



Henley Transport and Parking Plan Discussion Paper

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Introduction to the Henley Transport and Parking Plan

Aurecon have been engaged by the City of Charles Sturt to prepare a Henley Transport and Parking Plan (HTPP) for the Henley Beach study area. This Discussion Paper forms the second component of the HTPP and provides a discussion of the existing issues within the area and potential opportunities or solutions for improvement.

Study Area

The study area for the HTPP includes the Henley Square Precinct bordered by North Street, East Terrace, South Street and the coast, and the wider Henley Beach Area between Grange Road, Cudmore Terrace, Henley Beach Road and the coast. Refer to the **next page** for a map of the study area.

What Will the Plan Look Like?

The HTPP will be a plan about transport and parking in the Henley Beach study area, with a specific focus on the Henley Square Precinct. The plan will contain specific actions to improve transport and parking as well as concept designs for key streets. The HTPP will look at the following themes:

- Walking and Pedestrians.
- Cycling.
- Traffic Management.
- Car Parking and Loading Facilities.
- Public Transport.
- Urban Design and Amenity.

The Coast Park Bikeway upgrades and the urban design redevelopment of Henley Square are separate projects and therefore are not a focus of the HTPP.

The timeframe for improvements recommended in the HTPP are not specifically defined; however, the HTPP will generally focus on short to medium term solutions, and will prioritise actions and improvements to assist Council in allocating budgets.

What Are the Objectives of the HTPP?

- To better align transport with other aspects of a prosperous, socially and culturally cohesive community.
- To promote healthy, active sustainable lifestyles and transport choices.
- To plan for the future demand of streets and public places in response to the changing needs and expectations of people living in the precinct, foreseeable changing land uses and increasing urban densities.

What Are the Next Steps

- To invite community and stakeholder comment on the Discussion Paper.
- To conduct a second Community Workshop to discuss the Discussion Paper and preferred actions and treatments (likely date 13 March 2013).
- To Develop the Draft Henley Transport and Parking Plan.
- To conduct a second Stakeholder Workshop.
- To invite community and stakeholder comment on the Draft Henley Transport and Parking Plan and conduct a final community workshop.

HTPP Study Area





Community Consultation to Date and Previous Issues Paper Stage

The following consultation has been undertaken to inform the HTPP:

- Community workshops facilitated by the City of Charles Sturt were held in September and November 2011.
- A Stakeholder Workshop held with members of the following organisations on Friday 5 October 2012:
 - Public Transport Services Division, Office of Cycling and Walking and Metro Region of the Department of Planning, Transport and Infrastructure (DPTI).
 - The South Australian Police (SAPOL).
 - Taxi Council.
 - Urban Design Institute of Australia (UDIA).
 - Australian Institute of Urban Studies (AIUS).
- A Community Workshop was held at the Henley and Grange Memorial Oval on Wednesday 10 October 2012.
- A feedback form was posted to 2,450 residents and businesses throughout the study area. 172 completed forms were received and the comments reviewed.

Following the above consultation, an Issues Paper was prepared which summarised and presented known issues from all of the various consultation inputs. The Issues Paper along with raw data from the Community Workshop held in October 2012 can be viewed at the City of Charles Sturt website via the following link: <http://www.charlessturt.sa.gov.au>. Under the yellow 'Community Engagement' tab, click on 'Current Community Engagement' on the left hand side and scroll down to the Henley Transport and Parking Plan.

The following consultation has been undertaken to confirm that the Issues Paper was a fair representation of the issues facing the HTPP study area:

- A feedback form was posted to 2,450 residents and businesses throughout the study area. 240 completed forms were received and comments reviewed.
- A visitor survey has also been conducted throughout the month of January at Henley Square and via the City of Charles Sturt Website. Four visitor surveys have been received as of 31 January 2013.

Community and visitor consultation will continue throughout the development of the HTPP.

Existing Data

The City of Charles Sturt and Aurecon have collected data as background information to assist in development of the HTPP and to help respond to specific issues raised. The following information is presented **at the end of this document**:

- The existing transport network which includes the key bus routes and cycling routes (where there are both formal and informal marked on-road bicycle lanes or off-road bicycle paths).
- Traffic volumes and speed data where available:
 - Traffic volumes are represented by the average number of vehicles per day over the 7 day count period.
 - Speed data is represented as the speed that 85% of vehicles are travelling at or below. This represents the speed that the majority of drivers are currently adhering to, and is a commonly used statistic for traffic analysis.

- Crash history for the 5 year period between 2007 and 2011:
 - Crash history is represented as the total number of crashes at a certain location, and is broken down by crash type (injury or property damage only) – no fatalities were recorded.
- Seasonal traffic volume and speed data:
 - Seasonal data has been collected along Seaview Road and Military Road, immediately south of Marlborough Street in November, December and January to gauge the differences in traffic and speed during the hotter months. The seasonal counts are generally 10%-20% higher than the DPTI average.
- January 2013 pedestrian and cycle counts where available.
- January 2013 car parking occupancy and turnover surveys in the main off-street and on-street car parking areas within the Study Area. Car park utilisation at a peak times shows that car parking extends into residential areas.

It is noted that the car parking, cyclist and pedestrian counts were undertaken on Wednesday 9 January 2013 (recorded max 26C⁰), Saturday 12 January (recorded max 25C⁰) and Sunday 20 January (recorded max 31C⁰). The weather has a large impact on the pedestrian, cyclist and vehicle use of the HTPP Study Area which has been taken into account, the surveys may not represent the absolute car parking peak for the Study Area.

It is noted that an informal car parking utilisation survey was undertaken on Thursday 17 January at 8:00PM (recorded max 43C⁰). The survey indicated all the car parking in the Henley Square Precinct and up to Marlborough Street was 100% utilised, aside from East Terrace which was 40% utilised. The Pavilion (Foodland) car park had 85 spare car parking spaces at this time.

**Weather data has been sourced from Bureau of Meteorology (<http://www.bom.gov.au/>) - Adelaide Weather Station – located at Kent Town.*

In addition to data collection, Aurecon conducted a formal network assessment of the Study Area on Friday 18 January. The network assessment focused on a review of general road safety and was not a detailed Road Safety Audit. The following general observations were identified:

- Inconsistent cross section treatment – inconsistent along the roads within the Study Area, particularly the north south routes (predominantly Seaview Road and Military Road).
- Treatment of pedestrian footpaths – there are significant issues with the footpath provision throughout the study area. Key problems are narrow width, not *Disability Discrimination Act* compliant, trip hazards and no or poor crossings points.
- Provision of signage – lack of signage for cyclists and at pedestrian crossings, and signs missing at the roundabouts. Wayfinding is poor throughout the Study Area.
- Roundabouts – generally satisfactory, however, some with left turn slip lanes are confusing, and given that there is no issue with capacity, could be removed. Some roundabouts are too small for articulated buses.
- Line-marking – there is a number of locations throughout the Study Area where line marking is faded and generally hard to see.
- Sight distance – generally satisfactory, however, some locations have restricted visibility due to road furniture and overgrown vegetation.
- Residential streets are generally satisfactory.

Summary of Key Issues – Previous Stage

This section provides a summary of the key issues identified in the Issues Paper, including the associated community feedback. The issues provided below have been summarised for the purpose of this paper. Refer to the Issues Paper for expanded considerations of each issue.

Issues have been grouped by the following themes:

- Theme 1 – Walking and Pedestrians.
- Theme 2 – Traffic Management.
- Theme 3 – Car Parking and Loading Facilities.
- Theme 4 – Cycling.
- Theme 5 – Public Transport.
- Theme 6 – Urban Design and Amenity.

Theme 1 – Walking and Pedestrians	Consideration in Discussion Paper
1. Improve pedestrian safety on Seaview Road, particularly adjacent Henley Square	Refer to Treatment Options 1, 2, 5, 6, 7, 8, 12 and 13
2. Improve pedestrian safety on Military Road, particularly footpath quality and for pedestrians accessing Henley Square	Refer to Treatment Options 3, 4, 12 and 13
3. Improve pedestrian safety on Grange Road, particularly for access to shopping and recreational areas	Refer to Treatment Options 10 and 11
4. Ensure footpaths comply with the Disability Discrimination Act (DDA)1992	Refer to Treatment Option 13
5. Look at innovative, alternative pedestrian crossing solutions	Refer to Treatment Options 4
6. Improve pedestrian accessibility within the Study Area	Refer to Treatment Options 12, 13, 14, 15, 47 and 58
Theme 2 - Traffic Management	Consideration in Discussion Paper
1. Current speed limits on Seaview Road are too high	Refer to Treatment Options 1, 2, 3, 5, 6, 7, 8, 19, 20, 21 and 22
2. Improve traffic management within the Study Area to address perceived issues such as congestion and noise impacts of traffic	Refer to Treatment Options 1, 2, 3, 6, 7, 8, 9, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 and 31
3. Improve safety by implementing a lower precinct speed limit	Refer to Treatment Option 19, 20 and 21
4. Speeding drivers (including motorbikes) within Study Area	Refer to Treatment Options 16, 17, 18, 19, 20, 21 and 22
5. Improve pedestrian safety at roundabouts	Refer to Treatment Option 10
6. Service delivery vehicles accessing local roads	Education and management in response to particular issues when known. E.g. encourage alternative delivery times outside of busy times.

