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Town Planner
23 Valley Street
FRESHWATER QLD 4870

Chief Executive Officer
Douglas Shire Council
PO Box 723
MOSSMAN QLD 4873

DSC Ref: MCU12711/2018
Our Ref: ET18-021

04 July, 2018

Dear Sir,

RE: RESPONSE TO DSC INFORMATION REQUEST – MCU12711/2018

6-8 TEAMSTERS CLOSE, CRAIGLIE, BEING LOT 10 RP804923

Following is my client's response to the Council Information Request. For ease of reference each Item is reproduced below, followed by a response.

ITEM 1

1. Provide details on the ability to hose down/wash out the facilities in addition to providing advice on the mechanisms to be installed to separate solids and other waste matters (hair etc.) before entering the sewer. Hydraulic drawings are not required at this stage, however an overview of how the building will be modified to address the operational matters of the proposal is required. Is each kennel able to be hosed out in order to be kept clean and to reduce odours?

RESPONSE

The facility will have a concrete floor and kennels and internal walls, will incorporate acoustics works for further noise attenuation and hose down/wash plumbing. The concrete floor and walls will have resin or similar to seal the floors and up the walls to a suitable skirting height. Plumbing will be incorporated into the floor of the building, facilitated by concrete cutting, to provide for hose down and wash out facilities. Wet areas for hosing and scrubbing will be required in some circumstances to ensure cleanliness and odour elimination as well as to eliminate the spread of disease.

As per cleaning schedules all solid matter waste is to be collected as a priority to reduce odour and prior to the wet cleaning of each kennel. It is expected that as part of the cleaning schedule both mopping and hosing will occur.

A Hydraulic Engineer has been engaged to design and detail the specific requirements for the hose down and wash down facility system, both internal and external to the building. Please find attached at **Appendix 1** the detailed Schematic Plan prepared by the Hydraulic Engineer in association with the architect.

ITEM 2

2. The designated run areas are being proposed on concreted areas of the site (1-3). What improvements or modifications are taking place to this area to make suitable for the intended use. Detail the northern treatment of the designated run area 1-3 and treatments to designated run area 4.

RESPONSE

The four run areas will be upgraded and converted to suitable run areas. These areas will be fenced with solid fencing 2000mm high and made with a product acoustically recommended to limit noise from exiting the areas. All four runs will be completely fenced to avoid sight stimulation between runs. These areas will also have shaded areas with beds with fresh water available for the dogs that are utilising the area. The ground will be covered in artificial turf and elevated with a suitable product such as geo drainage or air drain to ensure these areas can be hosed down for cleaning and easily drained. Further drainage will be installed to take waste water to the appropriate exits. The runs will also include activity enrichment installations for use by the dog in the run, refer to images included in the updated Concept Plans attached at **Appendix 2**.

ITEM 3

3. The plans submitted with the application lack detail with respect to site modifications, boundary and fencing treatments. In addition to item 2 above, provide amended site plans and give specific detail plan/s illustrating the changes being proposed to the site to accommodate the proposed use. In addition, ensure all elements on the plan are appropriately scaled and accurately reflected on the drawings i.e refuse /waste building. The non-compliance with the 6 metre setback requirement for the Industry zone is not acknowledged in the planning report. Please clarify the size of the structure and address the Industry zone code in relation to the structure.

RESPONSE

A copy of updated Concept plans is attached at Appendix 2.

The external perimeter of the property will be surrounded by security fencing at least 2000mm high with lockable gates. All internal fencing surrounding the runs will be made of a material recommended by the Acoustic Engineer and at least 2000mm high. Fence modifications, garden renewal and the removal of the rear roller door to the property is the only external modification to the main building. At the detailed design stage skylights etc. may be proposed to ensure lots of natural light and solar panels may be added to the roof. All main building modifications will be internal.

The small shed on site will either be converted to caretaker’s accommodation or removed so accommodation can be built in its place, in accordance with the updated Concept Plans which show: Caretaker’s accommodation with an area of 80m², comprising combined lounge, kitchen, dining area, 2 bedrooms, 1 bathroom and a carport for one vehicle.

Industry Zone Code –

<p>PO2 Buildings and structures are setback to contribute to an attractive and consistent streetscape appearance and to protect the amenity of other land uses.</p>	<p>AO2.1 Buildings, structures, display and storage areas are set back a minimum of: (a) 8 metres to a State-controlled road; (b) 6 metres from any other road frontage(s).</p>	<p>Buildings exist and so the setbacks are already in place- 5 metre setback from Teamsters Close and a 7.5 metre and a 3 metre setback from Owen Street.</p> <p>However, to clarify further, the site has two street frontages, with Teamsters Close being the main street frontage, with the entrance to the building setback 5 metres. The main building is setback 7.5 metres from Owen Street and the existing shed is setback 3 metres from Owen Street.</p> <p>This stepped setback to Owen Street is considered acceptable as it exists and the conversion of the shed to Caretaker’s accommodation maintaining the existing 3 metre setback will not</p>
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		<p>detrimentally impact on the streetscape.</p> <p>It is considered that the Performance outcome is achieved.</p>
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ITEM 4

The proposal appears inconsistent with Operating Procedures with respect to exercising dogs off site. The Operating Procedures and the various appendices advise against exercising dogs off site and on public roads. Please provide further information as to why the Operating Procedures recommends against this practice and why such practices are considered acceptable and/or or how it will be managed in this particular circumstance.

RESPONSE

As per the Dog Walking policy, copy attached at **Appendix 3**, it is not advisable to walk boarding animals on the streets. Taking boarding animals off site is a high risk exercise with owners expecting their animals to be kept safe. Whilst a dog is being walked there is a risk of the dog escaping, catching a disease, obtaining a tick, injuring itself or possibly being lost, stolen or killed, exposing the association to veterinary costs and possible litigation. Boarding dogs can only go off property with the owner’s consent and waiving all legal responsibilities.

Refuge dogs, on the other hand, are owned by the association and under policy guidelines the advantages of walking the dogs outweigh the risks involved for the association. Boarding Dogs are short term, where refuge dogs can be longer term and benefit greatly from the external stimulation and training through human contact.

ITEM 5

Is there a particular amount of time that dogs are to have access to outdoors to satisfy the requirement of experiencing 'environment enrichment' referenced in the Operational Procedures? Is there a requirement or ability for the cats to have the same experience?

RESPONSE

The Animal Care and Protection Act 2001, at Section 33 specifies:

A person in charge of a dog that is closely confined for a continuous period of 24 hours must, unless the person has a reasonable excuse, ensure the dog is exercised or allowed to exercise itself for— (a) the next 2 hours; or (b) the next hour and for another hour in the next 24 hours.

Maximum penalty—20 penalty units. (2) In deciding whether a dog is closely confined for subsection (1), regard must be had to the dog's age, physical condition and size.

Cats have no exercise guidelines, though best practices state that they must have materials to entertain them, as per the Cattery Policy, copy attached at **Appendix 4.**

ITEM 6

6. Provide an acoustic engineering assessment of the building and the proposed use as referenced within the planning report.

RESPONSE

Please find attached, at **Appendix 5.**, a copy of the Acoustic Report prepared for the proposed development.

ITEM 7

Provide a complete hard copy of the development application and all supporting information which will form the copy to be publically displayed. Please ensure all plans are provided at the appropriate size and scale.

RESPONSE

A hard copy of the development application will be delivered over the counter for viewing during Public Notification.

This represents my clients' response to the DSC Information Request, the application will now proceed to Public Notification.

Yours faithfully,

A handwritten signature in black ink, appearing to read "Elizabeth Taylor", is written on a light-colored rectangular background.

