



# Woodville Road Streetscape Upgrade Concept Design Report

13th September 2019 - FOR CONSULTATION





# City of Charles Sturt

## Woodville Road Streetscape Upgrade

### Prepared by:

Outerspace Landscape Architects  
258a Rundle Street  
Adelaide SA 5000

### Contact:

Beth Pearson  
P 08 8223 3228  
E [beth.p@outerspace.net.au](mailto:beth.p@outerspace.net.au)  
[www.outerspace.net.au](http://www.outerspace.net.au)  
ABN 56 137 837 355

### Project Team:





# Contents.

<b>01 /</b>	<b>Introduction</b>	<b>4</b>
	/ Project History	
	/ Previous Studies	
	/ Project Site	
<b>02 /</b>	<b>Precinct Vision</b>	<b>6</b>
<b>03 /</b>	<b>Site Analysis</b>	<b>8</b>
	/ Existing Conditions	
<b>04 /</b>	<b>Traffic and Transport</b>	<b>12</b>
	/ Background Assessment	
	/ Streetscape Options	
	/ Key Design Recommendations	
	/ Street Sections	
<b>05 /</b>	<b>Concept</b>	<b>20</b>
	/ Schematic Plan	
	/ Urban Design Recommendations	
	/ Landscape Concept Plan	
	/ Street Greening	
	/ Materials Palette	
	/ Streetscape Sections	
<b>06 /</b>	<b>Parking</b>	<b>26</b>
	/ Parking Study	

<b>07 /</b>	<b>Civil and Stormwater</b>	<b>29</b>
<b>08 /</b>	<b>Lighting and Power</b>	<b>31</b>
	/ Lighting Locations	
<b>09 /</b>	<b>Smart Technology</b>	<b>34</b>
	/ Smart Cities	
	/ Smart Technology locations	
<b>10 /</b>	<b>DDA</b>	<b>37</b>
<b>11 /</b>	<b>Public art</b>	<b>38</b>
	/ Public Art Locations	
<b>12 /</b>	<b>Detail Studies</b>	<b>41</b>
	/ Civic Centre Forecourt	
	/ Public Plaza	
	/ Port Road Median	
	/ Preliminary Study: 67-85 Woodville Road	
<b>13 /</b>	<b>Costings and Staging</b>	<b>48</b>
<b>14 /</b>	<b>Community Engagement</b>	<b>51</b>
<b>15 /</b>	<b>Summary and Next Steps</b>	<b>54</b>
	<b>Appendices</b>	
	/ Appendix A: Cost Estimate Report	i
	/ Appendix B: Stormwater Report	ii
	/ Appendix C: Lighting Plan	iii
	/ Appendix D: Parking Study	iv



01/

# Introduction

## Project history

Outerspace Landscape Architects were engaged to prepare the Woodville Road Streetscape Upgrade Concept Plan in February 2018. A previous study 'Woodville Village Masterplan Final Report' was undertaken in 2010 by Jensen Planning, which provided recommendations for the wider precinct.

The focus of the upgrade is between Port Road and the Woodville Railway Station. It includes side streets Norman Street and Kemp Street, as well as several side street intersections. The Woodville Town Hall and the Civic Centre forecourt are included as part of Stage 1. Stage 2 includes a public plaza and potential mixed use development at 67-85 Woodville Road (the current sealed and unsealed public carpark opposite the Civic Centre) and Stage 3 being further improvements to the Port Road Median Gateway.

This enhancement to the precinct is one of the final pieces in the upgrade of the wider Woodville Road/ St. Clair precinct, with the St. Clair Recreation Centre and St. Clair Avenue having recently been completed. In addition, the reactivation of Council buildings through their leasing to NNQ, Fame Train and the rebuilding of the Woodville Town Hall, much has been achieved. Further to this, the open space development surrounding the Recreation Centre is due for completion in the first half of 2020.

Given all of this, the time is now right to complete this important portion of streetscape upgrade much anticipated by residents, traders and Elected Members.

The following Woodville Road Streetscape Upgrade Concept Plan and Report has been prepared following a comprehensive review of previous plans and discussions with both the Council Executive and the Project Steering Group.

## Previous studies

The previously mentioned 2010 Woodville Village Masterplan Final Report, set out a vision and recommendations for the development of the wider Woodville Village area. It highlighted that the area around Woodville Station was to be one of 14 identified TOD's throughout the Adelaide metropolitan area (now to be developed by AVEO as residential and supported medium density development), as well as associated developments including the St. Clair Development, the redevelopment of land owned by Council at 67-85 Woodville Road and the Queen Elizabeth Hospital upgrades.

It included recommendations for the current study area on Woodville Road associated with the Civic Centre, including:

- A Port Road Gateway
- Civic and Retail Heart
- Traffic calming
- Alfresco dining
- Pedestrian and cycle linkages
- Streetscape upgrade
- Public Art and Culture Framework
- Redevelopment of land owned by Council at 67-85 Woodville Road

This current project seeks to understand how the Woodville Village area has developed and changed since the previous report was undertaken in 2010 and to build on the recommendations that were made.

The Concept and Scope of work has been structured into 3 Stages:

- Stage 1 - Woodville Road Streetscape
- Stage 2 - Public Plaza and potential Development at 67-85 Woodville Road
- Stage 3 - Port Road Median Gateway

Each of these stages can be stand alone projects subject to funding and market readiness for mixed use development or be delivered concurrently.



Extract from Woodville Village Masterplan Final Report



## Project site

Woodville Road is a DPTI owned and managed road running south-west to north-east, with the proposed streetscape works focusing on the approximately 450m portion of Woodville Road from Port Road to Russell Terrace at Woodville Station.

The current road layout is approximately 13m wide with 2 lanes of traffic in each direction, and conveys approximately 21,400 vehicles per day (DPTI, 2016).

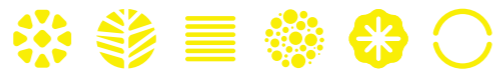
It includes the side streets Norman St, Kemp St and intersections with Bower St, Aberfeldy Ave and Russell St as well as the Port Road median as indicated in the diagram below.

The built form within the site includes a mix of civic buildings, small commercial, health, hospitality, retail, and residential buildings.

The site also includes the following features:

- City of Charles Sturt Civic Centre
- Historic buildings including the Woodville Town Hall, NNQ and St. Margaret's Anglican Church
- Sealed carpark
- Unsealed carpark adjacent Woodville Station
- Meals on Wheels site
- Connections to the Outer harbor Greenway following the train line





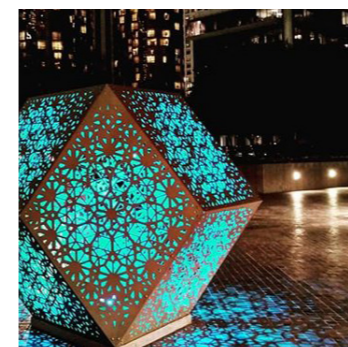
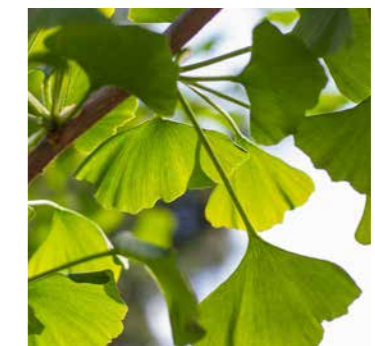
02/

## Precinct Vision

*"To establish the Woodville Road Precinct as the **Civic & Retail Heart** of Woodville."*

### The Woodville Road Streetscape Upgrade will:

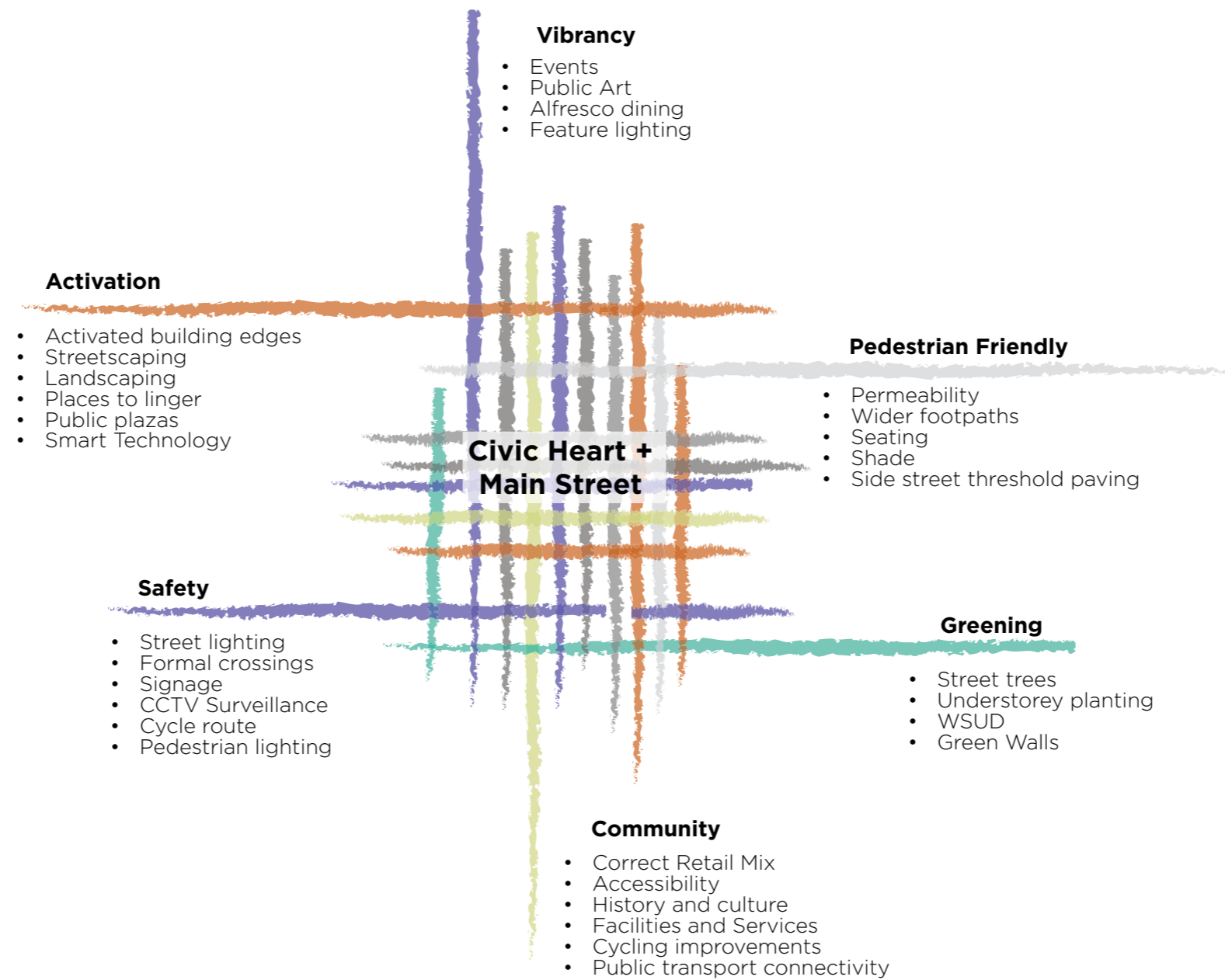
- Improve economic opportunities for traders via increased visitor numbers
- Enhance current vehicle movement along Woodville Road by maintaining two lanes of traffic in each direction and introducing sheltered right turn to side streets
- Attract private investment to under-utilised Council and private land holdings
- Provide activated places and facilities to attract visitors
- Create a more aesthetic streetscape environment
- Encourage increased use of Civic facilities e.g. Library, Civic Centre
- Improve pedestrian movement and linkages
- Enhance and promote the use of public transport (bus and rail)
- Enhance cycling connection from the Outer Harbor Greenway to the precinct
- Increase greenery within the precinct
- Improve public safety and encourage activity in the evenings
- Enhance existing historic architecture





## Precinct Vision

The Vision encompasses the following aims to create an attractive precinct for all to enjoy.





03/

## Site analysis

Woodville Road currently functions as a traditional vehicle-oriented roadway, however lacks amenity for pedestrians, public transport commuters and cyclists.

The condition of the streetscape is of average quality, with aging footpath treatments, a minimal amount of standard Council issue street furniture and a general lack of way-finding signage. The greening along the road is particularly poor, with inconsistent street-tree planting that is performing poorly, and with little to no understorey planting.

The road provides access to facilities such as the Civic Centre and Library, the Woodville Town Hall, and Woodville Station. The remainder of the site includes a mix of commercial, hospitality and residential buildings. There is one public plaza - the Civic Centre forecourt, that has a dark, uninviting entry canopy, a paved area, a few bike racks but no artworks, seating or engaging urban design features.

There is one pedestrian activated crossing (PAC) at the Woodville Town Hall. The lack of crossing points given the length of the road makes crossing the busy road at other intermediate points at peak hours difficult. The current location of bus stops and lack of cycling access to the precinct further inhibits its potential.

The side streets are tired, with aging pavements and outdated understorey planting. These spaces would be better utilised if the streetscaping was upgraded.

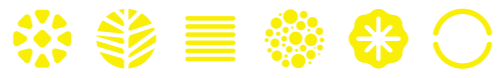
The Port Road median at the Woodville Road intersection has a grand row of *Corymbia maculata* (Spotted Gum) and a paved path, but little else in the way of pedestrian amenities such as seating, artworks or planting.

The public carpark is well utilised and provides convenient parking to access the Civic Centre. Several mature *Jacaranda mimosifolia* (Jacaranda) trees add greenery and are worth retaining. There is also an unsealed car park on council land that is well used, but the land could potentially be better utilised for development and public space.

Given the aging condition of the current streetscape, an upgrade is recommended to create a more cohesive civic and entertainment precinct.



Pedestrian crossing point adjacent the Town Hall and Civic Centre forecourt.



## Existing Condition

### Woodville Road

- Double lane roadway with narrow median
- Indented parking
- Narrow verges in some locations



Woodville Rd looking North West, adjacent Civic Centre



Woodville Rd looking North West, adjacent Snap Fitness



Woodville Rd verge condition

### Built Form

- Heritage buildings in good condition
- Civic Centre building
- Historic character



Town Hall



Civic Centre and forecourt



St. Margaret's Anglican Church and crossing

### Built Form

- NNQ outdoor dining enclosed
- Civic Centre entry canopy is low and confined



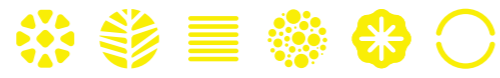
NNQ building and crossing



NNQ outdoor dining area



Civic Centre entry canopy



## Existing Condition

### Side streets

- Average condition
- Vehicle dominated
- Minimal landscaping



Norman St verge condition



Kemp St verge condition



Russell Tce pedestrian crossing points

### Carparks

- Well used
- Average condition
- Minimal landscaping



Sealed Carpark, Woodville Rd



Sealed Carpark with wide setback from Woodville Rd



Meals on Wheels site, Kemp St

### Gateways: Railway Line

- Average condition
- Lack of wayfinding signage
- Minimal landscaping



Unsealed Carpark and rail-way crossing



Woodville Station with shared path



Pedestrian crossing point



## Existing Condition

### Gateways: Port Road

- No formal 'gateway'
- Vehicle dominated
- Opportunities for further landscaping



Port Road/ Woodville Road intersection



Port Road Median



Port Road Median

### Public Transport

- Bus stops not indented causing traffic congestion
- Poor condition of waiting areas



Bus stops not indented



Poor pedestrian waiting areas



Bus stops not located at major public facilities such as the Woodville Town Hall and Civic Centre



# Traffic and Transport

The project seeks to establish the Woodville Road Precinct (between Port Road and St Clair Recreation Centre) as the civic heart and main street of Woodville. Accommodating safe access and movement for pedestrians, cyclists, public transport, service deliveries and private vehicles via upgrading the streetscape is a key part of creating a transport corridor that facilitates the vision for the precinct.

## Key issues

### Traffic Volumes

Woodville Road performs as an important connection between western coastal suburbs and suburbs east of Torrens Road. It is an important link for the community to QEH and Arndale carrying in the order of 23,100 vehicles per day at the Port Road end (DPTI Turning Movement Survey 2016), with around 1,870 of those in the AM peak hour (8:15am to 9:15am) and around 1,980 in the PM peak hour (4:15pm to 5:15pm).

Woodville road is also important for pedestrians and public transport users given the range of activities and services that are offered within the precinct.

### Crash History

A review of the Woodville Road crash history (2013-2017, sourced from Data.SA) indicates several locations with crash clusters;

- Norman Street intersection - 7 crashes - 3 x Rear End, 2 x Right Turn, 1 x Side Swipe, 1 x Hit Parked Vehicle
- Aberfeldy Avenue intersection - 7 crashes - 4 x Rear End, 1 x Right Turn, 1 x Right Angle, 1 x Hit Pedestrian
- Around pedestrian actuated crossing - 5 crashes - 3 x Hit Fixed Object, 2 x Rear End
- Kemp Street intersection - 5 crashes - 2 x Right Angle, 2 x Rear End, 1 x Right Turn
- Midblock cluster between Bower and Aberfeldy - 8

crashes - 3 x Side Swipe, 2 x Right Angle, 2 x Rear End, 1 x Head On

- Port Road (southeastbound) intersection - 23 crashes - 12 x Rear End, 6 x Right Angle, 4 x Side Swipe, 1 x Hit Fixed Object

### Transport Issues

Some of the other key transport issues on the subject section of Woodville Road include;

- Poor connections from the local street network (i.e. Rowley Terrace) to recently completed section of Grange Greenway (shared path) on the south side of the railway line
- While Woodville Road provides both East-West, North-South and city bound connections via bus and train services, the current disjointed placement of public transport stops is not conducive to interaction of these services
- Poor pedestrian facilities at Port Road intersection
- Narrow footpaths in many sections, which are further impacted by stobie poles, lighting columns, street furniture and indented parking bays
- Limited safe pedestrian permeability across Woodville Road
- Long wait times at pedestrian actuated crossing, resulting in many pedestrians crossing in gaps
- Lack of bike access both into the precinct and along Woodville Road
- Conflicting right turn lanes into Aberfeldy Avenue and Norman Street
- Conflict between pedestrians at railway maze and left turning vehicles into Russell Terrace, often at high speeds



Lack of permeability across Woodville Road for pedestrians including formal and informal crossing points.



Narrow verges with constricted footpaths and minimal public transport facilities.



## Background Traffic Assessments

### Traffic Volumes

Council commissioned a study into the operation of Woodville Road (Bitzios Consulting, October 2017) that compared options for one lane in each direction with that of two lanes in each direction. The assessment concluded that under current conditions there would be only limited impact on travel times and delays with one lane in each direction, but by 2036 (assuming current travel patterns and behaviours projected in to the future remain) one lane in each direction would result in significant increases in travel times and delays and that this would be more pronounced in the southbound direction.

A further assessment explored an option of one lane northbound and two lanes southbound. The results from this option were shown to significantly reduce the impacts in the southbound direction and this option provided the initial starting point for the detailed streetscape study.

### Traffic Options

Initially three options were identified for the traffic lanes within the streetscape design study:

- Two lanes retained in both directions;
- Two lanes southbound and one lane northbound
- One lane in each direction

Due to administration's concern that longer term single lane north-bound would also not be considered viable by DPTI and the community, options that retained two lanes in both directions were taken forward, with the left hand lane to be used for parking outside of clearway times.

This unfortunately has resulted in bike lanes not being included in the final recommended alignment as there was insufficient width for two lanes of traffic, pedestrian enhancement and landscaping and bike lanes. However improved side street connections, way finding and links to the proposed public plaza and the outer harbor Greenway will be strengthened as part of the upgrade.

The parking lane, (outside of clearway times) would be designed so that it is clearly a parking lane and travelling motorists do not attempt to travel in two lanes past parked vehicles. As the previous schemes had considered an option of one lane northbound that was shown to operate satisfactorily, the preferred option would be for the northbound carriageway to designate the left hand lane for parking throughout the day subject to DPTI approval.

Based on the preferred option of two lanes in each direction, a series of four cross sections were identified that considered the footpath, median and traffic lane configurations within the road reserve. The options proposed the right hand lanes as traffic lanes and in three of the four options proposed the left hand lane for peak period traffic and off-peak parking. Based on trader and DPTI feedback the preferred cross section includes 3m traffic lanes, 3.1m traffic/ parking lanes and a 2.9m median.

### Future Proofing

The two lane options were also considered to provide the most flexibility in terms of future proofing for changing transport trends. The left hand lanes could be adjusted to permanent traffic lanes or permanent parking lanes by simply changing clearway times and signage. Conversion of the left hand lane to include a bike lane could also be readily achieved to respond to different transport demands that may arise. In all cases only limited infrastructure changes would be required. Alternatively, sections of the left hand lanes could be repurposed to public realm or outdoor dining should future travel patterns result in reduced traffic and parking volumes.

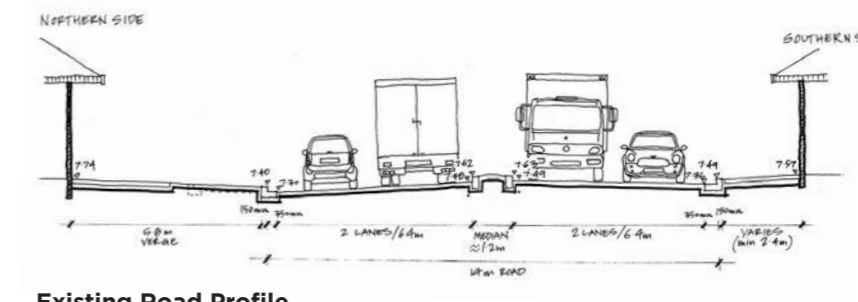
Refer following page for Traffic Options sketches.



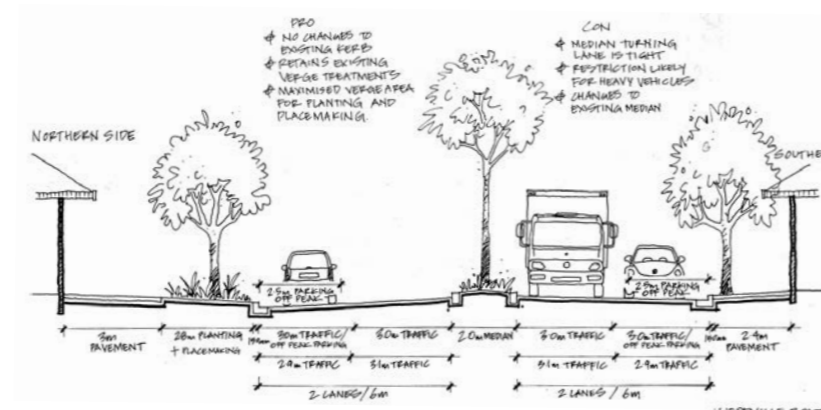


## Streetscape Options Diagrams

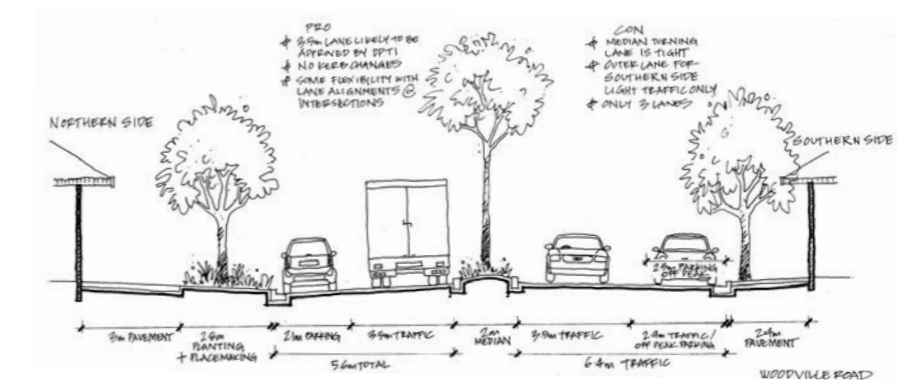
The following diagrams present the existing road cross-section and demonstrate four options for different road configurations investigated by the design team.



