



Airfield Operation Guide

White Gum Air Park

All hangars in this project will be occupied on a long term lease to a single occupant. One hangar-one tenant. Hangar 01 is the first hangar in this proposal. The purpose of the building is twofold, one is to store the aeroplane, and the second is to provide accommodation for two persons. The Hangar will provide a secure lockable enclosure whilst protecting the aircraft from the elements. The accommodation will provide temporary residence for the aircraft owner(s).

WhiteGum Aviation

White Gum Air Park is associated with and shares a common runway with our neighbours Whitegum Farm and SkySports Flying School. We have a sharing of resources and facilities. There is a self-serve fuel bowser and above ground fuel storage tank for refuelling with Premium Unleaded Petrol.

See Appendix 1.0. – Fuel Station

SkySports Flying Schools 'Chief Flying Instructor' is also our qualified Aircraft Maintainer. Aircraft servicing and minor aircraft repairs are performed at this location. Major works or work outside the scope of SkySports is performed off site at Northam Air Services, Hangar 24, Withers St, Northam WA 6401.

See Appendix 2.0. - Aircraft Servicing.

Hangar Use

The primary purpose of the hangar is to securely store the aircraft in a clean and safe environment. The hangar is not to be used for any other purpose. Maintenance is limited to daily pre-flight inspections which may require the topping up of engine oil, inflating tyres etc. The hangar floor area is painted and kept clean and not conducive with any form of heavy maintenance, cutting, grinding, welding, painting or similar. Furthermore, aircraft are quite a delicate/light construction and would be easily damaged by such operations. Smoking is not permitted in the hangar or accommodation sections of the Hangar/Accommodation Unit.

It is an offence hazard to smoke near an aircraft under Civil Aviation Regulation 289 - Creation of fire hazard - (1)
Subject to these Regulations, a person shall not smoke or do any act to procure a naked flame within 15 metres of an aircraft or in any part of an aerodrome in which a notice indicates that smoking is prohibited.

See Appendix 3.0. – Typical Communal Hangar.

Aircraft

The type of aircraft that will be using the facilities are classified by weight and are usually under 1500kg for General Aviation and under 600kg for recreational registered aircraft (Light Sport Aircraft). The majority of the aircraft are in the 600kg recreational category. However, there is the possibility of a 1500kg GA aircraft may use the hangar sometime in the future.



Positioning an aircraft in a hangar is by manually pushing, an aircraft's engine is never run inside a hangar; this includes either entry or exiting. It is an offence under the Civil Aviation Safety Authority rules to start or run the engine of an aircraft within 5 meters of any sealed building.

See Appendix 4.0 – Engine Ground Running.

Fuel supply in the aircraft can be isolated from the engine. All aircraft are fitted with a fuel shut-off valve. Fuel supply lines are inspected regularly (before each flight) by the pilot in command as part of their daily checks. Fuel hoses in the engine bay are protected with fire resistant hose or hose covering.

Fuel tanks are easily accessible being positioned in the wings. Leaks would be far easier to spot than in a vehicle where the tank is hidden away close to the ground.

Fuel levels are checked by dipping the tank (not relying on a gauge) the aircraft owner/pilot would be aware of any leak that may occur.

The aircraft is fitted with a Master Switch. In the ground position, this switch is off and all power is isolated.

See Appendix 5.0 – Aircraft Systems.

Fuel

Fuel used, in the type of aircraft to be stored in the hangar, is the same fuel used in the modern motor car. Generally we use the higher 98 octane rating (premium unleaded). Some aircraft must use AvGas 100, some aircraft can use either. It should be noted that contrary to popular belief, the higher octane fuels are *slightly* more difficult to ignite have a higher flash point, a slower burn rate, and has less BTU's of stored energy. Material Safety Data Sheets for both fuels are almost identical; sharing the same Hazchem Code 3YE.

Hazard Statement for Avgas : H225 – Highly flammable.

Hazard Statement for Premium Unleaded : R12 – Extremely flammable.

See Appendix 7.0 – Safety Data Sheets

Refuelling of the aircraft will be carried out in accordance with the Civil Aviation Safety Authority regulations. This prohibits any refuelling to take place closer than 5 metres of any sealed building.

See Appendix 6.0 – Refuelling.

Summary

An aircraft in a hangar is safer than a car in a garage at home. This can be substantiated by amongst other things, the aircraft's fuel and electrical systems, method of moving the aircraft around the hangar (with a cold or at the most a warm engine), maintenance and inspection procedures, standard rules regarding the operation, refuelling and smoking around aircraft.



References

Visual Flight Rules Guide	:	Civil Aviation Safety Authority	https://www.casa.gov.au
MSDS	:	BP Australia	http://www.msds(bp.com.au
Whitegum Farm	:	Re-fuelling	http://www.whitegumfarm.com.au
Skysports Flying School	:	Aircraft maintenance	http://www.microlight.com.au

Appendix

- 1.0 Fuel Station.
- 2.0 Aircraft Servicing and Maintenance.
- 3.0 Typical Hangar.
- 4.0 Engine Ground operation. (Extract from CASA Visual Flight Rules Guide Version 4 May 2010).
- 5.0 Aircraft Systems.
- 6.0 Refuelling. (Extract from CASA Visual Flight Rules Guide Version 4 May 2010).
- 7.0 Safety Data Sheet Premium Unleaded Petrol (BP). Page 1 only, full document available on request.
- 7.1 Safety Data Sheet Avgas 100 Petrol (BP). Page 1 only, full document available on request.



Appendix 1.0

Fuel Station (Whitegum Farm)



Appendix 2.0

Aircraft Servicing and Maintenance (H2 SkySports)





Appendix 3.0

Typical Communal Hangar (H3 Whitegum Aviation)



Appendix 4.0

Engine Ground Operation

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engine ground operation

- has sufficient knowledge of the aircraft's controls and systems to ensure the starting or running does not endanger any person or damage the aircraft.

The pilot in command or in his absence any other person responsible for starting or ground operation of an aircraft shall ensure that:

- In the case of land aircraft, passenger loading equipment to permit rapid evacuation of passengers and crew is kept immediately available during the starting of engines; and
- In the case of seaplanes, water transport of a capacity sufficient to enable rapid evacuation of passengers and crew is immediately available during the starting of engines.

Where any fuel or other flammable material is spilled within 15 metres (50 ft) of an aircraft, the aircraft engines shall not be started or operated until the fire hazard has been removed.

An aircraft engine shall not be started or operated:

- within 5 metres (17 ft) of any sealed building;
- within 8 metres (25 ft) of other aircraft;
- within 15 metres (50 ft) of any exposed public area; and
- within 8 metres (25 ft) of any unsealed building in the case of an aircraft with a maximum take-off weight not exceeding 5700 kg (12,566 lb).

MANIPULATION OF PROPELLER (CAR 231)

In spite of CAR 225 (pilots at controls page 23) and CAR 230 (above) and paragraph two below, the pilot in command of an aircraft which requires an operating crew of only one pilot may manipulate the propeller of the aircraft for the purposes of starting the aircraft if:

- assistance is not readily available for that purpose;
- adequate provision is made to prevent the aircraft moving forward; and
- no person is on board the aircraft.

A person who is the holder of the certificate of registration for, or the operator, hirer or pilot in command of, an Australian aircraft must not permit a person to manipulate the propeller of the aircraft to start the engine unless the firstmentioned person is satisfied that the person who is to manipulate the propeller knows the correct starting procedures for the aircraft and can manipulate the propeller safely.

1 — PILOT RESPONSIBILITIES

Appendix 5.0

Aircraft Systems



Fire Resistant Fuel Hoses



Fuel Shut-off valves

Andrew Cotterell : 0400 246 906

Mary Cotterell : 0401 279 773

Appendix 6.0

Refuelling

refuelling

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Attention is drawn to the necessity of using a positive method, such as suitable water-detecting paste or paper, in testing for the presence of free water since sensory perceptions of colour and smell, if used alone, can be quite misleading. In the case of turbine fuels, attention is also drawn to the necessity of watching for signs of cloudiness or other indication of the presence of suspended water droplets which will not necessarily be detected by a positive method.

All fuel shall be strained or filtered for the removal of free or suspended water and other contaminating matter before entering the aircraft tanks. Attention is drawn to the special standards of filtration which may be specified by the manufacturers of certain types of engines e.g. turbine engines and direct-injection piston engines.

LOCATION OF AIRCRAFT

During fuelling operations, the aircraft and ground fuelling equipment shall be so located that no fuel tank filling points or vent outlets lie:

- within 5 metres (17 ft) of any sealed building;
- within 6 metres (20 ft) of other stationary aircraft;
- within 15 metres (50 ft) of any exposed public area;
- within 15 metres (50 ft) of any unsealed building in the case of aircraft with a maximum take-off weight in excess of 5700 kg (12,566 lb), and
- within 9 metres (30 ft) of any unsealed building in the case of aircraft with a maximum take-off weight not exceeding 5700 kg (12,566 lb).

Notwithstanding the contents of the above paragraph, limited fuelling operations for maintenance purposes may be carried out in certain hangars under the following conditions:

- refuelling or defuelling of gasoline or wide-cut gasoline type turbine fuel is not permitted;
- overwing fuelling is not permitted;
- these operations shall not be permitted in hangars occupied by two or more tenants; and

1 — PILOT RESPONSIBILITIES

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refuelling

- the operator shall obtain approval from CASA for the detailed procedures under which these operations may be performed. These procedures shall be described in the maintenance manual and shall include: the circumstances under which refuelling or defuelling in hangars or maintenance area is permitted, and the maximum volume of fuel involved.

For the above purpose, a sealed building is one which all the external part within 15 metres (50 ft) of an aircraft's fuel tank filling points or vent outlets or ground fuelling equipment is of non-flammable materials and has no openings or all openings are closed.

Where the fuelling equipment is not mobile, the aircraft shall be so placed that it can be rapidly moved to a place of safety, and a means of ensuring that this can be done shall be readily available.

Note: The following operations are not deemed to constitute fuelling operations:

- the drainage of a small quantity of fuel from a fuel system drain point; and
- the transfer of fuel from tank to tank within an aircraft making use exclusively of lines and equipment permanently installed in the aircraft.

PASSENGERS ON BOARD DURING REFUELLED

The operator of an aircraft must ensure that avgas is not loaded onto an aircraft while passengers are on board, or entering or leaving, the aircraft.

1 — PILOT RESPONSIBILITIES



Appendix 7.0

Material Safety Data Sheet - Premium Unleaded Petrol (BP) (Page 1 Only)

Material Safety Data Sheet



1 . Identification of the material and supplier

Product name	BP Premium Unleaded Petrol
SDS no.	0000002734
Historic SDS no.	876
Product use	Fuel for spark ignition engines. NOT for aviation use. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Supplier	BP Australia Pty Ltd (ABN 53 004 085 616) 717 Bourke Street Docklands VIC 3008 Australia Tel: +61 (03) 9268 4111 Fax: +61 (03) 9268 3321
EMERGENCY TELEPHONE NUMBER	1800 638 556
Product code	0000002734

2 . Hazards identification

Statement of hazardous/dangerous nature	HAZARDOUS SUBSTANCE. DANGEROUS GOODS.
Risk phrases	R12- Extremely flammable. R45- May cause cancer. R46- May cause heritable genetic damage. R63- Possible risk of harm to the unborn child. R65- Also harmful: may cause lung damage if swallowed. R38- Irritating to skin. R67- Vapours may cause drowsiness and dizziness. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases	S2- Keep out of the reach of children. S16- Keep away from sources of ignition - No smoking. S23- Do not breathe gas/fumes/vapour/spray. S24- Avoid contact with skin. S29- Do not empty into drains. S36/37- Wear suitable protective clothing and gloves. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S61- Avoid release to the environment. Refer to special instructions/safety data sheet. S62- If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

3 . Composition/information on ingredients

Ingredient name	CAS no.	%
Petrol	86290-81-5	>90
Contains:		
Benzene	71-43-2	<1
tert-butyl alcohol	75-65-0	<1
tert-butyl methyl ether	1634-04-4	<1
Polycyclic aromatic hydrocarbons (PAHs)	mixture	<1
diisopropyl ether	108-20-3	<1

4 . First-aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Skin contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Drench contaminated clothing with water before removing. This is necessary to avoid the risk of sparks from static electricity that could ignite contaminated clothing. Contaminated clothing is a fire hazard. Contaminated leather, particularly footwear, must be discarded. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention.

Product name	BP Premium Unleaded Petrol	Product code	0000002734	Page:	1/6
Version 3	Date of issue	26 April 2012	Format	Australia (Australia)	Language ENGLISH (ENGLISH)

Appendix 7.1

Material Safety Data Sheet - Avgas 100 Petrol (BP) (Page 1 Only)

SAFETY DATA SHEET

Avgas 100



Section 1. Identification

GHS product identifier	Avgas 100
Product code	SAV2104.
SDS no.	SAV2104
Relevant identified uses of the substance or mixture and uses advised against	
Use of the substance/ mixture	Use only as a motor fuel for aviation. Should NOT be used as a solvent nor cleaning agent. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Manufacturer	
Supplier	BP Australia Pty Ltd Level 17, 717 Bourke Street Docklands, Victoria 3008 ABN 53 004 085 616 www.bp.com.au
	Tel: +61 (03) 9268 4111 Fax: +61 (03) 9268 3321
EMERGENCY TELEPHONE NUMBER	1800 638 556 (24 hour)
OTHER PRODUCT INFORMATION	Technical Helpline Number: 1300 139 700

Section 2. Hazard(s) identification

Classification of the substance or mixture	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 3 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 3 SKIN IRRITATION - Category 2 CARCINOGENICITY - Category 1B TOXIC TO REPRODUCTION (Unborn child) - Category 1A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1
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GHS label elements

Hazard pictograms



Signal word

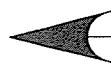
Hazard statements

DANGER

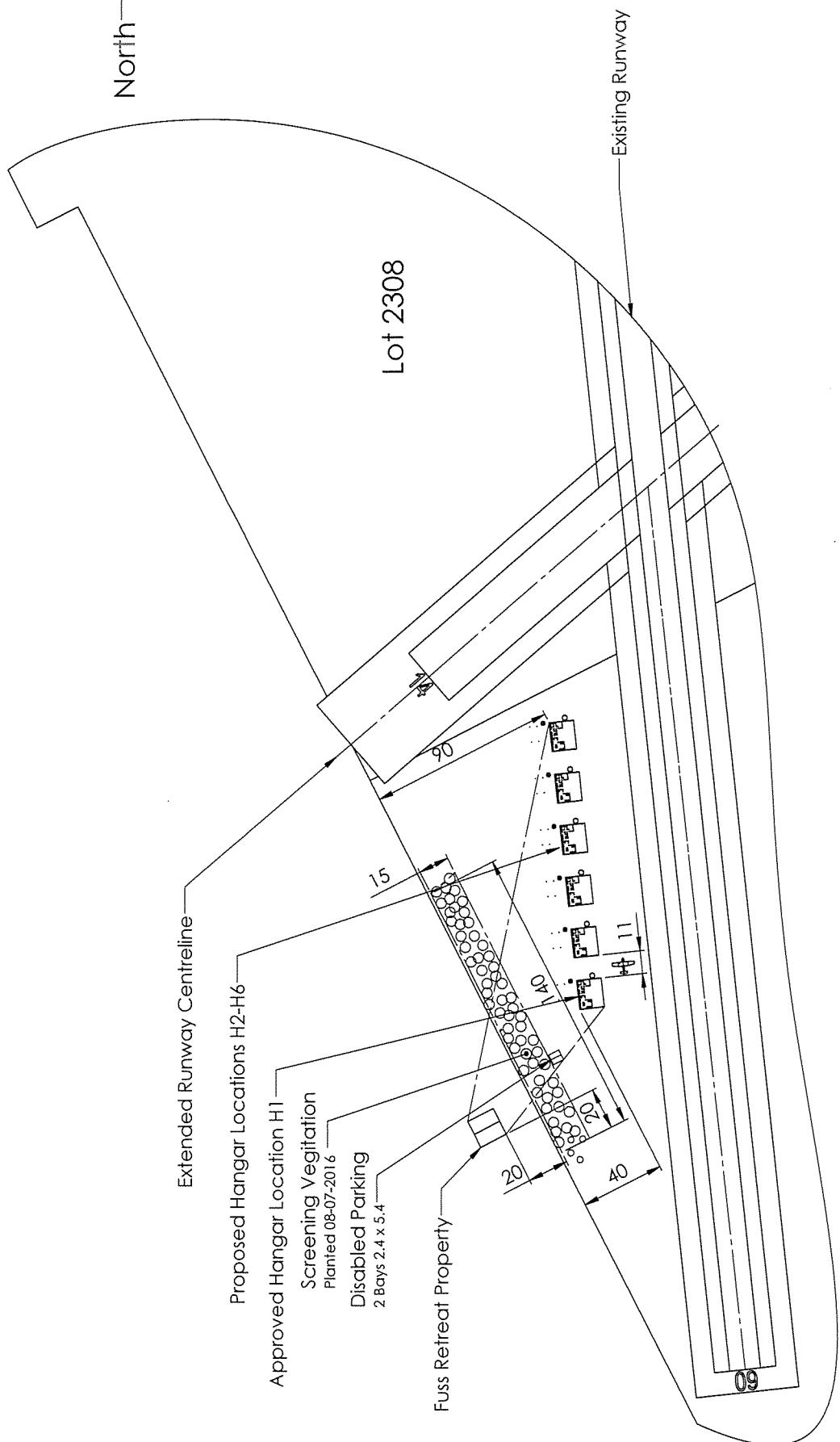
H225 - Highly flammable liquid and vapour.
 H301 + H311 + H331 - Toxic if swallowed, in contact with skin or if inhaled.
 H315 - Causes skin irritation.
 H350 - May cause cancer.
 H360 - May damage the unborn child.
 H304 - May be fatal if swallowed and enters airways.
 H336 - May cause drowsiness or dizziness.
 H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Product name	Avgas 100	Product code	SAV2104.	Page:	1/12
Version 1	Date of issue 28/01/2016	Format	Australia (Australia)	Language	ENGLISH (ENGLISH)