7. Improve emergency vehicle access to Henley Square	This issue has been acknowledged and is a key consideration for the Henley Square Urban Design Competition
8. Improve vehicle sight distance at corner blocks	Refer to Treatment Option 31

Theme 3 – Car Parking and Loading Facilities	Consideration in Discussion Paper
1. Car parking surrounding Henley Square at capacity during peak times	Refer to Treatment Options 32, 33, 34, 36, 38, 40 and 43
2. Congestion at the Henley Square Car Park (adjacent Evida restaurant)	Refer to Treatment Option 23
3. Pavilion (Foodland) Parking/Baju/H2O car park underutilised	Refer to Treatment Option 40
4. Conflict between Pavilion (Foodland) loading zone and bus stop / layover on Military Road	Refer to Treatment Options 24 and 51
5. Some land in the Study Area is currently underutilised or requiring additional off -street car parking	Refer to Treatment Option 40, 43 and 44
6. Bin collection clashes with peak Sunday night car parking	Outside the scope of this project – Council matter
7. Overspill of car parking into residential areas	Refer to Treatment Options 32, 33, 40, 43 and 44
8. Additional car parking required to cater for demand	Refer to Treatment Options 32, 33, 37, 40, 43 and 44
9. Vehicles parking illegally in residential areas	This issue has been acknowledged and additional council enforcement may be required (e.g. consider restricting non-residential parking to earlier hours e.g. 1am or 2am. Refer to Treatment Option 29
10. Noise impacts associated with late night parking	Outside the scope of this project – social issue. It is acknowledged that The Henley Square area includes some hotels and restaurants that support late night activities. People park in residential streets for a good part of the night, particularly on weekends, and this creates noise and disturbance. This could be addressed by restricting car parking in the surrounding streets at night (with the exception of permit parking) but this will only be successful if there is a public car park nearby that can be used. Other options for addressing the issue will need to be considered if a public car park is not established
11. Improve school traffic and parking at the Star of the Sea School	Refer to Treatment Options 41 and 42
12. Retain / improve car parking for local business and	Refer to Treatment Options 32, 33, 39, 40,

community facilities	43 and 44
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Theme 4 - Cycling	Consideration in Discussion Paper
1. No Exclusive Bicycle Lanes provided on Seaview Road	Refer to Treatment Option 2
2. Improve Cyclist safety on Military Road	Refer to Treatment Options 3 and 45
3. Limited bicycle parking and facilities within the Study Area e.g. lockable storage units, bike racks and cyclist front storage 'boxes'	Refer to Treatment Options 46 and 58
4. Cyclists have different needs, at different times	Respectful of cyclists with different needs which has been addressed through cyclist treatment options. Opportunity exists to incorporate any improvements at Henley Square with the Henley Square Design Competition
5. Improve cyclist accessibility / safety throughout the study area	Refer to Treatment Options 2 and 3, 45, 46 and 58

Theme 5 – Public Transport	Consideration in Discussion Paper
1. Review existing bus routes*	Most parts of the existing Study Area are considered to have good access to public transport. Refer to Treatment Option 43
2. There is no official Taxi rank provided near Henley Square	Refer to Treatment Options 9 and 52
3. Improve bus wayfinding	Refer to Treatment Option 53
4. There is no existing bus stop / route to Western Community Hospital*	Refer to Treatment Option 48
5. The bus stops at Henley Square are poorly located	Refer to Treatment Option 49
6. Improve bus stop locations and quality	Refer to Treatment Option 50
7. No provision of light rail or train services	Outside the scope of this project. Good bus service through the study area connects to Grange train services

**Jurisdiction of Public Transport Services*

Theme 6 – Urban Design and Amenity	Consideration in Discussion Paper
1. Close or partly close Main Street between Seaview Road and Military Road to create a shared use area with priority for pedestrians and cyclists, with outdoor	Refer to Treatment Options 5, 6, 7 and 8

dining opportunities

2. Improve streetscape along Seaview Road	Refer to Treatment Options 2, 35, 54, 55 and 57
3. Improve streetscape along main roads – Military Road, Grange Road, Henley Beach Road	Refer to Treatment Options 54, 55, 56 and 57
4. Take 'pressures' of demand off Henley Square	Visitors likely to be attracted to the area due to proximity of shopping, restaurants and the coast. Constrained by residential areas nearby. Not practicable within this study's timeframe to achieve this
5. Replace trees lost to natural attrition	All new planting will be with native species
6. Ensure open space is retained	No open space will be removed for proposed treatments
7. Improve amenity adjacent the coast	Outside the scope of this project. Refer to council's Coast Park Project and the Henley Square Urban Design Competition



Treatment Options

This section provides possible treatment options. General treatment options are discussed first with specific treatments grouped under the following headings:

- Theme 1 – Walking and Pedestrians.
- Theme 2 – Traffic Management.
- Theme 3 – Car Parking and Loading Facilities.
- Theme 4 – Cycling.
- Theme 5 – Public Transport.
- Theme 6 – Urban Design and Amenity.

Treatment options are proposed responding to issues raised in the Issues Paper and subsequent community feedback, and are based on the data collected. It is noted that some treatment options may produce different outcomes and effects. The potential benefits and potential issues of each separate Treatment Option is also provided.

All treatment options may have associated consequences within the Study Area such as:

- Banning of some vehicle turning movements.
- Reduction of on-street car parking.
- Creating new vehicle thoroughfares.
- Migrating issues and impacts from one area to another.



General Treatment Options

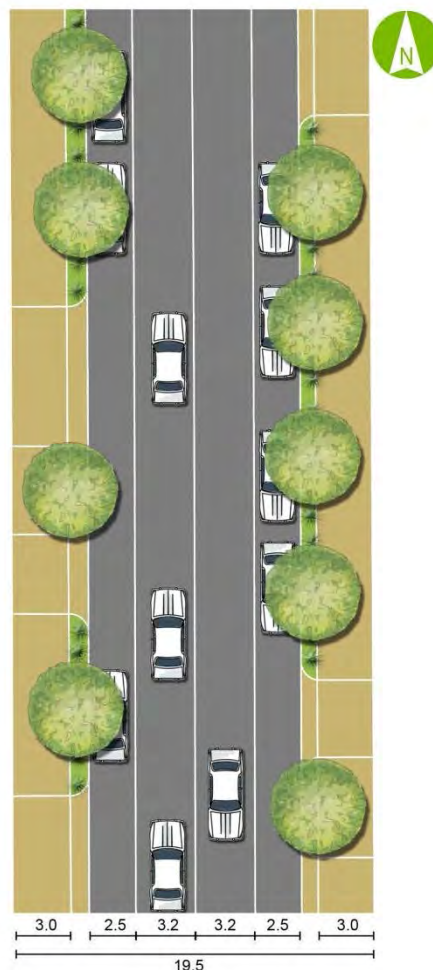
Treatment Option 1 – Narrow Seaview Road to increase safety and amenity (full length of Study Area)

The benefits are: promotes reduced traffic speed, wider footpaths for pedestrians, and improved safety and amenity. This option also retains existing on-street car parking. Potential issues may be: exacerbates perceived traffic congestion issues or encourage traffic onto other roads in the Study Area and no specific measures for cyclists.

An option to increase safety for pedestrians and cyclists and to improve amenity is to create a narrow two-way carriageway of 6.4m for general traffic including cyclists. There would be no specific provision for cyclists, such as cycle lanes. This would enable the footpath widths to be increased, improving pedestrian accessibility. The narrow 3.2m lane would discourage vehicles from overtaking cyclists and promotes a lower speed environment on Seaview Road.

This option also provides landscaping opportunities along the street and retains existing on-street parallel car parking (2.5m bays). It should be noted that lowering the speed of vehicles on Seaview Road may encourage traffic onto other local roads within the study area, e.g. Military Road. It is noted that Seaview Road is under the jurisdiction of DPTI and any treatment options are subject to DPTI approval.

Seaview Road narrow cross section example (indicative widths only)



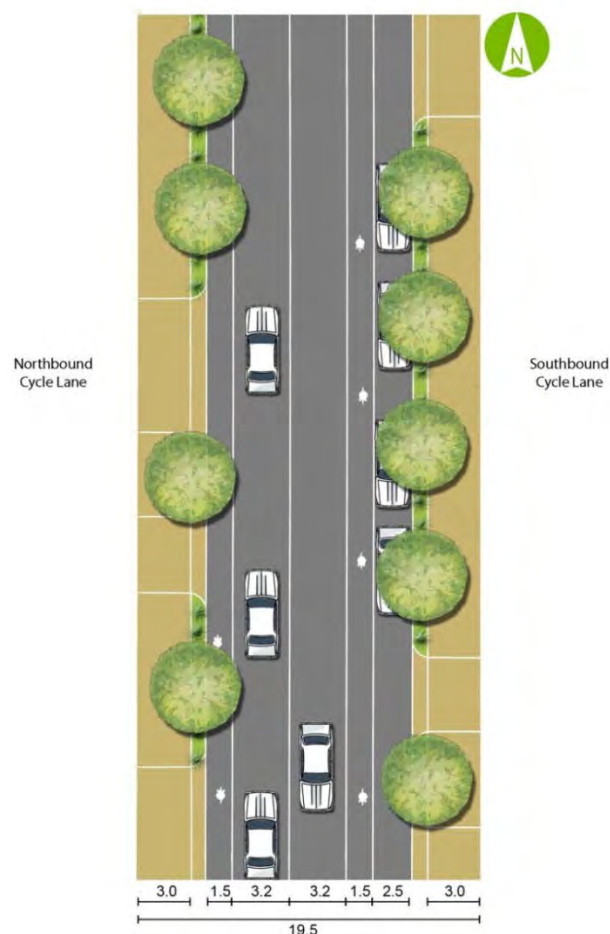
Treatment Option 2* – Install bicycle lanes on Seaview Road

The benefits are: promotes reduces traffic speed, improved cyclist safety, wider footpaths for pedestrians and improved amenity. Potential issues may be: loss of some on-street car parking on Seaview Road.

Cyclist survey data for Wednesday 6 January has indicated cyclists are predominantly using Seaview Road travelling north and Military Road travelling south. However, survey data for Sunday 20 January indicates equal number of cyclists are using both the northbound and southbound carriageway on Seaview Road. An option to improve safety for cyclists on Seaview Road is to install 1.5m bicycle lanes by removing existing on-street parallel car parking on the northbound (or southbound) carriageway. The footpath width on both roads would be increased on both sides of the road, improving pedestrian accessibility. Cyclist safety at access driveways is a key consideration for this treatment option.

This option would be feasible for the section of Seaview Road between Henley Beach Road and Marlborough Street and is subject to an engineering analysis for the section between Marlborough Street and Grange Road. North of Marlborough Street the cross section (excluding sloped driveway crossover on the western side of Seaview Road) narrows to approximately 17m between Marlborough Street and Reddie Street and 13.5m between Reddie Street and Grange Road respectively. Therefore the provision of cycle lanes may result in pavement and drainage modification and the loss of on-street car parking. It is noted that Seaview Road is under the jurisdiction of DPTI and any treatment options are subject to DPTI approval.

