



Government of South Australia

Department of Planning,  
Transport and Infrastructure

## **Charles Sturt Council Development Plan and Adelaide (City) Development Plan**

### **BOWDEN URBAN VILLAGE & ENVIRONS**

#### **Development Plan Amendment**

**By the Minister**

#### **THE AMENDMENT**

Declared by the Minister for Planning to be an  
approved amendment under Section 26 (8), of the  
*Development Act 1993*

.....  
Signature

.....  
Date of Gazette

15 JUL 2012



# Approval DPA

## Background

The Urban Village and Environs Development Plan Amendment (DPA) by the Minister amends the Charles Sturt Council and the Adelaide (City) Development Plans.

This DPA was undertaken as a DPA process B, which included:

- an Initiation Document agreed 1 September 2011
- a DPA released for concurrent agency, council and public consultation from 16 February 2012 to 11 April 2012
- Public Meeting conducted by the Development Policy Advisory Committee (DPAC) Public Meeting Subcommittee on 24 April 2012.

## Consultation

A total of eight (8) public submissions, two (2) council submission and twelve (12) agency submissions were received in relation to the DPA during the consultation period. Five (5) verbal submissions were made at the Public Meeting.

## Approval Stage

Based on a review of all submissions and the recommendations of DPAC, the following key alterations have been made to the Amendment:

### **Charles Sturt Council Development Plan**

#### ***General Section (DPA attachments A1 to A8)***

- Amend the Design and Appearance section to include overshadowing and visual privacy provisions consistent with those that currently apply in residential areas
- Amend the *Residential Development* section to:
  - (a) retain existing primary street setbacks and garage width parameters for carports/garages and outbuildings when located in residential zones (as a variation to the SA Planning Policy Library)
  - (b) retain existing private open space for dwellings with a ground floor level level in the residential zones
  - (c) allow consideration of attenuation measures to reduce adverse noise impacts on residential development when located near high noise sources (eg. main roads, rail lines etc) when located outside of an area designated for the purposes of the *Noise and Air Emissions Overlay*.
- Amend the *Transportation and Access* section to ensure the requirements for undercroft and below ground garaging apply generally across the City of Charles Sturt, not just zones that envisages these forms of parking.

#### ***Overlays (DPA attachments B1 to B3)***

- In the *Affordable Housing Overlay*, amend Principle of Development Control 1, to clarify intent in terms of addressing a shortfall from a preceding stage of a development.
- In the *Strategic Transport Routes Overlay*, amend Principle of Development Control 3 to provide for a 'minimum' 1.2 metres wide path.

### ***District Centre Zone amendments***

- Inclusion of various amendments to reflect the rezoning of land south of the rail line to a new Urban Core Zone (and consistent with those amendments introduced on an interim basis via the Bowden Urban Village and Environs (Interim Policy) DPA on 17 November 2011).

### ***Industry Zone amendments***

- Amend the Desired Character for *Precinct 25 Bowden*, by clarifying that access to the Precinct for industrial traffic will be primarily from Chief Street (ie. by deleting '*Hawker Street*' from the proposed replacement words).
- Inclusion of various amendments to reflect the rezoning of land north of the rail line to a new Urban Core Zone (and consistent with those amendments introduced on an interim basis via the Bowden Urban Village and Environs (Interim Policy) DPA on 17 November 2011).

### ***New Urban Core Zone***

- Insert a new Objective that supports the rehabilitation/remediation of contaminated land suitable for the intended use of the land.
- Amend the Desired Character for the Urban Core Zone to:
  - (a) strengthen the need for a high quality design in both public and private spaces, including bicycle parking rails as a landscape feature;
  - (b) expanding on the existing comments dealing with the brewery odour to ensure the location of sensitive uses also has regard to potential odour nuisance from the smallgoods facility; and
  - (c) add new text that acknowledges the presence of contaminated and potentially contaminated land where a site contamination audit may be required to verify that the site is suitable and safe for the intended use.
- Under the heading Form and Character, insert a new Principle of Development Control that explicitly addresses odour issues associated with the brewery and smallgoods facility, to complement changes to the Desired Character mentioned above.
- Amend Principle of Development Control to refer to 'target minimums' and 'aims' in reference to residential site density, rather than being interpreted as absolute minimums.
- Various amendments to emphasise the desired for high quality public and private open spaces.
- Adjusting requirements to acknowledge ceiling height as one element supporting the adaptation of buildings, including a target minimum ceiling height of 3.5 metres to the Main Street Policy Area.
- Provision to contemplate zero rear setbacks for buildings when constructed at different times based on a building envelope plan for the adjoining property where a wall is proposed on the rear boundary.
- Insert a new Principle of Development Control to ensure on-street parking along Park Terrace is not taken into account if seeking a reduction to off-street parking given the potential upgrading of Park Terrace may require the removal of parking in this locality.
- Amending policy Principle under *Land Division* to:
  - (a) support a variety of on-street parking spaces to accommodate different vehicle types
  - (b) Insert a new Principle of Development Control that supports the junctions of First and Second streets with Park Terrace remaining closed until the railway line is undergrounded.

### Main Street Policy Area

- Ensure that building floor levels and level with a footpath only when the footpath is constructed at a level to mitigate floor risk.

### Public Notification

- Adjust the Public Notification table to establish consistent notification requirements for bulky goods outlets on both sides of the rail corridor, when located outside of the Main Street Policy Area (ie. Category 1 where the floor area is 500 square metres or less).

### **Concept Plan ChSt/23**

- In the text relating to building heights and residential density, replace 'minimum' with target minimum / maximums.

### **Adelaide (City) Development Plan**

No alterations post public consultation were made.



# Development Act 1993

## Amendment Instructions Table – Development Plan Amendment

**Name of Local Government Area:** City of Charles Sturt

**Name of Development Plan:** Charles Sturt Council

**Name of DPA:** Bowden Urban Village & Environs

*The following amendment instructions (at the time of drafting) relate to the Charles Sturt Council Development Plan consolidated on **1 December 2011**. Where amendments to this Development Plan have been authorised after the aforementioned consolidation date, consequential changes to the following amendment instructions will be made as necessary to give effect to this amendment.*

*(Please note that this DPA supersedes the Bowden Urban Village & Environs (Interim Policy) Development Plan Amendment brought into interim operation on 17 November 2011)*

Amendment Instruction Number	Method of Change	Detail what is to be replaced or deleted or detail where new policy is to be inserted.	Detail what material is to be inserted (if applicable, i.e., use for <u>Insert</u> or <u>Replace</u> methods of change only).	Is Renumbering required (Y/N)	Subsequent Policy cross-references requiring update (Y/N) if yes please specify.
	<ul style="list-style-type: none"> <li>• Replace</li> <li>• Delete</li> <li>• Insert</li> </ul>	<ul style="list-style-type: none"> <li>• Objective (Obj)</li> <li>• Principle of Development Control (PDC)</li> <li>• Desired Character Statement (DCS)</li> <li>• Map/Table No.</li> <li>• Other (Specify)</li> </ul>			

### COUNCIL WIDE / GENERAL PROVISIONS (including figures and illustrations contained in the text)

Amendments required (Yes/No): Yes

#### Centres and Retail Development

1.	Replace	The whole section	With the content of <b>Attachment A1</b>	N	N
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#### Design and Appearance

2.	Replace	The whole section	With the content of <b>Attachment A2</b>	N	N
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#### Heritage Places

3.	Insert	After PDC 7	The following new PDC:  <i>'Multi-storey additions to a State or local heritage place should be compatible with the heritage value of the place through a range of design solutions such as:</i>	Y	N
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			(a) extending into the existing roof space or to the rear of the building (b) retaining the elements that contribute to the building's value (c) distinguishing between the existing and new portion of the building (d) stepping in parts of the building that are taller than the front facade.'		
<b>Interface Between Land Uses</b>					
4.	Replace	The whole section	With the content of <b>Attachment A3</b>	N	N
<b>Land Division</b>					
5.	Insert	At the beginning of PDC 15(d)	'Except in the Urban Core Zone, '	No	No
6.	Insert	At the beginning of PDC 17	'Except in the Urban Core Zone, '	No	No
<b>Medium and High Rise Development (3 or more storeys) - new</b>					
7.	Insert	Before the section headed 'Metropolitan Open Space System'	The content of <b>Attachment A4</b>	N	N
<b>Natural Resources</b>					
8.	Replace	The whole section	With the content of <b>Attachment A5</b>	N	N
<b>Outdoor Advertisements</b>					
9.	Delete	' <b>Outdoor</b> ' from the module heading, repositioning the module in alphabetical order accordingly.		N	
10.	Insert	After PDC 3(c)	'(d) driver distraction.'	N	N
11.	Delete	The following from PDC 7(d):  '; unless erected to fulfil a statutory requirement or as a complying type of advertisement or advertising hoarding associated with the residential use of the land'		N	N
12.	Insert	In PDC 13(c), after the word 'location'	The word 'especially'.		
13.	Insert	A new PDC after PDC 13	'Any internally illuminated advertising signs and/or advertising hoardings which utilise LED, LCD or other similar technologies should be located a minimum of 80 metres from traffic signals, level crossings and other important traffic control devices.'	Y	N
14.	Insert	After PDC 19	The content of <b>Attachment A6</b>	N	N
<b>Residential Development</b>					
15.	Replace	The whole section	With the content of <b>Attachment A7</b>	N	N

Transportation and Access					
16.	Insert	The whole section	With the content of <b>Attachment A8</b>	N	N
Overlays					
17.	Insert	After the end of the section headed ' <b>Waste Management Facilities</b> '	The content of <b>Attachment B1</b> (Affordable Housing)	N	N
18.	Insert	After the Affordable Housing Overlay	The content of <b>Attachment B2</b> (Noise and Air Emissions)	N	N
19.	Insert	After the Noise and Air Emissions Overlay	The content of <b>Attachment B3</b> (Strategic Transport Routes)	N	N
ZONE AND/OR POLICY AREA AND/OR PRECINCT PROVISIONS (including figures and illustrations contained in the text)					
Amendments required (Yes/No):Yes					
District Centre Zone – Hindmarsh Policy Area 2					
20.	Delete	The last sentence in the Desired Character for Precinct 5 Historic Hub as follows:  <i>'Views of the wall of the former SAGASCO site north of the railway line that is visible from Chief Street will be maintained by development.'</i>		N	N
21.	Delete	The last sentence in the Desired Character for Precinct 6 Port Road Office as follows:  <i>'The vista from the Entertainment Centre entrance to the Bowden Railway Station will be reinforced through appropriate development.'</i>		N	N
22.	Delete	In the first paragraph of the Desired Character for Precinct 8 Gateway, the words ' <i>South of Port Road,</i> ' from the beginning of the second sentence in the first paragraph.		N	N
23.	Delete	In the last sentence in the first paragraph of the Desired Character for Precinct 8 Gateway the following:  <i>'North of Port Road, a variety of uses are appropriate, such as offices, showrooms and tourist accommodation.'</i>		N	N
24.	Replace	The whole of the second paragraph under the Desired Character for Precinct 8 Gateway which states:	<ul style="list-style-type: none"> <li>With the following:  <i>'Development on the corner of Port Road and Adam Street will reflect its status as a major</i></li> </ul>	N	N

		<i>'Development on the corners of Port Road with Park Terrace and Adam Street, will reflect their status as major gateways to Adelaide's North Western suburbs and address this major intersection. Development in these locations will approach the maximum building height, be of substantial scale, and of good quality finishes and external appearance.'</i>	<i>gateway to Adelaide's north western suburbs and address this major intersection. Development in this location will approach the maximum building height, be of substantial scale and of good quality finishes and external appearance.'</i>		
25.	Delete	In the last paragraph for the Desired Character for Precinct 8 Gateway the words <i>'Park Terrace'</i> .		N	N
26.	Delete	PDC 8 under the heading Precinct 5 Historic Hub.		Y	N
27.	Delete	In PDC 12 under the heading Precinct 8 Gateway the words <i>'Park Terrace'</i> .		N	N
<b>Industry Zone</b>					
28.	Delete	In the Desired Character, the number <i>'41,'</i> from the heading <b><i>'Outside of the Interface Industry Area and Precincts 41, 42 and 43'</i></b> .		No	No
29.	Delete	In the Desired Character, the word <i>'Clipsal'</i> from the first paragraph under the heading <b><i>'Outside of the Interface Industry Area and Precincts 41, 42 and 43'</i></b> .		No	No
30.	Replace	In the Desired Character, the first sentence under the heading <i>'Precinct 25 Bowden'</i>	With: <i>'Access to the Precinct for industrial traffic will be primarily from Chief Street.'</i>	N	N
31.	Replace	In the Desired Character, the third sentence under the heading <i>'Precinct 26 Brompton'</i>	With: <i>'Access to the northern portion of the Precinct for industrial traffic will be provided from Coglein Street and Torrens Road, while access to the southern portion of the Precinct for industrial traffic will be primarily from Chief Street and Hawker Street.'</i>	N	N
32.	Delete	In the Desired Character, the heading <b><i>'Precinct 41 Gas Works'</i></b> and associated text.		No	
33.	Insert	After PDC 20 <i>'Land Division'</i>	The content of <b>Attachment C</b>	Y	N
34.	Replace	PDC 41 of Precinct 25 Bowden	With: <i>'Land uses serviced by heavy vehicles or which are high traffic generators are inappropriate in</i>	N	N

			<i>Second and Sixth Streets.'</i>		
35.	Replace	PDC 42 of Precinct 25 Bowden	With:  <i>'No further vehicular access points should be provided off Hawker Street.'</i>	N	N
36.	Delete	The heading ' <b>Precinct 41 Gas Works</b> ' and associated PDC 115 and 116.		Yes	Yes Delete ' <b>Precinct 41</b> ' from table of contents
37.	Delete	Under the heading <b>Complying Development</b> , the words ' <b>Precinct 41 Gas Works</b> ' from both the first and second paragraphs.		No	No
38.	Delete	In the table under the heading <b>Public Notification</b> , the number '41,' wherever it appears.		No	No
<b>Urban Core Zone (new)</b>					
39.	Insert	Urban Core Zone	As contained in <b>Attachment D</b> , immediately after the "Stadium Zone" policies.	N	N
<b>TABLES</b>					
Amendments required (Yes/No): Yes					
40.	Delete	In Table ChSt/1, the number '41,' from the column titled ' <b>Form of Development</b> ' under the heading ' <b>General Industry, Light Industry, Motor Repair Station, Road Transport Terminal, Service Industry, Service Trade Premises, Store, Warehouse...</b> '		No	No
<b>MAPPING SECTION (Structure Plans, Overlays, Enlargements, Zone Maps &amp; Policy Area Maps)</b>					
Amendments required (Yes/No):Yes					
<b>Map Reference Tables</b>					
41.	Insert	After the reference to ' <b>Stadium Zone</b> ' in the Zone Maps section	In the column headed Zone Name:  <i>'Urban Core Zone'.</i>  In the column headed Zone Map Numbers:  <i>'ChSt/15, ChSt/16, ChSt/21'.</i>	N	N
42.	Insert	After the reference to 'Woodville West Policy Area 23' in the Policy Area Maps section	In the column headed Policy Area Name:  <i>'Main Street Policy Area 24'.</i>  In the column headed Policy Map Numbers:  <i>'ChSt/21'.</i>	N	N
43.	Delete	In the Map Reference Table headed ' <b>Precinct Maps</b> ', ' <b>ChSt/21</b> ' from the column headed Zone Map Numbers as it relates to Precinct 26 Brompton.		N	N

44.	Delete	In the Map Reference Table headed ' <i>Precinct Maps</i> ', ' <i>Precinct 41 Gas Works</i> ' from the column headed Precinct Name and associated map numbers.		N	N
45.	Insert	In the Map Reference Table headed ' <i>Concept Plan Maps</i> '	After the last row in the table, within the column headed 'Concept Plan Title' insert 'Bowden Urban Village Urban Core Zone' and in the corresponding row 'Concept Plan Map Numbers' insert 'ChSt/23'	N	N
46.	Replace	The Overlay Maps Table	With the content of <b>Attachment E.</b>	N	N
<b>Spatial Extent Maps</b>					
47.	Replace	The following: <ul style="list-style-type: none"> <li>• Council Index Map</li> <li>• Overlay Map ChSt/1 Development Constraints</li> <li>• Zone Map ChSt/15</li> <li>• Precinct Map ChSt/15</li> <li>• Overlay Map ChSt/16 Development Constraints</li> <li>• Zone Map ChSt/16</li> <li>• Precinct Map ChSt/16</li> <li>• Overlay Map ChSt/21 Development Constraints</li> <li>• Zone Map ChSt/21</li> <li>• Policy Area Map ChSt/21</li> <li>• Precinct Map ChSt/21</li> <li>• Concept Plan Map ChSt/2</li> </ul>	With the contents of <b>Attachment F.</b>	N	N
48.	Insert	The following: <ul style="list-style-type: none"> <li>• Concept Plan Map ChSt/23 – Bowden Urban Village Urban Core Zone</li> <li>• Overlay Maps for: <ul style="list-style-type: none"> <li>- Affordable Housing</li> <li>- Noise and Air Emissions</li> <li>- Strategic Transport Routes</li> </ul> </li> </ul>	As contained in <b>Attachment G.</b>	N	N

# Development Act 1993

## Amendment Instructions Table – Development Plan Amendment

**Name of Local Government Area:** City of Adelaide

**Name of Development Plan:** Adelaide (City)

**Name of DPA:** Bowden Urban Village & Environs

*The following amendment instructions (at the time of drafting) relate to the Adelaide (City) Development Plan consolidated on 31 May 2012. Where amendments to this Development Plan(s) have been authorised after the aforementioned consolidation date, consequential changes to the following amendment instructions will be made as necessary to give effect to this amendment.*

Amendment Instruction Number	Method of Change	Detail what is to be replaced or deleted or detail where new policy is to be inserted.	Detail what material is to be inserted (if applicable, i.e., use for <u>Insert</u> or <u>Replace</u> methods of change only).	Is Renumbering required (Y/N)	Subsequent Policy cross-references requiring update (Y/N) if yes please specify.
	<ul style="list-style-type: none"> <li>• Replace</li> <li>• Delete</li> <li>• Insert</li> </ul>	<ul style="list-style-type: none"> <li>• Objective (Obj)</li> <li>• Principle of Development Control (PDC)</li> <li>• Desired Character Statement (DCS)</li> <li>• Map/Table No.</li> <li>• Other (Specify)</li> </ul>			

### COUNCIL WIDE / GENERAL PROVISIONS (including figures and illustrations contained in the text)

Amendments required (Yes/No): No

### ZONE AND/OR POLICY AREA AND/OR PRECINCT PROVISIONS (including figures and illustrations contained in the text)

Amendments required (Yes/No): Yes

#### Park Lands Zone

1.	Insert	In PDC 16, under the heading Non-complying Development and before 'Cafes:'	Bridge and associated structures providing pedestrian and bicycle access over Park Terrace to the River Torrens West Policy Area 37.	N	N
2.	Insert	In the Desired Character for River Torrens West Policy Area 37, following part (e)	(f) <i>pedestrian and bicycle links to areas westward of Park Terrace</i>	Y	Renumber part (f) to (g)
3.	Insert	In the River Torrens West Policy Area 37, after PDC 2(i)	(j) <i>a shared pedestrian / bicycle bridge connecting the Policy Area to land westward of Park Terrace.</i>	N	N



# ATTACHMENT A1

**(General Section – Centres and Retail Development)**



# Centres and Retail Development

## OBJECTIVES

- 1 Shopping, administrative, cultural, community, entertainment, educational, religious and recreational facilities located in integrated centres and mixed use zones.
- 2 Centres that ensure rational, economic and convenient provision of goods and services and provide:
  - (a) a focus for community life
  - (b) safe, permeable, pleasant and accessible walking and cycling networks.
- 3 The provision of a safe pedestrian environment within centres which gives high priority to pedestrians, public and community transport.
- 4 Increased vitality and activity in centres through the introduction and integration of housing.
- 5 Centres developed in accordance with a hierarchy based on function, so that each type of centre provides a proportion of the total requirement of goods and services commensurate with its role.
- 6 The central business district of the City of Adelaide providing the principal focus for the economic, social and political life of Greater Adelaide and the State.

## PRINCIPLES OF DEVELOPMENT CONTROL

- 1 Development within centres should:
  - (a) integrate facilities within the zone
  - (b) allow for the multiple use of facilities and the sharing of utility spaces
  - (c) allow for the staging of development within the centre
  - (d) be integrated with public and community transport.
- 2 Development within centres should be designed to be compatible with adjoining areas. This should be promoted through landscaping, screen walls, centre orientation, location of access ways, buffer strips and transitional use areas.
- 3 Development within centres should provide:
  - (a) public spaces such as malls, plazas and courtyards
  - (b) street furniture, including lighting, signs, litter bins, seats and bollards, that is sited and designed to complement the desired character
  - (c) unobtrusive facilities for the storage and removal of waste materials
  - (d) public facilities including toilets, infant changing facilities for parents, telephones and community information boards
  - (e) access for public and community transport and sheltered waiting areas for passengers
  - (f) lighting for pedestrian paths, buildings and associated areas
  - (g) a single landscaping theme

(h) safe and secure bicycle parking.

4 A single architectural theme should be established within centres through:

- (a) constructing additions or other buildings in a style complementary to the existing shopping complex
- (b) renovating the existing shopping complex to complement new additions and other buildings within the centre
- (c) employing a signage theme.

#### Arterial Roads

5 Centres should develop on one side of an arterial road or in one quadrant of an arterial road intersection.

6 Centre development straddling an arterial road should:

- (a) concentrate on one side of the arterial road or one quadrant of the arterial road intersection
- (b) minimise the need for pedestrian and vehicular movement from one part of the centre to another across the arterial road.

#### Retail Development

7 A shop or group of shops located outside of zones that allow for retail development should:

- (a) be of a size and type that will not hinder the development, function or viability of any centre zone
- (b) not demonstrably lead to the physical deterioration of any designated centre
- (c) be developed taking into consideration its effect on adjacent development.

8 Bulky goods outlets located within centre zones should:

- (a) complement the overall provision of facilities
- (b) be sited towards the periphery of those zones where the bulky goods outlet has a gross leasable area of 500 square metres or more.

9 Other than in Bulky Goods Policy Area 6, the incidental sale of foodstuffs, clothing, footwear or personal effects goods within any bulky goods outlet or service trade premises should be limited to:

- (a) 7.5 percent of the gross leasable area of the tenancy or 100 square metres, whichever is the lesser
- (b) 100 square metres in relation to the sale of food and beverages for consumption on premises, provided that the gross leasable area of the bulky goods outlet or service trade premises is greater than 2000 square metres.

# ATTACHMENT A2

**(General Section - Design and Appearance)**



# Design and Appearance

## OBJECTIVES

- 1 Development of a high architectural standard and appearance that responds to and reinforces positive aspects of the local environment and built form.
- 2 Roads, open spaces, paths, buildings and land uses laid out and linked so that they are easy to understand and navigate.

## PRINCIPLES OF DEVELOPMENT CONTROL

- 1 Buildings should reflect the desired character of the locality while incorporating contemporary designs that have regard to the following:
  - (a) building height, mass and proportion
  - (b) external materials, patterns, colours and decorative elements
  - (c) roof form and pitch
  - (d) façade articulation and detailing
  - (e) verandas, eaves, parapets and window screens.
- 2 Where a building is sited on or close to a side or rear boundary, the boundary wall should minimise:
  - (a) the visual impact of the building as viewed from adjoining properties
  - (b) overshadowing of adjoining properties and allow adequate sunlight access to neighbouring buildings.
- 3 The external walls and roofs of buildings should not incorporate highly reflective materials which will result in glare to neighbouring properties, drivers or cyclists.
- 4 Structures located on the roofs of buildings to house plant and equipment should be screened from view and form an integral part of the building design in relation to external finishes, shaping and colours.
- 5 Balconies should:
  - (a) be integrated with the overall form and detail of the building
  - (b) include balustrade detailing that enables line of sight to the street
  - (c) be recessed where wind would otherwise make the space unusable.
- 6 Transportable buildings and buildings which are elevated on stumps, posts, piers, columns or the like, should have their suspended footings enclosed around the perimeter of the building, and the use of verandas, pergolas and other suitable architectural detailing to give the appearance of a permanent structure.

## Development Adjacent Heritage Places

- 7 The design of multi-storey buildings should not detract from the form and materials of adjacent State and Local heritage places listed in [Table ChSt/7 – State Heritage Places](#) or in [Table ChSt/6 – Local Heritage Places](#).
- 8 Development on land adjacent to a State or Local heritage place, as listed in [Table ChSt/7 – State Heritage Places](#) or in [Table ChSt/6 – Local Heritage Places](#), should be sited and designed to reinforce the historic character of the place and maintain its visual prominence.

## Overshadowing

- 9 The design and location of buildings should enable direct winter sunlight into adjacent dwellings and private open space and minimise overshadowing of:
  - (a) windows of main internal living areas
  - (b) ground level private open space
  - (c) upper-level private balconies that provide the primary open space area for dwelling
  - (d) solar collectors (such as solar hot water systems and photovoltaic cells).
- 10 Except where specified in a zone, policy area or precinct, development should ensure that:
  - (a) north-facing windows to habitable rooms of existing dwelling(s) on the same allotment, and on adjacent allotments, receive at least 3 hours of direct sunlight over a portion of their surface between 9 am and 3 pm on the 21 June.
  - (b) ground level open space of existing buildings receives direct sunlight for a minimum of 2 hours between 9 am and 3 pm on 21 June to at least the smaller of the following:
    - i) half of the existing ground level open space
    - ii) 35 square metres of the existing ground level open space (with at least one of the area's dimensions measuring 2.5 metres).
  - (c) where overshadowing already exceeds the requirements contained in part (b), the area overshadowed should not increase by more than 20 per cent.

## Visual Privacy

- 11 Buildings with upper level windows, balconies, terraces and decks should minimise direct overlooking of habitable rooms and private open spaces of dwellings through one or more of the following measures:
  - (a) off-setting the location of balconies and windows of habitable rooms with those of other buildings so that views are oblique rather than direct
  - (b) building setbacks from boundaries (including building boundary to boundary where appropriate) that interrupt views or that provide a spatial separation between balconies or windows of habitable rooms
  - (c) screening devices (including fencing, obscure glazing, screens, external ventilation blinds, window hoods and shutters) that are integrated into the building design and have minimal negative effect on residents' or neighbours' amenity
  - (d) other than within the **Urban Core Zone**, sill heights of not less than 1.5 metres or permanent screens having a height of 1.5 metres above finished floor level.
- 12 Permanently fixed external screening devices should be designed and coloured to complement the associated building's external materials and finishes.

## Relationship to the Street and Public Realm

- 13 Buildings (other than ancillary buildings, group dwellings or buildings on allotments with a battle axe configuration) should be designed so that their main façade faces the primary street frontage of the land on which they are situated.
- 14 Buildings, landscaping, paving and signage should have a coordinated appearance that maintains and enhances the visual attractiveness of the locality.
- 15 Buildings should be designed and sited to avoid extensive areas of uninterrupted walling facing areas exposed to public view.

- 16 Building design should emphasise pedestrian entry points to provide perceptible and direct access from public street frontages and vehicle parking areas.
- 17 The ground floors of mixed use buildings should comprise non-residential land uses.
- 18 In mixed use areas, development facing the street should be designed to activate the street frontage(s) by:
  - (a) including features that attract people to the locality such as frequent doors and display windows, retail shopfronts and outdoor eating or dining areas
  - (b) minimising the frontage for fire escapes, service doors, plant and equipment hatches
  - (c) avoiding undercroft or ground floor vehicle parking that is visible from the primary street frontage
  - (d) using colour, vertical and horizontal elements, roof overhangs and other design techniques to provide visual interest and reduced massing.
- 19 Where zero or minor setbacks are desirable, development should incorporate shelter over footpaths to enhance the quality of the pedestrian environment.

#### Outdoor Storage and Service Areas

- 20 Outdoor storage, loading and service areas should be:
  - (a) screened from public view by a combination of built form, solid fencing and/or landscaping.
  - (b) conveniently located and designed to enable the manoeuvring of service and delivery vehicles
  - (c) sited away from sensitive land uses.
- 21 Adequate access should be provided to the rear of any site for servicing purposes, especially where a building does not extend to the rear boundary.

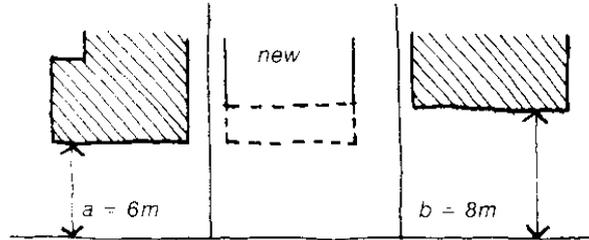
#### Building Setbacks from Road Boundaries

- 22 Except in areas where a new character is desired, the setback of buildings from public roads should:
  - (a) be similar to, or compatible with, setbacks of buildings on adjoining land and other buildings in the locality
  - (b) contribute positively to the function, appearance and/ or desired character of the locality
- 23 Except where specified in a particular zone, policy area or precinct, the main face of a building should be set back from the primary road frontage in accordance with the following table:

**Setback difference between Setback of new building buildings on adjacent allotments**

Up to 2 metres

The same setback as one of the adjacent buildings, as illustrated below:



When  $b - a \leq 2$ , setback of new dwelling = a or b

Greater than 2 metres

At least the average setback of the adjacent buildings.

- 24 Except in areas where a new character is desired or where specified in a zone, policy area or precinct, the setback of development from a secondary street frontage should reflect the setbacks of the adjoining buildings and other buildings in the locality.
- 25 All setbacks from the road frontage should be additional to the road widening setback established under the *Metropolitan Adelaide Road Widening Plan Act 1972*.
- 26 No development should be undertaken which would impair, disfigure, or interfere with the amenity, aesthetic appearance or scenic beauty of any of the following:
  - (a) the River Torrens
  - (b) land within 60 metres of the top of the bank of the River Torrens
  - (c) the landscape visible from the River Torrens.

# ATTACHMENT A3

**(General Section – Interface between land uses)**



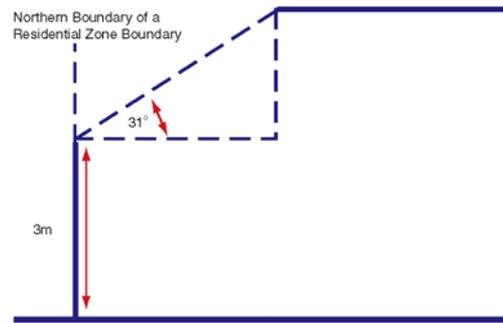
# Interface between Land Uses

## OBJECTIVES

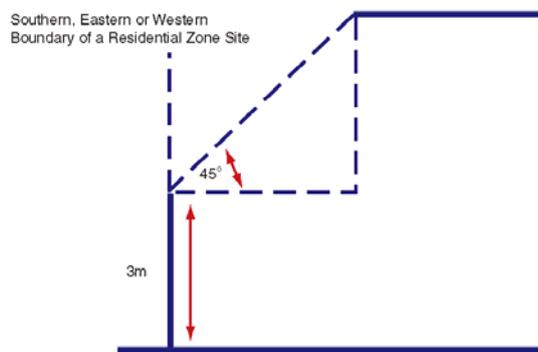
- 1 Development located and designed to prevent adverse impact and conflict between land uses.
- 2 Protect community health and amenity from adverse impacts of development.
- 3 Protect desired land uses from the encroachment of incompatible development.

## PRINCIPLES OF DEVELOPMENT CONTROL

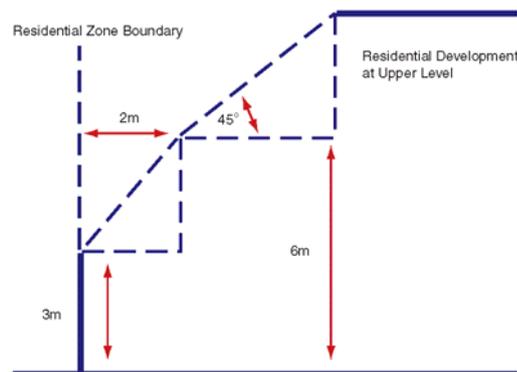
- 1 Development should not detrimentally affect the amenity of the locality or cause unreasonable interference through any of the following:
  - (a) the emission of effluent, odour, smoke, fumes, dust or other airborne pollutants
  - (b) noise
  - (c) vibration
  - (d) electrical interference
  - (e) light spill
  - (f) glare
  - (g) hours of operation
  - (h) traffic impacts.
- 2 Development should be sited and designed to minimise negative impact on existing and potential future land uses desired in the locality.
- 3 Development adjacent to a Residential Zone or residential area should be designed to minimise overlooking and overshadowing of adjacent dwellings and private open space.
- 4 Residential development adjacent to non-residential zones and land uses should be located, designed and/or sited to protect residents from potential adverse impacts from non-residential activities.
- 5 Sensitive uses likely to conflict with the continuation of lawfully existing developments and land uses desired for the zone should be designed to minimise negative impacts.
- 6 Non-residential development on land abutting a residential zone should be designed to minimise noise impacts to achieve adequate levels of compatibility between existing and proposed uses.
- 7 **Where the site of a building located in a centre zone:**
  - (a) abuts the northern boundary of a site in a zone where residential development is envisaged, building development should not intrude into a plane angled 31 degrees above the horizontal into the site, as measured from a point 3 metres above the boundary, as shown in the figure below:



- (b) abuts the southern, eastern or western boundary of a site in a zone where residential development is envisaged, building development should not intrude into a plane angled 45 degrees above the horizontal into the site, as measured from a point 3 metres above the boundary, as shown in the figure below:



- (c) contains wholly residential use or residential use at an upper level and abuts the side boundary of a residentially zoned site, then notwithstanding (a) or (b) above, such upper level residential development should not intrude into an envelope measured from 3 metres above the boundary, extending to 6 metres above natural ground level at a point 2 metres from the boundary, and then extending in a plane angled 45 degrees above the horizontal into the site, as shown in the figure below:



### Noise Generating Activities

- 8 Development that emits noise (other than music noise) should include noise attenuation measures that achieve the relevant *Environment Protection (Noise) Policy* criteria when assessed at the nearest existing noise sensitive premises.
- 9 Development with the potential to emit significant noise (e.g. industry) should incorporate noise attenuation measures that prevent noise from causing unreasonable interference with the amenity of noise sensitive premises.
- 10 Outdoor areas (such as beer gardens or dining areas) associated with licensed premises should be designed or sited to minimise adverse noise impacts on adjacent existing or future noise sensitive development.

