



Streaky Bay Aerodrome Master Plan

Adopted Version June 2016

2016 - 2036

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1 INTRODUCTION

1.1 Overview of the Airport

Streaky Bay Aerodrome is owned and operated by the District Council of Streaky Bay. It aerodrome is located is approximately 10km from the Streaky Bay township adjacent to the Flinders Highway.

The Aerodrome in its current location was constructed in the 1960's and provides a sealed landing facility for the Royal Flying Doctor Service, local aviation enthusiasts and charter flights.

1.2 Purpose and Objectives of the Master Plan

The Aerodrome Master Plan is developed to set out a long term framework for the development and maintenance of existing and future facilities. The Master Plan is proposed to cover a 20 year planning horizon between 2015 and 2035.

The key objectives of this Master Plan aim to:

- Maintain the ability for aircraft to operate safely and unrestricted.
- Promote the role of the Aerodrome and its significance as a community asset.
- Providing for the Aerodrome to increase revenue.
- Ensuring compliance with relevant regulations.

1.3 Methodology and Consultation

The preparation of this Master Plan has included:

- Direct consultation with stakeholders including Council, Regional Development Australia, the Royal Flying Doctor Service and aeroplane operators.
- Public consultation in accordance with Councils Public Consultation Policy.

2 MASTER PLAN CONTEXT

2.1 Historical Background

- The first aeroplane to land in Streaky Bay arrived in charge of Pilot Jacques and MA Bond in 1928.
- The present day Streaky Bay Aerodrome was constructed in the 1960's and sealed in the early 1980's at which time a regular passenger flight landed.
- The Aerodrome was resealed in 2011 and GPS navigation approaches were developed in 2013.

2.2 Regional Context

Streaky Bay is the hub of a bustling agricultural district, just off the National Highway One (Eyre Highway). The distance from Adelaide by road via Port Augusta is 720 kilometres.

Streaky Bay is the major service centre for the surrounding rural district. Grain crops such as wheat and barley are supported by beef, sheep, pigs and poultry farming. Fishing and aquaculture industries of significance are: fin fisheries (such as the King George whiting and shark fishing), southern rock lobster, abalone (wild and land based) and oyster fisheries
Census data suggested stagnant growth in the region.

Streaky Bay is the only registered aerodrome within the District. Ceduna, 112 km away, is the closest airport offering a Regular Public Transport (RPT) services.

2.3 Socio-Economic Context

The District Council of Streaky Bay had a population of 2102, *ABS 2011 Census*. The District includes the small agricultural towns of Poochera and Wirrulla, and coastal settlements of Haslam, Baird Bay, Sceale Bay, Perlubie, Eba Anchorage and Fishermans Paradise.

Of the employed people in the Streaky Bay District, 25.4% worked in Sheep, Beef Cattle and Grain Farming. Other major industries of employment include School Education 6.4%, Hospitals 5.2%, Supermarket and Grocery Stores 3.9% and Hotels, Taverns and Bars 3.4%.

2.4 Regulatory Context

The Civil Aviation Safety Authority (CASA) has responsibility under the Civil Aviation Act 1988 for the safety regulation of civil aviation in Australia. CASA conducts regular surveillance audits to ensure the aerodrome meets requirements identified in the Manual of Standards 139.

Development on or near the site is governed by Councils Development Plan composed under the Development Act 1993.

Other acts and regulations etc include:

- Landing fees are set under the Aerodrome Fees Act 1998
- Landside Acts cover Lease for hangars.
- Australian Standard AS 1940 covers the Storage and Handling of Flammable and Combustible Liquids.

2.5 Policy Context

The development of this Master Plan and the operation of the Streaky Bay Aerodrome are aligned to Council's Strategic Management Plan 2013-2022 as below

- Outcome 1.4: Effective strategic management planning and performance management.
- Objective 2: Maintain, develop and improve infrastructure to meet current and future needs.
- Outcome 2.1: A safe and reliable transport network.
 - 2.1.6 Develop and manage the Streaky Bay Aerodrome to appropriate standards.

The Streaky Bay Development Plan 2012 provides guidance in relation to the Aerodrome Limitations; Objective 25: Development height, location and design to have regard to the continued operational use of the Streaky Bay Aerodrome and safety of air traffic so that no undue hazard is created to users of the airport.

2.6 Key Stakeholders

Key stakeholders involved in the development of this Master Plan include:

- Council
- Emergency Services (SAPOL, CFS, SES)
- Royal Flying Doctor Service
- Lease Holders
- Neighbours
- Customers – Bank Plane, Charters

2.7 Previous and Current (Master) Plans

There have been no previous master planning studies completed for Streaky Bay.

3 CURRENT SITUATION

3.1 Ownership and Management

The Streaky Bay Aerodrome is owned and operated by the District Council of Streaky Bay. Councils Works Manager is responsible for the overall management of the Aerodrome.

3.2 Site Description

The Aerodrome is located 8.9km southeast of Streaky Bay. The land parcel, with access from the adjoining Flinders Highway, is located on approximately 82 Hectares at Section 75, Hundred of Forrest (CT Volume 4296, Folio 36).

