



## Bike Plan

# Final

November 2016



Realising potential

Report prepared by:



*Realising potential*

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## TABLE OF CONTENTS

<b>Executive Summary</b> .....	<b>1</b>
<b>1. Introduction</b> .....	<b>3</b>
<b>2. Background</b> .....	<b>4</b>
2.1 Aims and Objectives .....	4
2.2 Bike Plan Context.....	5
2.2.1 2013-2023 Community Strategic Plan .....	5
2.2.2 Gunnedah Development Control Plan 2012 (Amended 2014) .....	6
2.2.3 Gunnedah Economic Development Strategy - Adopted 19 March 2014 - Volume 2 .....	6
2.2.4 NSW Long Term Transport Master Plan (December 2012) .....	6
2.2.5 NSW 2021 – A Plan to Make NSW Number One (September 2011).....	7
2.2.6 NSW Bike Plan (May 2010) .....	7
2.2.7 National Cycling Strategy 2011-2016 .....	8
2.3 Cycling Data and Accident Statistics .....	8
2.4 The Bicycle Network .....	9
2.4.1 Use of Cycleways .....	11
2.5 Communications Methodology.....	12
2.5.1 Government Authorities.....	12
2.5.2 Ongoing Consultation .....	13
2.6 Stakeholder and General Public Feedback .....	13
2.7 Review of Existing Cycling Environment .....	13
<b>3. Background</b> .....	<b>14</b>
3.1 Existing Network – Gunnedah .....	14
3.1.1 Stock Road .....	14
3.1.2 Ashfords Watercourse.....	15
3.1.3 Links Road.....	16
3.1.4 Lincoln Street.....	17
3.1.5 George Street.....	18
3.1.6 View Street .....	19
3.1.7 Hunter Street .....	20
3.1.8 Marquis Street.....	21
3.1.9 South Street Cycleway.....	22
3.1.10 Wandobah Road (Northern) .....	23
3.1.11 Wandobah Road (Southern) .....	24
3.1.12 Tallowood Drive .....	25

3.1.13	Namoi River .....	26
3.2	Existing Network – Curlewis .....	26
3.3	Existing Network – Carroll .....	26
3.4	Existing Network – Breeza .....	26
<b>4.</b>	<b>Infrastructure Programs .....</b>	<b>27</b>
4.1	Standards and Signage .....	27
4.2	Proposed Augmentation Works.....	28
4.3	Proposed Augmentation Works – Gunnedah.....	29
4.3.1	Barber Street – Warrabungle to Chandos Street .....	29
4.3.2	Barber Street - Chandos Street to Elgin Street .....	30
4.3.3	Barber Street - Elgin Street to Osric Street .....	31
4.3.4	New Street .....	32
4.3.5	View Street .....	33
4.3.6	Wandobah Road .....	34
4.3.7	Riverine - Urban Precinct .....	35
4.3.8	Riverine - Stormwater Precinct.....	36
4.3.9	Osric Street .....	37
4.3.10	Elgin Street.....	38
4.3.11	Carroll Street .....	39
4.3.12	Pearson Street.....	40
4.3.13	Stock Road .....	41
4.3.14	Porcupine Reserve .....	42
4.3.15	Ross Kelly Reserve.....	43
4.3.16	Links Road .....	44
4.3.17	Leonavale Reserve .....	45
4.3.18	Mornington Heights.....	46
4.3.19	Bando Street.....	47
4.3.20	South Street (West) .....	48
4.3.21	South Street (East) .....	49
4.3.22	Lincoln Street (West).....	50
4.4	Proposed Augmentation Works – Carroll.....	51
4.4.1	Oxley Highway .....	51
4.5	Proposed Augmentation Works – Breeza and Curlewis.....	52
4.6	Proposed Works – Bike Security .....	53
4.7	Proposed Works – Signage & Pavement Markings .....	54
4.8	Proposed Works – Road Safety Bike Park.....	57
<b>5.</b>	<b>Non-Infrastructure Programs .....</b>	<b>58</b>

5.1	Ongoing Education of Cyclists, Pedestrians and Motorists.....	58
5.1.1	<i>Rules and Regulations – Cyclists and Motorists</i> .....	58
5.1.2	<i>Safety Awareness</i> .....	59
5.1.3	<i>Rules and Regulations - Pedestrians</i> .....	59
5.2	Cycling Initiatives and Campaigns .....	61
<b>6.</b>	<b>Funding</b> .....	<b>62</b>
6.1	Costs and Prioritisation .....	62
6.2	Funding Sources - Construction.....	62
6.2.1	<i>Development Contributions (Section 94A)</i> .....	62
6.2.2	<i>Funding included in Operational Plan 2016/17</i> .....	63
6.2.3	<i>Additional Funding Sources</i> .....	63
6.3	Funding Sources - Maintenance.....	63
<b>7.</b>	<b>Implementation and Maintenance</b> .....	<b>64</b>
7.1	Implementation Schedule.....	64
7.2	Maintenance.....	64
7.2.1	<i>Weeds</i> .....	64
7.2.2	<i>Pavement Maintenance</i> .....	64
7.2.3	<i>Minimum Levels of Service</i> .....	65
7.3	Follow-up Activities .....	65
<b>8.</b>	<b>References</b> .....	<b>66</b>
	<b>Appendix A Consultation Letters and Survey</b> .....	<b>A</b>
	<b>Appendix B Cycleway Maps</b> .....	<b>B</b>
	<b>Appendix C Schedule of Works</b> .....	<b>C</b>

## Executive Summary

The Gunnedah Shire Council Bike Plan (GSC Bike Plan) has been prepared to guide the future provision and management of cycling infrastructure within the Gunnedah Local Government Area. Bike Plan 2016 has been developed with reference to the NSW Roads and Maritime Services (RMS) document '*How to Prepare a Bike Plan (2012)*'.

One of the objectives and identified strategies from the Gunnedah Shire Council (GSC) '*2013 to 2023 Community Strategic Plan*' includes:

**Objective: Our infrastructure strategically managed.**

**Strategy: Facilitate improvements to motor vehicle, bicycle and pedestrian safety.**

The aim of the GSC Bike Plan is to develop a long-term plan for the development of safe cycling within the Gunnedah region via a coordinated and strategic approach that provides cycling infrastructure and promotional programs to the community. Bike Plan 2016 will also be used to support the strategy to assist with achieving the objective.

Bicycle riding or cycling is an activity which is synonymous with a healthy lifestyle. It is a non-polluting form of transport which does not deplete the planet's non-renewable resources. Cycling is an early introduction for children to road safety and cycling infrastructure, such as cycleways and safe bicycle parking facilities, is significantly cheaper than road infrastructure for motorised transport.

The GSC Bike Plan includes a quantum of works totalling approximately **\$6,482,350** (GST Exclusive) with a schedule of works established based on factors such as cycling needs and missing linkages to complete the existing network. Non-infrastructure programs, including cyclist and pedestrian education also form part of the GSC Bike Plan.

The following recommendations are made as part of the GSC Bike Plan:

- Adopt the schedule of works as provided in **APPENDIX C** for the ongoing construction of cycleways and associated facilities;
- Review and make recommendations with regards to the program of works for cycling infrastructure for future GSC '*Delivery Programs*' and '*Operational Plans*' commensurate with the schedule of works in **APPENDIX C** and subject to available funding;
- Adopt an annual program for ongoing education with particular focus on rules and regulations and safety awareness with the GSC website, newsletter and offices to be used at various times for the dissemination of educational material to cyclists, motorists and pedestrians as detailed in Section 5.1;
- Where appropriate, apply to RMS for cycling infrastructure funding;
- Provide sufficient funds in future Delivery Programs and Operational Plans for the ongoing maintenance of cycling infrastructure;
- Provide secure end-of-trip facilities (e.g. bike racks) at high end use locations;
- Where possible, provide a centreline on all two-way cycleways;

- Where possible, provide off-road cycleways which separate cyclists and motor vehicles, especially on designated heavy vehicle routes or roads with more than 5,000 vehicles per day;
- Ensure all bicycle infrastructure is either constructed or provided in accordance with the current guidelines and standards;
- Ensure that cycling infrastructure (or the provision of Section 94 Development Contributions for Cycleways) is included in future land development commensurate with the GSC Section 94A Contributions Plan, with the locations identified in this GSC Bike Plan and the relevant Development Control Plans; and
- Educate cyclists, pedestrians and motorists of the varying rights and responsibilities with regards to interaction with the other parties.

The current cycling infrastructure works for the GSC for 2017/2018 and 2018/2019 is provided in **Table 1**.

Future cycling infrastructure shall be determined from the works identified from the GSC Bike Plan subject to available funding from RMS and GSC's Draft Operational Plan 2016/17.

**Table 1 –Infrastructure Program – 2017/18**

Year	Description	Amount	Funding Contribution
2016/2017	Wandobah Road Cycleway Stage 2	\$126,472	50/50
2017/2018	Wandobah Road Cycleway Stage 2	\$133,673	50/50
2018/2019	Riverene Urban Precinct stage 1	\$159,600	50/50
2019/2020	Riverene Urban Precinct stage 2	\$114,600	50/50
<b>Total</b>		<b>\$534,345</b>	<b>50/50</b>

## 1. Introduction

The GSC Bike Plan is a strategic document that has been prepared to guide the future provision and management of cycleways, establishes cycling objectives, and identifies the actions needed to achieve these objectives for the Gunnedah region. It has been developed with reference to the RMS document '*How to Prepare a Bike Plan 2012*' (referred hereon in as the RMS Bike Plan Guidelines).

The GSC bicycle network provides defined routes for cyclists to travel around numerous locations within the Gunnedah region in a safe manner. The bicycle network is comprised of off-road cycleways with shared facilities for both cyclists and pedestrians, with some on road cycleways in use. The GSC Bike Plan has been developed to identify locations where connectivity of the bicycle network is lacking in specific areas of the Gunnedah region.

Cycleways need to be safe, smooth and low maintenance. Adopting lower standards for the construction of cycleways is not cost beneficial and creates more work including an unwanted financial burden for GSC in the longer term due to maintenance requirements to ensure that the infrastructure is safe and fit for purpose.

The GSC Bike Plan sets out a long term strategy for the ongoing development of the bicycle network within the Gunnedah region. These strategies include:

- Augmentation of the existing bicycle network;
- Provision for secure bike parking facilities particularly in the main urban areas;
- Improved signage including the provision of network signage at specific locations; and
- Non-infrastructure programs such as community awareness programs.

The GSC Bike Plan has been prepared with reference to the following National and State strategies:

- *National Cycling Strategy 2011-2016*(Austroads 2010);
- *NSW Long Term Transport Master Plan*(NSW Government 2012);
- *New England North West Regional Action Plan*(NSW Government 2012);
- *NSW 2021 – A Plan to Make NSW Number One*(NSW Government 2011); and
- *NSW Bike Plan* (NSW Government 2010).



## 2. Background

### 2.1 Aims and Objectives

One of the objectives and identified strategies from the GSC '2013 to 2023 Community Strategic Plan' includes:

**Objective:** Our infrastructure strategically managed.

**Strategy:** Facilitate improvements to car, bicycle and pedestrian safety.

The aim of a Bike Plan is to develop a long-term strategy for the development of safe cycling within the Gunnedah region and to address the barriers to cycling by providing a bicycle network that has connectivity.

Cyclists include those who use bicycles for recreational purposes such as fun or fitness, and commuters including school children cycling to school and adults cycling to their place of work.

This GSC Bike Plan includes an overview of existing cycling infrastructure and future cycleway needs taking into account previous planning for cycling infrastructure and input from stakeholders and it will also consider bike security, safety habits and the ongoing education of pedestrians, motorists and cyclists.

Cycling is an activity which is synonymous with a healthy lifestyle and provides an early introduction for children to road safety. It is a non-polluting form of transport which does not deplete the planet's non-renewable resources and cycling infrastructure, such as cycleways and safe parking facilities, is significantly cheaper to construct and maintain than road infrastructure required for motorised transport such as cars.

The following targets have been developed to support the strategy and assist with achieving the overall objective:

**Target 1:** Develop a long term strategy for improved safety for cyclists and for further development of cycling within the Gunnedah region that can be managed into the future and be updated on an annual basis and in line with GSC's '*Delivery Program*' and '*Operational Plan*'.

**Target 2:** Provide the necessary cycling infrastructure to ensure that an improved cycling environment is in place to link education institutions, sporting grounds and shopping centres. Addition of secure bicycle parking areas to encourage greater use of bikes.

**Target 3:** Promote cycling as a good form of exercise and an enjoyable leisure activity to improve the health and fitness of the community including advertising improvements in the bicycle network and supporting state and national initiatives for increasing the number of cyclists.

**Target 4:** Provide an improved bicycle network through the delivery of nominated infrastructure and non-infrastructure programs within GSC's budgetary and operational constraints with ongoing lobbying of State and Federal governments for funding assistance.

## 2.2 Bike Plan Context

The GSC Bike Plan has not been developed from just a local perspective but is part of a broader campaign at a state and national level to increase cycling activity amongst all Australians. The information provided in the following sections details the local, state and national strategies. Cycleway infrastructure forms an integral component of residential development, economic development, community mobility and cohesion, and assists in addressing community and Council environmental concerns. GSC has developed a number of strategies to address these issues, with cycleway infrastructure being included as a priority in each plan.

### Local Strategies

#### **2.2.1 2013-2023 Community Strategic Plan**

The Gunnedah Community *'Strategic Plan'* is a 10 year plan, identifying the Community's priorities. The plan identifies themes and objectives relating to the Gunnedah area focusing on key issues facing the community now and in the future. A number of aims and objectives relating to cycleways, cycleway improvements and management of infrastructure are contained within the plan. These include:

- Strategic Asset Management to ensure all assets are managed in a sustainable manner for current and future generations;
- Infrastructure strategically managed - provide and maintain safe and serviceable public facilities and infrastructure including roads, footpaths and storm water drains;
- Develop best practice asset registers and management plans and practices for infrastructure and assets;
- Facilitate improvements to car, bicycle and pedestrian safety;
- Identify innovative funding and partnerships to provide for new and upgraded assets and infrastructure;
- Implement and maintain developer contribution plans which require appropriate contributions for development impact upon infrastructure so as not to unfairly burden existing ratepayers or future developers;
- Develop strategies for sustainable local road network and regional transport, including options for public transport to connect with existing transport services;
- Create opportunities for people to participate in active and healthy recreational activities - Encourage cycling and walking through developing safe tracks and paths; and
- Environment - Increase the number of pedestrian and cycle ways in future - Programs for management and upgrade of cycleways, street lighting and roads.

The GSC Bike Plan contributes to this strategy by identifying improvements for cycling accessibility and infrastructure provision as well as providing local cycling strategies for towns and villages. Additionally, the GSC Bike Plan provides direction and focus to achieve the stated aims.

### **2.2.2 Gunnedah Development Control Plan 2012 (Amended 2014)**

The 'Gunnedah Development Control Plan 2012 (Amended 2014)' (DCP) contains detailed guidelines for development within the Gunnedah region. With respect to the provision of cycleways, the DCP states that residential subdivision must meet a number of criteria, including:

- Road network design should include consideration of vehicular, pedestrian and cyclist safety. This should include restricted/controlled use of four-way intersections, the standards for staggered-T intersections, the speed environment created by the road network and the risk to safety created by the design;
- Residential subdivision must incorporate appropriate facilities and opportunities for pedestrian and bicycle movement;
- A road within a residential subdivision must include a constructed pedestrian footpath/cycleway (minimum width of 2m) in accordance with Council's Footpath/Cycleway Masterplan; and
- Open spaces must be safely accessible by pedestrian and cycleway links and provide complimentary uses of open space (drainage, conservation, cycleways, etc.) that ensures ongoing usability.

