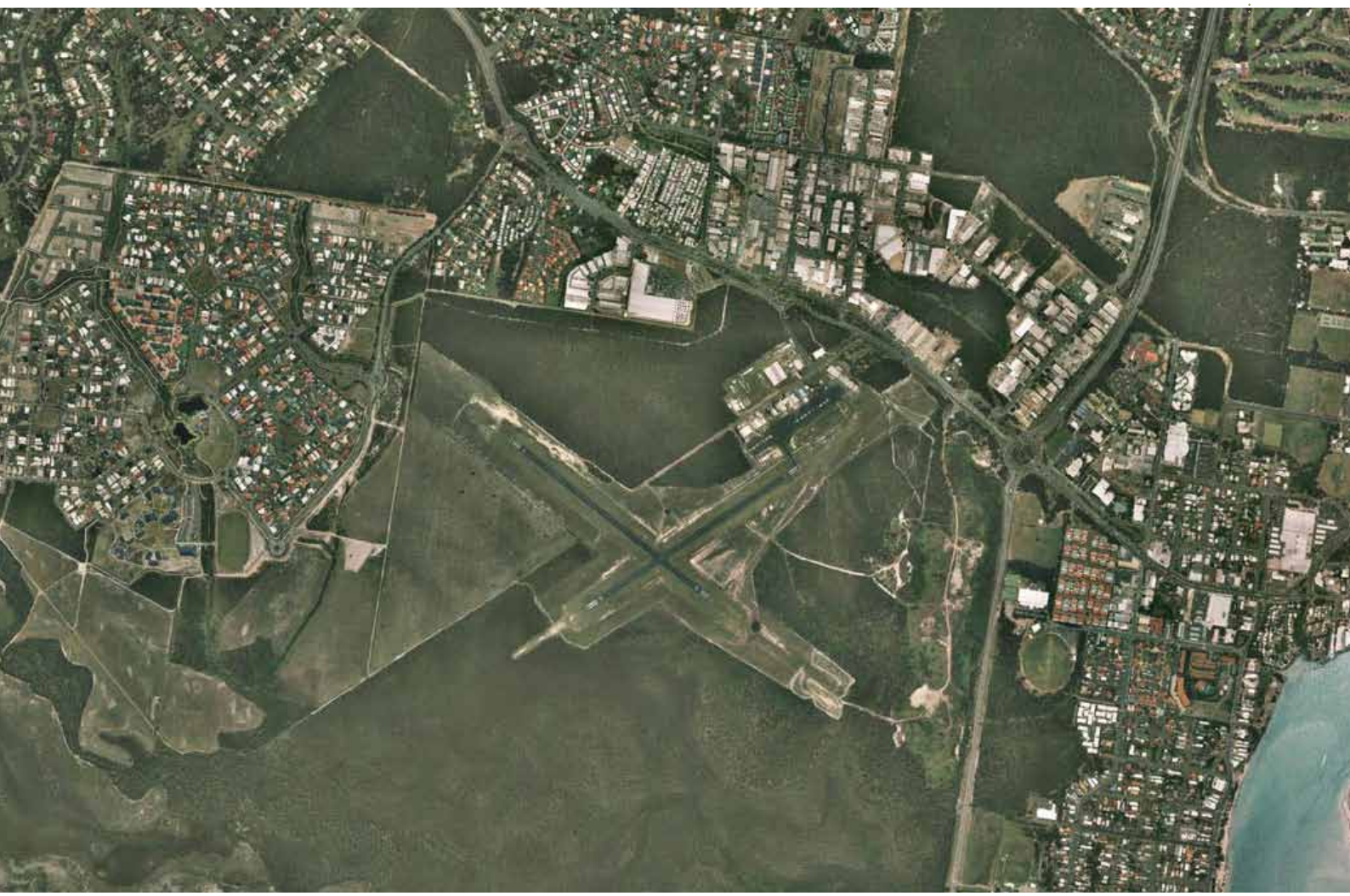
Sunshine Coast Council



CALOUNDRA AERODROME MASTER PLAN

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EXECUTIVE SUMMARY

CALOUNDRA AERODROME IS OWNED AND OPERATED BY THE SUNSHINE COAST COUNCIL AND WAS RESERVED AS AN AIRCRAFT LANDING GROUND IN 1931.

Caloundra Aerodrome is owned and operated by the Sunshine Coast Council and was reserved as an aircraft landing ground in 1931.

The aerodrome site has an area of approximately 145 hectares and accommodates two sealed runways – runway 05/23 and runway 12/30, both being 795m long and 18m wide.

The aerodrome is bounded to the east, north and west by existing urban development. Recent approvals within the Caloundra South development area will place additional urban development to the south.

The aerodrome accommodates approximately 40,000 aircraft movements per annum. Flight training, particularly training for helicopters, is a significant component of the Caloundra air traffic.

The Caloundra Aerodrome Master Plan (Master Plan) is a strategic land use planning document intended to guide future development decisions and achieve Council's strategic intent for Caloundra Aerodrome.

The land use planning framework for Caloundra Aerodrome is established by the *Sustainable Planning Act,* the *South East Queensland Regional Plan* and the *Caloundra City Plan.*

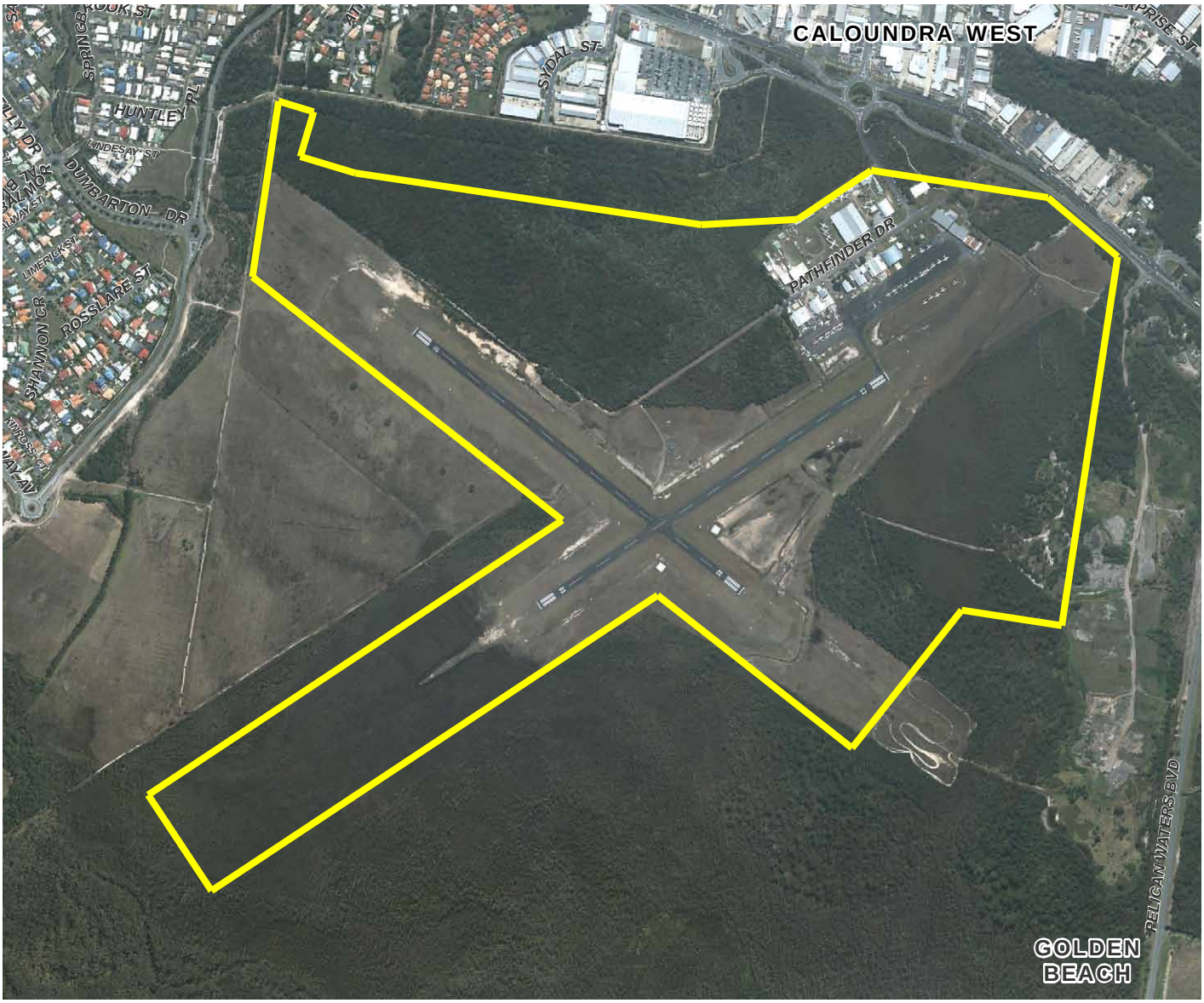
Regional objectives for the planning of Caloundra Aerodrome are:

- diversification of the region's economy.
- supporting existing aviation businesses.
- facilitation and attraction of new appropriate businesses.
- growth of the Sunshine Coast's tourism industry.
- support for aviation-related community groups and emergency services.

These outcomes are consistent with the themes expressed in Council's Corporate Plan.

Development of the aerodrome will seek to achieve the following:

- economic sustainability.
- legislative compliance.
- environmental sustainability.
- reduced impacts upon the surrounding community where practical.



Caloundra Aerodrome primarily caters for the needs of light aircraft operations in the Sunshine Coast Region. Operations at Caloundra are confined to helicopters and light fixed wing aircraft. Regular public transport (RPT) passenger operations are not contemplated at Caloundra Aerodrome within the forecast Master Plan period.

It is forecast that by 2030 the number of aircraft movements at Caloundra will increase from 40,000 per annum to 84,000 per annum.

Noise is generally an unavoidable consequence of airport operations. While airports are responsible for the noise emanating from ground operations, Airservices Australia is charged with the responsibility of managing the noise impacts of aircraft in flight. It is this component of airport noise that has the most significance for affected residents. Ideally land use planning around airports is undertaken to reduce inappropriate development that would result in conflict between aircraft operations and noise sensitive land uses.

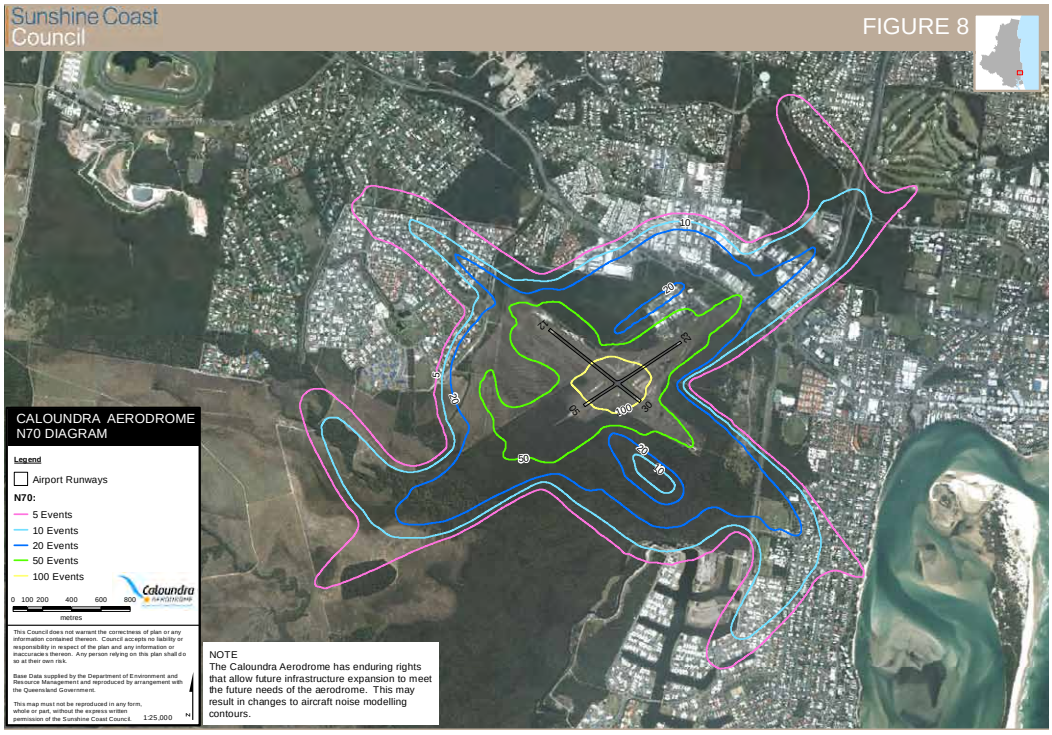
The Australian Noise Exposure Forecast (ANEF) system identifies noise impact by establishing current and predicted "noise contours". The ANEF contours are referenced in both Federal Airports legislation and in the *Queensland State Planning Policy.* Although neither the Federal legislation or state policy apply to Caloundra Aerodrome it is noted that the current Caloundra City Plan also relies upon the ANEF contours to identify and establish land use controls over land deemed to be affected by aircraft noise.

The ANEF diagram shown below has been prepared upon the 2030 traffic forecast for the aerodrome.

A more accurate measure of the likely impact of aircraft noise on individual properties can be provided via the preparation of a Transparent Noise Information Package (TNIP) for the aerodrome. This package calculates the number of noise events occurring at a locality that would exceed a specified noise level – typically 70 db when measured outside a dwelling. This gives an expected noise level of 60 db inside a typical non-noise attenuated dwelling.

The 60 db sound level is used as it reflects a level, beyond which, normal conversation is interrupted.

A TNIP model has been prepared for Caloundra Aerodrome. The model output shown below indicates that the impact of aircraft noise will persist significantly beyond the ANEF 20 contour.