It resides at an elevation of 21m above sea level. It has two runways: 13/31 has a sealed surface measuring 1,351 m × 18 m and 05/23 has a gravel surface measuring 780 m × 18 m. The Aerodrome has two illuminated wind indicators, one situated at the left approach to runway 13 and the other situated to the west of the intersection of the two runways. The land slopes gradually to the west.

3.3 Surrounding Land

The land surrounding the Aerodrome is zoned Primary Industry and is predominantly used for cropping and grazing. The aerodrome is located entirely within a Water Protection Zone

3.4 Existing Activities

The Aerodrome is serviced by a daily mail and bank plane and intermittently used by the Royal Flying Doctor Service, charter and private flyers.

3.5 Existing Facilities

The existing facilities at the Streaky Bay Aerodrome are summarised below,

Runway 13/31

- Dimensions – 1351 x 18m aligned 123 Deg Mag.
- Surface – 14/7mm 2 coat bituminous reseal applied in March 2011.

Runway 05/23

- Dimensions – 780 x 18m aligned 046 Deg Mag.
- Surface – compacted limestone gravel.

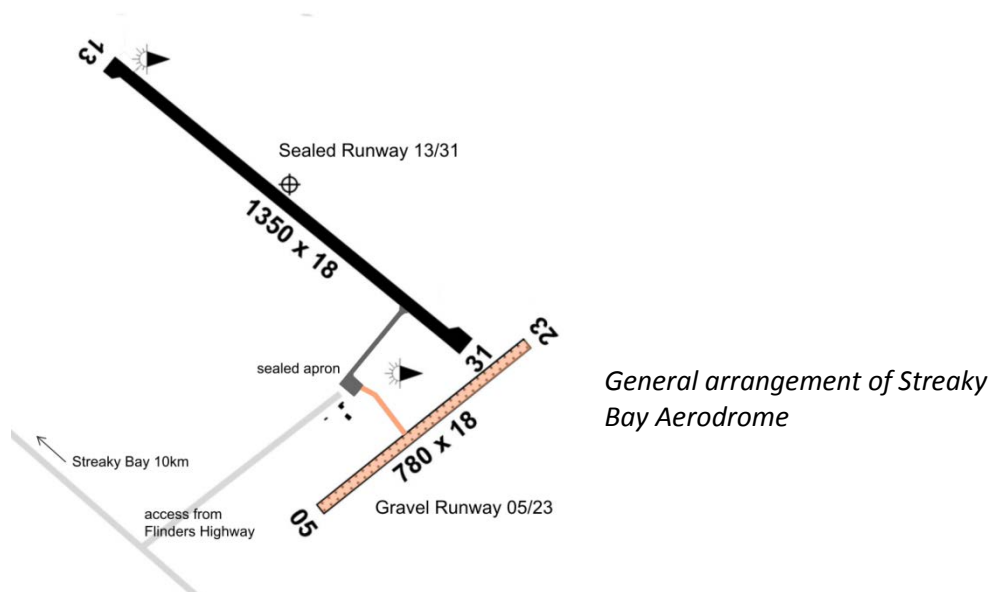
Sealed Taxiway

- Sealed 260m x 10.5m,
- Gravelled compacted limestone gravel 18m wide.

Apron

- overall 70m x 45m (approx) with 35m x 50m sealed.

A general layout arrangement of the aerodrome is shown overleaf



Aerodrome Lighting

Pilot Activated Lighting (PAL) low intensity runway lighting, taxiway lighting apron floodlighting
Illuminated Wind Indicators (2) –

Buildings

Two hangars, Council storage shed, toilet block, phone booth, passenger shed and lighting cubicle.

Fuel Storage in dedicated compound

- mobile AVGAS tanker housed in a locked compound
- drums storage of AVTUR for helicopter use
- fuel is privately owned and not fuel available for public purchase.

Fences

- aerodrome perimeter 1m stock-proof fence (not considered kangaroo proof)
- apron 1.2m post and mesh fence. with locked gate.

3.6 Ground Transport Access

Primary access to the site is via a sealed road from the Flinders Highway. There is a sealed car park for the parking of vehicles short and long term if required.

3.7 Utility Services

The site has good mobile phone coverage. Mains power for aerodrome lighting is supported by the availability of a generator in the event of failure. There is no mains water on site.

3.8 Environmental Values

There are significant tracts of vegetation surrounding the aerodrome. These serve as a shelter for animals such as kangaroos which can pose a risk. There are also a number of 'sinkholes' within the boundary of the aerodrome (outside the runway strips) which should be noted.

3.9 Heritage Values

There are no areas of known heritage significance on the Aerodrome.

