



Missing Links Footpath Construction Strategy 2019



Contents

Introduction	5
Objectives	6
Existing footpath network	6
Pedestrian Footpath network guidelines	7
Pedestrian footpath network criteria	8
Material type	8
Location	8
Width	8
Pedestrian footpath provision and cost	9
Prioritisation – design and maintenance issues	10
Key risks and opportunities	11
Disability access	11
Impact on trees	11
Accommodation works	12
Financial	12
Estimates	13
Priority Route Ratings	14
Criticality Matrix	15
Individual Town Priority Routes	19
Lake Boga Priority Routes	19
Manangatang Priority Routes	20
Nyah-Nyah West Priority Routes	21
Piangil Priority Routes	22
Robinvale Priority Routes	23
Swan Hill Priority Routes	24
Ultima Priority Routes	25
Woorinen South Priority Routes	26
Related documents/legislation	27

Introduction

Footpaths play an important role within the Swan Hill Rural City Council, providing a means of access to community facilities, services, public transport and open spaces. The provision of footpaths make communities more liveable and better connected and people healthier and more physically active.

Many areas in the Swan Hill Rural City Council are well suited to walking. Areas close to the Murray River provide ideal locations for pedestrian and cycle paths. Providing access to those areas is one of the objectives behind this strategy.

There are a number of residential roads that present some difficulty in establishing constructed footpaths due to street trees and other infrastructure that restrict the width available for a footpath.

In recognition of a desire to continue with the expansion of the footpath network and, where possible, to provide a footpath on at least one side of roads in the urban areas, a Missing Links Footpath Construction Strategy is developed.

The strategy focuses on the construction of footpaths to provide connectivity with other footpaths based on a hierarchy which predominately considers pedestrian needs associated with attractors such as shops, public transport nodes, proximity to aged care facilities, schools and childcare, playgrounds, places of worship, road hierarchy (the scheme for categorising roads into groups based on a number of factors including; usage, location, surface type, capacity, etc) and other high demand community facilities.



Shared path in Lake Boga



Recently constructed footpath in Nyah West

Objectives

The objectives of the Missing Links Footpath Construction Strategy are to:

- Promote and encourage walking as a sustainable and preferred mode of transport for short trips to work, shops, school and for recreation
- Reduce the risk of conflict between pedestrians and motor vehicles
- Improve the amenity, accessibility and safety of the footpath network so they are accessible for all users
- Minimise the removal of significant vegetation in the location of construction of new footpaths
- Establish criteria to guide the development of new footpaths, which proposes the construction of a footpath on at least one side of most residential roads, and include provision in the Long-Term Financial Plan to complete the development of the pedestrian footpath network in a financially sustainable manner.

Existing footpath network

Currently, the Swan Hill Rural City Council pedestrian footpath network incorporates approximately 152 km of footpaths constructed from concrete, block paving, bitumen, timber and gravel, valued at approximately \$25M. The footpaths are located in the urban areas throughout the municipality, along roads, the Murray River and through reserves.

Information pertaining to footpaths is stored in Council’s Asset Information Management System (AIM) and the Geographical Information System (GIS).

The GIS has enabled the existing footpaths throughout the city to be represented on a map base, and provides the means to undertake desktop analysis and mapping to plan for the provision of new footpaths.

The existing footpath network length, by material type, is listed in the table below.

Footpath material	Length (km)
Concrete paths	137.5
Block paved paths	2.1
Gravel paths	6.1
Bitumen paths	6.3
Timber paths	0.1

Pedestrian footpath network guidelines

Guidance for road designers and other practitioners on the design of paths for safe and efficient walking and cycling is provided in the *Australian Guide to Road Design – Part 6A: Pedestrian and Cycle Paths*.

The Austroads Guide provides the following general principles relating to the provision of footpaths:

- In general, all roads should have some type of walking facility out of the vehicle path. An exception may be categories of road that have a very low volume and low operating speed (i.e. <40 km/h) such as minor access roads
- The need for footpaths should also be related to the pedestrian network functional requirements. For example, the presence of pedestrians on many rural roads is a rare event and the provision of paths is not economically justified. In this situation the provision of shoulders will provide space for a pedestrian who happens to use the road. On the other hand, all roads that have a moderate to high speed (i.e. >40 km/h) and significant pedestrian activity should be provided with footpaths because of the high risk of serious injury should a pedestrian be struck by a vehicle
- Pedestrian volumes are not regularly collected by most agencies and cannot be easily forecast. Development density can be used as a surrogate for pedestrian usage in determining the need for footpaths
- A higher road functional classification in urban areas generally means higher traffic speeds and volumes, hence a need to provide for pedestrian mobility and safety. However, some roads classified as local streets also function as traffic routes and have similar needs
- Collector and arterial roads in the vicinity of schools should be provided with footpaths and desirably off-road cycle paths, shared or segregated footpaths, to increase safety for children travelling to and from school. Safe routes to school can also reduce reliance on car travel for school trips and have health and environmental benefits
- Many people with disabilities, and some elderly residents, undertake much of their travel either on foot, in wheelchairs or on personal mobility devices (e.g. scooters) and so the development of a network of adequate footpaths is important for their mobility. The provision of footpaths that meet recommended dimensions, surface requirements, and which are free of obstructions is important to ensure that they do not represent a hazard for people who have difficulty in detecting or manoeuvring around obstacles
- The use of electric powered scooters has emerged as an alternative means of transport for people with mobility impairment or other health issues and is likely to grow as the population ages. It is therefore important that paths and associated facilities can accommodate this type of use.

The Infrastructure Design Manual (IDM) provides the following requirements relating to the provision of footpaths:

The minimum footpath width should be 1.5m in residential areas and 2.0m in commercial areas.

- Footpaths should slope away from the property boundary, and be elevated above the adjacent nature strip. In general, reverse fall on nature strips is undesirable and will only be accepted where no practical alternative is available.

Shared paths should be designed and constructed in accordance with the Austroads *Guide to Road Design Part 6A: Pedestrian and Cyclist Paths, 2010* and any VicRoads supplement to those guidelines, and be at least 2.5m wide. Where a shared path crosses a pedestrian bridge, a minimum lateral clearance of 0.5m on both sides of the shared path should be provided where the speed of cyclists is less than 20km/hr. Where higher speeds are likely a minimum lateral clearance of 1m should be provided on both sides of the shared path.

Pedestrian footpath network criteria

Material type

Council uses a number of material types such as concrete, block paving, bitumen, timber and gravel. The selection of one material over another will depend on site specific circumstances including the desired level of amenity and future renewal and maintenance considerations.

