



GEORGE TOWN PATHWAY NETWORK PLAN

GEORGE TOWN COUNCIL
MARCH 2025

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George Town Pathway Network Plan

GEORGE TOWN COUNCIL

- Final
- May 2025

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1. Background

George Town Council has requested a review of the pathway network at George Town to provide for development consistent with the George Town Area Structure Plan (GTASP) - July 2021.

Accordingly, the GTASP has been referenced as a foundation for development of a suitable pathway network plan and in particular the proposed recommendations on actions and planning principles presented for pedestrians and cyclists, see Figure 1 and Appendix C.

Figure 1 Road Infrastructure recommendations – Extract from GTASP

Recommended Actions	
<i>Macquarie Street Entrance</i>	
MN1. Devise a concept plan for Macquarie Street entrance from Main Road to improve wayfinding and entry to the town centre. The entry point should be easily identifiable through an art installation and landscaping.	
<i>Alternative Access</i>	
MN2. Investigate the construction of a new road south of Victoria Street to provide a secondary vehicle route for residential traffic and commercial vehicles from Franklin Street to travel to Main Road.	
<i>Pedestrian Crossings</i>	
MN3. Investigate and identify a minimum of six additional pedestrian crossings across Low Head Road, Goulburn Street and Main Road at locations that connect with street junctions and the pedestrian and cycling network. Pedestrian crossings are to be marked and signed.	
<i>Bicycle Lane</i>	
MN4. On the road, bicycle lanes to be marked where off-road paths are not possible to correspond with identified routes. Community consultation to determine the path to be marked.	
<i>Gaps in Road Network</i>	
MN5. Construct permeable streets addressing gaps in the movement network.	
<i>Street Trees</i>	
MN6. Continue street tree planting incrementally along the primary walking and cycling route (where the road reserve has capacity) of George Town to improve the greening of the SP Area.	
MN7. Revise the road design standards to incorporate sufficient width to plant street trees as part of new development.	
<i>Bus Stops</i>	
MN8. Investigate where to locate additional bus stop locations adjacent to pedestrian and cycle linkages. Additional stops will become available as the population increases.	
Planning Principles	
P11. Main Road, Goulburn Street, Low Head Road remain the primary arterial road for vehicle movements to Bellbuoy Beach Road, Low Head, the East Tamar Highway and Bridport Road.	
P12. Provide an alternative route for vehicle movements originating from industrial activities and residential uses via Victoria Street to reduce traffic volumes and improve safety adjacent to the school.	
P13. New subdivision serviced to facilitate a grid road pattern and cul-de-sac not supported unless it furthers connection and linkages to the walking network.	
P14. Provide pedestrian crossings over the primary arterial road, near public transport stops, school & linkages.	
P15. Street Trees planted to green and define the streetscape.	
P16. Improved convenience for residents to access public transportation by increasing the intervals of bus stops.	

Road Infrastructure

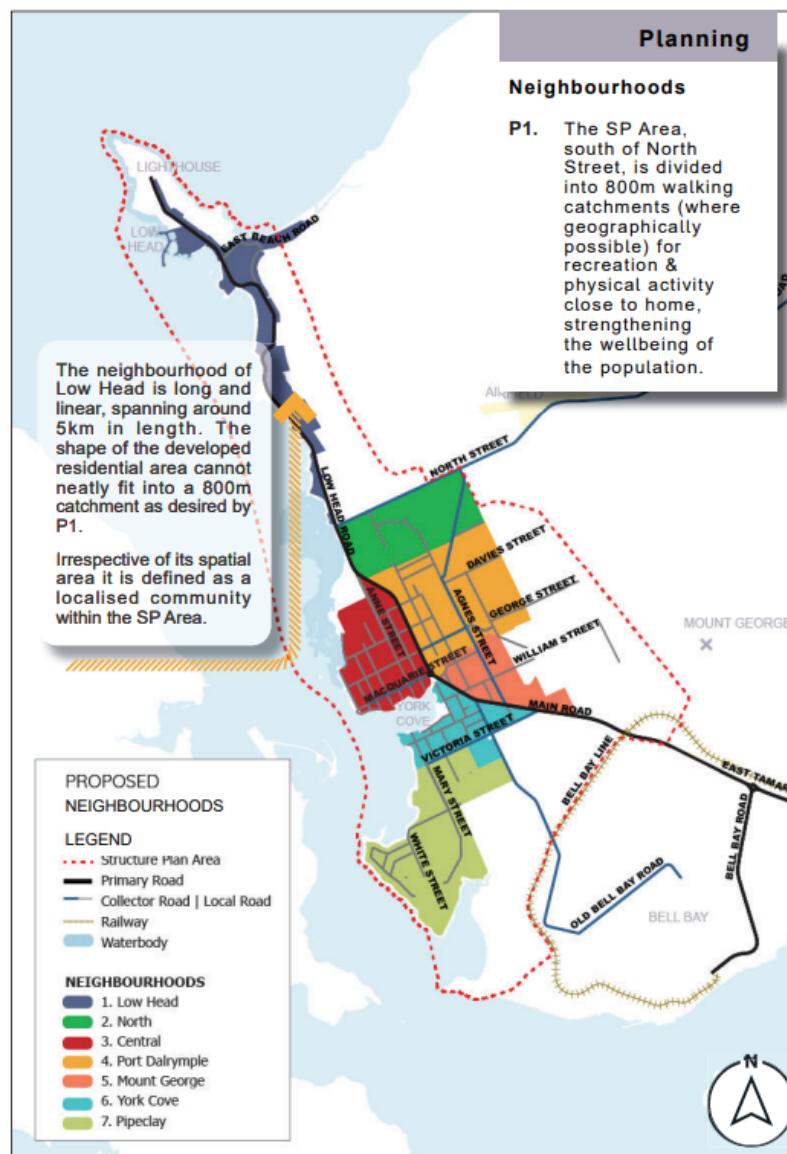
Source: George Town Area Structure Plan (July 2021)

In this report the pathway network in the George Town area has been assessed in three regions:

- Low Head (North of North Road)
- Central George Town (South of North Road to North of Main Road)
- South George Town (Southeast of Main Road to Old Bell Bay Road)

These regions correlate with the Neighbourhoods referenced in the GTASP, see Figure 2 and Appendix A.

Figure 2 Neighbourhoods – Extract from GTASP



Source: George Town Area Structure Plan (July 2021)

2. References

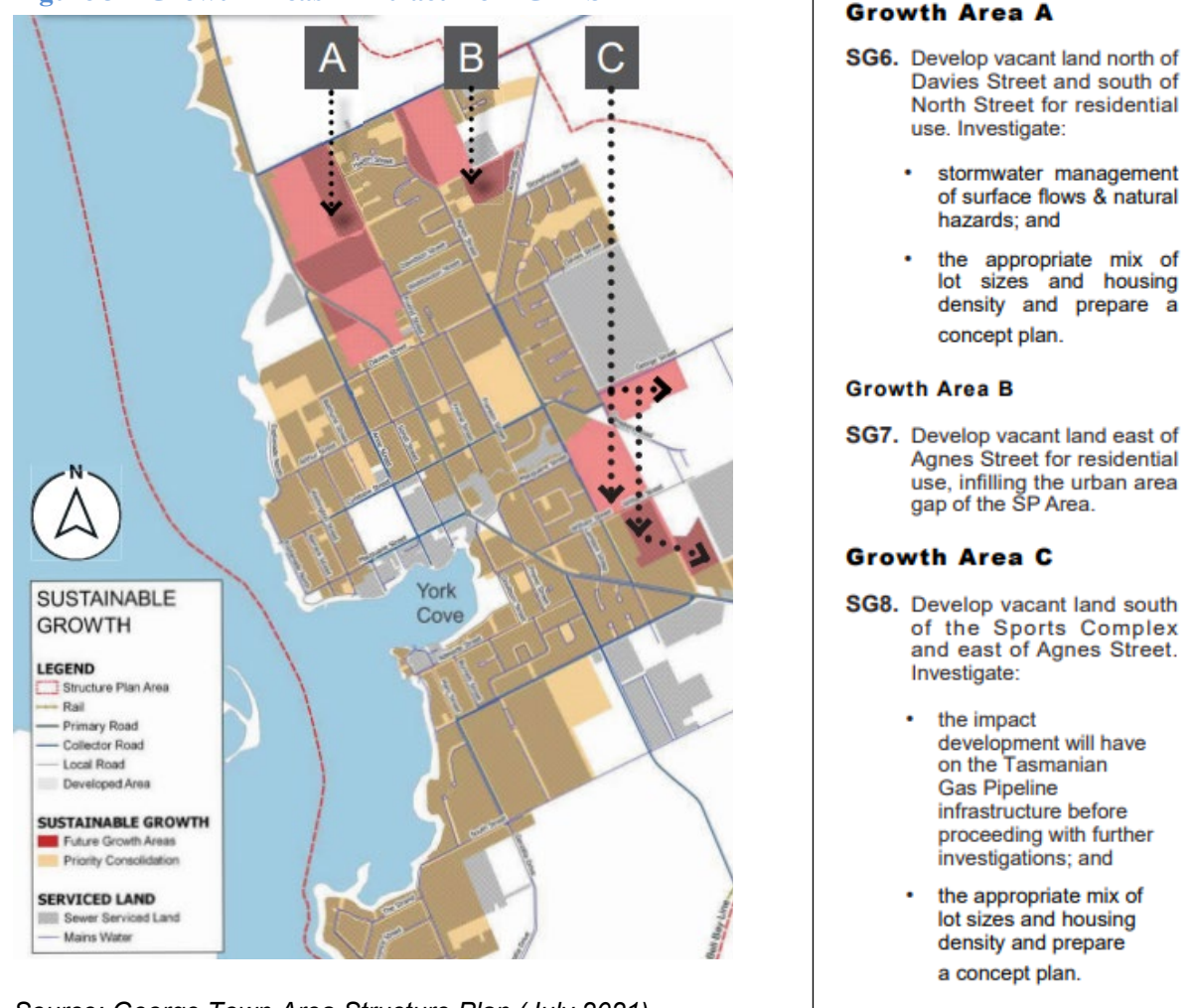
2.1 Technical References

- Traffic Engineering and Management by K.W. Ogden and S.Y. Taylor (TE&M)
- Austroads Safe Systems Assessment Framework (Research Report AP-R509-16)
- Austroads Guide to Road Design - Part 6A: Pedestrian and Cyclist Paths

2.2 George Town Area Structural Plan (July 2021)

The GTASP provides helpful input on identified sustainable growth areas that need to be considered in the development of a pathway network plan. These growth areas are shown in Figure 3 which is an extract from the GTASP, also see Appendix C.

Figure 3 – Growth Areas – Extract from GTASP



Source: George Town Area Structure Plan (July 2021)



2.3 Implications for Pathway Network Plan

2.3.1 Growth Areas A & B

- Growing importance of North, Friend and Agnes Street paths
- Growing function of the Primary Trail

2.3.2 Growth Area C

- Growing importance of Agnes and Cimitiere Street

3. George Town Pathways

This section of the report considers key existing pathways.

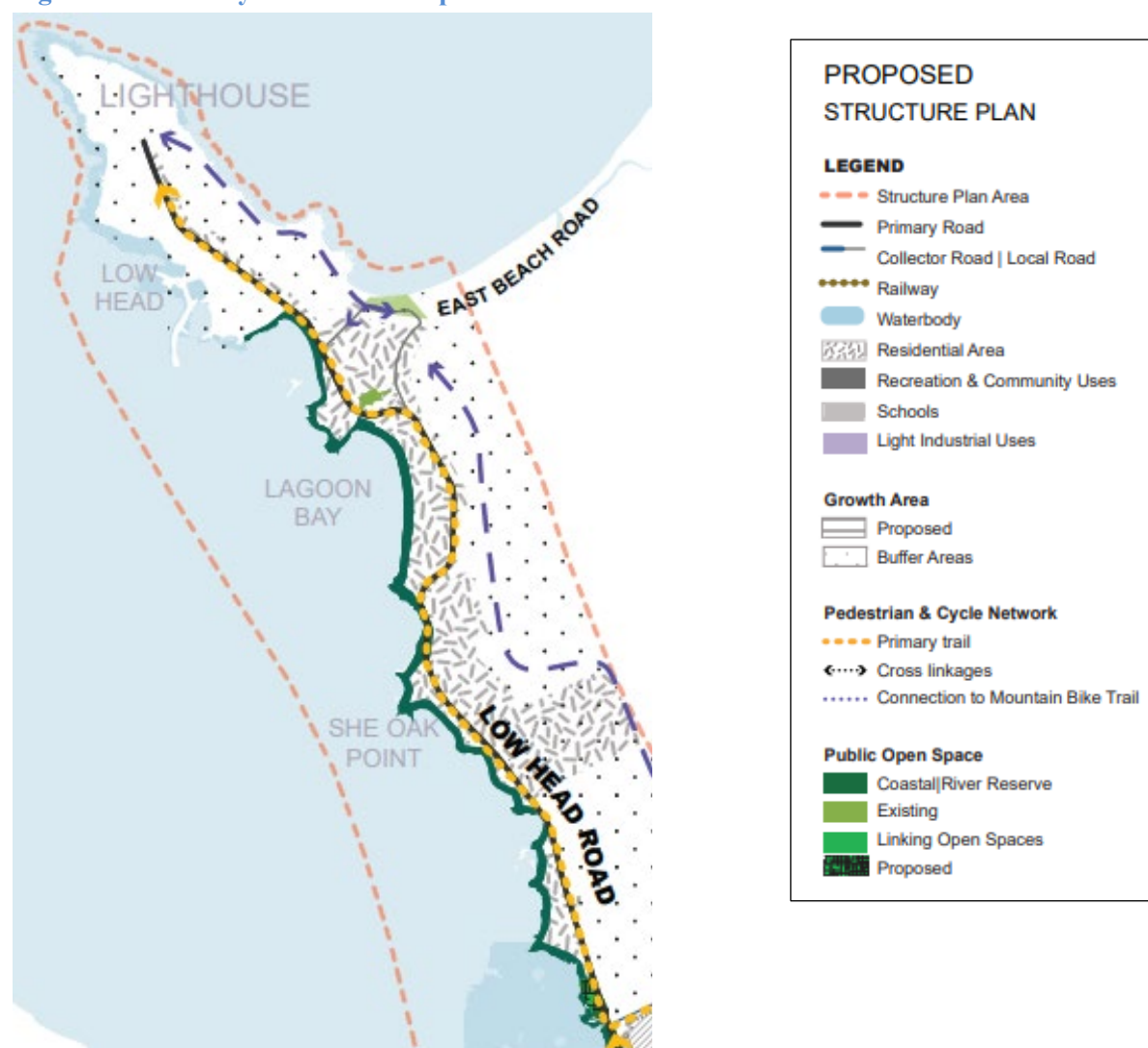
3.1 Low Head Pathways

Low Head pathways considered in this report are the Primary Trail which extends from Low Head Light House to Port Dalrymple and the other most important general-purpose trails.