4 STRATEGIC VISION AND OBJECTIVES

4.1 Strategic Vision

The vision for Streaky Bay Aerodrome is that remains it operational on a 24 hourly basis and is maintained at the existing high standard to provide tangible benefits for the community

4.2 Objectives

The objectives for the airport are:

- Ensure the Aerodrome infrastructure meets community needs, in particular with regard to emergency services
- Ensure appropriate agreements are in place for existing and future private ventures at the aerodrome
- Move from a heavily subsidised Aerodrome towards increased self-funding
- Attract regular charters, general aviation and investigate opportunities for a RPT service
- Ensure compliance with CASA standards and requirements
- Ensure that future infrastructure upgrades and land development occur in a planned and structured manner



5 CRITICAL AIRPORT PLANNING PARAMETERS

5.1 Forecast of Future Operations

The Aerodrome currently facilitates between 350 and 400 landings per year, which consists primarily of scheduled bank and mail plane (AERO COMMANDER 500-S) and the Royal Flying Doctor Service (PILATUS PC-12/47E). There are no passenger services.

It is not anticipated that future operations will vary significantly from current levels.

5.2 Aerodrome Reference Code System

The Aerodrome Reference Code is described by International Civil Aviation Organisation (ICAO) as a system that relates the characteristics of Airports to specifications that are suitable for the aeroplanes that are intended to operate from these Airports. The code number relates to the aeroplane reference field length, the code letter is based on the aeroplane wingspan and outer main gear wheel span. Note that determination of the aeroplane reference field length is solely for the selection of the code number and is not intended to influence the actual runway length provided.

Aerodrome Reference Code				
Code Element 1		Code Element 2		
Code number	Aircraft reference field length (ARFL)	Code letter	Wing span	Outer main gear wheel span
1	Less than 800m	A	Up to but not including 15m	Up to but not including 4.5m
2	800m up to but not including 1200m	B	15m up to but not including 24m	4.5m up to but not including 6m
3	1200m up to but not including 1800m	C	24m up to but not including 36m	6m up to but not including 9m
4	1800m and over	D	36m up to but not including 52m	9m up to but not including 14m
		E	52m up to but not including 65m	9m up to but not including 14m
		F	65m up to but not including 80m	14m up to but not including 16m

5.3 Selected Design Aircraft

The selected design aircraft for future use of the aerodrome will be a code 2B turbo prop with a maximum wingspan of 24m.

5.4 Aircraft Pavements

a) Runway Configuration

Wind data from Bureau of Meteorology (BoM) confirms the on average the predominant winds are north south in the morning shifting to winds ranging from westerly to southerly in the afternoon. The 2 runway layout with the secondary runway perpendicular to the main pavement allows smaller aircraft with lower cross wind tolerance to land into the westerly direction when winds dictate that landing on the main runway would be unfavourable. Larger aircraft have a larger cross wind tolerance and should be capable of landing on the main runway in the majority of cases. The low traffic volume does not support development of any additional runways.

b) Runway Length

The existing main runway at 1341m is unlikely to change within the period of the master plan unless there is a change of use such as mining operations requiring Fly in Fly out services. Any increase in length would require land purchase as it is not possible to extend within the existing perimeter.

The secondary runway is also unlikely to be extended although there is some space available within the site if needed.

c) Runway Width

Change in CASA standards has seen an increase in the sealed with requirement for some aircraft, meaning that the current width of 18m will not be suitable for Code 2B aircraft which now require a runway width of 23m. This master plan has included provision for widening of the sealed runway from 18m to 23m.

d) Pavement Strength

The existing sealed runway pavement is unrated and is therefore suitable for unlimited use by aircraft up to 5700kg. Being constructed from compacted limestone on a sandy sub-grade in a low rainfall environment, it is likely the pavement will be able to support; larger aircraft say up to 10 tonnes without significant degradation. Prior to introduction of new larger aircraft pavement geotechnical testing would be needed.

5.5 Navigation Systems

A non-precision instrument Global Navigation Satellite System (GNSS) GPS approach is published for Streaky Bay Runways 13 and 31.

The approach procedures to both runway ends are published in the Air Services Australia En Route Supplement Australia (ERSA) Departure and approach Plates (DAP). The Visual Segment Surface (VSS) for straight in non-precision approach is defined as a vertical grade of 3.28% from a 150m inner edge with 15% splay. Objects less than 15m above the runway RL can be ignored. The OLS includes additional data confirming the VSS is compliant with Air Services Australia requirement.

5.6 Aviation Support and Landside Facilities**a) Passenger Terminal**

The existing 'passenger terminal' consists of a shed with attached toilet. Whilst there is no intention to develop further, it is recommended that the shed be refurbished and proper facilities be provided for the storage of equipment.

b) Security

There are no RPT services into Streaky Bay so security measures are not mandated by the Department of Infrastructure and Transport Aviation Security Branch. The airport owner does have a duty of care to provide a safe environment for aircraft activity hence the aerodrome is fenced and gates are locked. A register of keys and access agreement for users of the Aerodrome needs to be established.

c) Hangars

There is a need to formalise existing arrangements in regard to the hangars which currently exist onsite. Determination of ownership and terms of the leases are imperative. Identification of sites for future hangar development is also required to ensure logical development of the area takes place.

d) Fuel Storage Compound

Formal agreements for the storage and management of fuel drums onsite should be established. This would include access agreements and disposal of used drums.