The Master Plan proposes:

- expansion of the aviation lease areas – a potential expansion of up to 6.9 hectares has been identified.
- expansion of the apron (with apron edge taxiway) in stages to coincide with the expansion of the aviation lease areas.
- expansion and sealing of the existing grass apron (see Figure 11).
- reconfiguration of the existing apron ensuring compliance with CASR (see Figure 11).
- reconfiguration of the existing public carpark and amenities to facilitate the towing of aircraft between the apron and the Queensland Air Museum.
- the construction of a helipad, engine run-up bays and compass swing area (see Figure 11).
- identification of a future site for public carparking, amenities and viewing area.
- the extension of both Pathfinder Drive and Henebery Place as required to provide access to the expanded business areas.
- the identification of a potential future development area of approximately 9.5 hectares.
- the establishment of a left in/left out access point to Caloundra Road as an emergency alternative to the present Pathfinder Drive access.

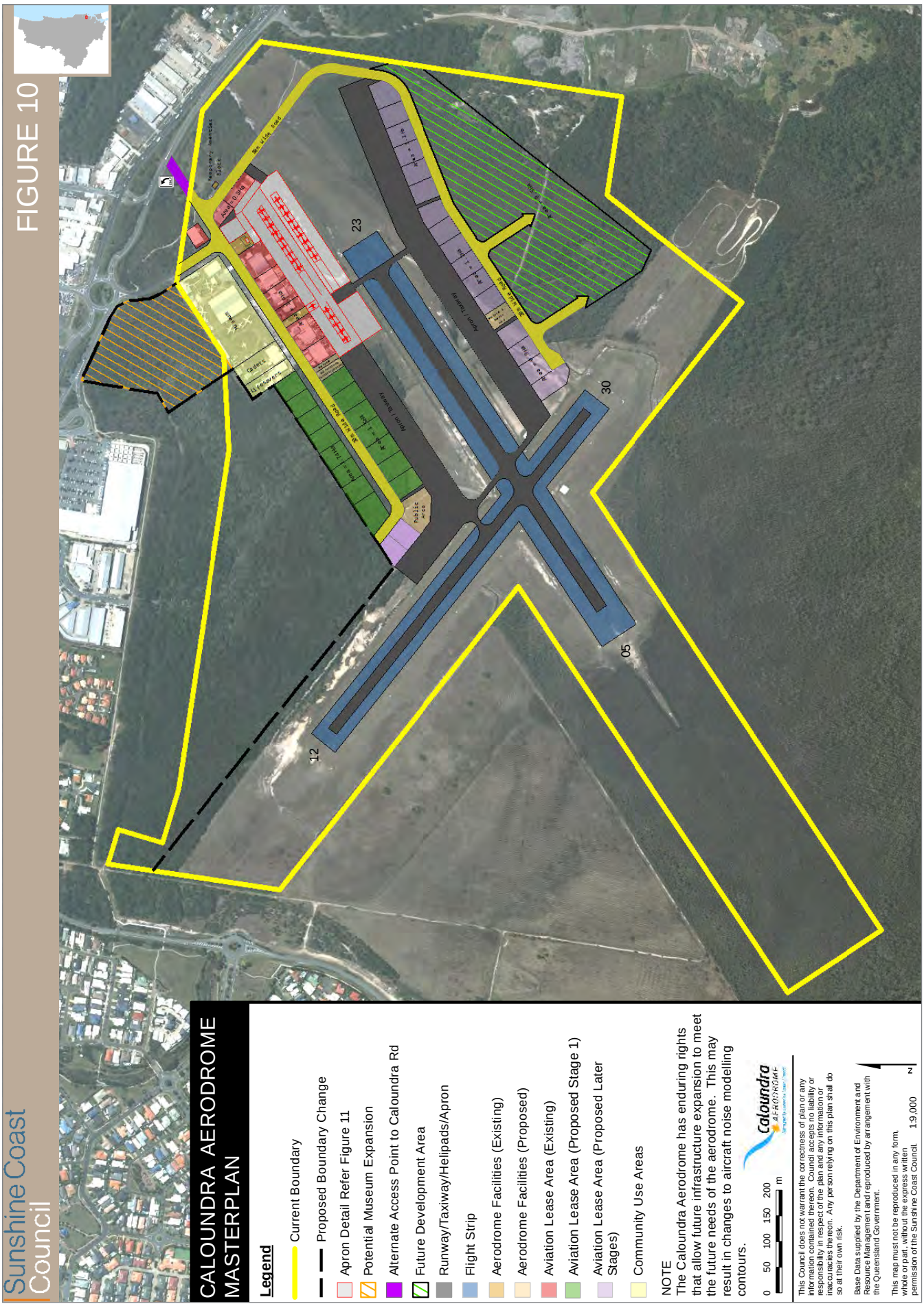
The implementation of the Master Plan will be staged, with Stage 1 consisting of:

The implementation of the Master Plan will be staged, with Stage 1 consisting of:

- the creation of 3 hectares of new aviation business area;
- reconfiguration of the existing sealed apron;
- development of a heavy helicopter landing pad, compass swing area and engine run-up bay.
- expansion and sealing of the existing grass apron.
- establishment of a left in/left out emergency road access point to Caloundra Road.

Stage 1 will occur over the next 1 to 5 years from the adoption of this Master Plan by Council.

FIGURE 10 – CALOUNDRA AERODROME MASTER PLAN



1 INTRODUCTION

FIGURE 1 - CURRENT CALOUNDRA AERODROME BOUNDARY

1.1. PURPOSE OF THE MASTER PLAN

The Caloundra Aerodrome Master Plan (Master Plan) is a strategic land use planning document intended to guide future development decisions and achieve Council's strategic intent for Caloundra Aerodrome. Its purpose is to reserve land for future activities based on the potential growth of the aerodrome activities. The Master Plan is not intended to provide detail on individual facilities or specific time frames for its implementation, rather, it sets the foundation upon which further detailed analysis and planning is based.

Accordingly, the Master Plan is designed to inform Council and assist in decision making with respect to economic development and land use planning.

This Plan will outline in detail the development of the Aerodrome over the next 20 years to 2033 and will provide a concept for the ultimate development of the site. Given the changing aviation environment the plan has been developed to allow some degree of flexibility into the future and will be reviewed on a 5 yearly cycle.

1.2. CONSULTATION

The Master Plan has been developed in consultation with users, the community and Government, through a series of consultation processes. The draft Master Plan was publicly exhibited for a period of 30 business days in late 2012. Submissions received in response to the exhibition have aided in the finalisation of this Master Plan

1.3. LEGISLATIVE FRAMEWORK

Caloundra Aerodrome is governed in accordance with a Deed of Agreement executed between the then Caloundra City Council and the Commonwealth Government (dated 29 June 1992) whereby Council is required to be solely responsible for developing, operating and maintaining the aerodrome in compliance with Civil Aviation Regulations and Standards under the Commonwealth *Civil Aviation Act 1988* and the *Air Navigation Act 1920.*

The land upon which Caloundra Aerodrome operates is under Queensland Government-controlled tenure (being a Reserve for Landing Ground for Aircraft Purposes, with Council as trustee). As a consequence, dealings with interests in land are required to be undertaken in accordance with Queensland's *Land Act 1994.* Similarly, given the trusteeship of the reserve is with Council, the requirements of Queensland's *Local Government Act 2009* and associated Regulations are applied.

The land use planning framework for Caloundra Aerodrome is established by the *Sustainable Planning Act,* the *South East Queensland Regional Plan* and the *Caloundra City Plan.*

Under the *Caloundra City Plan,* development for aviation related purposes on the aerodrome is "exempt development" not requiring the approval of a development application. The development on the aerodrome does however need to have regard for State and Commonwealth legislation in relation to vegetation management and biodiversity conservation, dependent upon the nature, location and impact of the activities being carried out.

At the time of writing the draft Sunshine Coast Planning Scheme was still being finalised. As exhibited the draft planning scheme proposed to require that development on the aerodrome be subject to development applications. There are ongoing discussions with Council's Strategic Planning Branch to progress this issue. It remains the objective of aerodrome management to achieve 'exempt' development status under the sustainable planning Act for aviation related purposes that are consistent with the Master Plan.

1.4. REGIONAL OBJECTIVES

In framing this document the overarching regional objectives being sought from the development of Caloundra Aerodrome are:

- Diversification of the region's economy through growing aviation (in particular, general aviation) as a cornerstone industry cluster;
- Supporting existing aviation businesses at Caloundra;
- Facilitation and attraction of new businesses to the region – particularly given the increasing pressure upon aviation infrastructure in the South East Queensland region;
- Growth of the Sunshine Coast's tourism industry through the development of an iconic tourist attraction at the Air Museum; and
- Support for aviation-related community groups and emergency services.

These outcomes are consistent with the themes expressed in Council's Corporate Plan.

1.5. DEVELOPMENT OBJECTIVES

Development of the aerodrome will seek to achieve the following:

- economic sustainability and diversity.
- legislative compliance.
- environmental sustainability.
- reduced impacts upon the surrounding community where practical.

2 CALOUNDRA AERODROME

2.1. LOCATION

Caloundra Aerodrome is approximately 65 kilometres north of Brisbane Airport, 22 kilometres south of the Sunshine Coast Airport and 55 kilometres south of Teewah Airfield.

Caloundra Aerodrome is located approximately 3 kilometres south-west of Caloundra town centre and is accessed via Caloundra Road.

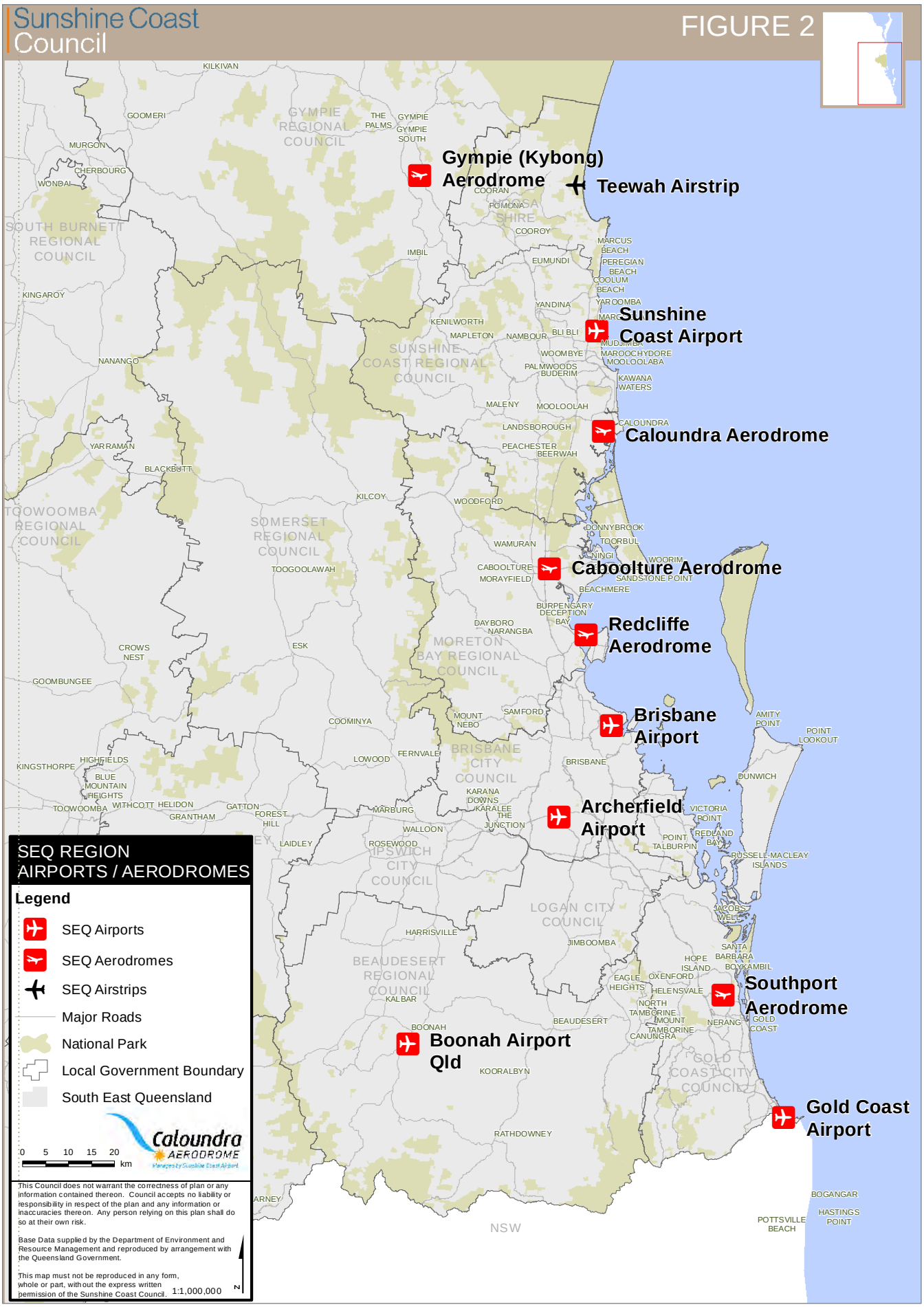
The site is bounded by Caloundra Road to the north, former Council waste disposal sites to the east, Lamerough Creek bushland to the south and the Bellvista residential area to the west.

Location Co-ordinates

South:	26’ 48.1”
East:	153’06.3”
Elevation:	38 feet
Location Identifier:	YCDR

Figure 2 shows Caloundra Aerodrome’s location within the context of the broader South East Queensland region.

FIGURE 2 - SEQ REGION AIRPORTS/AERODROMES



2.2. ROLE AND FUNCTION

Caloundra Aerodrome primarily caters for the needs of light aircraft operations in the Sunshine Coast Region. Operations at Caloundra are confined to helicopters and fixed wing aircraft capable of operating off the existing runway infrastructure. The fixed wing aircraft are generally single engine or small twin engine aircraft below 5700kg maximum take off weight (MTOW). Helicopters currently using Caloundra range from light training helicopter to larger machines capable of take-off weights up to 7500kg.