3.1.1 Primary Trail

The GTASP emphasises the need for a Primary Trail between Low Head Lighthouse to North Street, see Figure 4.

Figure 4 – Primary Trail from Proposed Structure Plan – Low Head



Source: George Town Area Structure Plan (July 2021)

3.1.2 General purpose pathways

The road network at Low Head is minimal so few footpaths have been required. East Beach and Lagoon Beach are popular recreational destinations and there is residential development potential development in these areas. Currently no pedestrian facilities exist.

East Beach Shared Way

There is potential to provide Shared Way facilities for pedestrian and cyclist access. Figure 5 shows potential facilities.

Figure 5 – Potential East Beach Pathway



Source: The List, DPIPWE

Lagoon Beach Shared Way

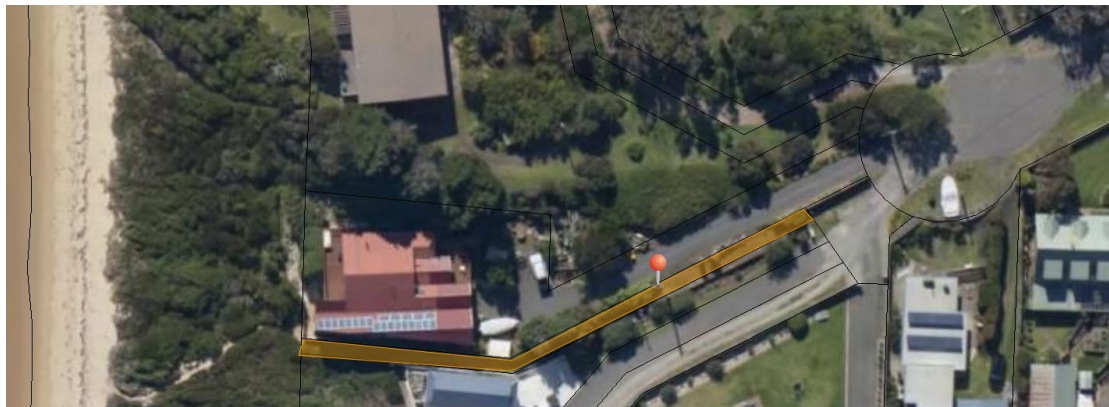
There is potential to provide a circuit of Lagoon Beach by installing a pedestrian pathway at the West end of Perrin Drive. Figures 6.1 to 6.3 show potential pathway linkage.

Figure 6.1 – Lagoon Beach



Source: *The List*, DPIPWE

Figure 6.2 – Potential Lagoon Beach Pathway link



Source: *The List*, DPIPWE

Figure 6.3 – Potential Lagoon Beach Pathway link



Source: *The List*, DPIPWE

3.2 Central George Town Pathways

Central George Town pathways considered in this report are the Primary Trail which extends across George Town from Macquarie Street to North Street and the other most important general-purpose trails.

3.2.1 Primary Trail

The GTASP emphasises the need for a Primary Trail circuit of Central George Town, see Figure 7.

Figure 7 – Primary Trail from Proposed Structure Plan – George Town



Source: George Town Area Structure Plan (July 2021)

Primary Trail construction is almost complete between North Street and the Northern end of Esplanade North with a 60m section remaining to be built. This section of trail consists of 2.5m wide reinforced concrete.



3.2.2 General purpose pathways

Within central George Town the following pathway observations were made.

Goulburn Street

Goulburn Street has a Sub Arterial function through George Town and as such is a relatively busy road. There is an unusual arrangement of pedestrian refuge islands on the Goulburn Street approaches to the Arthur Street intersection, see Figure 8. The default junction standard for the situation involves Basic Right turn facilities on the priority road approaches. In this case it appears priority has been given to pedestrians crossing Goulburn Street being on the desire line to Port Dalrymple School. However, the footpaths and access ramps do not align with the pedestrian refuge islands creating a potentially confusing situation for pedestrians crossing the road and turning traffic. The pedestrian refuge islands could be better connected to the nearby footpaths with standard accessible ramps.

Figure 8 – Aerial view of Goulburn / Arthur Street intersection



Source: *The List*, DPIPWE

Pedestrian refuge islands are not linked or aligned to the footpaths on Arthur Street.



Anne Street

The Low Head Road / Anne Street junction provides direct access to the George Town CBD and the most direct connection between the CBD and the North Street growth areas, see Figure 3. Footpath is provided along the West side of Low Head Road from Anne Street through to North Street.

Anne Street footpath terminates before the Low Head Road junction. Accordingly, there is a missing link between George Town CBD and North Street. The missing link at the Northern end of Anne Street is some 100m in length.

Friend Street

Friend Street has footpath on the RHS northbound which terminates some 60m South of the Junction with North Street, see Figure 9.

Figure 9 – Friend Street approach North Street

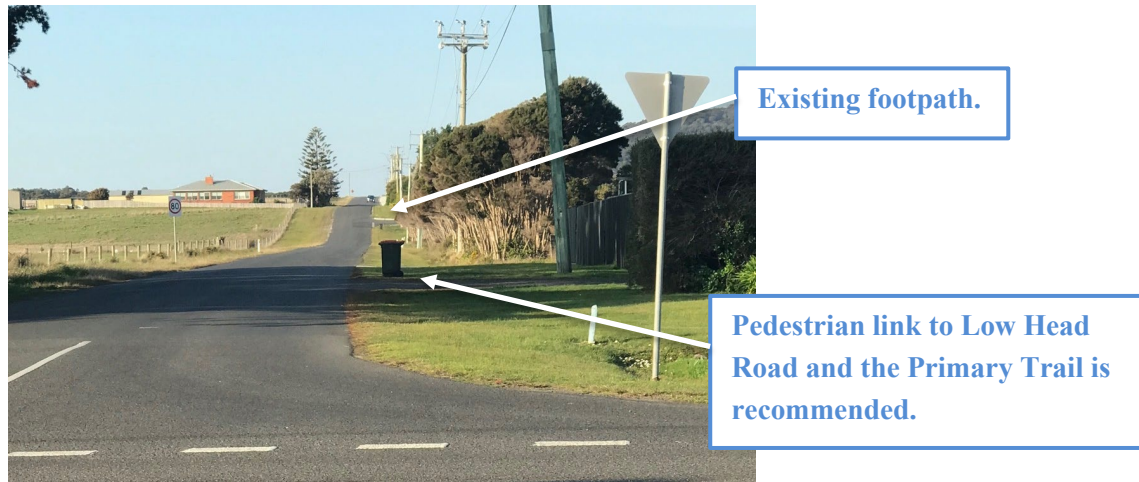


Footpath extension to North Street is recommended.

North Street

North St is narrow but generally straight with footpath on the South side, extending some 220m West of Agnes Street junction as can be seen in the distance in Figure 10.

Figure 10 – Looking East along North Street from Low Head Road.



Agnes Street

Agnes Street is wide and generally straight with footpaths typically both sides, see Figure 11, where there is a Crossing for Port Dalrymple School which is a strong pedestrian traffic generator.

Agnes Street between the Parish Crescent junctions, see Figure 12, however has no footpath along the West side. Given that Agnes Street will support development of Growth Area B and is within 800m of Port Dalrymple School, pedestrian connectivity is recommended.

Figure 11 – Agnes St looking South beside Port Dalrymple School.



Figure 12 – Agnes St between Parish Crescent Junctions.



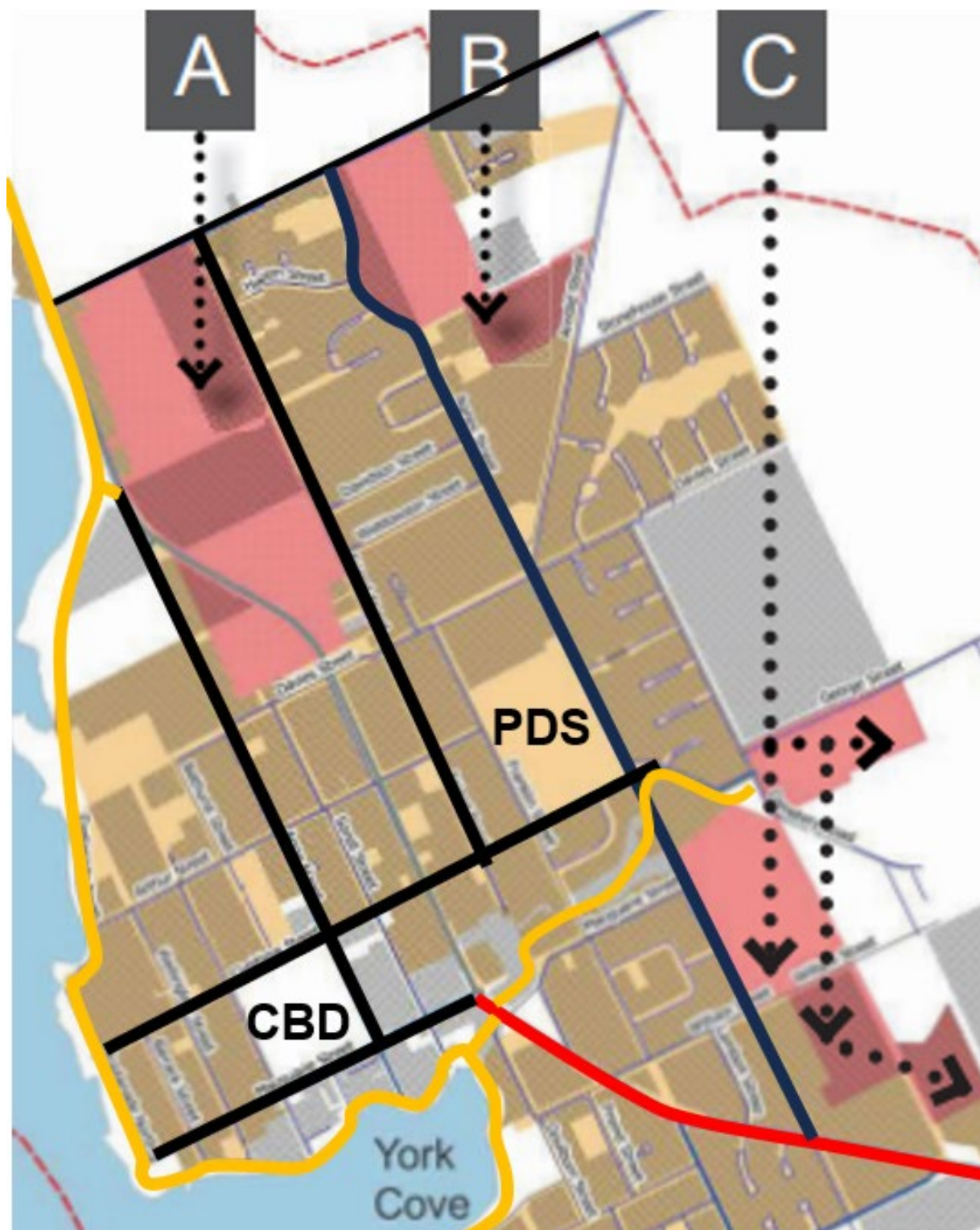
Cimitiere Street

Cimitiere Street directly links Agnes Street and Port Dalrymple School to the George Town CBD via Anne Street and as such is a pedestrian desire line. Figure 13 shows the Cimitiere Street link which is some 800m in length with footpath both sides

Figure 13 – Aerial View of Cimitiere Street (Anne Street to Agnes Street)



Figure 14 – Key Central George Town Pathways relative to Growth Areas A,B & C



Key pathways for pedestrian accessibility to Port Dalrymple School, George Town CBD and identified growth areas.



Macquarie Street

Macquarie Street caters well for pedestrians with wide footpaths both sides, see Figure 15 and pedestrian facilities for crossing the road with Wombat Crossings. A roundabout fitted with pedestrian refuge islands on the approach legs at the Macquarie/Anne Street intersection would improve pedestrian safety for crossing Macquarie Street.

Figure 15 – Wombat Pedestrian Crossing midblock on Macquarie Street



Pedestrians have no formal facilities for crossing Macquarie Street between Anne & Sorell Streets.

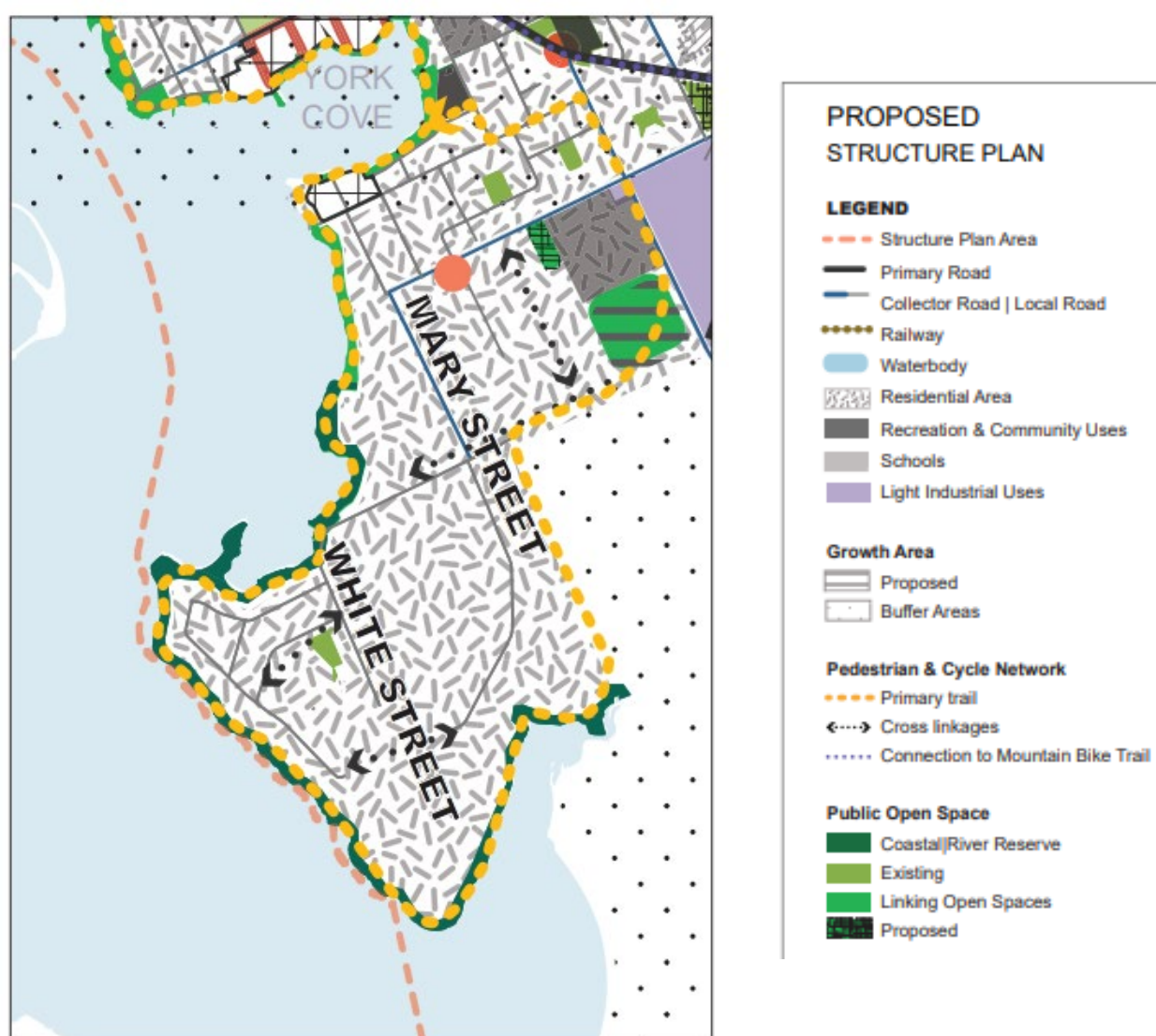
3.3 South George Town Pathways

South George Town pathways considered in this report are the Primary Trail which extend South from Macquarie Street to the Southern end of Tamar Avenue - Gerzalia Drive and the other most important general-purpose trails.