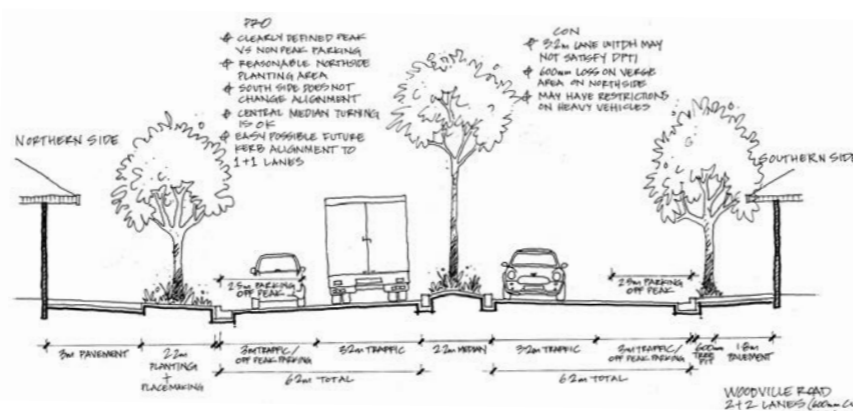
**Existing Road Profile**  
2+2 Lanes, 1.2m median



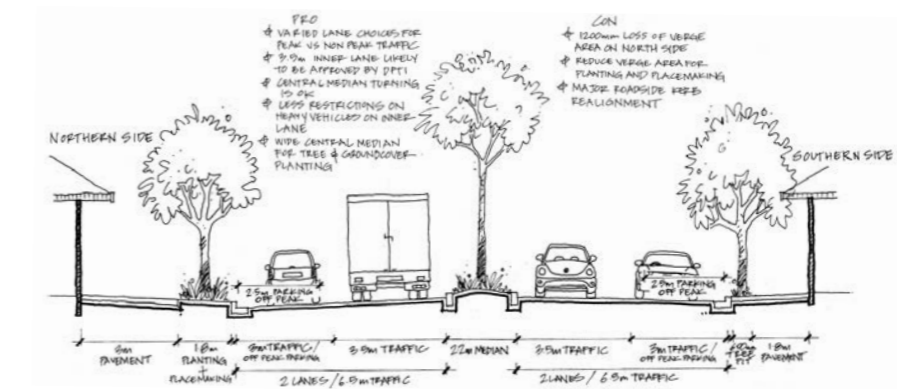
**Option 1 - 2+2 Lanes**  
3m lanes, off-peak parking, 2m median



**Option 2 - 1+2 Lanes**  
3.5m inner lanes, 1 lane parking, 2m median



**Option 3 - 2+2 Lanes**  
3.2m inner lanes, off-peak parking, 2.2m median



**Option 4 - 2+2 Lanes**  
3.5m inner lanes, off-peak parking, 2.2m median



## Key design recommendations:

### Traffic Management

- Improved right turn lane widths within the median
- Permanent parking restrictions on the southbound approach to Port Road intersection and around the level crossing

### Improved Pedestrian Connectivity

- Port Road Median Gateway as a pedestrian plaza with improved pedestrian design and crossing facilities
- Increased and improved pedestrian crossing points
- Improved footpath amenity with widened footpaths, verge areas, street trees and lighting

### Bicycle Facilities

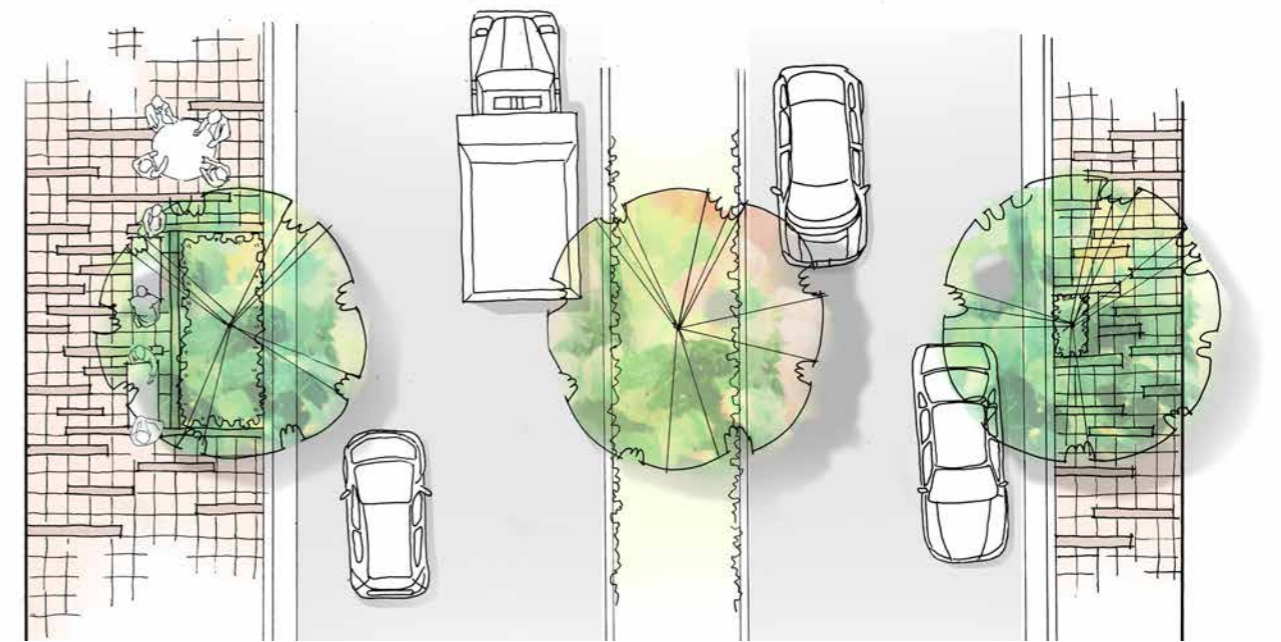
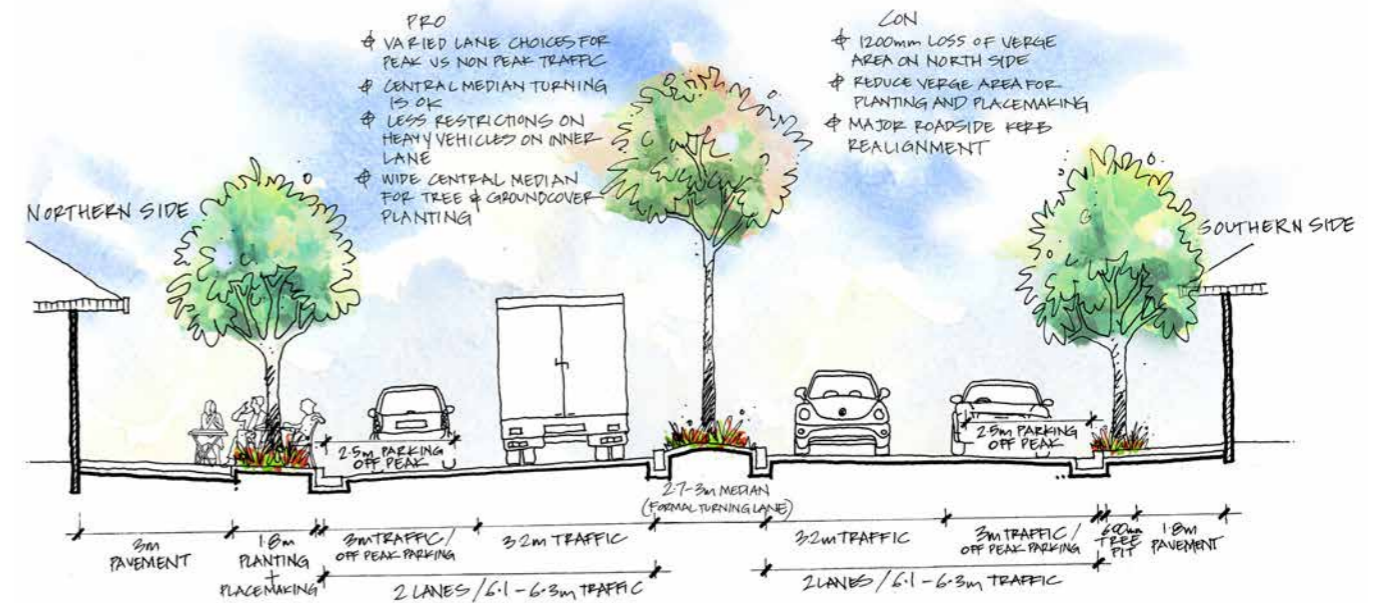
- Bike connections from Outer Harbor Greenway and railway station into the precinct
- Grange Greenway shared path connection improved with upgraded crossing provision to Russell Terrace on the southside of the train line
- Improved connections and way finding for parallel cycling routes i.e. Park Street south

### Public Transport

- Relocation and indenting of bus stops 221 to be closer to the Woodville Town Hall and railway station for improved access to a key destination and improved public transport interchange

### Future Proofing

- Future proofing carriageway design with no indented parking to allow for future traffic volume growth, cyclist volume growth (and dedicated facilities) or other changes to transport network demands, precinct activities and changes in the surrounding areas and local environment



**Preferred Option - 2+2 Lanes**  
3.2m inner lanes, off peak parking, 2.7-3m median



## Streetscape Sections

The following road sections illustrate the final preferred road profiles adjusted in discussion with DPTI for Woodville Road, as well as Norman Street and Kemp Street threshold locations.



**Section A - Typical Woodville Road, looking north**



Section B - Woodville Road at Civic Centre, looking north



**Section C - Norman Street threshold section**



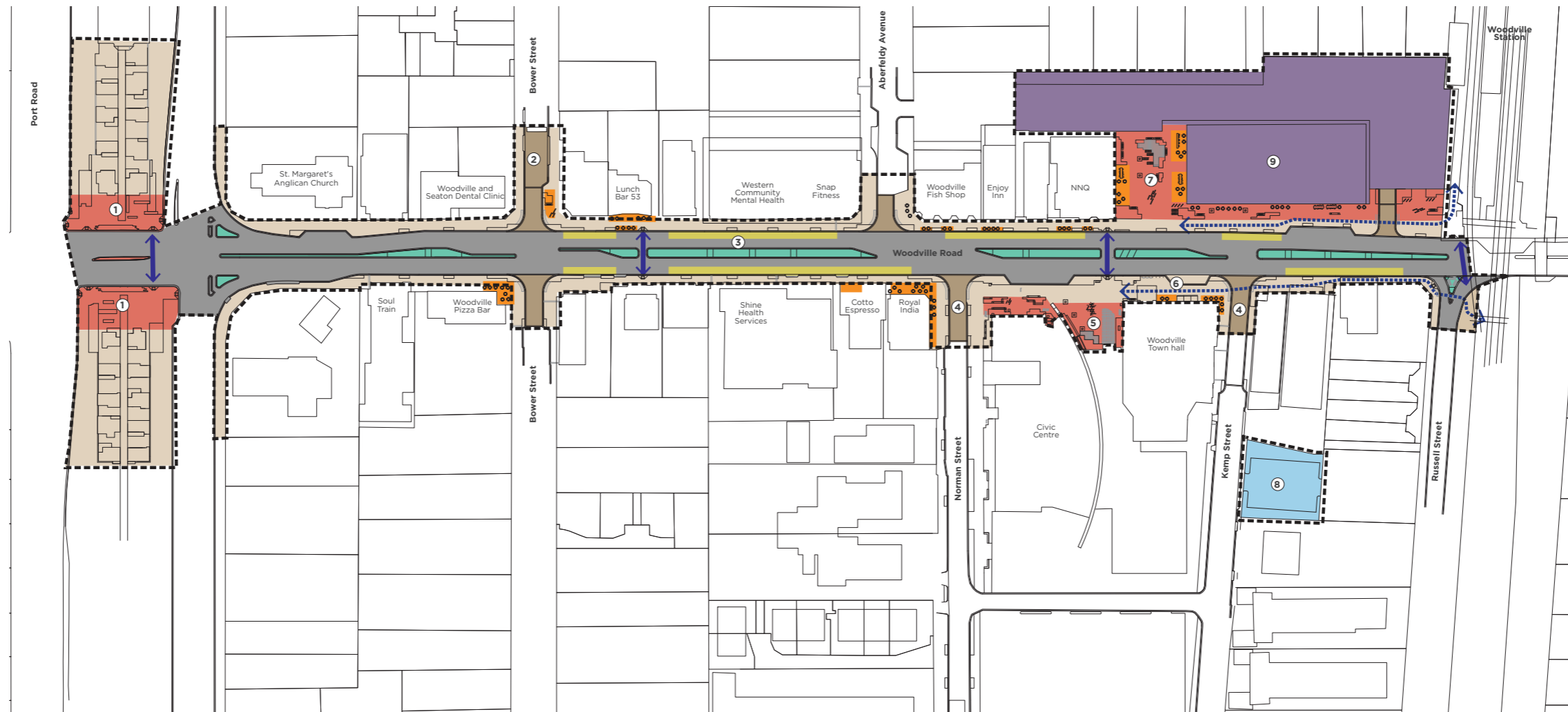
**Section D - Kemp Street threshold section**



# Concept Proposal

## Schematic Plan

A schematic plan was initially prepared to determine usage zones and identify public gathering locations. Vehicular and pedestrian zones are also identified.



- 1 Port Road Median Gateway (Stage 3)**
- Plazas with feature paving
  - Gateway artwork and lighting
  - Seating
  - Remaining median to be turf with central pathway
  - Retain existing trees

- 2 Bower Street (Stage 1)**
- Possible flush surface
  - Access to private carpark
  - Seating and furniture
  - AI Fresco dining

- 3 Woodville Road (Stage 1)**
- Widen median to allow for turning movements
  - Indented parking replaced with off-peak on-road parking
  - Verge street tree planting and possibly in median
  - Relocate water main to allow for median trees
  - Understorey greening
  - Increased pedestrian crossing points
  - AI fresco dining

- 4 Norman Street & Kemp Street (Stage 1)**
- Narrowed carriageways
  - Intersection threshold treatment
  - Possible flush surface
  - Opportunity for closure for small events
  - Feature paving

- 5 Civic Centre Forecourt (Stage 1)**
- Declutter entrance
  - Entry signage
  - Possible artistic entry canopy
  - Green-walls
  - Understorey greening
  - Seating
  - Smart technology
  - Possible water feature
  - Feature Lighting (bud lighting to trees)
  - Bike parking

- 6 Town Hall (Stage 1)**
- Feature lighting and signage (to be determined)
  - Feature artwork
  - Feature paving
  - AI fresco dining
  - DDA access into Town Hall
  - Possible relocation of bus-stop 221 to Town Hall to improve connectivity

- 7 Public Plaza (Stage 2)**
- Feature artwork
  - Feature paving
  - Raised deck/stage
  - Seating
  - Shade trees
  - Understorey greening
  - AI fresco dining
  - Play elements
  - Feature lighting
  - Smart technology
  - Bike parking

- 8 Meals on Wheels Site (Stage 2)**
- Site to become Council carpark
  - To accommodate shuttle buses
  - Understorey planting and screening to fences
  - Lighting to standard

- 9 Potential Development at 67-85 Woodville Road (Stage 2)**
- Potential for lot 67-85 Woodville Rd to be sold for mixed use private development
  - Associated carparking
  - Wide set-back to allow shared use path connections
  - Plaza spaces and urban furniture to activate ground level
  - Bike parking

**Legend**

- Red square: Pedestrian plaza
- Light brown square: Paved verge with street trees and street lighting
- Dark brown square: Paved side street cross-over
- Grey square: New roadway
- Green square: Widened median
- Yellow-green square: Off-peak on-road parking
- Orange square: AI fresco dining opportunity
- Purple square: Potential Mixed Use Development
- Blue square: Meals on Wheels site
- Blue double arrow: Pedestrian crossing points
- Blue dashed arrow: Proposed cycle route



## Urban Design

Based on the Site Analysis, recommendations taken from the Woodville Village Masterplan Report and discussions with Council, the Project Team proposes a set of Urban Design Recommendations. This list aims to cover all aspects of a renewal of the whole precinct, not limited to a streetscape upgrade. The overarching intent is to provide an attractive, vibrant hub that will increase visitor numbers and stimulate economic renewal in the area. The upgrades will respond to current local issues as well as be future proofed to ensure the longevity of the design. The recommendations are as follows:

### Key issues

#### Dominant vehicular traffic

Woodville Road is currently 2 lanes each way with a limited median. Subsequently crossing the road is difficult and confined to one Pedestrian Activated Crossing (PAC) and no mid island refuges. Cars are also dominant at side street intersections as there are no threshold treatments. Cyclists are not catered for with no on-road cycle lanes and narrow verges to negotiate.

#### Lack of Public Space

There are few inviting public spaces along Woodville Road, and little seating provided. The Civic Centre forecourt provides the main gathering space, but is uninviting and lacking seating. Side streets also present opportunities to create gathering places.

#### Tired streetscape environment

The streetscape is currently visually unappealing and looks in need of an upgrade. Verge paving is out-dated and inconsistent in materiality. Public art is non-existent and signage is minimal, resulting in a street with little vibrancy.

## Key design recommendations

### Road redesign

A whole road redesign is proposed, maintaining two lanes each way, but providing a widened median and off-peak parking lanes. This will maintain traffic flow but provide opportunities to plant the median, as well as protection from parked cars for kerb-side al fresco dining areas. For further detail, refer to **04/ Traffic and Transport**.

### Streetscape upgrade

The Woodville Road verges as well as selected intersecting side-streets will be upgraded with quality paving, planting and street furniture. Pedestrian and cycle links will also be strengthened. This will create a more visually attractive and cohesive environment that will benefit multiple user groups. For further detail, refer to **05/ Concept**.

### Civic spaces

A key recommendation is the upgrade of existing plazas and creation of new public plazas in the precinct as part of Stage 2. Elements such as seating, shade trees, water features, drinking fountains will create inviting places for visitors to stay and dwell, encouraging people to stay longer in the area. For further detail, refer to **12/ Detail Studies**.

### Greening

The street trees planted on Woodville Road are currently under-performing due to the harsh, constrained urban environment. There is also little understorey planting resulting in a very 'hard' streetscape. A palette of street trees, understorey planting and green-walls is proposed to provide much needed greening. For further detail, refer to **05/ Concept/ Street Greening**.

### Stage 2 Expression of Interest for the possible redevelopment of Lot 67-85 Woodville Rd

A process that may result in the sale and redevelopment of the Council owned Lot 67-85 Woodville Rd will allow for an active ground Mixed Use Development and new public plaza adjacent NNQ. The current unsealed carpark would be replaced by a sealed car park abutting St. Clair Avenue and



Source: <http://www.landezine.com/index.php/2017/09/sovereign-square-by-re-form-landscape-architecture/>



## Urban Design

Woodville Road. This carpark will be available for weekday train commuters and on weekends and after hours for recreation centre users.

For further detail, refer to **12/ Detail Studies/ 67-85 Woodville Road.**

### Car Parking

Current indented parking to be replaced with kerb-side parking outside of peak periods, freeing up verge space. Improved smart signage will direct drivers to existing available parking.

For further detail, refer to **06/ Parking.**

### Lighting

Improved street lighting to standard shall be provided as well as improvements to pedestrian and feature lighting to increase the atmosphere at night.

For further detail, refer to **08/ Lighting and Power.**

### Smart Technology

Smart technology shall be provided to enhance visitor's experience and future-proof the design. This may include smart street lighting, interactive screens and way-finding systems.

For further detail, refer to **09/ Smart Technology.**

### Threshold treatments

Side street intersections will be upgraded with road treatments to enhance pedestrian safety. Trafficable interlocking paving to match new verge materiality will reduce potential vehicle/pedestrian conflicts.

For further detail, refer to **05/ Concept/ Landscape Concept Plan**

### Public Art

A suite of Public Art will be proposed to add much needed vibrancy to the precinct. A hierarchy of art types will be considered including Gateway pieces, sculptures and artistic play elements in plazas and the Civic Centre forecourt as well as artistic elements integrated into the furniture suite

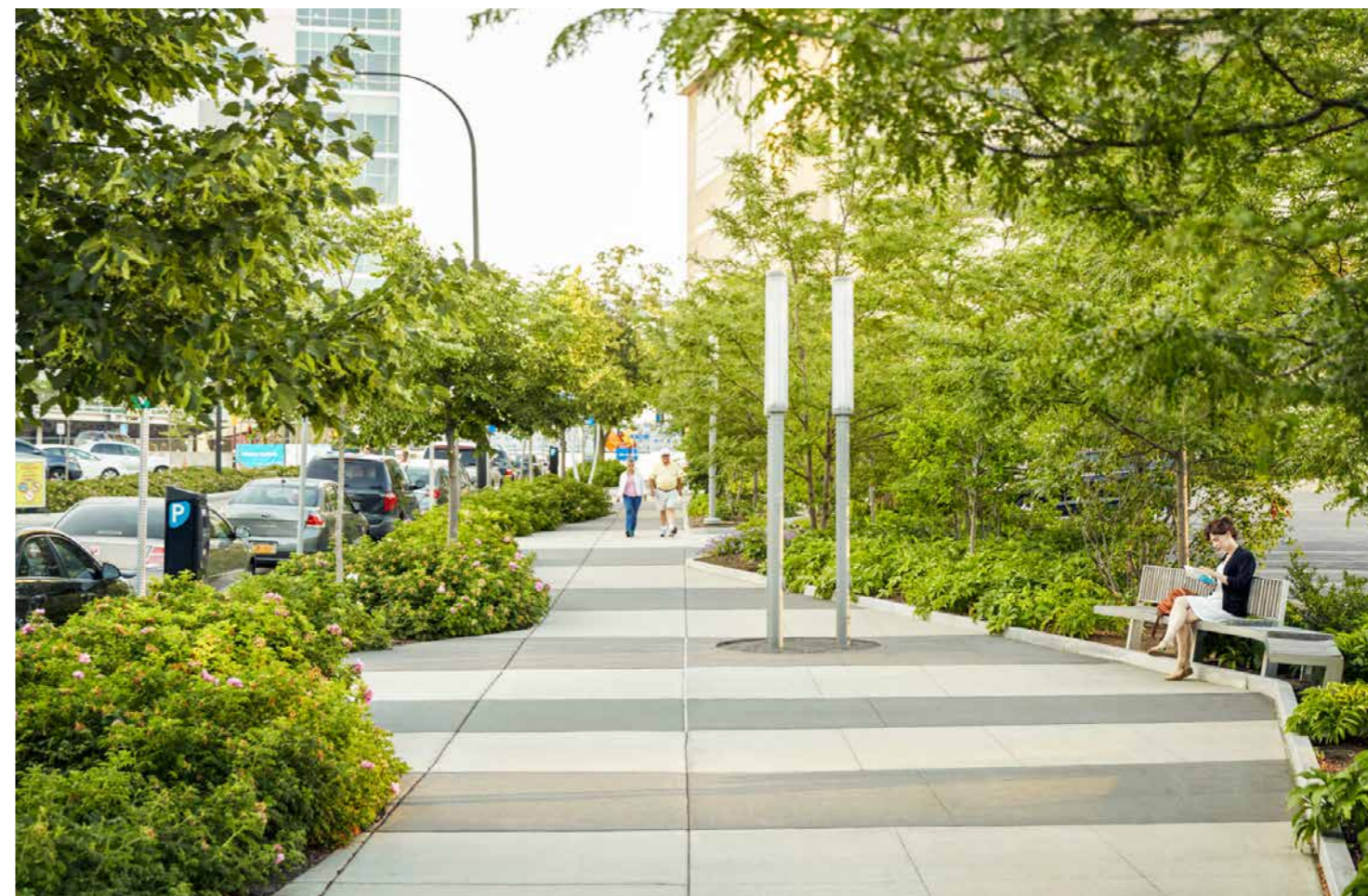
and paved areas.

For further detail, refer to **11/ Public Art.**

### Public Transport

Relocating bus stops 221 to the Woodville Town Hall will provide a more seamless transition between services, which provides connections both east-west and north-south across the Greater City of Adelaide. Locating these stops within indented bays will reduce congestion that currently occurs when buses are loading/unloading passengers.

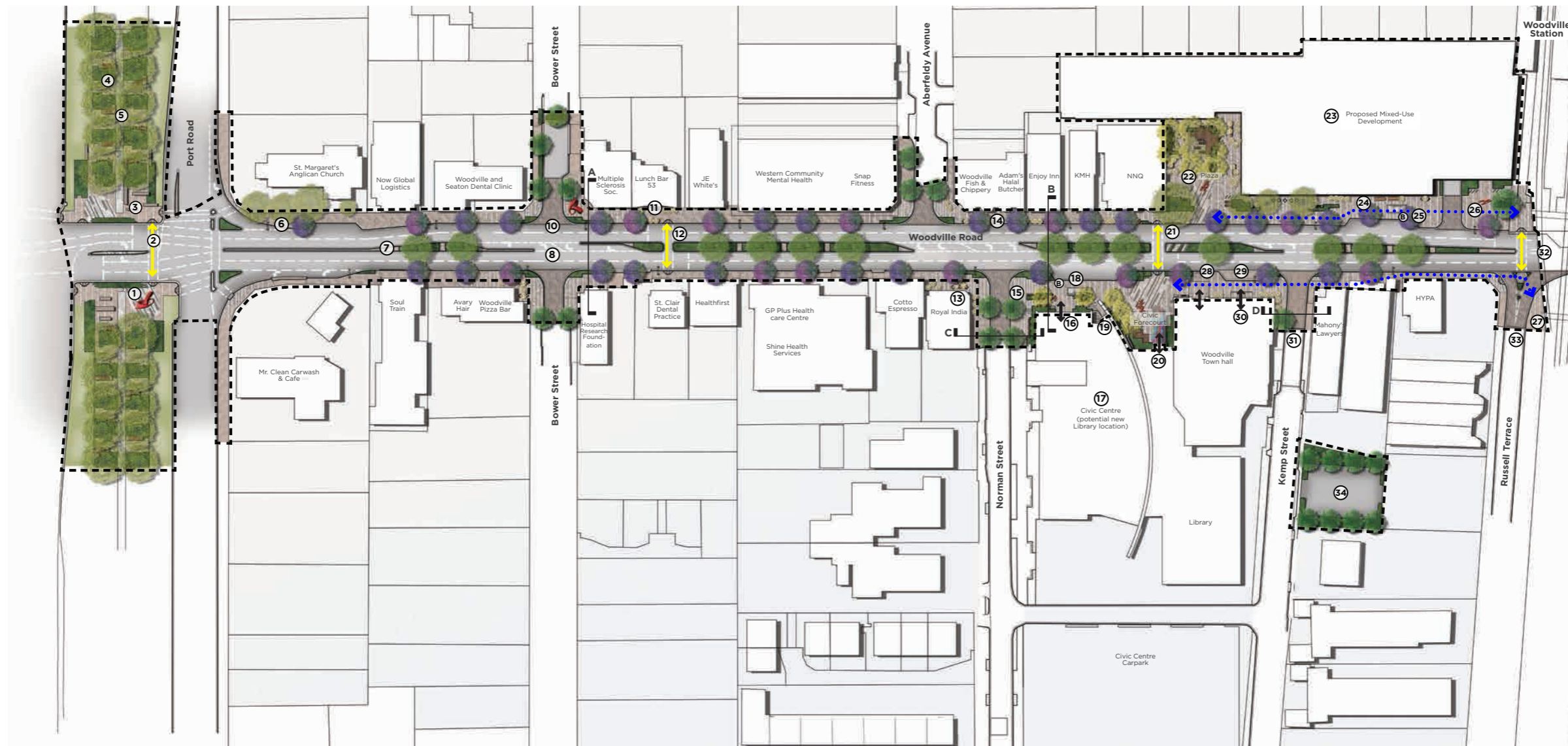
For further detail, refer to **04/ Traffic and Transport.**



Source: <https://www.scapestudio.com/projects/buffalo-niagara-medical-campus-streetscape/>



## Landscape Concept Plan



- Legend**
- Project boundary
  - Existing trees to be retained
  - Proposed verge trees
  - Proposed median trees \*
  - Proposed feature trees in plazas
  - Understorey planting
  - Roadway
  - Paved verge
  - Paved side street threshold treatment
  - Raised decking/ seating in plaza
  - Alfresco dining opportunity
  - Bench seating
  - Gateway artwork
  - Public art in plaza
  - Bus shelter
  - Drinking fountain
  - Bike rack
  - Rubbish bin
  - Streetlights
  - Proposed cycle connections
  - Pedestrian crossing point
  - Relocated bus stop 221
- \* Note: Relocation of water main required to achieve median tree planting

### Design Recommendations

- |   |  |  |   |
|---|--|--|---|
| <ul style="list-style-type: none"> <li>① Gateway artwork visible from Port Road and lit internally</li> <li>② Pedestrian crossing connecting Port Road medians. Extension to right turn storage lane as required.</li> <li>③ Plaza spaces with feature paving and seating</li> <li>④ Central shared path connecting median carparks, with pedestrian level lighting</li> <li>⑤ Sitting nodes with areas of low planting, compacted crushed surface treatment and seating</li> <li>⑥ Street trees to verges - <i>Jacaranda mimosifolia</i> species</li> <li>⑦ Widened medians with tree plantings (<i>Corymbia maculata</i> species), low planting and paved casual crossing points</li> <li>⑧ Sheltered storage lanes allow for turning movements</li> <li>⑨ Alfresco dining opportunity</li> <li>⑩ Paved threshold treatment to side streets with locally lowered pedestrian pavement to road level, tactile studs and bollards</li> </ul> | <ul style="list-style-type: none"> <li>⑪ Alfresco dining opportunity</li> <li>⑫ Pedestrian crossing point</li> <li>⑬ Alfresco dining opportunity</li> <li>⑭ Alfresco dining opportunity</li> <li>⑮ Norman Street threshold treatment and provide seating opportunities and planting to soften the front of the Civic Centre building</li> <li>⑯ Potential to provide new entry doors to open building to the street</li> <li>⑰ Opportunity to relocate Library to front of Civic Centre and open up facade to the street with new entry doors</li> <li>⑱ Relocate bus-stop 221 outside Civic Centre and provide bus shelter and seating</li> <li>⑲ Water feature pump location with screening fencing</li> <li>⑳ Civic Centre Forecourt with artistic entry canopy, raised decking for seating, <i>Ginkgo biloba</i> trees for shade, greenwall, artwork and feature paving, water feature with play element, bike parking and drinking fountain. Smart technology will be incorporated and pedestrian and feature lighting will encourage activity during the evening.</li> </ul> | <ul style="list-style-type: none"> <li>㉑ Upgrade to existing Pedestrian Activated Crossing (PAC)</li> <li>㉒ New Public Plaza will include artwork with feature paving, water feature with play element, <i>Ginkgo</i> shade trees, raised decking as seating/ stage for small events, low planting, designated alfresco dining areas for NNQ and the proposed mixed use development, pedestrian and feature lighting, smart technology and integrated artwork</li> <li>㉓ Proposed mixed use development up to a maximum of three levels, with activated retail to ground floor and commercial/residential above. Carparking to be included to satisfy development plan requirements.</li> <li>㉔ Wide set-back to mixed use development allowing for wider shared path, activated building edge, alfresco dining and greening</li> <li>㉕ Relocated bus-stop 221 and provide new bus shelter and seating</li> <li>㉖ Small plaza linking with Woodville Station, including small artwork, seating and bike parking</li> </ul> | <ul style="list-style-type: none"> <li>㉗ Provide cycle connection to greenway</li> <li>㉘ Woodville Town Hall wayfinding signage</li> <li>㉙ Flush paved disabled drop-off zone outside Woodville Town Hall</li> <li>㉚ Provide DDA access to Woodville Town Hall, and possible opportunity to include a cafe in the Woodville Town Hall with alfresco seating</li> <li>㉛ Kemp Street - paved threshold treatment</li> <li>㉜ New Pedestrian Activated Crossing (PAC) to southern side of train lines to allow for cyclists crossing to the greenway</li> <li>㉝ Paved threshold treatment at Russell Terrace</li> <li>㉞ Meals on Wheels site converted into Council carpark with capacity for shuttle buses. Understorey planting to boundary with screening shrubs to fence line.</li> </ul> |
|---|--|--|---|



# Street Greening



**TREES**

- Retain existing trees  
 Various species
- Median tree  
 *Corymbia maculata*
- Woodville Rd Verge  
 *Jacaranda mimosifolia*
- Side Street Verge and Carpark  
 *Ulmus parvifolia*
- Civic Centre Forecourt  
 *Ginkgo biloba*
- Civic Centre Forecourt  
 *Eucalyptus leucoxylon*
- Public Plaza  
 *Ginkgo biloba*
- Civic Centre Forecourt  
 Greenwalls

**UNDERSTOREY - Civic Centre Forecourt and Plaza Plants**



*Zamia furfuracea*   *Salvia* sp.   *Kalanchoe thyrsiflora*   *Aeonium arboreum*   *Gardenia - dwarf var.*

**UNDERSTOREY - Verge and Median Plants**



*Astroemeria 'Inca Mambo'*   *Limonium perezii*   *Senecio serpens*   *Nandina domestica 'Obsession'*   *Dianella 'Blaze'*



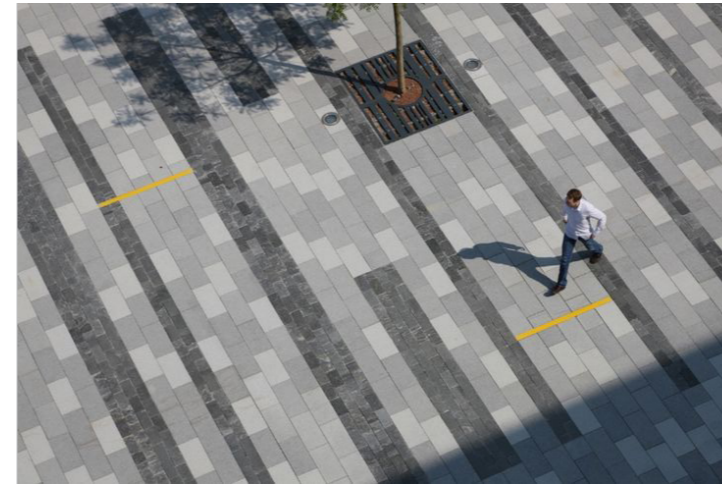
# Materials palette

## Streetscapes and Pavements

Street verges will be upgraded with high quality pavements, with feature paving a gathering points. A subtle banded paving pattern in-keeping with the artistic theme will be applied to the whole site to encourage a cohesive precinct and create a visual rhythm.



