1. NARROMINE AERODROME STRATEGIC AND MASTER PLAN 2019

Author	Director Community and Economic Development
Responsible Officer	Director Community and Economic Development, Manager Waste and Community Facilities
Link to Strategic Plans	CSP – 2.2.03.02 Update/ Review Aerodrome Strategic Master Plan CSP – 3.5.05.02 Maintain the Narromine aerodrome facility to meet reasonable user expectations and CASA requirements within the allocated budget

Executive Summary

This report provides Council with the final Narromine Aerodrome Strategic and Masterplan 2019 for consideration following the adoption of the draft plan at the November 2019 Council meeting and after the consideration of community consultation.

Report

Action 2.2.3.2 of Council's Delivery program is to update/review the Narromine Aerodrome Strategic Master Plan. The Plan forms the basis for the development and management of the Aerodrome over the next 25 years.

The Master Plan proposes suitable land uses for an area, based on planning and environmental constraints. The Strategic Plan is a more illustrative version of the land use plan, which also identifies infrastructure works and stages for development. Staff have now revised the document (***see Attachment No. 1***) to include an updated action list reflecting works completed over the previous 5 years, as well as specific actions identified in Council's Community Strategic Plan 2027.

The draft plan was exhibited from the 20th of November 2019 to the 18th of December 2019. During this time two submissions were received via email and a meeting with aerodrome users was held to discuss the plan. The feedback from those discussions has been incorporated into the plan. An outline of the submissions can be seen below.

1. NARROMINE AERODROME STRATEGIC AND MASTER PLAN 2019 (Cont'd)

Summary of submission issue	Response
Information was shared that provided a background on the formation of the Museum and the development of the building.	This additional information has been noted as background to the strategic document.
Outlining that some of the historic knowledge of the aerodrome is flawed.	This additional information has been noted as background to the strategic document.
Ensuring that the development of the 'Skypark' and its growth will not mean the demise of the aerodrome.	This is noted and any future residential development will require further extensive consultation in regards to the benefits and costs.
Ensuring that it is clearly outlined that any previous contamination of the aerodrome has been rehabilitated.	This is noted within the strategic plan.
Ensuring that there is oversight of the document by someone qualified in flight operations.	This concern is noted. Technical requirements are approved/ overseen by technical experts.
References to ensuring that the primary use of the aerodrome was acknowledged and that airside development was considered along with other uses.	This is acknowledged and this point has been expanded in the strategic plan.
Consideration for acknowledging the significant economic benefit of the aerodrome to the community.	Additional work on this point is required. This is an action for the Strategic Plan and will require some additional financial resources. It would assist in the future development of the aerodrome to model the positive economic and social benefits of the aerodrome.
Improving the technical specifications listed in the Plan.	Some additional detail has been added to the Strategic document however this detail is documented with Air services Australia and the En Route Supplement Australia (ERSA)

Financial Implications

The Narromine Aerodrome Strategic and Master Plan provides the long-term direction for the development and operation of the Aerodrome. Council's Long Term Financial Plan and Asset Management Plan identify the Aerodrome's service standards and long term projects of asset maintenance, rehabilitation and replacement costs.

1. NARROMINE AERODROME STRATEGIC AND MASTER PLAN 2019 (Cont'd)

Legal and Regulatory Compliance

Local Government Act 1993
Civil Aviation Legislation and Regulations
Narromine Local Environmental Plan 2011
Environmental Planning and Assessment Act 1979
Development Control Plan 2011

The Narromine Aerodrome Strategic and Master Plan 2019 should be reviewed again prior to the end of the next term of Council in 2024.

Risk Management Issues

Compliance with regulatory requirements. The Plan should be directly linked to Council's Community Strategic Plan 2027.

Internal/External Consultation

Initial consultation with known stakeholders of aerodrome was undertaken.

The draft strategic plan has been placed on public exhibition for a period of 28 days. A meeting to discuss the Aerodrome Master Plan was undertaken between Narromine Shire Council and aerodrome stakeholders.

Attachments

- Narromine Aerodrome Strategic and Master Plan 2019 (Attachment No. 1)

RECOMMENDATION

That suggested changes to the draft Narromine Aerodrome Strategic and Master Plan 2019 be accepted and the final plan adopted.

2. DRAFT SECTION 7.11 CONTRIBUTIONS PLAN 2020 – HEAVY VEHICLES

Author	Director Community and Economic Development
Responsible Officer	Director Community and Economic Development
Link to Strategic Plans	CSP – 3.3.2 – Ensure development needs align to utilities infrastructure

Executive Summary

The purpose of this report is to inform Council of the outcome of the public exhibition of the Draft Section 7.11 Contributions Plan 2020 - Heavy Vehicles and to recommend Council adoption.

Report
Background

At the Council meeting held 13 November 2019, Council resolved to place the draft Section 7.11 Contributions Plan – Heavy Vehicles on public exhibition for a period of 28 days in accordance with the Environmental Planning and Assessment Regulations 2000 and to notify all known quarry operators of the draft Plan.

Discussion

The Draft Plan was placed on public exhibition from the 22 November 2019 until 20 December 2019. During the exhibition period, one submission was received. No items arose from the submission that requires re-exhibition of the draft Plan or prevents the draft Plan from being adopted by Council. The issues and questions raised in the submission are summarised and addressed in the following tables and include proposed changes to the draft Plan.

2. DRAFT SECTION 7.11 CONTRIBUTIONS PLAN 2020 – HEAVY VEHICLES (Cont'd)

Issue No.	Issue	Council Comment/Change
1	*Do the contributions received go directly back into the road?*	The Plan identifies the monetary contribution required for the maintenance of roads. The contribution amount payable, as prescribed by the plan, will be directed into the maintenance of the approved haulage routes associated with the approved use.
2	*How did the council come up with the calculation of the operator/council split of 40/60 proportion of cost?*	In recognition of the economic benefits of extractive and mining industries, Councillors have resolved to adjust the contribution such that the operator is levied 40% of the calculated contribution, with Council meeting the remaining 60% of the additional road maintenance costs.
3	*Will already approved Development Applications be subject to the Plan?*	The rates in this Plan will not apply to development applications that were determined prior to the adoption of this Plan. Applications approved prior to the adoption of this Plan are bound by their conditions of consent that were issued at the time of approval which may or may not nominate a contribution rate.
4	*In regards to a development being under 5km from the nearest state road. We believe it is unjustified to charge the operator the minimum 5km opposed to the actual distance travelled.*	To simplify the Plan, it is proposed to remove the 5 km minimum aspect from the Plan and to include the actual distance travelled in the calculation. (up to a maximum amount of 15Km).
5	*How can Council justify the plan on roads that are already heavily trafficked?*	Future heavy vehicle generating developments will increase the existing traffic volumes on local roads. The Plan will provide Council with the ability to fund the increased road maintenance costs associated with heavy vehicle generating developments.
6	*Adding a levy to any business in this current climate and future developments going forward will be unwelcome as this extra cost will have to be passed on to the consumer.*	A heavy vehicle generating development such as an extractive industry increases the number of heavy vehicles using a road and will accelerate the deterioration of a road, leading to increased road maintenance costs being incurred by Council.

Issue No.	Issue	Council Comment/Change
		These increased costs will burden the community with providing the increased funds required by Council to maintain the existing level of service for the road network as a result of the development unless a contribution commensurate with the increased maintenance costs is made. In recognition of the economic benefits of extractive and mining industries, Councillors have resolved to adjust the contribution such that the operator is levied only 40% of the calculated contribution, with Council meeting the remaining 60% of the additional road maintenance costs.

Minor Amendments

The minor changes to the Plan are summarised as follows:

Change No.	Change	Page No.	Council Comment
1	Document title	Throughout	Title of the document changed to reflect the year of intended adoption being 2020.
2	Removal of minimum contribution requirements for developments located within 5 km of the nearest State road.	21	To simplify the Plan to use the actual distance from the development to the nearest State road. (to a maximum of 15Km.
3	Removal of *Example 1* of the less complex method	22	Removed concurrently with the reasoning for change No 2.

Implementation

If adopted, the Plan will come into effect on 19 February 2020. All development applications and Complying Development Applications that satisfy the relevant criteria and are lodged on or after this date will be subject to the provisions of this Plan.

A development application which has been submitted prior to the adoption of this Plan but not determined will be determined in accordance with the provisions of the Plan which applied at the date of determination of the application.

2. DRAFT SECTION 7.11 CONTRIBUTIONS PLAN 2020 – HEAVY VEHICLES (Cont'd)

Financial Implications

The adoption of the Plan will have a positive financial impact on Council as it will provide Council with the ability to fund road maintenance costs incurred as a direct result of the operation of heavy vehicle generating developments, rather than seeking an alternative funding source.

Legal and Regulatory Compliance

- *Environmental Planning & Assessment Act 1979*
- *Environmental Planning & Assessment Regulation 2000*
- Department of Planning & Environment Practice Notes 2005
- Ministerial Directions (Local Infrastructure Contributions)

Risk Management Issues

If Council does not adopt a contribution plan, it will need to fund road maintenance required as a result of heavy vehicle generating developments from another source.

There is a lack of transparency associated with relying on only voluntary planning agreements to fund road maintenance as they are negotiated on a case by case basis.

Consultation

An advertisement was placed in the local paper and the draft Plan was placed on exhibition from 22 November 2019 to 20 December 2019 on the Narromine Shire Council website and also Narromine Shire Council offices, in accordance with Clause 26 of the *Environmental Planning and Assessment Regulations 2000*.

The next stage in the formal adoption of the Narromine Shire Council Section 7.11 Contributions Plan 2020 – Heavy Vehicles as per the *Environmental Planning and Assessment Regulation 2000* requires Council to give public notice of its decision in a local newspaper within 28 days after the decision is made. Should Council not adopt the Plan, notice of its decision not to proceed must include Council's reason for the decision.

A contribution plan comes into effect on the date that the public notice of its approval is given in a local newspaper or on a later date specified in the notice. Subject to the adoption of the Contributions Plan by Council, public notice of Council's decision would be made in the local newspaper on 19 February 2020.

Attachments

Attachment 2 - Draft Narromine Shire Council 7.11 Contributions Plan 2020 – Heavy Vehicles

2. DRAFT SECTION 7.11 CONTRIBUTIONS PLAN 2020 – HEAVY VEHICLES (Cont'd)

RECOMMENDATION

That Council:

1. Adopts the amended draft Section 7.11 Contributions Plan – Heavy Vehicles 2020.

2. A public notice be placed in the local newspaper in accordance with Clause 31(4) of the Environmental Planning and Assessment Regulation 2000 notifying the public that the Section 7.11 Contributions Plan – Heavy Vehicles will come into force on the date that the notice is published.

3. TRANSFER PORTION GENANAGIE STREET, TOMINGLEY

Author	Director Community and Economic Development
Responsible Officer	Director Community and Economic Development
Link to Strategic Plans	CSP – 3.3.2 – Ensure development needs align to utilities infrastructure

Executive Summary

This report is presented to Council to consider the transfer of the subject portion of Crown Road (part Genanagie Street, Tomingley) under Section 151 of the Roads Act 1993.

Report

Crown Lands have advised Council that their records indicate that Genanagie Street Tomingley is registered as Crown Land. It is proposed to transfer the portion of Genanagie Street from its intersection with Budgeree Street and an unnamed road as per the below figure, from Crown Lands to Council.

3. TRANSFER PORTION GENANAGIE STREET, TOMINGLEY (Cont'd)

Council has control and maintains the truck parking area behind Lot 4. Genanagie Street which is currently an unformed road that runs north-south behind the truck stop and the site of a future highway service centre which will depend on Genanagie Street as an alternate access to the Newell Highway.

It is considered to be in Council's interest to have the highlighted portion of the Crown Road transferred to allow for Council, as the roads authority, to formalise and seal Genangie Street from the truck parking area and future highway service centre. The formalisation of Genanagie Street is in the public interest as it provides an alternate access from the Newell Highway to the future highway service centre whilst simultaneously improving the safety and access arrangements to those lots that have direct access onto Genanagie Street.

At Council's written request, Crown Lands can transfer the portion of Crown Road (highlighted green) to Council via gazette.

3. TRANSFER PORTION GENANAGIE STREET, TOMINGLEY (Cont'd)

Financial Implications

Any traffic generating developments that will depend on the use of Genanagie Street will need to be managed by Council via conditions of consent.

Council will be borne with the maintenance cost of the road. It is a condition of the development consent that the road is built at the developer's expense to Council's standard.

Legal and Regulatory Compliance

Section 151 of the Roads Act 1993, states that the Minister may, by order published in the Gazette, transfer a specified Crown road to another roads authority. On the publication of the order, the road ceases to be a Crown Road. If the road has been provided in a subdivision of Crown land, the official plans of survey showing the road adjacent to the land subdivided or measured are evidence of the width, extent and position of the road.

Section 152 of the Road Act 1993, states that the transfer of the ownership of a public road does not confer any right to compensation on the person from whom the land is transferred. This does not apply to land that is acquired by agreement or by compulsory acquisition.

Section 377(1)(h) of the Local Government Act 1993 states that Council cannot delegate the compulsory acquisition, purchase, sale, exchange or surrender of any land.