Seaview Road bicycle lane example (indicative widths only)

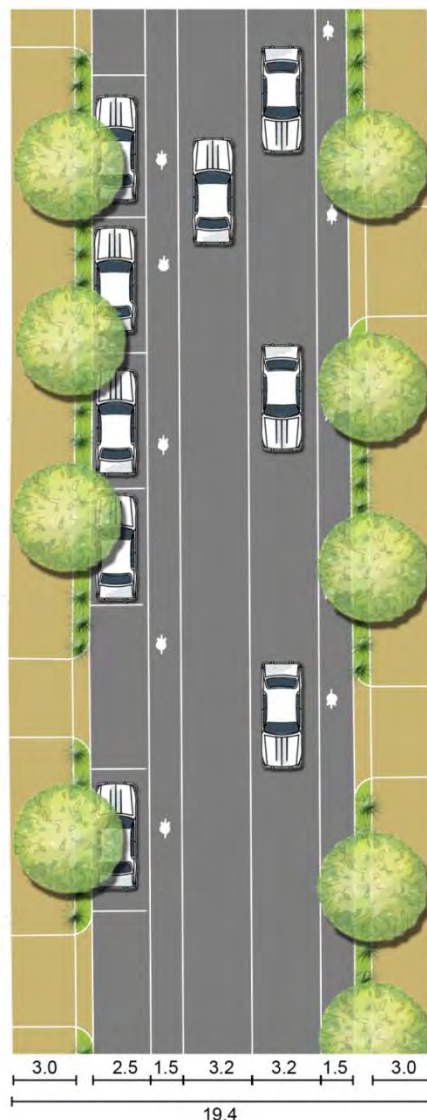


Treatment Option 3* – Install bicycle lanes on Military Road

The benefits are: promotes reduces traffic speed, improved cyclist safety, wider footpaths for pedestrians and improved amenity. Potential issues may be: loss of some on-street car parking on Military Road.

An option to improve cyclist safety on Military Road is to install cycle lanes by removing existing on-street parallel car parking on the southbound (or northbound) carriageway. Cyclist safety at access driveways is a key consideration for this treatment option. It is noted that the below concept applies to the length of Military Road within the Study Area as cross section widths are approximately similar. A section where modification may be required to accommodate the option below is adjacent the pedestrian refuge between Main Street and South Street (adjacent the existing police station) where the cross section narrows to approximately 17m (excluding the garden area on the west side of Military Road).

Military Road bicycle lane example (indicative widths only)



**it is noted that for the above treatment options (2 and 3); traffic lanes can be reduced to 3m, allowing a 1.7m cycle lane for cycles.*

Treatment Option 4 – Improve pedestrian safety at roundabouts by providing raised wombat crossings at each approach arm

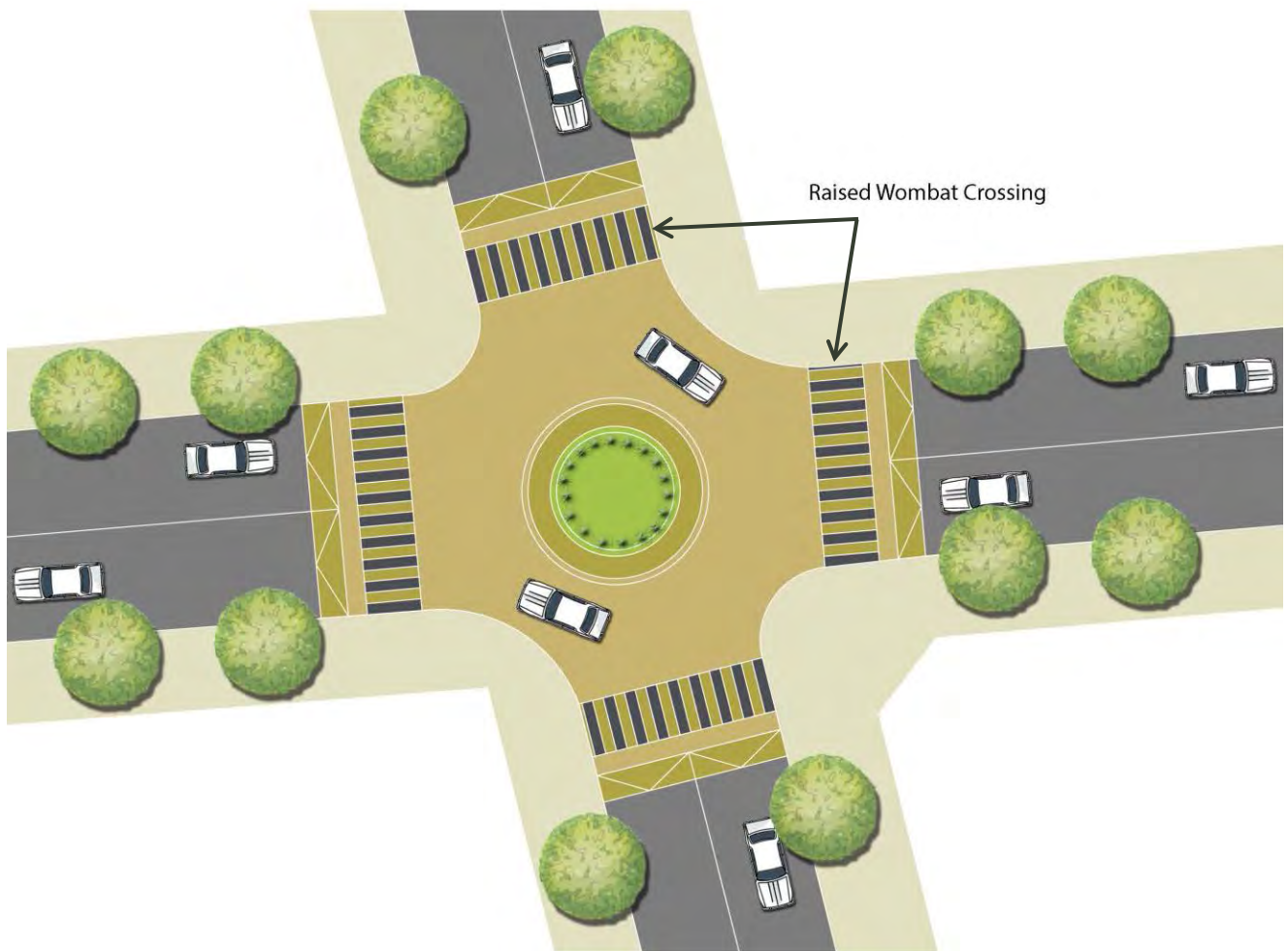
The benefits are: promotes reduces traffic speed, improved safety for pedestrians to cross the road at roundabouts. Potential issues may be: may increase delays to general traffic, can only be applied in a low speed environment and significant cost to implement.

This treatment option utilises roundabouts to slow traffic with raised pedestrian wombat crossings on each roundabout approach arm (whole roundabout raised). This treatment is new to South Australia and discussions with DPTI may be required. User education regarding the operation of the roundabout will also be necessary.

This treatment option can be applied to existing roundabouts in the Study Area or used for areas where a new roundabout may be installed.

It is noted that this option should only be implemented in a low speed environment e.g. a 25 km/hr area (refer to treatment option 21) due to potential conflict between vehicles and pedestrians.

Raised roundabout treatment example (indicative only)



Treatment Options 5, 6, 7, 8 and 9 – Main Street

Main Street Treatment Option 5 - Create a Pedestrian and cyclist shared zone on Main Street between Military Road and Seaview Road / closure option

The benefits are: easier for pedestrians to cross Seaview Road, improved safety for pedestrians on Main Street and improved street amenity. Potential issues may be: no vehicle or bus access to Main Street from Seaview Road, therefore increasing the use of North Street or South Street. The loss of some on-street car parking would also be required.

A shared zone would be created for this treatment option by closing this section of Main Street to traffic. A new centralised signalised pedestrian actuated crossing would link Henley Square with the shared zone. Landscaping and outdoor dining opportunities would also be provided, improving amenity adjacent Henley Square. The existing angled parking adjacent the Ramsgate Hotel on Main Street is replaced with parallel parking which is safer for both pedestrians and cyclists. A kerbless area would be provided for ease of transition for pedestrians and cyclists from / to Seaview Road. Colour paving is proposed to delineate the path of travel for private vehicles.

Considerations of this option include retaining access to the off-street car park, removing existing on-street angled parking, re-routing the H31 bus and east / west bicycle connections. In addition it will increase the use of North Street and South Street for east / west travel (approximately 1200 vehicles per day use this section of Main Street). It is noted that Seaview Road is under the jurisdiction of DPTI and any treatment options are subject to DPTI approval.

(Indicative concept option only)



Main Street Treatment Option 6 - Create a Pedestrian and cyclist shared zone on Main Street between Military Road and Seaview Road / partial closure option

The benefits are: easier for pedestrians to cross Seaview Road, improved safety and increased areas for pedestrians on Main Street, access for the H31 bus is retained, and improved street amenity.

Potential issues may be: difficult to enforce bus only access from Seaview Road into Main Street and the loss of some on-street car parking.

This treatment option is similar to option 5; however, the left turn into Main Street is provided for bus access only. Two parallel car parks are provided adjacent the Ramsgate Hotel compared to the existing angle parking arrangement. Angled parking is also removed from the northern side of Main Street to improve pedestrian and cyclist safety in the shared zone. It is noted that Seaview Road is under the jurisdiction of DPTI and any treatment options are subject to DPTI approval. A key consideration of this treatment option is to restrict vehicles from accessing Main Street from Seaview Road, otherwise shared use may not be acceptable.

(Indicative concept only)



Main Street Treatment Option 7 – Create a central median on Main Street linking to a signalised crossing on Seaview Road

The benefits are: full access from Seaview Road is provided and street amenity improved. It is also easier and safer for pedestrians to cross Seaview Road and Main Street. Potential issues may be: limited loss of some on-street car parking and limited improvement to pedestrian environment along Main Street (compared to Treatment Options 5 and 6).