The Bureau of Infrastructure, Transport and Regional Economics within the Department of Infrastructure, Transport, Regional Development and Local Government, in its 2008 Statistical Report of General Aviation Activity defines General Aviation (GA) as *"all non-scheduled (non-RPT) flying activities other than flying activities performed by major Australian airlines".*

General Aviation can be categorised as follows:

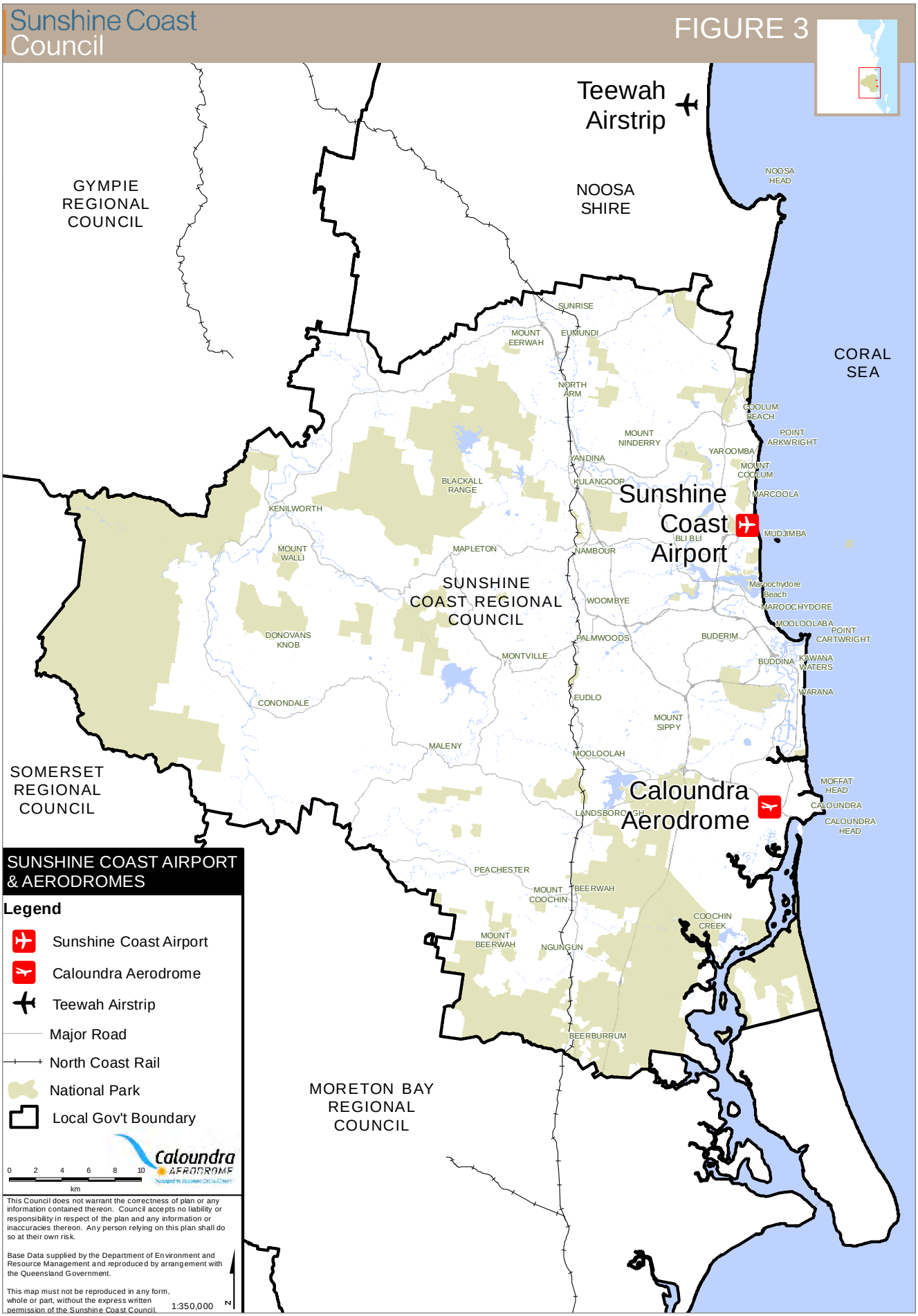
- Aircraft maintenance – access to maintenance facilities, which in turn require suitably qualified personnel, a fundamental requirement of General Aviation operations.
- Private, business and charter flying.
- Sports and recreational flying – particularly in the provision of an accessible network of facilities throughout the South East Queensland region.
- Rotary winged aviation industry – Caloundra Aerodrome businesses currently provide helicopter training to organisations from around the world, and maintenance and overhaul services covering Queensland, New South Wales and a number of international customers.

In addition to flying operations, General Aviation at Caloundra Aerodrome is supported by a range of ancillary and service industries, such as:

- Line service – fuelling and sale of lubricants
- Aircraft storage
- Aircraft maintenance – major repairs and reconstruction, minor repairs etc
- Engine maintenance
- Aircraft sales
- Parts sales and service
- Flying instruction

Whilst regular public transport (RPT) passenger operations are possible under CASA regulations at aerodromes such as Caloundra, it is not contemplated within the forecast Master Plan period that the aerodrome be developed for this purpose. Sunshine Coast Airport will remain the RPT focus for the Sunshine Coast.

FIGURE 3 - SUNSHINE COAST AIRPORT AND AERODROMES



2.3. USE OF ADJOINING/ADJACENT LAND

To the north west of the site is the Caloundra West Industrial Estate which accommodates a range of industrial and commercial activities servicing the local community.

To the east is Duck Holes Creek Reserve which provides boardwalks across rehabilitated wetlands. Further east is a recreation reserve which accommodates sporting facilities and playing fields. This latter reserve adjoins a retirement village and residential development.

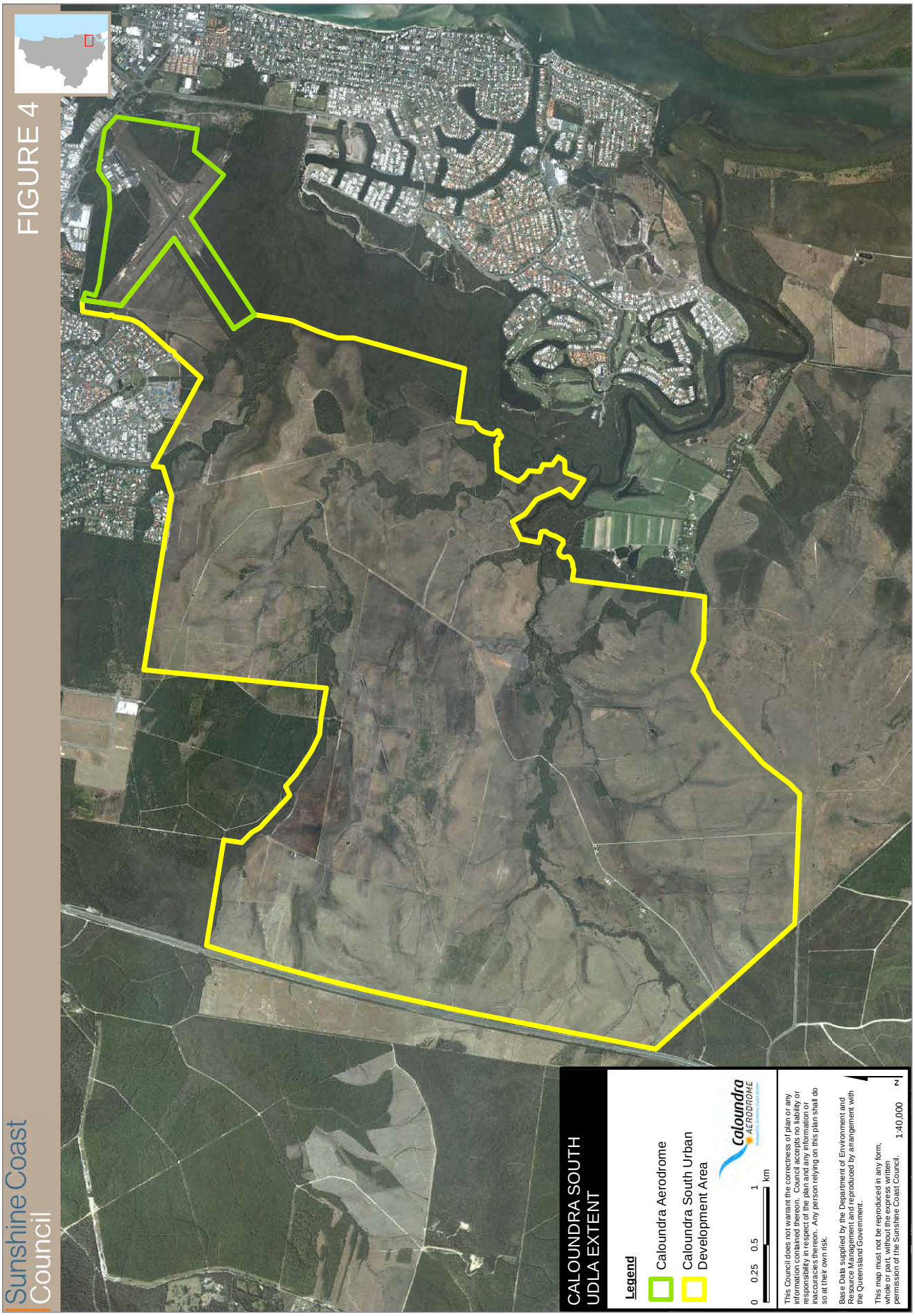
To the west of the site is the Bellvista residential estate, including Bells Reach (Bellvista Stage 2) residential development which the Urban Land Development Authority (ULDA) has recently approved.

To the south is the Caloundra South Urban Development Area, under the control of the ULDA, which includes the development of approximately 20,000 dwellings over the next 30 years. A proportion of these dwellings will be affected by current and future operations at Caloundra Aerodrome.

The use of land surrounding the aerodrome is governed by two separate planning regimes. The Caloundra South Development Area is administered in a land use planning context by the *Urban Land Development Authority Act.* Figure 4 below delineates the land area administered by the UDLA.

The remainder of the urban land surrounding the aerodrome is governed (in the land use planning context) by Council via the *Caloundra City Plan of 2004.* A new Sunshine Coast Planning Scheme is being prepared and will in time replace the *Caloundra City Plan.* It is noted that the planning intent of the new Scheme will reflect Council's decision to maintain Caloundra as an operating aerodrome.

FIGURE 4 - CALOUNDRA SOUTH UDLA EXTENT



3 REGIONAL SIGNIFICANCE

3.1. SOUTH EAST QUEENSLAND CONTEXT

Caloundra Aerodrome forms an important component of the South East Queensland (SEQ) aviation infrastructure. The Brisbane Basin contains a number of facilities including airports at Gold Coast, Southport, Amberley, Brisbane, Archerfield, Redcliffe, Caboolture and Sunshine Coast.

Urban development in SEQ remains a significant threat to the long term viability of some aerodromes placing increasing pressure on the capacity of the aerodromes to accommodate future growth. Additionally it should be noted that the growth of passenger traffic at Gold Coast, Brisbane and Sunshine Coast airports and their capacity to cater for the future demands of the general aviation industry is limited placing further importance on the existing general aviation facilities of South East Queensland.

Caloundra Aerodrome has been the subject of a number of studies and reviews by the former Caloundra City Council (CCC) and the State Government. These studies considered the operational sustainability of the aerodrome within the context of the *Caloundra City Plan* and identified the aerodrome as a valuable general aviation facility. It provides recreational aviation facilities, pilot and engineering training, aircraft maintenance and aviation services to the Sunshine Coast.

Operations have however been affected by increasing urban development adjacent the aerodrome and as a consequence the State Government engaged consultants GHD to review alternative sites for the relocation of the aerodrome. The report identified a number of possible sites with the preferred location being located within the State Forest at Johnstons Road, east of the Bruce Highway, some 13 km south of the current aerodrome.

At its meeting on 19 August 2010, Council resolved that the existing site would be retained unless certain conditions in relation to the preferred site were met by the State. On 2 September 2010, the State announced it would not be meeting the conditions outlined by Council. Consequently, Council determined that the existing Caloundra Aerodrome site would remain as an operating aerodrome.

These factors increase the strategic importance of Caloundra Aerodrome and the necessity of a well planned future.

3.2. ECONOMIC SIGNIFICANCE

The Queensland Government's *South East Queensland Regional Plan* articulates as one of its key policy statements that the State will support development of regional airports as significant economic and social links for regional communities.

Similarly, Council, through its Corporate Plan themes of "Robust Economy" and "Effective Business Management" has identified aviation as a driver of the regional economy. The development and growth of Caloundra Aerodrome will contribute to the strength and diversity of the economy of the Sunshine Coast and is consistent with Council's Corporate Plan aspirations.

A review of the state of the General Aviation sector in South East Queensland was completed in 2007 (Rehbein AOS) to assess the needs and determine the likely infrastructure required to meet those needs. The report identified the following key industry drivers affecting the physical and location requirements for General Aviation infrastructure in South East Queensland over the next 20 years:

- Aircraft maintenance – access to maintenance facilities
- International pilot training
- Private, business and charter flying
- Sports and recreational flying
- Helicopter industry – both training and maintenance activities

The report also confirmed that there would appear to be ongoing demand for commercial General Aviation facilities in the Caloundra catchment area.

Direct Economic Contribution

Caloundra Aerodrome directly employs 129 people, with an additional 50 active volunteers assisting with operations at the Queensland Air Museum.

Employment opportunities in the General Aviation sector, although smaller in number than in other industry sectors operating in the Sunshine Coast offer opportunities for highly trained and comparatively well remunerated employment.

Business activities service in excess of 4,600 customers, with 60 percent of these customers being based in Queensland, and almost half of these local to the Sunshine Coast region.

67 percent of Caloundra Aerodrome operators had an annual turnover greater than $1million, in 2011.