Risk Management Issues

Transfer of the road allows for administrative arrangements to formally rest with the appropriate road authority. In this instance the road will become part of Council's road network.

Transfer of the road to Council will preserve the road for current and future access needs. Council will however be responsible for managing incremental traffic-increasing developments and associated maintenance costs.

RECOMMENDATION

That Council formally agrees to the transfer of the subject Crown Road (part Genanagie Street Tomingley) to Council in accordance with Section 151 of the Roads Act 1993.

Phil Johnston
Director Community and Economic Development

Narromine
SHIRE COUNCIL

NARROMINE AERODROME STRATEGIC & MASTER PLAN

NOVEMBER 2019

AERODROME MASTER PLAN

Narromine Shire Council (2019) Revision History

Date	Version	Auth.
November 2015	1.0	Manager Planning
2nd August 2019	2.0	Director Community and Economic Development

Contents

Executive Summary

This document is known as the Narromine Aerodrome Strategic and Master Plan which will form the basis for development and management of the Aerodrome over the next 25 years. The Plan should be reviewed every 5 years and amended if necessary. The previous revision of the plan was in 2015. That document is the basis for this revision.

A Master Plan proposes suitable land uses for an area, based on planning and environmental constraints. A Strategic Plan is a more illustrative version of a land use plan, which also identifies infrastructure works and stages for development. The outcomes are divided into short, medium and long-term time frames.

This project aims to provide further strategic direction for the Narromine Aerodrome based on the history and potential of the site. The data and recommendations from these plans is intended to feed into Councils Integrated Planning and Reporting documentation as well as development controls and planning policies.

Purpose of the Plan

The purpose of the Strategic and Master Plan is to provide long- term direction for the development and operation of the Aerodrome.

The Narromine Aerodrome Strategic and Master Plan aims to:

1. Investigate options for short, medium and long-term development on the Aerodrome.
2. Identify and assess the planning constraints surrounding the development.
3. Provide recommendations on potential development areas, desired development types and development control measures for the area to ensure the long term viability of the site and to ensure it best serves the community.
4. Provide the nexus between Council's strategic direction and the local Economic Development Group to facilitate economic growth in the Narromine Local Government Area.
5. Assist Council in determining the level of service needed to support and grow the site.

Relationship with other Plans

This Plan provides the strategic framework for the development of the Narromine Aerodrome as well as forming a basis for the Asset Management Plan for the Narromine Aerodrome and fulfils requirements 2.2.1, 2.2.2 and 3.5.2 of Councils Community Strategic Plan.

Background

There has been extensive consultation into previous reports and strategic planning in regards to the Narromine Aerodrome. These documents developed in 1995 (reviewed 2004) and 2009 helped to inform the 2015 strategic plan and now the 2019 revision.

Much of the strategy outlined in the 1995 document has been used to guide development since.

Consultation

In terms of consultation, this study aimed to engage not only the current aerodrome users, but also:

- Adjoining land owners
- Business owners (both within and out of Narromine)
- Council's Infrastructure and Engineering Department and MANEX
- The wider Narromine Shire community

Comment has been sought in the drafting process for this revision with several comments received. These have been incorporated in this ~~draft. Once the draft is accepted by Council the document will again be circulated for comment, prior to final adoption.~~document.

Council would like to thank the parties involved in the discussion and consultation process for their input.

Regional Characteristics

From the Narromine Shire Community Strategic Plan:

Narromine, known as the "Gliding Capital of Australia", is considered to be the best gliding area in Australia, and one of the three best in the world. With beautiful weather and thermals, along with no airspace restrictions, pilots from around the world visit regularly to participate in recreational flying, gliding and to take part in the National and State Gliding Championships.

The aerodrome is also utilised each year to host the 'Ausfly' event which is a national fly in for general aviation and has recently hosted both the State and National aerobatic championships.

The 2022~~1~~ World Gliding Championships will be held at the Narromine Aerodrome.

Current Position

Site Location and Zoning (Ref Appendix 1)

From the Narromine Shire Community Strategic Plan:

> *"Located in the heart of New South Wales between Dubbo and Nyngan, Narromine Shire covers an area of 5,224km2 with a population of 6550, living in three urban centres of Narromine (3500), Trangie (1000) and Tomingley (50) as well as the surrounding rural areas. The aerodrome is 225 metres above sea level.*

The Aerodrome is located on the North Western edge of Narromine and is zoned SP2 Infrastructure – Aerodrome. The site occupies 322.3 hectares and is surrounded by agricultural, recreational and residential land uses.

> *The Objectives of the SP2 Infrastructure Zoning (Narromine LEP, 2011) are:*
>
> *To provide for infrastructure and related uses.*
>
> *To prevent development that is not compatible with or that may detract from the provision of infrastructure.*

Economic Environment

As stated in the Aerodrome Asset Management Plan (2019), Council's goal in managing infrastructure assets is to "meet the required level of service in the most cost effective manner for present and future users". The strategic objectives of the Asset Management Plan are to:

1. Provide aerodrome services to a standard that supports the outcomes identified in the Council Community Strategic Plan;

2. Ensure that infrastructure is maintained at a safe and functional standard, as set out in the Asset Management Plan;

3. Ensure that aerodrome infrastructure assets are managed to deliver the requirements of Council's Asset Management Policy and Strategic Asset Management Plan.

The primary income collected from the site is from leases on Council buildings, rates and land sales from the Skypark development.

The primary expenses attributed to the aerodrome are due to the maintenance and operation of the site. These expenses total approximately $169,000 per year. This figure does not include capital works or depreciation.

Current funding commitments are for the purposes of the maintenance, renewal and upgrade of tarmac, hangars and aerodrome buildings, the resealing and remarking of runways and installation of groundwater monitoring equipment at the fuel bowsers.

The Aerodrome Asset Management Plan (2019) estimates the Narromine Aerodrome has a fair value of $15.6 million. (calculated at June 2016).

The Aerodrome and the operations at the aerodrome make a significant contribution towards the economic well being of the Narromine Shire. The aerodrome now hosts the tourist information centre and hosts a number of significant events each year. The Aerodrome hosts and enables many businesses in the area who use the facilities for business, storage of aircraft and recreation amongst other pursuits.

The Aerodrome provides a significant opportunity for growth of the regions Gross Regional Product and will be important into the future as it provides increase industrial and residential opportunities.

A Brief History of the Narromine Aerodrome

The Narromine aerodrome has seen many changes over the years. Formed as an airstrip in 1919, the Narromine aerodrome became the home of the first regional Aero Club in Australia in 1929. In 1940, the Royal Australian Air Force established No 5 Elementary Flying Training School, instructing pilots to fly the Tiger Moth aircraft. Shortly after, the original runways were sealed in 1942.

The RAAF, in the form of many units remained at the site until 1947. QANTAS briefly set up a training base at Narromine in 1967 and in 1974, the Aerodrome was handed over to Narromine Municipal Council, which following amalgamation with Timbrebongie Shire Council in December 1980, became Narromine Shire Council.

Evidence of the history of the aerodrome is evident on the site in the form of buildings, runways, layout and plaques.

ABOVE: RAAF Narromine (Approximately 1940)

BELOW: The former Narromine Aero Club Building

Current Uses

The Narromine Aerodrome is currently owned and operated by Narromine Shire Council. Private operations on the site include agricultural activities, gliders, private and recreational aircraft, ultralight aircraft, as well as emergency services. The Aerodrome is home to the Narromine Aviation Museum, Narromine Aero Club, Narromine Gliding Club, the Sport Aircraft Association of Australia and other private operations in agriculture, gliding and ultralight training.

Aviation Activity

Aircraft Movements

The site experiences regular private aviation activities involving light to medium aircraft all year round. The peak gliding season is throughout the summer months.

Larger events tend to be held from spring through to autumn, taking advantage of the favourable weather conditions.

Runway Capacity

The runways and taxiways on site are capable of catering for medium sized, long winged aircraft. It is noted that taxiway C is restricted up to a maximum all up weight (MAUW) of 5700kg as noted in EW Route Supplement Australia (ERSA) for the aerodrome, as published by Air Services Australia.

Runway Characteristics

The site includes two bitumen sealed runways, 04/22 and 11/29, and three grassed runways, 04/22 grass left, 11/29 grass right, and 36/18. Note that the grass runways are identified as glider runways.

Identification	Length	Width	Construction
04/22	1100m	30m	Bitumen Seal
11/29	1521m	30m	Bitumen Seal
04/22 Grass L	1040m	90m	Grass
11/29 Grass R	814m	60m	Grass
36/18	848m	90m	Grass

Aerial View of Narromine Airshow

The Built Environment

The site is sparsely covered by buildings including hangars, office space and light industry buildings with an average age of approximately 35 years. The buildings are currently a combination of leased and privately owned by private operators and related businesses.

The concept of the Narromine Aviation Museum building was an initiative of the Narromine Aero Club, with funding provided by Government Grants, Council and the community. The Aviation Museum currently holds a 15 year lease on the building.

Traffic and Transport

Access is gained from a dual direction driveway.

In 2018 in a partnership between the NSW State Government and Narromine Shire Council the entrance, internal road and carparking were upgraded along Tom Perry Drive. The roadway and drainage has now been finalised to a high standard in recognition of the increased usage of the aerodrome and the development of the Aviation Museum.

A designated car parking area is located adjacent to the museum building. Informal car parking is also located alongside the arterial road.

Utilities and Services

The Aerodrome is currently serviced with electricity, telephone, water and sewerage mains. The residential Skypark area also has access to mains gas. A public amenities block on the aerodrome is now owned by the Narromine Tourist Park.

Recreational Opportunities

There are currently limited public recreational and open space opportunities on the site; one exception being an informal walking track along an irrigation channel.

Connections with the Community

The aerodrome is a historical site and major tourist attraction for the Shire.

There are ancillary benefits identified with organised events and attractions on the aerodrome site; these include increased tourism and revenue generated for local businesses.

Skypark

The Narromine Skypark is a residential estate that is closely connected with the aerodrome and is a unique development situated between the two runways allowing aircraft owners to 'park their aircraft in their backyard' with direct access to a taxiway and the runways. This development is ideal for pilots and people with an interest in aviation. Additionally, the development benefits from larger lots, a location slightly removed from the town centre and land adjoining the Narromine Golf Club.

As at October 2019 all but one lots have been sold of the 43 blocks allocated for stages 1 to 5. Stages 6, 7 and 8 are due for release late in 2020~~19~~ with a further 27 blocks available.

Adjoining Land Uses

The adjoining land uses and industries around the site include: recreational, residential, rural residential, intensive plant agriculture and rural activity.

This mix of adjoining land uses is due to the position of the Aerodrome being on the fringe of the Narromine Township. This characteristic however, also provides opportunity for compatible mixed-use development on the site.

Any further development on and around the site should take into consideration the potential impacts on the neighbouring land uses and the aerodrome.

An aerial view of Narromine Aerodrome with adjoining land uses 2010.

Constraints Identification & Analysis

Flooding & Drainage

The site is identified as flood prone as referenced in the Narromine Floodplain Risk Management Study and Plan (2011). Any development on the site is required to comply with the controls listed in the Narromine Flood Policy. A localised flood study has been done to identify specific levels of flooding across part of the site. Additionally, the proposed extension of the Narromine Levee Bank may also affect the flood liability on the site. Areas of high flood affectation should be avoided for development.

Due to the size of the site, stormwater should be carefully managed to ensure minimal impact on development from inefficient drainage systems. These considerations may require alternative solutions for stormwater management such as water sensitive design, particularly onsite collection, storage and reuse of storm water.

Throughout 2017, 18 and 2019 planning has been underway for improvements to the town levee system. Once finalised this may reduce flooding risks to the aerodrome.

Groundwater Vulnerability

The site is identified as a high groundwater vulnerability risk. This risk can be mitigated through appropriate controls in relation to effective management of effluent and other potentially hazardous land uses. These controls would entail connection to sewer mains or aerated wastewater treatment *systems.*

Heritage

The site is currently listed as a heritage item in the Narromine Local Environmental Plan 2011. Any development should be sympathetic to the heritage values of the site as identified in the Community Based Heritage Study and the site's associated statement of significance.

In May 2018 the Narromine Aerodrome Conservation Management Plan was completed. Two parts of the aerodrome are seen to have high heritage significance. These are:

- Hangar number 1. (built 1937) and
- Bellman Hangar (c 1943)

Of moderate significance are:

- The former parade ground
- The site layout (established WW2)
- Former lesser QANTAS building (relocated)

- Bitumen paved apron

Waste

The site is serviced by Council's contract waste collection service.

Contamination

Based on the past history of the site, there is potential for contamination oin the ~~Skypark,~~ apron and runway areas. Further investigations would need to be conducted on the site to determine the most suitable land use and if any remediation works are required. These investigations can be undertaken on a case-by-case basis, dependant on the type of the proposed development in an area.

Traffic

Currently, the traffic usage on the site is low, with the exception of large events, in which traffic and parking becomes difficult to manage. Any further development on the site should consider the requirement for traffic impact studies to determine applicable construction and maintenance to cater for increased traffic movements. These requirements may include dedicated car parking areas and traffic management systems.

Existing Infrastructure

Water & Sewer

The current water systems at the aerodrome are sufficient for the existing level of development, however any further developments will necessitate the upgrading of these systems. The anticipated increased consumption of water will need to be considered and quantified prior to any works.