It is proposed that Council will continue to use a range of different material types, acknowledging the majority of new paths will be constructed with concrete or other innovative and/or recycled materials..

Location

The location of a footpath within a road or road reserve will be selected to suit the topography so the path complies with the requirement for disability access (as far as practicable) and minimises disturbance to vegetation and impact on adjoining properties.

Width

The minimum width required for footpaths as stated in the Infrastructure Design Manual (IDM) is 1.5m, which provides for two pedestrians to walk side-by-side. The presence of couples walking side by side is a common occurrence along paths.

In high activity areas such as commercial and shopping areas wider footpath are likely to be necessary, as well as at locations of higher pedestrian activity such as school crossings and recreational facilities.

It is recommended that Council maintain the minimum requirements of the IDM and *Australian Guide to Road Design – Part 6A: Pedestrian and Cycle Paths* width of 1.5m for footpaths, where possible, and a minimum width of 2.5m for shared use paths, acknowledging in some circumstances wider paths are desirable where there is a high concentration of activity.

Pedestrian footpath provision and cost

The location of the existing footpath network has been mapped using Geographical Information System (GIS).

The GIS has been used to identify all roads that do not have a footpath on one side of the road and roads which should desirably have a footpath on both sides due to:

- traffic volumes in excess of 1,000 vehicles/day, or
- they provide for a bus service, or
- generate very high pedestrian activity due to the adjacent land use.

Approximately 43km of the road network has been identified as not providing a footpath on at least one side of the road.

The total length of footpath to be constructed under the Missing Links Footpath Construction Strategy is approximately;

- 43km if we invest in all identified missing links
- 9km if we only construct our immediate priority 1 footpaths
- 2.5km if we only deliver on the most critical of the priority 1 category footpaths. These are footpaths with a criticality rating of 3.5 or higher

The estimated cost of constructing footpaths lengths as listed above are;

- 43km of footpath with a width of 1.5m using concrete is estimated at \$7.7 million.
- 9km of footpath with a width of 1.5m using concrete is estimated at \$1.6 million
- 2.5km of footpath with a width of 1.5m using concrete is estimated at \$480 thousand

The linear kilometres of footpaths do not include the associated crossings, vegetation removal and offsets. After consultation with the Engineering Works department a compliant crossing costs between \$2,000 - \$4,000. For the estimates Council has tabled \$3,000 but these will need to be investigated on a case by case basis.

Prioritisation – design and maintenance issues

The location of the existing footpath network has been mapped using the GIS.

GIS enables the display of many different kinds of data on one map and allows us to easily see, analyse and understand relationships between different features.

For example, the footpath information includes location, material type, footpath width and condition. This information, used in conjunction with other spatial data, including the location of roads, schools, retail precincts, medical facilities, community centres, playgrounds and bus routes provides valuable information in planning for the provision of footpaths.

Due to the competing demands on Council's budget, the provision of footpaths need to be prioritised to maximise the benefit to the wider community, provide direction for installation of new footpaths and to justify the selection of footpath construction to residents and elected members.

Factors to consider for developing a prioritised hierarchy include:

- Road hierarchy – arterial, collector, Access
- Land use/facility – education, community centre, play ground, sports ground, shopping precinct, aged care facility, reserves, residential, commercial
- Bus route
- Linkage to other footpaths
- Pedestrian catchment – route most likely travelled to provide greater amenity – consider elderly and children
- Topography/sight distance
- Construction feasibility – vegetation and other infrastructure restricting or compromising the geometry
- Construction costs
- Trafficable verge area – non-trafficable/ trafficable.

Council will continue to develop and refine forward footpath construction programs based on the hierarchy and criteria listed above informed through consultation with local communities.

Key risks and opportunities

Disability access

Many people with disabilities undertake their travel on foot, in wheelchairs or on personal mobility devices (e.g. scooters). The provision of footpaths that meet recommended dimensions, surface requirements, which are free of obstructions is important to ensure they do not represent hazards for people who have difficulty in detecting or manoeuvring around obstacles.

However, in many areas throughout the Municipality, there are considerable difficulties in constructing footpaths that comply with the requirements of the Disability Discrimination Act in relation to the maximum slope, without significant earthworks and retaining walls which can impact upon properties, vegetation, driveways and other infrastructure.

It should be noted that it may not be possible to construct a footpath along some roads.

Footpaths and shared paths will be constructed in accordance with the following specifications:

Designs are to facilitate ease of use by the disabled and the aged including the use of tactile indicators. The maximum longitudinal gradient of paths is to be no greater than any adjacent street pavement and, where possible, no greater than 1:14. All footpath and shared paths designs will provide safe sight distances at crossing places and bends.

Cross-fall gradients shall be no greater than 1:40 as required by *Australian Standards AS/NZS 1428 - Design for Access and Mobility Part 1: General Requirements for Access – New Building Work*, *Australian Standards AS/NZS 2890 – Parking Facilities* and *Australian Standard AS/NZS 1742 – Manual of uniform control traffic devices*.

Impact on trees

Trees within the urban streetscape environment can cause conflict with footpaths. Residents value the amenity provided by trees and therefore there is a need to strike a balance that ensures trees are maintained while minimising the damage to footpaths. This may be achieved by the establishment of new streetscapes or the replacement of existing trees and may include the selection of appropriate tree species, use of root barrier products and the use of alternative footpath products around trees.

It should be noted that in many situations throughout the Municipality, the presence of mature trees will impede the construction of footpaths to the extent that a footpath cannot be provided.

An assessment of street trees will be made by Council and appropriate trimming or removal may be undertaken to ensure the technical footpath requirements are met in consideration of any special treatment around the tree protection zone of regulated trees that may need to be considered on a case by case basis.

Accommodation works

Prior to the construction of any new footpaths and shared paths, the following matters must be considered:

- Where existing irrigation systems encroach onto the road reserve, the resident or property owner shall be given notice to relocate their encroaching sprinkler systems or to mark locations of sprinkler heads (and lines if possible) prior to the installation of the footpath. If residents or property owners have not relocated their sprinkler systems, Council will assume they are happy for Council to remove the irrigation systems and reinstate/repair upon completion of the footpath construction, if practical and appropriate.
- Adjustment to service pits may need to be undertaken to ensure the technical footpath requirements are met.

Financial

Council recognises the need to develop a network of footpaths that increases pedestrian access and mobility for the community within available budgets.