The estimated 2009/2010 turnover of the business at Caloundra was in the order of $43 million. In addition the Queensland Air Museum attracts approximately 15,000 visitors annually. (PWC 2011)

Broader Regional Economic Contribution

In addition to 23 percent of operators sourcing in excess of 50 percent of their supplies from local businesses, Caloundra Aerodrome supports the diversification of the region's economy, particularly through the operations of aviation training schools.

Caloundra Aerodrome operators also create synergies with agglomeration benefits through co-location with similar businesses. Examples of this effect includes attracting tourists and other visitors to the region through the Queensland Air Museum with a flow-on effect to other tourism-related opportunities such as skydiving, charter flights and helicopter tours. (PWC, 2011)

4 AVIATION DEMAND FORECASTS

4.1. CURRENT AIRCRAFT MOVEMENTS

Aircraft movement activity has not been monitored and tracked in the past at Caloundra Aerodrome, hence a base model has been developed from the application of actual traffic within daylight hours over two 7 day periods during August 2010 and March 2011 resulting in a calculated average of approximately 40,000 movements per annum.

The table below shows the movements by aircraft type (GA Fixed wing, GA Rotary wing and Ultralight) over the monitoring period –

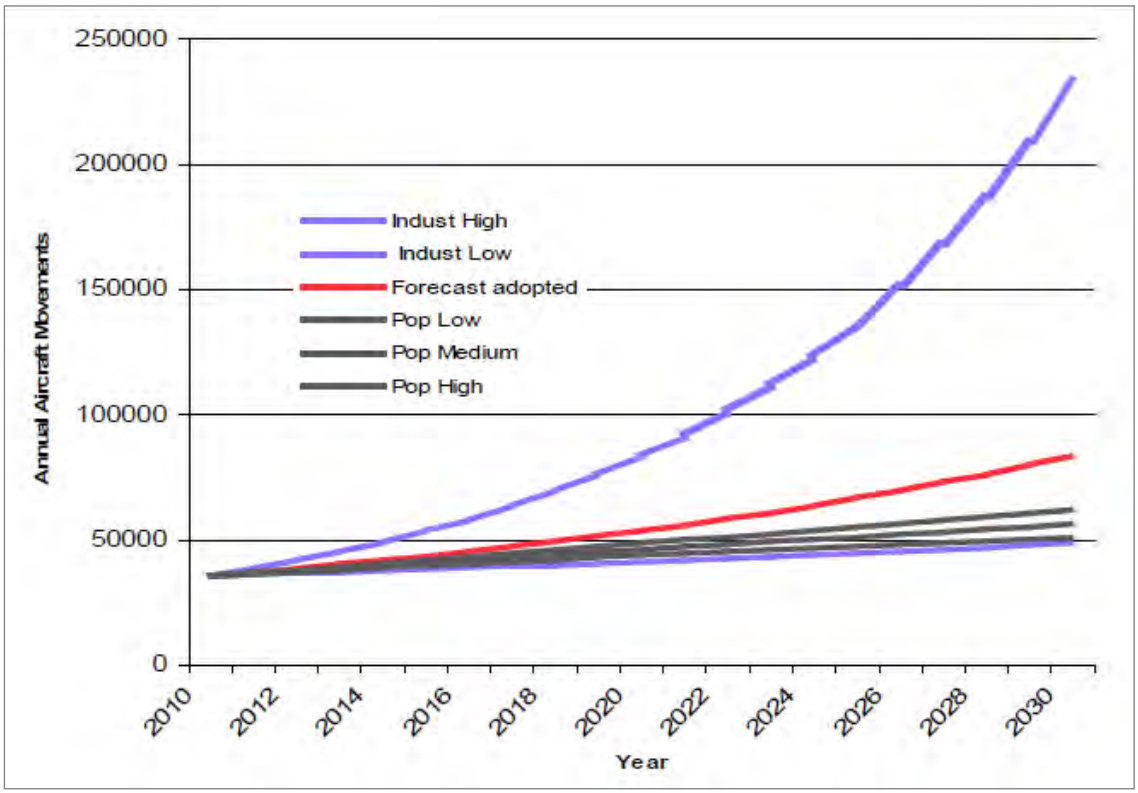
Operation	GA Fixed Wing	GA Rotary Wing	Ultralight	Total
Arrivals	187	110	62	359
Departures	211	136	75	422
Circuits	302	297	130	729
Total	700	543	267	1510
Percentage	46%	36%	18%	100%

An aircraft movement is a take off or landing, circuits have been counted as two movements.

4.2. FORECAST AIRCRAFT MOVEMENTS

In the absence of any specific data which related to likely growth of aviation activity at Caloundra Aerodrome, two broad indicators (industry and population trends) were used to develop low, medium and high growth scenarios.

The growth rates adopted have resulted in a greater spread of forecasts for the industry trends than for the population trends. The high industry based forecast has assumed that there are no constraints to growth associated with factors such as airspace or runway configuration. All the forecasts developed from industry and population trends are shown in the graph below –



Other influences on traffic forecasts include:

- Increasing fuel costs
- Increasing use of simulators for flying training
- Increased congestion at other GA aerodromes
- Introduction of landing and parking fees at Caloundra Aerodrome

Accordingly, the forecast outcome at 2030 is:

Indicators	Low	Medium	High
Industry	49,000	84,000	233,000
Population	51,000	56,000	62,000

This Master Plan has adopted the medium scenario based on industry trends as its 2030 forecast i.e. 84,000 movements.

This scenario:

- Recognises the steady increase in ultralight activity;
- Recognises the importance of training as a driver of growth; and
- Aligns closely with to the result of the high population growth scenario.

A provider of flying training services at Caloundra has advised that it foresees a considerable growth in its activities at Caloundra. While no specific data about its projected level of activity is available for inclusion in this forecast, the Master Plan assumes that the proportion of rotary wing aircraft movements could increase from the present estimated 26% to 50% of the total movements. The total number of circuits due to this increased training activity could also increase to 80% of the total movements. Whilst the commercial decisions of operators will have a significant bearing upon the growth and possible change in the makeup of traffic, consideration should be given to the development of a satellite training area to reduce the impact of helicopter circuit training activity upon the areas adjoining the aerodrome.

Using the current mix of aircraft activity identified by the site monitoring, an estimate of movement type has been produced for the 2030 forecast. This is shown in the table below. The arrival and departure movements have been rounded off to balance.

Break Up of Forecast Movements

Aircraft Type	Total	Arrival	Departures	Circuits #
GA Fixed Wing	20,034	3,113	3,113	13,808
GA Rotary Wing	42,050	2,184	2,184	37,682
Ultralights	22,016	2,734	2,734	16,548
Total	**84,100**	**8,410**	**8,410**	**67,280**

#Note: A circuit is considered to be the equivalent of two movements.

4.3. IMPLICATIONS FOR THE MASTER PLAN

It is appropriate for Council to manage the site in such a way that can satisfy the projected demand. In order to accommodate increased activities at Caloundra, additional leased land will be required to enable existing operators to expand and grow their businesses as well as cater for additional operators who express interest in relocating to Caloundra Aerodrome.

To accommodate this expected demand for land, an additional 6.9ha of leasable land has been identified for aviation purposes (3 ha, Stage 1).

The increased helicopter training activity identified within the forecast presents additional challenges for residents of the recently approved development of Bells Reach. This residential development lies adjacent the intersection of the two existing runways and at the confluence of two helicopter training circuits that were designed to avoid existing residential developments. The development was strenuously objected to by Council, however approval was subsequently granted by the Queensland Government in 2011. Residents of this development will be seriously impacted by current and future aircraft noise.

5 AVIATION FACILITIES

5.1. RUNWAYS 05/23 AND 12/30

Runways 05/23 and 12/30 are both 795m in length, 18m wide and sealed. The width, length and strength of the runways are considered suitable to accommodate existing and future, short to medium term traffic requirements with regular maintenance.

The Master Plan does not propose any changes to runway 12/30.

5.2. AIRCRAFT MANOEUVRING AREA

The main sealed apron is contiguous to the lease areas at the northern end of the aerodrome and is capable of accommodating up to 30 light aircraft.

The apron is connected to Runway 05/23 by a single taxiway and is also internally serviced by a network of apron edge taxiways.

The capacity of the apron is insufficient to meet current requirements and provides a challenge for aircraft maintenance organisations to park aircraft awaiting maintenance. This situation is exacerbated to some extent, by the location of the fuel bowsers and the long term parking of unserviceable aircraft. It is anticipated that some aircraft parking relief will be gained by the implementation of aircraft parking fees, whereby seldom used aircraft currently parked at Caloundra, are likely to relocate to other, free use, facilities.

A secondary natural surface apron is located abeam the northern end of the sealed apron. This natural surface apron becomes unusable for a significant part of the year after rain. It is proposed to upgrade this apron and the associated connecting taxiway to a sealed surface to increase its usability and reduce congestion on the main sealed apron.

An extension of the existing sealed apron to the south east has also been incorporated into the Master Plan as part of the Stage 1 development works (years 1-5) associated with increases in hangar development sites.

These two developments will effectively double the parking capacity of the aerodrome and allow sufficient parking for the medium (5-10 year) term.

Further development in terms of a dedicated aircraft run up bay and helipad are included in the Stage 1 works to accommodate the operational requirements of both fixed and rotary winged aircraft maintenance.

A new taxiway connecting the southern end of the extended apron to the runways will be required to increase operational efficiency of both the runways and apron.

Provision of future access from the Queensland Air Museum to the sealed apron has been considered to facilitate the transfer of flying exhibits should this be required.

5.3. RUNWAY LIGHTING

Pilot activated runway lighting is provided on Runway 05/23 for night time operations. No augmentation of this system is currently proposed.

5.4. NAVIGATIONAL AIDS

Caloundra Aerodrome is not equipped with navigational aids. There are two windsocks, one of which is illuminated. These are considered adequate to meet short and medium term needs.

5.5. FENCING

The airside area of the aerodrome is suitably fenced with access controlled by locked vehicle gates and keypad operated pedestrian gates. The gates and fencing have been substantially upgraded in the past 2 years, although some maintenance is required as found in the recent risk assessment process.

The extensive length of the fencing, at approximately 5.3 kilometres, does mean that the maintenance of the fence requires continual oversight with significant resourcing implications.

Closed circuit television cameras have been installed to assist in the investigation of any security breach. The cameras focus on the apron and taxiway to Runway 05/23.

6 SERVICES AND UTILITIES

6.1. STORMWATER

The aerodrome site is very flat and low lying. The drainage system consists of a mixture of piped and open drainage lines.

It is known that while the runways remain above the Q100 level there are nuisance flooding events associated with the taxiway and grassed areas adjacent to the existing aircraft apron. These become unusable for even light aircraft after relatively minor rain events.

Council's recent Lamerough Creek Drainage Investigation confirms that the runway, apron and existing lease areas will remain free of flooding up to the Q100 event.

A review of the adequacy of the piped and open drainage lines will be carried out as part of the design of the new lease areas (Stage 1 expansion). Similarly the design phase of the proposal to seal the grass apron will include the review of the current 'overland flow' and drainage swales in that part of the site.

6.2. SEWER

The sewerage infrastructure at Caloundra Aerodrome consists of connections from each lease area to a reticulated pipe system that incorporates a sewage pump. The system from the individual lease area connections is maintained by Unity Water. A number of the individual lease areas operate holding tanks with pumps to lift effluent to the Unity Water sewer. This is necessary because of a the very flat nature of the site and the fact that a number of the connections have 'evolved' from previous on site disposal systems.

Unity Water advises that the present system is adequate to meet the needs of existing development on the aerodrome. Any substantial expansion of development will require augmentation of the sewerage system. The provision of a new sewage pump will likely be required as part of the Stage 1 expansion due to the difficulty in achieving adequate fall from this area to the existing sewage main in Pathfinder Drive.

The augmentation cost would be a cost to the new development area. It would not be regarded as 'headworks' provided by Unity Water.

6.3. WATER SUPPLY

A reticulated water supply is provided via 150mm pipe from the Caloundra Road/Pathfinder Drive intersection. The pipe reduces in size to 100mm part way along Pathfinder Drive. Discussions with Unity Water confirm that the existing water supply is appropriate to meet demands from both the existing and proposed (Stage 1 expansion) development at Caloundra. Accordingly, other than the extension of the water service necessitated by the proposed Stage 1 expansion, no augmentation of the water supply infrastructure is proposed.

6.4. TELECOMMUNICATIONS

The aerodrome site is serviced by the Telstra fixed line network and by a range of mobile telecommunications service providers consistent with the urban areas across the Sunshine Coast. It is considered that the current telecommunication infrastructure is appropriate for the ongoing operation and proposed expansion of the aerodrome.

6.5. ELECTRICITY

A reticulated urban standard electricity supply is provided to the aerodrome. Individual lease areas are separately connected and metered. Discussions with the supplier Energex indicate that the current network is appropriate to meet the needs of the existing and proposed (Stage 1 expansion) development. It was noted that in the case of some of the individual lease areas, upgrading will be required to the private infrastructure to reflect growth in power usage and to ensure reliability.

Further discussions with Energex will be required when Energex commence the planning of services to the Caloundra South Development Area. This is important to ensure any overhead infrastructure does not impact upon the safe operation of the aerodrome.

