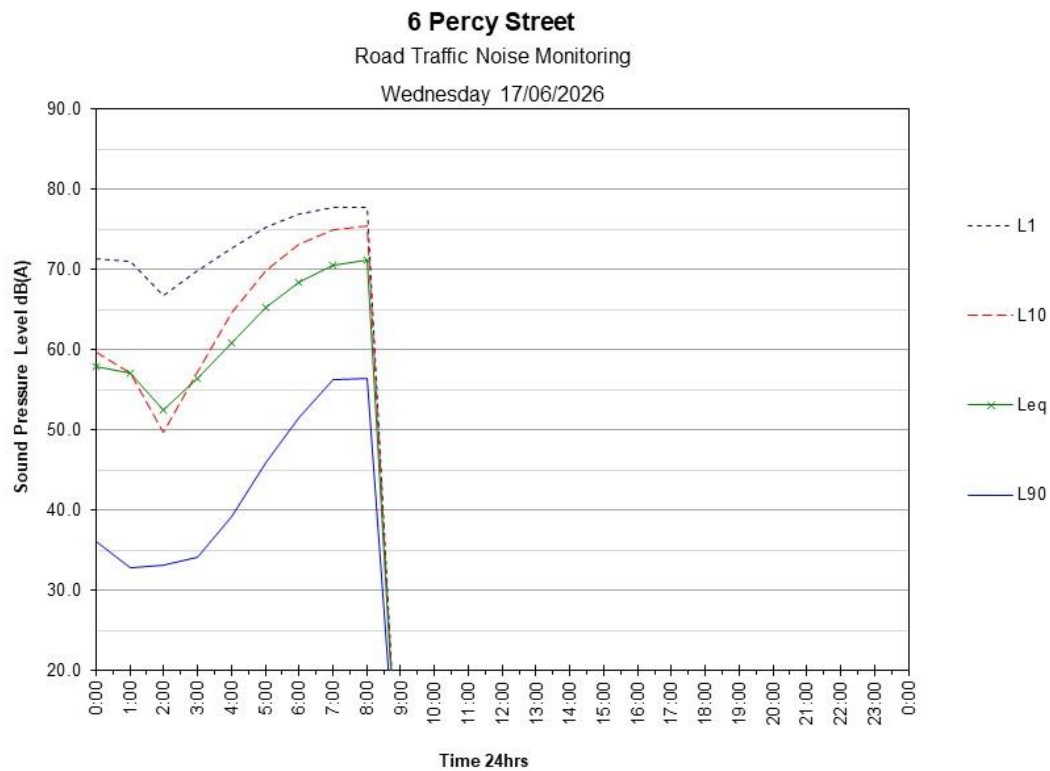
10.2.1.2 Monitor 2











ATTACHMENT 4

29 June 2026

Reference: 2026025 L01B 179 Francis Street, West End RTN -SARA IR.docx

The State Assessment and Referral Agency (SARA)
PO Box 5666
Townsville
QLD 4810

RE: 179 Francis Street, West End
Acoustic Response to Information Request 2605-52145 SRA

This letter is in response to a request by SARA for further information regarding the acoustic report prepared for a proposed residential development to be located at 179 Francis Street, West End. The acoustic issues raised by SARA, and the response from Acoustic Works are detailed as follows:

2. Noise Report

In reviewing the Acoustic Report prepared by Acousticworks, dated 25 March 2026 (reference 2026025, revision R01B), it has been identified that the report does not adequately demonstrate compliance with the applicable free-field noise criteria for private open space areas associated with the proposed development.

In particular, the report identifies exceedances of the 60 dB(A) free-field noise criterion within the ground level private open space areas of Units 9, 10 and 11, and the information provided is insufficient to verify compliance across all exclusive use outdoor areas.

Response requested:

Please provide an amended Acoustic Report that addresses the following matters:

Requested Issue:

- a) Review and validate the monitoring data used within the assessment. In particular, Section 5.2 of the report indicates that a number of monitoring days may have been affected by adverse weather conditions (including rainfall). Any exclusion of data due to adverse weather is to be undertaken in accordance with the requirements of the Transport Noise Management Code of Practice.*

Response:

Additional noise monitoring was conducted in June 2026 to determine road traffic noise levels during periods of minimal rainfall. The Transport Noise Management Code of Practice states that weather conditions for traffic noise measurements conducted over a 24 hour period are to be as follows;

- Average wind speed up to 3 m/s
- Rainfall up to 0.3mm/hr

The code specifies that data should be discarded when there are more than two consecutive hours of adverse weather conditions and when there are more than three non-consecutive hours of adverse weather conditions.