Annual reconstruction and maintenance costs to renew and maintain footpaths place a significant burden on the capital and operational budgets of Council. Council's financial commitment could be reduced by the way of State/Federal Government grants, alternative footpath surface types, partnerships with other organisations (VicRoads/VicTrack) and special charge schemes

As the footpath network length is increased there will be a need to increase the associated resources required to maintain the additional footpaths. Maintenance efficiencies and/or resources will need to increase accordingly as the assets age.

Staff implications

Significant operational funds are expended on removal of trip hazards, replacement of failed footpaths, renewal of worn sections of the network, infilling gaps and ensuring a serviceable footpath.

In addition, an expanded program for the construction of new paths will likely require additional resources to manage the program. The physical works will generally be carried out using Council staff. Council will need to undertake the project and contract management functions, including design, construction and administration of the program. It is anticipated that the resourcing of this work can be undertaken by redistribution of staff functions and will not require an additional staff position

Estimates

Township	Route Type	Routes length (m)	Width (m)	Unit Rate	Estimated Total costs
Lake Boga	SHRCC P1	1765	1.5	\$120	\$317,700
	All Other	4844			\$871,920
Manangatang	SHRCC P1	374	1.5	\$120	\$67,320
	All Other	2961			\$532,980
Nyah-Nyah West	SHRCC P1	1994	1.5	\$120	\$358,920
	All Other	8703			\$1,566,540
Piangil	SHRCC P1	336	1.5	\$120	\$60,480
	All Other	2236			\$402,480
Robinvale	SHRCC P1	1209	1.5	\$120	\$217,620
	All Other	2489			\$428,040
Swan Hill	SHRCC P1	1920	1.5	\$120	\$345,600
	All Other	8342			\$1,501,560
Ultima	SHRCC P1	987	1.5	\$120	\$177,660
	All Other	2685			\$483,300
Woorinen South	SHRCC P1	574	1.5	\$120	\$103,320
	All Other	2180			\$392,400
SHRCC P1					\$1,648,620
TOTAL					\$7,827,840

Notes on estimates

- Railway footpath crossings will need to be reviewed on a case by case basis. There are 5 in Swan Hill, 1 in Lake Boga and 1 in Nyah West
- All new footpaths are assumed to be concrete at 1.5m wide as per the Infrastructure Design Manual
- Priority routes have been mapped in conjunction with the Active Transport Strategy
- Swan Hill Rural City Council concrete unit rates current as at June 2018
- Cost estimates do not include footpath crossings

Priority route ratings

Priority	Description	Other information	Township	Route Road Type Score	Key Facilities Rating	AADT Score	Total Score
1	Link existing footpath east along Monash Ave from fire station to Ambulance station	Link Jacaranda Lodges to Nyah West CBD	Nyah-Nyah West	3	5	4	4
2	North along Stradbroke Avenue from Pritchard St to SH College and fill in gap from crossing to car park	Provides a safe off street walkway connection to existing footpath infrastructure	Swan Hill	3	5	4	4
3	South from roundabout on Boobiulla, Swan Hill-Ultima and Gray Sts connecting to SH Primary School	Provides a safe off street walk way.	Swan Hill	3	5	4	4
4	from rail crossing north west to Manangatang CBD	Laurundel Street northern side extend existing footpath network from Wattle Street to Pioneer Street	Manangatang	5	5	1	3.66
5	from rail crossing east to Recreation Reserve entrance	from rail crossing east to Recreation Reserve entrance	Manangatang	5	5	1	3.66
6	South on Palmer St from Monday St to Alma St	Provides safe off street walk way for school pick-up drop off. Also enables connection for school crossing	Woorinen South	3	5	3	3.66
7	North on Palmer St from school to Bright St intersection	Provides a safe off street walkway connection to existing footpath infrastructure	Woorinen South	3	5	3	3.66

Priority	Description	Other information	Township	Route Road Type Score	Key Facilities Rating	AADT Score	Total Score
8	North along Bromley Rd from Anniversary drive connecting to existing footpath on Ronald St	Provides a safe off street walkway connection to Robinvale	Robinvale	5	1	4	3.33
9	from Lake Boga CBD (17 Marraboor St) along southern side of Marraboor St to recreation reserve	from Lake Boga CBD (17 Marraboor St) along southern side of Marraboor St to recreation reserve	Lake Boga	3	5	1	3
10	from existing footpath near Caravan Park north to Lake Boga Yacht club.	from existing footpath near Caravan Park move east towards lake and then north to Lake Boga Yacht club connecting to existing network.	Lake Boga	5	0	4	3
11	East along Murray St from service station to Church St intersection	Provides a safe off street walkway to Post Office and a link to the proposed footpaths to Community Centre and further along Murray St towards the river Murray	Piangil	5	3	1	3
12	from existing footpath Stradbroke Ave Nyah south along MVH to Two Bays roadhouse	Provides a safe off highway walk way to Caravan park and links up to existing Nyah West walking path	Nyah-Nyah West	5	0	3	2.66

Priority	Description	Other information	Township	Route Road Type Score	Key Facilities Rating	AADT Score	Total Score
13	South on western side of Coronation Ave from bus stop at southern entrance of Parkview Dve to Wattie St	Provides safe off street walk way. Creates a walkway around entire Racecourse	Swan Hill	3	1	4	2.66
14	from Lake Boga CBD (17 Marraboor St) along western side of Kerang St to Primary and Pre School finishing approx skate park	from Lake Boga CBD (17 Marraboor St) along western side of Kerang St to Primary and Pre School finishing approx skate park	Lake Boga	1	5	1	2.33
15	Extend existing footpath network on Larundel St to V/Line bus stops on both side of road	Laurundel Street southern side extend existing footpath network from Wattle Street to swimming pool	Manangatang	5	1	1	2.33
16	North east along Leonora St from George St to St Marys School. Then east along Parke St to Latje Rd	Provides a safe off street walk way.	Robinvale	1	5	1	2.33
17	North along Watkin St to Latje Rd crossing to Recreation Resrve	Provides safe off street walk way	Robinvale	1	5	1	2.33
18	South on O'Connor St from Hayes St to Cameron St	Provides a safe off street walk way.	Ultima	1	5	1	2.33