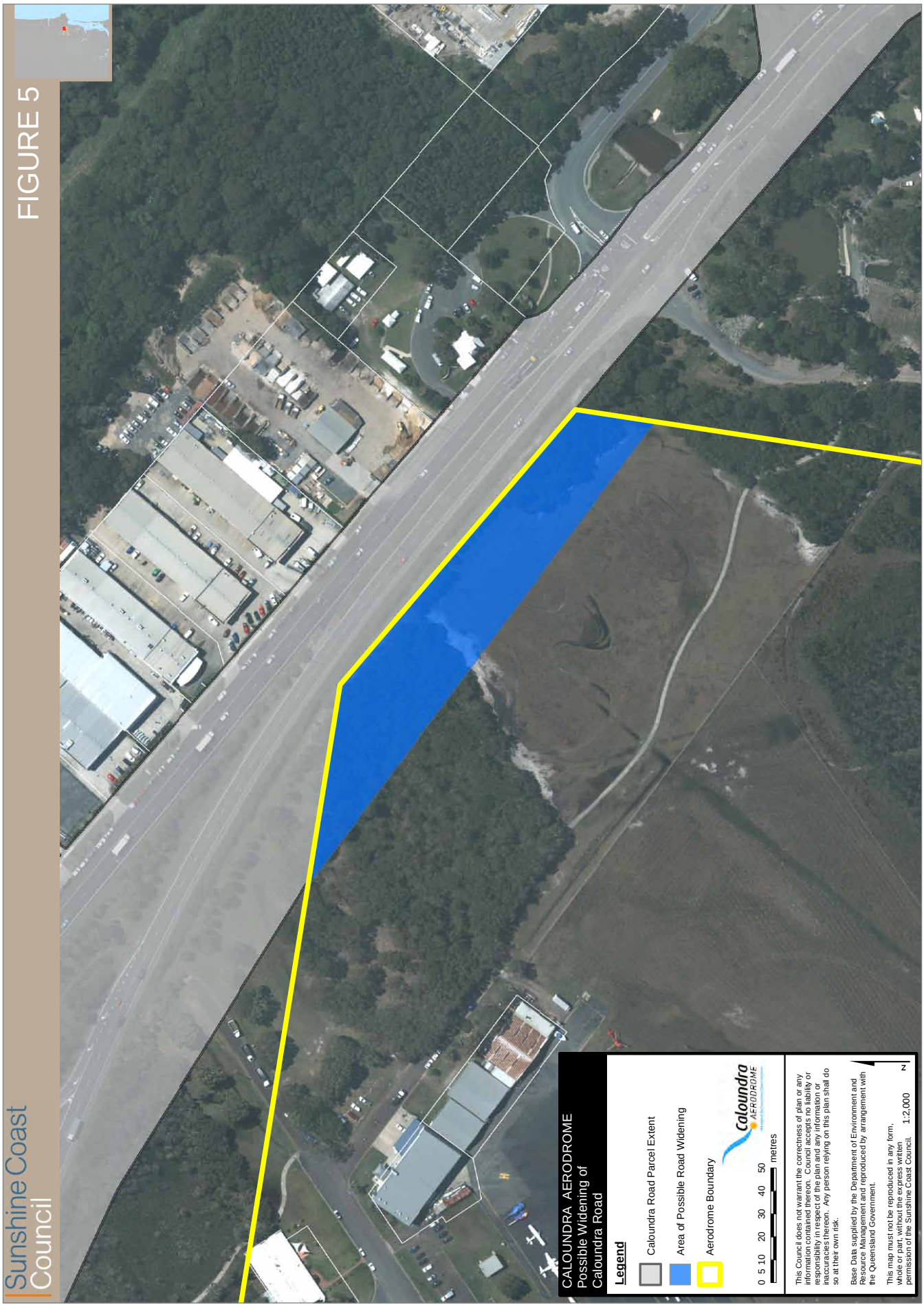
7 TRANSPORT AND ACCESS

7.1. AIRPORT ACCESS

The Department of Transport and Main Roads (DTMR) has commenced a corridor study for Caloundra Road. As indicated on Figure 5 below. It is possible that widening of Caloundra Road will be required to accommodate future traffic growth and, based on preliminary discussions with the DTMR a road widening strip of 30 metres has been included in the Master Plan to accommodate this proposed development.

The potential widening of Caloundra Road and the upgrading of Caloundra Road/Nicklin Way intersection may have adverse implications within the context of the Obstacle Limitation Surfaces as the road is reasonably close to the Runway 05/23 northern end. DTMR has been advised of this potential issue.

FIGURE 5 - CALOUNDRA AERODROME POSSIBLE WIDENING OF CALOUNDRA ROAD



7.2. INTERNAL ROAD NETWORK

The aerodrome is serviced by two internal roads, Pathfinder Drive and Henebery Place.

Both roads will require extensions to accommodate the future hangar and commercial developments, however the existing widths are considered adequate for the master planning period.

DTMR has been requested to consider the provision of an alternate emergency access direct from Caloundra Road to Henebery Place. A left in/left out access is proposed to allow continued access in the event the principal access, Pathfinder Drive, is restricted for any reason.

7.3. PUBLIC CAR PARKING FACILITIES

The sealed public carpark accommodates approximately 30 vehicles. It is anticipated that the carpark be retained in the short term while Stage 1 works are completed. The carpark is predominantly used by the general public to watch aircraft operating (plane spotting) and to service the customers of nearby leases including the Queensland Air Museum (QAM). While the carpark is generally under-utilised, with the future development of the QAM, parking is likely to become a significant issue for the museum. The current carpark is unlikely to fully meet QAM's future needs. Property held by the State Government to the north west of the existing museum site with road frontage has been identified as a potential area for expansion of both exhibit sites and future carparking for the museum.

A site north of the runway intersection in Stage 1 has been identified as a community area for plane spotting and the development of public facilities to encourage participation in the aviation industry. The concept includes carparking, a public viewing area, a BBQ area and toilets.

The current carpark and toilet block area could be redeveloped to provide visitor amenities and some parking as part of the proposal referred to in section 5.2 to provide a link between the museum and the apron.

A carparking management plan will be developed for the site to assist in managing carparking particularly the demands associated with 'special' events at the Air Museum.

7.4. PUBLIC TRANSPORT

Public transport services to the aerodrome are provided via bus services along Caloundra Road. There is no aerodrome specific service. The Sunbus 603 and 605 routes pass the site and connect to a range of destinations including:

- Caloundra CBD
- Kawana Town Centre
- Landsborough Railway Station

The nearest public bus stop to the aerodrome is located at Caloundra Road and Latcham Drive, 415m from the Aerodrome.

7.5. PEDESTRIAN AND CYCLE NETWORK

The aerodrome is connected to a Council designated cycle/pedestrian route that runs parallel to Caloundra Road through the aviation reserve. The pedestrian/cycle path connects the aerodrome to surrounding residential and business areas.

Future development on the aerodrome will respond to this infrastructure by including facilities for cyclists which will be accommodated within the existing road reserves.

7.6. PROPOSED CABOOLTURE - MAROOCHYDORE MULTI-MODAL TRANSPORT CORRIDOR

Dialogue between Council and Queensland DTMR has indicated that there will be a need in the future to facilitate access from Caloundra Aerodrome to the proposed Caboolture-Maroochydore Multi-modal transport corridor (CAMCOS). The Master Plan concept demonstrates that connection to the CAMCOS corridor could be achieved through the extension of Henebery Place in a south-easterly direction in conjunction with the future development of that part of the aerodrome. The possible need for the CAMCOS corridor to encroach upon the aerodrome site would be considered, on the condition that the corridor and its operation did not impinge upon the current or future operations of the aerodrome.

8 AIRPSACE

8.1. AIRSPACE PROTECTION – OLS

The Obstacle Limitation Surfaces (OLS) diagram (Figure 6) is the means by which the critical operational airspace of the aerodrome is defined and protected. The OLS diagram indicates the height above which temporary or permanent obstacles such as buildings, chimneys, cranes, phone towers and similar structures would impede the safe approach and/or departure of aircraft from the aerodrome.

An OLS diagram has been prepared for Caloundra Aerodrome.

As the OLS is primarily about managing building and development activities in close proximity to the airport, it is proposed that the OLS diagram will be included in Council's planning scheme. The Urban Land Development Authority will be requested to include the OLS in the Caloundra South Development Scheme.

FIGURE 6 - CALOUNDRA AERODROME OLS PLAN

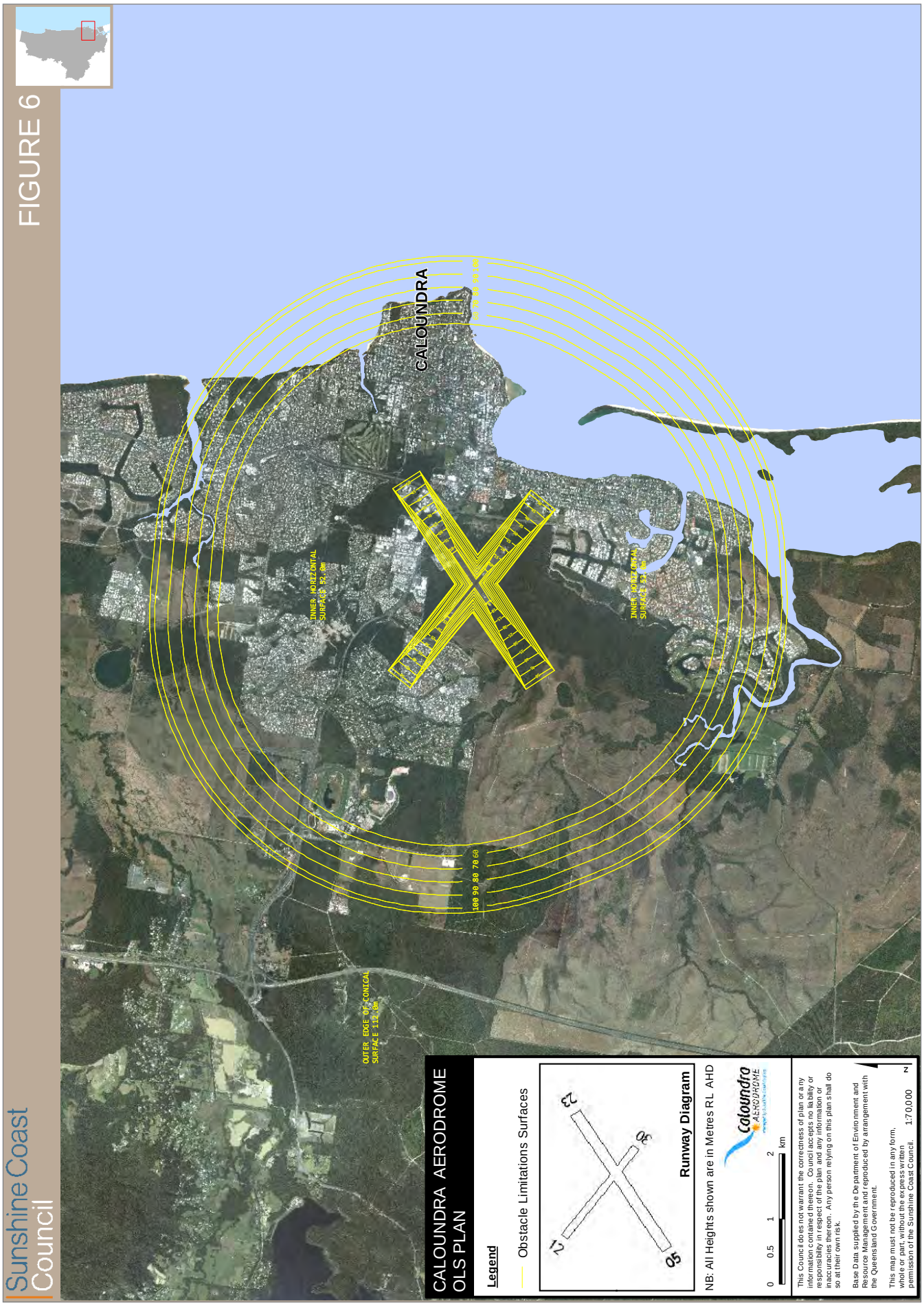
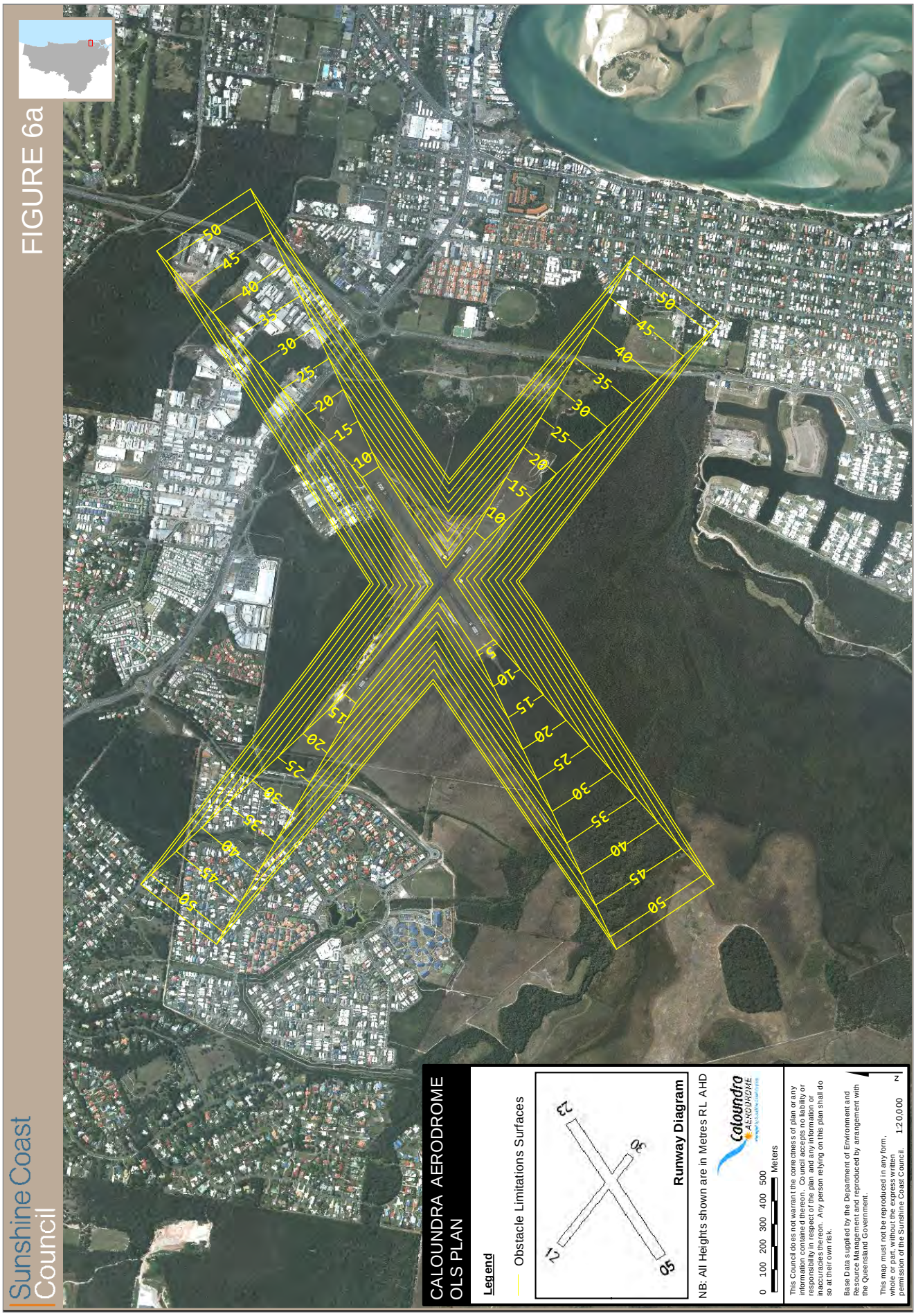


FIGURE 6A - CALOUNDRA AERODROME OLS PLAN



9 ENVIRONMENTAL MANAGEMENT

9.1. OBJECTIVE

Council's overarching environmental objective is to manage Caloundra Aerodrome in an environmentally sustainable manner, cognisant of the prime objective of the site which is to meet the needs of aerodrome operators.