Patterning in the pavement, with low level greening



Directional feature paving connecting plazas



High quality pavers in a neutral palette

## Plazas

Plazas will aim to encourage people to stay longer and so will include shade trees to create a comfortable environment. There will be seating opportunities in the form of seating walls and benches. Greenwalls will add further greenery to the forecourt plaza.



Shade trees with plentiful seating opportunities



Sitting walls with low level planting



Greenwalls on building façades

## Furniture

The furniture palette should be robust, stylish and flexible. It will include raised decking areas that can be used as seating or stages for a small event. Seating will be bespoke and connect with the artistic theming. Other furniture items such as bike racks and bins will be designed to be practical but stylish to fit with the other bespoke elements.



Raised decking in plazas as seating/ performance stages



High quality bespoke benches with artistic elements



Elegant bike racks



## Parking

The parking availability within the precinct currently constitutes indented on-road parking on Woodville Road, a limited amount of on-road parking on side streets, a sealed carpark adjacent and an unsealed carpark adjacent to Woodville Station and parking to the rear of the Civic Centre in the Council carpark. There is sufficient parking available for current usage, however this is not well signed.

Some of the parking is therefore underutilised and there is scope for the distribution and location of current parking to be optimised. Additionally, given potential increases in user numbers with the proposed precinct upgrades parking demand would increase and additional parking locations will be required.

### Key issues

- Indented parking reducing verge widths and occupying valuable pedestrian space
- A perceived lack of parking amongst users
- Minimal directional signage

### Key design recommendations:

- Kerbside parking: indented parking replaced with on-road parking outside of any required clearway times
- Preferred option is for on-road parking to be permanently available on northbound side, however DPTI have indicated a clearway, similar to that of the southbound side, is likely to be imposed
- Improved railway station/commuter car parking in conjunction with proposed public parking adjacent St. Clair Aveune, recreation centre and Woodville Road
- Smart parking signage to direct drivers to off street/rear

parking areas

- Encourage increased use of car park to rear of Civic Centre for evening and weekend parking demands
- Future mixed use development site could include up to 148 spaces including provision for public, customers, staff and residents plus air rights for DPTI if required. Up to 30 civic centre weekday permit car parks will continue to be provided on this site utilised by NNQ after-hours consistent with existing approvals (see independent car parking review by Circa appendix B).



Indented parking adjacent Snap Fitness on Woodville Road leads to narrow footpaths



Existing sealed and unsealed carparks are well utilised.



## Parking Study

A Parking Study was undertaken taking in the wider context of the precinct to determine the impact of changes to the current parking usage. In particular of interest was the effect of removing the existing sealed and unsealed carparks and developing the site.

The following diagrams illustrate the findings of this study.

### Existing Parking Supply

The existing parking supply for Woodville Road includes on-street parking, off street sealed carparks, as well as parking in the unsealed carpark adjacent Woodville Station. This includes the available carparks in the Port Road median as shown opposite. There are currently **650** existing parks within the wider precinct area of which 123 are permit only linked to the civic centre day time activities (4 on Norman, 6 on Kemp, 82 rear of Civic Centre and 31 at 67-85 Woodville Road).



- Unsealed parks in Car Park
- On-street Car Parking
- Off street Car Parking



### Proposed Parking supply

The potential parking available within the wider precinct area includes increased availability of on-street parking, new sealed parking provided as part of the proposed Development area, and the St. Clair Recreation Centre as well as at the former Meals on Wheels Site.

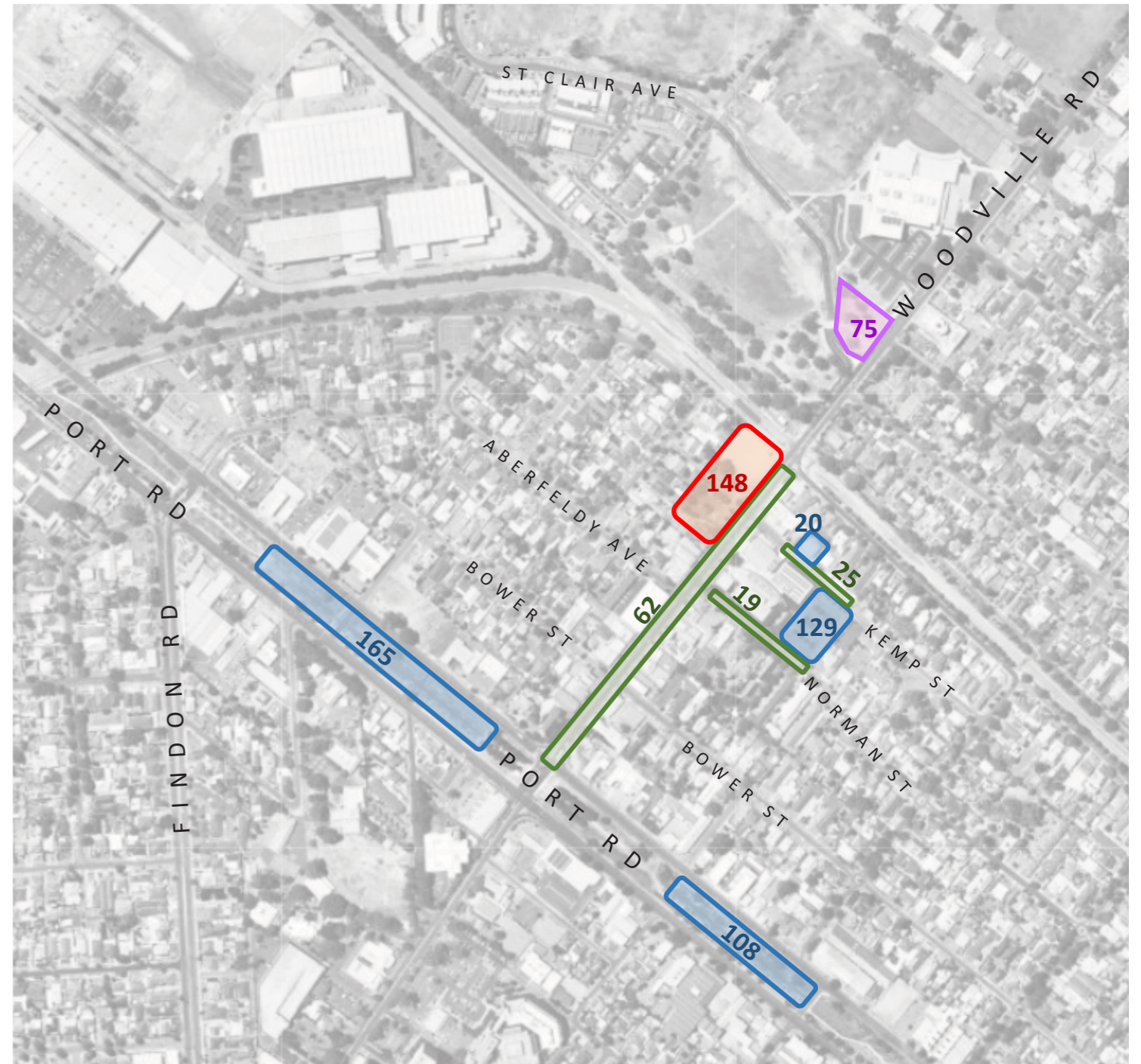
A total of **737** publicly accessible spaces are proposed in this strategy.

### Key Changes

The following are key changes proposed to the way parking is currently utilised in the precinct:

- The loss of the unsealed carpark but an additional 75 sealed car parks adjacent St. Clair Ave and Woodville Road
- Retention of 30 civic centre permit parking zones at 67-85 Woodville Rd shared by NNQ after hours
- Modification to loading bay at rear of civic centre to provide a further 6 spaces
- Expanded parking on the former Meals on Wheels Council site on Kemp Street
- Increased on-street car parking on Woodville Rd outside of clearway times

- Public / Park n Ride Parking with a/h rec centre overflow**
- Future Mixed Use Parking including permit, timed disabled and 14 residential parks, (refer part 12/ Detail Study for 67-85 Woodville Road)**
- On-street Car Parking**
- Off street Car Parking**





## Civil & Stormwater

### Introduction

The proposed road design in the Concept Plan does not differ substantially from the existing geometric layout - the main changes being a wider median allowing for turning movements, increased footpath width and amendments to bus pull in bays. These changes aim to increase public amenity whilst accommodating existing and future traffic flows.

Changes to the main road will be supported by activation within the side streets, which may include revisions to the existing cross-sections requiring detailed civil design to manage changes to the stormwater, pavement and levels within the works zone.

As part of the concept design, FMG Engineering has undertaken a number of high-level investigations to guide the concept design. Of particular importance for this site is stormwater, the site grades towards the south-west and discharges into the recently upgraded Port Road drainage network. For more detailed stormwater information please refer to the attachments - FMG Engineering preliminary gap flow assessment.

### Key issues

#### Management of Stormwater Runoff

- Surface flows along Woodville Road - FMG Engineering (along with information provided by Council) has investigated the existing stormwater conditions along Woodville Road, and prepared preliminary results modelling the likely outcomes of the proposed kerbing changes. In general, it appears stormwater can be managed to ensure flood risk will not be increased over existing performance, with a target to achieve DPTI's minor storm serviceability requirements (2m road width etc.)
- Existing Woodville Road trunk main, which is understood to be limited by the downstream conditions at the recently upgraded Port Road drainage network (5yr ARI

level of service). As such, it is expected that upgrades to the existing stormwater trunk main is outside the scope of this project. Stormwater inlets will be amended as required to accommodate the proposed kerbing changes, and connected into the existing system.

- Changes to side streets - Where raised thresholds are proposed, stormwater capacity will need to be managed to ensure flood risk to properties is not increased. Generally, this is of greater concern for side streets to the south/west of Woodville Road. Further detailed design may determine that raised thresholds cannot be facilitated in some locations, and this may present a risk to council where consultation communications could differ from final documented designs.

#### Clashes with Existing Services

As with all brownfield streetscape project, there exists a number of services varying from local property connections to larger trunks servicing the greater area. FMG Engineering and Outerspace have considerable experience in this area with a number of recent projects requiring detailed communication with service providers to ensure proposed design changes can be delivered in a holistic approach considering existing services. In particular, the following observations have been made to date;

- SA Water
  - i. Sewer - Existing sewer main is at a depth of -3m and is not considered a risk at this stage of our investigation
  - ii. Water - Previous investigation works undertaken by City of Charles Sturt indicate the presence of an existing potable water main along the alignment of the planted median proposed in the concept design. This is corroborated by SA Water's Aquamaps database. It is understood that Council undertook physical service depthing (circa 1988) which generally revealed a depth to obvert varying between 500mm-1000mm. Should we wish to relocate this service to facilitate the installation of large trees in the median, we would need SA Water to relocate approximately 300 linear metres of 300mm CICL. Preliminary discussions with SA

Water representatives estimate a cost of \$235k would be borne by Council to undertake these works (50% cost share, exc. GST). This is a considerable risk for the project, and the above estimate was prefaced with a high-level assessment which could result in +/- 50% cost.

- Gas - Medium pressure gas lines are observed along the southern verge of Woodville road (-1m off of property boundary). As minimal changes are proposed along the southern kerb, it is anticipated that this cast-iron sleeved service will be able to be incorporated with minimal inconvenience
- SAPN - A number of low voltage services run along/ across the street, with high voltage banks running along Kemp Street, along Woodcroft towards the north east. Changes to the cross-section of Kemp Street could be of high risk.
- Telstra - Main service duct along northern/western verge which could be of risk when undertaking changes to the kerb alignment.
- Other Services - A number of other services are featured within the site (comms etc.) but do not present any critical risk at this stage of our investigation

#### Undergrounding of existing services

- It is understood that Council have an in-principal agreement for future undergrounding (-2021) of the existing above ground HV cabling under the PLEC grant initiative. The risk of future works dilapidating the proposed streetscape upgrade should be considered by Council, and further discussions with SAPN may be beneficial in reducing rework and construction disruptions.

#### Pit Lids

As stated above, FMG Engineering and Outerspace have previous experience with projects of this scale and nature and advise that the modification of existing pit lids can be of considerable risk (both in construction time and cost) and should be resolved at the earliest opportunity. Risk reduction activities could include;



- Professional survey of all pits within the project scope, including photos of pits, identification of pit owner, condition and pit type.
- Extends survey for larger multi-part lid pits which can prove costly to revise.

#### **Safety in Design**

The design team shares a responsibility along with Council to prepare designs which consider the safety of users, construction workers and end users to ensure best outcomes are achieved, and risks are reduced. Sight lines and conformance with DPTI standards could provide obstacles to incorporating some of the vehicle/pedestrian changes which the current concept identifies

#### **Provision of sufficient carparking**

- Additional Parking facility on Kemp Street – FMG Engineering has explored potential layouts for a site on Kemp Street which could be redeveloped for the purpose of additional carparking in the precinct. Concept sketches indicate an additional 17 carparks could be provided within this space. Non-standard dimensions of this parcel of land limit the ability to provide more carparks to Australian Standards.
- Existing Parking facility North of Woodville Road – FMG Engineering has not provide detailed feedback at this stage of developing the concept design of formalising the parking allocations adjacent Woodville road to the north. Further revisions during detailed design may result in minor changes to proposed carparking layouts and spaces.
- Reconstruction of Woodville Road (DPTI Asset) – As part of the proposed works, there are a number of changes (including revisions to northern kerb alignments, new median kerb and planting) to the Woodville Road DPTI asset. It is not clear at this stage of our investigation what requirements DPTI will mandate for the reconstruction works (i.e. mill and reseal, or larger reconstruction works) nor is the current age of the pavement determines. There is a risk that DPTI may look to undertake broader

upgrades to the pavement asset and this could increase construction duration.

#### **Authority Approvals**

- DPTI – It is FMG Engineering’s experience that projects of this nature can often result in drawn out approval processes with the state transport body (DPTI). This is a potential risk to the project should construction timelines need to be accelerated prior to DPTI signoff
- SA Water – should a service relocation be required, lead times to the design, documentation and construction of the new main can add up and this should be managed early in the design documentation to avoid construction delays.

#### **Key design recommendations:**

##### **Stormwater main**

The existing stormwater trunk main, is understood to be limited by the recently upgraded Port Road drainage network (5yr ARI level of service). As such, it is expected that upgrades to the existing stormwater trunk main is outside the scope of this project. Stormwater inlets will be amended as required to accommodate the proposed kerbing changes, and connected into the existing system.

##### **Raised pedestrian thresholds**

Raised pedestrian thresholds/changes to road cross-section which result in lower stormwater capacities are not advised for Bower Street (both east and west of Woodville Road), Kemp Street and Norman Street.

##### **Service location**

Engage a suitable service location contractor to prepare a site wide service location investigation. Further discussions with council/contractor will be required to identify which services are of high risk, which could result in more detailed investigations of respective services.

#### **SID matrix**

We would suggest engaging in a detailed discussion with Council developing a Safety in Design matrix document which can be updated throughout the design process.

#### **Road conditions**

Open discussion with DPTI to confirm the current road conditions, and road reinstatements required for the proposed works.



## Lighting & Event Power

Woodville road is comprised of numerous electrical systems throughout the local precinct. Main road lighting systems are currently maintained and managed by the Department of Planning Transport and Infrastructure and span the entire length from Port Road to the Railway Corridor.

Local roadway lighting is maintained by SA Power Networks under a street lighting tariff agreement with Council. Public car-park lighting is owned and maintained by Council. There currently exists SA Power Networks overhead infrastructure at the south western corner of Woodville Road near the intersection with Port Road.

### Key issues

#### Lighting Ownership Strategy

It is anticipated that the ownership structure for the lighting systems will remain the same, i.e. with major arterial roadway (DPTI Lighting) remaining under the ownership and maintenance of DPTI. If this is the case then our design

will need to adhere to the minimum DPTI standards for road lighting and ultimately be accepted by DPTI. It is important that the City of Charles Sturt understand that under this arrangement there will be minimal flexibility for luminaire, colour, fitting and pole selections. Pole locations and adjustments to infrastructure associated with the road re-alignment will also need to be understood and presented to DPTI for discussion and acceptance.

Similarly, it will be understood that local roadways, and infrastructure within local roads and verges will be owned and maintained by the City of Charles Sturt.

#### Lighting Subcategory Selections

Illumination categories selected for the new precinct will need to align with the City of Charles Sturt precinct lighting strategy, DPTI guidelines and Australian Standard AS1158. If Woodville road continues to have ownership and maintenance retained by DPTI then a V3 lighting category

subcategory will be applicable. It is believed that local roads and footpaths will require a minimum of P3 or P4 lighting subcategory.

#### Existing services locations

A detailed survey will eventually need to be undertaken to identify existing underground services which required co-ordination.

### Key design recommendations:

#### Lighting Ownership Strategy

It is recommended that the existing arrangements remain, i.e. Woodville Road lighting infrastructure to be DPTI and all other lighting and electrical to remain City of Charles Sturt. Council administration have indicated limited council resources should be directed to Council obligations rather than accepting additional asset and associated obligations from the state. Lighting upgraded on local roads as part of this project would be owned and maintained by Council.

#### Lighting Subcategory Selections

Illumination categories for Woodville Road are to be V3, local roadways and pathways to be P3/P4. Local car parks are to be P11a/P12.

#### Event Power

Event power provisions can be in the form of free standing fabricated metal enclosures containing socket outlets appropriately sized for the application. According to the specific application power bollards can be specified with single phase or three phase outlets. Power bollards will need to be supplied from a local electrical distribution board. Specific operational procedures will be specific to the event strategy however it is envisaged that these enclosures would be located suitably within landscaped areas and lockable, openable by council when events are held with safety features built into the unit.

#### Building Facade Lighting

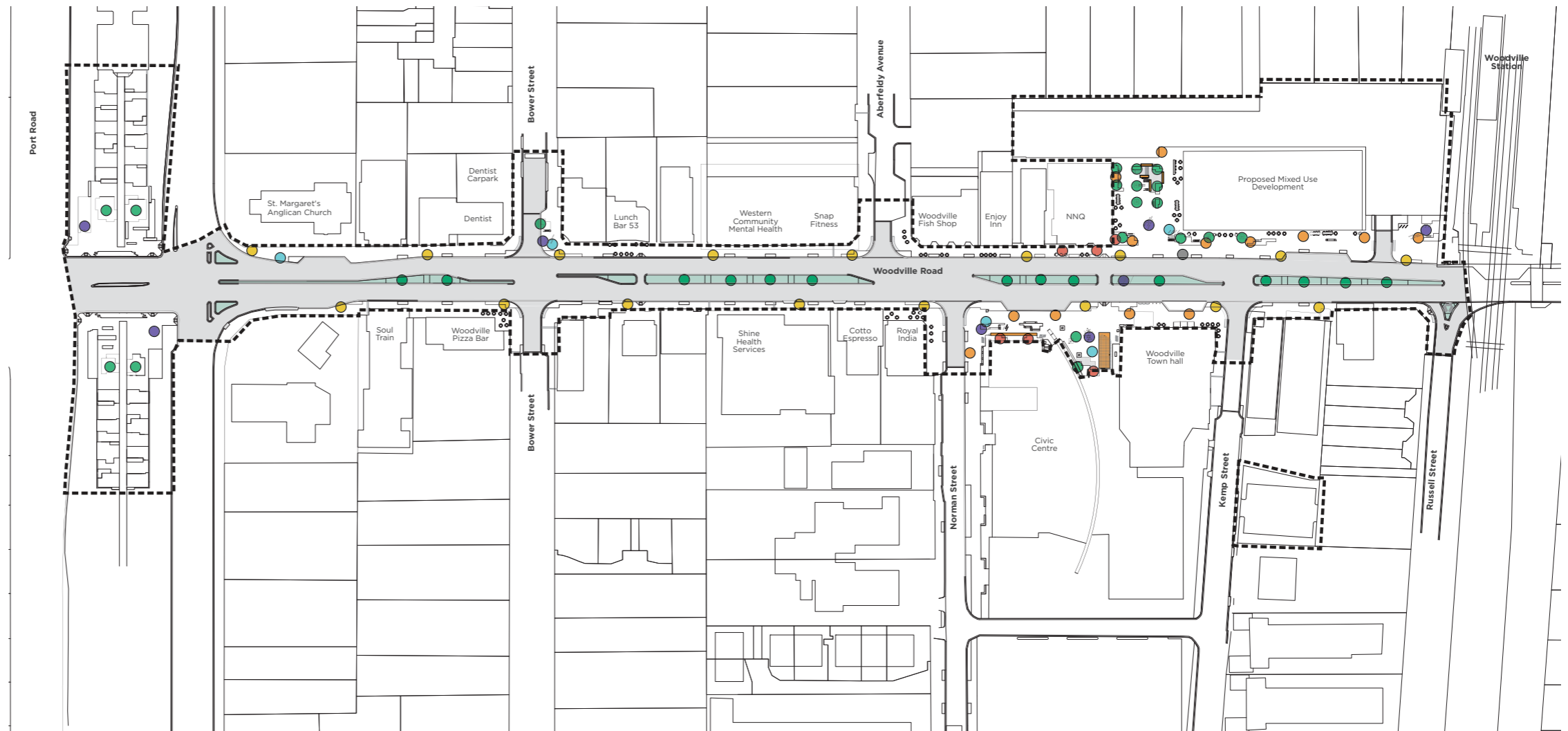
Façade lighting is to be achieved using colour adjustable in ground, projector, LED Strip and stencil luminaires. Inground lighting will need to be installed at the base of the building, LED strips to nominated locations of the building façade and projector lighting from post tops located a distance away. New electrical distribution systems including the associated electrical distribution boards, conduits wiring and control systems will be required. Programmable scenes according to Council's requirements are to be implemented using DMX control.



## Proposed Precinct Lighting Plan

The following plan illustrates the proposed lighting design for the precinct. It aims to light the roads to standard and provide suitable ambient lighting to pedestrian areas to increase safety and encourage evening activity.

For further detail, refer to Appendix for Lucid Lighting Plan.



- Street-lighting**

Lighting to illuminate the street to DPTI standards. 12m charcoal coloured pole with modern LED light fitting.
- Post-top lighting**

Post-top lighting to light side-streets and plazas. 5m charcoal light posts with LED column light fitting.
- Building up-lighting**

Up-lighting to illuminate key building facades including the Civic Centre, St. Margaret's Church and Woodville Town Hall.
- Woodville Town Hall projections**

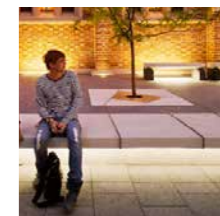
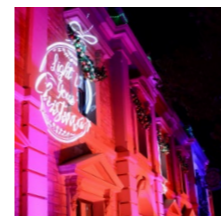
Feature lighting effects to include projections on the Woodville Town Hall facade. Lighting to be pole-mounted on opposite side of Woodville Road. Lighting to be programmable to produce changing artistic lighting effects.
- Artwork lighting**

Artworks will be lit to enhance the evening character of the precinct. Lighting may include uplighting, programmable coloured effects, as well as in-ground lighting in the pavement at key locations.
- Lighting columns**

Artistic lighting columns crafted with laser cut metal and lit internally, may be located in key areas such as the precinct entry, plaza and civic forecourt.
- Tree up-lighting**

Selected trees will be up-lit to add to the evening character. These may be programmable to include colour and/or effects. Some trees may also be wrapped in fairy lights.
- Furniture lighting**

Key furniture elements such as decking in the Public Plaza and the entry portico in the Civic Centre forecourt may be highlighted with integral strip lighting. This will add to the evening ambience and draw visitors in to activate the spaces.





## Precinct Lighting Fittings

Lucid Lighting recommends the following fittings to achieve the desired lighting effects as per the illustrative Precinct Lighting Plan on the previous page.



**Woodville Road Streetlight**  
Sylvania Roadled Midi LED



**Side Street Streetlight**  
Sylvania Streetled2 LED



**Port Road Median pedestrian lighting (if required)**  
Pecan 12C LED



**Tree and artwork uplighting**  
Lightvault 8 LED



**Street furniture strip lighting**  
F15 High output LED neon horizontal bend

## Town Hall Lighting Effects

Lighting Effects for the Woodville Town Hall have been previously trialled by Council on a temporary basis at Christmas time. This was popular with the Community and the design team recommends to provide provision for festive lighting effects on a permanent basis. Lucid Lighting proposes the following fittings to produce the desired coloured and changing light projection effects as seen below.