Elizabeth Taylor
Town Planner

APPENDIX: 1

O W E N S T R E E T

T E A M S T E R S C L O S E



STORMWATER DIVERSION VALVE TO SEWER & STORMWATER

ROOF STORMWATER RUN AT HIGH LEVEL TO AVOID DROPPING INTO RUNS

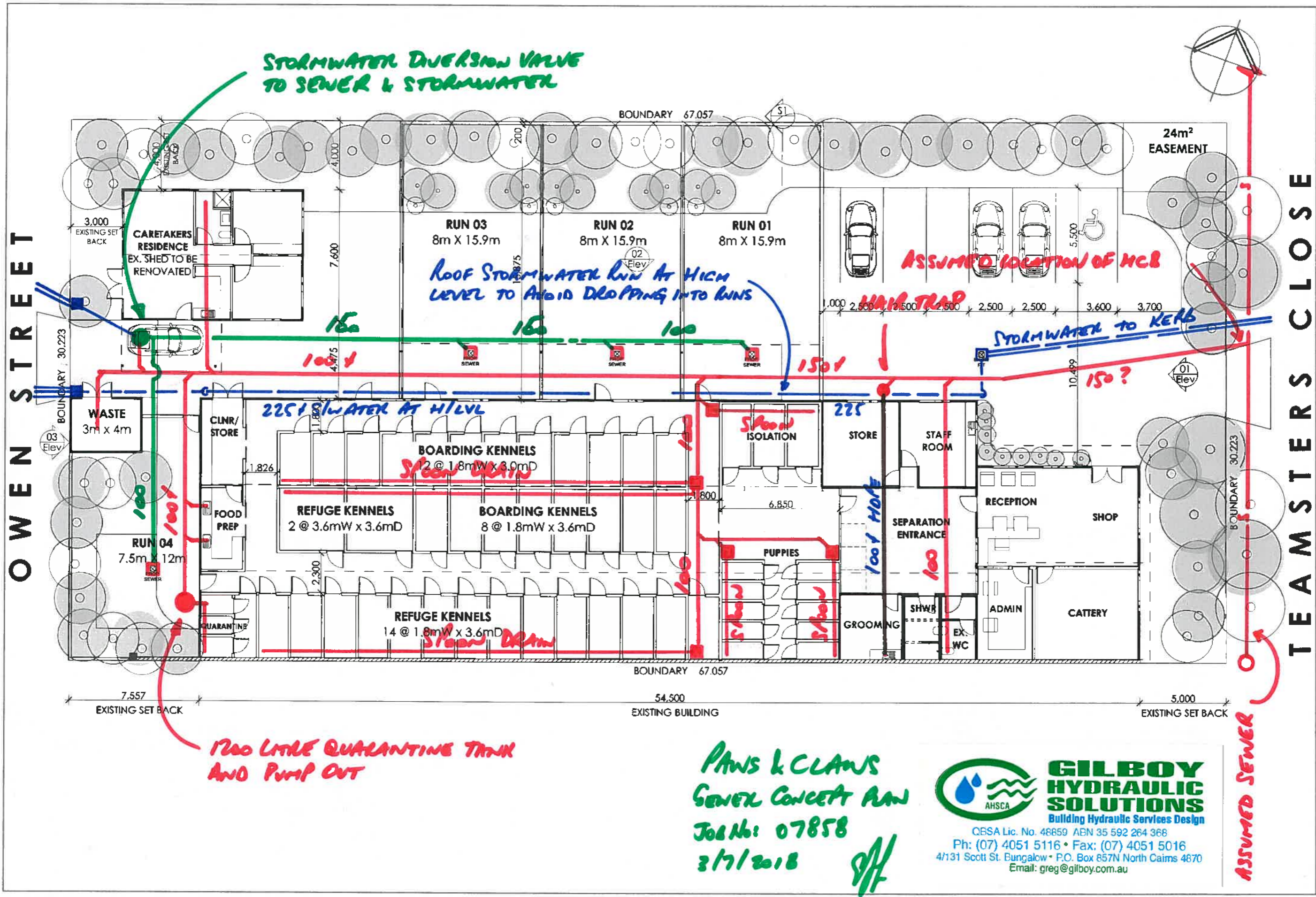
225mm WATER AT HI LVL

1200 LITRE QUARANTINE TANK AND PUMP OUT

PAWS & CLAWS
SEWER CONCEPT PLAN
JOB No: 07858
3/7/2018

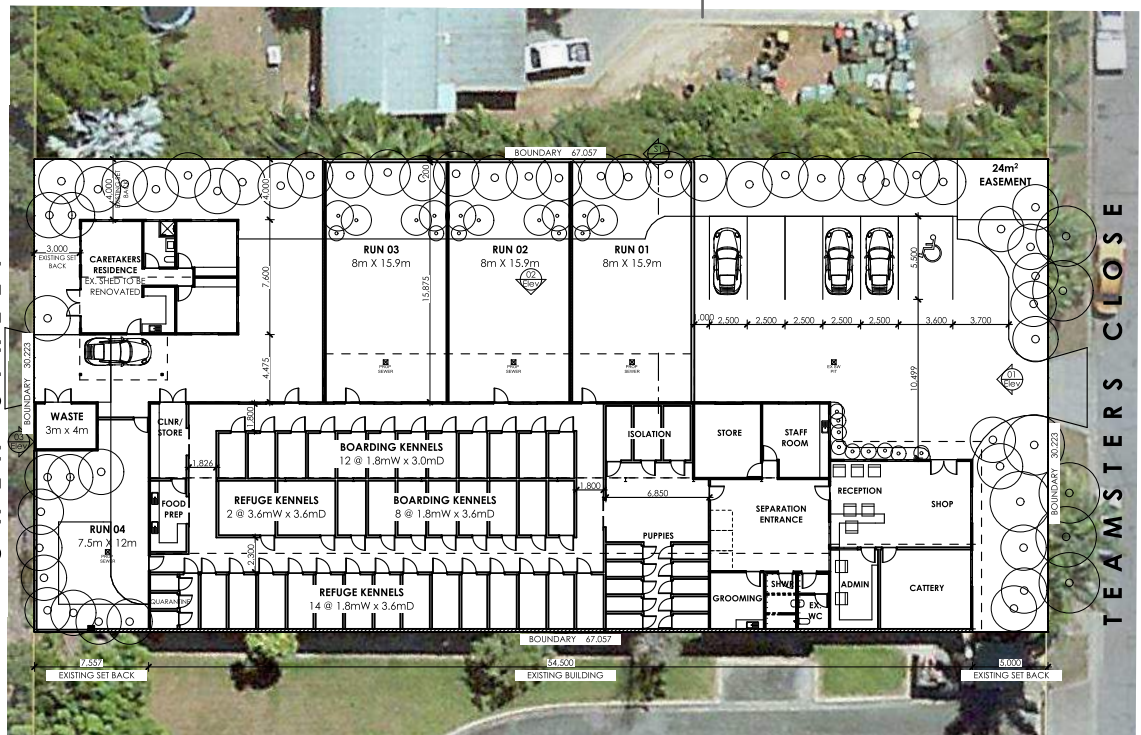
GILBOY HYDRAULIC SOLUTIONS
Building Hydraulic Services Design
QBSA Lic. No. 48859 AEN 35 592 264 368
Ph: (07) 4051 5116 • Fax: (07) 4051 5016
4/131 Scott St. Bungalow • P.O. Box 857N North Cairns 4870
Email: greg@gilboy.com.au

