Noise Assessment

Proposed Modification to Approved Car Wash Facility

206 High Street

Maitland, NSW

Prepared For: Brown Commercial Building Pty Ltd

August 2025

MAC252398-01RP1

Muller Acoustic Consulting

mulleracoustic.com

Document Information

Noise Assessment

Proposed Modification to Approved Car Wash Facility

206 High Street

Maitland, NSW

Prepared for: Brown Commercial Building Pty Ltd

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Robin Heaton	Robin Heaton			

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1 Introduction

Muller Acoustic Consulting Pty Ltd (MAC) has been commissioned by Brown Commercial Building Pty Ltd to prepare a Noise Assessment (NA) to quantify emissions from the proposed modification to the approved car wash facility (the 'project') to be located at 206 High Street, Maitland, NSW.

The NA has quantified potential operational noise emissions from the project and recommends reasonable and feasible noise controls where required.

This assessment has been undertaken in accordance with the following documents:

- NSW Environment Protection Authority (EPA), Noise Policy for Industry (NPI) 2017;
- Australian Standard AS 1055:2018 - Acoustics - Description and measurement of environmental noise - General Procedures;
- International Organisation for Standardisation (ISO) 9613-1:1993 (ISO9613:1) - Acoustics - Attenuation of Sound During Propagation Outdoors - Part 1: Calculation of the Absorption of Sound by the Atmosphere; and
- International Organisation for Standardisation (ISO) 9613-2:1996 (ISO9613:2) - Acoustics - Attenuation of Sound during Propagation Outdoors - Part 2: General Method of Calculation.

A glossary of terms, definitions and abbreviations used in this report is provided in **Appendix A**.

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2 Project Description

2.1 Background

The project is to be located at 206 High Street, Maitland, NSW, which is within in a MU1, mixed used zoned area.

The site is bound to the south west by High Street, and to the north by the Maitland Regional Athletics Centre access road. A commercial receiver is located to the south of the project site. The nearest residential receivers to the site, shop top housing, are located further to the south across High Street.

The approved car wash facility includes two self-wash bays, two auto wash bays, plant room at the rear of the site and associated car parking.

The project proposes the modification to the approved site to include a dual vacuum bay in the southern t corner and a dog wash bay along the eastern boundary. The approved hours of the project are 7am to 10pm. The approved hours are not proposed to change as part of the modification.

2.2 Receiver Review

A review of residential and non-residential receivers in proximity to the project has been completed and are summarised in **Table 1. Figure 1** provides a locality plan showing the position of these receivers in relation to the project.

Table 1 Receiver Locations

Receiver	Description	Receiver Height	Coordinates (/MGA56)	
			Easting	Northing
R01	Residential	4.5/7.5m	365340	6376658
R02	Residential	1.5/4.5m	365352	6376647
C01	Commercial	1.5m	365319	6376677
C02	Commercial	1.5m	365324	6376674
C03	Commercial	1.5m	365339	6376660
C04	Commercial	1.5/4.5m	365365	6376658

2.3 Proposed Activities & Operating Hours

There are several key activities associated with the proposal that have the potential to generate acoustic impacts on nearby receivers. **Table 2** provides a summary of proposal noise sources and the assessment period in which they propose to occur.

Table 2 Noise Generating Activities

Activity/Source	Period[1]	Operational
Customer Light Vehicles	Day	✓
	Evening	✓
	Night	X
Wash Bays and associated Mechanical Plant	Day	✓
	Evening	✓
	Night	X
Dog Wash Bay	Day	✓
	Evening	✓
	Night	X
Vacuum Bay	Day	✓
	Evening	✓
	Night	X

Note 1: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

FIGURE 1

Locality Plan

MAC252398-02

206 High Street,

Maitland, NSW

KEY

Receiver

Site Boundary

0 3 6 9 12 15 m

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3 Noise Policy and Guidelines

3.1 Noise Policy for Industry

The EPA released the Noise Policy for Industry (NPI) in October 2017 which provides a process for establishing noise criteria for consents and licenses enabling the EPA to regulate noise emissions from scheduled premises under the Protection of the Environment Operations Act 1997.

The objectives of the NPI are to:

- provide noise criteria that is used to assess the change in both short term and long-term noise levels;
- provide a clear and consistent framework for assessing environmental noise impacts from industrial premises and industrial development proposals;
- promote the use of best-practice noise mitigation measures that are feasible and reasonable where potential impacts have been identified; and
- support a process to guide the determination of achievable noise limits for planning approvals and/or licences, considering the matters that must be considered under the relevant legislation (such as the economic and social benefits and impacts of industrial development).

The policy sets out a process for industrial noise management involving the following key steps:

1. Determine the Project Noise Trigger Levels (PNTLs) (ie criteria) for a development. These are the levels (criteria), above which noise management measures are required to be considered. They are derived by considering two factors: shorter-term intrusiveness due to changes in the noise environment; and maintaining the noise amenity of an area.
2. Predict or measure the noise levels produced by the development with regard to the presence of annoying noise characteristics and meteorological effects such as temperature inversions and wind.
3. Compare the predicted or measured noise level with the PNTL, assessing impacts and the need for noise mitigation and management measures.
4. Consider residual noise impacts - that is, where noise levels exceed the PNTLs after the application of feasible and reasonable noise mitigation measures. This may involve balancing economic, social and environmental costs and benefits from the proposed development against the noise impacts, including consultation with the affected community where impacts are expected to be significant.

5. Set statutory compliance levels that reflect the best achievable and agreed noise limits for the development.

6. Monitor and report environmental noise levels from the development.

3.1.1 Project Noise Trigger Levels (PNTL)

The policy sets out the procedure to determine the PNTLs relevant to an industrial development. The PNTL is the lower (ie, the more stringent) of the **Project Intrusiveness Noise Level** (PINL) and **Project Amenity Noise Level** (PANL) determined in accordance with Section 2.3 and Section 2.4 of the NPI.

3.1.2 Rating Background Level (RBL)

The Rating Background Level (RBL) is a parameter determined from noise monitoring and is used for assessment purposes. As per the NPI, the RBL is an overall single figure background level representing each assessment period (day, evening and night) over the noise monitoring period.

3.1.3 Project Intrusiveness Noise Level (PINL)

The PINL ($LA_{eq(15min)}$) is the RBL + 5dB and seeks to limit the degree of change a new noise source introduces to an existing environment. Hence, when assessing intrusiveness, background noise levels need to be measured.