**Projection:** Meyer Lighting Nightspot Gobo RGBW Projectors



**Building facade colour:** Kim Lighting LIGHTVAULT 8 RGBW



**Edge definition:** Red Square High Output LED Neon Horizontal Bend RGBW



# Smart Technology

## Smart Cities

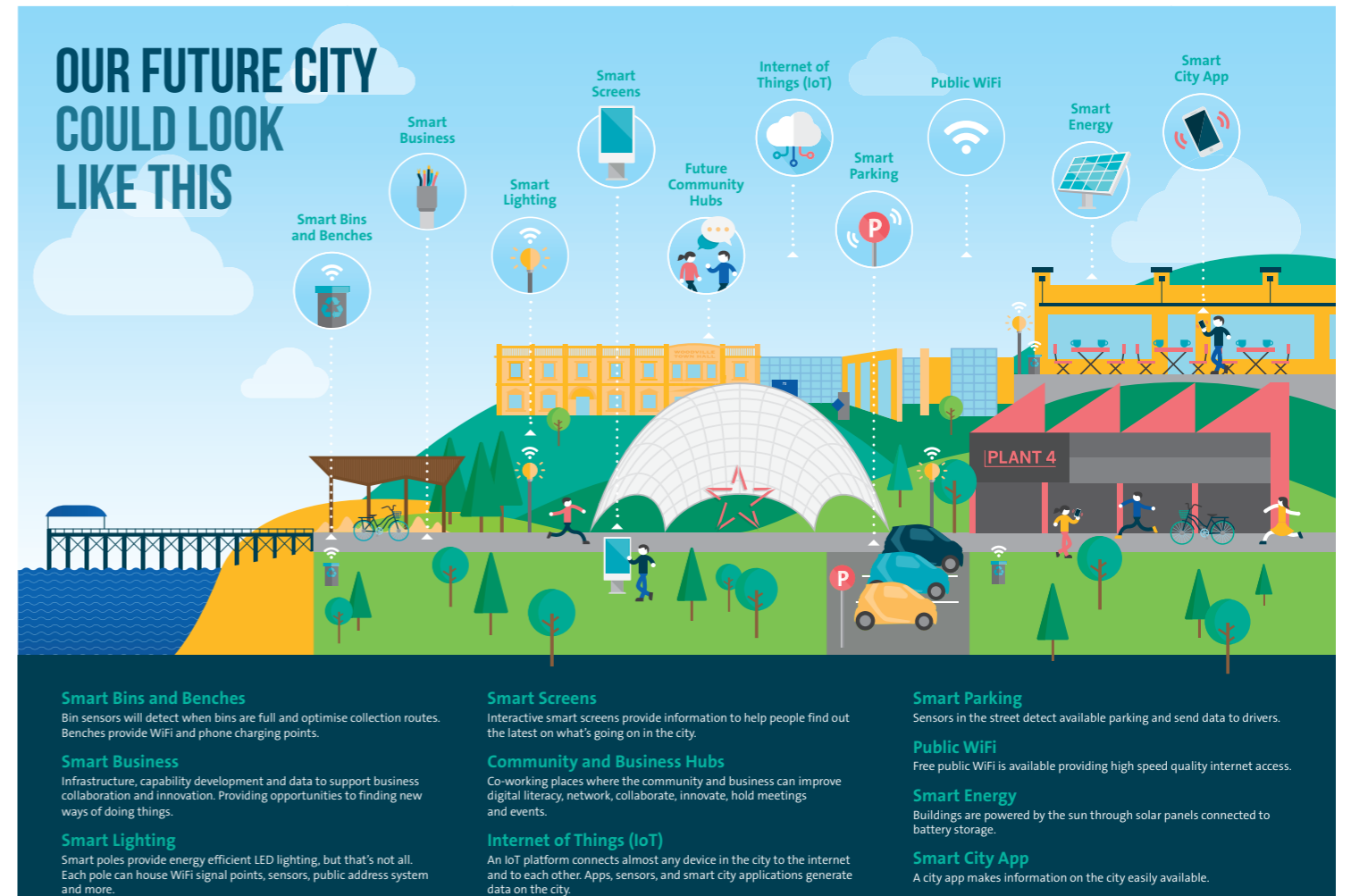
In order to future-proof our cities as populations grow, smart technology is increasingly being included in the urban design process to create more connected, liveable and efficient communities. Known as 'Smart Cities', the incorporation of information and communication technologies (ICT) aims to enhance the performance of urban services including energy, transportation and utilities to encourage digital connectivity and to encourage efficiency via data gathering. The result is thriving, vibrant communities that are increasingly reconnecting via these smart systems.

Smart Technology can encompass Council based regulating systems, public transport, as well as opportunities for people to feel more connected to their community. Data gathering systems can include car park monitoring, rubbish bin monitoring, street-light ambience control, and smart screen usage to promote Council related content. These initiatives can increase the efficiency of Council maintenance requirements and lead to more energy efficient cities.

An equally important outcome of incorporating smart systems is the quality-of-life outcomes such as social connectivity of the people living in and visiting the area. As people become more reliant on and connected to digital systems such as the internet through personal devices, the incorporation of IT technologies into public spaces encourages greater interaction. This may occur via the provision of free public WiFi, parking apps, interactive information kiosks providing content including public transport timetables, Council events and library information, as well as phone charging stations.

Additionally public safety can be improved via the introduction of smart poles that include distress beacons, and the provision of night lighting that adjusts to the required level of illumination depending on level of public usage at certain times.

The introduction of smart technology into an urban area is associated with an increased requirement for policy and planning as well as upfront costs but ultimately it will become an investment in the future success of the city and its community.



Source: City of Charles Sturt Smart City Plan 2018-2025



## Smart Cities

The City of Charles Sturt has recently written a Smart City Plan 2018-2025, which sets out to shape Charles Sturt as being a leading, liveable city. The Woodville Rd Precinct would be ideal to use as a test site to implement these initiatives and to monitor the success of various smart technologies.

The project team recommends to include a range of Smart Technologies, as well as installing connections for future Smart opportunities, as described below.

## Key issues

### Lack of connectivity

The precinct currently doesn't employ any smart technologies and as a result the spaces are not very interactive or engaging, especially for a younger demographic. There is also no technology in place to advertise or to be utilised during community events.

### Parking availability signage

There is currently a lack of awareness of available parking spaces within the precinct area, with only minor non-digital directional signage to indicate the location of these parks.

## Key design recommendations:

### Smart lighting

Smart light fittings can be dimmable at certain times of the night to reduce power usage. The poles can accommodate fixing multiple accessories such as signage, lighting, security and telecommunications. Additional capabilities such as CCTV, speakers and Wi-fi may be employed depending on Council's strategy.

### Smart on-street parking sensors

Smart on-street parking can be installed to indicate available parking locations throughout the precinct. This can reduce the need to build new carparks when existing parking exists but is not visually obvious.

Sensors in the roadway link wirelessly with an app on a smart phone or direct link back to Council computing systems.

Parking sensors are proposed for on-street parking on Woodville Road only however the system could extend to rear lot parking in future if required. Smart parking signs would convey the available parking numbers in real-time.

### Smart LED signs

Large LED variable double sided message signs may be installed that would display relevant Council information or parking numbers.

Interactive display kiosks may also be used, providing visitors with the opportunity to search for vendors on the street or public transport timetables.

### Smart benches

Smart benches may be installed that provide device charging points, Internet connection. These could also be solar powered.

### Smart public transport signage

Public transport can be facilitated through the introduction

of real-time public transport signage to display bus and train timetable information. These could be displayed in prominent locations including the Civic Centre Forecourt and Public Plaza.

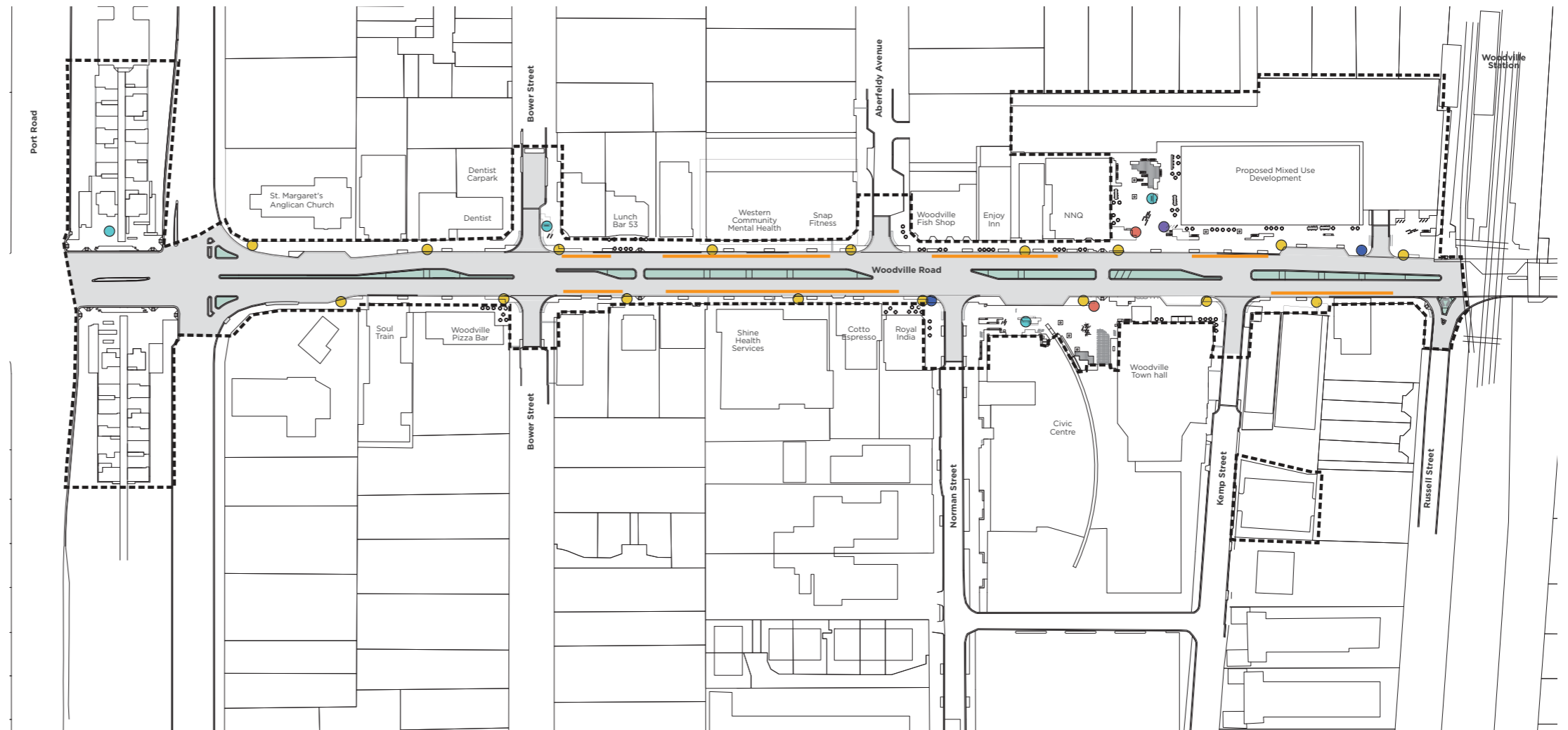
## Future Opportunities

Opportunities to install additional smart technologies in the future, including:

- Off-road carpark parking sensors
- Electric car charging points
- Smart automatic bollards for small events
- Additional Council data collection (e.g. smart bins, smart environmental monitoring)



## Smart Technology Locations



**Smart street-lighting & CCTV**

Street lighting can be fitted with additional functionality such as dimmable light fittings, CCTV and WiFi capabilities.



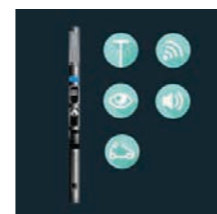
**Smart outdoor screen**

Smart screens can be located in plazas to provide visitors with additional information about the precinct, assist in travel plans and display relevant Council related content.



**Smart pole**

Smart poles may be located in high use areas to provide additional functionalities such as emergency beacons, intercom, phone charging ports, and WiFi.



**Smart bench**

Smart benches provide visitors with a location to sit and charge mobile devices while in the precinct.



**Smart parking sensors**

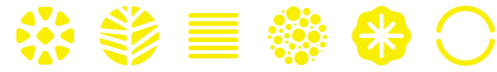
On-street carparks may be fitted with sensors to assist visitors in finding available parking spots in association with smart signage or apps. Sensors can also assist Council in determining when visitors over-stay their parking allocation.



**Smart signage**

Smart parking signage can be used in conjunction with parking sensors to direct visitors to available parking spots.





# Disability Compliance DDA

The design has been reviewed by Trento-Fuller consultants with regard to DDA issues. The intent was to identify and provide recommendations regarding the potential difficulties a person with a disability may face when accessing the Woodville Road precinct following the upgrade works. The objective is to ensure that all people are provided with safe, equitable and dignified access to existing buildings and premises. The assessment is based on the requirements of the Commonwealth Disability Discrimination Act 1992 (DDA), Disability (Access to Premises- Buildings) Standards 2010, and the referenced suite of Australian Standards for disability access to buildings and facilities.

## Key issues

### Paving and Entraceways into Buildings

Re-paving areas adjacent to footpaths can create steps and other impediments for access into tenancies and buildings. A detailed level will be required to be assessed to ensure that paving crossfalls are not excessive, there is ease of access to pedestrian crossing areas, and new accessways into buildings are predominantly level.

### Crossover transitions

Warnings for people with a vision impairment will be required where there are crossovers and access is required on roads, particularly where there are level transitions.

### Footpath Widths

Footpaths may narrow in some areas to less than 1.8 metres and not provide the required 1:40 crossfall. Choice of paving to consider long term movement and settlement; additional maintenance may be required to provide a safe path for people with a vision impairment who use canes. Joints in paving can be a potential tripping hazard, and abutment of surfaces need to be appropriately maintained to allow for ease of movement for wheelchairs.

## Key design recommendations:

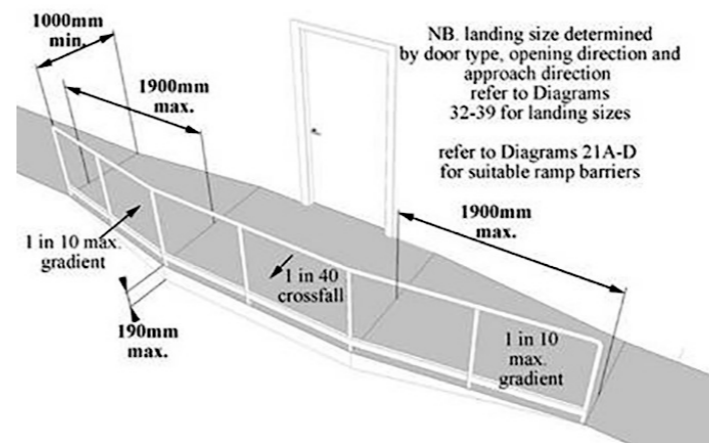
### Town Hall / Commercial Office Entrance [Northern Ramp]

The northern entrance into the Commercial office of the Town Hall building has a ramped section of paving leading to the entranceway. The existing ramping is non-compliant, in that the northern part of the ramp has a 1:10 gradient [compliant], the western side has a 1:8 gradient [non-compliant], and the southern side 1:12 [non-compliant]. We would recommend an alternative approach to reinstating a 1:10 ramp to the entrance since the footpath is along a path of travel and crossfalls should not exceed 1:40. We suggest installing a localised ramp to the entrance of the commercial office with a kerb and handrail to define the entranceway as

that a range of seating heights is ideal with provision for arm and back rest.

### Amenities

Accessible sanitary facility not provided - bench seating may increase numbers of people to spaces which requires further review on adequacy of sanitary facilities for liquor licensing.



per the diagram below.

### New Carparks

Community impact to be considered if there are no accessible carparks provided [DDA risk even though not serving a building and not technically required]

### Street Furniture

New seating, drinking fountains, bins, mailboxes will need to be accessible to elderly and people with disabilities. Note



## Public Art

*‘We all should know that diversity makes for a rich tapestry, and we must understand that all the threads of the tapestry are equal in value no matter what their colour’*

*Maya Angelou*

Public artworks play a major role in creating welcoming and vibrant public spaces, encouraging people-centred activities that in return encourages increased activity and stimulate the local economy.

We proposed to apply an artistic theme to the concept to strengthen the urban design and generate exciting public spaces in which to dwell.

### Artistic intent

Artistic themes that derive from understanding the local history and the local communities, can be the strongest as they tell a story about the place. This project will aim to reflect that the City of Charles Sturt is proud, cosmopolitan and contemporary. It will comment on the history of the area and also draw on the various multi-cultural demographics within the area.

### Theming

The team has drawn inspiration from the many ethnic groups residing in the area, with many ‘threads’ coming together as one.

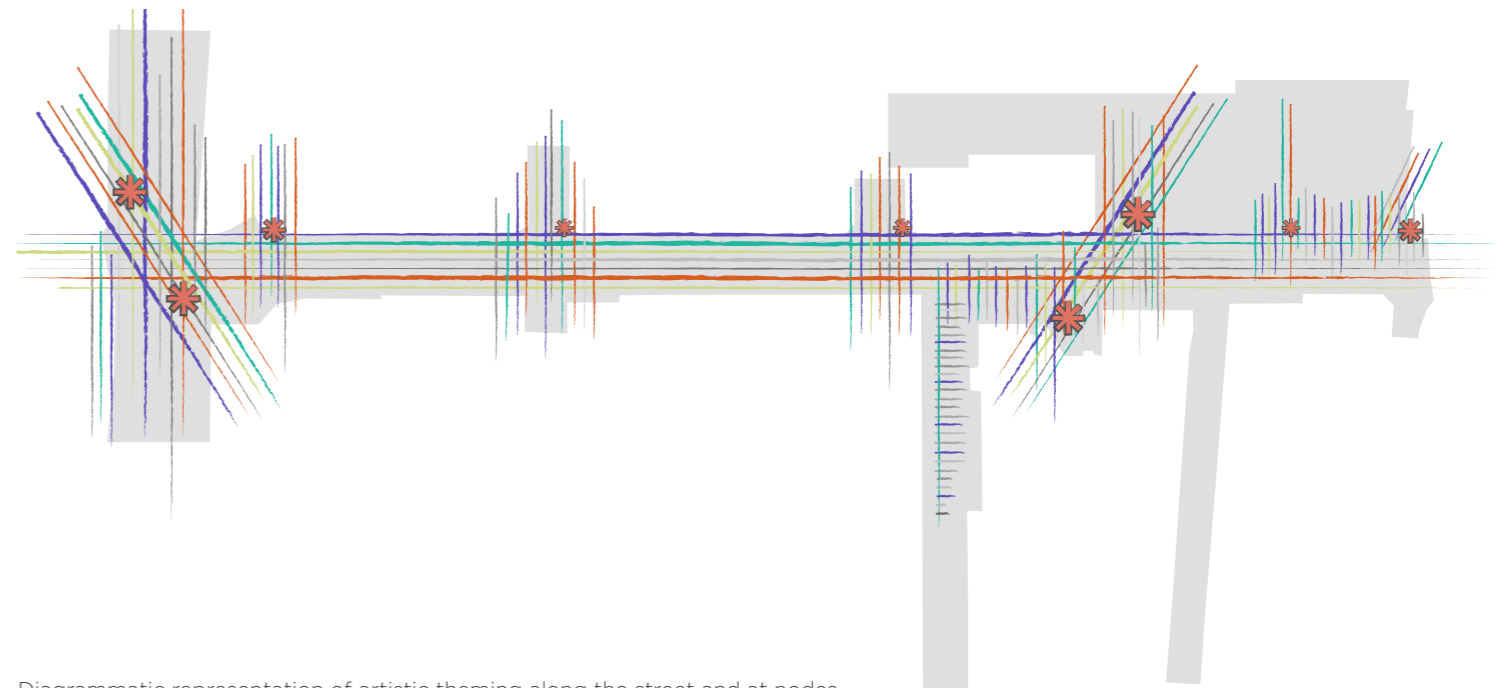
We will also reference the historic Actil factory that was previously located on Woodville Road and was important to the economy of the area.

Two themes of Tapestry and Palimpsest have been selected that offer a myriad of opportunities to express the unique

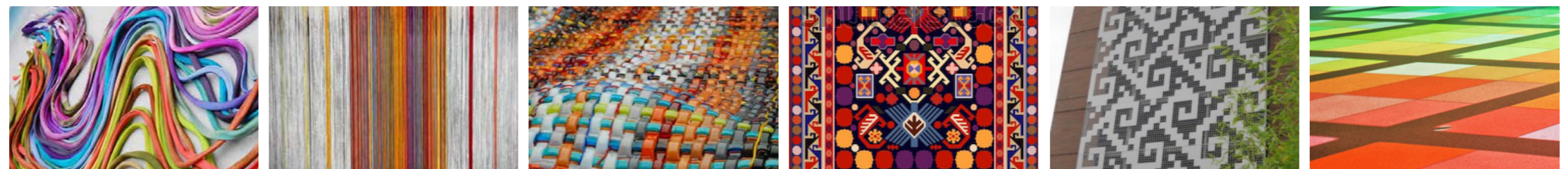
character of the Woodville Road precinct through various art forms, colour and textures.

- Palimpsest: something used again or altered but still bearing traces of its earlier form; which means you can see traces of the earlier influences mixed in with the new.
- Tapestry: a piece of textile fabric with pictures or designs formed by weaving coloured weft threads or by embroidering on canvas, used in reference to an intricate or complex sequence of events.

The artistic theme will reinforce the urban design of streetscape by providing a strong visual language. It will be expressed through paving patterns at important gathering nodes, in public artworks and in integrated art within the landscape design.



Diagrammatic representation of artistic theming along the street and at nodes





# Public Art

## Key design recommendations:

It is intended to include a range of artworks within the concept design to create richness and strengthen the artistic theme.

### Stand alone art works

- Iconic gateway markers are proposed at the Port Road intersection median. These would be visible to passing vehicles and create a visually strong entry point to the precinct. The sculptures may be constructed from multi-coloured plexi glass and lit internally at night to create a welcoming beacon.



Port Road median gateway artworks

- Medium sized artworks are also proposed for the Civic Centre forecourt and public plazas adjacent the potential Development at 67-85 Woodville Road. These would emphasise gathering nodes and add to the character of the spaces.



Plaza artworks and feature paving

### Integrated Art

Art is proposed to be integrated into the public realm to reinforce the artistic theme and create a visually cohesive environment that creates delight.

Elements could include:

- Entry canopy to Civic Centre
- Bus shelters
- Welcome mat artwork at bus stops
- Feature artistic paving
- Water feature with art elements
- Feature pedestrian light columns
- Green wall screens
- Seating and benches



Proposed entry canopy into Civic Centre



Feature pedestrian light column



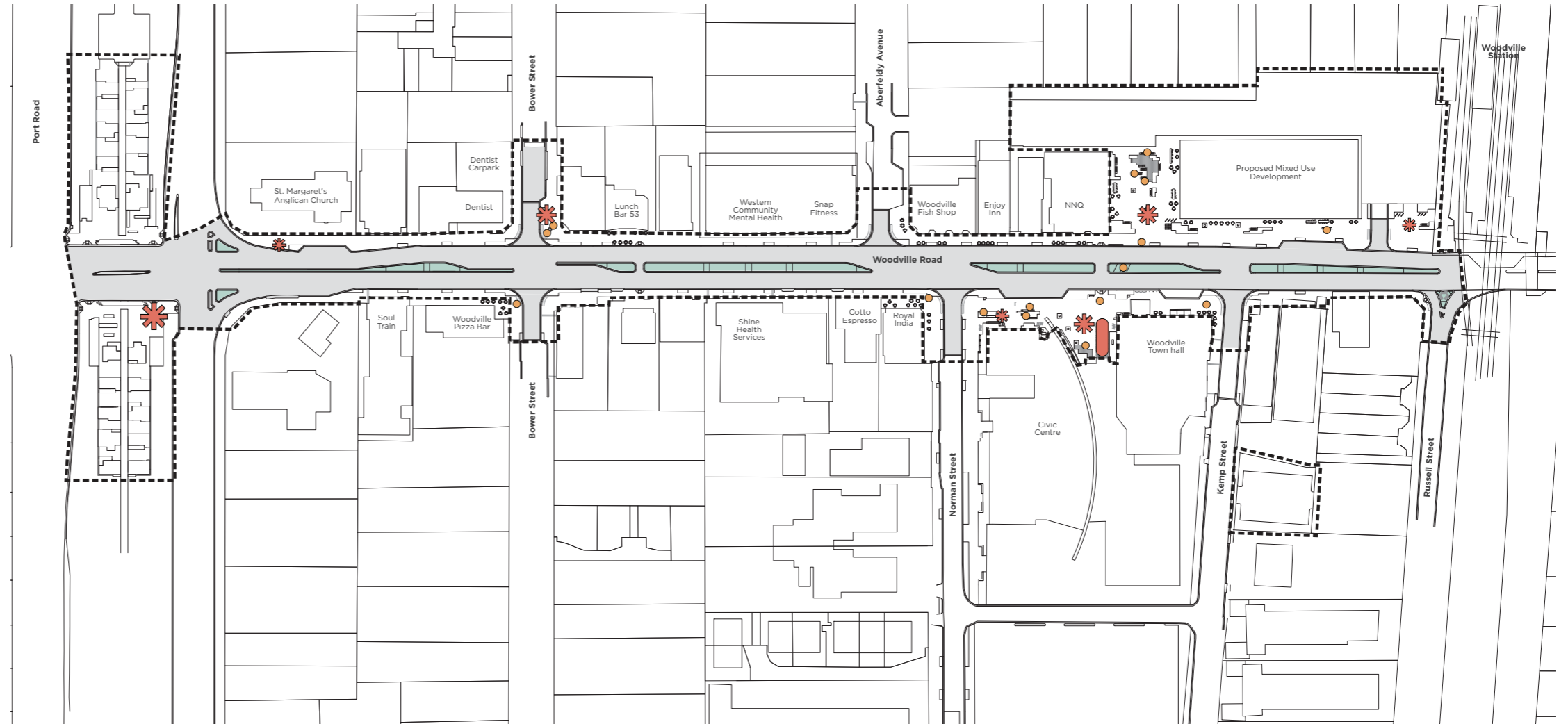
Greenwall screens



Bus shelter artwork and 'welcome mat artwork' in pavement



## Public Art Locations



### Port Road Median Gateway Art

Public art is proposed at the gateway to Woodville Road to highlight the entry point to visitors.

The art would consist of two large scale pieces, integrated with the Woodville Road artistic theme and could be lit at night.



### Plaza and Forecourt Artworks

The new Public Plaza and Civic Centre forecourt would benefit from the inclusion of public art to increase the character of the spaces.

A series of medium sized artworks would emphasise the artistic theme, and could include children's play elements and water play.



### Civic Centre Forecourt entry canopy

An opportunity exists to open up the forecourt and highlight the entry point to the Civic Centre.

A new artistically designed entry canopy, tying in with the art theme, would create an exciting and memorable feature when entering the building.



### Integrated Art

Integrated art is proposed throughout the precinct, drawing together the artistic theme.

This may be in the form of artistic inlays in the pavement, bespoke artistic furniture, artistic lighting elements and small artistic interventions to encourage discovery and delight.





# Detail Study - Civic Centre Forecourt

## Civic Forecourt Recommendations

The Civic Centre Forecourt spaces are currently lacking amenity, greenery and seating, whilst being hot in summer and dark and uninviting in winter. The design intent for the Civic Centre Forecourt is to create inviting spaces to encourage greater use of the Civic Centre Facilities.

Improvements will include feature paving and artworks with a water/play element to encourage interaction with the space. A new artistic canopy will open up the entry point to the Civic Centre and a variety of seating including flexible decking areas will be provided to encourage people to gather. Smart technology such as interactive screens and smart poles will also encourage people to stay longer in the spaces.

An opportunity exists to relocate the Library to the current Council Chambers to give it more prominence and create a new, more visible entry point from Woodville Road. Wayfinding

signage, visible from the road, would announce the new location to passing visitors.

Trees including *Jacaranda* and *Ginkgo* as well as lush understorey planting will soften and cool the spaces, as will a greenwall located on the curved Civic Centre spine wall.

There is an opportunity to activate the Woodville Town Hall with the inclusion of a cafe and associated alfresco dining, with wayfinding signage located road-side in front of the hall entry canopy.

Feature lighting to the Woodville Town Hall as well as bud-lighting to the forecourt trees would make the spaces come alive at night and further encourage an increased patronage.

