City of Charles Sturt

Beverley LATM Plan

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June 2009
Ref No 20080442RA2

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Document History and Status

Rev	Description	Author	Rev'd	App'd	Date
A	Final (Amendment to 20080442RA1)	PCS		PCS	25/06/09

Executive Summary

Tonkin Consulting was engaged by Council to prepare a Local Area Traffic Management (LATM) Plan for the area of Beverley. The study area is bounded by Port Road, East Avenue, Grange Road, Crittenden Road, Birch Street and Ledger Road.

The plan is required to consider local traffic issues raised by residents and Council, and to develop a conceptual plan that addresses the concerns and issues identified during the study process.

The development of this draft plan for consultation has been based on community input and a review of available traffic data. The plan has been prepared through liaison with an informal residents group. The plan has regard to Council's Transport Strategy and Development Plans.

Some of the key issues identified by the community and residents group included :

- *High traffic speeds along Main Street*
- *Through traffic and speeds along Alton St – Olveston Ave – Elford St*
- *Freight traffic along the northern end of Ledger Road*
- *Congestion and delays at Williams Street / Grange Road*

The report recommends further consideration be given to the following treatments :

High Priority / Immediate Action

- *Investigate the installation of min-roundabouts along Main Street, possibly at the intersections of Jeanes Street, Willsmore Street, Spring Street and George Street.*
- *Consider the re-opening of Woolgina Street at the junction with Ledger Road*
- *Clearly mark the 10m No Stopping restrictions around the corner of East Avenue and Watson Street and monitor driver observance of the prohibition*

Moderate Priority

- *Install 4 road humps / plateaux along Alton Street and Olveston Avenue (between Ledger Road and Woodlands Crescent)*
- *Widen the bend between Alton Street and Olveston Avenue and install a raised median to prevent corner cutting*
- *Relocate the bus stop in Port Road near the intersection with Howards Road through discussion with the Public Transport Division*

Low / Ongoing Review

- *Review opportunities to upgrade the intersection of Grange Road / William Street subject to any future land use changes to the adjacent properties*
- *Liaise with DTEI to ensure the most efficient operation of the traffic signals at the intersections of Grange Road / Holbrooks Road / East Avenue.*
- *Monitor driver observance of the No Entry provisions at the northern end of Main Street to assess the need for any further intervention, and liaise with SAPOL to coordinate enforcement if required*
- *Monitor traffic volumes along Goulding Street*
- *Monitor traffic volumes and commercial vehicle use of McLean Street*

1. Introduction

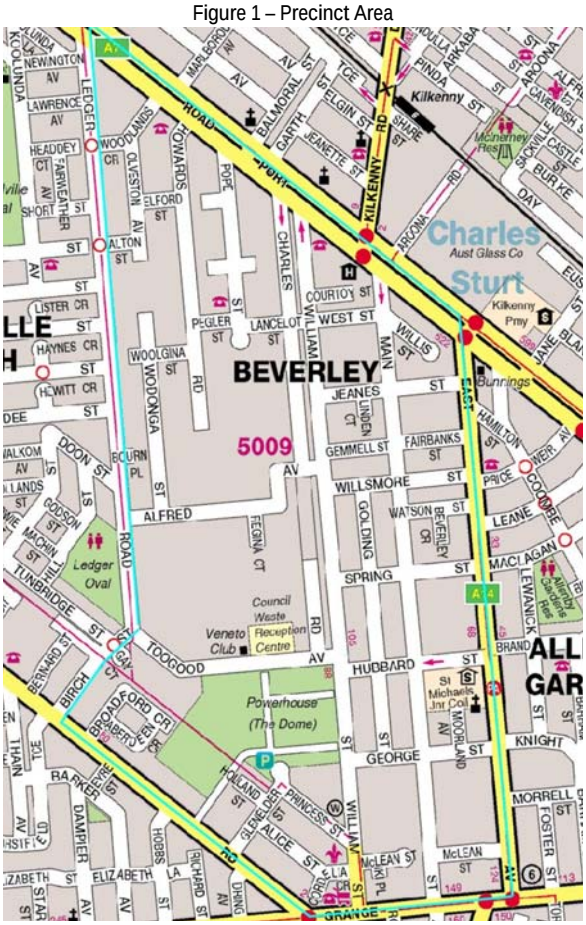
The City of Charles Sturt has engaged Tonkin Consulting to prepare a Local Area Traffic Management (LATM) Plan for the area of Beverley.

The plan is required to consider local traffic issues raised by residents and Council, and to develop a conceptual plan that addresses the concerns and issues identified during the study process.

As part of recommendations made in the City of Charles Sturt Traffic Management Strategy (2006) local areas were defined across the council area. Area 29 is ranked as a priority area for LATM development.

The Beverley local area is located in the centre of the Council area and includes parts of Beverley, Findon and Woodville South. The study area is bounded by Port Road, East Avenue, Grange Road, Crittenden Road, Birch Street and Ledger Road.

Figure 1 – Precinct Area



Although Ledger Road was generally excluded from the study area (having been previously reviewed as part of the Woodville South LATM), some issues arose during consultation that included Ledger Road, and more so, its relationship to side roads within the precinct area.

Beverley includes a mix of land uses including the Beverley Industrial Area which is identified as a key economic generator for the Council. There are also significant areas of residential land especially between William Street and East Avenue.

The plan has been prepared through consultation with the community. The final plan is intended to provide Council and the community with a clear direction for traffic management within the precinct.

2. Method

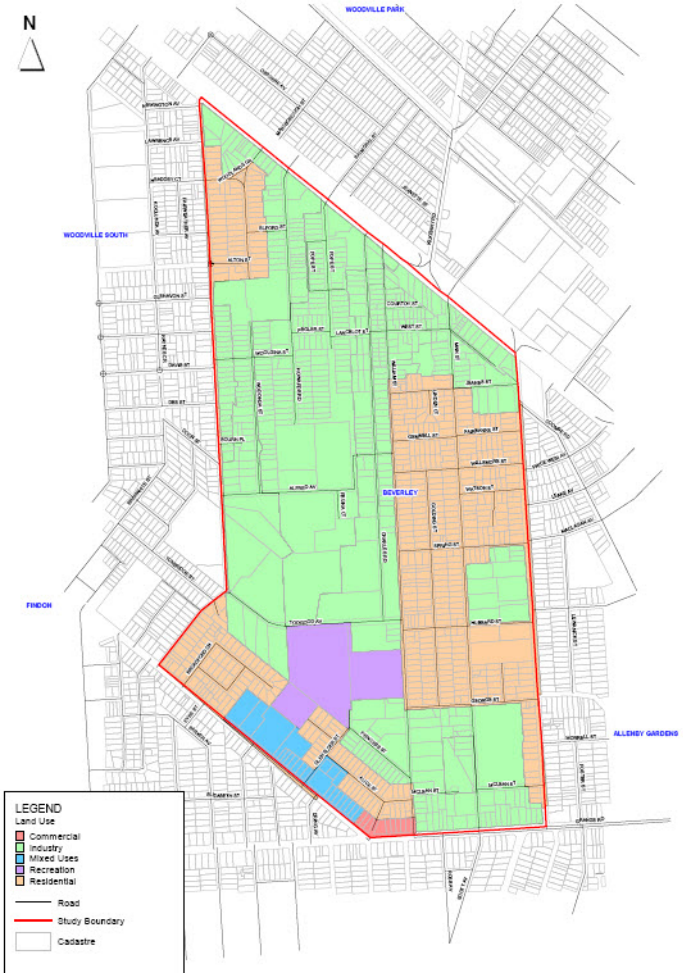
A LATM study is a formal way of investigating traffic, pedestrian and cyclist related issues within the local streets of the study area. This study consists of the following stages; taking into account a range of data, including background documents, on-site investigations, a review of speed, volume and collision data, and consultation with the community and relevant stakeholders to better determine the issues, concerns and opportunities in the area.

2.1 Background Documents

City of Charles Sturt Development Plan

The City of Charles Sturt Development Plan (consolidated 28th February 2008) defines the boundaries for land uses within the Beverley area. The study area consists primarily of industrial zoned land.

Figure 2 Precinct Land Uses



The remaining land is residential which is generally concentrated between William Street and East Avenue.

There are also small pockets of residential land located at the north of Ledger Road and amongst the mixed use and commercial zones along Crittenden Road.

The study area also has an area of recreational zoned land which contains the Distinctive Homes Dome (a basketball stadium).

General principles of traffic control applying to transportation across the City of Charles Sturt include:

- A comprehensive, integrated, and efficient, public and private transport system which will:
  - provide access to adequate transport services for all people, at an acceptable cost;
  - effectively support the economic development of metropolitan Adelaide and the State;
  - ensure a high level of safety; and
  - maintain the options for the introduction of suitable new transport technologies.
- A road hierarchy to form the basis of development controls and serve as a guide to the investment of road funds in order to ensure a safe and efficient traffic flow and to promote the saving of fuel and time. Arterial roads will provide for major traffic movements.
- A network of roads, paths and tracks, to accommodate satisfactorily a variety of vehicular, cycle and pedestrian, traffic.
- Safe and convenient pedestrian and cycle ways, particularly to link residential areas with centres and to provide a link to adjoining public open space.
- A road system which separates industrial traffic from predominantly residential areas.
- A compatible arrangement between land uses and the transport system which will:
  - ensure minimal noise and air pollution;
  - protect amenity of existing and future land uses;
  - provide adequate access; and
  - ensure maximum safety.

The Development Plan recognises and supports the industrial precinct within area, and the need to develop road networks suitable for large vehicles to improve access and competitiveness with other industrial precincts within the metropolitan Adelaide. Specific principles of development control which apply to this area include:

- Land uses serviced by heavy vehicles or which are high traffic generators are appropriate on the following roads:
  - Port and Howards Roads; Pope Street and Toogood Avenue
- Land uses which are high traffic generators are inappropriate in the following locations:
  - In the area bounded by East Avenue and Spring, Hubbard and Main Streets.