Background noise levels need to be determined before intrusive noise can be assessed. The NPI states that background noise levels to be measured are those that are present at the time of the noise assessment and without the subject development operating. For the assessment of modifications to existing premises, the noise from the existing premises should be excluded from background noise measurements. It is note that the exception is where the premises has been operating for a significant period of time and is considered a normal part of the acoustic environment; it may be included in the background noise assessment under the following circumstances:

- the development must have been operating for a period in excess of 10 years in the assessment period/s being considered and is considered a normal part of the acoustic environment; and,
- the development must be operating in accordance with noise limits and requirements imposed in a consent or licence and/or be applying best practice.

Where a project intrusiveness noise level has been derived in this way, the derived level applies for a period of 10 years to avoid continuous incremental increases in intrusiveness noise levels. This approach is consistent with the purpose of the intrusiveness noise level to limit significant change in the acoustic environment. The purpose of the project amenity noise level is to moderate against background noise creep.

3.1.4 Project Amenity Noise Level (PANL)

The PANL is relevant to a specific land use or locality. To limit continuing increases in intrusiveness levels, the ambient noise level within an area from all combined industrial sources should remain below the recommended amenity noise levels specified in Table 2.2 (of the NPI). The NPI defines two categories of amenity noise levels:

- **Amenity Noise Levels (ANL)** – are determined considering all current and future industrial noise within a receiver area; and
- **Project Amenity Noise Level (PANL)** – is the recommended level for a receiver area, specifically focusing the project being assessed.

Additionally, Section 2.4 of the NPI states: "to ensure that industrial noise levels (existing plus new) remain within the recommended amenity noise levels for an area, a project amenity noise level applies for each new source of industrial noise as follows":

PANL for new industrial developments = recommended **ANL** minus 5dBA.

The following exceptions apply when deriving the PANL:

- areas with high traffic noise levels;
- proposed developments in major industrial clusters;
- existing industrial noise and cumulative industrial noise effects; and
- greenfield sites.

The NPI states with respect to high traffic noise areas:

The level of transport noise, road traffic noise in particular, may be high enough to make noise from an industrial source effectively inaudible, even though the LA_{eq} noise level from that industrial noise source may exceed the project amenity noise level. In such cases the project amenity noise level may be derived from the LA_{eq}, period(traffic) minus 15 dB(A).

Where relevant this assessment has considered influences of traffic with respect to amenity noise levels (ie areas where existing traffic noise levels are 10dB greater than the recommended amenity noise level).

Furthermore, Section 2.4 of the NPI states "*where the project amenity noise level applies and it can be met, no additional consideration of cumulative industrial noise is required.* "

The recommended amenity noise levels as per Table 2.2 of the NPI are reproduced in **Table 3**.

Table 3 Amenity Noise Levels

Receiver Type	Noise Amenity Area	Time of day	Recommended amenity noise level dB LAeq(period)
Residential	Rural	Day	50
		Evening	45
		Night	40
	Suburban	Day	55
		Evening	45
		Night	40
	Urban	Day	60
		Evening	50
		Night	45
Hotels, motels, caretakers' quarters, holiday accommodation, permanent resident caravan parks.	See column 4	See column 4	5dB above the recommended amenity noise level for a residence for the relevant noise amenity area and time of day
School Classroom	All	Noisiest 1-hour period when in use	35 (internal) 45 (external)
Hospital ward			
- internal	All	Noisiest 1-hour	35
- external	All	Noisiest 1-hour	50
Place of worship - internal	All	When in use	40
Passive Recreation	All	When in use	50
Active Recreation	All	When in use	55
Commercial premises	All	When in use	65
Industrial	All	When in use	70

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

Note: The recommended amenity noise levels refer only to noise from industrial noise sources. However, they refer to noise from all such sources at the receiver location, and not only noise due to a specific project under consideration. The levels represent outdoor levels except where otherwise stated.

Types of receivers are defined as rural residential; suburban residential; urban residential; industrial interface; commercial; industrial – see Table 2.3 and Section 2.7 of the NPI.

4 Assessment Criteria

4.1 Project Noise Trigger Levels

Project Noise Trigger Levels (PNTLs) were sourced from Section 2.3.1 of the Noise Assessment report (report Ref 2-2849-R1, Reverb Acoustics, April 2023) (the historic report). The historic report was prepared as part of the development application for the project. **Table 4** presents the adopted applicable to the assessment NPI sourced from the historic report.

Table 4 Project Noise Trigger Levels

Receiver Type	Assessment Period	PNTL dB $LA_{eq(15min)}$
Residential	Day	44
	Evening	44
Commercial	When in Use	63

4.2 Notice of Determination Noise Goals

Additionally, to address Condition 13 of the NoD and to assess the internal amenity of the surrounding residential receivers, MAC have adopted an external noise goal derived based on the specified internal noise level outlined in the NoD and taking into account 10dB attenuation provided by a partially open window. **Table 5** presents the adopted external noise goal.

Table 5 Notice of Determination Noise Goals

Receiver Type	Internal Assessment Location	Internal Noise Goal	External Noise Goal
Residential	Bedroom or Sleeping Area	35	45[1]
	Other habitable Space	40	50[1]

Note 1: External level based on 10dB loss through partially open window.

It is noted that the PNTLs for the site are more conservative than the adopted external noise goals. Accordingly, satisfying the PNTLs the internal noise levels will also be satisfied.

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5 Modelling Methodology

A computer model was developed to quantify project noise emissions to neighbouring receivers using DGMR (iNoise, Version 2024.3) noise modelling software. iNoise is an intuitive and quality assured software for industrial noise calculations in the environment. 3D noise modelling is considered industry best practice for assessing noise emissions from projects.

The model incorporated a three-dimensional digital terrain map giving all relevant topographic information used in the modelling process. Additionally, the model uses relevant noise source data, ground type, attenuation from barrier or buildings and atmospheric information to predict noise levels at the nearest potentially affected receivers. Where relevant, modifying factors in accordance with Fact Sheet C of the NPI have been applied to calculations.

The model calculation method used to predict noise levels was in accordance with ISO 9613:1 and ISO 9613:2 including corrections for meteorological conditions using CONCAWE[1]. The ISO 9613 standards are the most used noise prediction method worldwide. Many countries refer to ISO 9613 in their noise legislation. However, the ISO 9613 standard does not contain guidelines for quality assured software implementation, which leads to differences between applications in calculated results. In 2015 this changed with the release of ISO/TR 17534-3. This quality standard gives clear recommendations for interpreting the ISO 9613 method. iNoise fully supports these recommendations. The models and results for the 19 test cases are included in the software.