North



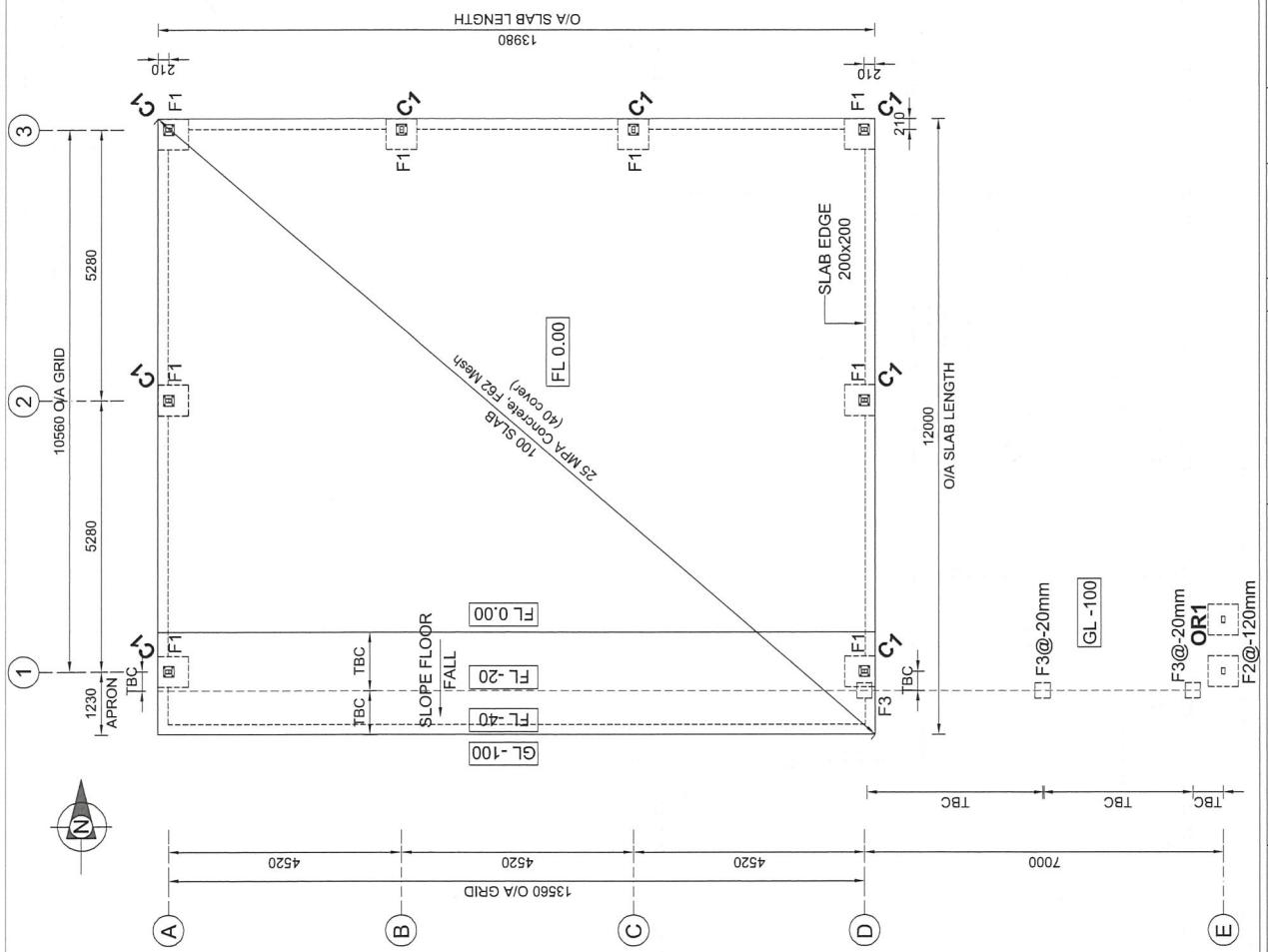
Notes:
o Screening Plants - Banksia, Acacia, Eucalyptus & Grevillea
All dimensions to nearest Metre

Landscape Plan

TOEPLANES		DRAWN	AIC	05/12/2014	White Gum Air Park - YWGM
ONE PLACED DECIMAL 0.01		CHEMNO	-	-	Tel: 0401 246906 Tel: 0401 279773
TWO PLACED DECIMAL 0.05		EGS APP:	-	-	
THREE PLACED DECIMAL 0.002					
ALWAYS TWO PLACES					
ALWAYS TWO PLACES					
THE DRAWING IS THE SOLE PROPERTY OF					
ANY PERSON OR COMPANY THAT					
OBTAINS A COPY OF THIS					
DRAWING IS NOT TO REPRODUCE IT IN PART OR AS A					
WHICH IS FOR INFORMATION ONLY.					
DO NOT SCALE DRAWING					
SCALE 1:2000 WEIGHT: 0.0g					
SHEET 2 OF 3					

REFER TO FABRICATION
DRAWING FOR FINAL
DIMENSIONS & DETAIL.

The logo for MetroCer building approval. It features the word 'CERTIFIED' in red capital letters above the word 'MetroCer' in a stylized blue and grey font. Below 'MetroCer' is the text 'BUILDING APPROVAL' in a smaller, grey, sans-serif font. To the right of the text is the date '16/01/2017'.



IMPORTANT NOTE:

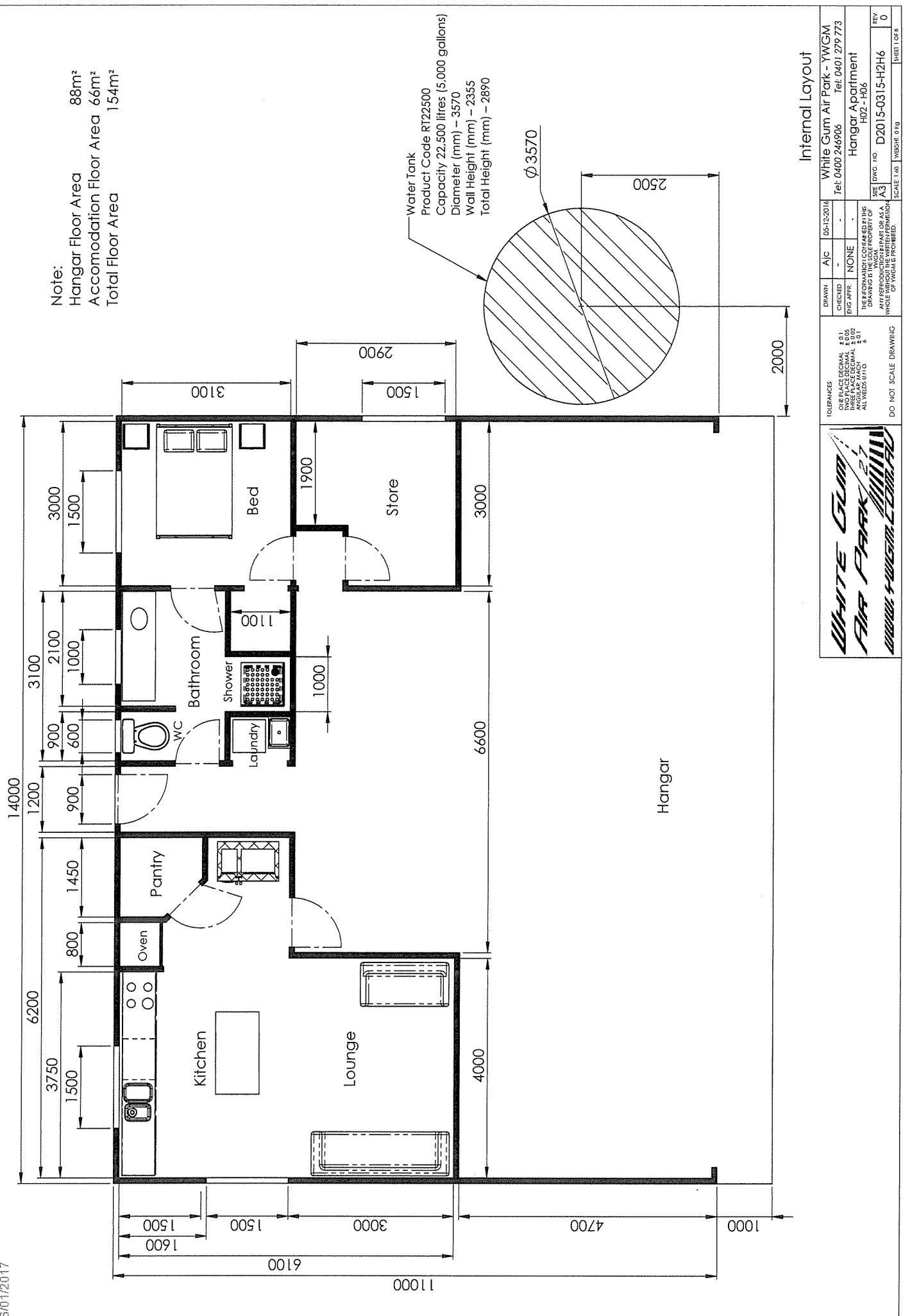
1. BEWARE PRE-PLUMBING
TO BE INSTALLED BY OTHERS.
WET AREA SET DOWN TO
BE CONFIRMED WITH CLIENT.

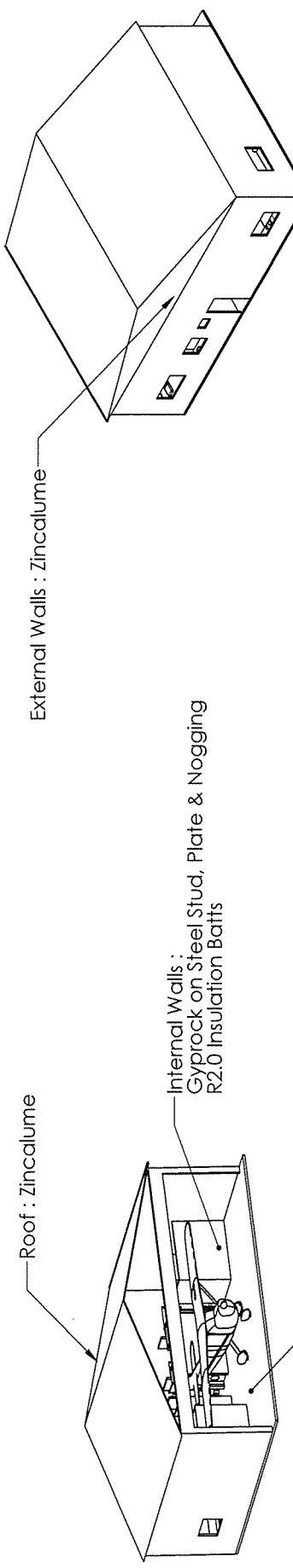
A. Abreu
SANTIAGO ABUEVA JR

OPTIMUM C
ENGINEERING CONSULTANTS
Atlanta, GA 30346-2323

CONSULTANT MEMBER
JUDE COBONG MIE Aust CPEng (4198579), MER, RPEQ

PROJECT DETAILS		DRAWING No.		REVISIONS		DESCRIPTION		INITIALS		DATE	
ITEM	DETAILS	ITEM	DETAILS	ITEM	DETAILS	ITEM	DETAILS	ITEM	DETAILS	ITEM	DETAILS
98 Byfield St	WEE WEE	PROJECT No.	2082	2082-02		AAR	ENGINEERS CERTIFICATION	09/05/2016		APRVD.	SA
Northam WA 6401	IN STEEL	CLIENT	WHITE GUM AIR PARK								01/06/16
Phone: 080 860 909		NEEDING HILLS ROAD, MALLEBELLING, WA 6392									
Fax: 1800 860 910		DRAWING	CONCRETE PLAN VIEW	00							
sales@wbsgroup.com.au		DATE	9/05/2016	SCALE 1:100	REV No.	BY					
www.wbsgroup.com.au		© THIS DRAWING IS THE COPYRIGHT OF WBS GROUP AND MAY NOT BE COPIED IN PART OR FULL WITHOUT THE WRITTEN PERMISSION OF WBS GROUP									

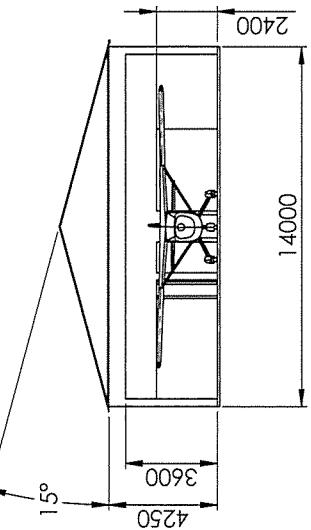




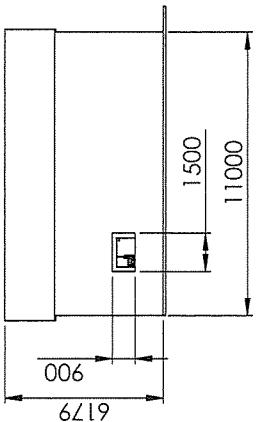
Internal Walls :
Gyproc on Steel Stud, Plate & Noggings
R2.0 Insulation Batt

Concrete Pad and Footing
To Engineers Specification

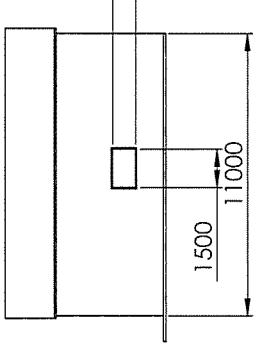
Front Elevation
Sliding Doors Not Shown



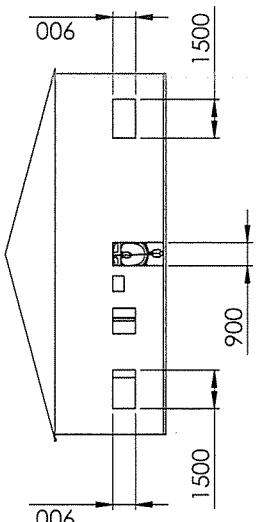
Side Elevation



Side Elevation



Rear Elevation



Note : Refer WBS Engineers Drawing No: 2082

WHITE GUM AIR PARK	
WHITE GUM AIR PARK	
DRAWN BY: <u>WHITE GUM AIR PARK</u>	
CHECKED BY: <u>WHITE GUM AIR PARK</u>	
APPROVED BY: <u>WHITE GUM AIR PARK</u>	
DATE: <u>WHITE GUM AIR PARK</u>	
REV: <u>WHITE GUM AIR PARK</u>	

Access

Access for the tenants of White Gum Air Park is to be through the existing access at White Gum Farm. This is of mutual benefit to both parties and has been agreed between Gary Sargeant and Andrew Cotterell. Private access including friends and relations, deliveries and contractors will be through the legal easement.



Taylor Road

Legal Access

The above shows the approximate legal access route to the hangars.

Alternative Access

A more convenient access for the tenants of the hangars will be off Cameron Road, through White Gum Farm. An existing gravel road, currently in use by visitors through White Gum Farm will be encouraged for tenant access.

Access is currently being further improved including signage at a crossing into the Air Park Property.



Access Road

Cameron Road

The above shows current tenant access to the hangars.

Agricultural Use

We are a 200 acre (809,365m²) property. In the past only a portion of this has been cropped due to the poor soil conditions (As noted on the original Survey for Lot 2308 On Plan 255532).

We currently crop approximately 285,000m² and we have a fenced area for sheep of approximately 90,000m². Agricultural use of the land will not be any less than previously used.



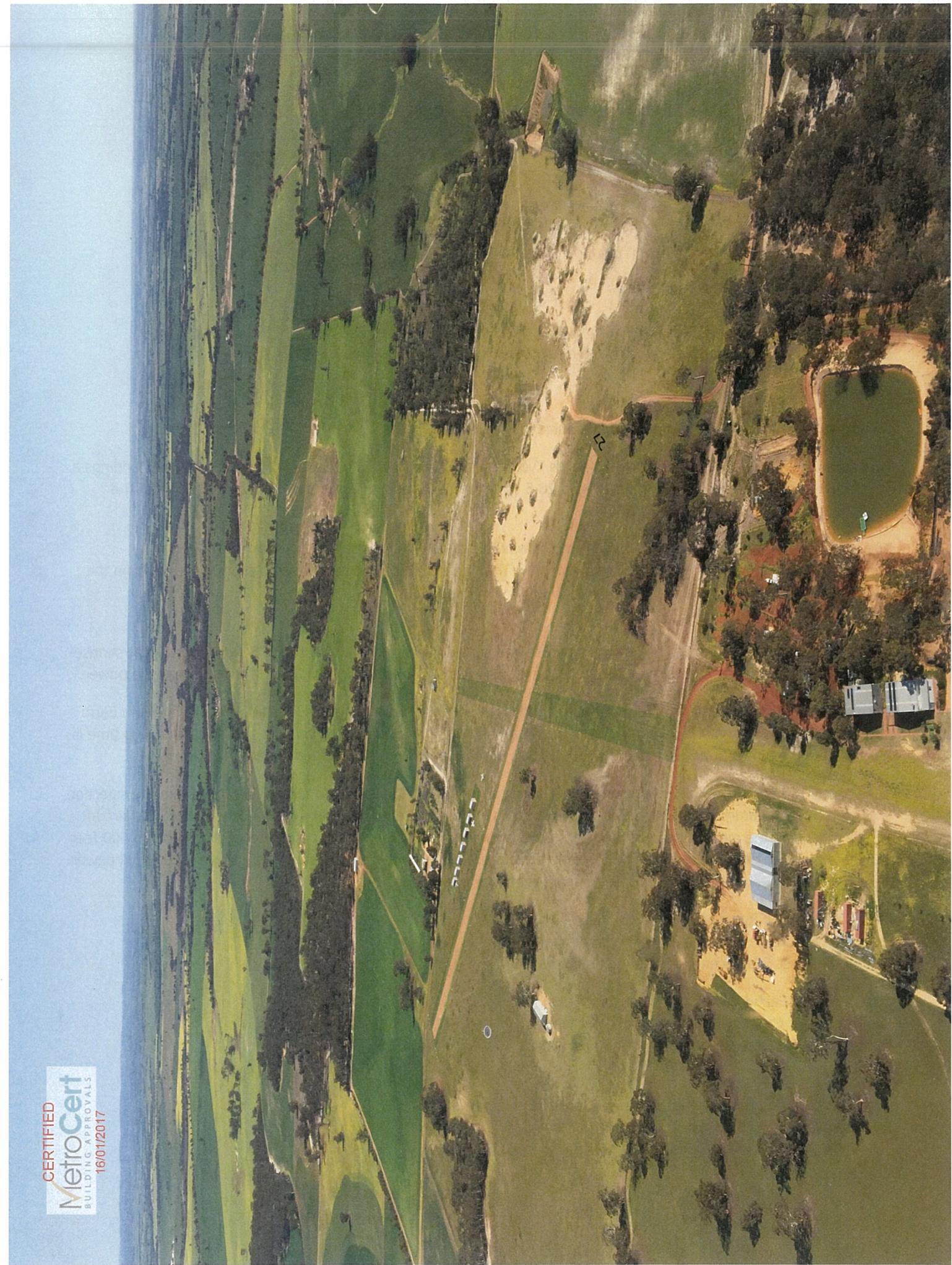
Signage

The purpose of the sign is to advise authorised persons and emergency services of our location. It will be located on a tree approximately 10m from the legal access on Taylor road.

Proposed sign is similar to below and includes the words in red 'Authorised Access Only'.

Approximate size 700mm x 600mm





Noise 2

(Revised 21-03-2017)

Flying School Take Off's over 3 months December 2016 to February 2017.

Note figures are totals all runways -

Microlight 36

3 axis 46

Gyro 150

Total of 232

Original Estimate -

Let's call it 250 take off's over 3 months.

That's 20 a week or 3 per day.

Presuming the wind averages 50% each runway, 1.5 a day.

Or less if you consider there are two ends to each of the runways, 0.75 per day.

Estimated future use -

The table below shows the estimated use inclusive of the new 6 hangars.

Recreational pilots rarely log more than 50 hours flying a year, I have been generous and say they do 120 landings a year or 10 per month. I personally have logged 28.6 hours and 55 landings in the past 12 months. Some of the landings have not been at White Gum.

The preferred runway is 09-27 purely based on the wind direction. When unsuitable runway 14-32 is used.

Runway 09-27 is closest to the Fuss Retreat property. The 27 or Eastern end is approximately 500 metres from the Fuss Retreat Property.

Required hours of operation will be between sunrise and sunset. Generally only the Flying School operates at sunrise during the summer months, weather permitting. Landings are not considered as the aircraft is usually at idle power.

Aircraft generally warm up in front of their hangar. Note, the flying school hangar is located on the WhiteGum Farm Property. The new hangars face the runway and warm ups will be shielded by the hangar itself. The warm up time is generally 5-10 minutes at an elevated idle (2000-2500 RPM) Full noise or take off RPM is around 5200 RPM.

Take off can be at either of the two runways into wind, giving us 4 options for the take-off location. Runway selection is chosen by the pilot in command, based on wind direction and a number of other factors. This is when the aircraft will be producing the most noise. Full throttle is used until around 500 feet above ground level. The climb to 500 feet may take approximately 90 seconds, by this time the aircraft will be well clear of the runway area. Time at full power passing the Fuss Retreat property will be no more than a few seconds.

Total Take Offs All Runways

Estimated Best Case Scenario 20 take offs per week

Estimated Worst Case Scenario 36 take offs per week

Total Take Off Each Runway (2 Runways, 4 Ends)

Estimated Best Case Scenario 5 take offs per week

Estimated Worst Case Scenario 9 take offs per week

Total Runway 09-27 (both directions)

Consider 09-27 to be the preferred runway, used 75% of the time.