It is intended to develop an Aerodrome Environment Strategy (AES) to address the ongoing environmental management at the airport.

The AES will provide the framework for responsible environmental management by airport users and Council as the manager of the aerodrome.

9.2. ENVIRONMENTAL RESPONSIBILITIES

The range of matters to be addressed in the AES include:

- developing and maintaining Caloundra Aerodrome's environmental management system;
- initiating and following up on environmental reviews of relevant aspects of the airport;
- providing internal resources to work with tenants to protect the environment of the aerodrome and assist with the investigation of incidents on the site; and
- liaising with and, where required, reporting to relevant internal and external environmental authorities.

It is noted that responsibility for implementing environmental management measures is established through relevant legislation. Depending on individual circumstances, it may rest with individual tenants, or Council operational personnel..

9.3. AIRCRAFT NOISE

Noise is generally an unavoidable consequence of airport operations. While airports are responsible for the noise emanating from ground operations, Air Services Australia is charged with the responsibility of managing the noise impacts of aircraft in flight. It is this latter component of airport noise that has the most significance for affected residents. Ideally land use planning around airports is undertaken to reduce inappropriate development that would result in conflict between aircraft operations and noise sensitive land uses.

9.3.1. THE AUSTRALIAN NOISE EXPOSURE FORECAST SYSTEM (ANEF)

The Australian Noise Exposure Forecast system (ANEF) is the aircraft noise exposure index currently adopted in Australia. The ANEF system provides a measure of noise exposure from aircraft operations around airports. It provides guidance for land use planning in the vicinity of an airport, taking into account the following factors of aircraft noise:

- the intensity, duration, tonal content and spectrum of audible frequencies of the noise of aircraft take-offs and landings;
- the forecast frequency of aircraft types and movements on the various flight paths; and
- the average daily distribution of aircraft take-off and landing movements in both day time and night time hours.

9.3.2. NOISE THRESHOLD LEVELS

The ANEF system identifies noise impact by establishing current and predicted "noise contours". The ANEF contours are referenced in both Federal Airports legislation and in the *Queensland State Planning Policy.* Although neither the Federal legislation or State policy apply to Caloundra Aerodrome, it is noted that the current *Caloundra City Plan* also relies upon the ANEF contours to identify and establish land use controls over land deemed to be affected by aircraft noise. Land Use Compatibility recommendations are provided by the Standards Association of Australia in AS2021-2000, Acoustics, Aircraft Noise Intrusion – Building Siting and Construction. A summary of these recommendations is provided in the table below.

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
Hotel, Motel, Hostel	Less than 25 ANEF	25-30 ANEF	Greater than 30 ANEF
School, University	Less than 20 ANEF (Note 1)	20 to 25 ANEF (Note 2)	Greater than 25 ANEF
Hospital, Nursing Home	Less than 20 ANEF (Note 1)	20-35 ANEF	Greater than 25 ANEF
Public Building	Less than 20 ANEF (Note 1)	20-30 ANEF	Greater than 30 ANEF
Commercial Building	Less than 25 ANEF	25-35 ANEF	Greater than 35 ANEF
Light Industrial	Less than 30 ANEF	30-40 ANEF	Greater than 40 ANEF
Other Industrial	Acceptable in all ANEF Zones		

Notes:

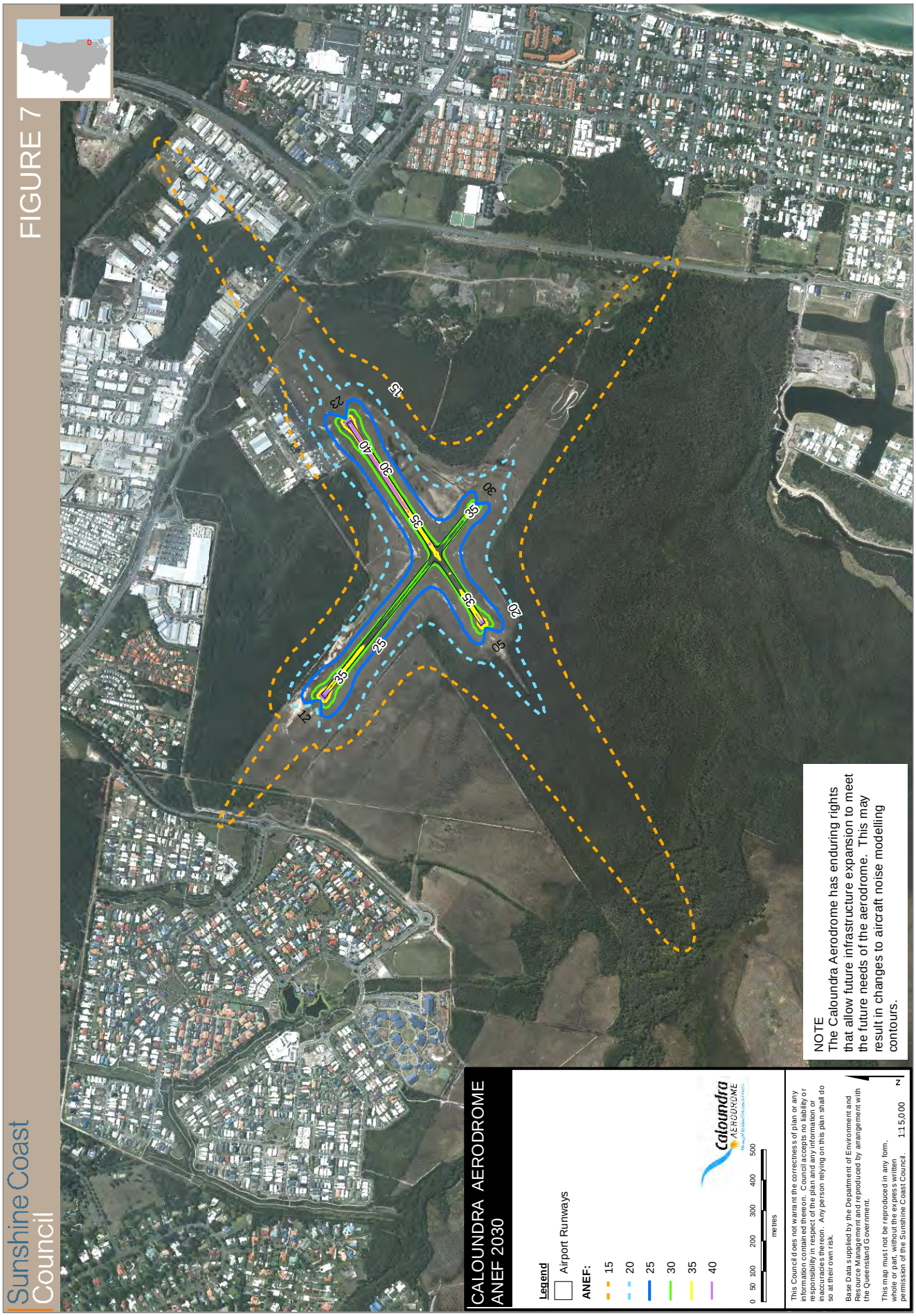
1. The actual location of the 20 ANEF contour is difficult to define accurately, mainly because of variation in aircraft flight paths. Because of this, the procedure of Clause 2.3.2 in AS2021 – 2000 may be followed for building sites outside but near to the 20 ANEF contour.
2. Within 20 ANEF to 25 ANEF, 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 (see also Figure A1 of Appendix A in AS2021 – 2000).

The Standard does not recommend development in unacceptable areas; however, where the relevant planning authority determines that any development may be necessary within existing built-up areas designated as unacceptable, it is recommended that such development should achieve the required ANR determined according to Clause 3.2 in AS2021 – 2000. For residences, schools etc., the effect of aircraft noise on outdoor areas associated with the building is not considered, under this standard.

In no case should new development take place in green field sites deemed unacceptable because such development may impact airport operations.

Council has prepared an ANEF diagram based upon the 2030 traffic forecast for the aerodrome, as illustrated in Figure 7.

FIGURE 7 - CALOUNDRA AERODROME ANEF 2030



9.3.3. INTEGRATED NOISE MANAGEMENT MODEL

While the ANEF system remains the noise impact measuring system referred to in State and Federal legislation, it is necessary to note that the ANEF is a tool designed to measure noise impacts of very noisy jet aircraft operation out of major airports. It is not a tool that can be relied upon to reflect the noise impacts of light aircraft or helicopters at regional aerodromes. This is recognised by the Federal Department of Infrastructure and Transport in their publications entitled:

- *Expanding Ways to Describe and Assess Aircraft Noise - March 2000; and*
- *Going Beyond Noise Contours – Local Approaches to Land Use Planning Around Smaller Australian Airports – October 2003*

A more accurate measure of the likely impact of aircraft noise on individual properties is provided via the preparation of an integrated noise management model calculated using a Transparent Noise Information Package (TNIP) for the aerodrome. This package developed by the Commonwealth Government calculates the number of noise events occurring at a locality that would exceed a specified noise level – typically 70 db when measured outside a dwelling. This gives an expected noise level of 60 db inside a typical non-noise attenuated dwelling.

The 60 db sound level is used as it reflects a level, beyond which normal conversation is interrupted.

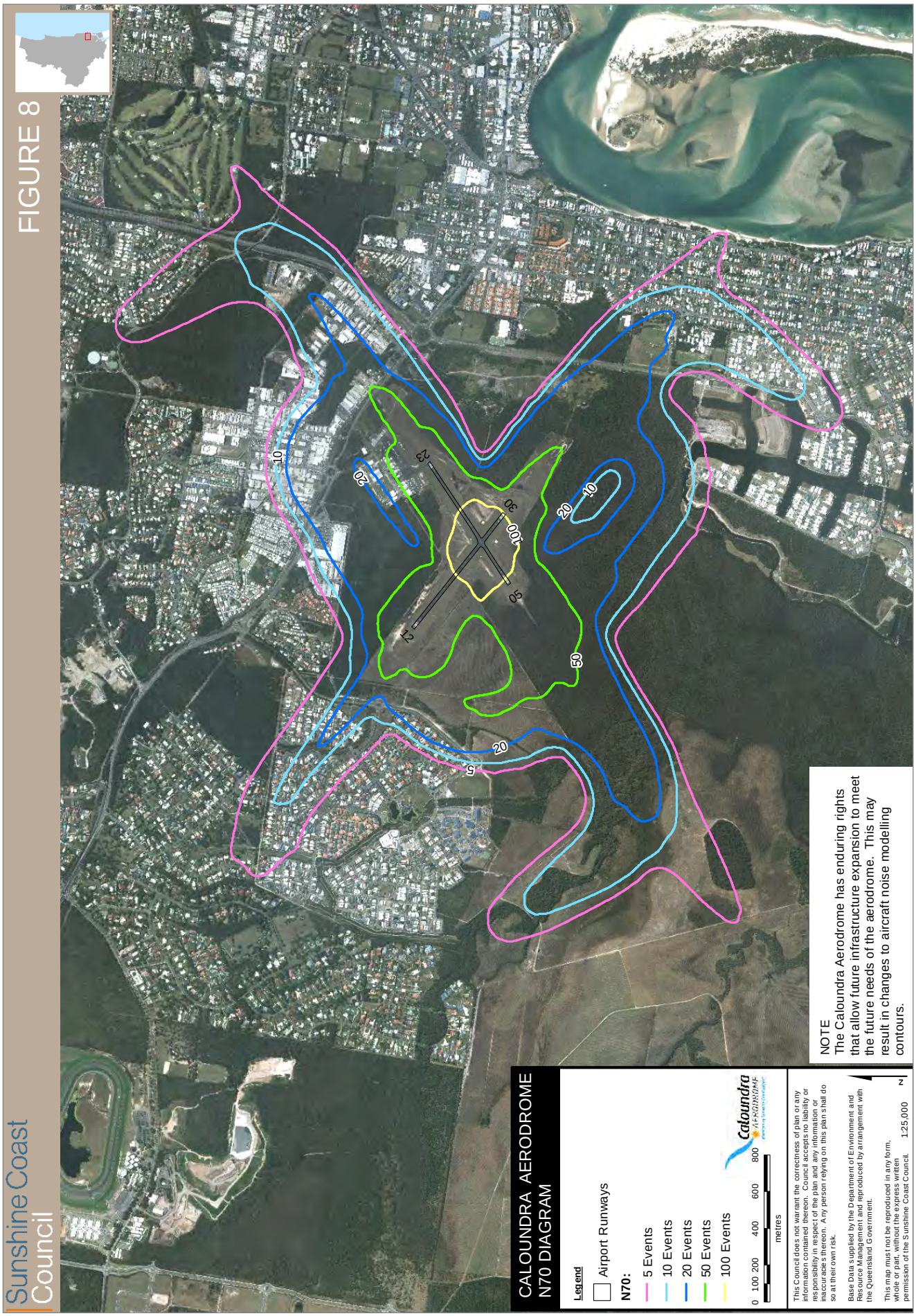
The TNIP model prepared for Caloundra Aerodrome as illustrated in Figure 8, indicates that the impact of aircraft noise will persist significantly beyond the ANEF 20 contour.