- 11 Development proposing music should include noise attenuation measures that achieve the following desired noise levels:

Noise level assessment location	Desired noise level
Adjacent existing noise sensitive development property boundary	<p>Less than 8 dB above the level of background noise (<math>L_{90,15min}</math>) in any octave band of the sound spectrum</p> <p>and</p> <p>Less than 5 dB(A) above the level of background noise (<math>LA_{90,15min}</math>) for the overall (sum of all octave bands) A-weighted level.</p>
<i>Adjacent land</i> property boundary	<p>Less than 65dB(Lin) at 63Hz and 70dB(Lin) in all other octave bands of the sound spectrum</p> <p>or</p> <p>less than 8 dB above the level of background noise (<math>L_{90,15min}</math>) in any octave band of the sound spectrum and 5 dB(A) overall (sum of all octave bands) A-weighted level.</p>

#### Air quality

- 12 Development with the potential to emit harmful or nuisance-generating air pollution should incorporate air pollution control measures to prevent harm to human health or unreasonable interference with the amenity of sensitive uses within the locality.
- 13 Chimneys or exhaust flues associated with commercial development (including cafes, restaurants and fast food outlets) should be designed to ensure they do not cause a nuisance or health concerns to nearby sensitive receivers by:
- (a) incorporating appropriate treatment technology before exhaust emission are released to the atmosphere
  - (b) ensuring that the location and design of chimneys or exhaust flues maximises dispersion and takes into account the location of nearby sensitive uses.



# ATTACHMENT A4

**(General Section – Medium and High Rise Development (3 or more storeys))**



## Medium and High Rise Development (3 or more storeys)

### OBJECTIVES

- 1 Medium and high rise development that provides housing choice and employment opportunities.
- 2 Residential development that provides a high standard of amenity and adaptability for a variety of accommodation and living needs.
- 3 Commercial, office and retail development that is designed to create a strong visual connection to the public realm and that contributes to the vitality of the locality.
- 4 Buildings designed and sited to be energy and water efficient.

### PRINCIPLES OF DEVELOPMENT CONTROL

#### Design and Appearance

- 1 Buildings should:
  - (a) achieve a human scale at ground level through the use of elements such as canopies, verandas or building projections
  - (b) provide shelter over the footpath where minimal setbacks are desirable
  - (c) ensure walls on the boundary that are visible from public land include visually interesting treatments to break up large blank façades.
- 2 **Non-residential land uses within** the ground floor level **areas** of buildings **and** foyers **within** residential buildings should be designed to enable surveillance from public land to the inside of the building at night.
- 3 Entrances to multi-storey buildings should:
  - (a) be oriented towards the street
  - (b) be clearly identifiable
  - (c) provide shelter, a sense of personal address and transitional space around the entry
  - (d) provide separate access for residential and non-residential land uses.

#### Visual Privacy

- 4 The visual privacy of ground floor dwellings within multi-storey buildings should be protected through the use of design features such as the elevation of ground floors above street level, setbacks from the street and the location of verandas, windows, porticos or the like.

#### Building Separation and Outlook

- 5 Residential buildings (or the residential floors of mixed use buildings) should:
  - (a) have adequate separation between habitable room windows and balconies from other buildings to provide visual and acoustic privacy for dwelling occupants and allow the infiltration of daylight to interior and outdoor spaces
  - (b) ensure living rooms have, at a minimum, a satisfactory short range visual outlook to public or communal space.

## Dwelling Configuration

- 6 Buildings comprising more than 20 dwellings should provide a variety of dwelling sizes and a range in the number of bedrooms per dwelling.
- 7 Dwellings with 3 or more bedrooms located on the ground floor of medium and high rise buildings should, where possible, have the windows of habitable rooms overlooking internal courtyard space or other public space.

## Adaptability

- 8 Multi-storey buildings should **enable flexibility in their internal design and layout to support adaptive reuse, including accommodation for larger tenancies or the conversion of student accommodation to self contained apartments.**

## Environmental

- 9 Multi-storey buildings should:
  - (a) minimise detrimental micro-climatic and solar access impacts on adjacent land or buildings, including effects of patterns of wind, temperature, daylight, sunlight, glare and shadow
  - (b) incorporate roof designs that enable the provision of rain water tanks (where they are not provided elsewhere), photovoltaic cells and other features that enhance sustainability.
- 10 Green roofs (which can be a substitute for private or communal open space provided they can be accessed by occupants of the building) are encouraged on all new residential, commercial or mixed use buildings.
- 11 Development of 5 or more storeys, or 21 metres or more in building height (excluding the rooftop location of mechanical plant and equipment), should be designed to minimise the risk of wind tunnelling effects on adjacent streets by adopting one or more of the following:
  - (a) a podium at the base of a tall tower and aligned with the street to deflect wind away from the street
  - (b) substantial verandas around a building to deflect downward travelling wind flows over pedestrian areas
  - (c) the placement of buildings and use of setbacks to deflect the wind at ground level.

## Site Facilities and Storage

- 12 Dwellings should provide a covered storage area of not less than 8 cubic metres in one or more of the following areas:
  - (a) in the dwelling (but not including a habitable room)
  - (b) in a garage, carport or outbuilding
  - (c) within an on-site communal facility
- 13 Development should provide a dedicated area for the on-site collection and sorting of recyclable materials and refuse.
- 14 Development with a gross floor area of 2000 square metres or more should provide for the communal storage and management of waste.

# ATTACHMENT A5

**(General Section – Natural Resources)**



## Natural Resources

### OBJECTIVES

- 1 Retention, protection and restoration of the natural resources and environment.
- 2 Protection of the quality and quantity of South Australia's surface waters, including inland, *marine and estuarine* and underground waters.
- 3 The ecologically sustainable use of natural resources including water resources, including *marine waters*, ground water, surface water and watercourses.
- 4 Natural hydrological systems and environmental flows reinstated, and maintained and enhanced.
- 5 Development consistent with the principles of water sensitive design.
- 6 Development sited and designed to:
  - (a) protect natural ecological systems
  - (b) achieve the sustainable use of water
  - (c) protect water quality, including receiving waters
  - (d) reduce runoff and peak flows and prevent the risk of downstream flooding
  - (e) minimise demand on reticulated water supplies
  - (f) maximise the harvest and use of stormwater
  - (g) protect stormwater from pollution sources
- 7 Storage and use of stormwater which avoids adverse impact on public health and safety.
- 8 Native flora, fauna and ecosystems protected, retained, conserved and restored.
- 9 Restoration, expansion and linking of existing native vegetation to facilitate habitat corridors for ease of movement of fauna.
- 10 Minimal disturbance and modification of the natural landform.
- 11 Protection of the physical, chemical and biological quality of soil resources.
- 12 Protection of areas prone to erosion or other land degradation processes from inappropriate development.
- 13 Protection of the scenic qualities of natural and rural landscapes.

### PRINCIPLES OF DEVELOPMENT CONTROL

- 1 Development should be undertaken with minimum impact on the natural environment, including air and water quality, land, soil, biodiversity, and scenically attractive areas.
- 2 Development should ensure that South Australia's natural assets, such as biodiversity, water and soil, are protected and enhanced.
- 3 Development should not significantly obstruct or adversely affect sensitive ecological areas such as creeks, wetlands, estuaries and significant seagrass and mangrove communities.

- 4 Development should be appropriate to land capability and the protection and conservation of water resources and biodiversity.

#### Water Sensitive Design

- 5 Development should be designed to maximise conservation, minimise consumption and encourage reuse of water resources.
- 6 Development should not take place if it results in unsustainable use of surface or underground water resources.
- 7 Development should be sited and designed to:
- (a) capture and re-use stormwater, where practical
  - (b) minimise surface water runoff
  - (c) prevent soil erosion and water pollution
  - (d) protect and enhance natural water flows
  - (e) protect water quality by providing adequate separation distances from watercourses and other water bodies
  - (f) not contribute to an increase in salinity levels
  - (g) avoid the water logging of soil or the release of toxic elements
  - (h) maintain natural hydrological systems and not adversely affect:
    - (i) the quantity and quality of groundwater
    - (ii) the depth and directional flow of groundwater
    - (iii) the quality and function of natural springs.
- 8 Water discharged from a development site should:
- (a) be of a physical, chemical and biological condition equivalent to or better than its pre-developed state
  - (b) not exceed the rate of discharge from the site as it existed in pre-development conditions.
- 9 Development should include stormwater management systems to protect it from damage during a minimum of a 1 in 100 year average return interval flood.
- 10 Development should have adequate provision to control any stormwater over-flow run-off from the site and should be sited and designed to improve the quality of stormwater and minimise pollutant transfer to receiving waters.
- 11 Development should include stormwater management systems to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure the carrying capacities of downstream systems are not overloaded.
- 12 Development should include stormwater management systems to minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system.
- 13 Stormwater management systems should preserve natural drainage systems, including the associated environmental flows.
- 14 Stormwater management systems should
- (a) maximise the potential for stormwater harvesting and reuse either on-site or as close as practicable to the source
  - (b) utilise, but not be limited to, one or more of the following harvesting methods:

- (i) the collection of roof water in tanks
  - (ii) the discharge to open space, landscaping or garden areas, including strips adjacent to car parks
  - (iii) the incorporation of detention and retention facilities
  - (iv) aquifer recharge.
- 15 Where it is not practicable to detain or disposed of stormwater on site, only clean stormwater runoff should enter the public stormwater drainage system.
- 16 Artificial wetland systems, including detention and retention basins, should be sited and designed to:
- (a) ensure public health and safety is protected
  - (b) minimise potential health risks arising from the breeding of mosquitoes.
- 17 Site drainage should not discharge into or onto a service lane unless adequately designed and engineered for such function.

### Water Catchment Areas

- 18 Development should ensure watercourses and their beds, banks, wetlands and floodplains are not damaged or modified and are retained in their natural state, except where modification is required for essential access or maintenance purposes.
- 19 No development should occur where its proximity to a swamp or wetland will damage or interfere with the hydrology or water regime of the swamp or wetland.
- 20 A wetland or low-lying area providing habitat for native flora and fauna should not be drained, except temporarily for essential management purposes to enhance environmental values.
- 21 Along watercourses, areas of remnant native vegetation, or areas prone to erosion, that are capable of natural regeneration should be fenced off to limit stock access.
- 22 Development such as cropping, intensive animal keeping, residential, tourism, industry and horticulture, that increases the amount of surface run-off should include a strip of land at least 20 metres wide measured from the top of existing banks on each side of a watercourse that is:
- (a) fenced to exclude livestock
  - (b) kept free of development, including structures, formal roadways or access ways for machinery or any other activity causing soil compaction or significant modification of the natural surface of the land
  - (c) revegetated with indigenous vegetation comprising trees, shrubs and other groundcover plants to filter run-off so as to reduce the impacts on native aquatic ecosystems and to minimise soil loss eroding into the watercourse.
- 23 Development resulting in the depositing of an object or solid material in a watercourse or floodplain or the removal of bank and bed material should not:
- (a) adversely affect the migration of aquatic biota
  - (b) adversely affect the natural flow regime
  - (c) cause or contribute to water pollution
  - (d) result in watercourse or bank erosion
  - (e) adversely affect native vegetation upstream or downstream that is growing in or adjacent to a watercourse.
- 24 The location and construction of dams, water tanks and diversion drains should:

- (a) occur off watercourse
  - (b) not take place in ecologically sensitive areas or on erosion-prone sites
  - (c) provide for low flow by-pass mechanisms to allow for migration of aquatic biota
  - (d) protect the needs of downstream users
  - (e) minimise in-stream or riparian vegetation loss
  - (f) incorporate features to improve water quality (e.g. wetlands and floodplain ecological communities)
  - (g) protect ecosystems dependent on water resources.
- 25 Irrigated horticulture and pasture should not increase groundwater-induced salinity.
- 26 Development should comply with the current *Environment Protection (Water Quality) Policy*.

### Biodiversity and Native Vegetation

- 27 Development should retain existing areas of native vegetation and where possible contribute to revegetation using locally indigenous plant species.
- 28 Development should be designed and sited to minimise the loss and disturbance of native flora and fauna, *including marine animals and plants, and their breeding grounds and habitats*.
- 29 Native vegetation should be conserved and its conservation value and function not compromised by development if the native vegetation does any of the following:
- (a) provides an important habitat for wildlife or shade and shelter for livestock
  - (b) has a high plant species diversity or includes rare, vulnerable or endangered plant species or plant associations and communities
  - (c) provides an important seed bank for indigenous vegetation
  - (d) has high amenity value and/or significantly contributes to the landscape quality of an area, including the screening of buildings and unsightly views
  - (e) has high value as a remnant of vegetation associations characteristic of a district or region prior to extensive clearance for agriculture
  - (f) is growing in, or is characteristically associated with a wetland environment.
- 30 Native vegetation should not be cleared if such clearing is likely to lead to, cause or exacerbate any of the following:
- (a) erosion or sediment within water catchments
  - (b) decreased soil stability
  - (c) soil or land slip
  - (d) deterioration in the quality of water in a watercourse or surface water runoff
  - (e) a local or regional salinity problem
  - (f) the occurrence or intensity of local or regional flooding.
- 31 Development that proposes the clearance of native vegetation should address or consider the implications that removing the native vegetation will have on the following:

- (a) provision for linkages and wildlife corridors between significant areas of native vegetation
  - (b) erosion along watercourses and the filtering of suspended solids and nutrients from run-off
  - (c) the amenity of the locality
  - (d) bushfire safety
  - (e) the net loss of native vegetation and other biodiversity.
- 32 Where native vegetation is to be removed, it should be replaced in a suitable location on the site with locally indigenous vegetation to ensure that there is not a net loss of native vegetation and biodiversity.
- 33 Development should be located and occur in a manner which:
- (a) does not increase the potential for, or result in, the spread of pest plants, or the spread of any non-indigenous plants into areas of native vegetation or a conservation zone
  - (b) avoids the degradation of remnant native vegetation by any other means including as a result of spray drift, compaction of soil, modification of surface water flows, pollution to groundwater or surface water or change to groundwater levels
  - (c) incorporates a separation distance and/or buffer area to protect wildlife habitats and other features of nature conservation significance.
- 34 Development should promote the long-term conservation of vegetation by:
- (a) avoiding substantial structures, excavations, and filling of land in close proximity to the trunk of trees and beneath their canopies
  - (b) minimising impervious surfaces beneath the canopies of trees
  - (c) taking other effective and reasonable precautions to protect both vegetation and the integrity of structures and essential services.
- 35 Horticulture involving the growing of olives should be located at least:
- (a) 500 metres from:
    - (i) a national park
    - (ii) a conservation park
    - (iii) a wilderness protection area
    - (iv) the edge of a substantially intact stratum of native vegetation greater than 5 hectares in area
  - (b) 50 metres from the edge of stands of native vegetation 5 hectares or less in area.
- 36 Horticulture involving the growing of olives should have at least one locally indigenous tree that will grow to a height of at least 7 metres sited at least every 100 metres around the perimeter of the orchard.

### Soil Conservation

- 37 Development should not have an adverse impact on the natural, physical, chemical or biological quality and characteristics of soil resources.
- 38 Development should be designed and sited to prevent erosion.
- 39 Development should take place in a manner that will minimise alteration to the existing landform.

- 40 Development should minimise the loss of soil from a site through soil erosion or siltation during the construction phase of any development and following the commencement of an activity.

# ATTACHMENT A6

**(General Section – Outdoor Advertising (additional PDCs))**



## Advertising in Mixed Use and Corridor Zones

- 20 Advertisements or advertising hoardings should be:
- (a) no higher than the height of the finished floor level of the second storey of the building to which it relates
  - (b) where located below canopy level, flush with the wall or projecting horizontally
  - (c) where located at canopy level, in the form of a fascia sign
  - (d) where located above the canopy, flush with the wall and within the height of the parapet.
- 21 Advertisements or advertising hoardings should not exceed 25 per cent of the ground floor wall area on the façade the sign is placed.



# ATTACHMENT A7

**(General Section – Residential Development)**



# Residential Development

## OBJECTIVES

- 1 Safe, convenient, pleasant and healthy-living environments that meet the full range of needs and preferences of a diverse community.
- 2 A diverse range of dwelling types and sizes available to cater for changing demographics, particularly smaller household sizes and supported accommodation.
- 3 Medium and high density residential development in areas close to activity centres, public and community transport and public open spaces.
- 4 The revitalisation of residential areas to support the viability of community services and infrastructure.
- 5 Affordable housing, student housing and housing for aged persons provided in appropriate locations.
- 6 Increased affordable housing opportunities through land division and the conversion of buildings to a residential use.

## PRINCIPLES OF DEVELOPMENT CONTROL

- 1 Residential allotments and sites should maximise solar orientation and have the area and dimensions to accommodate:
  - (a) the siting and construction of a dwelling and associated ancillary outbuildings
  - (b) the provision of landscaping and private open space
  - (c) convenient and safe vehicle, pedestrian and cycling access and parking
  - (d) water sensitive design systems that enable the storage, treatment and reuse of stormwater.
- 2 Residential allotments should be of varying sizes to encourage housing diversity.

## Design and Appearance

- 3 Dwellings and accommodation at ground floor level should contribute to the character of the locality and create active, safe streets by incorporating one or more of the following:
  - (a) front landscaping or terraces that contribute to the spatial and visual structure of the street while maintaining adequate privacy for occupants
  - (b) individual entries for ground floor accommodation
  - (c) opportunities to overlook adjacent public space.
- 4 Residential development should be designed to ensure living rooms have an external outlook.
- 5 Entries to dwellings or foyer areas should be clearly visible from the street, or access ways that they face ~~front~~ to enable visitors to easily identify individual dwellings.

## Garages, Carports and Outbuildings

- 6 Garages, carports and residential outbuildings should have a roof form and pitch, building materials and detailing that complement the associated dwelling.
- 7 Residential outbuildings, including garages and sheds, should not be constructed unless in association with an existing dwelling.

- 8 Garages, carports and residential outbuildings should not dominate the streetscape and be designed within the following parameters:

Parameter	Value
Maximum floor area	60 square metres
Maximum wall height	3 metres
Maximum building height	5 metres
Minimum setback from a primary road frontage	Garages and carports setback in accordance with the following: (a) within the <b>Residential Zone</b> or <b>Residential Character Zone</b> – at least 5.5 metres or 0.5 metres behind the main face of the associated dwelling, whichever is the greater distance from the primary frontage (b) no closer than any part of its associated dwelling and in any other case, be setback a minimum of 5.5 metres  Outbuildings should not protrude forward of any part of its associated dwelling
Minimum setback from a secondary road frontage	0.9 metres or in-line with the existing dwelling
Minimum setback from a rear or side vehicle access way	0 metres
Maximum length along the boundary	8 metres or 50 per cent of the length along that boundary (whichever is the lesser)
Maximum frontage width of garage or carport with an opening facing a rear access lane	No maximum
Maximum frontage width of garage or carport with an opening facing the street	Less than 50 per cent of the allotment frontage provided the width does not exceed 6 metres within the <b>Residential Zone</b> or <b>Residential Character Zone</b>

- 9 Rear vehicular access to garages or carports on sites that front the coast or Esplanade, or from a road that provides primary frontage for other sites, should:

- (a) have a maximum width of 6 metres or 80 per cent of the width of the site, whichever is the lesser  
 (b) landscape the balance of the frontage for a depth of at least 1 metre.

- 10 Except where otherwise specified in a particular zone, policy area or precinct, where there is no building set back pattern already established in the locality, development should be setback from the street boundaries in accordance with the following table:

Estimated traffic volume of the street	Minimum primary frontage	Minimum secondary frontage
300 - 2000 vehicles per day	4 metres from the main face of the dwelling, excluding any veranda, porch etc.	1 metre from any part of the dwelling
2001 - 6000 vehicles per day	4 metres from the main face of the dwelling, excluding any veranda, porch etc.	2 metres from any part of the dwelling

## Site Coverage

11 Site coverage should be limited to ensure sufficient space is provided for:

- (a) pedestrian and vehicle access and vehicle parking
- (b) domestic storage
- (c) outdoor clothes drying
- (d) a rainwater tanks
- (e) private open space and landscaping
- (f) convenient storage of household garbage and recycling receptacles.

## Private Open Space

12 Private open space (available for exclusive use by residents of each dwelling) should be provided for each dwelling and should be sited and designed:

- (a) to be accessed directly from the internal living areas of the dwelling
- (b) to be generally at ground level (other than for residential flat buildings) and to the side or rear of a dwelling and screened for privacy
- (c) to take advantage of, but not adversely affect, natural features of the site
- (d) to minimise overlooking from adjacent buildings
- (e) to achieve separation from bedroom windows on adjoining sites
- (f) to have a northerly aspect to provide for comfortable year round use
- (g) not to be significantly shaded during winter by the associated dwelling or adjacent development
- (h) to be partly shaded in summer
- (i) to minimise noise or air quality impacts that may arise from traffic, industry or other business activities within the locality
- (j) to have sufficient area and shape to be functional, taking into consideration the location of the dwelling, and the dimension and gradient of the site.

13 **Except where otherwise specified**, dwellings at ground level should provide private open space in accordance with the following table:

Site area per dwelling (square meters)	Minimum area excluding any area at ground level at the front of the dwelling (square metres)	Minimum dimension (metres)	Minimum area provided at the rear or side of the dwelling, directly accessible from a habitable room (square metres)
>500	80, of which 10 may comprise balconies, roof patios and the like, provided they have a minimum dimension of 2 metres.	4	24
300-500	60, of which 10 may comprise balconies, roof patios and the	4	16

Site area per dwelling (square meters)	Minimum area excluding any area at ground level at the front of the dwelling (square metres)	Minimum dimension (metres)	Minimum area provided at the rear or side of the dwelling, directly accessible from a habitable room (square metres)
	like, provided they have a minimum dimension of 2 metres.		
<300	24, of which 8 may comprise balconies, roof patios and the like, provided they have a minimum dimension of 2 metres.	3	16

14 For each dwelling in the **Residential Zone** or **Residential Character Zone** that has a ground floor level, private open space should:

(a) contain one primary useable part, directly accessible from a living room within the dwelling consistent with the following requirements:

Policy Area	Minimum area of useable private open space (square metres)	Minimum dimension (metres)	Maximum gradient
<b>Integrated Density Policy Area 20</b>	16 - for a site area 250 square metres or less	4	1-in-10
<b>Woodville Density Policy Area 21</b>	16 - for a site area 250 square metres or less 25 - for a site area greater than 250 square metres	4	1-in-10
<b>Cheltenham Park Policy Area 22 and Woodville West Policy Area 23</b>	10 - for a site area 250 square metres or less 15 - for a site area greater than 250 square metres	3	1-in-10
<b>All other policy areas</b>	25	4	1-in-10

(b) not be covered by verandas by more than 30 per cent and to not include any areas to be used for the parking of motor vehicles

(c) be located behind the building line

(d) be provided at the following rates and in accordance with the following requirements:

Zone / Policy Area	Detached dwelling Semi-detached dwelling Row dwelling	Group dwelling Residential flat building	Site area greater than 250 square metres	Site area 250 square metres or less
<b>Inner Suburban Policy Areas 15, Mid Suburban Policy Area 16, Western Edge Policy Area 17, West Lakes General Policy Area 18</b>	25 per cent of the site area 20 per cent of the site area or 60 square metres per dwelling (whichever is the greater) where an allotment is adjacent or abuts a public road that is adjacent a coastal reserve or zone, the River Torrens Linear Park, the lake at West Lakes or a public reserve with an area of at least 2500 square metres	80 square metres per dwelling or 25 per cent of the site area (whichever is the greater)		
<b>West Lakes Medium Density Policy Area 19</b>	20 per cent of the site area	20 per cent of the site area		
<b>Integrated Medium Density Policy Area 20</b>	20 per cent of the site area	20 per cent of the site area	20 per cent of the site area in Findon west of Findon Road	35 square metres per dwelling in Findon west of Findon Road
<b>Woodville Medium Density Policy Area 21</b>			20 per cent of the allotment area	35 square metres per dwelling 25 square metres where a dwelling has no more than 2 bedrooms and a total floor area of 110 square metres or less (which may partly comprise balconies, roof patios and similar provided the area is at least 8 square metres)
<b>Cheltenham Park Policy Area 22 and Woodville West Policy Area 23</b>			10 per cent of the allotment area	25 square metres per dwelling 20 square metres where a dwelling has no more than 2 bedrooms and a total floor area of 110 square metres or less (which may partly comprise balconies, roof patios and similar provided the area is at least 8 square metres)

Zone / Policy Area	Detached dwelling Semi-detached dwelling Row dwelling	Group dwelling Residential flat building	Site area greater than 250 square metres	Site area 250 square metres or less
<b>Residential Character Zone</b>	25 per cent of the site area 20 per cent of the site area or 60 square metres per dwelling (whichever is the greater) where an allotment is adjacent or abuts a public road that is adjacent a coastal reserve or zone, the River Torrens Linear Park, the lake at West Lakes or a public reserve with an area of at least 2500 square metres	80 square metres per dwelling or 25 per cent of the site area (whichever is the greater)		

- 14 Private open space should not include driveways, effluent drainage areas, rubbish bin storage areas, sites for rainwater tanks and other utility areas, and common areas such as parking areas and communal open space.
- 15 Private open space at ground level should be designed to provide a consolidated area of deep soil (an area of natural ground which excludes areas where there is a structure underneath, pools, and non-permeable paved areas) to:
- (a) assist with ease of drainage
  - (b) allow for effective deep planting
  - (c) reduce urban heat loading and improve micro-climatic conditions around sites and buildings.
- 16 Dwellings located above ground level should provide private open space in accordance with the following table:

Dwelling type	Minimum area of private open space
Studio (where there is no separate bedroom)	No minimum requirement
One bedroom dwelling	8 square metres
Two bedroom dwelling	11 square metres
Three + bedroom dwelling	15 square metres

- 17 Private open space located above ground level should have a minimum dimension of 2 metres and be directly accessible from a habitable room.
- 18 Private open space may be substituted for the equivalent area of communal open space where:
- (a) at least 50 per cent of the communal open space is visually screened from public areas of the development
  - (b) ground floor communal space is overlooked by habitable rooms to facilitate passive surveillance

- (c) it contains landscaping and facilities that are functional, attractive and encourage recreational use.

### Communal Open Space

- 19 Communal open space should be shared with more than one dwelling, not be publicly accessible and exclude:
  - (a) private open space
  - (b) public right of way
  - (c) private streets
  - (d) parking areas and driveways
  - (e) service and storage areas
  - (f) narrow or inaccessible strips of land.
- 20 Communal open space should only be located on elevated gardens or roof tops where the area and overall design is useful for the recreation and amenity needs of residents and where it is designed to:
  - (a) address acoustic, safety, security, and wind effects
  - (b) minimise overlooking into habitable room windows or onto the useable private open space of other dwellings
  - (c) facilitate landscaping and food production
  - (d) be integrated into the overall façade and composition of buildings.

### Noise

- 21 *Other than within an area designated for the purposes of the Noise and Air Emissions Overlay, residential development close to high noise sources (eg major roads, railway lines, tram lines and industry) should be designed to locate bedrooms, living rooms and private open spaces away from those noise sources, or protect these areas with appropriate noise attenuation measures.*
- 22 Noise generated by fixed noise sources such as air conditioning units and pool pumps should be located, designed and attenuated to avoid nuisance to adjoining landowners and occupiers.
- 23 External noise and artificial light intrusion into bedrooms should be minimised by separating or shielding these rooms from:
  - (a) active communal recreation areas, parking areas and vehicle access ways
  - (b) service equipment areas and fixed noise sources on the same or adjacent sites.

### Site Facilities and Storage

- 24 Site facilities for group dwellings, multiple dwellings and residential flat buildings should include:
  - (a) mail box facilities sited close to the major pedestrian entrance to the site
  - (b) bicycle parking for residents and visitors (for developments containing more than 6 dwellings)
  - (c) household waste and recyclable material storage areas away from dwellings.

### Affordable Housing

- 25 Affordable housing should be well integrated and complementary in design and appearance to other dwellings within the development.

### Dependent Accommodation

- 26 Dependent accommodation (i.e. accommodation where the living unit is connected to the same services of the main dwelling) should be developed on the same allotment as the existing dwelling only where:
- (a) the site is of adequate size and configuration
  - (b) the accommodation has a small floor area relative to the associated main dwelling(s)
  - (c) adequate outdoor space of a minimum of 20 square metres is provided for the use of all occupants
  - (d) adequate on-site car parking is provided
  - (e) the building is designed to, and comprises colours and materials that will, complement the associated dwelling.

### Swimming Pools and Outdoor Spas

- 27 Swimming pools, outdoor spas and associated ancillary equipment and structures should be sited so as to protect the privacy and amenity of adjoining residential land.

# ATTACHMENT A8

**(General Section – Transportation and Access (sections))**



# Transportation and Access

## OBJECTIVES

- 1 A comprehensive, integrated, affordable and efficient air, rail, sea, road, cycle and pedestrian transport system that will:
  - (a) provide equitable access to a range of public, community and private transport services for all people
  - (b) ensure a high level of safety
  - (c) effectively support the economic development of the State
  - (d) have minimal negative environmental and social impacts
  - (e) maintain options for the introduction of suitable new transport technologies.
- 2 Development that:
  - (a) provides safe and efficient movement for all transport modes
  - (b) ensures access for vehicles including emergency services, public infrastructure maintenance and commercial vehicles
  - (c) provides off street parking
  - (d) is appropriately located so that it supports and makes best use of existing transport facilities and networks.
  - (e) provides convenient and safe access to public transport stops.
- 3 A road hierarchy that promotes safe and efficient transportation in an integrated manner throughout the State.
- 4 Provision of safe, pleasant, accessible, integrated and permeable pedestrian and cycling networks that are connected to the public transport network.
- 5 Safe and convenient freight and people movement throughout the State.

## PRINCIPLES OF DEVELOPMENT CONTROL

### Land Use

- 1 Land uses arranged to support the efficient provision of sustainable transport networks and encourage their use.

### Movement Systems

- 2 Development should be integrated with existing transport networks, particularly major rail, road and public transport corridors as shown on *Location Map* and *Overlay Maps - Transport*, and designed to minimise its potential impact on the functional performance of the transport network.
- 3 Transport corridors should be sited and designed so as to not unreasonably interfere with the health and amenity of adjacent sensitive land uses.
- 4 Roads should be sited and designed to blend with the landscape and be in sympathy with the terrain.
- 5 Land uses that generate large numbers of visitors such as shopping centres, places of employment, schools, hospitals and medium to high density residential uses should be located so that they can be serviced by the public transport network and encourage walking and cycling.

- 6 Development generating high levels of traffic, such as schools, shopping centres and other retail areas, and entertainment and sporting facilities, should incorporate passenger pick-up and set down areas. The design of such areas should minimise interference to existing traffic and give priority to pedestrians, cyclists and public and community transport users.
- 7 The location and design of public and community transport set-down and pick-up points should maximise safety and minimise the isolation and vulnerability of users.
- 8 Development should provide safe and convenient access for all anticipated modes of transport.
- 9 Development at intersections, pedestrian and cycle crossings, and crossovers to allotments should maintain or enhance sightlines for motorists, cyclists and pedestrians to ensure safety for all road users and pedestrians.
- 10 Driveway crossovers affecting pedestrian footpaths should maintain the level of the footpath.
- 11 Driveway crossovers should be separated and the number minimised to optimise the provision of on-street visitor parking (where on-street parking is appropriate).
- 12 Development should be designed to discourage commercial and industrial vehicle movements through residential streets and adjacent other sensitive land uses.
- 13 Industrial/commercial vehicle movements should be separated from passenger vehicle car parking areas.
- 14 Development should provide for the on-site loading, unloading and turning of all traffic likely to be generated.