Estimated Best Case Scenario 15 take offs per week

Estimated Worst Case Scenario 27 take offs per week

Take Off Data

	Take Off	
Microlight	36.0	Actual
3 Axis Aircraft	46.0	Actual
Gyro	150.0	Actual
Others	20.0	Estimated
Total	252.0	Over 3 Months
Existing Total Month	84.0	Per Month
Additional Hangar 01	10.0	Estimated Per Month
Additional Hangar 02	10.0	Estimated Per Month
Additional Hangar 03	10.0	Estimated Per Month
Additional Hangar 04	10.0	Estimated Per Month
Additional Hangar 05	10.0	Estimated Per Month
Additional Hangar 06	10.0	Estimated Per Month
Total	144.0	Estimated Per Month
Total	36.0	Estimated Per Week
Total	5.14	Estimated Per Day
4 Take Off Positions	1.29	Estimated Per Day

Runway Layout



Aircraft are exempt from the Environmental Protection (Noise) Regulations 1997.

See below page 3 and 4 extract from the Environmental Protection (Noise) Regulations 1997 Part 1, As at 24 Jan 2017, Version 02-c0-00

3. Regulations do not apply to certain noise emissions

- (1) Nothing in these regulations applies to the following noise emissions —
- (a) noise emissions from the propulsion and braking systems of motor vehicles operating on a road;
 - (b) noise emissions from a safety warning device, other than a reversing alarm, fitted to a motor vehicle operating on a road;

As at 24 Jan 2017

Version 02-c0-00

page 3

Extract from www.slp.wa.gov.au, see that website for further information

Environmental Protection (Noise) Regulations 1997

Part 1 Preliminary

r. 3

- (c) noise emissions from trains or aircraft (other than model aircraft and trains operating on railways with a gauge of less than 70 cm);

Aircraft fall under the Air Navigation (Aircraft Noise) Regulations 1984. Statutory Rules 1984 No. 188 as amended, made under the Air Navigation Act 1920.

All aircraft, as part of their airworthy certificate, have a noise assessment. A certificate is then issued or, an exemption is issued if the aircraft noise is not significant. Below shows a copy of the exemption to operate without a certificate from our aircraft documents as an example.

McLeod, Ian

ID # 3545

From: Andrew Cotterell [peter@foxbat.com.au]
Sent: Wednesday, 7 March 2012 2:52 PM
To: Noise, Assessment
Subject: Application for Aircraft Noise Assessment



APPLICATION FOR AIRCRAFT NOISE ASSESSMENT IN ACCORDANCE WITH THE AIR NAVIGATION (AIRCRAFT NOISE) REGULATIONS

This Application relates to	Addition of an aircraft to the Australian Civil Register
Aircraft Make/Model	Aeroprakt A22LS Foshat
Serial No	A22LS 118
Reg No	24-3094
Country of Reg	Australia
Year of Manufacture	2012
Date of First C of A	
Maximum Takeoff Weight	600 kg
Engine Make/Model	Rotax 912U/LS
No. of Engines	1
By-Pass Ratio: Jets	NA
Are Engines Hush-Kitted?	
If YES, Make/Model	WarpDrive WHPL 14
Propeller/Rotor Make/Model	
No. of Blades	3
Certificate of Airworthiness Categories: Australian Reg Only	
Main purpose for which the Aircraft will be used	
If the Aircraft is designed for agricultural/aerobatic/ice fighting, will it be used exclusively for that purpose?	
Is the Aircraft Noise Certified?	
Noise Certification Standard details	
Applicant's Name	Andrew Cotterell
Address: For correspondence	PO Box 315 Kalamunda WA 6926
Company Name: If applicable	
Telephone No.	0417 902 132
Fax No.	03 9592 3101
E-Mail	peter@foxbat.com.au
Aircraft Operators Name and Address: If not Applicant	
Is the owner or operator a Corporation?	No

Airservices Use Only

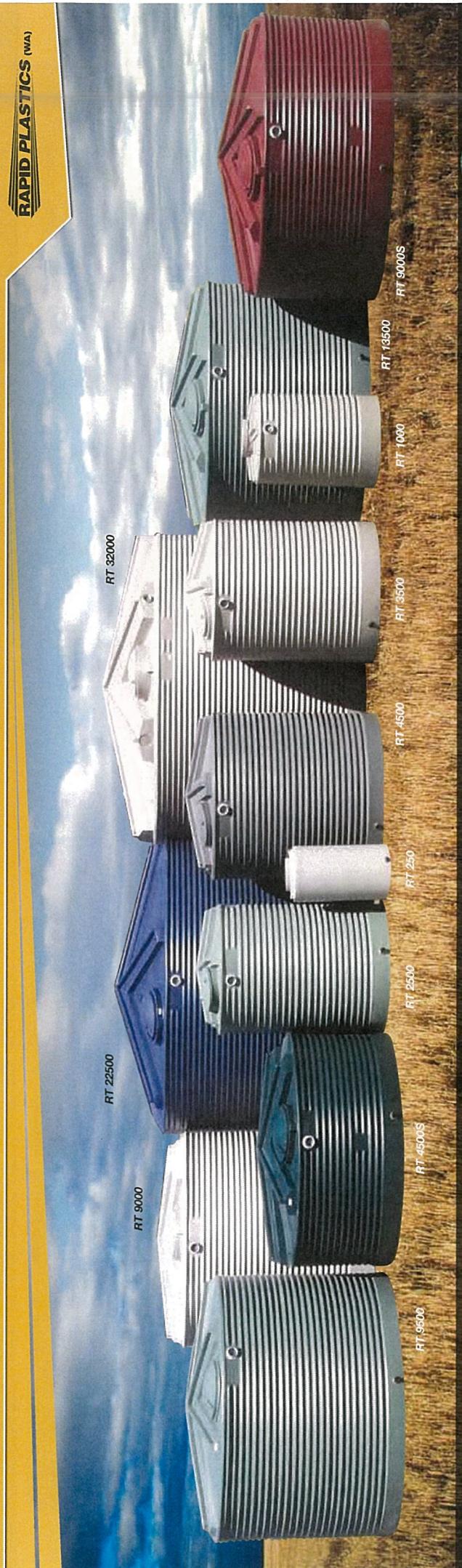
The above aircraft has been assessed for compliance with the Air Navigation (Aircraft Noise) regulations and is regarded as eligible for registration and operation in Australia on the following basis:

Permission under Regulation 9A (2) (a)

Compliance Status

Signed Ian McLeod
(Manager Environment Monitoring)

Date 8.7.2012



Poly Water Storage Tanks

Premium TUFF TANK Range

CORRUGATED POLY DOMESTIC WATER TANKS							CONTACT YOUR LOCAL AGENT	FOR PRICING
CODE	CAPACITY		DIA	WALL	OVERFLOW	RETAIL	PRICING (incl GST)	
	(litres)	(gallons)	(mm)	HEIGHT (mm)	POSITION (mm)			
RT 250	250	55	600	1800	1100	3.6.9.0R.12		
RT 1000	1000	220	1000	1300	1500	3.6.9.0R.12		
RT 2500	2500	550	1400	1750	2000	3.6.9.0R.12		
RT 3500	3500	750	1600	1800	2100	3.6.9.0R.12		
RT 4500	4500	1000	1850	1800	2100	3.6.9.0R.12		
RT 4500S	4500	1000	2400	1050	1400	3.6.9.0R.12		
RT 9000	9000	2000	2400	2050	2400	3.6.9.0R.12		
RT 9000S	9000	2000	2850	1400	1800	3.6.9.0R.12		
RT 9500	9500	2100	2600	1800	2150	3.6.9.0R.12		
RT 13500	13500	3000	2550	1900	2300	3.6.9.0R.12		
RT 22500	22500	5000	3550	2350	2850	3.6.9.0R.12		
RT 32000	32000	7000	3950	2600	3100	2.330.5.7. 8.30.10.R.12		
RT 45000	45000	10000				Tank Combination (2 x RT 22500)		
RT 64000	64000					Tank Combination (2 x RT 32000)		

FEATURES

- One piece construction
 - Attractive Heritage design
 - Corrugated for strength and traditional appearance
 - UV stabilised to withstand our harsh climate
 - Durable and impact resistant polyethylene for long life
 - Self supporting lid design eliminates need for centre support pole
 - Available in all colours

(see colour chart - page 7)

STANDARD WITH ALL TANKS



- PVC Mesh Overflow
90mm (across whole range)
 - Ball Valve
 - Twist Lock Manhole Cover
 - (bar external units)
 - 32mm (RT250-RT1000)
 - 40mm (RT2500-RT3200)

OPTIONAL EXTRAS:



- flat skirt of tank.

TANK ORDERING CHECK LIST:

- a. Dimensions of rainwater tank?
 - b. Fittings supplied with tank?
 - c. Position of fittings?
 - d. Selected tank colour?
 - e. Other accessories required?
 - f. Clearance available at property (large tanks only)?
 - g. Clear directions for truck driver (large tanks only)?
 - h. Specified ideal time frame for receiving tank?





Poly Water Storage Tanks

Water Tank Range

CHOOSING A TANK
The installation of a large as possible rainwater tank and harvesting the rainwater that falls on your roof will minimise the impact of water shortages!

TANK CHOICE CHECKLIST

Follow these easy steps to choose the tank that's right for your needs!
CERTIFIED
MetroCert
 BUILDING APPROVALS
 16/01/2017

- Calculate your likely annual usage from the water storage requirements table.
- Using the water catchment table and the average rainfall calculate the amount of rainwater captured.
- Now you can check your intended usage against the average annual catchment.

- Identify your proposal tank and measure the space and height available.

- Refer to tank details table for tank dimensions and select the maximum suitable size.

- Choose a colour from the colour chart below.

RAPID PLASTICS (WA) poly water tanks are designed and manufactured under strict control to ensure they are suitable for drinking quality and fully UV stabilised in all colours to survive our harsh climate.

Our tanks are manufactured using the best linear low density food grade polyethylene and in guidance with the following standards:

- AS/NZS 4766(INTL) Polyethylene storage tanks for water and chemicals
- AS/NZS 4020:2002 Aust. Std. for drinking water • AS 2070 Part 1 & Part 8 Aust. Std. for food contact

Corrugated for Strength traditional corrugated wall profile cannot be substituted for strength and appearance. This style has been in use and PROVEN for over 100 years and is recognised to be the strongest and best DESIGN. It is a well known fact that as soon as an object receives some ribbing the rigidity increases enormously.

Self Supporting Roof Design new roof profile has been designed and tested and has proven to be the strongest and most durable. No internal support is needed in any size tank.

AVERAGE HOUSEHOLD WATER REQUIREMENTS					
APPLICATION	1 PERSON	2 PERSON	4 PERSON	USAGE	NO. OF DAYS
Daily Use*	250LT	360LT	650LT	365	365
Washing Machine	120LT	130LT	150LT		
Dishwasher	35LT	35LT	35LT		
Total Litres					

*Daily use includes bath, toilet, cleaning teeth etc.

12 STANDARD TANK COLOURS



GUIDELINES FOR SOME TYPICAL APPLICATIONS

APPLICATION	GALLON	LITRES	ROOF AREA IN SQUARE METERS	ANNUAL RAINFALL	25mm (10") 50mm (20") 75mm (30") 100mm (40")	NOTE:	
One (1) person	50 / day	250 / day	36	9000	18000	27000	36000
Two (2) person	80 / day	360 / day	435	12500	25000	37500	50000
Three (3) person	145 / day	435 / day	15 / minute	25000	50000	75000	100000
Shower	200 / hour	140 / minute	30 gal.	37500	75000	112500	150000
Fill Bath	1 gal.	5 to 10 litres	150	1 min of rain falling on 1m ² of roof	area gives 50000	100000	200000
Flush Toilet	1 to 3 gal.	14 / minute	180 / hour	600 / hour	45 / minute	75 / minute	100 / minute
Sprinklers	600 / hour	14 / minute	1000 / hour	10 - 20 cattle per day	45 - 90 milking cows	400 / hour	400 / hour
1/2" Tap @ 20psi				300 sheep / pigs	135 - 180 sheep / pigs	375000	500000
3/4" Tap @ 20psi				400 sheep / pigs	1 - 2 sheep / pigs	4 - 9	

HERRING STORER ACOUSTICS

Suite 34, 11 Preston Street, Como, W.A. 6152
P.O. Box 219, Como, W.A. 6952
Telephone: (08) 9367 6200
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WHITE GUM AIR PARK

LOT 2308 CAMERON ROAD, MALEBELLING

ACOUSTIC ASSESSMENT

JULY 2017

OUR REFERENCE: 22023-2-17117

DOCUMENT CONTROL PAGE

**ACOUSTIC ASSESSMENT
AIR PARK**

CAMERON ROAD, MALEBELLING

Job No: 17117

Document Reference: 22023-2-17117

FOR
WHITE GUM AIR PARK

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EXECUTIVE SUMMARY

The purpose of this study was to assess noise emissions of aircraft using the White Gum Air Park facility. The assessment has been requested by the Shire of York and relates to an application currently under assessment for the construction of additional aircraft hangers at the facility.

To determine noise received at the neighbouring residence from the White Gum Air Park, noise emissions from aircraft operating at the park have been based on the results of noise modelling, which has been calibrated against hand held observed noise level measurements.

From the literature examined, there is no criteria that specifically applies to the assessment or management of aircraft noise from a facility such as the White Gum Air Park.

In Western Australia, the assessment of noise is undertaken using either the Environmental Protection (Noise) Regulations 1997 or State Planning Policy 5.4 Road and Rail Transport Noise and Freight Considerations in Land Use Planning. Both the regulations and policy specifically exclude assessment of aircraft noise.

Assessment of aircraft noise for airports such as Perth and Jandakot airport are assessed and managed under State Planning Policy 5.1 Land use planning in the vicinity of Perth Airport and; State Planning Policy 5.3 Land Use Planning in the Vicinity of Jandakot Airport. Both these policies use the Commonwealth Airports Act 1996 as a basis due to the airports being situated on Commonwealth land. As the White Gum Air Park is located on private land, the act and policies do not apply.

Australian Standard (AS) 2021:2015 Acoustics - Aircraft noise intrusion - Building siting and construction provides criteria for suitability of building sites. The standard is concerned with land use planning and building treatments in the vicinity of an airport. The objective is to provide guidance to regional and local authorities, organisations, communities and others associated with urban and regional planning and building development on the siting and construction of new buildings against aircraft noise intrusion and on the acoustical adequacy of existing buildings near aerodromes. It is noted that the standard is not intended to be applied for the purpose of assessing the effects of noise from aircraft. AS2021:2015 generally uses the relevant Australian Noise Exposure Forecast (ANEF) for consideration of building sites as to being "acceptable", "unacceptable" or "conditionally acceptable".

Where aerodrome usage (such as the White Gum Air Park) is confined to a small number of civil, non-jet aircraft movements the production of an ANEF chart may not be justified and is unlikely to occur. In these cases, AS2021:2015 provides alternative noise metrics, which are contained in Appendix E of the standard and are summarised below in Table E1.

TABLE E1 – BUILDING SITE ACCEPTABILITY BASED ON AIRCRAFT NOISE LEVELS*

Number of Flights Per Day	Aircraft Noise Level Expected at Building Site dB(A)		
	Acceptable	Conditionally Acceptable	Unacceptable
House, home unit, flat, caravan park, school, university, hospital, nursing home			
>30	<70	70-75	>75
15-30	<80	80-85	>85
<15	<90	90-95	>95

*The values in Table 1 are based on a small aerodrome with a small number of civil, non-jet aircraft movements. They should not be used in any other circumstance.

Based on the above information, the appropriate criteria for this assessment has been based on the recommendations contained in AS2021:2015. As the White Gum Air Park, has around 15-30 flights per day (on the busiest day), the acceptable noise level for surround buildings types (house) would be <80 dB(A) L_{Amax} and conditionally acceptable 80-85 dB(A) L_{Amax} .

The nearest noise sensitive premises (highly noise sensitive) is located approximately 100m from the centre of runway 09 towards the north. At this location, the L_{Amax} noise level of the worst case (take-off) operation has been determined to be 71 dB(A) for the most common aircraft type using the runway. For ground activities, such as aircraft taxiing around site, the L_{Amax} noise level is 47 at the same premise.

Even though noise emanating from aircraft using the air park complies with the stated applicable criteria, to formalise the operations of the White Gum Air Park, it is recommended that a management plan (which includes noise) be developed. This management plan provides a level of security to the facilities operations and to other stakeholders which may be affected by the operations.

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3.	CRITERIA	1
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APPENDICES

A	Locality Plan
B	Continuous Noise Monitoring Results
	Observed Noise Measurement Results
B	Noise Contour Plots

1. INTRODUCTION

Herring Storer Acoustics was commissioned by The White Gum Air Park on behalf of the owners, Andrew and Mary Cotterell, to carry out a noise study for the operations located at Lot 2308 Cameron Road, Malebelling (See Figure A2 in Appendix A for Study Area), with regards to noise emissions from aircraft using the park.

This assessment is provided to support the regulatory approvals processes sought from the Shire of York for the construction of additional hangers at the facility.

As part of the study, the following was carried out:

- Identification of individual operations and the associated noise levels.
- Measurement of aircraft and continuous monitoring of existing operational noise levels.
- Predictive noise modelling of the noise emissions associated with the air park operations.
- Assess the noise levels at the nearest surrounding noise sensitive premises.

For information, a locality plan is shown in Appendix A.

2. BACKGROUND

Runway 09-27 has been in active use for over 37 years. Whitegum Farm have used runway 09-27 for 17 years (with permission of property owners during the entire period). There has not been complaint in the past 17 years in regards to the operations, including the later 10 years where SkySports Flying School have operated from both runways. Hours of possible operation are sunrise to sunset. The runways and facilities are used by various visiting aircraft including agricultural crop spraying aircraft when in season.

3. CRITERIA

From the literature examined, there is no criteria that specifically applies to the assessment or management of aircraft noise from a facility such as the White Gum Air Park.

In Western Australia, the assessment of noise is undertaken using either the Environmental Protection (Noise) Regulations 1997 or State Planning Policy 5.4 Road and Rail Transport Noise and Freight Considerations in Land Use Planning. Both the regulations and policy specifically exclude assessment of aircraft noise.

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Where aerodrome usage (such as the White Gum Air Park) is confined to a small number of civil, non-jet aircraft movements the production of an ANEF chart may not be justified and is unlikely to occur. In these cases, AS2021:2015 provides alternative noise metrics, which are contained in Appendix E of the standard and are summarised below in Table 1.

TABLE 1 – BUILDING SITE ACCEPTABILITY BASED ON AIRCRAFT NOISE LEVELS*

Number of Flights Per Day	Aircraft Noise Level Expected at Building Site dB(A)		
	Acceptable	Conditionally Acceptable	Unacceptable
House, home unit, flat, caravan park, school, university, hospital, nursing home			
>30	<70	70-75	>75
15-30	<80	80-85	>85
<15	<90	90-95	>95
Hotel, motel, hostel, public building			
>30	<75	75-80	>80
15-30	<85	85-90	>90
<15	<95	95-100	>100
Commercial Building			
>30	<80	80-85	>85
15-30	<90	90-95	>95
<15	<100	100-105	>105

*The values in Table 1 are based on a small aerodrome with a small number of civil, non-jet aircraft movements. They should not be used in any other circumstance.

Appropriate Criteria

Based on the above information, the appropriate criteria for this assessment has been based on the recommendations contained in AS2021:2015. As the White Gum Air Park, has around 15-30 flights per day, the acceptable noise level for surround buildings types (house) would be <80 dB(A) L_{Amax} and conditionally acceptable 80-85 dB(A) L_{Amax} .

4. MEASUREMENTS

To enable the assessment of noise emissions from the Whit Gum Air Park, noise level measurements were carried out on the 16th June 2017 and continuously from the 7th to the 11th July 2017.