9.3.4. NOISE MODELLING ASSUMPTIONS

The assumptions used in the development of the ANEF and TNIP diagrams for Caloundra Aerodrome are:

- design aircraft – code 2B not exceeding 5700kg MTOW
- 84,000 aircraft movements per year
- limited turbo prop operations – maintenance/ferry/testing/charter only
- no regular public transport operations
- helicopter operations are 50% of all movements by 2030
- 330 flying days per year
- 254 movements per day
- 80% of movements are circuits

FIGURE 8 - CALOUNDRA AERODROME TNIP 2030 (N70)



Ground Running

Both the ANEF system and the TNIP model reference aircraft movements to arrive at noise forecasts; accordingly ground running of aircraft is not reflected in these noise models.

There will be noise generated by ground running associated with engine warm-ups, pre-flight and maintenance testing. It is noted that the majority of this activity will occur during 'business hours'.

Land Transport Impacts

The noise impact of land side transport/vehicular access to the aerodrome is very low – by virtue of both the relatively small volume of traffic entering the aerodrome, and the distance from Pathfinder Drive to any residential development.

Noise Management

The management response to the impact aircraft noise emanating from Caloundra Aerodrome will be:

- The continuation of the 'fly neighbourly policy'.
- Directing ground running and engine testing procedures to appropriate locations on the aerodrome.
- Under the Civil Aviation Act 1988 noise due to aircraft in flight, landing, taking off or taxiing is under the direct control of Airservices Australia (AsA). Any complaints received concerning aircraft movements are immediately directed to the responsible officer at Airservices Australia.
- Sunshine Coast Airport as the manager of the aerodrome will also continue to work with aerodrome operators to address noise complaints.
- The Caloundra Aerodrome Community and Aviation working group will continue to be convened and will enable an open dialogue on noise issues to occur between the aerodrome and the communities surrounding it.

It remains open to Council to consider the potential noise impacts of businesses seeking to commence operations at Caloundra within the leasing and/or subleasing process. Council will also seek the co-operation of the State Government with respect to the development of a satellite helicopter training area to reduce the noise impact of helicopter training circuits.

It must be recognised however, recent land use planning decisions made with respect to the Caloundra South Development Area will result in a substantial increase in the number of residents exposed to intrusive levels of aircraft noise in the future. Council will seek to ensure that all prospective purchasers and future residents are advised of the likely noise impacts of the aerodrome.

9.4. FLORA & FAUNA

The aerodrome is located in the middle to lower reaches of Lamerough Creek, about 4 kilometres upstream of the Pumicestone Passage. Much of the catchment of Lamerough Creek downstream of the aerodrome has been urbanised as the Pelican Waters residential area. Significant residential and rural residential development also exists upstream of the aerodrome at Bellvista and Little Mountain. The Caloundra South Urban Development Area will see the urbanisation of much of the remaining Lamerough Creek Catchment.

To the South, the aerodrome is bounded by undeveloped Crown land that would appear to be relatively undisturbed.

The aerodrome covers an area of approximately 145ha of which approximately 65ha is currently developed for aerodrome purposes. The remaining areas support a mixture of remnant and non-remnant vegetation.

Flora & Fauna Investigations and Findings

Flora and fauna investigations were carried out to define the current status of the aerodrome site with respect to vegetation communities and flora and fauna species of significance to both State and Commonwealth environmental protection legislation. The investigation included a review of relevant literature, State and Commonwealth databases and field inspections.

Particular attention has been given to those parts of the site that are considered important to the future development of the aerodrome.

Targeted Flora Investigations

After an initial site investigation, a more targeted examination of the Stage 1 expansion area was carried out. One flora species listed as near threatened under the *Nature Conservation Act* – 'Schoenus scabripes' was recorded. No further flora species listed under either State or Federal legislation was recorded. The development of the Stage 1 expansion area will require the approval of the Department of Environment and Heritage Protection (DEHP).

Targeted flora investigations have also been carried out with respect to museum expansion area. The investigation did not locate any threaten or near threatened plants in the area. It is noted that the development of the museum expansion area will require the approval of the DEHP and the DNRM.

Targeted Fauna Investigation

The initial site investigations identified two species of fauna listed under State or Commonwealth legislation on the aerodrome site (Wallum Froglet and Olongburra Frog).

The Wallum Froglet was the only species identified within the targeted Stage 1 expansion area. The development of this area will remove Wallum Froglet habitat and will require the approval of DEHP. A Species Management Plan has been prepared for consideration by DEHP, and consideration has been given to the identification of potential offsets sites to ensure compliance with the Queensland Biodiversity offsets policy.

The wallum froglet also been identified in the museum expansion site. Should this proposal proceed the habitat area affected will also need to be offset.

With appropriate management, the planned works are not expected to cause any long-term detrimental impacts to the future of Wallum Froglet populations within the broader Caloundra Aerodrome area.

Compliance with the Species Management Plan for Wallum Froglet will ensure that potential impacts to this species as a result of the planned works are minimised and appropriately mitigated.

9.5. GROUNDWATER

Council's investigations have referred to the Groundwater Resources of Queensland Map (1987) which indicates that the groundwater underlying the site is held within sedimentary strata (including sandstone, shale and conglomerate). The groundwater is suitable for most purposes but is marginal for human consumption and low salt tolerant crops.

Bore searches provided by the Queensland Department of Environment and Resources Management indicate that there are thirty one (31) registered groundwater wells within a 2km radius of the site. Standing water levels indicate that groundwater within the area is at shallow depths.

Council has received advice that registered groundwater bore information indicated there were no contaminants.

9.6. SURFACE WATER

The site is relatively low lying and, as discussed above, is located in the Lamerough Creek Catchment. Lamerough Creek itself does not flow through the site however there are a number of unnamed tributaries that drain the site.

Council's current flood layer which is being used in the preparation of the draft Sunshine Coast Planning Scheme has been received with respect to the aerodrome. This is provided in Figure 9.

FIGURE 9 - Q100 FLOOD EXTENT

Based on the available surface water information it is concluded that the bulk of the site, including all of the operation areas/assets remain flood free up to, and including, the Q100 storm event.

Discussions with Council's Infrastructure Policy Branch indicate that more recent flood modelling has been carried out with respect to the Lamerough Creek Catchment downstream of the aerodrome site.

The findings of this work relate primarily to the Pelican Waters area. The findings suggest that tail water effects of downstream flooding upon the aerodrome drainage network will need to be addressed in the detailed design phase for any new developments on the aerodrome.

Given the very limited extent of site coverage contemplated under the Master Plan and the location of any development above the Q100 level, it is unlikely that the aerodrome will have any flooding impacts upon other lands in the Lamerough Creek Catchment.

It will be important for Council to work with the State Government to ensure that any new urban development within the catchment of Lamerough Creek occurs without adversely impacting upon the flood immunity of the aerodrome site.

9.7. SOIL

The site is underlain by Triassic/Jurassic period Landsborough Sandstones consisting of sandstone, siltstone, shale, conglomerate, oolitic ironstone and coal.

Council's Acid Sulphate Soil Mapping indicates that much of the site is higher than 5m AHD, outside of the high risk areas for Acid Sulphate Soils. It is considered appropriate and consistent with State Planning Policy 2/02 "Planning and Managing Development involving Acid Sulphate Soils" however to maintain a precautionary approach to this issue, detailed soil investigations would be carried out before any new development is commenced on the aerodrome.

10 FUTURE DEVELOPMENT

10.1. OPERATIONAL NEED

The aerodrome traffic forecast predicts that general aviation movements at Caloundra will increase from a current level of approximately 40,000 movements per annum to in excess of 84,000 movements per annum.

Previous studies into South East Queensland aviation demand have identified that growth in aircraft maintenance, private and charter flying and flight training are the likely drivers of growth at Caloundra.

10.2. OPERATOR DEMAND

Uncertainty about the future of Caloundra Aerodrome has led business owners to defer decisions on major capital investment which has tempered the potential for growth of a number of businesses at the airport. Discussions with existing operators have confirmed their desire to expand their businesses if sufficient security of tenure were to be provided. Several of the businesses indicated that they would seek to double their current operating areas.

10.3. REGIONAL DEMAND

In addition to the "organic" growth in aviation activity at Caloundra, it is expected that demand within the South East Queensland region for aviation facilities will continue to grow.

It is apparent that a number of the existing South East Queensland general aviation aerodromes are under considerable pressure from a range of factors including, urban encroachment and, airspace changes arising from the new parallel runway at Brisbane Airport.

Despite being subjected to the encroachment of urban development, Caloundra, by virtue of its existing infrastructure and scope to expand its aviation business areas, is well placed to cater for regional growth in the general aviation sector.

It is therefore proposed that an additional aviation business area and associated apron be developed as a first stage of the aerodrome Master Plan.

10.4. FUTURE DEVELOPMENT AREA

During Council's investigations and planning in relation to the former CalToc proposal, demand for a range of potential business-orientated land uses within the aerodrome's locality was established. Further, Council's Economic Development Officers have indicated that a demand for land to support 'high-end manufacturing' purposes, (businesses that require spaces comprising a mix of corporate offices/boardrooms accompanied by large span industrial buildings) exists within the locality of the aerodrome.

These activities are appropriate land uses in the vicinity of an aerodrome and were contemplated within the Caltoc proposal. They would provide an additional revenue stream to support the aerodrome aviation activities.

Meeting the demand for commercial and industrial land availability within the Caloundra locality has the potential to create a more balanced revenue stream to off-set the sometimes variable revenue received from aeronautical activity.

Given the costs in maintaining Caloundra Aerodrome, expanding leased land for such purposes, without compromising the utilisation of the site as an operating aerodrome, will contribute to insulating the aerodrome from external influences affecting aircraft activities.

Preliminary investigations indicate than an area of approximately 9.5 hectares might be available for such purposes in the south eastern corner of the site subject to:

- confirmation that the area was not required for aviation purposes
- detailed consideration of Council's broader land use strategy, particularly as it relates to the hierarchy of centres
- flooding/stormwater analysis, and
- flora and fauna considerations

This part of the site would also be well placed to be serviced by public transport on the CAMCOS corridor should it eventuate.

10.5. EXPANSION OF QUEENSLAND AIR MUSUEUM

Discussions with Queensland Air Museum during the preparation of the Master Plan suggest that the potential exists to significantly expand the activities of the Museum to include improved displays, on site carparking, educational and function room facilities

The opportunity for the Museum to expand within the aerodrome boundary is constrained by existing leases and development. It is proposed therefore to explore the possibility of a 'land swap' with the adjacent Council reserve and unallocated crown land to provide additional land for the Museum, as indicated on Figure 10.

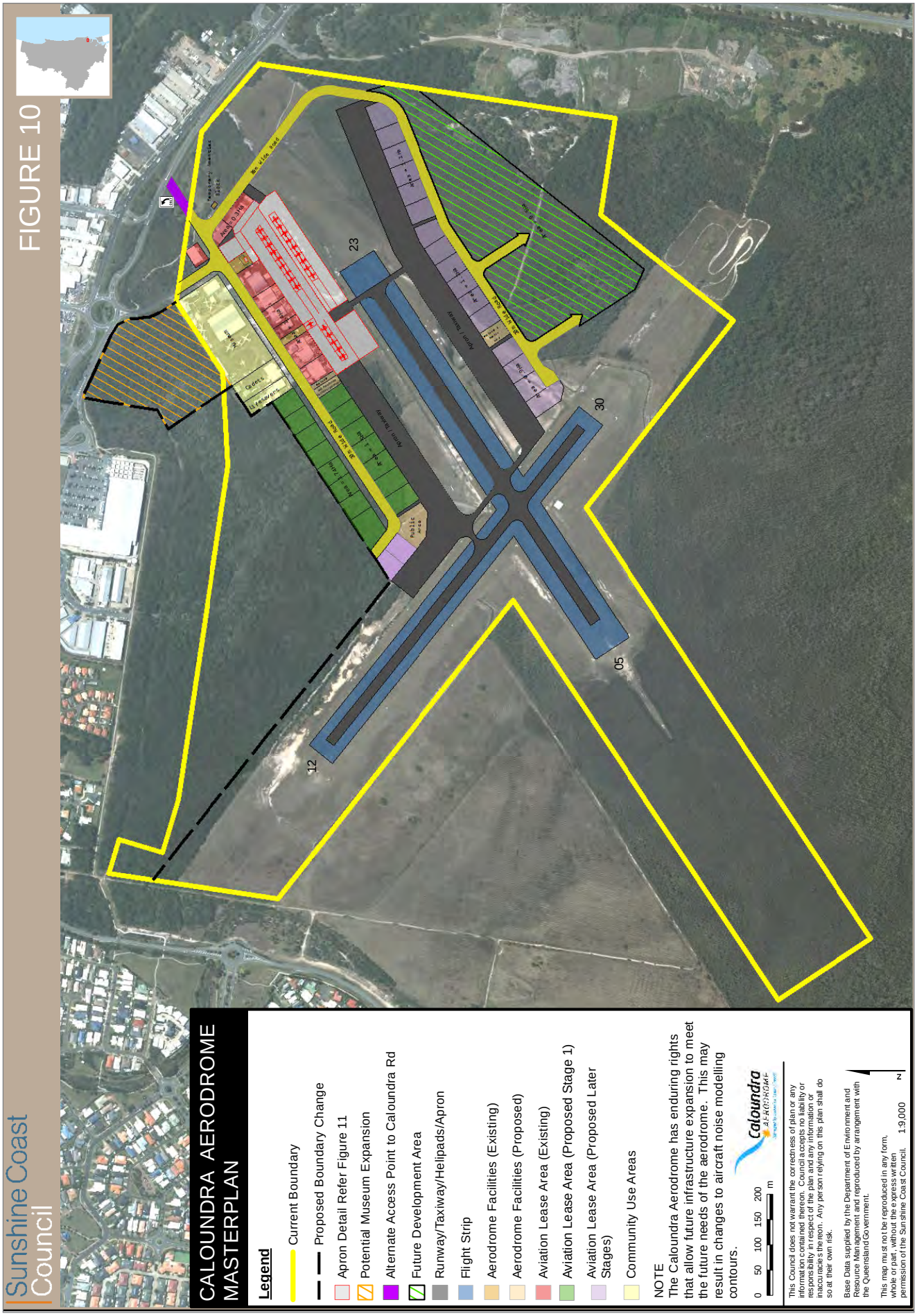
10.6. MASTER PLAN

A layout showing the 2032 Master Plan for Caloundra Aerodrome is shown at Figure 10.