### Cycling and Walking

- 15 Development should ensure that a permeable street and path network is established that encourages walking and cycling through the provision of safe, convenient and attractive routes with connections to adjoining streets, paths, open spaces, schools, pedestrian crossing points on arterial roads, public and community transport stops and activity centres.
- 16 Development should provide access, and accommodate multiple route options, for pedestrians and cyclists by enhancing and integrating with:
  - (a) open space networks, recreational trails, parks, reserves and sport and recreation areas
  - (b) Adelaide's principal cycling network (Bikedirect), which includes arterial roads, local roads and off road paths as depicted in *Overlay Maps - Transport*.
- 17 New developments should give priority to and not compromise existing designated bicycle routes.
- 18 Where development coincides with, intersects or divides a proposed bicycle route or corridor, development should incorporate through-access for cyclists.
- 19 Developments should encourage and facilitate cycling as a mode of transport by incorporating end-of-journey facilities including:
  - (a) showers, changing facilities, and secure lockers
  - (b) signage indicating the location of bicycle facilities
  - (c) secure bicycle parking facilities provided at the rate of 3 spaces per 50 employees.
- 20 On-site secure bicycle parking facilities should be:
  - (a) located in a prominent place
  - (b) located at ground floor level
  - (c) located undercover

- (d) located where surveillance is possible
  - (e) well lit and well signed
  - (f) close to well used entrances
  - (g) accessible by cycling along a safe, well lit route.
- 21 Pedestrian and cycling facilities and networks should be designed and provided in accordance with relevant provisions of the *Australian Standards and Austroads Guides*.

## Access

- 22 Development should have direct access from an all weather public road.
- 23 Development should be provided with safe and convenient access which:
- (a) avoids unreasonable interference with the flow of traffic on adjoining roads
  - (b) provides appropriate separation distances from existing roads or level crossings
  - (c) accommodates the type and volume of traffic likely to be generated by the development or land use and minimises induced traffic through over-provision
  - (d) is sited and designed to minimise any adverse impacts on the occupants of and visitors to neighbouring properties.
- 24 Development should not restrict access to publicly owned land such as recreation areas.
- 25 The number of vehicle access points onto arterial roads as shown on *Overlay Maps - Transport* should be minimised, and where possible access points should be:
- (a) limited to local roads (including rear lane access)
  - (b) shared between developments.
- 26 Development with access from roads with existing or projected traffic volumes exceeding 6000 vehicles per day should be sited to avoid the need for vehicles to reverse onto or from the road.
- 27 Vehicle access points servicing a corner allotment should be located at least 6 metres from the road intersection or junction in accordance with Australian Standard AS 2890.
- 28 Where a site has a frontage to both the Esplanade and another road, no vehicular access should be provided off the Esplanade.
- 29 Access points onto public roads should be limited to two with only one access point allowed where a site is less than 20 metres in width.
- 30 Development with access from arterial roads or roads as shown on *Overlay Maps - Transport* should be sited to avoid the need for vehicles to reverse onto or from the road.
- 31 Structures such as canopies and balconies that encroach onto the footpath of a road should not cause visual or physical obstruction to:
- (a) signalised intersections
  - (b) heavy vehicles
  - (c) street lighting
  - (d) overhead electricity lines

- (e) street trees
  - (f) bus stops.
- 32 Except within the **Urban Core Zone**, access provided to the rear of a site should provide space for landscaping, paving and footpaths particularly when operating as a primary frontage for a dwelling or dwellings.
- 33 Driveways, access tracks and parking areas should be designed and constructed to:
- (a) follow the natural contours of the land
  - (b) minimise excavation and/or fill
  - (c) minimise the potential for erosion from surface run-off
  - (d) avoid the removal of existing vegetation
  - (e) be consistent with *Australian Standard AS 2890 Parking facilities*.
- 34 Development serviced by heavy vehicles should:
- (a) be located where the access roads have a carriageway of at least 9.0 metres
  - (b) provide a turning circle of at least 30 metres in diameter to ensure the safe and convenient manoeuvring of vehicles on site.
- 35 Development serviced by heavy vehicles including 'B' doubles should be located and the access provided so that direct vehicle access from authorised heavy vehicle routes can be provided without traversing residential or similar environmentally sensitive zones.

#### Access for People with Disabilities

- 36 Development should be sited and designed to provide convenient access for people with a disability.
- 37 Where appropriate and practical, development should provide for safe and convenient access to the coast and beaches for disabled persons.

#### Vehicle Parking

- 38 Development should provide off-street vehicle parking and specifically marked accessible car parking places to meet anticipated demand in accordance with [Table ChSt/2 – Off Street Vehicle Parking Requirements](#).
- 39 Development should be consistent with *Australian Standard AS 2890 Parking facilities*.
- 40 Vehicle parking areas should be sited and designed to:
- (a) facilitate safe and convenient pedestrian linkages to the development and areas of significant activity or interest in the vicinity of the development
  - (b) include safe pedestrian and bicycle linkages that complement the overall pedestrian and cycling network
  - (c) not inhibit safe and convenient traffic circulation
  - (d) result in minimal conflict between customer and service vehicles
  - (e) avoid the necessity to use public roads when moving from one part of a parking area to another
  - (f) minimise the number of vehicle access points onto public roads
  - (g) avoid the necessity for vehicles to reverse onto public roads

- (h) where practical, provide the opportunity for shared use of car parking and integration of car parking areas with adjoining development to reduce the total extent of vehicle parking areas and the requirement for access points
  - (i) not dominate the character and appearance of a site when viewed from public roads and spaces
  - (j) provide landscaping that will shade and enhance the appearance of the vehicle parking areas
  - (k) include infrastructure such as underground cabling and connections to power infrastructure that will enable the recharging of electric vehicles.
- 41 Where vehicle parking areas are not obviously visible or navigated, signs indicating the location and availability of vehicle parking spaces associated with businesses should be displayed at locations readily visible to users.
- 42 Vehicle parking areas that are likely to be used during non-daylight hours should provide floodlit entry and exit points and site lighting directed and shaded in a manner that will not cause nuisance to adjacent properties or users of the parking area.
- 43 Vehicle parking areas should be sealed or paved in order to minimise dust and mud nuisance.
- 44 To assist with stormwater detention and reduce heat loads in summer, outdoor vehicle parking areas should include landscaping.
- 45 Vehicle parking areas should be line-marked to delineate parking bays, movement aisles and direction of traffic flow.
- 46 On-site visitor parking spaces should be sited and designed to:
- (a) not dominate internal site layout
  - (b) be clearly defined as visitor spaces not specifically associated with any particular dwelling
  - (c) be accessible to visitors at all times.

#### Vehicle Parking for Residential Development

- 47 On-site parking should be provided having regard to:
- (a) the number, nature and size of proposed dwellings
  - (b) proximity to centre facilities, public and community transport within walking distance of the dwellings
  - (c) the anticipated mobility and transport requirements of the likely occupants, particularly groups such as aged persons
  - (d) availability of on-street car parking
  - (e) any loss of on-street parking arising from the development (eg an increase in number of driveway crossovers).
- 48 Vehicle parking areas servicing more than one dwelling should be of a size and location to:
- (a) serve users, including pedestrians, cyclists and motorists, efficiently, conveniently and safely
  - (b) provide adequate space for vehicles, including emergency service vehicles, to manoeuvre between the street and the parking area
  - (c) reinforce or contribute to attractive streetscapes.

#### Vehicle Parking for Mixed Use and Corridor Zones

- 49 The provision of ground level vehicle parking areas, including garages and carports (other than where located along a rear lane access way), should:

- (a) not face the primary street frontage
  - (b) be located to the rear of buildings with access from a shared internal laneway
  - (c) ensure vehicle park entries are recessed at least 0.5 metres behind the main face of the building.
- 50 Development should provide off-street vehicle parking and specifically marked accessible car parking places to meet anticipated demand.
- 51 Loading areas and designated parking spaces for service vehicles should:
- (a) be provided within the boundary of the site
  - (b) not be located in areas where there is parking provided for any other purpose.
- 52 Vehicle parking spaces and multi-level vehicle parking structures within buildings should:
- (a) enhance active street frontages by providing land uses such as commercial, retail or other non-car park uses along ground floor street frontages
  - (b) complement the surrounding built form in terms of height, massing and scale
  - (c) incorporate facade treatments along major street frontages that are sufficiently enclosed and detailed to complement neighbouring buildings consistent with the desired character of the locality.
- 53 In mixed use buildings, the provision of vehicle parking may be reduced in number and shared where the operating hours of commercial activities complement the residential use of the site.

#### Undercroft and Below Ground Garaging and Parking of Vehicles

- 54 Undercroft and below ground garaging of vehicles should ensure:
- (a) the overall height and bulk of the undercroft structure does not adversely impact on streetscape character of the locality or the amenity of adjacent properties
  - (b) vehicles can safely enter and exit from the site without compromising pedestrian safety or causing conflict with other vehicles
  - (c) driveway gradients provide for safe and functional entry and exit
  - (d) driveways and adjacent walls, fencing and landscaping are designed to provide adequate sightlines from vehicles to pedestrians using the adjacent footpath
  - (e) openings to undercroft areas are integrated with the main building so as to minimise visual impact
  - (f) landscaping, mounding and/or fencing is incorporated to improve its presentation to the street and to adjacent properties
  - (g) the overall streetscape character of the locality is not adversely impaired (e.g. visual impact, building bulk, front setbacks relative to adjacent development)
  - (h) the height of the car park ceiling does not exceed 1 metre above the finished ground level.
- 55 In the case of undercroft and below ground car parks where cars are visible from public areas, adequate screening and landscaping should be provided.

# ATTACHMENT B1

**(Overlay: Affordable Housing)**



# Affordable Housing Overlay

Refer to the [Map Reference Tables](#) for a list of maps that relate to this overlay.

The following policies apply to the 'designated area' marked on the relevant *Overlay Map(s) - Affordable Housing*.

## INTERPRETATION

Where the Objectives and or Principles of Development Control that apply in relation to this Overlay are in conflict with the relevant General Objectives and or Principles of Development Control in the Development Plan, the Overlay will prevail.

## OBJECTIVES

- 1 Affordable housing that is integrated into residential and mixed use development.
- 2 Development that comprises a range of affordable dwelling types that cater for a variety of household structures.

## PRINCIPLES OF DEVELOPMENT CONTROL

- 1 Development comprising 20 or more dwellings should include a minimum of 15 per cent affordable housing unless the development is to occur in stages and it can be demonstrated that any shortfall in affordable housing from any stage of development will be accommodated in another stage or stages.



# ATTACHMENT B2

**(Overlay: Noise and Air Emissions)**



# Noise and Air Emissions Overlay

Refer to the [Map Reference Tables](#) for a list of maps that relate to this overlay.

The following policies apply to the 'designated area' marked on the relevant *Overlay Map(s) – Noise and Air Emissions*.

## INTERPRETATION

Where the Objectives and / or Principle of Development Control that apply in relation to this Overlay are in conflict with the relevant General Objectives and / or Principles of Development Control in the General Section of the Development Plan, the Overlay will prevail.

## OBJECTIVES

- 1 Protect community health and amenity from adverse impacts of noise and air emissions.

## PRINCIPLES OF DEVELOPMENT CONTROL

- 1 Noise and air quality sensitive development located adjacent to high noise and/or air pollution sources should:
  - (a) shield sensitive uses and areas through one or more of the following measures:
    - (i) placing buildings containing less sensitive uses between the emission source and sensitive land uses and areas
    - (ii) within individual buildings, place rooms more sensitive to air quality and noise impacts (e.g. bedrooms) further away from the emission source
    - (iii) erecting noise attenuation barriers provided the requirements for safety, urban design and access can be met
  - (b) use building design elements such as varying building heights, widths, articulation, setbacks and shapes to increase wind turbulence and the dispersion of air pollutants provided wind impacts on pedestrian amenity are acceptable
  - (c) locate ground level private open space, communal open space and outdoor play areas within educational establishments (including childcare centres) away from the emission source.



# ATTACHMENT B3

**(Overlay: Strategic Transport Routes)**



# Strategic Transport Routes Overlay

Refer to the [Map Reference Tables](#) for a list of maps that relate to this overlay.

The following policies apply to the 'designated area' marked on the relevant *Overlay Map(s) – Strategic Transport Routes*.

## INTERPRETATION

Where the Objectives and/or Principles of Development Control that apply in relation to this overlay are in conflict with the relevant General Objectives and/or Principles of Development Control in the Development Plan, the overlay will prevail.

## OBJECTIVES

- 1 Development that recognises the importance of strategic transport routes and does not impede traffic flow or create hazardous conditions for pedestrians, cyclists or drivers of vehicles, including emergency services vehicles.

## PRINCIPLES OF DEVELOPMENT CONTROL

- 1 Development adjacent to a strategic transport route should:
  - (a) avoid the provision of parking on the main carriageway
  - (b) be accessible via service roads, where possible, that provide:
    - (i) parking off the main carriageway
    - (ii) a buffer from the main carriageway for pedestrian and cycle activity
  - (c) not impede the potential for overhead cabling and associated infrastructure to be established in an existing or proposed tram corridor.
- 2 Vehicular site access should not be provided on to a strategic transport route where an alternative access is available.
- 3 Development adjacent kerbside bus stops should be set back to provide sufficient space for indented bus bays with associated hard stand area, shelter and a **minimum** 1.2 metre wide continuous accessible path behind the bus shelter.



# ATTACHMENT C

**(Industry Zone)**



## Traffic Generator Scale

21 The following table defines whether a development is a low, medium or high scale traffic generator:

<b>Scale</b>	<b>Associated daily vehicle trips per 100 square metres of total floor area used for the activity</b>
Low	Up to 15 daily vehicle trips
Medium	16 up to 100 daily vehicle trips
High	More than 100 daily vehicle trips



# ATTACHMENT D

**(Urban Core Zone)**



## Urban Core Zone

Refer to the [Map Reference Tables](#) for a list of the maps that relate to this zone.

### OBJECTIVES

- 1 A mixed use zone accommodating a mix of employment generating land uses and medium to high density residential development in close proximity to a high frequency public transport corridor.
- 2 Development within a mixed use environment that is compatible with surrounding development and which does not compromise the amenity of the zone or any adjoining residential zone.
- 3 Smaller dwellings, including innovative housing designs located close to local services and public transit stops.
- 4 Mixed use development integrated with a high quality public realm that promotes walking, cycling, public transport patronage and positive social interaction.
- 5 A zone that provides a spatial separation, or transitions down, in scale and intensity to adjacent lower density residential zones.
- 6 To identify and remediate contaminated land appropriate for its intended use.
- 7 Development that contributes to the desired character of the zone.

### DESIRED CHARACTER

This zone supports housing at medium and high densities and a range of dwelling types which are conveniently located in proximity to high frequency public transport services, recreation, commercial, education, shop, office and other mixed use activities. Development within this zone will also result in significant employment generating activity closely aligned to nearby public transport infrastructure and services.

Medium and high density housing, primarily in the form of row dwellings, residential flat buildings and mixed use buildings will be developed in the zone. Development will be encouraged to achieve the desired minimum average site density as shown on [Concept Plan Map ChSt/23 – Bowden Urban Village Urban Core Zone](#). In the case of integrated development areas containing multiple development sites, the aim should be to achieve the desired minimum average site density across all stages of the development where individual building sites may be above or below the average.

Due to the scale and intensity of development, the zone will focus around a Core Area with a Transition Area adjoining neighbouring residential zones as identified on [Concept Plan Map ChSt/23 – Bowden Urban Village Urban Core Zone](#). In that portion of the Transition Area adjacent to Chief Street, development closest to the Chief Street alignment should not exceed six storeys in height to complement the streetscape and provide an appropriate transition to lower scale residential areas outside of this zone.

The Core Area will provide the greatest intensity of land use and activity in the zone with a mix of residential, and neighbourhood scale commercial and employment generating activities integrated with adjacent public transit stop(s). Located within the Core Area is the **Main Street Policy Area 24**, which will provide the primary focus for convenience shopping, including supermarkets and cultural and community services in the zone.

Development adjacent to a fixed transit stop should be mixed both vertically and horizontally with non-residential uses encouraged on the ground floor to create visual interest and invite personal interaction on street frontages. The exterior storage or display of goods should not compromise pedestrian movement.

Neighbourhood scale retail activity is envisaged within the Core Area of the zone, in addition to other business and community facilities.

Student and aged accommodation, serviced apartments and affordable housing are also strongly encouraged in the Core Area to assist in delivering an overall mix of residential activity in this area.

The Transition Area will provide a buffer between the Core Area and adjacent residential areas / zones with development taking the form of high quality medium-high density housing where the combination of dwellings and residential flat buildings will provide a range of housing for a diverse community. There will be some provision for mixed use buildings, where it does not negatively impact the predominant residential character of the area. Retail floor space in the order of 250-500 square metres will be located within the Transition Area to provide community focus points.

Development in the zone will achieve high quality urban design in both the public and private realm. Buildings will contribute to the provision of a coherent public realm by shaping the street space and, in particular, the physical and functional character of development fronting a key arterial road or public transport corridor.

As development intensifies, overlooking, overshadowing and noise impacts will be moderated through good design and noise attenuation techniques. Impacts on adjoining zones will also be addressed through appropriate building envelopes, transition of building heights, design and location of windows and balconies, and use of landscaping. Buildings will also be designed to maximise solar access within the development site.

Development will contribute positively to the quality of the public realm by articulating buildings with canopies, modelled facades and balconies that make use of light and shade and by providing architectural detail. Solid material will be balanced with glazed areas and plant and service equipment will be enclosed and out of view from the street and neighbouring sites.

A proportion of the public open space will be sited away from transit corridors to ensure that residents and workers have a quiet tranquil outdoor place to relax in.

A range of setbacks will be provided in the zone to accommodate development fronting a primary and / or secondary road frontage and will be critical in softening the continuous edge of new built form and provide a higher amenity streetscape and pedestrian environment which is shaded by street trees and other forms of mature vegetation.

Where appropriate, landscaping features including public art, street furniture, bicycle parking rails and higher quality and recycled materials should be used to create high amenity spaces that establish a sense of place, a connection to heritage and promote community cohesion.

Wide footpaths and innovative use of landscaping will help define the street encouraging the development of active land uses at street level along key thoroughfares. Where opportunities exist, consideration should be given to the development of human-scale shared streets without demarcation or kerbing separating users, promoting voluntary behavioural change of all street users.

Cycling routes and pedestrian pathways and high amenity public open space will create an attractive living environment. Public open space will include a range of forms and sizes including smaller intimate spaces and formal plazas. Spaces will be designed as safe and attractive places for a range of community activities as well as water management.

On-site parking areas will be consolidated, shared and, where possible, not visible from the street or public spaces.

Water Sensitive Urban Design systems, including the harvest and reuse of storm water, will be integrated throughout the area at the neighbourhood, street, site and building level. Harvested storm water will improve the aesthetic and functional value of open spaces, including public access ways and greenways.

The zone contains a number of State and Local Heritage listed places and associated Contributory Items. In addition, the former SA Gas Company (SAGASCO) Gas Works are located in an Historic Conservation Area fronting Chief Street. In this Area, buildings of historic value are characterised by bluestone construction, pitched roofs and a variety of scales, from an intimate pedestrian scale near East Street to a large industrial scale along Chief Street and the railway line. It is desirable to conserve and enhance the historic SAGASCO buildings through sympathetic new development. The extent of places of heritage significance within the zone is well documented and their presence will be taken into account in the development of the wider area.

Established industrial uses within and nearby the Zone comprising the Thebarton brewery situated near the corner of Adam Street and Port Road in the City of West Torrens and a smallgoods facility on Sixth Street, have the potential to produce odours that could cause nuisance to future users and residents within this zone. Efforts

will be made to reduce the potential for land use conflict between these existing uses and new developments likely to be sensitive to odour.

Some parts of the zone are known to be contaminated, including significant contamination within the former Gasworks site located north of the rail line, west of Drayton Street. Other areas within the zone could also be contaminated because of previous activities. Due to these circumstances, development is expected to occur on a precautionary basis where a site contamination audit verifies that a site or sites are suitable and safe for the intended use, particularly where it involves sensitive uses like residential development.

## PRINCIPLES OF DEVELOPMENT CONTROL

### Land Use

- 1 The following forms of development, or combination thereof, are envisaged in the zone:
  - affordable housing
  - aged persons' accommodation
  - art gallery
  - hall
  - parking facility
  - community centre
  - consulting room
  - dwelling
  - educational establishment
  - licensed premises
  - nursing home
  - office
  - pre-school
  - primary school
  - railway station and infrastructure
  - residential flat building
  - retirement village
  - shop or group of shops
  - supported accommodation
  - tram station and infrastructure
- 2 The following additional forms of development, or combination thereof, are envisaged within the Core Area of the zone, identified on [Concept Plan Map ChSt/23 – Bowden Urban Village Urban Core Zone](#):
  - advertisement
  - entertainment venue
  - hotel
  - indoor recreation centre
  - library
  - light industry
  - motel
  - place of worship
  - tourist accommodation
- 3 Development listed as non-complying is generally inappropriate.
- 4 Core Areas, Transition Areas and other identified features should be developed in accordance with the relevant [Concept Plan Map ChSt/23 – Bowden Urban Village Urban Core Zone](#).
- 5 Core Areas should be developed to include a range of land uses that are high pedestrian generators, directly promote public transport use and provide opportunities for multi-purpose trips

- 6 Light industrial and commercial development (including high technology and research based activity) should be located in Core Areas and be compatible with adjoining uses.
- 7 Core Areas should incorporate integrated high quality public open spaces, sport and recreation facilities, and community areas that act as social hubs for communal activity.
- 8 Except in Core Areas where a higher intensity of development is envisaged, non-residential development should comprise uses that:
- (a) are of a local or neighbourhood scale
  - (b) encourage walking to local shopping, community services and other activities
  - (c) do not detrimentally impact on the amenity of nearby residents.
- 9 Except within the **Main Street Policy Area 24** where there is no maximum floor area, a shop or groups of shops should have the following maximum gross leasable areas:

Designated Area	Shop or groups of shops (square metres)
Core Area	500, except for: (a) restaurant (b) bulky goods outlet where the total area does not exceed 2000 square metres
Transition Area	500

#### Form and Character

- 10 Development should be consistent with the desired character for the zone.
- 11 Residential development (other than residential development in mixed use buildings), should achieve a target minimum net residential site density in accordance with [Concept Plan Map ChSt/23 – Bowden Urban Village Urban Core Zone](#), recognising that the target minimum net residential site density may comprise a series of developments or buildings that do not all individually achieve that target minimum.
- 12 Residential development in a mixed use building should aim to achieve a minimum net residential site density of 60 dwellings per hectare.
- 13 In Transition Areas, development should provide a built form that provides the transition between an intense core of development and neighbouring lower intensity development.
- 14 Residential development and other sensitive uses likely to be adversely affected by odour emissions from established industrial activities should:
- (a) be avoided in those parts of the zone closest to the Thebarton brewery (being south of Fourth Street and east of Drayton Street) until those operations cease, or odour reduction control measures have been implemented (or will be implemented within an acceptable period) at the source such that the anticipated odour concentration is within acceptable limits
  - (b) only encroach to within 100 metres of the odour sources associated with the smallgoods processing activities on Sixth Street where the odour concentration levels are unlikely to cause nuisance.

## Design and Appearance

### 15 In Core Areas:

- (a) the ground floor of buildings should be built to dimensions (including ceiling heights) to allow for adaptation to a range of land uses including shops, office and residential without the need for significant change to the building, with a target minimum ceiling height of 3.5 metres within the **Main Street Policy Area 24**
- (b) a minimum of 50 per cent of the ground floor primary frontage of buildings should be visually permeable, transparent or clear glazed to promote active street frontages and maximise passive surveillance.

### 16 Except in Core Areas, development of three or more storeys in height should ensure that:

- (a) north-facing windows to habitable rooms of existing dwelling(s) on the same allotment, and on adjacent allotments, receive at least 3 hours of direct sunlight over a portion of their surface between 9.00 am and 3.00 pm on 21 June
- (b) ground level open space of existing buildings receives direct sunlight for a minimum of 2 hours between 9.00 am and 3.00 pm on 21 June to at least the smaller of the following:
  - (i) half of the existing ground level open space
  - (ii) 35 square metres of the existing ground level open space (with at least one of the area's dimensions measuring 2.5 metres).

### 17 Buildings should address public open space and defined pedestrian and cycle routes as illustrated in [Concept Plan Map ChSt/23 – Bowden Urban Village Urban Core Zone](#).

### 18 Masonry fences should be no more than 1.2 metres in height to maintain sight lines between buildings and the street and to improve safety through passive surveillance.

### 19 Buildings should predominantly provide vehicle access via a side street or real lane access way.

### 20 The public realm should be designed and constructed to a high quality and amenity, create more appealing public spaces that include public art, feature lighting, the creative use of high quality recycled materials, street furniture and landscaping (including understorey plantings).

### 21 Side streets and rear lane access ways should be designed to:

- (a) provide space between buildings that reduces building mass and creates a more interesting public realm
- (b) achieve active frontages at a lower intensity than the primary street frontage.

## Building Envelope

### Building Height

### 22 Except where airport building height restrictions prevail, building heights (excluding any rooftop located mechanical plant or equipment) should be in accordance with [Concept Plan Map ChSt/23 – Bowden Urban Village Urban Core Zone](#).

### Setbacks from the Primary Road Frontage

### 23 Buildings (excluding verandas, porticos and the like) should be set back from the primary road frontage in accordance with the following parameters:

Designated Area	Minimum setback from the primary road frontage	Maximum setback from the primary road frontage
Urban Core Zone (except along Chief Street, south of the rail corridor)	No minimum	3 metres

- 24 Buildings (including verandas, porticos and the like) fronting Chief Street and within 40 metres of the southern edge of the rail corridor should be sited and designed to enable views of the State heritage place (SAGASCO wall) located north of the rail corridor.

### Setbacks from side boundaries

- 25 Buildings (excluding verandas, porticos and the like) should be set back from side boundaries in accordance with the following parameters:

Designated Area	Minimum setback from side boundaries
Urban Core Zone	No minimum

### Other Setbacks

- 26 Buildings (excluding verandas, porticos and the like) should be set back in accordance with the following parameters:

Setback parameter	Value
Minimum set back from secondary road frontage	No minimum
Minimum set back from a rear access way	No minimum where the access way is 6.5 metres or More  OR  Where the access way is less than 6.5 metres in width, the distance equal to the additional width required to make the access way 6.5 metres or more, to provide adequate manoeuvrability for vehicles
Minimum set back from the rear allotment boundary	5 metres except where:  (a) development abuts the wall of an existing or simultaneously constructed building on the adjoining land  (b) a building envelope plan exists for the adjoining land that proposes a wall on the rear boundary be constructed to the same or lesser length and height as provided for by that plan.

## Incentives

- 27 Where a minimum of 3 hours sunlight access on 21 June to habitable rooms and open space of dwellings in adjoining zones can be maintained, the following incentives apply to development:

Form of Development	Additional building height (except on land abutting an adjoining zone)	Car parking reduction (rounded to the nearest whole number)
The development includes undercroft parking with access from a road located to the side or rear of the site	1 storey	10 per cent
A building including non-residential development on the ground floor (or first two floors) with residential development on the floors above, where the residential component achieves the desired target minimum average site density for the relevant Area as shown on <a href="#">Concept Plan Map ChSt/23 – Bowden Urban Village Urban Core Zone</a>	1 storey	10 per cent except on land shown on <i>Overlay Map(s) - Strategic Transport Routes</i>
A building including a rooftop garden that occupies a minimum 25 per cent of the building footprint area	1 storey	
Sympathetic redevelopment of a local or State heritage place that retains the item and its appearance to the street		30 per cent
<b>Maximum Accumulated Allowance</b>	<b>For buildings 5 storeys or less - 1 storey (and less than 4) metres additional building height</b>  <b>For buildings of 6 storeys or more - 2 storeys (and less than 8 metres) additional building height</b>	<b>30 per cent</b>

- 28 Development adjacent to Station Place should ensure that views of the Bowden Railway Station are maintained from the Port Road entrance of the Entertainment Centre.

## Off Street Vehicle Parking

- 29 Except where incentives apply, vehicle parking should be provided at the following rates:

- (a) for residential development, 0.75 car parking spaces per dwelling
- (b) for shops, 3 car parking spaces per 100 square metres of gross leasable floor area
- (c) for tourist accommodation, 1 car parking space for every 4 bedrooms up to 100 bedrooms and 1 car parking space for every 5 bedrooms over 100 bedrooms

- (d) all other non-residential uses, 3 car parking spaces per 100 square metres of gross leasable floor area at ground floor level and 1.5 car parking spaces per 100 square metres of gross leasable floor area above ground floor level.
- 30 A lesser car parking rate may be applied where justified based on local circumstances, for example where:
- (a) the proposed development is adjacent to a designated pedestrian and/or cycling path
  - (b) the proposed development is in convenient walking distance to readily accessible and frequent public transport
  - (c) convenient on-street car parking is readily available (other than where on-street parking may be removed as a result of road works/widening, including along Park Terrace)
  - (d) the proposed development is on or adjacent to the site of a heritage place which hinders the provision of on-site parking
  - (e) there is the opportunity to exploit shared car parking areas between uses based upon compatible hours of peak operation
  - (f) suitable arrangements are made for any parking shortfall to be met elsewhere or by other means
  - (g) for studio apartments, student accommodation, affordable housing, retirement villages or aged persons' accommodation.
- 31 Car parking at basement level, undercroft parking or multi level parking (or a combination of) should be provided rather than 'at grade'.

#### Land Division

- 32 Streets that provide rear access for vehicles are encouraged.
- 33 A traditional street grid pattern should be reinforced in any comprehensive development of areas for mixed use activity to maintain clear sightlines and ensure maximum connectivity.
- 34 Wherever practicable, land division and site amalgamation should:
- (a) create allotments that vary in size and are suitable for a variety of residential and commercial uses
  - (b) improve the level of integration associated with the design and layout of buildings, vehicle parking areas, access points and landscaping treatments.
- 35 Road reserves should be designed to provide on-street parking spaces that vary in size to accommodate the parking of cars and commercial vehicles.
- 36 Vehicular access between First Street / Park Terrace and Second Street / Park Terrace should only be created once the adjacent railway is undergrounded.

## Main Street Policy Area 24

Refer to the [Map Reference Tables](#) for a list of the maps that relate to this policy area.

### OBJECTIVES

- 1 An entertainment, shopping and commercial main street supported by medium and high density residential development.
- 2 Development that is largely consistent in height and width, and frames the street at ground and first floor level.
- 3 An interesting and varied skyline as viewed from the street and afar, provided by modulation in roof forms and the use of parapets.
- 4 A visually interesting streetscape with buildings having a high level of fenestration and detail, and balconies oriented towards the street.
- 5 A high quality public realm with active streets created by buildings designed with frequently repeated frontage form and narrow tenancy footprints.
- 6 Development that contributes to the desired character of the policy area.

### DESIRED CHARACTER

The **Main Street Policy Area 24** primarily focuses on land either side of Gibson Street where development will contribute to a main street theme. Gibson Street will be lined with shopfronts and businesses, creating a lively scene that caters for residents and workers, and attracts visitors to the area including those attending events at the nearby Entertainment Centre and Hindmarsh Stadium. Through an appropriate mix of activities, positioning of shady trees and use of deep awnings, the urban form will foster an ambience that encourages long stays for dining and shopping. Above street level, uses will comprise local businesses, commercial offices and apartments.

The main street will provide the primary focus for convenience shopping, including supermarkets, and cultural and community services. These uses will be located towards the centre of the zone (north of the rail corridor) to ensure equitable access for residents and workers. Smaller scale retail development is appropriate south of the rail corridor.

The main street will encourage the development of a destination that attracts people to its combination of and variety of land uses. Development along that portion of Gibson Street to the south of the rail corridor will provide a continuous, attractive and inviting entrance way to the policy area. Ground floor uses will be non-residential and comprise activities that attract people to the location such as shops, offices and consulting rooms.

Buildings will provide visual interest to the pedestrian, contain frequent pedestrian entries and clear windows to the street. Buildings will be built with a zero set back from the main street, with the occasional section of building set back to create outdoor dining areas, visually interesting building entrances and intimate but active spaces. Footpaths will be sheltered with verandas, shelters and the like to enhance the pedestrian experience. Safe, landscaped pedestrian walkways between buildings will encourage permeability to neighbouring streets and enhance the sense of place and identity of the policy area.

Vehicle access will be grouped, where possible, and from the rear of buildings, with the development of lanes for this purpose encouraged.

On the footpath and at the front façade of developments, landscaping will be small scale or vertical, such as through the use of creepers and greenwalls and in planter boxes on the footpath. Street trees will be provided between parking spaces on the street.

Reuse of the existing warehouses between Third and Fourth Streets will provide opportunity for the development of a 'market' place with associated open space. This area will be the focus of a vibrant art, lifestyle, food and culture scene, providing the evolving precinct with an urban 'edge'.

## PRINCIPLES OF DEVELOPMENT CONTROL

### Land Use

- 1 Development on the ground floor of buildings should be non-residential.
- 2 There is no maximum floor area for shops or groups of shops in the policy area.

### Form and Character

- 3 Development should be consistent with the desired character for the policy area.
- 4 Pedestrian shelter and shade should be provided over footpaths through the use of structures such as awnings, canopies and verandas.
- 5 The ground level street frontages of buildings should contribute to the appearance and retail function of the area by providing at least 5 metres or 60 per cent of the street frontage (whichever is the greater) as an entry / foyer or display window to a shop (including cafe or restaurant) or other community or commercial use which provides pedestrian interest and activation.
- 6 When abutting a footpath, the finished floor level of the ground floor of buildings should be level with the footpath provided the footpath is constructed to an appropriate level to mitigate flood risk at the edge of the development site.

