## **ORDINARY COUNCIL**

Thursday 19 May 2022



## Ordinary Council Meeting Thursday, 19 May 2022

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# Leadership and Governance

## What we are trying to achieve

A community that works together in decision making that is defined as ethically, socially and environmentally responsible.

## What the result will be

We will have:

- A community that has the opportunity to be involved in decision making
- Open, easy, meaningful, regular and diverse communication between the community and decision makers
- Partnerships and collaborative projects, that meet the community's expectations, needs and challenges
- Knowledgeable, skilled and connected community leaders
- Strong corporate management that is transparent

## How we will get there

- 1.1 Inform and engage with the community about what Council does using varied communication channels
- 1.2 Maintain strong partnerships between all stakeholders local, state and federal so that they are affective advocates for the community
- 1.3 Demonstrate leadership
- 1.4 Use innovative, efficient and sustainable practices
- 1.5 Ensure strong corporate and financial management that is transparent and accountable



## Annual Report and Determination

Annual report and determination under sections 239 and 241 of the Local Government Act 1993

20 April 2022

NSW Remuneration Tribunals website

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## **Executive Summary**

The *Local Government Act 1993* (LG Act) requires the Local Government Remuneration Tribunal ("the Tribunal") to report to the Minister for Local Government by 1 May each year on its determination of categories of councils and the maximum and minimum amounts of fees to be paid to mayors, councillors, and chairpersons and members of county councils.

## Categories

The Tribunal found the allocation of councils into the current categories appropriate. Criteria for each category is published in Appendix 1. These categories have not changed further to the extensive review undertaken as part of the 2020 review.

## Fees

The Tribunal determined a 2 per cent per annum increase in the minimum and maximum fees applicable to each category.

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## Section 1 Introduction

- Section 239 of the LG Act provides that the Tribunal determine the categories of councils and mayoral offices and to place each council and mayoral office into one of those categories.
- 2. Section 241 of the LG Act provides that the Tribunal determine the maximum and minimum amount of fees to be paid to mayors and councillors of councils, as well as chairpersons and members of county councils for each of the categories determined under section 239.
- 3. Section 242A(1) of the LG Act, requires the Tribunal to give effect to the same policies on increases in remuneration as those of the Industrial Relations Commission.
- 4. The Tribunal can also determine that a council can be placed in another existing or new category with a higher range of fees without breaching the Government's Wages Policy as per section 242A (3) of the LG Act.
- 5. The Tribunal's determinations take effect from 1 July each year.

## Section 2 2021 Determination

- 6. The Tribunal received 18 submissions which included 9 requests for re-categorisation. At the time of making its determination, the Tribunal had available to it the Australian Bureau of Statistics 25 March 2020 population data for FY2018-19. The Tribunal noted the requirement of section 239 of the LG Act that it must determine categories for councils and mayoral offices at least once every 3 years. It noted that the Tribunal had conducted an extensive review in 2020 and decided that the categories would next be considered in 2023.
- The Tribunal found that the current categories and allocation of councils to these categories remained appropriate. The Tribunal's finding had regard to the 2020 review, the current category model and criteria and the evidence put forward in the received submissions.
- 8. In regard to fees, the Tribunal determined a 2 per cent per annum increase in the minimum and maximum fees applicable to each category.

## Section 3 2022 Review

## Process

9. In 2020, the categories of general purpose councils were determined as follows:

Metropolitan	Non-Metropolitan
Principal CBD	Major Regional City
Major CBD	Major Strategic Area
Metropolitan Large	Regional Strategic Area
Metropolitan Medium	Regional Centre
Metropolitan Small	Regional Rural

		Rural
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- 10. The Tribunal wrote to all mayors or general managers and LGNSW on 14 October 2021 to advise of the commencement of the 2021 review and invited submissions regarding recategorisation, fees and other general matters. The Tribunal's correspondence advised that an extensive review of categories was undertaken in 2020 and, as this was only legislatively required every three years, consideration would be next be given in 2023. The correspondence further advised that submissions requesting to be moved into a different category as part of the 2022 review would require a strong case supported by evidence that substantiates that the criteria for the requested category is met.
- 11. Seven submissions were received from individual councils and one submission was received from LGNSW. The Tribunal noted that several of the submissions had not been endorsed by their respective councils. The Tribunal also met with the President, Chief Executive and Senior Manager of LGNSW.
- 12. The Tribunal discussed the submissions at length with the Assessors.
- 13. The Tribunal acknowledged previous and ongoing difficulties imposed by COVID19 and natural disasters on councils.
- 14. The Tribunal also acknowledged submissions from councils in regional and remote locations that raised unique challenges, such as travel and connectivity, experienced by mayors and councillors in those areas.
- 15. A summary of the matters raised in the received submissions and the Tribunal's consideration of those matters is outlined below.

## Categorisation

16. Five council submissions requested recategorisation. Three of these requests sought the creation new categories.

#### Metropolitan Large Councils

- 17. Penrith City Council acknowledged that categories were not being reviewed until 2023. However, the Council reiterated their previous year's position and contended that their claim for the creation of a new category of "Metropolitan Large – Growth Centre" continues to be enhanced through their leading role in the Western Sydney City Deal. Council's submission further stated that the participation in the Deal demonstrated the exponential growth that will occur in the Penrith Local Government Area.
- 18. Blacktown City Council requested the creation of a new category "Metropolitan Large Growth Area". Council stated that the current criteria for "Metropolitan Large" does not reflect the Council's size, rate of growth and economic influence.

Council based its argument for a new category on the following grounds:

- Significant population growth. Current estimated population of 403,000 with an expected population of 640,000 in 2041.
- Blacktown being critical to the success of the Greater Sydney Region Plan while also being part of the fastest growing district for the next 20 years.
- 4th largest economy in NSW as of 30 June 2020, Gross Regional Product (GRP) was \$21.98 billion, comparatively City of Parramatta was \$31.36 billion.
- Undertaking of several transformational projects to increase economy and services. Examples include the redesign of Riverstone Town Centre, Australian Catholic University establishment of an interim campus for up to 700 undergrads

Item 11.03 Attachment 1

with a permanent campus to open by 2024, the \$1 billion Blacktown Brain and Spinal Institute proposal and Blacktown International Sports Park Masterplan to provide a first-class multi-sport venue.

- Expansion in provision of services such as childcare, aquatic and leisure centres.
- Diversity of population.

## Non-Metropolitan Major Regional City Councils

- 19. Newcastle Council requested clarification regarding City of Newcastle's status as either Metropolitan or Regional, noting that while City of Newcastle is classified as a "Major Regional City", the Newcastle Local Government Area is often exempt from both regional and metropolitan grant funding due to inconsistencies in classification. Council sought review on the following grounds:
  - Size of council area 187km<sup>2</sup> (in comparison of Parramatta Council 84km<sup>2</sup>).
  - Physical terrain.
  - Population and distribution of population.
  - Nature and volume of business dealt with by Council.
  - Nature and extent of development of City of Newcastle.
  - Diversity of communities served.
  - Regional, national and international significance of City of Newcastle.
  - Transport hubs.
  - Regional services including health, education, smart city services and public administration.
  - Cultural and sporting facilities.
  - Matters that the Tribunal consider relevant

## **Regional Centre**

20. Tweed Shire Council requested to be reclassified as a "Regional Strategic Area" on the following grounds:

- Proximity to the Gold Coast City and Brisbane.
- · Proximity to Sydney via the Gold Coast airport.
- Tweed being the major population and city centre for the Northern Rivers Joint Organisation.
- Tweed being the largest employer and strongest growth area in the Northern Rivers.

## Non-Metropolitan Rural Councils

- 21. Murrumbidgee Council requested recategorisation to "Regional Rural" as they are a product of the merger of the former Jerilderie Shire Council and the former Murrumbidgee Shire Council. Council also suggested that the criteria for "Regional Rural" is amended to:
  - Councils categorised as Regional Rural will typically have a minimum residential population of 20,000 or can demonstrate one of the following features...."
    - the product of the 2016 amalgamation where two or more Rural classified Local Governments Areas merged.

## Findings - categorisation

22. The Tribunal assessed each Council's submission and found that the current categories and allocation of councils to these categories remained appropriate. The Tribunal's findings had regard to the 2020 review, the current category model and

criteria and the evidence put forward in the received submissions.

- 23. Having regard to the requirements of sections 239 and 240 of the LG Act, the Tribunal did not find that any council's submission was strong enough for a change in category or for the creation of a new category.
- 24. The Tribunal did note, however, that some councils may have a better case for recategorisation at the next major review of categories in 2023.
- 25. The Tribunal was of the view that the 2023 determination and review of categories as required by s239 (1) of the LG Act will see more requests from councils for recategorisation and possible determination of new categories. The Tribunal and Assessors may benefit from visits to meet regional organisations of councils and direct opportunities for input from Mayors and general managers in this regard.

#### Fees

- 26. In determining the maximum and minimum fees payable in each of the categories, the Tribunal is required by section 242A of the LG Act, to give effect to the same policies on increases in remuneration as those that the Industrial Relations Commission is required to give effect to under section 146C of the *Industrial Relations Act 1996* (IR Act), when making or varying awards or orders relating to the conditions of employment of public sector employees.
- 27. Pursuant to section 146C(1)(a) of the IR Act, the current government policy on wages is expressed in the Industrial Relations (Public Sector Conditions of Employment) Regulation 2014 (IR Reg.). The IR Reg. provides that public sector wages cannot increase by more than 2.5 per cent per annum. The Tribunal therefore has the discretion to determine an increase of up to 2.5 per cent per annum.
- 28. Submissions that addressed fees sought an increase of a maximum of 2.5 per cent per annum or greater. These submissions raised issues such as comparative remuneration, cost of living and increasing workloads. One submission also suggested that higher fees are required to attract a higher standard of candidates to council roles.
- 29. The LGNSW submission contained 3 parts. The first part of the submission supported an increase of 2.5 per cent per annum in remuneration, but further argued that the maximum increase is inadequate and does not address the historical undervaluation of work performed by mayors and councillors, and the substantial expansion of their responsibilities and accountability in recently years. LGNSW used the following economic indexes and wage data in support of their argument:
  - Consumer price index (CPI)
  - National and state wages cases
  - Wage increases under the Local Government (State) Award 2020.
- 30. The second part of LGNSW's submission addressed inequity and impacts of low remuneration. It was supported by the research paper "Councillor perspectives on the (in)adequacy of remuneration in NSW local government: Impacts on well-being, diversity and quality of representation" (the "ANU Paper"), written by Associate Professor Jakimow of the Australian National University. A key finding of the ANU Paper was that "current remuneration levels are perceived as inadequately reflecting the extent and nature of council work." The finding was derived from the undertaking of

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a survey of councillors and mayors. The paper suggests that there is a disconnect between workload and remuneration and this was identified as the most frequent argument for increasing the current rate.

- 31. The third and final part of LGNSW's submission compared the minimum and maximum rates of NSW mayor and councillor remuneration to the remuneration of directors and chairpersons of comparable government bodies and not-for-profits, mayors and councillors in Queensland and members of the NSW Parliament. The submission contended that NSW mayor and councillor remuneration is below that of their counterparts.
- 32. Following the most recent review by the Independent Pricing and Regulatory Tribunal (IPART) the amount that councils will be able to increase the revenue they can collect from rates will depend on their level of population growth. IPART has set a 2022-23 rate peg for each council, ranging from 0.7 to 5.0 per cent. IPART's rate peg takes into account the annual change in the Local Government Cost Index, which measures the average costs faced by NSW councils, in addition to a population factor based on each council's population growth.
- 33. Employees under the *Local Government (State) Award 2020* will receive a 2 per cent per annum increase in rates of pay from the first full pay period to commence on or after 1 July 2022.
- 34. The Tribunal has determined a 2 per cent per annum increase in the minimum and maximum fees applicable to each category.

## Conclusion

- 35. The Tribunal's determinations have been made with the assistance of Assessors Ms Kylie Yates and Ms Melanie Hawyes.
- 36. It is the expectation of the Tribunal that in the future all submissions have council endorsement.
- 37. Determination 1 outlines the allocation of councils into each of the categories as per section 239 of the LG Act.
- 38. Determination 2 outlines the maximum and minimum fees paid to councillors and mayors and members and chairpersons of county councils as per section 241 of the LG Act.

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Viv May PSM Local Government Remuneration Tribunal Dated: 20 April 2022

Item 11.03 Attachment 1

## Section 4 2021 Determinations

Determination No. 1 - Allocation of councils into each of the categories as per section 239 of the LG Act effective from 1 July 2021

Table 1: General Purpose Councils - Metropolitan

Principal CBD (1) Sydney Major CBD (1) Parramatta

Metropolitan Large (12)
Bayside
Blacktown
Canterbury-Bankstown
Cumberland
Fairfield
Inner West
Liverpool
Northern Beaches
Penrith
Ryde
Sutherland
The Hills

Metropolitan Medium (8)
Campbelltown
Camden
Georges River
Hornsby
Ku-ring-gai
 North Sydney
 Randwick
Willoughby

Metropolitan Small (8)
Burwood
Canada Bay
Hunters Hill
Lane Cove
Mosman
Strathfield
Waverley
Woollahra

Major Regional City (2)	Major Strategic Area (1)	Regional Strategic Area (1)
Newcastle	Central Coast	Lake Macquarie
Wollongong		

## Table 2: General Purpose Councils - Non-Metropolitan

Regional Centre (24)		Regional Rural (13)
Albury	Mid-Coast	Bega
Armidale	Orange	Broken Hill
Ballina	Port Macquarie-Hastings	Byron
Bathurst	Port Stephens	Eurobodalla
Blue Mountains	Queanbeyan-Palerang	Goulburn Mulwaree
Cessnock	Shellharbour	Griffith
Clarence Valley	Shoalhaven	Kempsey
Coffs Harbour	Tamworth	Kiama
Dubbo	Tweed	Lithgow
Hawkesbury	Wagga Wagga	Mid-Western
Lismore	Wingecarribee	Richmond Valley Council
Maitland	Wollondilly	Singleton
1		Snowy Monaro

Rural (57)			
Balranald	Cootamundra- Gundagai	Junee	Oberon
Bellingen	Cowra	Kyogle	Parkes
Berrigan	Dungog	Lachlan	Snowy Valleys
Bland	Edward River	Leeton	Temora
Blayney	Federation	Liverpool Plains	Tenterfield
Bogan	Forbes	Lockhart	Upper Hunter
Bourke	Gilgandra	Moree Plains	Upper Lachlan
Brewarrina	Glen Innes Severn	Murray River	Uralla
Cabonne	Greater Hume	Murrumbidgee	Walcha
Carrathool	Gunnedah	Muswellbrook	Walgett
Central Darling	Gwydir	Nambucca	Warren
Cobar	Hay	Narrabri	Warrumbungle
Coolamon	Hilltops	Narrandera	Weddin
Coonamble	Inverell	Narromine	Wentworth

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Rural (57)	
	Yass

## Table 3: County Councils

Water (4)	Other (6)
Central Tablelands	Castlereagh-Macquarie
Goldenfields Water	Central Murray
Riverina Water	Hawkesbury River
Rous	New England Tablelands
	Upper Hunter
	Upper Macquarie

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Viv May PSM Local Government Remuneration Tribunal Dated: 20 April 2022

## Determination No. 2 - Fees for Councillors and Mayors as per section 241 of the LG Act effective from 1 July 2022

The annual fees to be paid in each of the categories to Councillors, Mayors, Members and Chairpersons of County Councils effective on and from 1 July 2022 as per section 241 of the *Local Government Act* 1993 are determined as follows:

Category		Councillor/Member		Mayor/Chairperson	
		Annual Fee (\$)		Additional Fee* (\$)	
		effective 1 July 2022		effective 1 July 2022	
		Minimum	Maximum	Minimum	Maximum
	Principal CBD	28,750	42,170	175,930	231,500
General Purpose	Major CBD	19,180	35,520	40,740	114,770
Councils - Metropolitan	Metropolitan Large	19,180	31,640	40,740	92,180
	Metropolitan Medium	14,380	26,840	30,550	71,300
	Metropolitan Small	9,560	21,100	20,370	46,010
	Major Regional City	19,180	33,330	40,740	103,840
	Major Strategic Area	19,180	33,330	40,740	103,840
General Purpose Councils -	Regional Strategic Area	19,180	31,640	40,740	92,180
Non-Metropolitan	Regional Centre	14,380	25,310	29,920	62,510
	Regional Rural	9,560	21,100	20,370	46,040
	Rural	9,560	12,650	10,180	27,600
County Councils	Water	1,900	10,550	4,080	17,330
	Other	1,900	6,300	4,080	11,510

#### Table 4: Fees for General Purpose and County Councils

\*This fee must be paid in addition to the fee paid to the Mayor/Chairperson as a Councillor/Member (s.249(2)).

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Viv May PSM Local Government Remuneration Tribunal Dated: 20 April 2021

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## Appendices

#### Appendix 1 Criteria that apply to categories

## Principal CBD

The Council of the City of Sydney (the City of Sydney) is the principal central business district (CBD) in the Sydney Metropolitan area. The City of Sydney is home to Sydney's primary commercial office district with the largest concentration of businesses and retailers in Sydney. The City of Sydney's sphere of economic influence is the greatest of any local government area in Australia.

The CBD is also host to some of the city's most significant transport infrastructure including Central Station, Circular Quay and International Overseas Passenger Terminal. Sydney is recognised globally with its iconic harbour setting and the City of Sydney is host to the city's historical, cultural and ceremonial precincts. The City of Sydney attracts significant visitor numbers and is home to 60 per cent of metropolitan Sydney's hotels.

The role of Lord Mayor of the City of Sydney has significant prominence reflecting the CBD's importance as home to the country's major business centres and public facilities of state and national importance. The Lord Mayor's responsibilities in developing and maintaining relationships with stakeholders, including other councils, state and federal governments, community and business groups, and the media are considered greater than other mayoral roles in NSW.

## Major CBD

The Council of the City of Parramatta (City of Parramatta) is the economic capital of Greater Western Sydney and the geographic and demographic centre of Greater Sydney. Parramatta is the second largest economy in NSW (after Sydney CBD) and the sixth largest in Australia.

As a secondary CBD to metropolitan Sydney the Parramatta local government area is a major provider of business and government services with a significant number of organisations relocating their head offices to Parramatta. Public administration and safety have been a growth sector for Parramatta as the State Government has promoted a policy of moving government agencies westward to support economic development beyond the Sydney CBD.

The City of Parramatta provides a broad range of regional services across the Sydney Metropolitan area with a significant transport hub and hospital and educational facilities. The City of Parramatta is home to the Westmead Health and Medical Research precinct which represents the largest concentration of hospital and health services in Australia, servicing Western Sydney and providing other specialised services for the rest of NSW.

The City of Parramatta is also home to a significant number of cultural and sporting facilities (including Sydney Olympic Park) which draw significant domestic and international visitors to the region.

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## Metropolitan Large

Councils categorised as Metropolitan Large will typically have a minimum residential population of 200,000.

Councils may also be categorised as Metropolitan Large if their residential population combined with their non-resident working population exceeds 200,000. To satisfy this criteria the non-resident working population must exceed 50,000.

Other features may include:

- total operating revenue exceeding \$200M per annum
- the provision of significant regional services to greater Sydney including, but not limited to, major education, health, retail, sports, other recreation and cultural facilities
- significant industrial, commercial and residential centres and development corridors
- high population growth.

Councils categorised as Metropolitan Large will have a sphere of economic influence and provide regional services considered to be greater than those of other metropolitan councils.

## Metropolitan Medium

Councils categorised as Metropolitan Medium will typically have a minimum residential population of 100,000.

Councils may also be categorised as Metropolitan Medium if their residential population combined with their non-resident working population exceeds 100,000. To satisfy this criteria the non-resident working population must exceed 50,000

Other features may include:

- total operating revenue exceeding \$100M per annum
- services to greater Sydney including, but not limited to, major education, health, retail, sports, other recreation and cultural facilities
- industrial, commercial and residential centres and development corridors
- high population growth.

The sphere of economic influence, the scale of council operations and the extent of regional servicing would be below that of Metropolitan Large councils.

## Metropolitan Small

Councils categorised as Metropolitan Small will typically have a residential population less than 100,000.

Other features which distinguish them from other metropolitan councils include:

• total operating revenue less than \$150M per annum.

While these councils may include some of the facilities and characteristics of both Metropolitan Large and Metropolitan Medium councils the overall sphere of economic influence, the scale of council operations and the extent of regional servicing would be below that of Metropolitan Medium councils.

## Major Regional City

Newcastle City Council and Wollongong City Councils are categorised as Major Regional City. These councils:

- are metropolitan in nature with major residential, commercial and industrial areas
- typically host government departments, major tertiary education and health facilities and incorporate high density commercial and residential development
- provide a full range of higher order services and activities along with arts, culture, recreation, sporting and entertainment facilities to service the wider community and broader region
- have significant transport and freight infrastructure servicing international markets, the capital city and regional areas
- have significant natural and man-made assets to support diverse economic activity, trade and future investment
- typically contain ventures which have a broader State and national focus which impact upon the operations of the council.

## Major Strategic Area

Councils categorised as Major Strategic Area will have a minimum population of 300,000. Other features may include:

- health services, tertiary education services and major regional airports which service the surrounding and wider regional community
- a full range of high-order services including business, office and retail uses with arts, culture, recreation and entertainment centres
- total operating revenue exceeding \$250M per annum
- significant visitor numbers to established tourism ventures and major events that attract state and national attention
- a proximity to Sydney which generates economic opportunities.

Currently, only Central Coast Council meets the criteria to be categorised as a Major Strategic Area. Its population, predicted population growth, and scale of the Council's operations warrant that it be differentiated from other non-metropolitan councils. Central Coast Council is also a

significant contributor to the regional economy associated with proximity to and connections with Sydney and the Hunter Region.

#### **Regional Strategic Area**

Councils categorised as Regional Strategic Area are differentiated from councils in the Regional Centre category on the basis of their significant population and will typically have a residential population above 200,000.

Other features may include:

- health services, tertiary education services and major regional airports which service the surrounding and wider regional community
- a full range of high-order services including business, office and retail uses with arts, culture, recreation and entertainment centres
- total operating revenue exceeding \$250M per annum
- significant visitor numbers to established tourism ventures and major events that attract state and national attention
- a proximity to Sydney which generates economic opportunities.

Currently, only Lake Macquarie Council meets the criteria to be categorised as a Regional Strategic Area. Its population and overall scale of council operations will be greater than Regional Centre councils.

#### **Regional Centre**

Councils categorised as Regional Centre will typically have a minimum residential population of 40,000.

Other features may include:

- a large city or town providing a significant proportion of the region's housing and employment
- health services, tertiary education services and major regional airports which service the surrounding and wider regional community
- a full range of high-order services including business, office and retail uses with arts, culture, recreation and entertainment centres
- total operating revenue exceeding \$100M per annum
- the highest rates of population growth in regional NSW
- significant visitor numbers to established tourism ventures and major events that attract state and national attention
- a proximity to Sydney which generates economic opportunities.

Councils in the category of Regional Centre are often considered the geographic centre of the region providing services to their immediate and wider catchment communities.

## **Regional Rural**

Councils categorised as Regional Rural will typically have a minimum residential population of 20,000.

Other features may include:

- a large urban population existing alongside a traditional farming sector, and are surrounded by smaller towns and villages
- health services, tertiary education services and regional airports which service a regional community
- a broad range of industries including agricultural, educational, health, professional, government and retail services
- large visitor numbers to established tourism ventures and events.

Councils in the category of Regional Rural provide a degree of regional servicing below that of a Regional Centre.

## Rural

Councils categorised as Rural will typically have a residential population less than 20,000. Other features may include:

- one or two significant townships combined with a considerable dispersed population spread over a large area and a long distance from a major regional centre
- a limited range of services, facilities and employment opportunities compared to Regional Rural councils
- local economies based on agricultural/resource industries.

## County Councils - Water

County councils that provide water and/or sewerage functions with a joint approach in planning and installing large water reticulation and sewerage systems.

## **County Councils - Other**

County councils that administer, control and eradicate declared noxious weeds as a specified Local Control Authority under the *Biosecurity Act 2015*.



Authorised by: Authorised date: Effective date: Next review date: File Number:

## Council Policy COUNCILLOR AND STAFF INTERACTION POLICY

## 1. INTRODUCTION

- 1.1 The Councillor and Staff Interaction Policy (the Policy) provides a framework for Councillors when exercising their civic functions by specifically addressing their ability to interact with, and receive advice from, authorised staff.
- 1.2 The Policy complements and should be read in conjunction with Council's Code of Conduct (the Code of Conduct).
- 1.3 The aim of the Policy is to facilitate a positive working relationship between Councillors, as the community's elected representatives, and staff, who are employed to administer the operations of the Council. The Policy provides direction on interactions between Councillors and staff to assist both parties in carrying out their day-to-day duties professionally, ethically and respectfully.
- 1.4 It is important to have an effective working relationship that recognises the important but differing contribution both parties bring to their complementary roles.

## 2 POLICY STATEMENT AND SCOPE

- 2.1 The objectives of the Policy are to:
  - a) establish positive, effective and professional working relationships between Councillors and staff defined by mutual respect and courtesy
  - b) enable Councillors and staff to work together appropriately and effectively to support each other in their respective roles
  - c) ensure that Councillors receive advice in an orderly, courteous and appropriate manner to assist them in the performance of their civic duties
  - d) ensure Councillors have adequate access to information to exercise their statutory roles
  - e) provide direction on, and guide Councillor interaction with, staff for both obtaining information and in general situations
  - f) maintain transparent decision making and good governance arrangements
  - g) ensure the reputation of Council is enhanced by Councillors and staff interacting consistently, professionally and positively in their day-to-day duties
  - h) provide a clear and consistent framework through which breaches of the Policy will be managed in accordance with the Code of Conduct.

This Policy applies to all Councillors and Council staff.

This Policy applies to all interactions between Councillors and staff, whether face-to-face, online (including social media and virtual meeting platforms), by phone, text message or in writing.

This Policy applies whenever interactions between Councillors and staff occur, including inside or outside of work hours, and at both Council and non-council venues and events.

This Policy does not confer any delegated authority upon any person. All delegations to staff are made by the Chief Executive Officer.

Councillor and Staff Interaction Policy

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Clause 3.1(b) of the Code of Conduct provides Council officials must not conduct themselves in a manner that is contrary to a council's policies. A breach of this Policy will be a breach of the Code.

## 3 POLICY

#### The Councillor Requests Process

- 3.1 Councillors have a right to request information provided it is relevant to Councillor's exercise of their civic functions. This right does not extend to matters about which a Councillor is merely curious.
- 3.2 Councillors do not have a right to request information about matters that they are prevented from participating in decision-making on because of a conflict of interest, unless the information is otherwise publicly available.
- 3.3 The Chief Executive Officer has identified Council support staff (the Councillor Administration Assistant) under this Policy for the management of requests from Councillors.
- 3.4 Councillors can use the Councillor requests process to:
  - a) request information or ask questions that relate to the strategic position, performance or operation of the Council
  - b) bring significant concerns that have been raised by members of the public to the attention of staff
  - c) request ICT or other support from the Council administration.
- 3.5 Councillors must, to the best of their knowledge, be specific about what information they are requesting, and make their requests respectfully. Where a Councillor's request lacks specificity, the Chief Executive Officer or staff member authorised to manage the matter is entitled to ask the Councillor to clarify their request and the reason(s) why they are seeking the information.
- 3.6 Staff must make every reasonable effort to assist Councillors with their requests and do so in a respectful manner.
- 3.7 The Chief Executive Officer or the staff member authorised to manage a Councillor request will provide an acknowledgement as soon as practicable with a response provided within a timely manner and advised of expected date of the response. Where a response cannot be provided within that timeframe, the Councillor will be advised, and the information will be provided as soon as practicable.
- 3.8 Councillors are required to treat all information provided by staff appropriately and to observe any confidentiality requirements.
- 3.9 Staff will inform Councillors of any confidentiality requirements for information they provide so Councillors can handle the information appropriately.
- 3.10 Where a Councillor is unsure of confidentiality requirements, they should contact the Chief Executive Officer, or the staff member authorised to manage their request.
- 3.11 The Chief Executive Officer may refuse access to information requested by a Councillor if:
  - a) the information is not necessary for the performance of the Councillor's civic functions, or
  - b) the Councillor has previously declared a conflict of interest in the matter and removed themselves from decision-making on it, or
  - c) the Chief Executive Officer is prevented by law from disclosing the information, or
  - d) if responding to the request would, in the Chief Executive Officer's opinion, result in an unreasonable diversion of staff time and resources.
- 3.12 Where the Chief Executive Officer refuses to provide information requested by a Councillor, they must act reasonably. The Chief Executive Officer must advise a Councillor in writing of their reasons for refusing access to the information requested.
- 3.13 Where a Councillor's request for information is refused by the Chief Executive Officer on the grounds referred to under paragraph c) of clause 3.11, the Councillor may instead request the information through a resolution of the Council by way of a notice of motion.

Councillor and Staff Interaction Policy

3.14 Where a Councillor persistently makes requests for information which, in the Chief Executive Officer's opinion, result in a significant and unreasonable diversion of staff time and resources the Council may, on the advice of the Chief Executive Officer, resolve to limit the number of requests the Councillor may make.

## Access to Council Staff

- 3.16 Councillors may directly contact members of staff that are listed at Schedule 1 of this Policy. The Chief Executive Officer may amend this list at any time and will advise Councillors promptly of any changes.
- 3.17 Councillors can contact staff listed in the "Authorised Staff Contacts for Councillors" table Schedule 1 about matters that relate to the staff member's area of responsibility.
- 3.18 Councillors should as far as practicable, only contact staff during normal business hours.
- 3.19 If Councillors would like to contact a member of staff not listed on Schedule 1, they must receive permission from the Chief Executive Officer before making any contact.
- 3.20 If a Councillor is unsure which authorised staff member can help with their enquiry, they can contact the Chief Executive Officer or the Councillor Administration Assistant who will provide advice about which authorised staff member to contact.
- 3.21 In some instances, the Chief Executive Officer or a member of the Council's Executive Leadership Team will direct a Council staff member to contact Councillors to provide specific information or clarification relating to a specific matter.
- 3.22 A Councillor or member of staff must not take advantage of their official position to improperly influence other Councillors or members of staff in the performance of their civic or professional duties for the purposes of securing a private benefit for themselves or for another person.

#### Councillor Access to Councillor Buildings

- 3.23 Councillors are entitled to have access to the Council Chamber, Committee Room, Mayor's office (subject to availability), Councillors' room, and public areas of Council's buildings during normal business hours for meetings. Councillors needing access to these facilities at other times must obtain approval from the Chief Executive Officer.
- 3.24 Councillors must not enter staff-only areas of Council buildings without the approval of the Chief Executive Officer.

#### Appropriate and Inappropriate Interactions

- 3.25 Examples of appropriate interactions between Councillors and staff include, but are not limited to, the following:
  - a) Councillors and Council staff are courteous and display a positive and professional attitude towards one another
  - b) Council staff ensure that information necessary for Councillors to exercise their civic functions is made equally available to all Councillors, in accordance with this Policy and any other relevant Council policies
  - c) Council staff record the advice they give to Councillors in the same way they would if it was provided to members of the public
  - d) Council staff, including Council's executive team members, document Councillor requests via the Councillor requests process
  - e) Council meetings and Councillor briefings are used to establish positive working relationships and help Councillors to gain an understanding of the complex issues related to their civic duties
  - f) Councillors and Council staff feel supported when seeking and providing clarification about Council related business
  - g) Councillors forward requests through the Councillor requests process and staff respond in accordance with the timeframes stipulated in this Policy

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- 3.26 Examples of inappropriate interactions between councillors and staff include, but are not limited to, the following:
  - a) Councillors and Council staff conducting themselves in a manner which:
    - is contrary to their duties under the Work Health and Safety Act 2011 and their responsibilities under any policies or procedures adopted by the Council to ensure workplace health and safety
    - ii) constitutes harassment and/or bullying within the meaning of clauses 3.7 and 3.9 of the Code of Conduct, or is unlawfully discriminatory
  - b) Councillors approaching staff, or meeting with staff organisations (ie unions), to discuss individual or operational staff matters (other than matters relating to broader workforce policy such as, but not limited to, organisational restructures or outsourcing decisions), grievances, workplace investigations and disciplinary matters
  - staff approaching Councillors to discuss individual or operational staff matters (other than matters relating to broader workforce policy such as, but not limited to, organisational restructures or outsourcing decisions), grievances, workplace investigations and disciplinary matters
  - d) subject to paragraph b) of clause 3.11, staff refusing to give information that is available to other Councillors to a particular Councillor
  - e) Councillors who have lodged an application with the Council, discussing the matter with staff in staff-only areas of the council
  - f) Councillors being overbearing or threatening to staff
  - g) staff being overbearing or threatening to Councillors
  - h) Councillors making personal attacks on staff or engaging in conduct towards staff that would be contrary to the general conduct provisions in Part 3 of the Code of Conduct in public forums including social media
  - i) Councillors directing or pressuring staff in the performance of their work, or recommendations they should make
  - staff providing ad hoc advice to Councillors without recording or documenting the interaction as they would if the advice was provided to a member of the community
- 3.27 Where a Councillor engages in conduct that, in the opinion of the Chief Executive Officer, puts the health, safety or welfare of staff at risk, the Chief Executive Officer may restrict the Councillor's access to staff.
- 3.28 Any concerns relating to the conduct of staff under this Policy should be raised with the Chief Executive Officer.

## 4 RESPONSIBILITIES AND AUTHORITIES

- 4.1 Several factors contribute to a good relationship between Councillors and staff. These include goodwill, understanding of roles, communication, protocols, and a good understanding of legislative requirements.
- 4.2 The Council's governing body and its administration (being staff within the organisation) must have a clear and sophisticated understanding of their different roles, and the fact that these operate within a hierarchy. The administration is accountable to the Chief Executive Officer, who in turn, is accountable to the Council's governing body.
- 4.3 Section 232 of the Local Government Act 1993 (the LGA) states that the role of a councillor is as follows:
  - a) to be an active and contributing member of the governing body
  - b) to make considered and well-informed decisions as a member of the governing body
  - c) to participate in the development of the integrated planning and reporting framework
  - d) to represent the collective interests of residents, ratepayers and the local community
  - e) to facilitate communication between the local community and the governing body

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- f) to uphold and represent accurately the policies and decisions of the governing body
- g) to make all reasonable efforts to acquire and maintain the skills necessary to perform the role of a councillor.
- 4.4 The administration's role is to advise the governing body, implement Council's decisions and to oversee service delivery.
- 4.5 It is beneficial if the administration recognises the complex political environments in which elected members operate and acknowledge that they work within a system that is based on democratic governance. Councillors similarly need to understand that it is a highly complex task to prepare information and provide quality advice on the very wide range of issues that Council operations cover.
- 4.6 Council commits to the following principles to guide interactions between Councillors and staff:

Principle Equitable and consistent	<b>Achieved by</b> Ensuring appropriate, consistent and equitable access to information for all Councillors within established service levels.
Considerate and respectful	Councillors and staff working supportively together in the interests of the whole community, based on mutual respect and consideration of their respective positions.
Ethical, open and transparent	Ensuring that interactions between Councillors and staff are ethical, open, transparent, honest and display the highest standards of professional conduct .
Fit for purpose	Ensuring that the provision of equipment and information to Councillors is done in a way that is suitable, practical and of an appropriate size, scale and cost for a client group of nine people.
Accountable and measurable	Providing support to Councillors in the performance of their role in a way that can be measured, reviewed and improved based on qualitative and quantitative data.

4.7 Councillors are members of the Council's governing body, which is responsible for directing and controlling the affairs of the Council in accordance with the LGA.

Councillors need to accept that:

- a) responses to requests for information from Councillors may take time and consultation to prepare and be approved prior to responding
- b) staff are not accountable to them individually
- c) they must not direct staff except by giving appropriate direction to the Chief Executive Officer by way of a Council or Committee resolution, or by the Mayor exercising their functions under section 226 of the LGA
- d) they must not, in any public or private forum, direct or influence, or attempt to direct or influence, a member of staff in the exercise of their functions
- e) they must not contact a member of staff on council-related business unless in accordance with this Policy
- f) they must not use their position to attempt to received favourable treatment for themselves or others.
- 4.8 The Chief Executive Officer is responsible for the efficient and effective day-to-day operation of the Council and for ensuring that the lawful decisions of the Council are implemented without undue delay.

Council staff need to understand:

- a) they are not accountable to individual Councillors and do not take direction from them. They are accountable to the Chief Executive Officer, who in turn is accountable to the Council's governing body
- b) they should not provide advice to Councillors unless it has been approved by the Chief Executive Officer or Divisional Director or under delegation from the Chief Executive Officer.

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- c) they must carry out reasonable and lawful directions given by any person having the authority to give such directions in an efficient and effective manner
- d) they must ensure that participation in political activities outside the service of the Council does not interfere with the performance of their official duties
- e) they must provide full and timely information to Councillors sufficient to enable them to exercise their civic functions in accordance with this Policy.

## 5 REFERENCES

Local Government Act 1993 Local Government (General) Regulation 2005 Office of Local Government's Model Councillor and Staff Interaction Policy

## 6 PROCESS OWNER

The Group Manager Governance is responsible for implementing and reviewing this Policy prior to each ordinary election.

#### Schedule 1 - Authorised Staff Contacts for Councillors

- 1. Clause 3.16 of this Policy provides that Councillors may directly contact members of staff that are listed below. The Chief Executive Officer may amend this list at any time.
- 2. Councillors can contact staff listed below about matters that relate to the staff member's area of responsibility.
- 3. Councillors should as far as practicable, only contact staff during normal business hours.
- 4. If Councillors would like to contact a member of staff not listed below, they must receive permission from the Chief Executive Officer.
- 5. If a Councillor is unsure which authorised staff member can help with their enquiry, they can contact the Chief Executive Officer or the Councillor Administrative Assistant who will provide advice about which authorised staff member to contact.
- In some instances, the Chief Executive Officer or a member of the Council's Executive Leadership Team will direct a Council staff member to contact Councillors to provide specific information or clarification relating to a specific matter.

Position	Acceptable Reasons for Contact
Chief Executive Officer	<ul> <li>When confidentiality must be maintained (the request should state why the request is confidential)</li> </ul>
	- For complaints against Council staff [or Elected Representatives]
	- For complaints against Council services or reputational risk
	- In relation to an emergency
	- Possible Code of Conduct breach
	- Request to attend conference or seminar
	- Request for Professional Development
	- Strategic matter/new idea
	- Request for advice or general information on Council matters
The Manager, Office of the CEO	Arrange a meeting with the CEO
	- Emergency items for the CEO
Councillor Administration Assistant	<ul> <li>For any administration matters relating to the role of a Councillor, and may include arranging meetings</li> </ul>
Executive Assistant - Mayor	- Arrange a meeting with the Mayor
	<ul> <li>Responding to invitations to Council functions</li> </ul>
Group Manager Governance	- Relating to procedures for Council and Committee meetings
	- Advice on Notices of Motion, Motions and Amendments
	<ul> <li>Matters relating to the Mayoral or Councillor Fees</li> </ul>
	- To discuss any Governance policy enquiries

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Governance Officer	- Matters relating to Ordinary Council Meetings
	- Matters relating to Sub-Committee Meetings
	- Designated Persons Disclosure of Interest
	- Related Parties Disclosures
	- Expense claims
Communications Team	- Liaising regarding interviews or media opportunities
Divisional Directors	- Enquiries regarding a Councillor Portfolio or Steering Group
	- Enquiries regarding a specific Council agenda item or an upcoming Council agenda item
	- When forwarding or providing a Director with information they might find useful i.e. a news article
	- Request for advice or general information on Council matters
Divisional Executive Assistants	- Relating to meeting request/invitations for Division Director
A351500115	- Relating to meetings for a Councillor Portfolio or Steering Group meeting where the DD is involved
	- copied on any Division Director email that falls within the protocol

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COUNCIL	File Number:	D2017/011117
PORT MACQUARIE HASTINGS	Next review date:	18/10/2019
	Effective date:	25/10/2017
	Authorised date:	18/10/2017
	Authorised by:	Council

## Provision of Information between Councillors and Staff

## 1. INTRODUCTION

Based on the provisions in the *Local Government Act* 1993 (the Act), Councillors and Council staff have distinctly different roles to play. The Council is responsible for the strategic direction and for determining the Policy framework of Council. The Council also has a statutory role as the consent authority, under both the *Environmental Planning and Assessment Act* 1979 and the Act, for applications for development consent and local approvals. The General Manager is responsible for the effective day to day management of the organisation and the carrying out of Council's Policies and strategic objectives.

The distinction between these two roles may at times become unclear. There often needs to be interaction between Councillors and Council staff, particularly regarding access to and provision of information, to effectively integrate policy making and service delivery.

The objective of this Policy is to provide Councillors with relevant information and an appropriate level of access to the staff of Council in order to exercise the functions of civic office and to facilitate informed decision making by:

- providing a documented process for Councillors to access Council information;
- ensuring Councillors have access to all information necessary for them to exercise their statutory role as a member of the governing body of Council;
- ensuring that Councillors receive advice to help them in the performance of their civic duty in an orderly and regulated manner; and
- providing direction on Councillors rights of access to staff and Council buildings.

## 2. POLICY STATEMENT AND SCOPE

Council's Code of Conduct provides that Councillors are to be provided sufficient information in a timely manner to enable them to carry out their civic office functions.

This Policy establishes the principles by which Councillors may access information and interact with staff in order to undertake their civic office functions, whilst facilitating a positive working relationship between Councillors and staff.

This Policy applies to all Councillors, staff and contractors of Port Macquarie-Hastings Council and their interactions.

## 2.1 Access to Council Information

Councillors are required to have full and timely access to information held by Council to assist them in making informed decisions on matters under their consideration or matters to be listed for consideration for which there is notification. This information should be relevant and appropriate to the discharge of their civic duty.

Councillors must properly examine and consider all the information provided to them relating to matters that they are dealing with to enable them to make a decision on the matter in accordance with Council's charter.

Councillors who have a private (as distinct from civic) interest in information held by Council have the same rights of access as any member of the public, that is as prescribed by the *Government Information (Public Access) Act 2009* (GIPA Act).

Section 6 of the GIPA Act prescribes that information that is 'open access information' must be made publicly available unless there is an overriding public interest against disclosure of the information. Additionally, Part 2 of the *Government Information (Public Access) Regulation 2009* outlines additional specific information that is 'open access information' for local authorities.

Section 8 and 9 of the GIPA Act prescribes the application process for access to information that is available to members of the public and Councillors.

## 2.1.1 Councillor Access to Information

Councillors wishing to access Council information, other than 'open access information' as prescribed by the GIPA Act that is not relevant to their civic duties, must make an application to the General Manager or Public Officer.

Councillors must draft the application carefully and precisely detail the information, or the nature of the information, being sought. It is expected that Councillors will act reasonably in making an application for information.

All Councillor applications will be treated as an 'informal access application', where appropriate, as prescribed by the GIPA Act and duly processed.

Councillor applications for information relating to the exercise of a Councillor's civic duties will be processed within fifteen (15) working days and provided with timely information on the progress of the application.

Councillor applications for information relating to a Councillor's private interest will be processed as prescribed by the GIPA Act.

## 2.1.1.1 Councillor Information Application Refusal

The General Manager and/or the Public Officer shall not unreasonably decide that information is not relevant to the performance of the Councillor's civic duty and refuse access to that information. The General Manager or the Public Officer must state their reasons for the decision if access is refused.

An application for information from a Councillor may be refused where it is demonstrated that significant resources will be required to respond to an application for information. The Councillor will be advised and provided with details of the estimates of time and/or costs that are likely to be incurred in providing the information.

If an application for information from a Councillor is refused, the Councillor is entitled to lodge a 'formal access application' for the information, as prescribed by the GIPA Act. Noting that an application fee will be required to be paid and additionally a processing charge for dealing with an access application may be imposed.

Councillors will not be provided with access to staff personnel files or details relating to Independent Commission Against Corruption investigations.

## 2.1.2 Use of Council Information

In regard to accessing information, a Councillor or Council staff member must:

- only access Council information needed for Council business;
- not use that Council information for private purposes;
- not seek or obtain, either directly or indirectly, any financial benefit or other improper advantage for themselves, or any other person or body, from any information to which they have by virtue of their office or position with Council; and
- only release Council information in accordance with established Council Policies and procedures and in compliance with relevant legislation.

## 2.1.3 Security of Confidential Information

The integrity and security of confidential information in the possession of a Councillor or Council staff member must be maintained.

In addition to general obligations relating to the use Council information, a Councillor or Council staff member must:

- protect confidential information;
- only release confidential information if they have authority to do so;
- only use confidential information for the purpose for which it is intended to be used;
- not use confidential information gained through their official position for the purpose of securing a private benefit for themselves or for any other person;
- not use confidential information with the intention to cause harm or detriment to Council or any other person or body; and
- not disclose any information discussed during a confidential session of a Council meeting.

## 2.1.4 Personal Information

When dealing with personal information, a Councillor or Council staff member must comply with:
The Privacy and Personal Information Protection Act 1998

- The Health Records and Information Privacy Act 2002
- The Information Protection Principles and Health Privacy Principles
- Council's Privacy Management Plan
- The Privacy Code of Practice for Local Government

## 2.2 Interaction between Councillors and Council staff

The Act provides that the General Manager is to direct staff in the performance of their duties. Any and all access to staff by Councillors, other than the General Manager, is to be authorised by the General Manager via Delegated Authority.

A Councillor or member of Council staff must not take advantage of their official position to improperly influence other Councillors or members of Council staff in the performance of their civic or professional duties for the purpose of securing private benefit for themselves or for some other person.

## 2.2.1 Inappropriate Interactions for Councillors

- Direct Council staff other than by giving appropriate direction to the General Manager in the performance of Council's functions by way of Council or Committee resolution, or by the Mayor exercising their power under Section 226 of the Act;
- in any public or private forum, direct, influence or attempt to direct or influence, any member
  of Council staff or a delegate of the Council in the exercise of the functions of the Council staff
  member or delegate;
- contact a Council staff member on Council related business outside of avenues available under this Policy and any associated procedures;
- contact or issue instructions to any of Council's contractors or tenderers, including Council's legal advisors, unless by the Mayor exercising their power under section 226 of the Act. This does not apply to Council's external auditors who, in the course of their work, may be provided with information by individual Councillors;
- approaching Council staff to discuss individual staff matters and not the broader industrial policy issues;
- Councillors who have lodged a development application with Council, discussing the matter with Council staff member(s) in staff-only areas of the Council;
- being overbearing, abusive or threatening to Council staff;
- making personal attacks on Council staff in a public forum;
- making threatening or derogatory comments about other Councillors or Council staff;
- directing or pressuring Council staff in the performance of their work, or recommendations they should make;
- approaching any Council staff member directly for confidential or otherwise sensitive information that does not relate to the exercise of their civic duties and is not generally available to the public; and
- personally reprimanding Council staff, rather than raising the matter with the General Manager.

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## 2.2.2 Inappropriate Interactions for Council Staff

- approaching Councillors directly to discuss individual staff matters and not the broader industrial policy issues;
- refusing to give information that is available to other Councillors to a particular Councillor;
- providing ad hoc advice to Councillors without recording or documenting the interaction as they would if the advice was provided to a member of the community;
- meeting with applicants or objectors alone AND outside of office hours to discuss development applications or proposals;
- lobbying Councillors to change resolutions of Council; and
- giving preferential treatment or service to one or more Councillors.

It is appropriate that staff and staff organisations have discussions with Councillors in relation to matters of industrial policy.

## 2.2.3 During Meetings

The interaction between Councillors and Council staff at Council and Committee meetings is regulated by:

- Council's Code of Meeting Practice;
- The Local Government Act 1993;
- The Local Government (General) Regulation 2005; and
- Council's adopted Code of Conduct.
- Council's Delegated Authorities

Councillors and Council staff must show respect to the Chair, other Council officials and any members of the public present during Council and Committee meetings or other formal proceedings of Council.

The interaction between Councillors and Council staff at subcommittee, steering group and advisory group meetings are regulated by the applicable adopted charters.

The interaction between Councillors and Council staff at Portfolio meetings are regulated by the Councillor Portfolio Protocol.

## 2.2.4 Outside of Meetings

Councillors may contact the General Manager, the relevant Director or other Council staff member as authorised by the General Manager via Delegated Authority to discuss or make arrangements to meet to discuss Council business.

Only Council staff authorised by the General Manager via Delegated Authority will provide advice to Councillors.

## 2.3 Councillor Access to Council Offices and Buildings

Councillors are entitled to have access to the Council Chamber, Committee room, Councillors room, Mayoral Office and public areas of Council's Headquarters building during normal business hours and for meetings. Councillors requiring access to these facilities at other times must seek prior authorisation from the General Manager.

Councillors who are not in pursuit of their civic duties have the same rights of access to Council buildings and premises as any other member of the public.

A Councillor has no rights to enter staff-only areas without the express authorisation of the General Manager.

Councillors must ensure when they are in a staff-only area they are mindful of potential conflict or pecuniary interest matters and avoid giving rise to the appearance that they may be improperly influencing Council staff decisions.

## 2.4 Breaches

All breaches of this Policy will be dealt with as a breach of Council's Code of Conduct.

## 3. RESPONSIBILITIES AND AUTHORITIES

The Group Manager Governance and Procurement is the Council officer responsible for the implementation of this Policy.

The Group Manager Governance and Procurement is the primary point on contact regarding the meaning and application of this Policy. The following Council officers may provide support and advice on this Policy:

- General Manager
- Executive Assistant to the Mayor
- Executive Assistant to the General Manager

The Group Manager Governance and Procurement will:

- undertake a review of this Policy biennially. The review will incorporate changes in relevant legislation, documentation released from relevant state agencies and best practice guidelines;
- investigate breaches of this Policy and refer matters to the General Manager as appropriate; and

All Councillors and staff are responsible and accountable for complying with this policy.

## 4. REFERENCES

Council's Code of Conduct Council's Delegated Authorities Council's Code of Meeting Practice Councillor Portfolio Protocol Subcommittee, Steering and Advisory Group Charters. Government Information (Public Access) Act 2009 Health Records and Information Privacy Act 2002 Local Government Act 1993 Local Government (General) Regulation 2005 Privacy and Personal Information Protection Act 1998

## 5. DEFINITIONS

Councillor's	Elected Council representatives, including the Mayor
the Act	Local Government Act 1993
Public Officer	Group Manager Governance and Procurement fulfils the role of Public Officer for Port Macquarie-Hastings Council
Open access information	government information that is required to be made publicly available by Council under section 6 of the GIPA Act
Formal access application	an application for access to government information under Part 4 of the GIPA Act
Informal access application	an application for access to government information which is not open
Personal Information	access information or does not require a formal access application. information or an opinion (including information or an opinion forming part of a database and whether or not recorded in a material form) about
	an individual whose identity is apparent or can reasonably be
	ascertained from the information or opinion.
Private Interest	information not relevant to the performance of a Councillor's civic duty

## 6. PROCESS OWNER

The Group Manager Governance and Procurement is the nominated process owner for this Policy.

## ATTACHMENT

## 7. AMENDMENTS

The following amendments have been made to this policy to the previous version:

- 1. Section 2.1.1- clarification of when an informal GIPA application must be lodged.
- 2. Section- 2.1.1.2- removal of section.
- 3. Section 2.2.3- acknowledgement of subcommittee, advisory group and portfolio meetings.
- 4. Expansion of definitions.
- 5. Minor wording changes.
- 6. Reformatting to the revised policy template.

	Authorised by:	<authority></authority>
	Authorised date:	DD/MM/YYYY
PORT MACOUARIE	Effective date:	DD/MM/YYYY
HASTINGS	Next review date:	DD/MM/YYYY
COUNCIL	File Number:	##########

## PROVIDING FUNDING ANS SUPPORT TO THE COMMUNITY POLICY

## 1. INTRODUCTION

Port Macquarie-Hastings Council provides a range of funding and support programs to individuals and community groups. These programs support activities, services and projects that benefit the community, build capacity and contribute to delivery of the Community Strategic Plan priorities.

The objective of this policy is to streamline funding and support provided to the community under one overarching framework using the Giving, Investing and Purchasing Model.

#### 2. POLICY STATEMENT AND SCOPE

Council assists eligible organisations and individuals with funding and support in recognition of their vital contribution to community development and well-being. Council aims to build strong partnerships with the community while ensuring value for money and consistency in administration.

This policy applies to all funding and support including grants, donations, discounts, waivers, subsidies, in-kind support, discretionary and mandatory payments made by Council.

Council will follow best practice funding management principles and comply with relevant legislation. Each funding and support program will have consistent, fair and transparent processes.

Funding is provided across the organisation from various teams such as but not limited to:

- Community
- Economic and Cultural Development
- Development Assessment
- Environmental and Regulatory Services
- Commercial & Business Services
- Community Infrastructure;
- Financial Services

Council also provides subsidies that are required by NSW legislation. Some of these include Pensioner Rates Rebates, NSW Fire Brigades, Rural Fire Service and State Emergency Services.

## 3. RESPONSIBILITIES AND AUTHORITIES

#### Chief Executive Officer

• Responsible for ensuring that all staff complies with the requirements outlined in this policy.

#### Directors and Group Managers

- Responsible for ensuring staff who administer funding programs to provide best practice grants administration;
- Ensure that relevant staff are aware of their responsibilities regarding to this policy.

## Community Inclusion Team Leader

- Responsible for Reviewing and implementing this policy;
- Ensure that the procedures, toolkit and templates are kept up to date and relevant.

#### Council Staff - Funding Program Administrators

- Ensure that this policy is implemented by using the procedures, toolkit and, where appropriate, Council's online grants management system;
- Review existing programs to ensure they comply with this policy and procedures;

Page 1 of 3

• Provide reports to Council on the funding programs on an annual basis, as a minimum.

## 4. REFERENCE

- Local Government Act NSW 1993 (relevant section 356)
- NSW Auditor-General's Report "Performance Report on Grants Administration" May 2009
- Government Information Public Access (GIPA) Act 2009
- Privacy and Personal Information Protection Act 1998

## 5. DEFINITIONS

Term	Definition
Discretionary payment	A discretionary payment is one where the amount is not fixed in advance by law or regulation. Government and their duly authorised representatives may provide discretionary assistance in some cases, through 'act of grace' payments, or by waiving debts owed.
'In kind' donation	This may involve an allocation (or donation) of facilities, Council personnel or services, to individuals, community groups or non-profit organisations, for the purpose of establishing or enhancing community services, facilities or events.
Funding Agreement	The Funding Agreement is a signed agreement, within a community organisation, local, State, or Federal Government level, following an initial offer of funding support to the applicant.
Grant	A grant is a payment 'to organisations such as community groups, which are directed at achieving goals and objectives consistent with Council policy. The payments are conditional upon recipients using the funds for specific purposes set out in the terms and conditions of the grant agreement.'
Funding Program Administrator	A Council officer who has the responsibility of administering a funding or support program.
Subsidy/Benefit	A subsidy is a non-repayable allocation of money to assist approved applicants and projects. Subsidies are usually provided by Council in the form of a cash payment, or reduction to groups or individuals. Subsidies are usually given to remove some type of burden or create incentive, deemed to be in the public interest. Some subsidies are mandated by law.

## 6. PROCESS OWNER

Group Manager Community.

## 7. AMENDMENTS

The amendment made to the existing *Providing Funding and Support to the Community Policy* dates 17 July 2013 were as follows:

- Refining of the existing information to be more succinct and relevant
- Updating organisational information and responsibilities.

## **ATTACHMENT**

**PUBLIC EXHIBITION SUMMARY** Draft Providing Funding & Support to the Community

### Background

Council provides a range of funding and support programs to individuals and community groups to support activities, services and projects that benefit the community, builds capacity and contributes to the delivery of the Community Strategic Plan priorities. This applies to all funding and support including grants, donations, discounts, waivers, subsidies, in-kind support, discretionary and mandatory payments made by Council.

### Engagement activities

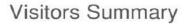
Have You Say website survey.

The draft Providing Funding & Support to the Community Policy was placed on public exhibition on the PMHC Have Your Say website from Wednesday 23 March 2022 to Thursday 21 April 2022.

Users were invited to provide feedback on the policy with the option of attaching images or documents to support their views.

### Have Your Say

The following graph summarises the user activity for the exhibition period where Council received 0 submissions.





1 - PUBLIC EXHIBITION SUMMARY: < PROJECT NAME>



Item 11.06 Attachment 2 Page 38

# Key Findings

 No feedback was submitted by the community during the Public Exhibition period.

## ATTACHMENT

**PUBLIC EXHIBITION SUMMARY** Draft Providing Funding & Support to the Community

## Results/Conclusion

There was no feedback provided from the community during the public exhibition period.

## Next Steps

A report will go to the May 2022 Ordinary Council Meeting recommending that Council adopt The Providing Funding & Support to the Community Policy.

2 - PUBLIC EXHIBITION SUMMARY: < PROJECT NAME >





## SOCIAL IMPACT ASSESSMENT POLICY

### 1. INTRODUCTION

A Social Impact Assessment (SIA) aims to identify potential impacts of development and ways in which to offset any adverse impacts through processes and procedures designed to manage change.

The intended outcomes of the Policy are to:

- To provide guidance to Council, developers and applicants as to what proposals require a SIA.
- Outline the relevant level of SIA required for particular developments to ensure social responsibility.
- Detail the process that Council expects applicants to undertake to produce a SIA.
- 2. POLICY STATEMENT AND SCOPE

The purpose of a SIA is to predict the social impact of development or land use change, be it positive or negative. The SIA process also encourages applicants to explore how any negative outcome of development can be mitigated, minimised or completely resolved, which in turn will better inform decision making within Council and better social outcomes for the community.

### In implementing the SIA Policy Council seeks to:

- Ensure proposals are considered in accordance with Section 4.15 of the Environment Planning & Assessment Act 1979 and the Hastings Local Environmental Plan, Port Macquarie- Hastings Development Control Plan 2013 and Policies
- Promote development activity that benefits the community without significant adverse social impact
- Ensure the community's needs are met in an equitable and inclusive way that enhances the area's environmental, social and economic qualities
- Ensure adequate community participation in any proposal that may impact them in accordance with Port Macquarie-Hastings Council's Engagement Policy
- · Assist with quadruple bottom line accountability
- To provide guidance to the industry as to what developments require a Social Impact Assessment (SIA)

### Scope

- Types of developments requiring an assessment under the policy.
- · Requirements for the level of assessment.
- Level of Information to be submitted.
- Guidelines to assist applicants in understanding SIA's.
- Key elements of an SIA. Strategies employed to manage the SIA should be adapted
- or varied to suit the specific project.
- Advice that a pre-lodgement meeting is encouraged, before lodgement of the application and assessment begins. A pre-lodgement meeting allows Council and the applicant the opportunity to discuss the proposal with Council staff.

### Outcomes

- An enhancement of Council's transparency and consistency in the assessment of potential social impacts of new policies, plans or proposed development.
- An enhancement of the positive social impacts and minimise the negative social impacts of Development Control Plans (DCP), Master Plans, Rezoning and other developments

- · Increased community participation and influence in decisions that affect them
- An opportunity for Council to better influence proposed development
- · An opportunity to better influence Council's strategic plans for future populations

### SIA's should be carried out where the proposal/policy is likely to have:

- A definite (either positive or negative) effect on a particular social group this includes but is not limited to Aboriginal and Torres Strait Islander people, young people, elderly people, people with disability, people on low incomes, LGBTQIA+ people and communities and children)
- · An Identifiable effect on the social composition, culture and/or character of the locality
- An identifiable effect on the availability and use of existing community services, facilities
- and land, and/or may require the provision of such services, facilities and land
- · Impact on the safety of residents within the identified area
- Change in housing choice, shopping, recreational facilities and services
- Change to lives of specific groups e.g. Change to community or group values, traditions, lifestyle and culture
- · Impacts on employment opportunities
- Alter the production of local products
- · Multiplier effects on the wider community and economy
- Change in affordability of goods and services
- Provision of urban infrastructure
- An Identifiable impact on localities history (historical buildings, areas or artefacts)

### 3. RESPONSIBILITIES AND AUTHORITIES

The Community Inclusion officer will be responsible for:

- The implementation of the policy.
- Ensuring policy is reviewed and updated to meet external compliance.
- Develop and implement the Social Impact Assessment Guideline.

The Development Assessment Team will be responsible for:

- Developing an assessment framework for evaluating SIAs.
- · Provide assistances and guidance on SAI's
- To prescribe what developments require a formal SIA submission (noting that Council must consider the social impact of every development).
- REFERENCES

The Environmental Planning & Assessment Act 1979 The NSW Liquor Act 2007 Disability Discrimination Act 1992

The SIA Policy should be read in conjunction with all other relevant State, Regional and Local Environmental Planning Instruments. To access relevant legislation please contact Council's Planning Department.

If a conflict does occur between State Environmental Protection Policies, the Regional Environment Plan, the Local Environment Plan or the Development Control Plan and the SIA policy, the former instruments overrule the SIA policy.

### 5. DEFINITIONS

SIA- Social Impact Assessment SIC- Social Impact Comment SIS- Social Impact Social

6. PROCESS OWNER

## Group Manager Community

## 7. AMENDMENTS

The amendments made to the exiting Social Impact Assessment Policy adopted 6 June 2010 are as follows:

- Formatting to form a more logical flow
- Refined the information to shorten the policy
- Information in relation to procedure removed from policy
- Added when an SIA should be undertaken
- Update organisational information

PUBLIC EXHIBITION SUMMARY Draft Social Impact Assessment Policy

### Background

The purpose of a Social Impact Assessment (SIA) is to predict the social impact of development or land use change, be it positive or negative. The SIA process also encourages applicants to explore how any negative outcome of development can be mitigated, minimised or completely resolved, which in turn will better inform decision making within Council and better social outcomes for the community.

### Engagement activities

Have Your Say website survey

The draft Social Impact Assessment Policy was placed on public exhibition on the PMHC Have Your Say website from Wednesday 23 March 2022 to Thursday 21 April 2022.

Users were invited to provide feedback on the policy with the option of attaching images or documents to support their views.

### Have Your Say

The following graph summarises the user activity for the exhibition period where Council received 4 submissions. Submissions are included in Appendix below.



1 - PUBLIC EXHIBITION SUMMARY: Draft Social Impact Assessment

## Key Findings

- Community Education on what a Council policy is and what it covers.
- Developing a guideline to address when a Social Impact Assessment is required and how to go about this.

PUBLIC EXHIBITION SUMMARY Draft Social Impact Assessment Policy

### Results/Conclusion

The overall feedback was in relation to the understanding of the difference between an overarching policy and the subsequent procedure needed to undertake a Social Impact Assessment.

As the concerns raised in the submission will be addressed in the development of the Social Impact Assessment Guideline, there have been no further amendments made to the policy.

#### Next Steps

A report will go to the May 2022 Ordinary Council Meeting recommending that Council adopt the Social Impact Assessment Policy.

### Appendix

The draft policy states on P2 "Increased community participation and influence in decisions that affect them". This is essential but this policy fails to show how it will be implemented.

<Name redacted> , 31 Mar 2022, 07:18 PM

In the most recent adoption of the new mayor and councilors, and the most recent ordinary and extraordinary meetings, I don't feel there has been any consideration for the community as a whole. For example, the orbital road. The Mayor just completely dismissed the proposal off the basis of a very small amount of residents complaining to her. This change affects thousands of others because of the traffic issues and safety issues that would have been fixed with the implementation of the orbital road.

Where was the social impact statement? Where was the inclusive and equitable consultation and consideration for the community? This was just her decision and because she has a full ticket of councilors backing her up, anything she wants gets put through. Zero consideration or consultation with the wider community on making that decision.

<Name redacted> , 05 Apr 2022, 08:23 AM

The following are some points for clarity around this policy

'All development applications Social impacts should be considered by Council this was a point quite evident in the current policy (2010) - the proposed document shifts the focus to the applicants. It is just a brief point in 3 -Council must consider social impact in every development - it is important to

2 - PUBLIC EXHIBITION SUMMARY: Draft Social Impact Assessment Policy



PUBLIC EXHIBITION SUMMARY Draft Social Impact Assessment Policy

start this way. Council should continue to have SI lense when viewing a DA proposal no matter how small the proposal.

Define: applicants

Define: developments - can these be residential ?

Scope is lacking in detail - compared to the 15 page document. While get that the document needs to be reduced perhaps an appendix is required to include simplified process/scope responsibility etc? How does the Policy link in with Local strategic Planning - should this be referred to in the document

6. Process Owner - this has no detail.

Thank you

Policy

<Name redacted> , 14 Apr 2022, 02:27 PM

My feedback is that the new Social Impact Assessment Policy retains the wording and reference from the current SIA Policy, in respect to the fact that a new strategic direction of council can be considered as cause to trigger that a Social Impact Assessment takes place.

<Name redacted> , 21 Apr 2022, 02:33 PM





## Graffiti and Vandalism Reward Scheme Policy

## 1. INTRODUCTION

Graffiti and Vandalism is of ongoing concern for the Port Macquarie-Hastings community because of its continuing visibility, detrimental impact on the local streetscape, and high cost of removal. Council recognises the value of programs that focus on the prevention of vandalism before it occurs as being complementary to those aimed at removing it once it has been applied.

The intended outcomes of the policy are to:

- Encourage the community to take action to report information about graffiti offenders or vandals to the NSW Police Force.
- Deter offending by increasing the risk of detection and apprehension.
- Remove excuse-making opportunities through educating people involved in the intentional or reckless damage of property (by committing incidents of vandalism or graffiti) that these acts are crimes.
- Promote a coordinated approach to addressing local vandalism and graffiti issues between state government, represented by the NSW Police Force, local government, represented by Port Macquarie-Hastings Council, and the community.

## 2. POLICY STATEMENT AND SCOPE

The Graffiti and Vandalism Reward Scheme Policy seeks to outline the process related to the payment of a financial reward to members of the community where information regarding a graffiti or vandalism incident is provided to the NSW Police Force, and results in legal action resulting in a conviction against offender.

The application of this Policy is limited by a number of factors, those being:

- The reward applies to incidents committed on, or to, Council-owned and managed property. Rewards may also apply (at Council's sole discretion) to offences committed on buildings on community land that are owned by a recognised community group, where Council has been involved in the repair or removal of damage.
- Rewards can only be paid to people 18 years and over. Informants under the age of 18 can submit a reward application with their parent's or guardian's consent. All rewards will be paid to a person 18 years and over.
- The amount of a reward will be equal to the remediation costs of the vandalism (as determined by Council and at Council's sole discretion) capped at a maximum of \$5,000 per event.
- The reward scheme is subject to an annual cap of \$20,000 per financial year. Once these funds have been exhausted, no further reward applications will be paid.
- All persons providing information must be aware that they may be required to attend a
  police station and make a formal statement and/or appear in a court to give evidence
  against the accused. Any person who makes a claim should be aware their identity will
  not remain confidential when required to appear in court.
- A reward under this scheme will only be payable in relation to information which leads to a criminal proceeding resulting in a conviction.

## 3. RESPONSIBILITIES AND AUTHORITIES

The CEO of Port Macquarie-Hastings Council will be responsible for:

• Approving any rewards after receiving confirmation of conviction from NSW Police Force. Reward amount to be determined by amount of damage (see appendix A)

The Community Inclusion Team Leader will be responsible for:

- The implementation of the Policy.
- Ensuring policy is reviewed and updated to meet external compliance
- Develop and implement the Graffiti Vandalism Management Plan
- Develop a Graffiti and Vandalism Reward Scheme Procedure
- Encouraging community participation in graffiti vandalism reporting, removal and restoration.

The PMHC asset owners will be responsible for:

• Determining the level of damage inflicted and the cost of repair.

NSW Police Force Officers are responsible for:

- Examining the information provided to the NSW Police Force.
- Undertaking appropriate investigations of the incident at the discretion of the NSW Police Force.
- Providing comment on the validity of applications and the information contained therein to the Community Inclusion Team Leader.

## 4. REFERENCES

Council has a firm commitment to establish and maintain a high quality system of managing graffiti and vandalism and has consulted the following legal document in the development of this Policy:

- Local Government Act 1993.
- Crimes Act 1900.
- Summary Offences Act 1988.
- Graffiti Control Act 2008.
- Young Offenders Act 1997.
- Government Information (Public Access) Act 2009.

## 5. DEFINITIONS

Term	Definition
Graffiti	Any inscription, word, figure, or word design that is marked, etched, scratched, drawn, sprayed, painted, pasted, applied or otherwise affixed to or on any surface without owners consent.
Vandalism	The willful or malicious destruction, injury, disfigurement, or defacement of any public property.
Criminal proceeding	

	A criminal proceeding is an action taken by the Police against an individual for a malicious damage offence. Criminal proceedings include an individual being charged for the offence, where that individual has admitted guilt, or been found guilty of those charges in a Court of law.
Incident	An incident refers to an offence of malicious damage occurring in one location or in a specific timeframe by the same offender or group of offenders, and as such may refer to more than one specific action.
Council-owned Property	Property owned or managed by Port Macquarie-Hastings Council

# 6. PROCESS OWNER

Group Manager Community

## 7. AMENDMENTS

Not applicable, new policy

# Appendix A: Graffiti and Vandalism Reward Scheme - Reward Amount Scale

Category	Damage Amount	Reward Amount for a Conviction
1	Up to \$1000	\$200
2	\$1001 to \$3000	\$500
3	\$3001 to \$5000	\$750
4	\$5001 to \$10,000	\$1500
5	\$10,001 to \$20,000	\$2,000
7	\$20,000 and above	\$5,000

Kirsty Callander

Page 4 of 4

UNCONTROLLED IF PRINTED

Item 11.08 Attachment 1



## **GRAFFITI VANDALISM MANAGEMENT**

## INTRODUCTION

Graffiti vandalism has a direct and immediate impact on the community by reducing the social amenity of public spaces, creating visual pollution and leading to increased fear for personal security.

The intended outcomes of the Policy are to:

- Minimise incidents of graffiti vandalism within the Port Macquarie-Hastings
- Reduce the social, environmental and economic impact of graffiti vandalism
- · Provide Council and the community with an effective framework to respond
- Enhance community confidence and perception of safety.

## POLICY STATEMENT AND SCOPE

Council recognises that graffiti vandalism is an increasingly prevalent social problem that causes serious damage to property and imposes significant repair and removal costs for Council, businesses and private citizens.

Council has identified and endorses the following Policy principles:

- Council believes that graffiti vandalism detracts from the visual amenity of the public domain
- Council supports the apprehension and prosecution of vandals by offering Graffiti & Vandalism Reward Scheme
- Council appreciates that graffiti prevention and removal is the responsibility of all levels
  of government, as well as private residents, businesses and utility owners
- Council is only responsible for cleaning graffiti from Council-owned property and will not remove graffiti from non-council owned property.
- Council accepts that while it does not have sufficient resources to remove graffiti from non-council owned property, nor is it appropriate to expend public funds on private property, it will lobby, assist, form partnerships with other stakeholders and encourage other parties to remove graffiti from their property
- Council will work in partnership with key stakeholders to identify appropriate locations and processes for the placement of public art
- Council is committed to a pro-active program of inspection, reporting and the rapid removal of graffiti from Council owned property
- Council recognises that its approach to graffiti vandalism needs to be managed holistically and transparently, and to do this has implemented a Graffiti Vandalism Management Plan to support, enhance and expand on the Policy

## 3. RESPONSIBILITIES AND AUTHORITIES

## 3.1 Responsible Officer

The Community Inclusion Team Leader will be responsible for:

- The implementation of the Policy.
- Ensuring that graffiti prevention, removal and reporting is undertaken in-line with the Policy.
- Ensuring policy is reviewed and updated to meet external compliance

- Develop and implement the Graffiti Vandalism Plan
- Develop a Graffiti and Vandalism Reward Scheme
- Maintain Graffiti Removal Register
- Encouraging community participation in graffiti vandalism removal and restoration

### 3.2 Council

In accordance with the Local Government Act 1993, Council is responsible for recording reported incidents of vandalism and for removing it from its property.

### 3.3 Directors

Directors are responsible for ensuring their Division adheres to the requirements of this policy and provide guidance in respect of enhancing safety in the public domain through a range of programs and partnerships within their division and the organisation.

### 3.4 Staff

All staff must adhere to the requirements of this policy and operate within the relevant authorities.

### 4. REFERENCES

Council has a firm commitment to establish and maintain a high quality system of managing graffiti and vandalism and has consulted the following legal document in the development of this Policy:

- Graffiti Control Act 2008
- Local Government Act 1993.
- Crimes Act 1900.
- Government Information (Public Access) Act 2009.

## 5. DEFINITIONS

Term	Definition
Graffiti Vandalism	Is the act of marking or defacing premises or other property without permission. It is illegal and an offence under the Graffiti Control Act (2008).

## 6. PROCESS OWNER

Group Manager Community

## 7. AMENDMENTS

Not applicable, new policy

## APPENDIX A: GRAFFITI REMOVAL - SERVICE STANDARD

## Council Property:

All graffiti vandalism to Council property that is reported will be removed. Removal of graffiti on Council property is the responsibility of the asset owner, and is prioritised based on the type of graffiti, with precedence given to the removal of offensive, racist or defamatory graffiti and/or graffiti on prominent sites or sites of significance within the community.

## Removal Response:

The following table outlines the graffiti removal timelines on Council assets depending on the type of the graffiti.

Graffiti Type	Timeframe to Respond
Offensive graffiti (racist, defamatory, rude/offensive words) on Council property, prominent sites and sites of significance	Where possible, within 2 working days of it being reported to Council.
Non-offensive graffiti (tags, stencils, uncommissioned murals) on Council property	Where possible, within 20 working days of it being reported to Council.

## Graffiti Removal Volunteer Program

Council offers a Graffiti Removal Program for volunteers (Graffiti Blasters), in order to assist with removal of graffiti and maintenance of community spaces and some Council property as determined by the Community Inclusion Team Leader. The program has been developed to respond to ongoing and escalating graffiti vandalism and anti-social behavior on Council-owned assets and property.

## Graffiti Removal Register

The Graffiti Control Act (2008) requires all Councils to keep a register of all graffiti removal work that is undertaken including location and cost of removal. Council will develop this register through existing programs, and will have it available to community on request.

# Background

Graffiti vandalism has a direct and immediate impact on the community by reducing the social amenity of public spaces, creating visual pollution and leading to increased fear for personal security. It also causes serious damage to property and imposes significant removal costs for Council, businesses and private citizens.

**PUBLIC EXHIBITION SUMMARY** Draft Graffiti Vandalism Management Policy and Draft Graffiti & Vandalism Reward Scheme Policy

With graffiti vandalism becoming an increasingly prevalent social problem over the past 18 months, a review of Councils approach to graffiti management including responsibilities has been conducted and resulted in the development of the draft Graffiti Vandalism Management Policy.

The Graffiti and Vandalism Reward Scheme Policy seeks to outline the process related to the payment of a financial reward to members of the community where information regarding a graffiti or vandalism incident is provided to the NSW Police Force, and results in legal action resulting in a conviction against offender.

# **Engagement** activities

## Have Your Say website survey

The draft Graffiti Vandalism Management Policy and draft Graffiti & Vandalism Reward Scheme Policy was placed on public exhibition on the PMHC Have Your Say website from Wednesday 23 March 2022 to Thursday 21 April 2022.

Users were invited to provide feedback on the policy with the option of attaching images or documents to support their views.

# **Key Findings**

- The Community agree that Graffiti Vandalism is an issue in the local area and needs to be addressed.
- By having a detailed Graffiti Management Plan in place will help reduce the impact of Graffiti Vandalism locally.

# **Have Your Say**

The following graph summarises the user activity for the exhibition period where Council received 2 submissions. Submissions are included in Appendix below.

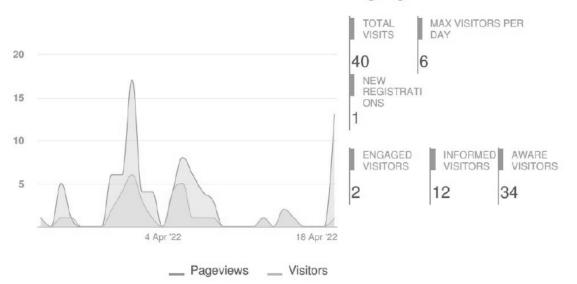
**1 - PUBLIC EXHIBITION SUMMARY** Draft Graffiti Vandalism Management and Graffiti & Vandalism Reward Scheme Policy



# **PUBLIC EXHIBITION SUMMARY** Draft Graffiti Vandalism Management Policy and Draft Graffiti & Vandalism Reward Scheme Policy

# Visitors Summary

# Highlights



# **Results/Conclusion**

The submission received show the community understand the impact of Graffiti Vandalism in our local area and agree that more needs to be done to address the issue including increased cleaning, community education and a collective approach to identifying repeat offenders.

# Next Steps

A report will go to the May 2022 Ordinary Council Meeting recommending that Council adopt the Graffiti Vandalism Management and Graffiti & Vandalism Reward Scheme Policy.

# Appendix

Comments received from submissions:

Graffiti control comment—a special Grafitti Task Force that jails offenders. And, supervises the offenders to clean the Grafitti off public places.

I did this as an educator in America—when I saw grafitti in my classroom, I called Security who then got the kid out from next class to come to my room and clean. They didn't like it!!

l also commented that businesses should get 24 hours to clean graffiti from their establishment. And, Grafitti Task Force.

## <Name redacted> , 05 APR 2022, 11:17 AM

2 - PUBLIC EXHIBITION SUMMARY Draft Graffiti Vandalism Management and Graffiti & Vandalism Reward Scheme Policy



## **PUBLIC EXHIBITION SUMMARY** Draft Graffiti Vandalism Management Policy and Draft Graffiti & Vandalism Reward Scheme Policy

## Draft Graffiti Vandalism Management Policy Policy Statement and Scope

The draft policy infers that Council is only responsible for cleaning graffiti from Council-owned property and therefore Council will not remove graffiti from non-Council-owned property.

This approach is inconsistent with policy approaches implemented by local government in areas where graffiti has been effectively managed. In fact, the Graffiti Control Act 2008 specifically empowers Councils to remove graffiti from property on private land (anywhere on private land with the owner or occupier's agreement, or otherwise graffiti visible from a public place can be removed from public land without agreement).

Vandals do not differentiate between assets that are owned by Council and other stakeholders, and similarly any proactive measures to identify and remove graffiti need to be consistent across the board.

Having said that, it is recognised that the Port Macquarie-Hastings Council is facing a huge challenge with graffiti vandalism currently, and Council may not have the resources or capacity to tackle the mammoth effort of removing graffiti from all properties/assets currently.

Nevertheless, there may still be circumstances where Council may elect to remove graffiti from non-Council property in the community's interest, using the powers under the Graffiti Control Act 2008. For example, instances of exceptionally unsightly or offensive/obscene graffiti, graffiti in highly visible/prominent locations, graffiti on property where the property owner or occupier does not have the means or capacity to remove the graffiti, graffiti that can be readily removed with minimal effort in the course of other graffiti removal activities etc. These situations could potentially be identified by Council officers, or by those volunteers engaged by Council to remove graffiti (Graffiti Blasters).

Recommendation: Amend 'Policy Statement and Scope' to recognise that while Council will typically only be responsible for the removal of graffiti from Council-owned property, it may also elect to remove graffiti from non-Council-owned property in particular circumstances (e.g. instances of exceptionally unsightly or offensive/obscene graffiti, graffiti in highly visible/prominent locations, graffiti on property where the property owner or occupier does not have the means or capacity to remove the graffiti, graffiti that can be readily removed with minimal effort in the course of other graffiti removal activities etc) at the discretion of Council, and consistent with the Graffiti Control Act 2008.

### Service Standard

Has there been any consideration around equipping Council with adequate resources to achieve the intent of this Service Standard?

For example, there are numerous Council sewage and water pumping stations that have been covered with graffiti for the best part of the past decade, with little or no action to remove this graffiti despite numerous reports, on the basis that is not offensive and therefore not a priority (despite the adverse visual amenity impacts to the community).

**3 - PUBLIC EXHIBITION SUMMARY** Draft Graffiti Vandalism Management and Graffiti & Vandalism Reward Scheme Policy



# **PUBLIC EXHIBITION SUMMARY** Draft Graffiti Vandalism Management Policy and Draft Graffiti & Vandalism Reward Scheme Policy

What will practically change in terms of resourcing to ensure that such service standards are achieved, or at least aimed for?

Recommendation: Council consider additional resourcing to complement current volunteer efforts to ensure that the intent of service standards are achieved or targeted in terms of graffiti removal, particularly in relation to Council's water and sewage pumping stations that have been defaced with graffiti for many years.

### Draft Graffiti and Vandalism Reward Scheme Policy Policy Statement and Scope

The draft policy only applies to incidents committed on, or to, Council-owned and managed property. As indicated above, vandals do not differentiate between assets that are owned by Council and other stakeholders, and similarly any proactive measures to address graffiti need to be consistent across the board.

Graffiti that is on non-Council-owned property that is still visible to the public still has a significant visual amenity impact on the community. I am sure that the community would support Council taking proactive measures in relation to graffiti on such properties, even if they are not Council-owned.

The draft policy indicates that the amount of a reward will be equal to the remediation costs of the vandalism, though then outlines a table in Appendix A that seems to contradict this, indicating that the reward is on a sliding scale associated with the remediation costs, but not equal to the remediation costs.

In any case, the reward amounts should be simplified to two categories (e.g. \$2,000 for under \$20K remediation costs and \$5,000 for \$20K+ remediation costs). The draft policy outlines rewards for lower-level and medium-level remediation matters that will not provide adequate incentive for community members to involve themselves in police and court matters, and to risk identifying themselves to an alleged offender through such proceedings.

Recommendation: Expand scope of reward scheme to include non-Council-owned property that is visible to the public. Amend third dot-point under 'Policy Statement and Scope' to align with Appendix A. Amend Appendix A to include two categories of rewards (e.g. \$2,000 for under \$20K remediation costs and \$5,000 for \$20K+ remediation costs).

### <Name redacted> , 20 Apr 2022, 04:49 AM



**4 - PUBLIC EXHIBITION SUMMARY** Draft Graffiti Vandalism Management and Graffiti & Vandalism Reward Scheme Policy



Authorised by: PMHC Authorised date: TO BE ADOPTED Effective date: TBA Next review date: 01/08/2026 File Number: D2021/XXXXX

# CONTAMINATED LAND POLICY

## 1. INTRODUCTION

Port Macquarie-Hastings Council recognises that the appropriate assessment and management of contaminated land matters is an important function of local government.

The 2017 Contaminated Land Policy was based upon a NSW Model Contaminated Land Policy. A suite of regional contaminated land management resources and tools were developed to provide the former Mid North Coast Regional Organisation of Councils (MIDROC) with the technical resources needed to appropriately respond to contaminated land issues.

This revised 2021 Port Macquarie-Hastings Council Contaminated Land Policy (the 'Policy') outlines Council's commitments and practices used to deal with land contamination matters.

Land contamination stemming from the improper use and storage of hazardous substances can leave a broad range of complex and lasting impacts on the land. Contamination and its effects can often remain unnoticed within the environment for long periods of time and can have serious implications on a site's ability to sustain healthy ecosystems and communities. In dealing with this issue it is important that planning authorities and land managers consider contamination and its potential impacts on the ways that land can be used.

In New South Wales, the Environment Protection Authority (EPA) and local councils perform various key roles in dealing with contaminated lands matters. The role of the EPA is to regulate and enforce management action on sites where contamination is considered significant. Local councils manage contamination whilst performing duties as a planning authority, public land manager and as a regulatory authority.

The Policy provides a framework through which council will manage land contamination within the Port Macquarie-Hastings Local Government Area and defines the principles that Port Macquarie-Hastings Council is committed to upholding when performing council functions. This Policy observes a cautionary approach and promotes processes that ensure land contamination is identified and dealt with at the earliest possible opportunity whilst carrying out planning, regulatory and land management activities.

Under Schedule 6 of the NSW Environmental Planning and Assessment Act, 1979 (EPA Act), council is provided with exemptions of liability for planning decisions made in 'good faith'. To qualify for this good faith status the EPA Act requires that council act substantially in accordance with the 'Managing Land Contamination - Planning Guidelines - SEPP 55 - Remediation of Land' (Planning Guidelines). This Policy was developed in accordance with the Planning Guidelines.

The objectives of this Policy include:

- To ensure land contamination is appropriately considered and dealt with at the earliest
  possible stage whilst carrying out council regulatory, land management, or planning activities
- To provide a contaminated land policy framework that follows the practices and standards of relevant legislation(s), guidelines and codes of practice
- To facilitate an approach to assessing and dealing with contaminated land issues that is regionally consistent and cooperative
- To ensure council maintains suitable contaminated land information management systems and provides the community and stakeholders with reliable information on contamination where applicable and available

- · To ensure contamination is appropriately considered prior to approving changes to land uses
- · To avoid placing inappropriate restrictions on land uses due to land contamination

Whilst every effort has been made to ensure the accuracy of the information in this publication, Port Macquarie-Hastings Council disclaims any liability to any person in respect of anything done or not done as a result of the contents of this Policy and the Policy Guidelines.

The Policy and Policy Guidelines should be read in conjunction with relevant legislation, guidelines and codes of practice. Where inconsistencies exist the most recent legislation shall prevail.

The Policy and Policy Guidelines do not constitute legal advice and should not be relied on. Legal advice should be sought in relation to particular circumstances, and liability will not be accepted by Port Macquarie-Hastings Council for losses incurred, or damage suffered, as a result of reliance on the Policy and Policy Guidelines.

### 2. POLICY STATEMENT AND SCOPE

The Policy applies to all land within the Port Macquarie-Hastings Council Local Government Area.

The content of the Policy is relevant to:

- Council staff
- Contaminated land management practitioners
- Property developers
- Land managers
- The general public

This Policy does not provide procedural guidance on how to satisfy Policy statements. Additional information on suitable approaches, procedures and considerations for implementing Policy statements can be found in:

- Port Macquarie-Hastings Council Contaminated Land Policy Guidelines
- Port Macquarie-Hastings Council Environmental Asbestos Guideline
- Port Macquarie-Hastings Council WHS No.13 Asbestos Procedure
- Other relevant legislation, guidelines and codes of practices including, but not limited to those listedunder Appendix B – Contaminated Land Planning and Legislative Framework

Port Macquarie-Hastings Council will consider and respond to the presence of land contamination in all instances where it is the appropriate:

- Planning Authority
- Regulatory Authority
- Public lands/assets manager

When performing these roles, Port Macquarie-Hastings Council will adhere to the requirements of this Policy and the Policy Guidelines in addition to the requirements of applicable legislation, guidelines and standards (refer to Appendix B).

#### Executing Port Macquarie-Hastings Council's Planning Decision Making Processes

Whilst performing roles as a planning authority, Port Macquarie-Hastings Council (council) will ensure land contamination is appropriately considered, identified, assessed and managed in accordance with the requirements of the Policy and the Policy Guidelines. In instances where the Policy and Policy Guidelines do not apply, a review of applicable legislation, guidelines and standards will be undertaken by council.

In its function as a planning authority, council will:

- Consider the likelihood of land contamination as early as possible in the planning and development control process
- Link decisions about the development of land with the information available about contamination

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possibilities

- Provide strategic and statutory planning options based on information about contamination
- · Exercise statutory planning functions with a reasonable standard of care

If the contamination status of land is unknown, no change in use should occur which may increase the risk of harm until the land has been investigated. If contamination causes an unacceptable risk of harm, the use of the land should be restricted to reduce the risk to acceptable levels.

### Initial Evaluation by Planning Authority

Council will carry out an initial evaluation of contamination to assess whether contamination may be an issue at a site and if sufficient information is available to carry out a planning function in good faith. Council will perform an initial evaluation of contamination when assessing the suitability of planning proposals and development applications. The internal evaluation should be performed in accordance with the objectives and processes outlined in the Policy Guidelines as well as the Planning Guidelines.

More information on the initial evaluation process is provided further in this document.

### Review of Environmental Factors (REF)

Where undertaking or reviewing environmental assessments performed under Part 5 of the EPA Act, council will ensure contamination is being appropriately assessed and managed. If contamination has the potential to be a factor at a site that is the subject of an REF, then further investigation and management processes should be carried out in accordance with the Policy and Policy Guidelines. Refer to the Policy Guidelines for site assessment and management processes.

### Preliminary Investigation

Stage 1 – Preliminary Investigations are undertaken to identify any past or present potentially contaminating activities carried out at a site, provide a preliminary assessment of any site contamination and, if required, provide a basis for a 'Detailed Investigation'. Preliminary Investigations must be undertaken by a 'suitably qualified and experienced contaminated land practitioner'.

Prior to exercising a planning function council may request a Preliminary Investigation Report be provided by the proponent in instances where:

- Past land uses have the potential to have caused site contamination (refer to Appendix C)
- · Site records do not outline a clear or complete site history
- · Gaps exist in knowledge of past land uses
- · Site history information provided by the applicant is not reliable or verifiable
- · Land surrounding the site has the potential to be contaminated
- The site is within 50 metres of known underground storage tank(s) or below ground infrastructure used for storing hazardous substances, i.e. petroleum products or chemicals

More information on the Preliminary Investigation stage is outlined further in this document.

## Detailed Investigation

Stage 2 - Detailed Investigations are undertaken to identify the nature, extent and degree of contamination providedat a site that is known or suspected of being contaminated. This is a highly technical phase of the site assessment process and must only be performed by a 'suitably qualified and experienced contaminated land practitioner'.

Prior to exercising a planning function, council may request a Detailed Investigation Report be submitted by the proponent in instances where:

- · Indications of contamination have been acknowledged in a Preliminary Investigation Report
- · Contamination has been previously identified on the site during a site assessment
- Pathways exist between the site and a known source of contamination (i.e. surface or groundwater)

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- Contamination is considered to occur at the site and a Preliminary Investigation is not deemed necessary
- Changes to land uses may increase exposure of the community or the environment to hazardous contaminants (eg a proposed land-use change from industrial land use to residential land use)
- To accompany a remediation proposal that requires development consent

More information on the Detailed Investigation stage is outlined further in this document.

### Remedial Action Plan (RAP)

In instances where remedial actions are required to make a site suitable for its current or intended uses, a RAP may be required by council. A RAP outlines the objectives and methods that a contaminated land practitioner intends to employ when remediating a site to a suitable standard. The RAP can only be developed by a 'suitably qualified and experienced contaminated land practitioner'.

Council shall request that a RAP be provided by the proponent in an instance where:

- Contamination has been identified during a site assessment and remedial actions are required to make the site suitable for any proposed or approved land uses
- The remediation works are considered Category 1 Remediation works
- The remediation works are being undertaken in preparation for a future development application or planning proposal

More information on RAPs is outlined further in this document.

### Site Validation

Where remedial actions have been carried out under the guidance of a RAP a validation assessment must be undertaken to confirm whether the objectives of the RAP have been achieved. If the remedial targets have not been achieved the Validation Report must explain why and outline any additional works required to satisfy the requirements of the RAP. This assessment must only be undertaken by a 'suitably qualified and experienced contaminated land practitioner'.

More information on Validation Reports is outlined further in this document.

### **Ongoing Site Monitoring**

Ongoing Site Monitoring Plans are created in circumstances where contamination may not be suitable for remediation or is to be controlled on site.

Council shall request an Ongoing Site Monitoring Plan be provided by the proponent for its consideration in instances where:

- A full clean-up of a site is not feasible
- Contamination is to be contained on the site

The Ongoing Monitoring Plan must only be developed by a 'suitably qualified and experienced contaminated land practitioner'.

More information on ongoing site monitoring is outlined further in this document.

### Site Audit

A Site Audit is an independent review of any or all stages of the site investigation processes conducted in accordance with the *Contaminated Land Management Act, 1997* (CLM Act) and associated EPA Guidelines. Site Audits are only to be performed by auditors accredited under the EPA administered Site Auditor Scheme. Council may request a Site Audit be submitted by a proponent where:

- It is believed that the information provided by the proponent is incorrect or incomplete
- Verification is required to confirm that information provided by the proponent adheres to appropriate standards, procedures, codes of practice and guidelines
- Council does not have the internal resources or expertise needed to conduct its own technical review

 Land use is proposed to change to a more sensitive land use (for example, rezoning commercial or industrial land use to residential land use)

In circumstances where an audit may not be necessary, council may request that a formal review be conducted on a contaminated land practitioner's reports, works and/or advice by another suitably qualified practitioner. More information on Site Audits is outlined further in this document.

### Remediation of Land

SEPP 55 sets contaminated land remediation works into two key categories to help ensure works are performed in an appropriate and responsible manner. In instances where a proposed remedial activity is classed as Category 1 works, the consent of council must be sought from council prior to works being carried out.

Remedial activities that are classed as Category 2 works do not require consent from council, however certain information must be provided to council on the nature and scope of the works prior to the work being carried out. Refer to Clauses 14-18 of SEPP 55 for further information.

Note: If remediation has reduced all risks to human health and the environment to acceptable levels, no restriction on land use will be placed on the site.

### Category 1 - Remediation Works

Category 1 remediation works are works that require planning consent due to their scope, type or potential impacts the works may pose to the community and/or environment. SEPP 55 outlines Category 1 works as works that:

- · Form part of designated development
- Are to be conducted on land declared to be critical habitat
- Are likely to have a significant effect on a critical habitat or a threatened species, population or ecological community
- Are associated with development for which another SEPP or a regional environmental plan requires development consent
- Are to be carried out in an area classified under Clause 9(e) of SEPP 55

In accordance with the provision of Clause 9(f) of SEPP 55, council requires all Category 1 works to be performed in line with applicable council Policy, including where:

- Restrictions are placed on the hours of operation for work
- · Restrictions are placed on the vehicle routes that can be used when performing work
- Restrictions are placed on parking
- Restrictions are placed on the disposal of contaminated spoil removed from remediated land

## Category 2 - Remediation Works

Category 2 remediation works are all remediation works that are not classified as Category 1 under Clause 9 of SEPP 55 or works identified in this Policy.

A person undertaking Category 2 remediation works must act in accordance with SEPP 55 which requires the proponent to:

- · Notify council of the commencement of works 30 days prior to their commencement
- In accordance with Clause 16(3) of SEPP 55 provide detail on the site and works to be undertaken
- · Notify council of the completion of works within 30 days of their conclusion

### Contaminated Land Practitioner Standards

Prior to considering information provided by a contaminated land practitioner, the practitioner must be able to suitably demonstrate to council that they have the necessary competencies and experience in the field that they intend to offer services in.

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From the adoption of the Policy in 2022, Council will only accept services, reports or advice from contaminated land practitioners accredited under an EPA supported accreditation scheme (information on contaminated land practitioner schemes can be found on the EPA website: <u>NSW site auditor scheme</u>).

See Section 7 of the Policy Guidelines for further information on Contaminated Land Practitioners.

### Professional Contaminated Land Reports, Plans and Advice

All professional contaminated land related reports, plans or official advice to be considered by council must be accompanied by a cover letter that includes the following information:

- · Company/practitioner name and contact details
- Scope of works to be overseen by the practitioner
- · Qualifications relevant to the services being provided
- Past professional experience in comparable projects
- Two references from past clients that have received similar services

A practitioner may choose to include a copy of their CV to council with initial correspondence or documents.

### Council Contaminated Land Records

Contaminated land issues can be dynamic, change over time as site assessments and remedial actions are performed, and new sites are identified. Due to the dynamic nature of contamination council does not hold a definitive 'register' of contaminated sites.

Wherever possible, council's records shall maintain accurate and reliable information on sites that:

- Have been assessed or regulated by the EPA under the provision of the CLM Act
- Have undergone previous contaminated land assessments or management actions and reports have been provided to council
- Have undergone a site audit by an accredited site auditor
- Are known by council to be contaminated.
- Have had a development application accepted for Category 1 remediation works
- Have provided a notification of Category 2 remediation works

Information pertaining to contaminated land matters will be recorded and managed by council in line with the Policy Guidelines and other applicable standards.

### Section 10.7 Planning Certificates

A planning certificate issued under Section 10.7 of the EPA Act is specific to a certain property and provides information about how the site may be used and if land use restrictions apply. Information on land contamination will be included in Section 10.7 planning certificates in line with the requirements of Section 59(2) of the CLM Act and the Policy Guidelines. If land use restrictions are placed on the land due to contamination this will be reflected within the Section 10.7 planning certificate.

### Section 10.7(2) Planning Certificates

Section 10.7(2) planning certificates issued by council will provide information relevant to the property on the date the certificate is issued, such as sites:

- Identified as significantly contaminated
- Subject to a management order

- Subject to an approved voluntary management proposal
- · Subject to an ongoing maintenance order
- Subject to a site audit where a Site Audit Statement has been produced and provided to council
- Indicate whether or not the land is affected by an adopted Policy of the council or any other public authority that restricts the development of land because of the likelihood of any risk of contamination

Further information, including standard Section 10.7(2) entries and explanations are provided in Appendix J of the Policy Guidelines.

### Section 10.7(5) Planning Certificates

In instances where council records indicate that a site is, or has the potential to be impacted by contamination, a special note will be added to the Section 10.7(5) planning certificate indicating that certain restrictions may apply to a site due to contamination. In instances where a declaration is present on the planning certificate, a proponent should contact council to seek further information on the nature and consequences of potential contamination issues at the site.

Council may also choose to add other specific information on contaminated land matters on the Section 10.7(5) planning certificate, including where:

- The site is known to have been used for a land use listed in Table 1 of Appendix C
- A Statement of Environmental Effect (SOEE) has identified that contamination may be a factor at the site
- A contaminated land assessment report has been produced and provided to council
- A validation of remediation has been undertaken and a report provided to council
- · Remedial actions have been approved for the remediation of the site
- · Council has been notified of remediation that is to be undertaken at the site
- Historic, or remediation work not validated, is known to have been undertaken at the site
- Underground Petroleum Storage System (UPSS) are known to be present on the site
- Advice associated with information provided under a 10.7(2) certificate is available

Further information including standard 10.7(5) entries and explanations are provided in Appendix J of the Policy Guidelines.

### Preventing Contamination

Measures to prevent possible pollution at its source may help to reduce future land contamination issues. Council will endeavour to prevent the occurrence of pollution and associated land contamination, where applicable, by:

- Applying appropriate controls on development and rezoning to reduce polluting activities and impacts
- Proactively investigate and regulate land use activities that may cause contamination
- Manage public land and assets in line with the requirements of this Policy and relevant regulation
- Promote the adoption of environmental practices that reduce the potential for contamination

### 3. RESPONSIBILITIES AND AUTHORITIES

The Environmental Health Team is responsible and accountable for:

- · Implementing and communicating this Policy
- Monitoring compliance of the Policy
- Ensuring this Policy is reviewed and updated to meet external compliance

Relevant Infrastructure staff are responsible and accountable to follow this Policy.

This Policy provides a best practice approach for dealing with contaminated land matters in the Port Macquarie-Hastings Council Local Government Area. The processes and standards provided in this Port Macquarie-Hastings Council Contaminated Land Policy UNCONTROLLED IF PRINTED Page 7 of 16

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document adhere to the requirements of the contaminated land legislative frameworks and associated planning guidelines. Planning decisions made in compliance with this Policy should be considered to be performed in good faith and are afforded exemption from liability under Schedule 6 of the EPA Act.

Council staff should seek legal guidance wherever they are uncertain about the application of this Policy.

## 4. REFERENCES

- Contaminated Land Management Act, 1997 (CLM Act)
- Environmental Planning and Assessment Act, 1979 (EPA Act)
- Protection of Environmental Operations Act, 1997 (POEO Act)
- State Environmental Planning Policy No. 55 Remediation of Lands (SEPP 55)
- Managing Land Contamination Planning Guidelines SEPP55 Remediation of Land (Planning Guidelines)

A more detailed review of the framework and its effects can be found in Appendix B.

### 5. DEFINITIONS

Category 1 remediation	has the same meaning as in SEPP 55, and is remediation work that needs development consent.
work:	
Category 2	has the same meaning as in SEPP55, and is remediation work that doesnot
remediation work:	need development consent.
CLM Act:	means the Contaminated Land Management Act, 1997 (NSW) as amended from time to time.
Contamination of land:	depending on the context:
	has the same meaning as in section 5(1) of the CLM Act, being the presence
	in, on or under the land ofa substance at a concentration above that normally
	present in, on or under the land in the same locality, being a presence that
	presents a risk of harm to human health or any other aspect of the
	environment, and "Contaminate" and "Contaminated" are to be construed
	accordingly. The words "land", "harm" and "environment" are defined as in the CLM Act.
	OR
	has the same meaning as in Schedule 6 of the EPA Act, being land in, on or under which any substance is present at a concentration above the
	concentration at which the substance is normally present in, on or under
	(respectively) land in the same locality, being a presence that presents a risk
	ofharm to human health or any other aspect of the environment. The words
	"land" and "environment" are defined as in the EPA Act.
Detailed	means an investigation to define the extent and degree of contamination,
investigation:	to assess potential risk posed by contaminants to health and the
	environment, and to obtain sufficientinformation for the development of a
	remedial action plan, if required.
EPA Act:	means the Environmental Planning and Assessment Act, 1979 (NSW) as
	amended from timeto time.
Independent	means an evaluation by an independent expert required by a planning
review:	authority of any information submitted by a proponent, conducted at the
	proponent's expense.
Initial	means an assessment of readily available factual information to determine
evaluation:	whethercontamination may be an issue relevant to the decision being made.
Preliminary	
investigation	means a preliminary investigation order issued by the EPA under section 10 of the CLM Act to investigate whether specified land is contaminated, and the
order:	
	nature and extent of any such contamination.

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## ORDINARY COUNCIL 19/05/2022

Notice of	means a notice to the council (or Minister for Planning where the Minister is
completion:	theconsent authority) in accordance with SEPP 55 that remediation work has been completed.
Notification of remediation:	means prior notice of a Category 2 remediation work given to the council in accordance with SEPP 55.
Planning authority:	means a public authority or other person responsible for exercising a planning function.
Planning Certificate:	means a planning certificate issued under Section 10.7 of the EPA Act.
Planning	means a function exercised by the council as a planning authority under the
function:	EPA Act, including the functions listed in Clause 2 of Schedule 6, such as the preparation or making of an environmental planning instrument and the determination of a development application.
Preliminary investigation:	means an investigation to identify any past or present potentially contaminating activities and to provide a preliminary assessment of any site contamination.
Remedial Action Plan:	means a plan which sets remediation goals and documents the process toremediate a site.
Management Order:	means a management order issued by the EPA under section 14 of the CLM Act,requiring the carrying out of specified actions in relation to the management of contaminated land (including remediation).
Significantly Contaminated Land:	means a site declared by the EPA under section 11 of the CLM Act tobe significantly contaminated land.
Remediation:	has the same meaning as in the CLM Act and includes:
	<ul> <li>preparing a long-term management plan (if any) for the land</li> </ul>
	<ul> <li>removing, dispersing, destroying, reducing, mitigating or containing the contamination of the landand</li> </ul>
	<ul> <li>eliminating or reducing any hazard arising from the contamination of the land (including bypreventing the entry of persons or animals on the land)</li> </ul>
SEPP 55:	means the State Environmental Planning Policy No 55 - Remediation of Land
Site audit:	has the same meaning as in the CLM Act, being a review:
	<ul> <li>that relates to management (whether under the CLM Act or otherwise) of the actual or possible contamination of land; and</li> </ul>
	<ul> <li>that is conducted for the purpose of determining any one or more of the following matters:</li> </ul>
	<ul> <li>the nature and extent of any contamination of the land</li> </ul>
	<ul> <li>the nature and extent of any management of actual or possible contamination of the land</li> </ul>
	<ul> <li>whether the land is suitable for any specified use or range of uses</li> </ul>
	<ul> <li>what management remains necessary before the land is suitable for any specified use or range of uses</li> </ul>
	<ul> <li>the suitability and appropriateness of a plan of management, long-term management plan or avoluntary management proposal</li> </ul>
Site auditor:	has the same meaning as in the CLM Act, being a person accredited by the EPA under the CLM Act to conduct site audits
Site audit statement:	means a site audit statement issued by a site auditor in accordance with Part 4 of the CLM Act.
Site audit	means a report prepared by a site auditor containing the key information
report:	and thebasis of consideration which leads to the issue of a site audit statement.
Site history:	means a land use history of a site which identifies activities or land uses which
0.00	may have contaminated the site, establishes the geographical location of
	particular processes within the site, and determines the approximate time
Site	periods over which these activities took place. means the process of investigating land which may be, or is, contaminated,for
investigation	the purpose of providing information to a planning authority.
_	use Council Contaminated Land Policy

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process:	
Validation:	means the process of determining whether the objectives for
	remediation and anyconditions of development consent in relation to
	the remediation have been achieved.

Acronyms are provided in Appendix A.

### 6. PROCESS OWNER

Group Manager Environment and Regulatory Services.

### 7. AMENDMENTS

Council's former Contaminated Land Policies were adopted in 2010 and 2017 and were also based on the SEPP 55 Guidelines. This Policy, adopted by Council in 2021, replaces the 2010 Policy.

### 8. ACKNOWLEDGEMENT

This Policy is based on the Model Contaminated Land Policy prepared for members of the former Mid North Coast Regional Organisation of Councils (MIDROC) as part of the then MIDROC Contaminated Land Program.That Program was assisted by the New South Wales Government through the NSW Environmental Protection Authority's (EPA) Contaminated Land Management Program with funding provided by the NSW Environmental Trust.

### 9. DISCLAIMER

Whilst every effort has been made to ensure the accuracy of the information in this Policy, Port Macquarie Hastings Council disclaims any liability to any person in respect of anything done or not done as a result of the contents of the Policy and Guideline.

### 10. APPENDICES

## ATTACHMENT

## ORDINARY COUNCIL 19/05/2022

## Appendix A: Acronyms

ARA	Appropriate Regulatory Authority – used in regulation
ANZECC	Australian and New Zealand Environment and Conservation Council
CLM Act	Contaminated Land Management Act, 1997
DA	Development Application
DCP	Development Control Plan
DP&E	Department of Planning & Environment
EPA	Environment Protection Authority
EPA Act	Environmental Planning and Assessment Act, 1979
LEP	Local Environmental Plan
LGA	Local Government Area
NSW	New South Wales
POEO	Protection of the Environment Operations Act, 1997
RAP	Remedial Action Plan
SEPP	State Environmental Planning Policy
UST	Underground Storage Tanks
UPSS	Underground Petroleum Storage System(s)

### Appendix B: Contaminated Land Planning and Legislative Framework

The key legislation and planning instruments that make up the contaminated land planning and legislative framework are:

- Environmental Planning and Assessment Act, 1979
- Contaminated Land Management Act, 1997
- Protection of Environmental Operations Act, 1997
- SEPP 55 Remediation of Lands
- Managing Land Contamination Planning Guidelines SEPP 55 Remediation of Lands

Other relevant legislation and planning instruments that affect the way that council deals with contaminated land matters include:

- Local Government Act, 1993
- Work Health and Safety Act, 2011
- Pesticides Act, 1999
- Dangerous Goods (Road and Rail Transport) Act, 2008
- Environmentally Hazardous Chemicals Act, 1985
- Environmental Planning and Assessment Regulation 2000
- Protection of Environmental Operations (General) Regulation 2021
- Protection of Environmental Operations (Waste) Regulation 2014
- Protection of Environmental Operations (Clean Air) Regulation 2021
- Protection of Environmental Operations (Underground Petroleum Storage Systems) Regulation 2019
- SEPP (Exempt and Complying Development Codes) 2008

Guidelines made by the EPA under the Contaminated Land Management (CLM) Act:

- · Assessment and management of hazardous ground gases: Contaminated Land guidelines
- Guidelines for the Vertical Mixing of Soil on Former Broad-acre Agricultural Land
- Sampling Design Guidelines
- Guidelines for Assessing Banana Plantation Sites
- Consultants Reporting on Contaminated Land: Contaminated Land Guidelines
- Guidelines for Assessing Former Orchards and Market Gardens
- Guidelines for the NSW Site Auditor Scheme, 3rd edition
- Guidelines for the Assessment and Management of Groundwater Contamination
- Guidelines on the Duty to Report Contamination under the CLM Act, 1997

## **Relevant National Standards**

Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG, August 2018) [Except for water quality of primary industries which still refer to the ANZECC & ARMCANZ, 2000]

National Environment Protection (Assessment of Site Contamination) Measure 1999 (April 2013)

Overview of Contaminated Land Planning and Legislative Framework effects

Contaminated Land Management Act, 1997

Provides powers to the EPA to:

- Regulate sites that are significantly contaminated (or assumed to be)
- · Issue orders to a public authority to carry out certain regulatory functions
- · Create guidelines for the assessment and management of contaminated sites
- Administer the NSW Site Auditor Scheme

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## ATTACHMENT

- · Impose penalties and cost recovery actions
- · Impose duties on land owners to notify the EPA of contamination
- Provide offset programs that may allow those responsible for significant contamination to implement offsets to mitigate contamination impacts
- Provides Site Auditors with a legal framework for undertaking statutory site audits
- Requires local planning authorities to provide advice in planning certificates made under Section 10.7(2) of the EPA Act for sites that have EPA regulatory actions or site audits in accordance with the provisions of the CLM act.

### Environmental Planning and Assessment Act, 1979

Provides powers to the NSW Department of Planning, Industry and Environment (DPIE) to:

Develop environmental planning instruments such as State Environmental Planning Policies

Provides planning authorities with a legal framework for:

- · Planning and development control processes
- · Developing Local Environmental Plans that are to be approved by the Minister
- Developing and implementing Development Control Plans
- Exemptions from liability for planning authorities if they are acting substantially in accordance with contaminated land planning guidelines and guidelines developed under the provisions of CLM Act
- Recording and presenting contaminated land information on Planning certificates
- Issuing orders that cease activities that do not align with conditions of a development consent

### Protection of Environment Operations Act, 1997

Provides planning authorities with a legal framework for:

- Issuing notices for the assessment and clean-up of contaminated land and associated pollution
- The regulation of waste materials
- Preventing or prohibiting certain land use activities that have the potential to exacerbate or contribute to land contamination

State Environmental Planning Policy 55 - Remediation of Lands

SEPP 55 sets out a state-wide planning approach to remediating lands:

- Requires remediation works to be carried out in accordance with the contaminated land planning guidelines and other guidelines created under the CLM Act
- · Specifies when consent is required for remediation works and remediation processes
- · Outlines relevant contaminated land considerations during planning processes
- · Specifics notices to be provided to council when carrying out remediation works

Managing Land Contamination Planning Guidelines - SEPP 55 - Remediation of Lands

Provides local government with:

- · Contaminated land assessment, remediation and site management practices
- · Information on the Site Audit process and when it should be considered
- · Planning and land management decision making approaches and considerations
- · Approaches for recording and managing contaminated land information
- Recommendations to develop a formal policy for dealing with contaminated land issues
- List of land uses that have the potential to cause contamination

SEPP (Exempt and Complying Development Codes) 2008

The SEPP:

- Overrides provisions of SEPP 55 and applicable LEP
- Provides streamlined assessment processes for development that complies with specified

Port Macquarie-Hastings Council Contaminated Land Policy

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Item 11.09 Attachment 1 development standards, including development that is considered exempt from planning approvals

• Development that complies with the code can be conducted in accordance with a complying development certificate without the need for planning approvals

National Environment (Assessment of Site Contamination) Protection Measure (NEPM) 1999 (April 2013)

Implemented in NSW under the National Environmental Protection Council (NSW) Act, 1995, the NEPM establishes national standards for:

- · Acceptable thresholds for contaminants in soil, air and water
- Processes and standards for assessing contaminated sites
- Processes and standards for monitoring ambient air quality
- · Standards for moving controlled waste materials

### Appendix C: Potentially Contaminating Land Uses

The following is a list of land use activities that may cause contamination (as identified in Table 1 of the Planning Guidelines):

- acid/alkali plant and formulation
- agricultural/horticultural activities
- airports
- asbestos production and disposal
- chemicals manufacture and formulation
- defence works
- drum re-conditioning works
- dry cleaning establishments
- · electrical manufacturing (transformers)
- electroplating and heat treatment premises
- engine works
- explosives industry
- gas works
- iron and steel works
- landfill sites
- metal treatment
- · mining and extractive industries
- oil production and storage
- paint formulation and manufacture
- · pesticide manufacture and formulation
- power stations
- railway yards
- scrap yards
- service stations
- sheep and cattle dips
- smelting and refining
- tanning and associated trades
- waste storage and treatment
- wood preservation

Note: It is not sufficient to rely solely on the contents of this list to determine whether a site is likely to be contaminated or not. The list is only a guide. A conclusive contamination status can only be determined after a review of the site history and, if necessary, sampling and analysis.

### Appendix D: Relevant Contacts

Port Macquarie-Hastings Council Environmental Health Officer Environment & Regulatory Services Community, Development & Environment Phone: 65818111 Email: council@pmhc.nsw.gov.au

NSW Environmental Protection Authority Environmental Line Phone: 131 555 Email: <u>info@environment.nsw.gov.au</u>

SafeWork NSW Phone: 131 050 Email: <u>contact@safework.nsw.gov.au</u>

Port Macquarie Public Health Unit (Mid North Coast and Northern NSW Local Health District) Phone: 6589 2120



# Council Policy ROAD RESERVE MANAGEMENT

# 1. INTRODUCTION

Port Macquarie-Hastings Council (PMHC) is committed to providing the community with well-planned and safe access within our public roads that minimises risk to users, public infrastructure, and our environment.

Ensuring that activity on or within Council road reserve is planned, assessed and managed in accordance with relevant legislation will ensure consistency, transparency and robust policy.

# 2. POLICY STATEMENT AND SCOPE

The Road Reserve Management policy sets out the principles by which Council manages specific infrastructure, activities, works and events within the public road reserve to:

- Provide a framework for the assessment and approval of certain works, activities and events within the road reserves under Council's control,
- Establish policies that provide guidance for contractors, external service providers and the general public who seek to undertake identified activities within road reserves under Council's control,
- Ensure identified works performed within road reserves under Council's control are undertaken to standard, conducted by appropriately insured and licensed entities in a safe manner with minimal impact on the environment.

## 2.1. Public Road Reserve Management

Council is responsible for the management of the public road reserve throughout our Local Government Area (LGA).

Roads are typically categorised into State, Regional and Local roads. State roads are classified with Transport for NSW as the relevant roads authority. Regional roads similarly are classified and managed by Council with funding assistance from Transport for NSW. Local roads are all public roads that are not State or Regional roads and are categorised as unclassified. They are managed and maintained by Council.

The construction, installation, or occupation of any specific infrastructure, activities, works or events, requires consent under the NSW Roads Act 1993.

For all unclassified roads and some classified roads, Council is the consent authority, with Transport for NSW's Roads and Maritime Services giving concurrence or consent on classified roads. Roads categorised as Crown Roads are under the care and control of NSW Crown Land as the relevant roads authority. As such, consent is required from NSW Department of Planning and the Environment – Crown Lands for any activities, events or works on Crown Roads.

## 2.1.1. Activities, Works and Occupation of the Public Road Reserve

Part 9, Division 3 Other Works and Structures, of the NSW Roads Act 1993 requires that all work undertaken within Council's road reserves or road related areas be approved by Council prior to any

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work being undertaken, as Council is the appropriate roads authority required to implement the provision of the NSW Roads Act.

Under the NSW Roads Act 1993, consent of the appropriate road authority is required for the following activities:

- · erect a structure or carry out a work in on or over a public road,
- · dig up or disturb the surface of a public road,
- remove or interfere with a structure, work or tree on a public road,
- pump water into a public road from any land adjoining the road.

The issue of a permit will depend on the type of occupation or works proposed. Council will only issue a permit to a contractor, person or authority that is suitably qualified or experienced to undertake the type of work proposed.

Certain council reserves are also considered road related areas, and require the same permissions.

Applications for activities, works or occupation within the public road reserve must meet specific criteria outlined in relevant procedures, in accordance with relevant Australian Standards and compliance, and are subject to fees for the application and occupation as outlined in Council's Schedule of Fees and Charges.

Utility service authorities or the agents of electricity and telecommunications infrastructure suppliers are required to notify Council of planned works as required under the relevant Telecommunications Act and Electrical Supply Act. This is known as a Land Access and Activity Notice (LAN) and must adhere to the respective Codes, Act and Notice requirements applicable for such activities within the road reserve.

# 2.1.2. Cattle Grids and Public Gates

PMHC's rural road network traverses large portions of agricultural land where there may be a need for public gates and cattle grids, known as a bypass.

To ensure public safety and reliability of the rural road network is not compromised, property owners are required to seek Council's consent for the installation, operation, inspection and maintenance of public gates and cattle grids within the public road reserve in accordance with Part 9, Division 2 Public Gates and Division 3 Other Works and Structures, of the NSW Roads Act 1993.

Landowners who have existing public gates and/or cattle grids that are not recorded on Council's register or do not have a permit granted are required to complete an Application for Works, Activities and Events within the Public Road Reserve for assessment and consent under the NSW Roads Act to ensure it meets the required construction standards approved by Council as the relevant road authority.

Where land adjacent to an existing or new public gate and/or cattle grid is transferred to a new entity, the maintenance and permit responsibilities for the infrastructure are carried forward to the new owner. It is the responsibility of the current permit holder at the time of the sale to advise the buyer of the responsibilities involved.

Applications for cattle grids and public gates within the public road reserve must meet specific criteria outlined in relevant procedures, in accordance with relevant Australian Standards and compliance, and are subject to fees for the application and occupation as outlined in Council's Schedule of Fees and Charges.

## 2.1.3. Events within the Public Road Reserve

Section 144 of the NSW Roads Act 1993 requires that all events undertaken within Council's road reserve or road related areas have the consent of Council prior to the event being undertaken.

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Applications for events within the public road reserve must meet specific criteria outlined in relevant procedures, in accordance with relevant Australian Standards and compliance, and are subject to fees for the application and occupation as outlined in Council's Schedule of Fees and Charges.

# 2.1.4. Roadside Memorials and Tributes

We recognise the installation of roadside memorials and tributes can assist with the grieving process after the passing of a loved one. These memorials can be in a range of forms including seating, plaques, crosses, trees and shrubs.

PMHC does not encourage the placement of roadside memorials on Council-owned road reserves as this can impact visibility and safety, and create a requirement for ongoing maintenance.

Council may, at times, consider applications for roadside memorials and tributes consistent with Transport for NSW's request and review process.

Council does not accept any responsibility pertaining to the maintenance of roadside memorials placed by members of the community. Where a member of the public chooses to erect or visit a roadside memorial within Council road reserve without consultant or consent, they do so at their own risk and risk to others. Council accepts no liability for any incidents that may occur.

## 2.1.5. Landscaping and Gardens

PMHC has the responsibility of managing hazards within the road reserve to maximise the safety and minimise risk for all road users and pedestrians.

Council relies on residents to maintain urban verge or nature strips adjacent to their property, which are a logical extension of their own lawn areas. This does not extend to the construction of landscape works or significant planting, other than lawn as these added structures can present a hazard to roadside users and pedestrians.

Council may perform maintenance of a nature strip on a reactive, ad-hoc basis where the area may pose a significant risk to public safety. In this instance the work will be carried out as a one-off event.

Where property owners have undertaken the construction of landscape works or significant planting within the road reserve, Council reserves the right to request immediate removal of such structures at the property owner's expense. Works may be subject to an Application for Works, Activities or Events within the Road Reserve, meet specific criteria outlined in relevant procedures, in accordance with relevant Australian Standards and compliance, and are subject to fees for the application and occupation as outlined in Council's Schedule of Fees and Charges.

# 2.1.6. Tourism, Community and Service Signage

PMHC considers signage to be very important and strives to maintain high quality standards with street signs and wayfinding. As such, we also have the expectation that the public meet these same standards.

Tourism, community and service signage is required to meet the basic principles of traffic management and road safety, as well as protecting the visual amenity of our roadsides and the scenic beauty of our Local Government Area. Tourism, community and service signage must also comply with Transport for NSW's requirements of tourist signposting.

Applications for signage must meet specific criteria outlined in relevant procedures, designed in accordance with the Australian Standard and are subject to fees for the application, supply and installation as outlined in Council's Schedule of Fees and Charges.

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# 2.1.7. Street Lighting and Glare

Street lighting is a requirement of the community for the public road network to ensure safe and comfortable travel at night for drivers and provides secondary benefits for pedestrians. Street lighting also serves other functions, such as deterring illegal or anti-social activities.

All new street lighting provided on public roads shall be designed in compliance with the specifications outlined in the relevant Australian Standards for public lighting, as per Council's adopted Street lighting on Public Roads Policy.

Lighting is installed to relevant standards and modern technology that is energy efficient such as Light Emitting Diodes (LED). Some street lights have light which spills into private residences and can appear obtrusive to the property owner. Glare shields may be suitable to minimise this impact. Glare shields are not available for all types of street lights.

In certain circumstances, residents may request the installation of a glare shield for existing street lighting. This is a user-pays process.

Applications for glare shields, including inspection, assessment and installation must meet specific criteria outlined in relevant procedures, in accordance with relevant Australian Standards and the relevant electrical infrastructure provider, and are subject to fees for the application, infrastructure and installation as outlined in Council's Schedule of Fees and Charges.

# 2.1.8. Placement of Recycled Clothing Bins on Council Owned Land

To encourage residents to recycle, maintain health and safety, and support for local charitable services, PMHC will review and assess the placement of recycled clothing collection bins on Council owned land.

Approval to place clothing bins within public road reserve may be given by Council for organisations who meet specific criteria and submit an application to Council that is accepted.

Members of the National Association of Charitable Recycling Organisation (NACRO) and organisations who are registered non-profit charitable organisations who use a proportion of the proceeds of sale of clothing collected through these bins to provide charitable and relief services to residents of the Port Macquarie-Hastings. Only organisations fitting these criteria will have their applications approved.

Applications for the placement of clothing bins must meet specific criteria outlined in relevant procedures, and approvals to the location of all bins shall be considered in accordance with the statutory requirements of the NSW Local Government Act and NSW Roads Act.

## 2.2. Consent

The Community Infrastructure Planning and Design team has the primary responsibility for the planning, design and approval of specific infrastructure, activities, works and events within the public road reserve.

## 3. RESPONSIBILITIES AND AUTHORITIES

Council is the Roads Authority for all roads and associated road reserves vested in fee simple to Council (meaning that it has absolute ownership of the land) as described within the NSW Roads Act 1993.

Council as the governing body is responsible and accountable for:

- Adopting the Public Road Reserve Management Policy
- Oversight of the implementation
- Determining strategic priorities for Community Infrastructure

The Chief Executive Officer and Directors are responsible and accountable for:

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- Communicating this Policy
- Ensuring compliance of this Policy
- Ensuring this Policy is reviewed and updated to meet current legislative requirements
- Ensuring appropriate delegations are in place with regard to exercising Road Authority functions

The Group Manager, Infrastructure Planning and Design is responsible and accountable for:

- Implementing this Policy
- Monitoring compliance of this Policy
- · Reviewing and updating this Policy to meet current legislative requirements
- Ensuring appropriate procedures are developed, implemented and monitored to meet the principles of this Policy

Infrastructure Planning and Design Engineers, Development Engineers, and Operations Engineers are responsible and accountable for:

- Implementing and communicating this Policy and any associated procedures to internal and external stakeholders
- Monitoring compliance of this policy and any associated procedures

All Council Officers are responsible and accountable for following this Policy and any associated procedures.

# 4. REFERENCES

NSW Local Government Act 1993 NSW Roads Act 1993 NSW Environmental Planning and Assessment Act 1979 Port Macquarie Local Environment Plan **Development Control Plan** Pedestrian and Access Mobility Plan All PMHC Area and Town Centre Master Plans PMHC Bike Plan and associated town centre bike lanes and shared pathways PMHC AUS-SPEC Design and Construction Specifications PMHC Local Strategic Planning Statement **Telecommunications Act 1997** NSW Electricity Supply Act 1995 Australian Communications and Media Authority Charitable Fundraising Act 1991 No 69 Transport for NSW Roadside Tributes Telecommunications Act 1997 (Cth) (Act) and Telecommunications Code of Practice 1997 (Cth) (Code) NSW Gas Supply Act 1996 Electricity Supply Act 1995 State Environment Planning Policy (Infrastructure) 2007

## 5. DEFINITIONS

## 5.1. Road Reserve

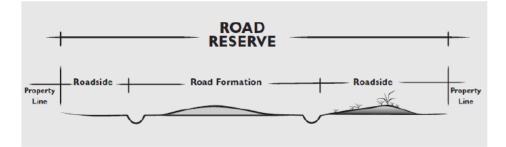
The road reserve is the area 'reserved' for facilities such as roads, footpaths, and associated features that may be constructed for public travel. It is the total area between boundaries. This is the land that is referred to as the "public road" within the NSW Roads Act 1993. It can include the public roadway or footpath, including the nature strip or verge.

The road reserve doesn't necessarily refer to a physical road, however it can refer to an area where a road 'may' be formed. Please see the below illustration.

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# 5.2. Roadside Memorial

A roadside memorial can be defined as any object placed within a Council road reserve that is usually put in place to mark the location of a roadside fatality.

# 5.3. Street Lighting

Streetlights are defined as those lights located within the roadway with the specific purpose of lighting the roadway for the benefit of motorists and pedestrians. This does not cover private security lighting within the roadway, or lighting of other Council-owned facilities such as parks, reserves, etc.

# 5.4. Tourism and Community Signage

Tourism and community signage fall into four key types of road wayfinding signs which are used by visitors to find tourist attractions and facilities within our Local Government Area. These include:

- i. Tourist Attraction Signs Brown and White
- ii. Service Signs Blue and White
- iii. Community Facility Signs Blue and White
- iv. Advertising Signs Signs on private property

## 6. PROCESS OWNER

The Group Manager, Infrastructure Planning and Design is the process owner. The process owner should be contacted for any information in relation to this Policy.

# 7. AMENDMENTS

This is a newly developed policy.

## 8. REVIEW

This Policy will be reviewed in three years or as necessary to ensure compliance with legal requirements.



Authorised by:CouncilAuthorised date:DD/MM/2022Effective date:DD/MM/2022Next review date:DD/MM/2026File Number:TBA

# ASSET MANAGEMENT POLICY

# 1. INTRODUCTION

Asset Management is a systematic, organisational wide process which guides the planning, design, acquisition, operation, maintenance, upgrade, renewal and disposal of assets.

This policy establishes a framework that determines the nature and direction of Asset Management within Port Macquarie-Hastings Council.

Council is committed to managing the community's assets in accordance with recognised best practice and obligations required under relevant legislation. Asset Management will enable Council to demonstrate resilience in response to external effects.

The sustainable management of Council's assets will be achieved by adopting current technologies and methodologies and requires appropriate consultation with the community to ensure that current and future community needs are being addressed.

Council's Asset Management objectives are to ensure adequate provision is made for the long-term management and replacement of major Council assets by:

- Delivering financial sustainability by making decisions that lead to a cost effective asset base, by focussing on asset renewal, ensuring assets are fit for purpose, rationalising under-utilised assets and limiting asset expansion unless justified.
- Identifying funding to support and maintain Council infrastructure.
- Ensuring that Council's infrastructure provides appropriate levels of service to residents, visitors and the environment as determined through consultation with the community.
- Safeguarding Council assets including physical assets and employees by implementing appropriate Asset Management strategies and appropriate financial resources for those assets, over their whole life.
- Identifying responsibilities and accountabilities for Asset Management.
- Creating an environment where all Council employees take an integral part in overall management
  of Council assets by creating and sustaining an awareness of Asset Management throughout the
  organisation by training and development.
- Meeting legislative requirements for Asset Management.
- Ensuring resources and operational capabilities are identified and responsibility for Asset Management is allocated.
- Demonstrating transparent and responsible Asset Management processes that align with demonstrated best practice.

# 2. POLICY STATEMENT AND SCOPE

Assets are critical in supporting the services delivered to the community by Port Macquarie-Hastings Council.

Port Macquarie-Hastings Council is committed to ensure that assets are managed to meet the strategic direction of Council and the community; and providing the services desired within the financial capacity of Council.

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To implement this Policy, the Council will continually improve the overall condition and management of its assets through the implementation of a long term Asset Management Strategy, Asset Management Plans and Service Plans.

The allocation of resources and decisions on Asset Management will have regard to the impacts of asset acquisition and the whole of life cost involved in the provision of the service facilitated by the asset.

This policy applies to all Council activities.

# Policy Background

Council is committed to implementing a systematic Asset Management methodology in order to apply appropriate Asset Management best practices across all areas of the organisation. This includes ensuring that assets are planned, created, operated, maintained, renewed, upgraded and disposed of in accordance with Council's priorities for service delivery.

Council owns and uses approximately \$2.625 billion (current replacement cost) of non-current assets to support its core business of delivery of services to the community. The value by asset class is included each year in Council's audited financial statement.

Asset Management practices impact directly on the core business of the organisation and appropriate Asset Management is required to achieve Council's strategic service delivery objectives.

Adopting Asset Management principles will assist Council in achieving its Community Strategic Plan and Resourcing Strategy.

A strategic approach to Asset Management will ensure that the Council delivers the highest appropriate level of service through its assets. This will provide a positive impact on;

- Members of the public and staff;
- Council's financial position;
- The ability of Council to deliver the expected level of service and minimise its risk;
- · The political environment in which Council operates; and
- The legal liabilities of Council.

# Policy Principles

A consistent Asset Management Strategy must exist for implementing systematic Asset Management and appropriate Asset Management best-practice throughout all sections of Council.

All relevant legislative requirements together with the natural, political, social and economic environments will be taken into account in Asset Management.

Asset Management principles will be integrated within existing planning and operational processes. Asset Management Plans will be developed for major service/asset categories. The plans will be informed by community consultation and financial planning and reporting.

Risk management is a key element of asset management. A risk management approach will be integrated into asset management planning to ensure critical services and assets are identified and prioritised accordingly.

Asset Management Information Systems will be used to manage assets and inform long term financial planning.

Our maturing approach to Asset Management planning will seek to understand the implications any funding gaps will have on the delivery of sustainable services to future generations.

A standard condition rating and inspection regime will be used as part of Asset Management to ensure agreed service levels are maintained and to identify asset renewal priorities.

Asset renewals, routine and preventative maintenance required to meet agreed service levels and identified in adopted service plans, Asset Management Plans and long term financial plans will form the basis of annual budget estimates with the service levels, asset condition and risk considered.

Service levels defined in adopted service plans and Asset Management Plans will form the basis of annual budget estimates with the service and risk consequences of variations in defined services levels and budget resources documented in budget documentation.

Asset renewal plans will be prioritised and implemented progressively based on agreed service levels and the effectiveness of the current assets to provide that level of service.

Systematic and cyclic reviews will be applied to all asset classes and will ensure that the assets are managed, valued and depreciated in accordance with appropriate best practice and applicable Australian Accounting Standards.

Future life cycle costs will be reported and considered in all decisions relating to new services and assets; and upgrading of existing services and assets.

Future service levels will be determined in consultation with the community.

Internal Asset Management skills will be reviewed to identify gaps in capability and to develop and implement a training program that enables officers to meet their Asset Management responsibilities.

A program will be developed and implemented to raise Council's awareness and understanding of Asset Management principles and the inherent link of the Asset Management function to long term financial planning and the sustainable delivery of services to the community.

The responsibility of service provision will be linked with the broader organisational Asset Management function.

Progress towards implementing Asset Management across the organisation will be monitored, measured and reported.

# **3. RESPONSIBILITIES AND AUTHORITIES**

A Councillor is responsible and accountable to:

- Act as custodians of assets on behalf of the community
- Approve the Asset Management Policy and Asset Management Strategy (Resourcing Strategy)
- Ensure the provision of services provided by the assets are meeting the community priorities for present and future generations
- Ensure decisions made regarding assets are in accordance with Council's Asset Management Policy
- Ensure appropriate resources for Asset Management activities are made available

The Chief Executive Officer and Directors are responsible and accountable to:

- Review the Asset Management Strategy and Asset Management Plans in accordance with the Integrated Planning and Reporting framework, legislative requirements and Council's strategic direction and report to Council as required
- Implement the Asset Management Strategy with agreed resources

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- Ensure the practices of the organisation are consistent with the adopted Asset Management Policy, Strategy and Plans
- Deliver levels of service to agreed risk and cost standards
- Provide leadership in implementing Asset Management
- Report to Council on the status of Asset Management within the organisation

All Council Officers are responsible and accountable to:

- Implement the Asset Management Strategy and Plans
- Engage current technologies, methodologies and continuous improvement processes in Asset Management
- Consistently provide programs, data and actions within the adopted Asset Management Policy, Strategy and Plans

# 4. REFERENCES

Asset Capitalisation Policy Asset Disposal Policy Asset Management Plans Asset Management Strategy Community Strategic Plan Operational Plan Resourcing Strategy Service Levels Australian Accounting Standards: Property, Plant and Equipment AASB 116 Australian Infrastructure Financial Management Manual (AIFMM 2015) Civil Liability Act 2002 Integrated Planning and Reporting Guidelines for Local Government in NSW March 2013 International Infrastructure Management Manual (IIMM 2015) International Standards Organisation (ISO) 55000:2014 Asset Management Local Government Act 1993 - Section 8 Local Government Amendment (Planning and Reporting) Act 2009 - Section 403 Local Government Final Code of Accounting Practice and Financial Reporting - Update 24 NSW Treasury Policy: Guidelines for Capitalisation of Expenditure on Property, Plant and Equipment

(TPP 06-6)

# 5. DEFINITIONS

Asset: A fixed item or facility used to satisfy a service potential or enabling the Council to meet its corporate objectives.

Asset Management: A systematic process to guide the planning, acquisition, operation, maintenance, renewal, upgrade and disposal of assets to provide the required level of service in the most efficient manner.

Asset Management Information System: The foundation of all Asset Management knowledge. It is a combination of processes and information managed to provide the essential outputs for efficient and effective Asset Management. The Asset Management Information System links to other information systems within Council such as the Property System, Geographic Information System, Finance System, and Document Management System.

Asset Management Strategy: Identifies the way Council currently looks after its assets, both day to day (maintenance and operational) and in the long term (strategic Asset Management). It also looks at where Council wants to be in the long term and how Council intends to get there. The Asset Management Strategy is a key component of the 10-year Council Resourcing Strategy.

Asset Management Plan: A strategic plan consisting of an assets description, maintenance plan, development plan and financial plan to manage the assets for the expected duration of the service to be provided by the asset

Councillor: Elected member of local government

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Council Officer: A member of Council staff Director: 2nd tier management position and titled as such Executive: 1st and 2nd tier management Chief Executive Officer: 1st tier management position and titled as such Group Manager: 3rd tier management position and titled as such Level of Service: The defined quality and quantity of services to meet community expectations delivered by Council.

# 6. PROCESS OWNER

Director Community Utilities

# 7. AMENDMENTS

The following changes have been made to the policy.

- Expansion of existing Asset Management definition to include reference to upgrade and renewal activities
- Expansion of existing Policy Scope to apply to all Council activities
- Expansion of existing Policy Principles
- Inclusion of additional References

Su	bmission		Issue						
1.	Philip Lloyd		There has been woeful management of some key assets such as the failure to adequately monitor the Rawdon Island Bridge (despite knowing that 2 other similar wooden Council bridges had failed, and the Rawdon Island Bridge was even older). It was only by 'accident" that the issues were discovered post flood inspections rather than a systematic and thorough inspection schedule. On page 3 of the draft policy there is the statement - "Service levels defined in adopted service plans and Asset Management Plans will form the basis of annual budget estimates with the service and risk consequences of variations in defined services levels and budget resources documented in budget documentation." Also "Future service levels will be determined in consultation with the community." Surely the lack of published/stated service levels (for such things as road maintenance) is a major red flag requiring urgent action. This situation has further exacerbated the management of assets such as roads - since they haven't undergone the regular maintenance that they should, they need even more expensive repairs creating an enormous backlog and debt burden.						
	Response/ Comment:	management, including d	importance of comprehensive asset letailed inspections and criticality nsure critical assets do not fail.						
		Service levels are a key element of asset management an outline the quality to which a given service can be delivere Affordability of a service level and balancing a finite amoun resources across numerous different services is always a challenge for Councils. As Council reviews and updates th relevant Asset Management Plans, the Service Levels will reviewed and updated. Council understands the importance transparency and will be working to publish the updated As Management Plans.							
		detailed Bridge Managen asset management appro bridges on a risk basis, c	nd Bridge, in 2016, Council developed a ement System (BMS), as part of the overall roach for bridge assets, to prioritise all considering condition and overall network. In 2016, Rawdon Island Bridge						

		other concrete bridges in at the time. Further detail over a number of years a bridge to be in fair to poo ranked 13th overall, and behind Lake Cathie Bridg Dunbogan Bridge has be and has been the focus of acknowledged that under at the time other detailed concrete doesn't degrade oxygen levels. Both Dunk had no issues on their for Bridge had a rare chemic caused strength loss and concrete. The asset man had scheduled a level 3 i	but of 133 bridges, and 12th compared to the network based on condition known iled inspections have been carried out is required by the BMS, and found the r condition generally and it is currently 2nd compared to other concrete bridges ge. It is noted that until early 2020, en ranked 1st overall within the network of concrete rehabilitation efforts. It is twater inspections were not undertaken inspection were carried out. Typically, e underwater where there are very low bogan Bridge and Stingray Creek Bridge undations underwater. Rawdon Island cal reaction within the concrete that wasn't related to the age of the agement approach adopted for bridges nspection, in 2022/23 with detailed 2023/24.
2.	John Oxley		I believe that reference to preventative maintenance processes is necessary. Key assets, in particular, should be maintained so as to prevent breakdowns. The sentence "A standard condition rating and inspection regime will be used as part of Asset Management to ensure agreed service levels are maintained and to identify asset renewal priorities" does not, I believe, go far enough and directly cover the issue of preventative maintenance. Risk management is not addressed in this policy, either. The word "priority" is used only for asset renewals. I think risk management should identify key assets that, if they break down or are damaged (by accident or deliberately), could cause great difficulties in the community. Water storage and delivery assets come to mind. No doubt Council could identify others.
	Response/ Comment:	management and the ide	management is a key element of asset ntification of critical assets for the vorks and preventive maintenance is

important to ensure those assets don't fail. The Policy has been
amended to include reference to risk management and
preventative maintenance within the principles section. The
holding essential spare parts is considered as part of the detailed
planning for the different asset classes.



# Visitors Summary



# PARTICIPANT SUMMARY

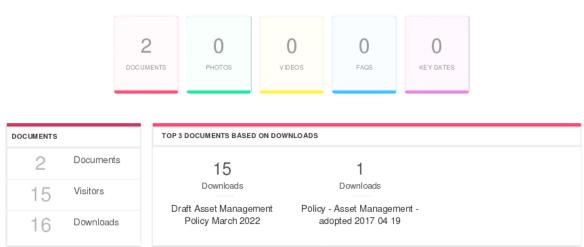
ENGAGED	2 ENGAGED PARTICIPANTS				(%)
		Registered U	Inverified A	no ny mo us	Policy Review - Draft Asset 2 (7.1%)
	Contributed on Forums	0	0	0	
INFORMED	Participated in Surveys	2	0	0	
INFORMED	Contributed to Newsfeeds	0	0	0	
	Participated in Quick Polls	0	0	0	
	Posted on Guestbooks	0	0	0	
	Contributed to Stories	0	0	0	
	Asked Questions	0	0	0	
AWARE	Placed Pins on Places	0	0	0	
	Contributed to Ideas	0	0	0	
	* A single engaged	participant can	perform mu	ltiple actions	* Calculated as a percentage of total visits to the Project
ENGAGED	17 INFORMED PARTICIPANT	ГS			(%)
ENGAGED				Participants	Policy Review - Draft Asset 17 (60.7%)
	Viewed a video			0	Folicy Review - Drait Asset 17 (00.7%)
	Viewed a photo			0	
	Downloaded a document			15	
	Visited the Key Dates page			0	
	Visited an FAQ list Page			0	
	Visited Instagram Page			0	
	Visited Multiple Project Pages			15	
AWARE	Contributed to a tool (engaged)			2	
	* A single informed	participant can	perform mu	Itiple actions	* Calculated as a percentage of total visits to the Project
ENGAGED	<b>28</b> AWARE PARTICIPANTS				
	_			Participants	Policy Review - Draft Asset 28
	Visited at least one Page			28	
INFORMED					
AWARE					
	* Aware user could have also pe	rformed on Into	med or Em	and Action	* Total list of unique visitors to the project
	Aware user courd have also pe	normeu an info	, ned of Eng	ageo Accon	rotal list of unique visitors to the project

Powered by Sang the TABLE engagement HQ.

# ENGAGEMENT TOOLS SUMMARY

О	1 SURVEYS	0 NEWS FEEDS	O QUICK POLLS	<b>O</b> GUESTBOOKS	0 stories	<b>0</b> Q8A'S	0 PLACES
SURVEYS SUM	MARY	TOP 3 SURVEYS BA	ASED ON CONTRIBU	ITORS			
1	Surveys	2					
		Contribu	toreto				
2	Contributors	Submis					

# INFORMATION WIDGET SUMMARY





# TRAFFIC SOURCES OVERVIEW

REFERRER URL	Visits
I.workplace.com	3
www.google.com	2
www.pmhc.nsw.gov.au	2
duckduckgo.com	1
www.bing.com	1
deref-mail.com	1



# SELECTED PROJECTS - FULL LIST

PROJECT TITLE	AWARE	INFORMED	ENGAGED
Policy Review - Draft Asset Management Policy	28	17	2



BUDGET VARIATIONS - April 2022											
Section	Project	Project Description	Capital/ Operating	Division	Full Year Original Budget	Full Year Current Budget	Actuals to April 2022	New Yearly Proposed Budget - April 2022	Movement	Funding Source	EFFECT ON FUNDING POSITION
Adjustments which impact Council's	Budget Positio	n									
To recognise additional rates revenue											
Financial Services	10890	General Rates - Extra Charges	Operating		-233,550	-233,550	-238,878	-293,550	60,000	Revenue	60,000
Financial Services	10902	Business General Rates	Operating	Business &	-350,187	-350,187	-358,615	-358,615	8,428	Revenue	8,428
Financial Services	10903	Residential General Rates - Defined Urban Centres	Operating	Performance	-35,953,928	-35,953,928	-36,122,461	-36,113,928	160,000	Revenue	160,000
Financial Services	10904	Residential General Rates - Other	Operating		-5,702,124	-5,702,124	-5,733,926	-5,732,124	30,000	Revenue	30,000
To bring to account additional interes	t revenue rece	ived on investments.	-		· · · ·			· · · ·		1	
Financial Services	10910	Interest on Investments - Gen Fund	Operating	Business & Performance	-2,440,000	-2,440,000	-2,130,592	-2,550,000	110,000	Revenue	110,000
Water Supply	9200	Transfer To Reserve	Operating		16,797,359	16,797,359	0	16,847,359	-50,000	Reserve	0
Water Supply	11350	Interest on Investments - Water Fund	Operating	Community	-1,830,000	-1,830,000	-1,573,280	-1,880,000	50,000	Reserve	0
Sewerage Services	9300	Transfer To Reserve	Operating	Utilities	10,967,024	10,967,024	0	11,007,024	-40,000	Reserve	0
Sewerage Services	11050	Interest on Investments - Sewer Fund	Operating		-840,000	-840,000	-733,858	-880,000	40,000	Reserve	0
Total Adjustments which impact Cour	ncil's Budget P	osition			i				368,428		368,428
Grants & Other Funding											
To recognise reimbursement by Mid N	orth Coast Ar	ea Health of cleaning expenses at the Re	egional Stadium	COVID testing	site.						
Building Services	42264	COVID Cleaning - Regional Stadium	Operating	Community	0	0	0	28,272	-28,272	Contribution	0
Building Services	19254	Operating Contribution	Operating	Planning & Environment	0	0	-56,784	-28,272	28,272	Contribution	0

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BUDGET VARIATIONS - April 2022				-				-			
Section Project P		Project Description	Capital/ Operating	Division			Actuals to April 2022	New Yearly Proposed Budget - April 2022	Movement	Funding Source	EFFECT ON FUNDING POSITION
Council received Federal Local Roads	& Community	Infrastructure Grant Funding for Lauriet	on Sports Con	nplex New Amen	ties & Log Wha	rf Reserve.					
Parks & Recreation	42164	Laurieton Sports Complex Improvements	Capital		0	0	0	150,000	-150,000	Grant	0
Parks & Recreation	42168	Log Wharf Reserve Upgrade	Capital	Community Planning & Environment	0	129,908	60,192	329,908	-200,000	Grant	0
Parks & Recreation	19282	Capital Grants	Capital	Environment	-5,786,640	-6,337,086	-3,322,753	-6,687,086	350,000	Grant	0
Total Grants & Other Funding					i				378,272		0
Reserve Movements											
Reallocation of funding required for p	rojects at Tow	n Beach, Westport Park and Bain Park Wa	auchope. Tran	sfer of reserve fu	nds required, g	rant funds rev	ersed and re	allocated to 22/2	3 budget.		
Parks & Recreation	42240	Outdoor Amphitheatre at Town Beach	Capital		0	150,000	21,063	52,000	98,000	Reserve	0
Parks & Recreation	42239	Upgrade Westport Park Playspace	Capital	Community	0	150,000	25,475	88,000	62,000	Reserve	
Parks & Recreation	42181	Revitalisation of Bain Park Wauchope	Capital	Planning & Environment	450,000	150,000	33,573	106,635	43,365	Reserve	
Parks & Recreation	19282	Capital Grants	Capital		-5,786,640	-6,687,086	-3,322,753	-6,237,086	-450,000	Grant	0
Parks & Recreation	19280	Transfer From Reserve	Capital		-1,209,922	-3,784,817	0	-4,031,452	246,635	Reserve	0
Transfer of reserve funds required for	Rock Ramp a	t Koree Island.									
Water Supply	20221	Rock Ramp at Koree Island	Capital	Community	150,000	55,000	0	56,840	-1,840	Reserve	0
Water Supply	19229	Transfer From Reserve	Capital	Utilities	-6,874,297	-7,519,364	0	-7,521,204	1,840	Reserve	0
Transfer to reserve additional rezoning	g fees revenue										
Landuse Planning	9025	Transfer To Reserve	Operating	Community	0	0	0	40,000	-40,000	Reserve	0
Landuse Planning	10810	Rezoning Fees	Operating	Planning & Environment	-36,298	-36,298	-75,279	-76,298	40,000	Reserve	0

BUDGET VARIATIONS - April 2022											
ection Project Project Description		Project Description	on Capital/ Di Operating Di		Full Year Original Budget	Full Year Current Budget	Actuals to April 2022	New Yearly Proposed Budget - April 2022	Movement	Funding Source	EFFECT ON FUNDING POSITION
Transfer to reserve additional develope	er contributio	ns.		`				· · · · ·			
Development Contributions	9050	Transfer To Reserve	Operating		8,981,782	8,981,782	0	18,171,782	-9,190,000	S.711	0
Development Contributions	10350	Section 7.11 - Community Facilities	Operating	Community Planning &	-2,242,030	-2,242,030	-4,789,032	-5,162,030	2,920,000	S.711	0
Development Contributions	10400	Section 7.11 - Open Space	Operating	Environment	-1,841,272	-1,841,272	-4,340,234	-4,641,272	2,800,000	S.711	0
Development Contributions	10410	Section 7.11 - Roadworks	Operating		-3,783,480	-3,783,480	-6,624,426	-7,253,480	3,470,000	S.711	0
Total Reserve Movements			·					· · ·	9,435,205	-	0
Budget Variation Requests/New Projec	t Bids - Appro	oved by Executive									
New Project Bid approved by Executive	e for Koala Co	onnectivity Corridor Establishment at C	airncross Waste	Management Fa	cility.						
Waste Disposal	50123	Koala Corridor Cairncross	Capital	Community	0	0	0	86,000	-86,000	Reserve	0
Waste Disposal	19309	Transfer From Reserve	Capital	Utilities	-4,460,000	-5,958,218	0	-6,044,218	86,000	Reserve	0
Budget Variance Request approved by	Executive for	r Sewer Rising Main Replacements.									
Sewerage Services	39368	Sewer Rehabilitation	Capital	Community	350,000	760,000	459,122	1,315,000	-555,000	Reserve	0
Sewerage Services	19219	Transfer From Reserve	Capital	Utilities	-4,666,154	-7,686,096	0	-8,241,096	555,000	Reserve	0
Total Budget Variations/New Project B	ids Approved	by Executive							641,000		0
ORGANISATI	ONAL TOTAL	- THIS REVIEW						-	10,822,905		368,428

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BUDGET VARIATIONS - April 2022													
Section	Project	Project Description Capital Operatin		Division	Full Year Original Budget	Full Year Current Budget	Actuals to	New Yearly Proposed Budget - April 2022	Movement	Funding Source	EFFECT ON FUNDING POSITION		
FORECAST FOR FIN	ANCIAL YEAR	ENDED 30 JUNE 2022											
		Original Budget as at 1 July 2021 <u>Plus: Adjustments</u> July Review August Review September Review October Review January Review March Review Aoril Review			Balanced Balanced Shortfall Surplus Surplus Shortfall Balanced Surplus	0 -427,403 5,841 18,636 65,560 -11,254 0 368,428							
FOREC	AST FOR 30 J	UNE 2022			Surplus	19,808							
Notes:	1	The result shown above is the general fu				•							
	2	Reserve are internal restrictions that hol that reserve.	d funds for a spec	ific purpose, e.g	. The airport has i	ts own reserve	and all incom	e and expenditur	e relating to th	ne airport is cre	dited/debited to		
	3	Council projects are funded from a varie	ty of funding sour	ces. Below is a o	s a definition of the various types of funding that are used to fund projects.								
		Revenue - All funds that are generated t considers appropriate.	hrough rates, ann	ual charges, fee	s and charges, inte	erestetc. Thes	e funds are ur	ntied and can be	expended on	any project that	Council		
		Grants - Government grants can either t road. Untied grants may be applied for a				Tied grants an	e required to b	be used for a spe	cific purpose :	such as the con	struction of a		
		Contributions - Contributions are non-real Examples are contributions given by rate				il is not require	d to give value	e in exchange for	the contributi	ons directly to ti	he contributor.		
		Reserves - Reserves are internal restric to that reserve.	tions held for a sp	ecific purpose, e	.g. The airport ha	s its own resen	ve and all inco	ome and expendi	ture relating to	the airport is c	redited/debited		
		S7.11 and S64 Contributions - Section 7 with a formal legal framework for levying								vides NSW loca	al government		
	4	Some projects are funded by multiple fur revenue funding adjustment as the other							t on capital c	olumn will only ៖	show the		

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Item 11.13 Attachment 1

# Port Macquarie-Hastings Council Budget Review for the quarter ended 31 March 2022 Income & Expenses

				ANNUAL				YEA	AR TO DATE		CURR	ENT QUART	TER
	Original Budget 2021/22 (000's)	Original Budget including Carry-over 2021/22 (000's)	Approved Changes Jul-Aug 21 Reviews (000's)	Approved Changes Sep-Oct 21 [ Reviews (000's)	Approved Changes Dec 21-Feb 22 Reviews (000's)	Revised Budget	Projected Year End Result 2021/22 (000's)	YTD Actuals (000's)	YTD Budget (000's)	Actuals as a % of Budget	Jan 22 - Mar 22 Actuals	Jan 22 - Mar 22 Budget	Jan 22 - Mar 22 Actuals as a % of Budget
Income													
Rates and annual charges	108,390	108,390				108,390	108,390	105,367	104,833	100.5%	1,581	1,612	98.1%
User charges and fees	39,588	39,588			30	39,618	39,618	26,293	27,417	95.9%	9,937	9,984	99.5%
Interest and investment revenue	5,455	5,455				5,455	5,455	4,230	4,091	103.4%	1,392	1,364	102.1%
Other revenues	5,458	5,458	127	(286)	499	5,798	5,798	3,665	3,888	94.3%	1,219	1,438	84.8%
Grants and contributions - operating	14,246	14,457	1,598	347	118	16,520	16,520	8,673	9,710	89.3%	2,230	3,185	70.0%
Grants and contributions - capital	46,599	49,173		7,852	5,086	62,111	62,111	72,133	19,098	377.7%	47,481	6,798	698.5%
Total income from continuing operations	219,736	222,521	1,725	7,913	5,733	237,892	237,892	220,361	169,037	130.4%	63,840	24,381	261.8%
Expenses													
Employee costs	55,268	55,268	482		381	56,131	56,131	40,640	42,639	95.3%	13,266	14,560	91.1%
Borrowing costs	2,158	2,158				2,158	2,158	1,105	1,419	77.9%	230	291	79.0%
Materials and contracts	45,201	47,305	93	343	278	48,019	48,019	32,236	39,834	80.9%	9,508	12,450	76.4%
Depreciation	50,236	50,236				50,236	50,236	36,460	37,677	96.8%	11,476	12,559	91.4%
Other expenses	15,352	15,352	2	(310)	(432)	14,612	14,612	9,992	10,764	92.8%	2,917	3,158	92.4%
Net Loss/(Profit) from disposal of assets	3,000	3,000				3,000	3,000	0	0	0.0%	0	0	0.0%
Total expenses from continuing operations	171,215	173,319	577	33	227	174,156	174,156	120,433	132,333	91.0%	37,397	43,018	86.9%
Net operating result from continuing operations - Surplus/(Deficit)	48,521	49,202	1,148	7,880	5,506	63,736	63,736	99,928	36,704	272.3%	26,443	(18,637)	-141.9%
Net operating result before capital items - Surplus/(Deficit)	1,922	29	1,148	28	420	1,625	1,625	27,795	17,606	157.9%	(21,038)	(25,435)	82.7%

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#### Port Macquarie-Hastings Council Budget Review for the quarter ended 31 March 2022 Capital Budget (excluding Commitments)

	Original Budget 2021/22 (000's)	Carry- over (000's)	Approved Changes Jul-Aug 21 Reviews (000's)	Approved Changes Sep-Oct 21 I Reviews (000's)	Approved Changes Dec 21-Feb 22 Reviews (000's)	Revised Budget	Projected Year End Result 2021/22 (000's)	YTD Actuals (000's)		Actuals as a % of Budget	Jan 22 - Mar 22 Actuals	Jan 22 - Mar 22 Budget	Jan 22 - Mar 22 Actuals as a % of Budget
Capital Funding													
General fund rates and environmental levy	17,912	644	835	80		19,471	19,471	15,580	13,217	117.9%	4,638	4,518	102.7%
Capital grants and contributions	31,360	2,151	586	1,749	3,477	39,323	39,323	17,900	18,258	98.0%	(1,637)	(1,190)	137.6%
Internal Restrictions	12,549	(829)	313	29	1,310	13,372	13,372	5,476	5,199	105.3%	967	2,733	35.4%
External Restrictions	15,430	4,567	(11)	850	2,501	23,337	23,337	13,127	13,300	98.7%	955	1,809	52.8%
S94/64 funds	7,837	123	(43)		809	8,726	8,726	4,576	4,315	106.0%	1,294	1,433	90.3%
Loans	0	171				171	171	0	0	0.0%	0	0	0.0%
Total Capital Funding	85,088	6,827	1,680	2,708	8,097	104,400	104,400	56,659	54,289	104.4%	6,217	9,303	66.8%
Capital Expenditure													
General fund asset purchases/construction	53,364	2,385	1,666	2,058	4,787	64,260	64,260	32,234	30,097	107.1%	2,618	4,520	57.9%
Waste management asset purchases/construction	4,310	1,481		650		6,441	6,441	5,089	5,094	99.9%	15	204	7.4%
Water supply asset purchases/construction	10,259	2,070	15		1,660	14,004	14,004	7,231	7,262	99.6%	930	1,431	65.0%
Sewerage services asset purchases/construction	6,141	891	(1)		1,650	8,681	8,681	4,879	4,106	118.8%	882	842	104.8%
Capital Expenditure excluding Loans	74,074	6,827	1,680	2,708	8,097	93,386	93,386	49,433	46,559	106.2%	4,445	6,997	63.5%
Loan Repayments (principal)	11,014	0	0	0	0	11,014	11,014	7,226	7,730	93.5%	1,772	2,306	76.8%
Total Capital Expenditure	85,088	6,827	1,680	2,708	8,097	104,400	104,400	56,659	54,289	104.4%	6,217	9,303	66.8%

# Port Macquarie-Hastings Council

Budget Review for the quarter ended 31 March 2022 Cash & Investments

	Original Budget 2021/22 (000's)	Carry- over (000's)	Approved Changes Jul- Aug 21 Reviews (000's)	Approved Changes Sep-Oct 21 Reviews (000's)	Approved Changes Dec 21-Feb 22 Reviews (000's)	Revised Budget	Recommended changes for Council Resolution		YTD Actuals (000's)
Unrestricted	0		(427)	24	55	(348)	0	(348)	
Externally restricted									
Developer Contributions (Incl Water & Sewer)	132,685	(123)	12		(809)	131,765		131,765	
Unexpended contributions Unexpended grants	156 24,942					156 24,942		156 24,942	
Unexpended loans	(1,334)	(615)	34			(1,915)		(1,915)	
Water Supply	81,848	(1,628)	85	40	(1,736)	78,609		78,609	
Sewerage Services Employee Leave Entitlements (Restricted)	37,343	(891)	1	(150)	(1,700)	34,603 0		34,603 0	
Special Rates	1,544					1,544		1,544	
Domestic Waste Management	17,763	(1,498)		(650)	489	16,104		16,104	
Stormwater Management Deposits & Bonds	356 6,446	(330)				26 6,446		26 6,446	
Total externally restricted	301,749	(5,085)	132	(760)	(3,756)	292,280	0	292,280	
	301,748	(0,000)	152	(700)	(3,730)	202,200		282,200	
Internally restricted Operational Reserves									
Committed Works	4,853	(478)	(72)			4,303		4,303	
Employee Leave Entitlements	4,708				14 040	4,708		4,708	
Office Building & Equipment Plant Replacement	1,441 6,079	(265)	59		(1,310)	131 5.873		131 5,873	
Working Capital	4,963	1,466	(82)	(100)		6,247		6,247	
Quarantined Funds	22,044	723	(95)	(100)	(1,310)	21,262	0	21,262	0
Crown Reserves	653	(10)				643		643	
Environment Levy	408	(448)	(46)		(10)	(96)		(96)	
Onsite Effluent	1,051	(80)				1,051		1,051	
Surf Clubs Tourism & Industry Promotion	744 94	(60) 342	(250)			684 186		684 186	
Wauchope Heated Indoor Pool	Ő	012	(200)			0		0	
Dende 8 la facebachura	2,950	(176)	(296)	0	(10)	2,468	0	2,468	0
Roads & Infrastructure Asset Revaluation	161	(45)				116		116	
Depot Works	2,900	()				2,900		2,900	
The Glasshouse	457					457		457	
Ferries Maintenance Infrastructure Priorities	1,744 287	(87)				1,744 200		1,744 200	
Lake Road Upgrade	0	(07)				0		0	
Major Buildings Renewals	194	(86)				108		108	
Ocean Drive Duplication Playing Fields	10,250 300					10,250 300		10,250 300	
PM Town Centre Masterplan	1,444	(247)	378	(29)		1,546		1,546	
Road Environmental Works	78					78		78	
Regional Road Infrastructure Strategic Priorities Reserve	613 141	(140)				613 1		613 1	
Transport Infrastructure Renewal	2,998	(140)				2,998		2,998	
William Street Carparking	3,391					3,391		3,391	
Works Associated with Developments	170 25,128	(50) (655)	378	(29)	0	120 24,822	0	120 24,822	0
Council Business Units	20,120	(000)	5/6	(28)	0	24,022	0	24,022	Ĭ
Airport	341					341		341	
Crematorium & Lawn Cemetery Property Investment	2,630	14				0 2,644		0 2,644	
repety incoment	2,971	14	0	0	0	2,985	0	2,985	0
Coastal & Estuary Management	77				(50)	27		27	
Canal Maintenance Lake Cathie Dredging	55				(50)	27 55		27 55	
Lake Cathie Remediation - Enforceable Undertaking	0					0		0	
Town Beach Sand Nourishment/4WD Access Points	751 883	(44) (44)	0	0	(20)	737	0	737	0
Other	0000	(44)	0	0	(20)	019	0	019	Ĭ
Business Improvement Initiatives	2,781		(74)	(137)		2,570		2,570	
Council Election Covid-19 Relief Measures	130 575	(351)	(80)			130 144		130 144	
Cultural Activities	106	(97)	(60)			9		9	
HACC Greenmeadows	0					0		0	
Planning Studies Street Lighting	152	(255)				(103) 0		(103) 0	
Town Bands	0					0		0	
Work Health & Safety Initiatives	162 3,906	(703)	(55)	(137)	0	107 2,857	0	2,857	0
Total internally restricted	57,882	(841)	(200)	(266)	(1,340)	55,213	0	55,213	
Total restricted	359,631	(5,926)	(90)	(1,026)	(5,096)	347,493	0	347,493	
Total cash and investments	359,631	(5,926)	(517)	(1,002)	(5,041)	347,145	0	347,145	
Available cash	0	0	(427)	24	55	(348)	0 tments per the Tri	(348)	403,362

Total Cash & Investments per the Trial Balance less Cash at Bank & on Hand 403,362 (8,694)

Total funds invested per the Investment Report 394,668

Responsible Accounting Officer Statement All restricted funds are invested in accordance with Council's Investment Policy. Council's cash has been reconciled to the bank statement to the 31 March 2022 The YTD Total Cash and Investments have been reconciled with funds invested and Cash at Bank.

# Port Macquarie-Hastings Council Budget Review for the quarter ended 31 March 2022

TCORP Ratios

T-Corp Ratios					Projected Jun	e 2022 Position		
Ratio	Purpose	Definition	Benchmark	June 2021 Actual Result	Original 2021/22 Budget	Revised 2021/22 Budget	Internal Target - Short Term (1-2 yrs)	CALCULATION METHOD
Operating Performance	This ratio measures Council's achievement of containing operating expenditure within operating revenue.	(Operating Revenue excluding capital grants and contributions - operating expenses) / (Operating Revenue excluding capital grants and contributions)	Greater than 0	Ø 3.99%	Ø 2.84%	2.63%	>0%	Budget
Own Source Revenue	This ratio measures fiscal flexibility. It is the degree of reliance on external funding sources such as operating grants and contributions. A Council's financial flexibility improves the higher the level of its own source revenue.	Operating Revenue excluding all grants and contributions/ Total Revenue including all grants and contributions	Greater than 60%	74.54%	78.79%	Ø 73.89%	60.00%	Budget
Unrestricted Current Ratio	This ratio is designed to represent Council's ability to meet short term obligations as they fall due.	Current assets less all external restrictions/ current liabilities less specific purpose liabilities	Greater than 1.5	1.30	2.50	2.95	>1.5	Estimate
Debt Service Cover	This ratio measures the availability of operating cash to service debt including interest, principal and lease payments.	(Op results before capital excluding interest & depn, impairment, amortisation) / (Principal repayments + borrowing costs)	Greater than 2	4.69	4.35	4.33	>2	Estimate
Rates and Annual Charges Outstanding Percentage	To assess the impact of uncollected rates and annual charges on liquidity and the adequacy of recovery efforts.	Rates and annual charges outstanding/ Rates and annual charges collectible	<5% metro and <10% rural		✓ 4.56	<b>S</b> .06	< 5.5%	Estimate
Cash Expenses Cover	This liquidity ratio indicates the number of months a Council can continue paying for its immediate expenses without additional cash flow.	(Current year's cash equivalents + term deposits) (Payments from cash flow of operating and financing activities) x 12	Greater than 3 months		29.47	32.39	> 3 months	Estimate
Building and Infrastructure Renewals Ratio	This ratio compares the proportion spent on infrastructure asset renewals and the asset's deterioration measured by its accounting depreciation.	Asset renewals (building, infrastructure and other structures/Depreciation, amortisation and impairment (building, infrastructure and other structures)	100%	⊗ 31.59%	84.63%	93.11%	>45%	Estimate
Infrastructure Backlog Ratio	This ratio shows what proportion the backlog is against the total value of Council's infrastructure.	Estimated cost to bring assets to a satisfactory condition/ Total value of infrastructure, building, other structures and depreciable land improvement assets.	Less than 2%	3.65%	3.61%	3.59%	<6%	Estimate
Asset Maintenance	This ratio compares actual versus required annual maintenance, as detailed in Special Schedule 7 (of the annual financial statements).	Actual asset maintenance/Required asset maintenance	Greater than 1	0 93.77%	0 93.40%	93.40%	>.9	Estimate

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Meets ratio benchmark Close to meeting ratio benchmark Does not meet benchmark

Item 11.14 Attachment 1

# Port Macquarie-Hastings Council Budget Review for the quarter ended 31 March 2022 Consultancy and Legal Expenses

	Expenditure YTD excluding GST	Budgeted Y/N
Expense		
Legal Fees	487,061	Yes
IT Consulting	397,906	Yes
Business Consultant	314,574	Yes
Engineering Consulting	3,001,065	Yes
Environmental Consulting	266,535	Yes
Property Development	135,292	Yes
Total Expense	4,602,433	

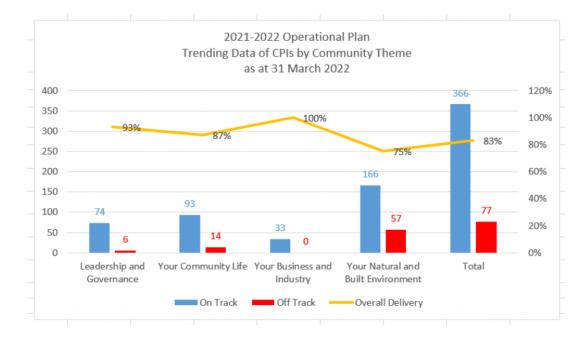
Port Macquarie-Hastings Council Budget Review for the quarter ended 31 March 2022 Contracts entered into during the March quarter.

Division	Contractor	Contract detail & purpose	Contract value	Commencement Date	Duration of Contract	Budgeted Y/N	Explanation as to why not budgeted.
		T-21-44 Management and Operation of Four Council Owned Pools	\$4,275,659	28-Mar-22	Five (5) years	Yes	Not Applicable



# Statistical Overview by Community Theme

2021-2022 Operational Plan Summary of Corporate	2021-2022 Operational Plan Summary of Corporate Performance Indicators (CPIs)				
Community Theme	Total	On Track	Off Track	Overall Delivery	
Leadership and Governance	80	74	6	93%	
Your Community Life	107	93	14	87%	
Your Business and Industry	33	33	0	100%	
Your Natural and Built Environment	223	166	57	75%	
Total	443	366	77	83%	

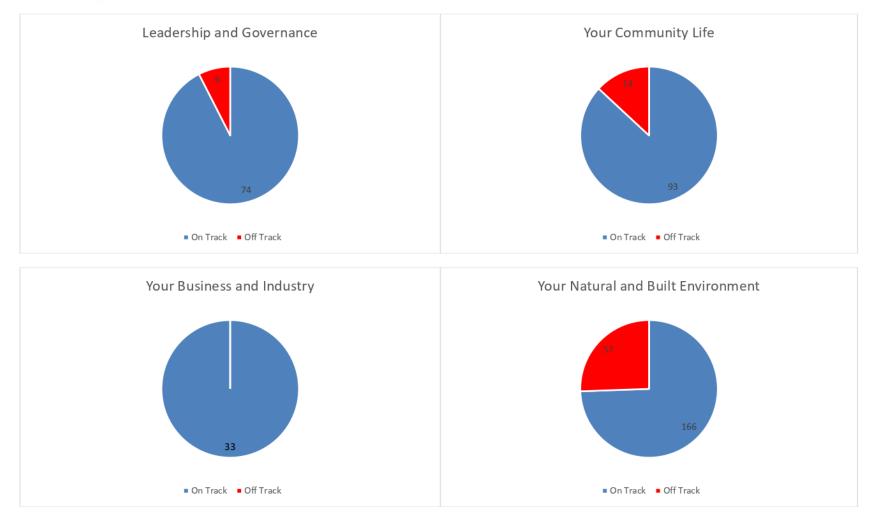


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# ORDINARY COUNCIL 19/05/2022

ATTACHMENT A







# **Operational Plan**

2021-2022 Quarterly Exception Report as at 31 March 2022



PORT MACQUARIE HASTINGS COUNCIL

> ttachment 2 Page 105

# 1: Leadership and Governance

A collaborative community that works together and uses opportunities for community participation in decision making that is defined as ethically, socially and environmentally responsible.

## 1.3: Demonstrate leadership

#### 1.3.4: Manage our workforce to deliver community outcomes.

Action Code	Action Name	Service	Status
1.3.4.4	Port Macquarie Depot - Rationalisation of Port Macquarie and Wauchope Council Depot operations	Property Investment Portfolio	

Coo	de	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
1.3.	.4.4.1	Infrastructure Operations	Holistic review of depot holdings and plans by 30 June 2022	30%	Change of Director in Community Infrastructure and recent significant wet weather events will again impact on progress. Further work within team to be done to get project back on track.	Off Track

# 1.4: Use innovative, efficient and sustainable practices

## 1.4.1: Provide efficient technology and inclusive digital systems that are easy to use and access.

Action Code	Action Name	Service	Status	
1.4.1.1	Undertake delivery of Implement phase 2 internal projects (DT - Roadmap Program - multi- year projects) Information and Communications - Projects	Digital Technology		

PMHC Quarterly Exception Report as at 31 March 2022

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
1.4.1.1.1	Digital Technology	Delivery of projects according to approved project roadmap, including:• Human Resources Information System • Commencement of the multi-year Core System Improvement Program• Office 365 Rollout	35%	HRIS is delayed - implementation post June 2022. Procure to Pay project is progressing - in last stages of build and test with focus on change management. Office O365 Teams rollout in progress.	Off Track

Action Code	Action Name	Service	Status
1.4.1.5	Develop asset design and as-constructed templates as part of the Asset Data Standards Review	Asset Management	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
1.4.1.5.1	Infrastructure Planning	Develop an Auto CAD file template for asset design and as-constructed plans that meets Asset Design As Constructed (ADAC) standards by 30 June 2022	0%	Planning to develop ADAC templates has not commenced due to other higher priority projects including response to Rawdon Island Bridge and AUSPEC.	Off Track

## 1.4.3: Deliver a customer focused service that provides the community with a consistent experience of Council.

Action Code Action Na	ime	Service	Status
1.4.3.4 Introduce	online payments for customers to purchase all products and services.	Customer Interactions	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
1.4.3.4.1	Customer Experience & Communications	Online payments solution identified.	20%	Project transitioned to Digital Technology team. Solution to be defined	Off Track

PMHC Quarterly Exception Report as at 31 March 2022

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# 1.5: Ensure strong corporate and financial management that is transparent and accountable

#### 1.5.1: Manage Council's financial assets and provide accurate, timely and reliable information.

Action Code	Action Name	Service	Status	
1.5.1.10	Implement Asset Designed As Constructed (ADAC) computerised automated process system	Asset Management		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
1.5.1.10.1	Infrastructure Planning	Complete implementation of ADAC within Council operations by 30 June 2022	0%	This action relies on completing the required ADAC templates which is currently behind schedule. A detailed review of project resourcing is required in order to plan to bring this project back on track.	Off Track

#### 1.5.3: Develop, manage and maintain Council business units through effective commercial management.

Action Code	Action Name	Service	Status
1.5.3.1	Increase operating revenue of the corporate business units	Multiple Services	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
1.5.3.1.1	Commercial Business Units	Increase operating revenue by 3% per annum at the Airport	0%	Operating revenue increased 0.3% on the corresponding period in the 20/21 financial year, noting both years impacted by COVID public health order restrictions.	Off Track

PMHC Quarterly Exception Report as at 31 March 2022

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### 2: Your Community Life

A healthy, inclusive and vibrant community

#### 2.1: Create a community that feels safe

2.1.3: Conduct regulatory and educational activities that safeguard public and environmental health, and ensures compliance with planning and building standards

/	Action Code	Action Name	Service	Status
	2.1.3.1	Monitor and take action as appropriate to ensure compliance with development approvals and building, environmental, public health and on-site sewage standards	Compliance	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
2.1.3.1.2	Environment & Regulatory Services	On-site sewage system inspections completed in accordance with approved program	50%	Limited staff available to undertake inspections due to leave and jury duty service.	Off Track
2.1.3.1.3	Environment & Regulatory Services	Food Premises inspection program completed by 30 June	50%	50% of initial inspections undertaken during this period required a reinspection reducing ability to conduct the reportable initial inspections. the reduced premises hygiene standards experienced have been attributed to the resourcing shortages in the hospitality sector.	Off Track
2.1.3.1.7	Environment & Regulatory Services	Underground Petroleum Storage Systems (UPSS) inspected in accordance with approved program	0%	Still awaiting responses from some facilities on Fuel System Operating Plans - where extensions granted.	Off Track

PMHC Quarterly Exception Report as at 31 March 2022

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
2.1.3.1.9	Environment & Regulatory Services	Mandatory pool compliance inspections completed in accordance with approved program	85%	Requests for inspections were booked generally within the required standard (5 days). Inspections were then conducted when access was made available with follow up inspections completed according to risk level. Noting that the lower compliance status during this reporting period was due to the Swimming Pool Inspector role becoming vacant and existing trained staff have had to undertake additional duties.	Off Track

Action Code	Action Name	Service	Status
2.1.3.3	Provide ranger and local law enforcement services to ensure compliance with legislation, regulations and Council policies relating to parking, regular beach patrols, illegal signage, sale of goods on roads, building site sediment control and companion animal management	Compliance	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
2.1.3.3.5	Environment & Regulatory Services	Respond to Development Compliance and Stormwater complaints within service standards	80%	CRMs responded to as received. Staffing shortages and excess rain have increased complaints and impacted response slightly	Off Track

# 2.3: Provide quality programs, community facilities and public spaces, e.g. for example, community halls, parks and vibrant town centres

#### 2.3.1: Ensure access to community facilities and activities: including access to natural environment

Action Code	Action Name	Service	Status
2.3.1.2	Through the Community Inclusion plan continue to manage Community Halls	Community	

Code		Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
2.3.1.	.2.1	Community	Review current Community Halls management structure. Complete EOI to convert Hall Management to community.	50%	Property Team are in the process of reviewing the leasing/management structure of the Community Halls, however due to other priorities this review has been delayed.	Off Track

#### 2.3.2: Provide a range of inclusive sporting and recreational opportunities and facilities to encourage a healthy and active lifestyle

Action Code	Action Name	Service	Status
2.3.2.13	Westport Park - boat ramp parking upgrade	Sports & Recreation	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
2.3.2.13.1	Recreation, Property & Buildings	Deliver project according to approved project plan	85%	Project seeking approval of funding variation from TfNSW for works which are identified as "if funding permits"	Off Track

PMHC Quarterly Exception Report as at 31 March 2022

Action Code	Action Name	Service	Status
2.3.2.14	Port Macquarie Regional Sports Stadium Upgrade	Building Maintenance	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
2.3.2.14.1	Recreation, Property & Buildings	Deliver project to approved project plan	25%	Works continue on damaged concrete tilt panels and their support brackets with waterproofing to follow. Further works will not start this year till funding for new seating is known, a carryover of remaining funds will be required post 30 June 2022	Off Track

# 2.3.3: Develop and implement management of operational and maintenance programs for open space, recreational and community facilities

Action Code	Action Name	Service	Status
2.3.3.18	Administration of public roads, public spaces, events and customer engagement: - Section 138 Road Applications - Road Encroachments - Customer Enquiries and Responses - Other Statutory Road Functions - Road Policies	Roads, Bridges & Transport	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
2.3.3.18.1	Infrastructure Planning	Responding to enquiries and issuing relevant permits within required service standards (these are not fully defined)	60%	Due to the ongoing deterioration of the roads due to weather events the number of customer enquires has increased considerably and response time has begun to extend.	Off Track

PMHC Quarterly Exception Report as at 31 March 2022

#### 2.3.4: Plan, investigate, design and construct open spaces, recreational and community facilities

Action Code	Action Name	Service	Status
2.3.4.14	Port Macquarie Pool - Continuation of Strategic Concept and Business Case development	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
2.3.4.14.1	Recreation, Property & Buildings	Deliver project according to approved project plan	80%	Some delay in coordinating the councilor briefing. Now scheduled for Apr 22.	Off Track

Action Code	Action Name	Service	Status
2.3.4.27	Detailed design - Bain Park revitalisation, Westport Park, Town Beach Amphitheatre	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
2.3.4.27.1	Recreation, Property & Buildings	Deliver project according to approved project plan	50%	Project planning put on hold by Council during this reporting period. Recommencement of this project subject to further Council direction/resolution.	Off Track

Action Code	Action Name	Service	Status
2.3.4.37	Camden Haven Surf Life Saving Clubhouse - connect to sewer	Building Maintenance	

PMHC Quarterly Exception Report as at 31 March 2022

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
2.3.4.37	.1 Recreation, Property & Buildings	To be completed as per completion of Development Application	25%	Location and construction of sewer pump station cannot proceed until confirmation of the new Camden Haven SLSC is known. Council is still waiting clarification from Dept of Lands	Off Track

#### 2.3.5: Plan and deliver innovative library services that cater for new technology and growing population

Action Code	Action Name	Service	Status
2.3.5.8	Creation of anytime library to provide resources to our other communities in Sovereign Hills and Lake Cathie	Library	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
2.3.5.8.1	Community	That the creative library solutions are implemented at the defined location in Lake Cathie and Sovereign Hills in accordance with grant timelines	50%	Lake Cathie Kiosk installed. Sovereign Hills has been delayed by lack of D.A, working with Lewis Land group to deliver this project. Revised timeframe is September 22.	Off Track

#### 2.4: Empower the community through encouraging active involvement in projects, volunteering and events

#### 2.4.1: Work with the community to identify and address community needs in order to inform Council processes, services and projects

Action Code	Action Name	Service	Status	
2.4.1.1	Support and connect with our community through delivering the actions outlined in the Community Inclusion Plan	Community		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
2.4.1.1.2	Community	Increase volunteers by 10%	50%	Recruitment is currently underway for Graffiti Blasters however residents are reluctant to sign up for volunteer opportunities with COVID still being a risk in the community	Off Track

### 4: Your Natural and Built Environment

connected, sustainable, accessible community and environment that is protected now and into the future.

4.1: Provide (appropriate) infrastructure and services including water cycle management, waste management, and sewer management

4.1.1: Plan, investigate, design and construct water supply assets ensuring health, safety, environmental protection and security of supply for the future growth of the region.

Action Code	Action Name	Service	Status
4.1.1.26	Continue construction of the Southern Arm Trunk Main (DN750) - Pacific Hwy to Bonny Hills	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.1.26.1	Infrastructure Planning, (Project Delivery)	Completion of detailed designs and approval of detailed project plan for construction	80%	Land matters associated with the revocation of the NPWS property required for this project have delayed the preconstruction planning during this reporting period.	Off Track

Action Code	Action Name	Service	Status
4.1.1.27	Commencement of design for the Water treatment/Filtration Plant at Cowarra Dam	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.1.27.1	Infrastructure Planning	Approval of detailed project plan and completion of concept designs	50%	Project inception/initiation has been delayed while additional project management resourcing has been progressed during this reporting period, The realignment of utilities project sponsorship arrangements have now been finalised and project planning recommenced.	Off Track

Action Code	Action Name	Service	Status
4.1.1.28	Preconstruction Works - Trunk Main from Bonny Hills to Kew (Area 12) Reservoir - Stage 1	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.1.28.1	Infrastructure Planning, (Project Delivery)	Completion of detailed designs for Stage 1	80%	Working through procurement and contract planning for design engagement.	Off Track

Action Code	Action Name	Service	Status	
4.1.1.31	Water Supervisory Control and Data Acquisition (SCADA) System - Replacement	Water Supply		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.1.31.	I Infrastructure Planning	Completion of system replacement	40%	Project delayed due to staff focus on other project priorities during this period.	Off Track

Action Code	Action Name	Service	Status
4.1.1.35	Preconstruction of Widderson St Reservoir Roof Replacement	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.1.35.1	Infrastructure Planning, (Infrastructure Operations)	Completion of detailed design	15%	Project inception remains delayed while recruitment of additional project management resourcing has been progressed. This project was not identified by the Executive as a priority to progress until additional resources are secured.	Off Track

Action Code	Action Name	Service	Status
4.1.1.47	Bulk water system chlorination upgrade	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.1.47.1	Infrastructure Planning, (Infrastructure Operations)	Completion of construction works	50%	Project delayed in preconstucion phase, construction works to proceed in 22/23.	Off Track

Action Code	Action Name	Service	Status
4.1.1.48	Commence preconstruction for an elevated reservoir at Bonny Hills	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.1.48.1	Infrastructure Planning, (Project Delivery)	Approval of detailed project plan and commencement of concept designs	50%	Project inception remains delayed while recruitment of additional project management resourcing has been progressed. This project was not identified by the Executive as a priority to progress until additional resources are secured.	Off Track

Action Code	Action Name	Service	Status
4.1.1.49	Commence preconstruction works for the Kew (Area 15) Reservoir	Infrastructure Delivery	

Co	ode	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1	1.1.49.1	Infrastructure Planning, (Project Delivery)	Approval of detailed project plan and commencement of concept designs	50%	Project inception remains delayed while recruitment of additional project management resourcing has been progressed. This project was not identified by the Executive as a priority to progress until additional resources are secured.	Off Track

Action Code	Action Name	Service	Status
4.1.1.52	Microwave link Cowarra to Rosewood	Water Supply	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.1.52.1	Infrastructure Planning, (Infrastructure Operations)	Completion of programmed works	40%	Project plan prepared but behind schedule	Off Track

Action Code	Action Name	Service	Status
4.1.1.53	Pre Construction of Cowarra to Wauchope Backfeed PS	Water Supply	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.1.53.1	Infrastructure Planning, (Infrastructure Operations)	Completion of detailed designs	0%	Project inception delayed while additional specifically focused, project management resourcing is sourced.	Off Track

Action Code	Action Name	Service	Status
4.1.1.54	Undertake asset revaluations for water supply network	Water Supply	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.1.54.1	Infrastructure Planning	Completion of revaluation to the required standard for external audit	80%	Draft report provided to PMHC for review. Minor delay due to reprioritisatn of resources, anticipate rectification by EOFY.	Off Track

#### 4.1.2: Develop and implement annual maintenance and preventative works program for water supply assets

Action Code	Action Name	Service	Status
4.1.2.3	Marbuk Motorised Valve Relocation	Water Supply	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.2.3	1 Infrastructure Operations	Completion of programmed works	60%	Minor delays experienced. Equipment arrived onsite and was incorrect, awaiting correct equipment to arrive (lead time of up to 6 weeks).	Off Track

# 4.1.3: Plan, investigate, design and construct sewerage assets ensuring health, safety, environmental protection and the future growth of the region.

Action Code	Action Name	Service	Status
4.1.3.18	Continuation of preconstruction of Thrumster Sewerage treatment Plant (Area 13) - Phase 1	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.3.18.1	Infrastructure Planning, (Project Delivery)	Approval of detailed project plan and commencement of treatment process scoping	50%	Project inception/initiation has been delayed while additional project management resourcing has been progressed during this reporting period. The realignment of utilities project sponsorship arrangements have now been finalised and project planning recommenced.	Off Track

PMHC Quarterly Exception Report as at 31 March 2022

Action Code	Action Name	Service	Status
4.1.3.29	Preconstruction of Wauchope Waste Water Treatment Plant Inlet Rationalisation	Sewerage	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.3.29.1	Infrastructure Planning, (Infrastructure Operations)	Approval of detailed project plan and commencement of concept design	0%	Planning and resourcing allocation yet to commence. Project is expected to commence in Quarter 4.	Off Track

Action Code	Action Name	Service	Status
4.1.3.39	Sewer Critical Infrastructure Site Security Upgrades	Sewerage	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.3.39.1	Infrastructure Planning, (Project Delivery)	Deliver project to approved project plan	0%	Budget removed from OP	Off Track

Action Code	Action Name	Service	Status
4.1.3.42	Centrifuge upgrade and Process Optimisation at PM WwTP	Sewerage	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.3.42.1	Infrastructure Planning, (Infrastructure Operations)	Approval of detailed project plan and commencement of investigations	30%	Consultant to be engaged for investigation works	Off Track

Ac	tion Code	Action Name	Service	Status
4.1	1.3.44	Installation of new Microwave Telemetry Links - Jolly Nose to BH WwTP	Sewerage	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.3.44.1	Infrastructure Planning, (Infrastructure Operations)	Deliver project to approved project plan	40%	Project plan prepared but behind schedule	Off Track

Action Code	Action Name	Service	Status
4.1.3.45	Installation of new Microwave Telemetry Links - Jolly Nose to CH WwTP	Sewerage	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.3.45.1	Infrastructure Planning, (Infrastructure Operations)	Completion of programmed works	40%	Project plan prepared but behind schedule	Off Track

Action Code	Action Name	Service	Status
4.1.3.46	Installation of new Microwave Telemetry Links - Rosewood/Bago to Wauchope WwTP	Sewerage	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.3.46.1	Infrastructure Planning, (Infrastructure Operations)	Completion of programmed works	40%	Project plan prepared but behind schedule	Off Track

Action Code	Action Name	Service	Status
4.1.3.47	Integrated Water Cycle Management Strategy Delivery (Multi-Year Project)	Sewerage	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.3.47.1	Infrastructure Planning, (Infrastructure Operations)	Council adoption of the Integrated Water Cycle Management Strategy	0%	Project has been discontinued. Delivery from consultant not to schedule, after discussions with DPIE it has been decided not to pursue this, to form a water security strategy (similar deliverables) and continue the IWCM under new guidelines once they are released.	Off Track

Action Code	Action Name	Service	Status
4.1.3.52	Thrumster STP Area 13 Augmentation Pre-Construction	Sewerage	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.3.52.1	Infrastructure Planning	Deliver project to approved project plan	0%	Pre-construction not commenced. Additional project manager engaged to work on this, as 1 of 2 high priority Water & Sewer projects	Off Track

#### 4.1.6: Develop and implement annual maintenance and renewal programs for stormwater assets

Action Code	Action Name	Service	Status
4.1.6.2	Undertake annual canal maintenance for Settlement Shores and Broadwater canals as required	Stormwater & Drainage	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.6.2.1	Infrastructure Planning	Undertake canal maintenance works in accordance with the rolling priority program and risk management processes	80%	The Hydrographic survey has commenced in Q3. The project is flagged as a carry-over project due to delays caused by weather. Community engagement on future maintenance is planned for early-mid 2022 following completion of the hydrographic survey.	Off Track

Action Code	Action Name	Service	Status
4.1.6.19	Carry-out stormwater engineering investigations in response to identified issues from both reactive and proactive inspections	Stormwater & Drainage	

PMHC Quarterly Exception Report as at 31 March 2022

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.6.19.1	Infrastructure Planning	Engineering Investigations completed for all complex issues raised	80%	Ongoing investigations are occurring following the March 2021 Floods, as well as recent heavy rains throughout the third quarter in early 2022. Notable investigations and reviews include at Panorama Drive, Bonny Hills, and Pembrooke Road and Mooney Street, Telegraph Point. Planned proactive CCTV maintenance has been delayed with availability of crews responding to reactive maintenance not being able to undertake planned CCTV inspections.	Off Track

Action Code	Action Name	Service	Status
4.1.6.20	Stormwater Asset Management Condition Rating of stormwater assets via CCTV inspections, including of newly constructed works	Stormwater & Drainage	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.6.20.1	Infrastructure Planning	In accordance with adopted programs and proactive maintenance requirements based on risk	80%	Ongoing investigations are occurring following the March 2021 Floods, as well as recent heavy rains throughout the third quarter in early 2022. Notable investigations and reviews include at Panorama Drive, Bonny Hills, and Pembrooke Road and Mooney Street, Telegraph Point.	Off Track

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
				Planned proactive CCTV maintenance has been delayed with availability of crews responding to reactive maintenance not being able to undertake planned CCTV inspections.	

Action Code	Action Name	Service	Status
4.1.6.21	Develop Urban Stormwater Catchment Management Plans for each of the 62 sub- catchments	Stormwater & Drainage	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.6.21.1	Infrastructure Planning	Approval of detailed project plan and commencement of investigations	80%	Consultant procurement planning and documentation are underway though delayed due to the scope being re-defined to include sewer. This delay will impact the project delivery timeline which will be carried over until the 22/23 financial year. Initial consultation with selected affected community groups has been undertaken.	Off Track

Action Code	Action Name	Service	Status
4.1.6.22	North Haven Flood Mitigation Works - investigation and concept design of remedial works	Stormwater & Drainage	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.6.22.1	Infrastructure Planning, (Project Delivery)	Approval of detailed project plan and commencement of investigations	50%	Project identified to be put on hold for 6 months due to Project Management resource allocation	Off Track

#### 4.1.7: Develop and implement effective waste management strategies

Action Code	Action Name	Service	Status
4.1.7.27	Waste Strategy - Develop new Waste Strategy following NSW 20yr Waste Strategy	Waste Management	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.7.27.1	Commercial Business Units	Development of new Waste Strategy commenced by 30 June 2022	30%	Planning for the new strategy has commenced. Additionally, Community Utilities has completed an analysis of needs in the Waste area, and it is now proposed to establish a panel of waste specialists and engineering designers to assist with the forward program of works, similar to that recently adopted in the Water and Sewer areas. This consolidated approach will allow for the review and development of the Waste Strategy as the first priority piece and then be able to be supported with specialist resources to meet any strategy so adopted.	Off Track

Action Code	Action Name	Service	Status
4.1.7.34	Kingfisher Waste Transfer Station Upgrade - Kingfisher Road Rehabilitation	Infrastructure Delivery	

PMHC Quarterly Exception Report as at 31 March 2022

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.1.7.34.1	Commercial Business Units	Finalise construction of Kingfisher Road Rehabilitation by 30 June 2022	50%	This project has been reprioritised to the 22/23 FY during this reporting period, due to professional resourcing limitations.	Off Track

# 4.2: Aim to minimise the impact of natural events and climate change, for example, floods, bushfires and coastal erosion

#### 4.2.1: Develop and implement Coastal, Estuary, Floodplain, and Bushfire management plans

Acti	ion Code	Action Name	Service	Status
4.2.	.1.11	Commence construction of new stormwater system at Illaroo Road	Natural Resource Management	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.2.1.11.1	Environment & Regulatory Services	Construction of Illaroo Road stormwater system has commenced	10%	Extraordinary Meeting 7 March 2022 resolved to delay this project.	Off Track

Action Code	Action Name	Service	Status
4.2.1.19	Installation of in-line monitoring instruments at Koree Island River intake	Water Supply	

PMHC Quarterly Exception Report as at 31 March 2022

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.2.1.19.	1 Infrastructure Planning, (Infrastructure Operations)	Deliver project according to approved project plan	50%	Delays in engaging consultant have put project behind	Off Track

#### 4.4: Plan for integrated transport systems that helps people get around and link our communities

4.4.1: Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Action Code	Action Name	Service	Status
4.4.1.34	Kew Main Street Upgrade	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.1.34.1	Infrastructure Planning	Completion of the Kew Main Street Upgrade	80%	Ongoing delay associated with limited professional resources, and revisions to designs and extent of works being progressed to deliver maximised outcomes within available grant funding. Negotiation with contractors also ongoing.	Off Track

Action Code	Action Name	Service	Status
4.4.1.37	4.4.1.37 Local Roads Proactive Renewal Program		

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### ATTACHMENT

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.1.37.1	Infrastructure Planning	Completion of listed road renewals and resurfacing works	50%	The 2021-22 Road Rehabilitation and Resealing Program includes the following projects:	Off Track
				<ul> <li>Planning Phase (Road Resurfacing and Rehabilitation):</li> <li>* Pacific Dr (Flynn to William), Port Macquarie (pending grant funding) - deferred</li> <li>* Kennedy Dr (Coral to Koala), Port Macquarie - delayed, likely carry over</li> <li>Planning Phase (Road Resealing):</li> <li>* Kindee Rd - deferred</li> <li>The rehabilitations and resurfacing has commenced and will be progressively completed until June 2022. The final program dates are yet to be finalised.</li> <li>Delivery Phase (Road Resurfacing and Rehabilitation):</li> </ul>	
				<ul> <li>* Highfields Cct, Port Macquarie - completed</li> <li>* Lake Rd (Ocean Dr to Central), Port Macquarie - completed</li> <li>* Pembrooke Rd (full length), Pembrooke - underway, 90% complete</li> <li>* Central Rd, Port Macquarie - delivery in April</li> </ul>	
				Delivery Phase (Road Resealing): * Comboyne Local roads - completed * Port Macquarie Local Roads (Transit Hill) - completed	

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Action Code	Action Name	Service	Status
4.4.1.44	Condition Rating - Transport Assets	Roads, Bridges & Transport	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.1.44.1	Infrastructure Planning	Undertake condition rating of Council's transport assets by 30 June 2022	80%	No further progress has been made since Q2. Planned pavement testing has been scoped but is yet to be procured and delivered due to impacts on staff availability. Routine monitoring occurring throughout this period.	Off Track

Action Code	Action Name	Service	Status
4.4.1.52	AUS-SPEC Review - Undertake a comprehensive review of Councils full suite of design and construction specifications - multi-year project	Roads, Bridges & Transport	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.1.52.1	Infrastructure Planning	Council adoption of the updated AUS_SPEC specifications	60%	Review of standard drawings is currently behind schedule due to other higher priority works. Planning for the review is continuing.	Off Track

Action Code	Action Name	Service	Status
4.4.1.63	Pembrooke Road - Stoney Creek Bridge Upgrade - Detailed Design	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.1.63.1	Infrastructure Planning	Completion of detailed design	50%	Following the unsuccessful initial request for quotation, an open tender has been advertised for this design during this reporting period. The tender evaluation is ongoing, but is behind original program.	Off Track

Action Code	Action Name	Service	Status
4.4.1.66	Kindee Bridge Upgrade Detailed Design	Roads, Bridges & Transport	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.1.66.1	Infrastructure Planning	Detailed project plan approval and commencement of the detailed design	10%	These works have been placed on-hold while the Bridges and Structure Engineer focuses on the Rawdon Island Bridge Renewal project. It is expected these works will be planned for future years and will not commence in the current financial year.	Off Track

Action Code	Action Name	Service	Status	
4.4.1.67	Transport Network Improvement Planning Project - Options Assessment and Strategic Business Case (Including Review of Orbital Road Options) - (multi-year project)	Roads, Bridges & Transport		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.1.67.1	Infrastructure Planning	Completion of a Transport Network Plan and Strategic Business Case for the highest priority improvements	50%	The Project has been put on hold following the resolution of Council at the Extraordinary Council Meeting held on 13 January 2022 to discontinue investigations for new roads within the Orbital Road Corridor. The project will be delayed until Council progresses further with the development of the Regional Integrated Transport Strategy and Integrated Strategic Transport Network master plan, to ensure that the intent of the new Council is captured within the SBC development. Council continues to work with TfNSW to align this project to their Oxley highway business Case development, as well as collaborating on the development of the Integrated Strategic Transport Network Master plan. It is expected this project will be delayed throughout Q4 and continue into 2022/23.	Off Track

Action Code	Action Name	Service	Status
4.4.1.82	Schools to Schools Shared Pathway - Plan & Design	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.1.82.1	Infrastructure Planning	Deliver project according to approved project plan	50%	Higher priority projects have impacted the progress of the initiation and planning of this pathway design project	Off Track

Action Code	Action Name	Service	Status
4.4.1.89	Undertake a detailed traffic analysis of the Sancrox/Thrumster/Fernbank growth area to identify high priority works	Roads, Bridges & Transport	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.1.89.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the investigations	90%	Planning for this project has commenced. Discussions with subdivision developers within this precinct have been ongoing regarding the timing of the study to occur with the proposed Le Clos Sancrox planning proposal. It is expected that a project plan will be developed in early 2022.	Off Track

Action Code	Action Name	Service	Status	
4.4.1.110	.4.1.110 Footpath - Watonga St: Connect to Matthew Flinders			

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.1.110.1	Infrastructure Planning	Deliver project according to approved project plan	80%	Project design has been revised to address issues regarding compliance with Accessibility standards. Construction of the final section is expected to commence in Q4 of 2021/22.	Off Track

Action Code	Action Name	Service	Status
4.4.1.111	New Bus Shelters (3 or 4) and Landing Pads	Roads, Bridges & Transport	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.1.111.1	Infrastructure Planning	Deliver project according to approved project plan	90%	The project has been delayed due to supplier availability of the shelters. Preparatory works on the slabs has commenced with the shelters to be installed once arrived. Expected to occur in 2022 though the project is at risk of not being delivered in this financial year.	Off Track

Action Code	Action Name	Service	Status
4.4.1.119	Commence Construction of the Lake Road / Jindalee Road / Fernhill Road Intersection upgrade (Multi Year)	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.1.119.1	Infrastructure Planning, (Project Delivery)	Approval of detailed project plan and completion of construction tender documents	50%	This project has been re prioritised by the executive during this reporting period and is now not expected to be progressed to construction in the 22/23FY.	Off Track

Action Code	Action Name	Service	Status
4.4.1.120	Commence detailed design and approvals for Lake Road Duplication (Ocean Drive to Chestnut Road) (Multi- year)	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.1.120.1	Infrastructure Planning, (Project Delivery)	Approval of detailed project plan and commencement of detailed design	50%	This project was reprioritised (down) by the executive during this reporting period due to resourcing. Progress on this project is expected to be held off until broader strategic traffic network planning is completed in conjunction with the Council.	Off Track

Action Code	Action Name	Service	Status
4.4.1.123	Maria River Road	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.1.123.1	Infrastructure Planning, (Project Delivery)	Construction contract award	80%	Design and property matters associated with National Park adjoining will delay design finalisation and contract award into 22/23FY. These delays are approved extensions of time within the Design contract.	Off Track

Action Code	Action Name	Service	Status
4.4.1.124 Ocean Drive (South of Port Macquarie) Soil Remediation		Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.1.124.1	Infrastructure Planning	Completion of works	50%	Project inception delayed while additional project management resourcing has been progressed with critical path next step being National Parks liaison as to extent of required works.	Off Track

Action Code	Action Name	Service	Status
4.4.1.127	Undertake sealed road network condition survey	Roads, Bridges & Transport	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.1.127.1	Infrastructure Planning	Completion of condition survey	25%	No further progress, planned pavement testing has been scoped however not procured or delivered due to staffing shortages resulting from emergency response requirements. Routine monitoring occurring throughout this period.	Off Track

#### 4.4.2: Develop and implement annual maintenance and renewal programs for transport assets

Action Code	Action Name	Service	Status	
4.4.2.2	Carry out annual unsealed road maintenance program including gravel resheeting, grading, and rural roadside vegetation clearing	Roads, Bridges & Transport		

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Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.2.2.1	Infrastructure Planning	In accordance with adopted programs and reactive maintenance requirements based on risk	80%	Grading crews were delayed due to wet weather during periods of Q3, however are working to bring the schedule back into line. Grading is planned for Sancrox and Rawdon Island areas in Q4 as Rawdon Island Bridge is reopened to heavy traffic.	Off Track

Action Code	Action Name	Service	Status
4.4.2.6	Bridgeworks and Road Rehabilitation Program - Undertake regular bridge and geotechnical road pavement tests to inform and develop program	Roads, Bridges & Transport	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.2.6.1	Infrastructure Planning	Completion of required testing and assessments	80%	No further progress, planned pavement testing has been scoped however yet to be procured and delivered due to staff shortages. Routine monitoring occurring throughout this period. Geotechnical testing was undertaken on Captain Cook Bicentennial Drive, and investigations undertaken into other areas such as Oxbow Circuit.	Off Track

Action Code	Action Name	Service	Status
4.4.2.12	Kindee Bridge - Immediate Structural Repairs	Roads, Bridges & Transport	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.2.12.1	Infrastructure Planning	Completion of structural repairs	0%	No works completed on this project this quarter - resourcing constraint and impacts of wet weather (flooding).	Off Track

Action Code	Action Name	Service	Status
4.4.2.24	Bril Bril Bridge Upgrade	Roads, Bridges & Transport	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.2.24.1	Infrastructure Planning	Commence the rehabilitation of Bril Bril Bridge	0%	Works have not progressed as scheduled due to rain delays throughout Q3. Bridgework involves removal of the bridge deck with a reliance on the low flow access which does go underwater and restricts access - estimated 5 months required to complete the project.	Off Track

Action Code	Action Name	Service	Status
4.4.2.27	Beechwood Pedestrian Upgrades	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.2.2	7.1 Infrastructure Planning	Completion of Pedestrian Upgrade	80%	Project planning delayed by wet weather/flooding and professional resourcing. Project Milestone of completion by end of June 22 at risk.	Off Track

Action Code	Action Name	Service	Status
4.4.2.28	New footpath on the North Shore	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.2.28.1	Infrastructure Planning	Completion of footpath at North Shore	50%	Preconstruction investigations for pavement upgrade have confirmed unfavorable foundations for proposed road rehabilitation during this reporting period. The necessary road foundation improvements would exceed significantly the available grant funding. Project progress therefore put on hold whilst reconsideration of proposed scope is defined.	Off Track

Action Code	Action Name	Service	Status
4.4.2.32	Rawdon Island Bridge Structural Repairs	Infrastructure Delivery	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.2.32.1	Infrastructure Planning, (Project Delivery)	Deliver project according to approved project plan	75%	Weather delays and heavy flood waters have created a delay in project delivery. Projected progress in Q3 has not been achieved. Flood trigger levels were reached on 4 separate occasions during March 2022, community was informed on each incident.	Off Track

Action Code	Action Name	Service	Status
4.4.2.33	Oxbow Circuit, King Creek Repairs	Roads, Bridges & Transport	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.4.2.33.1		Deliver project according to approved project plan	25%	Preliminary advice has identified that there is a lack of funds to progress this project. In the absence of additional funding the road will be maintained as required until substantial pavement repairs can be planned.	Off Track

#### 4.5: Plan for integrated and connected communities across the Port Macquarie-Hastings area

#### 4.5.1: Carry out strategic planning to manage population growth and provide for coordinated urban development

Action Code	Action Name	Service	Status
4.5.1.10	Review LEP and DCP provisions to promote appropriate housing choice options (UGMS Action 1)	Strategic Landuse Planning	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.5.1.10.1	Development Assessment	Complete Local Housing Strategy	95% Anticipated that a report will be presented to Council in the first half of 2022 detailing the submissions received and the next steps.		Off Track
4.5.1.10.2	Development Assessment	Report to Council by December 2021 on local housing priorities and timeframes for delivery of action	95%	Anticipated that a report will be presented to Council in the first half of 2022 detailing the submissions received and the next steps.	Off Track

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#### 4.6: Restore and protect natural areas

#### 4.6.1: Develop and implement a range of programs for the environmental management of lands within the local government area

Action Code	Action Name	Service	Status
4.6.1.6	Inform and educate residents, industry and community groups about Council's tree management requirements within the Port Macquarie-Hastings 2013 Development Control Plan (DCP)	Sports & Recreation	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Actual	Comments	Status
4.6.1.6.2	Recreation, Property & Buildings	Provide advice in accordance with service standards and industry best practice	96%	<ul> <li>Total number of CRM's received 282, equating to 406 actual tasks. 172 (Public), 50 (Private), 138 (Storm), 14 (Illegal tree removal/pruning) and 32 (Other categories).</li> <li>10 CRM's currently exceed service standard.</li> <li>Additional information: 224 enquires (171 public and 53 private phone and email enquires). This does not include calls transferred from call centre to mobile or landline. In addition, there were 27 internal enquiries and 13 hours for rural road/fire related inspections.</li> </ul>	Off Track





## Capital Works by Location

### Across the LGA

Code	Action	Progress	Status	
1.5.3.8	Survey, Valuation and Land Transactions		Progressing on Schedule	
2.1.2.2	Council supports Emergency Management Operations and Agencies. Bushfire Tank/Vehicle purchases	75%	Progressing on Schedule	
2.3.2.2	Deliver sporting facility renewal and upgrades program across the LGA - Vince Imon Sporting Fields – Sports Facility Upgrade - Sporting Infrastructure Renewals Allocated	65%	Progressing on Schedule	
2.3.3.1	Undertake the maintenance program for parks including parks signage, reserves and sporting fields	50%	Progressing on Schedule	
2.3.3.17	Carry out improvement and expansion works at Wauchope and Laurieton and other outlying cemeteries	50%	Progressing on Schedule	
2.3.3.2	Undertake scheduled and reactive maintenance programs of all Council-owned buildings including office furniture replacement	75%	Progressing on Schedule	
2.3.3.3	Undertake building rectification works in line with Council Asset Management - multi-year project	75%	Progressing on Schedule	
2.3.3.5	Deliver park furniture renewals across the local government area, including donated seats program	80%	Progressing on Schedule	
2.3.3.6	Parks and Open Space Upgrades	90%	Progressing on Schedule	
2.3.4.22	Parks and Gardens Future Designs - Preparation of engineering designs in advance of construction programs for Parks and Gardens	75%	Progressing on Schedule	
2.3.4.28	Town and Village Signage - Finalise the Installation of Signage in the Local Government area	45%	Progressing on Schedule	
2.3.4.35	Aquatic facilities - renewal of assets at end of useful life	50%	Progressing on Schedule	
2.3.5.1	Provide a range of library programs and lending services across the local government area. Includes: maintenance of the collection; management of the facility; delivery of services, programs and events; Furniture and Fixings.	75%	Progressing on Schedule	
2.3.5.2	Provide a range of library programs and lending services across the local government area. That include the maintenance of the collection, management of the facility and delivery of services, programs and events. Purchase of Library Books (multi-year project) To provide book stock at NSW State average per capita as a minimum level. Furniture and Fixings	75%	Progressing on Schedule	
2.3.5.7	Deliver Special Library Projects to enhance library delivery program	75%	Progressing on Schedule	
2.3.5.8	Creation of anytime library to provide resources to our other communities in Sovereign Hills and Lake Cathie	50%	Off Track	
3.1.1.14	Christmas Tree Decoration Renewal	100%	Completed	
3.4.3.4	CBD Wi-Fi - Wauchope, Laurieton, expand Port	75%	Progressing on Schedule	

Code	Action	Progress	Status
4.1.1.31	Water Supervisory Control and Data Acquisition (SCADA) System - Replacement	50%	Off Track
4.1.1.36	Water critical infrastructure - Site Security Upgrades	70%	Progressing on Schedule
4.1.1.4	Installation of new water supply services to residential and business premises to cater for new development	75%	Progressing on Schedule
4.1.1.42	Installation of Baffles within Reservoirs to ensure chlorination contact time for disinfection	50%	Progressing on Schedule
4.1.1.43	Annual Energy Efficiency Initiatives Allocation - Variable Speed Drive Pumps - Water sites	55%	Progressing on Schedule
4.1.1.47	Bulk water system chlorination upgrade	10%	Off Track
4.1.2.1	Conduct water asset replacement and renewal programs for live water mains, water meters, renewals and minor works, pumps and switchboards - Water Mains Relocations - Renewals - Live Water Mains; Water Meters; Minor Works - Annual Switchboard Replacement Program - Smart Metering System roll out - \$150,000	60%	Progressing on Schedule
4.1.2.2	Carry out programmed replacement of Water Treatment Plant (WTP) electrical and mechanical assets	75%	Progressing on Schedule
4.1.2.3	Marbuk Motorised Valve Relocation	55%	Off Track
4.1.3.23	Annual Energy Efficiency Initiatives Allocation - Variable Speed Drive Pumps – Sewer Sites	90%	Progressing on Schedule
4.1.3.26	Preconstruction works for: - upgrade of Lake Innes Sewerage Pump Station #71 (PMSPS71) - Camden Haven Sewer Pump Station 2 Refurbishment - upgrade of Port Macquarie Sewerage Pump Station #18	20%	Progressing on Schedule
4.1.3.3	Small Towns Sewerage Scheme Construction - Long Flat, Comboyne, Telegraph Point (multi-year project)	100%	Completed
4.1.3.39	Sewer Critical Infrastructure Site Security Upgrades	0%	Off Track
4.1.3.50	Replacement of 2nd Effluent Pump at Port WwTP	100%	Completed
4.1.4.1	Programmed replacement of Sewer Pumps and Electrical switchboards at Sewage Pump Stations	75%	Progressing on Schedule
4.1.4.4	Carry out programmed replacement of Sewer Treatment Plant (STP) electrical and mechanical assets - Annual Electrical STP Asset Replacement - Annual Mechanical STP Asset Replacement	60%	Progressing on Schedule
4.1.4.5	Conduct annual sewer assets replacement and maintenance programs for Sewer Rehabilitation and Relining Works	60%	Progressing on Schedule
4.1.4.9	Develop Urban Sewer Management Plans	25%	Progressing on Schedule
4.1.6.7	Carry out the Stormwater Renewal Program	50%	Progressing on Schedule
4.1.7.9	Deliver efficient waste and recycling services at all Waste Transfer Stations - New transfer bins x 4	75%	Progressing on Schedule
4.4.1.111	New Bus Shelters (3 or 4) and Landing Pads	70%	Off Track
4.4.1.3	Footpath, Cycleway and Pedestrian works	50%	Progressing on Schedule
4.4.1.37	Local Roads Proactive Renewal Program	50%	Off Track

Code	Action	Progress	Status
4.4.1.51	Installation of new bus shelters as per the Community Passenger Transport Infrastructure Grant Scheme (CPTIGS) Program	100%	Completed
4.4.2.1	Undertake road resurfacing and rehabilitation works throughout the local government area in accordance with the rolling priority program and Pavement Management System Continuation of High Traffic Road Resurfacing	75%	Progressing on Schedule
4.4.2.31	Resurface Council Carparks - Cameron St, Wauchope & Bridge St, Port Macquarie	100%	Completed
4.4.3.4	Rural Road Safety Improvements - Line marking, signs	100%	Completed
4.7.1.11	Install solar energy PV systems at Port Macquarie (Kingfisher Road), Wauchope and Kew waste transfer stations	50%	Progressing on Schedule

# Laurieton, Camden Haven and Surrounds

Code	Action	Progress	Status
2.3.4.18	Rainbow Beach Sports Fields - Commence construction of District Facilities	15%	Progressing on Schedule
2.3.4.29	Lake Cathie Community Reserve Basketball Court	Completed	
2.3.4.32	Bonny Hills Reserve Master Plan - Landscaping Improvements	65%	Progressing on Schedule
2.3.4.37	Camden Haven Surf Life Saving Clubhouse - connect to sewer	25%	Off Track
2.3.4.38	Kendall Tennis Club Upgrade	95%	Completed
4.1.1.26	Continue construction of the Southern Arm Trunk Main (DN750) - Pacific Hwy to Bonny Hills	40%	Off Track
4.1.1.28	Preconstruction Works - Trunk Main from Bonny Hills to Kew (Area 12) Reservoir - Stage 1	30%	Off Track
4.1.1.46	Bonny Hills Recycled Water System Upgrade	100%	Completed
4.1.1.48	Commence preconstruction for an elevated reservoir at Bonny Hills	5%	Off Track
4.1.1.49	Commence preconstruction works for the Kew (Area 15) Reservoir	5%	Off Track
4.1.3.28	Camden Haven Waste Water Treatment Membrane Replacements	75%	Progressing on Schedule
4.1.3.30	Bonny Hills WWTP Aerator Replacements	100%	Completed
4.1.3.44	Installation of new Microwave Telemetry Links - Jolly Nose to BH WwTP	20%	Off Track
4.1.3.45	Installation of new Microwave Telemetry Links - Jolly Nose to CH WwTP	20%	Off Track
4.1.3.48	Kew Sewerage Treatment Plant (STP) Upgrade, Complete project planning and commence construction (Multi- Year project)	50%	Progressing on Schedule
4.1.4.7	Installation of Dedicated Generators for backup power supply to Sewerage Pumping Stations CH SPS #9	40%	Progressing on Schedule

Code	Action	Progress	Status
4.1.5.14	Undertaken Panorama Drive/Binbilla Drive stormwater remediation works	75%	Progressing on Schedule
4.1.5.6	Continue design and construction for Black Swan Terrace - Stormwater detention facility (multi-year project)	15%	Progressing on Schedule
4.1.6.22	North Haven Flood Mitigation Works - investigation and concept design of remedial works	0%	Not Due To Start
4.2.1.11	Commence construction of new stormwater system at Illaroo Road	50%	Off Track
4.4.1.104	Footpath - Lake Street: Tunis St to Seymour St	100%	Completed
4.4.1.114	Captain Cook Bicentennial Drive Rehabilitation	100%	Completed
4.4.1.34	Kew Main Street Upgrade	10%	Off Track
4.4.1.55	Beach to Beach - shared path project at Camden Haven – Detailed design, environmental approvals and commencement of construction	60%	Progressing on Schedule
4.4.1.88	Lorne Road Sealing - Commence detailed design and approvals	75%	Progressing on Schedule
4.4.2.10	Timber Bridges - Renewals & Repairs for Logans Crossing Bridge	0.1	Progressing on Schedule
4.4.2.15	Old School Road Bridge, Herons Creek - Upgrade	0.05	Progressing on Schedule
4.4.2.21	Cutty Creek Bridge, Herons Creek Upgrade	0.05	Progressing on Schedule

# Port Macquarie

Code	Action	Progress	Status
1.1.4.4	Implement new Corporate Reporting Tool	100%	Completed
1.3.4.4	Port Macquarie Depot - Rationalisation of Port Macquarie and Wauchope Council Depot operations	40%	Off Track
1.3.5.3	Implement Phase 2 of Human Resource Information System (HRIS) - Including Learning Management System (LMS).	75%	Progressing on Schedule
1.4.1.1	Undertake delivery of Implement phase 2 internal projects (DT - Roadmap Program - multi-year projects) Information and Communications – Projects	25%	Off Track
1.4.1.3	Undertake delivery of Digital Technology projects (servers, storage, switches etc)	30%	Progressing on Schedule
1.5.2.2	Ensure plant purchases are in line with the plant replacement program (Plant Purchases and Disposals - multi-year project)	70%	Progressing on Schedule
2.1.2.3	Upgrade to Port Macquarie Emergency Operations Centre	90%	Progressing on Schedule
2.3.2.12	McInherney Park - Contribution to public amenities in new boat storage facility	25%	Progressing on Schedule
2.3.2.13	Westport Park - boat ramp parking upgrade	85%	Progressing on Schedule
2.3.2.14	Port Macquarie Regional Sports Stadium Upgrade	40%	Off Track

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Code	Action	Progress	Status	
2.3.3.12	Thrumster Sports Fields - Detailed design and approvals - multi-year project	55%	Progressing on Schedule	
2.3.4.12	Port Macquarie Town Centre Master Plan (TCMP) improvements - Foreshore Walk	60%	Progressing on Schedule	
2.3.4.14	Port Macquarie Pool - Continuation of Strategic Concept and Business Case development	20%	Progressing on Schedule	
2.3.4.25	Town Green Central & West/Playground	70%	Progressing on Schedule	
2.3.4.27	Detailed design - Bain Park revitalisation, Westport Park, Town Beach Amphitheatre	5%	Off Track	
2.3.4.30	Town Beach Reserve Basketball Courts	100%	Completed	
2.3.4.31	Wayne Richards Park Bike Track Upgrade	100%	Completed	
2.3.4.33	CSU-Googik Connection Consultancies COVID RELIEF RESERVE FUNDING	80%	Progressing on Schedule	
2.3.4.39	North Shore Fish Cleaning Table	90%	Progressing on Schedule	
2.3.4.40	Accessible Ramp - Tacking Point Lighthouse	75%	Progressing on Schedule	
2.3.4.8	Hastings Regional Sporting Complex	100%	Completed	
2.5.1.2	Undertake Glasshouse back of house maintenance; Plant and Equipment Purchases; Technical Equipment Purchases	75%	Progressing on Schedule	
3.2.1.4	Port Macquarie Lumiere Night Time Installation (Multi- year project)	100%	Completed	
3.3.1.4	Port Macquarie Airport Parallel Taxiway Stage 1 and General Aviation (GA) - pavement renewal – finalise pre- construction - (multiyear project)	75%	Progressing on Schedule	
3.3.1.7	Finalise development planning for the Port Macquarie Airport Business and Technology Park - (multi-year project)	75%	Progressing on Schedule	
4.1.1.16	Thrumster Reclaimed Water Interim Supply - Rising Main to Thrumster Reservoir - Booster Pumping Station and Interim Reservoir - undertake construction	95%	Progressing on Schedule	
4.1.1.35	Preconstruction of Widderson St Reservoir Roof Replacement	15%	Off Track	
4.1.3.18	Continuation of preconstruction of Thrumster Sewerage treatment Plant (Area 13) - Phase 1	5%	Off Track	
4.1.3.25	Port Macquarie Waste Water Treatment Plant Odour control mitigation works	75%	Progressing on Schedule	
4.1.3.42	Centrifuge upgrade and Process Optimisation at PM WwTP	20%	Progressing on Schedule	
4.1.3.49	Preconstruction works for upgrade of Port Macquarie Sewerage Pumping Station #64	0%	Not Due To Start	
4.1.3.52	Thrumster STP Area 13 Augmentation Pre-Construction	0%	Off Track	
4.1.4.8	Installation of Dedicated Generators for backup power supply to Sewerage Pumping Stations PM SPS#64	40%	Progressing on Schedule	
4.1.5.12	Stormwater Remediation - 35 Hart Street	20%	Progressing on Schedule	
4.1.7.34	Kingfisher Waste Transfer Station Upgrade - Kingfisher Road Rehabilitation	5%	Not Due To Start	
4.4.1.103	Footpath - The Parade: Ocean St to Surf Carpark	100%	Completed	
4.4.1.110	Footpath - Watonga St: Connect to Matthew Flinders	70%	Off Track	
4.4.1.119	Commence Construction of the Lake Road / Jindalee Road / Fernhill Road Intersection upgrade (Multi Year)	5%	Off Track	

Code	Action	Progress	Status
4.4.1.120	Commence detailed design and approvals for Lake Road Duplication (Ocean Drive to Chestnut Road) (Multi- year)	5%	Off Track
4.4.1.123	Maria River Road	25%	Progressing on Schedule
4.4.1.80	Boundary Street Upgrade - Detailed Design and Environmental Approvals	75%	Progressing on Schedule
4.4.1.83	Gordon Street Upgrade - Road Resurfacing, Stormwater flood mitigation and water main renewal works (multi- year project)	100%	Completed
4.4.1.93	Lord & Herschell St PMQ - Install Roundabout	100%	Completed
4.4.2.11	Ocean Drive Preliminaries	100%	Completed
4.4.2.28	New footpath on the North Shore	5%	Progressing on Schedule
4.4.2.29	Kerb and Gutter Installation - Wesley Avenue, Petit St, Hart St and Anderson St	60%	Progressing on Schedule

# Wauchope, Rural and Surrounds

Code	Action	Progress	Status
2.3.4.26	Park and Reserve Upgrades - Pioneer Park, Log Wharf & Long Flat Recreation Grounds	95%	Progressing on Schedule
2.3.4.36	Undertake building rectification for 1 Commerce St Building	Progressing on Schedule	
3.2.1.7	Renew the Maps at 'Comboyne Plateau'	75%	Progressing on Schedule
4.1.1.1	Construction planning for the Sancrox Reservoir to Area 13 (Thrumster) trunk main (DN750)	5%	Progressing on Schedule
4.1.1.27	Commencement of design for the Water treatment/Filtration Plant at Cowarra Dam	5%	Off Track
4.1.1.50	Construction of Rock Ramp to secure water level at Koree Island Pumping Stations Intake Pool	60%	Progressing on Schedule
4.1.1.52	Microwave link Cowarra to Rosewood	20%	Off Track
4.1.1.53	Pre Construction of Cowarra to Wauchope Backfeed PS	0%	Off Track
4.1.2.4	Property Acquisition associated with the Sancrox Reservoir to Wauchope Trunk Main Augmentation and mechanical assets	100%	Completed
4.1.3.29	Preconstruction of Wauchope Waste Water Treatment Plant Inlet Rationalisation	0%	Not Due To Start
4.1.3.46	Installation of new Microwave Telemetry Links - Rosewood/Bago to Wauchope WwTP	20%	Off Track
4.1.7.26	Cairncross Waste Management Facility (WMF) Expansion / Improvements - (multiyear project). Finalise construction of new landfill cell (1A, 1C, 1E) in accordance with Development Consent	95%	Progressing on Schedule
4.2.1.19	Installation of in-line monitoring instruments at Koree Island River intake	30%	Off Track
4.4.1.105	Footpath - Comboyne St to Graham St Connect at KSC	100%	Completed
4.4.1.106	Footpath - Hill Street: Pioneer Park to Main St	100%	Completed

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Code	Action	Progress	Status
4.4.1.107	Footpath - Parker Street: Wauchope High to Bain St	100%	Completed
4.4.1.125	Pembrooke Road Beechwood Rd & Stoney Creek Rd	90%	Progressing on Schedule
4.4.1.63	Pembrooke Road - Stoney Creek Bridge Upgrade - Detailed Design	Off Track	
4.4.1.66	Kindee Bridge Upgrade Detailed Design	50%	Off Track
4.4.1.84	Bago Road Rehab Stage 3 - Bluewater to Cameron Streets	95%	Progressing on Schedule
4.4.1.96	Design and Construction of the Pappinbarra Bridge Replacement	35%	Progressing on Schedule
4.4.1.98	The Hatch Rd - Reseal Sections - Investigation and design for sealing 3kms of Rd	100%	Completed
4.4.2.12	Kindee Bridge - Immediate Structural Repairs	20%	Off Track
4.4.2.13	Bridge 181, Mundays Lane - Upgrade	5%	Progressing on Schedule
4.4.2.14	Donkins Flat Bridge, Comboyne - Upgrade	5%	Progressing on Schedule
4.4.2.16	Cowal Creek Bridge, Bellangry - Upgrade	5%	Progressing on Schedule
4.4.2.17	Culvert - Thone River Rd, Byabarra	5%	Progressing on Schedule
4.4.2.18	Culvert - Farrawells Road, Telegraph Point	5%	Progressing on Schedule
4.4.2.19	Tower Rd Bridge, Pembrooke - Upgrade	5%	Progressing on Schedule
4.4.2.20	Bottlebrush No 1 Bridge Upgrade	5%	Progressing on Schedule
4.4.2.22	Joes Bridge Upgrade	5%	Progressing on Schedule
4.4.2.23	Langdons Bridge (Bottlebrush No 2) Upgrade	5%	Progressing on Schedule
4.4.2.24	Bril Bril Bridge Upgrade	50%	Off Track
4.4.2.25	Little Mortons Creek Bridge Upgrade	5%	Progressing on Schedule
4.4.2.26	King Creek Bridge Upgrade	25%	Progressing on Schedule
4.4.2.27	Beechwood Pedestrian Upgrades	15%	Progressing on Schedule
4.4.2.30	Bago Rd final seal	0%	Not Due To Start
4.4.2.7	Crowe Roods Bridge, Bellangry - Upgrade	5%	Progressing on Schedule
4.4.2.8	Bridge 178, Mundays Lane - Upgrade	10%	Progressing on Schedule
4.4.2.9	Bridge 179, Mundays Lane - Upgrade	5%	Progressing on Schedule

ATTACHMENT D

# **Operational Plan**

2021-2022 Quarterly Progress Report as at 31 March 2022



Item 11.15 Attachment 4

# 1: Leadership and Governance

A collaborative community that works together and uses opportunities for community participation in decision making that is defined as ethically, socially and environmentally responsible.