This option involves providing a raised signalised crossing from Main Street to Henley Square on Seaview Road with the existing left in / left out only control with Seaview Road retained. A central median along Main Street provides landscaping opportunities. The existing angled parking adjacent the Ramsgate Hotel on Main Street is replaced with parallel parking. This option is subject to appropriate turning radii for buses (e.g. left turn from Seaview Road to Main Street). It is noted that Seaview Road is under the jurisdiction of DPTI and any treatment options are subject to DPTI approval.

(Indicative concept only)

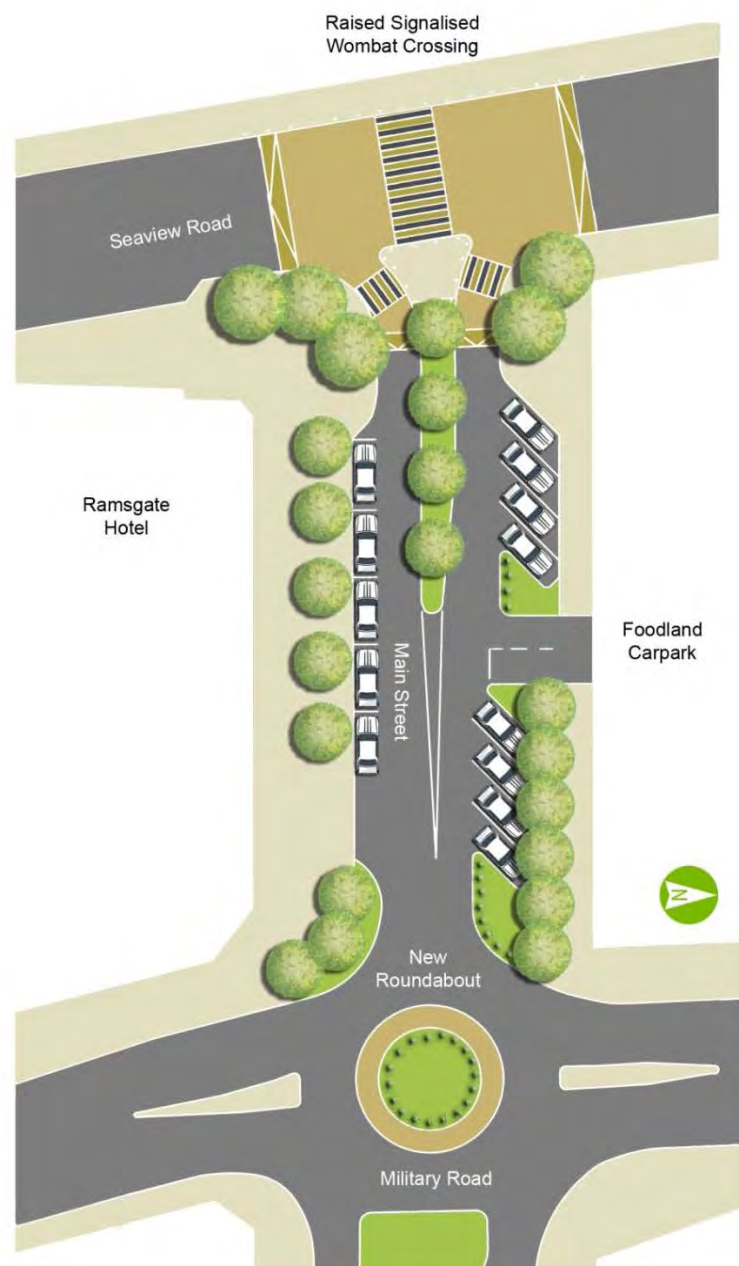


Main Street Treatment Option 8 – Install a roundabout at the Main Street / Military Road intersection

The benefits are: easier for pedestrian to cross Seaview Road, improved amenity and improved operation of the Military Road / Main Street intersection for vehicles. Potential issues may be: limited improvement to pedestrian environment along Main Street (compared to Treatment Options 5 and 6) and roundabouts are not good for pedestrians to cross without protection.

This option is similar to option 7; however, a roundabout would be installed at the Main Street and Military Road intersection. Pedestrian safety would be essential given the high volumes accessing Main Street and Henley Square (refer to Treatment Option 4 for pedestrian safety at roundabouts). It is noted that Seaview Road is under the jurisdiction of DPTI and any treatment options are subject to DPTI approval.

(Indicative concept only)





Main Street Treatment Option 9 – Provide a formal Taxi Rank on Main Street adjacent the Ramsgate Hotel

The benefits are: formal area for taxis to park without inconveniencing other traffic. Potential issues may be: the loss of some on-street car parking.

The consultation to date has identified that taxis currently store informally on Main Street, blocking the existing angled car parking adjacent the Ramsgate Hotel. This option involves reconfiguring the existing angled parking to provide a parallel car parking bay for taxis. This car parking area can then be used for private car parking during the day and as a formal taxi rank after 7pm. This option can be incorporated with the above Main Street treatment options.

Theme 1 - Walking and Pedestrians

Treatment Option 10 – Install a pedestrian and cyclist crossing to Grange Lakes on Grange Road

The benefits are: easier and safer for pedestrians and cyclists to cross Grange Road. Potential issues may be: establishing appropriate pedestrian and cyclist connections through the Wright Street reserve and Grange Lakes and general delay to traffic on Grange Road.

The community consultation identified Grange Road at the connection between Grange Lakes and the reserve along Wright Street as difficult for pedestrians and cyclists to cross.

It is noted that proposed upgrades to Grange Lakes and the existing Wright Street reserve are part of a separately run Council project named the 'Grange Corridor Master Plan'. This proposal includes the provision of a crossing on Grange Road connecting a pedestrian and cyclist shared path through Grange Lakes and the Wright Street Reserve respectively.

It is recommended that a pedestrian and cyclist crossing be installed in this location with the provision of a central median of 2m width minimum. Two lanes for the Grange Road eastbound and westbound carriageway would be retained.

It is noted that Grange Road is under the jurisdiction of DPTI and any treatment options are subject to DPTI approval.

Treatment Option 11 – Install a pedestrian crossing on Grange Road between Military Road and Anthony Street

The benefits are: easier and safer for pedestrians to cross Grange Road. Potential issues may be: general delays to traffic along Grange Road.

The community consultation identified that pedestrians find it difficult to cross Grange Road to access shops between Military Road and Anthony Street. The provision of a new median refuge of 2m width minimum on Grange Road is proposed to provide a safe pedestrian crossing point.

It is noted that Grange Road is under the jurisdiction of DPTI and any treatment options are subject to DPTI approval.

Treatment Options 12 – Ensure east / west major pedestrian thoroughfares have safe pedestrian crossing points across north / south streets

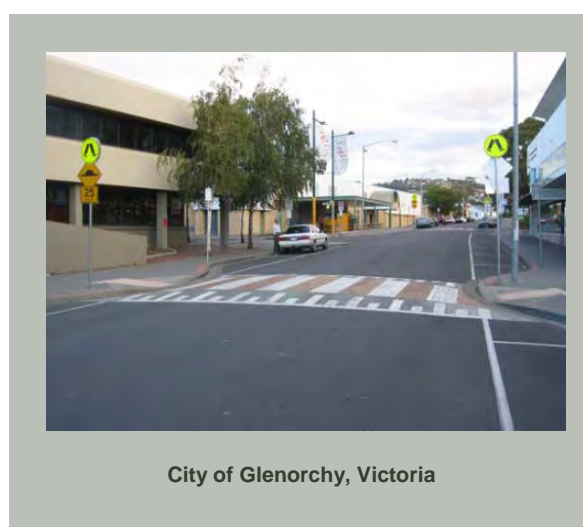
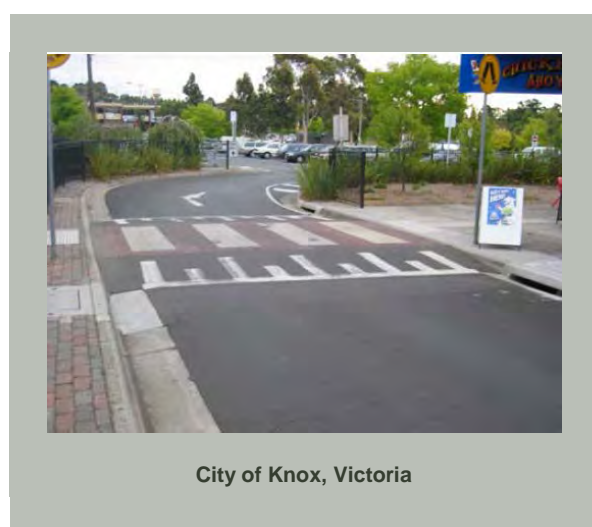
The benefits are: easier and safer for pedestrians to access the coast and formal pedestrian crossing areas. Potential issues may be: pedestrians may not use dedicated mid-block crossing points in the Study Area as access to the coast is via east / west roads and general delay to traffic where pedestrian crossings are located.

The network assessment has identified a requirement for safe east / west pedestrian crossing points. The pedestrian and cyclist surveys have identified the priority locations as:

- Near the Seaview Road / South Street intersection.
- Near the Seaview Road / North Street intersection.
- Main Street / Military Road intersection

Wombat crossing points can be provided at the locations identified above to improve pedestrian safety. Wombat crossings provide a designated pedestrian crossing point (generally for mid-block locations) and help to lower vehicle speeds. It is noted that the provision of wombat crossings on bus routes should have a sympathetic design. See the example below for a typical example of a raised wombat crossing.

Examples of raised wombat crossings



Source: Austroads Guide to Traffic Management, Part 8, Local Area Traffic Management


It is understood that DPTI will be trialling Zebra crossings (similar to a wombat crossing without the raised section). If the trial is successful, the installation of Zebra crossings within the Study Area could also be an option to improve pedestrian safety.