## PROCEDURAL MATTERS

### Complying Development

Complying developments are prescribed in Schedule 4 of the *Development Regulations 2008*.

### Non-complying Development

Development (including building work, a change in the use of land, or division of an allotment) for development involving any of the following is non-complying:

Form of development	Exceptions
Fuel depot	
General industry	
Public service depot	
Road transport terminal	
Service trade premises	
Shop or group of shops with a gross leasable area of greater than 500 square metres where located outside of the <b>Main Street Policy Area 24</b>	Except where for: (a) a bulky goods outlet located to the south of the rail corridor and the total gross leasable floor area does not exceed 2000 square metres (b) a restaurant
Special industry	
Store	
Transport depot	
Warehouse	
Waste reception, storage, treatment or disposal	

### Public Notification

Categories of public notification are prescribed in Schedule 9 of the *Development Regulations 2008*.

In addition, the following forms of development, or any combination of, (except where the development is classified as non-complying) are designated:

Category 1	Category 2
Advertisement Aged persons' accommodation All forms of development that are ancillary and in association with residential development Art gallery Parking facility Cinema Community centre Consulting room Dwelling Educational establishment Entertainment venue	All forms of development not listed as Category 1

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**Category 1****Category 2**

Hall

Hotel:

- (a) located in the **Main Street Policy Area 24**
- (b) fronting **Park Terrace**

Indoor recreation facility

Library

Licensed premises

Motel

Nursing home

Office

Pre-school

Primary school

Railway infrastructure

Railway station

Recreation area

Residential flat buildings

Retirement village

Shop or group of shops:

- (a) in the **Main Street Policy Area 24**
- (b) outside of the **Main Street Policy Area 24**, with a gross leasable area of 500 square metres or less (excluding a **restaurant**)
- (c) comprising **Bulky Goods Outlet** outside of the **Main Street Policy Area 24**, with a gross leasable area of 2000 square metres or less

Supported accommodation

Tram infrastructure

Tram station

Tourist accommodation

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# ATTACHMENT E

**(Replacement Overlay Maps Table)**



## Overlay Maps

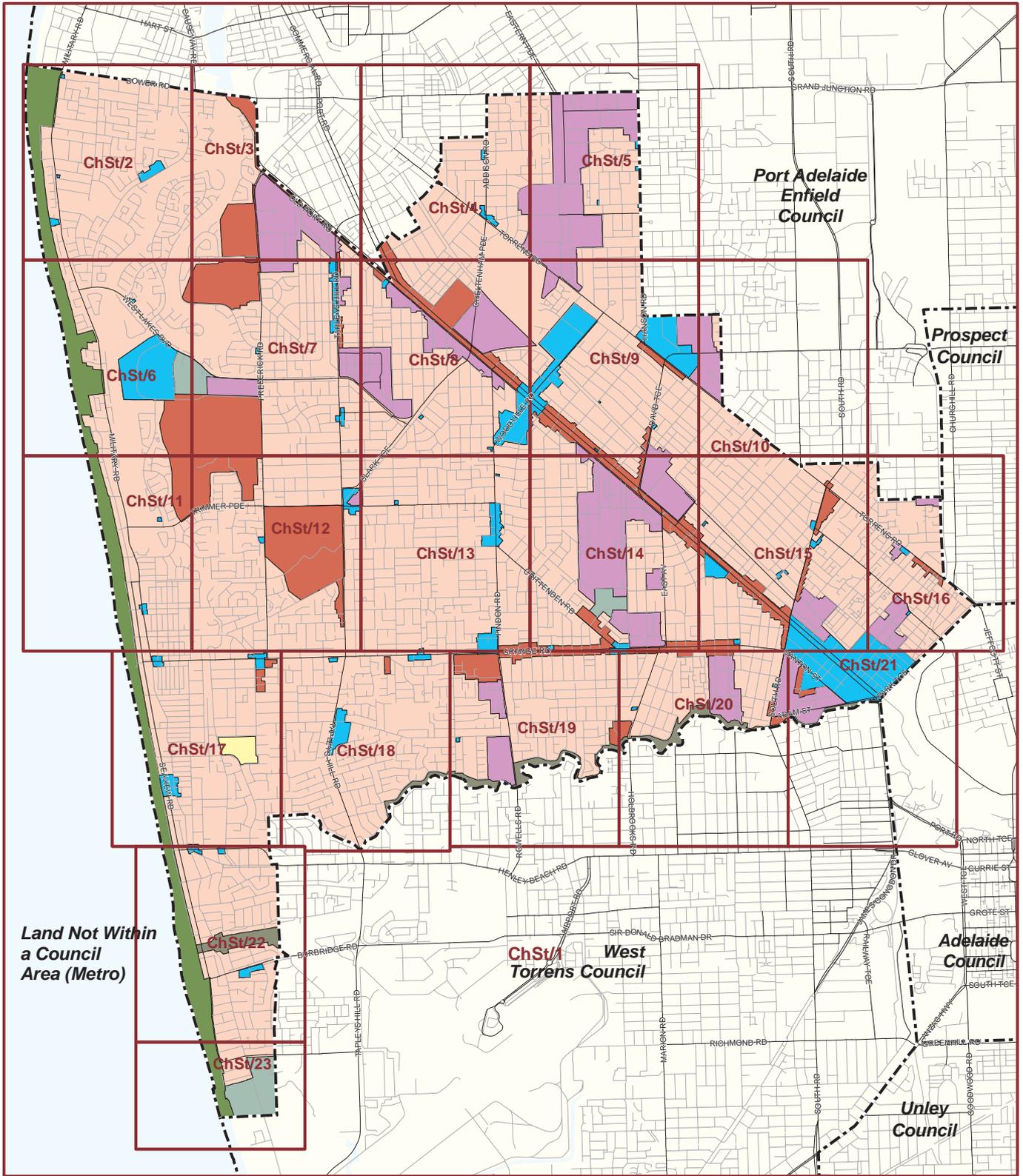
Issue	Overlay Map Numbers
Location	ChSt/1, ChSt/2, ChSt/3, ChSt/4, ChSt/4, ChSt/5, ChSt/6, ChSt/7, ChSt/8, ChSt/9, ChSt/10, ChSt/11, ChSt/12, ChSt/13, ChSt/14, ChSt/16, ChSt/17, ChSt/18, ChSt/19, ChSt/20, ChSt/21, ChSt/21, ChSt/23
Transport	ChSt/1, ChSt/2, ChSt/3, ChSt/4, ChSt/4, ChSt/5, ChSt/6, ChSt/7, ChSt/8, ChSt/9, ChSt/10, ChSt/11, ChSt/12, ChSt/13, ChSt/14, ChSt/16, ChSt/17, ChSt/18, ChSt/19, ChSt/20, ChSt/21, ChSt/21, ChSt/23
Heritage	ChSt/2, ChSt/3, ChSt/4, ChSt/5, ChSt/6, ChSt/8, ChSt/9, ChSt/10, ChSt/11, ChSt/12, ChSt/13, ChSt/14, ChSt/16, ChSt/17, ChSt/18, ChSt/20, ChSt/21, ChSt/21, ChSt/23
Development Constraints	ChSt/1, ChSt/2, ChSt/3, ChSt/4, ChSt/4, ChSt/5, ChSt/6, ChSt/7, ChSt/8, ChSt/9, ChSt/10, ChSt/11, ChSt/12, ChSt/13, ChSt/14, ChSt/16, ChSt/17, ChSt/18, ChSt/19, ChSt/20, ChSt/21, ChSt/21, ChSt/23
Affordable Housing	ChSt/15, ChSt/16, ChSt/21
Noise and Air Emissions	ChSt/15, ChSt/16, ChSt/21
Strategic Transport Routes	ChSt/21



# ATTACHMENT F

**(Replacement Maps)**



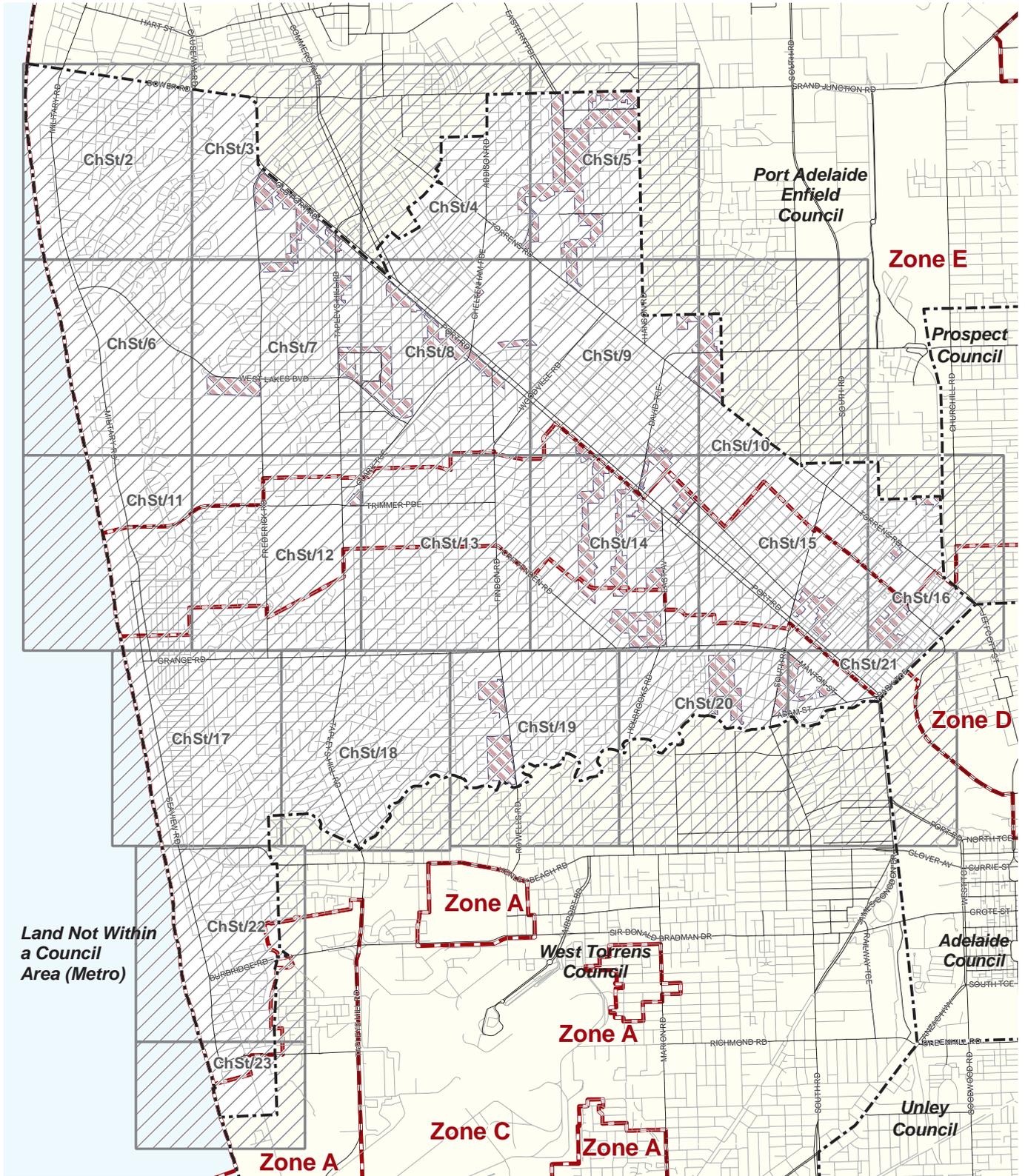


For the purposes of the Development Plan unless otherwise clearly indicated, the zone/policy area/precinct boundaries depicted on or intended to be fixed by Maps ChSt/1 to Map ChSt/24 inclusive shall be read as conforming in all respects (as the case may require) to the land division boundaries, to the centre line of roads or drain reserves or to the title boundaries, or to imaginary straight lines joining the positions defined by survey or by the measurements shown on the said maps against which the said zone/policy area/precinct boundaries are shown or otherwise indicated.

0



# Council Index Map



- Airport Building Heights**  
**Zone A** All Structures  
**Zone C** All Structures Exceeding 15 metres above existing ground level  
**Zone D** All Structures Exceeding 45 metres above existing ground level  
**Zone E** All Structures Exceeding 100 metres above existing ground level

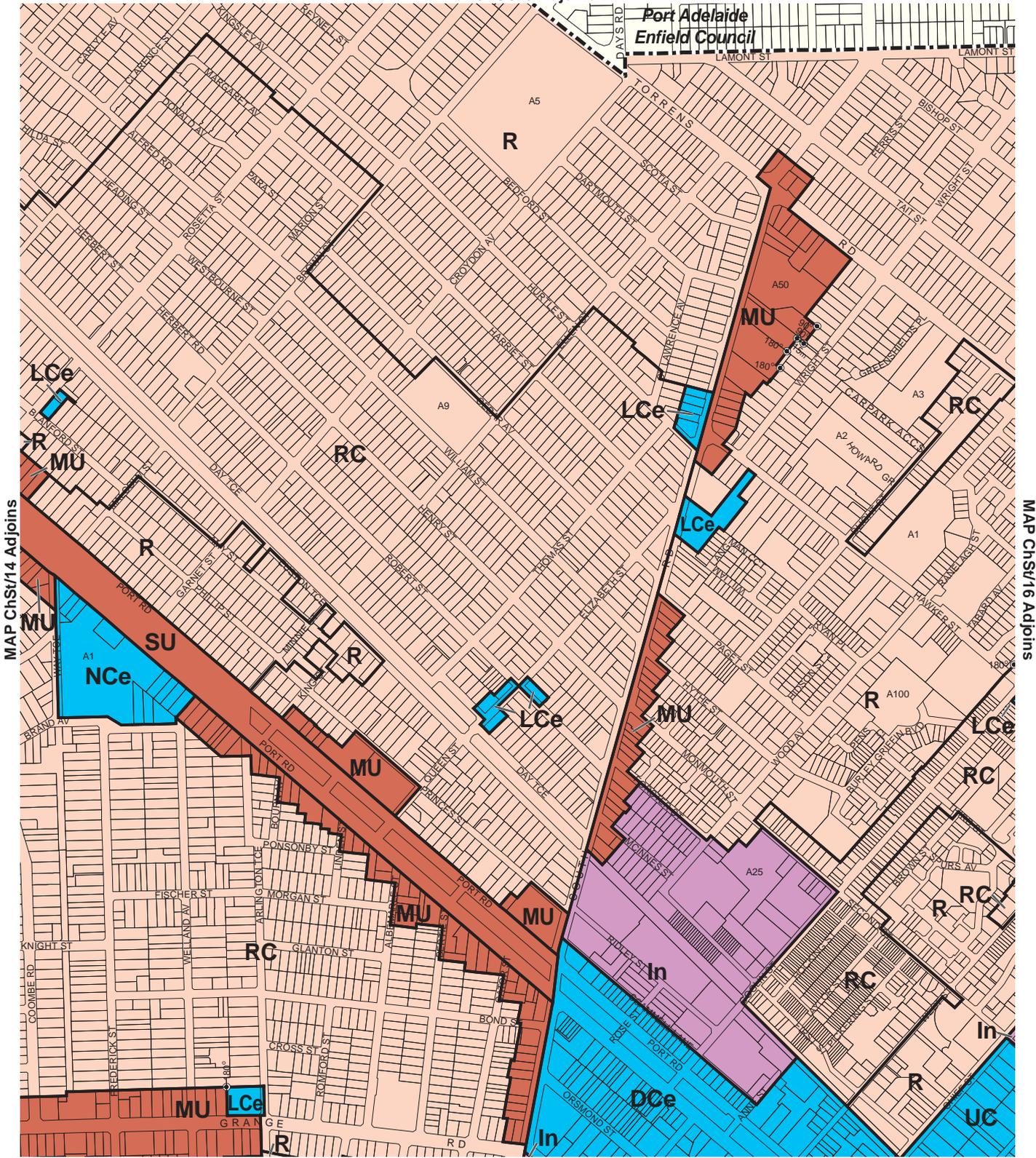
- Airport Building Heights
- Industry Interface Area
- Development Plan Boundary

# Overlay Map ChSt/1

## DEVELOPMENT CONSTRAINTS

MAP ChSt/10 Adjoins

Port Adelaide  
Enfield Council



MAP ChSt/20 Adjoins

MAP ChSt/21 Adjoins

Lamberts Conformal Conic Projection, GDA94

**Zones**

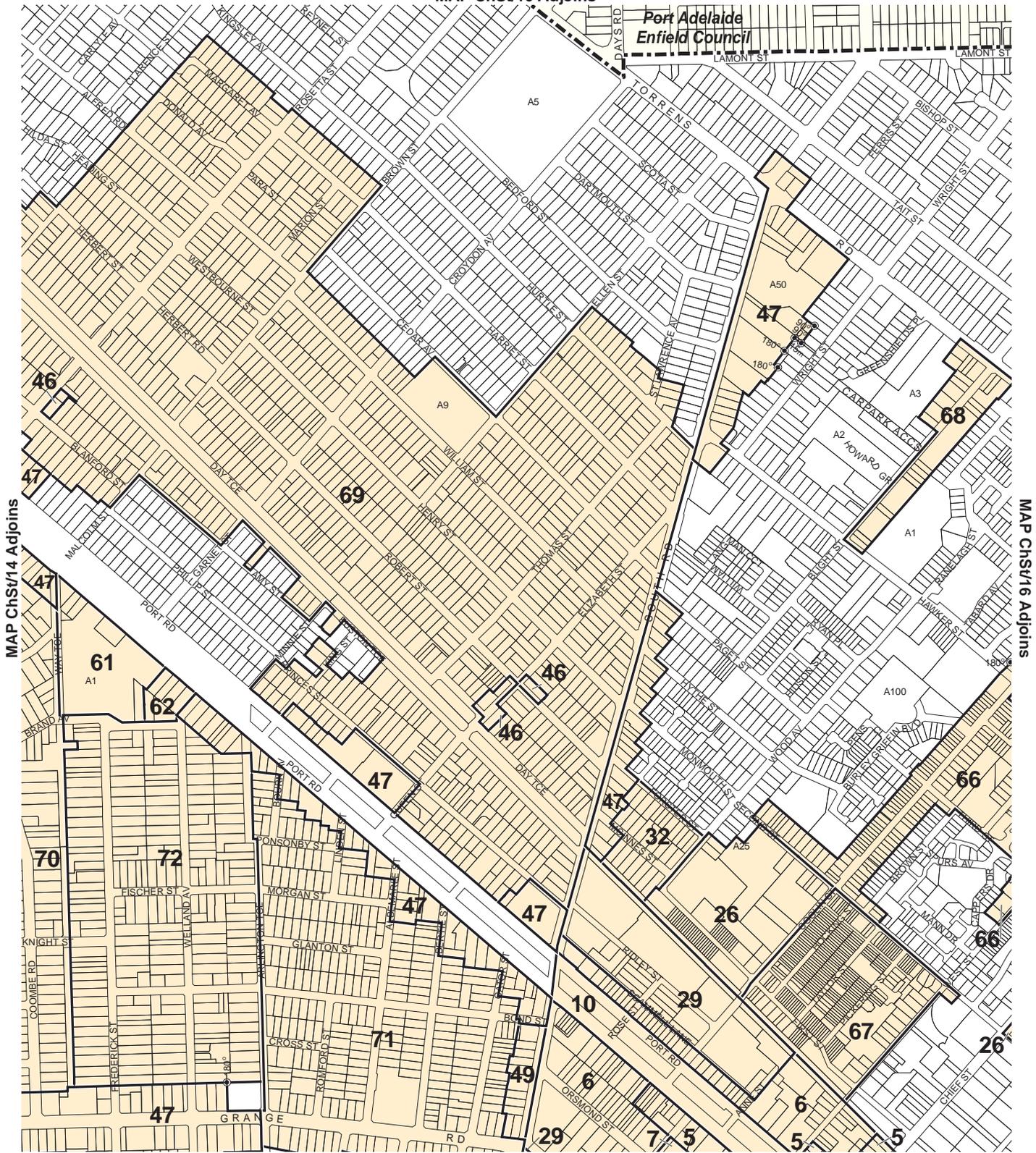
- DCe District Centre
- In Industry
- LCe Local Centre
- MU Mixed Use
- NCe Neighbourhood Centre
- R Residential
- RC Residential Character
- SU Special Use
- UC Urban Core
- Zone Boundary
- Development Plan Boundary



# Zone Map ChSt/15

MAP ChSt/10 Adjoins

Port Adelaide  
Enfield Council



MAP ChSt/14 Adjoins

MAP ChSt/16 Adjoins

MAP ChSt/20 Adjoins

MAP ChSt/21 Adjoins

Lamberts Conformal Conic Projection, GDA94

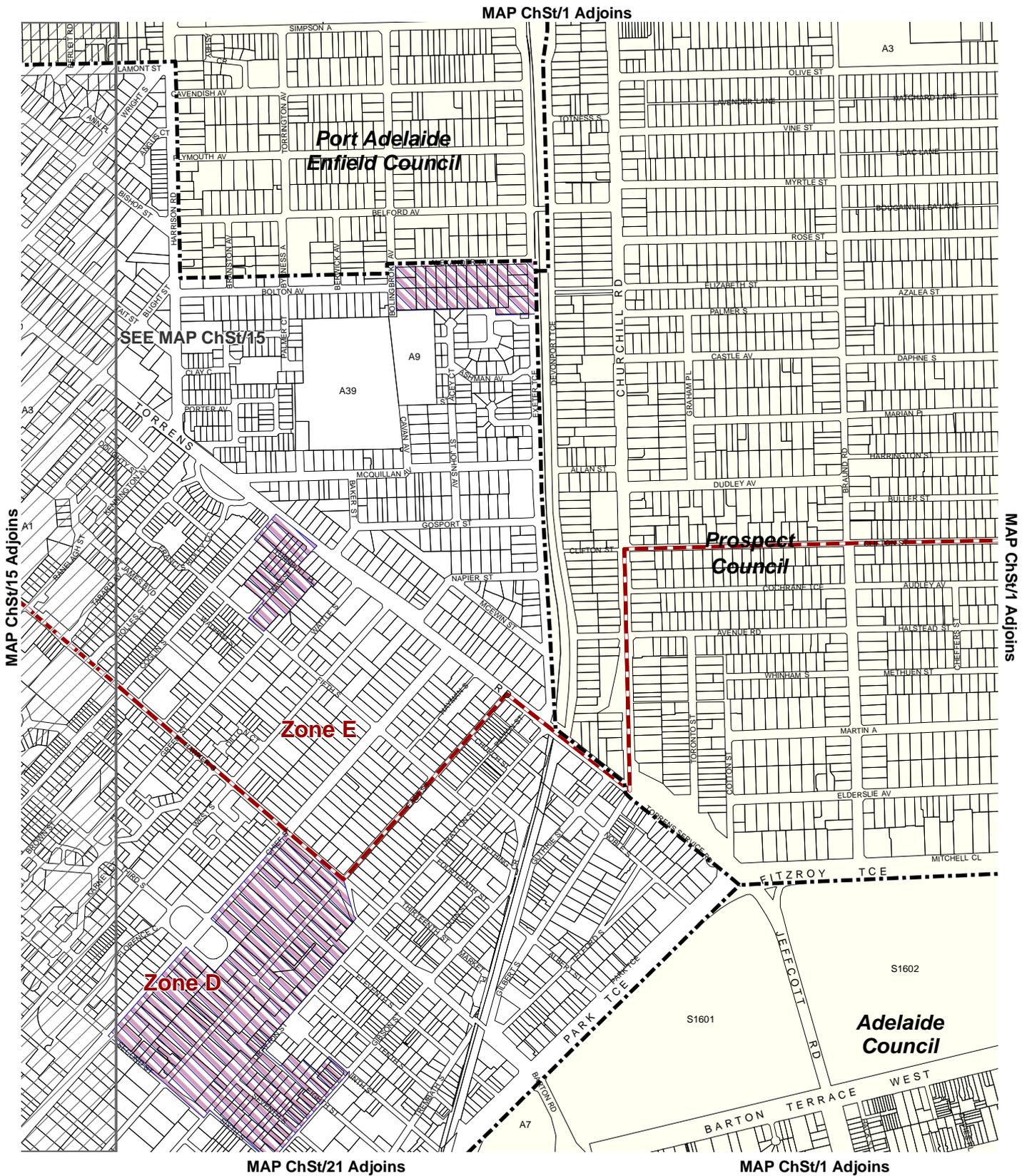
**Precinct**

- |                              |                         |
|------------------------------|-------------------------|
| 10 Port Road Gardens         | 69 Croydon/West Croydon |
| 26 Brompton                  | 7 Manton Street         |
| 29 Hindmarsh                 | 70 Allenby Gardens      |
| 32 Ridleyton                 | 71 Pre World War One    |
| 46 Stations                  | 72 Welland Character    |
| 47 Mixed Use                 |                         |
| 49 South Road                |                         |
| 5 Historic Hub               |                         |
| 6 Port Road Office           |                         |
| 61 Retail Core Welland       |                         |
| 62 Commercial Fringe Welland |                         |
| 66 Bowden/Brompton           |                         |
| 67 Brompton Park             |                         |
| 68 Early SA Housing Trust    |                         |



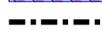
# Precinct Map ChSt/15

- Precinct Boundary
- Development Plan Boundary



**Airport Building Heights**  
**Zone D** All Structures Exceeding 45 metres above existing ground level  
**Zone E** All Structures Exceeding 100 metres above existing ground level

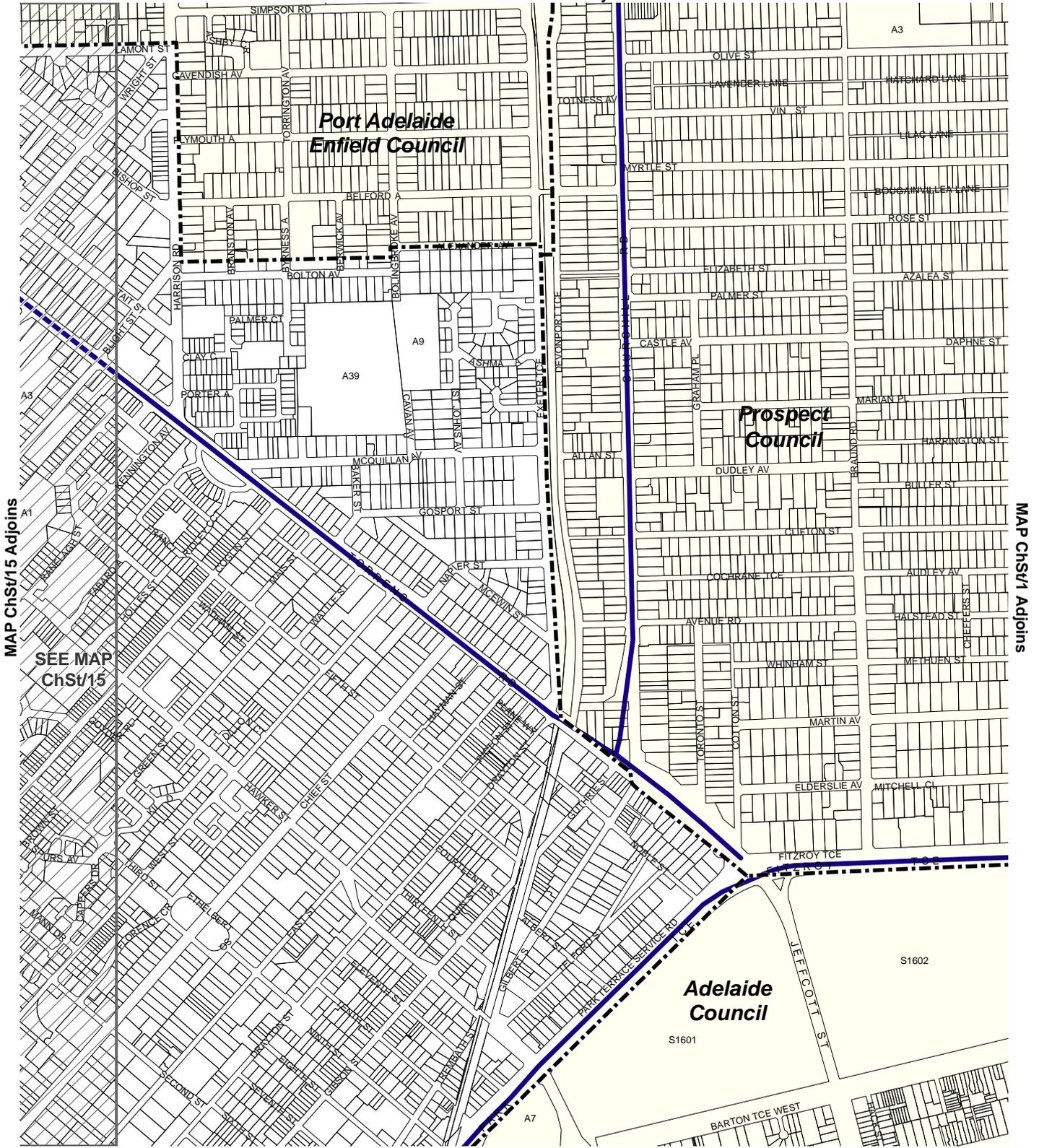


-  Airport Building Heights
-  Industry Interface Area
-  Development Plan Boundary