### **2.2.3 Gunnedah Economic Development Strategy - Adopted 19 March 2014 - Volume 2**

The Gunnedah Economic Development Strategy provides the framework and directions for economic development within Gunnedah Shire, with the focus being on actions that can be achieved over the next 5 years. Detailed strategies and priorities have been developed in the plan, with the most applicable to the Bike Plan being:

*'Priorities for Economic Development, Priority 2: To ensure that the foundation 'blocks' needed to stimulate and support economic development are in place.'* To ensure Gunnedah is considered an attractive place to work and live, the strategy encourages investment in *'Extend the cycling infrastructure – Continue to develop recreational and commuter cycleways throughout Gunnedah and provide support infrastructure (e.g. bicycle rack) in key locations – ensure that the network provides connectivity within and between the existing and new estates, and with the town centre, schools, sporting facilities etc.'*

## **State Strategies**

### **2.2.4 NSW Long Term Transport Master Plan (December 2012)**

The 'NSW Long Term Transport Master Plan (NSW Government)' is an overarching framework that brings together land use planning with transport planning that integrates planning for freight and passenger movements. The plan includes actions for all modes of transport including road, rail, bus, ferries, light rail, cycling and walking. The specific actions with respect to cycling for Regional NSW include investment in local cycleways in partnership with local councils. The investment from the state government as described in the plan includes:

- Better information and infrastructure to support cycling in conjunction with regional local councils;
- As part of the Cycling Investment Program, prioritise opportunities for regional tourism in the assessment criteria and seek to connect cycling networks around major regional towns and centres;
- Working with councils to improve and enhance paths and cycling routes in regional centres to increase the number of people who choose to cycle (Many regional roads were built without suitable space for cycling. In some cases, these roads now carry high levels of vehicle traffic that deter young or inexperienced cyclists from riding); and
- All new road projects or road network upgrades will be required to examine the feasibility of providing for cycling as an essential component of the project.

New measures relating to cycling will focus on safety (particularly around roads) and integration with public transport and include:

- Improved access to user-friendly bike trip information;
- A long term NSW Cycling Investment Program to improve the planning, management and delivery of cycleway capital programs, supported by design solutions and standards to reflect customer needs;
- A program to increase and improve bike parking at public transport interchanges; and
- Enhanced cycling routes in regional centres to increase the number of people who cycle.

### **2.2.5 NSW 2021 – A Plan to Make NSW Number One (September 2011)**

The 'NSW 2021 – A Plan to Make NSW Number One (NSW Government)' has the following goals which relate to cycling:

- **Goal 10** – Improve road safety;
- **Goal 11** – Keep people healthy and out of hospital;
- **Goal 20** – Build liveable centres;
- **Goal 22** – Protect our natural environment; and
- **Goal 27** – Enhance cultural, creative, sporting and recreation opportunities.

The provision of new and the maintenance of existing cycleways is not specifically identified in the sub-plan 'New England North West Regional Action Plan (NSW Government)', however GSC's approach to cycleways thus far has been commensurate with the goals of the NSW 2021 plan as listed above.

### **2.2.6 NSW Bike Plan (May 2010)**

Cycling is supported by the NSW Government as a healthy, low cost, environmentally friendly form of transport. Cycling offers a flexible and low impact

alternative to the use of private motor vehicles for commuter, recreational, and general purpose transport. The '*New South Wales Bike Plan (May 2010)*' provides the framework for the further development of cycling within NSW over a 10 year period to 2020.

The provision of cycleway infrastructure for recreational, commuter and general use in the Gunnedah region, as well as working with developers to ensure contributions for the construction of new cycleway infrastructure to service new residential developments, is consistent with the goals of the NSW Bike Plan.

## National Strategies

### 2.2.7 National Cycling Strategy 2011-2016

The goal of the '*National Cycling Strategy 2011-2016*' is to effectively double the number of people across Australia cycling over the next 5 years. There are six priorities and objectives of the strategy as follows:

1. **Cycling promotion:** Promote cycling as both a viable and safe mode of transport and an enjoyable recreational activity;
2. **Infrastructure and facilities:** Create a comprehensive and continuous network of safe and attractive routes to cycle and end-of-trip facilities;
3. **Integrated planning:** Consider and address cycling needs in all relevant transport and land use planning activities;
4. **Safety:** Enable people to cycle safely;
5. **Monitoring and evaluation:** Improve monitoring and evaluation of cycling programs and develop a national decision-making process for investment in cycling; and
6. **Guidance and best practice:** Support the development of nationally consistent guidance for stakeholders to use and share best practice across jurisdictions.

Whilst it has been recognised that cycling has not been supported by a high level of investment, the strategy will provide tools for local and state governments to make the case for increased investment.

## 2.3 Cycling Data and Accident Statistics

The Australian Bureau of Statistics collects information regarding cyclists as part of overall census data collection. Census data from the Gunnedah region indicates that in 2011 there were 13 commuter cyclists, as opposed to 5,226 total commuters.

The NSW Transport Centre for Road Safety collates crash data collected via RMS, NSW Police and NSW Health and for the 5 year period from 2010 to 2014. During this period, there were 3 accidents involving cyclists being injured, and 8 incidents in which pedestrians were injured.

## 2.4 The Bicycle Network

Bicycle networks are generally comprised of on-road and off-road cycleways incorporated as part of the road network and adjacent parklands and reserves.

- **Off-road** – this type of cycleway is generally located on a road-related area parallel to a road or through parks and reserves or other public land not open to motor vehicle traffic (refer **Plate 1**).



**Plate 1** – Typical off-road cycleway (shared path)

- **On-road** – this type of cycleway forms part of the road such as a dedicated bicycle lane or a road shoulder shared with parked vehicles



**Plate 2** – Typical on-road cycleway

The Gunnedah region currently has on-road cycleways and off-road cycleways with the off-road facilities considered **shared paths** as they are designated for use by both cyclists and pedestrians. In addition, these shared paths cater for two way movements of both pedestrians and cyclists.

The desirable features of a bicycle network are detailed in **Table 2**.

**Table 2 – Bicycle Network Features**

Route Feature	Comments
Safety	Minimal risk of traffic-related injury, low perceived danger, space to ride, minimum conflict with vehicles.
Coherence	Infrastructure should form a coherent entity, link major trip origins and destinations, have connectivity, be continuous, signed, consistent in quality, easy to follow, and have route options.
Directness	Route should be direct, based on desire lines, have low delay through routes for commuting, avoid detours and have efficient operating speeds.
Attractiveness	Lighting, personal safety, aesthetics, integration with surrounding area, access to different activities.
Comfort	Smooth skid-resistant riding surface, gentle gradients, avoid complicated manoeuvres, reduced need to stop, minimum obstruction from vehicles.

Source: Cycling Aspects of Austroads (2011)

Users of a bicycle network vary depending on the nature of their trip. Austroads has identified seven groups of cyclists, each with specific riding characteristics and network requirements as detailed in **Table 3**.

**Table 3 – Categories of Cyclists and their Network Requirements**

Category	Road Characteristics	Riding Environment
Primary school children	Cognitive skills not developed, little knowledge of road rules, require supervision.	Off-road path, footpath (where permitted) or very low volume residential street.
Secondary school children	Skill varies, developing confidence.	Generally use on-road facilities or off-road paths where available.
Recreational	Experience, age, skills vary greatly.	Desire off-road paths and quiet local streets, avoid heavily trafficked routes, more experienced will prefer to use road system for long journeys.
Commuter	Vary in age, skill and fitness, some highly skilled and able to handle a variety of traffic conditions.	Some prefer paths or low-stress roads, willing to take longer to get to destination, others want quick trips regardless of traffic conditions, primarily require space to ride and smooth riding surface, speed maintenance.
Utility	Ride for specific purposes (shopping), short length trips, routes unpredictable.	Not on highly trafficked roads, needs include comprehensive, low-stress routes, appropriate end of trip facilities.
Touring	Long distance journeys, may be heavily equipped, some travelling in groups.	Often route is similar to that of other tourists.

Category	Road Characteristics	Riding Environment
Sporting	Often in groups, two abreast occupying left lane, needs similar to commuters.	Travel long distances in training on arterials, may include challenging terrain in outer urban or rural areas, generally do not use off-road routes because of high speed and conflict with other users.

Source: Cycling Aspects of Austroads (2011)

The purpose of a bicycle network is therefore to enable cyclists of all ages with varying degrees of skill and experience to travel safely to and from a desired destination. Cyclists in the Gunnedah region are likely to be attracted by the following:

- Schools;
- Places of employment;
- Sporting and recreational facilities; and
- Local shops.

The frequency and type of participation in cycling is largely dependent upon individual choice, location, availability of cycling infrastructure and safety concerns regarding the interaction between motor vehicles and cyclists.

#### **2.4.1 Use of Cycleways**

Recreational cycling is an important part of the GSC Bike Plan and is to be encouraged in the Gunnedah region as it is a healthy lifestyle activity and likely to become even more popular as cycleways are extended and further linkages provided.

In order to encourage broad-scale use of cycleways, they must cater for a mixture of uses including:

- Recreational cyclists;
- Recreational users of wheeled devices such as skates, rollerblades and scooters;
- Commuter cyclists; and
- Pedestrians.

In order to achieve broad-scale use of cycleways, they should have the following features:

- Links to existing and proposed cycleways;
- Loops and circuits to provide for rides of various lengths;
- Attractive and enjoyable features, such as passing picnic areas, gardens and sporting fields;
- Access to toilets and drinking water; and
- Convenient access to and from vehicle parking areas.



## 2.5 Communications Methodology

Consultation with the public, particularly cyclists, was considered to be the most important element in the preparation of the GSC Bike Plan. In order to encourage effective community involvement in its development, consultation was undertaken with the following parties:

- Relevant government authorities;
- Relevant stakeholders; and
- General public.

### 2.5.1 Government Authorities

The following organisations were advised of the proposed plan via a letter and questionnaire issued in May 2015. A copy of the letter and questionnaire is provided in **APPENDIX A**.

- Gunnedah TAFE New England Campus;
- Gunnedah High School;
- St Xaviers Primary School;
- G.S. Kidd Memorial School;
- Curlewis Public School;
- Gunnedah Police Station;
- Paraplegic and Quadriplegic Association of NSW;
- Guide Dogs NSW/ACT;
- Alkira Aged Care;
- Gunnedah Railway Station;
- Gunnedah Radio Cabs;
- Hope PT;
- Keating Tours.
- Carinya Christian Community School;
- St Mary's College;
- Gunnedah South Public School;
- Community College;
- Carroll Public School;
- Curlewis Police Station;
- Gunnedah Community Health Service;
- Gunnedah Hospital;
- Gunnedah Aged Care Services;
- Gunnedah Taxis;
- Hawkins Coach Lines;
- Millerds Bus Service; and

At the end of the survey period dated 3 June 2016 a total of nil responses had been lodged. The feedback generally indicated the stakeholders had no objections to the provision of additional off-road cycleways (shared paths) and improved maintenance of the bicycle network.

### **2.5.2 Ongoing Consultation**

As per the RMS Bike Plan Guidelines, it is a requirement that the final draft of the GSC Bike Plan be placed on public display for a period of 28 days with the general public invited to view the plan and submit comments. This took place during the period of 27 September 2016 to 14 October 2016.

## **2.6 Stakeholder and General Public Feedback**

Safety is an important issue for cyclists and GSC continues to strive to ensure that cyclist and pedestrian safety is considered when designing new road and cycling infrastructure. Feedback was received regarding the proposed plans, with suggestions for alternatives being proposed. Some of these suggestions were adopted by Council, and others rejected due to cost and feasibility.

## **2.7 Review of Existing Cycling Environment**

Maps illustrating the locations of the existing bicycle network throughout the Gunnedah region are provided in the following section of this report. GSC's asset management system database provides specific details of the cycling infrastructure currently in place which includes:

- Construction date;
- Surface type;
- Width and length;
- Street name; and
- Location in street.

Construction standards have changed over the years resulting in variable widths and types of cycleways provided across the entire network. This is evident in the difference between the Stock Road bitumen cycleway and the section of the same cycleway which is of concrete construction.

### 3. Background

#### 3.1 Existing Network – Gunnedah

##### 3.1.1 Stock Road

**Location:** An off-road cycleway (**shared path**) is located in the median of Stock Road between Apex Road and Links Road.

**Length:** 1,300 metres

**Linkage:** Shared path along Ashfords Watercourse (refer Section 3.1.2); and Shared path along Links Road (refer Section 3.1.3)

**Type:** Asphalt and concrete

**Width:** Varying between 1.5 metres and 2.5 metres.



**Plate 3** - Bitumen section of Stock Road shared path



**Plate 4** - Concrete section of Stock Road shared path

### 3.1.2 Ashfords Watercourse

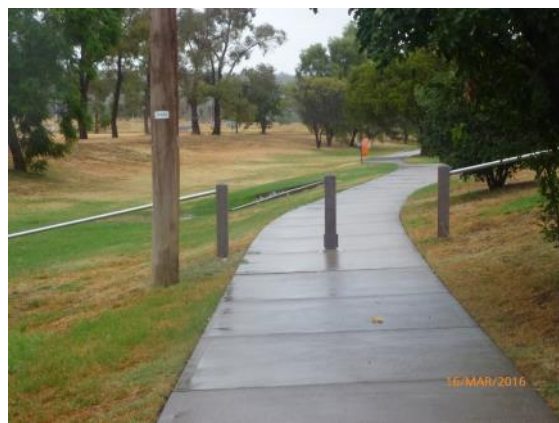
**Location:** An off-road cycleway (**shared path**) traverses Ashfords watercourse between Lincoln Street and Hunter Street.

**Length:** 1,500 metres

**Linkage:** On-road cycleway along Lincoln Street (refer Section 3.1.4); Shared path along Stock Road (refer Section 3.1.1); and On-road cycleway along Hunter Street (refer Section 3.1.7)

**Type:** Concrete

**Width:** 2 metres



**Plate 5** - Typical section of shared path



**Plate 6** - Termination of the shared path at Hunter Street



**Plate 7** - Commencement of shared path at Lincoln Street



**Plate 8** - Linkage of path between Ashfords Watercourse and Lincoln Street on-road cycleway

### 3.1.3 Links Road

<b>Location:</b>	<p>An off-road cycleway (<b>shared path</b>) is located on Links Road between Lincoln Street and George Street</p> <p>An on-road cycleway is located along Links Road between Stock Road and George Street.</p>
<b>Length:</b>	<p>1,000 metres Shared path</p> <p>250 metres on road cycleway</p>
<b>Linkage:</b>	<p>On-road cycleway and shared path along Lincoln Street (refer Section 3.1.4);</p> <p>Shared path along Stock Road (refer Section 3.1.1); and</p> <p>On-road cycleway along George Street (refer Section 3.1.5).</p>
<b>Type:</b>	Concrete and bitumen
<b>Width:</b>	1.5 metres



**Plate 9** - Links Road off road cycleway and shared path



**Plate 10** - Links Road shared path

### 3.1.4 Lincoln Street

**Location:** An on-road cycleway is located along Lincoln Street between View Street and Ashfords Watercourse.

An off road shared path is located between Links Road and View Street

**Length:** 1,000 metres of on-road cycleway

450 metres of shared path

**Linkage:** Shared path along Ashfords Watercourse (refer Section 3.1.2);  
On-road cycleway along Links Road (refer Section 3.1.3); and  
On-road cycleway along View Street (refer Section 3.1.6).