Priority	Description	Other information	Township	Route Road Type Score	Key Facilities Rating	AADT Score	Total Score
19	South on O'Connor St from Cameron St to 87m	Provides safe off street walk way for school pick-up drop off	Ultima	1	5	1	2.33
20	West from School along Bright St to Community Centre.	Provides a safe off street walkway connection to existing footpath infrastructure	Woorinen South	1	5	1	2.33
21	East on Alma St from Palmer St to Smith St	Provides a safe off street walkway connection to existing footpath infrastructure	Woorinen South	1	5	1	2.33
22	from former Nyah school east to River Street then north to Recreation Reserve entrance	Provides a safe off street walkway to AN Lewis Park and access to the river	Nyah-Nyah West	1	3	1	1.66
23	South along eastern side of Hall St to Memorial Park	Provides a safe off street walk way	Piangil	1	3	1	1.66
24	South along western side of Beveridge St to Community Centre.	Provides safe off street walk way to Memorial Park	Piangil	1	3	1	1.66
25	South from Memorial Park to Hayes St, then west to Recreation Reserve	Provides a safe off street walkway connection to existing footpath infrastructure	Ultima	1	3	1	1.66

Criticality matrix

Road type	Score	Key Facilities	Score	AADT	Score
Arterial / Link	5	Hospitals / Schools / CBD	5	U5000+	5
Collector	3	Community Centre / Oval / Playground	3	U1000-4999	4
Access	1	Active Transport Strategy / Bus Route	1	U500-999	3
				U500-	1

Notes on criticality matrix

- All traffic data for VicRoads controlled roads are located <https://www.vicroads.vic.gov.au/~media/files/documents/traffic-and-road-use/trafficvolumeinfofeb2017.xls?la=en>
- If road segments have multiple Road Types, highest score is applied
- If road segments have multiple AADT's, highest score is applied

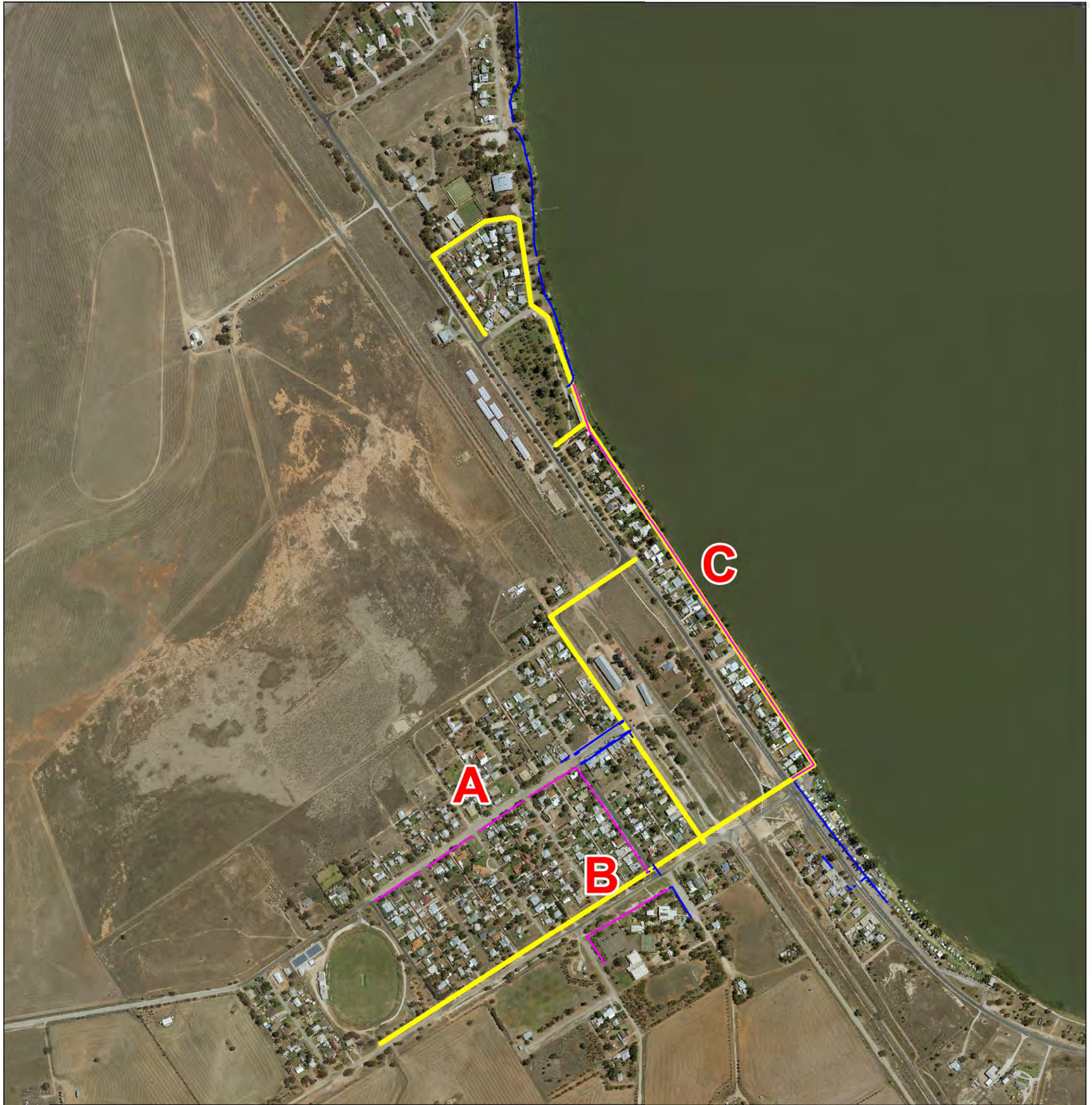
Individual town priority routes

The maps on the following pages indicate priority 1 new footpaths, existing footpaths, active transport priority routes and all potential footpaths for individual towns.