# Overlay Map ChSt/16

## DEVELOPMENT CONSTRAINTS

MAP ChSt/1 Adjoins



MAP ChSt/15 Adjoins

SEE MAP ChSt/15

MAP ChSt/21 Adjoins

MAP ChSt/1 Adjoins

MAP ChSt/1 Adjoins

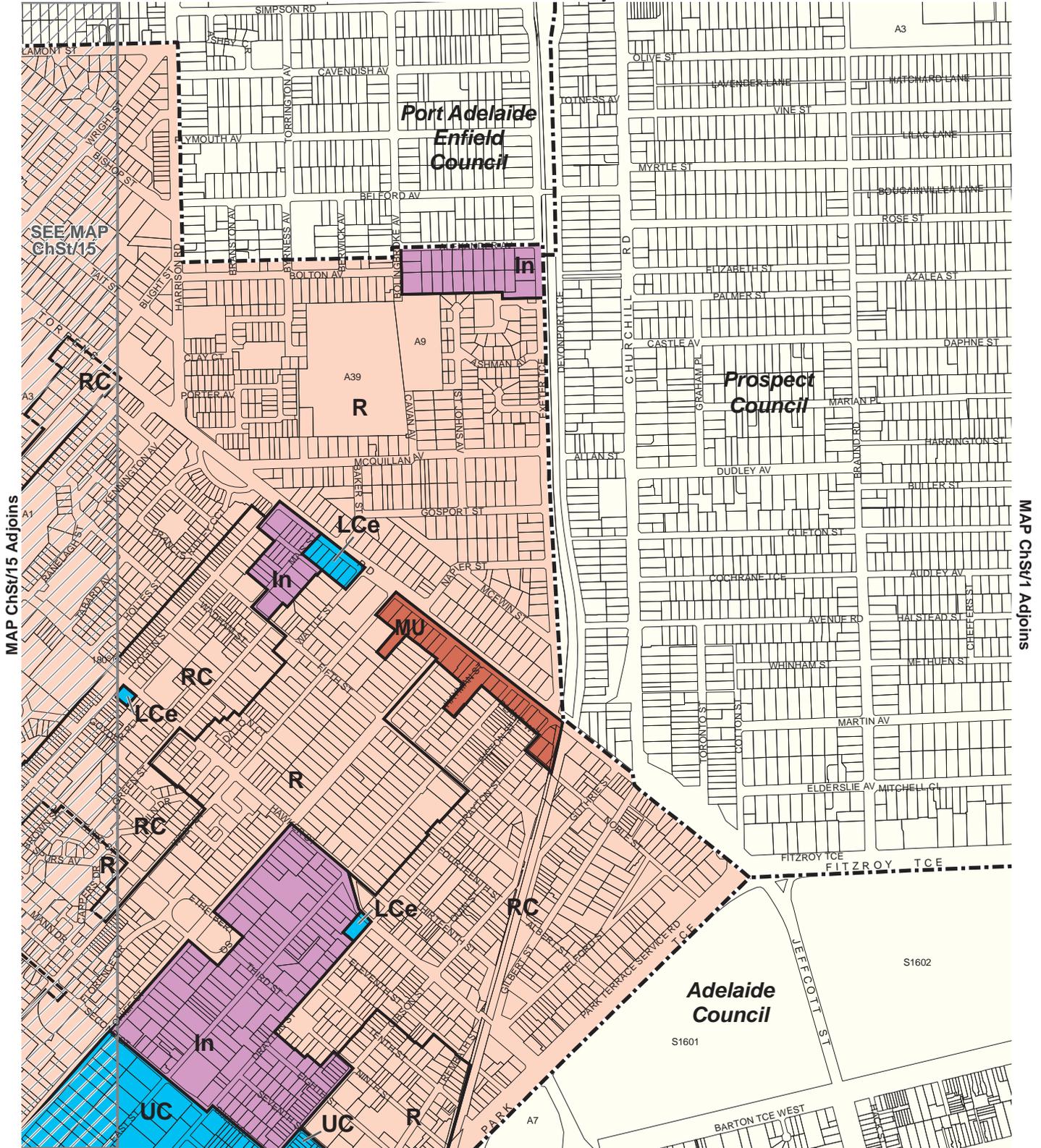


# Overlay Map ChSt/16

## STRATEGIC TRANSPORT ROUTES

- Strategic Transport Route
- Development Plan Boundary

MAP ChSt/1 Adjoins



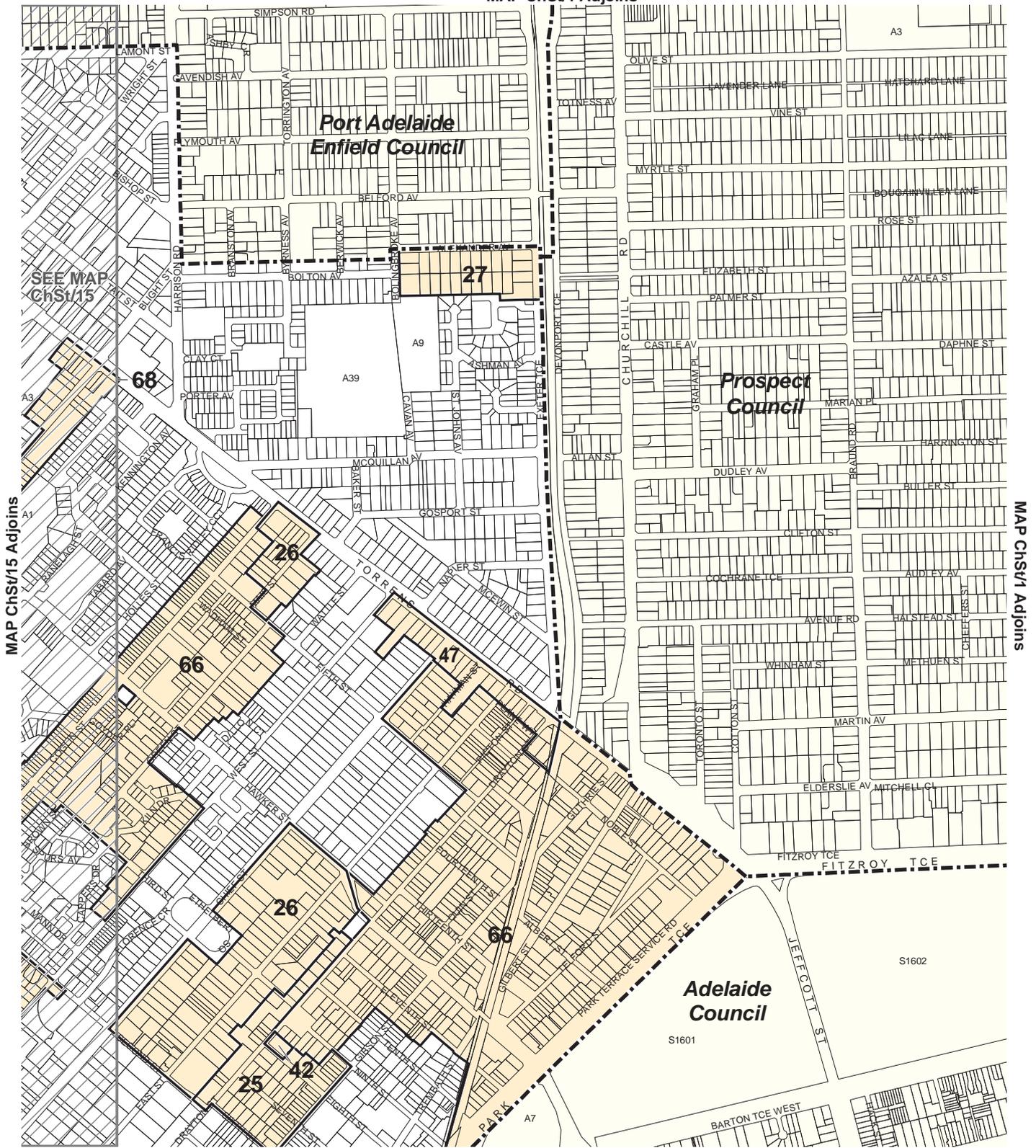
See enlargement map for accurate representation.  
 Lamberts Conformal Conic Projection, GDA94

- Zones**
- Industry
  - Local Centre
  - Mixed Use
  - Residential
  - Residential Character
  - Urban Core
  - Zone Boundary
  - Development Plan Boundary



# Zone Map ChSt/16

MAP ChSt/1 Adjoins



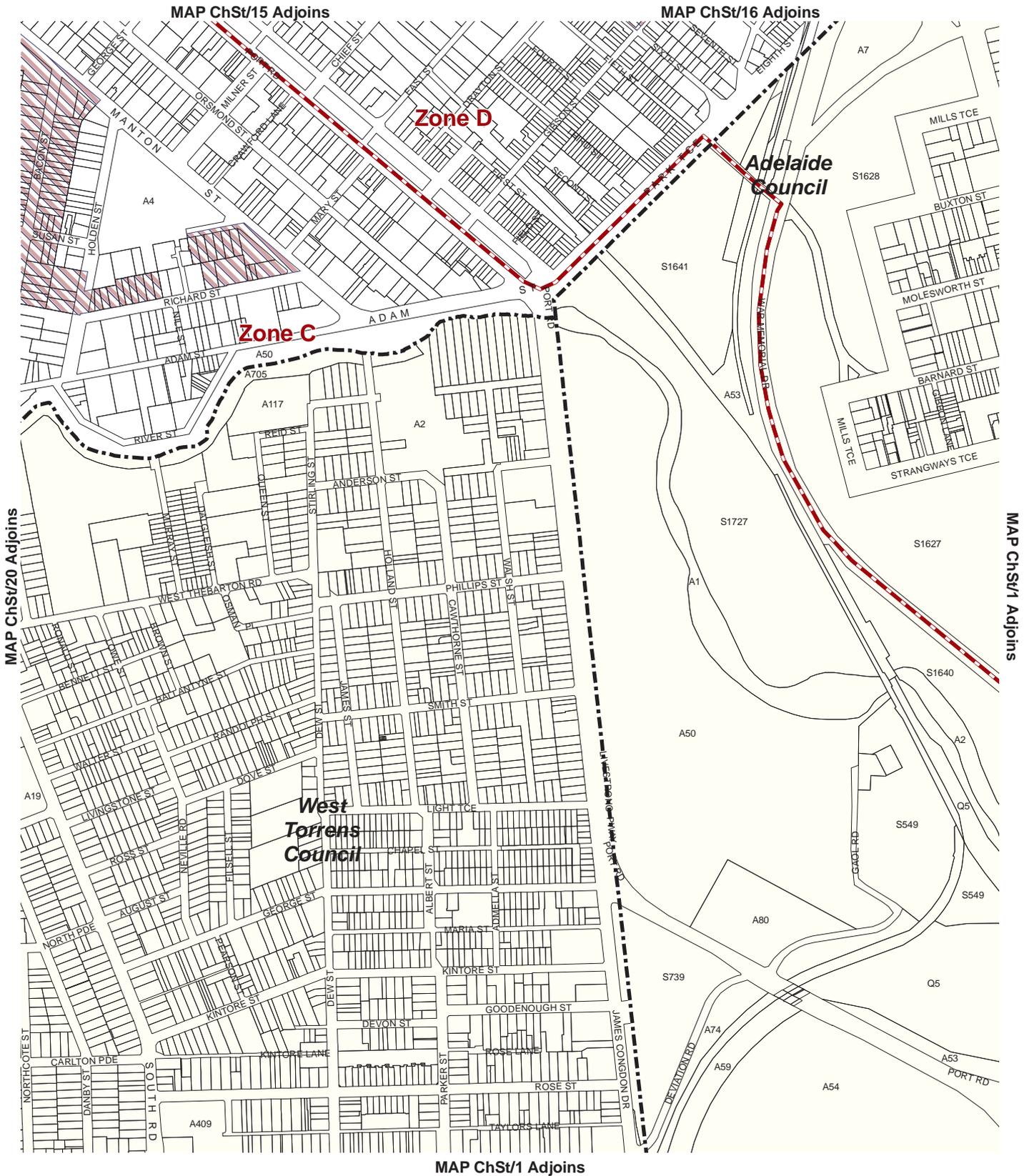
See enlargement map for accurate representation.  
Lamberts Conformal Conic Projection, GDA94

- Precinct**
- 25 Bowden
  - 26 Brompton
  - 27 Devon Park
  - 42 Eighth Street
  - 47 Mixed Use
  - 66 Bowden/Brompton
  - 68 Early SA Housing Trust



# Precinct Map ChSt/16

- Precinct Boundary
- Development Plan Boundary



**Airport Building Heights**  
**Zone C** All Structures Exceeding 15 metres above existing ground level  
**Zone D** All Structures Exceeding 45 metres above existing ground level



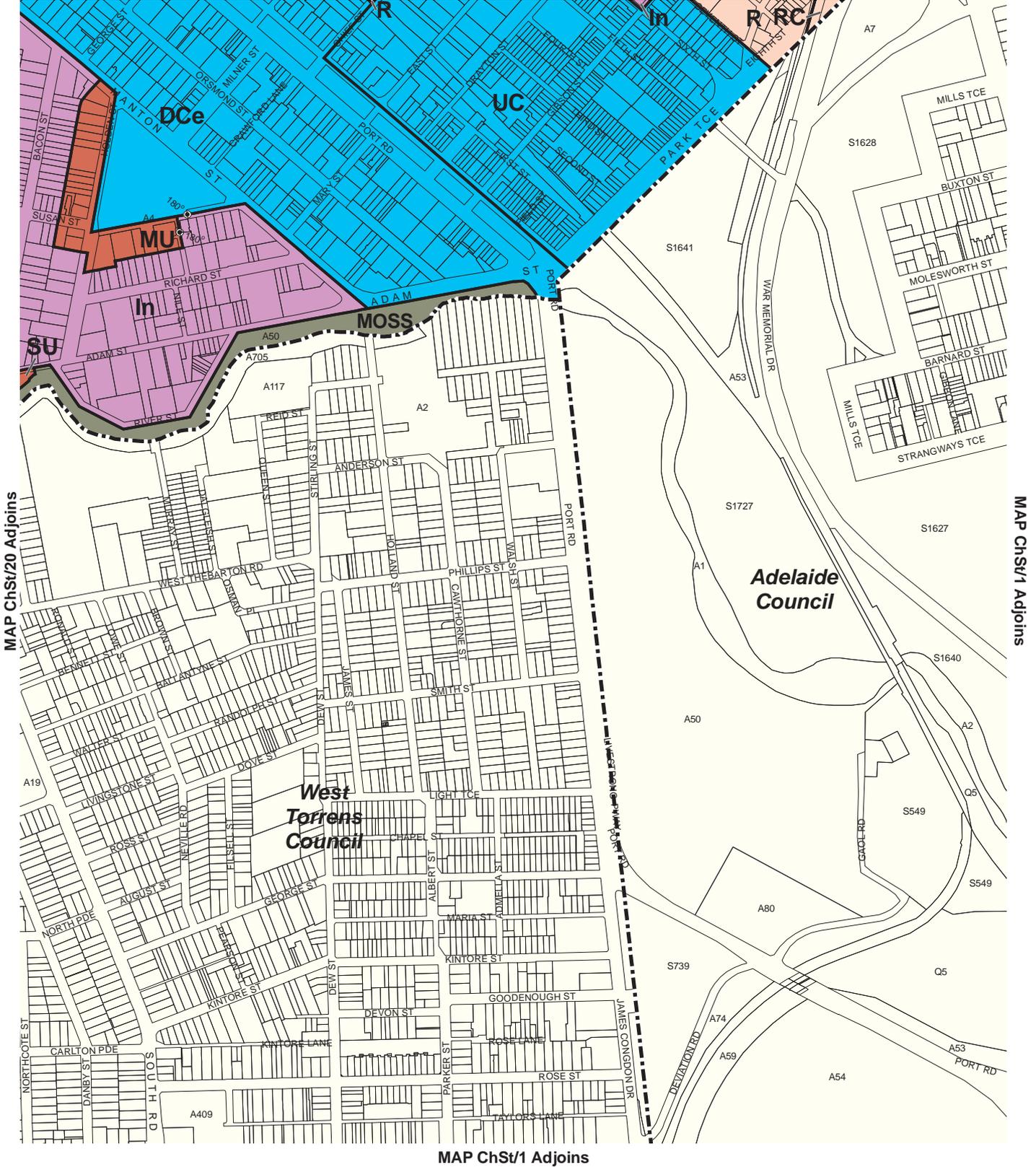
# Overlay Map ChSt/21

## DEVELOPMENT CONSTRAINTS

-  Airport Building Heights
-  Industry Interface Area
-  Development Plan Boundary

MAP ChSt/15 Adjoins

MAP ChSt/16 Adjoins



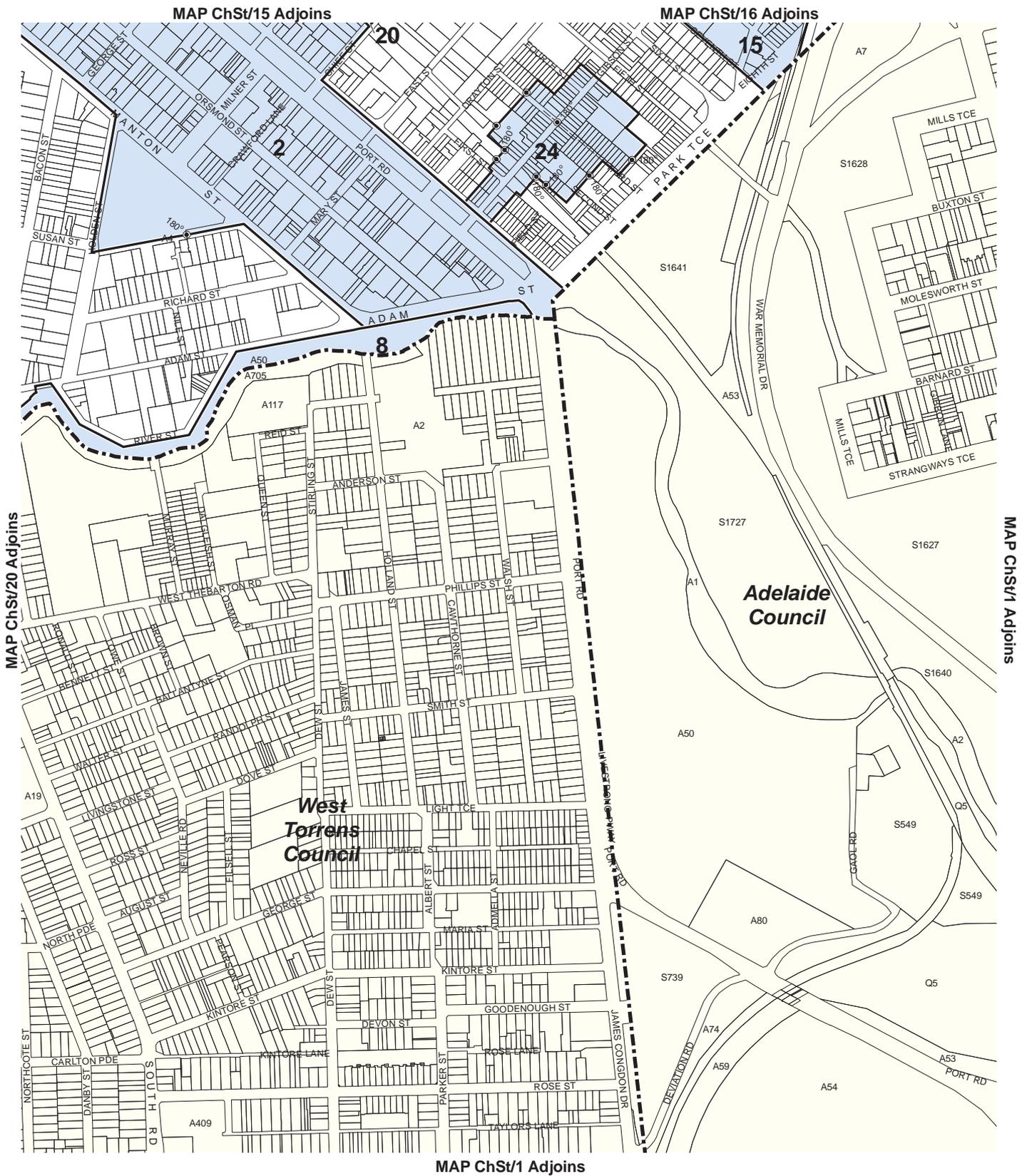
Lamberts Conformal Conic Projection, GDA94

Zones

- DCe** District Centre
- In** Industry
- MOSS** Metropolitan Open Space System
- MU** Mixed Use
- R** Residential
- RC** Residential Character
- SU** Special Use
- UC** Urban Core
- Zone Boundary
- - - - -** Development Plan Boundary



# Zone Map ChSt/21



Lamberts Conformal Conic Projection, GDA94

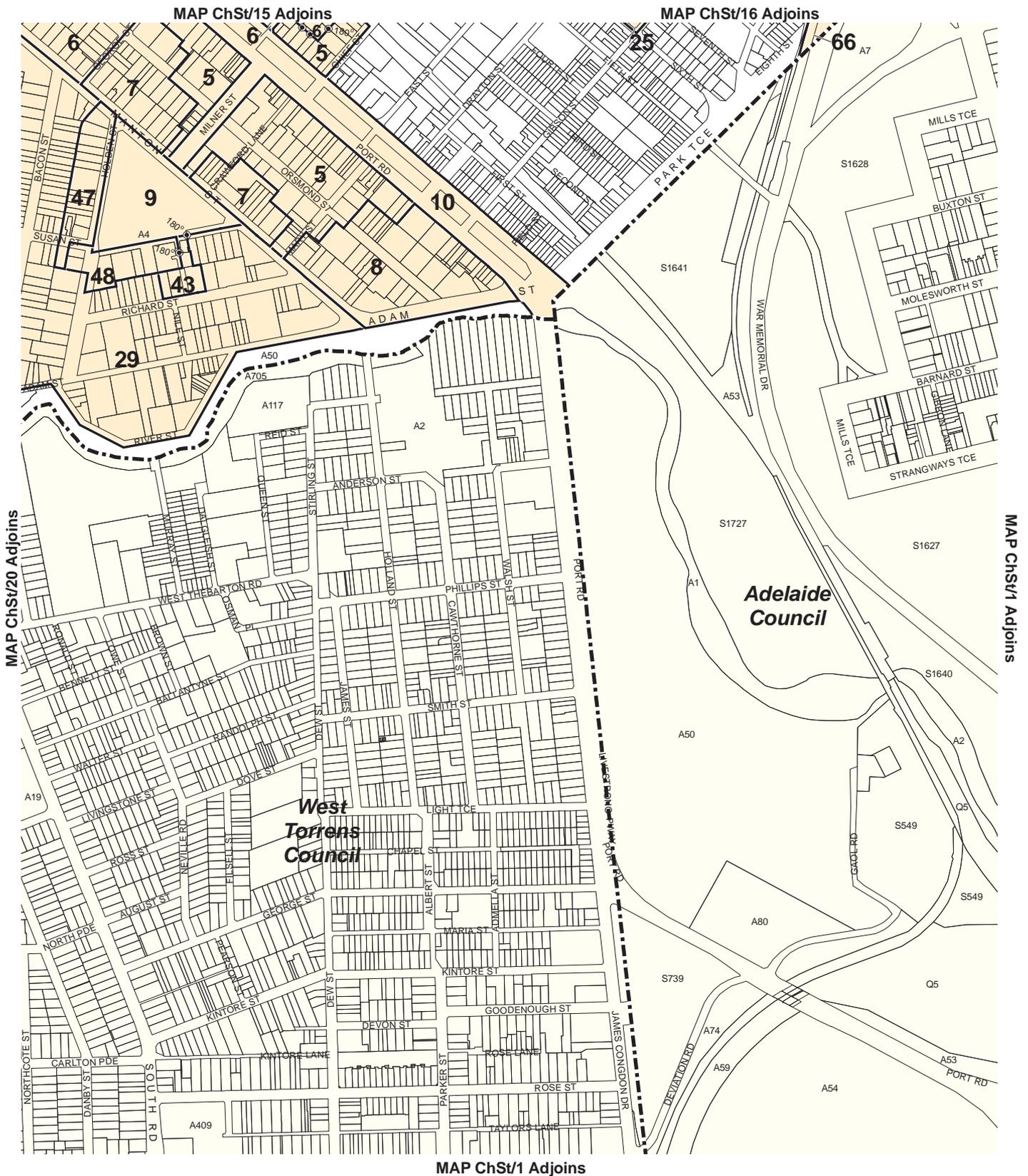
**Policy Area**

- 15 Inner Suburban
- 2 Hindmarsh
- 20 Integrated Medium Density
- 24 Main Street
- 8 Linear Park(River Torrens/Karrawirra Parri)



# Policy Area Map ChSt/21

- Policy Area Boundary
- Development Plan Boundary



Lamberts Conformal Conic Projection, GDA94

**Precinct**

- 10 Port Road Gardens
- 25 Bowden
- 29 Hindmarsh
- 43 Chapel Street
- 47 Mixed Use
- 48 Hindmarsh Place
- 5 Historic Hub
- 6 Port Road Office
- 66 Bowden/Brompton
- 7 Manton Street
- 8 Gateway
- 9 Recreation Hindmarsh

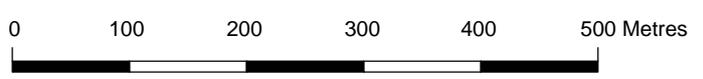
- Precinct Boundary
- Development Plan Boundary



# Precinct Map ChSt/21



- 5 Precinct 5 Historic Hub
- 6 Precinct 6 Port Road Office
- 7 Precinct 7 Manton Street
- 8 Precinct 8 Gateway
- 9 Precinct 9 Recreation Hindmarsh
- 10 Precinct 10 Port Road Gardens
- Major Townscape Focus
- State Heritage Place
- ▲ Local Heritage Place
- ▨ Places contributing to the Historic Character of the area
- Policy Area Boundary
- - - Precinct Boundary
- · - · Development Plan Boundary



HINDMARSH

# Concept Plan Map ChSt/2

## HINDMARSH POLICY AREA 2

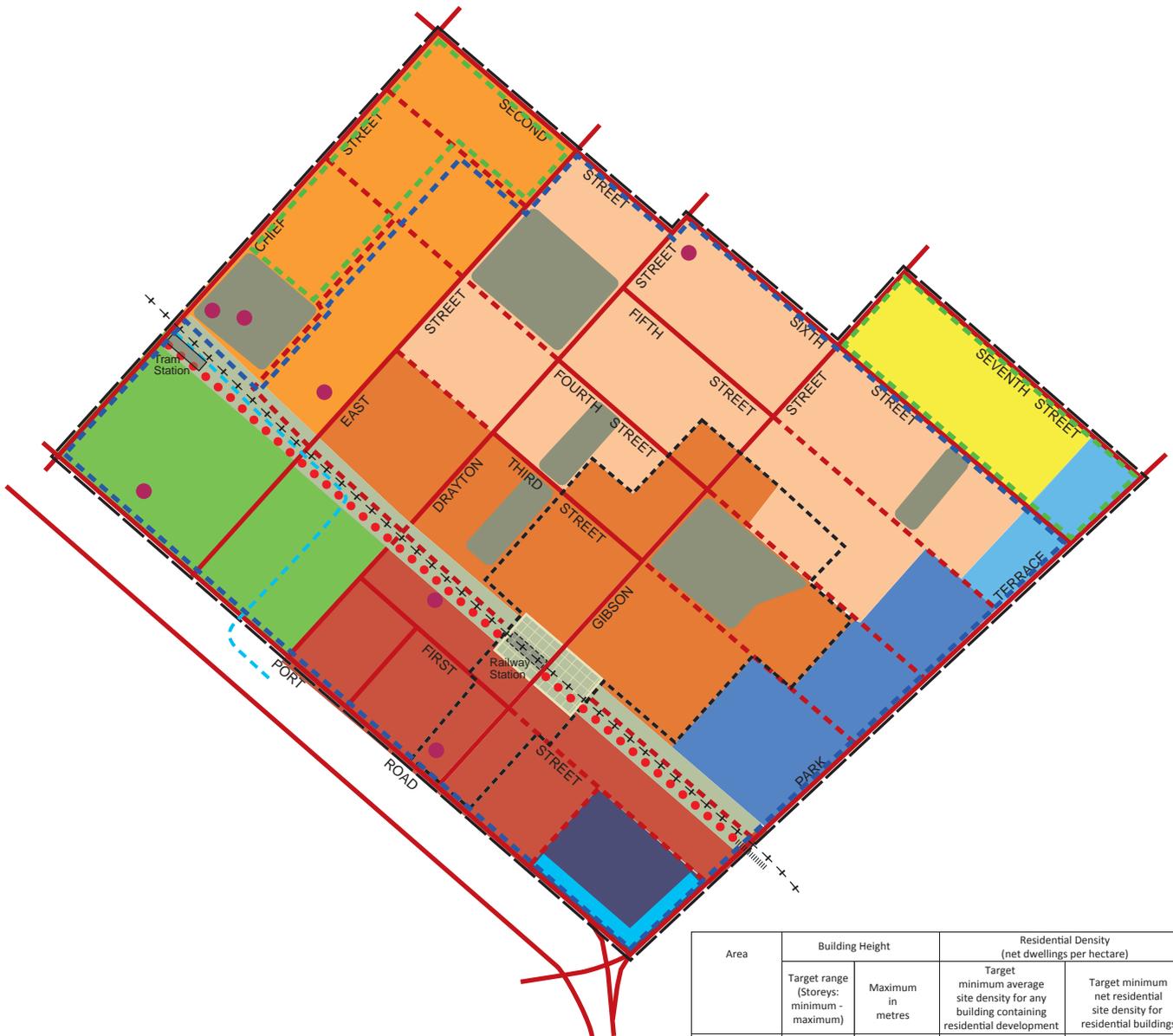
CHARLES STURT COUNCIL



# ATTACHMENT G

**(New Concept Plan and Overlay Maps)**





- Core
- Transition
- Greenway and bike/pedestrian path
- Piazza
- Proposed Pedestrian/Bicycle Overpass
- State Heritage Place
- Landmark Site
- Open Space
- Urban Core Zone
- Main Street Precinct boundary
- Potential extension of Tram Way
- Future Tram Station
- Future Underground Railway Station
- Potential for undergrounding and realignment of rail line
- Road
- Proposed new street

Area	Building Height		Residential Density (net dwellings per hectare)	
	Target range (Storeys: minimum - maximum)	Maximum in metres	Target minimum average site density for any building containing residential development	Target minimum net residential site density for residential buildings
	2 - 8	32.5	230	100
	3 - 4	16.5	90	60
	3 - 6	24.5	220	60
	3 - 10	40.5	260	130
	3 - 10	40.5	230	200
	4 - 6	24.5	220	150
	6 - 12	48.5	230	200
	6 - 12	48.5	270	220
	12 - 16	64.5	230	200



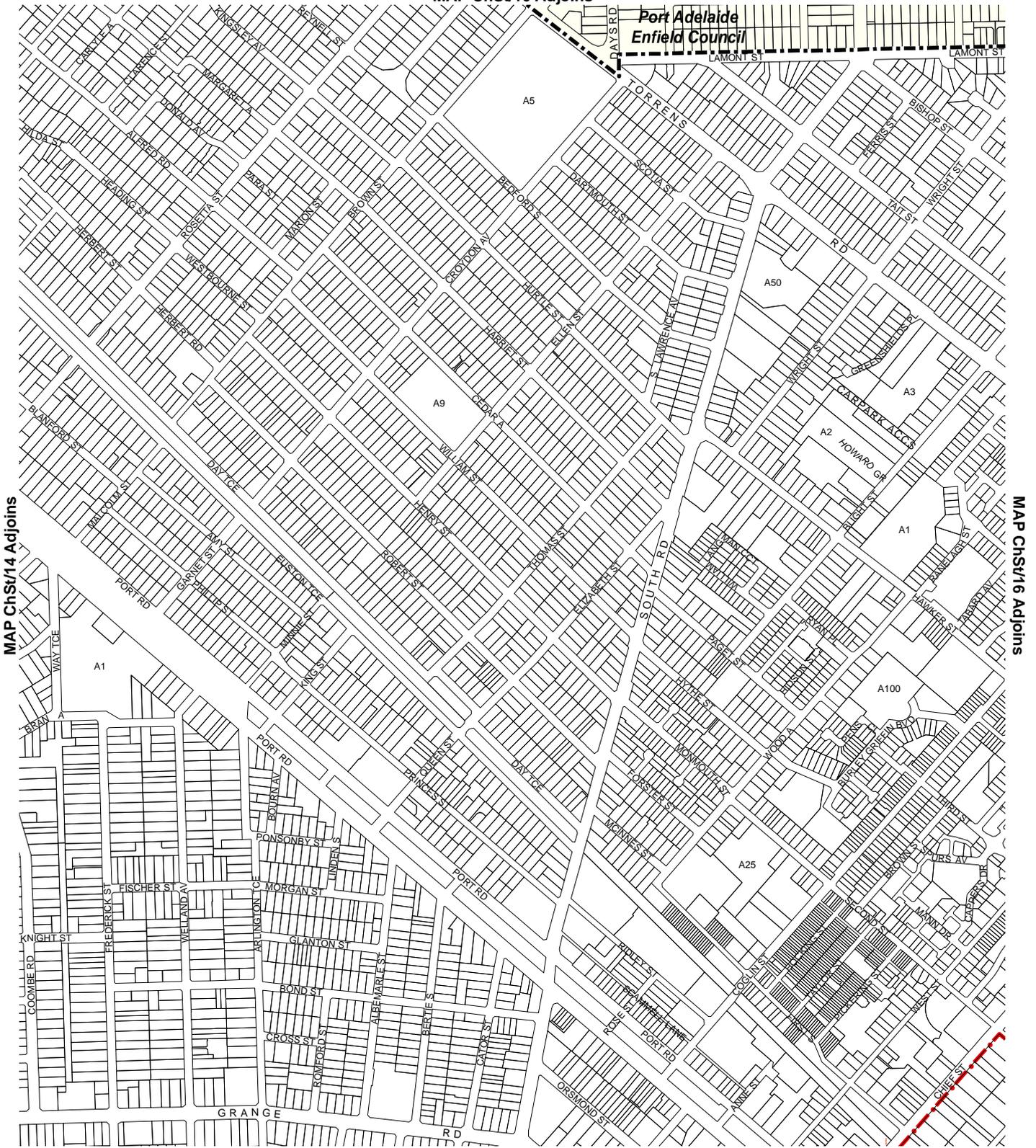
# Concept Plan Map ChSt/23

## BOWDEN URBAN VILLAGE

### URBAN CORE ZONE

MAP ChSt/10 Adjoins

Port Adelaide  
Enfield Council



MAP ChSt/14 Adjoins

MAP ChSt/16 Adjoins

MAP ChSt/20 Adjoins

MAP ChSt/21 Adjoins



# Overlay Map ChSt/15

## NOISE AND AIR EMISSIONS

-  Designated Area
-  Development Plan Boundary

CHARLES STURT COUNCIL

MAP ChSt/10 Adjoins

Port Adelaide  
Enfield Council



MAP ChSt/14 Adjoins

MAP ChSt/16 Adjoins

MAP ChSt/20 Adjoins

MAP ChSt/21 Adjoins



# Overlay Map ChSt/15

## AFFORDABLE HOUSING

-  Designated Area
-  Development Plan Boundary

CHARLES STURT COUNCIL



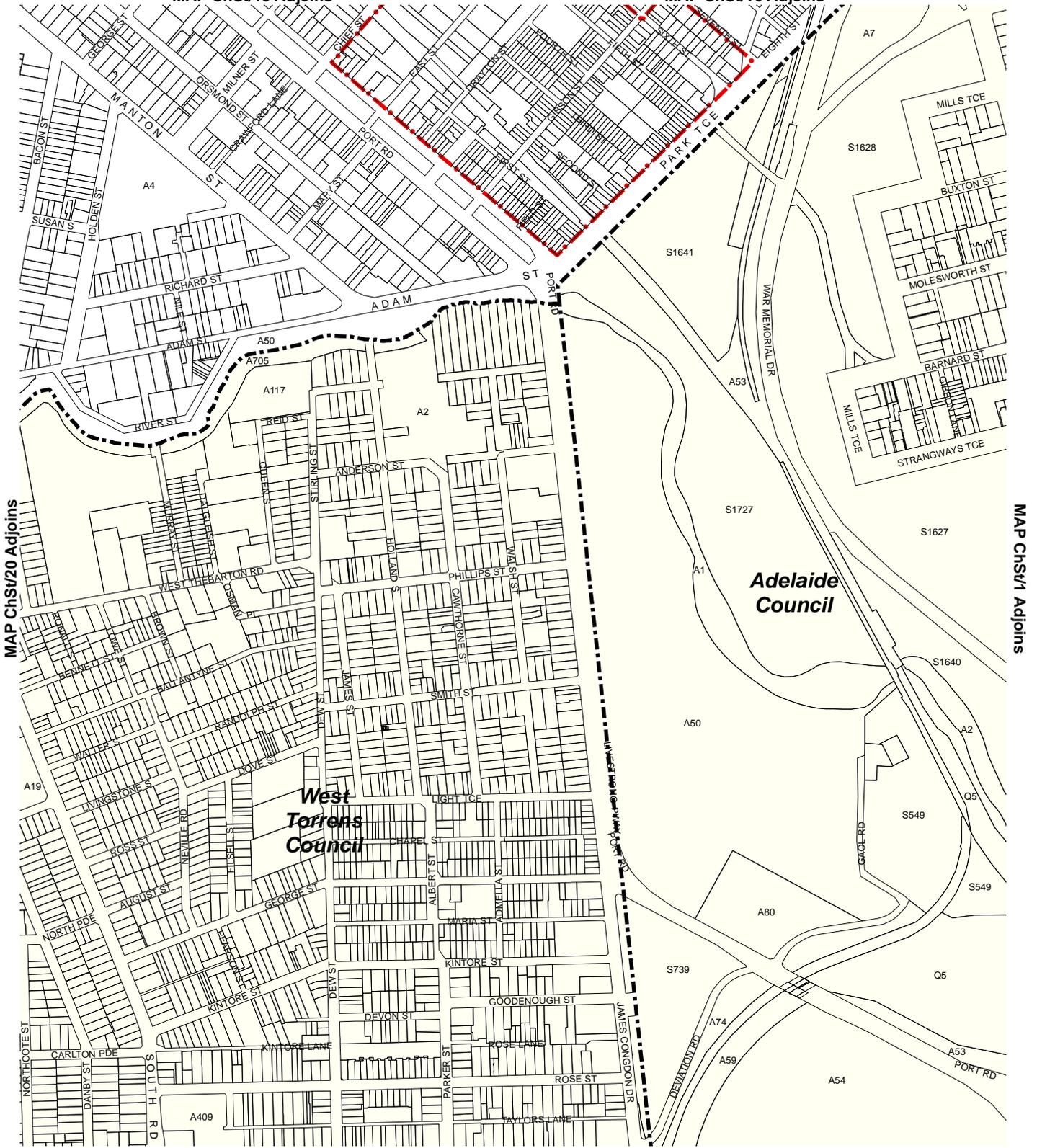






MAP ChSt/15 Adjoins

MAP ChSt/16 Adjoins



MAP ChSt/1 Adjoins



# Overlay Map ChSt/21

## AFFORDABLE HOUSING

-  Designated Area
-  Development Plan Boundary

CHARLES STURT COUNCIL



**Government of South Australia**

Department of Planning,  
Transport and Infrastructure

# **Charles Sturt Council Development Plan and Adelaide (City) Development Plan**

## **BOWDEN URBAN VILLAGE & ENVIRONS**

### **Development Plan Amendment**

**By the Minister**

**EXECUTIVE SUMMARY AND  
ANALYSIS RELEASED FOR  
CONSULTATION FROM 16  
FEBRUARY 2012 TO 11 APRIL  
2012**



# THE AMENDMENT

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# EXECUTIVE SUMMARY

## INTRODUCTION

The *Development Act 1993* provides the legislative framework for undertaking amendments to a Development Plan. The Act allows either the relevant council or the Minister for Planning (under prescribed circumstances) to amend a Development Plan.