**Type:** Bitumen

**Width:** 3 metres



**Plate 11** - On-road cycleway approaching Links Road



**Plate 12** - On-road cycleway looking west from Links Road

### 3.1.5 George Street

<b>Location:</b>	An on-road cycleway is located along George Street between View Street and Links Road.
<b>Length:</b>	400 metres
<b>Linkage:</b>	On-road cycleway along View Street (refer Section 3.1.6); and On-road cycleway along Links Road (refer Section 3.1.3)
<b>Type:</b>	Bitumen
<b>Width:</b>	2 metres



**Plate 13** - On-road cycleway between View Street and Links Road



**Plate 14** - On-road cycleway between View Street and Links Road

### 3.1.6 View Street

**Location:** An off-road cycleway (**shared path**) is located along View Street between Lincoln Street and George Street.

An on-road cycleway is located along both sides of View Street between George Street and Wandobah Road.

A shared path is located along View Street between Wandobah Road and the skate park.

**Length:** 1,000 metres of shared path between Lincoln Street and George Street

700 metres of on-road cycleway, on both sides of View Street

150 metres of shared path between Wandobah Road and the skate park

**Linkage:** On-road cycleway along Lincoln Street (refer Section 3.1.4);  
On-road cycleway along George Street (refer Section 3.1.5);  
On-road cycleway along Hunter Street (refer Section 3.1.7); and  
Shared path along Wandobah Road (Northern) (refer Section 3.1.10)

**Type:** Concrete and Bitumen

**Width:** 1.5 metres (Concrete section) to 3 metres (Bitumen section)



**Plate 15** - Shared path between Lincoln Street and George Street



**Plate 16** - On-road cycleway between George Street and Wandobah Road



### 3.1.7 Hunter Street

**Location:** An on-road cycleway is located along both sides of Hunter Street between View Street and Ashfords Watercourse.

**Length:** 1,000 metres

**Linkage:** On-road cycleway along View Street (refer Section 3.1.6); Shared path along Ashfords Watercourse (refer Section 3.1.2); and Shared path along Marquis Street (refer Section 3.1.8).

**Type:** Bitumen

**Width:** 2 metres



**Plate 17** - On-street cycleway between Marquis Street and View Street



**Plate 18** - Commencement of the on-street cycleway from the View Street intersection

### 3.1.8 Marquis Street

**Location:** An off-road cycleway (**shared path**) is located along Marquis Street between Hunter Street and South Street.

**Length:** 450 metres

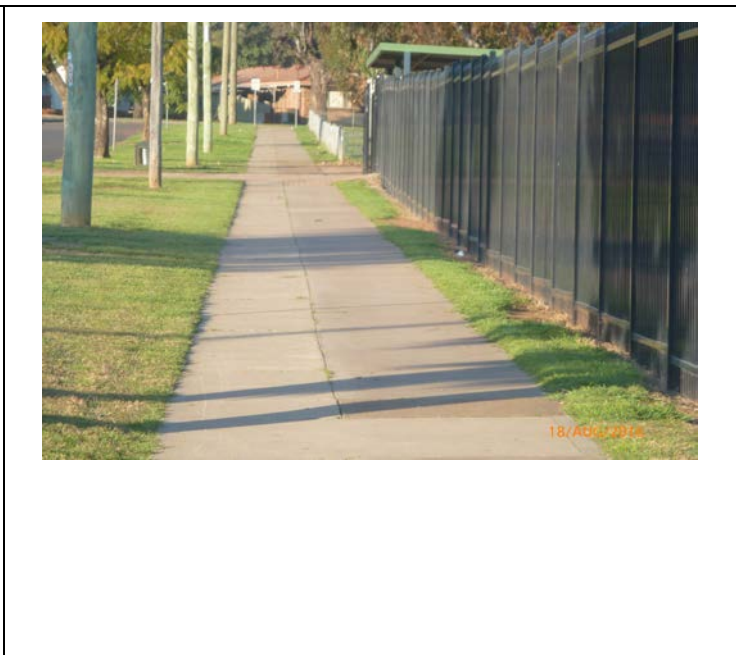
**Linkage:** On-road cycleway along Hunter Street (refer Section 3.1.6); and On-road cycleway along South Street (refer Section 3.1.9).

**Type:** Concrete

**Width:** 1.5 metres



**Plate 19** - Commencement of the shared path at the Hunter Street intersection



**Plate 20** - Shared path in Marquis Street

### 3.1.9 South Street Cycleway

**Location:** An on-road cycleway is located along South Street between Marquis Street and the showground.

**Length:** 300 metres

**Linkage:** Shared path along Marquis Street (refer Section 3.1.8).

**Type:** Bitumen

**Width:** 1.5 metres



**Plate 21** - South Street on-road cycleway



**Plate 22** – South Street Shared Path

### 3.1.10 Wandobah Road (Northern)

**Location:** An off-road cycleway (**shared path**) is located along Wandobah Road from View Street to George Street.

**Length:** 900 metres

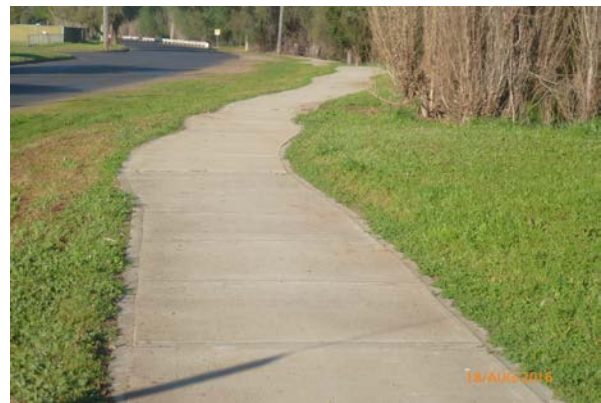
**Linkage:** On-road cycleway along View Street (refer Section 3.1.6).

**Type:** Concrete

**Width:** 2 metres



**Plate 23** – Shared path at Wandobah Reserve



**Plate 24** – Section of Wandobah Road (Northern) shared path

**3.1.11 Wandobah Road (Southern)**

**Location:** An off-road cycleway (**shared path**) is located along Wandobah Road between Bando Street and Tallowood Drive.

**Length:** 950 metres

**Linkage:** Existing shared path along Tallowood Drive (refer Section 3.1.12)

**Type:** Concrete

**Width:** 2 metres



**Plate 25** – Wandobah Road (Southern) shared path



**Plate 26** - Wandobah Road (Southern) shared path

### 3.1.12 Tallowood Drive

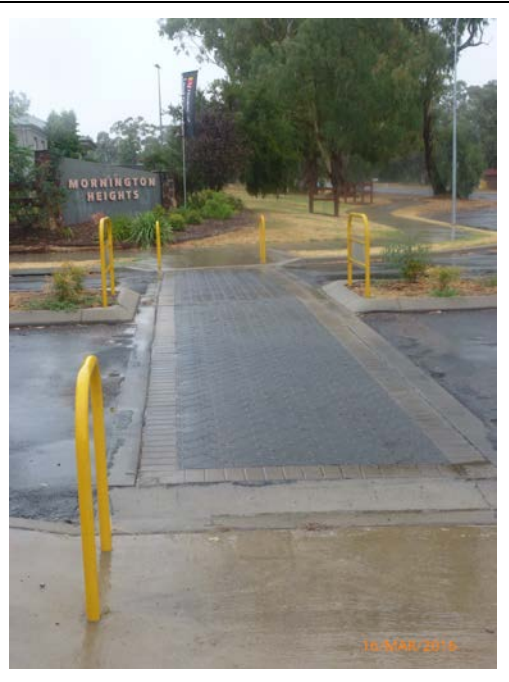
**Location:** An off-road cycleway is located along Wandobah Road between Bando Street and Tallowood Drive.

**Length:** 600 metres

**Linkage:** Existing shared path along Wandobah Road (refer Section 3.1.11)

**Type:** Concrete

**Width:** 2 metres



**Plate 27** – Tallowood Drive and Wandobah Road shared path link



**Plate 28** – Typical section of shared path in Tallowood Drive

### 3.1.13 Namoi River

<b>Location:</b>	A concrete and bitumen off-road cycleway ( <b>shared path</b> ) is located along the banks of the Namoi River, commencing at Marquis Street and terminating behind Donnelly Field.
<b>Length:</b>	325 metres
<b>Linkage:</b>	Nil
<b>Type:</b>	Bitumen and Concrete
<b>Width:</b>	2 metres (Bitumen), 1.5 metres (Concrete)



**Plate 29** - Concrete section of the shared path



**Plate 30** - Bitumen section of the shared path

### 3.2 Existing Network – Curlewis

There is no existing cycleway network in Curlewis.

### 3.3 Existing Network – Carroll

There is no existing cycleway network in Carroll.

### 3.4 Existing Network – Breeza

There is no existing cycleway network in Breeza.

## 4. Infrastructure Programs

### 4.1 Standards and Signage

The exposed nature of cycling means that cyclists are vulnerable to injuries resulting from accidents caused by poor construction standards for cycleways. Where cycleways are constructed using cheap, inferior surfaces (such as grass, gravel, or coarse textured bitumen) cyclists complain about the roughness and presence of loose stones. In such instances, cyclists will often refuse to use the cycleway, preferring to ride on smooth road surfaces instead.

Construction of cycleways to the recommended standards provided in the *'Cycling Aspects of Austroads Guides (Austroads 2011)'*, including the use of concrete, fine-textured bitumen or asphalt, assists in ensuring the safety of cyclists utilising cycleways.

Where economically feasible, GSC will use concrete, fine-textured bitumen or asphalt in the construction of cycleways in the Gunnedah region. Where ever possible all proposed new cycleways shall be constructed as off-road shared paths. Where traffic volumes exceed 5,000 vehicles per day, or are nominated restricted access vehicle routes, off-road shared paths are to be mandatory to ensure separation from road traffic.

Current RMS and Austroads guidelines specify that cycleway construction must have a minimum width of 2.5 metres wherever possible, however provision is made for areas where existing constraints necessitate the use of a 2 metre width. As a result, GSC will endeavour to provide 2.5 metre wide cycleways where feasible, with a minimum width of 2 metres. Specific details regarding the design and construction standard for cycleways is provided in the Cement and Concrete Associations *'Guide to Residential Streets and Paths, 2004'* and the GSC, *'Development Control Plan'* (2012 amended 2014).

Appropriate bicycle path signs are to be erected, where not currently present, on the busiest cycling routes throughout the region. Signage is to be prepared and installed in accordance with the recommended standards provided in the *'Cycling Aspects of Austroads Guides (Austroads 2011)'*. For on-road cycleways where line marking may be absent or faded, line marking is to be carried out in accordance with the RMS delineation guidelines, *'Roads and Traffic Authority 2008, Delineation'*. It should be noted that all RMS guidelines are prepared in accordance with Australian Standards and the Austroads Guides.

Several of the roads which currently have cycleways are designated restricted access vehicle routes (e.g. South Street/Oxley Highway and Wandobah Road). Heavily trafficked roads and truck routes should be avoided as much as possible in the selection and development of on-road cycleways due to the safety concerns associated with the interaction of large volumes and/or large vehicles with cyclists. However, it is not always practical to avoid such roads because many have suitable surfaces for cycling and provide the shortest route between destinations, making them popular (particularly with commuter cyclists) regardless of the presence or absence of a cycleway.



## 4.2 Proposed Augmentation Works

The proposed works have been identified by considering the following factors:


- Specific locations associated with funding agreements provided by RMS;
- Whether or not a proposed augmentation or new works will facilitate increased linkages in the overall bicycle network; and
- Feedback from the public survey responses.

Details of the proposed works are provided in Section 4.3 with additional mapping of the proposed cycleway network for Gunnedah provided in **APPENDIX B**. A priority listing has not been provided as this will enable GSC to determine works each year as part of the Operational Plan review subject to available funding. Further details on the proposed schedule of works are provided in **APPENDIX C**.


It should be noted that whilst the proposed locations of new cycleways are indicated on the plans in the following section of the report, the actual locations may be subject to change due to unforeseen limitations and restrictions as part of the future project development for each site.

### 4.3 Proposed Augmentation Works – Gunnedah

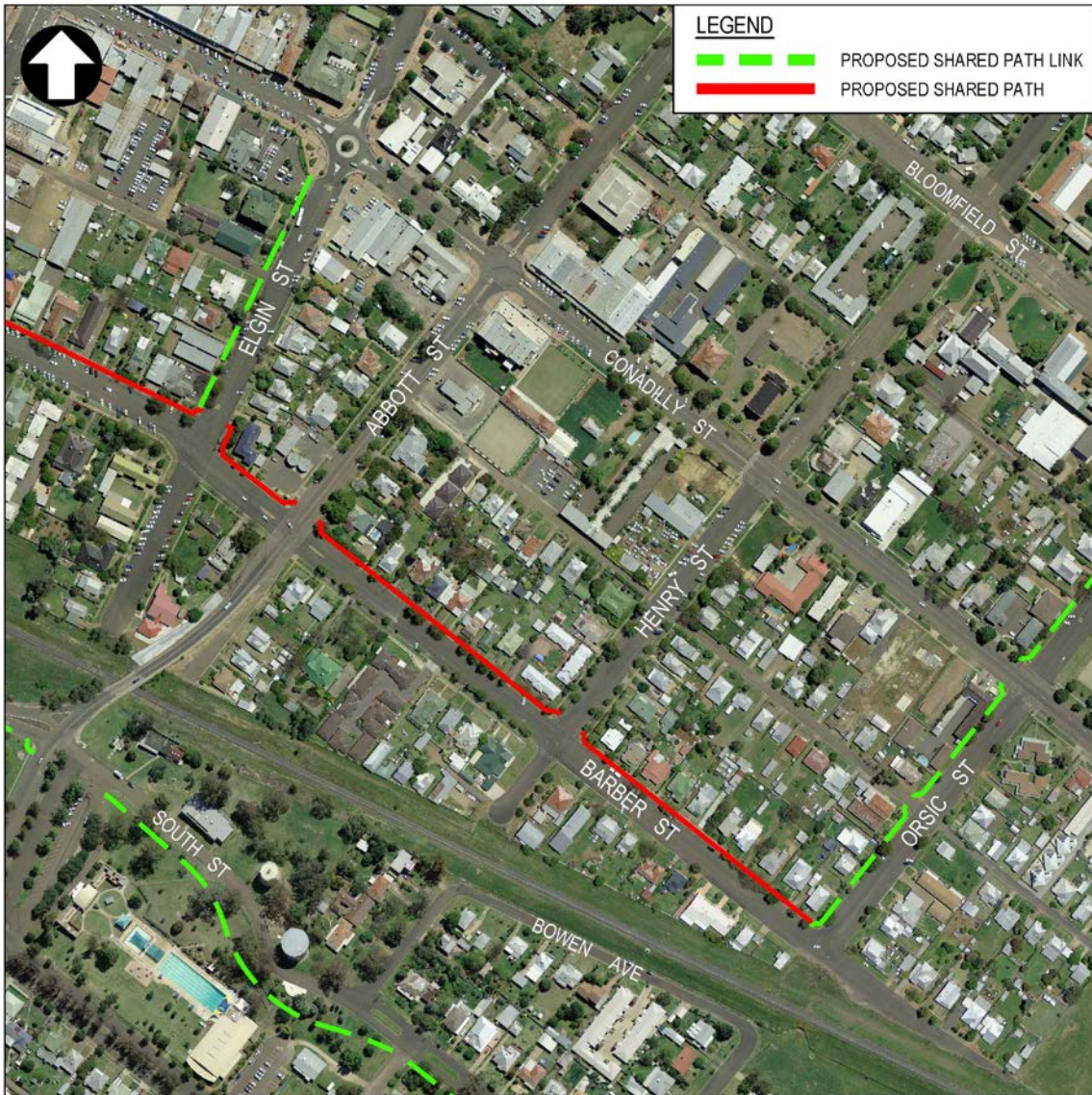


#### 4.3.1 Barber Street – Warrabungle to Chandos Street

Location	Details
	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) between Warrabungle Street and Chandos Street.</p> <p><b>Length:</b> 700 metres</p> <p><b>Linkage:</b> The proposed new shared path to the Riverine – Urban Precinct (refer Section 4.3.7); The proposed new shared path along New Street (refer Section 4.3.4); The proposed new shared path along Barber Street (refer Section 4.3.2 and 4.3.3); and The proposed new shared path along Elgin Street (refer Section 4.3.10)</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$269,500</p> <p><b>Final location may vary subject to the proposed location of the Gunnedah second road over rail bridge</b></p>