Treatment Option 13 – Improve pedestrian accessibility (throughout Study Area)

The benefits are: improved safety and pedestrian accessibility, improved footpath quality and improved wayfinding to the coast and other notable areas for pedestrians. Potential issues may be: the loss of some on-street car parking on narrow road sections.

The following treatment options have been identified to improve pedestrian accessibility, taking into account the *Disability Discrimination Act* (DDA):

- Narrow the road cross sections to incorporate wider verges for pedestrians.
- Provision of kerb ramps with tactile surface indicators.
- Improve footpath quality with new paving to remove trip hazards and landscaping to improve amenity.
- Increase footpath width of narrow sections (narrow the road cross sections to achieve this).
- Provide adequate signage at dedicated pedestrian crossings.



The following locations are identified as priority for the treatments identified above:

- Military Road.
- Seaview Road.

Treatment Option 14 – Line marked pedestrian areas adjacent Henley Jetty and stairs to beach in Henley Square

The benefits are: improved delineation for cyclists to reduce pedestrian / cyclist conflict in Henley Square. Potential issues may be: will require integration with Council's Henley Square Urban Design Competition.

The pedestrian and cyclist surveys indicate there are high numbers of pedestrians in comparison to cyclists on the Coast Park Section of Henley Square. This treatment option is proposed to alleviate issues with cyclist / pedestrian conflict by warning cyclists of areas with high pedestrian volumes.

Treatment Option 15 – Cyclists required to dismount in Henley Square

The benefits are: reduced pedestrian / cyclist conflict. Potential issues may be: difficult to enforce along coast park where some cyclists may ignore requirements to dismount.

Pedestrians and cyclists surveys indicate a large number of cyclists are travelling east / west, connecting to Coast Park or Seaview Road via Henley Square. This treatment option would involve the installation of signage at entry points to Henley Square, informing all cyclists that they are required to dismount.

Theme 2 -Traffic Management

Treatment Options 16, 17 and 18 – Local Area Traffic Management (LATM)

The benefits are: reduced traffic speed and landscaping opportunities. Potential issues may be: potentially unsafe for cyclists and may need to be installed near (but not blocking) residential driveways. LATM may also encourage traffic onto other roads within the Study Area.

LATM can be used for traffic calming and to lower vehicle speeds within the Study Area. The community consultation and speed data collection to date has identified the following areas where 85th percentile vehicle speeds are high and LATM is a priority:

- East Terrace
- Cudmore Terrace (including calming traffic before Henley High School and the Western Community Hospital).
- Wright Street.

The benefits of LATM are stated in *Austroads Guide to Traffic Management, Part 8, Local Area Traffic Management*:

'The primary target of LATM is to change driver behaviour, both directly by physical influence on vehicle operation, and indirectly by influencing the driver's perceptions of what is appropriate behaviour in that street. The objective is to reduce traffic volumes and speeds in local streets to increase liveability and improve safety and access for pedestrians and cyclists'.

The following LATM examples are provided for treatment options 16, 17 and 18:

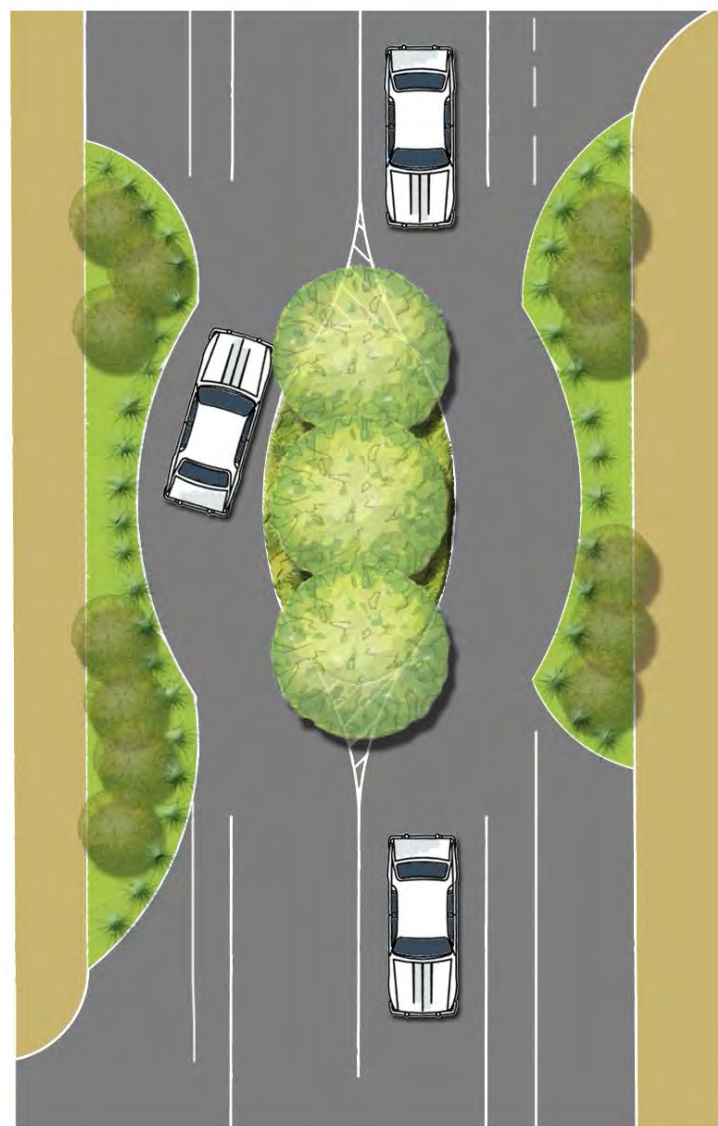
Centre blister island

Centre blister islands provide flexibility in design, allowing for commercial vehicles and buses. This option provides a pedestrian refuge and may enhance the streetscape through landscaping. It should be ensured that no driveway access is blocked and cyclist safety ensured. This LATM treatment lowers vehicle speeds in the vicinity of the device and along a whole street if used in a series.

Slow point / angled slow point

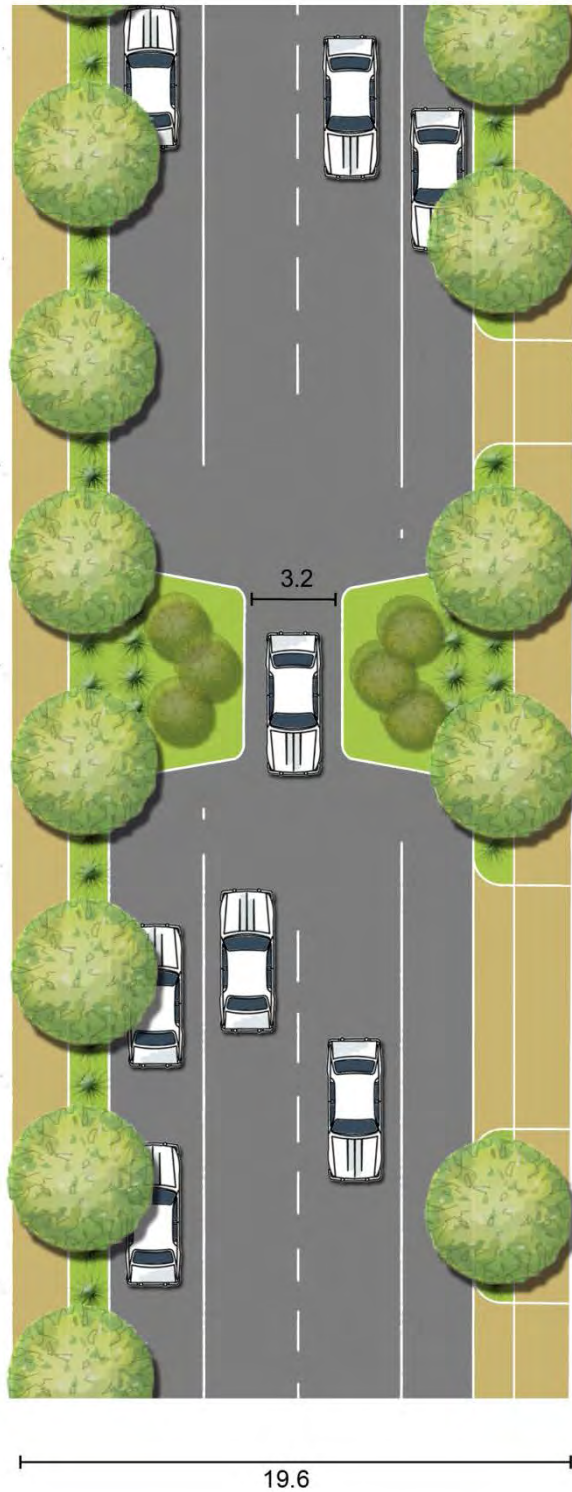
Slow points deter and slow vehicles along a whole street as they must be used in a series, spaced evenly along the entire section of road (80m to 120m apart). This option may enhance the streetscape through landscaping. Cyclist safety should be ensured in the detailed design of this LATM device. It is noted that when vehicles arrive simultaneously at the device, it may be unclear who should give way.