- In Beverley south of George Street, a future arterial road linking Holbrooks Road and William Street influences the extent of development in the area. Development should provide for the future arterial road and major buildings should be sited clear of the proposed alignment.
- The main focus for industrial traffic and heavy vehicles should be:
  - East and Toogood Avenues; Port, Grange and Howards Roads; Main Street (north of Jeanes Street), Pope and William Streets.
- Generation of industrial traffic should be reduced on the following streets:
  - Ledger Road, Elford and Jeanes Street (west of Main Street) and Woodlands Crescent.

City of Charles Sturt Transport Strategy 2005 – 2025

The objectives of the Transport Strategy are as follows:

- Maximise the land use - transport integration;
- Preserve and enhance the quality of the local environment;
- Maximise accessibility across the municipality;
- Retain jobs and economic competitiveness;
- Promote an environmentally sustainable transport system; and
- Increase patronage of public transport.

The strategy also sets out a range of short and medium term actions to achieve these objectives.

City of Charles Sturt Traffic Management Strategy, 2006

The Traffic Management Strategy sets out the road hierarchy at both functional and classical levels. This document also details the LATM precincts and areas and the prioritisation of these areas for the undertaking of LATM plans. The road hierarchy classifications as defined in the Traffic Management Strategy are as follows:

Distributor (Road)
A road that provides for the distribution of traffic from, within and through a local area.
This type of road would comprise a single lane in each direction with no median (depending on abutting activity) with the travelling lanes free of parking. Traffic volumes would generally be less than 6,000 to 8,000 vehicles per day.

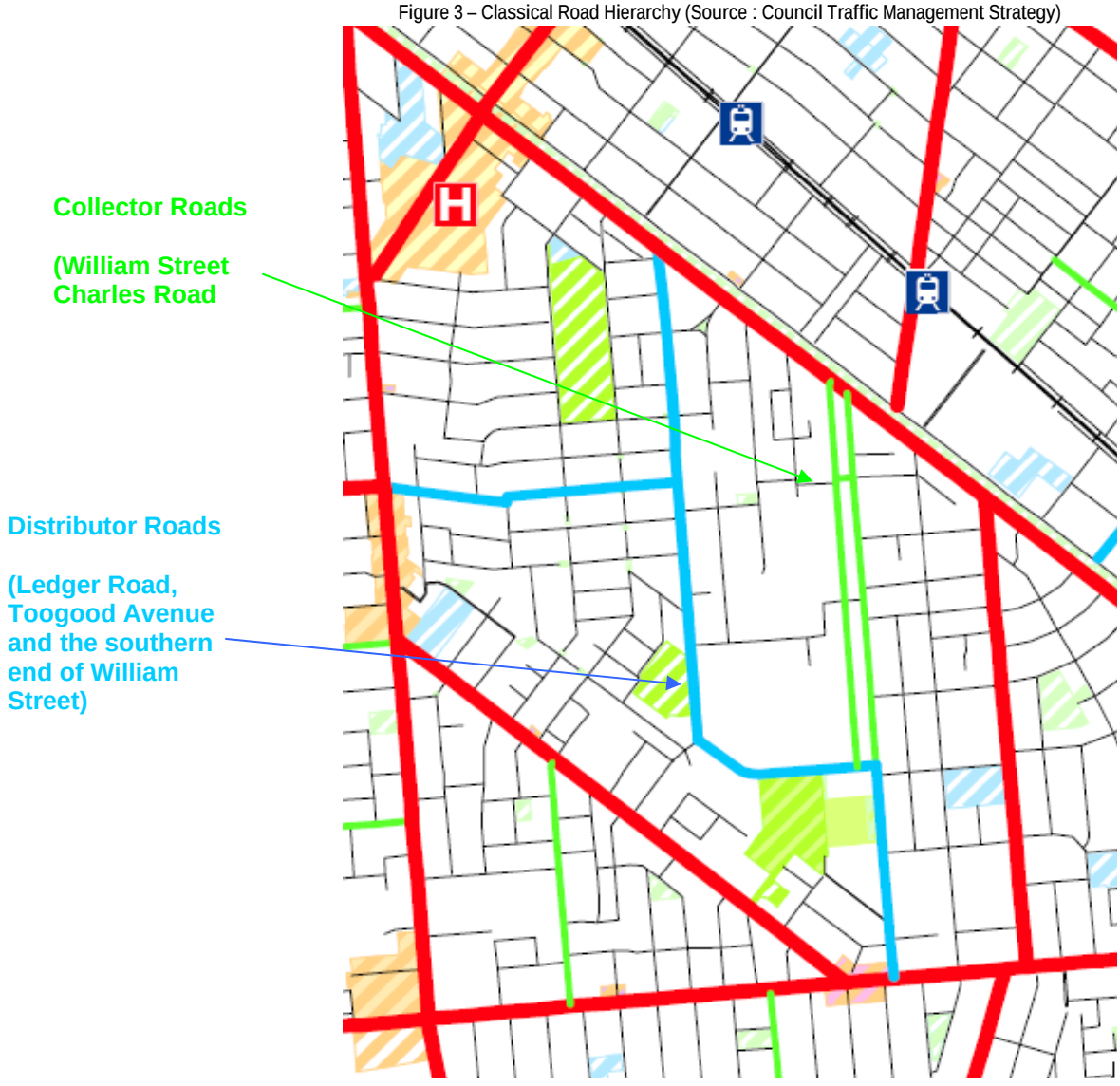
Collector (Street)
A road that provides connection to distributor and arterial roads from local streets within and through a local area. This type of road is generally wide enough to provide two directions of travel with parking on one side of the road only. Traffic volumes would be generally less than 3,000 vehicles per day.

Local (Street)
Roads that primarily provide access to abutting properties.
These roads are likely to be wide enough to allow parking on one or both sides and for a single vehicle to pass through. Traffic volumes would be generally less than 1,500 vehicles per day.

Within the Beverley LATM Plan study area, all roads are local streets with the exception of Toogood Avenue, William Street and Charles Road.

Toogood Avenue is a distributor road which runs east-west and connects Ledger Road to William Street. William Street runs north south between Port Road and Grange Road. South of Toogood Avenue, William Street is a distributor road. The remainder of William Street, from Toogood Avenue to Port Road, is classified as a collector street. Charles Road is also classified as a collector Street within the classical road hierarchy.

Figure 3 – Classical Road Hierarchy (Source : Council Traffic Management Strategy)

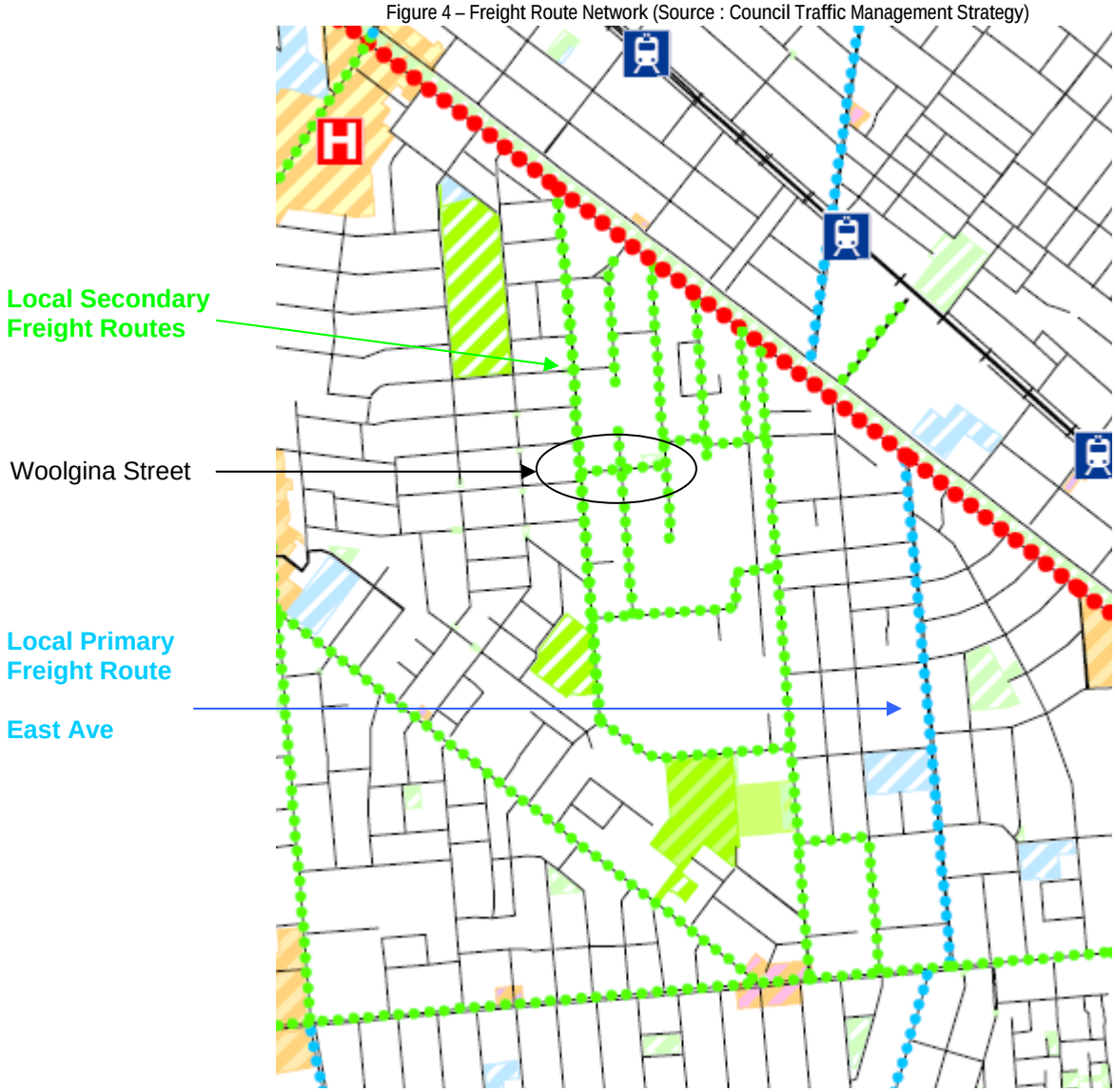


The Traffic Management Strategy also documents the functional use of various roads with regard to freight, cycling, commuter, and pedestrian / social access requirements.