LAKE BOGA FOOTPATHS

Footpath Construction Strategy Legend

- SHRCC Priority Paths
- Existing Footpaths
- Active Transport Strategy

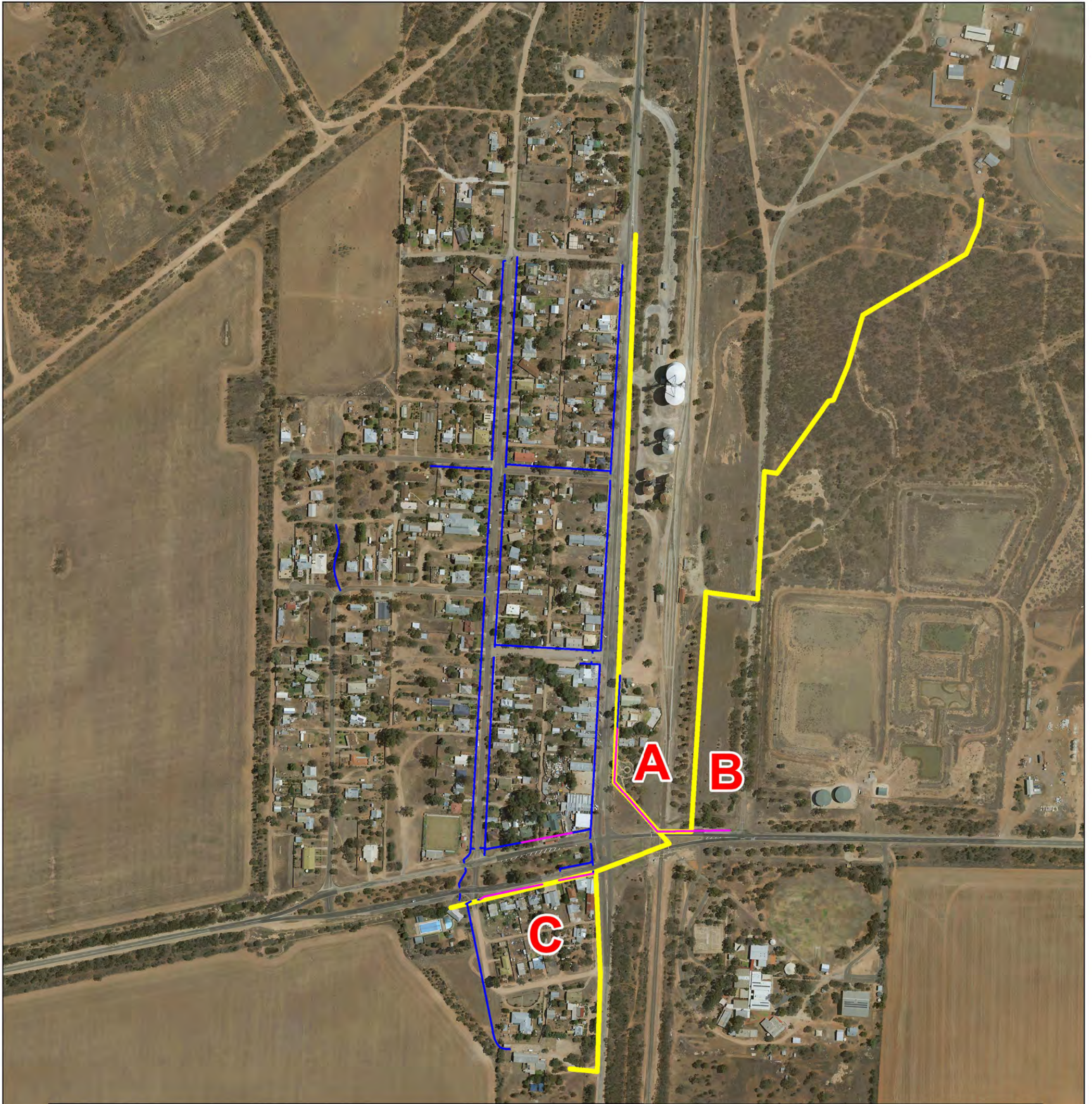


	Description	Other information	Estimated Length (m)	Width (m)	Approx Crossings	Estimated Total Costs
A	from Lake Boga CBD (17 Marraboor St) along southern side of Marraboor St to recreation reserve	Provides a safe off street walkway to Gray Park located opposite 33-35 Marraboor St	990		7	\$ 199,200.00
B	from Lake Boga CBD (17 Marraboor St) along western side of Kerang St to Primary and Pre School finishing approx skate park	Provides a safe off street walkway to Community Centre. Only needs one crossing installed as infrastructure is already present for school crossing	479	1.5	1	\$ 89,220.00
C	from existing footpath near Caravan Park move east towards lake and then north to Lake Boga Yacht club connecting to existing network.	Provides a safe off street walkway across front of Lake Boga. Continue existing walking path	958		0	\$ 172,440.00