Access to, and use of, the storage shed for a fuel vehicle should also be reviewed.

e) Airside Parking

Additional tie down points should be identified and potentially the sealed part of the apron needs to be expanded seal to provide for additional parking of planes.

5.7 Airspace Protection Surfaces

The parameters for protection of airspace Obstacle Limitation Surface (OLS) is included in the Aerodrome Manual. The extent of Procedures for Air Navigation Services (PANS) Ops for straight in GPS approaches is covered in the OLS. An OLS plan has been developed as part this master plan to ensure protection of airspace is included in development planning and approval process.

5.8 Aircraft Noise Contours

a) Australian Noise Exposure Forecasts

At capital city and major centres, information on aircraft noise at airports has been provided using Australian Noise Exposure Forecasts (ANEF). Modelling of aircraft activity is used to produce ANEF noise contours which identify restriction of land uses in certain ANEF zones, according to the sensitivity of the nominated land use.

The Australian Standard AS 2021 *Acoustics-Aircraft Noise Intrusion-Building Siting and Construction* lists various land uses (e.g. houses through to heavy industrial areas) considered acceptable/unacceptable within the various ANEF contours.

The recommended ANEF zones for residential development are shown in the following table from AS 2021.

Building Site Acceptability Based On ANEF Zones

	ANEF zone of site		
Building type	Acceptable	Conditionally acceptable	Unacceptable
House, home unit, flat, caravan park	Less than 20 ANEF (Note 1)	20 to 25 ANEF (Note 2)	Greater than 25 ANEF

NOTES:

1. The actual location of the 20 ANEF contour is difficult to define accurately, mainly because of variation in aircraft flight paths.
2. Within the 20 ANEF to 25 ANEF, some people may find that the land is not compatible with residential or educational uses. Land use authorities may consider that the incorporation of noise control features in the construction of residences or schools is appropriate. Ref AS 2021-2000

b) Single Event Contours

Because the ANEF is a summation of noise over an average day, when applied at aerodromes with small numbers of movements the results are less than satisfactory, in that the ANEF contours barely go beyond the airport, whereas it is known aircraft noise will be heard over a far greater area and will, in some situations, be considered intrusive.

Even with higher rates than expected it is unlikely Streaky Bay would receive more than 4 flights per day by larger 18- 50 seat aircraft. This low level of activity would be insufficient to push the area covered by the ANEF contours to effectively describe the areas subject to potential noise intrusion. This would still be the case even if the number of predicted movements were increased well above the likely growth rate.

An alternative is to plot the aircraft noise as a single noise level event contour, superimposed on the aircraft flight paths. Typically the 70 dB(A) contour is the benchmark used in studies undertaken by Commonwealth Department of Transport and Infrastructure, as it is equivalent to a single event level of 60dB(A) specified in the Australian Standard 2021, as the accepted indoor design sound level for normal domestic dwellings. (An external single noise event will be attenuated by approximately 10 dB(A) by the fabric of a house with open windows) An internal noise level above 60 dB(A) is likely to interfere with conversation or listening to the television.

The following table from AS 2021 provides noise levels appropriate for a particular building site and number of aircraft operations.

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, 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
>30	<85	85-90	>90
>30	<95	95-100	>100
Commercial Building			
>30	<80	80-85	>85
15-30	<90	90-95	>95
<15	<100	100-105	>105

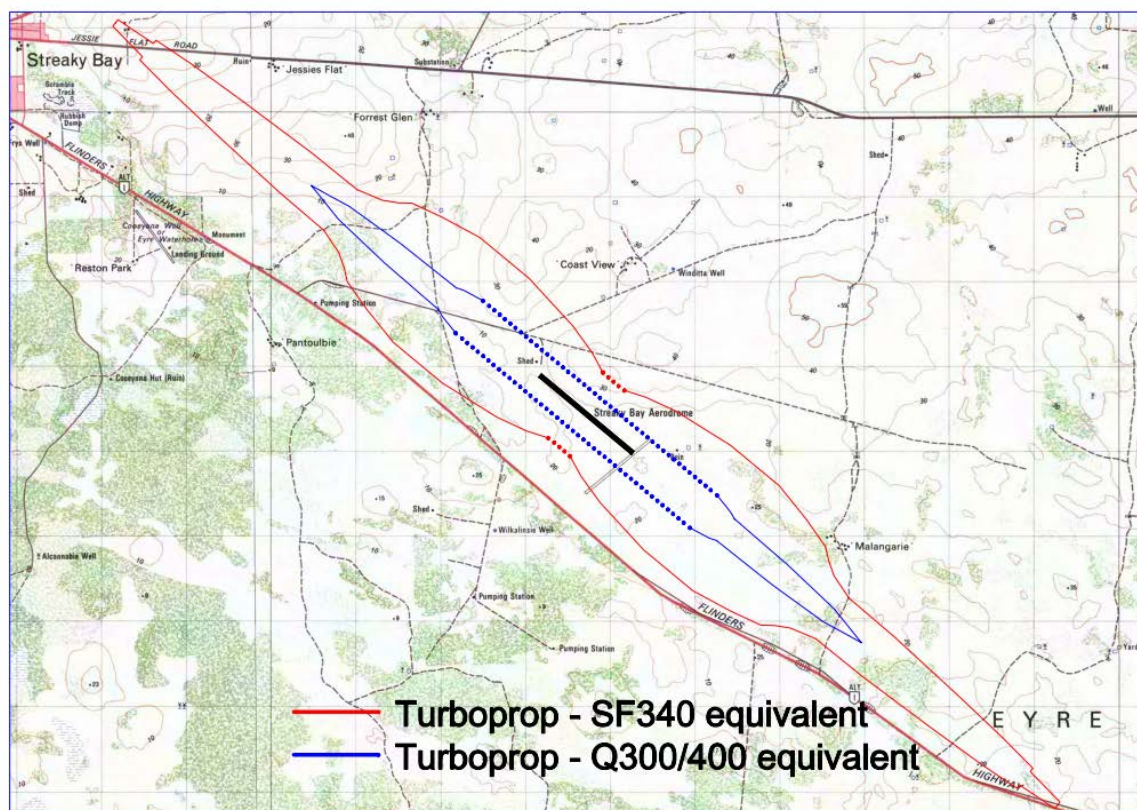
The values in the above table are based on a small aerodrome with a small number of civil, non-jet aircraft movements. They should not be used in any other circumstances.