1.1: Inform and engage with the community about what Council does using varied communication channels

1.1.1: Use a variety of tools to engage with the community in a manner that is transparent, effective, relevant and inclusive

Code	Operational Plan Action 2021-2022	Progress	Status	
1.1.1.1	Engage with the community using a range of methods to facilitate community involvement in decision making	75%		]

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.1.1.1.1	Community	Capture the number of engagement activities undertaken and number of participant including online	100%	100%	Zoom/Teams Meetings x 8: 57 participants Face-to-face meetings x 11: 136 participants CCAT Meetings x 3: 22 participants Pop-ups x 3: 76 participants Direct mail: 936 letters / notices ONLINE - HAVE YOUR SAY 6,234 visitors 17,398 page views 179 new registrations 422 engaged visitors 2,590 informed visitors 4,985 aware visitors	On Track



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.1.1.1.2	Community	Increased community participation on Council's Have your Say online portal	100%	100%	In the third quarter we had 179 new registrations on the HYS online portal. Other HYS data: 17,398 page views, 6,234 unique visitors (4,985 aware; 2,590 informed; 422 engaged)	On Track
1.1.1.3	Community	Improve overall engagement approach and levels of engagement and report through annual survey	100%	100%	Overall engagement is evolving in response to the changing COVID restrictions which have enabled us to return to face- to-face engagement, via community meetings, pop-ups and meetings. We continue to offer digital engagement opportunities alongside our face-to-face engagement activities to provide a richer diversity of opportunities for our community. Consideration is being given to the development of some additional survey questions to better understand how the	On Track
					additional survey questions to better understand how the community wants to engage and what platforms/opportunities they prefer.	

Code	Operational Plan Action 2021-2022	Progress	Status
1.1.1.5	Implement the Education Framework to educate and inform the community about Council's services and priorities	50%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.1.1.5.1	Community	Education Framework for Council finalised and implementation commenced	100%	100%	Education Framework implementation continues - activities in community planned with COVID Restriction lifted.	On Track



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.1.1.5.2	Community	Deliver regular and engaging education through a variety of channels.	100%	100%	Variety of activities in place with lift of restrictions including pop up stalls, information sessions, tours, school excursions, activity booklets, videos, interactive maps and continued work on digital and social presence,	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.1.1.8	Use targeted communication channels to ensure the community are informed of our activities and understand our priorities.	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.1.1.8.1	CEO's Office	Increased engagement across the digital channels we use to communicate with, year on year.	100%	100%	Engagement progressing	On Track

# 1.1.2: Support community involvement in decision making through education around Council matters and services

Code	Operational Plan Action 2021-2022	Progress	Status
1.1.2.1	Engage the community on developing the 2021 Community Strategic plan to drive council projects and programs into the future	75%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.1.2.1.1	Community	Engagement continues for the Community Strategic Plan until June 2022	100%	100%	The draft Community Strategic Plan will be reported to Council for recommendation for adoption at an extraordinary Council Meeting in April 2022.	On Track
1.1.2.1.2	Community	Community Strategic plan developed and adopted by June 2021	100%	100%	Community Strategic Plan to be reported to the April Council Meeting with a recommendation for adoption	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.1.2.3	Undertake the Community Planning Program	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.1.2.3.1	Community	Community plans developed by 1 December 2021	100%	100%	North Shore Plan will be shared with the community in the 4th quarter. CCAT meeting - for all CCATs - will be held in Zoom as part of the IP&R exhibition period.	On Track
1.1.2.3.2	Community	Implement Council actions identified in Community Plans and embed in future operational plans	100%	100%	The engagement team continues to work with other departments to secure grant funding for projects identified in the community plans, in the last quarter this has included assisting in grant applications for the Kendall Skate Park, Kew playground and the Streets for Shared Spaces for Laurieton CBD (successful - \$500,000 to trial elements of the draft masterplan)	On Track



Code	Operational Plan Ac	ction 2021-2022			Progre	s Status
1.1.2.4	2.4 Local Strategic Planning Statement 70%					
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.1.2.4.1	Strategy	Embed the LSPS in the Delivery Program, Operational Plans and actions across Council, ensuring alignment with the CSP	100%	100%	The Delivery Program and Operational Plan are being developed presently. The development of the documents will ensure alignment with Council's strategies and strategic direction. This will include embedding the CSP, LSPS, Sustainability Framework, Infrastructure Strategy, Regional Integrated Transport Strategy and other lead strategies of Council and mapping Councillor objectives and direction to the LSPS program.	On Track

# 1.1.3: Engage with the community on impacts and changes to services.

Code	Operational Plan Action 2021-2022	Progress	Status
1.1.3.2	Develop an annual Community Engagement program to enable community involvement in decision making in line with the Working Together Framework	75%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.1.3.2.1	Community	The Community Engagement program is developed and implementation of actions commenced and completed to approved plan by 30 June 2022	100%	100%	The Engagement Policy was reported to Council in March 2022 and is on public exhibition for comment until 20 April 2022. The Engagement Strategy has been drafted and is due December 2022. The Engagement program actions continue to roll out to assist the delivery of the Operational Plan and outcomes of Council resolutions.	On Track

# 1.1.4: Provide easy to understand and accessible community reporting.

Code	Operational Plan Action 2021-2022	Progress	Status
1.1.4.1	Produce and submit the annual report in accordance with Local Government Act requirements	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.1.4.1.1	People, Safety & Performance	Annual report adopted by Council and submitted to the Office of Local Government (OLG) by 30 November 2021	100%	100%	Completed	On Track
1.1.4.1.2	People, Safety & Performance	The Community Report Card (Part A); statutory report (Part B); and financial statements (Part C) is published for community viewing	100%	100%	Completed	On Track



Code	Operational Plan Action 2021-2022	Progress	Status
1.1.4.2	Provide progress reports on implementation of the Delivery Program in accordance with Local Government Act requirements	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.1.4.2.1	People, Safety & Performance	Report Delivery Program progress to Council on a six monthly basis	100%	100%	Council adopted the six monthly Delivery Program progress report ending 31 December 2022 at 16 February 2022 Ordinary Council Meeting.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.1.4.3	Develop the one year Operational Plan in accordance with Local Government Act requirements	80%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.1.4.3.1	People, Safety & Performance	Operational Plan adopted by 30 June 2022	100%	100%	Draft 2022-23 Operational Plan is in progress. The document will be submitted for endorsement and approval to be placed on public exhibition at the April 2022 Council meeting. Final adoption of the 2022-23 Operational Plan will be at the June 2022 Council meeting.	On Track



Code	Operational Plan Action 2021-2022			
1.1.4.4	Implement new Corporate Reporting Tool	100%		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.1.4.4.1	People, Safety & Performance	Implementation of the new corporate reporting tool completed by June 2022	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022	Progress	Status		
1.1.4.5	Review the Resourcing Strategy in accordance with Local Government Act requirements 80				

Code	e	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.1.4	4.5.1	People, Safety & Performance	Resourcing Strategy review completed by 30 June 2022	100%	100%	Preparation of draft Resourcing Strategy is ongoing and on track as part of the IP&R suite of documents to be placed on public exhibition following the April Council meeting.	On Track

# 1.1.5: Develop an effective and coordinated community focused Communications Strategy.

Code	Operational Plan Action 2021-2022				
1.1.5.6	Develop human centred brand and communications strategy.	75%			



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.1.5.6.1	CEO's Office	Develop human centered brand and communications strategy.	100%	100%	Progressing as scheduled.	On Track

# 1.1.6: Continue to promote access by the community to Councillors.

Code	Operational Plan Action 2021-2022	Progress	Status
1.1.6.1	Manage Councillor development program	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.1.6.1.1	Governance	Build training program for Councillors	100%	100%	Councillor induction program being delivered to Councillors including Code of Meeting Practice, Code of Conduct and other relevant training sessions	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.1.6.2	Deliver the Take the Council to the Community program	100%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.1.6.2.1	Governance	Hold two off-site Council meetings during the year (Wauchope and Laurieton)	100%	100%	March 2022 Ordinary Council meeting held in Wauchope	On Track

# 1.2: Maintain strong partnerships between all stakeholders — local, state and federal — so that they are affective advocates for the community

1.2.1: Promote Council participation and build linkages in local, state and federal initiatives, forums and opportunities to support Council's continued planning for the growth of the region

Code	Operational Plan Action 2021-2022	Progress	Status
1.2.1.1	Convene meetings with local business chambers for the Mayor and Senior Staff	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.2.1.1.1	CEO's Office	Convene meetings throughout the year	100%	100%	2022 meetings have been scheduled with the local Business Chambers, Mayor, CEO and senior staff noting some events are being rescheduled this quarter due to COVID-19 restrictions.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status		
1.2.1.2	Convene meetings with State and Federal Members for the Mayor and Senior Staff 7				

	Not Due to Start		Progressing on Schedule		Completed		Off Track	
~		-		-		-		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.2.1.2.1	. CEO's Office	Convene meetings throughout the year	100%	100%	The Mayor and CEO meet with our Local Members on an as needs basis. This includes strategic phone calls and discussions at media opportunities when available.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.2.1.3	Work proactively to secure grant funding from other levels of government to support Council project and service delivery priorities	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.2.1.3.1	Economic & Cultural Development	Identify and apply for grants in a timely and effective manner	100%	100%	In the January to March 2022 quarter, 23 grant applications were submitted, seeking funding of \$19.2m. Applications include eight footpath projects and \$5m funding for Rawdon Island Bridge.	On Track
1.2.1.3.2	Economic & Cultural Development	Report to Council on grant applications made and success biannually, February and August	100%	100%	Achieved. Three Reports were endorsed at the February 2022 Ordinary Council meeting. The Reports provided an update on Council Grant Applications, COVID Relief Reserve Funding and Bushfire Disaster Recovery Funding projects.	On Track

# 1.3: Demonstrate leadership

1.3.1: Provide effective leadership and equity.

Code	Operational Plan Action 2021-2022	Progress	Status
1.3.1.1	Participate in the Mid North Coast Joint Organisation (MNCJO)	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.3.1.1.1	CEO's Office	90% participation in the Regional Joint Organisation meetings by the Mayor and Chief Executive Officer	100%	100%	The Mayor and CEO continue to participate in MNCJO board meetings and liaise with other member councils on numerous matters.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.3.1.2	Participate in the Regional Cities NSW quarterly meetings	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.3.1.2.1	CEO's Office	Attendance at the meetings by the Mayor and Chief Executive Officer	100%	100%	The CEO and Mayor attended the most recent Regional Cities Meeting (virtually)	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.3.1.3	Ongoing community disaster preparedness and support	75%	

Not Due to Start Progressing on Schedule Completed Off Track

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.3.1.3.1	CEO's Office	Preparation of Business Continuity Plans	100%	100%	BCP amended accordingly as staff changes occur.	On Track

# 1.3.2: Build trust and improve Council's reputation through transparency, good decision making and living Council's Values.

Code	Operational Plan Action 2021-2022	Progress	Status
1.3.2.1	Manage the Legislative Compliance Register	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.3.2.1.1	Governance	Undertake annual review of the Legislative Compliance Register and report on it and consider improvements to the Legislative Compliance process	100%	100%	Completed.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.3.2.7	Submit annual performance reporting for the water and sewer business to NSW Office of Water for benchmarking comparisons	100%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.3.2.7.1	Infrastructure Planning	Collate and forward performance reporting data to NSW Office of Water annually	100%	100%	Completed.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.3.2.8	Meet statutory reporting obligations	90%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.3.2.8.1	Governance	Satisfactory reporting of Code of Conduct Complaints Report presented to Council no later than 31 December each year	100%	100%	Completed as required by due date	On Track
1.3.2.8.2	Governance	Government Information Public Access (GIPA) Report to Information and Privacy Commission no later than 31 October each year	100%	100%	Completed by due date as required	On Track
1.3.2.8.3	Governance	Report on Public Interest Disclosure (PID) biannually in July and February	100%	100%	February return completed by Internal Ombudsman as required	On Track
1.3.2.8.4	Governance	Submit PID annual report to NSW Ombudsman by 31 October each year	100%	100%	Submitted by due date as required	On Track



Code	Operational Plan Action 2021-2022	Progress	Status
1.3.2.9	Coordinate lodgement of annual Disclosures of Interest Returns	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.3.2.9.1	Governance	Annually update Disclosure Register by 30 September	100%	100%	Completed	On Track

# 1.3.3: Ensure there is appropriate management of risk to mitigate the impact for Council and the community.

Code	Operational Plan Action 2021-2022	Progress	Status	
1.3.3.2	Manage the Risk Management Action Plan, as part of the state wide continuous improvement program			

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.3.3.2.1	Governance	Review and implement the Risk Management Action Plan on a quarterly basis and report to Executive	100%	100%	Statewide Continuous Improvement Pathway undertaken for 2021/2022. Results reported to ARIC	On Track

Code	Operational Plan Action 2021-2022			
1.3.3.5	Improve the Risk Management Framework			

Not Due to Start Progressing on Schedule Completed Off Track

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.3.3.5.1	Governance	Improve the Risk Management Framework in line with project milestones	100%	100%	Revised Risk Management Framework presented to February 2022 Audit Risk and Improvement Committee	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.3.3.7	Manage the Delegation Framework		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.3.3.7.1	Governance	Review and approve before October end of year	100%	100%	Director delegation review almost complete. Group Manager delegations to be reviewed following finalisation of Director delegations	On Track

Code	Operational Plan Action 2021-2022			
1.3.3.8	Respond to formal information requests within required timeframes			



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.3.3.8.1	Governance	Respond to formal GIPA requests within the 20 days varying for applied exception	100%	100%	Complete and responses provided within required timeframes	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.3.3.9	Coordination of the Local Government Election with the inclusion of the Fluoridation Poll		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.3.3.9.1	Governance	Coordinate all requirements for the 2021 Local Government Election and Implement the Councillor Induction Program	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.3.3.10	Implement all requirements as specified in the Office of Local Government Risk Management and Internal Audit Framework		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.3.3.10.1	Governance	Implement all requirements as specified in the new Office of Local	100%	100%	Framework yet to be adopted by Office of Local Government	On Track



(	Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
			Government Risk Management and Internal Audit Framework				

# 1.3.4: Manage our workforce to deliver community outcomes.

Code	Operational Plan Action 2021-2022	Progress	Status
1.3.4.1	Implement workplace strategies and processes to continue to improve Human Resources	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.3.4.1.1	People, Safety & Performance	Actions implemented by 30 June 2022 as per the Workforce Management Strategy.	100%	100%	Review of PSP functions and key activities underway. Focus group sessions held with key work areas of PSP.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.3.4.2	Implement workplace strategies and processes to continue to improve Work, Health and Safety.	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.3.4.2.1	People, Safety & Performance	Actions implemented by 30 June 2022 as per the Work, Health Safety Strategy.	100%	100%	COVID advice to the workforce continuing as the restrictions under the PHO's ease. Wellbeing support for employees continues to be a priority.	On Track



Code	Code Operational Plan Action 2021-2022							
1.3.4.3	3.4.3 Implement workplace strategies and processes to continue to improve Learning and Development 75%							
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress	
1.3.4.3.:	L People, Safety & Performance	To develop a Learning and Development Strategy by June 2022	100%	100%	Training continues to be a priority with Chemica Awareness, Safe work near Power lines, Skin Ca Manual handling and HIAB cranes completed ir	ancer,	On Track	

Code	Operational Plan Action 2021-2022	Progress	Status
1.3.4.4	Port Macquarie Depot - Rationalisation of Port Macquarie and Wauchope Council Depot operations	40%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.3.4.4.1	Infrastructure Operations	Holistic review of depot holdings and plans by 30 June 2022	100%	30%	Change of Director in Community Infrastructure and recent significant wet weather events will again impact on progress. Further work within team to be done to get project back on track.	Off Track



#### 1.3.5: Build an engaged workforce.

Code	e Operational Plan Action 2021-2022							
1.3.5.1	5.1 Implement Organisational Development initiatives and strategies to develop a highly engaged workforce who are solutions focused 75							
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress	
1.3.5.1.1	L People, Safety & Performance	Actions implemented by 30 June 2022 as per the Organisational Development Strategy	100%	100%	The Transformation team continue to lead the HR function service review. The interim Executive Manager People, Safety & Performance is working with the Transformation team to progress the review.		On Track	

Code	Operational Plan Action 2021-2022	Progress	Status
1.3.5.3	Implement Phase 2 of Human Resource Information System (HRIS) - Including Learning Management System (LMS).	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.3.5.3.1	People, Safety & Performance	HRIS system implemented. Online leave and timesheet implemented.	100%	100%	HRIS expression of interest finalised and ready for market. LMS has been incorporated into the HRIS EOI.	On Track



# 1.4: Use innovative, efficient and sustainable practices

1.4.1: Provide efficient technology and inclusive digital systems that are easy to use and access.

Code	Operational Plan Action 2021-2022	Progress	Status
1.4.1.1	Undertake delivery of Implement phase 2 internal projects (DT - Roadmap Program - multi-year projects) Information and Communications - Projects	25%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.4.1.1.1	Digital Technology	Delivery of projects according to approved project roadmap, including: • Human Resources Information System • Commencement of the multi-year Core System Improvement Program • Office 365 Rollout	100%	35%	HRIS is delayed - implementation post June 2022. Procure to Pay project is progressing - in last stages of build and test with focus on change management. Office 0365 Teams rollout in progress.	Off Track

Code	Operational Plan Action 2021-2022				
1.4.1.3	Undertake delivery of Digital Technology projects (servers, storage, switches etc)				



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.4.1.3.1	Digital Technology	Delivery of projects according to approved project roadmap, including: • Partial Infrastructure Hardware Replacement complete by June 2022 • Digital Initiatives to support the Corporate transformation program	100%	100%	Finalising next procurement	On Track

Code	Operational Plan Action 2021-2022	Progress	Status		
1.4.1.5	Develop asset design and as-constructed templates as part of the Asset Data Standards Review				

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.4.1.5.1	Infrastructure Planning	Develop an Auto CAD file template for asset design and as-constructed plans that meets Asset Design As Constructed (ADAC) standards by 30 June 2022	100%	0%	Planning to develop ADAC templates has not commenced due to other higher priority projects including response to Rawdon Island Bridge and AUSPEC.	Off Track

# 1.4.2: Deliver agreed services at the agreed service level at best value.

Code	Operational Plan Action 2021-2022				
1.4.2.1	Work across the organisation to facilitate the implementation of the Transformation Strategy				

Not Due to Start Progressing on Schedule Off Track Page 23

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Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.4.2.1.1	CEO's Office	Develop Transformation Strategy, Roadmap and Program of Works for CEO approval	100%	100%	Transformation program of works completed, this will be further enhanced by the work being done by the Blueprint.	On Track
1.4.2.1.2	CEO's Office	Transformation program implemented Nov/Dec 2021	100%	100%	The program implemented includes the appointment of Change Project Specialists in the Transformation Team. These staff have been appointed, inducted and are well embedded to their roles, leading the organisation in Transformation activities. Projects that are being focused on in Q3 include HR, Procurement, Culture Amp, FBP and Pulse reporting and Annual Works Program.	On Track

# 1.4.3: Deliver a customer focused service that provides the community with a consistent experience of Council.

Code	Operational Plan Action 2021-2022	Progress	Status		
1.4.3.3	Develop a human centred customer experience strategy that delivers a roadmap for improving customer journey.				

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.4.3.3.1	Customer Experience & Communications	Customer experience strategy adopted. Customer journey mapped and improved.	100%	100%	On track as per DT roadmap.	On Track



Code	Operational Plan Action 2021-2022	Progress	Status
1.4.3.4	Introduce online payments for customers to purchase all products and services.	20%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.4.3.4.1	Customer Experience & Communications	Online payments solution identified.	100%	20%	Project transitioned to Digital Technology team. Solution to be defined	Off Track

# 1.5: Ensure strong corporate and financial management that is transparent and accountable

1.5.1: Manage Council's financial assets and provide accurate, timely and reliable information.

Code	Operational Plan Action 2021-2022	Progress	Status
1.5.1.1	Monitor and accurately report on Council's financial position in accordance with Local Government Act requirements	90%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.5.1.1.1	Financial Services	Submit three quarterly budget review statements and an annual report to Council	100%	100%	The Quarterly Budget Review Statement for the quarter ended 31 December 2021 was presented to the February 2022 Council meeting. The next report will be presented to the May 2022 Council meeting in accordance with reporting requirements.	On Track
1.5.1.1.2	Financial Services	Lodge audited financial statements with Office of Local Government by 31 October	100%	100%	Council's audited annual financial statements for the year ended 30 June 2021 were lodged with the Office of Local Government by the required deadline.	On Track



Code	<b>Operational Plan</b>	n Action 2021-2022				Progress	Status
1.5.1.2	2 Manage Council's investment portfolio to optimise investment returns within the constraints of the policy, the Local Government Act and Regulations						
Codo	Load	Corporate Performance Indicator	Tardat	Actual	Commente		Progress
Code	Lead	Corporate Performance Indicator	Target	Actual	Comments		

	Responsibility	(CPI)				
1.5.1.2.1	Financial Services	Exceed benchmark for investment return	100%	100%	Investment return has exceeded the benchmark for each month in isolation and the financial year to date.	On Track
1.5.1.2.2	Financial Services	Table report to Council monthly	100%	100%	Reports have been presented to Council within the required timeframes.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.5.1.3	Develop annual Operational Plan budget and review the Long Term Financial Plan	85%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.5.1.3.1	Financial Services	Develop the draft annual budget in line with Integrated Planning and Reporting time frames	100%	100%	Preparation of the annual budget is underway and is on track to be finalised by the required timeframes	On Track
1.5.1.3.2	Financial Services	Final budget adopted by Council by 30 June	100%	100%	The 2022/2023 budget preparation is underway and on track for the budget to be adopted in June 2022	On Track



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.5.1.3.3	Financial Services	Review the Long Term Financial Plan in line with the budget cycle	100%	100%	Preparation of the Long Term Financial Plan is underway, in conjunction with the 2022/2023 budget preparation, and is on track to meet the required timeframes	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.5.1.4	Prepare monthly financial reports for Council	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.5.1.4.1	Financial Services	Submit financial reports to Council monthly	100%	100%	Monthly financial reports have been presented to Council as required.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.5.1.6	Progress Partridge Creek residential development planning	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.5.1.6.1	Strategy	Provide a report to Council by June 2022 outlining Partridge Creek residential development options upon receipt of updated land valuation	100%	100%	Strategic Property Portfolio Review to be undertaken in 2022.	On Track



Code	Operational Plan Act	ion 2021-2022			Prog	ress	Status	
1.5.1.9	L.9       Progress Emily Avenue residential development planning       75%							
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	F	Progress	
1.5.1.9.1	Strategy	Receive Development Consent and	100%	100%	Strategic Property Portfolio Review to be undertaken in	n (	Эn	

Code	Operational Plan Action 2021-2022	Progress	Status
1.5.1.10	Implement Asset Designed As Constructed (ADAC) computerised automated process system	0%	

2022.

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.5.1.10.1	Infrastructure Planning	Complete implementation of ADAC within Council operations by 30 June 2022	100%	0%	This action relies on completing the required ADAC templates which is currently behind schedule. A detailed review of project resourcing is required in order to plan to bring this project back on track.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.5.1.14	Property Portfolio Investigations. Contamination reports/EOI	75%	

Not Due to Start Progressing on Schedule Completed Off Track

commence design by 30 June 2022

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Track

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.5.1.14.1	Strategy	Evolve the Operational, Financial, Physical and Environmental profile of existing and potential land and property assets through contemporary reports and studies.	100%	100%	Strategic Property Portfolio Review to be undertaken in 2022.	On Track

# 1.5.2: Use procurement, tendering, purchasing and contract management approaches that are transparent and equitable.

Code	Operational Plan Action 2021-2022	Progress	Status
1.5.2.1	Implement the recommendations of the external review of Council's Procurement function	45%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.5.2.1.1	Financial Services	Action plan for delivery of the recommendations devised with agreed timeframes and responsibilities. Complete implementation of actions with a 2022 timeframe.	100%	100%	Procurement & Contract Management portal provider engaged. P2P project continuing. Procurement restructure underway with all vacant roles now advertised. Skills 2 Procure project underway with module content being developed. Provider has been engaged to animate/voice over training modules.	On Track



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Code	Operational Plan Action 2021-2022	Progress	Status
1.5.2.2	Ensure plant purchases are in line with the plant replacement program (Plant Purchases and Disposals - multi-year project)	70%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.5.2.2.1	Infrastructure Operations	Plant replacement program delivered according to approved schedule. Purchase up to 150 items of plant completed by June 2022	100%	100%	Plant replacement progressing but supply is difficult.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.5.2.3	Manage and maintain Council's Plant and Fleet to support the operational activities of Council	50%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.5.2.3.1	Infrastructure Operations	Plant and Fleet managed and maintained in accordance with adopted program and budget	100%	100%	On target and in accordance with plant servicing programs.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.5.2.5	Undertake procurement activities in accordance with legislative requirements and that are transparent	75%	

Not Due to Start	Progressing on Schedule	Completed	Off Track
		-	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.5.2.5.1	Financial Services	Capture contracts awarded with a value of \$150,000 (including GST) or more	or contr		GIPA Contracts Register reviewed and updated as contracts over \$150,000 are advised to the Procurement Group.	On Track

1.5.3: Develop, manage and maintain Council business units through effective commercial management.

Code	Operational Plan Action 2021-2022	Progress	Status
1.5.3.	Increase operating revenue of the corporate business units	75%	
1.5.3.2	Increase operating revenue of the corporate business units	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.5.3.1.1	Commercial Business Units	Increase operating revenue by 3% per annum at the Airport			Off Track	
1.5.3.1.2	Commercial Business Units	Increase operating revenue by 3% per annum at the Glasshouse	3%	100%	Glasshouse income up 111% on the corresponding period in the 20/21 financial year noting both years impacted by COVID public health order restrictions.	On Track
1.5.3.1.3	Commercial Business Units	Increase operating revenue by 3% per annum at the Environmental Laboratory	3%	100%	Environmental Laboratory income up 15% on the corresponding period in the 20/21 financial year.	On Track



Code	Operational Plan Action 2021-2022	Progress	Status
1.5.3.2	Implement the Glasshouse Strategic Plan 2020-2022 in consideration of Council's Cultural Plan	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.5.3.2.1	Commercial Business Units	Present biannual reports to Council	100%	100%	The next Glasshouse report is due to be presented at the August 2022 Council meeting.	On Track
1.5.3.2.2	Commercial Business Units	Deliver actions according to adopted Plan	Council in July 2020 and actions continu		The Glasshouse Plan 2020-2022 was adopted by Council in July 2020 and actions continue to be delivered, noting the impact of COVID-19.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
1.5.3.6	Manage Council's property management, leasing and licensing, and statutory property functions for the most appropriate return to Council and the community	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.5.3.6.1	Recreation, Property & Buildings	Deliver statutory property projects according to approved project plan	100%	100%	Progressing projects as per approved project plans	On Track
1.5.3.6.2	Recreation, Property & Buildings	Manage Council's lease and license portfolio to ensure the most appropriate return to Council, maximisation of the use Council properties and equity amongst community groups	100%	100%	Progressing projects as per approved project plans	On Track



eted Off Track

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.5.3.6.3	Recreation, Property & Buildings	Undertake statutory property transactions and projects as required	100%	100%	Statutory property transactions and projects progressed as required	On Track

Code	Operational Plan Action 2021-2022	Progress	Status		
1.5.3.8	Land and Easement Acquisitions for Council Purposes - Survey, Valuation and Land Transactions 7				

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.5.3.8.1	Recreation, Property & Buildings	Undertake statutory property transactions as required			On Track	

# 1.5.4: Identify new commercially viable revenue sources.

Code	Operational Plan Action 2021-2022	Progress	Status		
1.5.4.1	Review current revenue sources and investigate the commercial viability of identified new revenue sources				

	Not Due to Start		Progressing on Schedule		Completed		Off Track
-		-		-		-	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
1.5.4.1.	L Commercial Business Units	Identify new revenue sources	100%	100%	Review of revenue sources continuing in conjunction with the development of the 2022-2023 Schedule of Fees and Charges.	On Track



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# 2: Your Community Life A healthy, inclusive and vibrant community 2.1: Create a community that feels safe 2.1.1: Support Community Safety initiatives Code Operational Plan Action 2021-2022 Progress Status

### 2.1.1.1 Manage the contract for approved lifeguard services

Corporate Performance Indicator Code Lead Target Actual Comments Progress Responsibility (CPI) Deliver approved lifeguard services On 2.1.1.1.1 Recreation, 100% 100% Lifeguard services continue to be undertaken across our Property & beaches as per the service delivery contract. Track Buildings 0n 2.1.1.1.2 Recreation, Deliver lifeguard education programs 100% 100% Lifeguard education programs have commenced Property & to schools and community groups throughout school term 1. Planning commenced for Track Buildings (target 2,500 students) Term 4 programs

Code	Operational Plan Action 2021-2022	Progress	Status
2.1.1.2	Work with communities to ensure safe access to Council facilities, events, programs and in time of emergency		



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25%

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.1.1.2.1	Community	Working with communities to develop preparedness emergency recovery plans to ensure their safety in times of emergency	100%	100%	Community Emergency Response meetings are being rolled out to all of our communities giving them the opportunity to start the development of their individual plans.	On Track
2.1.1.2.2	Community	Develop a community checklist to improve the community's perception of safety at our facilities and events.	100%	100%	Identifying needs in our community facilities is a key part of each Communities Emergency Plans. This will be done with the Community-Led Resilience Teams and CCATS.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.1.1.3	Working with our communities and CCATs to finalise Emergency Preparedness Plans for our communities		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.1.1.3.1	Community	Communities engaged and plans developed.	100%	100%	Community meetings commenced in March. Meetings have been held with Pappinbarra, North Shore, Hastings Hinterland, Telegraph Point	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.1.1.4	Managing & Operating a Recovery Centre - March 2021 Floods		



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.1.1.4.1	Community	1. Establish, manage and operate two Recovery Centres at Port Macquarie and Laurieton. 2. Reimbursement Claim for eligible costs of Recovery Centres approved by Resilience NSW	100%	100%	Completed	On Track

# 2.1.2: Advocate for, support and coordinate emergency services

Code	Operational Plan Action 2021-2022	Progress	Status
2.1.2.2	2 Council supports Emergency Management Operations and Agencies. Bushfire Tank/Vehicle purchases		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.1.2.2.1	Infrastructure	Provide coordination and support to emergency service units as required	100%	100%	Continue to Support MNCLHD with COVID 19 Pandemic response including surges in testing, Special Health Accommodation support. Support to RFS with admin of operational procurement	On Track

Code	Operational Plan Action 2021-2022			
2.1.2.3	Upgrade to Port Macquarie Emergency Operations Centre			



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.1.2.3.1	Infrastructure	Backbone EOC technology upgrades implemented in line with funding deed	100%	100%	awaiting Resilience NSW final endorsement for additional works within grant funding envelope	On Track

# 2.1.3: Conduct regulatory and educational activities that safeguard public and environmental health, and ensures compliance with planning and building standards

Cod	Operational Plan Action 2021-2022	Progress	Status
2.1.	1 Monitor and take action as appropriate to ensure compliance with development approvals and building, environmental, pu health and on-site sewage standards	ublic 75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.1.3.1.1	Environment & Regulatory Services	Risk Management Plans and annual audits monitored for all regulated cooling and heating systems and inspected as required.	100%	100%	Risk Management Plans and Annual Audits by third party are processed as they arrive. Reminder letter to those that are overdue will be sent out soon.	On Track
2.1.3.1.2	Environment & Regulatory Services	On-site sewage system inspections completed in accordance with approved program	100%	50%	Limited staff available to undertake inspections due to leave and jury duty service.	Off Track
2.1.3.1.3	Environment & Regulatory Services	Food Premises inspection program completed by 30 June	100%	50%	50% of initial inspections undertaken during this period required a reinspection reducing ability to conduct the reportable initial inspections. the reduced premises hygiene standards experienced have been attributed to the resourcing shortages in the hospitality sector.	Off Track



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.1.3.1.4	Environment & Regulatory Services	Pollution incidents responded to within the service standard for type of incident	100%	100%	Initial response/contact was within service standard	On Track
2.1.3.1.5	Environment & Regulatory Services	Public Health inspections completed for all public pools and spas in accordance with approved program	100%	100%	Additional inspections were conducted to make up for previous quarter. Public pool inspection program generally run over warm months when pools are open.	On Track
2.1.3.1.6	Environment & Regulatory Services	Inspections of personal appearance premises undertaken in accordance with approved program	100%	100%	Personal appearance premises inspections are conducted in the cooler months when public pools are less likely to be inspected	On Track
2.1.3.1.7	Environment & Regulatory Services	Underground Petroleum Storage Systems (UPSS) inspected in accordance with approved program	100%	0%	Still awaiting responses from some facilities on Fuel System Operating Plans - where extensions granted.	Off Track
2.1.3.1.8	Environment & Regulatory Services	Building certificate applications assessed within service standard	100%	100%	All pre-lodgement applications assessed within 5 day service standard.	On Track
2.1.3.1.9	Environment & Regulatory Services	Mandatory pool compliance inspections completed in accordance with approved program	100%	85%	Requests for inspections were booked generally within the required standard (5 days). Inspections were then conducted when access was made available with follow up inspections completed according to risk level. Noting that the lower compliance status during this reporting period was due to the Swimming Pool Inspector role becoming vacant and existing trained staff have had to undertake additional duties.	Off Track
2.1.3.1.10	Environment & Regulatory Services	Notices of Completion applications for caravan park and manufactured homes assessed within service standard	100%	100%	16 applications received, 15 closed, 1 from mid March under evaluation, 1 overdue.	On Track



Completed Off Track

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.1.3.1.11	Environment & Regulatory Services	Annual Fire Safety Statements pursued for all buildings with fire safety requirements	100%	100%	All overdue building fire statements pursued for the quarter	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.1.3.3	Provide ranger and local law enforcement services to ensure compliance with legislation, regulations and Council policies relating to parking, regular beach patrols, illegal signage, sale of goods on roads, building site sediment control and companion animal management	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.1.3.3.1	Environment & Regulatory Services	Respond to 80% of customer requests regarding compliance with parking beach patrols, illegal signage, sale of goods on roads, building site sediment control and companion animal management within set customer service standard	100%	100%	CRM's responded to as received. Staff leave has impacted response slightly	On Track
2.1.3.3.2	Environment & Regulatory Services	Monitor the number of offences detected during proactive patrols	100%	100%	Offences encountered are monitored	On Track
2.1.3.3.3	Environment & Regulatory Services	Monitor the number of companion animal incidents	100%	100%	CRMs monitored and attacks reported to Office Local Government	On Track



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.1.3.3.4	Environment & Regulatory Services	Maintain Animal Shelter return and rehoming rates	100%	100%	89 cats and 126 dogs received at Shelter in this quarter. 14.6% cats and 44% dogs returned to owner, 36.3% animals adopted as well as 25.1% transferred to rescue groups. Euthanasia only occurred for animals that were ill, feral/infant, dangerous, at owners request or unsuitable for rehoming.	On Track
2.1.3.3.5	Environment & Regulatory Services	Respond to Development Compliance and Stormwater complaints within service standards	100%	80%	CRMs responded to as received. Staffing shortages and excess rain have increased complaints and impacted response slightly	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.1.3.4	Manage Council's Environmental Laboratory and provide sampling, analysis, reporting and professional advice of water quality analysis and environmental programs in accordance with operational and regulatory requirements to internal and external customers on an approved fee for service basis	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.1.3.4.1	Commercial Business Units	Complete all sampling, analysis and reporting of operational and regulatory requests in accordance with approved budgets	100%	100%	On track. All sampling, analysis and reporting conducted within budget.	On Track
2.1.3.4.2	Commercial Business Units	Complete all sampling, analysis and reporting of operational and regulatory requests in accordance with agreed service standards	90%	100%	90.4% of finalised reports met the required service standard. All reports for urgent request and non-compliant results were met within the agreed service standard.	On Track



pleted Off Track

Code		Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.1.3	Commercial Business Units	Maintain National Association of Testing Authorities (NATA) corporate accreditation	100%	100%	NATA Accreditation maintained.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.1.3.5	Provide a safe water supply in accordance with Australian Drinking Water Quality Guidelines	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.1.3.5.1	Commercial Business Units	Have nil reportable incidents in accordance with NSW Health agreed protocols	100%	100%	No reportable incidents	On Track

# 2.2: Advocate for social inclusion and fairness

#### 2.2.1: Support and advocate for all community sectors

Code	Operational Plan Action 2021-2022	Progress	Status
2.2.1.1	Implement the Community Inclusion Plan	75%	





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Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.2.1.1.1	Community	Embed the Community Inclusion Committee and develop reconciliation action plan	100%	100%	The Community Inclusion Committee is no longer functioning as per a Council Resolution at the March OCM, however still a group that is engaged with when required to support Community initiatives. PMHC Has registered with Reconciliation Australia to start the development of the Reconciliation Action Plan.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.2.1.3	Through the Community Inclusion Plan coordinate the Community grants program to assist the community to deliver projects that contribute to a sense of place	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.2.1.3.1	Community	Deliver Community Grants Program through two rounds per year	100%	100%	2021-2022 round 2 Community Grants program was open from 28 February 2022 to 20 March 2022. Grants have been assessed with a report going to April OCM.	On Track

2.3: Provide quality programs, community facilities and public spaces, e.g. for example, community halls, parks and vibrant town centres

2.3.1: Ensure access to community facilities and activities: including access to natural environment

Code	Operational Plan Action 2021-2022			
2.3.1.1	Disabled Access - Buildings/Recreation Facilities	75%		



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.1.1.1	Community	Review and implement the actions as per the Disability Inclusion Action Plan	100%	100%	All actions in the 2017-2021 DIAP have been implemented and a review is currently underway for the 2022-2026 DIAP. From the Disability Access Budget \$60,000 towards accessible lift at Vince Inmon Club House in Laurieton and \$30,000 towards accessible toilets at Log Wharf.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.1.2	Through the Community Inclusion plan continue to manage Community Halls	50%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.1.2.1	Community	Review current Community Halls management structure. Complete EOI to convert Hall Management to community.	100%	50%	Property Team are in the process of reviewing the leasing/management structure of the Community Halls, however due to other priorities this review has been delayed.	Off Track

2.3.2: Provide a range of inclusive sporting and recreational opportunities and facilities to encourage a healthy and active lifestyle

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.2.2	Deliver sporting facility renewal and upgrades program across the LGA - Vince Inmon Sporting Fields - Sports Facility Upgrade - Sporting Infrastructure Renewals Allocated	65%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.2.2.1	Community	Deliver project to approved project plan	100%	100%	Project progressing as per approved project plan	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.2.3	Manage the Mayor's Sporting Fund	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.2.3.1	Recreation, Property & Buildings	Distribute funds as required and coordinate fundraising events	100%	100%	Mayor's Sporting Fund recommenced meetings (following the 2021 Council election hiatus) to consider applications and recommendations to distribute funds to eligible youth. Discussions commenced on planning for fundraising activities to take place later in 2022.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.2.4	Undertake regional master planning for recreational facilities	75%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.2.4.1	Recreation, Property & Buildings	Deliver project according to approved project plan	100%	100%	Bain Park Master Plan Complete Bonny Hills Reserves Master Plan is progressing as per approved project plan	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.2.6	Woodlands Reserve - Tennis Club Repairs - Insurance	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.2.6.1	Recreation, Property & Buildings	Deliver project to approved project plan	100%	100%	Tennis court completed, now working with other stakeholders to use remaining funds on the clubhouse, all works to be completed prior to 30 June 2022	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.2.7	Laurieton Sports Complex - Multi- Purpose Court	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.2.7.1	Recreation, Property & Buildings	Deliver project to approved project plan	100%	100%	Completed	On Track

Not Due to Start Progressing on Schedule Ormpleted Off Track

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Code	Operational Plan Ac	tion 2021-2022					Progress	Status
2.3.2.12	McInhemey Park - Contribution to public amenities in new boat storage facility 25%							
Code	Lead Responsibility	Corporate Performance Indicator	Target	Actual	Comments			Progress

	Responsibility	(CPI)				
2.3.2.12.1	Recreation, Property & Buildings	Contribution in accordance with agreed project milestones	100%	100%	Weather has continued to impact delivery of this project. Works now due for completion second quarter of 2022	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.2.13	Westport Park - boat ramp parking upgrade	85%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.2.13.1	Recreation, Property & Buildings	Deliver project according to approved project plan	100%	85%	Project seeking approval of funding variation from TfNSW for works which are identified as "if funding permits"	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.2.14	Port Macquarie Regional Sports Stadium Upgrade	40%	

Not Due to Start Progressing on Schedule Completed Off Track

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.2.14.1	Recreation, Property & Buildings	Deliver project to approved project plan	100%	25%	Works continue on damaged concrete tilt panels and their support brackets with waterproofing to follow. Further works will not start this year till funding for new seating is known, a carryover of remaining funds will be required post 30 June 2022	Off Track

#### 2.3.3: Develop and implement management of operational and maintenance programs for open space, recreational and community facilities

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.3.1	Undertake the maintenance program for parks including parks signage, reserves and sporting fields	50%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.3.1.	1 Recreation, Property & Buildings	Deliver program, including beach cleaning and playground inspections according to approved maintenance schedules	100%	100%	Parks staff focus in this quarter has been on: -Mowing parks, reserves, roadsides, buffer/link areas. -Medians, estates and CBD garden maintenance including hedging weed treatment mulching and planting -Sportsfield preparations for summer sports, including mowing, line marking and pesticide treatment -Playground inspections and identified works completed for school holidays. -Mowing of all cemeteries for seasonal growth. -CRM inspections and completion of works required.	On Track
					-Cleaning of bubblers, bins and parks furnishings. -Storm cleanups from march events , town Beach, repairs to safety fences at other flood damaged assets,	

Not Due to Start Progressing on Schedule Completed Off Track

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
					eg Westport park, Kooloonbung Ck boardwalks, -Assisting flood recovery team with Parks asset inspections -Event preparations for weddings, markets, Nitro Circus etc	

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.3.2	Undertake scheduled and reactive maintenance programs of all Council-owned buildings including office furniture replacement	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.3.2.1	Recreation, Property & Buildings	Provide office furniture replacement within two weeks of the request	100%	100%	Funds were reserved for the influx on staff returning to the admin building post COVID, we have enough funds to meet demand and will be able to stay within nominated budget	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.3.3	Undertake building rectification works in line with Council Asset Management - multi-year project	75%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.3.3.1	Recreation, Property & Buildings	Deliver project according to approved project plan	100%	100%	Works proceeding as per our nominated timeline and within budget, all works will be completed prior to 30 June 2022	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.3.4	Provide, maintain and manage public aquatic facilities	50%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.3.4.1	Recreation, Property & Buildings	Undertake quarterly meeting to oversee the management of Council's public aquatic facilities in accordance with lease obligation checklist	100%	100%	Meetings were held remotely due to COVID	On Track
2.3.3.4.2	Recreation, Property & Buildings	Undertake annual off-season facility maintenance in accordance with approved program to ensure facility is fit for purpose	100%	100%	Maintenance undertaken in off-season	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.3.5	Deliver park furniture renewals across the local government area, including donated seats program	80%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.3.5.1	Recreation, Property & Buildings	Deliver replacement program according to approved schedule	100%	100%	Project progressing as per approved project plan	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.3.6	Parks and Open Space Upgrades	90%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.3.6.1	Recreation, Property & Buildings	Blair Reserve Provision of Accessible Amenities - Deliver project to approved project plan	100%	100%	Project progressing as per approved project plan	On Track
2.3.3.6.2	Recreation, Property & Buildings	Town Beach Park, Stewart Street - Deliver project to approved project plan	100%	100%	Project complete - defects under action	On Track
2.3.3.6.3	Recreation, Property & Buildings	Bonny Hills Community Hall Reserve- Playground - Deliver project to approved project plan	100%	100%	Project complete	On Track
2.3.3.6.4	Recreation, Property & Buildings	Narran Park - Playground Replacement - Deliver project to approved project plan	100%	100%	Project complete	On Track
2.3.3.6.5	Recreation, Property & Buildings	John Dick Reserve Playground Replacement - Deliver project according to approved project plan	100%	100%	Project completed	On Track

Not Due to Start Progressing on Schedule Completed

Off Track

Code	Code Operational Plan Action 2021-2022						
2.3.3.9	2.3.3.9 Implement maintenance programs for boat ramps, wharves and jetties						
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress
2.3.3.9.1	Recreation, Property & Buildings	Deliver programs according to approved maintenance and schedule (for boat ramps, wharves and jetties)	100%	100%	Works delivered on budget. Works schedule bas inspections and assessment criteria from Counc and stormwater risk rating and road hierarchy s	cil's road	On Track

Code	Operational Plan Action 2021-2022			
2.3.3.10	Undertake the maintenance program for beaches			

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.3.10.1	Recreation, Property & Buildings	Undertake beach and beach access maintenance as per program	100%	100%	Beach cleaning and sign inspection is ongoing as part of the summer season.	On Track
2.3.3.10.2	Recreation, Property & Buildings	Undertake inspections of beach access signs	100%	100%	Signs inspected and replaced as required for the summer season	On Track



Code	Operational Plan Action 2021-2022			
2.3.3.12	Thrumster Sports Fields - Detailed design and approvals - multi-year project			

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.3.12.1	Recreation, Property & Buildings	Deliver project according to approved project plan	100%	100%	Progressing in accordance with project plan	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.3.17	7 Carry out improvement and expansion works at Wauchope and Laurieton and other outlying cemeteries		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.3.17.1	Customer Experience & Communications	Deliver projects according to approved project plan	100%	100%	Progressing as scheduled	On Track



Code	Operational Plan Action 2021-2022	Progress	Status
2.3.3.18	Administration of public roads, public spaces, events and customer engagement: - Section 138 Road Applications - Road Encroachments - Customer Enquiries and Responses - Other Statutory Road Functions - Road Policies	60%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.3.18.1	Infrastructure Planning	Responding to enquiries and issuing relevant permits within required service standards (these are not fully defined)	100%	60%	Due to the ongoing deterioration of the roads due to weather events the number of customer enquires has increased considerably and response time has begun to extend.	Off Track

Code	Operational Plan Action 2021-2022				
2.3.3.19	Review and update the policy that governs how we operate our public cemeteries 5				

Со	de	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3	3.3.19.1	Customer Experience & Communications	Policy completed end of Q3	100%	100%	Progressing as scheduled	On Track



Code	Operational Plan Action 2021-2022			
2.3.3.20	Plans of Management for Council Crown Reserve Sites 5			

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.3.20.1	Recreation, Property & Buildings	Plans of Management for Council Crown Reserve Sites undertaken as required	100%	100%	Draft Plans of Management are with Crown Lands for review and approval to proceed to public exhibition	On Track

#### 2.3.4: Plan, investigate, design and construct open spaces, recreational and community facilities

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.7	Googik Track	25%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.4.7.1	Recreation, Property & Buildings	Deliver project to approved project plan	100%	100%	Invoice received from NPWS for Council contribution for works to be undertaken in 2022	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.8	Hastings Regional Sporting Complex	100%	

	Not Due to Start		Progressing on Schedule		Completed		Off Track	
-		-		-		-		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.4.8.1	Recreation, Property & Buildings	Deliver project to approved project plan	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.12	Port Macquarie Town Centre Master Plan (TCMP) improvements - Foreshore Walk	60%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.4.12.1	Recreation, Property & Buildings	Deliver project according to approved project plan	100%	100%	Project progressing as per approved project plan	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.14	Port Macquarie Pool - Continuation of Strategic Concept and Business Case development       20%		



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.4.14.1	Recreation, Property & Buildings	Deliver project according to approved project plan	100%	80%	Some delay in coordinating the Councillor briefing. Now scheduled for Apr 22.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.18	Rainbow Beach Sports Fields - Commence construction of District Facilities       15%		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.4.18.1	Recreation, Property & Buildings	Deliver project according to approved project plan	100%	100%	Progressing as scheduled	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.22		75%	
	Gardens		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.4.22.1	Recreation, Property & Buildings	Parks and Gardens Future Designs preparation undertaken as required	100%	100%	Funding drawn down on as required to support future design & delivery functions	On Track



Code	Operational Plan Ac	perational Plan Action 2021-2022						
2.3.4.25	Town Green Central & West/Playground							
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress	
2.3.4.25.1	Recreation, Property & Buildings	Deliver project according to approved project plan	100%	100%	Project progressing as per approved project pla		On Track	

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.26	Park and Reserve Upgrades - Pioneer Park, Log Wharf & Long Flat Recreation Grounds	95%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.4.26.1	Recreation, Property & Buildings	Deliver project according to approved project plan	100%	100%	Pioneer park complete, Long Flat construction underway, Log Wharf commenced planning	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.27	Detailed design - Bain Park revitalisation, Westport Park, Town Beach Amphitheatre	5%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.4.27.1	Recreation, Property & Buildings	Deliver project according to approved project plan	100%	50%	Project planning put on hold by Council during this reporting period. Recommencement of this project subject to further Council direction/resolution.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.28	Town and Village Signage - Finalise the Installation of Signage in the Local Government area	45%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.4.28.1	Community	Deliver town and village signage to the northern region of LGA to complete the signage project by 30 June 2022	100%	100%	On Track: RFQ completed with preferred supplier selected and will complete with project by June 2022	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.29	Lake Cathie Community Reserve Basketball Court	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.4.29.1	Recreation, Property & Buildings	Deliver project according to approved project plan	100%	100%	Project completed	On Track



Code	Operational Plan Action 2021-2022						Statu		
2.3.4.30	2.3.4.30 Town Beach Reserve Basketball Courts 100%								
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progres		
2.3.4.30.1	Recreation, Property & Buildings	Deliver project according to approved project plan	100%	100%	Project completed		On Track		

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.31	Wayne Richards Park Bike Track Upgrade	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.4.31.1	Recreation, Property & Buildings	Deliver project according to approved project plan	100%	100%	Project completed	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.32	Bonny Hills Reserve Master Plan - Landscaping Improvements	65%	



Co	ode	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.	.3.4.32.1	Recreation, Property & Buildings	Deliver project according to approved project plan	100%	100%	Project progressing as per approved project plan, slight delay due to competing priorities due for completion June 2022	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.33	CSU-Googik Connection Consultancies COVID RELIEF RESERVE FUNDING	80%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.4.33.1	Recreation, Property & Buildings	Completion of detailed design for the Googik - CSU connection	100%	100%	Planning and design work is nearing completion. Discussions are continuing with stakeholders about property interfaces. It is anticipated the design will be completed in Q4.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.35	Aquatic facilities - renewal of assets at end of useful life	50%	

Not Due to Start	Progressing on Schedule	Completed	Off Track

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.4.35.1	Recreation, Property & Buildings	Carry out reactive maintenance for pool components at end of useful life	100%	100%	Maintenance works being undertaken across the four pool sites	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.36	Undertake building rectification for 1 Commerce St Building	50%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.4.36.1	Recreation, Property & Buildings	Rectification works as per building inspection on purchase by June 2022	100%	100%	Works are proceeding with allocated budgets and will be completed prior to 30 June 2022	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.37	Camden Haven Surf Life Saving Clubhouse - connect to sewer	25%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.4.37.1	Recreation, Property & Buildings	To be completed as per completion of Development Application	100%	25%	Location and construction of sewer pump station cannot proceed until confirmation of the new Camden Haven SLSC is known. Council is still waiting clarification from Department of Lands	Off Track

Not Due to Start Progressing on Schedule Completed

pleted Off Track

Code	Operational Plan Ac	erational Plan Action 2021-2022 F					
2.3.4.38	8 Kendall Tennis Club Upgrade						
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	1	Progress
2.3.4.38.1	Recreation, Property & Buildings	Deliver project according to approved project plan	100%	100%	Construction complete. Official opening held Friday 18 February 2022		On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.39	North Shore Fish Cleaning Table	90%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.4.39.1	Recreation, Property & Buildings	Deliver project to approved project plan	100%	100%	Project progressing as per approved project plan.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.4.40	Accessible Ramp - Tacking Point Lighthouse	75%	

Not Due to Start Progressing on Schedule Completed Off Track

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.4.40.	1 Recreation, Property & Buildings	Deliver project to approved project plan	100%	100%	Project progressing as per approved project plan	On Track

# 2.3.5: Plan and deliver innovative library services that cater for new technology and growing population

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.5.1	Provide a range of library programs and lending services across the local government area. Includes: maintenance of the collection; management of the facility; delivery of services, programs and events; furniture and fixings.	75%	
	management of the facility; delivery of services, programs and events; furniture and fixings.		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.5.1.1	Community	Annual library events program delivered	100%	100%	Full programs are now back in place across the three libraries.	On Track
2.3.5.1.2	Community	Increase Library membership by 5% annually	100%	100%	library membership is slowly increasing as the community comes out of COVID restrictions.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.5.2	Provide a range of library programs and lending services across the local government area. That include the maintenance of the collection, management of the facility and delivery of services, programs and events. Purchase of Library Books (multi-year project) To provide book stock at NSW State average per capita as a minimum level. Furniture and Fixings	75%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.5.2.1	Community	Complete book purchases by 30 June 2022	100%	100%	Book purchasing is on schedule. 70% of budget committed.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.5.4	Implement the Library Strategic Plan	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.5.4.1	Community	Implement actions as per the Library Strategic Plan, e.g. determine future library needs for Rainbow Beach and Sovereign Hills	100%	100%	Kiosk installed at Lake Cathie Community Hall. Sovereign Hills Delayed.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.5.7	Deliver Special Library Projects to enhance library delivery program	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.5.7.1	Community	Deliver Special Library Projects to enhance library delivery program through redesign and inclusion of new elements in the library spaces	100%	100%	Progressing as scheduled.	On Track



Code	Operational Plan Action 2021-2022						Status	
2.3.5.8	3 Creation of anytime library to provide resources to our other communities in Sovereign Hills and Lake Cathie 50%							
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress	
2.3.5.8.1	Community	That the creative library solutions are implemented at the defined location in Lake Cathie and Sovereign Hills in accordance with grant timelines	100%	50%	Lake Cathie Kiosk installed. Sovereign Hills has been delayed by lack of D.A, working with Lewis Land group to deliver this project. Revised timeframe is September 22.		Off Track	

#### 2.3.6: Support a range of inclusive community activities and programs

Code	Operational Plan Action 2021-2022	Progress	Status
2.3.6.5	Hamilton Green Projects	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.3.6.5.1	Community	Hamilton Green Maintenance Project undertaken	100%	100%	Working with the management committee on priorities for the second half of the Financial Year which includes looking at drainage issues	On Track
2.3.6.5.2	Community	Hamilton Green Enhancement Project undertaken	100%	100%	Concept designs have been completed, working with management group to source funds to progress to the detailed design step.	On Track



Code	Operational Plan Action 2021-2022					Progress	Status
2.3.6.11	ort Macquarie Hastings (PMH) Cares COVID RELIEF RESERVE FUNDING						
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress
2.3.6.11.1	Community	Develop Volunteer Program to support community members impacted by disaster or social issues	100%	100%	PMH Cares Volunteer program is underway with approximately 8 volunteers out in the communit review of this program in underway to look at gro the program however attracting new volunteers difficult in the current climate.	y. A owing	On Track

# 2.4: Empower the community through encouraging active involvement in projects, volunteering and events

2.4.1: Work with the community to identify and address community needs in order to inform Council processes, services and projects

Code	Operational Plan Action 2021-2022	Progress	Status
2.4.1.1	Support and connect with our community through delivering the actions outlined in the Community Inclusion Plan 7		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.4.1.1.1	Community	Implement Events and Volunteering programs to encourage residents to actively contribute to their community	100%	100%	Currently recruiting members for the Graffiti Blasters Program with 6 residents going to be inducted mid-April.	On Track



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.4.1.1.2	Community	Increase volunteers by 10%	100%	50%	Recruitment is currently underway for Graffiti Blasters however residents are reluctant to sign up for volunteer opportunities with COVID still being a risk in the community	Off Track
2.4.1.1.3	Community	The community events delivered annually	100%	100%	Splashfest Youth Events were delivered over the summer school holidays which attracted hundreds of local youth.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.4.1.8	Design the Strategic Education Program	50%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.4.1.8.1	Community	Complete the design of the Annual Education program that influences community behaviours, including the Schools Program	100%	100%	The annual plan is on continually reviewed and is still on target	On Track

# 2.5: Promote a creative and culturally rich community

#### 2.5.1: Support cultural activities within the community



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Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.5.1.1.1	Economic & Cultural Development	Deliver the 'lost at sea' art piece	100%	100%	Three submissions refined and presented to the Professional Public Art Reference Panel, final design has been selected, references are being checked and commissioning agreement in train.	On Track
2.5.1.1.2	Economic & Cultural Development	Deliver maintenance as per asset management plan priorities and established budget	100%	100%	Public Art maintenance process developed and maintenance is ongoing.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.5.1.2	Undertake Glasshouse back of house maintenance; Plant and Equipment Purchases; Technical Equipment Purchases 7		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.5.1.2.1	Commercial Business Units	Undertake maintenance as required	100%	100%	Planned preventative maintenance on the building and equipment undertaken as required.	On Track
2.5.1.2.2	Commercial Business Units	Upgrade Glasshouse foyer seating by 30 June 2022	100%	100%	Procurement process complete, awaiting delivery of the new furniture in 4th quarter 2021-22.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.5.1.3	Manage the delivery of a range of high quality performing and visual arts events at the Glasshouse in consideration of Council's Glasshouse Plan and Cultural Plan	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.5.1.3.1	Commercial Business Units	Deliver the exhibition program as per the annual gallery program (20 exhibitions)	100%	100%	The Glasshouse Regional Gallery has presented the following exhibitions as per the annual visual arts program: Mating Dance - Anna Willi Highfield You Already Know - Liam Benson Explore, Excite, Summer Creative Learning Program - 29 events	On Track
2.5.1.3.2	Commercial Business Units	Deliver the performing arts program as per the annual season launch (15 events)	100%	100%	The Glasshouse Performing Arts Program presented the following events as per the 2022 annual theatre season: Annual Launch event The Wharf Review - 2 performances Adelaide Writers Week live stream - 24 sessions Guess How Much I Love You - 2 performances The Celebration of Swing Girls With Altitude - 3 performances	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.5.1.4	Commence development of new Cultural Plan	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.5.1.4.1	Economic & Cultural Development	Finalise new Cultural Plan	100%	100%	New Cultural Plan complete and adopted	On Track



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.5.1.4.2	Economic & Cultural Development	Implement plan working with the Cultural Steering Group and key stakeholders and report annually to Council	100%	100%	Implementation continues, noting the dissolution of the Cultural Steering Group.	On Track

Code	Operational Plan Action 2021-2022		Status
2.5.1.6	Bicentenary Activities	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.5.1.6.1	Economic & Cultural Development	Bicentenary activities delivered according to the adopted events plan	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022			
2.5.1.7	Wauchope Bicentenary Riverside Sculptural Trail			

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.5.1.7.1	Economic & Cultural Development	Wauchope Bicentenary Riverside Sculptural Trail delivered according to the adopted project plan	100%	100%	Project complete with only the audio guide still pending noting additional conversations needed with the local aboriginal community.	On Track



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Code	Operational Plan Action 2021-2022	Progress	Status
2.5.1.8	Art Walk	75%	
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Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.5.1.8.1	Economic & Cultural Development	Artwalk annual event delivered successfully	100%	100%	Event planning on schedule for delivery on June 10th.	On Track

Code	Operational Plan Action 2021-2022		Status
2.5.1.9	Public Art Audit & Maintenance	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.5.1.9.1	Economic & Cultural Development	Implement agreed Cultural Plan actions	100%	100%	Public Art maintenance progressing, a number of tasks completed and Gateway Sculpture cleaning in planning for delivery this FY.	On Track

Code	Operational Plan Action 2021-2022		Status
2.5.1.10	Port Macquarie Cultural Precinct Plan 75		



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.5.1.10.1	Economic & Cultural Development	Deliver project according to approved project plan	100%	100%	Consultation complete and findings report is in development.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
2.5.1.11	Live and Local Music Program	80%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
2.5.1.11.1	Economic & Cultural Development	Successful delivery of series of micro-festival events, professional development programs and industry forums	100%	100%	Microfestival, professional development and industry forum completed successfully.	On Track



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# **3: Your Business and Industry**

The Port Macquarie-Hastings region is a successful place that has a vibrant, diversified and resilient regional economy for people to live, learn, work, play and invest.

# 3.1: Embrace business and a stronger economy

3.1.1: Assist the growth of local business and industry, ensuring this is a central consideration of Council activities

Code	Operational Plan Action 2021-2022	Progress	Status
3.1.1.1	Implement actions from the 2017-2021 Economic Development Strategy to lead, create and proactively support an environment that stimulates sustainable industry, business and investment growth	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.1.1.1.1	Economic & Cultural Development	Implement actions from the Economic Development Strategy and report to Council on implementation twice per year (November and May)	100%	100%	Actions from the 2017-2021 Economic Development Strategy implemented. Delivery against the new 2022- 32 Economic Development Strategy expected to commence following Council adoption.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
3.1.1.2	Finalise development of new Economic Development Strategy	90%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.1.1.2.1	Economic & Cultural Development	Finalise and commence implementation of the new Economic Development Strategy by June 2022	100%	100%	2022-32 Economic Development Strategy to be presented to April Council meeting recommending adoption.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
3.1.1.3	Tourism Product & Trade Market Development Stage2	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.1.1.3.1	Economic & Cultural Development	Deliver project to approved project plan	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
3.1.1.4	Additional Investment in Tourism PR & Marketing	90%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.1.1.4.1	Economic & Cultural Development	Deliver project to approved project plan	100%	100%	On schedule for delivery by EOFY	On Track



Code	Code Operational Plan Action 2021-2022						
3.1.1.10	3.1.1.10 Cultural Industries - Networking & Mentoring						
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress
3.1.1.10.1	Economic & Cultural Development	Deliver project to approved project plan	100%	100%	Completed		On Track

Code	Operational Plan Action 2021-2022	Progress	Status
3.1.1.11	Creative & Arts Trails Development	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.1.1.11.1	Economic & Cultural Development	Deliver project according to approved project plan	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
3.1.1.14	Christmas Tree Decoration Renewal	100%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.1.1.14.1	Economic & Cultural Development	Purchase complete	100%	100%	Completed	On Track

# 3.1.2: Optimise the use of appropriately zoned land for business uses

Code	Operational Plan Action 2021-2022	Progress	Status
3.1.2.2	Review and prepare planning proposals for specific sites within the Port Macquarie-Hastings Local Government Area based on	100%	
	priorities as determined by Council		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.1.2.2.1	Development Assessment	Report to Council bi annually on progress and status of site specific amendments	100%	100%	Next report on the status of site specific planning proposals to amend the Local Environmental Plan to be presented to Council in June 2022.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
3.1.2.3	Greenmeadows Drive - Development Planning and Feasibilities	75%	



Coo	de	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.1	2.3.1	Strategy	Consider Greenmeadows Drive appropriateness for strategy on community use assets by 30 June 2022	100%	100%	Strategic Property Portfolio Review to be undertaken in 2022.	On Track

#### 3.1.3: Implement the Major Events Strategy

Code	Operational Plan Action 2021-2022	Progress	Status
3.1.3.2	Implement the Port Macquarie-Hastings Events Plan	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.1.3.2.1	Economic & Cultural Development	Implementation of Events Plan actions relating to 'Major Events'	100%	100%	Work on the objectives in the event action plan is progressing. Including connecting our chambers of commerce with event owners to ensure that businesses know of opportunities that are available and creating ways to leverage the events. As the events spaces are increasingly sort after we are working with Parks booking teams and event owners to ensure a good outcome for the grounds and all users. And we are activating car parks that are require to be closed so that there is community benefit as well as economic. Considering the impact on local sporting groups and our infrastructure we have chosen some sponsorship opportunities in the next 6months that make use of the indoor stadium and beaches instead of fields.	On Track



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.1.3.2.2	Economic & Cultural Development	Successful distribution of Events Grants and Sponsorships	100%	100%	Council supported five major events during the January - March 2022 quarter. This resulted in an economic impact of approximately \$3 million to the community.	On Track
					Traditionally the Junior State Touch competition which has the second largest economic impact of Council's sponsorship portfolio, would have been in February. However, was cancelled due to consistent rains throughout summer. The NSW Senior State Touch, which has the third largest economic impact of Council's sponsorship portfolio was postponed from December until March but was also canceled due to rain.	
					The Major Events Grants had six recipients. These, plus additional grants for events that have been rolled over from the previous year, will create a vibrant and busy second half of 2022.	

#### 3.1.4: Implement the Destination Management Plan.

Code	Operational Plan Action 2021-2022	Progress	Status
3.1.4.1	Work with stakeholders to implement actions from the Destination Management Plan in accordance with the identified strategic outcomes	75%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.1.4.1.1	Economic & Cultural Development	Implement actions within the Destination Management Plan (DMP)	100%	100%	Work continues to deliver the DMP actions.	On Track
3.1.4.1.2	Economic & Cultural Development	Increase year on year website visits by 15%	100%	100%	Monitoring continues, many changes are taking place in the online advertising and search space. This and campaign activity will impact on final result.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
3.1.4.2	Finalise Greater Port Macquarie Brand Review and Marketing Strategy	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.1.4.2.1	Economic & Cultural Development	New brand developed	100%	100%	New Brand endorsed by Council and Guidelines finalised.	On Track
3.1.4.2.2	Economic & Cultural Development	Marketing Strategy finalised	100%	100%	Procurement complete and project in progress as planned.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
3.1.4.4	Finalise and implement the public spaces interpretation strategy and guidelines - COVID RELIEF RESERVE FUNDING	50%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.1.4.4.1	Economic & Cultural Development	Strategy and guidelines developed	100%	100%	Project is in progress	On Track
3.1.4.4.2	Economic & Cultural Development	Commence installation of new interpretive signs/assets in accordance with established budget	100%	100%	Additional signage installed along the Wauchope Bicentennial Riverside Sculpture trail as planned.	On Track

# 3.2: Create vibrant and desirable places

#### 3.2.1: Support vibrant commercial, tourism, recreational and/or community hubs across the region

Code	Operational Plan Action 2021-2022	Progress	Status
3.2.1.4	Port Macquarie Lumiere Night Time Installation (Multi-year project)	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.2.1.4.1	Economic & Cultural Development	Deliver project to approved project plan	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
3.2.1.6	Tourism & Culture Development Project Officer	100%	



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Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.2.1.6.1	E Economic & Cultural Development	Recruitment completed and allocated projects delivered	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
3.2.1.7	Renew the Maps at 'Comboyne Plateau'	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.2.1.7.1	Community	Deliver project to approved project plan	100%	75%	A community workshop was held with the artist and community members in March. The project is progressing on schedule	On Track

# 3.3: Embrace opportunity and attract investment to support the wealth and growth of the community

3.3.1: Develop, manage and maintain Port Macquarie Airport as a key component of the regional transport network and continue to grow the airport's contribution to the regional economy.

Code	Operational Plan Action 2021-2022	Progress	Status
3.3.1.1	Continue to monitor, plan and implement the Port Macquarie Airport Master Plan to meet demand and regulatory requirements - (multiyear project)	75%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.3.1.1.1	Commercial Business Units	Undertake further planning and investigate the business case for an expansion of the General Aviation (GA) precinct to provide for new hangar development sites	100%	100%	Concept design complete, with further investigation of business case planned in Q4 2021/22. Briefing with Councillors scheduled for May 2022 for consideration in conjunction with other priorities.	On Track
3.3.1.1.2	Commercial Business Units	Finalise relocation of the existing Bureau of Meteorology weather station (AWIS)	100%	100%	Completed.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
3.3.1.2	Support, facilitate and advocate for regular public transport (RPT) airline services at Port Macquarie Airport	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.3.1.2.1	Commercial Business Units	Annual passenger numbers compared to previous year	2%	14%	On schedule against 2020/21, noting both years impacted by COVID-19 travel restrictions. March 2022 passenger numbers at 64% of March 2019 pre-COVID level.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
3.3.1.4	Port Macquarie Airport Parallel Taxiway Stage 1 and General Aviation (GA) - pavement renewal - finalise pre-construction - (multiyear project)	75%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.3.1.4.1	Commercial Business Units	Finalise pre construction planning and design of Stage 1 parallel taxiway and General Aviation pavement renewal by 30 June 2022	100%	100%	Detailed design complete and DA approved. Major civil contractor tender issued on 8 March 2022.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
3.3.1.5	Continue to monitor, plan and implement the Port Macquarie Airport Biodiversity Certification Strategy and related environmental approvals	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.3.1.5.1	Commercial Business Units	Prepare Vegetation Management Plan in accordance with NSW Biodiversity & Conservation Division (BCD) requirements	100%	100%	Completed	On Track
3.3.1.5.2	Commercial Business Units	Prepare a Threatened Allocasuarina Management Strategy in accordance with Australian Government Department of Environment requirements	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
3.3.1.6	Operate and maintain Port Macquarie Airport in accordance with regulatory, safety and security requirements Maintenance and refurbishment of Council-owned Hangars	75%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.3.1.6.	1 Commercial Business Units	Carry out maintenance/refurbishment of Council owned hangars as required	100%	100%	Hangar maintenance undertaken as required.	On Track
3.3.1.6.	2 Commercial Business Units	Ensure airport operational manuals are reviewed by 30 June	100%	100%	Airport Operations Manual and Transport Security Program updated as required.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
3.3.1.7	Finalise development planning for the Port Macquarie Airport Business and Technology Park - (multi-year project)	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.3.1.7.1	Commercial Business Units	Brief Councillors on the proposed Airport Business & Technology Park by 30 June 2022	100%	100%	Councillor Briefing planned for May 2022.	On Track

3.4: Partner for success with key stakeholders in business, industry, government, education and the community

3.4.1: Foster partnerships with higher education institutions through research and development, innovation and local skills development

Code	Operational Plan Action 2021-2022	Progress	Status
3.4.1.2	Partner with Charles Sturt University in delivering the Port Macquarie Innovation Hub.	75%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.4.1.2.1	Economic & Cultural Development	Maintain co-working use	100%	100%	The Hub Business and Co-working Centre is now operating at normal capacity with a strong subscriber base.	On Track
3.4.1.2.2	Economic & Cultural Development	Support and grow innovation events and opportunities	100%	100%	Council ran a successful Hub Open Night on 24th March with Innovation Expert Nils Vesk as part of NSW Small Business Month. This event - developed with support from Charles Sturt University - attracted a significant turnout from across the business community to learn simple techniques to increase business innovation.	On Track

# 3.4.3: Encourage innovation that will support our growth as a regional city including smart community technology

Code	Operational Plan Action 2021-2022	Progress	Status
3.4.3.3	Implement Council's Smart Community Roadmap	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.4.3.3.1	Economic & Cultural Development	Smart Communities Initiatives developed and implemented in accordance with priorities identified in Roadmap	100%	100%	A range of Smart Community initiatives being commenced across Council in line with priorities identified in the Smart Community Roadmap.	On Track



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Code	Operational Plan Action 2021-2022	Progress	Status
3.4.3.4	CBD Wi-Fi - Wauchope, Laurieton, expand Port	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
3.4.3.4.1	Economic & Cultural Development	Deliver project according to approved project plan (managed by DT)	100%	100%	Project is on track for delivery.	On Track



# 4: Your Natural and Built Environment

A connected, sustainable, accessible community and environment that is protected now and into the future.

4.1: Provide (appropriate) infrastructure and services including water cycle management, waste management, and sewer management

4.1.1: Plan, investigate, design and construct water supply assets ensuring health, safety, environmental protection and security of supply for the future growth of the region.

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.1.1	Construction planning for the Sancrox Reservoir to Area 13 (Thrumster) trunk main (DN750)	5%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.1.1.1	Infrastructure Planning, (Project Delivery)	Resolution of land matters and approval of detailed project plan	100%	100%	On track with acquisitions and project planning.	On Track

C	ode	Operational Plan Action 2021-2022	Progress	Status
4	1.1.1.4	Installation of new water supply services to residential and business premises to cater for new development	75%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.1.4.1	Infrastructure Planning	Delivery of works as required to support development	100%	100%	Executed as required	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.1.16	Thrumster Reclaimed Water Interim Supply - Rising Main to Thrumster Reservoir - Booster Pumping Station and Interim Reservoir - undertake construction	95%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.1.16.1	Infrastructure Planning, (Project Delivery)	Completion of construction	100%	100%	Construction on track for completion next reporting period. Commissioning to extend into 22/23 FY	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.1.26	Continue construction of the Southern Arm Trunk Main (DN750) - Pacific Hwy to Bonny Hills	40%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.1.26.1	Infrastructure Planning, (Project Delivery)	Completion of detailed designs and approval of detailed project plan for construction	100%	80%	Land matters associated with the revocation of the NPWS property required for this project have delayed the preconstruction planning during this reporting period.	Off Track



Code	Operational Plan Action 2021-2022						Status
4.1.1.27	Commencement of design for the Water treatment/Filtration Plant at Cowarra Dam						
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress
4.1.1.27.1	Infrastructure Planning	Approval of detailed project plan and completion of concept designs	100%	50%	Project inception/initiation has been delayed while additional project management resourcing has been progressed during this reporting period, The realignment of utilities project sponsorship arrangements have now been finalised and project planning recommenced.		Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.1.28	Preconstruction Works - Trunk Main from Bonny Hills to Kew (Area 12) Reservoir - Stage 1		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.1.28.1	Infrastructure Planning, (Project Delivery)	Completion of detailed designs for Stage 1	100%	80%	Working through procurement and contract planning for design engagement.	Off Track



Code	Operational Plan Action 2021-2022	Progress	Status	
4.1.1.31	Water Supervisory Control and Data Acquisition (SCADA) System - Replacement			

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.1.3	1.1 Infrastructure Planning	Completion of system replacement	100%	40%	Project delayed due to staff focus on other project priorities during this period.	Off Track

Code	Operational Plan Action 2021-2022			
4.1.1.35	5 Preconstruction of Widderson St Reservoir Roof Replacement			

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.1.35.1	Infrastructure Planning, (Infrastructure Operations)	Completion of detailed design	100%	15%	Project inception remains delayed while recruitment of additional project management resourcing has progressed. This project was not identified by the Executive as a priority to progress until additional resources are secured.	Off Track

Code	Operational Plan Action 2021-2022			
4.1.1.36	Water critical infrastructure - Site Security Upgrades			



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.1.36.1	Infrastructure Planning, (Infrastructure Operations)	Completion of programmed works	100%	100%	Fence installation progressing at North Haven Booster along with enabling works at other sites	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.1.42	Installation of Baffles within Reservoirs to ensure chlorination contact time for disinfection		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.1.42.1	Infrastructure Operations	Completion of programmed works	100%	100%	Hunter H20 progressing with design	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.1.43	Annual Energy Efficiency Initiatives Allocation - Variable Speed Drive Pumps - Water sites	55%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.1.43.1	Infrastructure Operations	Deliver project according to approved project plan	100%	100%	Project progressing at with installation of variable speed drives at Cowarra Dam and Koree Island	On Track



Code	Operational Plan Action	on 2021-2022				Progress	Status
4.1.1.46	Bonny Hills Recycled	Water System Upgrade				100%	
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress
4.1.1.46.1	Infrastructure Planning, (Project Delivery)	Deliver project according to approved project plan	100%	100%	Some delays in commissioning this project were experienced. Construction Contract completion milestone has been exceeded by the contractor. performance testing has completed in this report period. Complete	Proof of	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.1.47	Bulk water system chlorination upgrade	10%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.1.47.1	L Infrastructure Planning, (Infrastructure Operations)	Completion of construction works	100%	50%	Project delayed in preconstruction phase, construction works to proceed in 22/23.	Off Track



Code	Operational Plan Action 2021-2022	Progress	Status
4.1.1.48	8 Commence preconstruction for an elevated reservoir at Bonny Hills 59		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.1.48.1	Infrastructure Planning, (Project Delivery)	Approval of detailed project plan and commencement of concept designs	100%	50%	Project inception remains delayed while recruitment of additional project management resourcing has been progressed. This project was not identified by the Executive as a priority to progress until additional resources are secured.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.1.49	Commence preconstruction works for the Kew (Area 15) Reservoir 5%		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.1.49.1	Infrastructure Planning, (Project Delivery)	Approval of detailed project plan and commencement of concept designs	100%	50%	Project inception remains delayed while recruitment of additional project management resourcing has been progressed. This project was not identified by the Executive as a priority to progress until additional resources are secured.	Off Track



Code	Operational Plan Action 2021-2022	Progress	Status
4.1.1.50	Construction of Rock Ramp to secure water level at Koree Island Pumping Stations Intake Pool 60%		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.1.50.1	Infrastructure Planning, (Project Delivery)	Completion of survey works - dependent on river water levels	100%	100%	Scope modified. Design to be finalised by end of FY	On Track

Code	Operational Plan Action 2021-2022 Pr		Status
4.1.1.52	Microwave link Cowarra to Rosewood	20%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.1.52.1	Infrastructure Planning, (Infrastructure Operations)	Completion of programmed works	100%	40%	Project plan prepared but behind schedule	Off Track

Code	Perational Plan Action 2021-2022 P				
4.1.1.53	Pre Construction of Cowarra to Wauchope Backfeed PS	0%			



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.1.53.1	Infrastructure Planning, (Infrastructure Operations)	Completion of detailed designs	100%	0%	Project inception delayed while additional specifically focused, project management resourcing is sourced.	Off Track

Code	Operational Plan Action 2021-2022 P				
4.1.1.54	Undertake asset revaluations for water supply network	60%			

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.1.54.1	Infrastructure Planning	Completion of revaluation to the required standard for external audit	100%	80%	Draft report provided to PMHC for review. Minor delay due to reprioritisation of resources, anticipate rectification by EOFY.	Off Track

#### 4.1.2: Develop and implement annual maintenance and preventative works program for water supply assets

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.2.1	Conduct water asset replacement and renewal programs for live water mains, water meters, renewals and minor works, pumps and switchboards - Water Mains Relocations - Renewals - Live Water Mains; Water Meters; Minor Works - Annual Switchboard Replacement Program - Smart Metering System roll out - \$150,000	60%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.2.1.1	Infrastructure Planning, (Infrastructure Operations)	Completion of programmed works	100%	100%	Asset renewals being undertaken as required	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.2.2	Carry out programmed replacement of Water Treatment Plant (WTP) electrical and mechanical assets	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.2.2.1	Infrastructure Operations	Completion of programmed works	100%	100%	Asset replacement progressing as required	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.2.3	Marbuk Motorised Valve Relocation	55%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.2.3.1	Infrastructure Operations	Completion of programmed works	100%	60%	Minor delays experienced. Equipment arrived onsite and was incorrect, awaiting correct equipment to arrive (lead time of up to 6 weeks).	Off Track



Code	Code Operational Plan Action 2021-2022						Status
4.1.2.4	4.1.2.4 Property Acquisition associated with the Sancrox Reservoir to Wauchope Trunk Main Augmentation and mechanical assets 100						
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress
4.1.2.4.1	Infrastructure Planning, (Project Delivery)	Completion of programmed works	100%	100%	Complete		On Track

4.1.3: Plan, investigate, design and construct sewerage assets ensuring health, safety, environmental protection and the future growth of the region.

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.3.3	Small Towns Sewerage Scheme Construction - Long Flat, Comboyne, Telegraph Point (multi-year project)	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.3.3.1	Infrastructure Operations	Completion of project reporting and finalisation	100%	100%	Completed	On Track



Code	Operational Plan Action 2021-2022	Progress	Status
4.1.3.18	Continuation of preconstruction of Thrumster Sewerage treatment Plant (Area 13) - Phase 1		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.3.18.1	Infrastructure Planning, (Project Delivery)	Approval of detailed project plan and commencement of treatment process scoping	100%	50%	Project inception/initiation has been delayed while additional project management resourcing has been progressed during this reporting period. The realignment of utilities project sponsorship arrangements have now been finalised and project planning recommenced.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status	
4.1.3.23	Annual Energy Efficiency Initiatives Allocation - Variable Speed Drive Pumps - Sewer Sites			

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.3.23.1	Infrastructure Operations	Completion of programmed works	100%	100%	Completed as per program	On Track

Code	Operational Plan Action 2021-2022			
4.1.3.25	Port Macquarie Waste Water Treatment Plant odour control mitigation works 7			



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.3.25.2	Infrastructure Planning, (Project Delivery)	Completion of mitigation works in accordance with EPA requirements	100%	100%	Progressing as planned	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.3.26	Preconstruction works for: - upgrade of Lake Innes Sewerage Pump Station #71 (PMSPS71) - Camden Haven Sewer Pump Station 2 Refurbishment - upgrade of Port Macquarie Sewerage Pump Station #18	20%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.3.26.1	Infrastructure Planning, (Infrastructure Operations)	Completion of concept designs and construction contract award	100%	100%	on target	On Track

Code	Operational Plan Action 2021-2022	Progress	Status	
4.1.3.28	Camden Haven Waste Water Treatment Membrane Replacements			



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.3.28.1	Infrastructure Planning, (Project Delivery)	Commencement of works	100%	100%	Membranes arrived on site, due for installation end of April	On Track

Code	Operational Plan Action 2021-2022	Progress	Status	
4.1.3.29	Preconstruction of Wauchope Waste Water Treatment Plant Inlet Rationalisation			

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.3.29.1	Infrastructure Planning, (Infrastructure Operations)	Approval of detailed project plan and commencement of concept design	100%	0%	Planning and resourcing allocation yet to commence. Project is expected to commence in Quarter 4.	Off Track

Code	Operational Plan Action 2021-2022		Status
4.1.3.30	Bonny Hills WWTP Aerator Replacements	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.3.30.1	Infrastructure Planning	Deliver project to approved project plan	100%	100%	Project complete	On Track



Code Operational Plan Action 2021-2022						Progress	Status
4.1.3.39 Sewer Critical Infrastructure Site Security Upgrades						0%	
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress
4.1.3.39.1	Infrastructure Planning, (Project Delivery)	Deliver project to approved project plan	100%	0%	Budget removed from OP		Off Track

Code	Operational Plan Action 2021-2022		Status
4.1.3.42	2 Centrifuge upgrade and Process Optimisation at PM WwTP		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.3.42.1	Infrastructure Planning, (Infrastructure Operations)	Approval of detailed project plan and commencement of investigations	100%	30%	Consultant to be engaged for investigation works	Off Track

Code	Operational Plan Action 2021-2022		Status
4.1.3.44	Installation of new Microwave Telemetry Links - Jolly Nose to BH WwTP 20%		

Not Due to Start Progressing on Schedule Completed Off Track

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Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.3.44.1	Infrastructure Planning, (Infrastructure Operations)	Deliver project to approved project plan	100%	40%	Project plan prepared but behind schedule	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.3.45	Installation of new Microwave Telemetry Links - Jolly Nose to CH WwTP	20%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.3.45.1	Infrastructure Planning, (Infrastructure Operations)	Completion of programmed works	100%	40%	Project plan prepared but behind schedule	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.3.46	Installation of new Microwave Telemetry Links - Rosewood/Bago to Wauchope WwTP		



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.3.46.1	Infrastructure Planning, (Infrastructure Operations)	Completion of programmed works	100%	40%	Project plan prepared but behind schedule	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.3.47	Integrated Water Cycle Management Strategy Delivery (Multi-Year Project)		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.3.47.1	Infrastructure Planning, (Infrastructure Operations)	Council adoption of the Integrated Water Cycle Management Strategy	100%	0%	Project has been discontinued. Delivery from consultant not to schedule, after discussions with DPIE it has been decided not to pursue this, to form a water security strategy (similar deliverables) and continue the IWCM under new guidelines once they are released.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.3.48	Kew Sewerage Treatment Plant (STP) Upgrade, Complete project planning and commence construction (Multi- Year project)		



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.3.48	.1 Infrastructure Planning, (Project Delivery)	Completion of concept designs and construction contract award	100%	100%	Concept design being completed. Procurement documents yet to be drafted.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status	
4.1.3.49	Preconstruction works for upgrade of Port Macquarie Sewerage Pumping Station #64			

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.3.49.1	Infrastructure Planning, (Project Delivery)	Deliver project to approved project plan	100%	100%	Tender evaluation due for completion this month. Pre- con and plan will be presented after tender is awarded	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.3.50	Replacement of 2nd Effluent Pump at Port WwTP	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.3.50.1	Infrastructure Planning, (Infrastructure Operations)	Completion of programmed works	100%	100%	Completed	On Track



Code	Operational Plan Act	ational Plan Action 2021-2022 Pr					Status	
4.1.3.51	Undertake asset rev	ndertake asset revaluations for sewer network 85%						
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress	
4.1.3.51.1	Infrastructure Planning	Completion of revaluation to the required standard for external audit	100%	100%	Final revaluation report being prepared for revie checking has occurred over the past several we correct several errors identified.		On Track	

Code	Operational Plan Action 2021-2022				
4.1.3.52	Thrumster STP Area 13 Augmentation Pre-Construction 0				

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.3.52.1	Infrastructure Planning	Deliver project to approved project plan	100%	0%	Pre-construction not commenced. Additional project manager engaged to work on this, as 1 of 2 high priority Water & Sewer projects	Off Track



### 4.1.4: Develop and implement annual maintenance and preventative works program for sewerage assets

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.4.1	Programmed replacement of Sewer Pumps and Electrical switchboards at Sewage Pump Stations - Sewer Pump Replacement Program - Annual Switchboard Replacement - Lid Replacement Program	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.4.1.1	Infrastructure Operations	Completion of programmed works	100%	100%	Infrastructure Upgrades progressing on schedule	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.4.4	Carry out programmed replacement of Sewer Treatment Plant (STP) electrical and mechanical assets Annual Electrical STP Asset Replacement Annual Mechanical STP Asset Replacement	60%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.4.4.1	Infrastructure Operations	Completion of programmed works	100%	100%	Mechanical and Electrical Asset Replacement being undertaken as required	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.4.5	Conduct annual sewer assets replacement and maintenance programs for Sewer Rehabilitation and Relining Works	60%	

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Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.4.5.1	Infrastructure Operations	Completion of programmed works	100%	100%	Contractor undertaking preliminary works	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.4.7	Installation of Dedicated Generators for backup power supply to Sewerage Pumping Stations CH SPS #9	40%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.4.7.1	Infrastructure Planning, (Infrastructure Operations)	Completion of installation	100%	100%	Quotes being sought for purchase	On Track

Code	Operational Plan Action 2021-2022 P				
4.1.4.8	Installation of Dedicated Generators for backup power supply to Sewerage Pumping Stations PM SPS#64				



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.4.8.1	Infrastructure Planning, (Infrastructure Operations)	Completion of installation	100%	100%	Initial quotes received	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.4.9	Develop Urban Sewer Management Plans	25%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.4.9.1	Infrastructure Planning	Completion of programmed works	100%	100%	Project planning in conjunction with the Urban Stormwater Catchment Management Plans project is underway. The services order request for the newly appointed Water and Sewer Client Side Engineering consultancy firm is currently being prepared.	On Track

### 4.1.5: Work towards planning, investigation, design, and construction of stormwater assets

Code	Operational Plan Action 2021-2022	Progress	Status		
4.1.5.6	Continue design and construction for Black Swan Terrace - Stormwater detention facility (multi-year project)				



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Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.5.6.1	Infrastructure Planning	Completion of detailed designs	100%	100%	Progressing as scheduled	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.5.12	Stormwater Remediation - 35 Hart Street	20%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.5.12.1	Infrastructure Planning	Completion of detailed designs	100%	100%	Progressing as scheduled	On Track

Code	Operational Plan Action 2021-2022	Progress	Status	
4.1.5.14	Indertaken Panorama Drive/Binbilla Drive stormwater remediation works 759			

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.5.14.1	Infrastructure Planning, (Project Delivery)	Completion of construction works	100%	100%	Design has been completed with a reduced scope. Works are to be completed by August 2022.	On Track



### 4.1.6: Develop and implement annual maintenance and renewal programs for stormwater assets

Code	Operational Pla	Operational Plan Action 2021-2022						
4.1.6.2	Undertake ann	Undertake annual canal maintenance for Settlement Shores and Broadwater canals as required						
Code	Lead	Corporate Performance Indicator	Target	Actual	Comments			Prograss

	Responsibility	(CPI)				
4.1.6.2.1	Infrastructure Planning	Undertake canal maintenance works in accordance with the rolling priority program and risk management processes	100%	80%	The Hydrographic survey has commenced in Q3. The project is flagged as a carry-over project due to delays caused by weather. Community engagement on future maintenance is planned for early-mid 2022 following completion of the hydrographic survey.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.6.7	Carry out the Stormwater Renewal Program	50%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.6.7.1	Infrastructure Planning	Completion of listed renewal works	100%	100%	Procurement activities underway with a commencement date expected in June 2022 as per program.	On Track



Code	Operational Plan Ac	tion 2021-2022			Progre	ss Status	
4.1.6.18	Carry-out stormwater maintenance program including inspections, monitoring and repair works 75%						
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress	
4.1.6.18.1	Infrastructure Planning	In accordance with adopted programs and reactive maintenance requirements based on risk	100%	100%	Works undertaken as required. The March 2021 Flood repairs are being managed by the specific flood recovery project.	On Track	
					Numerous repairs and make safe works were undertaken throughout the LGA in response to heavy rains throughout this quarter.		

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.6.19	Carry-out stormwater engineering investigations in response to identified issues from both reactive and proactive inspections	70%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.6.19.1	Infrastructure Planning	Engineering Investigations completed for all complex issues raised	100%	80%	Ongoing investigations are occurring following the March 2021 Floods, as well as recent heavy rains throughout the third quarter in early 2022.	Off Track
					Notable investigations and reviews include at Panorama Drive, Bonny Hills, and Pembrooke Road and Mooney Street, Telegraph Point.	
					Planned proactive CCTV maintenance has been delayed with availability of crews responding to reactive maintenance not being able to undertake planned CCTV inspections.	

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.6.20	Stormwater Asset Management Condition Rating of stormwater assets via CCTV inspections, including of newly constructed works	70%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.6.20.1	Infrastructure Planning	In accordance with adopted programs and proactive maintenance requirements based on risk	100%	80%	Ongoing investigations are occurring following the March 2021 Floods, as well as recent heavy rains throughout the third quarter in early 2022. Notable investigations and reviews include at Panorama Drive, Bonny Hills, and Pembrooke Road and Mooney Street, Telegraph Point. Planned proactive CCTV maintenance has been delayed with availability of crews responding to reactive maintenance not being able to undertake planned CCTV inspections.	Off Track

Code	Operational Plan Action 2021-2022 P				
4.1.6.21	Develop Urban Stormwater Catchment Management Plans for each of the 62 sub-catchments 70				

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.6.21.1	Infrastructure Planning	Approval of detailed project plan and commencement of investigations	100%	80%	Consultant procurement planning and documentation are underway though delayed due to the scope being re-defined to include sewer. This delay will impact the project delivery timeline which will be carried over until the 22/23 financial year. Initial consultation with selected affected community groups has been undertaken.	Off Track



Code	Operational Plan Action 2021-2022	Progress	Status
4.1.6.22	North Haven Flood Mitigation Works - investigation and concept design of remedial works		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.6.22.1	Infrastructure Planning, (Project Delivery)	Approval of detailed project plan and commencement of investigations	100%	50%	Project identified to be put on hold for 6 months due to Project Management resource allocation	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.6.23	Gross Pollutant Trap Audit & Maintenance Planning	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.6.23.1	Infrastructure Operations	Deliver project according to approved project plan	100%	100%	Project Completed.	On Track

### 4.1.7: Develop and implement effective waste management strategies

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.7.6	Ensure effective recycling and recovery of domestic waste through Material Recovery Facility (MRF)	75%	

Not Due to Start	Progressing on Schedule	Completed	Off Track	
		-	-	

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Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.7.6.1	Commercial Business Units	Recovery of domestic waste through Material Recovery Facility in accordance with regulatory requirements	100%	100%	Recovery (recycling) of domestic waste through Material Recovery Facility (MRF) continuing as required.	On Track
4.1.7.6.2	Commercial Business Units	Finalise options analysis and commence planning for new Material Recovery Facility by 30 June 2022	100%	100%	Options analysis completed and planning for new MRF continuing.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.7.7	Ensure effective recycling and recovery of organic waste through Organic Recovery Facility (ORF)	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.7.7.1	Commercial Business Units	Recovery of domestic waste through Organic Resource Recovery Facility(ORRF) in accordance with regulatory requirements	100%	100%	Recovery of domestic waste through Organic Recovery Facility (ORF) continuing as required.	On Track
4.1.7.7.2	Commercial Business Units	Capture and report carbon credit data associated with organic waste diversion from landfill	100%	100%	Recovery of domestic waste through Organic Recovery Facility (ORF) continuing. Carbon credit data captured as required.	On Track



Code	Operational Plan Action 2021-2022	Progress	Status
4.1.7.9	Deliver efficient waste and recycling services at all Waste Transfer Stations - New transfer bins x 4	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.7.9.1	Commercial Business Units	Operation of all Waste Transfer Stations undertaken in accordance with regulatory requirements	100%	100%	Waste Transfer Stations operations undertaken in accordance with regulatory requirements.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.7.13	Address illegal dumping and provide cleanup programs	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.7.13.1	Commercial Business Units	Illegal dumping and cleanup programs delivered by 30 June 2022	100%	100%	Illegal dumping and cleanup programs undertaken as required.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.7.20	Better Waste & Recycling Fund	75%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.7.20.1	Commercial Business Units	Deliver projects according to approved Office of Environment and Heritage (OEH) project plans	100%	100%	Waste education projects continuing including Connect Ed, Little Legends Passport, The Good Food Fight (Commercial Organics) and Drop off for Free.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.7.26	Caimcross Waste Management Facility (WMF) Expansion / Improvements - (multiyear project). Finalise construction of new landfill cell (1A, 1C, 1E) in accordance with Development Consent	95%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.7.26.	1 Commercial Business Units	Finalise construction of new landfill cell by 30 June 2022	100%	100%	Construction completed in December 2021. CQA report completed, submitted and approved by EPA. Completion report pending.	On Track

Code	Operational Plan Action 2021-2022				
4.1.7.27	Waste Strategy - Develop new Waste Strategy following NSW 20yr Waste Strategy	10%			



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.7.27.1	Commercial Business Units	Development of new Waste Strategy commenced by 30 June 2022	100%	30%	Planning for the new strategy has commenced. Additionally, Community Utilities has completed an analysis of needs in the Waste area, and it is now proposed to establish a panel of waste specialists and engineering designers to assist with the forward program of works, similar to that recently adopted in the Water and Sewer areas. This consolidated approach will allow for the review and development of the Waste Strategy as the first priority piece and then be able to be supported with specialist resources to meet any strategy so adopted.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.7.28	Deliver efficient waste collection, disposal and resource recovery services, including domestic, public place, commercial, and construction and demolition waste	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.7.28.1	Commercial Business Units	Waste collection, disposal and resource recovery services delivered in accordance with industry best practice	100%	100%	Waste collection services delivered as required.	On Track



Code	Operational Plan Action 2021-2022	Progress	Status
4.1.7.29	Ensure effective operation of Cairncross waste management facility including effective disposal of waste to landfill	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.7.29.1	Commercial Business Units	Operation of Cairncross waste management facility undertaken in accordance with regulatory requirements	100%	100%	Operations undertaken as required within regulatory requirements.	On Track
4.1.7.29.2	Commercial Business Units	Capture the tonnage of waste to landfill for environmental reporting	100%	100%	Reporting completed as required.	On Track

Code	Operational Plan Action 2021-2022					
4.1.7.30	1.7.30 Undertake Waste Education and Marketing campaigns					

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.7.30.1	Commercial Business Units	Waste Education and Marketing campaigns delivered according to approved programs	100%	100%	Waste education campaigns delivered as required in support of Council's Waste Strategy and services.	On Track



pleted Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.1.7.31	Operate and maintain waste facilities in accordance with regulatory requirements and industry best practice	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.7.31.1	Commercial Business Units	Undertake landfill gas monitoring in accordance with regulatory requirements	100%	100%	Landfill gas monitoring ongoing as required.	On Track

Code	Operational Plan Action 2021-2022				
4.1.7.34	Kingfisher Waste Transfer Station Upgrade - Kingfisher Road Rehabilitation 5				

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.1.7.34.1	Commercial Business Units	Finalise construction of Kingfisher Road Rehabilitation by 30 June 2022	100%	50%	This project has been reprioritised to the 22/23 FY during this reporting period, due to professional resourcing limitations.	Off Track



# ATTACHMENT

4.2: Aim to minimise the impact of natural events and climate change, for example, floods, bushfires and coastal erosion

4.2.1: Develop and implement Coastal, Estuary, Floodplain, and Bushfire management plans

Code	Operational Plan Action 2021-2022					
4.2.1.1	Deliver the annual bushfire risk mitigation program for PMHC	75%				

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.2.1.1.1	Environment & Regulatory Services	90% of program delivered	100%	100%	Staff shortage but this project will be delivered as per the schedule.	On Track
4.2.1.1.2	Environment & Regulatory Services	RFFF estimates are submitted to the RFS for the following financial year grant application	100%	100%	Completed in Q1	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.2.1.2	Implement actions from the Flying Fox Camp Management Plan for Kooloonbung Creek	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.2.1.2.1	Environment & Regulatory Services	National flying fox census count x 4 (quarterly)	100%	100%	Census completed 18 Feb 2022.	On Track



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.2.1.2.2	Environment & Regulatory Services	Community meetings x 2 annually	100%	100%	Next meeting in June	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.2.1.5	Continue to ensure development compliance to achieve sound environmental outcomes - Vegetation Management Plans, Koala Plans of Management developed, registered, implemented and monitored	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.2.1.5.	1 Environment & Regulatory Services	Register new plans and continue to undertake audits of VMP's and KPoM's to ensure on ground works are completed.	100%	100%	VMP & KPoM audits are running on schedule	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.2.1.6	Development of environmental program of works (registration, implementation, monitoring) to ensure compliance to Airport bio certification	75%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.2.1.6.1	Environment & Regulatory Services	Ongoing monitoring, generate reports, manage budgets for payment of contracts and write final report pertinent to on-ground environmental management actions	100%	100%	All on-ground activities are up to date, however no reporting has been undertaken as yet. Due end of Fin Yr.	On Track
4.2.1.6.2	Environment & Regulatory Services	Undertake scoping, briefing preparation, and requisition of appropriate services	100%	100%	Vegetation management and vertebrate pest management contracts are up to date	On Track

Code	Operational Plan Action 2021-2022				
4.2.1.7	7 Provide subject matter expert advice on DA and landuse application referrals				

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.2.1.7.1	Environment & Regulatory Services	Referrals to DA applications is undertaken within 14 days	100%	100%	DA applications are being processed in appropriate timeframes	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.2.1.9	Continue to develop a Flood Study for the North Brother Local Catchments - facilitation of stormwater remediation	100%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.2.1.9.1	Environment & Regulatory Services	Development of a North Brother Flood Study underway to facilitate future stormwater remediation	100%	100%	Project Completed	On Track

Code	Operational Plan Action 2021-2022	Progress	Status	
4.2.1.11	1 Commence construction of new stormwater system at Illaroo Road 50			

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.2.1.11.1	Environment & Regulatory Services	Construction of Illaroo Road stormwater system has commenced	100%	10%	Extraordinary Meeting 7 March 2022 resolved to delay this project.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.2.1.14	Coast and estuary management committee	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.2.1.14.1	Environment & Regulatory Services	Four committee meetings held per year	100%	100%	Ceased due to the Extraordinary Meeting	On Track



Code	Operational Plan Act	Operational Plan Action 2021-2022						
4.2.1.16	Development of a Co	evelopment of a Coastal Management Program for Lake Cathie - Tidal Improvement - Lake Innes/Lake Cathie Estuarine						
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress	
4.2.1.16.1	Environment & Regulatory Services	Continue to undertake studies and engagement for Coastal Management Program Stage 2 specific to Lake Cathie, including funding for hydrodynamic model associated with Kenwood Drive Bridge. Continued discussion regarding Illaroo revetment wall and acid sulphate studies associated with holistic estuary management	100%	100%	Stage 2 Projects have commenced. Hydrodynam model project has commenced and Illaroo Road design workshops with the community have bee scheduled for May	aroo Road co-		

Code	Operational Plan Action 2021-2022	Progress	Status
4.2.1.17	Develop the annual bushfire risk mitigation program for Council lands prepared in accordance with the Bush Fire Risk Management Plan	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.2.1.17.1	Environment & Regulatory Services	The annual Bushfire Risk Management Program is adopted by 30 September 2021	100%	100%	Adoption of the annual bushfire risk management program occurred in Q2 and was endorsed by Council.	On Track



Code	Operational Plan Ac	tion 2021-2022				Progress	Status			
4.2.1.18	Flood mapping - Up	date LEP Flood Maps to incorporate new	knowledge a	und latest f	lood model results across LGA.	70%				
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress			
4.2.1.18.1	Environment & Regulatory Services	Complete updates to LEP Flood Mapping by June 2022	100%	100%	Test mapping being used.		On Track			

Code	Operational Plan Action 2021-2022	Progress	Status
4.2.1.19	Installation of in-line monitoring instruments at Koree Island River intake	30%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.2.1.19.1	Infrastructure Planning, (Infrastructure Operations)	Deliver project according to approved project plan	100%	50%	Delays in engaging consultant have put project behind	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.2.1.20	Commence development of the Coastal Management Plan - CMP Stage 2 - Hastings River Drive	75%	

Not Due to Start Progressing on Schedule Off Track Page 127

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.2.1.2.3	Environment & Regulatory Services	Delivery of on ground management actions (including subsidy program and operation of sprinkler system)	100%	100%	The sprinkler system has been ceased as per Exec brief. Subsidy program also finalised and completed this quarter.	On Track
4.2.1.20.1	Environment & Regulatory Services	Begin studies and engagement for Coastal Management Program Stage 2 specific to Hastings River area	100%	100%	Bank & riparian assessment study has commenced and Hydro dilution study for Kooloonbung Creek will commence before end of Fin yr.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.2.1.21	Sensitive Receptors	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.2.1.21.1	Environment & Regulatory Services	• Establish Baseline Water Quality pre 2019 Bushfire event and establish water quality monitoring plans for Lake Innes/Lake Cathie and Watson Taylor • Complete Ecological Assessment of the Saltmarsh community within the Lake Cathie/Lake Innes Catchment • Complete Water Quality Monitoring Program of Lake Cathie / Lake Innes and Watson Taylor	100%	100%	Baseline complete. Ecological assessment of saltmarsh due end of Q4. Water quality monitoring program to commence Q1 next financial year.	On Track



### 4.2.2: Promote strategies to mitigate climate change

Code	Operational Plan Action 2021-2022	Progress	Status
4.2.2.1	Undertake development of a Sustainability and Climate Change Strategy	20%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.2.2.1.1	Environment & Regulatory Services	Climate Change Response Strategy & Action Plan developed and adopted	100%	100%	The Strategy is not yet developed but a draft is possible by June but will depend on the outcome of the Climate Change response policy which is currently being publicly exhibited prior to a decision whether it will be rescinded by Council at the May 2022 Ordinary Council meeting. In February 2022 Council's resolution dissolved the Sustainability Advisory Sub Committee that would have helped co-develop both the Climate Change and Sustainability Strategies.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.2.2.2	Implement sustainability and climate change strategy actions	20%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.2.2.2.1	Environment & Regulatory Services	Commence action in accordance with Climate Change Response Strategy	100%	100%	Strategy and Action Plan not yet developed but rapidly working on it. We will optimistically report to be on track with 20% of the pre-work done to be able to potentially present to June 2022 Ordinary Council meeting. Note: There was a recent change of responsibility from Strategy to Sustainability to create the Climate Change Response Strategy and Sustainability Strategy. Council resolved to dissolve Sustainability Advisory Sub Committee in Feb 2022 which was created to help co- develop the strategies. The March 2022 proposal to rescind Climate Change Response Policy will not be decided on until May 2022, a month before this Strategy is due to Council.	On Track

# 4.3: Facilitate development that is compatible with the natural and built environment

4.3.1: Undertake transparent and efficient development assessment in accordance with relevant legislation

Code	Operational Plan Action 2021-2022	Progress	Status
4.3.1.1	Ensure development assessment, building certification and subdivision certification activities are completed efficiently and in accordance with legislation	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.3.1.1.1	Development Assessment	Capture the number of applications and processing times, together with a commentary on development trends and report to Council quarterly	100%	100%	Progressing as scheduled	On Track



Code	de Operational Plan Action 2021-2022						
4.3.1.2	4.3.1.2 Ensure the Development Assessment Panel operates in accordance with their charter and all applications are accurately determined						
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress
4.3.1.2.1	L Development Assessment	Have no successful legal appeals relating to process errors	100%	100%	No legal appeals as a result of process error		On Track

# 4.4: Plan for integrated transport systems that helps people get around and link our communities

4.4.1: Plan, investigate, design and construct transport assets which address pedestrians, cyclist and vehicular needs to cater for the future growth of the region

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.2	Regional Integrated Transport Strategy	85%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.2.1	Infrastructure Planning, (Project Delivery)	Production of a draft RITS for exhibition before 30 June 2022	100%	100%	The first draft of the Regional Integrated Transport Strategy is complete. It was reported to the March 2022 Ordinary Council Meeting. The strategy will go through a process of realignment when the outcomes of the Blueprint if it is adopted are known to ensure that strategic alignment exists across all Council's highest level strategies.	On Track



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Code	Operational Plan Action 2021-2022 Pr								
4.4.1.3	4.1.3 Footpath, Cycleway and Pedestrian works 50								
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progres		
4.4.1.3.2	1 Infrastructure Planning	Complete construction of listed works	100%	100%	The project is currently in planning stage with no construction works currently programmed until completion of the strategy in early 2022.		On Track		

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.32	Continue corridor planning - Kendall Road - Ocean Drive - Hastings River Drive regional road corridor (MR538/MR600) - multi-year project	95%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.32.1	Infrastructure Planning	Council adoption of the completed road corridor plan	100%	100%	The project was unable to conduct the public exhibition due to missing march Ordinary Council meeting to consider the report prior to going to public exhibition, Strategy is now going to April Ordinary Council meeting, public exhibition will commence immediately after. The community feedback will be included in the Strategy and a report will be prepared for Council to consider in the fourth quarter	On Track



Code	Operational Plan Ac	tion 2021-2022			Progre	ss Status
4.4.1.34	Kew Main Street Up	ograde			10%	
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.34.1	Infrastructure Planning	Completion of the Kew Main Street Upgrade	100%	80%	Ongoing delay associated with limited professional resources, and revisions to designs and extent of works being progressed to deliver maximised outcomes within	

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.37	Local Roads Proactive Renewal Program	50%	

available grant funding. Negotiation with contractors

also ongoing.

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.37.1	Infrastructure Planning	Completion of listed road renewals and resurfacing works	100%	50%	The 2021-22 Road Rehabilitation and Resealing Program includes the following projects: Planning Phase (Road Resurfacing and Rehabilitation): * Pacific Dr (Flynn to William), Port Macquarie (pending grant funding) - deferred * Kennedy Dr (Coral to Koala), Port Macquarie - delayed, likely carry over Planning Phase (Road Resealing): * Kindee Rd - deferred	Off Track

Not Due to Start 🔵 Progressing on Schedule 🧲

Completed Off Track

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Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
					The rehabilitations and resurfacing has commenced and will be progressively completed until June 2022. The final program dates are yet to be finalised. Delivery Phase (Road Resurfacing and Rehabilitation): * Highfields Cct, Port Macquarie - completed * Lake Rd (Ocean Dr to Central), Port Macquarie - completed * Pembrooke Rd (full length), Pembrooke - underway, 90% complete * Central Rd, Port Macquarie - delivery in April Delivery Phase (Road Resealing): * Comboyne Local roads - completed * Port Macquarie Local Roads (Transit Hill) - completed	

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.44	Condition Rating - Transport Assets	70%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.44.1	Infrastructure Planning	Undertake condition rating of Council's transport assets by 30 June 2022	100%	80%	No further progress has been made since Q2. Planned pavement testing has been scoped but is yet to be procured and delivered due to impacts on staff availability. Routine monitoring occurring throughout this period.	Off Track



Code	Operational Plan Act	tion 2021-2022				Progress	Status
4.4.1.48	Development Contri	bution Plan (Roads) Review and Update				50%	
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress
4.4.1.48.1	Strategy	Deliver project according to approved project plan	100%	100%	The first draft of the Regional Integrated Transp Strategy is complete and was reported to the Ma 2022 Ordinary Council Meeting. It will be aligned Blueprint if adopted prior to being endorsed for exhibition.	arch d to the	On Track
					The Development Contributions component is a element of the Development Contributions holis review and the creation of a new Contributions Framework for PMHC.	0	

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.51	Installation of new bus shelters as per the Community Passenger Transport Infrastructure Grant Scheme (CPTIGS) Program	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.51.1	Infrastructure Planning	Completion of listed bus shelter installations	100%	100%	Progressing as scheduled	On Track



Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.52	AUS-SPEC Review - Undertake a comprehensive review of Councils full suite of design and construction specifications - multi-year project	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.52.1	Infrastructure Planning	Council adoption of the updated AUS_SPEC specifications	100%	60%	Review of standard drawings is currently behind schedule due to other higher priority works. Planning for the review is continuing.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.55	Beach to Beach - shared path project at Camden Haven - Detailed design, environmental approvals and commencement of construction	60%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.55.1	Infrastructure Planning	Completion of the detailed design and environmental approvals	100%	100%	Completion of detailed design and environmental approvals progressing	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.63	Pembrooke Road - Stoney Creek Bridge Upgrade - Detailed Design	10%	



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Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.63	1 Infrastructure Planning	Completion of detailed design	100%	50%	Following the unsuccessful initial request for quotation, an open tender has been advertised for this design during this reporting period. The tender evaluation is ongoing, but is behind original program.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.66	Kindee Bridge Upgrade Detailed Design	50%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.66.1	Infrastructure Planning	Detailed project plan approval and commencement of the detailed design	100%	10%	These works have been placed on-hold while the Bridges and Structure Engineer focuses on the Rawdon Island Bridge Renewal project. It is expected these works will be planned for future years and will not commence in the current financial year.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.67	Transport Network Improvement Planning Project - Options Assessment and Strategic Business Case (Including Review of Orbital Road Options) - (multi-year project)	50%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.67.1	Infrastructure Planning	Completion of a Transport Network Plan and Strategic Business Case for the highest priority improvements	100%	50%	The Project has been put on hold following the resolution of Council at the Extraordinary Council Meeting held on 13 January 2022 to discontinue investigations for new roads within the Orbital Road Corridor.	Off Track
					The project will be delayed until Council progresses further with the development of the Regional Integrated Transport Strategy and Integrated Strategic Transport Network master plan, to ensure that the intent of the new Council is captured within the SBC development.	
					Council continues to work with TfNSW to align this project to their Oxley highway business Case development, as well as collaborating on the development of the Integrated Strategic Transport Network Master plan. It is expected this project will be delayed throughout Q4 and continue into 2022/23.	

Code	Operational Plan Action 2021-2022					
4.4.1.80	80 Boundary Street Upgrade - Detailed Design and Environmental Approvals					

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.80.1	Infrastructure Planning	Completion of the detailed design and environmental approvals.	100%	100%	Project on track for completion late 2022 in accordance with approved contract program.	On Track



Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.82	Schools to Schools Shared Pathway - Plan & Design	5%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.82.1	Infrastructure Planning	Deliver project according to approved project plan	100%	50%	Higher priority projects have impacted the progress of the initiation and planning of this pathway design project	Off Track

Operational Plan Action 2021-2022	Progress	Status
Gordon Street Upgrade - Road Resurfacing, Stormwater flood mitigation and water main renewal works (multi-year project)	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.83.1	Infrastructure Planning	Completion of works	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.84	Bago Road Rehab Stage 3 - Bluewater to Cameron Streets	95%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.84.1	Infrastructure	Deliver project according to approved project plan	100%	100%	Works completed, including repairs to small proportion of total area. Continued monitoring of this rehabilitation for further repairs ongoing.	On Track

Code	Operational Plan Action 2021-2022			
4.4.1.85	Bago Road Stage 3B - Timbertops CI to Azalea Ave	100%		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.85.1	Infrastructure Planning	Deliver project according to approved project plan	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.88	Lorne Road Sealing - Commence detailed design and approvals	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.88.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the detailed design.	100%	100%	Detailed design for Lorne Road has commenced, finalisation of design will be completed in 22/23.	On Track



Code	Operational Plan Acti	on 2021-2022				Progress	Status
4.4.1.89	Undertake a detailed traffic analysis of the Sancrox/Thrumster/Fernbank growth area to identify high priority works 30%						
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress
4.4.1.89.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the investigations	100%	90%	Planning for this project has commenced. Disc with subdivision developers within this precinc been ongoing regarding the timing of the study occur with the proposed Le Clos Sancrox plann proposal. It is expected that a project plan will developed in early 2022.	t have to ing	Off Track

Code	Operational Plan Action 2021-2022				
4.4.1.93	Lord & Herschell St PMQ - Install Roundabout	100%			

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.93.1	Infrastructure	Deliver project according to approved project plan	100%	100%	Agreed revised project scope (pedestrian refuges) completed during this reporting period.	On Track



Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.96	Design and Construction of the Pappinbarra Bridge Replacement	35%	

Code	e	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.:	1.96.1	Infrastructure Planning	Completion of construction	100%	100%	Wet weather has significantly impacted this project with ongoing Extensions of Time approved during this reporting period. Completion target for June 22 subject to favorable conditions.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.97	Review of Car Parking Strategy	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.97.1	Infrastructure Planning	Completion of draft Car Parking Action Plan and Parking Policy for public exhibition	100%	100%	This project has progressed well following delays with survey contractors due to COVID in Q2. Parking surveys and first draft paper has been completed. Community engagement will commence at the beginning of Q4 and the project has realigned to its original program with expected completion in September 2022.	On Track



Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.98	The Hatch Rd - Reseal Sections - Investigation and design for sealing 3kms of Rd	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.98.1	Infrastructure Planning	Completion of construction	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.103	Footpath - The Parade: Ocean St to Surf Carpark	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.103.	1 Infrastructure Planning	Deliver project to approved project plan	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.104	Footpath - Lake Street: Tunis St to Seymour St	100%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.10	4.1 Infrastructure Planning	Deliver project to approved project plan	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.105	Footpath - Comboyne St to Graham St Connect at KSC	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.105.1	Infrastructure Planning	Deliver project to approved project plan	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022			
4.4.1.106	Footpath - Hill Street: Pioneer Park to Main St	100%		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.106.1	Infrastructure Planning	Deliver project to approved project plan	100%	100%	Completed	On Track



Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.107	Footpath - Parker Street: Wauchope High to Bain St	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.107.1	Infrastructure Planning	Deliver project to approved project plan	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022			
4.4.1.110	Footpath - Watonga St: Connect to Matthew Flinders 7			

Сс	ode	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.	4.1.110.1	Infrastructure Planning	Deliver project according to approved project plan	100%	80%	Project design has been revised to address issues regarding compliance with Accessibility standards. Construction of the final section is expected to commence in Q4 of 2021/22.	Off Track

Code	Operational Plan Action 2021-2022			
4.4.1.111	New Bus Shelters (3 or 4) and Landing Pads	70%		



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.111.1	Infrastructure Planning	Deliver project according to approved project plan	100%	90%	The project has been delayed due to supplier availability of the shelters. Preparatory works on the slabs has commenced with the shelters to be installed once arrived. Expected to occur in 2022 though the project is at risk of not being delivered in this financial year.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.113	Laurieton Town Centre Master Plan COVID PROJECTS	85%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.113.1	Strategy	Completion of draft Master Plan for public exhibition	100%	100%	The Laurieton Town Centre Master Plan was placed on Exhibition from November 2021 to 31 March 2022. The final Master Plan will be presented to the June Council meeting for adoption	On Track

Code	Operational Plan Action 2021-2022		Status
4.4.1.114	Captain Cook Bicentennial Drive Rehabilitation	100%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.114.1	Infrastructure Planning	Deliver project according to approved project plan	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.119	Commence Construction of the Lake Road / Jindalee Road / Fernhill Road Intersection upgrade (Multi Year)	5%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.119.1	Infrastructure Planning, (Project Delivery)	Approval of detailed project plan and completion of construction tender documents	100%	50%	This project has been reprioritised by the executive during this reporting period and is now not expected to be progressed to construction in the 22/23FY.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.120	Commence detailed design and approvals for Lake Road Duplication (Ocean Drive to Chestnut Road) (Multi- year)	5%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.120.1	Infrastructure Planning, (Project Delivery)	Approval of detailed project plan and commencement of detailed design	100%	50%	This project was reprioritised (down) by the executive during this reporting period due to resourcing. Progress on this project is expected to be held off until broader strategic traffic network planning is completed in conjunction with the Council.	Off Track

Not Due to Start Progressing on Schedule Completed Off Track

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de Operational Plan Action 2021-2022						Status
Maria River Road					25%	
Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress
Infrastructure Planning, (Project Delivery)	Construction contract award	100%	80%	Park adjoining will delay design finalisation and contract award into 22/23FY.	d	Off Track
	Maria River Road	Maria River Road  Lead Responsibility Infrastructure Planning, (Project Corporate Performance Indicator (CPI) Construction contract award	Maria River Road           Lead Responsibility         Corporate Performance Indicator (CPI)         Target           Infrastructure Planning, (Project         Construction contract award         100%	Lead Responsibility       Corporate Performance Indicator (CPI)       Target       Actual         Infrastructure Planning, (Project       Construction contract award       100%       80%	Lead Responsibility       Corporate Performance Indicator (CPI)       Target       Actual       Comments         Infrastructure Planning. (Project Delivery)       Construction contract award       100%       80%       Design and property matters associated with N Park adjoining will delay design finalisation and contract award into 22/23FY.	Maria River Road       25%         Lead Responsibility       Corporate Performance Indicator (CPI)       Target       Actual       Comments         Infrastructure Planning, (Project       Construction contract award       100%       80%       Design and property matters associated with National Park adjoining will delay design finalisation and

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.124	Ocean Drive (South of Port Macquarie) Soil Remediation	5%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.124.1	Infrastructure Planning	Completion of works	100%	50%	Project inception delayed while additional project management resourcing has been progressed with critical path next step being National Parks liaison as to extent of required works.	Off Track



Code	Operational Plan Ad	ction 2021-2022			Progres	s Status
4.4.1.125	Pembrooke Road Beechwood Rd & Stoney Creek Rd 90%					
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.125.1	Infrastructure Planning	Completion of works	100%	100%	The road rehabilitation works have progressed between Beechwood Rd and Stoney Creek Rd. Road sealing, line marking and signs for these sections are all on schedule. Scope has increased with additional funding under round 3 of Fixing Local Roads program. These additional works are nearing completion, however were delayed with wet weather and further flood analysis of the final section near Mooney Street was required. The flood analysis has been completed with additional drainage works required to offset any impact from lifting the road levels. It is expected these can be sourced and constructed in Q4. Final approval from the funding partner is being sought for the additional scope.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.127	Undertake sealed road network condition survey	20%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.127.1	Infrastructure Planning	Completion of condition survey	100%	25%	No further progress, planned pavement testing has been scoped however not procured or delivered due to staffing shortages resulting from emergency response requirements. Routine monitoring occurring throughout this period.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.128	Rocks Ferry Reserve Boat Ramp and Pontoon	60%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.1.128.1	Infrastructure Planning, (Project Delivery)	Complete works in accordance with grant funding conditions	100%	100%	progressing to plan, noting subsequent flooding has extended delivery program	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.1.129	Rollands Plains Road Guardrail	10%	



Cod	de	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4	1.1.129.1		Construct road safety improvements in accordance with grant funding conditions	100%	100%	on track for completion within Grant funding milestones	On Track

#### 4.4.2: Develop and implement annual maintenance and renewal programs for transport assets

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2	<ol> <li>Undertake road resurfacing and rehabilitation works throughout the local government area in accordance with the rolling priority program and Pavement Management System Continuation of High Traffic Road Resurfacing         <ul> <li>Continuation of Pavement Rejuvenation Treatments</li> <li>Road Resealing Works</li> </ul> </li> </ol>	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.1.1	Infrastructure Planning	Completion of listed road renewal and resurfacing works	100%	100%	Wet weather has delayed some road resealing during Q3, though program still on track to be delivered by end of 2021/22. Notable planned sealing works included this year include Pembrooke Road, Highfields Circuit and the Transit Hill/Lighthouse Beach areas.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.2	Carry out annual unsealed road maintenance program including gravel resheeting, grading, and rural roadside vegetation clearing	70%	



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Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.2.1	Infrastructure Planning	In accordance with adopted programs and reactive maintenance requirements based on risk	100%	100%	Grading crews were delayed due to wet weather during periods of Q3, however are working to bring the schedule back into line.	Off Track
					Grading is planned for Sancrox and Rawdon Island areas in Q4 as Rawdon Island Bridge is reopened to heavy traffic.	

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.3	Carry out annual sealed road maintenance program including resurfacing, jet patching, heavy patching and installation of roadside	50%	
	furnishings		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.3.1	Infrastructure Planning	In accordance with adopted programs and reactive maintenance requirements based on risk	100%	100%	Works delivered on budget. Reactive maintenance works schedule based on inspections and assessment criteria from Council's road and stormwater risk rating and road hierarchy systems.	On Track
					Wet weather delayed certain road resealing during Q3, though program still on track to be delivered by end of 2021/22.	
					Notable planned sealing works included this year include Pembrooke Road, Highfields Circuit and the Transit Hill/Lighthouse Beach areas.	



Code	Operational Plan Actio	on 2021-2022				Progress	Status
4.4.2.4	Undertake bridges an	d culverts maintenance and repair progra	am includir	ng inspectio	ns, monitoring and bridge repair works	50%	
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress

	-				
4.4.2.4.1	Infrastructure Planning	In accordance with adopted programs and reactive maintenance requirements based on risk	100%	Works delivered on budget. Works schedule based on inspections and assessment criteria from Council's road and stormwater risk rating and road hierarchy systems.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.5	Carry out reactive maintenance to Koala Food Trees and Koala Fencing on Link Rd (Ocean Dr)	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.5.1	Infrastructure Planning	In accordance with adopted programs and reactive maintenance requirements based on risk	100%	100%	Link Rd is on track to get to compliance level. This action belongs to Infra.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.6	Bridgeworks and Road Rehabilitation Program - Undertake regular bridge and geotechnical road pavement tests to inform and develop program	70%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.6.1	Infrastructure Planning	Completion of required testing and assessments	100%	80%	No further progress, planned pavement testing has been scoped however yet to be procured and delivered due to staff shortages. Routine monitoring occurring throughout this period. Geotechnical testing was undertaken on Captain Cook Bicentennial Drive, and investigations undertaken into other areas such as Oxbow Circuit.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.7	Crowe Roods Bridge, Bellangry - Upgrade	5%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.7.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the detailed design	100%	100%	This project forms part of the Fixing Country Bridges program and is on track.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status	
4.4.2.8	Bridge 178, Mundays Lane - Upgrade	10%		



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.8.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the detailed design	100%	100%	This project forms part of the Fixing Country Bridges program and is on track.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.9	Bridge 179, Mundays Lane - Upgrade	5%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.9.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the detailed design	100%	100%	This project forms part of the Fixing Country Bridges program and is on track.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.10	Timber Bridges - Renewals & Repairs for Logans Crossing Bridge	10%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.10.1	Infrastructure Planning	Approval of detailed project plan and commencement of detailed design	100%	100%	Detailed design contract engagement awarded. on track	On Track



Code	Operational Plan Act	tion 2021-2022				Progress	Statu
4.4.2.11	Ocean Drive Prelimii	naries				100%	
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progres
4.4.2.11.1	Infrastructure Planning	Approval of detailed project plan and construction contract documentation	100%	100%	Preliminaries complete and Construction tender advertised to market during this reporting period		On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.12	Kindee Bridge - Immediate Structural Repairs	20%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.12.1	Infrastructure Planning	Completion of structural repairs	100%	0%	No works completed on this project this quarter - resourcing constraint and impacts of wet weather (flooding).	Off Track

Code	Operational Plan Action 2021-2022			
4.4.2.13	Bridge 181, Mundays Lane - Upgrade	5%		



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.13.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the detailed design	100%	100%	This project forms part of the Fixing Country Bridges program and is on track.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.14	Donkins Flat Bridge, Comboyne - Upgrade	5%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.14.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the detailed design	100%	100%	This project forms part of the Fixing Country Bridges program and is on track.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.15	Old School Road Bridge, Herons Creek - Upgrade	5%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.15.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the detailed design	100%	100%	This project forms part of the Fixing Country Bridges program and is on track.	On Track



Code	Operational Plan Action 2021-2022						Status
4.4.2.16	4.4.2.16       Cowal Creek Bridge, Bellangry - Upgrade       5						
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	1	Progress
4.4.2.16.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the detailed design	100%	100%	This project forms part of the Fixing Country Brid program and is on track.	0	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.17	Culvert - Thone River Rd, Byabarra	5%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.17.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the detailed design	100%	100%	This project forms part of the Fixing Country Bridges program and is on track.	On Track

Code	Operational Plan Action 2021-2022			
4.4.2.18	Culvert - Farrawells Road, Telegraph Point	5%		



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.18.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the detailed design	100%	100%	This project forms part of the Fixing Country Bridges program and is on track.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.19	Tower Rd Bridge, Pembrooke - Upgrade	5%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.19.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the detailed design	100%	100%	This project forms part of the Fixing Country Bridges program and is on track.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.20	Bottlebrush No 1 Bridge Upgrade	5%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.20.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the detailed design	100%	100%	This project forms part of the Fixing Country Bridges program and is on track.	On Track



Code	Operational Plan Act	Prational Plan Action 2021-2022					
4.4.2.21	4.4.2.21       Cutty Creek Bridge, Herons Creek Upgrade       5						
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress
4.4.2.21.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the detailed design	100%	100%	This project forms part of the Fixing Country Bi program and is on track.	0	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.22	Joes Bridge Upgrade	5%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.22.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the detailed design	100%	100%	This project forms part of the Fixing Country Bridges program and is on track.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.23	Langdons Bridge (Bottlebrush No 2) Upgrade	5%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.23.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the detailed design	100%	100%	This project forms part of the Fixing Country Bridges program and is on track.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.24	Bril Brilge Upgrade	50%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.24.1	Infrastructure Planning	Commence the rehabilitation of Bril Bril Bridge	100%	0%	Works have not progressed as scheduled due to rain delays throughout Q3. Bridgework involves removal of the bridge deck with a reliance on the low flow access which does go underwater and restricts access - estimated 5 months required to complete the project.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.25	Little Mortons Creek Bridge Upgrade	5%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.25.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the detailed design	100%	100%	This project forms part of the Fixing Country Bridges program and is on track.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.26	King Creek Bridge Upgrade	25%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.26.1	Infrastructure Planning	Approval of the detailed project plan and commencement of the detailed design	100%	100%	This project forms part of the Fixing Country Bridges Multi span bridges program and is on track with design underway.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.27	Beechwood Pedestrian Upgrades	15%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.27.1	Infrastructure Planning	Completion of Pedestrian Upgrade	100%	80%	Project planning delayed by wet weather/flooding and professional resourcing. Project Milestone of completion by end of June 22 at risk.	Off Track



Code	Operational Plan Act	erational Plan Action 2021-2022					
4.4.2.28	New footpath on the	ew footpath on the North Shore					
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress
4.4.2.28.1	Infrastructure Planning	Completion of footpath at North Shore	100%	50%	Preconstruction investigations for pavement upg have confirmed unfavorable foundations for prop road rehabilitation during this reporting period. T necessary road foundation improvements would significantly the available grant funding. Project p therefore put on hold whilst reconsideration of pu scope is defined.	e foundations for proposed his reporting period. The improvements would exceed rant funding. Project progress	

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.29	Kerb and Gutter Installation - Wesley Avenue, Petit St, Hart St and Anderson St	60%	

C	ode	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.	.4.2.29.1	Infrastructure Operations	Completion of Kerb and Gutter Installation	100%	100%	On site construction has commenced. On track for completion by end of Financial Year	On Track



Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2	80 Bago Rd final seal	0%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.30.1	Infrastructure Planning	Completion of works	100%	100%	Not due to start	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.31	Resurface Council Carparks - Cameron St, Wauchope & Bridge St, Port Macquarie	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.31.1	Infrastructure Planning	Completion of Resurfacing	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022			
4.4.2.32	Rawdon Island Bridge Structural Repairs 5			



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.32.1	Infrastructure Planning, (Project Delivery)	Deliver project according to approved project plan	100%	75%	Weather delays and heavy flood waters have created a delay in project delivery. Projected progress in Q3 has not been achieved. Flood trigger levels were reached on 4 separate occasions during March 2022, community was informed on each incident.	Off Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.2.33	Oxbow Circuit, King Creek Repairs	20%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.33.1		Deliver project according to approved project plan	100%	25%	Preliminary advice has identified that there is a lack of funds to progress this project. In the absence of additional funding the road will be maintained as required until substantial pavement repairs can be planned.	Off Track

Code	Operational Plan Action 2021-2022			
4.4.2.34	Pembrooke Rd Rehabilitation	0%		



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.2.34.1	Infrastructure Operations	Completion in accordance with funding conditions	100%	100%	<ul> <li>Approximately 90% of Pembrooke Rd has been rehabilitated. Remaining sections include:</li> <li>1) Road slip (near Redbank Rd) to be treated as part of the disaster response</li> <li>2) Road rehabilitation (near Mooney St) across the flood plain is subject to a Flood Study, final pavement design and culvert upgrade. Planning of the works is underway.</li> </ul>	On Track

### 4.4.3: Develop and implement traffic and road safety programs

Code	Operational Plan Action 2021-2022	Progress	Status
4.4.3.1	Develop a Road Safety Action Plan and undertake associated safety education and awareness programs identified in the plan	50%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.3.1.1	Community	Undertake road safety educational programs	100%	100%	Road safety projects postponed due to COVID restrictions have been rescheduled and on track to be completed by end of June. Road Safety messaging continues as required throughout the year.	On Track

Code	Operational Plan Action 2021-2022			
4.4.3.2	Install and maintain street lights in accordance with identified priorities			

Not Due to Start Progressing on Schedule Completed Off Track

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Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.3.2.1	Infrastructure Planning	Deliver street lighting program according to approved schedule and prioritisation	100%	100%	Delivery is currently scheduled for 2022 with anticipated start date in April 2022. This project is a multi-year project.	On Track

Code	Operational Plan Action 2021-2022			
4.4.3.4	Rural Road Safety Improvements - Line marking, signs			

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.4.3.4.1	Infrastructure Planning	Deliver project according to approved project plan	100%	100%	Completed	On Track

## 4.5: Plan for integrated and connected communities across the Port Macquarie-Hastings area

4.5.1: Carry out strategic planning to manage population growth and provide for coordinated urban development

Code	Operational Plan Action 2021-2022	Progress	Status
4.5.1.7	Review Local Environmental Plan (LEP) and Development Control Plan (DCP) provisions to promote development of the Yippin Creek Urban Release Area (UGMS Action 4)	50%	



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Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.5.1.7.1	Strategy	Report to Council regarding draft planning outcomes to Council by 30 June 2022	100%	100%	There is an identified risk in the flood studies with regard to flood free access. Alternative solutions are being explored presently as a co-design with the landholders who are actively participating in identifying solutions to address the risks. There is no identified solution that is economically feasible in the immediate term and addresses the flood risk to the community. This issue places at risk the timeline to the Planning Proposal. The extent of the impact will be understood when the infrastructure requirements and program for delivery are adequately developed and studied.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.5.1.8	Progress Council led precinct planning for the proposed Health and Education Precinct (UGMS Action 13)	70%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.5.1.8.1	Strategy	Continue support studies for a planning proposal in consultation with stakeholders by 30 June 2022	100%	100%	The Health & Education Precinct Strategic Land Use Planning is well progressed. The outcomes and yields of the precinct will be determined by the TfNSW strategy on the Oxley Highway Upgrade, particularly Wrights Road and Lake Road intersections. Engagement continues with TfNSW and when the outcomes are released by the state agencies the planning can be finalised. Council are working closely with TfNSW and DPIE to support information for the state agencies business case for funding of the transport network investment required by the NSW Government.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.5.1.10	Review LEP and DCP provisions to promote appropriate housing choice options (UGMS Action 1) 7		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.5.1.10.1	Development Assessment	Complete Local Housing Strategy	100%	95%	Anticipated that a report will be presented to Council in the first half of 2022 detailing the submissions received and the next steps.	Off Track
4.5.1.10.2	Development Assessment	Report to Council by December 2021 on local housing priorities and timeframes for delivery of action	100%	95%	Anticipated that a report will be presented to Council in the first half of 2022 detailing the submissions received and the next steps.	Off Track



Code	Operational Plan Ac	perational Plan Action 2021-2022							
4.5.1.11		estigate the capacity of land at the intersection of Ocean Drive with Houston Mitchell Drive for light industrial use and at the ersection of Ocean Drive with Bonny View Drive for light industrial development or for use as a school (UGMS Action 17)							
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress		
4.5.1.11.1	Development Assessment	Final report to Council re Local Environmental Plan (LEP) and Development Control Plan (DCP) amendments by 30 June2022	100%	100%	Timing for investigation of land at the intersection Ocean Drive with Bonny View Drive for light indu- development or a school is subject to the preparand lodgement of a rezoning proposal by the land owner.	ew Drive for light industrial s subject to the preparation			

Code	Operational Plan Action 2021-2022	Progress	Status
4.5.1.15	Port Macquarie Civic Precinct - Commence investigations for strategic landuse planning of Council owned property	30%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.5.1.15.1	Strategy	Planning investigations commenced for Council owned property in the Port Macquarie Civic Precinct	100%	100%	FYE 2022 will only include the preliminary investigations and in principle benefits of the strategic planning. This work is progressing on schedule and budget. FYE 2023 will include the progression of this work into the strategic land use planning.	On Track



Code	Operational Plan Ac	tion 2021-2022			Progr	ess	Status
4.5.1.17	1.17 Fernbank Creek/Sancrox - Support Studies						
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Pi	rogress
4.5.1.17.1	Strategy	NSW DPIE endorsement of Structure Plan by December 2021	100%	100%	The Structure Plan is substantially advanced and submissions have been made by state agencies. Transport is a concern and Council, Transport for NSW and DPIE are working through the issues collaboratively Council are presenting community submissions to that forum. The upgrade to the Oxley Highway announcement by the NSW Government which is imminent would substantially progress the infrastructure strategy for Sancrox and Fernbank Creek.		)n irack

Code	Operational Plan Action 2021-2022		Status
4.5.1.18	Sustainability Strategy	30%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.5.1.18.1	Strategy	Production of a draft Sustainability Strategy by 30 June 2022.	100%	100%	The Sustainability Strategy planning has required a full review in the context of Council's rescission of the Climate Emergency declaration and contemplated possible rescission of the Climate Change Response Policy. The Sustainability work is beyond these environmental elements to include financial, social and leadership sustainability in the Quadruple bottom line however alignment of this work with the Council's strategic intent is critical.	On Track

Code	Operational Plan Action 2021-2022			
4.5.1.19	Conduct a strategic review of development contributions plans	50%		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.5.1.19.1	Strategy	Strategic Review the DSP and Contributions Plans and recommendations by 30 June 2022.	100%	100%	The draft consultant's report has been received. Comments have been returned and the creation of the framework is underway. Q4 FYE 2022 will finalise the framework and start to work through the program of transformation and transition from the existing to the new plans.	On Track



Code	Operational Plan Ac	tion 2021-2022			Pro	ogress	Status
4.5.1.20	Finalise and implement the Port Macquarie Regional City Action Plan in collaboration with DPIE						
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress
4.5.1.20.1	Strategy	Implement and advocate for actions by 30 June 2022	100%	100%	The Regional City Action Plan is being used to inform Strategy development on Strategic Land Use Plannin and Regional Integrated Transport. Engagement on the RCAP advocacy is a regular meeting with state agenu- including DPIE, TfNSW and BCD. The Regional City Action Plan will inform the Joint Integrated Transport Plan between Council and TfNSW.	ng the cies	On Track

# 4.5.2: Plan for infrastructure that supports population growth

Code	Operational Plan Action 2021-2022	Progress	Status
4.5.2.2	Continue the review of the Major Roads Contributions Plan for completion in 2020-2021 (UGMS Action 23)	50%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.5.2.2.1	Strategy	Complete review of draft works program for review of the Major Roads Contributions Plan by 30 June 2022	100%	100%	This item will be addressed as part of the holistic review of Development Contributions and the development of a new contributions framework for PMHC. This item is progressing on schedule.	On Track



#### 4.6: Restore and protect natural areas

4.6.1: Develop and implement a range of programs for the environmental management of lands within the local government area

Code	Operational Plan Action 2021-2022	Progress	Status
4.6.1.1	Undertake strategic biosecurity (weed management) program to restore and conserve the natural environment of the Mid North Coast	75%	
	Coast		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.6.1.1.1	Environment & Regulatory Services	600 high risk species inspections undertaken	100%	100%	Currently achieved 669 inspections.	On Track
4.6.1.1.2	Environment & Regulatory Services	2,000km of high risk/priority pathways inspected	100%	100%	2044.9km inspected	On Track
4.6.1.1.3	Environment & Regulatory Services	210ha of control for high risk species	100%	100%	447.7ha controlled	On Track
4.6.1.1.4	Environment & Regulatory Services	200km of high risk pathways treated for high risk species	100%	100%	103.1km treated.	On Track
4.6.1.1.5	Environment & Regulatory Services	Extension events conducted on weed biosecurity (field days, workshops, presentations)	100%	100%	Cumulative to date is 3.	On Track
4.6.1.1.6	Environment & Regulatory Services	Develop Local Weed Management Plan in accordance with the North Coast Regional Strategic Weed Management Plan framework	100%	100%	Completed.	On Track



Code	Operational Plan Act	tion 2021-2022				Progress	Status
4.6.1.5	Implement the Bushland Regeneration Management Program and collaborate with various community groups (e.g. Landcare) 75%						
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress
4.6.1.5.1	L Environment & Regulatory Services	Undertake management of Council reserves that are deemed of significant ecological value following guidance and direction from the Ecological Restoration report	100%	100%	Ecosure contract almost delivered.		On Track
4.6.1.5.2	2 Environment & Regulatory Services	Develop a roles and responsibilities charter for Landcare and bush care groups in PMHC that work on Council land	100%	100%	MOU with all Landcare is almost finalised.		On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.6.1.6	Inform and educate residents, industry and community groups about Council's tree management requirements within the Port Macquarie-Hastings 2013 Development Control Plan (DCP)	50%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.6.1.6.1	Recreation, Property & Buildings	Develop and implement educational material and delivery program	100%	100%	Educational material delivered via correspondence and conversations regarding different legislative requirements, including civil advice letters, Local Land Services, Office of Environment and Heritage jurisdiction, meetings with contractors and residents regarding Development Control Plan provisions and application process.	On Track
4.6.1.6.2	Recreation, Property & Buildings	Provide advice in accordance with service standards and industry best practice	100%	96%	Total number of CRM's received 282, equating to 406 actual tasks. 172 (Public), 50 (Private), 138 (Storm), 14 (Illegal tree removal/pruning) and 32 (Other categories). 10 CRM's currently exceed service standard. Additional information: 224 enquires (171 public and 53 private phone and email enquires). This does not include calls transferred from call centre to mobile or landline. In addition, there were 27 internal enquiries and 13 hours for rural road/fire related inspections.	Off Track
4.6.1.6.3	Recreation, Property & Buildings	Undertake investigations in relation to all reported illegal tree works	100%	100%	14 illegal tree incidents reported and investigated during this reporting period.	On Track

Code	Operational Plan Action 2021-2022			
4.6.1.15	Environmental Compliance Auditing of Part 5 Review of Environmental Factors			



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.6.1.15.1	Environment & Regulatory Services	Undertake 10 site inspections throughout the year to audit environmental compliance	100%	100%	All VMP compliance up to date. Two REF audits undertaken in this quarter.	On Track
4.6.1.15.2	Environment & Regulatory Services	Toolbox talks have been held with relevant teams to relay information regarding environmental management procedures	100%	100%	Tool box talks are embedded within the REF process.	On Track

Code	Operational Plan Action 2021-2022			
4.6.1.16	Commence the Natural Resources asset and maintenance register			

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.6.1.16.1	Environment & Regulatory Services	Continue to carry out priority maintenance actions within the budget allocated	100%	100%	Will be completed by end of Fin yr.	On Track

Code	Operational Plan Action 2021-2022			
4.6.1.17	Review of Environmental Factors (REF) Training and process/capability improvement			



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.6.1.17.1	Environment & Regulatory Services	Provide internal staff with four environmental training opportunities during the year	100%	100%	New regulation under EP & A Act commenced 1 March 2022. Tim to provide training as of 15 March 2022.	On Track
4.6.1.17.2	Environment & Regulatory Services	Create new training and process documents where relevant (environmental induction, environmental awareness training, Environmental Work Method Statement (EWMS), procedures, environmental inspection checklist)	100%	100%	New regulation will require an update on the Templates for REF & Pre lodgments. An update to the internal processes in Authority will need to be updated.	On Track

Code	Operational Plan Action 2021-2022			
4.6.1.18	Partridge Creek Acid Sulfate Soils Wetland Management	75%		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.6.1.18.1	Environment & Regulatory Services	Six site inspections of weir conducted each year	100%	100%	Installed remote pH sensor. Site inspected four times for Q3.	On Track

Code	Operational Plan Action 2021-2022		
4.6.1.20	Wild deer management in PMHC		



Item 11.15 Attachment 4

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.6.1.20.1	Environment & Regulatory Services	Implement PMHC specific management actions generated from the Hastings Wild Deer Program.	100%	100%	Monitoring and control programs are monitoring as scheduled.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.6.1.21	Tip Gravel Road Environmental Protect Biodiversity Conservation (EPBC) Act Koala Management Plan 755		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.6.1.21.1	Environment & Regulatory Services	Undertake actions as required which include camera monitoring, fence inspections and submission of compliance report	100%	100%	Report completed and put on website and sent to Feds.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.6.1.24	Undertake feasibility study for engineering solutions and initial concept design work to combat koala road strike 759		



(	Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4	4.6.1.24.1	Environment & Regulatory Services	Feasibility study report completed	100%	100%	Contract underway and approaching hold point 1.	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.6.1.25	Undertake development of workflow procedure for identification and reporting of unauthorised vegetation clearing	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.6.1.25.1	Environment & Regulatory Services	Development of workflow procedure	100%	100%	Completed	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.6.1.26	6.1.26 Undertake development of Illegal Tacks Identification and Prioritisation Plan		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.6.1.26.1	Environment & Regulatory Services	Illegal tracks plan created	100%	100%	Report is currently in draft and being reviewed.	On Track



Code Operational Plan Action 2021-2022						Progress	Status
4.6.1.27	4.6.1.27 Review the Koala Population Recovery Strategy 2018						
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress
4.6.1.27.1	Environment & Regulatory Services	Review of strategy completed with opportunities for improvements identified	100%	100%	Report to 17 March 2022 Ordinary Council		On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.6.1.28	Contract management of invasive weed and ecological restoration on Council owned land as per Vegetation Management Plans	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.6.1.28.1	Environment & Regulatory Services	New contracts are scoped, briefs are prepared and services are secured for work for 2021-2022 operational year	100%	100%	Previous comments are for a different budget line. This one is on target.	On Track

Code	Operational Plan Action 2021-2022 P				
4.6.1.29	Investigation of stewardship sites establishment on Council owned lands. 90				

Not Due to Start Progressing on Schedule Completed Off Track

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Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.6.1.29.1	Environment & Regulatory Services	Investigation of feasibility of bushland reserves becoming stewardship sites	100%	100%	Council report prepared for 17 March Meeting - this action is complete.	On Track
4.6.1.29.2	Environment & Regulatory Services	Investigation for new lands for Development Control Plan (DCP) offsets	100%	100%	Report to Council meeting 17 March 2022 for endorsement of criteria regarding land acquisition.	On Track

Code	Operational Plan Action 2021-2022		Status
4.6.1.30	Japanese Walnut Incursion	100%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.6.1.30.1	Environment & Regulatory Services	Extent of Japanese walnut incursion defined and all infestations controlled.	100%	100%	Completed	On Track

#### 4.7: Provide leadership in the development of renewable energy opportunities

4.7.1: Promote renewable energy outcomes within Council





Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.7.1.11.1	Commercial Business Units	Finalise construction of solar energy PV systems by 30 June 2022	100%	100%	Project planning and design continuing in line with revised scope of works with construction due to be undertaken in Quarter 4 2021-22.	On Track

#### 4.8: Increase awareness of issues affecting our environment, including the preservation of flora and fauna

4.8.1: Ensure all operations comply with environmental standards and regulations

Code	Operational Plan Action 2021-2022	Progress	Status
4.8.1.1	Dependence of the provided of the provided of the provided the programs and scheme requirements		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.8.1.1.1	Infrastructure Operations	Monitor plants continuously with plant breakdowns attended to within 24 hours	100%	100%	Plants monitored 24/7 and problems responded to as required	On Track

Code	Operational Plan Action 2021-2022					
4.8.1.2	Operate the water supply network to ensure public health and safety 75					



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.8.1.2.:	L Infrastructure Operations	Ensure any public health and safety issues in relation to water supply are responded to in line with service standards	100%	100%	Water network operated in accordance with legislative requirements, monitored by SCADA 24/7 and enquiries responded to in line with service standards	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.8.1.3	Maintain and operate storage dams in accordance with Australian National Committee On Large Dams (ANCOLD) guidelines	75%	

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.8.1.3.1	Infrastructure Operations	Ensure any issues in relation to the operation and maintenance of storage dams are handled in line with ANCOLD guidelines	100%	100%	Dams operated and maintained in accordance with ANCOLD Guidelines	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.8.1.	Operate and maintain sewerage treatment plants in accordance with environmental licenses, adopted maintenance programs and scheme requirements	75%	



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.8.1.4.1	Infrastructure Operations	Monitor plants continuously with plant breakdowns attended to within 24 hours	100%	100%	Monitoring completed and breakdowns attended to as required	On Track

Code	Operational Plan Action 2021-2022	Progress	Status
4.8.1.5	1.5 Operate the sewerage network to ensure service delivery meets public health and safety requirements		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.8.1.5.1	Infrastructure Operations	Ensure any public health and safety issues in relation to sewerage network are responded to in line with service standards	100%	100%	Sewerage network operated in accordance with legislative requirements. SCADA monitored 24/7 and enquiries responded to within service standards. Overflows and surcharge events occurred as a result of heavy rainfall.	On Track

#### 4.8.2: Increase community awareness and enable access to the natural environment

Code	Operational Plan Action 2021-2022	Progress	Status	
4.8.2.1	8.2.1 Deliver bushfire preparedness and planning programs to the community			



Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.8.2.1.1	Environment & Regulatory Services	Attendance at BFMC and bushfire risk meetings - 90% participation	100%	100%	100% attendance.	On Track
4.8.2.1.2	Environment & Regulatory Services	Attendance at relevant industry training and workshops - 90% participation	100%	100%	100% attendance.	On Track
4.8.2.1.3	Environment & Regulatory Services	CRM completion 100% within the relevant service standards - variable	100%	100%	No outstanding CRM's.	On Track

#### 4.8.3: Promote Biodiversity Programs

Code	Operational Plan Action 2021-2022	Progress	Status
4.8.3.1	Continue implementation of identified actions from the adopted Biodiversity Strategy		

Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments	Progress
4.8.3.1.1	Environment & Regulatory Services	Implementation of actions from the following plans (as outlined in specific OP plan goals):- Koala Recovery Strategy- Flying-fox Camp Management plan- Ecological restoration report- Mid- North Coast Feral Deer Strategy	100%	100%	Progressing as scheduled in individual action plans.	On Track



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Code	Operational Plan Ac	tion 2021-2022				Progress	Status
4.8.3.2	PMHC in partnershi	p with JO, KPS, and DPIE support the ongoi	ng work of	the Koala	Recovery Partnership Program	100%	
Code	Lead Responsibility	Corporate Performance Indicator (CPI)	Target	Actual	Comments		Progress

	Responsibility					
4.8.3.2.1	Environment & Regulatory Services	Operational objectives of the Koala Recovery Partnership Program are met	100%	100%	Completed	On Track

END OF REPORT





# **Monthly Investment Report**

# April 2022



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### **Executive Summary**

#### **Compliance**

Compliance Measure	Within Policy Limits (Y/N)	Reason if Not Compliant
Term to Maturity	Yes – Compliant	n/a
Counterparty	Yes – Compliant	n/a
Credit Quality	Yes – Compliant	n/a

Performance

As at 30/04/2022	1m (actual)	1m (% p.a.)	FYTD (actual)	FYTD (% p.a.)
AusBond Bank Bill Index	-0.02%	-0.19%	0.01%	0.01%
Council's Portfolio^	0.12%	1.47%	1.30%	1.56%
Outperformance	0.14%	1.66%	1.29%	1.55%

^Total portfolio performance excludes Council's cash account holdings. Overall returns would be lower if cash was included.

#### Impact of COVID-19 to Council's Portfolio

COVID-19 has adversely impacted financial markets, which in turn, has also affected Council's investment portfolio. We provide a quick summary in this section.

The RBA cut rates to record lows on 3<sup>rd</sup> November 2020 to 0.10%, consistent with most global central banks resetting their official rates to emergency levels. As global markets transitioned to the recovery phase, supply chain issues has resulted in surging inflationary pressures. Longer-term bond yields have risen significantly in recent months as central banks reverse their easing policy measures (i.e. quantitative easing), whilst also flagging the potential to aggressive hike official interest rates and much quicker than previously anticipated in order to control inflation. **Markets are now bracing an environment where central banks will move from their excessively loose policy measures to a rapid tightening cycle**.

The biggest impact to Council's investment portfolio is with regards to its largest exposure being assets held in bank term deposits, which accounts for around ~89½% of Council's total investment, and cash (~5% of the total investment portfolio). The biggest risk that PMHC faces over the medium-longer term in this environment is not the potential loss of capital (given all the banks are well capitalised and regulated by APRA), but the rapid loss of interest income as interest rates have plummeted.

Council's term deposit portfolio was yielding 1.52% p.a. as at 30/04/2022, with a weighted average duration of around 728 days or ~2.0 years. This average duration will provide some income protection against the low interest rate environment over the next 18 months.

We note the current interest rates in the term deposit market:

- The highest deposit rate from any rated ADI in the market is now ~4.10% p.a. for 5 years;
- The highest deposit rates amongst the "AA-" rated ADIs (major banks) is now yielding between 2.45%-3.75% p.a. (depending on terms between 12m 5 years);

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- The highest deposit rates amongst the "A" rated ADIs was yielding between 2.45%-4.10% p.a. (depending on terms between 12m - 5 years);
- The highest deposit rates amongst the "BBB" rated ADIs was yielding between 2.50%-4.00% p.a. (depending on terms between 12m 5 years).

With markets factoring in official rate hikes over coming months, this has seen a significant shift in longer-term deposit rates. 'New' investments above 2½% p.a. now appears likely if Council can continue to place the majority of its surplus funds for terms of 12 months to 2 years.

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## **Council's Portfolio**

#### Asset Allocation

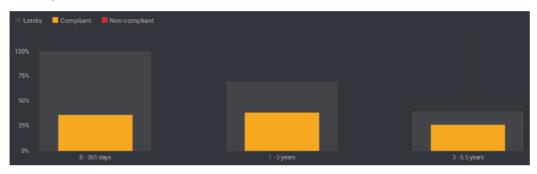
The portfolio is predominately directed to fixed term deposits (89.54%). The remainder of the portfolio is directed to fixed bonds with the Northern Territory Treasury Corporation (4.85%), the overnight cash account with Westpac (4.88%) and the single FRN with Bendigo-Adelaide (0.73%).

Senior FRNs are now becoming more attractive as spreads widened again over April – new issuances should now be considered again on a case by case scenario. In the interim, fixed deposits for 12 months to 2 years appear quite appealing following the spike in longer-term rates in recent months.

	TD - 89.54%
BOND - 4.85%	
FRN - 0.73%	
CASH - 4.88%	

#### Term to Maturity

All maturity limits (minimum and maximum) comply with the Investment Policy. Short-Medium Term (1-3 years) assets account for around 38% of the total investment portfolio, with capacity of around \$131m remaining. Future investments should be directed to the 1-3 year horizon as this is where we currently see the best value.



Where there is (counterparty) capacity to invest in attractive 1-3 year investments, we recommend this be allocated to new any remaining attractive fixed term deposits or secondary market fixed bonds (refer to respective sections below).

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Compliant	Horizon	Invested (\$)	Invested (%)	Min. Limit (%)	Max. Limit (%)	Available (\$)
×	0 - 365 days	\$147,673,941	35.78%	0%	100%	\$265,006,369
×	1 - 3 years	\$158,006,369	38.29%	0%	70%	\$130,869,848
×	3 – 5½ years	\$107,000,000	25.93%	0%	40%	\$58,072,124
×	5½ - 10 years	\$0	0.00%	0%	10%	\$41,268,031
		\$412,680,310	100.00%			

#### **Counterparty**

As at the end of April, Council did not have an overweight position to any single ADI. Overall, the portfolio is diversified across the investment grade credit spectrum (rated BBB- or higher), with no exposure to unrated ADIs.

Compliant	lssuer	Rating	Invested (\$)	Invested (%)	Max. Limit (%)	Available (\$)
✓	NAB	AA-	\$74,000,000	17.93%	30.00%	\$49,804,093
×	NTTC	AA-	\$20,000,000	4.85%	30.00%	\$103,804,093
×	WBC	AA-	\$85,673,941	20.76%	30.00%	\$38,130,152
×	Rabobank	A+	\$8,000,000	1.94%	20.00%	\$74,536,062
×	ICBC Sydney	А	\$68,000,000	16.48%	20.00%	\$14,536,062
×	ING Bank Aus.	А	\$37,500,000	9.09%	20.00%	\$45,036,062
×	Aus. Military Bank	BBB+	\$10,500,000	2.54%	10.00%	\$30,768,031
×	Aus. Unity Bank	BBB+	\$6,000,000	1.45%	10.00%	\$35,268,031
×	BOQ	BBB+	\$37,000,000	8.97%	10.00%	\$4,268,031
×	Bendigo	BBB+	\$3,006,369	0.73%	10.00%	\$38,261,662
×	AMP	BBB	\$10,000,000	2.42%	10.00%	\$31,268,031
×	Auswide	BBB	\$10,000,000	2.42%	10.00%	\$31,268,031
×	MyState	BBB	\$23,000,000	5.57%	10.00%	\$18,268,031
×	P&N Bank	BBB	\$19,000,000	4.60%	10.00%	\$22,268,031
×	Coastline CU	Unrated	\$1,000,000	0.24%	5.00%	\$19,634,016
			\$412,680,310	100.00%		

Effective March 2022, ME Bank formally relinquished its banking (ADI) licence with APRA, following its acquisition by BoQ in mid-2021. All ME Bank assets are now part of its parent company, BoQ.

We remain supportive of the regional and unrated ADI sector (and have been even throughout the GFC period). They continue to remain solid, incorporate strong balance sheets, while exhibiting high levels of capital – typically, much higher compared to the higher rated ADIs. Some unrated ADIs have up to 25-40% more capital than the domestic major banks, and well above the Basel III requirements.

RBA Governor Lowe has commented that they have not seen any signs of stress in the financial system and that unlike during the GFC, the banks (all ADIs) now have cash, are well capitalised and are acting as "shock absorbers" in the current crisis.

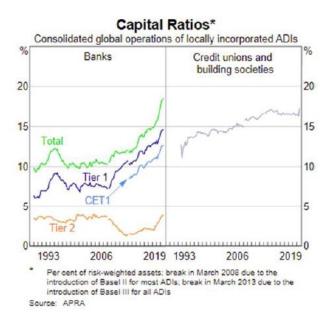
Overall, the lower rated ADIs (BBB and unrated) are generally now in a better financial position then they have been historically (see the Capital Ratio figure below). We believe that deposit investments

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with the lower rated ADIs should be continued going forward, particularly when they offer 'above market' specials. Not only would it diversify the investment portfolio and reduce credit risk, it would also improve the portfolio's overall returns. The lower rated entities are generally deemed to be the more 'ethical' ADIs compared to the higher rated ADIs.

In the current environment of high regulation and scrutiny, all domestic (and international) ADIs continue to carry high levels of capital. There is minimal (if any) probability of any ADI defaulting on their deposits going forward – this was stress tested during the GFC and the pandemic period. **APRA's mandate is to** *"protect depositors"* and provide *"financial stability"*.



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#### Fossil Fuel Investments

#### What is Council's current exposure to institutions that fund fossil fuels?

Using the following link <u>http://www.marketforces.org.au/banks/compare</u>, based on the Council's investment portfolio balance as at 30/04/2022 (\$412.68m), we can roughly estimate that ~64% of the investments have some form of exposure.

#### How would Council modify its Investment Policy to cater for divestment of fossil fuels?

If the major banks were withdrawn from investments, some members of the community may look at that remaining list of ADIs (banks) and say "Why the do we have all our money with those no-name institutions? I've never even heard of them. We don't want to take risks with our money after councils lost \$100's of millions speculating in the GFC". It will be difficult to please everyone. We suggest starting the discussion with all Councillors asking "are you comfortable investing all the money with the lower rated regionals and credit unions?" If not, then a full divestment campaign will be complicated.

Some ways to potentially 'make changes' to the policy, or at least have a discussion, includes:

- "Where possible within policy and without compromising the risk and return profile, we favour..."
- "We have not yet made a decision to divest because it will have implications on credit quality, ratings and income, but we are actively discussing..."

#### What would be implications on our portfolio credit rating?

By adopting a free fossil fuel policy or an active divestment strategy, this would eliminate the major banks rated "AA-" as well as some other "A" rated banks (AMP, BoQ and ING). Council would be left with a smaller sub-sector of banks to choose to invest with.

#### What would be risks and implications on Council's portfolio performance?

Some implications include:

- High concentration risk limiting Council to a selected number of banks;
- Increased credit/counterparty risk;
- May lead to a reduction in performance (most of the senior FRN issues are with the higher rated ADIs) which could result in a significant loss of income generated – could be in excess of hundreds of thousands of dollars per annum;
- Underperformance compared to other Councils.

It may be contrary to Council's primary objective to preserve capital as the investment portfolio's risk would increase (all things being equal). Council may not be maximising its returns – this is one of the primary objectives written in the Investment Policy.



Council's exposure is summarised as follows:

Counterparty	Credit Rating	Funding Fossil Fuel
NAB	AA-	Yes
NTTC	AA-	Yes
WBC (St George)	AA-	Yes
Rabobank	A+	No
ICBC, Sydney	A	No
ING Bank Australia	А	Yes
Australian Military	BBB+	No
Australian Unity	BBB+	No
BoQ	BBB+	Yes
Bendigo-Adelaide	BBB+	No
AMP	BBB	Yes
Auswide	BBB	No
MyState Bank	BBB	No
P&N Bank	BBB	No
Coastline CU	Unrated	No

^^The underlying exposure in these managed funds includes the domestic major banks. Source: <u>https://www.marketforces.org.au/info/compare-bank-table/</u>

Funding Fossil Fuel	Amount	Invested %	Wgt. Avg. Yield % p.a.
Yes	\$264,173,941	64%	1.30%
No	\$148,506,369	36%	1.70%
Total / Wgt. Avg.	\$412,680,310	100%	1.44%

During April 2022, Council diversified its portfolio further amongst the non-Fossil Fuel lending ADIs, by taking up deposit investments Australian Unity Bank (BBB+), as they were offering favourable yields at the time of investment.

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#### T/D Rates Before & After COVID

Pre-pandemic (March 2020), a 'normal' marketplace meant the lower rated ADIs (i.e. BBB category) were offering higher rates on term deposits compared to the higher rated ADIs (i.e. A or AA rated). But due to the cheap funding available provided by the RBA since mid-2020<sup>1</sup>, those lower rated ADIs (BBB rated) did not require deposit funding from the wholesale deposit from the likes of PMHC. Given the higher rated banks had more capacity to lend (as they have a greater pool of borrowers), they subsequently were offering relatively attractive deposit rates. In fact, some of the lower rated banks were not even offering deposit rates at all. This is why PMHC has invested a higher proportion of deposit investments with the higher rated (A or AA) banks over the past two years.

Pre-pandemic, PMHC locked in higher yields with the BBB rated banks given they were generally offering higher rates than the higher rated banks (a 'normal' market). Currently, the 2019 investments placed with the BBB category is still averaging close to 2% p.a. This is the reason why the BBB category's current yield is still higher than the higher rated banks - it is largely driven by the investments placed prior to the pandemic.

Going forward however, with the RBA now removing these cheap borrowing facilities, this has meant the lower rated banks (BBB rated) have started to become more competitive as the market starts to 'normalise'. PMHC will have a larger opportunity to start investing a higher proportion of its surplus funds with the lower rated institutions (up to Policy limits), from which the majority are not lending to the Fossil Fuel industry.

<sup>1</sup> The RBA's Term Funding Facility (TFF) allowed the ADI to borrow as low as 0.10% fixed for 3 years: <u>https://www.rba.gov.au/mkt-operations/term-funding-facility/overview.html</u>

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#### **Credit Quality**

The portfolio remains diversified from a credit ratings perspective. The portfolio is mainly directed to the investment grade ADIs (BBB- or higher), with a minimal investment placed with the local credit union (unrated ADI). There is high capacity to invest in the higher rated ADIs (A or higher), particularly after the downgrades of BoQ and Bendigo-Adelaide Bank in May 2017.

There is currently sufficient capacity to invest with the "BBB" rated ADIs (~\$25.93m remaining at month-end). From a ratings perspective, the "BBB" rated banks now generally dominate the number of ADIs issuing deposits within the investment grade space. There has been further signs of appetite developing in the wholesale deposit market as additional lower rated ("BBB" and unrated) ADIs have come to market to raise 'new' money. Over the coming year, we may start to see a more 'normalised' environment where the lower rated banks start to offer higher rates compared to the higher rated banks as the competition for deposits grow. As more of these banks become more competitive for funds, Council may look to allocate additional funds amongst this sector, particularly with those ADIs that are not lending to the Fossil Fuel industry.

If there are any attractive deposits being offered in the "BBB" rated sector (outside of BoQ, which Council is close to maximum limits), we will inform Council to take advantage and invest accordingly.

Compliant	Credit Rating	Invested (\$)	Invested (%)	Max. Limit (%)	Available (\$)
×	AA Category	\$179,673,941	43.54%	100%	\$233,006,369
×	A Category	\$113,500,000	27.50%	60%	\$134,108,186
×	BBB Category	\$118,506,369	28.72%	35%	\$25,931,740
×	Unrated ADIs	\$1,000,000	0.24%	5%	\$19,634,016
		\$412,680,310	100.00%		

All ratings categories are within the current Policy limits:

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#### **Performance**

Council's performance for the period ending 30 April 2022 is summarised as follows:

Performance (Actual)	1 month	3 months	6 months	FYTD	1 year
Official Cash Rate	0.01%	0.02%	0.05%	0.08%	0.10%
AusBond Bank Bill Index	-0.02%	-0.01%	0.01%	0.01%	0.02%
Council's T/D Portfolio	0.12%	0.36%	0.75%	1.31%	1.62%
Council's FRN Portfolio	0.09%	0.27%	0.55%	0.92%	1.11%
Council's Bond Portfolio	0.10%	0.29%	0.59%	-	-
Council's Portfolio^	0.12%	0.36%	0.74%	1.30%	1.60%
Outperformance	0.14%	0.37%	0.74%	1.28%	1.59%

ATotal portfolio performance excludes Council's cash account holdings. Overall returns would be lower if cash was included.

Performance (Annualised)	1 month	3 months	6 months	FYTD	1 year
Official Cash Rate	0.10%	0.10%	0.10%	0.10%	0.10%
AusBond Bank Bill Index	-0.19%	-0.03%	0.01%	0.01%	0.02%
Council's T/D Portfolio	1.49%	1.50%	1.53%	1.58%	1.62%
Council's FRN Portfolio	1.11%	1.10%	1.10%	1.11%	1.11%
Council's Bond Portfolio	1.20%	1.20%	1.20%	-	-
Council's Portfolio^	1.47%	1.48%	1.50%	1.56%	1.60%
Outperformance	1.67%	1.51%	1.49%	1.54%	1.59%

ATotal portfolio performance excludes Council's cash account holdings. Overall returns would be lower if cash was included.

For the month ending April 2022, the total portfolio (excluding cash) provided a solid return of +0.12% (actual) or +1.47% p.a. (annualised), outperforming the benchmark AusBond Bank Bill Index return of -0.02% (actual) or -0.19% p.a. (annualised). Over the past year, the portfolio returned a very strong +1.60% p.a., outperforming bank bills by 1.59% p.a.

The strong performance continues to be driven by the handful of deposits still yielding above 3% p.a. However, some of these individual deposits are approaching maturity and will be reinvested at much lower prevailing rates.

We are pleased that PMHC remains amongst the best performing Councils in the state of NSW where deposits are concerned, earning on average, around \$2,970,000 in additional interest income compared to its peers (refer to our February 2022 rankings). We have been pro-active in our advice about protecting interest income and addressing reinvestment risk for many years and encouraged to maintain a long duration position. This is now reflected by the high performance of the investment portfolio. Of the 97 individual deposits PMHC held, 40 are still yielding higher than 1½% p.a. That is, around 41% of outstanding deposits held is earning an interest rate that is fifteen times the prevailing cash rate of 0.10%.

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#### Council's Term Deposit Portfolio & Recommendation

As at the end of April 2022, Council's deposit portfolio was yielding 1.52% p.a. (up 4bp from the end of the previous month), with an average duration of ~2.0 years. Where possible, we recommend Council maintains this weighted average duration. With an upward sloping deposit curve, investors are rewarded if they can continue to maintain a longer average duration.

As the past decade or so has highlighted (post-GFC era), we have seen too many portfolios overpay for liquidity and generally not insured themselves by diversify their funding across various tenors. Those investors that can maintain a weighted average duration of +12-18 months are likely to yield, on average, up to 1% p.a. higher than those investors who maintain a weighted average duration of less than 6-9 months.

ADI	LT Credit Rating	Term	T/D Rate
ICBC, Sydney	А	3 years	3.80% p.a.
BoQ/ME Bank	BBB+	3 years	3.75% p.a.
Westpac	AA-	3 years	3.53% p.a.
ING	А	2 years	3.45% p.a.
ICBC, Sydney	А	2 years	3.45% p.a.
BoQ/ME Bank	BBB+	2 years	3.35% p.a.
AMP Bank	BBB	2 years	3.30% p.a.^
Westpac	AA-	2 years	3.28% p.a.
NAB	AA-	2 years	3.15% p.a.

At the time of writing, we see value in:

^ AMP T/Ds - contact us to receive an additional 0.20% p.a. rebated commission on top of the rate shown above

The above deposits are suitable for investors looking to maintain diversification and likely to lock-in a premium compared to purely investing short-term.

Monthly Investment Report: April 2022



For terms under 12 months, we believe the strongest value is currently being offered by the following ADIs (dependent on daily funding requirements):

ADI	LT Credit Rating	Term	T/D Rate
СВА	AA-	12 months	2.71% p.a.
ING	А	12 months	2.70% p.a.
AMP Bank	BBB	11-12 months	2.50% p.a.^
BoQ/ME Bank	BBB+	12 months	2.50% p.a.
Westpac	AA-	12 months	2.48% p.a.
ICBC, Sydney	А	12 months	2.47% p.a.
NAB	AA-	12 months	2.40% p.a.
Bendigo-Adelaide	BBB+	12 months	2.35% p.a.

^ AMP T/Ds – contact us to receive an additional 0.20% p.a. rebated commission on top of the rate shown above

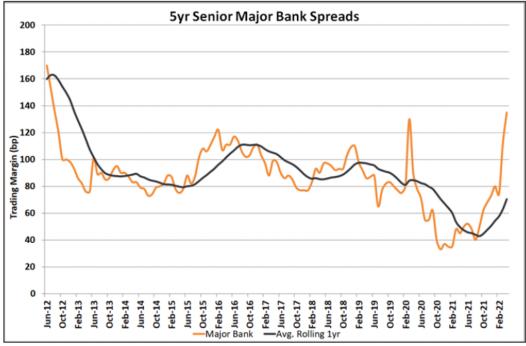
Despite the uplift in outright rates recently, we still believe there is better value in slightly longer-dated terms of 18 months - 2 years. For those investors that do not require high levels of liquidity and can stagger their investments longer-term, they will be rewarded over coming years if they roll for an average term of 18 months - 2 years (this is where we current value), yielding, on average, up to 1% p.a. higher compared to those investors that entirely invest in short-dated deposits.

Monthly Investment Report: April 2022



#### Senior FRNs & Recommendations

Over April, amongst the senior major bank FRNs, physical credit securities widened by up to 30bp at the long-end of the curve. After the major banks (CBA, NAB and WBC) issued new 3 and/or 5 year securities in recent months, a new 5 year senior major bank security would now be issued around the +135bp level, the first time it has broken three figure mark since early 2019 (outside the brief spike in March 2020 due to the original COVID outbreak):



Source: IBS Capital

Amongst the "A" and "BBB" rated sector, the securities widened by up to 35bp at the long-end of the curve. There was ongoing activity in the primary market, highlighted by new issuances from:

- OCBC (AA-): 3 year senior FRN at +70bp
- Bank of Queensland (BBB+): 3½ year senior FRN / fixed bond at +110bp

Credit securities are looking much more attractive given the widening of spreads in recent months. FRNs will play a much larger role in investor's portfolios as official rates start to rise. They also provide the benefit of being liquid and the ability to roll down the curve and gross up returns over ensuing years (in a relatively stable credit environment).

Monthly Investment Report: April 2022



Senior FRNs (ADIs)	30/04/2022	31/03/2022
"AA" rated – 5yrs	+135bp	+112bp
"AA" rated – 3yrs	+115bp	+84bp
"A" rated – 5yrs	+150bp	+120bp
"A" rated – 3yrs	+125bp	+95bp
"BBB" rated – 3yrs	+140bp	+105bp

Source: IBS Capital

We now generally recommend switches ('benchmark' issues only) into new primary issues, out of the following senior FRNs that are maturing:

- On or before mid-2024 for the "AA" rated ADIs (domestic major banks);
- On or before early-mid 2023 for the "A" rated ADIs; and
- Within 6 months for the "BBB" rated ADIs (consider case by case).

Investors holding onto the above senior FRNs ('benchmark' issues only) in their last few years are now generally holding sub-optimal investments and are not maximising returns by foregoing realised capital gains. In the current low interest rate environment, any boost in overall returns should be locked in when it is advantageous to do so, particularly as switch opportunities become available.

In late August 2019, Council placed a bid of \$3m into the new Bendigo (BBB+) 5 year FRN at +97bp maturing 06/09/2024 (ISIN: AU3FN0050019). This FRN should be viewed as a 3½-4 year holding period, with the ability to 'roll down the curve', realise capital gains which would boost the overall return of the investment portfolio. As at 30/04/2022, the security was marked around +87.0bp (from +93.5bp at the end of the previous month) or a capital price ~\$100.21 or unrealised capital gain of ~\$6k. We recommend Council holds this FRN at this stage.

Monthly Investment Report: April 2022



#### Council's Senior Fixed Bond

During September 2021, Council placed parcels in NTTC (AA-) fixed bonds as follows:

Investment Date	Maturity Date	Principal	Rate % p.a.^	Remaining Term (Yrs)	Interest Paid
7/09/2021	15/12/2024	\$5,000,000	0.90%	2.63 yrs	Annually
14/09/2021	15/12/2025	\$5,000,000	1.10%	3.63 yrs	Annually
2/09/2021	15/12/2026	\$5,000,000	1.40%	4.63 yrs	Annually
7/09/2021	15/12/2026	\$5,000,000	1.40%	4.63 yrs	Annually
	Totals / Wgt. Avg.	\$20,000,000	1.20%	3.88 yrs	

<sup>^</sup>Council will receive the full rebated commission of 0.25% (plus GST) on the face value of investment on all these parcels (currently totalling \$55,000).

We believe these investments were prudent at the time of investment given the low rate environment and especially after the rate cut delivered in early November 2020 and its ongoing forward guidance on official interest rates.

The NTTC bonds are a 'retail' offering and not 'wholesale' issuances. Given the lack of liquidity and high penalty costs if they were to be sold/redeemed prior to the maturity date, they are considered to be a hold-to-maturity investment and will be marked at par value (\$100.00) throughout the term of investment.

Monthly Investment Report: April 2022



#### Senior Fixed Bonds – ADIs (Secondary Market)

As global inflationary pressures have emerged, this has seen a significant lift in longer-term bond yields (valuations fell) as markets have strongly factored in a tightening of global central bank policy measures (i.e. withdrawal of Quantitative Easing and lifting official interest rates).

This has resulted in some opportunities in the secondary market. We currently see value in the following fixed bond lines, with the majority now being marked at a significant discount to par (please note supply in the secondary market may be limited on any day):

ISIN	lssuer	Rating	Capital Structure	Maturity Date	~Remain. Term (yrs)	Fixed Coupon	Indicative Yield
AU3CB0265403	Suncorp	AA-	Senior	30/07/2024	2.26	1.85%	3.73%
AU3CB0265593	Macquarie	A+	Senior	07/08/2024	2.28	1.75%	3.61%
AU3CB0265718	ING	AAA	Covered	20/08/2024	2.32	1.45%	3.50%
AU3CB0266179	ANZ	AA-	Senior	29/08/2024	2.34	1.55%	3.44%
AU3CB0266377	Bendigo	BBB+	Senior	06/09/2024	2.36	1.70%	3.68%
AU3CB0268027	BoQ	BBB+	Senior	30/10/2024	2.51	2.00%	3.85%
AU3CB0269710	ANZ	AA-	Senior	16/01/2025	2.72	1.65%	3.60%
AU3CB0269892	NAB	AA-	Senior	21/01/2025	2.74	1.65%	3.67%
AU3CB0270387	Macquarie	A+	Senior	12/02/2025	2.80	1.70%	3.91%
AU3CB0287415	Westpac	AA-	Senior	17/03/2025	2.89	2.70%	3.52%
AU3CB0280030	BoQ	BBB+	Senior	06/05/2026	4.02	1.40%	4.23%
AU3CB0282358	ING	AAA	Covered	19/08/2026	4.31	1.10%	3.93%
AU3CB0286037	Westpac	AA-	Senior	25/01/2027	4.75	2.40%	4.01%

Monthly Investment Report: April 2022



### **Economic Commentary**

#### International Market

Equity markets sold off again in April, as markets braced for a series of aggressive rate hikes from global central banks to combat the surge in inflation. The ongoing geo-political tensions with the war in Ukraine also provided little refuge in bond markets, as yields continued to soar.

In the US, the S&P 500 Index fell -8.80%, while the NASDAQ plummeted -13.26%. Europe's main indices did not suffer as much, with losses incurred from Germany's DAX (-2.20%) and France's CAC (-1.89%). UK's FTSE bucked the trend and gained +0.38%).

US CPI headline inflation came in at  $\pm 1.2\%$  m/m for March and  $\pm 8.5\%$  y/y, against expectations for  $\pm 1.2\%$  /  $\pm 8.4\%$  respectively. Gasoline prices, up  $\pm 18.3\%$  m/m drove much of the increase. The core measure slowed to  $\pm 0.3\%$  m/m.

US Fed Chair Powell commented that in his view it is appropriate to move a little more quickly and a 50bp hike is a live possibility for the May meeting.

The US unemployment rate fell to 3.6% in March (vs 3.7% expected), just one tenth above the pre-pandemic level. The US labour force participation rose 0.1% to 62.4%.

EU inflation printed at +7.5% y/y from a revised +5.9% y/y in February and well above consensus estimate of +6.7% y/y. ECB minutes revealed "*a large number*" of members saw the case for immediate steps towards policy normalisation helped European yields higher.

UK unemployment fell 0.1% to 3.8%, matching the lows seen in 2019 prior to the pandemic.

The Bank of Canada's 50bp rate hike was fully expected, in addition to which the BoC said it would commence *"quantitative tightening* (QT)", with its bond portfolio expected to shrink around 40% over the next two years.

Canada's CPI rose +6.7% y/y in March from +5.7% y/y in February, against expectations for +6.1% y/y, resulting in the highest reading since January 1991.

New Zealand's Reserve Bank (RBNZ) raised the official cash rate by 50bp to 1.50% in a bid to contain inflationary pressures. Inflation in New Zealand hit a 32-year high, recorded at +6.9% for the year to March 2022.

Index	1m	3m	1yr	3yr	5yr	10yr
S&P 500 Index	-8.80%	-8.50%	-1.18%	+11.94%	+11.63%	+11.45%
MSCI World ex-AUS	-8.49%	-8.96%	-4.94%	+8.73%	+8.41%	+8.21%
S&P ASX 200 Accum. Index	-0.85%	+8.24%	+10.16%	+9.42%	+8.81%	+9.90%

The MSCI World ex-Aus Index fell -8.49% for the month:

Source: S&P, MSCI

Monthly Investment Report: April 2022



#### Domestic Market

The RBA's April meeting left policy on hold at 0.10% as widely expected, but the post-meeting statement underwent a fairly substantial rewrite, dropping any reference to being "*patient*" and opened the door to react to data flow "*in the coming months*".

The RBA minutes confirmed their pivot, flagging to the market that a rate hike was imminent, declaring "members also noted that, for some time, the Board had been communicating that it wanted to see evidence that inflation is sustainably within the 2-3% range before increasing interest rates. It had also been communicating that this was likely to require a faster rate of wages growth than had been experienced over previous years".

Headline CPI came in much stronger than expected, at +5.1% y/y (+4.6% expected) while the preferred trimmed mean core inflation measure was +1.4% higher on the quarter (+3.7% y/y). With the RBA's preferred core inflation measure now well above the top of its 2-3% inflation target range, the market has swiftly moved to bring forward RBA tightening expectations, with 15bp now priced in for the 3<sup>rd</sup> May meeting. On inflation, the International Monetary Fund (IMF) sees Australia CPI at +3.9% this year, sharply higher than its +2.1% forecast in January.

The trade surplus surprised sharply to the downside, falling \$4.3bn to \$7.5bn in February, well below the consensus for \$11.7bn.

Australia's unemployment rate remain unchanged at 4.0% in March, with the participation rate also remaining unchanged at 66.4%.

Private sector credit growth slowed to +0.4% m/m in March from +0.6% in February, missing forecasts for +0.6% m/m.

Retail deposit data from APRA showed strong deposit growth for households in March, up \$17.7bn. Household deposits are now \$272bn above their pre-pandemic level, a cash pool equivalent to over 20% of annual household consumption.

The Australian dollar fell -4.46%, finishing the month at US71.48 cents (from US74.82 cents the previous month).

#### Credit Market

The global credit indices widened significantly over the month as the market prepares itself for a series of aggressive rate hikes by global central banks. The indices are back to their levels experienced in mid-2020:

Index	April 2022	March 2022
CDX North American 5yr CDS	81bp	67bp
iTraxx Europe 5yr CDS	89b p	73bp
iTraxx Australia 5yr CDS	97b p	86bp

Source: Markit

Monthly Investment Report: April 2022



## **Fixed Interest Review**

#### Benchmark Index Returns

Index	April 2022	March 2022
Bloomberg AusBond Bank Bill Index (0+YR)	-0.02%	+0.00%
Bloomberg AusBond Composite Bond Index (0+YR)	-1.49%	-3.75%
Bloomberg AusBond Credit FRN Index (0+YR)	-0.05%	-0.29%
Bloomberg AusBond Credit Index (0+YR)	-1.34%	-3.05%
Bloomberg AusBond Treasury Index (0+YR)	-1.51%	-4.03%
Bloomberg AusBond Inflation Gov't Index (0+YR)	-1.60%	-4.27%

Source: Bloomberg

#### Other Key Rates

Index	April 2022	March 2022	
RBA Official Cash Rate	0.10%	0.10%	
90 Day (3 month) BBSW Rate	0.71%	0.23%	
3yr Australian Government Bonds	2.71%	2.31%	
10yr Australian Government Bonds	3.12%	2.84%	
US Fed Funds Rate	0.25%-0.50%	0.25%-0.50%	
10yr US Treasury Bonds	2.89%	2.32%	

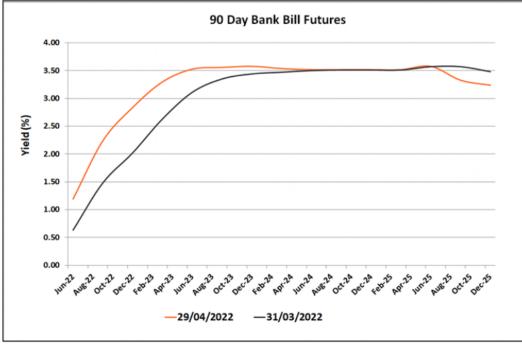
Source: RBA, AFMA, US Department of Treasury

Monthly Investment Report: April 2022



#### 90 Day Bill Futures

Over April, bill futures rose sharply at the short-end of the curve as the market prepares itself for the RBA to hike rates for the first time since 2010. A significant rise remains in 2022-2023 as markets anticipate aggressive rate cuts over the next few months as inflationary pressures continue to mount:



Source: ASX

Monthly Investment Report: April 2022



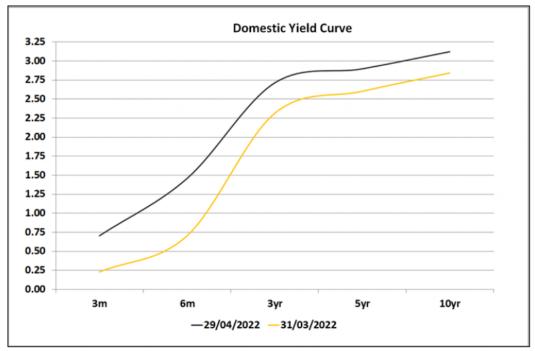
### **Fixed Interest Outlook**

After the US Fed hiked rates in March, the market is factoring in an additional 7½ rate rises this calendar year to stem the surge in inflation. A 50bp rate hike for May has all been but priced into the market.

Domestically, the RBA reference to being patient as it monitors how the various factors affecting inflation in Australia evolve was withdrawn. The RBA has moved from being backward looking to more forward looking with the Board's pandemic policy settings and desire to see actual evidence of inflation sustainably at target no longer written in future tense. With the latest inflationary figures confirming underlying inflation is above the Board's preferred target, a first rate rise in over a decade has been priced into the market for their next meeting on the 3<sup>rd</sup> May.

There is currently up to fourteen rate increases currently priced over the next two years in Australia, something that looks fairly excessive over this timeframe, without further upside surprises to the outlook for strong growth, tight labour markets and inflationary settings currently in evidence.

The domestic bond market continues to suggest a prolonged low period of interest rates on a historical basis (longer-term still below 3% environment). Over the month, yields rose around 40bp at the long-end of the curve:



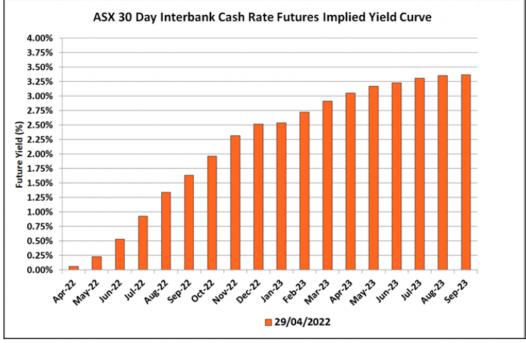
Source: AFMA, ASX, RBA

Following the RBA's admission that an official rate hike was imminent, markets have brought forward their expectations, with a 15bp hike priced in for May 2022, followed by an additional 8 hikes priced by December 2022:

Monthly Investment Report: April 2022

#### ORDINARY COUNCIL 19/05/2022





Source: ASX

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## **Investment Report**

01/04/2022 to 30/04/2022

Item 11.16 Attachment 2

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#### ORDINARY COUNCIL 19/05/2022

PORT MACQUARIE-HASTINGS

## Portfolio Valuation as at 30/04/2022

Issuer	Rating	Туре	Alloc	Interest	Purchase	Maturity	Rate	Capital Value	Accrued	Accrued MTD
Westpac	AA-	TD	LOCAL BRANCH	At Maturity	21/05/2021	23/05/2022	0.2500	10,000.00	23.63	2.05
BOQ	BBB+	TD	GENERAL	Annual	28/05/2019	30/05/2022	2.4000	4,000,000.00	88,898.63	7,890.41
BOQ	BBB+	TD	GENERAL	Annual	02/06/2021	02/06/2022	0.4000	5,000,000.00	18,246.58	1,643.84
Rabobank Australia Branch	A+	TD	GENERAL	Annual	08/06/2017	07/06/2022	3.2200	5,000,000.00	144,238.36	13,232.88
Australian Military Bank	BBB+	TD	GENERAL	Annual	19/06/2020	20/06/2022	1.1500	2,000,000.00	19,786.30	1,890.41
Australian Military Bank	BBB+	TD	GENERAL	Annual	19/06/2020	20/06/2022	1.1500	2,000,000.00	19,786.30	1,890.41
Australian Military Bank	BBB+	TD	GENERAL	Annual	23/06/2020	23/06/2022	1.0500	3,500,000.00	31,413.70	3,020.55
Westpac	AA-	TD	GENERAL	Quarterly	23/06/2020	23/06/2022	1.0100	3,500,000.00	3,777.12	2,905.48
Westpac	AA-	TD	GENERAL	Quarterly	24/06/2020	24/06/2022	1.0200	5,000,000.00	5,309.59	4,191.78
NAB	AA-	TD	GENERAL	Annual	02/08/2018	02/08/2022	3.2200	4,000,000.00	95,629.59	10,586.30
NAB	AA-	TD	GENERAL	Annual	16/08/2018	16/08/2022	3.0500	4,000,000.00	86,235.62	10,027.40
Westpac	AA-	TD	LOCAL BRANCH	Annual	23/08/2021	23/08/2022	0.2500	20,000.00	34.38	4.11
ICBC Sydney Branch	А	TD	GENERAL	Annual	28/08/2019	29/08/2022	1.6400	5,000,000.00	54,816.44	6,739.73
Auswide Bank	BBB	TD	GENERAL	At Maturity	06/09/2019	06/09/2022	1.8000	3,000,000.00	143,210.96	4,438.36
Westpac	AA-	TD	LOCAL BRANCH	Annual	13/09/2017	13/09/2022	3.4100	3,000,000.00	64,463.01	8,408.22
Rabobank Australia Branch	A+	TD	GENERAL	Annual	13/09/2017	13/09/2022	3.3800	3,000,000.00	63,895.89	8,334.25
MyState Bank	BBB	TD	GENERAL	Annual	29/09/2020	29/09/2022	0.8500	5,000,000.00	24,917.81	3,493.15
Westpac	AA-	TD	GENERAL	Quarterly	29/09/2020	29/09/2022	0.7200	5,000,000.00	3,254.79	2,958.90



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Issuer	Rating	Туре	Alloc	Interest	Purchase	Maturity	Rate	Capital Value	Accrued	Accrued MTD
Auswide Bank	BBB	TD	GENERAL	Annual	30/09/2019	30/09/2022	1.7500	4,000,000.00	40,849.32	5,753.42
ICBC Sydney Branch	А	TD	GENERAL	Annual	23/10/2019	24/10/2022	1.7000	3,000,000.00	26,268.49	4,191.78
ICBC Sydney Branch	A	TD	GENERAL	Annual	31/10/2019	31/10/2022	1.7300	5,000,000.00	43,605.48	7,109.59
AMP Bank	BBB	TD	GENERAL	At Maturity	09/11/2021	09/11/2022	1.0000	2,000,000.00	9,479.45	1,643.84
Coastline Credit Union	Unrated	TD	GENERAL	At Maturity	03/03/2022	05/12/2022	0.8500	1,000,000.00	1,373.97	698.63
Australian Unity Bank	BBB+	TD	GENERAL	At Maturity	27/04/2022	27/01/2023	2.0000	6,000,000.00	1,315.07	1,315.07
Members Equity Bank	BBB+	TD	GENERAL	Annual	22/02/2022	22/02/2023	0.9000	5,000,000.00	8,383.56	3,698.63
ING Direct	A	TD	GENERAL	Annual	27/02/2020	27/02/2023	1.6000	2,500,000.00	6,794.52	3,287.67
Members Equity Bank	BBB+	TD	GENERAL	Annual	28/02/2022	28/02/2023	0.9000	5,000,000.00	7,643.84	3,698.63
ING Direct	А	TD	GENERAL	At Maturity	17/03/2022	17/03/2023	1.2500	4,000,000.00	6,164.38	4,109.59
ING Direct	А	TD	GENERAL	At Maturity	17/03/2022	17/03/2023	1.2500	3,000,000.00	4,623.29	3,082.19
ING Direct	А	TD	GENERAL	At Maturity	17/03/2022	17/03/2023	1.2500	5,000,000.00	7,705.48	5,136.99
ING Direct	А	TD	GENERAL	At Maturity	29/03/2022	29/03/2023	1.6000	4,000,000.00	5,786.30	5,260.27
ING Direct	А	TD	GENERAL	At Maturity	29/03/2022	29/03/2023	1.6000	4,000,000.00	5,786.30	5,260.27
ING Direct	A	TD	GENERAL	At Maturity	27/04/2022	20/04/2023	2.4500	6,000,000.00	1,610.96	1,610.96
ING Direct	A	TD	GENERAL	At Maturity	27/04/2022	27/04/2023	2.4500	6,000,000.00	1,610.96	1,610.96
BOQ	BBB+	TD	GENERAL	Annual	28/05/2019	29/05/2023	2.5500	4,000,000.00	94,454.79	8,383.56
BOQ	BBB+	TD	GENERAL	Annual	19/06/2020	19/06/2023	1.3500	2,000,000.00	23,227.40	2,219.18
BOQ	BBB+	TD	GENERAL	Annual	27/06/2019	27/06/2023	2.2000	5,000,000.00	92,520.55	9,041.10
AMP Bank	BBB	TD	GENERAL	Annual	28/07/2021	28/07/2023	0.7500	2,000,000.00	11,383.56	1,232.88

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Issuer	Rating	Туре	Alloc	Interest	Purchase	Maturity	Rate	Capital Value	Accrued	Accrued MTD
Westpac	AA-	TD	GENERAL	Quarterly	11/08/2021	11/08/2023	0.5600	5,000,000.00	6,060.27	2,301.37
MyState Bank	BBB	TD	GENERAL	Annual	14/09/2020	14/09/2023	0.9000	4,000,000.00	22,586.30	2,958.90
MyState Bank	BBB	TD	GENERAL	Annual	14/09/2020	14/09/2023	0.9000	4,000,000.00	22,586.30	2,958.90
AMP Bank	BBB	TD	GENERAL	Annual	12/10/2021	12/10/2023	0.8000	3,000,000.00	13,216.44	1,972.60
ICBC Sydney Branch	A	TD	GENERAL	Annual	27/11/2019	27/11/2023	1.7600	6,000,000.00	44,265.21	8,679.45
Westpac	AA-	TD	GENERAL	Quarterly	02/12/2021	04/12/2023	1.1900	3,000,000.00	5,868.49	2,934.25
ICBC Sydney Branch	A	TD	GENERAL	Annual	16/12/2019	18/12/2023	1.8100	4,000,000.00	26,976.44	5,950.68
Westpac	AA-	TD	GENERAL	Quarterly	02/02/2022	02/02/2024	1.4500	2,500,000.00	8,739.73	2,979.45
Westpac	AA-	TD	GENERAL	Annual	08/02/2022	08/02/2024	1.5500	4,000,000.00	13,928.77	5,095.89
MyState Bank	BBB	TD	GENERAL	Annual	28/02/2022	28/02/2024	1.8000	5,000,000.00	15,287.67	7,397.26
P&N Bank	BBB	TD	GENERAL	Annual	02/03/2022	04/03/2024	1.7000	4,000,000.00	11,178.08	5,589.04
Auswide Bank	BBB	TD	GENERAL	At Maturity	02/03/2020	04/03/2024	1.7500	3,000,000.00	113,630.14	4,315.07
NAB	AA-	TD	GENERAL	Annual	04/04/2022	04/04/2024	2.6000	4,000,000.00	7,693.15	7,693.15
BOQ	BBB+	TD	GENERAL	Annual	18/06/2020	18/06/2024	1.4500	3,000,000.00	37,779.45	3,575.34
ING Direct	А	TD	GENERAL	Annual	23/06/2020	24/06/2024	1.2500	3,000,000.00	32,054.79	3,082.19
BOQ	BBB+	TD	GENERAL	Annual	11/08/2021	12/08/2024	0.7900	2,000,000.00	11,384.66	1,298.63
Westpac	AA-	TD	GENERAL	Quarterly	11/08/2021	12/08/2024	0.7700	3,000,000.00	4,999.73	1,898.63
Australian Military Bank	BBB+	TD	GENERAL	Annual	19/08/2021	19/08/2024	0.7200	3,000,000.00	15,090.41	1,775.34
Westpac	AA-	TD	GENERAL	Quarterly	17/08/2021	19/08/2024	0.7200	2,000,000.00	2,880.00	1,183.56
Bendigo and Adelaide	BBB+	FRN	GENERAL	Quarterly	06/09/2019	06/09/2024	1.1050	3,006,369.00	4,995.21	2,724.66

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Issuer	Rating	Туре	Alloc	Interest	Purchase	Maturity	Rate	Capital Value	Accrued	Accrued MTD
BOQ	BBB+	TD	GENERAL	Annual	27/09/2019	27/09/2024	2.0000	2,000,000.00	23,671.23	3,287.67
AMP Bank	BBB	TD	GENERAL	Annual	12/10/2021	11/10/2024	1.0000	3,000,000.00	16,520.55	2,465.75
NAB	AA-	TD	GENERAL	Annual	16/10/2020	16/10/2024	0.8000	5,000,000.00	21,369.86	3,287.67
ICBC Sydney Branch	А	TD	GENERAL	Annual	03/11/2021	04/11/2024	1.6500	3,000,000.00	24,275.34	4,068.49
Westpac	AA-	TD	GENERAL	Quarterly	09/11/2021	11/11/2024	1.4500	1,000,000.00	3,217.81	1,191.78
Westpac	AA-	TD	GENERAL	Quarterly	16/11/2021	18/11/2024	1.6000	4,000,000.00	12,975.34	5,260.27
NAB	AA-	TD	GENERAL	Annual	18/11/2020	18/11/2024	0.7000	5,000,000.00	15,726.03	2,876.71
Westpac	AA-	TD	GENERAL	Quarterly	29/11/2021	29/11/2024	1.6000	5,000,000.00	13,589.04	6,575.34
Westpac	AA-	TD	GENERAL	Quarterly	02/12/2021	02/12/2024	1.6200	2,000,000.00	5,326.03	2,663.01
ICBC Sydney Branch	A	TD	GENERAL	Annual	09/12/2021	09/12/2024	1.9200	5,000,000.00	37,610.96	7,890.41
Northern Territory Treasury	AA-	BOND	GENERAL	Semi-Annual	07/09/2021	16/12/2024	0.9000	5,000,000.00	16,890.41	3,698.63
NAB	AA-	TD	GENERAL	Annual	29/01/2021	29/01/2025	0.7200	4,000,000.00	7,101.37	2,367.12
Westpac	AA-	TD	GENERAL	Quarterly	02/02/2022	03/02/2025	1.8200	2,500,000.00	10,969.86	3,739.73
P&N Bank	BBB	TD	GENERAL	Annual	15/02/2022	17/02/2025	2.3700	5,000,000.00	24,349.32	9,739.73
P&N Bank	BBB	TD	GENERAL	Annual	22/02/2022	24/02/2025	2.0500	2,000,000.00	7,638.36	3,369.86
MyState Bank	BBB	TD	GENERAL	Annual	28/02/2022	28/02/2025	2.2500	5,000,000.00	19,109.59	9,246.58
ICBC Sydney Branch	А	TD	GENERAL	Annual	02/03/2022	03/03/2025	2.3000	4,000,000.00	15,123.29	7,561.64
NAB	AA-	TD	GENERAL	Annual	02/03/2021	03/03/2025	0.9500	4,000,000.00	6,246.58	3,123.29
P&N Bank	BBB	TD	GENERAL	Annual	15/03/2022	17/03/2025	2.4600	3,000,000.00	9,503.01	6,065.75
P&N Bank	BBB	TD	GENERAL	Annual	28/03/2022	28/03/2025	2.9000	5,000,000.00	13,506.85	11,917.81

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Issuer	Rating	Туре	Alloc	Interest	Purchase	Maturity	Rate	Capital Value	Accrued	Accrued MTD
ICBC Sydney Branch	A	TD	GENERAL	Annual	18/06/2020	18/06/2025	1.7500	2,000,000.00	30,397.26	2,876.71
NAB	AA-	TD	GENERAL	Annual	26/07/2021	28/07/2025	1.0000	5,000,000.00	38,219.18	4,109.59
ICBC Sydney Branch	A	TD	GENERAL	Annual	02/09/2021	02/09/2025	1.2000	5,000,000.00	39,616.44	4,931.51
ICBC Sydney Branch	А	TD	GENERAL	Annual	16/10/2020	16/10/2025	1.2000	5,000,000.00	32,054.79	4,931.51
ICBC Sydney Branch	А	TD	GENERAL	Annual	17/11/2020	17/11/2025	1.3000	6,500,000.00	38,198.63	6,945.21
NAB	AA-	TD	GENERAL	Annual	17/11/2020	17/11/2025	0.8500	3,500,000.00	13,448.63	2,445.21
ICBC Sydney Branch	А	TD	GENERAL	Annual	03/12/2020	03/12/2025	1.2000	5,000,000.00	24,493.15	4,931.51
ICBC Sydney Branch	А	TD	GENERAL	Annual	07/12/2020	08/12/2025	1.2000	5,000,000.00	23,835.62	4,931.51
NAB	AA-	TD	GENERAL	Annual	07/12/2020	08/12/2025	0.9000	5,000,000.00	17,876.71	3,698.63
Northern Territory Treasury	AA-	BOND	GENERAL	Semi-Annual	14/09/2021	15/12/2025	1.1000	5,000,000.00	20,643.84	4,520.55
NAB	AA-	TD	GENERAL	Annual	29/01/2021	29/01/2026	0.9100	4,000,000.00	8,975.34	2,991.78
NAB	AA-	TD	GENERAL	Annual	02/03/2021	02/03/2026	1.2100	4,000,000.00	7,956.16	3,978.08
Westpac	AA-	TD	GENERAL	Quarterly	09/03/2021	09/03/2026	1.2500	5,000,000.00	9,075.34	5,136.99
NAB	AA-	TD	GENERAL	Annual	16/03/2021	16/03/2026	1.2500	5,000,000.00	7,876.71	5,136.99
NAB	AA-	TD	GENERAL	Annual	26/05/2021	26/05/2026	1.2500	5,000,000.00	58,219.18	5,136.99
ICBC Sydney Branch	А	TD	GENERAL	Annual	02/06/2021	02/06/2026	1.4000	2,500,000.00	31,931.51	2,876.71
NAB	AA-	TD	GENERAL	Annual	02/06/2021	02/06/2026	1.3000	2,500,000.00	29,650.68	2,671.23
Westpac	AA-	TD	GENERAL	Quarterly	23/06/2021	23/06/2026	1.3200	5,000,000.00	7,052.05	5,424.66
Westpac	AA-	TD	GENERAL	Quarterly	23/06/2021	23/06/2026	1.3200	5,000,000.00	7,052.05	5,424.66
NAB	AA-	TD	GENERAL	Annual	26/07/2021	27/07/2026	1.2000	5,000,000.00	45,863.01	4,931.51

IMPERIUM MARKETS

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ACQUARIE-HASTINGS	*
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Issuer	Rating	Туре	Alloc	Interest	Purchase	Maturity	Rate	Capital Value	Accrued	Accrued MTD
ICBC Sydney Branch	А	TD	GENERAL	Annual	28/07/2021	28/07/2026	1.3200	2,000,000.00	20,035.07	2,169.86
NAB	AA-	TD	GENERAL	Annual	23/09/2021	23/09/2026	1.2000	5,000,000.00	36,164.38	4,931.51
Northern Territory Treasury	AA-	BOND	GENERAL	Semi-Annual	07/09/2021	15/12/2026	1.4000	5,000,000.00	26,273.97	5,753.42
Northern Territory Treasury	AA-	BOND	GENERAL	Semi-Annual	02/09/2021	15/12/2026	1.4000	5,000,000.00	26,273.97	5,753.42
Westpac	AA-	CASH	GENERAL	Monthly	30/04/2022	30/04/2022	0.3500	20,143,941.49	5,793.33	5,793.33
TOTALS								412,680,310.49	2,601,425.45	459,198.12



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Best-Practice Management of Water Supply and Sewerage Guidelines

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	COAG/NCP/NWI/Statutory Requirements	(4)	Demonstrate long term financial sustainability of the business to comply with NCP and NWI. Page 12 of Ref 14.	See above.	Full cost-recovery with consumption based water supply pricing, trade waste charging and removal of cross-subsidies to comply with COAG Strategic Framework for Water Reform, NCP and NWI. Pages 12, 17, 18, 22 of Ref 14.
eria .	Tools & Resources		Appendix A	Appendix A	Ref 4 Appendix B
Table 1 – Required Outcomes for Best-Practice Criteria	Indicators to Demonstrate Achievement of Outcome	(3)	<ul> <li>Current SBP that includes:</li> <li>Current SBP that includes:</li> <li>Operating environment review</li> <li>Asset management plan (operation, maintenance, capital works)</li> <li>Key performance indicators</li> <li>Key performance indicators</li> <li>Levels of service plan</li> <li>Levels of service</li> <li>Human resources plan</li> <li>Address issues in Ref 1 and the Check List* in Appendix A. A current SBP and financial plan is one which has been prepared or updated within the last 3 years.</li> </ul>	<ul> <li>A robust minimum 20 year financial plan which identifies the lowest required stable typical residential bill (TRB).</li> <li>Address the issues in Ref 2 and the Check List* in Appendix A.</li> <li>* Each check list is essentially a road map to assist LWUs to quickly address the issues covered by the relevant guidelines as well as any developments since publication of the guidelines.</li> </ul>	<ul> <li>Appropriate tariffs without significant cross-subsidies.</li> <li>Total annual income and projected TRB should be consistent with above financial plan. This generally results in a positive economic real rate of return (ERR).</li> </ul>
	Required Outcome	(2)	A current, sound Strategic Business Plan (SBP) and financial plan.	A robust financial plan which includes a capital works plan.	Full cost-recovery for each of water supply and sewerage businesses.
	Criterion	(1)	1 Strategic Business Planning	Financial Planning	2 Pricing <sup>18</sup> and (a) Developer Charges

<sup>18</sup> Agreement has been reached with the Local Government Association and the Shires Association of NSW to amendment of the Local Government Act 1993 in order to provide NSW LWUs with the option of using integrated water pricing for their water supply and sewerage services. An LWU implementing integrated water pricing in accordance with Attachment 2 on Page 35 will comply with elements 2 (a), 2 (b) and 2 (c) of Criterion 2 above.