MANANGATANG FOOTPATHS

Footpath Construction Strategy Legend

- SHRCC Priority Paths
- Existing Footpaths
- Active Transport Strategy

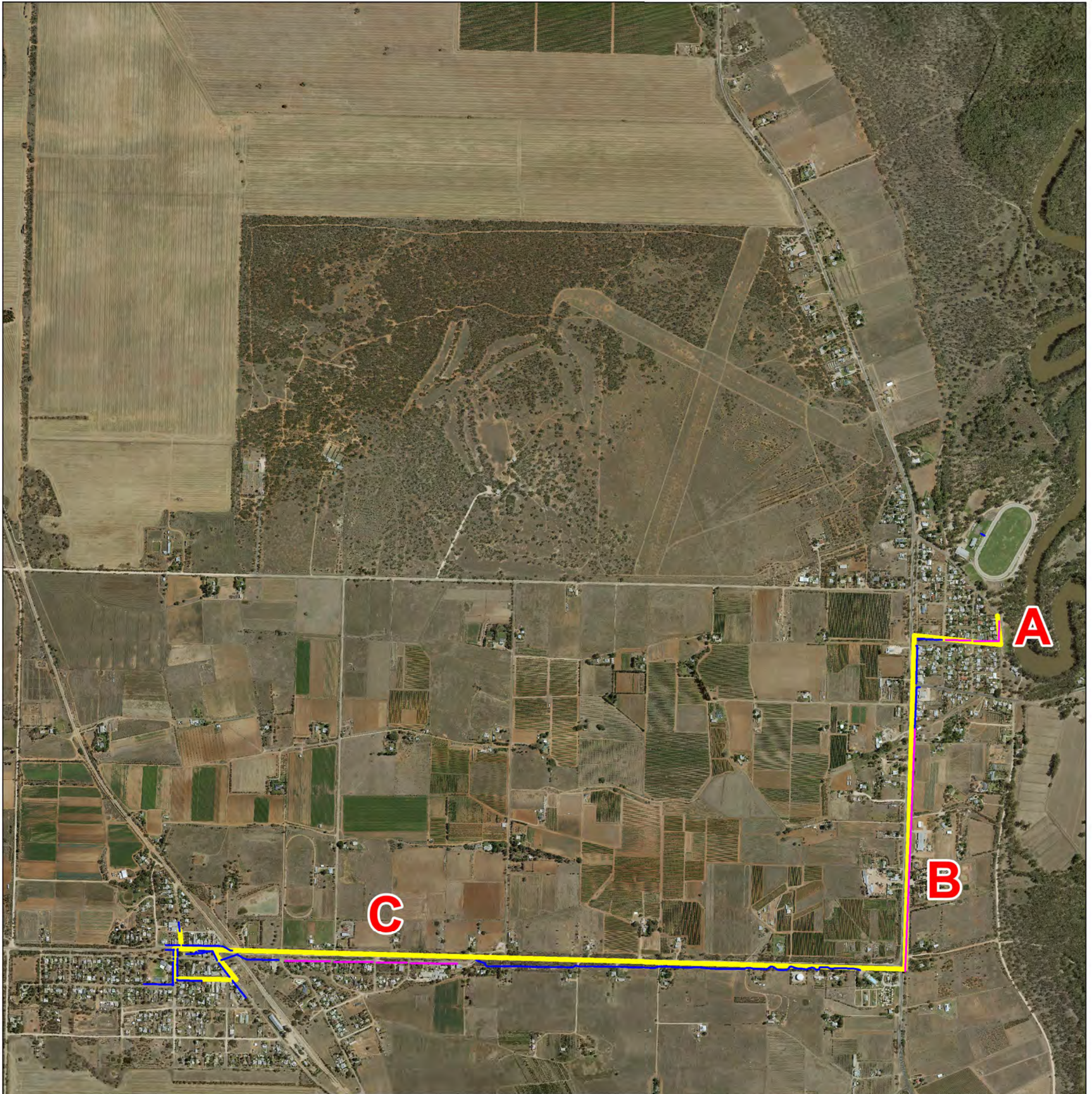


	Description	Other information	Estimated Length (m)	Width (m)	Approx Crossings	Estimated Total Costs
A	Laurundel Street northern side extend existing footpath network from Wattle Street to Pioneer Street	Provides a safe off street to existing footpath network	63	1.5	0	\$ 11,340.00
B	from rail crossing east to Recreation Reserve entrance	Provides an additional safe rail crossing	139		1	\$ 28,020.00
C	Laurundel Street southern side extend existing footpath network from Wattle Street to swimming pool	Provides a safe off street to existing footpath network	132		0	\$ 23,760.00

NYAH-NYAH WEST FOOTPATHS

Footpath Construction Strategy Legend

- SHRCC Priority Paths
- Existing Footpaths
- Active Transport Strategy

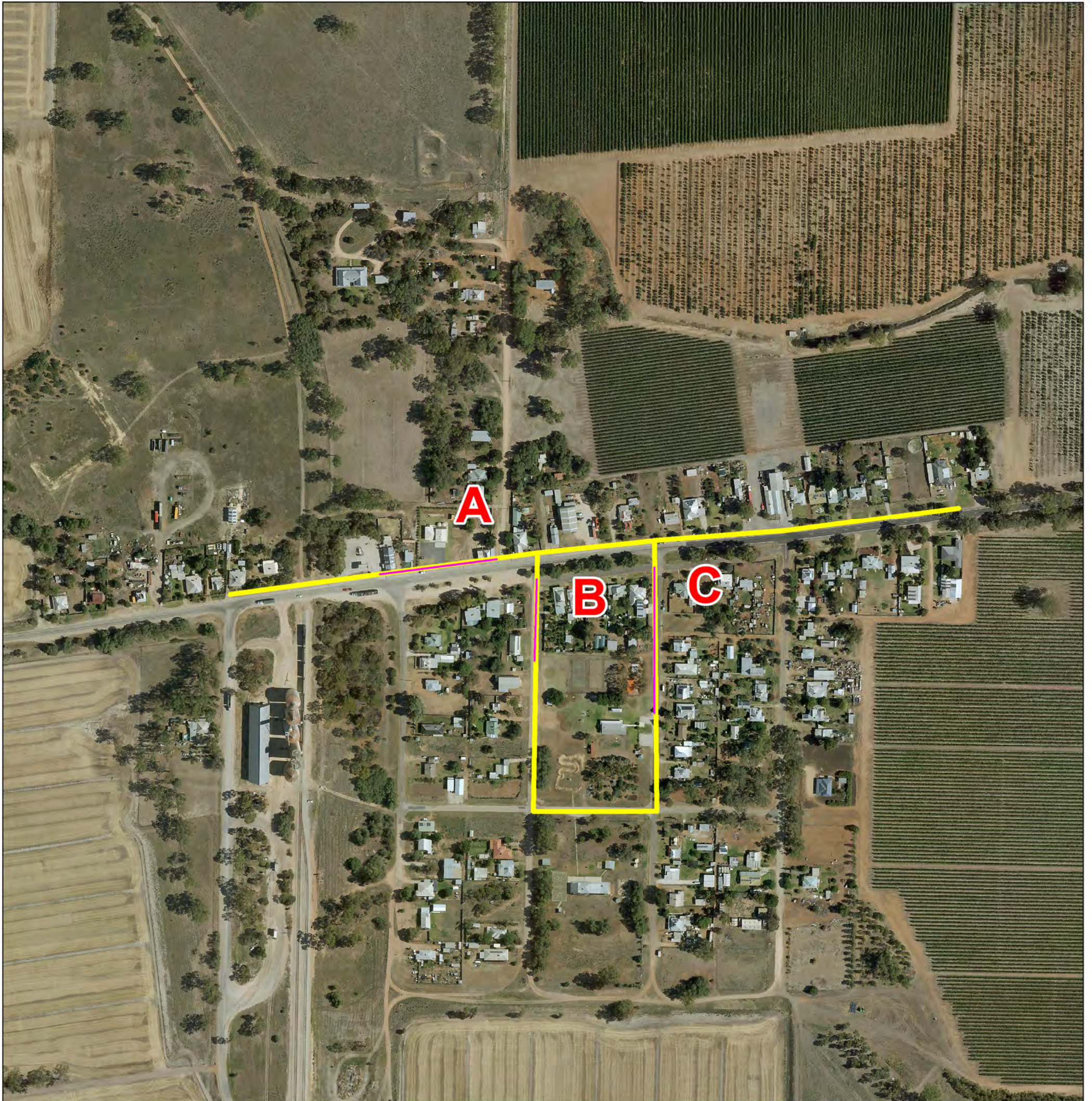


	Description	Other information	Estimated Length (m)	Width (m)	Approx Crossings	Estimated Total Costs
A	from former Nyah school east to River Street then north to Recreation Reserve entrance	Provides a safe off street walkway to AN Lewis Park and access to the river	293	1.5	5	\$ 52,740.00
B	from existing footpath Stradbroke Ave Nyah south along MVH to Two Bays roadhouse	Provides a safe off highway walk way to Caravan park and links up to existing Nyah West walking path	1025		0	\$ 184,500.00
C	Link existing footpath east along Monash Ave from fire station to Ambulance station	Link Jacaranda Lodges to Nyah West CBD	676		7	\$ 142,680.00