In ~~2019 planning is~~2020 works are underway to upgrade the sewer pump station located at the entrance to the aerodrome. This system captures waste from the buildings on Tom Perry Drive and will also capture the waste from the new industrial subdivision.

Power

Electricity is primarily delivered to the site via aboveground services. The exception to this is the Skypark site and hangar sites beyond the main access road.

Telephone/Internet

The site has access to existing telephone and Internet services as provided by relevant telecommunications companies.

Noise and Vibration

With increased activity on site, it is anticipated the ambient noise levels will increase moderately over time. While a dramatic increase in noise and vibration is not expected as a

result of development on site, building design and construction should encompass noise and vibration mitigation measures.

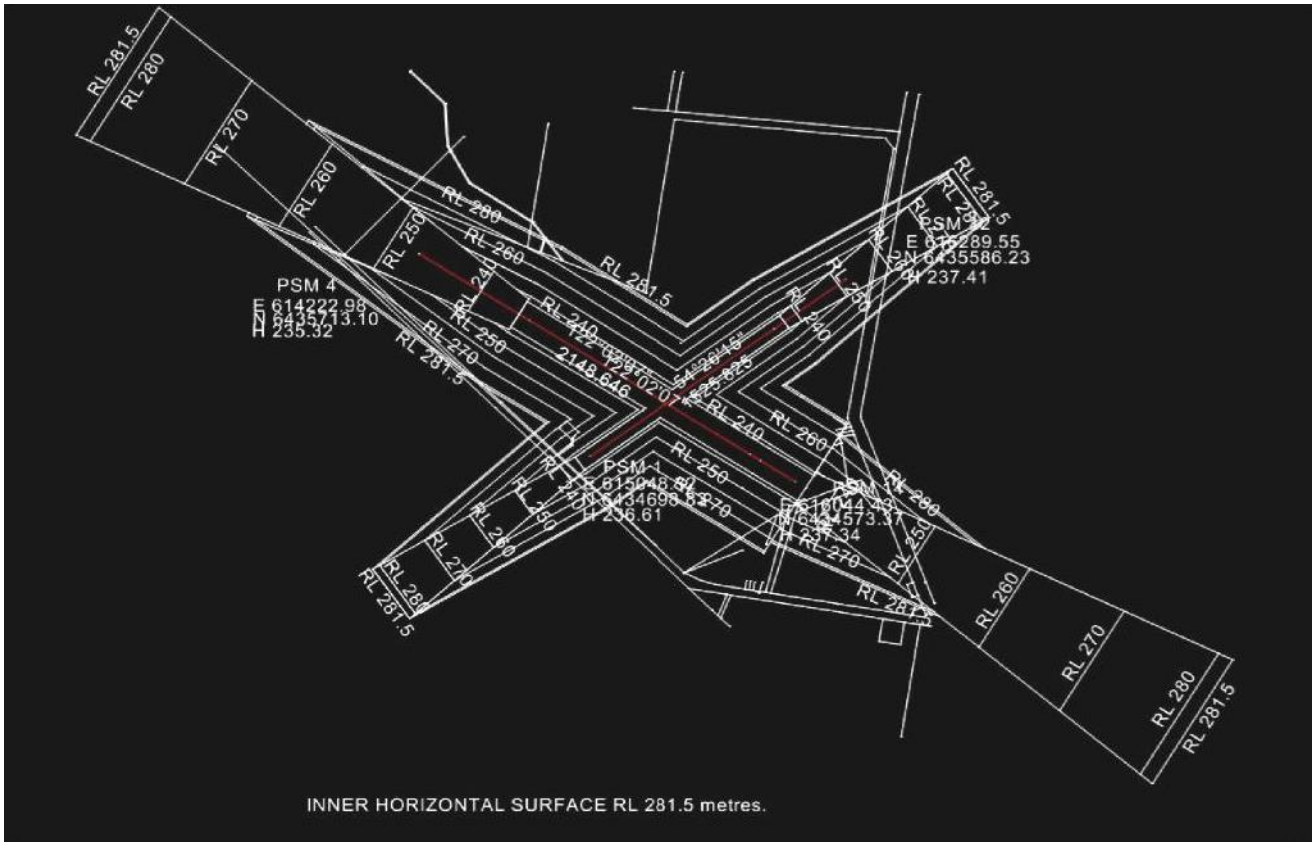
Amenity

The site enjoys low ambient noise levels and a scenic outlook. Consideration should be given to maintaining these elements in the design of proposed building works and facilities. The proximity to the golf club and the Macquarie River adds to the scenic outlook and recreational opportunities for the site.

Obstacle Limitation Surfaces

The Obstacle Limitation Surfaces are the heights at which development in the area is not to exceed. This is to reduce the risk of obstruction to aircraft flight paths. Any development on or around the aerodrome site must consider these height limitations.

Below: Narromine Obstacle Limitation Surfaces. Please note this image is an extract only of the OLS Plan held at Council.



Instrument Approaches

To assist pilots in navigation there are two windsocks to indicate wind speed and direction. Additionally, pilots may also utilise a GPS approach. Airservices Australia publish a certified RNAV approach. The document is entitled RNAV-Z (GNASS) RWY-11. The document can be found at https://www.airservicesaustralia.com/aip/pending/dap/NRMGN01-147_27FEB2020.pdf.

Lighting

Pilot activated runway edge lighting (PAL) is installed along runway 11/29 and taxiway centre lighting on the bitumen sealed taxiway.

Security

The site consists of security measures such as restricted access gates, fencing and signs delineating the public and airside areas. As part of the Narromine Aerodrome Manual and CASA Regulations, security measures must be installed on the site, dependant on the classification and operations on the site.

Refuelling Facilities

A 24 hour Avgas fuel bowser is managed on site by a private operator under lease from Council. Additionally, an unused facility is located in the apron area. These facilities are required to comply with the Underground Petroleum Storage System Regulation 2014 in terms of monitoring and protection systems.

Regulatory Framework

The Aerodrome is required to comply with the Civil Aviation Legislation and Regulations.

As a Registered Aerodrome, the Narromine Aerodrome must comply with Part 139 in the Civil Aviation Safety Authority (CASA) Manual of Standards. Although an Aerodrome Manual is not required, the site must comply with the physical standards identified and ensure the data in the En-Route Supplement Australia (ERSA) is accurate and current.

Planning Framework

The planning framework governs land use and is identified by the Environmental Planning & Assessment Act 1979 which is administered by the NSW Department of Planning, Industry and Environment.

Locally, the Narromine Local Environmental Plan 2011, the Narromine Development Control Plan 2015, and the Section 94A Development Contributions Plan (s.7.12) are the principle planning documents for new developments in the Shire. These documents apply to the aerodrome site. Council has also undertaken various land use strategies to assist in the development of future planning instruments.

All of these documents combine to guide development and minimise negative impacts in terms of environment, economy, public health and safety and social interaction.

Narromine Local Environmental Plan (LEP) 2011

The LEP is a legislative document which, based on land use zones, determines permissible and prohibited development in various areas of the Shire and nominates selected development standards. The Land Use Table for the SP2 zone is included below. The applicable clause to this document from the LEP relates to airspace operations

Zone SP2 Infrastructure

1 Objectives of zone

- To provide for infrastructure and related uses.
- To prevent development that is not compatible with or that may detract from the provision of infrastructure.

2 Permitted without consent

Roads

3 Permitted with consent

Aquaculture; The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose

4 Prohibited

Any development not specified in item 2 or 3

Applicable LEP Clauses Narromine

6.9 Airspace operations

(1) The objectives of this clause are as follows:

(a) to provide for the effective and ongoing operation of the Narromine Airport by ensuring that such operation is not compromised by proposed development that penetrates the Limitation or Operations Surface for that airport,

(b) to protect the community from undue risk from that operation.

(2) If a development application is received and the consent authority is satisfied that the proposed development will penetrate the Limitation or Operations Surface, the consent authority must not grant development consent unless it has consulted with the relevant Commonwealth body about the application.

(3) The consent authority may grant development consent for the development if the relevant Commonwealth body advises that:

(a) the development will penetrate the Limitation or Operations Surface but it has no objection to its construction, or

(b) the development will not penetrate the Limitation or Operations Surface.

(4) The consent authority must not grant development consent for the development if the relevant Commonwealth body advises that the development will penetrate the Limitation or Operations Surface and should not be constructed.

(5) In this clause:

Limitation or Operations Surface means the Obstacle Limitation Surface or the Procedures for Air Navigation Services Operations Surface as shown on the Obstacle Limitation Surface Map or the Procedures for Air Navigation Services Operations Surface Map for the Narromine Airport.

Development Control Plan 2011

relevant Commonwealth body means the body, under Commonwealth legislation, that is responsible for development approvals for development that penetrates the Limitation or Operations Surface for the Narromine Airport.

air transport facility means an airport or a heliport that is not part of an airport, and includes associated communication and air traffic control facilities or structures.

airport means a place that is used for the landing, taking off, parking, maintenance or repair of aeroplanes, and includes associated buildings, installations, facilities and movement areas and any heliport that is part of the airport.

The applicable clauses from the Narromine DCP 2015 include guidance on aircraft noise, height limitations, reflective materials, and certain restricted developments.

Council Policy

Council must demonstrate responsible management of assets, compliance with regulatory requirements and identify funding needed to provide the required services.

Narromine Section ~~94A~~ 7.12 ~~Development~~ Contributions Plan

This contributions Plan, adopted by Council in ~~February 2014~~November 2019, sets out a framework for council to levy developments to contribute to ongoing costs associated with infrastructure service provision and necessary upgrades. ~~The Aerodrome and Skypark are included in this plan and are therefore subject to these levies. It is worth noting that the Development Contributions Plan is under review at November 2019.~~ Section 7.12 of the Act provide Council with the means to levy contributions towards the cost of public facilities and services to meet the increased demand created by development. Section 7.12 contributions do not require a nexus between the development, infrastructure and the contribution.

Master Plan

This Master Plan provides detail on desired land uses and development objectives. It provides an 'entire- picture' approach to ensure all facets of development are complementary and reduce land use conflicts.

The objectives of development on the site are:

- *To ensure the ongoing operations of the aerodrome as an aerodrome for the benefits of all aviators and the aviation community.*
- *To provide a range of mixed-use development including business, industrial and community and accommodation land uses.*
- *To encourage employment and economic development through business opportunities, tourism activities and enhancing airside operations.*
- *To encourage development that is innovative while being sympathetic with the character of the area.*

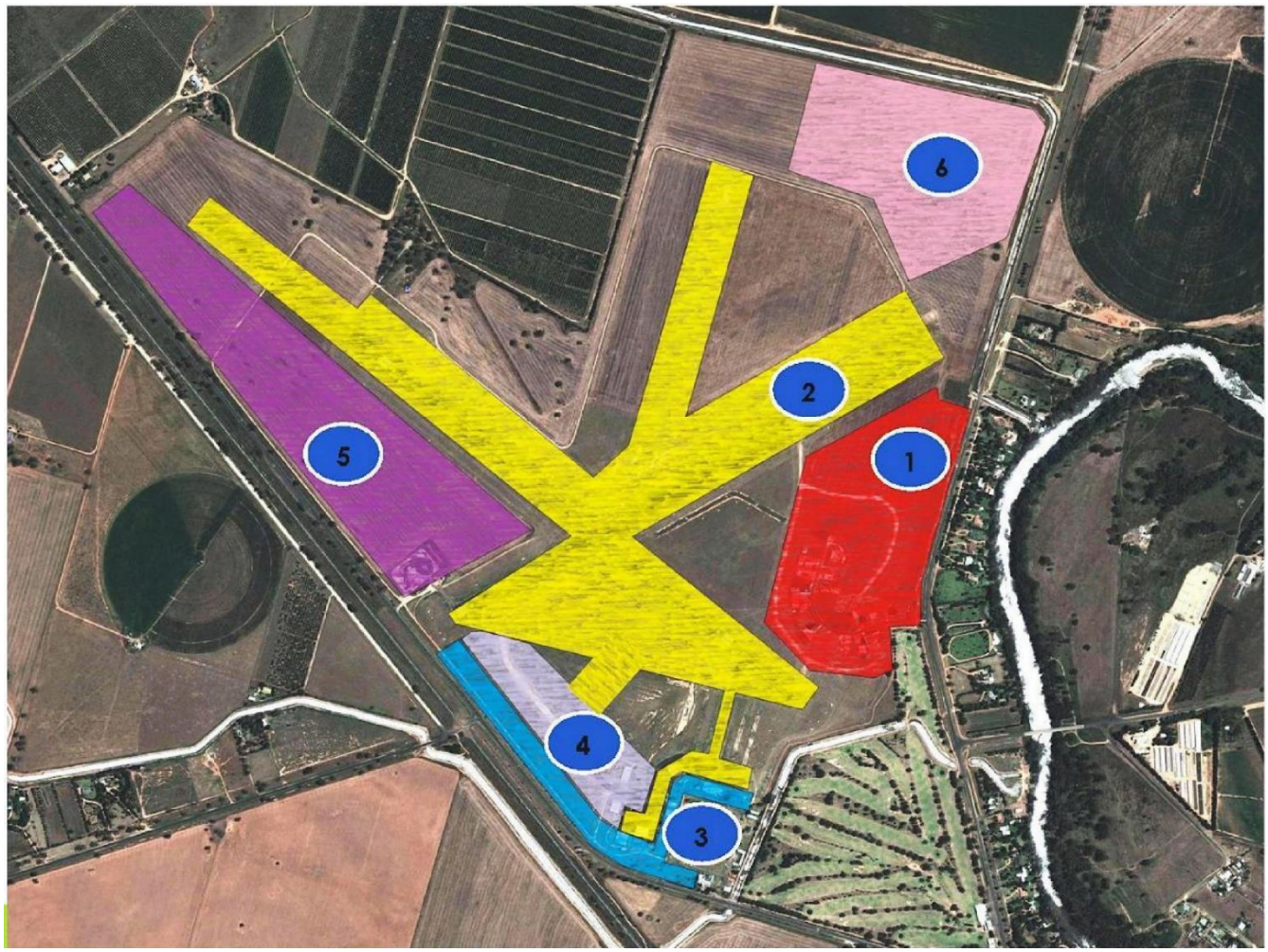
Development is guided by Land Use Zones, which identify permissible development in the area and development objectives. The Land Use Zones recommended in this Plan are:

- *SP2 Infrastructure – This zone is utilised on land that is unlikely to be used for a different purpose in the future. The type of infrastructure applicable to this land is also listed in the Local Environmental Plan (LEP), which in this case, is 'Air Transport Facilities'.*
- *R1 General Residential – This zone allows for a range of housing types and densities, as well as development, which is consistent with residential housing such as neighbourhood shops and community facilities. This is the current zoning for 'Skypark'*
- *SP1 Special Purpose Zone – This zone is generally intended for land uses or sites with special characteristics that cannot be accommodated in other zones. The permitted use is annotated on the map along with any development that is ordinarily ancillary to that use.*
- *IN1 General Industrial – This zone is intended to be used for a wide range of industrial and warehouse uses. These uses may be light industrial, or heavy industry activities such as depots and warehouses.*

RE1 Public Recreation – This zone is used for land reserved for recreational and community facilities. The site is divided up into precincts, depending on primary land use and objectives. The intentions of these

precincts are as follows:

Precinct 1	Skypark Residential Estate This area is currently and is suggested to be retained as R1 General Residential Zoning. The intent of the area is to be an aviation-compatible residential estate. Proposed development controls would ensure compatibility with the aerodrome operations, as well as maintaining the desirability of the
Precinct 2	Active Airside This area is to remain an active airside area and subject to all civil aviation requirements. The proposed land use zoning is as current, SP2 Infrastructure.
Precinct 3	Community and Commercial This area is central to the connections between the local aviation and non-aviation communities. The proposed land use zoning for this area is SP1 Special Activities or Purpose Zone, which allows for a combination of aviation-related, and commercial uses. This area will form the 'hub' of the public interface with the aerodrome. Development controls for this area will encourage active use of the site, generate community interest and provide opportunity for the establishment of aviation related businesses.
Precinct 4	Aviation related commercial uses and Hangar Area The objective of this area is to provide opportunity for aviation related commercial businesses to establish including aircraft construction and maintenance, and hangars. The suggested land use zone in this precinct is SP1, as for precinct 3 and development controls, are to be implemented in relation to compatibility, amenity and public access.
Precinct 5	Industrial and Transport The desired land uses of the industrial and transport precinct include storage, transport and construction to take advantage of the adjoining transport networks of road, rail, and air traffic. This is a long term vision and site-specific studies incorporating supply and demand for such land would be required prior to developing this precinct.
Precinct 6	Expansion Reserve This area is reserved for compatible rural and residential land uses, subject to obstacle limitation surfaces and potential flight paths. It is not considered an immediate to medium term priority for the strategy, however may be considered in conjunction with long-term development strategies for the township of Narromine. Further consultation should be undertaken about the benefits and costs of this expansion. Consider optimum levels of development and alternative areas.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Strategic Plan

The recommendations discussed in this document were collected from previous aerodrome plans and as suggestions during the consultation phase. The recommendations were then assessed against the constraints as identified in pages 18-23 of this document; the accepted results are presented below as actions.

It should be noted that all development is subject to individual development assessment. Considerations include: aviation interface, operations, natural hazards and adjoining land uses. Hence, the final results may differ from those described in this plan.

The actions are divided into categories, depending on context and given a reference number. This number is further utilised in the Staging Plan which assigns a time frame for the completion of that aspect, the responsible party and a suggested funding option. Depending on external influences and dependencies, these suggestions may change following timely review of the Plan.

Actions

1. Planning and Regulatory Framework

No.	Description	Details	Timeframe
1.1	Conservation Management Plan	Ensure that development within the aerodrome considers the issues and priorities raised within the Conservation Management Plan 2018.	Ongoing
1.2	Subdivide land for individual ownership	Facilitate development through the subdivision and sale of existing buildings (such as hangars, offices and ablutions block) and surrounding land. Additionally, new, serviced development sites should be offered for sale.	Short term
1.3	Enforce covenants and restrictions	To mitigate land use conflicts and improvement of amenity through appropriate development controls. These site-specific controls can be detailed in the Development Control Plan.	Ongoing
1.4	Asset Management Planning	To ensure consistent management of the site in accordance with CASA, Air Services Australia and Council requirements, the most effective option is for the CASA requirements of aerodrome operations to be included in a management plan for the aerodrome. These requirements include: security, navigation and safety compliance. This document would replace the current Aerodrome Manual.	Ongoing

2. Aviation Activity

No.	Description	Details	Timeframe
2.1	Ensure runway and airside facilities meet modern requirements	• Continue to allow for provision of runway renewal and maintenance • Continue to maintain and improve aerodrome fencing • Explore the potential and need for an additional glider runway • Be open to further development of the facility in line with future events and the needs of the developing industrial area • Develop additional tie down facilities if required and within budget considerations	Medium to long term
2.2	Amend ERSA with updated information	With constant changes taking place on the site, the ERSA (En Route Supplement Australia) is required to be maintained with current information.	Ongoing
2.3	Draft obstacle limitation surfaces	Draft Obstacle Limitation Surfaces for glider and aerobatic operations for use with development planning, aviation activities and events planning	~~Medium~~Short

3. Built Environment

No.	Description	Details	Timeframe
3.1	Private hangarage options	1. Individual hangar sites for glider storage 2. Additional hangar sites for larger aircraft 3. Combination of private and business hangar sites 4. Hangar sites with 'weekender' accommodation options While Council is not in a position to construct individual hangars, it can facilitate the subdivision and sale of land for the purpose of this and other development such as flying schools and aircraft maintenance facilities.	Short
3.2	Continue Skypark development	Continue to provide accommodation options in the Skypark area.	Short
3.3	Establish a formal glider trailer storage area	To facilitate convenient and orderly glider trailer tie down and storage.	Medium
3.4	Events facilities and infrastructure	To encourage aviation events to the site, preparation should be made to incorporate the necessary facilities required for these events. These facilities include amenities, car parking, undercover display areas, control towers, and viewing areas.	Medium
3.5	Develop facilities to encourage aerodrome use by peak aviation bodies, clubs and instructors.	Given the rich history of usage by peak governing bodies such as SAAA and the ongoing opportunities for additional events consideration to develop purpose built facilities to accommodate increased usage for events and by peak bodies should be given.	Short-medium
3.6	Heritage Conservation	Based on the rich history of the site, Council should consider carefully managing the heritage significance through conservation and adaptive reuse initiatives.	Ongoing
3.7	Glider amenities block	Seek to establish additional amenities alongside the Glider runway to assist in the running of events. Eg toilet, shade, water.	Short

4. Traffic and Transport

No.	Description	Details	Timeframe
4.1	Improve and extend internal road network	Improve public roads within the precinct when funding is available	Ongoing

5. Community Connections

No.	Description	Details	Timeframe
5.1	Community benefits	Assets and facilities of Council provide benefit to the community by direct use of the item, however these facilities can provide indirect benefits to the local economy through the accommodation and catering of visitors/events etc. Calculation of these indirect benefits can provide valuable data to Council and the community for decision-making purposes and grant funding applications. Ideally, this task would be based on accurate data such as: number of visitors, vehicles, aircraft (number, type and origin) etc. Undertaken model of direct and indirect benefits of aerodrome.	~~Ongoing~~Medium
5.2	Public Open Space	The provision of public open space and recreational facilities provides for additional uses on the site and increased community and user connections. Open space facilities encourage healthy, active living and improve amenity. Further planning should be undertaken in regards to the recreation facilities, landscaping and approved usage of the parade ground particularly in regards to the heritage of the site.	Ongoing Ongoing
5.3	Events Planning	The drafting of an events plan would ensure that facilities and infrastructure for the site are integrated within the needs for conducting and management of events on the site.	Short

6. Infrastructure

No.	Description	Details	Timeframe
6.1	Water/Sewer Services	Council would be required to anticipate water consumption and sewer usage associated with further development to determine required upgrades and expansion works.	Ongoing
6.2	Electricity Supply	Due to the nature of the aerodrome, it is necessary to consider underground electricity supply for future development on the site.	Medium
6.3	Public Transport Connections	With the anticipated increase in visitors and residents to the aerodrome, it is important to maintain public transport links with the town centre.	Ongoing
6.4	Underground Petroleum Storage Systems	There are currently two existing fuel storage facilities on the site, only one currently in use. Council is responsible for the compliance of these facilities with the UPSS Regulations and is subsequently required to install monitoring equipment around the facilities. Issues to be considered in this action include: the current use of the facility, the cost of installing the monitoring equipment, the impacts of Council absolving responsibility of the units and the possible costs of installing alternative systems.	Ongoing

7. Economic Development

No.	Description	Details	Timeframe
7.1	Funding Options	Council has adopted a series of fees and charges for those using the site. Ongoing charges and income are derived from: • Leases • Proceeds from the sale of land • Developer contributions • Hire fees • Land Rates It should be noted that landing fees are not considered an option for revenue due to the possible discouragement of aircraft to the site, the cost prohibitive nature of the management of the system and the aim to remain competitive with other similar aerodromes. Additionally, the Skypark lots were advertised for sale, stating 'no landing fees' were incurred on the site.	Ongoing
7.2	Advertising and Signage	To encourage visitors, local residents and businesses to the site, Council should actively undertake advertising of the site. • The updating of a 'prospectus' for businesses and residents interested in relocating to the site, once the developments are serviced. This prospectus should include information on the likelihood of noise from the activities on the site. • 2. Improved directional and business identification signage on and around the site.	Short

8. Amenity

No.	Description	Details	Timeframe
8.1	Landscaping	The amenity of the site can be improved through appropriate landscaping including: trees, shrubs, fencing, mowing and weeding. These actions provide opportunity for community involvement in the shaping and maintenance of the site.	Short-medium

9. Natural Environment

No.	Description	Details	Timeframe
9.1	Flooding	To ensure minimal impact from flooding the aerodrome precinct should continue to be included in plans for the development of the town levee. This is important for the residential and industrial future of the site and also to ensure emergency access to the aerodrome in times of major flooding.	Ongoing

References

Aerodrome Operation Support Pty Ltd. (1995). Narromine Aerodrome Planning Strategy and Management Plan. Narromine

Narromine Shire Council. (2017). Community Strategic Plan: Narromine Shire 2027. Narromine

Narromine Shire Council. (2015). Narromine Aerodrome Planning Strategy and Management Plan. Narromine

GML Heritage for Narromine Shire Council (2018). Conservation Management Plan. Narromine

FINAL DRAFT FOR COUNCIL ADOPTION

Narromine Shire Council

Section 7.11 Contributions Plan 2020 -Heavy Vehicles

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Narromine Shire Council Section 7.11 Contributions Plan – Heavy Vehicles 2020

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Contents

Tables

1. SUMMARY

1.1. Background

1.1.1. What are development contributions?

Development contributions are contributions made by those undertaking development approved under the Environmental Planning and Assessment Act 1979 (the Act). Contributions may be in the form of money, the dedication of land or some other material public benefit (or a combination of these). The mechanisms available for development contributions are limited to:

- In the case of contributions made under sections 7.11 or 7.12 of the Act - toward the provision or improvement of amenities or services (or the recouping of the cost of provision or improvement of amenities or services), or
- In the case of contributions made under a planning agreement prepared in accordance with sections 7.4 to 7.10 of the Act toward public purposes.

This Plan deals with Section 7.11 contributions.

1.1.2. Section 7.11 levies

Section 7.11 of the Environmental Planning and Assessment Act 1979 enables Council to levy contributions from development for the provision of public services and amenities required as a consequence of that development. Contributions may be in the form of cash payments, transfer or dedication of land to Council, or the provision of a Material Public Benefit or Works in Kind.

For Council to levy contributions under Section 7.11 there must be a clear nexus between the proposed development and the need for the public service or amenity for which the levy is being required and as detailed in a Contributions Plan.

This Section 7.11 Contributions Plan seeks contributions towards the additional costs of road maintenance from developments which generate frequent heavy haulage vehicle movements.

Accordingly, certain developments will be levied because of their impact on the frequency of road maintenance, determined by a consistent methodology based on heavy vehicle usage.