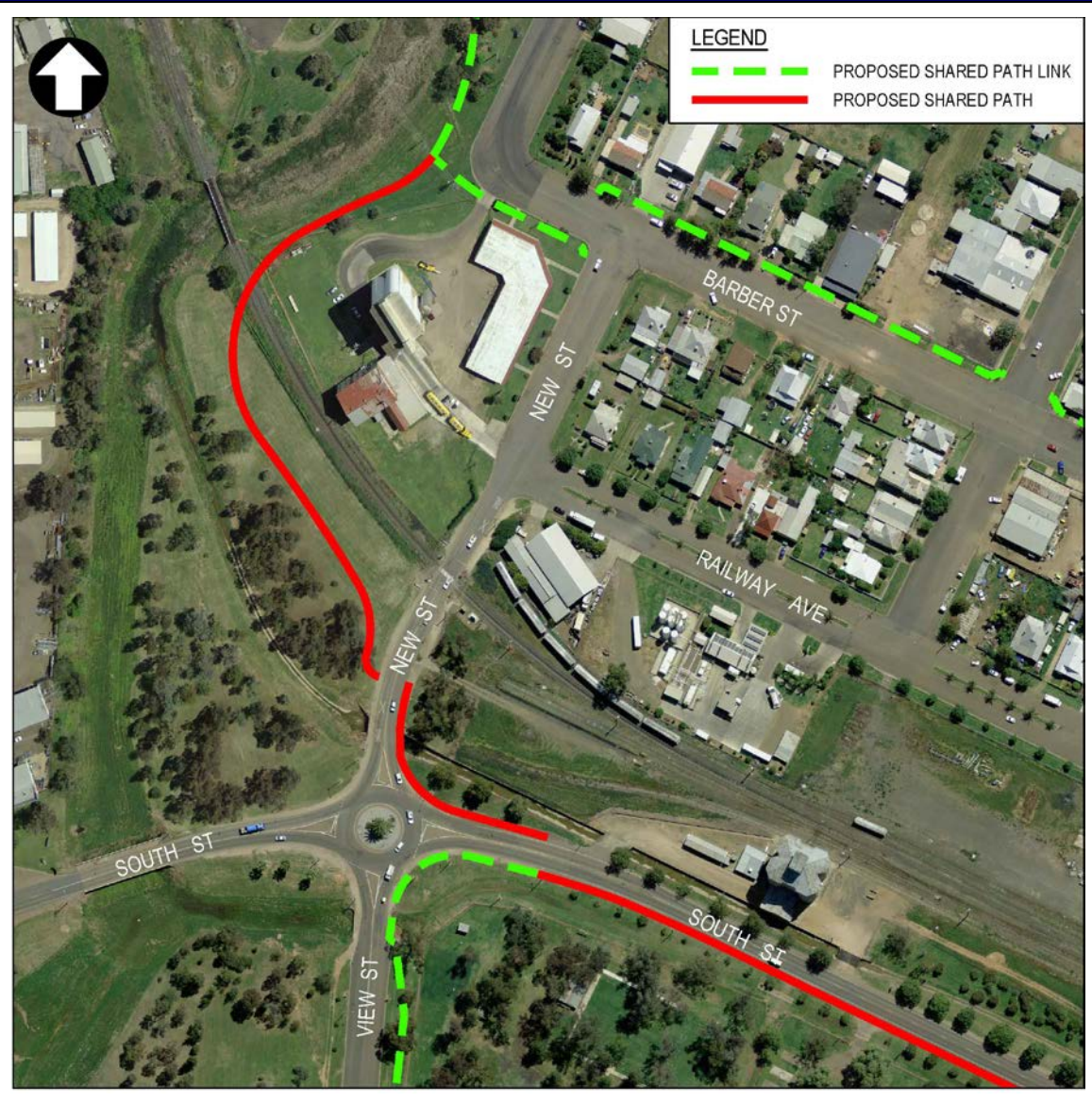
### 4.3.2 Barber Street - Chandos Street to Elgin Street

Location	Details
	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) between Chandos Street and Elgin Street.</p> <p><b>Length:</b> 500 metres</p> <p><b>Linkage:</b> The proposed new shared path to the Riverine – Urban Precinct (refer Section 4.3.7); The proposed new shared path along New Street (refer Section 4.3.4); The proposed new shared path along Barber Street (refer Section 4.3.1 and 4.3.3); and The proposed new shared path along Elgin Street (refer Section 4.3.10).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$192,500</p>

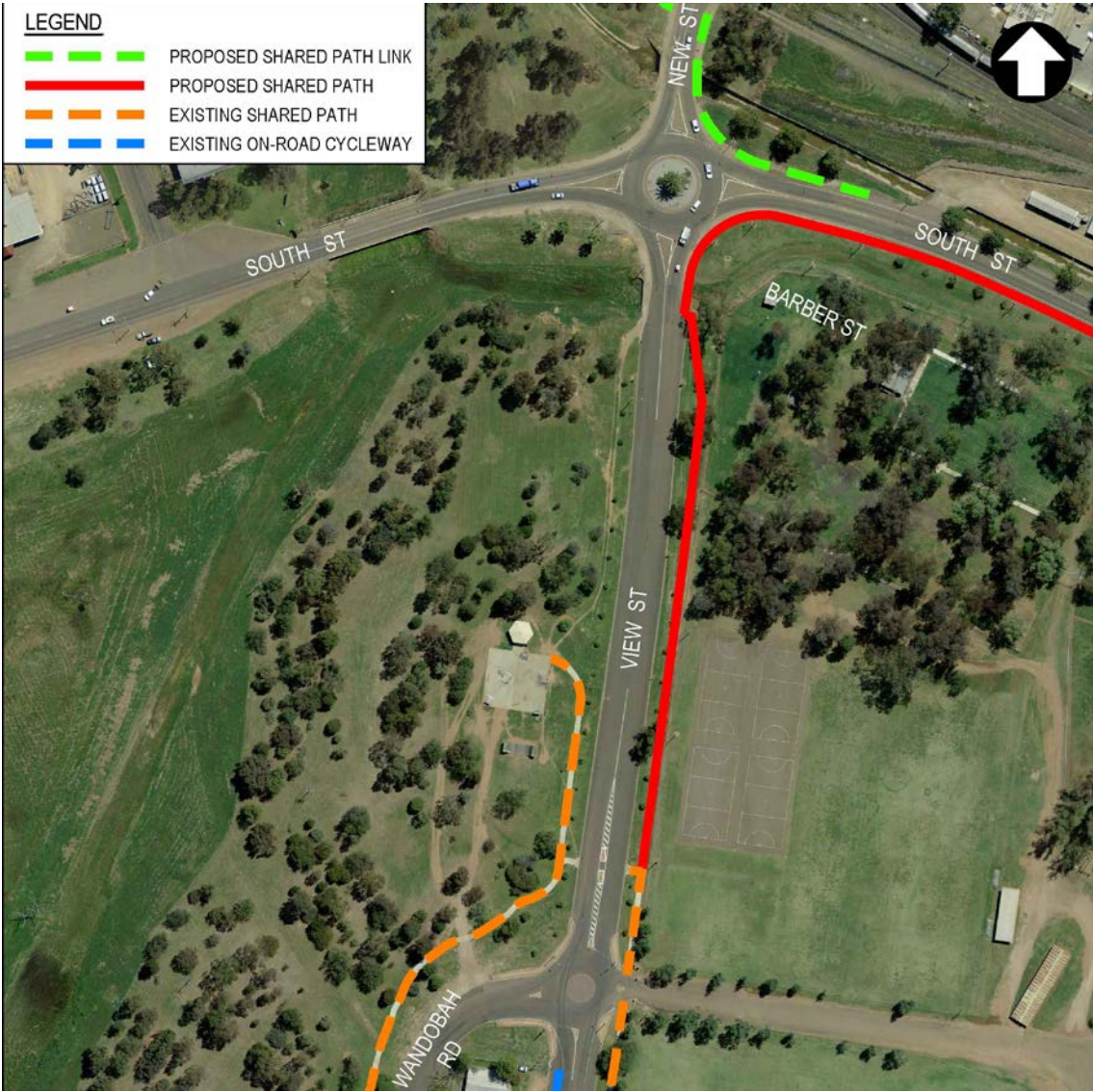
### 4.3.3 Barber Street - Elgin Street to Osric Street

Location	Details
 <p><b>LEGEND</b>   PROPOSED SHARED PATH LINK   PROPOSED SHARED PATH</p>	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) between Elgin Street and Osric Street.</p> <p><b>Length:</b> 550 metres</p> <p><b>Linkage:</b> The proposed new shared path to the Riverine – Urban Precinct (refer Section 4.3.7);  The proposed new shared path along New Street (refer Section 4.3.4);  The proposed new shared path along Barber Street (refer Section 4.3.1 and 4.3.3); and  The proposed new shared path along Elgin Street (refer Section 4.3.10).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$211,750</p>


#### 4.3.4 New Street

Location	Details
 <p><b>LEGEND</b>  <span style="color: green;">---</span> PROPOSED SHARED PATH LINK  <span style="color: red;">---</span> PROPOSED SHARED PATH</p>	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) between South Street and Barber Street.</p> <p><b>Length:</b> 250 metres</p> <p><b>Linkage:</b> The proposed new shared path along Barber Street (refer Section 4.3.1, 4.3.2 and 4.3.3);  The proposed new shared path along View Street (refer Section 4.3.5); and  The proposed new shared path along South Street (refer Section 4.3.20).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$96,250</p> <p><b>Final location may vary subject to the proposed location of the Gunnedah second road over rail bridge</b></p>


### 4.3.5 View Street

Location	Details
<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li><span style="color: green;">—</span> PROPOSED SHARED PATH LINK</li> <li><span style="color: red;">—</span> PROPOSED SHARED PATH</li> <li><span style="color: orange;">—</span> EXISTING SHARED PATH</li> <li><span style="color: blue;">—</span> EXISTING ON-ROAD CYCLEWAY</li> </ul> 	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) between South Street and Wandobah Road.</p> <p><b>Length:</b> 320 metres</p> <p><b>Linkage:</b> The proposed new shared path along New Street (refer Section 4.3.4); The existing shared path along Wandobah Road (refer Section 3.1.10); and The existing on-road cycleway along View Street (refer Section 3.1.6).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$123,200</p> <p><b>Final location may vary subject to the proposed location of the Gunnedah second road over rail bridge</b></p>

### 4.3.6 Wandobah Road


Location	Details
	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) between George Street and Bando Street.</p> <p><b>Length:</b> 750 metres</p> <p><b>Linkage:</b> The existing shared path along Wandobah Road (refer Section 3.1.10); The existing shared path along Wandobah Road (refer Section 3.1.11); and The proposed Bando Street shared path (refer Section 4.3.19).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$288,750</p> <p><b>Given the length it is envisaged that construction may be undertaken in stages subject to available funding</b></p>

### 4.3.7 Riverine - Urban Precinct


Location	Details
	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) traversing the Namoi River flats, and then following the Namoi River linking with the existing shared path behind Donnelly Fields.</p> <p><b>Length:</b> 920 metres</p> <p><b>Linkage:</b> The proposed new shared path along Barber Street (refer Section 4.3.1, 4.3.2 and 4.3.3); and The existing shared path behind Donnelly Fields (refer Section 3.1.13).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$354,200</p> <p><b>Given the length it is envisaged that construction may be undertaken in stages subject to available funding</b></p>



### 4.3.8 Riverine - Stormwater Precinct

Location	Details
	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) from Marquis Street, traversing adjacent to Mullibah Lagoon and Maitland Street through to Carroll Street. The path will include a section of Osric Street between Maitland Street and the Finch Street soccer fields.</p> <p><b>Length:</b> 1,450 metres</p> <p><b>Linkage:</b> The proposed new shared path for the Riverine - Urban Precinct (refer Section 4.3.7); The proposed new shared path along Osric Street (refer Section 4.3.9); and The proposed new shared path along Carroll Street (refer Section 4.3.11).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$558,250</p> <p><b>Given the length it is envisaged that construction may be undertaken in stages subject to available funding</b></p>


### 4.3.9 Osric Street

Location	Details
	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) from the Barber Street though to the proposed new shared path along the Riverine – Stormwater Precinct</p> <p><b>Length:</b> 900 metres</p> <p><b>Linkage:</b> The proposed new shared path for the Riverine - Stormwater Precinct (refer Section 4.3.8); and The proposed new shared path for Barber Street (refer Section 4.3.1, 4.3.2 and 4.3.3).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$346,500</p> <p><b>Given the length it is envisaged that construction may be undertaken in stages subject to available funding</b></p>

### 4.3.10 Elgin Street

Location	Details
	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) from the Barber Street though to the proposed new shared path along the Riverine – Stormwater Precinct</p> <p><b>Length:</b> 200 metres</p> <p><b>Linkage:</b> The proposed new shared path for Barber Street (refer Section 4.3.1, 4.3.2 and 4.3.3).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$77,000</p>

### 4.3.11 Carroll Street

Location	Details
	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) from Maitland Street to South Street.</p> <p><b>Length:</b> 900 metres</p> <p><b>Linkage:</b> The proposed new shared path for the Riverine - Stormwater Precinct (refer Section 4.3.8); and The proposed new shared path along South Street (refer Section 4.3.21).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$346,500</p> <p><b>Given the length it is envisaged that construction may be undertaken in stages subject to available funding</b></p>