PIANGIL FOOTPATHS

Footpath Construction Strategy Legend

- SHRCC Priority Paths
- Existing Footpaths
- Active Transport Strategy

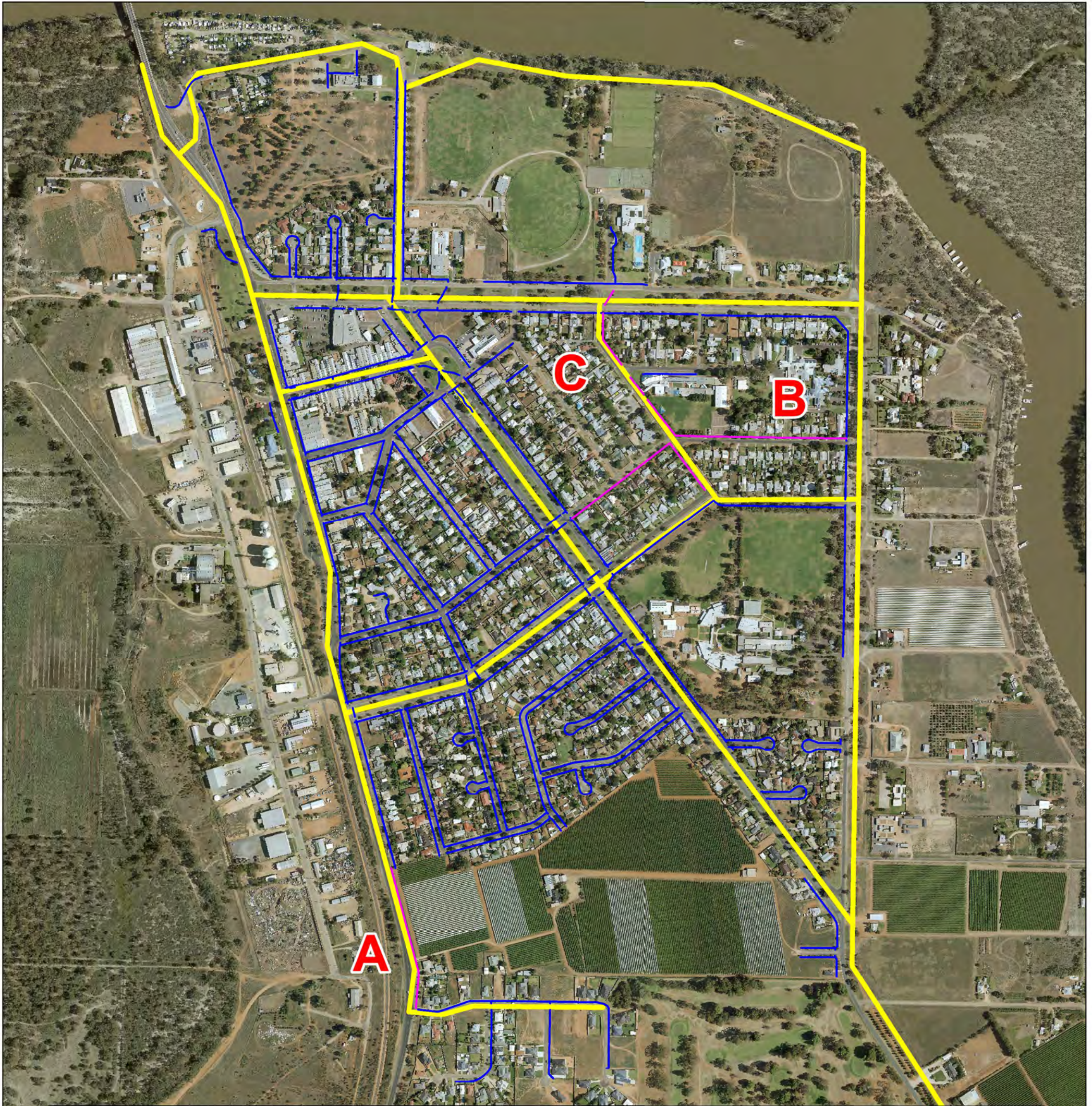


	Description	Other information	Estimated Length (m)	Width (m)	Approx Crossings	Estimated Total Costs
A	East along Murray St from service station to Church St intersection	Provides a safe off street walkway to Post Office and a link to the proposed footpaths to Community Centre and further along Murray St towards the river Murray	114	1.5	1	\$ 20,520.00
B	South along eastern side of Hall St to Memorial Park	Provides a safe off street walk way	76		1	\$ 16,680.00
C	South along western side of Beveridge St to Community Centre.	Provides safe off street walk way to Memorial Park	146		1	\$ 29,280.00