1.2. Purpose

The primary purpose of this Plan is to authorise the levying of contributions that will assist Council to provide public services and amenities to:

- Ensure roads are maintained in a reasonable condition for users as a result of damage caused by developments that generate frequent heavy haulage movements.

This Plan enables Council to require a contribution from development towards the provision, extension or augmentation of public services and public amenities that will, or are likely to be, required as a consequence of new development.

The contribution may involve payment of a monetary contribution.

Other purposes of this Plan are to:

- Provide an overall strategy for the coordinated delivery of public facilities and infrastructure consistent with Council's strategic plans and management plan;
- Provide a comprehensive strategy and administrative framework for the assessment, collection, expenditure, accounting and review of developer contributions towards the equitable provision of public services and amenities;

- Identify the additional services and amenities required to meet the demands arising from new development;
- Provide an adequate level of public services and amenities to meet demand arising from development within a reasonable time, as development occurs, and at a reasonable cost, without unduly impacting on the affordability of the proposed development;
- Ensure that the development contributions are based on reasonable estimates of cost;
- Ensure that the existing community is not unduly burdened by the provision of public services and amenities which are needed (either partly or fully) as a result of ongoing development in the LGA, and that there is a reasonable apportionment of cost between existing demand and new demand for public infrastructure provided by Council, and
- Ensure that contributions are fair and reasonable.

1.3. Nexus

All heavy vehicles contribute to the deterioration of road pavements. Australian Road Research Board (ARBB) research shows that an increase in the number of heavy vehicles using a road will accelerate the deterioration of a road, and lead to increased road maintenance costs being incurred by Council. The impact of heavy vehicles on the condition of road pavements has been well documented by Austroads and other authoritative sources.

Council maintains the LGA's roads at an adopted level of service. As a result of a development using heavy haulage vehicles, Council will need to undertake increased maintenance work to maintain this level of service. The extent of the increased maintenance is dependent on the heavy vehicular traffic generated by the subject development.

Increased road maintenance results in an increased drain on Council's finances. Unless the subject development provides a contribution commensurate with the increased maintenance costs resulting from that development, the cost burden will be borne by the Council, and by implication, the wider community.

This Plan outlines a methodology to ensure that heavy vehicle haulage associated with a specific development provides a fair contribution towards the additional costs incurred by Council as a result of any heavy haulage traffic associated with that development.

The costs of keeping roads in a satisfactory condition occur in three main areas:

- Rehabilitation:
  - Regional sealed pavement rehabilitation;
  - Rural sealed pavement rehabilitation, and
  - Unsealed pavement rehabilitation/gravel resheeting or gravel patching.
- Reseals
  - Maintenance reseal (i.e. regional and local roads)
- Maintenance
  - Annual routine maintenance, and
  - Heavy patching or stabilisation of selected sections.

A traffic generating development will be required to contribute a proportion of all of the above costs based upon the heavy vehicle Equivalent Standard Axle (ESA) impact on the regional or local road used by the heavy vehicles in question, within a given period of time. Developments will be required to regularly report their haulage tonnages and the types of vehicles involved, in order for these costs to be accurately determined.

The methodology used by the Plan to determine the contribution is based on the average annualised road maintenance costs, and the length, and type, of roads to be used by heavy vehicles associated with the subject development

The contribution and its calculation do not apply to State Roads that are the funding responsibility of the State Government, and not Council, such as the Mitchell or Newell Highways.

The operation of this Plan will also generate the need for planning, administration and management activities associated with this Plan, in order to regularly review, update and manage the future provision of infrastructure.

1.4. Exemptions

This Plan does not apply to:

- Extractive industries with an average annual approved output of up to and including 5,000 m^3 of solid material, or
- Other developments within an average annual approved total haulage of up to and including 7,500 tonnes of material, or
- Development located in a Business, or Industrial land uses zone.

1.5. Structure of the Plan

This Plan is arranged into a summary and 7 sections as detailed below:

Section 1 Executive Summary and Purpose of the Plan.

Section 2 Introduction

Section 3 Operation of the Plan.

Section 4- Administration

Section 5 Nexus

Section 6 Transport Facilities

Section 7 Plan Administration Costs

1.6. Summary of Contributions Rates

Contribution rate:

Table 1: Heavy Haulage Vehicle Movement Generating Development Contribution Summary

Contribution Type	Per annum rate per tonne per kilometre of road hauled material
Road maintenance	As determined by the methodology in Section 6
Plan Management and Administration	1% of the above figure
TOTAL	**Total of the above as calculated**

Note: these amounts are subject to indexation.

2. INTRODUCTION

2.1. Name of the Plan

This Plan is referred to as the Narromine Shire Council Section 7.11 Contributions Plan 2020.

This Contributions Plan has been prepared in accordance with the relevant provisions of the Environmental Planning and Assessment Act 1979, as amended (the Act), the Environmental Planning and Assessment Regulation 2000, the Department of Planning and Infrastructure's Development Contributions Practice Notes 2005, relevant Ministerial Directions, and Department of Planning and Environment Circulars and Guidelines.

2.2. Area to Which the Plan Applies

This Contributions Plan applies to the Narromine Shire Council Local Government Area.

2.3. Types of Development to which this Plan applies

This Plan applies to:

– Developments that generate heavy haulage vehicle movements arising from extractive or mining industries.

Note: "development" referred to in this clause has the same meaning as in the Act.

Exemptions

Certain developments which use heavy vehicle haulage are exempt from the payments for the heavy vehicle contribution, in order to:

– Assist the viability of smaller local scale enterprises;

– Simplify administration of the Plan, and

– Recognise the generally higher design standards in respect of vehicle loadings of roads in business and industrial areas.

The exempt developments are:

– Extractive industries with an average annual approved output of up to and including 5,000 m3 of solid material, or

– Development undertaken by or on behalf of Council, unless undertaken as a business enterprise.

2.4. Commencement of Plan

This Contributions Plan takes effect on XX XX 2020.

2.4.1. Savings and transitional arrangements

A development application which has been submitted prior to the adoption of this Plan but not determined shall be determined in accordance with the provisions of the Plan which applied at the date of determination of the application.

2.5. Relationship to other Plans and Policies

This Plan complements the Narromine Shire Council Section 94A (7.12) Plan and its successors.

3. OPERATION OF THE PLAN

3.1. Method of Operation - Authorisation

In determining a Development Application or issuing a Complying Development Certificate to which this Plan applies, this Plan authorises the Council to impose a condition of consent requiring the payment of a monetary contribution in accordance with the provisions of this Plan, or in lieu thereof, accept the provision of a material public benefit or works in kind.

Prior to the issue of a Complying Development Certificate for development to which this Plan applies, the issuer of the certificate must impose a condition pursuant to this Plan if such condition may be imposed.

Complying Development Certificates must be assessed and issued by Council if the developer wishes Council to consider land dedication, material public benefits, or works-in-kind.

3.2. Types of Contributions

There are a number of alternative methods of settlement of Section 7.11 developer contributions. These are as follows:

– Monetary contribution;

– Dedication of land;

– Material Public Benefit, or

– Works in Kind.

Where a developer negotiates a material public benefit (for works not in the works schedule), works in kind (for items included in the works schedule), or the dedication of land, in lieu of paying any part of the monetary contribution required under this Plan, the applicant must still pay Council's reasonable costs for the management of the Plan (plan management and administration contributions).

The Act also provides the ability for the Council to consider entering into a Planning Agreement (PA) as part of a development application or when rezoning land. Public amenities and services delivered through a PA may be in addition to or instead of the payment of a monetary contribution under Section 7.11.

3.3. Monetary contribution

This Plan identifies the monetary contribution required for the maintenance of roads. The contribution amount payable will be included as a condition of consent on any development approval issued. Details of how and when the amount will be adjusted will be included in the consent, as detailed in this Plan.

3.3.1. Dedication of land

Dedication of land in lieu of monetary contributions described in this Plan will only be considered when Council deems that the land is in a location, and has physical and servicing characteristics, that make it suitable for the designated purpose.

All costs of dedication are to be borne by the applicant, including but not limited to, survey, legal and administration costs.

The land is to be in a condition suitable for its intended purpose cleared of all debris, weeds and waste materials. The land is to have a compliance certificate from a registered testing authority stating that the land is free from contaminated and hazardous materials and substances.

3.3.2. Works in Kind / Material Public Benefits

A works in kind (WIK) is the undertaking of a work or provision of a facility that is scheduled within a Contributions Plan, in lieu of the part or full payment of either a monetary contribution or the dedication of land that would normally apply. WIKs are generally offered and assessed as part of the development application process. Applicants seeking Council's acceptance of a WIK arrangement should initially discuss such a proposal with Council officers to determine whether Council would agree to enter into such agreement and to establish Council's requirements.

A material public benefit (MPB) may be offered by the developer in part or full satisfaction of a condition requiring the payment of a monetary contribution. A MPB may include the provision of work that is not scheduled within a Contributions Plan. Council may accept the provision of a MPB if it can be justified why it is of equivalent or greater benefit to the community compared to what has been identified under the Plan.

Such alternative development contributions arrangements may be negotiated with the Council in connection with the carrying out of development in the following circumstances:

a) Offer made to the Council as part of a development application

If an applicant does not wish to pay a monetary Section 7.11 contribution in connection with the carrying out of development, the applicant may include in a development application a proposal to carry out the works towards which a contribution or levy would otherwise have been applied.

Council will consider the alternative arrangement as part of its assessment of the development application. If Council agrees to the arrangement and grants consent to the application, it will impose a condition of consent requiring the works to be carried out. If Council does not agree to the alternative arrangement, it may grant consent subject to a condition imposed under Section 7.11 requiring payment of the monetary contribution.

b) Offer made to Council following the grant of development consent:

If development consent has been granted to the carrying out of development subject to a condition under Section 7.11 requiring payment of a monetary contribution towards the cost of public amenities and public services, the applicant may request in writing that they instead provide to the Council a material public benefit in part or full satisfaction of the requirements of the relevant condition. This application should be made in the form of a formal modification of development consent made under section 96 of the Act.

The material public benefit may be the carrying out of work or another public benefit but not the payment of money or the dedication of land free of cost.

If the Council agrees to the applicant's request, the applicant is required to comply with the alternative arrangement and is not required, in part or whole, as relevant, to comply with the conditions imposed under Section 7.11. If the Council declines the applicant's request, the applicant will be required to comply with the requirements of the conditions imposed under Section 7.11.

In either case, in deciding whether to agree to the applicant's request, the Council will have regard to the requirements of the current Revised Development Practice Notes (DIPNR 2005) and may consider matters such as, but not limited to, the following:

- The need for the facility and how it achieves the outcome being sought by this Plan and the imposition of the condition;
- The purpose and objectives of this Plan and any relevant plans or strategies;
- Whether the alternative will prejudice the timing or the manner of the provision of the infrastructure for which the contribution was required, and
- Full details of the quantities, finishes and costings of the proposed works.

The acceptance of a WIK agreement or a MPB will be at Council's absolute discretion, and aside from any exceptional circumstances, no credits will be granted for in-kind works carried out by the developer that are in excess of the approved contribution amount. Where the value of the WIK, MPB or dedication of land is less than the value of the required contribution, the applicant will be required to settle the balance of the contribution by way of a monetary contribution and/or land dedication.

All works in kind will be designed and constructed in accordance with relevant Australian Standards and with the prevailing adopted practice of Narromine Shire Council in relation to the relevant category of works.

3.4. Planning Agreements

An applicant may offer to enter into a Planning Agreement with the Council in connection with a development application or a rezoning application that is made for the purposes of being able to subsequently make a development application. Provision is made for Planning Agreements under Sections 7.4-7.10 of the Environmental Planning and Assessment Act 1979, as amended.

Under a Planning Agreement the applicant may offer to pay money, dedicate land, carry out works, or provide other material public benefits for public purposes. The applicant's provision under a Planning Agreement may be additional to, or instead of, making contributions under Section 7.11 of the Act.

The offer to enter into a Planning Agreement, together with the draft Agreement, will generally need to accompany the relevant development or rezoning application. The Council will publicly notify the draft Agreement and explanatory note relating to the draft Agreement along with the relevant application, and will consider the Agreement as part of its assessment of the relevant application. If Council agrees to enter into the Agreement, it may impose a condition of development consent requiring the Agreement to be entered into and performed.

Council encourages the use of Planning Agreements, particularly for larger and/or more complex development.

3.5. Payment of the Contribution

3.5.1. Timing of Payments

The time of payment of contributions shall be as follows:

- Within 28 days of receipt of a quarterly notice from the Council stating the contribution amount pursuant to the previous quarter's heavy haulage vehicle activity.

3.5.2. Deferred or Periodic Payments

Council may consider the deferred payment of contributions or payments made by periodic instalments.

A request for deferral or periodic payment must be made in writing to Council, stating the proposed length of deferral, and may only be accepted where:

- There are valid reasons for the deferral or periodic payment;
- The deferral will not prejudice the efficiency and operation or cash flows of the Plan;
- The granting of the request for deferred payment will not jeopardise the timely provision of works or land identified within the Plan;
- A suitable bank guarantee (or equivalent security) can be, and is, provided in the event that the request is accepted by Council;
- The applicant intends to make a contribution by way of a Planning Agreement, works-in-kind or land dedication in lieu of a cash contribution and Council and the applicant have a legally binding agreement for the provision of the works or land dedication, and
- The periodic or deferred contributions are paid, including indexing, at no cost to Council.