Most roads within the industrial precinct are identified as part of Council's local secondary freight network. East Avenue is recognised as a primary local freight route.

Note that Woolgina Street is identified as a Local Freight Route between Ledger Road and Howards Road, although Woolgina Street is currently closed.

Figure 4 – Freight Route Network (Source : Council Traffic Management Strategy)

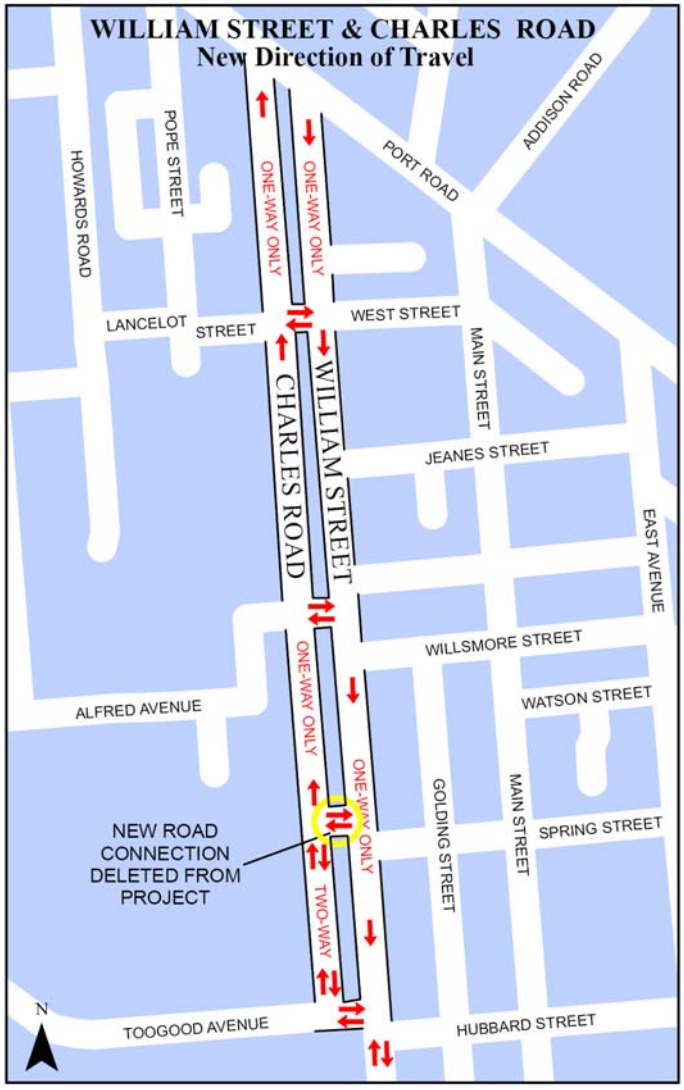


William Street and Charles Road Consultation, 2008

In 2008 Council undertook separate consultation with regard to William and Charles Road. Both streets are long, straight and narrow, not conducive for two-way traffic and with limited footpaths. A one-way clockwise road loop was developed through extensive community consultation with over 1300 businesses and residents in the surrounding area (being the same area as this LATM study).

William Street was reconstructed as a one-way southbound road, while Charles Road was reconstructed as a one-way northbound road. The following consultation diagram shows the new directions of travel. These works were undertaken during the initial development of the draft LATM and associated community consultation.

Figure 5 – Williams Street and Charles Road One Way Loop



Port Road Access – Freight B-Double Access Study

Council has been developing plans for upgrading the stormwater infrastructure within the centre of Port Road. The plans are likely to require the progressive reconstruction of the Port Road median over many years.

As an adjunct to this project, the Department of Transport Energy and Infrastructure (DTEI) investigated the provision of one-way median crossover along the length of Port Road and Old Port Road between Frederick Road and South Road. The general recommendation in principle was to replace the existing two way median crossovers with one-way loops, to improve road safety along Port Road.

Within this section of Port Road, the crossover opposite William Street was identified as a potential northbound crossover, while the opening opposite Pope Street was identified as a potential southbound crossover.

Concurrently, Council has been preparing a B-Double access study to provide accessibility for larger vehicles into the industrial precinct within Beverley. The report recommends that Howards Road and Pope Street should provide B-Double access in principle, although notes that some modifications may be needed to actually enable B-Double access. Woodlands Crescent (between Port Road and Olveston Avenue) was also identified for B-Double access.

Changes to the Port Road median crossovers should not affect the B-Double access as uncontrolled right turns to/from the median would not normally be permitted for B-Double vehicles.

2.2 Site Investigations

All roads in the study area were reviewed and driven by vehicle. The locations of existing traffic management measures have been documented, with a view to forming treatment recommendations that are consistent with existing measures.

The site inspections, undertaken from the perspective of a motorist, are important in forming an overall 'feel' for the study area and where speeding, and safety conflicts may occur.

The principles applicable to Network Road Safety Auditing were used to some extent at the sites, for example:

- Noting conflict between parked vehicles / travelling vehicles in particular streets;
- Noting the environments which are conducive to high speeds, for example, long straight streets with no interruptions to the forward sight distance;

- The provisions for vulnerable road users such as cyclists and pedestrians;
- A check on land use conflicts, for example abutting residential and commercial zones.

2.3 Traffic Data

Traffic surveys were undertaken by Council at a number of locations throughout the area. The data provided information on speed, volume and peak hour traffic volumes over a 7 days period. This information has been summarised in Appendix B.

2.4 Collision Data

The collision data for the area was obtained from the DTEI geo-coded collision information for the 5 year period 2003-2007. A plan showing the approximate location, type and severity of crashes in the study area is shown in Appendix C.

2.5 Consultation

A number of consultation methods have been used in developing this LATM, to ascertain community, stakeholder and Council staff views, to identify the significant concerns and issues within the study area.

The community consultation process for this study to date consisted of the following:

- Advertisement in local (Messenger) newspapers, August 2008;
- Letter and survey to residents within the LATM area, August 2008;
- Resident Steering Group including an online resident panel, October/November 2008;

An informal residents group was established to assist the consultant team in the process of identifying key issues, possible treatments and priorities. The Group met on three occasions and included a general representation of residents from within the area. The draft LATM was reviewed (and generally supported) by the Group for endorsement by Council for wider community consultation.

The draft LATM was put back to the community for review and comment in March 2009. The community was specifically asked to indicate their level of support for each of the proposed treatments. This information has been contained in within this final report (and Appendix D2).

2.6 Design Standards

Recommendations for alternative traffic control devices have been developed in accordance with the South Australian Code for the Installation of Traffic Control Devices, and associated Australian Standards and Guidelines.

3. Findings

3.1 Traffic Data

The speed and volume data over a 24 hour period and the AM and PM peak period volumes has been summarised on the plan shown in Appendix B (from available traffic data provided by Council).

Speeds recorded within the study area were generally high with around 50% of the roads experiencing an 85th percentile speed of greater than the default 50 km/h speed limit. The 85th percentile speed is the speed at which 85% of the motorists are travelling at or below. Similarly, many roads have average speeds exceeding 40 km/h. The following table highlights those road sections with speeds higher than these benchmarks.

While speeds are high in some roads, traffic volumes are generally commensurate within the acceptable limits (1500vpd for local streets). Only Ledger Road, Toogood Avenue and William Street have volumes exceeding 1500 vpd, which is considered acceptable for the collector-distributor function of these roads. (Traffic volumes in William Street may vary following the reconstruction and reconfiguration of traffic flows).

Road	Location	Daily Volume (2-way)	85%ile Speed	Average Speed
Alice Street	#17	529	49.7	37.8
Charles Rd	Lancelot St to Alfred Ave	498	55.8	44.9
Fairbanks St	Main St to East Ave	497	53.3	45.0
George St	Adjacent #2 Moorland Ave	1,106	51.1	42.4
Golding St	#59	132	45.0	34.9
Ledger Rd	South of Woodlands Cres	1,622	52.2	44.0
Ledger Rd	South of Fife St	3,091	57.6	49.5
Main St	Hubbard to Spring #84	961	57.2	48.8
Main St	Jeanes St to Fairbanks St	802	57.6	48.4
Main St	Spring St to Hubbard St	985	59.0	50.5
Olverston Ave	#24	1118	44.6	38.4
Pope St	midblock	799	58.3	46.8
Spring St	Main St to East St	580	51.8	44.2
Toogood Ave	depot to BASA	2,963	60.8	51.4
William St	North of Spring St, #85	2,865	59.8	52.5
William St	South of Port Rd, #14	1,619	56.9	48.5
William St	North of Grange, #150	4,011	47.9	40.1
William St	George to Hubbard#137	3,410	59.4	52.6
Willsmore St	Main St to East St	440	50.0	41.6

3.2 Collision Data

Plans showing the location, type and severity of crashes in the study area are shown in Appendix C.

There were 397 collisions recorded within the overall precinct – including collisions along the boundary arterial roads of the study area. The recorded collisions not including those on the arterial roads totalled 58 collisions.

Within the study area there were no fatalities, with approximately 23% personal injury and 77% property damage only collisions. This is reasonably typical of local street networks within the metropolitan area.