## Design Recommendations

- ① Artistic entry canopy with integrated lighting
- ② Feature paving and artwork with water/play feature
- ③ Greenwall
- ④ Understorey planting
- ⑤ Raised decking / seating
- ⑥ Sitting wall
- ⑦ Relocated Kaurna signage
- ⑧ Bike racks and water refill station
- ⑨ Relocate memorial drinking fountain
- ⑩ Smart screen
- ⑪ Bike racks and seating
- ⑫ Seating, planting and artworks
- ⑬ Potential to relocate Library to current Council Chambers with new entrance from Woodville Rd
- ⑭ Relocated bus stop 221
- ⑮ New bus shelter
- ⑯ Woodville Town hall wayfinding signage
- ⑰ Disabled drop-off zone (raised pavement)
- ⑱ Pole-mounted projector to provide lighting effects to Woodville Town Hall facade
- ⑲ Ramp to provide DDA access to Woodville Town Hall
- ⑳ Opportunity for cafe in Woodville Town Hall with associated alfresco dining
- ㉑ Remove existing tubular steel fencing at crossing and provide bollards and garden areas





# Detail Study - Public Plaza

## Public Plaza Recommendations

Currently the precinct lacks well designed public space and a place to meet and recreate. The inclusion of a potential Mixed Use Development at 67-85 Woodville Road will draw additional visitors to the area and increase the need for such a space.

A Public Plaza will provide visitors with opportunities to pause and relax, dine al fresco and use the available facilities. A central artwork and feature paving will anchor the space and connect with the art in the Civic Centre forecourt across the road. A central raised decking area can be used as seating or a play element, and can also transform into a stage for small pop-up events.

Greening will be provided in the form of a grove of trees (*Ginkgo biloba*) which will also provide much needed shade, together with lush understorey planting.

The Public Plaza will include public amenities such as an interactive smart screen to provide information about the precinct and Council events, as well as a smart pole with security technology and phone charging opportunities to encourage people to linger longer in the space.

End of trip bike facilities will encourage cyclists riding on the Greenway to use the precinct including bike racks and water refill stations.

The Public Plaza will be activated at all hours, with increased pedestrian night lighting for safety, as well as feature lighting in the trees, furniture, artworks and ground-plane to add to the evening atmosphere.

A wide set-back from Woodville Road will be a requirement for the potential Mixed Use Development, allowing for pedestrian friendly space to extend through on the northern side to Woodville Station.



## Design Recommendations

- ① Feature paving and artwork with water/play feature
- ② Raised decking can be used as seating and for small events
- ③ Grove of trees (*Ginkgo*) and understorey planting
- ④ Public amenities such as a smart screen and smart pole, phone charging locations
- ⑤ Dedicated al fresco dining for NNQ to activate the plaza
- ⑥ Al fresco dining associated with Mixed Use Development
- ⑦ Retain existing *Jacaranda* trees and provide understorey planting
- ⑧ Bike racks and water refill station
- ⑨ Pole-mounted projector to provide lighting effects to Woodville Town Hall facade
- ⑩ Wide set-back allows for al fresco dining, sitting nodes and greening
- ⑪ Relocated bus-stop 211 with associated bus shelter and seating. Bus-bay length T.B.C. with DPTI
- ⑫ Remove existing tubular steel fencing at crossing and provide bollards and garden areas
- ⑬ Disabled drop-off zone (raised pavement)



# Detail Study - Port Road Median

## Port Road Median Recommendations

The Port Road Median at the Woodville Road intersection currently has a double row of mature *Corymbia maculata*, with a central path connecting to newly refurbished carparks. Council's intent is to utilise the medians as has been done in other locations on Port Road, and as such pedestrian connections and spaces will be required between the carparks and Woodville Road.

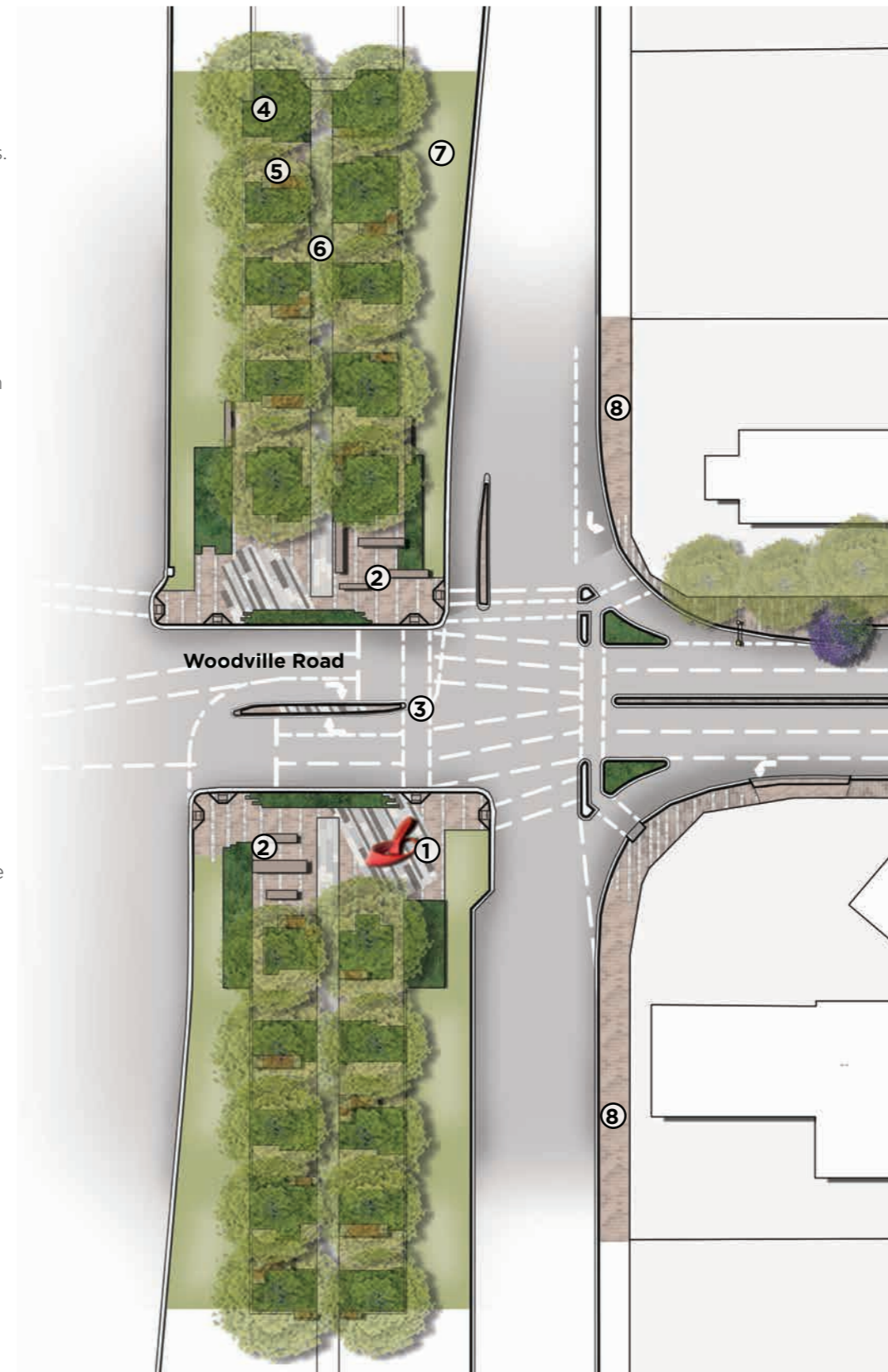
Our intent is to create a gateway to the Woodville Precinct in the median space, to indicate to potential visitors the location of the turnoff. This will centre around the installation of two large sculptures, one on each side of the divided median. The artworks will tie in with the overall public art intent for the precinct, that is 'tapestry' and 'palimpsest' (refer Proposal - Public Art for description), exhibiting ideas of multi-culturalism and the value of the individual.

The artworks will be located within paved plaza spaces, with feature paving, seating walls and understorey planting creating opportunities to gather. The gateway sculptures are proposed to be constructed from multi-coloured translucent plexi-glass material or similar to give the art presence without too much weight. It is intended to light the sculptures internally at night to create a beacon at the intersection.

The *Corymbia maculata* are to be retained, underplanted with garden beds and the central path replaced to match the precinct materiality. Seating nodes will be created under the trees, including a crushed compacted surface material and seating elements. The remaining median will be finished with irrigated turf.

Additionally two new pedestrian crossings are proposed to provide pedestrian connection between the two portions of median. This would be necessary if increased use is proposed in the plaza spaces, as people would try and cross between these points regardless which could increase the risk of pedestrian/vehicle accidents.

The Port Road median landscaping would complete the upgrade of the precinct and confirm Woodville Road's potential status as a vibrant, well known destination. The construction of this area will be staged after the Woodville Road upgrade and will be subject to funding.



## Design Recommendations

- ① Gateway sculptures with feature paving and internal lighting
- ② Plaza spaces with paving, seating and understorey planting
- ③ New pedestrian activated crossing point (PAC)
- ④ Retain existing *Corymbia maculata* trees and underplant with garden beds
- ⑤ Create sitting nodes in-between trees
- ⑥ Repave central pathway to match Woodville Road precinct materiality
- ⑦ Provide irrigated turf to remaining median
- ⑧ Extend footpath paving around corner



## Preliminary Study - 67-85 Woodville Road

The City of Charles Sturt has owned 67-85 Woodville Road for many years. It was purchased as a development site but used for both Civic Centre overflow parking and as an informal all day park for train commuters. With the redevelopment of St Clair Recreation Centre and the relocation of Meals on Wheels, Council now has the ability to relocate car parking elsewhere in the precinct where it can achieve additional benefits. As Council controls the site at 67-85 Woodville Road Council can, to a degree, be prescriptive about end uses including ground floor retail and parking that will add some further vibrancy and short term visitor parking to precinct (Council development criteria). Council intends to retain some permit parking on site for civic centre purposes.

In addition, Council intends to create a Public Plaza between NNQ and the proposed Development to create more attractive out door dining and social spaces for the community. The mixed use Development will be undertaken by private developers at their risk. Subject to Council approval an open and transparent Expression of Interest process will follow the public consultation process.

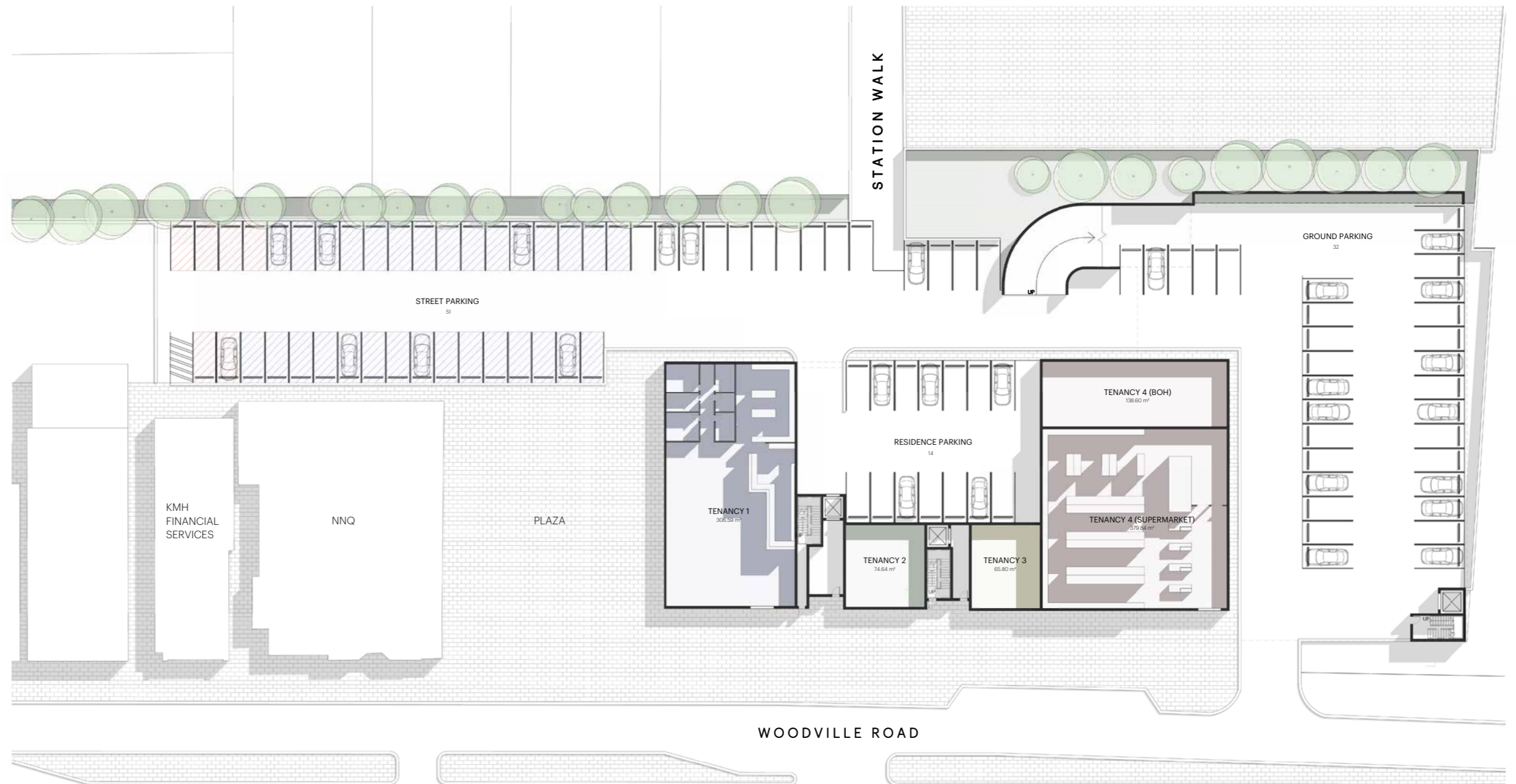
This preliminary study simply illustrates what might be possible that complies with the current Development Plan. It is intended that the development will be undertaken by a developer at their cost who may alter the concept based on market forces whilst still meeting Council's Development criteria.





# Preliminary Study - 67-85 Woodville Road

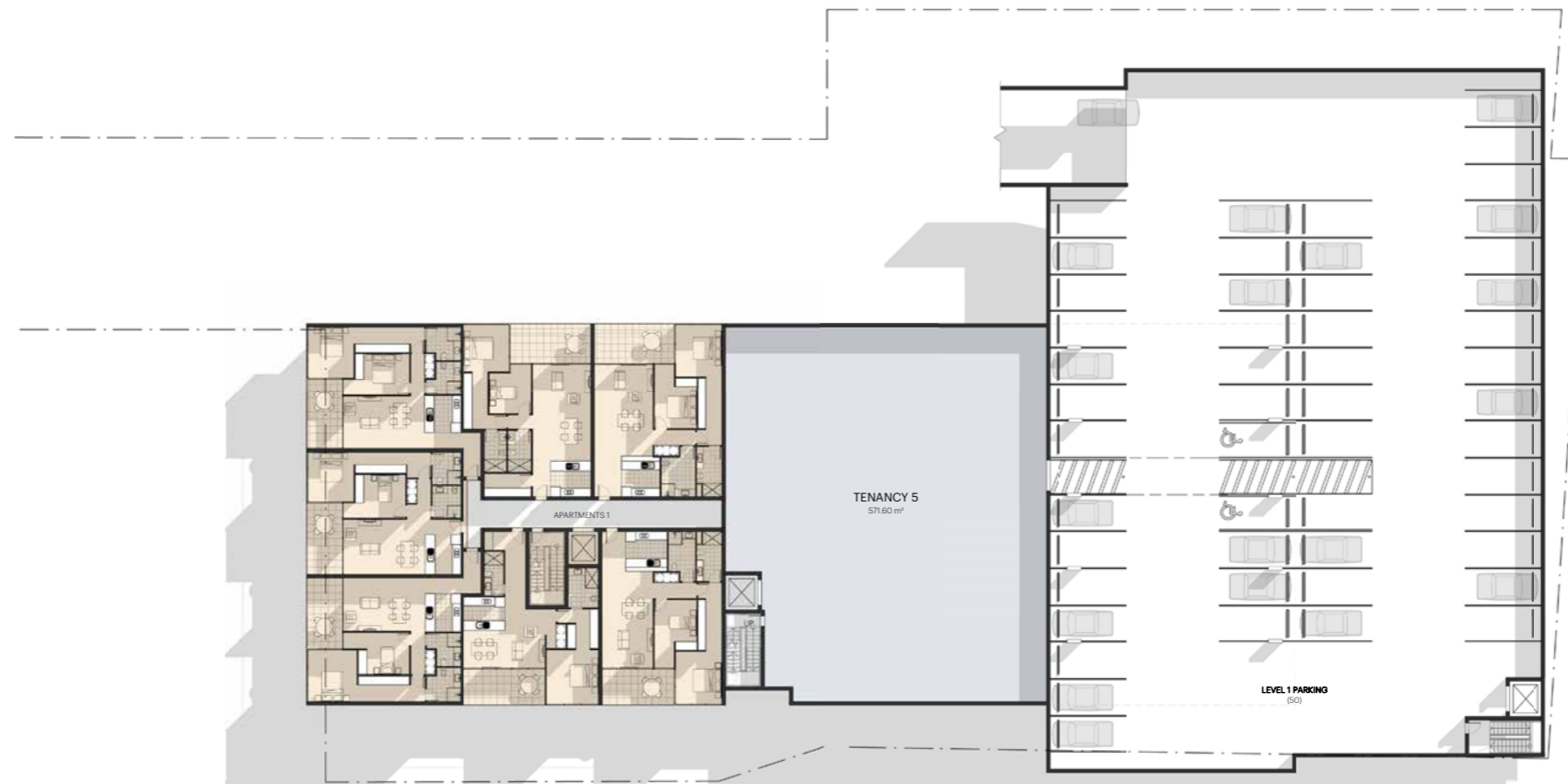
## Ground Floor Plan



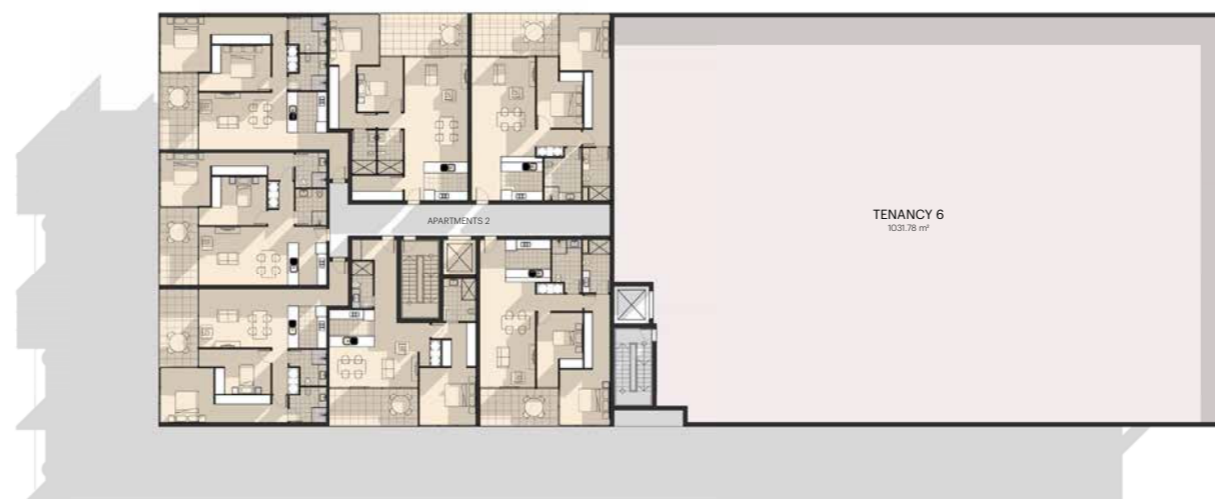


# Preliminary Study - 67-85 Woodville Road

## First Floor Plans



FIRST FLOOR PLAN



SECOND FLOOR PLAN



# Preliminary Study - 67-85 Woodville Road

Street Preliminary Study





## Costing and Staging

Rider Levett Bucknall (RLB) have prepared a Concept Design Order of Cost Estimate for the Woodville Road Upgrade based on the concept drawings prepared by Outerspace and discussions with the design team and Council.

The Estimate is inclusive of Woodville Road, the side streets Norman and Kemp Streets, and the proposed Development and Public Plaza at 67-85 Woodville Road. It also includes the carpark proposed for the Meals on Wheels site and the Port Road median landscaping works.

For further detail please refer to the Appendix A for the RLB Woodville Road Cost Report.

### Staging Options

Due to the scale of the Woodville Road Streetscape Upgrade project the suggested implementation of works is a staged approach that will make the project more achievable through the annual City of Charles Sturt budgeting process.

The following outlines the proposed priority staging of the works to maximise usability for all stakeholders.

#### Stage 1 - Woodville Road, Norman Street and Kemp Street

It is proposed to implement the Woodville Road streetscape design initially, to achieve an overall precinct upgrade. This will provide the basis to promoting urban renewal within the wider precinct. Woodville Road itself would be the priority, including the Civic Centre forecourt to the front of Woodville Town Hall and Civic Centre.

#### Stage 2 - 67-85 Woodville Road, Meals on Wheels Carpark and St. Clair Rec Centre public carparking

The establishment of 67-85 Woodville Road as a mixed use development is considered key to the success of the precinct. The combination of retail, potentially including a small supermarket, commercial and residential, as well as

associated parking would better establish the precinct as a destination.

It is recommended that this mixed use development should be staged after the Woodville Road works, to capitalise on the initial upgrade of the street. The sale of the combined lots will also be subject to market response so there will be an element of uncertainty to the development of this area.

Property owned by Council at 43 Aberfeldy Ave is recommended to be retained in the medium term for possible car parking site and car parking circulation to the rear of Woodville Road properties but does not form part of this proposed scope.

#### Stage 3 - Port Road Median Landscaping

The Port Road Median Landscaping design is an important element within the design of the whole precinct, as it marks the entrance to Woodville Road. Acting as a gateway and a form of visual wayfinding it will potentially draw more visitors to the precinct.

Despite this, this area is not as essential to the success of the precinct as the streetscape or 67-85 Woodville Road development and should be staged after these areas.

It would be appropriate in the short to medium term to consider pedestrian crossing and public art work to create a gateway to Woodville Road.

### Cost Implications

The cost implications for the proposed stages include the following (ex GST):

<b>Stage 1</b>	
Woodville Road	\$8,869,944.20
Norman Street (threshold only)	\$315,523.60
Kemp Street (threshold only)	\$169,160.70
<b>Total Stage 1 works</b>	<b>\$9,354,628.50</b>
<b>Stage 2</b>	
Public Plaza and site preparation of 67-85 Woodville Road Development Site (building works excluded)	\$1,718,852.30
Meals on Wheels Carpark	\$338,559.20
St Clair Rec Centre public carparks (75 no.)	\$270,000
<b>Total Stage 2 works</b>	<b>\$2,327,411.50</b>
<b>Stage 3</b>	
Port Road Median Landscaping Works	\$1,993,200.50
<b>Total Stage 3 works</b>	<b>\$1,993,200.50</b>
<b>Total All Works</b>	<b>\$13,780,096</b>

### Funding Income

<b>Stage 2 Income opportunities</b>	-\$3,900,000
Assets disposal 63 and 67-85 Woodville Road	
<b>Places for people funding</b>	-\$1,000,000
Public Plaza	
<b>TOTAL Net total order of range costs</b>	<b>\$6,782,040</b>
(excluding Port Road median works, margins and adjustments)	

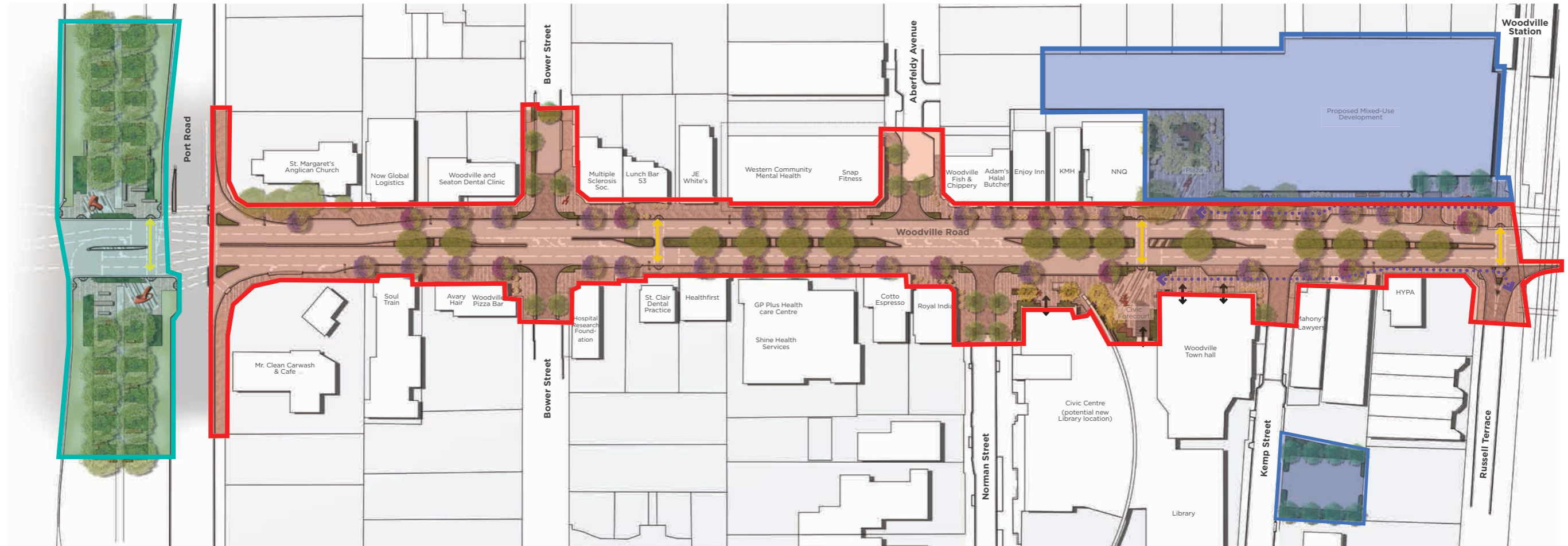


## Staging Plan

The following diagram illustrates the proposed staging approach for the precinct and the associated cost implications per stage.

### Costs per Stage

<b>Stage 1</b>	
Woodville Road	\$8,869,944.20
Norman Street (threshold only)	\$315,523.60
Kemp Street (threshold only)	\$169,160.70
<b>Total Stage 1 works</b>	<b>\$9,354,628.50</b>
<b>Stage 2</b>	
Public Plaza and site preparation of 67-85 Woodville Road Development Site (building works excluded)	\$1,718,852.30
Meals on Wheels Carpark	\$338,559.20
St Clair Rec Centre public carparks (75 no.)	\$270,000
<b>Total Stage 2 works</b>	<b>\$2,327,411.50</b>
<b>Stage 3</b>	
Port Road Median Landscaping Works	\$1,993,200.50
<b>Total Stage 3 works</b>	<b>\$1,993,200.50</b>





## Costing Assumptions

The Concept Design Order of Cost Estimate is based upon measured quantities to which RLB have applied rates and conditions we currently believe applicable as at March 2019. RLB have assumed that the project will be competitively tendered to a suitable sized and experienced Civil Contractor under standard industry contract conditions.

The estimate is based on the concept plans provided by the design team and does not, at this stage, provide a direct comparison with tenders received for the trade works at any future date. To enable monitoring of costs this estimate should be updated regularly during the design and documentation phases of the project.

The following assumptions have been assumed in generating the Cost Estimate.