[1] Report no. 4/18, "the propagation of noise from petroleum and petrochemical complexes to neighbouring communities", Prepared by C.J. Manning, M.Sc., M.I.O.A. Acoustic Technology Limited (Ref.AT 931), CONCAWE, Den Haag May 1981

5.1 Sound Power Levels

Table 6 presents the sound power level for each noise source modelled in this assessment. It is noted that sound power levels were sourced from manufacturer's specifications or from in-field measurements at similar project sites.

Table 6 Acoustically Significant Sources - Sound Power Levels dBA (re 10^{-12} Watts)

Item and number modelled per 15 minutes	Individual Sound Power Level	Modelled Sound Power Level dB LAeq(15min)	Source Height[1]
Operation			
Car enters, park, start up, idle and drive off (x2)	73	76	0.5m
Customers vehicles travelling through Project Site (15 cars per 15min)[2]	81	85	0.5m
Auto Wash Bay Entry/Exit (x4)[3]	82	86	2.0m
Self-Wash Bay (x2)	86	89	1.5m
Vacuum System (x1)	85	85	1.4m
Dog Wash Bay (x1)	85	85	1.0m

Note 1: Height above the relative ground or building below source.

Note 2: Modelled as a moving point source with adjustments for length of travelled path, velocity and number of movements in a 15-minute period.

Note 3: Modelled as an emitting façade which includes attenuation losses for the tunnel of carwash.

5.2 Mitigation Included in Design and Noise Control Recommendations

The noise model incorporated the following recommendations and noise controls:

- the project is constructed as per the site design and plans (as presented in **Appendix B**) which includes the attenuation provided by the project and surrounding buildings;
- all car wash bays operate 100% of the time, which is considered to be a conservative worst-case scenario;
- construction of an impervious barriers along the southeastern façade of the vacuum bay (see **Figure 2**). The barrier should be constructed to the full 4.0m height of the vacuum bay and consist of materials with a surface density of at least 10kg/m^2, and not contain any gaps (ie lapped and capped timber or equivalent); and
- construction of an impervious barriers along the southeastern façade of the dog wash bay (see **Figure 2**). The barrier should be constructed to the full 2.5m height of the dog wash bay and consist of materials consistent with those outlined above.

FIGURE 2

Barrier Plan

MAC252398-02

206 High Street,

Maitland, NSW

KEY

Dogwash Bay Barrier

Vacuum Bay Barrier

0 1 2 3 4 5 m

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6 Assessment Results

This assessment has quantified operational noise levels at the nearest receivers.

6.1 Operational Noise Assessment

Noise predictions from all sources of the revised project design have been quantified to the noise sensitive receivers surrounding the project site and are presented in **Table 7**.

Table 7 Combined Noise Predictions – All Receivers

Residential Receivers					
Receiver	Predicted Noise Level dB $L_{Aeq(15min)}$		PNTL dB $L_{Aeq(15min)}$		Compliant
	Day	Evening	Day	Evening	
R01	40	40	44	44	✓
R02	38	38	44	44	✓

Other Receivers				
Rec	Period	Predicted Noise Level dB $L_{Aeq(15min)}$	PNTL dB $L_{Aeq(15min)}$	Compliant
C1	When in Use	45	63	✓
C2	When in Use	45	63	✓
C3	When in Use	38	63	✓
C4	When in Use	45	63	✓

Note 1: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

The results of the Noise Assessment demonstrate that noise emissions from the project would satisfy the relevant PNTLs at all assessed receivers for all assessment periods once noise controls for the project are implemented.

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7 Discussion and Conclusion

Muller Acoustic Consulting Pty Ltd (MAC) has completed a Noise Assessment (NA) to quantify emissions from the proposed modification to the approved car wash facility to be located at 206 High Street, Maitland, NSW.

The assessment has quantified potential operation emissions pertaining to customer generated noise, including the approved onsite light vehicles, self and auto wash bays and the proposed vacuum bays and dog wash bay at the project site.

The results of the NA demonstrate that noise emissions from the operation would satisfy the relevant PNTLs at all assessed receivers for all assessment periods once noise controls for the project are implemented (see **Section 5.2**):

- the project is constructed as per the site design and plans (as presented in **Appendix B**) which includes the attenuation provided by the project and surrounding buildings;
- all car wash bays operate 100% of the time, which is considered to be a conservative worst-case scenario;
- construction of an impervious barriers along the southeastern façade of the vacuum bay (see **Figure 2**). The barrier should be constructed to the full 4.0m height of the vacuum bay and consist of materials with a surface density of at least 10kg/m^2, and not contain any gaps (ie lapped and capped timber or equivalent); and
- construction of an impervious barriers along the southeastern façade of the dog wash bay (see **Figure 2**). The barrier should be constructed to the full 2.5m height of the dog wash bay and consist of materials consistent with those outlined above.

Accordingly, the Noise Assessment supports the Development Application for the project incorporating the recommendations and controls outlined in this report.

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Appendix A – Glossary of Terms

A number of technical terms have been used in this report and are explained in **Table A1**.