ROBINVALE FOOTPATHS

Footpath Construction Strategy Legend

- SHRCC Priority Paths
- Existing Footpaths
- Active Transport Strategy

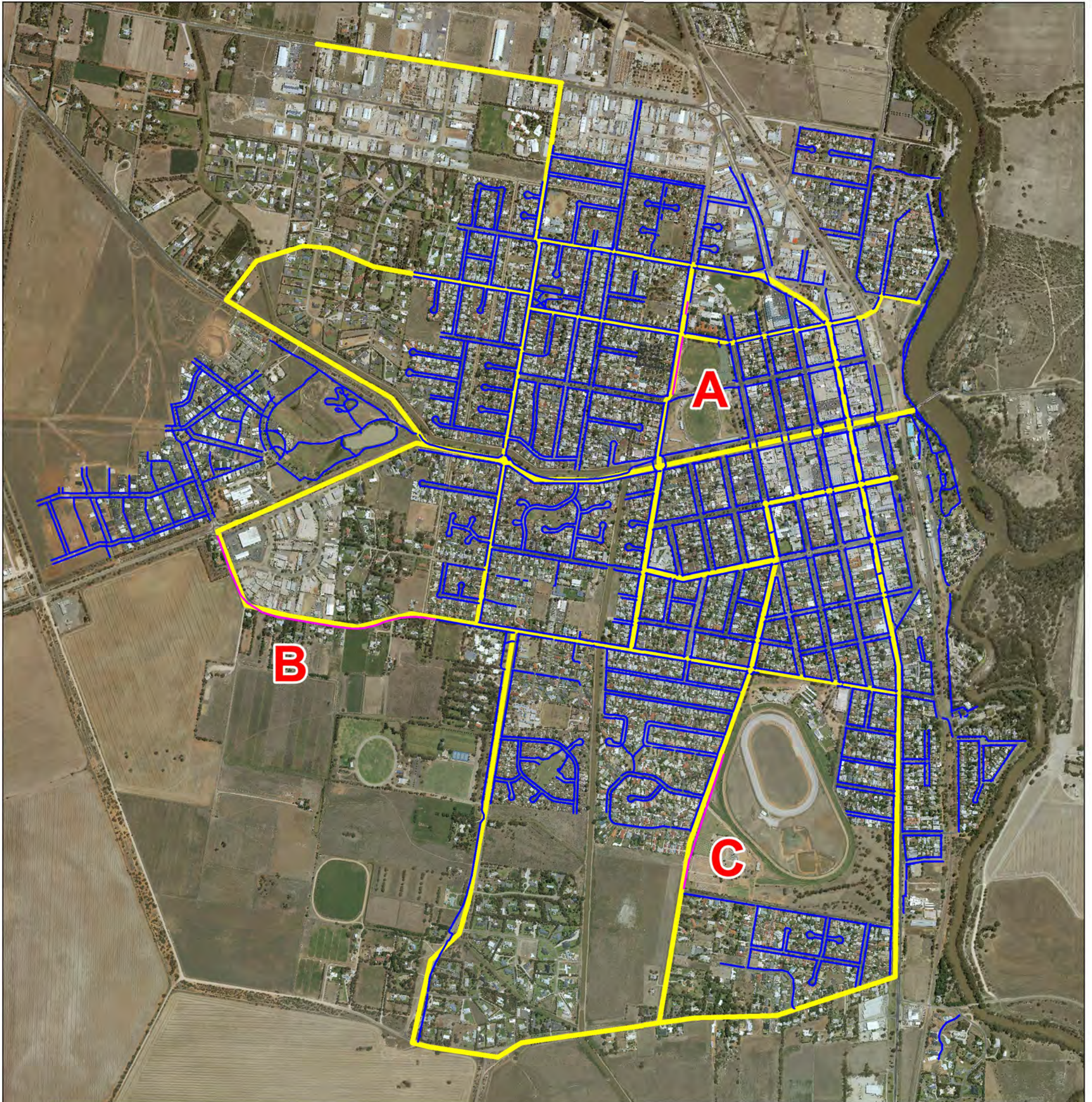


	Description	Other information	Estimated Length (m)	Width (m)	Approx Crossings	Estimated Total Costs
A	North along Bromley Rd from Anniversary drive connecting to existing footpath on Ronald St	Provides a safe off street walkway connection to Robinvale	273		0	\$ 49,140.00
B	North east along Leonora St from George St to St Marys School. Then east along Parke St to Latje Rd	Provides a safe off street walk way.	642	1.5	2	\$ 121,560.00
C	North along Watkin St to Latje Rd crossing to Recreation Reserve	Provides safe off street walk way	294		5	\$ 67,920.00

SWAN HILL FOOTPATHS

Footpath Construction Strategy Legend

- SHRCC Priority Paths
- Existing Footpaths
- Active Transport Strategy



	Description	Other information	Estimated Length (m)	Width (m)	Approx Crossings	Estimated Total Costs
A	North along Stradbroke Avenue from Pritchard St to SH College and fill in gap from crossing to car park	Provides a safe off street walkway connection to existing footpath infrastructure	280	1.5	2	\$ 50,400.00
B	South from roundabout on Boobialla, Swan Hill-Ultima and Gray Sts connecting to SH Primary School	Provides a safe off street walk way.	1077		2	\$ 199,860.00
C	South on western side of Coronation Ave from bus stop at southern entrance of Parkview Dve to Wattie St	Provides safe off street walk way. Creates a walkway around entire Racecourse	563		1	\$ 104,340.00

ULTIMA FOOTPATHS

Footpath Construction Strategy Legend

- SHRCC Priority Paths
- Existing Footpaths
- Active Transport Strategy



	Description	Other information	Estimated Length (m)	Width (m)	Approx Crossings	Estimated Total Costs
A	South from Memorial Park to Hayes St, then west to Recreation Reserve	Provides a safe off street walkway connection to existing footpath infrastructure	694	1.5	8	\$ 148,920.00
B	South on O'Connor St from Hayes St to Cameron St	Provides a safe off street walk way.	206		2	\$ 43,080.00
C	South on O'Connor St from Cameron St to 87m	Provides safe off street walk way for school pick-up drop off	87		1	\$ 18,660.00

WOORINEN SOUTH FOOTPATHS

Footpath Construction Strategy Legend

- SHRCC Priority Paths
- Existing Footpaths
- Active Transport Strategy



	Description	Other information	Estimated Length (m)	Width (m)	Approx Crossings	Estimated Total Costs
A	West from School along Bright St to Community Centre.	Provides a safe off street walkway connection to existing footpath infrastructure	84	1.5	0	\$ 15,120.00
B	East on Alma St from Palmer St to Smith St	Provides a safe off street walkway connection to existing footpath infrastructure	198		2	\$ 41,640.00
C	South on Palmer St from Monday St to Alma St	Provides safe off street walk way for school pick-up drop off. Also enables connection for school crossing	100		2	\$ 24,000.00
D	North on Palmer St from school to Bright St intersection	Provides a safe off street walkway connection to existing footpath infrastructure	99		1	\$ 20,820.00

Related documents/legislation

- Disability Discrimination Act 1992
- Road Traffic Act 1961
- Australian Standard AS/NZS 1428.1, 2009, Design for Access and Mobility Part 1: General Requirements for Access – New Building Work
- Austroads Guide to Road Design – Part 6A: Pedestrian and Cyclist Paths
- Infrastructure Design Manual (IDM)
- Australian Standard AS/NZS1428.4, 2009 Design for Access and Mobility – Means to Assist the Orientation of People with Vision Impairment – Tactile Ground Surface Indicators
- Traffic Engineering Manual Volume 1 – Section 4.9
- Australian Standard AS/NZS 2890.1, 2009 Parking Facilities – Part 1 Offstreet Carparking
- Australian Standard AS/NZS 1742, 2014 Manual of uniform control traffic devices
- Australian Standards AS/NZS 2890, 2009 Parking Facilities
- Swan Hill Rural City Council Active Transport Strategy 2014-2034