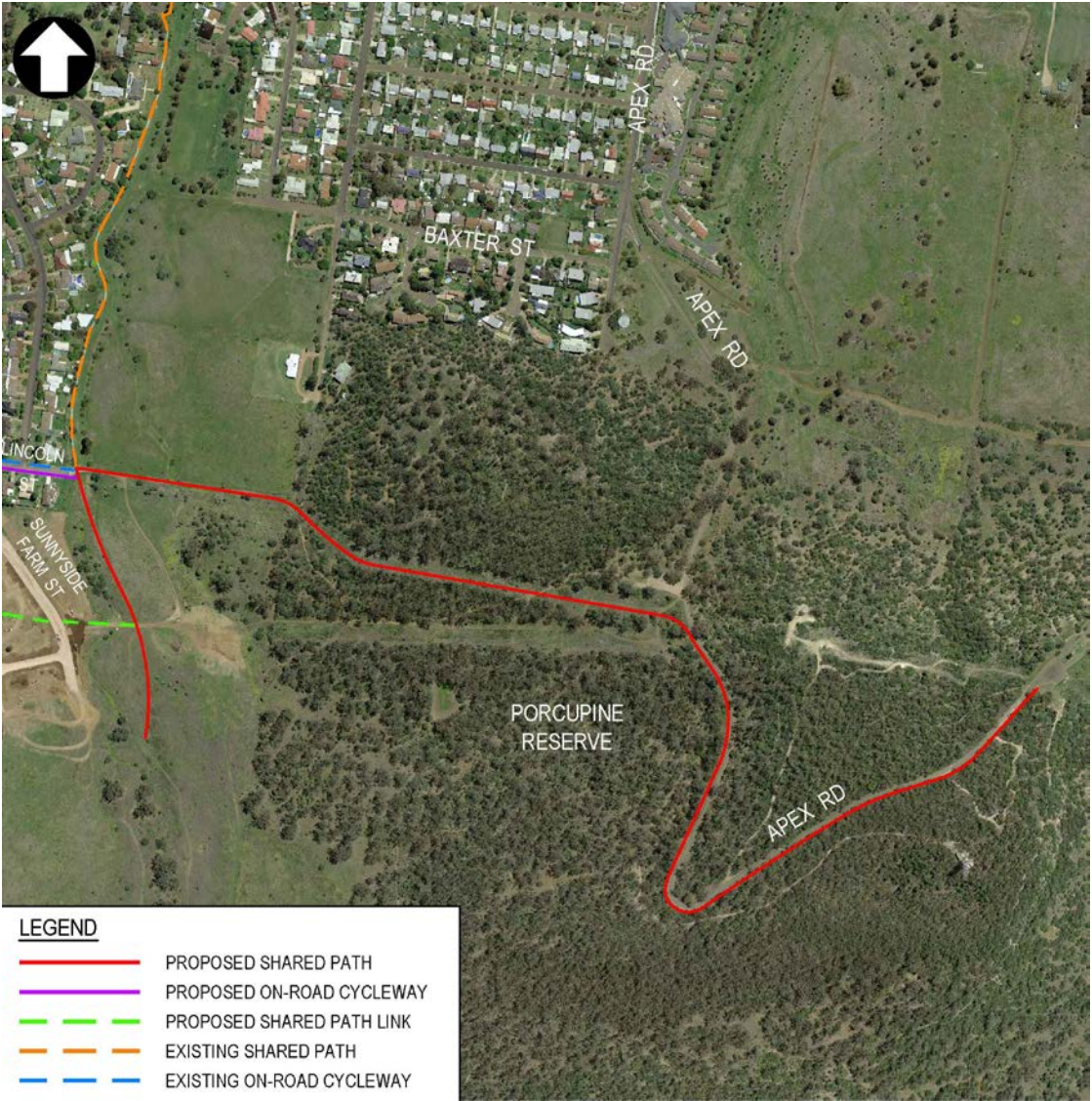
### 4.3.12 Pearson Street

Location	Details
	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) between South Street and Stock Road.</p> <p><b>Length:</b> 850 metres</p> <p><b>Linkage:</b> The proposed new shared path along Carroll Street (refer Section 4.3.11); and The proposed new shared path along Stock Road (refer Section 4.3.13).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$327,250</p> <p><b>Given the length it is envisaged that construction may be undertaken in stages subject to available funding</b></p>

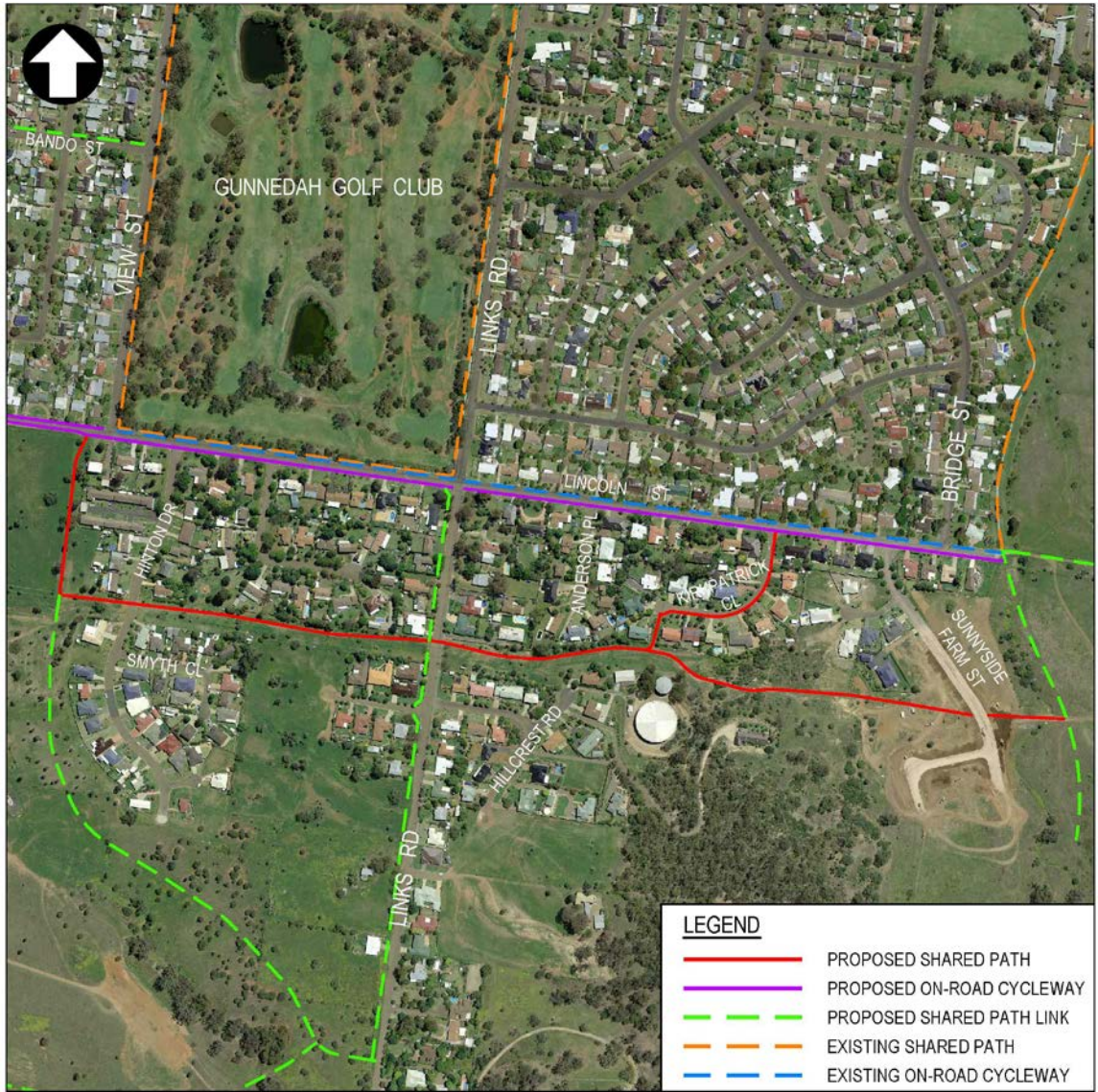
### 4.3.13 Stock Road

Location	Details
	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) between Pearson Street and Apex Road.</p> <p><b>Length:</b> 70 metres</p> <p><b>Linkage:</b> The proposed new shared path along Pearson Street (refer Section 4.3.12); and The existing shared path along Stock Road (refer Section 3.1.1).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$26,950</p>

#### 4.3.14 Porcupine Reserve

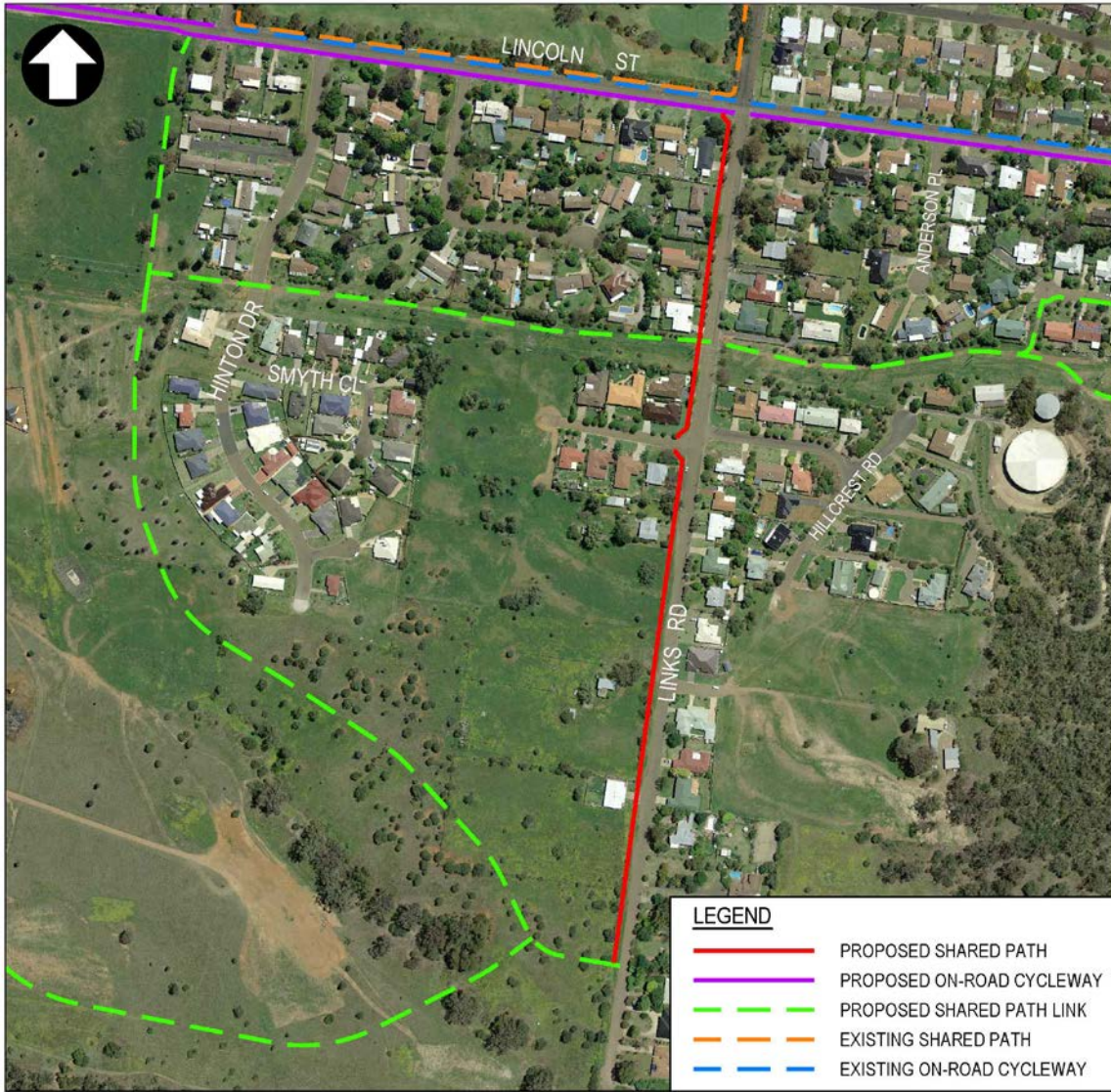
Location	Details
 <p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li><span style="color: red;">—</span> PROPOSED SHARED PATH</li> <li><span style="color: purple;">—</span> PROPOSED ON-ROAD CYCLEWAY</li> <li><span style="color: green;">—</span> PROPOSED SHARED PATH LINK</li> <li><span style="color: orange;">—</span> EXISTING SHARED PATH</li> <li><span style="color: blue;">—</span> EXISTING ON-ROAD CYCLEWAY</li> </ul>	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) from Ashfords Watercourse into Porcupine Reserve.</p> <p><b>Length:</b> 600 metres</p> <p><b>Linkage:</b> The existing shared path along Ashfords Watercourse (refer Section 3.1.2); The existing on-road cycleway along Lincoln Street (refer Section 3.1.4).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$231,000</p> <p><b>Given the length it is envisaged that construction may be undertaken in stages subject to available funding</b></p>

### 4.3.15 Ross Kelly Reserve


Location	Details
	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) from Lincoln Street, through Kirkpatrick Street, traversing Ross Kelly Reserve.</p> <p><b>Length:</b> 900 metres</p> <p><b>Linkage:</b> The existing on-road cycleway in Lincoln Street (refer Section 3.1.4); The proposed new shared path on Links Road (refer Section 4.3.16); and The proposed new shared path through Leonavale Reserve (refer Section 4.3.17).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimated:</b> \$346,500</p> <p><b>Given the length it is envisaged that construction may be undertaken in stages subject to available funding</b></p>