Table A1 Glossary of Acoustical Terms

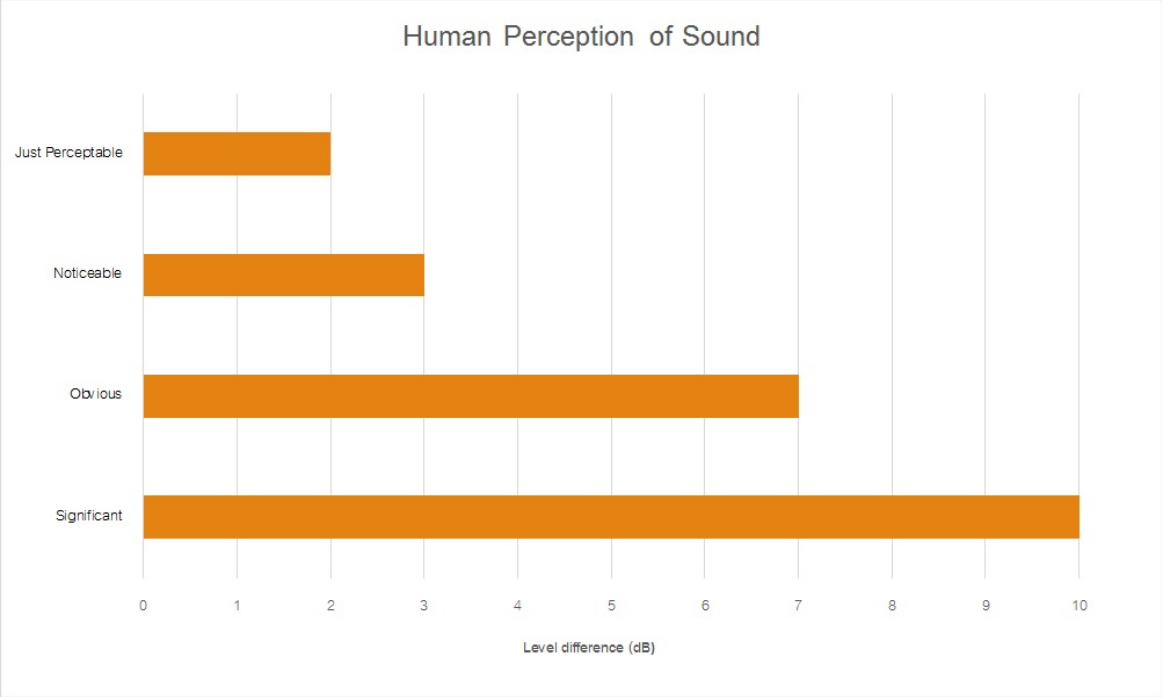
Term	Description
1/3 Octave	Single octave bands divided into three parts
Octave	A division of the frequency range into bands, the upper frequency limit of each band being twice the lower frequency limit.
ABL	Assessment Background Level (ABL) is defined in the NPI as a single figure background level for each assessment period (day, evening and night). It is the tenth percentile of the measured L90 statistical noise levels.
Ambient Noise	The total noise associated with a given environment. Typically, a composite of sounds from all sources located both near and far where no particular sound is dominant.
A Weighting	A standard weighting of the audible frequencies designed to reflect the response of the human ear to sound.
Background Noise	The underlying level of noise present in the ambient noise, excluding the noise source under investigation, when extraneous noise is removed. This is usually represented by the LA90 descriptor
dBA	Noise is measured in units called decibels (dB). There are several scales for describing noise, the most common being the 'A-weighted' scale. This attempts to closely approximate the frequency response of the human ear.
dB(Z), dB(L)	Decibels Z-weighted or decibels Linear (unweighted).
Extraneous Noise	Sound resulting from activities that are not typical of the area.
Hertz (Hz)	The measure of frequency of sound wave oscillations per second - 1 oscillation per second equals 1 hertz.
LA10	A sound level which is exceeded 10% of the time.
LA90	Commonly referred to as the background noise, this is the level exceeded 90% of the time.
LAeq	Represents the average noise energy or equivalent sound pressure level over a given period.
LAmax	The maximum sound pressure level received at the microphone during a measuring interval.
Masking	The phenomenon of one sound interfering with the perception of another sound. For example, the interference of traffic noise with use of a public telephone on a busy street.
RBL	The Rating Background Level (RBL) as defined in the NPI, is an overall single figure representing the background level for each assessment period over the whole monitoring period. The RBL, as defined is the median of ABL values over the whole monitoring period.
Sound power level (Lw or SWL)	This is a measure of the total power radiated by a source in the form of sound and is given by 10.log10 (W/Wo). Where W is the sound power in watts to the reference level of 10^{-12} watts.
Sound pressure level (Lp or SPL)	the level of sound pressure; as measured at a distance by a standard sound level meter. This differs from Lw in that it is the sound level at a receiver position as opposed to the sound 'intensity' of the source.

Table A2 provides a list of common noise sources and their typical sound level.

Table A2 Common Noise Sources and Their Typical Sound Pressure Levels (SPL), dBA

Source	Typical Sound Pressure Level
Threshold of pain	140
Jet engine	130
Hydraulic hammer	120
Chainsaw	110
Industrial workshop	100
Lawn-mower (operator position)	90
Heavy traffic (footpath)	80
Elevated speech	70
Typical conversation	60
Ambient suburban environment	40
Ambient rural environment	30
Bedroom (night with windows closed)	20
Threshold of hearing	0

Figure A1 – Human Perception of Sound



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Appendix B – Site Plans

MOD DA SET
206 HIGH ST, MAITLAND

GENERAL NOTES:

1. BUILDING SHELL DESIGN INTENT SHOWN,CONTRACTOR TO PROPOSE DETAILED DESIGN FOR CONSTRUCTION, INCLUDING ALL SITE RELATED WORKS, STRUCTURAL, CIVIL WORKS & BUILDING SERVICES.
2. THE CONTRACTOR SHALL VERIFY ALL EXISTING IN-GROUND AND ABOVE-GROUND SERVICES WITHIN THE SCOPE OF WORKS BEFORE COMMENCING CONSTRUCTION/DEMOLITION.
3. ANY 3D DRAWINGS ARE INDICATIVE ONLY, AND ARE TO BE READ IN CONJUNCTION WITH OTHER RELEVANT DRAWINGS.
4. ALL ACCESSIBILITY AND MOBILITY DESIGN (DOA) ITEMS TO COMPLY WITH A.S. 1428.1:2009
5. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT CONTRACTS, SPECIFICATIONS, SCHEDULES AND DRAWINGS INCLUDING CIVIL, STRUCTURAL, HYDRAULIC
6. DIMENSIONS.

CONTRACTOR AND SUB-CONTRACTOR SHALL VERIFY ALL DIMENSIONS OF THIS DRAWING AND SITE CONDITIONS PRIOR TO ANY WORK COMMENCING.
FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS (UNLESS NOTED OTHERWISE).
FIGURED DIMENSIONS ARE:

- WALL / PARTITIONS SETOUT TO CENTRE LINE WHERE NOTED
- ALL OTHER WALL/PARTITION DIMENSIONS ARE TO FINISHED FACE OF PARTITION.
- CEILINGS: FINISHED UNDERSIDE OF CEILINGS - CEILING HEIGHT IS MEASURED FROM FINISH FLOOR LEVEL
- FITTINGS AND FIXTURES: - DIMENSIONS TO FIXTURES AND FITTINGS ARE SETOUT FROM FINISH WALL FACE / FINISH FLOOR LEVEL.

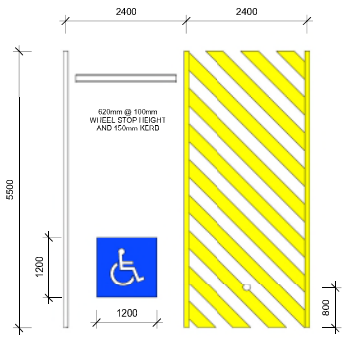
PLANS TO BE READ IN CONJUNCTION WITH:

- BUILDING CODE OF AUSTRALIA
- RELEVANT AUSTRALIAN STANDARDS
- HYDRAULIC DRAWING SET
- CIVIL DRAWING SET
- STRUCTURAL DRAWING SET
- LANDSCAPE DRAWING SET

IF NO INTERNAL FITOUT FINISHES & PLANS ARE PRESENT, CLIENT SELECTIONS & DETAILS ARE TO TAKE PRECEDENCE.