ASSUMED SEWER

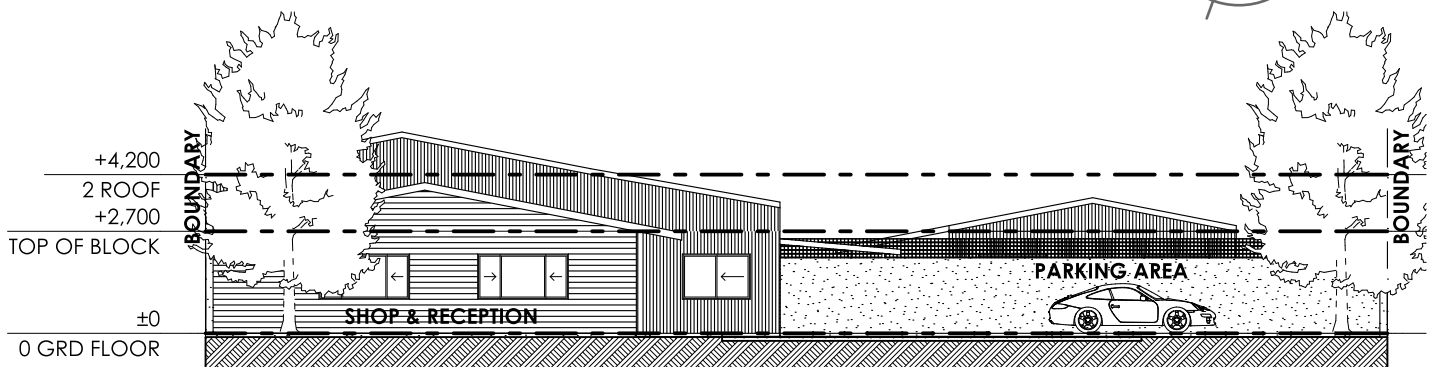


APPENDIX: 2

ELEVATION 02

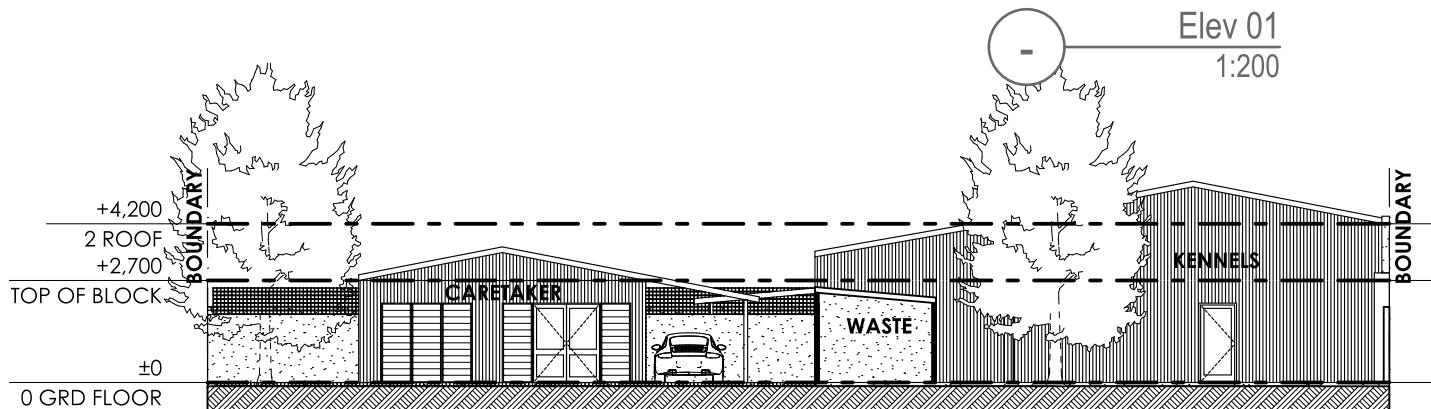


SITE PLAN
1:500

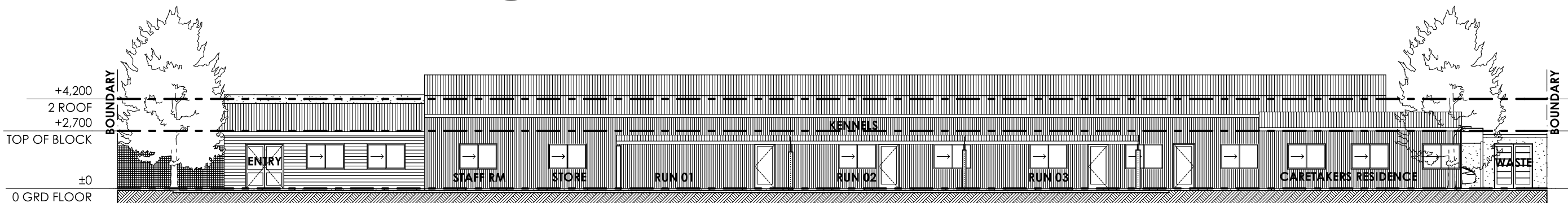


ELEVATION 01

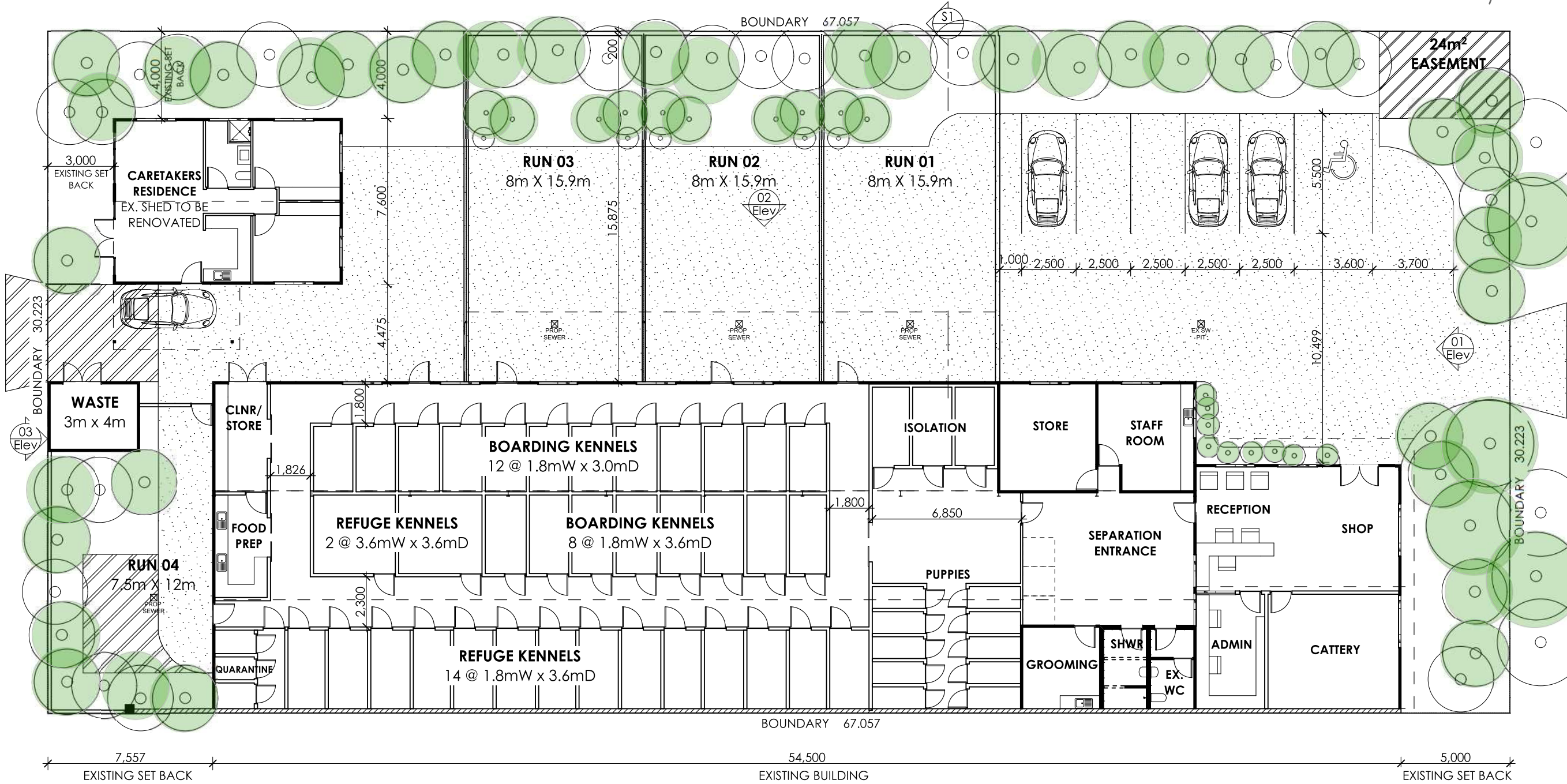
Elev 01
1:200



Elev 03
1:200

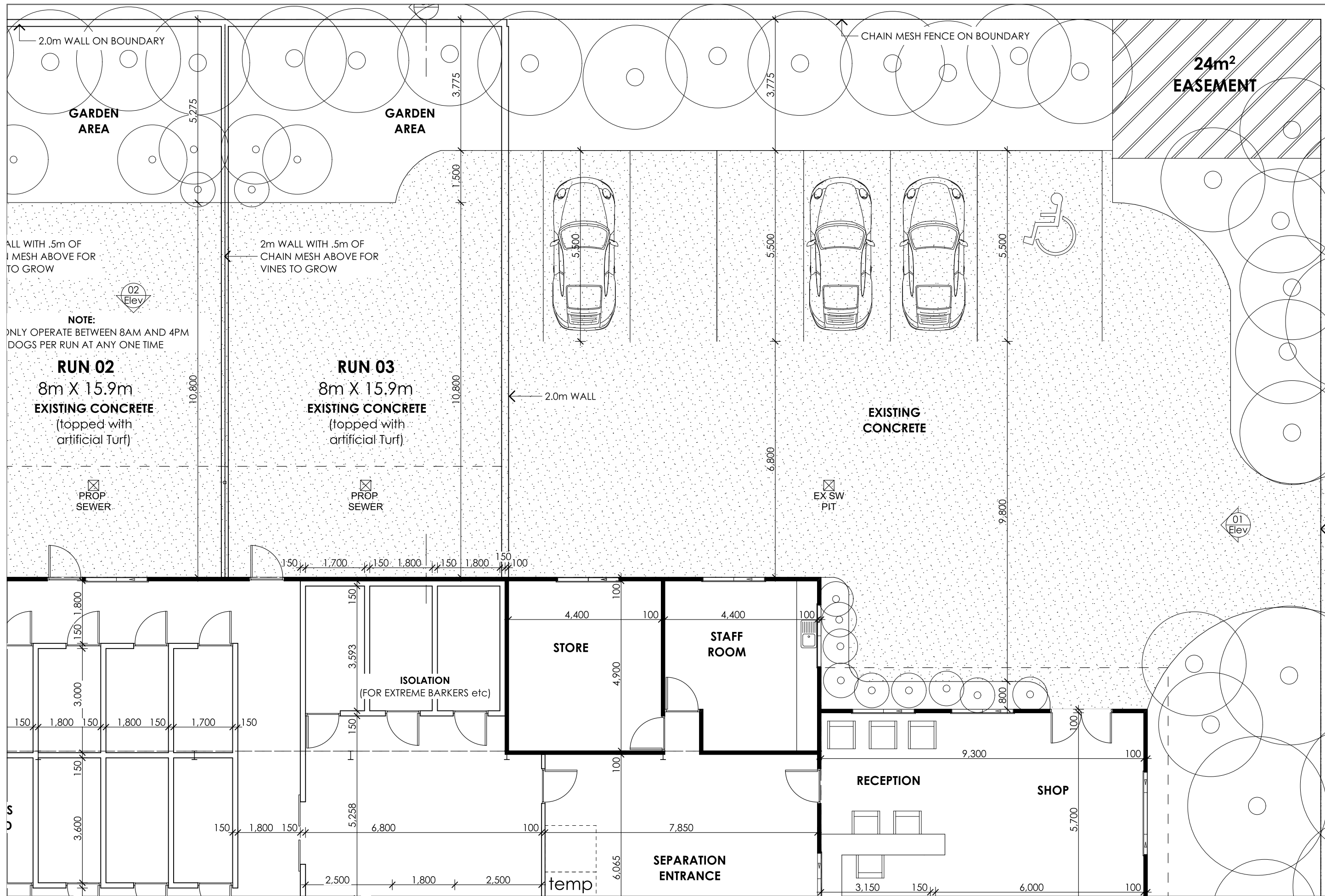


Elev 02
1:200



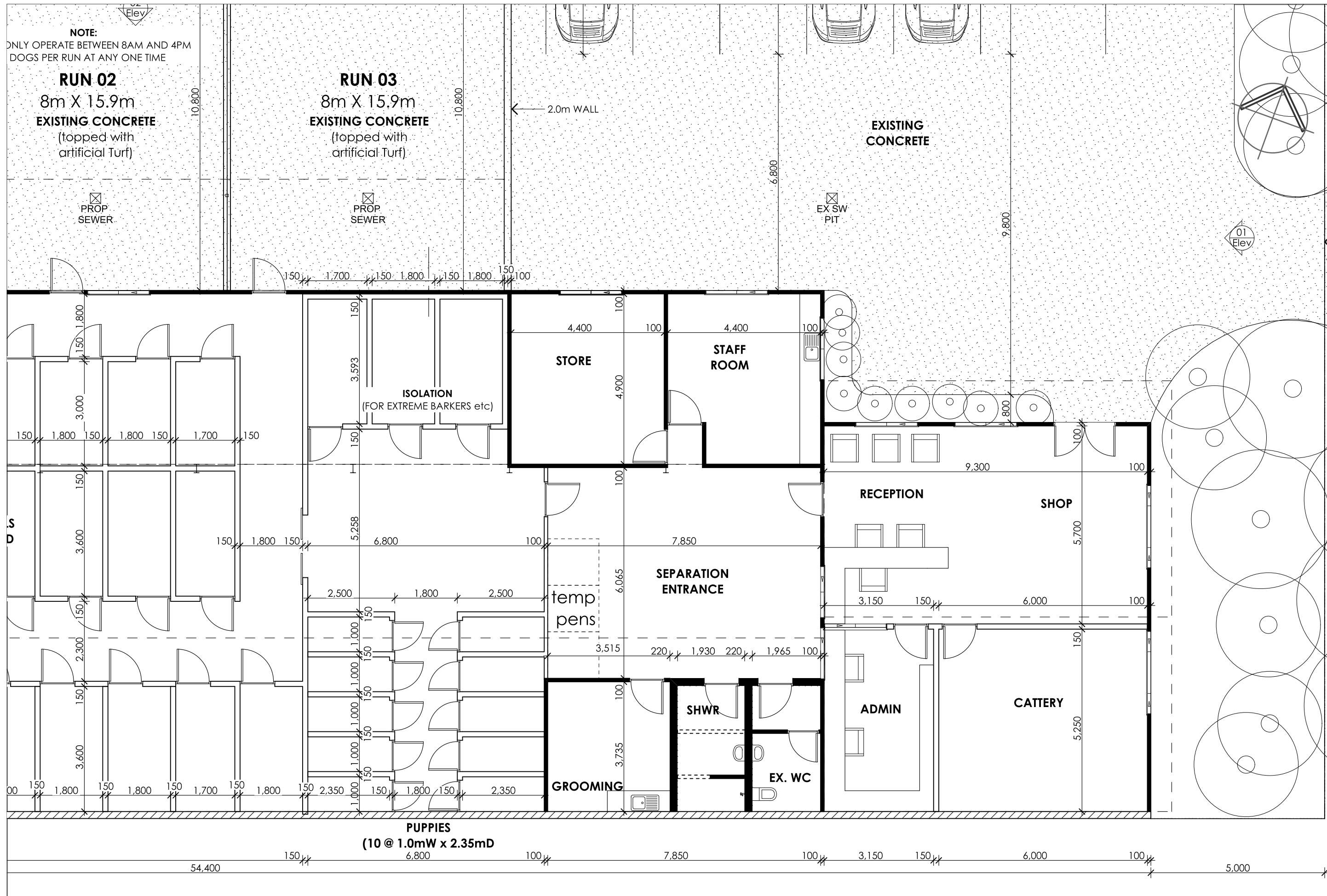
SITE PLAN
1:200

REV F
A3 SHEET
4/07/2018



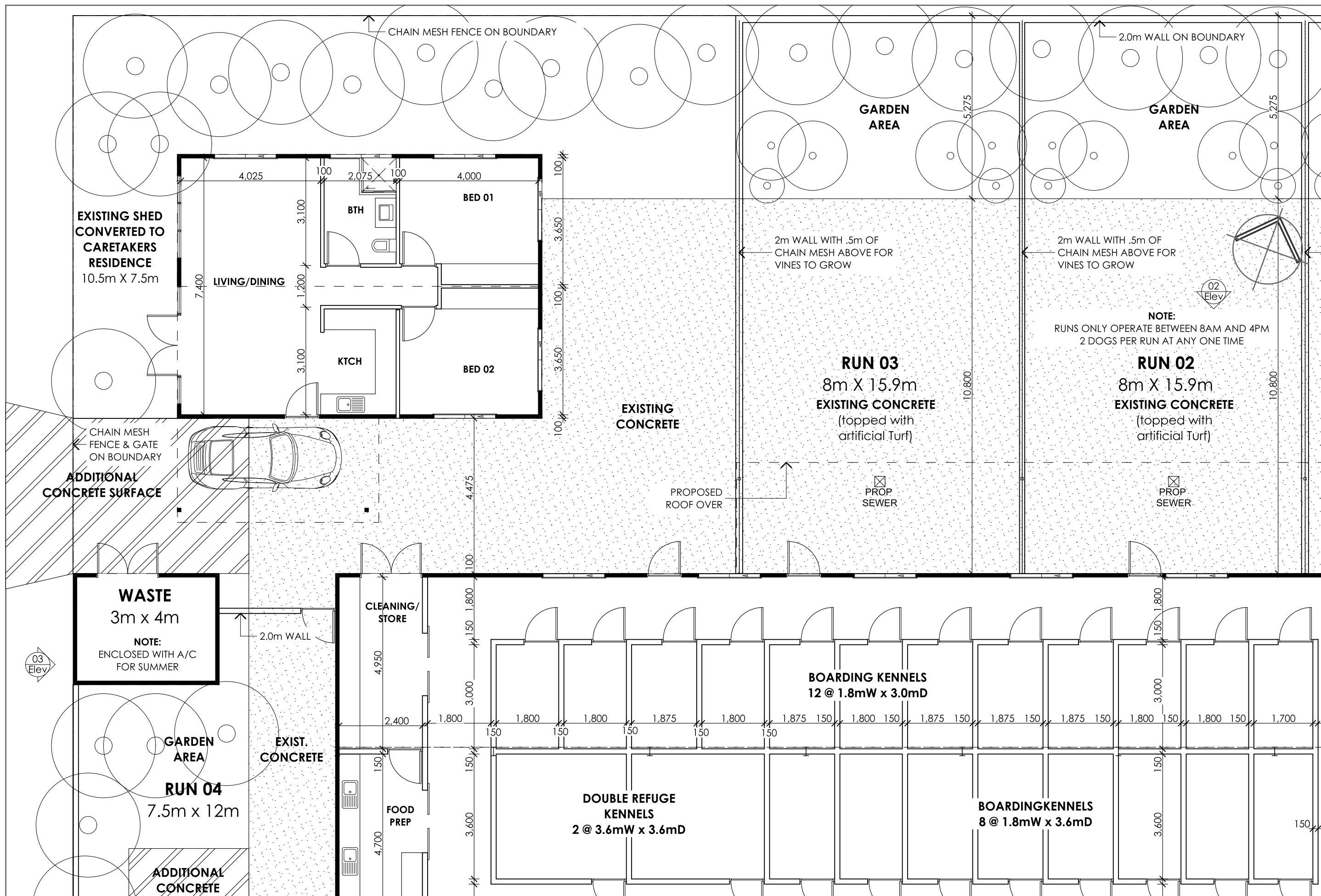
CONCEPT PLANS
 REV F
 A3 SHEET
 4/07/2018

FLOOR PLAN 1/4
 1:100



C O N C E P T P L A N S
 REV F
 A3 SHEET
 4/07/2018

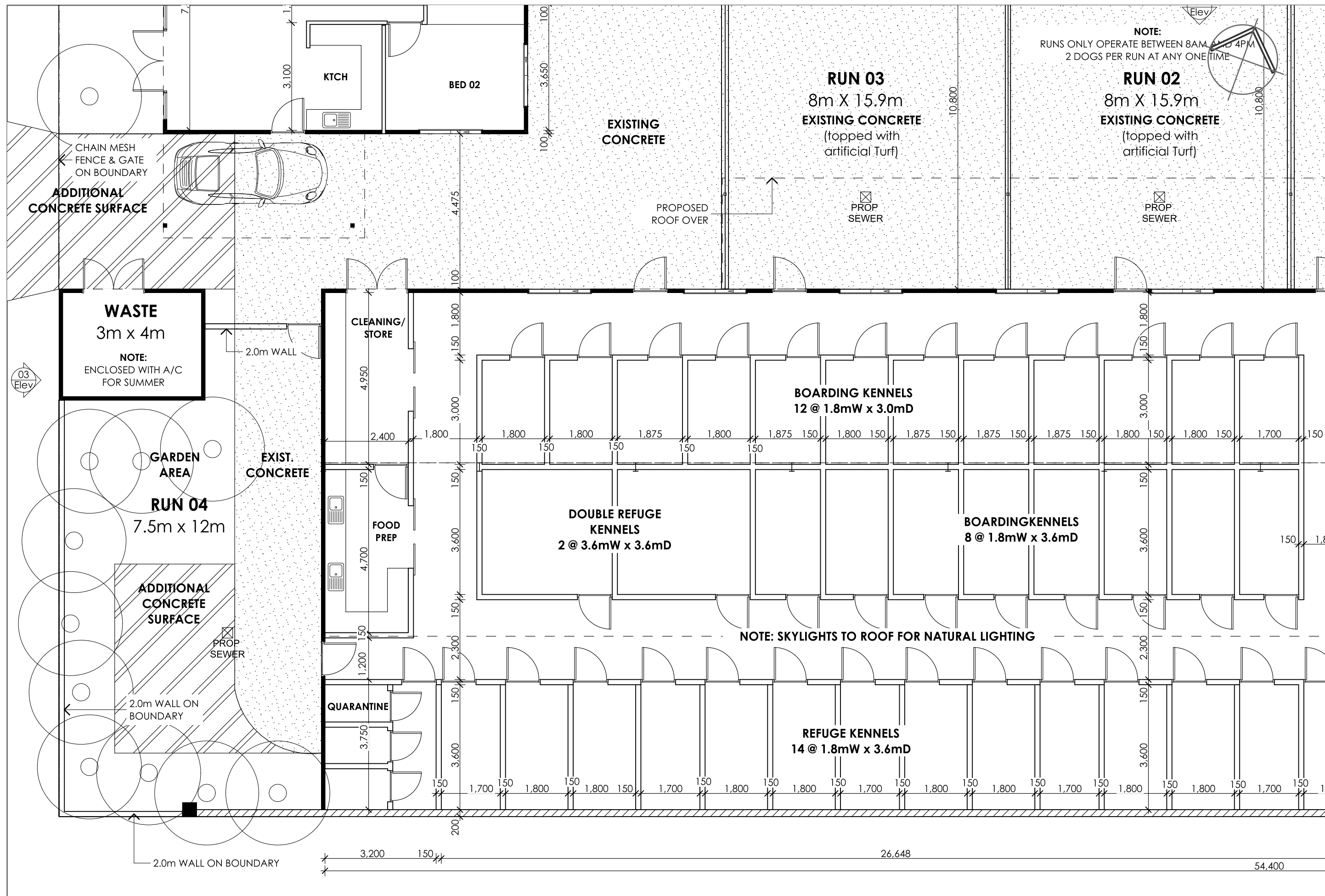
FLOOR PLAN 2/4
1:100



NOTE:
 RUNS ONLY OPERATE BETWEEN 8AM AND 4PM
 2 DOGS PER RUN AT ANY ONE TIME

WASTE
 3m x 4m
NOTE:
 ENCLOSED WITH A/C
 FOR SUMMER

FLOOR PLAN 3/4
 1:100



NOTE:
 RUNS ONLY OPERATE BETWEEN 8AM AND 4PM
 2 DOGS PER RUN AT ANY ONE TIME

RUN 03
 8m X 15.9m
 EXISTING CONCRETE
 (topped with artificial Turf)