Noise level measurements were conducted using two methods. The first method involved utilising two Ngara loggers recording continuous noise levels at two different locations. The noise monitors recorded continuous noise levels from the 7th to 11th July 2017. The first logger was setup at the northern boundary of Lot 2308, near to the closest neighbouring residential receiver. The second unit was positioned on the southern boundary of Lot 2308. Both loggers were set to record continuous noise levels for the assessment period and were time synchronised so that the noise levels at each location were comparable. Notations for aircraft movements and type over this period were made by the operators of the facility and have been provided for information in Table 2. Monitoring locations and pictures of the monitors are shown in Figure 1 and 2 below.

TABLE 2 – AIRCRAFT MOVEMENT LOG SAT 8TH TO MONDAY 10TH JULY 2017

Date Time	Aircraft	Runway
Saturday 8th July 2017		
12:30	Ultralight Zodiac	Arrival Runway 27
13:00	Ultralight Zodiac	Departure Runway 27
Sunday 9th July 2017		
08:00	Microlight	Departure Runway 09
08:10	Microlight	Departure Runway 09
08:45	Microlight	Arrival Runway 09
09:15	Microlight	Arrival Runway 09
09:25	Microlight	Arrival Runway 09
15:15	Ultralight Foxbat	Departure Runway 27
15:30	Microlight	Departure Runway 09
16:15	Ultralight Foxbat	Arrival Runway 09
16:45	Microlight	Arrival Runway 09
Monday 10th July 2017		
11:00	Cessna	Touch And Go Runway 09



FIGURE 1 – CONTINUOUS MONITORING LOCATIONS



FIGURE 2 – MONITORING LOCATION PICTURES

The second method of measurement was short term hand held noise level measurements using a Svan 948 integrated sound and vibration level meter. These measurements were carried out in the near field to an operating aircraft at various operating parameters.

The aircraft measured was an Aeroprakt A22 Foxbat with a Rotax 912, 100 Horsepower motor. Noise levels within 1 to 3 metres of the aircraft were measured to allow calculation of the sound power levels. During the measurements, the aircraft was run at maximum rpm to allow for the highest noise level. Additionally, noise level measurements were conducted when the aircraft was running through the preflight checks (higher than idle operations), taxiing in and around the runway, and take-off and landing operations.

Pictures of the measurement position and aircraft are shown in Figure 3.



FIGURE 3 – FOXBAT AIRCRAFT NOISE MEASUREMENTS

Weather conditions during the course of the measurements were observed as calm (wind) and cool temperatures with some cloud cover. This was confirmed on the Bureau of Meteorology web site which recorded a daily observation of calm and cool conditions.

5. MEASURED RESULTS

Based on the analysis of the measured noise levels from the White Gum Air Park operations, noise levels at various locations have been determined. Detailed representation of results in the form of graphical plots are contained in Appendix B.

5.1 OBSERVED NOISE LEVEL MEASUREMENTS

The resultant noise levels from hand held, observed measurements of a Foxbat aircraft are contained in Table 3 below.

TABLE 3 MEASURED NOISE LEVELS AEROPRAKT FOXBAT AIRCRAFT dB(A)

Operating Parameter	Distance	L _{Asmax}	Comments
Checking	2m	82.5	On Ground Right Side
Full Revs 2m	2m	101.7	On Ground Right Side
Full Revs Rear 1m	1m	93.8	On Ground Tail Side
Take Off 6m Side	6m	97.3	To Side of Runway
Touch and Go (pass at 20m high) 6m to side runway	6m	73.3	To Side of Runway
Landing 6m side	6m	73	To Side of Runway
Ground moving past (Taxiing) 60m either side of measurement location	6m	72.8	To Side of Runway

Additional to the overall noise level measured (Table 3), time history noise levels were recorded for each operating parameter. The time history allows for analysis of the duration of the activity. Figure 4 details a graphical plot of the time history for an aircraft to pass by while taxiing on the runway. The measurement location for this event remained stationary, with the measurement carried out when the aircraft was approximately 60m away, and continued until 60m past the measurement point.

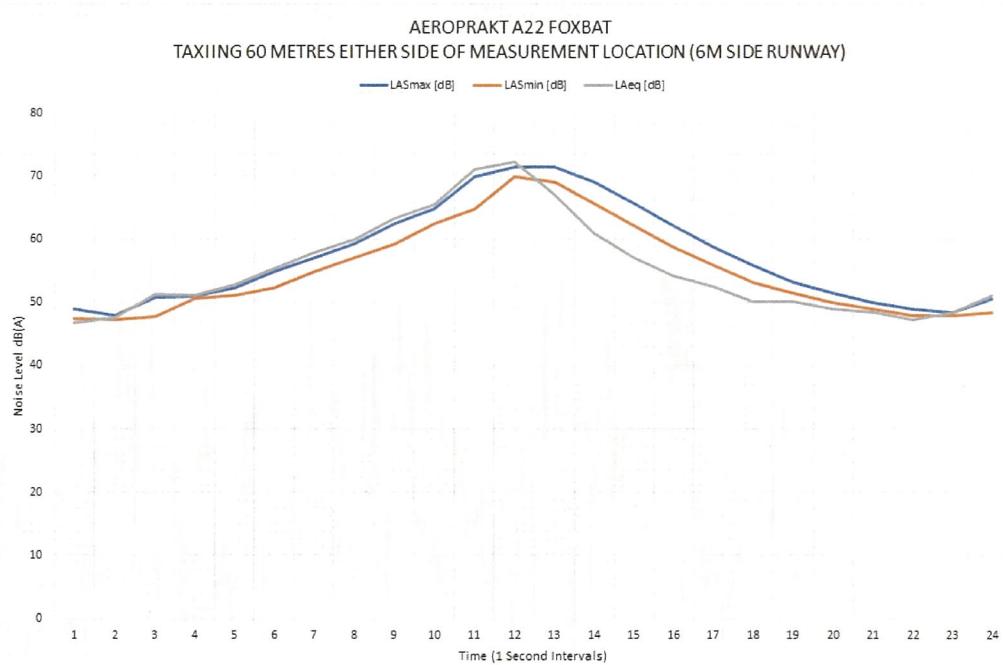


FIGURE 4 – FOXBAT AIRCRAFT NOISE MEASUREMENTS TIME HISTORY - TAXIING

5.2 CONTINUOUS NOISE MONITORING

Results of the continuous noise monitoring have been summarised in Table 4, with the graphical example contained in Figure 5 for Sunday 9th July (highest amount of aircraft movements). Noise level data was correlated against the known times for an aircraft event as per the log provided previously in Table 2. For the graphical plots the aircraft type and landing airstrip over the duration of the monitoring have been noted for comparison of the noise levels.

TABLE 3 MEASURED NOISE LEVELS dB(A)

Date	Time / Aircraft Type and Runway	Noise Level L _{Amax} dB(A)	
		Logger A (Northern Boundary)	Logger B (Southern Boundary)
Saturday 8th July 2017	12:30 - Ultralight Zodiac Arrival Runway 27	47	51
	13:00 - Ultralight Zodiac Departure Runway 27	52	55
	08:00 - Microlight Departure Runway 09	66	66
	08:10 - Microlight Departure Runway 09	75	70
	08:45 - Microlight Arrival Runway 09	64	72
	09:15 - Microlight Arrival Runway 09	59	67
Sunday 9th July 2017	09:25 - Microlight Arrival Runway 09	75	68
	15:15 - Ultralight Foxbat departure Runway 27	68	62
	15:30 - Microlight Departure Runway 09	60	46
	16:15 - Ultralight Foxbat arrival Runway 09	57	69
	16:45 - Microlight Arrival Runway 09	53	70
Monday 10th July 2017	11:00 - Cessna touch and go Runway 09	66	58

Note: To allow for any time disparity between the log and the monitored noise levels, the maximum noise level for five minutes either side of the noted time has been used.

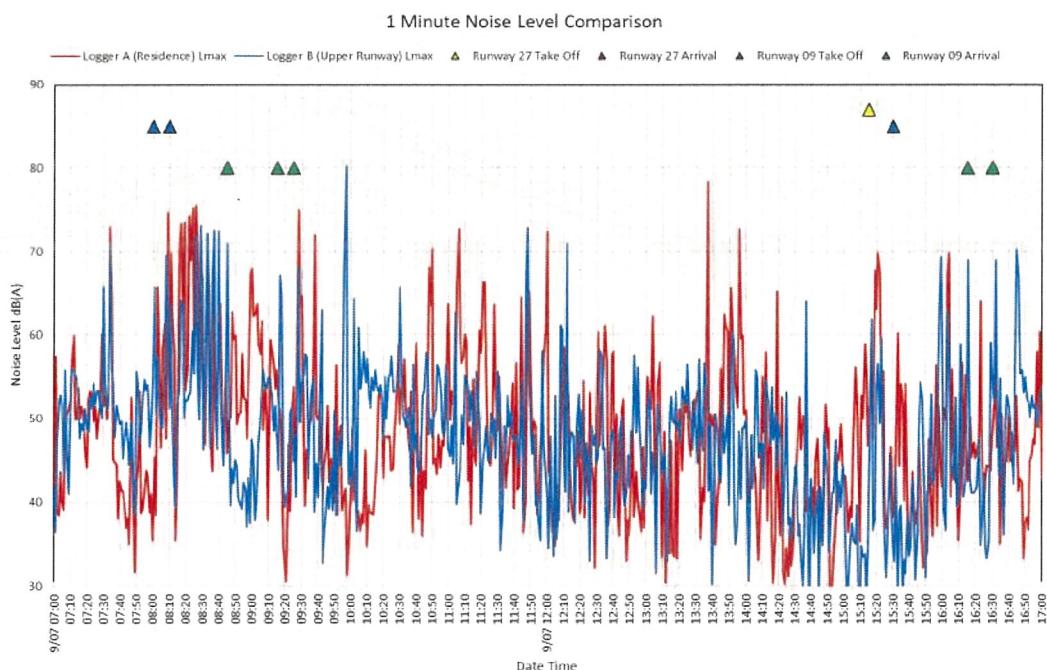


FIGURE 5 – MONITORED NOISE LEVEL COMPARISON AGAINST KNOWN AIRCRAFT EVENT TIMES

6. MODELLING

Noise emissions from the operating White Gum Air Park was modelled with the computer programme SoundPlan. Sound power levels used for the calculations are based on the measured noise levels conducted on site (Table 3).

Two modelling scenarios were developed for the White Gum Air Park operations being:

Scenario 1 – Foxbat Aircraft Take off, any runway;

Scenario 2 – Foxbat aircraft taxiing, any runway or hanger location (including future hangers).

The Aeropark Foxbat aircraft has been used as the basis of the noise modelling. From information provided, this is understood to be a representation of the worst-case noise levels for the facility. The modelled scenarios have been calibrated against the measured noise levels conducted on site.

It is noted that to allow for any noise associated with the additional hangers, aircraft noise sources have been located at all the future hangers, not yet constructed. This allows for assessment of noise for current and future operations.

The source height for scenario 1 is 1m above ground and scenario 2 allows for the aircraft noise source to be 1m to 150m (500 feet) to represent a take-off operation.

The receiver locations have been based on the aerial image (Figure 6) for the area surrounding the air park.



FIGURE 6 – RECEIVER LOCATIONS

Weather conditions for modelling were as stipulated in the DER's "Draft Guidelines on Environmental Noise for Prescribed Premises" and for the night period as listed in Table 4.

TABLE 4 – WEATHER CONDITIONS

Condition	Day
Temperature	20°C
Relative humidity	50%
Pasquill Stability Class	E
Wind speed	4 m/s*

* From sources, towards receivers.

Resultant noise levels for the for the above scenarios are summarised in Table 5 for known receiver locations. The graphical noise contour plots are contained in Appendix D.

TABLE 5 – MODELLED NOISE LEVELS DB(A) $L_{A\text{MAX}}$

Receiver Location	Scenario 1 Ground Operations	Scenario 2 Take-off Operations
Residence A	47	71
Residence B	13	43
Residence C	0	31
Residence D	8	37
Residence E	18	45

7. DISCUSSION

To determine noise received at the neighbouring residence from the White Gum Air Park, noise emissions from aircraft operating at the park have been based on the results of noise modelling, which has been calibrated against hand held observed noise level measurements.

The nearest noise sensitive premises (highly noise sensitive) is located approximately 100m from the centre of runway 09 towards the north. At this location, the $L_{A\text{MAX}}$ noise level of the worst case (take-off) operation has been determined to be 71 dB(A) for the most common aircraft type using the runway. For ground activities, such as aircraft taxiing around site, the $L_{A\text{MAX}}$ noise level is 47 at the same premise.

The usage of the White Gum Air Park by air craft is intermittent. Over the course of the study period, logging of aircraft flights resulted in aircraft movements of generally 2 to 3 movements during weekdays and 6 to 9 movements during weekends. Each landing or take off was counted as 1 movement.

As previously explained, there is no criteria to relate the noise levels to, however, using AS2021:2015 as a guide to building acceptability, the highest assessable noise level at the nearest residential building for an airfield having 15-30 aircraft movements per day is a noise level of <80 dB(A). This can be compared against the noise level at Residence A which has been assessed at 71 dB(A).

Whilst the current aircraft movements are at around 9 on the busiest day, it is unlikely that the additional hangers will significantly impact on the quantity of movements. To future proof the assessment and allow for the noise levels associated with an increase in traffic for the additional hangers, the use of the 15-30 aircraft movements criteria would be considered appropriate.

8. CONCLUSION

Even though noise emanating from aircraft complies with the stated criteria, to formalise the operations of the White Gum Air Park, it is recommended that a management plan (which includes noise) is developed. This management plan provides a level of security to the facilities operations and to other stakeholders which may be affected by the operations.

Information which would be contained within the management plan would be generally as follows:

- Outline of operations, mission statement, background etc.
- Management of operational activities.
- Flight paths.
- Standard hours of operation.
- Fly Neighbourly Agreement.
- Flight training guidelines.
- Noise complaint process.
- Noise assessment and monitoring.
- Land use planning for future development.
- Communication and consultation.

APPENDIX A

LOCALITY PLAN – SITE LAYOUT

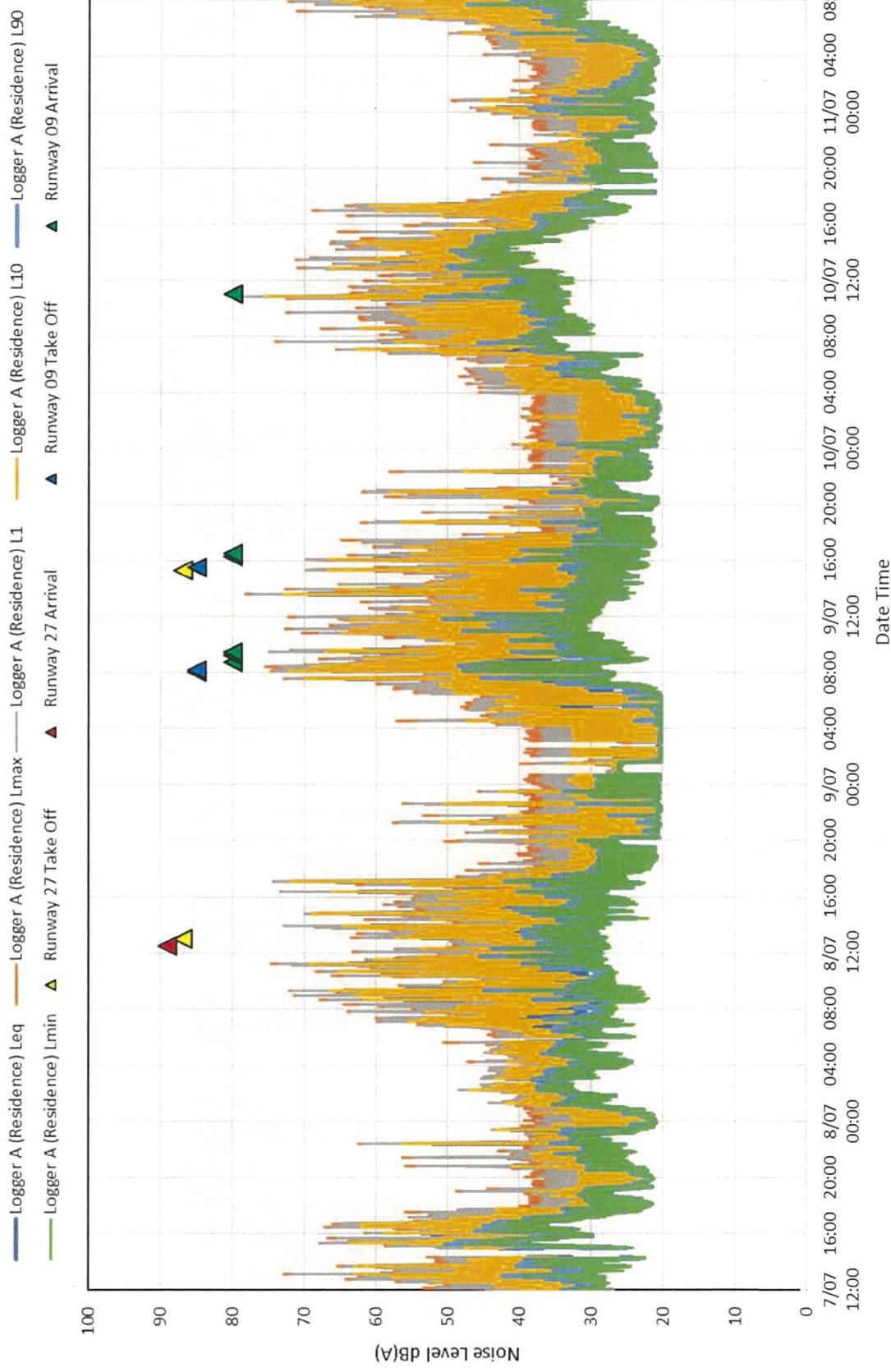
FIGURE A1 – WHITE GUM AIR PARK LAYOUT PLAN