	COAG/NCP/NWI/Statutory Requirements	(4)	e.	×		
eria	Tools & Resources		Page 9 Ref 4 Page 10 Ref 4 Appendix B			Page 28 Ref 4 Page 29 Ref 4 Page 29 Ref 4
Table 1 – Required Outcomes for Best-Practice Criteria	Indicators to Demonstrate Achievement of Outcome	(3)	<ul> <li>Appropriate water usage charge/kL based on long-run marginal cost.</li> <li>Access charge relative to a customer's capacity requirements.</li> <li>No land value based charges (ie. rates) and no "free" or "pre-paid" water allowance.</li> <li>Any large increases in non-residential customer bills phased in over 5 years.</li> <li>To encourage water conservation, high water consuming residential customers should be subjected to a step price increase of at least 50% for incremental usage above a specified threshold. This threshold should not exceed 450 kL/a per household, except for LWUs outside the DWE Coastal and Tablelands Zone with a high incidence of evaporative air cookies, where a threshold of up to 600kLa per evaporative air coaper.</li> </ul>		<ul> <li>Livus with under 4,000 connected properties to have at least 30% of residential water revenue* generated through usage charges.</li> <li>LWUs may demonstrate compliance with this requirement on the basis of either (i) or (ii) below.</li> <li>(i) their projected total residential revenue for the next financial year, or</li> <li>(ii) their projected typical residential bill (on the basis of their (ii) their projected total residential bill (on the basis of their (ii) their projected total residential bill (on the basis of their (ii) their projected total residential bill (on the basis of their (iii) their projected total residential bill (on the basis of their (iii) their projected total residential bill (on the basis of their (iii) their projected total residential bill (on the basis of their (iii) their projected total residential bill (on the basis of their (iii) their projected total residential bill (on the basis of their (iii) their projected total residential bill (on the basis of their (iii) their projected total residential bill (on the basis of their (iii) their projected total residential bill (on the basis of their (iii) their projected total residential bill (on the basis of their (iii) their projected total residential bill (on the basis of their (iii) their brown of the bill bill (iii) their bill (iii) their bill bill (iii) their bill bill bill bill bill bill bill bi</li></ul>	<ul> <li>Appropriate residential tariff.</li> <li>Appropriate residential tariff.</li> <li>No land value based charges (ie. rates).</li> <li>Non-residential</li> <li>Two-part tariff.</li> </ul>
	Required Outcome	(2)	Complying water supply tariff.			Complying sewerage tariff.
	Criterion	(1)	<b>(q)</b>			(c)

ATTACHMENT

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Best-Practice Management of Water Supply and Sewerage Guidelines

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	COAG/NCP/NWI/Statutory Requirements	(4)			Sections 305 to 307 of Water Management Act 2000. Section 64 of Local Government Act 1993.	COAG, NCP and NWI – page 18 of Ref 14 Section 68 of Local Government Act 1993, Local Government (General) Regulation 2005.
eria	Tools & Resources		Page 31 Ref 4	Page 208 Ref 5 Page 209 Ref 5 Pages 209 to 212 Ref 5	Page iv Ref 6 Appendix B	Ref 5 Appendix A
Table 1 – Required Outcomes for Best-Practice Criteria	Indicators to Demonstrate Achievement of Outcome	(3)	<ul> <li>Appropriate sever usage charge/kL.</li> <li>Access charge that is reflective of the cost of providing these severage services.</li> <li>Any large increases in non-residential customer bills phased in over 5 years.</li> </ul>	<ul> <li>Annual trade waste fee for all liquid trade waste dischargers.</li> <li>Trade waste usage charge for dischargers with prescribed pre-treatment.</li> <li>Excess mass charges for large dischargers and industrial waste.</li> </ul>	<ul> <li>Development Servicing Plan<sup>#</sup> in accordance with Ref 6, with commercial developer charges.</li> <li># LWUs with growth of under 5 lots/a exempted.</li> </ul>	<ul> <li>Liquid Trade Waste approvals issued in accordance with Ref 5.</li> <li>Liquid Trade Waste Policy adopted and implemented in accordance with Ref 5.</li> </ul>
	Required Outcome	(2)		Complying liquid trade waste fees and charges for <u>all</u> liquid trade waste dischargers.	Commercial Developer Charges.	Liquid trade waste approval issued to each trade waste discharger.
	Criterion	(1)		(d)	Developer (e) Charges (DC)	Liquid Trade (f) Waste Approvals

Best-Practice Management of Water Supply and Sewerage Guidelines

	Tools & COAG/NCP/NWI/Statutory Resources Requirements (4)	E .	J Ref 4 dix B	dix C COAG, NCP and NWi Page 52 of Ref 14 Water Management Act 2000.	dix D Water Management Act 2000. Local Government Act 1993.
eria	Res	·	Page 9 Ref 4 Appendix B	Appendix C	Appendix D Ref 19
Table 1 – Required Outcomes for Best-Practice Criteria	Indicators to Demonstrate Achievement of Outcome (3)	(6)	<ul> <li>The potable water supply tariff in dual water supplies to comply with 2(b) above, except that step pricing is not a requirement.</li> <li>For the non-potable component of dual water supplies: <ul> <li>LuVUs are encouraged to install a non-potable water meter for each customer served where practical.</li> <li>Appropriate non-potable water usage charge/kL based on long-run marginal cost.</li> <li>Access charge relative to a customer's capacity requirements.</li> <li>No land value based charges (ie. rates) and no "free" or "pre-paid" non-potable water allowance.</li> <li>At least 50% of residential revenue<sup>+</sup> generated through usage charges.</li> </ul> </li> </ul>	<ul> <li>Sound water conservation and demand management implemented.</li> <li>Identification of most cost-effective demand management initiatives.</li> <li>Subsidisation and promotion of at least two of the identified demand management initiatives.</li> <li>Include demand monitoring, leakage measurement and reduction and community education.</li> </ul>	<ul> <li>Compile data on existing system, your LWU's drought management planning, including adoption of a schedule of trigger points for timely implementation of appropriate water restrictions.</li> <li>Sound drought management implemented in accordance with the LWU's adopted schedule.</li> </ul>
	Required Outcome	(7)	Complying tariffs for dual water supplies.	Sound waler conservation and demand management in place.	Sound drought management in place.
	Criterion	(1)	Dual Water (g) Supplies	Water Conservation	Drought Management
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ORDINARY COUNCIL 19/05/2022

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Best-Practice Management of Water Supply and Sewerage Guidelines	

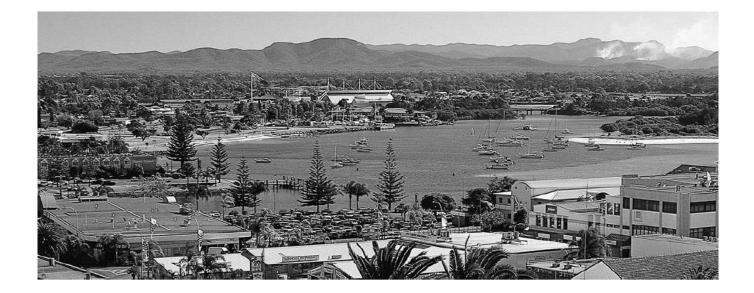
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	د COAG/NCP/NWI/Statutory rces Requirements	(4)	COAG, NCP and NWI Page 31 of Ref 14, page 15 of Ref 15 and page 1 of Ref 16.	F COAG, NCP and NWI Page 43 of Ref 14. WMA 2000.
ria	Tools & Resources		Ref 3 Appendix E	Ref 8 Appendix F
Table 1 – Required Outcomes for Best-Practice Criteria	Indicators to Demonstrate Achievement of Outcome	(3)	<ul> <li>Reporting forms provided to DWE by 15 September each year.</li> <li>Draft of Special Schedules 3 to 6 and Notes 2 and 3 of the LWU's Special Purpose Financial Reports provided to DWE by 15 September each year.</li> <li>LWUs with over 10,000 connected properties to arrange auditing of their core performance indicators in accordance with the auditing frequirements of the <i>National Performance Framework</i>.</li> <li>Action Plan provided to Council following review of your LWU's 2-page Performance Report (water, sewerage).</li> <li>Statement of Compliance to be submitted to DWE prior to payment of dividend from surplus (including Dividend Payment Form, Statement of Financial Performance of Business Activities, a Compliance Audit Report).</li> </ul>	<ul> <li>Completion of integrated Water Cycle Management Evaluation by June 2007.</li> <li>Completion of integrated Water Cycle Management Strategy by June 2008.</li> <li>Implementation of Integrated Water Cycle Management in accordance with the Strategy by June 2008.</li> </ul>
	Required Outcome	(2)	Completed performance reporting forms to DWE Review 2-page LWU Performance Report, prepare Action Plan.	sound IWCM implemented.
	Criterion	(1)	Performance Reporting	Integrated Water Cycte Management (IWCM)
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Item 11.17 Attachment 1 Page 372

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## Port Macquarie-Hastings Council

Report on Audit of Best Practice Management of Water Supply and Sewerage Services in 2020/21

April 2022

A division of the Department of Regional NSW

## Port Macquarie-Hastings Council

Report on Audit of Best Practice Management of Water Supply and Sewerage Services in 2020/21

April 2022

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Cover Image: PMH Council

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Public Works Advisory

PMHC – Best Practice Management Audit Report

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## 1. Report of Compliance

## 1.1 Introduction

Public Works Advisory were engaged by the Port Macquarie-Hastings Council (PMHC) to audit their water supply and sewerage services for compliance with the DPE Water Best Practice Management Guidelines, May 2007 (BPM Guidelines) and the NSW Best Practice Management Framework for Water Supply and Sewerage, February 2019 (BPM Framework) for the reporting year 2020/21.

The audit involved off-site collection, collation and review of relevant documentary evidence, and this document is the audit report outlines the scope of audit and records the audit findings and conclusions regarding the compliance of Port Macquarie-Hastings Council (PMHC) with the BPM Guidelines and the BPM Framework for Water Supply and Sewerage services in the reporting year 2020/21.

## 1.2 Scope

We have performed the agreed procedures in accordance with our proposal for engagement by Port Macquarie-Hastings Council and described below with respect to the compliance of the PMHC's Water Supply and Sewerage services with the NSW Best Practice Management Guidelines, August 2007 as updated through the BPM Framework, February 2019 for the year ended 30 June 2020 based on relevant criteria as set forth in column (3) of Table 1 of the Guidelines. Our engagement was generally undertaken in accordance with Australian Auditing Standards applicable to agreed-upon procedures of engagements.

The responsibility for determining the adequacy or otherwise of the procedures agreed to be performed is that of Council and the DPE Water. The procedures were performed solely to assist PMHC and DPE Water in evaluating the validity of the compliance requirements and are summarised as follows:

- We reviewed the current Strategic Business Plan, September 2014 (SBP) to ensure that it included an:
  - Operating environment review
  - Total Asset management plan operation, maintenance, capital works
  - Key performance indicators
  - Customer service plan

- Levels of service
- Work Force plan
- We reviewed the Financial Plan as contained within the SBP to ensure that it covered a period of at least 20 years and it reports the lowest required stable typical residential bill (TRB)
- 3) We reviewed **full cost recovery** for both water supply and sewerage is consistent with the outcomes listed in column (3) of Table 1
- We reviewed water supply tariffs to confirm they complied with the outcomes listed in column (3) of Table 1
- 5) We reviewed the **sewerage tariffs** to confirm they complied with the outcomes listed in column (3) of Table 1
- 6) We reviewed the **liquid trade waste fees and charges** to confirm they complied with the outcomes listed in column (3) of Table 1
- We reviewed the commercial developer charges to confirm the existence of a Development Servicing Plan with commercial developer charges.
- We reviewed the liquid trade waste approvals to confirm they complied with the outcomes listed in column (3) of Table 1
- We reviewed the water conservation measures to confirm that it included the outcomes listed in column (3) of Table 1
- 10) We reviewed the **drought management** plan to confirm that it included the outcomes listed in column (3) of Table 1
- 11) We checked documentary evidence to ensure that **performance reporting** forms were completed and lodged to DPE Water within the required time frame, and
- 12) We checked for completion and implementation of **IWCM Strategy** following substantial commencement of sound Integrated Water Cycle Management.

## 1.3 Findings

We report our findings as follows:

Public Works Advisory

PMHC – Best Practice Management Audit Report

- a) With respect to (1) above, we found the Strategic Business Plan, September 2014 included the outcomes listed in column (3) of Table 1 of the Best-Practice Management Guidelines. Council has commenced the development of IWCM Strategy in accordance with the latest BPM Framework, hence review and update of the Strategic Business Plan was not due during the current audit period.
- b) With respect to (2) above, we found that PMHC have reported in the 2014 SBP the typical residential bills for water supply and sewerage arrived at using their "in-house" spreadsheet financial model. We also found that Council has undertaken annual update of the spreadsheet financial models for the water and sewer funds for 2020/21.
- c) With respect to (3) above, we found that the projected total annual water supply and sewerage services income in the Council's financial models provided full cost recovery, resulting in a positive economic real rate of return for 2020/21.
- d) With respect to (4) above, we found that water supply tariffs considered the outcomes listed in column (3) of Table 1 with 74.96% of residential revenue generated through residential usage charges for the year 2020/21. We note that as a result of the implementation of a phased restructure of water tariffs to achieve 75% of the residential revenue over a 3-year period starting from 2019/20, the residential usage charge revenue has substantially improved from the 69.89% reported for FY 2019/20.
- e) With respect to (5) above, we found that the residential sewerage tariffs considered the outcomes listed in column (3) of Table 1. We also found that not all categories of the non-residential customers are levied the sewerage usage charge as part of the adopted two-part tariff structure, and hence is **not fully compliant** with the BPM Guidelines. In this regard, Council reported that the sewerage tariff structure are currently being reviewed with a view to align the same with best practice pricing from FY 2022/23.
- f) With respect to (6) above, we found that the liquid trade waste fees and charges considered the outcomes listed in column (3) of Table 1.
- g) With respect to (7) above, we found that the adopted Development Servicing Plans (DSPs) for Water Supply and Sewerage Services in September 2014 with the developer charges calculated on the basis of the NSW Developer Charges Guidelines – Consultation Draft 2012. The Development Servicing Plans considered the outcomes listed in column (3) of Table 1 and noted that the Plans took into account the cross subsidy that will occur due to the adoption of uniform developer charges across all the DSP areas. Council reported that it has planned and budgeted to take-up the review,

Public Works Advisory

PMHC – Best Practice Management Audit Report

update and adoption of the water and sewerage DSPs in accordance with the 2016 Developer Charges Guidelines in FY 2022/23.

- h) With respect to (8) above, we found that the Liquid Trade Waste Policy amended and adopted in 29 August 2018 considered the outcomes listed in column (3) of Table 1 with regard to issue of liquid trade waste approvals.
- i) With respect to (9) above, we found that Council's Water Supply Policy, amended and adopted on 19 May 2021, considered implementation of a sound water conservation and demand management initiatives to achieve the outcomes listed in column (3) of Table 1. The initiatives are currently reviewed for update as part of IWCM Strategy development.
- j) With respect to (10) above, we found that Council's Water Supply Policy, amended and adopted on 19 May 2021, considered the outcomes listed in column (3) of Table 1 for sound drought management. The initiatives are currently reviewed for update as part of IWCM Strategy development.
- k) With respect to (11) above, we found that performance reporting forms for 2020/21 have been completed and lodged with DPE Water on 23 September 2021, which is within the required time frame.
- I) With respect to (12) above, we found that following a 'gap analysis' to review its IWCM Strategy completed in 2016, PMHC has engaged consultants to update the same to fully comply with IWCM checklist, February 2019. Council reports that a number of supplementary reports addressing IWCM checklist requirements including Secure Yield Assessment report, Sewerage Scheme Load Analysis and Forecasts report, Asset Renewal Plans and a Continuity and Reliability of Supply Assessment report, have been completed during 2020-21.

Council further reports that it is in discussion with DPE Water to develop a strategic planning roadmap outlining revised milestones to align Council's IWCM Strategy upon the release of an improved IWCM process based on current DPE review of IWCM checlist requirements.

## 1.4 Conclusion

Based on the findings of our audit, we conclude that Port Macquarie-Hastings Council has demonstrated 'substantial compliance' with Best Practice Management of Water Supply

*and Sewerage* in line with the DPE Water Guidelines as applicable for the year ended 30<sup>th</sup> June 2021.

## 1.5 Definition

We have adopted the following definition for this engagement:

- "Substantial Compliance" means the level of compliance with the Guidelines such that any identified deficiencies do not detract from the general intent of the Guidelines to achieve Best Practice Management for Water Supply and/or Sewerage Services.
- What constitutes substantial compliance is also a function of at what point in time the issue is examined. Therefore, the best practice management adopted must take into account likely future scenarios and apply the current body of industry knowledge in regard to best practice.

### 1.6 Disclaimer

Our report is solely for the purpose set forth in the first paragraph of this report and for the information of Port Macquarie Hastings Council and the DPE Water and is not to be used for any other purpose or distributed to any other party. This report relates only to the items specified above and does not extend to any financial report of the Council taken as a whole.

Signed:

Date signed: 21 April 2022

H. Hor I

Marimuthu Sundaravadivel Senior Engineer, Strategic Water Planning Public Works Advisory 4 Parramatta Square Parramatta, NSW 2150



4 Parramatta Square, 12 Darcy Street Parramatta NSW 2150

www.publicworksadvisory.nsw.gov.au



#### INDEPENDENT AUDITOR'S REPORT

#### Report on the special purpose financial statements

#### Port Macquarie-Hastings Council

To the Councillors of the Port Macquarie-Hastings Council

#### Opinion

I have audited the accompanying special purpose financial statements (the financial statements) of Port Macquarie-Hastings Council's (the Council) Declared Business Activities, which comprise the Statement by Councillors and Management, the Income Statement of each Declared Business Activity for the year ended 30 June 2021, the Statement of Financial Position of each Declared Business Activity as at 30 June 2021 and the Significant accounting policies note.

The Declared Business Activities of the Council are:

- Water supply
- Sewerage
- Waste Management.

In my opinion, the financial statements present fairly, in all material respects, the financial position of the Council's declared Business Activities as at 30 June 2021, and their financial performance for the year then ended, in accordance with the Australian Accounting Standards described in the Significant accounting policies note and the Local Government Code of Accounting Practice and Financial Reporting 2020–21 (LG Code).

My opinion should be read in conjunction with the rest of this report.

#### **Basis for Opinion**

I conducted my audit in accordance with Australian Auditing Standards. My responsibilities under the standards are described in the 'Auditor's Responsibilities for the Audit of the Financial Statements' section of my report.

I am independent of the Council in accordance with the requirements of the:

- Australian Auditing Standards
- Accounting Professional and Ethical Standards Board's APES 110 'Code of Ethics for Professional Accountants (including Independence Standards)' (APES 110).

I have fulfilled my other ethical responsibilities in accordance with APES 110.

Parliament promotes independence by ensuring the Auditor-General and the Audit Office of New South Wales are not compromised in their roles by:

- providing that only Parliament, and not the executive government, can remove an Auditor-General
- mandating the Auditor-General as the auditor of councils
- precluding the Auditor-General from providing non-audit services.

I believe the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Level 19, Darling Park Tower 2, 201 Sussex Street, Sydney NSW 2000 GPO Box 12, Sydney NSW 2001 | t 02 9275 7101 | mail@audit.nsw.gov.au | audit.nsw.gov.au

#### **Emphasis of Matter - Basis of Accounting**

Without modifying my opinion, I draw attention to the Significant accounting policies note to the financial statements which describes the basis of accounting. The financial statements have been prepared for the purpose of fulfilling the Council's financial reporting responsibilities under the LG Code. As a result, the financial statements may not be suitable for another purpose.

#### **Other Information**

The Council's annual report for the year ended 30 June 2021 includes other information in addition to the financial statements and my Independent Auditor's Report thereon. The Councillors are responsible for the other information. At the date of this Independent Auditor's Report, the other information I have received comprise the general purpose financial statements and Special Schedules (the Schedules).

My opinion on the financial statements does not cover the other information. Accordingly, I do not express any form of assurance conclusion on the other information. However, as required by the *Local Government Act* 1993, I have separately expressed an opinion on the general purpose financial statements and Special Schedule 'Permissible income for general rates'.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work I have performed, I conclude there is a material misstatement of the other information, I must report that fact.

I have nothing to report in this regard.

#### The Councillors' Responsibilities for the Financial Statements

The Councillors are responsible for the preparation and fair presentation of the financial statements and for determining that the accounting policies, described in the Significant accounting policies note to the financial statements, are appropriate to meet the requirements in the LG Code. The Councillors' responsibility also includes such internal control as the Councillors determine is necessary to enable the preparation and fair presentation of the financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Councillors are responsible for assessing the Council's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting.

#### Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to:

- obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error
- issue an Independent Auditor's Report including my opinion.

Reasonable assurance is a high level of assurance, but does not guarantee an audit conducted in accordance with Australian Auditing Standards will always detect material misstatements. Misstatements can arise from fraud or error. Misstatements are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions users take based on the financial statements.

A description of my responsibilities for the audit of the financial statements is located at the Auditing and Assurance Standards Board website at: <a href="http://www.auasb.gov.au/auditors">www.auasb.gov.au/auditors</a> responsibilities/ar4.pdf. The description forms part of my auditor's report.

The scope of my audit does not include, nor provide assurance:

- that the Council carried out its activities effectively, efficiently and economically
- about the security and controls over the electronic publication of the audited financial statements on any website where they may be presented
- about any other information which may have been hyperlinked to/from the financial statements.

Gaarad Lingerald

Gearoid Fitzgerald

Delegate of the Auditor-General for New South Wales

22 October 2021 SYDNEY



#### Independent Auditor's Review Report To the Councillors' of Port Macquarie-Hastings Council

#### Report on the 2021 Overhead Reallocation Charges to Water and Sewer Business Activities

We have reviewed the methodology and calculations supporting the reallocation of overheads from general fund to water and sewer funds as disclosed in the Port Macquarie-Hastings Council (Council) special purpose financial statements for the year ended 30 June 2021.

#### Management's Responsibility for the Income Statement

Management of Council is responsible for determining the methodology supporting the calculation of overheads and their reallocation to the water and sewer business activities so they reflect a fair and reasonable assignment of costs to each business activity. This responsibility includes establishing and maintaining internal control relevant to the calculation and reallocation of overheads to each business activity so they reasonably reflect the costs incurred by each business activity and they are free from material misstatement, whether due to fraud or error.

#### Auditor's Responsibility

Our responsibility is to express a conclusion on the allocation of overheads to each business activity based on our review. We conducted our review in accordance with Auditing Standard on Review Engagements ASRE 2405 *Review of Historical Information Other Than a Financial Report* in order to state whether, on the basis of the procedures described, we have become aware of any matter that makes us believe that the overhead reallocations to the water and sewer business activities in the 2021 special purpose financial statements is not fair and reasonable. No opinion is expressed as to whether the overhead calculation methodology used by Council is appropriate to the needs of the Council.

A review consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

#### Independence

In conducting our review, we have complied with the independence requirements of the Accounting Professional and Ethical Standards Board.

#### Conclusion

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the reallocation of overheads to Council's water and sewer business activities disclosed in the special purpose financial statements for the year ended 30 June 2021 is not fair and reasonable.

#### THOMAS NOBLE & RUSSELL CHARTERED ACCOUNTANTS

Per: Pin h **K R FRANEY** (Partner)

Dated at Lismore this 3rd day of May 2022

31 Keen Street PO Box 106 Lismore NSW 2480 Phone: +61 (02) 6626 3000



Suite 901, Level 9, The Rocket 203 Robina Town Centre Drive Robina QLD 4226 Phone: +61 (07) 5593 1601 Email: enquiries@tnr.com.au Website: www.tnr.com.au

Liability limited by a scheme approved under the Professional Standards Legislation.



## PMHC GIPA Contracts Register

	Last	Updated		9/05/2022 13:55											
Contract Date	e Contract Class	t TenderNo	Method of Tender	Contract The	Contract Description	Successful Contractor	Address	ABN	Commencemen t Date	End Date	D uradio n	Options	Contracted Amount Ex. Gst	Delegation Exercised by CEC	Assessment Cirteria
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## ORDINARY COUNCIL 19/05/2022



## To be reported back to Council

	Last Updated		6/05/2022 10:33								
Date of Ordinary	Resolution of Meeting	Tender No	Contract Title	Contract Description	Successful Contractor	Commencemen	End Date	Duration	Options	Contracted Amount Ex. Gst	Report back to
Council Meeting		Tender No	Contract The	Contract Description		t Date	End Date	Duration	Options	Contracted Amount Ex. Ost	Council
18/11/2020	RESOLVED: Griffiths/Hawkins That Council: 1. In accordance with the Local Government (General) Regulations 2005 clause 178(1)(b) and 178(3)(e), decline to accept any of the tenders submitted for Request for Tender T-20-31 Gaimcross Landfill Expansion Project - Construction and enter into negotiations with any tenderer that submitted a tender or any person in response to Request for Tender T-20-31, with a view to entering into a contract for the Cairncross Landfill Expansion Project - Construction. 2. Pursuant to clause 178(4)(a) and (b) of the Local Government (General) Regulations 2005 decline to invite fresh tenders or applications for the reasons that the project is time critical and that the Tender Evaluation Panel considers that there are tenderers that have the	T-20-31	Cainrcross Landfill Expansion Stages 1A, 1C and 1E	To engage a suitably qualified and experienced divil contractor abd lining specialist to carry out the construction of the landfill expansion in accordance with the design package	Ditchfiled Contracting Pty Limited	15/12/2020	24/11/2021	48 weeks	Nil	\$ 6,333,214.18 R	eport back to Council
	experience, capacity and capability to meet the requirements of the Request for Tender. 3. Note that the General Manager shall accept the tender of the successful tenderer, following negotiation, under existing delegation to the General Manager and present a further report to a future meeting of Council on completion of the negotiation process for Council's information. 4. Maintain the confidentiality of the documents and considerations in respect of Request for Tender T-20-31.										
4/08/2021	RESOLVED: Turner/Intemann	T-21-15	Stage 1 Construction of Rainbow Beach Sporting Fields	Provision of Stage 1 works for the Rainbow Beach Sporting Fields at Lake Cathie, NSW.	Glascott Landscape and Civil Pty Ltd	29/10/2021	30/06/2022	8 Months	N/A	\$ 6,076,727.26 R	eport back to Council
	That Council: 1. In accordance with dauses 178(1)(b) and 178(3)(e) of the Local Government (General) Regulations 2005, decline to accept any of the tenders submitted for Request for Tender T-21- 15 Stage 1 Construction of Rainbow Beach Sporting Fields and enter into negotiations with Glascott Landscape and civil Py Ltd or any person that submitted a tender in response to Request for Tender T-21-15, with a view to entering into a contract for Stage 1 Construction of Rainbow Beach Sporting Fields. 2. Pursuant to clause 178(4)(a) and (b) of the Local Government (General) Regulations 2005 decline to invite fresh tenders or applications for the reasons that the Tender Evaluation Panel considers that the preferred tenderer has demonstrated the experience, capacity and capability to meet the requirements of the Request for Tender, and that inviting fresh tenders likely will not achieve a superior outcome and will unduly delay the project. 3. Note that the Chief Executive Officer, under existing delegations to the General Manager, may accept a tender following successful negotiations, and present a further report to a future meeting of Council on completion of the negotiation process for Council's information. 4. Maintain the confidentiality of the documents and consideration in respect of Request for Tender T-21-15.										
13/10/2021	RESOLVED: Internann/Alley	T-21-35	Pappinbarra Junction Bridge - Bridge and Civil Package	Construction of Pappinbarra Junction Bridge Replacement	Saunders Civilbuild Pt y Ltd	29/10/2021	N/A	N/A	N/A	\$ 2,482,993.15 R	eport back to Council
13/10/2014	That Council: 1. In accordance with section 178(1)(b) and 178(3)(e) of the Local Government (General) Regulation 2021, decline to accept any of the tenders submitted for T-21-35 Pappinbara Junction Bridge - Bridge and Civil Package and enter into negotiations with Bridge and Civil Pty and Saunders Civilbuild Pty Ltd, or any other person where or not they submitted a tender for T-21-35 Pappinbara J unction Bridge - Bridge and Civil Package, with a view to entering into a contract in relation to the subject matter of the tender 2. Pursuant to section 178(4)(a) and (b) of the Local Government (General) Regulation 2021 decline to invite frait henders for the reasons that : the Tender Evaluation Panel considers that the preferred tenderers have the demonstrated the experience, capacity and capability to meet the requirements of the Request for Tender; inviting fresh tenders filely will not achieve a superior outcome; and, inviting fresh tenders will delay the project beyond the funding deadline. 3. Note the Chief Executive Officer, under existing delegations to the General Manager, may accept a tender for T-21-35 Pappinbara Junction Bridge - Bridge and Civil Package following successful negotiations, and present a further report to a future meeting of Council after contract award for Council's information. 4. Maintain the confidentiality of the documents and consideration in respect of Request for Tender T-21-35 Pappinbara Junction Bridge - Bridge and Civil Package. BEFOLUET: Biopen/Criffithe		Deplacement of Elftration Membranes - Consider Using Vibrits Vibrits Vibrits	t Beel argument of Elitration Membranes, Angular Viscon	Alcontak Dr. 114	22/12/02/1	MA	N/A	b/A	6 970 300 40	envert back to Onco
13/10/2021	RESOLVED: Pinson/Griffiths	T-21-54	Replacement of Filtration Membranes - Camden Haven Waste Water Treatment Plant	t Replacement of Filtration Membranes - Camden Haven Waste Water Treatment Plant	Akvotek Pty Ltd	23/12/2021	N/A	N/A	N/A	\$ 879,200.00 R	eport back to Council
	That Council: 1. In accordance with section 55(3)(i) of the Local Government Act 1993, not invite tenders for 7:21-54 Replacement of Filtration Membranes - Camden Haven Waste Water Treatment Plant due to extenuating circumstances being risk of total failure and loss of Environmental Protection Agency Discharge Lience. 2. Issue a formal Request for Quotation 7:21-54 Replacement of Filtration Membranes - Camden Haven Waste Water Treatment Plant on a single invitation basis to the Contractor recognised by Council. 3. Note that the Chief Executive Officer, under existing delegations to the General Manager, may accept a quotation for 7:21-54 Replacement of Filtration Membranes - Camden Haven Waste Water Treatment Plant, and present a further report to a future meeting of Council after contract award for Council's information. 4. Maintain the confidentiality of the documents and consideration in respect of 7:21-54 Replacement of Filtration Membranes - Camden Haven Waste Water Treatment Plant and this report.										
3/11/2022	RESOLVED: Intemann/Griffiths	T-21-13	Water & Sewer Client Side Engineering Support Services	The supply of Water & Sewer Client Side Engineering Support Services	Hunter H20 Holdings Pty Limited	9/02/2022	8/02/2025	3 Years	2x2 Years	Schedule of Rates R	eport back to Council
	That Council: 1. Note that in accordance with Section 377 of the Local Government Act 1993, the Chief Dexcutive Officer, under existing delegations to the General Manager, may accept: a) a tender for T-21-13 Water & Sewer Client Side Engineering Support Services; and b) tenders for T-21-4 Water & Sewer Design Services Panel Arrangement, and present a further report to a future meeting of Council after contract award for Council's information. 2. Maintain the confidentiality in respect of Request for Tenders T-21-13 and T-21-34.										

## ORDINARY COUNCIL 19/05/2022

Date of Ordinary Council Meeting	Resolution of Meeting	Tender No	Contract Title	Contract Description	Successful Contractor	Commencemen t Date	End Date	Duration	Options	Contracted Amount Ex. Gst	Report back to Council
3/11/2022	RESOLVED: Intemann/Griffiths That Council: 1. Note that in accordance with Section 377 of the Local Government Act 1993, the Chief Executive Officer, under existing delegations to the General Manager, may accept: a) a tender for T-21-13 Water & Sewer Clencific Side Engineering Support Services; and b) tenders for T-21-14 Water & Sewer Clencific Side Engineering Support Services; and b) tenders for T-21-14 Water & Sewer Clencific Side Engineering Support Services; further report to a future meeting of Council after contract award for Council's information. 2. Maintain the confidentiality in respect of Request for Tenders T-21-13 and T-21-14.	T-21-14	Water & Sewer Design Services Panel Arrangement	Water and Sewer Design Services Panel Arrangement is a panel of consultancy firms ("consultants") that will be utilised for completing detailed designs and construction phase support in the delivery of Water and Sewer Infrastructure Projects.	Tonkin Consulting Pty Limited	9/02/2022	8/02/2025	3 Years	2x2 Years	Schedule of Rates	Report back to Council
13/10/2021	RESOLVED: Internann/Griffiths That Council: 1. In accordance with s55(3)(i) of the Local Government Act 1993, not invite tenders for Ice Pigging Services due to the unavailability of competitive tenderers as the methodology for Ice pigging is proprietary to the sole contractor recognised by Council. 2. Enter into negotiations with the sole contractor recognised by Council with a view to entering into a contract for tenging services. 3. Note that the Chief Executive Officer, under existing delegations to the General Manager, may award a contract for 12.1 Sit Ice Pigging Services following successful negotiations, and present a further report to a future meeting of Council after contract award for Council's information. 4. Maintain the confidentiality of the documents and consideration in respect of this report.	T-21-31	ice Pigging Services	Provision of Ice Pigging Services for the cleaning and maintenance of the Port Maœuarie-Hastings water supply network.	Suez Water & Treatment Solutions Pty Ltd	Oct-21	Dec-21	36 days		\$439,862.00	Report back to Council
16/02/2022	RESOLVED: Intemann/Maltman That Council: 1. Note the intention to align future waste management contracts in 2026 upon the expiry of the Domestic Waste Collection Contract and the Organics Processing Contract. 2. Commence work on the terms of a short term contract to allow alignment of the respective future waste contracts including the Processing of Dry Recycling at the Caincross Materials Recovery Facility. 3. In accordance with Section 55(3)(i) of the Local Government Act, 1993, due to the extenuating circumstances to allow sufficient time to plan for an interim short term contract to facilitate Council's long term recycling infrarructure and alignment, not to call public tenders for the Processing of Dry Recycling at the Caincross Materials Recovery Facility with JR Richards Pty Limited for a further period expiring 26 June 2023 in accordance with the terms and conditions specified in the contract. 5. Delegate to the Chief Executive Officer the authority to negotiate and sign the contract deed of variation with JR Richards Pty Limited expiring 25 June 2023 in accordance with the terms and conditions specified in the contract. 6. Note that a further report will be tabled providing the negotiated rates/fees accepted for the contract variation. 7. Maintain the confidentiality of the documents and consideration in respect of this contract.		Processing of Dry Recyclables at the Cairncross Materials Recovery Facility	Processing of Dry Recyclables at the Cairncross Materials Recovery Facility	JR & EG Richards Pty Ltd	24/06/2006	30/06/2022	12 Years	2 x 2 Years	Existing terms and conditions of the Contract apply for the extended term.	Report back to Council

## ORDINARY COUNCIL 19/05/2022

Authorised by: Council

PORT MACQUARIE HASTINGS c o u n c i l	

 Authorised date:
 DD/03/2022

 Effective date:
 DD/06/2022

 Next review date:
 DD/06/2024

 File Number:
 D2022/063424

#### Community Engagement

#### 1. INTRODUCTION

This policy outlines the commitment and approach to community engagement by Port Macquarie Hastings Council as part of its decision-making processes.

Council recognises the right of the community members to be informed and have input into decisions which affect their lives, community and place.

Council is committed to strengthening our community relationships and regions through effective community engagement to share information, gather views and opinions, develop options, and make good decisions based on community priorities.

Council seeks to balance the views, needs and aspirations expressed by the community with other decision-making influences such as social, economic, technological, legislative and environmental constraints that must be considered to make informed, sustainable decisions.

Since 2007 Council has adopted the International Association of Public Participation (IAP2) Spectrum as the accepted standard for undertaking community engagement. The spectrum describes five (5) levels of community engagement: Inform, Consult, Involve, Collaborate and Empower.

#### 2. POLICY STATEMENT AND SCOPE

This Community Engagement Policy applies to the Port Macquarie Hastings Local Government Area and the exercise of Council's functions under both the *Local Government Act 1993 (NSW)* and the *Environmental Planning and Assessment Act 1979 (NSW)*.

Community engagement is a vital part of local democracy. It aims to strengthen the trust between Council and the community and build confidence in Council's ability to plan and make decisions that will respond to the present and future needs of the community.

Through effective and inclusive community engagement practices, Council looks to capture the diverse knowledge, experience and aspirations of our community, recognising that the best outcomes come from working together. Council is committed to delivering plain English information to achieve informed engagement with stakeholders.

#### **Objectives**

- 1. Develop a strong organisation-wide culture of engagement where Council staff and Councillors engage with the community in a meaningful and appropriate way about decisions that affect them.
- 2. Embed engagement as part of our regular business practices at all levels of the organisation, using engagement outcomes as part of decision-making processes to inform what we do.
- 3. Implement an evolving best-practice approach in all community engagement activities thereby ensuring that all engagement activities are focused and effective. Be proactive and open to new and innovative ways to engage with the community.
- 4. Develop an environment of trust between the community and Council where Council and community can exchange ideas, views and information leading to a shared responsibility for decisions and confidence in the decision-making process.
- 5. Develop sustained collaboration, partnerships and new ways to involve and empower the community.

Community Engagement

UNCONTROLLED IF PRINTED

Page 1 of 4

#### <u>Scope</u>

This policy applies to all Council staff, Councillors and Contractors undertaking engagement on behalf of Council.

This policy applies to all facets of Council's operations including corporate, strategic land use, financial planning and Council's day-to-day business activities including: -

- **Major projects:** these include projects that would impact on future developments and budgets and include multi-year projects such as transport and infrastructure projects, community development projects or major facilities e.g. swimming pool, airport terminal.
- Policy and strategy development: Council will engage on the development and/or reviews of Council policies and strategies.
- Service planning: Council will engage with the community on issues that relate to changes to improve, develop or redevelop a service. These services could impact the whole area (e.g. changes to library services or waste collection services) or change to how services are accessed or the level of service provided.
- Area improvement: these are issues that impact on a neighbourhood area, such as rezoning of land, changes to the appearance or use of public space, changes in traffic flow, road improvements, playground installations and minor development proposals.
- Site specific: these are issues that only affect a particular site, such as changes in planned use of facilities or reserves. This may also include access issues or car parking issues for a site.
- Other: any circumstance where Council needs more information or evidence to make an informed decision.
- **Council owned or managed land:** When undertaking high impact development on Council owned and managed land, a community engagement process consistent with the IAP2 engagement framework will be undertaken in addition to the statutory requirements.
- **Private Development:** Community engagement guidelines for private development are outlined in *Community Participation Plan 2019* (as legislated), *Environmental Planning, and Assessment Act 1979.*

The level of engagement will be determined on the level of impact and will reflect the IAP2 Spectrum of Public Participation.

#### IAP2 Spectrum

- **Inform:** To provide the public with balanced and objective information to assist them in understanding the problem, alternative, opportunities and/or solutions.
- Consult: To obtain public feedback on analysis, alternatives and/or decisions.
- **Involve:** To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.
- **Collaborate / Co-design:** To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.
- **Empower**: to place final decision making in the hands of the public.

#### Key Considerations

This Policy will be supported by the adoption of the *Community Engagement Strategy* (under development).

All community engagement activity will be undertaken in accordance with the principles of the IAP2 Spectrum of Public Participation.

Community engagement does not necessarily mean achieving consensus.

Council will endeavour to ensure that its engagement processes are appropriate, accessible, wellplanned and adequately resourced.

Page 2 of 4

Council will conduct an Acknowledgement or Welcome to Country for online and physical events.

Engagement activities will be open for a minimum of 14 days for Inform engagement activities and a minimum of 28 days for Consult/Involve/Collaborate and Empower engagements. Care will be taken to avoid key dates that may affect the ability of everyone to participate, e.g. school holidays, public holidays, and other major events.

Engagement activities will be closed prior to the December/January holiday period and where this is not possible, extensions of time will be considered.

Community engagement is multifaceted and requires a standard of consultation that appropriately responds to the nature, complexity and impact of the issue/s involved.

Community feedback received is regarded as public information and may be published on websites and in Council reports. The collection or holding of personal information is legislated in the *Privacy* and *Personal Information Protection Act 1998* (PPIPA).

Timely and meaningful feedback about the results of the engagement process will be provided to those who participated.

In some circumstances, Council may encounter situations that impact community engagement timing and/or the ability to conduct certain activities, for example where Council is not the lead agency (eg, State or Federal Government); specific knowledge or expertise is required; work is commercial in confidence; or there is a safety risk if we do not take immediate action.

#### 3. RESPONSIBILITIES AND AUTHORITIES

#### Policy Owner

Group Manager Community and will be responsible for implementing, communicating and monitoring compliance with the policy.

#### Implementing this Policy

#### Engagement Lead

The delegated person responsible for ensuring this policy is implemented and is the person who is leading the decision process whether this be for a project, activity or policy. The lead person will be responsible for ensuring that plan is developed and information is made available to relevant Council staff, Councillors and the community.

#### Staff

The Executive, Group Managers, Project Managers, Engagement Officers, Council Officers and all Council appointed consultants

#### **Related Council Documents**

Community Engagement Strategy (June 2023)

#### Review

The policy will be reviewed in four years (2026)

#### 4. REFERENCES

- Local Government Act 1993, Section 8A
- Government Information (Public Access) Act 2009 (GIPA Act)
- International Association for Public Participation (2004) 'IAP2 Public Participation Spectrum'
- Environmental Planning and Assessment Amendment Act 2017

#### 5. DEFINITIONS

Councillor	An elected member of Council
The Executive	The Chief Executive Officer and the Directors of Council

Community Engagement

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Page 3 of 4

Group Managers Project Managers Council Officer	Members of the Senior Leadership team. Council Officers responsible for delivering projects A member of Council staff
Community Engagement	"Any process that involves the community in problem solving or decision making and uses community input to make better decisions" International Association of Public Participation (IAP2).
Community	Community is a broad term used to define a groups of people including people who live, work, study, own property, conduct private or government business, visit or use the services, facilities and public spaces and places of the Port Macquarie Hastings area. The community can be referred to as stakeholders or be comprised of stakeholders.
Communication	Refers to the many ways in which Council provides information on our current and potential future business operations as well as keeping them informed on decisions made and helping them understand how and why public money is being spent. This can be via media communication, signage, customer service or via official correspondence and more.
IAP2	International Association of Public Participation (www.iap2.org.au)
Submission	A formal response to a public document (ie policy, plan, strategy) made during the public exhibition period. Submissions may be considered public and available for general access.
Comment	A response received during early engagement or consultation that is not part of a formal Public Exhibition endorsed by Council.
Level of Impact	The degree to which a community is determined to be affected by a decision.
Level of Public Participation	The degree to which a community is involved in decision making.

#### 6. PROCESS OWNER

Group Manager Community will be responsible for implementing, communicating and monitoring compliance with the policy.

The Engagement team will assist the organisation in delivery community engagement in regards to this policy and associated documents.

#### 7. AMENDMENTS

This policy was last reviewed in 2016. The organisational approach to engagement has evolved in that time. The essence of policy is the same although the approach more robust and holistic.

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## PUBLIC EXHIBITION SUMMARY Community Engagement Policy

## Background

The Community Engagement Policy was first adopted in 2014, it was reviewed in 2016 and most recently in 2022.

Over the past few years, community engagement within Port Macquarie Hastings Council and the local government sector has evolved and is now recognised as an essential component of good governance and making robust, sustainable decisions. Community engagement also forms part of the Integrated Planning and Reporting Guidelines for Local Government in NSW under the Local Government Act 1993 and the Local Government (General) Regulation 2021.

The Community Engagement Policy demonstrates Council's commitment to delivering effective and meaningful engagement. Community engagement does not replace the decision-making powers of elected Councillors, Chief Executive Officer or Council staff, it aims to support well-informed, sustainable decisions that take into consideration community aspirations, feedback and their lived experience.

## **Engagement approach**

The Engagement approach was Involve, with any submissions received to be considered.

## **Engagement** activities



Have Your Say

The draft Community Engagement Policy was placed on Have Your Say for public comment from Monday 20 March 2022 until Wednesday 22 April 2022.

The community was invited to have their say via an online survey, they could also attach images and documents to support their views.

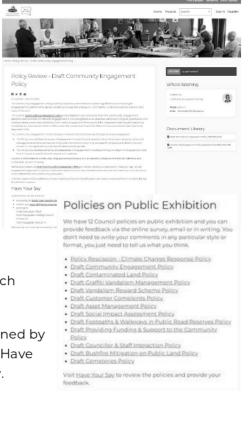


Have Your Say enews

The Community Engagement Policy was listed in the March 2022 Have Your Say enewsletter.

This newsletter was sent to 3,032 subscribers and was opened by 1,318 recipients (44.27%). 43 people clicked through to the Have Your Say website from the Engagement Policy specifically.





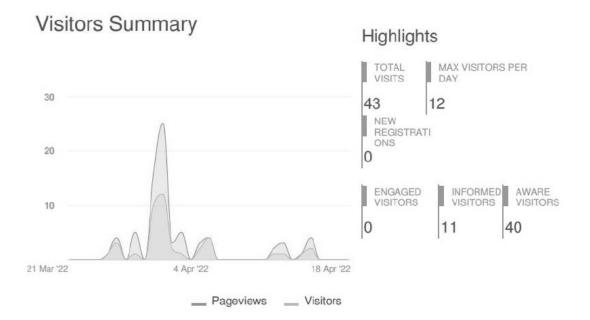


## PUBLIC EXHIBITION SUMMARY Community Engagement Policy

## **Have Your Say**

The following graph summarises the user activity for the exhibition period.

The draft Community Engagement Policy 2022 was downloaded 9 times and the Community Engagement Policy adopted (July 2014) was downloaded 3 times.



## **Results/Conclusion**

No feedback was received from the community during this exhibition period.

## Next Steps

The draft Community Engagement Policy will be presented to the May 2022 Council Meeting with a staff recommendation for adoption.



Item 11.21 Attachment 2 Page 394

2 - PUBLIC EXHIBITION SUMMARY Community Engagement Policy

# **3 Your Business and Industry**

### What we are trying to achieve

A region that is a successful place that has vibrant, diversified and resilient regional economy that provides opportunities for people to live, learn, work, play and invest.

## What the result will be

We will have:

- A strong economy that fosters a culture supportive of business and ensures economic development of the region
- Townships, villages and business precincts that are vibrant commercial, cultural, tourism, recreational and/or community hubs
- A region that attracts investment to create jobs
- Partnerships that maximise economic return and create an efficient and effective business environment

#### How we will get there

- 3.1 Embrace business and a stronger economy
- 3.2 Create vibrant and desirable places
- 3.3 Embrace opportunity and attract investment to support the wealth and growth of the community
- 3.4 Partner for success with key stakeholders in business, industry, government, education and the community



ORDINARY COUNCIL 19/05/2022



This Fly Neighbourly Agreement (FNA) is a voluntary code of practice endorsed by General Aviation aircraft operators based at Port Macquarie Airport in the interests of reducing the disturbance caused by pilot training aircraft in the vicinity of Port Macquarie Airport. provide the opportunity to seek further input from the community, Airport stakeholders and relevant authorities.

The primary geographic area of the FNA is nominally within 2nm (3.7km) of Port Macquarie Airport, as illustrated in *Figure 1*.

This FNA acknowledges that aircraft noise is an unavoidable consequence of aircraft activity, particularly in close proximity to the Airport and does not aim to cease aircraft noise, nor to reduce the level of aircraft activity, but aims to mitigate the impact of aircraft noise on residents through the practical noise mitigation measures set out below.

The content of the FNA will be reviewed after an initial 12-month trial period, which will



Figure 1: FNA primary geographic area

PORT MACQUARIE AIRPORT | FLY NEIGHBOURLY AGREEMENT

Page I OF 3

#### ATTACHMENT



### FLY NEIGHBOURLY AGREEMENT

#### SAFETY FIRST

Safety is paramount at Port Macquarie Airport.

Aircraft operators utilise the aerodrome and its facilities in accordance with relevant obligations for the purpose of appropriate private or commercial activities.

All aircraft operations are conducted in accordance with Civil Aviation Regulations and mandatory aviation operating and safety procedures have precedence over the FNA in all circumstances.

#### LIMITING CONTINUOUS CIRCUIT TRAINING HOURS

A vital part of pilot training is "circuit training", which involves repeated take-offs and landings, and flying along a designated path that is within sight of the Airport at all times.

At Port Macquarie, circuit training is conducted with a standard left hand (the most common) circuit, meaning that aircraft turn left after take-off and fly in an anticlockwise direction around the Airport.

When wind and traffic conditions permit, pilots are encouraged to operate off runway 03 with circuits conducted to the west of the airport.

To minimise the noise impact on Airport neighbours, continuous circuit training hours will be limited to:

DAYLIGHT SAVINGS

– Monday to Friday 0700hrs-2200hrs AEDT WINTER

- Monday to Friday 0700hrs-2100hrs AEST **SATURDAYS** 

– 0800hrs-1800hrs

SUNDAYS AND PUBLIC HOLIDAYS

– No continuous circuit training

Note: Exemptions apply - refer to undertakings 2, 3 on page 3

Port Macquarie Airport operates 24 hours a day. Non-training aircraft departing or returning to the Airport are not subject to these training limits and may still need to fly around a circuit to land safely.

It is also acknowledged that emergency services operators including police, fire, search and rescue and infrastructure-monitoring operations may not always be able to adhere to the guidance contained herein.

#### FLYING HIGH TO LESSEN NOISE

Pilots are required by law to maintain a safe altitude at all times, including when flying over residential areas. Aside from landing or taking off, the minimum height a plane will fly is 1,000ft over inhabited areas and 500ft over uninhabited areas or the sea (Figure 2).

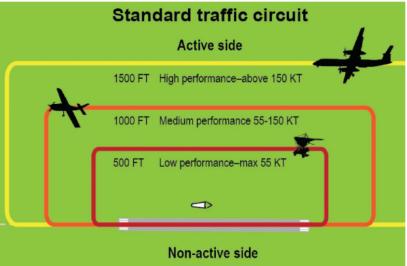


Figure 2: Lateral and vertical separation in the standard aerodrome traffic circuit

Flying around the Airport circuit does involve planes being below this height when they are landing or taking off, however as soon as practical pilots will fly at 1,000ft which decreases noise impacts on surrounding areas.

Note: The Civil Aviation Safety Authority may issue an exemption to altitude requirements for training purposes.

Page 2 OF 3



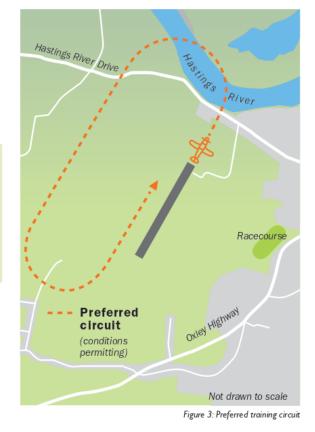
### FLY NEIGHBOURLY UNDERTAKINGS

General Aviation operators at Port Macquarie Airport are committed to reducing the impact of their operations on the surrounding community, while maintaining the safe operation of aircraft, according to the following undertakings:

I. Conduct continuous circuit training during the *Circuit Training Hours of Operation*, being:

#### MONDAY TO FRIDAY

- 0700hrs-2200hrs AEDT
- 0700hrs-2100hrs AEST
- SATURDAY – 0800hrs-1800hrs SUNDAY AND PUBLIC HOLIDAYS
- No continuous circuit training
- 2. Recreational aircraft (up to 600kg MTOW) may commence continuous circuit training from 0600hrs Monday to Friday.
- 3. Operators may catch up on lost time caused by weather, airspace, technical or other disruptions, on Sundays between 0800hrs and 1600hrs.
- 4. Operators will implement their own procedures to practically and safely manage the number of aircraft operating in the circuit at any one time, preferring to maintain four or fewer aircraft in the circuit where practicable.
- 5. Preferred use of runway 03 (Figure 3) when wind and traffic conditions permit, with circuits conducted to the west of the Airport.
- 6. Commensurate with traffic situation and aircraft performance operators will implement their own procedures for turning crosswind after take-off that considers the impact of aircraft noise on residential areas.
- When conducting Precautionary Search and Landing – not operating below 500ft within the vicinity of the runway otherwise not below 700ft.
- 8. Aircraft engine ground operations performed by an aircraft maintenance organisation, for the purpose of aircraft engine diagnosis and testing, should only be performed during the hours of 0700hrs and 1800hrs all year round. This excludes urgent maintenance engine test operations required for a commercial operator and engine ground operations, including pre-take off engine functionality checks.
- 9. Minimising low level flight over built-up areas in accordance with Civil Aviation Regulations.



#### NOISE INFORMATION

Port Macquarie-Hastings Council will maintain an aircraft noise complaint register and will coordinate communication with the community regarding noise management and events. Aircraft operators will be provided deidentified noise complaint data on a quarterly basis. Where the complaint relates to a specific aircraft movement, the data provided will include the time and location of the event.

Port Macquarie-Hastings Council will actively engage with an aircraft operator that fails to achieve the undertakings herein and seek to remedy the situation.

This FNA will be reviewed on a regular basis. For more information please visit our website, at <u>www.portmacquarieairport.com.au</u>, or to discuss Airport noise, please contact:

Peter Allen Airport Business Manager peter.allen@pmhc.nsw.gov.au 02 6581 8111

PORT MACQUARIE AIRPORT | FLY NEIGHBOURLY AGREEMENT

Page 3 OF 3

Page 1 of 7

### **Fly Neighbourly Agreement**

Before we start, it would be prudent to define what 'neighbourly' means, and how and to whom that applies to flight training aircraft noise in Port Macquarie.

What does neighbourly mean: In the sense of a business relationship which in this case it is between residents and flight training schools, we consider it to mean to be considerate, decent, agreeable, obliging (helpful).

Under the current operations of the pilot training operators, they can conduct training flights 24 by 7, 365 of days of the year. The commercial school being the

states (as per their submission to Council) that they operate 362 days of the year. states that they do not conduct circuit training on Christmas, Boxing Day and New Year's Day.

The hours of flight operation being:

- I. Monday to Friday 0700-2200 (Summer-time)
- II. Monday to Friday 0700–2100 (Eastern Standard Time)
- III. Saturday to Sunday 0800–2000 (All Year)

monopolizes all, of the daylight hours and the bulk of quality evening hours. Therefore subjecting residents to excessive industrial scale flight training noise pollution. This leaves no quality time for people's rest and relaxation. So, we base our log of claims on a creating a better share of quality hours for residents.

For the Fly Neighbourly Agreement, we refer to neighbours as Residents and Flight Training Schools.

#### Residents:

Residents as defined as those within the (current and potential future) circuit zones. Be they touch and go zones or general Flight School navigational flying. General navigational intermediary flying, which often includes regular criss-crossing loops over a wider geographic area. This practice regularly includes Port Macquarie and down the coast to Lake Cathie and Bonny Hills. Intermediary flying is not a major problem yet for the broader community, however, it will be a major problem if flight training operations continue to expand.

#### Flight Training Schools:

It is also prudent to categorise the Flight Training Schools. Why? Because the operations of those schools are different and the impact lesser or greater dependent on the school. The challenge will be to find a solution that clearly recognises and reflects those differences.

There are several smaller operators, mainly servicing recreational training requirements. We also have a large-scale commercial school being the **example to the sevent set of the sevent set of** 

We maintain that we should view the commercial school like any other factory business. A business that has inputs and outputs. They are training a distinct class of student and have more scope to alter and schedule their operations to meet residents' needs and their own, than do recreational schools.

#### Page 2 of 7

Our log of claims therefore relates mainly to the operation of the Commercial Flight Training School being the training school with the largest impact on residents; **I**. The increase in flight traffic is evidenced by this school as published in the Councils report, following the recent Airport Noise Survey. (Refer to attachment B). In this context, we maintain we should treat the Commercial Flight Training School as any other manufacturing business.

We restrict manufacturing businesses to various hours of operation. If were in the middle of a suburban street, they would be subject to stringent noise control conditions. Just as the heavy vehicles servicing factories are heavily regulated on noise, routes taken and hours of operations in compliance with EPA regulations. Just because the 'business' in conducting their operations off the ground and above resident's houses should not imply they have carte blanch to do as they please. As any small backyard home business in Port Macquarie is well-aware, the conditions of operation PMHC imposes are very, strict penalties. Where breaches are clear PMHC imposes heavy penalties including closing the business down.

#### In Conclusion:

We accept that what residents seek is different to what happens now. We are also aware, that despite current assurances by **a set of their** hours of operation, they frequently operate outside of those hours, of an evening. This happened more frequently prior to COVID. The expectation is, that it will be normal practice for **a set of the se** 

We are asking that circuit training be reduced to blocks of no more than 4 hours per day; morning and afternoon, (maximum 8-hours in total) with agreed times set. This will enable residents to plan their days in advance. You will also note no circuit training of weekend or public holidays. (Refer to attachment A – Log of Claims).

We are also aware, that the fitting of mufflers/silencers (a Non-Negotiable item on RIFT's list of Claims) was not accepted by **and**, as part of the negotiation process for a Fly Neighbourly Agreement in Kempsey. It is understood, **and** refusal was based on cost. However, it is our opinion that any business that wants to operate in a populated area has an obligation to reduce the impact on residents.

What we are asking for is fair and indeed essential, to create more balance for residents. It should be acknowledged, that many hundreds of residents were not subject to repetitive (and rapidly increasing) flight noise prior to **set balance** of a moderate level of noise. That has changed. Our question to Council is this. When will Council put the needs, sanity, the health and well-being of residents (rate payers) above the privileged few who are benefiting from this industrial scale operation; **set balance**. We are also unequivocal in our belief that maximising the value of the Airport for the community does not equal "training as many pilots at Port Macquarie as possible."

RIFT – Residents Impacted by Flight Training – Port Macquarie

RIFT - Fly Neighbourly Agreement Proposal

Page **3** of **7** 

#### Attachments:

- A. RIFT Log of Claims
- B. Chart highlighting the increase in Flight Training activity (taken from the Councils Aircraft Noise and Monitoring Survey)
- C. Doppler Effect chart
- D. Example of Intermediary Criss-Crossing flight activity

RIFT – Fly Neighbourly Agreement Proposal

Item 13.01 Attachment 2 Page 401 Page 4 of 7

#### Attachment A:

#### **RIFT LOG of CLAIMS**

RATING	ITEM	REQUIREMENT	COMPROMISE
N/N	Circuit Training Days of Operation	Monday to Friday ONLY NO Circuit Training on Public Holidays No night circuits after 1700 on	
	Mufflers/Silencers	Wednesdays Fit manufactured approved silencers to all training aircraft	
	Simulated Engine Failure After Take Off (SEFATO)	Not over residential areas	
N/AC	Circuit Altitude	Follow runway extended centre line & climb to 1000 ft before 1 <sup>st</sup> turn into circuit	
	Circuit Direction	Change Circuit to Right Hand to minimise the residential impact area. This is common practice at many airports. Take off to the North as allowed	Mix the circuit to a month to Right and a month to the left
	Number of <b>Training Aircraft in</b> Circuit at One Time	1	2
	Circuit Training: Hours of Operation	Maximum hours per day 8**. In blocks of no more than 4 hours. Take off no earlier than 0800am Land no later than 2000pm	Take off no earlier than 0900am Land no later than 2100pm
	Navigation Training: Hours of Operation	Take of no earlier than 0900 am Land no later than 2100 (Including summertime) NOTE: Navigation flying over, populated areas to be minimal and include zero circuits	Take of no earlier than 0800 am Land no later than 2200 pm
	Suitability of Planes	Twin-Engine aircraft are significantly louder. They should not be used to conduct circuits at any anytime	Use between 9000am and 1700 pm ONLY
CASA	Transponders	Mode C – fitted and turned on. Whilst the Commercial School operational transponders the smaller schools appear not to	

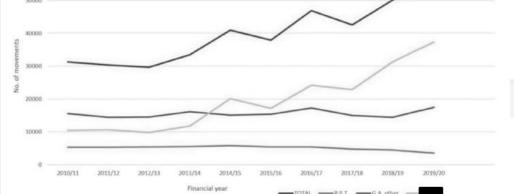
RATING: N/N – Not-Negotiable: N/AC – Negotiable after consultation

RIFT – Fly Neighbourly Agreement Proposal

Page 5 of 7

#### Attachment B:

As shown in the chart below, aircraft movements have grown significantly over the past 10 years, primarily associated with the growth in pilot training activities. Movements associated with the largest pilot training organisation at the Airport, are shown for reference purposes only and to demonstrate the correlation between the increase in overall aircraft movement numbers at the Airport and the growth in pilot training activity. It is acknowledged that there are a number of organisations at the Airport conducting private and commercial pilot training operations. Aircraft movements since 2010/11 5000

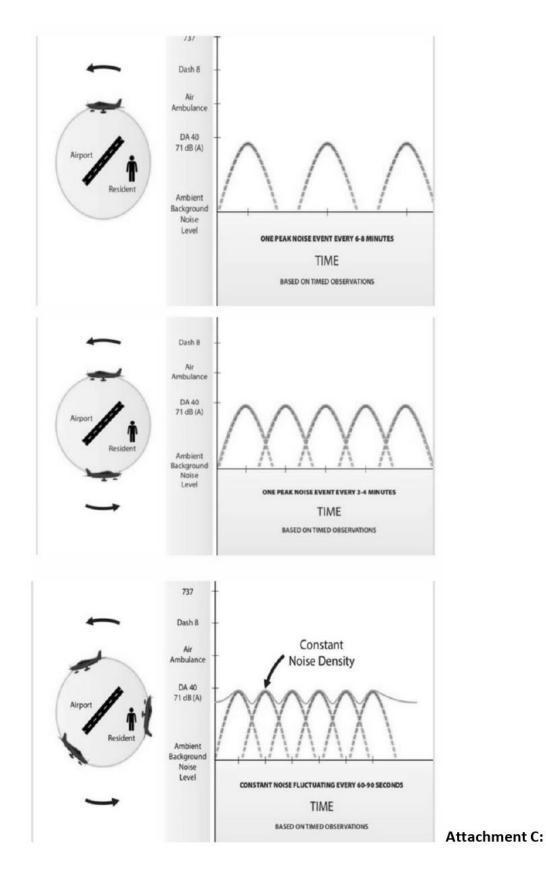


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TOTAL

RIFT - Fly Neighbourly Agreement Proposal

Item 13.01 Attachment 2 Page 403 Page 6 of 7



RIFT – Fly Neighbourly Agreement Proposal

Page 7 of 7

#### Attachment: D

Whilst not an **second** aircraft this serves as an example of criss-crossing which is a regular activity for Flight Training Aircraft. Whilst the altitude is above that of circuit training the repetitive nature and frequency of these flights results in the same Doppler Effect.



RIFT - Fly Neighbourly Agreement Proposal

Item 13.01 Attachment 2 Page 405

# **4** Your Natural and Built Environment

#### What we are trying to achieve

A connected, sustainable, accessible community and environment that is protected now and into the future.

#### What the result will be

We will have:

- Effective management and maintenance of essential water, waste and sewer infrastructure
- A community that is prepared for natural events and climate change
- Sustainable and environmentally sensitive development outcomes that consider the impact on the natural environment
- Accessible transport network for our communities
- Infrastructure provision and maintenance that meets community expectations and needs
- Well planned communities that are linked to encourage and manage growth
- Accessible and protected waterways, foreshores, beaches and bushlands
- An environment that is protected and conserved for future generations
- Renewable energy options that are understood and accessible by the community

#### How we will get there

- 4.1 Provide (appropriate) infrastructure and services including water cycle management, waste management, and sewer management
- 4.2 Aim to minimise the impact of natural events and climate change, for example, floods, bushfires and coastal erosion
- 4.3 Facilitate development that is compatible with the natural and built environment
- 4.4 Plan for integrated transport systems that help people get around and link our communities
- 4.5 Plan for integrated and connected communities across the Port Macquarie-Hastings area
- 4.6 Restore and protect natural areas
- 4.7 Provide leadership in the development of renewable energy opportunities
- 4.8 Increase awareness of issues affecting our environment, including the preservation of flora and fauna



25 March 2022

The Mayor Port Macquarie-Hastings Council PO Box 84 Port Macquarie NSW 2444

By email: mayor@pmhc.nsw.gov.au

Dear Mayor Pinson,

#### RE: Footpath Garden Crescent Port Macquarie.

We write to you regarding the pathway located at the South East corner of Westerweller Way and Garden Crescent Port Macquarie, adjacent to Garden Village (**Pathway**).

We live at Garden Village Port Macquarie.

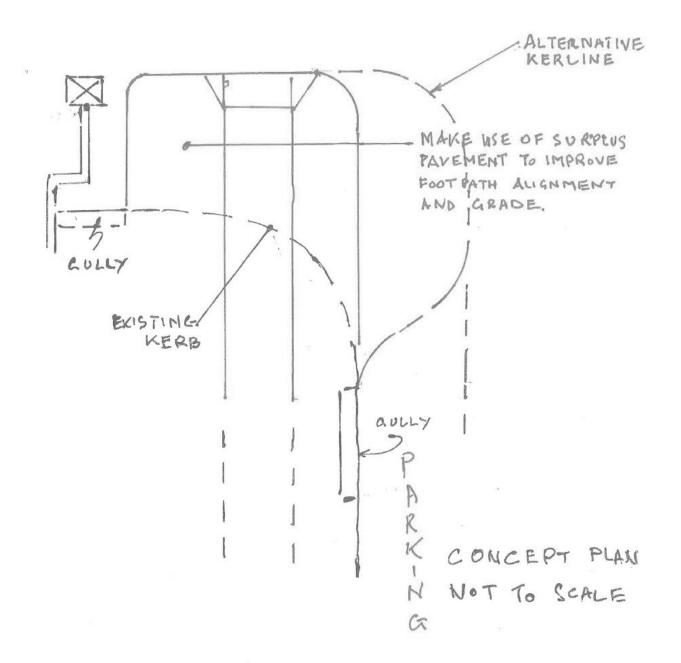
The Retirement Village at Garden Village has 290 elderly residents living in the main campus on the western side of Garden Crescent and at the Cascades on the southern side of Garden Crescent that opened in 2018.

The average age of the residents in our retirement village is 85years. A number of residents have age related mobility issues or disabilities. Residents frequently use the Pathway to go between the main campus and the Cascades and to access the shops in Gordon Street. All residents have to use the Footpath on the southern side of Garden Crescent.

We have observed a number of near misses when elderly residents have used the Pathway. So far there has not been any major injuries but we are very concerned it will only be a matter of time before a significant injury occurs due to the steep and curved incline of the Pathway. It creates a dangerous slip, trip and fall risk and it is very foreseeable that significant head injury, hip or other serious fractures requiring hospitalization will occur.

Elderly residents with walking aids struggle to navigate this path. Many are unable to physically push the aid up the steep incline. Many are forced to use the road which has a better gradient. This puts them at greater risk of being hit by a motor vehicle.

Elderly residents using wheelchairs or motorized scooters to access the main campus or the bus stop have had many near misses. A number of them have tipped backwards on their scooter because of the dangerous and steep incline. Some have chosen to use their scooter on the roadway which has a better gradient and less risk of tipping. However there is a greater risk of being struck by a motor vehicle causing serious injury.



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Re: Footpath Garden Crescent Port Macquarie

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Re: Footpath Garden Crescent Port Macquarie

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9/2/22	Name	Signature
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DEVELOPMENT ASSESSMENT PANEL 20/04/2022

Item: 05

Subject: DA2021 - 999.1 DWELLING AND SWIMMING POOL INCLUDING A CLAUSE 4.6 OBJECTION TO CLAUSE 4.3 (HEIGHT OF BUILDING) OF THE PORT MACQUARIE HASTINGS LOCAL ENVIRONMENTAL PLAN 2011, LOT 3 DP 238250, NO 5 ORR STREET PORT MACQUARIE

Report Author: Development Assessment Planner, Steven Ford

Applicant:	Karen Burke Registered Architect
Owner:	BP & RS Lulham
Estimated Cost:	\$650,000
Parcel no:	15815

#### Alignment with Delivery Program

4.3.1 Undertake transparent and efficient development assessment in accordance with relevant legislation.

#### RECOMMENDATION

That it be recommended to Council that DA 2021-999 for a Dwelling and Swimming Pool Including a Clause 4.6 Objection to Clause 4.3 (Height of Building) of the Port Macquarie Hastings Local Environmental Plan 2011 at Lot 3, DP 238250, No. 5 Orr Street, Port Macquarie, be determined by granting consent subject to the recommended conditions

#### **Executive Summary**

This report considers a development application for a Dwelling and Swimming Pool including a Clause 4.6 Objection to Clause 4.3 (Height of Building) of the Port Macquarie-Hastings Local Environmental Plan 2011 at the subject site and provides an assessment of the application in accordance with the Environmental Planning and Assessment Act 1979.

Following exhibition of the application, three (3) submissions were received.

The site is considered suitable for the proposed development and the proposal adequately addresses relevant planning controls. The development is not considered to be contrary to the public's interest and will not result a significant adverse social, environmental or economic impact.

This report recommends that the development application be referred to Council for approval subject to the attached conditions as outlined in Attachment 1.

The reason for the application being referred to Council's Development Assessment Panel (DAP) is because the application includes a Clause 4.6 exception to a development standard under the Port Macquarie-Hastings Local Environmental Plan

HASTINGS

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#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

2011. A copy of the DAP Charter outlining the delegations and functions of the DAP is available on Council's website.

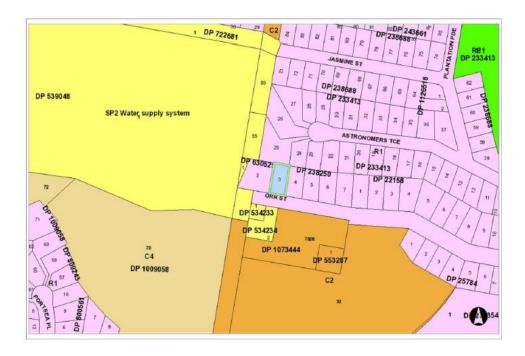
The application is required to be reported to a meeting of the Ordinary Council following consideration of the application by the DAP.

#### 1. BACKGROUND

#### **Existing Sites Features and Surrounding Development**

The site has an area of 704.35m<sup>2</sup>.

The site is zoned R1 General Residential in accordance with the Port Macquarie-Hastings Local Environmental Plan 2011, as shown in the following zoning plan:



The existing subdivision pattern and location of existing development within the locality is shown in the following aerial photograph:



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#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022





#### 2. DESCRIPTION OF DEVELOPMENT

Key aspects of the proposal include the following:

Proposed Dwelling and Swimming Pool



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#### ORDINARY COUNCIL 19/05/2022

#### AGENDA

#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

- Clause 4.6 Objection to Clause 4.3 (Height of Building) of the Port Macquarie Hastings Local Environmental Plan
- Natural slope is from the street to the rear and falls approximately 12m.

Refer to Attachment 2 at the end of this report for plans of the proposed development.

#### **Application Chronology**

- 08 November 2021 Application Lodged
- 18 November to 01 December 2021 Public Notification 3 submissions received
- 29 November 2021 Additional information requested
- 22 December 2021 Further additional information requested
- 7 January 2022 Concurrence from RFS received
- 7 February 2022 Amended Plans and Additional information received
- 1 March 2022 Amended clause 4.6 objection and amended elevations received
- 20 March 2022 Stormwater drainage and sewer reticulation strategy received

#### 3. STATUTORY ASSESSMENT

#### Section 4.15(1) Matters for Consideration

In determining the application, Council is required to take into consideration the following matters as are relevant to the development that apply to the land to which the development application relates:

#### (a) The provisions (where applicable) of: (i) Any Environmental Planning Instrument

#### State Environmental Planning Policy (Koala Habitat Protection) 2021

Clause 6 - This SEPP applies to all non-rural zoned land within the Port Macquarie-Hastings Local Government Area.

Clause 12 (other land - no KPoM and less than 1 hectare) - Having considered the SEPP, the application and on completion of a site inspection, Council is not prevented from granting consent in this case for the following reasons:

- 1. The property is not subject to a KPOM, or
- 2. The site is not considered to be core koala habitat.

#### State Environmental Planning Policy No. 55 - Remediation of Land

Following an inspection of the site and a search of Council records, the subject land is not identified as being potentially contaminated and is suitable for the intended use.

#### State Environmental Planning Policy (Coastal Management) 2018

Clause 7, this SEPP prevails over the Port Macquarie-Hastings LEP 2011 in the event of any inconsistency.

The site is not located within a coastal use area.



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# DEVELOPMENT ASSESSMENT PANEL 20/04/2022

# State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

A BASIX certificate has been submitted demonstrating that the proposal will comply with the requirements of the SEPP. It is recommended that a condition be imposed to ensure that the commitments are incorporated into the development and certified at Occupation Certificate stage.

#### State Environmental Planning Policy (Infrastructure) 2007

Clause 45 - Development in proximity to electricity infrastructure - referral to Essential Energy has been completed having regard for any of the following:

- the penetration of ground within 2m of an underground electricity power line or an electricity distribution pole or within 10m of any part of an electricity tower,
- (b) development carried out:
  - (i) within or immediately adjacent to an easement for electricity purposes (whether or not the electricity infrastructure exists), or
  - (ii) immediately adjacent to an electricity substation, or
  - (iii) within 5m of an exposed overhead electricity power line,
- (c) installation of a swimming pool any part of which is:
  - within 30m of a structure supporting an overhead electricity transmission line, measured horizontally from the top of the pool to the bottom of the structure at ground level, or
  - (ii) within 5m of an overhead electricity power line, measured vertically upwards from the top of the pool.

Essential Energy have no specific concerns regarding the development, but have provided some general advice. The advice received from Essential Energy has been forwarded the Applicant for consideration.

#### Port Macquarie-Hastings Local Environmental Plan 2011

The proposal is consistent with the LEP having regard to the following:

- Clause 2.2 The subject site is zoned R1 General Residential.
- Clause 2.3(1) and the R1 zone landuse table The dwelling and ancillary structures to a dwelling is a permissible landuse with consent.

The objectives of the R1 zone are as follows:

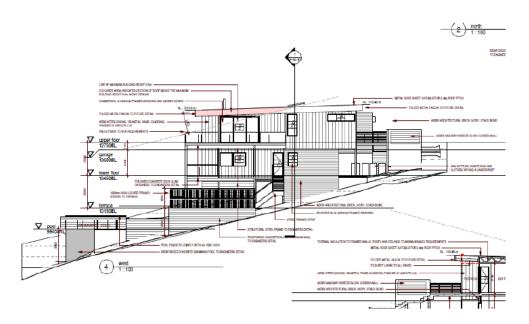
- o To provide for the housing needs of the community.
- To provide for a variety of housing types and densities.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- Clause 2.3(2) The proposal is consistent with the zone objectives as it contributes to the range of housing options in the locality.
- Clause 4.3 This clause establishes the maximum "height of a building" (or building height) that a building may be built to on any parcel of land. The term "building height (or height of building)" is defined in the LEP to mean: "the vertical distance between ground level (existing) and the highest point of `the building, including plant and lift overruns, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like". The term "ground level (existing)" is also defined in the LEP to mean "the existing".



#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

The building height limit for the site is identified on the Height of Buildings Map as being 8.5m. The proposed development (new works) exceed the height standard by 1.87m (at the northern covered deck) which represents a variation of 22%.

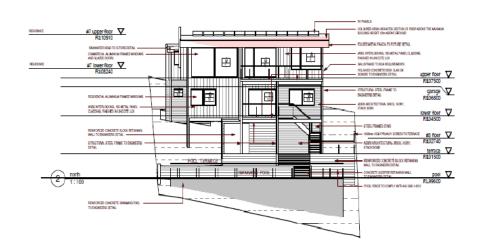
The attached elevation plans, demonstrate the areas of the building that exceed the height limit. It is noted by the elevations that it is small sections of the roofline where the land slopes away steeply, that result in the height variation.





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#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022



In considering the height variation, compliance with the objectives of Clause 4.3 of the LEP have been considered below:

(a) to ensure that buildings are compatible with the height, bulk and scale of the existing and desired future character of the locality,

#### Comments:

The locality and Orr Street are characterised by a number of other dwellings with similar heights, due mainly to the steepness of the land.

A key aspect of this proposal is that it presents as a single storey dwelling to the street/public domain.

The proposed variation does not create any additional habitable floor levels above the height of building provisions.

Based on the above, the proposed height, bulk and scale of the development is considered compatible with the existing and future character of the locality.

(b) to minimise visual impact, disruption of views, loss of privacy and loss of solar access to existing development,

#### <u>Comment:</u>

The visual impact of the building is considered satisfactory for the following reasons:

- The main variations are located behind the front facade of the building and are therefore less distinctive from Orr Street.
- The building height is similar to the existing dwellings in the area and will therefore not be visually dominant.
- The variation is created by the land sloping steeply away from the street.
- Due to semi-open nature of the decks along the northern elevation to take advantage of views and solar access, the adjoining neighbours view is not disrupted by the height of building variation.



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#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

- Shadow diagram demonstrated the proposed variation does not create adverse any overshadowing.
- Potential privacy impacts are considered under the relevant DCP provisions below and have been satisfactorily addressed in the building design.

(c) to minimise the adverse impact of development on heritage conservation areas and heritage items,

#### Comment:

The site does not contain or directly adjoin any known heritage items or sites of significance.

(d) to nominate heights that will provide a transition in built form and land use intensity within the area covered by this Plan.

#### Comment:

The proposed height is consistent with other dwellings in the area and attempts to balance the site constraints of the topography. The variation does not compromise this intent of the standard.

In addition to the above, the applicant has lodged a written request in accordance with Clause 4.6 of the LEP objecting to the 8.5m building height standard applying to the site, which is established under Clause 4.3 (see comments below under Clause 4.6).

- Clause 4.4 The floor space ratio of the proposal is 0.38:1, which complies with the maximum 0.65:1 floor space ratio applying to the site.
- Clause 4.6 This clause establishes a degree of flexibility for certain development standards in certain circumstances which have demonstrated that a better planning outcome will occur from that flexibility.

In this regard, the proposal seeks a variation to the building height standard as identified under clause 4.3 of this report. Assistance on the approach to variation to this standard is also taken from NSW Land and Environment Court and NSW Court of Appeal decisions in:

- 1. Wehbe v Pittwater Council (2007) NSW LEC 827 (Wehbe);
- 2. Four2Five Pty Ltd v Ashfield Council (2015) NSWLEC 1009; and
- 3. Al Maha Pty Ltd v Huajun Investments Pty Ltd (2018) NSWCA 245

Having regard to specific requirements of clause 4.6(3) and 4.6(4) the following assessment comments are provided:

(3) Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:

- (a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and
- (b) that there are sufficient environmental planning grounds to justify contravening the development standard.

The Applicant has submitted a request in writing - Refer Attachment 3 - to justify the contravention of the building height standard for the following reasons (as summarised):

 Compliance with the development standard is unnecessary as the proposal has demonstrated to be consistent with the objectives of the height of buildings standard.



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#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

2. The natural slope of the site falls 12m over approximately 36m, from the front to the rear. To avoid extensive cut and fill, an elevated 2 level residence with a garage on a mid-level was considered an appropriate design solution.



(Above: North and West Elevations)

- 3. The height variation would not result in increased overshadowing of the adjoining properties as compared with a compliant proposal.
- 4. The height variation would not result in any additional loss of views across the site compared with a compliant proposal.
- The development is considered to be a good contextual fit for an infill development and is consistent with the streetscape and bulk and scale outcomes envisaged for the area.
- The height exceedance occurs at the rear of the existing 2-storey building due to the steepness of the slope and this part of the building will not be highly visible in the streetscape.
- 7. The height of building variation will not have an adverse impact to the public domain.

(4) Development consent must not be granted for development that contravenes a development standard unless:

(a) the consent authority is satisfied that:

(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), Having regard to: 3(a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case:

In *Wehbe* 'five methods' have been developed to test whether a compliance with the standard is unreasonable or unnecessary.

- The objectives of the height standard are achieved/not achieved notwithstanding the non-compliance with the numerical 8.5m height standard.
- 2. The underlying objective or purpose of the standard is/not relevant to the development and therefore compliance is unnecessary.
- The underlying object or purpose would be/not be defeated or thwarted if compliance was required and therefore compliance is unreasonable.



#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

- 4. The development standard hasn't been virtually abandoned or destroyed by the Council's own actions in granting a consent to the proposal departing from the 8.5m standard and hence compliance is unreasonable or unnecessary.
- The zoning of the particular land is reasonable or appropriate so that a development standard appropriate for that zoning is also reasonable and necessary as it applies to the land.

The proposed variation relies upon the first test. It is considered that the Applicant's written request has satisfactorily demonstrated that the proposed development will achieve the objectives of the height of building development standard despite the numerical non-compliance.

While it is acknowledged that consent has been granted for other buildings in the precinct that have exceeded the height controls they have been appropriately tested on merit in accordance with the provisions of Clause 4.6 and found to be acceptable. Therefore, it is not considered that these decisions have abandoned or destroyed the integrity of the development standard. The decisions do, however, provide some context for how the development will fit into the locality.

The first method (1) is sufficient to establish that compliance with the development standard is unnecessary in the circumstances of the case.

#### Comments:

On the basis of the above, it is considered that the Applicant's clause 4.6 variation request has adequately addressed the matters required to be demonstrated by clause 4.6(3).

(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out,

The consistency of the proposal with the zone objectives has been discussed above under Clause 2.3. Consideration of the proposal's consistency with the objectives of height of buildings standard (Clause 4.3) is provided as follows: '

(a) To ensure that buildings are compatible with the height, bulk and scale of the existing and desired future character of the locality.

#### (ii) Comments:

In this regard, the proposed dwelling is similar in height, bulk and scale to other dwellings in the area and maintains an FSR below the numerical control and commensurate with other dwellings in the locality.

Although the variation is 22%, when viewed from the North and Western elevations of the proposal, the encroachment relates to a small section of the upper storey verandah roof.

The locality is characterised by a number of other residential buildings ranging in height from two to three storeys above ground level, mainly due to the steepness of the terrain and north-east views.

The floor space ratio for the proposal is below the maximum of 0.65:1 for the area.



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#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

The proposed height, bulk and scale of the development are considered compatible with the character of the locality in this regard.

(iii) (b) to minimise visual impact, disruption of views, loss of privacy and loss of solar access to existing development;

(iv) Comments:

The visual impact of the building is considered satisfactory for the following reason/s:

- Given the topography of the site and orientation of adjoining dwellings there
  will be no significant view sharing or overshadowing impacts.
- The proposal will not result in the disruption of any significant views. No submissions were received regarding concern for loss of views in the locality.
   (v)

(c) to minimise the adverse impact of development on heritage conservation areas and heritage items;

(vi) Comments:

The site does not contain any known heritage items or sites of significance.

(d) to nominate heights that will provide a transition in built form and land use intensity within the area covered by this Plan.

#### (vii) Comments:

- The site is located within an established locality maintaining consistent zoning and numerical controls.
- The public benefit of the standard is not compromised by the proposed development.
- The development is consistent with the zoning and height objectives of the LEP 2011 and is unlikely to have any implications on State related issues or the broader public interest.
- (b) the concurrence of the Secretary has been obtained.

#### (viii) Comments:

In accordance with Planning Circular PS 20-002, the Secretary's concurrence can be assumed for development contravenes a numerical standard by greater than 10%. However, as the numerical variation being sort is 22%, this Application is required to be reported to the Development Assessment Panel, which then needs to be referred to an Ordinary meeting of Council for determination. A public register of variations is maintained and quarterly reporting made to the Department.

Based on the above, the development is consistent with the height control objectives and also the zoning objectives as discussed previously in this report. It is recommended that the Clause 4.6 variation to Clause 4.3 be supported.

• Clause 7.13 - Satisfactory arrangements are in place for provision of essential services including water supply, electricity supply, sewer infrastructure, stormwater drainage and suitable road access to service the development.

#### (ii) Any draft instruments that apply to the site or are on exhibition

No draft instruments apply to the site.



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#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

### (iii) Any Development Control Plan in force

Port Macquarie-Hastings Development Control Plan 2013

DCP Objective	<b>Development Provisions</b>	Proposed	Complies	
3	a) Development must comply with Council's Developments, Public Place & Events - Waste Minimisation and Management Policy.	Satisfactory arrangements can be put in place for storage and collection of waste. Standard condition recommended for construction waste management.	Yes	-
Cut and Fi	ll Regrading			
4	a) Development shall not exceed a maximum cut of 1.0m and fill of 1.0m measured vertically above the ground level (existing) at a distance of 1.0m outside the perimeter of the external walls of the building (This does not apply to buildings where such cut and fill is fully retained within or by the external walls of the building).	Minimal earthworks are proposed. The site falls 12m from front to rear and the proposed retaining walls are proposed to be fully retaining within the building line, under the elevated terrace and pool areas. To transition between to each level and create level useable private open space areas, elevated terraces are proposed with reinforced concrete block retaining walls to create useable level space with minimum cut that could impact adjoining properties. The ground floor terrace on the western side of the dwelling has an area of fill greater than the 1m standard to 2.8m in height at the highest point directly below the terrace. The design has minimised the use of excessive cut and fill by minimising the retaining walls to area directly below the proposed terraces.	No, but considered acceptable due to the merits of the site.	80000000000000000000000000000000000000
		The proposal does not adversely impacts drainage of adjoining properties and		PORT MACQU HASTIN C O U N C

#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

5       a) A certified practicing structural engineer must certify any retaining wall greater than 1.0m.       Engineering detail is noted on proposed plans. A draft condition have also been included to confirm structural engineering for the retaining walls and footings prior to release of the Construction Certificat         b) Where a combination of a fence and a wall is proposed to be greater than 1.2m high:       No Front fence proposed.         -       be a maximum combined height of 1.8m above existing property boundary level;       No Front fence proposed.         -       be constructed up to the front boundary for a maximum length of 6.0m or 30% of the street frontage, whichever is less;       will somewhat reduce the water existing property	d No, but t capable of being managed with recommended condition.
<ul> <li>structural engineer must certify any retaining wall greater than 1.0m.</li> <li>b) Where a combination of a fence and a wall is proposed to be greater than 1.2m high:         <ul> <li>be a maximum combined height of 1.8m above existing property boundary level;</li> <li>be constructed up to the front boundary for a maximum length of 6.0m or 30% of the street frontage, whichever is less;</li> </ul> </li> <li>on proposed plans. A draft condition have also been included to confirm structural engineering for the retaining walls and footings prior to release of the Construction Certificat</li> <li>No Front fence proposed.</li> </ul>	t capable of being managed with recommended condition.
a fence and a wall is proposed to be greater than 1.2m high: - be a maximum combined height of 1.8m above existing property boundary level; - be constructed up to the front boundary for a maximum length of 6.0m or 30% of the street frontage, whichever is less;	N/A
<ul> <li>has openings which make it not less than 25% transparent; and</li> <li>provide a 3m x 3m splay for corner sites, and</li> <li>provide a 900mm x 900mm splay for vehicle driveway entrances.</li> </ul>	
DOD 2012. David D. Conserval Provincian D. D. Haranda Managama	
DCP 2013: Part B - General Provision - B3: Hazards Managemen Bushfire Hazard Management	
18       a) APZs are to be located outside of environmental protection zones and wholly provided within private land. Note perimeter roads provided as part of a residential subdivision are classified as being part of the subdivision and not a separate permissible land use within environment       APZ not reliant on land beyond the road reservance beyond the road reservance provided as part of a residential subdivision are	ve.
Flooding	PORT MACQUAI

#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

19	a) Development must comply with Council's Floodplain Management Plan and Flood Policies.	NA	NA	
Access an	: Part B- General Provisions- E nd Car Parking	34: Transport, Traffic Mana	gement,	
DCP Objective	Development Provisions	Proposed	Complies	-
Parking Pi	rovision			
24	<ul> <li>a) Off-street Parking is provided in accordance with Table 3:</li> <li>1 parking space per each dwelling for dwelling-house.</li> </ul>	Proposal provides a double garage.	Yes	
Parking La	ayout			
28	<ul> <li>c) Parking spaces shall generally be behind the building line but may be located between the building line and the street when: <ul> <li>it is stacked parking in the driveway; or</li> <li>it can be demonstrated that improvements to the open space provided will result; and</li> <li>the spaces are screened (densely landscaped or similar) from the street by a landscaping with a minimum width of 3.0m for the entire length of the parking area.</li> </ul> </li> <li>d) Parking design and layout in provided in generating area</li> </ul>	Proposed Garage is behind the building line. The proposed plans have also been amended to comply with minimum 4.5m building line front setback. However, the driveway length is limited to a 4.6m length inside of the front boundary to provide casual stacked parking opportunities on the driveway.	Yes	
	is provided in accordance with AS/NZS 2890.1 - Parking facilities - Off-street car parking.			$\hat{\mathcal{D}}$
34	a) All parking and manoeuvring spaces must be designed to avoid concentrations of water runoff on the surface.	Residential driveway only, capable of complying.	Yes	50
	b) Council will not permit the discharge of stormwater directly into kerbing and guttering or table drains for any development other than that of a minor nature.	Capable of complying with appropriate driveway.	yes	PORT M

#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

DCP 2013: Part B - General Provisions - B5: Social Impact Assessment and					
Crime Prevention					
DCP Objective	<b>Development Provisions</b>	Proposed	Complies		
Crime Prev	vention				
43	<ul> <li>a) The development addresses the generic principles of crime prevention:</li> <li>Casual surveillance and sightlines;</li> <li>Land use mix and activity generators;</li> <li>Definition of use and ownership;</li> <li>Basic exterior building design;</li> <li>Lighting;</li> <li>Way-finding; and</li> <li>Predictable routes and entrapment locations;</li> <li>as described in the Crime Prevention Through Environmental Design (CPTED) principles.</li> </ul>	No concealment or entrapment areas proposed. Adequate casual surveillance available.	Yes		

DCP 2013: Part C - Development Specific Provisions - C1: Low Density Residential Development				
DCP Objective	Development Provisions	Proposed	Complies	
Front Setb	acks			
44	<ul> <li>a) Dwellings may incorporate an articulation zone to a street frontage at no less than 3m from property boundary. The following building elements are permitted within the articulation zone:</li> <li>an entry feature or portico;</li> <li>a balcony, deck, patio, pergola, terrace or verandah;</li> <li>a window box treatment;</li> <li>a bay window or similar feature;</li> <li>an awning or other feature over a window;</li> <li>a sun shading feature.</li> </ul>	Setback of 3m to elevated front porch. Note there is a breeze block feature adjoining the entrance path, this is a balustrade due to the elevation, do not extend above the eave and somewhat characterised as a fence. This is considered acceptable based on the merit of the site and safety.	Yes	

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PORT MACQUARIE HASTINGS c o u n c i i

#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

			20/04/2022
	<ul> <li>b) These building elements should not extend above the eave gutter line, other than a pitched roof to an entry feature or portico that has the same pitch as the roof on the dwelling house.</li> <li>c) The primary road front setback shall be: Classified road = any frontage 6.0m Primary frontage = 4.5m Secondary frontage = 3.0m Ancillary Lane = 2.0m Large lot residential and rural zones = 10.0m</li> </ul>	The primary setback to a external wall of a habitable room is 6m and to the proposed garage external facing wall is 4.5m.	Yes.
45	<ul> <li>a) A garage, carport or car parking space should:</li> <li>be at least 1m behind the building line, where the dwelling(s) has a setback from a front boundary of 4.5m or more, or</li> <li>be at least 5.5m from a front boundary, where the dwelling(s) has a setback of less than 4.5m.</li> </ul>	The garage is setback more than 1m behind the Breeze block feature and front porch elements of the proposal. The garage opening however, is only setback 4.6m. see justification below.	No, but considered acceptable based on the site constraints.
	<ul> <li>b) The total width of the garage/carport openings should not be more than 6m and not more than 50 per cent of the width of the building.</li> <li>c) Driveway crossovers are</li> </ul>	Proposed garage opening is 5.5m and approximately 40% of the width of the building. Proposed 5m driveway.	Yes
	no greater than 5.0m in width. d) Where a dual occupancy or attached dwelling is proposed on a corner lot a garage and driveway is provided on each road frontage.	NA	NA
Side and F	Rear Setbacks		
46	a) A minimum rear boundary setback of 4m is to be provided to dwellings (including verandahs, patios and decks).	Proposed rear setback of 4m to the elevated pool area. The proposed rear building line of the dwelling is 16.48m.	Yes



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	b) A minimum rear boundary setback of 900mm applies to sheds and swimming pools subject to achieving minimum required private open space area.	Proposed pool is setback 4m.	Yes	
	c) Council may consider varying rear setback requirements where it is demonstrated that the private open space could achieve better solar access between the building and the side setback. In that instance, one side setback should be a minimum 4m in width (for an equivalent length of rear boundary, behind building line) and the rear setback may be reduced to 900mm.	NA	NA	
47	a) Ground floors (being <1m above existing ground level) should be setback a minimum of 900mm from side boundaries.	Setbacks Eastern Boundary - 1.3m Western Boundary - 3m	Yes	
	b) First floors and above (including single storey with floor level >1m) should be setback a minimum of 3m from the side boundary, or reduced down to 900mm where it can be demonstrated that the adjoining property's primary living rooms and principal private open space areas are not adversely overshadowed for more than 3hrs between 9am - 3pm on 21 June.	First floor Setbacks Eastern Boundary - 3.05m Western Boundary - 3.08m Note, the elevated terrace under the lower level is setback a minimum 190mm to 300mm from the western boundary. This is considered unacceptable due to bulk and scale, with a maximum height being 4.3m directly adjoining the proposed dwelling. It will be acceptable if the side setback achieved the minimum setback for a single level development, providing more separation and access for future maintenance. A condition has been recommended to amend plans prior to the release of the Construction Certificate.	Acceptable when the western elevation of the terrace is increased to a 1m side setback.	

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	c) First floors and above should have building walls that step in and out at least every 12m by a minimum of 500mm articulation. Where first floors and above are setback >3m, wall articulation is not required.	The external walls of the proposed building are well articulated with external finishes and no single span of wall exceeding 12m	Yes
Private Op	en Space		
48.	<ul> <li>a) All dwellings should have a minimum area of private open space of 35m2, which includes a principal private open space area with:</li> <li>a minimum dimension of 4m x 4m, and</li> <li>a maximum grade of 5% for minimum 4m x 4m of the total open space requirement, and</li> <li>direct accessibility from a ground floor living area and orientated to maximise use.</li> </ul>	Suitable private open space is provided on lower terrace and pool area. There are multiple terraces that comply with the objectives of this clause. No adverse concerns.	Yes
	<ul> <li>b) Private open space may include clothes drying areas and garbage storage.</li> </ul>	Noted on plans adjoining lower level laundry.	Yes
Public Dor	nain and Fencing		
49	a) Front fences built forward of the building line for the primary road frontage should be detailed on the development application plans.	Note that a breeze block wall is proposed on along the front porch and entrance path. Due to site constraints the porch is elevated and a balustrade is required. This is not a front fence for the intent of this clause.	NA
	<ul> <li>b) Solid Front fences up to</li> <li>1.2m high should be: <ul> <li>Setback 1.0m from the front boundary, and</li> <li>Suitably landscaped to reduce visual impact, and</li> <li>Provide a 3m x 3m splay for corner sites.</li> </ul> </li> </ul>	NA	NA
	b) Front fences proposed to be more than 1.2m high should be a maximum of 1.8m in height, above existing front property boundary level, and either:	NA	NA

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#### AGENDA DEVELOPMENT ASSESSMENT PANEL 20/04/2022 Include landscaped recesses having minimum dimensions of 1.8m long x 900mm deep which occupy no less than 50% of the total length of the fence. or be erected up to the front \_ boundary for a maximum length of 6.0m or 50% of the street frontage, c) have openings which NA, but the breeze block NA make it not less than 25% construction will provide transparent (no individual adequate transparency. opening more than 30mm wide); d) provide a 3m x 3m splay NA NA for corner sites, and e) provide a 900mm x NA - adequate separation Yes 900mm splay for vehicle provided to driveway. driveway entrances. 50 a) For tennis courts or other NA NA similar areas, chain wire fences should be black or dark green plastic coated mesh. b) Solid fences enclosina NA NA these facilities should not be permitted over 1.8m. Bulk and Scale 51 a) Direct views between The development will not Yes indoor living rooms and compromise privacy in the principal private open space area due to a combination of adjacent dwellings, of lack of windows on including proposed dwellings relevant boundaries, use approved on adjoining lots, of obscure windows, high including possible dwellings sill windows, limiting living on future lots, should be areas/windows that face obscured or screened adjoining living areas/open where: space, compliant Ground and first floor separation, fencing and (and above) indoor living use of screening to room windows are within obscure views/direct views a 9m radius. towards the rear \_ Direct views between boundary. principal private open space areas where within a 12m radius. Direct views between

indoor living rooms of dwellings into the

principal area of private

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open space of other dwellings within a 12m radius.			
<ul> <li>b) A balcony, deck, patio, pergola, terrace or verandah should have a privacy screen where there are direct views of: <ul> <li>Indoor living room windows of adjacent dwellings, including proposed dwellings approved on adjoining lots within 9m radius; or</li> <li>Principal areas of private open space of adjacent dwellings, including proposed dwellings approved on adjoining lots within a 12m radius.</li> </ul> </li> </ul>	From certain areas on the elevated terraces and decks, some minimal side views into neighbouring open space areas will still be possible. However, the proposed screening directs the view more to the rear and such minimal side views would require a specific effort to look into the neighbouring properties. Private open space adjoining the rear boundary are further than 12m from the proposed terrace and decks. The site is naturally more elevated than the adjoining developments. These areas appear to be screened for landscaping and there are no adverse impacts.	Yes	S S S S S S S S S S S S S S S S S S S
<ul> <li>c) Privacy protection is not required for: <ul> <li>Any Indoor living room windows with a sill height of greater than 1.5m above the finished floor level of that room or where fixed non- openable translucent glass is installed to the same height.</li> </ul> </li> </ul>	Refer to comments on 51(a) above.	Yes	2000 2000 2000
<ul> <li>d) Direct views described above may be reduced or obscured by one of the following measures (details to be submitted with the development application):</li> <li>1.8m high fence or wall between ground-floor level windows or between a dwelling and principal private open space</li> <li>Screening of minimum</li> </ul>	Refer to comments on 51(a) above.	Yes	
 1.7m height, that has			COUNCIL

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	<ul> <li>25% openings (max), with no individual opening more than 30mm wide, is permanently fixed and is made of durable materials.</li> <li>A window, the whole of which has translucent glass and is not able to be opened.</li> </ul>			
Roof Terra	aces			
52	<ul> <li>a) Direct views between roof terraces and indoor living room windows or principal areas of private open space of adjacent dwellings should be screened where: <ul> <li>Ground and first floor (and above) indoor living room windows are within a 9m radius of the trafficable area of the roof terrace;</li> <li>Direct views between roof terraces principal areas of private open space within a 12m radius of the trafficable area of the roof terrace.</li> </ul> </li> </ul>	NA	NA	
	<ul> <li>b) Screening should only be considered where: <ul> <li>the height of the screen does not exceed the maximum building height; and</li> <li>the screening contributes to the building form, and</li> <li>the screening is integrated into the design of the roof; and</li> <li>is constructed and designed with materials complementary to the building.</li> </ul> </li> </ul>	NA	NA	1000000
	<ul> <li>c) Lighting installations on roof terraces should be: <ul> <li>contained within the roof terrace area and located at a low level, and</li> <li>appropriately shaded and fixed in a non- adjustable manner so that light is projected</li> </ul> </li> </ul>	NA	NA	PORT MACQUARTE HASTINGS c o u n c t t

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A	downwards onto the floor surface of the terrace. - designed in compliance with Australian Standards AS4282 - Control of obtrusive effects of outdoor lighting.		
Ancillary I	Development		
56	<ul> <li>a) For ancillary development in R1 General Residential, R2 Low Density Residential, R3 Medium Density Residential, R4 High Density Residential, R5 Large Lot Residential and RU5 Village zones: <ul> <li>The height of an outbuilding or the alterations and additions to an existing outbuilding on a lot should not be more than 4.8m above ground level (existing).</li> <li>The building should be single storey construction with a maximum roof pitch of 24 degrees.</li> <li>The maximum area of the building should be 60m2 for lots less than 900m<sup>2</sup> and maximum of 100m<sup>2</sup> for larger lots.</li> <li>Ancillary development that is a garage, or an outbuilding, or a rainwater tank should not be located in front of the main building line with the exception of swimming pools.</li> </ul> </li> </ul>	Proposed elevated pool is a maximum 3.02m high from natural ground level and less than 60m2. Generally, this complies with this clause. Rainwater tanks and onsite stormwater detention generally complies.	Yes

The proposal seeks to vary Development Provision relating to clause 45 variation to minimum garage setback.

The relevant objectives are:

- To minimise the impact of garages and driveways on the streetscape, on street parking and amenity.
- To minimise the visual dominance of garages in the streetscape.
- To provide safe and functional vehicular access.



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Having regard for the development provisions and relevant objectives, the variation is considered acceptable for the following reasons:

- The proposed garage is setback 4.6m from the front setback, creating a front setback consistent with front building line setback.
- The design was attempting to minimise the need for engineering and support of an elevated garage floor.
- The visual dominance towards the street scape has been minimised with proposed feature cladding and articulation of the front building line.
- The proposal is in keeping with the established character of Orr Street with many examples of garages being forward of the building line due to the site constraints.
- The submitted plans have been amended to provide a 4.5m setback which now provides casual stacked car parking between the building and the kerb.
- There are no residential properties adjoining the site across Orr Street.
- Based on the merit of the location at the end of Orr Street, the proposed variation will not add any adverse impacts to the proposed design or if the minimum garage setback of 5.5m was achieved.

Based on the above assessment, the variations proposed to the provisions of the DCP are considered acceptable and the relevant objectives have been satisfied. Cumulatively, the variations do not amount to an adverse impact of a significance that would justify refusal of the application.

# (iiia) Any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4

No planning agreement has been offered or entered into relating to the site.

#### (iv) Any matters prescribed by the Regulations

#### Demolition of buildings AS 2601 - Clause 92

Demolition work on the site is capable of compliance with this Australian Standard and is recommended to be conditioned.

#### (b) The likely impacts of that development, including environmental impacts on both the natural and built environments, social and economic impacts in the locality

#### Context and Setting

The proposal will not have any significant adverse impacts on existing adjoining properties and satisfactorily addresses the public domain.

The proposal is considered to be compatible with other residential development in the locality and adequately addresses planning controls for the area.

The proposal does not have a significant adverse impact on existing view sharing.

The proposal does not have significant adverse lighting impacts.

There are no significant adverse privacy impacts.



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There are no significant adverse overshadowing impacts. The proposal does not prevent adjoining properties from receiving 3 hours of sunlight to private open space and primary living areas on 21 June.

#### View Sharing

The overall notion of view sharing is invoked when a property enjoys existing views and a proposed development would share that view by taking some of it away for its own enjoyment. Taking all the view away cannot be called view sharing, although it may, in some circumstances, be quite reasonable.

Having considered the principles of NSW Land and Environment Court case law -Tenacity Consulting v Warringah 2004 NSW LEC 140 and following an inspection of the area, an assessment against the four (4) step process will be provided below to establish whether the view sharing is acceptable.

The four (4) steps are also listed below for context.

#### Step 1

Assessment of views to be affected. Water views are valued more highly than land views. Iconic views (e.g. of the Opera House, the Harbour Bridge or North Head) are valued more highly than views without icons. Whole views are valued more highly than partial views, e.g. a water view in which the interface between land and water is visible is more valuable than one in which it is obscured.

#### Step 2

Consider from what part of the property the views are obtained. For example, the protection of views across side boundaries is more difficult than the protection of views from front and rear boundaries. In addition, whether the view is enjoyed from a standing or sitting position may also be relevant. Sitting views are more difficult to protect than standing views. The expectation to retain side views and sitting views is often unrealistic.

#### Step 3

Assess the extent of the impact. This should be done for the whole of the property, not just for the view that is affected. The impact on views from living areas is more significant than from bedrooms or service areas (though views from kitchens are highly valued because people spend so much time in them). The impact may be assessed quantitatively, but in many cases this can be meaningless. For example, it is unhelpful to say that the view loss is 20% if it includes one of the sails of the Opera House. It is usually more useful to assess the view loss qualitatively as negligible, minor, moderate, severe or devastating.

#### Step 4

Assess the reasonableness of the proposal that is causing the impact. A development that complies with all planning controls would be considered more reasonable than one that breaches them. Where an impact on views arises as a result of non-compliance with one or more planning controls, even a moderate impact may be considered unreasonable. With a complying proposal, the question should be asked whether a more skilful design could provide the applicant with the same development potential and amenity and reduce the impact on the views of neighbours. If the answer to that question is no, then the view impact of a complying development would probably be considered acceptable and the view sharing reasonable.

On balance, whilst a design change may reduce the perceived impact from side facing windows of the adjoining development. The part of the proposed building that



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is impacting the views enjoyed across the current vacant land would be potentially blocked by a complying development building envelope on the subject lot. Note that the height of building variation discussed earlier in this report does not impact views from the adjoining developments.

The proposal is considered reasonable when reviewing compliance against key view sharing principle criteria for the immediate neighbours to the west (1-3 Orr Street). The proposed development complies with the side and rear setback requirements. It is also common to find 2-3 storey dwellings in the locality due to the site constraints so the bulk and scale are also considered reasonable. The proposal will not have any adverse view sharing impacts that would warrant refusal of the application and the proposal is considered acceptable.

#### Access, Traffic and Transport

The proposal will not have any significant adverse impacts in terms access, transport and traffic. The existing road network will satisfactorily cater for any increase in traffic generation as a result of the development.

#### Water Supply Connection

Service available – details required with Section 68 application. An appropriate standard condition is recommended in this regard.

#### Sewer Connection

The proposed works are to be clear of the existing sewer junction and main traversing the site. The required distance off the junction is to be determined in relation to the depth.

The swimming pool is proposed over the sewer main traversing the site. This has been assessed as being acceptable subject to appropriate engineering design to be prepared prior to the issue of the Construction Certificate.

Service available - details required with Section 68 application. An appropriate standard condition is recommended in this regard.

#### Stormwater

Service available - details required with Section 68 application. An appropriate standard condition is recommended in this regard.

#### Other Utilities

Telecommunication and electricity services are available to the site.

#### Heritage

This site does not contain or adjoin any known heritage item or site of significance. The site is considered to be disturbed land.

#### Other land resources

The site is within an established urban context and will not sterilise any significant mineral or agricultural resource.

#### Water cycle

The proposed development will not have any significant adverse impacts on water resources and the water cycle.



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#### Soils

The proposed development will not have any adverse impacts on soils in terms of quality, erosion, stability and/or productivity subject to a standard condition requiring erosion and sediment controls to be in place prior to and during construction.

#### Air and microclimate

The construction and/or operations of the proposed development will not result in any significant adverse impacts on the existing air quality or result in any pollution. Standard precautionary site management condition recommended.

#### Flora and fauna

Construction of the proposed development will not require any removal/clearing of any native vegetation and therefore does not trigger the biodiversity offsets scheme. Part 7 of the Biodiversity Conservation Act 2016 is considered to be satisfied.

#### Waste

Satisfactory arrangements are in place for proposed storage and collection of waste and recyclables. No adverse impacts anticipated. Standard precautionary site management condition recommended.

#### Energy

The proposal includes measures to address energy efficiency and will be required to comply with the requirements of BASIX.

#### Noise and vibration

The construction of the proposed development will not result in any significant adverse impacts on the existing air quality or result in any pollution. Standard precautionary site management condition recommended.

#### Bushfire

The site is identified as being bushfire prone.

The Applicant has submitted a bushfire report prepared by a Certified Consultant.

As the assessment has determined that a BAL 40/Flame Zone construction is required, and referral to the Local Rural Fire has been made. The RFS have reviewed the proposal and made recommendations which will be required to be imposed via conditions of consent.

Management of bushfire risk is acceptable subject to BAL construction levels being implemented and APZ being maintained. An appropriate condition is recommended.

#### Safety, security and crime prevention

The proposed development will be unlikely to create any concealment/entrapment areas or crime spots that would result in any identifiable loss of safety or reduction of security in the immediate area. Adequate casual surveillance is available.

#### Social impacts in the locality

Given the nature of the proposed development and its location the proposal is not considered to have any significant adverse social impacts.

#### Economic impact in the locality

The proposal is not considered to have any significant adverse economic impacts on the locality. A likely positive impact is that the development will maintain employment



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in the construction industry, which will lead to flow impacts such as expenditure in the area.

#### Site design and internal design

The proposed development design satisfactorily responds to the site attributes and will fit into the locality. Particularly having regard to the steep topography of the site.

#### Construction

Construction impacts are considered capable of being managed, standard construction and site management conditions have been recommended.

#### **Cumulative impacts**

The proposed development is not considered to have any significant adverse cumulative impacts on the natural or built environment or the social and economic attributes of the locality.

#### (c) The suitability of the site for the development

The proposal will fit into the locality and the site attributes are conducive to the proposed development.

Site constraints of bushfire, stormwater and slope have been adequately addressed and appropriate conditions of consent recommended.

### (d) Any submissions made in accordance with this Act or the Regulations

Following exhibition of the application in accordance with the Community Participation Plan, three (3) submissions were received. The key issues raised are addressed below;

Submission Issue/Summary	Planning Comment/Response
The proposal in its current form does not comply with building height regulations of 8.5m.	As discussed earlier in this report. The applicant submitted amended plans including a Clause 4.6 exception to Development Standard to Clause 4.3 (Height of Buildings) of the Port Macquarie-Hastings Local Environmental Plan 2011
	The proposed development (new works) exceed the height standard by 1.87m (at the northern covered deck) which represents a variation of 22%. Key issues raised in the clause 4.6 exception is severe sight constraints due to slope, variation is only part of the roof line, proposed variation is not for additional habitable floor level, variation does not create adverse overshadow or view loss and is not out of character for the locality.
	Based on the assessment, the variations proposed to the provisions of the DCP and the LEP 2011 are both considered acceptable and the relevant objectives have been satisfied. Cumulatively, the variations do not amount to



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	an adverse impact of a significance that would justify refusal of the application.
Variation to Side Setbacks - Western raised terrace is 190mm from the side boundary and elevated a maximum 2.8m.	The lower terrace is elevated to create a level usable space to transition from the Lower level of the dwelling to the proposed pool area. The proposed terrace is a secondary outdoor area. The proposed elevated terrace does not have adverse overshadowing impacts, however, there is a perception of bulk, due to the proposed height of 2.8m and an additional 1.8m privacy screening. In terms of the level of the terrace proposed, it is considered to be consistent with other sites
	is considered to be consistent with other sites in the area, due to the steep terrain.
	The proposed side setback does appear to be unnecessary impact to the adjoining development as it is a side setback variation and will have future issues with regards to maintenance. Due to the size of the lower terrace, increasing the side setback will not impact the function of the secondary area. As a mitigation measure, it is recommended
	that a condition be included to requires prior to the release of the construction certificate that the lower terrace be amended to provide a 1m side setback.
The bulk and scale of the development along with inadequate setbacks results in unreasonable impacts on privacy and amenity.	The proposed development complies with the floor space ratio complying to the site. The height of building variation has been discussed earlier and is considered not out of character for the locality due to site constraints with various examples of similar variations.



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	Privacy impacts have been assessed in the DCP 2013 component of this report and considered compliant. It is considered that adequate design, implementation of privacy screening, window location and separation has softened the perceived impacts of an elevated site.
	The proposed bulk and scale is considered consistent with the envisaged development of this locality.
Access, traffic and manoeuvring	The proposed plans have been amended to comply with the minimum front building line. The proposed garage is now setback 4.6m from the front boundary and has been considered acceptable earlier in this report. This provides more appropriate site lines for manoeuvring entering and exiting the garage.
	With regards to site management, the construction management plan will need to included site access as part of the management. This should include adequate notification of road closures during construction.
Visually prominent to the existing landscape and out of character	Orr Street is one of the highest positioned residential areas within the locality. The built form of the locality is well established as buildings appearing to be 2 to 3 storey in height. The proposed development will not be out of character to the built form of adjoining residential developments along Orr street. There are no adverse impacts with regards to visual prominence to support refusal of this application.
Stormwater disposal	As discussed earlier in this report, stormwater management plans have been provided and provided with concurrence from Council's stormwater engineers. The proposed roofline will drain to Orr street and the remaining catchment will drain to an onsite detention basin at the rear. This will improve the current overland flows experience.
Concerned about the proposed development's proximity to existing rubble/rock retaining wall on adjoining property. regarding structural impact and stormwater.	The drainage and structure of the adjoining properties rumble retaining wall appears to have existing issues with regards to drainage and structural capacity. The proposed development has satisfied proposed stormwater drainage and overland flows; this should soften some of the existing issues.
	The proposed swimming pool is proposed to be setback 4m from the rear boundary. Prior to the construction certificate engineering plans are to



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confirm the footings over the sewer line to support the elevated structure. Being over 4m from the boundary it is anticipated that this is capable of being outside of the zone of influence of the adjoining landscaping rubble retaining wall on the adjoining site.
Based on the above, the excavation, levels and associated impacts are acceptable and capable of being managed.

### (e) The Public Interest

The proposed development will be in the wider public interest with provision of appropriate additional housing.

The proposed development satisfies relevant planning controls and will not have any significant adverse impacts on the wider public interest.

#### Ecologically Sustainable Development and Precautionary Principle

Ecologically sustainable development requires the effective integration of economic and environmental considerations in decision-making processes.

- The four principles of ecologically sustainable development are:
- the precautionary principle,
- intergenerational equity,
- conservation of biological diversity and ecological integrity,
- improved valuation, pricing and incentive mechanisms.

The principles of ESD require that a balance needs to be struck between the manmade development and the need to retain the natural vegetation. Based on the assessment provided in the report and with recommended conditions of consent, it is considered an appropriate balance has been struck.

#### Climate change

The proposal is not considered to be vulnerable to any risks associated with climate change.

### 4. DEVELOPMENT CONTRIBUTIONS APPLICABLE

The proposed development will comprise a new single dwelling and does not involve the creation of any additional residential component. As a result, s7.11 contributions do not apply.

# 5. CONCLUSION AND STATEMENT OF REASON

The application has been assessed in accordance with Section 4.15 of the Environmental Planning and Assessment Act 1979.

Issues raised during assessment and public exhibition of the application have been considered in the assessment of the application. Where relevant, conditions have been recommended to manage the impacts attributed to these issues.



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#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

The site is considered suitable for the proposed development and the proposal adequately addresses relevant planning controls. The development is not considered to be contrary to the public's interest and will not result a significant adverse social, environmental or economic impact. It is recommended that the application be approved, subject to the recommended conditions of consent provided in the attachment section of this report.

# Attachments

- 1. DA2021 999.1 Recommended Conditions
- 2. DA2021 999.1 Plans
- 3. DA2021 999.1 Clause 4.6 Variation Report



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# FOR USE BY PLANNERS/SURVEYORS TO PREPARE LIST OF PROPOSED CONDITIONS - 2011

NOTE: THESE ARE DRAFT ONLY

DA NO: 2021/999 DATE: 12/04/2022

#### PRESCRIBED CONDITIONS

The development is to be undertaken in accordance with the prescribed conditions of Part 6 - Division 8A of the *Environmental Planning & Assessment Regulations* 2000.

#### A – GENERAL MATTERS

(1) (A001) The development is to be carried out in accordance with the plans and supporting documents set out in the following table, as stamped and returned with this consent, except where modified by any conditions of this consent.

Plan / Supporting Document	Reference	Prepared by	Date
Plans	DA1b, DA2b, DA3b, DA4b	Karen Burke	03/02/2022
Stormwater Drainage and sewer reticulation strategy	Burke - 01 Orr (DA) dwg (sheet 1 of 1)	Kevin Hall	17/03/2022
BASIX Certificate	12512445	Karen Burke	04/11/2022
Bushfire Hazard Assessment	5 Orr street, Port Macquarie	David Pensini	July 2021

In the event of any inconsistency between conditions of this development consent and the plans/supporting documents referred to above, the conditions of this development consent prevail.

- (2) (A002) No work shall commence until a Construction Certificate has been issued and the applicant has notified Council of:
  - a) the appointment of a Principal Certifying Authority and
  - b) the date on which work will commence.

Such notice shall include details of the Principal Certifying Authority and must be submitted to Council at least two (2) days before work commences.

- (3) (A008) Any necessary alterations to, or relocations of, public utility services to be carried out at no cost to council and in accordance with the requirements of the relevant authority including the provision of easements over existing and proposed public infrastructure.
- (4) (A009) The development site is to be managed for the entirety of work in the following manner:

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- 1. Erosion and sediment controls are to be implemented to prevent sediment from leaving the site. The controls are to be maintained until the development is complete and the site stabilised with permanent vegetation;
- 2. Appropriate dust control measures;
- Building equipment and materials shall be contained wholly within the site unless approval to use the road reserve has been obtained. Where work adjoins the public domain, fencing is to be in place so as to prevent public access to the site;
- Building waste is to be managed via appropriate receptacles into separate waste streams;
- 5. Toilet facilities are to be provided on the work site at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.
- Building work being limited to the following hours, unless otherwise permitted by Council;
  - Monday to Saturday from 7.00am to 6.00pm
  - No work to be carried out on Sunday or public holidays

The builder to be responsible to instruct and control his sub-contractors regarding the hours of work.

- (5) (A011) The design and construction of all public infrastructure works shall be in accordance with Council's adopted AUSPEC Specifications.
- (6) (A053) The required relocation and/or replacement of the sewer pipe that traverses the land is the responsibility of the proponent. Any costs associated with these works shall be the responsibility of the proponent.
- (7) (A013) The general terms of approval from the following authorities, as referred to in section 4.50 of the Environmental Planning and Assessment Act 1979, and referenced below, are attached and form part of the consent conditions for this approval.
  - NSW Rural Fire Service The General Terms of Approval, Reference DA20211121005060-Original-1 and dated 7 January 2022, are attached and form part of this consent.

#### B - PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE

- (1) (B001) Prior to release of the Construction Certificate, approval pursuant to Section 68 of the Local Government Act, 1993 to carry out water supply, stormwater and sewerage works is to be obtained from Port Macquarie-Hastings Council. The following is to be clearly illustrated on the site plan to accompany the application for Section 68 approval:
  - · Position and depth of the sewer (including junction)
  - Stormwater drainage termination point
  - Easements
  - Water main
  - · Proposed water meter location
- (2) (B003) Submission to the Principal Certifying Authority prior to the issue of a Construction Certificate detailed design plans for the following works associated with the developments. Public infrastructure works shall be constructed in accordance with Port Macquarie-Hastings Council's current AUSPEC specifications and design plans are to be accompanied by AUSPEC DQS:
  - 1. Sewerage reticulation.

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#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

- 2. Water supply reticulation.
- 3. Retaining walls.
- 4. Stormwater systems.
- 5. Erosion & Sedimentation controls.
- (3) (B006) An application pursuant to Section 138 of the Roads Act, 1993 to carry out works required by the Development Consent on or within public road is to be submitted to and obtained from Port Macquarie-Hastings Council prior to release of the Construction Certificate.

Such works include, but not be limited to:

- i. Footway and gutter crossing
- ii. Functional vehicular access
- (4) (B038) Footings and/or concrete slabs of buildings adjacent to sewer lines or stormwater easements are to be designed so that no loads are imposed on the infrastructure. Detailed drawings and specifications prepared by a practising chartered professional civil and/or structural engineer are to be submitted to the Principal Certifying Authority with the application for the Construction Certificate.
- (5) (B039) Detailed drawings and specifications prepared by a professional engineer for all retaining walls supporting:
  - i. earthworks that are more than 600mm above or below ground level (existing); or
  - ii. located within 1m of the property boundaries; or
  - iii. earthworks that are more than 1m above or below ground level (existing) in any other location;

are to be submitted to the Principal Certifying Authority with the application for Construction Certificate.

(6) (B046) The building shall be designed and constructed so as to comply with the Bushfire Attack Level (BAL) 40 and flame zone requirements of Australian Standard 3959 and the specifications and requirements of Planning for Bush Fire Protection. Details shall be submitted to the Principal Certifying Authority with the application for Construction Certificate demonstrating compliance with this requirement.

Please note: Compliance with the requirements of the current Planning for Bush Fire Protection Guidelines to prevail in the extent of any inconsistency with the Building Code of Australia.

- (7) (B071) Prior to the release of the Construction Certificate, a CCTV inspection to assess the condition of Council's sewer mains shall be undertaken prior to construction work commencing and at the completion of all construction work in accordance with the Conduit Inspection Reporting Code of Australia WSA 05, at no cost to Council. Any damage to Council's sewer mains as a result of the construction work shall be rectified using a method approved by Council, at no cost to Council.
- (8) (B072) A stormwater drainage design is to be submitted and approved by Council prior to the issue of a Construction Certificate. The design must be prepared in accordance with Council's AUSPEC Specifications and the requirements of Relevant Australian Standards and make provision for the following:
  - a) The legal point of discharge for the proposed development is defined as Council's piped drainage system for hardstand areas capable of gravity fall

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#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

to Orr St, and on-site disposal for remaining areas via a suitably designed and sized system to mimic existing natural overland flow behaviour and flow rates to receiving downstream private property.

In regards to the piped drainage system, the system in Orr Street must be extended by an appropriately sized pipeline (minimum 225mm diameter) to the frontage of the site, where a junction pit must be installed, to allow direct piped connection from the development site into the public drainage system.

The pipeline must be designed to have the capacity to convey flows that would be generated by a 5% AEP storm event.

- b) The design is to be generally in accordance with the stormwater drainage concept plan on Drawing No Burke - 01 prepared by Kevin Hall Civil Engineering Designs and dated 17/03/2022.
- c) All allotments must be provided with a direct point of connection to the public piped drainage system. Kerb outlets are not permitted.
- d) The design shall incorporate facilities to limit site stormwater discharge from catchment areas unable to be discharged to the Council piped drainage system, ensuring discharge is less than or equal to pre development flow rates for all storm events up to and including the 1% AEP event. Note that pre development discharge shall be calculated assuming that the site is a 'greenfield' development site as per AUSPEC requirements.
- e) The design is to make provision for the natural flow of stormwater runoff from uphill/upstream properties/lands. The design must include the collection of such waters and discharge to the Council drainage system.
- f) An inspection opening or stormwater pit must be installed inside the property, adjacent to the boundary, for all stormwater outlets.
- g) Existing redundant driveway laybacks shall be re-instated to match existing kerb and gutter profiles.
- b) Detail to be confirmed with regards to the overland flow from the on-site level spreader / landscape berm.
- (9) (B073) (Note: Where work is within 1m of public infrastructure)

A dilapidation report on the visible and structural condition of the following public infrastructure must be provided to Council prior to the issue of a Construction Certificate.

a) Councils existing kerb inlet pit on Orr St, where proposed pipe extension is to connect.

The dilapidation report is to be prepared by a practising Structural/Civil Engineer agreed to by both the applicant and Council. All costs incurred in achieving compliance with this condition shall be borne b the applicant.

The applicant shall be responsible for public infrastructure. Any damage to public infrastructure in the vicinity of the site, where such damage is not accurately recorded by the requirements of this condition will be borne by the applicant.

(10) Prior to the release of the construction certificate, the proposed plans are to be amended to increase the western side setback of the lower terrace to provide a minimum 1m side setback for the length of the proposed terrace.

#### C - PRIOR TO ANY WORK COMMENCING ON SITE

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#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

(1) (C013) Where a sewer manhole and/or Vertical Inspection Shaft exists within a property, access to the manhole/VIS shall be made available at all times. Before during and after construction, the sewer manhole/VIS must not be buried, damaged or act as a stormwater collection pit. No structures, including retaining walls, shall be erected within 1.0 metre of the sewer manhole or located so as to prevent access to the manhole.

#### **D**-DURING CONSTRUCTION

Nil

#### E - PRIOR TO OCCUPATION OR THE ISSUE OF OCCUPATION CERTIFICATE

- (E001) The premises shall not be occupied or used in whole or in part until an Occupation Certificate has been issued by the Principal Certifying Authority.
- (2) (E058) Written confirmation being provided to the Principal Certifying Authority (PCA) from any properly qualified person (eg the builder), stating that all commitments made as part of the BASIX Certificate have been completed in accordance with the certificate.
- (3) (E034) Prior to occupation or the issuing of the Occupation Certificate provision to the Principal Certifying Authority of documentation from Port Macquarie-Hastings Council being the local roads authority certifying that all matters required by the approval issued pursuant to Section 138 of the Roads Act have been satisfactorily completed.
- (4) (E051) Prior to occupation or the issuing of any Occupation Certificate a section 68 Certificate of Completion shall be obtained from Port Macquarie-Hastings Council.
- (5) (E053) All works relating to public infrastructure shall be certified by a practicing Civil Engineer or Registered Surveyor as compliant with the requirements of AUSPEC prior to issue of Occupation Certificate or release of the security bond.
- (6) (E056) Certification that the construction of footings and piers adjacent to the sewer lines has been carried out in accordance with the approved drawings and specifications, shall be provided by a practising chartered professional civil and/or structural engineer to Council with the application for the Section 307 - Certificate of Compliance/Occupation Certificate.
- (7) (E057) A Certificate of Compliance under the provisions of Section 307 of the Water Management Act must be obtained prior to the issue of any occupation or subdivision certificate.
- (8) (E082) Submission of a compliance certificate accompanying Works as Executed plans with detail included as required by Council's current AUSPEC Specifications. The information is to be submitted in electronic format in accordance with Council's "CADCHECK" requirements detailing all infrastructure for Council to bring in to account its assets under the provisions of AAS27. This information is to be approved by Council prior to issue of the Subdivision or Occupation Certificate. The copyright for all information supplied, shall be assigned to Council.
- (9) (E039) An appropriately qualified and practising consultant is required to certify the following:
  - a. all drainage lines have been located within the respective easements, and
  - b. any other drainage structures are located in accordance with the Construction Certificate.
  - c. all stormwater has been directed to a Council approved drainage system

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#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

- d. all conditions of consent/ construction certificate approval have been complied with.
- e. Any on site detention system (if applicable) will function hydraulically in accordance with the approved Construction Certificate.
- (10) (E047) Prior to the issue of any Occupation Certificate, a positive covenant is to be created under Section 88E of the Conveyancing Act 1919, burdening the owner(s) with the requirement to ensure the ongoing maintenance of the proposed on-site stormwater level spreader / landscaped berm downstream of surcharge pit to ensure discharge mimics natural stormwater sheet flow to downstream private property.

The terms of the 88E instrument with positive covenant are to include, but not be limited to, the following:

- a. The proprietor of the property shall be responsible for maintaining and keeping clear the on-site level spreader / landscaped berm.
- b. The Council shall have the right to enter upon the land referred to above, at all reasonable times to inspect, construct, install, clean, repair and maintain in good working order all components or structures in or upon the said land which comprise the on-site level spreader / landscaped berm; and recover the costs of any such works from the proprietor.
- c. The registered proprietor shall indemnify the Council and any adjoining land owners against damage to their land arising from the failure of any component of the level spreader / landscaped berm, or failure to clean, maintain and repair the level spreader / landscaped berm.

Evidence of registration with the Lands and Property Information NSW shall be submitted to and approved by the Principal Certifying Authority prior to the issue of any Occupation Certificate.

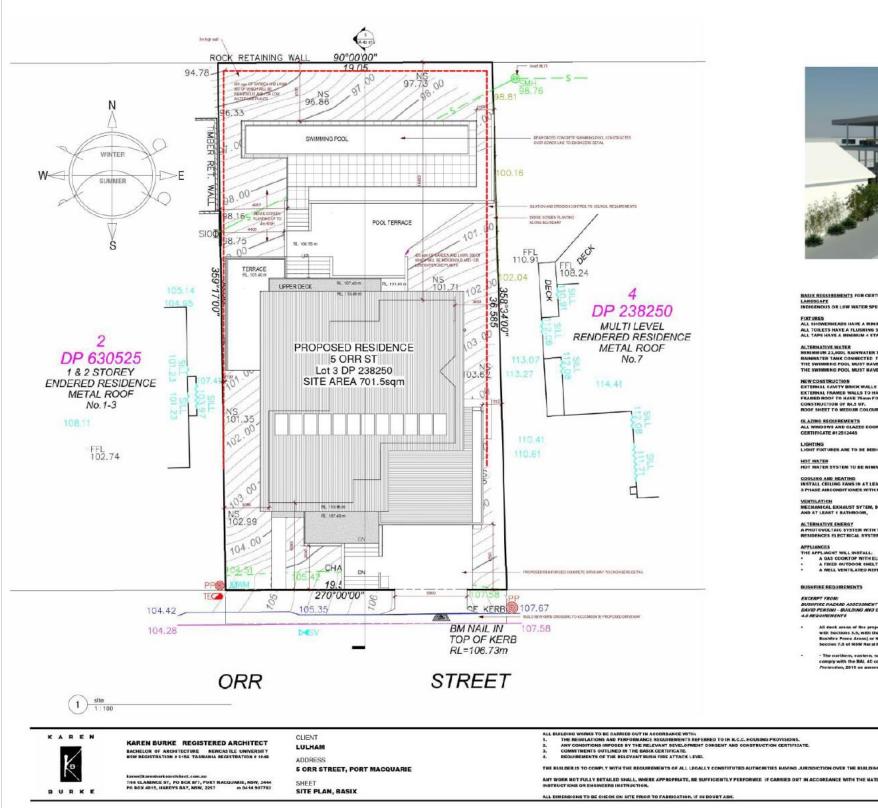
(11) Prior to occupation or issue of the occupation certificate, all privacy screens are to be installed.

#### F - OCCUPATION OF THE SITE

 (F035) The consent only permits the use of the building as a single dwelling and does not permit the adaption or use of the building so as to create a second occupancy.

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# ATTACHMENT





INTS FOR CERTIFICATE # 12512445 - ISSUE DATE 4-11-2021 R LOW WATER SPECIES OF VEGETATION THROUGHOUT 300 sgm OF THE SITE IUM 4 STAR WATER RATING OR FLOW RATE % BU YSTEM WITH NINIMUM 4 STAR WATER RATING. ATER TANK INSTALLED TO COLLECT RUNOFF PROM MIRINUM 2004(IN ROOF AREA. TED TO AT LEAST 1 OUTGOOR TAP, PLUS A TAP LOCATED WITHIN 1000 OF THE SWIMMING P I NAVEA MARIMUM VOLUME OF 20 INIBUTO. T MAVEA APOOL COVER, THE POOL PUMP RUST BE ON A TINER AND MUST NOT BE HEATED. EXTERNAL FRAMED WALLS TO HAVE ADDITIONAL INSULATION TO OBTAIN A TOTAL RATING OF R3-4 INCLUDI RAMED ROOF TO HAVE 75mm Foil BACKED BLANKET AND ANY ADDITIONAL INSULATION TO OBTAIN A TOTA -----CE SA 0.475 - 0.7 ED IN THE GLAZIN HOT WATER HOT WATER SYSTEM TO BE P COOLING AND HEATING INSTALL CEILING FANS IN AT LEAST ONE B

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OF THE HOME BUILDING ACT

• The northern, eastern, southern and vestern elevations of the envised areas of the proposed dwelling are to be sensitivated to comply with the BAL 40 construction requirements of AS1959 - 2018 as areanided by NSW Rural Fire Services, Planning for Bushifter Protection, 2019 as anometical by NSW rules (Fire Services, Planning for dublic) exploration as a protection, 2019.

THE BUILDING WORKS AND THE PROP

# **ORDINARY COUNCIL** 19/05/2022

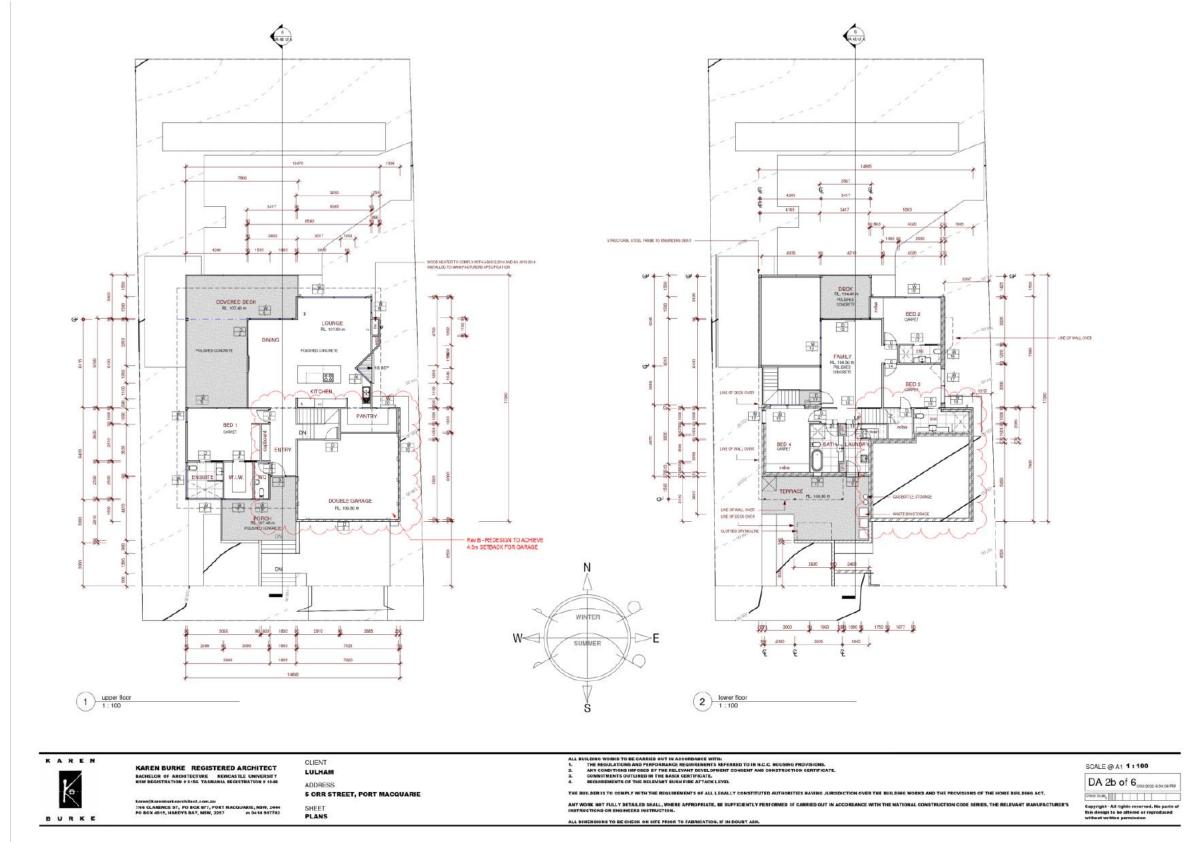
### DEVELOPMENT ASSESSMENT PANEL 20/04/2022



SCALE @ A1 1:100 DA 1b of 6 Storms Control Check Scale Copyright - All rights reserved. No p this design to be altered or reproduce without written permission

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ATTACHMENT

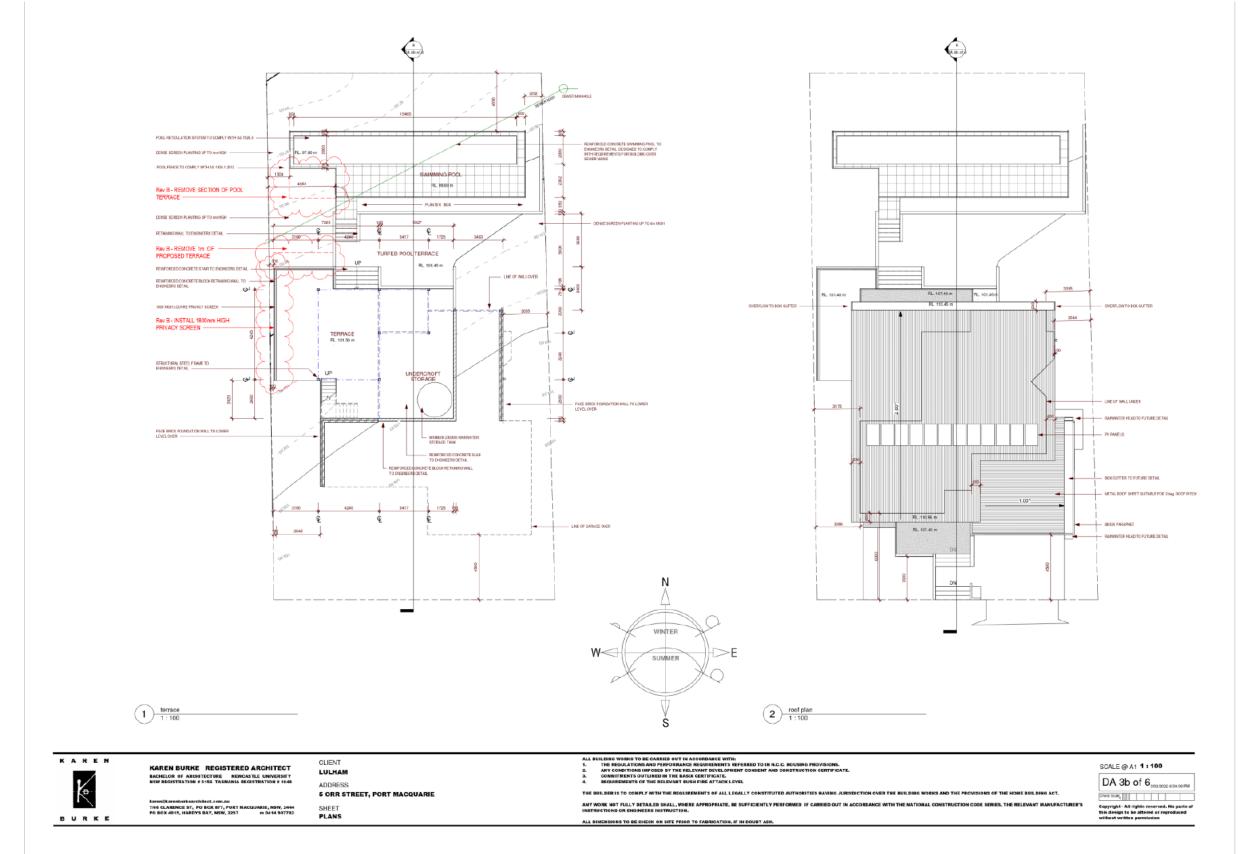


# ORDINARY COUNCIL 19/05/2022

## DEVELOPMENT ASSESSMENT PANEL 20/04/2022

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# ATTACHMENT

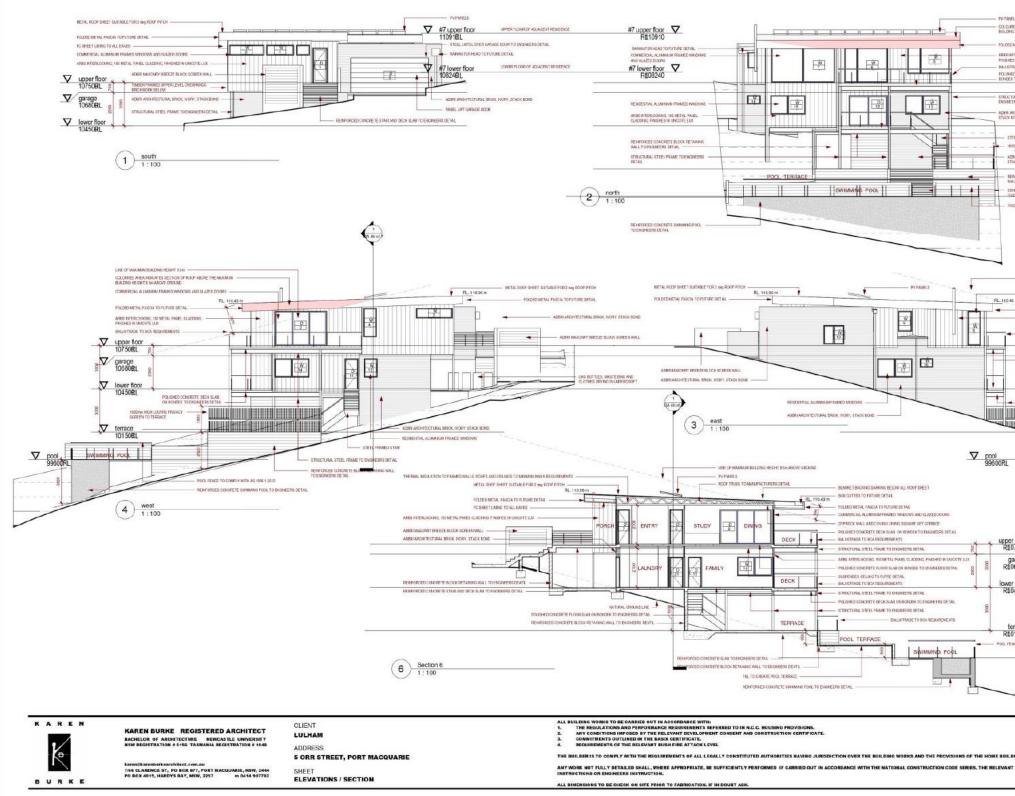


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#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

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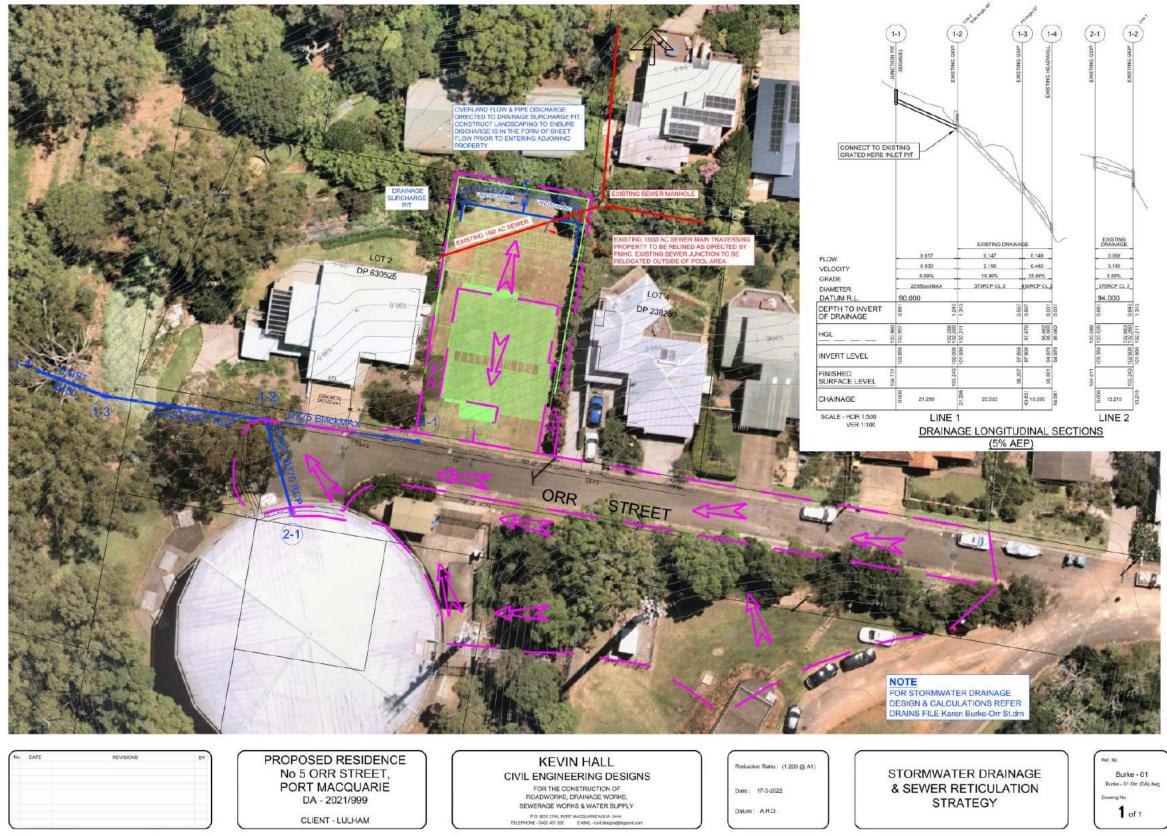
# ORDINARY COUNCIL 19/05/2022

# DEVELOPMENT ASSESSMENT PANEL 20/04/2022

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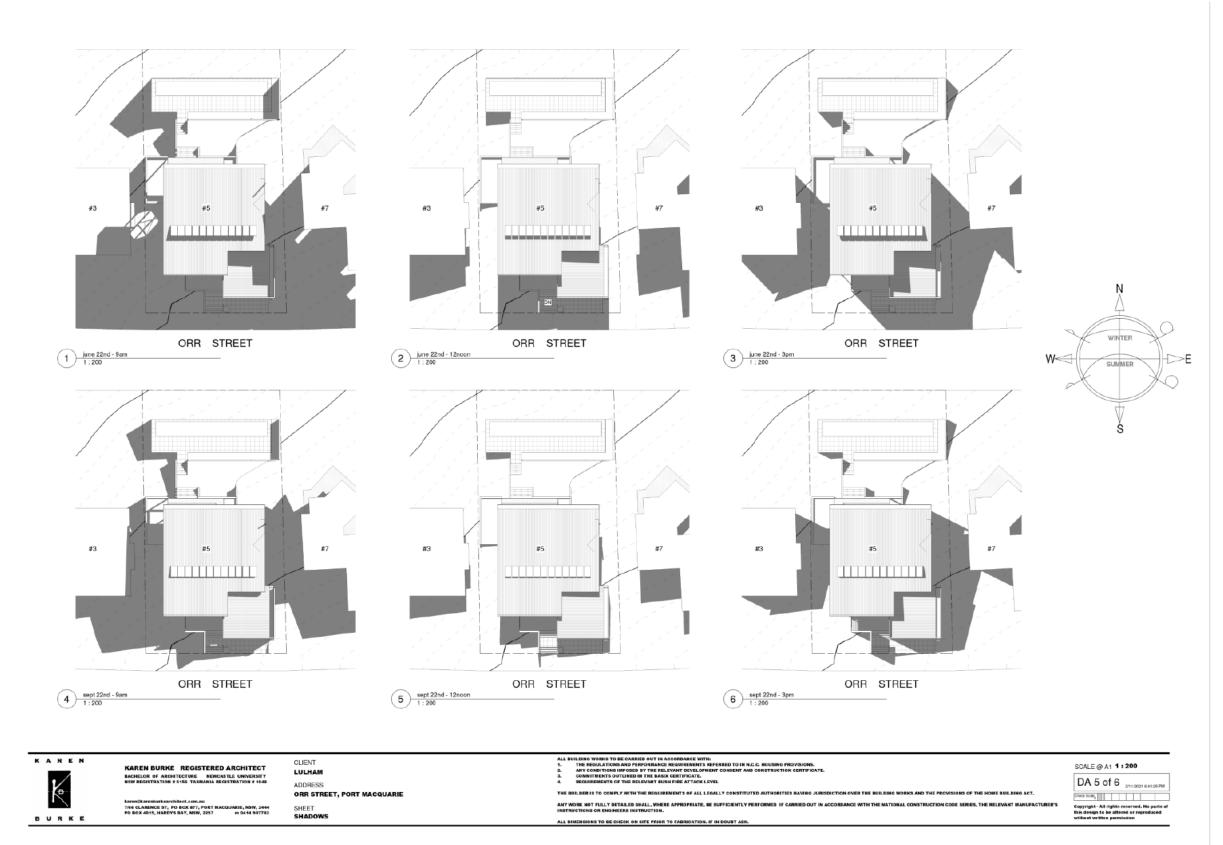


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# **ORDINARY COUNCIL** 19/05/2022

#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

BRENDAN & REBECCA LULHAM

DETAIL & CONTOUR SURVEY OF LOT 3 on DP 238250 ORR STREET PORT MACQUARIE

NOTES The ttie boundaries shown hereon were not marked at the time of survey and have been determined by plan dimensions only and not by field survey. Services shown hereon have been located where possible by field survey. If not able to be so located, services have been plotted from the records of relevant authonties where available and have been noted accordingly on the plan. Where such records do not exist or are inadequate a notation has been made hereon.

Prior to any demolition, excavation or construction on the site, the relevant authority should be contacted for possible location of further underground services and detailed locations of all services.

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# B.R. Development Consulting

COUNCIL REF N/A SURVEYOR SKR DRAWN	SURVEY DATE
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CHECKED SKR	DATE 17-03-2021
SHEET 1	OF I SHEETS
	SKA

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## DEVELOPMENT ASSESSMENT PANEL 20/04/2022

KAREN



EXCEPTION TO DEVELOPMENT STANDARDS (PMHC LEP 2011 Clause 4.6 Variation). - Front Setback to Garage - Height of Building - Side Setback to Garage 5 ORR STREET, PORT MACQUARIE

#### Port Macquarie – Hastings DCP 2013 C1: LOW DENSITY RESIDENTIAL DEVELOPMENT.

#### 45.0bjective

- To minimise the impact of garages and driveways on the streetscape, on street parking and amenity.
- To minimise the visual dominance of garages in the streetscape.
- To provide safe and functional vehicular access.

Development Provisions

a) A garage, carport or car parking space should:

- be at least 1m behind the building line, where the dwelling(s) has a setback from a front boundary of 4.5m or more, or

- be at least 5.5m from a front boundary, where the dwelling(s) has a setback of less than 4.5m.

Note: The distance to the garage/carport or parking space may be measured to the entry point of the garage/carport or parking space or front posts or walls.

#### Front Setback

A variation to the front setback to the garage is requested.

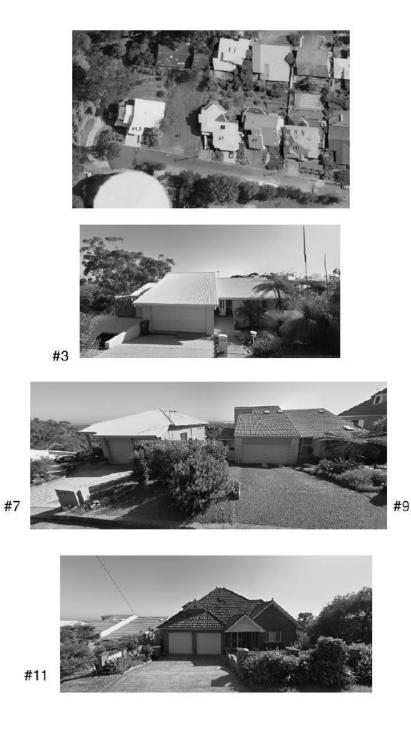
The proposed garage setback of 4.5m meets the objectives of the DCP, minimizing its visual dominance on the streetscape and provides functional access. The proposal is also in keeping with surrounding development, as the adjacent residences have similar site conditions, so have located their garages forward of the dwellings. (as demonstrated in the following images)

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# DEVELOPMENT ASSESSMENT PANEL 20/04/2022



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#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

Port Macquarie – Hastings Local Environment Plan - 2011 Part 4: PRINCIPAL DEVELOPMENT STANDARDS.

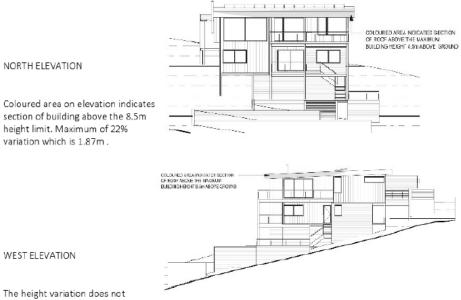
4.3. Height of Buildings

- 1. The objectives of this clause are as follows-
  - (a) to ensure that buildings are compatible with the height, bulk and scale of the existing and desired future character of the locality,
  - (b) to minimise visual impact, disruption of views, loss of privacy and loss of solar access to existing development,
  - (c) to minimise the adverse impact of development on heritage conservation areas and heritage items,
  - (d) to nominate heights that will provide a transition in built form and land use intensity within the area covered by this Plan.

8.5m Maximum Height

A variation to the 8.5m maximum height is requested.

The natural slope of the site falls 12m from the southern street boundary to the northern rear boundary. On such a steep site, to avoid extensive cut and fill, a steel framed, 2 level residence has been proposed, with an attached garage on a mid-level. The outcome of this approach has a section of the roof of the north east corner, exceeding the 8.5m building height. (as indicated on the following images)



create loss of amenity to the adjacent neighbours regarding view loss, loss of privacy or overshadowing.

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# ORDINARY COUNCIL 19/05/2022

### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

The eastern neighbour is much higher and is oriented toward the north-east to capture the ocean views. As evident in the image of the western wall of #7, there is one small window on the lower floor, and the windows on the upper floor look across the top of the proposed residence at #5.

#### WESTERN WALL OF #7

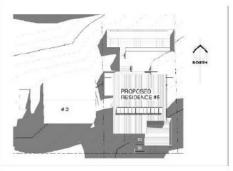
The western neighbour is much lower and living areas orient toward the north west taking in the bushland views of the adjacent reserve. There are also minimal windows on the eastern wall of # 3. Thus, views and privacy will not be significantly impacted by the proposed residence.

Due to the North South orientation of the site, there is minimal overshadowing created by the proposed residence, to the lower, western neighbour's living areas, both internal and external. The shadows are off the northern façade and yard area by 10am in June, which is the worst-case scenario. (see following image)

EASTERN WALL OF #3







SHADOWS CAST AT 10AM- JUNE 22



STREETSCAPE - NORTHERN VIEW

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# DEVELOPMENT ASSESSMENT PANEL 20/04/2022

In addition:

NSW Land and Environment Court and NSW Court of Appeal decisions in Wehbe v Pittwater Council (2007) NSW LEC 827 (Wehbe). 5 part test excerpt. Note; Test 1, is sufficient to establish that compliance with the development standard is unreasonable in the circumstances of this site

As demonstrated in the above discussion, compliance with the development standard of 8.5m maximum height, would be unreasonable in the circumstances of this site. The proposed development meets all objectives of the DCP and does not impact the amenity of the adjacent neighbours. The proposed development is compatible with the height, bulk and scale of the existing character of the area, does not create visual impact, disruption of views, loss of privacy and loss of solar access to existing development. As demonstrated in the streetscape image, the proposed height provides a transition in built form within the area.

#### Port Macquarie – Hastings DCP 2013 C1: LOW DENSITY RESIDENTIAL DEVELOPMENT.

46 - 47 .Side and Rear Setback

#### 47 - Objective

- To reduce overbearing and perceptions of building bulk on adjoining properties
- To provide for visual and acoustic privacy between dwellings.

Development Provisions

- a) Ground floors (being <1m above existing ground level) should be setback a minimum of 900mm from side boundaries.
- b) First floors and above (including single storey with floor level >1m) should be setback a minimum of 3m from the side boundary or reduced down to 900mm where it can be demonstrated that the adjoining property's primary living rooms and principal private open space areas are not adversely overshadowed for more than 3hrs between 9am - 3pm on 21 June.
- c) First floors and above should have building walls that step in and out at least every 12m by a minimum of 500mm articulation. Where first floors and above are setback >3m, wall articulation is not required.

#### Rear Setback

The proposed residence complies with the rear setback requirement of 4m

#### <u>Side Setback</u>

A variation to the side setback to the garage is requested.

Due to the steepness of the site, and the need to achieve a 4.5m setback, the eastern wall of the garage structure starts at ground level and climbs to 2m above ground at the northern wall. A minimum setback of 1300mm to the eastern boundary is proposed. The reduced setback does not create loss of amenity to the adjacent neighbour at #7 regarding view loss, loss of privacy or overshadowing as the adjacent residence is much higher than the proposed garage and has a 9m setback in this corner of the site.

The remainder of the proposed residence complies with side setback requirements.

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#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022

#### Port Macquarie – Hastings DCP 2013 C1: LOW DENSITY RESIDENTIAL DEVELOPMENT.

51 .Bulk and Scale - Objective

To protect the visual privacy of on-site and nearby residents

Development Provisions

- a) Direct views between indoor living rooms and principal private open space of adjacent dwellings, including proposed dwellings approved on adjoining lots, including possible dwellings on future lots, should be obscured or screened where:
  - Ground and first floor (and above) indoor living room windows are within a 9m radius.
  - <sup>o</sup> Direct views between principal private open space areas where within a 12m radius.
  - Direct views between indoor living rooms of dwellings into the principal area of private open space of other dwellings within a 12m radius.
- b) A balcony, deck, patio, pergola, terrace or verandah should have a privacy screen where there are direct views of:
  - Indoor living room windows of adjacent dwellings, including proposed dwellings approved on adjoining lots within 9m radius; or
  - Principal areas of private open space of adjacent dwellings, including proposed dwellings approved on adjoining lots within a 12m radius.

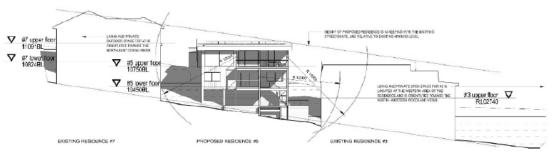


APPROX. LOCATION OF ADJACENT LIVING AREAS AND PRIVATE OPEN SPACES

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#### DEVELOPMENT ASSESSMENT PANEL 20/04/2022



OUTLOOK WITHIN 12m RADIUS OF PROPOSED UPPER DECK

The elevated residence at #7 is lightweight construction with suspended floors, high on the site to obtain the expansive ocean views to the north east. Thus, indoor living areas and private outdoor decks are both orientated toward the north east, and much higher than the proposed living areas of #5.

Alternatively, the residence at #3 is excavated into the site thus sits much lower than #7 and enjoys the western bushland views over the adjacent reserve. The indoor living areas and related private open spaces are also on the western side of the residence.

As demonstrated in the previous images, there will be no direct views between indoor living areas and related private open spaces, to either neighbour, within a 12m radius of the subject properties proposed living areas and decks.

The steep sites and available views have been governing factors in the existing development on the adjacent lots. Most homes along the northern side of Orr St, have indoor living areas and private open spaces oriented toward the northern views. As the homes are mostly elevated, due to the steepness of the sites, it is impossible not to overlook adjacent residences both to the side and rear.

#### Port Macquarie – Hastings DCP 2013 C1: LOW DENSITY RESIDENTIAL DEVELOPMENT.

56 Ancillary Development - Objective

- To facilitate and sustain certain development as ancillary development.
- Have regard to the desired scale, bulk and height of existing residential development as well as streetscape in the locality.

#### Development Provisions

- For ancillary development in R1 General Residential, R2 Low Density Residential, R3 Medium Density Residential, R4 High Density Residential, R5 Large Lot Residential and RU5 Village zones:
  - <sup>o</sup> The height of an outbuilding or the alterations and additions to an existing outbuilding on a lot should not be more than 4.8m above ground level (existing).
  - The building should be single storey construction with a maximum roof pitch of 24 degrees.
  - The maximum area of the building should be 60m2 for lots less than 900m<sup>2</sup> and maximum of 100m<sup>2</sup> for larger lots.
  - Ancillary development that is a garage, or an outbuilding, or a rainwater tank should not be located in front of the main building line with the exception of swimming pools.

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> Item 05 Attachment 3

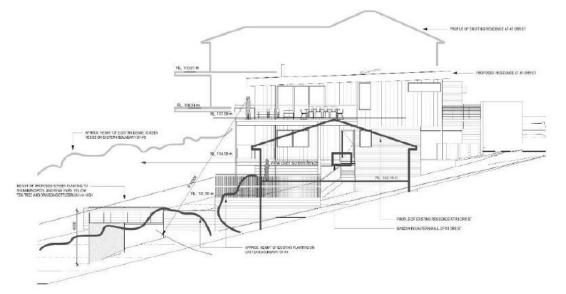
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# DEVELOPMENT ASSESSMENT PANEL 20/04/2022



EXISTING SCREEN PLANTING #3

EXISTING SCREEN PLANTING #7



PROFILES - EXISTING RESIDENCES AND PLANTING

As demonstrated in the above image, there will be no view loss for #3 created by the proposed terrace, swimming pool and screen planting. The existing screen planting on the eastern boundary of #7 blocks any potential view to the east from the upper level of #3. The proposed screen planting of Tea Tree and Bottlebrush will grow to an approx. height of 4m which will add to the existing screen and create privacy from the pool.

To create level areas of open space a terrace design has been incorporated to the rear yard of the proposed residence. As the site is very steep the terrace area sits well above ground level on the northern extent. A minimal offset has been adopted to avoid inaccessible areas that would be difficult to maintain. Given the proximity of the terrace to the boundary, an 1800mm high privacy screen is proposed for the western wall, thus reducing the potential loss of privacy between the rear yards of #3 and #5. This screen will not impact the existing views or increase overshadowing to the living and private open space of #3.

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### DEVELOPMENT ASSESSMENT PANEL 20/04/2022



#### STREETSCAPE - SOUTH WESTERN VIEW

As demonstrated, the proposed residence is compatible with the scale, bulk and height of surrounding residential development as well as streetscape and landscape in the locality. Given the site constraints of views and the steep top ography, the design of the proposed residence, including the variations requested, meets the relevant planning objectives of the zone:

- Have regard to the desired scale, bulk and height of existing residential development as well as streetscape and landscape in the locality
- Be attractive and functional
- Not unduly affect the amenity of neighbours
- Have adequate and functional onsite parking
- · Have adequate and functional common and private open space areas on site
- Preserve the building's relationship to natural features
- · Provide optimum solar access to public open spaces within the development and adjoining properties
- · Ensure ongoing privacy of neighbouring properties

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# FOR USE BY PLANNERS/SURVEYORS TO PREPARE LIST OF PROPOSED CONDITIONS - 2011

#### NOTE: THESE ARE DRAFT ONLY

DA NO: 2021/999 DATE: 12/04/2022

#### PRESCRIBED CONDITIONS

The development is to be undertaken in accordance with the prescribed conditions of Part 6 - Division 8A of the *Environmental Planning & Assessment Regulations* 2000.

#### A – GENERAL MATTERS

(1) (A001) The development is to be carried out in accordance with the plans and supporting documents set out in the following table, as stamped and returned with this consent, except where modified by any conditions of this consent.

Plan / Supporting Document	Reference	Prepared by	Date
Plans	DA1b, DA2b, DA3b, DA4b	Karen Burke	03/02/2022
Stormwater Drainage and sewer reticulation strategy	Burke - 01 Orr (DA) dwg (sheet 1 of 1)	Kevin Hall	17/03/2022
BASIX Certificate	1251244S	Karen Burke	04/11/2022
Bushfire Hazard Assessment	5 Orr street, Port Macquarie	David Pensini	July 2021

In the event of any inconsistency between conditions of this development consent and the plans/supporting documents referred to above, the conditions of this development consent prevail.

- (2) (A002) No work shall commence until a Construction Certificate has been issued and the applicant has notified Council of:
  - a) the appointment of a Principal Certifying Authority and
  - b) the date on which work will commence.

Such notice shall include details of the Principal Certifying Authority and must be submitted to Council at least two (2) days before work commences.

- (3) (A008) Any necessary alterations to, or relocations of, public utility services to be carried out at no cost to council and in accordance with the requirements of the relevant authority including the provision of easements over existing and proposed public infrastructure.
- (4) (A009) The development site is to be managed for the entirety of work in the following manner:

- 1. Erosion and sediment controls are to be implemented to prevent sediment from leaving the site. The controls are to be maintained until the development is complete and the site stabilised with permanent vegetation;
- 2. Appropriate dust control measures;
- Building equipment and materials shall be contained wholly within the site unless approval to use the road reserve has been obtained. Where work adjoins the public domain, fencing is to be in place so as to prevent public access to the site;
- 4. Building waste is to be managed via appropriate receptacles into separate waste streams;
- 5. Toilet facilities are to be provided on the work site at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.
- 6. Building work being limited to the following hours, unless otherwise permitted by Council;
  - Monday to Saturday from 7.00am to 6.00pm
  - No work to be carried out on Sunday or public holidays

The builder to be responsible to instruct and control his sub-contractors regarding the hours of work.

- (5) (A011) The design and construction of all public infrastructure works shall be in accordance with Council's adopted AUSPEC Specifications.
- (6) (A053) The required relocation and/or replacement of the sewer pipe that traverses the land is the responsibility of the proponent. Any costs associated with these works shall be the responsibility of the proponent.
- (7) (A013) The general terms of approval from the following authorities, as referred to in section 4.50 of the Environmental Planning and Assessment Act 1979, and referenced below, are attached and form part of the consent conditions for this approval.
  - NSW Rural Fire Service The General Terms of Approval, Reference DA20211121005060-Original-1 and dated 7 January 2022, are attached and form part of this consent.

### **B - PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE**

- (1) (B001) Prior to release of the Construction Certificate, approval pursuant to Section 68 of the Local Government Act, 1993 to carry out water supply, stormwater and sewerage works is to be obtained from Port Macquarie-Hastings Council. The following is to be clearly illustrated on the site plan to accompany the application for Section 68 approval:
  - Position and depth of the sewer (including junction)
  - Stormwater drainage termination point
  - Easements
  - Water main
  - Proposed water meter location
- (2) (B003) Submission to the Principal Certifying Authority prior to the issue of a Construction Certificate detailed design plans for the following works associated with the developments. Public infrastructure works shall be constructed in accordance with Port Macquarie-Hastings Council's current AUSPEC specifications and design plans are to be accompanied by AUSPEC DQS:
  - 1. Sewerage reticulation.

- 2. Water supply reticulation.
- 3. Retaining walls.
- 4. Stormwater systems.
- 5. Erosion & Sedimentation controls.
- (3) (B006) An application pursuant to Section 138 of the Roads Act, 1993 to carry out works required by the Development Consent on or within public road is to be submitted to and obtained from Port Macquarie-Hastings Council prior to release of the Construction Certificate.

Such works include, but not be limited to:

- i. Footway and gutter crossing
- ii. Functional vehicular access
- (4) (B038) Footings and/or concrete slabs of buildings adjacent to sewer lines or stormwater easements are to be designed so that no loads are imposed on the infrastructure. Detailed drawings and specifications prepared by a practising chartered professional civil and/or structural engineer are to be submitted to the Principal Certifying Authority with the application for the Construction Certificate.
- (5) (B039) Detailed drawings and specifications prepared by a professional engineer for all retaining walls supporting:
  - i. earthworks that are more than 600mm above or below ground level (existing); or
  - ii. located within 1m of the property boundaries; or
  - iii. earthworks that are more than 1m above or below ground level (existing) in any other location;

are to be submitted to the Principal Certifying Authority with the application for Construction Certificate.

(6) (B046) The building shall be designed and constructed so as to comply with the Bushfire Attack Level (BAL) 40 and flame zone requirements of Australian Standard 3959 and the specifications and requirements of Planning for Bush Fire Protection. Details shall be submitted to the Principal Certifying Authority with the application for Construction Certificate demonstrating compliance with this requirement.

Please note: Compliance with the requirements of the current Planning for Bush Fire Protection Guidelines to prevail in the extent of any inconsistency with the Building Code of Australia.

- (7) (B071) Prior to the release of the Construction Certificate, a CCTV inspection to assess the condition of Council's sewer mains shall be undertaken prior to construction work commencing and at the completion of all construction work in accordance with the Conduit Inspection Reporting Code of Australia WSA 05, at no cost to Council. Any damage to Council's sewer mains as a result of the construction work shall be rectified using a method approved by Council, at no cost to Council.
- (8) (B072) A stormwater drainage design is to be submitted and approved by Council prior to the issue of a Construction Certificate. The design must be prepared in accordance with Council's AUSPEC Specifications and the requirements of Relevant Australian Standards and make provision for the following:
  - a) The legal point of discharge for the proposed development is defined as Council's piped drainage system for hardstand areas capable of gravity fall

to Orr St, and on-site disposal for remaining areas via a suitably designed and sized system to mimic existing natural overland flow behaviour and flow rates to receiving downstream private property.

In regards to the piped drainage system, the system in Orr Street must be extended by an appropriately sized pipeline (minimum 225mm diameter) to the frontage of the site, where a junction pit must be installed, to allow direct piped connection from the development site into the public drainage system.

The pipeline must be designed to have the capacity to convey flows that would be generated by a 5% AEP storm event.

- b) The design is to be generally in accordance with the stormwater drainage concept plan on Drawing No Burke - 01 prepared by Kevin Hall Civil Engineering Designs and dated 17/03/2022.
- c) All allotments must be provided with a direct point of connection to the public piped drainage system. Kerb outlets are not permitted.
- d) The design shall incorporate facilities to limit site stormwater discharge from catchment areas unable to be discharged to the Council piped drainage system, ensuring discharge is less than or equal to pre development flow rates for all storm events up to and including the 1% AEP event. Note that pre development discharge shall be calculated assuming that the site is a 'greenfield' development site as per AUSPEC requirements.
- e) The design is to make provision for the natural flow of stormwater runoff from uphill/upstream properties/lands. The design must include the collection of such waters and discharge to the Council drainage system.
- f) An inspection opening or stormwater pit must be installed inside the property, adjacent to the boundary, for all stormwater outlets.
- g) Existing redundant driveway laybacks shall be re-instated to match existing kerb and gutter profiles.
- h) Detail to be confirmed with regards to the overland flow from the on-site level spreader / landscape berm.
- (9) (B073) (Note: Where work is within 1m of public infrastructure)

A dilapidation report on the visible and structural condition of the following public infrastructure must be provided to Council prior to the issue of a Construction Certificate.

a) Councils existing kerb inlet pit on Orr St, where proposed pipe extension is to connect.

The dilapidation report is to be prepared by a practising Structural/Civil Engineer agreed to by both the applicant and Council. All costs incurred in achieving compliance with this condition shall be borne b the applicant.

The applicant shall be responsible for public infrastructure. Any damage to public infrastructure in the vicinity of the site, where such damage is not accurately recorded by the requirements of this condition will be borne by the applicant.

- (10) Prior to the release of the construction certificate, the proposed plans are to be amended to increase the western side setback of the lower terrace to provide a minimum 1m side setback for the length of the proposed terrace.
- (11) Prior to the issue of a Construction Certificate a dilapidation report prepared by a suitably qualified person is to be submitted to Council. The report is to cover the rock retaining wall on the northern boundary/northern property.

#### C - PRIOR TO ANY WORK COMMENCING ON SITE

(1) (C013) Where a sewer manhole and/or Vertical Inspection Shaft exists within a property, access to the manhole/VIS shall be made available at all times. Before during and after construction, the sewer manhole/VIS must not be buried, damaged or act as a stormwater collection pit. No structures, including retaining walls, shall be erected within 1.0 metre of the sewer manhole or located so as to prevent access to the manhole.

#### **D – DURING CONSTRUCTION**

Nil

#### E - PRIOR TO OCCUPATION OR THE ISSUE OF OCCUPATION CERTIFICATE

- (1) (E001) The premises shall not be occupied or used in whole or in part until an Occupation Certificate has been issued by the Principal Certifying Authority.
- (2) (E058) Written confirmation being provided to the Principal Certifying Authority (PCA) from any properly qualified person (eg the builder), stating that all commitments made as part of the BASIX Certificate have been completed in accordance with the certificate.
- (3) (E034) Prior to occupation or the issuing of the Occupation Certificate provision to the Principal Certifying Authority of documentation from Port Macquarie-Hastings Council being the local roads authority certifying that all matters required by the approval issued pursuant to Section 138 of the Roads Act have been satisfactorily completed.
- (4) (E051) Prior to occupation or the issuing of any Occupation Certificate a section 68 Certificate of Completion shall be obtained from Port Macquarie-Hastings Council.
- (5) (E053) All works relating to public infrastructure shall be certified by a practicing Civil Engineer or Registered Surveyor as compliant with the requirements of AUSPEC prior to issue of Occupation Certificate or release of the security bond.
- (6) (E056) Certification that the construction of footings and piers adjacent to the sewer lines has been carried out in accordance with the approved drawings and specifications, shall be provided by a practising chartered professional civil and/or structural engineer to Council with the application for the Section 307 - Certificate of Compliance/Occupation Certificate.
- (7) (E057) A Certificate of Compliance under the provisions of Section 307 of the Water Management Act must be obtained prior to the issue of any occupation or subdivision certificate.
- (8) (E082) Submission of a compliance certificate accompanying Works as Executed plans with detail included as required by Council's current AUSPEC Specifications. The information is to be submitted in electronic format in accordance with Council's "CADCHECK" requirements detailing all infrastructure for Council to bring in to account its assets under the provisions of AAS27. This information is to be approved by Council prior to issue of the Subdivision or Occupation Certificate. The copyright for all information supplied, shall be assigned to Council.
- (9) (E039) An appropriately qualified and practising consultant is required to certify the following:
  - a. all drainage lines have been located within the respective easements, and

- b. any other drainage structures are located in accordance with the Construction Certificate.
- c. all stormwater has been directed to a Council approved drainage system
- d. all conditions of consent/ construction certificate approval have been complied with.
- e. Any on site detention system (if applicable) will function hydraulically in accordance with the approved Construction Certificate.
- (10) (E047) Prior to the issue of any Occupation Certificate, a positive covenant is to be created under Section 88E of the Conveyancing Act 1919, burdening the owner(s) with the requirement to ensure the ongoing maintenance of the proposed on-site stormwater level spreader / landscaped berm downstream of surcharge pit to ensure discharge mimics natural stormwater sheet flow to downstream private property.

The terms of the 88E instrument with positive covenant are to include, but not be limited to, the following:

- a. The proprietor of the property shall be responsible for maintaining and keeping clear the on-site level spreader / landscaped berm.
- b. The Council shall have the right to enter upon the land referred to above, at all reasonable times to inspect, construct, install, clean, repair and maintain in good working order all components or structures in or upon the said land which comprise the on-site level spreader / landscaped berm; and recover the costs of any such works from the proprietor.
- c. The registered proprietor shall indemnify the Council and any adjoining land owners against damage to their land arising from the failure of any component of the level spreader / landscaped berm, or failure to clean, maintain and repair the level spreader / landscaped berm.

Evidence of registration with the Lands and Property Information NSW shall be submitted to and approved by the Principal Certifying Authority prior to the issue of any Occupation Certificate.

(11) Prior to occupation or issue of the occupation certificate, all privacy screens are to be installed.

### F - OCCUPATION OF THE SITE

(1) (F035) The consent only permits the use of the building as a single dwelling and does not permit the adaption or use of the building so as to create a second occupancy.

ORDINARY COUNCIL 19/05/2022



# MR538 and MR600 Corridor Strategy

# **Corridor Strategy Technical Report**

# Port Macquarie-Hastings Council

04 April 2022



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### **Document Issue History**

Report File Name	Prepared	Reviewed	Issued	Date	Issued to
P4665.001R MR538 and M600 Corridor Strategy Technical Report	S. Seeney / J. Brook	A. Eke	J. Brook	21/01/2022	Clinton Grohs via email
P4665.001R MR538 and M600 Corridor Strategy Technical Report	S. Seeney / J. Brook	J.Brook	J. Brook	4/04/2022	Clinton Grohs via email





# **EXECUTIVE SUMMARY**

### **Executive Summary**

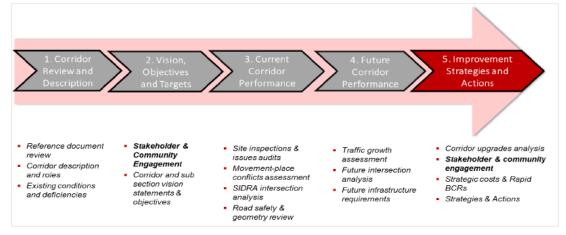
The Port Macquarie-Hastings local government area has experienced significant growth in recent years and this growth is anticipated to continue with an estimated population to 112,000 by 2040. With this growth, the region's transport infrastructure will experience pressures, and Council aims to maintain a safe and functional road corridor that provides access between population centres and services for all road users.

Bitzios Consulting has been engaged by Port Macquarie-Hastings Council to prepare a corridor strategy for MR538 and MR600 (approximately 54kms in length), which includes Hastings River Drive, Ocean Drive, Kendall Road, River Street and Nancy Bird Walton Drive. This road corridor links Port Macquarie to neighbouring local towns and villages along the coast, and then inland to Kew and Kendall.

The corridor has been divided into 10 separate sections based on road form, transport modes, function, and surrounding land uses. The start and end of each section was determined at locations where a clear transition occurred in road profile and land use (e.g. transition from rural to urban areas) and generally occurs at intersections.

- Section 1 Hastings River: Pacific Highway Interchange to southern side of Tuffins Lane
- Section 2 Port Macquarie: Southern side of Tuffins Lane to southern side of the Hastings River Drive / Oxley Highway intersection
- Section 3 Port Macquarie: Southern side of Oxley Highway to southern side of Elkhorn Grove
- Section 4 Port Macquarie to Lake Cathie: Southern side of Elkhorn Grove to southern side of Dirah Street
- Section 5 Lake Cathie: Southern side of Dirah Street to southern side of Bonny View Drive
- Section 6 Bonny Hills: Southern side of Bonny View Drive to southern side of no. 800 Ocean Drive
- Section 7 800 Ocean Drive to northern side of Edith Street
- Section 8 North Haven to Laurieton: Southern side of no. 800 Ocean Drive to western side of Kew Road
   / Ocean Drive intersection
- Section 9 Laurieton to Kew: Northern side of Kew Road / Ocean Drive intersection to eastern side of Pacific Highway interchange
- Section 10 Kew to Kendall: Eastern side of Pacific Highway interchange to Comboyne Street / Graham Street

The study process has been divided into five parts as show below:



The traffic assessment provided an assessment of current (2020) and future (2040) traffic impacts at an intersection and link level. Intersection modelling was undertaken using SIDRA Intersection 8 to assess its operational performance levels. A Level of Service (LOS) analysis was undertaken at a link level across the corridor, on a per lane basis.



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Traffic growth was still generally observed across the corridor (an average of 4-5%) from 2019 to 2020. Based on this, the 2020 traffic survey data was considered fit for purpose and not adversely impacted by COVID-19. AM and PM peak period site inspections were also undertaken on the 2nd and 3rd of February 2021 to observe typical intersection operations and back of queues. These observations, combined with footage from the traffic surveys (surveys undertaken 22nd October 2020) and site observations undertaken in June 2020, were used to calibrate the SIDRA Intersection models.

While some intersections along the corridor experience peak period queuing or selected approach delays, the majority of intersections across the corridor perform at LOS C or better based on the current performance assessment (2020). The majority of the corridor link performance was identified to operate with a minimum LOS C, except at the following locations, which operated between LOS D and E for some directions / peak periods:

- Hastings River Drive Between Boundary Street and Hibbard Road (west)
- Ocean Dr between Lake Road and Pacific Drive.

A table and maps presenting the LOS as well as key data (volume, number of lanes, capacity, posted speed etc.), for each link segment is presented in **Appendix F**.

For future performance (2030 and 2040), the majority of intersections across the corridor perform at LOS C or better. The following intersections were identified to operate outside the acceptable limits:

- Clifton Drive / Hastings River Drive
- Park Street / Hastings River Drive
- Gordon Street / Ocean Drive
- Lake Road / Ocean Drive
- Koala Street / Ocean Drive
- Greenmeadows Drive / Ocean Drive.

Consistent with the existing operations, downstream capacity constraints near Lake Road were a major factor impacting intersection performance at the Ocean Drive / Lake Road and Ocean Drive / Koala Street intersections. Resolving this downstream capacity constraint will be a key item to address in future upgrade planning.

The majority of the corridor was identified to operate with a minimum LOS C as shown in Table 5.6 and Table 5.7 of this report, except at the following locations, which operated between LOS D some directions / peak periods in 2030:

- Hastings River Drive Between Tuffins Lane and Boundary Street (eastbound)
- Hastings River Drive Between Bellbowrie Street and Findlay Lane (eastbound)
- Ocean Drive between Lake Road and Koala Street (northbound)
- Ocean Drive between Fiona Crescent and Dirah Street (northbound).

In 2040, the following sections are also expected to operate at LOS D as shown in Table 5.8 and Table 5.9:

- Ocean Drive between Greenmeadows Drive and Maranatha Place (northbound)
- Ocean Drive between River Street and Comboyne Street (westbound)
- Ocean Drive between Dirah Street and Aqua Crescent (southbound).

A table and maps presenting the LOS as well as key data (volume, number of lanes, capacity, posted speed etc.), for each link segment is presented in **Appendix G**.

As the corridor's function will change in the future with increased residential and retail growth, its movement and place conflicts will also change. The corridor's future movement and place conflicts has been assessed considering the anticipated key growth areas and future function of each section.





Section	Movement and Place Conflict Category						
2020 2040		2040	Comment				
1	No change		High movement function remains consistent with traffic current performance				
2	No change		Movement and place function remains consistent with current performance				
3	4B 4C		Slight increase in place function at key locations				
4	No change		High movement function remains consistent with traffic current performance				
5	4B 4D & 4C		Increase in place function at key locations based on Area 14 development				
6	4C 4D		Increase in conflict due to traffic and urban growth				
7	No change		High movement function remains consistent with current performance				
8	4C	4E	Increase in conflict due to traffic and urban growth				
9	4B	4D	Increase in conflict due to Area 15 development				
10	5A 4B		Increase in conflict due to traffic and urban growth				

#### Movement and Place Conflict Change Summary 2020 - 2030

As shown above the movement and place conflict assessment is based on a broad spectrum and therefore the changes within the corridor do not significantly impact the conflict assessment.

The proposed actions for each section of the corridor are provided in **Section 8** of the report. The timing and priority of each action is categorised into short (1-10 years), medium (11-20 years) and long (20+ years) which considers land use growth along the corridor. A number of actions are considered to be signature projects that are earmarked by Council to be of key significant in the improvement of the corridor in terms of safety and efficiency specifically for accommodating future growth. *Signature Projects* are also highlighted.

Specific projects and improvements out of this Strategy will need to be considered for prioritisation along with a number of other transport improvements identified out of Regional Integrated Transport Strategy and Port Network Transport Network Planning. The below tables highlights the high-level strategic cost estimate by works program type To note these are estimates only to inform program budget planning and would require concept designs level investigation to provide more reliable estimates. These do not include maintenance works which will need to be considered as part of ongoing asset management.

ACTION		PROGRAM BUDGET ESTIMATE
Traffic		
	Short Term (to 2025)	~\$11.5 Million
	Medium Term (2026-2030)	~\$44.7 Million
0 0	Long Term (2030-2040)	~\$12.7 Million
Active Transport		
	Short Term (to 2025)	~\$13.7 Million
	Medium Term (2026-2030)	~\$16.9 Million
010 1	Long Term (2030-2040)	~\$0.9 Million
Public Transport		
	Long Term (2030+)	~\$2.5 Million



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# **1.** INTRODUCTION

# 1.1 Background

The Port Macquarie-Hastings local government area has experienced significant growth in recent years and this growth is anticipated to continue with an estimated population to 112,000 by 2040. With this growth, the region's transport infrastructure will experience pressures, and Council aims to maintain a safe and functional road corridor that provides access between population centres and services for all road users.

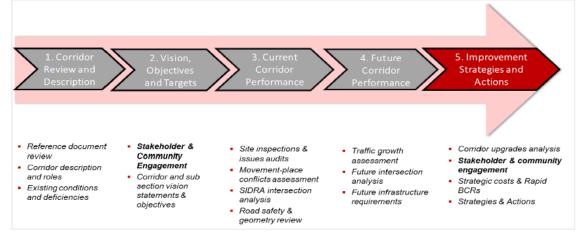
Bitzios Consulting has been engaged by Port Macquarie-Hastings Council to prepare a corridor strategy for MR538 and MR600 (approximately 54kms in length), which includes Hastings River Drive, Ocean Drive, Kendall Road, River Street and Nancy Bird Walton Drive. This road corridor links Port Macquarie to neighbouring local towns and villages along the coast, and then inland to Kew and Kendall.

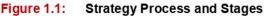
This corridor strategy will integrate with Council's plans and strategies for the region as well as the NSW Government's plans for the Pacific and Oxley Highways. It will focus on preserving the corridor and setting out a broad design framework for future transport network upgrades for all users including traffic, walking, cycling and public transport. It will also define priorities for future road maintenance, operation, and safety for all road users, while also considering the diverse communities it serves and planned growth across the region.

The corridor has been divided into 10 separate sections based on road form, transport modes, function, and surrounding land uses. The start and end of each section was determined at locations where a clear transition occurred in road profile and land use (e.g. transition from rural to urban areas) and generally occurs at intersections.

## 1.2 Project Process

The study process has been divided into five parts as show in Figure 1.1.







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As shown in Figure 1.1, the study was divided into six 'Parts', summarised as follows:

- Part 1 Corridor Review and Description: involved building on our existing knowledge of the corridor through a thorough review of available material and information gathering via stakeholders and via site inspections. Collected information will be added to the GIS database and the corridor described
- Part 2 Vision, Objectives and Targets: involved the development a corridor-wide Vision along with key objectives and targets. Sub-ordinate visions for each section with specific objectives and metrices will then be developed, with more of a focus on specific aspects of each section
- Part 3 Current Corridor Performance: involved data collection, processing and modelling being undertaken on the existing corridor road environment considering operational, safety and geometry aspects
- Part 4 Future Corridor Performance: involved forecasting traffic growth and applying the
  objectives to understand how the balance between movement and place should be struck in each
  sub-section to inform what types of options should be tested to address identified deficiencies in
  each section
- Part 5 Improvements, Strategies and Actions: involved the development of sub-corridor upgrade plans directly to the vision and objectives and leading to a costed and prioritised actions schedule
- **Part 6 Reporting**: All of the previous working papers and technical notes are collated and organised into a Technical Report (this report) and the Strategy Summary Report

Key inputs into developing the Corridor Strategy include:

- Intersection traffic counts at 27 key intersections to inform intersection and road capacity analysis
- Site inspections & audits of peak period conditions inform traffic analysis
- Review of crash history along the corridor
- Road safety review including alignment, geometry, pavement health and a roadside environment review
- Assessment of road structures such as culverts, bridges, and sections subject to flooding
- Consideration and alignment with relevant studies, investigation, community strategic plans, and Council's urban growth management strategy







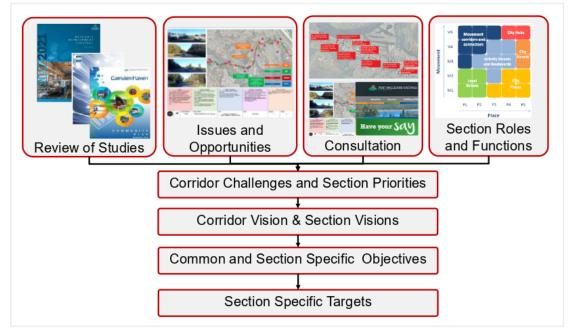


Figure 1.2: Vision, Objective and Target Development Process

### 1.3 Technical Report Purpose and Scope

This Technical Report collates the detailed work that has been completed throughout the study process that has informed the corridor strategy. Technical detail from the previously prepared reports and technical notes will be included to demonstrate the analysis and evaluation of the corridor strategy development. The technical report scope includes:

- Overview of the corridor study area, sections, and descriptions
- A review of previous reports, plans and strategies that relate to the corridor, various sections, and strategy development
- An overview of the site inspection assessments, road safety review and geometrical review
- Assessment of current and future traffic impacts at an intersection and link level
- Assessment of the existing and future alternate transport infrastructure including bus facilities, footpaths, crossings, and cycle facilities
- A summary of each section's movement place function and role along the corridor
- Details of the section improvements and actions including timing and priorities
- An overview of the community consultation process and details of the outcomes and key findings
- Details of the next steps from strategy to implementation.





# 2. CORRIDOR STUDY AREA

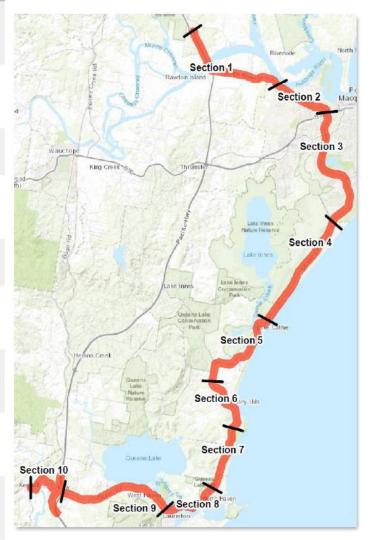
### 2.1 Corridor Sections and Description

The corridor has been divided into 10 separate sections based on road form, transport modes, function, and surrounding land uses. The start and end of each section was determined at locations where a clear transition occurred in road profile and land use (e.g. transition from rural to urban areas) and generally occurs at intersections.

The corridor has a high movement function across its entire length, facilitating movement between coastal towns and the Pacific Highway, Port Macquarie, and the coastal towns along Ocean Drive. The place function varies significantly along the corridor from environmental areas with limited to no activity through to highly urbanised areas with active street frontages.

#### Description

- 1 Hastings River: Pacific Highway Interchange to southern side of Tuffins Lane
- 2 Port Macquarie: Southern side of Tuffins Lane to southern side of the Hastings River Drive / Oxley Highway intersection
- 3 **Port Macquarie:** Southern side of Oxley Highway to southern side of Elkhorn Grove
- 4 Port Macquarie to Lake Cathie: Southern side of Elkhorn Grove to southern side of Dirah Street
- 5 Lake Cathie: Southern side of Dirah Street to southern side of Bonny View Drive
- 6 Bonny Hills: Southern side of Bonny View Drive to southern side of no. 800 Ocean Drive
- 7 Bonny Hills to North Haven: Southern side of no. 800 Ocean Drive to northern side of Edith Street
- 8 North Haven to Laurieton: Southern side of no. 800 Ocean Drive to western side of Kew Road / Ocean Drive intersection
- 9 Laurieton to Kew: Northern side of Kew Road / Ocean Drive intersection to eastern side of Pacific Highway interchange
- 10 Kew to Kendall: Eastern side of Pacific Highway interchange to Comboyne Street / Graham Street





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# **REVIEW OF PREVIOUS STUDIES, PLANS AND** 3. POLICIES

#### 3.1 Reference Documents

Below provides a review and summary of various reference documents and their relevance to the corridor and strategy development.

#### 3.1.1 Area 14 Study (2010)

In 2010, the Area 14 Traffic Impact Study assessed the traffic impacts associated with the development of approximately 180 hectares which is planned to accommodate 10,000 future residents between Lake Cathie and Bonny Hills. Key findings from the study identified that Ocean Drive would not cater for the future growth in its current two-lane rural arterial cross section. To accommodate the urban release area as well as background growth along Ocean Drive, a series of upgrades and intersection treatments were recommended to be implemented as Area 14 is developed, and include:

- Sections of Ocean Drive upgraded to a four-lane cross section
- Ocean View Drive / Huston Mitchell Drive intersection upgrade
- Bonny View Drive / Ocean View Drive intersection upgrade .
- A new signalised intersection on Ocean View Drive / Baltic Street
- Abel Tasman Drive / Ocean Drive intersection upgrade.

#### Area 15 Study (2009) 3.1.2



In 2009, the Area 15 Traffic Study assessed the traffic impacts associated with the development of 875 dwellings and a light industrial area located in the West Haven area. The study recommended a range of intersection treatments that are required to cater for the development and include:

- Glen Haven Drive / Ocean View Drive intersection
- Lake Ridge Drive / Ocean View Drive intersection
- Mountain View Drive / Ocean View Drive intersection
- Brother Glen Drive / Ocean View Drive intersection
- Sirius Drive / Ocean View Drive intersection

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Proposed Waste Transfer Station (west of Glen Haven Drive / Ocean Drive intersection).







### 3.1.3 Kendell Main Street Plan (2017)

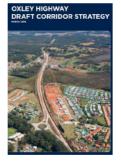
The Kendell Main Street Plan aimed to improve traffic flow and activate the street frontage while making active transport more convenient. Site specific traffic and transport related upgrades include:

- Intersection treatments at the Graham Street / Comboyne Street
- Formalise on-street parking on the northern side of River Street
- Establish a shared path starting from River Street to Comboyne Street
- Improvements to the bus stop located on River Street
- Install a pedestrian refuge on River Street in proximity to the bus stop
- Install a pedestrian crossing on Graham Street near Comboyne Street.

### 3.1.4 Kew Main Street Masterplan (2010)

The plan focuses on the intersection hub of Nancy Bird Walton Dive, Kendall Road and Ocean Drive. The aim of the plan is to improve traffic management, pedestrian connectivity, and urban amenity in the area. Initial stages of the upgrade are complete including upgrade of the Ocean Drive / Nancy Bird Walton Drive intersection to a roundabout and median upgrade. Further works will include improvements to urban amenity, pathways pedestrian crossings and on-street parking.





### 3.1.5 Oxley Highway Corridor Strategy (RMS, 2016)

The Oxley Highway Corridor Strategy sets out a 20-year plan to manage and guide the development of the road corridor to improve safety, traffic efficiency and sustainability. Based on the anticipated growth along the corridor, a number of prioritised actions have been identified. This strategy aims to guide further investigations and the development of site-specific treatments for several actions. The Oxley Highway only intersects with the corridor study area once at the Oxley Highway / Ocean Drive intersection. No specific actions have been identified for this intersection as part of the Oxley Highway Corridor Strategy.

# 3.1.6 Pedestrian Access and Mobility Plan for Port Macquarie (town centre), North Haven, Laurieton, Kew, Kendall (2015)

The Pedestrian Access and Mobility Plan (PAMP) is a strategic action plan to identify pedestrian facilities and improve walkability, safety and mobility. A number of pedestrian related treatments are proposed within key focus areas along the corridor. These include:

Port Macquarie:

- A footpath on both sides of Hastings River Drive through Port Macquarie

- Lake Cathie:
  - Five pedestrian refuge crossings at different locations along Ocean Drive throughout Lake Cathie.
  - A footpath on Ocean Drive Between Lake Cathie bridge and Evans Street
  - A footpath on the eastern side of Ocean Drive between Aqua Crescent and the main shopping centre access



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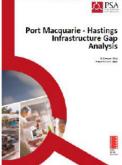
- Bonny Hills:
  - Three pedestrian refuge crossings at different locations on Ocean Drive throughout Bonny Hills
  - A footpath on the northern side of Ocean Drive between Rodley Street and existing path to the surf club
  - A footpath on the western side of ocean drive between the tennis courts and Jungarra Crescent
- North Haven:
  - An upgrade of the Stingray Creek bridge with footpaths on both sides in North Haven
- Kew:
  - A pedestrian refuge crossing on Kendall Road and Homedale Road in Kew village centre
- Kendall:
  - Pedestrian refuge crossing on River Street and Graham Street in Kendall village centre
  - A footpath on Graham Street.

### 3.1.7 Port Macquarie – Hastings Bike Plan (2015)

The Bike Plan for Port Macquarie-Hastings assists in coordinating the delivery of cycling infrastructure in order to create a cohesive and connected cycle network. This plan aims to increase cycling participation within the community, for both transport and recreation and in return reduce car dependency. Several on and off-road facilities are identified across the region to connect existing facilities. An inter-town bicycle network is also proposed to connect regional towns. The Bike Plan has identified the following treatments relevant to the study corridor:



- Road shoulders along the entire length of Hastings River Drive and Ocean Drive as part of the inter-town bicycle network
- Shared path along Ocean Drive between Laurieton and Kew
- Shared path along the new Stingray Creek bridge
- Shared path along Kendall Road between Kendall and Kew.



# 3.1.8 Port Macquarie – Hastings Infrastructure Gap Analysis (2014)

The Port Macquarie-Hastings Infrastructure Gap Analysis provides a capacity assessment of the transport and telecommunications infrastructure for the current and future demands of the region. An audit was undertaken of the existing strategies which provide transport infrastructure upgrades and based on this a number of deficiencies were identified. These gaps within the network have the potential to limit economic growth in the Port Macquarie-Hastings region. The key infrastructure recommendations outlined in the Gap Analysis that impact the study corridor include:

- Duplication of Hastings River Drive (Boundary Street to Wood Street)
- Duplication of Hastings River Drive (Ashton Street to Gordon Street).





### 3.1.9 Port Macquarie Hastings Orbital Road Feasibility Study (2019)

The Orbital Road Feasibility Study included a detailed analysis of providing a new road link from Hastings Rive Drive to the Oxley Highway and through to Ocean Drive. This new corridor is proposed to provide a more accessible route through Port Macquarie and alleviate congestion on Oxley Highway and Lake Road. The study identified a preferred route based on a multicriteria analysis, environmental constraints and the cost benefit of the Orbital Road. The options analysis identified that Option 1/1A is the preferred route which connects the Ocean Drive / Greenmeadows Drive intersection and the Hastings River Drive / Boundary Street intersection to the proposed Orbital Road.





# 3.1.10 Port Macquarie – Hastings Economic Development Strategy (2019)

The 2017 – 2021 Economic Development Strategy aims to create the right environment for growth with a balanced economy that will provide employment growth. In order to support this growth improved infrastructure is required to sustain the region into the future. A key action identified within the strategy is to review the Infrastructure Gap Analysis Report which provides direct upgrades to the transport infrastructure along the study corridor.

# 3.1.11 Port Macquarie – Hastings Local Government Area Traffic Study (2018)

The Local Area Traffic Study evaluated the road network performance for the Port Macquarie-Hastings area. This included testing a range of infrastructure improvements whilst considering future growth, road safety and existing traffic conditions. Approximately 20% of the anticipated future growth will occur along the Ocean Drive corridor between Lake Cathie and Kew. Infrastructure upgrades are therefore required to support this growth in the future.



Upgrades specific to the corridor within the traffic study include:

- Upgrade signals at the Boundary Street / Hastings River Drive intersection
- Signal phasing changes at the Hastings River Drive / Oxley Highway intersection
- Upgrade the Ocean Drive / Kew Road intersection to a roundabout
- Signalise the Ocean Drive / Sirius Drive intersection.

# 3.1.12 Port Macquarie – Hastings Urban Growth Management Strategy 2017-2036 (2018)



The Port Macquarie-Hastings LGA is identified as a priority area for urban growth within the North Coast Regional Plan (2017). This strategy provides a strategic planning framework for residential, rural, retail, industrial and tourism development for the area. This will be progressively implemented over the 20-year period whilst considering the planning principles of the Regional Strategy and State Government Settlement Planning Guidelines for the Mid North Coast.

A key action from this strategy is the development of an overarching regional integrated transport strategy. A number of the transport infrastructure upgrades identified within the other studies were referenced and include:





- Consideration of the orbital road and corridor planning priorities
- Flood free access options to the Port Macquarie Airport.

### 3.1.13 Section 94 Settlement City Precinct Roads Contributions Plan

The Settlement City Precinct Roads Contributions Plan clearly indicates the provisions for Council to apply Section 7.11 contributions (previously Section 94) onto developments to levy development contributions for intersections and roadwork upgrading. The plan describes the types of developments excluded from Section 7.11, the monetary value of contributions, and the method and timing of contributions.

### 3.1.14 Community Plans (CCATS 2019)

The available Community Plans have been reviewed in relation to the study corridor as community engagement is a critical part of transport planning. By identifying user issues and priorities as well as gaining local knowledge, the community plans will be utilised throughout the corridor study to assist with future planning.

The following community priorities were identified for the corridor:

- Improved footpaths and cycleway connections along Ocean Drive
- Enhanced connectivity between Lake Cathie and North Haven.

Kew, Kendall, Herons Creek and Lorne Community Plan (2019)

- Construct a shared pathway from Kew to Kendall connecting Lakewood and Laurieton which shall be wheelchair accessible. This is highlighted as a top priority
- Install a safe crossing from Kendall Op-Shop to Kendall Services Club and tennis court
- Improve the road and pathway condition from Graham Street to Kendall Public School
- Connect public transport services from Kew, Kendall, Herons Creek and Lorne to Port Macquarie, Laurieton and Bonny Hills.
- Camden Haven Community Plan (2019)
- Having safe roads and pathways
- Significant demand for additional pathways and cycleways
- Frequent public transport services that provide direct options.

## 3.2 Recent Road Upgrade and Design Projects

Recent upgrades completed along the corridor within the last 5 years, including:

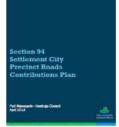
- Reclassification of Hastings River Drive north of Winery Drive to a regional road as part of the Pacific Highway upgrade
- Traffic signals at the intersection of Hastings River Drive and Boundary Street
- Roundabout at the intersection of Hastings River Drive and Newport Island Road
- Duplication of Hastings River Drive between Aston and Park Street including a new roundabout at Findlay Avenue
- Upgrade of Ocean Drive at Abel Tasman Drive and Seaside Drive to accommodate new residential subdivisions
- Roundabout at the intersection of Ocean Drive and Houston Mitchell Drive



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- New Ocean drive bridge over Stingray Creek
- Shared path on southern side of Ocean Drive between Pacific Highway and Fairwinds Avenue.

### 3.3 Planned Road Upgrade and Design Projects

Council had already identified a series of road upgrade design projects, at various stages of development as shown in **Appendix A** and include:

- Hastings River Drive upgrade between Boundary Street and Hughes Place
- Hastings River Drive traffic signals at Aston Street
- Ocean Drive upgrade between Greenmeadows Drive (south) and Matthew Flinders Drive
- Ocean Drive upgrade between Ernest Street and Middle Rock Road
- Ocean Drive upgrade between Abel Tasman Drive and Houston Mitchell Drive
- Ocean Drive shared path between Kendall, Kew, and Laurieton
- Ocean Drive / Nancy Bird Walton Drive / Kendall Road roundabout upgrade.





# 4. EXISTING CONDITIONS AUDIT

### 4.1 Overview

The existing conditions audit focuses on infrastructure and road safety which is informed by a range of site visits undertaken by Bitzios Consulting and Northrop in June 2020. Northrop's assessment involved road geometry and infrastructure, including culvert and bridge conditions and pavement health.

### 4.2 Road Safety Assessment

As part of the assessment, Bitzios Consulting undertook site inspections along the entire corridor length in June 2020 to assess existing conditions and review road safety issues. Northrop has undertaken the assessment of road geometry and infrastructure, including culvert and bridge condition and pavement health. Northrop undertook site inspections along the corridor to inform their assessment. The site inspections formed the basis of Working Paper 1, which reviewed road safety and, geometry and infrastructure. The following sections provide a summary of this assessment.

### 4.2.1 Crash Analysis

The corridor has a history of crashes occurring consistently along the entire length. Some clusters were identified; however, crashes are generally spread across the sections. The majority of crashes were injury or non-casualty. There are 6 fatal crashes that were recorded across the corridor, 5 occurring within Section 1.

As part of Working Paper 1 – Site Inspection report, detailed crash analysis was undertaken for the entire corridor. This included assessment analysis of crashes by type and severity. Crash maps by severity and Road User Movement (RUM) code were also prepared.

Corridor crash history has also been summarised by proximity to intersections. Crashes that occurred on the corridor within 50m of an intersection have been summarised in Table 4.1.

Cross Street (Closest Intersection)	Total Crashes	Fatal Crashes	Injury Crashes	Non-casualty Crashe		
Section 1 (Pacific Highway Interchange to Tuffins Lane)						
Pacific Highway Interchange	1	0	1	0		
Swamp Road	1	0	1	0		
Glen Ewan Road	1	0	1	0		
Winery Drive	6	0	1	5		
Willow Creek	1	0	1	0		
Fernbank Creek Road	1	1	1	0		
Tuffins Lane	1	0	1	0		
Section 2 (Tuffins Lane to Go	don Street / Hast	ings River Drive)	1			
Boundary Street	2	0	2	0		
Hibbard Street	1	0	1	0		
Woods Street	1	0	1	0		
Mumford Street	1	0	1	0		

### Table 4.1: Crash Type Summary by Intersection



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Cross Street (Closest Intersection)	Total Crashes	Fatal Crashes	Injury Crashes	Non-casualty Crashes
Newport Island Road	1	0	1	0
Bellbowrie Street	2	0	2	0
Clifton Drove	2	0	1	1
Widderson Street	1	0	1	0
Aston Street	3	0	3	0
Hilltop Crescent	1	0	0	1
Park Street	2	0	2	0
Gordon Street	3	0	3	0
Section 3 (Gordon Street / Ha	stings River Drive	to Elkhorn Grove	)	1
Table Street	1	0	1	0
Heather Street	2	0	2	0
Denehurst Place	2	0	1	1
Hindman Street	1	0	1	0
Lake Street	7	0	5	2
Koala Street	4	0	2	2
Greenmeadows Drive	1	0	1	0
Treeview Way	2	0	1	1
Greenmeadows Drive	2	0	2	0
Crestwood Drive	2	0	1	1
Section 4 (Elkhorn Grove Inte	rsection to Dirah	Street)	1	1
Elkhorn Grove	1	0	1	0
Dirah Street	1	0	0	1
Section 5 (Dirah Street to Bor	ny View Drive)		1	
Boodgery Street	1	0	1	0
Tallong Drive	1	0	0	1
Ernest Street	1	0	0	1
Ocean Street	1	0	1	0
Miala Street	2	0	2	0
Houston Mitchell Drive	1	0	1	0
Section 6 (Bonny View Drive	to 800 Ocean Driv	re)	1	
Beach Street	1	0	1	0
Binbilla Drive	1	0	0	1
Seaview Street	1	0	0	1
Section 7 (800 Ocean Drive to	Edith Street)			
Alma Street	1	0	1	0
Vine Street	1	0	1	0
Lake Street	1	0	1	0
	1		1	1



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Cross Street (Closest Intersection)	Total Crashes	Fatal Crashes	Injury Crashes	Non-casualty Crashes	
Section 8 (Edith Street to Kew	Road / Ocean Di	rive)	I	1	
Hoschke Road	1	0	0	1	
Captain Cook Bicentennial Drive	1	0	0	1	
Bottlebrush Place	1	0	1	0	
Sirius Drive	2	0		2	
Section 9 (Kew Road / Ocean	Drive to Pacific H	lighway Interchan	ge)		
Nancy Bird Walton Drive	2	0	1	1	
Section 10 (Pacific Highway Interchange to Comboyne Street)					
Pacific Highway	1	0	0	1	
Bethesda Place	2	0	1	1	

### 4.2.2 Road Safety Review

A high-level review of road safety issues was undertaken for each section of the corridor as part of Working Paper 1. This was undertaken generally as per the processes specified in Austroads Guide to Road Safety. It is noted that this review did not identify every individual issue and was intended to identify key issues which occur across the section and corridor.

The same types of issues were consistently present in each section. Issues included:

- Hazards within the clear zone / in close proximity to travel lanes. Hazards typically included trees, power poles and non-traversable culverts
- Frequent drop-offs / embankments which are not protected with guardrail
- Limited shoulder provisions
- Limited or no pedestrian / cyclist facilities
- Poor pavement conditions
- Poor delineation of the road environment

Other issues identified across some sections included the occurrence of four-way priority-controlled intersections, lack of turn treatments, poor lighting, and overgrown vegetation.

### 4.3 Road Geometry Review & Infrastructure Review

The following was identified as part of the Road Geometry and Infrastructure review:

- The road geometry and alignment is inconsistent and often deficient. Particularly:
  - Narrow lane widths of less than 3.5m, which are not appropriate for the road environment, high vehicle volumes or use by heavy vehicles
  - Narrow or no shoulder provision. Shoulders are often unsuitable for the road environment, or the verge commences immediately at the edge of the travel lane. Shoulders are essential to allow for recovery maneuverers, breakdowns, and cyclists. Shoulders also allow general traffic to leave the travel lanes to let emergency vehicles pass
  - Inconsistent provision of kerb and channel across the corridor, particularly through urban sections
     Sections of poor road alignment within the road reserve
- Consistently poor pavement health across the corridor, including rutting, cracking, potholes and wearing





- Generally poor to average bridge infrastructure. The Stingray Creek Bridge and Pacific Highway overpass (Section 10) are considered to be of high quality. The remainder of bridges had no shoulder provision and poor pathway connectivity or pedestrian facilities
- Sub-standard culvert design with many non-traversable culverts located in the clear zone
- Substandard roadside environment, with limited pedestrian / activity transport provisions. The roadside environment also often included unprotected steep embankments and trees / power poles in close proximity to travel lanes.