PLEASE NOTE:
DETAILS SHOWN ON THIS PLAN ARE INTENDED TO BE ACCURATE. HOWEVER INFORMATION WRITTEN INTO INDIVIDUAL CONTRACTS AND DRAWINGS WILL TAKE PRECEDENCE OVER THIS SET.

PARKING DETAILS



ALL PARKING TO COMPLY WITH:

AS/NZ 2890.1:2004 PART 1 OFF STREET PARKING
AS/NZ 2890.6:2009 PART 6 OFF-STREET PARKING FOR PEOPLE WITH DISABILITIES

SHEET LIST

LIST OF CLAUSES:

- Clause B1D4 — Materials & Forms Constructions
- Spec. 5 — Fire Resisting Construction
- Spec. 7 — Fire Hazard Properties
- Spec. 8 — Performance of External Walls in a Fire
- Clause C3D7 — Vertical Separation of Openings in External Walls
- Clause C3D13 — Separation of Equipment
- Clause C3D14 — Electricity Supply System
- Clause C4D5 — Acceptable Methods of Protection (of openings)
- Clause C4D9 — Opening in Fire Isolated Exits
- Clause C4D15 — Openings for Service Installations
- Clause D2D15 — Discharge from Exits
- Clause D3D6 — Installations in Exits and Paths of Travel

*- **Clause D3D14—Goings and Risers**
Treads which have:-
(a) A surface with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586**or**
(b) A nosing strip with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586.

*- **Clause D3D15—Landings**which have: -
(a) A surface with a slip-resistance classificaton not less than that listed in Table D3D15 when tested in accordance with AS 4586**or**
(b) A strip at the edge of the landing with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586, where the edge leads to a flight below.

- Clause D3D16 — Thresholds
- *- Clause D3D17-D3D21 — Balustrades
- *- Clause D3D22 — Handrails
- Clause D3D26 — Operation of Latch
- Clause D3D28 — Sign on Doors
- Clause D4D2 — General Building Access Requirements
- Clause D4D4 — Parts of Building to be Accessible
- Clause D4D7 — Signage
- Clause D4D9 — Tactile Indicators
- Clause F2P2 — Wet Areas
- Clause F1D6 / F1D7 — Damp Proofing
- Clause F4D6 — Construction of Sanitary Compartments
- Part F6 — Lighting and Ventilation
- Clause F7D5 — Sound Insulation Rating of Floors
- Clause F7D6 — Sound Insulation Rating of Walls
- Clause F7D7 — Sound Insulation Rating of Internal Services
- Clause F7D8 — Sound Insulation of Pumps

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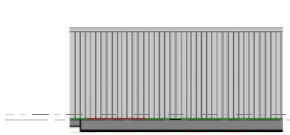
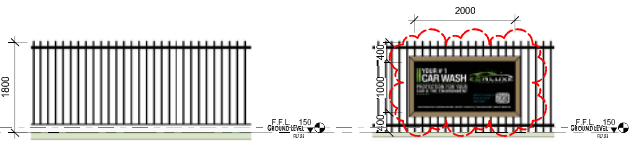
Rev.	Description	Date	Issued by
7	Notation	29.05.25	H.Skinner
8	Revision	25.06.25	H.Skinner
9	Notation Changes	08.07.25	H.Skinner
10	Mod Da Set	10.07.25	H.Skinner
11	Revision Set	21.07.25	H.Skinner
12	Revision 14	24.07.25	H.Skinner
13	Revision 16	06.08.25	H.Skinner

NOTES:
1. All dimensions, levels, and setouts are to be verified on site prior to fabrication or construction
2. Written dimensions take precedence over scaled ones

Project: **CAR WASH**
Sheet Title: **TITLE**
Project No: **BC0402**
Lot: 1 DP: 230063 No: 206 Street: HIGH STREET Suburb: MAITLAND
Client: **SAROFF**
Project Status: **MOD DA SET**
Scale: **1 : 50** on A1
Revision: **13**
DWG No: **00**



2 FENCE TYPE 1
1 : 50



3 FENCE TYPE 2
1 : 50

4 Signage - S1
1 : 50

FENCING LENGTHS

FENCING TYPE 1: 39.6m
FENCING TYPE 2: 80.0m

SIGNAGE DETAILS

S1 - CAR WASH SIGNAGE

FENCING NOTES:

- FENCING TYPE 1: TIMBER LAPPED AND CAPPED 1.8m PAINTED TRANQUIL RETREAT
- FENCING TYPE 2: BLACK PALISADE FENCE AND LOCKABLE GATE TO DRIVEWAYS

NOTES:

- ALL PLANT EQUIPMENT, STORAGE AND OTHER FIXTURES OR FITTINGS LIABLE BY FLOODS ARE LOCATED ABOVE THE FLOOD STANDARD.
- ALL PUMPS, COMPRESSORS ETC. TO BE LOCATED IN PLANT ROOM

2X SLIMLINE 5000L TANKS
PORTABLE WATER TANK 3000L
TANK
TANK
ROOF LINE
ROOF LINE
ROOF LINE
ROOF LINE
AWNING ABOVE
COLOMNS REUSED PLASTER CAPITALS X 3
9m LOCKABLE SECURITY GATE
6m LOCKABLE SECURITY GATE
S1
2 D.P.1265055
1 D.P.1040220
2750
9000
10400
6000
9231

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Rev.	Description	Date	Issued by
5	Notation	29.05.25	H.Skinner
6	Revision	25.06.25	H.Skinner
7	Notation Changes	08.07.25	H.Skinner
8	Mod Da Set	10.07.25	H.Skinner
9	Revision Set	21.07.25	H.Skinner
10	Revision 14	24.07.25	H.Skinner
11	Revision 16	06.08.25	H.Skinner