NOTE: The forecast daily average number of aircraft flights affecting the site should be obtained from the aerodrome owner. However, each night-time flight between 1900 hours and 0700 hours is to count as four operations.

The following assumptions have been made in selection of aircraft for the noise study:

- The maximum size aircraft will be the Q300 or equivalent.

A single event 70 dB(A) noise for a Q400 and a Saab SF 340 aircraft is shown overleaf.



Single event 70 dB(A) noise contour for a Q400 and a Saab SF 340 aircraft

5.9 Environmental and Heritage Sites

The aerodrome is located within the Robinson Basin Groundwater Protection Zone. Strict controls over the use of this area are included in the Council Development Plan - refer section 6 of this Master Plan.

There are no known sites of heritage significance located on the aerodrome.

6 LAND USE PLAN

Refer to Refer to section 6 of the supporting information.

6.1 Land Use Precincts

The Aerodrome is located within the Robinson Basin Groundwater Protection Zone as defined in Councils Development Plan.

6.2 Land Use Precinct Guidelines

The objectives and principles of development control that follow apply to the Robinson Groundwater Basin Protection Zone are detailed below.

Objectives

Objective 1: Protection of land within the zone from development which could contribute to the pollution of surface or groundwater resources.

Objective 2: Accommodation of wind farms and ancillary development.

Wind farms and ancillary development such as substations, maintenance sheds, access roads and connecting power-lines (including to the National Electricity Grid) are envisaged within the zone and constitute a component of the zone's desired character. These facilities will need to be located in areas where they can take advantage of the natural resource upon which they rely and, as a consequence, components (particularly turbines) may need to be:

- (a) located in visually prominent locations such as ridgelines;
- (b) visible from scenic routes and valuable scenic and environmental areas;
- (c) located closer to roads than envisaged by generic setback policy.

Principles Of Development Control

1. This zone should be retained for non-polluting agricultural activities and the conservation of flora and fauna.
2. Activities which have strong organic or other wastes should not be established within this zone.
3. Wind farms and ancillary development should be located in areas which provide opportunity for harvesting of wind and efficient generation of electricity and may therefore be sited:
 - a. in visually prominent locations;
 - b. closer to roads than envisaged by generic setback policy.
4. No additional allotments should be created within this zone (exceptions cited).

Non-complying Development

5. The following kinds of development are non-complying in the Robinson Groundwater Basin Protection Zone:

Caravan Park	Irrigated Horticulture	Rubbish Dump
Feedlot	Junk Yard	Semi-detached Dwelling
Emu Farming	Landfill	Service Industry
Fuel Depot	Motel	Shop
General Industry	Light Industry	Special Industry
Group Dwelling	Multiple Dwelling	Stock Salesyard
Horse Keeping	Ostrich Farming	Stock Slaughter Works
Hotel	Restaurant	
Intensive Animal Keeping	Row Dwelling	

Building near Airfields

Objectives

1 Development that ensures the long-term operational, safety, commercial and military aviation requirements of airfields (airports, airstrips and helicopter landing sites) continue to be met.

Principles Of Development Control

1 The height and location of buildings and structures should not adversely affect the long-term operational, safety, commercial and military aviation requirements of airfields.

2 Development in the vicinity of airfields should not create a risk to public safety, in particular through any of the following:

- (a) lighting glare
- (b) smoke, dust and exhaust emissions
- (c) air turbulence
- (d) storage of flammable liquids
- (e) attraction of birds
- (f) reflective surfaces (e.g. roofs of buildings, large windows)
- (g) materials that affect aircraft navigational aids.