# 5. TRAFFIC ASSESSMENT

### 5.1 Overview

The traffic assessment provided an assessment of current (2020) and future (2040) traffic impacts at an intersection and link level. Intersection modelling was undertaken using SIDRA Intersection 8 to assess its operational performance levels. A Level of Service (LOS) analysis was undertaken at a link level across the corridor, on a per lane basis.

## 5.2 Background Traffic

Traffic surveys were undertaken by Matrix on Thursday 22 October 2020 (intersection surveys for AM and PM weekday peak periods) to determine background traffic volumes. Intersection counts were undertaken at 27 intersections across the corridor.

Peak hour periods for each intersection varied, however generally occurred within the following periods:

- AM Peak Period: 7:45-9:00AM
- PM Peak Period: 3:00-5:15PM.

Slight variances in the actual intersection peak periods occurred across the corridor.

Tube count surveys were undertaken between 20 and 26 October 2020 for Annual Average Daily Traffic, (AADT). Tube count surveys undertaken by TTM at 43 locations along the corridor between 11 March and 24 March 2019 was provided by Council.

Network diagrams are presented in **Appendix A** which summarises the 2020 survey traffic volumes, across the varies peak periods. The traffic survey data for each intersection is attached at **Appendix B**. The survey data for each intersection specifies the specific peak hour periods for that intersection. Traffic volumes for the recorded peak hour was used for the intersection assessment.

### 5.2.1 Survey Data Validation, Inspections and Calibration

Due to the impacts associated with COVID-19 traffic surveys were delayed until October 2020 once restrictions were generally eased and traffic volumes were considered to be back to typical levels. To identify if COVID-19 had any impacts on traffic volumes at the time at which traffic surveys were undertaken, a comparison of AADT volumes between 2019 and 2020 was undertaken. 7-day surveys were undertaken in March 2019 and October 2020, with data compared for the following four locations:

- Hastings River Drive between Tuffins Lane and Boundary Street
- Ocean Drive between Lake Road and Koala Street
- Ocean Drive between Miala Street and Seaside Drive
- Ocean Drive between Pioneer Street and Vine Street.

The comparison of data is presented in Table 5.1.





	2019		2020		Difference	
Location	Weekday	7-Day	Weekday	7-Day	% Change Weekly	% Change 7 Day
Hastings River Drive between Tuffins Lane and Boundary Street	9,514	8,728	10,029	9,282	5.4%	6.3%
Ocean Drive between Lake Road and Koala Street	28,392	25,586	28,633	25,658	0.8%	0.3%
Ocean Drive between Miala Street and Seaside Drive	87,84	7,925	9,083	8,412	3.4%	6.1%
Ocean Drive between Pioneer Street and Vine Street	8,204	7,894	8,931	8409	8.9%	6.5%

### Table 5.1: AADT Data Comparison

As demonstrated, growth was still generally observed across the corridor (an average of 4-5%) from 2019 to 2020. Based on this, the 2020 traffic survey data was considered fit for purpose and not adversely impacted by COVID-19.

AM and PM peak period site inspections were also undertaken on the 2<sup>nd</sup> and 3<sup>rd</sup> of February 2021 to observe typical intersection operations and back of queues. These observations, combined with footage from the traffic surveys (surveys undertaken 22<sup>nd</sup> October 2020) and site observations undertaken in June 2020, were used to calibrate the SIDRA Intersection models where required. Calibration was undertaken to back of queue and based on the recommended methodology by SIDRA for different intersection types as follows:

- Signalised intersections: modification of the area type factor and or basic saturation flow value
- Roundabouts: modification of the environment factor and or entry/circulating flow factor
- Priority controlled: modification of the follow up headway and critical gap.

### 5.3 Assessment Methodology

### 5.3.1 Intersection Assessments

Intersection modelling was undertaken using SIDRA Intersection 8 to assess the current and future operational performance levels of the subject intersections.

The existing geometric layout for each intersection was used. For the signalised intersections, the Traffic Control Site (TCS) plans, and SCATS Intersection Diagnostic Monitor (IDM) signal data was obtained from Transport for NSW (TfNSW) to inform signal phasing and timing. SCATS phasing is attached at **Appendix E**.

Intersection Level of Service (LOS) was based on intersection delays, consistent with the Roads and Maritime Services (RMS) methodology. The control delay for LOS for the RMS method is summarised in Table 5.2

For traffic signals, the average movement delay and level of service over all movements has been adopted.

For roundabouts and priority control signals intersections, the worst movement has been adopted.





LOS	Average Delay per Vehicle (s)			
A	d < 14			
В	d < 15 to 28			
С	d < 29 to 42			
D	d < 43 to 56			
E	d ≤ 57 to 70			
F	d > 70			

### Table 5.2: Level of Service (LOS) Delay – RMS Method

Two intersections were considered to have sufficient width (minimum 6m) for vehicles to stage in the central median. To replicate this in SIDRA, these intersections were modelled with a staged crossing.

### 5.3.2 Link Assessment

A Level of Service (LOS) analysis was undertaken at a link level across the corridor, on a per lane basis. This was undertaken for each direction in the AM and PM peak periods. Tube count data for 43 locations across the corridor undertaken in 2019 was provided by Council.

The corridor was segmented into links based on the tube count locations. The LOS analysis was undertaken based on recorded volumes and midblock lane capacities as detailed in Austroads Guide to Traffic Management Part 3: Transport Study and Analysis Methods (AGTM03). The adopted lane capacities varied between 900-1,400 vehicles/hour based on the road environment (divided/undivided, presence of kerbside parking, presence of side streets etc.). The adopted LOS criteria is summarised in Table 5.3.

Specific issues identified at intersections are summarised below the table.

LOS	V/C Criteria	Description
A	Maximum V/C of 0.26	Free-flow operations. FFS prevail, and vehicles are almost completely unimpeded in their ability to manoeuvre within the traffic stream.
В	Maximum V/C of 0.41	Reasonably free-flow operations, and FFS is maintained. The ability to manoeuvre within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high
с	Maximum V/C of 0.59	Flow conditions with speeds near the FFS. Freedom to manoeuvre within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver. Minor incidents may still be absorbed, but the local deterioration in service will be substantial.
D	Maximum V/C of 0.81	The level at which speeds begin to decline slightly with increasing flows, with density increasing more quickly. Freedom to manoeuvre within the traffic stream is seriously limited, and the drivers experience reduced physical and psychological comfort levels
E	Maximum V/C of 1.0	Operation at or near capacity. Operations on the at this level are highly volatile because there are virtually no usable gaps within the traffic stream, leaving little room to manoeuvre within the traffic stream
F	V/C greater than 1.0	Describes unstable flow. Such conditions exist within queues forming behind bottlenecks. Breakdowns occur for a number of reasons

### Table 5.3: LOS Criteria and Descriptions





The RMS Guide to Traffic Generating Developments (2002) recommends a minimum LOS C for major rural road and LOS C is also the target LOS identified in the RMS Traffic Modelling Guidelines. LOS C was therefore adopted as the threshold for acceptable link performance across the corridor.

### 5.4 Current Performance

### 5.4.1 2020 Intersection Performance

The overall intersection operations are summarised in Table 5.4 and Table 5.5 based on the either the overall LOS (signalised intersections) or worst performing leg (priority-controlled intersections and roundabouts) recorded for each intersection and respective scenario. LOS C was adopted as the target LOS based on the RMS Traffic Modelling Guidelines. It should be noted that the overall LOS provides a high-level summary of the intersection performance and does not necessarily identify specific performance issues (such as queues exceeding available storage lengths or intersections operating at capacity). The intersection modelling and detailed model outputs are presented in **Appendix F** and includes the following:

- Peak hour volumes
- SIDRA intersection geometry
- LOS by lane
- Detailed model outputs by lane (LOS, delays, queues)
- Brief commentary on the intersection performance.

Specific operational issues identified at intersections are summarised below in Table 5.4 and Table 5.5.





#	Intersection	Туре	Avg. Delay (s)	LOS	Avg. Delay (s) (worst movement)	LOS (worst movement)	Comment
1	Hastings River Drive / Boundary Street	*	20	В	46	D	The overall intersection performance is within acceptable thresholds. Right-turns present as LOS D, due to relatively high delays for these movements. However, the volumes are low, and queues are contained in the right-turn pockets
2	Hastings River Drive / Hughes Place	$\bigtriangledown$	6	А	13	А	The intersection performance is within acceptable performance thresholds
3	Hastings River Drive / Newport Island Road	$\bigtriangledown$	6	A	12	А	The intersection performance is within acceptable performance thresholds
4	Hastings River Drive / Clifton Drive	$\bigtriangledown$	16	В	27	В	The intersection performance is within acceptable performance thresholds
5.1	Hastings River Drive / Bellbowrie Street	GIVE	5	С	30	С	The intersection performance is within acceptable performance thresholds
5.2	Hastings River Drive / Widderson Street	GIVE	3	A	12	A	The intersection performance is within acceptable performance thresholds
6	Hastings River Drive / Aston Street		5	F	222	F	The majority of movements at the intersection perform at LOS A. The degree of saturation is 0.87, which is above the acceptable limit of 0.80. This is due to the right-turn on Aston Street, which performs at LOS F. The median width is 4m and not considered wide enough to safely store a vehicle turning right.
7	Hastings River Drive / Findlay Ave	$\mathbf{N}$	5	В	15	В	The intersection performance is within acceptable performance thresholds
8	Hastings River Drive / Park Street	$\mathbf{N}$	6	В	16	В	The intersection performance is within acceptable performance thresholds
9	Oxley Highway / Hastings River Drive / Gordon Street / Ocean Drive	\$	39	с	55	D	The intersection if performing at the practical capacity (DOS 0.90). The right turn movement on the eastern approach has queues of approximately 100m at time times which exceeds the available turn pocket length
10	Ocean Drive / Table Street	$\heartsuit$	2	А	14	А	The intersection performance is within acceptable performance thresholds
11	Ocean Drive / Hindman Street	$\mathbf{\nabla}$	5	А	12	А	The intersection performance is within acceptable performance thresholds
12	Ocean Drive / Lake Road	*	77	F	251	F	The intersection performs outside of acceptable performance levels with LOS F and DOS 1.22. This is however as a result of downstream impacts at the Lake Road / Central Street intersection rather than capacity limitations at the subject intersection. Downstream capacity constraints on Lake Road result in queues extending to the south on Ocean Drive beyond Koala Street. Further details are provided in Section 3.2.4. It is expected the intersection would perform within acceptable limits if the downstream constraints were resolved
13	Ocean Drive / Koala Street	V	47	F	97	F	The intersection performs outside the acceptable thresholds due to delays on the southern approach. This is as a result of the downstream impacts at the Lake Road / Central Street intersection with queues extending south on Ocean Drive and through to Koala Street. Further details are provided in Section 3.2.4.
14	Ocean Drive / Greenmeadows Drive (north)	\$	36	С	56	D	Overall the intersection operates at the threshold of acceptable performance limits. All of the right-tums presented LOS D, with relatively high delays for these movements. The right turn on the northern approach has queuing in the order 125m, exceeding the turn lane length by almost double. This will impact through movements in the adjacent lane. Right turn queues on the western are in the order of 39m, which is greater than the separation distance from the roundabout to the west. It is likely that right turn queues are queuing into the roundabout and may be blocking other movements at the roundabout. The left turn queues on the western approach also exceed the available spacing from the roundabout to the west
15	Ocean Drive / Crestwood Drive / Dahlsford Drive		43	F	213	F	Overall the intersection has LOS F and the degree of saturation is 1.15, which is above acceptable limit of 0.85. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The intersection design and location on a crest appears to limit capacity (based on site observations). As a result the southern approach (Crestwood Drive) has high delays.
16	Ocean Drive / Pacific Drive / Jonas Absalom Drive	V	18	С	35	С	The intersection DOS is 0.91, which is above the acceptable limit of 0.85. This is due to the combination of high right turn volumes on Pacific Drive impacting through movements from the Ocean Drive south-east approach (which also have high volumes). The intersection is a single lane roundabout which limits capacity.
17	Ocean Drive / Matthew Flinders Drive / Emerald Drive	V	8	В	16	В	The intersection performance is within acceptable performance thresholds
18	Ocean Drive / Woolworths Access (Lake Cathie)	GIVE	3	A	7	А	The intersection performance is within acceptable performance thresholds
19	Ocean Drive / Abel Tasman Drive / Seaside Drive	GIVE	4	В	27	В	The intersection performance is within acceptable performance thresholds
20	Ocean Drive / Houston Mitchell Drive	$\bigotimes$	6	В	15	В	The intersection performance is within acceptable performance thresholds
21	Ocean Drive / Beach Street (south)	STOP	2	A	12	A	The intersection performance is within acceptable performance thresholds
22	Ocean Drive / The Parade	$\overline{\mathbf{v}}$	6	A	10	А	The intersection performance is within acceptable performance thresholds

# Table 5.4: Performance Summary (Overall LOS) – All Intersections (Year 2020 AM)



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#	Intersection	Туре	Avg. Delay (s)	LOS	Avg. Delay (s) (worst movement)	LOS (worst movement)	Comment
23	Ocean Drive / Kew Road		4	A	10	А	The intersection performance is within acceptable performance thresholds
24	Ocean Drive / Sirius Drive	GIVE	4	В	17	В	The intersection performance is within acceptable performance thresholds
25	Ocean Drive / Pacific Highway off-ramp/on- ramp	8	6	A	12	А	The intersection performance is within acceptable performance thresholds
26	Ocean Drive / Nancy Bird Walton Drive / Kendall Road	8	8	A	13	A	The intersection performance is within acceptable performance thresholds
27	Graham Street / Comboyne Street	STOP	2	А	6	А	Overall the intersection performs within acceptable thresholds

# Table 5.5: Performance Summary (Overall LOS) – All Intersections (Year 2020 PM)

#	Intersection	Туре	Avg. Delay (s)	LOS	Avg. Delay (s) (worst movement)	LOS (worst movement)	Comment
1	Hastings River Drive / Boundary Street	\$	23	В	42	С	Overall the intersection performs within acceptable thresholds
2	Hastings River Drive / Hughes Place	$\heartsuit$	7	В	16	В	The intersection performance is within acceptable thresholds
3	Hastings River Drive / Newport Island Road	$\mathbf{\nabla}$	7	В	17	В	The intersection performance is within acceptable thresholds
4	Hastings River Drive / Clifton Drive	$\heartsuit$	10	В	21	В	The intersection performance is within acceptable performance thresholds
5.1	Hastings River Drive / Bellbowrie Street	GIVE	4	В	11	В	The intersection performance is within acceptable performance thresholds
5.2	Hastings River Drive / Widderson Street	GIVE	3	В	13	В	The intersection performance is within acceptable performance thresholds
6	Hastings River Drive / Aston Street	GIVE	8	F	457	F	The majority of movements at the intersection perform at LOS A. The degree of saturation is 1.2, which is above the acceptable limit of 0.80. This is due to the right-turn on Aston Street, which performs at LOS F. The delay shown for the right turn out of Aston Street is unrealistic as the movement is saturated, however indicates the poor level of service for this right turn from the northern approach.
7	Hastings River Drive / Findlay Ave	$\heartsuit$	5	А	16	А	The intersection performance is within acceptable performance thresholds
8	Hastings River Drive / Park Street	$\mathbf{\nabla}$	8	В	18	В	The intersection performance is within acceptable performance thresholds
9	Oxley Highway / Hastings River Drive / Gordon Street / Ocean Drive	\$	37	С	54	D	The intersection if performing just outside capacity (DOS 0.90). The right turn movement on the eastern approach has queues of approximately 100m at time times which exceeds the available turn pocket length
10	Ocean Drive / Table Street	$\mathbf{\nabla}$	2	А	14	А	The intersection performance is within acceptable performance thresholds
11	Ocean Drive / Hindman Street	$\mathbf{\nabla}$	5	А	11	А	The intersection performance is within acceptable performance thresholds
12	Ocean Drive / Lake Road	\$	43	D	80	E	The intersection is performing just outside typical performance thresholds with DOS 0.94. The right turn lanes on the west approach exceed the lane length and queue into the through lane. This was consistent with observed operations.
13	Ocean Drive / Koala Street	$\heartsuit$	9	В	18	В	The intersection performance is within acceptable performance thresholds
14	Ocean Drive / Greenmeadows Drive (north)	\$	25	В	35	С	The intersection performance is within acceptable performance thresholds
15	Ocean Drive / Crestwood Drive / Dahlsford Drive	8	140	F	268	F	The western approach has long queues which extend back in the order of 1.4km (almost as far as Greenmeadows Drive south) which was confirmed during site observations. The intersection design and location on a crest appears to limit the approach capacity (based on site observations). There are limited conflicting vehicle movements or queues on other approaches.
16	Ocean Drive / Pacific Drive / Jonas Absalom Drive	8	17	С	32	С	The intersection DOS is 0.87, which is just above the acceptable limit of 0.85. This is due to the high volumes on Ocean Drive (north west approach), limiting the vehicles from the north-east approach from entering the intersection.
17	Ocean Drive / Matthew Flinders Drive / Emerald Drive	8	9	В	16	В	The intersection performance is within acceptable performance thresholds
18	Ocean Drive / Woolworths Access (Lake Cathie)	GIVE	3	A	8	А	The intersection performance is within acceptable performance thresholds
19	Ocean Drive / Abel Tasman Drive / Seaside Drive	GIVE	3	В	28	В	The intersection performance is within acceptable performance thresholds



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#	Intersection	Туре	Avg. Delay (s)	LOS	Avg. Delay (s) (worst movement)	LOS (worst movement)	Comment
20	Ocean Drive / Houston Mitchell Drive	$\heartsuit$	6	В	16	В	The intersection performance is within acceptable performance thresholds
21	Ocean Drive / Beach Street (south)	STOP	1	А	11	А	The intersection performance is within acceptable performance thresholds
22	Ocean Drive / The Parade	$\mathbf{\nabla}$	6	А	10	А	The intersection performance is within acceptable performance thresholds
23	Ocean Drive / Kew Road	GIVE	3	A	9	А	The intersection performance is within acceptable performance thresholds
24	Ocean Drive / Sirius Drive	GIVE	5	В	17	В	The intersection performance is within acceptable performance thresholds
25	Ocean Drive / Pacific Highway off-ramp/on- ramp	$\mathbf{v}$	6	А	12	А	The intersection performance is within acceptable performance thresholds
26	Ocean Drive / Nancy Bird Walton Drive / Kendall Road	$\mathbf{\nabla}$	7	А	12	А	The intersection performance is within acceptable performance thresholds
27	Graham Street / Comboyne Street	STOP	3	А	6	A	The intersection performance is within acceptable performance thresholds



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As demonstrated, the majority of intersections across the corridor perform at LOS C or better. The following intersections were identified to operate outside the acceptable LOS D:

- Hastings River Drive / Aston Street Hastings River Drive performed at LOS A for both approaches due to this being the priority movement. The right-turn on the northern approach (Aston Street) however performed at LOS F during both the AM and PM peak periods. This is due to the high bi-directional through volumes (min. 1,500 veh/hour) on Hastings River Drive which the right-turn gives way to. While some vehicles may stage in the median, the width of the median (4m) is considered insufficient to safely store vehicles turning right-out of Aston Street
- Hastings River Drive / Oxley Drive The intersection is performing at or just outside capacity (DOS 0.90). The right turn movement on the eastern approach has queues of approximately 100m at time times which exceeds the available turn pocket length. From an operational perspective the intersection was observed to generally function well, with the majority of vehicles clearing the intersection each cycle
- Ocean Drive / Lake Road During the AM Peak, the intersection operates outside acceptable performance thresholds. This is however as a result of downstream impacts at the Lake Road / Central Street intersection rather than capacity limitations at the subject intersection. Further details are provided in Section 3.2.4. In the PM peak, queues for the right turn on the western approach exceeded the available turn lane capacity. Various turning movements are operating between LOS D-F
- Ocean Drive / Koala Street During the AM peak the intersection performs at LOS F due to delays on the southern approach. This is as a result of the downstream impacts at the Lake Road / Central Street intersection with queues extending south on Ocean Drive and through to Koala Street. Further details are provided in Section 3.2.4.
- Ocean Drive / Crestwood Drive / Dahlsford Drive In the AM peak Ocean Drive performed at LOS A or B for both approaches, primarily due to the high volumes on Ocean Drive and unbalanced flows through the roundabout. The southern approach (Crestwood Drive) performed at LOS F in the AM peak due to the high westbound volumes (over 1,000 veh/hour) on the eastern approach. In the PM Peak, there are long queues in the order of 1.4km on Ocean Drive on the northern approach. The intersection design and location on a crest appears to limit the approach capacity. The intersection performs at overall LOS F

The following was also identified in terms of intersection performance:

- Right turn movements from side streets at the Hastings River Drive / Bellbowrie Street and Hastings River Drive / Widderson Street intersections is likely reliant on the ability to store within the median. It is noted that there are alternate options for these right turns (and other right turns from side streets along the section of the corridor), including utilisation of a number of nearby roundabouts
- The intersection of Ocean Drive / Greenmeadows Drive is operating LOS C and B in the AM and PM peak periods, respectively. However, it is operating at capacity in terms of the overall degree of saturation (DOS). In the AM peak, the right turn queues on the northern approach exceed the turn lane length by in the order of 60m and queues are spilling into the through lane. Similarly, queues on the western approach exceed the separation length from the adjacent roundabout. It is likely that queues are blocking other movements at the roundabout
- While operating with an overall LOS C, the intersection of Ocean Drive / Pacific Drive operates
  outside the performance threshold for DOS. This is due to the limited capacity of the single lane
  roundabout and relatively high volumes on a number of approaches





### 5.4.2 Network Constraints

Network constraints external to the corridor were identified to impact the capacity and operations of the Ocean Drive / Lake Road and Ocean Drive / Koala Street intersections. Site observations during the AM peak hour identified that capacity constraints at the Lake Road / Central Street intersection (downstream of the Ocean Drive / Lake Road intersection) resulted in queues extending:

- Back along Lake Road
- Through the Lake Road / Ocean Drive intersection
- Back on Ocean Drive to the south and through the Ocean Drive / Koala Street intersection.

This specific network issue was only observed in the AM peak. To maintain suitable current and future operations of the corridor from a capacity perspective, capacity constraints external to the corridor such as this will need to be mitigated. From site observations, the overall capacity of the Ocean Drive / Lake Road and Ocean Drive / Koala Street intersections appeared generally sufficient, although queues in the right turn lanes on the Lake Road west approach exceeded the turn lane lengths in the PM peak. Figure 5.1 to Figure 5.3 shows the impact of the external capacity constraints on Ocean Drive.



Figure 5.1: Westbound Queues on Lake Road (west of Ocean Drive, AM Peak)





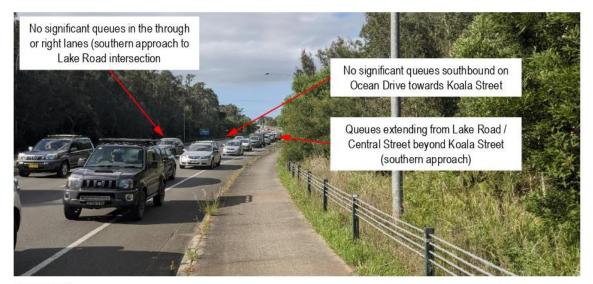


Figure 5.2: Northbound Queues on Ocean Drive (South of Lake Road, AM Peak)



Figure 5.3: Lake Road / Ocean Drive – AM Operations on Northern and Eastern Legs

### 5.4.3 School and Event Peak Constraints

Intersection modelling utilises peak hour volumes and represents typical weekday peak periods. These peak hour models may not necessarily pick-up confined peaks which occur within the peak hour and the associated intersection performance. School peak periods are usually very short, between 15-30 minutes and often have performance impacts at school accesses and nearby intersections. Known locations where school peaks impact intersection operations are:

- Queuing at the Hastings River Drive / Findlay Avenue roundabout as a result of Hastings Secondary College Westport Campus
- Queues extending beyond turn pockets and available approaches distances at the Greenmeadows Drive / Ocean Drive signalised intersection as a result of St Peter's Primary School
- Localised congestion around St Joseph's Primary School
- Localised congestion around Camden Haven High School near Glen Haven Drive.

Local events, including at sports facilities may also have performance impacts which occur outside typical peak periods from time to time.



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## 5.4.4 Other Intersection Operation Considerations

During site observations and a review of existing conditions, a number of operational aspects for various intersections on the corridor were identified, which do not relate directly to capacity. These are as follows:

- Hastings River Drive yields to Winery Drive, however the dominant moment is the flow of vehicles between the Pacific Highway and Port Macquarie. It would be more practical and efficient for Winery Drive to be re-prioritised to yield to Hastings River Drive (subject to modelling and further assessment)
- The southern approach to the Ocean Drive / Clifton Drive roundabout has a short and narrow stand-up lane (total approach width of approximately 5.6m for two lanes). This is likely limiting the performance of this approach
- The left turn lane on the western approach of the Ocean Drive / Sirius Drive intersection is very narrow (approximately 2.3m wide). This is likely to often be ineffective as a turn lane and is a safety risk
- While operating within acceptable performance limits, the function of the Ocean Drive / Nancy Bird Walton Drive intersection as a roundabout was limited. Most vehicles were observed turning across the flush central island. Further, the approach geometry does not have adequate deflection to reduce vehicle speeds on approach
- While operating within acceptable performance limits, the intersection of Comboyne Street / Graham Street has poor alignment and geometry.

## 5.4.5 Current Link Performance

The majority of the corridor was identified to operate with a minimum LOS C, except at the following locations, which operated between LOS D and E for some directions / peak periods:

- Hastings River Drive Between Boundary Street and Hibbard Road (west)
- Ocean Dr between Lake Road and Pacific Drive.

A table and maps presenting the LOS as well as key data (volume, number of lanes, capacity, posted speed etc.), for each link segment is presented in **Appendix G**. It is noted that this assessment is intended to assess the available link capacity based on the number of lanes, speed, and surrounding environment. This assessment is based on midblock capacity and does not identify capacity constraints as a result of intersections. This is particularly relevant through Sections 2 and 3 of the corridor, which have frequent intersections.





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## 5.5 Future Performance

## 5.6 Traffic Growth

The Port Macquarie-Hastings Local Government Area Traffic Aimsun model prepared by GHD was used to determine growth rates for the corridor. The model considers anticipated population growth and development between 2016 and 2036. Peak period traffic volumes for the 2016, 2026 and 2036 scenarios were used for the analysis. Growth for the corridor sections were assessed at a sectional level while side streets were assessed individually.

The compounding growth rates determined from the model were applied to the 2020 survey volumes to establish the 2030 and 2040 future year traffic scenarios. Manual corrections were made to the growth rates at some locations (such as where the model showed negative growth due to re-routing of trips). Corrections were based on growth at surrounding locations, other peak periods, population growth and the likely growth on the approach.

Ocean Drive currently has a limited catchment and the eastern leg of the Houston Mitchel Drive intersection had not yet opened at the time surveys were undertaken. Both of these locations will facilitate access for significant future development areas. Application of growth rates at these locations was therefore not suitable. Peak hour traffic volumes at Ocean Drive (southern leg) were obtained from the Aimsun model as this leg had very low volumes in the survey year.

Volumes for the Houston Mitchel Drive / Ocean Drive intersection were adopted as follows:

- Year 2030: From the Traffic Impact Assessment for the Houston Mitchel Drive Employment Lands prepared by King and Campbell in March 2021
- Year 2040: From the Traffic Impact and Access Assessment for the Area 14 Development prepared by King and Campbell in June 2016
- Where the 2020 survey volumes with growth applied to 2030 and 2040 were higher than the volumes at the intersection from the traffic impact assessments, the higher value was adopted.

The traffic growth rates are summarised in **Appendix C**. The 2030 and 2040 future year traffic volumes are presented in **Appendix D**.

## 5.6.1 Intersection Performance Summary

The overall intersection operations are summarised in Tables 5.7-5.10 based on the either the overall LOS (signalised intersections) or worst performing leg (priority-controlled intersections and roundabouts) recorded for each intersection and respective scenario. LOS C was adopted as the target LOS based on the RMS Traffic Modelling Guidelines. It should be noted that the overall LOS provides a high-level summary of the intersection performance and does not necessarily identify specific performance issues (such as queues exceeding available storage lengths or intersections operating at capacity). The intersection modelling and detailed model outputs are presented in **Appendix D** and includes the following:

- Peak hour volumes
- SIDRA intersection geometry
- LOS by lane
- Detailed model outputs by lane (LOS, delays, queues)
- Brief commentary on the intersection performance.

Specific operational issues identified at intersections are summarised below in Table 5.6 to Table 5.10





The majority of intersections across the corridor perform at LOS C or better. The following intersections were identified to operate outside the acceptable limits:

- Clifton Drive / Hastings River Drive
- Park Street / Hastings River Drive
- Gordon Street / Ocean Drive
- Lake Road / Ocean Drive
- Koala Street / Ocean Drive
- Greenmeadows Drive / Ocean Drive.

Consistent with the existing operations, downstream capacity constraints near Lake Road were a major factor impacting intersection performance at the Ocean Drive / Lake Road and Ocean Drive / Koala Street intersections. Resolving this downstream capacity constraint will be a key item to address in future upgrade planning.

Section 5.8 discusses potential improvements to address performance issues for these intersections.

Detailed model outputs are presented in Appendix F.

## 5.7 Link Assessment

A Level of Service (LOS) analysis was undertaken at a link level across the corridor, on a per lane basis. This was undertaken for each direction in the AM and PM peak periods. Tube count data for 43 locations across the corridor undertaken in 2019 was provided by Council as part of the current performance assessment. The corridor was segmented into links based on the tube count locations. The LOS analysis was undertaken based on recorded volumes and midblock lane capacities as detailed in Austroads Guide to Traffic Management Part 3: Transport Study and Analysis Methods (AGTM03). Growth was applied to the 2019 link volumes to determine the 2030, 2040 and 2050 scenarios. The growth rates are detailed in Section 3.

The adopted lane capacities varied between 900-1,400 vehicles/hour based on the road environment (divided/undivided, presence of kerbside parking, presence of side streets etc.). The RMS Guide to Traffic Generating Developments (2002) recommends a minimum LOS C for major rural road and LOS C is also the target LOS identified in the RMS Traffic Modelling Guidelines. LOS C was therefore adopted as the threshold for acceptable link performance across the corridor.

The majority of the corridor was identified to operate with a minimum LOS C as shown in Table 5.6 and Table 5.7, except at the following locations, which operated between LOS D some directions / peak periods in 2030:

- Hastings River Drive Between Tuffins Lane and Boundary Street (eastbound)
- Hastings River Drive Between Bellbowrie Street and Findlay Lane (eastbound)
- Ocean Drive between Lake Road and Koala Street (northbound)
- Ocean Drive between Fiona Crescent and Dirah Street (northbound).

In 2040, the following sections are also expected to operate at LOS D as shown in Table 5.8 and Table 5.9:

- Ocean Drive between Greenmeadows Drive and Maranatha Place (northbound)
- Ocean Drive between River Street and Comboyne Street (westbound)
- Ocean Drive between Dirah Street and Aqua Crescent (southbound).

A table and maps presenting the LOS as well as key data (volume, number of lanes, capacity, posted speed etc.), for each link segment is presented in **Appendix G**.



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#	Intersection	Туре	Avg. Delay (s)	LOS	Avg. Delay (s) (worst movement)	LOS (worst movement)	Comment		
1	Hastings River Drive / Boundary Street	\$	17	в	52	D	The overall intersection performance is within acceptable thresholds. Right-turns present as LOS D, due to relatively high delays for these movements. However, the volumes are low, and queues are contained in the right-turn pockets		
2	Hastings River Drive / Hughes Place	8	6	А	13	A	The intersection performance is within acceptable performance thresholds		
3	Hastings River Drive / Newport Island Road	8	6	А	12	A	The intersection performance is within acceptable performance thresholds		
4	Hastings River Drive / Clifton Drive	8	40	E	66	E	The intersection performance is <b>above</b> the acceptable performance thresholds. The average delay is 40 seconds. Failure occurs on the Clifton Drive approach and Hastings River Drive (west) approach		
5.1	Hastings River Drive / Bellbowrie Street	GIVE	5	с	30	С	The intersection performance is within acceptable performance thresholds		
5.2	Hastings River Drive / Widderson Street	GIVE	3	А	12	A	The intersection performance is within acceptable performance thresholds		
6	Hastings River Drive / Aston Street	\$	16	В	26	В	The majority of movements at the intersection perform at LOS B. The degree of saturation is 0.67, which is within the acceptable limit of 0.90.		
7	Hastings River Drive / Findlay Ave	$\mathbf{\nabla}$	5	В	16	В	The intersection performance is within acceptable performance thresholds		
8	Hastings River Drive / Park Street	$\heartsuit$	9	В	19	В	The intersection performance is within acceptable performance thresholds		
9	Oxley Highway / Hastings River Drive / Gordon Street / Ocean Drive	\$	38	С	49	D	The intersection performance of 0.91 is just outside the practical capacity (DO 0.90). The right turn movement on the eastern approach has queues of approximately 100m at times. This is within the turn pocket (which is planned be extended)		
10	Ocean Drive / Table Street	$\heartsuit$	2	В	16	В	The intersection performance is within acceptable performance thresholds		
11	Ocean Drive / Hindman Street	Ø	5	А	12	А	The intersection performance is within acceptable performance thresholds		
12	Ocean Drive / Lake Road	*	86	F	294	F	The intersection performs outside of acceptable performance levels with LOS F and DOS 1.27. This is however as a result of downstream impacts at the Lake Road / Central Road intersection rather than capacity limitations at the subject intersection. Downstream capacity constraints on Lake Road result in queues extending to the south on Ocean Drive beyond Koala Street. Further details are provided in Working Paper 2 which discusses the existing operations. It is expected the intersection would perform significantly better if the downstream constraints were resolved		
13	Ocean Drive / Koala Street	8	18	С	41	С	The intersection performance is within acceptable performance thresholds in terms of LOS and delays. The intersection performs outside the acceptable thresholds for DOS on the southern approach. This is as a result of the downstream impacts at the Lake Road / Central Road intersection with queues extending south on Ocean Drive and through to Koala Street		
14	Ocean Drive / Greenmeadows Drive (north)	*	67	E	100	F	The intersection operates outside the acceptable performance limits. Most of the right turns presented LOS F, with relatively high delays for these movements. The right turn on the northern approach has queuing in the order 244m, exceeding the turn lane length by almost four times. This will impact through movements in the adjacent lane. Right turn queues on the western are in the order of 71m, which is greater than the separation distance from the roundabout to the west. It is likely that right turn queues are queuing into the roundabout and may be blocking other movements at the roundabout. The left turn queues on the wester approach also exceed the available spacing from the roundabout to the west		
15	Ocean Drive / Crestwood Drive / Dahlsford Drive	\$	28	в	47	D	The intersection performance is within acceptable performance thresholds		
16	Ocean Drive / Pacific Drive / Jonas Absalom Drive	\$	22	В	31	с	The intersection performance is within acceptable performance thresholds		
17	Ocean Drive / Matthew Flinders Drive / Emerald Drive	\$	18	В	27	В	The intersection performance is within acceptable performance thresholds		
18	Ocean Drive / Woolworths Access (Lake Cathie)	\$	14	А	22	В	The intersection performance is within acceptable performance thresholds		
19	Ocean Drive / Abel Tasman Drive / Seaside Drive	\$	21	в	32	С	The intersection performance is within acceptable performance thresholds		

## Table 5.6: Performance Summary (Overall LOS) – All Intersections (Year 2030 AM)



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#	Intersection	Туре	Avg. Delay (s)	LOS	Avg. Delay (s) (worst movement)	LOS (worst movement)	Comment	
20	Ocean Drive / Houston Mitchell Drive	8	6	A	15	В	The intersection performance is within acceptable performance thresholds	
21	Ocean Drive / Beach Street (south)	STOP	2	А	12	A	The intersection performance is within acceptable performance thresholds	
22	Ocean Drive / The Parade	$\heartsuit$	6	А	10	А	The intersection performance is within acceptable performance thresholds	
23	Ocean Drive / Kew Road	GIVE	4	А	9	А	The intersection performance is within acceptable performance thresholds	
24	Ocean Drive / Sirius Drive	\$	17	В	24	В	The intersection performance is within acceptable performance thresholds	
25	Ocean Drive / Pacific Highway off- ramp/on-ramp	Ø	6	А	12	A	The intersection performance is within acceptable performance thresholds	
26	Ocean Drive / Nancy Bird Walton Drive / Kendall Road	8	8	A	14	A	The intersection performance is within acceptable performance thresholds	
27	Graham Street / Comboyne Street	STOP	3	А	6	А	Overall the intersection performs within acceptable thresholds	

## Table 5.7: Performance Summary (Overall LOS) – All Intersections (Year 2030 PM)

#	Intersection	Туре	Avg. Delay (s)	LOS	Avg. Delay (s) (worst movement)	LOS (worst movement)	Comment	
1	Hastings River Drive / Boundary Street	\$	41	с	70	E	The intersection performance is over the acceptable thresholds. Right-turns present as LOS E, due to relatively high delays for these movements	
2	Hastings River Drive / Hughes Place	8	7	В	16	В	The intersection performance is within acceptable performance thresholds	
3	Hastings River Drive / Newport Island Road	8	10	в	28	В	Overall the intersection has LOS B and the degree of saturation is 0.93, which is above the acceptable limit of 0.85. This is mostly due to capacity issues for the northern approach	
4	Hastings River Drive / Clifton Drive	$\heartsuit$	13	с	30	С	The intersection performance is within acceptable performance thresholds	
5.1	Hastings River Drive / Bellbowrie Street	GIVE	4	в	20	В	The intersection performance is within acceptable performance thresholds	
5.2	Hastings River Drive / Widderson Street	GIVE	3	в	18	В	The intersection performance is within acceptable performance thresholds	
6	Hastings River Drive / Aston Street	\$	19	В	26	В	The majority of movements at the intersection perform at LOS B. The degree of saturation is 0.83, which is within the acceptable limit of 0.90.	
7	Hastings River Drive / Findlay Ave	$\heartsuit$	5	В	17	В	The intersection performance is within acceptable performance thresholds	
8	Hastings River Drive / Park Street	$\heartsuit$	14	В	27	В	The intersection performance is within acceptable performance thresholds	
9	Oxley Highway / Hastings River Drive / Gordon Street / Ocean Drive	\$	36	с	58	E	The intersection performance of 0.95 is just outside the practical capacity (DOS 0.90). The right turn movement on the eastern approach has queues of approximately 100m at times	
10	Ocean Drive / Table Street	$\heartsuit$	2	В	15	В	The intersection performance is within acceptable performance thresholds	
11	Ocean Drive / Hindman Street	$\heartsuit$	5	А	11	А	The intersection performance is within acceptable performance thresholds	
12	Ocean Drive / Lake Road	\$	100	F	295	F	The intersection performs outside of acceptable performance levels with LOS F and DOS 1.26. This is however as a result of downstream impacts at the Lake Road / Central Road intersection rather than capacity limitations at the subject intersection. Downstream capacity constraints on Lake Road result in queues extending to the south on Ocean Drive beyond Koala Street. Further details are provided in Working Paper 2. It is expected the intersection would perform significantly better if the downstream constraints were resolved	
13	Ocean Drive / Koala Street	$\heartsuit$	10	В	22	В	The intersection performance is within acceptable performance thresholds	
14	Ocean Drive / Greenmeadows Drive (north)	\$	23	в	36	С	The intersection performance is within acceptable performance thresholds	
15	Ocean Drive / Crestwood Drive / Dahlsford Drive	\$	18	в	31	С	The intersection performance is within acceptable performance thresholds	



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#	Intersection	Туре	Avg. Delay (s)	LOS	Avg. Delay (s) (worst movement)	LOS (worst movement)	Comment
16	Ocean Drive / Pacific Drive / Jonas Absalom Drive	*	22	В	28	В	The intersection performance is within acceptable performance thresholds
17	Ocean Drive / Matthew Flinders Drive / Emerald Drive	*	20	В	26	В	The intersection performance is within acceptable performance thresholds
18	Ocean Drive / Woolworths Access (Lake Cathie)	*	15	В	22	В	The intersection performance is within acceptable performance thresholds
19	Ocean Drive / Abel Tasman Drive / Seaside Drive	*	21	в	16	В	The intersection performance is within acceptable performance thresholds
20	Ocean Drive / Houston Mitchell Drive	Ø	6	в	32	С	The intersection performance is within acceptable performance thresholds
21	Ocean Drive / Beach Street (south)	STOP	1	A	12	A	The intersection performance is within acceptable performance thresholds
22	Ocean Drive / The Parade	$\heartsuit$	6	А	10	А	The intersection performance is within acceptable performance thresholds
23	Ocean Drive / Kew Road	GIVE	4	А	9	А	The intersection performance is within acceptable performance thresholds
24	Ocean Drive / Sirius Drive	*	18	В	27	В	The intersection performance is within acceptable performance thresholds
25	Ocean Drive / Pacific Highway off- ramp/on-ramp	8	6	А	13	A	The intersection performance is within acceptable performance thresholds
26	Ocean Drive / Nancy Bird Walton Drive / Kendall Road	8	8	В	15	В	The intersection performance is within acceptable performance thresholds
27	Graham Street / Comboyne Street	STOP	2	А	7	А	Overall the intersection performs within acceptable thresholds



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#	Intersection	Туре	Avg. Delay (s)	LOS	Avg. Delay (s) (worst movement)	LOS (worst movement)	Comment		
1	Hastings River Drive / Boundary Street	\$	18	в	52	D	The overall intersection performance is within acceptable thresholds. Right-tums present as LOS D, due to relatively high delays for these movements. However, the volumes are low, and queues are contained in the right-turn pockets		
2	Hastings River Drive / Hughes Place	8	8	A	13	A	The intersection performance is within acceptable performance thresholds		
3	Hastings River Drive / Newport Island Road	<b>V</b>	6	A	12	A	The intersection performance is within acceptable performance thresholds		
4	Hastings River Drive / Clifton Drive	8	89	F	228	F	The intersection performance is <b>above</b> the acceptable performance thresholds, with DOS 1.22. The Clifton Drive approach and Hastings River Drive (west) fails, with high delays and queues between 310-575m		
5.1	Hastings River Drive / Bellbowrie Street	GIVE	5	с	30	С	The intersection performance is within acceptable performance thresholds		
5.2	Hastings River Drive / Widderson Street	GIVE	3	A	12	А	The intersection performance is within acceptable performance thresholds		
6	Hastings River Drive / Aston Street	*	18	В	26	В	The majority of movements at the intersection perform at LOS B. The degree of saturation is 0.76, which is within the acceptable limit of 0.90.		
7	Hastings River Drive / Findlay Ave	$\heartsuit$	5	В	17	В	The intersection performance is within acceptable performance thresholds		
8	Hastings River Drive / Park Street	$\overline{\mathbf{v}}$	12	В	24	В	The intersection performance is within acceptable performance thresholds		
9	Oxley Highway / Hastings River Drive / Gordon Street / Ocean Drive	*	43	D	59	E	The intersection performance of 0.89 is just within the practical capacity (DOS 0.90). The right turn movement on the eastern approach has queues of more than 130m at times, which exceeds the available lane length (including with the proposed extension)		
10	Ocean Drive / Table Street	$\mathbf{\nabla}$	2	В	17	В	The intersection performance is within acceptable performance thresholds		
11	Ocean Drive / Hindman Street	$\mathbf{\nabla}$	5	А	13	А	The intersection performance is within acceptable performance thresholds		
12	Ocean Drive / Lake Road	\$	137	F	410	E	The intersection performs outside of acceptable performance levels with LOS F and DOS 1.40. This is however as a result of downstream impacts at the Lake Road / Central Road intersection rather than capacity limitations at the subject intersection. Downstream capacity constraints on Lake Road result in queues extending to the south on Ocean Drive beyond Koala Street. Further details are provided in Working Paper 2. It is expected the intersection would perform significantly better if the downstream constraints were resolved		
13	Ocean Drive / Koala Street	8	56	F	119	F	The intersection performs outside the acceptable thresholds due to delays on the southern approach. This is as a result of the downstream impacts at the Lake Road / Central Road intersection with queues extending south on Ocean Drive and through to Koala Street.		
14	Ocean Drive / Greenmeadows Drive (north)	\$	113	F	177	F	The intersection operates outside the acceptable performance limits. Most of the right turns presented LOS F, with relatively high delays for these movements. The right turn on the northem approach has queuing in the order 385m, exceeding the turn lane length by almost six times. This will impact through movements in the adjacent lane. Right turn queues on the western are in the order of 77m, which is greater than the separation distance from the roundabout to the west. It is likely that right turn queues are queuing into the roundabout and may be blocking other movements at the roundabout. The left turn queues on the western approach also exceed the available spacing from the roundabout to the west. There are also significant queues on the Ocean Drive (south) approach		
15	Ocean Drive / Crestwood Drive / Dahlsford Drive	\$	32	с	76	F	The intersection performance is within acceptable performance thresholds. The right turns on Ocean Drive operate at LOS E to F due high delays. Queues for these movements are contained within the turn lanes.		
16	Ocean Drive / Pacific Drive / Jonas Absalom Drive	*	26	В	38	С	The intersection performance is within acceptable performance thresholds		
17	Ocean Drive / Matthew Flinders Drive / Emerald Drive	\$	19	в	28	В	The intersection performance is within acceptable performance thresholds		
18	Ocean Drive / Woolworths Access (Lake Cathie)	\$	14	А	22	В	The intersection performance is within acceptable performance thresholds		
19	Ocean Drive / Abel Tasman Drive / Seaside Drive	\$	22	В	36	С	The intersection performance is within acceptable performance thresholds		
20	Ocean Drive / Houston Mitchell Drive	$\mathbf{\nabla}$	6	В	15	В	The intersection performance is within acceptable performance thresholds		

#### Table 5.8: Performance Summary (Overall LOS) – All Intersections (Year 2040 AM)



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#	Intersection	Туре	Avg. Delay (s)	LOS	Avg. Delay (s) (worst movement)	LOS (worst movement)	Comment
21	Ocean Drive / Beach Street (south)	STOP	2	А	14	A	The intersection performance is within acceptable performance thresholds
22	Ocean Drive / The Parade	$\heartsuit$	6	А	10	А	The intersection performance is within acceptable performance thresholds
23	Ocean Drive / Kew Road	GIVE	4	A	9	А	The intersection performance is within acceptable performance thresholds
24	Ocean Drive / Sirius Drive	\$	19	В	25	В	The intersection performance is within acceptable performance thresholds
25	Ocean Drive / Pacific Highway off- ramp/on-ramp	8	6	А	13	A	The intersection performance is within acceptable performance thresholds
26	Ocean Drive / Nancy Bird Walton Drive / Kendall Road	8	8	A	15	В	The intersection performance is within acceptable performance thresholds
27	Graham Street / Comboyne Street	STOP	3	А	7	А	Overall the intersection performs within acceptable thresholds

 Table 5.9:
 Performance Summary (Overall LOS) – All Intersections (Year 2040 PM)

#	Intersection	Туре	Avg. Delay (s)	LOS	Avg. Delay (s) (worst movement)	LOS (worst movement)	Comment	
1	Hastings River Drive / Boundary Street	\$	44	D	74	F	The intersection performance is over the acceptable thresholds. Right-tums present as LOS E and F, due to relatively high delays for these movements	
2	Hastings River Drive / Hughes Place	8	7	В	16	В	The intersection performance is within acceptable performance thresholds	
3	Hastings River Drive / Newport Island Road	8	30	F	143	F	Overall the intersection has LOS C and the degree of saturation is 1.13, which is above the acceptable limit of 0.85. This is mostly due to capacity issues for the northern approach	
4	Hastings River Drive / Clifton Drive	$\heartsuit$	29	F	118	F	The intersection performance is <b>above</b> the acceptable performance thresholds. This is due to high delays on the Clifton Drive approach	
5.1	Hastings River Drive / Bellbowrie Street	GIVE	4	в	20	В	The intersection performance is within acceptable performance thresholds	
5.2	Hastings River Drive / Widderson Street	GIVE	3	в	18	В	The intersection performance is within acceptable performance thresholds	
6	Hastings River Drive / Aston Street	\$	18	В	31	С	The majority of movements at the intersection perform at LOS B. The degree of saturation is 0.76, which is within the acceptable limit of 0.90.	
7	Hastings River Drive / Findlay Ave	$\heartsuit$	5	В	18	В	The intersection performance is within acceptable performance thresholds	
8	Hastings River Drive / Park Street	$\heartsuit$	32	E	69	E	The intersection performance of 1 is over the practical capacity (DOS 0.85)	
9	Oxley Highway / Hastings River Drive / Gordon Street / Ocean Drive	*	42	С	60	E	The intersection performance of 0.94 is just over the practical capacity (DOS 0.90). The right turn movement on the eastern approach has queues of approximately 120m at times, which just exceeds the available turn lane length	
10	Ocean Drive / Table Street	Ø	2	В	16	В	The intersection performance is within acceptable performance thresholds	
11	Ocean Drive / Hindman Street	Ø	6	А	12	А	The intersection performance is within acceptable performance thresholds	
12	Ocean Drive / Lake Road	*	149	F	389	F	The intersection performs outside of acceptable performance levels with LOS F and DOS 1.37. This is however as a result of downstream impacts at the Lake Road / Central Road intersection rather than capacity limitations at the subject intersection. Downstream capacity constraints on Lake Road result in queues extending to the south on Ocean Drive beyond Koala Street. Further details are provided in Working Paper 2. It is expected the intersection would perform significantly better if the downstream constraints were resolved	
13	Ocean Drive / Koala Street	$\heartsuit$	12	В	28	В	The intersection performance is within acceptable performance thresholds	
14	Ocean Drive / Greenmeadows Drive (north)	\$	27	В	38	С	The intersection performance is within acceptable performance thresholds	
15	Ocean Drive / Crestwood Drive / Dahlsford Drive	\$	19	В	32	С	The intersection performance is within acceptable performance thresholds	



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#	Intersection	Туре	Avg. Delay (s)	LOS	Avg. Delay (s) (worst movement)	LOS (worst movement)	Comment
16	Ocean Drive / Pacific Drive / Jonas Absalom Drive	*	22	В	31	С	The intersection performance is within acceptable performance thresholds
17	Ocean Drive / Matthew Flinders Drive / Emerald Drive	*	20	В	27	В	The intersection performance is within acceptable performance thresholds
18	Ocean Drive / Woolworths Access (Lake Cathie)	\$	16	в	22	В	The intersection performance is within acceptable performance thresholds
19	Ocean Drive / Abel Tasman Drive / Seaside Drive	\$	21	в	34	С	The intersection performance is within acceptable performance thresholds
20	Ocean Drive / Houston Mitchell Drive	$\mathbf{\nabla}$	6	в	16	В	The intersection performance is within acceptable performance thresholds
21	Ocean Drive / Beach Street (south)	STOP	2	A	13	A	The intersection performance is within acceptable performance thresholds
22	Ocean Drive / The Parade	$\heartsuit$	6	A	10	А	The intersection performance is within acceptable performance thresholds
23	Ocean Drive / Kew Road	GIVE	4	A	9	А	The intersection performance is within acceptable performance thresholds
24	Ocean Drive / Sirius Drive	*	19	В	31	С	The intersection performance is within acceptable performance thresholds
25	Ocean Drive / Pacific Highway off- ramp/on-ramp	8	7	А	13	A	The intersection performance is within acceptable performance thresholds
26	Ocean Drive / Nancy Bird Walton Drive / Kendall Road	V	8	A	17	В	The intersection performance is within acceptable performance thresholds
27	Graham Street / Comboyne Street	STOP	2	А	7	А	Overall the intersection performs within acceptable thresholds



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## 5.8 Future Intersection Improvements

Table 5.10 summarises the intersection upgrades tested to improve the future 2040 performance for the key intersections found to operate at a LOS D or worse during the Working Paper 3: Future Performance. As noted in Section 5.7, downstream capacity constraints near Lake Road were a major factor impacting intersection performance at the Ocean Drive / Lake Road and Ocean Drive / Koala Street intersections. This upgrade is therefore outside the corridor and would need to be considered as part of wider road network planning for the area.

Table 5.10:	Suggested Long Term Upgrades
-------------	------------------------------

Intersection	Base SIDRA Geometry	/LOS	Upgrade S	SIDRA Ge	ometry		Co	mment				
	Level of Service	n	•	Extend right tum lane on Hastings River Drive (W) to 120m Dual through approach lanes on Hasting River Drive (E) to increase capacity Left turn slip lane on Boundary Street								
	Intersection Performance Summary: This analysis had been made on an assumption that only a proportion of airport business											
	park has been develope											
	been identified as part o	-	•									
	Land Use	Quantity	Trip Rate		Peak Trips AM PM							
		PW										
Hastings River	Low Intensity Industrial	33600	30									
Drive /	Warehousing	14700	0.0085x-62	0.0082x- 30	643	456						
Boundary Street	High intensity industrial	32500	0.0085x-62	0.0082x- 30	045	450						
	Retail	3200	0.0085x-62	0.0082x- 30								
	Office	28400	Office	0.046	45.4	614						
	Office	38400 Future De	0.012 velopment Area	0.016	461	614						
	Low Intensity Industrial	52600	0.0085x-62	0.0082x- 30	373	293						



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Intersection	Base SIDRA Geometry/LOS	Upgrade SIDRA Geometry	Comment							
Hastings River Drive / Newport Island Drive	Level of Service		<ul> <li>Add a left turn lane on the Newport Island Drive approach to improve capacity and reduce delays on this approach</li> </ul>							
		ne the intersection will operate at an ction delays would reduce to 7 second								
Clifton Drive / Hastings River Drive	Level of Service	N         Testings River 0 = (N)	<ul> <li>Upgrade to traffic signals to operate satisfactorily by 2040.</li> </ul>							
	Intersection Performance Summary with Upgrade: Overall the intersection will operate at a LOS B with the upgrade to signals.									
Park Street / Hastings River Drive	Level of Service Log A Log D Log A Log A L	N Hentrya River D. # (N)	<ul> <li>Upgrade to traffic signals to operate satisfactorily by 2040.</li> </ul>							
	Intersection Performance Summary: With an upgrade to signals, the intersection will be able to operate at an LOS A in the 2040 AM peak and LOS B in the PM peak. PM peak degree of saturation would be 0.88 which is just below the practical limit of 0.9 DOS and average delays of 18 seconds. This is an improvement on the average 32 second delay that would be experienced as a roundabout configuration.									
Gordon Street/ Ocean Drive			<ul> <li>Add left turn slip lanes to all approaches</li> <li>Extend right turn on Oxley Highway (W) from 55m to 100m</li> </ul>							
	saturation of 0.86 which is just wit	<b>nary</b> : section will be able to operate an LOS hin practical limits. Average delay wil econds from 42 second delays that w	be 32 seconds which							



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## 6. WALKING, CYCLING AND PUBLIC TRANSPORT

## 6.1 Overview

The walking and cycling infrastructure consists of footpaths, a variety of crossing facilities, on-road cycle lanes and road shoulders. The provision and quality of infrastructure varies significantly along each section, in part due to the varying movement and place function that the corridor serves.

The existing and planned requirements for walking, cycling & public transport infrastructure along the corridor has been reviewed to assess its performance and adequacy in the future.

For a key arterial corridor, the following standard of facilities should be available for road users:

- A connected pathway network, including pathways on both sides of the road in highly urbanised areas with a high place function
- On road cycle facilities including dedicated cycle lanes through urbanised areas where demand is highest and shoulder provisions suitable for cyclists in rural areas
- High quality and frequent bus stops facilities. This includes indented stops to minimise impacts to through traffic and bus shelters and seats to encourage utilisation.

The existing walking, cycling and public transport infrastructure has been mapped for the corridor. The maps also identify missing footpath links in locations where there is a place function.

The following sections provide a summarised review of the pedestrian, cyclist, and public transport deficiencies along each section of the corridor.

Walking, cycling and public transport section maps are provided in Appendix H.

## 6.2 Active Transport

The on-road cycle network is fragmented throughout the corridor with cycle lanes inconsistently starting or ending and with inconsistent sign posting.

### Table 6.1: Active Transport Deficiencies

Section	Active Transport Deficiencies		
1	No connection to Bridge pathway		
2	<ul> <li>Incomplete footpath network between:</li> <li>Tuffins Lane to Boundary Street</li> <li>Newport Island Road to Widderson Street</li> </ul>		
3	Incomplete footpath network between Ackroyd Street to Heather Street 2 crossing locations at: • Crestwood Drive • Pacific Drive		
4	No connection to recreational trails and beach accesses		





Section	Active Transport Deficiencies		
	Incomplete footpath network between:		
5	Dirah Street to Evans Street		
	Solomon Drive to east of Huston Mitchell Drive		
	West of Huston Mitchell Drive to Bonny View Drive		
	2 crossing locations at:		
	Ernest Street		
	East of Huston Mitchell Drive		
	Incomplete footpath network between:		
	Bonny View Drive to Beach Street		
	Rodley Street to Reflections Holiday Park		
6	4 crossing locations at:		
0	Seawind Chase		
	Beach Street		
	Reflections Holiday Park		
	Panorama Drive		
7	No connection to recreational trails or beach accesses		
	Incomplete footpath network between:		
	Edith Street and the North Haven Public School		
	East of Adeline Street and Bridge Street		
8	Haven Court to Kew Road		
	2 crossing locations at:		
	Haven Court		
	Kew Road		
9	Incomplete footpath network along the entire length of Section 9		
	5 crossing locations at:		
	Waterview Crescent		
	Mission Terrace		
	Brotherglen Drive		
	Pacific Highway		
10	Incomplete footpath network between:		
10	Nancy Bird Walton Drive to Old Bridge Road		

## 6.3 Public Transport

Public transport infrastructure along the corridor consists of bus stops that are serviced by a number of bus routes.

Bus stop facilities and infrastructure vary along the corridor including the provision of shelters and idented stops. The public transport provisions are managed by Transport for NSW and consultation between government departments is required for future planning.

Examples of the varying quality of bus stop infrastructure along the corridor are shown in Figure 6.1 and Figure 6.2.



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Figure 6.1: Indented Bus Stop with Shelter



### Figure 6.2: Unformalised Bus Stop – J Pole Only

The bus stop deficiencies identified are summarised by section below.

Section	Bus Stop Deficiencies
2	Lack of shelters and supporting facilities with 2 bus stop pairs located at: <ul> <li>Clifton Drive</li> <li>Findlay Avenue</li> </ul>
3	Bus stop on Ocean Drive at Greenmeadows Drive (southern end) with lack of shelter and seating provision and possible need for bay indent
8	Lack of provision for bus stops at the North Haven Public School with shelters and seating





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## 6.4 Walking, Cycling and Public Transport Infrastructure Upgrades

There are a range of walking, cycling and public transport infrastructure upgrades planned along the study corridor. These are predominantly associated with the road network upgrades detailed in Section 3.3. The infrastructure associated with these upgrades typically includes new or upgraded:

- Pedestrian paths and shared paths
- Crossing facilities
- Shared paths
- On-road cycle lanes
- Bus stops.

The key planned walking, cycling and public transport infrastructure upgrades are summarised in Table 6.3.

Section	Planned Upgrade	Transport Mode	
Section 2: Hastings River Drive	<ul> <li>Pathway on both sides of Ocean Drive</li> </ul>	<ul> <li>Walking</li> </ul>	
	<ul> <li>Three crossings located at the Hastings River Drive / Hibbard Drive intersection</li> </ul>	<ul> <li>Walking</li> </ul>	
	<ul> <li>On-road cycle lane at the Hastings River Drive / Aston Street intersection</li> </ul>	<ul> <li>Cycling</li> </ul>	
Section 2: Ocean Drive	<ul> <li>Pathway on the western side of Ocean Drive between Greenmeadows Drive to Emerald Drive</li> </ul>	<ul> <li>Walking</li> </ul>	
	<ul> <li>Bus stops located north of Greenmeadows Crescent, at the Ocean Drive / Dahlsford Drive intersection and Ocean Drive / Pacific Drive intersection</li> </ul>	<ul> <li>Public Transport (Bus)</li> </ul>	
Section 4:	<ul> <li>Pathway from Ernest Street to south of Fiona Crescent</li> </ul>	<ul> <li>Walking</li> </ul>	
Ocean Drive	Two crossings at the Ocean Drive / Fiona Crescent intersection	<ul> <li>Walking</li> </ul>	
Section 8:	n 8: Seven crossings located across Ocean Drive • Walkir		

Table 6.3: Key Planned Walking, Cycling and Public Transport Upgrades

A number of other active transport upgrades were identified in the Pedestrian Access and Mobility Plan 2015 (PAMP) as outlined in Technical Note 1 of the project. Majority of these upgrades have been constructed and now form part of the existing network along the corridor. The existing and planned infrastructure has been mapped and is provided in **Appendix B**.





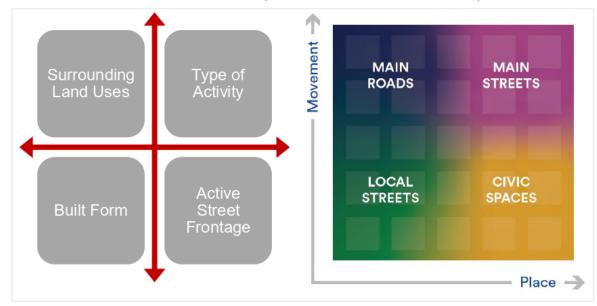
## 7. MOVEMENT AND PLACE

## 7.1 Current Status

The NSW Government Practitioner's Guide to Movement and Place (2020) was used as a guide in assessing the movement and place functions based on the sectional characteristics of the corridor. The Movement and Place function for the corridor was assessed in Technical Note 1 of the project.

This assessment identified that the corridor has a high movement function across its entire length, facilitating movement between the Pacific Highway, Port Macquarie, and the coastal towns along Ocean Drive. The place function varies significantly along the corridor from environmental areas with limited to no activity through to highly urbanised areas with active street frontages. The place function was determined on the key elements shown Figure 7.1

Figure 7.1 also shows how various movement and place combinations are categorised into main roads, main streets, local streets, and civic spaces based on their movement and place function.



## Figure 7.1: Movement and Place – Key Elements

As part of this assessment the 5 x 5 movement and place matrix from the Practitioner's Guide to Movement and Place was adopted to categorise the conflicts in each section of the corridor. Figure 7.2 shows the movement and place conflict assessment for the entire corridor. Conflicts increase as both movement and place functions increase. Category 5E (main streets) has the highest conflict between movement and place, while category 1A (local streets) has the lowest conflict.



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### Figure 7.2: Movement and Place Conflict Summary

As shown above, Section 1, 4 and 7 have minimal movement – place conflicts given these sections do not accommodate urban land uses or generate significant activity. The high movement function is catered for in the built form of the road corridor and does not conflict with any current place function.

Sections 2, 5, 6, 8 and 9 have significant conflicts as these sections accommodate both high movement and high place functions. This conflict consists of high traffic volumes with active street frontages throughout the various town centres that include active and public transport usage. The conflict is derived from these various travel modes (i.e. car, bus, walking and cycling) concentrated in an area and having competing priorities.

Sections 3 and 10 accommodate a primarily high movement function however also front small sections of urbanised areas where the place function increases and as such the conflict increases.

The movement and place conflicts for the corridor have been mapped, based on the 5 x 5 matrix. This conflict map is presented in **Appendix I**.

## 7.2 Future Movement and Place Conflicts

As the corridor's function will change in the future with increased residential and retail growth, its movement and place conflicts will also change. The corridor's future movement and place conflicts has been assessed considering the anticipated key growth areas and future function of each section.



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Table 7.1 shows the movement and place conflict assessment for the entire corridor. Conflicts increase as both movement and place functions increase. Category 5E (main streets) has the highest conflict between movement and place, while category 1A (local streets) has the lowest conflict. The future conflicts assessment considers changes in land use that will impact future movement and place functions of the corridor.

Section	Movement and Place Conflict Category		Comment
	2020	2040	
1	No change		High movement function remains consistent with traffic current performance
2	No change		Movement and place function remains consistent with current performance
3	4B	4C	Slight increase in place function at key locations
4	No change		High movement function remains consistent with traffic current performance
5	4B	4D & 4C	Increase in place function at key locations based on Area 14 development
6	4C	4D	Increase in conflict due to traffic and urban growth
7	No change		High movement function remains consistent with current performance
8	4C	4E	Increase in conflict due to traffic and urban growth
9	4B	4D	Increase in conflict due to Area 15 development
10	5A	4B	Increase in conflict due to traffic and urban growth

Table 7.1:	Movement and Place Conflict Change Summary 2020 - 2030
	Movement and Flace Connet Change Summary 2020 - 2050

As shown above the movement and place conflict assessment is based on a broad spectrum and therefore the changes within the corridor do not significantly impact the conflict assessment.

Key areas where the movement and place conflict has changed based on future growth estimates includes section 5, 6, 8 & 9.

The future movement and place conflicts for the corridor have been mapped, based on the  $5 \times 5$  matrix. This conflict map is presented in **Appendix I.** 





## 8. SECTION IMPROVEMENTS

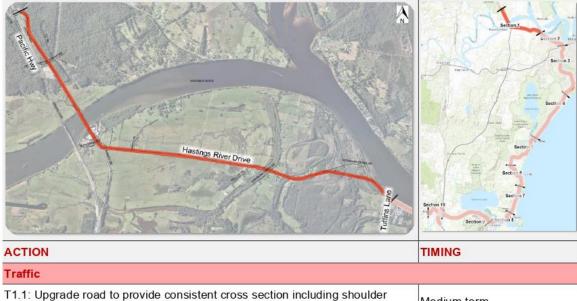
## 8.1 Overview

The proposed actions for each section of the corridor are provided below.

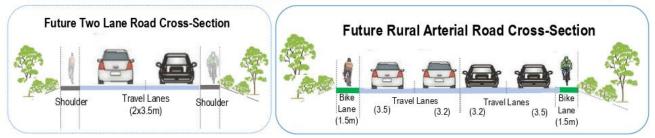
The timing and priority of each action is categorised into short (1-10 years), medium (11-20 years) and long (20+ years) which considers land use growth along the corridor.

A number of actions are considered to be signature projects that are earmarked by Council to be of key significant in the improvement of the corridor in terms of safety and efficiency specifically for accommodating future growth. *Signature Projects* are also highlighted in the following sections.

## 8.2 Section 1: Hastings River Drive (Pacific Highway to Tuffins Lane)



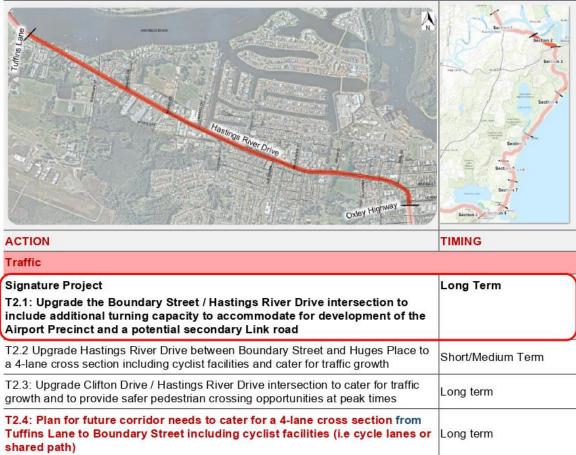
improvements to cater for on-road cycling and informal hail'n'ride bus services	Medium term
T1.2: Plan for upgrade to four-lane cross section including bridge realignments to cater for future traffic volumes	Long term
Signature Project T1.3: Upgrade the Hastings River Drive / Fernbank Creek Road intersection to improve safety	Short term
T1.4: Maintain pavement and bridge condition	Short term





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# 8.3 Section 2: Port Macquarie: Hastings River Drive (Tuffins Lane to Gordon Street)

 Tuffins Lane to Boundary Street including cyclist facilities (i.e cycle lanes or shared path)
 Long term

 T2.5: Upgrade the Aston Street / Hastings River Drive to a signalised intersection including additional turning capacity
 Long term

 T2.6: Upgrade the Oxley Highway / Hastings River Drive / Gordon Street / Ocean Drive intersection to increase turning capacity
 Short term

 T2.7: Schedule maintenance to maintain the pavement and corridor infrastructure
 Short term

 Active Transport
 Image: Construct of the construction of the

A2.1: Provide a shared path on one side of the corridor through Port Macquarie by upgrading the current path

#### Public Transport

P2.1: Formalise and improve bus stops to provide consistent high-quality facilities ILong term

#### Future Urban Arterial Road Cross-Section





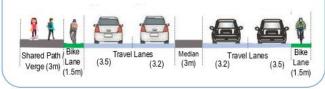
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When the second se	Section 10
ACTION	TIMING
Traffic	
T3.1: Upgrade Ocean Drive to a four-lane divided cross section on between Gordon Street to Denehurst Place	Long term
T3.2: Upgrade the Ocean Drive / Lake Road to increase turning capacity	Long term
T3.3: Upgrade the Ocean Drive / Green Meadows Drive to improve safety	Long term
Signature Project T3.4: Upgrade Ocean Drive to a four-lane cross section between Greenmeadows Drive (south) to Matthew Flinders Drive including the following intersections: • Ocean Drive / Crestwood Drive / Dahlsford Drive • Ocean Drive / Pacific Drive / Jonas Absalom Drive • Ocean Drive / Matthew Flinders Drive / Emerald Drive	Medium term 2026 - 2030
T3.5: Upgrade the Ocean Drive /Links Crescent / Elkhorn Grove intersection to improve safety	Long term
T3.6: Maintain pavement and bridge condition	Short term
Active Transport	
A3.1: Provide appropriate crossings at key locations	Short term
A3.2: Provide a shared path on one side of the corridor	Short term
Public Transport	
P3.1: Plan for the upgrade and potential relocation of bus stops north of Greenmeadows Crescent, at the Ocean Drive / Dahlsford Drive intersection and Ocean Drive / Pacific Drive intersection	Long term

## 8.4 Section 3: Ocean Drive (Gordon Street to Elkhorn Grove)

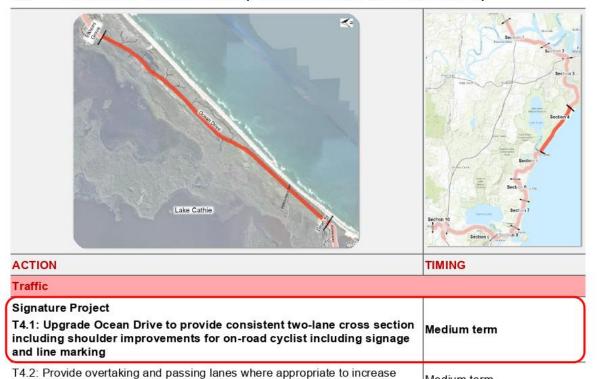






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Medium term

Medium term

Long term

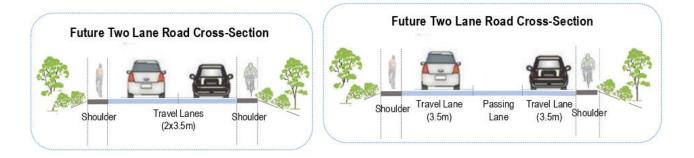
Long term

#### 8.5 Section 4: Ocean Drive (Elkhorn Grove to Dirah Street)

A4.1: Complete shoulder improvements and widening for on-road cycle lanes

A4.2: Investigate opportunities for an off-road path connecting Port Macquarie

P4.1: Provide suitable lane widths and curve widening to cater for buses





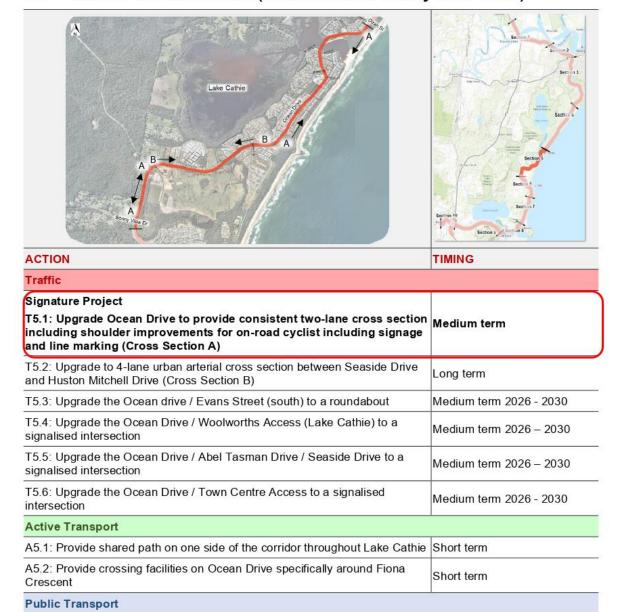
traffic flow

**Active Transport** 

to Lake Cathie **Public Transport** 

in line with road cross section upgrades





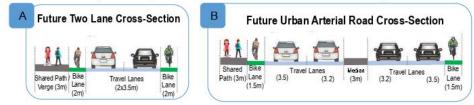
## 8.6 Section 5: Ocean Drive (Dirah Street to Bonny View Drive)

P5.2: Provide suitable lane widths and curve widening to cater for buses Long term
It is noted that after further investigations and detailed design Council may consider the ability to

Long term

implement an off-road cycle facility to accommodate for the different user gro

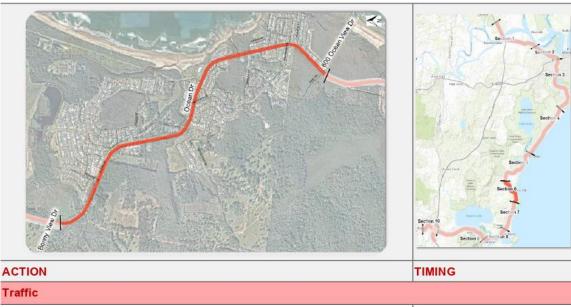
P5.1: Formalise and upgrade bus stops to cater for school bus interchanges





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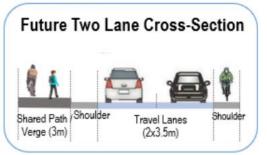


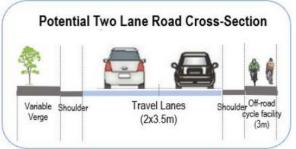


#### Section 6: Ocean Drive (Bonny View Drive to 800 Ocean Drive) 8.7

T6.1: Upgrade the Ocean Drive / McGilvray Road intersection to a roundabout	Medium term	
T6.2: Upgrade Ocean Drive to provide consistent two-lane cross section, including shoulder improvements for cyclist including signage and line marking	Medium term	
T6.3: Maintain road safety by clearing overgrown roadside vegetation and other roadside hazards	Short term	
Active Transport		
A6.1: Provide shared path on one side of Ocean Drive through Bonny Hills	Short term	
Signature Project A6.2: Provide safe crossings at: Beach Street / Ocean Drive Fronting the Reflections Holiday Park Fronting the top shop	Short term	
Public Transport		
P6.1: Formalise and upgrade bus stops to provide consistent and frequent stops along Ocean Drive	Long term	

It is noted that after further investigations and detailed design Council may consider the ability to implement an off-road cycle facility to accommodate for the different user groups. A potential cross section is shown below.

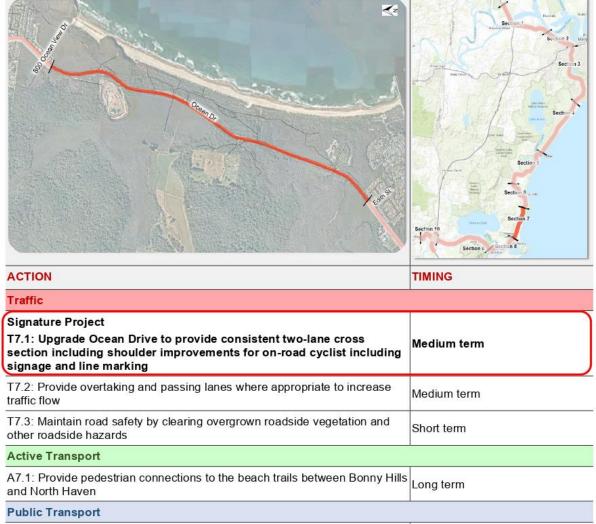






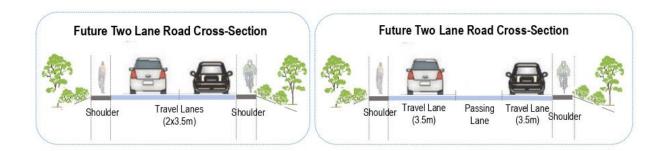
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## 8.8 Section 7: Ocean Drive (800 Ocean Drive to Edith Street)

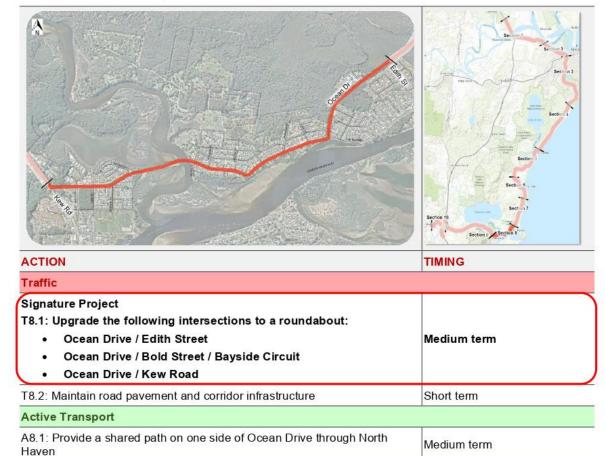
P7.1: Provide suitable lane widths and curve widening to cater for buses Long term





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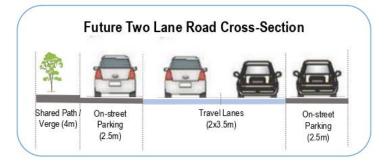


## 8.9 Section 8: Ocean Drive (Edith Street to Kew Road/Ocean Drive intersection)

Public Transport
P8.1: Formalise and upgrade bus stops to provide consistent and frequent

stops along Ocean Drive

Long term







#### Section 9: Ocean Drive (Kew Road / Ocean Drive intersection to 8.10 **Pacific Highway)**



#### ACTION

Traffic	
T9.1: Upgrade the Ocean Drive / Sirius Drive to a signalised intersection	Short term 2021-2025
T9.2: Upgrade the Ocean Drive / Lake Ridge Drive to a signalised intersection	Short term 2026-2030
T9.3: Upgrade the Ocean Drive / Mountain View Road intersection to a roundabout	Medium term
T9.4: Maintain road pavement and corridor infrastructure	Short term
Active Transport	
Signature Project A9.1: Provide a shared path on one side of Ocean Drive	Medium term

#### **Public Transport**

P9.1: Formalise and upgrade bus stops to provide consistent and frequent Long term stops along Ocean Drive

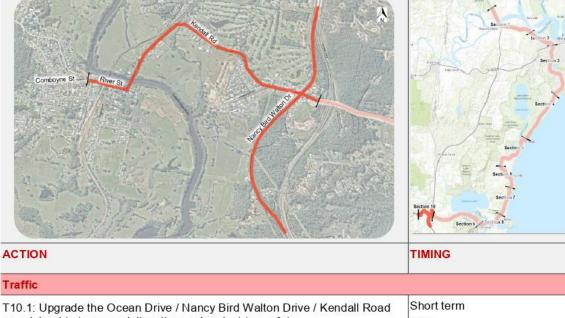
> Future Two Lane Road Cross-Section Shared Path Shoulder **Travel Lanes** Shoulder (3m) (2x3.5m)







## 8.11 Section 10: Kendall Road (Pacific Highway interchange to Comboyne Street)



T10.1: Upgrade the Ocean Drive / Nancy Bird Walton Drive / Kendall Road roundabout to improve delineation and pedestrian safety	Short term 2021	
T10.2: Upgrade Ocean Drive to provide consistent two-lane cross section including shoulder improvements for on-road cyclist including signage and line marking	Medium term	
T10.3: Maintain road pavement and corridor infrastructure	Short term	
Active Transport		
A10.1: Provide a shared path on one side of the corridor between Kew	Medium term	
A10.1: Provide a shared path on one side of the corridor between Kew and Kendall		
Signature Project A10.1: Provide a shared path on one side of the corridor between Kew and Kendall A10.2: Provide safe pedestrian crossing opportunities in Kew and Kendall	Medium term Medium term	
A10.1: Provide a shared path on one side of the corridor between Kew and Kendall		





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## 9. COMMUNITY CONSULTATION

The community and stakeholder engagement approach was designed to ensure key stakeholders, community groups, and interested local community members were given opportunities to provide direct input to the draft corridor strategy at key points in the process.

The community and stakeholder engagement process consisted of two phases:

- Phase One Corridor Review, Description and Vision
- Phase Two Improvement Strategies and Actions.

Community and stakeholder input captured during initial phase of engagement fed into project team's work to define the vision, objectives, and targets for the corridor. The second phase of the engagement captured input to inform the draft strategies and actions.

A third phase of engagement is being delivered by Council, as part of public exhibition on this draft Corridor Strategy.

During both phases of the community and stakeholder engagement consistent feedback emerged.

Analysis of the feedback received during the second phase of engagement indicated that there were a range of issues important to community members and key stakeholders. These consistent issues, or key themes, that were mentioned across all sections of the corridor are illustrated below:

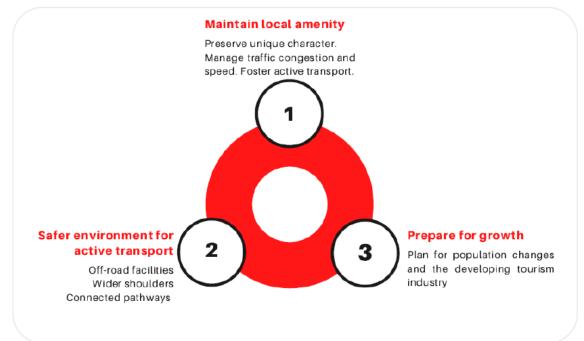


Figure 9.1: Key Themes from Engagement







## **10. NEXT STEPS: FROM STRATEGY TO** IMPLEMENTATION

As part of Council budget approximately \$36M of its \$85M capital works program is spent for roads and road associated infrastructure projects annually. This budget is to cover not only this corridor but an overall road infrastructure network with over 1,300kms of sealed and unsealed roads and more than 220kms of footpaths.

Specific projects and improvements out of this Strategy will need to be considered for prioritisation along with a number of other transport improvements identified out of Regional Integrated Transport Strategy and Port Network Transport Network Planning.

Council projects are identified as part a 4-year delivery program which represents what the Council aims to deliver and serves as a guide when developing annual Operational Plans. The last 4-year delivery program (2017-2021) is due for review and update so this Strategy and work on a Regional Integrated Transport Strategy and Port Macquarie Transport Network Planning will be incorporated as part of this next adopted delivery program.

Further, there may be opportunities to seek additional funding from various sources to complete bring forward projects in the implementation plan/program or improvement specific treatments (i.e. off-road cycle tracks as opposed to shoulder widening improvements). For example, the NSW State Government has a Walking and Cycling Program whereby local government authorities can make submissions to allow for jointed funded improvements for shared paths, footpaths, and cycle lanes.

The below tables highlights the high-level strategic cost estimate by works program type and section. To note these are ballpark estimates to inform program budget planning and would require concept designs level investigation to provide more reliable estimates. These do not include maintenance works which will need to be considered as part of asset management.

ACTION		PROGRAM BUDGET ESTIMATE	
Traffic and Roads Improvements			
	Short Term (to 2025)	~\$11.5 Million	
	Medium Term (2026-2030)	~\$44.7 Million	
-00-	Long Term (2030-2040)	~\$12.7 Million	
Active Transport Imp	Active Transport Improvements		
	Short Term (to 2025)	~\$13.7 Million	
	Medium Term (2026-2030)	~\$16.9 Million	
ofo Y	Long Term (2030-2040)	~\$0.9 Million	
Public Transport Imp	Public Transport Improvements		
	Long Term (2030+)	~\$2.5 Million	

### Table 10.1: Actions Program Cost Estimates by Time Frame







### Table 10.2: Program Costs Estimates by Section

SECTION	TOTAL	SHORT TERM	MEDIUM TERM	LONG TERM
1: Hastings River: Pacific Highway Interchange to southern side of Tuffins Lane	\$2.7 Million	-	\$2,700,000.00	-
2: Port Macquarie: Southern side of Tuffins Lane to southern side of the Hastings River Drive / Oxley Highway intersection	\$9.3 Million	\$2,800,000.00	\$2,100,000.00	\$4,400,000.00
3: Port Macquarie: Southern side of Oxley Highway to southern side of Elkhorn Grove	\$19.1 Million	\$5,000,000.00	\$10,100,000.00	\$4,000,000.00
4: Port Macquarie to Lake Cathie: Southern side of Elkhorn Grove to southern side of Dirah Street	\$6.4 Million	-	\$6,100,000.00	\$300,000.00
5: Lake Cathie: Southern side of Dirah Street to southern side of Bonny View Drive	\$18.8 Million	\$3,400,000.00	\$10,200,000.00	\$5,200,000.00
6: Bonny Hills: Southern side of Bonny View Drive to southern side of no. 800 Ocean Drive	\$12.7 Million	\$3,500,000.00	\$9,000,000.00	\$200,000.00
7: Bonny Hills to North Haven: Southern side of no. 800 Ocean Drive to northern side of Edith Street	\$4.5 Million	-	\$3,300,000.00	\$1,200,000.00
8: North Haven to Laurieton: Southern side of no. 800 Ocean Drive to western side of Kew Road / Ocean Drive intersection	\$8.1 Million	-	\$7,800,000.00	\$300,000.00
9: Laurieton to Kew: Northern side of Kew Road / Ocean Drive intersection to eastern side of Pacific Highway interchange	\$15.8 Million	\$9,400,000.00	\$6,100,000.00	\$300,000.00
<b>10. Kew to Kendall:</b> Eastern side of Pacific Highway interchange to Comboyne Street / Graham Street	\$5.5 Million	\$1,100,000.00	\$4,200,000.00	\$200,000.00





ID	Intersection / Road Section	Upgrade Details	Anticipated Completion Year	Drawing Reference
001	Hastings River Drive / Fernbank Creek Road	Black Spot Intersection	N/A	N/A
002	Hastings River Drive / Boundary Street	Four lanes on Boundary Street southern leg. Four lanes on Hastings River Drive eastern leg.	Ву 2030	Boundary Street Upgrade (concept - complete, detailed - current) & Hastings River Drive Upgrade (detailed) designs. (13/01/2020)
003	Hastings River Drive / Hughes Place	Dual lane approach and departure to the western side.	By 2030	Hastings River Drive Upgrade – Hughes Place to Boundary Street. (24/09/2020)
004	Hastings River Drive / Aston Street	Upgrade to signalised intersection. Left-turn pocket on western approach, right-turn pocket on easter approach. Four lanes on Aston Street	Ву 2030	Hastings River Drive & Aston Street Traffic Signals (01/06/2016)
005	Oxley Highway / Hastings River Drive / Gordon Street / Ocean Drive	Extension of the right turn lane on the eastern leg.	2021	Gordon Street Drainage Mitigation, Pavement Rehabilitation & Water Main Rejuvenation Works (30/10/2020)
006	Ocean Drive: Gordon Street to Denehurst Place	Upgrade to four lane divided road standard required (as per adjacent section to south)	N/A	N/A
007	Ocean Drive / Lake Road	Right turn pocket extension (both lanes) on western approach	N/A	Lake Road at Ocean Drive extension of eastbound right turn lanes
008	Ocean Drive / Greenmeadows Drive (south)	Blackspot intersection due to high-speed environment, minimal gaps for turning movements and merging manoeuvres.	N/A	N/A
009	Ocean Drive: Greenmeadows Drive (south) to Matthew Flinders Drive	Four lane upgrade of Ocean Drive upgrade between Greenmeadows Drive (south) and Matthew Flinders Drive.	2026-2030	Ocean Drive upgrade between Greenmeadows Drive (south) and Matthew Flinders Drive detailed design. (Design - ODU- DD-001-DWG-04 IFC Drawings Part 1 Civil - FINAL DESIGN - 2017 05 17.PDF)
010	Ocean Drive / Crestwood Drive / Dahlsford Drive	Four lane upgrade of Ocean Drive	2026-2030	See above.
011	Ocean Drive / Pacific Drive / Jonas Absalom Drive	Four lane upgrade of Ocean Drive	2026-2030	See above.
012	Ocean Drive / Matthew Flinders Drive / Emerald Drive	Four lane upgrade of Ocean Drive	2026-2030	See above.
013	Ocean Drive / Links Cres / Elkhorn Grove	Blackspot intersection	N/A	N/A
014	Ocean Drive / Evans Street (south)	Upgrade to roundabout	2026-2030	Ocean Drive / Evans Street (south) roundabout concept design. (Concepts Designs Key Intersections_MR600 & 538)
015	Ocean Drive: Ernest Street to Miala Street	Ocean Drive upgrade between Ernest Street and Miala Street (median divided two lane cross section with bicycle lanes and various intersection upgrades)	2026-2030	Ocean Drive Upgrade Lake Cathie (Revision G)

## Appendix A: Planned Road Network Upgrades



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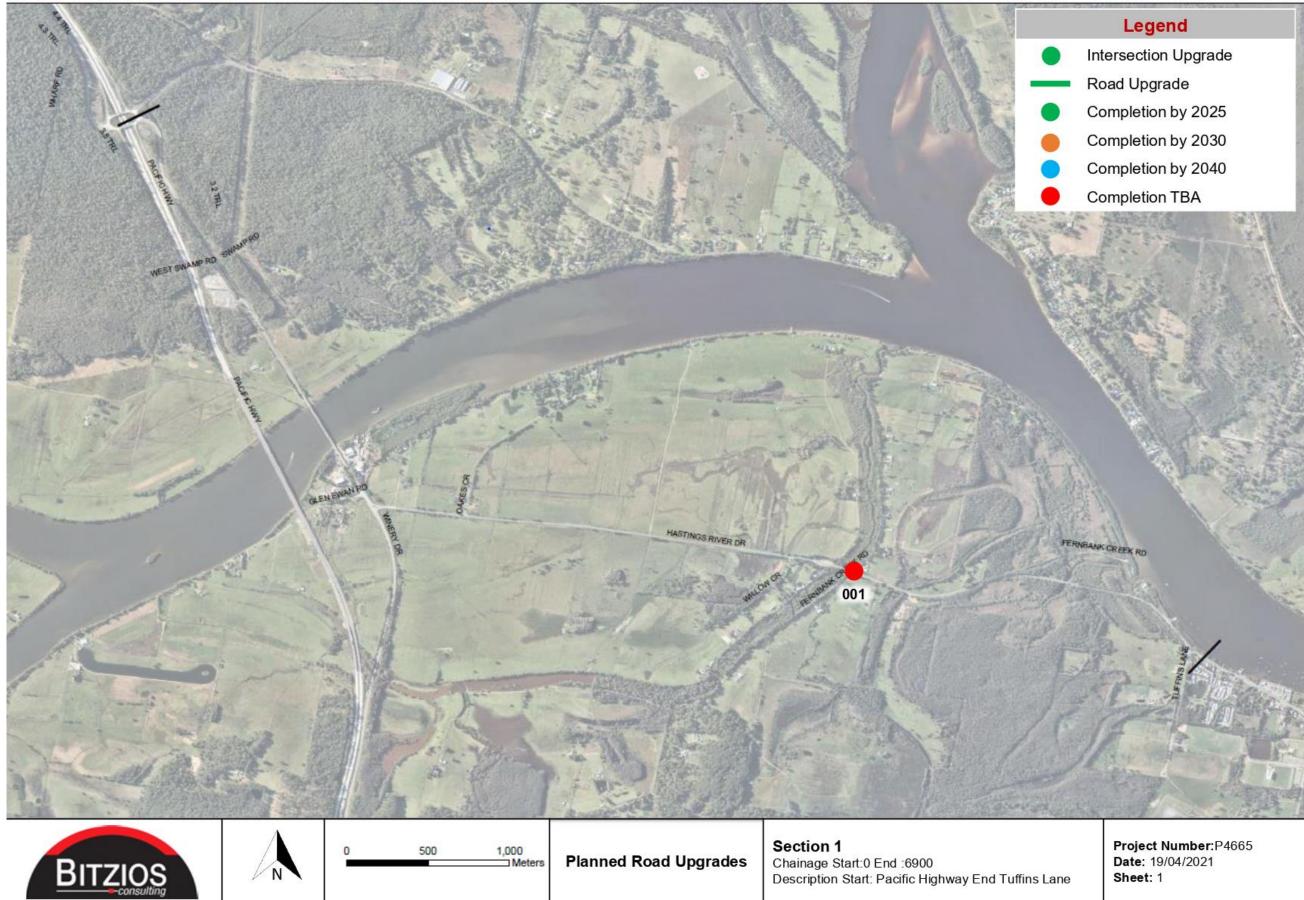


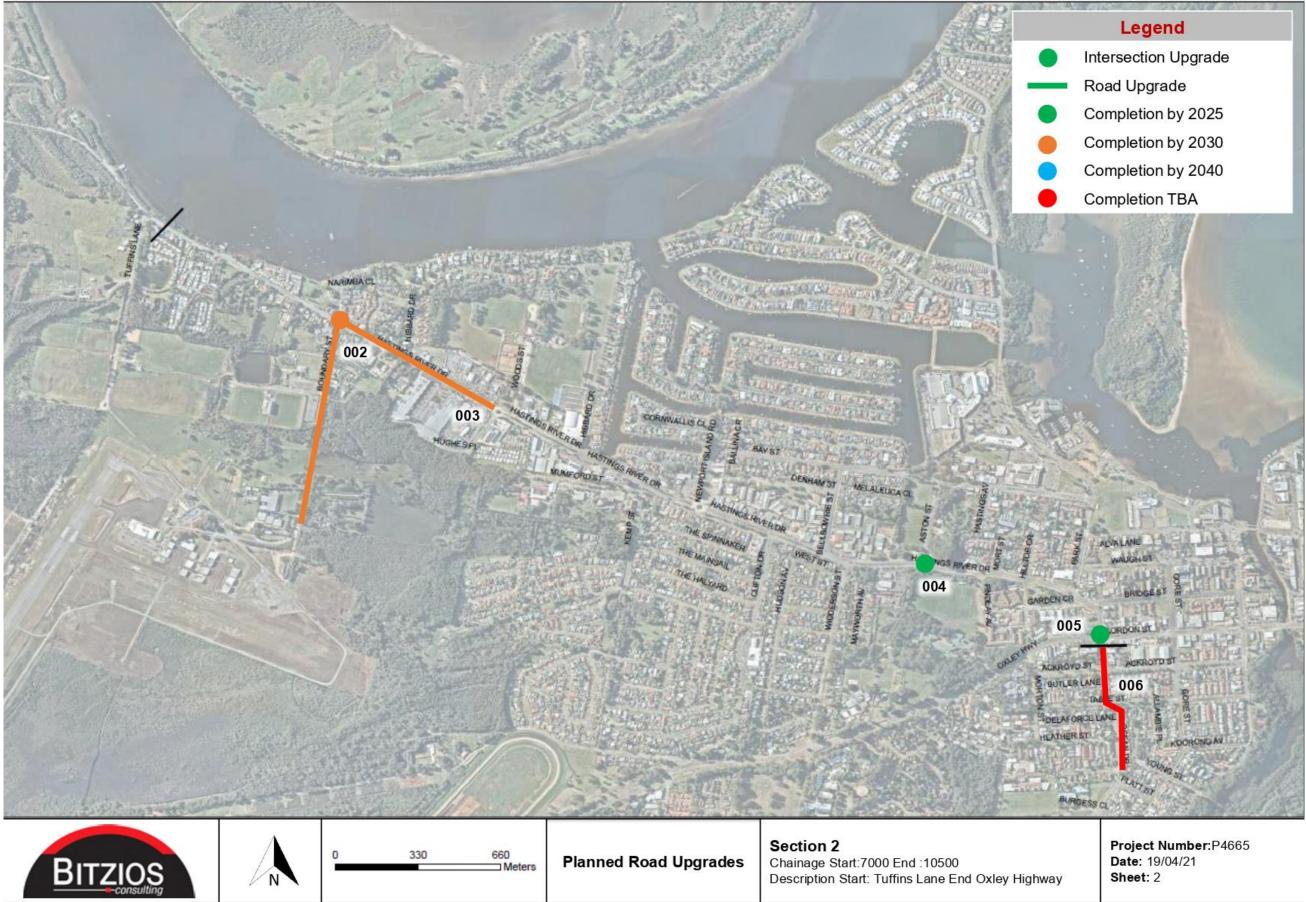
ID	Intersection / Road Section	Upgrade Details	Anticipated Completion Year	Drawing Reference
016	Ocean Drive / Woolworths Access (Lake Cathie)	Upgrade to traffic signals	2026-2030	Ocean Drive Upgrade Lake Cathie (Revision G)
017	Ocean Drive: Abel Tasman Drive to Bonny View Drive	Various upgrades including cycle lanes and edge treatments	N/A	Section 94 Local Roads Contributions Plan - Areas 13, 14 & 15.
018	Ocean Drive / Abel Tasman Drive / Seaside Drive	Upgrade to traffic signals	2026-2030	Ocean Drive & Abel Tasman Drive Intersection Ultimate Overlay
019	Ocean Drive / Town Centre Access	See plans for Ocean Drive traffic signals at Town Centre Access.	2026-2030	Section 94 Local Roads Contributions Plan - Areas 13, 14 & 15.
020	Ocean Drive / Houston Mitchell Drive	Eastern approach to be opened to traffic in 2021.	2021	N/A
021	Ocean Drive / McGilvray Road	Upgrade to roundabout	N∕A	Ocean Drive / McGilvray Road roundabout concept design. (Concepts Designs Key Intersections_MR600 & 538)
022	Ocean Drive / Beach Street (south)	Blackspot intersection	N/A	N/A
023	Ocean Drive / Panorama Drive / Third Ave	Channelisation required	N/A	N/A
024	Ocean Drive / Edith Street	Upgrade to roundabout	2026-2030	Ocean Dr & Edith St, North Haven Roundabout Sketch Layout
025	Ocean Drive / Bold Street / Bayside Circuit	Upgrade to roundabout	2026-2030	Ocean Drive/Bold Street, Laurieton Roundabout Sketch Plan
026	Ocean Drive / Kew Road	Upgrade to roundabout	2026-2030	Ocean Drive/ Kew Road, Laurieton 50km/H Roundabout Sketch Plan
027	Ocean Drive / Sirius Drive	Upgrade to signalised intersection.	2021-2025	Ocean Drive / Sirius Drive Traffic Signals Sketch Layout
028	Ocean Drive: Sirius Drive to Pacific Highway	Existing corridor upgrades	2031-2035	N/A
029	Ocean Drive / Mountain View Road	Upgrade to roundabout	N/A	Section 94 Local Roads Contributions Plan - Areas 13, 14 & 15.
030	Ocean Drive / Lake Ridge Drive	Upgrade to traffic signals	2026-2030	Section 94 Local Roads Contributions Plan - Areas 13, 14 & 15.
031	Ocean Drive / Nancy Bird Walton Drive / Kendall Road	Upgrade of existing roundabout	2021	Kew Main Street Plan (16167- LD-DR-C-Combined)
032	Graham Street: River Street to Comboyne Street	General improvements	N/A	Kendall Main Street Plan
033	Graham Street / Comboyne Street	See plans for intersection upgrade	2026-2030	Graham St / Comboyne St Masterplan Concept Sketch

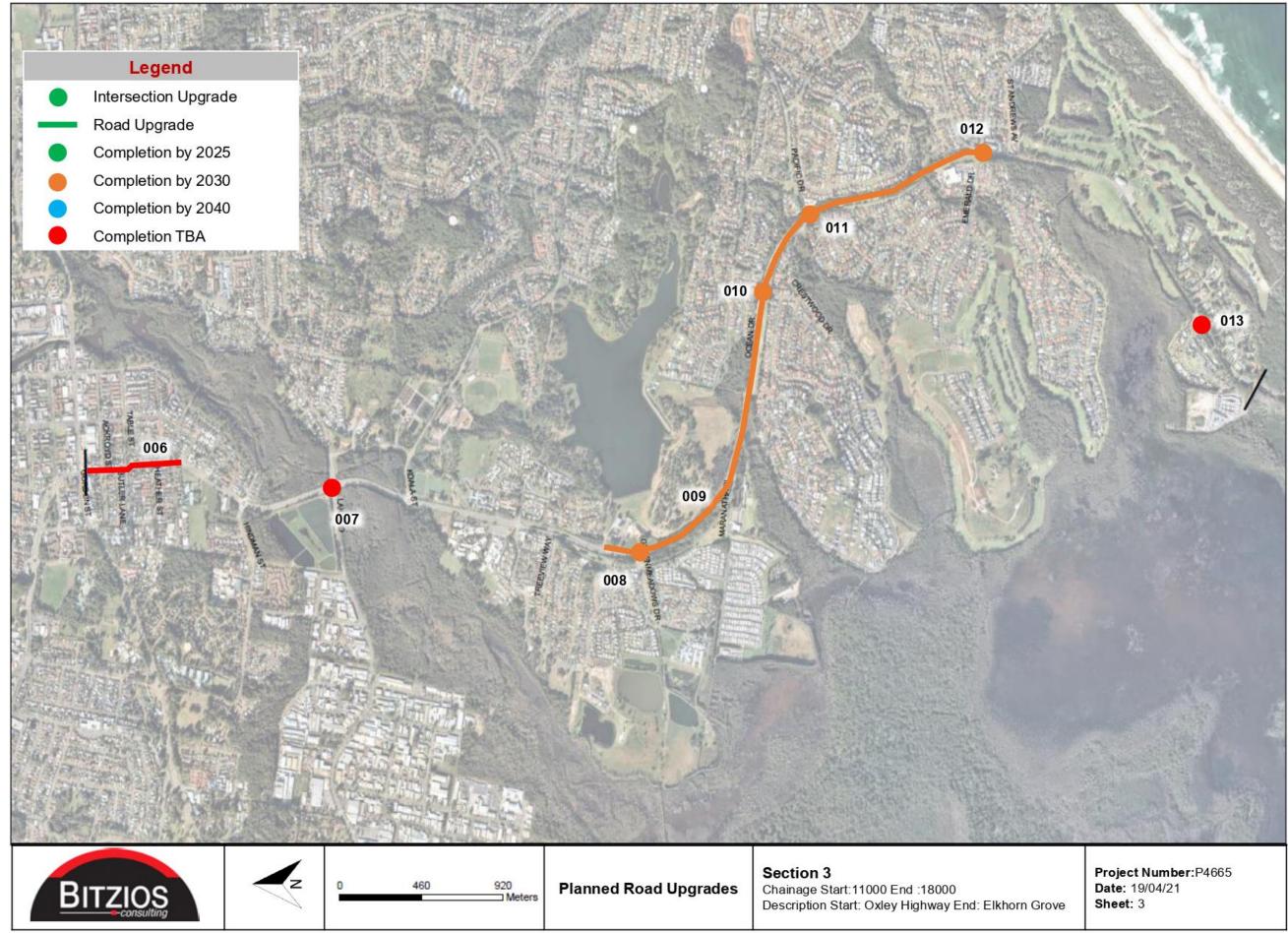


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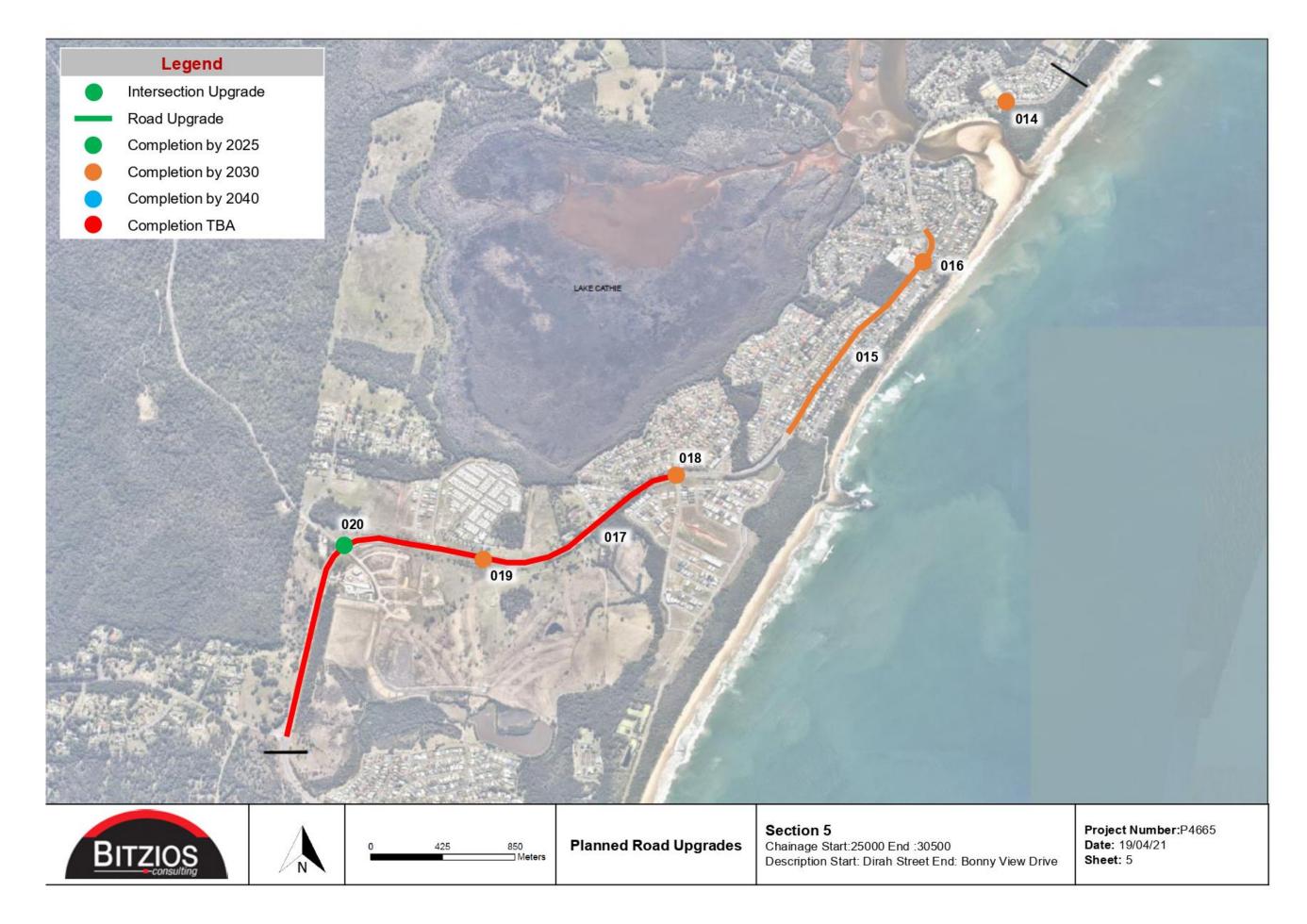


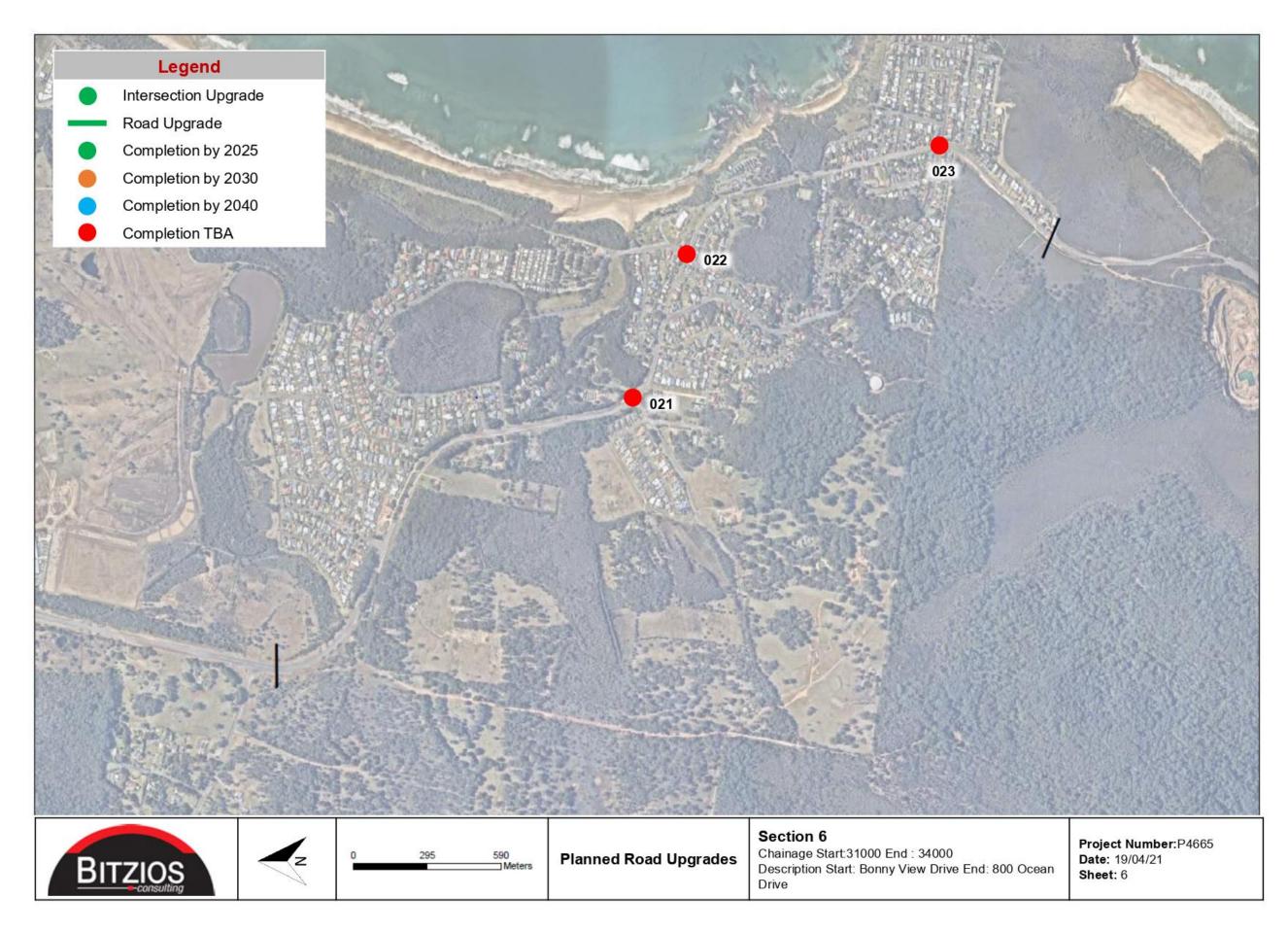
### Legend

Intersection Upgrade Road Upgrade Completion by 2025 Completion by 2030 Completion by 2040

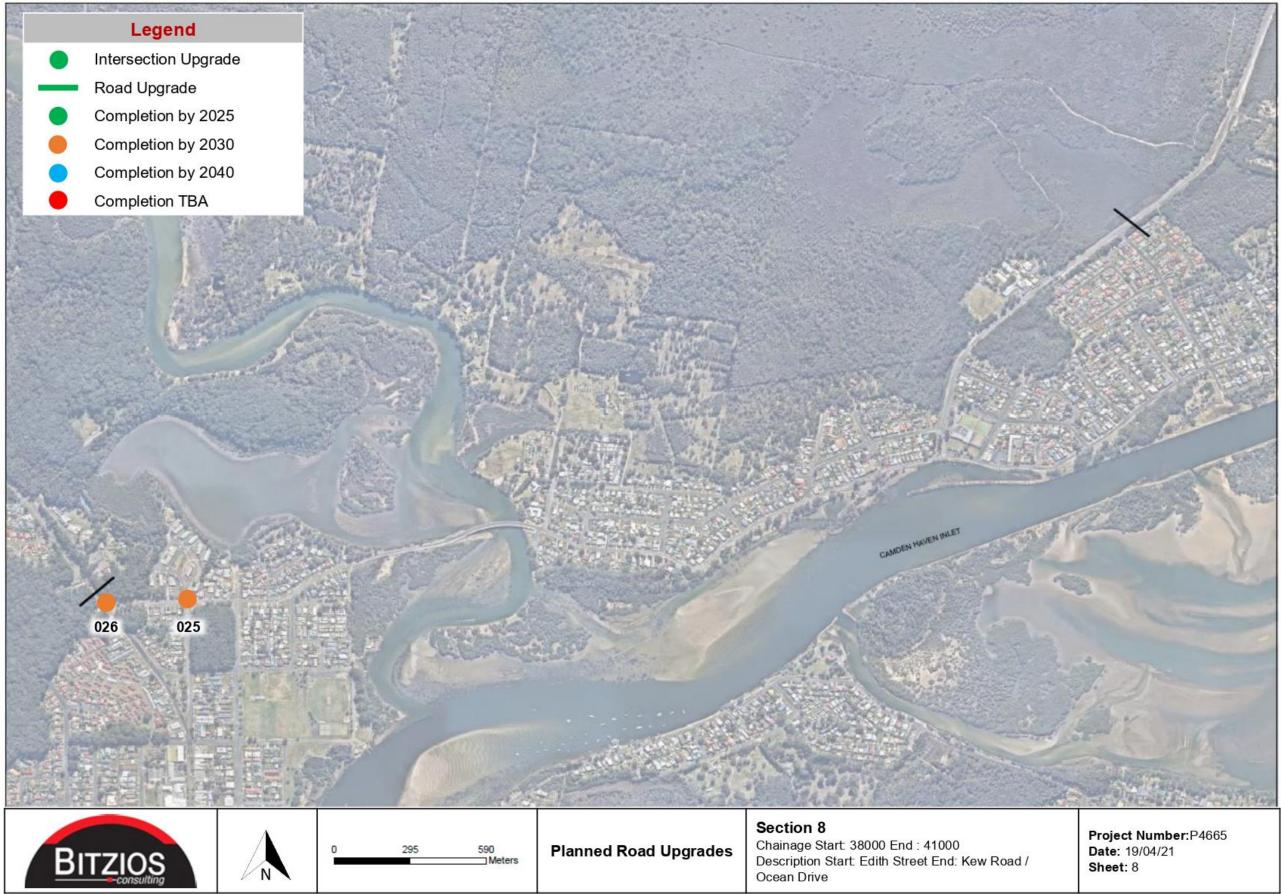


Project Number:P4665 Date: 19/04/21 Sheet: 4













Legend Intersection Upgrade Road Upgrade Completion by 2025 Completion by 2030 Completion by 2040 Completion TBA

Project Number:P4665 Date: 19/04/21 Sheet: 10

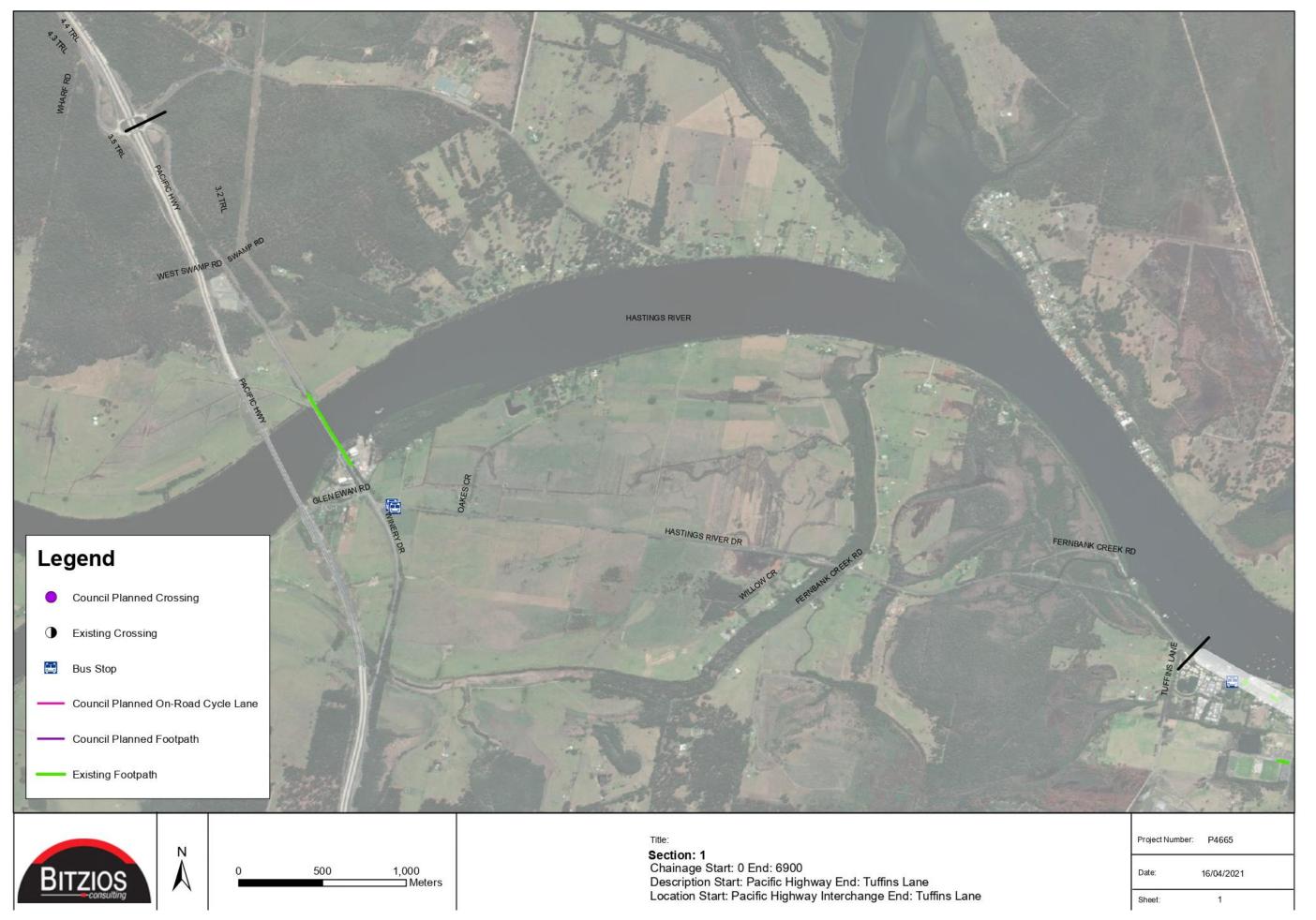


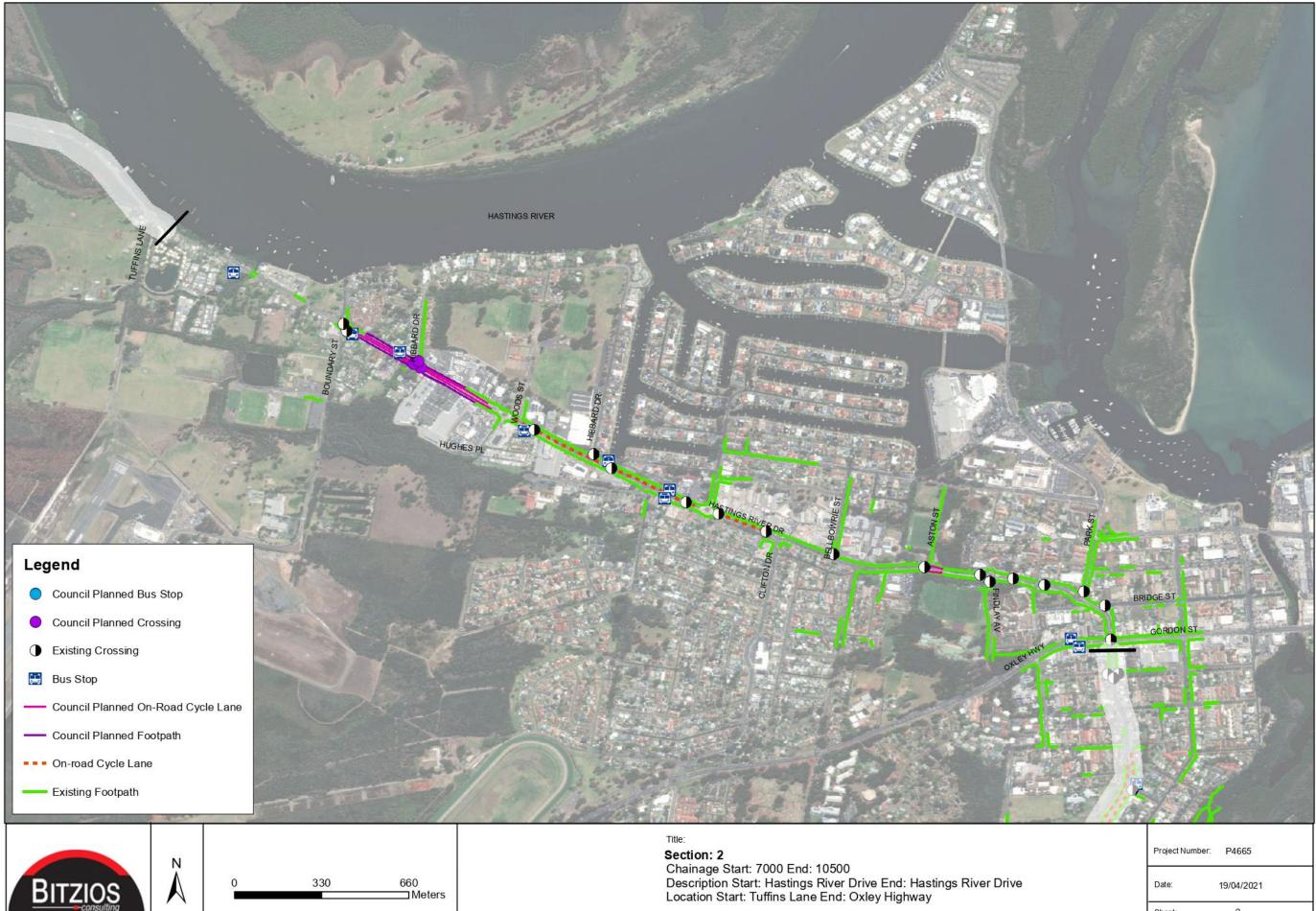
Appendix B: Existing and Planned Infrastructure



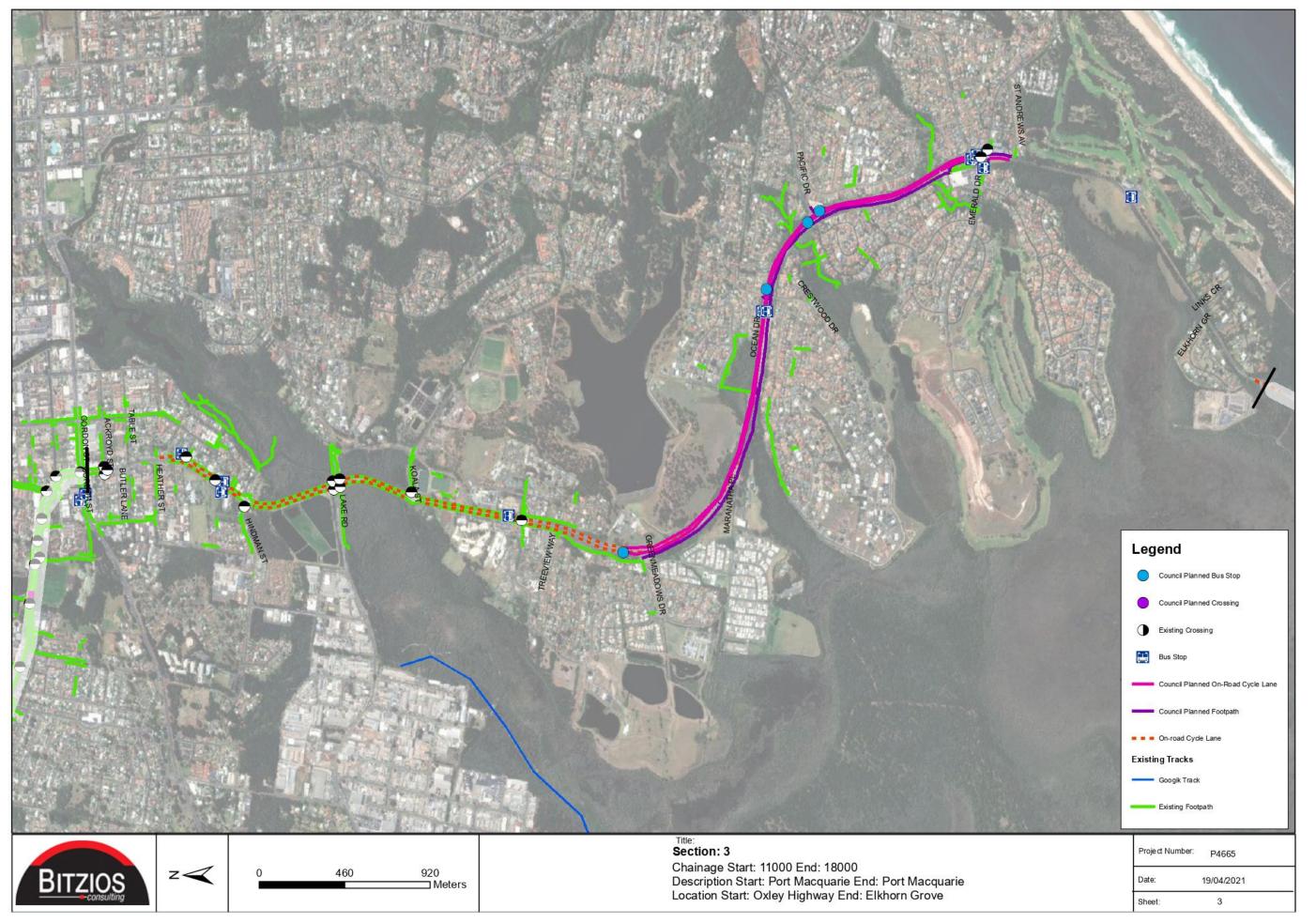
MR538 and MR600 Corridor Strategy: Draft Corridor Strategy Report Project: P4665 Version: 001







Project Number:	P4665	
Date:	19/04/2021	
Sheet:	2	





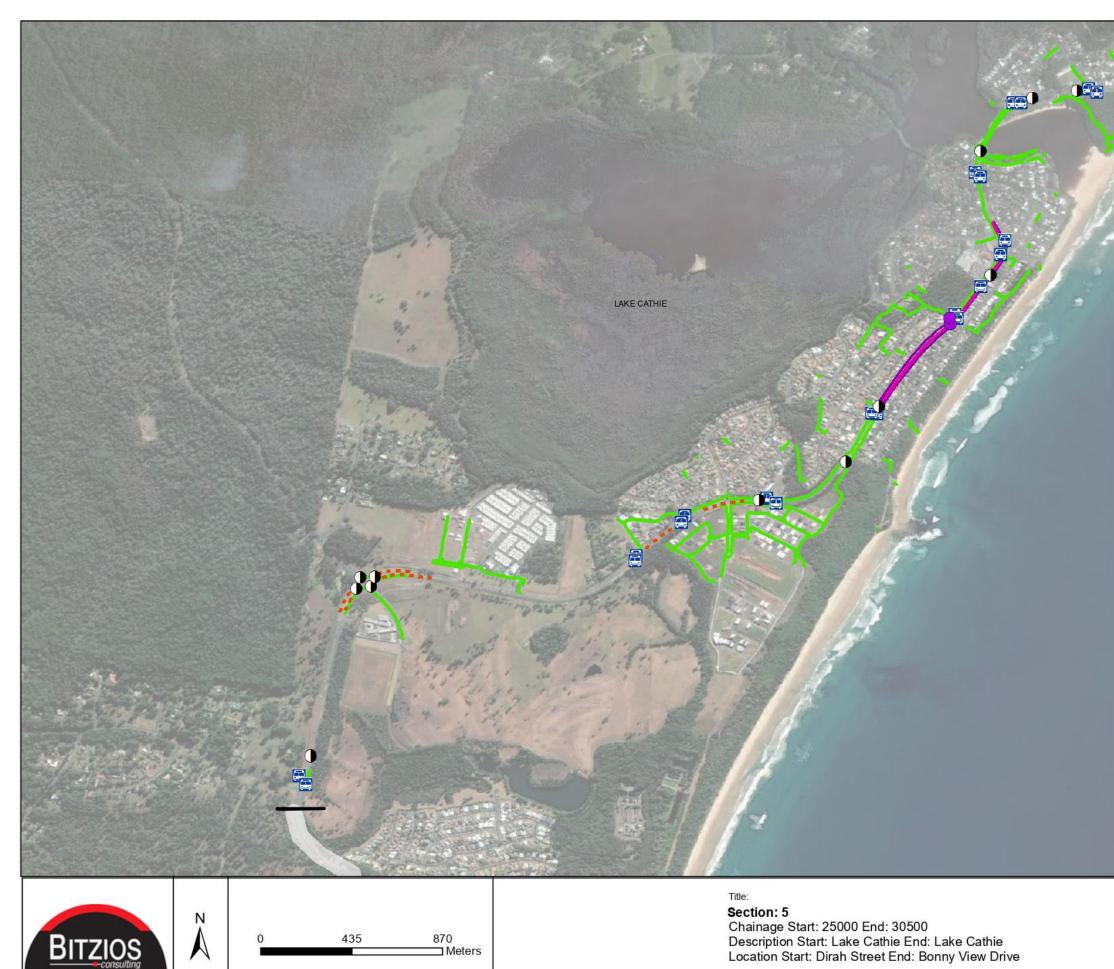


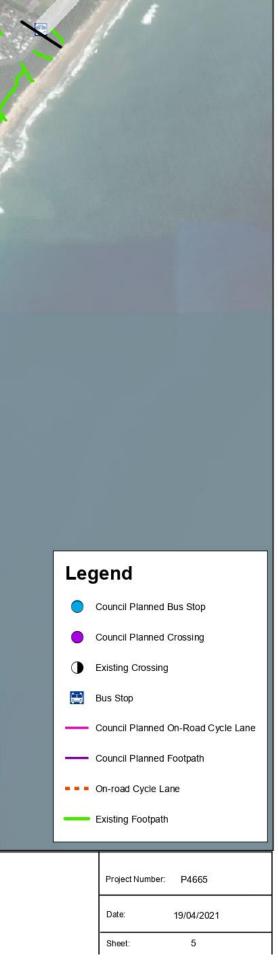


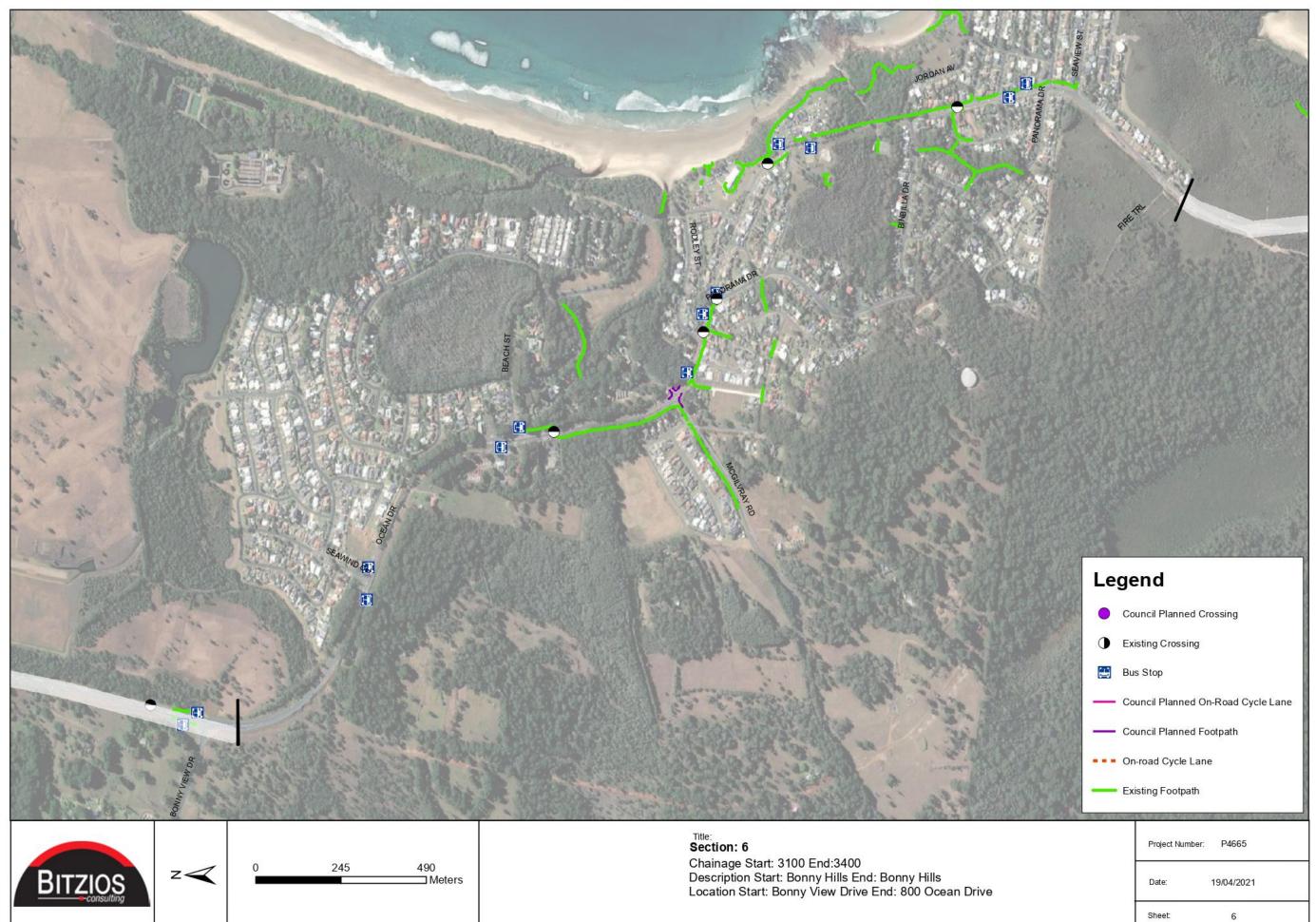
Title: **Section: 4** Chainage Start: 18500 End: 24500 Description Start: Port Macquarie End: Lake Cathie Location Start: Elkhorn Grove End: Dirah Street

### ORDINARY COUNCIL 19/05/2022

Project Num	ber: P4665	
Date:	19/04/2021	
Sheet:	4	

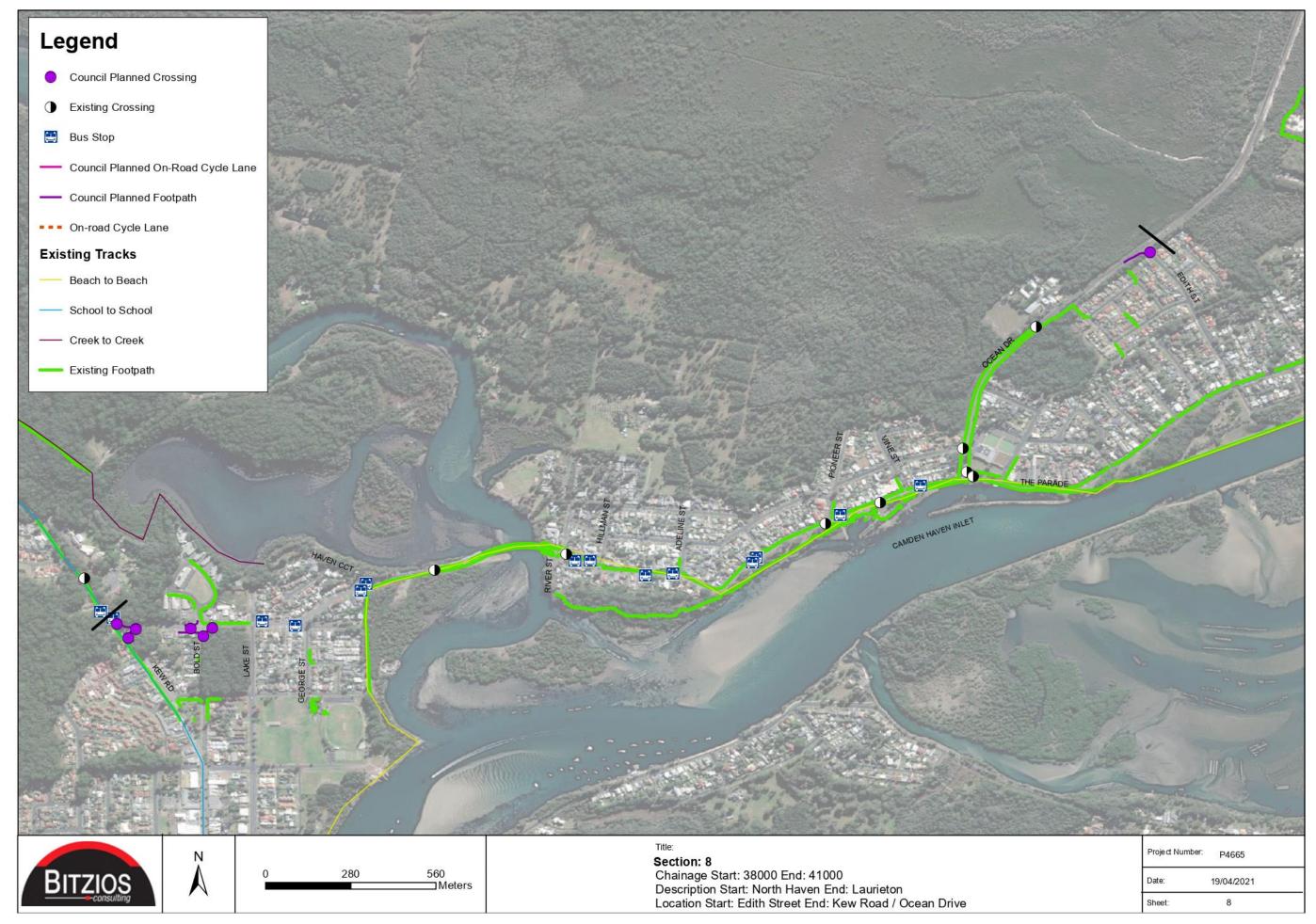


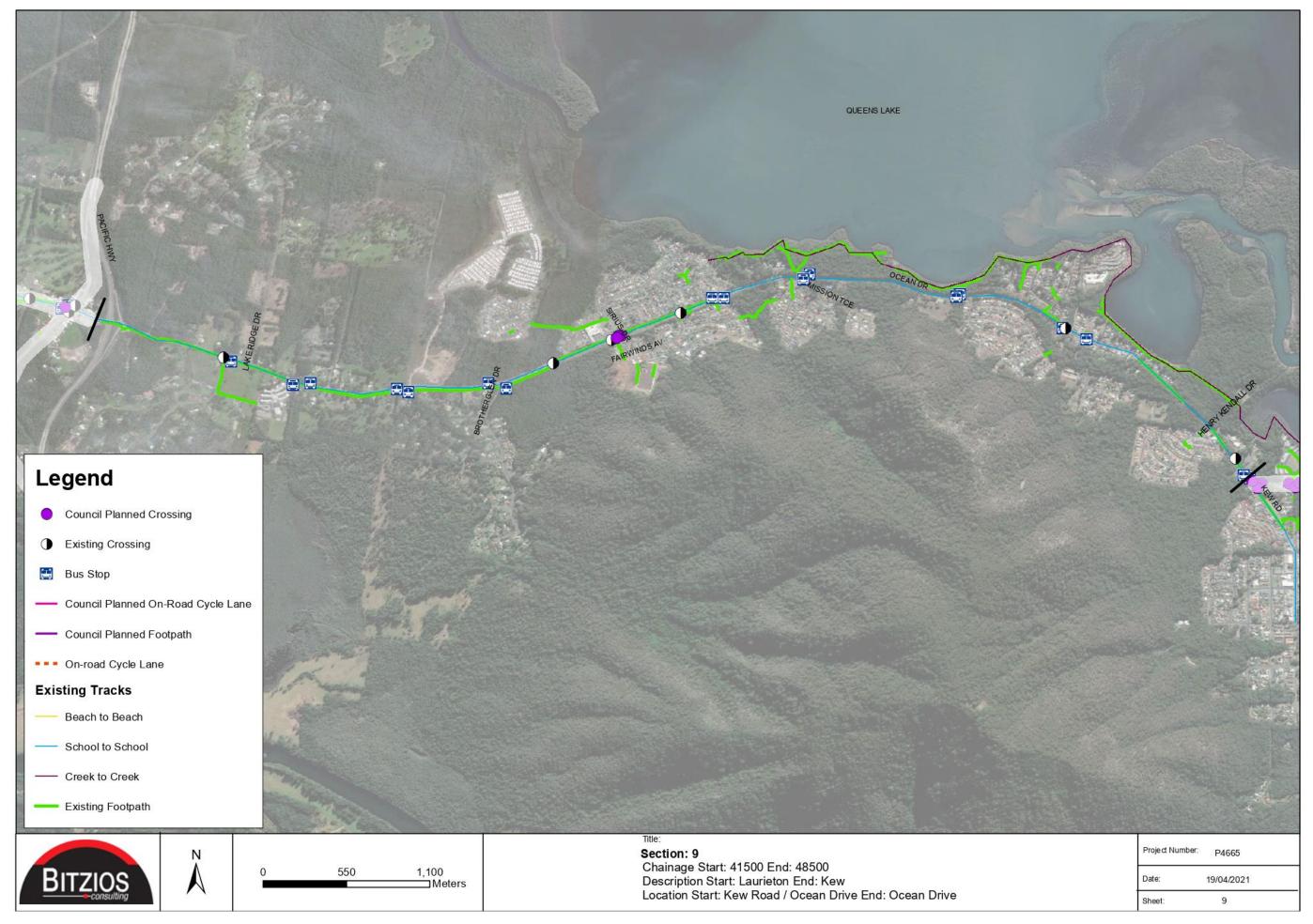


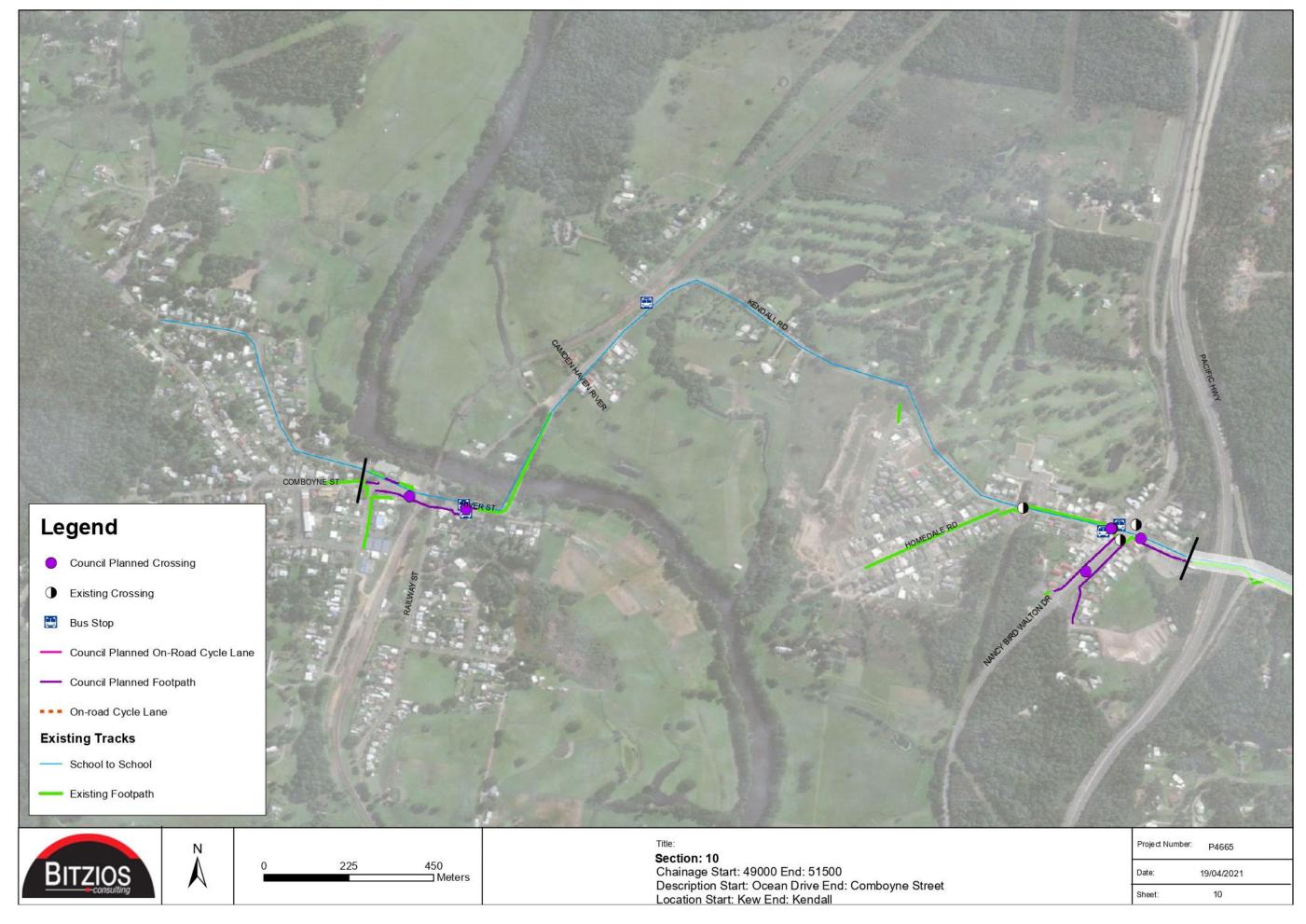




7









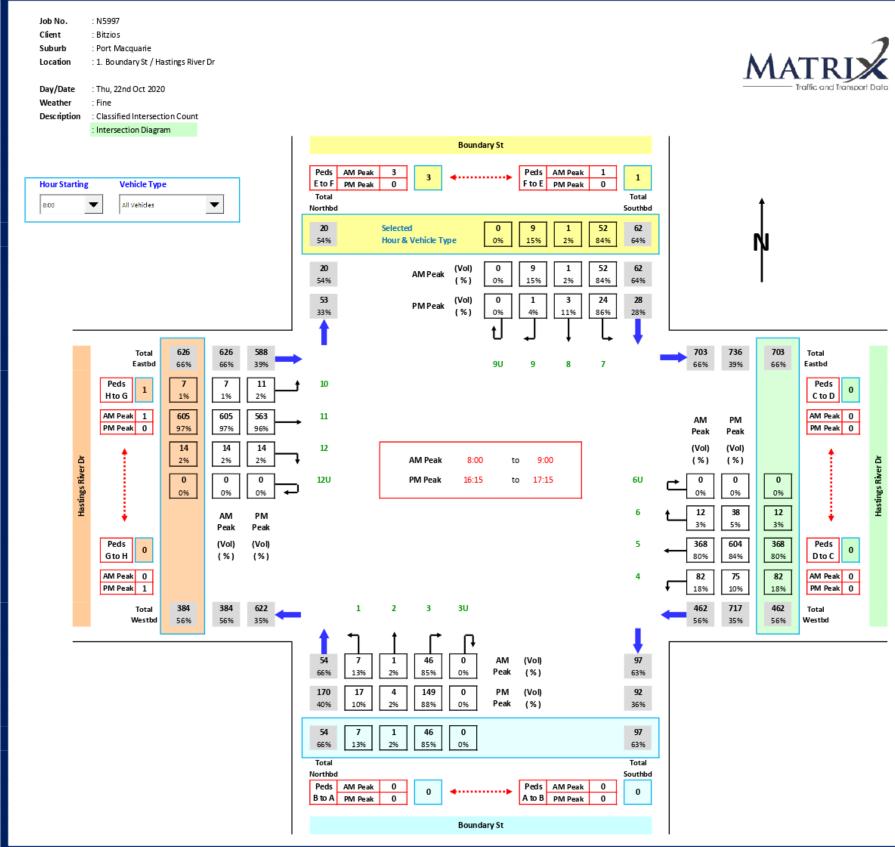
Appendix C: Traffic Survey Data



MR538 and MR600 Corridor Strategy: Draft Corridor Strategy Report Project: P4665 Version: 001



### 1. Boundary Street / Hastings River Drive



P4665.001 Working Paper 2 - Intersection Peak Hour Volumes

### **ORDINARY COUNCIL** 19/05/2022



## 2. Hastings River Drive / Hughes Place

N5997 Bitzios Port Macquarie 2. Hughes PI / Hasti Thu, 22nd Oct 2020 Fine Classified Intersect Intersection Diagra	1	) ion Count m											<u>M</u>		TRUE raffic and Transpor	2 Data
_	All Vehicles	•											Ņ			
	Total Eastbd Peds 0		07 684 7% 35%									<b>40 96</b> 6% 35		340 6%	Total Eastbd	
	Hto G AM Peak 0 PM Peak 2		<b>79 639</b> 5% 93%	→ <sup>11</sup>								M PN			C to D AM Peak 0 PM Peak 0	
Hastings River Dr	····· • • • • • •	21 3% 3 7 1%	N PM	12 D 120		AM Peak PM Peak	8:00 15:15		9:00	60	() ( (	eak Pei /ol) (Vo %) (% 03 12 5% 11	n) ;) 1 1	. <b>03</b> 5%	• • • • • • • • •	Hastings River Dr
	Peds G to H	P( (V	zak Peak /ol) (Vol) %) (%)							5	_	02 80 1% 73		<b>602</b> 1%	Peds D to C	
	AM Peak 0 PM Peak 1	<b>E10</b>	10 070			3	211			4		98 17 4% 16	% 1	98 4%	AM Peak 0 PM Peak 0	
-	Total Westbd		18 879 7% 39%	67 77% 271 37%	1 9 13% 61 23%	58 87% 209 77%	0% I	AM (Vol) Peak (%) PM (Vol) Peak (%)	)	119 61% 211 40%		03 1,1 7% 39		7%	Total Westbd	
				67 77% Total	9 13%	58 87%	0 0%	Selec Hour	ted & Vehicle Type	Total						
				Northbd Peds B to A	AM Peak PM Peak	1 1	•	Peda A to I		Southbd 3 1 3						
							Hughes F	ય								

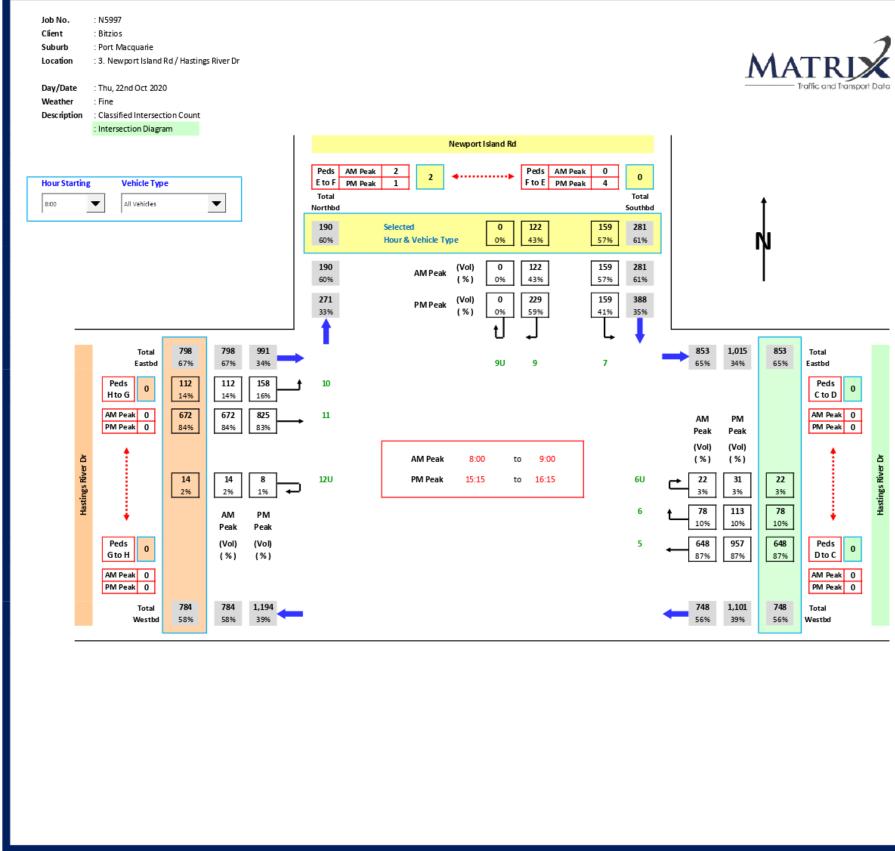
P4665.001 Working Paper 2 – Intersection Peak Hour Volumes

### ORDINARY COUNCIL 19/05/2022





## 3. Hastings River Drive / Newport Island Road

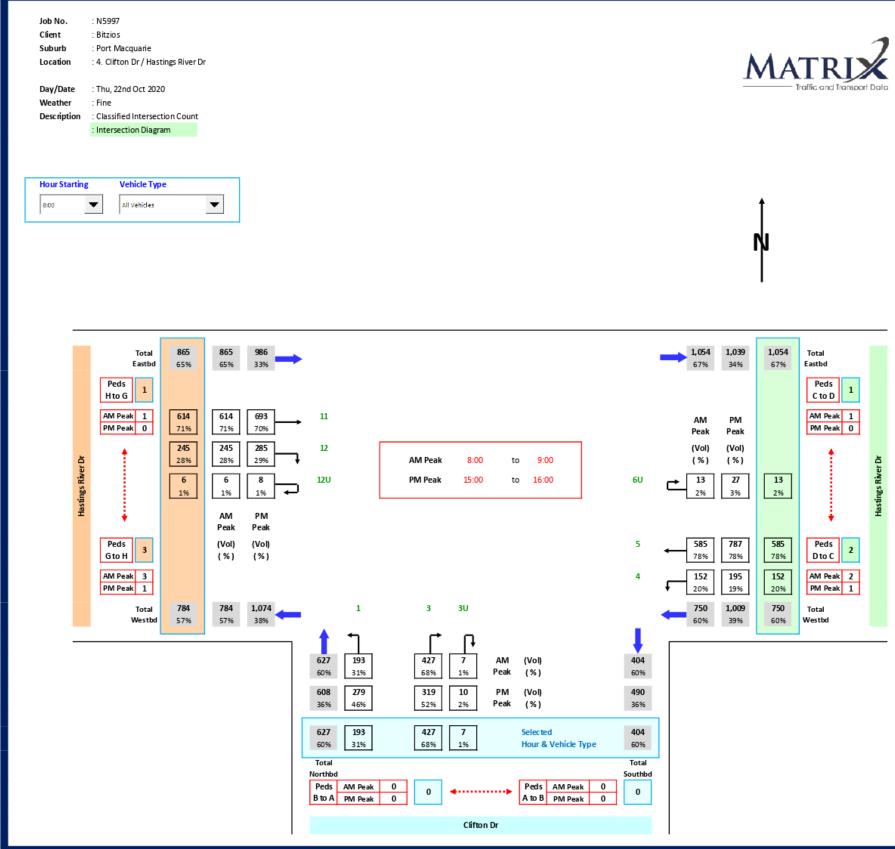


P4665.001 Working Paper 2 - Intersection Peak Hour Volumes

### **ORDINARY COUNCIL** 19/05/2022



## 4. Street Hastings River Drive / Clifton Drive



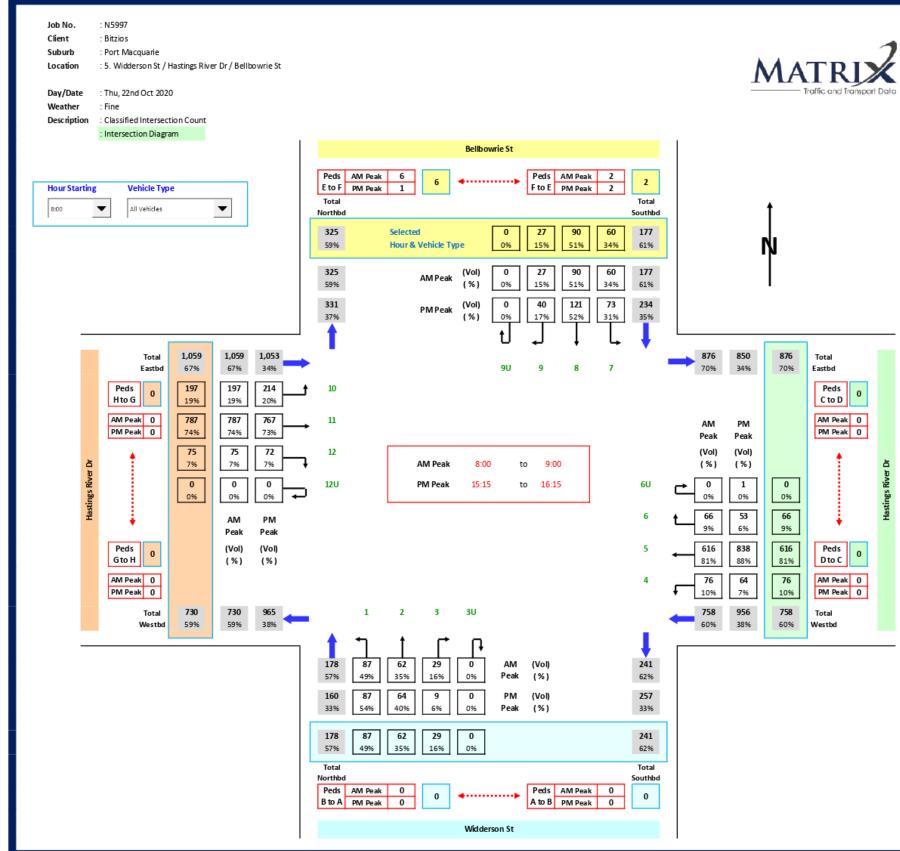
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### **ORDINARY COUNCIL** 19/05/2022





### 5. Hastings River Drive / Bellbowrie Street / Widderson Street

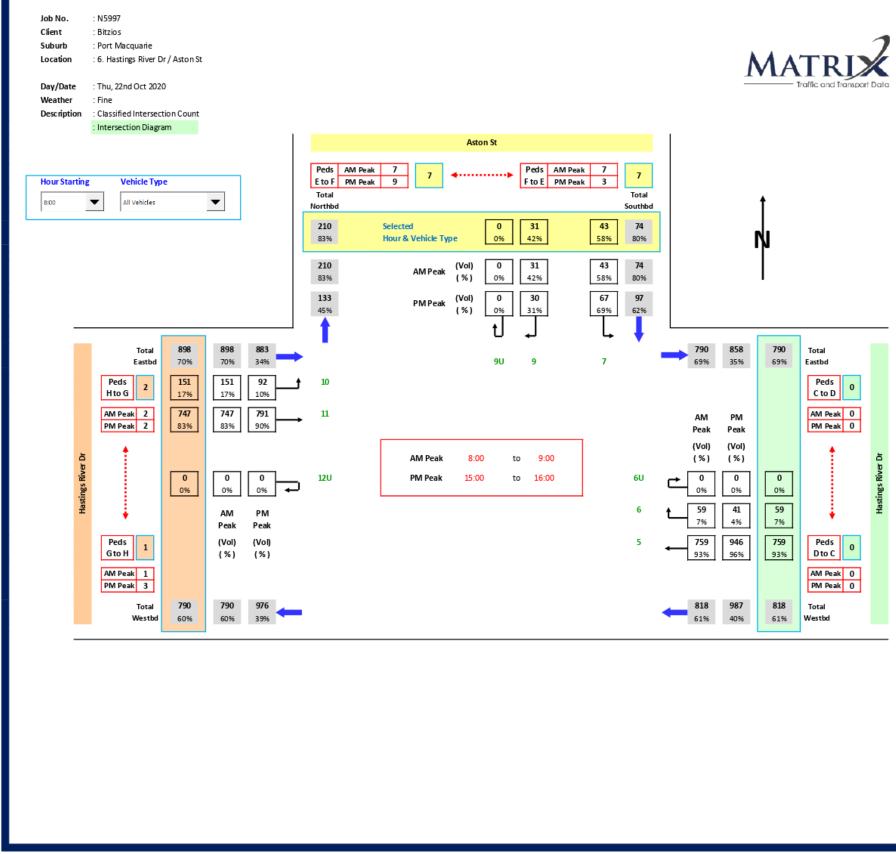


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### **ORDINARY COUNCIL** 19/05/2022



## 6. Hastings River Drive / Aston Street

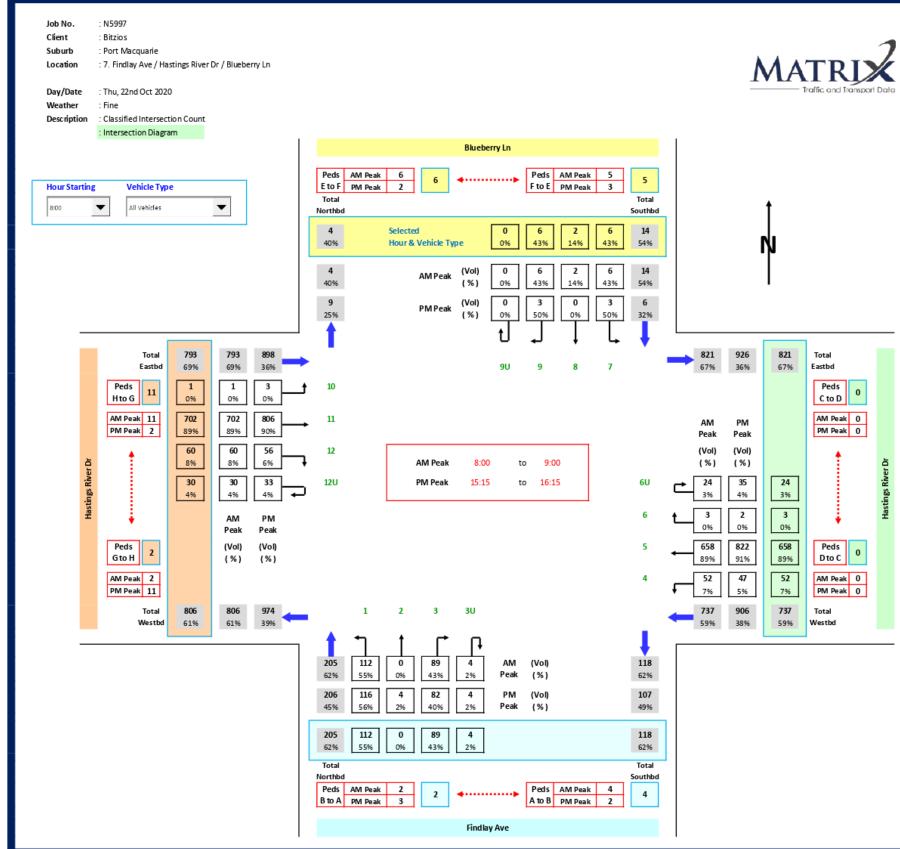


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### **ORDINARY COUNCIL** 19/05/2022



### 7. Hastings River Drive / Findlay Avenue / Blueberry Lane

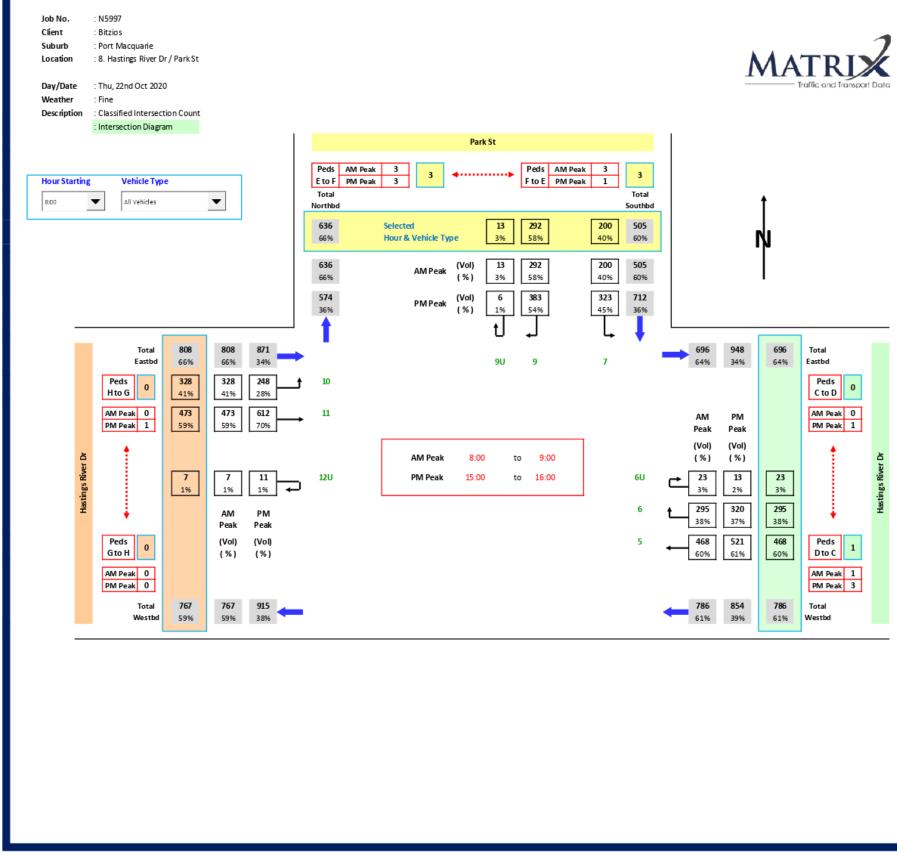


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### **ORDINARY COUNCIL** 19/05/2022



## 8. Hastings River Drive / Park Street

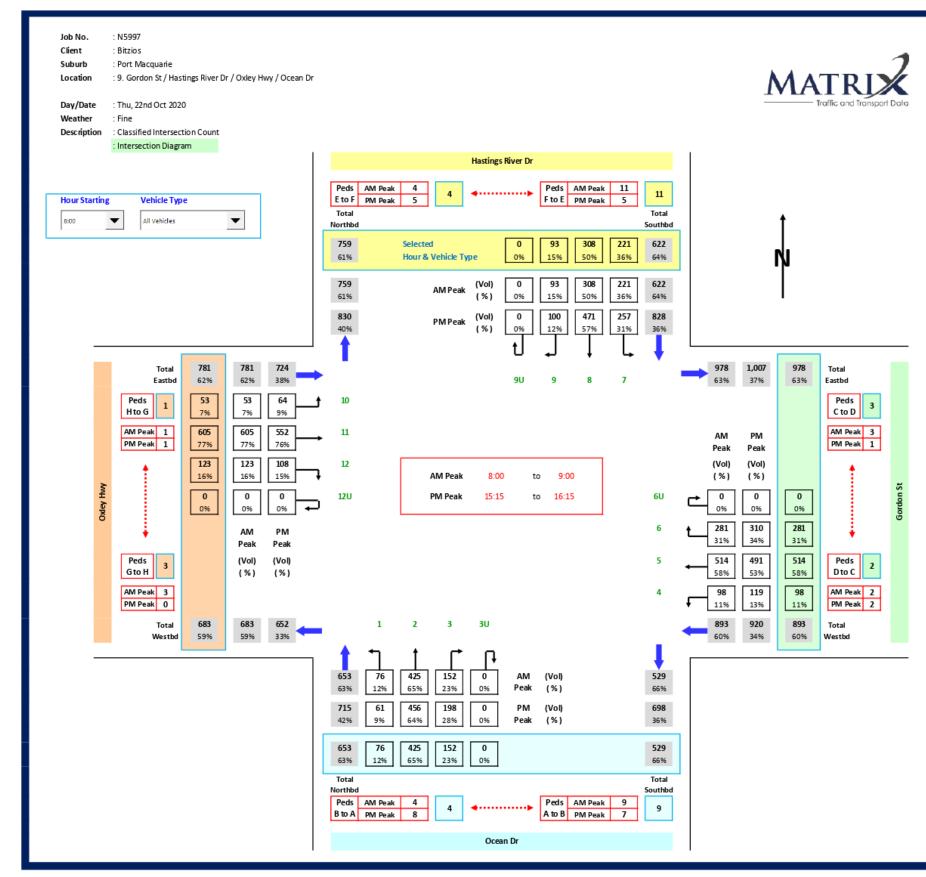


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### **ORDINARY COUNCIL** 19/05/2022



### 9. Hastings River Drive / Oxley Highway / Ocean Drive / Gordon Street

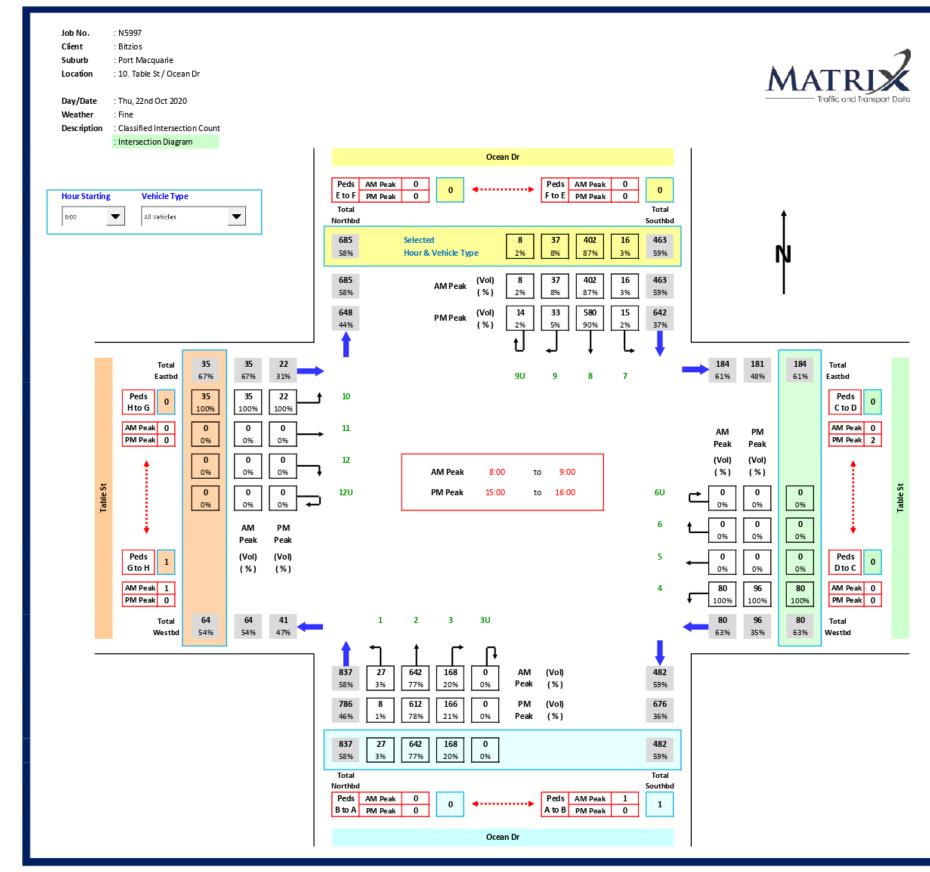


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### ORDINARY COUNCIL 19/05/2022



### **10. Ocean Drive / Table Street**

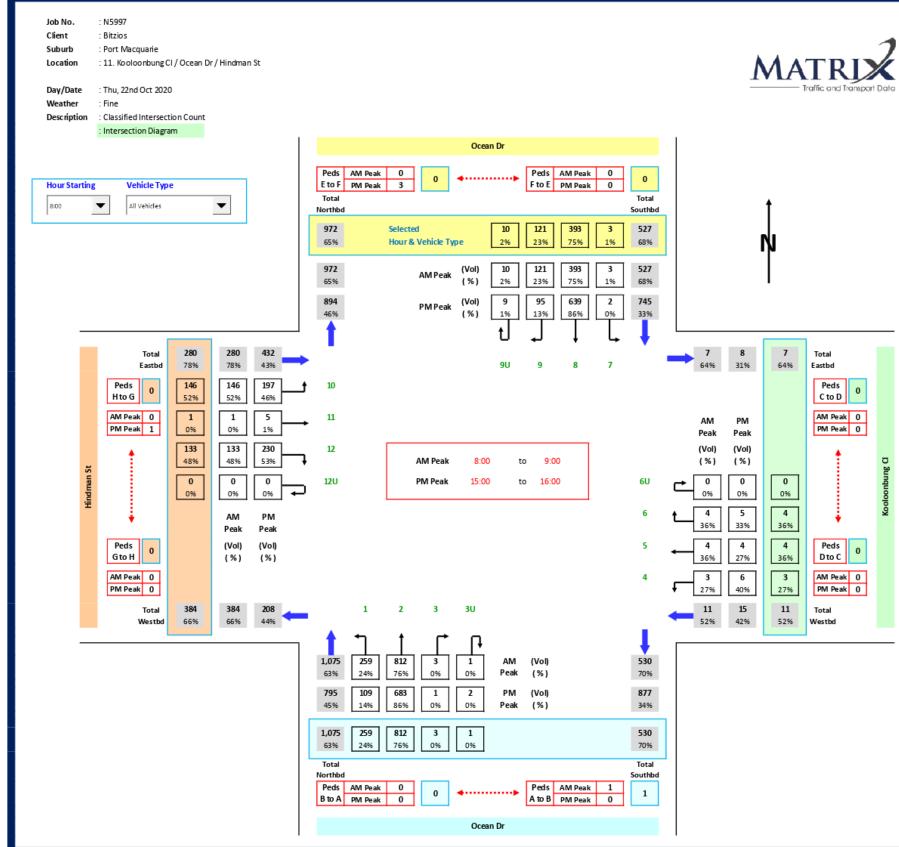


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### 11. Ocean Drive / Hindman Street / Kooloonbung Close

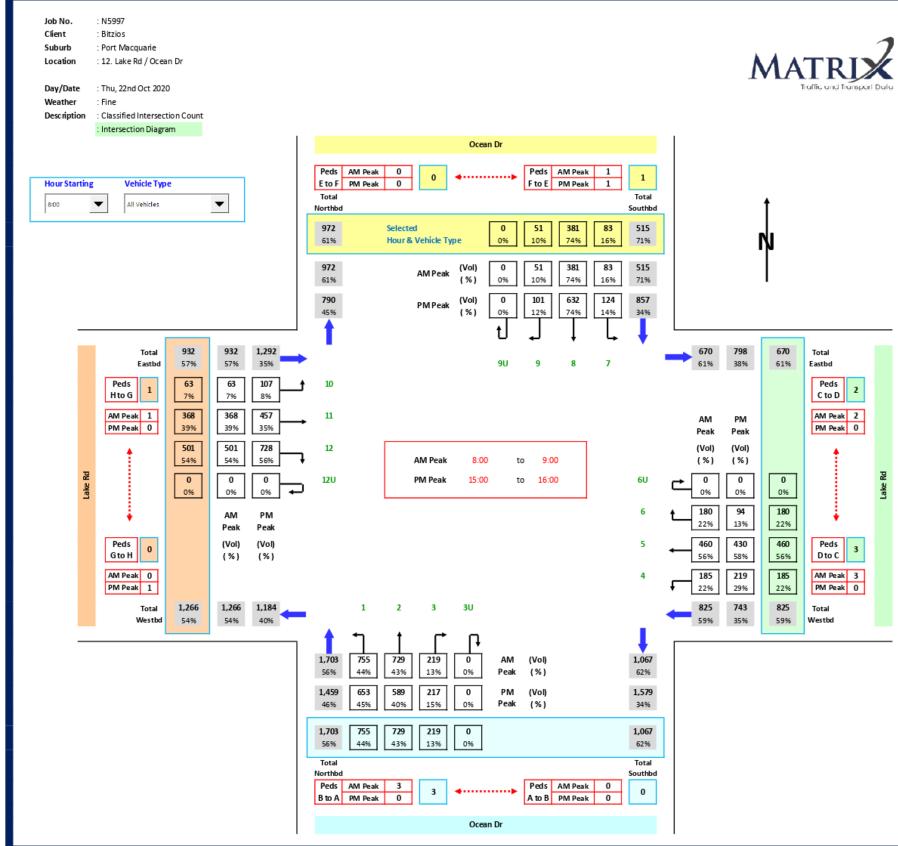


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### 12. Ocean Drive / Lake Road

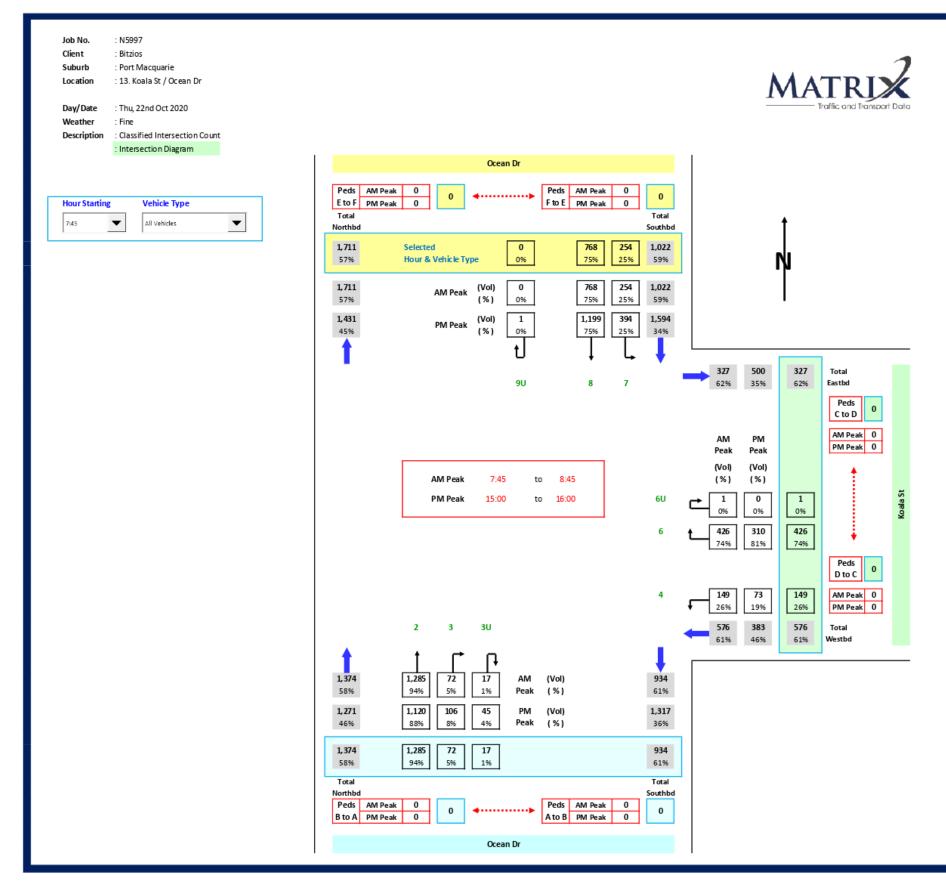


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### **ORDINARY COUNCIL** 19/05/2022



### 13. Ocean Drive / Koala Street

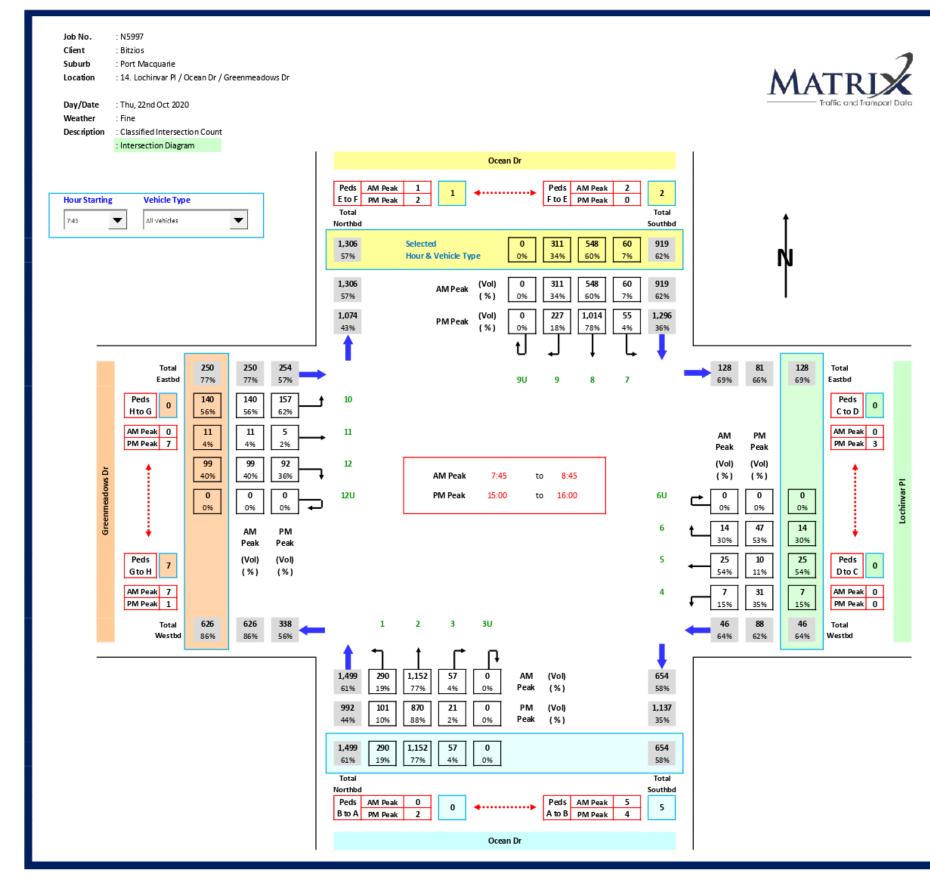


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#### ORDINARY COUNCIL 19/05/2022



### 14. Ocean Drive / Greenmeadows Drive / Lochinvar Place

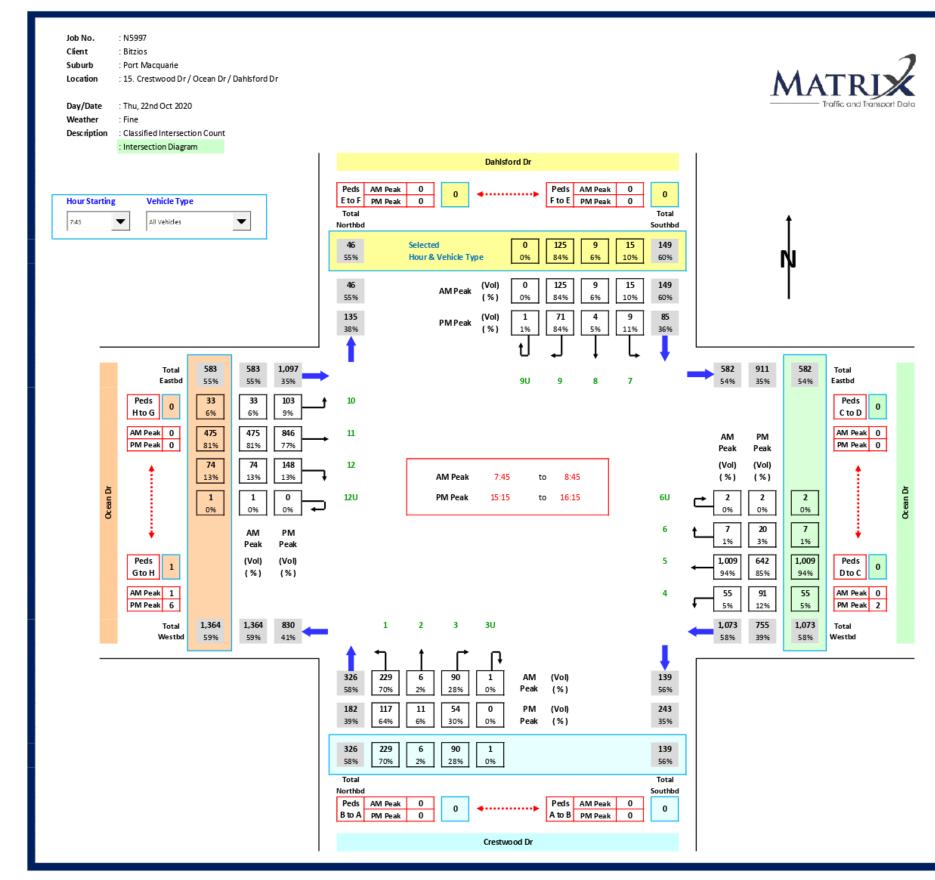


P4665.001 Working Paper 2 – Intersection Peak Hour Volumes

### ORDINARY COUNCIL 19/05/2022



### 15. Ocean Drive / Crestwood Drive / Dahlsford Drive

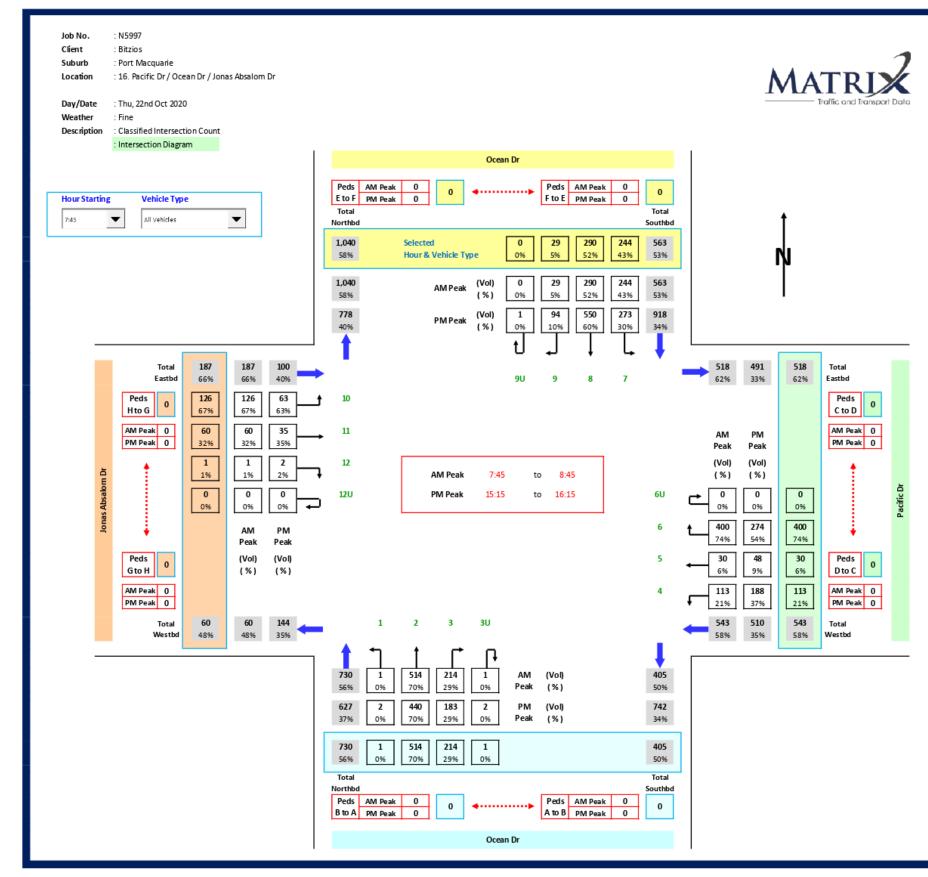


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### ORDINARY COUNCIL 19/05/2022



### 16. Ocean Drive / Jonas Absalom Drive / Pacific Drive

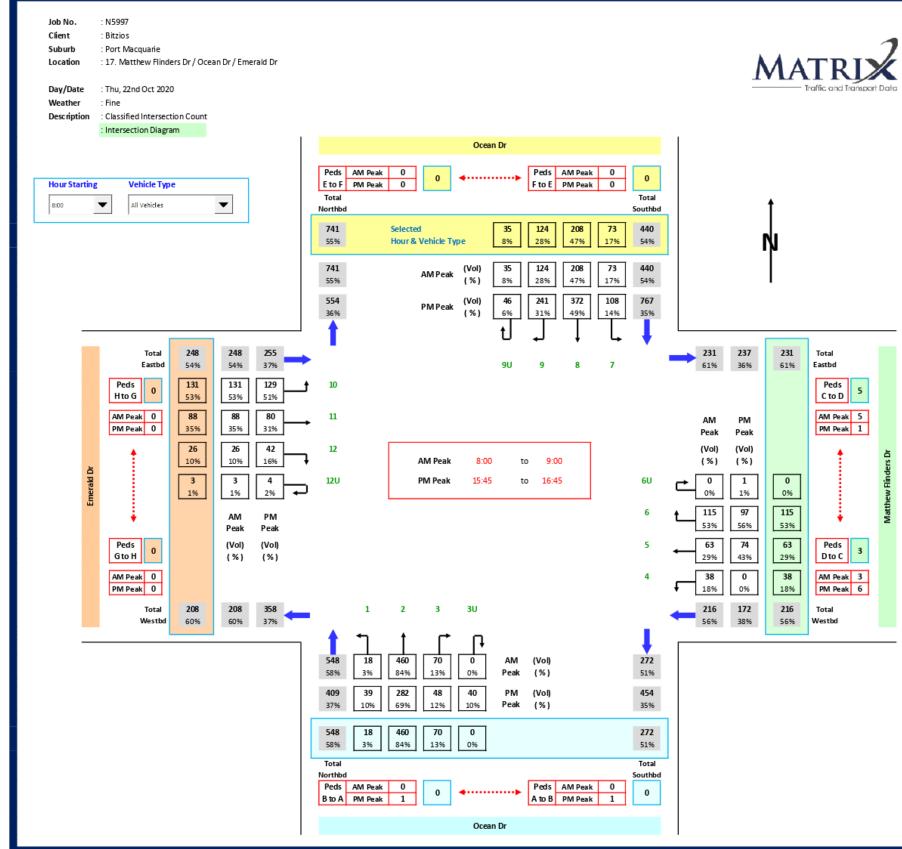


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# 17. Ocean Drive / Matthew Flinders Drive / Emerald Drive

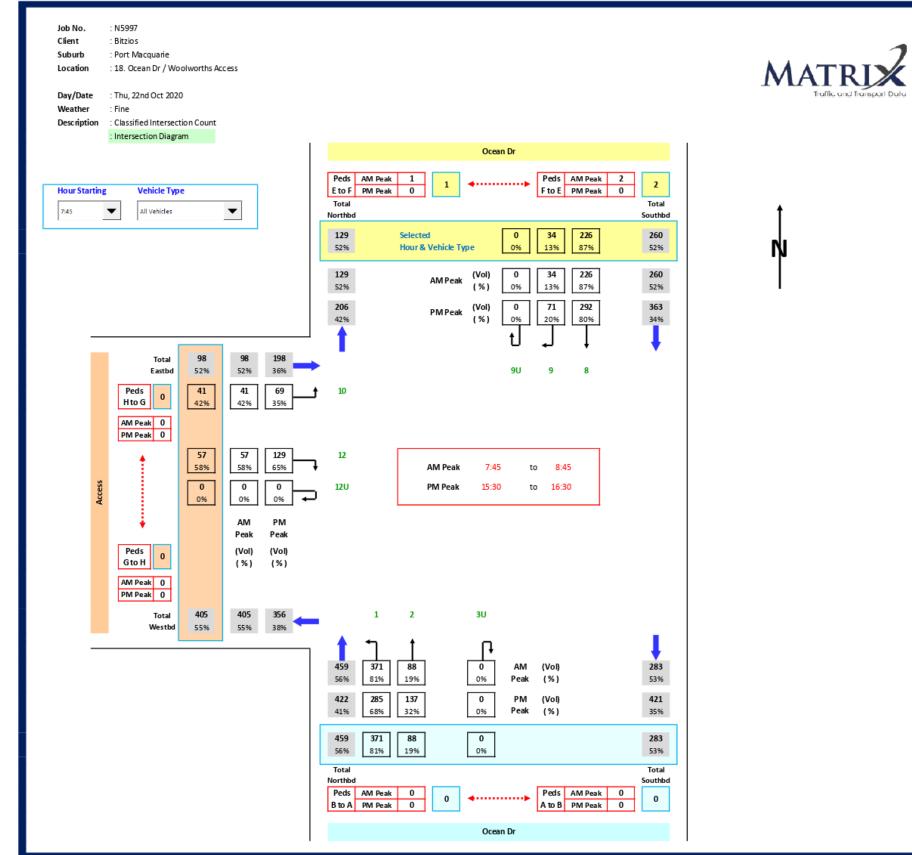


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# 18. Ocean Drive / Woolworths Access



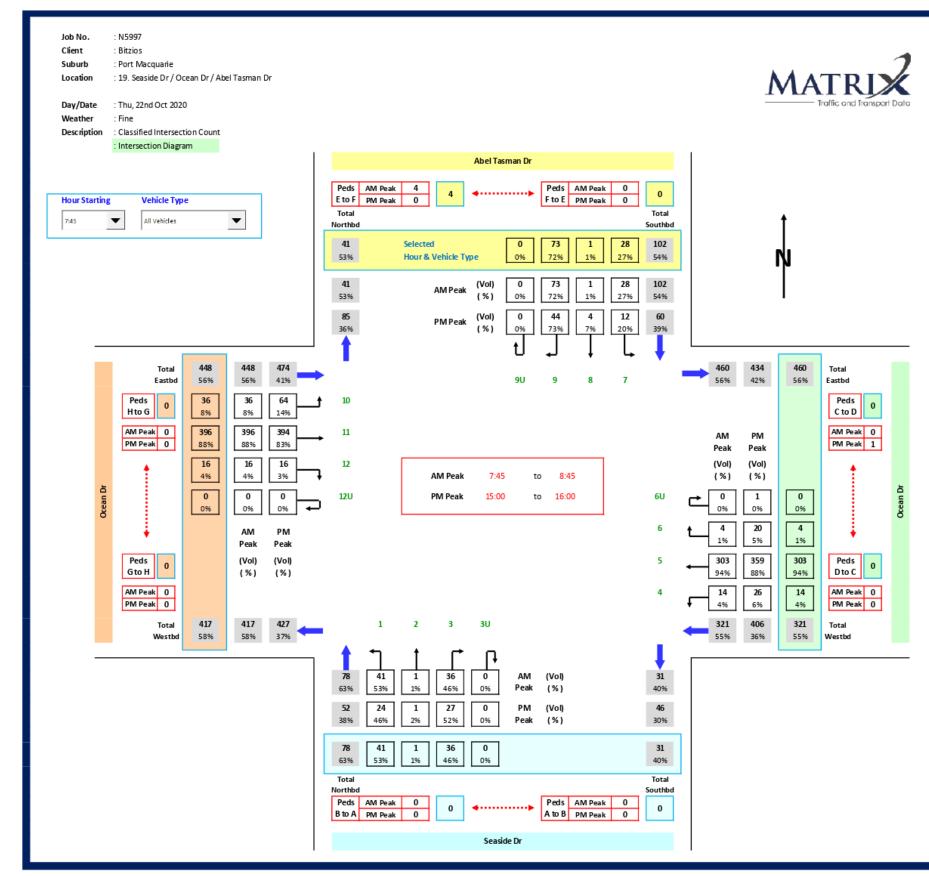
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## **ORDINARY COUNCIL** 19/05/2022





# 19. Ocean Drive / Abel Tasman Drive / Seaside Drive

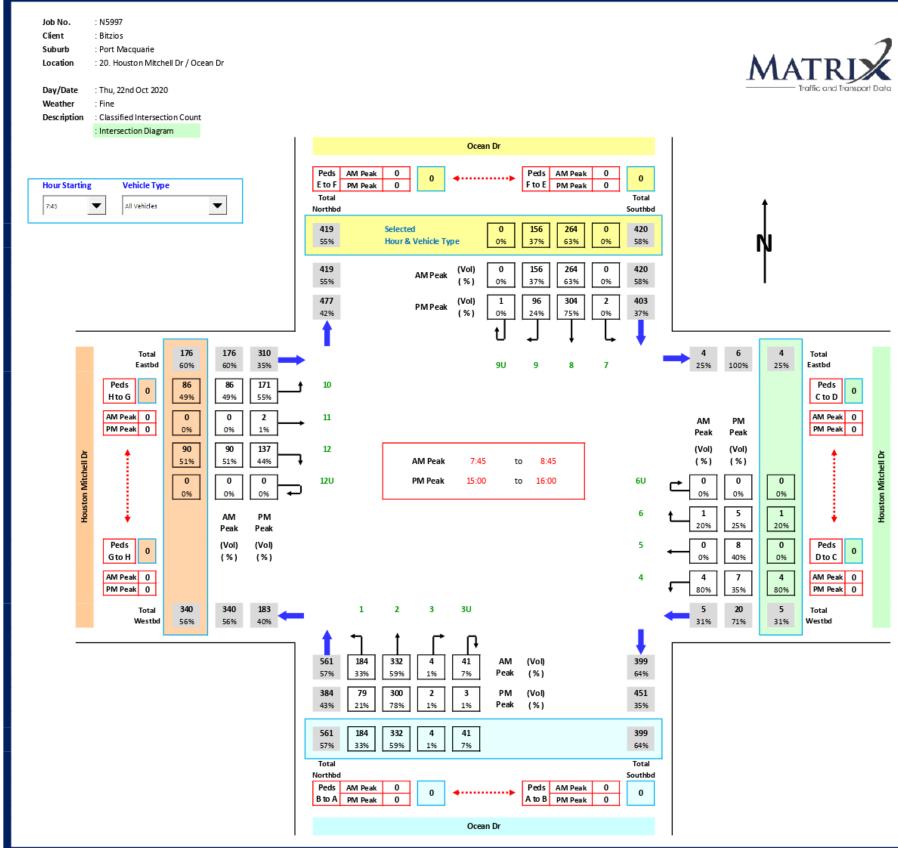


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20. Ocean Drive / Houston Mitchell Drive

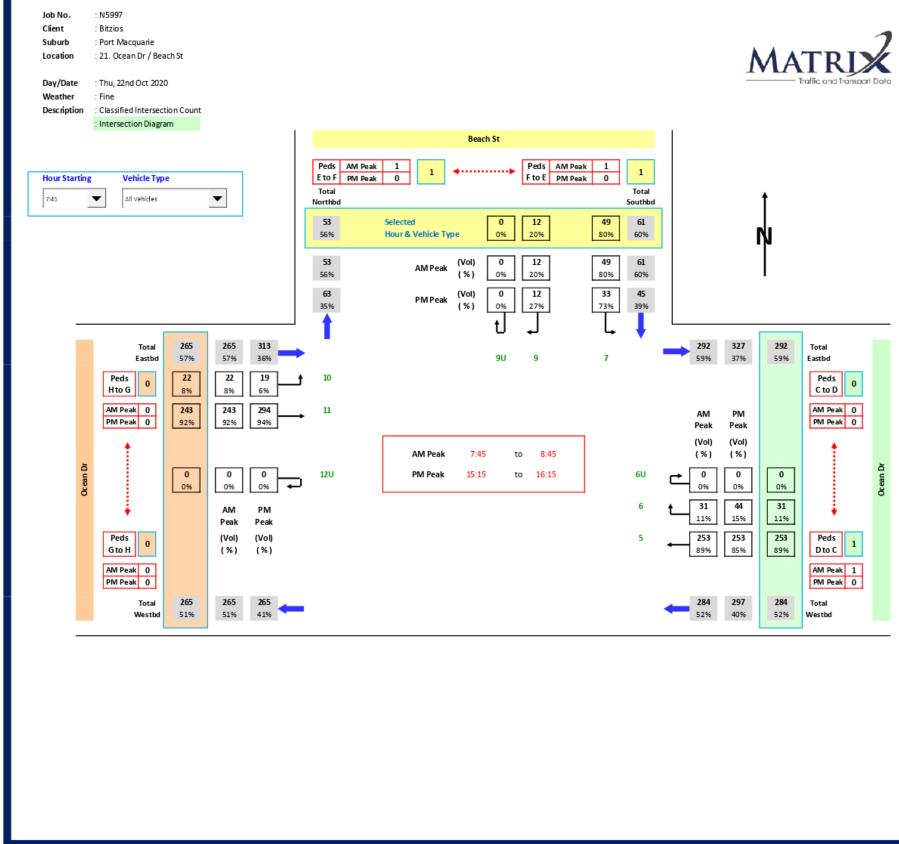


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## **ORDINARY COUNCIL** 19/05/2022



# 21. Ocean Drive / Beach Street

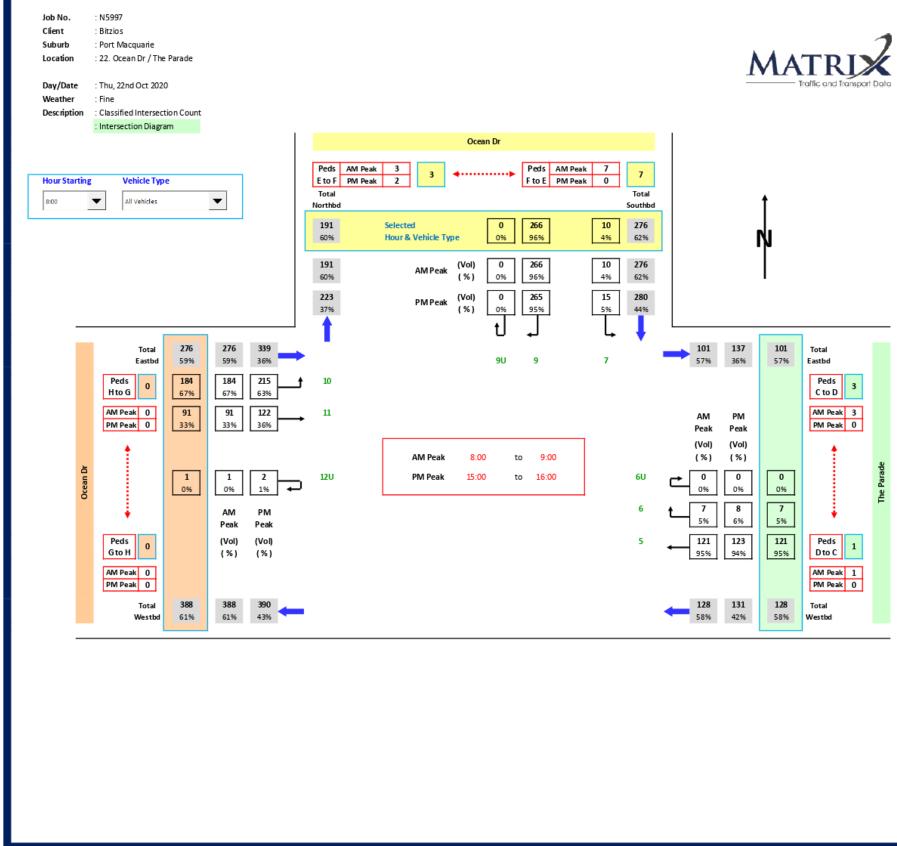


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# 22. Ocean Drive / The Parade

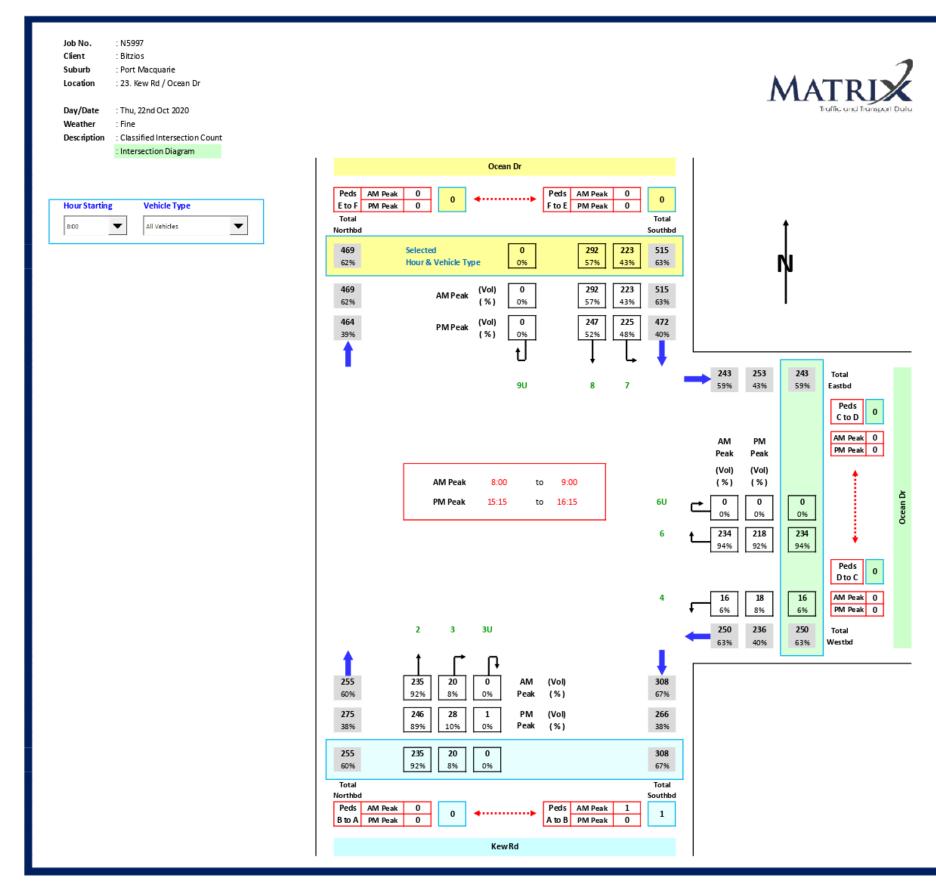


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# 23. Ocean Drive / Kew Road

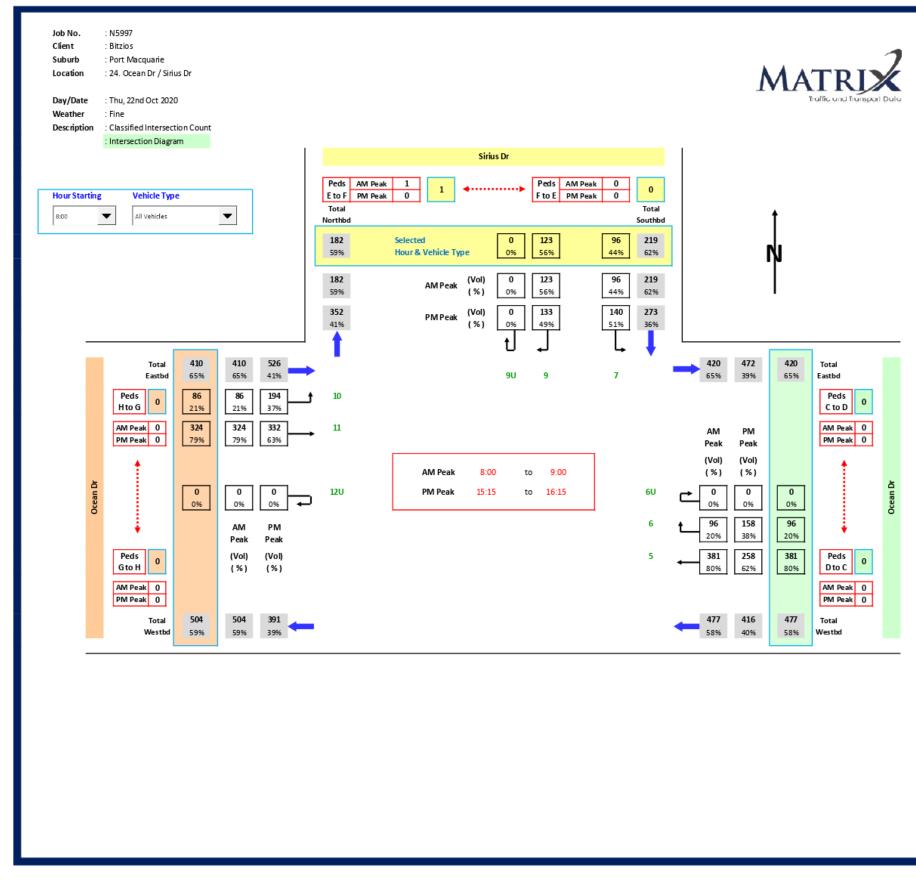


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# 24. Ocean Drive / Sirius Drive

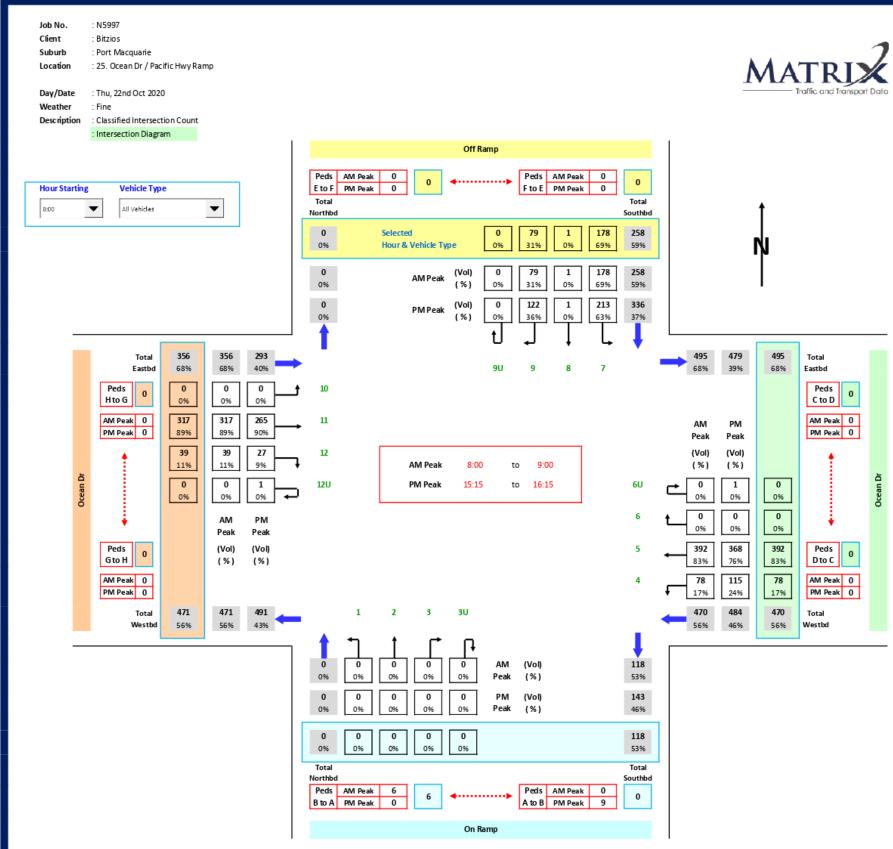


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25. Ocean Drive / Pacific Highway Ramp