Weather data conducted at 30min interval was obtained from the Bureau of Meteorology (BoM). An analysis of rainfall trace was undertaken during the monitoring period to determine compliance with the Code.

Rainfall trace data represents cumulative rainfall recorded over the previous 24-hour period (ending at 9am daily). During the monitoring period, rainfall was recorded on 9 June between 9:30am and 1:00pm. Incremental rainfall between 1hr intervals was calculated to assess compliance with the 0.3mm/hr criterion.

The maximum hourly rainfall total was 1.6mm, however there were no consecutive hours above 0.3mm/hr and also not more than three non-consecutive hours of adverse rainfall. Therefore, the data was deemed not to be significantly impacted by rainfall conditions.

Date and Time	Rain Trace (mm)	Rain Increments (mm per time interval)	Hourly Rainfall Total (mm)
09/09:00am	0	0	-
09/09:30am	0.2	0.2	1.6
09/10:00am	1.6	1.4	-
09/10:30am	1.6	0	0
09/11:00am	1.6	0	-
09/11:30am	1.6	0	0.2
09/12:00pm	1.8	0.2	-
09/12:30pm	2.0	0.2	1.2
09/01:00pm	3.0	1	-
09/01:30pm	3.0	0	0
09/02:00pm	3.0	0	-
09/02:30pm	3.0	0	0
09/03:00pm	3.0	0	-
09/03:30pm	3.0	0	0
09/04:00pm	3.0	0	-
09/04:30pm	3.0	0	0
09/05:00pm	3.0	0	-
09/05:30pm	3.0	0	0
09/06:00pm	3.0	0	-
09/06:30pm	3.0	0	0
09/07:00pm	3.0	0	-
09/07:30pm	3.0	0	0
09/08:00pm	3.0	0	-
09/08:30pm	3.0	0	0
09/09:00pm	3.0	0	-
09/09:30pm	3.0	0	0
09/10:00pm	3.0	0	-
09/10:30pm	3.0	0	0
09/11:00pm	3.0	0	-
09/11:30pm	3.0	0	0
10/12:00am	3.0	0	-
10/12:30am	3.0	0	0
10/01:00am	3.0	0	-
10/01:30am	3.0	0	0
10/02:00am	3.0	0	-
10/02:30am	3.0	0	0
10/03:00am	3.0	0	-
10/03:30am	3.0	0	0
10/04:00am	3.0	0	-
10/04:30am	3.0	0	0
10/05:00am	3.0	0	-
10/05:30am	3.0	0	0
10/06:00am	3.0	0	-

Date and Time	Rain Trace (mm)	Rain Increments (mm per time interval)	Hourly Rainfall Total (mm)
10/06:30am	3.0	0	0
10/07:00am	3.0	0	-
10/07:30am	3.0	0	0
10/08:00am	3.0	0	-
10/08:30am	3.0	0	0
10/09:00am	3.0	0	-

Wind speed data was also reviewed to assess potential impacts on noise monitoring results. Recorded wind speeds ranged between 0 and 10m/s during the monitoring period with approximately 80% of the data intervals exceeding 3m/s.

However an analysis of the annual wind rose for the site has been conducted to determine if wind speeds are generally below 3m/s over long term conditions at the locality.

At 9am, wind speeds below 3m/s occur less than 30% of the time, while at 3pm windspeeds below 3m/s occur less than 5% of the time as can be seen from the wind rose data below;

Wind speed and direction rose

Product ID code: IDCJCM0021

Location: TOWNSVILLE AERO

Latitude: 19.25°S

Period: 9am Annual

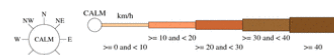
Download: [PDF](#) | [Wind Frequency Data](#)