Within the study area, the most common types of collision were rear end (37.5%), right angle (24.7%), side swipe (11.3%) and hitting a fixed object (9.1%).

There were 3 locations where 3 or more collisions were reported within the 5 year period. None of these locations satisfy the minimum eligibility criterion for black spot funding. The locations are summarised in the following:

William Street and West Street Intersection

9 crashes

- 2 Injury
  - 2 x Right Angle
- 7 Property Damage Only (PDO)
  - 6 x Right Angle
  - 1 x Hit Parked Vehicle

Note that this intersection will be reconstructed as part of the revised one-way loop along William Street and Charles Road

William Street and Jeanes Street Intersection

3 crashes

- 1 Injury
  - 1 x Hit Parked Vehicle
- 2 PDO
  - 1 x Hit Fixed Object
  - 1 x Rear End

Note that this intersection will be reconstructed as part of the revised one-way loop along William Street and Charles Road.

Main Street and Hubbard Street Intersection

3 crashes

- 3 PDO
  - 2 x Right Angle
  - 1 x Right Turn

3.3 Consultation

The community raised various concerns, issues and opportunities regarding traffic management from the consultation process, which have formed the basis for the recommendations in the LATM Plan.

There were approximately 100 initial responses received from the community. Appendix D1 contains a summary of the community responses to the initial consultation in August 2008. Main Street and William Street were the two streets most frequently referenced by the community.

Throughout the whole area, common concerns included:

- Speeding
- Rat running in some streets
- Commercial vehicles
- Narrow streets and parked cars

Through consultation with the residents group, further discussion refined the list into the following key issues. This summary does not infer that conditions in other streets should not be addressed, rather that these locations represent the worst cases that justify particular attention.

In response to the draft LATM circulated in March 2009, there were approximately 45 responses received. This information has been included in Appendix D2.

3.4 Summary of Key Issues

Main Street

- Community concern over speeds along the road
- Average speeds are 48-50 km/h while the recorded 85th percentile speeds are 57-59 km/h. This speed profile is considered unacceptable for a residential street.
- Long straight road which is conducive to high speeds.
- Traffic volumes are less than 1000vpd

Alton Street – Olveston Avenue – Elford Street

- Concern over 'rat-running' from Ledger Road to Port Road
- Drivers in Ledger Road that intend turning right into Port Road must access Howards Road as this is the nearest junction with Port Road that has right turn provision (to Adelaide)

- There is a dominant movement using Alton Street – Olveston Avenue – Elford Street. Traffic volumes in Olveston Avenue between Alton and Elford are 1100vpd
- Resident concern also over speeds and vehicle positioning through the bend between Alton Street and Olveston Avenue

Ledger Road – Freight Traffic

- Concern over use of the northern section of Ledger Road by commercial vehicles
- Roundabouts at the intersections of Alton Street and Woodlands Crescent are constantly run-over by larger vehicles
- Commercial vehicles should be encouraged to use Woolgina Street (currently closed) and Howard Street

Alice Street

- Concern over 'rat-running' between William Street, Glen Elder Street and Crittenden Road (due to delays at the intersection of Williams Street and Grange Road).
- Concern also over speeds and vehicle positioning through the bend in Alice Street adjacent the junction with Cordelia Crescent

East Avenue / Watson Street

- Parked vehicles near deli cause sight restrictions and localised congestion

William Street / Grange Road

- Delays and congestion at junction
- Congestion also created by drivers entering / leaving the adjacent shopping centre (west side of Williams Street)

Main Street – Road closure at northern end

- Reported high disregard for No Entry provision at the northern end of Main Street (between West Street and Port Road)

Howards Road / Port Road (Bus Stop)

- Location of the bus stop in Port Road causes sight restriction for drivers turning out of Howard Street

Port Road – Car Park and U-Turn Provisions

- The community has sought improved U-turn provision at the junction of Port Road and East Avenue, in association with a revised car park layout in the centre of the median adjacent the Glass Factory.

Grange Road / East Avenue / Holbrooks Road

- Concern over delays and congestion at the staggered signalised intersection

Main Street Proposed Industrial Estate

- Concern over the development of the industrial site between George Street and McLaren Street and potential impact on commercial vehicles in residential streets.

4. Discussion and Recommendations

In evaluating proposed improvement measures within the study area, a number of more detailed investigations were undertaken to ascertain the suitability of options available to address the particular issues.

The following section outlines the recommendations and where appropriate, responses are offered to comments made by the community. The level of community support for each of the treatments (as indicated from the March 2009 consultation on the draft LATM) is also summarised below.

4.1 Main Street

Discussion

While traffic volumes are generally less than 1000 vpd, speeds are too fast, with approximately 50% of vehicles exceeding the 50 km/h speed limit. The road is approximately 8.4 m wide and is long and straight. Side road traffic must give way to Main Street.

The Traffic Management Strategy identifies the road as a local street and with no strategic role in supporting freight movements. This functional classification is considered appropriate.

Initial Proposal

Investigate the installation of mini-roundabouts along the road to break-up the long continuous road layout and reduce speeds to an acceptable level without adversely affecting traffic flows in the precinct. The intersections of Jeanes Street, Willsmore Street, Spring Street and George Street could be investigated for the potential installation of mini-roundabouts. The installation of roundabouts will also reduce speeds in the side roads between East Avenue and William Street (which were referenced by the community as having high speeds).

Preliminary investigations suggest that standard size roundabouts maybe difficult to install due to the available road widths, particularly in some of the side roads which are relatively narrow. Mini-roundabouts (e.g. 5m diameter) appear to be a potential alternative and should have the same effect on reducing speeds. Further consideration will be needed to the actual design once full engineering survey is available. It should be noted that Council does not have delegated authority for the installation of mini-roundabouts, and that DTEI approval will be required for these devices.

Level of Community Support

Number of responses to this question 35

Strongly Agree	40%	63%
Agree	23%	
Neutral	20%	20%
Disagree	11%	17%
Strongly Disagree	6%	

There was general support for the proposed installation of mini-roundabouts to reduce speeds along the length of Main Street. Some concern was expressed that drivers might simply drive over the humps and that commercial vehicle access will be diminished.

Main Street is a local street that is not a key freight route in the area. The use of mini roundabouts is considered appropriate and will retain access for larger vehicles that legitimately need to use the road. They are an effective traffic control measure to reduce speeds.

Recommendation

Retain the initial proposal to undertake further detailed investigations into the design of mini-roundabouts at the intersections of Jeanes Street, Willsmore Street, Spring Street and George Street.

4.2 Alton Street – Olveston Avenue – Elford Street

Discussion

While traffic volumes are generally less than 1500 vpd site observations and community advice confirm a traffic movement between Ledger Road and Howards Road via Alton Street, Olveston Avenue and Elford Street. This is thought to occur as there is no median opening through Port Road opposite Ledger Road, so citybound traffic must migrate to Howards Road to access the Port Road median crossover at this location.

Concern was also expressed over the speed and vehicle positioning through the 90 degree bend / junction between Alton Street and Olveston Avenue. Despite this junction being reconstructed (narrowed) in recent years in an effort to control speeds, there is still concern over corner cutting.

Initial Proposals

- Install 4 road humps / plateaux along Alton Street and Olveston Avenue, between Ledger Road and Woodlands Crescent to discourage through traffic movements and control speeds around the bend
- Widen the bend Alton Street and Olveston Avenue and install a raised median to prevent corner cutting
- Note that the proposed opening of Woolgina Street (refer below) will also reduce traffic volumes in this area.

Level of Community Support – Humps in Alton and Olveston

Number of responses to this question 35

Strongly Agree	26%	49%
Agree	23%	
Neutral	34%	34%
Disagree	9%	18%
Strongly Disagree	9%	

Level of Community Support – Widen the bend between Alton and Olveston

Number of responses to this question 34

Strongly Agree	32%	62%
Agree	29%	
Neutral	38%	38%
Disagree	0%	0%
Strongly Disagree	0%	

There was strong support for these measures and no opposition to undertaking further works at the bend between Alton Street and Olveston Avenue. There remains community concern over speeds in this area and vehicles 'drifting' around the bend.

Recommendation
Retain the initial proposal.

4.3 Freight Traffic Access

Discussion

Residents expressed concern over the use of Ledger Road (north) by commercial vehicles. While Ledger Road is recognised as a distributor route within the overall road network, The route is a secondary freight route (mainly due to the commercial premises along the southern end of the road, Council's Development Plan indicates a principle of reducing commercial vehicle traffic from Ledger Road.

While roundabouts at the intersections of Alton Street and Woodlands Crescent should discourage use by heavy vehicles and control speeds, it was noted that the annulus of the roundabouts have recently been reconstructed to allow overrun by some larger vehicles (e.g. garbage trucks).

A reduction in freight traffic along this route in accordance with the Development Plan can only be achieved if alternative freight routes are established, particularly if industry continues to grow in the area.

Woolgina Street is identified in Council's Traffic Management Strategy as a freight route, and it is also identified as an important east-west linkage for cyclists. Woolgina Street provides a direct connection between the southern end of Ledger Road and the predominantly industrial precinct along Howard Street (with right turn access to/from Port Road).

Council advised that Woolgina Street was closed at the junction with Ledger Road in 1989. Its closure was undertaken in conjunction with the filling of Popes' pug hole which allowed Wodonga St to be extended to Alfred Ave which in turn was extended to Ledger Rd. This gave industrial traffic a better alternative route to Ledger Rd, especially for trucks servicing Popes' white goods warehouse.

Initial Proposal

- Consideration should be given to re-opening Woolgina Street at the junction with Ledger Road, as a means of providing an alternative connection between Ledger Road and Howards Road (and Port Road), and to facilitate Council's cycling strategy.