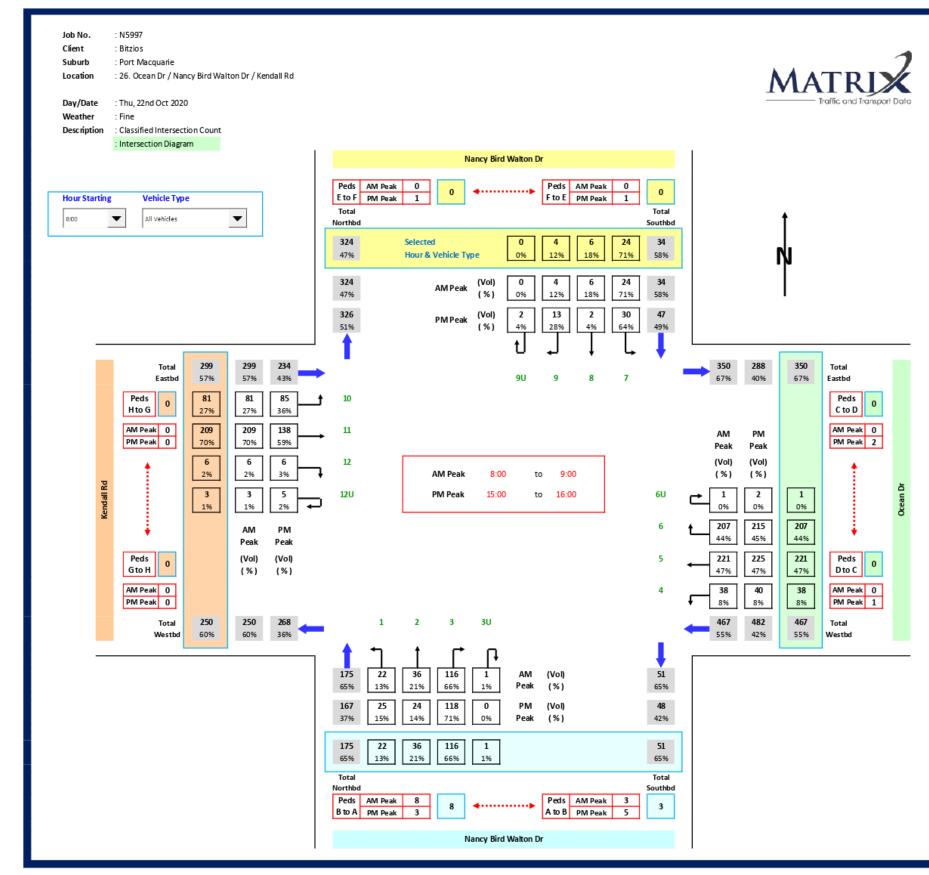


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## **ORDINARY COUNCIL** 19/05/2022



# 26. Ocean Drive / Nancy Bird Walton Drive / Kendall Road

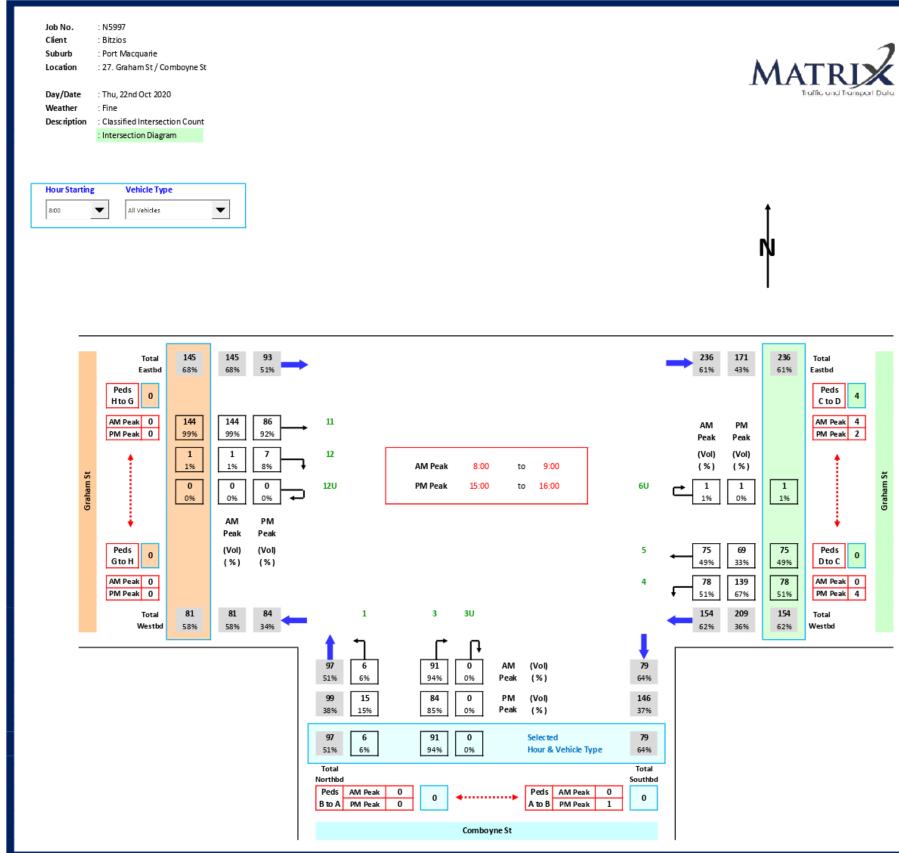


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## ORDINARY COUNCIL 19/05/2022



# 27. Comboyne Street / Graham Street



P4665.001 Working Paper 2 - Intersection Peak Hour Volumes

## **ORDINARY COUNCIL** 19/05/2022







Appendix D: Traffic Growth Rates



MR538 and MR600 Corridor Strategy: Draft Corridor Strategy Report Project: P4665 Version: 001



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S dN Intersection Results Comparison Pelaik 0700-1000

									Volume (veh)		Growth From	n 2016 (Veh)	Yearly Compo From	unding Growin 2016		unding Growth By Approach	Ad opied Growth	
ID	Intersection	Almaun Code	Turn Numbor	Movement Code	From	То	Turn	2016	2026	2036	2026	2036	2026	2036	2026	2036	2036	Com mont
101	Boundary Street	101-1	1	101-1	Boundary Street (N)	Hastings River Drive (W)	R	13	20	18	7	5	4.40%	1.64%				kiadel resulta reasonable
	Hastings River Drive	101-2	2	101-2		Boundary Street (S)	Т	4	11	12	7	8	10.65%	5.65%	1.01%	0.63%	0.63%	
	Boundary Street Hastings River Drive	101-3 101-4	3	101-3	Hastings River Drive (E)	Hastings River Drive (E) Boundary Street (N)	LR	191 68	199 70	206 52	8	15 -16	0.41% 0.29%	0.38% -1.33%				Carridar sectional average growth adopted
		101-5	5	101-5		Hastings River Drive (W)	т	358	570	605	12	47	0.21%	0.41%	6.20%	3.14%	0.97%	control socialistic signature stapped
		101-6 101-7	6	101-6 101-7	Boundary Street (S)	Boundary Street (S) Hastings River Drive (E)	L R	396 354	1,225	1,241 532	829 180	845 178	11.96% 4.20%	5.88% 2.06%				tigh growth due to airportexpansion. 2020 surveys may be low with limited flights and indu
		101-8	8	101-8	boundary cricer(o)	Boundary Street (N)	т	0	1	1	1	1	N/A	N/A	5.25%	2.44%	Abs.	develapment Absolute madel values adapted
		101-9	9 10	101-9	Hastings River Drive (W)	Hastings River Drive (W) Boundary Street (S)	L	23 109	94 254	77 340	71	54 231	15.12% 8.83%	6.23% 5.85%				Carridar sectional average grawth adopted
		101-11	11	101-11		Hastings River Drive (E)	т	920	1,165	1,429	245	509	2.39%	2.23%	3.33%	2.79%	0.97%	comon serenarave age grown archeo
		101-12	12	101-12	011	Boundary Street (N)	L	2 2,638	4,154	18 4,531	9	16 1,893	18.59%	11.61%				
102	Hastings River Drive	102-1	1	102-1	Hastings River Drive (E)	Hastings River Drive (W)	т	1,022	1,837	1,890	815	868	6.04%	3.12%	3.20%	1.62%	0.97%	Conidor sectional average growth adopted
	Hughes Place Hastings River Drive	102-2 102-3	2	102-2 102-3	Hughes Place (S)	Hughes Place (S) Hastings River Drive (E)	L	632 121	430 129	391 107	-202	-241 -14	-3.78% 0.64%	-2.37% -0.61%			0.51 10	Class 1 and 4 - 14 - 1 and 4 - 1 and - 1005 and 4
	naongo niter bitte	102-4	4	102-0	Inspice Place (a)	Hastings River Drive (W)	L	10	6	7	-4	-3	-4.98%	-1.77%	0.30%	-0.69%	0.30%	Closed calchment 0.3% adopted based on 2026 growth
		102-5 102-6	5	102-5 102-6	Hastings River Drive (W)	Hughes Place (S) Hastings River Drive (E)	R	37 1,413	51 1,800	58 2,089	14 387	21 676	3.26% 2.45%	2.27% 1.97%	2.47%	1.96%	0.97%	Conidor sectional average growth adopted
		10240		102-0	All	hastings kiver brive (c)		3,235	4,253	4,542	1,018	1,307	2.77%	1.71%				
103	Newport Island Road	103-1	1	103-1	Newport Island Road (N)	Hastings River Drive (W)	R	247	273	282	26	35	1.01%	0.66%	0.33%	0.13%	0.13%	Reasonable - dosed residential catchment
	Hastings River Drive Hastings River Drive	103-2 103-3	2 3	103-2 103-3	Hastings River Drive (E)	Hastings River Drive (E) Newport Island Road (N)	L R	539 467	539 544	524 575	77	-15 108	0.00% 1.54%	-0.14% 1.05%				Carridar sectional average grawth adapted
		103-4	4	103-4		Hastings River Drive (W)	Т	1,751	2,491	2,545	740	794	3.59%	1.89%	3.19%	1.72%	0.97%	
		103-5 103-6	5	103-5	Hastings River Drive (W)	Hastings River Drive (E) Newport Island Road (N)		1,360	1,666 258	1,861	306 86	501 157	2.05% 4.14%	1.58% 3.30%	2.30%	1.80%	0.97%	Carridar sectional average grawth adapted
					All			4,536	5,771	6,116	1,235	1,580	2.44%	1.51%				
104	Hastings River Drive Clifton Drive	104-1 104-2	1 2	104-1 104-2	Hastings River Drive (E)	Hastings River Drive (W) Clifton Drive (S)	Т	1,479 166	1,896 169	2,021 137	417	542 -29	2.51% 0.18%	1.57% -0.96%	2.30%	1.37%	0.97%	Carridar sectanal average grawth adapted
	Hastings River Drive	104-2	3	104-3	Clifton D ive (S)	Hastings River Drive (E)	R	1,365	1,008	973	-357	-392	-2.99%	-1.68%	0.22%	-0.06%	1.40%	Clifan Oris a through routef ratrun: 1,4% growth rate adopted in line with population grow
		104-4	4 5	104-4	Hardinan Diversibility	Hastings River Drive (W)	L	747 662	1,151	1,114	404 51	367 70	4 4 2%	2.02%	0.22%	4000-	1.40 %	
		104-5 104-6	6	104-5 104-6	Hastings River Drive (W)	Clifton Drive (S) Hastings River Drive (E)	т	1,235	713 1,485	732	250	412	0.74% 1.86%	0.50% 1.45%	1.46%	1.14%	0.97%	Canidar sectional average growth adapted
					All			5,654	6,422	6,624	768	970	1.28%	0.79%				
105.1	Bellbowrie Street Hastings River Drive	105.1-1 105.1-2	1 2	105.1-1 105.1-2	Bellowie Street (N)	Hastings River Drive (W) Hastings River Drive (E)	R L	181	214 368	183 617	-29	20	1.69%	0.05% 0.16%	0.05%	0.14%	0.14%	Reasonable - unlikely to attract high demand due to intersection form (operations
	Hastings River Drive	105.1-3	3	105.1-3	Hastings River Drive (E)	Bellowie Street (N)	R	898	1,040	934	142	36	1.46%	0.20%	1.97%	1.00%	0.97%	Carridar sestanal average grawth adapted
		105.1-4 105.1-5	4	105.1-4	Hastings River Drive (W)	Hastings River Drive (W) Hastings River Drive (E)	т т	1,576	1,966 1,862	2,062	390	506 -60	2.24% -0.28%	1.40% -0.16%				Carridar sectional average growth adapted
		105.1-6	6	105.1-6		Bellowie Street (N)	L	793	738	863	-55	70	-0.72%	0.42%	-0.41%	0.02%	0.97%	annan satanin na nga giawa na pes
105.2	Hastings River Drive	105.2-1	1	105.2-1	All Hastings River Drive (E)	Hastings River Drive (W)	т	5,960	6,388 2,057	6,534 2,222	428 330	574 495	0.70%	0.46%				Carridar sectional average growth adapted
105.2	Widderson Street	105.2-2	2	105.2-2		Widderson Street (S)	i	152	234	391	82	239	4.41%	4.84%	2.00%	1.66%	0.97%	Camoor Bestanai average grawn asapea
	Hastings River Drive	105.2-3 105.2-4	3 4	105.2-3 105.2-4	Widderson Street (S)	Hastings River Drive (E)	R	539 748	437 950	492 797	-102 202	-47 49	-2.08% 2.42%	-0.46% 0.32%	0.75%	0.01%	0.75%	Widerson Skis a hrough routefratrun - 0.75% adopted based on growth to 2026
		105.2-5	4 5	105.2-5	Hastings River Drive (W)	Hastings River Drive (W) Widderson Street (S)	R	318	392	485	74	167	2.11%	2.13%	-0.33%	-0.08%	0.97%	Camidar sectional average grawth adapted
		105.2-6	6	105.2-6	All	Hastings River Drive (E)	т	2,194	2,038	1,986 6,373	-156 430	-208 695	-0.73% 0.73%	-0.50% 0.58%	10.5576	-0.00%	0.9176	
106	Aston Street	106-1	1	106-1	Aston Street (N)	Hastings River Drive (W)	R	111	167	235	430 36	124	4.17%	3.82%	4.11%	3.54%	1.408	Trafic to sports fields etc. fikely to grow to grow consistent with population growth 1,4% gro
	Hastings River Drive	106-2	2	106-2		Hastings River Drive (E)	L	30	44	48	14	18	3.90%	2.38%	4.1176	0.04%	1.40%	rate adopted in line with population growth
	Hastings River Drive	106-3 106-4	3 4	106-3 106-4	Hastings River Drive (E)	Aston Street (N) Hastings River Drive (W)	T N	55 1,728	75 2,108	79 2,335	20 380	24 607	3.15% 2.01%	1.83% 1.52%	2.04%	1.53%	0.97%	Carridor sectional average growth adopted
		106-5	s	106-5	Hastings River Drive (W)	Hastings River Drive (E)	Т	2,525	2,239	2,139	-285	-386	-1.19%	-0.83%	-0.94%	-0.48%	0.97%	Carridar sestanal average grawti adapted
		106-6	6	106-6	All	Aston Street (N)	L	190 4,639	232	328 5,164	42 226	136	2.02%	2.77%				
107	Віцевелу Lane	107-1	1	107-1	Blueberry Lane(N)	Hastings River Drive (W)	R	1,783	2,163	2,415	400	632	2.04%	1.53%				Na grawth expedied (dased calahment)
	Hastings River Drive Findlay Avenue	107-2 107-3	2	107-2		Findlay Avenue (S) Hastings River Drive (E)	Т   L	3	3	1 10	0	-2	0.00% 0.00%	-5.34% 0.53%	2.03%	1.52%	0.00%	
	Hastings River Drive	107-4	4	107-4	Hastings River Drive (E)	Blueberry Lane (N)	R	11	13	10	2	-1	1.68%	-0.48%				Canidar sectional average growth adopted
		107-5 107-6	5	107-5 107-6		Hastings River Drive (W) Findlay Avenue (S)	Т   L	1,307	1,572 134	1,774	265	467 -30	1.86% -1.45%	1.54% -1.07%	1.56%	1.30%	0.97%	
		107-7	7	107-7	Findlay Avenue (S)	Hastings River Drive (E)	R	140	139	535	-1	395	-0.07%	6.93%				klainty school trafic. 1.4% growth rate adopted in line with population growth
		107-8 107-9	8 9	107-8 107-9		Blueberry Lane (N) Hastings River Drive (W)	T L	9 392	11 546	14 570	2	5 178	2.03% 3.41%	2.23% 1.89%	2.58%	3.70%	1.40%	
		107-9	9 10	107-9	Hastings River Drive (W)	Findlay Avenue (S)	R	206	226	190	20	-16	0.93%	1.89%				Canidar sectional average growth adapted
		107-11	11 12	107-11 107-12		Hastings River Drive (E)	T	2,212 54	1,959 46	1,907	-253 -8	-305 -13	-1.21% -1. <del>5</del> 9%	-0.74% -1.37%	-1.02%	-0.72%	0.97%	
		107-12	62	107-12	All	Blueberry Lane (N)	L	6,281	6,843	41 7,992	-6 562	-13 1,311	-1.59%	-1.37% 0.95%				
108	Park Street	108-1	1	108-1	Park Street (N)	Hastings River Drive (W)	R	445	573	651	128	206	2.56%	1.92%	2.17%	1.05%	1.05%	Model rate is reasonable
	Hastings River Drive Hastings River Drive	108-2 108-3	2 3	108-2 108-3	Hastings River Drive (E)	Hastings River Drive (E) Part Street (N)	R	401 592	476 800	391 917	75 208	-10 325	1.73% 3.06%	-0.13% 2.21%	1.002	4.400	0.078	Comidar sectional average growth adopted
		108-4	4	108-4		Hastings River Drive (W)	Т	1,017	1,151	1,240	134	223	1.25%	1.00%	1.95%	1.48%	0.97%	
		108-5 108-6	5	108-5 108-6	Hastings River Drive (W)	Hastings River Drive (E) Park Street (N)	Т Ц	1,554 923	1,392 867	1,535	-162 -56	-19 186	-1.09% -0.62%	-0.06% 0.92%	-0.92%	0.33%	0.97%	Conidor sectional average growth adopted
15-					All			4,932	5,239	5,843	327	911	0.64%	0.85%				
109	Hastings River Drive Gordon Street	109-1 109-2	1 2	109-1 109-2	Hastings River Drive (N)	Oxley Highway (W) Ocean Drive (S)	R	175 842	247 888	135 934	72 46	-40 92	3.51% 0.53%	-1.29% 0.52%	-0.51%	-0.11%	0.97%	Comidor sectional average growth adopted
	Ocean Drive	109-3	3	109-3		Gordon Street (E)	'.	939	724	846	-215	-93	-2.57%	-0.52%	2210			
	Oxley Highway	109-4 109-5	4 5	109-4 109-5	Gordon Street (E)	Hastings River Drive (N)	R	435 2,051	433 2,078	491 2,069	-2 27	56 16	-0.05% 0.13%	0.51% 0.04%	-0.49%	-0.06%	0.97%	Canidar sectional average growth adopted
		109-5	6	109-5		Oxley Highway (W) Ocean Drive (S)		820	2,078 638	2,069	-182	-111	-2.48%	0.04% -0.72%	-VA976	-0.00%	0.91%	
		109-7	7	109-7	Ocean Drive (S)	Gordon Street (E)	R	514	44.1	400	-73	-114	-1.52%	-1.25%				Carridar sec€anal average graw¶r adapted
		109-8 109-9	8 9	109-8 109-9		Hastings River Drive (N) Oxley Highway (W)	Т   L	967	1,280 216	1,453 263	313	486 96	2.84% 2.61%	2.06% 2.30%	1.63%	1.26%	0.97%	
		109-10	10	109-10	Oxley Highway (W)	Ocean Drive (S)	R	71	185	202	114	131	10.05%	5.37%				Carridar sectional average growth adapted
		109-11	11	109-11	1	Gordon Street (E)	Г	1,043	2,047	2,084	1,004	1,041	6.98%	3.52%	6.44%	3.20%	0.97%	
		109-12	12	109-12		Hastings River Drive (N)	l i	203	226	187	23	-16	1.08%	-0.41%				

## ORDINARY COUNCIL 19/05/2022

_									Volume (veh)		SIGMULTION	n 2016 (Veh)	From	2016		unding Growth By Approach T	Adopied
ID	Intersection	Almaun Code	Turn Number	Movement Code	From	То	Turn	2016	2026	2036	2026	2036	2026	2036	2026	2036	20
110	Ocean Drive Table Street	110-1 110-2	1 2	110-1 110-2	Ocean Drive (N)	Ocean Drive (S) Table Street (E)	T L	1,435 294	1,259 448	1,289 552	-176 154	-146 258	-1.30% 4.30%	-0.54% 3.20%	-0.13%	0.31%	0.8
	Ocean Drive	110-3	3	110-3	Table Street (E)	Ocean Drive (S)	L	41	42	85	1	44	0.24%	3.71%	0.24%	3.71%	0.7
	Table Street	110-4 110-5	4	110-4 110-5	Ocean Drive (S)	Ocean Drive (N) Table Street (W)	T L	1,485 740	1,763 848	1,697 968	277	411 228	1.72%	1.23% 1.35%	1.61%	1.27%	0.8
		110-6	6	110-6	Table Street (W)	Ocean Drive (N)	L 1	162	174	219	100	57	0.72%	1.52%	1.26%	1.52%	<u>k</u>
	One of Datus				All	Uladaraa Cha ah Uhiji		4,158	4,534	5,010	376	852	0.87%	0.94%			
111	Ocean Drive Kooloonbung Close	111-1 111-2	1 2	111-1	Ocean Drive (N)	Hindman Street (W) Ocean Drive (S)	R T	658 700	576 588	645 587	-82 -112	-13 -113	-1.32% -1.73%	-0.10% -0.88%	-1.40%	-0.30%	0.8
	Qoean Drive	111-3	3	111-3		Kooloonbung Close (E)	L	6	21	53	15	47	13.35%	11.51%			
	Hindman Street	111-4	4	111-4	Kooloonbung Close (E)	Ocean Drive (N) Hindman Street (W)	R T	5 5	7	9	2	10	3.42% 10.03%	5.65% 2.98%	5.24%	4.33%	0.0
		111-6	6	111-6		Ocean Drive (S)	i	5	5	11	o	6	0.00%	4.02%		4.0010	
		111-7 111-8	7	111-7 111-8	Ocean Drive (S)	Kooloonbung Close (E) Ocean Drive (N)	R	4 1,704	46 2,202	92 2,410	42 498	88 706	27.66% 2.60%	16.97% 1.75%	2.57%	1.81%	0.8
		111-9	9	111-0		Hindman Street (W)	'.	355	410	449	35	94	1.45%	1.18%	2.51%	1.01%	0.0
		111-10	10	111-10	Hindman Street (W)	Ocean Drive (S)	R	624	853	674	229	50	3.18%	0.39%			
		111-11	11 12	111-11		Kooloonbung Close (E) Ocean Drive (N)	T L	2 491	40 544	63 613	36 53	61 122	34.93% 1.03%	18.83% 1.12%	2.55%	0.95%	0.9
					AI			4,599	5,305	5,621	746	1,062	1.53%	1.05%			
112	Ocean Drive Lake Road	112-1 112-2	1 2	112-1	Ocean Drive (N)	Lake Road (W) Ocean Drive (S)	R	74 854	32 993	53 775	-42 129	-21 -89	-8.04% 1.40%	-1.66% -0.54%	0.93%	-0.20%	0.8
	Qoean Drive	112-3	3	112-3		Lake Road (E)	i	378	418	437	40	59	1.01%	0.73%	0.5010	-0108	
	Lake Road	112-4 112-5	4	112-4 112-5	Lake Road (E)	Ocean Drive (N)	R	245 535	385 912	457 1,029	140 377	212 494	4.62% 5.46%	3.17% 3.32%	4.55%	2.78%	2.7
		112-6	6	112-5		Lake Road (W) Ocean Drive (S)		397	540	549	143	152	3.12%	1.63%	4.55%	2.1076	2.1
		112-7	7	112-7	Ocean Drive (S)	Lake Road (E)	R	622	662	510	40	-112	0.63%	-0.99%			
		112-8	8	112-8 112-9		Ocean Drive (N) Lake Road (W)	Т 1	1,684 2,061	2,096 2,398	2,304 2,489	412 337	620 428	2.21%	1.58% 0.95%	1.67%	0.98%	0.8
		112-10	10	1 12-10	Lake Road (W)	Ocean Drive (S)	R	1,050	1,231	1,537	181	487	1.60%	1.92%			
		112-11	11	112-11		Lake Road (E)	Т	667	916	1,087	229	400	2.92%	2.32%	2.21%	2.07%	2.0
		112-12	12	1 12-12	All	Ocean Drive (N)	L	134 8,731	180 10,763	194 11,421	45 2,032	60 2,690	3.00%	1.87% 1.39%			
113	Ocean Drive	113-1	1	113-1	Ocean Drive (N)	Ocean Drive (S)	т	1,700	2,053	2,201	353	501	1.90%	1.30%	1.80%	1.15%	1.1
	Koala Street Ocean Drive	113-2 113-3	2	113-2	Koala Street (E)	Koala Street (E) Ocean Drive (N)	L R	476 1,135	548 1,385	533 1,384	72 230	57 229	1.42%	0.57% 0.91%			
		113-4	4	113-4		Ocean Drive (S)		238	226	211	-12	-27	-0.52%	-0.60%	1.46%	0.68%	0.6
		113-5 113-6	5	113-5 113-6	Ocean Drive (S)	Koala Street (E) Ocean Drive (N)	R	132 3,104	118 3,640	125 3,624	-14 536	-7 720	-1.11% 1.61%	-0.27% 1.05%	1.51%	1.00%	1.1
		113-0		113-0	All	Ocean Drive (N)	1	6,805	7,970	8,276	1,165	1,473	1.59%	0.98%			-
1 14	Ocean Drive	114-1	1	114-1	Ocean Drive (N)	Greenmeadows Drive (W)	R	152	154	173	2	21	0.13%	0.65%	2.01%	1.27%	1.1
	Ocean Drive Greenmeadows Drive	114-2 114-3	2	114-2	Ocean Drive (S)	Ocean Drive (S) Ocean Drive (N)	T T	1,447 2,888	1,798 3,385	1,686 3,564	351 497	439 676	2.20%	1.33% 1.06%			<u> </u>
		114-4	4	114-4		Green meadows Drive (W)	L	22	30	35	8	13	3.15%	2.35%	1.61%	1.07%	1.1
		114-5 114-6	5	114-5 114-6	Greenmeadows Drive (W)	Ocean Drive (S) Ocean Drive (N)	R	19 136	25 187	14	6 51	-5 25	2.78%	-1.52% 0.85%	3.18%	0.61%	0.6
					Al			4,664	5,579	5,833	915	1,169	1.81%	1.12%			
115	Dahisford Dilve Ocean Drive	115-1 115-2	1 2	115-1 115-2	Dahlsford Dilve (N)	Ocean Drive (W) Crestwood Drive (S)	R	258 7	303 6	272 7	45	14	1.62%	0.26% 0.00%	1.96%	0.52%	0.5
	Crestwood Drive	115-3	3	115-3		Ocean Drive (E)	i i	86	115	110	29	24	2.95%	1.24%			
	Ocean Drive	115-4 115-5	4	115-4 115-5	Ocean Drive (E)	Dahlsford D five (N)	R	53 2,314	57 2,674	49 2,878	4 360	-4 564	0.73%	-0.39% 1.10%	1.32%	1.01%	1.1
		115-6	6	115-6		Ocean Drive (W) Crestwood Drive (S)	'.	108	90	96	-18	-12	-1.81%	-0.59%	1.52.6	1.01.6	1
		115-7	7	115-7	Crestwood Drive (S)	Ocean Drive (E)	R	150	139	140	-11	-10	-0.76%	-0.34%			
		115-8 115-9	9	115-8		Dahlsford Difve (N) Ocean Drive (W)		34 338	32 439	32 450	101	112	-0.60% 2.65%	-0.30% 1.44%	1.57%	0.88%	0.8
		115-10	10	1 15-10	Ocean Drive (W)	Crestwood Drive (S)	R	14 1	231	216	90	75	5.06%	2.16%			
		115-11	11	1 15-11 1 15-12		Ocean Drive (E) Dahisford Drive (N)	T L	1,211 105	1,448	1,543 138	237	332 33	1.80%	1.22% 1.38%	2.23%	1.33%	1.1
		11012	12	110-12	All		6	4,805	5,674	5,931	869	1,126	1.68%	1.06%			
116	Ocean Drive	116-1	1	116-1	Ocean Drive (N)	Jonas Absalom Drive (W)	R	83	88	98	5	15	0.59%	0.83%		4.0771	
	Pacific Drive Ocean Drive	116-2 116-3	2	116-2 116-3		Ocean Drive (S) Pacific Drive (E)	T L	861 500	936 667	1,017 670	75	156 170	0.84%	0.84% 1.47%	1.59%	1.07%	1.1
	Jonas Absalom Drive	116-4	4	116-4	Padific Drive (E)	Ocean Drive (N)	R	961	1,002	1,140	21	159	0.21%	0.75%			
		116-5 116-6	5	116-5 116-6		Jonas Absalom Drive (W) Ocean Drive (S)	T L	28 417	35 426	30 412	7 9	2 -5	2.26% 0.21%	0.35% -0.06%	0.26%	0.52%	0.5
			7	116-7	Ocean Drive (S)	Padific Drive (E)	R	706	831	871	125	165	1.64%	1.06%			
		116-7				Ocean Drive (N)	т	1,325 24	1, <b>544</b> 22	1,684	319	359	2.18%	1.21%	1.97%	1.16%	1.1
		116-8	8	116-8			1 .			32	-2	8	-0.87%	145%			4
				116-8 116-9 116-10	Jonas Absalom Drive (W)	Jonas Absalom Drive (W)	LR	24 45	50	43	5	-2	1.06%	-0.23%			
		116-8 116-9 116-10 116-11	8 9 10 11	116-9 116-10 116-11	Jonas Absalom Drive (W)	Jonas Absalom Drive (W) Ocean Drive (S) Pacific Drive (E)	R T	45 84	50 91	109	7	25	0.80%	1.31%	0.90%	0.82%	0.8
		116-8 116-9 116-10	8 9 10	1 16-9 1 16-10	Jonas Absalom Drive (W)	Jonas Absalom Drive (W) Ocean Drive (S)	R	45 84 182	50 91 199	109 214	7 17	25 32	0.80% 0.90%	1.31% 0.81%	0.90%	0.82%	0.8
117	Ocean Drive	116-8 116-9 116-10 116-11 116-12 117-1	8 9 10 11 12 1	116-9 116-10 116-11 116-12 117-1	Jonas Absalom Drive (W) All Ocean Drive (N)	Jonas Absalom Drive (W) Ocean Drive (S) Pacific Drive (E) Ocean Drive (N) Emerald Drive (W)	R T L R	45 84 162 5,236 950	50 91 199 5,991 1,002	109 214 6,320 1,071	7 17 755 32	25 32 1,064 121	0.80% 0.90% 1.36% 0.53%	1.31% 0.81% 0.95% 0.60%			-
117	Matthew Finders Drive	116-8 116-9 116-10 116-11 116-12 117-1 117-2	8 9 10 11 12 1 2	116-9 116-10 116-11 116-12 117-1 117-2	AII	Jo nas Absalom Drive (W) Ocean Drive (S) Padito Drive (E) Ocean Drive (N) Emeraid Drive (W) Ocean Drive (S)	R T L R T	45 84 182 5,236 950 206	50 91 199 5,991 1,002 234	109 214 6,320 1,071 220	7 17 755 32 28	25 32 1,084 121 14	0.80% 0.90% 1.36% 0.53% 1.28%	1.31% 0.81% 0.95% 0.60% 0.33%	0.90%	0.82%	0.8
117		116-8 116-9 116-10 116-11 116-12 117-1	8 9 10 11 12 1	116-9 116-10 116-11 116-12 117-1	AII	Jonas Absalom Drive (W) Ocean Drive (S) Pacific Drive (E) Ocean Drive (N) Emerald Drive (W)	R T L R	45 84 162 5,236 950	50 91 199 5,991 1,002	109 214 6,320 1,071	7 17 755 32	25 32 1,064 121	0.80% 0.90% 1.36% 0.53%	1.31% 0.81% 0.95% 0.60%			-
117	Matthew Finders Dilve Ocean Drive	116-8 116-9 116-10 116-11 116-12 117-1 117-2 117-3 117-4 117-5	8 9 10 11 12 7 2 3 4 5	116-9 116-10 116-11 116-12 117-1 117-2 117-3 117-4 117-5	All Ocean Drive (N)	Jonas Absalom Drive (W) Ocean Drive (S) Pacific Drive (E) Ocean Drive (N) Emeraid Drive (W) Ocean Drive (S) Matthew Filinders Drive (E) Ocean Drive (N) Emeraid Drive (W)	R T L R T L R T	45 84 182 5,236 950 206 160 394 16	50 91 199 5,991 1,002 234 169 438 22	109 214 6,320 1,071 220 177 482 17	7 17 755 32 28 9 44 6	25 32 1,084 121 14 17 88 88 1	0.80% 0.90% 1.36% 0.53% 1.28% 0.55% 1.06% 3.24%	1.31% 0.81% 0.95% 0.50% 0.33% 0.51% 1.01% 0.30%			1.1
117	Matthew Finders Dilve Ocean Drive	116-8 116-9 116-10 116-11 116-12 117-1 117-2 117-3 117-4	8 9 10 11 12 1 2 3 4	116-9 116-10 116-11 116-12 117-1 117-2 117-3 117-4	All Goean Drive (N) Matthew Filnders Drive (E)	Jonas Absalom Drive (W) Ocean Drive (S) Pacific Drive (E) Ocean Drive (N) Emeraid Drive (W) Ocean Drive (W) Ocean Drive (S) Matthew Flinders Drive (E) Ocean Drive (N) Emeraid Drive (W) Ocean Drive (S)	R T L R T L R	45 84 162 5,236 950 206 160 394	50 91 199 5,991 1,002 234 169 438	109 214 6,320 1,071 220 177 482	7 17 755 32 28 9 44	25 32 1,084 121 14 17 83	0.80% 0.90% 1.36% 0.53% 1.28% 0.55% 1.06%	1.31% 0.81% 0.95% 0.50% 0.33% 0.51% 1.01%	0.56%	0.55%	1.1
117	Matthew Finders Dilve Ocean Drive	116-8 116-9 116-10 116-11 116-12 117-1 117-2 117-3 117-4 117-5 117-5 117-7 117-8	8 9 10 11 2 3 4 5 6 7 8	116-9 116-10 116-11 116-12 117-1 117-2 117-3 117-4 117-5 117-6 117-7 117-8	All Ocean Drive (N)	Jonas Absalom Drive (W) Goean Drive (S) Pacific Drive (E) Goean Drive (N) Emeraid Drive (W) Goean Drive (S) Matthew Finders Drive (E) Goean Drive (N) Emeraid Drive (W) Goean Drive (S) Matthew Finders Drive (E) Goean Drive (N)	R T L R T L R T L R T	45 84 182 950 206 160 394 16 85 144 1,264	50 91 199 5,991 1,002 234 169 436 22 99 161 1,577	109 214 6,320 1,071 220 177 482 17 102 158 1,396	7 17 32 28 9 44 6 14 14 17 313	25 32 1,084 121 14 17 88 1 17 17 14 332	0.80% 0.90% 0.53% 1.26% 0.53% 1.28% 0.55% 1.06% 3.24% 1.54% 1.12% 2.24%	1.31% 0.93% 0.60% 0.33% 0.51% 1.01% 0.30% 0.92% 0.46% 1.17%	0.56%	0.55%	1.1
117	Matthew Finders Dilve Ocean Drive	116-8 116-9 116-10 116-11 116-12 117-4 117-2 117-3 117-4 117-5 117-6 117-7 117-8 117-9	8 9 10 11 12 2 3 4 5 6 7 8 9	116-9 116-10 116-11 116-12 117-1 117-2 117-3 117-4 117-5 117-6 117-7 117-8 117-9	All Ocean Drive (N) Matthew Flinders Drive (E) Ocean Drive (S)	Jonas Absalom Drive (W) Ocean Drive (S) Pacific Drive (E) Ocean Drive (N) Emeraid Drive (W) Ocean Drive (S) Matthew Finders Drive (E) Ocean Drive (N) Emeraid Drive (S) Matthew Finders Drive (E) Ocean Drive (S) Matthew Finders Drive (E) Ocean Drive (N) Emeraid Drive (W)	R T L R T L R T L R T L	45 84 182 950 206 160 394 16 85 144 1,264 84	50 91 199 5,991 1,002 234 169 4.38 22 99 161 1,577 99	109 214 6,320 1,071 220 177 482 17 102 158 1,396 105	7 17 755 82 28 9 44 6 14 14 17	25 32 1,034 121 14 17 88 1 1 7 14 332 21	0.80% 0.90% 1.36% 0.53% 1.28% 0.55% 1.06% 3.24% 1.54% 1.12% 2.24% 1.56%	1.31% 0.81% 0.93% 0.50% 0.33% 0.51% 1.01% 0.30% 0.92% 0.46% 1.17% 1.12%	0.56%	0.55%	1.1
117	Matthew Finders Dilve Ocean Drive	116-8 116-9 116-10 116-11 116-12 117-1 117-2 117-3 117-4 117-5 117-5 117-7 117-8	8 9 10 11 2 3 4 5 6 7 8	116-9 116-10 116-11 116-12 117-1 117-2 117-3 117-4 117-5 117-6 117-7 117-8	All Goean Drive (N) Matthew Filnders Drive (E)	Jonas Absalom Drive (W) Goean Drive (S) Pacific Drive (E) Goean Drive (N) Emeraid Drive (W) Goean Drive (S) Matthew Finders Drive (E) Goean Drive (N) Emeraid Drive (W) Goean Drive (S) Matthew Finders Drive (E) Goean Drive (N)	R T L R T L R T L R T	45 84 182 950 206 160 394 16 85 144 1,264	50 91 199 5,991 1,002 234 169 436 22 99 161 1,577	109 214 6,320 1,071 220 177 482 17 102 158 1,396	7 17 32 28 9 44 6 14 14 17 313	25 32 1,084 121 14 17 88 1 17 17 14 332	0.80% 0.90% 0.53% 1.26% 0.53% 1.28% 0.55% 1.06% 3.24% 1.54% 1.12% 2.24%	1.31% 0.93% 0.60% 0.33% 0.51% 1.01% 0.30% 0.92% 0.46% 1.17%	0.56%	0.55%	0.9
117	Matthew Finders Dilve Ocean Drive	116-8 116-9 116-10 116-11 117-1 117-2 117-3 117-4 117-5 117-6 117-7 117-8 117-9 117-10	8 9 10 11 12 2 3 4 5 6 7 8 9 10	116-9 116-10 116-11 116-12 117-1 117-2 117-3 117-3 117-5 117-6 117-7 117-8 117-9 117-10	All Ocean Drive (N) Matthew Flinders Drive (E) Ocean Drive (S)	Jonas Absalom Drive (W) Ocean Drive (S) Pacific Drive (E) Ocean Drive (H) Emeraid Drive (W) Ocean Drive (S) Matthew Flinders Drive (E) Ocean Drive (W) Ocean Drive (S) Matthew Flinders Drive (E) Ocean Drive (S) Matthew Flinders Drive (E) Ocean Drive (S)	R T L R T L R T L R T L R	45 84 132 950 206 160 394 16 85 144 1,264 84 78 215 399	50 91 199 5,991 1,002 234 169 438 22 99 161 1,577 99 79 79 79 232 490	109 214 6,320 1071 220 177 482 17 102 158 1,596 105 95 95 210 517	7 17 755 28 9 44 6 14 14 17 313 15 1 1 17 91	25 32 1,084 121 14 17 88 1 17 14 332 21 17 5 118	0.80% 0.90% 1.36% 0.53% 1.28% 0.55% 1.06% 3.24% 1.54% 1.12% 2.24% 1.56% 0.13% 0.76% 2.03%	1.31% 0.81% 0.50% 0.33% 0.51% 1.01% 0.30% 0.92% 0.46% 1.17% 1.12% 0.99% 0.12% 1.30%	0.56%	0.55%	0.9
117	Matthew Finders Dilve Ocean Drive	1168 1169 11610 11611 11611 11612 1174 1172 1173 1174 1176 1177 1178 1179 117-10 117-11	8 9 10 11 12 2 3 4 5 6 7 8 9 10 11	116-9 116-10 116-11 116-11 117-1 117-2 117-3 117-4 117-5 117-6 117-7 117-8 117-9 117-10 117-11	All Ocean Drive (N) Matthew Flinders Drive (E) Ocean Drive (S)	Jonas Absalom Drive (W) Ocean Drive (S) Pacific Drive (E) Ocean Drive (H) Emeraid Drive (W) Ocean Drive (S) Matthew Filinders Drive (E) Ocean Drive (N) Emeraid Drive (W) Matthew Filinders Drive (E) Ocean Drive (W) Emeraid Drive (W) Emeraid Drive (W) Emeraid Drive (W) Emeraid Drive (W) Emeraid Drive (W) Emeraid Drive (S) Matthew Filinders Drive (E)	R T L R T L R T L R T L R T L R T	45 84 122 950 206 160 394 16 85 144 1,264 84 78 215	50 91 199 2,991 1,002 224 169 438 22 99 161 1,577 99 99 79 232	109 214 6,320 1,071 220 177 482 17 102 158 1,396 105 95 210	7 17 755 28 9 44 6 14 17 313 15 1 17	25 32 1,064 121 14 17 88 1 17 14 332 21 17 -5	0.80% 0.90% 1.36% 0.53% 1.28% 0.53% 1.06% 3.24% 1.54% 1.12% 2.24% 1.56% 0.13% 0.76%	1.31% 0.81% 0.50% 0.33% 0.51% 1.01% 0.92% 0.46% 1.17% 1.12% 0.99% 0.12%	0.56% 1.22% 2.10% 1.47%	0.55%	1.1 0.9 1.1
	Watthew Finders Drive Ocean Drive Emerald Drive Ocean Drive Ocean Drive Ocean Drive	1166 1169 11610 11611 11612 117-1 117-2 117-3 117-4 117-5 117-6 117-7 117-8 117-9 117-10 117-11 117-12 118-1 118-1 118-2	8 9 10 11 12 3 4 5 6 7 8 9 10 11 11 12	116-9 116-10 116-11 116-11 117-1 117-2 117-3 117-4 117-5 117-6 117-7 117-8 117-7 117-8 117-7 117-8 117-10 117-11 117-12 <b></b>	All Ocean Drive (N) Matthew Filnders Drive (E) Ocean Drive (S) Emerald Drive (W) All Ocean Drive (N)	Jonas Absalom Drive (W) Ocean Drive (S) Pacific Drive (E) Ocean Drive (H) Emeraid Drive (W) Ocean Drive (S) Matthew Filinders Drive (E) Ocean Drive (N) Emeraid Drive (W) Ocean Drive (S) Matthew Filinders Drive (E) Ocean Drive (S)	R T L R T L R T L R T L R T L R T	45 84 132 950 206 160 394 16 85 144 1,264 84 78 215 399 3,995 34 316	50 91 199 5,991 1,002 234 169 438 22 99 161 1,577 99 79 232 490 4,502 4,502	109 214 6,320 177 482 17 102 188 1,396 105 95 210 517 4,730 36 392	7 17 755 32 28 9 44 6 14 14 17 313 15 1 17 91 91 607 15 43	25 32 1,084 121 14 17 88 1 17 14 332 21 17 5 118 755 2 76	0.80% 0.90% 1.36% 0.53% 1.28% 0.53% 1.28% 0.53% 1.28% 0.53% 1.54% 1.54% 1.54% 1.54% 0.76% 2.08% 1.42% 3.72% 1.28%	1.31% 0.81% 0.50% 0.33% 0.51% 1.01% 0.30% 0.92% 0.46% 1.17% 1.12% 0.99% 0.12% 1.30% 0.87% 0.87%	0.56%	0.55%	0.9
	Watthew Finders Drive Ocean Drive Emerald Drive Ocean Drive	1168 1169 11610 11611 11612 117-1 117-2 117-3 117-4 117-3 117-4 117-5 117-6 117-7 117-6 117-7 117-9 117-10 117-11 117-12 <b></b>	8 9 10 111 12 2 3 4 5 6 7 7 8 9 10 111 11 12	116-9 116-10 116-10 116-11 116-12 117-2 117-3 117-4 117-3 117-4 117-5 117-6 117-7 117-8 117-9 117-10 117-11 117-12 118-1	All Ocean Drive (N) Matthew Flinders Drive (E) Ocean Drive (S) Emerald Drive (W)	Jonas Absalom Drive (W) Ocean Drive (S) Pacific Drive (N) Emerated Drive (N) Cocean Drive (N) Cocean Drive (S) Matthew Flinders Drive (E) Ocean Drive (S) Matthew Flinders Drive (E) Ocean Drive (S) Matthew Flinders Drive (E) Ocean Drive (N) Emerated Drive (N) Emerated Drive (S) Matthew Flinders Drive (E) Ocean Drive (S) Matthew Flinders Drive (E) Ocean Drive (N) Woolworths Access (W) Ocean Drive (S) Ocean Drive (S)	R T L R T L R T L R T L R T L R R	45 84 132 950 206 160 394 16 85 144 1,264 84 78 215 399 3,995 34	50 91 199 5,991 1,002 234 169 438 22 99 161 1,577 99 79 232 490 4,502 49	109 214 6,320 1,071 220 177 482 17 102 158 1,996 105 95 210 517 4,750 36	7 17 755 28 9 44 6 14 14 17 313 15 1 1 17 91 607 15	25 32 1,084 121 14 17 88 1 17 14 332 21 17 5 118 755 2	0.80% 0.90% 1.36% 0.53% 1.23% 0.55% 1.06% 3.24% 1.54% 1.12% 2.24% 1.56% 0.13% 0.76% 2.06% 1.42% 3.72%	1.31% 0.81% 0.50% 0.33% 0.51% 1.01% 0.30% 0.92% 0.46% 1.17% 1.12% 0.99% 0.12% 1.30% 0.87%	0.56% 1.22% 2.10% 1.47%	0.55%	1.1 0.9 1.1 0.8
	Watthew Finders Drive Ocean Drive Emerald Drive Ocean Drive Ocean Drive Ocean Drive	1168 1169 11610 11611 11612 1174 1172 1173 1174 1175 1176 1177 11778 1179 11710 11711 11711 11711 11711 1182 1183	8 9 10 11 12 3 4 5 6 7 7 8 9 10 11 11 12 1 2 3	116-9 116-10 116-11 116-12 117-1 117-2 117-3 117-4 117-5 117-6 117-7 117-8 117-9 117-10 117-10 117-10 117-10 117-11 117-12 <b>118-1</b>	All Ocean Drive (N) Matthew Filnders Drive (E) Ocean Drive (S) Emerald Drive (W) All Ocean Drive (N)	Jonas Absalom Drive (W) Ocean Drive (S) Pacific Drive (E) Ocean Drive (H) Emeraid Drive (W) Ocean Drive (S) Matthew Filinders Drive (E) Ocean Drive (N) Emeraid Drive (W) Ocean Drive (S) Matthew Filinders Drive (E) Ocean Drive (S)	R T L R T L R T L R T L R T L R T T	45 84 162 5,2,35 206 160 394 16 85 164 85 144 1,264 84 78 215 399 3,995 3,995 3,4 3,16 390	50 91 199 5,991 1,002 234 169 433 22 99 161 1,577 99 79 232 490 4,602 49 359 649	109 214 6,320 1,071 220 177 482 17 102 158 1,596 105 95 210 517 4,750 36 392 675	7 17 755 28 9 44 6 14 14 17 313 15 1 1 17 91 91 607 15 43 259	25 32 1,084 121 14 17 88 1 17 4 332 21 17 4 332 21 17 -5 118 755 2 85	0.80% 0.90% 1.36% 0.53% 1.28% 0.53% 1.06% 3.24% 1.54% 1.12% 2.24% 1.56% 0.13% 0.76% 2.08% 1.42% 3.72% 1.28% 5.22%	1.31% 0.81% 0.50% 0.33% 0.51% 1.01% 0.30% 0.92% 0.46% 1.17% 1.12% 0.99% 0.12% 1.30% 0.87% 0.87% 0.87%	0.66%	0.55%	1.1 0.9 1.1

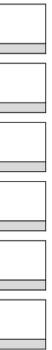
pled Growth	
2036	Com me ni
0.82%	Camidar sectional average growth adapted
0.75%	0.75% adapted - average of the Table Street approach growth in 2026 Corridor sectional average growth adopted
	0.75% adapted - average of the Table Street approach growth in 2026
0.82%	Carridor sectional average growth adopted
0.00%	Na grawth expected (dated calahment)
0.82%	Camidar socianal average grawiti adapted
0.95%	kładel resulta are reasonable
0.82%	Carridar sectional average grawth adapted
2.78%	Madel results adapted
0.82%	Camidar sectional average growth adopted
2.07%	kłodel results ad opted
1.13%	Camidar sestional average grawth adapted
0.66%	klodel results are reasonable
1.13%	Canidar sectanal average grawth adapted
1.13%	Camidar sectanal average grawth adapted
1.13%	Comidor sectional average growth adopted
0.61%	Model results are reasonable
0.52%	Madel rævik are reasonable
1.13%	Camidar socianal average grawh adapted
0.88%	Madel results are reasonable
1.13%	Camidar sectional average growth adapted
1.13%	Camidar sectional average grawth adapted
0.52%	Model resulta are reasonable
1.13%	Camidar socianal average grawth adapted
0.82%	kładel resulta are reasonable
1.13%	Camidar sectional average grawth adapted
0.97%	Madel resulta are reasonable
1.13%	Camidar socianal average grawti adapted
0.86%	klodel resulta are reasonable
1.28%	Comidar sectional average growth adopted
1.28%	Comidor sectional average growth adopted
0.22%	klodel results are reasonable

••••••••••••••••••••••••••••••••••••						_				Volume (veh)		Growth Fro	m 2016 (Veh)		unding Growth 2016	Yearly Compo From 2016	unding Growth By Approach	Ad opted Growt	
Name         Name <th< th=""><th>ID</th><th>interaection</th><th>Almaun Code</th><th></th><th></th><th>ni From</th><th>Tœ</th><th>Turn</th><th>2016</th><th>2026</th><th>2036</th><th>2026</th><th>2036</th><th>2026</th><th>2036</th><th>2026</th><th>2006</th><th>2036</th><th>Comment</th></th<>	ID	interaection	Almaun Code			ni From	Tœ	Turn	2016	2026	2036	2026	2036	2026	2036	2026	2006	2036	Comment
Marting         Marting <t< td=""><td>1 19</td><td></td><td></td><td>1 ·</td><td></td><td>Abel Tasman Dilve (N)</td><td></td><td>R</td><td>39 0</td><td></td><td></td><td>1</td><td>1</td><td></td><td></td><td>623%</td><td>3.02%</td><td>1.40%</td><td>Adapti 4% based an population growth - limited calcium ent</td></t<>	1 19			1 ·		Abel Tasman Dilve (N)		R	39 0			1	1			623%	3.02%	1.40%	Adapti 4% based an population growth - limited calcium ent
Image: sector         Image: s			119-4	1 .	119-4	Ocean Drive (E)	Abel Tasman Dive (N)		10	11	16	1	6	0.96%	2.38%	0.070	0.001	4 77 11	Camidar sectanal average grawh adapted
Image: black         Image: black <th< td=""><td></td><td></td><td>119-6</td><td>1 -</td><td>119-6</td><td>Seaside Drive (S)</td><td>Seaside Drive (S)</td><td></td><td>0</td><td>19</td><td>5</td><td>19</td><td>5</td><td>N/A</td><td>N/A</td><td>0.37%</td><td>0.25%</td><td>1.26%</td><td>Approximately 50% of lots on Sesside Drive are vacant-traffic estimated to double</td></th<>			119-6	1 -	119-6	Seaside Drive (S)	Seaside Drive (S)		0	19	5	19	5	N/A	N/A	0.37%	0.25%	1.26%	Approximately 50% of lots on Sesside Drive are vacant-traffic estimated to double
Image: Property of the state of t			119-9	9	119-9		Ocean Drive (W)	T L	0	1	171	1	171	N/A	N/A	N/A	N/A	3.00%	
Image: state			119-11	11	1 19-11	Ocean Drive (W)	Ocean Drive (E)	R   T   L	1	976	1,011	139	174	1.59%	0.95%	2.97%	1.79%	1.28%	Camidar socianal average grawti adapted
Image: Problem						All	1		1,709		2,459	723		3.59%					
Name         No         No        No        No        No </td <td>120</td> <td></td> <td></td> <td>1 ·</td> <td></td> <td>Ocean Drive (NE)</td> <td></td> <td>R</td> <td>1</td> <td></td> <td></td> <td>1</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td>4.540</td> <td>Kiodel resultreasonable</td>	120			1 ·		Ocean Drive (NE)		R	1			1	1					4.540	Kiodel resultreasonable
Image         Image <t< td=""><td></td><td></td><td>1</td><td>1</td><td></td><td></td><td></td><td></td><td>1</td><td></td><td>1</td><td>1</td><td>1</td><td></td><td></td><td>2.80%</td><td>1.31%</td><td>1.31%</td><td></td></t<>			1	1					1		1	1	1			2.80%	1.31%	1.31%	
Image: Problem			1	1 .		Public School Access (SE)		R	ŏ	-	-	1	-						Absolute values obtained from Area 14 and industrial development TIAs
Image: series of the			1	1 .				т	0	1	1	1	1			N/A	N/A	Abs.	
Image: state         Image: state<			1	1 -		Ocean Drive (SWI)						1							lister with a second la
Image: sector         Image: s			1	1		Goean Dirive (Silv)			751	1	1	1	1			2.4.1%	1.58%	1.56%	Model resurceasanable
Image: state			120-9	9				L	389	422	445	33	36		0.67%				
Image         Image <t< td=""><td></td><td></td><td>1</td><td>1</td><td></td><td>Houston Mitchell Drive (NW)</td><td></td><td>R</td><td>140</td><td></td><td>1</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td>Absolute values obtained from Area 14 and industrial development TLAs</td></t<>			1	1		Houston Mitchell Drive (NW)		R	140		1	1							Absolute values obtained from Area 14 and industrial development TLAs
Image: state			1						128		1		1			4.52%	2.99%	ADS.	
Name         Norma						All													
Name         No         No        No        No         No<	121			· ·		Beach Street (N)		R			1	1	43			3.4.1%	1.38%	1.38%	Model results are reasonable
Image: Property of the state of the sta			121-3	3	121-3	Ocean Drive (E)	Beach Street (N)		5	1	6	-4	1	-14.87%	0.92%				Carridar socianal average grawth adapted
Image: state			1	· ·		Ocean Drive (W)			1		1	1	1						Garridar sectional average growth adopted
112     120     0200 fead     130     130     130     0300 fead     130     0300 fead     130     0300 fead     0			121-6	6	121-6		Beach Street (N)	L					· ·			2.38%	1.40%	1.26%	
In Finite         Termine	100	Ocean Difus	122.1	<u> </u>	100.1	All Coolar Dates (N)	Coo an Difus (IAI)	-											
Name         Particip         Particip <th< td=""><td>122</td><td></td><td>1</td><td>2</td><td></td><td>Social Direction</td><td></td><td>L L</td><td>1</td><td></td><td>1</td><td></td><td></td><td></td><td></td><td>1.67%</td><td>1.17%</td><td>0.45%</td><td>Comidar sectional average growth adopted</td></th<>	122		1	2		Social Direction		L L	1		1					1.67%	1.17%	0.45%	Comidar sectional average growth adopted
Name         Name <th< td=""><td></td><td></td><td>1</td><td>3</td><td></td><td>The Parade (E)</td><td></td><td>R</td><td>0</td><td>-</td><td>-</td><td>0</td><td>2</td><td></td><td>N/A</td><td>-2.04%</td><td>-1.95%</td><td>0.00%</td><td>Na grawth expected (closed catchment)</td></th<>			1	3		The Parade (E)		R	0	-	-	0	2		N/A	-2.04%	-1.95%	0.00%	Na grawth expected (closed catchment)
Image: state				· ·		Oce an Drive (MD	1	· ·	1	1	1	1	1						Carity and the second started
121       New Road       121       1 <t< td=""><td></td><td></td><td></td><td>1 .</td><td></td><td>Social Diffe (iv)</td><td></td><td>· · ·</td><td></td><td>1</td><td>1</td><td></td><td></td><td></td><td></td><td>0.78%</td><td>0.41%</td><td>0.45%</td><td>Comor sectoral average grown acopie o</td></t<>				1 .		Social Diffe (iv)		· · ·		1	1					0.78%	0.41%	0.45%	Comor sectoral average grown acopie o
Nome         Nome <th< td=""><td></td><td></td><td></td><td></td><td></td><td>All</td><td></td><td></td><td></td><td></td><td></td><td></td><td>197</td><td></td><td></td><td></td><td></td><td></td><td></td></th<>						All							197						
Image:         Image:<	123		1	1		Kew Road (N)			1				1			0.21%	0.27%	0.45%	Comidar sectional average growth adopted
Normal         Normal<				3		Ocean Drive (E)		R	1	1		1	1						Carridar sestional average growth adapted
Image: Proprint of the state of the sta			1	4				L	0	0	0	0	0	N/A		1.00%	0.14%	0.45%	
n         n			1	s		Kew Road (S)		R				1				1.52%	0.30%	0.30%	kiodel resulta are reasonable
121     126     126     12     126 <td></td> <td></td> <td>123-0</td> <td></td> <td>123-0</td> <td>All</td> <td>Rew Road (N)</td> <td></td> <td>-</td>			123-0		123-0	All	Rew Road (N)												-
Oddition         Open Unive         Open Univ	124	Sirlus Drive	124-1	1	124-1	Sirlus Dilve (N)	Ocean Drive (W)	R								1079	1700	1.759	Nodel results are reasonable - additional growth fixely with Area 15 (relative to typical corrido
Participant         17.44         4.4         17.24         6.4         17.24         6.4         17.24         6.4         17.24         6.4         17.24         6.4         17.24         6.4         17.24         6.4         17.24 <td></td> <td></td> <td>1</td> <td>-</td> <td></td> <td>and a start start</td> <td></td> <td>L .</td> <td></td> <td>1</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td>1.9276</td> <td>1.70%</td> <td>1.70%</td> <td></td>			1	-		and a start start		L .		1	1					1.9276	1.70%	1.70%	
Image: Proprior of the state of the sta		cocean Drive	1	1		Cloean Drive (E)			1	1	1	1	1			0.61%	0.20%	0.79%	Carridar sectanal average grawth adapted
Image: mark of the second se	1		1	- · ·		Ocean Drive (W)		T		1		1	1				1.000	0.750	Gamidar sectanal average grawth adapted
125       Partic Highway Or-Camp (H)       1 <th< td=""><td></td><td></td><td>124-6</td><td>6</td><td>124-6</td><td></td><td>Stitus Dilve (N)</td><td>L</td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td>14.5%</td><td>1.22%</td><td>0.79%</td><td></td></th<>			124-6	6	124-6		Stitus Dilve (N)	L		-				-		14.5%	1.22%	0.79%	
Ocean Drive         1752         2         152         150         Padde Highway On-taing Point         T         0         0         0         0         NA         NA         2.4%         2.3%         2.3%           Point         153         3         4         125         125         0         000m (n)         17         0         0         0         0         NA         NA         2.4%         2.3%         2.3%           Ocean Drive         123         4         4         125         0         000m (n)         7         836         990         10.3%	125	Pacific Highway Off-rame	125.1	1	175.1		Orean Drive (M)					288							Hadel results are reasonable - arouth filely with draw 15 (relative to buical consider mediant)
Patic Highway Ourrang       235       3       125       3       125       00an Dive (m)       L       339       425       226       61       126       2.0       1.0 <th< td=""><td>120</td><td></td><td></td><td>1 .</td><td></td><td>r sono nigimay or namp (n)</td><td></td><td></td><td>1</td><td>1</td><td></td><td>0</td><td>l</td><td></td><td></td><td>2.44%</td><td>2.30%</td><td>2.30%</td><td></td></th<>	120			1 .		r sono nigimay or namp (n)			1	1		0	l			2.44%	2.30%	2.30%	
125       5       125       5       125<		Pacific Highway On-ramp	125-3	1	125-3		Ocean Drive (E)	-			1	1		2.29%	2.18%				
Image: bit is a section of the sectin of the sectin of the sectin of the section of the section of the		Ocean Drive				Ocean Drive (E)						1				1.42%	0.97%	0.97%	Model results are reasonable - additional growth likely with Area 15 (relative to typical corrid- region)
Image: second secon				1		Ocean Drive (W)						1	· ·						-
Image: state sta			1	-					1	1	1	1	· ·			0.78%	0.76%	0.79%	oomon soonna ava age grawn avapea
Ocean Drive       126-2       2       126-2       126-2       126-3       3       126-3       3       126-3       3       126-3       3       126-3       3       126-3       3       126-3       3       126-3       3       126-3       3       126-3       3       126-3       3       126-3       3       126-3       3       126-3       3       126-3       3       126-4       4       126-4       4       126-4       4       126-4       4       126-4       4       126-4       4       126-4       4       126-4       4       126-4       4       126-4       4       126-4       4       126-4       4       126-4       4       126-4       4       126-4       4       126-4       4       127-8						AI			-	-			-						
Obesine Net         Lod 2         2         100 2         2         100 10 Nation Participant Nation Part (5)         1         0         0         0         0.50 m         0.50 m <th< td=""><td>126</td><td></td><td></td><td>1</td><td></td><td>Nancy Bird Walton Drive (N)</td><td></td><td></td><td>1</td><td>1</td><td>1</td><td>1</td><td></td><td></td><td></td><td>0.60%</td><td>0.022</td><td>0.029</td><td></td></th<>	126			1		Nancy Bird Walton Drive (N)			1	1	1	1				0.60%	0.022	0.029	
Kendal Road       1264       4       1264       0 cen Dirive (E)       Nancy Bird Wation Dirive (N)       R       603       668       734       55       131       1.33%       0.99%       1.64%       1.27%				-								1	· ·			0.032	0.90%	0.96%	
Income			126-4	1 .	126-4	Ocean Drive (E)	Nancy Bird Walton Drive (N)		603	688	734	85	131	1.33%	0.99%				Nodel results are reasonable - additional growth fixely with Area. 15 (relative to typical corrido
1267       7       1267       Nancy Bird Waton Diffye (\$)       Open Diffye (E)       R       236       296       314       10       28       0.34%       0.47%       Anny       Anny       Anny Bird Waton Diffye (\$)       Anny Bird Waton Diffye (\$)       T       0       0       0       0       NA       NA       0.43%				1 .							1					1.64%	1.27%	1.27%	ecolor)
1263       8       1263       8       1264       Nancy Bird Wation Drive (N)       T       0       0       0       N/A       N/A       0.43%       0.43%       0.73%         1264       9       1269       Kendal Road (W)       L       61       67       66       6       7       0.94%       0.54%       0.43%       0.43%       0.73%       0.43%       0.73%       0.43%       0.73%       0.43%       0.43%       0.73%       0.43%<				6		Nancy Bird Watton Drive 255				1	1	1							Carridar marken al sum can arouth -dt-d
125-9       9       125-9       Kendal Road (W)       L       61       67       68       6       7       0.94%       0.54%       0.54%       126-10       126-10       Kendal Road (W)       Kendal Road (W)       R       3.6       6       2       3.5       5.24%       3.53%       -       Amount and the second and the sec				8		inancy one watch onte (a)			1	1	1	1				0.45%	0.46%	0.79%	oomon sovenalaverage grown anapeo
126-11       11       126-12			126-9	9	126-9		Kendall Road (W)	L	1	1	1	-	· ·	0.94%	0.54%				
126-12 12 126-12 126-12 Nancy Bird Watton Drive (N) L 269 371 409 102 140 3.27% 2.12%				1		Kendal Road (W)					-	1	· ·			9.544	1.5.40	0.754	Comidar sectoral average growth adapted
				1					1		1	1				2.31%	1.61%	0.79%	
					123 12	All													1

## ATTACHMENT

Section I	Boundary Street			Boundary Street	Oxdey	г	16,170	16,494	17,382	324	1,212	0.20%	0.36%	0.20%	0.36%	
	la Oxley Highway															1
	Odey tighway			Boundary Street	Oxdey	т	13,132	16,928	18,167	3,796	5,035	2.57%	1.64%	2.57%	1.64%	1
	la Boundary Street	_	_									_				
				All			29,302	33, <b>4</b> 22	35,549	4,120	6,247	1.32%	0.97%	1.32%	0.97%	
Section 2	Table St			Table Street	Lake Road	т	2,999	2,840	2,651	-159	-348	-0.54%	-0.61%	-0.54%	-0.61%	1
	la Lake Road															1
	Lake Road			Lake Road	Table Street	т	4,874	6,061	6,611	1, 187	1,737	2.20%	1.54%	2.20%	1.54%	1
	lo Table St															L
				All			7,873	8,901	9,262	1,028	1,389	1.23%	0.82%	1.23%	0.82%	
<u> </u>																
Section 3	Kasla St			Kaala Skeet	Mahow Finders	т	5,425	6,469	6,867	1,044	1,442	1.78%	1.19%	1.78%	1.19%	1
	la Malhew Finders					_						4 7 7 1	4		4.000	1
	Lake Road			Mahew Finders	Kaala Skeet	T	10,895	12,920	13,546	2,025	2,651	1.72%	1.09%	1.72%	1.09%	1
	lo Table St			AI			16,320	19,389	20,413	3.069	4,093	1.74%	1.13%	1.74%	1.13%	<u> </u>
							10,520	19/09	20,415	3,069	4,095	1.1476	1.1376	1.7476	1.13%	
Section 4	Wodworks Assess (Lake Cahie)			Wadwarths Access	Beach Street	т	2,424	2,882	3,026	458	602	1.75%	1.12%	1.79%	1.12%	
30040114	la Beach St			And Works Models	Beaut direct		2,424	2,002	0,020							1
	Beach St			Beach Street	Waalwarks Access	т	2,694	3,430	3,969	736	875	2.44%	1.42%	2 4 4 %	1.42%	1
	Wadwarths Access			Data acci			2,04	9,499	4,40.5							1
				All			5,118	6,312	6,595	1,194	1,477	2.12%	1.28%	2.12%	1.28%	
Section 5	The Parade			The Parade	Kew Road	т	886	993	986	107	100	1.15%	0.54%	1.15%	0.54%	$\square$
	la Kew Raad															1
	Beach St			Kew Road	The Parade	т	808	832	867	24	59	0.29%	0.35%	0.29%	0.35%	1
	Waalwarks Access															
				All			1,694	1,825	1,853	131	159	0.75%	0.45%	0.75%	0.45%	
Section 6	Situs Jrive la			Situs Jrive	Nancy Eird	т	2,095	2,413	2,504	318	409	1.42%	0.90%	1.42%	0.90%	1
	Nancy Bird															1
1	Nancy Bird to			Nancy Eird	Sirus Jrive	т	1,392	1,480	1,ទាទ	86	183	0.61%	0.62%	0.61%	0.62%	1
1																
	Sirus Jrive la			All			3,487	3,893	4,079	406	592	1.11%	0.79%	1.11%	0.79%	

# ORDINARY COUNCIL 19/05/2022



FOR MICOSO AND MICOUL CONTON SUBJECT

SUN Intersection Results Comparison Peak 1400-1600

									Volume (veh)		Growth Fro	m 2016 (Veh)		ounding Growth 1 2016		unding Growth By Approach	Adopte d Growth	
ID	Intersection	Aimsun Code	Turn Num ber	Movement Code	From	То	Turn	2016	2026	2036	2026	2036	2026	2036	2026	2036	2036	Comment
101	Boundary Street Hastings River Drive	101-1 101-2	1 2	101-1 101-2	Boundary Street (N)	Hastings River Drive (W) Roundary Street (S)	R T	7	12 0	19 0	5 0	12 0	5.54% N/A	5.12% N/A	0.33%	-0.02%	0.33%	2026 growth adopted
	Roundary Street Hastings River Drive	101-3 101-4 101-5	3 4 5	101-3 101-4 101-5	Hastings River Drive (E)	Hastings River Drive (E) Boundary Street (N) Hastings River Drive (W)	R	200 167 1,321	202 161 1,472	187 179 1,775	2 -6 151	-13 12 454	0.10% -0.37% 1.09%	-0.34% 0.35% 1.49%	1.95%	1.57%	0.78%	Corridor sectional average growth adopted
		101-6	6 7	101-5 101-6 101-7	Roundary Street (S)	Roundary Street (S) Hastings River Drive (E)	L R	516	797 941	780 984	281 145	264	4.44%	2.09%	1.8576		0.7076	High growth due to airport expansion. 2020 surveys
		101-8 101-9 101-10	8 9 10	101-8 101-9 101-10	Hastings River Drive (W)	Boundary Street (N) Hastings River Drive (W) Roundary Street (S)	L	2 133 43	5 932 60	9 986 96	3 799 17	7 853 53	9.60% 21.49% 3.39%	7.81% 10.54% 4.10%	7.27%	3.84%	Abs.	with limited tights and industrial development. Abso values adopted Consists continued success growth astrobot
		101-11 101-12	11 12	101-11 101-12		Hastings River Drive (E) Boundary Street (N)	T	1,356 9	1.408 9	1,407 15	52 0	51 6	0.38% 0.00%	0.18% 2.59%	0.48%	0.38%	0.78%	Corridor sectional average growth adopted
102	Hastings River Drive	102-1	1	102-1	All Hastings River Drive (E)	Hastings River Drive (W)	т	4,550	5,999	6,437 2,404	1,449 424	1,887	2.80%	1.75%				Demides and in all success much a dealer
102	Hughes Place	102-2	2	102-2	nasings river brive (E)	Hughes Place (S)	i i	482	349	395	-133	-87	-3.18%	-0.99%	1.28%	1.26%	0.78%	Corridor sectional average growth adopted
	Hastings River Drive	102-3	3	102-3	Hughes Place (S)	Hastings River Drive (E)	R	557	573	558	16	1	0.28%	0.01%	0.24%	0.04%	0.30%	klodel rale is reasonable
		102-4 102-5	4 5	102-4 102-5	Hastings River Drive (W)	Hastings River Drive (W) Hughes Place (S)	R	320 51	325 69	326 76	5	6 25	0.16% 3.07%	0.09%			0.0070	
		102-6	6	102-6	riasings river brive (vr)	Hastings River Drive (E)	Т	2,295	2,479	2,494	184	199	0.77%	0.42%	0.83%	0.46%	0.78%	Corridor sectional average growth adopted
					All			5,400	5,914	6,253	514	853	0.91%	0.74%				
03	Newport Island Road Hastings River Drive	103-1 103-2	1	103-1 103-2	Newport Island Road (N)	Hastings River Drive (W) Hastings River Drive (E)	R	346 778	351	366 1,081	5 222	20 303	0.14% 2.54%	0.28%	1.86%	1.27%	1.27%	klodel rate is reasonable
	Hastings River Drive	103-2	3	103-2	Hastings River Drive (E)	Newport Island Road (N)	R	297	471	536	174	239	4.72%	3.00%			0.700	Corridor sectional average growth adopted
	,	103-4	4	103-4		Hastings River Drive (W)	т	2,289	2,785	3,031	496	742	1.98%	1.41%	2.33%	1.62%	0.78%	
		103-5 103-6	5	103-5 103-6	Hastings River Drive (W)	Hastings River Drive (E)	T	2,201 651	2,477 571	2,403 645	276	202	1.19% -1.30%	0.44%	0.67%	0.33%	0.78%	Corridor sectional average growth adopted
		103-0	0	103-0	All	Newport Island Road (N)		6,562	7,655	8,062	1,093	1,500	1.55%	1.03%				
04	Hastings River Drive	104-1	1	104-1	Hastings River Drive (E)	Hastings River Drive (W)	Т	1,649	1,884	2,119	235	470	1.34%	1.26%	1.32%	1.10%	0.78%	Corridor sectional average growth adopted
	Clifton Drive	104-2	2	104-2 104-3	Olifana Drive (C)	Clifton Drive (S)	L R	285 905	320 1,138	288 1,155	35 233	3 250	1.17%	0.05%				1.87 grouts rule adapted in line with non-define
	Hastings River Drive	104-3 104-4	4	104-3	Clifton Drive (S)	Hastings River Drive (E) Hastings River Drive (W)	L	905	1,138	1,155	438	520	2.32% 3.89%	1.23%	3.15%	1.76%	1.40%	1.4% growh rate adopted in line with population
		104-5	5	104-5	Hastings River Drive (W)	Clifton Drive (S)	R	793	1,089	1,096	296	303	3.22%	1.63%	1.55%	0.79%	0.78%	Corridor sectional average growth adopted
		104-6	6	104-6		Hastings River Drive (E)	T	2,183	2,381	2,386	198	203	0.87%	0.45%	1,0076	0.78%	0.70%	
5.1	Bellbowrie Street	105.1-1	1	105.1-1	All Bellbowrie Street (N)	Hastings River Drive (W)	R	6,757 160	8,192 180	8,506 177	1,435	1,749	1.94%	1.16%				Reasonable - unively to atracthigh demand du
NJ. 1	Hastings River Drive	105.1-2	2	105.1-2	Denoonne Greet (it)	Hastings River Drive (E)	L	624	608	625	-16	1	-0.28%	0.01%	0.05%	0.11%	0.11%	form / operations
	Hastings River Drive	105.1-3	3	105.1-3	Hastings River Drive (E)	Bellbowrie Street (N)	R	729	617	617	-112	-112	-1.65%	-0.83%	0.45%	0.61%	0.78%	Corridor sectional average growth adopted
		105.1-4 105.1-5	4	105.1-4 105.1-5	Hastings River Drive (W)	Hastings River Drive (W) Hastings River Drive (E)	T	1,811 2,569	2,039	2,252 2,750	228 185	441 181	1.19%	1.10% 0.34%				Parrielar and in a success mouth adapted
		105.1-6	6	105.1-6		Bellbowrie Street (N)	i	553	777	807	224	254	3.46%	1.91%	1.24%	0.65%	0.78%	Corridor sectional average growth adopted
					All			6,446	6,975	7,228	529	782	0.79%	0.57%				
)5.2	Hastings River Drive Widderson Street	105.2-1 105.2-2	1 2	105.2-1 105.2-2	Hastings River Drive (E)	Hastings River Drive (W) Widderson Street (S)	T	1,649 244	1,834 597	2,019 908	185 353	370 664	1.07% 9.38%	1.02% 6.79%	2.53%	2.20%	0.78%	Corridor sectional average growth adopted
	Hastings River Drive	105.2-3	3	105.2-3	Widderson Street (S)	Hastings River Drive (E)	R	72	201	233	129	161	10.81%	6.05%	0.62%	0.59%	0.62%	Reasonable
		105.2-4	4	105.2-4		Hastings River Drive (W)	L	891	823	851	-68	-40	-0.79%	-0.23%	0.02%	0.39%	0.02%	
		105.2-5 105.2-6	5	105.2-5 105.2-6	Hastings River Drive (W)	Widderson Street (S) Hastings River Drive (E)	R	842 2,349	938 2,424	1,012 2,361	96 75	170 12	1.09% 0.31%	0.92%	0.52%	0.28%	0.78%	Corridor sectional average growth adopted
		1001.0	, , , , , , , , , , , , , , , , , , ,	100.2 0	All	Treasings rave brive (c)	· ·	6,047	6,817	7,384	770	1,337	1.21%	1.00%				
	Aston Street	106-1	1	108-1	Aston Street (N)	Hastings River Drive (W)	R	155	237	258	82	103	4.34%	2.58%	3.28%	1.83%	1.40%	Traile to sports fields etc. If vely to grow to grow o population growth 1.4% growth rate adopted in til
	Hastings River Drive Hastings River Drive	106-2 106-3	2	108-2 108-3	Hastings River Drive (E)	Hastings River Drive (E) Aston Street (N)	LR	26	13 72	2 48	-13 -75	-24 -99	-6.70% -6.89%	-12.04%				
	instruger the state	108-4	4	108-4		Hastings River Drive (W)	т	1,689	2,163	2,648	474	959	2.50%	2.27%	1.99%	1.94%	0.78%	Corridor sectional average growth adopted
		106-5	5	108-5	Hastings River Drive (W)	Hastings River Drive (E)	Т	2,348	2,429	2,349	81	1	0.34%	0.00%	0.81%	0.35%	0.78%	Corridor sectional average growth adopted
		106-6	6	108-6	All	Aston Street (N)	L	68 4,433	191 5,105	240 5,545	123 672	172	10.88%	6.51% 1.13%				-
07	Blueberry Lane	107-1	1	107-1	Blueberry Lane (N)	Hastings River Drive (W)	R	1,836	2,235	2,697	399	861	1.99%	1.94%				No grow in expected (closed calchment)
	Hastings River Drive	107-2	2	107-2		Findlay Avenue (S)	Т	26	5	5	-21	-21	-15.20%	-7.91%	1.87%	1.87%	0.00%	
	Findlay Avenue Hastings River Drive	107-3 107-4	3	107-3 107-4	Hastings River Drive (E)	Hastings River Drive (E) Blueberry Lane (N)		32 10	39 11	44	7	12	2.00% 0.96%	1.61% -1.77%				Cognitive continenal anarous assume where a
		107-5	5	107-5		Hastings River Drive (W)	т	1,314	1,730	2,167	416	853	2.79%	2.53%	2.58%	2.41%	0.78%	Corridor sectional average growth adopted
		107-6	6	107-6		Findlay Avenue (S)	L	83	70	92	-13	9	-1.69%	0.52%				
		107-7 107-8	7	107-7 107-8	Findlay Avenue (S)	Hastings River Drive (E) Blueberry Lane (N)	R	165 10	223 5	365 6	58 -5	200	3.06% -6.70%	4.05%	-0.09%	1.03%	1.03%	klodel rate is reasonable
		107-0	9	107-0		Hastings River Drive (W)	l i	486	427	441	-59	-45	-1.29%	-0.48%				
		107-10	10	107-10	Hastings River Drive (W)	Findlay Avenue (S)	R	158	128	128	-30	-30	-2.08%	-1.05%				Corridor sectional average growth adopted
		107-11 107-12	11	107-11 107-12		Hastings River Drive (E) Blueberry Lane (N)	T	2,173 30	2,267 32	2,184 29	94	-1	0.42% 0.65%	0.03%	0.28%	-0.04%	0.78%	
		10/-12	12	10/1-12	All	Diveveny Lane (N)	-	6,323	7,172	8,165	849	1,842	1.27%	1.29%				-
08	Park Street	108-1	1	108-1	Park Street (N)	Hastings River Drive (W)	R	434	1,068	1,406	634	972	9.42%	6.05%	2.85%	2.37%	1.40%	1.4% adopted in line with population growth
	Hastings River Drive	108-2 108-3	2	108-2 108-3	Hastings Diver Drive (E)	Hastings River Drive (E) Park Street (N)	L R	902 1,508	702	728	-200 -80	-174 21	-2.48% -0.54%	-1.07% 0.07%				Description of an area of the start of
		108-3	3		Hastings River Drive (E)		к		1,428			1	-0.54% -3.67%	-1.19%	-1.61%	-0.37%	0.78%	Corridor sectional average growth adopted
	Hastings River Drive	108-4	4	108-4		Hastings River Drive (W)	T	901	620	709	-281	-192	-3.0/%	-1.19%	1			
	Hastings River Unive	108-4 108-5 108-6	4 5	108-4 108-5 108-6	Hastings River Drive (W)	Hastings River Drive (W) Hastings River Drive (E) Park Street (N)	T	901 1,625 919	1,696	1,823	-281 71 51	-192 198 41	-3.07% 0.43% 0.54%	0.58%	0.47%	0.45%	0.78%	Corridor sectional average growth adopted

## ORDINARY COUNCIL 19/05/2022

									Volume (veh)		Growth Fro	m 2016 (Veh)	reany compo From	2016	From 2016	By Approach	Adopte d Growt	n
ID	Intersection	Aimsun Code	Turn Num ber	Movement Code	From	То	Turn	2016	2026	2036	2026	2036	2026	2036	2026	2036	2036	Comment
109	Hastings River Drive	109-1	1	109-1	Hastings River Drive (N)	Oxley Highway (W)	R	461	289	374	-172	-87	-4.56%	-1.04%				Corridor sectional average growth adopted
	Gordon Street Ocean Drive	109-2 109-3	2 3	109-2 109-3		Ocean Drive (S) Gordon Street (E)	L	1,040	978 1,151	975 1,212	-62 90	-65 151	-0.61% 0.82%	-0.32% 0.67%	-0.58%	0.00%	0.78%	
	Oxley Highway	109-4 109-5	4	109-4 109-5	Gordon Street (E)	Hastings River Drive (N) Oxley Highway (W)	R	911 2,882	511 3,263	631 3,417	-400 381	-280 535	-5.62% 1.25%	-1.82% 0.86%	-0.09%	0.33%	0.78%	Corridor sectional average growth adopted
		109-6	6	109-6		Ocean Drive (S)	Ĺ	897	875	957	-22	60	-0.25%	0.32%		0.3576	0.70%	
		109-7 109-8	8	109-7 109-8	Ocean Drive (S)	Gordon Street (E) Hastings River Drive (N)	R T	1,091	893 1,330	1,039 1,412	-198 103	-52 185	-1.98% 0.81%	-0.24% 0.70%	-0.33%	0.37%	0.78%	Corridor sectional average growth adopted
		109-9 109-10	9 10	109-9 109-10	Oxley Highway (W)	Oxley Highway (W) Ocean Drive (S)	L R	342 334	350 283	412 419	8 -51	70 85	0.23% -1.64%	0.94% 1.14%				Corridor sectional average growth adopted
		109-11	11	109-11	,, (,	Gordon Street (E)	т	1,602	2,220	2,271	618	669	3.32%	1.76%	2.05%	1.34%	0.78%	Control sectorial average grown adopted
		109-12	12	109-12	All	Hastings River Drive (N)	L	215 12,063	132 12,275	116 13,235	-83 212	-99	-4.76% 0.17%	-3.04% 0.46%				
110	Ocean Drive Table Street	110-1 110-2	1	110-1 110-2	Ocean Drive (N)	Ocean Drive (S) Table Street (E)	T L	2,094 164	1,890 239	1,940 400	-204 75	-154 236	-1.02% 3.84%	-0.38% 4.56%	-0.59%	0.18%	0.78%	Corridor sectional average growth adopted for the previous se-
	Ocean Drive	110-3	3	110-3	Table Street (E)	Ocean Drive (S)	L	694	829	982	135	288	1.79%	1.75%	1.79%	1.75%	0.75%	Limited growth expected. Based on Ald peak
	Table Street	110-4 110-5	5	110-4 110-5	Ocean Drive (S)	Ocean Drive (N) Table Street (W)	L	2,265 640	2,111 781	2,326 896	-154 141	61 256	-0.70% 2.01%	0.13% 1.70%	-0.70%	0.13%	0.78%	Corridor sectional average growth adopted for the previous se
		110-6	6	110-6	Table Street (W) All	Ocean Drive (N)	L	400 6,257	464 6,314	538 7,082	64 57	138	1.50%	1.49% 0.62%	1.02.76	1.02.76	0.75%	Limited growth expected. Based on Ald peak
111	Ocean Drive	111-1	1	111-1	Ocean Drive (N)	Hindman Street (W)	R	456	625	667	169	211	3.20%	1.92%		0.489	0.70%	Corridor sectional average growth adopted for the previous se
	Kooloonbung Close Ocean Drive	111-2 111-3	2	111-2 111-3		Ocean Drive (S) Kooloonbung Close (E)	Ľ	1,863	1,735 20	1,704 29	-128 16	-159 25	-0.71% 17.46%	-0.45% 10.41%	0.24%	0.16%	0.78%	
	Hindman Street	111-4 111-5	4	111-4 111-5	Kooloonbung Close (E)	Ocean Drive (N) Hindman Street (W)	R T	17	48 31	66 32	31 27	49 28	10.94% 22.72%	7.02% 10.98%	9.37%	5.12%	0.00%	Adapt 0% - no growth ankcipated.
		111-6	6	111-6	Osess Drive (P)	Ocean Drive (S)	L	28	41	35 46	13	7 37	3.89%	1.12%				Corridor continuel autoropa answeb established for the second
		111-7 111-8	8	111-7 111-8	Ocean Drive (S)	Kooloonbung Close (E) Ocean Drive (N)	т	9 2,189	40 1,736	1,802	31 -453	-387	16.09% -2.29%	8.50% -0.97%	-1.48%	-0.05%	0.78%	Corridor sectional average growth adopted for the previous se
		111-9 111-10	9	111-9 111-10	Hindman Street (W)	Hindman Street (W) Ocean Drive (S)	R	211 811	300 1,329	535 1,805	89 518	324 994	3.58% 5.06%	4.76% 4.08%				1.4% growh rate adopted in line with population growth
		111-11	11	111-11		Kooloonbung Close (E)	Т	3	45	96	42	93 788	31.10%	18.92%	7.14%	4.80%	1.40%	
		111-12	12	111-12	All	Ocean Drive (N)	L	392 5,987	1,030 6,980	1,180 7,997	638 993	2,010	10.14% 1.55%	5.66% 1.46%				-
112	Ocean Drive Lake Road	112-1 112-2	1	112-1 112-2	Ocean Drive (N)	Lake Road (W) Ocean Drive (S)	R	130 2,246	41 2,446	24 2,666	-89 200	-106 420	-10.90% 0.86%	-8.10% 0.86%	1.38%	1.36%	1.38%	Wodel nate is reasonable
	Ocean Drive	112-3 112-4	3	112-3 112-4	Lata Band (C)	Lake Road (E)	LR	320	606 167	844 237	286 -47	524 23	6.59% -2.45%	4.97% 0.51%				
	Lake Road	112-5	5	112-4	Lake Road (E)	Ocean Drive (N) Lake Road (W)	T	214 1,178	1,482	1,510	304	332	2.32%	1.25%	2.22%	1.12%	1.12%	Wodel rate is reasonable
		112-6 112-7	6	112-8 112-7	Ocean Drive (S)	Ocean Drive (S) Lake Road (E)	L R	771 718	1,045 787	954 869	274 69	183 151	3.09% 0.92%	1.07% 0.96%				kiodel rate is reasonable
		112-8 112-9	8	112-8		Ocean Drive (N)	T	1,670 1,645	1,596	1,821	-74 427	151 375	-0.45%	0.43% 1.03%	1.00%	0.78%	0.78%	
		112-10	10	112-9 112-10	Lake Road (W)	Lake Road (W) Ocean Drive (S)	R	3,001	2,072 3,021	2,020 2,821	20	-180	2.33% 0.07%	-0.31%				Adopt 1. 12% consistent with Lave Road (W)
		112-11 112-12	11	112-11 112-12		Lake Road (E) Ocean Drive (N)	L	1,051 532	1,158 329	1,166 339	107 -203	115 -193	0.97% -4.69%	0.52% -2.23%	-0.17%	-0.29%	1.12%	
113	Ocean Drive	113-1		113-1	All Ocean Drive (N)	Ocean Drive (S)	T	13,476 4,608	14,750 5,055	15,271 5,022	1,274 447	1,795 414	0.91%	0.63%				
115	Koala Street	113-2	2	113-2		Koala Street (E)	Ĺ	1,394	1,397	1,344	3	-50	0.02%	-0.18%	0.73%	0.29%	0.57%	Corridor sectional average growth adopted
	Ocean Drive	113-3 113-4	3	113-3 113-4	Koala Street (E)	Ocean Drive (N) Ocean Drive (S)	R	1,033 278	1,067 310	1,132 316	34 32	99 38	0.32%	0.46% 0.64%	0.49%	0.50%	0.50%	Model rate is reasonable
		113-5 113-6	5	113-5 113-6	Ocean Drive (S)	Koala Street (E) Ocean Drive (N)	R	46 3,002	72 3,353	58 3,548	26 351	12 546	4.58% 1.11%	1.17% 0.84%	1.17%	0.84%	0.57%	Corridor sectional average growth adopted
					All			10,361	11,254	11,420	893	1,059	0.83%	0.49%				
114	Ocean Drive Ocean Drive	114-1 114-2	1 2	114-1 114-2	Ocean Drive (N)	Greenmeadows Drive (W) Ocean Drive (S)	R T	390 4,205	419 4,647	415 4,615	29 442	25 410	0.72%	0.31% 0.47%	0.98%	0.45%	0.57%	Corridor sectional average growth adopted
	Greenmeadows Drive	114-3 114-4	3	114-3 114-4	Ocean Drive (S)	Ocean Drive (N) Greenmeadows Drive (W)	T	2,965 25	3,325 34	3,495 40	360	530 15	1.15% 3.12%	0.83% 2.38%	1.17%	0.84%	0.57%	Corridor sectional average growth adopted
		114-5	5	114-5	Greenmeadows Drive (W)	Ocean Drive (S)	R	9	8	16	-1	7	-1.17%	2.92%	2.23%	1.57%	1.57%	Model rale is reasonable
4.1-		114-6	6	114-6	All	Ocean Drive (N)		76 7,670	98 8,531	100 8,681	22 861	24 1,011	2.57%	1.38% 0.62%				
115	Dahlsford Drive Ocean Drive	115-1 115-2	1 2	115-1 115-2	Dahlsford Drive (N)	Ocean Drive (W) Crestwood Drive (S)	R T	327 15	369 15	397 14	42 0	70	1.22% 0.00%	0.97% -0.34%	1.40%	0.79%	0.79%	klodel rate is reasonable
	Crestwood Drive Ocean Drive	115-3 115-4	3	115-3 115-4	Ocean Drive (E)	Ocean Drive (E) Dahlsford Drive (N)	L R	55 38	72 52	54 68	17 14	-1 30	2.73% 3.19%	-0.09% 2.95%				Possider antional success growth adapted
	Second Diffe	115-5	5	115-5	Contracted (C)	Ocean Drive (W)	т	2,216	2,518	2,661	302	445	1.29%	0.92%	1.24%	0.91%	0.57%	Corridor sectional average growth adopted
		115-6 115-7	6	115-6 115-7	Crestwood Drive (S)	Crestwood Drive (S) Ocean Drive (E)	R	241 211	252 211	261 199	11 0	20 -12	0.45% 0.00%	0.40% -0.29%				Reasonable
		115-8 115-9	8	115-8 115-9		Dahlsford Drive (N) Ocean Drive (W)	T L	20 450	20 474	20 477	0 24	0 27	0.00% 0.52%	0.00% 0.29%	0.35%	0.11%	0.11%	
		115-10	10	115-10	Ocean Drive (W)	Crestwood Drive (S)	R	456	529	580	73	124	1.50%	1.21%				Corridor sectional average growth adopted
		115-11 115-12	11 12	115-11 115-12		Ocean Drive (E) Dahlsford Drive (N)	T L	3,313 438	3,651 471	3,560 482	338 33	247 44	0.98% 0.73%	0.36% 0.48%	1.01%	0.47%	0.57%	
116	Ocean Drive	116-1	1	116-1	All Ocean Drive (N)	Jonas Absalom Drive (W)	R	7,780 434	8,634 464	8,773 449	854 30	993 15	1.05% 0.87%	0.60%				Corridor and increase growth whether
. 10	Pacific Drive	116-2	2	116-2		Ocean Drive (S)	т	2,221	2,413	2,398	192	177	0.83%	0.38%	0.94%	0.30%	0.57%	Corridor sectional average growth adopted
	Ocean Drive Jonas Absalom Drive	116-3 116-4	3	116-3 116-4	Pacific Drive (E)	Pacific Drive (E) Ocean Drive (N)	R	922 988	1,051 1,207	949 1,258	129 219	27 270	1.32% 2.02%	0.14% 1.22%				klodel rale is reasonable
		116-5 116-6	5	116-5 116-6		Jonas Absalom Drive (W) Ocean Drive (S)	T	70 735	61 804	73 879	-9 69	3 144	-1.37% 0.90%	0.21% 0.90%	1.46%	1.05%	1.05%	
		116-7	7	116-7	Ocean Drive (S)	Pacific Drive (E)	R	776	1,023	1,042	247	266	2.80%	1.48%				Corridor sectional average growth adopted
		116-8 116-9	8	116-8 116-9		Ocean Drive (N) Jonas Absalom Drive (W)	L	1,339 38	1,410 56	1,510 39	71 18	171	0.52% 3.95%	0.60% 0.13%	1.46%	0.93%	0.57%	
	1	116-10	10	116-10	Jonas Absalom Drive (W)	Ocean Drive (S)	R	13	24	20	11	7	6.32%	2.18%				klodel rale is reasonable
		116-11	11	116-11		Pacific Drive (E)	Т	59	65	61	6	2	0.97%	0.17%	2.08%	1.27%	1.27%	

									Volume (veh)		Growth Fro	m 2016 (Veh)	reany Compo From	anang Growan 1 2016	From 2016	By Approach	Adopte d Growt	
ID	Intersection	Aimsun Code	Turn Num ber	Movement Code	From	То	Turn	2016	2026	2036	2026	2036	2026	2036	2026	2036	2036	Comment
117	Ocean Drive	117-1	1		Ocean Drive (N)	Emerald Drive (W)	R	1,938	2,185	2,241	247	303	1.21%	0.73%				Corridor sectional average growth adopted
	Matthew Flinders Drive Ocean Drive	117-2 117-3	2	117-2 117-3		Ocean Drive (S) Matthew Flinders Drive (E)	L T	555 470	620 427	609 445	65 -43	54 -25	1.11% -0.95%	0.47%	0.87%	0.53%	0.57%	
	Emerald Drive	117-4	4	117-4	Matthew Flinders Drive (E)	Ocean Drive (N)	R	461	553	550	92	89	1.84%	0.89%				klodel rale is reasonable
		117-5 117-6	5	117-5 117-8		Emerald Drive (W) Ocean Drive (S)	T L	20 165	23 240	24 218	3 75	4 53	1.41% 3.82%	0.92% 1.40%	2.36%	1.02%	1.02%	
		117-0	7	117-0	Ocean Drive (S)	Matthew Flinders Drive (E)	R	143	148	174	5	31	0.34%	0.99%				Corridor sectional average growth adopted
		117-8	8	117-8		Ocean Drive (N)	Т	1,219	1,294	1,317	75	98	0.60%	0.39%	0.51%	0.44%	0.57%	
		117-9 117-10	9 10	117-9 117-10	Emerald Drive (W)	Emerald Drive (W) Ocean Drive (S)	R	112 152	109 224	117 213	-3 72	5	-0.27% 3.95%	0.22%				kiodel rate is reasonable
		117-11	11	117-11		Matthew Flinders Drive (E)	Т	246	283	268	37	22	1.41%	0.43%	2.83%	1.63%	1.63%	
		117-12	12	117-12	Al	Ocean Drive (N)	L	475 5,956	647 6,753	726 6,902	172	251 946	3.14%	2.14%				-
118	Ocean Drive	118-1	1	118-1	Ocean Drive (N)	Woolworths Access (W)	R	536	535	525	-1	-11	-0.02%	-0.10%	2.26%	0.95%	0.93%	Corridor sectional average growth adopted
	Ocean Drive Woolworths Access	118-2 118-3	2	118-2 118-3	Ocean Drive (S)	Ocean Drive (S) Ocean Drive (N)	T T	254 529	453 601	430 652	199 72	176 123	5.96% 1.28%	2.67% 1.05%				Corridor sectional average growth adopted
		118-4	4	118-4		Woolworths Access (W)	L	734	774	778	40	44	0.53%	0.29%	0.85%	0.62%	0.93%	
		118-5 118-6	5	118-5 118-6	Woolworths Access (W)	Ocean Drive (S) Ocean Drive (N)	R	928 888	926 910	953 910	-2 22	25 22	-0.02% 0.25%	0.13%	0.11%	0.13%	0.13%	klodel rate is reasonable
			-		All			3,869	4,199	4,248	330	379	0.82%	0.47%				
119	Abel Tasman Drive Ocean Drive	119-1 119-2	1 2	119-1 119-2	Abel Tasman Drive (N)	Ocean Drive (W) Seaside Drive (S)	R	12	5	10	-7	-2	-8.38% N/A	-0.91% N/A	-2.34%	0.26%	0.28%	klodel rale is reasonable
	Seaside Drive	119-3	3	119-3		Ocean Drive (E)	Ĺ	7	10	9	3	2	3.63%	1.26%				
	Ooean Drive	119-4 119-5	4	119-4 119-5	Ocean Drive (E)	Abel Tasman Drive (N) Ocean Drive (W)	R	10 1,169	8 1,188	14 1,222	-2 19	4 53	-2.21% 0.16%	1.70% 0.22%	1.63%	0.76%	0.93%	Corridor sectional average growth adopted
		119-6	6	119-6		Seaside Drive (S)	Ľ	0	190	135	190	135	N/A	0.22 %	1.03 /6	0.70%	U.8576	
		119-7	7	119-7	Seaside Drive (S)	Ocean Drive (E)	R	0	14	27	14	27	N/A	N/A			0.000	Approximately 50% of lots on Seaside Drive are vacant - traffic estimated to double
		119-8 119-9	9	119-8 119-9		Abel Tasman Drive (N) Ocean Drive (W)	L	0	2 279	355	2 279	1 355	N/A N/A	N/A N/A	N/A	N/A	3.00%	
		119-10	10	119-10	Ocean Drive (W)	Seaside Drive (S)	R	0	420	453	420	453	N/A	N/A				Corridor sectional average growth adopted
		119-11 119-12	11 12	119-11 119-12		Ocean Drive (E) Abel Tasman Drive (N)		1,285 18	1,383 30	1,428 40	98 12	143 22	0.74% 5.24%	0.53% 4.07%	3.47%	1.96%	0.93%	
100		100.1			All			2,501	3,529	3,695	1,028	1,194	3.50%	1.97%				
120	Ocean Drive Public School Access	120-1 120-2	2	120-1 120-2	Ocean Drive (NE)	Houston Mitchell Drive (NW) Ocean Drive (SW)	R T	151 1,024	261 1,186	229 1,331	110 162	78 307	5.62% 1.48%	2.10%	2.21%	1.48%	1.48%	klodel result reasonable
	Ocean Drive	120-3	3	120-3		Public School Access (SE)	L	0	15	11	15	11	N/A	N/A				
	Houston Mitchell Drive	120-4 120-5	4	120-4 120-5	Public School Access (SE)	Ocean Drive (NE) Houston Mitchell Drive (NW)	R	0	7 148	6 71	7 148	6 71	N/A N/A	N/A N/A	NA	N/A	Abs.	Absolute values obtained from Area 14 and industrial developm 11As
		120-6	6	120-6		Ocean Drive (SW)	L	0	181	227	181	227	N/A	N/A				
		120-7 120-8	7 8	120-7 120-8	Ocean Drive (SW)	Public School Access (SE) Ocean Drive (NE)	R	0 793	55 897	60 910	55 104	60 117	N/A 1.24%	N/A 0.69%	1.50%	1.07%	1.07%	kiodel result reasonable
		120-9	9	120-9		Houston Mitchell Drive (NW)	Ĺ	187	185	242	-2	55	-0.11%	1.30%				
		120-10 120-11	10 11	120-10 120-11	Houston Mitchell Drive (NW)	Ocean Drive (SW) Public School Access (SE)	R	366 0	456 397	524 368	90 397	158 368	2.22% N/A	1.81% N/A	7.29%	3.89%	Abs.	Absolute values obtained from Area 14 and industrial developm TIAs
		120-11	12	120-12		Ocean Drive (NE)	Ľ	524	945	1,018	421	494	6.07%	3.38%	120%	5,0878	~3.	
121	Beach Street	121-1	1	121-1	All Beach Street (N)	Ocean Drive (W)	R	3,045 84	4,733 94	4,997	1,688	1,952 20	4.51%	2.51%				kiodel result reasonable
	Ocean Drive	121-2	2	121-2		Ocean Drive (E)	L	34	32	42	-2	8	-0.60%	1.06%	0.66%	1.07%	1.07%	
	Ooean Drive	121-3 121-4	3	121-3 121-4	Ocean Drive (E)	Beach Street (N) Ocean Drive (W)	R	7 740	4 848	9 908	-3 108	2 168	-5.44% 1.37%	1.26% 1.03%	1.32%	1.03%	0.93%	Corridor sectional average growth adopted
		121-5	5		Ocean Drive (W)	Ocean Drive (E)	T	1,037	1,340	1,478	303	441	2.60%	1.79%	2.58%	1.84%	0.93%	Corridor sectional average growth adopted
		121-6	6	121-6	All	Beach Street (N)	L	119 2,021	151 2,469	188 2,729	32 448	69 708	2.41%	2.31%	2.00 %	1.217	0.0070	-
122	Ocean Drive	122-1	1	122-1	Ocean Drive (N)	Ocean Drive (W)	R	396	482	487	86	91	1.98%	1.04%	2.20%	1.19%	0.89%	Corridor sectional average growth adopted
	The Parade Ocean Drive	122-2 122-3	2	122-2 122-3	The Parade (E)	The Parade (E) Ocean Drive (N)	L R	349 0	444	456	95 0	107 3	2.44% N/A	1.35% N/A				Lis manife converted Alexand a sinite set
		122-4	4	122-4		Ocean Drive (W)	T	63	36	45	-27	-18	-5.44%	-1.67%	-5.44%	-1.35%	0.00%	No growth expected (closed calciment)
		122-5 122-6	5	122-5 122-8	Ocean Drive (W)	The Parade (E) Ocean Drive (N)	Т	625 563	669 684	669 702	44 121	44 139	0.68% 1.97%	0.34% 1.11%	1.31%	0.72%	0.89%	Corridor sectional average growth adopted
			~		All		-	1,996	2,315	2,362	319	366	1.49%	0.85%				
123	Kew Road Ocean Drive	123-1 123-2	1 2	123-1 123-2	Kew Road (N)	Kew Road (S) Ocean Drive (E)	L	830 686	882 729	858 778	52 43	28 92	0.61% 0.61%	0.17% 0.63%	0.61%	0.38%	0.89%	Corridor sectional average growth adopted
	Kew Road	123-3	3	123-3	Ocean Drive (E)	Kew Road (N)	R	707	754	842	47	135	0.65%	0.88%	0.65%	0.88%	0.89%	Corridor sectional average growth adopted
		123-4 123-5	4	123-4 123-5	Kew Road (S)	Kew Road (S) Ocean Drive (E)	L R	0	0 18	0	0	0	N/A 16.23%	N/A 4.14%				Model res # resormable
		123-6	6	123-6		Kew Road (N)	т	672	718	715	46	43	0.66%	0.31%	0.85%	0.34%	0.34%	kiodel result reasonable
124	Sirius Drive	124-1	1	124-1	All Sirius Drive (N)	Ocean Drive (W)	R	2,899 424	3,101 639	3,202 732	202 215	303 308	0.68%	0.50%				kiodel results are reasonable - actilional growth i sely with Are-
127	Ocean Drive	124-2	2	124-2		Ocean Drive (E)	L	458	450	458	-8	0	-0.18%	0.00%	2.13%	1.51%	1.51%	(relative totypical corridor section)
	Ocean Drive	124-3 124-4	3	124-3 124-4	Ocean Drive (E)	Sirius Drive (N) Ocean Drive (W)	R	543 842	565 905	579 977	22 63	36 135	0.40%	0.32% 0.75%	0.60%	0.58%	1.10%	Corridor sectional average growth adopted
		124-5	5	124-5	Ocean Drive (W)	Ocean Drive (E)	T	993	1,084	1,112	91	119	0.88%	0.57%	1.81%	1.37%	1.10%	Corridor sectional average growth adopted
		124-6	6	124-6	All	Sirius Drive (N)	L	327 3,587	496 4,139	620 4,478	169 552	293 891	4.25%	3.25%				-
125	Pacific Highway Off-ramp	125-1	1	125-1	Pacific Highway Off-ramp (N)	Ocean Drive (W)	R	212	331	433	119	221	4.56%	3.64%				Model results are reasonable - actificinal growth i vely with Are-
	Ocean Drive Pacific Highway On-ramp	125-2 125-3	2	125-2 125-3		Pacific Highway On-ramp (S) Ocean Drive (E)	T L	0 597	0 782	0 901	0	0 304	N/A 2.74%	N/A 2.08%	3.24%	2.53%	2.53%	(relative to typical corridor section)
	Ooean Drive	125-4	4	125-4	Ocean Drive (E)	Ocean Drive (W)	T	1,135	1,400	1,549	265	414	2.12%	1.57%	1.97%	1.49%	1.49%	Model results are reasonable - actificinal growth fixely with Are -
		125-5 125-6	5	125-5 125-6	Ocean Drive (W)	Pacific Highway On-ramp (S) Pacific Highway On-ramp (S)	R	129 64	136 66	149 71	7	20	0.53%	0.72%				(relative totypical corridor section) Corridor sectional average growth adopted
		125-7	7	125-7		Ocean Drive (E)	т	778	853	889	75	111	0.92%	0.67%	0.88%	0.66%	1.10%	

									Volume (veh)		Growth Fro	m 2016 (Veh)	From	2016	From 2016	By Approach	Adopte d Growth	
ID	Intersection	Aimsun Code	Turn Num ber	Movement Code	From	То	Turn	2016	2026	2036	2026	2036	2026	2036	2026	2036	2036	Comment
126	Nancy Bird Walton Drive	126-1	1	126-1	Nancy Bird Walton Drive (N)	Kendall Road (W)	R	10	12	13	2	3	1.84%	1.32%				kriodel results reasonable
0	Ocean Drive	126-2	2	126-2		Nancy Bird Walton Drive (S)	Т	9	9	8	0	-1	0.00%	-0.59%	1.66%	0.60%	0.60%	
1	Nancy Bird Walton Drive	126-3	3	128-3		Ocean Drive (E)	L	20	25	23	5	3	2.26%	0.70%				
	Kendall Road	126-4	4	126-4	Ocean Drive (E)	Nancy Bird Walton Drive (N)	R	778	1,032	1,108	254	330	2.87%	1.78%				klodel results are reasonable - actifional growth fively with
		126-5	5	128-5		Kendall Road (W)	Т	532	654	827	122	295	2.09%	2.23%	2.57%	1.96%	1.98%	(relative to typical corridor section)
		126-6	6	128-8		Nancy Bird Walton Drive (S)	L	32	44	43	12	11	3.24%	1.49%				
		126-7	7	128-7	Nancy Bird Walton Drive (S)	Ocean Drive (E)	R	402	419	445	17	43	0.42%	0.51%				Corridor sectional average growth adopted
		126-8	8	126-8		Nancy Bird Walton Drive (N)	Т	0	0	0	0	0	N/A	N/A	0.42%	0.53%	1.10%	
		126-9	9	126-9		Kendall Road (W)	L	87	91	99	4	12	0.45%	0.65%				
		128-10	10	126-10	Kendall Road (W)	Nancy Bird Walton Drive (S)	R	16	13	10	-3	-6	-2.05%	-2.32%				kiodel results reasonable
		128-11	11	126-11		Ocean Drive (E)	Т	420	477	494	57	74	1.28%	0.81%	2.04%	1.27%	1.27%	
		128-12	12	128-12		Nancy Bird Walton Drive (N)	L	203	292	319	89	116	3.70%	2.29%				
					All			2,509	3,068	3,389	559	880	2.03%	1.51%				

Section 1	Boundary Street		Boundary Street	Oxley	т	20,139	21,293	21,132	1,154	993	0.56%	0.24%	0.56%	0.24%	
	lo Codey Highway														
	Coley Highway		Boundary Street	Codey	т	15,545	17,976	20,536	2,431	4,991	1.46%	1.40%	1.46%	1.40%	
	b Boundary Street			-		-	-	-							
			All			35,684	39,269	41,668	3,585	5,984	0.96%	0.78%	0.96%	0.78%	
Section 2	Table St		Table Street	Lave Road	т	6,203	6,071	6,310	-132	107	-0.21%	0.09%	-0.21%	0.09%	
	lo Lave Road														
	Lave Road		Lase Road	Table Street	т	6,124	5,443	5,949			-1.17%	-0.14%	-1.17%	-0.14%	
	lo Table St	 													
			All			12,327	11,514	12,259	-813	-68	-0.68%	-0.03%	-0.68%	-0.03%	
<b>-</b>									4 404	4 000	0.05%	0.409/	0.05%	0.40%	
Section 3	Koala St		Koala Sireet	Mahew Rinders	т	14,902	16,386	16,204	1,484	1,302	0.95%	0.42%	0.95%	0.42%	
	lo klathew Rinders				_				1,159	1,790	1.03%	0.77%	1.03%	0.77%	
	Laxe Road Io Table 3:		Wathew Rinders	Koda Sireet	т	10,741	11,900	12,531	1,109	1,780	1.03%	0.77%	1.03%	0.77%	
	o lable st					05.040			0.040	0.000	0.99%	0.57%	0.99%	0.57%	
			All			25,643	28,286	28,735	2,643	3,092	0.99%	0.07%	0.99%	0.37 %	
Serion 4	Wholworths Arress / Lace Cathie)			Beach Street		· · · · · · · · · · · · · · · · · · ·									
Section 4	Woolworths Access (Lave Cathie) Io Reach St		All Woolworths Access	Beach Street	Т	3,303	3,870	4,097	2,643	794	1.60%	1.08%	1.60%	1.08%	
Section 4	Wookworths Access (Lave Cathie) To Beach St Beach St		Woolworths Access		т т	3,303	3,870	4,097							
Section 4	lo Beach St			Beach Street Woolworths Access	·	· · · · · · · · · · · · · · · · · · ·			567	794	1.60%	1.08%	1.60%	1.08%	
Section 4	lo Beach St Beach St		Woolworths Access		·	3,303	3,870	4,097	567	794	1.60%	1.08%	1.60%	1.08%	
Section 4	lo Beach St Beach St		Woolworths Access Beach Street		·	3,303 3,347	3,870 3,729	4,097 3,898	567 382 949	794 551 1,345	1.60% 1.09% 1.34%	1.08% 0.76% 0.93%	1.60% 1.09% 1.34%	1.08% 0.76% 0.93%	
Section 4	lo Beach St Beach St		Woolworths Access Beach Street		·	3,303 3,347	3,870 3,729	4,097 3,898	567 382	794 551	1.60%	1.08% 0.76%	1.60%	1.08%	
	lo Beach St Beach St Woolworths Access		Woolworths Access Beach Street All	Woolw offs Access	T	3,303 3,347 6,650	3,870 3,729 7,599	4,097 3,898 7,995	567 382 949 133	794 551 1,345 226	1.60% 1.09% 1.34% 1.14%	1.08% 0.76% 0.93% 0.94%	1.60% 1.09% 1.34% 1.14%	1.08% 0.76% 0.93% 0.94%	
	to Beach St Beach St Woolworths Access The Parade		Woolworths Access Beach Street All	Woolw offs Access	T	3,303 3,347 6,650	3,870 3,729 7,599	4,097 3,898 7,995	567 382 949	794 551 1,345	1.60% 1.09% 1.34%	1.08% 0.76% 0.93%	1.60% 1.09% 1.34%	1.08% 0.76% 0.93%	
	Io Beach St Beach St Woolworths Access The Parade Io Kew Road		Woolworths Access Beach Street All The Parade Kew Road	Wookvorths Access	T	3,303 3,347 6,650 1,103 1,249	3,870 3,729 7,599 1,226 1,413	4,097 3,898 7,995 1,329 1,480	567 382 949 133 184	794 551 1.345 226 231	1.80% 1.09% 1.34% 1.14% 1.24%	1.08% 0.76% 0.93% 0.94% 0.85%	1.60% 1.09% 1.34% 1.14% 1.24%	1.08% 0.76% 0.93% 0.94% 0.85%	
	Ib Beach St Beach St Woolworks Access The Parade Ib Kew Road Beach St		Woolworths Access Beach Street All The Parade	Wookvorths Access	T	3,303 3,347 6,650 1,103	3,870 3,729 7,599 1,236	4,097 3,898 7,995 1,329	567 382 949 133	794 551 1,345 226	1.60% 1.09% 1.34% 1.14%	1.08% 0.76% 0.93% 0.94%	1.60% 1.09% 1.34% 1.14%	1.08% 0.76% 0.93% 0.94%	
Section 5	b Beach St Beach St Woolworths Access The Parade b Kew Road Beach St Woolworths Access		Woolworths Access Beach Street All The Parade Kew Road All	Woolwrotths Access	T 	3,300 3,347 6,650 1,100 1,249 2,352	3,870 3,729 7,599 1,2% 1,413 2,649	4,097 3,898 7,995 1,329 1,480 2,809	567 382 949 133 164 297	794 551 1.345 226 231 457	1.80% 1.09% 1.34% 1.14% 1.24% 1.20%	1.08% 0.78% 0.93% 0.94% 0.85% 0.89%	1.80% 1.09% 1.34% 1.14% 1.24% 1.20%	1.08% 0.78% 0.93% 0.94% 0.85% 0.89%	
	b Beach St Beach St Woolworths Access The Parade b Kew Road Beach St Woolworths Access Situs Drive to		Woolworths Access Beach Street All The Parade Kew Road	Wookvorths Access	T	3,303 3,347 6,650 1,103 1,249	3,870 3,729 7,599 1,226 1,413	4,097 3,898 7,995 1,329 1,480	567 382 949 133 184	794 551 1.345 226 231	1.80% 1.09% 1.34% 1.14% 1.24%	1.08% 0.76% 0.93% 0.94% 0.85%	1.60% 1.09% 1.34% 1.14% 1.24%	1.08% 0.76% 0.93% 0.94% 0.85%	
Section 5	b Beach St Beach St Weboworths Access The Parade b Kew Road Beach St Weboworths Access Situs Drite to Namy Bird		Woolworths Access Beach Street All The Parade Kew Road All Sirus Drive	Wookworths Access Kew Road The Parade Hancy Bird	T T T T T	3,303 3,347 6,650 1,103 1,249 2,352 2,509	3,870 3,729 7,599 1,235 1,413 2,849 2,959	4,097 3,696 7,995 1,339 1,480 2,809 3,383	587 382 949 133 184 297 450	794 551 1,345 226 231 457 844	1.60% 1.09% 1.34% 1.14% 1.24% 1.20% 1.68%	1.08% 0.76% 0.93% 0.94% 0.85% 0.89% 1.46%	1.80% 1.09% 1.34% 1.14% 1.24% 1.20% 1.88%	1.08% 0.76% 0.93% 0.94% 0.85% 0.89% 1.46%	
Section 5	b Beach St Beach St Woolworts Access The Parade b Kew Road Beach St Woolworts Access Situs Drive to Hancy Brid Nancy Brid Nancy Brid		Woolworths Access Beach Street All The Parade Kew Road All	Woolwrotths Access	T 	3,300 3,347 6,650 1,100 1,249 2,352	3,870 3,729 7,599 1,2% 1,413 2,649	4,097 3,898 7,995 1,329 1,480 2,809	567 382 949 133 164 297	794 551 1.345 226 231 457	1.80% 1.09% 1.34% 1.14% 1.24% 1.20%	1.08% 0.78% 0.93% 0.94% 0.85% 0.89%	1.80% 1.09% 1.34% 1.14% 1.24% 1.20%	1.08% 0.78% 0.93% 0.94% 0.85% 0.89%	
Section 5	b Beach St Beach St Weboworths Access The Parade b Kew Road Beach St Weboworths Access Situs Drite to Namy Bird		Woolworths Access Beach Street All The Parade Kew Road All Sirus Drive	Wookworths Access Kew Road The Parade Hancy Bird	T T T T T	3,303 3,347 6,650 1,103 1,249 2,352 2,509	3,870 3,729 7,599 1,235 1,413 2,849 2,959	4,097 3,898 7,995 1,339 1,480 2,809 3,383	587 382 949 133 184 297 450	794 551 1,345 226 231 457 844	1.60% 1.09% 1.34% 1.14% 1.24% 1.20% 1.68%	1.08% 0.76% 0.93% 0.94% 0.85% 0.89% 1.46%	1.80% 1.09% 1.34% 1.14% 1.24% 1.20% 1.88%	1.08% 0.76% 0.93% 0.94% 0.85% 0.89% 1.46%	



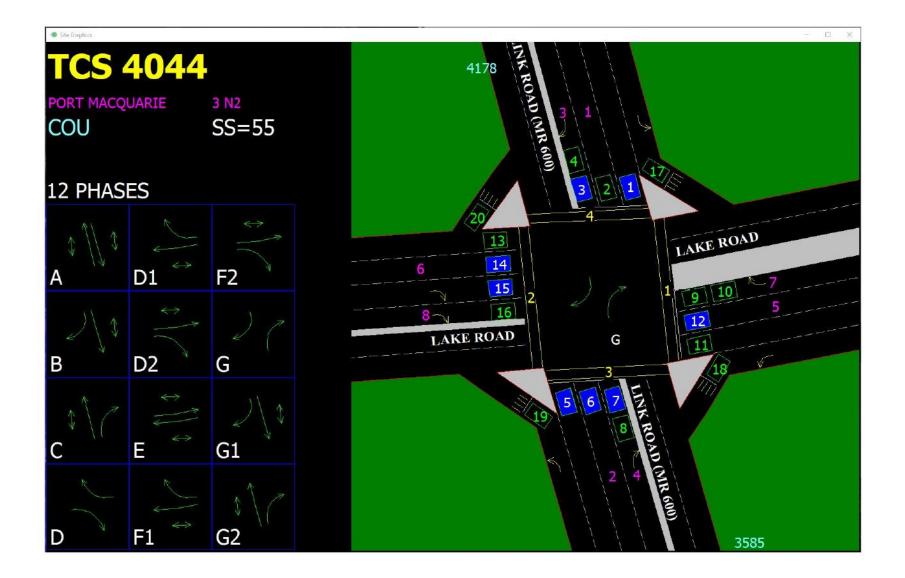
Appendix E: SCATS Phasing



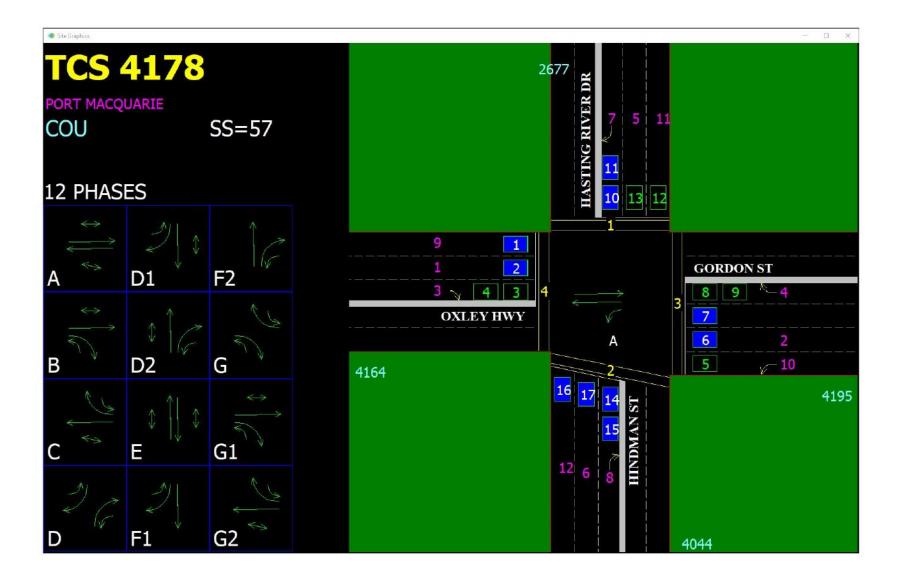
MR538 and MR600 Corridor Strategy: Draft Corridor Strategy Report Project: P4665 Version: 001







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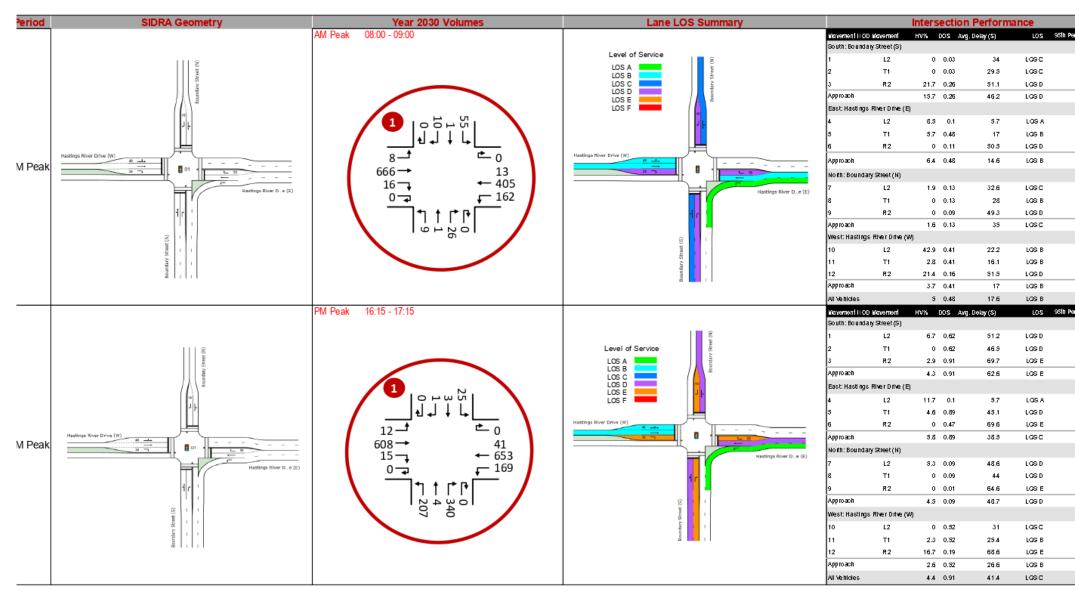
Appendix F: Intersection Performance Summaries



MR538 and MR600 Corridor Strategy: Draft Corridor Strategy Report Project: P4665 Version: 001



# 1. Boundary Street / Hastings River Drive 2030

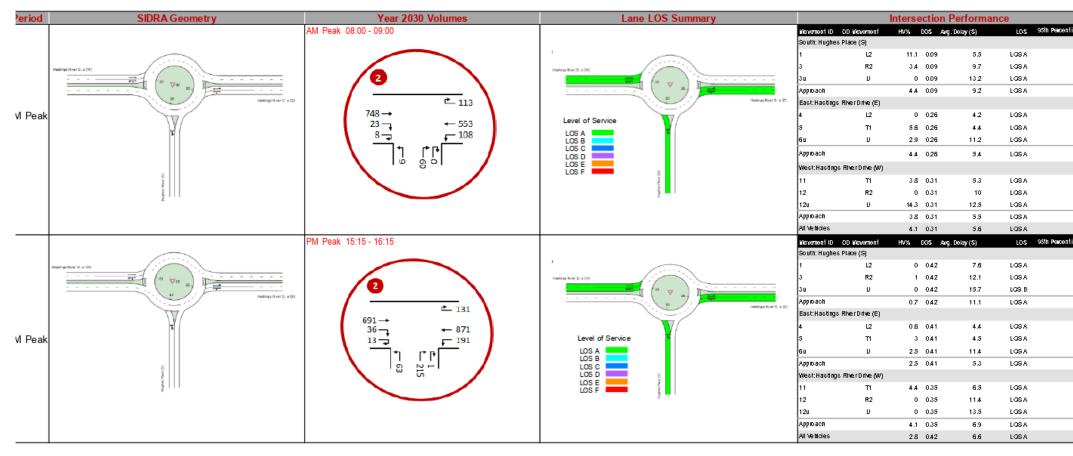


#### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
ecentile BaQ(m)	Overall the intersection has LOS B and the
	degree of saturation is 0.48, which is within
	the acceptable limit of 0.9. The right-turns
2.5	present as LOS D, this is due to relatively
10.2	high delays for these movements. However
10.2	the volumes are low and queues are
	contained in the right-turn pockets. The
0	average delay across the intersection is 18
92.5 4.2	seconds.
92.5	
92.5	
14.3	
14.3	
32	
14.5	
71.9	
71.9	
6.2	
71.9	
92.5	
ecentile BaQ(m)	Overall the intersection has LOS C and the
ecentile BaQ(m)	Overall the intersection has LOS C and the degree of saturation is 0.91, which is just
acentile BaQ(m) 88.4	degree of saturation is 0.91 , which is just <b>outside</b> the acceptable limit of 0.9. The
88.4 88.4	degree of saturation is 0.91, which is just <b>outside</b> the acceptable limit of 0.9. The average delay across the intersection is 41
88.4 88.4 175.7	degree of saturation is 0.91, which is just outside the acceptable limit of 0.9. The average delay across the intersection is 41 seconds. The right turn for the southem
88.4 88.4	degree of saturation is 0.91, which is just outside the acceptable limit of 0.9. The average delay across the intersection is 41 seconds. The right turn for the southern approach operates at LOS E and is the
88.4 88.4 175.7 175.7	degree of saturation is 0.91, which is just outside the acceptable limit of 0.9. The average delay across the intersection is 41 seconds. The right turn for the southem
88.4 88.4 175.7 175.7 0	degree of saturation is 0.91, which is just outside the acceptable limit of 0.9. The average delay across the intersection is 41 seconds. The right turn for the southern approach operates at LOS E and is the
88.4 88.4 175.7 175.7 0 308.6	degree of saturation is 0.91, which is just outside the acceptable limit of 0.9. The average delay across the intersection is 41 seconds. The right turn for the southern approach operates at LOS E and is the
88.4 88.4 175.7 175.7 0 308.6 18.5	degree of saturation is 0.91, which is just outside the acceptable limit of 0.9. The average delay across the intersection is 41 seconds. The right turn for the southern approach operates at LOS E and is the
88.4 88.4 175.7 175.7 0 308.6	degree of saturation is 0.91, which is just outside the acceptable limit of 0.9. The average delay across the intersection is 41 seconds. The right turn for the southern approach operates at LOS E and is the
88.4 88.4 175.7 175.7 0 308.6 18.5 308.6	degree of saturation is 0.91, which is just outside the acceptable limit of 0.9. The average delay across the intersection is 41 seconds. The right turn for the southern approach operates at LOS E and is the
884 884 1757 1757 0 308.6 18.5 308.6 10.5	degree of saturation is 0.91, which is just outside the acceptable limit of 0.9. The average delay across the intersection is 41 seconds. The right turn for the southern approach operates at LOS E and is the
88.4 88.4 175.7 175.7 0 308.6 18.5 308.6	degree of saturation is 0.91, which is just outside the acceptable limit of 0.9. The average delay across the intersection is 41 seconds. The right turn for the southern approach operates at LOS E and is the
884 884 1757 1757 0 3086 185 3086 105 105	degree of saturation is 0.91, which is just outside the acceptable limit of 0.9. The average delay across the intersection is 41 seconds. The right turn for the southern approach operates at LOS E and is the
884 884 175.7 175.7 0 308.6 18.5 308.6 18.5 308.6 10.5 10.5 0.4	degree of saturation is 0.91, which is just outside the acceptable limit of 0.9. The average delay across the intersection is 41 seconds. The right turn for the southern approach operates at LOS E and is the
884 884 175.7 175.7 0 308.6 18.5 308.6 18.5 308.6 10.5 10.5 0.4	degree of saturation is 0.91, which is just outside the acceptable limit of 0.9. The average delay across the intersection is 41 seconds. The right turn for the southern approach operates at LOS E and is the
884 884 1757 1757 0 3085 185 3065 105 105 04	degree of saturation is 0.91, which is just outside the acceptable limit of 0.9. The average delay across the intersection is 41 seconds. The right turn for the southern approach operates at LOS E and is the
88.4 88.4 175.7 175.7 0 308.6 18.5 308.6 10.5 10.5 0.4 10.5 93.3	degree of saturation is 0.91, which is just outside the acceptable limit of 0.9. The average delay across the intersection is 41 seconds. The right turn for the southern approach operates at LOS E and is the
884 884 1757 1757 0 3086 185 3086 105 105 04 105 04 105 933 934	degree of saturation is 0.91, which is just outside the acceptable limit of 0.9. The average delay across the intersection is 41 seconds. The right turn for the southern approach operates at LOS E and is the
884 884 1757 0 3085 185 3085 105 105 04 105 04 105 933 934 75	degree of saturation is 0.91, which is just outside the acceptable limit of 0.9. The average delay across the intersection is 41 seconds. The right turn for the southern approach operates at LOS E and is the

# 2. Hastings River Drive / Hughes Place 2030

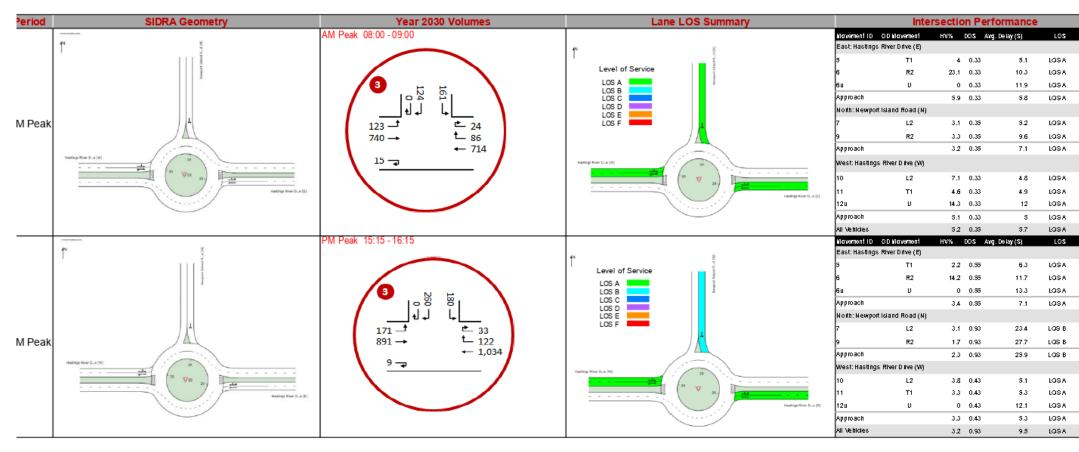


### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
ile BaQ (m)	Overall the intersection has LOS A and the
	degree of saturation is 0.31, which is within the
	acceptable limit of 0.85. The average delay acros
	the intersection is 6 seconds.
2.5	
2.5	
14.1	
14.1	
14	
14.1	
15.7	
15.4	
15.4	
15.7	
15.7	
ile BaQ (m)	Overall intersection has LOS A and the degree (
10	saturation is 0.42, which is within the acceptable
	limit of 0.85.The average delay across the intersection is 7 seconds.
15	
15	1
10	
27.1	
27.1	
26.7	
27.1	
27.1	
27.1	
19.5	
19.5 18.4	

# 3. Hastings River Drive / Newport Island Road 2030

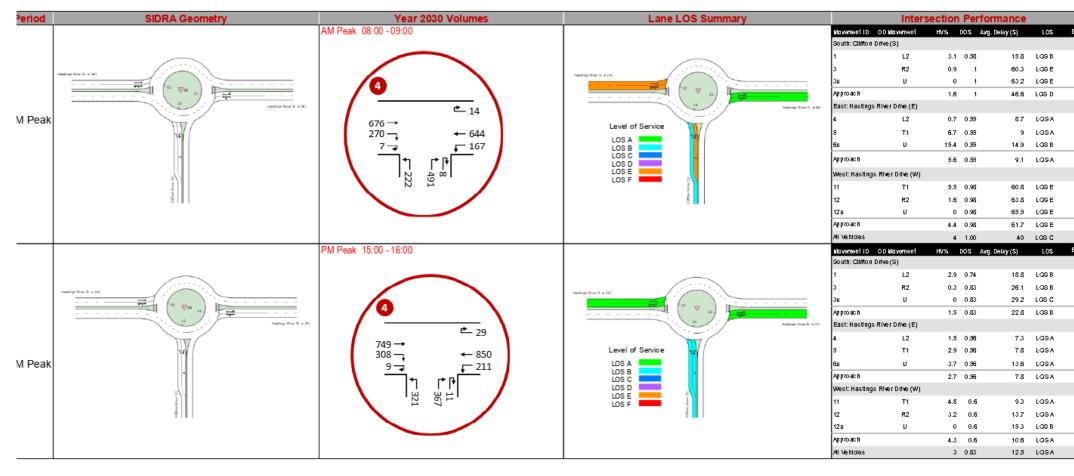


### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
BaQ (m)	Overall the intersection has LOS A and the
	degree of saturation is 0.35, which is within
	the acceptable limit of 0.85. The average
18.3	delay across the intersection is 6 seconds.
18.3	
18.3	
9.8	
9.8	
9.8	
18.5	
18.5	
18	
18.5	
18.5	
BaQ (m)	Overall the intersection has LOS B and the
	degree of saturation is 0.93, which is abov
38.7	the acceptable limit of 0.85. The average
37.2	delay across the intersection is 10 seconds.
37.2	-
38.7	
72	
72	
72	
72	
72 27.3	
72 27.3 27.3	
72 27.3 27.3 26.3	
72 27.3 27.3	

# 4. Street Hastings River Drive / Clifton Drive 2030

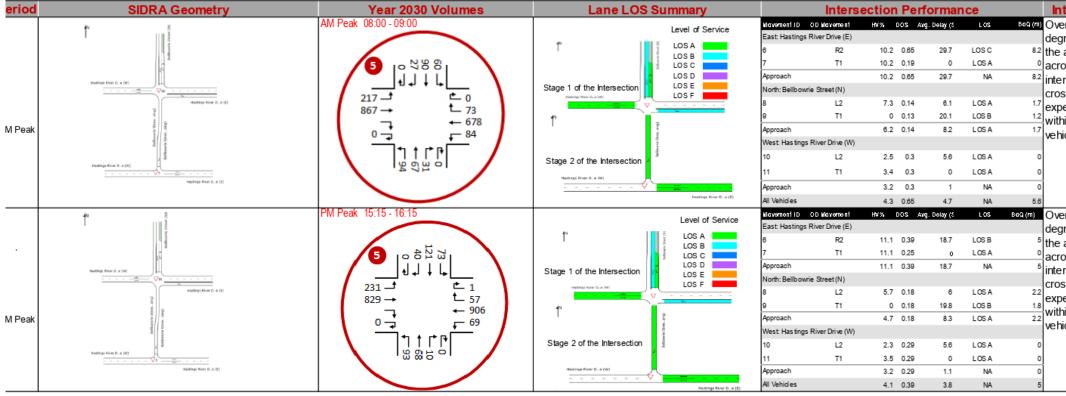


### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
	Overall the intersection has LOS E and the
	degree of saturation is 1.00, which is <b>above</b> the
	acceptable limit of 0.85. The average delay acros
172.7	the intersection is 40 seconds.
172.7	
172.7	
36.8	
36.8	
37.6	
37.6	
197.3	
197.3	
197.3	
199 199	
	Overall the intersection has LOS B and the
evere ( nij	degree of saturation is 0.83, which is within the
45	acceptable limit of 0.85. The average delay acros
<b>59.7</b>	the intersection is 13 seconds.
<b>59.7</b>	the intersection is to seconds.
<b>59.7</b>	
37 A	
47.1	
47.1 45.4	
45.4	
47.1	
59.7	

# 5.1. Hastings River Drive / Bellbowrie Street / Widderson Street 2030



#### ORDINARY COUNCIL 19/05/2022

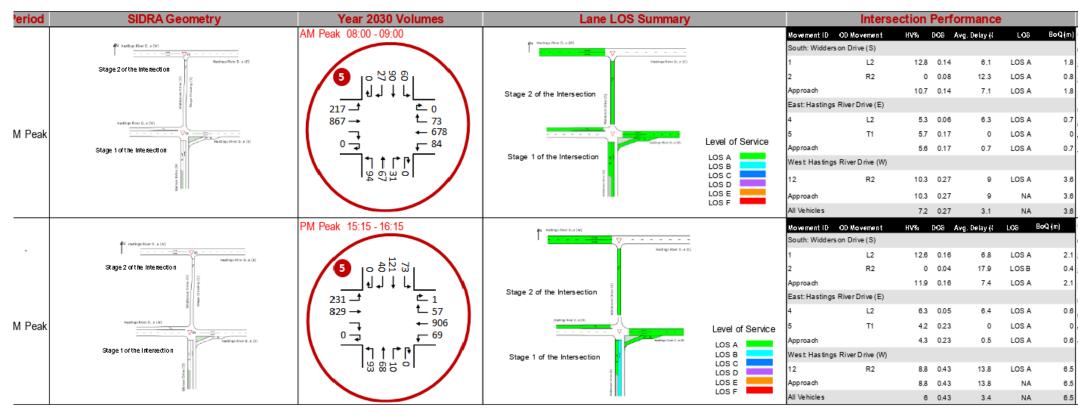


erall the intersection has a LOS B and the gree of saturation is 0.65, which is within acceptable limit of 0.80. The average delay toos the intersection is 5 seconds. The ersection was modelled with a staged assing for the right turn movement. It is bected that the right turn is only performing hin acceptable limits due to the ability for hicles to stage in the median.	
gree of saturation is 0.65, which is within acceptable limit of 0.80. The average delay ross the intersection is 5 seconds. The ersection was modelled with a staged assing for the right turn movement. It is bected that the right turn is only performing hin acceptable limits due to the ability for hicles to stage in the median. erall the intersection has a LOS B and the gree of saturation is 0.39, which is within acceptable limit of 0.80. The average delay ross the intersection is 4 seconds. The ersection was modelled with a staged assing for the right turn movement. It is bected that the right turn is only performing hin acceptable limits due to the ability for	tersection Performance Summary
gree of saturation is 0.39, which is within acceptable limit of 0.80. The average delay ross the intersection is 4 seconds. The ersection was modelled with a staged assing for the right turn movement. It is bected that the right turn is only performing hin acceptable limits due to the ability for	gree of saturation is 0.65, which is within acceptable limit of 0.80. The average delay ross the intersection is 5 seconds. The ersection was modelled with a staged assing for the right turn movement. It is bected that the right turn is only performing hin acceptable limits due to the ability for
	gree of saturation is 0.39, which is within acceptable limit of 0.80. The average delay ross the intersection is 4 seconds. The ersection was modelled with a staged assing for the right turn movement. It is bected that the right turn is only performing hin acceptable limits due to the ability for

29

19

# 5.2. Hastings River Drive / Bellbowrie Street / Widderson Street 2030



#### ORDINARY COUNCIL 19/05/2022

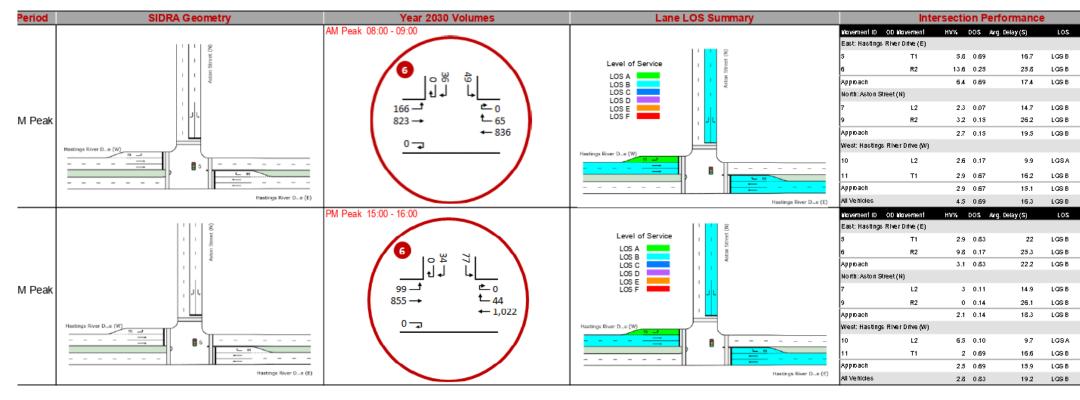


#### Intersection Performance Summary

Overall the intersection has LOS A and the degree of saturation is 0.27, which is within th acceptable limit of 0.80. The average delay across the intersection is 3 seconds. The intersection was modelled with a staged crossing for the right turn movement. It is expected that the right turn is only performing within acceptable limits due to the ability for vehicles to stage in the median.

HV%DOSAvg. Delay (f)LOSBeQ (m)00.166.8LOS A2.112.60.166.8LOS A2.100.0417.9LOS B0.411.90.167.4LOS A2.1acceptable limit of 0.80. The average delayacceptable limit of 0.80. The average delayacceptable limit of 0.80. The average delayacceptable limit of 0.80. The average delay11.90.167.4LOS A2.16.30.056.4LOS A0.8420.230LOS A0430.230.5LOS A0.8vehicles to stage in the median.0.80.8

# 6. Hastings River Drive / Aston Street 2030

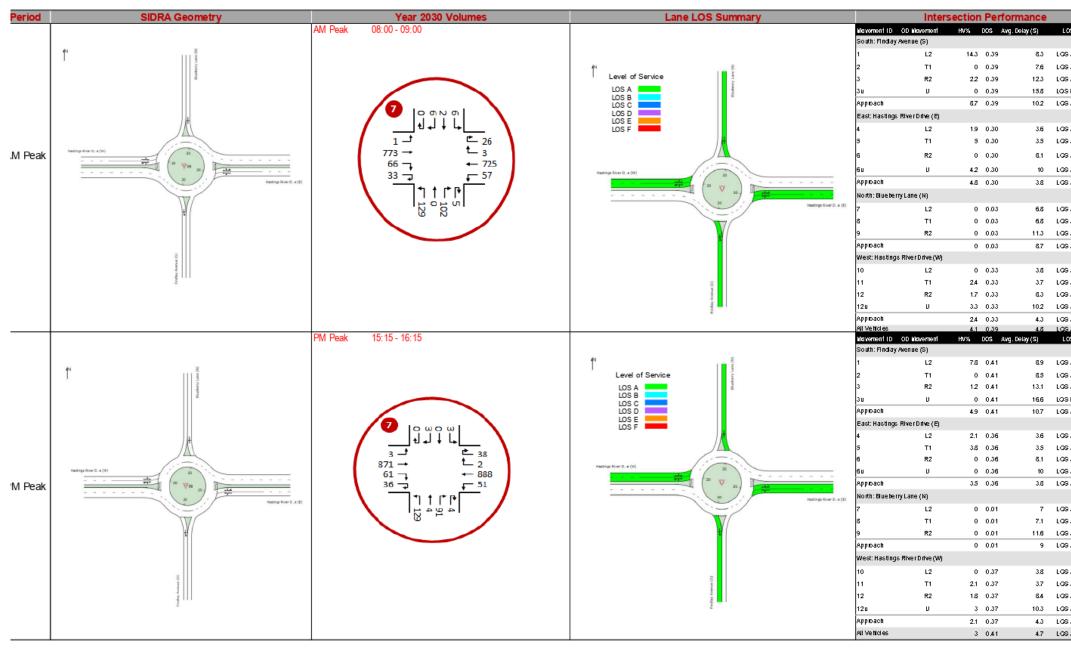


### ORDINARY COUNCIL 19/05/2022



Intersection Performance Summary         Board of Constraints         Band the degree of saturation is 0.69,         Which is above the acceptable limit of 0.90         T22         Which is above the acceptable limit of 0.90         T23         is 16 seconds.         56         62         63         64         72         72         72         72         72         72         72         72         72         72         72         72         72         72 <t< th=""><th></th><th></th></t<>		
B and the degree of saturation is 0.69, which is above the acceptable limit of 0.90 The average delay across the intersection is 16 seconds. 14.3 68.4 68.4 72.9 60.0 B and the degree of saturation is 0.83, which is within the acceptable limit of 0.90 The average delay across the intersection 104.5 7.8 9.77 10.75		
723       which is above the acceptable limit of 0.90         122       The average delay across the intersection         723       is 16 seconds.         56       62         62       62         64       729         634       684         634       684         634       684         635       62         64       729         634       684         635       62         64       729         64       729         65       62         64       72         729       84         64       72         72       72	BaQ (m)	Generally the intersection performs at LO
122       The average delay across the intersection         729       is 16 seconds.         56       62         62       62         62       62         634       684         684       729         604 (m)       Generally the intersection performs at LO         B and the degree of saturation is 0.83, which is within the acceptable limit of 0.90         78       78         9       78         9       78         9       78         9       78         9       78         9       78         9       78         9       78         9       78         9       77         9       77         9       77         9       72         72       72		
<ul> <li><sup>729</sup>/<sub>56</sub></li> <li><sup>56</sup>/<sub>62</sub></li> <li><sup>62</sup>/<sub>62</sub></li> <li><sup>62</sup>/<sub>62</sub></li> <li><sup>634</sup>/<sub>684</sub></li> <li><sup>684</sup>/<sub>729</sub></li> <li><sup>604</sup>/<sub>68</sub></li> <li><sup>614</sup>/<sub>58</sub></li> <li><sup>616</sup>/<sub>58</sub></li> <li><sup>616</sup>/<sub>58</sub></li> <li><sup>616</sup>/<sub>58</sub></li> <li><sup>616</sup>/<sub>58</sub></li> <li><sup>616</sup>/<sub>58</sub></li> <li><sup>616</sup>/<sub>58</sub></li> <li><sup>616</sup>/<sub>58</sub></li> <li><sup>616</sup>/<sub>58</sub></li> <li><sup>616</sup>/<sub>58</sub></li> <li><sup>617</sup>/<sub>58</sub></li> <li><sup>616</sup>/<sub>58</sub></li> <li><sup>616</sup>/<sub>58</sub></li> <li><sup>616</sup>/<sub>58</sub></li> <li><sup>616</sup>/<sub>58</sub></li> <li><sup>616</sup>/<sub>58</sub></li> <li><sup>616</sup>/<sub>58</sub></li> <li><sup>617</sup>/<sub>58</sub></li> <li><sup>616</sup>/<sub>58</sub></li> <l< td=""><td></td><td></td></l<></ul>		
356         62         62         62         62         62         634         634         634         634         634         634         634         634         635         84         72         72	12.2	The average delay across the intersection
62         62         62         14.3         684         729         №0 (m)         Generally the intersection performs at LO         B and the degree of saturation is 0.83, which is within the acceptable limit of 0.90         7.8         104.5         104.5         9         5.7         9         8.4         72	72.9	is 16 seconds.
62         62         62         14.3         684         729         №0 (m)         Generally the intersection performs at LO         B and the degree of saturation is 0.83, which is within the acceptable limit of 0.90         7.8         104.5         104.5         9         5.7         9         8.4         72		
62 14.3 68.4 72.9 Beaq (m) Beand the degree of saturation is 0.83, 104.5 104.5 104.5 104.5 104.5 104.5 104.5 104.5 105.2		
14.3 68.4 72.9 <b>Board (m)</b> <b>B</b> and the degree of saturation is 0.83, which is within the acceptable limit of 0.90 7.8 104.5 The average delay across the intersection 104.5 19 seconds. 9 5.7 9 8.4 7.2 7.2 7.2	6.2	
684         684         729         89 (m)         B and the degree of saturation is 0.83,         104.5         which is within the acceptable limit of 0.90         7.8         104.5         104.5         104.5         9         67         9         73         9         84         72         72	62	
684         684         729         89 (m)         B and the degree of saturation is 0.83,         104.5         which is within the acceptable limit of 0.90         7.8         104.5         104.5         104.5         9         67         9         73         9         84         72         72		
68.4         72.9         899 (m)         Generally the intersection performs at LO         B and the degree of saturation is 0.83,         104.5         which is within the acceptable limit of 0.90         7.8         The average delay across the intersection         104.5         9         5.7         9         8.4         72         72	14.3	
729         899 (m)       Generally the intersection performs at LO         B and the degree of saturation is 0.83,         104.5       which is within the acceptable limit of 0.90         7.8       The average delay across the intersection         104.5       9         5.7       9         8.4       72         72       72	68.4	
899 (m)       Generally the intersection performs at LO         B       and the degree of saturation is 0.83,         104.5       which is within the acceptable limit of 0.90         7.8       The average delay across the intersection         104.5       is 19 seconds.         9       5.7         9       8.4         72       72	68.4	
B and the degree of saturation is 0.83, which is within the acceptable limit of 0.90 The average delay across the intersection is 19 seconds.	72.9	
B and the degree of saturation is 0.83, which is within the acceptable limit of 0.90 The average delay across the intersection is 19 seconds.	BoQ (m)	Generally the intersection performs at LO
<ul> <li><sup>104.5</sup> which is within the acceptable limit of 0.90</li> <li>78 The average delay across the intersection</li> <li><sup>104.5</sup> is 19 seconds.</li> <li>9</li> <li>5.7</li> <li>9</li> <li>8.4</li> <li>72</li> <li>72</li> </ul>		B and the degree of saturation is 0.83,
78 The average delay across the intersection is 19 seconds. 9 57 9 84 72 72	104.5	
1045 9 57 9 84 72 72		
9 57 9 84 72 72	104.5	is 19 seconds.
5.7 9 8.4 72 72		
9 84 72 72	9	
8.4 72 72	5.7	
72	9	
72		
72	84	
	72	
104.5	72	
	104.5	

# 7. Hastings River Drive / Findlay Avenue / Blueberry Lane 2030

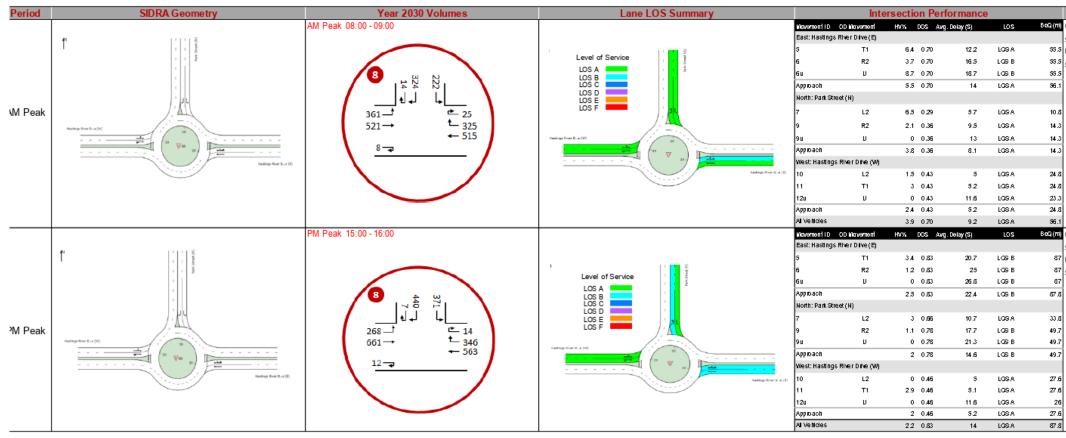


#### ORDINARY COUNCIL 19/05/2022



		Intersection Performance Summary
.0S	BoQ (m)	Overall the intersection has LOS A and the
		degree of saturation is 0.39, which is within
SΑ	15.5	the acceptable limit of 0.85. The average
GΑ	15.5	delay across the intersection is 5 seconds.
SΑ	15.5	,
SB	15.5	
SΑ	15.5	
SА	16.6	
G A	16.6	
SA	16.3	
SA	16.3	
SΑ	16.6	
SΑ	0.7	
SΑ	0.7	
SA	0.7	
SА	0.7	
SΑ	19.1	
SΑ	19.1	
GΑ	18.6	
SΑ	18.6	
SΑ	19.1	
SA	19.1	
.0S	BaQ (m)	Overall the intersection has LOS A and the
		degree of saturation is 0.41, which is within
SΑ	15.6	the acceptable limit of 0.85. The average
SΑ	15.6	delay across the intersection is 5 seconds.
SA	15.6	
SB	15.6	
SΑ	15.6	
SΑ	21	
SΑ	21	
SΑ	20.5	
SA	20.5	
GΑ	21	
SΑ	0.4	
SΑ	0.4	
<b>.</b>		
S A	0.4	
GA GA	0.4	
SΑ	0,4 21,8	
GA GA GA	0.4 21.8 21.8	
GA GA GA GA	0.4 21.8 21.8 21.2	
SA SA SA SA SA	0,4 21,8 21,2 21,2 21,2	
GA GA GA GA	0.4 21.8 21.8 21.2	

# 8. Hastings River Drive / Park Street 2030



### ORDINARY COUNCIL 19/05/2022

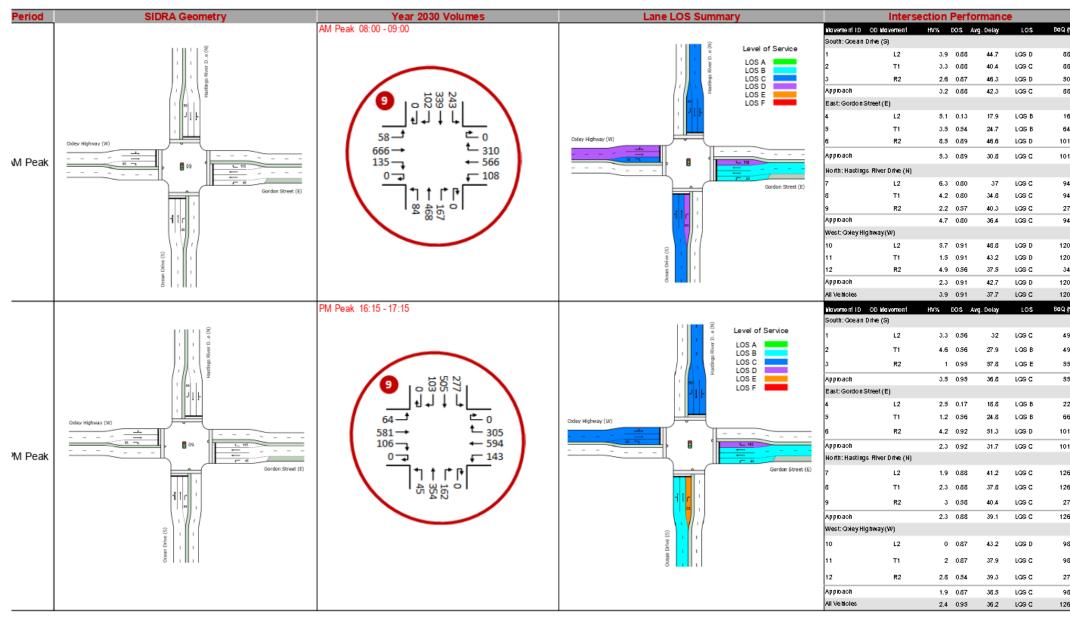


Intersection Performance Summary Footm Overall the intersection has LOS B and the degree of

saturation is 0.70, which is within the acceptable limit of <sup>\$355</sup> 0.85.The average delay across the intersection is 9 <sup>\$355</sup> seconds.

Overall the intersection has LOS B and the degree of saturation is 0.83, which is within the acceptable limit of 0.85.The average delay across the intersection is 14 seconds.

# 9. Hastings River Drive / Oxley Highway / Ocean Drive / Gordon Street 2030



#### ORDINARY COUNCIL 19/05/2022



Intersection Performance Summary
Overall the intersection has LOS C and the degree
of saturation is 0.91, which is just outside the
practical limit of 0.9. The right-turns presented a LOS
C and D, this is due to a relatively high delays for
these movements. The average delay across the
intersection is 38 seconds.
Overall the intersection has LOS C and the degree
of saturation is 0.95 , which is just <b>outside</b> the
practical limit of 0.9. The right-turns presented a LOS
C, D and E, this is due to a relative high delays for
these movements. The average delay across the
intersection is 36 seconds.

### 10. Ocean Drive / Table Street 2030

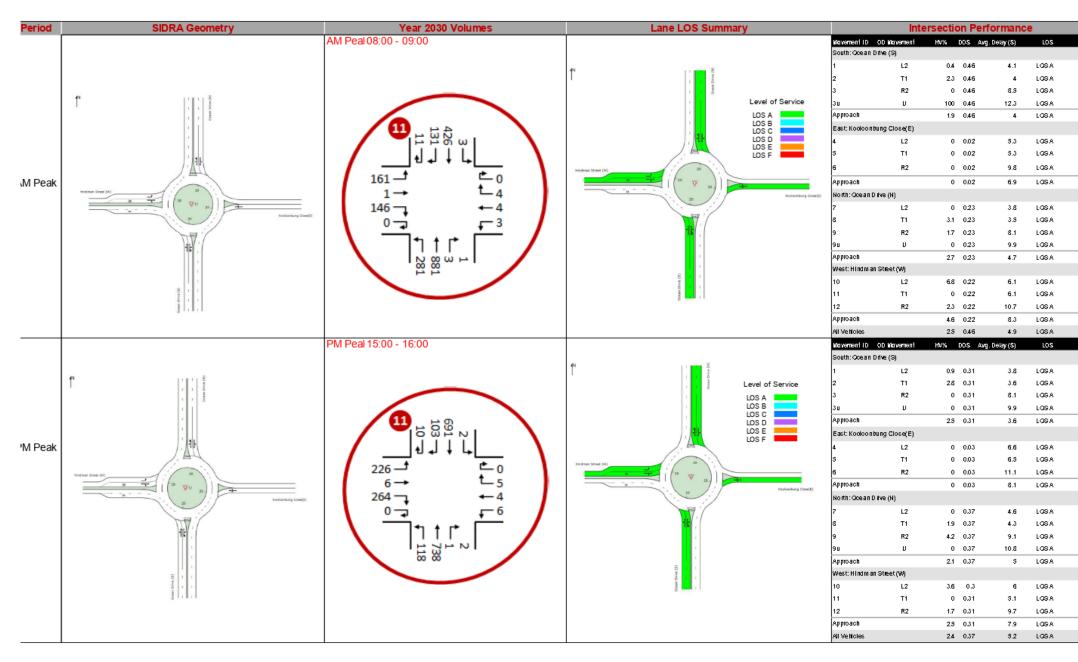


### ORDINARY COUNCIL 19/05/2022



		Intersection Performance Summary
LOS	BaQ(m)	Overall the intersection has a LOS A an
		the degree of saturation is 0.22, which is
SA	0	within the acceptable limit of 0.80. The
SA	0	average delay across the intersection is
SA	6.4	seconds.
NA	6.4	
SA	2.2	
SA	2.2	
SA	0	
SA	0	
SA	2.5	
ßВ	2.5	
NA	2.5	
SA	1.1	
SA	1.1	
NA	6.4	
LOS	BaQ(m)	Overall the intersection has a LOS A an
		the degree of saturation is 0.19, which is
SA	0	within the acceptable limit of 0.80. The
SA	0	average delay across the intersection is
SA	5.8	seconds.
NA	5.8	
SA	2.6	
SA	2.6	
SA	0	
SA	0	
SA	2.6	
ßВ	2.6	
NA	2.6	
SA	0.6	
ISA ISA	0.6 0.6	

### 11. Ocean Drive / Hindman Street / Kooloonbung Close 2030

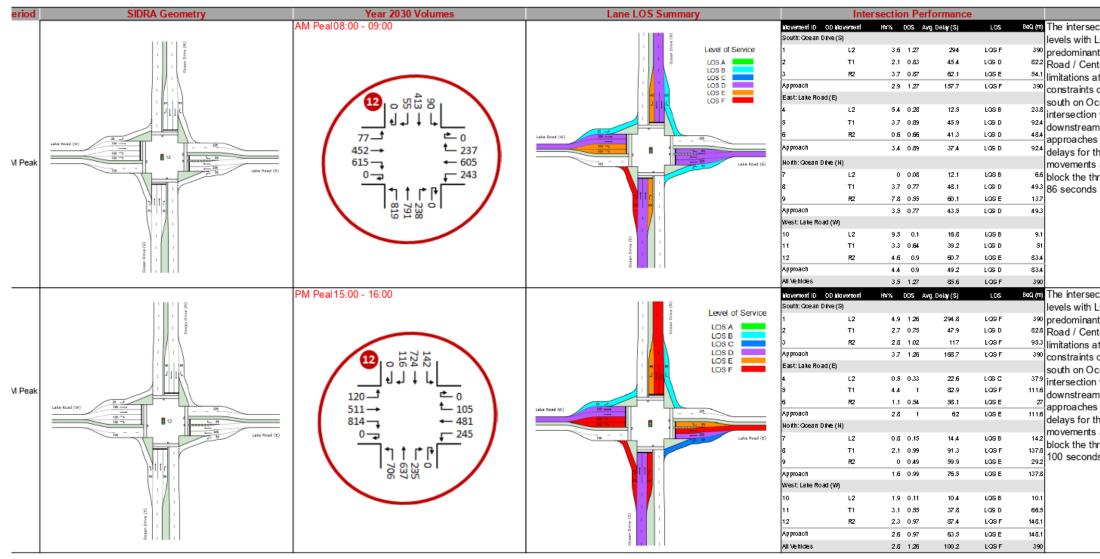


#### ORDINARY COUNCIL 19/05/2022



	Internetion Parformance Commence
	Intersection Performance Summary
	Overall the intersection has a LOS A and the
	degree of saturation is 0.46, which is within the
	acceptable limit of 0.80. The average delay
	across the intersection is 5 seconds.
27.5	
27.5	
27.8	
0.4	
0.4	
0.4	
0.4	
10.8	
10.8	
10.5	
10.5	
10.8	
7.6	
7.3	
7.3	
7.6	
27.8	
BaQ (m)	Overall the intersection has a LOS A and the
	degree of saturation is 0.37, which is within the
	degree of saturation is 0.37, which is within the acceptable limit of 0.80.The average delay
16.7	degree of saturation is 0.37, which is within the acceptable limit of 0.80. The average delay across the intersection is 5 seconds.
16.7	acceptable limit of 0.80. The average delay
16.7 16.7	acceptable limit of 0.80. The average delay
16.7 16.7 16.4	acceptable limit of 0.80. The average delay
16.7 16.7 16.4 16.4	acceptable limit of 0.80. The average delay
16.7 16.7 16.4 16.4	acceptable limit of 0.80. The average delay
16.7 16.7 16.4 16.4	acceptable limit of 0.80. The average delay
16.7 16.7 16.4 16.4 16.7 0.8	acceptable limit of 0.80. The average delay
16.7 16.7 16.4 16.4 16.7 0.8 0.8	acceptable limit of 0.80. The average delay
16.7 16.7 16.4 16.4 16.7 0.8 0.8 0.8	acceptable limit of 0.80. The average delay
16.7 16.7 16.4 16.4 16.7 0.8 0.8 0.8	acceptable limit of 0.80. The average delay
16.7 16.4 164 165 0.8 0.8 0.8 0.8 0.8	acceptable limit of 0.80. The average delay
16.7 16.7 16.4 16.4 16.7 0.8 0.8 0.8 0.8 0.8 18.8	acceptable limit of 0.80. The average delay
16.7 16.7 16.4 16.4 16.7 0.8 0.8 0.8 0.8 0.8 0.8 18.8 18.8	acceptable limit of 0.80. The average delay
16.7 16.7 16.4 16.4 16.7 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 18.8 18	acceptable limit of 0.80. The average delay
16.7 16.7 16.4 16.4 16.7 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 18.8 18	acceptable limit of 0.80. The average delay
16.7 16.4 16.4 16.7 0.8 0.8 0.8 0.8 0.8 0.8 18.8 18.8 18.8	acceptable limit of 0.80. The average delay
16.7 16.7 16.4 16.4 16.7 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 18.8 18	acceptable limit of 0.80. The average delay
16.7 16.4 16.4 16.7 0.6 0.8 0.8 0.8 0.8 0.8 18.8 18.8 18.8 18.8	acceptable limit of 0.80. The average delay
16.7 16.4 16.4 16.7 0.6 0.8 0.8 0.8 0.8 0.8 18.8 18.8 18.8 18.8	acceptable limit of 0.80. The average delay
16.7 16.4 16.4 16.7 0.6 0.8 0.8 0.8 0.8 0.8 18.8 18.8 18.8 18.8	acceptable limit of 0.80. The average delay

### 12. Ocean Drive / Lake Road 2030



#### ORDINARY COUNCIL 19/05/2022

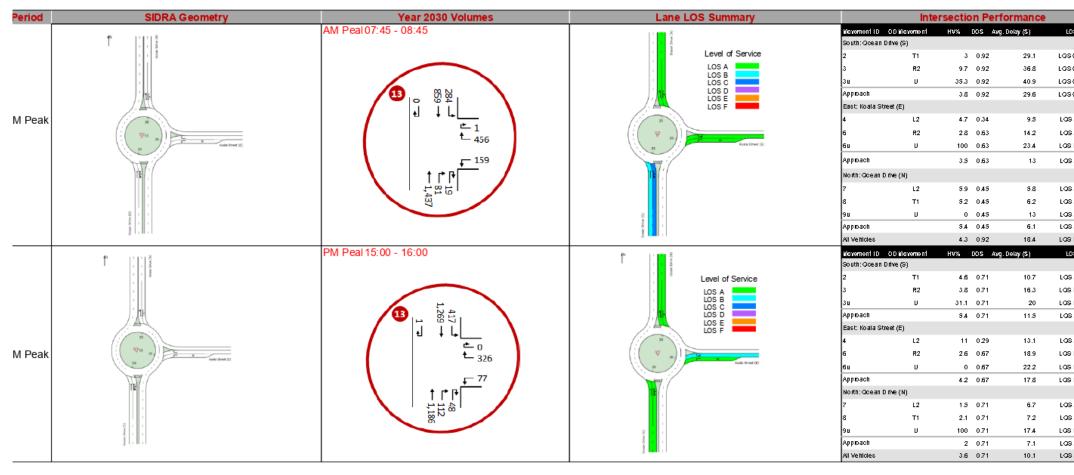


#### Intersection Performance Summary

The intersection performs **outside** of acceptable performance levels with LOS F and DOS 1.27. This is however predominantly as a result of downstream impacts at the Lake Road / Central Street intersection rather than capacity limitations at the subject intersection. Downstream capacity constraints on Lake Road result in queues extending to the south on Ocean Drive beyond Koala Street. It is expected the intersection would perform significantly better if the downstream constraints were resolved. The right-turns on approaches operate at LOS D and E, due to relatively high delays for these movement. Queues for some of the movements are not contained within the turn pockets and will block the through movements. Overall the intersection delay is 86 seconds

The intersection performs outside of acceptable performance levels with LOS F and DOS 1.26. This is however
 predominantly as a result of downstream impacts at the Lake Road / Central Street intersection rather than capacity
 limitations at the subject intersection. Downstream capacity constraints on Lake Road result in queues extending to the south on Ocean Drive beyond Koala Street. It is expected the downstream constraints were resolved. The right-turns on approaches operate at LOS E and F, due to relatively high delays for these movement. Queues for some of the movements are not contained within the turn pockets and will block the through movements. Overall the intersection delay is 100 seconds

### 13. Ocean Drive / Koala Street 2030

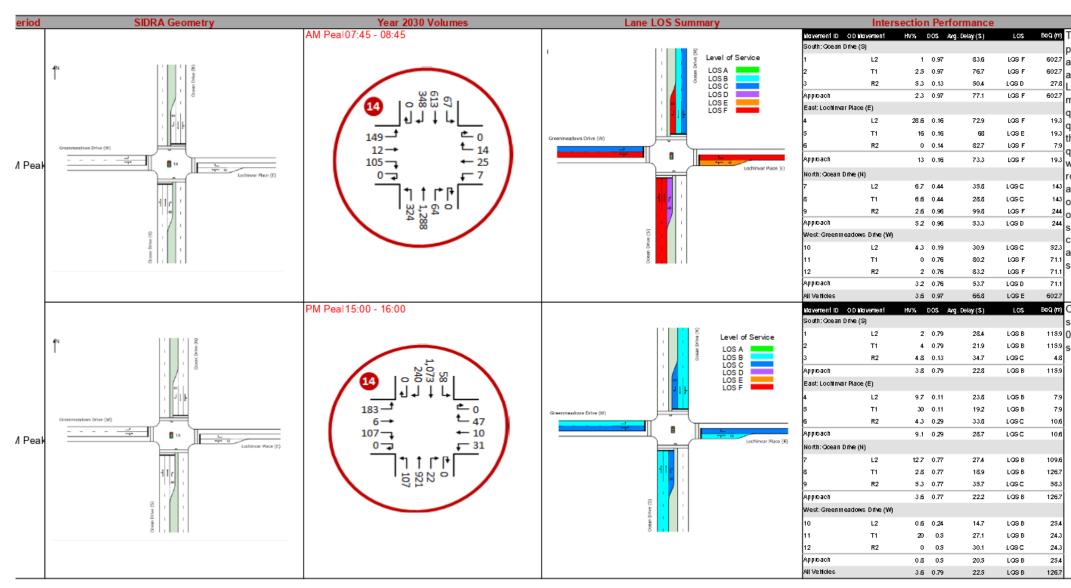


### ORDINARY COUNCIL 19/05/2022



		Intersection Performance Summary
.0\$	BaQ (m)	Overall the intersection has LOS C and
		the degree of saturation is 0.92. The
sc	189.5	intersection performs outside the
sc	177.5	acceptable thresholds due to delays on
sc	177.5	the southern approach. This is as a resu
эc	189.5	of the downstream impacts at the Lake
		Road / Central Street intersection with
SA	12.3	queues extending south on Ocean Drive
SA	36	and through to Koala Street.
SB	36	
SA	36	
SA	33.1	
SA	33.1	
SA	32.1	
SA	33.1	
SВ	189.5	
.0\$	BaQ (m)	Overall the intersection has LOS B and
		the degree of saturation is 0.71, which is
SA	70.6	within the acceptable limit of 0.85.The
SВ	70	average delay across the intersection is
SВ	70	10 seconds.
SA	70.6	
SA	10.7	
SВ	38.8	
SB	38.8	
SВ	38.8	
SA	65.3	
SA	65.3	
		1
SB	63.3	
SB SA SA	63.3 65.3 70.6	

### 14. Ocean Drive / Greenmeadows Drive / Lochinvar Place 2030



#### ORDINARY COUNCIL 19/05/2022

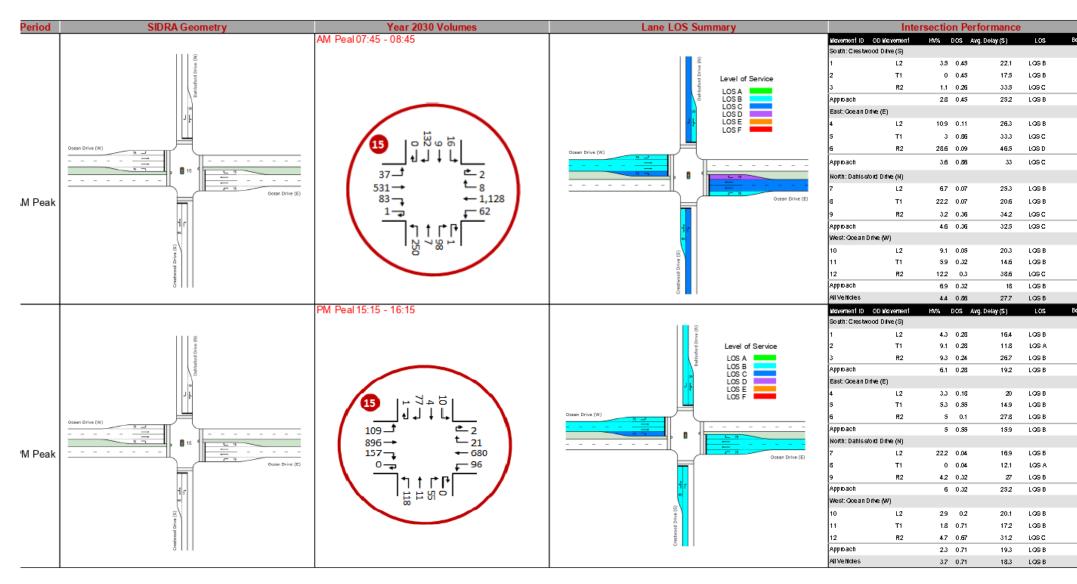


Intersection Performance Summary

The intersection operates outside the acceptable performance limits. Overall the intersection has LOSE <sup>602,7</sup> and the degree of saturation is 0.97, which is above the 602.7 acceptable limit of 0.9. All of the right-turns presented a 278 LOS D and F, with relatively high delays for these 602.7 movements. The right turn on the northern approach has queuing in the order 244m, almost four times the availabl <sup>193</sup> queuing distance within the turn pocket. This will impact <sup>193</sup> through movements in the adjacent lane. Right turn queues on the western approach are in the order of 71m <sup>19.3</sup> which is greater than the separation distance from the roundabout to the west. It is likely that right turn queues <sup>143</sup> are queuing into the roundabout and may be blocking 143 other movements at the roundabout. The left turn queues on the western approach also exceed the available spacing from the roundabout to the west. Queues are contained in the right turn pocket on the southern approach. The average delay across the intersection is 6 seconds.

Coverall the intersection has LOS B and the degree of saturation is 0.79, which is just below acceptable limit of 0.9. The average delay across the intersection is 23 seconds.

## 15. Ocean Drive / Crestwood Drive / Dahlsford Drive 2030

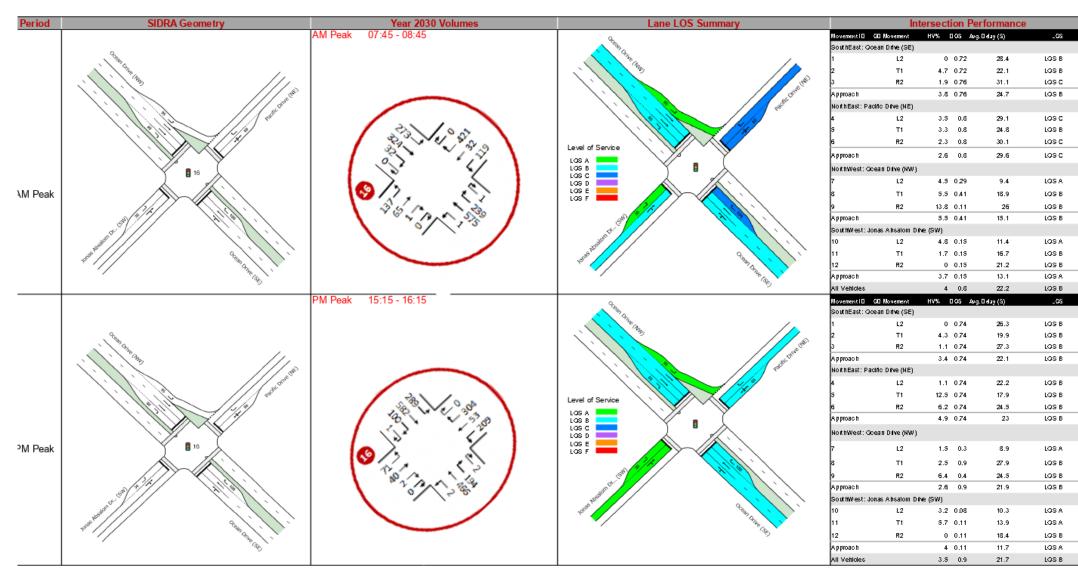


### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
8Q (m)	Overall the intersection has LOS B and the degree
	of saturation is 0.86, which is within the acceptable
	limit of 0.50. The intersector has high through
54.1	volumes on Ocean Drive, which are unbalanced with
24.5	the side streets. The average delay across the
54.1	intersection is 28 seconds.
13.5	
181.8	
3.6	
181.8	
5.6	
5.6	
34.1	
34.1	
6.5	
50.S	
24.1	
50.5	
181.8	
	Overall the intersection has LOS B and the degree
kiQ (m)	Overall the intersection has LOS B and the degree of saturation is 0.71 , which is within the acceptable
थ <b>् (</b> m) 16.9	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through
4 <b>Q (m)</b> 16.9 16.9	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with
4 <b>Q (m)</b> 16.9 16.9 10.2	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the
4 <b>Q (m)</b> 16.9 16.9	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with
aQ (m) 16.9 16.9 10.2 16.9	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the
aQ (m) 16.9 16.9 10.2 16.9 13.1	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the
49 (m) 16.9 16.9 10.2 16.9 13.1 53.7	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 18 seconds.
44Q (m) 16.9 16.9 10.2 16.9 13.1 53.7 4	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 18 seconds.
49 (m) 16.9 16.9 10.2 16.9 13.1 53.7	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 18 seconds.
44Q (m) 16.9 16.9 10.2 16.9 13.1 53.7 4 53.7	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 18 seconds.
4Q (m) 16.9 16.9 10.2 16.9 13.1 53.7 4 53.7 1.9	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 18 seconds.
419 (m) 16.9 16.9 10.2 16.9 13.1 53.7 4 53.7 4 53.7 1.9 1.9	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 18 seconds.
499 (m) 16.9 16.9 10.2 16.9 13.1 53.7 4 53.7 1.9 1.9 1.9 14.1	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 18 seconds.
419 (m) 16.9 16.9 10.2 16.9 13.1 53.7 4 53.7 4 53.7 1.9 1.9	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 18 seconds.
499 (m) 16.9 16.9 10.2 16.9 13.1 53.7 4 53.7 1.9 1.9 1.9 14.1	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 18 seconds.
16.9 16.9 16.9 10.2 16.9 13.1 53.7 4 53.7 4 53.7 1.9 1.9 1.9 14.1 14.1	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 18 seconds.
16.9 16.9 16.9 10.2 16.9 13.1 15.3 7 4 53.7 4 53.7 1.9 1.9 1.9 1.4.1 14.1 15	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 18 seconds.
499 (m) 16.9 16.9 10.2 16.9 10.2 16.9 13.1 53.7 4 53.7 1.9 1.9 1.9 14.1 14.1 15 77.2	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 18 seconds.
499(m) 16.9 16.9 10.2 16.9 13.1 53.7 4 53.7 4 53.7 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	Overall the intersection has LOS B and the degree of saturation is 0.71, which is within the acceptable limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 18 seconds.

## 16. Ocean Drive / Jonas Absalom Drive / Pacific Drive 2030

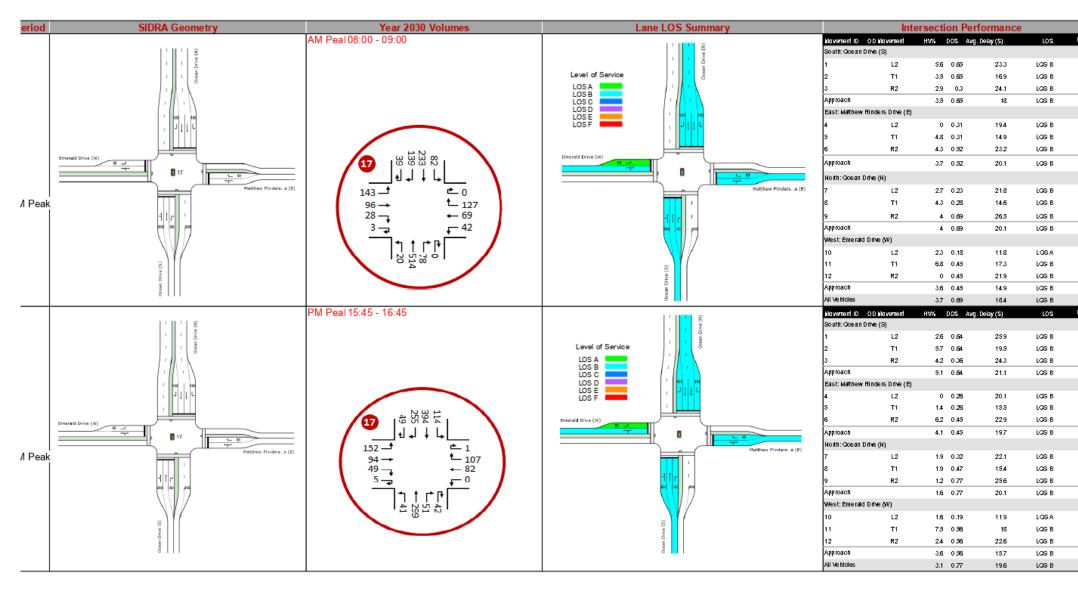


### ORDINARY COUNCIL 19/05/2022



_	
	Intersection Performance Summary
BoQ(m)	Overall the intersection has LOS B and the degree
	of saturation is 0.80, which is within the acceptab
	limit of 0.90. The average delay across the
	intersection is 22 seconds.
47.6	
55.5	
62.9	
62.9	
62.9	
62.9	
16.9	
27.4	
5.7	
27.4	
13.5	
9.8	
9.8	
13.5	
62.9	
	Overall the intersection has LOS B and the degre
809 (m)	of saturation is 0.90, which is the acceptable limit
80Q (m) 38	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay
8∞Q(m) 38 38.1	of saturation is 0.90, which is the acceptable limit
BoQ(m) 38 38.1 31.6	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay
8∞Q(m) 38 38.1	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay
BoQ(m) 38 38.1 31.6 38.1	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay
BoQ(m) 38 38.1 31.6 38.1 52.7	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay
BoQ(m) 38 38.1 31.6 38.1 52.7 52.7	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay
B∞Q(m) 38 38.1 31.6 38.1 52.7 52.7 52.7 52.7	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay
BoQ(m) 38 38.1 31.6 38.1 52.7 52.7	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay
8×4(m) 38 38.1 31.6 38.1 52.7 52.7 52.7	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay
8×4 (m) 38 38.1 31.6 38.1 52.7 52.7 52.7 52.7 52.7	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay
8e4(m) 38 38.1 31.6 38.1 52.7 52.7 52.7 52.7 52.7 52.7 52.7 52.7	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay
8¢4(m) 38 38.1 31.6 38.1 52.7 52.7 52.7 52.7 52.7 52.7 52.7 52.7	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay
8e4(m) 38 38.1 31.6 38.1 52.7 52.7 52.7 52.7 52.7 52.7 52.7 52.7	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay
8¢4(m) 38 38.1 31.6 38.1 52.7 52.7 52.7 52.7 52.7 52.7 52.7 52.7	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay
884 (m) 38 38.1 31.6 38.1 52.7 52.7 52.7 52.7 52.7 52.7 52.7 52.7	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay
884 (m) 38 38.1 31.6 38.1 52.7 52.7 52.7 52.7 52.7 52.7 52.7 52.7	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay
884 (m) 38 38.1 31.6 38.1 52.7 52.7 52.7 52.7 52.7 52.7 52.7 52.7	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay
BoQ (m) 38 38.1 31.6 38.1 52.7 52.7 52.7 52.7 52.7 52.7 52.7 52.7	of saturation is 0.90, which is the acceptable limit for a signalised intersection. The average delay

## 17. Ocean Drive / Matthew Flinders Drive / Emerald Drive 2030



### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
B <b>o</b> Q (m)	Overall the intersection has LOS B and the degre
	of saturation is 0.69, which is within the acceptable
	limit of 0.90. The average delay across the
39.8	intersection is 18 seconds.
11.1	
39.8	
14.6	
14.6	
19.3	
19.3	
10.8	
152	
28.6	
28.6	
12.9	
18.6	
18.6	
18.6	
39.8	
BoQ (m)	Overall the intersection has LOS B and the degre
	of saturation is 0.77, which is within the acceptable
26,4	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
264 27.6	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
26,4	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
264 27.6 13.5	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
264 27.6 13.5	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
26.4 27.6 13.5 27.6	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
264 27.6 13.5 27.6 10.9	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
264 27.6 13.5 27.6 10.9 10.9	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
264 27.6 13.5 27.6 10.9 10.9 10.9	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
264 27.6 13.5 27.6 10.9 10.9 10.9	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
264 27.6 13.5 27.6 10.9 10.9 16.3 16.3 16.3 15.2 26.6	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
264 275 135 275 109 109 163 163 163 152 265 484	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
264 27.6 13.5 27.6 10.9 10.9 16.3 16.3 16.3 15.2 26.6	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
264 27,6 13,5 27,6 10,9 10,9 16,3 16,3 16,3 15,2 26,6 48,4 48,4	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
264 27,6 13,5 27,6 10,9 10,9 16,3 16,3 16,3 15,2 26,6 46,4 48,4 48,4	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
264 276 135 276 10.9 10.9 16.3 16.3 152 266 484 484 484 13.7 226	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
264 276 135 276 109 109 163 163 163 163 163 266 484 484 484 484 484 226	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
264 276 135 276 109 163 163 163 163 152 265 484 484 484 484 137 225 225	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the
264 276 135 276 109 109 163 163 163 163 266 484 484 484 484 484 484	of saturation is 0.77, which is within the acceptable limit of 0.90.The average delay across the

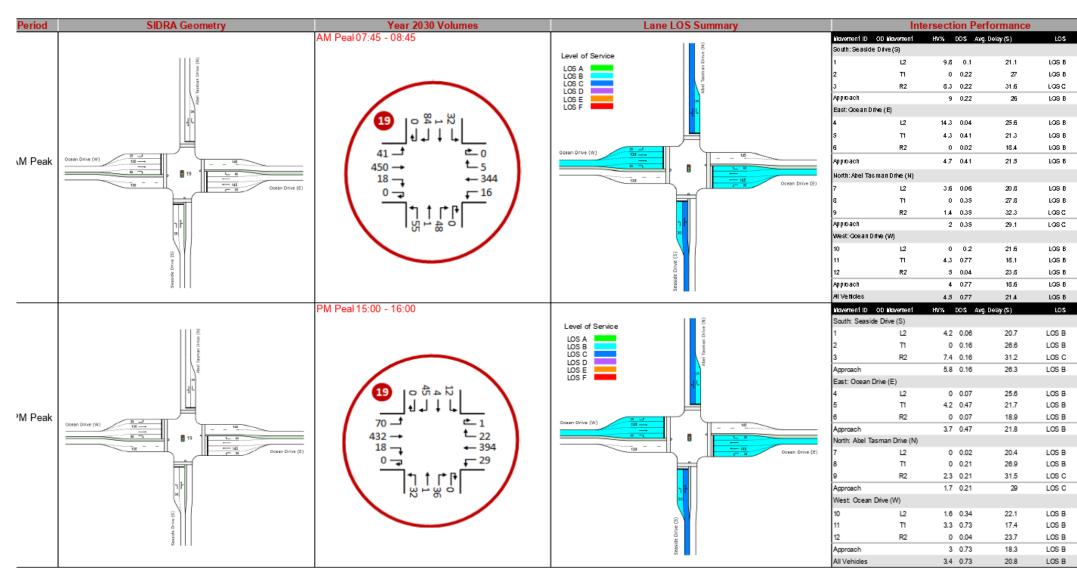
## 18. Ocean Drive / Woolworths Access 2030

Period	SIDRA Geometry	Year 2030 Volumes	Lane LOS Summary	Inters	ection Perform	mance	Intersection Performance Summary
		AM Peak 07:45 - 08:45		Movement ID OD Movement	HV% DOS Awg.	Delay ({ I	LOS Boo(m) Overall the intersection has LOS A and
			Level of Service	South: Oce an Drive (S)			the degree of saturation is 0.57, which is
	Contraction of the second s		LOS A	1 L2	5.1 0.48	11.3 LO	<sup>41.3</sup> within the acceptable limit of 0.90. The
				2 T1	2.3 0.22	13.4 LC	average delay across the intersection is
				Approach	4.6 0.48	11.7 LC	<sup>ASA 41.3</sup> 14 seconds.
	3 a		LOS E	North: Ocean Drive (N)			
	Woolwo tito Access (W)	42 1	LOS F	8 T1	5.3 0.57		S B 36.1
M Peak		50		9 R2	0 0.15		6 B 5.2
	) The second se			Approach	4.6 0.57	16 LO	S B 36.1
				West: Woolworths Access (W)			
				10 L2	2.4 0.06	9.4 LC	NSA 3.7
	Ξ		a	12 R2	1.8 0.23	19.5 LO	S B 8.1
			Die	Approach	2 0.23	15.3 LO	S B 8.1
	8		Queer	All Vehicles	4.3 0.57		VS A 41.3
	8	PM Peak 15:30 - 16:30		Movement ID OD Movement	HV% DOS Awg.	Delay (& I	Los Boolm Overall the intersection has LOS B and
	a dece		Level of Service	South: Ocean Drive (S)			the degree of saturation is 0.72, which is
		ω		1 L2	5.1 0.36		<sup>28.1</sup> within the acceptable limit of 0.90. The
				2 T1	2.3 0.33		<sup>25 A</sup> 18.9 average delay across the intersection is
	14	€↓	LOS E	Approach	4.2 0.36	11.8 LC	<sup>28.1</sup> 15 seconds.
		70		North: Ocean Drive (N)			
			Wookvertha Access (W)	8 T1	5.3 0.72		S B 49.7
'M Peak		131		9 R2	0 0.3		S B 10.8
				Approach	4.3 0.72	18.1 LO	S B 49.7
	<u>ר</u>	(†) † (°)		West: Woolworths Access (W)			
	N I I			10 L2	2.4 0.1		NSA 6.3
	10 ag		12 (2)	12 R2	1.8 0.63		G B 19.8
			C uno george	Approach	2 0.63		S B 19.8
	0.1.0001		· • •	All Vehicles	3.8 0.72	15.2 LO	S B 49.7

### ORDINARY COUNCIL 19/05/2022



## 19. Ocean Drive / Abel Tasman Drive / Seaside Drive 2030



### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
BoQ (m)	Overall the intersection has LOS B and the
	degree of saturation is 0.77, which is within the
9.8	acceptable limit of 0.90. The average delay
114	across the intersection is 21 seconds.
114	
114	
3.3	
42	
0.7	
42	
5.3	
19.1	
19.1	
19.1	
6.4	
47.4	
3.3	
47.4	
47.4	
	Overall the intersection has LOS B and the
	Overall the intersection has LOS B and the degree of saturation is 0.73, which is within the
BoQ (m) 5.4 8.4	degree of saturation is 0.73, which is within the
800 (m) 5.4 8.4 8.4	degree of saturation is 0.73, which is within the acceptable limit of 0.90.The average delay
BoQ (m) 5.4 8.4	degree of saturation is 0.73, which is within the acceptable limit of 0.90.The average delay
BoQ (m) 5.4 8.4 8.4 8.4	degree of saturation is 0.73, which is within the acceptable limit of 0.90.The average delay
Bog (m) 5.4 8.4 8.4 8.4 5.4	degree of saturation is 0.73, which is within the acceptable limit of 0.90.The average delay
BoQ (m) 5.4 8.4 8.4 8.4 5.4 49	degree of saturation is 0.73, which is within the acceptable limit of 0.90.The average delay
BoQ (m) 5.4 8.4 8.4 8.4 5.4 49 3.2	degree of saturation is 0.73, which is within the acceptable limit of 0.90.The average delay
BoQ (m) 5.4 8.4 8.4 8.4 5.4 49	degree of saturation is 0.73, which is within the acceptable limit of 0.90.The average delay
800 (m) 5.4 8.4 8.4 8.4 5.4 49 3.2 49	degree of saturation is 0.73, which is within the acceptable limit of 0.90.The average delay
BoQ (m) 5.4 8.4 8.4 8.4 5.4 49 3.2	degree of saturation is 0.73, which is within the acceptable limit of 0.90.The average delay
800 (m) 5.4 8.4 8.4 8.4 5.4 49 3.2 49 1.9	degree of saturation is 0.73, which is within the acceptable limit of 0.90.The average delay
509 (m) 54 84 84 84 84 84 9 32 49 32 49 1.9 10.8	degree of saturation is 0.73, which is within the acceptable limit of 0.90.The average delay
509 (m) 54 84 84 84 84 84 9 32 49 32 49 1.9 1.9 10.8 10.8	degree of saturation is 0.73, which is within the acceptable limit of 0.90.The average delay
5.4 8.4 8.4 9 3.2 49 1.9 1.9 10.8 10.8	degree of saturation is 0.73, which is within the acceptable limit of 0.90.The average delay
509 (m) 54 84 84 84 84 84 9 32 49 32 49 1.9 1.9 10.8 10.8	degree of saturation is 0.73, which is within the acceptable limit of 0.90.The average delay
502 (m) 5.4 8.4 8.4 8.4 5.4 49 3.2 49 1.9 10.8 10.8 10.8 10.8 11.3	degree of saturation is 0.73, which is within the acceptable limit of 0.90.The average delay
502 (m) 5.4 8.4 8.4 6.4 9 3.2 49 3.2 49 1.9 10.8 10.8 10.8 10.8 11.3 43.7	degree of saturation is 0.73, which is within the acceptable limit of 0.90.The average delay
5.4 8.4 8.4 8.4 5.4 49 3.2 49 1.9 10.8 10.8 10.8 10.8 11.3 43.7 3.2	degree of saturation is 0.73, which is within the acceptable limit of 0.90.The average delay

## 20. Ocean Drive / Houston Mitchell Drive 2030

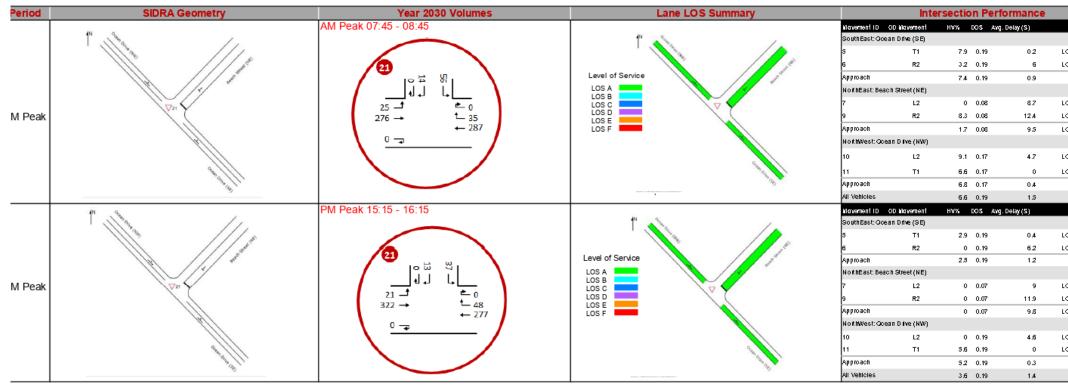


#### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
	Overall the intersection has LOS A and the
	degree of saturation is 0.53, which is within the
19	acceptable limit of 0.85. The average delay acros
	the intersection is 8 seconds.
19	
19	
19	
14.5	
14.5	
7.8	
7.8	
14.5	
5.5	
7	
7	
7	
7	
30.1	
30.1	
29.3	
29.3	
30.1	
30.1	
	Overall the intersection has LOS A and the
	degree of saturation is 0.71, which is within the
1.6	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
1.6 1.6	degree of saturation is 0.71, which is within the
1.6 1.6 1.6	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
16 16 16 16	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
1.6 1.6 1.6	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
1.6 1.6 1.6 1.6 1.6	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
16 16 16 16	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
1.6 1.6 1.6 1.6 1.6 66.7	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
1.6 1.6 1.6 1.6 1.6 66.7 66.7	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
1.6 1.6 1.6 1.6 1.6 66.7 66.7 6.7	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
1.6 1.6 1.6 1.6 1.6 66.7 66.7 6.7 6.7	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
1.6 1.6 1.6 1.6 1.6 66.7 66.7 6.7 6.7	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
115 115 116 116 116 66.7 66.7 6.7 6.7 6.7 6.7 66.7	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
1.5 1.5 1.5 1.5 66.7 66.7 6.7 6.7 6.7 66.7 7.3	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
115 115 115 115 115 115 115 115 115 115	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
1.6 1.6 1.6 1.6 66.7 66.7 6.7 6.7 6.7 6.7 7.3 9.8 9.8	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
16 16 16 16 66.7 66.7 67 67 67 67 67 67 7.3 98 98 98 98 98	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
16 16 16 16 66.7 66.7 67 67 67 67 67 67 7.3 98 98 98 98 98	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
116 116 116 116 116 116 116 116 116 116	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
16 16 16 16 66.7 66.7 66.7 66.7 67 66.7 67 67 98 98 98 98 98 98 98	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
116 116 116 116 116 116 106 106 10 10 10 10	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
115 115 115 66.7 66.7 67 66.7 6.7 66.7 6.7 6.7 3 9.8 9.8 9.8 9.8 9.8 9.8 9.8 9.8 9.8 9.8	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros
116 116 116 116 116 166 7 66.7 67 67 67 67 67 67 66.7 98 98 98 98 98 98 98 98 98 98 98 98 98	degree of saturation is 0.71, which is within the acceptable limit of 0.85.The average delay acros

# 21. Ocean Drive / Beach Street 2030

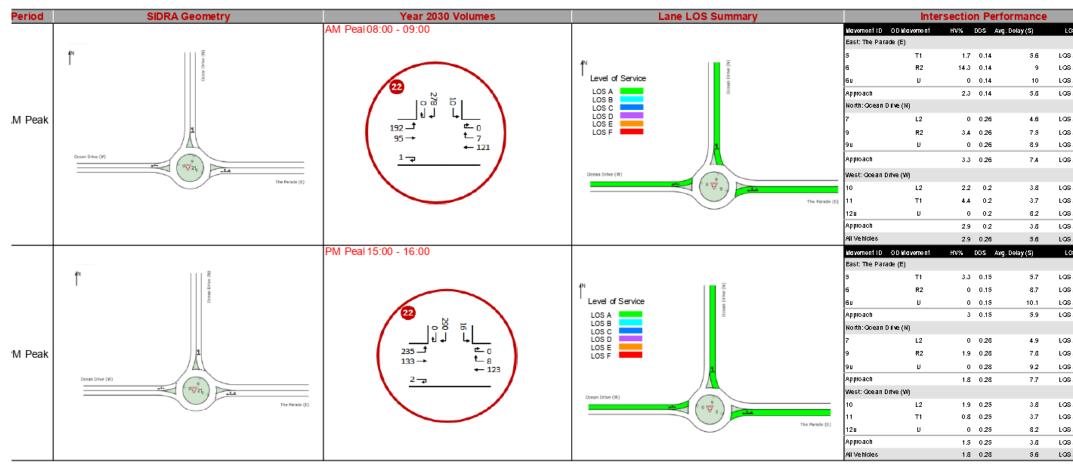


### ORDINARY COUNCIL 19/05/2022



		Intersection Performance Summary
LOS	BaQ (m)	Overall the intersection has LOS A and
		the degree of saturation is 0.19, which is
OSA	2.5	within the acceptable limit of 0.80.The
OSA	2.5	average delay across the intersection is
NA	2.5	seconds.
OSA	2.2	
OSA	2.2	
OSA	2.2	
OSA	0	
OSA	0	
NA	0	
NA	2.5	
LOS	BaQ (m)	Overall the intersection has LOS A and
		the degree of saturation is 0.19, which is
OSA	3.3	within the acceptable limit of 0.80. The
OSA	3.3	average delay across the intersection is
NA	3.3	
OSA	1.6	
OSA	1.6	
OSA	1.6	
OSA	0	
OSA	0	
NA	0	
NA	3.3	

# 22. Ocean Drive / The Parade 2030

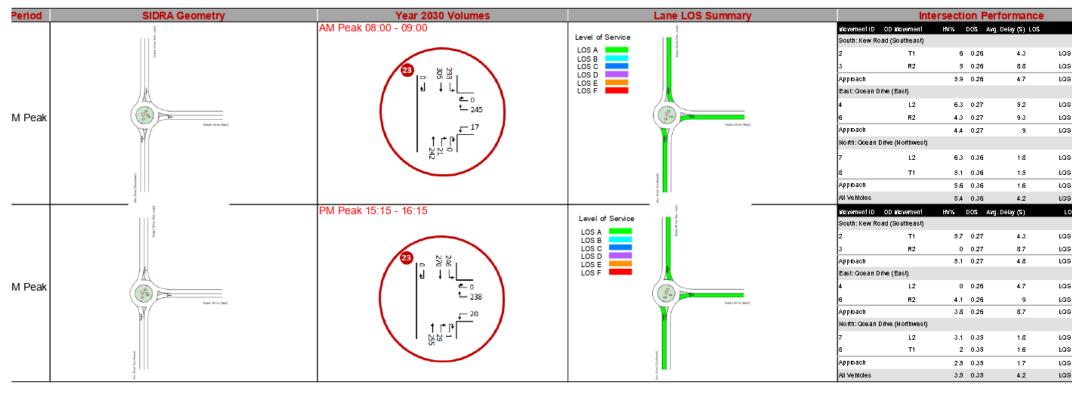


### ORDINARY COUNCIL 19/05/2022



Intersection Perform	
	ance Summary
.cs Eva (m) Overall the intersection h	nas LOS A and
the degree of saturation	is 0.26, which is
SA 5.7 within the acceptable lim	it of 0.85.The
SA 57 average delay across the	e intersection is
s A 5.7 seconds.	
SA 5.7	
SA 11.5	
SA 10.6	
GA 11.5	
.os Bag (m) Overall the intersection h	nas LOS A and
the degree of saturation	is 0.26, which is
6.1 within the acceptable lim	it of 0.85.The
6.1 average delay across the	e intersection is
s A 6.1 seconds.	
SA 6.1	
SA 12.9	
SA 12.9	
SA 12.9	
SA 12.9	
SA 14.1	
SA 14.1 SA 14.1	
SA 14.1 SA 14.1 SA 14.1	
SA 14.1 SA 14.1	

### 23. Ocean Drive / Kew Road 2030

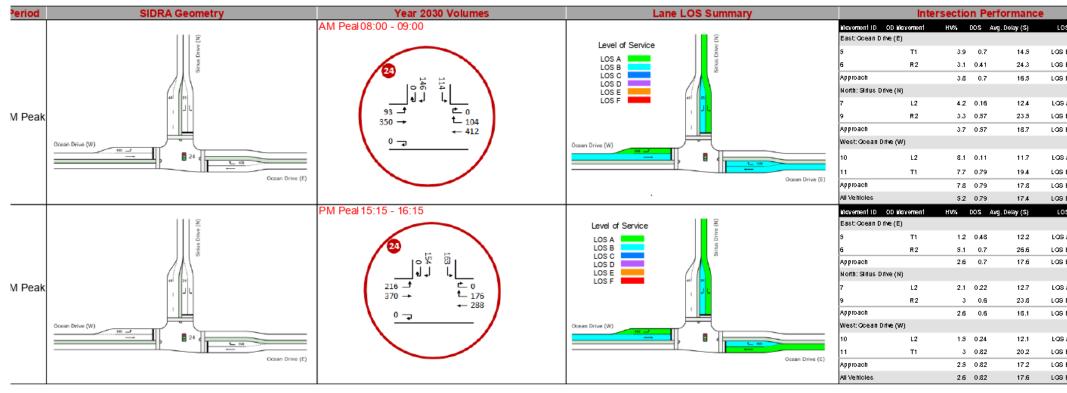


### ORDINARY COUNCIL 19/05/2022



Intersection Performant           609 (m)         Overall the intersection ha           sA         11.8           score of saturation is         average delay across the seconds.	s LOS A and 0.36, which is
the degree of saturation is <sup>SA</sup> 118 within the acceptable limit <sup>SA</sup> 118 average delay across the	0.36, which is
SA 11.8 within the acceptable limit SA 11.8 average delay across the	,
sA 118 average delay across the	of 0.85. The
	intersection is
SA 11.3	
SA 11.3	
SA 11.3	
SA 20.2	
os Bog (m) Overall the intersection ha	s LOS A and
the degree of saturation is	0.35, which is
SA 12.5 within the acceptable limit	of 0.85. The
sA 12.5 average delay across the	intersection is
SA 125 seconds.	
SA 10.7	
SA 10.7	
SA 10.7	
SA 18.7	

# 24. Ocean Drive / Sirius Drive 2030

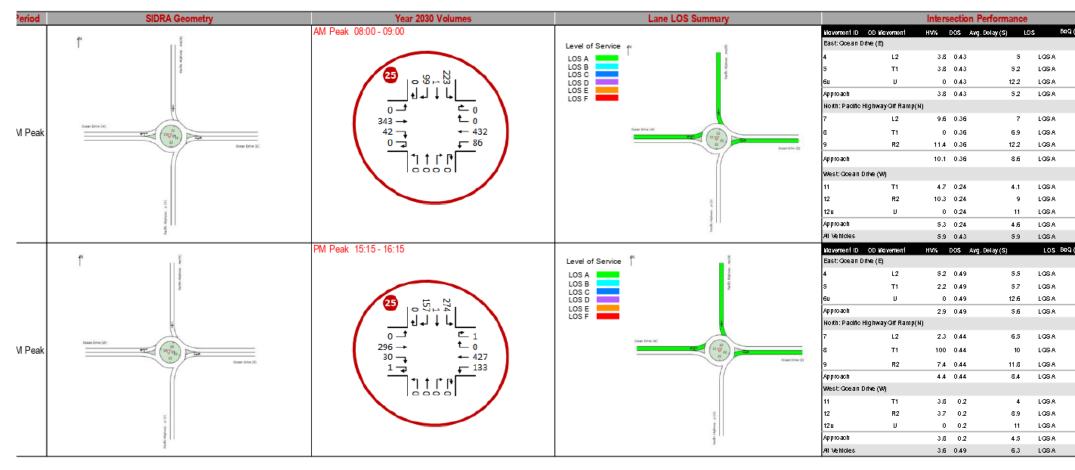


### ORDINARY COUNCIL 19/05/2022



		Intersection Performance Summary
s	BoQ (m)	Overall the intersection has LOS B and
		the degree of saturation is 0.79, which is
в		within the acceptable limit of 0.90.The
В	15.2	average delay across the intersection is
в	59.5	17 seconds.
A	10.8	
в	22.3	
в	22.3	
A	7.3	
в	60.2	
в	60.2	
в	60.2	
s	BoQ (m)	Overall the intersection has LOS B and
		the degree of saturation is 0.82, which is
A	35	within the acceptable limit of 0.90.The
в	28.9	average delay across the intersection is
в	35	18 seconds.
A	15.6	
В	23.7	
в	23.7	
A	17.5	
в	62.7	
в	62.7	
В	62.7	

### 25. Ocean Drive / Pacific Highway Ramp 2030



### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
(m)	Overall the intersection has LOS A and the
	degree of saturation is 0.43, which is within the
25.5	acceptable limit of 0.85.The average delay acros
25.5	the intersection is 6 seconds.
25.5	{
25.5	1
17.6	
17.6	
17.6	
17.6	
12.5	
12.5	
12.5	{
12.5	
25.5	
(m)	Overall the intersection has LOS A and the
30.5	degree of saturation is 0.49, which is within the
30.5	acceptable limit of 0.05. The average delay acros
30.5	Ithe Intersection is 6 seconds.
30.5	{
22.3	
22.3	
22.3	
22.3	
22.3	
22.3 10.5	
22.3 10.5 10.5	

### 26. Ocean Drive / Nancy Bird Walton Drive / Kendall Road 2030

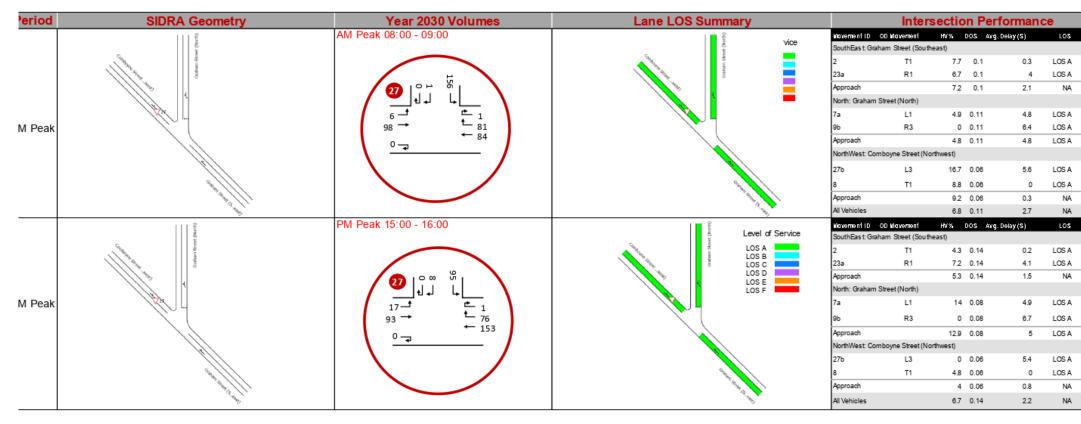


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_	
	Intersection Performance Summary
(m)	Overall the intersection has LOS A and the degree of
	saturation is 0.4, which is within the acceptable limit o
92	0.85.The average delay across the intersection is 8
92	seconds.
92	
92	
192	
2	
2	
2	
2	
2	
20.1	
20.1	
20.1	
20.1	
20.1	
12.6	
12.6	
12.6	
12.6	
12.6	
20.1	
(m)	Overall the intersection has LOS A and the degree of
	saturation is 0.41, which is within the acceptable limit
22.6	0.85.The average delay across the intersection is 8
22.6	seconds.
22.6	
22.6	
22.6	
22	
22	
22	
22	
22	
16.9	
16.9	
16.9	
16.9	
16.9	
13.1	
13.1	
13.1	
13.1	
13.1	
22.6	

## 27. Comboyne Street / Graham Street 2030



### ORDINARY COUNCIL 19/05/2022



	ntersection Performance Summa
BaQ (m)	Overall the intersection has LOS A and
	the degree of saturation is 0.11, which is
3.4	within the acceptable limit of 0.80. The
3.4	average delay across the intersection is
3.4	seconds.
3.5	
3.5	
3.5	
0	
0	
0	
3.5	
BaQ (m)	Overall the intersection has LOS A and
	the degree of saturation is 0.14, which is
	within the acceptable limit of 0.80. The
3.8	average delay across the intersection is
	average delay across the intersection is
3.8	average delay across the intersection is seconds.
3.8 3.8 2.5	average delay across the intersection is seconds.
3.8 3.8 2.5 2.5	average delay across the intersection is seconds.
3.8 3.8 2.5	average delay across the intersection is seconds.
3.8 3.8 2.5 2.5 2.5 2.5	average delay across the intersection is seconds.
3.8 3.8 2.5 2.5 2.5 0	average delay across the intersection is seconds.
3.8 3.8 2.5 2.5 2.5 0 0	average delay across the intersection is seconds.
3.8 3.8 2.5 2.5 2.5 0	average delay across the intersection is seconds.