### Project Scope

The Concept Estimate specifically includes and assumes the following scope of works;

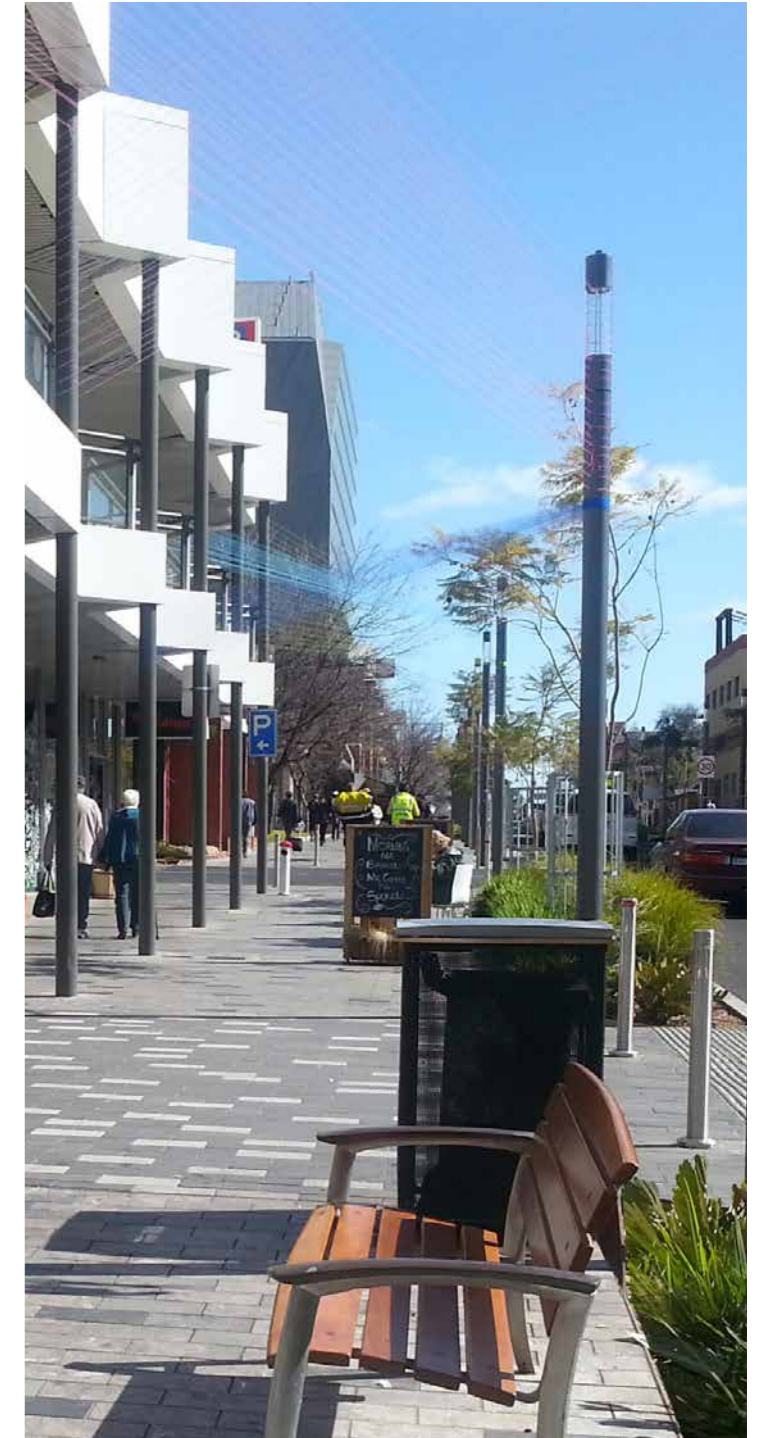
- Taking up existing pavements ready for new
- Removal of existing landscaping ready for new
- Minor earthworks across site to create new levels for car parking, paths and landscaping
- New pavements to footpaths
- Plane and reinstate existing asphalt on Woodville Road
- Deep lift asphalt construction to road widening on Woodville Road
- New irrigated garden beds and turf areas
- New landscaped medians
- Stratacells to garden beds directly behind kerbs on Woodville Road and in Medians (Refer markup drawings provided)
- New timber decking
- Street furniture

- Smart signage
- Canopy to Civic Centre forecourt
- Lighting to Woodville Road and Public Plaza areas (As detailed within the Concept Design documentation)
- New street furniture and fencing
- Public art
- Water bubbler including pumps and associated fixings
- New parking sensors
- Relocation of existing water main (50% of cost allowed only, SA Water to fund remaining 50% cost)

### Project Exclusions

The Cost Estimate excludes the following items that may require further consideration when preparing an overall Project feasibility study;

- Relocation and major upgrade of other existing services infrastructure apart from relocating water main
- Disposal / remediation of contaminated material
- Excavation in rock
- Sealer to unit and concrete pavements
- Lighting to Norman Street, Kemp Street and Port Road Median
- Demolition works to Port Road Median
- Re-sheeting of Norman Street and Kemp Street
- Major Earthworks to Mixed Use Development Site
- Dark oxide to new kerbing
- SAPN Fees and Charges
- Escalation Beyond Mid 2019
- Goods and Services Taxation



Source: Supplied



# Community Engagement

## Introduction

Council will be undertaking community consultation on the draft concept in keeping with its Public Consultation Policy and an endorsed Community Engagement Approach. A range of engagement methods will be employed with those making submissions given the rights to be heard.

## Community Engagement Approach

The scope for community engagement includes the following steps:

Step	Title	Description
1	<b>Prepare Approach</b>	Prepare a community engagement approach in relation to the matter.
2	<b>Authorise Approach</b>	Obtain authorisation of the community engagement approach from the Council
3	<b>Undertake Community Engagement</b>	<p><b>Plan, deliver and manage engagement activities.</b>            Minimum statutory requirements under the Act and PCP</p> <ul style="list-style-type: none"> <li>• Publish on the City of Charles Sturt Website and Charles Sturt 'Your Say' site</li> </ul> <p><b>Additional engagement activities:</b></p> <ul style="list-style-type: none"> <li>• One on one discussions with key partners;</li> <li>• Letter and fact sheets to key stakeholders, property owners and businesses in the locality;</li> <li>• Displays at St. Clair Recreation Centre, Civic Library and the Brocas;</li> <li>• Provide information on Council's social media platforms;</li> <li>• Publish, in the Westside Weekly, City and Portside Messenger Newspaper, under the City of Charles Sturt's fortnightly column;</li> <li>• Posters to be distributed to several businesses along Woodville Road;</li> <li>• Pop up display with staff in attendance at Arndale Shopping Centre and/or St. Clair Shopping Centre;</li> <li>• 2 x Community Information Sessions (evening and weekend); and</li> <li>• Pavement stickers along Woodville Road</li> </ul>
4	<b>Consider Submissions</b>	Consider written submissions received
5	<b>Prepare Report</b>	Prepare a report for Council which: <ul style="list-style-type: none"> <li>• Summarises the community engagement process and outcomes;</li> <li>• Presents information in the broader context of the matter; and</li> <li>• Makes recommendations for Council to consider when deciding on the matter.</li> </ul>
6	<b>Council Decision</b>	Council members will consider the report and recommendation(s) and decide on the matter. The right of a member of the community to address Council by way of deputation in support of any written submission may be granted at the discretion of the Mayor.
7	<b>Communicate Decision</b>	<ul style="list-style-type: none"> <li>• Publish results on the City of Charles Sturt website and Charles Sturt 'Your Say' site.</li> </ul>



# Community Engagement

## Communication and Engagement Techniques and Promotions

The following communication and engagement techniques and promotions are proposed:

Communication Techniques and Promotions	Engagement Techniques and Promotions
<p><b>Print Media Techniques</b></p> <ul style="list-style-type: none"> <li>• CCS Column in the Messenger Newspaper</li> <li>• Insert or Article in Messenger Newspaper</li> <li>• Article in CCS Kaleidoscope Magazine (timeframes permitted)</li> </ul> <p>Social Media Techniques</p> <ul style="list-style-type: none"> <li>• CCS Facebook</li> </ul> <p><b>Online Techniques</b></p> <ul style="list-style-type: none"> <li>• City of Charles Sturt website</li> <li>• City of Charles Sturt social media platforms</li> <li>• City of Charles Sturt's e-Newsletter Diamond Bytes (timeframes permitted)</li> <li>• Your Say Charles Sturt</li> <li>• Newsletter to Your Say Charles Sturt registered participants (includes over 1,900 registered participants)</li> </ul> <p><b>Public Display Techniques</b></p> <ul style="list-style-type: none"> <li>• Charles Sturt Banner in project area</li> <li>• Display in CCS Civic Library</li> <li>• Display in The Brocas</li> <li>• Display in Civic Centre Internal Street</li> <li>• Display in St Clair Recreation Centre</li> <li>• Posters in businesses along project area</li> </ul> <p>Public displays at Arndale Shopping Centre and/or St. Clair Shopping Centre</p> <p><b>Other Communication Techniques</b></p> <ul style="list-style-type: none"> <li>• Letter Box Drop / Mail Out</li> <li>• Email</li> </ul>	<p><b>Online Engagement Techniques</b></p> <ul style="list-style-type: none"> <li>• Your Say Charles Sturt engagement - open to the general community</li> <li>• Online Survey - open to the general community</li> </ul> <p><b>Conventional Engagement Techniques</b></p> <ul style="list-style-type: none"> <li>• Survey - hardcopy, telephone or face to face</li> <li>• Interview - individual or small group</li> <li>• Written Submission</li> <li>• Stakeholder briefing</li> <li>• Public meeting</li> <li>• Contact number for further information and questions</li> </ul> <p><b>Other Engagement Techniques</b></p> <ul style="list-style-type: none"> <li>• Community Information Session</li> </ul>

## Reporting on Community Engagement

All submissions received electronically (i.e. email, Your Say site and Council's website) and written feedback forms and submissions will be collated to formulate a combined community feedback result. All submissions will be considered to summarise common themes, key issues and community preferences for recommendation to Council. Full submissions will be available for elected members to review.



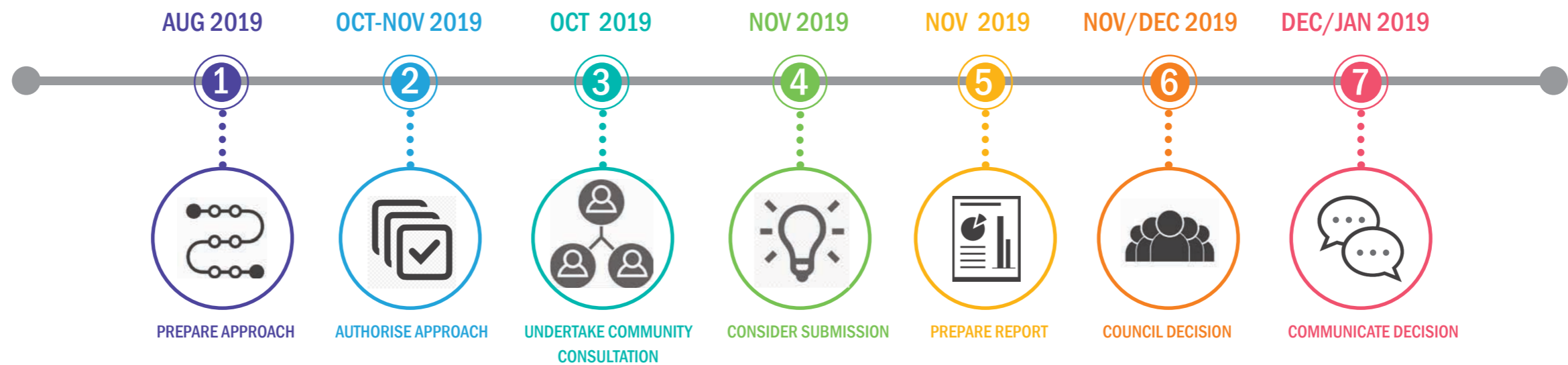


# Community Engagement

## Communication Timeframe

The following communication and engagement techniques and promotions are proposed:

Step	Title	Timing
1	Prepare Approach	August 2019
2	Authorise Approach	September 2019
3	Undertake Community Engagement	October/November 2019
4	Consider Submissions	November 2019
5	Prepare Report	November 2019
6	Council Decision	November/ December 2019
7	Communicate Decision	December 2019 - January 2020





## Summary and Next Steps

### Summary

The Woodville Road Streetscape Upgrade project is an important step in completing the urban renewal of the Woodville Village area, initiated by the development of the St. Clair Recreation Precinct and associated residential development site north of the rail-line.

The precinct has a lot of potential, located adjacent to Woodville station, and including the Woodville Town Hall, Civic Centre and Library - all important civic buildings. The old stone buildings along the street contribute to the heritage character of the area. The current mix of cafes, retail and commercial could be built upon to create a thriving commercial hub.

Car parking is currently under utilised and the inclusion of on-street off peak parking would increase the perceived parking availability.

The current streetscape materials and facilities are of average condition and are in need of an upgrade. There is a lack of key shopping options within the area which could be addressed by the creation of a potential development site at 67-85 Woodville Road.

The precinct has a general lack of public gathering areas and poor pedestrian and cycle connectivity, discouraging visitors from staying to shop in the area. Additionally the absence of significant greenery, street furniture and public art contribute to a lack of vibrancy within the streetscape.

An upgrade of the streetscape and associated side streets, facilities and gateway is highly recommended to create a drawcard, encouraging people back to the area. This project has the potential to reposition Woodville Road as a destination and significantly increase vibrancy and retailer profitability within the area.

### Next Steps

Following the completion of the concept design phase of the Woodville Road Streetscape Upgrade it is anticipated the following process will be undertaken.

#### 2019/2020

- Consultation with Stakeholders, Traders and the wider Community
- Feedback received from the Consultation as well as Council comments. The Design Team may undertake changes to the Concept Design based on this feedback
- Final Concept Design provided for public viewing
- Council accepts the final concept including a staged approach to its delivery and makes necessary financial provisions in its long term financial plan
- Council undertakes a Development Application for the Civic Centre administration building to adjust car parking requirements including Kemp Street
- Council seeks Expressions of interest for the development of 67-85 Woodville Road
- Council commences a public art procurement process to identify artist to finalise detailed design and public art components

#### 2020/2021

- Council Engineering to complete detailed design and documentation
- Subject to EOI Council seeks to dispose of surplus assets to offset costs

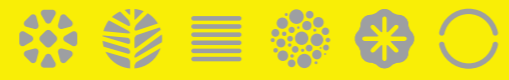
#### 2021/2022

- Civil contractor and artist appointed to undertake works scheduled and completed for that financial year





Civic Centre forecourt perspective showing proposed new entry canopy, artwork, bike facilities, feature paving and water feature.



## Appendices.



# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Summary

Rates Current At March 2019

Location	Total Cost
A WOODVILLE ROAD	8,869,944.20
B NORMAN STREET	315,523.60
C KEMP STREET	169,160.70
D PLAZA AND MIXED USE DEVELOPMENT SITE	1,718,852.30
E PORT ROAD MEDIAN LANDSCAPING WORKS	1,993,200.50
F MEALS ON WHEELS CARPARK	338,559.20
<b>ESTIMATED NET COST</b>	<b>\$13,405,240.50</b>
 <b>MARGINS &amp; ADJUSTMENTS</b>	
Professional Fees and Charges	Excl.
Escalation Beyond mid 2019	Excl.
Goods and Services Taxation	Excl.
<b>ESTIMATED TOTAL COST</b>	<b>\$13,405,240.50</b>
 BR NORMAN STREET (REMOVED SCOPE)	 546,507.80
CR KEMP STREET (REMOVED SCOPE)	207,507.50
<b>ESTIMATED TOTAL COST</b>	<b>\$754,015.30</b>

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### A WOODVILLE ROAD

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
<b>DE Demolition and Site Clearance</b>				
1 Clear site of rubbish and debris	m <sup>2</sup>	13,097	0.10	1,309.70
69 Cut down existing small tree including grubbing out roots	No	27	380.00	10,260.00
68 Cut down existing medium tree including grubbing out roots	No	7	850.00	5,950.00
52 Saw cut existing bitumen road ready for removal	m	1,875	15.00	28,125.00
53 Saw cut existing concrete kerb ready for removal	No	12	40.00	480.00
54 Break up existing bitumen road pavement and remove debris from site	m <sup>2</sup>	1,494	22.50	33,615.00
55 Break up existing concrete pavement and dispose debris off site	m <sup>2</sup>	220	35.00	7,700.00
56 Take up existing footpath pavers and dispose off site	m <sup>2</sup>	3,996	17.00	67,932.00
66 Take up existing trafficable pavers and dispose debris off site	m <sup>2</sup>	124	19.00	2,356.00
70 Take up existing gravel median and dispose spoil off site	m <sup>2</sup>	429	28.50	12,226.50
74 Break up existing concrete median and dispose debris off site	m <sup>2</sup>	17	55.00	935.00
65 Take up existing garden beds and dispose off site	m <sup>2</sup>	82	15.00	1,230.00
71 Break up existing kerb and gutter and dispose debris off site	m	545	19.00	10,355.00
75 Break up existing spoon drain and dispose debris off site	m	347	25.00	8,675.00
76 Break up kerb only and dispose debris off site	m	361	17.00	6,137.00
72 Break up existing driveway crossover and dispose debris off site	m	79	30.00	2,370.00
73 Break up existing median kerb and dispose debris off site	m	788	18.00	14,184.00
77 Take up existing pedestrian fencing and dispose debris off site	m	42	55.00	2,310.00
153 Take up existing bollards including footings and dispose debris off site	No	26	75.00	1,950.00
155 Take up existing Telstra phone box and remove from site (assume redundant)	No	1	1,500.00	1,500.00
154 Take down existing 'Civic Centre' entrance sign and remove from site	No	1	550.00	550.00
162 Take down existing bus stop signs and store on site for future reuse	No	3	110.00	330.00
163 Take up existing post box and store on site for future reuse	No	1	400.00	400.00
81 Disconnect, make safe and take down existing goose neck light poles and dispose of site	No	16	1,500.00	24,000.00
80 Disconnect, make safe and take down existing outreach from stobie pole and dispose of site	No	5	550.00	2,750.00
79 Allowance to protect existing stobie poles throughout construction	No	11	80.00	880.00
78 Allowance to protect existing traffic light poles throughout construction	No	11	80.00	880.00
82 Allowance to protect safety camera throughout construction	No	1	1,000.00	1,000.00
110 Allowance to protect existing trees throughout works	No	4	80.00	320.00
83 Allowance to take down and remove existing signage	Item			6,000.00
85 Allowance to remove existing street furniture and dispose off site made redundant	Item			15,000.00

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### A WOODVILLE ROAD (continued)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
84 Allowance for sundry and unforeseen demolition	Item			30,000.00
86 No allowance for alterations to existing verandas and structures to remain	Note			Excl.
<b>Demolition and Site Clearance</b>				<b>\$301,710.20</b>
<b>EW Earthworks</b>				
87 Box out existing subgrade ready for new unit pavers including disposal of spoil off site	m <sup>2</sup>	3,800	35.50	134,900.00
146 Box out existing subgrade ready for new plaza unit pavers including disposal of spoil off site	m <sup>2</sup>	358	38.50	13,783.00
88 Box out existing subgrade ready for new trafficable unit pavers including disposal of spoil off site	m <sup>2</sup>	137	48.50	6,644.50
145 Box out existing subgrade ready for new median island unit pavers including disposal of spoil off site	m <sup>2</sup>	142	55.00	7,810.00
89 Box out to subgrade to new road crossovers including disposal of spoil off site	m <sup>2</sup>	570	43.50	24,795.00
264 Box out to subgrade to new paved on street parking including disposal of spoil off site	m <sup>2</sup>	46	48.50	2,231.00
90 Box out to subgrade for new road widening areas including disposal of spoil off site	m <sup>2</sup>	736	78.50	57,776.00
94 No allowance for contaminated spoil remediation or disposal	Note			Excl.
96 No allowance for rock excavation	Note			Excl.
<b>Earthworks</b>				<b>\$247,939.50</b>
<b>PV Pavements</b>				
<b>FP Footpath Pavers</b>				
2 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	3,800	8.50	32,300.00
5 Supply and place crushed rock base course to new footpath unit pavers including trimming and compacting	m <sup>2</sup>	3,800	26.50	100,700.00
9 Supply and place Best Terrazzo unit pavers or similar on sand bed to new footpath (PC Sum \$90/m2)	m <sup>2</sup>	3,800	180.00	684,000.00
22 Form isolation joint or similar to junction of new pavers and existing buildings	m	445	28.00	12,460.00
27 Allowance to match into existing footpath	m	49	35.00	1,715.00
28 Allowance for humouring to pavement levels to suit existing entry levels	Item			2,500.00
13 No allowance for concrete slab below footpath pavers	Note			Excl.
166 No allowance to seal pavers	Note			Excl.
<b>Footpath Pavers</b>				<b>\$833,675.00</b>
<b>PP Plaza Pavers</b>				
26 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	358	8.50	3,043.00
8 Supply and place crushed rock base course to new plaza unit pavers including trimming and compacting	m <sup>2</sup>	358	26.50	9,487.00
12 Supply and place Urbanstone concrete pavers or similar to Plaza areas (PC Sum \$150/m2)	m <sup>2</sup>	358	285.00	102,030.00
167 No allowance to seal pavers	Note			Excl.
<b>Plaza Pavers</b>				<b>\$114,560.00</b>

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### A WOODVILLE ROAD (continued)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
<b>DW Driveway Pavers</b>				
25 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	137	8.50	1,164.50
6 Supply and place crushed rock as sub base to new driveway unit pavers including trimming and compacting	m <sup>2</sup>	137	26.50	3,630.50
7 Supply and place fine crushed rock base course to new driveway pavers including trimming and compacting	m <sup>2</sup>	137	29.50	4,041.50
11 Supply and place Best trafficable unit paver or similar to driveways (PC Sum \$110/m2)	m <sup>2</sup>	137	230.00	31,510.00
49 No allowance for concrete slab below driveway pavers	Note			Excl.
169 No allowance to seal pavers	Note			Excl.
<b>Driveway Pavers</b>				<b>\$40,346.50</b>
<b>PRP Paved On-Street Parking</b>				
190 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	46	8.50	391.00
191 Supply and place crushed rock sub base to raised side street crossovers	m <sup>2</sup>	46	28.00	1,288.00
194 Construct concrete base to raised road crossover including formwork, reinforcement and concrete	m <sup>2</sup>	46	155.00	7,130.00
193 Supply and place trafficable interlocking unit pavers on mortar bed (PC Supply \$55/m2)	m <sup>2</sup>	46	255.00	11,730.00
<b>Paved On-Street Parking</b>				<b>\$20,539.00</b>
<b>RC Road Crossovers</b>				
39 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	570	8.50	4,845.00
38 Supply and place crushed rock sub base to raised side street crossovers	m <sup>2</sup>	570	28.00	15,960.00
91 Construct concrete base to raised road crossover including formwork, reinforcement and concrete	m <sup>2</sup>	570	155.00	88,350.00
41 Supply and place trafficable interlocking unit pavers on mortar bed (PC Supply \$55/m2)	m <sup>2</sup>	570	255.00	145,350.00
<b>Road Crossovers</b>				<b>\$254,505.00</b>
<b>TC Tactiles</b>				
217 Supply and place tactile pavers or similar on a mortar bed	m <sup>2</sup>	44	550.00	24,200.00
<b>Tactiles</b>				<b>\$24,200.00</b>
<b>RW Road Widening</b>				
58 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	736	8.50	6,256.00
59 Supply and place 250mm thick PM1/20 sub base in two equal layers to road widening including trimming and compacting	m <sup>2</sup>	736	26.50	19,504.00
92 Supply and place prime	m <sup>2</sup>	736	4.50	3,312.00
174 Supply and place 75mm thick AC14M (assumed pavement detail as per figure 5 from DPTI Pavement reinstatement configurations)	m <sup>2</sup>	736	45.50	33,488.00
173 Supply and place 75mm thick AC14M (assumed pavement detail as per figure 5 from DPTI Pavement reinstatement configurations)	m <sup>2</sup>	736	45.50	33,488.00

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### A WOODVILLE ROAD (continued)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
172 Supply and place 75mm thick AC14M (assumed pavement detail as per figure 5 from DPTI Pavement reinstatement configurations)	m <sup>2</sup>	736	45.50	33,488.00
171 Supply and place 75mm thick AC14M (assumed pavement detail as per figure 5 from DPTI Pavement reinstatement configurations)	m <sup>2</sup>	502	45.50	22,841.00
60 Supply and place 50mm thick AC10M A35P wearing course (assumed pavement detail as per figure 5 from DPTI Pavement reinstatement configurations)	m <sup>2</sup>	502	32.50	16,315.00
<b>Road Widening</b>				<b>\$168,692.00</b>
<b>KR Kerb Reinstatement</b>				
36 Allow to reinstate existing bitumen roadway 300mm wide where new kerb installed including sub base, base course, wearing course	m	610	95.00	57,950.00
<b>Kerb Reinstatement</b>				<b>\$57,950.00</b>
<b>PR Plane and Reinstatement Existing Roadway</b>				
29 Plane existing asphalt and dispose debris off site	m <sup>2</sup>	6,369	10.50	66,874.50
31 Supply and place prime to roadway	m <sup>2</sup>	6,369	4.50	28,660.50
30 Supply and place asphalt to roadway	m <sup>2</sup>	6,369	30.50	194,254.50
<b>Plane and Reinstatement Existing Roadway</b>				<b>\$289,789.50</b>
<b>MI Median Islands</b>				
24 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	142	10.50	1,491.00
23 Supply and place crushed rock as sub base to new median island unit pavers including trimming and compacting	m <sup>2</sup>	142	38.00	5,396.00
10 Supply and place Best unit pavers or similar on sand bed to new median islands (PC Sum \$90/m <sup>2</sup> )	m <sup>2</sup>	123	235.00	28,905.00
45 Supply and place Urbanstone unit pavers or similar on sand bed to new median islands (PC Sum \$150/m <sup>2</sup> )	m <sup>2</sup>	19	330.00	6,270.00
42 No allowance for concrete slab below median pavers	Note			Excl.
168 No allowance to seal pavers	Note			Excl.
<b>Median Islands</b>				<b>\$42,062.00</b>
<b>Pavements</b>				<b>\$1,846,319.00</b>
<b>CW Concrete Works</b>				
47 Supply and place concrete infill to median island including reinforcement and concrete	m <sup>2</sup>	135	135.00	18,225.00
14 Concrete kerb and gutter	m	840	85.00	71,400.00
19 Concrete edge kerb	m	170	65.00	11,050.00
175 Concrete bond beam (coloured)	m	122	280.00	34,160.00
21 Concrete flush edge to garden beds	m	469	60.00	28,140.00
18 Concrete median kerb	m	831	68.00	56,508.00
20 Concrete driveway crossover	m	47	140.00	6,580.00
16 Concrete spoon drain	m	83	130.00	10,790.00
17 Kerb ramp	No	9	1,450.00	13,050.00

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### A WOODVILLE ROAD (continued)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
170 No allowance for dark oxide to new kerbing	Note			Excl.
<b>Concrete Works</b>				<b>\$249,903.00</b>
<b>LM Line Marking</b>				
208 Broken lane marking	m	793	2.50	1,982.50
209 Hold line marking	m	63	10.00	630.00
210 Continuity line marking	m	378	2.50	945.00
211 Pedestrian crossing marking	m	255	2.50	637.50
212 Turn line marking	m	124	2.50	310.00
214 Directional arrow	No	15	95.00	1,425.00
216 Supply and install RRPMS	No	34	15.00	510.00
141 Allowance for miscellaneous road line marking	Item			7,500.00
<b>Line Marking</b>				<b>\$13,940.00</b>
<b>LA Landscaping</b>				
<b>GB Garden Beds</b>				
44 Detailed excavation and preparation for new garden beds including disposal of excess spoil off site	m <sup>2</sup>	457	43.00	19,651.00
51 Deep rip subgrade ready for new garden beds	m <sup>2</sup>	457	6.50	2,970.50
97 Supply and place imported topsoil to garden beds (assumed 300mm deep)	m <sup>2</sup>	457	33.00	15,081.00
98 Supply and place organic mulch to garden beds	m <sup>2</sup>	457	9.00	4,113.00
99 Extra over for stratacells including additional excavation, stratacells, geofabrics and specified backfilling material	m <sup>2</sup>	638	550.00	350,900.00
177 Supply and install irrigation to garden beds	m <sup>2</sup>	457	20.00	9,140.00
180 Supply and install conduits under footpath inbetween garden beds including excavation, bedding and backfilling	m	524	95.00	49,780.00
195 Supply and install conduits under road inbetween garden beds including excavation, bedding and backfilling	m	51	155.00	7,905.00
101 Supply and plant ground covers and shrubs to garden beds (assumed 3-4 plants/m <sup>2</sup> )	No	2,054	14.00	28,756.00
104 Supply and plant 200L verge trees including preparation works	No	43	1,500.00	64,500.00
108 Supply and plant feature trees to plaza areas including preparation works	No	5	5,500.00	27,500.00
196 Supply and install tree grates	No	3	4,500.00	13,500.00
178 Allowance for new water meter for irrigation supply	Item			5,000.00
179 Allowance to connect irrigation into existing water supply	Item			5,000.00
109 Allowance for sundry and feature plantings	Item			5,000.00
112 Allowance for 52 week maintenance period	Item			18,000.00
<b>Garden Beds</b>				<b>\$626,796.50</b>
<b>MI Median Islands</b>				
46 Detailed and preparation for new garden beds including disposal of excess spoil off site	m <sup>2</sup>	512	55.00	28,160.00