RUN 02
 8m X 15.9m
 EXISTING CONCRETE
 (topped with artificial Turf)

WASTE
 3m x 4m
NOTE:
 ENCLOSED WITH A/C
 FOR SUMMER

BOARDING KENNELS
 12 @ 1.8mW x 3.0mD

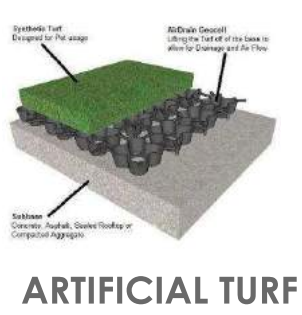
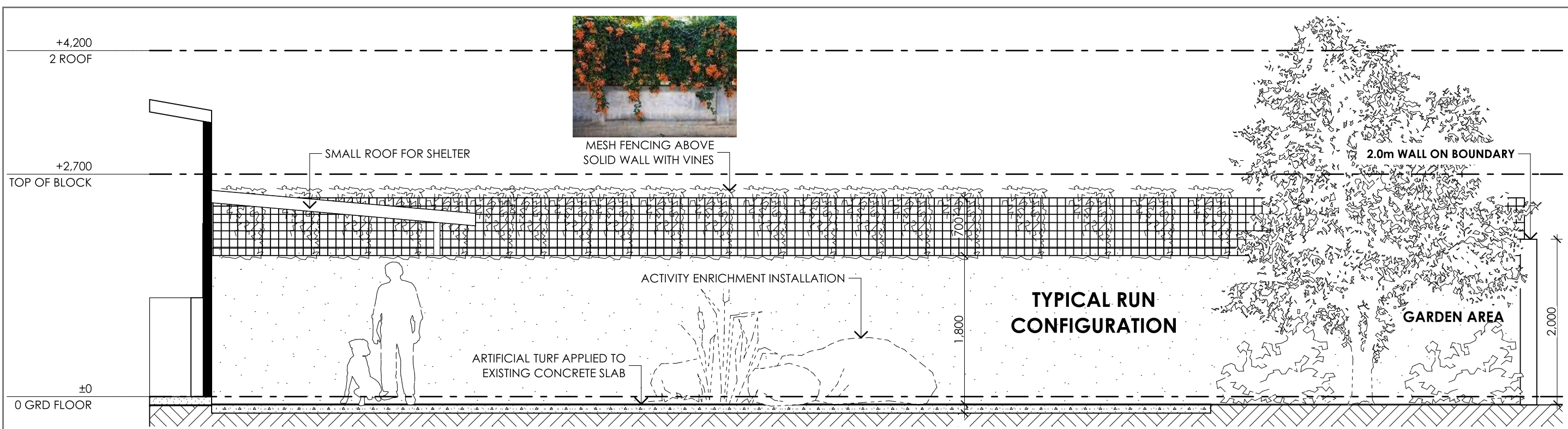
DOUBLE REFUGE KENNELS
 2 @ 3.6mW x 3.6mD

BOARDING KENNELS
 8 @ 1.8mW x 3.6mD

REFUGE KENNELS
 14 @ 1.8mW x 3.6mD

NOTE: SKYLIGHTS TO ROOF FOR NATURAL LIGHTING

FLOOR PLAN 4/4
 1:100



ARTIFICIAL TURF



ACTIVITY ENRICHMENT INSTALLATIONS



TYPICAL PUPPY ENCLOSURES



TYPICAL DOG ENCLOSURES



TYPICAL DOG ENCLOSURES



TYPICAL DOG ENCLOSURES

APPENDIX: 3



Dog Walking

Operational Management: Dog Walking Policy of the Homeless Animal Society and Boarding Kennels Inc Facility 6-8 Teamsters Close Craigie QLD 4877

1. Definition: Facility = Dog Rescue Centre, Dog Boarding Kennel, Cat Boarding Cattery, Grooming and sale of Pet merchandise

2. Prelim

The Dog Walking Policy is related to operational aspects of the facility.

3. Requirements

All management practices will meet all QLD Legislative requirements including the Animal Care and Protection Act 2001, the Animal Management (Cats and Dogs) Act 2008 QLD and the Environmental Protection Act 1994.

4. Dog Walking Outcomes Method

- 4.1 Implement appropriate dog walking measures to meet Development Application approval
- 4.2 Implement appropriate dog walking measures to ensure animal and walker safety
- 4.3 Daily record of animals walked and who walked them
- 4.4 Adhere to Complaints Handling protocols if they occur

5. Dog Walking Management

The dog walking policy is designed to minimise any issues that may arise from dogs in the facility being walked on public roads.

5.1 Dog Walking objective overview;

The primary objective of the Dog walking policy is to prevent injury or loss of animals through theft and to ensure that the procedure of dog walking does not cause an impact or negative effect to surrounding businesses or residents.

5.2 General Considerations;

The procedure of dog walking is divided in two sections. Refuge dogs and Boarding dogs.

- a) Boarding Dogs -No Boarding dogs can leave the facility at any time without the direct consent given by the owner of the animal. On arrival the owner will be given the option for their animal to be walked externally by a staff member or verified volunteer. Whilst the highest amount of care would be taken the owner waives all rights of litigation by agreeing to allow the dog to be walked.
- b) Refuge Dogs – All refuge animals are the property of The Homeless Animal Society and Boarding Kennels Inc. who through the Facility Manager gives consent for the dogs to be walked for the benefit of the mental and physical health of the animal. Long term animals also benefit greatly through the external stimulation and training provided by walking.

All dog walkers must be known to the facility by providing photographic identification, completing the Volunteer information form and completing and acknowledging the Dog walking policy and walking conditions that are in place.

Approved Boarding dogs can only be walked by staff members or local based volunteers who have no less than one month's experience in regularly walking facility dogs.

5.3 Dog walking basics

Dog walking can only occur during facility hours of 9am and 3pm. These times may also be limited due to outside temperatures. All animals must be returned to the facility prior to 3pm unless a foster care agreement has been entered into. Dog walkers are expected to be aware of local laws in the area regarding animals and whilst representing the organisation obey these laws and all other laws that may be in place by state or federal guidance.

- A walker's may only take one dog at any time
- A walker must have the dog restrained and on leash at all times
- A walker must be aware of the Observation sheet and Adoption profile of the dog being walked
- A walker must carry multiple waste bags (provided)at all times and collect and appropriately discard any animal waste whilst walking.
- A walker must obey all road laws whilst walking.
- A walker must carry a working mobile phone at all times.
- Any incidents that occur whilst walking must be reported back to the facility immediately.

Whilst entering or exiting the facility, stimulation noise can occur is an expected result of housing dogs in any dog kennel environment. All efforts must be taken to quickly and firmly move the dogs either on site or off site as to not impact other businesses in the area.

5.4 Dog Walking Procedure

- Each morning Facility staff create a list of dogs available to be walked with a copy of their Observation sheet and Adoption profile available.
- Upon request of walking a walker volunteer is identified by photographic identification and verification of address or accommodation.
- Volunteer form is completed and checked against ID
- Kennel staff must assess the walker so a suitable dog can be assigned so that strength, size and personality are appropriately matched.
- Volunteer walker is provided the Dog walking information pamphlet which contains all relating policy requirements and laws which may affect them carrying out this activity.
- Volunteer walker is given the Observation sheet and Adoption profile of the dog to be walked.
- Staff member and volunteer sign dog out and expected return time completed.
- Staff member and volunteer sign dog back in to facility.
- Staff member assesses animal on return including a tick check before being returned to kennel housing.

6. Importance of Dog Walking

Boarding dogs have limited stays at the facility and in most cases are content with having two hours of outdoor time per day either in a two-hour period or two one-hour periods which is the state minimum requirement for dogs that are in closely confined housing. There are also higher risks involved in taking Boarding dogs outside the facility as accidents can occur such as dogs escaping, catching illnesses or worst case being killed whilst walking. For this reason, Boarding Dogs take higher priority of utilising out door runs where a safe environment can be contained and the opportunity for litigation and undue stress to owners is avoided.

Refuge dogs are normally kept at the facility for much longer periods so it is important that these dogs continue to get external stimulation and training which occurs through human interaction. Like humans' dogs that are contained in environments with no stimulation become bored, stressed and often depressed. By having various volunteers walk these dogs they gain training, interaction skills and well needed stimulation which all make the animal healthier and ready for its new long-term home.

7. Complaints Handling Management

Complaints regarding animals being walked will follow the Complaint Handling policy used for all complaints handling. The Complaint Handling policy has been provided in a separate document.

APPENDIX: 4



Cattery

Operational Management: Cattery Policy of the Homeless Animal Society and Boarding Kennels Inc Facility 6-8 Teamsters Close Craigie QLD 4877

1. Definition: Facility = Dog Rescue Centre, Dog Boarding Kennel, Cat Boarding Cattery, Grooming and sale of Pet merchandise

2. Prelim

The Cattery Policy is related to operational aspects of the facility.

3. Requirements

All management practices will meet all QLD Legislative requirements including the Animal Care and Protection Act 2001, the Animal Management (Cats and Dogs) Act 2008 QLD and the Environmental Protection Act 1994.

4. Cattery Outcomes Method

- 4.1 Implement appropriate measures to meet Development Application approval
- 4.2 Implement appropriate Cattery measures to ensure animals are healthy, stimulated and safe
- 4.3 Daily procedures of Cattery
- 4.4 Adhere to Complaints Handling protocols if they occur

5. Cattery Management

The Cattery policy is designed to minimise any issues that may arise from Cats being kept in the facility.

5.1 Cattery objective overview;

The primary objective of the Cattery policy is to prevent injury or loss of animals whilst being kept at the facility and to ensure that the procedure of keeping cats makes for a healthy and balanced accommodation for the animals and does not cause an impact or have a negative effect to surrounding businesses or residents.

5.2 General Considerations;

The facility will keep cats for rescue and adoption only. No cat boarding will be provided at the facility. Cats will be kept in a group environment. Cats love the luxury of the indoors, although for some, their inquisitive nature calls them to explore the world beyond the safety of a warm bed. Cats like privacy when using the toilet so place their litter tray away from noisy areas or busy corridors. Cats also prefer to eat and drink away from where they toilet so ensure their food and water bowls are placed in a separate part of the enclosure. In addition, cats don't like to drink close to where they eat so make sure their food and water apart. Vertical resting spaces and hiding places should be located in a variety of spots throughout the enclosure. Cats are great climbers so the enclosure should have a suitable number of climbing poles and high sitting areas for the number of cats contained.