This Development Plan Amendment (DPA) has been prepared by the Minister in accordance with sections 24(1)(g) and 26 of the Act. Section 24(1)(g) of the Act allows the Minister to prepare an amendment where he is of the opinion that the matter is of significant social, economic or environmental importance.

A DPA (this document) explains what policy changes are being proposed and why, and how the amendment process will be conducted.

A DPA may consist of:

- Executive Summary (this section)
- Analysis
- The Amendment.

## NEED FOR THE AMENDMENT

*The 30-Year Plan for Greater Adelaide* has designated land at Bowden/Brompton and Hindmarsh (primarily focussing on the former 'Clipsal Australia' site, the former 'Gas Works' site and adjoining land to the south with a frontage to Port Road) as a transit-oriented development site.

Prior to the introduction of the Bowden Urban Village & Environs (Interim Policy) DPA, the area affected was located within an Industry Zone and a District Centre Zone in the Charles Sturt Council Development Plan. The policies for the Industry Zone, in particular, did not anticipate the types and form of development envisaged for the transit-oriented development site, where residential and a range of commercial uses (e.g. offices, shops and consulting rooms) are discouraged and subject to non-complying development requirements. The former Industry Zone provisions essentially prevented activities that were likely to be sensitive to industrial activities consistent with the historical use of the land.

While the types of activities anticipated within the District Centre Zone are considered more accommodating than those of the Industry Zone in terms of delivering the land use outcomes being sought for a transit-oriented development, it too does not provide an adequate basis to support a significant and visionary land use change and the desired Village character.

The area affected is now a Deferred Development Zone introduced as a temporary holding measure while this DPA undergoes consultation. The main purpose of this draft DPA is to replace the temporary zone and associated policies with a cohesive land use framework that can guide development in keeping with the vision for a transit-oriented development. While there are some potential constraints to the development of the land (i.e. site contamination, existing industrial uses and impacts from major transport routes adjacent to and through the site), there are also significant development opportunities in terms of the provision of higher-density residential, commercial and retail development in proximity to major public transport and the Adelaide CBD.

In addition, major areas of open space associated with the Adelaide Park Lands provide opportunities for recreation close to a proposed high-density living environment. Providing

opportunities for improved access between the area affected and the Park Lands and CBD is also an important consideration.

## **PROPOSED POLICY CHANGES**

The DPA proposes to amend two Development Plans as follows:

### ***Charles Sturt Council Development Plan***

- Rezone the whole of the area affected as a new Urban Core Zone to support mixed-use and higher-density residential development centred around major public transport improvements.
- Within the proposed Urban Core Zone, establish a Main Street Policy Area to act as a community hub and activity node for residents and businesses.
- Introduce a new policy module in the General Section of the Development Plan titled *Medium to High Rise Development (3 or more storeys)*.
- Introduce three new Overlays and associated policy in the General Section of the Development Plan namely: *Affordable Housing; Noise and Air Emissions; and Strategic Transport Routes* that will guide development in the area affected by this DPA.
- Amend / replace existing policy modules in the General Section of the Development Plan considered relevant to the future development of the area affected by this DPA including:
  - *Centres and Retail Development* – proposed to be updated to reflect the current Planning Policy Library, including recent changes to accommodate shops in mixed use areas, particularly in areas designated for more intensive use, including high density housing
  - *Design and Appearance* – incorporating various to up-date and consolidate policy dealing with urban design matters consistent with Version 6 of the Planning Policy Library
  - *Heritage Places* – insertion of a new policy into the existing policy module relating to the redevelopment of heritage places consistent with Version 6 of the Planning Policy Library
  - *Interface Between Land Uses* – replacement of the module with more detailed requirements for noise generating activities and new policy on air quality
  - *Natural Resources* – updated to reflect the current release of the State's Planning Policy Library (Version 6), which will update requirements for water sensitive urban design
  - *Outdoor Advertising* - updated to reflect the current release of the State's Planning Policy Library (Version 6), with new policy introduced relating to advertising in mixed use and corridor zones
  - *Residential Development* – updated to provide consistent policy for ancillary structures (e.g. garages, sheds) and the provision of private open space (including balconies); and to relocate some existing policy to other modules within the General Section of the Development Plan that are relevant to forms of development besides residential uses (e.g. vehicle parking and parking areas, street setbacks, overshadowing etc)
  - *Transportation and Access* – updated to reflect the current version of the module contained in the Library (Version 6), and reviewed to include existing policy relating to parking, parking areas, and access that previously only applied on a limited basis (e.g. to residential development)

- Introduce a new Concept Plan for the area affected providing information on key elements including the road network, built form, density, open space, and a 'main street' shopping area
- Amend various maps in the Development Plan to reflect the amendments proposed to zoning, policy areas and precincts
- Insertion of new maps associated with the new Overlays for *Affordable Housing, Noise and Air Emissions* and *Strategic Transport Routes*

Some of the changes proposed to the General Section of the Development Plan are essentially a rearrangement of existing policies or format and therefore may have applied to development proposals prior to this DPA. However, the insertion of new and the relocation of some policies will mean that the additional requirements might be applied to development proposals located outside of the Village area.

### ***Adelaide (City) Development Plan***

- Amending the Park Lands Zone to allow a shared pedestrian/bicycle bridge between the Village and the Adelaide Park Lands to be considered 'on-merit' against the zone policies.

### **AREA AFFECTED**

The area affected by this DPA primarily relates to a Deferred Development Zone as shown on Figure 1, referred to as the Bowden Urban Village project. The Deferred Development Zone replaced a portion of the Industry Zone at Bowden/Brompton and a portion of the District Centre Zone at Hindmarsh.

In addition, this DPA proposes specific changes to the requirements in the adjacent Adelaide Park Lands to encourage greater synergies with the Bowden Urban Village project, as well as changes of a more general nature that seek to update the Charles Sturt Council Development Plan with current best practice planning policy for assessing future development proposals in the area affected and in other parts of the City of Charles Sturt.

### **LEGAL REQUIREMENTS**

Prior to the preparation of this DPA, the Minister received advice from a person or persons holding prescribed qualifications pursuant to section 26 of the *Development Act 1993*.

The DPA has assessed the extent to which the proposed amendment:

- accords with the Planning Strategy
- accords with other parts of Council's Development Plan
- complements the policies in Development Plans for adjoining areas
- satisfies the requirements prescribed by the Regulations.

### **CONSULTATION**

This DPA is now released for concurrent Council, agency and public consultation.

The organisations and agencies that will be consulted on the DPA include:

- Department of Planning, Transport and Infrastructure
- Department of Environment and Natural Resources
- Department for Communities and Social Inclusion



- Department of Health
- Department for Water
- Environment Protection Authority
- Land Management Corporation
- Department of Education and Child Development
- South Australian Tourism Commission
- Department of the Premier and Cabinet
- Department of Planning and Local Government - Office for Recreation and Sport
- Department of Justice (State Emergency Service, SA MFS, SA Police)
- Adelaide and Mount Lofty Ranges Natural Resources Management Board
- Federal Department of Sustainability, Environment, Water, Population and Communities – Historic Heritage , Heritage Division
- City of Charles Sturt
- City of West Torrens
- City of Adelaide
- Origin Energy
- APA Group
- SA Water
- ETSA Utilities
- ElectraNet
- Adelaide Airport Limited
- Local Members of Parliament for Croydon, West Torrens and Adelaide
- Conservation Council of South Australia
- Planning Institute of Australia – SA Division
- Urban Development Institute of Australia – SA Division
- Local Government Association
- Property Council of Australia – SA Division

All written and verbal agency and public submissions made during the consultation phase will be considered by the Development Policy Advisory Committee (DPAC), which is an independent body responsible for conducting the consultation stage of Ministerial DPAs. Changes to the DPA may occur as a result of this consultation process. (See also 'Have your say' information box at the front of this DPA.)

## **THE FINAL STAGE**

When DPAC has considered the comments received and heard all the public representations, it will provide the Minister for Planning with a report on its findings.

The Minister will then either approve (with or without changes) or refuse the DPA.

*(Note: This Executive Summary is for information only and does not form part of the Amendment to the Development Plan)*



# ANALYSIS

## 1. BACKGROUND

### 1.1 Context

This DPA is proposing to review the policies affecting land at Bowden/Brompton and Hindmarsh, primarily focussing on the former 'Clipsal Australia' site, the former 'Gas Works' site and adjoining land to the south with frontage to Port Road.

The State Government purchased the former Clipsal site (approximately 10 hectares) at Park Terrace, Bowden in 2008, following the relocation of Clipsal Australia facilities to Gepps Cross. The former 'Gas Works' site (approximately 6 hectares) at Chief Street, Brompton, which has seen diminished use since the 1960s, has also been included in the land area under review. In addition, the land bound by the Outer Harbor rail line, Chief Street, Port Road and Park Terrace at Hindmarsh is also included in the area under review.

The land occupies a strategically important location in that it:

- is within 3 kilometres of the Adelaide CBD
- adjoins the Adelaide Park Lands, providing extensive recreation areas and outlook
- adjoins the Bowden Railway Station and is in close proximity to the newly completed tram line to the Adelaide Entertainment Centre
- is in close proximity to the River Torrens Linear Park, providing direct pedestrian and cycle linkages with the Adelaide CBD and the western beaches
- has a high level of accessibility and visual exposure, being located near the major intersection of Port Road, Park Terrace and Adam Street and enjoying significant frontages to Port Road and Park Terrace
- is generally in an underutilised and/or degraded state, providing opportunity for significant upgrading and improvement in amenity for the area.

In recognition of this strategic location, the land has been designated as a transit-oriented development site in *The 30-Year Plan for Greater Adelaide*. Until recently the land was located within the Industry Zone and the District Centre Zone in the Charles Sturt Council Development Plan. The policies for the Industry Zone and, to a lesser extent, the District Centre Zone do not provide the level of guidance necessary to achieve the desired development outcomes sought for a transit-oriented development and therefore require amendment.

Following the introduction of the Bowden Urban Village & Environs (Interim Policy) DPA on an interim basis, the land is now a Deferred Development Zone – a zone intended to complement the objectives of this DPA and ensure development does not occur while the changes proposed herein undergo consultation and a determination made in relation to the DPA.

### 1.2 Existing Land Uses

Key land uses within and adjacent to the area affected are shown on Figure 2.

In terms of the area affected:

- the majority of the land north of the Outer Harbor rail corridor is either vacant or disused former industrial land, with a small amount of land in private ownership located north of Fourth Street currently used for various purposes including warehousing/offices, light industrial, smallgoods manufacture and builders premises

Figure 2

Land Uses

- Former industrial land
- Residential land
- Vacant land
- Bowden Railway Station
- Tram platform
- State heritage place
- Local heritage place



- land to the south of the rail corridor is generally of a commercial nature with some underutilised/disused industrial land on the corner of Port Road and Park Terrace, a small amount of vacant land and some residential development adjacent the rail corridor.

Land use data for land surrounding the area affected shows:

- a strong presence of commercial and industrial uses to the north of Second Street and south of Port Road (some of the more prominent uses are shown on Figure 2)
- significant open space located on the opposite side of Park Terrace (being part of the Adelaide Park Lands), with a small reserve also located north of Seventh Street
- concentrations of residential development west of Chief Street and north of Seventh Street.

The above characteristics provide information that can assist in the formulation of land use policy and design elements that might inform the redevelopment of the Bowden Urban Village site. However, the extent to which the existing land uses might influence the Village should be balanced with the wider strategic directions, including the desire for a new urban form in key locations and along major transit corridors.

### **1.3 Land Ownership**

The area affected by this DPA comprises over 21 hectares (excluding the rail corridor and roads). The Land Management Corporation (LMC) is the majority owner, with approximately 16 hectares of land all of which is located on the northern side of the Outer Harbor rail corridor. The remaining 5.5 hectares (approx) is in private ownership, which includes about 1 hectare on the northern side of the rail corridor and all the land south of the rail corridor (see Figure 3).

The pattern of land ownership north of the rail corridor provides a significant opportunity for a highly integrated urban form to take shape over several years. This is unusual because most CBD fringe areas, as with the privately held land holdings within the area affected by this DPA, are held by a multitude of individuals and businesses with their own plans, aspirations and timeframes.

With the above in mind, the changes proposed to the Development Plans affected by this DPA seek to balance the level of guidance needed to achieve the desired new urban form consistent with the strategic directions for the area, and still provide an appropriate basis for the respective landowners and developers to formulate proposals against a backdrop of market and commercial factors.

## **2. THE STRATEGIC CONTEXT AND POLICY DIRECTIONS**

### **2.1 South Australia's Strategic Plan**

South Australia's Strategic Plan outlines a medium to long-term course for the whole of South Australia. It has two important, complementary roles. First, it provides a framework for the activities of the South Australian Government, business and the entire South Australian community. Second, it is a means for tracking state-wide progress, with the targets acting as points of reference that can be assessed periodically.

Figure 3

Land Tenure

- Private land holdings
- Land Management Corporation land holdings



Area Affected

Council Boundary

City of Charles Sturt

City of Adelaide

City of West Torrens

Amending Development Plan policy to guide the development of the area affected will assist in achieving a number of the Strategic Plan’s objectives and targets.

The changes to the Development Plan proposed in this DPA will provide opportunities for a range housing forms and choices within an environment that supports a wide range of complementary non-residential land uses. The land use opportunities will assist in meeting the needs of a diverse population for accommodation and jobs. As such, there is potential for the area affected to deliver against a broad range of targets, some of which are identified below.

**Table 1: Strategic Plan Summary**

Strategic Plan Goal	Strategic Plan Target	Comment
<b>Community</b>		
New developments are people friendly, with open spaces and parks connected by public transport and bikeways.	<b>Target 2: Cycling</b> Double the number of people cycling in South Australia by 2020	The DPA will contribute to the improvement of wellbeing by providing for increased sport and recreation opportunities through the provision of open spaces, walking and cycling opportunities, connections to existing cycling paths and improved connections to the adjacent Adelaide Park Lands.
Everyone can afford to rent or buy a home.	<b>Target 7: Affordable housing</b> South Australia leads the nation over the period to 2020 in the proportion of homes sold or built that are affordable by low and moderate income households	The DPA proposes policies that support the provision of affordable housing. This provision will be assisted due to government ownership of land in the area affected.
<b>Prosperity</b>		
South Australia has a sustainable population.	<b>Target 45: Total population</b> Increase South Australia’s population to 2 million by 2027	The DPA will provide a planning framework for the area affected that will progress these goals and associated targets by introducing policies that will facilitate the establishment of higher density housing and employment opportunities – providing increased investment and job opportunities.
All South Australians have job opportunities.	<b>Target 47: Jobs</b> Increase employment by 2% each year from 2010 to 2016	
<b>Environment</b>		
We reduce our reliance on cars in the metropolitan area, by walking, cycling and increasing use of public transport.	<b>Target 63: Use of public transport</b> Increase the use of public transport to 10% of metropolitan weekday passenger vehicle kilometres travelled by 2018	With a focus on: <ul style="list-style-type: none"> <li>- convenient access to public transport and shops</li> <li>- higher residential densities and increased numbers of people</li> <li>- an urban design conducive to walking</li> <li>- strong links to walking and cycling paths</li> <li>- capture and re-use of stormwater</li> <li>- energy efficient layout and design of buildings</li> </ul> the implementation of the DPA will assist in attaining sustainability.

## 2.2 Consistency with Planning Strategy – The 30-Year Plan for Greater Adelaide

The Planning Strategy presents current State Government policy for development in South Australia. In particular, it seeks to guide and coordinate State Government activity in the construction and provision of services and infrastructure that influence the development of South Australia. It also indicates directions for future development to the community, the private sector and local government.

*The 30-Year Plan for Greater Adelaide* (The Plan) is a volume of the Planning Strategy for South Australia and applies to the area affected by this DPA. The Plan has been prepared by the State Government to guide the community, local government, business and industry.

The main aim of The Plan is to outline how the South Australian Government proposes to balance population and economic growth with the need to preserve the environment and protect the heritage, history and character of Greater Adelaide. The Plan seeks to create inclusive, vibrant and liveable communities, while protecting the regional hinterlands and primary production lands and sustaining natural resources. Finally, The Plan is one of the key tools to assist the State Government, local government and the entire community in building resilience to the risks and impacts of climate change.

### **2.2.1 Context and Vision**

The context and vision for The Plan is outlined in detail in Chapters B and C of The Plan. While it is not intended to reiterate the content of these chapters in any detail, it is worth providing a snapshot of comments considered relevant to formulating a land use planning framework for areas identified in The Plan as transit-oriented development sites and transit corridors.

The Plan's context provides discussion on a number of main themes including population characteristics, form of new development and employment. In relation to expected changes to the size and make-up of the population within the Greater Adelaide Region, the Plan anticipates the following:

- a total forecast population for Greater Adelaide of 1.85 million people by 2036 – the population is growing faster than was forecast in South Australia's Strategic Plan (2004) and the Prosperity Through People population policy (2004), which both forecast a target of 2 million people by 2050 for the entire state; this is now projected to be reached 23 years ahead of target, in 2027.
- Greater Adelaide's population is older than the Australian average and our share of people aged over 65 is growing faster than the national average:
  - those aged over 65 will increase from 194,000 in 2006 to 407,000 in 2036, a 110 per cent increase
  - the proportion of aged people (over 65 years) in the population will increase from 18 per cent in 2006 to 22 per cent in 2036
  - the number of South Australians aged 85 years or more is projected to increase by 222 per cent by 2036, with those living in non-private accommodation projected to increase by more than 220 per cent from about 10,000 in 2006 to in excess of 31,000 in 2036.
- the three dominant household types in Greater Adelaide (couples with children, couples without children and lone-person households) will comprise about 84 per cent of total occupied private dwellings and of these:
  - lone-person households were the fastest-growing household type in the past decade and are projected to account for 33 per cent of all household types in Greater Adelaide by 2036
  - lone-person households reflect the ageing of the population and changes in family relationships.
- changes in population dynamics has resulted in the need for more dwellings to accommodate the same number of people - in the 1950s to 1970s, when households were made up of large families, 300 extra homes were needed for every 1000 extra people; today, 420 homes are required for every 1000 people; and by 2036, 435 homes will be required for every 1000 people.

To meet the demands of a larger population and household needs, The Plan outlines a vision for a 'new urban form' (see page 60 of The Plan) including:

- *Concentrating new housing in existing areas (page 60):*
  - The Plan proposes locating a greater share of new housing in the existing urban lands and particularly within transit corridors.
- *Locating new housing and new jobs in transport corridors (page 60):*
  - The Plan contains a detailed strategy to locate the bulk of new housing in established areas around the existing public transport networks and transit corridors to create a transit-connected city.
- *Establishing new transit-oriented developments (page 61):*
  - A centrepiece of the new urban form will be the establishment of substantial transit-oriented developments.
  - They will be walkable, mixed-use, connected communities that collocate medium-to-high density residential housing with retail services, other key services such as health and education, and a variety of employment opportunities, particularly knowledge economy jobs.
  - They will be adjacent to key public transport interchanges – railway and tram stations and major bus interchanges.
  - They will accommodate a significant amount of growth without affecting the character of existing neighbourhoods.
  - It is proposed that key government services, such as primary and community health, social services, and Service SA Centres, will be collocated in the new transit-oriented developments.
  - Transit-oriented developments will be concentrated on the remnant industrial and brownfield sites that are scattered across Greater Adelaide.

For example, the former Clipsal site at Bowden, a 10-hectare former industrial site, is now being transformed into a sustainable green village located on the Adelaide CBD's doorstep. The Bowden Village\* will offer rapid transit, energy and water efficient developments, and a broad range of housing choice.

(\*Since the Plan was initially prepared the Government has increased the overall site of the proposed Bowden Urban Village to approximately 21-hectares (i.e. the area affected by this DPA).

- *Increasing densities around stations and transport interchanges (page 61):*
  - The new urban form will result in a significant increase in densities in the established areas, particularly around shops, railway and tram stations, bus interchanges, and within transit corridors.
- *Placing an emphasis on good design and creating unique precincts (page 62)*
  - The expectations for a wide mix of land uses, incorporation of a main street element as a community hub, and capacity for a range of built forms combine to provide significant opportunity for the area to develop unique characteristics. The requirements proposed as part of this DPA will support outcomes of high architectural merit and design.

While all the land affected by this DPA will be subject to assessment by the relevant planning authority against the proposed policies, development on the LMC land will undergo an additional level of scrutiny, imposed by the Corporation, to ensure the vision established for the Bowden Urban Village will be achieved via a well designed and integrated form of development.

- *Creating vibrant mixed-use precincts (page 62):*
  - A greater co-location of a greater mixture of building uses (e.g. street facing shops and services located under residential apartments, providing walkable neighbourhoods and easy access to services)
- *Achieving a diversity of dwelling types (page 63):*
  - Achieve a greater mixture of dwelling types at high densities to cater for the changing make-up of the population. These would range from detached to low-rise attached accommodation such as townhouses and villas, and medium-density housing such as well designed three-to-five-storey apartment blocks (in appropriate locations).
- *Water and energy efficiency (page 63)*
  - Requirements for water and energy efficiencies form part of the assessment for all development proposals within the City of Charles Sturt in accordance with the general provisions in the Development Plan. This DPA proposes to update some of the general provisions on the Development Plan with the most up to date land use policy from The South Australian Planning Policy Library relating to water and energy efficiency matters.

In addition, there are requirements under the Building Code in respect to the energy efficiency of residential and commercial buildings.

Subject to the class of building proposed, new houses may also be required to be connected to an alternative water supply, such as through a recycled water third-pipe scheme or, more commonly, a rainwater tank, which must be connected to the toilet, laundry or hot water service.
- *Greenways and a network of open spaces (page 63):*
  - A network of connected open spaces would characterise the major activity centres and transit corridors. These very distinct green buffers would improve amenity, have a cooling effect and provide a noise buffer between residential accommodation and transport thoroughfares.

***Implications for this DPA:***

The above matters are relevant to the area affected and it is therefore appropriate to consider formulating land use policy to achieve the new urban form being contemplated.

The Plan's vision provides a challenge in that the deliverable physical outcomes for the area affected have the potential to create tensions with established neighbouring residential, industrial and centre areas. However, the need to mitigate such tensions through transitional measure such as the siting and design of buildings, use of open space, restrictions on centre uses and streetscapes, should be considered against the significant advantages of the locality and the long term vision created by The Plan.

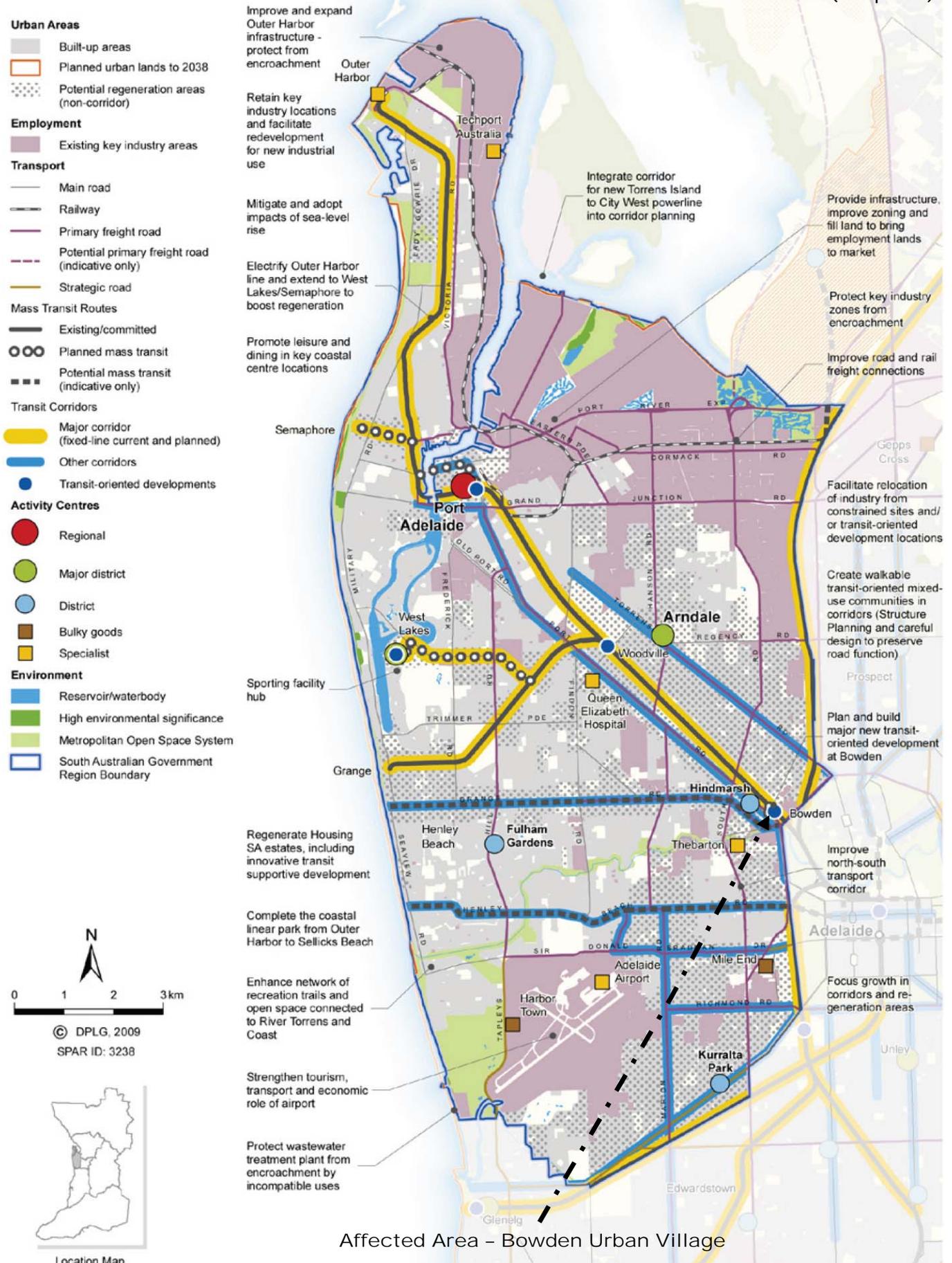
**2.2.2 Western Adelaide: Targets and Policies**

The Plan contains policies and targets that address a range of development matters. The table contained in **Appendix A** identifies the policies and targets of relevance to this DPA and how they are being addressed.

Table 2 summarises targets for population, dwelling and jobs growth for the Western Adelaide Region.

Figure 4

Western Adelaide Directions (Map E3)



**Table 2: Western Adelaide Region targets 2009-2038**

Population Growth Target	Dwelling Growth Target	Jobs
83,000	42,560	40,500

Source: The 30-Year Plan for Greater Adelaide, February 2010, Government of South Australia

The targets for the Western Adelaide Region are further distributed based on location within and outside transit corridors. At a regional level, most of the additional housing (33,060) is expected to be located within corridors (including transit-oriented developments). Less than one quarter of the additional dwellings (9500 dwellings) are anticipated in non-corridor areas.

#### **Implications for this DPA:**

As previously discussed, the area affected has been identified within The Plan as a transit-oriented development site (see Figure 4: Western Adelaide directions). This DPA will assist in achieving the above targets by facilitating increased dwelling numbers at high densities, a larger population, the provision of affordable housing and employment opportunities, as a result of transforming a former industrial site, as well as facilitating a more intensive scale of development than that contemplated under the former District Centre Zone.

## **2.3 Other Key Documents**

The DPA has been prepared cognisant of a number of other documents, and the goals and objectives contained within them. The following sections provide a summary of these as they relate to the planning needed to contribute to the new urban form at Bowden Urban Village.

### **2.3.1 Housing Plan for South Australia 2005**

#### *Objective 1 - Affordable housing and strong communities*

##### **Actions:**

- Expand the supply of affordable housing by implementing a target of 10% affordable and 5% high need housing in all significant new housing developments.
- Ensure development policies support a mix of housing densities, sizes and styles within each neighbourhood and target the development of higher density housing in strategic locations linked to activity centres and transport nodes.
- Work with the Department for Planning and Local Government (formerly Planning SA) to develop mechanisms to support affordable housing provision, including: amending development plans to accommodate affordable housing
- Work with local government to identify opportunities and good practice in the adoption of planning mechanisms (such as density, set back, parking, zoning and height controls) that encourage affordable housing development and designs that decrease operating costs.

#### *Objective 2 - High needs housing*

##### **Actions:**

- Promote private and public development of accessible and adaptable housing and urban designs with a particular focus on agencies with responsibilities in housing, ageing, disabilities, planning and building regulation.

#### *Objective 5 - Environmental sustainability*

##### **Actions:**

- Continue to implement energy, sustainable water and waste management practices and innovations in new social housing development.

### **Implications for this DPA:**

The policies in the DPA will facilitate the achievement of these Objectives by requiring affordable housing to be provided (via the application of a new Affordable Housing Overlay for the whole of the area affected), encouraging a mix of housing densities, sizes and styles within a mixed use development.

### **2.3.2 Strategic Infrastructure Plan for South Australia (2004/5 - 2014/15)**

The Strategic Infrastructure Plan for South Australia is a coordinated long-term approach to infrastructure provision throughout the state. It provides an overarching framework for the planning and delivery of infrastructure by all government and private sector infrastructure providers. The Plan identifies strategic priorities for 14 infrastructure sectors such as transport, energy, health, and recreation and sport.

Although Bowden Urban Village is not specifically mentioned in the Infrastructure Plan, it does include a number of strategic priorities that have a bearing on the Village's redevelopment. The Infrastructure Plan sets out both broad and specific priorities concerning all aspects of the State's infrastructure – physical and social. The infrastructure priorities of relevance to this DPA include:

**Table 3: Infrastructure Priorities Assessment**

<b>INFRASTRUCTURE PRIORITIES</b>	<b>RESPONSE</b>
<b>Infrastructure (Priorities)</b>  Increase use of public transport.  Better manage our water resources, including stormwater.  Be energy efficient and reduce greenhouse gas emissions.	  This DPA will facilitate the development of about 2400 dwellings with easy access to train, tram and bus transport. Public transport patronage is expected to increase as a result.  The DPA will require the development of energy efficient buildings and will promote walking and cycling and public transport use over car usage, all assisting in reducing greenhouse gas emissions. Access to recycled water will be provided to the Village, while green spaces will be designed using principles of sustainability.
<b>Transport</b>  A shift to rail transport for passenger and freight movements will be encouraged where it offers environmental and economic benefits, Adelaide's urban passenger transport system will continue to be a cost-effective, environmentally friendly and modern metropolitan network.	  As discussed above, this DPA will facilitate the use of public transport, including rail transport, with the Village being served by the Bowden rail station and Entertainment Centre tram station, as well as having access to the North Adelaide rail station.
<b>Land</b>  To ensure the residential land supply is sufficient to meet the needs of the market, greater consideration of demographic changes will be required in residential land supply planning. Planning for residential developments will be more closely integrated with infrastructure planning.	  The area affected has been identified as a transit-oriented development site in <i>The 30-Year Plan for Greater Adelaide</i> . The State Government has purchased some 16 hectares of the overall site and charged the Land Management Corporation with releasing the land for a high density mixed use development. This DPA will assist in the release of this land to the market and will guide the form of development that can be undertaken on it.