3 Outdoor lighting within 6 kilometres of an airport should be designed so that it does not pose a hazard to aircraft operations.

4 Development that is likely to increase the attraction of birds should not be located within 3 kilometres of an airport used by commercial aircraft. If located closer than 3 kilometres the facility should incorporate bird control measures to minimise the risk of bird strikes to aircraft.

5 Development within areas affected by aircraft noise should be consistent with Australian Standard AS 2021: - Acoustics - Aircraft Noise Intrusion - Building Siting and Construction.

7 FACILITY DEVELOPMENT PLAN

7.1 Movement Area Facilities

The **sealed runway** should be continually monitored for fatigue, stripping etc. The effective life of the seal is estimated at 15 years which would indicate a reseal necessary in 2026. The aircraft pavement line marking should be renewed every 5–7 years. Monitoring should continue with renewal to be expected in 2017.

The same renewal arrangement applies to the sealed taxiway and apron.

The **gravel runway** requires cyclical grading (light grade each year) and major regrade every 5 years including resheeting.

The same maintenance regime applies to the gravel taxiway and the unsealed portions of the apron.

The runways and taxiways are contained within graded strip areas. These require ongoing maintenance in the form of weed control, filling of scours etc. A complete regrade of all strip areas is required every 10 years.

The extent of the apron seal would benefit from extension plus installation of formal aircraft tie anchor points

Access to the 2 hangars is over natural terrain and requires formation so the facilities are connected to a formalised apron.

The airport lighting was installed over 20 years ago and will require eventual replacement including replacement of cables, light fittings, controls and transformers and intake substation. New regulations require all cabling to be installed into a pit and duct system. Similarly the illuminated wind direction indicators and the apron flood light towers are likely to require replacement within the master plan time frame

7.2 Aviation Support Facilities

Passenger terminal

The existing shed is not considered suitable for passenger waiting. A new facility incorporating passenger waiting room with seating small office etc of at least 40 square metres is considered a requirement within the next 20 years

Fuel facilities

The drum enclosure will require re-gravelling and eventual replacement of the security fence. Bunding to ensure any release of fuel does not reach soil or groundwater is also warranted.

Aircraft hangars

Development of new hangar would be privately funded. Council will need to identify site allocation to ensure long term planning layouts and the operation of the aerodrome are not compromised.

Navigation aids

It is not envisaged ground based navigational aids will be required within the time frame of this master plan.

Meteorological facilities

The BoM have rationalised Terminal Area Forecast sites into locations with high levels of traffic. It is therefore unlikely the installation of weather equipment will occur at Streaky Bay within the time frame of this master plan

7.3 Other Facilities

The access road from Eyre Highway has been identified in the 2014 Sealed Road Assessment Report as stripping with dead binder. A 7mm C170 seal is recommended in the short to medium term. The same level of treatment will be needed to the car parking area.

Aviation / Non-aviation / commercial development on the site may place demand for increased capacity in the available engineering services - water, power, sewer, telecom, and drainage etc.

8 GROUND TRANSPORT PLAN

The sealed road link to the Flinders highway is considered capable of meeting the road transport demands for the time frame of this Master Plan.

9 ENVIRONMENTAL MANAGEMENT PLAN

At the time of writing there are no additional planning policies and controls relating to protection of the environment covering the airport than those covered in the Streaky Bay Development Plan 2012.

10 HERITAGE MANAGEMENT PLAN

At this stage a HMP has not been prepared on the basis that there are no known sites of archaeological or heritage significance within the aerodrome boundary.

11 AIRPORT SAFEGUARDING PLAN

11.1 National Airports Safeguarding Framework (NASF)

The National Airports Safeguarding Framework is a national land use planning framework that aims to:

- improve community amenity by minimising aircraft noise-sensitive developments near airports; and,
- Improve safety outcomes by ensuring aviation safety requirements are recognised in land use planning decisions through guidelines being adopted by jurisdictions on various safety-related issues.

The National Airports Safeguarding Advisory Group (NASAG), comprising of Commonwealth, State and Territory Government planning and transport officials, the Australian Government Department of Defence, the Civil Aviation Safety Authority (CASA), Airservices Australia and the Australian Local Government Association (ALGA), has developed the National Airports Safeguarding Framework (the Framework).

The National Airports Safeguarding Framework was developed to provide guidance for Planners to consider potential impact of developments outside the airport on airport operations. Principles of the guideline will be considered in local planning processes when assessing a development application in the vicinity of Streaky Bay Aerodrome. The purpose of the framework is to enhance the current and future safety, viability and growth of aviation operations by supporting and enabling:

- the implementation of best practice in relation to land use assessment and decision making in the vicinity of airports;
- assurance of community safety and amenity near airports;
- better understanding and recognition of aviation safety requirements and aircraft noise
- impacts in land use and related planning decisions;
- the provision of greater certainty and clarity for developers and land owners;
- improvements to regulatory certainty and efficiency; and
- the publication and dissemination of information on best practice in land use and related planning that supports the safe and efficient operation of airports.