5.3 Cattery basics

The cattery will consist of the following attributes

- **Companionship.** Cats require plenty of social contact with people. Volunteers and staff will be welcome to interact with cats during opening hours.
- **Space.** Cats prefer to have their own 'personal space', and this is particularly important to prevent aggression in group housing situations. Each cat requires his/ her own area that provides all the essentials (food, water, bed, resting places, litter tray etc).
- **Sleeping, resting and viewing areas.** Cats like to spend a lot of time sleeping and resting in quiet areas where they feel safe and secure. Cat beds, blankets, towels, etc will be provided. High sided cat beds and boxes are useful to give cats a sense of 'privacy'. Cats use elevated areas as vantage points from which to observe their surroundings. These are essential, and can be provided by access to platforms, shelves, climbing posts or window ledges. Some cats love to watch birds or insects, fish in aquariums and even nature footage on TV which will be in the cattery.
- **Food and water.** Ensure bowls are located away from the litter tray. Many cats like having their water bowl in a separate area to their food bowl. Cats can also be given grass to chew (nontoxic varieties).
- **Litter boxes.** Each cat requires his/ her own litter box, that is big enough for easy access and is located in a safe and private area (if a cat is startled while using the box, he/she may not use that box in future). Cats are very clean animals that do not like using dirty litter boxes, so boxes will need to be scooped at a minimum daily and cleaned with water and non-scented soap once a week as per the cleaning schedules
- **Scratching posts.** Scratching is a natural behaviour for cats, that sharpens claws, stretches muscles and leaves scent marks. Your cat will need a scratching post, which can be horizontal or vertical, and can be made from sisal (a course natural fibre), carpet, cardboard or wood. You can encourage your cat to use the scratching post (rather than other things like the furniture!) by putting catnip on it. Cats have an excellent sense of smell, and many cats love catnip, which can be supplied as a dried herb or grown fresh in pots.
- **Toys and exercise.** Exercise the cats through play or even by training. Cats enjoy toys that move or make noise, and remind them of prey such as mice, birds, and insects. They need a variety of toys they can roll, pounce on, capture and bite, and toys should be rotated regularly to prevent boredom. Some examples of simple and cheap toys (that are safe for cats to play with) are crumpled paper balls, paper bags to explore, cardboard boxes, and toilet paper tubes. Try stuffing old cotton socks with cotton balls and some catnip and tying a knot in the end. You can also buy furry toys (eg in the shape of a mouse) that make noises and can be rolled, balls (eg ping pong balls, or balls that can be filled with food or treats), sticks with toys dangling from the end of a string etc.

6. Complaints Handling Management

Complaints regarding animals being walked will follow the Complaint Handling policy used for all complaints handling. The Complaint Handling policy has been provided in a separate document.

APPENDIX: 5



Proposed Animal Shelter
6-8 Teamsters Close
Craigie

ACOUSTIC REPORT



Client:

Homeless Animal Society and
Boarding Kennels Inc.
Attn: Michael Kerr

Reference:

2018205 R01C 6-8 Teamsters Close Craigie ENV

Date Issued:

3rd July 2018

Document Information

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Report Register

Date	Revision	Author	Reviewer
28/06/2018	R01A	Paul Lonard	Greg Pearce
3/07/2018	R01C	Paul Lonard	Greg Pearce

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1. Introduction

The following report is in response to a request by the Homeless Animal Society and Boarding Kennels Inc. for an environmental noise assessment of a proposed animal shelter located at 6-8 Teamsters Close, Craiglie. To facilitate the assessment, unattended noise monitoring was conducted in the vicinity of nearby residence to determine the criteria for onsite activities. Based on the noise data obtained, onsite activities were assessed to sensitive receivers located in the vicinity of the development.

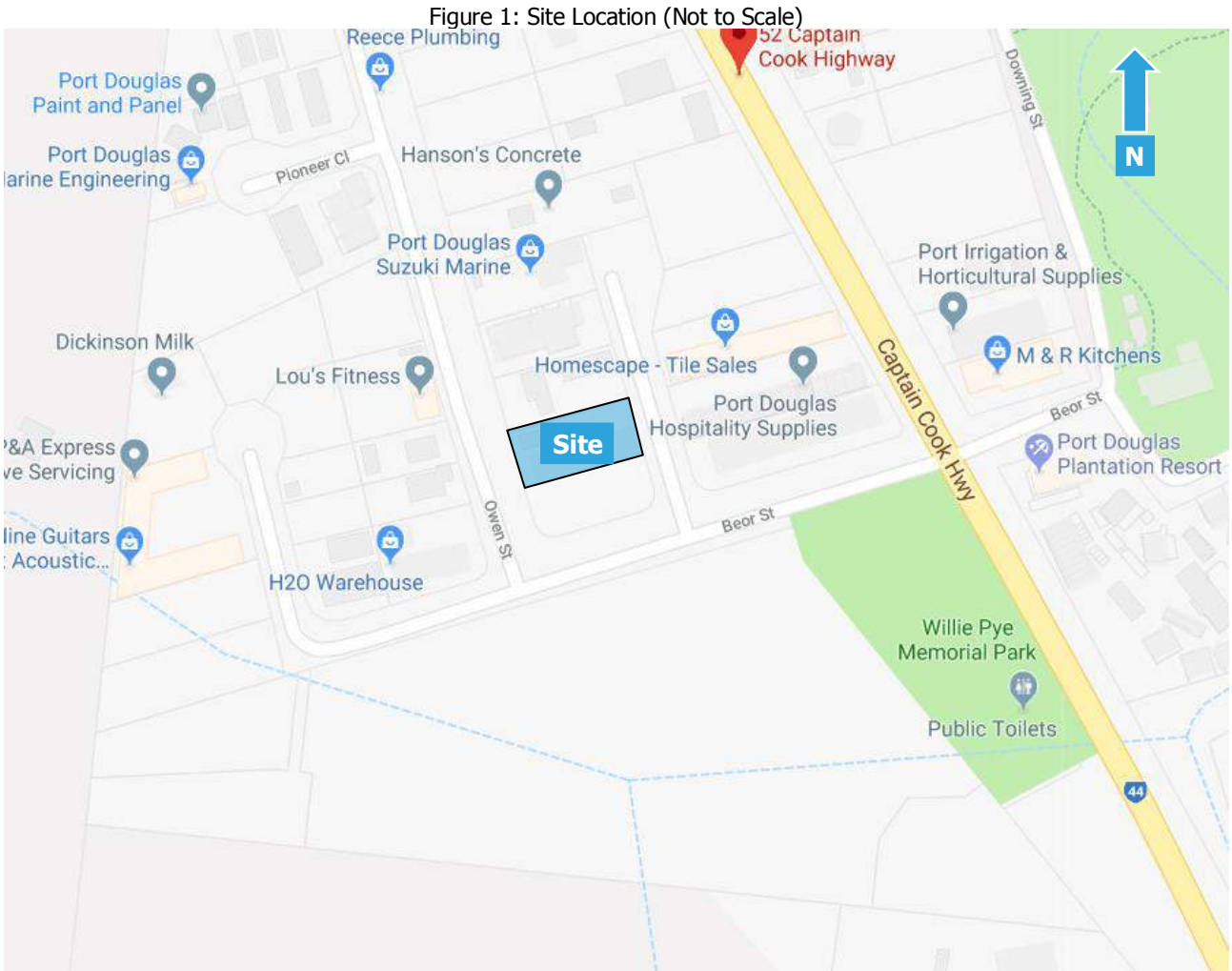
2. Site Description

2.1 Site Location

The site is described by the following:

6-8 Teamsters Close Craiglie
Lot 10 on RP804923

Refer to Figure 1 for site location.



A comprehensive site survey was conducted on the 18th of June 2018 which identified the following:

- a) The site currently consists of two single storey shed structures which will be refurbished for the development.
- b) A Cleanaway waste truck depot bounds the site to the north.
- c) An Origin Energy gas depot bounds the site to the south.
- d) Teamsters Close bounds the site to the south, separating the development from commercial land uses.
- e) Owen Street bounds the site to the north, separating the development from commercial land uses.

2.2 Proposal

The site currently consists of two sheds which shall be refurbished for the development. The larger shed located on the southern portion of the site will be converted into the animal shelter, with the smaller shed located on the north-western portion of the site to be converted into a caretaker's dwelling. The animal shelter will consist of the following;

- 38 dog kennels, 10 puppy kennels and 3 isolation kennels.
- Cattery.
- Reception and shop.
- Quarantine, staff, grooming, administration and store rooms.

Dog runs will be provided adjacent to the northern and western façades of the animal shelter building and will be used between 8am and 4pm. A total of 8 dogs will use the 4 external dog runs at any one time. At all other times dogs will be located within the shelter building, which will be fully enclosed and air-conditioned.

2.3 Acoustic Environment

The surrounding area is primarily affected by road traffic noise from the local road network with nearby commercial properties potentially impacting residents in the area.

3. Equipment

The following equipment was used to record noise levels:

- Rion NL42 Environmental Noise Monitor
- BSWA Technology Co. Ltd Sound Calibrator

The Rion NL42 Environmental Noise Monitor 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. Receivers and Noise Monitoring Locations

4.1 Receiver Locations

The nearest residential receiver locations were identified as follows;

1. A single storey residential dwelling is located to the west at 52 Owen Street.
2. The Plantation Resort consists of 2 storey unit buildings and is located to the east at 1 Captain Cook Highway.
3. A 2 storey dwelling is located to the southeast at 5903 Captain Cook Highway

Note that in accordance with Performance Outcome 10 of the DSC Industry Zone Code, the development must not lower the standards of amenity with respects to noise at any sensitive receiver outside of the Industry Zone. Therefore the above locations were chosen as being representative of the nearest residential receivers in proximity to the proposed development. Refer to Figure 2 for these locations.

Figure 2: Receivers and Noise Monitoring Location



4.2 Unattended Noise Monitoring

The Rion NL42 environmental noise monitor was placed at the Plantation Resort to measure ambient noise levels. The location was selected as it was considered representative of the ambient noise environment at the nearest potentially affected receiver identified in Figure 2. The monitor was located in a free field position with the microphone approximately 1.4 metres above ground surface level. The noise monitor was set to record noise levels between the 18th and 25th of June 2018.

The environmental noise monitor was set to record noise levels in "A" weighting, Fast response using 15 minute statistical intervals. Ambient noise monitoring was conducted generally in accordance with Australian Standard AS1055:1997 *Acoustics – Description and measurement of environmental noise*.

For the unattended noise monitoring location refer to Figure 2.

5. Measured Noise Levels

5.1 Measured Ambient Noise Levels

Table 1 presents the measured ambient noise levels from the unattended noise monitoring location. Any periods of extraneous noise were omitted from the measured data prior to determining the results.

Table 1: Measured road traffic and ambient noise levels - all time periods

Day	Date	L90 dB(A)		
		Day	Evening	Night
Monday	18/06/18	49	39	30
Tuesday	19/06/18	50	37	30
Wednesday	20/06/18	50	36	28
Thursday	21/06/18	49	37	29
Friday	22/06/18	49	39	30
Saturday	23/06/18	48	37	31
Sunday	24/06/18	48	39	31
Overall value		49	38	30

Refer to the appendix for graphical representation of the measured noise levels.

5.2 Measured Offsite Activity Noise Levels

Noise measurements were performed at the location of the proposed caretakers dwelling on Monday 18th of June between the hours of 12:45am and 1.15pm to determine any requirements for acoustic treatments, with the results as follows;

Table 2: Attended noise measurement results

Activity assessed	Measured activity noise level dB(A) Leq 15min	Time	Comments
Offsite commercial and industrial activity	52	12:45am-1:00pm	Observed noise included; <ul style="list-style-type: none"> Voices, reverse alarms, power tools, metal drops from industrial premises to the north. Concrete truck and vehicle movements on surrounding roads. Distant continuous plant noise.
Offsite commercial and industrial activity	49	1:00pm-1:15pm	Observed noise included; <ul style="list-style-type: none"> Voices, reverse alarms, power tools, metal drops from industrial premises to the north. Concrete truck and vehicle movements on surrounding roads. Distant continuous plant noise

The measured noise impacts by attended measurement were found to be 49-52 dB(A) Leq 15min, with levels dominated by traffic and offsite industrial activity. A summary of the measured levels is provided in Section 7.2.

6. Environmental Noise Criteria

6.1 Environmental Noise Policy 2008

The noise criteria as applied under the *Environmental Protection (Noise) Policy 2008* are as follows;

6.1.1 Acoustic Quality Objectives

Table 3 below presents the acoustic quality objectives at noise sensitive receptors as detailed in Schedule 1 of the EPP (Noise) 2008.

Table 3: Acoustic Quality Objectives at Noise Sensitive Properties

Sensitive Receptor	Time of Day	Acoustic Quality Objectives, dB(A)		
		L _{Aeq,adj,1hr}	L _{A10,adj,1hr}	L _{A1,adj,1hr}
Dwelling (outdoors)	Day and Evening (7am – 10pm)	50	55	65
Dwelling (Indoors)	Day and Evening (7am – 10pm)	35	40	45
	Night (10pm - 7am)	30	35	40

6.1.2 Background Creep

The Background Creep criteria are as follows;

Time-varying noise:

$$L_{Aeq,adj,T} \leq \text{Ambient } L_{A90,T} + 5\text{dB(A)}$$

Steady-state noise:

$$L_{A90,T} \leq \text{Ambient } L_{A90,T}$$

The time period (T) is a time interval of at least 15 minutes, or if the noise continues for less than 15 minutes, the duration of the noise source.