3.3.1 Primary Trail

The GTASP shows a primary trail South George Town, see Figure 16. The existing trail varies widely in standard with much of the trail grassed, see Figure 17 or unmade.

Figure 16 – Primary Trail from Proposed Structure Plan – South George Town



Source: George Town Area Structure Plan (July 2021)

Figure 17 – Looking West from the White Street Bend



Typical nature of the Primary Trail South of the York Cove Marina, which is informal, consisting of pedestrian friendly grassed and mowed open

3.3.2 General purpose pathways

Main Road

Main Road and Goulburn Street together with Low Head Road constitute the North - South Sub Arterial spine through central George Town. Main Road consists of the following sections:

- Mount George Road to Pembroke Street: No footpaths either side
- Pembroke Street to Victoria Street: No footpaths either side
- Victoria Street to Agnes Street: No footpaths either side.
- Agnes Street to Macquarie Street: Footpaths both sides.

Ultimately the Pembroke to Agnes Street link should have footpath both sides which would potentially link with South Street.

South Street

South Street consists of the following sections:

- White Street to Mary Street: Footpaths both sides.
- Mary Street to #52 South Street: No footpaths, see Figure 18
- #52 South Street to Franklin Street: Unmade
- Franklin Street to Thompson Avenue: No footpaths, see Figure 19
- Thompson Avenue to Main Road (opposite Pembroke St.): Unmade.

With ultimate development of South Street, the Mary to Main Road section should have footpath at least one side.



Figure 18 – Aerial view of South Street East of Mary Street



Figure 19 – Aerial view of South Street East of Franklin Street





Tamar Avenue – White Street – Gerzalia Drive link

The opportunity exists as part of subdivision development to provide pathways for pedestrian and bicyclists, see Figure 20 which could be linked to an eventual Primary Trail as proposed on the GTASP.

Figure 20 – Aerial View of Tamar Avenue – White Street – Gerzalia Drive interface





4. Objectives and Methodology

4.1 General Objectives for George Town

General Pathway Guidelines are attached in Appendix B. Other objectives include:

- **Development of land use capacity of the area**
 - Consistent with TPS and potential rezoning opportunities
 - Consideration of ultimate development needs of the whole area.
 - Respond to topography & environmental constraints
- **Provision of cost-effective transport infrastructure to support development**
 - Appropriate functional road hierarchy for cost effective development.
 - Appropriate use of traffic management facilities
- **Efficient access**
 - Multimodal access and integration with surrounding road network
 - Provide for pedestrians and cyclists
 - Appropriate connections with major traffic generating sites e.g. residential areas, educational facilities (schools) and commercial centres (shopping)
- **Integration**
 - Respond to constraints (brownfield areas) and opportunities (greenfield areas) to achieve the best integration possible for the situation.

4.2 Specific Objectives for George Town

Modern Pathway Network Guidelines are attached in Appendix D.

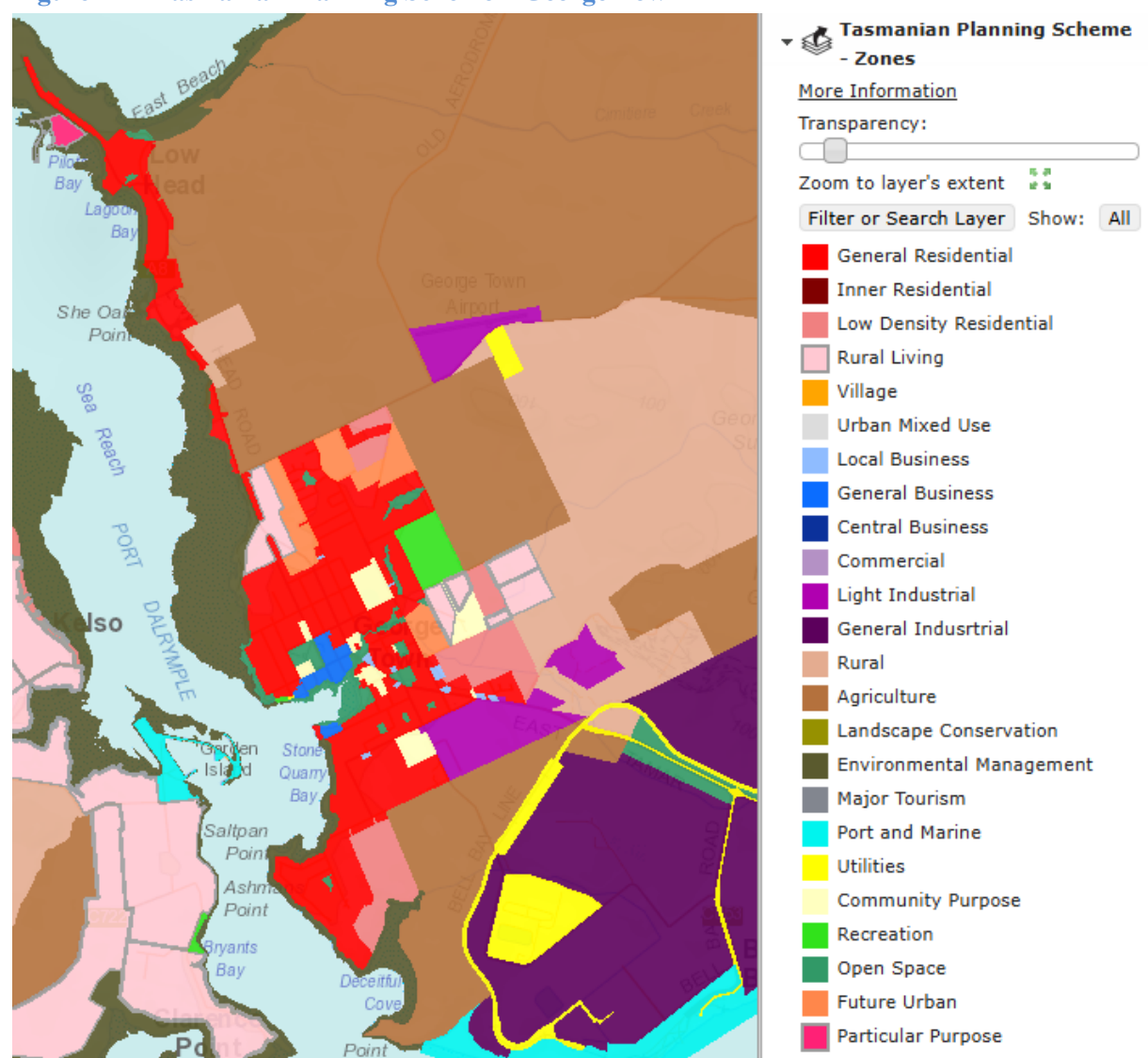
Pathway Network Objectives for George Town are attached in Appendix E.

Specific Pathway Network Strategies for George Town are attached in Appendix F.

5. Tas. Planning Scheme – George Town

Figure 21 shows the relevant TPS land use zoning within the study area. There is abundant land that could be rezoned subject to demand which could impact the road network plan.

Figure 21 – Tasmanian Planning Scheme – George Town



Source: *The List*, DPIPWE

6. 2024 Pathway Operation

This section provides a snapshot of existing characteristics of the road network

6.1 Northeast Tasmania growth rates

From review of development in other towns within Northeast Tasmania there is evidence of the following growth rates:

- Population growth: - 2.1%
- Dwellings growth: 4.0%
- Traffic (vpd): around 1.0%

6.2 George Town and Low Head growth rates

Population data provide evidence for the following growth rates at George Town:

- Population growth: - 2.14%, see Figure 22.
- Traffic (vpd): up to 1.0%, inferred.

Figure 22– Population Data – George Town Urban Area

Population		
George Town Structure Plan Area	4740 people	
George Town Municipality	6764 people	7117 people 2020 Australian Bureau of Statistics, Estimated Resident Population
George Town Urban Area	90% of Structure Plan Area	Current Growth Rate: 2.14% in 2020 for the municipality .
Low Head Locality	10% of Structure Plan Area	Population target 10,000 for the municipality. 75% population in SP Area.
Source: Australian Bureau of Statistics, Community Profile 2016		

Source: George Town Area Structure Plan July 2021

6.3 Crash Data as an indicator of existing road network safety

Generally, the reported crash history provides evidence that the road network is operating relatively safely and as expected for the level of traffic exposure. All the pedestrian and bicycle crash data collated is summarised in Figure 23.

The crash data indicates some pedestrian crashes in Macquarie Street. This makes sense being the busiest part of the road / pathway network in terms of vehicular and pedestrian activity.

There is no clear pedestrian crash propensity however by crash type.

It is considered that facilities that help pedestrians to safely cross the road would be beneficial between Anne Street and Main Road which is the busiest section of road in the network for vehicles and pedestrians.

Figure 23– 10 Year Reported Crash History Summary for Bicyclists & Pedestrians

Crash Id	Location	Date	Time	Crash Type	Severity	Light	Speed Limit	Units
1613118	Anne St	17 Mar 2016	12:00 pm	147 - Emerging	First Aid	Day	050	BC;LV
2068602	Cimitiere / Sorell St Int.	12 July 2017	12:40 pm	110 - Cross traffic	Serious	Day	050	BC;LV
50604779	Cimitiere / Friend St. Int.	10 Mar 2020	02:49 pm	110 - Cross traffic	Serious	Day	050	BC;LV
49687191	Goulburn / Davies S. Int.	28 Nov 2018	06:30 pm	110 - Cross traffic	First Aid	Day	060	BC;LV
52257095	Goulburn St.	10 Jan 2024	06:35 pm	149 Other maneuvering	PDO	Day	060	BC;LV
49687191	Low Head / Davies St. Int.	28 Nov 2018	06:30 pm	110 - Cross traffic	First Aid	Day	060	BC;LV
530750	Macquarie St.	21 Feb 2015	11:54 am	101 - Emerging	Serious	Day	050	LV;Ped
48819198	Macquarie St.	05 Jan 2018	11:07 am	100 - Near side	Minor	Day	050	LV;Ped
51431095	Macquarie St.	19 Oct 2021	01:45 pm	109 - Other pedestrian	PDO	Day	050	LV;Ped
51740117	Macquarie St.	06 Aug 2022	11:51 am	163 - Vehicle door	Minor	Day	050	ES; LV
52193591	Main Rd.	17 Nov 2023	12:30 pm	109 - Other pedestrian	Minor	Day	060	LV;Ped
51704606	Victoria / Franklin St. Int.	15 June 2022	07:10 pm	110 - Cross traffic	First Aid	Night	050	BC;LV

PDO | Prop. Damage Only

ES | Electric Scooter

Ped | Pedestrian

LV | Light Vehicle

HV | Heavy Vehicle

MC | Motorcycle

BC | Bicycle

7. Forecast Traffic Generation

Projected traffic based on assumed compound annual growth rate of 1.0% has been calculated and summarised in Figure 24, for 2034 and 2044.

Except for Main Road and Macquarie Street traffic activity is low for the foreseeable future.

Figure 24 – Projected traffic activity at George Town and Low Head

Authority	Road	Location	Year	AADT (vpd)	Growth Rate	AADT 2034 (vpd)	AADT 2044 (vpd)
GTC	Agnes	North of Arnold Street	2020	840	Compound Annual Growth Rate of 1.0%	970	1070
		South of Arnold Street	2020	1100		1260	1400
		Port Dalrymple School	2023	2372		2650	2900
	Anne	Low Head Road junction #50	2024	860		970	1070
			2022	500			
	Cimitiere			500			
	Goulburn			1500			
	Arnold	Agnes Street junction	2021	1046		760	840
			2020	660			
	Franklin	Main Road Victoria Street	2021	2200		680	750
			2021	600			
	Macquarie	CBD	2019	4715		5400	5940
	Mt George		2022	99		120	130
	Old Aerodrome		2022	240		280	310
	Victoria	East of Edgar Street Main Road junction	2017	1369		1700	1870
			2021	1500		690	760
			2021	600			
	Low Head Road	Pilot Station	2023	419		460	510
		North of Anne St	2024	2000		2200	2420
		South of Anne St	2024	1200		1300	1430
	Main Road	Near Mt George Rd	2023	5314		5800	6400
		North of Victoria Street	2021	2900		3200	3500
		South of Victoria Street	2021	3400		3740	4120
DSG	East Tamar Hwy	Nth of Bell Bay MR Rabt	2017	3997			
			2023	5078			
	Bell Bay MR	East Tamar Hwy Rabt	2017	2201			
			2023	2246			
	Bell Bay MR	South of Mobil Road	2023	1100			
	Bridport MR	East Tamar Hwy Jcn	2014	1135			
			2023	1212			



8. Pathway Network Guidelines

This section considers pathway network guidelines applicable for George Town based on Austroads Guide to Road Design - Part 6A: Pedestrian & Cyclist Paths (2021)

8.1 Traffic and Pathway Networks as a System

See Appendix B.

8.2 Specific Objectives for George Town

Modern Pathway Network Guidelines are attached in Appendix D.