# 1. Boundary Street / Hastings River Drive 2040



#### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
	Overall the intersection has LOS B and the degree of saturation is 0.53, which is within
	the acceptable limit of 0.9. The right-turns
_	present as LOS D, this is due to relatively
18.5	high delays for these movements. However
	the volumes are low and queues are
0	contained in the right-turn pockets. The average delay across the intersection is 18
105.1	seconds.
4.8	seconds.
105.1	
15.4	
15.4	
32	
15.4	
80.6	
80.7	
6.6	
80.7	
105.1	Querell the intersection has LOOD and the
	Overall the intersection has LOS D and the degree of saturation is 0.93, which is just
	outside the acceptable limit of 0.9. The
1 14.5	average delay across the intersection is 44
169.7	seconds
169.7 169.7	5 ,
	5 ,
169.7	5 ,
169.7 0 365.1	5 ,
169.7 0 365.1 19.9	5 ,
169.7 0 365.1	5 ,
169.7 0 365.1 19.9	5 ,
169.7 0 365.1 19.9 365.1	5 ,
169.7 0 365.1 19.9 365.1	5 ,
169.7 0 365.1 19.9 365.1 10.9 10.9	5 ,
169.7 0 365.1 19.9 385.1 10.9 10.9 0.4	5 ,
169.7 0 365.1 19.9 385.1 10.9 10.9 0.4	5 ,
169.7 0 365.1 19.9 365.1 10.9 10.9 0.4 10.9	5 ,
169.7 0 365.1 19.9 385.1 10.9 10.9 0.4 10.9 0.4 99.5	5 ,
169.7 0 365.1 19.9 365.1 10.9 10.9 0.4 10.9 9.5 99.6	5 ,
169.7 0 365.1 19.9 365.1 10.9 0.4 10.9 0.4 10.9 9.5 99.5 99.6 8.1	5 ,

## 2. Hastings River Drive / Hughes Place 2040

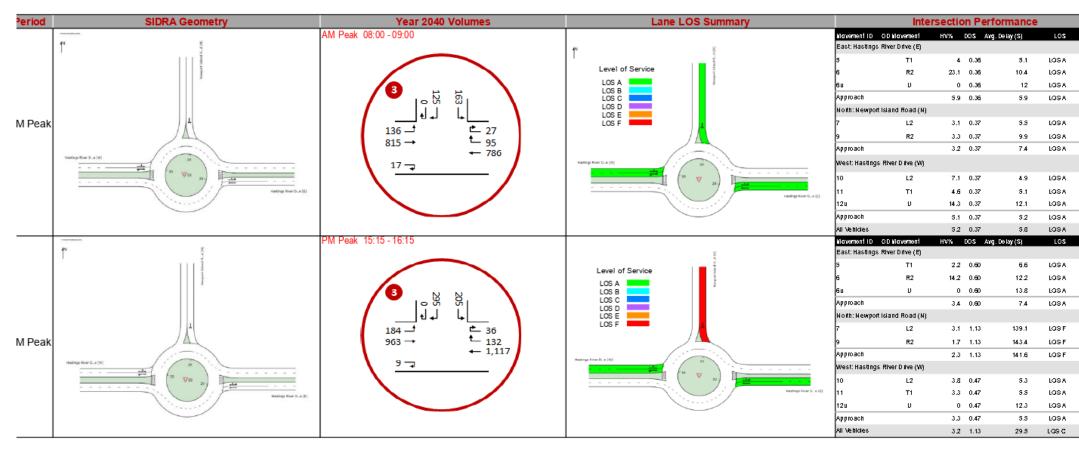


### ORDINARY COUNCIL 19/05/2022



	Internet des Deutermanne Co
	Intersection Performance Summary
ile BaQ (m)	Overall the intersection has LOS A and the
	degree of saturation is 0.34, which is within the
2.7	acceptable limit of 0.85. The average delay acros
	the intersection is 6 seconds.
2.7	1
2.7	
16.2	
16.2	
16.1	Į
16.2	
18	
17.7	
17.7	
18	
18	
ile BaQ (m)	Overall intersection has LOS A and the degree of
	saturation is 0.46, which is within the acceptable
17	limit of 0.85. The average delay across the
17	intersection is 7 seconds.
17	
17	
30.9	
30.9	
30.5	1
30.9	
22	
20.8	
20.8 20.8	
20.8	

## 3. Hastings River Drive / Newport Island Road 2040

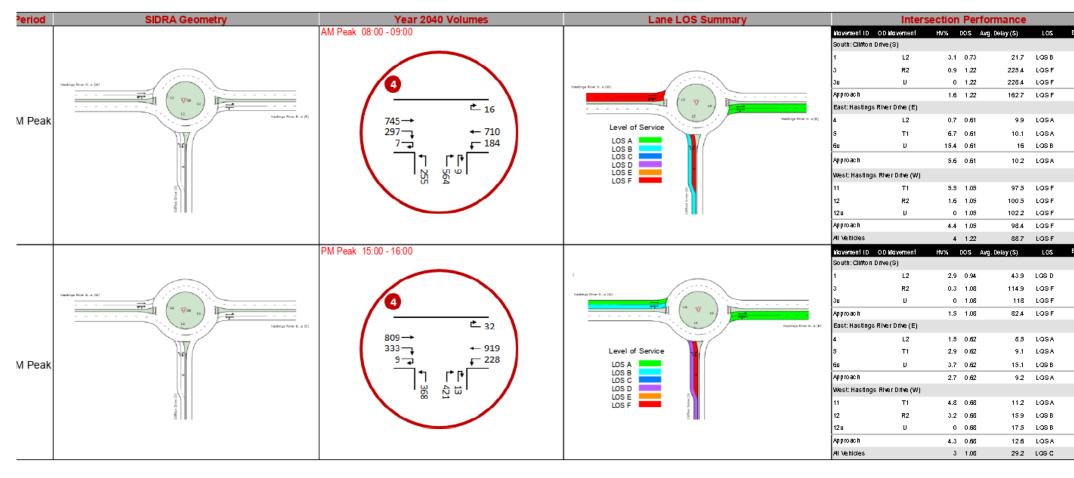


### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
BaQ (m)	Overall the intersection has LOS A and the
	degree of saturation is 0.37, which is within
	the acceptable limit of 0.85. The average
21	delay across the intersection is 6 seconds.
21	
21	
11.1	
11.1	
11.1	
21.6	
21.6	
21	
21.6	
21.6 8a() (m)	
cond (rii)	Overall the intersection has LOS F and the
44.4	degree of saturation is 1.13, which is <b>abov</b>
44.7	the acceptable limit of 0.85. The average
44.7	delay across the intersection is 30 seconds.
44.7	
345,6	
345.6 345.6	
345.6	
345.6	
345.6 345.6	
345.6 345.6 31.3	
345.6 345.6 31.3 31.3	

## 4. Street Hastings River Drive / Clifton Drive 2040

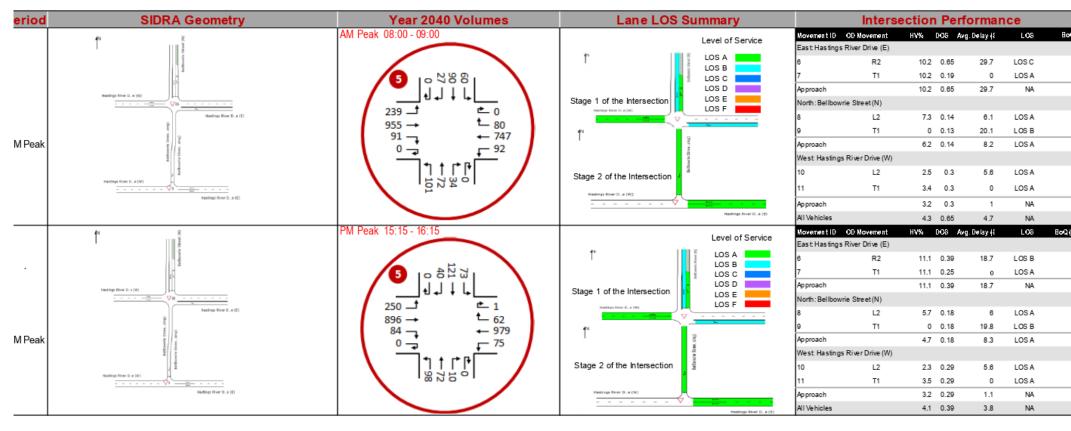


### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
BaQ (m)	Overall the intersection has LOS F and the
	degree of saturation is 1.22, which is above the
41.3	acceptable limit of 0.85. The average delay acros
575.7	the intersection is 88.7 seconds.
575.7	
\$75.7	
46.3	
46.3	
47.2	
47.2	
310.7	
310.7	
310.7	
312.7	
\$75.7	
BaQ (m)	Overall the intersection has LOS F and the
98.6	degree of saturation is 1.08, which is <b>above</b> the
90.0 250	acceptable limit of 0.85. The average delay acros
230 230	the intersection is 29 seconds.
250	
49.8	
49.8	
48.9	
49.8	
62.5	
59.3	
59.3	
62.5	
250	

## 5.1. Hastings River Drive / Bellbowrie Street / Widderson Street 2040

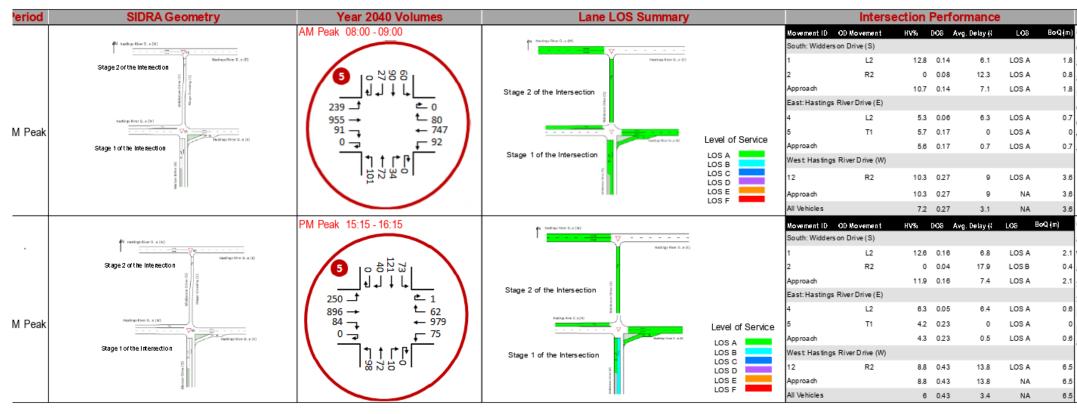


### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
<b>xQ (</b> m)	Overall the intersection has a LOS between
	and C and the degree of saturation is 0.65,
8.2	which is within the acceptable limit of 0.80.Th
0	average delay across the intersection is 5
8.2	seconds. The intersection was modelled with
	staged crossing for the right turn movement.
1.7	is expected that the right turn is only
1.2	performing within acceptable limits due to the
1.7	ability for vehicles to stage in the median.
0	
0	
0	
5.6	
(m)	Overall the intersection has a LOS between
	and B and the degree of saturation is 0.39,
5	which is within the acceptable limit of 0.80.Th
0	average delay across the intersection is 4
5	seconds. The intersection was modelled with
2.2	staged crossing for the right turn movement.
1.8	is expected that the right turn is only
2.2	performing within acceptable limits due to the
2.2	ability for vehicles to stage in the median.
0	
0	
0	
5	

## 5.2. Hastings River Drive / Bellbowrie Street / Widderson Street 2040



### ORDINARY COUNCIL 19/05/2022



#### Intersection Performance Summary

Overall the intersection has LOS A and the degree of saturation is 0.27, which is within th acceptable limit of 0.80. The average delay across the intersection is 3 seconds. The intersection was modelled with a staged crossing for the right turn movement. It is expected that the right turn is only performing within acceptable limits due to the ability for vehicles to stage in the median.

 HW%
 DOS
 Avg. Dolby (f
 LOS
 Box (m)

 126
 0.16
 6.8
 LOS A
 2.1

 0
 0.04
 17.9
 LOS B
 0.4

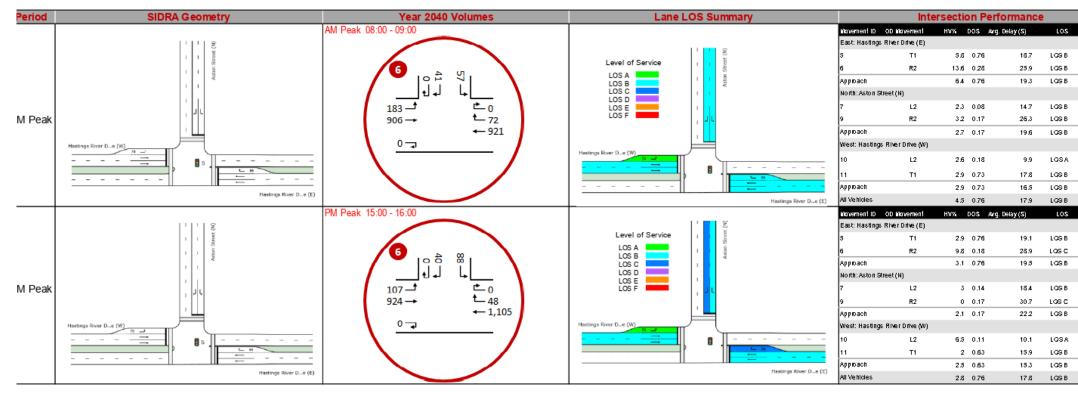
 11.9
 0.16
 7.4
 LOS A
 2.1

 6.3
 0.05
 6.4
 LOS A
 0.4

 42
 0.23
 0
 LOS A
 0.6

 43
 0.23
 0.5
 LOS A
 0.6

## 6. Hastings River Drive / Aston Street 2040

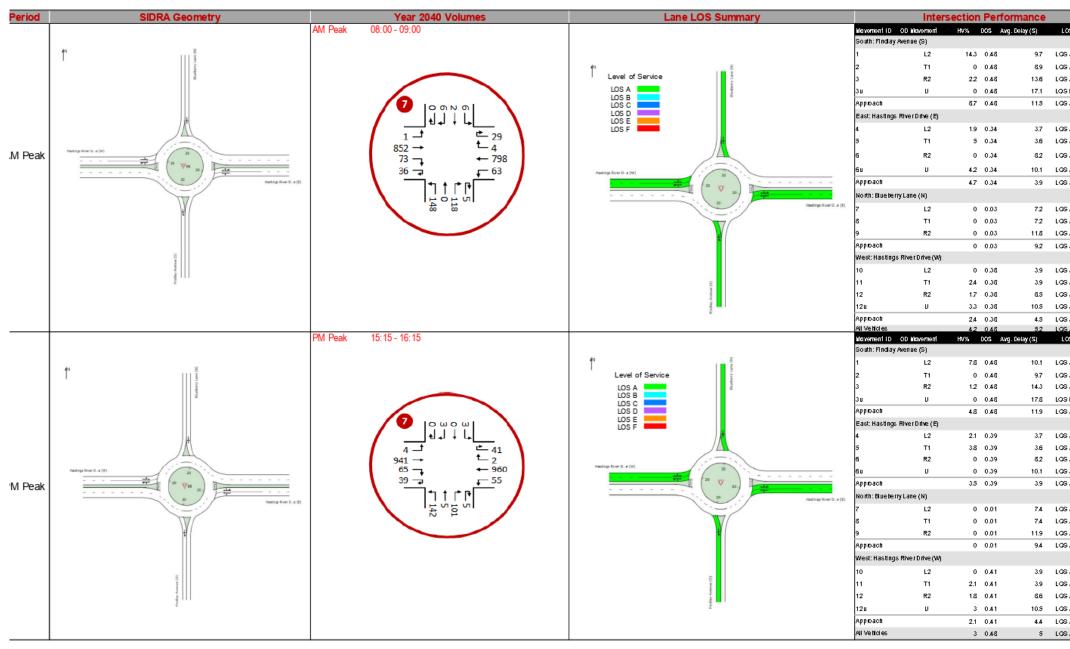


### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
BaQ (m)	Generally the intersection performs at LO
	B and the degree of saturation is 0.76,
87.1	which is above the acceptable limit of 0.90
13.6	The average delay across the intersection
87.1	is 18 seconds.
6.6	
7.1	
7.1	
15.9	
80.9	
80.9	
87.1	
BaQ (m)	Generally the intersection performs at LO
	B and the degree of saturation is 0.76,
114.9	which is within the acceptable limit of 0.90
10.1	The average delay across the intersection
114.9	is 18 seconds.
13.1	
8.1	
13.1	
10.4	
83	
83	
114.9	

### 7. Hastings River Drive / Findlay Avenue / Blueberry Lane 2040

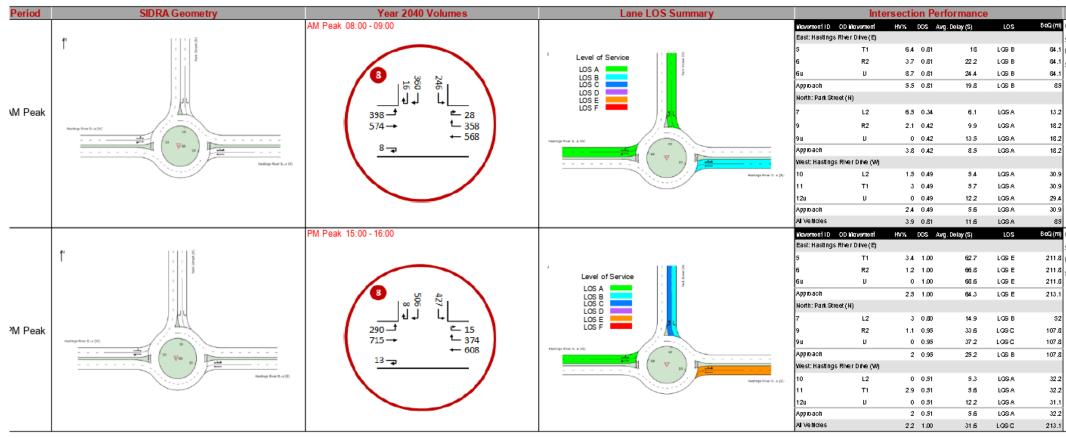


#### ORDINARY COUNCIL 19/05/2022



		Intersection Performance Summary
.05	BoQ (m)	Overall the intersection has LOS A and the
		degree of saturation is 0.48, which is within
SA	20.8	the acceptable limit of 0.85. The average
SA	20.8	delay across the intersection is 5 seconds.
SA	20.8	,
SB	20.8	
SA	20.8	
SA	19.4	
SA	19.4	
SA	19	
SA	19	
SA	19.4	
SA	8.0	
SA	0.8	
SA	0.8	
SA	8.0	
SA	22.5	
SA	22.5	
SA	21.8	
SA	21.8	
SA	22.5	
SA .OS	22.5 BaQ (m)	Overall the intersection has LOS A and the
	and of (111)	degree of saturation is 0.48, which is within
SA	19.6	•
SA		the acceptable limit of 0.85. The average
SA SA	19.6 19.6	delay across the intersection is 5 seconds.
SA	19.6 19.6	
S A S B	19.6 19.6 19.6	
SA	19.6 19.6	
SA SB SA	19.6 19.6 19.6 19.6	
S A S B	19.6 19.6 19.6	
SA SB SA SA	19.6 19.6 19.6 19.6 19.6 23.9	
SA SB SA SA SA	19.6 19.6 19.6 19.6 23.9 23.9 23.9	
SA SB SA SA SA	19.6 19.6 19.6 19.6 23.9 23.9 23.3	
SA SA SA SA SA	19.6 19.6 19.6 19.6 23.9 23.9 23.3 23.3 23.3	
SA SA SA SA SA	19.6 19.6 19.6 19.6 23.9 23.9 23.3 23.3 23.3	
SA SA SA SA SA SA	196 196 196 196 239 239 233 233 233 233	
SA SB SA SA SA SA SA SA SA	195 195 195 23.9 23.9 23.3 23.3 23.3 23.9 0.4 0.4	
SA SA SA SA SA SA	195 195 195 23.9 23.9 23.3 23.3 23.3 23.3 23.9 23.9	
SA SB SA SA SA SA SA SA SA	1955 1955 1955 1955 23.9 23.3 23.3 23.3 23.9 0.4 0.4 0.4	
S A S B S A S A S A S A S A S A S A S A S A	1955 1955 1955 23.9 23.9 23.3 23.3 23.3 23.3 23.9 0.4 0.4 0.4	
SA SB SA SA SA SA SA SA SA SA	195 195 195 23.9 23.9 23.3 23.3 23.3 23.9 0.4 0.4 0.4 0.4 0.4 0.4 0.4	
S A S B S A S A S A S A S A S A S A S A S A S A	1955 1955 1955 1955 23.9 23.9 23.3 23.3 23.9 23.9 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4	
SA SB SA SA SA SA SA SA SA SA SA SA	195 195 195 23.9 23.3 23.3 23.3 23.3 23.3 23.3 23.9 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 24.9 24.9 24.9	
S A S B S A S A S A S A S A S A S A S A S A S A	195 195 195 239 233 233 233 233 233 233 233 04 04 04 04 04 04 04 249 249 249 249	
SA SB SA SA SA SA SA SA SA SA SA SA	195 195 195 23.9 23.3 23.3 23.3 23.3 23.3 23.3 23.9 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 24.9 24.9 24.9	

## 8. Hastings River Drive / Park Street 2040



### ORDINARY COUNCIL 19/05/2022



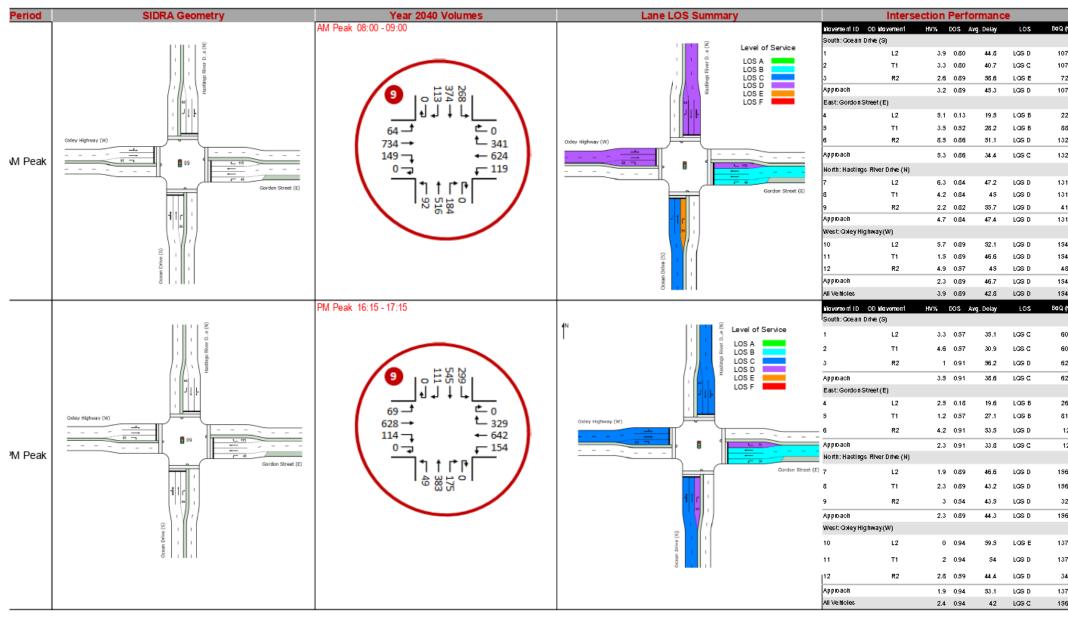
 Intersection Performance Summary

 804(m)
 Overall the intersection has LOS B and the degree of saturation is 0.81, which is within the acceptable limit of 0.85. The average delay across the intersection is 12

 84.1
 seconds.

Overall the intersection has LOS E and the degree of saturation is 1.00, which is **above** the acceptable limit of 0.85.The average delay across the intersection is 32 seconds.

## 9. Hastings River Drive / Oxley Highway / Ocean Drive / Gordon Street 2040

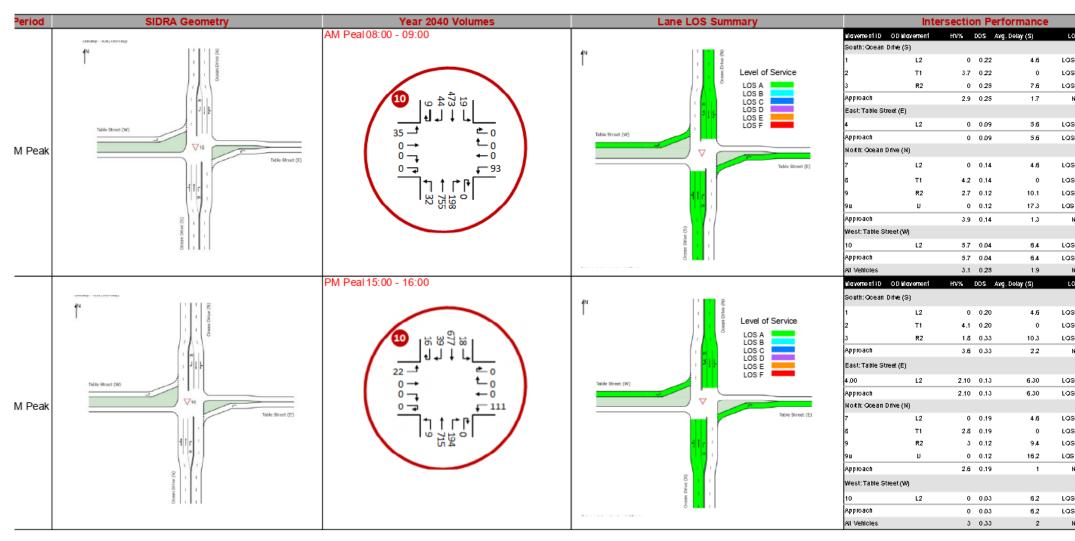


#### ORDINARY COUNCIL 19/05/2022



_	
	Intersection Performance Summary
	Overall the intersection has LOS D and the degree of saturation is 0.89, which is at the practical
7.5	capacity. The right-turns presented a LOS D and E,
	this is due to a relatively high delays for these
2.1	movements. The right turn on the eastern approach
7.5	has queues of approximately 130m at times which exceeds the available turn pocket length. The
2.1	average delay across the intersection is 43 seconds
8.1	average delay across the intersection is 40 seconds
22	
22	
1.6	
1.6	
1.3	
1.6	
4.1	
4.1 8.3	
۵.0 4.1	
4.1 4.1	
	Overall the intermedian has I OS C and the degree
(m)	Overall the intersection has LOS C and the degree of saturation is 0.94, which is just <b>outside</b> the
	practical limit of 0.9. The right-turns presented a LOS
	C and D, this is due to a relative high delays for thes
2.6	movements. The right turn movement on the eastern
2.6	approach has queues of approximately 120m at
6.9	times which exceeds the available turn pocket lengt! The average delay across the intersection is 42
1.5	seconds.
20	
20 20	
-	
6.3	
6.3	
2.9	
6.3	
7.8	
7.8	
4.1	
_	
7.8	

### 10. Ocean Drive / Table Street 2040

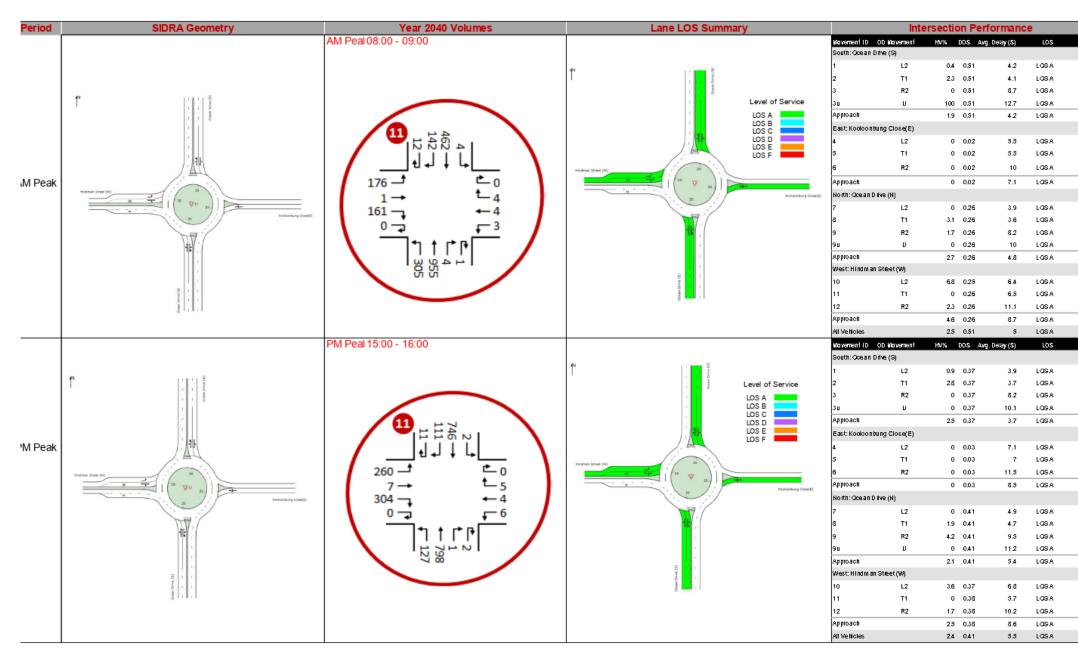


### ORDINARY COUNCIL 19/05/2022



Intersection Performance S Intersection Performance S Overall the intersection has a L the degree of saturation is 0.25 within the acceptable limit of 0.8 average delay across the inters seconds.	
the degree of saturation is 0.25 within the acceptable limit of 0.8 average delay across the inters	00.4 an
<ul> <li>within the acceptable limit of 0.8</li> <li>average delay across the inters</li> </ul>	.OS A an
<ul> <li>within the acceptable limit of 0.8</li> <li>average delay across the inters</li> </ul>	, which is
average delay across the inters	
ISA 74 seconds.	ection is
NA 74	
ISA 24	
ISA 24	
ISA 0	
ISA 0	
ISA 3	
GB 3	
NA 3	
ISA 1.1	
ISA 1.1	
NA 7.4	
Los Bag(m) Overall the intersection has a L	OS A an
the degree of saturation is 0.33	, which is
within the acceptable limit of 0.8	30.The
average delay across the inters	
ISA 10.8 SECONDS.	
NA 10.8	
S1 33	
ISA 3.30	
ISA 3.30 ISA 3.30	
ISA 3.30	
ISA 3.30 ISA 0	
ISA 3.30	
ISA 3.30 ISA 0 ISA 0 ISA 3.1	
ISA 3.30 ISA 0 ISA 0 ISA 3.1	
ISA 3.30 ISA 0 ISA 0 ISA 3.1 ISB 3.1	
ISA 3.30 ISA 0 ISA 0 ISA 3.1 ISB 3.1 INA 3.1	
ISA 3.30 ISA 0 ISA 0 ISA 3.1 ISB 3.1 ISA 0.6	
ISA 3.30 ISA 0 ISA 0 ISA 3.1 ISB 3.1 INA 3.1	

### 11. Ocean Drive / Hindman Street / Kooloonbung Close 2040

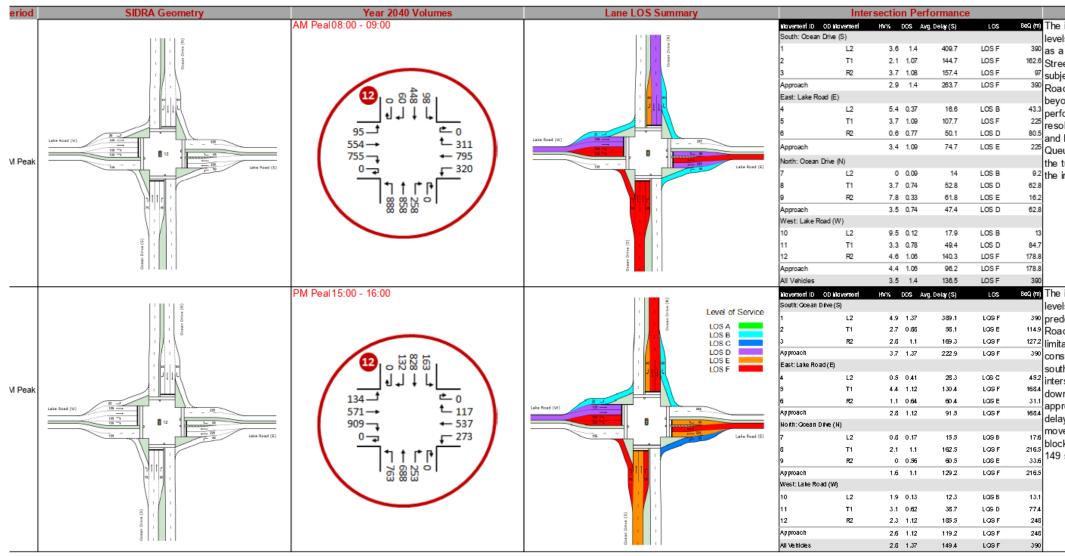


#### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
BaQ (m)	Overall the intersection has a LOS A and the
	degree of saturation is 0.51, which is within the
32.3	acceptable limit of 0.80.The average delay
32.3	across the intersection is 5 seconds.
31.9	
31.9	
32.3	
04	
04	
0.4	
0.4	
12.3	
12.3	
11.9	
11.9	
12.3	
9.1	
8.8	
8.8	
9.1	
32.3	
	Over well the inference fine have a 1000 A could be
BaQ (m)	Overall the intersection has a LOS A and the
	degree of saturation is 0.41, which is within the
21.1	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 21.1	degree of saturation is 0.41, which is within the
21.1 21.1 20.7	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 21.1 20.7 20.7	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 21.1 20.7	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 21.1 20.7 20.7 21.1	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 21.1 20.7 20.7 21.1 0.9	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 21.1 20.7 20.7 21.1 0.9 0.9	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 21.1 20.7 20.7 21.1 0.9 0.9 0.9	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 21.1 20.7 20.7 21.1 0.9 0.9	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 21.1 20.7 20.7 21.1 0.9 0.9 0.9 0.9	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 21.1 20.7 20.7 21.1 0.9 0.9 0.9 0.9 0.9 0.9 22.3	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 21.1 20.7 20.7 0.9 0.9 0.9 0.9 0.9 0.9 22.3 22.3	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 21.1 20.7 20.7 21.1 0.9 0.9 0.9 0.9 0.9 0.9 0.9 22.3 22.3 22.3 21.4	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 21.1 20.7 20.7 21.1 0.9 0.9 0.9 0.9 0.9 0.9 22.3 22.3 21.4 21.4	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 21.1 20.7 20.7 21.1 0.9 0.9 0.9 0.9 0.9 0.9 0.9 22.3 22.3 22.3 21.4	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 21.1 20.7 20.7 21.1 0.9 0.9 0.9 0.9 0.9 0.9 22.3 22.3 21.4 21.4	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 20.7 20.7 21.1 0.9 0.9 0.9 0.9 0.9 0.9 0.9 22.3 21.4 21.4 21.4	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 20.7 20.7 21.1 0.9 0.9 0.9 0.9 0.9 0.9 22.3 22.3 21.4 21.4 21.4 21.4 21.3	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 21.1 20.7 20.7 21.1 0.9 0.9 0.9 0.9 0.9 22.3 22.3 22.3 21.4 21.4 21.4 21.4 22.3 21.4 3.3 313.6	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay
21.1 21.1 20.7 20.7 21.1 0.9 0.9 0.9 0.9 0.9 22.3 22.3 21.4 21.4 21.4 21.4 21.3 3 13.6 13.6	degree of saturation is 0.41, which is within the acceptable limit of 0.80. The average delay

### 12. Ocean Drive / Lake Road 2040



#### ORDINARY COUNCIL 19/05/2022

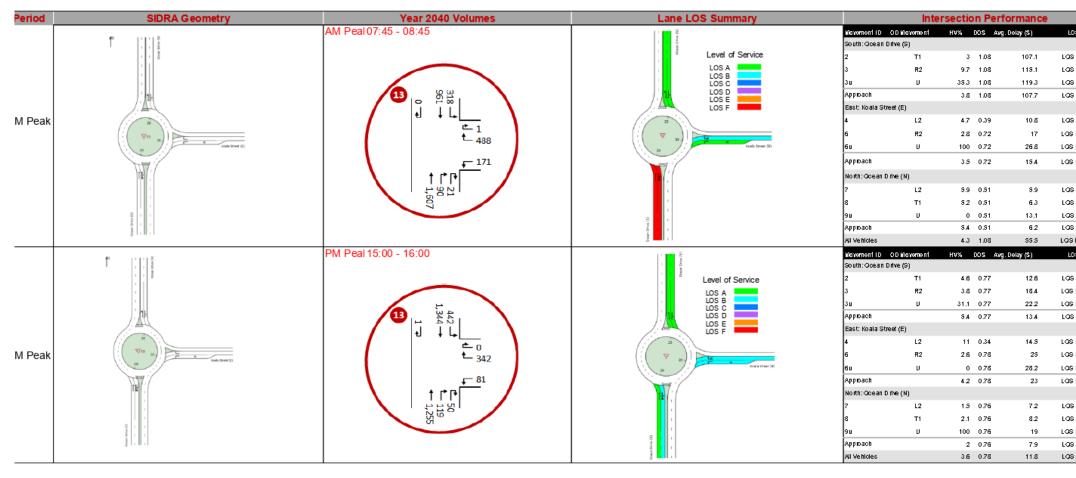


#### Intersection Performance Summary

The intersection performs outside of acceptable performance levels with LOS F and DOS 1.4. This is however predominant as a result of downstream impacts at the Lake Road / Centra for the subject intersection rather than capacity limitations at the subject intersection. Downstream capacity constraints on Lak Road result in queues extending to the south on Ocean Drive beyond Koala Street. It is expected the intersection would perform significantly better if the downstream constraints wer resolved. The right-turns on approaches operate at LOS D, E and F, due to relatively high delays for these movement. Queues for some of the movements are not contained within the turn pockets and will block the through movements. Overa the intersection delay is 137 seconds

The intersection performs outside of acceptable performance levels with LOS F and DOS 1.37. This is however
 predominantly as a result of downstream impacts at the Lake
 Road / Central Street intersection rather than capacity
 limitations at the subject intersection. Downstream capacity
 constraints on Lake Road result in queues extending to the south on Ocean Drive beyond Koala Street. It is expected the
 downstream constraints were resolved. The right-turns on approaches operate at LOS E and F, due to relatively high delays for these movement. Queues for some of the movements are not contained within the turn pockets and will block the through movements. Overall the intersection delay is 149 seconds

### 13. Ocean Drive / Koala Street 2040

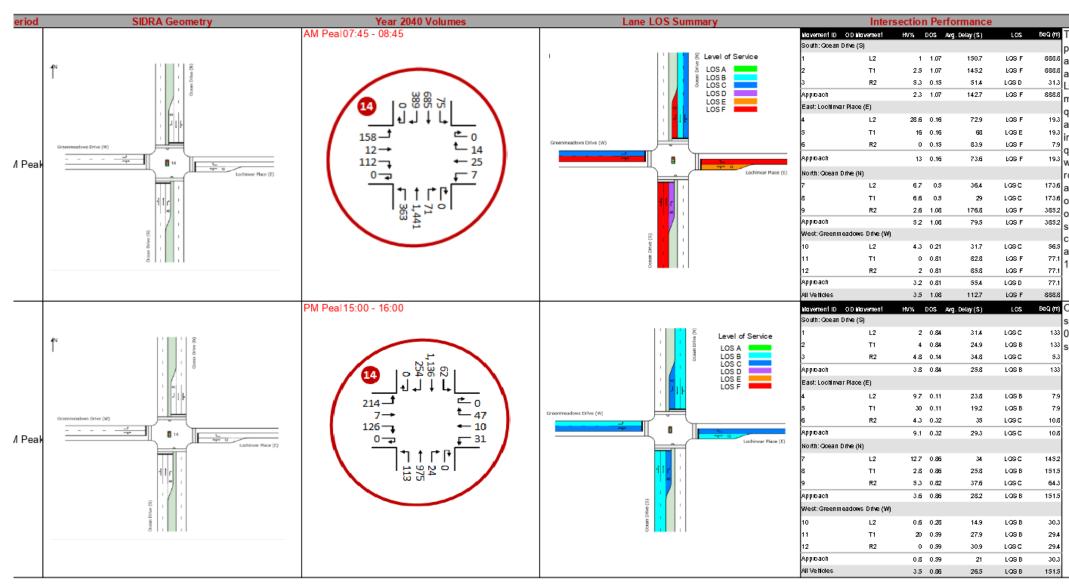


### ORDINARY COUNCIL 19/05/2022



os 200 (m) Overall the intersection has LOS F and the degree of saturation is 1.08. The s F <sup>\$712</sup> intersection performs outside the acceptable thresholds due to delays or			
the degree of saturation is 1.08. The intersection performs outside the acceptable thresholds due to delays or the southern approach. This is as a res of the downstream impacts at the Lake Road / Central Street intersection with queues extending south on Ocean Drive and through to Koala Street. SA 396 SA 397 SA 397 SA 397 SA 397 SA 397 SA 397 SA 397 SA 397 SA 397 SA 396 SA 396 SA 397 SA 397			Intersection Performance Summary
SF       5712         SF       494         acceptable thresholds due to delays or         the southern approach. This is as a rest         of the downstream impacts at the Lake         Road / Central Street intersection with         queues extending south on Ocean Drive         and through to Koala Street.         SA	05	BaQ (m)	Overall the intersection has LOS F and
SF       494         SF       494         SF       494         SF       5712         of the downstream impacts at the Lake         Road / Central Street intersection with         queues extending south on Ocean Drive         and through to Koala Street.         SA         SB       478         SA       396         SD       5712         Overall the intersection has LOS B and the degree of saturation is 0.78, which within the acceptable limit of 0.85.The average delay across the intersection is 12 seconds.         SB       875         SB       875         SB       875         SB       875         SB       875         SB       875         SB       875 </td <td></td> <td></td> <td>the degree of saturation is 1.08. The</td>			the degree of saturation is 1.08. The
SF       494         SF       494         SF       494         SF       5712         of the downstream impacts at the Lake         Road / Central Street intersection with         queues extending south on Ocean Drive         and through to Koala Street.         SA         SB       478         SA       396         SD       5712         Overall the intersection has LOS B and the degree of saturation is 0.78, which within the acceptable limit of 0.85.The average delay across the intersection is 12 seconds.         SB       875         SB       875         SB       875         SB       875         SB       875         SB       875         SB       875 </td <td>SF</td> <td>571.2</td> <td>intersection performs outside the</td>	SF	571.2	intersection performs outside the
SF       5712         of the downstream impacts at the Lake Road / Central Street intersection with queues extending south on Ocean Driving and through to Koala Street.         SA       151         SB       478         SB       478         SA       396         SA       39712         OS       Edo(m)         Overall the intersection has LOS B and the degree of saturation is 0.78, which within the acceptable limit of 0.85. The average delay across the intersection is 12 seconds.         12 seconds.       12 seconds.	SF		
SF       \$712         of the downstream impacts at the Lake Road / Central Street intersection with queues extending south on Ocean Drive and through to Koala Street.         SA       478         SB       478         SA       396         SA       396         SD       \$712         OS       £44(m)         Overall the intersection has LOS B and the degree of saturation is 0.78, which within the acceptable limit of 0.85. The average delay across the intersection is 12 seconds.         SA       89.1	SF	494	the southern approach. This is as a resu
SA       15.1         SA       15.1         SB       47.8         SA       39.6         SA       39.6         SD       5712         Overall the intersection has LOS B and the degree of saturation is 0.78, which within the acceptable limit of 0.85. The average delay across the intersection is 12 seconds.         SA       89.1         12 seconds.	SF	571.2	
SA       15.1         SB       47.8         SA       39.6         SA       39.6         SA       39.6         SA       39.6         SD       5712         OVerall the intersection has LOS B and the degree of saturation is 0.78, which within the acceptable limit of 0.85. The average delay across the intersection is 12 seconds.         SA       89.1         12 seconds.			·
<ul> <li>and through to Koala Street.</li> <li>and through to Koala St</li></ul>	SA	15.1	
5 6       47.8         5 6       47.8         5 8       47.8         5 8       47.8         5 8       39.6         5 A       39.6         5 A       39.6         5 A       39.6         5 A       89.1         5 B       87.5         5 A       89.1         12 seconds.	ЭB	47.8	
SA 396 SA 396 SA 396 SD 5712 Cos E40(00) Overall the intersection has LOS B and the degree of saturation is 0.78, which within the acceptable limit of 0.85. The average delay across the intersection is SA 89.1 SA 89.1 SA 89.1 SA 89.1	SВ	47.8	
s A 396 s A 384 s A 396 s D 5712 os tod (m) S A 89.1 s B 87.5 s A 89.1 s A 89.1 s B 87.5 s A 89.1 s A 89.1 s A 89.1 s B 87.5 s A 89.1 s A 89.1 s B 87.5 s A 89.1 s A 89.1 s B 87.5 s A 89.1 s B 87.5 s A 89.1 s B 87.5 s A 89.1 s B 89.1 s B 80.5 s B 80.	ЭΒ	47.8	
s A 396 s A 384 s A 396 s D 5712 os tod (m) S A 89.1 s B 87.5 s A 89.1 s A 89.1 s B 87.5 s A 89.1 s A 89.1 s A 89.1 s B 87.5 s A 89.1 s A 89.1 s B 87.5 s A 89.1 s A 89.1 s B 87.5 s A 89.1 s B 87.5 s A 89.1 s B 87.5 s A 89.1 s B 89.1 s B 80.5 s B 80.			
s A 396 s A 384 s A 396 s D 5712 os tod (m) S A 89.1 s B 87.5 s A 89.1 s A 89.1 s B 87.5 s A 89.1 s A 89.1 s A 89.1 s B 87.5 s A 89.1 s A 89.1 s B 87.5 s A 89.1 s A 89.1 s B 87.5 s A 89.1 s B 87.5 s A 89.1 s B 87.5 s A 89.1 s B 89.1 s B 80.5 s B 80.	SA	39.6	
SA       396         SD       \$712         OS       E40(00)         Overall the intersection has LOS B and the degree of saturation is 0.78, which         SA       89.1         SB       87.5         SB       87.5         SB       87.5         SA       89.1         12       seconds.			
SD       \$712         GS       \$60(0)         Overall the intersection has LOS B and the degree of saturation is 0.78, which within the acceptable limit of 0.85. The within the acceptable limit of 0.85. The seconds average delay across the intersection is 12 seconds.         SA       89.1	SA	38.4	
os       Eoq (m)       Overall the intersection has LOS B and the degree of saturation is 0.78, which within the acceptable limit of 0.85. The within the acceptable limit of 0.85. The seconds average delay across the intersection is a seconds.         S A       89.1         S A       89.1         S A       89.1	SA	39.6	
the degree of saturation is 0.78, which within the acceptable limit of 0.85. The average delay across the intersection is average delay across the intersection is s a seconds.	9 D	571.2	
<ul> <li><sup>8 89.1</sup> within the acceptable limit of 0.85. The</li> <li><sup>8 87.5</sup> average delay across the intersection is</li> <li><sup>8 87.5</sup> 12 seconds.</li> </ul>	os	BaQ (m)	Overall the intersection has LOS B and
<ul> <li><sup>8 89.1</sup> within the acceptable limit of 0.85. The</li> <li><sup>8 87.5</sup> average delay across the intersection is</li> <li><sup>8 87.5</sup> 12 seconds.</li> </ul>			the degree of saturation is 0.78, which is
<ul> <li>8 87.5 average delay across the intersection is</li> <li>8 8 87.5 average delay across the intersection is</li> <li>8 8 89.1 12 seconds.</li> </ul>	SA	89.1	
s 8 87.5 s A 89.1	SВ	87.5	· ·
SA 89.1	ЭB	87.5	
5 B 12.9	SA	89.1	12 0000100.
S B 12.9			
	SВ	12.9	
SB 52.4	SВ	52. <b>4</b>	
SB 52.4	SВ	52 <b>A</b>	
9 B 52 A	эв	52 A	
SA 78	SA	78	
SA 81.5	SA	81.5	
	SВ	81.5	
	SA	81.5	
	SA	89.1	

### 14. Ocean Drive / Greenmeadows Drive / Lochinvar Place 2040



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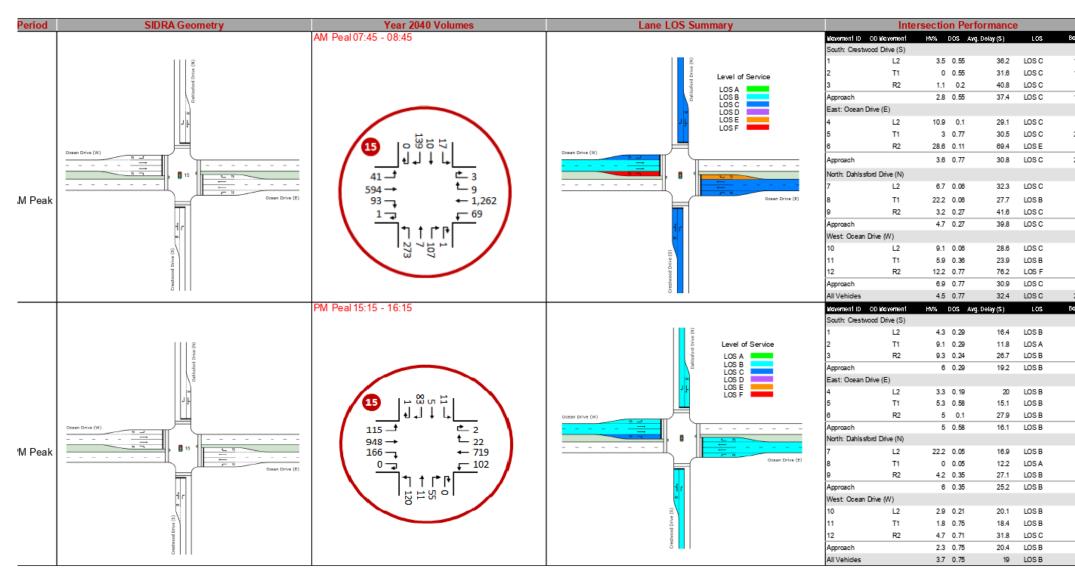


Intersection Performance Summary

The intersection operates outside the acceptable performance limits. Overall the intersection has LOSF <sup>8888</sup> and the degree of saturation is 1.08, which is above the acceptable limit of 0.9. All of the right-turns presented a <sup>31.3</sup>LOS D and F, with relatively high delays for these movements. The right turn on the northern approach has queuing in the order 385m, almost seven times the <sup>19.3</sup> available queuing distance within the turn pocket. This wi <sup>193</sup> impact through movements in the adjacent lane. Right tur queues on the western approach are in the order of 77m <sup>19.3</sup> which is greater than the separation distance from the roundabout to the west. It is likely that right turn queues 173.6 are queuing into the roundabout and may be blocking 173.6 other movements at the roundabout. The left turn queues on the western approach also exceed the available spacing from the roundabout to the west. Queues are contained in the right turn pocket on the southern approach. The average delay across the intersection is 113 seconds.

Overall the intersection has LOS B and the degree of saturation is 0.87, which is just below acceptable limit of 0.9. The average delay across the intersection is 27 seconds.

## 15. Ocean Drive / Crestwood Drive / Dahlsford Drive 2040

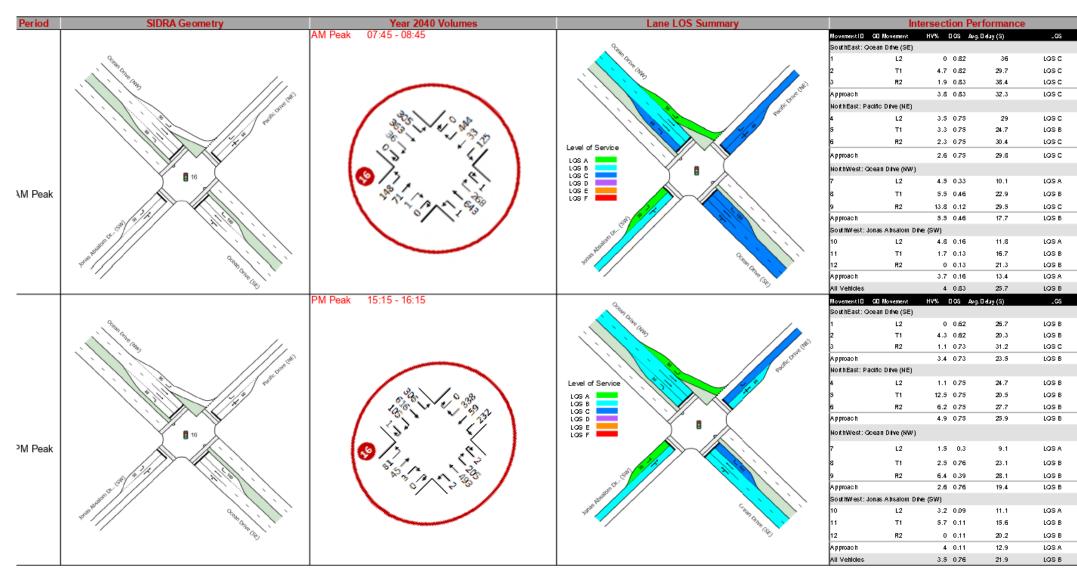


### ORDINARY COUNCIL 19/05/2022



	Internetien Derfermenen Commune
o () ( m)	Intersection Performance Summary Overall the intersection has LOS C and the degree
aalini	of saturation is 0.77, which is within the acceptable
102.1	limit of 0.90. The intersection has high through
102.1	volumes on Ocean Drive, which are unbalanced with
37.7	the side streets. The average delay across the
102.1	intersection is 32 seconds.
	intersection is 52 seconds.
20.3	
253.3	
6.8	
253.3	
8.8	
8.8	
50.5	
50.5	
11.6	
92.5	
51.9	
92.5	
253.3	
ଏସ୍(ଲ)	Overall the intersection has LOS B and the degree
17.2	of saturation is 0.75, which is within the acceptable
17.2	limit of 0.90. The intersection has high through
17.2	limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with
17.2 10.2	limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the
17.2	limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with
17.2 10.2	limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the
17.2 10.2 17.2	limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the
17.2 10.2 17.2 14	limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the
17.2 10.2 17.2 14 57.6	limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the
17.2 10.2 17.2 14 57.6 4.2 57.6	limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the
17.2 10.2 17.2 14 57.6 4.2 57.6 2.2	limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the
17.2 10.2 17.2 14 57.6 4.2 57.6 2.2 2.2	limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 19 seconds.
17.2 10.2 17.2 14 57.6 4.2 57.6 2.2 2.2 15.2	limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 19 seconds.
17.2 10.2 17.2 14 57.6 4.2 57.6 2.2 2.2	limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 19 seconds.
17.2 10.2 17.2 14 57.6 4.2 57.6 2.2 2.2 15.2 15.2	limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 19 seconds.
17.2 10.2 17.2 14 57.6 4.2 57.6 2.2 2 2 2 15.2 15.2 15.9	limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 19 seconds.
17.2 10.2 17.2 14 57.6 4.2 57.6 2.2 2.2 15.2 15.2 15.9 85.8	limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 19 seconds.
17.2 10.2 17.2 14 57.6 4.2 57.6 4.2 57.6 2.2 2.2 15.2 15.2 15.9 85.8 33.5	limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 19 seconds.
17.2 10.2 17.2 14 57.6 4.2 57.6 2.2 2.2 15.2 15.2 15.9 85.8	limit of 0.90. The intersection has high through volumes on Ocean Drive, which are unbalanced with the side streets. The average delay across the intersection is 19 seconds.

## 16. Ocean Drive / Jonas Absalom Drive / Pacific Drive 2040

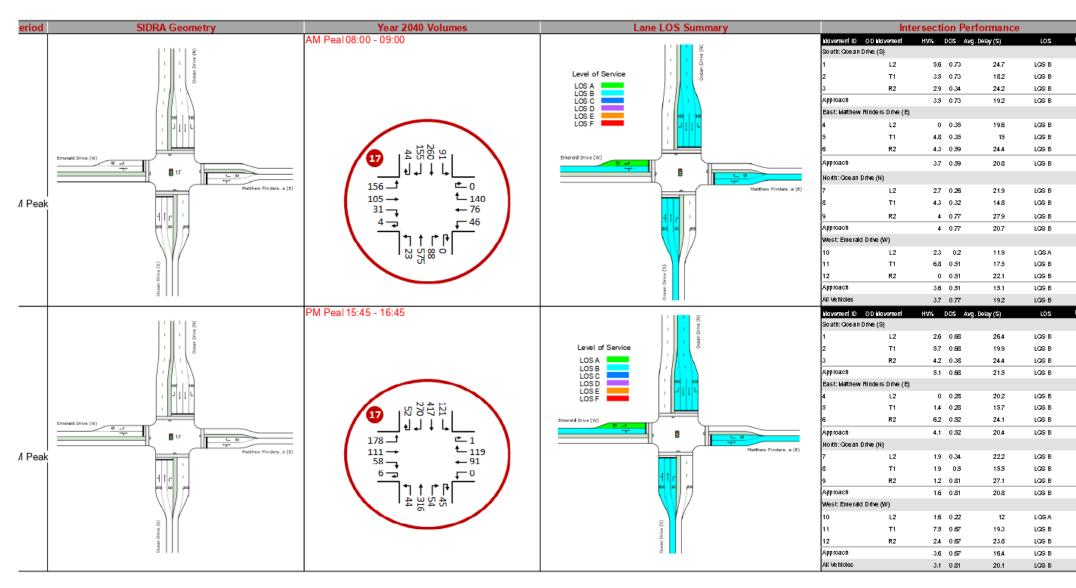


### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
BoQ(m)	Overall the intersection has LOS B and the degre
	of saturation is 0.83, which is within the acceptab
	limit of 0.90. The average delay across the
	intersection is 26 seconds.
67.4	
80.2	
72.7	
72.7	
72.7	
72.7	
24.2	
37.2	
7.5	
37.2	
16.4	
11.7	
11.7	
16.4	
80.2	
80Q (m)	Overall the intersection has LOS B and the degre
	of saturation is 0.76, which is within the acceptabl
44.5	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 44.5	of saturation is 0.76, which is within the acceptabl
44.5 44.5 40.4	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 44.5	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 44.5 40.4 44.5	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 44.5 40.4 44.5 70.8	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 44.5 40.4 44.5 70.8 70.8	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 44.5 40.4 44.5 70.8	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 44.5 40.4 44.5 70.8 70.8 70.8	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 40.4 44.5 70.8 70.8 70.8 70.8 70.8	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 44.5 40.4 44.5 70.8 70.8 70.8	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 40.4 44.5 70.8 70.8 70.8 70.8 70.8	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 44.5 40.4 44.5 70.8 70.8 70.8 70.8 70.8 70.8	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 44.5 40.4 44.5 70.8 70.8 70.8 70.8 70.8 70.8 70.8 70.8	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 44.5 40.4 44.5 70.8 70.8 70.8 70.8 70.8 70.8 70.8 70.8	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 44.5 40.4 70.8 70.8 70.8 70.8 70.8 70.8 70.8 70.8	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 44.5 40.4 70.8 70.8 70.8 70.8 70.8 70.8 70.8 70.8	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 44.5 40.4 70.8 70.8 70.8 70.8 70.8 70.8 70.8 70.8	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 44.5 40.4 70.8 70.8 70.8 70.8 70.8 70.8 70.8 70.8	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the
44.5 44.5 44.5 70.8 70.8 70.8 70.8 70.8 70.8 70.8 17.4 60.2 19.3 60.2 7.6 7.1 7.1	of saturation is 0.76, which is within the acceptabl limit of 0.90. The average delay across the

## 17. Ocean Drive / Matthew Flinders Drive / Emerald Drive 2040



### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
B <b>oQ (m</b> )	Overall the intersection has LOS B and the degre
	of saturation is 0.77, which is within the acceptable
	limit of 0.90.The average delay across the
47.1	intersection is 19 seconds.
12.6	
47.1	
162	
16.2 22	
22	
12	
17.1	
33.6	
33.6	
14.2	
20.8	
20.8 20.8	
47.1	
	Overall the intersection has LOS B and the degre
e ad fui	of saturation is 0.81, which is within the acceptable
28.5	limit of 0.90. The average delay across the
29.7	
	intersection is 20 seconds
14.5	intersection is 20 seconds.
	intersection is 20 seconds.
14.5	intersection is 20 seconds.
14.5 29.7 12.2	intersection is 20 seconds.
14.5 29.7 12.2 12.2	intersection is 20 seconds.
14.5 29.7 12.2 12.2 18.8	intersection is 20 seconds.
14.5 29.7 12.2 12.2	intersection is 20 seconds.
14.5 29.7 12.2 18.8 18.8	intersection is 20 seconds.
14.5 29.7 12.2 12.2 18.8 18.8 18.8	intersection is 20 seconds.
14.5 29.7 12.2 18.8 18.8 18.8 16.2 28.3	intersection is 20 seconds.
14.5 29.7 12.2 18.8 18.8 18.8 18.8 28.3 53.9	intersection is 20 seconds.
14.5 29.7 12.2 18.8 18.8 18.8 16.2 28.3	intersection is 20 seconds.
14.5 29.7 122 18.8 18.8 16.2 28.3 53.9 53.9	intersection is 20 seconds.
14.5 29.7 122 18.8 18.8 18.8 18.8 28.3 53.9 53.9 53.9	intersection is 20 seconds.
14.5 29.7 122 18.8 18.8 16.2 28.3 53.9 53.9	intersection is 20 seconds.
14.5 29.7 12.2 12.2 18.8 18.8 18.8 16.2 28.3 53.9 53.9 53.9 16.3 28.2	intersection is 20 seconds.
14.5 29.7 12.2 18.8 18.8 18.8 18.8 28.3 53.9 53.9 53.9 16.3 28.2 28.2	intersection is 20 seconds.

# 18. Ocean Drive / Woolworths Access 2040

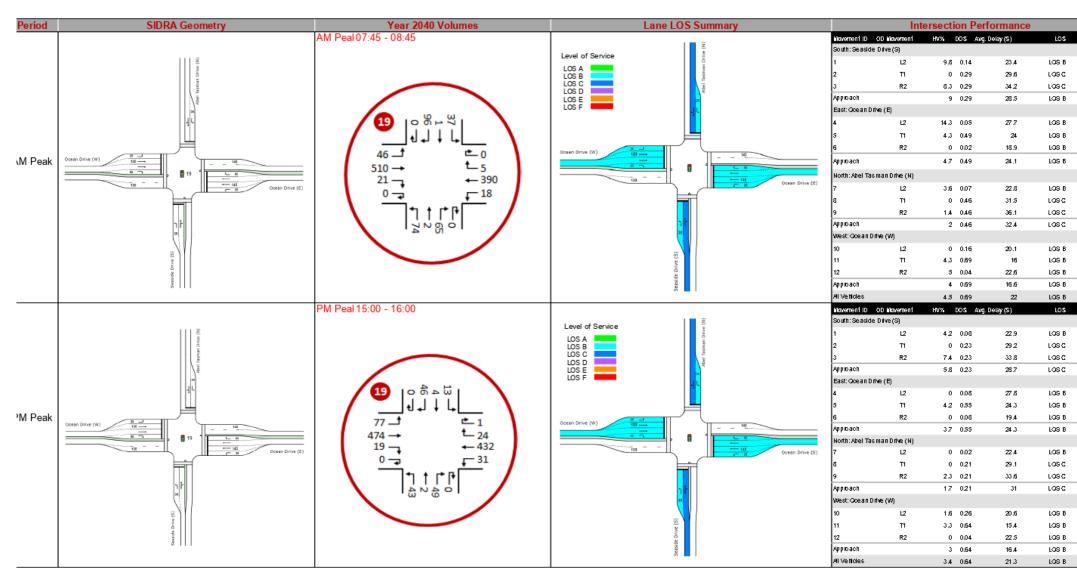


#### ORDINARY COUNCIL 19/05/2022



		Intersection Performance Summary
OS		Overall the intersection has LOS A and
		the degree of saturation is 0.65, which is
SΑ		within the acceptable limit of 0.90.The
SA	13.9	average delay across the intersection is
SΑ	49.2	14 seconds.
βB	43	
βB	5.9	
βB	43	
SΑ	3.8	
SВ	8.3	
SВ	8.3	
SΑ	49.2	
OS	BoQ (m)	Overall the intersection has LOS B and
		the degree of saturation is 0.82, which is
SΑ		within the acceptable limit of 0.90.The
SΑ		average delay across the intersection is
SΑ	31.6	16 seconds.
βB	60.9	
βB	11.9	
δВ	60.9	
SΑ	6.4	
SВ	20	
βB	20	
SВ	60.9	

# 19. Ocean Drive / Abel Tasman Drive / Seaside Drive 2040

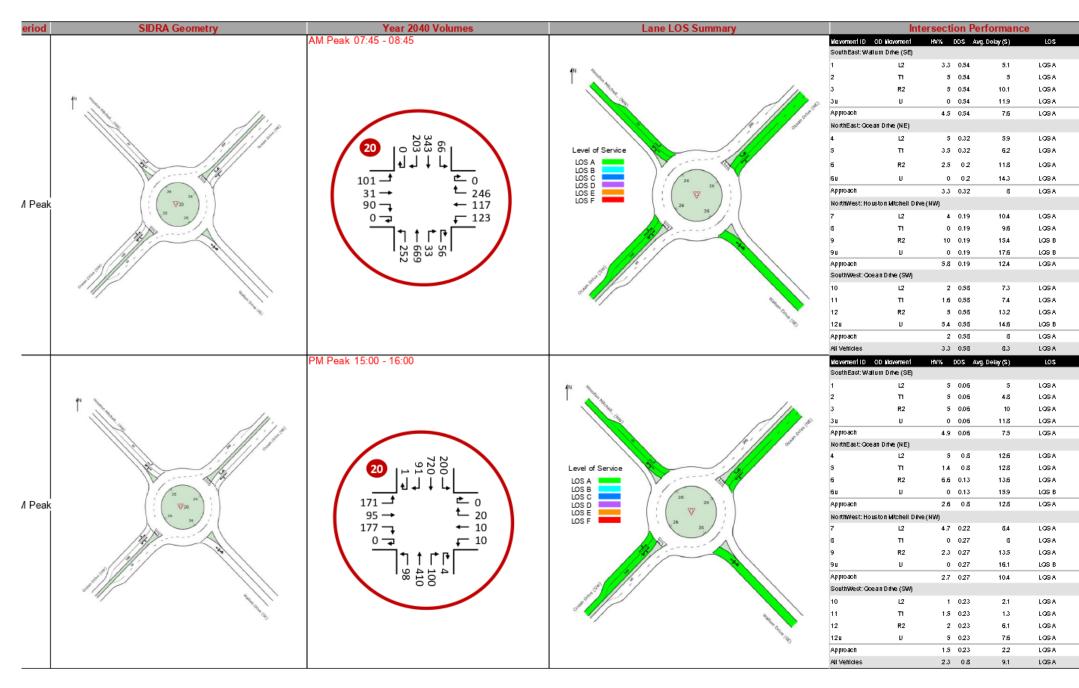






	Intersection Performance Summary
BoQ (m)	Overall the intersection has LOS B and the
	degree of saturation is 0.69, which is within the
14.7	acceptable limit of 0.90. The average delay
16.8	across the intersection is 22 seconds.
16.8	across the intersection is 22 seconds.
16.8	
4	
52.5	
0.7	
52.5	
68	
24.1	
24.1	
24.1	
6.8	
50.6	
3.8	
50.6	
S2.5	
52.5 BoQ (m)	Overall the intersection has LOS B and the
	degree of saturation is 0.64, which is within the
BoQ (m) 7.9	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay
BoQ (m) 7.9 12.5	degree of saturation is 0.64, which is within the
BoQ (m) 7.9 12.5 12.5	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay
BoQ (m) 7.9 12.5	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay
800 (m) 7.9 12.5 12.5 12.5	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay
800 (m) 7.9 12.5 12.5 12.5 6.2	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay
800 (m) 7.9 125 125 125 62 59.1	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay
800 (m) 7.9 125 125 125 125 62 59.1 35	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay
800 (m) 7.9 125 125 125 62 59.1	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay
800 (m) 7.9 125 125 125 125 62 59.1 35	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay
802 (m) 7.9 125 125 125 62 59.1 35 59.1	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay
802 (m) 7.9 125 125 125 125 59.1 35 59.1 35 59.1 2.3	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay
802 (m) 7.9 125 125 125 62 59.1 35 59.1 35 59.1 2.3 11.7	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay
802 (m) 7.9 125 125 125 62 59.1 35 59.1 2.3 11.7 11.7	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay
802 (m) 7.9 125 125 125 62 59.1 35 59.1 2.3 11.7 11.7	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay
800 (m) 7.9 125 125 125 125 59.1 35 59.1 2,3 11.7 11.7	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay
800 (m) 7.9 125 125 125 62 59.1 35 59.1 2.3 11.7 11.7 11.7	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay
800 (m) 7.9 125 125 125 62 59.1 3.5 59.1 13.5 59.1 11.7 11.7 11.7 11.9 44.7	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay
802 (m) 7.9 125 125 125 62 59.1 35 59.1 35 59.1 1.3 5 99.1 1.7 11.7 11.7 11.7 11.9 44.7 3.3	degree of saturation is 0.64, which is within the acceptable limit of 0.90.The average delay

# 20. Ocean Drive / Houston Mitchell Drive 2040

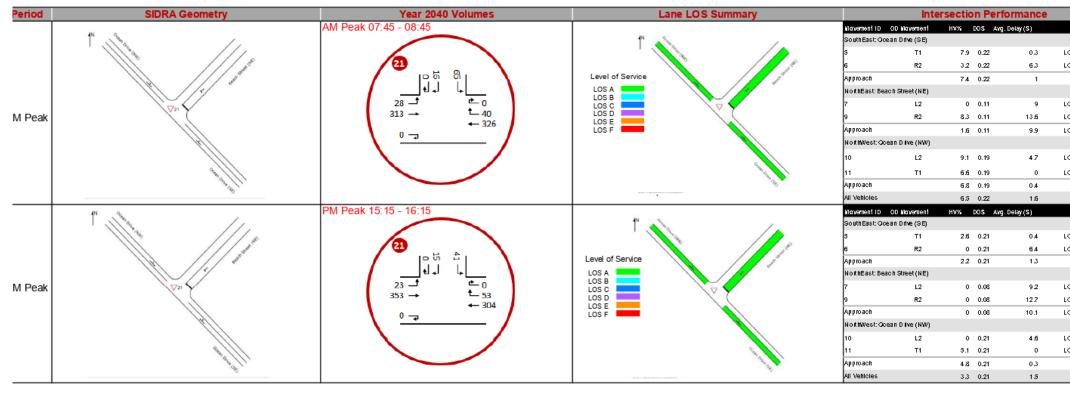


#### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
ΒοΟ, (π)	Overall the intersection has LOS A and the
	degree of saturation is 0.58, which is within the
19.9	acceptable limit of 0.85. The average delay acros
19.9	the intersection is 8 seconds.
19.9	
19.9	
19.9	
16.7	
16.7	
9.1	
9.1	
16.7	
7.3	
7.8 7.8	
7.8 7.8	
7.8 7.8	
43.8	
43.8	
41.4	
41.4	
41.4 43.8	
43.8 43.8	Overall the intersection has LOS A and the
43.8 43.8 BoQ (m)	degree of saturation is 0.8, which is within the
43.8 43.8 BoQ (m) 2	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
43,8 43,8 BoQ (m) 2 2	degree of saturation is 0.8, which is within the
43,8 43,8 BoQ (m) 2 2 2 2	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 Boq (m) 2 2 2 2 2	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
43,8 43,8 BoQ (m) 2 2 2 2	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 Boq (m) 2 2 2 2 2	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 Boq (m) 2 2 2 2 2 2 2 2	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 600 (m) 2 2 2 2 2 2 2 100	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 <b>600 (m)</b> 2 2 2 2 2 2 2 100 100	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 Boq (m) 2 2 2 2 2 2 2 2 2 2 100 100 54	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 509 (m) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 800 (m) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 800 (m) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3 4 100 54 54 100 7,6 10	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 500 (m) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 503 (m) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 500 (m) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 809 (m) 2 2 2 2 2 2 2 2 2 2 100 100 54 54 100 100 10 10 10	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 22 22 22 22 20 100 100 54 54 100 10 10 10 10 10 10	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 800 (m) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 800 (m) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 800 (m) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:
438 438 800 (m) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	degree of saturation is 0.8, which is within the acceptable limit of 0.85.The average delay acro:

# 21. Ocean Drive / Beach Street 2040



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		Intersection Performance Summary
LOS	BaQ (m)	Overall the intersection has LOS A and
		the degree of saturation is 0.22, which is
OSA	3.1	within the acceptable limit of 0.80.The
OSA	3.1	
NA	3.1	seconds.
OSA	2.7	
OSA	2.7	
OSA	2.7	
OSA	0	
OSA	0	
NA	0	
NA	3.1	
LOS	BaQ (m)	Overall the intersection has LOS A and
		the degree of saturation is 0.21, which is
OSA	3.9	within the acceptable limit of 0.80. The
OSA	3.9	average delay across the intersection is
NA	3.9	second.
OSA	1.9	
OSA	1.9	
OSA	1.9	
OSA	0	
OSA	0	
NA	0	
NA	3.9	

# 22. Ocean Drive / The Parade 2040

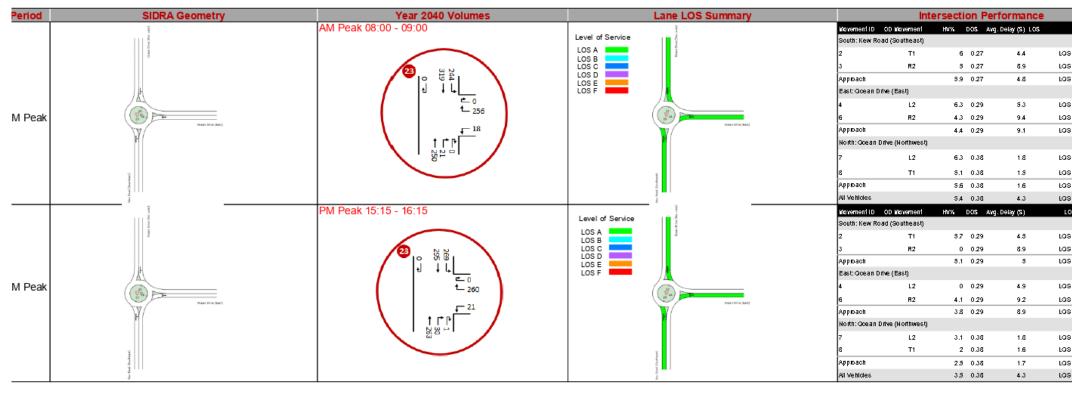


#### ORDINARY COUNCIL 19/05/2022



the degree of saturation is 0.27, which is within the acceptable limit of 0.85. The average delay across the intersection is seconds. SA 56 SA 123 SA 123 SA 123 SA 112 SA 11			
the degree of saturation is 0.27, which is within the acceptable limit of 0.85. The average delay across the intersection is seconds. A 58 A 58 A 123 A			Intersection Performance Summary
<ul> <li>SA 54 SA 56 SA 56 SA 56 SA 56 SA 56 SA 56 SA 56 SA 123 SA 135 SA 135 S</li></ul>	.os	BaQ (m)	Overall the intersection has LOS A and
A 123 SA 123			the degree of saturation is 0.27, which is
Average delay across the intersection is seconds. SA 56 SA 123 SA 123 SA 123 SA 123 SA 123 SA 123 SA 123 SA 123 SA 112 SA 123 SA 63 SA	SΑ	5.8	within the acceptable limit of 0.85. The
SA 56 SA 56 SA 123 SA 123 SA 123 SA 123 SA 123 SA 123 SA 123 SA 112 SA 112 SA 112 SA 112 SA 112 SA 112 SA 112 SA 112 SA 112 SA 123 Overall the intersection has LOS A and the degree of saturation is 0.31, which is within the acceptable limit of 0.85.The average delay across the intersection is seconds. SA 63 SA 75 SA	SΑ	5.8	average delay across the intersection is
SA       123         SA       123         SA       123         SA       123         SA       123         SA       112         SA       112         SA       112         SA       112         SA       112         SA       112         SA       123         Overall the intersection has LOS A and the degree of saturation is 0.31, which is within the acceptable limit of 0.85. The average delay across the intersection is seconds.         SA       63         SA       147         SA       147         SA       158         SA       158         SA       158         SA       158	S A	5.8	seconds.
SA       123         SA       123         SA       123         SA       112         SA       123         Overall the intersection has LOS A and the degree of saturation is 0.31, which is within the acceptable limit of 0.85. The average delay across the intersection is seconds.         SA       63         SA       63         SA       63         SA       63         SA       14.7         SA       14.7         SA       14.7         SA       14.7         SA       158         SA       158         SA       158	GΑ	5.8	
SA       123         SA       123         SA       123         SA       112         SA       123         Overall the intersection has LOS A and the degree of saturation is 0.31, which is within the acceptable limit of 0.85. The average delay across the intersection is seconds.         SA       63         SA       63         SA       63         SA       63         SA       14.7         SA       14.7         SA       14.7         SA       14.7         SA       158         SA       158         SA       158			
SA 123 SA 123 SA 123 SA 123 SA 112 SA 112 SA 112 SA 112 SA 112 SA 112 SA 112 SA 123 COverall the intersection has LOS A and the degree of saturation is 0.31, which is within the acceptable limit of 0.85.The average delay across the intersection is seconds. SA 63 SA 63 S	SΑ	12.3	
SA 112 SA 123 Overall the intersection has LOS A and the degree of saturation is 0.31, which is within the acceptable limit of 0.85.The average delay across the intersection is seconds. SA 63 SA 63 S	SA	12.3	
sA 112 sA 112 sA 112 sA 112 sA 112 sA 123 cos	SA	12.3	
SA 112 SA 112 SA 112 SA 112 SA 123 Overall the intersection has LOS A and the degree of saturation is 0.31, which is within the acceptable limit of 0.85.The average delay across the intersection is seconds. SA 63 SA	GΑ	12.3	
SA 112 SA 112 SA 112 SA 112 SA 123 Overall the intersection has LOS A and the degree of saturation is 0.31, which is within the acceptable limit of 0.85.The average delay across the intersection is seconds. SA 63 SA			
SA       112         SA       112         SA       123         Cos       Read (m)         Overall the intersection has LOS A and the degree of saturation is 0.31, which is within the acceptable limit of 0.85. The average delay across the intersection is seconds.         SA       63         SA       14.7         SA       14.7         SA       14.7         SA       14.7         SA       158         SA       158         SA       158	SА	11.2	
SA       112         SA       123         Cos       Red (m)         Overall the intersection has LOS A and the degree of saturation is 0.31, which is within the acceptable limit of 0.85. The average delay across the intersection is seconds.         SA       63         SA       14.7         SA       14.7         SA       14.7         SA       14.7         SA       158         SA       158         SA       158	SA	11.2	
SA       12.3         CS       124         CS       124         Overall the intersection has LOS A and the degree of saturation is 0.31, which is within the acceptable limit of 0.85. The average delay across the intersection is seconds.         SA       6.3         SA       14.7         SA       14.7         SA       14.7         SA       14.7         SA       15.8         SA       15.8         SA       15.8         SA       15.8         SA       15.8	SA	11.2	
cs       iso (m)       Overall the intersection has LOS A and the degree of saturation is 0.31, which is within the acceptable limit of 0.85. The average delay across the intersection is seconds.         SA       6.3         SA       14.7         SA       14.7         SA       14.7         SA       14.7         SA       15.8         SA       15.8         SA       15.8         SA       15.8	SA	11.2	
the degree of saturation is 0.31, which is within the acceptable limit of 0.85. The average delay across the intersection is seconds. SA 14.7 SA 14.7 SA 14.7 SA 14.7 SA 14.7 SA 15.8 SA 15.8 SA 15.8 SA 15.8 SA 15.8	SA	12.3	
<ul> <li>sA 6.3</li> <li>seconds.</li> </ul>	.os	BaQ (m)	Overall the intersection has LOS A and
sA 63 sA 63 sA 63 sA 63 sA 63 sA 147 sA 158 sA 158			the degree of saturation is 0.31, which is
Average delay across the intersection is seconds. seconds. seconds. seconds. seconds. seconds. seconds. seconds. seconds. seconds. seconds. seconds. seconds. seconds. seconds. seconds.	SΑ	6.3	within the acceptable limit of 0.85.The
Seconds. SA 63 SA 14.7 SA 15.8 SA 15.8 SA 15.8 SA 15.8 SA 15.8	GΑ	6.3	average delay across the intersection is
SA 14.7 SA 14.7 SA 14.7 SA 14.7 SA 15.8 SA 15.8 SA 15.8 SA 15.8	SA	6.3	seconds.
SA 14.7 SA 14.7 SA 14.7 SA 15.8 SA 15.8 SA 15.8 SA 15.8	SA	6.3	
SA 14.7 SA 14.7 SA 14.7 SA 15.8 SA 15.8 SA 15.8 SA 15.8			
SA 14.7 SA 14.7 SA 15.8 SA 15.8 SA 15.8 SA 15.8	SA		
SA 14.7 SA 15.8 SA 15.8 SA 15.8 SA 15.8	SA	14.7	
SA 158 SA 158 SA 158 SA 158	6 A	14.7	
SA 158 SA 158 SA 158	GΑ	14.7	
SA 158 SA 158 SA 158			
SA 158 SA 158	SA		
GA 15.8	SΑ		
	SA		
GA 158	G A		
	SA	15.8	

## 23. Ocean Drive / Kew Road 2040

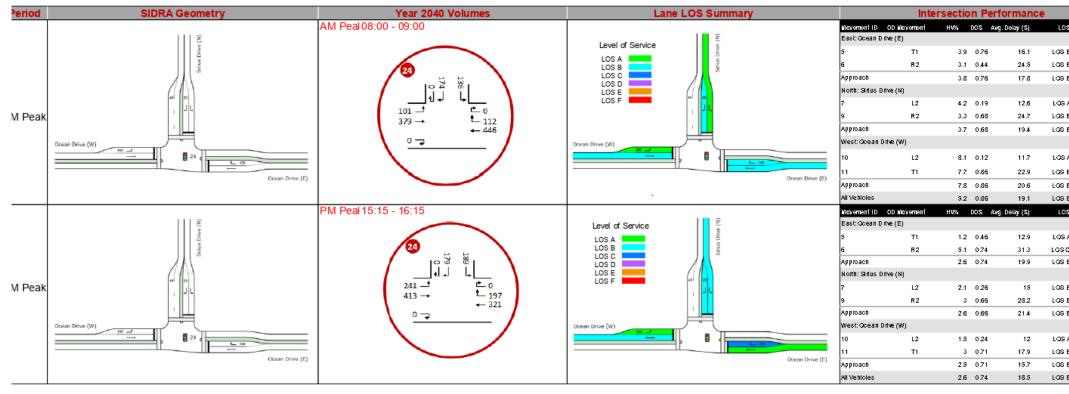


#### ORDINARY COUNCIL 19/05/2022



<ul> <li>within the acceptable limit of 0.00. The average delay across the intersection is seconds.</li> <li>sA 124</li> <li>sA 121</li> <li>sA 121</li> <li>sA 121</li> <li>sA 2117</li> <li>sA 2115</li> <li>sA 2115</li> <li>sA 2115</li> <li>sA 2115</li> </ul>			
the degree of saturation is 0.38, which is within the acceptable limit of 0.85. The average delay across the intersection is seconds. A 121 A 121 A 121 A 121 A 121 A 121 A 121 A 217 A 217			Intersection Performance Summary
<ul> <li>sA 124 sA 124 sA 124 sA 124 sA 124 sA 121 sA 122 sA 123 sA 125 sA 125</li></ul>		BaQ (m)	Overall the intersection has LOS A and
<ul> <li>within the acceptable limit of 0.00. The average delay across the intersection is average delay across the intersection is seconds.</li> <li>sA 121</li> <li>sA 121</li> <li>sA 121</li> <li>sA 2117</li> <li>sA 13.6</li> <li>sA 13.6</li> <li>sA 13.6</li> <li>sA 13.6</li> <li>sA 13.7</li> <li>sA 213</li> <li>sA 215</li> <li>sA 215</li> </ul>			the degree of saturation is 0.38, which is
A 124 SA 124 SA 124 SA 121 SA 121 SA 217 SA 217	SA	12.4	within the acceptable limit of 0.85. The
SA 121 SA 121 SA 121 SA 217 SA 136 SA 136 SA 136 SA 136 SA 137 SA 122 SA 122 SA 122 SA 122 SA 122 SA 217 SA	SA	12.4	average delay across the intersection is
sA 121 SA 121 SA 121 SA 217 SA 215	SA	12.4	seconds.
sA 121 SA 121 SA 121 SA 217 SA 215			
SA       12.1         SA       21.7         SA       21.7         SA       21.7         SA       21.7         SA       21.7         OVerall the intersection has LOS A and the degree of saturation is 0.38, which is within the acceptable limit of 0.85. The average delay across the intersection is seconds.         SA       13.6         SA       13.6         SA       122         SA       122         SA       122         SA       123         SA       215	SA	12.1	
SA 217 SA 136 SA 136 SA 135 SA 122 SA 122 SA 122 SA 122 SA 215 SA 215 SA 215	SA	12.1	
SA       217         SA       217         SA       217         SA       217         OS       690 min         SA       136         SA       135         SA       135         SA       136         SA       136         SA       136         SA       136         SA       122         SA       122         SA       122         SA       122         SA       1215	SA	12.1	
SA       217         SA       217         SA       217         SA       217         OS       690 min         SA       136         SA       135         SA       135         SA       136         SA       136         SA       136         SA       136         SA       122         SA       122         SA       122         SA       122         SA       1215			
SA       217         SA       217         Overall the intersection has LOS A and the degree of saturation is 0.38, which is within the acceptable limit of 0.85. The average delay across the intersection is seconds.         SA       136         SA       136         SA       137         SA       136         SA       137         SA       138         SA       132         SA       122         SA       122         SA       122         SA       123         SA       215	SA	21.7	
SA 217 CS 899 (m) SA 217 Overall the intersection has LOS A and the degree of saturation is 0.38, which is within the acceptable limit of 0.85. The average delay across the intersection is seconds. SA 122 SA 122 SA 122 SA 122 SA 215 SA 215	SA	21.7	
estimation     estimation       00     00       01     00       02     00       03     13.6       04     00       05     13.6       05     13.6       05     13.6       05     13.6       05     13.6       06     13.6       07     13.6       08     122       08     122       08     122       08     122       08     122       08     122       08     122       08     122       09     125       09     21.5       09     21.5	SA	21.7	
the degree of saturation is 0.38, which is within the acceptable limit of 0.85. The average delay across the intersection is seconds. average delay across the intersection is seconds. SA 122 SA 122 SA 122 SA 122 SA 215 SA 215	SA	21.7	
<ul> <li>SA 135 within the acceptable limit of 0.85. The average delay across the intersection is seconds.</li> <li>SA 135 seconds.</li> <li>SA 122 sA 123 s</li></ul>	.0\$	BaQ (m)	Overall the intersection has LOS A and
SA     136       SA     136       average delay across the intersection is       SA     122       SA     122       SA     122       SA     122       SA     122       SA     123       SA     215			the degree of saturation is 0.38, which is
sA     136       sA     137       seconds.       sA     122       sA     122       sA     122       sA     122       sA     123       sA     215       sA     215	SA	13.6	within the acceptable limit of 0.85. The
SECUTIOS. SA 122 SA 122 SA 122 SA 215 SA 215	SA	13.6	average delay across the intersection is
SA 122 SA 122 SA 123 SA 215 SA 215	SA	13.6	seconds.
SA 122 SA 122 SA 123 SA 215 SA 215			
SA 122 SA 215 SA 215 SA 215	SA	12.2	
SA 215 SA 215 SA 215	SA	12.2	
SA 21.5 SA 21.5	SA	12.2	
SA 21.5 SA 21.5			
SA 21.5	SA		
	SA	21.5	
SA 21.5	SA		
	SA	21.5	

## 24. Ocean Drive / Sirius Drive 2040

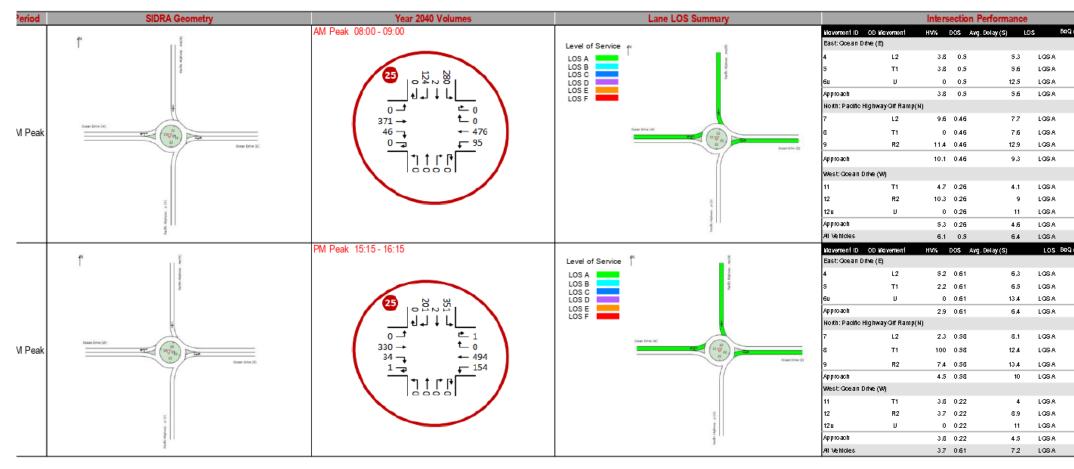


#### ORDINARY COUNCIL 19/05/2022



		Intersection Performance Summary
s	BoQ (m)	Overall the intersection has LOS B and
		the degree of saturation is 0.86, which is
В		within the acceptable limit of 0.90. The
в	16.5	average delay across the intersection is
в	68.9	19 seconds.
A	13	
В	27.8	
в	27.8	
A	8	
в	72.2	
в	72.2	
в	72.2	
s	BoQ (m)	Overall the intersection has LOS B and
		the degree of saturation is 0.74, which is
A	44.9	within the acceptable limit of 0.90.The
С		
	40.1	
в	40.1 44.9	average delay across the intersection is
В	40.1	average delay across the intersection is
B	40.1 44.9 23	average delay across the intersection is
-	44.9	average delay across the intersection is
в	44.9 23	average delay across the intersection is
B	44.9 23 34.3	average delay across the intersection is
B	44.9 23 34.3	average delay across the intersection is
B B	44.9 23 34.3 34.3	average delay across the intersection is
B B A	44.9 23 34.3 34.3 21.5	average delay across the intersection is

## 25. Ocean Drive / Pacific Highway Ramp 2040



#### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
(m)	Overall the intersection has LOS A and the
	degree of saturation is 0.5, which is within the
31.2	acceptable limit of 0.85. The average delay acros
31.2	the intersection is 6 seconds.
31.2	
31.2	
24.8	
24.8	
24.8	
24.8	
14.5	
14.5	
14.5	
14.5	
31.2	
(m)	Overall the intersection has LOS A and the
42.6	degree of saturation is 0.61, which is within the
42.5	acceptable limit of 0.85.The average delay acros
42.5	the intersection is 7 seconds.
42.5	
42.0	
37.6	
37.6	
37.6	
37.6	
37.6	
37.5 12.5	
37.6 12.6 12.6	

## 26. Ocean Drive / Nancy Bird Walton Drive / Kendall Road 2040

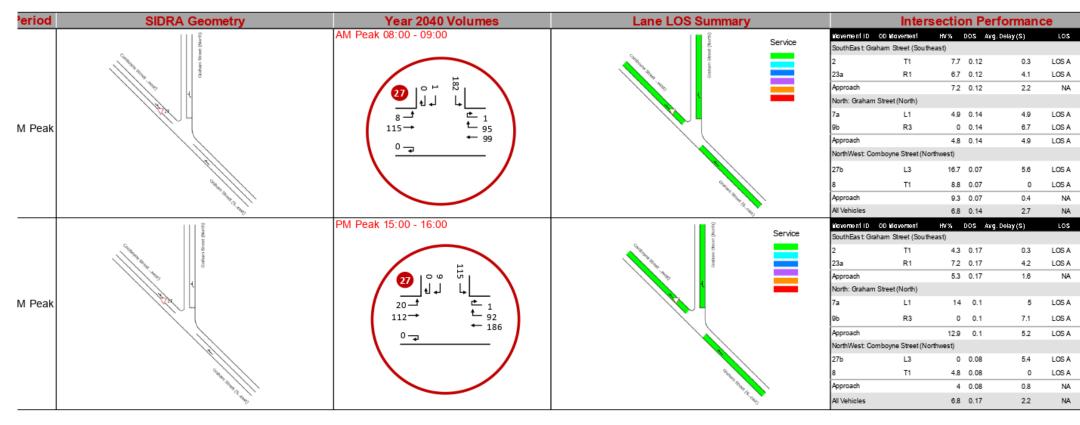


#### ORDINARY COUNCIL 19/05/2022



	Intersection Performance Summary
(m)	Overall the intersection has LOS A and the degree of
	saturation is 0.44, which is within the acceptable limit
23.4	0.85.The average delay across the intersection is 8
23.4	seconds.
234	
23.4	
23.4	
2.3	
2.3	
2.3	
2.3	
2.3	
23.2	
23.2	
23.2	
23.2	
23.2	
3.7	
3.7	
3.7	
3.7	
3.7	
234	
(m)	Overall the intersection has LOS A and the degree of
	saturation is 0.5, which is within the acceptable limit o
1.3	0.85.The average delay across the intersection is 8
)1.3 )1.3	seconds.
)1.3	
)1.3 )1.3	
1.5	
24 24	
24 24	
2.4 2.4	
24	
20.9	
20.9 20.9	
20.9	
20.9	
20.9	
5.3	
15.3 15.3	
15.3 15.3	
IS.3 IS.3	
) 1.3	
1.0	

# 27. Comboyne Street / Graham Street 2040



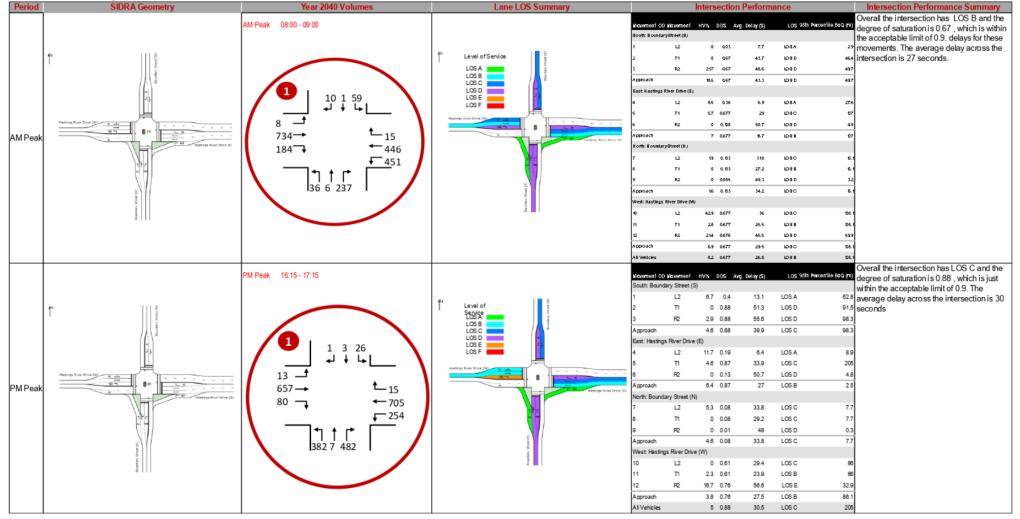
#### ORDINARY COUNCIL 19/05/2022



	ntersection Performance Summa
BaQ (m)	Overall the intersection has LOS A and
	the degree of saturation is 0.14, which is
4.1	within the acceptable limit of 0.80. The
4.1	average delay across the intersection is
4.1	seconds.
4.2	
4.2	
4.2	
7.2	
0	
0	
0	
4.2	
	Overall the intersection has LOS A and
	the degree of saturation is 0.17, which is
4.8	within the acceptable limit of 0.80. The
4.8	
4.8	average delay across the intersection is
4.8	average delay across the intersection is seconds.
4.8	average delay across the intersection is seconds.
4.8 3.2 3.2	average delay across the intersection is seconds.
4.8	average delay across the intersection is seconds.
4.8 3.2 3.2 3.2	average delay across the intersection is seconds.
4.8 3.2 3.2 3.2 0	average delay across the intersection is seconds.
4.8 3.2 3.2 3.2 0 0	average delay across the intersection is seconds.
4.8 3.2 3.2 3.2 0	average delay across the intersection is seconds.

### 1. Hastings River Drive / Boundary Street 2040 - Upgrade

### Without Airport Link Road





### 1. Hastings River Drive / Boundary Street 2040 - Upgrade

### With Airport Link Road



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#### ATTACHMENT

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### 3. Hastings River Drive / Newport Island Road 2040 - Upgrade



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# **BITZIOS**

## 4. Hastings River Drive / Clifton Drive 2040 - Upgrade

Period	SIDRA Geometry	Year 2040 Volumes	Lane LOS Summary	Inters	section Performan	се	Intersection Performance Summary
		AM Peak 08:00 - 09:00		Mavement ID OD Mavement	HV% DOS Avg. Delay	S) LOS	oo(m) Overall the intersection has LOS B and the
				South:Cliffton Drive(S)			degree of saturation is 0.76, which is below the
	N Hadings liver b. e. (N)	$\sim$		1 1.2	3.1 0.46	76 LOS 8	313 acceptable limit of 0.85. The average delay
			N Hastings River D., e (W)	3 R2	0.9 0.76	9.3 LOS 8	833 across the intersection is 16 seconds.
				Approach	16 0.76	8.8 LOS 8	833
	Hastings River De (E)		Hostings River D., c (E)	East: Hastings River Drive (E)			
		r 16	<b>—</b>	4 L2	0.7 0.27	5.3 LOS 8	19.2
AM Peak	n c	$745 \rightarrow$ 297 $ -$ 710	Level of Service	5 T1	6.9 0.54	11 LOS A	453
		297 → ← 710 7 → 184	LOS A	Approach	5.6 0.54	119 LOS A	453
	-		LOS B	West Hastings River Drive (W)			
	pe (2)		LOSD	11 T1	5.5 0.75	7.5 LOS 8	597
				12 R2		9.2 LOS A	206
	õ I 📕		8 1	Approach		5.1 LOS 8	59.7
				All Vehicles		5.1 LOS 8	833
		PM Peak 15:00 - 16:00		Movement ID OD Movement			og (m) Overall the intersection has LOS B and the
				South:Cliffton Drive(S)	The sea of the sea	9 200	degree of saturation is 0.69, which is below the
		$\sim$		1 L2	2.9 0.66	9.3 LOS 8	sos acceptable limit of 0.85. The average delay
	N Hestings River De (W)		N Hastings River De (W)	3 R2		7.7 LOS 8	across the intersection is 15 seconds.
				Approach	15 0.65	8.5 LOS 8	668
			B	East: Hastings River Drive (E)			
	Hastings River Ce (E)	r 32	Haatinga River De (E)	4 L2	15 0.34	5.6 LOS 8	24.8
		809→		5 T1		29 LOSA	653
	7 r	$333 \rightarrow \qquad \leftarrow 919$	Level of 11	Approach		34 LOSA	653
DM D		9	Service LOS A	West Hastings River Drive (W)	21 0.07	an baan	
PM Peak	σ)		LOS B				
	Delee	368 113	LOS C Javes	11 T1		44 LOS A	58.3
	gitter		LOS E	12 R2		0.4 LOS A	282
			LOS F	Approach		3.2 LOS A	\$8.3
				All Vehicles	3 0.69	4.6 LOS 8	653

#### ATTACHMENT

#### ORDINARY COUNCIL 19/05/2022



## 8. Hastings River Drive / Park Street 2040 - Upgrade

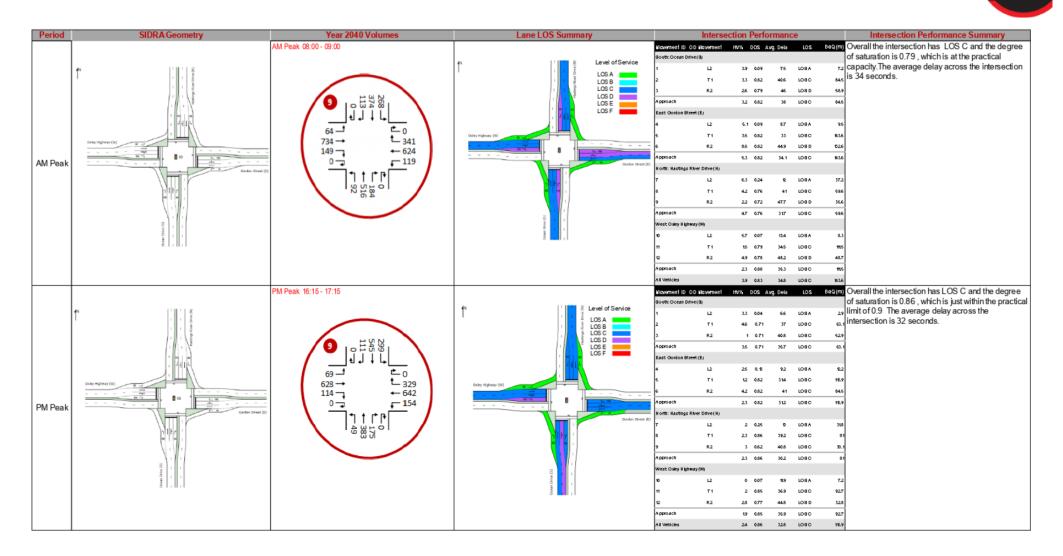
Period	SIDRA Geometry	Year 2040 Volumes	Lane LOS Summary	Inte	ersection	Performanc	е		Intersection Performance Summary
		AM Peak 08:00 - 09:00		Koverneni ID OD Koverneni East: Hastings RiverDrive(E)	HV% DOS	Avg. Delay (S)	LOS		Overall the intersection has LOS A and the degree of saturation is 0.70, which is within the acceptable limit of
	4N  '  ' @		N Level of Service	6 T1	6.4 0.5	51 7	LOB A		0.85.The average delay across the intersection is 14
			LOSA	6 R2	4.1 05	51 18.7	LOB A	22.4	seconds.
		<sup>6</sup> 15 26	LOS B	Approach	5.5 0.5	51 9.7	LOB A	48.7	
			LOS C LOS D	Horth: Park Street (H)					
	. L	398 - 28		7 12	4.3 0.6			55.5	
AM Peak		574→ <sup>1</sup> 358		9 R2	3 0.6		LOB B	66.6	
	Hestings River De (W)	← 568 8	Hantings River De (W)	Approach West Hastings River Drive (W)	3.8 0.6	6 96	LOB B	66.6	
		· · · · · · · · · · · · · · · · · · ·		D L2	15 0.4	12 113	LOB A	34.6	
				н т1	29 07	71 <b>F</b> S	LOG B	44.8	
	Heating Rowr Dr. # (E)		Hasting River Dr. e (E	Approach	24 03	71 6.2	LOS B	44.8	
				All Vehicles	3.9 0.7	71 16.2	LOB A	55.5	
		PM Peak 15:00 - 16:00		Inerrevolui CO Cli herrevolui	HV% DOS	Avg. Delay (S)	LOS	BoQ (m)	Overall the intersection has LOS B and the degree of
			N Level of	East: Hastings River Drive(E)					saturation is 0.88, which is <b>above</b> the acceptable limit of
			Service	5 T1	3.4 0.6		LOB A		0.85.The average delay across the intersection is 18 seconds.
			LOS A LOS B	6 R2	12 0.6		LOS B		Seconds.
			LOS C LOS D	Approach Horth: Park Btreet (H)	26 0.6	i1 128	LOB A	74.3	
			LOS E	7 L2	26 0.8	0 226	LOB B		
	· 1*	290-1 - 15		r L2 9 R2	13 0.8		LOG B	195.8 195.8	
PM Peak		715→ <sup>1</sup> 374	Hastings River De (W)	Approach	2 0.8		LOB B	15.8	
1 WIT Cak	Hestings River D., e (W)	← 608		West Hastings River Drive (W)					
		<u> </u>		0 L2	0 0.2	6 9.7	LOB A	22.6	
	Hating Roor Dr. 4 (k)		Hasting River Drue (E	# т1	28 0.7	7 22	LOS B	70.7	
	Plasting River Dr. # (P)			Approach	2 0.7	7 85	LOB B	70.7	
				All Vehicles	22 0.8	0 8.6	LOB B	25.8	

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BITZIOS

### 9. Hastings River Drive / Oxley Highway/ Ocean Drive / Gordon Street 2040 - Upgrade





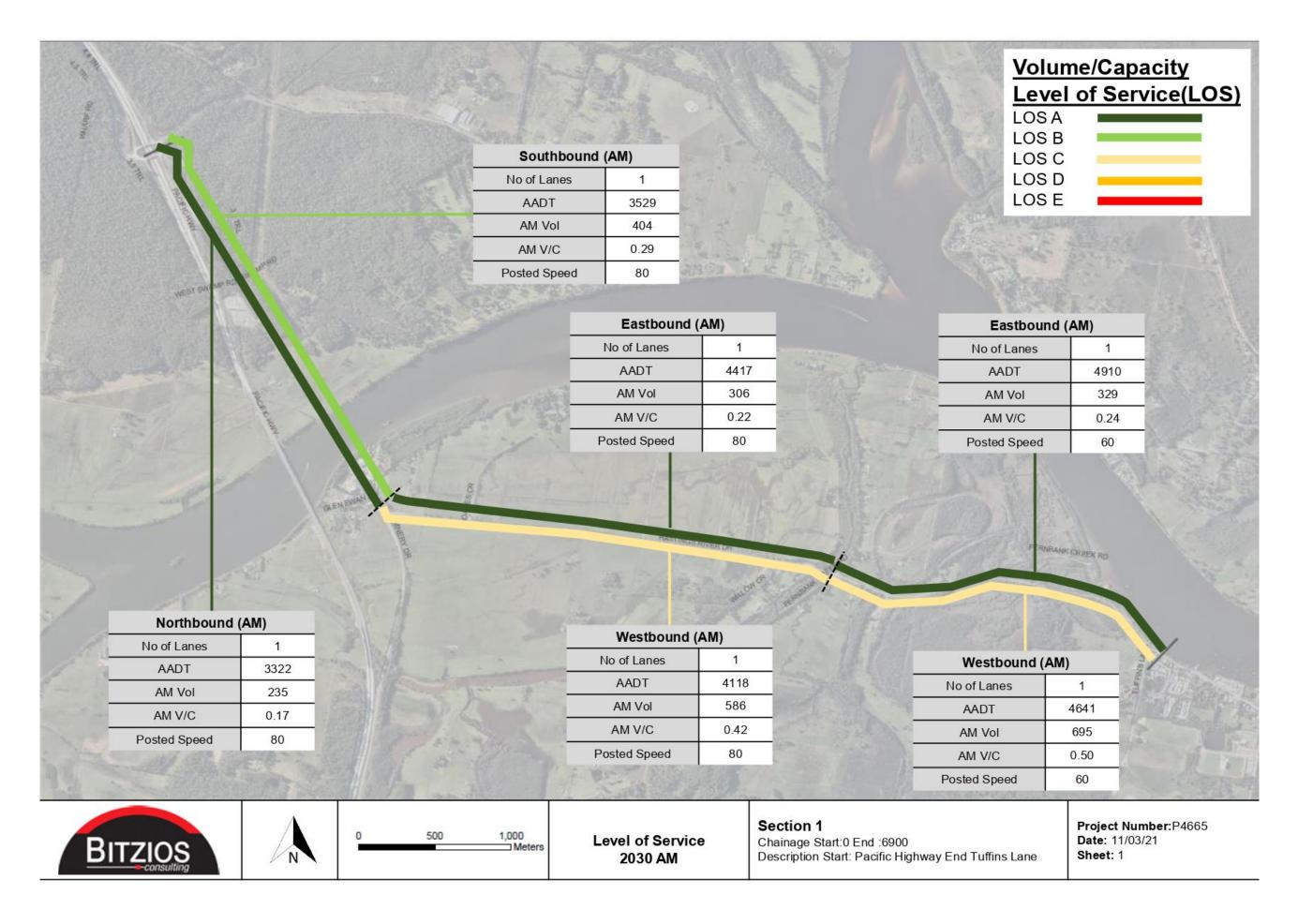
Appendix G: Link LOS Summaries

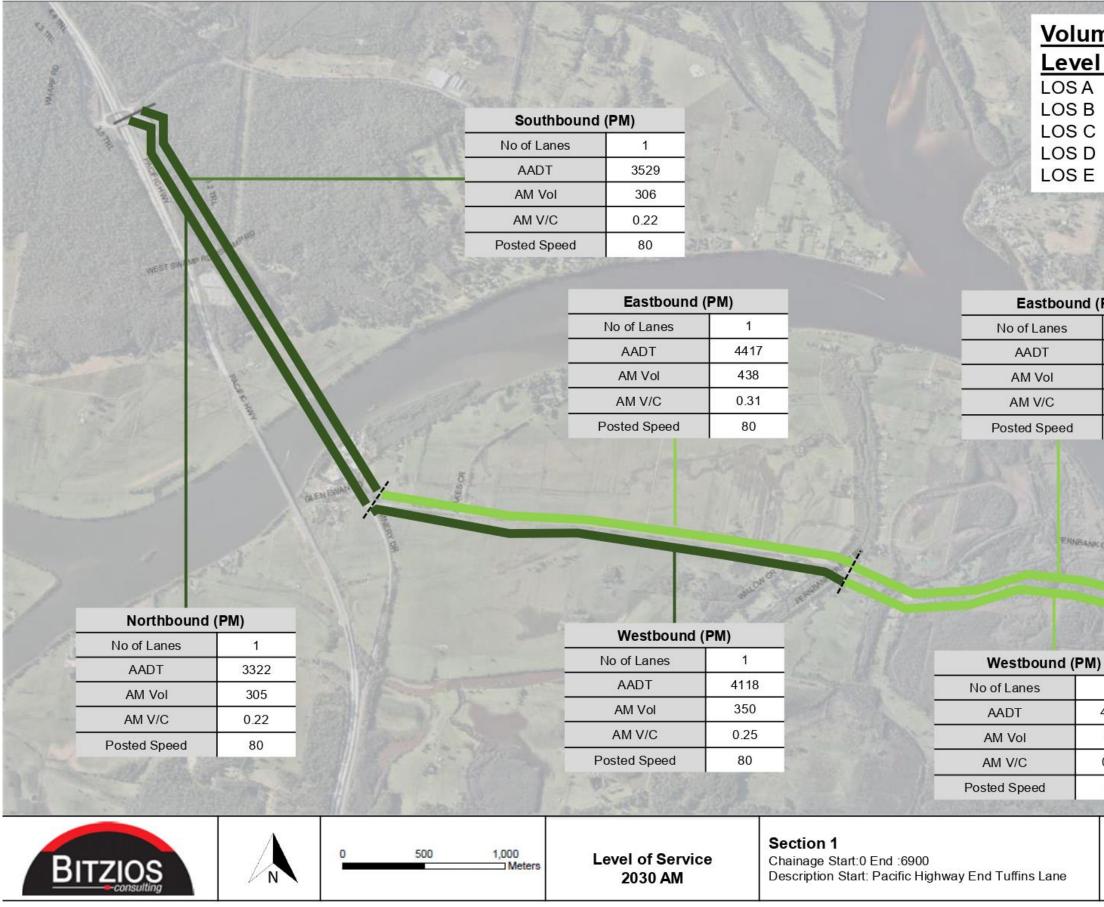


MR538 and MR600 Corridor Strategy: Draft Corridor Strategy Report Project: P4665 Version: 001



| Add, Lastings, Hay Dis, Sing Dis,<br>Addi, Lastings, Hay Dis,<br>Addi, Dis,<br>Add   
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  | Vioteday P'il Feek IIF<br>Vioteday P'il Feek IIF<br>Volume Cen'tr'<br>355<br>453<br>454<br>454<br>454<br>454<br>454<br>455<br>455  | Brown           To1           Standard           Standard | Pri Pask Average Speed<br>0m1*1<br>7439<br>7439<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7437<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>747<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447<br>7447 | A Yi U He<br>Notamo Equatiy (VIC)<br>Rafa<br>0 25<br>0 25<br>0 25<br>0 25<br>0 25<br>0 25<br>0 25<br>0 25   | P M U
%<br>VolumeGapacity<br>(VC & Rate<br>22<br>22<br>22<br>22<br>22<br>22<br>22<br>22<br>22<br>22<br>22<br>22<br>22   | Atl Pask Ave Speed 7<br>Roded Speed<br>0.54<br>0.55<br>0.56<br>0.56<br>0.56<br>0.56<br>0.56<br>0.56<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0 | P V Feak Aut Speed /<br>Potent speed<br>0 5%<br>0 6%<br>0 6% 0 6%<br>0 6% | A Vi Link-Opend Level of<br>derrine (LoG)<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A  | P II Link Bjered Level of<br>Service (Le3)<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A   | A M Link WC Level of<br>Service (LoS)<br>A<br>C<br>A<br>C<br>A<br>C<br>A<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C   | P W Link W<br>Berdior (Lo<br>Berdior |
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ABC         Hattings (Hey Disp.           ABC			
   | T C 8-300 F Blackmars Printing change<br>T C 8-00 F Blackmars Printing change<br>T C 8 of When y Cr<br>D 6 of When y Cr<br>D 6 of When y Cr<br>D 7 0 of Whe  | Direction         Dir           08         08           08         08           08         08           08         08           08         08           08         08           08         08           08         08           09         08           09         08           09         08   |  | Bayed   
   | Hg (1)         IV           Low         Low           Methum         Hechum           Low         Low   
  | Previous         Previous           1400         -           1400         -           1400         -           1400         -           1400         -           1400         -           1400         -           1400         -           1400         -           1400         -           1400         -           1400         -           1500         -           1500         -           1500         -           1500         -           1500         -           1500         -           1500         -           1500         -           1500         -           1500         -           1500         -           1500         -           1600         -           1600         -           1600         -           1600         -           1600         -           1600         -   | Alogy of Y         (22) 47           1400         312           1400         312           1400         312           1400         312           1400         411           1400         411           1400         411           1400         411           1400         411           1400         411           1200         510           2000         711           2000         700 <th>1         Traftso           2         383           2         383           2         383           2         383           2         382           3         461           3         372           2         372           2         372           3         600           5         450           5         450           5         450           5         450           5         555           5         555           5         555           5         555           5         555           5         555           5         555           5         555           5         7951           5         7125           5         71373           5         11042           7         11042           7         11042           7         10432</th> <th>Volume (ve1/*)<br/>= 235<br/>= 404<br/>= 404<br/>= 326<br/>= 526<br/>= 724<br/>= 556<br/>= 724<br/>= 724<br/>= 556<br/>= 724<br/>= 724</th> <th>Wollmark(ref*7)           305           305           305           403           544           549           544           543           649           742           742           742           742           742           742           742           742           742           742           742        
  740           740           740           740           740           740</th> <th>Brown           To1           Standard           Standard</th> <th>(km)*n           T43           T48           T68           T72           S75           S75           S24           4777           493           514           493           493           51           52           493           493           51           329           423           647           643           647           638           638           638           638           638           638           638           638</th> <th>Bafo           617           623           642           642           631           642           643           644           643           644           643           644           643           644           645           646           647           648           649           641           621           623           624           635           636           637           648           649           631           644           621           623           634           634           634           634           634           634           634           634           634</th> <th>(WC0) 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<th>0-64d Spred           0.54           0.52           0.52           0.54           0.55           0.55           0.56           0.63           0.63           0.63           0.63           0.64           0.63           0.63           0.63           0.63           0.64           0.65           0.67           0.67           0.67           0.67           0.63           0.63           0.63           0.63           0.63           0.63           0.64           0.65           0.59</th> <th>Politika Speed<br/>0.94<br/>0.94<br/>0.95<br/>0.97<br/>0.97<br/>0.97<br/>0.98<br/>0.97<br/>0.94<br/>0.92<br/>0.92<br/>0.92<br/>0.97<br/>0.00<br/>0.97<br/>0.00<br/>0.97<br/>0.00<br/>0.97<br/>0.97</th> <th>A the speed of the off<br/>derived (Loss of<br/>a<br/>a<br/>a<br/>a<br/>a<br/>a<br/>a<br/>a<br/>a<br/>a<br/>a<br/>a<br/>a</th> <th></th> <th></th> <th></th> | 1         Traftso           2         383           2         383           2         383           2         383           2         382           3         461           3         372           2         372           2         372           3         600           5         450           5         450           5         450           5         450           5         555           5         555           5         555           5         555           5         555           5         555           5         555           5         555           5         7951           5         7125           5         71373           5         11042           7         11042           7         11042           7         10432  | Volume (ve1/*)<br>= 235<br>= 404<br>= 404<br>= 326<br>= 526<br>= 724<br>= 556<br>= 724<br>= 724<br>= 556<br>= 724<br>= 724  | Wollmark(ref*7)           305           305           305           403           544           549           544           543           649           742           742           742           742           742           742           742           742           742           742           742           740           740           740           740           740           740  
   | Brown           To1           Standard           Standard | (km)*n           T43           T48           T68           T72           S75           S75           S24           4777           493           514           493           493           51           52           493           493           51           329           423           647           643           647           638           638           638           638           638           638           638           638   | Bafo           617           623           642           642           631           642           643           644           643           644           643           644           643           644           645           646           647           648           649           641           621           623           624           635           636           637           648           649           631           644           621           623           634           634           634           634           634           634           634           634           634  | (WC0)
Ratio<br>0,22<br>0,22<br>0,23<br>0,24<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25<br>0,25 | 0-64d Spred           0.54           0.52           0.52           0.54           0.55           0.55           0.56           0.63           0.63           0.63           0.63           0.64           0.63           0.63           0.63           0.63           0.64           0.65           0.67           0.67           0.67           0.67           0.63           0.63           0.63           0.63           0.63           0.63           0.64           0.65           0.59   | Politika Speed<br>0.94<br>0.94<br>0.95<br>0.97<br>0.97<br>0.97<br>0.98<br>0.97<br>0.94<br>0.92<br>0.92<br>0.92<br>0.97<br>0.00<br>0.97<br>0.00<br>0.97<br>0.00<br>0.97<br>0.97  | A the speed of the off<br>derived (Loss of<br>a<br>a<br>a<br>a<br>a<br>a<br>a<br>a<br>a<br>a<br>a<br>a<br>a |   |   |   
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  | 2         3351           3371         3391           3381         3772           4482         4482           4482         4495           4482         4495           499         6666           1084         4999           60         6793           9         6666           1084         4999           60         6793           9         6895           9         6895           9         6895           9         8895           9         8895           9         8895           9         8895           9         8895           9         8995           9         8995           9         7511           8         7641           9         11377           9         10127           9         10127           9         10127           9         10122           9         10122   
   | - 235<br>- 404<br>- 396<br>- 582<br>- 582<br>- 582<br>- 584<br>- 584 | 305<br>305<br>433<br>554<br>584<br>584<br>584<br>584<br>584<br>584<br>799<br>699<br>799<br>709<br>709<br>709<br>709<br>709<br>709<br>709<br>709<br>7   | 751           755           755           755           757   | T49           T68           767           927           927           927           928           929           921           921           921           921           921           921           921           921           921           921           921           923           924           925           924           925           924           925           924           925           924           925           927           928           929           929           929           929           929           929           929           929           929           929           929           929           929           929           929           929           929           929      >929  | 017<br>023<br>024<br>034<br>034<br>035<br>035<br>035<br>044<br>042<br>044<br>044<br>043<br>044<br>044<br>044<br>044<br>044<br>044<br>044   
  | 0.22<br>0.21<br>0.31<br>0.28<br>0.28<br>0.28<br>0.28<br>0.28<br>0.28<br>0.28<br>0.28  | 0.544<br>0.522<br>0.546<br>0.546<br>0.546<br>0.545<br>0.545<br>0.545<br>0.545<br>0.545<br>0.545<br>0.545<br>0.545<br>0.545<br>0.545<br>0.545<br>0.545<br>0.545<br>0.545<br>0.546   | 0.14<br>0.15<br>0.15<br>0.15<br>0.15<br>0.15<br>0.15<br>0.15<br>0.15  | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A                 | A           A           A           A           A           A           A           A           A           A           A           A           A           A           A           B           A           B           A           B           A           B           A           B           A | A<br>B<br>A<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C  |                                     
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948</td><td>042<br/>054<br/>055<br/>055<br/>066<br/>046<br/>046<br/>046<br/>046<br/>044<br/>043<br/>043<br/>043<br/>043<br/>043<br/>043<br/>043<br/>043<br/>043</td><td>0.46<br/>0.35<br/>0.36<br/>0.50<br/>0.55<br/>0.55<br/>0.55<br/>0.55<br/>0.55<br/>0.55<br/>0.5</td><td>1.00<br/>1.00<br/>0.77<br/>0.63<br/>0.80<br/>0.94<br/>0.89<br/>0.99</td><td>0.87<br/>0.84<br/>0.80<br/>0.82<br/>0.82<br/>0.82<br/>0.85<br/>0.82<br/>0.82<br/>0.82<br/>0.82<br/>0.85<br/>0.66<br/>0.81<br/>0.66<br/>0.81<br/>0.97<br/>0.92<br/>0.99<br/>0.99</td><td>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A</td><td>A A A A A A A A A A A A A A A A A A A</td><td>8<br/>8<br/>0<br/>8<br/>0<br/>8<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0</td><td></td></td>  | Lose<br>Lose<br>Lose<br>Jose<br>Jose<br>Jose<br>Jose<br>Jose<br>Jose<br>Lose<br>Lose<br>Lose<br>Lose<br>Lose<br>Lose<br>Lose<br>L  | 1400         1400           1400         1400           1400         1400           1200         1000           1000 <td>1400         -441           1400         411           1400         411           1400         411           1400         411           1400         411           1400         411           1200         510           2000         1101           2000         1101           2000         1021           2000         1022           2000</td> <td>7         4081           8         3772           8         3772           9         4982           9         5035           9         5035           9         5035           9         49702           9         49703           9         5035           9         5036           9         3939           9         3939           9         3939           9         3939           9         7934           8         7934           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252&lt;</td> <td>- 129<br/>- 696<br/>- 724<br/>- 724<br/>- 656<br/>- 724<br/>- 656<br/>- 724<br/>- 656<br/>- 724<br/>- 656<br/>- 746<br/>- 656<br/>- 746<br/>- 656<br/>- 746<br/>- 656<br/>- 724<br/>- 727<br/>- 729<br/>- 729<br/>-</td> <td>504<br/>534<br/>549<br/>425<br/>719<br/>557<br/>712<br/>712<br/>712<br/>712<br/>712<br/>712<br/>712<br/>712<br/>712<br/>71</td> <td>803<br/>874<br/>871<br/>861<br/>967<br/>867<br/>867<br/>867<br/>867<br/>867<br/>867<br/>867<br/>8</td> <td>77.2           60,7           57.5           524           924           91           933           931           931           931           931           933           934         
 935           936           937           938           939           946           946           943           946           946           947           948           949           946           947           948           949           940           941           941           942           943           944           945           945           946           947           948           948           948           948           948           948           948           948           948           948           948</td> <td>042<br/>054<br/>055<br/>055<br/>066<br/>046<br/>046<br/>046<br/>046<br/>044<br/>043<br/>043<br/>043<br/>043<br/>043<br/>043<br/>043<br/>043<br/>043</td> <td>0.46<br/>0.35<br/>0.36<br/>0.50<br/>0.55<br/>0.55<br/>0.55<br/>0.55<br/>0.55<br/>0.55<br/>0.5</td> <td>1.00<br/>1.00<br/>0.77<br/>0.63<br/>0.80<br/>0.94<br/>0.89<br/>0.99</td> <td>0.87<br/>0.84<br/>0.80<br/>0.82<br/>0.82<br/>0.82<br/>0.85<br/>0.82<br/>0.82<br/>0.82<br/>0.82<br/>0.85<br/>0.66<br/>0.81<br/>0.66<br/>0.81<br/>0.97<br/>0.92<br/>0.99<br/>0.99</td> <td>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A</td> <td>A A A A A A A A A A A A A A A A A A A</td> <td>8<br/>8<br/>0<br/>8<br/>0<br/>8<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0</td> <td></td> | 1400         -441           1400         411           1400         411           1400         411           1400         411           1400         411           1400         411           1200         510           2000         1101           2000         1101           2000         1021           2000         1022           2000   
  | 7         4081           8         3772           8         3772           9         4982           9         5035           9         5035           9         5035           9         49702           9         49703           9         5035           9         5036           9         3939           9         3939           9         3939           9         3939           9         7934           8         7934           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252           9         11252<  | - 129<br>- 696<br>- 724<br>- 724<br>- 656<br>- 724<br>- 656<br>- 724<br>- 656<br>- 724<br>- 656<br>- 746<br>- 656<br>- 746<br>- 656<br>- 746<br>- 656<br>- 724<br>- 727<br>- 729<br>-   | 504<br>534<br>549<br>425<br>719<br>557<br>712<br>712<br>712<br>712<br>712<br>712<br>712<br>712<br>712<br>71  | 803<br>874<br>871<br>861<br>967<br>867<br>867<br>867<br>867<br>867<br>867<br>867<br>8   | 77.2           60,7           57.5           524           924           91           933           931           931           931           931           933           934           935           936           937           938           939           946           946           943           946           946           947           948           949           946           947           948           949           940      
    941           941           942           943           944           945           945           946           947           948           948           948           948           948           948           948           948           948           948           948  | 042<br>054<br>055<br>055<br>066<br>046<br>046<br>046<br>046<br>044<br>043<br>043<br>043<br>043<br>043<br>043<br>043<br>043<br>043   | 0.46<br>0.35<br>0.36<br>0.50<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.5   | 1.00<br>1.00<br>0.77<br>0.63<br>0.80<br>0.94<br>0.89<br>0.99  
  | 0.87<br>0.84<br>0.80<br>0.82<br>0.82<br>0.82<br>0.85<br>0.82<br>0.82<br>0.82<br>0.82<br>0.85<br>0.66<br>0.81<br>0.66<br>0.81<br>0.97<br>0.92<br>0.99<br>0.99  | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A                 | A A A A A A A A A A A A A A A A A A A   | 8<br>8<br>0<br>8<br>0<br>8<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0   |  |
| ABD         Hattings Rive D M           ABD         Coam D Mm Matheting  
   | er to E of Winey Dr<br>er to W of Tuffins Lin<br>C W of Tuffins Lin<br>C W of Tuffins Lin<br>C W of Tuffins Lin<br>D Net, Dann Tuffins Lin & Sounday 28.<br>Check, Dann Tuffins Lin & Sounday 28.<br>C House Discourses 24. Mitbody 20.<br>C House Discourses 24. Mitbody 20.<br>C House Discourse 24.<br>C House Discour   | E8  V9  V9  V9  V9  V9  V9  V9  V9  E8  V9  V9  V9  V9  V9  V9  V9  V9  V9  V   | 1  | 60         Level           62         Level           63         Level           64         Level           65         Level           66         Level           67         Level           68         Level           69         Level           60         Level           61         Level           62         Level           63         Level           64         Level           65         Level           66         Level           67         Level           68         Level           69         Level           60         Level           61         Level           62         Level           63         Level           64         Level           65         Level <td>Lose<br/>Lose<br/>Lose<br/>Lose<br/>Lose<br/>Hestum<br/>Hestum<br/>Hestum<br/>Lose<br/>Lose<br/>Lose<br/>Lose<br/>Lose<br/>Lose<br/>Lose<br/>Lose</td> <td>1400         1400           1400         1400           1400         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1400           1400         1400           1400         1400           1400         1400           1400         1400           1400         1400           1400         1400           1400         1400           1400         1400</td> <td>1490         491           1490         491           1490         494           1200         540           1200         540           2000         719           2000         703           2000         1022           2000</td> <td>8         3772           9         4482           4382         4382           4383         5035           8         4562           9         6666           9         6666           9         7076           8         5035           9         6707           9         7081           9         7081           9         7081           9         11372           9         11377           9         11377           9         10422</td> <td>- 129<br/>- 696<br/>- 724<br/>- 724<br/>- 656<br/>- 724<br/>- 656<br/>- 724<br/>- 656<br/>- 724<br/>- 656<br/>- 746<br/>- 656<br/>- 746<br/>- 656<br/>- 746<br/>- 656<br/>- 724<br/>- 727<br/>- 729<br/>- 729<br/>-</td>
<td>504<br/>534<br/>549<br/>425<br/>719<br/>557<br/>712<br/>712<br/>712<br/>712<br/>712<br/>712<br/>712<br/>712<br/>712<br/>71</td> <td>803<br/>874<br/>871<br/>861<br/>967<br/>867<br/>867<br/>867<br/>867<br/>867<br/>867<br/>867<br/>8</td> <td>997           575           52           994           471           471           473           474           473           50           511           339           229           445           451           57           58           511           339           229           446           539           543           643           543           543           543           543           543           544           545           547           548           549           541           542           543           543           544           545           545           545           545           545           545           545           545</td> <td>0 590<br/>0 511<br/>0 560<br/>0 628<br/>0 642<br/>0 643<br/>0 644<br/>0 640<br/>0 643<br/>0 646<br/>0 643<br/>0 644<br/>0 646<br/>0 646<br/>0 645<br/>0 56<br/>0 51<br/>0 56<br/>0 51<br/>0 54<br/>0 54<br/>0 644<br/>0 645<br/>0 645<br/>0<br/>0<br/>645<br/>0<br/>645<br/>0<br/>645<br/>0<br/>645<br/>0<br/>64</td> <td>0.46<br/>0.35<br/>0.36<br/>0.50<br/>0.55<br/>0.55<br/>0.55<br/>0.55<br/>0.55<br/>0.55<br/>0.5</td> <td>1.00<br/>1.00<br/>0.77<br/>0.63<br/>0.80<br/>0.94<br/>0.89<br/>0.99</td> <td>0.87<br/>0.84<br/>0.80<br/>0.82<br/>0.82<br/>0.85<br/>0.85<br/>0.85<br/>0.79<br/>100<br/>100<br/>0.79<br/>100<br/>0.79<br/>100<br/>0.66<br/>0.81<br/>0.87<br/>0.97<br/>0.92<br/>0.99</td> <td>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8</td> <td>A           A           A           A           B           A           B           A           B           A           B           A           B           A           B           B           A           B           C           B           C           A           A           B           A           A           A           A           A           A           A           A           A           A           A           A           A           A           A           A           A           A           A</td> <td>C<br/>A<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C</td> <td></td> | Lose<br>Lose<br>Lose<br>Lose<br>Lose<br>Hestum<br>Hestum<br>Hestum<br>Lose<br>Lose<br>Lose<br>Lose<br>Lose<br>Lose<br>Lose<br>Lose   | 1400         1400           1400         1400           1400         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1200           1200         1400           1400         1400           1400         1400           1400         1400           1400         1400           1400         1400           1400         1400           1400         1400           1400         1400  
  | 1490         491           1490         491           1490         494           1200         540           1200         540           2000         719           2000         703           2000         1022           2000  
   | 8         3772           9         4482           4382         4382           4383         5035           8         4562           9         6666           9         6666           9         7076           8         5035           9         6707           9         7081           9         7081           9         7081           9         11372           9         11377           9         11377           9         10422   | - 129<br>- 696<br>- 724<br>- 724<br>- 656<br>- 724<br>- 656<br>- 724<br>- 656<br>- 724<br>- 656<br>- 746<br>- 656<br>- 746<br>- 656<br>- 746<br>- 656<br>- 724<br>- 727<br>- 729<br>-   | 504<br>534<br>549<br>425<br>719<br>557<br>712<br>712<br>712<br>712<br>712<br>712<br>712<br>712<br>712<br>71  
                                       | 803<br>874<br>871<br>861<br>967<br>867<br>867<br>867<br>867<br>867<br>867<br>867<br>8   | 997           575           52           994           471           471           473           474           473           50           511           339           229           445           451           57           58           511           339           229           446           539           543           643           543           543           543           543           543           544           545           547           548           549           541           542           543           543           544           545           545           545           545           545           545           545           545  | 0 590<br>0 511<br>0 560<br>0 628<br>0 642<br>0 643<br>0 644<br>0 640<br>0 643<br>0 646<br>0 643<br>0 644<br>0 646<br>0 646<br>0 645<br>0 56<br>0 51<br>0 56<br>0 51<br>0 54<br>0 54<br>0 644<br>0 645<br>0 645<br>0<br>0<br>645<br>0<br>645<br>0<br>645<br>0<br>645<br>0<br>64 | 0.46<br>0.35<br>0.36<br>0.50<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.5   | 1.00<br>1.00<br>0.77<br>0.63<br>0.80<br>0.94<br>0.89<br>0.99   | 0.87<br>0.84<br>0.80<br>0.82<br>0.82<br>0.85<br>0.85<br>0.85<br>0.79<br>100<br>100<br>0.79<br>100<br>0.79<br>100<br>0.66<br>0.81<br>0.87<br>0.97<br>0.92<br>0.99   
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| A 90 M (at https://www.shifting.com/<br>A 91 D (com 0 D thm (box<br>A 91 D (com 0 D thm (box<br>A 91 D (com 0 D thm (box<br>A 91 D com 0 D thm (box<br>A 92 D com 0 D thm (box<br>A 93 D com 0 D thm (box<br>A 93 D com 0 D thm (box<br>A 93 D com 0 D thm   
  | In the Control of the   | WB           NB           3B           NB           3B           NB           3B           WB           MB           MB | 1  | 50         Level           50         Level <td>Low Low Lies Low Lies Low Lies Low Low Low Low Low Low Low Low Low Low</td> <td>1600         1           1200         1         2           1200         1         2         2           1200         1         2         2         2           1000         1         2</td> <td>1400         444           1420         540           1200         540           1200         540           1200         540           1200         540           2000         753           2000         763           2000         762           2000         762           2000         763     <td></td><td>695           170           724           654           948           946           144           948           946           944           849           944           970           971           711           611           970           711           611           970           711           610           970           711           610           970           9144           905           905           1054           1054           1054           1054</td><td>194<br/>549<br/>639<br/>719<br/>639<br/>719<br/>639<br/>712<br/>701<br/>702<br/>702<br/>702<br/>702<br/>702<br/>702<br/>702<br/>702<br/>702<br/>702</td><td>147<br/>451<br/>597<br/>595<br/>512<br/>4174<br/>4174<br/>4174<br/>4174<br/>316<br/>4161<br/>4161<br/>4161<br/>4161<br/>417<br/>516<br/>549<br/>547<br/>516<br/>5176</td><td>493<br/>518<br/>991<br/>473<br/>50<br/>511<br/>339<br/>229<br/>446<br/>483<br/>887<br/>887<br/>687<br/>685<br/>535<br/>535<br/>529</td><td>0 590<br/>0 511<br/>0 560<br/>0 628<br/>0 642<br/>0 643<br/>0 644<br/>0 640<br/>0 643<br/>0 646<br/>0 643<br/>0 644<br/>0 646<br/>0 646<br/>0 645<br/>0 56<br/>0 51<br/>0 56<br/>0 51<br/>0 54<br/>0 54<br/>0 644<br/>0 645<br/>0 645<br/>0<br/>0<br/>645<br/>0<br/>645<br/>0<br/>645<br/>0<br/>645<br/>0<br/>64</td><td>0.46<br/>0.35<br/>0.36<br/>0.50<br/>0.55<br/>0.55<br/>0.55<br/>0.55<br/>0.55<br/>0.55<br/>0.5</td><td>1.00<br/>1.00<br/>0.77<br/>0.63<br/>0.80<br/>0.94<br/>0.89<br/>0.99</td><td>0.87<br/>0.84<br/>0.80<br/>0.82<br/>0.82<br/>0.85<br/>0.85<br/>0.85<br/>0.79<br/>100<br/>100<br/>0.79<br/>100<br/>0.79<br/>100<br/>0.66<br/>0.81<br/>0.87<br/>0.97<br/>0.92<br/>0.99</td><td>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A</td><td>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A</td><td>A<br/>C<br/>B<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C</td><td></td></td>   
  | Low Low Lies Low Lies Low Lies Low   | 1600         1           1200         1         2           1200         1         2         2           1200         1         2         2         2           1000         1         2  
   | 1400         444           1420         540           1200         540           1200         540           1200         540           1200         540           2000         753           2000         763           2000         762           2000         762           2000         763 <td></td> <td>695           170           724           654           948           946           144           948           946           944           849           944           970           971           711           611           970           711           611           970           711           610           970           711           610           970           9144           905           905           1054           1054           1054           1054</td> <td>194<br/>549<br/>639<br/>719<br/>639<br/>719<br/>639<br/>712<br/>701<br/>702<br/>702<br/>702<br/>702<br/>702<br/>702<br/>702<br/>702<br/>702<br/>702</td> <td>147<br/>451<br/>597<br/>595<br/>512<br/>4174<br/>4174<br/>4174<br/>4174<br/>316<br/>4161<br/>4161<br/>4161<br/>4161<br/>417<br/>516<br/>549<br/>547<br/>516<br/>5176</td> <td>493<br/>518<br/>991<br/>473<br/>50<br/>511<br/>339<br/>229<br/>446<br/>483<br/>887<br/>887<br/>687<br/>685<br/>535<br/>535<br/>529</td> <td>0 590<br/>0 511<br/>0 560<br/>0 628<br/>0 642<br/>0 643<br/>0 644<br/>0 640<br/>0 643<br/>0 646<br/>0 643<br/>0 644<br/>0 646<br/>0 646<br/>0 645<br/>0 56<br/>0 51<br/>0 56<br/>0 51<br/>0 54<br/>0 54<br/>0 644<br/>0 645<br/>0 645<br/>0<br/>0<br/>645<br/>0<br/>645<br/>0<br/>645<br/>0<br/>645<br/>0<br/>64</td> <td>0.46<br/>0.35<br/>0.36<br/>0.50<br/>0.55<br/>0.55<br/>0.55<br/>0.55<br/>0.55<br/>0.55<br/>0.5</td> <td>1.00<br/>1.00<br/>0.77<br/>0.63<br/>0.80<br/>0.94<br/>0.89<br/>0.99</td> <td>0.87<br/>0.84<br/>0.80<br/>0.82<br/>0.82<br/>0.85<br/>0.85<br/>0.85<br/>0.79<br/>100<br/>100<br/>0.79<br/>100<br/>0.79<br/>100<br/>0.66<br/>0.81<br/>0.87<br/>0.97<br/>0.92<br/>0.99</td> <td>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A</td> <td>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A<br/>A</td> <td>A<br/>C<br/>B<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C</td> <td></td>  
  |  | 695           170           724           654           948           946           144           948           946           944           849           944           970           971           711           611           970           711           611           970           711           610           970           711           610           970           9144           905           905           1054           1054           1054           1054  | 194<br>549<br>639<br>719<br>639<br>719<br>639<br>712<br>701<br>702<br>702<br>702<br>702<br>702<br>702<br>702<br>702<br>702<br>702  | 147<br>451<br>597<br>595<br>512<br>4174<br>4174<br>4174<br>4174<br>316<br>4161<br>4161<br>4161<br>4161<br>417<br>516<br>549<br>547<br>516<br>5176  
  | 493<br>518<br>991<br>473<br>50<br>511<br>339<br>229<br>446<br>483<br>887<br>887<br>687<br>685<br>535<br>535<br>529   | 0 590<br>0 511<br>0 560<br>0 628<br>0 642<br>0 643<br>0 644<br>0 640<br>0 643<br>0 646<br>0 643<br>0 644<br>0 646<br>0 646<br>0 645<br>0 56<br>0 51<br>0 56<br>0 51<br>0 54<br>0 54<br>0 644<br>0 645<br>0 645<br>0<br>0<br>645<br>0<br>645<br>0<br>645<br>0<br>645<br>0<br>64 | 0.46<br>0.35<br>0.36<br>0.50<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.5   | 1.00<br>1.00<br>0.77<br>0.63<br>0.80<br>0.94<br>0.89<br>0.99   | 0.87<br>0.84<br>0.80<br>0.82<br>0.82<br>0.85<br>0.85<br>0.85<br>0.79<br>100<br>100<br>0.79<br>100<br>0.79<br>100<br>0.66<br>0.81<br>0.87<br>0.97<br>0.92<br>0.99  
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| Adds (Lating) Sing Chen (Lating)   
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  | 4         -005           8         -4700           9         -8666           10016         -10016           9         -10016           9         -10016           9         -10016           9         -2001           9         -2005           9         -2005           9         -2005           9         -2005           9         -2005           9         -2005           9         -2005           9         -2005           9         -2005           9         -2005           9         -2005           9         -2005           9         -11287           9         -11287           9         -11287           9         -11287   
   | 554         554           955         956           946         1794           651         870           914         616           910         701           711         711           616         590           2005         1051           1342         1005           1068         1068  | 719<br>609<br>973<br>1122<br>1861<br>985<br>887<br>762<br>763<br>612<br>764<br>764<br>763<br>764<br>763<br>764<br>763<br>763<br>764<br>763<br>764<br>763<br>764<br>763<br>765<br>765<br>765<br>765<br>765<br>765<br>765<br>765<br>765<br>765   | 147<br>451<br>597<br>595<br>512<br>4174<br>4174<br>4174<br>4174<br>316<br>4161<br>4161<br>4161<br>4161<br>417<br>516<br>549<br>547<br>516<br>5176   | 493<br>518<br>991<br>473<br>50<br>511<br>339<br>229<br>446<br>483<br>887<br>887<br>687<br>685<br>535<br>535<br>529   | 0 443<br>0 447<br>0 666<br>0 443<br>0 443<br>0 446<br>0 446<br>0 456<br>0 356<br>0 356<br>0 356<br>0 356<br>0 434<br>0 441<br>0 621<br>0 72<br>0 38<br>0 448                        
   | 0.46<br>0.35<br>0.36<br>0.50<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.55<br>0.5   | 1.00<br>1.00<br>0.77<br>0.63<br>0.80<br>0.94<br>0.89<br>0.99   | 0.87<br>0.84<br>0.80<br>0.82<br>0.82<br>0.85<br>0.85<br>0.85<br>0.79<br>100<br>100<br>0.79<br>100<br>0.79<br>100<br>0.66<br>0.81<br>0.87<br>0.97<br>0.92<br>0.99   
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| ABS         Halting Street Diversities           ABS         Count Diversities           ABS   
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   | Hestum<br>Hestum<br>Hestum<br>Hestum<br>Hestum<br>Low<br>Low<br>Low<br>Hestum<br>Low<br>Low<br>Low<br>Low<br>Low<br>Low<br>Low<br>Low<br>Low<br>Low  | 1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>100  
  | 2000         718           2000         839           2000         839           2000         108           2000         108           2000         108           2000         109 <td>9         8866           5         5.73           9         10016           8         11312           9         2350           9         2350           9         2350           9         7531           9         7532           9         7530           9         7530           9         7531           9         7532           9         7533           9         7534           9         7535           9         7534           9         7535           9         7534           9         7534           9         7534           9         7534           9         7534           9         7534           9         7034           9         7034           9         7034           9         7042           9         7042           9         7042           9         7042           9         7042           9         7042      9         7042      9<td>554         554           955         956           946         1794           651         870           914         616           910         701           711         711           616         590           2005         1051           1342         1005           1068         1068</td><td>719<br/>609<br/>973<br/>1122<br/>1861<br/>985<br/>887<br/>762<br/>763<br/>612<br/>764<br/>764<br/>763<br/>764<br/>763<br/>764<br/>763<br/>763<br/>764<br/>763<br/>764<br/>763<br/>764<br/>763<br/>765<br/>765<br/>765<br/>765<br/>765<br/>765<br/>765<br/>765<br/>765<br/>765</td><td>487<br/>474<br/>499<br/>307<br/>347<br/>401<br/>401<br/>401<br/>401<br/>401<br/>401<br/>401<br/>401<br/>405<br/>50<br/>50<br/>50<br/>50<br/>50<br/>50<br/>50<br/>50<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51</td><td>493<br/>518<br/>991<br/>473<br/>50<br/>511<br/>339<br/>229<br/>446<br/>483<br/>887<br/>887<br/>687<br/>685<br/>535<br/>535<br/>529</td><td>0 443<br/>0 447<br/>0 666<br/>0 443<br/>0 443<br/>0 446<br/>0 446<br/>0 456<br/>0 356<br/>0 356<br/>0 356<br/>0 356<br/>0 434<br/>0 441<br/>0 621<br/>0 72<br/>0 38<br/>0 448</td><td>0.49<br/>0.56<br/>0.53<br/>0.47<br/>0.44<br/>0.38<br/>0.38<br/>0.38<br/>0.38<br/>0.33<br/>0.28<br/>0.37<br/>0.26<br/>0.34<br/>0.44<br/>0.48<br/>0.37<br/>0.26<br/>0.34<br/>0.48<br/>0.34<br/>0.48<br/>0.55</td><td>1.00<br/>1.00<br/>0.77<br/>0.63<br/>0.80<br/>0.94<br/>0.89<br/>0.99</td><td>0.82<br/>0.86<br/>0.82<br/>0.79<br/>100<br/>0.78<br/>0.60<br/>0.81<br/>0.97<br/>0.92<br/>0.92<br/>0.990</td><td>* * * * * * * * * * * * * * * * * * *</td><td>B           A           A           A           A           A           B           C           A           A           B           C           A           A           B           C           A           A           A           B           C           A           A           A</td><td>8<br/>8<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>0<br/>0<br/>0<br/>0<br/>0<br/>8<br/>8<br/>8<br/>8<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0</td><td></td></td>   
   | 9         8866           5         5.73           9         10016           8         11312           9         2350           9         2350           9         2350           9         7531           9         7532           9         7530           9         7530           9         7531           9         7532           9         7533           9         7534           9         7535           9         7534           9         7535           9         7534           9         7534           9         7534           9         7534           9         7534           9         7534           9         7034           9         7034           9         7034           9         7042           9         7042           9         7042           9         7042           9         7042           9         7042      9         7042      9 <td>554         554           955         956           946         1794           651         870           914         616           910         701           711         711           616         590           2005         1051           1342         1005           1068         1068</td> <td>719<br/>609<br/>973<br/>1122<br/>1861<br/>985<br/>887<br/>762<br/>763<br/>612<br/>764<br/>764<br/>763<br/>764<br/>763<br/>764<br/>763<br/>763<br/>764<br/>763<br/>764<br/>763<br/>764<br/>763<br/>765<br/>765<br/>765<br/>765<br/>765<br/>765<br/>765<br/>765<br/>765<br/>765</td> <td>487<br/>474<br/>499<br/>307<br/>347<br/>401<br/>401<br/>401<br/>401<br/>401<br/>401<br/>401<br/>401<br/>405<br/>50<br/>50<br/>50<br/>50<br/>50<br/>50<br/>50<br/>50<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51</td> <td>493<br/>518<br/>991<br/>473<br/>50<br/>511<br/>339<br/>229<br/>446<br/>483<br/>887<br/>887<br/>687<br/>685<br/>535<br/>535<br/>529</td> <td>0 443<br/>0 447<br/>0 666<br/>0 443<br/>0 443<br/>0 446<br/>0 446<br/>0 456<br/>0 356<br/>0 356<br/>0 356<br/>0 356<br/>0 434<br/>0 441<br/>0 621<br/>0 72<br/>0 38<br/>0 448</td> <td>0.49<br/>0.56<br/>0.53<br/>0.47<br/>0.44<br/>0.38<br/>0.38<br/>0.38<br/>0.38<br/>0.33<br/>0.28<br/>0.37<br/>0.26<br/>0.34<br/>0.44<br/>0.48<br/>0.37<br/>0.26<br/>0.34<br/>0.48<br/>0.34<br/>0.48<br/>0.55</td> <td>1.00<br/>1.00<br/>0.77<br/>0.63<br/>0.80<br/>0.94<br/>0.89<br/>0.99</td> <td>0.82<br/>0.86<br/>0.82<br/>0.79<br/>100<br/>0.78<br/>0.60<br/>0.81<br/>0.97<br/>0.92<br/>0.92<br/>0.990</td> <td>* * * * * * * * * * * * * * * * * * *</td> <td>B           A           A           A           A           A           B           C           A           A           B           C           A           A           B           C           A           A           A           B           C           A           A           A</td> <td>8<br/>8<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>0<br/>0<br/>0<br/>0<br/>0<br/>8<br/>8<br/>8<br/>8<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0<br/>0</td> <td></td> | 554         554           955         956           946         1794           651         870           914         616           910         701           711         711           616         590   
       2005         1051           1342         1005           1068         1068  | 719<br>609<br>973<br>1122<br>1861<br>985<br>887<br>762<br>763<br>612<br>764<br>764<br>763<br>764<br>763<br>764<br>763<br>763<br>764<br>763<br>764<br>763<br>764<br>763<br>765<br>765<br>765<br>765<br>765<br>765<br>765<br>765<br>765<br>765   | 487<br>474<br>499<br>307<br>347<br>401<br>401<br>401<br>401<br>401<br>401<br>401<br>401<br>405<br>50<br>50<br>50<br>50<br>50<br>50<br>50<br>50<br>51<br>51<br>51<br>51<br>51<br>51<br>51<br>51<br>51<br>51<br>51<br>51<br>51  | 493<br>518<br>991<br>473<br>50<br>511<br>339<br>229<br>446<br>483<br>887<br>887<br>687<br>685<br>535<br>535<br>529   | 0 443<br>0 447<br>0 666<br>0 443<br>0 443<br>0 446<br>0 446<br>0 456<br>0 356<br>0 356<br>0 356<br>0 356<br>0 434<br>0 441<br>0 621<br>0 72<br>0 38<br>0 448   
  | 0.49<br>0.56<br>0.53<br>0.47<br>0.44<br>0.38<br>0.38<br>0.38<br>0.38<br>0.33<br>0.28<br>0.37<br>0.26<br>0.34<br>0.44<br>0.48<br>0.37<br>0.26<br>0.34<br>0.48<br>0.34<br>0.48<br>0.55  | 1.00<br>1.00<br>0.77<br>0.63<br>0.80<br>0.94<br>0.89<br>0.99   | 0.82<br>0.86<br>0.82<br>0.79<br>100<br>0.78<br>0.60<br>0.81<br>0.97<br>0.92<br>0.92<br>0.990  
   | * * * * * * * * * * * * * * * * * * *   | B           A           A           A           A           A           B           C           A           A           B           C           A           A           B           C           A           A           A           B           C           A           A           A   | 8<br>8<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>8<br>8<br>8<br>8<br>8<br>8<br>0<br>0<br>0<br>0<br>0<br>8<br>8<br>8<br>8<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0           |  |
| A90         Hattings Ryer Dim           A91         Gattings Ryer Dim           A91         Coant D thm Ible           A92 <td>I Che, Dan Bourday &amp; A. Bickard Rif W<br/>To Teb, Taha Jiang G B &amp; Hesport Land Ri<br/>To Teb, Taha Jiang D B &amp; Hesport Land Ri<br/>To Teb, Taha Jiang D B &amp; Hotsport &amp; B<br/>D Teb, Taha Jiang D B &amp; Hotsport &amp; B<br/>To Tehn, Hann Chen D &amp; Hotsport &amp; B<br/>To Tehn Actin 3 and Rhild Are<br/>To Tehn Actin 3 and Rhild Are<br/>Tehn Social Sant Acting 48<br/>I Million B and Acting 48<br/>I Million B acting 48<br/>I Million Acting 48<br/>I Millio</td> <td>88         88           C8         98           W8         98</td> <td>2 6 6 2<br/>2 7 7 7<br/>2 7 7 7 7<br/>2 7 7 7<br/>2</td> <td>O         Level           SO         Level           Local         Level           Local         Level           SO         Level</td> <td>Hestum<br/>Hestum<br/>Hestum<br/>Loov<br/>Loov<br/>Loov<br/>Hestum<br/>Hestum<br/>Loov<br/>Loov<br/>Loov<br/>Loov<br/>Loov<br/>Loov<br/>Loov<br/>Loo</td> <td>1000         1000           1000         1000</td> <td>2000         1000           2000         1188           2000         1188           2000         1000           2000<td>4         00016           7         00016           2         11312           2         983           9         939           9         939           5         9845           6         9843           10         7051           8         16313           7         11337           7         11337           7         11337           7         11337           7         11337           7         11021           9         10028           9         10028</td><td>1160<br/>590<br/>2005<br/>1061<br/>1342<br/>1005<br/>1486</td><td>973<br/>1122<br/>1661<br/>1843<br/>1847<br/>1847<br/>1847<br/>1857<br/>1855<br/>1857<br/>1858<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1857<br/>1</td><td>487<br/>474<br/>499<br/>307<br/>347<br/>401<br/>401<br/>401<br/>401<br/>401<br/>401<br/>401<br/>401<br/>405<br/>50<br/>50<br/>50<br/>50<br/>50<br/>50<br/>50<br/>50<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51<br/>51</td><td>493<br/>518<br/>991<br/>473<br/>50<br/>511<br/>339<br/>229<br/>446<br/>483<br/>887<br/>887<br/>687<br/>685<br/>688<br/>685<br/>535<br/>629</td><td>0 443<br/>0 447<br/>0 666<br/>0 443<br/>0 443<br/>0 446<br/>0 446<br/>0 456<br/>0 356<br/>0 356<br/>0 356<br/>0 356<br/>0 434<br/>0 441<br/>0 621<br/>0 72<br/>0 38<br/>0 448</td><td>0.49<br/>0.56<br/>0.53<br/>0.47<br/>0.44<br/>0.38<br/>0.38<br/>0.38<br/>0.38<br/>0.37<br/>0.28<br/>0.37<br/>0.28<br/>0.34<br/>0.44<br/>0.48<br/>0.37<br/>0.26<br/>0.34<br/>0.48<br/>0.34<br/>0.48<br/>0.55</td><td>1.00<br/>1.00<br/>0.77<br/>0.63<br/>0.80<br/>0.94<br/>0.89<br/>0.99</td><td>0.82<br/>0.86<br/>0.82<br/>0.79<br/>100<br/>0.78<br/>0.60<br/>0.81<br/>0.97<br/>0.92<br/>0.92<br/>0.990</td><td>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8<br/>8</td><td>λ           λ           λ           λ           δ</td><td>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C<br/>C</td><td></td></td> | I Che, Dan Bourday & A. Bickard Rif W<br>To Teb, Taha Jiang G B & Hesport Land Ri<br>To Teb, Taha Jiang D B & Hesport Land Ri<br>To Teb, Taha Jiang D B & Hotsport & B<br>D Teb, Taha Jiang D B & Hotsport & B<br>To Tehn, Hann Chen D & Hotsport & B<br>To Tehn Actin 3 and Rhild Are<br>To Tehn Actin 3 and Rhild Are<br>Tehn Social Sant Acting 48<br>I Million B and Acting 48<br>I Million B acting 48<br>I Million Acting 48<br>I Millio   | 88         88           C8         98           W8         98   | 2 6 6 2<br>2 7 7 7<br>2 7 7 7 7<br>2   | O         Level           SO         Level           Local         Level           Local         Level           SO         Level   
  | Hestum<br>Hestum<br>Hestum<br>Loov<br>Loov<br>Loov<br>Hestum<br>Hestum<br>Loov<br>Loov<br>Loov<br>Loov<br>Loov<br>Loov<br>Loov<br>Loo  
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     | 2000         1000           2000         1188           2000         1188           2000         1000           2000 <td>4         00016           7         00016           2         11312           2         983           9         939           9         939           5         9845           6         9843           10         7051           8         16313           7         11337           7         11337           7         11337           7         11337           7         11337           7         11021           9         10028           9         10028</td> <td>1160<br/>590<br/>2005<br/>1061<br/>1342<br/>1005<br/>1486</td> 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  | 4         00016           7         00016           2         11312           2         983           9         939           9         939           5         9845           6         9843           10         7051           8         16313           7         11337           7         11337           7         11337           7         11337           7         11337           7         11021           9         10028           9         10028  | 1160<br>590<br>2005<br>1061<br>1342<br>1005<br>1486   | 973<br>1122<br>1661<br>1843<br>1847<br>1847<br>1847<br>1857<br>1855<br>1857<br>1858<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1857<br>1 |
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   | 1661           343           847           823           762           763           764           765           762           762           763           360           1057           1057           1057           1057           1057           803           809  | 487<br>474<br>499<br>307<br>347<br>401<br>401<br>401<br>401<br>401<br>401<br>401<br>401<br>405<br>50<br>50<br>50<br>50<br>50<br>50<br>50<br>50<br>51<br>51<br>51<br>51<br>51<br>51<br>51<br>51<br>51<br>51<br>51<br>51<br>51  | 518<br>471<br>473<br>50<br>51<br>519<br>239<br>4426<br>483<br>647<br>627<br>616<br>538<br>635<br>627   | 047<br>066<br>043<br>0443<br>0445<br>046<br>046<br>046<br>045<br>035<br>035<br>035<br>035<br>041<br>041<br>041<br>041<br>072<br>038<br>048  
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   | I o than Acton 3 And Rolly Ave<br>I o than Acton 3 And Rolly Ave<br>I o than Cool a and Bulge 31.<br>I o than 3 And Actor 43.<br>I o than 3 And Actor 50.<br>I o than 4 And Actor 50.<br>I o Control Actor 50. A distants B.<br>I o Control Actor 50. And Beats D.<br>I o Control 4 And Actor 50.<br>I o To A distance Rinders 50.<br>I o that 1 & C I distance Rinders 50.<br>I o that 1 & C I distance Rinders 50.<br>I o that 1 & C I distance Rinders 50.<br>I o that 1 & C I distance Rinders 50.<br>I o that 1 & C I distance Rinders 50.<br>I o that 1 & C I distance Rinders 50.<br>I o that 1 & C I distance Company.<br>I o S A Distance S Decksprent.  | E9  | 2  | Solution         Level   
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   | In them Develop 8 and Bridge 81.<br>In Ocean 8 and Adong 48.<br>In Ocean 8 and Adong 48.<br>In Informa 8 and Idong 48.<br>In Union 8 and Idong 48.<br>In Union 8 and Idong 8.<br>In Union 8 and Idong 8.<br>Inter 8 and 9.<br>Inter 8 and Idong 8.<br>Inter 8 and 9.<br>Inter 8 and 9.<br>In   | 88         88           88         88           88         88           88         88           88         88           88         88           88         88           88         88           88         88           88         88           88         88   | 2 99<br>2 99<br>2 99<br>2 99<br>2 99<br>2 99<br>2 77<br>2 77<br>77<br>2 77<br>2 77<br>77<br>2 77<br>77<br>77<br>77<br>77<br>77<br>77<br>77<br>77<br>77   | 50         Lanet           50         Lanet           70         Lanet  
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  | 950<br>1357<br>1538<br>1007<br>1291<br>809   | 62<br>628<br>50<br>597<br>576<br>61<br>67.6   | 229<br>4426<br>4433<br>647<br>629<br>616<br>538<br>635<br>629  | 072<br>038<br>048  
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   | 7051<br>7054<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>14313<br>7891<br>7891<br>7891<br>7891<br>7891<br>7891<br>7891<br>7891  
  | 1160<br>590<br>2005<br>1061<br>1342<br>1005<br>1486   | 950<br>1357<br>1538<br>1007<br>1291<br>809   | 62<br>628<br>50<br>597<br>576<br>61<br>67.6   | 647<br>629<br>616<br>588<br>635<br>629  
  | 072<br>038<br>048   | 0.48<br>0.66<br>0.36  |  | 097<br>092<br>090<br>088<br>084   
   | A<br>A<br>B<br>B  | A<br>A<br>A   | 8<br>C<br>A<br>D<br>8   |  |
| A 34 ( Coan D than link<br>A 34 ( Coan D than link<br>A 34 ( Coan D than link<br>A 35 ( Coan D than link<br>A 35 ( Coan D than link<br>A 36 ( Coan D than link<br>A 36 ( Coan D than link<br>A 37 ( Coan D than Chan A 37 ( Coan D than Chan<br>A 37 ( Coan D than Chan<br>A 38 ( Coan D than Cha  
  | n Bindma Stand Luke Rd<br>ni Luke Rd and Koda St<br>ni Luke Rd and Koda St<br>mi Luke Rd and Koda St<br>mi Koda Stand Lochmar FI<br>mi Koda Stand Lochmar FI<br>ni Ceenmackows Dr and Laranahu R<br>mi Ceenmackows Dr anahu  | 38         38           48         38           38         38           48         38           48         38           48         38           48         38           48         38           48         38           48         38           48         39           48         39           48         39           48         39           48         39           48         39           48         39           48         39           59         39   | 2 77<br>2 77<br>1 70<br>1 70 | Level         0  
  | Low<br>Low<br>Low<br>Low<br>Low<br>Low<br>Low<br>Low<br>Low<br>Low   | 1400<br>1400<br>1400<br>1400<br>1400<br>1400<br>1400<br>1400  
   | 2800         355.           2800         1571           2800         1521           2800         1322           2800         1322           2800         1322           2800         100           2800         100           2800         100           2800         100           2800         100           2800         965           2800         962           2800         889   
  | 3 7891<br>3 14313<br>3 13737<br>3 1325<br>3 11255<br>3 11245<br>3 10028<br>9 10028<br>3 3912   | 2005<br>1061<br>1342<br>1005<br>1486  
   | 950<br>1357<br>1538<br>1007<br>1291<br>809   | 50<br>527<br>576<br>61<br>676   | 616<br>588<br>615<br>629   | 072<br>038<br>048   
   | 0.48<br>0.66<br>0.36  |  | 0.92<br>0.90<br>0.88<br>0.84  | 4<br>4<br>9<br>9  | A<br>A<br>A   | C<br>A<br>D<br>B  |  
   |
| A 94 Coant D text list<br>A 94 Coant D text list<br>A 95 Coant D text list<br>A 96 Coant D text list<br>A 97 Coant D text list<br>A 97 Coant D text list<br>A 98 Coant D text list   
   | n Bindman Stand Lake Rd<br>m Lake Rd and Koola St<br>m Koola St<br>no Commendeve D and Lakanatha R<br>m Createward Dr and Fadite Dr<br>m Createward Dr and Fadite Dr<br>m Rodite Dr J Lakathew Rinket S Dr<br>m Rodite Dr J Lakathew Rinket S Dr<br>m Rodite Dr J Lakathew Rinket S Dr<br>Dam II S D Imite Crea<br>Dam I   | 38<br>HB<br>38<br>HB<br>48<br>HB<br>38<br>HB<br>48<br>WB<br>HB<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38  | 2 77<br>2 77<br>1 77<br>2 77<br>1 77 | Level         0           Level         Lovel           Level         0   
   | Low<br>Low<br>Low<br>Low<br>Low<br>Low<br>Low<br>Low<br>Low<br>Low   | 1400<br>1400<br>1400<br>1400<br>1400<br>1400<br>1400<br>1400<br>1400<br>1400<br>1400<br>1400   
  | 2800         385.           2800         1971           2800         1921           2800         1522           2800         1322           2800         1322           2800         1322           2800         100           2800         100           2800         100           2800         765           2800         765           2800         892           2800         892   
   | 3 7891<br>3 14313<br>3 13737<br>3 1325<br>3 11255<br>3 11245<br>3 10028<br>9 10028<br>3 3912   | 2005<br>1061<br>1342<br>1005<br>1486   
  | 1291<br>809  | 50<br>527<br>576<br>61<br>676   | 616<br>588<br>615<br>629   | 072<br>038<br>048  
  | 0.48<br>0.66<br>0.36  |  | 0.90<br>0.88<br>0.84  | A<br>B<br>A   | A   | A<br>D<br>B                               
   |  |
| A 8 6 (cent 0 then to then to 4 4 6 (cent 0 then to 4 6 6 (cent 0 thent 0 then to 4 6 6 (cent 0 thent 0 then   
   | In Litle Roll and Kada St<br>min Kada Stand Lochinar PI<br>am Kada Stand Lochinar PI<br>Concentrative Sci and Manashia Pi<br>an Construction Sci and Manashia Pi<br>an Construction Sci and Fadib. Dr<br>In Fadib. Cr & Mathew Rinkets Sci<br>Man II Sci Mins Cr Sci<br>Man II Sci Min   | 38<br>HB<br>38<br>HB<br>48<br>HB<br>38<br>HB<br>48<br>WB<br>HB<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38  | 2         7°           2         7°           2         7°           2         7°           2         7°           2         7°           2         7°           2         7°           2         7°           2         7°           2         7°           2         7°           2         7°           2         7°           2         7°           2         7°           1         7°           1         100           1         100   | Invest         0"   
   | Low<br>Low<br>Low<br>Low<br>Low<br>Low<br>Low<br>Low<br>Low<br>Low   | 1400<br>1400<br>1400<br>1400<br>1400<br>1400<br>1400<br>1400   
  | 2800         1621           2800         1230           2800         1322           2800         1322           2800         1102           2800         1102           2800         1002           2800         1002           2800         1002           2800         1002           2800         1002           2800         1002           2800         1002           2800         1002           2800         1002           2800         1002           2800         1002  
   | 13737           11285           11347           10122           10028           3912  
  | 2005<br>1061<br>1342<br>1006<br>1486<br>766<br>1172   | 1291<br>809  | 61<br>67.6  | 629   
  | 012<br>038<br>048<br>036  | 0.66<br>0.36  | 0.01   | 088   
   | A   | 8   | 8   |  |
| A 8 (can) from them load           A 9 (can)   
   | en Koad Stand Lochmar FI<br>m Koad Stand Lochmar FI<br>m Creamendow Dr. and Varanaha F<br>m Creamendow Dr. and Varanaha F<br>m Costword Dr. and Padit. Dr<br>m Kolt. Dr. 3 Mathew Rindes Dr<br>m Kolt. Dr. 3 Mathew Rindes Dr<br>Math. Dr. 3 Math. 2 Mathew Rindes Dr<br>Math. 2 Mathew Rindes Dr<br>Math. 2 Mathew Rindes Dr<br>Math. 2 Math. 2 Mathew Rindes Dr<br>Math. 2 Math. 2   | 38<br>HB<br>38<br>HB<br>48<br>HB<br>38<br>HB<br>48<br>WB<br>HB<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38  | -         -           2         77           2         77           2         77           2         77           2         77           2         77           2         77           2         77           2         77           2         77           2         70           2         70           1         70           1         100           1         400   | Invel           0         Lovel           00         Lovel  
  | Low  
   | 1400<br>1400<br>1400<br>1400<br>1400<br>1400<br>1400<br>1400  | 2800         1230           2800         1322           2800         1100           2800         1100           2800         1100           2800         962           2800         9638  
  | 2 11265<br>5 11347<br>3 10122<br>9 10008<br>8912   
   | 1342<br>1005<br>1486<br>766   | 1291<br>809  | 61<br>67.6  | 629  
   | 048<br>036  | 0.36  | 0.00  
  |   |   | a .   |   |  |
| A 48 Coant 0 then cost of the  
   | en Toola Bland Lochtmar FI<br>In Concentration Dr. and Austrahum R<br>In Concentration Dr. and Austrahum R<br>In Concentration Dr. and Austrahum R<br>In Concentration Dr. and P. Adr. Dr.<br>In Concentration Dr. Adv. Dr. Adv. Dr.<br>Dr. In Concentration Dr. Adv. Dr.<br>Dr. In Concentration Dr. Adv. Dr.<br>Dr. Dr. Dr. Dr. Marker Rindra S. Dr.<br>Dr. In Concentration Dr. Adv. Dr. Dr.<br>Dr. In Concentration Dr. Dr. Dr. Dr.<br>Dr. Dr. Dr. Dr. Dr. Dr. Dr. Dr. Dr. Dr.<br>Dr. Dr. Dr. Dr. Dr. Dr. Dr. Dr. Dr. Dr.  | 38<br>HB<br>38<br>HB<br>48<br>HB<br>38<br>HB<br>48<br>WB<br>HB<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38<br>38  | 2 77<br>2 77<br>2 77<br>2 77<br>2 77<br>2 77<br>2 77<br>2 77<br>1 70<br>1 70<br>1 70<br>1 70<br>1 70   | Izevel           70         Izevel  
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  | 1400<br>1400<br>1400<br>1400<br>1400<br>1400<br>1400<br>1400  | 2800         1322           2800         1100           2800         1100           2800         965           2800         962           2800         858   
   | 11847<br>10122<br>10008<br>8912   
  | 1005<br>1486<br>766<br>1172   | 809  | 61<br>676   | | |
  | 0.36  | 0.46  |  
   | 0.91  | A   | Â   | C   |  |
| A 87 (Cash C ben C   
   | n Creamendow Dr. and Manantha R.<br>n Contensedow Dr. and Manantha R.<br>n Contensedow Dr. and Manantha R.<br>n Contenso Dr. and Padit. Dr.<br>n Rolft. Dr. 24 Justiver Rindes Dr.<br>n Rolft. Dr. 24 Justiver Rindes Dr.<br>tanta Lit. 24 Jus   | 38<br>HB<br>38<br>HB<br>WB<br>HB<br>38  | 2 71<br>2 71<br>2 71<br>2 70<br>2 70<br>2 70<br>1 70<br>1 70<br>1 70<br>1 400  | Iswel           70         Iswel  
  | Low<br>Low<br>Low<br>Low<br>Low<br>Low   | 1400<br>1400<br>1400<br>1400<br>1400<br>1400  
   | 2800 965<br>2800 962<br>2800 838  
  | 7 10008<br>1 8912  
   | 1486<br>766<br>1172   | 809<br>1173  | 67.6  | 624  
   |   |   | 0.87   | 0.90   
  | a a   | A   | 8   |  |
| A 98 (Cean D than Core A 10 than Core A 98 (Cean D that A 98 (Cean D than Core A 98 (Cean D than A 98 (Cean D  
   | n Ceretaroo Dar and Partin. Dr<br>n Ceretaroo Dar and Partin. Dr<br>n Fordin. Dr 3. Mathew Finders Dr<br>Todan. Dr 3. Mathew Finders Dr<br>than H & Or Links Cres.<br>Barr of Links Cres.<br>Barr of Links Cres.<br>Barr of Links Cres.<br>Barr of Links Cres.<br>Dr 2015 Control Control Control Control Control Control<br>of Links Control Control Control Control Control Control Control<br>of Links Control Co   | 38<br>HB<br>38<br>HB<br>WB<br>HB<br>38  | 2 70<br>2 70<br>2 70<br>2 70<br>2 70<br>1 70<br>1 70<br>1 400<br>1 400   | Lavel           r0         Lavel  
   | Low   
  | 1400<br>1400<br>1400<br>1400<br>1400  | 2800 965<br>2800 962<br>2800 838   
   | 8912  
  | 766   | 1173   |   |   
  | 053   | 0.29  | 0.97   | 0.99  
   | A   | A   | C   |  |
| A 38 (Cean D then fod<br>A 32 (Cean D the fod<br>A 32 (Cean D the fod<br>A 32 (Cean D the fod<br>A 32 (Cean D then fod<br>A 33 (Cean D then fod D then fod D then fod<br>A 33 (Cean D then fod D then fod D then fod<br>A 33 (Cean D then fod D then fod D then fod<br>A 33 (Cean D then fod D then fod D then fod<br>A 33 (Cean D then fod D then fod D then fod<br>A 33 (Cean D then fod D t   
   | n Creatives Dr. and Pacific. Dr.<br>n Pacific. Dr. & Mathew Finders Dr.<br>n Pacific. Dr. & Mathew Finders Dr.<br>bonn Hie of Units Cress.<br>Down Hie of Units Cress.<br>11 do Focalesc. Development<br>n Bi of Koalesc. Development<br>Volan BI.   | 38<br>HB<br>38<br>HB<br>WB<br>HB<br>38  | 2 70<br>2 70<br>2 70<br>1 70<br>1 70<br>1 100<br>1 400   | Invest         Invest           70         Level           70         Level           70         Level           70         Level           70         Level           70         Level   
   | Low Low Low Low Low Low   
  | 1400<br>1400<br>1400<br>1400  | 2800 962 2800 838  
   
   | 3796   |   | 707  | 67.6  
   | 651  | 0.27  | 0.42  | 0.97   
   | 0.93  | Α   | A   | 8   | _  |
| A 8 9 Cean D then Red<br>A 8 9 Cean D then Red<br>A 8 9 Cean D the Red<br>A 8 9 Cean D the Red<br>A 8 0 Cean D the then<br>A 8 0 Cean D the then<br>A 8 0 Cean D the D the<br>A 8 0 Cean D the Red<br>A 8 0 Cean D the R   
   | m Badic Dr & Mathew Rhides Dr<br>m Badic Dr & Mathew Rhides Dr<br>Etwin HE of Units Cres<br>Down HE of Units Cres<br>m 3 of Poaleres Development<br>m 3 of Poaleres Development<br>of Drail Bt<br>Of Drail Bt  | W 8<br>H 8<br>88  | 2 71<br>2 71<br>1 70<br>1 70<br>1 100<br>1 400   | TO         Level           70         Level           70         Level           70         Level           70         Level  
   | Low<br>Low<br>Low<br>Low  
  | 1400  | 2800 - 838   
   
   |  | 670   | 1004   |   
   | 57.9   | 0.24  | 0.36  | 0.83   
   | 083   | 4   | A   | Å   |  |
| A32         Coan Dire, then           A33         Coan Dire, then           A34         Coan Dire, then           A32         Coan Dire, then  
   | blann HE of Units Cress<br>blann HE of Units Cress<br>m 3 of Roateres Development<br>m 3 of Roateres Development<br>of Data 31   | W 8<br>H 8<br>88  | 2 70<br>1 76<br>1 70<br>1 100<br>1 100   | ro Level<br>ro Level  
   
   | Low  | 1400   
  |  
   | 5 7940   | 884   | 598  
   | 534   | 632  | 0.32  | 0.21  | 0.76   
   | 0.90  | e   | Ä   | 8   |  |
| A42         Coan Dre, Bren           A42         Coan Dre, Bren           A42         Coan Dre, Bren           A42         Coan Dr. Hot Drait           A43         Coan Dr. Hot Drait           A43         Coan Dr. Hot Drait           A43         Coan Drait </td <td>bown HE of Unks Cres<br/>m 3 of Posteres Development<br/>m 3 of Posteres Development<br/>of Drah 91</td> <td>W 8<br/>H 8<br/>88</td> <td>1 70<br/>1 70<br/>1 100<br/>1 400</td> <td>ro Level</td> <td>Low</td> <td></td> <td>2800 819</td> <td>768.2</td> <td>- 692</td> <td>843</td> <td>636</td> <td>649</td> <td>021</td> <td>0.30</td> <td>0.91</td> <td>0.93</td> <td>A</td> <td>A</td> <td>A</td> <td></td>  
   | bown HE of Unks Cres<br>m 3 of Posteres Development<br>m 3 of Posteres Development<br>of Drah 91   | W 8<br>H 8<br>88  | 1 70<br>1 70<br>1 100<br>1 400   | ro Level  
   
   | Low  |  
  | 2800 819   
   | 768.2  | - 692   | 843  
   | 636   | 649  | 021   | 0.30  | 0.91   
   | 0.93  | A   | A   | A   |  |
| A32 (cean 0 them 3 of them 3 of<br>A32 (cean 0 them 3 of<br>A32 (cean 0 them 3 of<br>A32 (cean 0 the 3 of<br>A32 (cean 0 them 5 of<br>A32 (cean 0 them 5 of<br>A32 (cean 0 them 5 of<br>A32 (cean 0 them 1 of<br>A33 (cean 0 t   
   | m 3 of Posteres Development<br>m 3 of Posteres Development<br>of Diruh 3 t   | H8<br>88  | 1 10.  |   
   |   
  | 1400  | 1400 486   
   
   |  | 626   | 360  | 634   
   | 64.2   | 0.46<br>0.26  | 0.26  | 0.91   
   | 0.92  | A   | A   | c   | _  |
| A32 (cent 0 then 3 of 14 of 0 then<br>A32 (cent 0 then 5 of 14 of 0 then<br>A32 (cent 0 then 5 then<br>A33 (cent 0 then 5 then<br>A34 (cent 0 then 14 then)  
  | m Glof Pozieres Development<br>of Dirah St   | 98<br>HB  | 1 404  |  
  | LOW  
   | 1400  
   | 1400 482  
  |  | - 960   | 4/9   
  | 847   | 709  | 643   | 0.23  | 0.85  
  | 036   | P   | R   | A   |  |
| A 22 (coan 0r Ho D Kai)<br>A 22 (coan 0r Ho D Kai)<br>A 22 (coan 0r Ho D Kai)<br>A 22 (coan 0r Hon D Kai)<br>A 23 (coan 0r Hon D Kai)<br>A 24 (coan 0r Hon Hai)<br>A 25 (coan 0r Hon Hai)<br>A 26 (coan 0r Hon Hai)<br>A 27 (coan 0r Hon Hai)<br>A 28 (coan 0r Hon Hai)<br>A 28 (coan 0r Hon Hai)<br>A 29 (coan 0r Hon Hai)<br>A 20 (coan 0r Han Hai)  
   | of Dirah St  | HB<br>88  |  | 00 Level  
   | Low   
  | 1400  | 1400 - 464   
   
   | 4292   | - 342   | 481  | 366   
   | 888  | 0.24  | 0.34  | 0.87   
   | 0.89  | à   | Â   | Ă   |  |
| A32 (cean 0 then feed on the feed of the f   
   |  | 88  | 1 51   | so Level  
   | Low   
  | 1400  | 1400 - 463   
   
   | 5 - 4310   |   | 319  | 656   
   | 67.6   | 042   | 0.23  | 1.31   
   | 135   | A   | A   | C   |  |
| A22 Ocean 0 then Bod<br>A34 Ocean 0 then Bod<br>A34 Ocean 0 then Bod<br>A34 Ocean 0 then Bod<br>A34 Ocean 0 then Bd<br>A35 Ocean 0 then Bd<br>A35 Ocean 0 then Bd<br>A37 Ocean 0 then Bd<br>A32 Ocean 0 then Bd<br>A33 Ocean 0 then Bd   
   | x/Dirah St   |   | 1 50   | SQ Level  
   
   | Low  | 1400   
  | 1400 464   
   | 4290   | 342   | 482  
   |   | 584  | 0.24  | 0.34  | 1.18   
   | 117   | A   | A   | A   |  |
| A34         (cean fr them flow)           A37         (cean fr them flow)           A37         (cean fr them flow)           A33         (cean fr them flow)  
   | n Evens Stand Tallong Dr<br>n Evens Stand Tallong Dr   | 88  | 1 50   | 0 Level   
   
   | Low  | 900  
  | 900 504  
   | 4714   | 605   | 364  
   | 462   | 466  | Q67<br>Q41  | 0.40  | 0.92   
   | 0.93  | A   | A   | D D   |  |
| A32 (cent) to them ido<br>A32 (cent) them idd<br>A32 (cent) the idd<br>A32 (cent) the idd<br>A32 (cent) the idd<br>A32 (cent) the idd<br>A32 (cent) them idd<br>A33 (cent) them idd  
  | a Shorning Canite and Bona Czes  | HB  | 1 4  | 30 Level   
   
  | Medium   | 900   
   | 900 - 499   
  |  | 536   | 400   
  | 461   | 485  | 0.59  | 0.44  
   | 0.96   | 0.97  |   | <u>ب</u>  | 0   |  |
| A33         Cost D         Desk D           A34         Cost D         Desk D           A37         Cost D         Desk D           A34         Cost D         Desk D           A34         Cost D         Desk D           A34         Cost D         Desk D           A33         Cost D         Desk D  
   | an Shocoing Centre and Rona Cres   | 88  | 1 9  | a Level   
   
   | Medium   | 900  
  | 900 - 489  
   |  | 372   | 462  
   | 504   | 505  | 041   | 0.51  |
1.01   | 101   | Â   | Â   | C   |  |
| A32 (cean Drepter Ortepter C<br>A32 (cean Drepter C<br>A32 (cean Drepter C<br>A32 (cean Drepter C<br>A32 (cean Dremt L<br>A32 (cean Dremt C<br>A32 (cean Dremt C<br>A33 (cean Dre  
  | n Maaaca Menca Cence   | HB  | 1 70   | 10 Level   
  | Low  
   | 1200  | 1200 - 478  
   
  | - 4372   | 498   | 401  | \$3   | 546  
   | 042   | 0.33  | 0.76  
  | 078   | e   | В   | C   |  |
| A32 Ocean Drite, binn C<br>A327 Ocean Dritma Like<br>A327 Ocean Dritma Like<br>A322 Ocean Dritma Ase<br>A322 Ocean Dritma Ase<br>A322 Ocean Dritma Ase<br>A323 Ocean Dritma Cat<br>A333 Ocean Dritma Cat<br>A333 Ocean Dritma Cat<br>A333 Ocean Dritma Ase<br>A333 Ocean Dritma Ase  
  | n Mala St & Medical Centre   | 88  | 1 70   | 70 Level<br>70 Level   
   
  | Low  | 1200  
   | 1200 476.   
  | 4484   | 361   | 432   
  | 963   | 559  | 0.30  | 0.36  
   | 0.79   | 0.80  | e   | В   | 8   |  |
| A3.27         Ocean Dr bhm, Like           A3.27         Ocean Dr bhm, Like           A3.22         Ocean Dr bhm, Bay           A3.23         Ocean Dr bhm, Gai           A3.23         Ocean Dr bhm, Gai           A3.23         Ocean Dr bhm, Gai           A3.33         Ocean Dr bhm, Aim  
   | biwn Ocean Club Access & Houston Mitchell Dr<br>biwn Ocean Club Access & Houston Mitchell Dr   | EB  | 1 70   | ro Level  
   
   | Low  |  
  | 1400 491   
   |  | 512<br>432  | 411  
   | 635   | 67.3   | 0.31  | 0.31  | 0.91       
   | 692   | A   | A   | 8   |  |
| A32 Ccan Dr thm 8ea<br>A322 Ccan Dr thm 8ea<br>A322 Ccan Dr thm 6ea<br>A322 Ccan Dr thm 6ea<br>A320 Ccan Dr thm Cal<br>A330 Ccan Dr thm A4<br>A331 Ccan Dr thm A4<br>A331 Ccan Dr thm A4<br>A331 Ccan Dr thm A4<br>A332 Ccan Dr thm A4<br>A332 Ccan Dr thm A4<br>A332 Ccan Dr thm A4<br>A333 Ccan Dr thm A4<br>A333 Ccan Dr thm A4<br>A333 Ccan Dr thm A4  
   | m Lake Cathle School Access and Bonny Mew D  | HB I  | 1 7  | TO Level  
   
   | Low  | 1400   
  | 1400 - 464   
   | - 4454   | - 552   | 334  
   | 528   | 67.2   | 0.39  | 0.24   
  | 0.86   | 0.96  | Â   | Â   | 8   |  |
| A32 Ocean Dr than Sea<br>A322 Ocean Dr than Gai<br>A323 Ocean Dr Hof Edit<br>A333 Ocean Dr Hof Edit<br>A333 Ocean Dr Hof Edit<br>A331 Ocean Dr Hof Edit<br>A331 Ocean Dr Hom Aim<br>A32 Ocean Dr than Aim<br>A32 Ocean Dr than Aim<br>A32 Ocean Dr than Aim<br>A333 Ocean Dr than Aim<br>A333 Ocean Dr than Aim  
   | m Lake Cathle School Access and Bonny Mew D  | 88  | 1 70   | 70 Level  
   
   | Low  | 1400   
  | 1400 467   
   |  | - 350   | 497  
   | 648   | 706  | 0.25  | 0.36   
  | 0.93   | 101   | A   | A   | A   |  |
| A329 Ocean Dr than Grail<br>A329 Ocean Dr than Grail<br>A330 Ocean Dr Hor Edit<br>A330 Ocean Dr Hor Edit<br>A331 Ocean Dr than Aim<br>A331 Ocean Dr than Aim<br>A332 Ocean Dr than Aim<br>A332 Ocean Dr than Aim<br>A332 Ocean Dr than Aid<br>A333 Ocean Dr than Aid   
   | m Beawind Chase and Beach Bt   | HB  | 1 70   | ro Level  
   
   | Low  |  
  | 1200 429   
   |  | 443   | 306  
   | 59  | 606  | 637   | 0.25   
  | 0.84   | 687   | A   | A   | В   |  |
| A829 Ocean Dr bhan Grai<br>A820 Ocean Dr H of Edit<br>A830 Ocean Dr H of Edit<br>A831 Ocean Dr H of Edit<br>A831 Ocean Dr bhan Aim<br>A832 Ocean Dr bhan Aim<br>A832 Ocean Dr bhan Aim<br>A832 Ocean Dr bhan Aim<br>A833 Ocean Dr bhan Aid<br>A833 Ocean Dr bhan Aid<br>A833 Ocean Dr bhan Aid   
   | n Geawind Chase and Beach St.  | 38  | 1 70   | ro Level<br>50 Rolling  
   
   | Low  | 1200   
  | 1200 433   
   | 4136   | 331   | 460  
   | 514   | 623  | 0.25  | 0.37   
  | 0.88   | 0.89  | A   | A   | 8   |  |
| A930 Ocean Dr H of Edit<br>A930 Ocean Dr H of Edit<br>A931 Ocean Dr Iban Aim<br>A931 Ocean Dr Iban Aim<br>A932 Ocean Dr Iban Ron<br>A932 Ocean Dr Iban Ron<br>A933 Ocean Dr Iban Aie<br>A933 Ocean Dr Iban Aie<br>A933 Ocean Dr Iban Aie   
   |  | 38  | 1 9  | SO Roling   
   
   | Low  | 1200   
  | 1200 - 367   
   | 3612   | - 309   | 118  
   | 546   | 546  | 0.26  | 0.28   
  | 1.09   | 109   | A   | A   | Å   |  |
| A930 Ocean Dr. H of Editi<br>A931 Ocean Dr. Hwn Aim<br>A931 Ocean Dr. Hwn Aim<br>A932 Ocean Dr. Hwn Aim<br>A932 Ocean Dr. Hwn Aie<br>A933 Ocean Dr. Hwn Aie<br>A933 Ocean Dr. Hwn Aie<br>A933 Ocean Dr. Hwn Aie  
   | x Edith St   | HB  | 1 91   | io Level  
   
   | Low  |  
  | 1200 - 317   
   |  | - 241   | 295  
   | 67.7  | 701  | 0.20  | 0.26   
  | 0.75   | 078   | B   | B   | A   |  |
| A831 Ocean Dr bhwn Aim<br>A831 Ocean Dr bhwn Aim<br>A832 Ocean Dr bhwn Ron<br>A832 Ocean Dr bhwn Ron<br>A833 Ocean Dr bhwn Ale<br>A833 Ocean Dr bhwn Ale<br>A833 Ocean Dr bhwn Ale   
   | af Edith St  | 38  | 1 97   | io Level  
   
   | Low  |  
  | 1200 - 322   
   | 3046<br>2636   | - 305   | 281  
   | 621   | 644  | 0.25  | 0.23   
  | 0.69   | 072   | B   | B   | A   |  |
| AB 12 Ocean Dr blwn Ron<br>AB 12 Ocean Dr blwn Ron<br>AB 13 Ocean Dr blwn Ade<br>AB 13 Ocean Dr blwn Ade<br>AB 13 Ocean Dr blwn Ade<br>AB 14 Ocean Drive, blwn 1   
   | n Aima Stand The Parade  | HB  | 1 50   | SO Level  
   
   | Medium   | 900  
  | 900 - 276  
   | 5 <u>- 2636</u><br>7 <u>- 2860</u>   | 213   | 254  
   | 429   | 428  | 0.24  | 0.28   
  | 0.86   | 086   | <u> </u>  | A   | A   |  |
| A312 Ocean Dr blwn Ron<br>A313 Ocean Dr blwn Ade<br>A313 Ocean Dr blwn Ade<br>A314 Ocean Dr blwn Ade   
   |  | 88  | 1 50   | 30 Level  
   
   | High   | 902  
  | 900 - 301<br>900 - 436   
   |  | 291   | <u> </u>   
   | *1  | 429  | 0.32  | 0.31   
  | 0.82   | 032   | R   | B   | 8   |  |
| A833 Ocean Dr blwn Ade<br>A834 Ocean Drive, blwn 1   
   | n Roneer Stand Vine St   | WB  | 1 9  | a Level   
   
   | High   | 900  
  | 900 - 456  
   |  | 402   | - 388  
   | 36  | 385  | 046   | 0.43   
  | 0.72   | 077   | B   | B   | c   |  |
| AS 34 Ocean Drive, blwn 1  
   | n Adeline Stand Short St   | HB  | 1 50   | 50 Level  
   
   | High   | 900  
  | 900 - 463  
   | 4367   | 371   | 422  
   | 418   | 418  | 041   | 0.47   
  | 0.84   | 084   | A   | A   | c   |  |
| As selected brive, then it   
   | n Adeline Stand Short St.  | 88  | 1 50   | SO Level  
   
   | High   | 900  
  | 900 462  
   | 4365   | 403   | 377  
   | 44.3  | 453  | 045   | 0.42   
  | 0.89   | 691   | A   | A   | 0   | -  |
| 6.9.14 Ocean Drive March   
   | blwn Haven Circuit & Stingray Creek Bridge<br>blwn Haven Circuit & Stingray Creek Bridge   | E8<br>W8  | 1 50   | so Level  
   
   | High   | 900  
  | 900 491  
   |  | 403   | 462  
   | 492   | 538<br>517   | 045   | 0.51   
  | 1.00   | 103   | A   | A A   | C   |  |
| AS 34 Ocean Dr Me, Diwn Kew  
   | n Kew Roland Bold St   | EB  | 1 90   | so unen   
   
   | High<br>High   | 900  
  | 900 - 282  
   | - 2068   | - 246   | 275  
   | 484   | 426  | 0.27  | 0.31   
  | 0.97   | 0.99  | Å   | Å   | 8   |  |
| AS 35 Ocean Dr blwn Kew  
   | m Kew Rd and Bold St   | WB  | 1 57   | i0 Level  
   
   | High   | 902  
  | 900 - 284  
   | - 268.2  | - 254   | 239  
   | 467   | 47.8   | 0.28  | 0.27   
  | 0.93   | 0.96  | à   | Â   | 8   |  |
| AS S Ocean Dr than Kee   
   | m Kew Rd and Finders Dr  | HB  | 1 50   | io Level  
   
   | Medium   |  
  | 1200 593   
   |  | 481   | 515  
   | 456   | 424  | 040   | 0.43   
  | 0.91   | 0.99  | A   | A   | 8   |  |
| I HO S LOCAIN DE DWN MAN   
   | AT NEW NO AND HINDERS OF   | 38  | 1 \$   | SQ Level  
   
   | Liedium  | 1200   
  | 1200 596   
   | 5571   | 656   | 561  
   | 425   | 467  | 0.46  | 0.47   
  | 0.86   | 0.93  |   | A   | 0   |  |
| AS 7 Ocean Dr blun Wat   
   | m Waterview Cres and Captain Cook Bicentennial Drive<br>in Waterview Cres and Captain Cook Bicentennial Drive  | 38  | 1 7/   | 10 Level  
   
   | Low  | 1400   
  | 1400 520   
   | 4841   | 423   | 4/1  
   | 518   | 958  | 0.30  | 0.34   
  | 0.78   | 0.80  | 8   | B   | 8   |  |
| A838 Ocean Dr blwn Birlu   
   | m Birlus Dr and Fairwinds Ave  | EB  | 1 7/   | ro Level  
   
   | Low  |  
  | 1400 - 519   
   |  | 442   | 493  
   | 646   | 648  | 0.32  | 0.35   
  | 0.92   | 0.93  | A   | A   | 8   |  |
| AS 33 Ocean Dr blwn Sirlu  
   | an Stirlus Dr and Fairwinds Ave  | WB  | 1 70   | ro Level  
   
   | Low  | 1400   
  | 1400 - 520   
   | 2 4863   | 459   | 462  
   | 633   | 638  | 033   | 0.33   
  | 0.90   | 691   | A   | A   | 8   |  |
|  
   | m Padric Hwy and Glen Haven Dr   | EB  | 1 60   | SO Level  
   
   | Low  | 1400   
  | 1400 488   
   | 4623   | 468   | 484  
   | 623   | 638  | 033   | 0.36   
  | 1.04   | 106   |   | A   | 8   |  |
|  
   | m Padific Hwy and Olen Hiaven Dr   | W B<br>EB   | 1 60   | 30 Level  
   
   | Low  | 1400   
  | 1400 - 489<br>900 - 344  
   |  | 443   | 501  
   | 629   | 535  | 0.32  | 0.36   
  | 1.06   | 108   | A   | A   | 8   |  |
| AS40 Ocean Drive, & Pac  
   |  |   | 1 60   | ay unven  
   
   | Wedlum   | 900  
  |  
   |  | 419.  | 523  
   | 907   | 517  | 049   | 0.58   
  | 0.85   | 086   |   |   | c .   |  |
| A841 Hancy Bird Walton   
   | at Pacific Hwy Overbridge W<br>at Pacific Hwy Overbridge W   | HB  | 1 8  | SQ Level  
   
   | Low  | 1400   
  | 900 501  
   |  | - 334   | 306  
   | 70  | 712  | 0.24  | 0.22   
  | 0.88   | 089   | à   | Â   | Å   |  |
| AS41 Hancy Bird Walton   
   | at Pacific Hwy Overbridge W  | 38  | 1 84   | 30 Level  
   
   | Low  | 1400   
  | 1400 150   
   | 190  | 16  | 17   
   | 527   | 523  | 001   | 0.01   
  | 0.66   | 066   | Ö   | C   | A   |  |
| A842 Hancy Bird Walton   
   | at Pacific Hwy Overbridge W<br>Jalton Dribhwn Herons Creek Rd and Ocean Dr<br>Jalton Dribhwn Herons Creek Rd and Ocean Dr  | HB  | 1 80   | so Level  
   
   | Low  | 1400   
  | 1400 - 148   
   |  | 126   | - 136  
   | 67.1  | 67.8   | 009   | 0.10   
  | 0.84   | 0.85  | A   | A   | A   |  |
| ASIAL Hancy Brd Walton<br>ASIAL Kendal Edition V   
   | at Pacific Hwy Overbridge W<br>Jatton Dr bitwn Herons Creek: Rd and Ocean Dr<br>Jatton Dr bitwn Herons Creek: Rd and Ocean Dr<br>Jatton Dr bitwn Bethesda Pland Ocean Dr   |   |  | so Level  
   
   | Low  | 1400   
  | 1400 92  
   | 290  | 214   | 10   
   | 667   | 681  | 0.26  | 0.01   
  | 0.83   | 085   | <u>^</u>  | A   | A   |  |
| A843 Kendal Rd blwn Ho   
   | at Rachic Hay Coethidge W<br>Jaltan Dribban Herans Creek Rol and Ocean Dr<br>Jaltan Dribban Herans Creek Rol and Ocean Dr<br>Jaltan Dribban Bethesda Pland Ocean Dr<br>Jaltan Dribban Bethesda Pland Ocean Dr  | 38  | 1 84   | ~ <u>uned</u>   
   
   | Low  | 900  
  | 900 - 290  
   |  | 331   | 264  
   | 489   | 486  | 0.20  | 0.29   
  | 0.98   | 0.97  | 5   | Å   | 8   |  |
| A844 Kendal Rd blwn Du   
   | at Recht Hwy Overbridge W<br>Jaten Drobwn Herns Creek Rd and Ocean Dr<br>Jaten Drobwn Herns Creek Rd and Ocean Dr<br>Jaten Drobwn Bethesda Pland Ocean Dr<br>Jaten Drobwn Bethesda Pland Ocean Dr<br>Man Homedae Rd and Hanry Bind Walton Dr   |   | 1 84<br>1 54<br>1 40   | 50 Level 00   
   
   | Low  | 900  
  | 900 - 249  
   |  | - 184   | - 254  
   | 597   | 628  | 0.20  | 0.28   
  | 1.00   | 105   | A   | A   | A   |  |
| A844 Kendal Rd blwn Du   
   | af Bacific Hwy Owetridge W<br>Jakan Driban Hennas Creek Rid and Ocean Dr<br>Jakan Driban Hennas Creek Rid and Ocean Dr<br>Jakan Driban Bethesde Rijard Ocean Dr<br>Jakan Driban Bethesde Rijard Ocean Dr<br>Maka Nordale Rid and Hanzy Girk Walton Dr<br>Man Honodale Rid and Hanzy Girk Walton Dr<br>Man Daneodale Rid and Hanzy Girk   | 88  | 1 84<br>1 54<br>1 54<br>1 60   | 50 Level<br>50 Level  
   
   |  | 900  
  | 900 - 245  
   |  | 294   | 211  
   | 60.9  | 616  | @33   | 0.23   
  | 1.02   | 103   | A   | A   | 8   |  |
| A846 River Stotwn Rallwy   
   | af Rectic livey Overbridge W<br>Jahron Dribben Internas Creefi Ni and Ocean Dr<br>Jahron Dribben Internas Creefi Ni and Ocean Dr<br>Jahron Dribben Bethesde Ji Pand Ocean Dr<br>Jahron Dribben Bethesde Ji Pand Ocean Dr<br>Bake Internated Rei and Drawn Dr<br>Bake Internated Rei and Hanzy Life Vahen Dr<br>Bake Internated Rei and Hanzy Life Wahen Dr<br>Ban Danscoolei Strand Hamotale Rei<br>an Danscoolei Strand Hamotale Rei<br>Drawn Bethesde Rei Strand Banz Banz Banz Banz Banz Banz Banz Banz   | 38<br>E8<br>W8<br>E8  | 1 84<br>1 54<br>1 54<br>1 60<br>1 60   | io Level  
   
   | Low  | 905  
  | 900 - 228  
   |  | 272   | 204  
   | d/37  | 326<br>329   | 0.30  | 0.23   
  | 0.69   |   |   |   | 8   |  |
| A846 River Stolown Railwa<br>A846 Oraham Stolown Railwa  
   | af Racific Hay Overbridge W<br>adaro Dribme Hennas Greek Rid and Ocean Dr<br>Jahon Dribme Hennas Greek Rid and Ocean Dr<br>Jahon Dribme Bethead Pilard Ocean Dr<br>Jahon Dribme Bethead Pilard Ocean Dr<br>Mathon Dribme Bethead Pilard<br>Rathon Draw Bethead National Pilard<br>Rathon Draw Bethead Pilard<br>Rathon Draw Bethead<br>Rathon Draw Bethead   | 88<br>68<br>W8  | 1 84<br>1 94<br>1 94<br>1 94<br>1 94<br>1 94<br>1 94<br>1 94<br>1 9  | so Level  
   | Low<br>Low<br>Low   
  | 902   | 900 - 226  
   
   |  |   | 232  | 37.3  
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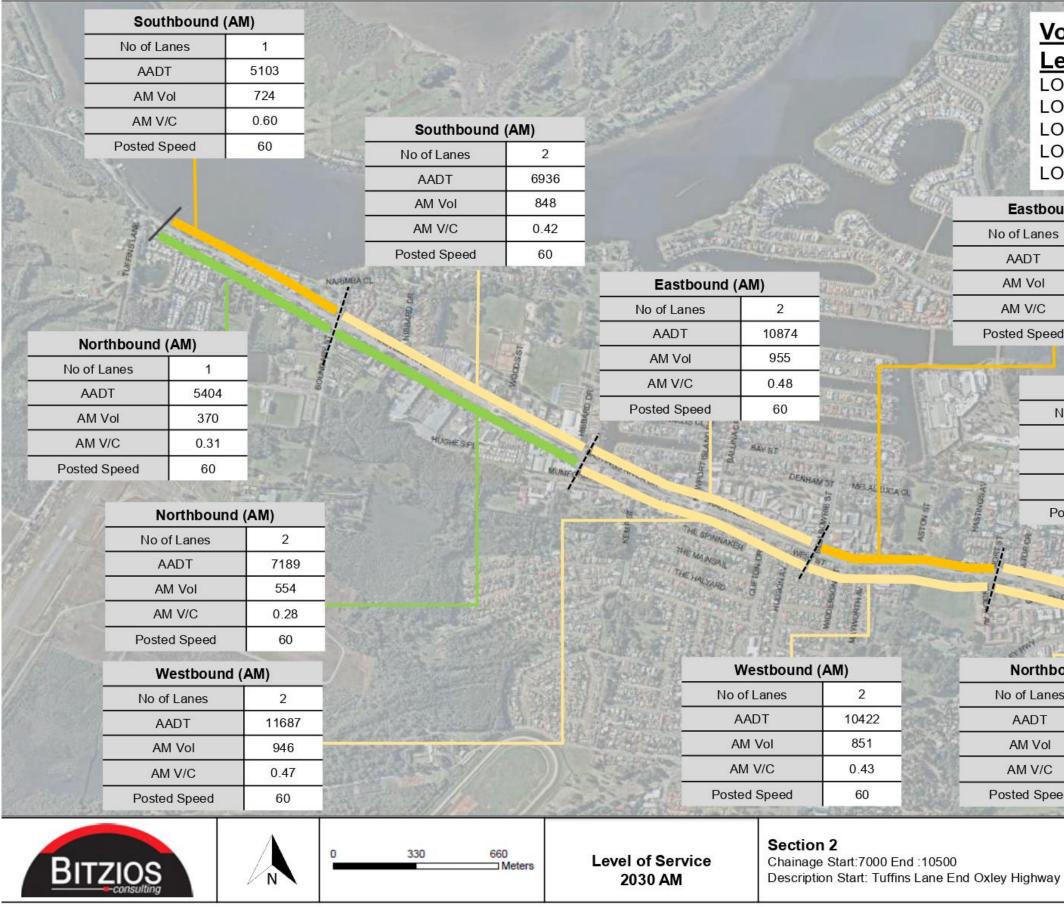


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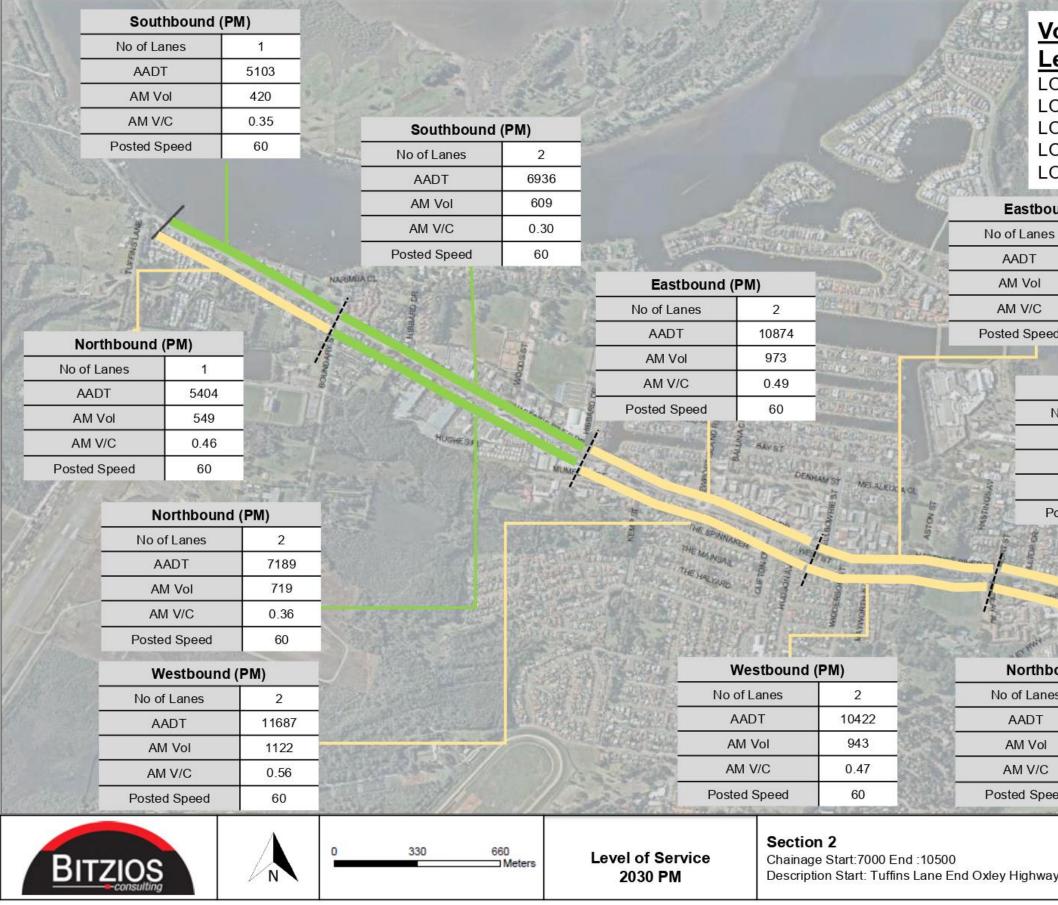
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**ORDINARY COUNCIL** 



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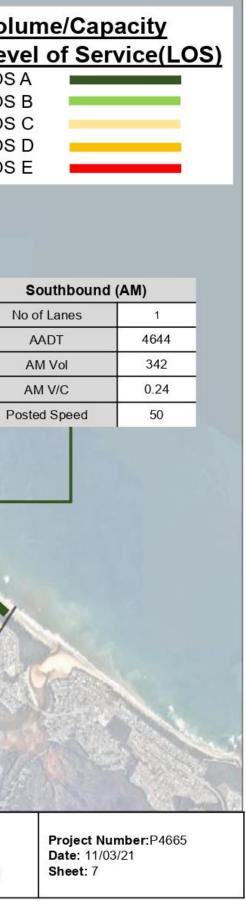


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2-4-F-1 0-1	AM V/C	0.37	a sparsed and	AM V/C	0.55	A REAL	AM V/C	0.36	AM V/C	0.30		AM V/C	0.3
星月志	Posted Speed	50		Posted Speed	70	Pos	ted Speed	70	Posted Speed	70		Posted Speed	70
							N.	PAGEICOR		-			
Southbou		Land Barry	Southbour	20.3		Southbou	nd (PM)		1000	STA P	1 W Sal	34344 K 1347	ALC: NOT
No of Lanes	2	增生品 1	No of Lanes	2		No of Lanes	2		Northbour	d (PM)	TANI		and the
AADT	9128	LIER.	AADT	8558		AADT	11059		No of Lanes	2	CE PAR		12
AM Vol	759	いな話し	AM Vol	950		AM Vol	1173		AADT	8385	人品在考	A ST	
AM V/C	0.38	Martin I.	AM V/C	0.34	E SE	AM V/C	0.42		AADT AM Vol	598	- Energy de		1
Posted Speed	50	lense 1	Posted Speed	70	A BEI	Posted Speed	70		AM V/C	0.21	1 Same		R San
	and a second	and the second second	State Trace	MA CONTRACTOR		e 6	C. La El		Posted Speed	70	REAL	and the second second	
自動が記事		2.7 2 3	Party and	in the	South	bound (PM)	and all		r östed Speed		- BURGE	the second second	
二十 正 四	三國 金人		1000	1 5 J 8/1 2	No of La	nes 2	These and	ANDERED	Northbour	nd (PM)	Longs .		
	APUE		1000 E	- MD/ 942	AAD	13225			No of Lanes	2	1 Section	-	
The Party	the and the	Seat 1	10		AM V	bl 1291	Cierta 10		AADT	9651	1 States	Northbound	(DM)
10.00	CONCERNMENT OF THE OWNER		Alter Cart	8	AM V/	C 0.46			AM Vol	707		No of Lanes	( <b>F WI)</b>
				- F4. +	Posted S	peed 70	87 7		AM V/C	0.25	177	AADT	4860
9	ST		in the second		Carl Carl	19 million 1	BIDU A		Posted Speed	70	19.128-	AM Vol	350
		1 2	19 P	- 11000-20	A DECEMBER OF	and the o		ALCINE	2.3月我的一篇	the mark	£ 199	AM V/C	0.25
A DAN NO	NAME: COL	Contraction of the local division of the loc				Black and	Under all a	States of the second	Northbour	nd (PM)		Posted Speed	70
	thbound (PM)	- 10 C 1 C	AL DE TES	THE PARTY OF		THE REPORT	THE REAL OF	1997 (PR)	No of Lanes	2		T Usied Speed	10
No of I		2	STAREN	St. Mar. Suchas	10000年月	图:雷王森,高	We -		AADT	11083			
AA	200 C.	689	All Planting	1 0 1 m			R		AM Vol	809			
AM		62	heren Z						AM V/C	0.29			
AM		.38	10 plana	and the state	3 6 V 84	AV - S	all and a	and the	Posted Speed	70	Volu	me/Capaci	tv
Posted	Speed 5	50	THE NE	and the second	ALL ALL	123	A STATES		and a second second		2 V V V	262 - 26132 - 6633 - 671 - 284	133/17 (Hilling)
Nor	thbound (PM)	)	North	nbound (PM)	N	orthbound (PM)			Northbour	d (PM)		l of Servic	e(LO
No of	Lanes	2	No of La	anes 2	No	of Lanes	2		No of Lanes	2	LOS A		
AA	DT 6	845	AAD	T 8203	Page 1	ADT 15	5796		AADT	12300	LOS B		
AM	Vol 6	612	AM V	ol 729	A	M Vol 1:	357		AM Vol	1007	LOS C		
AM	V/C 0	.31	AM V/	/C 0.26	A	M V/C 0	.48	ALTER OFFICE	AM V/C	0.36	LOS D		
Posted	Speed	50	Posted S	peed 70	Poste	ed Speed	70	SALE REAL	Posted Speed	70	LOS E		
Віта	ZIOS -consulting	<	Z 0	460	920 Meters	Level of 2030		Control Providence (1991)	on 3 ge Start:11000 End :18 btion Start: Oxley Highv		om Grove	Project Number: Date: 11/03/21 Sheet: 5	P4665

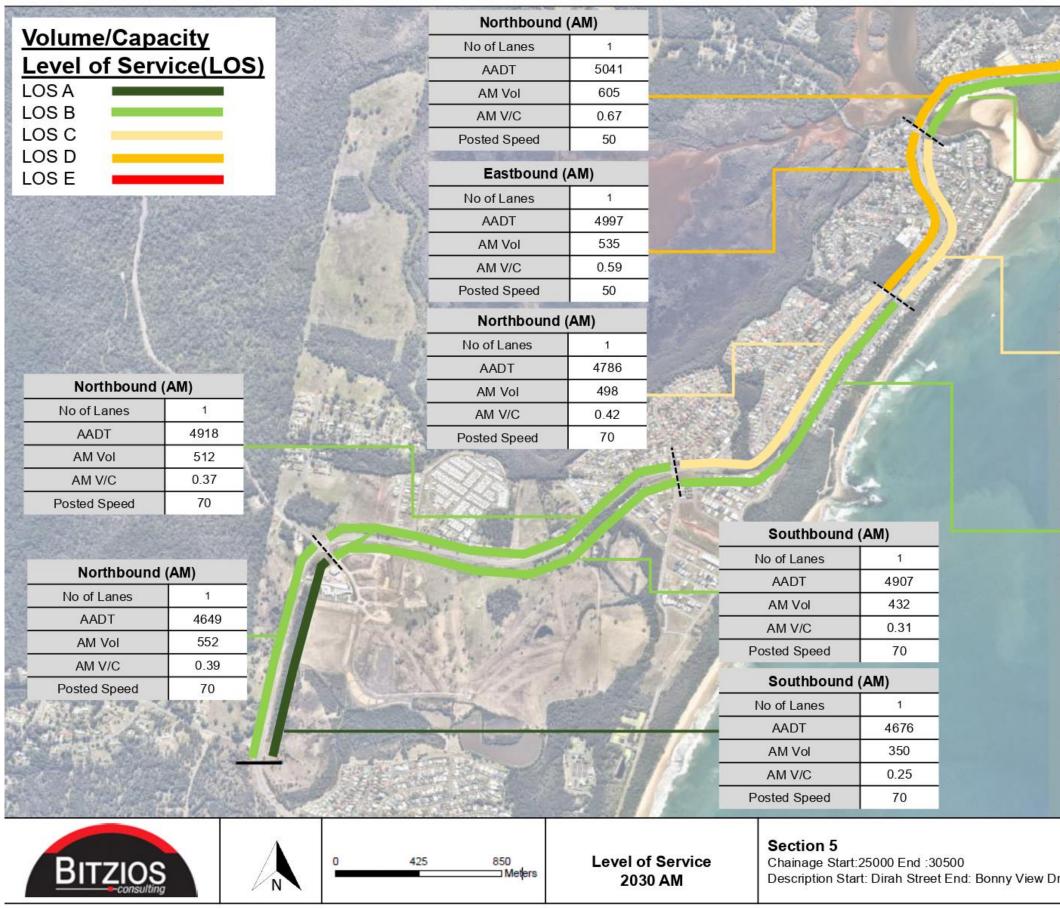
A REAL PROPERTY AND AND A REAL PROPERTY AND A REAL		Southbound	(AM)		Val
	N SA	No of Lanes	1	-	<u>Vol</u> Lev
		AADT	4646		LOS
CHARLES NO AND A		AM Vol	342		LOS
	4	AM V/C	0.24		LOS
		Posted Speed	100		LOS
					LOS
The state of the s					
Northbound (	AM)				
No of Lanes	1				
AADT	4662				1
AM Vol	598				
AM V/C	0.43		110		
Posted Speed	100				
		North	thbound (Al	VI)	
		Nort No of L	thbound (Al anes	<b>VI)</b>	
			anes		
		No of L	anes )T	1	
		No of L AAD AM V	anes )T /ol	1 4635 582	
		No of L AAD AM V AM V	anes DT /ol //C	1 4635 582 0.42	
		No of L AAD AM V	anes DT /ol //C	1 4635 582	