Based on the results of ambient noise monitoring, the project specific background creep noise limits are shown in Table 4.

Table 4: Background Creep Noise Limits

Time Period	Noise Level Limits SPL dB(A)	
	L _{Aeq,T}	L _{A90,T}
Day 7am – 6pm	54	49
Evening 6pm – 10pm	43	38
Night 10pm – 7am	35	30

7. Environmental Assessment

7.1 Onsite Activities

Noise associated with the proposed development was assessed based on measurements of similar activities. The calculations assume that the nominated activities are located at a representative distance within the development site to each receiver location. Any relevant shielding or building transmission loss is taken into account for these activities. Based on the existing construction of the shed, the external façade is predicted to achieve a 15 dB(A) sound reduction.

7.1.1 Acoustic Quality Objectives

The average maximum noise source levels and predicted levels at the receiver locations are shown in Table 5. Note: LA10 and LA1 results are not shown in cases where the total duration of the events is less than the minimum time required e.g. LA10(1hr) requires noise events to occur for at least 360 seconds of an hour long period. LAeq results are not shown where the calculated total is less than 0dBA.

Table 5: Acoustic Quality Objective Noise Levels, 1 hour

Receiver	Description	Source Leq@1m dB(A)	Correction dB(A)*	Corrected Leq@1m dB(A)	No. of events per 1hr Day	No. of events per 1hr Eve	No. of events per 1hr Night	Duration per event	Barrier (height (m))	Barrier screening dB	Building TL or shield dB	Topo screening dB	Dist atten. @ 60ft/dd	LAeq adj.,1hr ext. dB(A) Day	LAeq adj.,1hr int. dB(A) Day	LAeq adj.,1hr ext. dB(A) Eve	LAeq adj.,1hr int. dB(A) Eve	LAeq adj.,1hr ext. dB(A) Night	LAeq adj.,1hr int. dB(A) Night	LA10 adj.,1hr ext. dB(A) Day	LA10 adj.,1hr int. dB(A) Day	LA10 adj.,1hr ext. dB(A) Eve	LA10 adj.,1hr int. dB(A) Eve	LA10 adj.,1hr ext. dB(A) Night	LA10 adj.,1hr int. dB(A) Night	Amenity LAeq Compliance			LA10 Compliance			LA1 Compliance																												
																										Day/ eve	Day/ eve indoor	Night indoor	Day/ eve	Day/ eve indoor	Night indoor	Day/ eve	Day/ eve indoor	Night indoor																										
																										50	35	30	55	40	35	65	45	40																										
Criteria																													50	35	30	55	40	35	65	45	40																							
1	Car door closure	75	2	77	20	20	20	2						-50	7	7	7									13	3	13	3	13	3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes																				
	Car passby	69		69	20	20	20	15						-49	9	9	9									14	4	14	4	14	4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes																			
	Car start	74	2	76	20	20	20	2						-49	6	6	6									12	2	12	2	12	2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes																		
	Dog kennel 38 dogs (day)	94	2	96	4			900			-15			-48	32	22					34	24					43	33				Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes																		
	Dog kennel 38 dogs (eve)	90	2	92		4		900			-15			-48			28	18								30	20				Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes																			
	Dog kennel 38 dogs (night)	84	2	86			4	900			-15			-48					22	12										33	23		Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes																	
	2 Dogs, Dog run 1	92	2	94	4			900			-7	-49	37	27								38	28				43	33				Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes																		
	2 Dogs, Dog run 2	92	2	94	4			900			-7	-49	38	28													44	34				Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes																		
	2 Dogs, Dog run 3	92	2	94	4			900			-7	-48	38	28													39	29				Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes																		
	2 Dogs, Dog run 4	92	2	94	4			900			-7	-48	38	28													39	29				Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes																		
	Total														44	34	28	18	23	13	45	35	30	20	24	14	51	41	39	29	33	23	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes																
	2	Car door closure	75	2	77	20	20	20	2						-47	10	10	10									16	6	16	6	16	6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes																
		Car passby	69		69	20	20	20	15						-47	12	12	12	2	12	2							17	7	17	7	17	7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes															
Car start		74	2	76	20	20	20	2						-47	10	10	10										16	6	16	6	16	6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes															
Dog kennel 38 dogs (day)		94	2	96	4			900			-15			-47	34	24											45	35				Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes															
Dog kennel 38 dogs (eve)		90	2	92		4		900			-15			-47			30	20									32	22				n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	Yes																
Dog kennel 38 dogs (night)		84	2	86			4	900			-15			-47					24	14							26	16				n/a	Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes																	
2 Dogs, Dog run 1		92	2	94	4			900			-7	-48	39	29								40	30				45	35				Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a															
2 Dogs, Dog run 2		92	2	94	4			900			-7	-48	39	29													45	35				Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a															
2 Dogs, Dog run 3		92	2	94	4			900			-7	-48	39	29													45	35				Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a															
2 Dogs, Dog run 4		92	2	94	4			900	2	-10	-49	35	25									36	26				41	31				Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a															
Total														45	35	30	20	25	15	46	36	32	22	26	16	52	42	41	31	35	25	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes																
3		Car door closure	75	2	77	20	20	20	2						-51	6	6	6										12	2	12	2	12	2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes																
		Car passby	69		69	20	20	20	15						-51	8	8	8										13	3	13	3	13	3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes															
	Car start	74	2	76	20	20	20	2						-51	6	6	6										12	2	12	2	12	2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes															
	Dog kennel 38 dogs (day)	94	2	96	4			900			-15			-51	30	20											41	31				Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a															
	Dog kennel 38 dogs (eve)	90	2	92		4		900			-15			-51			26	16									28	18				n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a														
	Dog kennel 38 dogs (night)	84	2	86			4	900			-15			-51					20	10							22	12				n/a	Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes	n/a	Yes	Yes																	
	2 Dogs, Dog run 1	92	2	94	4			900			-12	-51	31	21													32	22				Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a															
	2 Dogs, Dog run 2	92	2	94	4			900			-12	-51	31	21													32	22				Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a															
	2 Dogs, Dog run 3	92	2	94	4			900			-12	-51	31	21													37	27				Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a															
	2 Dogs, Dog run 4	92	2	94	4			900	2	-10	-51	33	23														34	24				Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a	n/a	Yes	n/a															
	Total														38	28	27	17	21	11	39	29	28	18	23	13	46	36	37	27	32	22	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes														

Compliance is predicted with the Acoustic Quality Objectives for all activities associated with the development provided the recommendations in Section 8 are implemented.

7.1.2 Background Creep

The noise source levels and predicted levels at the receiver locations are shown as follows;

Table 6: Background Creep Noise Levels, 15min

Receiver	Description	Receivers										Laeq 15 min Compliance									
		Source Leq@1m dB(A)	Correction dB(A)*	Corrected Leq@1m dB(A)	No. of events per 15min Day	No. of events per 15min Eve	No. of events per 15min Night	Duration per event	No Barrier (height (r	Barrier screening dB	Building TL or shield dB	Topo screening dB	Dist. atten. @-6dB/dd	Laeq adj,Text. dB(A) Day	Laeq adj,Text. dB(A) Eve	Laeq adj,Text. dB(A) Night	Day	Eve	Night		
1	Criteria															54	43	35			
	Car door closure	75	2	77	5	5	5	2					-50	7	7	7	Yes	Yes	Yes		
	Car passby	69		69	5	5	5	15					-49	9	9	9	Yes	Yes	Yes		
	Car start	74	2	76	5	5	5	2					-50	6	6	6	Yes	Yes	Yes		
	Dog kennel 38 dogs (day)	94	2	96	1			900			-15		-49	32			Yes	n/a	n/a		
	Dog kennel 38 dogs (eve)	90	2	92		1		900			-15		-49		28		n/a	Yes	n/a		
	Dog kennel 38 dogs (night)	84	2	86			1	900			-15		-49			22	n/a	n/a	Yes		
	2 Dogs, Dog run 1	92	2	94	1			900					-7	-50	37		Yes	n/a	n/a		
	2 Dogs, Dog run 2	92	2	94	1			900					-7	-49	38		Yes	n/a	n/a		
	2 Dogs, Dog run 3	92	2	94	1			900					-7	-49	38		Yes	n/a	n/a		
	2 Dogs, Dog run 4	92	2	94	1			900					-7	-49	38		Yes	n/a	n/a		
	Total															44	28	23	Yes	Yes	Yes
	2	Criteria															54	43	35		
Car door closure		75	2	77	5	5	5	2					-47	10	10	10	Yes	Yes	Yes		
Car passby		69		69	5	5	5	15					-47	12	12	12	Yes	Yes	Yes		
Car start		74	2	76	5	5	5	2					-47	10	10	10	Yes	Yes	Yes		
Dog kennel 38 dogs (day)		94	2	96	1			900			-15		-47	34			Yes	n/a	n/a		
Dog kennel 38 dogs (eve)		90	2	92		1		900			-15		-47		30		n/a	Yes	n/a		
Dog kennel 38 dogs (night)		84	2	86			1	900			-15		-47			24	n/a	n/a	Yes		
2 Dogs, Dog run 1		92	2	94	1			900					-7	-48	39		Yes	n/a	n/a		
2 Dogs, Dog run 2		92	2	94	1			900					-7	-48	39		Yes	n/a	n/a		
2 Dogs, Dog run 3		92	2	94	1			900					-7	-48	39		Yes	n/a	n/a		
2 Dogs, Dog run 4		92	2	94	1			900	2	-10			-49	35			Yes	n/a	n/a		
Total																45	30	25	Yes	Yes	Yes
3		Criteria															54	43	35		
	Car door closure	75	2	77	5	5	5	2					-51	6	6	6	Yes	Yes	Yes		
	Car passby	69		69	5	5	5	15					-51	8	8	8	Yes	Yes	Yes		
	Car start	74	2	76	5	5	5	2					-51	6	6	6	Yes	Yes	Yes		
	Dog kennel 38 dogs (day)	94	2	96	1			900			-15		-51	30			Yes	n/a	n/a		
	Dog kennel 38 dogs (eve)	90	2	92		1		900			-15		-51		26		n/a	Yes	n/a		
	Dog kennel 38 dogs (night)	84	2	86			1	900			-15		-51			20	n/a	n/a	Yes		
	2 Dogs, Dog run 1	92	2	94	1			900					-12	-51	31		Yes	n/a	n/a		
	2 Dogs, Dog run 2	92	2	94	1			900					-12	-51	31		Yes	n/a	n/a		
	2 Dogs, Dog run 3	92	2	94	1			900					-12	-51	31		Yes	n/a	n/a		
	2 Dogs, Dog run 4	92	2	94	1			900	2	-10			-51	33			Yes	n/a	n/a		
	Total															38	27	21	Yes	Yes	Yes

*Correction due to tonality and impulsiveness as per AS1055:1997.

Compliance is predicted with the Background Creep criteria for all activities associated with the development provided the recommendations in Section 8 are implemented.