Pathway Network Objectives for George Town are attached in Appendix E.

Specific Pathway Network Strategies for George Town are attached in Appendix F.

8.3 Pathway Network Management

Facilities for pedestrians and cyclists can take various forms and involve links and intersections where exposure to light and heavy vehicles compounds crash risk subject to traffic and pedestrian volumes, speed environment and the type of infrastructure facilities.

According to the Austroads Safety System Assessment approach to risk management crash risk can be estimated from exposure, likelihood and the speed environment of the location.

Pathway types

- Shareways for pedestrians and cyclists for commuter and recreational use.
- Collector Road footpaths provided both sides of the road
- Residential Street footpaths provided one side of the street.
- Pedestrian or bicycle trails linking suburbs and separate from the road network.

At George Town the focus is on:

- Primary Trails (shareways) for recreational / tourist use
- Provision of appropriate footpaths links within proposed and existing residential enclaves.
- Separation of pedestrian and cyclist networks where possible and within new residential subdivisions.



8.4 Design of new urban networks

8.4.1 Crash History

The Department of State Growth is supplied with reported crashes by Tasmania Police. The Department maintains a crash database from the crash reports which is used to monitor road safety, identify problem areas and develop improvement schemes.

8.4.2 Safety in new subdivisions

See Appendix D, E & F for guidelines, objectives and strategies for pedestrian walkability at George Town.

- Distinguish between the arterial, local street and pathway networks as each have different road functions and network needs.
- Preserve sight lines (avoid planting trees and shrubs, building fences and placing infrastructure that limits sight distance) for junctions and accesses.
- Provide safe pedestrian facilities.

8.4.3 Liveability, Safety and Amenity Guidelines

Residential precincts need to be bounded by traffic routes and/or natural barriers.

Cyclist and pedestrian demands should be catered for separately.

To maximise the liveability, safety and amenity of the local area, road and street network layout should be such that:

- A minimum of 60% of lots should abut residential streets with less than 300vpd passing traffic.
- A minimum of 80% of lots should abut residential streets with less than 600 vpd passing traffic.
- A maximum of 5% of single dwelling lots should abut residential streets with between 1,000-2,000 vpd passing traffic.
- A maximum of 1% of single dwelling lots should abut local streets or collectors with less than 3,000 vpd passing traffic, and
- No single dwelling lot should abut a route with more than 3,000 vpd passing traffic.



8.5 Facilities for Pedestrians and Cyclists

The following pedestrian and cyclist facilities are proposed to assist Council in achieving George Town Structure Plan Objectives.

8.5.1 Proposed Primary Shared Trail

The George Town Area Structure Plan outlines the proposed Primary Trail. The Primary Trail is aspirational and a work in progress as follows:

- **Low Head (Light House to North Street)**

This portion of the trail has been formalised with concrete pathway beside Low Head Road. The standard and separation from Low Head Road varies however the facilities provided are characteristically safe and of suitable standard.

- **Central George Town (North Street to Main Road)**

The Western leg of the trail has been recently formalised with 2.5m wide concrete shareway following the edge of the Tamar Estuary between North Street and North Esplanade. Older existing pathway continues South then east to Main Road.

The Eastern and North St. legs are unmade. North St. (Agnes St. to Low Head Rd) is considered a priority subject to timing of the forecast Growth Areas A & B, see Figure 3.

The trail East of Arnold Street is used but is unmade and treatment of this section will grow in priority subject to expected growth areas A, B and C and Mount George biking trails.

- **South George Town (York Creek to South end of Tamar Ave)**

The Western leg of the trail consists of a narrow-sealed footpath from York Creek to the York Cove Marina. South of the Marina the trail is unmade consisting of cleared and mowed ground. Access to the Southern end is overgrown and not accessible from the Southern end of Tamar Avenue along the shoreline of Deceitful Cove.

A cleared but unmade trail exists East of Gerzalia Drive thru to South Street and continues East along the unnamed South Street Road corridor to Franklin Street. Franklin Street has no pathways from the South Street Road corridor to Victoria Street. Footpaths link Victoria Street to York Creek.

8.5.2 Proposed Footpaths

A range of potential footpath links have been identified that are considered a growing priority for formalization.



8.5.3 Proposed Road Crossings

Collector Roads are potential barriers for pedestrians and various options are considered suitable for the situation at George Town, see Appendix F.

- **Roundabouts**

A range of roundabouts are proposed at Central and South George Town for traffic safety and efficiency reasons that also improve permeability for pedestrians.

- **Pedestrian refuge islands**

Some locations have been identified where refuge islands and access ramps are sufficient to cater for pedestrian desire lines.

8.5.4 Provide separate off-road cycling paths or shared use trails

This especially applies in new residential subdivisions or recreational precincts such as beaches.

9. Pathway Network Plans

The following pathway plans and priorities have been identified to support pedestrian and bicycle transport.

9.1 Target Pathways – Low Head

9.1.1 Pathway Plan

The Primary Trail is continuous between North St. and Low Head Lighthouse, see Figure 25

Figure 25 – Target Pathway Network Plan – Low Head



Legend:

- Primary Trail
- Minor Collector Footpaths
- Proposed Paths

9.1.2 Intervention Treatments

Figure 25 shows the Primary Trail. Generally, there is separation provided between the pathway and road which is highly desirable for vulnerable road user safety. It is recommended that as much separation as practically possible be provided between vulnerable road users and the road edge if other pathways are planned. Mitigations include:

- Clearing of vegetation to separate paths from roads as far as practical and keep pathways clear for pedestrian and cyclist use.
- Speed Management e.g reduced speed limit or traffic calming
- Pedestrian / Bicyclist Warning signage



9.1.3 Intervention Justifications

Maintenance of the existing paths is the main priority to ensure pathways are kept clear of overhanging vegetation.

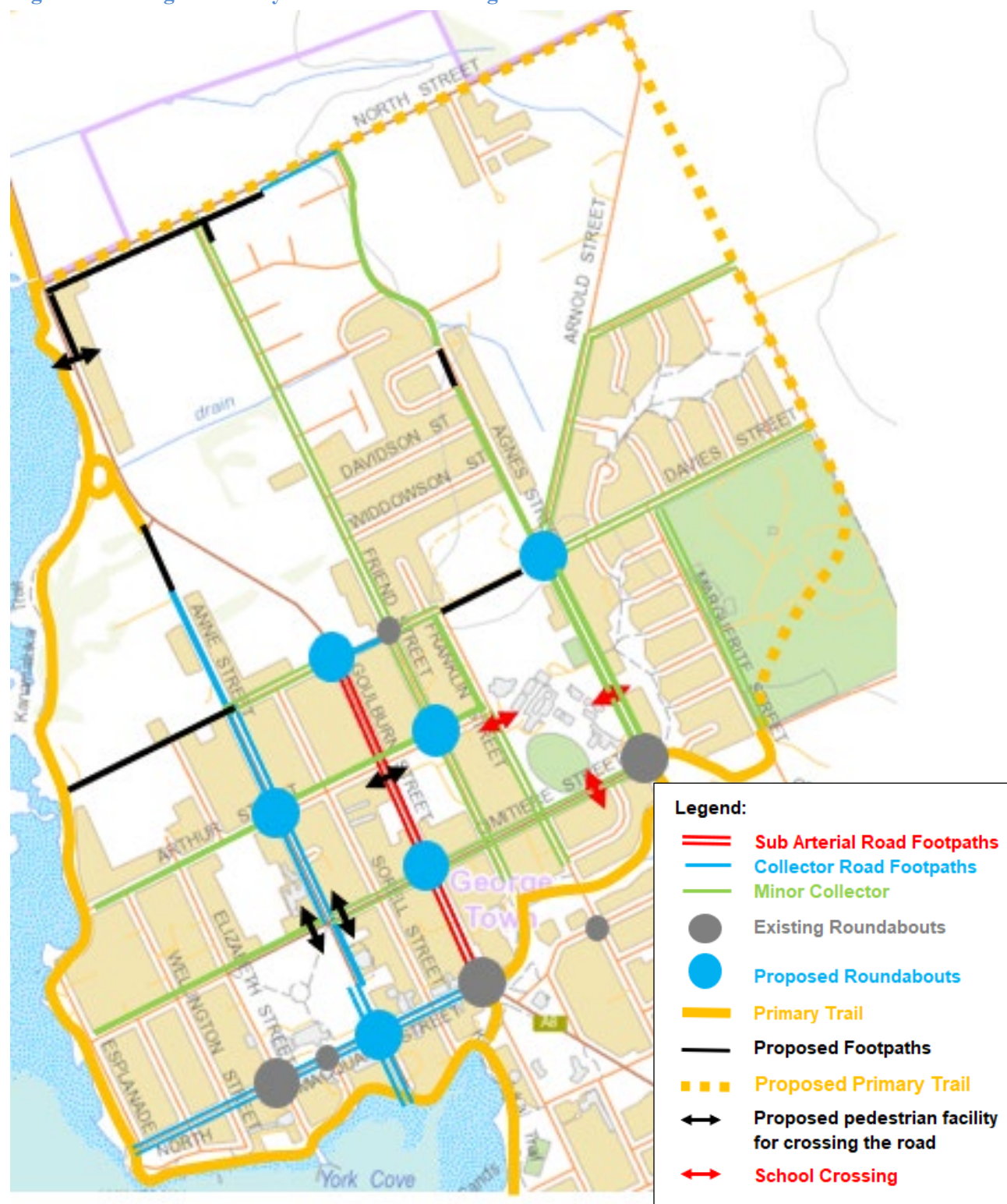
Where paths are beside the road and vegetation encroaches pedestrians can be forced onto the road. Such vegetation should be removed.

9.2 Target Pathways – Central George Town

9.2.1 Pathway Plan

The proposed Pathway Network Plan for Central George Town is shown in Figure 26.

Figure 26 – Target Pathway Plan – Central George Town



9.2.2 Intervention Treatments

The recommended interventions are summarised in Figure 27.

Figure 27 – Recommended interventions for Central George Town

Pedestrian & Cyclist Facilities					
Priority Road	Side Road	Existing 2024	Proposed facilities	Intervention by Year	Priority
George Town					
Low Head Road					
	Sth of North Street	None	50m of footpath & Crossing	2034	7
Goulburn Street					
	Davies	None	Roundabout	2034	6
	Arthur	Adverse Islands	Compliant Islands	2030	2
	Cimitiere	None	Roundabout	2034	9
North Street					
	Southern side	None	475m of footpath	WD	4
Anne Street					
	Northern end	None	100m of footpath	WD	7
	Arthur Street	Simple Int.	Roundabout	2034	10
	Cimitiere Street	Simple Int.	Crossing islands	2027	3
Macquarie Street					
	Anne Street	Simple Int.	Roundabout	2030	1
Davies Street					
	Agnes - Friend	Informal path	240m of footpath	WD	13
	Anne - Esplanade Nth	None	370m of footpath	WD	14
Agnes Street					
	West side (Parish Cres.)	None	80m of footpath	2030	5
	Arnold Street	None	Roundabout	2034	11
Friend Street					
	RHS at North St jcn.	None	40m of footpath	2034	8
Arthur Street					
	Friend Street	Simple int.	Roundabout	2040	12

WD **With Development**



9.2.3 Intervention Justifications

The need for most of the proposed facilities is triggered by development and missing links in the pedestrian network. It is considered that a pedestrian facility for crossing Low Head Road to link North Street to the Primary Trail will become a growing priority. Figures 28 to 31 show existing and future footpath development.

Figure 30 shows a short-term treatment considered suitable for low pedestrian activity levels on the desire line.

Figure 31 shows a long-term concept for a right turn facility incorporating a pedestrian refuge island. A reduced Speed Limit should also be considered as part of the treatment.

Low Head Road / North Street junction

Figure 28 – Low Head Road Southern Approach to North Street.



Figure 29 – North Street (Low Head Road to Agnes Street)

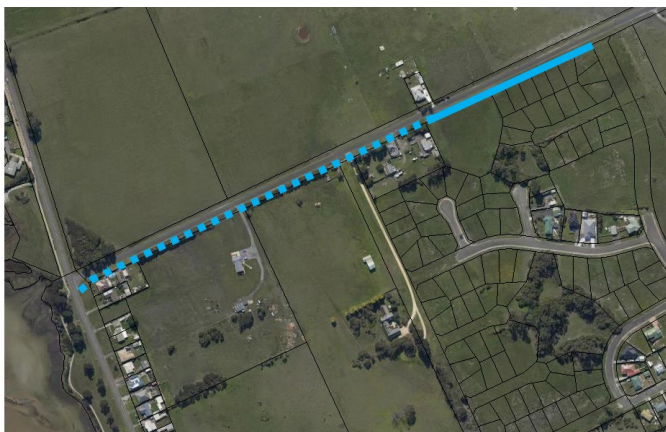


Figure 30 – Low Head Road / North Street junction – Short Term Treatment



Figure 31 – Low Head Road / North Street junction – Long Term Treatment Concept.



This concept provides for future growth areas A and B as well as the Primary Trail development in the GTASP.

A right turn facility would be provided on Low Head Road involving road widening which provides the opportunity to fit a pedestrian refuge island.