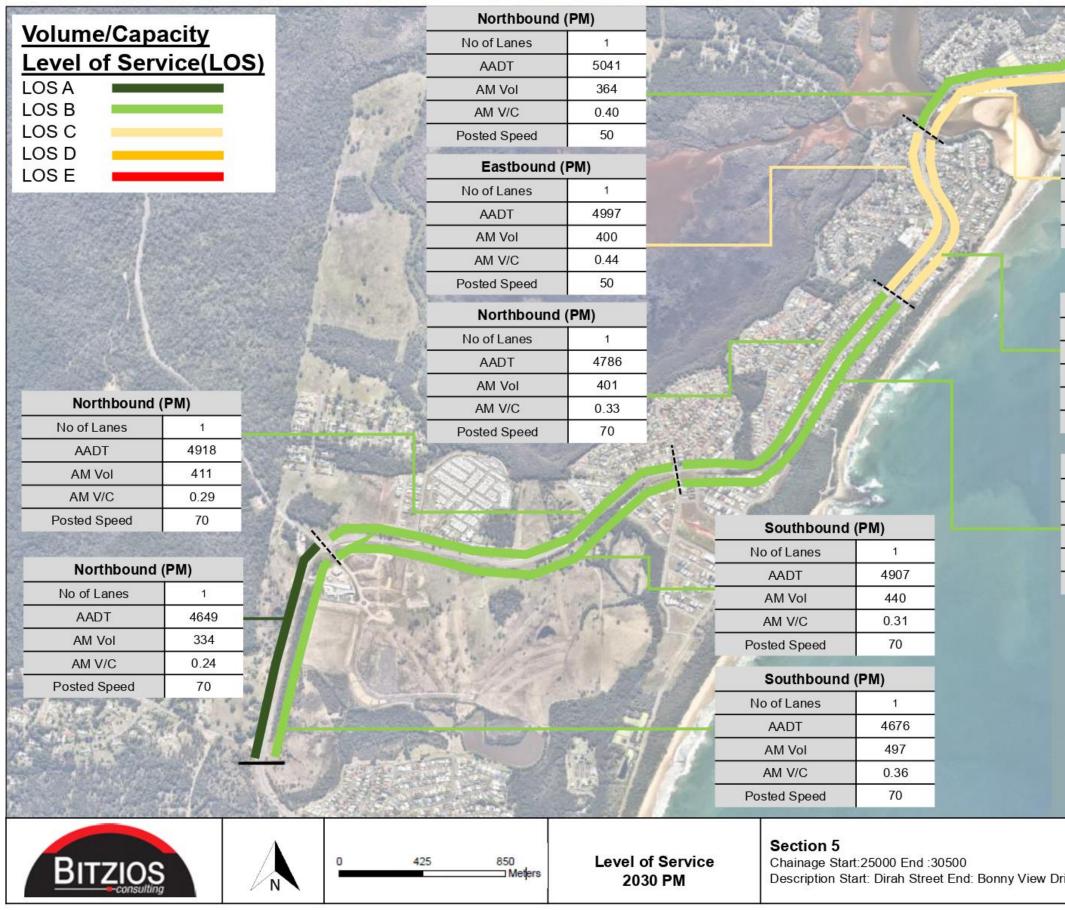
(Part) (Part) (Part)		11	Sou	ithbound (F	PM)		Volur	ne/Cap	acity
Start Grand Start	All All All	121	No of	anes	1				vice(LOS
CORP. OF ALL ST		1 11	AA	от	4646		LOSA	UI SEI	VICE(LOS
East C Grant Market	8 8 V / A		AM	Vol	481		LOS A		
	and the second second		AM	V/C	0.34		LOS C		
	1 19 De 1		Posted	Speed	100		LOS D		
	1 4795 - 1		11/				LOS E		
								1	
	Northbound (I								
	No of Lanes	1		111			S	outhbound	(PM)
	AADT	4662					No c	of Lanes	1
	AM Vol	327			1.		A	ADT	4644
	AM V/C	0.23					A	M Vol	482
	Posted Speed	100					IA	N V/C	0.34
							Poste	ed Speed	50
				No of Lat AADT AM Vo		1 1635 319			
			-	AM V/		0.23			20.2
			-	Posted Sp		50	Real Providence		A States
	AT A	All St.				The fail		2	
BITZIOS	Z 0 8	00 1,600 Meters	Level of Ser 2030 PM		Section 4 Chainage Sta Description S	art:18500 End :24500 itart: Elkhorn Grove End	: Dirah Street	Project Nur Date: 11/03 Sheet: 8	<b>mber:</b> P4665 3/21



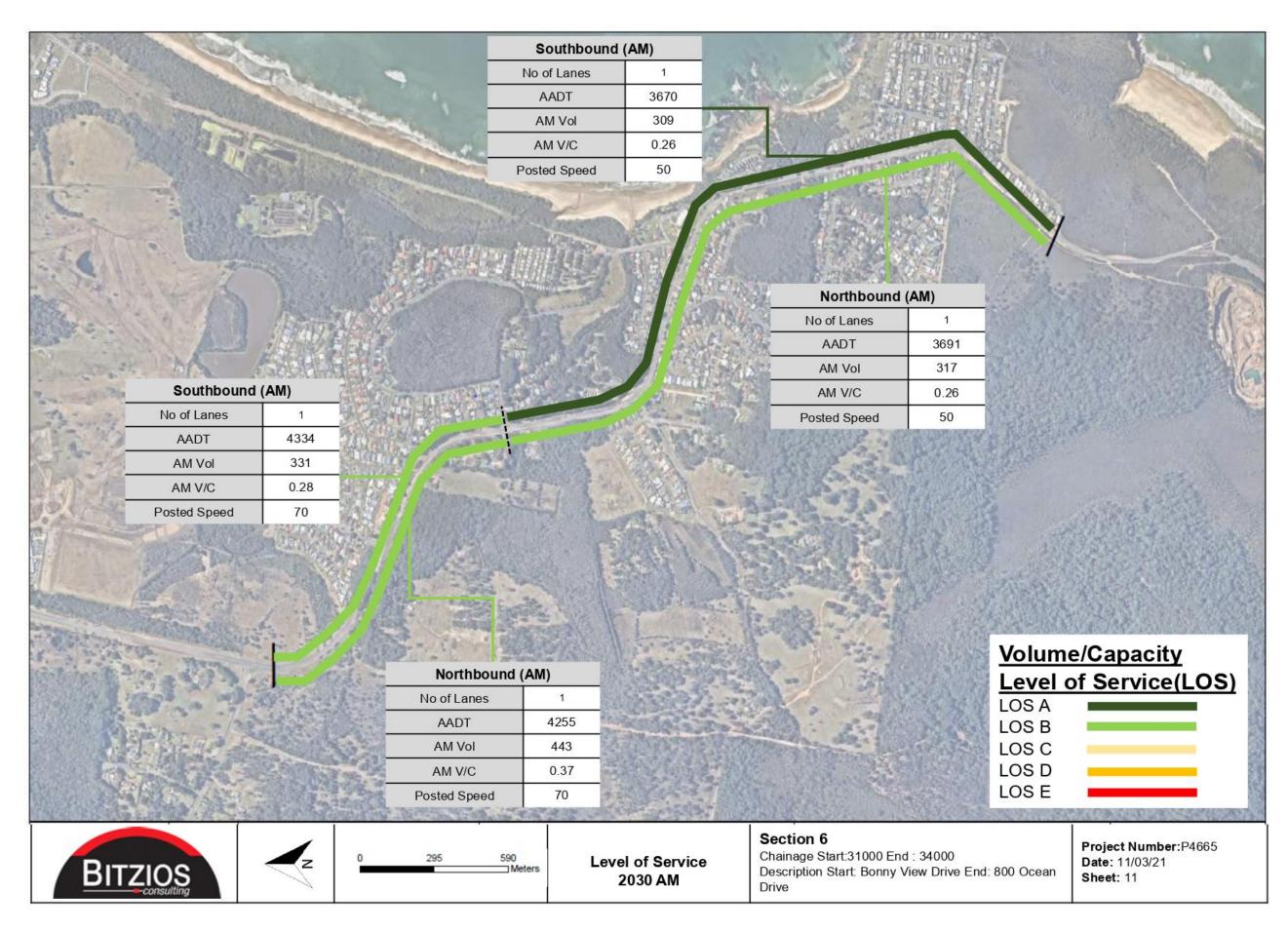


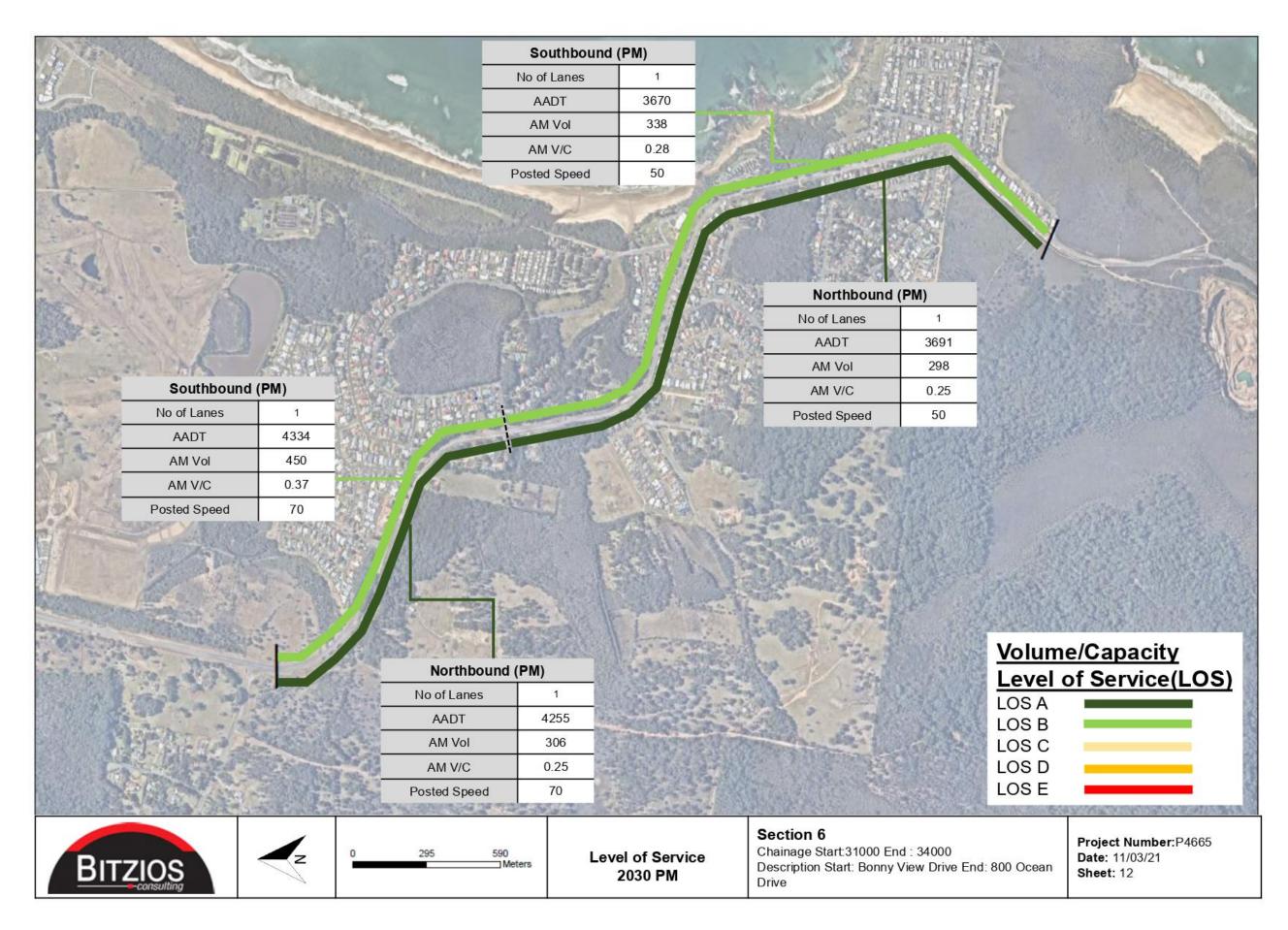


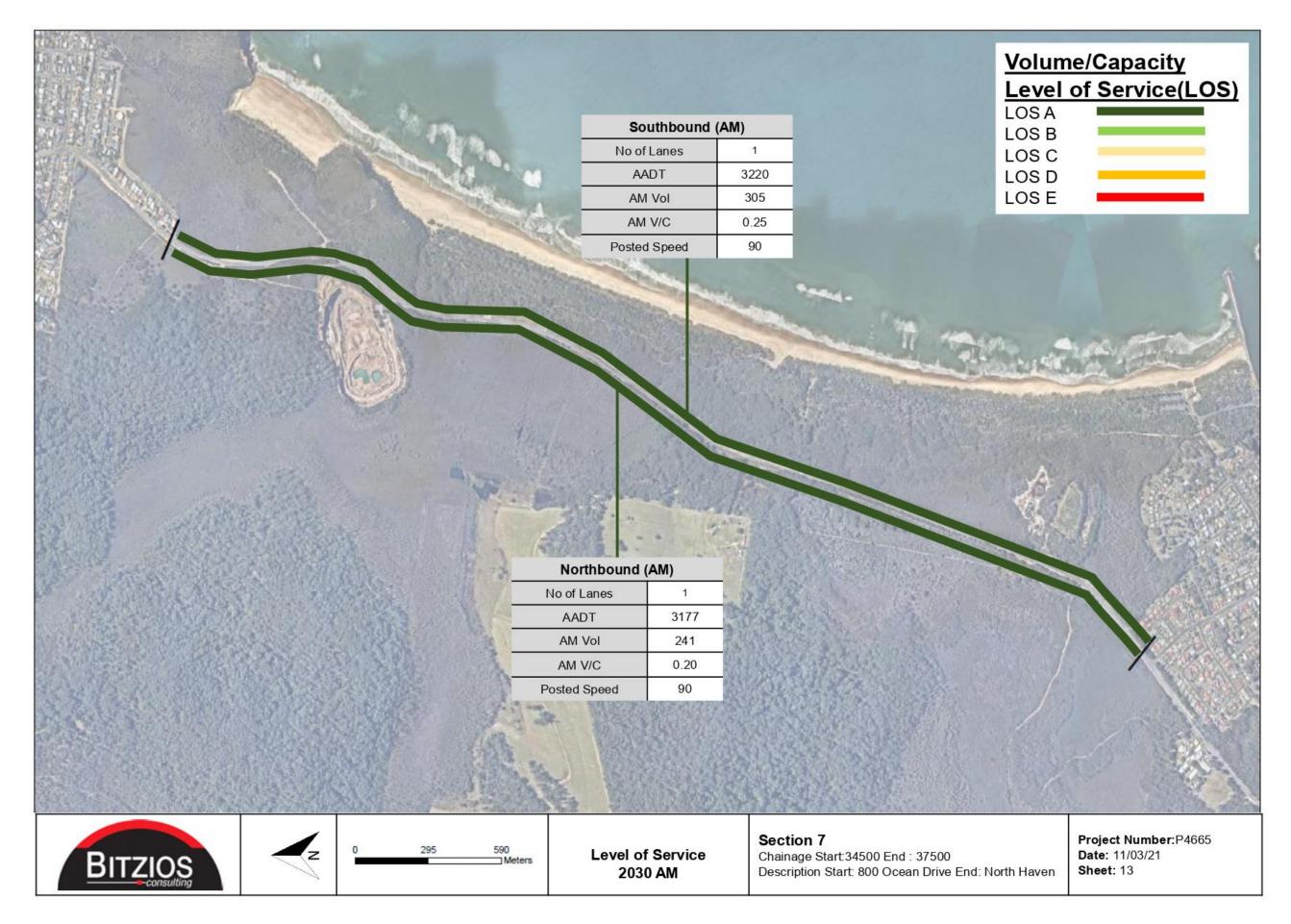
P		
1	12/10	
	Southbound	(AM)
	No of Lanes	1
	AADT	5022
	AM Vol	366
	AM V/C	0.41
F	Posted Speed	50
	Westbound (	(AM)
	No of Lanes	1
	AADT	4896
	AM Vol	372
	AM V/C	0.41
F	Posted Speed	50
	Southbound	(AM)
	No of Lanes	1
	AADT	4762
	AM Vol	361
	AM V/C	0.30
F	Posted Speed	70
	Project Numbe Date: 11/03/21	<b>r</b> :P4665

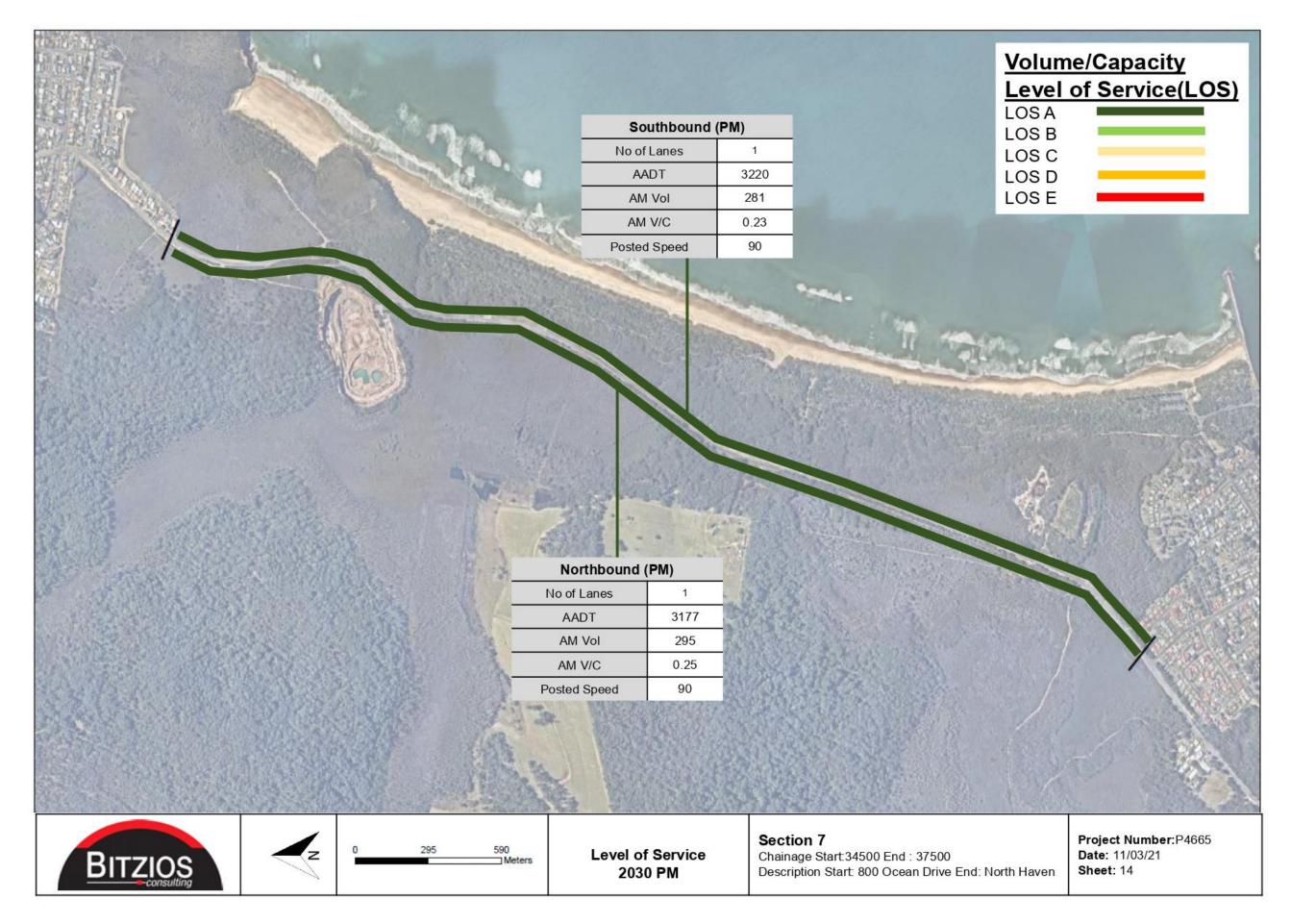


Southbound	(PM)
No of Lanes	1
AADT	5022
AM Vol	510
AM V/C	0.57
Posted Speed	50
Westbound	(PM)
No of Lanes	1
AADT	4896
AM Vol	462
AM V/C	0.51
Posted Speed	50
Southbound	(PM)
No of Lanes	1
AADT	4762
AM Vol	432
AM V/C	0.36
Posted Speed	70



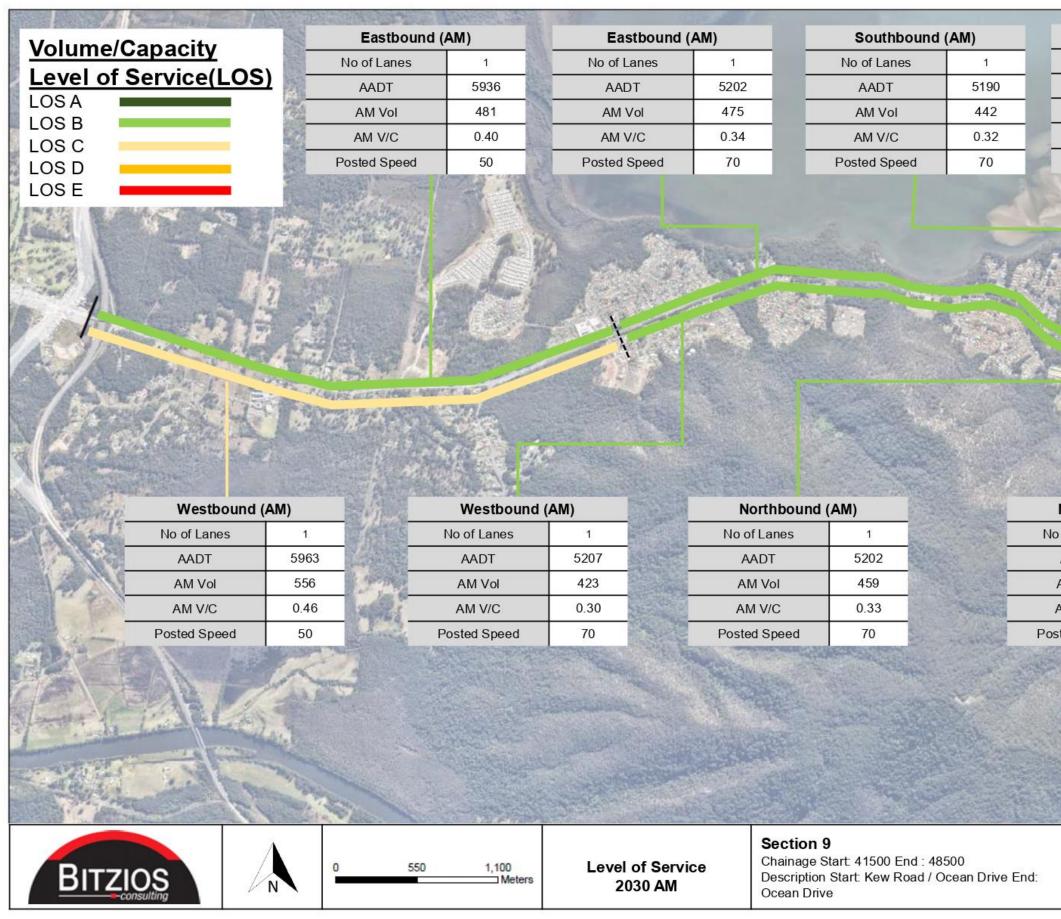




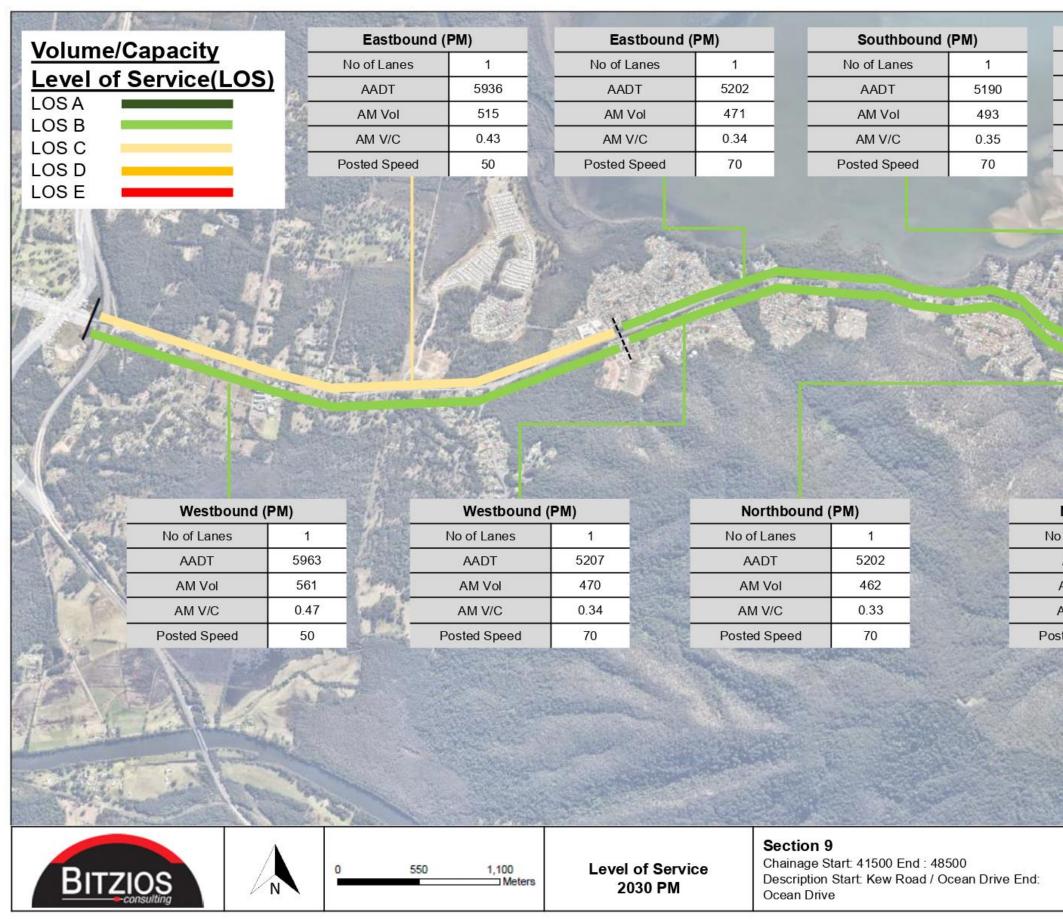


lume/Capa	oity	100		ALC: NO	Northbour	nd (AM)	Fastho	und (AM)	and the second	Northbound	(AM)
And the second second	Varia (1997) and a start weather				No of Lanes	1	No of Lanes		-	No of Lanes	1
<u>el of Serv</u>		- Start	e e		AADT	4539	AADT	4912	and the	AADT	282
B		an a			AM Vol	371	AM Vol	403		AM Vol	246
S C		A AND AND		i - i - i	AM V/C	0.41	AM V/C	0.45	1	AM V/C	0.27
D 📂	-	W TY BIG	wand -		Posted Speed	50	Posted Spee	d 50		Posted Speed	50
SE Eastbound (	(AM)		Eastbou	Ind (AM)					and the second		
No of Lanes	1	and the	No of Lanes	1	ALC ALCONG		State State		Contraction of the		and the second
AADT	2765		AADT	4369	44	and all		Same of	June -		EAG
AM Vol	213	1 Cont	AM Vol	351			and the second second			Southbound	(AM)
AM V/C	0.24	Anna	AM V/C	0.39	Altraid.	a state of the second			State 1	No of Lanes	1
Posted Speed	50	1000	Posted Speed	1 50			Sec. 1			AADT	284
2.2157			Currier of	11/15		学生现 福	1月1日		TELES	AM Vol	254
2.00		and the second	and the second	1 19		上上的情况				AM V/C	0.28
at an in					1 an 10	1.1. A	20 States	Carlos and the second		Posted Speed	50
A. St					The state	and the second	States 1	1		1	3
	22 (2)	The Real			and the second		and the second second	-N BALE	- FR	Westbound	(AM)
	Ner K		L'and	9	Contraction of the local division of the loc		1 1	CAMDEN HAVEN INLE		No of Lanes	1
12 6	1.47 37		12	11201		abe of		A COMPANY	Constant of the	AADT	493
		1 200		And And	-	~				AM Vol	432
Sec. P				TTA			A			AM V/C	0.48
Wes	stbound (AM)			Westbound	(AM)	24	Southbound	(AM)	1237	Posted Speed	50
No of L	anes	1	Tel (	No of Lanes	1	set all	No of Lanes	1		At DE	-
AAD	)T 30	017	10 miles	AADT	4568	and the	AADT	4528		State .	
AM \	/ol 2	91	300	AM Vol	402	and the	AM Vol	403	aller at		
AM V	//C 0.	.32	J.	AM V/C	0.45	Sec. Eng	AM V/C	0.45	and	Carlo I	
Posted	Speed 5	50	and	Posted Speed	50		Posted Speed	50		a mile	and they
Contraction of the Contract of Contraction	And the part of the state of the	WRI (SES)			¥ 200	a second and the first of the	Section 8	The set of the	and the second second	Project Numbe	DAGGE

lumo/Con	noity	1000	5	City and	Northbound	(PM)	Eastbou	nd (PM)	Section and	Northbound	(PM)
olume/Capa	Y2-0 (1920)	120	and the		No of Lanes		No of Lanes		-	No of Lanes	
vel of Serv	/ice(LOS	2	4		AADT	4539	AADT	4912	and the second	AADT	2821
SA		AT LESS	1 1	1 - 33	AM Vol	4000	AM Vol	462		AM Vol	275
SB SC		and the		1-1-1-1-1	AM V/C	0.47	AM V/C	0.51	S	AM V/C	0.31
SD		-	Warmen and		Posted Speed	50	Posted Speed	50	-	Posted Speed	50
SE —	0.0023	ign				- normal		a subside			
Eastbound	(PM)		Eastbou	Ind (PM)					(alla)		
No of Lanes	1	and the second	No of Lanes	1	at a start				and the	a constraint	and the
AADT	2765	1	AADT	4369	3215	Ar In		Same de same de la	and the second second	Par statest	Seaffer 1
AM Vol	254	a star	AM Vol	411						Southbound	(PM)
AM V/C	0.28	The make	AM V/C	0.46	addressed .				State.	No of Lanes	1
Posted Speed	50	100	Posted Speed						15 25	AADT	2841
			1 Usiou opuor				一月之		A ANNER	AM Vol	239
	No.	and the second		- 1 1		1.472		State A.	州镇	AM V/C	0.27
The la				100		The second second		and a second		Posted Speed	50
1. 8			State .		THE SHALL	Statistics .	and the second	12			et a
	The for	The Day	Con 1		Calles Backley			7 8/100		Westbound	(PM)
	1 Class		1	6	Contraction of the local division of the loc		fr 1	CAMDEN HAVEN INLE I		No of Lanes	1
19 0	123	a la la come	P	all Elle	State of the state				-	AADT	4932
		and still	20 7	A CARDON AND	-	and a second	1	in the second	-	AM Vol	409
ALL PR				TAN						AM V/C	0.45
We	stbound (PM)	6753-000.000		Westbound	(PM)		Southbound (I	PM)	2.5	Posted Speed	50
No of L	anes	1		No of Lanes	1	and the second	No of Lanes	1		and the	
AAE	от з	017		AADT	3208		AADT	4528		St. Real	
AM	Vol	276		AM Vol	363	10.54	AM Vol	377	Con at	ALL Y	
AM	V/C (	0.31	1997 - 19	AM V/C	0.26	1000	AM V/C	0.42		Contra la	
Posted		50	1	Posted Speed	80		Posted Speed	50		S. S. Co	
		Δ		590 Meters	Level of		Section 8 Chainage Start: 380	00 E 1 44000		Project Numbe	<b>r</b> :P4665



	1 States of	
Southb	ound (A	AM)
No of Lanes		1
AADT		4883
AM Vol		468
AM V/C		0.33
Posted Speed		60
Northbound (		
of Lanes	1	
AADT	4897	
AM Vol	443	- Sandiel Child
AM V/C	0.32	1. 23
ted Speed	60	and the second
	and and	

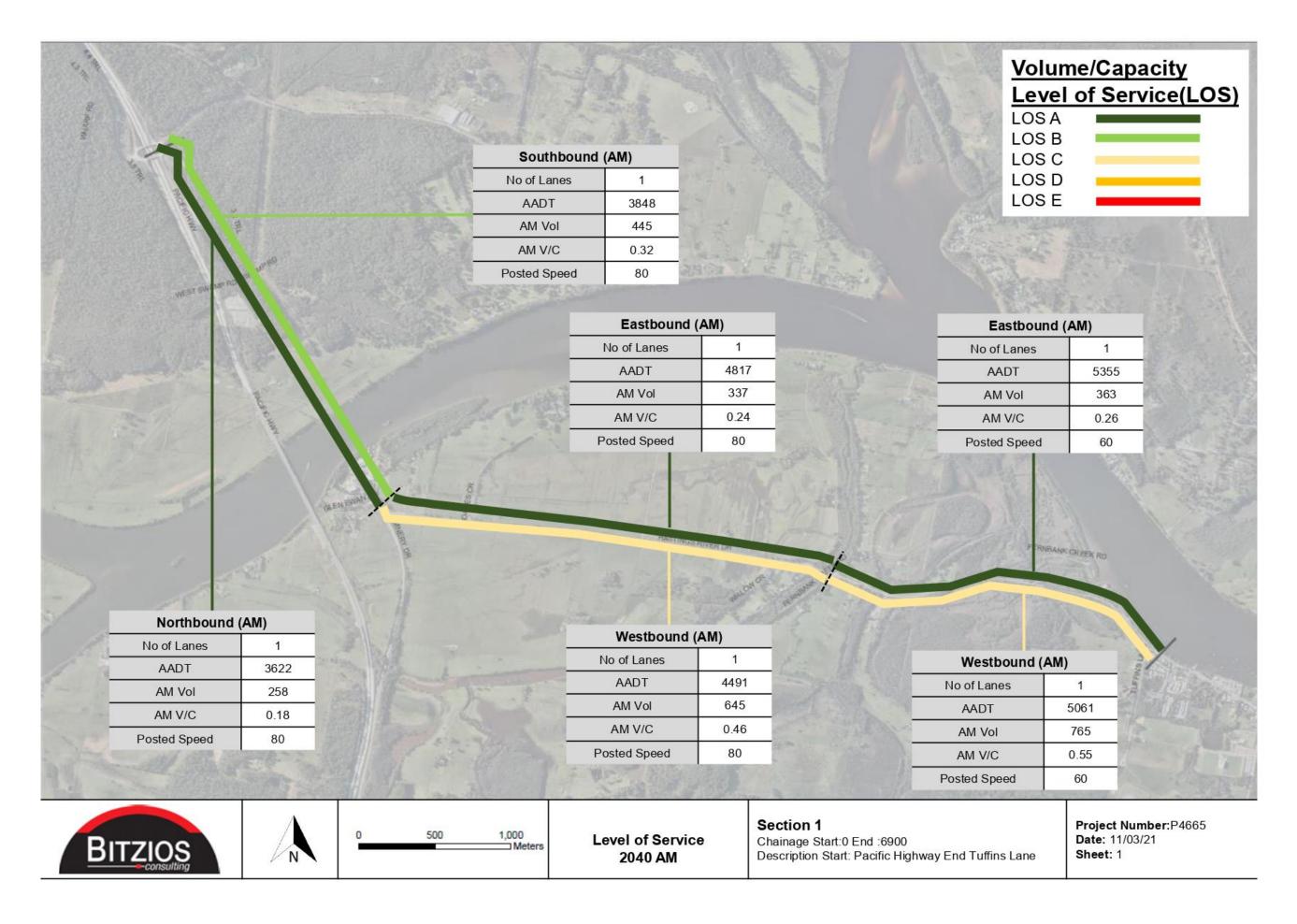


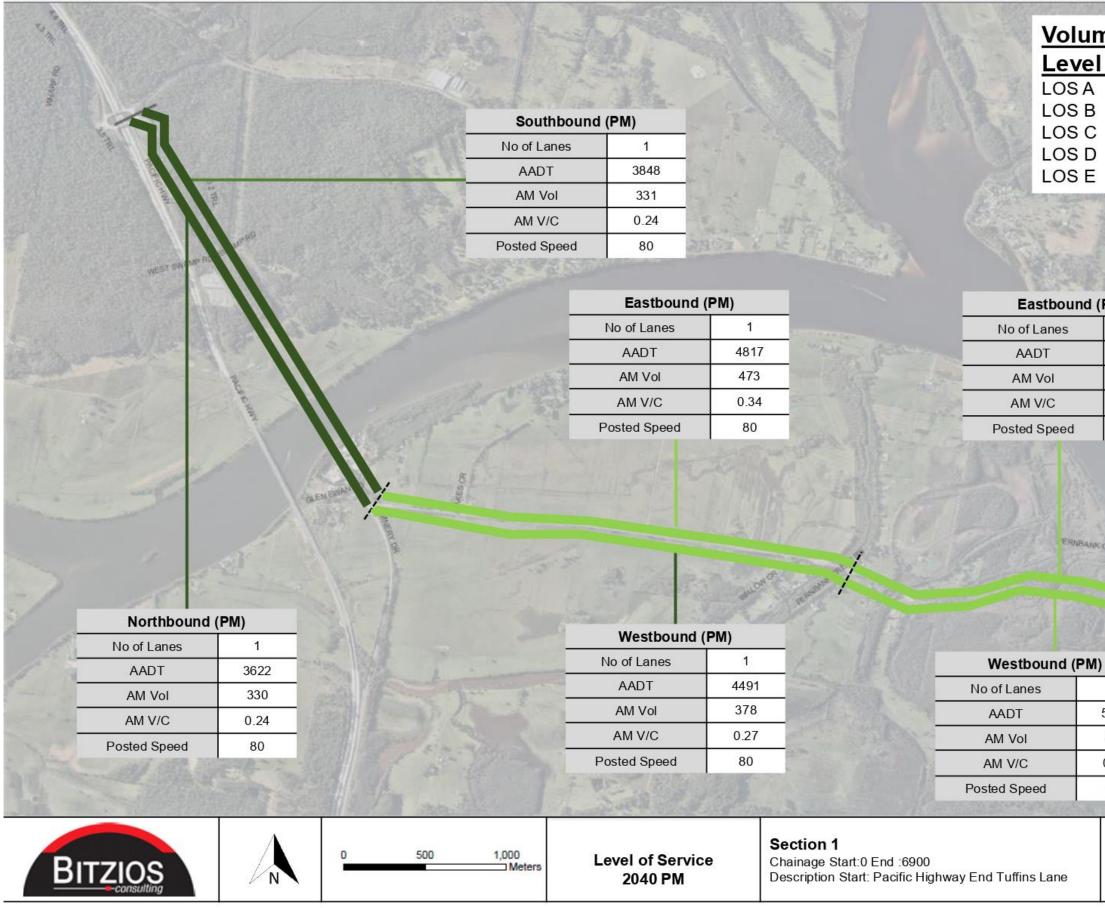
The second second	115	
Southb	ound (Pl	(IV
No of Lanes		1
AADT		4883
AM Vol		484
AM V/C		0.35
Posted Speed		60
Contraction of the second		
and the second		R. A.
	1 Carlos	
The D		
B.M.C.		
Taxan I		
	-	
10 lat	1	
ARC AL	112	100
And And And	1	No 2
The second		154
	The second	/
Northbound (	PM)	
of Lanes	1	1202
AADT	4897	
AM Vol	501	
AM V/C	0.36	and an
ted Speed	60	
Constant Sector	Number of	CALCON ST
	and the second	ether!
	Catal Catal	
A STATISTICS	a the set	
	There	
		the state
		2 State
Destruction	lumber D	ICCE
Date: 11/	l <b>umber:</b> P4 03/21	COO
Sheet: 18		

Eastbound (	AM)	4 pm	Eastbound (	AM)		Northbound	(AM)		1-12 C
No of Lanes	1	and the barn of	No of Lanes	1	-tot	No of Lanes	1	Real Providence	
AADT	2889		AADT	2450		AADT	1483	》一次	
AM Vol	234		AM Vol	184		AM Vol	126		1.1.1.1.1.1
AM V/C	0.26		AM V/C	0.20	1/20	AM V/C	0.09	Southbound (	AM)
Posted Speed	50		Posted Speed	60		Posted Speed	80	No of Lanes	1
the second second	14		1 1 S. 1	East	bound (A	MAX AND		AADT	92
Eastbound (	AM)	The SI		10-		1	14-15	AM Vol	8
No of Lanes	1	and a set of the set		No of Lar			and the second	AM V/C	0.01
AADT	3447	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Callensis to A	AADT		2284		Posted Speed	80
AM Vol	326	A CONTRACTOR OF A CONTRACTOR	Charles St. Carb	AM Vo		272	Participant / Artic	Marries March	TY AGRO
AM V/C	0.36			AM V/0		0.30	Alm & a		
Posted Speed	60		X	Posted Sp	peed	60	1.10	er the	lespe
	R S IS		1 200		810	1 Marine # 11	12.23	Eastbound (A	MASSESO
Westbound (	AM)	線路(日)ふで	S. Same			Complete and	- CELSE CLAS	SN	1
No of Lanes	1		P & K	a	Set	the states		No of Lanes AADT	
AADT	5015		Westbound	(AM)		1			943
AM Vol	438		No of Lanes	1				AM Vol	153
AM V/C	0.49		AADT	2452	100			AM V/C	0.17
Posted Speed	60		AM Vol	294	1			Posted Speed	60
1862 1973 1973 1973 1973 1973 1973 1973 1973	Sauther Barts		AM V/C	0.33	EIR		THE PARTY	10日で、日本語である	
Westbound (			Posted Speed	60	sut his		11/2	Westbound (A	
No of Lanes	1	11 10 1 10 10 10 10 10 10 10 10 10 10 10	Westbound	(AM)		A SUN	1/2 3 - 5	No of Lanes	1
AADT	2904		No of Lanes					AADT	914
AM Vol	331	a set of a set of	AADT	2254				AM Vol	87
AM V/C	0.37		AM Vol	165		4		AM V/C	0.10
Posted Speed	50	Distance A	AM V/C	0.18	ASS	27/2 A.	ALL STREET,	Posted Speed	60
lume/Capa	city	Lat a cate	Posted Speed	60	1356	1 ANT	N. N.	- Calcu opecu	681
vel of Serv		alle alle	Northbound	and the second of the second of the				Southbound (	AM)
SA		1				0 1 1 - 1	and the second	No of Lanes	1
SA SB			No of Lanes	3197		2 Hater in	And the second second	AADT	150
SC		in the second	AADT		·	C. C	State State	AM Vol	16
SD		and the set of the set	AM Vol	334	a subba		100	AM V/C	0.01
SE		and the set	AM V/C Posted Speed	0.24 80			11.82 ; 20	Posted Speed	80
BITZIOS		N 0 337.5	675 Level	of Service 30 AM	Chair	tion 10 nage Start 41500 E	nd : 48500 Drive End: Comboyr	Project Numbe Date: 11/03/21 Sheet: 19	r:P4665

Eastbound (	PM)	1 pro 10 1	Eastbound (I	PM)		Northbound	(PM)	/ Ye	
No of Lanes	1	And Timber	No of Lanes	1	- AND	No of Lanes	1	And And	
AADT	2889		AADT	2450		AADT	1483	JE AL	
AM Vol	289		AM Vol	254		AM Vol	136		14.6
AM V/C	0.32		AM V/C	0.28	14	AM V/C	0.10	Southbound	(PM)
Posted Speed	50		Posted Speed	60	F	Posted Speed	80	No of Lanes	1
and the second second				Eact	bound (Pl		11	AADT	92
Eastbound (	(PM)	The States		No of Lar		1		AM Vol	10
No of Lanes	1	a lote a sub sta		AADT		2284	1 4 4 4 4	AM V/C	0.01
AADT	3447	11086	State State	<u>a</u>		204		Posted Speed	80
AM Vol	335		The states of the states	AM Vo			Participant / Part	Warter March	TY ARD
AM V/C	0.37	A A A		AM V/C		0.23	AL. K.		
Posted Speed	60	and		Posted Sp	beed	60	in the second	er 15	Inner
	1 2 3 4		11 200	And the second s	8101	Maria A 1	12	Eastbound (F	DMI)
Westbound (	(PM)		S. Sugar	Contraction of the second		Countries of the	- 62258 00.00		- <b>I</b>
No of Lanes	1		19 1 R	The second	a sale	100 100 1 h	ABRE BES	No of Lanes AADT	943
AADT	5015		Westbound	(PM)	2 7	a		AADT AM Vol	109
AM Vol	523		No of Lanes	1				82-	
AM V/C	0.58		AADT	2452			ST I TELESTING	AM V/C	0.12
Posted Speed	60		AM Vol	211				Posted Speed	60
THE REAL PROPERTY OF THE PARTY OF	Same Barto		AM V/C	0.23	EIR	17.	The !!		
Westbound	<u> </u>		Posted Speed	60	110		11/20	Westbound (	DM)
No of Lanes	1	the shall be and the state	Westbound	(PM)		ARC D	14 30 3	No of Lanes	1
AADT	2904 264	、その人間 一個学生	No of Lanes	1		and the second	A BARAN	AADT	914
AM Vol	0.29		AADT	2254				AM Vol	89
AM V/C Posted Speed	50		AM Vol	232			A THERE	AM V/C	0.10
r osteu opeeu	J 30	Stand A	AM V/C	0.26	A	27 1 2 3	A States	Posted Speed	60
olume/Capa	acitv		Posted Speed	60	Sec.	11-5/	· ·	CONTRACTOR OF THE OWNER	E.C.
evel of Serv			Northbound	and the second second				Southbound (	PM)
SA		-	No of Lanes	1		With and		No of Lanes	1
S B			AADT	3197		Re		AADT	150
SC		man and and a some	AM Vol	306	(	113134		AM Vol	17
S D		and a start of the second	AM V/C	0.22	a sector			AM V/C	0.01
SE			Posted Speed	80		Miles.	all set is all	Posted Speed	80
BITZIOS		N 0 337.5	Meters	of Service 30 PM	Chain	<b>ion 10</b> age Start: 41500 E iption Start: Ocear	ind : 48500 Drive End: Comboy	Project Numbe Date: 11/03/21 Sheet: 20	er:P4665

	l i	Ť	°		5 Trained	1	12	1	3 14	15	10	1	18	1	9 20	21	4		.3 _24	
omidor	No. La	esin Eson	Terrain (I Rolling Viourtain	us) (Low, Viedium	Peak Period	Contidor Capacity (	Weekday Daily Trafilo Volume	7day Daily	Weekday A.W. Peak Hr	Weekday PVI Peak Hr	All Peak Average Speed	PM Peak Average Speed	A VILL 14. Volume/Capacity (V/C)	PM Unik VolumeCapacity	All Peak Ave Speed /	Phi Peak Ave Speed /	A Millink Speed Level of			PMLInkV/C
eoton Link_ID Stie Location 1 AB02 Hastings River Dr Bouth of Blackmans Pointinterchange	Direction Dir	edion i	Posied Speed	High) Low	1400	Direction) went/m		Tratilo - 3383	Volume (ven/m)	Volume(ven/m)	(km'n) 751	(km/m) 749	Ratio Q 18	(V/C) Ratio 0.24	Posled Speed	Posted Speed	Service (LoS)	Sentoe (LoS)	Service (LoS)	Senice(Loi
1 AB02 Hastings River Dr Bouth of Blackmans Pointinterchange	38	1	80 Leve	Low	1400	1400	3622	- 3689	- 445	- 331	733	748	0.32	0.24	0.92	0.94	Â	Â	i i	
1 AB03 Hastings River Dr E of Winery Dr 1 AB03 Hastings River Dr E of Winery Dr	EB	1	80 Leve		1400	1400	- 3848 - 48.17	398.9	445	473	765	768	0.32	0.24	0.96	0.96	A	A	B	
1 AB03 Hastings River Dr. E of Winery Dr. 1 AB04 Hastings River Dr. W. of Tuffins Lin	WB EB	1	80 Leve	Low	1400	1400	4491	4460	- 557 - 645	4/3	603	77.2	0.24	0.34	1.01	101	р. 	A	R C	_
1 AB04 Hastings River Dr W of Tuffins Ln	WB	1	60 Leve	Low	1400	1400	<b></b> 5365	4964	- 363		57.4	57.5	0.26	0.39	0.96	0.96	A	A	A	
2 ABOS Hastings River Drive, blwn Tuffins in & Boundary St	HB	1	60 Leve	Medium	1200	1200	5061	- 4634	765	426	\$1	52	064	0.36	0.86	087	A	A	D	
2 ASIOS Hastings River Drive, blwn Tuffins in & Boundary St 2 ASIOS Hastings River Drive, blwn Boundary St & Hibbard Rd W	88	2	60 Leve	Medium Medium	1200	2000	6893	5490 5125	408	454	461	524	0.34	0.49	0.80	080	A	A	8	
Algos Hastings River Drive, them Boundary & S. Hibbard Rd W     Algos Hastings River Drive, them Wumford St.S. Heaport Island Rd	38	2	60 Leve	Medium	1000	2000	7840	7268	610			491	0.30	0.39	0.84	082	Â	A	8	
2 AB07 Hastings River Drive, blwn Wumford Bt & Hewport Island Rd	EB	2	60 Leve	Medium	1000	2000	7564	6955	934	658	50	423	047	0.33	0.83	082	A	A	0	
ASOT Hastings River Drive, Dawn Wumford St.S. Hexport Island Rd     ASOS Hastings River Drive, Dawn Clifton Dr.S. Bellbowrie St	E8	2	60 Leve	Medium Medium	1000	2000	11898	10923	1052	1061	512	518	053	0.53	0.85	082	A	A	C C	_
2 AS08 Hastings River Drive, then Clifton Dr & Bellownie St	WB	2	60 Leve	Medium	1000	2000	13333	12336	1315	1147	47.4	47.3	066	0.67	0.79	079	è	B	Ď	
2 AB09 Hastings River Dr blwm Aston St and Findlay Ave	E8	2	50 Leve	Low	1000	2000	11366	10527	937	1019	499		047	0.61	1.00	100	A	A	C	
2 A 809 Hastings River Dr blivin Aston St and Rindlay Ave	WB HB	2	50 Leve	Low	1000	2000	10577	9643	958	958	50	511	048	0.48	1.00	102	A	A	0	
2 AS 10 Hastings River Dr blwn Gordon Sk and Bridge St 2 AS 10 Hastings River Dr blwn Gordon Sk and Bridge St	38	2	50 Leve	Low	1000	2000	10585	9150	892	874	307	299	045	0.50	0.63	060	0	0	0	-
3 AB 13 Ocean Dr blwn Gordon St and Adkroyd St	HB	2	50 Leve	Medium	1020	2000	9809	9183	755	821	40.1	426	0.38	0.41	0.80	081	Å	Å	8	
3 AB 13 Ocean Dr blwn Gordon St and Adkroyd St	88	2	50 Leve	Hedium	1000	2000	7413	6770	772	662	47.1	483	0.39	0.33	0.94	0.97	A	A	8	
3 A3 14 Ocean Dr blwn Hindman St and Lake Rd 3 A3 14 Ocean Dr blwn Hindman St and Lake Rd	H8 90	2	70 Leve 70 Leve	Low	1400	2800	3405	7636	670	802	628	647	045	0.23	0.07	0.90	A	A	A	
3 A8 15 Ocean Dribtwn Lake Rd and Kosla St	НВ	2	70 Leve		1400	2800	9249	8312	682	983	50	616	0.24	0.36	0.71	088	e e	Â	Å	
3 A816 Ocean Drittwn Lake Rol and Kosla St	88	2	70 Leve	Low	1400	2800	17089	15485	2244	1437	597	588	0.80	0.51	0.86	084	A	A	D	
3 A816 Ocean Dr. bbwn. Koala Stand Lochinvar Pl 3 A816 Ocean Dr. bbwn. Koala Stand Lochinvar Pl	H8 98	2	70 Leve 70 Leve	Low	1400	2800	16477	14362	1188	1628	57.6	635	042	0.58	0.82	0.91	A	A	0	_
3 AS 17 Ocean Dr blwn Greenmesdows Dr and Maranatha Pl	HB	2	70 Leve	Low	1400	2800	14307	12187	1124	1367	67.6	624	040	0.49	0.97	0.99	Å	Â	8	
3 AS 17 Ocean Dr blwn Greenmeadows Dr and Maranatha Pl	88	2	70 Leve	Low	1400	2800	11992	10951	1662	856	67.6	651	0.59	0.31	0.97	0.93	Ä	Ä	Ū.	
3 AS 18 Ocean Dr blwn Crestwood Dr and Padific Dr	HB	2	70 Leve	Low	1400	2800	11964	10827	867	124.2	487	603	031	0.44	0.70	086	B	A	8	_
3 AS 18 Ocean Dr blwn Crestwood Dr and Padific Dr 3 AS 19 Ocean Dr blwn Padific Dr & Walthew Rinders Dr	38	2	70 Leve 70 Leve	Low	1400	2800	10441	9642	750	748	534	632	0.27	0.27	0.05	0.90	A	A	C R	
3 AS 19 Ocean Dritten Padric Dr & Mathew Rinders Dr	88	2	70 Leve	Low	1400	2800	9072		989	633	635	649	0.35	0.23	0.91	0.93	À	Â	8	
3 AS20 Ocean Drive, then HE of Units Cres	HB	1	70 Leve	Low	1400	1400	8868	8311	662	892	634	64.2	047	0.64	0.91	0.92	A	A	C	
3 A320 Ocean Drive, blwn HE of Links Cres 4 A321 Ocean Dr blwn 3 of Posteres Development	WB HB	1	70 Leve 100 Leve	Low	1400	1400	6268	4866	700	547	704	70.9	0.50	0.26	0.95	036	<u>ρ</u>	A	0	
4 AS21 Ocean Dr blwn S of Posteres Development	88	1	100 Leve	Low	1400	1400	- 5190	- 4822	679	358	866	888	049	0.26	0.87	0.89	à	Â	C	
4 A822 Ocean Dr H of Dirah St	HB	1	50 Leve	Low	1400	1400	<b></b> \$173	- 4779	- 388		656	67.5	0.28	0.26	1.31	135	A	A	8	
4 A322 Ocean Dr. H of Dirah St 5 A323 Ocean Dr. blwn: Bians Stand Tallong Dr	88	1	50 Leve 50 Leve	Low	1400	1400	5160	4799	661	350	588	584	047	0.25	1.18	117	A	A	0	
5 A823 Ocean Dr blwn Bvans Stand Tallong Dr	38	1	50 Leve	Low	900	900	5612	5.349	687	400	467	462	076	0.53	0.93	092	<u>р</u> А	A	D	
5 AS24 Ocean Dr. Hum Shorning Centre and Bona Cres.	HB	1	50 Leve	Medium	900	900	5591	5 194	415	560	481	485	046	0.62	0.96	0.97	A	A	C	
A 324 Ocean Dr. blan. Biogping. Centre and Rona Cres     A 325 Ocean Dr. blan. Mala 31 & Medical Centre	88	1	50 Leve 70 Leve	Low	900	900	5564	5306	607	438	504	505	067	0.49	1.01	101	A	A	0	
5 A82 Ocean brown Waasts Welca Centre 5 A82 Ocean brown Waasts Welca Centre	38	1	70 Leve			1200	6329	4868	422	440	55	546	0.95	0.42	0.79	0.80	8	B	C	-
6 A826 Ocean Drive, blun Ocean Club Access & Houston Mitchel Dr	68	1	70 Leve	Low	1200	1400		-4992	410	474	652	67.3	0.29	0.34	0.93	0.96	Ā	A	8	
5 A826 Ocean Drive, blan Ocean Club Access & Houston Mitchel Dr	WB HB	1	70 Leve	Low	1400	1400	5476	5200	581	451	636	64.1	042	0.32	0.91	0.92	A	A	0	
AB27 Ocean Dr blwn Lake Cathle School Access and Bonny View D     AB27 Ocean Dr blwn Lake Cathle School Access and Bonny View D	98	+ +	70 Leve 70 Leve	Low	1400	1400	5463	4903	4¥1 6.27	482	528	57.2	0.95	0.34	0.85	101	<u> </u>	A	8	_
6 A8.23 Ocean Drittwin Seawind Chase and Beach St	HB	1	70 Leve	Low	1200	1200	- 5206	-4940	397			626	0.33	0.46	0.84	087	Â	Â	8	
6 AS23 Ocean Dr blwn Seawind Chase and Beach St	88	1	70 Leve	Low	1200	1200	4738	- 4549	- 503	336	614	623	042	0.28	0.88	089	A	A	C	
AS22 Ocean Dr blwn Graham St and Jordan Ave     AS22 Ocean Dr blwn Graham St and Jordan Ave	HB	1	50 Rolin	2 Low 2 Low	1200	1200	4826	4604	376	493	954	961	0.31	0.41	1.11	112	A	A	8	_
7 A830 Ocean Dr Hor Edith 8t	88	1	50 Rolin 90 Leve	Low	1200	1200	3783	- 3621	- 296	321	67.7	701	0.25	0.31	0.75	078	8	B	A	
7 AS30 Ocean Dr H of Edith St	88	1	90 Leve	Low	1200	1200	- 3410	- 3,218	- 252	323	621	644	0.21	0.27	0.69	072	B	B	A	
8 AB31 Ocean Dr Dwn Aima St and The Parade	HB	1	60 Leve		900	900	- 3466 2968	- 3.268	319	307	429	428	0.35	0.34	0.86	086	A .	A.	в	
8 AS 31 Ocean Dr blwn Alma St and The Parade 8 AS 32 Ocean Dr blwn Richer St and Vine St	88	1	50 Leve 50 Leve	Hedium High	900	900	2968	- 2830	223	277	*1	429	0.25	0.31	0.82	082	B	B	B	
8 AS 12 Ocean Dr. blwn. Roneer St. and Vine St.	WB	1	50 Leve	High	900	900	4689	4965	- 367	449	36	385	041	0.60	0.72	077	B	B	В	
8 AB 33 Ocean Dr Dwn Adeline St and Short St	HB	1	50 Leve	High	900	900	4903	4751	421	424	418	418	047	0.47	0.84	084	A	A	0	
8 AS 33 Ocean Dr. blwn. Adeline St. and Short St. 8 AS 34 Ocean Drive, blwn. Haven Circuit & Stingray Creek Bridge	38	1	50 Leve 50 Leve	High High	900	900	4872	4687	422	461	44.3	453	043	0.61	0.89	108	A	A	C	
8 AS 34 Ocean Drive, blwn Haven Circuit & Stingray Creek Bridge	WB	1	50 Leve	High	900	900	5272		422	505	501	\$17	047	0.56	1.00	103	à	A	C	
8 AB36 Ocean Dr blwn Kew Rd and Bdd Bt	E8	1	50 Leve	High	900	900	6688	5361	485	467	484	496	054	0.52	0.97	0.99		A	ç	
8 AS35 Ocean Dr blwn Kew Rd and Bdd St 9 AS35 Ocean Dr blwn Kew Rd and Rinders Dr	WB HB	1	50 Leve 50 Leve	High	900	900	3107	- 2938	267	307	467	47.8	0.30	0.34	0.93	0.96	A	A	8	
9 All a Ocean Dr blwn Kew Rd and Rinders Dr	38	1	50 Leve	Medium	1200	1200	6638	6 126	520	575	425	467	043	0.48	0.86	0.93	Â	Â	ê î	
A 8 37 Ocean Dr blwn Waterview Cres and Captain Cook Bicentennial Drive	HB	1	70 Leve	Low	1400	1400	6567	6136	602	625	518	527	043	0.45	0.74	075	B	В	0	
A 3 37 Ocean Dr blwn Waterview Cres and Captain Cook Bicentennial Drive A 3 33 Ocean Dr blwn Birlus Dr and Fairwinds Ave	28	1	70 Leve 70 Leve	Low	1400	1400	5729	5331 5331	<u> </u>	526 525	548	558 648	0.37	0.38	0.78	080	B	B	8	
AS 33 Ocean Dr blwn Sirlus Dr and Fairwinds Ave	WB	1	70 Leve	Low	1400	1400		5331	458	550	633	638	0.34	0.39	0.90	0.91	Â	A	8	
9 A839 Ocean Dribben Padific Hwy and Olen Haven Dr	E8	1	60 Leve	Low	1400	1400	5729		497	516	623	638	0.35	0.37	1.04	106	A	A	в	
AG 39 Ocean Dr blwn Padific Hwy and Glen H aven Dr     AG 40 Ocean Dribe, at Bacific Hwy Overbridge W	WB	1	60 Leve 60 Leve	Low	1400	1400	6378	4981	<u> </u>	540	629	65 535	0.36	0.39	1.05	108	A	A	8	
AS40 Ocean Drive, at Pacific Hwy Overbridge W     AS40 Ocean Drive, at Pacific Hwy Overbridge W	WB	1	60 Leve	Medium	900	900	5394		4/9	559	527	535	039	0.62	0.86	086	à	A	B	
6 AS41 Hancy Bird Walton Dr blwn Herons Creek Rd and Ocean Dr	HB	1	80 Leve	Low	1400	1400	<b>55.24</b>	- 3606 - 5013	- 474	584	70	712	0.34	0.42	0.88	089	À	Ä	В	
6 A841 Hancy Brd Walton Dribben Herons Creek Rd and Ocean Dr	38	1	30 Leve		1400	1400	3621	- 3150	361	341	527	923	0.26	0.24	0.66	066	0	C	A	
A842 Hancy Bird Walton Dribtwn Bethesda Pland Ocean Dr     A842 Hancy Bird Walton Dribtwn Bethesda Pland Ocean Dr	H8 98	1	80 Leve 80 Leve	Low	1400	1400	165 1634	* 166 = 1611	18	19	67.1	67.8	0.10	0.01	0.84	0.85	A	A	A	
10 AB43 Kendal Rolbown Homedale Rol and Hancy Bird Walton Dr	EB	1	50 Leve	Low	900	900	102	99	8	11	451	527	001	0.01	0.90	105	A	Â	Â	
10 A843 Kendal Rolbown Homedale Rol and Hancy Bird Walton Dr	WB	1	50 Leve	Low	900	900	- 3182	- 2920	254	322	489	486	0.28	0.36	0.98	0.97	A	A	8	
10 AS44 Kendal Rd blwn Dunwcodle St and Homedale Rd	EB	1	60 Leve 60 Leve	Low	900	900	3198	- 2928	369	294	597	628	040	0.33	1.00	105	A	A	8	
10 AS44 Kendali Rolbkwn Dunwoodle Stand Homedale Rol 10 AS46 River Stobwn Rallway Line and Rallway St	W 8 E8	+ +	60 Leve	Low	900	900	- 2698 - 2701	- 2476	199	283	407	616 396	022	0.31	0.68	103	A B	A C	A	
10 A 846 River Stotion Rallway Line and Rallway St	WB	1	60 Leve		900	900	2616	- 2399	- 294	- 228	37.3	399	033	0.25	0.62	Q67	ċ	č	8	
10 A 846 Oraham Stoteen Raymond Stand Comboyne St	EB	1	60 Leve	Low	905	900	- 2483	- 2280	- 178	259	512	50.9	0.20	0.29	0.85	0.85		4		



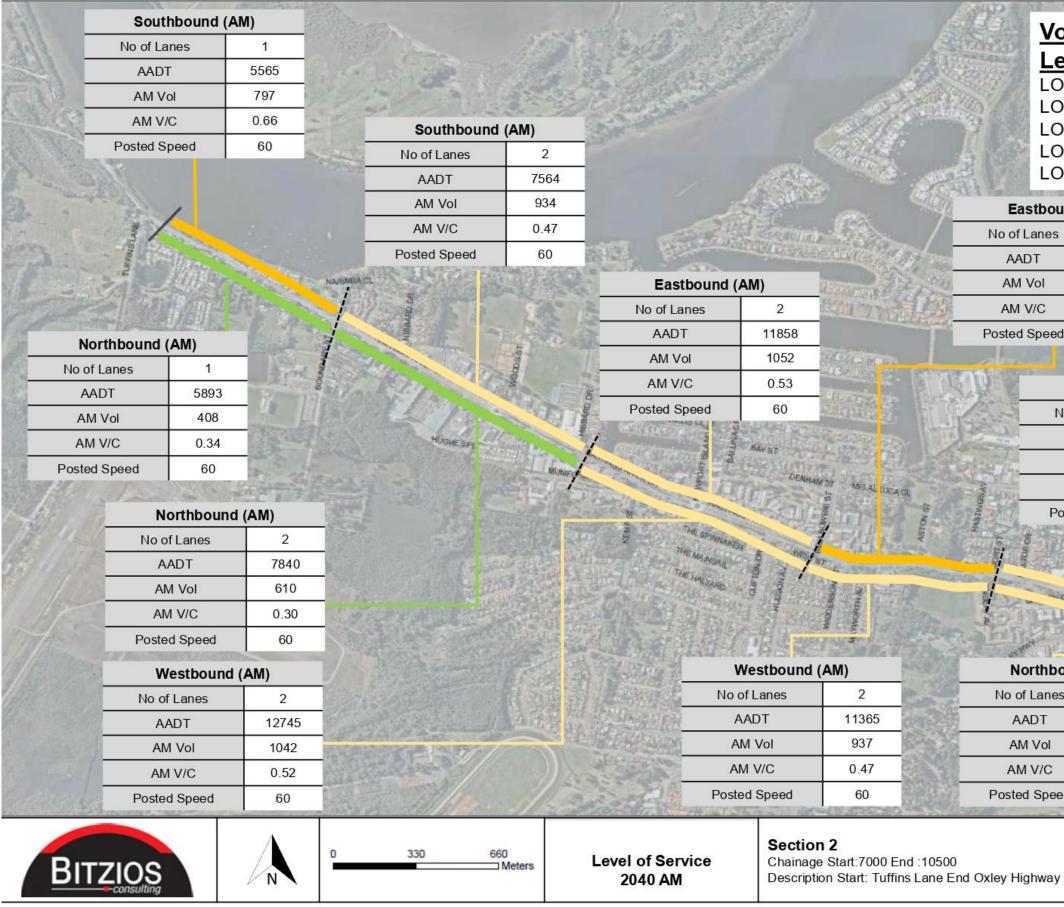


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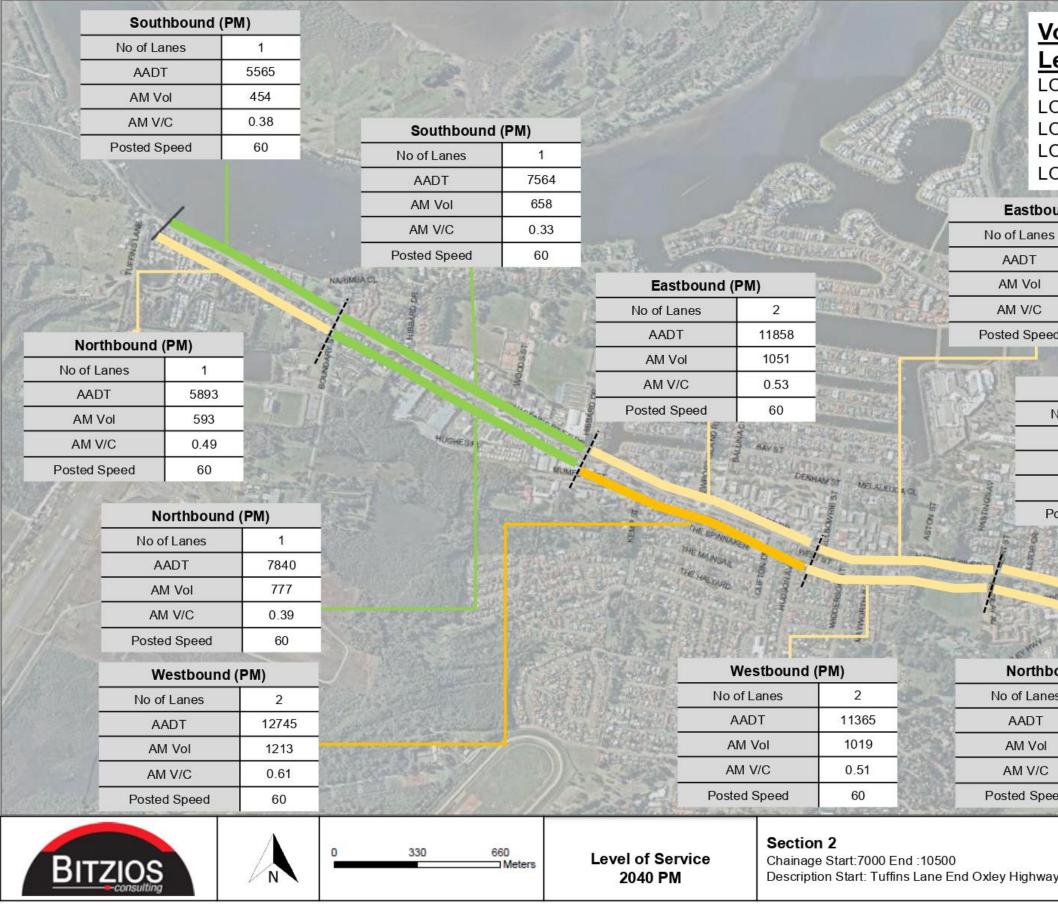
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**ORDINARY COUNCIL** 



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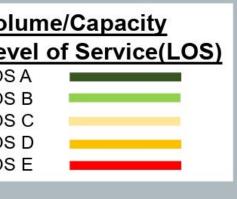
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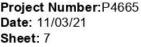
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Value and	Southbound	(PM)	States and	Southbound	I (PM) 🛛 🏅	200	South	nbound (F	M) 🔛	Southbound	(PM)
	No of Lanes	2		No of Lanes	2	-	No of La	ines	2	No of Lanes	2
	AADT	8405	a steering at	AADT	16477	S Allertan	AAD	Г	10413	AADT	8868
ANTIG LA	AM Vol	802		AM Vol	1628	Shall and	AM V	ol	1063	AM Vol	892
FIELD D	AM V/C	0.40	SECO	AM V/C	0.58		AM V/	C	0.38	AM V/C	0.32
P	Posted Speed	50	12000年1	Posted Speed	70	al show	Posted S	peed	70	Posted Speed	70
									PADEICOR		
Southbound	I (PM)	ARE ST	Southbound	1	132 5	Sout	thbound (	PM)		100 S S	SET ANY
No of Lanes	2	杨志可	No of Lanes	2		No of L	anes.	2		Northboun	d (PM)
AADT	9954	指展1_	AADT	9268		AAE	от	11964		1940	2
AM Vol	821	新藏作	AM Vol	1027		AM	Vol	1242	S AL OR	AADT	9072
AM V/C	0.41	Antona II	AM V/C	0.37	Catal State	AM ۱	//C	0.44		AADT	633
Posted Speed	50	Search 1	Posted Speed	70		Posted	Speed	70		7.00 001	
	the liter	States of	A Distanting and	S CONTRACTOR		8	(Sec.	23 120/2		AM V/C	0.23
DA AR SA	800 S 1. S	1 2 3	A MARINE A	and the second second	Sout	hbound (P	M)	nd ale	Contraction of the second	Posted Speed	1 70
計四目		2 2 1 2 1	AT DESIGN	ALT CAL	No of La	· ·	2	20 100	A DECEMBER	Northboun	
	Total States		THOMAS I	Contraction of the	AAD		14307			No of Lanes	2
	and share	82113	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		AM V		1367	In. 10	N E BALS	AADT	10441
	California California	Enterla		CARLES .	AM V		0.49			AM Vol	748
		284			Posted S		70	100 100	+ 24	AM V/C	0.27
RLA		1 1 - 1-		And al 10	Gather (22)	Pla ( 168.87	and there	MAIN		Posted Speed	70
		1	A B	(income	and the second s			100	and h		
			認知アイト	15	NOVO)mers	lia.	-1-	100 martin - 25 2		Northboun	d (PM)
North	bound (PM)		No.	NILDINA NA			and the second		EBRS	No of Lanes	2
No of Lan	nes 2			e ma Stander	E	清景王	S. S. M. E.			AADT	11990
AADT	1056	5		S ALE	S S Re	法部公司	RO		Continue Continue	AM Vol	856
AM Vol	I 824					原始建作	and the second s	100 March 100	HERE'S A CONTRACT	AM V/C	0.31
AM V/C	0.41	())	A COL		318310	North Street	The second second	DOH (	And Personal Property lies	Posted Speed	70
Posted Sp					Set 1	CIA2	E	al inc	AND A	Contraction and	AND THE REAL
North	bound (PM)		Northb	ound (PM)	N	orthbound	(PM)	Ser.		Northboun	d (PM)
No of Lar			No of Lan			of Lanes	2	44		No of Lanes	2
AADT		3	AADT	8884		AADT	17089	Jage B		AADT	13307
AM Vo		11111 B	AM Vol				1437	A STATE		AADT AM Vol	1066
AM V/0		Subtra .	AM V/C			M V/C	0.51	Car of	RECEIPTED REC	AM V/C	0.38
Posted Sp			Posted Spe		- Mar (	ed Speed	70	and the second	and the state	253	70
T Usied Sp		C. C. Car	all magazine		FUSI	.cu Speeu	1 10	a de s	Star Aller	Posted Speed	1 10
BITZ	<b>OS</b>		~	460	920 Meters		el of Ser 2040 PN		2000 ( March 1997 - 199	o <b>n 3</b> ge Start:11000 End :18 tion Start: Oxley Highw	

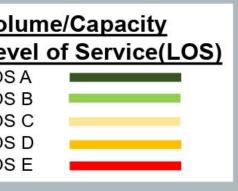
-North	Southbour	nd (PM)
13:3	No of Lanes	1
EL AN	AADT	5222
	AM Vol	507
100	AM V/C	0.36
al a statement	Posted Speed	70
and Atopta Berry	man Strand	11 1983
Contractor of		Challen A
REAL		COGGE
Sec. St.		6. Com
1 151	1997 N 1997	And the second
All the second	10 1 1000	ST 11
1.1.2		12 4
	3 11	232 1 2
A State		
1 Sup 1		0 2 2 2
REFE	1	
- Jan Hall		3 1 1
STATE .		
		0
12102	The second second	No. of Street,
15-178	Northbound	(PM)
3600	No of Lanes	1
1030	AADT	5258
133	AM Vol	371
X	AM V/C	0.26
	Posted Speed	70
	100 million 100	CARL COLOR
		100 100 200
Volur	ne/Capaci	tv
		1303: PERCENTRAL
	of Servic	e(LOS)
LOS A		_
LOS B		
LOS C		_
LOS D		
LOS E		_
SINA BUILD	1. K. C. M. C. M. C. K. C.	and sector
	Project Number: Date: 11/03/21	P4665
Grove	Sheet: 5	

	A State of the sta		Southbound	(AM)		Volume/Cap	acity
			No of Lanes	1		Level of Ser	
CARE AN ANAL COM			AADT	5173			VICE(LOS
San C Granna Ch	Tall Statist		AM Vol	388		LOS A LOS B	_
	and the second		AM V/C	0.28		LOS C	
AND NEVERSEN	1 22 22		Posted Speed	100		LOS D	
	and a store					LOSE	
		and the second se					
	Northbound	(AM)					
AN PAR	No of Lanes	1				Southbound	(AM)
	AADT	5190				No of Lanes	1
	AM Vol	679				AADT	5170
	AM V/C	0.49		11:		AM Vol	388
	Posted Speed	100				AM V/C	0.28
		HER LAND				Posted Speed	50
The second second						T USIEU Opeeu	30
MARK AND							
and the second second						× .	
and the second second							
FRANK PERS			Nor	thbound (AM)			
A A			No of L	T. T.	1		
			AA	т	5160	Contraction of the second	100
MARCH CONTRACTOR			AM	Vol	661	CALL PORT	
C. S. Aspender & Loss			AM	V/C	0.47		130.00
			Posted		50	No. The Market	S. S. Star
			100104	opood			- Andrew
							a starting
					and the second	ACT CONTRACTOR	Miles
			12 12 dectarian acció	Section 4			umber:P4665
BITZIOS	Z	00 1,600 Meters	Level of Service	Chainage St	art:18500 End :24500	h Street Date: 11/0 Sheet: 7	3/21
			2040 AM	Description	Start: Elkhorn Grove End: Dira	in Street Sneet: /	
	1		1				

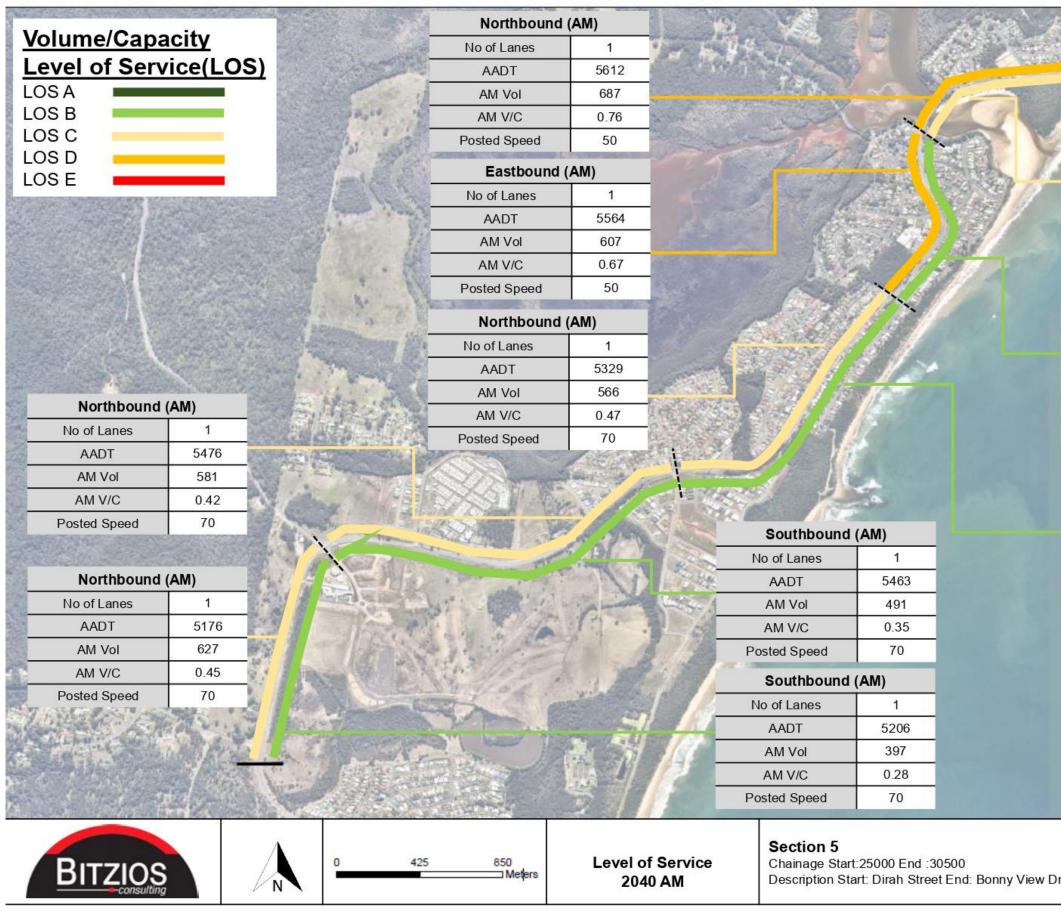




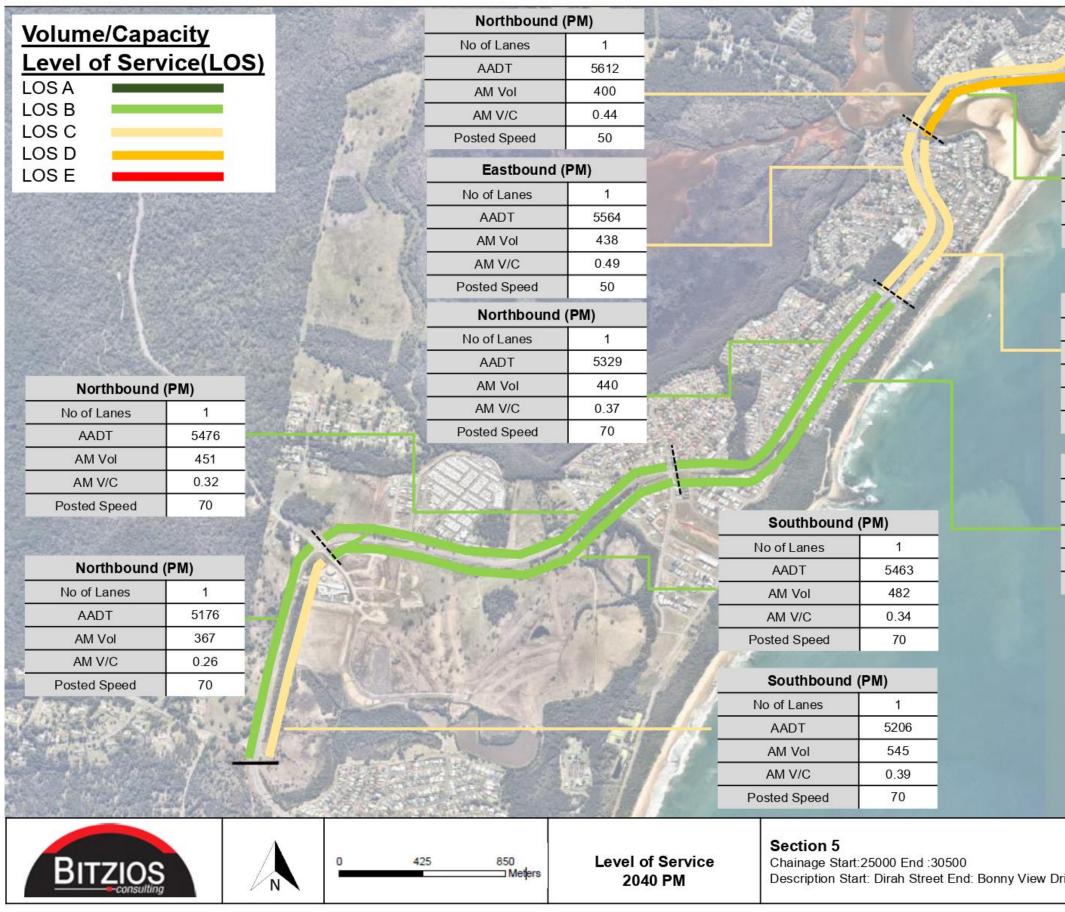
		11.11	Southbour	nd (PM)		Volume/Cap	acity
<b>这百公司了你是</b> 了你已经有	alle alle	1 5	No of Lanes	1		Level of Ser	
	WAY HO N		AADT	5173		LOSA	TICE(ECC
Sale V Gradula, Ve			AM Vol	527		LOS B	
	and the second	_/	AM V/C	0.38		LOS C	
	ALC: N		Posted Speed	100		LOS D	
A HANNER	1 475 - V					LOS E	
	P						
	Northbound						
	No of Lanes	1				Southbound	(PM)
	AADT	5190		1		No of Lanes	1
	AM Vol	358				AADT	5170
	AM V/C	0.26				AM Vol	528
	Posted Speed	100				AM V/C	0.38
						Posted Speed	50
			No c A	orthbound of Lanes ADT M Vol M V/C	(PM) 1 5160 350 0.25		
				ed Speed	50		Sa Station
		AV B		Sectio	on 4		imber:P4665
BITZIOS	Z	800 1,600 Meters	Level of Service 2040 PM		ge Start:18500 End :24500 tion Start: Elkhorn Grove End: Dirah St	treet Date: 11/0.	3/21



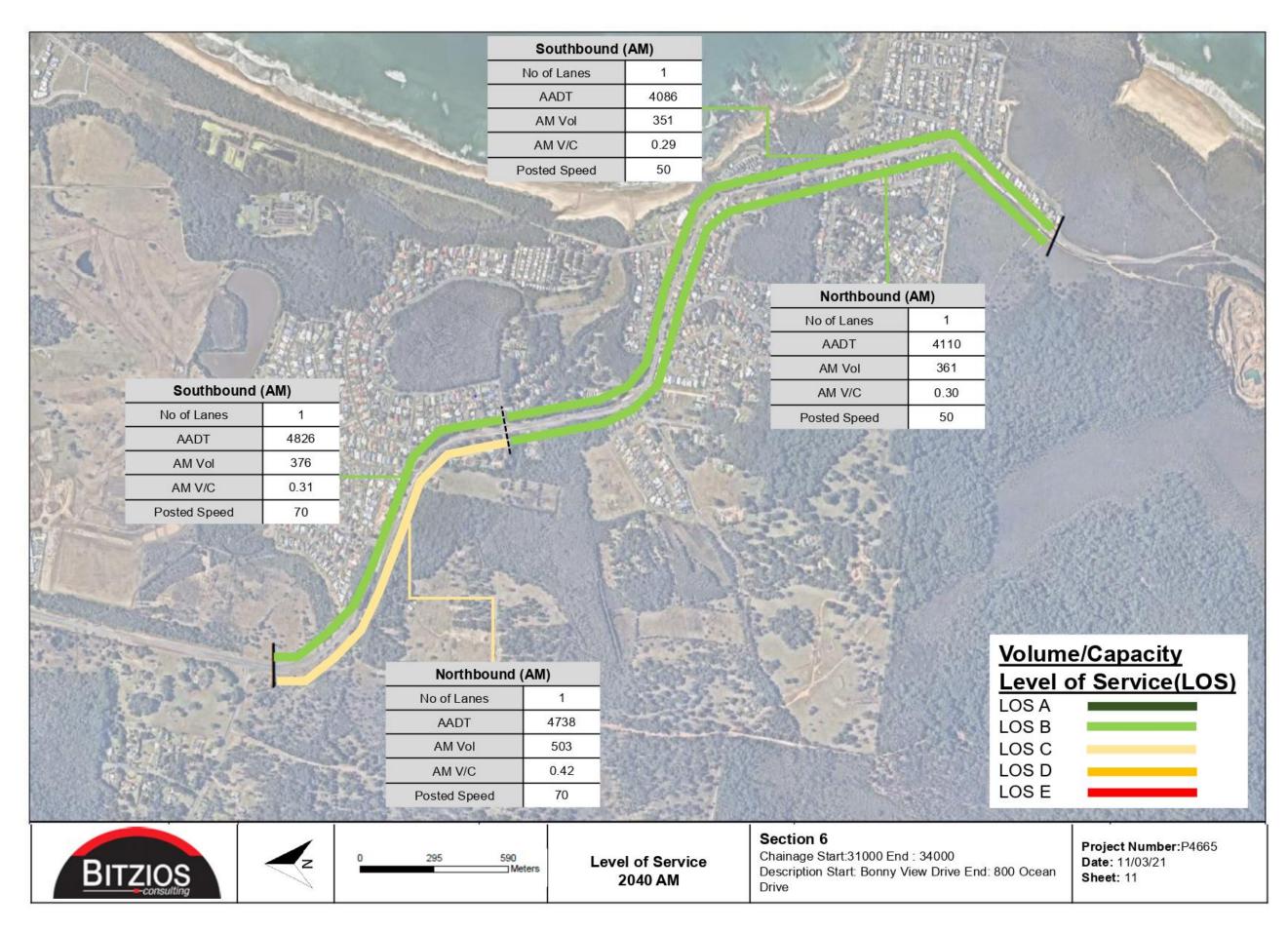


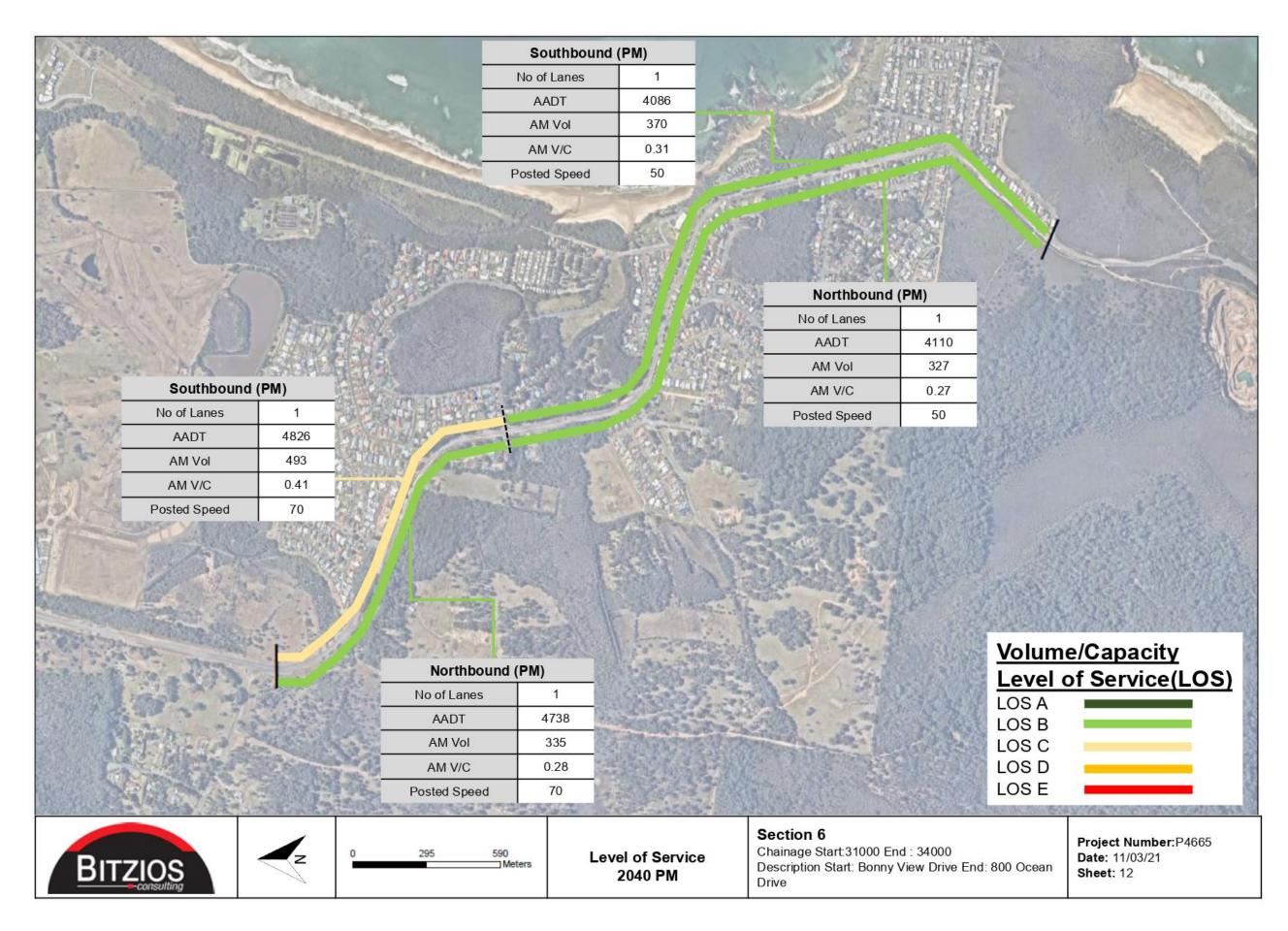


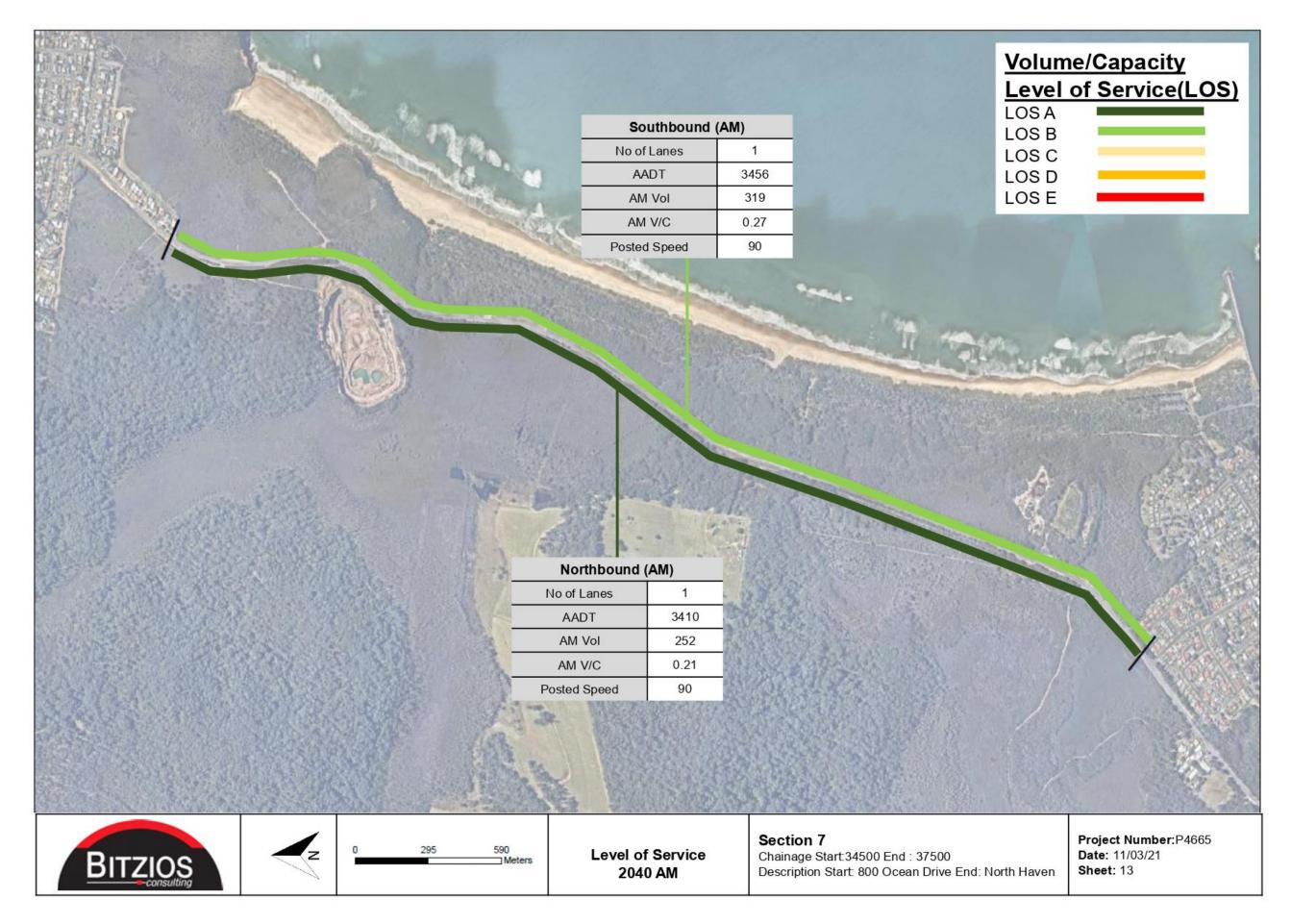
Southbound	<u>.</u>
No of Lanes	1
AADT	5591
AM Vol	415
AM V/C Posted Speed	0.46
Westbound ( No of Lanes	<b>AM)</b>
AADT	5451
AM Vol	422
AM V/C	0.47
Posted Speed	50
Southbound	(AM)
No of Lanes	1
AADT	5302
AM Vol	410
AM V/C	0.34
Posted Speed	70

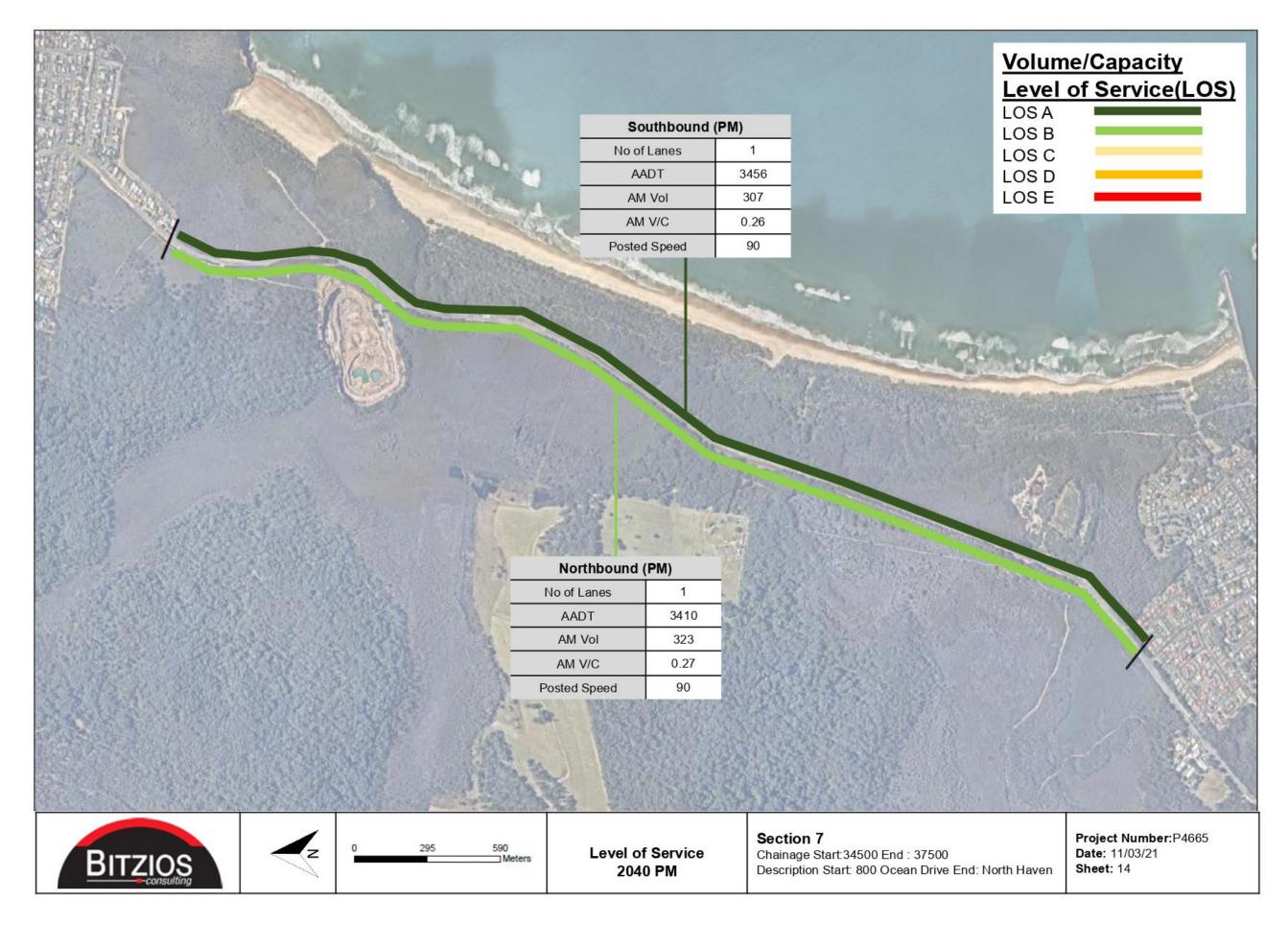


Occution 1	(014)
Southbound	
No of Lanes	1
AADT	5591
AM Vol	560
AM V/C Posted Speed	0.62
Westbound	(PM)
No of Lanes	1
AADT	5451
AM Vol	506
AM V/C	0.56
Posted Speed	50
Southbound	(PM)
No of Lanes	1
AADT	5302
AM Vol	474
AM V/C	0.39
Posted Speed	70



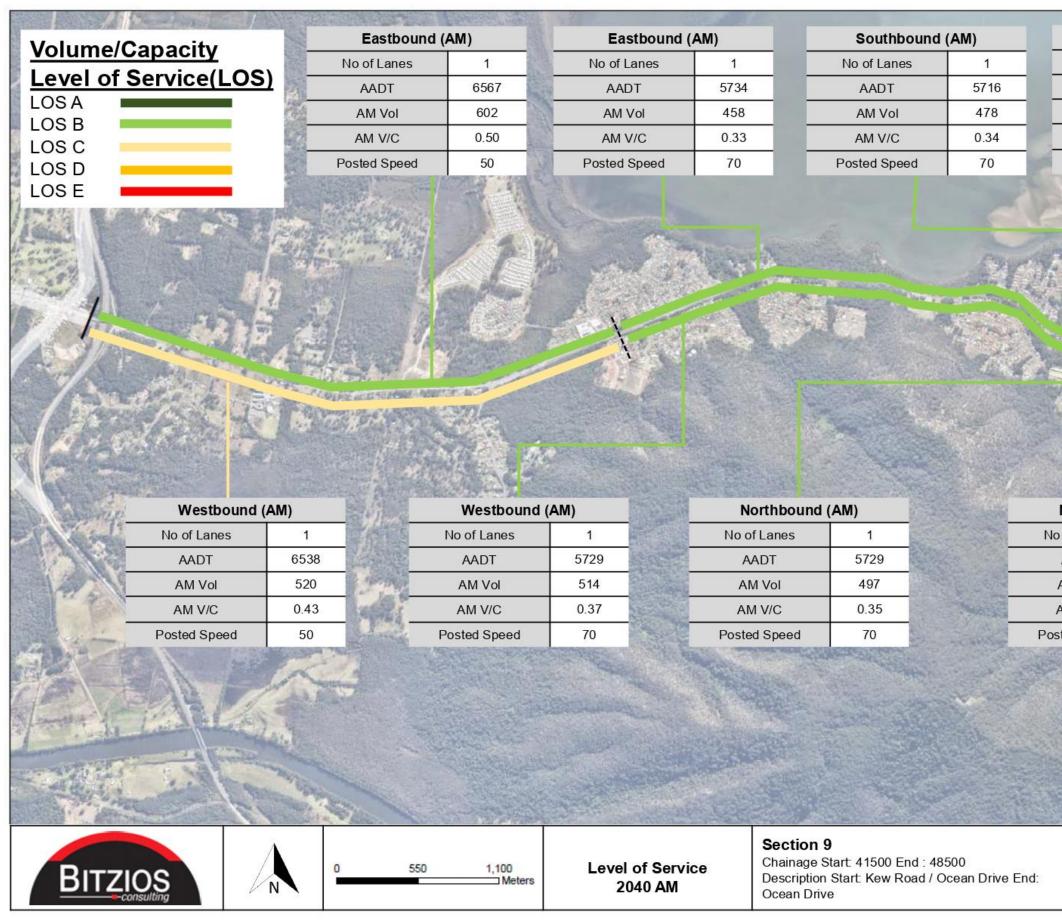




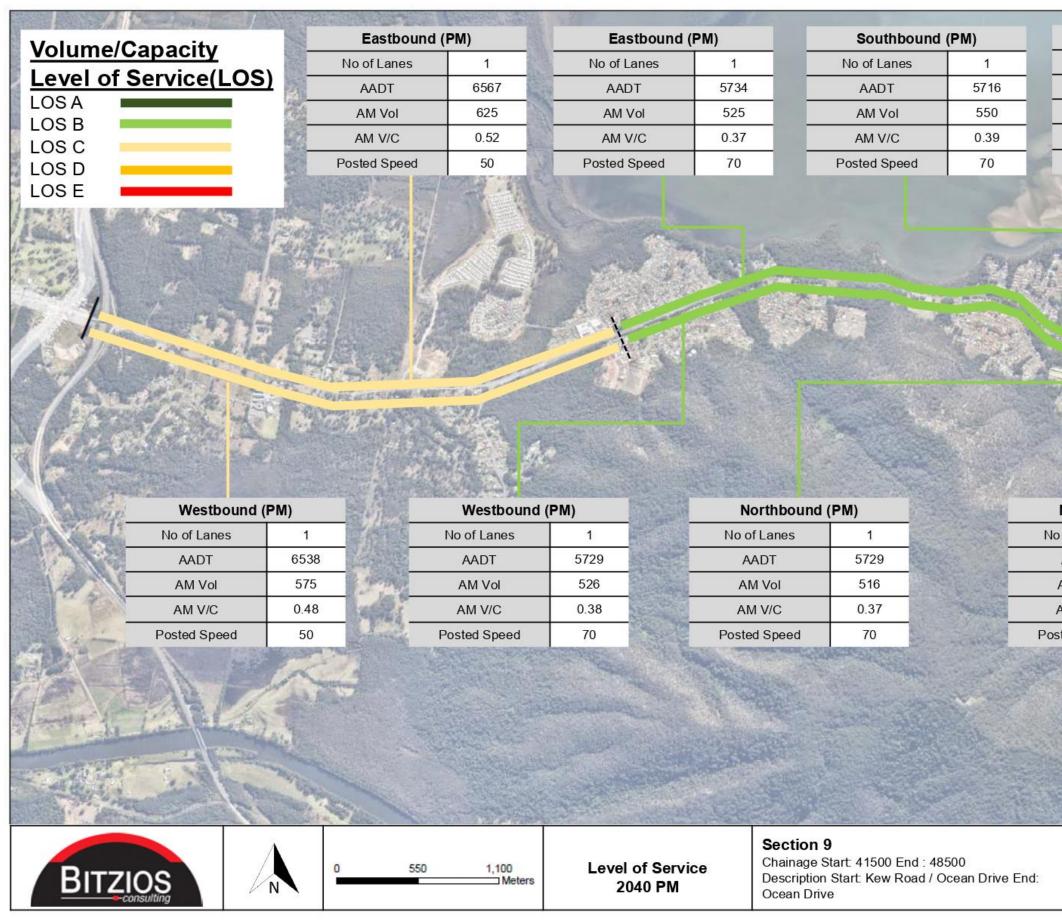


CONTRACTOR OF STREET, STRE		and	All of the second second		Sector and the sector of the sector	Rath Analy States and		ALC: NO ALCON		CONTRACTOR SALES	Sector Sector
lume/Capa	acity	232	2	11-1-1-28	Northbou	nd (AM)		und (AM)	Carlo and and a	Northbound	(AM)
vel of Serv	vice(LOS)	C. A. C.			No of Lanes	1	No of Lanes			No of Lanes	1
6A 💻		1	· · ·		AADT	4872	AADT	5272	and the	AADT	3107
бВ ———		HT IS SALE		1	AM Vol	388	AM Vol	422	100	AM Vol	267
S C		The second second	and the second second	15-61-5	AM V/C	0.43	AM V/C	0.47	ALC -	AM V/C	0.30
SD		and the second	X m	· · · ·	Posted Speed	50	Posted Spee	d 50		Posted Speed	50
A.			Eastha	und (AM)					-		
Eastbound		-	No of Lanes		La Participation	12				and the second	The second
AADT	2968	10-	AADT	4689	1.	T. comin			and and	Contraction of the second	
AADT AM Vol	2908		AM Vol	367	- (			Santa M	1	Southbound	(AM)
WATER OF ADDRESS		430.8-	and the second	0.41	- Andrews	all species	The second	a tonin	Sec. de	No of Lanes	1
AM V/C	0.25		AM V/C							AADT	3129
Posted Speed	50		Posted Spee	d 50			143		Section and	AM Vol	275
267		and all a	and the second	- A participant			C. A. E. C.	N.	人和國	AM V/C	0.31
Set .			AND I	C.B		C. C	AV3 - CHIL	Charles .	A 1 21-	Posted Speed	50
1			At Cart C		- adar		and the second	2		1	all and
(Para 1	1	The	allington .	T		and the second	1		-	Westbound	(AM)
A started	1910		¥		Chicago and a second		A F	CAMDEN HAVEN INLE	AT THE MAN	No of Lanes	
	DELES		1	11658	Son a station state	and the second	1	AN AN AN		AADT	5294
	5-122 - 3×B 7-2	1.42	4 4		Star Star	Sall Succession	2/	1	-	AM Vol	452
Les Ha	a ur								A son	AM V/C	0.50
We	stbound (AM)	PETILO DE		Westbound	(AM)		Southbound	(AM)		Posted Speed	50
No of L		1		No of Lanes	1	Stalle-	No of Lanes	1			1
AAE		238	181	AADT	4903	-	AADT	4860			
AM		304	- Charles	AM Vol	421	-	AM Vol	422	Er y	1 Salt	
AM		0.34		AM V/C	0.47	ten tent	AM V/C	0.47	Sale Contraction	100	
Posted		50	¥ -	Posted Speed	50	and at -	Posted Speed	50	Charles and	T. an	
A REAL	Tane	Contract of the second s		1511	- Internet	and the second	STENDART.	PUT STORE		See State	5
			0 295	590 Meters		of Service	Section 8 Chainage Start: 38	000 End - 41000		Project Number Date: 11/03/21	

lumo/Con	acity	1962		Sec. 72	Northbound	(PM)	Eastbou	nd (PM)	State Stream	Northbound	(PM)
lume/Capa	voru (1992) an and a start	1328			No of Lanes		No of Lanes		Part	No of Lanes	
vel of Serv	vice(LOS	2			AADT	4872	AADT	5272	and the	AADT	3107
SA		AT LA BAS	7 m		AM Vol	461	AM Vol	505	-	AM Vol	307
SB SC		an faith	and the second	in the second	AM V/C	0.51	AM V/C	0.56	5	AM V/C	0.34
SD		-		S	Posted Speed	50	Posted Speed	50	-	Posted Speed	50
SE 🛑	111111	ipt			-	- Sugar		a subside	11		
Eastbound	(PM)		Easthou	Ind (PM)					1		
No of Lanes		and the	No of Lanes	1	ALL STREET	and the second		and the second	De al a	Star Star	- Andrew
AADT	2968	1	AADT	4689		An The		and and the	and the second		E. S.
AM Vol	277	3 Part	AM Vol	449				1	1000	Southbound	(PM)
AM V/C	0.31	the same	AM V/C	0.50	- and the set	all the second			S. A. A.	No of Lanes	1
Posted Speed	50	100	Posted Speed			un Part				AADT	3129
T Usled Opeed			T Usied Opeer				唐王		A SWEEK	AM Vol	267
	and the second s	and the second				477		and the second	分别意	AM V/C	0.30
The in				100			The Call	and a second		Posted Speed	50
1. 1			Stand .		S TREAM		and the second	11		· ·	Ed.
A CONTRACT	10	F. Da	Contraction of the second		Carl States			1 100		Westbound	(PM)
	a de la		1	0	Contractor of a second		AF 1	CAMDEN HAVEN INLE I		No of Lanes	1
19 6	6 . E 3		Past	distant.	State and the state of the stat	1		AR L	-	AADT	5294
			7	A CAR	and the second		1	in the second second		AM Vol	447
A Sec. 19	3 44			TAN					( ARR )	AM V/C	0.50
We	stbound (PM)			Westbound	(PM)		Southbound (I	PM)	1.5	Posted Speed	50
No of L	Lanes	1		No of Lanes	1	and all and and	No of Lanes	1		est. It	
AAI	DT 3	238	1 and the	AADT	4903	· · · ·	AADT	4860		31/2	
AM S	Vol 3	301	IN POR	AM Vol	424	and the second	AM Vol	412	Con Chin	A Start K	
AMY	V/C C	).33		AM V/C	0.47	ALC: NO	AM V/C	0.46	and the second s		
Posted	10 C	50	1	Posted Speed	80		Posted Speed	50		And the second	1-1-1
		x			8		Section 8			Project Numbe	<b>r</b> :P4665



10.00	and the second second
ound (Al	M)
s	1
	5378
	506
	0.36
ed	60
and the second	- And
and the second	1
TERMS	and the second
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1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Con Ca
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1 ale	100
	Vie &
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	1.000
AM)	1000
1	22.00
5394	
479	
0.34	
60	No.
and the second	CAR
	E The
Cate S	
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The Real Property in	Super-
	- the
umber:P4	1665
03/21	
	s ed ed AM) 1 5394 479 0.34 60 Umber: P <sup>2</sup>



Southb	ound (PI	VI)		
No of Lane	s	1		
AADT		5378		
AM Vol		540		
AM V/C		0.39		
Posted Spee	ed	60		
Contraction of the second				
TIME C				
and the	1 Carlos			
KAN				
and a second				
ALL N	1			
16 14				
	NA.	100		
		NE S		
		V		
	27	X		
Northbound (	PM)	X		
Northbound ( of Lanes	<b>PM)</b> 1			
T				
of Lanes AADT	1			
of Lanes AADT AM Vol	1 5394			
of Lanes AADT AM Vol AM V/C	1 5394 559			
of Lanes AADT AM Vol AM V/C	1 5394 559 0.40			
of Lanes AADT AM Vol AM V/C	1 5394 559 0.40			
of Lanes AADT AM Vol AM V/C	1 5394 559 0.40			
of Lanes AADT AM Vol AM V/C	1 5394 559 0.40			
of Lanes AADT AM Vol AM V/C	1 5394 559 0.40			
of Lanes AADT AM Vol AM V/C	1 5394 559 0.40			
of Lanes AADT AM Vol AM V/C	1 5394 559 0.40			
of Lanes AADT AM Vol AM V/C	1 5394 559 0.40			
of Lanes AADT AM Vol AM V/C ted Speed	1 5394 559 0.40	665		
of Lanes AADT AM Vol AM V/C ted Speed	1 5394 559 0.40 60 0 0 40 60	665		

Eastbound (	AM)	4000	Eastbound (	AM)		Northbound	(AM)		
No of Lanes	1	from the law of	No of Lanes	1	100	No of Lanes	1	A.	
AADT	3182	ANDREA	AADT	2698		AADT	1634	Jan Hand	· Calendar
AM Vol	254		AM Vol	199		AM Vol	137		1 Parts
AM V/C	0.28		AM V/C	0.22	18	AM V/C	0.10	Southbou	ind (AM)
Posted Speed	50		Posted Speed	60		Posted Speed	80	No of Lanes	1
a local and a loca			1 1 S. 1	Eact	bound (A	MAX AND		AADT	102
Eastbound (	(AM)	The State		No of Lar		1		AM Vol	8
No of Lanes	1					2516	1 13 5 2	AM V/C	0.01
AADT	3797	1. 1. 1. 1. 1.	Sallensi to A	AADT	-	294		Posted Speed	80
AM Vol	353	Contraction of the second	The start	AM Vo	2005 		Participation / 44	Warres Mar	CARLANS IN
AM V/C	0.39	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		AM V/C		0.33	Sen b.	and the plant of the	5. Ja:
Posted Speed	60	and an and a local	X	Posted Sp	beed	60	Strand Ste		Terras
			11 NO 40		830	Straight 1	12	Eastbour	d (AM)
Westbound	(AM)		A Share &				- 422.5	No of Lanes	
No of Lanes	1		1 · · ·		. Salt	and all a		AADT	1039
AADT	5524	states, a faile	Westbound	(AM)	1 8	a. 5		AADT AM Vol	165
AM Vol	474		No of Lanes	1					0.18
AM V/C	0.53		AADT	2701	in 1			AM V/C	
Posted Speed	60		AM Vol	319				Posted Speed	60
THE REPORT OF STREET	Saladi Min. BALTER	美国 語言 しん 語言ない	AM V/C	0.35	ENE		The last		-
Westbound	<u> </u>	第二、第一台自己 13	Posted Speed	60	als ha	A Star	1///	Westbour	nd (AM)
No of Lanes AADT	1 3198	the start of the start	Westbound	(AM)		A B C D	1435	No of Lanes	
AM Vol	3198	New York Company	No of Lanes	1		and and		AADT	1007
		A AND DE A	AADT	2483				AM Vol	94
AM V/C Posted Speed	0.40 50		AM Vol	178			a market	AM V/C	0.10
Posted Speed	1 30	Balling the	AM V/C	0.20	A	1 / A 2	A DE LAN	Posted Speed	60
olume/Capa	acitv	and all the second	Posted Speed	60	Sint.	11 - 51	S Lawry	CONTRACTOR OF THE	AN AND
evel of Serv			Northbound	(AM)			1 -1	Southbou	nd (AM)
SA		- The states	No of Lanes	1				No of Lanes	1
S B			AADT	3521		1 de	the state of the	AADT	165
S C		man and and a star	AM Vol	361	(			AM Vol	18
SD		and the set of the set	AM V/C	0.26	a spinter			AM V/C	0.01
SE		and the second and an	Posted Speed	80			all set	Posted Speed	80
BITZIOS		N 0 337.5	Meters	of Service 40 AM	Chair	t <b>ion 10</b> nage Start: 41500 E ription Start: Ocear	End : 48500 n Drive End: Combo	Date: 11/0	<b>mber:</b> P4665 3/21

Eastbound (	PM)	4000	Eastbour	nd (PM)	The second for		/ Yest	
No of Lanes	1	And Time I have	No of Lanes	1	Northbo	ound (PM)	R. S.	
AADT	3182		AADT	2698	No of Lanes	s 1	JE SA	
AM Vol	322		AM Vol	283	AADT	1634		1.1
AM V/C	0.36		AM V/C	0.31	AM Vol	152	Southbound (	PM)
Posted Speed	50		Posted Speed	60	AM V/C	0.11	No of Lanes	1
a long	BAN A		「「「「「「「」」	T BEAL IN P	Posted Spee	d 80	AADT	102
Eastbound (	(PM)	Arris Part State	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- # CO-	bound (PM)	THE HEAD	AM Vol	11
No of Lanes	1			No of Lar			AM V/C	0.01
AADT	3797	1. 1. 1. 1. 1. M	the state	AADT		1 1 1 State 27	Posted Speed	80
AM Vol	374	PARTICIPATION AND AND AND AND AND AND AND AND AND AN	F THE REAL	AM Vo			Watthes Marco	
AM V/C	0.42		- 199	AM V/0		11 2 1		IN PA
Posted Speed	60		No.4	Posted Sp	beed 60		er va	
	States and	12-10 8 189	1180	and the second states of the s	A & B Million			
Westbound	(PM)		P. S. Chine				Eastbound (P	
No of Lanes	1		1 1 1 K		a the set of the		No of Lanes	1
AADT	5524	States & Junit	Westbo	und (PM)			AADT	1039
AM Vol	584		No of Lanes		2. 2. C. 2. 2. 2. P		AM Vol	122
AM V/C	0.65		AADT	2701			AM V/C	0.14
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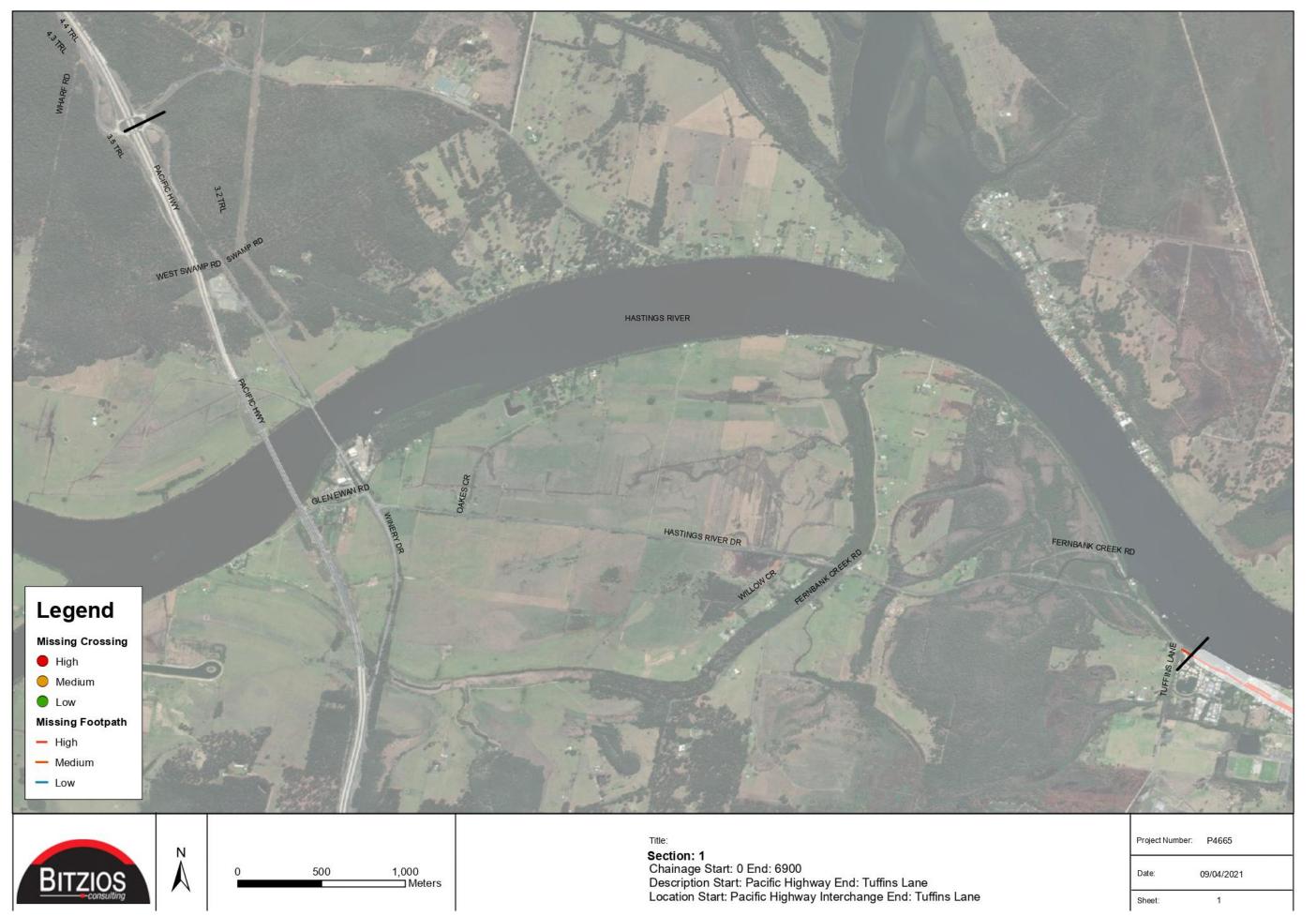


**Appendix H:** Walking Cycling and Public Transport Infrastructure Maps



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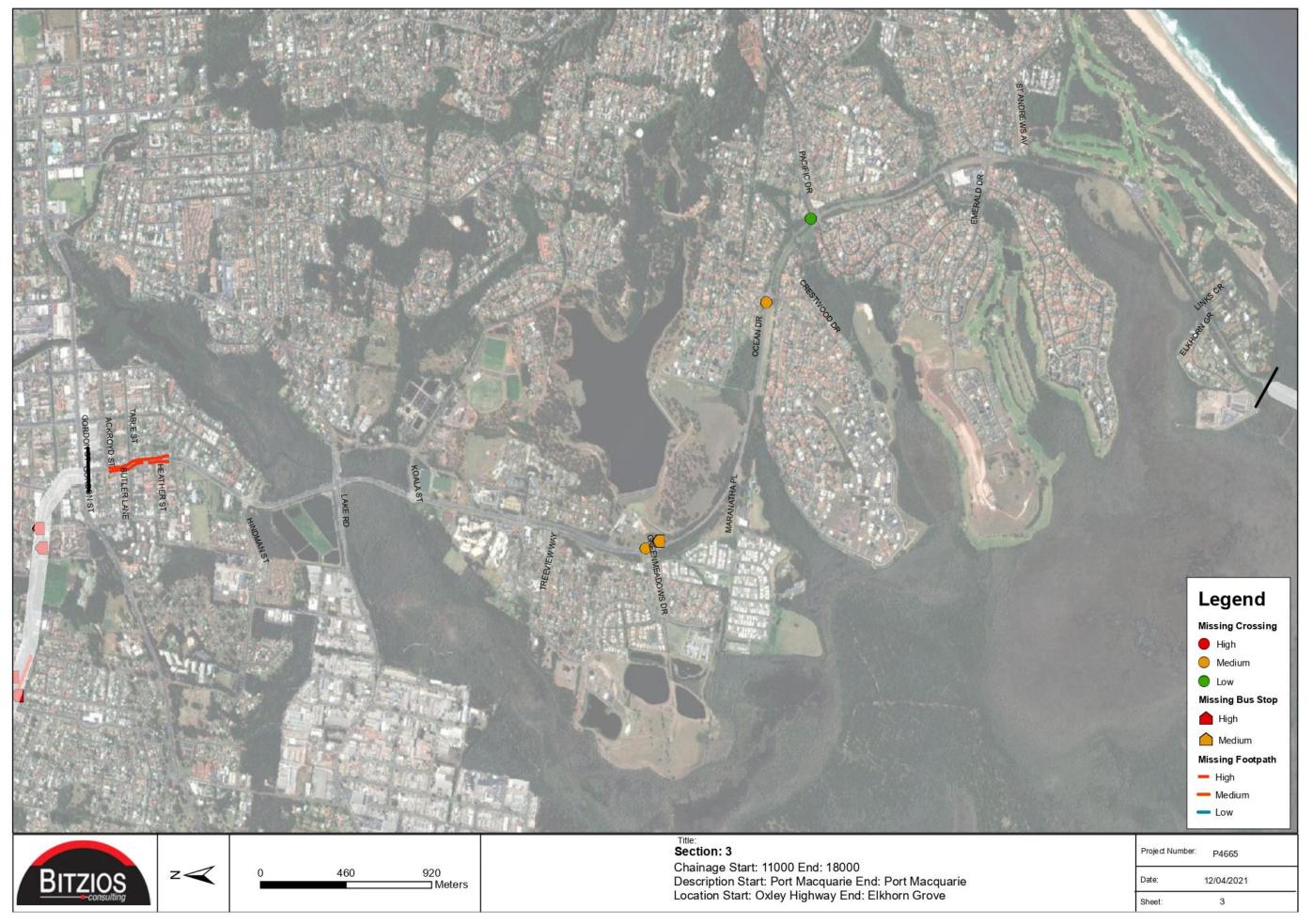




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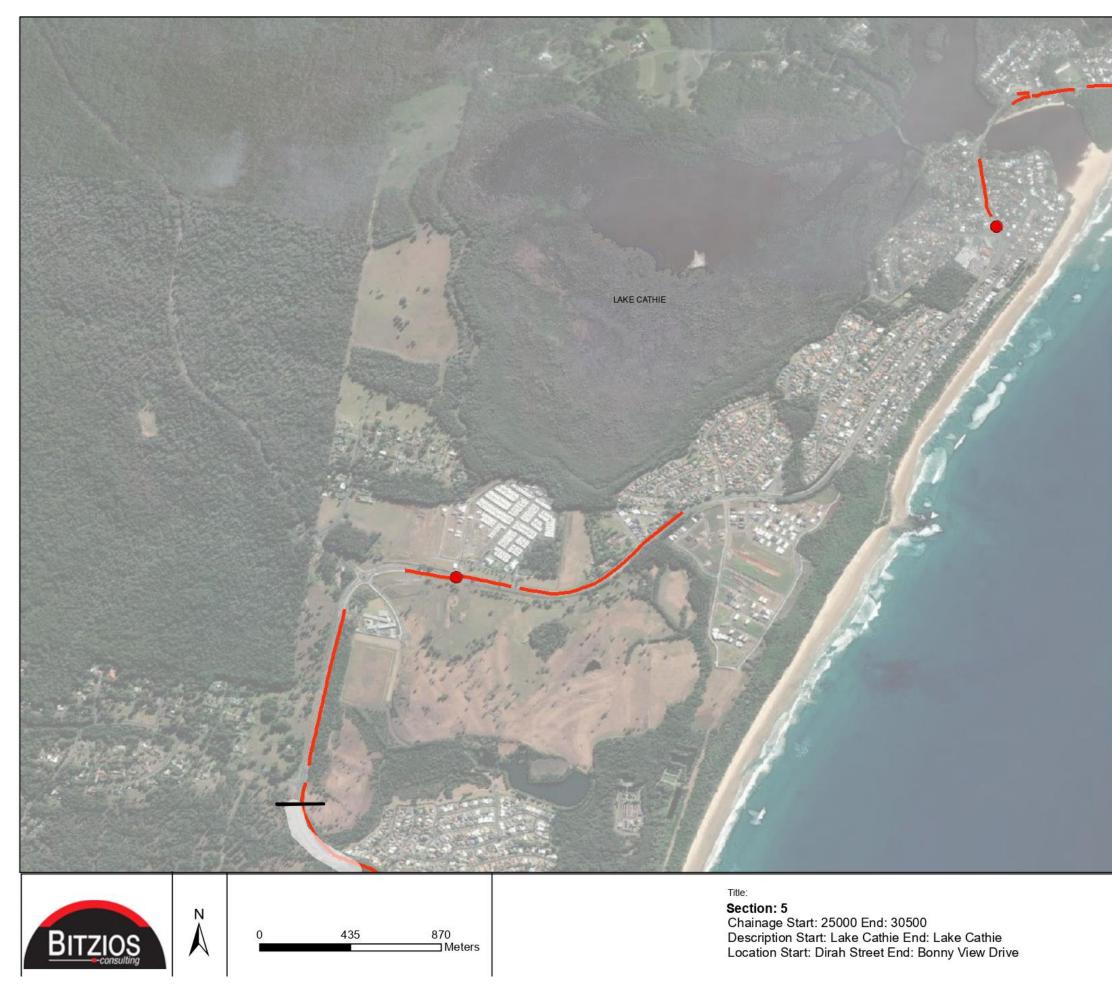
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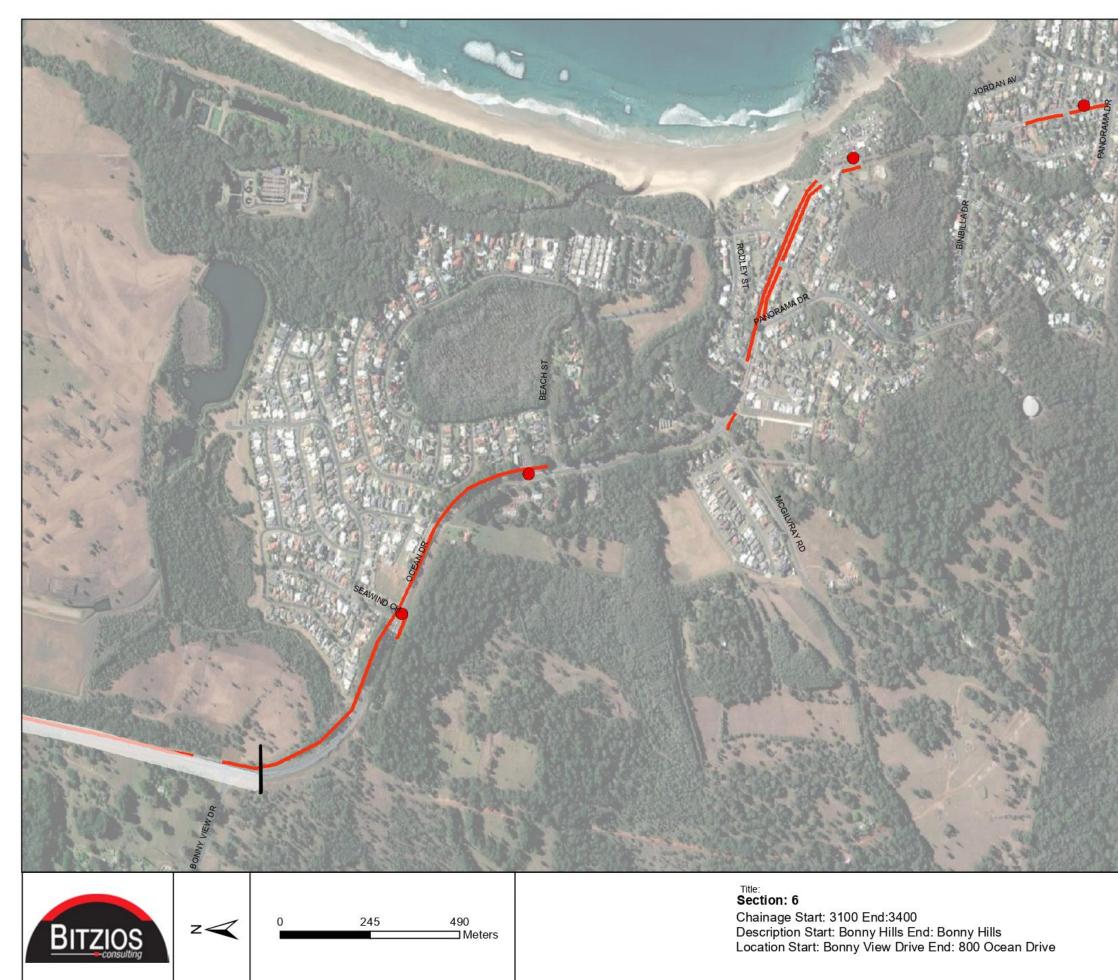


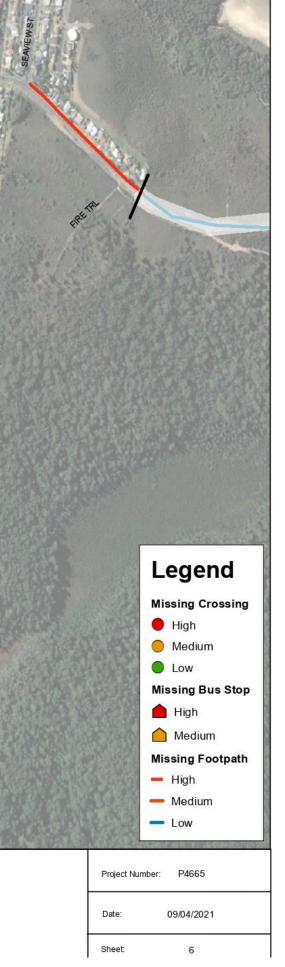


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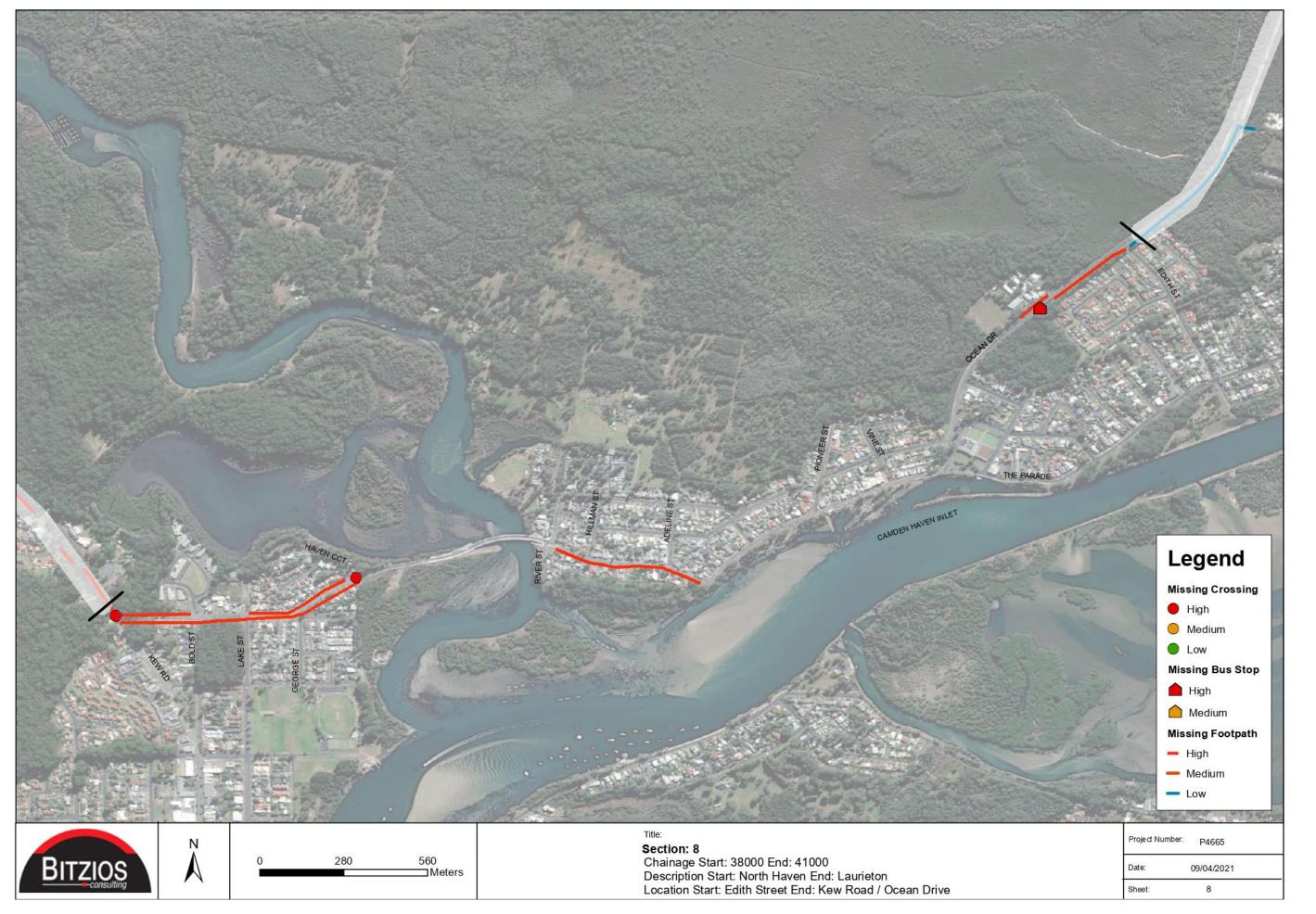




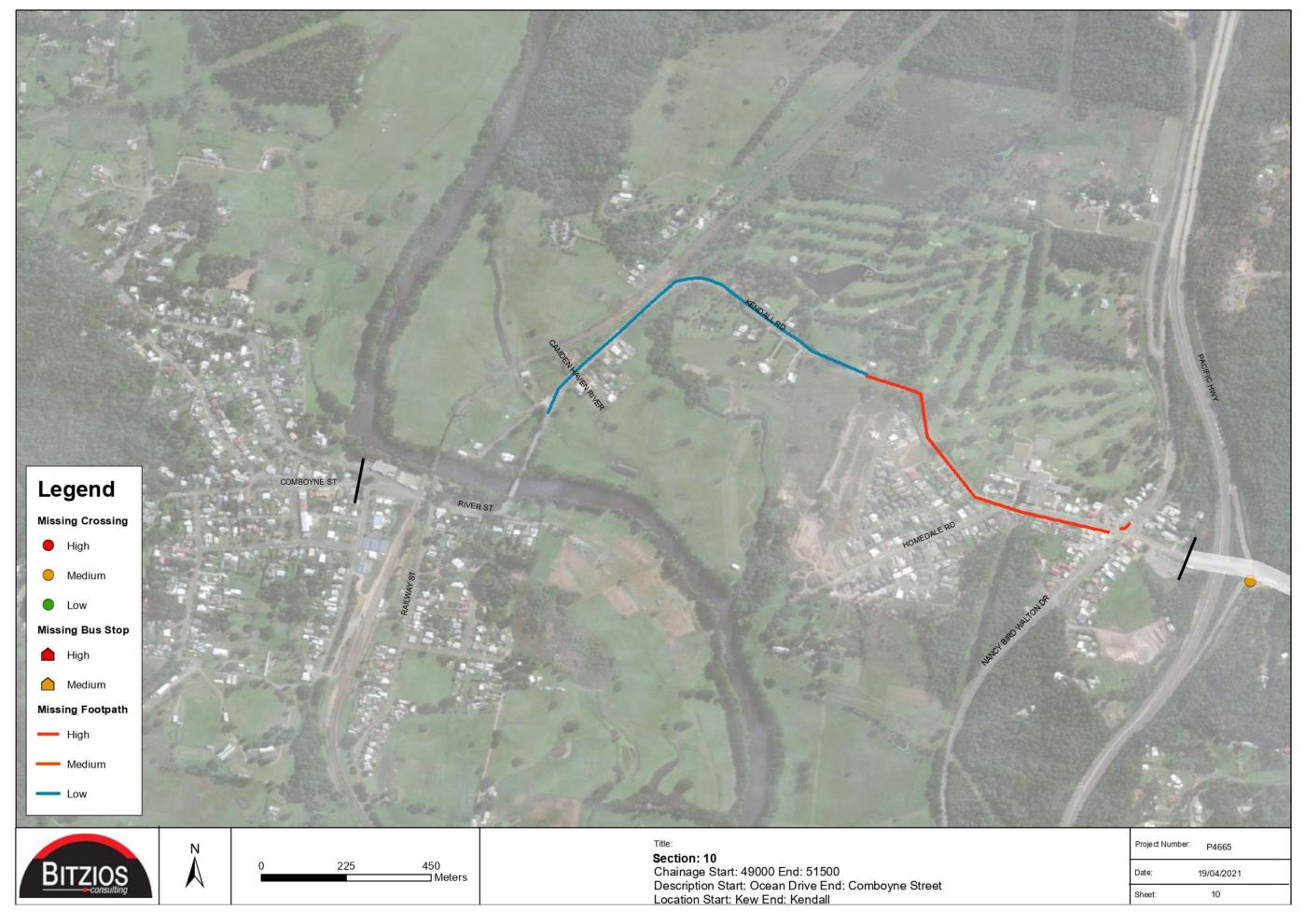












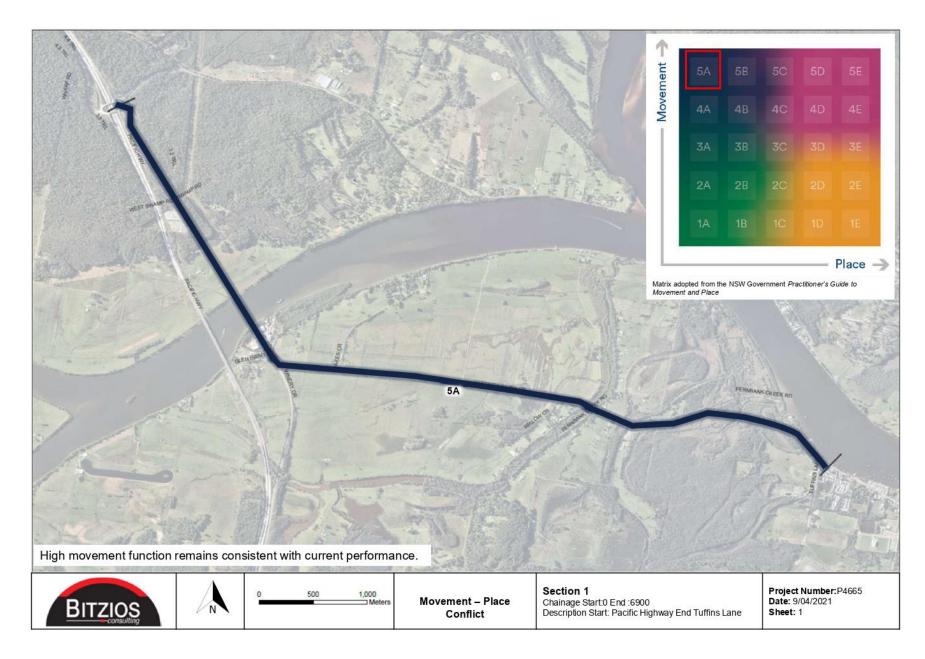


**Appendix I:** Movement and Place Conflict Maps

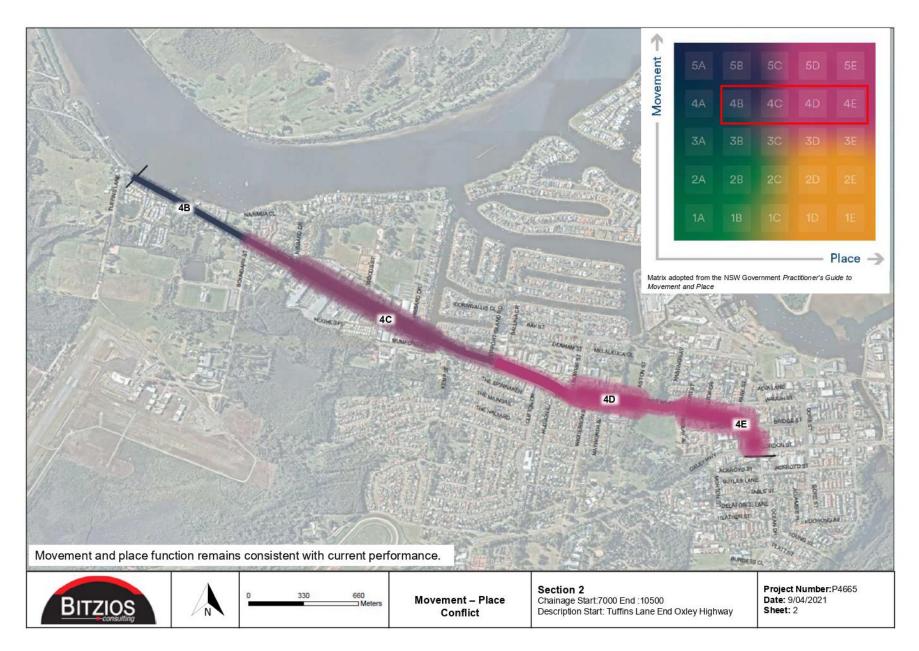


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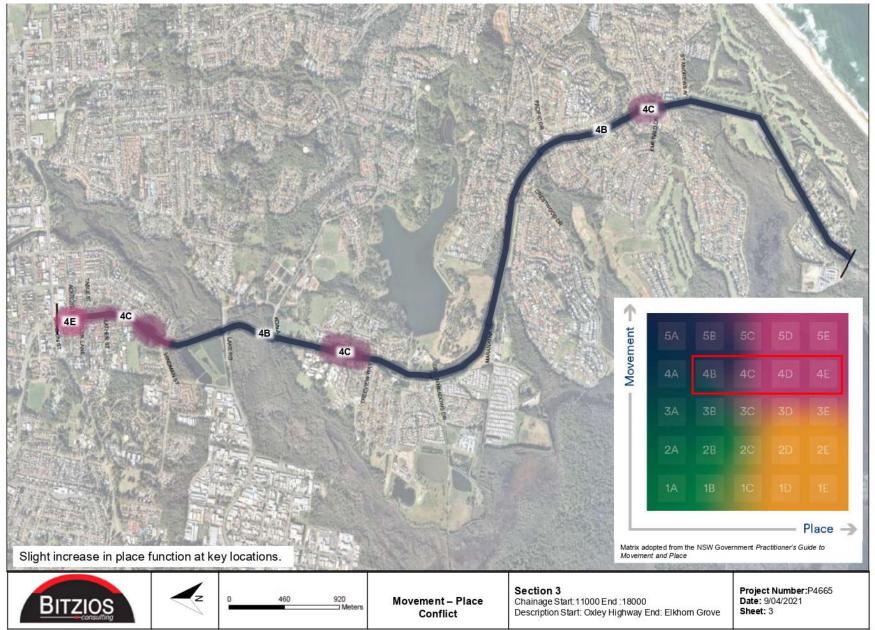


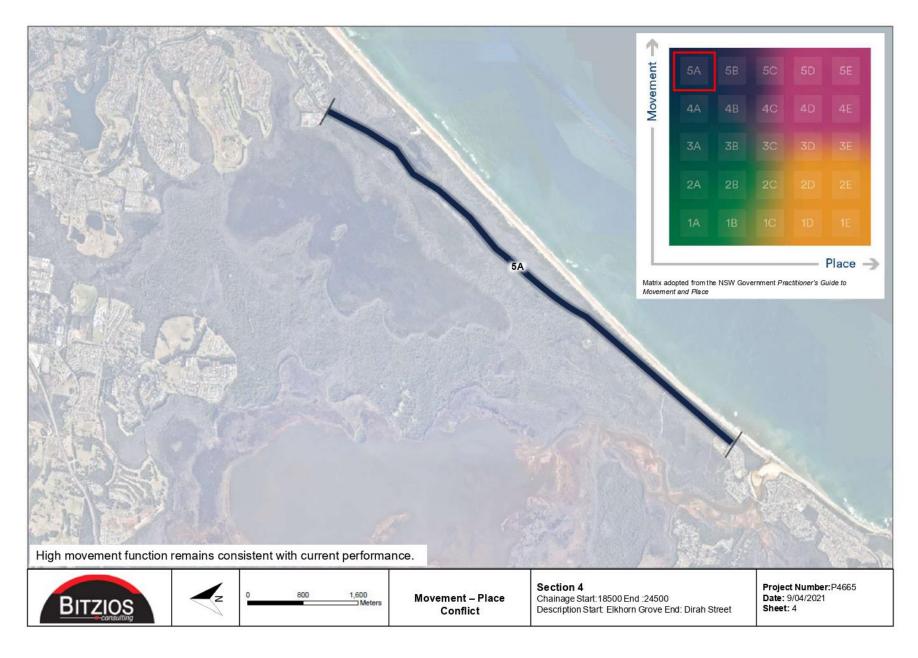


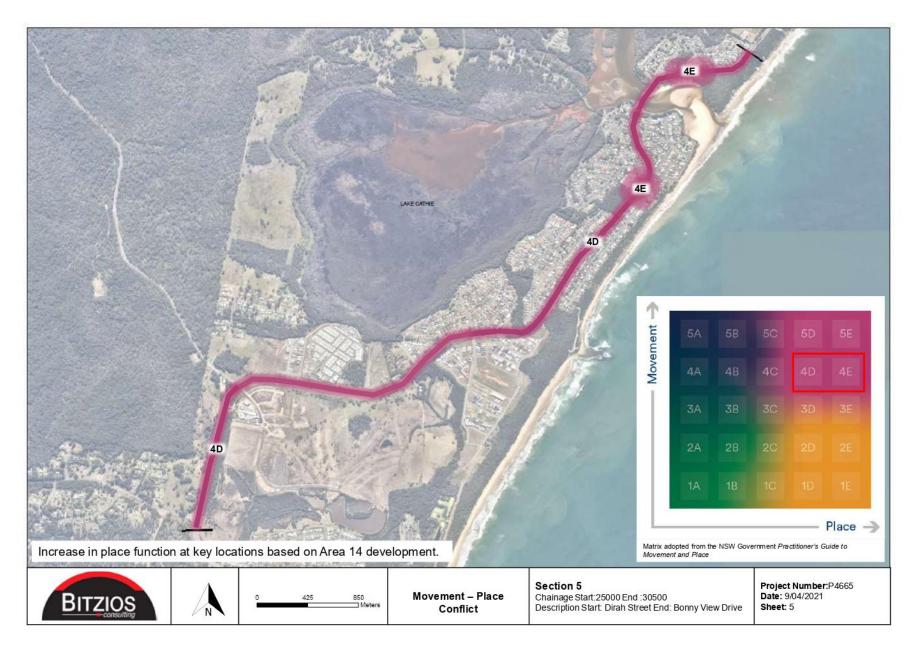
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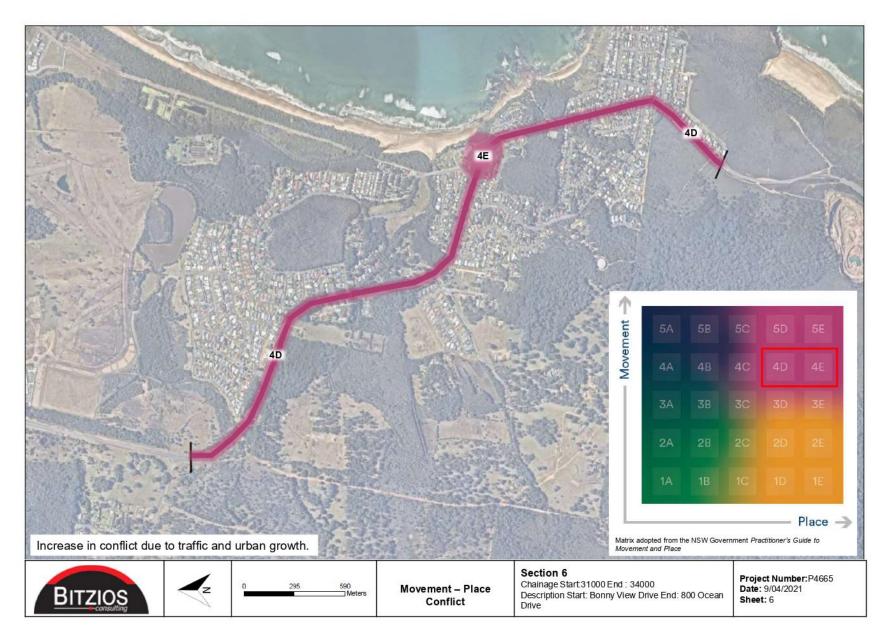


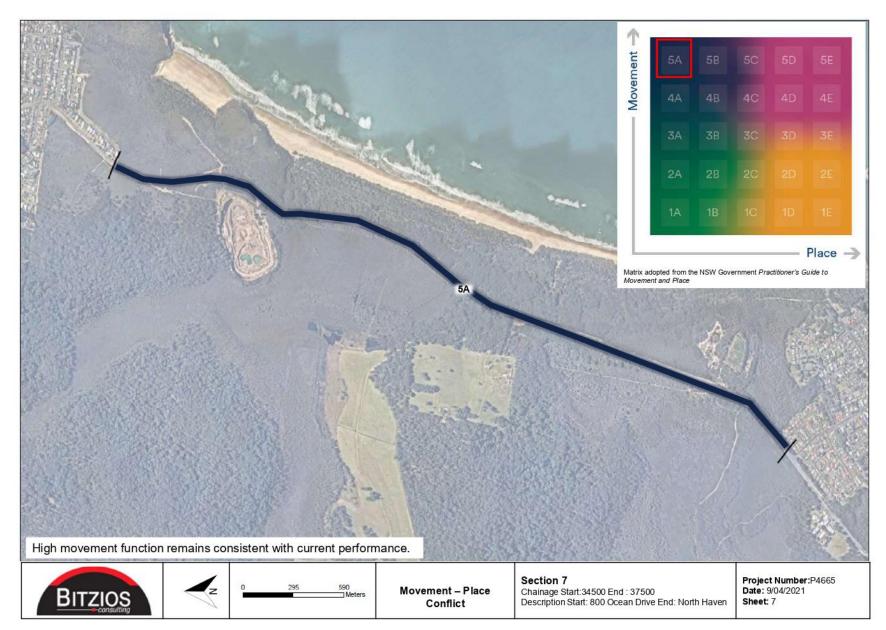
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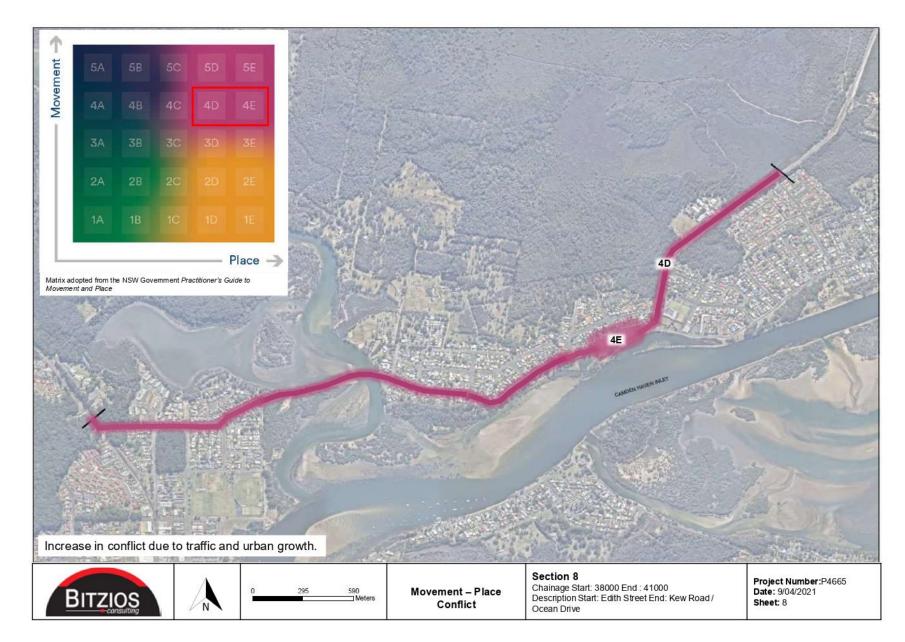


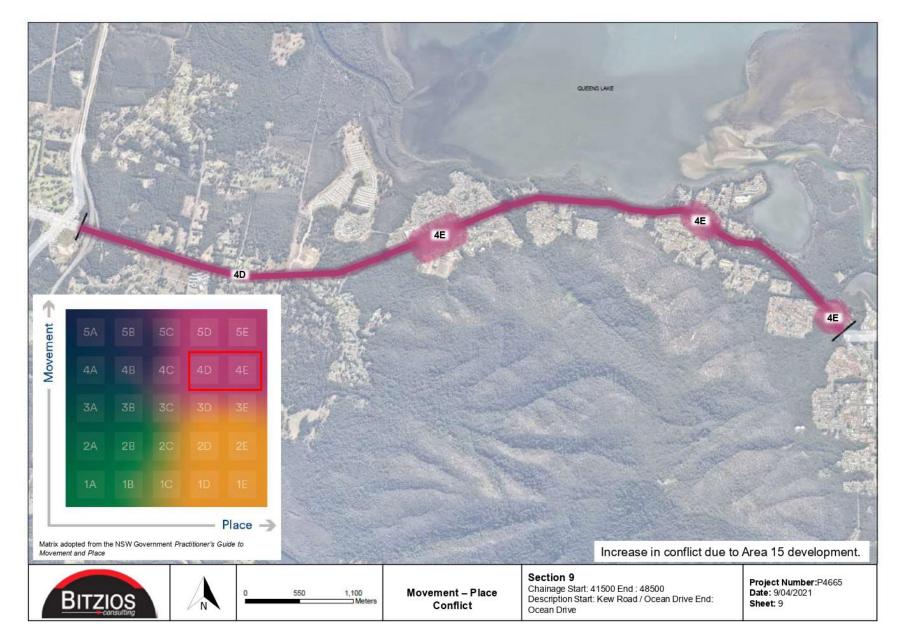




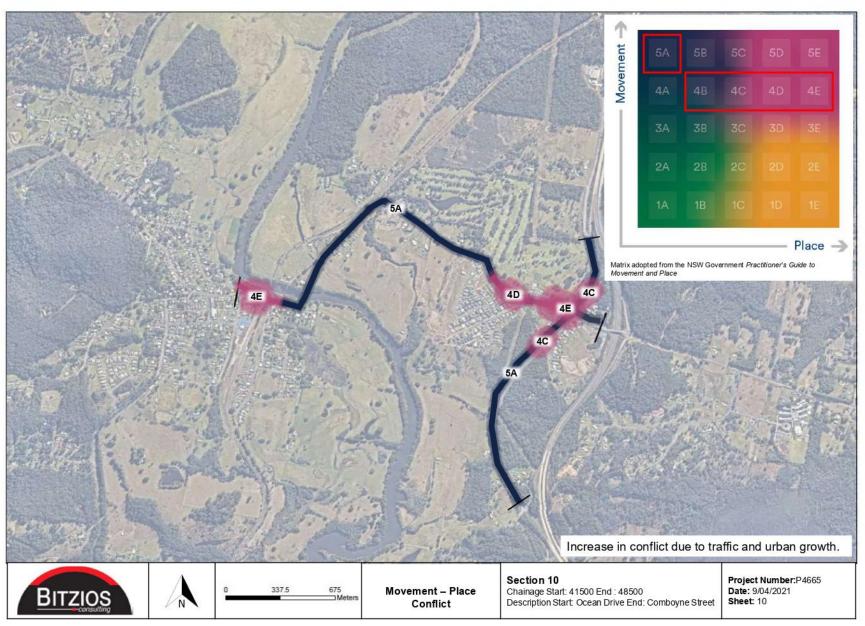








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# MR538 and MR600 Corridor Strategy

# **Draft Corridor Strategy Report**

# Port Macquarie-Hastings Council

06 April 2022





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#### **Document Issue History**

Report File Name	Prepared	Reviewed	Issued	Date	Issued to
P4665.001R MR538 and MR600 Corridor Strategy Report	S. Seeney / J. Brook	A. Eke	J. Brook	16/09/2021	Clinton Grohs, PMHC via Email
P4665.002R MR538 and MR600 Corridor Strategy Report	S. Seeney / J. Brook	J. Brook	J. Brook	29/10/2021	Clinton Grohs, PMHC via Email
P4665.003R MR538 and MR600 Corridor Strategy Report	J. Brook	J. Brook	J. Brook	18/11/2021	Clinton Grohs, PMHC via Email
P4665.004R MR538 and MR600 Corridor Strategy Report	J. Brook	J. Brook	J. Brook	23/11/2021	Clinton Grohs, PMHC via Email
P4665.005R MR538 and MR600 Corridor Strategy Report	J. Brook	J. Brook	J. Brook	06/04/2022	Clinton Grohs, PMHC via Email



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# 1. INTRODUCTION AND CORRIDOR DESCRIPTION

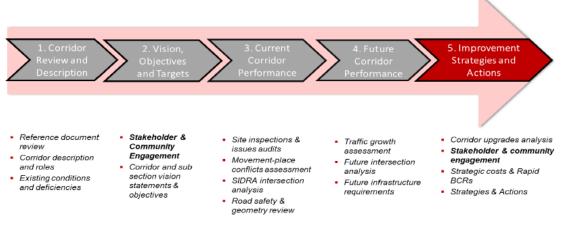
### 1.1 Why a Corridor Strategy?

The Port Macquarie-Hastings local government area has experienced significant growth in recent years and this growth is anticipated to continue with an estimated population of 112,000 by 2040.

With this growth, the region's transport infrastructure will be significantly impacted, and Council aims to maintain an integrated transport system that provides access between population centres and services.

# 1.2 Strategy Development and Engagement

The study process was divided into five parts shown in Figure 1.1 with community engagement conducted at the visioning and section improvements refinement stages.



#### Figure 1.1: Strategy Development Stages

This corridor strategy seeks to integrate with Council's plans and strategies for the region as well as the NSW Government's plans for the Pacific and Oxley Highways. It will focus on preserving the corridor and setting out a broad design framework for future transport network upgrades for all users including traffic, walking, cycling and public transport.

It also defines priorities for future road maintenance, operation, and safety for all road users, while also considering the diverse communities it serves and planned growth across the region.

#### What You Told Us?

- Key intersections in Port Macquarie are congested and need upgrading
- Narrow roads with limited shoulders that don't cater for all road users
- Continuous pedestrian footpath and shared paths are needed, along with improved lighting
- Safe crossings at key locations are needed
- Improved bus services and shelters are needed
- Poor maintenance is impacting on safety and road function in places.





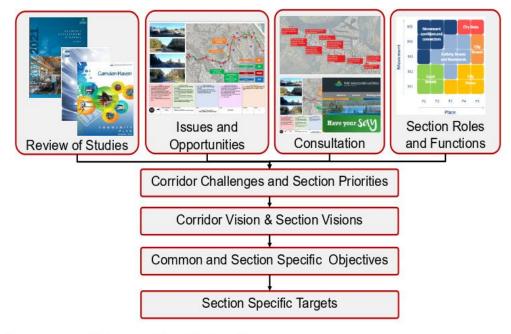


# 1.3 How the Strategy was Developed

#### **Key Inputs**

Key inputs required in developing the Corridor Strategy include:

- Intersection traffic counts at 27 key intersections to inform intersection and road capacity analysis
- Site inspections & audits of peak period conditions inform traffic analysis
- Review of crash history along the corridor
- Road safety review including alignment, geometry, pavement health and a roadside environment review
- Assessment of road structures such as culverts, bridges, and sections subject to flooding
- Consideration and alignment with relevant studies, investigation, community strategic plans, and Council's urban growth management strategy



#### How Engagement Informed the Strategy?

The community and stakeholder engagement provided insights into localised issues and assisted in prioritising the action plan and strategies for each section of the corridor. The first stage of engagement allowed the project team to understand the key issues and challenges users face on the corridor. Based on this, a range of actions were developed to help improve safety and efficiency across the various modes of transport.

#### Community Input Example:

The use of off-road shared paths along sections of the corridor were not considered appropriate to accommodate all users. Engagement identified that both separate bike lanes as well as pathways is ideally preferred to accommodate a range of different user groups. The delivery of both facilities however was understood to be a challenge when considering timing, funding opportunities and prioritisation.



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# 1.4 Corridor Function

The corridor has been divided into 10 separate sections based on road form, transport modes, function, and surrounding land uses.

The start and end of each section was determined at locations where a clear transition occurred in road profile and land use (e.g. transition from rural to urban areas) and generally occurs at intersections.

The corridor has a high movement function across its entire length, facilitating movement between coastal towns and the Pacific Highway, Port Macquarie, and the coastal towns along Ocean Drive.

The place function varies significantly along the corridor from environmental areas with limited to no activity through to highly urbanised areas with active street frontages.

#### Description

- 1 Hastings River: Pacific Highway Interchange to southern side of Tuffins Lane
- 2 Port Macquarie: Southern side of Tuffins Lane to southern side of the Hastings River Drive / Oxley Highway intersection
- 3 Port Macquarie: Southern side of Oxley Highway to southern side of Elkhorn Grove
- 4 Port Macquarie to Lake Cathie: Southern side of Elkhorn Grove to southern side of Dirah Street
- 5 Lake Cathie: Southern side of Dirah Street to southern side of Bonny View Drive
- 6 Bonny Hills: Southern side of Bonny View Drive to southern side of no. 800 Ocean Drive
- 7 Bonny Hills to North Haven: Southern side of no. 800 Ocean Drive to northern side of Edith Street
- 8 North Haven to Laurieton: Southern side of no. 800 Ocean Drive to western side of Kew Road / Ocean Drive intersection
- 9 Laurieton to Kew: Northern side of Kew Road / Ocean Drive intersection to eastern side of Pacific Highway interchange
- 10 Kew to Kendall: Eastern side of Pacific Highway interchange to Comboyne Street / Graham Street





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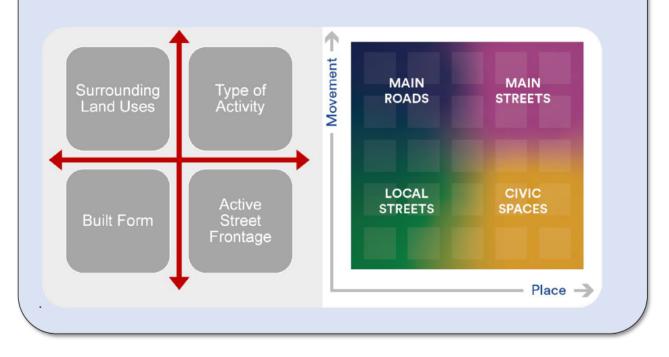


### **Movement and Place**

The Government Architect *NSW's Practitioner's Guide to Movement and Place* (PGMP) uses a road and street environment classification system with four main categories:

- Main roads: Main roads are high-capacity roads which typically feature higher speed limits and primarily service long distance trips for people and goods. These usually include key movement corridors including motorways, freight corridors and major public transport routes
- Main streets: Main streets attract both high volumes of both vehicular and pedestrian traffic and are typically bustling urban activity centres. As the interface between different types of traffic, main streets must find a balance in streetscape design to accommodate both pedestrians and vehicles
- Local streets: Local streets are typically a low-speed road environment characterised primarily by the quiet, neighbourhood streets servicing the local residential community. A majority of the road network is comprised of local streets
- **Civic spaces:** Civic spaces are characterised by slow movement areas with high pedestrian activity generators, with limited access or connectivity for through traffic. These are often found in town and city centres and are typically envisaged to be pedestrian or shared priority areas.

The place function was determined based on the key elements shown in the figures below and also show how various movement and place combinations are categorised into main roads, main streets, local streets, and civic spaces based on their movement and place function.





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### 1.5 Land Use and Growth

The corridor serves a variety of land uses and frequently transitions between rural and urban areas along its length.

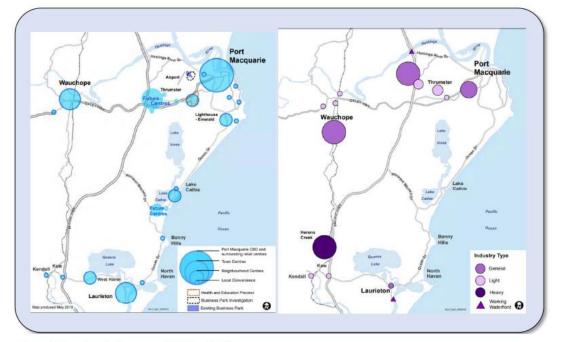
Future growth of the greater Port Macquarie-Hastings region based on its Urban Growth Strategy 2017-2036 formed a key part in informing the development of the corridor strategy.

The Urban Growth Strategy notes a population growth rate of approximately 1.4% per annum, equating to an additional 1,200 people per year over the next 20 years is anticipated for the LGA.

Further to items in the growth strategy, other developments have been considered. The Sancrox Planning proposal has been considered which aims to accommodate the future population growth with a proposed village centre and a mix of residential densities. In proximity to the airport, the proposed Airport Business Park has also been considered in scenarios for northern section of the corridor. The growth of smaller towns, including Lake Cathie (Area 14) and Kew (Area 15) will increase activity and traffic at these particular locations, but will also increase the propensity for increased movements to and from the major centre of Port Macquarie on a daily basis.

It is therefore critical to ensure that the corridor and its intersections are adequately preserved and provide sufficient capacity to maintain safe and efficient movement by all transport modes well into the future.

Given the corridor also provides a 'Main Street' function to several towns including Lake Cathie, Bonny Hills, North Haven, Kew and Kendall, the management of traffic volumes, speeds and pedestrian / vehicle conflicts is very important in maintaining a successful centre without losing their unique local and community character.



Source: Urban Growth Management Strategy 2017



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#### 1.6 Traffic

Traffic includes movement of passenger, freight, and emergency vehicles. The corridor varies significantly and includes both rural and urban road cross sections with speeds ranging from 50 km/h through urban areas and local towns up to 100 km/h along rural arterial sections of Ocean Drive. There are also a number of 40km/h school zones along the corridor.

Objectives for the corridor strategy for traffic relate to the safety and efficiency of the corridor and is focused on the network capacity, design of travel lanes and pavement cross section.



### 1.7 Active and Public Transport in the Corridor

#### 1.7.1 Walking and Cycling

The movement of pedestrians and cyclists along and across the corridor. Pedestrian and cyclist facilities include pathways, on and offroad cycle facilities and crossing facilities.

The existing active transport infrastructure is lacking in many locations along the corridor including poor condition, inadequate width, lack of continuous pathway connections and crossing facilities.



Improvements to pathways and 'connecting' local communities was



also a key theme across all available Community Plans along the corridor.

Cycle facilities vary considerably along the corridor and are a key consideration for the various user types (i.e sports cyclists, school students, commuter and recreational cyclists).

Objectives for walking and cycling relate to the safety and connectivity of these facilities and reducing the barrier created by the corridor.

#### 1.7.2 Public Transport

Public transport on the corridor consists of bus services. Corridor objectives relate to bus infrastructure (bus stops, design standards, connectivity) and pavement cross-sections. Objectives to not relate to provision of services, route planning etc. and rather focuses on facilitating these improvements through targets for the corridor infrastructure.



Infrastructure such as dedicated bus lanes or bus jumps lanes (at intersections) have not been considered in targets as these rely on high service frequencies (typically in the order of 5-minute intervals) in order to be considered economically feasible and an appropriate use of available road space.



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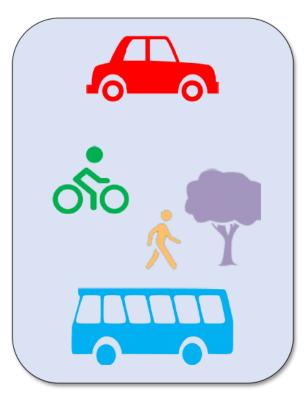
# 2. A VISION FOR THE FUTURE AND CORRIDOR OBJECTIVES

# 2.1 Corridor Vision

The aim of the corridor vision is to provide a clear and encompassing statement of intent for the corridor. Based on the review of the corridor's role and function as well as its relationship with the communities it serves, the combined overall vision for the corridor is:

### Corridor Vision:

To provide a safe and efficient transport route for all users. The corridor will connect Port Macquarie, Lake Cathie, Bonny Hills, North Haven, Laurieton, Kew and Kendall. The corridor will support growth in the region, consider the environment, while maintaining a sense of place, character, and amenity of the unique and diverse communities it serves.



The combined corridor of the MR538 and MR600 between the Pacific Highway at Blackmans Point through to Kendall is diverse and each section of the corridor incorporates its own challenges and priorities to achieving the overall corridor vision. It is therefore appropriate that each section of the corridor expands on this single vision and incorporates its own specific vision, objectives, and targets.

# 2.2 Corridor Objectives

The objectives for each section of the corridor set out a series of goals or outcomes the strategy seeks to achieve. The objectives are to provide a clear and consistent approach for those responsible to maintain, plan and deliver the corridor in the future.

The objectives for each section of the corridor are targeted and categorised into traffic, walking and cycling, public transport and community, environment, and land use.

Targets refer to a specific action or inclusion to be considered to achieve the identified objective for each corridor section and categorised under the following headings:

- Traffic
- Walking and Cycling
- Public Transport
- Environment, Land Use Planning and Growth
- Asset Management.



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### Corridor Strategy's Relationship with other Transport Initiatives

This Corridor Strategy is just one piece of Port Macquarie Hasting Council's work in developing strategies to manage the transport network for the long-term benefit of the community.

Broader road network matters (not on this road corridor) are being considered as part of the Council current work on a Regional Integrated Transport Strategy and Port Macquarie Transport Network Planning.

The **Regional Integrated Transport Strategy** will outline the policy direction for transport in the region. It will respond to the challenges and opportunities facing our region and outline a vision to address the Port Macquarie-Hastings' regional transport needs. As part of the project, Council is working closely with Transport for NSW (TfNSW) to analyse and assess the road network to gain an understanding of the relative priority of the key upgrades required. The project will seek to provide the community with an aligned approach across all levels of Government to support the strategic prioritisation and timing of road upgrades.

A **Port Macquarie Transport Network Planning - Strategic Business Case** is seeking to develop options to improve accessibility, connectivity and road safety for the Port Macquarie Road Network. This initiative is following on from the proposed Orbital Road Project. The strategic business case will include a review of route options and how these compare with or add to possible improvements to the existing road network, such as planned upgrades to Lake Road, Ocean Drive, or other Council-managed roads, and the Oxley Highway, as a State-managed road. Flood-free connection to the airport and business park will be assessed, as will improved connectivity to key destinations including Port Macquarie Base Hospital, Charles Sturt University, St Columba Anglican School, and the Regional Sports Stadium. The study will consider long term solutions to addressing our current and future traffic growth and is essential for the economic and social vitality of the community.

The three key planning projects currently underway are:

- Oxley Highway Stage 2 Corridor Investigations Undertaken by TfNSW investigating the Oxley Highway from just west of the Pacific Highway interchange into Port Macquarie
- Hastings River Drive, Ocean Drive and Kendall Road (MR538 and MR600) Corridor investigations and strategy development (this strategy)
- Port Macquarie Transport Network Improvements Planning Project involving a detailed analysis of the Port Macquarie road network

These projects all build on the work previously done as part of the 2018 Local Government Area Wide Traffic Study.

In relation to the prospect of a Bonny Hills Bypass, this new road link was previously analysed in the Area Wide Traffic Study. The analysis showed that while around two thirds of the traffic is likely to use the bypass, the travel time saving is marginal at around 50 seconds. Therefore it is recommended that investment in the short to medium term be prioritised towards upgrading the existing Ocean Drive corridor through Bonny Hills in line with the recommendations as part of this MR5368 and MR600 Corridor Strategy and the Bonny Hills Community Plan.



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# 3. CURRENT CORRIDOR PERFORMANCE

The corridor performance was assessed based on:

- Site analysis to assess existing road conditions, geometry, infrastructure conditions and road safety issues
- Traffic data along the corridor at key intersections
- Review of historical crash data
- Detailed intersection analysis for forecast years

### 3.1 Corridor Planning Sections, and Road Hierarchy

Road segmentation was used so targets and actions can be tailored to the specific areas to respond to the changes in land use, topography, road environment and level of property access.

The Transport for NSW (TfNSW) road network has been categorised into hierarchies as specified in the RTA Network Performance Measure and Network Planning Targets. Roads are categorised into 12 classes, with six urban and six rural classifications.

The criteria within the RTA Network Planning Practice Notes was used as guide to determine an equivalent hierarchy, predominantly based on:

- Annual average daily traffic (AADT)
- Posted speed limit
- Number of lanes
- Road function
- Surrounding environment (rural or urban).

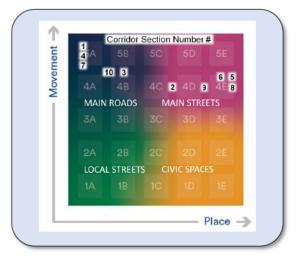
To note, the hierarchies nominated within the Network Performance Measure and Network Planning Targets are for state-controlled roads only and all state roads have been classified. MR538 and MR600 are not state controlled roads and have not been classified by TfNSW. This classification has therefore been undertaken as a guide only.

### 3.2 Movement and Place

The corridor has a high movement function across its entire length, facilitating movement between coastal towns and the Pacific Highway, Port Macquarie and the coastal towns along Ocean Drive. The place function varies significantly along the corridor from environmental areas with limited to no activity through to highly urbanised areas with active street frontages.

As part of this assessment the 5 x 5 movement and place matrix from the Practitioner's Guide to Movement and Place was adopted to categorise the conflicts in each section of the corridor.

The below shows the movement and place conflict assessment for the entire corridor. Conflicts increase as both movement and place functions increase. Category 5E (main streets) has the highest conflict between movement and place, while category 1A (local streets) has the lowest conflict.





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Section Number	Section Name	Corridor Section Roles and Description	Movement & Place Function	Category
1	Hastings River: Pacific Highway Interchange to southern side of Tuffins Lane	Provides the northern access to Port Macquarie and connection to the Pacific Highway.	<b>Movement Function:</b> Facilitates a primary Movement Function between Port Macquarie and the Pacific Highway. <b>Place Function</b> : Has a very low Place Function due to the rural nature of the section and low pedestrian activity both along and across the corridor.	5A
2	Port Macquarie: Southern side of Tuffins Lane to southern side of the Hastings River Drive / Oxley Highway intersection	Connects the northern areas of Port Macquarie to the CBD and to the Pacific Highway. Facilitates access to established business, residential catchments, and future planned employment growth around Port Macquarie airport.	<ul> <li>Movement Function: Has a high Movement Function for both inter-regional trips from the north into Port Macquarie, to the Airport and to the Pacific Highway (through traffic). There is also a high Movement Function for trips within Port Macquarie to the business precinct along Hastings River Drive.</li> <li>Place Function: The Place Function varies significantly across this section. The place function is relatively low to the west, which increases to a medium and high Place Function east of Hughes Place as a result of commercial land uses and shop frontages to Hastings River Drive.</li> </ul>	4B-E
3	Port Macquarie: Southern side of Oxley Highway to southern side of Elkhorn Grove	The primary north- south corridor for Port Macquarie linking southern townships, established residential areas and employment centres via major intersections such as Lake Road and Gordon Street.	<ul> <li>Movement Function: Has a high Movement Function for interregional trips from coastal towns to Port Macquarie and for trips within Port Macquarie.</li> <li>Place Function: The Place Function is generally low, with street activation. The northern extent of the section does however transition to a high Place Function providing direct property access and high pedestrian activity.</li> </ul>	4B-E, 5B
4	Port Macquarie to Lake Cathie: Southern side of Elkhorn Grove to southern side of Dirah Street	Connects southern coastal townships to Port Macquarie including Lake Cathie, Bonny Hills and North Haven	<ul> <li>Movement Function: Has a high Movement Function as the key link between Port Macquarie and Lake Cathie as well as other coastal towns to the south.</li> <li>Place Function: The section has a low Place Function due to the rural nature of the section, most of which is located adjacent to the Lakes Innes Nature Reserve.</li> </ul>	5A
5	Lake Cathie: Southern side of Dirah Street to southern side of Bonny View Drive	Primary north-south corridor connection to Port Macquarie while also facilitating access to Lake Cathie's residential community, urban growth areas, school, neighbourhood facilities and coastal attractions including beach and foreshore reserve	<ul> <li>Movement Function: The section has a high Movement Function, facilitating movement within Lake Cathie, to and from Lake Cathie as well as through movements between coastal towns and Port Macquarie.</li> <li>Place Function: The section has a high Place Function particularly at the northern extent of the section in proximity to Lake Cathie Reserve and the town centre. This area is an established township as well as a popular tourist/recreational area with high demand for pedestrian accessibility. The existing Place Function to the south is currently relatively lower, however is expected to increase with future development of Area 14 (Rainbow Beach)</li> </ul>	4B-E



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6

Bonny Hills:

Southern side

of Bonny View

southern side

of no. 800

Ocean Drive

Drive to

Primary north-south

road linking Bonny Hills

and Lake Cathie while also facilitating access to Bonny Hills

residential community,

neighbourhood facilities

#### **ORDINARY COUNCIL** 19/05/2022



		and coastal attractions.	<b>Place Function</b> : The section generally has a medium Place Function with direct residential frontages as well as local business including shops and the Reflections Holiday Park. The Place Function increases during holiday peaks and on weekends.	4B-E
7	Bonny Hills to North Haven: Southern side of no. 800 Ocean Drive to northern side of Edith Street	Connects southern coastal townships of North Haven and Laurieton to Bonny Hills and Lake Cathie via the coastline	<ul> <li>Movement Function: Has a high Movement Function as the key link between Bonny Hills and North Haven.</li> <li>Place Function: The section has a low Place Function due to the rural nature of the section, most of which is located adjacent to the Queens Lake Nature Reserve.</li> </ul>	5A
8	North Haven to Laurieton: Southern side of no. 800 Ocean Drive to western side of Kew Road / Ocean Drive intersection	Primary east-west road linking North Haven to Laurieton. Services North Haven community linking residential catchments and providing direct access to local businesses, foreshore community facilities.	<ul> <li>Movement Function: The section has a high Movement Function, facilitating movement within North Haven and Laurieton. It also facilitates through movements associated with the surrounding towns.</li> <li>Place Function: The section has a high Place Function particularly in proximity to Camden Haven Inlet and the North Haven town centre. This area is an established township as well as a popular tourist/recreational area with high demand for pedestrian activity particularly during weekends and holiday periods.</li> </ul>	4C-E
9	Laurieton to Kew: Northern side of Kew Road / Ocean Drive intersection to eastern side of Pacific Highway interchange	East-west corridor connecting Kew and the Pacific Highway to coastal townships of Laurieton and North Haven as well servicing the growth catchments of West Haven and Lakewood.	<ul> <li>Movement Function: The section facilitates a high Movement Function between the Pacific Highway and North Haven and Laurieton. The Area 15 urban release area will further increase the movement function of this section.</li> <li>Place Function: The section generally has a low-medium Place Function due to residential land uses (urban areas accessed via collector roads or large rural residential lots). The Area 15 urban release area will further increase the Place Function of this section.</li> </ul>	4B-E
10	Kew to Kendall: Eastern side of Pacific Highway interchange to Comboyne Street / Graham Street	East-west road linking the towns of Kew and Kendall to the Pacific Highway as well as providing a main street function to both towns.	<ul> <li>Movement Function: This section has a medium Movement Function, predominantly facilitate movement within Kew / Kendal as well as to the Pacific Highway and to coastal towns to the east.</li> <li>Place Function: The Place Function is generally high through the established rural townships of Kew and Kendall. This is reduced for the section between Kew and Kendall.</li> </ul>	4D-E, 5A

Bonny Hills.







# 3.3 Road Safety

A high-level review of road safety issues was undertaken for each section of the corridor, generally as per the processes specified in *Austroads Guide to Road Safety*. The review did not identify every individual issue and was intended to identify key issues which occur across the section and corridor.

The same types of issues were consistently present in each section. Issues included:

- Hazards within the clear zone / in close proximity to travel lanes. Hazards typically included trees, power poles and non-traversable culverts
- Frequent drop-offs / embankments which are not protected with guardrail
- Limited shoulder provisions
- Limited or no pedestrian / cyclist facilities
- Poor pavement conditions
- Poor delineation of the road environment

Other issues identified across some sections included the occurrence of four-way priority-controlled intersections, lack of turn treatments, lack of safe passing opportunities, poor lighting, and overgrown vegetation.







# **Benefit of Passing Lanes**

Austroads Passing Lanes Research Report 2019 identifies that passing lanes are provided to break up traffic platoons and improve traffic flow over a section of road.

Passing lanes improve journey times through a small increase in travel times and a significant reduction in the proportion of time spent behind a slower vehicle.



It is noted that passing lanes are used to increase traffic flow when an additional travel lane is not warranted by traffic volumes.

Based on our link capacity assessment this style of treatment was found to be suitable for Section 4 and Section 7 between townships to provide safe opportunities and where forecasted traffic demand found adequate traffic capacity is available.



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# 3.4 Traffic

Intersection modelling was undertaken using to assess the current operational performance levels of the subject intersections.

Intersection Level of Service (LOS) was based on intersection delays, consistent with the Roads and Maritime Services (RMS) methodology. The control delay for LOS for the RMS method is summarised in Table 3.1

Table 3.1:	LOS	Delay -	RMS	Method
------------	-----	---------	-----	--------

LOS	Average Delay per Vehicle (s)
A	d < 14
В	d < 15 to 28
С	d < 29 to 42
D	d < 43 to 56
E	d ≤ 57 to 70
F	d > 70

The majority of intersections across the corridor performed at LOS C or better, with the exception of:

- Intersections between the corridor and Aston Street, Oxley Highway / Gordon Street, Lake Road, Koala Street and Crestwood Drive; and
- Downstream capacity constraints on Lake Road were the major factor impacting intersection performance at the Ocean Drive / Lake Road and Ocean Drive / Koala Street intersections.

For traffic signals, the average movement delay and level of service over all movements

has been adopted. For roundabouts and priority control



signals intersections, the worst movement has been adopted. Traffic performance at each intersection therefore needs to be put into context. For example, while a signalised intersection has a long queue on a single approach (i.e peak inbound traffic flows), the average performance of the intersection is still deemed acceptable.

A summary of the 2040 LOS per section is provided below.

		,
Section #		2040 LoS
	АМ	PM
1	с	в
2	D	D
3	D	С
4	С	В
5	D	D
6	С	С
7	в	В
8	С	С
9	с	С
10	с	D

At a link level, the majority of the corridor was identified to operate with a minimum LOS C, except for the sections between Boundary Street and Hibbard Drive and between Lake Road and Pacific Drive which operated between LOS D and E for some directions / peak periods.

**Level of Service (LoS) :** The LoS is a measure of how easily traffic flows on the road. It assesses the operating condition of a road based on various factors, including traffic volumes, proportion of heavy vehicles, terrain and frequency of intersections. Levels of service range from 'A' to 'F' with 'A' representing free-flowing traffic and 'F' representing severe congestion.

LoS	Description
А	Free flowing traffic during peak periods
В	Small delays throughout the peak period
С	Delays during the peak period
D	Large delays during the peak period
E	Significant delays and congestion during the peak period
F	Severe delays and congestion during the peak period



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#### Table 3.2: 2040 LOS By Section



# 3.5 Road Geometry

The following was identified as part of the Road Geometry and Infrastructure review:

- The road geometry and alignment is inconsistent and often deficient in some locations. Particularly:
  - Narrow lane widths of less than 3.5m, which are not appropriate for the road environment, high vehicle volumes or use by heavy vehicles
  - Narrow or no shoulder provision. Shoulders are often unsuitable for the road environment, or the verge commences immediately at the edge of the travel lane. Shoulders are essential to allow for recovery maneuverers, breakdowns, and cyclists. Shoulders also allow general traffic to leave the travel lanes to let emergency vehicles pass
  - Inconsistent provision of kerb and channel across the corridor, particularly through urban sections
  - Sections of poor road alignment within the road reserve

- Consistently poor pavement health across the corridor, including rutting, cracking, potholes and wearing
- Generally poor to average bridge infrastructure. The Stingray Creek Bridge and Pacific Highway overpass (in Section 10) are considered to be of high quality. The remainder of bridges had no shoulder provision and poor pathway connectivity or pedestrian facilities
- Sub-standard culvert design with many non-traversable culverts located in the clear zone
- Substandard roadside environment, with limited pedestrian / activity transport provisions. The roadside environment also often included unprotected steep embankments and trees / power poles in close proximity to travel lanes.



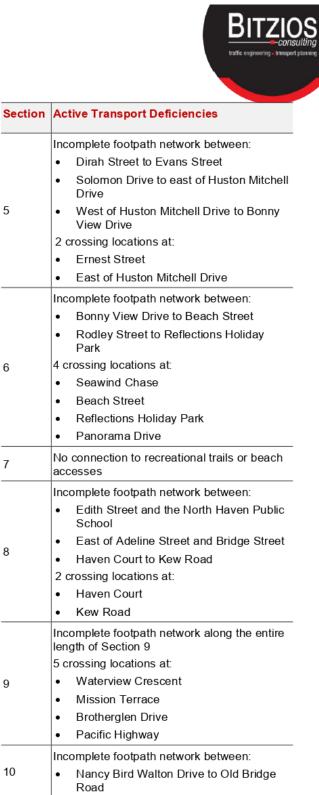






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# 3.6 Active Transport

The existing walking, cycling & public transport infrastructure along the corridor were reviewed to assess its current performance and adequacy. The walking and cycling infrastructure consist of footpaths, a variety of crossing facilities, on-road cycle lanes and road shoulders.

The provision and quality of infrastructure varies significantly along each section, in part due to the varying movement and place function that the corridor serves.

The on-road cycle network is fragmented throughout the corridor with cycle lanes inconsistently starting or ending and with inconsistent sign posting.



The active transport deficiencies by section are summarised below.

#### Table 3.3: Active Transport Deficiencies

Section	Active Transport Deficiencies
1	No connection to Bridge pathway
2	<ul> <li>Incomplete footpath network between:</li> <li>Tuffins Lane to Boundary Street</li> <li>Newport Island Road to Widderson Street</li> </ul>
3	Incomplete footpath network between Ackroyd Street to Heather Street 2 crossing locations at: • Crestwood Drive • Pacific Drive
4	No connection to recreational trails and beach accesses





group.

RITTI

# Active Transport Infrastructure Users and Investment

# Council needs to ensure the infrastructure that is delivered is fit for purpose, represents value for money outcomes and demonstrates the benefits to the community.

Connections between townships are often challenging due to environmentally sensitive areas, dense vegetation, and other deliverability challenges. Further there is the need to consider what level of investment and prioritisation is appropriate based on likely user type and foreseeable demand. The below table identifies main key cycling and walking user groups and the typical characteristics of each

#### User Groups & Typical Characteristics

A CONTRACTOR OF THE OWNER	
	<ul> <li>School Children, People with a Disability, Seniors, Parents with Prams</li> <li>Ages and skill levels vary</li> <li>At higher risk of injury</li> <li>Travel to a variety of destinations such as schools, shopping centres, community facilities and public transport stops</li> <li>Trip length is usually short (generally up to 1.5km)</li> <li>Prefer routes that are direct but are also as flat as possible</li> <li>May require wider paths to accommodate mobility scooters etc.</li> </ul>
Recreational and Tou	ırist Users
	<ul> <li>Travel for fitness, fun, relaxation</li> <li>Often travel along scenic routes (e.g. coastal stretches and hinterland trails)</li> <li>Trip length may vary greatly depending on the level of experience of the users</li> <li>Prefer routes that prioritise scenery and link points of interest</li> <li>Quality supporting facilities (e.g. water fountains and rest spots) and wayfinding signage is a priority for these users</li> </ul>
Sport Users	
	<ul> <li>Professional athletes, sporting club members</li> <li>Typically training for sporting events and may train in groups</li> <li>Usually walk/run/cycle at higher speeds</li> <li>Prefer uncongested routes and potentially those with challenging topography</li> </ul>
Commuter / Day to D	ay Users
	<ul> <li>Travel to a variety of destinations such as work, shopping centres, community facilities and public transport stops</li> <li>Trip length is usually short – typically up to 2km for walkers and under 10km for cyclists</li> <li>Prefer routes that are direct but are also as flat as possible</li> <li>Routes that provide continuous connections to key destinations are critical</li> </ul>
road Cycle Lanes	/ Off-road Shared Pathways
-	e preferred for more experienced users however is not practical for vulnerabl

recreational users, particularly in high-speed environments. Alternatively, off-road shared pathways are a safer solution to addressing various cycle user types, but also need to consider the safety implications on pedestrians, particularly in areas of high pedestrian activity.

Cycle infrastructure along the corridor therefore ultimately needs to accommodate for the wide variety of users, promote active transport travel modes and seek to manage user conflicts. A combination of cycle lanes, shared paths, and the potential for Council to also adopt separated cycleways in the future has been considered in the Strategy.



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# 3.7 Public Transport

Public transport infrastructure along the corridor consists of bus stops that are serviced by a number of bus routes.

Bus stop facilities and infrastructure vary along the corridor including the provision of shelters and idented stops. The public transport provisions are managed by Transport for NSW and consultation between government departments is required for future planning. The bus stop deficiencies identified are summarised by section below.

#### Table 3.4: Public Transport Deficiencies

#### Section Bus Stop Deficiencies

	Lack of shelters and supporting facilities with 2 bus stop pairs located at:
2	Clifton Drive
	Findlay Avenue
3	Bus stop on Ocean Drive at Greenmeadows Drive (southern end) with lack of shelter and seating provision and possible need for bay indent
8	Lack of provision for bus stops at the North Haven Public School with shelters and seating

#### 3.8 Environment, and Land Use

The corridor serves a variety of land uses and frequently transitions between rural and urban areas along its length. These various land uses, and the historical function of the corridor present a challenge for managing the 'movement function' of the road to provide adequate capacity and connect towns, but also providing a 'place function' of the road at key locations within various towns to service local communities and provide a safe and efficient access for all road users.

The land uses, communities, and environments the corridor serves has been considered in the development of the strategy, specifically the future growth of the greater Port Macquarie region. This growth will increase activity and traffic but will also increase the propensity for increased movements to and from the major centre of Port Macquarie on a daily basis.







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# 4. CORRIDOR CHALLENGES AND PROPOSED ACTIONS

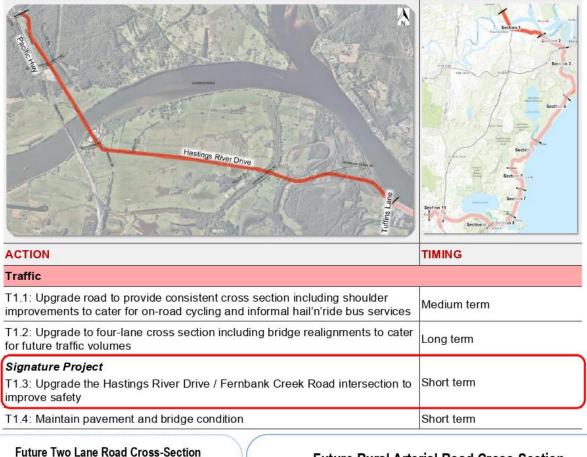
# 4.1 Overview

The proposed actions for each section of the corridor are provided below.

The timing and priority of each action is categorised into short (1-10 years), medium (11-20 years) and long (20+ years) which considers land use growth along the corridor.

A number of actions are considered to be signature projects that are earmarked to be of key significance in the improvement of the corridor in terms of safety and efficiency specifically for accommodating future growth. *Signature Projects* are also highlighted in the following sections.

# 4.2 Section 1: Hastings River Drive (Pacific Highway to Tuffins Lane)





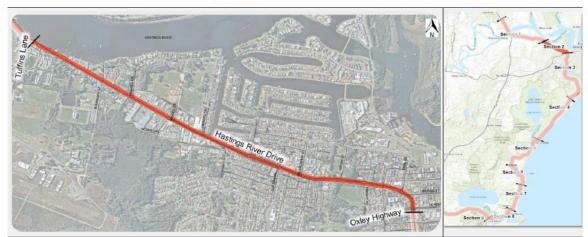


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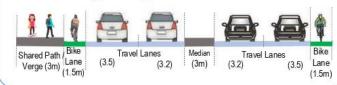




# 4.3 Section 2: Port Macquarie: Hastings River Drive (Tuffins Lane to Gordon Street)



ACTION	TIMING
Traffic	
Signature Project T2.1: Upgrade the Boundary Street / Hastings River Drive intersection to include additional turning capacity to accommodate for development of the Airport Precinct and a potential Orbital Link road	Long term
T2.2 Upgrade Hastings River Drive between Boundary Street and Huges Place to a 4-lane cross section including cyclist facilities and cater for traffic growth	Short/Medium tern
T2.3: Upgrade Clifton Drive / Hastings River Drive intersection to cater for traffic growth and to provide safer pedestrian crossing opportunities at peak times	Long term
T2.4: Plan for future corridor needs to cater for a 4-lane cross section from Tuffins Lane to Boundary Street including cyclist facilities (i.e cycle lanes or shared path)	Long Term
T2.5: Upgrade the Aston Street / Hastings River Drive to a signalised intersection including additional turning capacity	Long term
T2.6: Upgrade the Oxley Highway / Hastings River Drive / Gordon Street / Ocean Drive intersection to increase turning capacity	Short term
T2.7: Schedule maintenance to maintain the pavement and corridor infrastructure	Short term
Active Transport	
A2.1: Provide a shared path on one side of the corridor through Port Macquarie by upgrading the current path	Short term
Public Transport	<i>2</i>
P2.1: Formalise and improve bus stops to provide consistent high-quality facilities in the corridor	Long term
Future Urban Arterial Road Cross-Section	





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# 4.4 Section 3: Ocean Drive (Gordon Street to Elkhorn Grove)

	Becinit B Becinit B Becinit B Becinit B Becinit B Becinit B Becinit B
ACTION Traffic	TIMING
T3.1: Upgrade Ocean Drive to a four-lane divided cross section in between Ackroyd Street to Denehurst Place	Long term
T3.2: Upgrade the Ocean Drive / Lake Road to increase turning capacity	Long term
T3.3: Upgrade the Ocean Drive / Green Meadows Drive to improve safety	Long term
Signature Project         T3.4: Upgrade Ocean Drive to a four-lane cross section between Greenmeadows Drive (south) to Matthew Flinders Drive including the following intersections:         • Ocean Drive / Crestwood Drive / Dahlsford Drive         • Ocean Drive / Pacific Drive / Jonas Absalom Drive         • Ocean Drive / Matthew Flinders Drive / Lanes Absalom Drive	Medium term 2026 - 2030
T3.5: Upgrade the Ocean Drive /Links Crescent / Elkhom Grove intersection to improve safety	Long term
T3.6: Schedule maintenance to maintain the pavement and corridor infrastructure	Short term
Active Transport	
A3.1: Provide appropriate crossings at key locations	Short term
A3.2: Provide a shared path on one side of the corridor	Short term
Public Transport	
P3.1: Plan for the upgrade and potential relocation of bus stops north of Greenmeadows Crescent, at the Ocean Drive / Dahlsford Drive intersection and Ocean Drive / Pacific Drive intersection	Long term

# Future Urban Arterial Road Cross-Section



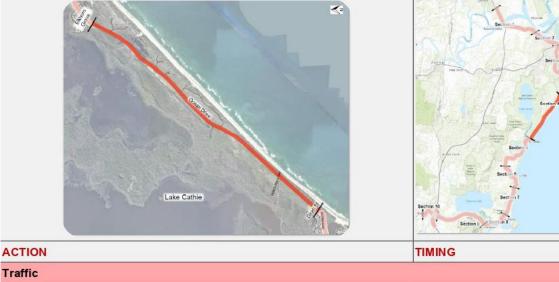


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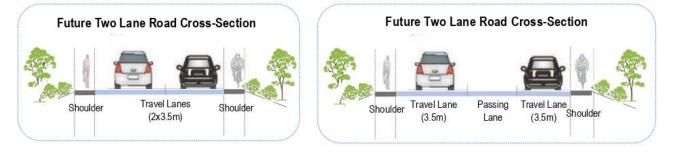




# 4.5 Section 4: Ocean Drive (Elkhorn Grove to Dirah Street)



Traffic	
Signature Project T4.1: Upgrade Ocean Drive to provide consistent two-lane cross section including shoulder improvements for on-road cyclist including signage and line marking	Medium term
T4.2: Provide overtaking and passing lanes where appropriate to increase traffic flow	Medium term
Active Transport	
A4.1: Complete shoulder improvements and widening for on-road cycle lanes in line with road cross section upgrades	Medium term
A4.2: Investigate opportunities for an off-road path connecting Port Macquarie to Lake Cathie	Long term
Public Transport	
P4.1: Provide suitable lane widths and curve widening to cater for buses	Long term
	No. 1997









# 4.6 Section 5: Ocean Drive (Dirah Street to Bonny View Drive)



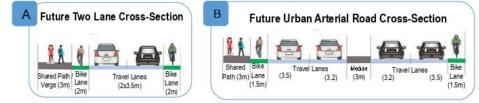
T5.6: Upgrade the Ocean Drive / Town Centre Access to a signalised intersection

#### **Active Transport**

A5.1: Provide shared path on one side of the corridor throughout Lake Cathie Short term A5.2: Provide crossing facilities on Ocean Drive specifically around Fiona Short term Crescent **Public Transport** P5.1: Formalise and upgrade bus stops to cater for school bus interchanges Long term

P5.2: Provide suitable lane widths and curve widening to cater for buses Long term

It is noted that after further investigations and detailed design Council may consider the ability to implement an off-road cycle facility to accommodate for the different user groups.





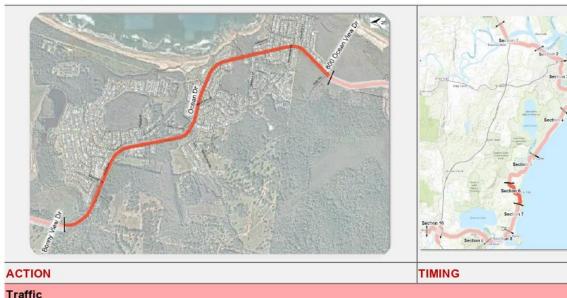
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Medium term 2026 - 2030

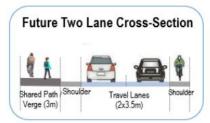


# 4.7 Section 6: Ocean Drive (Bonny View Drive to 800 Ocean Drive)



Tranc	
T6.1: Upgrade the Ocean Drive / McGilvray Road intersection to a roundabout	Medium term
T6.2: Upgrade Ocean Drive to provide consistent two-lane cross section, including shoulder improvements for cyclist including signage and line marking	, Medium term
T6.3: Maintain road safety by clearing overgrown roadside vegetation and other roadside hazards	Short term
Active Transport	
A6.1: Provide continuous shared path on one side of Ocean Drive through Bonny Hills (i.e. from Bonny View Drive to the Field Stop 1 beach access)	Short term
Signature Project	
A6.2: Provide safe crossings at:	
Beach Street / Ocean Drive	Short term
Fronting the Reflections Holiday Park	
Fronting the top shop	
Public Transport	
P6.1: Formalise and upgrade bus stops to provide consistent and frequent stops along Ocean Drive	Long term
	- 1

It is noted that after further investigations and detailed design Council may consider the ability to implement an off-road cycle facility to accommodate for the different user groups. A potential cross section is shown below.





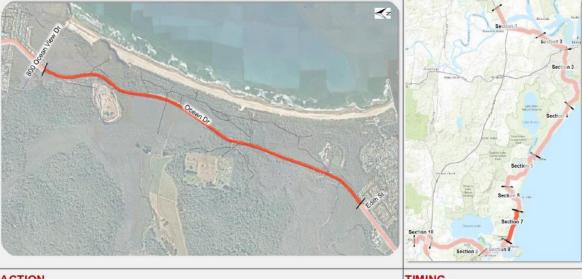


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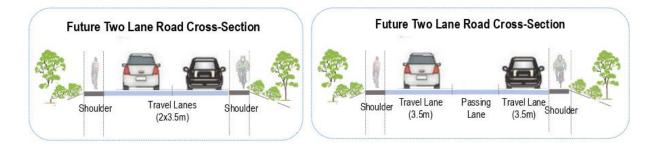




# 4.8 Section 7: Ocean Drive (800 Ocean Drive to Edith Street)



ACTION	TIMING
Traffic	
Signature Project T7.1: Upgrade Ocean Drive to provide consistent two-lane cross section including shoulder improvements for on-road cyclist including signage and line marking	Medium term
T7.2: Provide overtaking and passing lanes where appropriate to increase traffic flow	Medium term
T7.3: Maintain road safety by clearing overgrown roadside vegetation and other roadside hazards	Short term
Active Transport	-
A7.1: Provide pedestrian connections to the beach trails between Bonny Hills and North Haven	Long term
Public Transport	
P7.1: Provide suitable lane widths and curve widening to cater for buses	Long term





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# 4.9 Section 8: Ocean Drive (Edith Street to Kew Road/Ocean Drive intersection)

	Section 10
ACTION	TIMING
Traffic	
Signature Project         T8.1: Upgrade the following intersections to a roundabout:         • Ocean Drive / Edith Street         • Ocean Drive / Bold Street / Bayside Circuit         • Ocean Drive / Kew Road	Medium term
T8.2: Maintain road pavement and corridor infrastructure	Short term

### Active Transport

A8.1: Provide a shared path on one side of Ocean Drive through North Haven Medium term

### Public Transport

P8.1: Formalise and upgrade bus stops to provide consistent and frequent stops along Ocean Drive



Long term



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# 4.10 Section 9: Ocean Drive (Kew Road / Ocean Drive intersection to Pacific Highway)

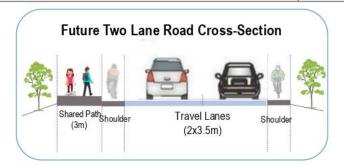




ACTION

Traffic

T9.1: Upgrade the Ocean Drive / Sirius Drive to a signalised intersection	Short term 2021-2025
T9.2: Upgrade the Ocean Drive / Lake Ridge Drive to a signalised intersection	Short term
T9.3: Upgrade the Ocean Drive / Mountain View Road intersection to a roundabout	Medium term
T9.4: Maintain road pavement and corridor infrastructure	Short term
Active Transport	
<i>Signature Project</i> A9.1: Provide a shared path on one side of Ocean Drive to complete missing link from Fairwinds Avenue to Kew Road	Medium term
Public Transport	
P9.1: Formalise and upgrade bus stops to provide consistent and frequent stops along Ocean Drive	Long term





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# 4.11 Section 10: Kendall Road (Pacific Highway interchange to Comboyne Street)





### ACTION

Traffic	
T10.1: Upgrade the Ocean Drive / Nancy Bird Walton Drive / Kendall Road roundabout to improve delineation and pedestrian safety	Short term 2021
T10.2: Upgrade Ocean Drive to provide consistent two-lane cross section including shoulder improvements for on-road cyclist including signage and line marking	Medium term
T10.3: Maintain road pavement and corridor infrastructure	Short term
Active Transport	
Signature Project A10.1: Provide a shared path on one side of the corridor between Kew and Kendall	Medium term
A10.2: Provide safe and formalised pedestrian crossing opportunities in Kew and Kendall	Medium term
Public Transport	
P10.1: Formalise and upgrade bus stops to provide consistent and frequent stops along Ocean Drive	Long term





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# 5. COMMUNITY CONSULTATION

The community and stakeholder engagement approach was designed to ensure key stakeholders, community groups, and interested local community members were given opportunities to provide direct input to the draft corridor strategy at key points in the process.

The community and stakeholder engagement process consisted of two phases:

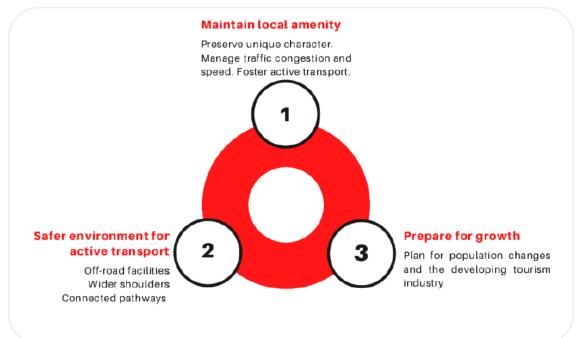
- Phase One Corridor Review, Description and Vision
- Phase Two Improvement Strategies and Actions.

Community and stakeholder input captured during initial phase of engagement fed into project team's work to define the vision, objectives, and targets for the corridor. The second phase of the engagement captured input to inform the draft strategies and actions.

A third phase of engagement is being delivered by Council, as part of public exhibition on this draft Corridor Strategy.

During both phases of the community and stakeholder engagement consistent feedback emerged.

Analysis of the feedback received during the second phase of engagement indicated that there were a range of issues important to community members and key stakeholders. These consistent issues, or key themes, that were mentioned across all sections of the corridor are illustrated below:









# 6. NEXT STEPS: STRATEGY TO IMPLEMENTATION

As part of Council budget approximately \$36m of its \$85m capital works program is spent for roads and road associated infrastructure projects annually. This budget is to cover not only this corridor but an overall road infrastructure network with over 1,300kms of sealed and unsealed roads and more than 220kms of footpaths.

Specific projects and improvements out of this Strategy will need to be considered for prioritisation along with a number of other transport improvements identified out of Regional Integrated Transport Strategy and Port Network Transport Network Planning.

Council projects are identified as part a 4-year delivery program which represents what the Council aims to deliver and serves as a guide when developing annual Operational Plans. The last 4-year delivery program (2017-2021) is due for review and update so this Strategy and work on a Regional Integrated Transport Strategy and Port Macquarie Transport Network Planning will be incorporated as part of this next adopted delivery program.

Further, there may be opportunities to seek additional funding from various sources to complete bring forward projects in the implementation plan/program or improvement specific treatments (i.e. off-road cycle tracks as opposed to shoulder widening improvements). For example, the NSW State Government has a Walking and Cycling Program whereby local government authorities can make submissions to allow for jointed funded improvements for shared paths, footpaths, and cycle lanes.