APPENDIX B

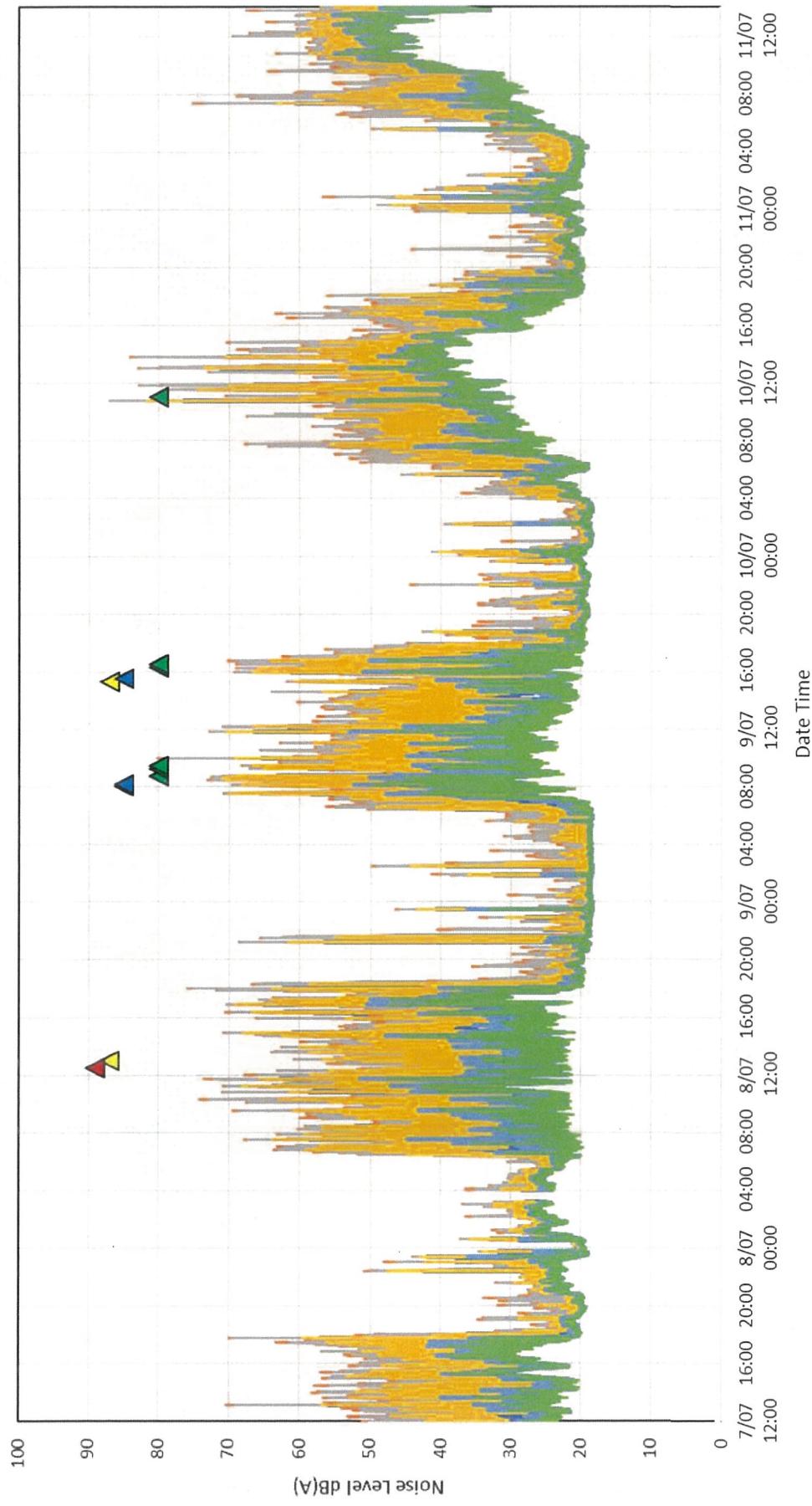
CONTINOUS NOISE MONITORING RESULTS

Monitoring Location A - Residence



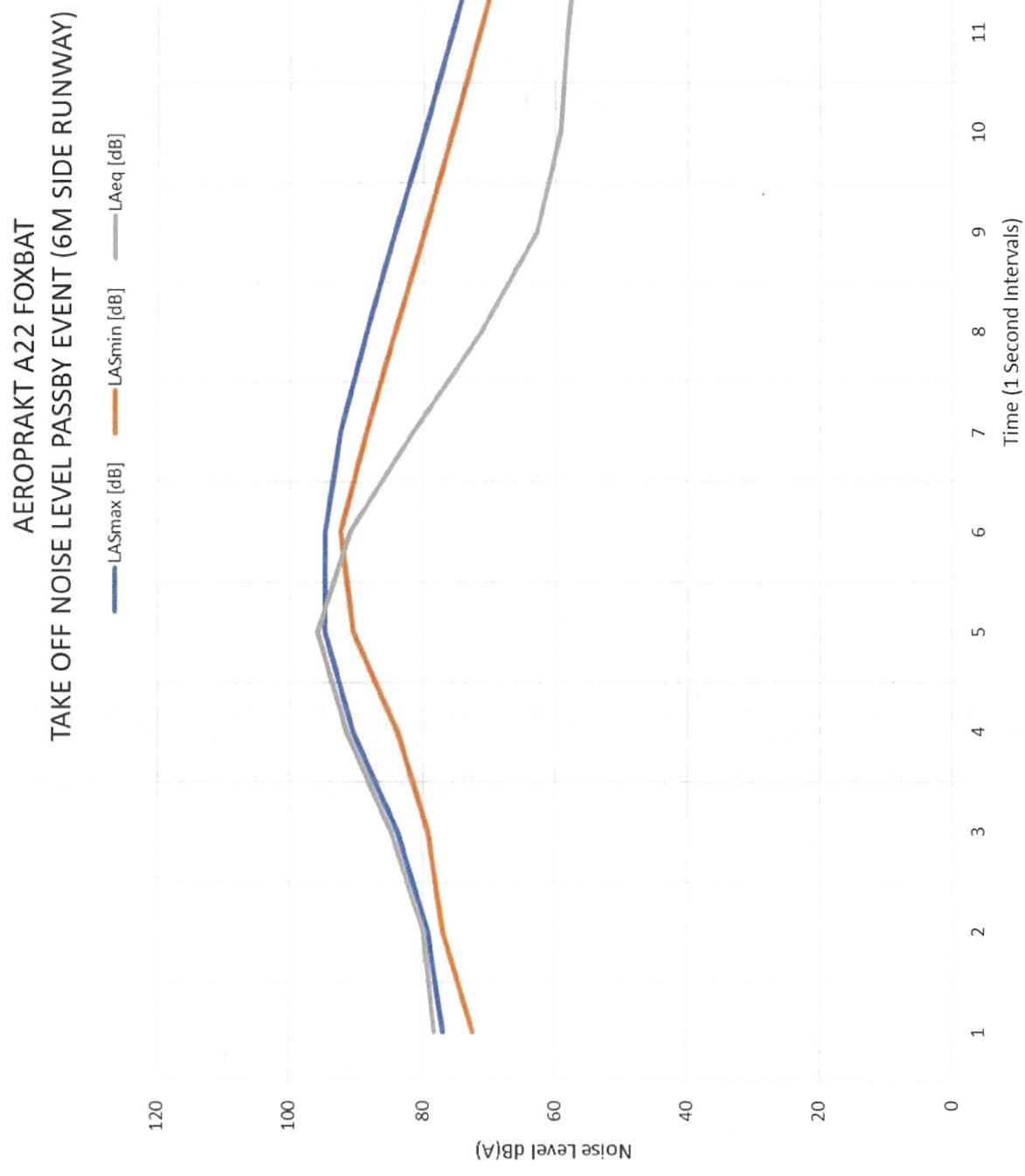
Monitoring Location B - Upper Runway

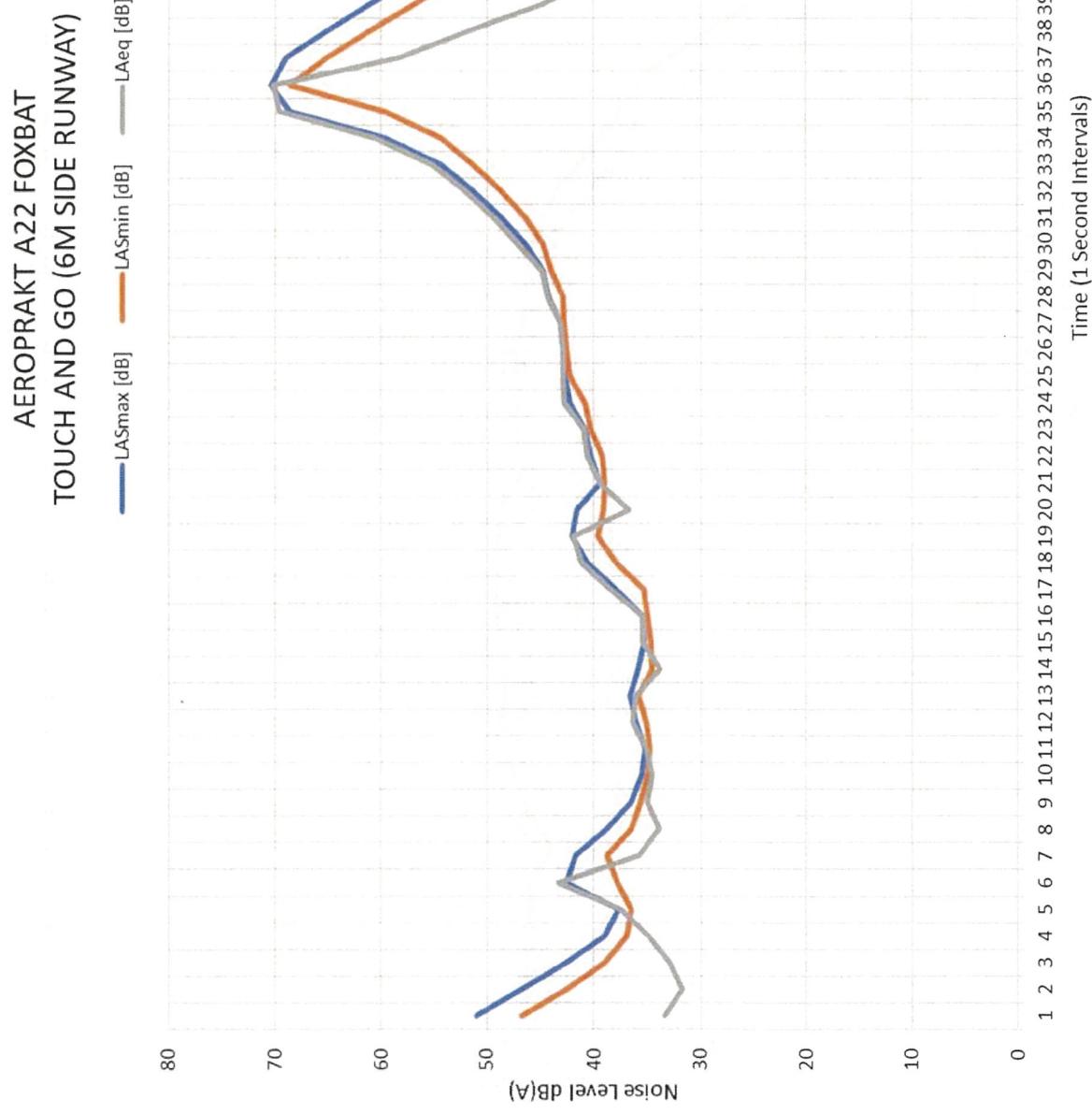
Legend:
Logger B (Upper Runway) L_{eq} — Orange line
Logger B (Upper Runway) L_{max} — Grey line
Logger B (Upper Runway) L₁ — Green line
Logger B (Upper Runway) L₁₀ — Yellow line
Runway 27 Take Off ▲ Yellow triangle
Runway 27 Arrival ▲ Red triangle
Runway 09 Take Off ▲ Blue triangle
Runway 09 Arrival ▲ Green triangle



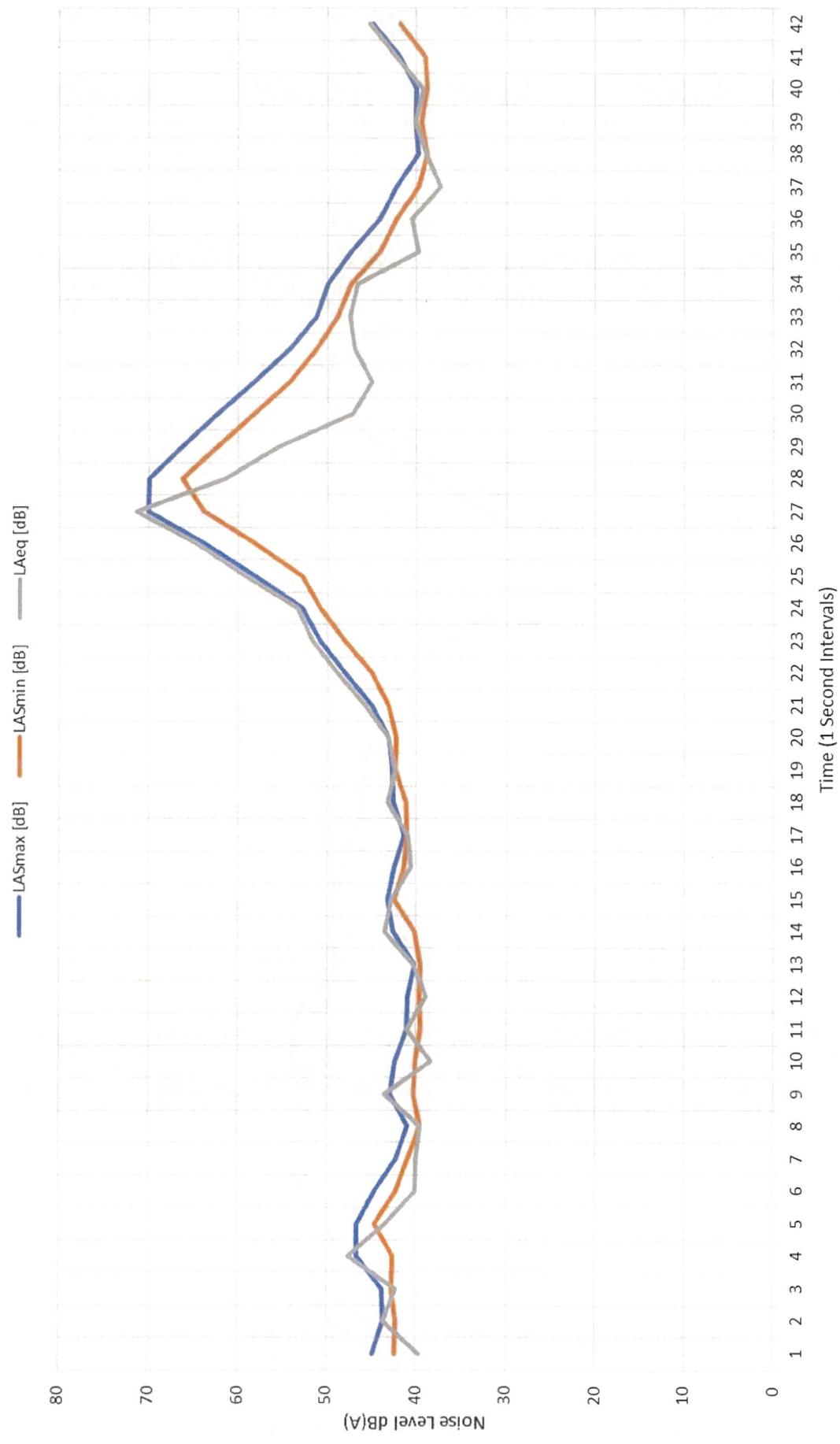
APPENDIX C

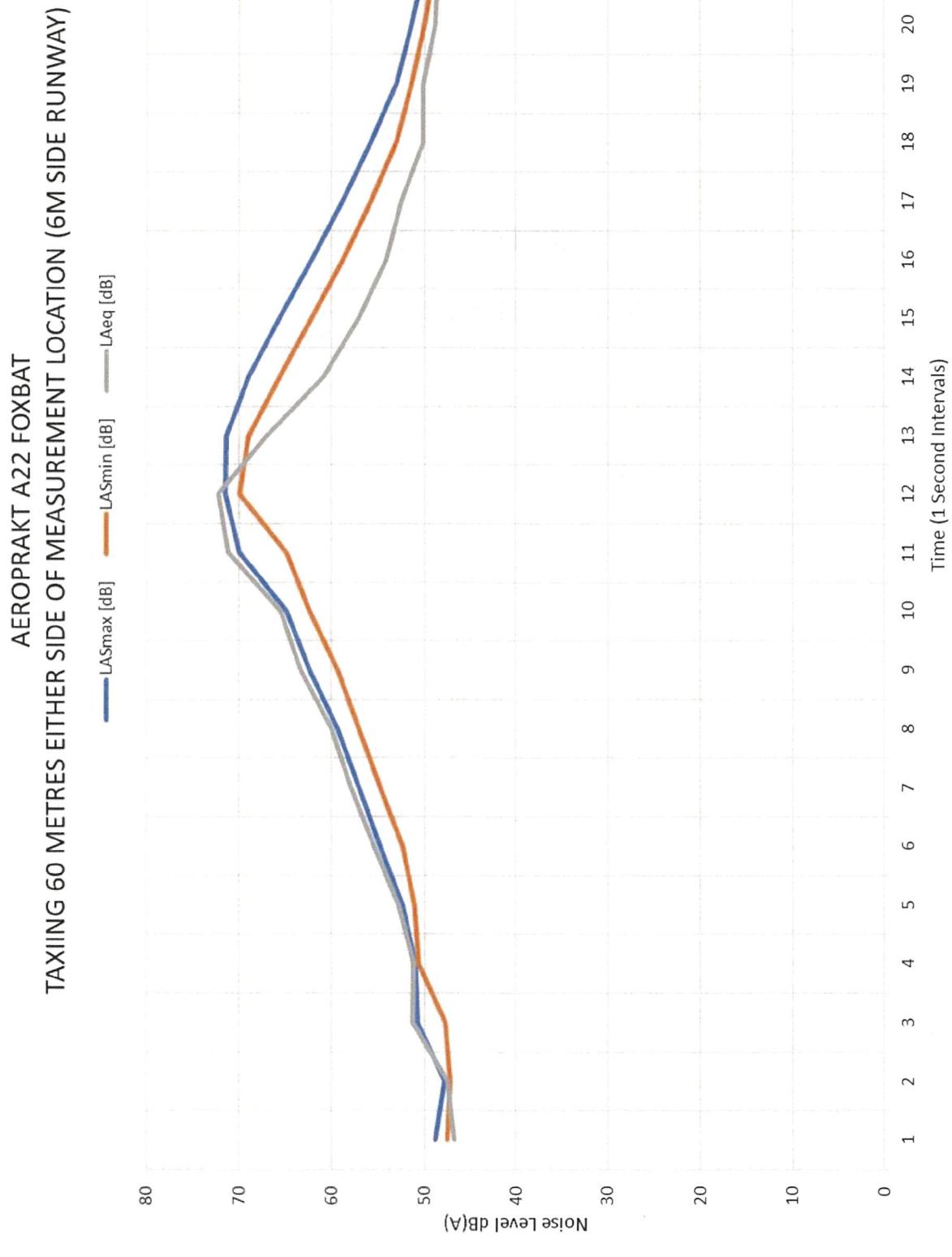
HAND HELD NOISE RESULTS





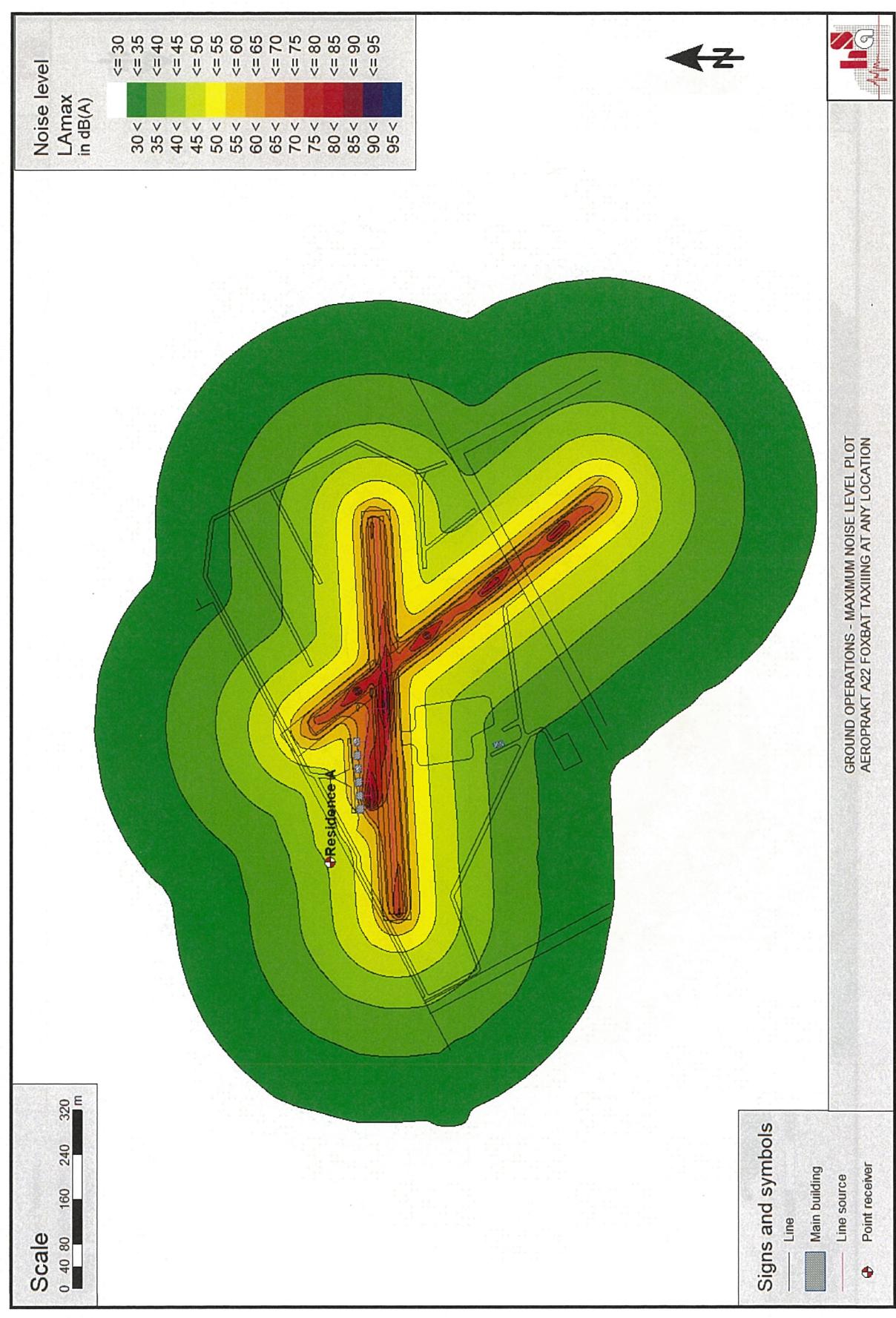
AEROPRAKT A22 FOXBAT LANDING (6M SIDE RUNWAY)