Level of Community Support

Number of responses to this question 33

Strongly Agree	9%	45%
Agree	36%	
Neutral	45%	45%
Disagree	6%	9%
Strongly Disagree	3%	

While the majority of respondents supported the proposal, 3 residents either disagreed or strongly disagreed, on the basis of a potential increase in commercial traffic and negative impact on Ledger Road. Residents supporting the proposal acknowledged that it would allow better access to Ledger Road from Port Road, meaning possibly less traffic on Olveston Avenue and Alton Street, and less commercial traffic on the Port Road end of Ledger Road.

Recommendation

Retain the initial proposal and undertake further detailed investigations into the impact of the proposal, including origin : destination movements of commercial vehicles in the area.

4.4 Alice Street

Discussion

It was reported that the road is frequently used by drivers 'rat-running' between William Street and Crittenden Road (via Glen Elder St) to avoid delays at the William Street / Grange Road junction (refer below) and the traffic signals at the intersection of Grange Road and Crittenden Road. The community also reported concerns over the narrow bend around Cordelia Crescent.

The road is identified as a local street, and as such, traffic volumes up to 1000-1500vpd are considered acceptable. However, traffic volumes in Alice Street are only approximately 500 vpd and most speeds are commensurate with its use as a local street. While the road may be used as an alternative connection to Crittenden Road, the installation of restrictive traffic measures (eg road humps) will potentially shift traffic into Princess Street, or compound existing issues at the junction of Grange Road and William Street.

Recommendation

- No action at this stage

4.5 East Avenue / Watson Street

Discussion

Parked vehicles near the delicatessen cause sight restrictions and localised congestion. Site observations confirm that vehicles park too close to the intersection in both East Avenue and Watson Street.

Initial Proposal

- Discuss the option of extending the No Stopping restriction around the corner to 15m with the shop proprietor and mark with yellow lines and signs.

Level of Community Support

Number of responses to this question 33

Strongly Agree	15%	36%
Agree	21%	
Neutral	30%	30%
Disagree	3%	33%
Strongly Disagree	30%	

The shop proprietor has raised concerns over lengthening the No Stopping restriction around the corner due to loss of an additional 2 car parks. Clearly marking road at 10m would provide customers one car park at front of shop and a better defined parking area.

Recommendation

Amend the initial proposal to clearly marking the 10m parking restriction around the corner and monitor driver observance of the prohibition.

4.6 William Street / Grange Road

Discussion

The junction is one of only a few main connections between the precinct and Grange Road (the others being Main Street and East Avenue).

William Street is less than 9m wide at the junction which does not allow for two formal exit lanes (one left turn and one right turn) into Grange Road although some drivers do queue in 2 lanes. The entry lane for northbound traffic into William Street is also relatively narrow.

Localised congestion and frustration occurs when drivers try to enter / leave the adjacent shopping centre car park, which has a long / uncontrolled driveway arrangement.

William Street is a distributor route within the precinct and part of the local secondary freight route. Ideally, the southern end of the road should be wider to support its functional use within the hierarchy.

In the short term, it will be difficult to improve traffic conditions at this junction without widening William Street or introducing turning restrictions (e.g. prohibit right turns onto Grange Road).

Road / junction widening will impact on the adjacent shopping centre car park, as will any rationalisation of the car park driveways. The introduction of turning restrictions is not supported as Williams Street is a collector-distributor route and a primary connection to the precinct. Turning restrictions will simply force traffic to use other less suited routes.

Initial Proposal

- As it is unlikely that any substantive changes can be made to this intersection without affecting the adjacent properties, Council should monitor any future land use changes / development plans for the sites, and seek to upgrade the intersection at such time.

Level of Community Support

Number of responses to this question 33

Strongly Agree	30%	61%
Agree	30%	
Neutral	33%	33%
Disagree	0%	6%
Strongly Disagree	6%	

While a few residents indicated that 'there is nothing wrong with the intersection', the majority of responses reiterated concerns over safety and congestion. Some of the feedback included:

- Very dangerous intersection. Should be high priority.
- This intersection is a nightmare to get across, the lights need to be sorted out so you can actually get across, every time you think you can get out the lights at Crittenden Road go green and cars come flying around the corner.
- IGA supermarket parking makes traffic worse

Recommendation

Retain the initial proposal to investigate upgrading options as/when land development proposal are made.

4.7 Main Street – Road closure at northern end

Discussion

The residents group reported occasional disregard of the No Entry provision at the northern end of Main Street (between West Street and Port Road). Traffic conditions in this section of Main Street have been altered to include a bicycle lane along the western side of the road. A median island associated with the bike lane has been installed at the junction with Port Road which should make harder the (illegal) left turn exit from Main Street into Port Road.

Initial Proposal

- No further action is required at this stage. Disregard of the No Entry provision should be monitored to determine the need for any further intervention.

Level of Community Support

Of the responses received to this question, 58% supported the proposal and 38% were neutral. Only one resident did not support the proposal. There was some concern that drivers are still not observing the No Entry signage, and one suggestion to reopen this section of road for two-way traffic as the recent alterations on Williams Street affect access to Port Road.

Recommendation

It is not considered appropriate to reopen this section of road for two-way traffic, and the initial proposal to monitor driver observance (together with some enforcement) is recommended.

4.8 Howards Road / Port Road (Bus Stop)

Discussion

The location of the bus stop in Port Road causes sight restriction for drivers turning out of Howards Road.

Initial Proposal

Seek the approval of the Public Transport Division to relocate bus stop as part of Council's progressive upgrade of bus stops to comply with DDA requirements.

Level of Community Support

Of the responses received to this question, 38% supported the relocation of the bus stop and 63% were neutral. There was no opposition to the proposal.

Recommendation

Retain the initial proposal.

4.9 Port Road – Car Park and U-Turn Provisions

Discussion

Although outside of the scope of this LATM project, concern was expressed over the design of the entry / exits to the car park in the centre of Port Road (opposite the Glass Factory) and desire for an improved U-turn facility for traffic travelling toward the city.

Initial Proposal

Continue discussions with DTEI over the design of the car park, access arrangements and the integration of a U-turn slip lane.

Recommendation

As the car park and median access in this area have recently been reconfigured, this recommendation can be deleted from the Beverley LATM.

4.10 Grange Road / East Avenue / Holbrooks Road

Discussion

Although outside of the scope of this LATM project, concern was expressed over the operation of the traffic signals at the junctions of East Avenue and Holbrooks Road with Grange Road. Delays and congestion can cause traffic to use alternative routes such as William Street or Main Street.

Initial Proposal

The operational efficiency of traffic signals at staggered T-junctions can be limited due to the diversity of traffic movements and need to preserve coordination along the continuing road. Notwithstanding, Council should liaise with DTEI to ensure the most efficient operation of the traffic signals at these junctions.

Level of Community Support

Number of responses to this question 33

Strongly Agree	58%	85%
Agree	27%	
Neutral	15%	15%
Disagree	0%	0%
Strongly Disagree	0%	

There was continued strong support for this proposal, and many comments highlighted concern and frustration over this intersection, as summarised below.

- Current traffic signals create traffic back-up
- Major overhaul required of whole intersection.
- This is the worst intersection in the Western Suburbs; I am surprised there are not more accidents with so many people running red lights and cutting lanes to get onto Holbrooks Road from East Avenue. The line up to get around that corner goes half way down East Avenue at peak times.
- Lining up East Ave and Holbrooks Road would be ideal.
- A vital consideration

Recommendation

As the control of these roads is the responsibility of DTEI, Council should liaise with the Department to ensure the most efficient operation of the traffic signals at these junctions.

4.11 Port Road Access – Freight B-Double Access Study

Discussion

As outlined in Section 2.1 there are various inter-related strategies that will influence access to / from the Beverley LATM precinct from Port Road, most notably a stormwater management plan for Port Road (which will impact the cross-overs) and a B-Double access strategy.

Initial Proposal

- Support in principle DTEI's recommendations for one-way links between the two Port Road roadways
- Continue to liaise with DTEI over the B-Double access strategy these roads.

Recommendation

This particular issue was not included in the community consultation questionnaire. Retention of the recommendation is considered appropriate.

4.12 George Street

Discussion

Several of the community responses identified speeds in George Street as a concern. George Street is identified as a local residential street in Council's Traffic Management Strategy. As such, daily traffic volumes less than 1500vpd are considered acceptable.

Actual volumes between Main Street and East Avenue are currently around 1100vpd. Average speeds are approximately 42 km/h which is reasonably typical of a local street.

Initial Proposal

- On this basis of available traffic data, specific intervention is not considered warranted. Notwithstanding, the suggested potential installation of a roundabout at the intersection of George Street and Main Street should reduce speeds along this section of road.

Recommendation

This particular issue was not included in the community consultation questionnaire. Retention of the recommendation is considered appropriate.

4.13 Willsmore Street

Discussion

Several of the community responses identified speeds in Willsmore Street as a concern.

Willsmore Street is also identified as a local residential street in Council's Traffic Management Strategy. Actual volumes between Main Street and East Avenue are currently around 440vpd, while average speed of traffic is 41 km/h.

Existing traffic volumes and speeds are therefore considered acceptable.

Initial Proposal

- While specific intervention is not considered warranted, the suggested potential installation of a roundabout at the intersection of Willsmore Street and Main Street should reduce speeds along this section of road.

Recommendation

This particular issue was not included in the community consultation questionnaire. Retention of the recommendation is considered appropriate.

4.14 Golding Street

Discussion

Golding Street is a relatively narrow residential street with does not connect directly with industry or any of the immediate collector roads. While traffic data was not yet available, we would expect volumes to be less than 1000 vpd as the road only provides access to the immediate residences. Several of the community responses identified speeds as a concern.

Initial Proposal

- Traffic and speed data be obtained for Golding Street once traffic flows have stabilised after construction of the William Street and Charles Road one-way couplet. Subject to this data, consideration could be given to the installation of appropriate traffic controls and / or streetscape and landscape works along the full length of road between George Street and Willsmore Street.