The conditions under which Council may accept deferred payment by way of a bank guarantee are:

- The bank guarantee is by an Australian Bank;
- indexing will be calculated from the date the contribution was due until the date of payment in accordance with the CPI indexing provisions stated in Section 3.8 of this Plan;
- The bank guarantee is for a maximum period of twelve months;
- The amount of the bank guarantee is the sum of the total contribution or the amount of the outstanding contribution at the time of deferring payment, plus an amount determined by Council to include any anticipated indexation for the next thirteen months following the date the contribution was due;
- The bank unconditionally pays the guaranteed sum to Council if Council so demands in writing, no earlier than 12 months from the provision of the guarantee or completion of the work, whichever occurs first;
- The bank must pay the guaranteed sum without reference to the applicant or landowner or other person who provided the guarantee, and without regard to any dispute, controversy, issue or other matter relating to the development consent or the carrying out of development in accordance with the development consent;
- The bank's obligations are discharged when payment to the Council is made in accordance with the approved bank guarantee or when Council notifies the bank in writing that the guarantee is no longer required, and
- Council's registration and release of bank guarantee fee is paid.

Any outstanding component of the contribution shall be indexed quarterly in accordance with the Consumer Price Index movements. Indexing will be calculated from the date the contribution was due until the date of payment.

3.6. Complying Development

Accredited Certifiers must impose a condition requiring monetary contributions in accordance with this Plan, in accordance with Section 7.11 of the Environmental Planning and Assessment Act. The amount of the contribution is to be determined in accordance with the formulas contained in the Plan and the current contribution rates. The conditions imposed must be consistent with Council's standard Section 7.11 consent conditions and be in accordance with this Plan. It is the responsibility of accredited certifiers to correctly calculate the contribution and apply the Section 7.11 contribution.

3.7. Goods and Services Tax

Monetary Section 7.11 development contributions are exempt from the Federal Government Goods and Services Tax (GST).

3.8. Adjusting Contribution Rates

To ensure that the value of contributions is not eroded over time by movements in the Consumer Price Index, CPI) land value increases, the capital costs of construction of facilities and administration of the plan or through changes in the costs of studies to support the Plan, the Council will index the contribution rates indicated in this Plan, on a quarterly basis, with reviewed rates to apply from the first working day of December, March, June and September.

This Plan authorises Council to undertake these index based changes without the necessity of preparing a new or amending contributions plan.

The contribution rates will be reviewed and subsequently indexed by reference to the Construction costs by the Consumer Price Index (All Groups – Sydney) as published quarterly by the Australian Bureau of Statistics.

In accordance with Clause 32(3)(b) of the Environmental Planning and Assessment Regulations, the following sets out the means by which Council will index contribution rates that are set out in this Plan:

For changes to the Consumer Price Index (Sydney All Groups), the contributions will be reviewed quarterly in accordance with the following formula:

ew Contribution Rate = $\frac{C \times CPI\ 2}{CPI\ 1}$

where:

– C is the initial contribution rate at the time of adoption of the Plan, expressed in dollars

– CPI 2 is the Consumer Price Index Number (Sydney All Groups) available at the time of the review

– CPI 1 is the Consumer Price Index Number (Sydney All Groups) at the date of adoption of the Plan, or its subsequent amendment.

3.8.1. Adjusting Contributions at the Time of Payment

Contributions required as a condition of development consent will be adjusted at the time of payment using the following formula.

Contribution amounts will initially be calculated and regularly updated in accordance with the terms of Clause 3.8 at the time development consent is granted. The contributions amounts included in a development consent are to be adjusted at the date of payment on the basis of the contribution rates that are applicable at the time of the payment, and not at the date of the approval of the development.

Adjustments to the contributions amount in a consent will be made in the following manner:

CP = $\frac{CDC + (CDC \times (CRP-CRC)}{CRC}$

Where:

– CP is the amount of the contribution calculated at the time of payment;

– CDC is the amount of the original contribution as set out in the development consent;

– CRP is the contribution rate at the time of payment, and

– CRC is the contribution rate at the time of the original consent or quarterly statement.

The current contribution rates are published by Council and are available from Council Officers.

3.9. Reassessment of Contributions

Council may consider an application for the reassessment of the development contributions payable. This may result in the contribution being reduced, waived or modified.

Where a condition of development consent has already been imposed requiring the payment of a contribution, the applicant will need to lodge an application to review the consent in accordance with Section 8.3 of the Environmental Planning and Assessment Act 1979, as amended.

The request shall be in writing and provide sufficient information to satisfy Council of the inappropriate nature of the contribution and the implications to Council of reducing or waiving the contribution in the particular circumstances.

3.10. Review of the Plan

This Plan may be reviewed in full, or in part, when considered appropriate, having regard to the rate and type of development, cost of facility provision, and community response to service and facility provision.

A complete review of this Plan is anticipated every five (5) years from the date of commencement of the Plan.

3.11. Funding and Timing of Works

The contributions made to Council under the Plan may fully or partially fund the public amenities and services identified in this Plan. The contribution rates have been determined on the basis of apportionment between the expected

development and other sources of demand. In circumstances where public amenities and services are not fully funded by contributions, the remaining funds will be supplied from other Council sources.

Public amenities and services are required at the time demand is created, which may be before sufficient contributions are received. Council's ability to forward fund these services and amenities is very limited, and consequently their provision is largely contingent upon the availability of contributions. Pooling of funds to assist with the provision of infrastructure, as detailed in Section 3.12 will be considered and used when necessary.

Council will aim to spend all funds within a reasonable time and in a manner which achieves an equitable high standard of road maintenance.

To provide a strategy for the implementation of the services and amenities levied for in this Plan, and to use contributions in the most effective manner, work will be reprioritised. This will take into account development trends, population characteristics, existing funds, funds from other sources (where required) and anticipated revenue flows. The priorities for Council's maintenance works will be published in Council's Delivery Program.

3.12. Pooling of Contributions

This Plan expressly authorises monetary Section 7.11 Contributions paid for different purposes to be pooled and applied (progressively or otherwise) for those purposes. The priorities for the expenditure of the contributions are shown in the Works Schedules (if any).

3.13. Accountability

Financial management and accountability are important components of Section 7.11, and Council is obliged to maintain an accurate and up to date register of all Section 7.11 contributions.

Monetary contributions received under the authority of this Plan must be recorded and kept through a separate account specifically established for this Plan. The records must indicate the contributions received, contributions expended and must include the interest, if any, earned on invested funds for each account.

These records are updated on a monthly basis.

Separate accounting records are maintained for all Council's Section 7.11 and Section 7.12 Contribution Plans. Information on Section 7.11 accounts and funds relating to this Plan will be provided in a condensed format within Narromine Shire Council's Annual Report/s in accordance with requirements of the Environmental Planning and Assessment Regulation.

Information is also available in Council's contribution register relating to this Plan, which can be inspected at Council during normal business hours.

4. ADMINISTRATION OF THE PLAN

4.1. Management Costs of the Plan

There are substantial time and cost overheads associated with this Plan and its implementation.

Accordingly, costs associated with the preparation, administration and management of this Plan will be levied on all applications which result in a contribution payable under this Plan. These costs are shown as a separate element in the rates schedule and the method of calculation is described in Section 6, and cover the implementation review, monitoring and updating procedures set out in the Plan. In addition, studies are undertaken to determine the design and costing of works as well as to review the development and demand assumptions of the Plan.

Where a MPB or WIK agreement is negotiated between a developer and the Council, the Plan Administration and Management Contribution levy will still apply. This amount will cover plan review costs and also Council's costs associated with negotiating the MPB or PA and supervision of the work undertaken.

5. NEXUS AND METHODOLOGY

This section of the Plan establishes the relationship (nexus) between the expected types of development in the Contribution Areas and the demand for additional public services and facilities to meet the needs of that development.

Nexus is the relationship between the expected types of development in the area and the demonstrated need for additional public facilities created by those developments. The concept of nexus is often referred to in the following terms:

– Causal Nexus – 'what'. This is a demonstration that the anticipated development will or is likely to create a need or increases the demand for a particular public facility.

– Spatial or physical nexus – 'where'. Spatial nexus requires that the proposed public facility be located so as to serve the needs of those who created the demand for it.

– Temporal nexus – 'when'. Temporal nexus seeks to ensure that the public facility will be provided in a timely manner to benefit those who contributed towards it.

The level of provision sought for the facilities identified in this Plan is considered reasonable, and is required to satisfy the expected demands arising from relevant development in the Plan's Contributions Area. New or expanding development utilising heavy vehicle haulage will increase the need for maintenance of certain public roads. It will therefore be necessary for increased maintenance to be provided in response to the impact of increased heavy vehicle usage.

Table 2: Facilities categories

Category	Types of Services/Facilities
Heavy vehicle Generating Development	Road maintenance (heavy haulage vehicle impacts),
Plan Management and Administration	Management of development contributions and works, and review of the Plan.

Details of the methodology for calculating the contribution towards increased maintenance costs are attached to this Plan.

6. HEAVY VEHICLE GENERATING DEVELOPMENT

6.1. Introduction

The contributions provided for in this Plan are required to meet the increase in road maintenance from new development within the identified Contribution Area.

The key documents supporting these works are identified below:

- Narromine Shire Council Community Strategic Plan 2027 Narromine Shire Council
- Council Revised 2017/18-2020/21 Delivery Plan 2018-2019 Narromine Shire Council
- Council Operational Plan 2018-2019 Narromine Shire Council
- Council Long Term Financial Plan Narromine Shire Council (adopted 2018)
- Asset Management Plan
- Asset Management Policy 2017 Narromine Shire Council
- Bitumen and Asphalt Resurfacing Policy Narromine Shire Council
- Narromine Shire Council Roads Manual
- Austroads Guide to Pavement Technology Part 2: Pavement Structural Design (2012)
- Australian Trucking Association – Track Impact Chart – Technical Advisory Procedure dated March 2018

6.2. Nexus

Facilities provided for within this Plan are consistent with the Council's Community Strategic Plan (CSP), and in particular:

- Outcome 3.6: OUR ROAD NETWORK IS SAFE, WELL MAINTAINED AND APPROPRIATELY FUNDED
    - Action 3.6.1: Ensure local and regional roads are safe, well constructed and maintained

A contribution is sought in the case of development that generates significant heavy haulage vehicle movements. It is well documented that heavy vehicles accelerate the deterioration of road surfaces, and lead to a requirement for more frequent and expensive remediation and maintenance works if road service standards are to be maintained. Accordingly, such developments may be required to contribute towards the costs of the resultant more frequent maintenance regime.

6.3. Apportionment

In relation to heavy vehicle haulage contributions, the contribution rate has been calculated solely on the demand attributable to a proposed development, and as a result no apportionment has been applied.

6.4. Methodology

All heavy vehicles contribute to the deterioration of road pavements. An increase in the number of heavy vehicles using a road will accelerate the deterioration of a road, and lead to increased road maintenance costs being incurred by Council. The impact of heavy vehicles on the condition of road pavements has been well documented by Austroads and other authoritative sources.

Council maintains the Local Government Area's roads at an adopted level of service as specified in the Narromine Shire Council's Asset Management Plan – Transport (AMP6). As a result of a development using heavy haulage vehicles, Council will need to undertake increased maintenance work to maintain this level of service. The extent of the increased maintenance is dependent on the heavy vehicular traffic generated by the subject development.

Increased road maintenance results in an increased drain on Council's finances. These increased costs will burden the community with providing the increased funds required by Council in order to maintain the existing level of service for the road network as a result of the development, unless the subject development provides a contribution commensurate with the increased maintenance costs.

The purpose of this methodology is to ensure that heavy vehicle haulage associated with a specific development provides a fair contribution towards the additional costs incurred by Council as a result of any heavy haulage traffic associated with that development.

The costs of keeping roads in a satisfactory condition occur in three main areas:

- Rehabilitation:
  - Regional sealed pavement rehabilitation;
  - Rural sealed pavement rehabilitation, and
  - Unsealed pavement rehabilitation/gravel resurfacing.
- Reseals
  - Maintenance reseal (i.e. regional and local roads).
- Maintenance
  - Annual routine maintenance, and
  - Heavy patching or stabilisation of selected sections.

A traffic generating development will be required to pay a proportion of all of the above costs based upon the heavy vehicle Equivalent Standard Axle (ESA) impact on the regional or local road used by the heavy vehicles in question. An Equivalent Standard Axle (ESA) is defined as a Dual Tyred Single Axle transmitting a load of 80kN (or 8.2 tonne) to the pavement (Austroads).

The contribution and its calculation do not apply to State Roads that are the funding responsibility of the State Government, such as the Mitchell or Newell Highways.

6.4.1. Roads and Design Life

Council maintains a mix of sealed and unsealed roads. These roads have been subdivided into three categories for the purposes of this Plan:

- Regional sealed pavement;
- Local sealed pavement, and
- Unsealed pavement.

Each road type has a different design life and maintenance requirements.