Treatment Option 16 – Introduce centre blister island on East Terrace to calm traffic (indicative widths only)

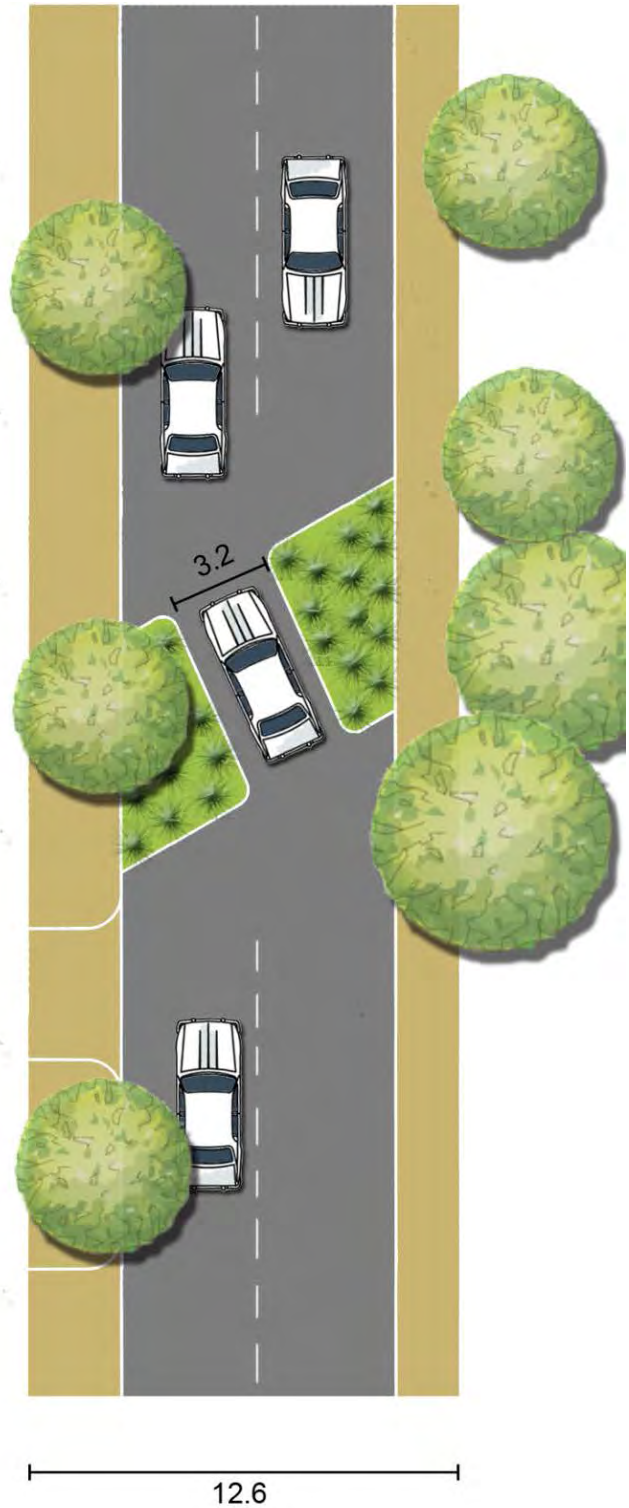


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Treatment Option 17 – Introduce slow points along Cudmore Terrace to calm traffic (indicative widths only)



Treatment Option 18 – Introduce angled slow points on Wright Street to calm traffic (indicative widths only)





Treatment Option 19 – Introduce a 40 km/hr Study Area precinct speed limit

The benefits are: reduced traffic speed and road safety (general traffic, pedestrians and cyclists). Potential issues may be: difficult for SAPOL to enforce without LATM treatments.

This option would reduce vehicle speeds throughout the whole Study Area (bounded by Grange Road, Cudmore Terrace, Henley Beach Road and the Coast - refer to the map on page 2) to improve pedestrian and cyclist safety. LATM treatments would be required on existing wide cross sections to reduce the 85th percentile speed of vehicles, close to the 40 km/hr limit (could be introduced quickly and initially on an experimental basis).

This option would impact on a large area, potentially affecting residents, business and visitors travelling in the Study Area.

It is noted that all 40 km/hr speed reductions are subject to DPTI approval.

Treatment Option 20 – Introduce a 40 km/hr Henley Beach precinct speed limit

The benefits are: reduced traffic speed and road safety (general traffic, pedestrians and cyclists). Potential issues may be: difficult for SAPOL to enforce without LATM treatments.

An alternative treatment for a reduction in speed across the whole Study Area is the provision of a 40 km/hr speed limit in the Henley Square Precinct (bounded by North Street, East Terrace, South Street and the Coast - refer to the map on page 2).

It is noted that all 40 km/hr speed reductions are subject to DPTI approval.

Treatment Option 21 – Introduce a 25 km/hr Henley Beach precinct speed limit

The benefits are: reduced traffic speed and road safety (general traffic, pedestrians and cyclists) and provides opportunities for shared space options. Potential issues may be: difficult for SAPOL to enforce without LATM treatments.

An alternative treatment for a reduction in speed is the provision of a 25 km/hr speed limit in the Henley Square Precinct only (bounded by North Street, East Terrace, South Street and the Coast - refer to the map on page 2).

It is noted that any speed reductions on Seaview Road is subject to DPTI approval.

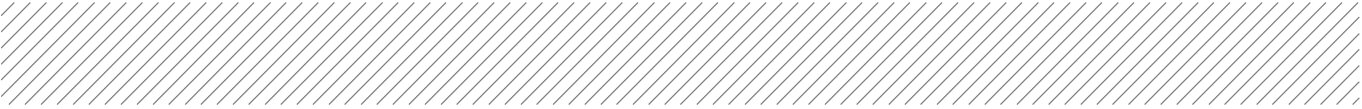
Treatment Option 22 – Low speed design solutions within the Study Area

The benefits are: reduced traffic speed and road safety (general traffic, pedestrians and cyclists). Potential issues may be: central medians may block right turn access to residential driveways.

This option retains the current speed limits in the Study Area with increased speed enforcement and design to slow the 85th percentile speed of vehicles. This may be achieved through LATM design (see examples above) or central medians to narrow the roadway. Central medians can be provided at a lower cost as no modifications are required to existing kerbing and drainage. Protuberances can also be provided at junctions to create a 'weaving' effect, slowing traffic. It is noted that this treatment option will restrict driveway access to left in / left out only.

Treatment Option 23 - Left out only into Seaview Road from the Henley Square car park

The benefits are: simplifies egress from the car park and potentially improves safety. Potential issues may be: increase removes the right turn out of car park which may the use of other streets for vehicle turning maneuverers e.g. north Street or Marlborough Street.



This treatment option is proposed to reduce congestion at the exit caused by vehicles turning right. It is noted that Seaview Road is under the jurisdiction of DPTI and any treatment options are subject to DPTI approval.

Treatment Option 24 - Left out only into Military Road from the Pavilion (Foodland) car park

The benefits are: improved safety at the Pavilion car park exit for all road users. Potential issues may be: removes the right turn out of car park which may the use of other streets for vehicle turning maneuverers e.g. north Street or Marlborough Street.

Negotiations would be required with the proponent to formalise the exit from the car park and reduce concerns regarding sight distance due to the existing bus layover area for this option.

Treatment Option 25 - Remove slip lanes at the South Street and Military Road intersection

The benefits are: reduced traffic speed at roundabout approach arms and reduced confusion for motorists. Potential issues may be: some increase in queuing at peak periods.

Given traffic volumes indicate no issues with the roundabout capacity, the left turn slip lanes on the South Street approaches to Military Road can be removed to avoid confusion and reduce speeds at the roundabout.

Treatment Option 26 – Create a 4 approach arm roundabout at the Henley Beach Road / Seaview Road intersection

The benefits are: improved safety at the intersection and increased reserve space. Potential issues may be: pedestrian and cyclist safety and a high establishment cost.

This intersection has been identified as the area with the highest number of crashes (24) in the Study Area over the 5 year crash data period (2007 – 2011), indicating an alternative treatment may be required.

This option involves modifying the current intersection layout and extending the existing reserve to provide a 4 approach arm roundabout which includes removing the stop sign at the Seaview Road approach arm. .

It is noted that this treatment would be subject to a full intersection analysis and engineering report to determine if it is appropriate and feasible.

It is noted that Seaview Road and Henley Beach Road are under the jurisdiction of DPTI and any treatment options are subject to DPTI approval.

Treatment Option 27 – Provide signage and line marking to control and limit through traffic, speed and parking in laneways

The benefits are: reduced speed of traffic and better delineation of car parking areas in laneways. Potential issues may be: may require enforcement to ensure compliance.

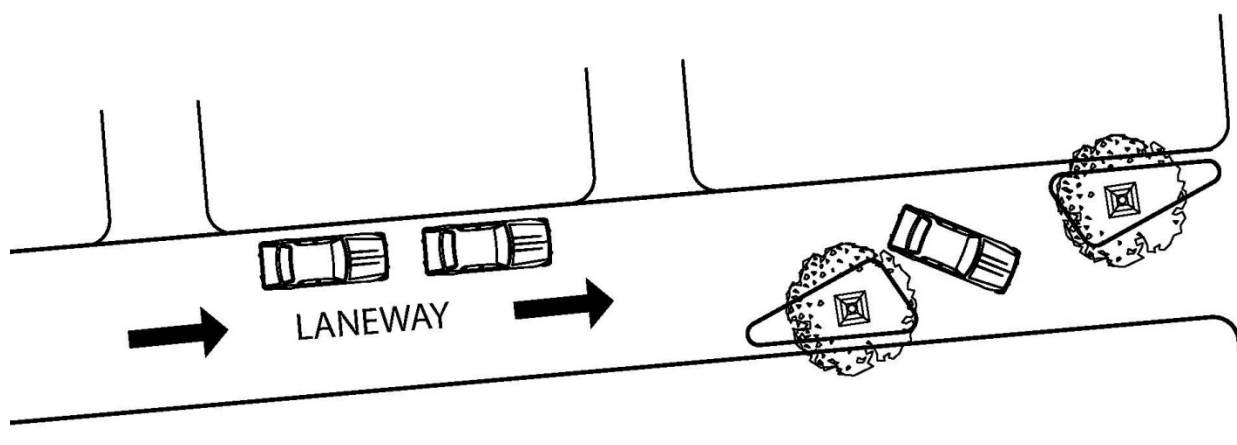
The provision of compliance signage and line marking may alleviate issues identified in the community consultation regarding illegally parked vehicles blocking laneways or residential access and limit traffic speed.

Treatment Option 28 – All laneways modified to one-way

The benefits are: increased permit car parking spaces for residents only and landscaping opportunities. Potential issues may be: confusion over laneway direction.

This option utilises a one-way system, designed with protuberances (narrowing of the laneway) to slow speed and remove the possibility of vehicle / vehicle conflicts. This removes the potential for obstruction of residential access and provides landscaping opportunities, e.g. tree planting. Car parking would be retained / provided on one side of the laneway for residential permit parking only, providing residential driveway access is not impeded.