NASF PRINCIPLES

Principle 1. The safety, efficiency and operational integrity of airports should be protected by all governments, recognising their economic, defence and social significance.

Principle 2. Airports, governments and local communities should share responsibility to ensure that airport planning is integrated with local and regional planning.

Principle 3. Governments at all levels should align land use planning and building requirements in the vicinity of airports.

Principle 4. Land use planning processes should balance and protect both airport/aviation operations and community safety and amenity expectations.

Principle 5. Governments will protect operational airspace around airports in the interests of both aviation and community safety.

Principle 6. Strategic and statutory planning frameworks should address aircraft noise by applying a comprehensive suite of noise measures.

Principle 7. Airports should work with governments to provide comprehensive and understandable information to local communities on their operations concerning noise impacts and airspace requirements.

NASF GUIDELINES

Over the long term, inappropriate development around airports can result in unnecessary constraints on airport operations and negative impacts on community amenity due to the effects of aircraft noise. These impacts need to be managed in a balanced and transparent way.

Guideline A provides advice on the use of a complementary suite of noise metrics, to inform planners and provide communities with comprehensive and understandable information about aircraft noise.

Guideline B presents a layered risk approach to the siting and design of buildings near airport runways to assist land use planners and airport operators to reduce the risk of building - generated windshear and turbulence. It also provides options to modify existing buildings.

Guideline C provides advice to help protect against wildlife hazards originating off-airport through appropriate land use planning decisions and the way in which existing land use is managed in the vicinity of airports.

Guideline D provides advice on the location and safety management of wind turbines and other similar structures which can constitute a risk to low-flying aviation operations and can also affect the performance of Communications, Navigation equipment operated by Airservices Australia.

Guideline E provides advice on ensuring lighting in the vicinity of airports is not configured so as to cause distraction or confusion to pilots

Guideline F provides advice for planners and decision makers about working within and around protected airspace, including obstacle limitation surface (OLS) and Procedures for Air Navigation Services (PANS-OPS) intrusions, and how these can be better integrated into local planning processes.

11.2 Airspace Protection Surfaces

Obstacle Limitation Surface Plan and PANS OPS

An airport OLS is needed for the protection of the 2 runways. The OLS plan is attached to the end of this master plan. Streaky Bay has no ground based navigational aids. The GPS approaches require similar protection to the OLS.

11.3 Aircraft Noise Contours

Australian Noise Exposure Forecasts have not been prepared for Streaky Bay on the basis that the frequency of aircraft movements and the type of aircraft flying are not sufficient to generate a meaningful ANEF even using the most optimistic forecasts. Instead single event noise contours have been generated using modelling data for aircraft types typically using the aerodrome. Refer Section 5.9 of this Master Plan.

11.4 Planning Policies and Controls

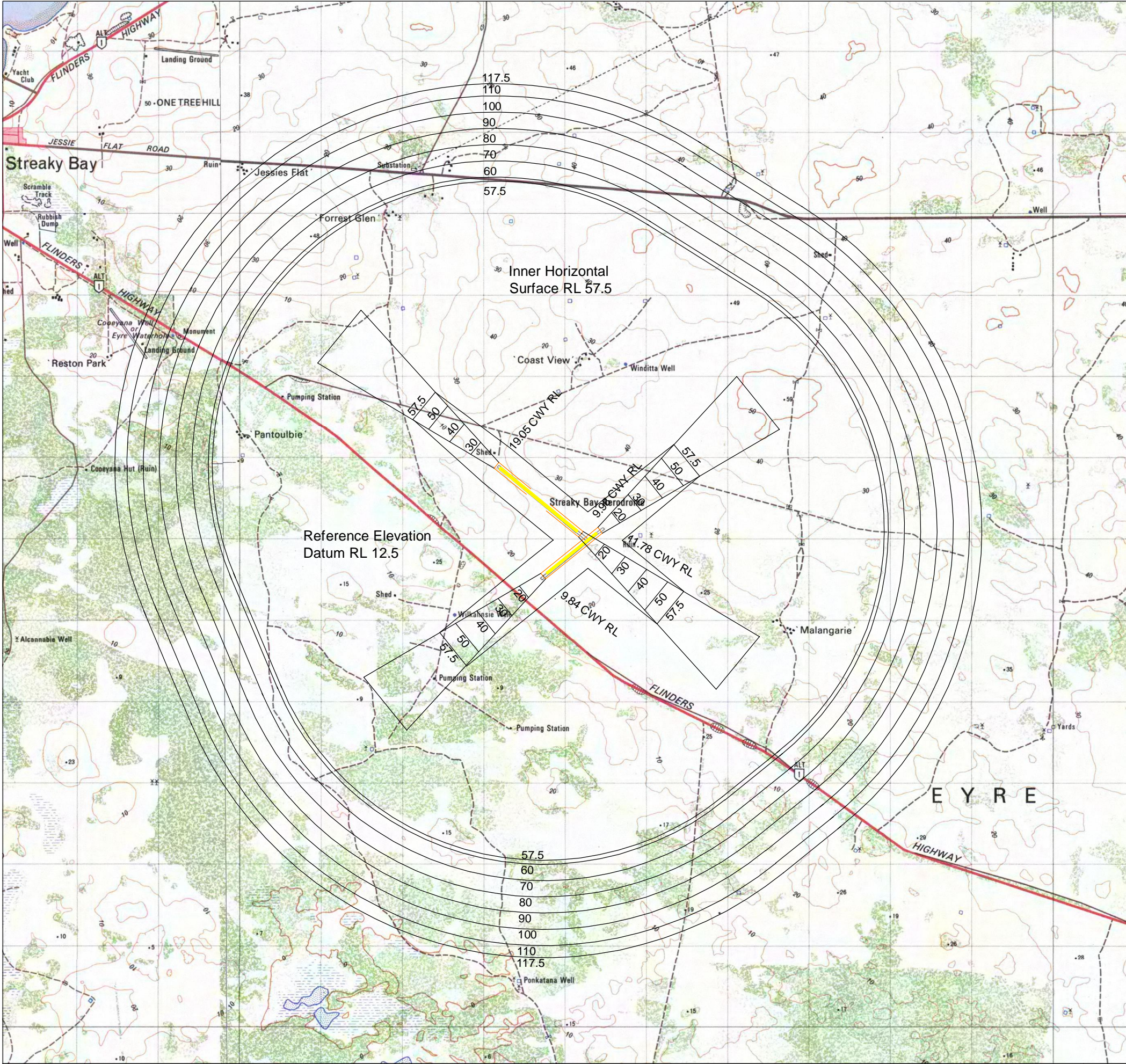
At the time of writing there are no additional planning policies and controls relating to safeguarding of the airport than those covered in the Streaky Bay Development Plan 2012. As part of this master plan process, OLS plans are to be prepared which can be incorporated into the Council development assessment and approval process.