Key Features of the Master Plan are:

- expansion of the aviation lease areas – a potential expansion of up to 6.9 hectares has been identified.
- expansion of the apron (with apron edge taxiway) in stages to coincide with the expansion of the aviation lease areas.
- expansion and sealing of the existing grass apron (see Figure 11).
- reconfiguration of the existing apron ensuring compliance with CASR (see Figure 11).
- reconfiguration of the existing public carpark and amenities to facilitate the towing of aircraft between the apron and the Queensland Air Museum.
- expansion of the Queensland Air Museum site.
- the construction of a helipad, engine run-up bays and compass swing area (see Figure 11).
- identification of a future site for public carparking, amenities and viewing area.
- the extension of both Pathfinder Drive and Henebery Place as required to provide access to the expanded business areas.
- the identification of a potential future development area of approximately 9.5 hectares.
- the establishment of a left in/left out access point to Caloundra Road as an emergency alternative to the present Pathfinder Drive access.

FIGURE 10 - CALOUNDRA AERODROME MASTER PLAN


Sunshine Coast Council
FIGURE 10
CALOUNDRA AERODROME MASTERPLAN
Legend
Current Boundary
Proposed Boundary Change
Apron Detail Refer Figure 11
Potential Museum Expansion
Alternate Access Point to Caloundra Rd
Future Development Area
Runway/Taxiway/Helipads/Apron
Flight Strip
Aerodrome Facilities (Existing)
Aerodrome Facilities (Proposed)
Aviation Lease Area (Existing)
Aviation Lease Area (Proposed Stage 1)
Aviation Lease Area (Proposed Later Stages)
Community Use Areas
NOTE
The Caloundra Aerodrome has enduring rights that allow future infrastructure expansion to meet the future needs of the aerodrome. This may result in changes to aircraft noise modelling contours.
0 50 100 150 200 m
Caloundra AERODROME
This Council does not warrant the correctness of plan or any information contained thereon. Council accepts no liability or responsibility in respect of the plan and any information or inaccuracies thereon. Any person relying on this plan shall do so at their own risk.
Base Data supplied by the Department of Environment and Resource Management and reproduced by arrangement with the Queensland Government.
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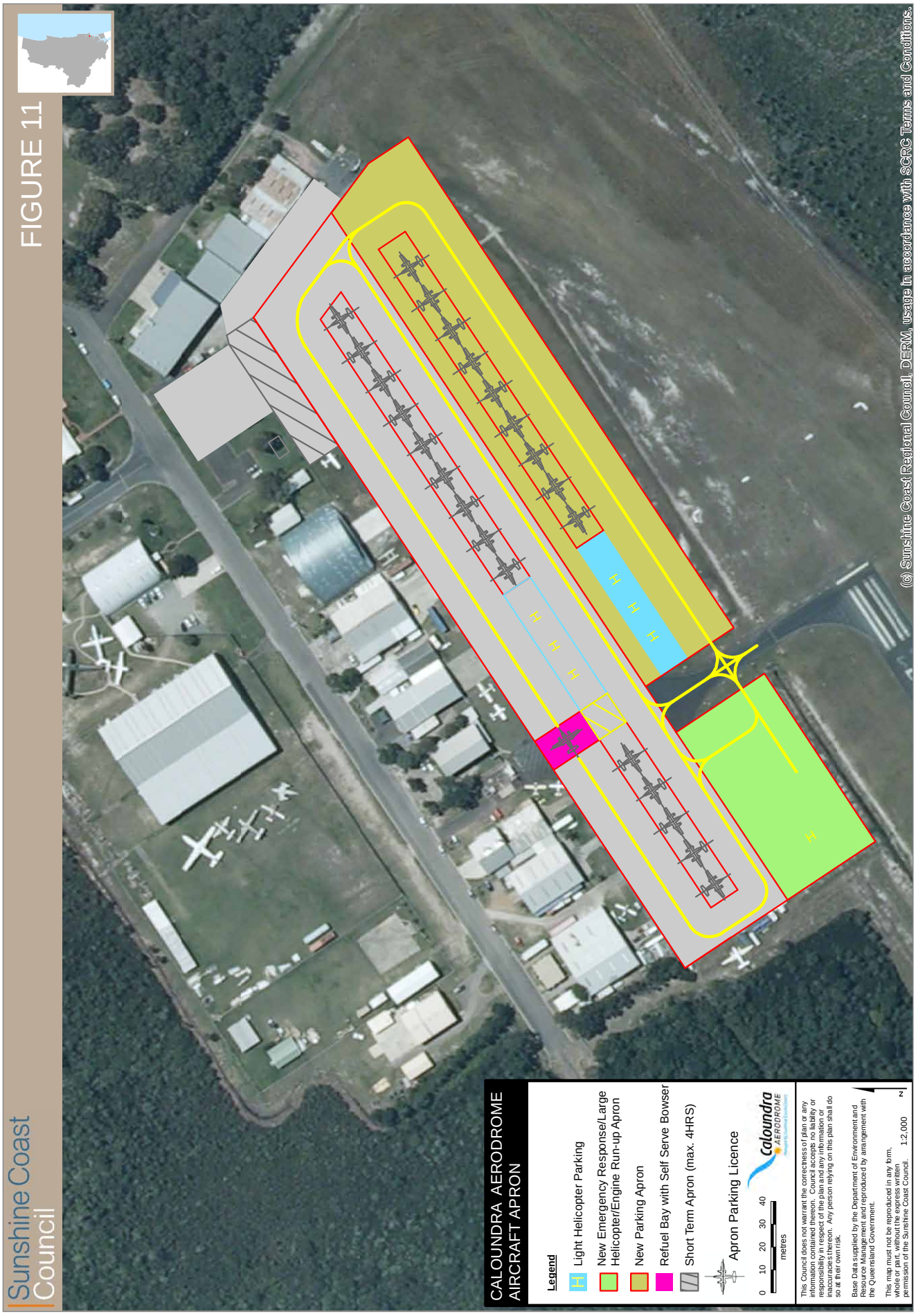
1:9,000
N
12
23
30
05
Apron / Taxiway
Public Area
Cadets
Lifesavers
Temporary Hangars
Bellvista Road
Aero Club Site
Aero Club Site
Aero Club Site

FIGURE 11 - CALOUNDRA AERODROME AIRCRAFT APRON



11 IMPLEMENTATION

The implementation of the elements of Stage 1 will occur over a period of 1 to 5 years following the adoption of this Master Plan by Council.

The implementation of future stages of the Master Plan will be dependant upon demand. It is anticipated that the Stage 1 expansion of the aviation business area will meet needs in the short term. The test of demand will occur via the public tendering process for the Stage 1 expansion area.

11.1. STAGE 1 (YEARS 1-5)

The key elements of Stage 1 are:

- The creation of 3 hectares of new aviation business area

  This expansion will occur in a southerly direction accompanied by an extension of Pathfinder Drive and an extension of the general aviation apron. The expanded business area will provide for seven 2000m² airside aviation business lease sites and eight 2000m² landside aviation business lease sites. Subject to confirmation of commercial interest and the necessary approvals, it is proposed that this land be available for aviation business development by late 2014.

- Reconfiguration of the existing sealed apron
- The development of heavy helicopter landing pad, compass swing area and engine run-up bay adjacent to the taxiway to the 23 runway end
- Expansion and conversion of the existing grass apron to a sealed surface
- Establishment of a left in/left out emergency road access point to Caloundra Road

All capital works projects will be the subject of a business case and detailed financial consideration by Council before proceeding.

Other elements

Other elements not necessarily associated with land use planning but scheduled to be completed as part of the Stage 1 development of the aerodrome are:

- preparation of an Environmental Management Plan for the aerodrome;
- the establishment of an Aerodrome Consultative Committee, and.
- Preparation of development guidelines for an aerodrome development.

11.2. INTERNAL PLANNING/APPROVALS PROCESS

Development for aviation related purposes within the aerodrome is currently 'exempt' development under the *Caloundra City Plan,* i.e. development for aviation business purposes do not require the prior approval by Council of a development application. Under the draft Sunshine Coast Planning Scheme aviation development on the aerodrome would require the submission of development applications. Discussions with Council's Strategic Planning Branch indicate that this situation is yet to be resolved and it may be that the finalised planning scheme reverts to the current planning situation dependent upon the outcome of planning scheme negotiations with the State Government. Regardless of the final outcome with respect to the need for development applications, a development guideline will be prepared to ensure that development on the aerodrome is consistent with Council's expectations with respect to design, visual impact, water sensitive urban design, energy efficiency and traffic management.

11.2.1. COST ESTIMATES

The table below provides an estimate of the cost to implement the elements of Stage 1 of the Master Plan. The cost estimates are preliminary only and will be refined as part of the business case development and, design and procurement processes.

Element	Description	Estimated Cost
1	Stage 1 business area, apron, taxiway	$5,000,000
2	Reconfiguration of existing apron	$155,000
3	Expansion and sealing of grass apron	$310,000
4	Emergency access to Caloundra Road	$100,000
5	Establish consultative committee	N/A
6	Construction of run-up bay, heavy helipad and compass swing area	$450,000
7	Environmental Strategy	$50,000

12 STAKEHOLDER CONSULTATION

In relation to the development of this Master Plan, the following stakeholders have been consulted as interested parties:

- SCC Councillors and Executive
- Queensland Government
- Sunshine Coast Airport as the Manager of Caloundra Aerodrome
- Lessees of Caloundra Aerodrome
- Businesses operating out of Caloundra Aerodrome
- Local Business and Industry Groups
- Community Groups
- Moreton Bay Regional Council
- Relevant Commonwealth Government agencies

The draft Master Plan was publicly exhibited for a period of 30 business days in late 2012. A total of 34 written submissions were received in response to the exhibition. The submissions and the feedback received at the three information displays held at the local markets and shopping centres have shaped the final Master Plan.

To progress the ongoing implementation of the Master Plan and the operation of the aerodrome it is proposed to form an Aerodrome Consultative Committee. The committee will consist of aerodrome leaseholders and business operators and the management team members from Sunshine Coast Airport.

The role of the committee will be to provide an avenue for ongoing dialogue between the parties most interested in the operation of the aerodrome on matters such as:

- Master Plan implementation
- aerodrome safety and security
- environmental sustainability
- business development; and
- any other matters that may arise

It is proposed to continue to engage with the local community via the Caloundra Aerodrome Community Forum with respect to the development and ongoing operation of the aerodrome.

APPENDIX A – REFERENCES

29 June 1992	The Caloundra Aerodrome Deed
November 1997	Caloundra Aerodrome Management Plan
30 June 1999	Caloundra Aerodrome Land Use Study – prepared by GHD – Old Caloundra Council File no. 446 002 000
September 2000	SEQ General Aviation Needs & Opportunities Study Information paper – Qld Transport report prepared by Economic Associates & Aerodrome Operations Support
2001	Queensland Aviation Strategy 2001 and Queensland Aerospace Industry Development Plan 2001 – Queensland Government
2004	Caloundra City Plan 2004
April 2005	Caloundra Aerodrome Investigation – Background Report (Caloundra City Council)
2007	Review of the State of the GA Sector in SEQ – prepared by Rehbein AOS
November 2008	Department of Infrastructure and Planning – Replacement Aerodrome Study for Caloundra Aerodrome – Draft Report for Phases One – Stages 1 and 2 – draft prepared by GHD
2008	BTRE Report – General Aviation Activity 2008
2009	Sunshine Coast Council Corporate Plan 2009
2009	SEQ Regional Plan – Department Local Government & Planning 2009
December 2009	Commonwealth Government Aviation White Paper – Chapter 3 – General Aviation
2010	Sunshine Coast Council Economic Development Strategy 2010
2010 – 2012	Caloundra South Structure Plans/Master Plans and Development applications – Urban Land Development Authority and Stockland
April 2011	Caloundra Aerodrome – Threatened Flora and Fauna Assessment
June 2011	Caloundra Aerodrome Safety/Compliance Risk Assessment – Aviation Projects
July 2011	Environmental Assessment Report Caloundra Aerodrome, WSP
August 2011	Caloundra Aerodrome – Economic Contribution - PWC
December 2011	Environment – Flora Species Survey – Caloundra Aerodrome Biodiversity Assessment & Management
December 2011	Species Management Plan Crinia Tinnula – Caloundra Aerodrome – Biodiversity Assessment and Management
March 2012	Report for 2030 Aircraft Movement Forecast – Caloundra Aerodrome
2012	BTRE Report – General Aviation Activity 2011