Indicative one-way laneway treatment



Treatment Option 29 – Re-mark faded line marking throughout Study Area

The benefits are: better delineation of car parking areas and improved vehicle compliance with the Road Rules.

Line marking is faded in many locations which may contribute to illegal parking or illegal vehicle manoeuvres.

Treatment Option 30 – Redesign existing roundabouts to cater for buses that currently ‘hit’ existing kerbing

The benefits are: improved comfort for public transport passengers at roundabouts. Potential issues may be: the radii of the roundabout may need to be increased which may affect amenity, and require existing footways to be reduced.

This option involves re-shaping roundabout kerb profile / internal radius of existing roundabouts to alleviate issues of buses ‘hitting’ the roundabout kerbing.

Treatment Option 31 – Remove / trim existing vegetation where possible to alleviate sight distance concerns at corner blocks

The benefits are: improved safety at intersections. Potential issues may be: potentially affect amenity.

Relevant Council approvals and investigations would be required for this treatment option.

Theme 3 – Car Parking and Loading Facilities

Treatment Options 32 and 33 – New off-street car park (can be established to replace car parking removed for other treatment options)

The benefits are: more off-street car parking in close proximity to Henley Square. Potential issues may be: very expensive capital cost and would need to be paid parking to cover costs of establishment and maintenance. It may also encourage more traffic into the local area, impeding on pedestrians and cyclists.

The community consultation and data collection has identified that car parking associated with Henley Square is at capacity and is 'spilling out' into residential areas. To alleviate this issue, the following would be available for the establishment of new car parking:

Treatment Option 32 - New underground / undercroft car park

If a new car park was to be provided underground close to the sea front (e.g. under the existing Henley Square or Esplanade South car parks, expensive engineering would be required due to the water table. The car park would likely need to be paid parking to recover cost of establishment and maintenance.

Treatment Option 33 - New multi-storey car park

Council may be required to buy suitable land for a multi-storey car park. The car park would likely need to be paid parking to recover cost of establishment and maintenance.

Possible locations for a new multi-storey car park include:

- Town Hall and RSL Club – owned by Council.
- Council Depot – owned by Council, however, not a large site (therefore possibly not a viable option).
- South side of Ramsgate Hotel and MP's office – Council would be required to buy some land.
- Police Station and Community Hall – The police would be required to relocate (at least temporarily) if a car park was built on this site. Potential exits to incorporate the police station into a multi-storey mixed use building (e.g. police, car parking and residential) on the current site.

It is noted that by improving the car parking arrangements at Henley Square, more visitors and traffic may be attracted to the area, thereby exacerbating existing perceived issues of traffic congestion.

Treatment Option 34 – Install car parking meters for existing on-street and off-street car parks adjacent to Henley Square

The benefits are: increased turnover of car parking adjacent Henley Square. Increased Council revenue may be used to fund other projects. Potential issues may be: may encourage parking in 'free' residential streets.

Car parking survey data indicates 16%-26% of vehicles have a duration of stay 2 or over hours for all of the survey areas combined. The introduction of short stay metered parking would increase vehicle turnover and generate Council revenue to potentially fund other improvements in the Study Area.



Treatment Option 35 - Remove Henley Square car park (north of Henley Square) if suitable alternative is built

The benefits are: improved use of prime coastal land and increased amenity of Henley Square. Potential issues may be: very expensive capital cost and would need to be paid parking to cover costs of establishment and maintenance. It may also encourage more traffic into the local area, impeding on pedestrians and cyclists.

The existing car park is located on prime coastal land and has the potential for an improved use. For example, if additional parking provision was provided elsewhere the land could be converted to open space. However, it is likely that the provision of alternative car parking will require significant funds (refer to Treatment Options 32 and 33).

From a recreation and tourism perspective there would ideally be less car parking within Henley Square. Car parking currently dominates a large proportion of Henley Square and this impacts on the usability of the Square for recreation activity and events. Council has recently initiated a design competition for Henley Square and it is possible that the car parking provision will be reviewed as part of this planning.

Treatment Option 36 – Provide a dedicated pick up / drop off point at the beach for beach goers travelling by car

The benefits are: visitors may not be required to park directly adjacent the beach, leading to reduced vehicle congestion. Potential issues may be: loss of some on-street car parking.

Possible locations for this Treatment Option include:

- Coast Park car park (south of Henley Square - accessed from the Esplanade).
- Henley Square Car Park.
- Esplanade, immediately north of Henley Square.

It is noted that the provision of a dedicated pick up / drop off point at these locations may result in the loss of existing car parking for other uses.

A dedicated pick up point / drop off zone may reduce the perceived congestion and parking issues associated with Henley Square e.g. beachgoers may be comfortable parking further away if they have an area to unload before finding a car park.


Treatment Option 37 – Increase car parking near Henley Square for persons with a disability

The benefits are: improved access to Henley Square and surrounding area for persons with a disability. Potential issues may be: loss of some on-street car parking for general visitors.

This treatment option involves increasing existing provision of car parking for persons with a disability along the Coast Park car park (south of Henley Square - accessed from the Esplanade) and Henley Square Car Park to increase accessibility.

The current provision for reserved spaces for people with a disability in close proximity to Henley Square is:

- Henley Square Car Park - 2.
- Pavilion (Foodland) car park - 8.
- Henley and Grange Library car park - 3.
- Off-street car park on the Corner of Main Street and Military Road - 2.



This generally complies with the City of Charles Sturt Development Plan provision of 1 in every 100 spaces should be reserved for persons with a disability.

Treatment Option 38 - Redesign Coast Park car park (located south of Henley Square, accessed from the Esplanade) to improve amenity, perhaps provide more car parking and improve traffic flow

The benefits are: improved traffic flow in the car park, improved amenity and perhaps more parking for visitors. Potential issues may be: increased traffic in area due to increase car parking availability which may reduce pedestrian and cyclist amenity.

The network assessment has indicated vehicles cannot make some required turns in the car park. A one way system would address this problem.

Treatment Option 39 – Establish a car parking levy for any new development

The benefits are: potentially provide funds to pay for wider transport initiatives in the Study Area to meet Council vision.

This option would mean that any new development in the Study Area will include a levy to provide and maintain a new car park in the vicinity of Henley Square.

Treatment Option 40 – Negotiate a deal with the Pavilion (Foodland) car park proprietor regarding increased use and opening hours

The benefits are: improved efficiency of car space in Pavilion car park and reduced demand for car parking spaces surrounding Henley Square. Potential issues may be: effect business customers and cost of car park security for after-hours use.

Parking surveys have identified the Pavilion (Foodland) car park is underutilised during busy periods. This treatment option would involve negotiating increased use of the car park for the public, particularly after shop closing times. The provision of electronic signage indicating car park opening hours and available parking spaces may also increase community and visitor awareness that the car park is free for the first 2 hours.

Treatment Option 41 – Regulate on-street car parking and create a drop off zone at Star of the Sea School

The benefits are: reduced vehicle congestion adjacent Star of the Sea School. Potential issues may be: loss of some on-street car parking.

The community consultation has indicated that the Star of the Sea School locality is congested during school drop off / pickup times and requires additional parking. Given constraints of a small car park many vehicles are required to park on the street. This option creates a 2 minute drop off zone in the immediate vicinity of the school, requiring long stay parkers to park further away and creating car parking turnover. Council enforcement would subsequently be required at peak times.

Treatment Option 42 – Star of the Sea School – Promote ‘walking bus’

The benefits are: reduced vehicle congestion adjacent Star of the Sea School during peak times and a sustainable and a healthy transport method.

This option promotes walking to and from school via a pre-determined route with pre-determined adult supervisors. This could potentially be from dedicated pick up / set down areas.

Treatment Option 43 – Utilise existing schools for off-street car parking on weekends or for events

The benefits are: additional off-street car parking adjacent the coast. Potential issues may be: security of school grounds and increased car trips to the area, resulting in congestion.

A number of schools are located around Henley Square including Star of the Sea Primary School, Henley High School and St Michaels College. Whilst Henley High School and St Michaels College are likely to be too far for people to walk to Henley Square, there could be potential to utilise the Star of the Sea Primary School site for car parking. Drivers could 'drop off' their passengers at Henley Square (using a drop off area) and then park in the school grounds (approximately 36 formal off-street car parks are located at Star of the Sea School, accessed from Seaview Road).

Henley High School and St Michaels College could possibly provide an overflow for sports activities and when there are major events at Henley Square. To enable car parking within the school sites there would need to be a partnership arrangement with each school including a fee payment or other compensation (e.g. usage of sports grounds). This opportunity will require discussion with each of the schools and relevant government departments.

This option could be utilised on weekends when car parking surrounding the square is at or near capacity (refer to Parking Survey Map for 20 January at the **end of the document**). Security of school grounds and property is also required for this treatment option.

Treatment Option 44 – Provide additional off-street car parking for Henley and Grange Community Oval and utilise for events associated with Henley Square

The benefits are: additional off-street car parking and less vehicle congestion associated with sporting event days. Potential issues may be: reduction in reserve space to facilitate additional car parking and increased car trips to the area, resulting in congestion.

The community has suggested there are issues with traffic when the Henley Grange Memorial Oval is used for sport, particularly at game 'change over' times. The roads become congested and cars park in the streets. This highlights the need to consider opportunities for increasing 'off street' car parking around the sportsground and potentially improving the entry and exit points. Options could include the creation of some overflow car parking within the sportsground or the establishment of overflow car parking linked to the surrounding schools. Parking limits on the surrounding roads could be introduced to encourage use of this overflow car parking. Parking limits may also encourage sports players to share transport to the ground or use alternative modes of transport.

The options for car parking within and around the Henley Grange Memorial Oval will require discussion with Council, the sporting groups and the surrounding schools (Henley High School and St Michaels College).

Theme 4 – Cycling

(Refer also to General Treatment Options 1, 2 and 3)

Treatment Option 45 – Provide 'watch for cyclists' signs at roundabouts

The benefits are: improved cyclist safety at roundabouts and cheap to introduce. Potential issues may be: additional signage worsens 'street clutter'.