<p>State and local government will jointly identify options for more strategic use of public land to deliver community services more efficiently. Work to improve the efficiency of the planning system will continue to receive high priority to provide a competitive business climate for investment in the state. These improvements will ensure the timely release and development of industrial and residential land throughout the state by the development industry.</p>	<p>The DPA will also provide opportunity for private land holders to participate in the rejuvenation and up-lift of this inner city area, supportive of increasing the number of people living in a location with good access to transport services and areas of employment.</p>
<p><b>Community Services and Housing</b></p> <p>South Australia will be a leader in affordable housing innovation and a partner in providing and developing affordable housing in our community.</p> <p>There will be increased attention to ecological sustainable development (ESD) principles in residential and urban design.</p> <p>Location, access to transport and services, community support and employment are crucial aspects of a healthy community.</p> <p>Higher-density residential development near activity centres and transport nodes will be encouraged with support for more intensive infill redevelopment in appropriate urban areas through planning for land use and infrastructure augmentation. The greater uptake of ESD technologies in new residential developments will be encouraged.</p>	<p>This DPA requires the provision of 15% affordable housing in residential developments.</p> <p>The DPA proposes requirements for best practice in sustainable built form and urban environments.</p> <p>Bowden Urban Village enjoys a prime location being in proximity to the Adelaide Park Lands and CBD, and easy access to a range of public transport options. It will provide for higher density residential development and increased employment opportunity through its mixed use form of development.</p>
<p><b>Water</b></p> <p>Improved water-use efficiencies will have been achieved among all water users. Metropolitan Adelaide stormwater systems will have been upgraded through our water proofing Adelaide initiative with greater beneficial re-use of stormwater and wastewater.</p>	<p>The DPA proposes to update requirements in the Development Plan dealing with water management, including principles for Water Sensitive Urban Design (WSUD).</p> <p>Bowden Urban Village is expected to meet a range of water efficiency aims and employ best practice water sensitive urban design measures in the design and management of open space in both the public realm and body corporate common areas, and in buildings. Subject to detailed design, the Village will be supplied with treated stormwater from the regional 'Waterproofing the West' project.</p>
<p><b>Transport (Priorities)</b></p> <p>Coordinate the development of urban planning and transport systems to maximise the economic, social and environmental benefits.</p>	<p>The location of the Bowden Urban Village enables it to take full advantage of existing train, tram and bus public transport options.</p>
<p><b>Integration of Services</b></p> <p>Improve community access and amenity</p>	<p>See discussion above under Community Services</p>

by better linking housing to transport infrastructure and services.	and Housing.
<p><b>Housing</b></p> <p>There is increasing recognition of the need to make future housing and urban design more responsive to changing community preferences and demographic trends including disability access and environmental sustainability design principles. The government is committed to encouraging greater energy and water efficiency, recycling initiatives and other ecologically sustainable development (ESD) technologies. By encouraging the greater uptake of ESD principles in residential developments by the private sector, the government will be helping to achieve the sustainability targets of South Australia's Strategic Plan (SASP).</p>	<p>The DPA requires the provision of a range of housing types and sizes to cater for the various needs of the wider community, including the provision of affordable housing. As discussed previously, the DPA also supports a sustainable built form and surrounding environment.</p>
<p><b>Housing (Priorities)</b></p> <p>Incorporate affordability objectives within the planning system so that the development approval process supports an appropriate supply of affordable and high needs housing.</p> <p>Encourage higher-density residential development in appropriate urban areas through planning for land use and infrastructure augmentation.</p> <p>Promote energy efficiency and environmental sustainability in new residential developments.</p>	<p>As previously discussed, the DPA requires the provision of 15% affordable housing, including high needs housing, via the introduction of a new Affordable Housing Overlay. As a designated transit-oriented development site, residential development proposed will be of higher density and will be supported with appropriate infrastructure. The DPA also requires a sustainable built form and surrounding environment.</p>

### 2.3.3 The South Australian Urban Design Charter

The Urban Design Charter records the recognition by the South Australian Government of the benefits of good urban design. It commits Government agencies to achieve good urban design when managing public places or creating the public buildings and infrastructure that contribute to the qualities of our streets, squares, parks and waterfronts.

The Charter calls upon agencies to ensure that the designs for public places and their interaction with the private buildings and spaces reinforce the urban environment as liveable, efficient, creative, sustainable and socially inclusive.

The Urban Design Charter sets out the following principles as indicators of the importance of collaborative and customised processes, which are needed to establish urban design as integral to project inception and delivery:

- Searching out community aspirations
- Nurturing cultural expression
- Reinforcing local character
- Integrating a diversity of interests and expertise

- Formulating concepts and testing ideas
- Combining community interest, public property and private initiative
- Being environmentally responsible
- Investing in quality.

**Implications for this DPA:**

The foundation of this DPA is based upon the outcomes of various urban design approaches undertaken in developing a 'vision' for this strategically important site. These approaches were based on the above principles and reflect the State Government's commitment to meeting the ideals expressed in the Urban Design Charter.

The policy framework needed to guide the new urban form promoted by the Planning Strategy has been formulated in consultation with design professionals, building industry participants and planning authorities, which have been included into the latest version of South Australia's Planning Policy Library. The amendments proposed to the Charles Sturt Council Development Plan, on top of the existing requirements, provide a framework to foster creative design and environmental solutions.

While all development in the area affected will be assessed against these Development Plan requirements, development proposed on the LMC controlled land will also undergo an additional level of scrutiny, imposed by the Corporation, to ensure the vision established for the Bowden Urban Village will be achieved with a well designed, integrated form of development.

**2.3.4 Housing and Employment Land Supply Program Report 2010, Greater Adelaide**

The South Australian Government released the first annual report of the Housing and Employment Land Supply Program (HELSP) in October 2010. HELSP is a key instrument for achieving *The 30-Year Plan for Greater Adelaide* objective to improve the management of land supply for residential, industrial, retail and commercial purposes. This first report deals comprehensively with residential and industrial trends in land supply and annual take-up rates, and includes information on retail and commercial activity.

The HELSP Report has divided Greater Adelaide into a number of sub-regions for reporting purposes. The Bowden Urban Village site is located within the Western Adelaide Region. The following extracts from the Western Adelaide Region sections of the report are considered relevant to this DPA.

Residential land

*'The region contains limited residential broad acre land to contribute to supply; however, there is a steady supply of dwellings from minor infill development (that is, 10 dwelling sites or fewer).'*

The Strategic response requires: 'Structure planning and policy changes to facilitate higher-density, infill opportunities around transit corridors and transit-oriented developments (TOD).

The Bowden Urban Village site is identified as being an example of a TOD site and within a transit corridor – being suitable for major residential infill.

**Implications for this DPA:**

The Bowden Urban Village site is identified in *The 30-Year Plan for Greater Adelaide* as within a transit corridor and as a TOD site. Higher density residential infill opportunities for the site are therefore supported by HELSP.

## Employment land

*'The region is the state's traditional industrial heartland and contains 27 per cent of the developable industry land in Greater Adelaide.'*

The Strategic response requires: 'Complete the Development Plan Amendment (DPA) and scoping infrastructure works for the Gillman Eco-Industrial Precinct within five years.'

The HELSP notes that 'Between the 2002 and 2008 Industrial Databases about 150 hectares of vacant industrial land was rezoned from industry to other uses. To ensure residential infill targets are met, future rezoning of areas in the central regions of Greater Adelaide may also occur.'

Table 4.17 of HELSP identifies 'Key industrial land sites, Western Adelaide'. Land at Bowden is not listed in the Table, although Map 4.9 shows the Bowden Urban Village site currently as 'Industrial land use' and 'Potential industrial land'.

### **Implications for this DPA:**

While most of the Bowden Urban Village was zoned for industrial purposes (until its recent replacement with a Deferred Development Zone), it is identified in *The 30-Year Plan for Greater Adelaide* as a TOD site. The HELSP does not identify this land as strategically important for industrial purposes, rather it supports its use for major residential infill.

## Retail land

*'The creation of transit-oriented developments (TODs), designated by the Plan, will affect both the demand and supply of retail floor space and, to some extent, market regions.'*

Further, HELSP comments that *'While there will continue to be retail activity in the established urban areas, it is more likely to be centred in TODs and opportunistic locations (for example, Harbour Town within the Adelaide Airport site). Major changes in existing retail trade areas will be driven by retailing trends, such as those outlined above, and will depend to a much lesser extent on land availability.'*

### **Implications for this DPA:**

The HELSP acknowledges that TODs, such as that proposed at Bowden Urban Village, will prove to be centres for retail activity. The DPA will facilitate mixed use development, including provision for a retail hub based on a 'main street' theme.

## Commercial land

'Commercial land' is land on which office buildings are located and is used typically for commercial enterprises including financial, business and professional services – collectively known as the 'services sector.'

Under 6.4 Planning implications, HELSP comments that *'Planning policy should encourage the concentration of jobs growth in the designated transit-oriented developments (TODs), transit corridors, higher-order activity centres and new growth areas identified in The 30-Year Plan for Greater Adelaide, to ensure that jobs are located close to where people live and to realise the potential of TODs as desirable living environments.'*

#### **Implications for this DPA:**

The HELSP acknowledges that TODs, such as that proposed at Bowden Urban Village, should encourage jobs growth within its site. The changes proposed as part of this DPA support a variety of uses, and include a specific requirement that ground floors of buildings in the main street are non-residential.

### **2.3.5 Adelaide and Mount Lofty Ranges Natural Resource Management Plan**

The Adelaide and Mount Lofty Ranges Natural Resource Management (NRM) Plan targets and outcomes relevant to the DPA are contained in Table 4 below.

**Table 4: Adelaide and Mount Lofty Ranges NRM Targets**

<b>Relevant NRM Targets</b>	<b>Outcomes</b>
T1 Stormwater and waste water used	75% of stormwater used. 100% of waste water reused.
T2 Surface water and groundwater	All water resources meet water quality guidelines to protect defined environmental values.
T3 Water resources managed within sustainable limits	All water resources used within sustainable yield (allowing for variability).
T4 Flood damage	Reduce average annual cost of flood damage.
T10 Land based impacts on coastal, estuarine and marine processes	Impacts reduced from current levels.

#### **Implications for this DPA:**

The attainment of the water related targets are supported by existing policy in the Charles Sturt Council Development Plan. These requirements promote water sensitive urban design (WSUD) measures in all developments, protect stormwater from pollution sources (refer to General Section under the heading *Natural Resources*) and mitigate the effect of flood waters on property and development (refer to General Section under the heading *Hazards*).

Changes proposed as part of this DPA will update the *Natural Resources* section of the Development Plan to include the latest policy on WSUD, consistent with the Planning Policy Library.

### **2.3.6 Council's Strategic Directions**

The City of Charles Sturt has prepared and released a number of documents in recent years that provide an understanding of Council's priorities and its intentions in the years to follow. The following tables contain a selection of objectives, policies and ideas from several documents considered relevant to and supported by this DPA.

#### **(a) Community Plan - Shaping the Western Suburbs 2027**

<b>Outcome/Theme</b>	<b>Objectives</b>	<b>Strategies</b>
<b>1</b> A safe and healthy City that supports a vibrant community life	<b>1.1</b> Encourage strong, supportive local communities	<b>1.1.2</b> Provide opportunities for people to connect and interact locally <b>1.1.5</b> Cultivate a strong sense of identity and community across local neighbourhoods
	<b>1.2</b> Contribute to the quality of life of all individuals in the community	<b>1.2.1</b> Facilitate equitable access to facilities, activities and services and information particularly by those most in need

	<p><b>1.4</b> Contribute to an improved sense of safety</p>	<p><b>1.4.2</b> Design for and promote safe and responsible use of streets and public places.</p> <p><b>1.4.3</b> All new private and public developments are designed for safety</p>
<p><b>2</b> An economically prosperous, attractive and functional City</p>	<p><b>2.1</b> Protect the history, heritage and character of the City</p> <p><b>2.2</b> Support and encourage a diverse mix of complementary land uses</p> <p><b>2.3</b> Provide and facilitate a safe, connected and well maintained transport network</p> <p><b>2.4</b> Create attractive, well maintained streetscapes</p> <p><b>2.5</b> Establish and maintain a linked system of open space</p> <p><b>2.7</b> Encourage local business and employment opportunities</p>	<p><b>2.1.1</b> Identify and protect features of historic significance throughout the City</p> <p><b>2.2.1</b> Provide for appropriately located, mixed density housing that caters for our diverse population;</p> <p><b>2.2.2</b> Encourage the provision of well designed, accessible, vibrant, local and regional shopping facilities</p> <p><b>2.2.3</b> Encourage business investment in appropriately located, attractive commercial and industrial precincts which complement adjoining land uses</p> <p><b>2.3.1</b> Develop and maintain a safe network of connected cycle and pedestrian routes</p> <p><b>2.3.2</b> Manage local road networks for the safe movement of people, goods and services</p> <p><b>2.3.3</b> Advocate for a connected, reliable safe and well maintained public transport system, including options for light rail</p> <p><b>2.4.2</b> Create and maintain attractive landscaped streetscapes which incorporate principles of water sensitive urban design</p> <p><b>2.5.1</b> Create an accessible network of developed open space that responds to the recreation and sporting needs of the community</p> <p><b>2.5.2</b> Develop environmentally sustainable landscapes within public open space.</p> <p><b>2.5.3</b> Ensure that new developments have access to useable private and public open space;</p> <p><b>2.7.1</b> Encourage the establishment of business hubs and home based employment</p>
<p><b>3</b> A City which values, protects and enhances the natural environment</p>	<p><b>3.3</b> Promote ecologically sustainable urban development within the City</p>	<p><b>3.3.1</b> Ensure development controls reflect the principles of ecologically sustainable development</p> <p><b>3.3.2</b> Encourage water sensitive urban design in all new developments;</p> <p><b>3.3.3</b> Investigate and implement sustainable stormwater management practices that reduce discharge into the Gulf</p>

(b) Towards One Planet Living: Greening the Western Suburbs 2008-2013

Strategy	Comment
1.1 Reduce our community's ecological footprint	
2.2 Adapt to a changing climate	Assess risks of climate change to the broader community within the City of Charles Sturt, and plan to reduce their impacts
2.3 Improve building performance	Advocate for and identify opportunities to showcase sustainable development, including energy efficient building design, at key sites including as part of the redevelopment of the former Cheltenham racecourse, Clipsal site and others
2.5 Reduce transport related greenhouse emissions	Focus new higher density residential and commercial developments around existing public transport nodes (transit-oriented developments) and link these areas with surrounding walking and cycling networks Provide cycling paths through the city as this becomes possible
3.3 Water Sensitive Urban Design in new and existing developments	Adopt a flexible approach to the selection of WSUD treatments and solutions to deliver on (the above) targets, incorporating the use of rainwater tanks, on and off-site stormwater detention and MAR schemes and other mechanisms as appropriate to suit the characteristics of each site and the nature of each development, and acknowledging that on-site detention of stormwater may not be appropriate in all instances
3.4 Minimise polluting discharge to watercourses and water dependent ecosystems and maintain environmental flows	Increase stormwater harvesting and storage to reduce flooding and pollutant loads to the environment and to provide an alternative source of water for irrigation purposes within the City of Charles Sturt
4.3 Revegetate with local native species	Incorporate local native species.

(c) Corporate Plan Shaping the Western Suburbs 2008-2012

Strategy	Comment
1.2.1 Facilitate equitable access to facilities, activities and services and information particularly to those most in need	Improve physical amenity of public infrastructure in areas of high need
1.3.3 Promote and encourage increased participation in organised sport, active recreation and healthy lifestyle activities	Provide for a range of physical activities throughout the community such as playgrounds, community courts, walking and cycling trails
1.4.2 Design for and promote safe and responsible use of streets and public places	Design and maintain streets and public places incorporating Crime prevention through Environmental Design Principles (CPTED)
1.4.3 All new and private developments are designed for safety	Encourage CPTED initiatives into new developments
1.6.1 Encourage the establishment of business hubs and home based employment	Develop and implement appropriate planning policy (Centres review and Industry DPA)
2.1.1 Identify and protect features of historic significance throughout the City	Identify items and areas of historic significance and put measures in place to protect them
2.2.2 Encourage the provision of well designed, accessible, vibrant, local and regional shopping facilities	Coordinate the upgrade of streetscapes concurrent with major private investment in local urban villages
2.3.1 Develop and maintain a safe network of connected cycle and pedestrian routes	Implement the Planning to Walk Strategy and the Planning to Cycle Strategy

2.3.2	Manage local road networks for the safe movement of people, goods and services	Implement the Traffic Management Strategy 2005-2025
2.3.3	Advocate for a connected, reliable, safe and well maintained public transport system including options for light rail	Seek government support to review the public transport needs of the western suburbs
2.5.1	Create an accessible network of developed open space that responds to the recreation and sporting needs of the community	Implement the Open Space Strategy 2006
2.5.2	Develop environmentally sustainable landscapes within public open space	Develop open space using water Sensitive Urban Design Principles
3.2.1	Encourage energy efficiency and greenhouse gas emission reductions across the community	<p>Improve cycle and pedestrian infrastructure to reduce reliance on motor vehicles</p> <p>Promote energy efficiency and carbon constraint amongst local industry</p> <p>Review and amend the Development Plan to require higher standards of energy efficient design for new developments</p>
3.2.2	Encourage water consumption reduction amongst the community	<p>Promote water management practices that include water storage and reuse and drought tolerant gardens</p> <p>Amend the Development Plan to require higher standards of water conservation and reuse</p> <p>Promote water sensitive building design and retro-fit</p>
3.3.1	Ensure development controls reflect the principles of Ecologically Sustainable Development (ESD)	Undertake a Development Plan Amendment to strengthen existing development controls
3.3.2	Encourage Water Sensitive Urban Design (WSUD) in all new developments	Build WSUD into new developments consistent with the Planning SA base targets
3.4.3	Reduce Council's water consumption	Design public places utilising Water Sensitive Urban Design principles

### 2.3.7 Other Sections of the Development Plan

This DPA is consistent in format, content and structure with the Charles Sturt Council and Adelaide (City) Development Plans.

Details of the changes proposed to each Development Plan are provided in the *Amendment Instructions Tables* located in The Amendment section of this DPA.

### 2.3.8 Adjacent Councils' Development Plans

The area proposed to be rezoned by this DPA is contained wholly within Charles Sturt Council Development Plan area. However, there are two other jurisdictions close to the area affected which are discussed separately below.

Other jurisdictions (i.e. Prospect and Port Adelaide Enfield) bordering the Charles Sturt Council Development Plan area are considered to be sufficiently distant from the area affected not to warrant specific consideration.

### **Adelaide (City)**

The Adelaide (City) Development Plan area shares a boundary of over 400 metres with the area affected. Future development in the Bowden Urban Village is separated from the Adelaide Park Lands to the east by the Park Terrace road reserve.

The proximity of the Village to the open space of the Park Lands and the attractions of the City beyond are significant advantages that have attracted some attention in the *Bowden Urban Village Revised Master Plan Report*. Specifically, the vision includes improved connectivity between the Village and Park Lands/CBD via the construction of a pedestrian/bicycle bridge over Park Terrace, linking the greenway along the rail corridor alignment (adjacent to Second Street) with the pedestrian/cycle paths in the Park Lands. This will require discussion with the City of Adelaide to determine the final form and location of the bridge, and the processes in seeking the necessary approvals.

While the procedures under the *Development Act 1993* for public infrastructure are generally different to those for other development approvals, being subject to a determination in accordance with section 49 of the *Development Act 1993* (Crown development and public infrastructure), such procedures only apply to development within the Adelaide Park Lands by exception. A pedestrian / bicycle bridge extending into the Adelaide Park Lands is not a prescribed activity and therefore likely to be subject to assessment and determination by the relevant planning authority against the Development Plan applicable to the area.

A review of the Adelaide (City) Development Plan has been undertaken and changes are proposed as part of this DPA to ensure the expected benefits of the Village location can be realised. Changes proposed to this Development Plan are discussed later.

### **West Torrens (City)**

The other jurisdiction considered in preparing this DPA is the West Torrens (City) Development Plan area.

The nearest point of the area affected is a distance of some 100 metres to zones in the adjacent City of West Torrens to the south. Effectively this distance consists of the major road reserves associated with Port Road/Adam Street and the land surrounding the River Torrens channel, which forms the boundary between the two Council areas in this location.

The nearest zones in the City of West Torrens are the Linear Park (River Torrens) Zone and the Industry Zone.

In this location, the River Torrens (Linear Park) Zone comprises a relatively narrow strip of land with a southerly boundary that follows the shoulder of the River bank. The Objectives for the Zone relate to preserving the character, aesthetic appearance, scenic beauty and amenity of the River Torrens and ensuring its flood mitigation control function is not compromised. Public access to this portion of the Zone is not available and the development proposed in the area affected is not expected to have any impact on the Zone.

Immediately to the south of the Linear Park (River Torrens) Zone is the Industry Zone, which covers a relatively extensive area and has a significant frontage to Port Road. This strip along Port Road contains a number of well established industries with a significant investment in facilities, including the South Australian Brewing Company and Coca Cola Amatil. The Objective for the Zone is to accommodate a wide range of industrial, storage, warehouse and transport distribution activities.

### ***Implications for the DPA***

The focus for this DPA is on proposed changes needed to realise the vision for the Bowden Urban Village site. The rezoning of land needed to achieve this is wholly contained in the Charles Sturt Council Development Plan area. However, to support links with the adjacent Adelaide Park Lands, a review of the Adelaide (City) Development Plan is considered appropriate.

The only other Development Plan jurisdiction within a relatively short distance of the area affected is West Torrens (City). No amendments to this Plan were identified during the preparation of this DPA.

## **2.4 The South Australian Planning Policy Library**

The State Government is improving South Australia's planning and development assessment system by encouraging and assisting in the conversion of Development Plans using the South Australian Planning Policy Library. Many metropolitan Adelaide and regional councils have already undertaken a conversion of Development Plans to adopt relevant sections of the Library and the new format.

In preparing this DPA, regard has been given to various policy modules in the current version of the Planning Policy Library. The current version (Version 6) was released for use by planning professionals and councils in September 2011.

In respect to the two Development Plans proposed to be amended by this DPA:

- the Charles Sturt Council Development Plan was comprehensively replaced in August 2009 following approval of its *Better Development Plan and General Development Plan Amendment*
- the Adelaide (City) Development Plan has not been amended to adopt Library policy and format.

Due to the limited nature and scope of changes proposed to the Adelaide (City) Development Plan, a review of existing Development Plan policy against the Library was not considered necessary.

However, a close inspection of the Charles Sturt Council Development Plan was considered appropriate given the location of the area affected and the timing of Council's earlier conversion process with respect to the release of the current Library. While a general comparison was undertaken to determine the extent of any differences between the Library and the Development Plan, the review focussed on those policy modules found in the General Section of the Development Plan which are likely to be most relevant to the future development of the Village.

As a review of the Charles Sturt Council Development Plan progressed, a separate policy reform process was underway to update some of the general Library modules in Version 6, as well as the preparation of new draft zones and policy modules intended to assist with wider strategic directions related to inner city growth along key transit corridors and for transit-oriented development sites.

The reforms are incorporated into new Version 6 of the Library. Importantly, these initiatives are directly relevant to the development outcomes being sought as part of this DPA, and have therefore been taken into account in formulating the proposed changes to the Charles Sturt Council Development Plan.

## **2.5 Interim Zoning – Interim Policy DPA**

The area affected by this DPA was recently rezoned to a new Deferred Development Zone following the introduction of the *Bowden Urban Village and Environs (Interim*

*Policy*) DPA on an interim basis in November 2011. The Interim Policy DPA has been crafted as a holding measure while the more comprehensive suite of changes proposed in this DPA undergoes consultation.

It is anticipated that the Interim Policy DPA will eventually be superseded by this DPA. If and when that occurs, this DPA may require some alteration to adopt some of the changes initially included in the Interim Policy DPA and, as such, should be referred to in conjunction with this DPA.

The Interim Policy DPA has been released for consultation and is also available for viewing on the Department of Planning and Local Government's web site.

### **3. THE VISION FOR BOWDEN VILLAGE**

#### **3.1 Bowden Urban Village - Master Plan Report**

In supporting Adelaide's growth as an enjoyable, prosperous and safe place for people to live and work, the State Government prepared and published *The 30- Year Plan for Greater Adelaide*. A key aim of the Plan is the planning and implementation of new mixed use developments that focus on public transport and allow for more sustainable forms of living and working - referred to as transit-oriented developments.

The Bowden Urban Village site is a key deliverable on this vision. In working towards this vision, the State Government appointed a consultant team comprising HASSELL, Parsons Brinckerhoff and key specialists to prepare a Master Plan for the Bowden Urban Village.

The initial Master Plan proposed a new neighbourhood that is vastly different from the one that exists at present. Rather than a mix of open swathes of vacant land and many unused former industrial buildings, a much richer land use tapestry was proposed that has the potential to become the signature for transit-oriented development in Adelaide.

Overall, the initial Master Plan demonstrated that Bowden Urban Village was capable of delivering up to 2000 dwellings, many new parks and spaces, significant retail and office floor space and opportunities for the creative arts and allied industries.

Following completion of this Master Plan process, the State Government (through the LMC) undertook a series of further investigations, including market testing of proposals with the development industry for that portion of Bowden Urban Village located north of the Outer Harbor rail corridor. A range of issues were identified that further influenced the Master Plan including:

- The former Origin Energy Gasworks in the western part of the Village area had areas that required remediation in order to allow for contemporary uses, and the significant time lag and costs associated with this means that development will happen later than the eastern parts of the site on the former Clipsal factory.
- The need to develop a sufficient level of amenity, particularly with the provision of sufficient retail and commercial activity to residents in a retail/commercial hub earlier in the project life.
- The large public open space around the railway station was seen to require more suitable scale and spatial containment.
- The likely undergrounding of the Outer Harbor rail line.
- A land bridge (pedestrian/bicycle crossing) linking the Village site with the Adelaide Park Lands to the east, was seen as better located on a realigned Second Street, rather than further north.

This has resulted in the evolution of the Master Plan and refinements to the detail of the proposal.

A proposed 'site plan' was subsequently commissioned to provide details on the nature and spread of allotment diversity and more specific building types on these allotments. Such a detailed plan was considered necessary to achieve coherent streetscapes, good and diverse building design and a range of dwelling offers to market and reinforce the importance of the project to lead and transform Adelaide's perception of transit-oriented developments and mixed-use urban infill. The details of the proposed site plan also enabled more accurate analysis for delivery option assessment and identification of infrastructure requirements and costs.

Figure 5 shows the proposed site plan. Detailed plans and an explanation of the vision are contained in the *Bowden Urban Village Revised Master Plan Report* (February 2011). These plans are expected to assist the LMC to proceed to market and project delivery.

### **3.2 Role of the Guiding Principles and Urban Design Guidelines**

The LMC is proposing to put in place additional steps that will assist the Government in achieving a desired urban form over the majority of the area affected by this DPA. The additional level of scrutiny is non-statutory and will be additional to the formal development processes established under the *Development Act 1993* for development proposals.

The broad intentions for LMC's holdings were formed around a number of Guiding Principles that were developed through the Master Plan process and subsequent discussions with the local community and the City of Charles Sturt. Further details about the Guiding Principles are contained in Appendix B, grouped under the following topics:

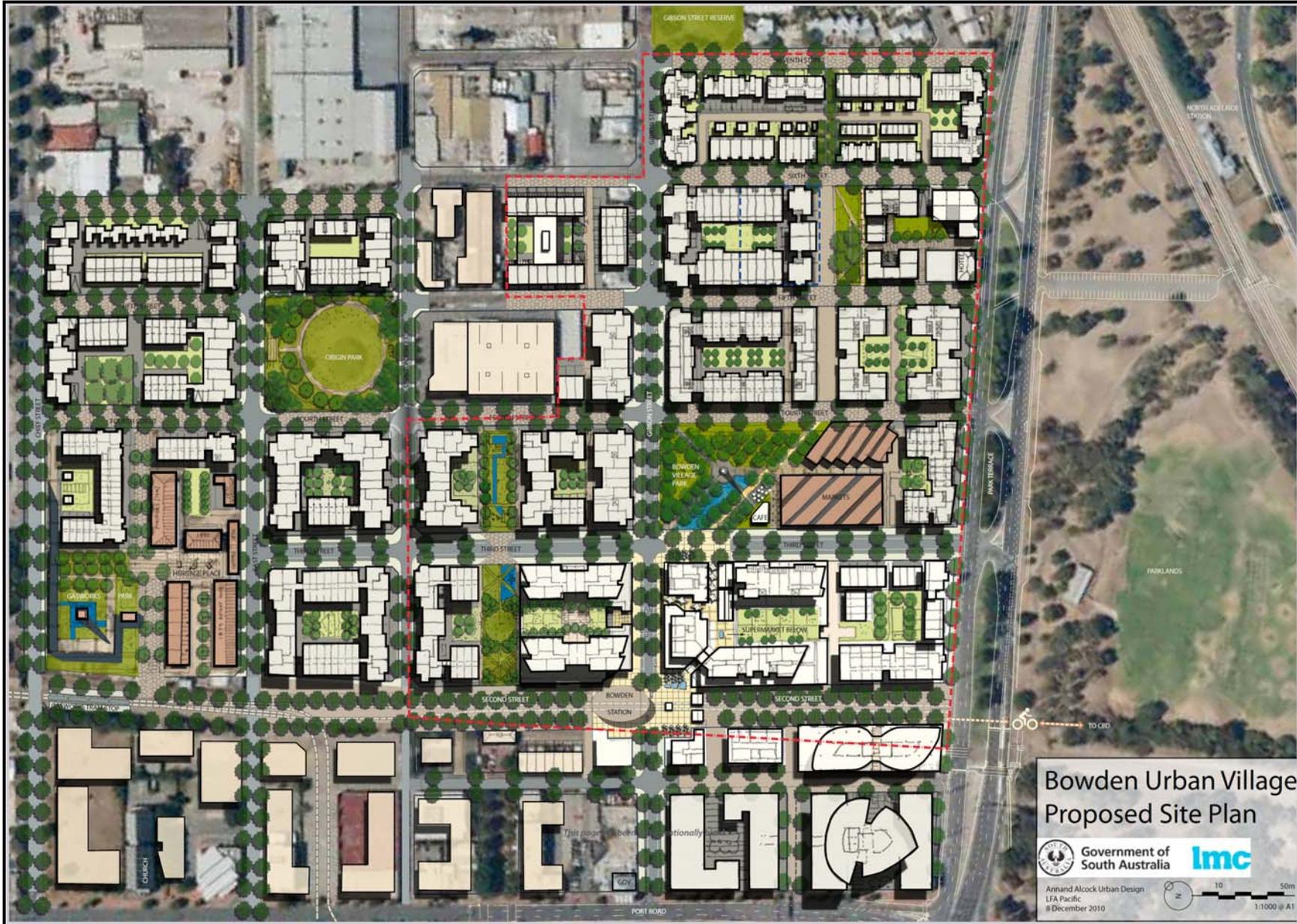
- Integration
- The Site
- The Buildings
- Streets, Squares and Open Spaces
- Movement and Transport
- Mixed Use Development
- Sustainability

The Guiding Principles are important because they provided the foundation for formulating more detailed design criteria that LMC intends to apply to development within its land holdings in the form of Urban Design Guidelines. They also provide information to businesses, Council and the community about the expectations and deliverables that are sought in relation to place making and function that are often outside the ambit of Development Plans.

The Urban Design Guidelines will form a 'manual' for design and development that underpins the delivery of the LMC controlled land and is the starting point for design. Their purpose is to provide a robust assessment framework within which both architectural diversity and quality can thrive, whilst affording priority to the public domain and an integrated delivery of sustainable design and infrastructure.

Figure 5

Site Plan



Source: Bowden Urban Village Revised Master Plan Report (Feb 2011)

The Guidelines will form part of the LMC's assessment framework for building development, to be used by both building developers and design consultants as they prepare development proposals. As landowner of the Origin Energy and Clipsal sites and encumbrancee for development parcels contained within those sites, LMC proposes to establish processes requiring that, prior to any development of that allotment being undertaken, approval must be sought and obtained from the master developer.

A proposal will be required to be submitted to the LMC for consideration and then assessed on how it responds to the relevant guidance in the Urban Design Guidelines in order to obtain 'approval'.