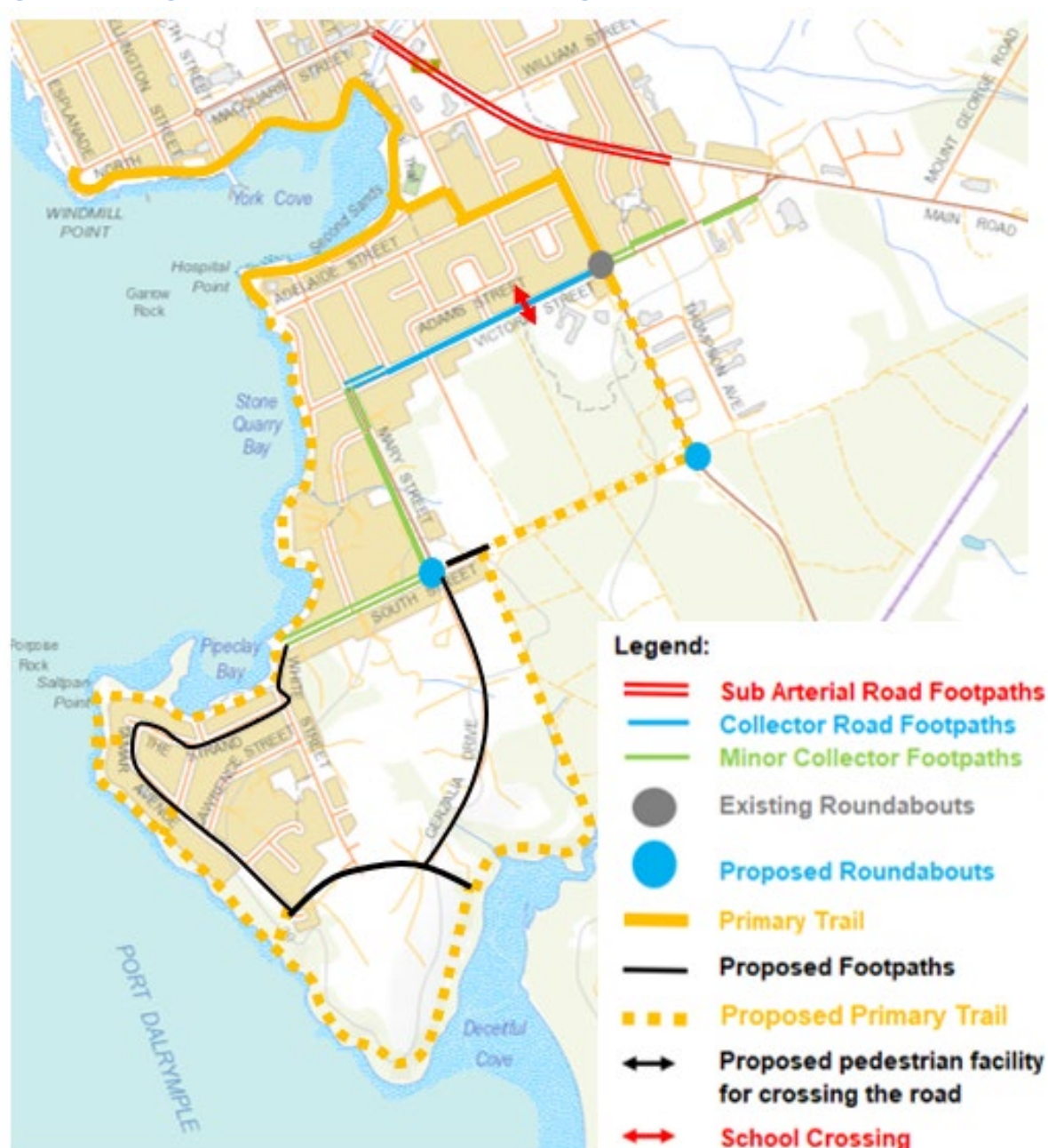
A 60 Km/h Speed limit should be considered to reduce crash risk as part of this concept.

9.3 Target Pathways – South George Town

9.3.1 Pathway Plan

The proposed Road Network Plan for South George Town is shown in Figure 32.

Figure 32 – Target Road Network Plan – South George Town





9.3.2 Intervention Treatments

The recommended interventions are summarised in Figure 33.

Figure 33 – Recommended interventions for South George Town

Pedestrian & Cyclist Facilities					
Priority Road	Side Road	Existing 2024	Proposed facilities	Intervention by Year	Priority
South George Town					
Primary Trail					
	Adelaide - Victoria St. Foreshore Circuit	None	6,000m of 2.5m wide Shareway	Staged over 20 years	2
South Street					
	East of Mary Street	None	120m of footpath	WD	7
	Franklin St.	Simple jcn.	Roundabout	2034	5
	Mary St.	Simple int.	Roundabout	2030	4
Tamar - The Strand - White and Gerzalia					
	Shareway link	None	2000m of footpath	WD	1

WD With Development

9.3.3 Intervention Justifications

The need for most of the proposed facilities is triggered by development and missing links in the pedestrian network.



10. Recommendations and Conclusions

This report develops a pathway network plan for management of South George Town, Central George Town and Low Head.

South George Town Pathway Plan – see Figure 32

Key proposals:

- Linking Tamar Avenue, The Strand, White Street and Gerzalia Drive, see Figure 32.
- Primary Trail development
- Main Road (Agnes Street to Victoria Street)
- South Street pathway development with road development

Development of South Street creates opportunities to progress Primary Trail development.

Central George Town Pathway Plan – see Figure 26

Key proposals:

- Macquarie / Anne Street roundabout
- North Street Primary Trail development and crossing Low Head Road options, see Figures 60.1 & 60.2.
- Anne Street footpath extension to Low Head Road
- Range of intersection and missing link projects

Growth areas A, B & C increase the importance of pathways on North Street, Anne Street, Friend Street, Agnes Street and Cimitiere Street, see Figure 14.

Development of North Street creates opportunities to progress Primary Trail development.

Low Head Pathway Plan – see Figure 25

Key proposals:

- Maintenance of existing pathways.
- East Beach pathway & Lagoon Beach link.

Primary Trail development has been achieved. Council can consider other proposals local to the area.



Appendices

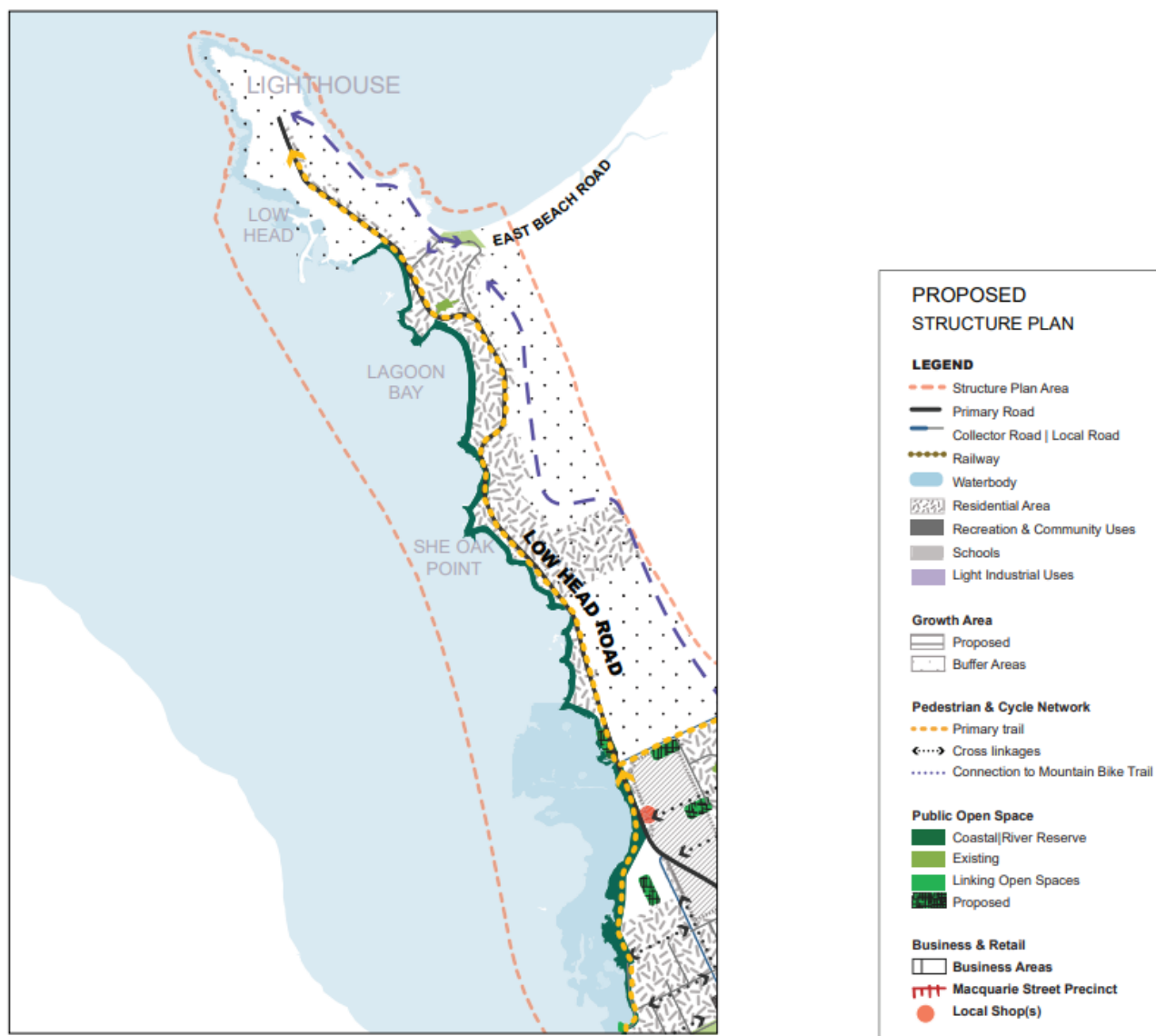
Appendix A - Neighbourhood Structure Plans

Source: George Town Area Structure Plan – July 2021

A.0 – Neighbourhoods

- 1** **Low Head**
Low Head is a linear residential area that extends north towards the tip of the Low Head Peninsula and has strong connection to river and
- 2** **North**
At the northern edge of the urban area of George Town. Access to the Sports Complex and opportunity to contain a
- 3** **Central**
A central residential area & includes the town centre of George Town.
- 4** **Port Dalrymple**
The largest neighbourhood and home to the Port Dalrymple School.
- 5** **Mount George**
At the entryway of George Town, immediately to the east of Main Road and includes Anzac Park.
- 6** **York Cove**
The residential area addresses York Cove and is home to the South George Town Primary School and Star of the Sea Catholic College.
- 7** **Pipeclay**
At the most southern side of the urban area bordered by an extensive vegetative buffer defining its edge.

A.1 – Low Head Structure Plan



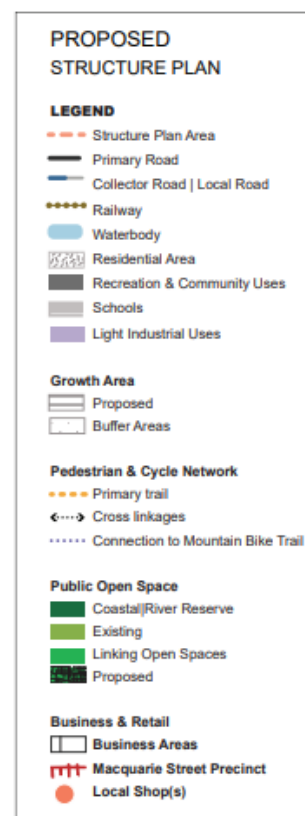
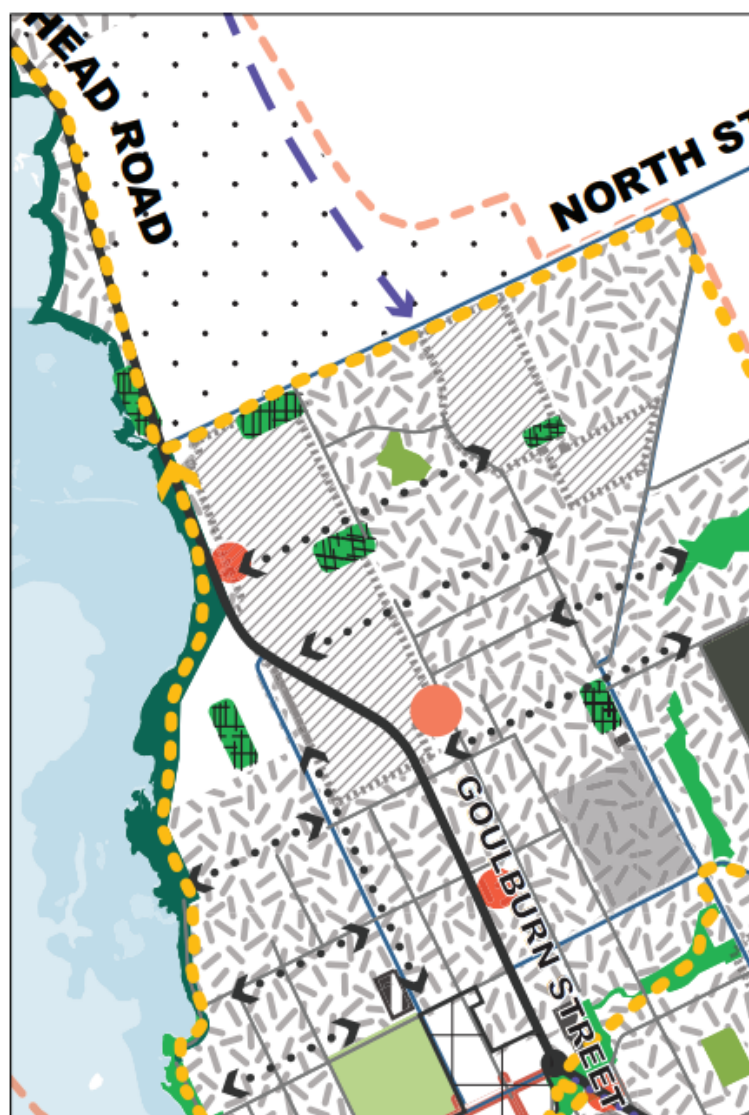
A.1 – Low Head Recommended Actions

Recommended Actions

Connectivity & Public Open Space

- LHN1.** Explore diversifying the users experience of the kanamaluka trail by identifying nature walks in the coastal reserve between North Street to East Beach. Only consider this opportunity if the natural and cultural values can be managed and the Penguin Rookery at Low Head is not detrimentally impacted.
- LHN2.** Improve management of East Beach Road by considering the introduction of a mandatory low-speed environment and shared zone for pedestrians, cyclists and vehicles.
- LHN3.** Explore the opportunity of creating a walking and cycling loop by providing a right-of-way over private land. Consult with private land owners between East Beach and North Street to determine if a trail could be possible.
- LHN4.** Consult the neighbourhood community to determine the location of additional pedestrian crossings north of North Street. The crossings should be marked and signed and co-located to bus stops and other intersections for the neighbourhood.
- LHN5.** Seating and shelter provided at regular intervals along the length of the kanamaluka trail. For example a rest top is desirable at 65 Low Head Road. Further investigations necessary to determine the locations of any rest stops.

A.2 – North



Recommended Actions

Connectivity & Public Open Space

- NN1.** Determine the viability of developing a walking and cycling route from Edward Court to Low Head Road through the unmade road reserves until such time infill development occurs.
- NN2.** Investigate developing the northern shoulder of the North Street carriageway as a shared walking and cycling route, connecting the kanamaluka trail and Sports Complex.
- NN3.** Prepare an open space plan for the neighbourhood setting aside land that will form part of the walking and cycling route. The open space plan must consider providing:
- open space or linkages south of North Street, providing connection to Agnes Street;
 - a central reserve, west of Low Head Road behind the linear strip of houses south of North Street, with a minimum area of 5000m² or an appropriate area determined later;
 - Consult with key stakeholders to determine a hierarchy of open spaces through the neighbourhood as part of developing an open space plan.