Level of Community Support

Number of responses to this question 33

Strongly Agree	15%	48%
Agree	33%	
Neutral	48%	48%
Disagree	3%	3%
Strongly Disagree	0%	

While half of the responses were neutral on this proposal, there was also strong support to monitor speeds and volumes in this area, and only 1 respondent that opposed the recommendation.

- Golding Street is a disgrace, it needs to have parking on one side only and have the other side no parking, with the changes on William St there is a lot of traffic down Golding St. It needs to be fixed, the road is far to narrow for parking on both sides of the road, personally I have had to stop completely to get through two parked cars.

Recommendation

Retain the initial proposal to monitor traffic flows in Golding Street, now that William Street and Charles Road have been completed.

4.15 Main Street Proposed Industrial Estate

Concern has been expressed over the development of the industrial site along Main Street between George Street and McLean Street (the former Coles Myer distribution centre) and potential impact of additional traffic volumes in residential streets.

The proposed development includes 16 industrial allotments and a new internal access road connecting with McLean Street. The total floor area of the proposed development will be approximately 13,520m2 in comparison to approximately 19,259m2 of floor space that was previously utilised by the Coles Myer distribution centre.

The traffic assessment undertaken for the proposed development estimated the overall development would generate around 600vpd. While traffic data is not available for McLean Street, we do not believe that this would be substantially different (potentially less) than the traffic generated from the previous Coles Myer operations.

The traffic assessment associated with the development considered the potential closure of McLean Street at the eastern end, albeit that this access provides direct connection to East Avenue (as a sub-arterial road and freight route), and the signalised intersections of Port Road and Grange Road.

The proposed closure of McLean Street would increase traffic movements along Main Street to access and egress to area. All traffic movements associated with the site (600vpd) would be forced to use Main Street. Traffic would distribute toward Grange Road and Port Road, and some would loop back to East Avenue via George Street. These potential impacts may adversely affect conditions along Main Street and George Street. Accordingly, the closure of McLean Street is not supported.

Traffic volumes and the percentage of commercial vehicles associated with the proposed development are not likely to be significantly different from the former operation of the site as the Coles Myer Distribution Centre.

Initial Proposal

- Council monitor traffic volumes and commercial vehicle use of McLean Street

Level of Community Support

Number of responses to this question 32

Strongly Agree	22%	56%
Agree	34%	
Neutral	41%	41%
Disagree	3%	3%
Strongly Disagree	0%	

There was generally strong support to monitor speeds and volumes in this area, and only 1 respondent that opposed the recommendation.

Recommendation

Retain the initial proposal to monitor traffic flows in McLean Street following the development of the adjacent land.

4.16 Road Hierarchy

The existing road hierarchy as presented in Section 2.1 (Figure 3) is considered appropriate and no changes are proposed to the functionality of the network.

5. Summary of Recommendations

The recommendations include traffic management measures for the road network and specific locations, comprising treatments, investigations and/or further monitoring. Many of the recommended actions will require further detailed investigation, consultation with the immediately affected property owners and detailed design before implementation should be considered. Refer to Appendix E for conceptual plans of the proposed traffic management measures. The following summary and priority listing is submitted for consideration by Council and the community.

High Priority / Immediate Action

- Investigate the installation of mini-roundabouts along Main Street, possibly at the intersections of Jeanes Street, Willsmore Street, Spring Street and George Street.
- Consider the re-opening of Woolgina Street at the junction with Ledger Road. Undertake additional traffic surveys (eg origin : destination movements of commercial vehicles) to quantify the impact of the proposal.
- Clearly mark the 10m No Stopping restrictions around the corner of East Avenue and Watson Street and monitor driver observance of the prohibition.

Moderate Priority

- Install 4 road humps / plateaux along Alton Street and Olveston Avenue (between Ledger Road and Woodlands Crescent)
- Widen the bend between Alton Street and Olveston Avenue and install a raised median to prevent corner cutting
- Relocate the bus stop in Port Road near the intersection with Howards Road through discussion with the Public Transport Division

Low / Ongoing Review

- Review opportunities to upgrade the intersection of Grange Road / William Street subject to any future land use changes to the adjacent properties
- Liaise with DTEI to ensure the most efficient operation of the traffic signals at the intersections of Grange Road / Holbrooks Road / East Avenue.
- Monitor driver observance of the No Entry provisions at the northern end of Main Street to assess the need for any further intervention, and liaise with SAPOL to coordinate enforcement if required
- Monitor traffic volumes along Goulding Street
- Monitor traffic volumes and commercial vehicle use of McLean Street

Appendix A

LATM Study Area

N

WOODVILLE PARK

WOODVILLE SOUTH

BEVERLEY

FINDON

ALLENBY GARDENS

OSBORNE AV
MARLBOROUGH ST
BALMORAL ST
JEANETTE ST
KILKENNY RD
NEWINGTON AV
LAWRENCE AV
WOODLANDS CR
HEADDEY CT
KOOLUNDA AV
FAIRWEATHER AV
ELFORD ST
ALTON ST
POPE ST
POPE ST
COURTOY ST
GLENAVON ST
PEGLER ST
LANCELOT ST
WEST ST
HAYNES CR
DAVIS ST
WOOLGINA ST
WODONGA ST
HOWARDS RD
WILLIAM ST
MAIN ST
JEANES ST
DEE ST
LINDEN CT
COOMBE RD
GEMMELL ST
FAIRBANKS ST
DOON ST
BOURN PL
WILLSMORE ST
PRICE WEIR AV
BRANWHITE ST
ALFRED AV
REGINA CT
WATSON ST
LEANE AV
GOLDING ST
CHARLES RD
MACLAGAN AV
SPRING ST
TUNBRIDGE ST
TOOGOOD AV
HUBBARD ST
LEWANICK ST
BROADFORD CR
GEORGE ST
EYRE ST
BARKER AV
GLEN ELDER ST
PRINCESS ST
MORRELL ST
ALICE ST
MCLEAN ST
MCLEAN ST
FOSTER ST
ELIZABETH ST
DRING AV
GRANGE RD
ROSS AV
SCOTT AV

LEGEND

Study boundary

Cadastre

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MAP DETAILS

Streetpro Data:	MapInfo
Job Number:	2008.0442
Filename:	Study area.wor
Drawn:	Matt Brown
Date:	30/07/2008

-160 0 160 320 480m

Scale: 1:8,000

City of Charles Sturt

Beverley Precinct

LOCAL AREA TRAFFIC MANAGEMENT PLAN

Appendix B

Traffic Data – Speed and Volume

N

WOODVILLE PARK

WOODVILLE SOUTH

BEVERLEY

FINDON

ALLENBY GARDENS

OSBORNE AV
MARLBOROUGH ST
BALMORAL ST
JEANETTE ST
KILKENNY RD
NEWINGTON AV
LAWRENCE AV
HEADDEY CT
KOOLUNDA AV
FAIRWEATHER AV
ELFORD ST
ALTON ST
POPE ST
POPE ST
GLENAVON ST
HOWARDS RD
PEGLER ST
LANCELOT ST
COURTOY ST
WEST ST
MAIN ST
HAYNES CR
DAVIS ST
WOOLGINA ST
WODONGA ST
WILLIAM ST
JEANES ST
DEE ST
DOON ST
BOURN PL
FAIRBANKS ST
COOMBE RD
WILLSMORE ST
PRICE WEIR AV
WATSON ST
LEANE AV
BRANWHITE ST
ALFRED AV
REGINA CT
GOLDING ST
CHARLES RD
SPRING ST
MACLAGAN AV
TUNBRIDGE ST
TOOGOOD AV
HUBBARD ST
LEWANICK ST
BROADFORD CR
EYRE ST
BARKER AV
GLEN ELDER ST
PRINCESS ST
ALICE ST
GEORGE ST
MORRELL ST
MCLEAN ST
MCLEAN ST
FOSTER ST
ELIZABETH ST
DRING AV
GRANGE RD
ROSS AV
SCOTT AV

ID:19
VPD:275
85% kph:42.5
AM Peak:18
PM Peak:28

ID:1
VPD:1622
85% kph:52.2
AM Peak:122
PM Peak:158

ID:27
VPD:1118
85% kph:44.6
AM Peak:99
PM Peak:138

ID:18
VPD:1619
85% kph:56.9
AM Peak:135
PM Peak:162

ID:2
VPD:3091
85% kph:57.6
AM Peak:238
PM Peak:298

ID:4
VPD:1019
85% kph:44.6
AM Peak:78
PM Peak:116

ID:6
VPD:148
85% kph:37.4
AM Peak:11
PM Peak:22

ID:9
VPD:250
85% kph:42.8
AM Peak:22
PM Peak:26

ID:16
VPD:498
85% kph:55.8
AM Peak:42
PM Peak:46

ID:10
VPD:802
85% kph:57.6
AM Peak:53
PM Peak:82

ID:8
VPD:414
85% kph:48.2
AM Peak:32
PM Peak:50

ID:7
VPD:497
85% kph:53.3
AM Peak:36
PM Peak:56

ID:14
VPD:440
85% kph:50.0
AM Peak:35
PM Peak:42

ID:13
VPD:310
85% kph:47.9
AM Peak:25
PM Peak:29

ID:3
VPD:3087
85% kph:64.1
AM Peak:247
PM Peak:297

ID:17
VPD:2865
85% kph:59.8
AM Peak:279
PM Peak:282

ID:12
VPD:580
85% kph:51.8
AM Peak:40
PM Peak:62

ID:11
VPD:985
85% kph:59.0
AM Peak:78
PM Peak:94

ID:15
VPD:200
85% kph:44.6
AM Peak:25
PM Peak:19

ID:5
VPD:961
85% kph:57.2
AM Peak:94
PM Peak:101

ID:26
VPD:2963
85% kph:60.8
AM Peak:259
PM Peak:314

ID:25
VPD:401
85% kph:42.8
AM Peak:76
PM Peak:68

ID:21
VPD:3410
85% kph:59.4
AM Peak:282
PM Peak:308

ID:24
VPD:132
85% kph:45.0
AM Peak:9
PM Peak:15

ID:23
VPD:1106
85% kph:51.1
AM Peak:173
PM Peak:141

ID:22
VPD:529
85% kph:49.7
AM Peak:46
PM Peak:46

ID:20
VPD:4011
85% kph:47.9
AM Peak:337
PM Peak:348

LEGEND

- Traffic Count
- Study Boundary
- Road
- Cadastre

Traffic Data

VPD = Vehicles per day
85th% kph = Speed which 85% of motorists are not exceeding