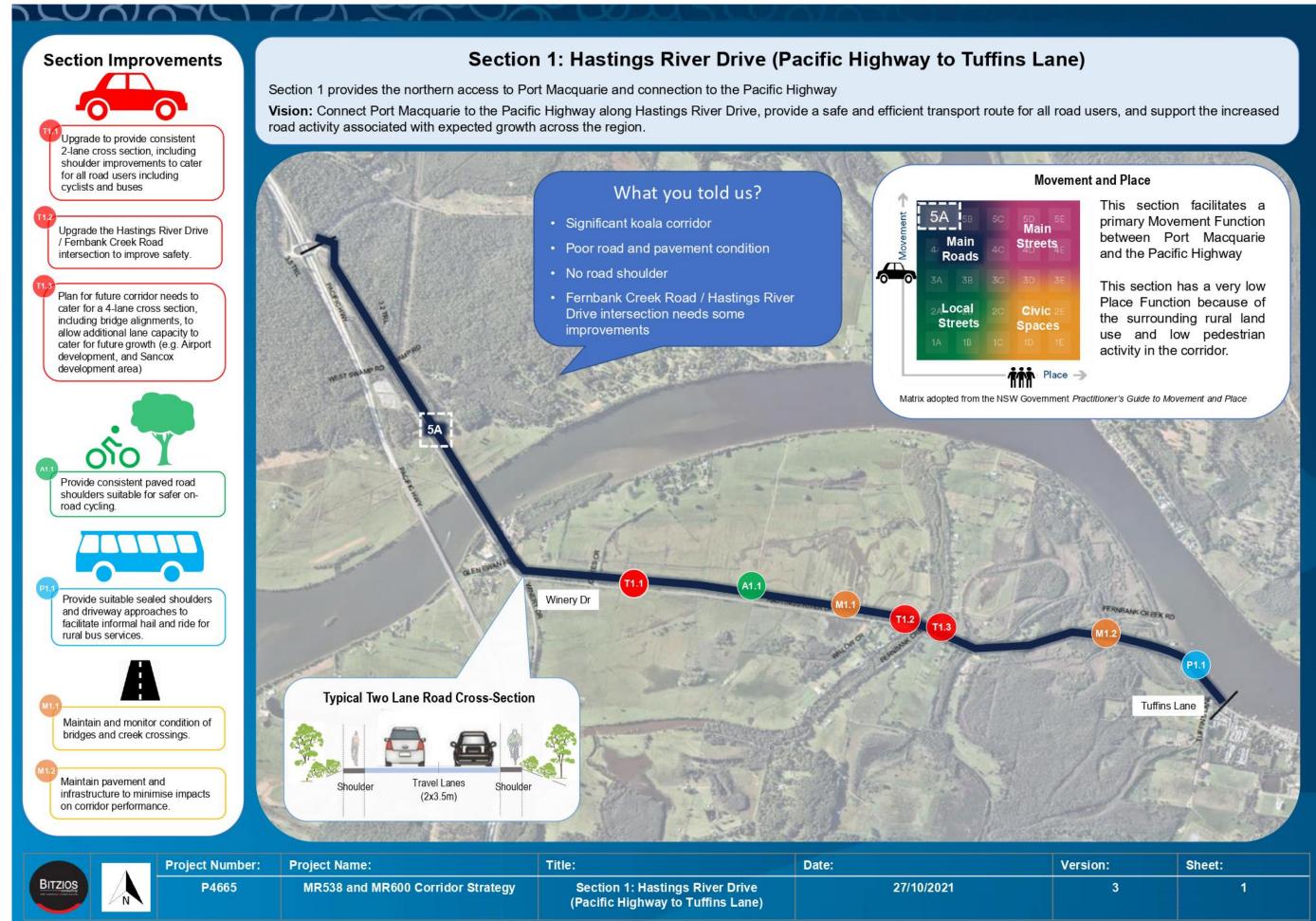


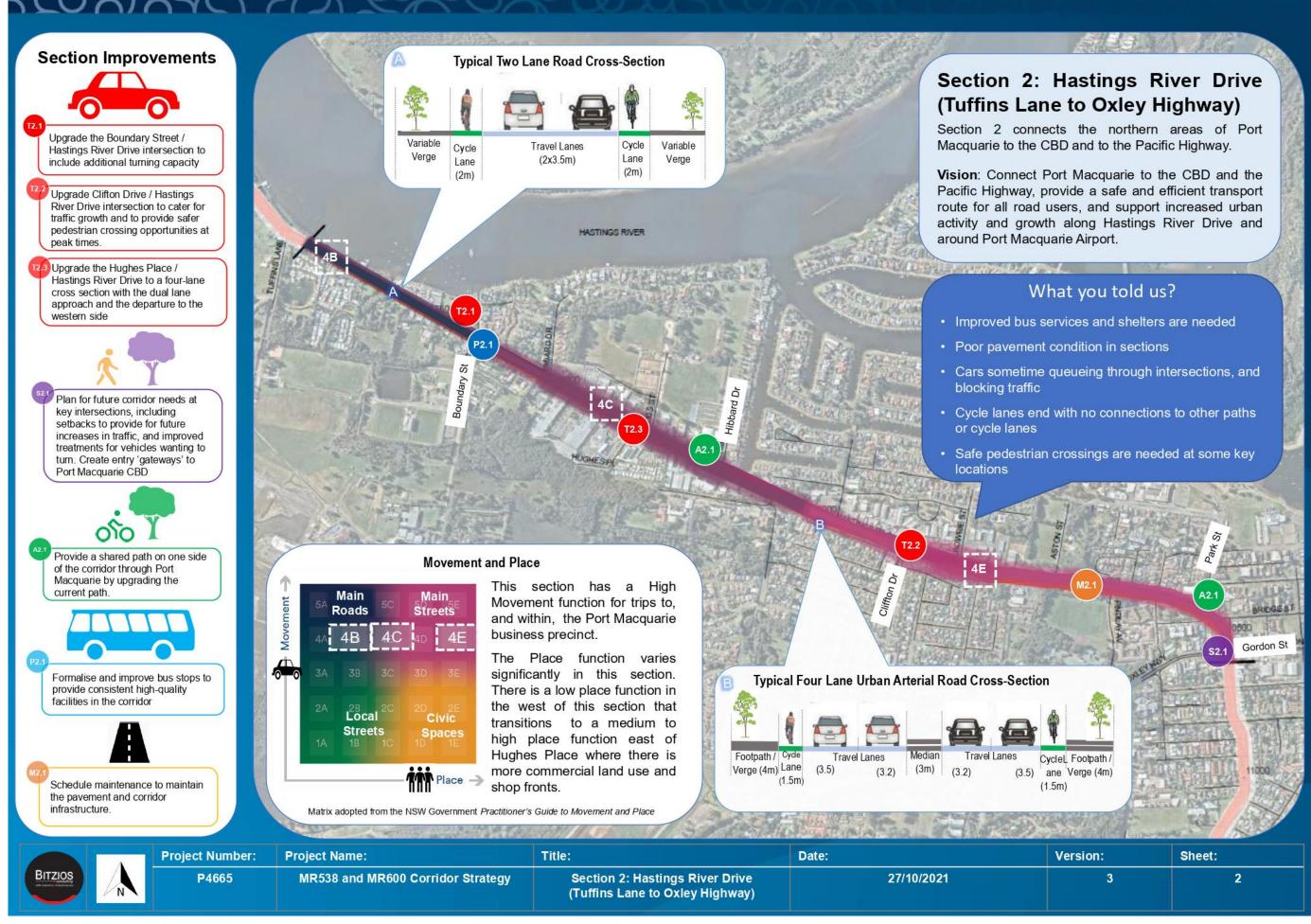
MR538 and MR600 Corridor Strategy: Draft Corridor Strategy Report Project: P4665 Version: 001

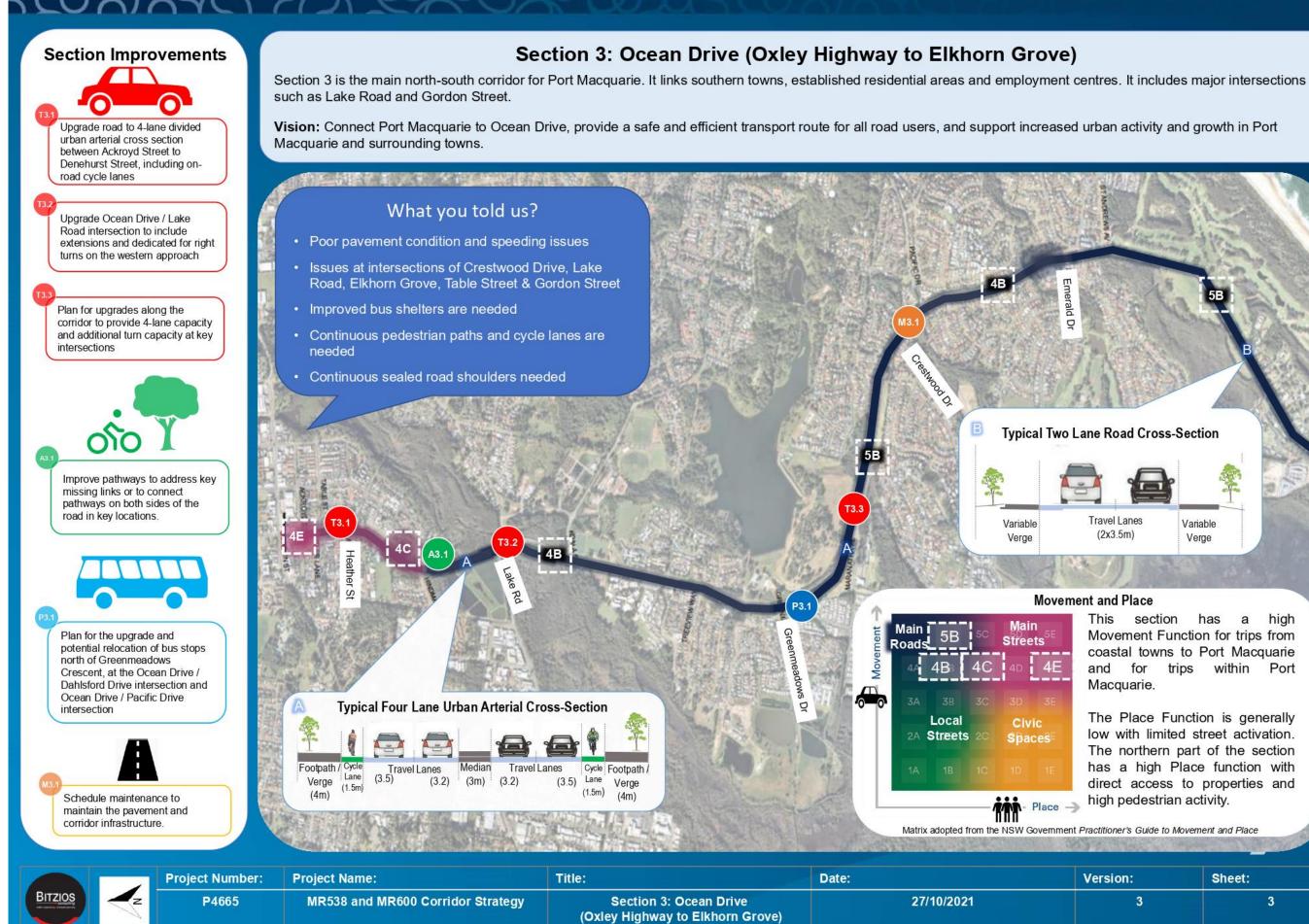




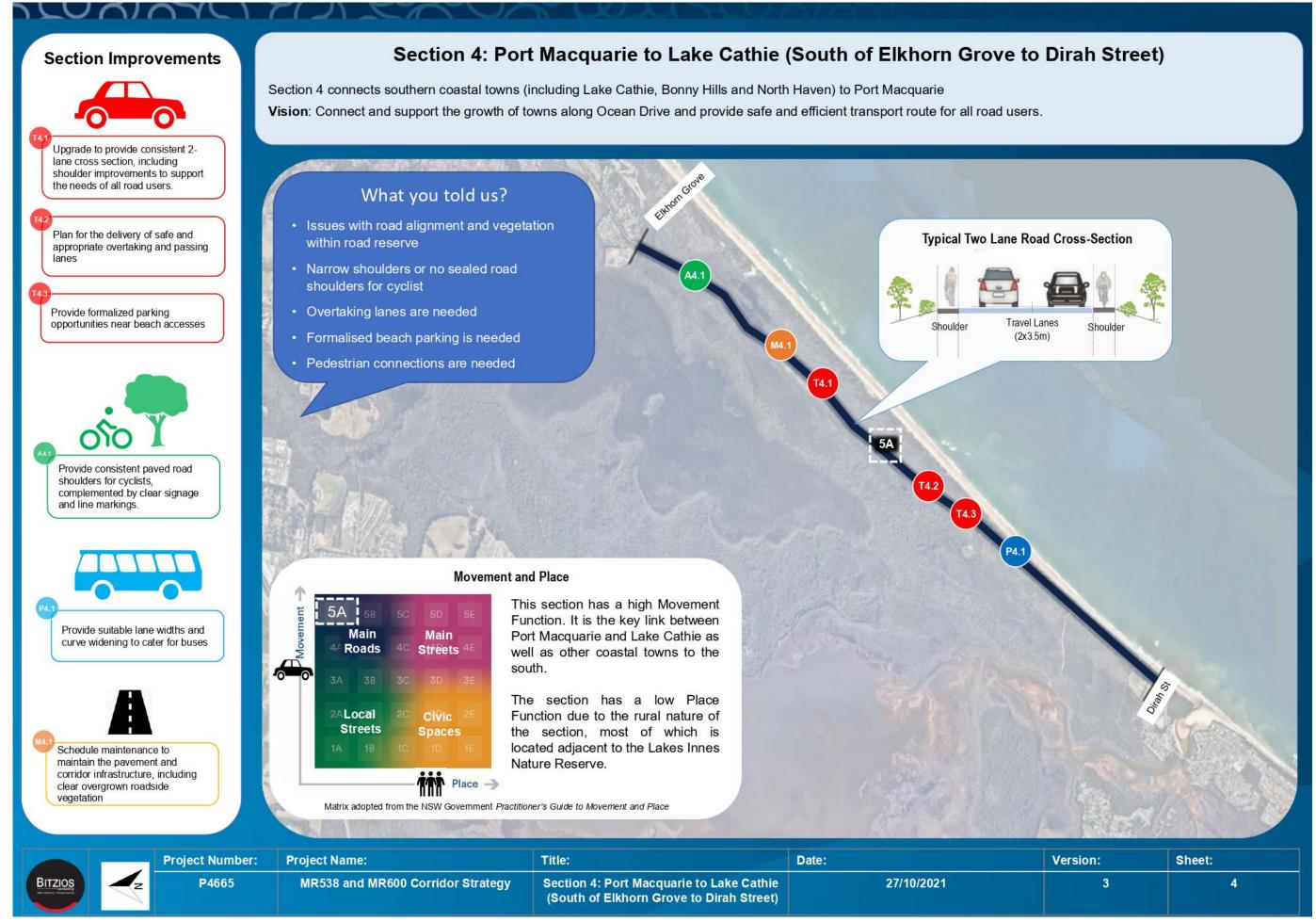
**Appendix A: Section Improvement Plans** 

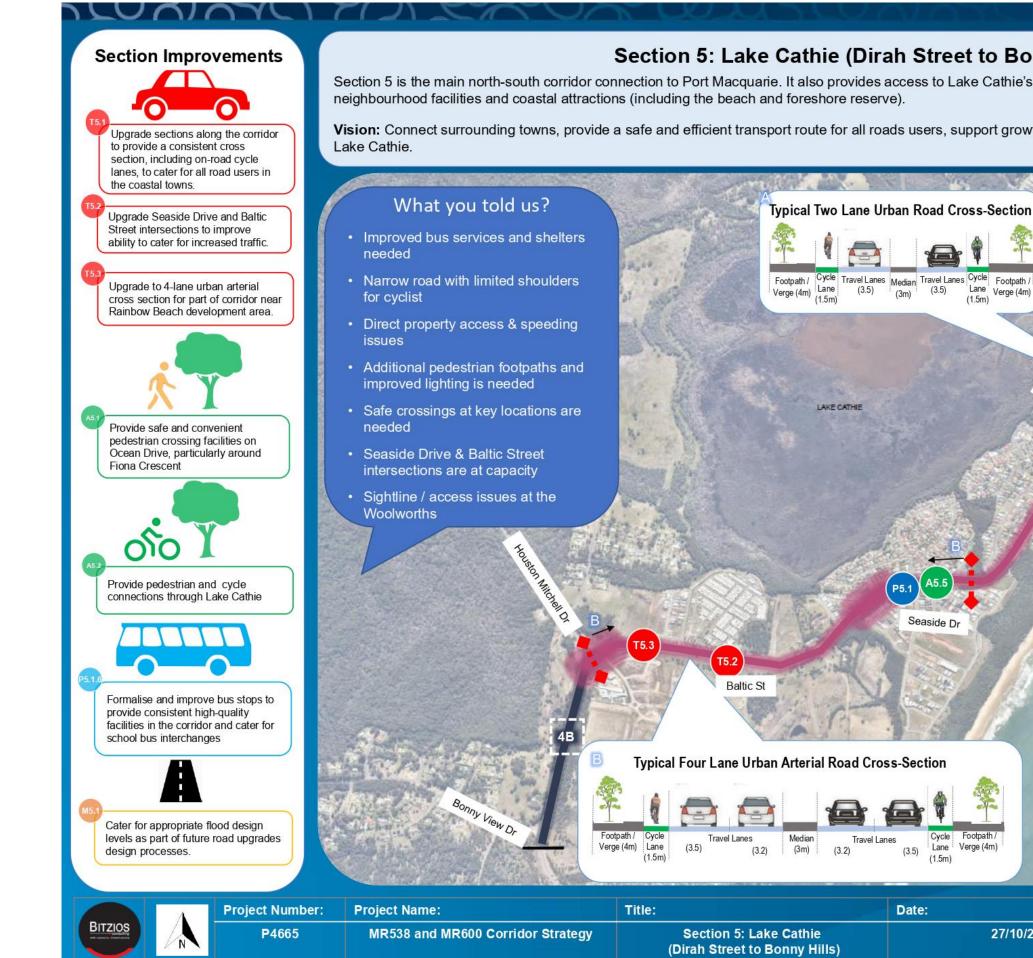






ent and Place	
coastal towns	has a high action for trips from to Port Macquarie aps within Port
low with limite The northern   has a high P	
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# Section 5: Lake Cathie (Dirah Street to Bonny Hills)

Lane Verge (4m)

Woolworths

(1.5m)

Footpath

27/10/2021

Lane Verge (4m)

Cycle

(1.5m)

(3.5)

Date:

(3.5)

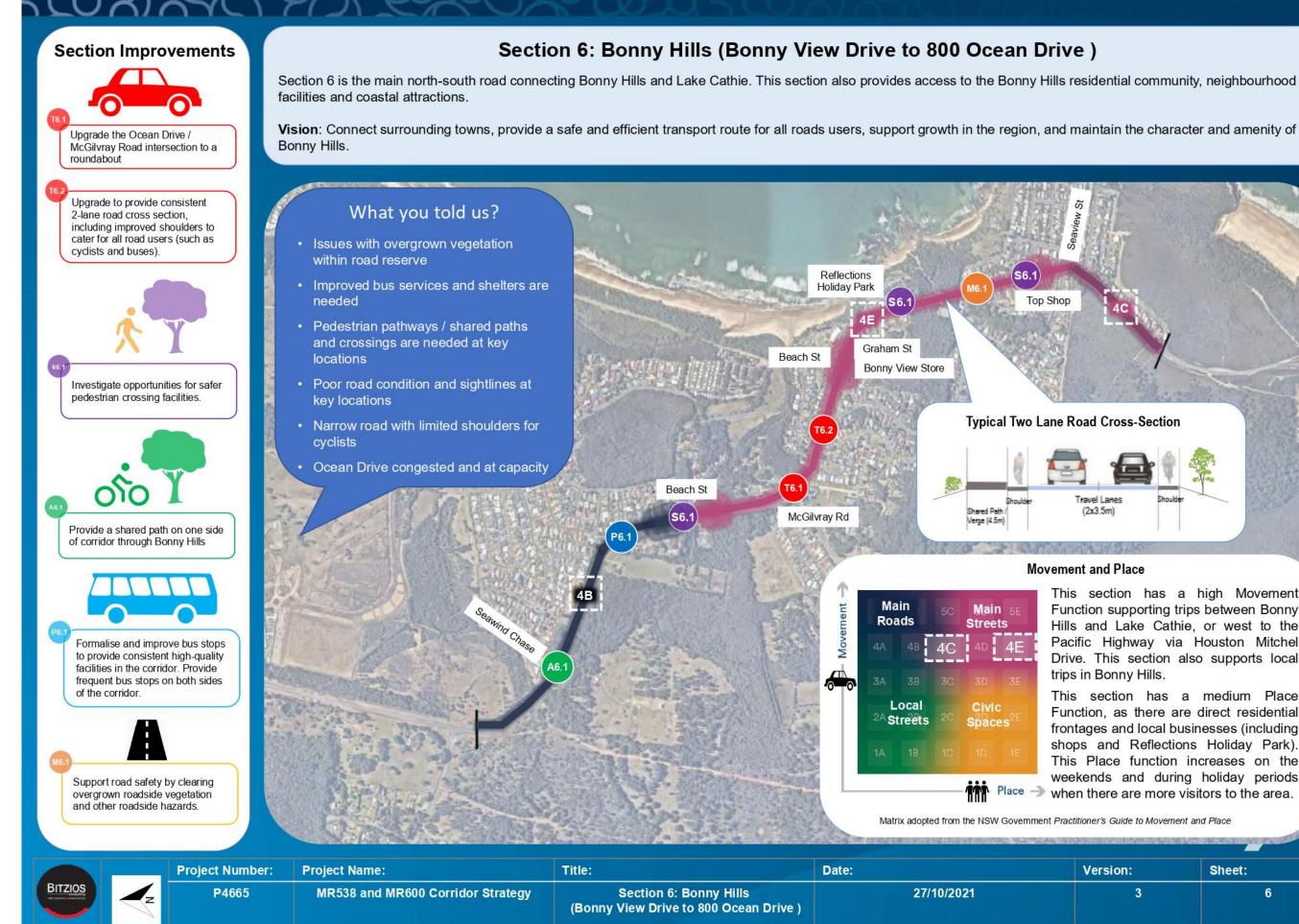
(3m)

Section 5 is the main north-south corridor connection to Port Macquarie. It also provides access to Lake Cathie's residential community, urban growth areas, school, neighbourhood facilities and coastal attractions (including the beach and foreshore reserve).

Vision: Connect surrounding towns, provide a safe and efficient transport route for all roads users, support growth in the region, and maintain the character and amenity of

## **ORDINARY COUNCIL** 19/05/2022





This section has a high Movement Function supporting trips between Bonny Hills and Lake Cathie, or west to the Pacific Highway via Houston Mitchel Drive. This section also supports local

This section has a medium Place Function, as there are direct residential frontages and local businesses (including shops and Reflections Holiday Park). This Place function increases on the weekends and during holiday periods

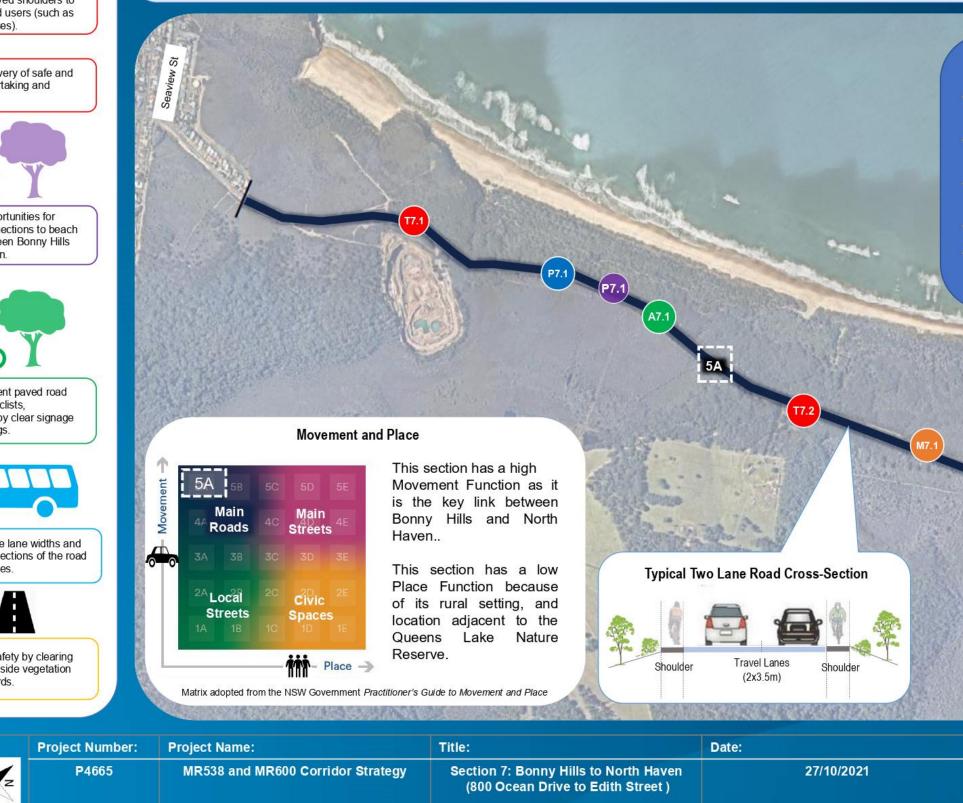
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# Section 7: Bonny Hills to North Haven (800 Ocean Drive to Edith Street)

Section 7 provides a coastal connection from the southern coastal towns of North Haven and Laurieton to Bonny Hills and Lake Cathie.

Vision: Connect surrounding towns, provide a safe and efficient transport route for all road users along Ocean Drive, and support growth within the coastal towns.



## **ORDINARY COUNCIL** 19/05/2022

# What you told us?

- Issues with overgrown vegetation within road reserve
- Formalised access to beach trails and the Quarry are needed.
- · Narrow road with no shoulders for cyclists
- Overtaking lanes are needed
- Off-road pedestrian connections between Bonny Hills and North Haven are needed

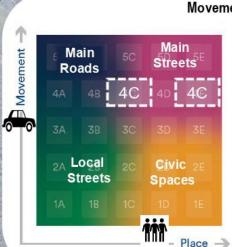
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# Section 8: North Haven to Laurieton (Edith Street to Kew Road)

Section 8 is the main east-west road linking North Haven to Laurieton. It links residential catchments and providing direct access to local businesses, and foreshore community facilities.

Vision: Connect surrounding towns, provide a safe and efficient transport route for all road users, support growth in the region, and maintain the character and amenity of North Haven.



( )

# Movement and Place

This section has a high Movement Function, supporting movement within North Haven and Laurieton. It also supports connections to surrounding towns.

This section also has a high Place Function near Camden Haven Inlet and the North Haven town centre. This area is an established town, and a popular tourist and recreational area. Pedestrian activity is high, particularly during weekends and holiday periods.

Matrix adopted from the NSW Government Practitioner's Guide to Movement and Place

# What you told us?

- On-street parking needs to be maintained to meet demands
- Pedestrian crossing needed on Ocean Drive between Lake Street and Bold Street
- On-road cycle lanes needed
- Poor line marking and road condition
- Ocean Drive / The Parade roundabout congested

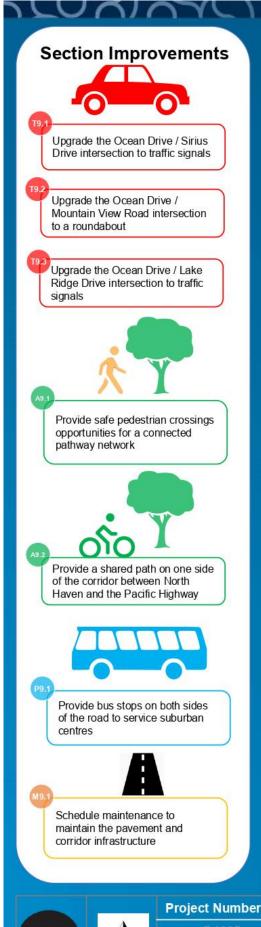


 
 BITZIOS
 Project Number:
 Project Name:
 Title:
 Date:

 P4665
 MR538 and MR600 Corridor Strategy (Edith Street to Kew Road)
 Section 8: North Haven to Laurieton (Edith Street to Kew Road)
 27/10/2021

# ORDINARY COUNCIL 19/05/2022



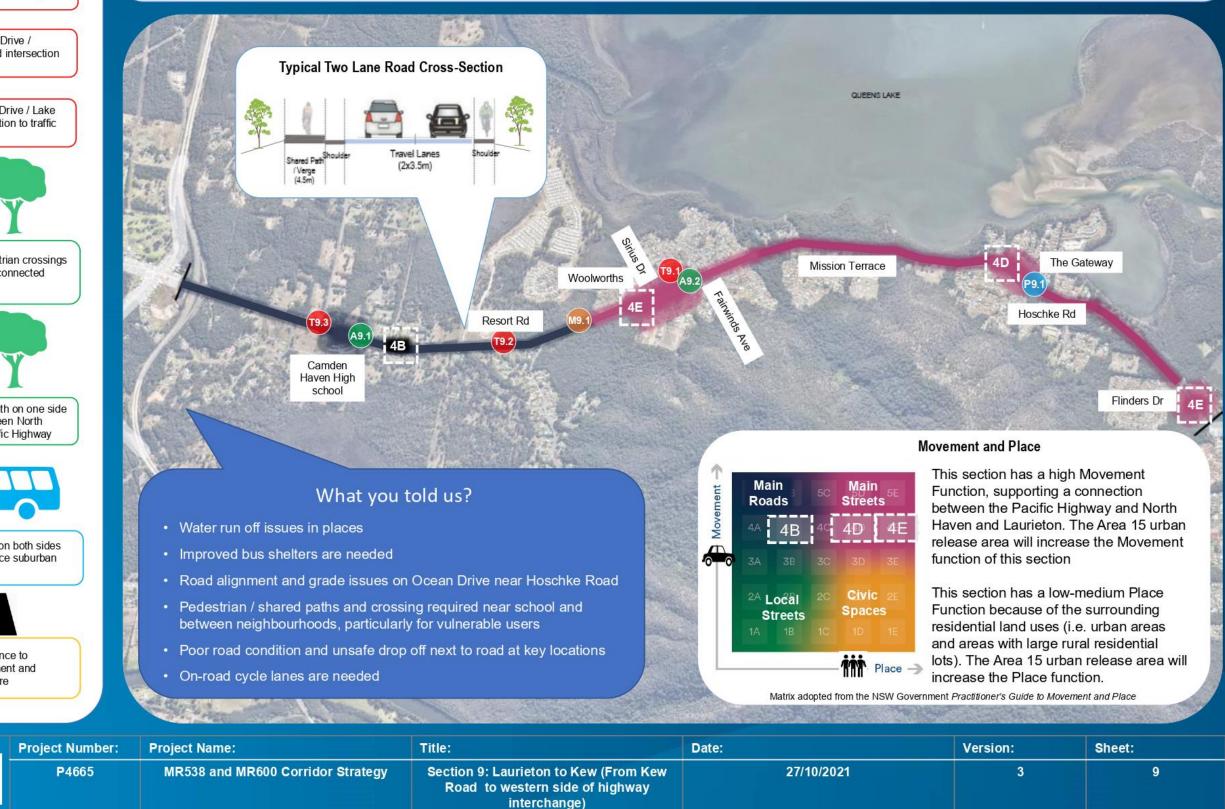


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# Section 9: Laurieton to Kew (From Kew Road to western side of highway interchange)

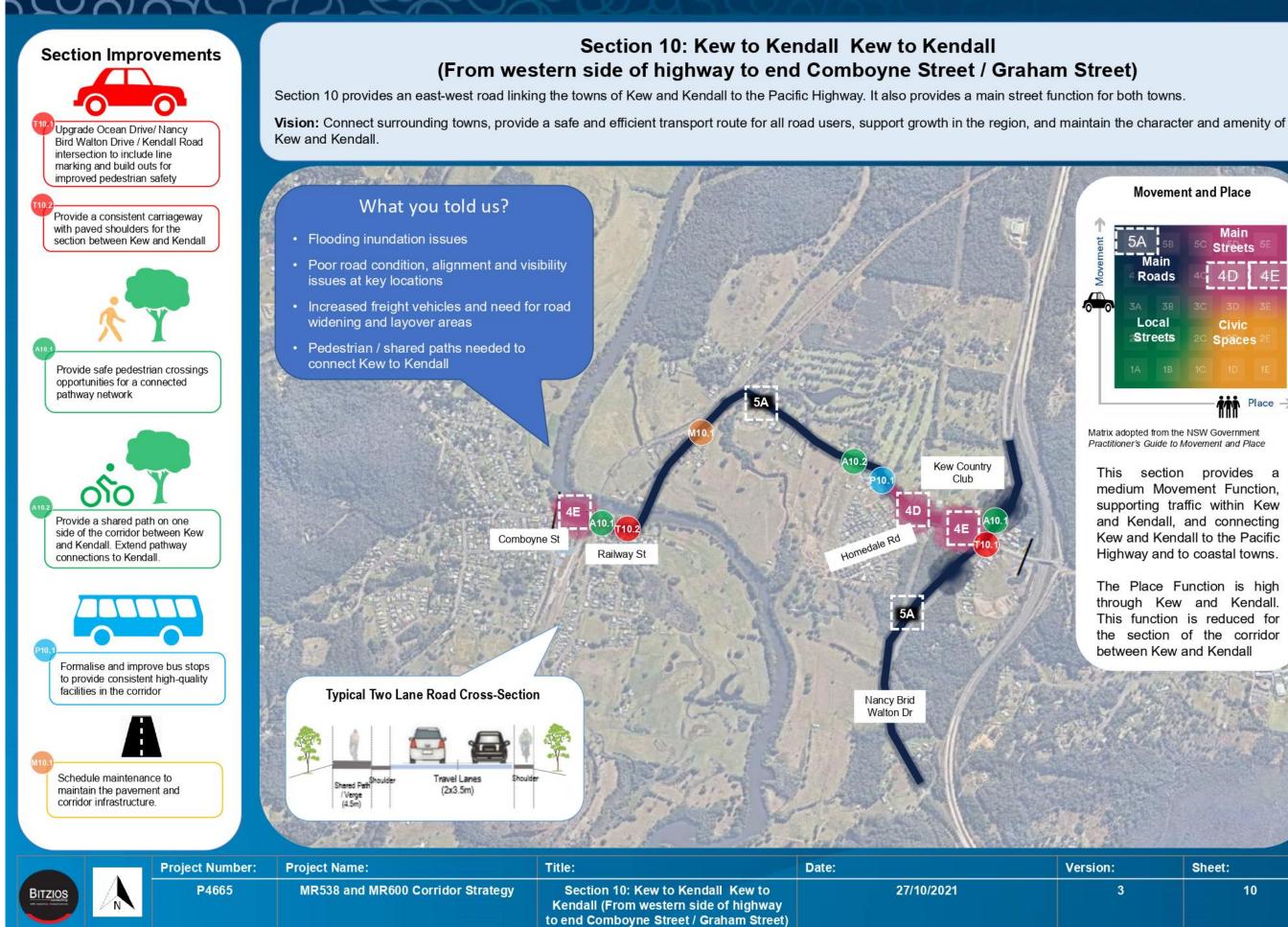
Section 9 is the east-west corridor connecting Kew and the Pacific Highway to the coastal towns of Laurieton and North Haven. It also services the growth catchments of West Haven and Lakewood.

Vision: Connect surrounding towns, provide a safe and efficient transport route for all road users, support growth in the region, and maintain the character and amenity of Lakewood.



# **ORDINARY COUNCIL** 19/05/2022

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	WOV	emei	nt and	FIACE	,
ment	5A	5B	5C (	Main Street	
Movement	Ma 4 Roa		40	4D	4E
<b>_</b>	3A	3B			
	Loc 2Stre		20	Civic Space	

Matrix adopted from the NSW Government Practitioner's Guide to Movement and Place

This section provides a medium Movement Function, supporting traffic within Kew and Kendall, and connecting Kew and Kendall to the Pacific Highway and to coastal towns.

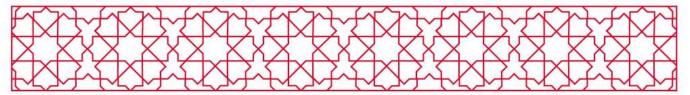
The Place Function is high through Kew and Kendall. This function is reduced for the section of the corridor between Kew and Kendall

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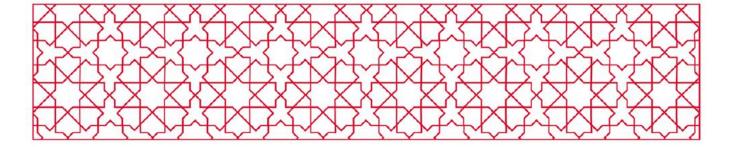


Leisa Prowse CONSULTING

# MR538 & MR600 Corridor Strategy Planning – Community and Stakeholder Engagement

# **Technical Note**

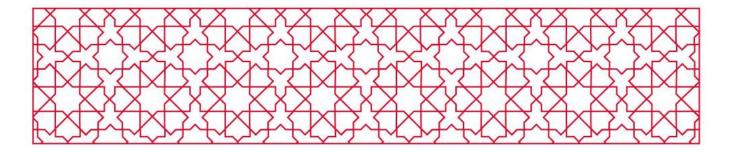
September 2021



# Document Control Sheet

Version history

Version	Date	Author	Reviewer	Action
Working draft	14/09/2021	Amelia Burr	Leisa Prowse	Working draft focused on Phase 2 issued to client for review.
1.0	20/09/2021	Amelia Burr Chelsea Baker	Leisa Prowse	Issued to client for review.
2.0	22/09/2021	Amelia Burr	Leisa Prowse	Client changes addressed.
Final	02/03/2022	Leisa Prowse	Leisa Prowse	Issued as final



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# 1 Introduction

The Port Macquarie-Hastings Local Government Area (LGA) is experiencing significant growth. This growth, centred around Port Macquarie and other coastal communities, is generating a greater number of trips and putting pressure on key transport corridors.

The MR538 and MR600 road corridor includes Hastings River Drive, Ocean Drive, Kendall Road and River Street. This critical north–south 54-kilometre road corridor connects many of the major urban areas within the LGA. Currently, the corridor is a combination of two and four lane sections of road, with posted speeds that range from 50km/h to 100km/h.

The corridor is shown in Figure 1. Given the length of the corridor, it was separated into 10 sections to support the community and stakeholder engagement process. These sections are shown in Figure 1.



### Figure 1: MR538 and MR600 road corridor

These sections are described as:

- Section 1 Hastings River Drive (Pacific Highway to Tuffins Lane)
- Section 2 Hastings River Drive (Tuffins Lane to Oxley Highway)
- Section 3 Ocean Drive (Oxley Highway to Elkhorn Grove)
- Section 4 Port Macquarie to Lake Cathie (south of Elkhorn Grove to Dirah Street)
- Section 5 Lake Cathie (Dirah Street to Bonny Hills)
- Section 6 Bonny Hills (Bonny View Drive to 800 Ocean Drive)
- Section 7 Bonny Hills to North Haven (800 Ocean Drive to Edith Street)
- Section 8 North Haven to Laurieton (Edith Street to Kew Road)
- Section 9 Laurieton to Kew (Kew Road to western side of highway interchange)
- Section 10 Kew to Kendall (Western side of highway interchange to end of Comboyne and Graham Street).

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In 2020, Port Macquarie-Hastings Council (Council) engaged Bitzios Consulting (BC) to develop a corridor strategy that will identify ways to protect and enhance the corridor and its interaction with surrounding landuses. This strategy will inform Council's future planning and investment decisions, and their discussions with other government agencies about the corridor. It will also align with other transport network planning strategies being undertaken by Council.

As part of the BC project team, Leisa Prowse Consulting (LPC) has worked with Council to design and deliver a community and stakeholder engagement process to inform the development of the strategy. Initially intended to target key government and community stakeholders through a series of workshops, the engagement process has evolved to also seek broader community input.

This report documents:

- the community and stakeholder engagement process
- identified key stakeholders
- issues, challenges, ideas, and opportunities raised during initial engagement
- community and stakeholder feedback on the draft strategies and actions
- how community and stakeholder input informed the development of the strategy.

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# 2 Community and stakeholder engagement process

This section describes the community and stakeholder engagement process, including the:

- engagement goal and objectives
- engagement approach
- identified stakeholders.

#### 2.1 Community and stakeholder engagement goal and objectives

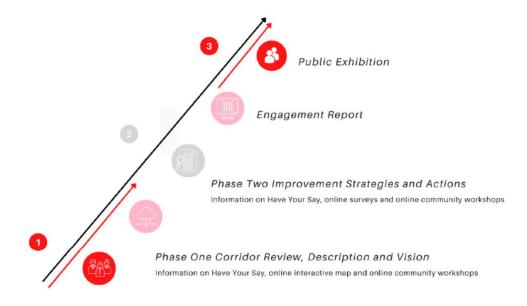
The goal of the community and stakeholder engagement process was to work collaboratively with key community and government stakeholders to understand their expectations about the future of the corridor, building acceptance and ownership of the outcomes of the corridor strategy.

The following objectives ensured the community and stakeholder engagement goal was achieved:

- Connect with identified community and government stakeholders to understand expectations of the outcomes of the corridor strategy.
- Provide opportunities to meaningfully collaborate with identified community and government stakeholders at key points in the project to explore identified issues, challenges, opportunities, and ideas.
- Create workshop environments that encourage robust, purposeful, and respectful discussion amongst key community and government stakeholders that ultimately moves the development of the corridor strategy forward.

#### 2.2 Community and stakeholder engagement approach

The community and stakeholder engagement approach was designed to ensure key stakeholders, community groups, and interested local community members were given opportunities to provide direct input to the draft corridor strategy at key points in the process. Figure 2 illustrates the engagement process.



### Figure 2. Engagement process

The community and stakeholder engagement process consisted of two phases:

- Phase One Corridor Review, Description and Vision
- Phase Two Improvement Strategies and Actions.

Community and stakeholder input captured during initial phase of engagement fed into project team's work to define the vision, objectives, and targets for the corridor. The second phase of the engagement captured input to inform the draft strategies and actions.

A third phase of engagement will be delivered by Council, when the draft Corridor Strategy will be placed on public exhibition.

### 2.2.1 Phase One

Community and stakeholder engagement activities delivered during Phase One included:

- information posted on a project page on Council's Have Your Say page
- an interactive map hosted on Council's Have Your Say page, on which 121 pins were dropped by 29 community members
- five online community workshops attended by 32 community members
- a stakeholder workshop attended by representatives from NSW National Parks and Wildlife Service, NSW Department of Premier and Cabinet, Transport for NSW, and Essential Energy
- stakeholder meetings with representatives from NSW Department of Planning, Industry and Environment and Busways.

#### 2.2.2 Phase Two

Community and stakeholder engagement activities delivered during Phase Two included:

- updated information posted on the project page on Council's Have Your Say page
- · an online survey hosted on Council's Have Your Say page
- interested community members invited to provide written feedback, with 15 written submissions and six emails received from community members and organisations
- four online community workshops, attended by 28 community members
- key stakeholder groups invited to provide written feedback, with feedback received from Transport for NSW, NSW National Parks and Wildlife Service, and NSW Department of Planning, Industry and Environment.

#### 2.3 Identified stakeholders

The MR538 and MR600 road corridor provides an important connection between the coastal towns and villages, and Port Macquarie. A range of government and community stakeholders were identified as having a potential interest in the development of the corridor strategy.

#### 2.3.1 NSW State Government Stakeholders

- Transport for NSW
- NSW Department of Planning, Industry and Environment
- NSW National Parks and Wildlife Service
- NSW Department of Premier and Cabinet
- Essential Energy
- Busways.

#### 2.3.2 Community stakeholders

- Port Macquarie Transport Network Community Consultative Committee
- Lake Cathie Community-Council Action Team
- Bonny Hills Community-Council Action Team
- Bonny Hills Progress Association

- Lake Cathie Progress Association
- Laurieton/Camden Haven Community-Council Action Team
- Kew/Kendall Community-Council Action Team
- local community members (including property owners, tenants, and other interested community members).

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# 3 Feedback captured during Phase One engagement

The community and stakeholder engagement process has captured a range of input and ideas that has informed the development of the corridor strategy.

### 3.1 Phase One summary of feedback

This section provides a summary of the feedback received from key stakeholders and community members during the first phase of engagement.

### 3.2 Interactive map

A total of 121 pins were dropped on the interactive map. Interested community members were able to drop pins, allocating them to the following categories:

- environment
- land uses and urban areas
- public transport facilities
- road condition and services
- traffic
- walking and cycling
- general comment.

Of the 121 total pins dropped:

- three pins related to environmental issues
- one pin related to land use and urban area issues
- one pin related to public transport facilities
- four pins related to road condition and services
- sixty-one pins related to traffic
- · forty-seven pins related to walking and cycling
- four pins related to general comments.

Appendix A includes maps prepared by BC, which show the locations where pins were dropped.

The following table provides a broad analysis of the comments associated with the dropped pins.

Section	Pins	Categories	Summary of feedback
1	10	<ul> <li>Traffic</li> <li>Walking and cycling</li> <li>General comment</li> </ul>	<ul> <li>Consider improved sight lines.</li> <li>Consider intersection function and need for improvements.</li> <li>Consider cycle lanes (which connect to the Pacific Highway), and road shoulders.</li> <li>Safety of cyclists and pedestrians.</li> <li>Consider improved line markings.</li> <li>Consider maintenance of roads and removal of rubbish.</li> </ul>
2	15	<ul> <li>Traffic</li> <li>Walking and cycling</li> </ul>	<ul> <li>Consider intersection function and need for improvements.</li> <li>Consider improved road surface.</li> </ul>

<ul> <li>Road condition and services</li> <li>Consider additional lanes, upgra turning lanes.</li> <li>Desire for cycle lanes, sealed ro paths and footpaths.</li> </ul>	ade to four lanes, and
	oad shoulders, shared
Safety of cyclists and pedestriar	ns.
Consider improved pedestrian c	crossings.
3 33 • Traffic • Walking and • Desire for road duplication to ea improved road alignment.	ase traffic congestion, and
• Public transport     • Public transport	nd need for
facilities • Desire to remind traffic to reduce	e speed.
Land use and urban areas     Consider providing parking to er carpool.	ncourage people to
Environment     Desire for cycle lanes, sealed ropaths, shared paths, footpaths a	
Safety of cyclists and pedestriar	ns.
Consider additional bus shelters	5.
Desire for an upgrade to four lar turn lanes, and improvement of	
Consider roadside landscaping	to reduce road noise.
Desire for a link between Ocean Highway.	n Drive and Oxley
Consider wildlife crossings and	fencing.
Cater for tourists.	
4 18 • Traffic • Desire for cycle lanes, road sho	oulders and shared paths.
Walking and Safety of cyclists and pedestriar cycling	ns.
Road condition     Desire for an upgrade to four lar     turn lanes, and improvement of	
and services     Environment     and services     Desire for a connection to Innes     area.	Lake or the industrial
General comment     Consider need for wildlife crossi	ings.
5 13 • Traffic • Walking and • Consider intersection function at improvements.	nd need for
Walking and cycling     Strong desire for bypasses of th	ne villages.
General     General     Consider pedestrian crossings,	and visibility of crossings.
comment     Consider safety of pedestrians a need for lighting on paths.	and cyclists, including
Desire to encourage businesses     Macquarie to other centres.	s to relocate from Port
Desire for dedicated cycle lanes shoulders.	s or sealed road

			Desire for upgrade to four lanes.
6	5	<ul> <li>Traffic</li> <li>Walking and cycling</li> <li>General comment</li> </ul>	<ul> <li>Consider intersection function and need for improvements.</li> <li>Mix of traffic and purpose of trips.</li> <li>Desire for upgrade to four lanes.</li> <li>Desire for pedestrian crossings.</li> <li>Question about Bonny Hills Bypass.</li> <li>Desire for cycling facilities, cycle lanes and paths.</li> </ul>
7	8	<ul> <li>Traffic</li> <li>Walking and cycling</li> </ul>	<ul> <li>Consider cyclist safety, and the need for dedicated cycle lanes or sealed road shoulders.</li> <li>Consider intersection function and need for improvements.</li> <li>Strong desire for a Bonny Hills Bypass.</li> <li>Consider need to improve road condition.</li> </ul>
8	8	<ul> <li>Traffic</li> <li>Walking and cycling</li> </ul>	<ul> <li>Consider intersection function and need for improvements.</li> <li>Desire for dedicated cycle paths, footpaths or shared paths.</li> <li>Consider visibility of pedestrian crossings.</li> <li>Question about North Haven Bypass.</li> </ul>
9	7	<ul> <li>Traffic</li> <li>Walking and cycling</li> </ul>	<ul> <li>Consider road maintenance and upkeep</li> <li>Desire to complete cycle and footpath between Lakewood and Laurieton.</li> <li>Intersection function and need for improvements.</li> <li>Safety of cyclists and pedestrians.</li> <li>Strong desire for a bypass, upgrade to four lanes or passing lanes.</li> </ul>
10	3	Walking and cycling	Desire for off-road cycle and footpaths between Kendall and Kew.
Unspecified	1	Traffic	<ul> <li>Consider intersection function and need for improvements.</li> </ul>

### 3.3 Stakeholder workshop and meetings

During the workshop with stakeholders, and subsequent stakeholder meetings, feedback and input was captured according to the ten sections that the road corridor had been separated into.

### Stakeholder workshop

The stakeholder workshop was held on 26 August 2020. It was attended by representatives from:

- NSW National Parks and Wildlife Service
- NSW Department of Premier and Cabinet
- Transport for NSW

• Esse	ential Energy.
	of observations, issues and feedback shared during the workshop is summarised according to
Section 1	Observed increase in cyclist trips, particularly in the early morning, and, as a result, cycle lanes need to be considered.
	<ul> <li>Needs of airport business park and existing marine industry facilities on the river need to be considered.</li> </ul>
Section 2	<ul> <li>Two nearby schools are creating a high demand for improved cycle paths and walkways.</li> </ul>
	Observation that area is a key sporting precinct.
	<ul> <li>If the road is widened in this section, utility assets will need to be modified.</li> </ul>
Section 3	<ul> <li>Engagement with biodiversity team from National Parks is required to understand the Aboriginal Land Claim covering land east of the Lake Road intersection.</li> </ul>
	Impacts on utility assets will need to be considered.
Section 4	<ul> <li>Ironman event and training route along this stretch of the corridor was acknowledged.</li> </ul>
	<ul> <li>Existing section of road follows the nature reserve. Any road widening would require approval from National Parks.</li> </ul>
	Existing utility assets present along the section, limits capacity for road widening.
Section 5	Consider proposed mountain bike strategy to the west of Houston Mitchell Drive
	Community sensitivities regarding Lake Cathie bridge.
Section 6	<ul> <li>Engagement with biodiversity team from National Parks is required to understand the Aboriginal Land Claim covering land east of the Lake Road intersection.</li> </ul>
	<ul> <li>Impacts on utility assets will need to be considered.</li> </ul>
Stakeholde	r meetings
	as held with representatives of the <b>NSW Department of Planning, Industry and</b> It on 28 July 2020.
A summary of the corridor s	of observations, issues and feedback shared during the meeting is summarised according to section.
Section 1	<ul> <li>Discussed shoulder widths, bridge structures, location of trees, property access, connection to the Pacific Highway.</li> </ul>
	Discussed pedestrian and cyclist activity, and pathways.
	Discussed location of bus stops and demand for public transport.
	<ul> <li>Discussed flood prone land, surrounding rural land use, industrial use, and</li> </ul>
	environmental management areas.
Section 2	
Section 2	<ul> <li>environmental management areas.</li> <li>Discussed shoulder widths, sections of poor pavement, property access, on-street</li> </ul>

	Discussed surrounding land uses.
Section 3	<ul> <li>Discussed shoulder widths, transition to four lanes, and intersection function.</li> <li>Discussed pedestrian activity and demand, and need for pathways and crossings.</li> <li>Discussed public transport services and location of bus stops.</li> <li>Discussed surrounding land uses.</li> </ul>
Section 4	<ul> <li>Discussed shoulder widths, need for road shoulders in places, and location of trees.</li> <li>Discussed pedestrian and cyclist activity, and need for cycle facilities.</li> <li>Discussed public transport services and need for bus stops.</li> <li>Discussed surrounding land uses.</li> </ul>
Section 5	<ul> <li>Discussed shoulder widths, need for road shoulders in places, inconsistent kerb and channel, informal on-street parking, and road pavement.</li> <li>Discussed pedestrian and cyclist activity, need for connected pathways and crossings, and need for cycle facilities.</li> <li>Discussed public transport services and location of bus stops.</li> <li>Discussed surrounding land uses, and future urban development.</li> </ul>
Section 6	<ul> <li>Discussed shoulder widths, inconsistent kerb and channel, informal on-street parking, condition of road pavement, and location of trees.</li> <li>Discussed pedestrian and cyclist activity, need for connected pathways and crossings, and need for cycle facilities.</li> <li>Discussed public transport services and location of bus stops.</li> <li>Discussed surrounding land uses.</li> </ul>
Section 7	<ul> <li>Discussed shoulder widths and location of trees.</li> <li>Discussed pedestrian and cyclist activity, need for pathways, and need for connected cycle facilities.</li> <li>Discussed public transport services.</li> <li>Discussed surrounding land uses.</li> </ul>
Section 8	<ul> <li>Discussed shoulder widths, inconsistent kerb and channel, and on-street parking.</li> <li>Discussed pedestrian and cyclist activity, need for connected pathways and crossings, and need for cycle facilities.</li> <li>Discussed public transport services.</li> <li>Discussed surrounding land uses.</li> </ul>
Section 9	<ul> <li>Discussed shoulder widths, location of trees, property access, location of School Zones, connection to the Pacific Highway.</li> <li>Discussed pedestrian and cyclist activity, need for connected pathways and crossings, and need for cycle facilities.</li> <li>Discussed public transport services.</li> <li>Discussed surrounding land uses.</li> </ul>

Section 10	<ul> <li>Discussed shoulder widths, location of trees, inconsistent kerb and channel, and condition of road pavement.</li> <li>Discussed pedestrian and cyclist activity, need for connected pathways and crossings, and need for cycle facilities.</li> <li>Discussed public transport services.</li> </ul>
	<ul> <li>Discussed public transport services.</li> <li>Discussed surrounding land uses.</li> </ul>
A meeting w	as held with representatives of <b>Busways</b> on 29 July 2020.
	f observations, issues and feedback shared during the meeting is summarised according to
Section 1	Indicated there is a need for road shoulder to accommodate hail and ride.
Section 2	<ul> <li>Indicated there are congestion points, particularly around peak school pick-up periods at Findlay Avenue and the Oxley Highway intersection.</li> </ul>
Section 3	<ul> <li>Indicated that there are impacts from peak hour traffic along the two-lane section of the corridor north of Maranatha Place.</li> </ul>
Section 4	<ul> <li>Indicated there are a lack of bus stop facilities.</li> <li>Indicated that road shoulders impact on cyclist ability to pass vehicles safely.</li> </ul>
Section 5	Indicated there is a need for additional facilities.
Section 7	<ul> <li>Indicated there are a lack of bus stop facilities.</li> <li>Indicated that road shoulders impact on cyclist ability to pass vehicles safely.</li> </ul>
Section 8	<ul> <li>Indicated there are conflicts between buses and vehicles during peak school periods.</li> </ul>
Section 9	<ul> <li>Indicated there is a need for additional bus stop facilities and services.</li> <li>Indicated that road shoulders impact on cyclist ability to pass vehicles safely.</li> <li>Indicated there are choke points.</li> </ul>

### 3.4 Community workshops

Five online community workshops were delivered during the initial phase of engagement. These workshops were based on location, and discussion focused on the sections of the corridor nearest to each of these locations.

The workshop areas, and the associated section of the corridor, were:

- Port Macquarie (Sections 1, 2 and 3)
- Lake Cathie (Sections 4 and 5)
- Bonnie Hills (Sections 6 and 7)
- Laurieton/Camden Haven (Section 8)
- Kew/Kendall (Sections 9 and 10)

Detailed discussions occurred in each online workshop, with feedback captured directly onto maps of the associated sections of the corridor. Copies of these maps are included in Appendix B. The project team extracted 451 comments from the workshops, which related to the following topics:

• seventy-two comments related to environmental issues

- seventy comments related to land use and urban area issues
- forty-three comments related to public transport facilities
- eighty-two comments related to road condition and services
- ninety-eight comments related to traffic
- eighty-six comments related to walking and cycling.



### Image 1: Bonny Hills community workshop during Phase One

A summary of the feedback received during each workshop is summarised in the following table.

5:30pm – 7	30pm Tuesday 25 August 2020
The online v	workshop was attended by five interested community members.
Section 1	Issues raised and feedback shared included a need to consider:
	<ul> <li>potential growth areas including industrial areas</li> </ul>
	<ul> <li>wildlife and ability to cross the corridor and measures to protect wildlife, including fauna fencing</li> </ul>
	koala habitat
	<ul> <li>existing road corridor issues including lack of road shoulders, lack of drainage, deteriorated road surfaces, poor sightlines, and potential for flooding</li> </ul>
	traffic concerns including upgrades to intersections, choke points and access issue
	<ul> <li>road shoulders being too narrow for cyclists.</li> </ul>

Issues raised and feedback shared included a need to consider
<ul> <li>wildlife including points where animals cross the road, koala habitat, areas of vegetation that leave animals stranded</li> </ul>
flood prone areas
land use including areas of proposed development and the airport business park
<ul> <li>sense of place as this area is a gateway to Port Macquarie</li> </ul>
<ul> <li>public transport including the lack of facilities such as bus shelters, the demand for more services to key destinations, the reliance on cars that is caused by a lack of public transport services, and the generation of traffic congestion at bus stops</li> </ul>
<ul> <li>the condition of the road corridor including deteriorated pavements, cracked roads, worn away line markings</li> </ul>
<ul> <li>poor design, for example a perceived hazardous roundabout</li> </ul>
<ul> <li>traffic concerns including access issues, and congested intersections and roundabouts</li> </ul>
<ul> <li>lack of existing off-road walking and cycle paths, high demand for pedestrian crossing points between the school and the bus stop, unwelcome environment for pedestrians and cyclists created by the road corridor.</li> </ul>
Issues raised and feedback shared included a need to consider:
healthy wildlife population that requires protection and crossing points
koala habitat area
Iand use including the future development areas generating increased traffic
sense of place of this area as the southern gateway to Port Macquarie
<ul> <li>road condition including poor pavement, culvert sagging, and fatigue cracking and rutting</li> </ul>
<ul> <li>location of sites where there are frequent accidents</li> </ul>
<ul> <li>traffic concerns including significant congestion at the Lake Road intersection during peak periods, issues traveling between Koala Road and Lake Road, access issues on the corridor between Maranatha Place and Emerald Drive</li> </ul>
<ul> <li>lack of pedestrian and cycle facilities between Lake Road and Hindman Street, lack of end-of-journey facilities at key destinations, poor connectivity on established routes, and the need for a pedestrian crossing north of Pacific Drive.</li> </ul>
Online Community Workshop
30pm Thursday 3 September 2020
orkshop was attended by twelve interested community members.
Issues raised and feedback shared included a need to consider:
<ul> <li>frequent animal crossings, fire hazards and frequent littering</li> </ul>
recreation areas along the corridor
<ul> <li>road alignment concerns, lack of overtaking lanes, lack of road shoulders and issues with the road surface</li> </ul>
narrow road shoulders and lack of separation from vehicles and the impact of these

	the need for access to the beach and walking trails.
Section 5	Issues raised and feedback shared included a need to consider:
	<ul> <li>water run off issues, frequent animal crossings and impacts to the health of the waterway due to construction impacts at the bridge</li> </ul>
	<ul> <li>existing land uses including residential, sporting facilities and recreation areas</li> </ul>
	<ul> <li>future land uses including retired residential and new schools</li> </ul>
	<ul> <li>desired public transport service routes, bus stop facilities, relocating bus stops for increased safety and frequency of services.</li> </ul>
	<ul> <li>existing narrow roads, road alignment, drainage, poor road form and constrained intersections</li> </ul>
	<ul> <li>intersection changes, demand for on-street parking, adjustments to speed limits and maintaining the village amenity of Lake Cathie</li> </ul>
	<ul> <li>mobility scooters, safe pedestrian access, adequate pathway lighting, existing narrow paths, missing links, and poor facilities.</li> </ul>
Bonny Hills	Online Community Workshop
5:30pm – 7:3	0pm Tuesday 1 September 2020
The online w	orkshop was attended by eight interested community members.
Section 6:	Issues raised and feedback shared included a need to consider:
	<ul> <li>flooding and drainage impacts, wildlife crossing areas (including areas where there is a high number roadkill) and potential bush fire hazard areas</li> </ul>
	<ul> <li>emergency access to Bonny Hills and Lake Cathie</li> </ul>
	<ul> <li>potential for new primary and high schools, a future urban growth investigation area</li> </ul>
	<ul> <li>consider a bypass to reduce congestion, reduce traffic through the town centre, and maintain high place function in Bonny Hills</li> </ul>
	<ul> <li>impacts on public transport with the introduction of new schools</li> </ul>
	<ul> <li>additional public transport services, routes and supporting infrastructure required</li> </ul>
	<ul> <li>drainage, narrow roads, poor sightlines, road alignment concerns, lack of safe crossing points, roads in poor condition</li> </ul>
	<ul> <li>upgrades to road pavement, kerb and channel, and line markings</li> </ul>
	<ul> <li>speed limit encourages more dangerous driving and sightline issues</li> </ul>
	<ul> <li>distracted drivers looking at the view with no lookout to stop at</li> </ul>
	<ul> <li>need for pedestrian and cycling infrastructure, connecting missing links, ongoing maintenance, and the need for crossing points.</li> </ul>
Section 7:	Issues raised and feedback shared included a need to consider:
	<ul> <li>rubbish dumping, thick vegetation overhanging the road, flood inundation, frequent wildlife activity and a lack of safe wildlife crossings</li> </ul>
	<ul> <li>the quarry and its life span, future development west of Ocean Drive, and the likelihood that the popularity and use of the beach areas will continue to grow with population growth</li> </ul>
	<ul> <li>road alignment and sight lines, dangerous culverts, and access to the quarry</li> </ul>
	<ul> <li>frequent heavy vehicle haulage due to quarry, vehicles overtaking on narrow sections, sight line issues and a blind corner</li> </ul>

	<ul> <li>pedestrian and cyclist safety and opportunities to improve existing pathways.</li> </ul>
Lauriston/	amden Haven Online Community Workshop
	30pm Thursday 20 August 2020
-	vorkshop was attended by four interested community members.
Section 8	Issues raised and feedback shared included a need to consider:
	mangroves on either side of Ocean Drive at the river
	<ul> <li>congestion caused at the sports facilities on Castle Street on weekends and during sporting seasons</li> </ul>
	<ul> <li>an observed lack of on-street parking, poor road shoulder condition, poor line markings, lack of pedestrian crossing facilities, and a lack of lighting in urban areas for aesthetics and to support surveillance</li> </ul>
	traffic concerns at the Ocean Drive and Kew Road intersection
	<ul> <li>the impact of peak holiday periods on traffic and parking demand</li> </ul>
	<ul> <li>traffic congestion generated by the boat ramp.</li> </ul>
	<ul> <li>critical pedestrian and cycle facilities throughout the section, including links between schools, additional crossing facilities, integration of the various walking paths with connections to the Town Centre.</li> </ul>
Kew/Kenda	II CCAT Online Community Workshop
	30pm Monday 24 August 2020
	vorkshop was attended by three interested community members.
Section 9	Issues raised and feedback shared included a need to consider:
Section 9	
Section 9	<ul> <li>Issues raised and feedback shared included a need to consider:</li> <li>environmental concerns including flood risk near Victoria Place, need for wildlife corridors near Mountain View Road and Casuarina Drive, potential fire hazard, and</li> </ul>
Section 9	<ul> <li>Issues raised and feedback shared included a need to consider:</li> <li>environmental concerns including flood risk near Victoria Place, need for wildlife corridors near Mountain View Road and Casuarina Drive, potential fire hazard, and gravel driveway erosion during peak rainfall</li> <li>land use concerns, particularly the additional traffic generated by new residential</li> </ul>
Section 9	<ul> <li>Issues raised and feedback shared included a need to consider:</li> <li>environmental concerns including flood risk near Victoria Place, need for wildlife corridors near Mountain View Road and Casuarina Drive, potential fire hazard, and gravel driveway erosion during peak rainfall</li> <li>land use concerns, particularly the additional traffic generated by new residential estates and the further pressure this will put on the corridor</li> <li>public transport facilities including pedestrian crossing facilities near bus stop locations, and the need for another bus stop on Ocean Drive to support the bus</li> </ul>
Section 9	<ul> <li>Issues raised and feedback shared included a need to consider:</li> <li>environmental concerns including flood risk near Victoria Place, need for wildlife corridors near Mountain View Road and Casuarina Drive, potential fire hazard, and gravel driveway erosion during peak rainfall</li> <li>land use concerns, particularly the additional traffic generated by new residential estates and the further pressure this will put on the corridor</li> <li>public transport facilities including pedestrian crossing facilities near bus stop locations, and the need for another bus stop on Ocean Drive to support the bus stop at Sirius Drive, which is heavily used by school students, during peak periods</li> <li>moving the bus stop off Sirius Drive and onto Ocean Drive because of poor sight lines and traffic congestion generated by students getting dropped off at the bus</li> </ul>
Section 9	<ul> <li>Issues raised and feedback shared included a need to consider:</li> <li>environmental concerns including flood risk near Victoria Place, need for wildlife corridors near Mountain View Road and Casuarina Drive, potential fire hazard, and gravel driveway erosion during peak rainfall</li> <li>land use concerns, particularly the additional traffic generated by new residential estates and the further pressure this will put on the corridor</li> <li>public transport facilities including pedestrian crossing facilities near bus stop locations, and the need for another bus stop on Ocean Drive to support the bus stop at Sirius Drive, which is heavily used by school students, during peak periods</li> <li>moving the bus stop off Sirius Drive and onto Ocean Drive because of poor sight lines and traffic congestion generated by students getting dropped off at the bus stop</li> <li>lighting in key pedestrian areas, drainage issues, large drainage culverts causing</li> </ul>
Section 9	<ul> <li>Issues raised and feedback shared included a need to consider:</li> <li>environmental concerns including flood risk near Victoria Place, need for wildlife corridors near Mountain View Road and Casuarina Drive, potential fire hazard, and gravel driveway erosion during peak rainfall</li> <li>land use concerns, particularly the additional traffic generated by new residential estates and the further pressure this will put on the corridor</li> <li>public transport facilities including pedestrian crossing facilities near bus stop locations, and the need for another bus stop on Ocean Drive to support the bus stop at Sirius Drive, which is heavily used by school students, during peak periods</li> <li>moving the bus stop off Sirius Drive and onto Ocean Drive because of poor sight lines and traffic congestion generated by students getting dropped off at the bus stop</li> <li>lighting in key pedestrian areas, drainage issues, large drainage culverts causing road safety issues,</li> <li>road maintenance, particularly where poor road construction has been observed,</li> </ul>

Section 10	Issues raised and feedback shared included a need to consider:	
	<ul> <li>vegetation rehabilitation and potential flood risk</li> </ul>	
	<ul> <li>the flow-on traffic effects of key land uses including new residential estates, the Kew and Kendall town centres, and new industrial development expected further north of Section 10</li> </ul>	
	<ul> <li>road condition including poor road surfaces and drainage, poor road alignment, and frequent need for maintenance</li> </ul>	
	<ul> <li>poor design which does not consider heavy vehicles carrying freight over the Logans Crossing bridge</li> </ul>	
	<ul> <li>traffic concerns including safety issues, lack of boom gates at the level rail crossing, local sporting events generating increased traffic, increased heavy vehicle traffic due to industrial development in the north</li> </ul>	
	<ul> <li>pedestrian and cycle facilities including boom gates at the Kendall level rail crossing, missing links, and crossing points, particularly across Nancy Bird Walton Drive.</li> </ul>	

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# 4 Phase One engagement findings

### 4.1 Overarching feedback summary

During Phase One of the community and stakeholder engagement consistent feedback emerged. This feedback is summarised in the following list.

- Community members, particularly those that live in or near the smaller coastal villages and towns, indicated that the character and amenity of the area and the coastal towns needed to be protected.
- Community members suggested that the corridor strategy needs to include references to Council's broader plans, such as potential bypass connections.
- Community members and stakeholders indicated that a connected bicycle network is critical, with a
  suggestion that dedicated bicycle facilities along the entire corridor would be an appropriate strategic
  action.
- Community members and stakeholders indicated that reducing congestion and traffic speeds was critical, particularly in the smaller coastal towns.
- Community members indicated that a connected pedestrian network would help to minimise local car trips and enhance the enjoyment of local areas.
- Community members and stakeholders indicated that public transport needs to play more of a role within the corridor, particularly to support other means of travel as the area continues to grow and develop.
- Community members and stakeholders indicated that the strategy should work to improve safety for people who use all forms of transport.
- Community members and stakeholders indicated that tourism is a vital local industry and that the corridor strategy should work to support key coastal tourist areas.
- Detailed feedback was provided, particularly during initial engagement, in relation to environmental considerations, flooding impacts, and maintenance requirements.

The project team analysed 572 comments captured during the community workshops and from the interactive map. Detailed analysis of these comments indicated that:

- Only 26 of the 572 comments did not relate to the strategy. These comments typically included
  reference to specific environmental issues (such as acid sulphate soils), community education about
  the location of pathways, and areas or projects considered to be outside the corridor.
- Of the 572 comments:
  - 130 comments related to matters that required specific action in the draft strategy
  - 416 comments related to matters that required consideration in the action plan
  - 26 comments related to matters that required no action.

### 4.2 Feedback summary by corridor section

This following table provides an overarching summary for each section of the corridor, and the associated section improvements that were proposed for discussion in Phase Two of the community and stakeholder engagement process.

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Section	Summary of community and stakeholder comments	Proposed section improvements to be discussed in Phase Two
Section 1	During Phase One of the engagement process, community members and stakeholders indicated that:	As a result, the proposed section improvements, discussed in Phase Two, included:
	<ul> <li>this area was a significant koala corridor</li> <li>there was poor road and pavement condition</li> <li>there were no road shoulders</li> <li>the Fembank Creek Road and Hastings River Drive intersection needed some improvements.</li> </ul>	<ul> <li>upgrading to provide a consistent two-lane cross section, including shoulder improvements to cater for all road users including cyclists and buses</li> <li>upgrading the Fernbank Creek Road and Hastings River Drive intersection to improve safety</li> <li>needing to cater for a four-lane cross section in future corridor planning, including bridge alignments, to allow additional lane capacity to cater for future growth (e.g., Airport development, and Sancox development area)</li> <li>providing consistent paved road shoulders suitable for safer on-road cycling</li> <li>providing suitable sealed shoulders and driveway approaches to allow informal hail and ride for rural bus services</li> <li>maintaining and monitoring condition of bridges and creek crossings</li> <li>maintaining pavement and infrastructure to minimise impacts on corridor performance.</li> </ul>
Section 2	<ul> <li>During Phase One of the engagement process, community members and stakeholders indicated that:</li> <li>improved bus services and shelters were needed</li> <li>there was poor pavement condition in sections</li> <li>cars sometimes queue through intersections, and block traffic</li> <li>cycle lanes end with no connections to other paths or cycle lanes</li> <li>safe pedestrian crossings were needed at some key locations.</li> </ul>	<ul> <li>As a result, the proposed section improvements, discussed in Phase Two, included:</li> <li>upgrading to a four-lane urban arterial cross section between Tuffins Lane and Boundary Street, including on-road cycle lanes</li> <li>upgrading the Clifton Street and Hastings River Drive intersection to cater for traffic growth and to provide safer pedestrian crossing opportunities at peak times</li> <li>planning for future corridor needs at key intersections, including setbacks to provide for future increases in traffic, and improved treatments for vehicles wanting to turn</li> <li>creating entry 'gateways' to Port Macquarie CBD</li> </ul>

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Section 3	<ul> <li>During Phase One of the engagement process, community members and stakeholders indicated that:</li> <li>improved bus services and shelters were needed</li> <li>there was poor pavement condition in sections</li> <li>cars sometimes queue through intersections, and block traffic</li> <li>cycle lanes end with no connections to other paths or cycle lanes</li> <li>safe pedestrian crossings were needed at some key locations.</li> </ul>	<ul> <li>providing a shared path on one side of the corridor through Port Macquarie by upgrading the current path</li> <li>formalising and improving bus stops to provide consistent high-quality facilities in the corridor</li> <li>maintaining the pavement and corridor infrastructure.</li> <li>As a result, the proposed section improvements, discussed in Phase Two, included:         <ul> <li>upgrading to a four-lane urban arterial cross section between Tuffins Lane and Boundary Street, including on-road cycle lanes</li> <li>upgrading the Clifton Street and Hastings River Drive intersection to cater for traffic growth and to provide safer pedestrian crossing opportunities at peak times</li> <li>planning for future corridor needs at key intersections, including setbacks to provide for future increases in traffic, and improved treatments for vehicles wanting to turn</li> <li>creating entry 'gateways' to Port Macquarie CBD</li> <li>providing a shared path on one side of the corridor through Port Macquarie by upgrading the current path</li> <li>formalising and improving bus stops to provide consistent high-quality facilities in the corridor</li> </ul> </li> </ul>
Section 4	During Phase One of the engagement process, community	maintaining the pavement and corridor infrastructure.  As a result, the proposed section improvements, discussed in Phase
Section 4	members and stakeholders indicated that:	Two, included:
	<ul> <li>there were issues with road alignment and vegetation within road reserve</li> <li>there were narrow shoulders or no sealed road shoulders</li> </ul>	<ul> <li>upgrading to provide consistent a two-lane cross section, including shoulder improvements to support the needs of all road users</li> </ul>
	<ul> <li>overtaking lanes were needed</li> </ul>	<ul> <li>planning for the delivery of safe and appropriate overtaking and passing lanes</li> </ul>
	<ul> <li>formalised beach parking was needed</li> </ul>	<ul> <li>providing formalised parking opportunities near beach accesses</li> </ul>

	<ul> <li>pedestrian connections were needed.</li> </ul>	<ul> <li>providing consistent paved road shoulders for cyclists, complemented by clear signage and line markings</li> <li>providing suitable lane widths and curve widening to cater for buses</li> <li>scheduling maintenance for the pavement and corridor infrastructure, including clearing overgrown roadside vegetation.</li> </ul>
Section 5	<ul> <li>During Phase One of the engagement process, community members and stakeholders indicated that:</li> <li>improved bus services and shelters were needed</li> <li>the road was narrow road with limited shoulders for cyclists</li> <li>there were issues with direct property access and speeding</li> <li>additional pedestrian footpaths and improved lighting were needed</li> <li>safe crossings at key locations were needed</li> <li>Seaside Drive and Baltic Street intersections were at capacity</li> <li>there were sightline and access issues at Woolworths.</li> </ul>	<ul> <li>As a result, the proposed section improvements, discussed in Phase Two, included:</li> <li>upgrading sections along the corridor to provide a consistent cross section, including on-road cycle lanes, to cater for all road users in the coastal towns</li> <li>upgrading Seaside Drive and Baltic Street intersections to improve the ability to cater for increased traffic</li> <li>upgrading to a four-lane urban arterial cross section for part of the corridor near the Rainbow Beach development area</li> <li>providing safe and convenient pedestrian crossing facilities on Ocean Drive, particularly around Fiona Crescent</li> <li>providing pedestrian and cycle connections through Lake Cathie</li> <li>formalising and improving bus stops to provide consistent high-quality facilities in the corridor and cater for school bus interchanges</li> <li>catering for appropriate flood design levels as part of future road upgrades design processes.</li> </ul>
Section 6	<ul> <li>During Phase One of the engagement process, community members and stakeholders indicated that:</li> <li>there were issues with overgrown vegetation within the road reserve</li> <li>improved bus services and shelters were needed</li> <li>pedestrian pathways and shared paths, and crossings, were needed at key locations</li> </ul>	<ul> <li>As a result, the proposed section improvements, discussed in Phase Two, included:</li> <li>upgrading the Ocean Drive and McGilvray Road intersection to a roundabout</li> <li>upgrading to provide a consistent two-lane road cross section, including improved shoulders, to cater for all road users (such as cyclists and buses)</li> </ul>

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	<ul> <li>there was poor road condition and sightlines at key locations</li> <li>the road was narrow road with limited shoulders for cyclists</li> <li>Ocean Drive was congested and at capacity.</li> </ul>	<ul> <li>investigating opportunities for safer pedestrian crossing facilities</li> <li>providing a shared path on one side of the corridor through Bonny Hills</li> <li>formalising and improving bus stops to provide consistent high-quality facilities in the corridor</li> <li>providing frequent bus stops on both sides of the corridor</li> <li>supporting road safety by clearing overgrown roadside vegetation and other roadside hazards.</li> </ul>
Section 7	<ul> <li>During Phase One of the engagement process, community members and stakeholders indicated that:</li> <li>there were issues with overgrown vegetation within the road reserve</li> <li>formalised access to beach trails and the Quarry were needed</li> <li>the road was narrow road with no shoulders for cyclists</li> <li>overtaking lanes were needed</li> <li>off-road pedestrian connections between Bonny Hills and North Haven were needed.</li> </ul>	<ul> <li>As a result, the proposed section improvements, discussed in Phase Two, included:</li> <li>upgrading to provide a consistent two-lane road cross section, including improved shoulders, to cater for all road users (such as cyclists and buses)</li> <li>planning for the delivery of safe and appropriate overtaking and passing lanes</li> <li>investigating opportunities for pedestrian connections to beach trials, and between Bonny Hills and North Haven</li> <li>providing consistent paved road shoulders for cyclists, complemented by clear signage and line markings</li> <li>providing suitable lane widths and widening curved sections of the road to cater for buses</li> <li>supporting road safety by clearing overgrown roadside vegetation and other hazards.</li> </ul>
Section 8	<ul> <li>During Phase One of the engagement process, community members and stakeholders indicated that:</li> <li>on-street parking needed to be maintained to meet demand</li> <li>a pedestrian crossing was needed on Ocean Drive between Lake Street and Bold Street</li> <li>on-road cycle lanes were needed</li> </ul>	<ul> <li>As a result, the proposed section improvements, discussed in Phase Two, included:</li> <li>upgrading the Ocean Drive and Edith Street intersection to a roundabout</li> <li>upgrading the Ocean Drive and Bold Street and Bayside Circuit intersection to a roundabout</li> </ul>

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	<ul> <li>there was poor line marking and road condition</li> <li>the Ocean Drive and The Parade roundabout was congested.</li> </ul>	<ul> <li>upgrading the Ocean Drive and Kew Road intersection to a roundabout</li> <li>maintaining on-street parking in the town centre to encourage traffic to travel at a lower speed in this high pedestrian activity area</li> <li>providing a shared path on one side of the corridor through North Haven and safe pedestrian pathways, with crossing points, where required</li> <li>formalising and improving bus stops to provide consistent high-quality facilities in the corridor</li> <li>maintaining the pavement and corridor infrastructure.</li> </ul>
Section 9	<ul> <li>During Phase One of the engagement process, community members and stakeholders indicated that:</li> <li>there were water run off issues in places</li> <li>improved bus shelters were needed</li> <li>there were road alignment and grade issues on Ocean Drive near Hoschke Road</li> <li>pedestrian paths and shared paths and crossings were required near the school and between neighbourhoods, particularly for vulnerable users</li> <li>there was poor road condition and unsafe drop off next to road at key locations</li> <li>on-road cycle lanes were needed.</li> </ul>	<ul> <li>As a result, the proposed section improvements, discussed in Phase Two, included:</li> <li>upgrading the Ocean Drive and Sirius Drive intersection to traffic signals</li> <li>upgrading the Ocean Drive and Mountain View Road intersection to a roundabout</li> <li>upgrading the Ocean Drive and Lake Ridge Drive intersection to traffic signals</li> <li>providing safe pedestrian crossing opportunities for a connected pathway network</li> <li>providing a shared path on one side of the corridor between North Haven and the Pacific Highway</li> <li>providing bus stops on both sides of the road to service suburban centres</li> <li>maintaining the pavement and corridor infrastructure.</li> </ul>
Section 10	<ul> <li>During Phase One of the engagement process, community members and stakeholders indicated that:</li> <li>there were flooding inundation issues</li> <li>there was poor road condition, alignment and visibility issues at key locations</li> </ul>	<ul> <li>As a result, the proposed section improvements, discussed in Phase Two, included:</li> <li>upgrading Ocean Drive and Nancy Bird Walton Drive and Kendall Road intersection to include line marking and build outs for improved pedestrian safety</li> </ul>

<ul> <li>there were increased freight vehicles and a need for road widening and layover areas</li> </ul>	<ul> <li>providing a consistent carriageway with paved shoulders for the section between Kew and Kendall</li> </ul>
<ul> <li>pedestrian and shared paths were needed to connect Kew to Kendall.</li> </ul>	<ul> <li>providing safe pedestrian crossing opportunities for a connected pathway network</li> </ul>
	<ul> <li>providing a shared path on one side of the corridor between Kew and Kendall</li> </ul>
	extending pathway connections to Kendall
	<ul> <li>formalising and improving bus stops to provide consistent high-quality facilities in the corridor</li> </ul>
	maintaining the pavement and corridor infrastructure.

# 5 Feedback captured during Phase Two engagement

This section provides a summary of the feedback received from key stakeholders and community members during the second phase of engagement. The feedback captured during the second phase of engagement related to information provided by the project team about the vision, objectives, and actions for each section of the road corridor. This material is provided in Appendix C.

### 5.1 Community workshops

Four online community workshops were delivered during the second phase of engagement. These workshops were based on location, and discussion focused on the sections of the corridor nearest to each of these locations.

The workshop areas, and the associated section of the corridor, were:

- Port Macquarie (Sections 1, 2 and 3)
- Lake Cathie (Sections 4 and 5)
- Bonnie Hills (Sections 6 and 7)
- Laurieton/Camden Haven and Kew/Kendall (Section 8, 9 and 10).



#### Image 2: Lake Cathie Phase Two online community session

During these workshops, participants were asked questions that mirrored the online survey hosted on Council's Have Your Say page. The responses to these questions were captured during each online session using Mentimeter, a real-time data capture platform. The graphs generated in response to each question, in each online session are provided Appendix D.

Detailed feedback captured during the workshops in relation to the vision is included in section 5.5 of this report.

The detailed discussions that occurred in each online workshop are summarised in the following table.

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Port Macquarie Online Community Session		
5:00pm – 7:00pm Thursday 22 July 2021		
Online session was attended by seven interested community members.		
Sections 1, 2 and 3 Participants shared the following issues and feedback in relation to the draft strategy and actions:		
	<ul> <li>Participants indicated that there are areas of environmental amenity that require accommodation and protection through the strategy, including mangroves and wildlife (such as koalas). The group discussed existing koala fencing measures.</li> </ul>	
	<ul> <li>Participants discussed safety concerns, particularly the need for safe pedestrian crossing points.</li> </ul>	
	<ul> <li>Participants discussed the significant proportion of car journeys that are through- traffic bound for the highway. They also acknowledged that traffic is projected to increase further.</li> </ul>	
	<ul> <li>Participants discussed the population growth projections and the proposed and approved residential developments in the local area that will continue to contribute to population growth.</li> </ul>	
	<ul> <li>Participants shared their concern about the need for cycle paths and safe road shoulder widths, particularly in relation to the inclusion of median strips in the middle of the road.</li> </ul>	
Lake Cathie O	nline Community Session	
5:00pm – 7:00p	om Tuesday 20 July 2021	
Online session	was attended by seven interested community members.	
Section 4 and 5	Participants shared the following issues and feedback in relation to the draft strategy and actions:	
	<ul> <li>Participants suggested that existing public transport services are insufficient and expensive. Services are not frequent enough, and buses do not service the newly developed housing estates. Some participants indicated that a shuttle bus could provide key links between the towns and Port Macquarie.</li> </ul>	
	<ul> <li>Participants discussed safety concerns in relation to cycling on this stretch of the corridor. Some participants indicated that the missing or narrow road shoulders created hazardous conditions for cyclists and pedestrians. Participants also noted that current speed limits contributed to the lack of safety on the corridor.</li> </ul>	
	<ul> <li>Participants questioned the population growth projections that underpin the study, noting the proposed and approved residential developments in the local area that will continue to contribute to population growth.</li> </ul>	
	<ul> <li>Participants discussed the need to include a Lake Cathie and Bonny Hills bypass in the strategy. Participants indicated that this bypass would enable through traffic to avoid the townships and go straight to the highway, which would reduce traffic impacts within the towns and improve amenity.</li> </ul>	

5:00pm - 7:00	pm Wednesday 28 July 2021
Online session	was attended by twelve interested community members.
Sections 6 and 7	Participants shared the following issues and feedback in relation to the draft strategy and actions:
	<ul> <li>Participants discussed the need to protection village amenity. Participants suggested this could be achieved through the inclusion of a bypass road that would divert traffic around Bonny Hills and Lake Cathie.</li> </ul>
	<ul> <li>Participants discussed concerns about existing road conditions, particularly in relation to road widths and the feasibility of including lanes for cyclists and pedestrians.</li> </ul>
	<ul> <li>Participants encouraged the project team to consider provision for future technologies including electric vehicles. Participants also referred to flexible pavement options.</li> </ul>
	<ul> <li>Participants discussed the importance of creating a safe environment for pedestrians, with particular emphasis on tourists who visit the area and enjoy walking to destinations.</li> </ul>
	Participants acknowledged continued population growth and development
	occurring in the local area.
Laurieton, Ca	occurring in the local area. mden Haven, Kew & Kendall Online Community Session
5:00pm – 7:00	mden Haven, Kew & Kendall Online Community Session
5:00pm – 7:00	mden Haven, Kew & Kendall Online Community Session pm Monday 26 July 2021
5:00pm – 7:00 Online session Sections 8, 9	mden Haven, Kew & Kendall Online Community Session pm Monday 26 July 2021 was attended by two interested community members. Participants shared the following issues and feedback in relation to the draft strategy and
5:00pm – 7:00 Online session Sections 8, 9	<ul> <li>mden Haven, Kew &amp; Kendall Online Community Session</li> <li>pm Monday 26 July 2021</li> <li>was attended by two interested community members.</li> <li>Participants shared the following issues and feedback in relation to the draft strategy and actions:         <ul> <li>Participants acknowledged the continued population growth and development occurring in the local area, as well as an increase in local tourism. Participants noted this has resulted in increased traffic in the local area, particularly during</li> </ul> </li> </ul>
5:00pm – 7:00 Online session Sections 8, 9	<ul> <li>mden Haven, Kew &amp; Kendall Online Community Session</li> <li>pm Monday 26 July 2021</li> <li>was attended by two interested community members.</li> <li>Participants shared the following issues and feedback in relation to the draft strategy and actions: <ul> <li>Participants acknowledged the continued population growth and development occurring in the local area, as well as an increase in local tourism. Participants noted this has resulted in increased traffic in the local area, particularly during peak holiday periods.</li> <li>Participants discussed the protection of village amenity. Participants suggested that this could be achieved through the inclusion of a bypass road that would</li> </ul> </li> </ul>
5:00pm – 7:00 Online session Sections 8, 9	<ul> <li>mden Haven, Kew &amp; Kendall Online Community Session</li> <li>pm Monday 26 July 2021</li> <li>was attended by two interested community members.</li> <li>Participants shared the following issues and feedback in relation to the draft strategy and actions: <ul> <li>Participants acknowledged the continued population growth and development occurring in the local area, as well as an increase in local tourism. Participants noted this has resulted in increased traffic in the local area, particularly during peak holiday periods.</li> <li>Participants discussed the protection of village amenity. Participants suggested that this could be achieved through the inclusion of a bypass road that would divert traffic around Bonny Hills and Lake Cathie.</li> <li>Participants discussed the importance of cycling and the inclusion of a safe and practical cycle network. Participants noted this would service the entire</li> </ul> </li> </ul>

#### 5.2 Written submissions

During the second phase of engagement, community members had the opportunity to provide their feedback through a written submission. Fifteen written submissions were received by Council.

Community members and organisations raised a range of issues and provided feedback on the draft strategy and actions. A summary of these issues and feedback follows.

• Participants indicated that population growth within the local area continues to raise concerns about increased traffic and potential congestion impacts.

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- Participants noted that tourism will continue to be critical to the area. The corridor needs to have the capability to support this growth into the future.
- Participants indicated that the Bonny Hills Bypass is a critical route that would alleviate traffic congestion through the coastal villages, improve connectivity and improve safety. The Bonny Hills Bypass was mentioned in most written submissions.
- Participants indicated that safety, particularly in relation to speeding vehicles, is a concern. A range of traffic calming measures were suggested to combat this issue including larger roundabouts, road realignment, overtaking and passing lanes, and speed cameras.
- Participants indicated that the preservation of the local character of the coastal towns needs to be a priority. Participants suggested that residents want the small-town amenity to remain.
- Participants noted a desire for a better environment for cycling and walking, characterised by adequate pedestrian crossings, a dedicated cycleway, shared pathways, wider shoulders, and connectivity between the various residential estates and connectivity between schools.
- Participants mentioned the mix of traffic on the corridor, including haulage trucks.
- Participants noted the need to consider connections to the Pacific Highway, and the perception that this would remove traffic from the corridor.
- Other issues raised by participants included the need for low-noise surfaces to be used in any
  upgrade works, the need for infrastructure to provide flood-free access, timeframes for proposed
  works, and how the proposed works would be funded.

In the written submissions, community members and organisations mentioned specific intersections, including Graham Street, Solomon Drive, Bonny View Drive, Yalumba Drive, Houston Mitchell Drive, and Seawide Estate. The need for additional intersections to support future residential, industrial, and school development were also mentioned in the written submissions, specifically at Greenmeadows and Crestwood.

### 5.3 Project emails

During Phase Two of the engagement, six emails were received from community members with feedback on the draft strategy and actions. The following issues and feedback was provided by these community members.

- Participants commented on, and questioned, design considerations including proposed road surfaces, kerbs, lighting, and drainage.
- Participants asked about speed limits proposed for the corridor, with a particular interest in ensuring safety.
- Participants discussed the Bonny Hills bypass and questioned why it was not included in the strategy.
- Participants commented on the importance of including footpaths of an adequate width to cater for
  pedestrians and people with a range of needs.
- Participants requested the inclusion of shared pathways along the corridor.

### 5.4 Stakeholder feedback

Key stakeholders were invited provide written feedback on the draft corridor strategy. Feedback was received from:

- Transport for NSW
- NSW National Parks and Wildlife Service
- NSW Department of Planning, Industry and Environment.

The following feedback was provided by the respective stakeholders.

Transport fo	r NSW
All sections	Transport for NSW made the following recommendations and observations:
	<ul> <li>include a consistent, preferably off-road, cycle link or shared path for the entire length of Ocean Drive</li> </ul>
	<ul> <li>review the off-road path widths and upgrade to shared path width throughout</li> </ul>
	review signage and line marking
	<ul> <li>provide consistent way finding signage and behavioural signage, such as keep left, on shared paths</li> </ul>
	<ul> <li>provide pedestrian access ramps at road crossing to ensure accessibility for wheelchairs, mobility scooters, prams, and bicycles</li> </ul>
	<ul> <li>provide bicycle and scooter parking facilities at key destinations along the route</li> </ul>
	<ul> <li>ensure there is safe and convenient pedestrian and cyclist movement at all crossings, this could include the use of refuges</li> </ul>
	<ul> <li>ensure there is lighting at intersections and on pathways</li> </ul>
	<ul> <li>provide formalised parking facilities, allowing space for people with disabilities</li> </ul>
	<ul> <li>consideration public transport infrastructure, services and facilities, including hard stands, bus shelters and lighting at bus stops</li> </ul>
	<ul> <li>offer to work closely with Council on the ongoing strategy and design.</li> </ul>
NSW Nation	al Parks and Wildlife Service (NPWS)
Sections 1,	NPWS made the following recommendations and observations:
2 and 3	<ul> <li>include an improved connection for wildlife between Kooloonbung Creek and Lake Innes Nature Reserve</li> </ul>
	<ul> <li>provide improved pedestrian and cycle connections across the intersection between Kooloonbung Creek and the Googik Track</li> </ul>
	<ul> <li>provide an improved wildlife connection between remnant vegetation due to the duplication of Ocean Drive, potentially near Crestwood Drive and the golf course.</li> </ul>
Sections 5,	NPWS made the following recommendation and observation:
6 and 7	<ul> <li>consider the long-term connection of the Googik Track through Lake Cathie to Laurieton and the impact of the corridor strategy on this.</li> </ul>
Section 9	NPWS made the following recommendation and observation:
	<ul> <li>provide better wildlife corridors across the road to connect Dooragan National Park to Queens Lake foreshore reserves.</li> </ul>
NSW Depart Division	ment of Planning, Industry and Environment (DPIE), Biodiversity and Conservation
All sections	No detailed comments were provided by DPIE.
	More generally, DPIE indicated an expectation that the appropriate environmental assessment will be undertaken for road works in the corridor. They also expect that the design of such works will seek to avoid and minimise the impacts on biodiversity, and ensure there is no encroachment into the National Park.

### 5.5 Responses to survey questions

During the second phase of engagement, community members also had the opportunity to provide their insights via an online survey hosted on Council's Have Your Say page. The questions explored during the online survey were also explored during the online community sessions, with the data captured in these sessions collated with the results reported in this section.

Thirty online surveys were completed and 28 community members participated in the online community workshops and responded to the survey questions through Mentimeter.

It is important to note that individual survey respondents did not provide a response to all survey questions, instead focusing on the sections they were interested in. Also, the responses received during the online community sessions were allocated to the corridor section that the session was focused on.

#### 5.5.1 Corridor section vision statements

During the Phase Two online community sessions and the online survey, community members were asked to indicate whether they agreed with the draft vision for each section of the corridor. Figure 3 shows that most respondents indicated they agree with the draft vision articulated for each section of the corridor.

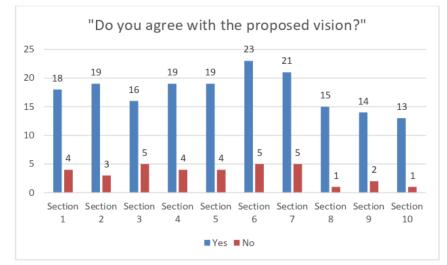


Figure 3: Agreement with the proposed vision for each section

#### 5.5.2 Elements missing from the vision

Following the question about agreement with the vision, community members were asked if there were elements they thought were missing from the vision statements. The following table summarises the elements community members identified as being missing from the vision for each section.

Section	Elements identified as missing from the vision
1	Mention of active transport and pedestrians.
2	<ul><li>Inclusion of public transport, with reference to bus stops and shelters.</li><li>Mention of active transport and pedestrians.</li></ul>
3	<ul> <li>Integration of other major networks into the strategy. Reference was made to the Orbital Link Road.</li> <li>Mention of active transport, cycle lanes, and pedestrians.</li> </ul>
4	<ul> <li>Inclusion of public transport, with reference to bus stops and shelters.</li> <li>Dedicated cycleway along entire corridor.</li> </ul>

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	Duellans for some
	Dual lane for cars.
	Easy pedestrian movement.
5	<ul> <li>Integration of other major networks into the strategy, reference was made to the Orbital Link Road.</li> </ul>
	Further emphasis on cycle lanes and a dedicated cycleway along entire corridor.
	Dual lane for cars.
	Easy pedestrian movement.
6	Mention of Bonny Hills bypass.
	Remove heavy vehicles from the residential area.
	Mention of alternative methods of transport.
	Scheduled road maintenance.
	Acknowledgement of planning for new high school.
7	Further emphasis on cycling.
	Mention of Bonny Hills bypass.
	Remove heavy vehicles from the residential area.
	Alternative methods of transport.
	Scheduled road maintenance.
	Acknowledgement of planning for new high school.
8	Ways in which Council will maintain the character and amenity of North Haven and Lakewood.
	Traffic lights at the Ocean Drive and Glenn Haven Drive intersection.
	Planning for active transport.
9	Ways in which Council will maintain the character and amenity of North Haven and Lakewood.
	Traffic lights at the Ocean Drive and Glenn Haven Drive intersection.
	Planning for active transport.
10	Integration of other major networks to the strategy, with reference to connecting to the highway.
	Alternative methods of transport.
L	I

## 5.5.3 Further improvement for inclusion

Following the question about what they would add to the vision, community members were asked whether there were further improvements they would include in the strategy. The following table summarises the improvements identified for each of the respective sections:

Section	Improvement measures identified for potential inclusion in the strategy
1	<ul> <li>A greater emphasis on cycling and pedestrian facilities, including a dedicated cycleway and wider road shoulders for cycling.</li> </ul>

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	Stronger consideration of wildlife and the potential to include wildlife corridors     underneath road infrastructure.
	Improving infrastructure.
2	Inclusion of noise walls.
	Focus on safe pedestrian crossings.
	Dedicated cycleway and wider road shoulders for cycling.
	Improving infrastructure.
3	<ul> <li>Inclusion of dedicated cycle lanes, a dedicated cycleway, and wider road shoulders for cycling.</li> </ul>
	Streetscaping for visual amenity.
	Improving infrastructure.
4	Inclusion of noise walls.
	Focus on safe pedestrian crossings.
	More lanes for cars.
	Wildlife considerations.
	Promote public transport with frequent bus stops.
	Intersection at Ocean Drive, Seaside Drive and Abel Tasman Drive needs traffic lights or roundabout.
	Overnight truck parking section needed.
5	Inclusion of dedicated cycle lanes.
	Streetscaping for visual amenity.
	More lanes for cars.
	Wildlife considerations.
	Promote public transport with frequent bus stops.
	Intersection at Ocean Drive, Seaside Drive and Abel Tasman Drive needs traffic lights or roundabout.
	Overnight truck parking section needed.
6	The inclusion of a bypass road around Lake Cathie and Bonny Hills.
	• Further emphasis on safer conditions for cyclists including the inclusion of a dedicated cycleway.
	Focus on safe pedestrian crossings.
	More lanes for cars.
7	The inclusion of a bypass road around Lake Cathie and Bonny Hills.
	• Further emphasis on cycle lanes and the inclusion of a dedicated cycleway.
	A lookout for tourists.
	More lanes for cars.
8	Bike lanes to and from Laurieton/Camden Haven to the school.

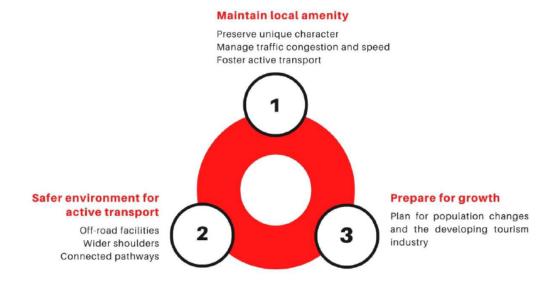
9	<ul><li>Further emphasis on cycle lanes and the inclusion of a dedicated cycleway.</li><li>Bike lanes to and from Laurieton/Camden Haven to the school.</li></ul>
10	<ul><li>Further emphasis on cycle lanes and the inclusion of a dedicated cycleway.</li><li>Upgrade and enlargement of roundabouts to help slow traffic.</li></ul>

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# 6 Phase Two engagement findings

Analysis of the feedback received during the second phase of engagement indicated that there were a range of issues important to community members and key stakeholders. These consistent issues, or key themes, that were mentioned across all sections of the corridor are illustrated in Figure 4 and relate to:

- · maintaining the amenity of the local area
- creating a better environment for active transport
- preparing for future growth in the region, from both a residential and tourism perspective.



#### Figure 4: Key themes

In addition, community members provided a range of comments about specific locations that reinforced feedback captured during the first phase of engagement. Community members also provided general feedback about the road corridor and its condition.

These common themes are described in more detail in the following section of this report.

#### 6.1 Key themes related to the development of the corridor strategy

#### Maintain local amenity

This theme relates to the following issues raised by community members and stakeholders.

- Community members expressed a need to preserve and maintain the unique village character of the small coastal towns.
- Community members expressed a need to remove through-traffic from travelling through the small coastal towns. This traffic, which was considered to be enroute to Port Macquarie and the highway, was considered to generate traffic congestion and unnecessary amenity impacts for the local community (such as noise and air quality impacts).
- Community members expressed that the potential solution to removing through traffic from the coastal towns is a bypass road, particularly a road that provides a bypass for Bonny Hills and Lake Cathie.
- Community members and stakeholders expressed a need to foster a safer environment for pedestrians and cyclists within the coastal towns to enable better walkability and encourage active transport.

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 Community members indicated that a focus on reducing vehicle speed through the coastal towns would help local amenity. Traffic calming measures and appropriate infrastructure modifications, were suggested, including upgrading the small roundabouts and making them larger.

#### Create a safer environment for active transport

This theme relates to the following issues raised by community members and stakeholders.

- Community members and stakeholders expressed a need for a safer cycling environment supported by off-road cycling facilities, wider road shoulders and a dedicated cycleway along the entire corridor.
- Community members requested an integrated pathway network that connects the coastal towns and land uses, with a particular emphasis on connecting schools with safe cycle paths for students.
- Community members requested that missing links for pathway infrastructure throughout the corridor be resolved.
- Community members indicated that traffic calming measures would assist in reducing the speed of road traffic creating a safer environment.

#### Prepare for growth within the region

This theme relates to the following issues raised by community members and stakeholders.

- Observation and understanding that the wider Port Macquarie area is anticipated to experience significant growth in the coming years.
- Observation of, and appreciation for, the steady increase in local tourism and the desire to create an environment that supports tourism.
- Community concern expressed about ongoing development and a perceived lack of strategic coordination in relation to providing supporting infrastructure.
- Observation that, as the population continues to grow and the number of car trips increases, a behaviour change towards public and active transport is critical. Community members noted that the existing public transport services do not provide a more attractive alternative to traveling by car.
- Community members suggested that there is need to 'future proof' the corridor through ongoing strategic decisions.
- Observation about existing infrastructure throughout the corridor that requires maintenance, including the Lake Cathie bridge.

#### Broader community issues

Community members mentioned some issues that are not considered to be within the scope of the corridor strategy. These issues have been captured and shared with the appropriate sections within Council to inform other work.

Broader community and stakeholder issues that were raised during the engagement process include:

- Observations about environmental considerations including wildlife corridors, koala fencing and existing areas of mangroves.
- Observations about flooding and drainage impacts throughout the corridor.
- Requests and comments about ongoing maintenance works required along the length of the corridor.

### 6.2 Word cloud summary

Figure 5 provides a summary of the key issues and comments made during Phase Two of the engagement process. The word cloud has been created from the raw data captured during Phase Two of the engagement process. Words appear larger when they are mentioned more frequently.



#### Figure 5: Words used frequently during Phase Two engagement activities

### 6.3 Section summary

The following section provides an overarching summary of community and stakeholder comments on each section.

## Sections 1, 2 and 3

Comments and observations related to the:

- importance of environment, particularly mangroves and koalas, and improved wildlife connections
- need for safe pedestrian crossing points
- volume of through traffic
- need for cycle paths and shoulders
- importance of public transport
- Orbital Road Link
- need for noise walls and streetscaping.

### Sections 4 and 5

Comments and observations related to the:

- need for improved public transport
- · safety of cyclists and pedestrians, and need for dedicated cycleway and safe pedestrian crossings

- need for the Bonny Hills Bypass
- Orbital Road Link
- need for noise walls, wildlife connections and streetscaping
- need to promote public transport
- more road lanes.

### Sections 6 and 7

Comments and observations related to the:

- need for the Bonny Hills Bypass
- constraints to road widening
- safety of pedestrians, particularly tourists
- presence of heavy vehicles
- safety of cyclists, including the need for a dedicated cycleway
- more road lanes.

## Sections 8, 9 and 10

Comments and observations related to the:

- need for the Bonny Hills Bypass
- need for cycling network
- road condition
- need for improved public transport
- need for wildlife corridors.

# 7 Conclusion and recommendations

Phase One of the community and stakeholder engagement process for the MR538 and MR600 corridor strategy captured insights and feedback that directly informed the development of the vision, strategies and actions developed for each section of the corridor. This information was then shared with the community and stakeholders as part of the Phase Two engagement process.

Analysis of the feedback captured during the Phase Two engagement identified three key themes that relate to:

- maintaining local amenity
- creating a better environment for cycling and walking
- preparing for growth within the region.

These key themes will continue to inform the development of the corridor strategy, which will be released for public exhibition in late 2021.

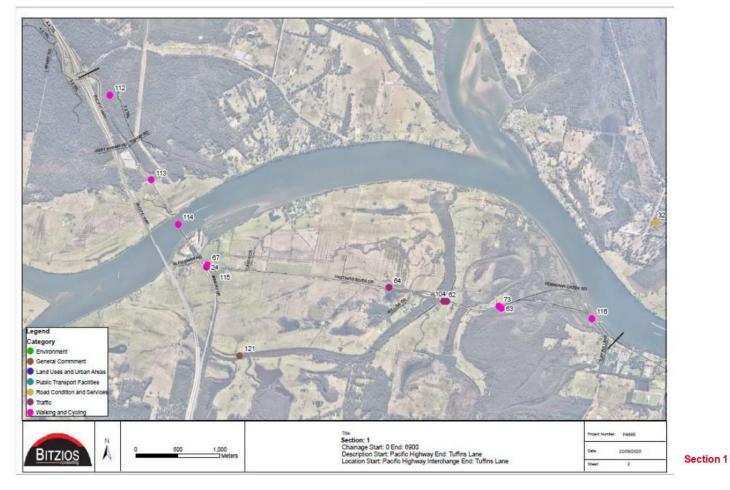
In addition to these key themes, it is important to note a strong community expectation that the draft corridor strategy will acknowledge broader issues, such as:

- the expectation that a Bonny Hills Bypass will be referenced
- the expectation that the Orbital Link Road is referenced
- the robustness of the population projections that underpin the strategy development
- environmental, flooding and drainage considerations.

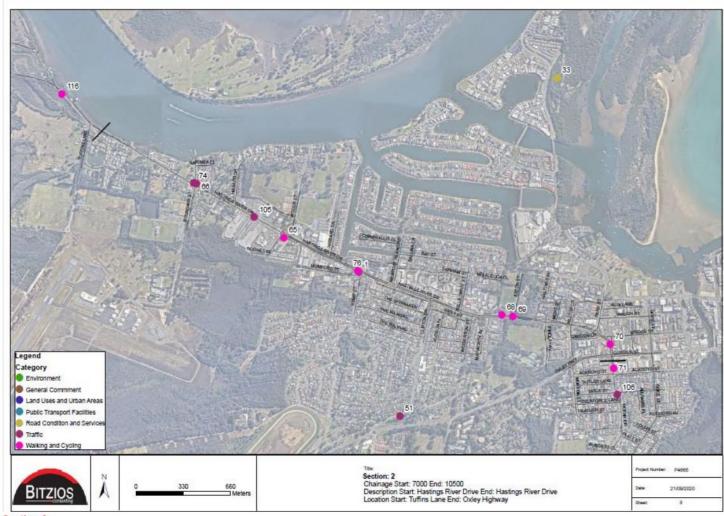
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# Appendix A: Location of pins dropped on interactive map

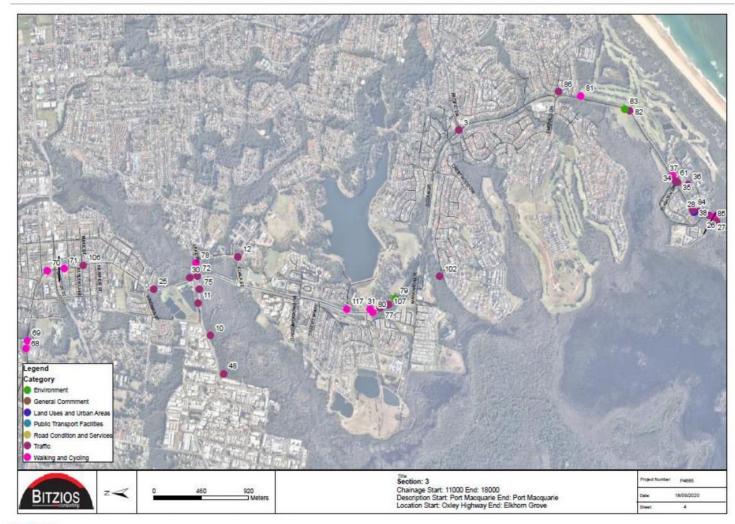
This Appendix includes maps created by the project team to illustrate the location of the pins dropped on the interactive map hosted on Council's Have Your Say page. These maps show the pins dropped in each of the 10 corridor sections.



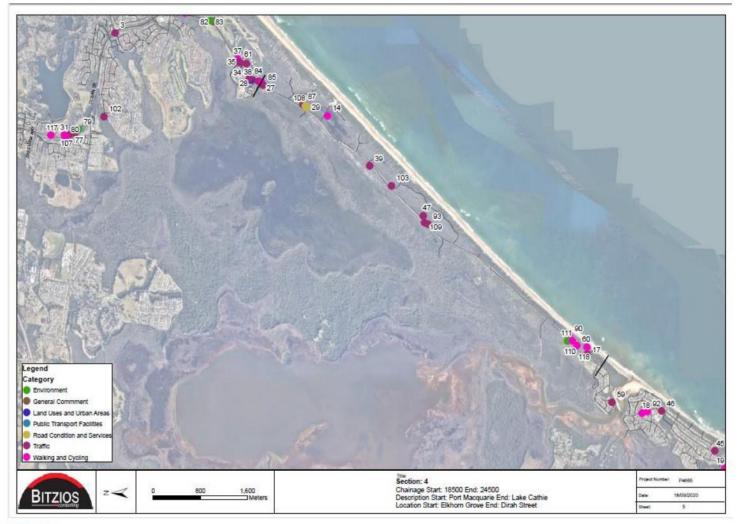
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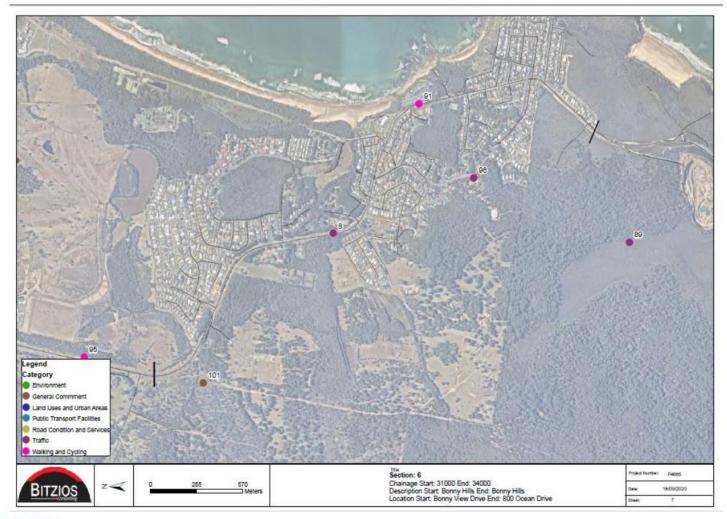
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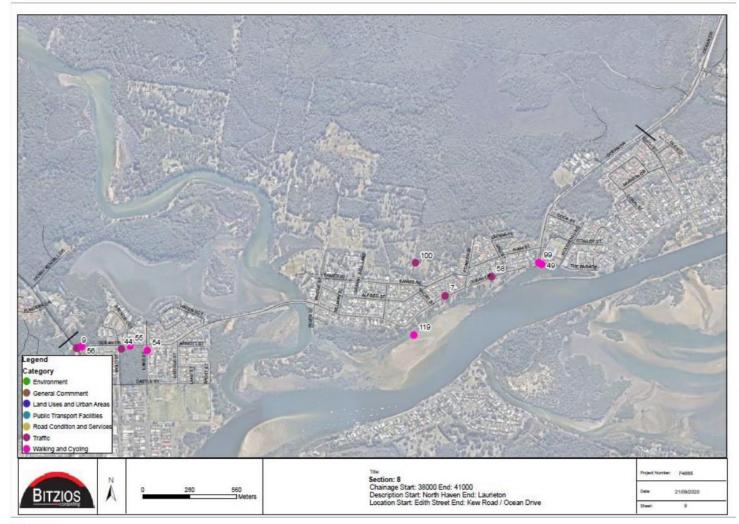
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# Appendix B: Outputs from Phase One community workshops

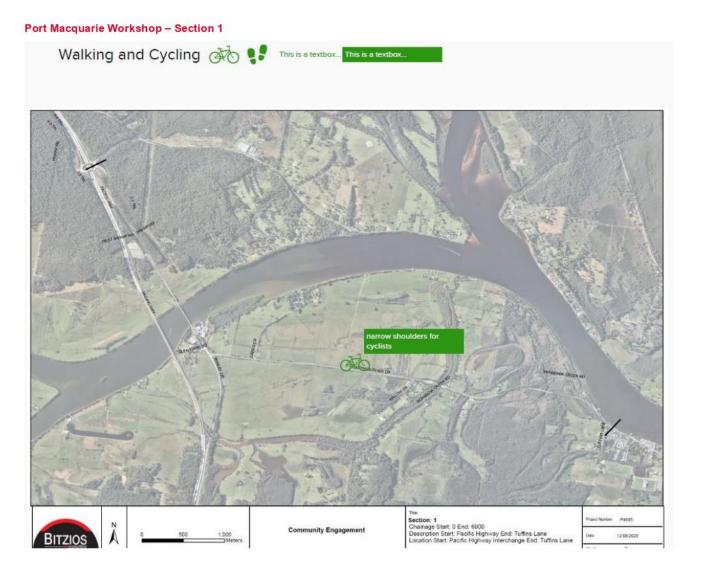
This Appendix includes the comments and feedback that was captured from community members during the Phase One community workshops. Workshops were held for the following locations:

- Port Macquarie (Sections 1–3)
- Lake Cathie (Sections 4 and 5)
- Bonny Hills (Sections 6 and 7)
- Laurieton Camden Haven (Sections 8 and 9)
- Kew Kendall (Section 9 and 10).

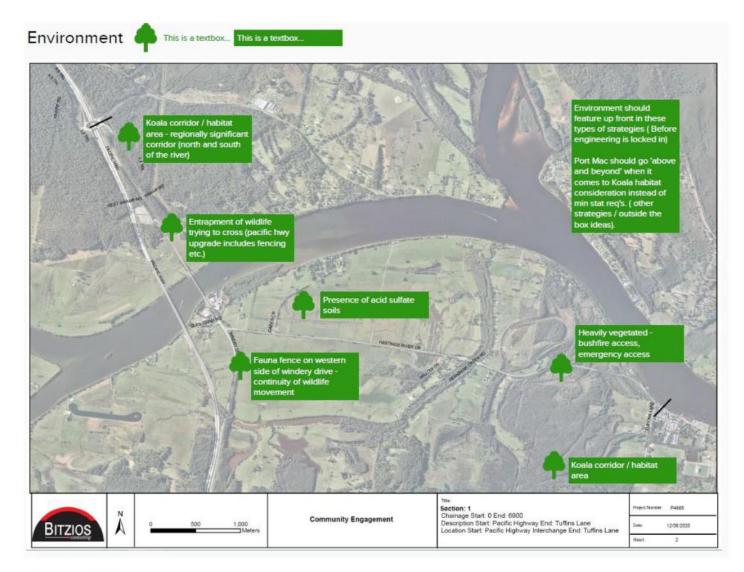
Each workshop created a map for the following topics:

- walking and cycling
- environment
- land use and urban areas
- public transport
- · road condition and services
- traffic.

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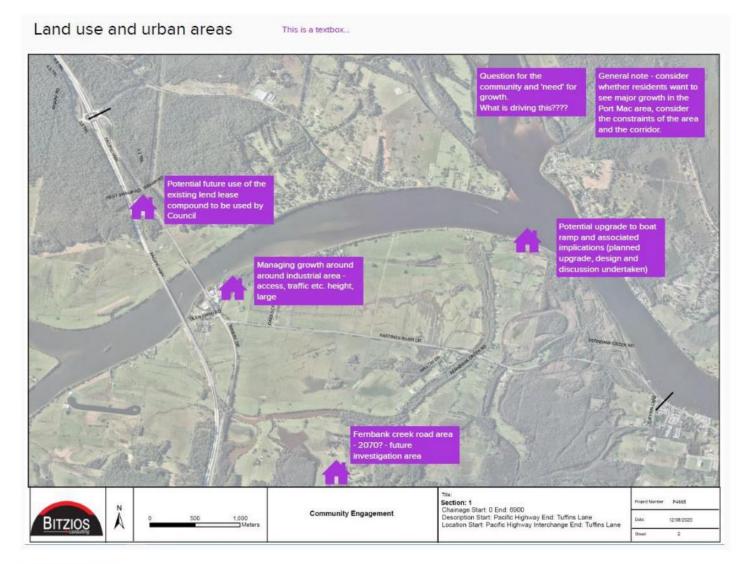


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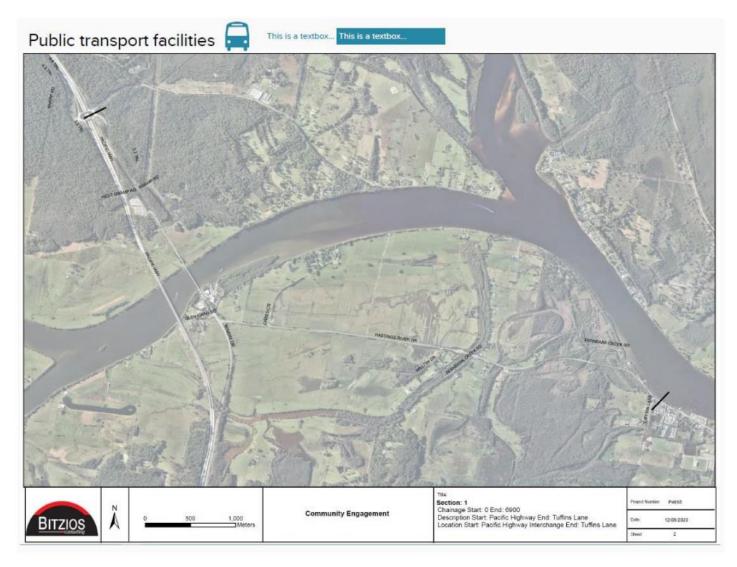
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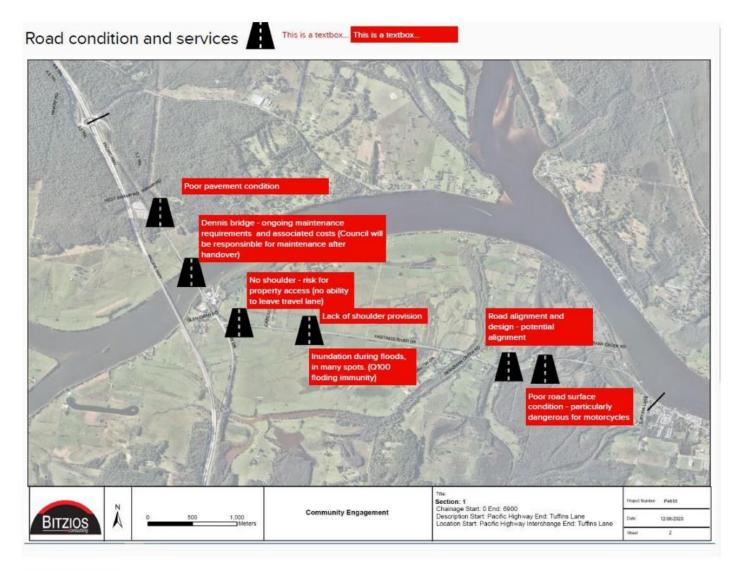


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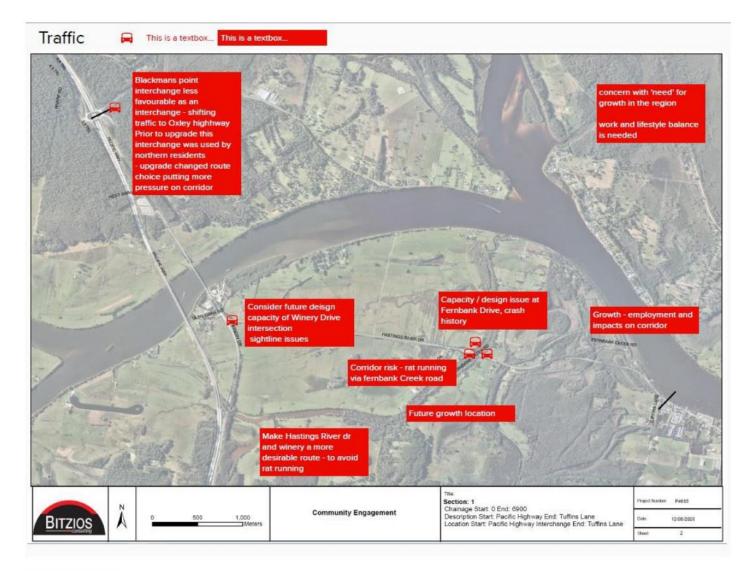
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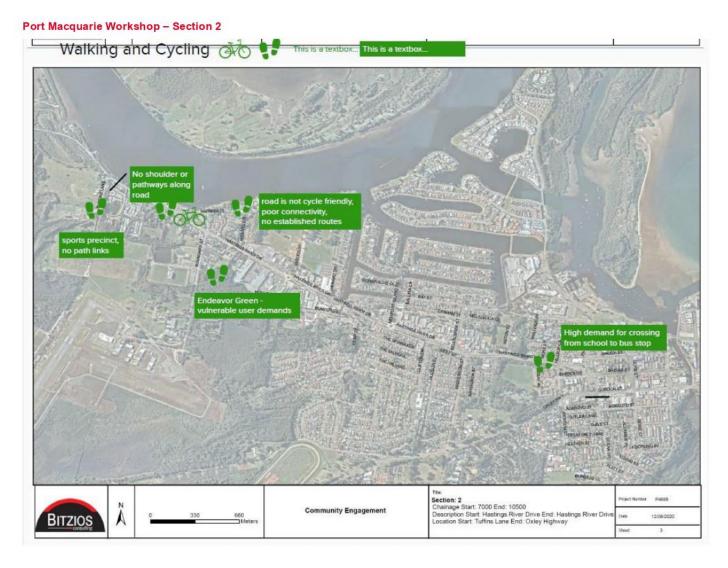
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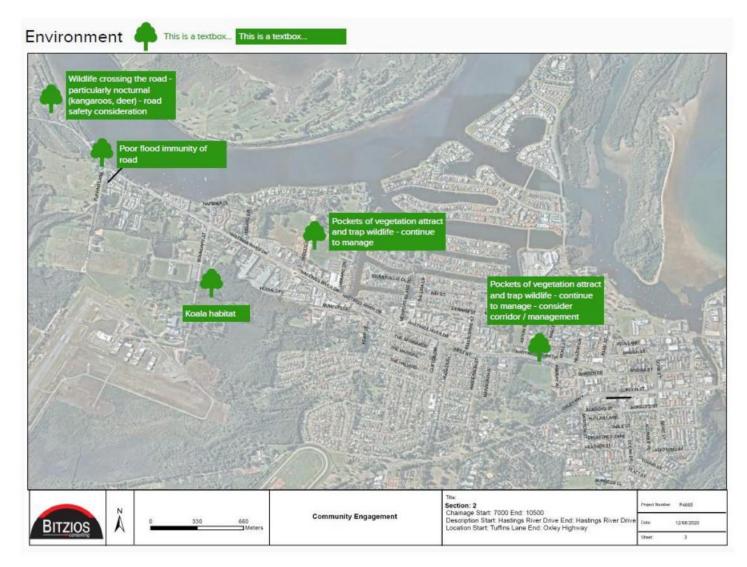
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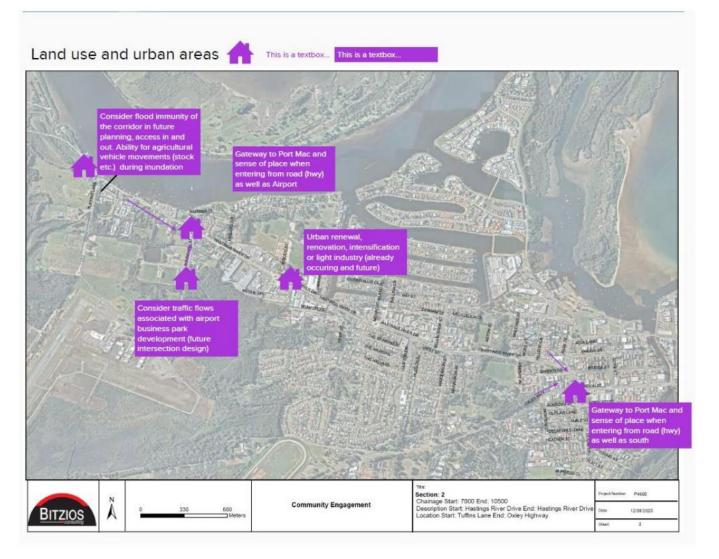
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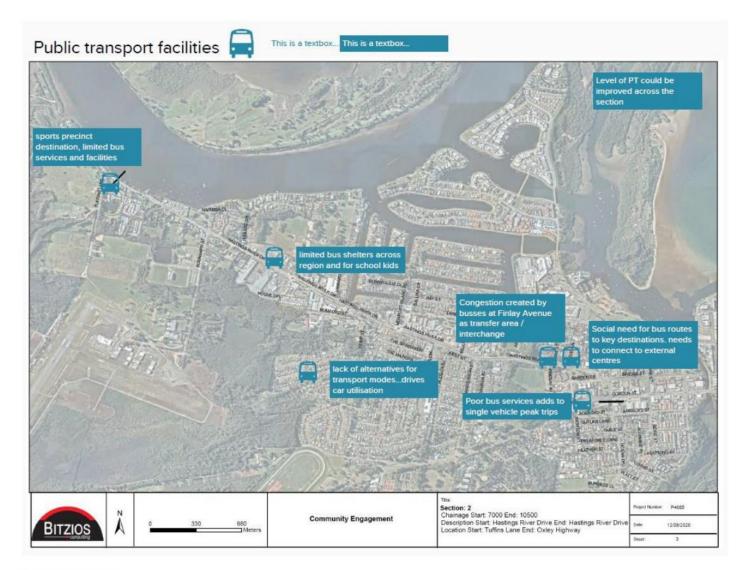
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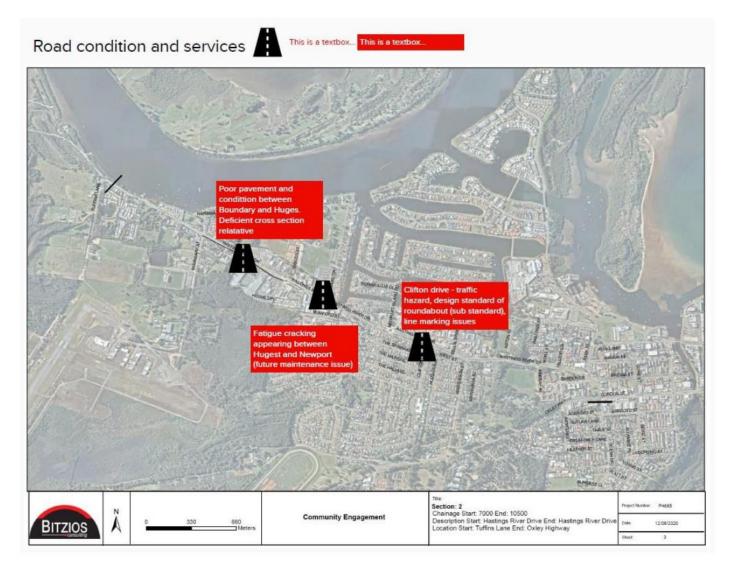
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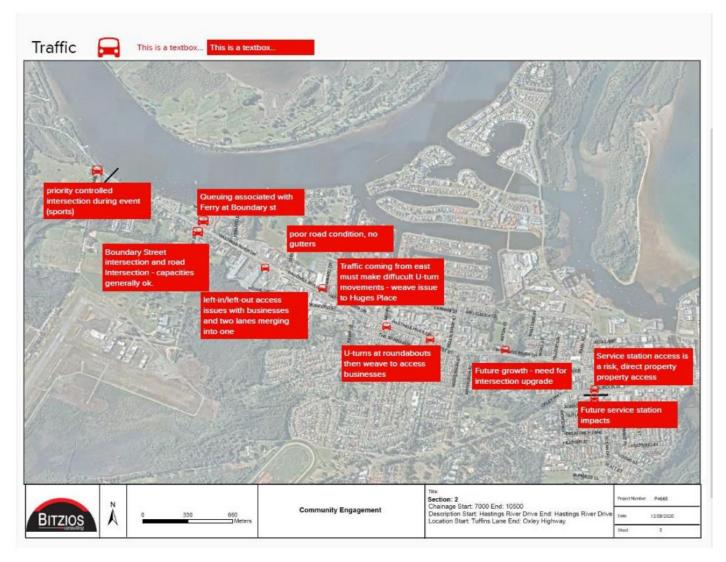
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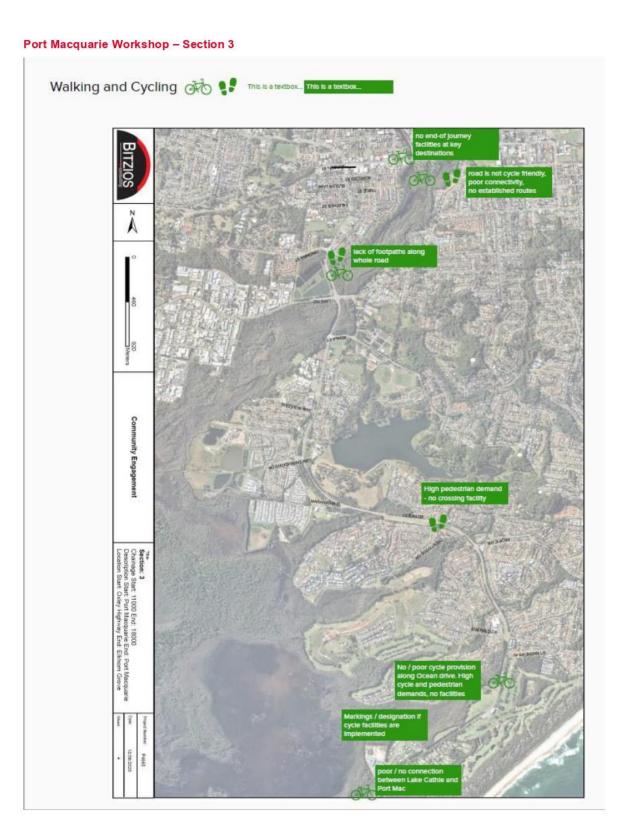
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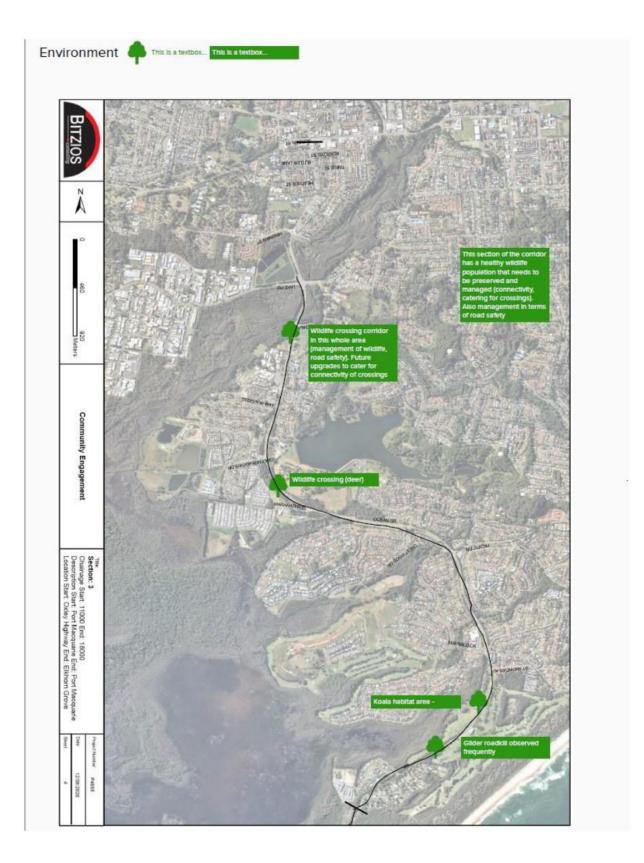


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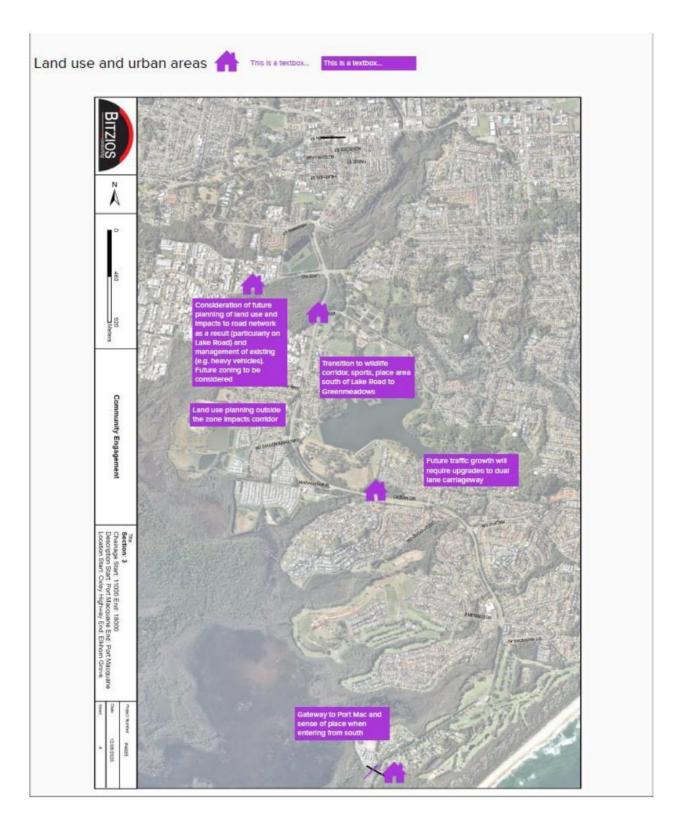


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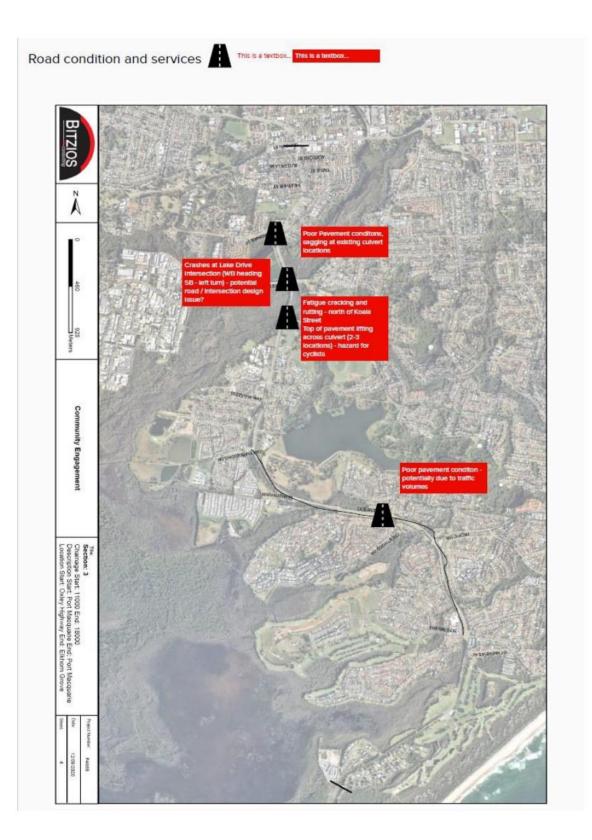
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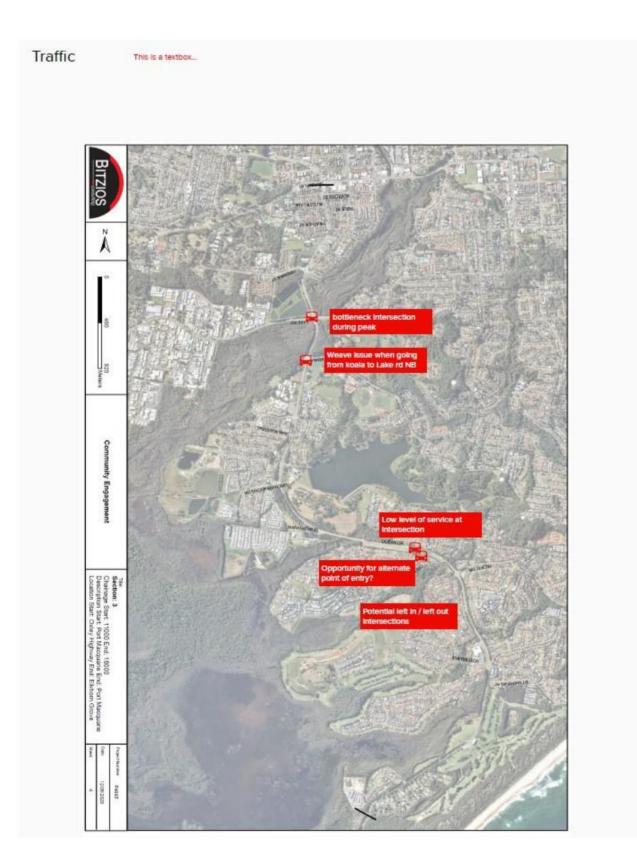


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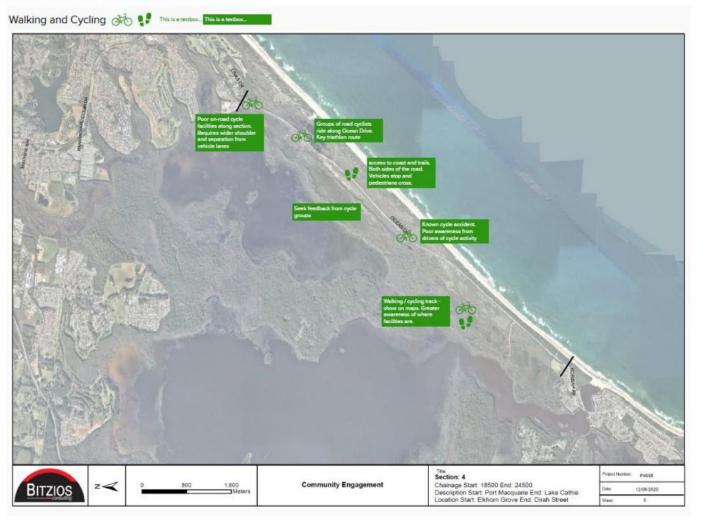
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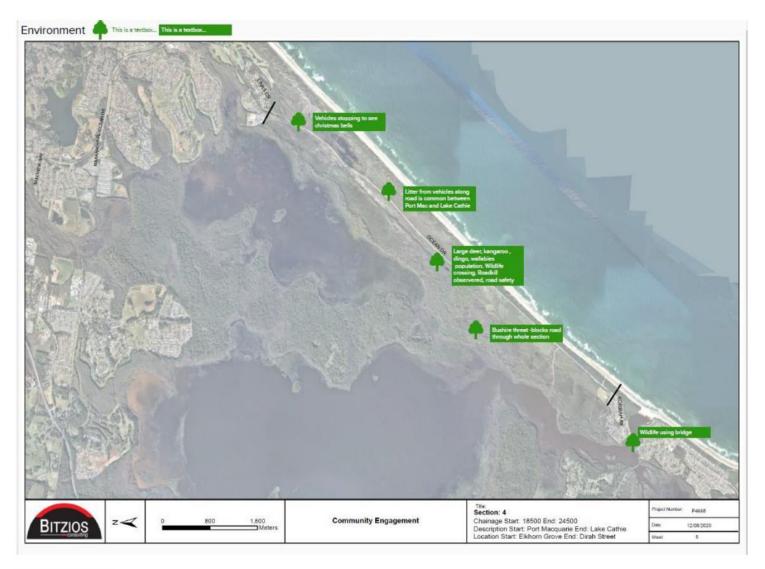


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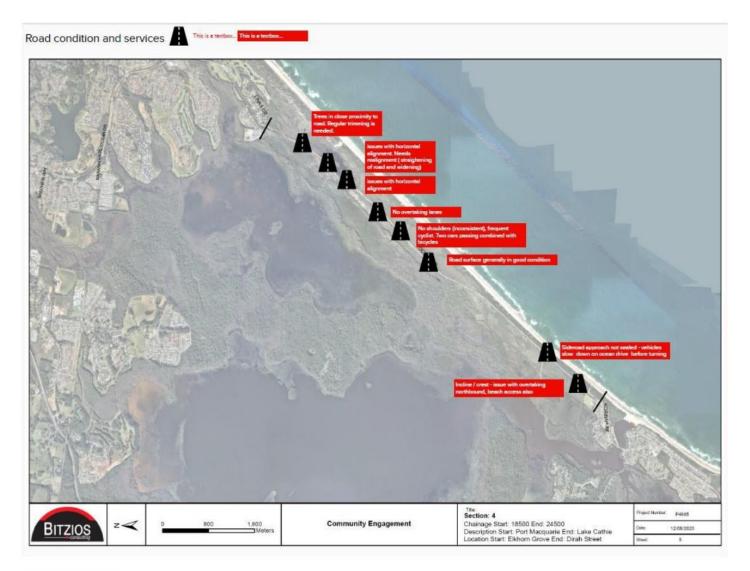
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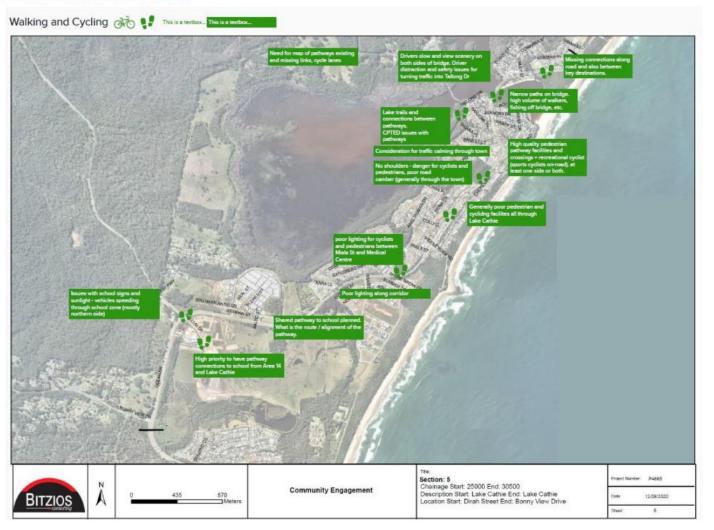


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Lake Cathie Workshop - Section 5

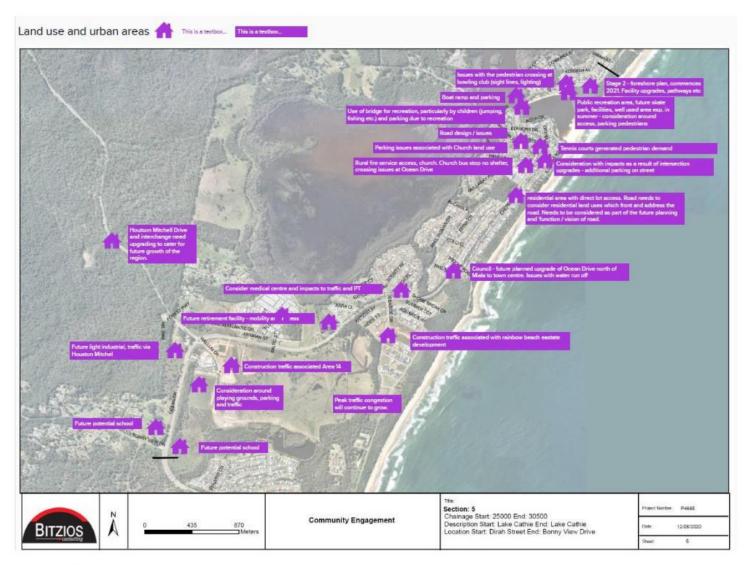


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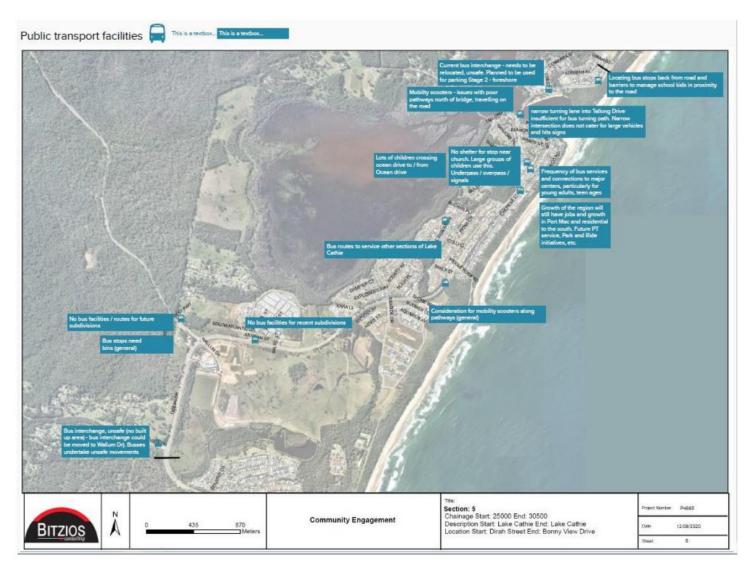
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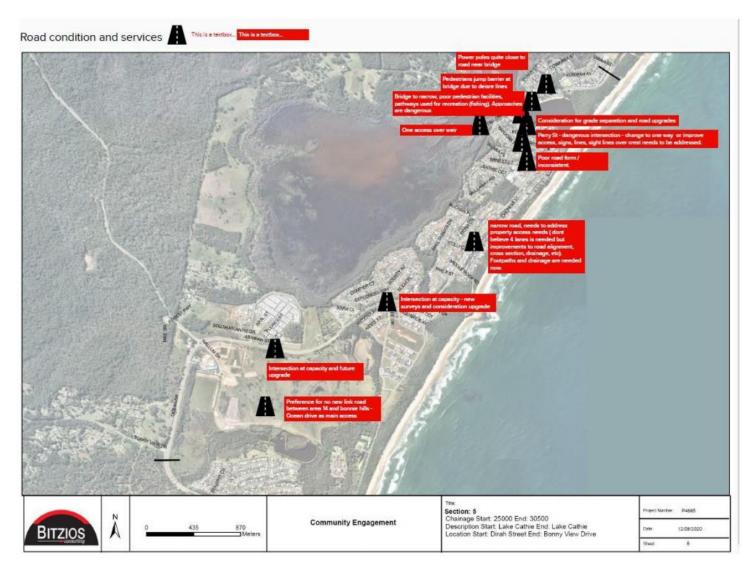
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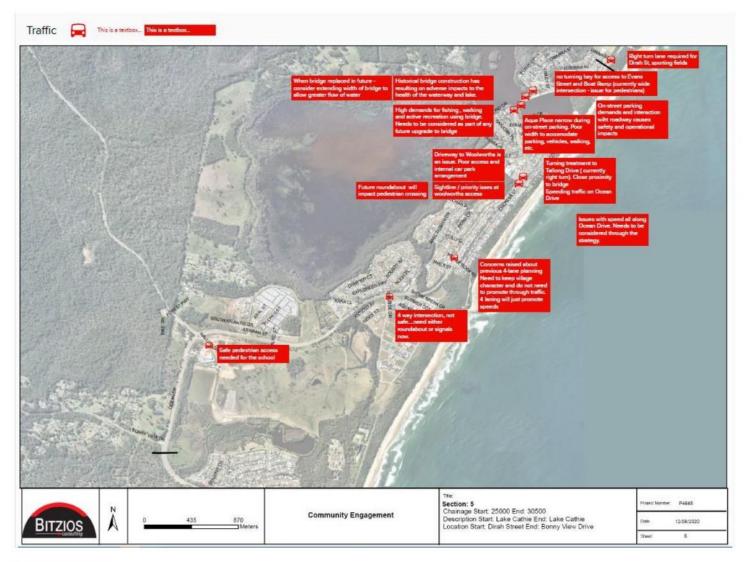
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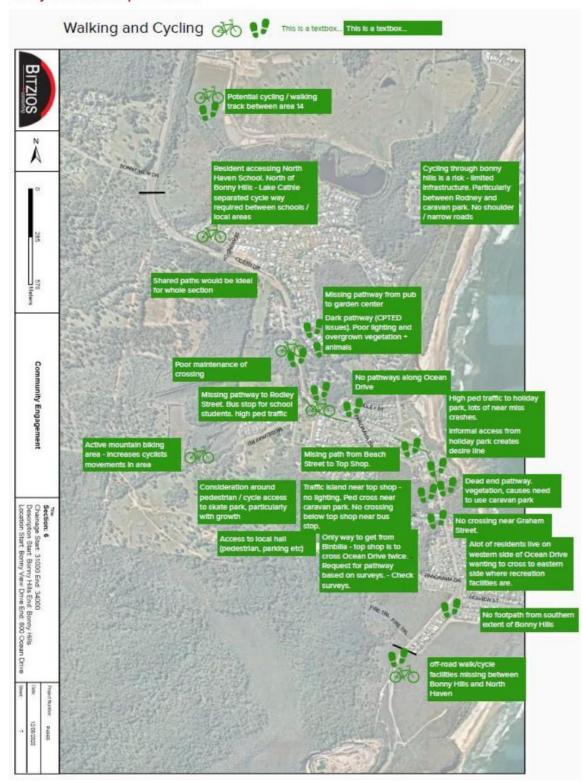
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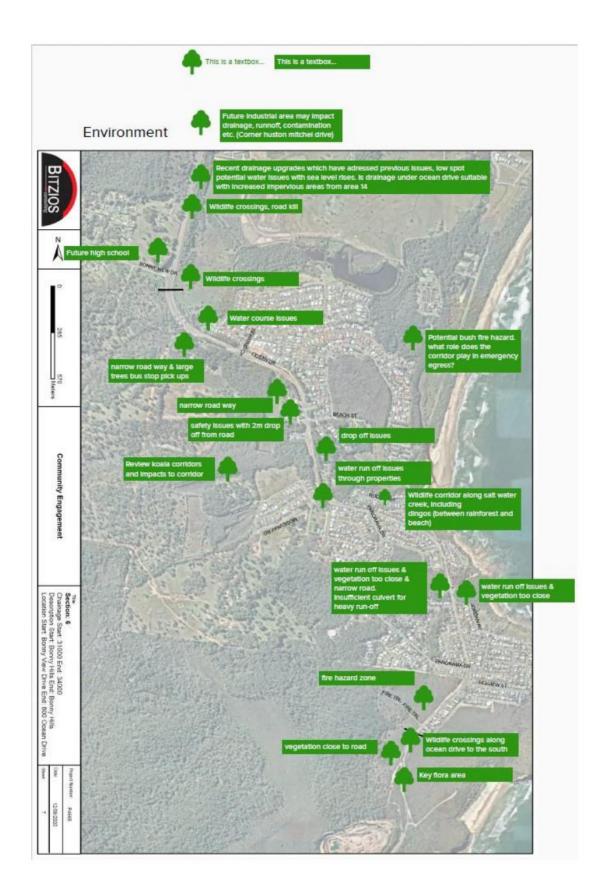
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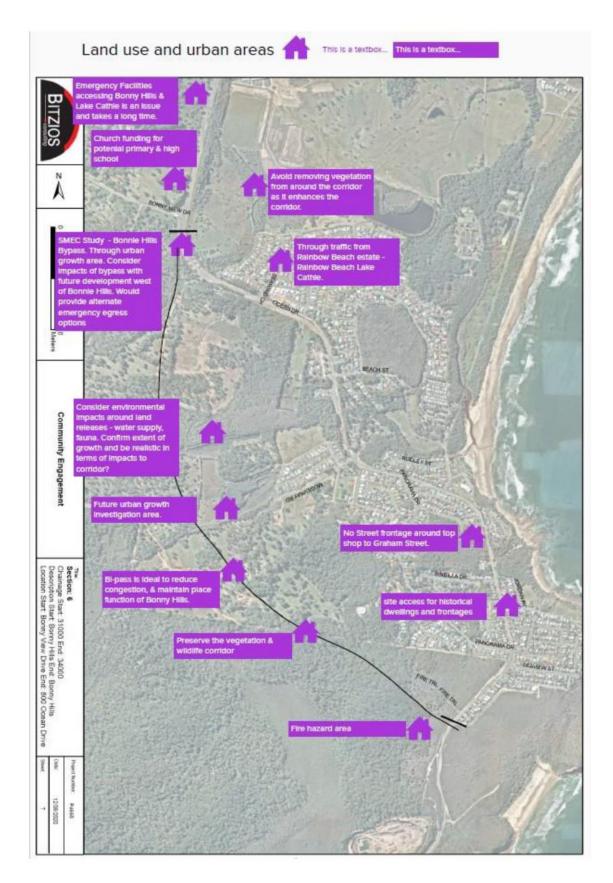
Bonny Hills Workshop - Section 6

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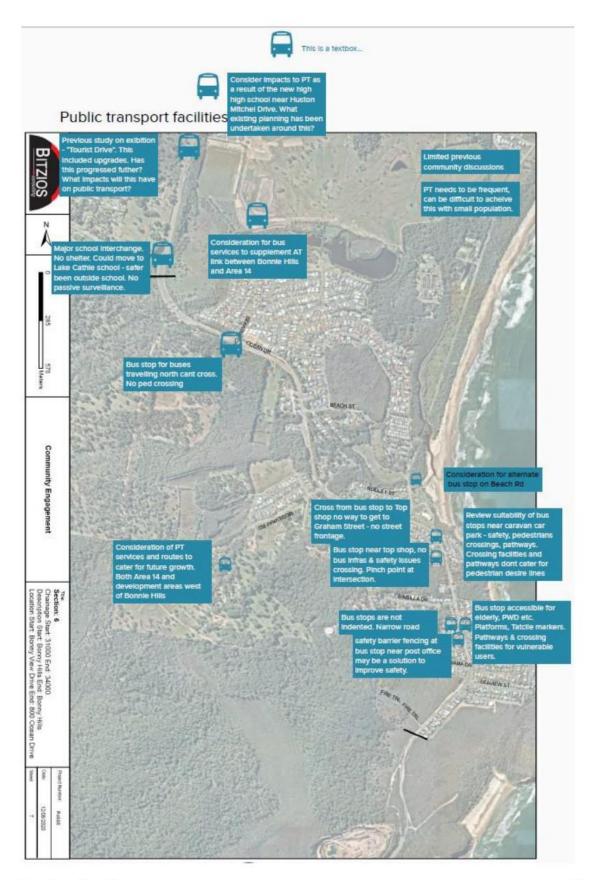
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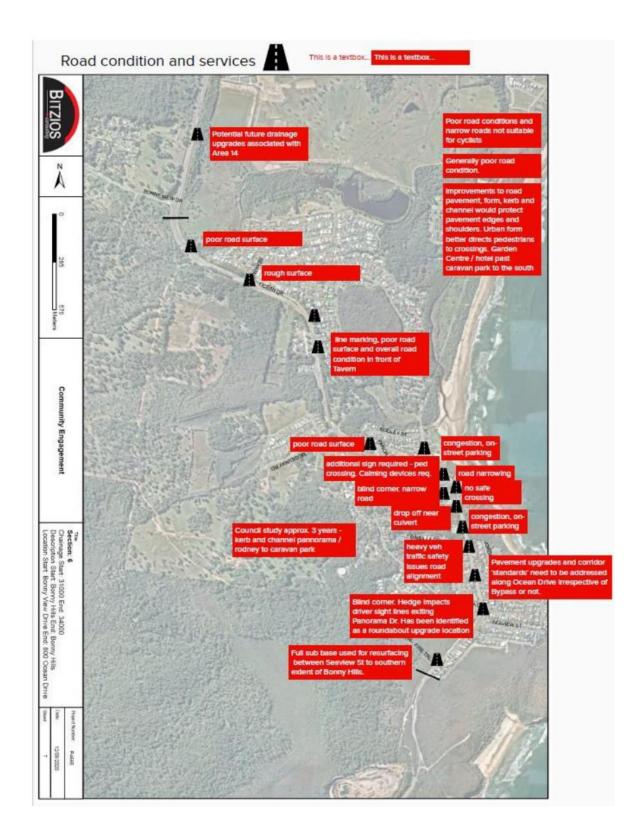
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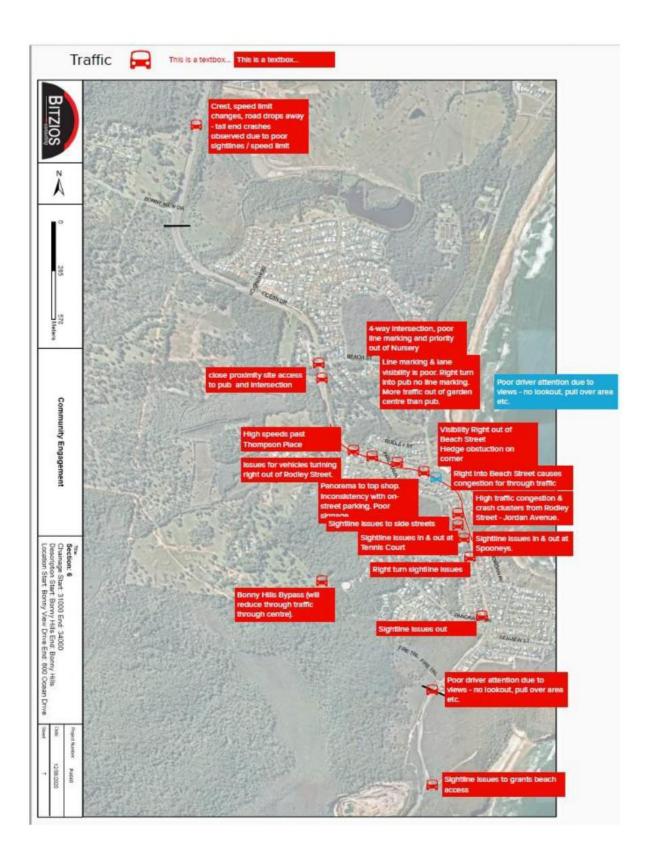
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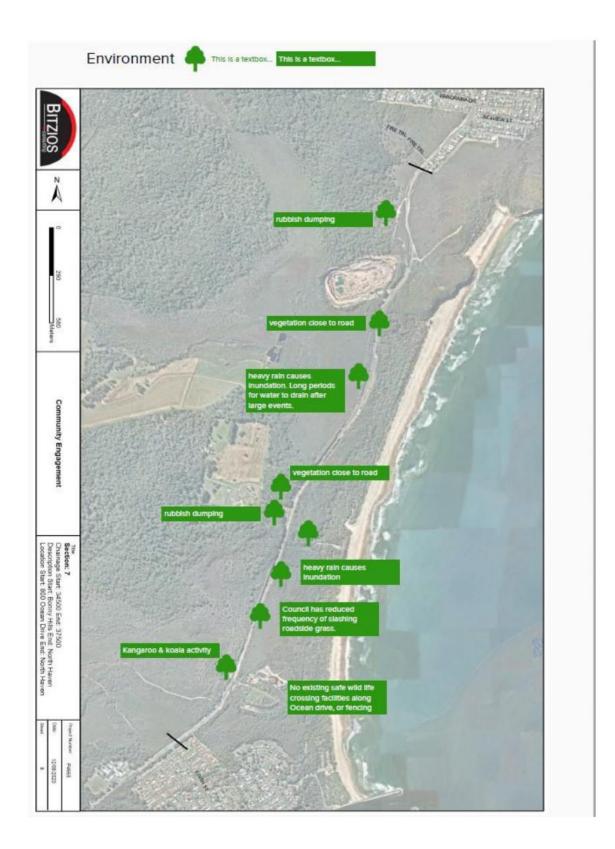
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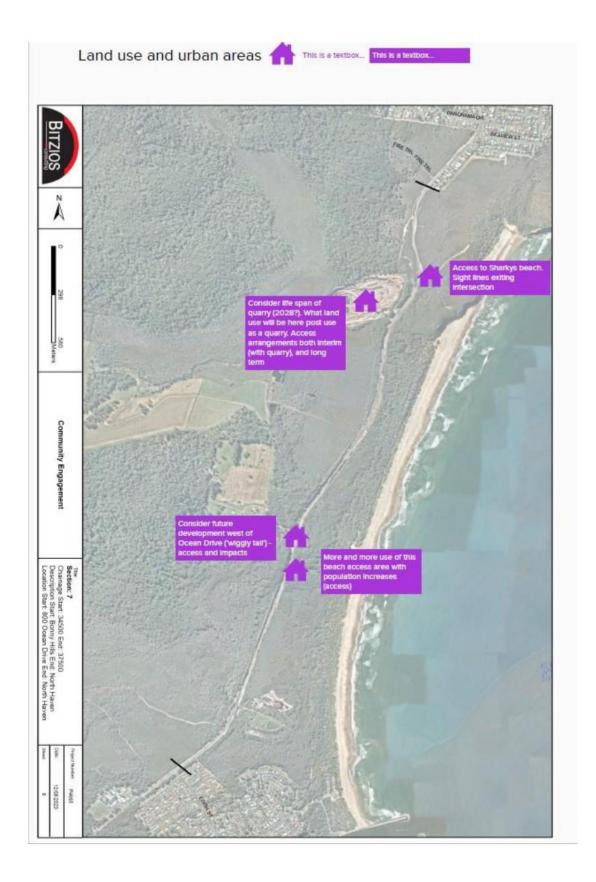
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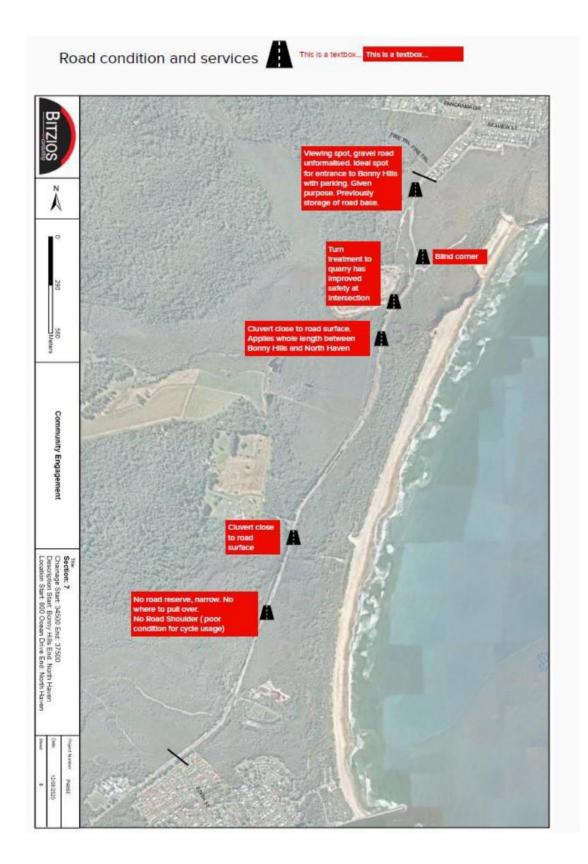


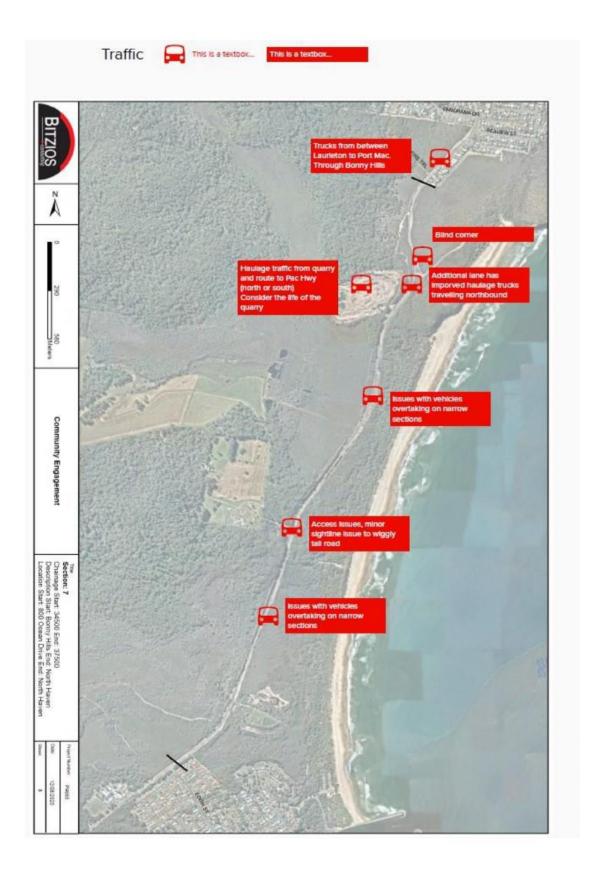
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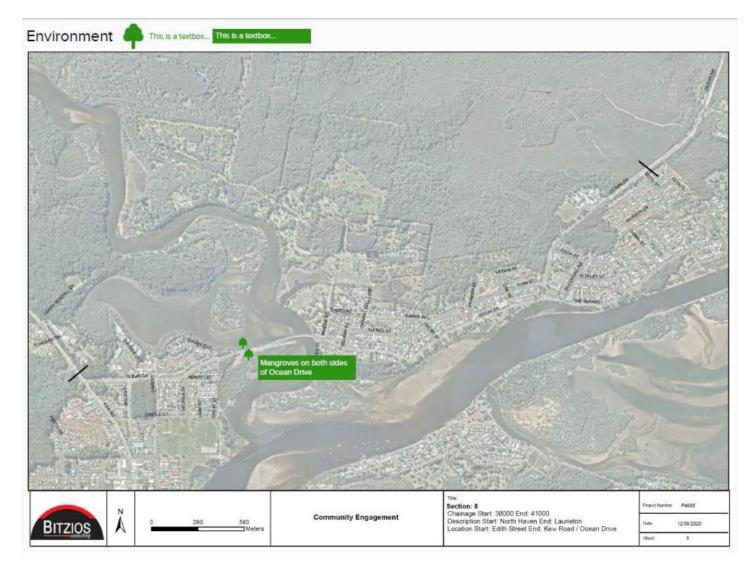


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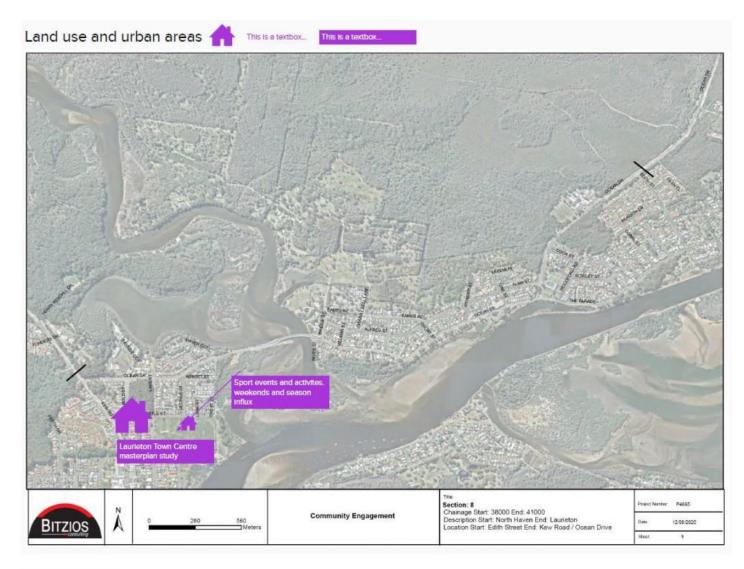


Laurieton Camden Haven Workshop - Section 8

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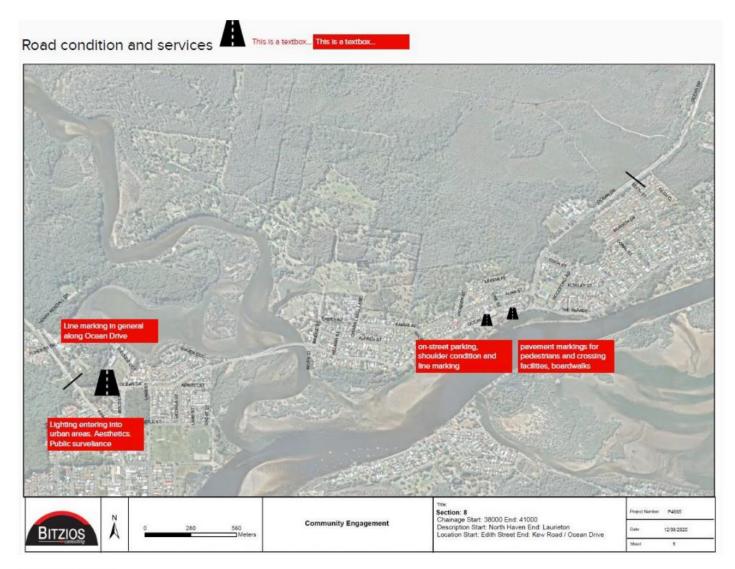
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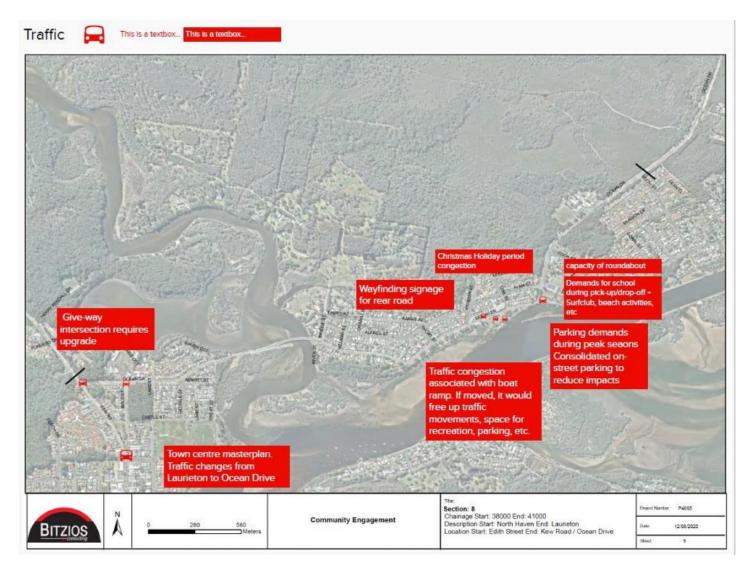
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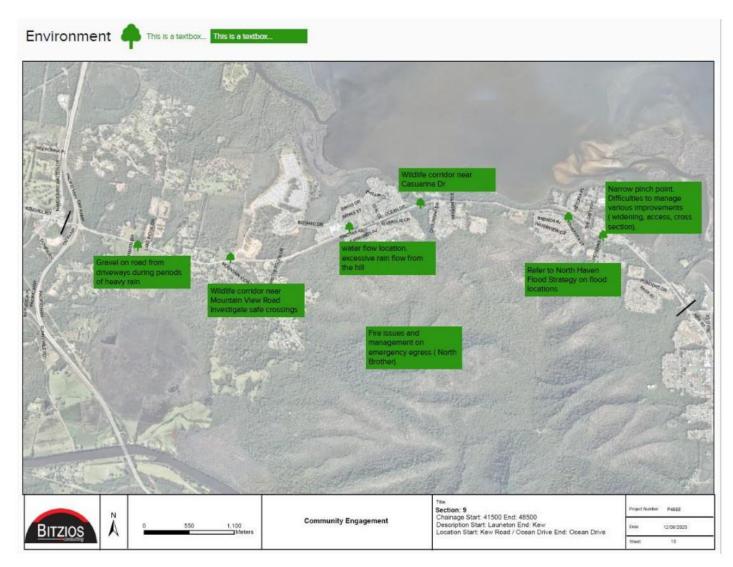


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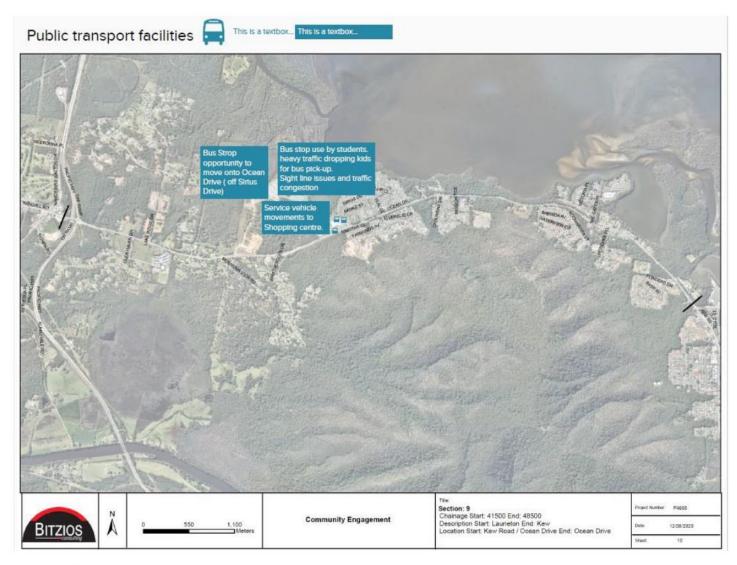




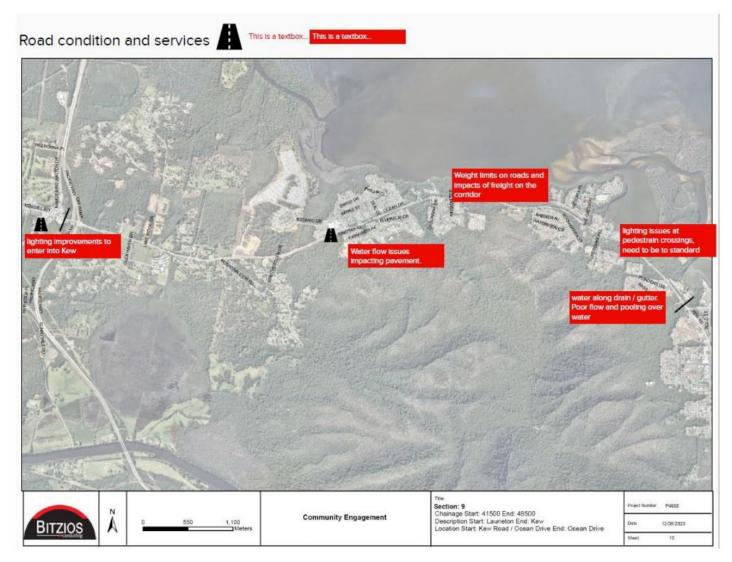
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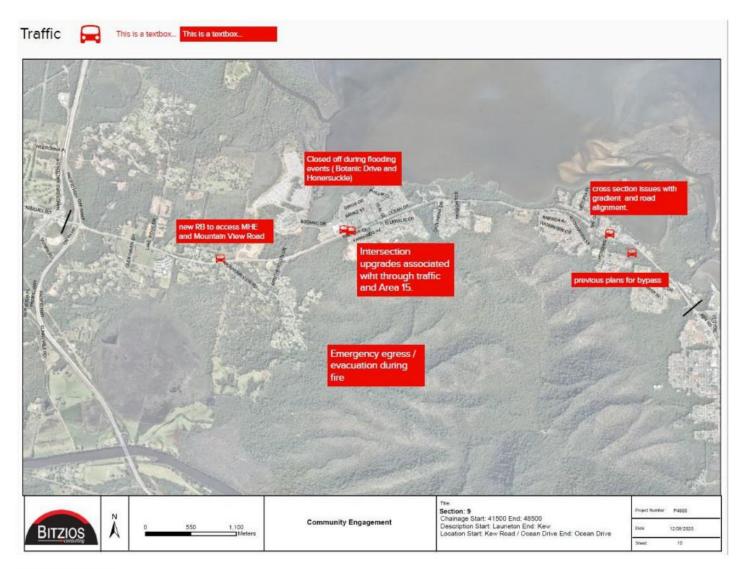


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Kew Kendall Workshop – Section 9

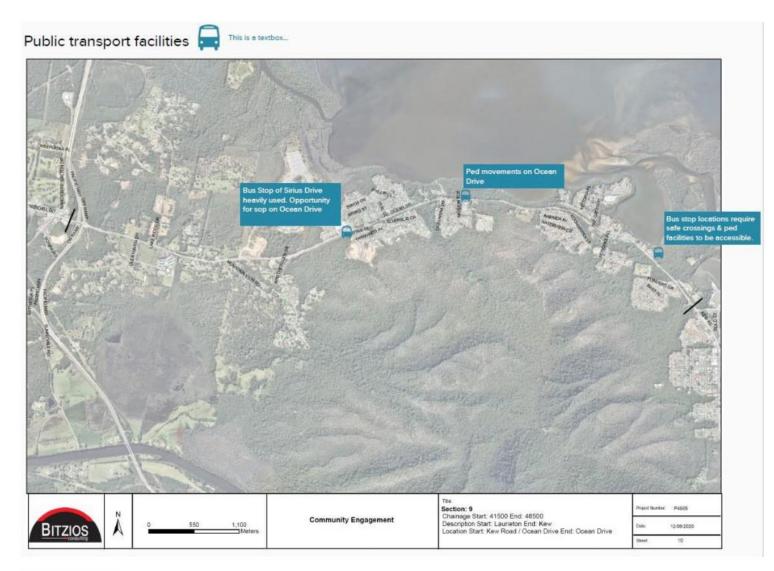


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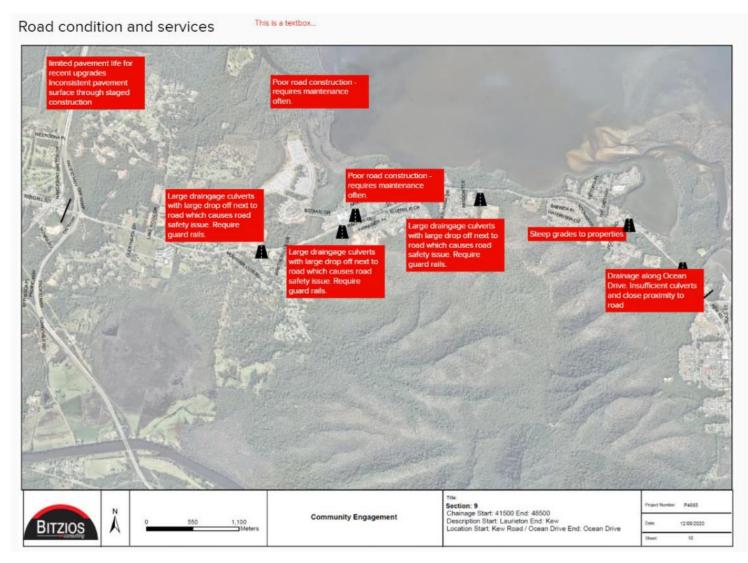


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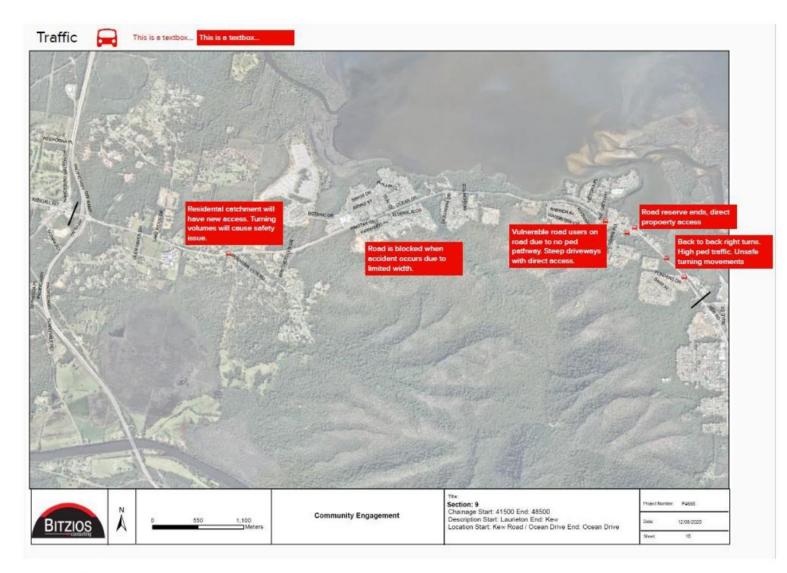


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## ATTACHMENT



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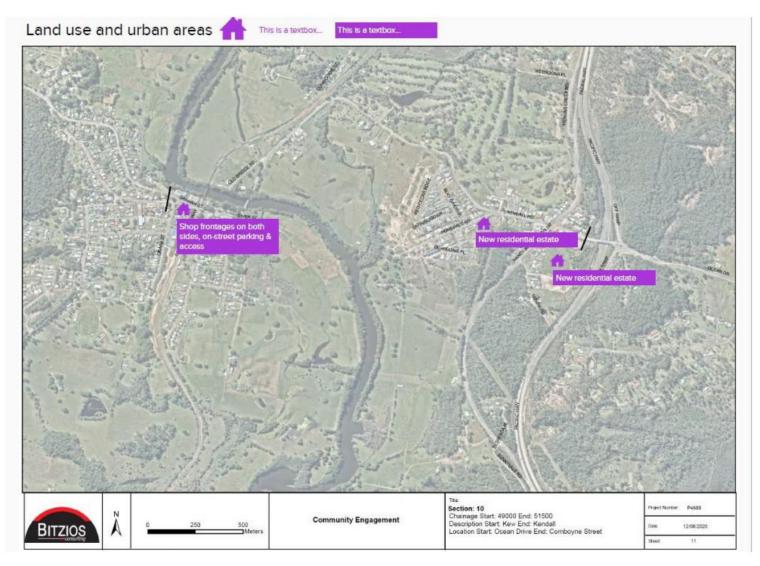
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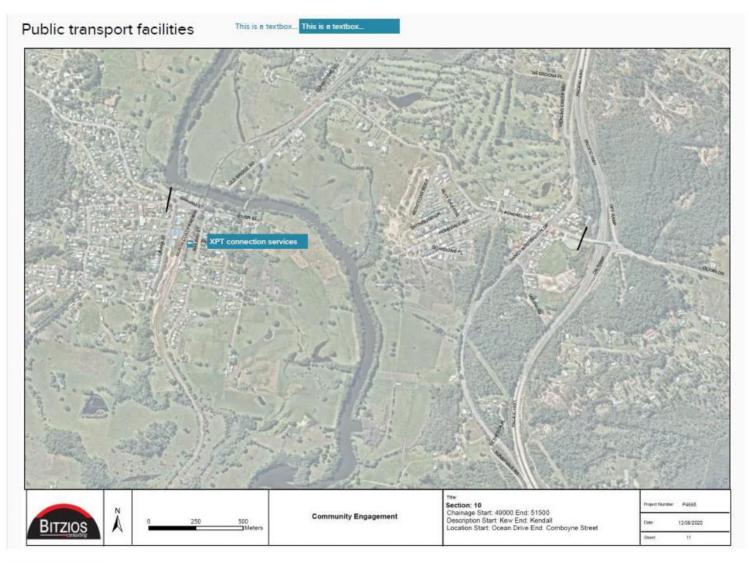
Kew Kendall Workshop - Section 10

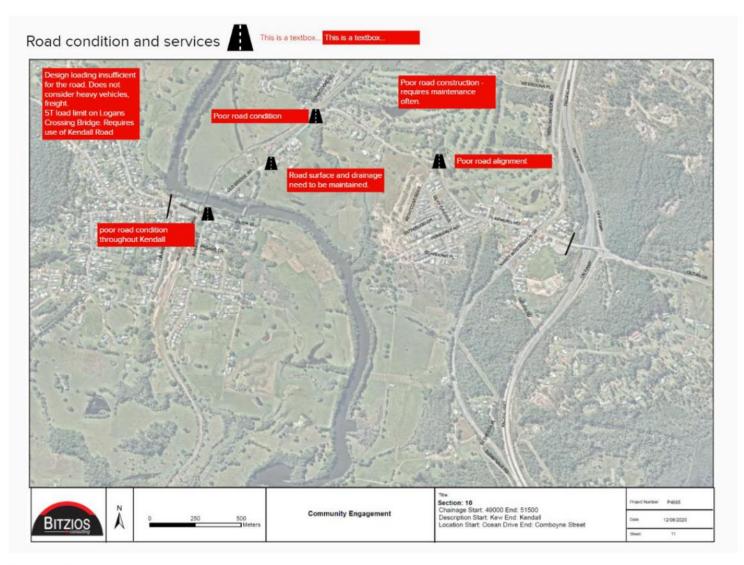
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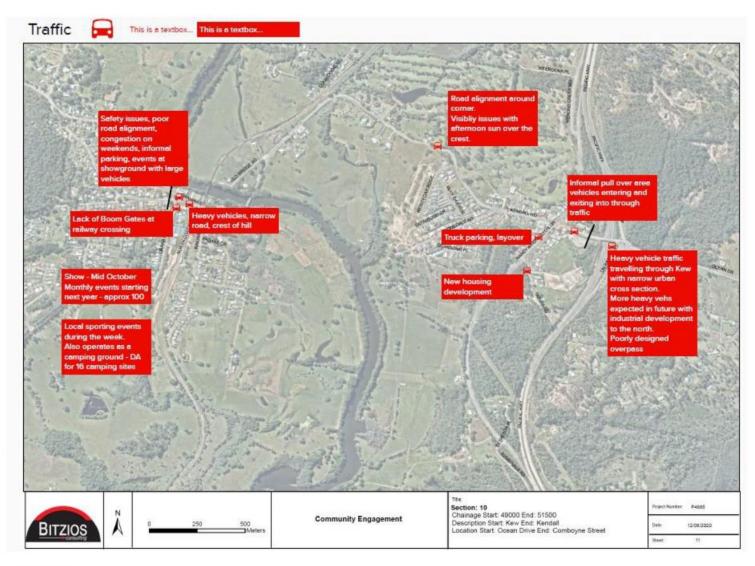




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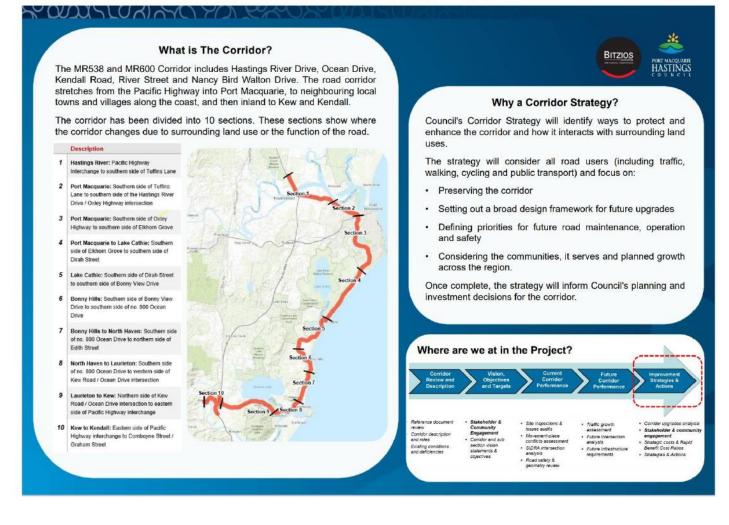






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## Appendix C: Information provided during Phase Two



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How does the Corridor Function for Movement & Place?

The corridor has a high **Movement Function** across its entire length, enables movement between coastal towns and Port Macquarie, the Pacific Highway, and other coastal towns along Ocean Drive.

The **Place Function** varies significantly along the corridor. Some places are highly urbanised with active street frontages, others are environmental areas with limited to no activity.

Transport for NSW defines four main categories of road type under Movement and Place, with varying levels of movement and place, as shown below.



## What have you told us?

- Some key intersections are congested and need upgrading
- Narrow roads with limited shoulders that don't cater for all road users
- Continuous pedestrian footpaths, shared paths are needed, along with improved lighting
- Safe crossings at key locations are needed
- Improved bus services and shelters are needed
- Poor maintenance is impacting on safety and road function in places.

## How does the Strategy respond?

The Corridor Strategy includes actions which seek to plan, and cater, for growth in traffic demand. There are also actions that will make sure that there is more consistency [of what] in the corridor, ensuring safety is maintained and enhanced for all road users.



The Corridor Strategy does not address wildlife crossings and flooding in detail. The community feedback we received about these matters have been passed on to other Port Macquarie-Hastings Council teams.



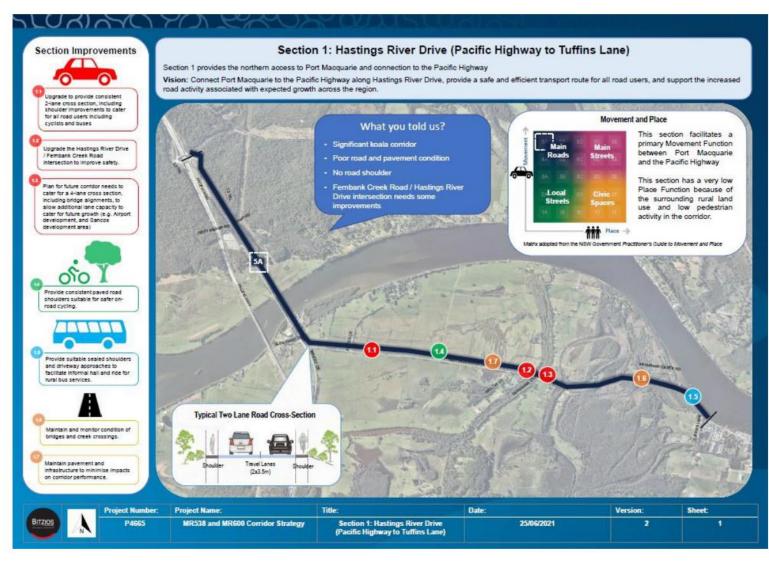
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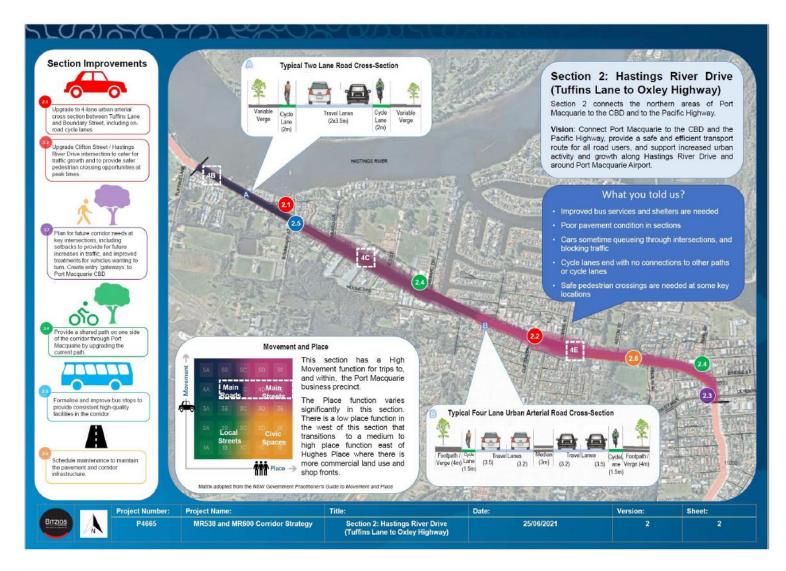
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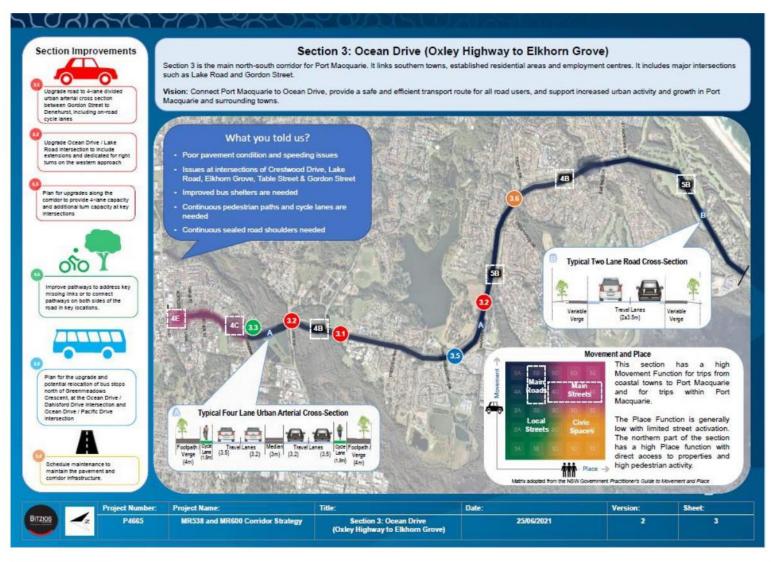
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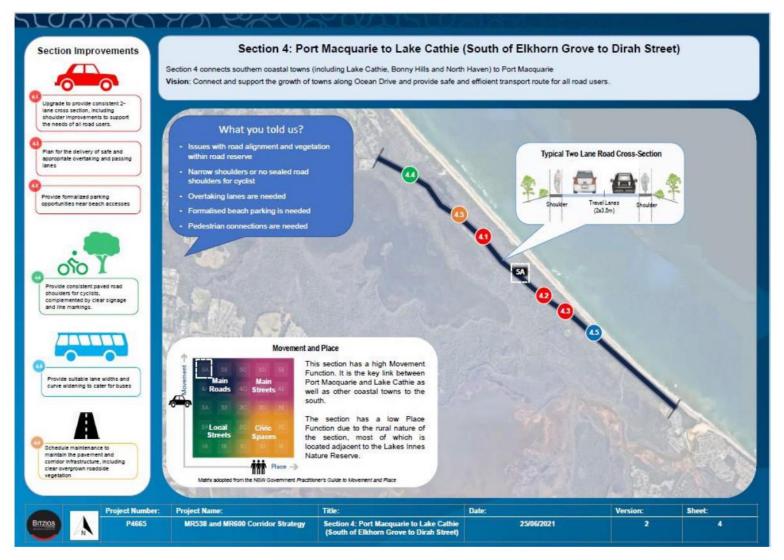
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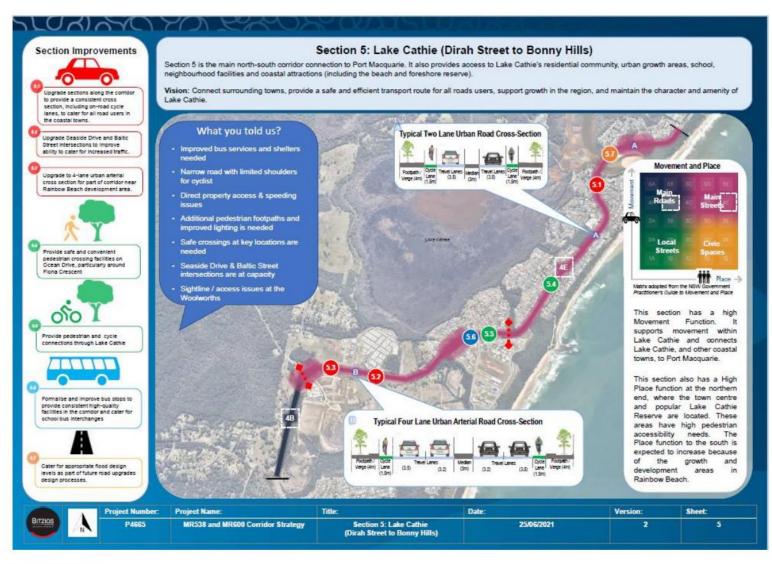
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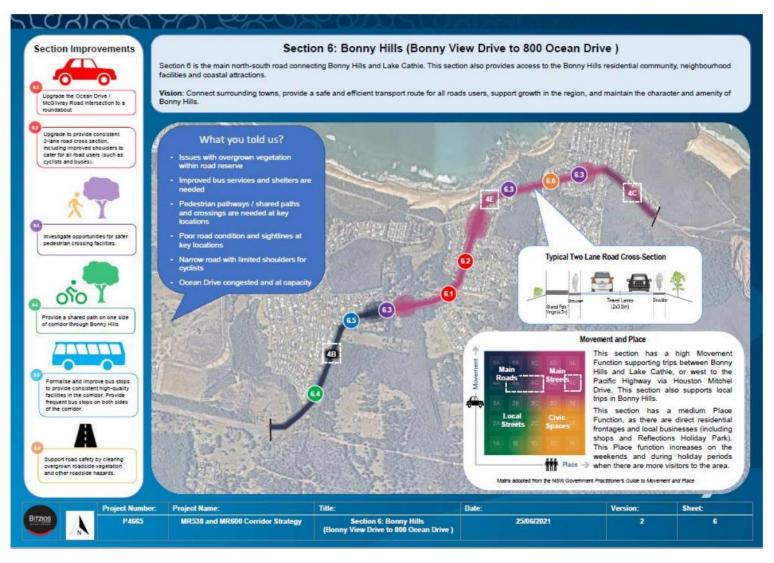
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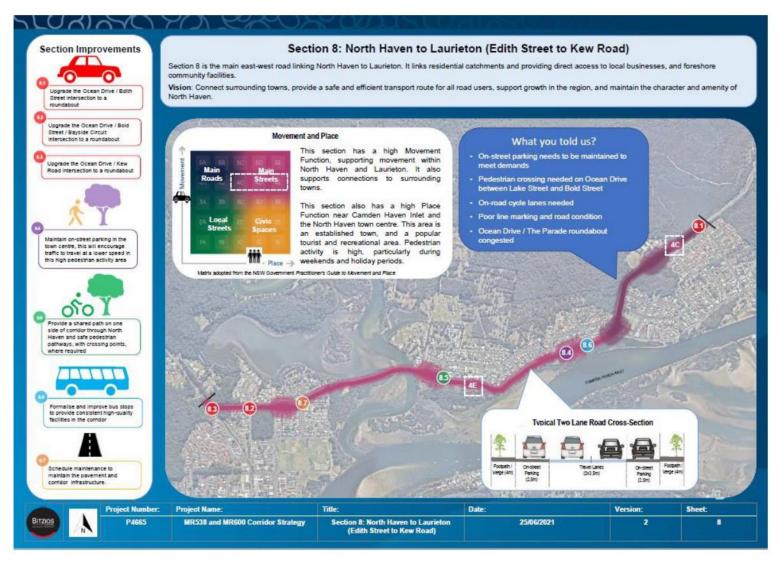


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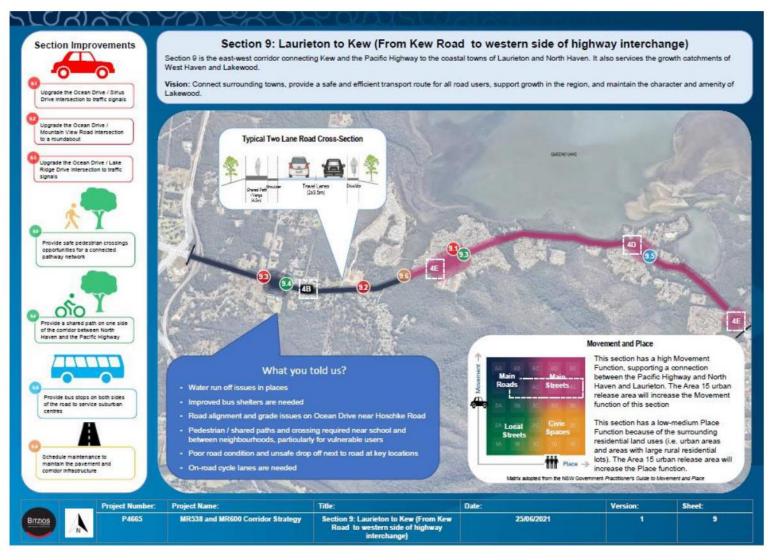


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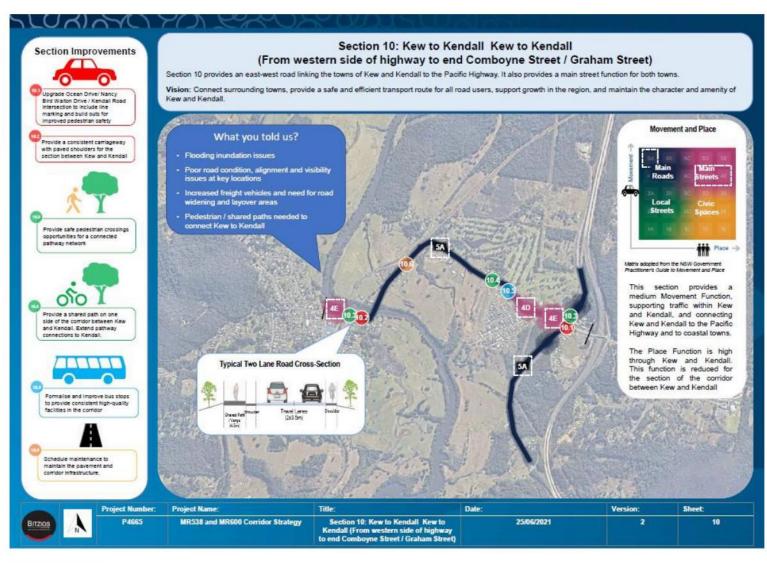




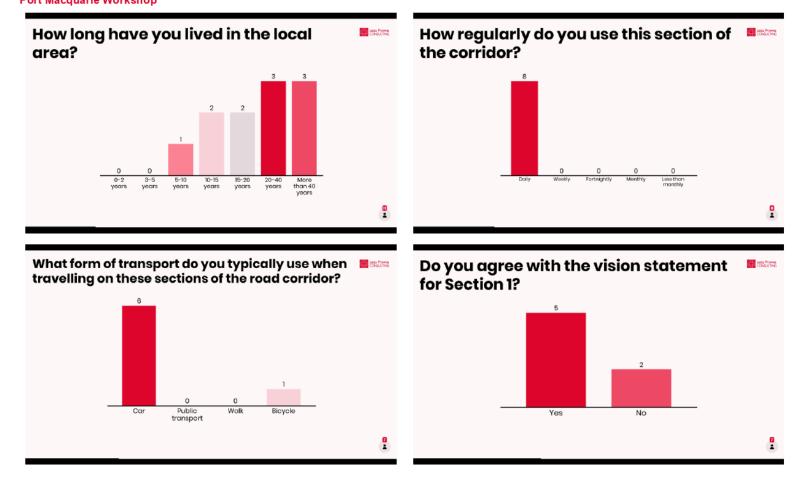
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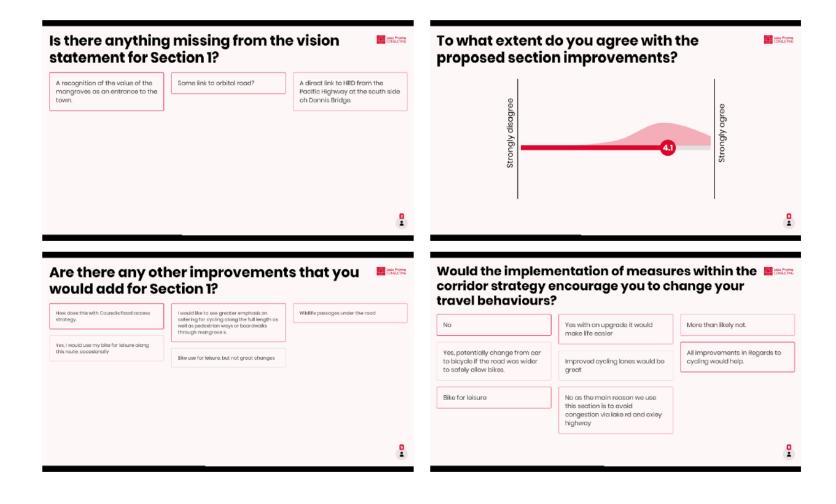


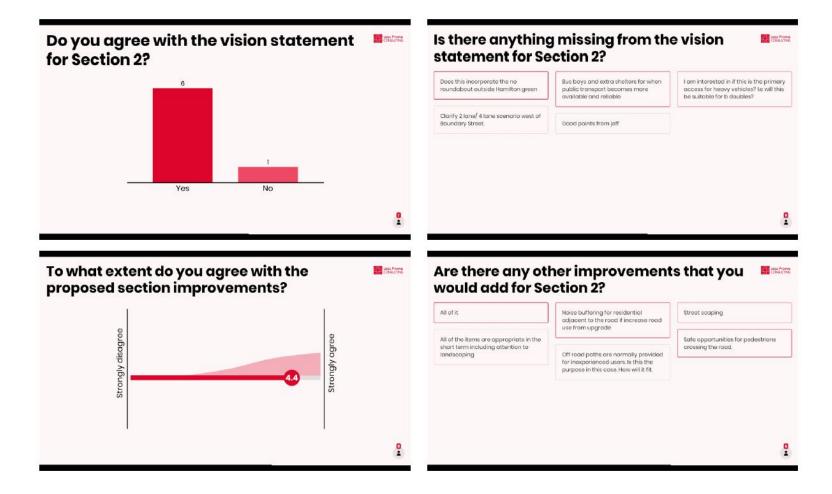
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## Appendix D: Input captured using Mentimeter in the Phase Two community workshops







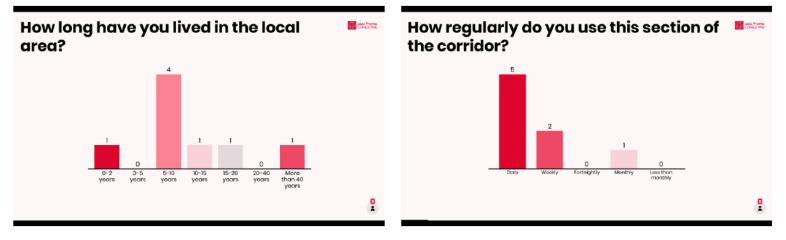


Are there any other improvements that you would add for Section 3?

Would the implementation of measures within the corridor strategy encourage you to change your travel behaviours?

No	Better access through from estates	Underpasses if possible for wildlife	daver benaviours.			
	that feed into the road		No	No	Yes	
I want to add off road bike lanes for		Trees planted at regular intervals				
oll sections	Cycle Lanes to Elkhorn Grove	along shared paths	No	No	Yes	
					100	
Need clearer links between traffic flows and new developments. There						
does not seem to be a clear link now and in the past.						
		<u> </u>				

#### Lake Cathie Workshop



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#### ATTACHMENT



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Are there any other improvements that you would add for Section 4?

#### 4 lanes plus wider cycle lanes 4 lanes And a bypass around Easy access to beach and parks. Proper cycle ways - 4 lanes Access to beach and parks No Cathie and Bonny Hills 4 lanes Cats eyes or reflectors the whole Intersection upgrade at length lighthouse beach for traffic distribution and alleviate No congestion No if the current suggestions are carried though section 4 would be a safe useable corridor Wildlife fencing 2 Ŧ Would the implementation of measures within the Do you agree with the vision statement Leiss Provise CONSULTING corridor strategy encourage you to change your for Section 5? travel behaviours? 5 No No No Yes. Bike more often. If public transport was cheaper, park No, if the quality of surface was and ride schemes introduced, yes better it would just make it more popular for commuters and recreational cyclists alike Yes No .

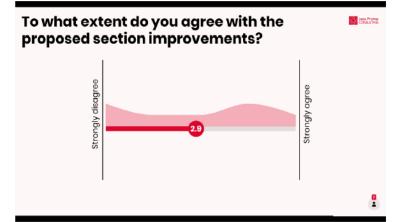
Are there any other improvements that you

would add for Section 4?

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Is there anything missing from the vision **statement for Section 5**?

No	No	No
Transport links solely between the villages	Nothing missing , we need this upgrade	Don't make the car 'king' through the village encourage through traffic to use alt routes
Slip lane to turn into Parry Street from Ocean Drive going north		



Are there any other improvements that you would add for Section 5?

port

# Public transport options Pedestrian safety Pathways that join up Resident safety Speed cameras! Roundabouts rather than traffic lights The plan has footpaths cycle lanes Traffic lights do not belong south of Image: Comparison of the plan has footpath to cycle lanes

Public transport or some form of

people movement, roundabouts rather than light and only two lanes!

.

### Are there any other improvements that you would add for Section 5?



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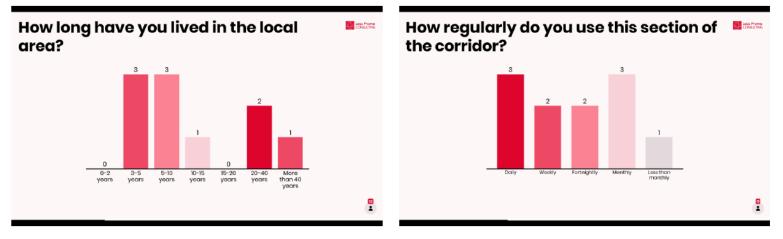
and an upgraded road what's not to

like

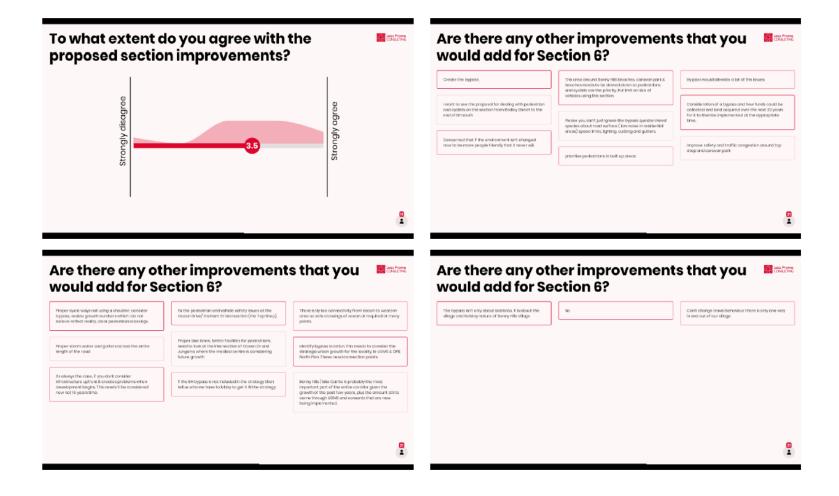
Would the implementation of measures within the corridor strategy encourage you to change your travel behaviours?

No	No	Yes. Increased bike usag	je
Not in a 4 lane section	No	No	

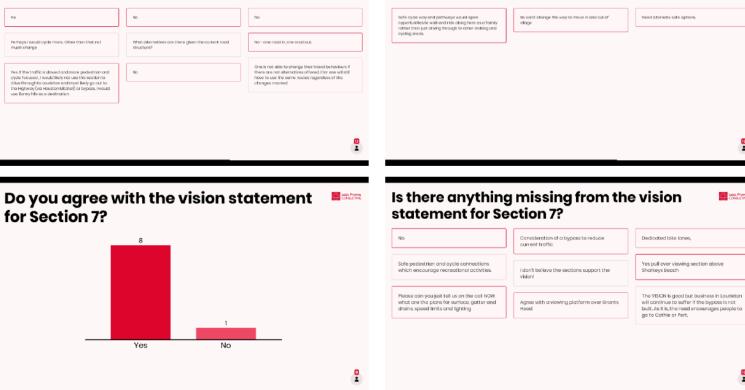
**Bonny Hills Workshop** 







Would the implementation of measures within the corridor strategy encourage you to change your travel behaviours?



Would the implementation of measures within the

corridor strategy encourage you to change your

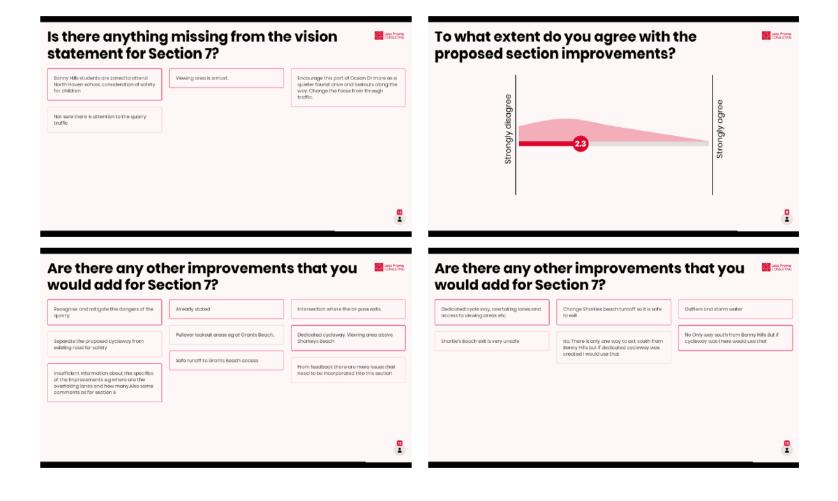
travel behaviours?

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Would the implementation of measures within the second corridor strategy encourage you to change your travel behaviours?

No No If suggest	ons re cycleway we ted, Yes
	ay south out of village ally would use

Laurieton, Camden Haven, Kew and Kendall Workshop