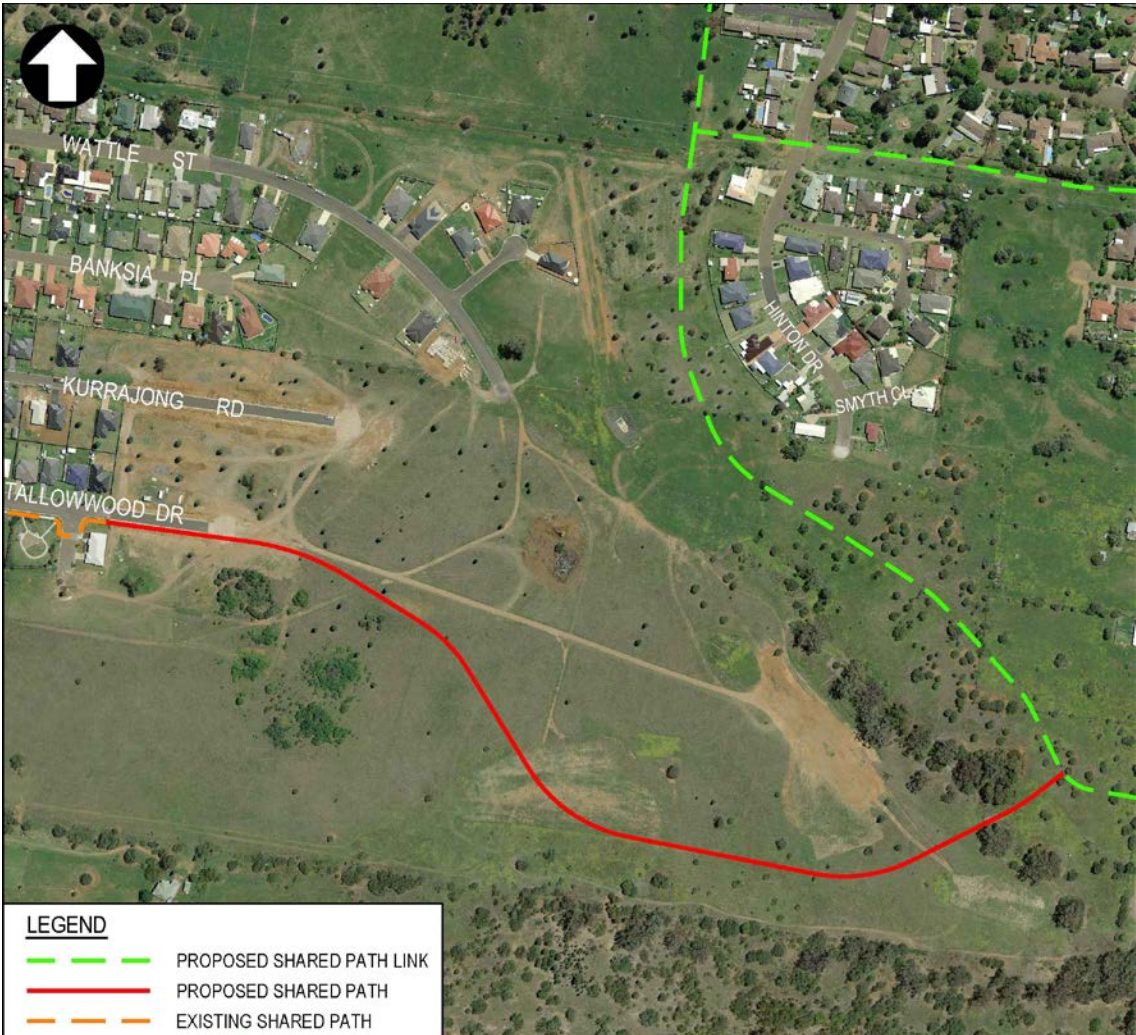
### 4.3.16 Links Road

Location	Details
	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) from Lincoln Street to the new proposed path at Ross Kelly Reserve</p> <p><b>Length:</b> 750 metres</p> <p><b>Linkage:</b> The existing on-road cycleway in Lincoln Street (refer Section 3.1.4); The proposed new shared path through Ross Kelly Reserve (refer Section 4.3.15); The proposed new shared path through Leonavale Reserve (refer Section 4.3.17); The proposed new shared path through Mornington Heights (refer Section 4.3.18).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimated:</b> \$288,500</p> <p><b>Given the length it is envisaged that construction may be undertaken in stages subject to available funding</b></p>


### 4.3.17 Leonavale Reserve

Location	Details
	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) linking the proposed new shared path for Ross Kelly Reserve through to Links Road.</p> <p><b>Length:</b> 900 metres</p> <p><b>Linkage:</b> The proposed new shared path for Ross Kelly Reserve (refer Section 4.3.15); The proposed new shared path for Links Road (refer Section 4.3.16); The proposed new shared path for Mornington Heights (refer Section 4.3.18).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimated:</b> \$346,500</p> <p><b>Given the length it is envisaged that construction may be undertaken in stages subject to available funding</b></p>


### 4.3.18 Mornington Heights

Location	Details
	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) from Links Road through to Tallowood Drive.</p> <p><b>Length:</b> 900 metres</p> <p><b>Linkage:</b> The proposed new shared path for Leonavale Reserve (refer Section 4.3.17); The proposed new shared path on Links Road (refer Section 4.3.16); The existing shared path along Tallowood Drive (refer Section 3.1.12)</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$346,500</p> <p><b>Given the length it is envisaged that construction may be undertaken in stages subject to available funding</b></p>


### 4.3.19 Bando Street

Location	Details
	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) from View Street through to Wandobah Road.</p> <p><b>Length:</b> 700 metres</p> <p><b>Linkage:</b> The proposed new shared path along Wandobah Road (refer Section 4.3.6); and The existing shared path along View Street (refer Section 3.1.6).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$269,500</p> <p><b>Given the length it is envisaged that construction may be undertaken in stages subject to available funding</b></p>

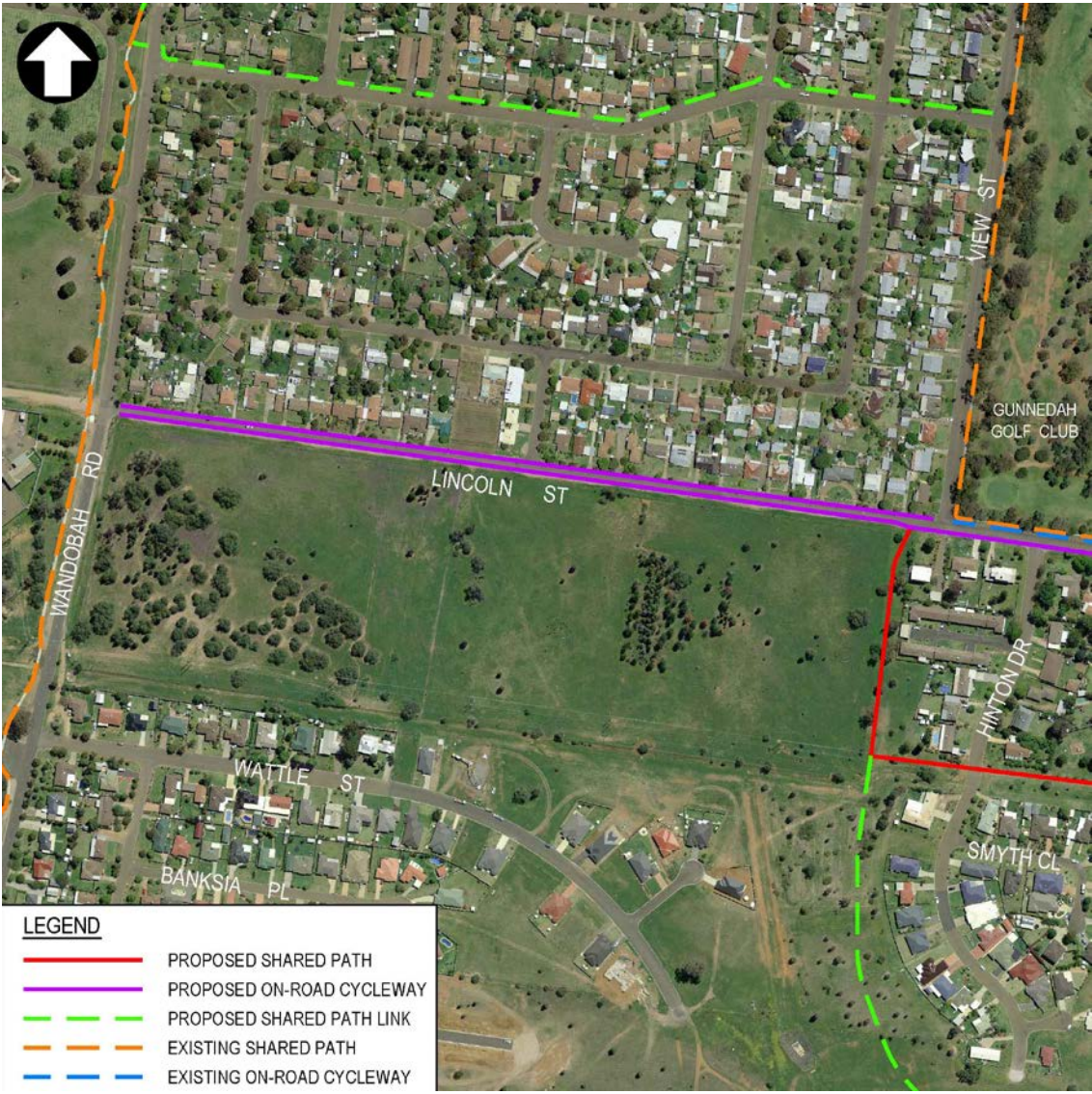
### 4.3.20 South Street (West)

Location	Details
	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) between Anzac Parade and View Street. <i>(This proposed shared path will replace the existing on road cycleway along South Street between Marquis Street and New Street)</i></p> <p><b>Length:</b> 1,100 metres</p> <p><b>Linkage:</b> Proposed New Street shared path (refer Section 4.3.4) The existing shared path along View Street (refer Section 3.1.6). The existing shared path in Marquis Street (refer section 3.1.8)</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$423,500</p> <p><b>Given the length it is envisaged that construction may be undertaken in stages subject to available funding</b></p>

### 4.3.21 South Street (East)

Location	Details
	<p><b>Location:</b> Provision of a new off-road cycleway (<b>shared path</b>) between Pearson Street and Anzac Parade. <i>(This proposed shared path will replace the existing on road cycleway along South Street between Marquis Street and New Street)</i></p> <p><b>Length:</b> 1,100 metres</p> <p><b>Linkage:</b> Proposed Carroll Street shared path (refer Section 4.3.11) The proposed new South Street shared path (refer Section 4.3.20).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$423,500</p> <p><b>Given the length it is envisaged that construction may be undertaken in stages subject to available funding</b></p>

### 4.3.22 Lincoln Street (West)

Location	Details
 <p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li><span style="color: red;">—</span> PROPOSED SHARED PATH</li> <li><span style="color: purple;">—</span> PROPOSED ON-ROAD CYCLEWAY</li> <li><span style="color: green;">—</span> PROPOSED SHARED PATH LINK</li> <li><span style="color: orange;">—</span> EXISTING SHARED PATH</li> <li><span style="color: blue;">—</span> EXISTING ON-ROAD CYCLEWAY</li> </ul>	<p><b>Location:</b> Provision of a new on-road cycleway between Ashfords Watercourse and Wandobah Road.</p> <p>This will be a duplicate of the existing on road cycleway in Lincoln Avenue, until it reaches the Golf Club. The proposed path would then be duplicated on both sides of the road until it reached Wandobah Road.</p> <p><b>Length:</b> 1,700 metres</p> <p><b>Linkage:</b> Proposed Carroll Street shared path (refer Section 4.3.11); and The proposed new South Street shared path (refer Section 4.3.20).</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimate:</b> \$68,000</p>

#### 4.4 Proposed Augmentation Works – Carroll

##### 4.4.1 Oxley Highway

Location	Details
No imagery available	<p><b>Location:</b> Provision of a new <b>off-road</b> cycleway (<b>shared path</b>) between Howe Street and Bright Street.</p> <p><b>Length:</b> 2,000 metres</p> <p><b>Linkage:</b> Nil</p> <p><b>Type:</b> Concrete</p> <p><b>Width:</b> 2.5 metres</p> <p><b>Estimated:</b> \$520,000</p> <p><b>Given the length it is envisaged that construction may be undertaken in stages subject to available funding</b></p>



#### **4.5 Proposed Augmentation Works – Breeza and Curlewis**

In consultation with GSC representatives, no proposed shared paths have been identified for Curlewis and Breeza. Facilities at these localities will be considered as part of future reviews and revisions of the GSC Bike Plan.

#### 4.6 Proposed Works – Bike Security

Security of bicycles and end-of-trip facilities have not been previously given a high priority in the Gunnedah region and this may be a deterrent to cycling when considering the cost of stolen items and attempts to recover them.

The provision of secure end-of-trip facilities does not have to be a costly exercise. Generally, all that is required is a rack or rail to which a bicycle's frame and/or wheels can be secured. Cyclists normally supply their own chain and padlock (or other locking device) when using such facilities. More expensive facilities which provide for secure storage of both bikes and other items such as helmets and wet weather clothing include steel reinforced 'lockers'.

To continue to attract people to cycling, whether it be as a commuter or for recreation, end-of-trip secure storage facilities need to be considered. In order for these secure storage facilities to be effective they must be:

- Located in areas that are close to businesses, schools, or other areas which cyclists frequent;
- Easily accessible and within view;
- Located in well-lit areas;
- Appropriately signposted; and
- Well-maintained.

Cyclists will not utilise facilities where they feel they are in danger or that their bike may be the target of malicious damage, with inappropriate locations having an adverse effect upon the usage of such facilities. Suggested storage areas were determined based on:

- Effectiveness, as detailed above; and
- Site investigations into regularly frequented locations where cyclists would be likely to use end-of-trip facilities.

Given the above considerations it is suggested that secure storage facilities be provided at the following locations in the Gunnedah region:

- Kitchener Park located on Wentworth Street;
- Skate park located on View Street;
- Various locations along Conadilly Street between Abbot Street and Tempest Street; and
- Various sporting field locations.

#### 4.7 Proposed Works – Signage & Pavement Markings

Knowing the location of the bicycle network is important for cyclists and pedestrians. Appropriate route directional signage located at specific locations is proposed to alert cyclists and pedestrians. A typical example of route signage is shown in **Figure 1**.



**Figure 1– Route Directional Signage Example**

(Source: NSW Bicycle Guidelines)

In addition to route signage, the installation of warning, advisory and regulatory signage, pavement markings and centre line marking, particularly for shared paths is also proposed to enhance the existing bicycle network. Examples of the different forms of signage for cyclists and road users are provided in **Figure 2** and **Figure 3**.



**Figure 2 – Regulatory Signage**

(Source: NSW Bicycle Guidelines)



**Figure 3 – Warning and Guidance Signage**

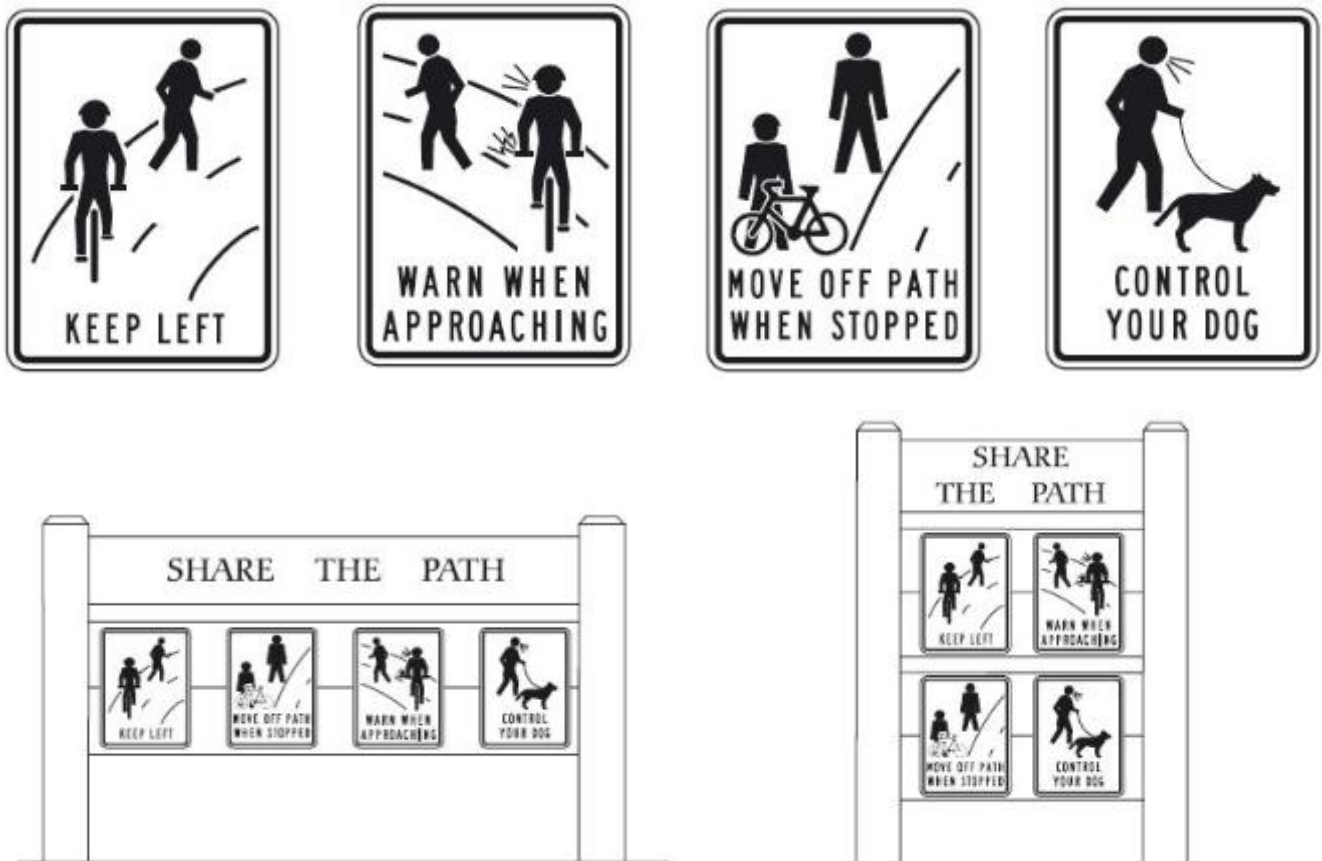
(Source: NSW Bicycle Guidelines)

Pavement markings generally consist of broken and continuous separation lines as well as pavement symbols and colour as shown in **Plate 31**



**Plate 31 Pavement markings**

Installation of shared path behavioural signage is recommended as this will also reinforce any education programs as described in Section 5 and encourage shared path users to behave in a co-operative manner. Examples of the behavioural signage and suggested layouts and grouping are provided in **Figure 4**.