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MAP DETAILS

Streetpro Data:	MapInfo
Job Number:	2008.0442
Filename:	speed&volume.wor
Drawn:	Matt Brown
Date:	20/04/2009

-160 0 160 320 480m

Scale: 1:8,000

City of Charles Sturt

Beverley Precinct

LOCAL AREA TRAFFIC MANAGEMENT PLAN

Speed & Volume

Appendix C

Collision Data

N

WOODVILLE PARK

WOODVILLE SOUTH

BEVERLEY

FINDON

ALLENBY GARDENS

OSBORNE AV
MARLBOROUGH ST
BALMORAL ST
JEANETTE ST
KILKENNY RD
NEWINGTON AV
LAWRENCE AV
HEADDEY CT
WOODLANDS CT
KOOLUNDA AV
FAIRWEATHER AV
ELFORD ST
ALTON ST
POPE ST
GLENAVON ST
HAYNES CR
DAVIS ST
DEE ST
WOOLGINA ST
WODONGA ST
HOWARDS RD
COURTOY ST
PEGLER ST
LANCELOT ST
WEST ST
MAIN ST
WILLIAM ST
JEANES ST
LINDEN CT
GOOMBE RD
DOON ST
BOURN PL
GEMMELL ST
FAIRBANKS ST
WILLSMORE ST
PRICE WEIR AV
WATSON ST
LEANE AV
MACLAGAN AV
BRANWHITE ST
ALFRED AV
REGINA CT
GOLDING ST
CHARLES RD
SPRING ST
TUNBRIDGE ST
TOOGOOD AV
HUBBARD ST
LEWANICK ST
BROADFORD CR
GEORGE ST
EYRE ST
BARKER AV
GLEN ELDER ST
PRINCESS ST
ALICE ST
MCLEAN ST
MORRELL ST
FOSTER ST
ELIZABETH ST
DRING AV
GRANGE RD
ROSS AV
SCOTT AV

LEGEND

Crash Type

10
5
1

- Rear End
- Hit Fixed Object
- Side Swiped
- Right Angle
- Head On
- Hit Pedestrian
- Roll Over
- Right Turn
- Hit Parked Vehicle
- Hit Animal
- Hit Object on Road
- Left Road
- Other

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MAP DETAILS

Streetpro Data:	MapInfo
Accident Data:	Transport SA
Job Number:	2008.0442
Filename:	crash type.wor
Drawn:	Matt Brown
Date:	30/07/2008

-160 0 160 320 480m

Scale: 1:8,000

City of Charles Sturt

Beverley Precinct

COLLISION DATA 2003 - 2007

Crash Type

N

WOODVILLE PARK

WOODVILLE SOUTH

BEVERLEY

FINDON

ALLENBY GARDENS

OSBORNE AV
MARLBOROUGH ST
BALMORAL ST
JEANETTE ST
KILKENNY RD
NEWINGTON AV
LAWRENCE AV
HEADDEY CT
WOODLANDS CR
KOOLUNDA AV
FAIRWEATHER AV
ELFORD ST
ALTON ST
POPE ST
GLENAVON ST
HAYNES CR
DAVIS ST
DEE ST
WOOLGINA ST
WODONGA ST
HOWARDS RD
COURTOY ST
WEST ST
LANCELOT ST
PEGLER ST
MAIN ST
WILLIAN ST
JEANES ST
LINDEN CT
GOOMBE RD
DOON ST
BOURN PL
GEMMELL ST
FAIRBANKS ST
WILLSMORE ST
PRICE WEIR AV
WATSON ST
LEANE AV
MACLAGAN AV
BRANWHITE ST
ALFRED AV
REGINA CT
GOLDING ST
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TOOGOOD AV
HUBBARD ST
LEWANICK ST
BROADFORD CR
GEORGE ST
EYRE ST
BARKER AV
GLEN ELDER ST
PRINCESS ST
ALICE ST
MCLEAN ST
MORRELL ST
FOSTER ST
ELIZABETH ST
DRING AV
GRANGE RD
ROSS AV
SCOTT AV

LEGEND

Crash Severity

10
5
1

Tot_PropertyDamage
Tot_Injury
Tot_Fatal

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MAP DETAILS

Streetpro Data:	MapInfo
Accident Data:	Transport SA
Job Number:	2008.0442
Filename:	crash severity.wor
Drawn:	Matt Brown
Date:	30/07/2008

-160 0 160 320 480m

Scale: 1:8,000

City of Charles Sturt

Beverley Precinct

COLLISION DATA 2003 - 2007

Crash Severity

Appendix D1

Community Responses – Initial Consultation

Beverley LATMP Community Responses	
Number of Remarks	**Street**
	Alton Avenue
3	Speeding
	Alice Street
4	Speedng
2	Not enough On street parking (due to business)
3	Rat Running
	Bradford Cresent
1	Heavy Vehicles
	Elford Street
1	Rat running
	East Avenue
1	Speeding
	Fairbank Street
1	Speeding
	Gemmell Street
1	Speeding
2	Rat running
2	Heavy vehicles
	George Street
6	Speeding
2	Rat Running
	Glenelder Street
3	Speeding
3	Rat running
	Golding Street
4	Speeding
2	On-street Parking affecting Traffic Flow
	Howard Street
2	Speeding
2	Heavy Vehicles
1	Rat running
1	Parked vehicles

	Hubbard Street
1	Heavy Vehicles (Trucks)
1	Too narrow and High volume
1	Tyre Burn Outs
	Jeanes Street
1	Narrow street
1	Heavy Vehicles (Trucks)
	Ledger Road
1	Speeding
1	Parked Cars
1	Heavy Vehicles (Trucks)
	Main Street
23	Speeding
2	High Traffic Volume
5	Heavy Vehicles (Trucks)
4	Rat Running
1	Traffic Issues during School Drop-Off
2	Parked Cars
	Olveston Street
4	Speeding
3	Rat Running
	Pope Street
1	Speeding
	Spring Street
3	Parked vehicles/trucks
1	Speeding
	William Street
27	Speeding
11	Heavy Vehicles (Trucks)
7	High Traffic Volume
3	Rat Running
5	Traffic Issues during School Drop-Off
10	Too Narrow (parked vehicles)
7	Hoon Driving during night
	Willsmore Street
4	Speeding
2	Heavy Vehicles (Trucks)

Beverley LATM - Summary of Community Responses	
Number	**Intersection**
	Alton Avenue/Oliveston Avenue
5	Crashes and several near misses
5	Speeding
	Golding Street/ Spring Street
3	Parked Cars blocking Intersection
	Golding Street/ Willsmore Street
2	Speeding
	Toogood/William street
1	Speeding

Appendix D2

Community Responses – Draft LATM

Responses To DRAFT LATM
Summary of Comments

Location	Comment
Mini Roundabouts in Main St	Drivers drive over them without care. Any preventative measures are welcome. Excessive amount of humps for short streets. Commercial vehicle access will be diminished. Rat running and speeding on Main Street Car and truck speeding. Stop beg (??) trucks Suggest emergency vehicles use East Avenue if access impeded. Street not wide enough for roundabouts. If not roundabouts, then stop signs or speed humps. The MATS plan should be implemented as soon as possible.
Reopen Woolgina St	Strong opposition to what might cause increase in commercial traffic. No stopping zone on corner of Grange & Main St. Negative impact on Ledger Road which already carries heavy traffice loads. Would allow better access to Ledger Road from Port Road, meaning possibly less traffice on Olveston & Alton Streets. Might encourage rat running. Welcome anything that will divert commercial traffic away from Port Road end of Ledger Road. Hopefully will reduce traffic volume on Elford -Oreston - Alford route. Request more information regarding street re-opening.
East Ave/Watson	Not necessary to be that far away from corners. This might serve to disadvantage the deli to no very good purpose. The extension would provide local snack bar with no partking at front of shop. Clearly marking road at 10m would provide customers one car park at front of shop and a better defined parking area. Suggest restriction only enforced during business hours. Speeding occurs more when there are no parked cars.
Humps in Alton and Olveston	This should be high priority. Make Alton St no through road. Recent white markers of no consequence as "drifting" is most common. Excessive amount of humps for short streets. Olveton Avenue speeding would increase government revenue. A chicane would be preferable. Humps/plateaus would be inconvenient. Consider closing the Hungary (??) back exit to Olveston Suggest installing hump/plateau on Elford to slow people as they enter from Olveston. Waste of money as humps create more problems that they solve.
Bend in Alton-Olveston	Any slowing device welcome ASAP as hoon driving worsens in wet weather. Safety increase welcome. Greatly welcome. Roundabouts (above) reduce the need for this.
Relocate Bus Stop in Port Rd	Current position of bus stop impeding visibility. Most welcome upgrade. To where? It is most convenient in current position. What implications on other bus stops? Need more information regarding this change.
Grange Rd / William St	Very dangerous intersection. Should be high priority. This intersection is a nightmare to get across, the lights need to be sorted out so you can actually get across, every time you think you can get out the lights at Crittenden Road go green and cars come flying around the corner. IGA supermarket parking makes traffic worse Remove Crittenden Rd sign from its current location. It can be confusing. Nothing wrong with this intersection
Port Road Median	Need to monitor no entry as many cars ignoring sign. Great idea. Isn't this currently happening? Waste of monet if state government going ahead with tramline to Port Adelaide