12 IMPLEMENTATION PLAN

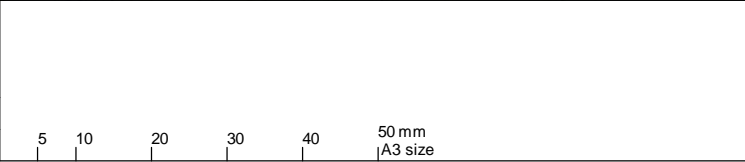
	ITEM	Suggested FY	Order of Cost Estimate	Notes
1	Formalise Hangar Lease Agreements	2016	\$ 1,500	Admin costs only
2	Upgrade fuel storage facility with roof cover, concrete bunded floor, fencing and access etc	2016	\$ 5,000	Minor repairs to existing shed
3	Formalise existing Fuel Storage arrangements	2016	\$ 1,500	Admin costs only
4	Repaint aircraft pavement line marking	2017	\$ 5,000	Contractor
5	Reseal access road and car park	2017	\$ 60,000	
6	Investigate Fuel Sale Options, install fuel facilities	2017	\$ 160,000	Plus ongoing fees & charges
7	Resheet runway 08/26, the gravel taxiway and the gravel apron (5 yearly)	2018	\$ 26,000	
8	Extend seal aircraft apron (100m x 60m). Install tie down points.	2018	\$ 40,000	
9	Extend gravel apron to connect with hangar site entrances	2018	\$ 25,000	
10	Replace airport lighting including new cabling in a pit and duct system, new light fittings (runway edge, runway end/ threshold, taxiway edge), replace 2 illuminated wind direction indicators, and apron flood lights, control system, transformers etc	2020	Unknown until quoted	
11	Additional Short Term Hangar Development	2021	\$ 85,000	Shed with concrete floor
12	Resheet runway 08/26, the gravel taxiway and the gravel apron (5 Yearly)	2023	\$ 30,000	
13	Seal runway 05/23 (780m x 18m)	2025	\$ 78,000	
14	Widen runway 13/31 from 18m to 23m (incl seal)	2025	\$240,000	
15	Reseal runway 13/31 (18m), sealed taxiway and sealed apron	2026	\$ 250,000	
16	New passenger terminal	2030	\$ 1,500,000	
	Regrade and add additional material to all runway strips, taxiway strips,	Every 10 years		
	Resheet runway 08/26, the gravel taxiway and the gravel apron	Every 5 years		
	Upgrade engineering services	TBC		
	Consider adjoining land purchase should land become available for purchase	Ongoing	TBC	

13 DRAWINGS

- FUTURE LAYOUT PLAN
- OBSTACLE LIMITATION SURFACE PLAN



A	17/05/16	First issue	PF
REV.	DATE	REVISION DESCRIPTION	APP'D





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Drawn :	CF
Designed :	CF
Approved :	PF

PROJECT:
**STREAKY BAY -SA
AERODROME**
FOR: District Council
Streaky Bay

TITLE: OLS PLAN		
DRAWING STATUS INFORMATION	DRAWING No. YKBY-16-01 Copy	REV. A