Austroads Pavement Design Guides contain design tables where pavement design life can be expressed in accordance with design traffic loadings (ESA). Thus, a standard life of pavement can be expressed as ESAs. This means that the life of a pavement can be expressed as the total number of equivalent axles that should pass over it prior to replacement.

The standard life (assumed design life) for the road categories above in expressed as ESA are:

- Regional sealed roads: approximately 1,000,000 ESA over 60 years
- Local sealed approximately 1,000,000 ESA over 90 years
- Unsealed roads approximately 200,000 ESA over 15 years

A sealed road incurs construction costs, maintenance costs and replacement of the wearing course over its design life. An unsealed road incurs ongoing costs for maintenance and gravel resheeting and heavy gravel patching, with additional work required if there is significant damage for natural events, such as flood events.

6.4.2. Maintain the Narromine Shire Council Roads Network

The Table below indicates the costs of maintaining specific road types as determined by Council, at the time of preparation of this Plan. The figures are those generally applying across Council's road network, however specific roads have differing maintenance costs. They are derived from the Narromine Shire Council Roads Management Strategic Plan. This information can be used to calculate the "notional" cost of regional and rural sealed roads, as well as unsealed roads, over their design life. The actual current cost of these works, as they relate to the specific roads affected by a development, will be used by Council in calculating a contribution, in order to ensure that the calculated contribution closely reflects actual costs.

In recognition of the economic benefits of extractive and mining industries Council has resolved **to adjust the contribution such that development is levied only 40% of the calculated contribution**, with Council meeting the remaining 60% of the additional road maintenance costs.

Table: General cost of roads over their design life

Road type	Cost per km	How often
Regional sealed roads:		
Rehabilitation	$325,000	at 60th year
Reseals (average width of 8m)	$32,000	at 15th year
Maintenance	$3,000	annually
Local sealed roads		
Rehabilitation	$162,000	at 90th year
Reseals (average width of 6m)	$35,000	at 15th year
Maintenance	$3,000	annually
Unsealed roads		
Resheet	$40,000	at 20-25th year
Maintenance	$2,500	annually

Applicants are advised to consult with Council in order to determine the current costs for the above maintenance activities for the specific roads affected by their proposal, prior to assessing the likely contribution of a specific development.

Based on the General Table above, the total cost per kilometre of a **regional sealed** road over its assumed design life is:

$ maintenance x 55 yrs. + $reseal (@ 15th, 30th, 45th years) + $ reconstruction (@60th year)

= ($3,000 x 55) + $32,000 x 3 + $325,000

= $586,000 per km

The total cost per kilometre of a **local sealed** road over its assumed design life is:

$ maintenance x 84 yrs. + $ reseal (@ 15th, 30th, 45th, 60th, 75 years) + $ reconstruction (@ 90th year)

= ($3,000 x 84) + $35,000 x 5 + $162,000

= $589,000 per km

The total cost per kilometre of an **unsealed road** is over its assumed design life:

$ maintenance x 18yrs + $ resheet gravel (@ 20th year)

= ($2,500 x 18) + $40,000

= $85,000 per km

6.4.3. Measuring Traffic Impacts at DA Stage

An assessment of vehicle movements generated by a development is required as part of the Statement of Environmental Effects (SEE) or Environmental Impact Statement (EIS) accompanying the proposed development application.

6.4.4. Measuring Traffic Impacts, Post DA Determination

Notwithstanding the assessment carried out at DA Stage, Council will require ongoing reporting of haulage movements and tonnages in order to ensure an accurate assessment of contributions towards maintaining the relevant roads.

A quarterly report will be required from the operator of the development. The quarterly report should include details of the number and type of vehicle movements over the past 3 months, including tonnages hauled. Details of the extracted volume of material will also be required, as is usually submitted annually in returns to the NSW Government Department with responsibility for mines and quarries (if relevant). The documents should be audited and certified by the operating company's auditor.

Council may require confirmation of the accuracy of the operator's records at the operator's expense, if Council feels there are discrepancies in the operator's records or no audited statement is provided by the development. If the confirmation process determines that the operator's records are accurate within a tolerance of 5 percent, Council will assume responsibility for the relevant expenses, such as traffic surveys, etc.

There is a relationship between the volume of material extracted from the ground and the vehicle movements generated. For extractive industries, generally a 30% loose volume factor is used for conversion of solid volume to loose volume and therefore, it is assumed that an average haulage truck of loose fill volume 10 m3 represents 7.7m³ of solid volume extracted. Should an applicant be of the view that this volume factor is inappropriate an alternative factor may be applied provided it is justified to Council's satisfaction.

6.4.5. Method of Assessment

The impact of heavy vehicles on roads will be calculated using ESA (equivalent standard axle) and tonnage transported, which provides a widely accepted way of determining the likely damage to a road pavement from heavy vehicles. The ESA of the relevant heavy vehicles in the operator's annual return will be calculated using the Australian Trucking Association – Track Impact Chart – Technical Advisory Procedure dated March 2018.

The calculation of contributions will be expressed as a yearly cost, calculated annually and payable quarterly.

6.4.6. Contributions Methodology Formula

This Plan applies a consistent formula to determine the contribution of heavy vehicle haulage towards road maintenance.

This formula considers:

- Use of the roads in question expressed in ESA
- The design life of the roads
- The lifecycle costs of maintaining the roads

Different road vehicles have different axle configurations and different axle load configurations. In turn, vehicle class configurations are converted to equivalent standard axles (ESA).

The Australian Trucking Association – Track Impact Chart – Technical Advisory Procedure dated March 2018 provides a methodology for the identifying the ESAs for different vehicles. The table at Appendix 1 shows the ESA applying to specific vehicle types.

The calculation of the periodic contribution relating to any heavy haulage development is determined by calculating the aggregate impact of the subject heavy vehicle movements on each of the road type described above. Should vehicle configurations be utilised other than those stated in the Table, the applicant should consult with Council to determine the applicable ESA that applies to their vehicle category. The periodic contribution is determined by applying the following formula:

$$\$C = \frac{\$Reg \times ESA \times Reg\ Length}{Reg.\ life} + \frac{\$Local\ seal \times ESA \times Local\ sealed\ Length}{Local\ seal\ life} + \frac{\$Unseal \times ESA \times Unsealed\ Length}{Unsealed\ life}$$

where:

- $C is the monetary contribution payable by the development for the relevant period (e.g. preceding quarter) in dollars
- $Reg is the standard cost of regional road per kilometre over the design life in dollars, being $586,000
- $Local sealed is the standard cost of local sealed road per kilometre over the design life in dollars, being $589,000
- $Unseal is the standard cost of local gravel road per kilometre over the design life in dollars, being $85,000
- ESA is the total number of ESAs generated by the development in the preceding period
- Reg life is the standard life of a sealed regional road, which is 1,000,000 ESA
- Local sealed life is the standard life of a local sealed road, which is 1,000,000 ESA
- Unsealed life is the standard life of a local gravel road, which is 200,000 ESA
- Reg Length is the total length of regional sealed road travelled by the development's laden heavy vehicles estimated at the time of the development application, in kilometres
- Local seal Length is the total length of local sealed road travelled by the development's laden heavy vehicles, and
- Unsealed Length is the total length of local unsealed road travelled by the development's laden heavy vehicles estimated at the time of the development application, in kilometres.

6.4.7. Approach to Measuring Traffic Impacts

Two methods can be used to calculate the impact of a specific development, based on the above - a less complex method using “generic” assumptions”, and a more complex method using only information specific to the subject development. Applicants can choose the methodology they prefer.

Method 1: Less Complex

A less complex method makes assumptions about the nature of the roads utilised and vehicles used. The limitations of this method are the underlying assumptions. The assumed road is based on the proportional distance of local unsealed, local sealed and regional sealed roads that make up the Shire’s road system. The assumed vehicle is based on an assessment of vehicles typically used by extractive or mining industries. The basis of this method is:

- Current Council road maintenance costs are $586,000 per km per design life for regional sealed roads, $589,000 per km per design life for local sealed roads and $85,000 per km per design life for unsealed local roads.
- The general split of roads relevant to this plan within the Narromine LGA is 51.4 % local unsealed roads, 12.4 % local sealed roads and 36.2 % sealed regional roads.

- The design life for the road pavements expressed in Equivalent Standard Axle (ESA) loadings is regional sealed roads: - approximately 1,000,000 ESA over 60 years, local sealed roads approximately 1,000,000 ESA over 90 years, and local unsealed roads approximately 200,000 ESA over 15 years.
- Based on the two most likely heavy vehicle types transporting material from quarries being a three axle heavy rigid vehicle with a payload of up to 15.5 tonne and a six axle truck and trailer combination with a payload up to 33 tonnes the relevant traffic impact values to be used in this document are 292 ESA's per 1,000 tonne delivery (three axle truck) and 290 ESA's per 1,000 tonne delivery (six axle truck and trailer). Note this allows for a fully laden load out of the quarry as well as the unladen heavy vehicle movement back to quarry.

It is considered a single maintenance cost based on the split of road types in the Shire is relevant and given the minor difference in ESA's per 1,000 tone it is also considered appropriate to adopt a traffic impact value of 290 ESA's per 1,000 tonne for all heavy vehicle types hauling from the quarry. The majority of heavy vehicle traffic is likely to be truck and trailer combinations, and there is little difference in ESA's per 1,000 tonnes load between the 3 axle heavy rigid vehicle and the truck and trailer combination.

However, the difference in design life between sealed and unsealed roads is significant. Therefore, the formulae includes two parts being the sealed road part combining local and regional roads, and an unsealed part for the unsealed local roads.

Therefore, the generic sealed road costs for inclusion in the formulae is be calculated as follows:

- Sealed road costs = 0.124 x $ 589,000 per km + 0.362 x $586,000 per km = $ 285,168 per km
- Unsealed road costs = 0.514 x $85,000 per km = $ 43,690 per km

Therefore, the required contribution per tonne noting the traffic impact of the heavy vehicles as 0.290 ESA's per tonne is as follows:

Contribution per tonne per km = 0.290 x $285,168 per km / 1,000,000 + 0.290 x $ 43,690 per km / 200,000.

= 0.0827 + 0.0633

= $ 0.146 per tonne per km.

The full contribution rate to be used under the less complex method is $ 0.146 per tonne per km with a distance from the subject development to the nearest State road being calculated to a maximum of 15 km (see below).

However, in recognition of the economic benefits of extractive and mining industries **Council has resolved to adjust the contribution such that operator is levied only 40% of the calculated contribution**, with Council meeting the remaining 60% of the additional road maintenance costs.

i.e. The adjusted contribution payable by the operator is $0.146 per tonne per kilometre x 40% =$ 0.0584 per tonne per kilometre.

In addition, in recognition of the economic benefits of extractive and mining industries, **Council has resolved if the distance travelled to the nearest State road is greater than 15 kilometres, 15 kilometres is to be specified as the distance in the formula**, (e.g. If the distance is 22 kilometres, 15 kilometres would be used in the formula).

Examples of application of the less complex method

Example 1

A quarry extracting 500,000 tonnes per year with a haulage route of 2 km over the local and regional road network would be required to pay the following annual contribution:

Full Contribution = $ 0.146 x 500,000 x 2 = $ 146,000 per annum

Adjusted contribution payable by operator = $ 146,000 per annum x 40% (i.e. 0.4) = $ 58,400 per annum.

Example 2

A quarry extracting 100,000 per annum over 10 km haulage route over the local and regional road network would be required to pay the following annual contribution:

Contribution = $ 0.146 x 100,000 x 10 = $ 146,000 per annum

Adjusted contribution payable by operator = $ 146,000 per annum x 40% (i.e. 0.4) = $58,400 per annum.

Method 2: Development Specific.

A more complex method based on specific information about the subject development in relation to the actual roads travelled and the vehicles used by the development to transport the output of the industry.

The methodology considers the average annualised road maintenance costs, and the length and type of roads to be used by heavy vehicles associated with the subject development. Increased maintenance costs are calculated using the ESA loading on the road per vehicle as a proportion of the total loadings on the road. This is then converted to a total cost per tonne (1000 kilograms) per annum over the designated route travelled by the vehicles.

The increased costs associated with each road travelled will be calculated separately, and the total contribution payable for the development will be the sum of all the calculated contribution rates for all the individual roads on the designated travel route/s that are described in the relevant Development Application, or subsequent amended information.

However, in recognition of the economic benefits of extractive and mining industries **Council has resolved to adjust the contribution such that development is levied only 40% of the calculated contribution**, with Council meeting the remaining 60% of the additional road maintenance costs.

In addition, in recognition of the economic benefits of extractive and mining industries **Council has resolved if the aggregate distance travelled to the nearest State road is greater than 15 kilometres, 15 km is to be used** as the aggregate of distances travelled, and the distance travelled would be proportioned over the type of actual roads travelled (e.g. if the aggregate distance was 24 Km over 6 km of local unsealed road, 6 km of local sealed road and 12 km of regional sealed road, the proportions would be 25% local unsealed:25% local sealed and 50% regional sealed, which would translate into distances of 3.75 km local sealed, 3.75 km local sealed, 7.5 km regional sealed being used in the formula, to give an aggregate distance of 15 km).

6.4.8. Notional examples

Note: these examples show a higher cost per tonne per kilometre than the less complex method because of the higher proportion of sealed roads travelled in these examples, relative to the Shire average proportion of sealed vs unsealed roads.