NOTES:
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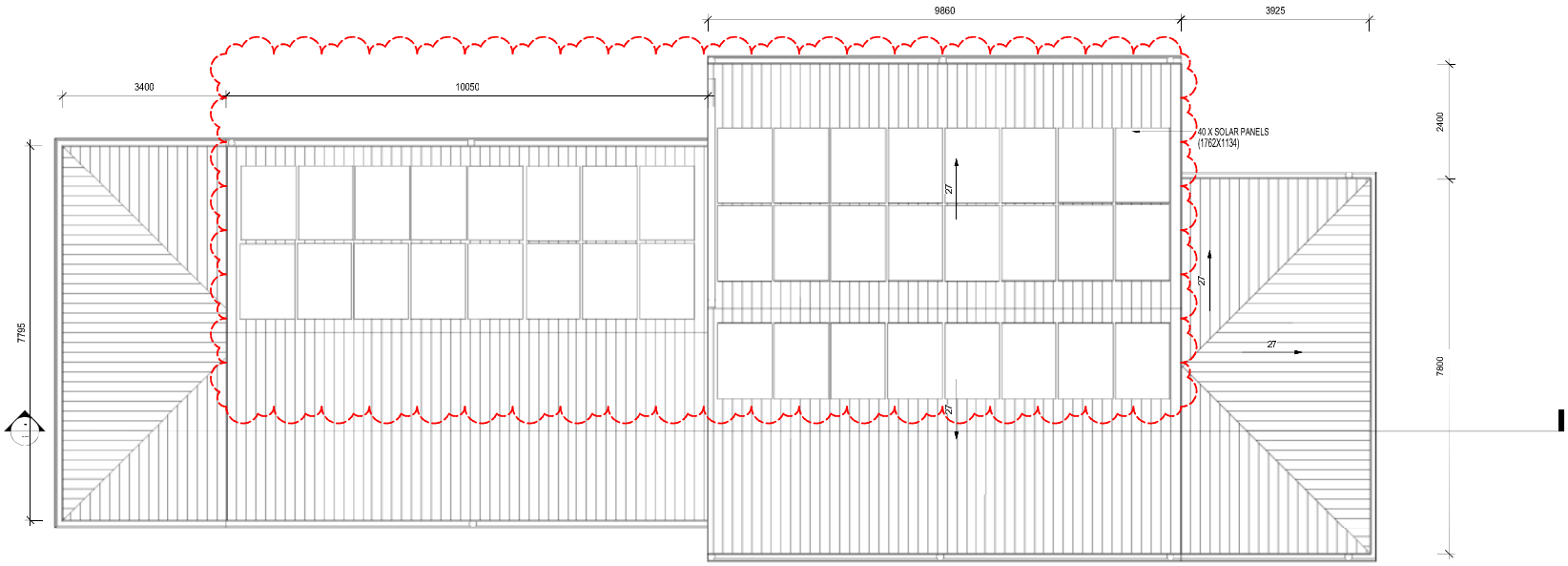
Project: CAR WASH
Sheet Title: SITE PLAN
Project No: BC0402
Lot: 1 DP: 230063 No: 206 Street: HIGH STREET Suburb: MAITLAND
Client: SAROFF
Project Status: MOD DA SET
Scale: As indicated on A1
Revision: 11
DWG No: 01



1 ROOF PLAN
1 : 50

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Rev.	Description	Date	Issued by
1	CC Set	03.03.25	H.Skinner
2	Notation Changes	08.07.25	H.Skinner
3	Mod Da Set	10.07.25	H.Skinner
4	Revision 16	06.08.25	H.Skinner

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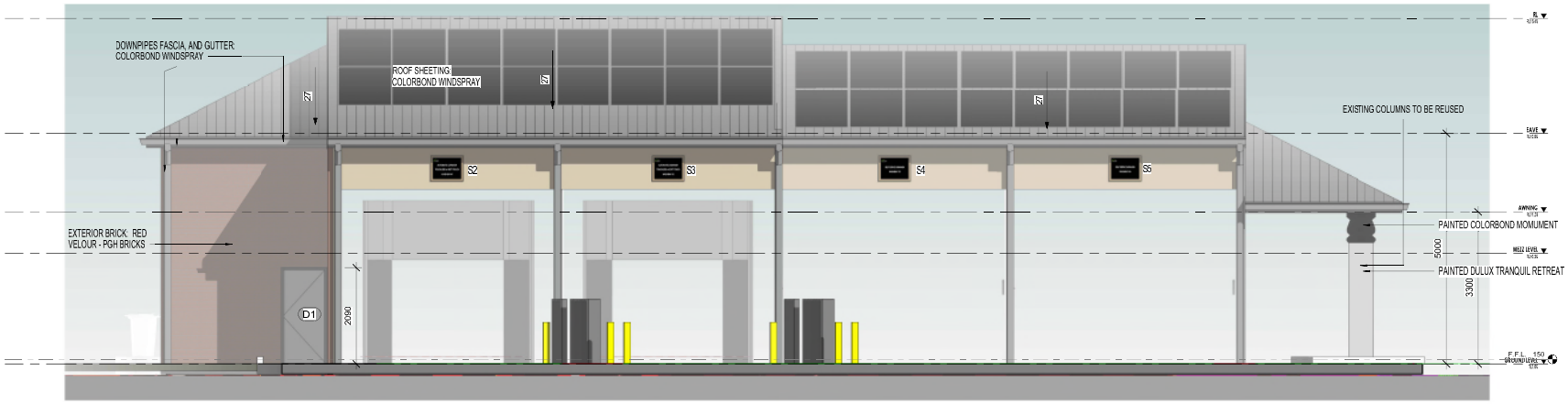
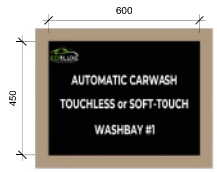
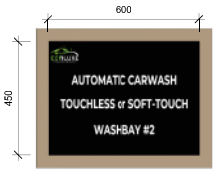
Project: CAR WASH
Sheet Title: ROOF PLAN
Project No: BC0402
Lot: 1 DP: 230063 No: 206 Street: HIGH STREET Suburb: MAITLAND
Client: SAROFF
Project Status: MOD DA SET
Scale: 1 : 50 on A1
Revision: 4
DWG No: 02