A.3 – Central



PROPOSED STRUCTURE PLAN

LEGEND

- Structure Plan Area
- Primary Road
- Collector Road | Local Road
- +++++ Railway
- Waterbody
- Residential Area
- Recreation & Community Uses
- Schools
- Light Industrial Uses

Growth Area

- Proposed
- Buffer Areas

Pedestrian & Cycle Network

- Primary trail
- Cross linkages
- Connection to Mountain Bike Trail

Public Open Space

- Coastal/River Reserve
- Existing
- Linking Open Spaces
- Proposed

Business & Retail

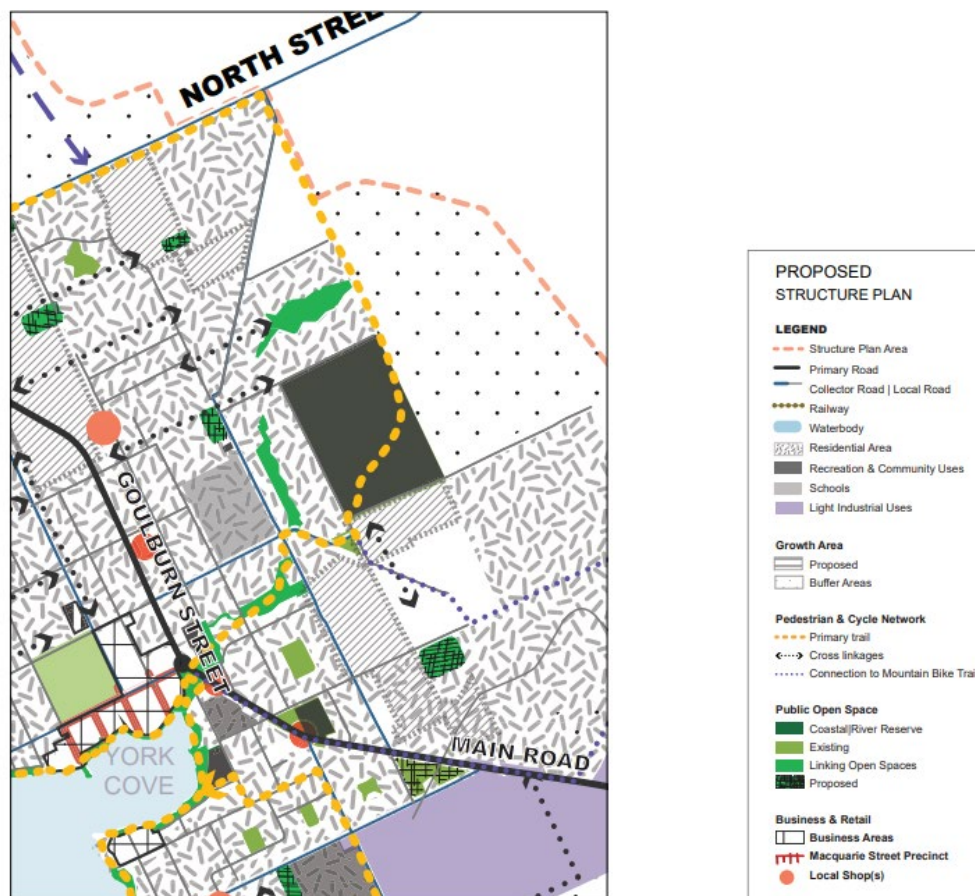
- Business Areas
- Macquarie Street Precinct
- Local Shop(s)

Recommended Actions

Connectivity & Public Open Space

- CN1.** Consult and involve the neighbourhood community to develop a plan and prioritise the preferred walking and cycling route through the neighbourhood that connects with key destinations and open space network.
- CN2.** Anne Street is the primary north-south connector from Macquarie Street. Anne Street is recommended to be developed as part of the secondary walking and cycling network.
- CN3.** Prepare an open space plan for the neighbourhood setting aside land that will form part of the primary walking and cycling network. The open space plan should consider:
 - allocating low lying land along the eastern side of the river to public open space;
 - investigate Aboriginal heritage of this land.

A.4 – Port Dalrymple

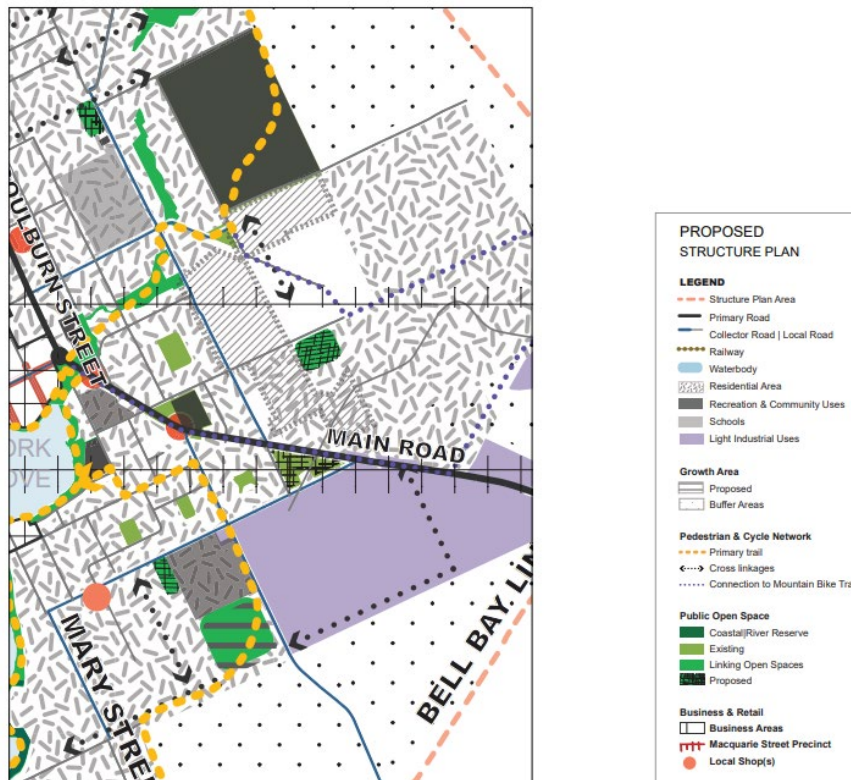


Recommended Actions

Connectivity & Public Open Space

- NPD1.** Invest in a primary walking and cycling route through the neighbourhood, linking the adjacent residential areas. Initial investment should address the priorities for improving the footpath network, utilising unmade road reserves to facilitate trails whilst the rezoning of land is considered.
- NPD2.** Consult and involve the neighbourhood community to develop a plan and prioritise the preferred walking and cycling routes that connect with key destinations and open space network.
- NPD3.** Determine the viability of developing a walking and cycling route through the unmade road reserves between North Street and Sports Complex.
- NPD4.** Integrate public open space in conjunction with the provision of a local centre at Friend Street.

A.5 – Mount George

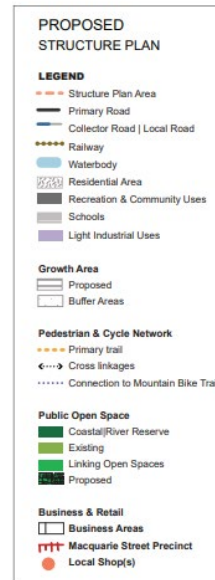


Recommended Actions

Connectivity & Public Open Space

- MtG1.** Invest in a primary walking/cycling route through the neighbourhood, linking the adjacent residential areas. Initial investment should address the priorities for building the footpath network, utilising unmade road reserves to facilitate trails whilst rezoning of land can be further considered.
- MtG2.** Consult and involve the neighbourhood community to develop a plan and prioritise the preferred pedestrian/cycling route through the neighbourhood that connects with key destinations and open space network.
- MtG3.** Investigate extending a trail along York Rivulet through the neighbourhood to facilitate the primary walking and cycling route.
- MtG4.** Investigate a shared cycle and pedestrian pathway linking the neighbourhood with the Sports Complex.

A.6 – York Cove

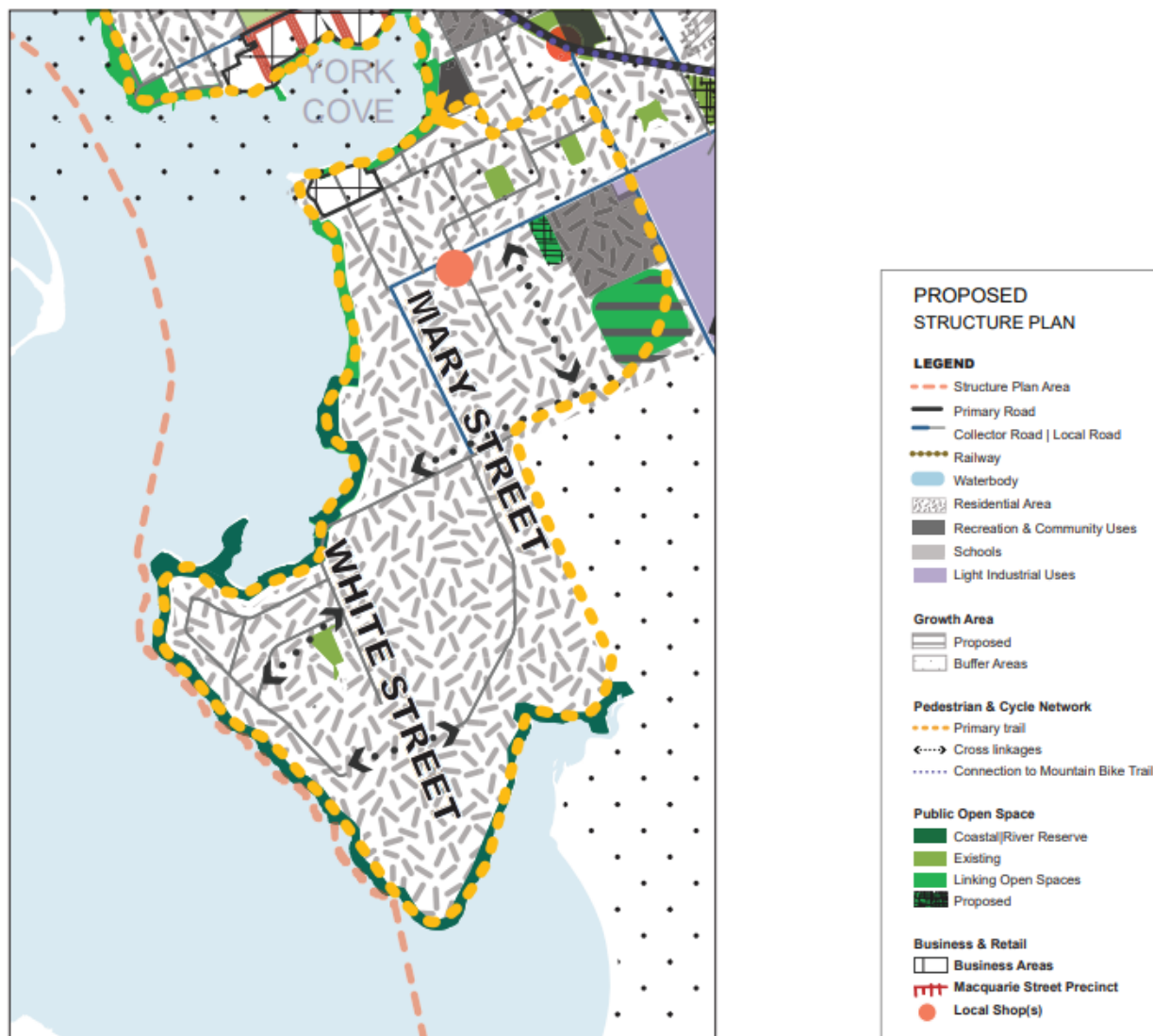


Recommended Actions

Connectivity & Public Open Space

- YC1.** Explore options for the development of Killarra Reserve to improve the quality of open space.
- YC2.** Address the physical interface between residential development in the light industrial area on Victoria Street. Investigate introducing landscaping on the southern side of Victoria Street.
- YC3.** Prepare an open space plan for the neighbourhood setting aside land that will form part of the primary walking and cycling route. The open space plan must consider the infrastructure investment required to improve the quality and patronage of established open space.
- YC4.** New development and subdivision must include footpath provision, street trees and open space.

A.7 – Pipe Clay



Recommended Actions

Connectivity & Public Open Space

PC1. Investigate the viability of continuing the primary walking/cycling route from outside the neighbourhood, extending the kanamaluka trail south, around the river reserve of the neighbourhood and connecting with the road network and proposed open space south of South George Town Primary School.

The investigations must have regard to:

- the impact on native vegetation around the tidal reserve;
- natural hazards;
- the nature of the pathway and the purpose it will serve; and
- width required to establish the reserve and whether it can be practically constructed.

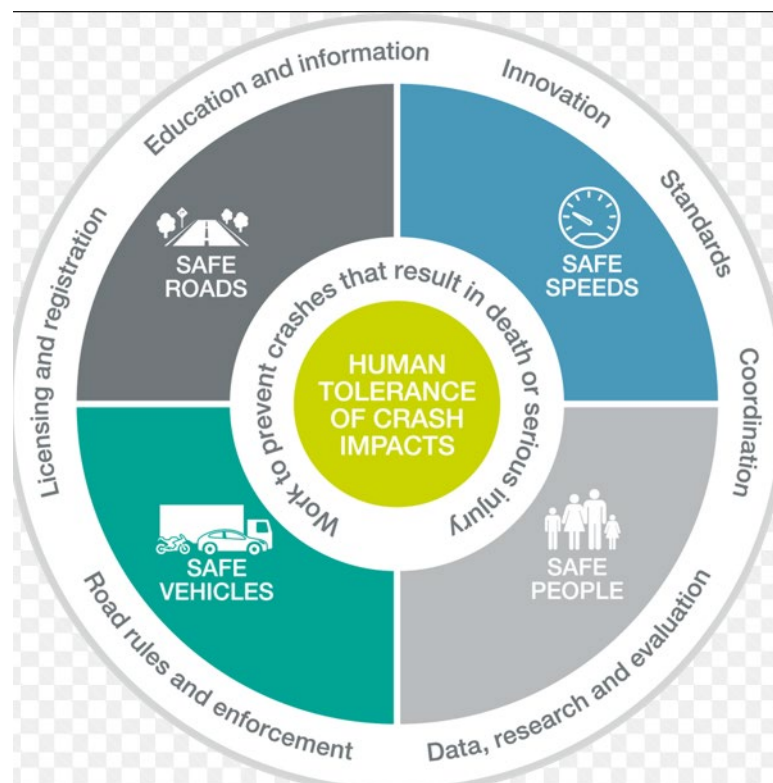
PC2. Consult Crown Land Services to determine if land in their ownership, could be leased for public open space. The retention of standing vegetation on this land is desirable. The public open space should be connected with the primary walking/cycle linkage and determine if it is viable to create a dog park in this location.