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### A WOODVILLE ROAD (continued)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
116 Deep rip subgrade ready for new garden beds	m <sup>2</sup>	512	10.50	5,376.00
115 Supply and place imported topsoil to garden beds (assumed 300mm deep)	m <sup>2</sup>	512	38.00	19,456.00
114 Supply and place organic mulch to garden beds	m <sup>2</sup>	512	10.50	5,376.00
182 Supply and install irrigation to garden beds	m <sup>2</sup>	512	25.00	12,800.00
100 Extra over for stratacells under median including additional pavement removal, excavation, stratacells, geofabrics, specified backfilling material and road pavement reinstatement	m <sup>2</sup>	481	650.00	312,650.00
181 Supply and install conduits inbetween garden beds	m	174	135.00	23,490.00
176 Supply and install root barrier to median island garden beds	m	470	30.00	14,100.00
113 Supply and plant ground covers and shrubs to garden beds (assumed 3-4 plants/m2)	No	2,304	17.00	39,168.00
103 Supply and plant 200L median trees including preparation works	No	14	1,800.00	25,200.00
184 Allowance for new water meter for irrigation supply	Item			5,000.00
183 Allowance to connect irrigation into existing water supply	Item			5,000.00
111 Allowance for 52 week maintenance period	Item			12,000.00
<b>Median Islands</b>				<b>\$507,776.00</b>
<b>TD Timber Decking</b>				
203 Locally excavate ground below deck to accommodate sub frame including stockpiling spoil on site	m <sup>2</sup>	17	180.00	3,060.00
204 Concrete footings including excavation, reinforcement and concrete to support timber deck framing	m <sup>2</sup>	17	450.00	7,650.00
205 Timber framing to deck including fixings and connections	m <sup>2</sup>	17	650.00	11,050.00
206 Supply and install timber decking including fixings and connections	m <sup>2</sup>	17	400.00	6,800.00
<b>Timber Decking</b>				<b>\$28,560.00</b>
<b>Landscaping</b>				<b>\$1,163,132.50</b>
<b>FF Furniture, Fitments and Signage</b>				
199 Supply and install new proprietary bench seat including footings	No	13	2,850.00	37,050.00
198 Supply and install new proprietary bin enclosure including footing	No	1	2,200.00	2,200.00
197 Supply and install new proprietary bike racks including footing	No	12	950.00	11,400.00
219 Supply and install new hold rails to pedestrian crossings including footings	No	10	1,100.00	11,000.00
200 Supply and install new drinking fountain including associated connections	No	2	8,500.00	17,000.00
220 Supply and install bubbler water feature around artwork including associated infrastructure and pumps (PC Sum)	No	1	100,000.00	100,000.00
117 Supply and install smart outdoor screen including concrete footing and associated electrical connections	No	1	25,000.00	25,000.00
121 Supply and install smart signage	No	2	15,000.00	30,000.00

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### A WOODVILLE ROAD (continued)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
119 Supply and install smart bench including concrete footing and associated electrical connections	No	3	18,000.00	54,000.00
159 Supply and install powdercoated proprietary bollards including new footing	No	80	1,550.00	124,000.00
161 Reinstate existing bus stop signs	No	3	250.00	750.00
185 Supply and install new Adshell bus stop shelter including footings	No	2	18,000.00	36,000.00
160 No allowance to reinstall existing Telstra phone box including new footing	No	1		Excl.
164 Allowance to reinstall existing post box including new footing	No	1	1,500.00	1,500.00
202 Supply and install minor artwork	No	3	30,000.00	90,000.00
120 Supply and install smart parking sensors including fixing to road to either side of Woodville Road (PC Sum)	Item			100,000.00
123 Allowance for wayfinding and interpretive signage including footing	Item			15,000.00
122 Allowance sundry road signs including new post and footing	Item			6,000.00
125 Allowance for feature canopy to Civic Centre forecourt (approx. 60m2)	Item			150,000.00
134 No allowance for loose tables, chairs, umbrellas, etc - supplied by Tenant	Note			Excl.
<b>Furniture, Fitments and Signage</b>				<b>\$810,900.00</b>
<b>LI Lighting</b>				
127 Supply and install 12.0m charcoal coloured smart light pole including smart LED luminaire including footings, and connection into existing electrical infrastructure	No	21	6,500.00	136,500.00
149 Extra over for smart light capabilities including CCTV camera and WIFI modem	No	21	8,000.00	168,000.00
129 Supply and install building facade lighting including connection into existing electrical infrastructure	No	11	1,100.00	12,100.00
130 Supply and install artwork lighting including connection into existing electrical infrastructure	No	4	15,000.00	60,000.00
131 Supply and install lighting columns lighting including connection into existing electrical infrastructure	No	4	12,000.00	48,000.00
132 Supply and install tree up lighting including connection into existing electrical infrastructure	No	19	1,500.00	28,500.00
133 Supply and install furniture lighting including connection into existing electrical infrastructure	m	17	500.00	8,500.00
186 Allowance for projection lighting to town hall for opposite side of road including connections (PC Sum)	Item			100,000.00
143 Supply and install electrical supply to new lighting works including trenching, conduit, cabling and backfill	Item			165,000.00
144 Allowance for new switchboard for new lighting	Item			35,000.00
<b>Lighting</b>				<b>\$761,600.00</b>
<b>TS Traffic Signals</b>				
156 Allowance for modification works to existing pedestrian activated crossing	Item			75,000.00

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### A WOODVILLE ROAD (continued)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
157 No allowance to modify existing traffic signals at the Port Road and Woodville Road intersection	Note			Excl.
158 No allowance to modify existing traffic signals at the rail crossing	Note			Excl.
<b>Traffic Signals</b>				<b>\$75,000.00</b>
<b>SR Service Relocations</b>				
165 Relocate existing water main including excavation, decommissioning existing, bedding, new pipework, backfilling and reinstatement (Council contribution as advised by SA Water)	m	300	785.00	235,500.00
147 Allowance to adjust service lids to suit new footpath levels (PC Sum)	Item			300,000.00
148 Allowance to adjust service lids to suit new raised crossover levels (PC Sum)	Item			15,000.00
<b>Service Relocations</b>				<b>\$550,500.00</b>
<b>SW Stormwater</b>				
50 Relocate existing double side entry pits including excavation, bedding and backfilling	No	4	8,500.00	34,000.00
188 Allowance to adjust existing stormwater pits to suit new levels	Item			50,000.00
285 No allowance to replace or upgrade existing stormwater infrastructure	Note			Excl.
<b>Stormwater</b>				<b>\$84,000.00</b>
<b>COC Contractors On-Costs</b>				
286 Allowance for builders and temporary works	Item			152,500.00
135 Preliminaries and Supervision	Item			720,000.00
136 Traffic Management	Item			397,500.00
187 Extra over for night works	Item			185,000.00
<b>Contractors On-Costs</b>				<b>\$1,455,000.00</b>
<b>POC Project Contingencies</b>				
137 Design Development Contingency	Item			570,000.00
138 Construction Contingency	Item			740,000.00
<b>Project Contingencies</b>				<b>\$1,310,000.00</b>
<b>WOODVILLE ROAD</b>				<b>\$8,869,944.20</b>

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### B NORMAN STREET

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
<b>DE Demolition and Site Clearance</b>				
1 Clear site of rubbish and debris	m <sup>2</sup>	376	0.10	37.60
52 Saw cut existing bitumen road ready for removal	m	25	15.00	375.00
53 Saw cut existing concrete kerb ready for removal	No	2	40.00	80.00
54 Break up existing bitumen road pavement and remove debris from site	m <sup>2</sup>	161	22.50	3,622.50
56 Take up existing footpath pavers and dispose off site	m <sup>2</sup>	159	17.00	2,703.00
65 Take up existing garden beds and dispose off site	m <sup>2</sup>	52	15.00	780.00
71 Break up existing kerb and gutter and dispose debris off site	m	50	19.00	950.00
83 Allowance to take down and remove existing signage	Item			1,000.00
84 Allowance for sundry and unforeseen demolition	Item			5,000.00
<b>Demolition and Site Clearance</b>				<b>\$14,548.10</b>
<b>EW Earthworks</b>				
87 Box out existing subgrade ready for new unit pavers including disposal of spoil off site	m <sup>2</sup>	178	35.50	6,319.00
89 Box out to subgrade to new road crossovers including disposal of spoil off site	m <sup>2</sup>	159	43.50	6,916.50
94 No allowance for contaminated spoil remediation or disposal	Note			Excl.
96 No allowance for rock excavation	Note			Excl.
<b>Earthworks</b>				<b>\$13,235.50</b>
<b>PV Pavements</b>				
<b>FP Footpath Pavers</b>				
2 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	178	8.50	1,513.00
5 Supply and place crushed rock base course to new footpath unit pavers including trimming and compacting	m <sup>2</sup>	178	26.50	4,717.00
9 Supply and place Best Terrazzo unit pavers or similar on sand bed to new footpath (PC Sum \$90/m <sup>2</sup> )	m <sup>2</sup>	178	180.00	32,040.00
22 Form isolation joint or similar to junction of new pavers and existing buildings	m	17	28.00	476.00
27 Allowance to match into existing footpath	m	7	35.00	245.00
13 No allowance for concrete slab below footpath pavers	Note			Excl.
166 No allowance to seal pavers	Note			Excl.
<b>Footpath Pavers</b>				<b>\$38,991.00</b>
<b>DW Driveway Pavers</b>				
49 No allowance for concrete slab below driveway pavers	Note			Excl.
169 No allowance to seal pavers	Note			Excl.
<b>Driveway Pavers</b>				<b>Excl.</b>
<b>RC Road Crossovers</b>				
39 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	159	8.50	1,351.50
38 Supply and place crushed rock sub base to raised side street crossovers	m <sup>2</sup>	159	28.00	4,452.00
91 Construct concrete base to raised road crossover including formwork, reinforcement and concrete	m <sup>2</sup>	159	155.00	24,645.00

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### B NORMAN STREET (continued)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
41 Supply and place trafficable interlocking unit pavers on mortar bed (PC Supply \$55/m2)	m <sup>2</sup>	159	255.00	40,545.00
<b>Road Crossovers</b>				<b>\$70,993.50</b>
<b>KR Kerb Reinstatement</b>				
36 Allow to reinstate existing bitumen roadway 300mm wide where new kerb installed including sub base, base course, wearing course	m	4	95.00	380.00
<b>Kerb Reinstatement</b>				<b>\$380.00</b>
<b>Pavements</b>				<b>\$110,364.50</b>
<b>CW Concrete Works</b>				
14 Concrete kerb and gutter	m	4	85.00	340.00
19 Concrete edge kerb	m	51	65.00	3,315.00
175 Concrete bond beam (coloured)	m	22	280.00	6,160.00
21 Concrete flush edge to garden beds	m	35	60.00	2,100.00
170 No allowance for dark oxide to new kerbing	Note			Excl.
<b>Concrete Works</b>				<b>\$11,915.00</b>
<b>LM Line Marking</b>				
141 Allowance for miscellaneous road line marking	Item			1,500.00
<b>Line Marking</b>				<b>\$1,500.00</b>
<b>LA Landscaping</b>				
<b>GB Garden Beds</b>				
44 Detailed excavation and preparation for new garden beds including disposal of excess spoil off site	m <sup>2</sup>	37	43.00	1,591.00
51 Deep rip subgrade ready for new garden beds	m <sup>2</sup>	37	6.50	240.50
97 Supply and place imported topsoil to garden beds (assumed 300mm deep)	m <sup>2</sup>	37	33.00	1,221.00
98 Supply and place organic mulch to garden beds	m <sup>2</sup>	37	9.00	333.00
177 Supply and install irrigation to garden beds	m <sup>2</sup>	37	20.00	740.00
180 Supply and install conduits under footpath inbetween garden beds including excavation, bedding and backfilling	m	25	95.00	2,375.00
101 Supply and plant ground covers and shrubs to garden beds (assumed 3-4 plants/m2)	No	165	14.00	2,310.00
104 Supply and plant 200L verge trees including preparation works	No	4	1,500.00	6,000.00
178 Allowance for new water meter for irrigation supply	Item			2,500.00
179 Allowance to connect irrigation into existing water supply	Item			5,000.00
109 Allowance for sundry and feature plantings	Item			1,500.00
112 Allowance for 52 week maintenance period	Item			3,000.00
<b>Garden Beds</b>				<b>\$26,810.50</b>
<b>Landscaping</b>				<b>\$26,810.50</b>

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### B NORMAN STREET (continued)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
<b>FF Furniture, Fitments and Signage</b>				
199 Supply and install new proprietary bench seat including footings	No	4	2,850.00	11,400.00
122 Allowance sundry road signs including new post and footing	Item			750.00
134 No allowance for loose tables, chairs, umbrellas, etc - supplied by Tenant	Note			Excl.
<b>Furniture, Fitments and Signage</b>				<b>\$12,150.00</b>
<b>LI Lighting</b>				
189 No allowance for lighting or electrical works	Note			Excl.
<b>Lighting</b>				<b>Excl.</b>
<b>SR Service Relocations</b>				
147 Allowance to adjust service lids to suit new footpath levels (PC Sum)	Item			5,000.00
148 Allowance to adjust service lids to suit new raised crossover levels (PC Sum)	Item			10,000.00
<b>Service Relocations</b>				<b>\$15,000.00</b>
<b>SW Stormwater</b>				
188 Allowance to adjust existing stormwater pits to suit new levels	Item			7,500.00
285 No allowance to replace or upgrade existing stormwater infrastructure	Note			Excl.
<b>Stormwater</b>				<b>\$7,500.00</b>
<b>COC Contractors On-Costs</b>				
286 Allowance for builders and temporary works	Item			5,000.00
135 Preliminaries and Supervision	Item			25,000.00
136 Traffic Management	Item			15,000.00
187 Extra over for night works	Item			7,500.00
<b>Contractors On-Costs</b>				<b>\$52,500.00</b>
<b>POC Project Contingencies</b>				
137 Design Development Contingency	Item			20,000.00
138 Construction Contingency	Item			30,000.00
<b>Project Contingencies</b>				<b>\$50,000.00</b>
<b>NORMAN STREET</b>				<b>\$315,523.60</b>

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### C KEMP STREET

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
<b>DE Demolition and Site Clearance</b>				
1 Clear site of rubbish and debris	m <sup>2</sup>	162	0.10	16.20
52 Saw cut existing bitumen road ready for removal	m	24	15.00	360.00
53 Saw cut existing concrete kerb ready for removal	No	2	40.00	80.00
54 Break up existing bitumen road pavement and remove debris from site	m <sup>2</sup>	128	22.50	2,880.00
55 Break up existing concrete pavement and dispose debris off site	m <sup>2</sup>	25	35.00	875.00
56 Take up existing footpath pavers and dispose off site	m <sup>2</sup>	26	17.00	442.00
71 Break up existing kerb and gutter and dispose debris off site	m	36	19.00	684.00
83 Allowance to take down and remove existing signage	Item			1,000.00
84 Allowance for sundry and unforeseen demolition	Item			5,000.00
<b>Demolition and Site Clearance</b>				<b>\$11,337.20</b>
<b>EW Earthworks</b>				
87 Box out existing subgrade ready for new unit pavers including disposal of spoil off site	m <sup>2</sup>	53	35.50	1,881.50
89 Box out to subgrade to new road crossovers including disposal of spoil off site	m <sup>2</sup>	117	43.50	5,089.50
94 No allowance for contaminated spoil remediation or disposal	Note			Excl.
96 No allowance for rock excavation	Note			Excl.
<b>Earthworks</b>				<b>\$6,971.00</b>
<b>PV Pavements</b>				
<b>FP Footpath Pavers</b>				
2 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	53	8.50	450.50
5 Supply and place crushed rock base course to new footpath unit pavers including trimming and compacting	m <sup>2</sup>	53	26.50	1,404.50
9 Supply and place Best Terrazzo unit pavers or similar on sand bed to new footpath (PC Sum \$90/m <sup>2</sup> )	m <sup>2</sup>	53	180.00	9,540.00
22 Form isolation joint or similar to junction of new pavers and existing buildings	m	19	28.00	532.00
27 Allowance to match into existing footpath	m	5	35.00	175.00
13 No allowance for concrete slab below footpath pavers	Note			Excl.
166 No allowance to seal pavers	Note			Excl.
<b>Footpath Pavers</b>				<b>\$12,102.00</b>
<b>RC Road Crossovers</b>				
39 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	117	8.50	994.50
38 Supply and place crushed rock sub base to raised side street crossovers	m <sup>2</sup>	117	28.00	3,276.00
91 Construct concrete base to raised road crossover including formwork, reinforcement and concrete	m <sup>2</sup>	117	155.00	18,135.00
41 Supply and place trafficable interlocking unit pavers on mortar bed (PC Supply \$55/m <sup>2</sup> )	m <sup>2</sup>	117	255.00	29,835.00
<b>Road Crossovers</b>				<b>\$52,240.50</b>
<b>Pavements</b>				<b>\$64,342.50</b>

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### C KEMP STREET (continued)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
<b>CW Concrete Works</b>				
19 Concrete edge kerb	m	40	65.00	2,600.00
175 Concrete bond beam (coloured)	m	22	280.00	6,160.00
170 No allowance for dark oxide to new kerbing	Note			Excl.
<b>Concrete Works</b>				<b>\$8,760.00</b>
<b>LM Line Marking</b>				
141 Allowance for miscellaneous road line marking	Item			1,000.00
<b>Line Marking</b>				<b>\$1,000.00</b>
<b>LA Landscaping</b>				
<b>GB Garden Beds</b>				
104 Supply and plant 200L verge trees including preparation works	No	1	1,500.00	1,500.00
109 Allowance for sundry and feature plantings	Item			1,500.00
112 Allowance for 52 week maintenance period	Item			3,000.00
<b>Garden Beds</b>				<b>\$6,000.00</b>
<b>Landscaping</b>				<b>\$6,000.00</b>
<b>FF Furniture, Fitments and Signage</b>				
122 Allowance sundry road signs including new post and footing	Item			750.00
134 No allowance for loose tables, chairs, umbrellas, etc - supplied by Tenant	Note			Excl.
<b>Furniture, Fitments and Signage</b>				<b>\$750.00</b>
<b>LI Lighting</b>				
189 No allowance for lighting or electrical works	Note			Excl.
<b>Lighting</b>				<b>Excl.</b>
<b>SR Service Relocations</b>				
147 Allowance to adjust service lids to suit new footpath levels (PC Sum)	Item			10,000.00
148 Allowance to adjust service lids to suit new raised crossover levels (PC Sum)	Item			7,500.00
<b>Service Relocations</b>				<b>\$17,500.00</b>
<b>SW Stormwater</b>				
188 Allowance to adjust existing stormwater pits to suit new levels	Item			5,000.00
285 No allowance to replace or upgrade existing stormwater infrastructure	Note			Excl.
<b>Stormwater</b>				<b>\$5,000.00</b>
<b>COC Contractors On-Costs</b>				
286 Allowance for builders and temporary works	Item			2,500.00
135 Preliminaries and Supervision	Item			15,000.00
136 Traffic Management	Item			7,500.00
187 Extra over for night works	Item			2,500.00
<b>Contractors On-Costs</b>				<b>\$27,500.00</b>

**Woodville Road Streetscape**  
Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

**C KEMP STREET (continued)**

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
<b>POC Project Contingencies</b>				
137 Design Development Contingency	Item			10,000.00
138 Construction Contingency	Item			10,000.00
			<b>Project Contingencies</b>	<b>\$20,000.00</b>
			<b>KEMP STREET</b>	<b>\$169,160.70</b>

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### D PLAZA AND MIXED USE DEVELOPMENT SITE

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
<b>DE Demolition and Site Clearance</b>				
1 Clear site of rubbish and debris	m <sup>2</sup>	6,603	0.10	660.30
69 Cut down existing small tree including grubbing out roots	No	5	380.00	1,900.00
68 Cut down existing medium tree including grubbing out roots	No	10	850.00	8,500.00
67 Cut down existing large tree including grubbing out roots	No	3	2,500.00	7,500.00
63 Break up existing bitumen carpark pavement and remove debris from site	m <sup>2</sup>	2,894	10.50	30,387.00
56 Take up existing footpath pavers and dispose off site	m <sup>2</sup>	30	17.00	510.00
66 Take up existing trafficable pavers and dispose debris off site	m <sup>2</sup>	32	19.00	608.00
62 Take up existing gravel pavement from carpark and dispose dpoil off site	m <sup>2</sup>	3,182	5.50	17,501.00
74 Break up existing concrete median and dispose debris off site	m <sup>2</sup>	3	55.00	165.00
65 Take up existing garden beds and dispose off site	m <sup>2</sup>	612	15.00	9,180.00
75 Break up existing spoon drain and dispose debris off site	m	87	25.00	2,175.00
73 Break up existing median kerb and dispose debris off site	m	422	18.00	7,596.00
110 Allowance to protect existing trees throughout works	No	8	80.00	640.00
218 Allowance to demolish existing wall and outdoor dining area infront of NNQ including disposal of spoil off site	Item			5,000.00
84 Allowance for sundry and unforeseen demolition	Item			10,000.00
86 No allowance for alterations to existing verandas and structures to remain	Note			Excl.
<b>Demolition and Site Clearance</b>				<b>\$102,322.30</b>
<b>EW Earthworks</b>				
87 Box out existing subgrade ready for new unit pavers including disposal of spoil off site	m <sup>2</sup>	559	35.50	19,844.50
146 Box out existing subgrade ready for new plaza unit pavers including disposal of spoil off site	m <sup>2</sup>	648	38.50	24,948.00
89 Box out to subgrade to new road crossovers including disposal of spoil off site	m <sup>2</sup>	26	43.50	1,131.00
94 No allowance for contaminated spoil remediation or disposal	Note			Excl.
96 No allowance for rock excavation	Note			Excl.
<b>Earthworks</b>				<b>\$45,923.50</b>
<b>PV Pavements</b>				
<b>FP Footpath Pavers</b>				
2 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	559	8.50	4,751.50
5 Supply and place crushed rock base course to new footpath unit pavers including trimming and compacting	m <sup>2</sup>	559	26.50	14,813.50
9 Supply and place Best Terrazzo unit pavers or similar on sand bed to new footpath (PC Sum \$90/m2)	m <sup>2</sup>	559	180.00	100,620.00
13 No allowance for concrete slab below footpath pavers	Note			Excl.
166 No allowance to seal pavers	Note			Excl.
<b>Footpath Pavers</b>				<b>\$120,185.00</b>

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### D PLAZA AND MIXED USE DEVELOPMENT SITE (continued)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
<b>PP Plaza Pavers</b>				
26 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	648	8.50	5,508.00
8 Supply and place crushed rock base course to new plaza unit pavers including trimming and compacting	m <sup>2</sup>	648	26.50	17,172.00
12 Supply and place Urbanstone concrete pavers or similar to Plaza areas (PC Sum \$150/m <sup>2</sup> )	m <sup>2</sup>	648	285.00	184,680.00
43 No allowance for concrete slab below plaza pavers	Note			Excl.
167 No allowance to seal pavers	Note			Excl.
<b>Plaza Pavers</b>				<b>\$207,360.00</b>
<b>RC Road Crossovers</b>				
39 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	26	8.50	221.00
38 Supply and place crushed rock sub base to raised side street crossovers	m <sup>2</sup>	26	28.00	728.00
91 Construct concrete base to raised road crossover including formwork, reinforcement and concrete	m <sup>2</sup>	26	155.00	4,030.00
41 Supply and place trafficable interlocking unit pavers on mortar bed (PC Supply \$55/m <sup>2</sup> )	m <sup>2</sup>	26	255.00	6,630.00
<b>Road Crossovers</b>				<b>\$11,609.00</b>
<b>KR Kerb Reinstatement</b>				
36 Allow to reinstate existing bitumen roadway 300mm wide where new kerb installed including sub base, base course, wearing course	m	11	95.00	1,045.00
<b>Kerb Reinstatement</b>				<b>\$1,045.00</b>
<b>Pavements</b>				<b>\$340,199.00</b>
<b>MUD Mixed Use Development Site and Carpark</b>				
150 Grade mixed-use development site to set levels	m <sup>2</sup>	5,119	1.50	7,678.50
152 Supply and place crushed rock base to mixed used development site for future developments	m <sup>2</sup>	5,119	15.00	76,785.00
<b>Mixed Use Development Site and Carpark</b>				<b>\$84,463.50</b>
<b>CW Concrete Works</b>				
14 Concrete kerb and gutter	m	11	85.00	935.00
19 Concrete edge kerb	m	10	65.00	650.00
21 Concrete flush edge to garden beds	m	169	60.00	10,140.00
170 No allowance for dark oxide to new kerbing	Note			Excl.
<b>Concrete Works</b>				<b>\$11,725.00</b>
<b>LA Landscaping</b>				
<b>GB Garden Beds</b>				
44 Detailed excavation and preparation for new garden beds including disposal of excess spoil off site	m <sup>2</sup>	148	43.00	6,364.00
51 Deep rip subgrade ready for new garden beds	m <sup>2</sup>	148	6.50	962.00
97 Supply and place imported topsoil to garden beds (assumed 300mm deep)	m <sup>2</sup>	148	33.00	4,884.00
98 Supply and place organic mulch to garden beds	m <sup>2</sup>	148	9.00	1,332.00

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### D PLAZA AND MIXED USE DEVELOPMENT SITE (continued)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
177 Supply and install irrigation to garden beds	m <sup>2</sup>	148	20.00	2,960.00
180 Supply and install conduits under footpath inbetween garden beds including excavation, bedding and backfilling	m	29	95.00	2,755.00
101 Supply and plant ground covers and shrubs to garden beds (assumed 3-4 plants/m2)	No	663	14.00	9,282.00
108 Supply and plant feature trees to plaza areas including preparation works	No	8	5,500.00	44,000.00
196 Supply and install tree grates	No	4	4,500.00	18,000.00
178 Allowance for new water meter for irrigation supply	Item			5,000.00
179 Allowance to connect irrigation into existing water supply	Item			5,000.00
109 Allowance for sundry and feature plantings	Item			2,500.00
112 Allowance for 52 week maintenance period	Item			9,000.00
<b>Garden Beds</b>				<b>\$112,039.00</b>
<b>TD Timber Decking</b>				
203 Locally excavate ground below deck to accommodate sub frame including stockpiling spoil on site	m <sup>2</sup>	41	180.00	7,380.00
204 Concrete footings including excavation, reinforcement and concrete to support timber deck framing	m <sup>2</sup>	41	450.00	18,450.00
205 Timber framing to deck including fixings and connections	m <sup>2</sup>	41	650.00	26,650.00
206 Supply and install timber decking including fixings and connections	m <sup>2</sup>	41	400.00	16,400.00
<b>Timber Decking</b>				<b>\$68,880.00</b>
<b>Landscaping</b>				<b>\$180,919.00</b>
<b>FF Furniture, Fitments and Signage</b>				
199 Supply and install new proprietary bench seat including footings	No	14	2,850.00	39,900.00
197 Supply and install new proprietary bike racks including footing	No	4	950.00	3,800.00
220 Supply and install bubbler water feature around artwork including associated infrastructure and pumps (PC Sum)	No	1	100,000.00	100,000.00
118 Supply and install smart pole including concrete footing and associated electrical connections	No	1	20,000.00	20,000.00
119 Supply and install smart bench including concrete footing and associated electrical connections	No	1	18,000.00	18,000.00
202 Supply and install minor artwork	No	2	30,000.00	60,000.00
123 Allowance for wayfinding and interpretive signage including footing	Item			10,000.00
122 Allowance sundry road signs including new post and footing	Item			3,000.00
134 No allowance for loose tables, chairs, umbrellas, etc - supplied by Tenant	Note			Excl.
<b>Furniture, Fitments and Signage</b>				<b>\$254,700.00</b>
<b>LI Lighting</b>				
128 Supply and install 7.0m high charcoal coloured light pole including LED luminaire including footings, and connection into existing electrical infrastructure	No	3	3,500.00	10,500.00