Grange / Holbrooks	Current traffic signals create traffic back-up Major overhaul required of whole intersection. This is the worst intersection in the Western Suburbs, I am surprised there are not more accidents with so many people running red lights and cutting lanes to get onto Holbrooks Road from East Avenue. The line up to get around that corner goes half way down East Avenue at peak times. Lining up East Ave and Holbrooks Road would be ideal. A vital consideration
Main St No Entry	Remove "no entry" as recent alterations on William St affect access to Port Road. Many drivers not observing current signs.
Golding St Volumes	Reduce hoons and burnouts. Golding Street is a disgrace, it needs to have parking on one side only and have the other side no parking, with the changes on William St there is a lot of traffic down Golding St. It needs to be fixed, the road is far to narrow for parking on both sides of the road, personally I have had to stop completely to get through two parked cars.
McLean St Volumes	If you modify Main st, Mclean will get used more frequently. Mclean should be a loading zone on the southern side for the trucks that load at the factories. They are always getting stuck due to the parked cars. You should aquire the empty block corner Main and Mclean from the DTEI for parking for workers and gym users who block all the surrounding areas As money was spent developing a commercial area, you can't forbid use of the streets by commercial vehicles.
Other	Old Myer warehouse land should have been re-zoned residential - enough commercial in the area already. Negative impact of commercial vehicles on residential areas. Cross roads of Hubbard/St Michael's corner and Main Road. Poor visibility due to large vehicles. Parking on both sides of streets should be reduced. The trees need to be trimmed or removed on Main St, as you can not see past them down the street when coming out of Spring and Willsmore Streets. Also there are some large Trucks that park on Main St which make it very hard to see if there is any traffic coming down the road. Main Street and Grange Road intersection is also very difficult to get across during peak times. Reducing speed at Woodland may be enough to limit speed on Ledgers without using speed humps. Willsmore Street traffic volume and speed needs monitoring. Great to know council spending money wisely. High speeds and rat running on Ledger Road. Current speed limiting devices on Ledger Road have had no impact. William Street/Port Road - cameras and fines to deter bad drivers. Children and pet safety Spring street needs volume and speed monitoring Monitor speeds on East Avenue Council needs to liaise with state government re. tramline extension. Monitor speeds on Main Street Main Street/Grange Road needs "keep clear" sign at traffic lights.

BEVERLEY LATM
SUMMARY OF COMMUNITY RESPONSES TO DRAFT LATM
June 2009

Mini Roundabouts in Main St					Reopen Woolgina St					East Ave/Watson					Humps in Alton and Olveston				
SA	A	N	D	SD	SA	A	N	D	SD	SA	A	N	D	SD	SA	A	N	D	SD
			x				x				x					x			
x							x					x				x			
x						x				x						x			
x							x			x						x			
															x				
x							x				x						x		
			x			x					x								x
				x		x								x		x			
	x								x			x						x	
x							x					x				x			
x						x											x		
x							x							x			x		
	x					x				x					x				
		x					x							x					x
				x		x						x					x		
	x							x				x			x				
x							x				x				x				
x						x						x					x		
		x					x							x			x		
		x				x						x						x	
x							x			x					x				
			x			x								x					x
	x							x					x		x				
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x						x						x				x			
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		x					x							x			x		
			x																
x					x					x					x				
SA	A	N	D	SD	SA	A	N	D	SD	SA	A	N	D	SD	SA	A	N	D	SD
14	8	7	4	2	3	12	15	2	1	5	7	10	1	10	9	8	12	3	3
40%	23%	20%	11%	6%	9%	36%	45%	6%	3%	15%	21%	30%	3%	30%	26%	23%	34%	9%	9%
63%		20%	17%		45%		45%	9%		36%		30%	33%		49%		34%	17%	

Bend in Alton-Olveston					Relocate Bus Stop in Port Rd					Grange Rd / William St					Port Road Median				
SA	A	N	D	SD	SA	A	N	D	SD	SA	A	N	D	SD	SA	A	N	D	SD
	x						x				x						x		
x						x					x						x		
x					x					x					x				
		x					x			x					x				
x																			
	x					x					x					x			
	x					x					x					x			
		x					x							x					x
x							x					x					x		
x						x				x						x			
x						x				x							x		
		x					x					x			x				
x					x							x					x		
		x					x					x			x				
		x					x				x					x			
	x				x							x				x			
		x					x				x						x		
		x								x					x				
	x						x			x							x		
x							x				x						x		
	x						x			x					x				
	x						x							x		x			
x							x			x						x			
	x				x						x					x			
		x			x					x							x		
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		x					x					x					x		
	x						x				x					x			
															x				
	x						x					x				x			
		x				x					x					x			
		x					x					x					x		
		x					x					x			x				
x						x				x					x				
SA	A	N	D	SD	SA	A	N	D	SD	SA	A	N	D	SD	SA	A	N	D	SD
11	10	13	0	0	5	7	20	0	0	10	10	11	0	2	9	11	13	0	1
32%	29%	38%	0%	0%	16%	22%	63%	0%	0%	30%	30%	33%	0%	6%	26%	32%	38%	0%	3%
62%		38%	0%		38%		63%	0%		61%		33%	6%		59%		38%	3%	

Grange / Holbrooks					Main St No Entry					Golding St Volumes					McLean St Volumes				
SA	A	N	D	SD	SA	A	N	D	SD	SA	A	N	D	SD	SA	A	N	D	SD
x						x						x					x		
	x					x						x			x				
x					x						x					x			
x					x					x					x				
	x					x					x					x			
	x						x				x					x			
x						x					x				x				
x							x					x					x		
x						x				x						x			
x							x			x					x				
x									x			x					x		
	x					x						x				x			
	x						x					x					x		
x					x							x					x		
		x					x					x					x		
	x				x						x					x			
x					x					x						x			
x							x					x				x			
	x						x					x					x		
x						x							x				x		
x						x						x						x	
x						x						x			x				
x					x						x				x				
x						x					x								
	x					x					x					x			
		x					x					x					x		
		x					x					x					x		
x					x						x					x			
	x					x					x					x			
x							x				x						x		
		x					x					x					x		
		x					x					x					x		
x					x					x					x				
SA	A	N	D	SD	SA	A	N	D	SD	SA	A	N	D	SD	SA	A	N	D	SD
19	9	5	0	0	8	12	12	0	1	5	11	16	1	0	7	11	13	1	0
58%	27%	15%	0%	0%	24%	36%	36%	0%	3%	15%	33%	48%	3%	0%	22%	34%	41%	3%	0%
85%		15%	0%		61%		36%	3%		48%		48%	3%		56%		41%	3%	

Appendix E

Proposed LATM Plan

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POSSIBLE FUTURE B-DOUBLE ROUTE

RELOCATE BUS STOP AWAY FROM CORNER

INSTALL 4 ROAD HUMPS OR PLATEAUX

INSTALL PAVEMENT BARS TO REDUCE SPEED THROUGH JUNCTION OF TURNS

MINOR CURVE WIDENING AND INSTALL RAISED MEDIAN THROUGH CURVE & JUNCTION

POSSIBLE FUTURE B-DOUBLE ROUTES

CONSIDER RE-OPENING WOOLGINA STREET

ONE WAY STREETS

MONITOR DRIVER OBSERVANCE OF NO ENTRY

REVIEW MINI-ROUNDABOUT

INSTALL NO STOPPING SIGNS/LINES IN WATSON STREET AND EAST AVENUE TO CONTROL PARKING AROUND CORNER

REVIEW MINI-ROUNDABOUT

REVIEW MINI-ROUNDABOUT

MARK 10M NO STOPPING RESTRICTION AROUND INTERSECTION

MONITOR TRAFFIC VOLUMES AND SPEED IN GOLDING ST

REVIEW MINI-ROUNDABOUT

MONITOR TRAFFIC VOLUMES

CONSIDER JUNCTION UPGRADE SUBJECT TO FUTURE ADJACENT LAND DEVELOPMENTS

LIASE WITH DTEI FOR MANAGING CONGESTION AT TRAFFIC SIGNAL

NEWINGTON AV
LAWRENCE AV
MARLBOROUGH ST
WOODLANDS CR
JEANETTE ST
KILKENNY RD
ELFORD ST
ALTON ST
POPE ST
POPE ST
COURTOY ST
WEST ST
PEGLER ST
LANCELOT ST
HAYNES CR
WOOLGINA ST
DAVIS ST
HOWARDS RD
WODONGA ST
MAIN ST
JEANES ST
LINDEN CT
DEE ST
COOMBE RD
GEMMELL ST
DOON ST
BOURN PL
WILLSMORE ST
ALFRED AV
REGINA CT
LEANE AV
BRANWHITE ST
MACLAGAN AV
SPRING ST
CHARLES RD
TUNBRIDGE ST
GOLDING ST
TOOGOOD AV
HUBBARD ST
LEWANICK ST
BROADFORD CR
WILLIAM ST
GEORGE ST
EYRE ST
BARKER AV
GLEN ELDER ST
PRINCESS ST
MORRELL ST
ALICE ST
FOSTER ST
MCLEAN ST
MCLEAN ST
ELIZABETH ST
GRANGE RD
GRANGE RD

E adelaide@tonkin.com.au
W www.tonkin.com.au

MAP DETAILS

Streetpro Data:	MapInfo
Job Number:	2008.0442
Filename:	Proposed.wor
Drawn:	Simon Callaghan/TJF
Date:	06/03/2009

-150 0 150 m

1:7,000

City of Charles Sturt

Beverley Precinct

LOCAL AREA TRAFFIC MANAGEMENT PLAN