Appendix B – General Pathway Guidelines

B.1 - Traffic Networks as a System

Consider the transport network as a system, see Figure B.1, in terms of all road users i.e. light vehicles, heavy vehicles, public transport (buses and taxis etc), motor cyclists, cyclists and pedestrians.

Figure B.1 – Safe System Model



Prepare Safe System Assessments in accordance with Austroads Safe System Assessment Framework for existing situations and proposals to:

- Identify crash risk.
- Determine effectiveness of proposals in treating crash risk. Useful for assessing retrofits or proposals.



B.2 – Design Considerations

Shared Zones

Shared Zones are specifically designed and intended to give priority to vulnerable road users and should be made to not look like a road, with the provision that light and heavy vehicles may use the area subject to the Shared Zone speed limit, usually 10-20km/h.

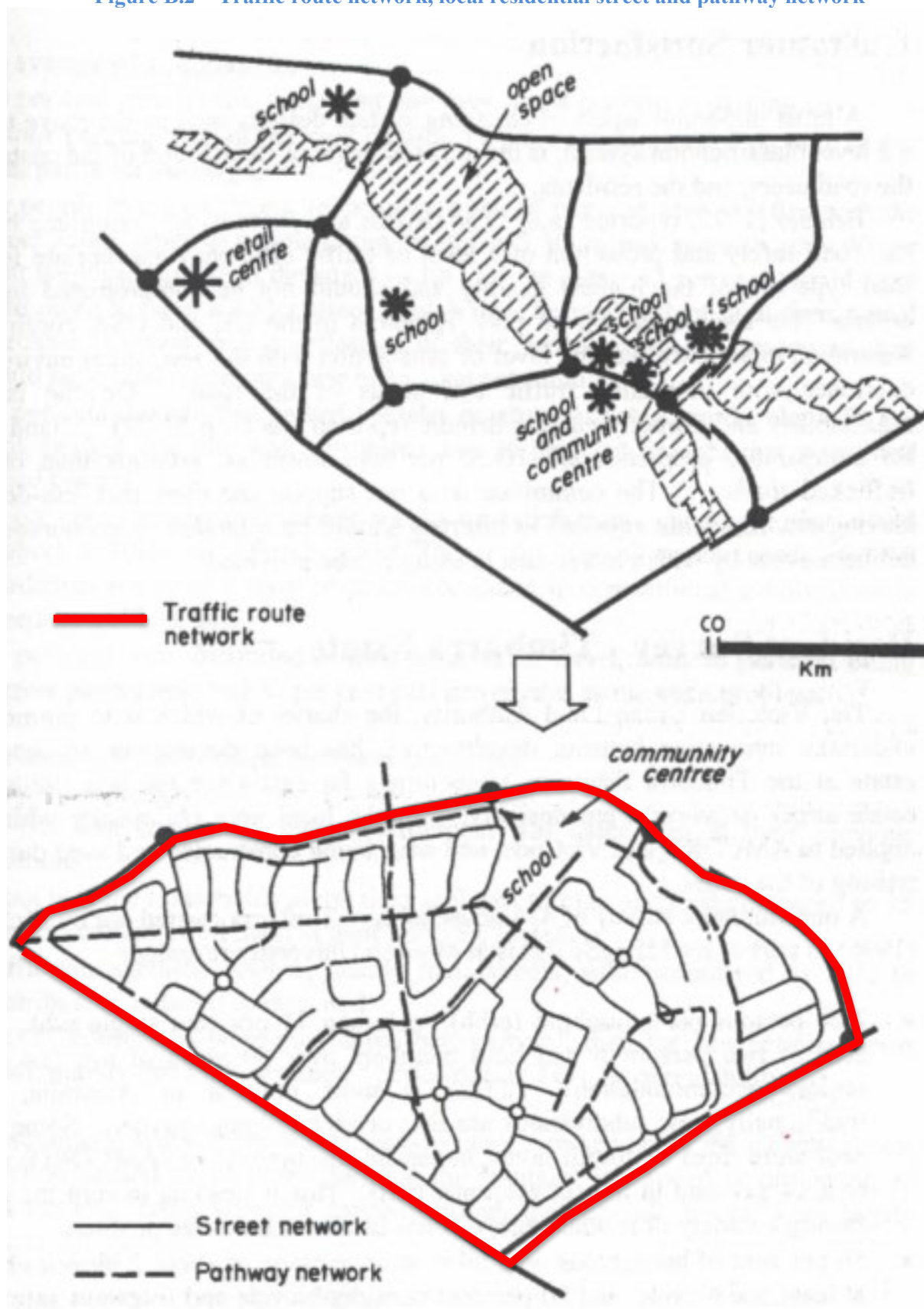
Safety in new subdivisions

- Distinguish between the arterial network, the local street network and pathway network have different road function and network needs.
- Preserve sight lines (avoid planting trees and shrubs, building fences and placing infrastructure that limits sight distance) for junctions and accesses.
- Avoid long straight streets as this encourages speeding.
- Provide safe pedestrian facilities.

Residential area planning

- Arterial networks should bound residential precincts, see Figure B.2.
- Direct vehicular and pedestrian access should be avoided from single dwelling unit developments.
- Effective street lengths should be less than 200-250m i.e. distance between slowing or slow points.
- Where demand justifies, cater for pedestrian and cycle demand separately.
- Minimise traffic on residential streets.
- Number of lots abutting streets with minimal traffic flows should be maximised.

Figure B.2 – Traffic route network, local residential street and pathway network





Liveability, Safety and Amenity Guidelines

The basic requirements necessary for the safety and amenity of a residential area:

- Residential precincts need to be bounded by traffic routes and/or natural barriers to minimise conflict.
- Direct vehicular and pedestrian access should be avoided from single dwelling units onto road with over 2,000 vehicles per day.
- Effective street lengths should be less than 200-250m in order to achieve typical vehicle speeds of 40km/h.
- Cyclist and pedestrian demands should be catered for separately using path or cycle networks. See Section 3.2.3

To maximise the liveability, safety and amenity of the local area, road and street network layout should be such that:

- A minimum of 60% of lots should abut residential streets with less than 300vpd passing traffic.
- A minimum of 80% of lots should abut residential streets with less than 600 vpd passing traffic.
- A maximum of 5% of single dwelling lots should abut residential streets with between 1,000-2,000 vpd passing traffic.
- A maximum of 1% of single dwelling lots should abut local streets or collectors with less than 3,000 vpd passing traffic, and
- No single dwelling lot should abut a route with more than 3,000 vpd passing traffic.

These guidelines are adopted from *TE&M Chapter 2.2: Design of New Urban Networks*.

B.3 - Road users

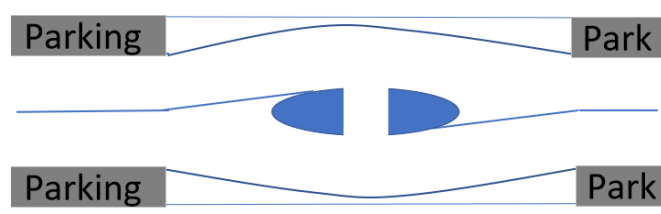
Pedestrians

Where pedestrian refuge islands are required, they are to be designed in accordance with DSG or LGAT standards. Pedestrian crossing facilities should be conspicuous and obvious to drivers. See Figure B.3 for positioning example.

Pedestrian refuge Islands as a traffic calming device:

- For 50km/h zones provide island widths of 1.5m & path width of at least 1.5m
- For 60km/h zones provide island widths of 1.5m & path width of 2.0m
- For 80km/h zones provide island widths of 2.0m & path width of 3.0m

Figure B.3 – Example of Pedestrian Refuge Island layout.



Cyclists

Off-road cycling paths or shared use trails are preferred to reduce or eliminate crashes. Cyclist facilities may be considered for collector roads but are generally not required on access roads and local areas with a low-speed environment. For on street cycling facilities the desirable width for cyclists is 1.5m with 1.2m as an absolute minimum.

Where there is on street parking an edge line 3.7m from the kerb is desirable (2.2m for parking and 1.5m for cyclists). This allows a cyclist to pass a parked car safely. According to *GTM Chapter 8*, where cyclists share the lane with vehicular traffic the lane width should be:

- Greater than 3.7m to allow for safe passage of a cyclist.
- Less than 3.0m to prevent overtaking.
- Widths of between 3.0m-3.7m create squeeze points and conflicts.

The provision of cycling facilities, using edge lines, cyclist symbols and No Stopping restrictions, is a low cost and efficient way to provide for cyclists.

As a guide 1.5m of width is recommended with a general minimum of 1.2m. However, the width should be taken to be the characteristic width. There may be pinch points or short tapers



where the facility is less than 1.2m in width. Refinements, which can be costly and delay the project, can be made at a later stage if necessary.

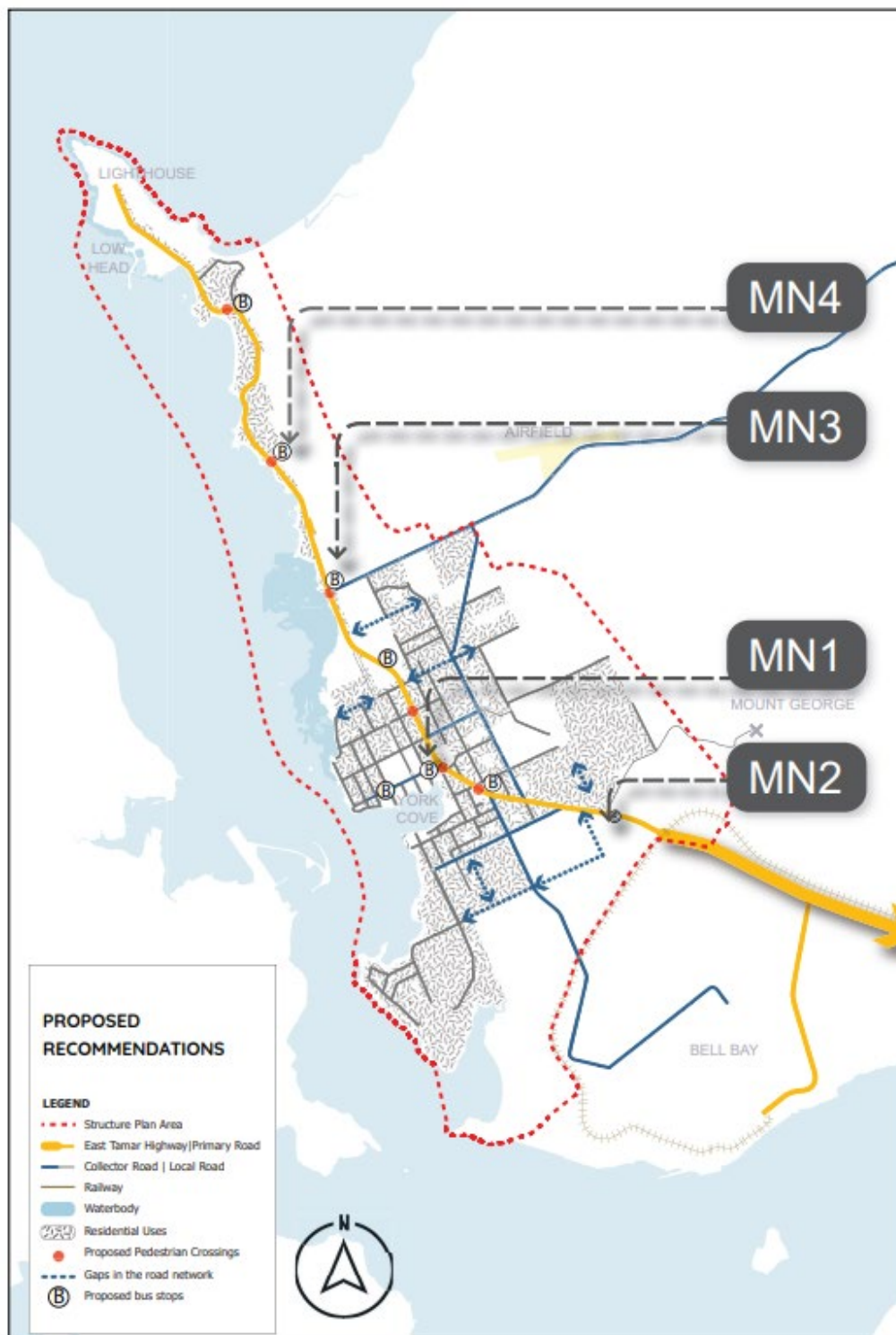
Cycling facilities are distinct from Cycling Lanes in that Austroads Cycling Lanes are signposted and a dedicated facility. Cycling facilities are created with edge lines and pavement markings only. The City of Launceston primarily provides Cycling Facilities, see Figure E.7.

Figure B.4– Elphin Road, Launceston – example of cycling facilities



Appendix C – George Town Area SP

Source: George Town Area Structure Plan



Source: George Town Structure Plan

Recommended Actions

Macquarie Street Entrance

MN1. Devise a concept plan for Macquarie Street entrance from Main Road to improve wayfinding and entry to the town centre. The entry point should be easily identifiable through an art installation and landscaping.

Alternative Access

MN2. Investigate the construction of a new road south of Victoria Street to provide a secondary vehicle route for residential traffic and commercial vehicles from Franklin Street to travel to Main Road.

Pedestrian Crossings

MN3. Investigate and identify a minimum of six additional pedestrian crossings across Low Head Road, Goulburn Street and Main Road at locations that connect with street junctions and the pedestrian and cycling network. Pedestrian crossings are to be marked and signed.

Bicycle Lane

MN4. On the road, bicycle lanes to be marked where off-road paths are not possible to correspond with identified routes. Community consultation to determine the path to be marked.

Gaps in Road Network

MN5. Construct permeable streets addressing gaps in the movement network.

Street Trees

MN6. Continue street tree planting incrementally along the primary walking and cycling route (where the road reserve has capacity) of George Town to improve the greening of the SP Area.

MN7. Revise the road design standards to incorporate sufficient width to plant street trees as part of new development.

Bus Stops

MN8. Investigate where to locate additional bus stop locations adjacent to pedestrian and cycle linkages. Additional stops will become available as the population increases.

Planning Principles

P11. Main Road, Goulburn Street, Low Head Road remain the primary arterial road for vehicle movements to Bellbuoy Beach Road, Low Head, the East Tamar Highway and Bridport Road.

P12. Provide an alternative route for vehicle movements originating from industrial activities and residential uses via Victoria Street to reduce traffic volumes and improve safety adjacent to the school.