**Figure 4 – Shared Path Behavioural Signage**

(Source: NSW Bicycle Guidelines)

Furthermore, consistency with signage and pavement markings is also proposed which will require the replacement of existing signage at specific locations and the installation of new signage and pavement markings on the bicycle network.

It is anticipated that the required works for signage, pavement marking and centre line marking will be identified as part of the routine inspections to be undertaken by the relevant GSC officers.

#### 4.8 Proposed Works – Road Safety Bike Park

Learning to ride a bicycle is a lifelong skill, with recreational cycling a popular activity amongst children. To help children gain the skills and knowledge they need to cycle safely on roads many communities across Australia have constructed road safety bike parks. These parks simulate real life road conditions, allowing children to not only learn how to ride a bicycle in a safe environment but to also become familiar with road rules.

A typical road safety bike park would consist of:

- Sealed roadways;
- Road signs; and
- Line marking including intersections and pedestrian crossings.

Depending on available funding, road safety bike parks can be further enhanced to simulate real life conditions with the introduction of the following infrastructure:

- Roadside furniture including street seats, garbage bins and light poles; and
- Landscaping.

A typical road safety bike park is shown in **Plate 32** and **Plate 33**.



**Plate 32**



**Plate 33**

Use of road safety bike parks, combined with exposure to ongoing education programs for road safety, provides a good basis for children to develop knowledge of the road rules as they grow up.

It is anticipated that GSC will investigate the most appropriate location for a road safety bike park within Gunnedah subject to available funding.

## 5. Non-Infrastructure Programs

Road Safety Education programs are part of the National School Curriculum. RMS pamphlets are available for children, parents and other cyclists, as well as educational pamphlets for motorists. These pamphlets are regularly distributed via schools.

More needs to be done to ensure that motorists, cyclists and pedestrians all understand their rights and obligations and improvements need to be made to cycleway design and the inclusion of cycleways in future development throughout the Gunnedah region. As part of Bike Plan 2016, GSC may consider implementing the following non-infrastructure programs on an annual basis:

- Ongoing education of cyclists;
- Ongoing education of pedestrians;
- Appropriate design of recreational cycleways; and
- Appropriate recreational area development.

### 5.1 Ongoing Education of Cyclists, Pedestrians and Motorists

Ongoing education of cyclists will be facilitated by the Director-Works with particular focus on the following:

- Rules and regulations; and
- Safety awareness.

The GSC website, newsletter and offices will all be used at various times for the dissemination of educational material to cyclists, motorists and pedestrians.

#### ***5.1.1 Rules and Regulations – Cyclists and Motorists***

There is a need for cyclists to be made aware of the following rules regarding right of way from the NSW Government Road Rules, Part 15: -

- **Rule 248:** The rider of a bicycle must not ride across a road, or part of a road, on a children's crossing or pedestrian crossing;
- **Rule 249:** The rider of a bicycle must not ride on part of a separated footpath designated for the use of pedestrians;
- **Rule 250:** The rider of a bicycle who is 12 years old or older must not ride on a footpath if another law of this jurisdiction prohibits the rider from riding on the footpath; and
- **Rule 251:** The rider of a bicycle riding on a bicycle path, footpath, or shared footpath, must keep to the left of any oncoming bicycle rider on the path.

Other cyclist specific rules and regulations are provided under the NSW Road Rules as follows:

- May ride two abreast, but no more than 1.5m apart;

- May overtake on the left-hand side of slow moving or stopped vehicles;
- May travel in Bus and Transit Lanes;
- May turn right from the left-hand side of a multi-lane roundabout with the proviso that they give way to the traffic entering the roundabout before them;
- May travel on road shoulders;
- Cannot ride across un-signalised pedestrian crossings;
- Cannot ride across signalised crossings unless there are special bicycle lights;
- Cannot travel in Bus Only Lanes;
- Must use provided bike lanes, where practicable;
- Must have at least one working brake and a bell or horn;
- When travelling at night must have: -
  - A steady or flashing white light that is visible for at least 200m from the front of the bike;
  - A steady or flashing red light that is visible for at least 200m from the rear of the bike; and
  - A red rear reflector that is clearly visible for at least 50m when light is projected onto it by a vehicle's headlight on low beam.

### **5.1.2 Safety Awareness**

There is a need for cyclists to be made aware of the safety benefits of:

- Always wearing helmets when cycling;
- Wearing bright or reflective clothing when cycling;
- Undertaking visual checks when approaching parked vehicles to ensure that doors are not about to be opened into the path of the bike; and
- Cycleway etiquette for pedestrians and cyclists, including the requirement to keep left and always listen for the bell of an approaching cycle.

### **5.1.3 Rules and Regulations - Pedestrians**

In many cases cycleways are provided as shared paths for the dual use of pedestrians and cyclists, with all off-road cycleways in the Gunnedah region being shared paths. This shared use can result in conflicts and accidents between cyclists and pedestrians. Pedestrians complain that cyclists ride two abreast and don't make way for them, and cyclists complain that pedestrians will not move aside for them.

Adopting a minimum width of 2 metres for the future construction of cycleways, and providing centrelines, arrows and signage where appropriate can assist in reducing this conflict. Advising pedestrians of cycleway etiquette, such as keeping left on shared



paths and listening for the bell of approaching bikes, via appropriate signage is another way of reducing this conflict.

There is a need for pedestrians to be made aware of Rule 239 from the Australian Road Rules regarding right of way:

- (1) *A pedestrian must not be on a bicycle path, or part of a separated footpath designated for the use of bicycles, unless the pedestrian:*
  - a. *Is crossing the bicycle path or separated footpath by the shortest safest route; and*
  - b. *Does not stay on the bicycle path or separated footpath for longer than necessary to cross the bicycle path or separated footpath safely.*
- (2) *However, a pedestrian may be on a bicycle path, or part of a separated footpath designated for the use of bicycles, if:*
  - a. *The pedestrian is:*
    - i. *In or pushing a wheelchair; or*
    - ii. *On rollerblades, roller skates, or a similar wheeled recreational device; and*
    - iii. *There is no traffic control device, or information on or with a traffic control device, applying to the bicycle path or separated footpath that indicated that the pedestrian is not permitted to be on the bicycle path or the part of the separated footpath that is designated for the use of bicycles.*
- (3) *A pedestrian who is crossing a bicycle path, or a part of a separated footpath designated for the use of bicycles, must keep out of the path of any bicycle, or any pedestrian which is permitted under sub-rule (2) to be on the bicycle path, or the path of the separated footpath designated for the use of bicycles.*
- (4) *In the Australian Road Rules:*

*Bicycle path means a length of path beginning at a bicycle path sign or road marking, and ending at the nearest of the following:*

  - a. *An end bicycle path sign or end bicycle path road marking;*
  - b. *A separated footpath sign or separated footpath road marking;*
  - c. *A road except a road related area; and*
  - d. *The end of the path.*

*Separated footpath means a length of footpath beginning at a separated footpath sign or separated footpath road marking, and ending at the nearest of the following:*

    - a. *An end separated footpath sign or end separated footpath road marking;*

- b. A bicycle path sign or bicycle path road marking;*
- c. A no bicycle sign or no bicycles road marking;*
- d. A road (except a road related area); and*
- e. The end of the footpath.*

## **5.2 Cycling Initiatives and Campaigns**

As part of GSC's support for cycling within the region, GSC will provide information to the community of any state or national cycling initiatives that are proposed such as NSW Bike Week, Ride to Work Day and cycling safety campaigns such as 'a metre matters' for example.

These initiatives and campaigns will be advertised on the GSC website as well as the provision of notices in the local newspapers to inform the local community.

## 6. Funding

### 6.1 Costs and Prioritisation

All of the proposed cycleway locations as detailed in Section 4 and indicated on the maps provided in **APPENDIX B** have been inspected in terms of feasibility for the future expansion of the bicycle network for the Gunnedah region.

In order to determine new cycling infrastructure works, all proposed locations have been assessed using factors including, public survey results, proximity to services, commercial areas, schools, public facilities and the ability to link to the existing bicycle network.

The schedule for proposed cycling infrastructure works is provided in **APPENDIX C**.

### 6.2 Funding Sources - Construction

Funding for the construction of cycleway infrastructure and associated facilities is generally provided as per the funding arrangements as detailed in **Table 4**.

**Table 4 – Funding Contributions for Cycleway Construction**

Road Classification	RMS Contribution	GSC Contribution <sup>(1)</sup>
State Roads (including National Highway)	100%	Nil <sup>(2)</sup>
Local Roads	50% <sup>(3)</sup>	50% <sup>(3)</sup>

*Note (1) – GSC contributions can comprise of funding sources including the General Fund, Restricted Reserves, Section 94A contributions and adjacent landholder contributions.*

*Note (2) – GSC contributions to cycleways on State Roads are provided on a case by case basis dependent on specific arrangements with RMS.*

*Note (3) – Whilst the 50/50 funding contribution is the typical funding arrangement, there is scope for GSC to request an increased contribution from RMS on a case by case basis.*

In line with the NSW government objectives with regards to cycling, RMS has been actively encouraging councils to construct cycling infrastructure and proactively advise councils when funds are available for works as defined in the Bike Plan.

#### 6.2.1 Development Contributions (Section 94A)

In January 2013, GSC adopted the 'Gunnedah Shire Council Section 94A Contributions Plan'. This Section 94A Plan has been prepared to satisfy the requirements of the Environmental Planning and Assessment Act (1979) and Regulation (2000), enabling GSC or an accredited certifier to levy contributions from development for the provision of community infrastructure including cycleway infrastructure.

The Section 94A Plan ensures that adequate community infrastructure is provided for future development and that the existing community is not burdened by the provision of community infrastructure required as a result of future development.

The cycleway infrastructure to be provided by funds as indicated in the Section 94A Plan are detailed in **Table 5**.

**Table 5 – Development Contributions - Summary of Cycleway Infrastructure Works**

Description	Estimated Expenditure	Staging <sup>(1)</sup>
Wandobah Road	\$250,000	Short to Medium
New Street	\$140,000	Short to Medium
Riverine (Urban Precinct)	\$200,000	Short to Medium
Riverine (Stormwater Precinct)	\$320,000	Short to Medium

*Note (1) – Short term = 1-2 years; Medium term = 3-4 years.*

From time to time, developers offer to construct cycleway or shared use paths in lieu of payment of cycleway related contributions in conjunction with the construction of residential areas. These ‘works in kind’ offers or developer initiatives often receive favourable consideration as they can result in the timely and coordinated provision of infrastructure which also enhances the appeal of the respective development itself.

### **6.2.2 Funding included in Operational Plan 2016/17**

The provision of funding for the construction of cycleway infrastructure and associated facilities as per the GSC “*DRAFT Delivery Program 2013-2017 and Operational Plan 2016/17*” is detailed in **Table 6**.

**Table 6 – Cycleway Construction Funding**

Year	Description	Amount	Funding Contribution
2016/17	Wandobah Road Cycleway Stage 2	\$126,472	100%
2017/18	Wandobah Road Cycleway Stage 2	\$133,673	100%
<b>Total</b>		<b>\$282,972</b>	<b>100%</b>

### **6.2.3 Additional Funding Sources**

Funding for the construction of cycleway infrastructure can also be derived from community partnership programs inclusive of in-kind support from local community organisations.

## **6.3 Funding Sources - Maintenance**

Funding for the maintenance of cycleway infrastructure and associated facilities is generally provided from the GSC General Fund and/or Restricted Reserves. No specific funding is provided by RMS for maintenance activities associated with cycleway infrastructure and associated facilities.

The provision of funding for the maintenance of cycleway infrastructure and associated facilities is included with the overall funding provided for road and bridge maintenance. The amount allocated for cycleway maintenance each year is commensurate with the required maintenance of deficiencies identified as part of routine inspections.

## 7. Implementation and Maintenance

### 7.1 Implementation Schedule

Given GSC's existing financial commitments it is unrealistic to expect that all of the proposed works nominated in the GSC Bike Plan will be completed in the next 10 years. To do so would require a substantial increase in the funding for cycleways in future budgets, potentially to the detriment of other facilities and services. As a consequence, it is proposed to use the schedule of works provided in **APPENDIX C** to target cycleway construction based on available funding over future years.

### 7.2 Maintenance

Following the investment of significant amounts of money in the construction of cycleways, it is important that sufficient funds be budgeted on an annual basis to maintain these assets in a safe and usable condition. Maintenance costs will vary depending on the location and type of wearing surface. However, it is considered that the maintenance needs of the cycleway network within the Gunnedah region can be adequately managed via an annual allocation within the overall maintenance budget as described in Section 6.3.

#### 7.2.1 Weeds

Weeds, particularly the Cathead (*Tribulus terrestris*), are a genuine and serious concern for cyclists because they easily cause tyre punctures. Catheads can grow through poorly maintained bitumen pavements or are thrown onto cycleways (generally by mowers). In order to eliminate, or at least reduce, the impact of Catheads:

- Cycleways should be well-constructed;
- A program of weed removal (including spraying with selective herbicide) should be undertaken alongside cycleways;
- Grassing of cycleway verges should be encouraged to prevent the establishment of catheads; and
- Where possible, mowing adjacent to the off-road cycleway should be undertaken such that grass is thrown away from the cycleway.

#### 7.2.2 Pavement Maintenance

Cycleway pavements require regular inspection and routine maintenance to ensure that the pavement is maintained in a smooth and safe condition. Inspections resulting in a condition rating are undertaken by GSC Officers on an annual basis.

Concrete pavements should have cracks repaired, or whole sections replaced when the extent of cracking or failures is assessed as extreme. Well-constructed concrete paths could be expected to have an average useful life of 50 years.

For asphalt or bitumen cycleways, routine maintenance comprises of the repair of cracks and potholes, with resurfacing required every five to ten years in accordance with condition assessment undertaken by GSC Officers.