Example 1

A fictitious quarry is proposed. The distance travelled on Shire roads from the quarry to the nearest State road is approximately 10 km of local sealed roads.

The applicant states that the quarry will produce 100,000 tonnes of material each year.

The haulage of the excavated material will involve three axle heavy rigid vehicle.

Because only one type of road (local sealed) is involved, the formula is:

$$\$C = \frac{\$\text{Local sealed} \times \text{ESA} \times \text{Local sealed Length}}{\text{Local sealed life}}$$

$$\$C = \frac{\$589{,}000 \times .0292 \times 100{,}000 \times 10}{1{,}000{,}000}$$

= $ 171,988 per annum

Adjusted contribution payable by operator = $ 171,988 per annum x 40% (i.e. 0.4) = $68,795 per annum.

Example 2

A fictitious mine is proposed. The distance travelled on Shire roads from the mine to the nearest State road is approximately 5 km of regional sealed roads, 10 km of local sealed roads and 5 km of local unsealed roads. This is an aggregate distance of 20 km which is greater than the 15 kilometre maximum distance (see below).

The applicant states that the mine will produce 50,000 tonnes of material each year.

The haulage of the excavated material will involve six axle truck and trailer vehicle movements.

Because all three road types are involved, the formula is:

$$\$C = \frac{\$\text{Reg} \times \text{ESA} \times \text{Reg Length}}{\text{Reg. life}} + \frac{\$\text{Local sealed} \times \text{ESA} \times \text{Local sealed Length}}{\text{Local sealed life}} + \frac{\$\text{Unseal} \times \text{ESA} \times \text{Unsealed Length}}{\text{Unsealed life}}$$

Because the distance is 20 kilometres (greater than 15 kilometres), the distances travelled on various types of roads need to be proportioned to reflect a maximum aggregate distance no greater than 15 kilometres. In this example, the proportioning is 15/20 = 0.75

$$\$C = \frac{\$586{,}000 \times 0.290 \times 50{,}000 \times 5 \times 0.75}{1{,}000{,}000} + \frac{\$589{,}000 \times 0.290 \times 50{,}000 \times 10 \times 0.75}{1{,}000{,}000} + \frac{\$85{,}000 \times 0.290 \times 50{,}000 \times 5 \times 0.75}{200{,}000}$$

= $31,864 + $74,355+ $23,111

= $129,330 per annum proportioned for 15 kilometres

Adjusted contribution payable by operator = $129,330 per annum x 40% (i.e. 0.4) = $51,732 per annum.

7. PLAN ADMINSTRATION COSTS

7.1. Nexus

The preparation and administration of a Section 7.11 plan requires resources. Council employs staff to undertake the financial accounting of contributions, and implement the Plan and its works. In addition, consultant studies and specialist advice (e.g. legal and valuation) are obtained to assist with Plan preparation, management and review.

The costs involved with administering Section 7.11 are an essential component of the efficient provision of facilities necessitated by development within the Contributions Areas.

7.2. Strategy

The Plan aims to provide funds to ensure the efficient management of the Section 7.11 planning and financial processes within Council. These processes will be ongoing throughout the life of the Plan.

Council staff that are accountable for facility/service planning and delivery will be involved in reviewing and updating the Plan. This may include review of the works schedules or the latest information on community needs to ensure that facility planning is current and appropriate. This may also include engaging specialist consultants (e.g. planning and engineering specialists) to carry out studies.

7.3. Calculation of Contribution

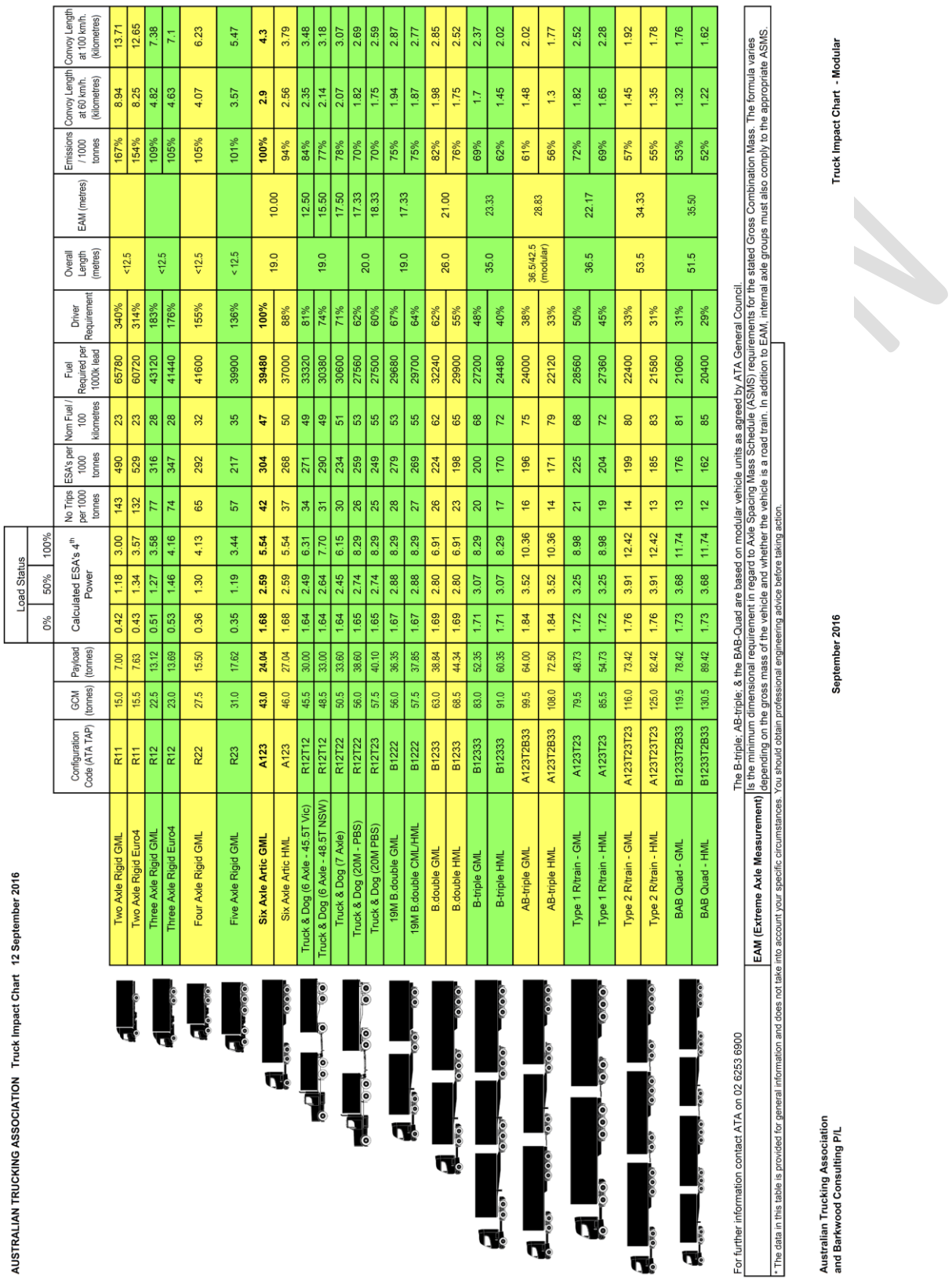
The estimated cost of Council staff and specialist consulting assistance in the preparation, implementation, management and administration of this Plan is 1% of the value of contributions.

Table 3: Plan Preparation and Management Contributions

Contributions Area	Contribution
Plan Management Administration- Heavy Vehicle Generating Development	1% of the calculated contribution

Appendix 1- Truck Impact Chart ATA

From Technical Advisory Procedure 2.2 edition – March 2018



AUSTRALIAN TRUCKING ASSOCIATION Truck Impact Chart 12 September 2016

	Configuration Code (ATA TAP)	GCM (tonnes)	Payload (tonnes)	Load Status 0%	Load Status 50%	Load Status 100%	No Trips per 1000 tonnes	ESA's per 1000 tonnes	Nom Fuel / 100 kilometres	Fuel Required per 1000k lead	Driver Requirement	Overall Length (metres)	EAM (metres)	Emissions / 1000 tonnes	Convoy Length at 60 km/h. (kilometres)	Convoy Length at 100 km/h. (kilometres)
Two Axle Rigid GML	R11	15.0	7.00	0.42	1.18	3.00	143	490	23	65780	340%	<12.5		167%	8.94	13.71
Two Axle Rigid Euro4	R11	15.5	7.63	0.43	1.34	3.57	132	529	23	60720	314%			154%	8.25	12.65
Three Axle Rigid GML	R12	22.5	13.12	0.51	1.27	3.58	77	316	28	43120	183%	<12.5		109%	4.82	7.38
Three Axle Rigid Euro4	R12	23.0	13.69	0.53	1.46	4.16	74	347	28	41440	176%			105%	4.63	7.1
Four Axle Rigid GML	R22	27.5	15.50	0.36	1.30	4.13	65	292	32	41600	155%	<12.5		105%	4.07	6.23
Five Axle Rigid GML	R23	31.0	17.62	0.35	1.19	3.44	57	217	35	39900	136%	< 12.5		101%	3.57	5.47
Six Axle Artic GML	**A123**	**43.0**	**24.04**	**1.68**	**2.59**	**5.54**	**42**	**304**	**47**	**39480**	**100%**	19.0	10.00	**100%**	**2.9**	**4.3**
Six Axle Artic HML	A123	46.0	27.04	1.68	2.59	5.54	37	268	50	37000	88%			94%	2.56	3.79
Truck & Dog (6 Axle - 45.5T Vic)	R12T12	45.5	30.00	1.64	2.49	6.31	34	271	49	33320	81%		12.50	84%	2.35	3.48
Truck & Dog (6 Axle - 48.5T NSW)	R12T12	48.5	33.00	1.64	2.64	7.70	31	290	49	30380	74%	19.0	15.50	77%	2.14	3.18
Truck & Dog (7 Axle)	R12T22	50.5	33.60	1.64	2.45	6.15	30	234	51	30600	71%		17.50	78%	2.07	3.07
Truck & Dog (20M - PBS)	R12T22	56.0	38.60	1.65	2.74	8.29	26	259	53	27560	62%	20.0	17.33	70%	1.82	2.69
Truck & Dog (20M PBS)	R12T23	57.5	40.10	1.65	2.74	8.29	25	249	55	27500	60%		18.33	70%	1.75	2.59
19M B.double GML	B1222	56.0	36.35	1.67	2.88	8.29	28	279	53	29680	67%	19.0	17.33	75%	1.94	2.87
19M B.double CML/HML	B1222	57.5	37.85	1.67	2.88	8.29	27	269	55	29700	64%			75%	1.87	2.77
B.double GML	B1233	63.0	38.84	1.69	2.80	6.91	26	224	62	32240	62%	26.0	21.00	82%	1.98	2.85
B.double HML	B1233	68.5	44.34	1.69	2.80	6.91	23	198	65	29900	55%			76%	1.75	2.52
B-triple GML	B12333	83.0	52.35	1.71	3.07	8.29	20	200	68	27200	48%	35.0	23.33	69%	1.7	2.37
B-triple HML	B12333	91.0	60.35	1.71	3.07	8.29	17	170	72	24480	40%			62%	1.45	2.02
AB-triple GML	A123T2B33	99.5	64.00	1.84	3.52	10.36	16	196	75	24000	38%	36.5/42.5 (modular)	28.83	61%	1.48	2.02
AB-triple HML	A123T2B33	108.0	72.50	1.84	3.52	10.36	14	171	79	22120	33%			56%	1.3	1.77
Type 1 R/train - GML	A123T23	79.5	48.73	1.72	3.25	8.98	21	225	68	28560	50%	36.5	22.17	72%	1.82	2.52
Type 1 R/train - HML	A123T23	85.5	54.73	1.72	3.25	8.98	19	204	72	27360	45%			69%	1.65	2.28
Type 2 R/train - GML	A123T23T23	116.0	73.42	1.76	3.91	12.42	14	199	80	22400	33%	53.5	34.33	57%	1.45	1.92
Type 2 R/train - HML	A123T23T23	125.0	82.42	1.76	3.91	12.42	13	185	83	21580	31%			55%	1.35	1.78
BAB Quad - GML	B1233T2B33	119.5	78.42	1.73	3.68	11.74	13	176	81	21060	31%	51.5	35.50	53%	1.32	1.76
BAB Quad - HML	B1233T2B33	130.5	89.42	1.73	3.68	11.74	12	162	85	20400	29%			52%	1.22	1.62

The B-triple; AB-triple; & the BAB-Quad are based on modular vehicle units as agreed by ATA General Council.

EAM (Extreme Axle Measurement) Is the minimum dimensional requirement in regard to Axle Spacing Mass Schedule (ASMS) requirements for the stated Gross Combination Mass. The formula varies depending on the gross mass of the vehicle and whether the vehicle is a road train. In addition to EAM, internal axle groups must also comply to the appropriate ASMS.

* The data in this table is provided for general information and does not take into account your specific circumstances. You should obtain professional engineering advice before taking action.

For further information contact ATA on 02 6253 6900

Australian Trucking Association and Barkwood Consulting P/L

September 2016

Truck Impact Chart - Modular

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