1 Car Wash North
1 : 50



3 S2
1 : 10



5 S3
1 : 10

6 S4
1 : 10

7 S5
1 : 10

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NOTES:
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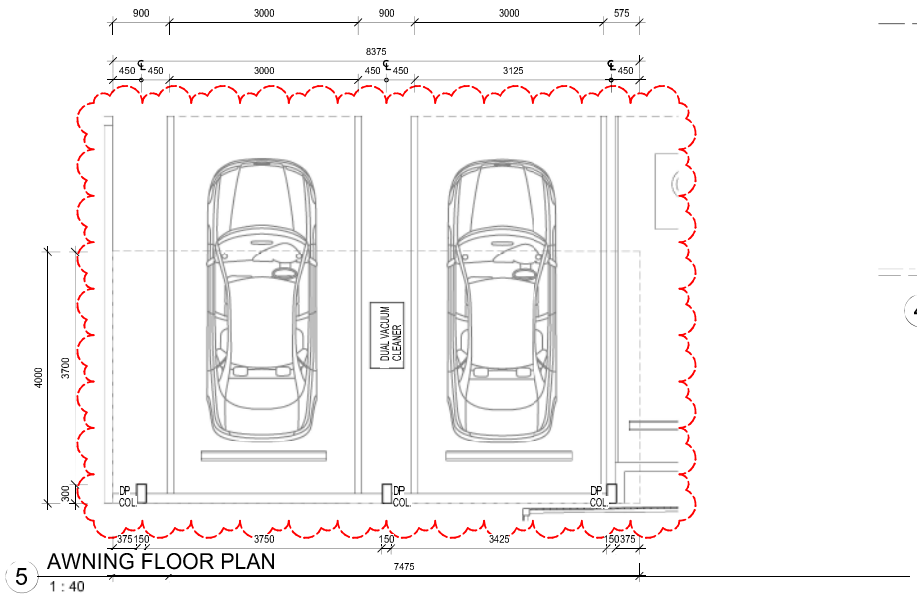
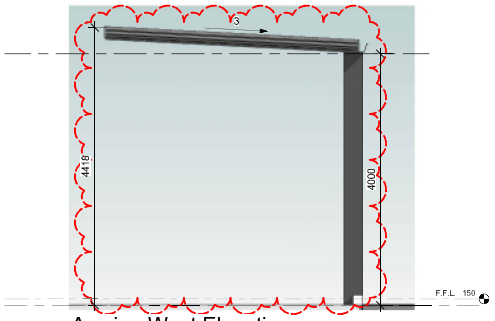
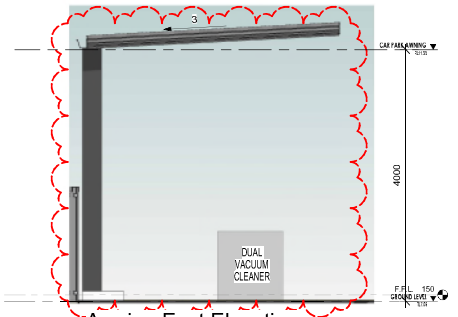
Project: CAR WASH
Sheet Title: ELEVATIONS
Project No: BC0402
Lot: 1 DP: 230063 No: 206 Street: HIGH STREET Suburb: MAITLAND
Client: SAROFF
Project Status: MOD DA SET
Scale: As indicated on A1
Revision: 5
DWG No: 03



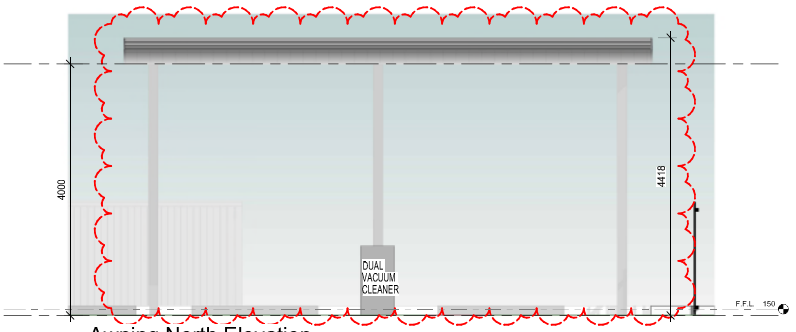
5 AWNING FLOOR PLAN
1 : 40



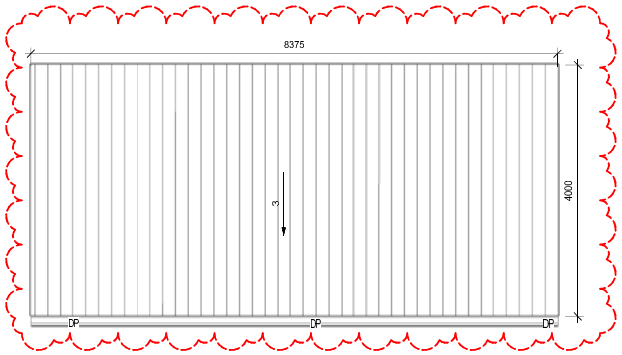
4 Awning West Elevation
1 : 40



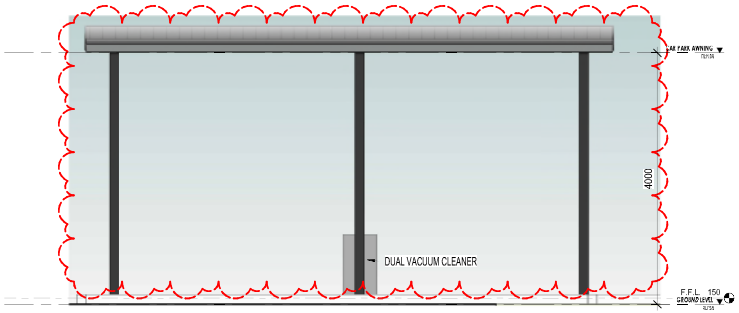
1 Awning East Elevation
1 : 40



2 Awning North Elevation
1 : 40



6 AWNING ROOF
1 : 40



3 Awning South Elevation
1 : 40

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3	Mod Da Set	10.07.25	H.Skinner
4	Revision 14	24.07.25	H.Skinner
5	Revision 16	06.08.25	H.Skinner