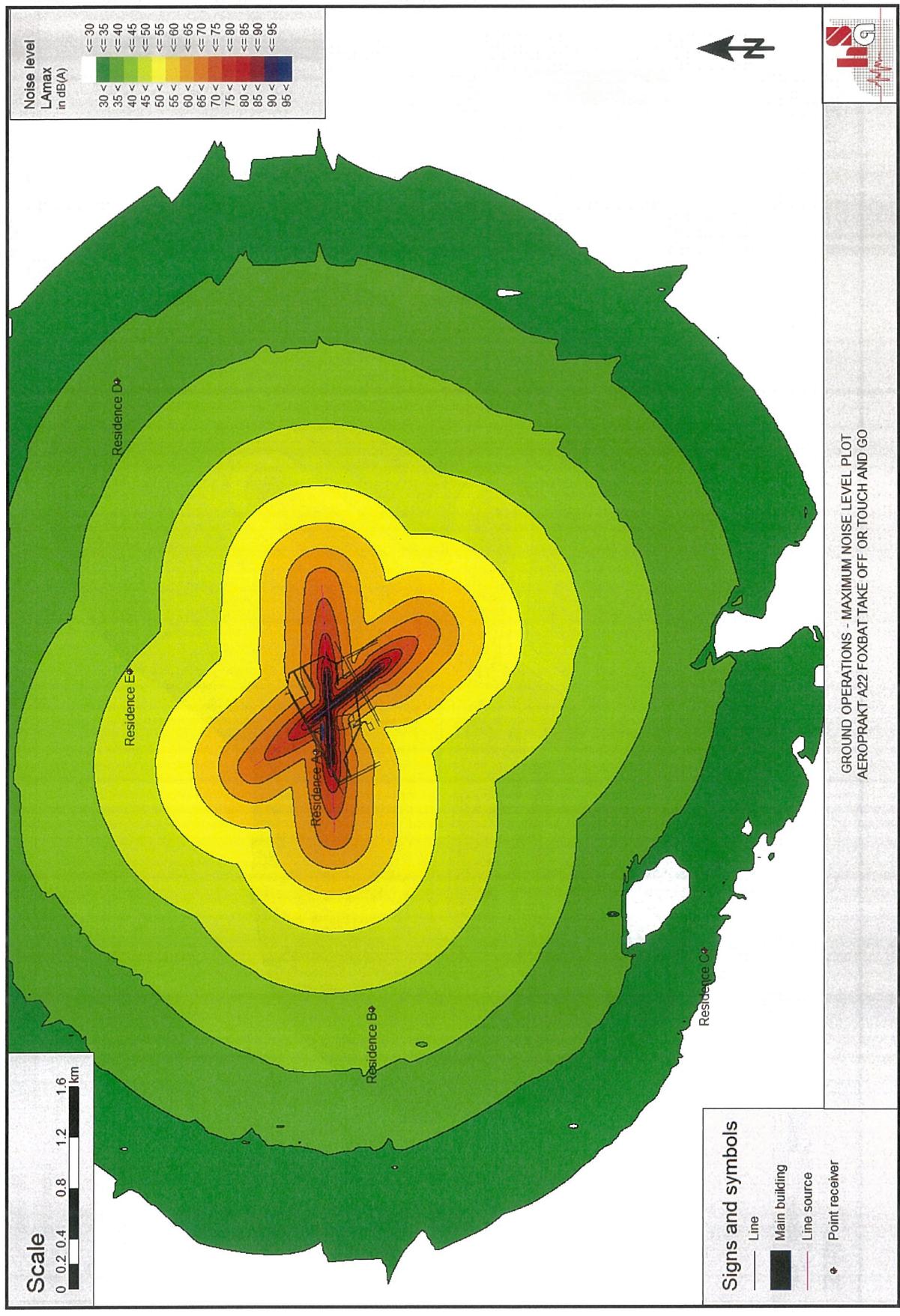




APPENDIX D

NOISE CONTOUR PLOTS





Bushfire Attack Level Assessment Report

Prepared by a BPAD Accredited Practitioner



CERTIFIED
MetroCert
Fire Protection Association Australia Life Property Environment
1/10/2016



AS 3959 BAL Assessment Report

This report has been prepared by an Accredited BPAD Practitioner using the Simplified Procedure (Method 1) as detailed in Section 2 of AS 3959 – 2009 (Incorporating Amendment Nos 1, 2 and 3). FPA Australia makes no warranties as to the accuracy of the information provided in the report. All enquiries related to the information and conclusions presented in this report must be made to the BPAD Accredited Practitioner.

Property Details and Description of Works

Address Details	Unit no	Street no	Lot no	Street name / Plan Reference					
			2308	Cameron Road					
Local government area	Suburb			State	Postcode				
	Malebelling				WA	6302			
Main BCA class of the building	York								
Description of the building or works	Class 10a	Use(s) of the building	Aircraft Hangers						
Proposed Aircraft Hangers									

Report Details

Report / Job Number	Report Version	Assessment Date	Report Date
J004703	1	15 September 2016	29 September 2016

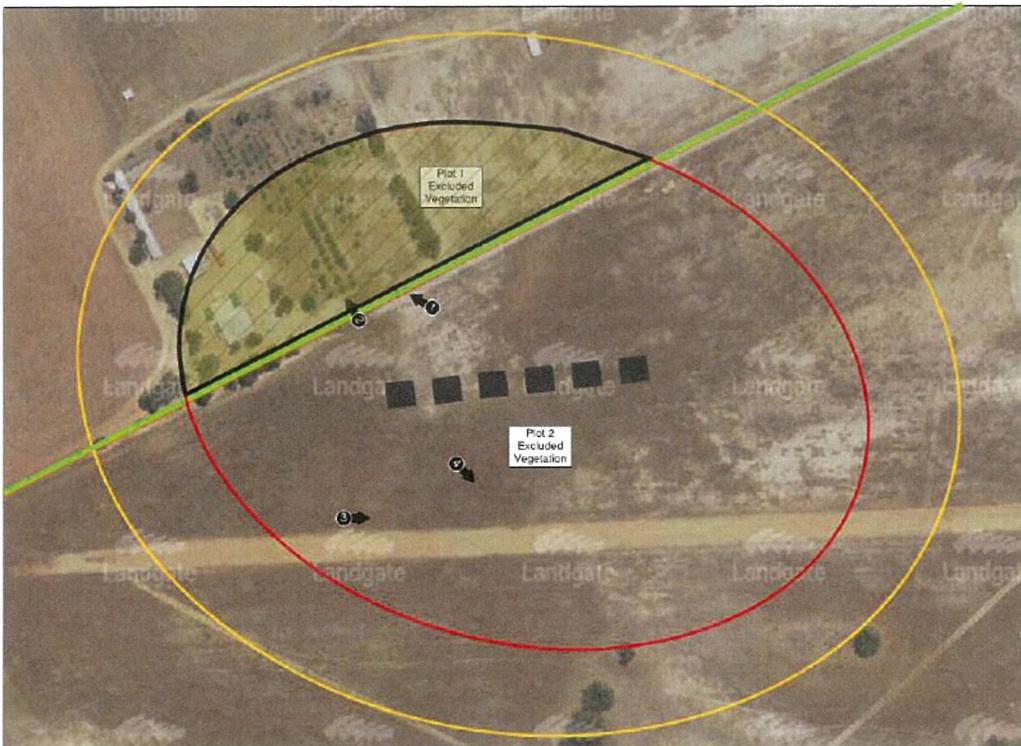
BPAD Accredited Practitioner Details

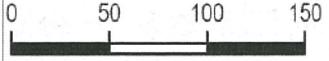
Name John Greenwood	<p>I hereby declare that I am a BPAD accredited bushfire practitioner.</p> <p>Accreditation No. BPAD 336633</p> <p>Signature </p> <p>Date 29 September 2016</p>
Company Details WABAL BushfireAssessmentLogic	<p>Authorised Practitioner Stamp</p>

Reliance on the assessment and determination of the Bushfire Attack Level contained in this report should not extend beyond a period of 12 months from the date of issue of the report. If this report was issued more than 12 months ago, it is recommended that the validity of the determination be confirmed with the Accredited Practitioner and where required an updated report issued.

Site Assessment & Site Plans

The assessment of this site / development was undertaken on 15 September 2016 by a BPAD Accredited Practitioner for the purpose of determining the Bushfire Attack Level in accordance with AS 3959 - 2009 Simplified Procedure (Method 1).



<p>Address: Lot 2308 Cameron Road, Malebelling</p> <p>Assessment date: 15 September 2016</p> <p>Accreditation level: BPAD level 1</p> <p>Accreditation number: BPAD 336633</p>	<p>BAL ASSESSMENT SITE PLAN</p>  <p>metres</p> 	<p>LEGEND</p> <ul style="list-style-type: none">Proposed Building100m wide buffer150m wide bufferVegetation extentsPhoto location and directionSite boundary	<p>WABC WESTERN AUSTRALIA BUILDING CERTIFIERS AND ASSESSORS</p> <p>WABAL BushfireAssessmentLogic</p>
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Vegetation Classification

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2009. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.

Photo ID: 1	Plot: 1	
Vegetation Classification or Exclusion Clause		
Excludable - 2.2.3.2(f) Low Threat Vegetation		
Description / Justification for Classification		
Plot 1 refers to a orchard on the neighbouring property, which has been excluded as being managed and low threat.		
Photo ID: 2	Plot: 1	
Vegetation Classification or Exclusion Clause		
Excludable - 2.2.3.2(f) Low Threat Vegetation		
Description / Justification for Classification		
An alternative view of Plot 1.		

Photo ID: 3	Plot: 2	
Vegetation Classification or Exclusion Clause		
Excludable - 2.2.3.2(f) Low Threat Vegetation		
Description / Justification for Classification		
Plot 2 is an area of low threat managed grassland surrounding the proposed buildings.		
Photo ID: 4	Plot: 2	
Vegetation Classification or Exclusion Clause		
Excludable - 2.2.3.2(f) Low Threat Vegetation		
Description / Justification for Classification		
An alternative view of Plot 2.		

Relevant Fire Danger Index

The fire danger index for this site has been determined in accordance with Table 2.1 or otherwise determined in accordance with a jurisdictional variation applicable to the site.

Fire Danger IndexFDI 40 FDI 50 FDI 80 FDI 100 *Table 2.4.5**Table 2.4.4**Table 2.4.3**Table 2.4.2***Potential Bushfire Impacts**

The potential bushfire impact to the site / proposed development from each of the identified vegetation plots are identified below.

Plot	Vegetation Classification	Effective Slope	Separation (m)	BAL
1	Excludable – Clause 2.2.3.2(f)	-	-	BAL – LOW
2	Excludable – Clause 2.2.3.2(f)	-	-	BAL – LOW

*Table 1: BAL Analysis***Determined Bushfire Attack Level (BAL)**

The Determined Bushfire Attack Level (highest BAL) for the site / proposed development has been determined in accordance with clause 2.2.6 of AS 3959-2009 using the above analysis.

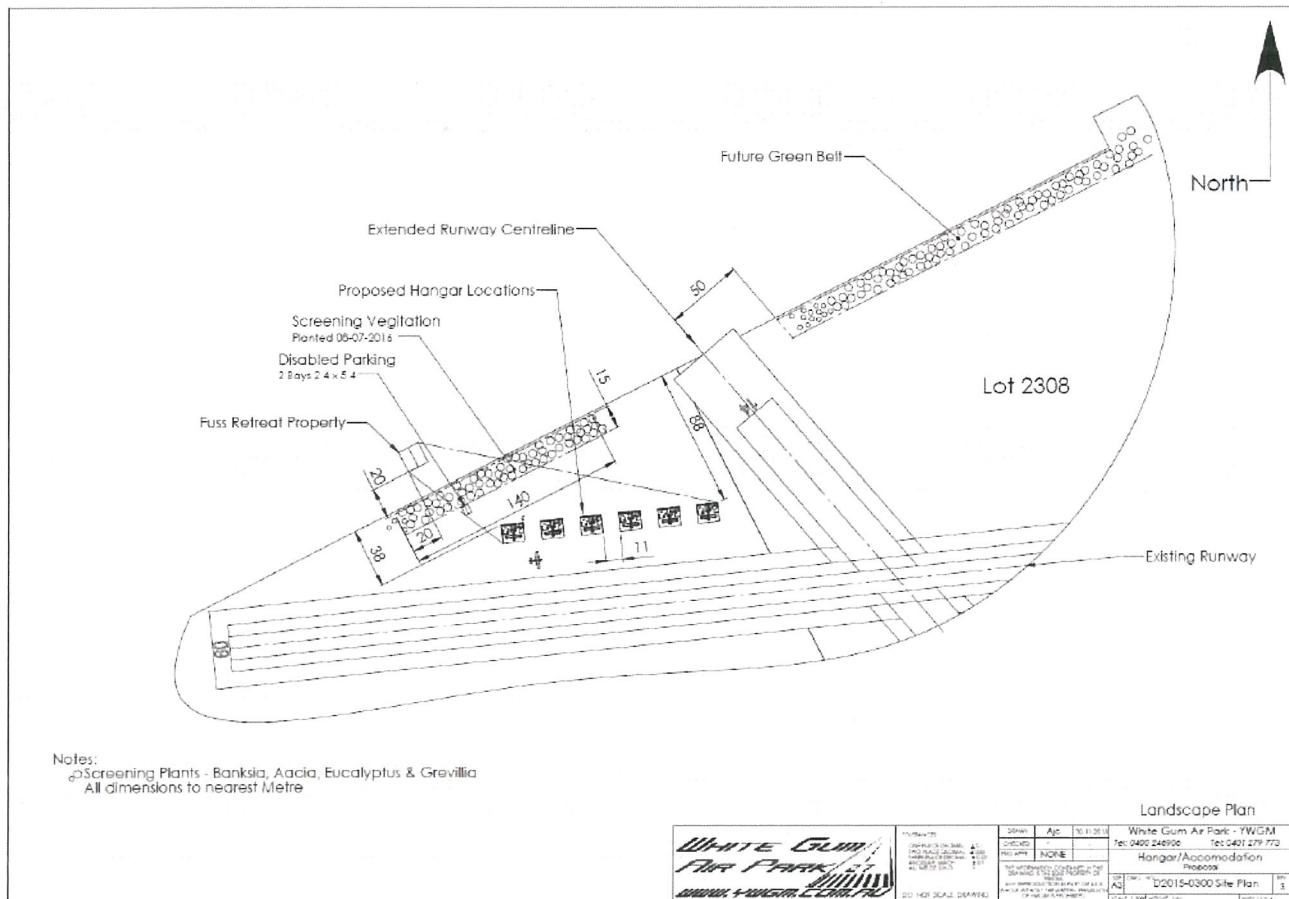
Determined Bushfire Attack Level**BAL – LOW**

Appendix 1: Plans and Drawings

Plans and drawings relied on to determine the bushfire attack level

Drawing / Plan Description Landscape Plan

Drawing Number D2015-0300	Revision 3	Date of Revision 30/11/2015
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Government of Western Australia
Department of Health

SHIRE OF YORK	
FILE	CA1.60838
OFFICER	INITIALS
Carly	
22 JAN 2018	
I/164289	
REFERRED TO COUNCIL	
DATE	INITIALS

Your Ref: O128993/CA1.A60838
Our Ref: F-AA-27149 EHB17/1370
Enquiries: Vic Andrich

Mr Paul Martin
Chief Executive Officer
Shire of York
PO Box 22
YORK WA 6302

Attention: Carly Rundle, Senior Planner

Dear Mr Martin

PROPOSED DEVELOPMENT – ADDITIONAL AIRCRAFT HANGARS AND ACCOMMODATION – LOT 2308 CAMERON ROAD, MALEBELLING

Thank you for your letter of 3 November 2017 requesting comment from the Department of Health (DOH) on the above.

The DOH has no objection to the proposal.

Should you have queries or require further information please contact Vic Andrich on

Yours sincerely

Stan Goodchild
A/EXECUTIVE DIRECTOR
ENVIRONMENTAL HEALTH DIRECTORATE

17 January 2018

Environmental Health Directorate
All correspondence PO Box 8172 Perth Business Centre Western Australia 6849
Grace Vaughan House 227 Stubbs Terrace Shenton Park WA 6008

www.health.wa.gov.au
28 684 750 332



Australian Government

Civil Aviation Safety Authority

STAKEHOLDER ENGAGEMENT GROUP

CASA Ref: G/17/953

28 November 2017

Ms Carly Rundle
Senior Planner
Shire of York
PO Box 22
YORK WA 6302

Email: records@york.wa.gov.au

Dear Ms Rundle

Thank you for your letter of 3 November 2017 requesting comment from the Civil Aviation Safety Authority (CASA) on a proposed development at Malebelling for holiday accommodation/aircraft hangar and retrospective application for private recreation (flying school).

CASA has reviewed the details provided and I am advised that White Gum Air Park is neither a certified or registered aerodrome and consequently has no instrument flight procedures published and therefore CASA does not have any comment for this development.

CASA has published an advisory document that may assist Council for the safe development of this airfield. Please refer to Civil Aviation Advisory Publication (CAAP) 92-1(1) *Guidelines for aeroplane landing area*. This CAAP can be downloaded from the following link
<https://www.casa.gov.au/rules-and-regulations/standard-page/civil-aviation-advisory-publications>

The proponent may also wish to consider the specific issues which are contained in the attachment as part of any planning and development.

I trust this information is of assistance.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Pradeep de Silva'.

Pradeep de Silva
Acting Section Head, Government and Corporate Relations
Stakeholder Engagement Group



ATTACHMENT – CASA Recommendations

Departure and Approach Procedures

Any proposed structures and cranes if used in construction should be referred to the procedure design organisation/s responsible for the maintenance of instrument flight procedures at the Aerodrome. Please be aware that there may be more than one organisation responsible for the procedures at the aerodrome.

To check which organisations are responsible you can view the procedures at <http://www.airservicesaustralia.com/aip/aip.asp> then Departure and Approach Procedures. The logo on the bottom of each procedure plate indicates the design organisation responsible.