P13. New subdivision serviced to facilitate a grid road pattern and cul-de-sac not supported unless it furthers connection and linkages to the walking network.

P14. Provide pedestrian crossings over the primary arterial road, near public transport stops, school & linkages.

P15. Street Trees planted to green and define the streetscape.

P16. Improved convenience for residents to access public transportation by increasing the intervals of bus stops.

Source: George Town Structure Plan



Appendix D – Pathway Network Guidelines

Pedestrian friendly urban planning

(www.lerek.com)

Key Elements for Walkability

- Safe and Accessible Pathways
- Green and Open Spaces
- Mixed Use Development
- Public Transport Integration
- Human Centred Street Design – Streets designed for people rather than just vehicles create vibrant, urban spaces. Features such as pedestrian only zones, outdoor seating and engaging storefronts enhance the walking experience and contribute to a lively city atmosphere.

Economic and Social Impact

Walkable cities attract businesses, boost tourism and increase property values. Studies have shown that pedestrian friendly areas support local economies by encouraging foot traffic to shops, restaurants and cultural venues. Additionally, these spaces foster a stronger sense of community and public areas become social hubs where people can connect and engage.

Looking Ahead

As cities evolve, the focus on pedestrian centric design becomes even more critical. Therefore, urban planners, architects and policymakers must continue to prioritize walkability in order to create healthier and more resilient communities. Moreover, by designing cities for people rather than cars, we can build environments that are not only functional but also enriching and sustainable for future generations.



Pedestrian planning principles (NZ Transport Agency)

Pedestrian characteristics

Deals with understanding the pedestrian demographic and catering for the human capability:

Physical space and walking speed

Safe, Obvious and Step free

Planning and designing for accessible and inclusive streets and places

Pedestrian Activity and Assessing Demand

Pedestrian desire line surveys and projections to understand demand for the area and impact of changed environments.

Engagement

Understand community perceptions and promotion of walking

Disability Sector Engagement

Engage with disability sector for inclusive design for walking

Walkability

Walkability describes the extent to which the built environment is walking friendly.

Walkable Places

Walkability is a useful way to assess walkable nature of an area and degree of access to key destinations.



Urban Form

Urban form relates to how communities are designed and structured, the type of development that it allows and where, and how the different areas are connected. Urban form affects the need to travel and attractiveness (or otherwise) of walking as a practical form of transport.

Pedestrian Network Characteristics

A walkable place or community has several important qualities as described by seven pedestrian network principles:

- Safe
- Inclusive
- Comfortable
- Direct
- Legible
- Attractive
- Connected – Walking networks should have a high density of route options to connect pedestrians to the places they wish to reach including public transport and surrounding networks. Achieving connectedness often requires overcoming barriers such as railways, waterway, arterial roads and motorways which sever communities and make for long walking trips. Dedicated crossing facilities can help connected neighbourhoods that previously were separated from each other, encouraging people to walk.

Measuring Walkability

Measuring walkability of an area or route means understanding the ease by which pedestrians can move around. There are many different methods to measuring walkability using desktop analysis, on site assessment or through pedestrians' experiences.

Austroads Guide to Road Design: Part 6A Pedestrian and Cyclist Paths 2021

Introduction

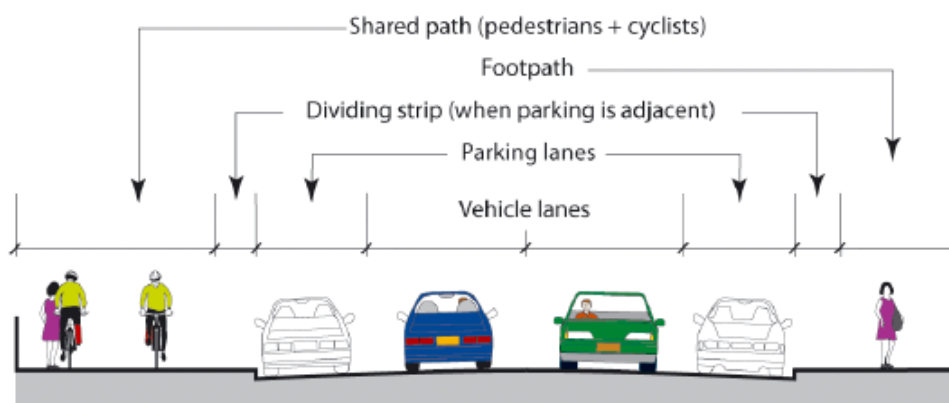
Adopt a Safe System Approach to minimise conflict.

Roads outside road corridors should be designed to be forgiving with minimal hazards.

Paths within road corridors should remove hazards and separate vulnerable road users.

Types of Paths

Shared paths cater for cyclists and pedestrians and have sufficient width to reduce conflict between the path users.



Path User Considerations

Connected:

- Continuous routes that are as short as possible
- Integrated with public transport
- Management of crossing opportunities

Comfortable and Convenient:

- User friendly

Universal:

- Cater for all path users



Design Considerations

- **Path location**

Factors influencing path location:

- Desire lines
- Safe and efficient alignment
- Cater for local features of interest e.g beaches, lookouts, shops etc
- Optimised personal security
- Access for emergency services
- Landscaping to support proposal
- Privacy of private property owners
- Environmental or heritage features

- **Path Width**

Assess the situation in terms of usage level, speed and available clearance

- **Lighting**

Where paths are heavily used in times of darkness consideration should be given to the provision of path lighting. The decision to provide lighting is a matter for the relevant agency i.e Council.

Lighting should be considered to help path users see and avoid hazards and to improve personal security at night. The need for lighting of paths should be considered on a case-by-case basis depending on the situation. Key issues to consider include:

- Sight distance to avoid conflict
- Standard of pathway delineation for the situation.

Intersections between paths

Factors to consider for intersections between paths:

- Pavement markings
- Splays
- T junctions at busy location
- Path clearance to avoid conflict
- Services

Scenarios to consider:

- Intersection of shared paths
- Intersection of bicycle paths and pedestrian paths
- Intersection of shared paths and pedestrian paths

Intersections between paths and roads

Factors to consider for intersections between paths and roads:

- Physically prevent cars from accessing paths e.g. bollards
- Physically deter vulnerable road users from inadvertently entering a road when not safe to do so, e.g staggered fence treatment or offset paths

Staggered pedestrian fences



Offset pedestrian fences



Appendix E – Pathway Network Objectives & Strategies

Pedestrian Pathway Objectives for George Town

District	Major Destinations	Issues					Key Objective	Strategies
		Accessibility	Pedestrian Safety	Major Barriers	Walkability	Pedestrian Use		
Low Head	Existing Residential Streets	M	M	Missing links	M	L	Walkability	Treat missing links
	Low Head Light House	M	H	none	M	L	Access to Light	As is
	Lagoon Beach	L	M	Residential Zone	M	M	Access to Beach	Perrin Drive Walkway to Beach
	East Beach	H	M	none	M	M	Pedestrian safety	Separation of vehicle & pedestrians
	Proposed Residential Streets						Walkability	Avoid missing links and avoid cross intersections
North George Town	Existing Residential Streets	M	M	Missing links			Walkability	Treat missing links
	Crossing Arterial Roads	L	L	Arterial Road	L	L	Walkability	Crossing treatments
	Port Dalrymple School	H	H	none	H	M	Pedestrian safety	As is
	Paterson Memorial Monument	M	H	none	H	M	Walkability	As is
	Medical	H	H	none	H	M	Walkability	As is
	CBD	H	H	none	H	H	Walkability	As is
	Yacht Club	M	M	none	M	M	Walkability	As is
	Proposed Residential Streets						Walkability	Avoid missing links and avoid cross intersections
South George Town	Existing Residential Streets	M	M	Missing links		M	Walkability	Treat missing links
	South GT Primary	H	H	none	H	M	Pedestrian safety	As is
	York Cove Hotel	L	M	Missing link	L	M	Walkability	Treat missing links
	Proposed Residential Streets						Walkability	Avoid missing links and avoid cross intersections



Appendix F – Specific Pathway Network Strategies for George Town

1. Missing Links

Such links can be identified and treated where there are demonstrated desire lines. Some missing links may be because there is no pedestrian demand.

2. Walkways between properties

Walkways between properties can be used to:

- connect nearby or adjacent cul-de-sacs within a residential enclave
- connect to public open space
- provide access to major destinations e.g. beaches

3. Separation of vehicles and pedestrians

Physical separation of vehicles and pedestrians should be provided on Collector and Arterial roads for pedestrian safety. Separation can be achieved using:

- kerb and Channel
- placement of paths along property fence lines rather than road edges subject to wheelie bin access considerations
- on street parking as a buffer.

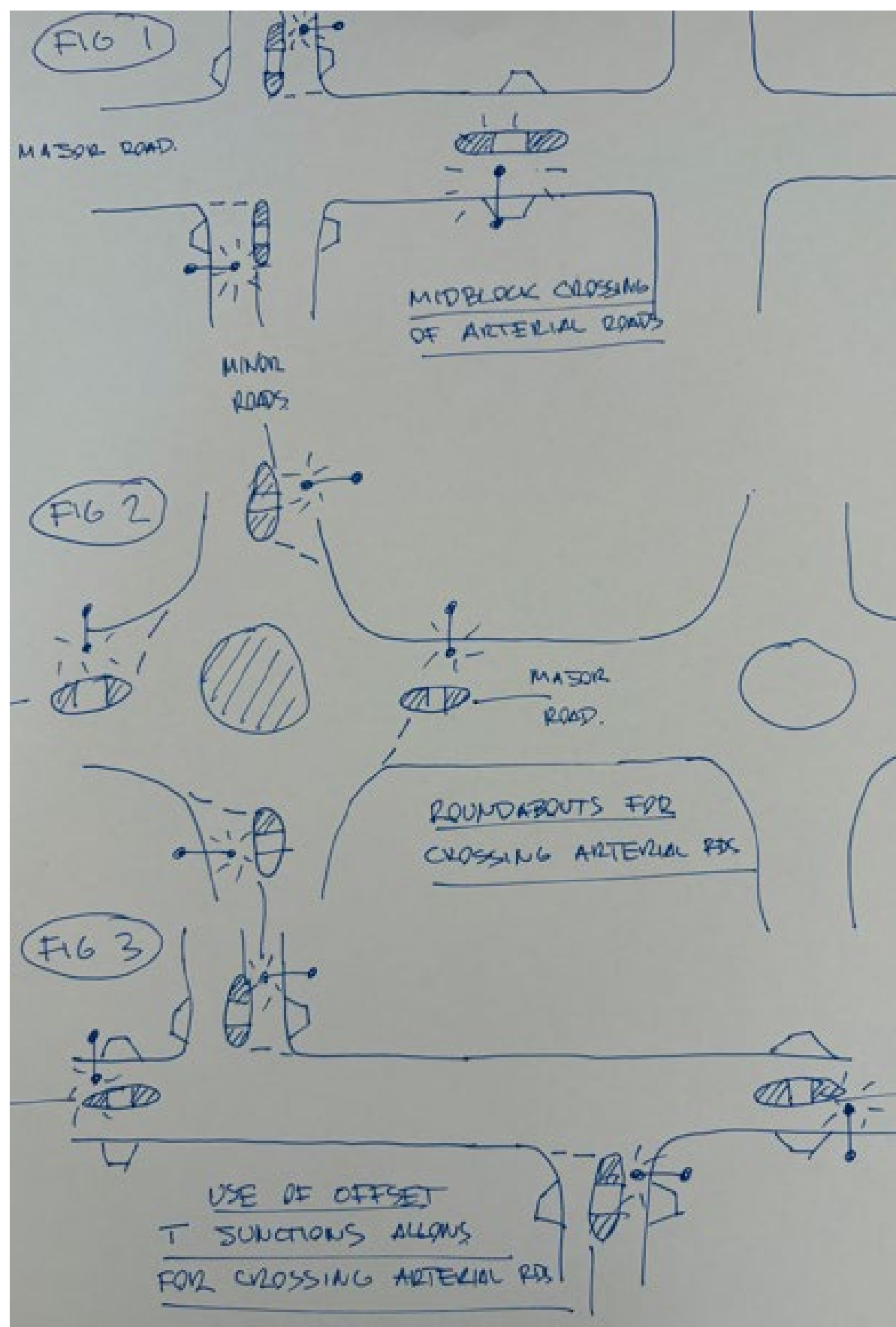
4. Avoid creating missing links and cross intersections

George Town has a grid road network layout with many cross intersections. Cross intersections are a legacy issue for pedestrian permeability & walkability where there are desire lines along minor roads which cross major roads e.g Anne St & Goulburn St.

In the subdivision planning and concept development stage ensure:

- roads should be specified with footpaths according to their function. Major Collector and Arterial Roads should have footpaths both sides. This also provides for public transport access e.g. bus stops each side of the road.
- Cross intersections should be avoided as they create potential barriers. George Town has legacy issues due to widespread use of cross intersections that hinder pedestrian permeability.

Figures 1 -3 show various strategies for avoiding cross intersection issues. Please note that wherever solid islands are required on a road they should be accompanied with street lighting.





With new subdivision development roundabouts or offset T junctions should be used rather than cross intersections.

With existing infrastructure where there are cross intersections, retrofit of roundabouts or mid-block crossings is recommended to improve pedestrian permeability. Obviously when the minor road is the pedestrian desire line, directness is important and detouring to a midblock crossing some 100-200m distant is undesirable. This is why retrofit of roundabout is preferred.

5. Crossing treatments on arterial roads

Midblock crossings on arterial roads should be pedestrian refuge islands as they allow pedestrians to negotiate one direction of traffic at a time. Also breaks crossing distance into shorter sections.

Midblock crossing can also be supported with kerb outstands especially where there are on street parking lanes.

If crossing needs to coincide with pedestrian desire lines on minor side road, a roundabout should be considered with the splitter islands used as ped refuge islands. Roundabouts also calm traffic and the reduced speed environment reduces crash risk.

Guidelines recommend pedestrian and traffic surveys to establish the crash risk exposure. As an example, the Department of State Growth - Road Safety – Road User Services arrange pedestrian and traffic surveys at school crossings where requests are received from the school for school crossing patrol officers. The point is that data and projected growth estimates should be used to objectively assess the need and location of potential pedestrian facilities.

Council could set clear internal guidelines on when treatments on arterial roads are applied. It is likely that not every existing cross intersection requires treatment.

In summary George Town (population 10,000) is a small country town and obviously does not have exposure to pedestrian walkability issues as much as major cities (population > 500,000). See pathway network guidelines in Appendix D. Accordingly the 5 strategies discussed above are considered appropriate for George Town. These strategies have been used in this report to identify feasible walkability improvements.