Longitude: 146.77°E
Start year: 1940

Site Number: 032040

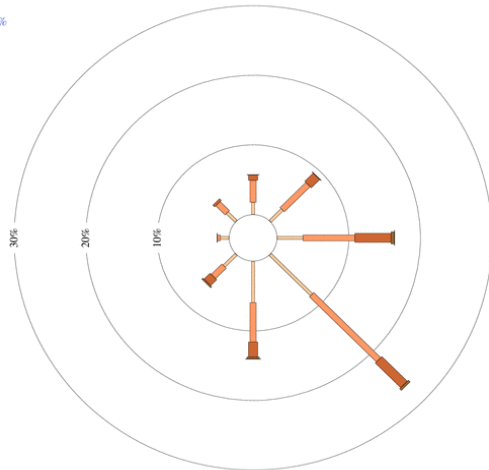
Elevation: 4 metres (above sea level)

End year: 2016



9 am
28606 Total Observations

Calm 17%



Wind speed and direction rose

Product ID code: IDCJCM0021

Location: TOWNSVILLE AERO

Latitude: 19.25°S

Period: 3pm Annual

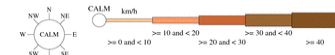
Download: [PDF](#) | [Wind Frequency Data](#)

Longitude: 146.77°E
Start year: 1940

Site Number: 032040

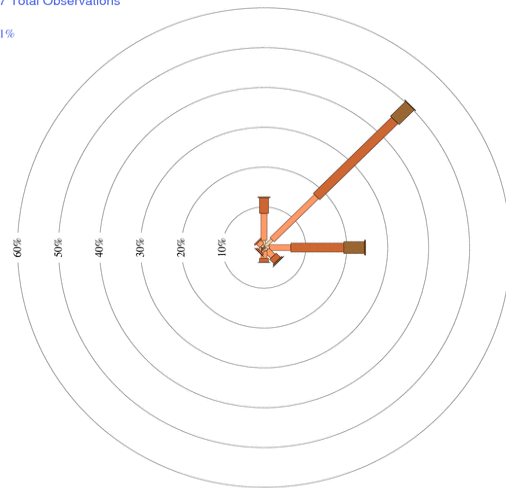
Elevation: 4 metres (above sea level)

End year: 2016



3 pm
28607 Total Observations

Calm 1%



Based on this, wind speeds at the locality, are predominantly above the criteria specified in the Code. With regard to the monitoring location, wind direction during the monitoring period were generally from the southeast i.e. downwind from the road, therefore all data during the monitoring period has been utilised in the assessment.

Requested Issue:

- b) Revise the assessment contained in Section 7.3 and Figure 4 (of the Acoustic Report, prepared by Acousticworks, dated 25 March 2026) to address the predicted exceedances of the 60 dB(A) freefield noise criterion within the ground level private open space areas of Units 9, 10 and 11.*

Response:

A revised road traffic noise assessment has been conducted, based on updated monitoring, to determine compliance with free field criterion for all outdoor private areas. To achieve predicted compliance, acoustic barriers for the affected lots 9 to 11 have been increased from 2.0m to 2.4m. Based on the updated acoustic treatments, revised L10,18hr predictions and corresponding noise categories have also been provided in Table 10.

Requested Issue:

- c) Provide revised noise contour plots that clearly identify the 60 dB(A) free-field noise contour line, as the current contour plots do not enable clear verification of compliance with the applicable criterion.*

Response:

Figure 5 has been revised based on updated treatment requirements. The noise contour shows predicted compliance with 60dBA free field requirements.

Requested Issue:

- d) Provide detailed and zoomed-in noise contour plots for Units 9, 10 and 11, including any proposed acoustic mitigation measures such as noise barriers, to clearly demonstrate compliance with the 60 dB(A) free-field noise criterion across all private open space areas.*

Response:

An additional noise contour figure has been provided to show predicted compliance for lots 9 to 11. This figure provides a zoomed-in plot which shows the acoustic barrier locations and noise contour compliance.

Requested Issue:

- e) Demonstrate that all areas intended for the exclusive use of residents, including yards and landscaped areas associated with the proposed units, comply with the applicable free-field noise criterion.*

Response:

Based on the updated acoustic treatments, compliance for all areas of the outdoor passive areas is predicted and demonstrated in Figure 5 and 6.

We trust that this information meets your current requirements. Should you have any queries please do not hesitate to contact Acoustic Works.

Regards,

A handwritten signature in blue ink, appearing to read 'K Dawn'.

Kaitlyn Dawn
Acoustic Consultant
acousticworks)))