Compliance with standards

Any aerodrome developments to aviation facilities associated with the planning proposal need to be consistent with the requirements of *Civil Aviation Safety Regulations 1998* Part 139 and the associated Manual of Standards. Further details are available on the CASA website. <https://www.casa.gov.au/standard-page/casr-part-139-aerodromes>

The National Airports Safeguarding Framework provides guidance on planning requirements for development that affects aviation operations. This includes building activity around airports that might penetrate operational airspace and/or affect navigational procedures for aircraft. The Framework consists of a set of guiding principles with six guidelines relating to aircraft noise, windshear and turbulence, wildlife strikes, wind turbines, lighting distractions and protected airspace. Further information is available from the following link: https://infrastructure.gov.au/aviation/environmental/airport_safeguarding/nasf/

Aerodrome operations

Consultation should also be undertaken with the aerodromes operational management team to manage the following issues with developments adjacent to any aerodromes:

- Airport master planning: Council should ensure that the proposal does not affect any future development or upgrades planned by the aerodrome's operational management.
- Obstacle limitation surfaces (OLS) and Procedures for Air Navigation Services – Aircraft Operations: Prior to construction, the development and crane activity should be reviewed by the aerodrome's management team for the protection of these surfaces.
- Wildlife hazard management plan: Consideration needs to be given to the final heights and bird attractions of landscaping provisions which potentially may cause a risk to aviation activities.
- Obstacle lighting: The building and any construction cranes would need to be marked to comply with CASR 139 and associated MOS, paying particular attention to the quantity, type, luminescence and whether day and/or night marking is required.
- Lighting in the vicinity of an aerodrome: Any proposed non-aeronautical ground light in the vicinity of an aerodrome may by reason of its intensity, configuration or colour, cause confusion or glare to pilots and therefore might endanger the safety of aircraft.
- Gaseous plume: Exhaust plumes can originate from a number of sources and aviation authorities have established that an exhaust plume with a vertical gust in excess of 4.3 metres/second may cause damage to an aircraft airframe, or upset an aircraft when flying at low levels.
- Control of dust: During any construction the emission of airborne particulate may be generated which could impair the visual conditions.

Sharla Simunov

From: Customer Service Centre SSR [REDACTED]
Sent: Monday, 13 November 2017 2:19 PM
To: Records
Subject: I163276 - CA1 - Ref# O128993/CA1, A60838 - PROPOSED DEVELOPMENT- LOT 2308 CAMERON RD, MALEBELLING.
Attachments: PROPOSED DEVELOPMENT - LOT 2308 CAMERON RD MALEBELLING.PDF

Dear Carly

Thank you for your Notification intent to carry out work, received on 9th November, 2017.

A Danger Zone, Registered Easement, Restriction Zone or Minimum approach distance represent areas of high risk when building or working near the Western Power network. Before commencing any work it is essential that you complete a Dial Before You Dig enquiry to obtain the location and voltage of the Western Power network.

Areas of high risk include;

- Danger Zone – Defined by regulation 3.64 of the Occupational Safety and Health Regulations 1996
- Registered Easement - Western Power easements are registered on the Certificate of Title for the property. Easements and conditions are available from Landgate (www.landgate.wa.gov.au)
- Restriction Zone – These are applied in the absence of a registered easement and are calculated in line with the Australian Standard for overhead line design (AS/NZS 7000:2010)
- Minimum approach distance

It is recommended that persons planning to build or undertake works in high risk areas near transmission or communication assets (including those listed above) act in a safe manner at all times and in accordance with all applicable legal and safety requirements (including the 'duty of care' under the laws of negligence, Worksafe requirements and guidelines, Australian Standards and Western Power policies and procedures).

Western Power provides services that may assist persons planning to build or work within high risk areas near transmission or communication assets (refer to your Dial Before You Dig enquiry for location and voltage). These services can be found by visiting the Transmission and communication assets section of the Western Power website (<https://www.westernpower.com.au/safety-access/working-near-our-network/>).

Kind regards
Kelly
Customer Service Coordinator
Customer Service
Western Power – 363 Wellington Street Perth WA 6000

[REDACTED]

westernpower.com.au





Electricity Networks Corporation, trading as Western Power
ABN: 18 540 492 861

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Department of Planning,
Lands and Heritage

ENQUIRIES : Aidan Ash- Ph 6551 8040
OUR REF: PLH0247
YOUR REF: O128993/CA1, A60838

Ms Carly Rundle
Senior Planner
Shire of York
Email: records@york.wa.gov.au

Dear Ms Rundle

PROPOSED DEVELOPMENT LOT 2308 CAMERON ROAD MALEBELLING

Thank you for your letter dated 3 November 2017 regarding the proposed development for an aircraft hanger (the Proposal).

The Aboriginal Heritage Directorate (AHD) of the Department of Planning, Lands and Heritage (DPLH) advises there are no reported Aboriginal sites within the area of the Proposal.

The AHD recommends that developers undertaking activities within the area of the Proposal take into consideration the DPLH's Aboriginal Heritage Due Diligence Guidelines when planning specific developments associated with the Proposal. These guidelines have been developed to assist proponents to identify any risks to Aboriginal heritage and to mitigate risk where heritage sites may be present.

The guidelines are available at: <https://www.daa.wa.gov.au/heritage/land-use/>.

If you have any queries in regards to this please do not hesitate to contact me on [REDACTED].

Yours sincerely

Aidan Ash
TEAM LEADER HERITAGE

16 November 2017

Sharla Simunov

From: Brett Coombes [REDACTED]
Sent: Wednesday, 8 November 2017 4:06 PM
To: Records
Subject: I163202 - CA1 - Development Lot 2308 Cameron Road Malebelling (Your ref: O128993/ CA1, A60838)

Carly,

Thank you for your letter of 3 November 2017 inviting comments on the proposed airfield development.

The site is remote from the Water Corporation's water and wastewater infrastructure and services are therefore not available to this development.

Regards

Brett Coombes

Senior Planner, Land Planning
Assets Planning Group

Water Corporation

T: [REDACTED]
629 Newcastle Street, Leederville, WA 6007
www.watercorporation.com.au



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Sharla Simunov

From: Angela Coletti [REDACTED]
Sent: Monday, 20 November 2017 1:28 PM
To: Records
Subject: I163412 - CA1 - Proposed Development - Lot 2308 Cameron Road, Malebelling

ATTENTION: Carly Rundle

Thank you for your correspondence dated 3 November 2017 seeking comment from the Environmental Protection Authority (EPA) regarding the proposed Local Development – Lot 2308 Cameron Road, Malebelling. The Environmental Planning Branch of the EPA notes that the proposal is for the construction of additional aircraft hangers and a management plan (which includes noise) is being developed.

The EPA does not generally provide comment on planning proposals. If you believe that this development will have a significant impact on the environment it can be formally referred to the EPA under section 38 of the *Environmental Protection Act 1986*. Information on what might be considered significant can be found on the EPA's website in the Referral Information guide at <http://www.epa.wa.gov.au>.

I trust this information is of assistance.

Kind regards
Angela

Angela Coletti
Environmental Officer
Environmental Planning Branch

Department of Water and Environmental Regulation
Level 4, The Atrium, 168 St Georges Terrace, PERTH WA 6000
Locked Bag 33, Cloisters Square, PERTH WA 6850

[REDACTED] www.dwer.wa.gov.au www.epa.wa.gov
Twitter: [@DWER_WA](https://twitter.com/DWER_WA) @EPA WA

ARE YOU BUSHFIRE READY?

It's a team effort. Go to areyouready.wa.gov.au

Disclaimer: This e-mail is confidential to the addressee and is the view of the writer, not necessarily that of the Department of Water and Environmental Regulation, which accepts no responsibility for the contents. If you are not the addressee, please notify the Department by return e-mail and delete the message from your system; you must



0128992 / CA1.A60838

Proposed development – Lot 2308 Cameron
Road, Malebelling, 6302.

Questions and objections.

“Resident A”

[REDACTED]

Email: [REDACTED]

Phone: [REDACTED]

Postal: [REDACTED]

[REDACTED]

Phone: [REDACTED]

Postal: [REDACTED]

22 November 2017

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1 Introduction

spent many years searching through umpteen real estate websites and papers trying to find the perfect property to start our new family on. We have always had a soft spot for the heritage and community of York as we have friends and family that grew up and still live in the surrounding area.

On notice from a local real estate agent when [REDACTED] became available, we inspected the site at 9pm at night – this is a testament to how eager we were after viewing photos online. We spent that evening and a lot of the next day looking at the property and falling in love with it.

We had the normal questions about the property, but one of the main questions was about the use for the runway in the adjacent property Lot 2308 Cameron road. We were advised that this was used by the previous owner as his means to get from Perth to his weekend retreat and that the new owners continue to use this as part of their hobby for flying.

With little deter after confirming it was not part of the existing operations of the flight school one property over, we settled for the property more than happy to put up with the traffic of the flight school and that we were located far enough away for it not to impact us.

A short time into our occupancy we were introduced to Mary and Andrew Cotterell where their plans were dictated to us. Unfortunately the first Hanger that is now installed was approved whilst [REDACTED] had no occupancy and therefore no objections were submitted and this went ahead uninhibited.

We are only one voice in a growing town, but I write this submission with the future of my family in mind and hope there is enough understanding in the shire to act accordingly and decline further *commercial* development of Lot 2308, Cameron Road, Malebelling.

2 Signage

The signage requested as part of the application for development is strongly disagreed to. Notifying occupants of Taylor road, that there is a commercial operation through these gates is a red flag for unsavory characters that there is easy access valuables available for theft or damage. Adding words in red 'Authorised Access Only' is not a deterrent to unwanted and possibly violent visitors (like that of a contractor delivering an elevated work platform to White Gum Air Park).

One delivery driver missed the entrance gate to Lot 2308, so decided he would dismantle the rural fencing to make his own entrance at 5am in the morning and left without reinstating it and creating a risk to our pets and livestock.

We have no objections if Mary and Andrew would like a personal sign at the entrance to the easement, but a commercial advertisement is strongly disagreed with.

If the entrance is for Authorised access only, the authorized person should be aware of White Gum Air Parks location and shouldn't require a sign. Our address is not listed online, GPS or road maps and Authorised people have no problems accessing our property.

During the construction of Hangar 01, we had a multitude of trucks and light vehicles arrive at our house looking for the location, much work being done whilst the Cotterells were in Perth. These trucks were forced to perform U-turns into cropped paddocks and cause damage. This was not counting the amount of tracks entering our driveway that were noticed when we returned home. White Gum Farm has a commercial entrance with contact details and clearly marked driveways to navigate to White Gum Air Park and should be used by all trade vehicles and emergency vehicles to remove confusion with the residential easement off of Taylor Road. The address of the property is after all lot 2308 *Cameron Road*.

These contractors/visitors will begin to be reported in the future as we grow tired with these trespassers. As pictured the Cotterells have signage on the entrance to their property, if contractors and delivery drivers can not adhere to that sign, what is another sign going to achieve?

3 Hours of Operation

As explicitly set out in Mary and Andrew's application, they are exempt from all governing bodies in the aviation and environmental industries, so I would like to request that the shire set fixed hours of operation, to not only their planned operations, but prohibit White Gum Farm flight school from using Runway 27 in its entirety. Sunrise to Sunset is too difficult to govern and in the summer months, this allows planes to take off and land at 4.30am.

The local regulations for the shire of the York allow noise to be generated between the hours of 7am and 7pm Monday to Saturday and 9am and 7pm Sundays and Public Holidays. We adhere to these restrictions the same as anyone else residing in the shire of York and I am unsure why another resident would be given exception.

This regulation includes the restricted use of recreational motorbikes, chainsaws and lawnmowers, all of which are fitted with 2 or 4 stroke engines with a lot less power and noise output than the aircraft being flown at lot 2308.

The environment conditions do not fluctuate that much within a couple of hours to effect flying activities and would avoid disrupting neighbours that work night shift or have young children.

4 Acoustic Assessment

The acoustic assessment provided is flawed and should not be used as a true reflection of noise levels, take-off and landing calculations/estimations.

Mary and Andrew's own application shows that the most frequently used aircraft is a Gyrocopter with "as stated" 150 take offs between December and February of 2016. The Gyro is used more than 3 times more frequently and yet is not part of the assessment. The acoustic assessment however has recorded a noise level of 71dB using "the most common aircraft" in this case "the most common" aircraft is the Aeroprakt A22 Foxbot which as I have previously indicated to the shire of York, is one of the most quiet aircrafts of the fleet.

The assessment has been done over 3 days – 8th of July to the 10th of July. How can the Council make an educated decision based on data that does not relate to the peak period of operations, Namely December to February. If the assessment was to give a true account of the noise levels an assessment should be carried out for a minimum of 7 day period during the peak months of operation. Using the most common aircraft – The "Gyro"

During this period a group of 4 pilots flying paragliders relocated their take-off and landing location to the furthest point of Lot 2308 Cameron road whilst the microphone was located approximately 700meters away at our house. This continued for 4 days with each glider performing over 10 take-offs and landings. Please view [Multiple Paragliders climbing.MP4](#) and [Paraglider climbing.MP4](#)

[Relocated Site from Acoustic Test Site.MP4](#) also shows a comparison from where the testing equipment was located to where the majority of the aircraft operations were taking place. Together with the "Gyro" not performing any flights during the testing period, I can only assume this was a deliberate attempt at misleading the Council with an inaccurate acoustic assessment.

The assessment does not detail the left hand circuits that are performed 90% of the time, that has the pilot taxi east down the runway, take off at full RPM's, climb to altitude, then bank North over 50 Fuss retreat, traverse East along our property line and then re-enters our property to land on Runway 27 from the East. At times the pilot will not even reach our Northern property line and directly over our property.

Obviously not with the fixed wing aircraft, but the Gyrocopter at times also hovers above our property (unsure of why) and increases and decreases the revs of the aircraft before coming in to land. Please view [Gyrocopter taking off North South.MP4](#). As part of the students training, the aircrafts engine cuts out and restarts mid-air. Majority of the time this is an unpowered aircraft with an inexperienced pilot in control of a potential life threatening situation.

If the use of these small aircraft is not governed by any official body, why does the pilot insist on making left hand circuits? Why can't they perform right hand circuits and fly above the existing flight school that has no complaints about their operations and majority of the time, is their Chief Instructor.

I would also like to dis-agree with the assessor's assumption that 15-30 "movements" is deemed as acceptable. By his own admission, there is nothing legislatively that restricts and allows the amount of times a plane can take-off and land so I believe it is up to the Council to make limitations.

Again, I would like to document how inaccurate this assessment is and request that it is not used as evidence of current or forecasted noise pollution.

Photo 1 – Relocated Activities while acoustic assessment taking place



Photo 2 – Relocated Activities while acoustic assessment taking place



5 Land Value

I have recently sought realtor advice about the impact of a “mini Jandakot” as it’s locally tagged, will have on surrounding house and land values. The outcome of this was as no surprise, when I was advised informally that my land value will be greatly depreciated having a functional aerodrome as my direct neighbour.

Contrary to the ambitions of a White Gum Farm employee, we have bought our dream property and won’t be bullied into submission, regardless of how ever many childish games he wishes to play. We are not entertaining the idea of selling our property, not now or in the near future, however the depreciating value of my land as an asset significantly effects our personal finances.

We have instilled our lives into York, we no longer consider ourselves city slickers, we buy local and support local businesses. We attend local events and volunteer where we can. This farm wasn’t much when we bought it, but we have worked hard to make improvements, and it is disheartening when all the improvements are negated by a constantly increasing stream of air traffic above our roof.

White Gum Air Park went above and beyond to have high visibility marker balls installed on western powers power lines on our property, and in doing so have shown they have no respect for the landscape and preserving this pristine location.

Water means everything in these parts, and should our water become contaminated by an influx of Avgas usage I will be forced to cart in water at my expense that again would add more financial strain to an already lucrative industry. Should my water remain fresh and untainted, there is also the added pressures of additional water demands from White Gum Air Park Hangars depleting our precious ground supply. We already have replenishment issues with a neighbouring man-made lake.

I think this should be another item for consideration when the application goes before the Council.

6 Fuel / Fire Hazards

I would like to make comment that the “fuel station” depicted in the application does not have any bunding or firefighting equipment nearby. Surely with this amount of fuel storage there should be some means of protecting the environment against accidental spill or discharge. And with crops in close proximity should there not be sufficient firefighting equipment to deal with the amount of fuel being stored?

I am not a fire fighter but I struggle to see the use of the applicants domestic firefighting trailer should – what looks like- 4000 liters of petrol be ignited?

The application states that there will be fuel stored in the hangars. I don't see any reflection of this in the BAL statement. It also shows that a plane or fuel should not be located within 15meters of a naked flame or ignition source. With the sheds only 14m x 11m is this achievable?

I'm also sure there would be some regulations around the storage of a plane large or small in the same building someone sleeps in? This is not to mention the fuel that will also be stored there.

Under the Bush Fires Regulations 1954 Section 38A, and/or Section 24C, a harvest and movement ban may be issued by the Shire and I would like confirmation that aviation activities are in no way exempt of this ban. For clarification a summary of the harvest and movement ban is extracted below

Activities **NOT PERMITTED** during a Harvest and Vehicle Movement Ban

- Harvesting operations are not permitted,
- Any “hot works” (e.g. welding, grinding, cutting, heating, lawn mowers, hedge trimmers, combustible engines etc.) in the “open air” are not permitted.
- Other – **Use or operation of any engine, vehicle**, plant, equipment or machinery in the area likely to cause a bush fire or contribute to the spread of a bush fire.

The applicants have revealed that some aircraft will be using Avgas 100, a product containing Tetraethyl lead (Lead alkyls), for the convenience of Council, I have attached the complete MSDS and not just a summary that excludes the information relating to lead and “**Air contaminants may be formed during use of the product.**” Please take note of the highlighted sections for clarity around the hazards associated with Avgas 100.

These airborne contaminants produced by low flying aircraft have the potential to settle on the surrounding areas lakes, dams and other open water sources, causing a toxic film naked to the human eye. With a 500% increase in current air traffic anticipated, this would likely expedite health issues and environmental pollution in the direct area.

SAFETY DATA SHEET

Avgas 100



Section 1. Identification

GHS product identifier	Avgas 100
Product code	SAV2104.
SDS no.	SAV2104
Relevant identified uses of the substance or mixture and uses advised against	
Use of the substance/ mixture	Use only as a motor fuel for aviation. Should NOT be used as a solvent nor cleaning agent. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Manufacturer	
Supplier	BP Australia Pty Ltd Level 17, 717 Bourke Street Docklands, Victoria 3008 ABN 53 004 085 616 www.bp.com.au
EMERGENCY TELEPHONE NUMBER	Tel: +61 (03) 9268 4111 Fax: +61 (03) 9268 3321 1800 638 556 (24 hour)
OTHER PRODUCT INFORMATION	Technical Helpline Number: 1300 139 700

Section 2. Hazard(s) identification

Classification of the substance or mixture	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 3 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 3 SKIN IRRITATION - Category 2 CARCINOGENICITY - Category 1B TOXIC TO REPRODUCTION (Unborn child) - Category 1A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1
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GHS label elements

Hazard pictograms



Signal word

Hazard statements

DANGER

H225 - Highly flammable liquid and vapour.

H301 + H311 + H331 - Toxic if swallowed, in contact with skin or if inhaled.

H315 - Causes skin irritation.

H350 - May cause cancer.

H360 - May damage the unborn child.

H304 - May be fatal if swallowed and enters airways.

H336 - May cause drowsiness or dizziness.

H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

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Section 2. Hazard(s) identification

General	P103 - Read label before use. P102 - Keep out of reach of children. P101 - If medical advice is needed, have product container or label at hand.
Prevention	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P281 - Use personal protective equipment as required. P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P233 - Keep container tightly closed. P271 - Use only outdoors or in a well-ventilated area. P260 - Do not breathe vapour. P270 - Do not eat, drink or smoke when using this product. P264 - Wash hands thoroughly after handling.
Response	P314 - Get medical attention if you feel unwell. P308 + P313 - IF exposed or concerned: Get medical attention. P304 + P340 + P311 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician. P301 + P310 + P330 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P302 + P352 + P312 + P362-2 - IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off contaminated clothing. P332 + P313 - If skin irritation occurs: Get medical attention.
Storage	P405 - Store locked up. P403 - Store in a well-ventilated place. P235 - Keep cool.
Disposal	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	Not applicable.

Other hazards which do not result in classification

Air contaminants may be formed during use of the product.