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### D PLAZA AND MIXED USE DEVELOPMENT SITE (continued)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
129 Supply and install building facade lighting including connection into existing electrical infrastructure	No	1	1,100.00	1,100.00
130 Supply and install artwork lighting including connection into existing electrical infrastructure	No	2	15,000.00	30,000.00
131 Supply and install lighting columns lighting including connection into existing electrical infrastructure	No	1	12,000.00	12,000.00
132 Supply and install tree up lighting including connection into existing electrical infrastructure	No	10	1,500.00	15,000.00
133 Supply and install furniture lighting including connection into existing electrical infrastructure	m	15	500.00	7,500.00
143 Supply and install electrical supply to new lighting works including trenching, conduit, cabling and backfill	Item			60,000.00
<b>Lighting</b>				<b>\$136,100.00</b>
<b>SR Service Relocations</b>				
147 Allowance to adjust service lids to suit new footpath levels (PC Sum)	Item			30,000.00
<b>Service Relocations</b>				<b>\$30,000.00</b>
<b>SW Stormwater</b>				
285 No allowance to replace or upgrade existing stormwater infrastructure	Note			Excl.
<b>Stormwater</b>				<b>Excl.</b>
<b>PT Public Toilets</b>				
140 No allowance for Public Toilets to Plaza area	Note			Excl.
<b>Public Toilets</b>				<b>Excl.</b>
<b>COC Contractors On-Costs</b>				
286 Allowance for builders and temporary works	Item			30,000.00
135 Preliminaries and Supervision	Item			140,000.00
136 Traffic Management	Item			77,500.00
187 Extra over for night works	Item			35,000.00
<b>Contractors On-Costs</b>				<b>\$282,500.00</b>
<b>POC Project Contingencies</b>				
137 Design Development Contingency	Item			110,000.00
138 Construction Contingency	Item			140,000.00
<b>Project Contingencies</b>				<b>\$250,000.00</b>
<b>PLAZA AND MIXED USE DEVELOPMENT SITE</b>				<b>\$1,718,852.30</b>

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### E PORT ROAD MEDIAN LANDSCAPING WORKS

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
<b>DE Demolition and Site Clearance</b>				
284 Clear site of rubbish and debris (By CCS)	m <sup>2</sup>	4,050		Excl.
283 Saw cut existing concrete kerb ready for removal (By CCS)	No	4		Excl.
282 Break up existing kerb and gutter and dispose debris off site (By CCS)	m	105		Excl.
281 Allowance to protect existing trees throughout works (By CCS)	No	20		Excl.
239 Break up existing stone retaining wall and dispose debris off site (By CCS)	m	115		Excl.
267 Break up existing concrete pavement and dispose debris off site (By CCS)	m <sup>2</sup>	533		Excl.
268 Take up existing landscaping and dispose spoil off site (By CCS)	m <sup>2</sup>	3,528		Excl.
270 No allowance for demolition works to Port Road Median - assumed to be undertaken by CCS	Note			Excl.
<b>Demolition and Site Clearance</b>				<b>Excl.</b>
<b>EW Earthworks</b>				
261 Box out existing subgrade ready for new unit pavers including disposal of spoil off site	m <sup>2</sup>	594	55.00	32,670.00
262 Box out existing subgrade ready for new concrete shared path including disposal of spoil off site	m <sup>2</sup>	292	38.50	11,242.00
265 Box out existing subgrade ready for granitic sand including disposal of spoil off site	m <sup>2</sup>	652	22.50	14,670.00
<b>Earthworks</b>				<b>\$58,582.00</b>
<b>PV Pavements</b>				
<b>PRMP Port Road Median Paving</b>				
246 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	594	8.50	5,049.00
247 Supply and place crushed rock base course to new footpath unit pavers including trimming and compacting	m <sup>2</sup>	594	38.00	22,572.00
248 Supply and place Urbanstone concrete pavers or similar to Road Median (PC Sum \$150/m <sup>2</sup> )	m <sup>2</sup>	594	305.00	181,170.00
249 No allowance for concrete slab below footpath pavers	Note			Excl.
250 No allowance to seal pavers	Note			Excl.
<b>Port Road Median Paving</b>				<b>\$208,791.00</b>
<b>SP Shared Path</b>				
241 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	292	10.50	3,066.00
242 Supply and place crushed rock base course to new concrete footpath including trimming and compacting	m <sup>2</sup>	292	26.50	7,738.00
243 Construct concrete pavement including formwork, reinforcement and concrete	m <sup>2</sup>	292	125.00	36,500.00
245 Exposed aggregate finish to concrete pavement	m <sup>2</sup>	292	25.00	7,300.00
<b>Shared Path</b>				<b>\$54,604.00</b>
<b>GS Granitic Sand</b>				
252 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	652	8.50	5,542.00

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### E PORT ROAD MEDIAN LANDSCAPING WORKS (continued)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
254 Compacted cement stabilised granitic sand	m <sup>2</sup>	652	55.00	35,860.00
<b>Granitic Sand</b>				<b>\$41,402.00</b>
<b>KR Kerb Reinstatement</b>				
36 Allow to reinstate existing bitumen roadway 300mm wide where new kerb installed including sub base, base course, wearing course	m	105	95.00	9,975.00
<b>Kerb Reinstatement</b>				<b>\$9,975.00</b>
<b>Pavements</b>				<b>\$314,772.00</b>
<b>CW Concrete Works</b>				
14 Concrete kerb and gutter	m	105	85.00	8,925.00
17 Kerb ramp	No	9	1,450.00	13,050.00
<b>Concrete Works</b>				<b>\$21,975.00</b>
<b>LA Landscaping</b>				
<b>GB Garden Beds</b>				
44 Detailed excavation and preparation for new garden beds including disposal of excess spoil off site	m <sup>2</sup>	1,009	43.00	43,387.00
51 Deep rip subgrade ready for new garden beds	m <sup>2</sup>	1,009	6.50	6,558.50
97 Supply and place imported topsoil to garden beds (assumed 300mm deep)	m <sup>2</sup>	1,009	33.00	33,297.00
98 Supply and place organic mulch to garden beds	m <sup>2</sup>	1,009	9.00	9,081.00
177 Supply and install irrigation to garden beds	m <sup>2</sup>	1,009	20.00	20,180.00
255 Supply and install steel edging to garden bed and granitic sand	m	599	45.00	26,955.00
101 Supply and plant ground covers and shrubs to garden beds (assumed 3-4 plants/m <sup>2</sup> )	No	4,538	14.00	63,532.00
<b>Garden Beds</b>				<b>\$202,990.50</b>
<b>TU Turf</b>				
256 Detailed and preparation for new turf areas including disposal of excess spoil off site	m <sup>2</sup>	1,527	35.50	54,208.50
257 Deep rip and cultivate subgrade ready for new lawn beds	m <sup>2</sup>	1,527	5.50	8,398.50
258 Supply and place imported topsoil 200mm depth	m <sup>2</sup>	1,527	25.00	38,175.00
259 Supply and place instant turf	m <sup>2</sup>	1,527	17.00	25,959.00
260 No allowance for irrigation system to turf areas	m <sup>2</sup>	1,527	20.00	30,540.00
<b>Turf</b>				<b>\$157,281.00</b>
<b>Landscaping</b>				<b>\$360,271.50</b>
<b>FF Furniture, Fitments and Signage</b>				
271 Construct concrete seating walls with timber battens including footings	m	32	2,500.00	80,000.00
199 Supply and install new proprietary bench seat including footings	No	20	2,850.00	57,000.00
198 Supply and install new proprietary bin enclosure including footing	No	2	2,200.00	4,400.00
197 Supply and install new proprietary bike racks including footing	No	10	950.00	9,500.00

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### E PORT ROAD MEDIAN LANDSCAPING WORKS (continued)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
200 Supply and install new drinking fountain including associated connections	No	2	8,500.00	17,000.00
159 Supply and install powdercoated proprietary bollards including new footing	No	20	1,550.00	31,000.00
201 Supply and install major artwork	No	2	125,000.00	250,000.00
<b>Furniture, Fitments and Signage</b>				<b>\$448,900.00</b>
<b>LI Lighting</b>				
130 Supply and install artwork lighting including connection into existing electrical infrastructure	No	2	15,000.00	30,000.00
240 No allowance for new road or pedestrian lighting	Note			Excl.
<b>Lighting</b>				<b>\$30,000.00</b>
<b>TS Traffic Signals</b>				
277 Allowance to protect existing traffic signals during construction period	No	9	100.00	900.00
279 Allowance to protect existing communications cabinet during construction period	No	2	100.00	200.00
<b>Traffic Signals</b>				<b>\$1,100.00</b>
<b>SR Service Relocations</b>				
278 Retain existing water pit lid and adjust to suit new levels	No	2	2,000.00	4,000.00
275 Retain existing small Telstra pits and adjust to suit new levels	No	1	5,000.00	5,000.00
274 Retain existing large Telstra pits and adjust to suit new levels	No	2	20,000.00	40,000.00
276 Retain existing large electrical pits and adjust to suit new levels	No	4	20,000.00	80,000.00
280 Allowance to protect existing stobie pole throughout construction period	No	11	100.00	1,100.00
<b>Service Relocations</b>				<b>\$130,100.00</b>
<b>SW Stormwater</b>				
285 No allowance to replace or upgrade existing stormwater infrastructure	Note			Excl.
<b>Stormwater</b>				<b>Excl.</b>
<b>COC Contractors On-Costs</b>				
286 Allowance for builders and temporary works	Item			35,000.00
135 Preliminaries and Supervision	Item			160,000.00
136 Traffic Management	Item			90,000.00
187 Extra over for night works	Item			42,500.00
<b>Contractors On-Costs</b>				<b>\$327,500.00</b>
<b>POC Project Contingencies</b>				
137 Design Development Contingency	Item			130,000.00
138 Construction Contingency	Item			170,000.00
<b>Project Contingencies</b>				<b>\$300,000.00</b>
<b>PORT ROAD MEDIAN LANDSCAPING WORKS</b>				<b>\$1,993,200.50</b>

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### F MEALS ON WHEELS CARPARK

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
<b>DE Demolition and Site Clearance</b>				
1 Clear site of rubbish and debris	m <sup>2</sup>	662	0.10	66.20
55 Break up existing concrete pavement and dispose debris off site	m <sup>2</sup>	157	35.00	5,495.00
272 Take up existing landscaping and dispose spoil off site	m <sup>2</sup>	294	18.00	5,292.00
221 Demolish existing building and dispose debris off site	m <sup>2</sup>	213	100.00	21,300.00
71 Break up existing kerb and gutter and dispose debris off site	m	3	19.00	57.00
72 Break up existing driveway crossover and dispose debris off site	m	16	30.00	480.00
<b>Demolition and Site Clearance</b>				<b>\$32,690.20</b>
<b>EW Earthworks</b>				
224 Box out existing subgrade ready for new concrete footpath including disposal of spoil off site	m <sup>2</sup>	33	43.50	1,435.50
263 Box out existing subgrade ready for new carpark pavement including disposal of spoil off site	m <sup>2</sup>	468	38.50	18,018.00
<b>Earthworks</b>				<b>\$19,453.50</b>
<b>PV Pavements</b>				
<b>CP Concrete Footpath</b>				
223 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	33	10.50	346.50
225 Supply and place crushed rock base course to new concrete footpath including trimming and compacting	m <sup>2</sup>	33	26.50	874.50
226 Construct concrete pavement including formwork, reinforcement and concrete	m <sup>2</sup>	33	125.00	4,125.00
228 Allowance to match into existing footpath	m	4	55.00	220.00
227 No allowance for exposed aggregate finish to concrete pavement	Note			Excl.
<b>Concrete Footpath</b>				<b>\$5,566.00</b>
<b>CARP Carpark</b>				
229 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	468	8.50	3,978.00
230 Supply and place crushed rock sub base to new carpark including trimming and compacting	m <sup>2</sup>	468	19.50	9,126.00
231 Supply and place fine crushed rock base course to new carpark including trimming and compacting	m <sup>2</sup>	404	23.50	9,494.00
232 Supply and place prime	m <sup>2</sup>	404	4.50	1,818.00
233 Supply and place asphalt	m <sup>2</sup>	404	38.50	15,554.00
<b>Carpark</b>				<b>\$39,970.00</b>
<b>KR Kerb Reinstatement</b>				
36 Allow to reinstate existing bitumen roadway 300mm wide where new kerb installed including sub base, base course, wearing course	m	28	95.00	2,660.00
<b>Kerb Reinstatement</b>				<b>\$2,660.00</b>
<b>Pavements</b>				<b>\$48,196.00</b>
<b>CW Concrete Works</b>				
14 Concrete kerb and gutter	m	91	85.00	7,735.00

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### F MEALS ON WHEELS CARPARK (continued)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
20 Concrete driveway crossover	m	16	140.00	2,240.00
<b>Concrete Works</b>				<b>\$9,975.00</b>
<b>LM Line Marking</b>				
234 Allowance for line marking to carpark	Item			1,500.00
<b>Line Marking</b>				<b>\$1,500.00</b>
<b>LA Landscaping</b>				
<b>GB Garden Beds</b>				
44 Detailed excavation and preparation for new garden beds including disposal of excess spoil off site	m <sup>2</sup>	227	43.00	9,761.00
51 Deep rip subgrade ready for new garden beds	m <sup>2</sup>	227	6.50	1,475.50
97 Supply and place imported topsoil to garden beds (assumed 300mm deep)	m <sup>2</sup>	227	33.00	7,491.00
98 Supply and place organic mulch to garden beds	m <sup>2</sup>	227	9.00	2,043.00
177 Supply and install irrigation to garden beds	m <sup>2</sup>	227	20.00	4,540.00
101 Supply and plant ground covers and shrubs to garden beds (assumed 3-4 plants/m2)	No	1,021	14.00	14,294.00
235 Supply and install 200L tree including preparation	No	8	1,500.00	12,000.00
178 Allowance for new water meter for irrigation supply	Item			2,500.00
179 Allowance to connect irrigation into existing water supply	Item			2,500.00
112 Allowance for 52 week maintenance period	Item			2,500.00
<b>Garden Beds</b>				<b>\$59,104.50</b>
<b>Landscaping</b>				<b>\$59,104.50</b>
<b>LI Lighting</b>				
273 Allowance for lighting for new carpark including connections to existing	Item			60,000.00
<b>Lighting</b>				<b>\$60,000.00</b>
<b>SW Stormwater</b>				
237 Allowance for minor stormwater to carpark including pits and pipe	m <sup>2</sup>	404	35.00	14,140.00
<b>Stormwater</b>				<b>\$14,140.00</b>
<b>COC Contractors On-Costs</b>				
286 Allowance for builders and temporary works	Item			7,500.00
135 Preliminaries and Supervision	Item			30,000.00
238 Traffic Management	Item			6,000.00
<b>Contractors On-Costs</b>				<b>\$43,500.00</b>
<b>POC Project Contingencies</b>				
137 Design Development Contingency	Item			20,000.00
138 Construction Contingency	Item			30,000.00
<b>Project Contingencies</b>				<b>\$50,000.00</b>
<b>MEALS ON WHEELS CARPARK</b>				<b>\$338,559.20</b>

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Summary

Rates Current At March 2019

Location	Total Cost
BR NORMAN STREET (REMOVED SCOPE)	546,507.80
CR KEMP STREET (REMOVED SCOPE)	207,507.50
<b>ESTIMATED NET COST</b>	<b>\$754,015.30</b>
 <b>MARGINS &amp; ADJUSTMENTS</b>	
Professional Fees and Charges	Excl.
Escalation Beyond mid 2019	Excl.
Goods and Services Taxation	Excl.
<b>ESTIMATED TOTAL COST</b>	<b>\$754,015.30</b>

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### BR NORMAN STREET (REMOVED SCOPE)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
<b>DE Demolition and Site Clearance</b>				
1 Clear site of rubbish and debris	m <sup>2</sup>	1,178	0.10	117.80
55 Break up existing concrete pavement and dispose debris off site	m <sup>2</sup>	341	35.00	11,935.00
56 Take up existing footpath pavers and dispose off site	m <sup>2</sup>	552	17.00	9,384.00
65 Take up existing garden beds and dispose off site	m <sup>2</sup>	292	15.00	4,380.00
110 Allowance to protect existing trees throughout works	No	14	80.00	1,120.00
86 No allowance for alterations to existing verandas and structures to remain	Note			Excl.
<b>Demolition and Site Clearance</b>				<b>\$26,936.80</b>
<b>EW Earthworks</b>				
87 Box out existing subgrade ready for new unit pavers including disposal of spoil off site	m <sup>2</sup>	686	35.50	24,353.00
88 Box out existing subgrade ready for new trafficable unit pavers including disposal of spoil off site	m <sup>2</sup>	100	48.50	4,850.00
94 No allowance for contaminated spoil remediation or disposal	Note			Excl.
96 No allowance for rock excavation	Note			Excl.
<b>Earthworks</b>				<b>\$29,203.00</b>
<b>PV Pavements</b>				
<b>FP Footpath Pavers</b>				
2 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	686	8.50	5,831.00
5 Supply and place crushed rock base course to new footpath unit pavers including trimming and compacting	m <sup>2</sup>	686	26.50	18,179.00
9 Supply and place Best Terrazzo unit pavers or similar on sand bed to new footpath (PC Sum \$90/m <sup>2</sup> )	m <sup>2</sup>	686	180.00	123,480.00
22 Form isolation joint or similar to junction of new pavers and existing buildings	m	9	28.00	252.00
13 No allowance for concrete slab below footpath pavers	Note			Excl.
166 No allowance to seal pavers	Note			Excl.
<b>Footpath Pavers</b>				<b>\$147,742.00</b>
<b>DW Driveway Pavers</b>				
25 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	100	8.50	850.00
6 Supply and place crushed rock as sub base to new driveway unit pavers including trimming and compacting	m <sup>2</sup>	100	26.50	2,650.00
7 Supply and place fine crushed rock base course to new driveway pavers including trimming and compacting	m <sup>2</sup>	100	29.50	2,950.00
11 Supply and place Best trafficable unit paver or similar to driveways (PC Sum \$110/m <sup>2</sup> )	m <sup>2</sup>	100	230.00	23,000.00
49 No allowance for concrete slab below driveway pavers	Note			Excl.
169 No allowance to seal pavers	Note			Excl.
<b>Driveway Pavers</b>				<b>\$29,450.00</b>
<b>Pavements</b>				<b>\$177,192.00</b>
<b>CW Concrete Works</b>				
21 Concrete flush edge to garden beds	m	270	60.00	16,200.00

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

**BR NORMAN STREET (REMOVED SCOPE) (continued)**

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
170 No allowance for dark oxide to new kerbing	Note			Excl.
<b>Concrete Works</b>				<b>\$16,200.00</b>
<b>LA Landscaping</b>				
<b>GB Garden Beds</b>				
44 Detailed excavation and preparation for new garden beds including disposal of excess spoil off site	m <sup>2</sup>	384	43.00	16,512.00
51 Deep rip subgrade ready for new garden beds	m <sup>2</sup>	384	6.50	2,496.00
97 Supply and place imported topsoil to garden beds (assumed 300mm deep)	m <sup>2</sup>	384	33.00	12,672.00
98 Supply and place organic mulch to garden beds	m <sup>2</sup>	384	9.00	3,456.00
177 Supply and install irrigation to garden beds	m <sup>2</sup>	384	20.00	7,680.00
180 Supply and install conduits under footpath inbetween garden beds including excavation, bedding and backfilling	m	118	95.00	11,210.00
101 Supply and plant ground covers and shrubs to garden beds (assumed 3-4 plants/m2)	No	1,725	14.00	24,150.00
104 Supply and plant 200L verge trees including preparation works	No	4	1,500.00	6,000.00
<b>Garden Beds</b>				<b>\$84,176.00</b>
<b>Landscaping</b>				<b>\$84,176.00</b>
<b>FF Furniture, Fitments and Signage</b>				
199 Supply and install new proprietary bench seat including footings	No	8	2,850.00	22,800.00
<b>Furniture, Fitments and Signage</b>				<b>\$22,800.00</b>
<b>LI Lighting</b>				
189 No allowance for lighting or electrical works	Note			Excl.
<b>Lighting</b>				<b>Excl.</b>
<b>SR Service Relocations</b>				
147 Allowance to adjust service lids to suit new footpath levels (PC Sum)	Item			10,000.00
<b>Service Relocations</b>				<b>\$10,000.00</b>
<b>SW Stormwater</b>				
188 Allowance to adjust existing stormwater pits to suit new levels	Item			7,500.00
285 No allowance to replace or upgrade existing stormwater infrastructure	Note			Excl.
<b>Stormwater</b>				<b>\$7,500.00</b>
<b>COC Contractors On-Costs</b>				
286 Allowance for builders and temporary works	Item			10,000.00
135 Preliminaries and Supervision	Item			45,000.00
136 Traffic Management	Item			25,000.00
187 Extra over for night works	Item			12,500.00
<b>Contractors On-Costs</b>				<b>\$92,500.00</b>
<b>POC Project Contingencies</b>				
137 Design Development Contingency	Item			30,000.00

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

**BR NORMAN STREET (REMOVED SCOPE) (continued)**

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
138 Construction Contingency	Item			50,000.00
<i>Project Contingencies</i>				<b><u>\$80,000.00</u></b>
<b>NORMAN STREET (REMOVED SCOPE)</b>				<b><u>\$546,507.80</u></b>

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### CR KEMP STREET (REMOVED SCOPE)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
<b>DE Demolition and Site Clearance</b>				
1 Clear site of rubbish and debris	m <sup>2</sup>	280	0.10	28.00
54 Break up existing bitumen road pavement and remove debris from site	m <sup>2</sup>	130	22.50	2,925.00
55 Break up existing concrete pavement and dispose debris off site	m <sup>2</sup>	53	35.00	1,855.00
56 Take up existing footpath pavers and dispose off site	m <sup>2</sup>	101	17.00	1,717.00
71 Break up existing kerb and gutter and dispose debris off site	m	41	19.00	779.00
86 No allowance for alterations to existing verandas and structures to remain	Note			Excl.
<b>Demolition and Site Clearance</b>				<b>\$7,304.00</b>
<b>EW Earthworks</b>				
87 Box out existing subgrade ready for new unit pavers including disposal of spoil off site	m <sup>2</sup>	137	35.50	4,863.50
89 Box out to subgrade to new road crossovers including disposal of spoil off site	m <sup>2</sup>	124	43.50	5,394.00
94 No allowance for contaminated spoil remediation or disposal	Note			Excl.
96 No allowance for rock excavation	Note			Excl.
<b>Earthworks</b>				<b>\$10,257.50</b>
<b>PV Pavements</b>				
<b>FP Footpath Pavers</b>				
2 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	137	8.50	1,164.50
5 Supply and place crushed rock base course to new footpath unit pavers including trimming and compacting	m <sup>2</sup>	137	26.50	3,630.50
9 Supply and place Best Terrazzo unit pavers or similar on sand bed to new footpath (PC Sum \$90/m <sup>2</sup> )	m <sup>2</sup>	137	180.00	24,660.00
22 Form isolation joint or similar to junction of new pavers and existing buildings	m	43	28.00	1,204.00
13 No allowance for concrete slab below footpath pavers	Note			Excl.
166 No allowance to seal pavers	Note			Excl.
<b>Footpath Pavers</b>				<b>\$30,659.00</b>
<b>RC Road Crossovers</b>				
39 Proof roll and trim subgrade ready for new pavements	m <sup>2</sup>	124	8.50	1,054.00
38 Supply and place crushed rock sub base to raised side street crossovers	m <sup>2</sup>	124	28.00	3,472.00
91 Construct concrete base to raised road crossover including formwork, reinforcement and concrete	m <sup>2</sup>	124	155.00	19,220.00
41 Supply and place trafficable interlocking unit pavers on mortar bed (PC Supply \$55/m <sup>2</sup> )	m <sup>2</sup>	124	255.00	31,620.00
<b>Road Crossovers</b>				<b>\$55,366.00</b>

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### CR KEMP STREET (REMOVED SCOPE) (continued)

Rates Current At March 2019

Description	Unit	Qty	Rate	Total
<b>KR Kerb Reinstatement</b>				
36 Allow to reinstate existing bitumen roadway 300mm wide where new kerb installed including sub base, base course, wearing course	m	7	95.00	665.00
<b>Kerb Reinstatement</b>				<b>\$665.00</b>
<b>Pavements</b>				<b>\$86,690.00</b>
<b>CW Concrete Works</b>				
14 Concrete kerb and gutter	m	7	85.00	595.00
19 Concrete edge kerb	m	41	65.00	2,665.00
21 Concrete flush edge to garden beds	m	10	60.00	600.00
170 No allowance for dark oxide to new kerbing	Note			Excl.
<b>Concrete Works</b>				<b>\$3,860.00</b>
<b>LA Landscaping</b>				
<b>GB Garden Beds</b>				
44 Detailed excavation and preparation for new garden beds including disposal of excess spoil off site	m <sup>2</sup>	8	43.00	344.00
51 Deep rip subgrade ready for new garden beds	m <sup>2</sup>	8	6.50	52.00
97 Supply and place imported topsoil to garden beds (assumed 300mm deep)	m <sup>2</sup>	8	33.00	264.00
98 Supply and place organic mulch to garden beds	m <sup>2</sup>	8	9.00	72.00
177 Supply and install irrigation to garden beds	m <sup>2</sup>	8	20.00	160.00
101 Supply and plant ground covers and shrubs to garden beds (assumed 3-4 plants/m2)	No	36	14.00	504.00
104 Supply and plant 200L verge trees including preparation works	No	2	1,500.00	3,000.00
<b>Garden Beds</b>				<b>\$4,396.00</b>
<b>Landscaping</b>				<b>\$4,396.00</b>
<b>LI Lighting</b>				
189 No allowance for lighting or electrical works	Note			Excl.
<b>Lighting</b>				<b>Excl.</b>
<b>SR Service Relocations</b>				
147 Allowance to adjust service lids to suit new footpath levels (PC Sum)	Item			20,000.00
148 Allowance to adjust service lids to suit new raised crossover levels (PC Sum)	Item			7,500.00
<b>Service Relocations</b>				<b>\$27,500.00</b>
<b>SW Stormwater</b>				
188 Allowance to adjust existing stormwater pits to suit new levels	Item			5,000.00
285 No allowance to replace or upgrade existing stormwater infrastructure	Note			Excl.
<b>Stormwater</b>				<b>\$5,000.00</b>
<b>COC Contractors On-Costs</b>				
286 Allowance for builders and temporary works	Item			2,500.00
135 Preliminaries and Supervision	Item			15,000.00

# Woodville Road Streetscape

## Woodville Road | Concept Estimate Split

Location Main Headings/Sub Headings Item

### CR KEMP STREET (REMOVED SCOPE) (continued)

Rates Current At March 2019

Description		Unit	Qty	Rate	Total
136	Traffic Management	Item			10,000.00
187	Extra over for night works	Item			5,000.00
				<b>Contractors On-Costs</b>	<b>\$32,500.00</b>
<b>POC Project Contingencies</b>					
137	Design Development Contingency	Item			10,000.00
138	Construction Contingency	Item			20,000.00
				<b>Project Contingencies</b>	<b>\$30,000.00</b>
				<b>KEMP STREET (REMOVED SCOPE)</b>	<b>\$207,507.50</b>