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Project: **CAR WASH**

Sheet Title: **AWNING PLAN & ELEVATIONS**

Project No: **BC0402**

Lot: 1 DP: 230063 No: 206 Street: HIGH STREET Suburb: MAITLAND

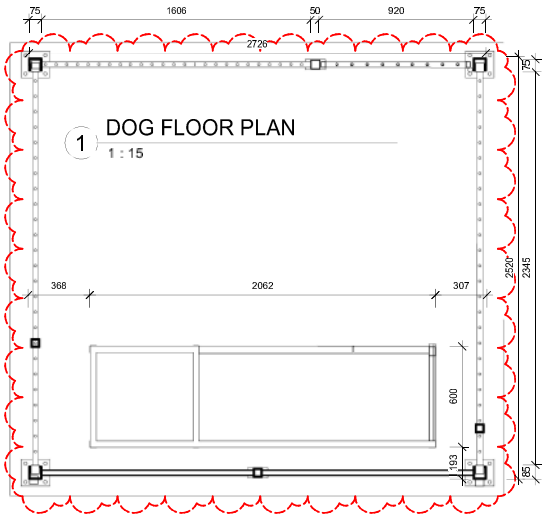
Client: **SAROFF**

Project Status: **MOD DA SET**

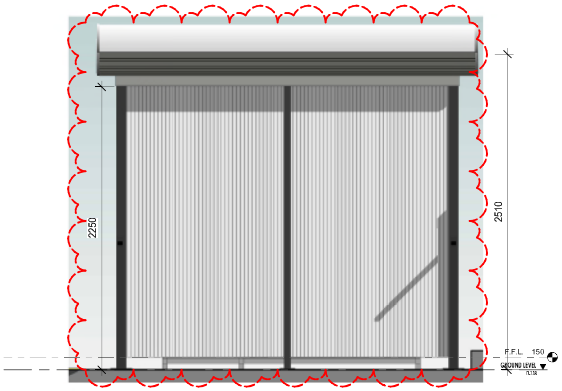
Scale: **1 : 40** on A1

Revision: 5

DWG No: **04**

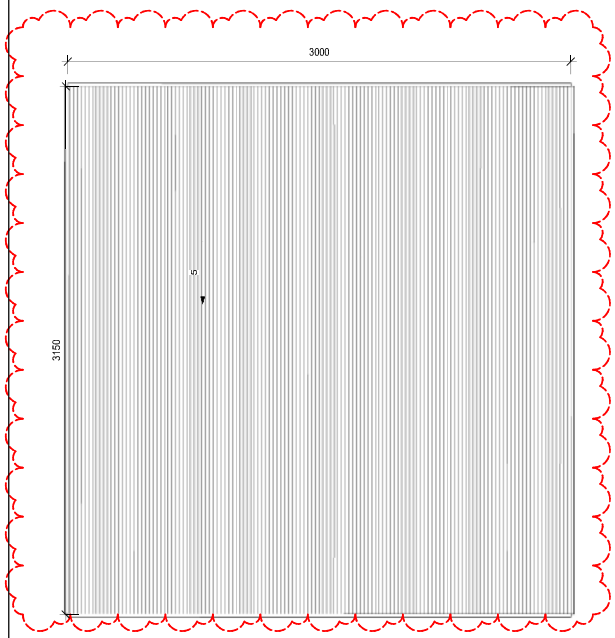


1 DOG FLOOR PLAN
1 : 15

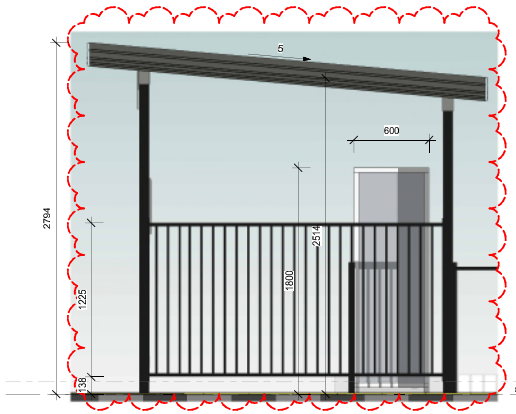


5 DW South
1 : 20

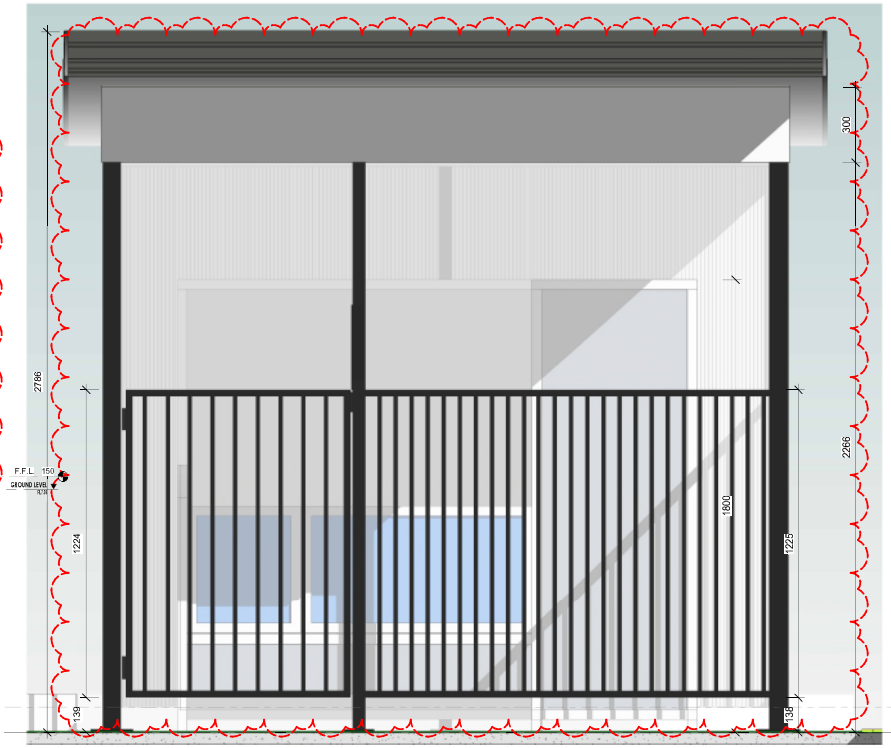
3 DW East
1 : 20



2 DOG WASH ROOF
1 : 15



6 Dw West
1 : 20



4 DW North
1 : 10

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4	Revision 14	24.07.25	H.Skinner
5	Revision 16	06.08.25	H.Skinner

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Project: CAR WASH
Sheet Title: DOG WASH PLANS & ELEVATIONS
Project No: BC0402
Lot: 1 DP: 230063 No: 206 Street: HIGH STREET Suburb: MAITLAND
Client: SAROFF
Project Status: MOD DA SET
Scale: As indicated on A1
Revision: 5
DWG No: 05

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4	Revision Set	21.07.25	H.Skinner
5	Revision 14	24.07.25	H.Skinner
6	Signage	29.07.25	H.Skinner
7	Revision 16	06.08.25	H.Skinner

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Project: **CAR WASH**

Sheet Title: **PERSPECTIVES**

Project No: **BC0402**

Lot: 1 DP: 230063 No: 206 Street: HIGH STREET Suburb: MAITLAND

Client: **SAROFF**

Project Status: **MOD DA SET**

Scale: on A1

Revision: 7

DWG No: **06**

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