### **7.2.3 Minimum Levels of Service**

In order to provide safe and smooth pavement surfaces which cyclists will utilise a high standard of maintenance is required. In order to achieve this high standard, the following minimum levels of service are recommended:

- Concrete Cycleways:
  - Inspect annually or when notified of an issue by public submissions to GSC;
  - Repair cracks when they appear;
  - Replace sections that are badly cracked or deformed as required;
  - Spray weeds alongside cycleways on an annual basis;
- Asphalt/Bitumen Cycleways:
  - Inspect annually or when notified of an issue by public submissions to GSC;
  - Repair cracks and potholes when they appear;
  - Resurface with asphalt overlay every 15-20 years, depending on condition; and
  - Spray weeds alongside cycleways on an annual basis.

### **7.3 Follow-up Activities**

A review of the GSC Bike Plan will be undertaken as part of the development of GSC's future Delivery Programs and Operational Plans.

## 8. References

- Austroads 2014, *Cycling Aspects of Austroads Guidelines*
- Austroads 2010, *National Cycling Strategy 2011-2016*
- Cement and Concrete Association 2004, *Guide to Residential Streets and Paths*
- NSW Government December 2012, *NSW Long Term Transport Master Plan,*
- NSW Government December 2012, *New England North West Regional Action Plan,*
- NSW Government September 2011, *NSW 2021 – A Plan to Make NSW Number One,*
- NSW Government May 2010, *NSW Bike Plan,*
- NSW Government, *Road Rules 2008,*
- NSW Roads and Maritime Services 2012, *How to Prepare a Bike Plan,*
- NSW Roads and Traffic Authority 2008, *Delineation,*
- NSW Roads and Traffic Authority 2003, *NSW Bicycle Guidelines,*
- Gunnedah Shire Council *2013-2023 Community Strategic Plan,*
- Gunnedah Shire Council *Delivery Program 2013-2017 and Operational Plan 2015-16 - Final as at 1 July 2015,*
- *Gunnedah Development Control Plan 2012 - Amended Jan 2014 - current version,*
- *Gunnedah Economic Development Strategy - Adopted 19 March 2014 - Volume 1,*
- *Gunnedah Economic Development Strategy - Adopted 19 March 2014 - Volume 2,*
- *Gunnedah Shire Council Long Term Financial Plan 2015-2025 - as at 1 July 2015,*
- *Gunnedah Shire Council Section 94A Contributions Plan - Jan 2013,*
- Gunnedah Shire Council *Strategic Asset Management Plan 2015-2025 - as at 1 July 2015*
- Gunnedah Shire Council, *DRAFT Delivery Program 2013-2017 and Operational Plan 2016-17*

**APPENDIX A**  
**Consultation Letters and**  
**Survey**



5 May 2016

**Gunnedah Shire Council Pedestrian Access Mobility Plan (PAMP) & Bike Plan**

Dear Sir/Madam,

Constructive Solutions, on behalf of Gunnedah Shire Council, is currently preparing a Pedestrian Access Mobility Plan (PAMP) and Bike Plan for the Gunnedah Shire and is seeking input from various sectors of the community to gauge a broader understanding of the needs of its residents.

A PAMP is a strategic action plan to develop and construct effective pedestrian improvements in areas where they offer the most benefit. A Bike Plan serves the same purpose for cycling. Both plans will take approximately 6 months to complete and will assist Council in terms of strategic planning and future external funding opportunities for pedestrian and cycling infrastructure in the local government area for the next five to ten years.

The benefits of a PAMP and Bike Plan include but are not limited to:-

- The installation of appropriate pedestrian and cycling facilities in specific areas;
- Improved access for those persons with a mobility impairment;
- The linking of existing pedestrian and cyclist generating developments or features, such as shopping centres, car parks, parks, and schools; and
- Ensuring all facility improvements are consistent throughout NSW.

The PAMP and Bike Plan will include nomination of sites for priority-based attention over the next five to ten years. Types of works included in the PAMP and Bike Plan are limited to the following areas:-

- Kerb ramp and cycleway construction or improvement;
- Taxi and/or bus zone improvements including signage, handrails (at specific locations only) and general pedestrian amenity improvements;
- Tactile tile installation for the vision impaired in selected locations commensurate with the specific RMS warrant;
- General improvements in linking existing pedestrian and cyclist generating developments; and
- Areas of general improvement as being beneficial to pedestrian and cyclist amenity in specific areas.

PAMP and Bike Plan works do not include paved footpaths, pedestrian crossings, sealed or unsealed road maintenance, street lighting or bus shelters.

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PROFESSIONAL PROJECT, VALUE & ENVIRONMENTAL MANAGEMENT SERVICES

Once the draft plans have been completed, a public exhibition period will be undertaken to allow further feedback from the community before they are finalised and considered by Council.

The PAMP and Bike Plan will be implemented as funding permits with nominated works generally completed on 50:50 funding basis with NSW Roads and Maritime Services (RMS).

All sites or requests for works nominated as part of this consultation process will be inspected and assessed to ensure compliance with the Roads and Maritime Services (RMS) PAMP and Bike Plan guidelines prior to inclusion as a nominated site.

Constructive Solutions will accept written submissions for the PAMP and Bike Plan on Council's behalf up until the close of business on 3 June 2016. Please send any responses to either [danielle@constructivesolutions.com.au](mailto:danielle@constructivesolutions.com.au), or post to:

Constructive Solutions  
PO Box 1498  
TAMWORTH NSW 2340

We look forward to your valuable contribution to further improving pedestrian and cyclist amenity within the LGA.

Yours Faithfully

A handwritten signature in black ink, appearing to read 'S. O'Rourke', with a horizontal line underneath.

Steve O'Rourke  
Director

## Gunnedah Shire Council – PAMP and Bike Plan Survey

<b>Name:</b>				
<b>Address:</b>				
<b>Email:</b>				
<b>Phone No.:</b>				
<i>Please tick &amp;/or answer the following questions where relevant</i>				
<b>1. Gender:</b>	<input type="checkbox"/> Male		<input type="checkbox"/> Female	
<b>2. Age:</b>	<input type="checkbox"/> <15	<input type="checkbox"/> 16-25	<input type="checkbox"/> 26-35	<input type="checkbox"/> 36-45
	<input type="checkbox"/> 46-55	<input type="checkbox"/> 56-65	<input type="checkbox"/> 66-75	<input type="checkbox"/> >75
<b>3. Where do you predominately travel to and from home (using any mode of transport)?</b>				
<input type="checkbox"/> work		<input type="checkbox"/> School		<input type="checkbox"/> Supermarket / Town Centre
<input type="checkbox"/> Sporting Facility		<input type="checkbox"/> Friend or relative's home		<input type="checkbox"/> Tourist Attraction
<input type="checkbox"/> Recreation Area (eg: park, pool)		<input type="checkbox"/> Other (provide details):		
Comments:				
<b>4. During the week, which mode of transport do you most commonly use and how long do the trips take?</b>				
<b>Time:</b>	<input type="checkbox"/> <10 minutes	<input type="checkbox"/> 10-30 minutes	<input type="checkbox"/> 30-60 minutes	<input type="checkbox"/> > 60 minutes
<b>Mode:</b>	<input type="checkbox"/> Walking	<input type="checkbox"/> Cycling	<input type="checkbox"/> Driving	<input type="checkbox"/> Public Transport
	<input type="checkbox"/> Other (provide details):			

<b>5. Do you own or have access to a bicycle?</b>		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>6. How frequently do you ride a bicycle?</b>			
<input type="checkbox"/> Everyday	<input type="checkbox"/> At least once a week	<input type="checkbox"/> Infrequently	<input type="checkbox"/> Never
<b>7. How confident are you about riding a bicycle?</b>			
<input type="checkbox"/> Highly skilled / no issues	<input type="checkbox"/> Confident	<input type="checkbox"/> Somewhat confident / have concerns about safety	<input type="checkbox"/> Not confident
<i>Please only answer Question 8 if you do not ride or do so irregularly.</i>			
<b>8. What is the primary reason why you do not cycle?</b>			
<input type="checkbox"/> Safety	<input type="checkbox"/> Lack of adequate paths/lanes/end-of trip facilities	<input type="checkbox"/> Lack of time	
<input type="checkbox"/> Negative image associated with cycling	<input type="checkbox"/> Don't own/have access to a bicycle	<input type="checkbox"/> Unable to ride	
<input type="checkbox"/> Weather	<input type="checkbox"/> Other modes of transport more convenient	<input type="checkbox"/> Other (provide details):	
Comments:			
<i>If you answered Question 8, please skip ahead to Question 11.</i>			
<b>9. What is the primary reason why you cycle?</b>			
<input type="checkbox"/> Recreation	<input type="checkbox"/> Fitness	<input type="checkbox"/> Commuting	
<input type="checkbox"/> Touring	<input type="checkbox"/> Other (provide details):		
Comments:			

**10. What are the major benefits you experience from cycling?**

Health/fitness

Enjoyment

Financial

Convenience

Freedom / independence

Social

Other (provide details)

Comments:


**11. What improvements would you like to see that would encourage you to walk or cycle more often?**


**12. Any other comments?**


**13. Are you happy to be contacted for further information?**

Yes

No



27 September 2016

Dear Sir / Madam,

**Draft Pedestrian Access and Mobility Plan and Draft Bike Plan Project: Have Your Say**

You may be aware that Gunnedah Shire Council has recently prepared a Draft Pedestrian Access and Mobility Plan (PAMP) and Draft Bike Plan with the assistance of consultants Constructive Solutions.

The purpose of the Pedestrian Access and Mobility Plan (PAMP) and Draft Bike Plan is to provide greater long term strategic focus for the development of accessible pedestrian routes and coordinated cycling infrastructure in the shire.

We are excited to let you know that both draft documents are now on public exhibition, with the Gunnedah Shire community invited to review and provide comment on the proposals and actions identified in the planning documents.

Copies of the Draft Pedestrian Access and Mobility Plan (PAMP) and Draft Bike Plan are available at [www.gunnedah.nsw.gov.au](http://www.gunnedah.nsw.gov.au), Paper copies of the plans are also available at the following Council buildings:

- Shire Administration Building, 63 Elgin Street, Gunnedah
- Gunnedah Shire Library, 291 Conadilly Street, Gunnedah
- The Civic, 85 Chandos Street, Gunnedah

If you would like to make comment on the Draft Pedestrian Access and Mobility Plan (PAMP) and Draft Bike Plan please do so in writing and address submissions to: General Manager, Gunnedah Shire Council, PO Box 63, GUNNEDAH NSW 2380 or [council@infogunnedah.com.au](mailto:council@infogunnedah.com.au). Submissions will be received no later than 4.00 pm on Friday, 14 October 2016.

For further information on the Draft Pedestrian Access and Mobility Plan (PAMP) and Draft Bike Plan please contact our Customer Relations Team on 02 6740 2100 or email [council@infogunnedah.com.au](mailto:council@infogunnedah.com.au).

A handwritten signature in black ink, appearing to read "C. Formann".

Colin Formann

ACTING GENERAL MANAGER

**APPENDIX B**  
**Cycleway Maps**



**LEGEND**

- PROPOSED SHARED PATH
- PROPOSED ON-ROAD CYCLEWAY
- - - - EXISTING SHARED PATH
- - - - EXISTING ON-ROAD CYCLEWAY

REV.	DATE	DESCRIPTION	CHK.
4	10/11/2016	SHARED PATHS AMENDMENTS	MB
3	31/08/2016	SHARED PATHS AMENDMENTS	MB
2	26/08/2016	SHARED PATHS AMENDMENTS AND ON-ROAD CYCLEWAYS ADDED	MB
1	19/08/2016	ISSUED FOR INFORMATION	MB

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Client: <b>GUNNEDAH SHIRE COUNCIL</b>	
<b>GUNNEDAH BIKE PLAN OVERALL NETWORK PLAN</b>	
Design Completed: <b>10/11/2016</b>	Designed: <b>BE</b>
Status: <b>PRELIMINARY</b>	Plan Size: <b>A3</b>



Drawing No:	<b>201604-01</b>
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**APPENDIX C**  
**Schedule of Works**

## Gunnedah Shire Council Bike Plan - Schedule of Works

<b>Gunnedah</b>							
Reference	Location	Speed Zone (km/h)	AADT > 5000	Facility	Type	Length (metres)	Estimated Cost
4.3.1	Barber Street - Warrabungle to Chandos Street	n/a	N	Off-road	Concrete	700	\$269,500
4.3.2	Barber Street - Chandos Street to Elgin Street	n/a	N	Off-road	Concrete	500	\$192,500
4.3.3	Barber Street - Elgin Street to Osric Street	n/a	N	Off-road	Concrete	550	\$211,750
4.3.4	New Street	50	N	Off-road	Concrete	250	\$96,250
4.3.5	View Street	50	N	Off-road	Concrete	320	\$123,200
4.3.6	Wandobah Road (Between George St and Bando St)	50	N	Off-road	Concrete	750	\$288,750
4.3.7	Riverine (Urban Precinct)	50	N	Off-road	Concrete	920	\$354,200
4.3.8	Riverine (Stormwater Precinct)	50	N	Off-road	Concrete	1450	\$558,250
4.3.9	Osric Street	50	N	Off-road	Concrete	900	\$346,500
4.3.10	Eglin Street	51	N	Off-road	Concrete	200	\$77,000
4.3.11	Carroll Street (Maitland Street to South Street)	50	N	Off-road	Concrete	900	\$346,500
4.3.12	Pearson Street	50	N	Off-road	Concrete	850	\$327,250
4.3.13	Stock Road (Between Pearson Street and Apex Road)	n/a	n/a	Off-road	Concrete	70	\$26,950
4.3.14	Porcupine Reserve	n/a	n/a	Off-road	Concrete	600	\$231,000
4.3.15	Ross Kelly Reserve	n/a	n/a	Off-road	Concrete	900	\$346,500
4.3.16	Links Road	n/a	n/a	Off-road	Concrete	750	\$288,750
4.3.17	Leonavale Reserve	n/a	N	Off-road	Concrete	900	\$346,500
4.3.18	Mornington Heights	n/a	N	Off-road	Concrete	900	\$346,500
4.3.19	Bando Street	50	N	Off-road	Concrete	700	\$269,500
4.3.20	South Street (West)	50	N	Off-road	Concrete	1100	\$423,500
4.3.21	South Street (East)	50	N	Off-road	Concrete	1100	\$423,500
4.3.22	Lincoln Street West (Both sides of the road)	50	N	On-road	Concrete	1700	\$68,000
<b>Subtotal</b>							<b>\$5,962,350</b>
<b>Carroll</b>							
Reference	Location	Speed Zone (km/h)	AADT > 5000	Facility	Type	Length (metres)	Estimated Cost
4.4.1	Oxley Highway between Howe Street and Bright Street	70	Y	Off-road	Concrete	2000	\$520,000
<b>Subtotal</b>							<b>\$520,000</b>
<b>Total</b>							<b>\$6,482,350</b>

Notes:- (1) Estimated costs are inclusive of signage, line marking & traffic control provisions during construction;

(2) Estimated costs are current as at August 2016;

(3) It is recommended that the estimated costs be adjusted in accordance with the CPI rate for the preparation of future annual operational plans;

(4) Whilst the facility and type of each cycleway has been nominated, these may be adjusted in order to satisfy available funding;