7.2 Measured Offsite Activity Noise Levels

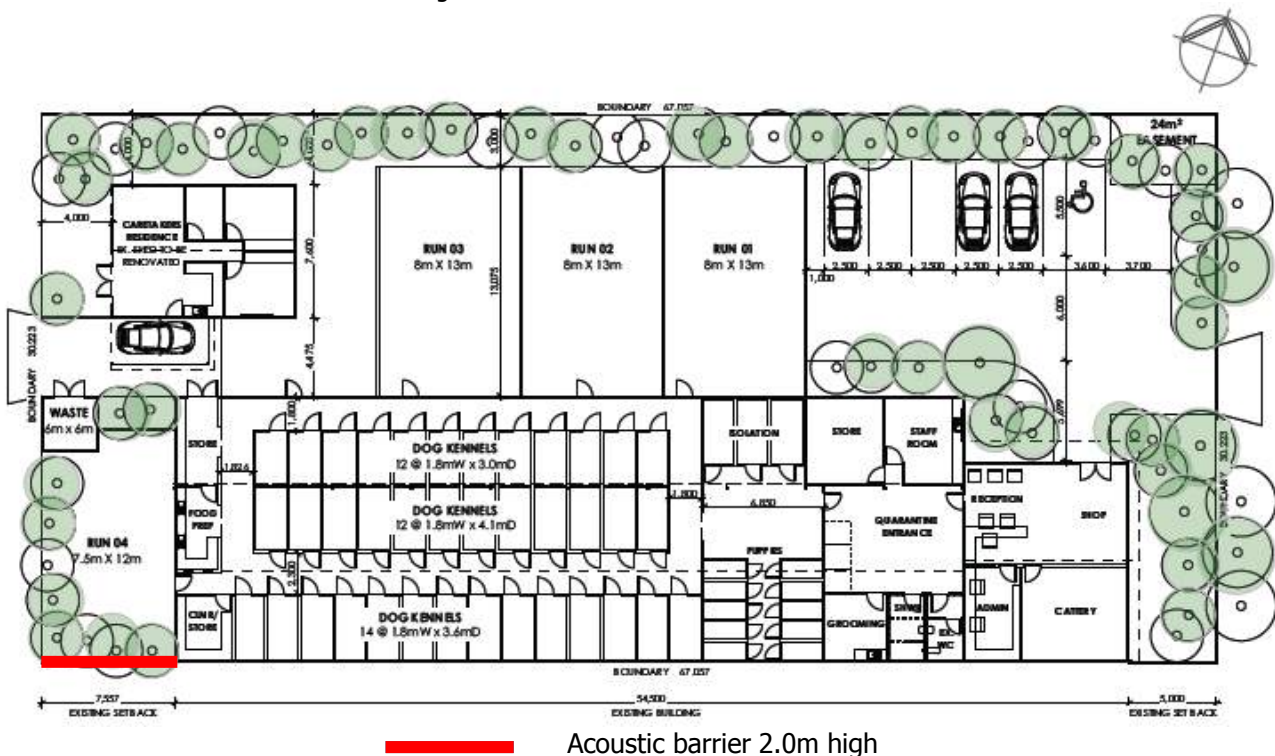
The acoustic quality objectives for indoor noise within a habitable room is Leq 35 dB(A) during the daytime and Leq 30 dB(A) during the night time . Based on the measured noise levels, a maximum noise reduction (from outside to inside) of up to 22 dB(A) would be required in order to satisfy the criteria. This can be satisfied with the use of slightly upgraded façade construction, refer to the recommendations presented in Section 8.3.

8. Recommendations

8.1 Acoustic Barrier

To reduce noise from the external dog run, an acoustic barrier is recommended as presented in Figure 3. The acoustic barrier shall be constructed using materials that achieve a minimum surface density of at least 10kg/m². Suitable materials may include lapped 19mm thick pine palings with 40% overlap, 9mm fibre cement sheet, masonry, aerated concrete, glass or other materials which satisfy the minimum surface density requirement. The barriers should be free of gaps and holes and the height of the barriers is relative to the finished dog run level.

Figure 3: Recommended Acoustic Barrier



8.2 Management Controls

The assessment has demonstrated that onsite activities are predicted to comply with the criteria in Section 6, on the condition the following recommendations are implemented;

- Use of the external dog runs is limited to the daytime period (8am-4pm) 7 days per week.

8.3 Caretaker's Dwelling

8.3.1 Building Treatments

To achieve a suitable level of internal amenity for offsite commercial activity noise, we recommend the following:

- The external facade and roof shall achieve minimum Rw 35.
- External windows shall require minimum thickness 4mm float with acoustic seals (minimum Rw 27)
- External sliding doors shall require minimum thickness 4mm toughened glazing with acoustic seals (minimum Rw 27).

A lightweight construction option for the external façade is as follows;

- Rw 35: 6mm FC externally with 70mm stud and 75mm glasswool batts (14kg/m³) in the cavity with 13mm plasterboard internally.

For the roof system, we recommend construction as follows;

- Rw 35: Metal sheet roof with Bradford Anticon 55 insulation, 75mm glasswool Batts in the cavity with 10mm plasterboard internally.

Penetrations shall not reduce the overall acoustic performance of the installed façade/roof/ceiling systems.

8.3.2 Alternative Ventilation

We recommend that all habitable rooms have the provision for an alternative ventilation system similar to air-conditioning or mechanical ventilation to allow windows and doors to be closed.

8.4 Mechanical Plant

No information regarding mechanical services was available at the time of the assessment. We recommend that any new mechanical plant is designed to comply with the criteria. We recommend an assessment by qualified acoustic consultant be conducted prior to installation to determine any requirements for acoustic treatments to mechanical plant.

9. Conclusion

An environmental noise assessment was conducted for the proposed animal shelter located at 6-8 Teamsters Close, Craigie, which considered onsite activities to sensitive receivers in the vicinity of the site. On the condition the recommendations detailed in Section 8 are implemented, compliance is predicted with assessment criteria.

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

Report Prepared By

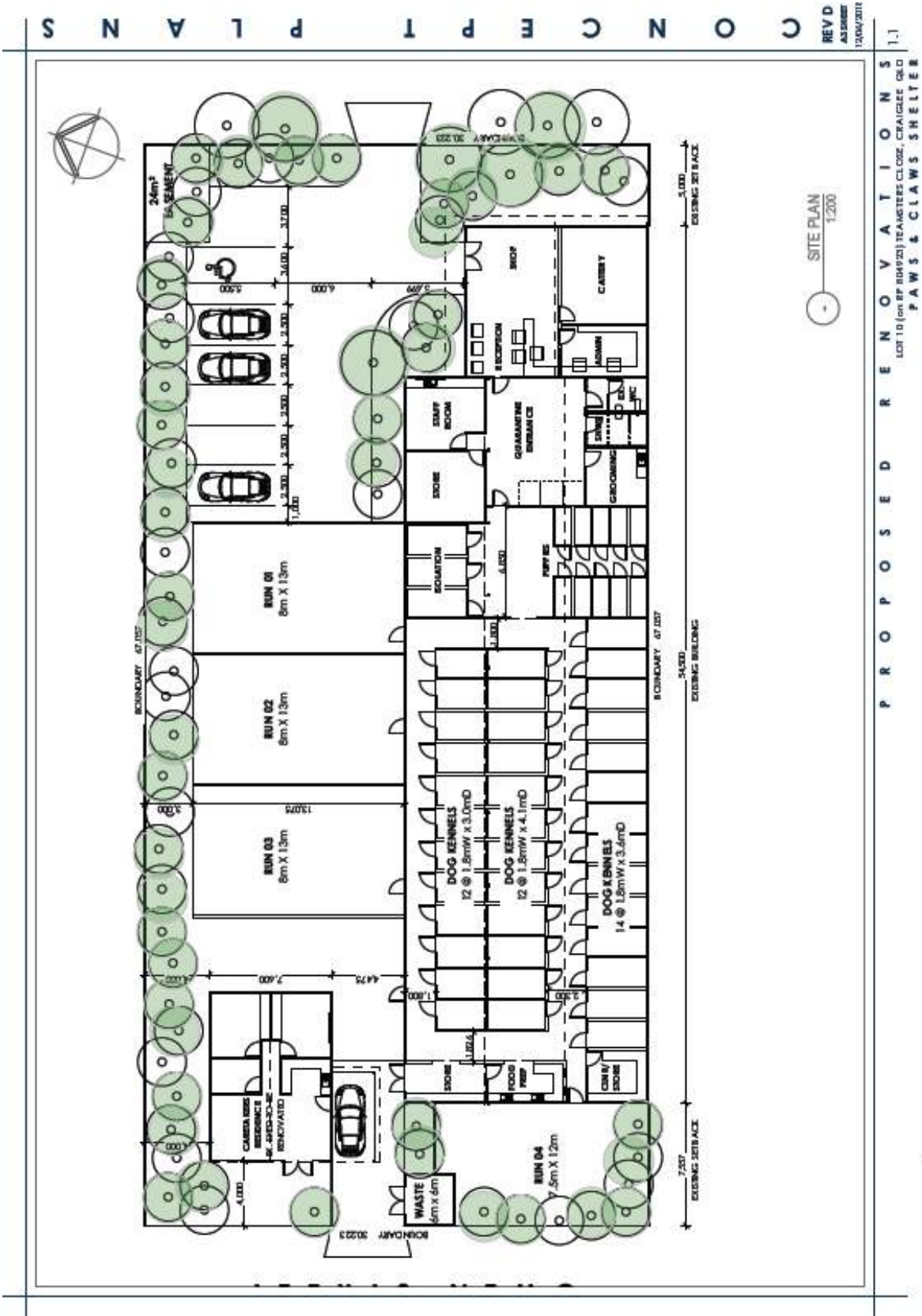


Paul Lonard B.Env.Sc
Senior Acoustic Consultant

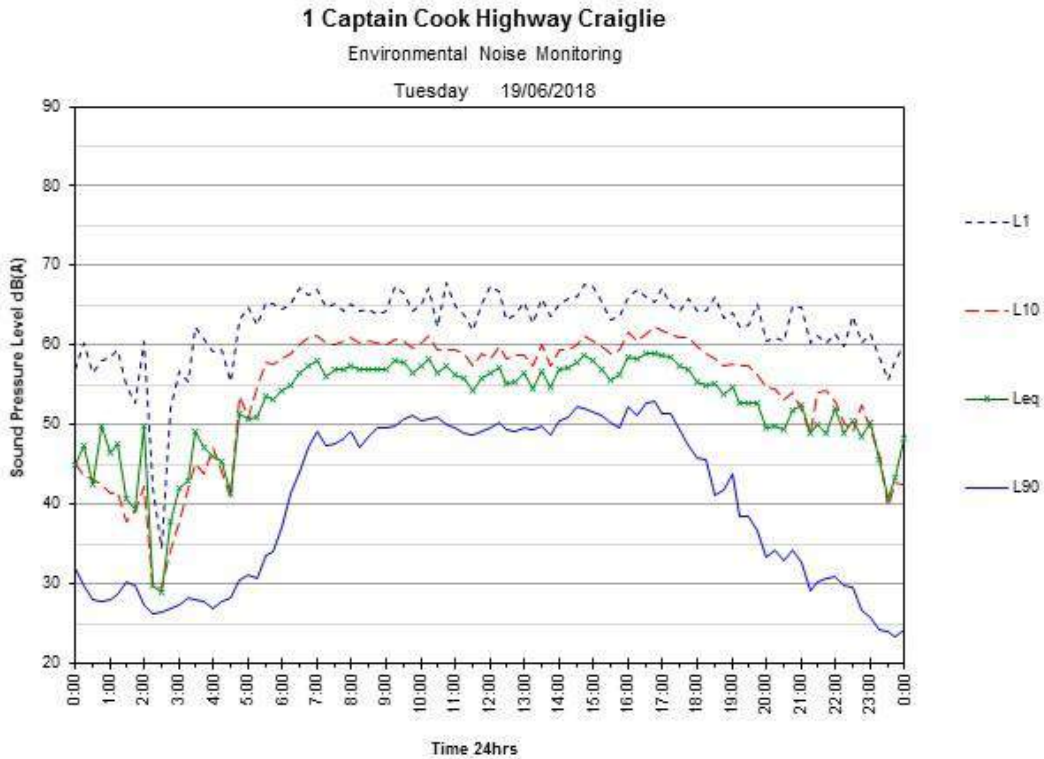
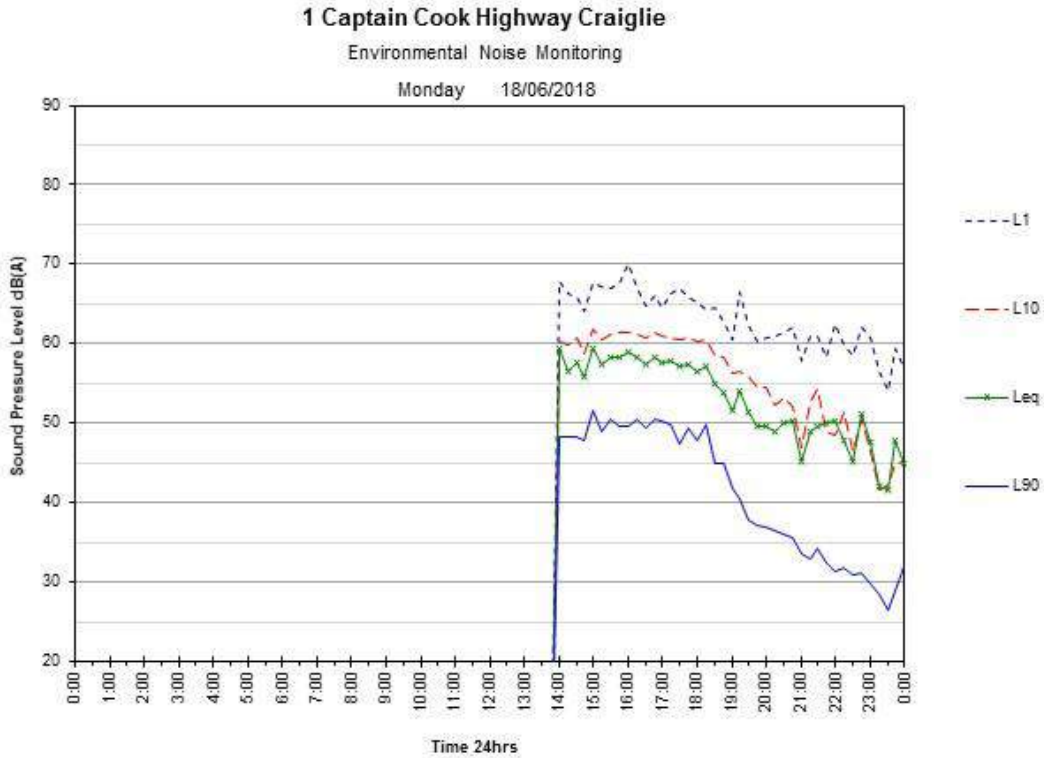
acousticworks)))