Section 3. Composition and ingredient information

Substance/mixture	Mixture		
A complex mixture of volatile hydrocarbons containing paraffins, naphthenes, olefins and aromatics with carbon numbers predominantly between C4 and C12. May also contain small quantities of proprietary performance additives. Contains lead. May be dyed.			
Ingredient name	% (w/w)	CAS number	
Gasoline	≥90	86290-81-5	
1,2-dibromoethane	≥0.3 - <1	106-93-4	
Tetraethyl lead (Lead alkyls)	0.1 - <0.2	78-00-2	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

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Section 4. First-aid measures

Description of necessary first aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention.
	If exposure to vapour, mists or fumes causes drowsiness, headache, blurred vision or irritation of the eyes, nose or throat, remove immediately to fresh air. Keep patient warm and at rest. If any symptoms persist obtain medical advice.
Skin contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Clean shoes thoroughly before reuse. Drench contaminated clothing with water before removing. This is necessary to avoid the risk of sparks from static electricity that could ignite contaminated clothing. Contaminated clothing is a fire hazard. Contaminated leather, particularly footwear, must be discarded. Get medical attention.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Aspiration hazard if swallowed. Can enter lungs and cause damage. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects. Product can be aspirated on swallowing or following regurgitation of stomach contents, and can cause severe and potentially fatal chemical pneumonitis, which will require urgent treatment. Because of the risk of aspiration, induction of vomiting and gastric lavage should be avoided. Gastric lavage should be undertaken only after endotracheal intubation. Monitor for cardiac dysrhythmias.
Specific treatments	No specific treatment.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	In case of fire, use water fog, foam, dry chemical or carbon dioxide extinguisher or spray.
Unsuitable extinguishing media	Do not use water jet.
Specific hazards arising from the chemical	Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. Vapours can form explosive mixtures with air. Vapours are heavier than air and can spread along the ground or float on water surfaces to remote ignition sources. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Liquid will float and may reignite on surface of water.

Section 5. Fire-fighting measures

Hazardous thermal decomposition products	Combustion products may include the following: carbon dioxide carbon monoxide
Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
Hazchem code	3YE

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Immediately contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling. Eliminate all ignition sources.
For emergency responders	Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".
Environmental precautions	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities. Collect recovered product and other contaminated materials in suitable tanks or containers for recycle, recovery or safe disposal.

Methods and material for containment and cleaning up

Small spill	Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres.
Large spill	Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Dike spill area and do not allow product to reach sewage system and surface or ground water. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilt product. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Take precautionary measures against electrostatic discharges. Avoid contact of spilt material and runoff with soil and surface waterways. Empty containers retain product residue and can be hazardous. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Do not breathe vapour or mist. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid exposure during pregnancy. Do not swallow. Aspiration hazard if swallowed. Can enter lungs and cause damage. Never siphon by mouth.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Light hydrocarbon vapours can build up in the headspace of tanks. These can cause flammability/explosion hazards even at temperatures below the normal flash point (note: flash point must not be regarded as a reliable indicator of the potential flammability of vapour in tank headspaces). Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electrical discharge and all ignition sources during filling, ullaging and sampling from storage tanks. Do not enter storage tanks. If entry to vessels is necessary, follow permit to work procedures. When the product is pumped (e.g. during filling, discharge or ullaging) and when sampling, there is a risk of static discharge. Ensure equipment used is properly earthed or bonded to the tank structure. Electrical equipment should not be used unless it is intrinsically safe (i.e. will not produce sparks). Explosive air/vapour mixtures may form at ambient temperature. If product comes into contact with hot surfaces, or leaks occur from pressurised fuel pipes, the vapour or mists generated will create a flammability or explosion hazard. Product contaminated rags, paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use. Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

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Section 8. Exposure controls and personal protection

Ingredient name	Exposure limits
Gasoline	ACGIH TLV (United States). TWA: 300 ppm 8 hours. Issued/Revised: 5/1996 TWA: 890 mg/m ³ 8 hours. Issued/Revised: 5/1996 STEL: 500 ppm 15 minutes. Issued/Revised: 5/1996 STEL: 1480 mg/m ³ 15 minutes. Issued/Revised: 5/1996 EH40/2005 WELs (United Kingdom (UK)). Absorbed through skin. TWA: 3.9 mg/m ³ 8 hours. Issued/Revised: 1/1997 TWA: 0.5 ppm 8 hours. Issued/Revised: 1/1997
1,2-dibromoethane	[Air contaminant] Safe Work Australia (Australia). Absorbed through skin. TWA: 0.1 mg/m ³ , (as Pb) 8 hours. Issued/Revised: 5/1995
Tetraethyl lead (Lead alkyls)	

Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Chemical splash goggles.

Skin protection

Wear chemical resistant gloves.

Hand protection

Do not re-use gloves. Protective gloves must give suitable protection against mechanical risks (i.e. abrasion, blade cut and puncture). Protective gloves will deteriorate over time due to physical and chemical damage. Inspect and replace gloves on a regular basis. The frequency of replacement will depend upon the circumstances of use.

Section 8. Exposure controls and personal protection

Skin protection	<p>Use of protective clothing is good industrial practice. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.</p> <p>Wear suitable protective clothing.</p> <p>Footwear highly resistant to chemicals.</p> <p>When there is a risk of ignition from static electricity, wear anti-static protective clothing. For greatest effectiveness against static electricity, overalls, boots and gloves should all be anti-static.</p> <p>When there is a risk of ignition wear inherently fire resistant protective clothes and gloves.</p> <p>Work clothing / overalls should be laundered on a regular basis. Laundering of contaminated work clothing should only be done by professional cleaners who have been told about the hazards of the contamination. Always keep contaminated work clothing away from uncontaminated work clothing and uncontaminated personal clothes.</p> <p>When the risk of skin exposure is high (from experience this could apply to the following tasks: cleaning work, maintenance and service, filling and transfer, taking samples and cleaning up spillages) then a chemical protective suit and boots will be required.</p> <p>Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.</p>
Other skin protection	<p>Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.</p>
Respiratory protection	<p>Use with adequate ventilation.</p> <p>In case of insufficient ventilation, wear suitable respiratory equipment.</p> <p>If there is a requirement for the use of a respiratory protective device, but the use of breathing apparatus (independent of ambient atmosphere) is not required, then a suitable filtering device must be worn.</p> <p>The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product.</p> <p>The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.</p>
Refer to standards:	<p>Respiratory protection:AS/NZS 1715 and AS/NZS 1716</p> <p>Gloves:AS/NZS 2161.1</p> <p>Eye protection:AS/NZS 1336 and AS/NZS 1337</p>

Section 9. Physical and chemical properties

Appearance

Physical state	Liquid.
Colour	Green.
Odour	Petrol
Odour threshold	Not available.
pH	Not available.
Melting point	Not available.
Boiling point	40 to 170°C (104 to 338°F)
Flash point	Closed cup: <40°C (<40°F) [Pensky-Martens.]
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable. Based on - Physical state

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Section 9. Physical and chemical properties

Lower and upper explosive (flammable) limits	Not available.
Vapour pressure	38 to 49 kPa (285.02 to 367.53 mm Hg) [37.8°C (100°F)]
Vapour density	3 to 4 [Air = 1]
Relative density	710 kg/m³ (0.71 g/cm³) at 15°C
Solubility	Very slightly soluble in water
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Kinematic: <7 mm²/s (<7 cSt) at 40°C

Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Avoid excessive heat.
Incompatible materials	Reactive or incompatible with the following materials: oxidising materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Gasoline	Category 3	Not applicable.	Narcotic effects
1,2-dibromoethane	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Tetraethyl lead (Lead alkyls)	Category 1	Not determined	blood system, central nervous system (CNS), kidneys and reproductive organs
1,2-dibromoethane	Category 2	Not determined	kidneys, liver and lungs

Aspiration hazard

Name	Result
Gasoline	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Eye contact No known significant effects or critical hazards.

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Section 11. Toxicological information

Inhalation	Toxic if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact	Toxic in contact with skin. Causes skin irritation.
Ingestion	Toxic if swallowed. Irritating to mouth, throat and stomach. Aspiration hazard if swallowed -- harmful or fatal if liquid is aspirated into lungs.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	Adverse symptoms may include the following: irritation redness reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	Adverse symptoms may include the following: nausea or vomiting reduced foetal weight increase in foetal deaths skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Inhalation	Vapour, mist or fume may irritate the nose, mouth and respiratory tract.
General	May cause damage to organs through prolonged or repeated exposure. Solvent "sniffing" (abuse) or intentional overexposure to vapours can produce serious central nervous system effects, including unconsciousness, and possibly death.
Carcinogenicity	May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	May damage the unborn child.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.

Other information	Lead is a cumulative poison. It can cause anaemia, central nervous system effects, gastro-intestinal symptoms and kidney damage.
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Section 12. Ecological information

Persistence and degradability

Expected to be biodegradable.

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

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Section 12. Ecological information

Mobility in soil

Soil/water partition coefficient (K _{oc})	Not available.
Mobility	Spillages may penetrate the soil causing ground water contamination.

Other ecological information	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.
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Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Special Precautions for Landfill or Incineration	No additional special precautions identified.
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Section 14. Transport information

	ADG	IMDG	IATA
UN number	UN1203	UN1203	UN1203
UN proper shipping name	GASOLINE or MOTOR SPIRIT	GASOLINE or MOTOR SPIRIT	GASOLINE or MOTOR SPIRIT
Transport hazard class(es)	3 	3  	3 
Packing group	II	II	II
Environmental hazards	No.	Yes.	No.
Additional information	<u>Hazchem code</u> 3YE <u>Initial emergency response guide</u> 14	The marine pollutant mark is not required when transported in sizes of \leq 5 L or \leq 5 kg. <u>Emergency schedules (EmS)</u> F-E, S-E	The environmentally hazardous substance mark may appear if required by other transportation regulations.

Special precautions for user	Not available.
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Section 14. Transport information

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Proper shipping name

MARPOL Annex 1 rules apply for bulk shipments by sea.
Category: gasoline and spirits

Section 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

7, 6

Consumer products - This material is a scheduled poison and must be stored, maintained and used in accordance with the relevant regulations.

Industrial Products - Labelling requirements for SUSMP do not apply to a poison that is packed and sold solely for industrial, laboratory or manufacturing use. However, this product is labelled in accordance with NOSH National Code of Practice for labelling of workplace substances.

Model Work Health and Safety Regulations - Scheduled Substances

<u>Ingredient name</u>	<u>Schedule</u>
Tetraethyl lead (Lead alkyls)	Restricted hazardous chemical [For abrasive blasting at a concentration of greater than 0.1% as lead or which would expose the operator to levels in excess of those set in the regulations covering lead]
1,2-dibromoethane	Restricted carcinogen [When used as a fumigant; Restricted use - Genuine research or analysis]

International lists

National inventory

REACH Status	The company, as identified in Section 1, sells this product in the EU in compliance with the current requirements of REACH.
Australia inventory (AICS)	Contact supplier for regulatory information.
Canada inventory	At least one component is not listed.
China inventory (IECSC)	At least one component is not listed.
Japan inventory (ENCS)	At least one component is not listed.
Korea inventory (KECI)	At least one component is not listed.
Philippines inventory (PICCS)	At least one component is not listed.
Taiwan inventory (CSNN)	Not determined.
United States inventory (TSCA 8b)	At least one component is not listed.

Section 16. Any other relevant information

History

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Date of previous issue	No previous validation
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Section 16. Any other relevant information

Key to abbreviations

ADG = Australian Dangerous Goods
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
NOHSC = National Occupational Health and Safety Commission
STEL = Short term exposure limit
SUSMP = Standard Uniform Schedule of Medicine and Poisons
UN = United Nations
TWA = Time weighted average
VOC = Volatile Organic Compound
SADT = Self-Accelerating Decomposition Temperature
Varies = may contain one or more of the following 101316-69-2, 101316-70-5, 101316-71-6, 101316-72-7, 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64741-97-5, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-64-9, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1, 74869-22-0, 90669-74-2

Procedure used to derive the classification

Classification	Justification
Flam. Liq. 2, H225	On basis of test data
Acute Tox. 3, H301	Expert judgment
Acute Tox. 3, H311	Expert judgment
Acute Tox. 3, H331	On basis of test data
Skin Irrit. 2, H315	Calculation method
Carc. 1B, H350	Calculation method
Repr. 1A, H360 (Unborn child)	Expert judgment
STOT SE 3, H336	Calculation method
STOT RE 2, H373	Expert judgment
Asp. Tox. 1, H304	Calculation method

 Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

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7 Compliance with Shire – Monitoring

There is a couple of questions I have about the monitoring of operations for Lot 2308. To date the shire has set conditions for the property and the owners and/or the Chief flight instructor for White Gum farm have disregarded these conditions.

As approved, I am led to believe that the existing “club house” on Lot 2308 is approved as an outbuilding and should only be occupied for 3 nights of a 30 day period. From the day we moved into [REDACTED] the “club house” has had people occupying it day and night for a minimum of 3 days a week. If this same stipulation is required for the proposed hangars, and the existing one for that matter, how is the shire going to monitor compliance with the level of occupancy?

If this application is approved I can see the occupants staying in the hangars for extended periods of time and in turn causing more vehicle traffic on the easement, and more air traffic with their aircraft. This will also put pressure on the power feed that we currently share and any individual water/septic systems.

Also a question for how the shire will monitor the vehicles using the easement, if the planned signage goes ahead, what will prohibit students of the second flight school in the direct area from entering from Taylor road ?

If approved, what is to stop the applicants then using the runway non-stop all day, is this not a situation that would be better off handled proactively by not approving the application, than reactively after the fact, with the shire having to allow resources for managing compliance and non-conformances?

8 Visual Impact

For the benefit of the people that may have only seen the plans of Hangar 01 and are unable to get perspective of how close these hangars are to our home, please see the below image.



This is the view coming up our driveway, so the first thing our guests and ourselves are greeted with is a 40foot multi-coloured sea-container with a 20foot advertisement. One could conclude that this is not conducive to current surroundings.

This application will be 5 times the infrastructure that you see here and visible from all areas of our property. The orange bunting you see here is the “vegetative screening” that has been planted as part of the previous application that was approved. This is the applicant’s second attempt at growing trees in summer with no water.

A comment on the vegetative screening that has been documented on sheet 2 of drawing D2015-0300-H2H6 as being planted. With no maintenance this vegetative screen has died and been replanted but is still not receiving any maintenance or providing a screen.

9 Agricultural Zoning

Lot 2308 and its surrounding farms are zoned as agricultural use. The owners knew its zoning when they purchased the property, along with everyone else that has bought in this area. There is not only a current flight school operating next door to them, but a primary aerodrome not 5 minutes flight from here. Does York need another flight school?

The application is quite clear that the occupants intend on future development with 50 additional hangars drawn on their plans, this is a commercial venture and is outside the guidelines for the area. I am aware not all the surrounding farmers reside on their farm, but we do, albeit 100 acres, we crop it, we raise livestock and we appreciate and respect the landscape. There are other areas in York and surrounds that are more suited for the influx in traffic, the isolation from rate paying residents and have opportunity for the expansion that the Cotterell's are seeking from this application.

If Lot 2308 is rezoned to allow for the expansion into a commercial aerodrome it will set a precedent for zoning and planning across the shire. We need to retain what York and surrounds are known and loved for. I accept that some people enjoy flying light aircraft, and that is why the Council approved the application for White Gum Farm all those years ago.

The applicants have embellished the amount of tourism that their venture will bring to the shire of York. If the primary use of White Gum Air Park is for Fly-in and Fly-out guests, what means do the guests have to drive to town and inject revenue into local businesses?

The only tourist activities available to the "guests" of White Gum Air Park will be the neighbouring White Gum Farm facilities.

10 Estimated Traffic

The air traffic and vehicle traffic has been severely under estimated by both the Cotterell's and the Acoustic Assessor. As a first hand witness of the take-offs and landings, I think the figures are 30% that of reality.

Clearly both sides of the forecasted traffic are bias, but the actual traffic should be available by the means of flight logs from Chief Instructor Gordon Marshall. Or maybe they don't have to log flights because they are exempt?

With the unknown status of the future occupants of Hangar 02-06 how can any assumptions be made on

- What aircraft they have
- What the dB output of unknown aircraft is
- How many times unknown occupant wants to fly a circuit

Another figure that has been manipulated to support this application.

All "calculations" have been made based on aircraft only being used for 3 months of the year and a rough estimation of their take-offs in this period. Even if the remaining 9 months were 50% less active – based on bias figures – this would equate to a further 372 take-offs for the year. I am also wondering why, apart from providing misleading information that only take-offs are counted? So, unless Landings have a mute function, this would then increase the numbers to 744, just for the remaining 9 months that apparently were not important.

Adding this rough figure to the already underestimated 252 take-offs during the December to February period (504 if we are counting landing as well) this brings our total to 1,248 take-offs and landings per annum. Please be reminded that this is for an airpark that is currently unapproved for commercial use and the Hangar 01 has no occupant so no additional aircrafts have been allowed for.

As these figures are part of White Gum Air Parks application, and that White Gum Farm is operating on a previous approval this figure does not include all the commercial flights undertaken by the flight school at White Gum Farm.

Keeping White Gum Farm aside, and adding the fictitious estimation of 10 take-offs Per Month – Remembering that's 20 take-offs and landings. Per additional Hangar the applicant has hinted at a mere 120 flights per month over the 3month peak period. Again let's assume the other 9 months operate at 50% that is another 60 take-offs and landings per month. In Total 900 additional flights with the construction of 6 Hangars.

Now we have a functioning flight school at White Gum Farm, neighbouring a "small town fly-in accommodation park" catering for 2,148 take-offs and landings per annum, with a shared flight instructor, owners that are only allowed to stay on the property 36 nights of the year, no instrumentations, and exemptions from any aviation, environmental and federal regulations.

Doesn't sound like a low-impact development when realistic figures are used.

11 Existing Infrastructure

I am sure the research has been done, but before the Cotterells purchased lot 2308, the flight school operated unimpeded for many years with the runway infrastructure already in place. This consists of a North South Runway (runway 14/32) and alternative runways 10-28 and 17-35. Even with this infrastructure and before this application has been put before council, runway 09-27 is being advertised as the preferred runway for events being held at White Gum Farm. Events which have not been mentioned or allowed for in "expected worst case traffic" which from experience can have up to 50 pilots visiting and this is backed up by the numerous social media posts.

The extension of the North South Runway was completed 12 months ago with no Shire Approval and no consideration to the effect of having this runway now end at the property line between Lot 2038 and [REDACTED]

The current East West runway has been left unmaintained in place of runway 27 but if it was functional and fit for purpose for all of these years, what is the reason for relocating the runway apart from causing angst with neighbouring properties.

Aerial View of Existing un-maintained Runway



12 Closing

MAJOR LOSS OF AMENITY – it will destroy peace and tranquillity forever – we will lose lifestyle quality and the existing character of the picturesque York landscape.

NOISE POLLUTION – the frequency of events, level of sound and annoying noise characteristics of aircraft noise will affect the mental and physical health of people in the surrounding York community and harass livestock.

AIR POLLUTION – the fuel and exhaust fumes will impact on tank water and dam quality for residents and nearby waterways impacting on residents' and livestock health.

DEVALUATION OF PROPERTIES – it will decimate the financial futures of residents that have spent years building and developing their properties and homes.

NEGATIVE ECONOMIC IMPACT – it will ruin the clean green image of our crop industry and other local produce. It will significantly damage our tourism industry which is based on the serenity of the district. It will deter the desire to build a life in this beautiful part of the world, which is where future economic growth lies – impacting investment and sustainable development for the region.

FIRE RISK – Will be greatly increased risk with stored fuel, required airstrip maintenance and aircraft collisions and accidents.

Such development is totally unsuitable for a rural shire and goes against the key objectives of York Shire Planning Strategy and Framework.

It is hoped that our experiences are helpful to you assessing, non-essential airport enterprises; self-regulation; corporate greed, misinformation, unconscionable conduct; and most importantly, help legislating the protection of innocent people's health over profit – and that should be a public duty, independent of any civil persuasion.