Military Road, predominantly at the existing roundabouts has been identified as unsafe for cyclists during the community consultation. 'Watch for cyclists' signage can be provided to increase driver awareness at existing roundabouts.



Treatment Option 46 – Increase bicycle parking facilities at Henley Square

The benefits are: additional areas for cyclists to securely store their bike encouraging sustainable transport modes. Potential issues may be: ensuring bicycle parks are located where they will be used.

This treatment option involves increasing the provision of bicycle racks is proposed in close proximity to Henley Square which does not adversely impact on amenity. Further community consultation regarding the exact location for these facilities is required.

Treatment Option 47 – Create line marked shared path along Coast Park section (adjacent jetty) or rumble strips to delineate change of conditions

The benefits are: better delineation for cyclists to reduce pedestrian / cyclist conflict. Potential issues may be: affect amenity of Henley Square.

Pedestrian surveys indicate high volumes utilising the Coast Park section adjacent the Henley Square Jetty (1000+ in each direction on the weekend). Existing issues raised in the community consultation relate to cyclist / pedestrian conflicts at this location due to perceived high bicycle speeds. This option delineates changed conditions on the entry to Henley Square with surface changes to create cyclist rumble strips. This provides an indication to cyclists that conditions have changed and to slow speed in an area with high volumes of pedestrians. Different coloured paving and signage could also be used to minimise pedestrian / cyclist conflict. Refer to Treatment Options 14 and 15 regarding changed conditions for cyclists at Henley Square.

Theme 5 - Public Transport

Treatment Option 48 – Negotiate with the Public Transport Services Division of DPTI to re-route an existing bus service or provide a new bus service and provide a bus stop adjacent the Western Community Hospital (PTS jurisdiction)

The benefits are: improved convenience for Hospital patients and visitors and encouraging public transport use to the Hospital. Potential issues may be: increased costs for public transport service providers.

The provision of a new bus stop in front of the Western Community Hospital (Cudmore Terrace) has been identified during community and stakeholder consultation. This would involve re-routing an existing service or providing a new bus to service the location. This option will involve negotiations with PTS regarding public transport provision at the second stakeholder workshop (likely consultation date in March).

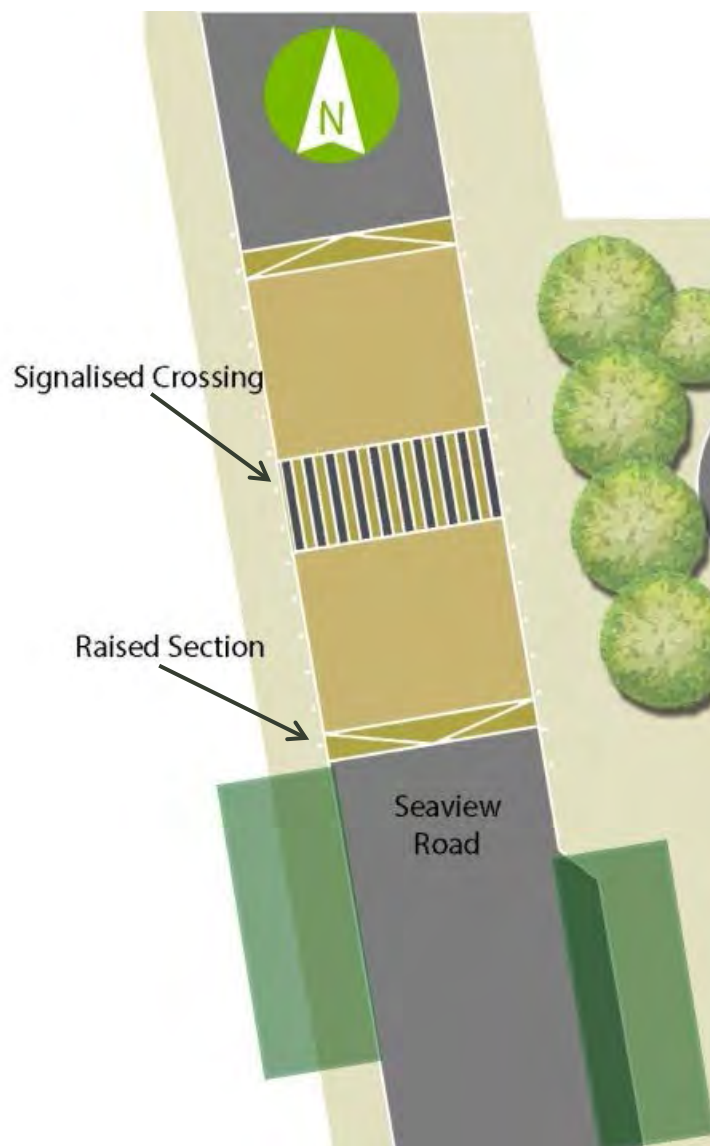
Treatment Option 49 – Provide ‘iconic’ bus stops at Henley Square

The benefits are: improved public transport waiting facilities at Henley Square encouraging sustainable transport modes. Potential issues may be: affect current facilities in these locations e.g. footpath and on-street car parking.

The City of Charles Sturt and the Public Transport Services Division of DPTI has indicated their preference for new, iconic bus stops located at Henley Square. As the western bus stop was temporarily moved approximately 200m north of Henley Square, this would provide a new bus stop location for the northbound carriageway. The bus stop for the southbound carriageway outside the Ramsgate Hotel would also be improved. Indicative locations along Seaview Road for the bus stops are shown in green below (south of the signalised pedestrian crossing).

It is noted that this may affect orientation of existing facilities in Henley Square and the existing pedestrian footpath adjacent to the Ramsgate Hotel entry / exit on Seaview Road.

It is noted that Seaview Road is under the jurisdiction of DPTI and any treatment options are subject to DPTI approval.



Treatment Option 50 - Upgrade all bus stops within the Study Area to comply with the *Disability Discrimination Act* requirements

The benefits are: improved public transport waiting facilities throughout the Study Area encouraging sustainable transport modes. Potential issues may be: footpath widening may be required in some locations.

This option may require narrowing of the roadway cross section to widen the footpath in some locations. All bus stop locations would also be upgraded to a consistent standard.



Treatment Option 51 – Relocate / modify bus layover area on Military Road

The benefits are: reduce existing sight distance concerns with the exit from the Pavilion (Foodland) car park. Potential issues may be: relocating the layover may create a sight distance issue elsewhere and possible increase cost to public transport service providers.

The community consultation and network assessment has identified sight distance issues associated with the Pavilion (Foodland) car park exit and the bus layover located on Military Road. Relocating or modifying the layover area would eliminate this issue. Consultation will be required with the Public Services Transport Division of DPTI to identify suitable alternative locations.

Treatment Option 52 – Provide a late night taxi rank on Seaview Road

The benefits are: formal area for taxis to park without inconveniencing other traffic. Potential issues may be: loss of some on-street car parking.

An alternative area for the location of a Taxi Rank is on Seaview Road, directly outside of the Ramsgate Hotel. It is noted that this treatment option will result in the loss of some on-street car parking and the relocation of the existing bus stop.

It is noted that Seaview Road is under the jurisdiction of DPTI and any treatment options are subject to DPTI approval.

Theme 6 - Urban Design and Amenity

Treatment Option 53 - Improve wayfinding in the Study Area

The benefits are: increased information for residents, visitors and tourists to access to coast and other notable landmarks via sustainable transport modes. Potential issues may be: negative impact on amenity due to additional signage.

The network assessment has identified that wayfinding in the area is generally poor. The provision of signage directing pedestrians to safe crossing points to access the beach and other notable areas or facilities is proposed. In addition, the network assessment has identified the requirement for a general improvement and provision of public transport wayfinding such as real time information at bus stops and additional directional signage throughout the Study Area.

Treatment Option 54 – Use native plant species in landscaping improvements

The benefits are: improved street amenity through the use of native species.

This treatment option involves providing native plant species only in all landscaping improvements. It is noted that the provision of landscaping should not impede the required sight lines for vehicles.

Treatment Option 55 – Improve the consistency of landscaping treatments

The benefits are: improved street amenity. Potential issues may be: increased establishment and maintenance costs.

This option involves providing consistent and quality landscaping for all new treatments in the Study Area.



Treatment Option 56 – Advocate for a ‘green wall’ or green landscaping at the Bajju/H2O development on Military Road

The benefits are: improved street amenity on Military Road. Potential issues may be: increased establishment and maintenance costs.

An option to improve amenity on Military Road is to advocate with the Bajju/H2O proprietor for green landscaping or ‘green walling’. ‘Green walling’ involves the planting of green vegetation on a vertical wall.

Treatment Option 57 – Improve Streetscape along main roads (Seaview Road, Military Road, Grange Road, Henley Beach Road)

The benefits are: improved street amenity on main roads. Potential issues may be: increased establishment and maintenance costs.

Options to improve the streetscape and amenity in these locations includes improved branding and signage (including wayfinding), safety i.e. improvements to public lighting and undertaking street maintenance to improve quality of the paving, providing pedestrian comfort through seating and drinking fountains, increased shade with street trees and improved pedestrian safety through better crossing points / reduction in traffic speed.

Treatment Option 58 – Improve pedestrian and cyclist connections to Grange Lakes

The benefits are: improved pedestrian / cyclist connections between recreational open space and Henley Square. Potential issues may be: some on-street car parking may be reduced to facilitate cyclist connections.

Grange Lakes has been identified as an opportunity for a linear connection and Henley Square is identified as a significant destination to which there should be bike and pedestrian connections. Henley Square is potentially connected to a linear connection from Grange Lakes through to the Henley Grange Memorial Oval. There is a need to provide safe connections and crossing points for a Grange Lakes connection (refer to treatment option 10) on Grange Road and the provision of bike racks, shelter, drinking water and information maps will be important.

Main Street is currently an east / west bicycle connection with marked bicycle lanes. However, connections from North Street and South Street through to Coast Park and Henley Square could be considered.

Pedestrian connection to Henley Square from Grange Lakes is also important. A visual connection could be achieved through landscape and paving with treed and shady pathways both sides of Seaview Road and with the east / west connections, and signage and public art could be used to promote both Henley Square and the commercial area.