10. Appendices

10.1 Development Plans



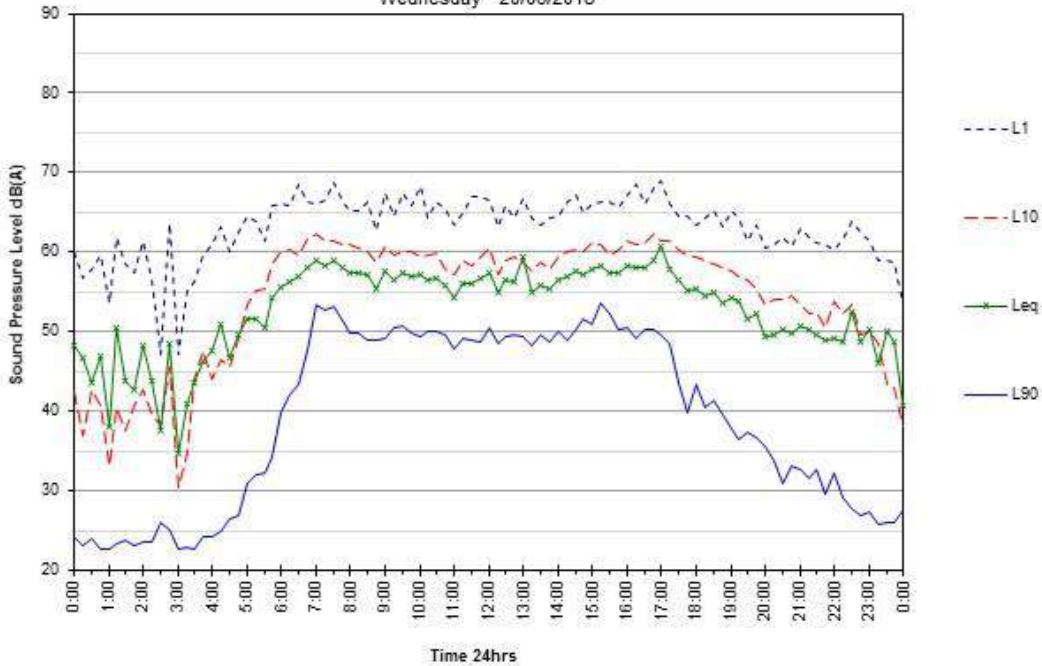
10.2 Noise Monitoring Charts



1 Captain Cook Highway Craiglie

Environmental Noise Monitoring

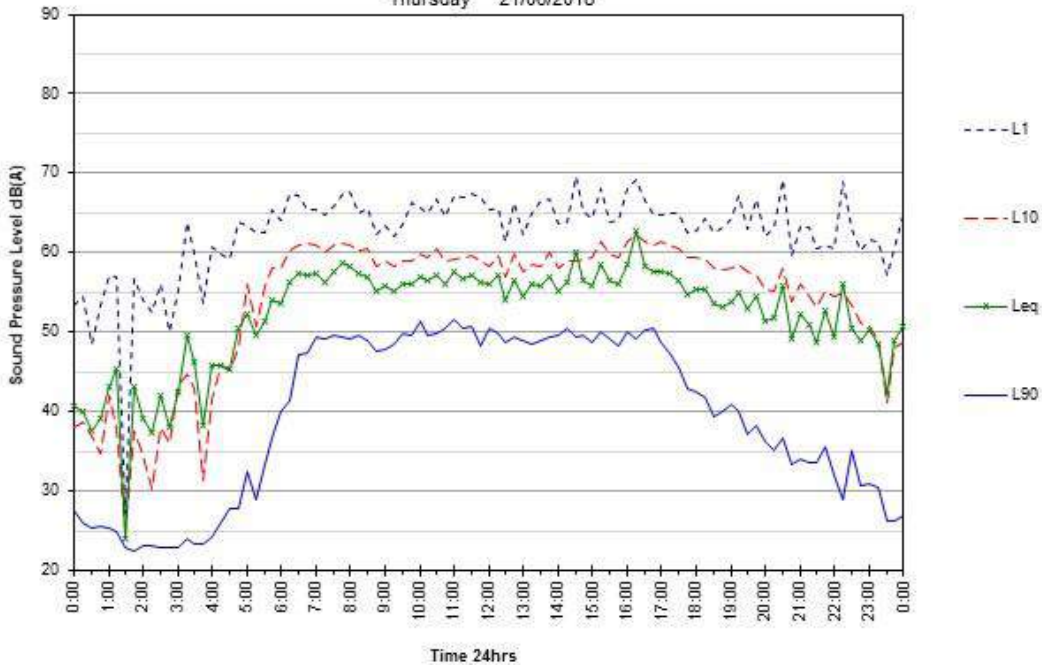
Wednesday 20/06/2018



1 Captain Cook Highway Craiglie

Environmental Noise Monitoring

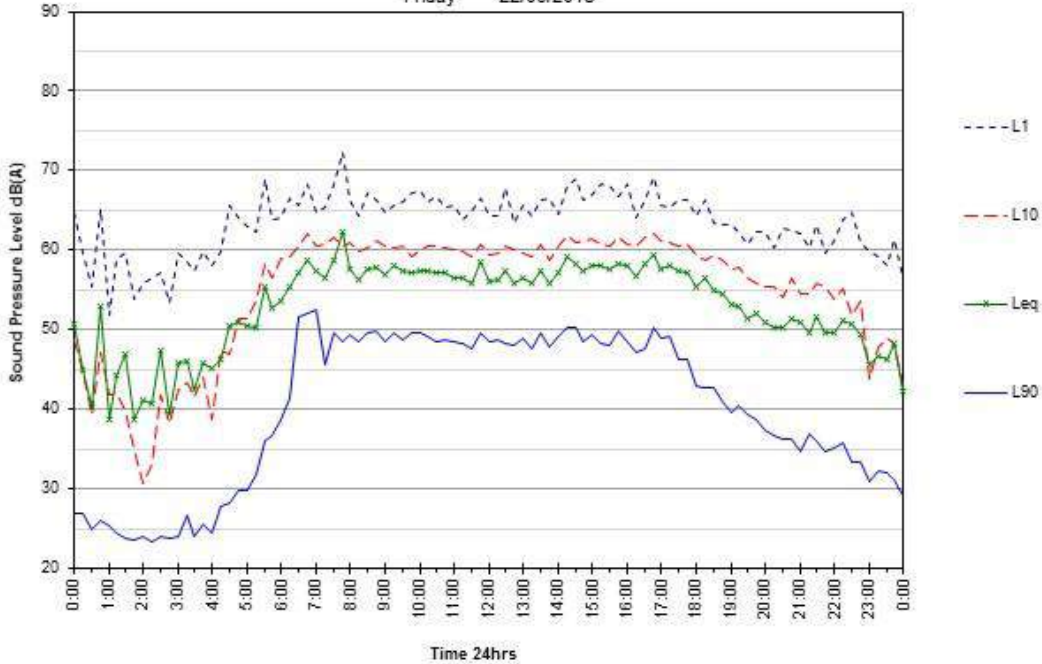
Thursday 21/06/2018



1 Captain Cook Highway Craiglie

Environmental Noise Monitoring

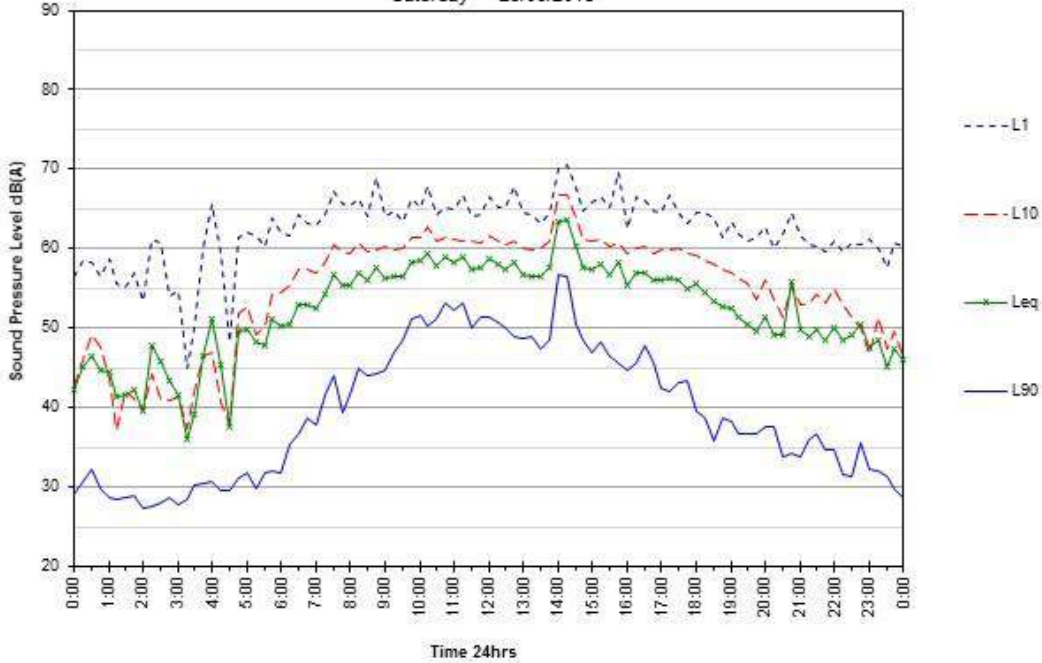
Friday 22/06/2018



1 Captain Cook Highway Craiglie

Environmental Noise Monitoring

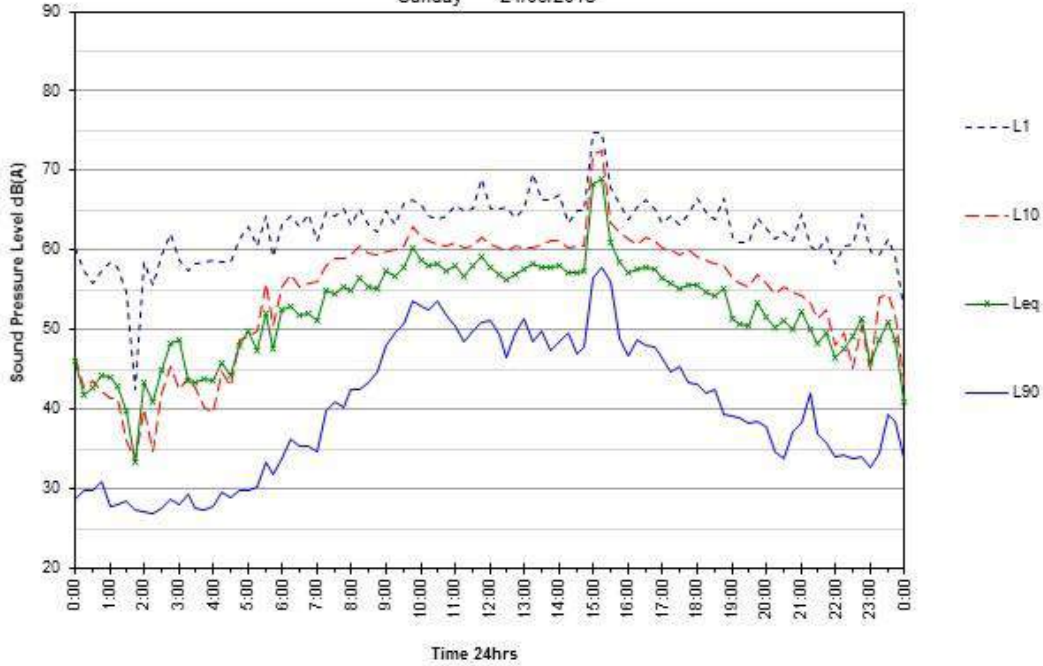
Saturday 23/06/2018



1 Captain Cook Highway Craigie

Environmental Noise Monitoring

Sunday 24/06/2018



1 Captain Cook Highway Craigie

Environmental Noise Monitoring

Monday 25/06/2018