In addition to the LMC's assessment, it is anticipated that the proposal will be presented to a Design Review Panel (DRP) established by the Corporation to provide expert opinion and advice on each application. The DRP will comprise:

- an eminent and notable architect
- an eminent and notable landscape architect
- an eminent and notable urban designer
- an Integrated Design Commission representative.

Following that process, development approval from the relevant planning authority (under the *Development Act 1993*) will then be required for the proposed development to proceed.

The additional, but non-statutory, elements to the development of LMC land have no bearing on the development of private land holdings within the area affected. The policy guidance to be offered through the Development Plan will establish appropriate standards for development across the whole area based on best practice development policy.

#### ***Implications for this DPA***

The Urban Design Guidelines have been considered in framing the criteria and desired character statements contained in the DPA that will apply to the whole area affected. The Guidelines will also provide an additional level of design detail expected to be used by LMC in its dealings regarding the sale of Corporation land and the form and quality of development undertaken.

## **4. INVESTIGATIONS INFORMING THIS DPA**

### **4.1 Introduction**

A number of documents have been reviewed and investigations undertaken as part of establishing the strategic context and policy directions of this DPA. The key elements of these documents and investigations and their impact on the development of planning policy for the area affected are discussed in the following sections.

### **4.2 Existing Zoning**

The zones applicable to the area affected and its environs are illustrated in Figure 6.

#### **4.2.1 Zoning of Area Affected**

Until recently, the area affected was located within both the Industry Zone (north of the Outer Harbor rail corridor) and the District Centre Zone (south of the Outer Harbor rail corridor) as identified in the Charles Sturt Council Development Plan. These zones are shown on Figure 6 as 'former' zones to reflect the operational status of the *Bowden*

*Urban Village & Environs (Interim Policy) DPA*. A short summary of these 'former' zones follows to provide additional context.

#### Industry Zone:

The Industry Zone provides opportunity for a wide range of industrial, warehouse, storage and transport land uses. No types of industry are non-complying in the zone.

However, subject to meeting certain conditions, light and general industries (amongst other uses) are complying in the zone unless within a certain Precinct or within an area shown in the Development Plan as an *Industry Interface Area* on *Overlay Maps – Development Constraints*. Because complying development must be approved by the relevant planning authority, the potential implications of future land use change for the area affected must be considered.

Prior to becoming a Deferred Development Zone, the area affected comprised 3 Precincts: Precinct 25 (Bowden); Precinct 26 (Brompton) and Precinct 41 (Gas Works). Of these, complying development extended to Precincts 25 and 26 – these precincts made up most of the former industrial zoning of the area affected.

The portion of Precinct 25 between Sixth and Seventh streets was previously part of the Industry Interface Area as shown on Figure 6. This portion of the Industry Interface Area was removed following the introduction of the Deferred Development Zone. The amendments to the Industry Interface Area will need to be incorporated into this DPA in the event that the Interim Policy DPA is superseded to ensure the amendments continue to operate and reflect the intended use of land within the Village.

#### District Centre Zone:

The District Centre Zone supports a range of non-residential activities (e.g. retail, offices, consulting rooms, and cultural, community, public administration, entertainment, etc) and medium to high-density residential development when undertaken in conjunction with non-residential development.

All of the land between Port Road and the rail corridor was zoned in this way. The zone level policy:

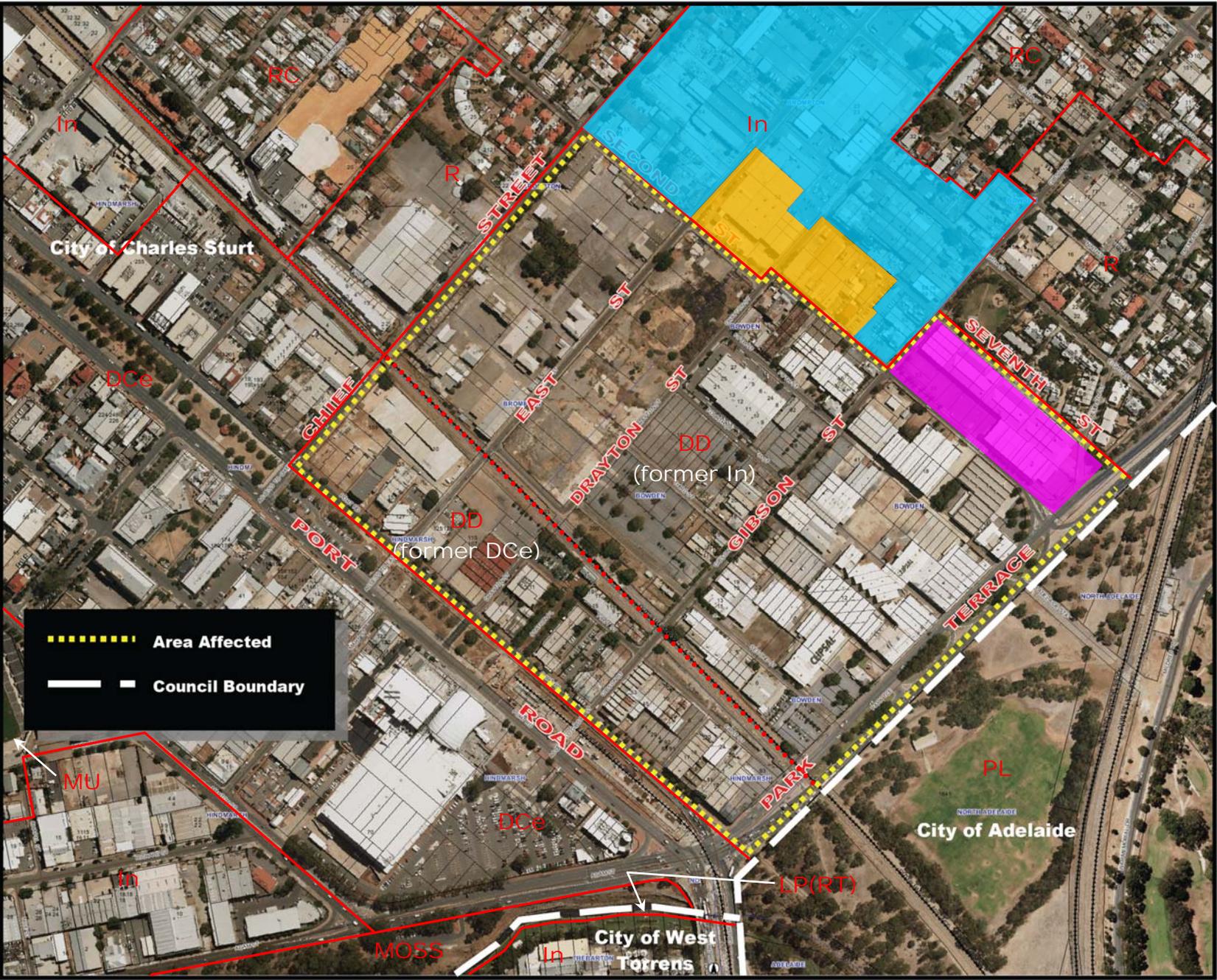
- reinforced expectations that residential development only occur above or behind non-residential development
- stipulated density and built form requirements for residential activity (medium density up to 67 dwelling per hectare net and in the form of 2 to 4 storey buildings, high density over 67 dwelling per hectare net and in the form of buildings of 4 storeys or more)
- land division that is 'consistent with the zone objectives' – no minimum size was specified.

Expectations for development were also provided via Policy Areas and Precincts across the zone. The area affected more specifically fell within Policy Area 2 (Hindmarsh), and Precincts 5, 6 and 8 of the zone.

Policy Area 2 extends to land well beyond the area affected and indeed relates to all of the District Centre Zone shown in Figure 6, continuing in a westerly direction along Port Road to South Road. The Desired Character statement for the Policy Area provided detail relevant to the area affected as follows:

- the edges of the policy area will be '*regenerated and reinforced by a more intensive mix of business and commercial activities complemented by appropriately designed housing and tourist accommodation*'
- along Port Road promotion of '*active and attractive frontages*' and development that maximises pedestrian access
- in relation to retail development – supermarkets and specialty shops are envisaged along the southern side of Port Road only, with bulky good outlets and restaurants appropriate along both sides
- small street setbacks along roads (other than Port Road, unless there is a predominant street setback present)

Figure 6



Zones

- Zone boundary
- ⋯ Zone boundary removed

- DD Deferred Development
- In Industry
- R Residential
- RC Residential Character
- DCe District Centre
- MOSS Metropolitan Open Space System
- MU Mixed Use
- PL Park Lands
- LP(RT) Linear Park (River Torrens)

- Industry Interface Area unaffected by Bowden Urban Village & Environs (Interim Policy) DPA
- Industry Interface Area introduced via Bowden Urban Village & Environs (Interim Policy) DPA
- Industry Interface Area removed via Bowden Urban Village & Environs (Interim Policy) DPA

- - - - - Area Affected
- - - - - Council Boundary

- two storey buildings appropriate along roads other than Port Road – if exceeded, then upper storeys should be set back further than the first two storeys.

The Principles of Development Control for Policy Area 2 sought to limit development to 3 storeys.

More specific requirements were also found in each of the Precincts as follows:

- Precinct 5 (Historic Hub) comprises land between Chief and East streets. One of the themes to this Precinct is maintenance of views to the historic wall on the former SAGASCO site on Chief Street, and includes specific requirements for building setbacks along Chief Street to attain such views.
- Precinct 6 (Port Road Office) comprises land between East and Gibson streets. Office and residential accommodation is considered appropriate (provided noise from adjoining uses is addressed). The precinct also encourages the maintenance of views between the Entertainment Centre entrance and the Bowden Railway Station.
- Precinct 8 (Gateway) comprises the remaining land between Gibson Street and Park Terrace. Development that reinforces the prominence of the Port Road/Park Terrace gateway is encouraged, with development expected to approach the maximum building height of 15 metres.

Both the Industry Zone and District Centre Zone have been replaced with a Deferred Development Zone that limits the types of activities and development that can occur within the Bowden Urban Village project area. This action was taken to ensure development does not occur contrary to the desired outcomes for the Village and to reinforce efforts to achieve the strategic directions of The Plan.

#### ***Implication for this DPA***

A Deferred Development Zone has been introduced over the area affected specifically to provide an environment that complements the purpose of this DPA. Importantly, this new zone addresses concerns in relation to industrial development that may have otherwise persisted until this DPA was finalised, potentially allowing activities to occur that would be contrary to the longer term vision for the land.

While the provisions associated with the former Industry Zone and District Centre Zone are not considered appropriate to guide the form of development envisaged in the transit-oriented development foreshadowed in the Master Plan, matters addressed in those zones in relation to potential interface issues, industrial traffic routes, heritage and built form and design have been considered further in formulating the policy and zoning proposed herein.

It is anticipated that this DPA will replace the Deferred Development Zone with an Urban Core Zone, thus providing a single, cohesive set of requirements for assessment purposes based on the South Australian Planning Policy Library, including the policy reform initiatives with a focus on higher density mixed use forms of multi-storey development.

If the Interim Policy DPA is superseded, some material from the Interim Policy DPA will need to be incorporated into this DPA so that amendments relevant to future development of the Village are not lost.

#### **4.2.2 Zoning of Adjacent Areas**

The zones adjacent to the area affected are also shown on Figure 6.

##### North-easterly Side

Land generally north-east of the area affected is zoned for either residential or industrial use.

The Industry Zone referred to here is the same as the one previously discussed. The only additional matter worth mentioning is the Industry Interface Area. Prior to the

operation of the *Bowden Urban Village & Environs (Interim Policy) DPA*, land to the immediate north of Second and Sixth streets was not part of the Industry Interface Area, potentially allowing industrial uses to be assessed as complying development.

Expanding the Industry Interface Area and introducing temporary zoning over the area affected, signals the intent to use the land for residential and a range of compatible uses, and provides assurances that uses proposed in the Industry Zone on the northern boundary of the Village will undergo a higher level of scrutiny to minimise potential adverse impacts on adjacent areas.

The land north of Seventh Street is within Policy Area 15 (Inner Suburban) of the Residential Zone. This area contemplates a range of detached, semi-detached and row dwellings up to 2 storeys, with site areas down to 220 square metres and frontages to 7 metres wide.

#### ***Implications for this DPA***

While no changes are specifically identified to the areas north of the area affected as part of this DPA, the changes to the Industry Interface Area of the Industry Zone will need to be retained if the Interim Policy DPA is superseded.

Given the current requirements for residential development in the Residential Zone, some consideration has been given to the scale of development within the area affected, taking into account the street separation and potential benefits to existing residents as a result of recasting the former industrial land to a more compatible residential/mixed use environment.

#### **North-westerly Side**

Land generally to the north-west of the area affected falls into a Residential Zone or a District Centre Zone (both discussed above).

Areas north of the railway line and west of Chief Street are within Policy Area 20 (Integrated Medium Density) of the Residential Zone. Key elements of the Policy Area include:

- no limit on housing density
- development up to three storeys in the middle of the Policy Area.

Chief Street establishes a separation between the area affected by this DPA and the residential areas to the west. At this stage, only portions of the Residential Zone across Chief Street have been developed for residential purposes.

#### ***Implications for this DPA***

No changes have been identified to the areas west of the area affected as part of this DPA.

As above, given the current requirements for residential development in the Residential Zone, some consideration has been given to the scale of development within the area affected, taking into account the street separation and potential benefits to existing residents as a result of recasting the former industrial land to a more compatible residential/mixed use environment.

#### **South-westerly Side**

Land generally south (Port Road side) of the area affected is wholly within the District Centre Zone. General discussion about the distribution of land uses north and south of Port Road was canvassed above.

#### ***Implications for this DPA***

No changes have been identified to the areas south of the area affected as part of this DPA.

### South-easterly Side

The Park Lands Zone within the Adelaide (City) Development Plan area comprises all the land generally to the east of the area affected.

The Park Lands Zone provides for recreational and sporting pursuits in a landscaped park setting. Part of the vision for the Zone is a reduction in the number of structures and hard paving.

The land opposite the Bowden Urban Village site is within Policy Area 37 (River Torrens West) of the Park Lands Zone. The policies for the Policy Area generally mirror the wider objectives of the Zone. One main difference is that the Policy Area includes some historic buildings and other attractions including the Police Barracks and the Old Adelaide Gaol. The retention and reuse of these attractions is supported by the Policy Area provisions.

The Park Lands Zone makes all development non-complying unless specifically exempted. This is a significant aspect to the Zone because non-complying development involves additional procedural requirements that create additional uncertainty for proponents of non-complying proposals (e.g. concurrence with the relevant council or the Development Assessment Commission when a planning authority decides to approve a non-complying development proposal, no appeal rights for applicants etc). These requirements, when considered in conjunction with the limited avenues for determining development proposals in the Park Lands under the *Development Act 1993*, and the Zone policy which discourages further structures and paving, are not conducive to achieving some of the subsidiary, but complementary, matters associated with enhancing the potential success and overall experience of the Village.

As mentioned in section 3.1, the Master Plan for Bowen Urban Village contemplates construction of a pedestrian/bicycle bridge to establish a link between future residents and businesses west of Park Terrace and the significant offerings in the Park Lands and CBD.

Adding an exemption to the non-complying development list to allow a bridge proposal to proceed 'on-merit' and assessed against the Zone provisions accordingly might be viewed as weakening the integrity of the Park Lands Zone, however:

- such an amendment would be limited in scope
- the provision of a bridge would be expected to result in a structure at the Zone's periphery and unlikely to have any obvious impact on the recreational capacity and values within the affected portion of the Park Lands
- although as a matter likely to be determined by the Development Assessment Commission (as it affects two council areas), checks and balances will still be in place by virtue of the fact the land in the Park Lands is owned by the City of Adelaide
- there are significant access benefits that will promote use of the Park Lands, with associated benefits for community health and improved safety.

It is noted that the approach to list all development in this part of the Park Lands as non-complying dates back to mid 2000 following approval of the General Development Plan Review DPA prepared by the Council. At that time, the Park Lands opposite the area affected were referred to as the Bonython Park Precinct (PL16). The non-complying development approach has essentially been maintained since then and therefore the strategic directions set up by The Plan and the Government's aspirations with respect to the Bowden area could not have been foreshadowed.

### **Implications for this DPA**

The non-complying development provision in the Park Lands Zone limits any form of development unless previously contemplated and listed. This approach does not contemplate the potential to improve access to the Park Lands via construction of a pedestrian/cycle bridge to the Village.

To ensure a pedestrian/bicycle bridge over Park Terrace (and partly constructed in the Park Lands) is adequately anticipated by the zoning, this DPA proposes to amend the Park Lands Zone by inserting policy and altering the non-complying requirements for the zone to anticipate a bridge across Park Terrace.

## **4.3 Transport and Access**

The south-westerly boundary of the Bowden Urban Village site fronts Port Road while the south-easterly boundary fronts Park Terrace, both primary arterial roads carrying significant amounts of traffic at 41,000 vehicles per day (vpd) and 35,900 vpd – (Annual Average Daily Traffic (AADT) estimates) respectively.

Public transport options available to the site include existing commuter train services from the Bowden Station (and to a lesser extent the North Adelaide Station), tram services to the Adelaide Entertainment Centre and buses along Port Road and Hawker Street.

The site is also served by the *Bikedirect Network* which provides for bicycle movement on arterial and secondary roads (marked bike lanes and in wide kerb lanes), and off-road sealed paths. Bike paths connect the site through the Park Lands to North Adelaide and the CBD.

As development of the area affected progresses, the application of specific, overall Guiding Principles established for the development of the LMC controlled land will assist in meeting various transport and access requirements including:

- key movement corridors where slow moving vehicles share with pedestrian and cycle movements
- provision for shared use schemes for bikes and vehicles (possibly electric)
- safe, direct pedestrian and cycle linkages to the Adelaide Park Lands and CBD and existing cycling networks using the proposed 'Greenway' route along the north eastern side of the rail corridor, signalised crossings and the Park Terrace bridge underpass
- provision for secure lockup and on-street bike parking and end of journey facilities
- a multi-purpose well integrated car park, designed as part of the central 'heart' to meet the demand from retail and other mixed uses
- reduced car parking to promote alternative transport options (i.e. less than one per household, shared parking schemes to off-set total parking requirements, use of local car clubs to serve commercial and residential activities)
- incentive schemes for bikes and bike lending schemes.

### **4.3.1 Road and Cycling Network**

As part of the Master Plan for the area affected, a hierarchical movement network has been identified (refer to Figure 7). The street hierarchy values each route not by the number of cars it accommodates or by the speed at which they are allowed to be driven, but rather by the benefits offered to the Village as a whole by each route having regard to the following:

- convenient and safe movements for pedestrians and cyclists, within the Village, to destinations in the immediate environs and to external destinations
- convenient resident access to public transport

- provision of appropriate access for emergency and service vehicles
- discouragement of through traffic movements
- creation of a unique 'village' atmosphere through low speed and shared spaces.

The hierarchy identifies the arterial road status of Port Road and Park Terrace, the Distributor nature of Chief Street and proposes Sixth Street and Second Street (Brompton) as a Neighbourhood Connector. Gibson Street and Third Street are identified as a 'Main Street' while other streets are identified as Local Streets. A Greenway (for commuter cycling) is proposed along the Outer Harbor rail corridor.

Advice on the road network received after the preparation of the Master Plan (Feb 2011) provides that only left in/out access is proposed along the Port Road and Park Terrace frontages to the Village site, with the exception of the existing signalised intersection at Port Road / Chief Street, and the junction of Park Terrace / Sixth Street which will operate as a left-in / left-out and right-in. To facilitate movements out of the Village, a U-turn facility is contemplated in the vicinity of the existing Park Terrace / Fifth Street junction. The junction of Gibson Street with Port Road is being investigated as a possible location for a signalised pedestrian crossing, providing convenient pedestrian access to the Village's 'main street' area and the Entertainment Centre on the southern side of Port Road.

While Park Terrace currently provides a barrier to convenient pedestrian/bicycle access between the Village and the Adelaide Park Lands and CBD to the east, it is proposed to construct a pedestrian and cycling bridge over Park Terrace, providing a critical, integral element of both the Village project and the proposed Greenway cycle route to Outer Harbor. It is proposed that the overpass be constructed as a continuation of the greenway which is to be located in the vicinity of the rail corridor.

Traffic and parking analysis of the proposed development of the Village site has been undertaken by Parsons Brinckerhoff, based on traffic characteristics of a transit oriented development, including reduced levels of trip making and higher levels of public transport usage. Key findings were as follows:

- the analysis has shown no significant impacts on the operation of the arterial road network and supports the adopted road hierarchy
- passive traffic control devices integrated into the overall street design will positively assist in reducing the overall travel speed through the development and provide an improved balance between the various transport users (e.g. motorists vs bicyclist vs pedestrians). More active control will be required to safely manage traffic movements through the Sixth Street/ Second Street/Drayton Street intersection.

Statements relating to that portion of the Village site formerly in the Industry Zone direct heavy vehicle and industrial traffic movements along a number of the streets running through the area as follows:

***Precinct 25 – Desired Character***

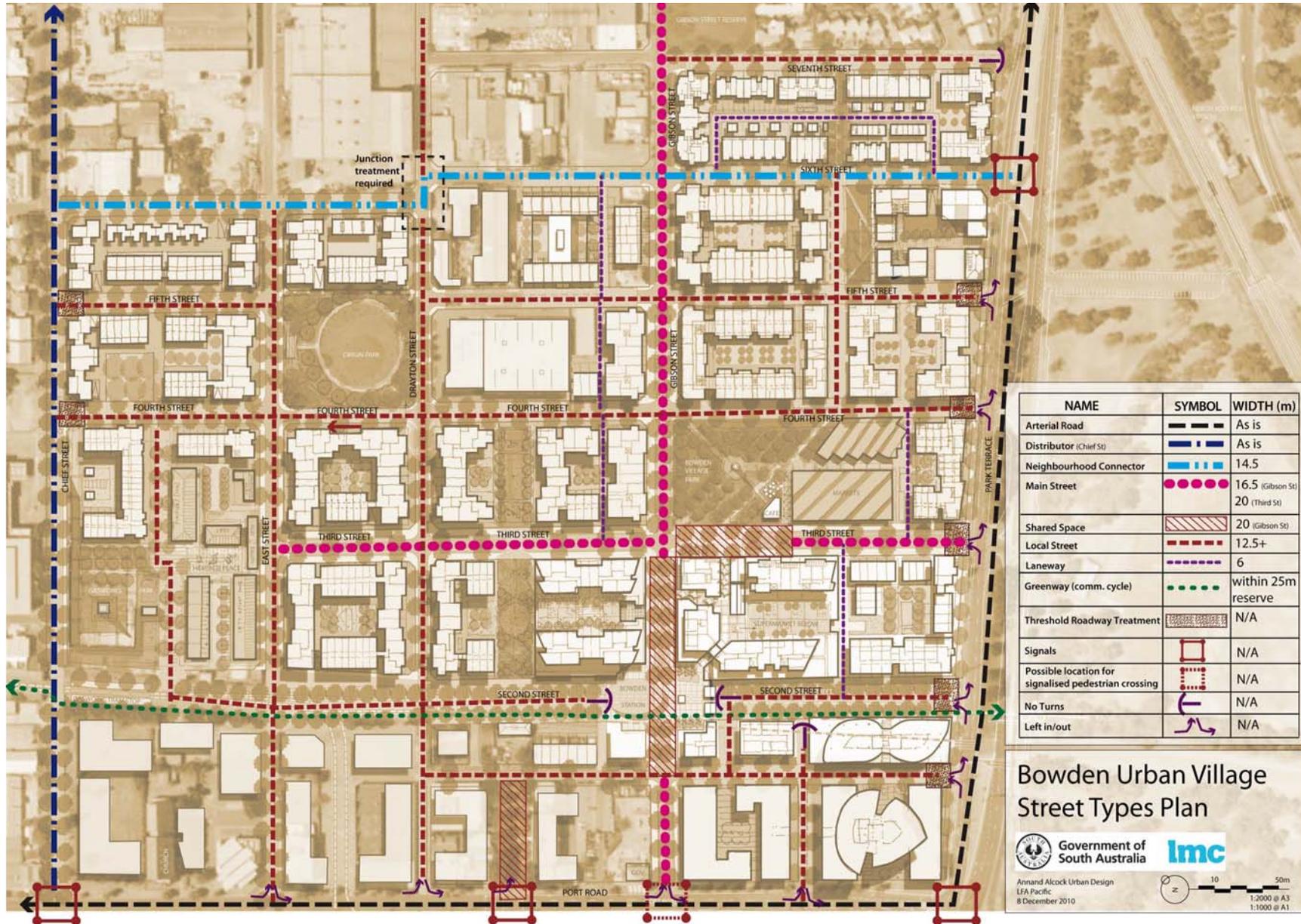
*Park Terrace, Sixth, Gibson, East and Second Streets and Torrens Road provide main routes in the Industry Zone and will remain the main focus for industrial traffic and heavy vehicles and for land uses which are high traffic generators.*

***Precinct 26 – Desired Character***

*Second and Coglin Streets and Torrens Road provide main routes in the Industry Zone and will remain the main focus for industrial traffic and heavy vehicles.*

Figure 7

Streets Plan



Source: Bowden Urban Village Revised Master Plan Report (Feb 2011)

The Desired Character for Precinct 25 is supported by two policies that address vehicular traffic and access.

However, industrial traffic movement will become increasingly inappropriate as the area develops for a mix of land uses in an environment less accepting of industrial traffic. An objective is therefore to restrict the use of the Village street network by heavy truck traffic, either to destinations within the Village site, or to the adjoining industrial sites to the north. In particular, truck access to the industrial properties to the north of Sixth Street/Second Street should desirably take place off Chief Street or Hawker Street via the northern portions of East Street, Drayton Street or Gibson Street. The use of Sixth Street/Second Street for heavy vehicle traffic movements should be limited to that required for operational reasons, not day-to-day movements.

#### ***Implications for this DPA***

The Industry Zone policy promotes the use of certain roads for use by industrial traffic. While the use of roads in this context is more about traffic management as opposed to matters that can be addressed through the Development Plan and the assessment of development proposals, the message conveyed through the policy is no longer reflective of the environment sought to be created through the redevelopment of the area affected. Amendment to existing statements in the Desired Character and policies for Precincts 25 and 26 of the Industry Zone is required to discourage industrial traffic movements through the middle of the proposed Urban Core Zone.

In addition, the Development Plan contains comprehensive policy in the *Transportation and Access* section of the Charles Sturt Council Development Plan detailing matters that should be taken into account when adjusting the road network, proposing access from adjacent land, and the impact on road safety. These provisions have been reviewed as part of a reform process undertaken by the Department of Planning and Local Government, which has resulted in an updated Planning Policy Library. Given the nature and number of changes made to this module, it is proposed replace it in its entirety as part of this DPA.

The changes proposed in this DPA also include the insertion of two new Overlays and associated policy:

- (a) Strategic Transport Routes – to provide additional guidance when development occurs adjacent Port Road and Park Terrace, both identified as strategic roads
- (b) Noise and Air Emissions – to allow consideration of potential impacts from busy roads and rail services, particularly for development likely to be sensitive to noise and air quality levels.

#### **4.3.2 Rail Network**

The area affected straddles the Outer Harbor rail corridor and adjoins the extended tram line.

Planning and staging of the Village project is proceeding on the basis that the section of the Outer Harbor rail line between the Torrens Junction (in the Park Lands) and Chief Street will be undergrounded, albeit with possible realignment. This would involve the track being deepened at the Torrens Junction and then remaining depressed under Park Terrace, through the Village site and returning to grade west of Chief Street. It is envisaged a redeveloped Second Street would be constructed over the rail line. The undergrounding will eliminate the at-grade severancing effect of the current rail line through the site as well as providing for improved traffic flows at the Port Road/Adam Street/Park Terrace intersection, which should also reduce traffic emissions in the locality.

A new underground Bowden railway station is planned near to the junction of Second Street and Gibson Street.

However, it should be noted that negotiations for the undergrounding of the rail line are still proceeding and will depend on Federal funding commitments. Should the undergrounding not proceed, development adjacent to the current rail corridor will be designed to ameliorate potential noise and air quality impacts from rail traffic and ensure that safety is achieved without impacting on the rail operations.

#### ***Implications for this DPA***

The form of development sought at Bowden Urban Village provides an opportunity to capitalise on any future upgrades to the rail network and passenger services. The DPA supports more intense built form nearer the rail corridor, thus increasing the likelihood that workers, residents and visitors will use passenger rail services.

The built form will, however, need to mitigate potential impacts from rail operations (noise and air emissions). A new *Overlay – Noise and Air Emissions* has been developed for this purpose as part of the suite of Modules in the latest version of the Planning Policy Library, and is proposed to be inserted as part of this DPA.

In addition, the proposed Concept Plan provides guidance on the alignment of the rail/tram lines and the potential location of rail and tram stops.

### **4.3.3 Tram Line**

The recently extended tram line from the City to the Adelaide Entertainment Centre at Hindmarsh is proposed to be extended through the southern portion of the Village site to eventually link to West Lakes and Port Adelaide/Semaphore as a tram-train service. The line will extend across the inbound carriageway of Port Road, then through the Village site to Second Street, then head west along the rail corridor at-grade. A new tram station is planned on Second Street between East Street and Chief Street. Tram-train services will merge with train services west of Chief Street.

#### ***Implications for this DPA***

Refer to comments for the 'Rail Network' above.

### **4.4 Public Transport Use**

As part of the traffic forecasting process undertaken for the Village site by Parsons Brinckerhoff, consideration was given to all transport modes serving the Village.

Public transport was treated as a single mode, though most new ridership attributable to the transit-oriented development is likely to comprise a combination of train and tram-train services, with some minor potential increases in bus patronage. At full development of the Village, total peak rail ridership is estimated to comprise:

- AM peak in: 200
- AM peak out: 640
- PM peak in: 720
- PM peak out: 230

Based on the locations of the respective train and tram-train stations, it is estimated that more than 50% of this ridership is likely to use rail services given the more central location of the proposed new Bowden rail station, with the tram-train station more in the south west quadrant of the site. This percentage does not take account of any future Government fare policy arrangements for the tram-train, which may further influence ridership.

#### ***Implications for this DPA***

Refer to comments on the 'Rail Network' above.

## 4.5 Car Parking

### 4.5.1 Residential Development

Parking rates for residential development within the City of Charles Sturt are provided by *Table ChSt/2 – Off Street Vehicle Parking Requirements*. This table sets out requirements for different types of accommodation and, for selected forms of accommodation, also provides a different parking rate based on the number of bedrooms.

Detached and semi-detached housing forms command the highest rate of parking provision at 2 car parking spaces per dwelling. Given the minimum density requirements proposed to be applied within the area affected, these forms of accommodation are unlikely to occur in the traditional sense.

For row dwellings and residential flat buildings/apartments the rate (inclusive of visitor spaces) changes from a low of 1 car parking space for a 1 bedroom dwelling to 1.5 spaces for dwellings with three or more bedrooms (slightly higher rates apply when not near a District Centre or close to public transport stops). These rates generally correspond to the rates proposed to apply to areas identified for infill and urban renewal as part of the Department of Planning and Local Government's policy review process.

Notably, the Development Plan provides a standard rate of 1 space per dwelling in a centre zone.

This DPA proposes unique parking rates that better reflect the intentions for the land as a key demonstration transit-oriented development. More specifically, Parsons Brinckerhoff (August 2011) has advised that parking provision for the development should be based on transit-oriented development principles, and recommended adoption of a single rate of 0.75 spaces per dwelling. This proposed parking requirement is based on experiences gained in other transit-oriented developments, the Village having a design philosophy that encourages sustainability and provides convenient walking and cycling paths (including to the wider area), the provision of day-to-day retail and commercial services in the centre of the site and residents having convenient accessibility to a range of transport options.

The residential parking rate proposed by Parsons Brinckerhoff is, however, noted as being at the lower end of the spectrum of existing parking requirements contained in the Development Plan and similar to the rate applied to residential development in a centre. As a key demonstration project, the potential for further reductions in parking provision should also be contemplated. While the current *Residential Development* section Development Plan provides some basis for altering parking rates for individual developments based on factors like availability of on-street parking, the end rate may be higher or lower than stated minimums. In this case, the emphasis is on reducing private travel demands and associated parking required. As such, policy has been included in the proposed zone identifying circumstances that may support a reduction in the overall provision of parking (e.g. uses with different peak parking profiles sharing the same car parking areas) based on the application of a single standard rate for housing.

### 4.5.2 Non-residential Development

Parking requirements for non-residential development can vary significantly both in terms of the rate and the feature upon the total number of spaces is determined (i.e. 'X' spaces per number of: seats; floor area; beds etc).

Similar to the approach for residential development, this DPA seeks to support a generally lower rate of on-site parking for non-residential uses than might be required presently. Reassigning a new parking rate to each non-residential use found in *Table ChSt/2 – Off Street Vehicle Parking Requirements* was not favoured because of a desire to encourage changes in land use in response to market trends and community preferences within the mixed use Village environment. When different parking rates are applied to different uses, the transition from one use to another can be more difficult, or unattainable where the parking rate applicable to a proposed use is higher.

Work recently undertaken by the Department of Planning and Local Government in comparing parking requirements between several jurisdictions in South Australia and areas interstate considered a possible application of more standardised parking rates for development in mixed use areas. This DPA proposes to adopt this type of approach by establishing the following minimum parking rates:

- shops - a minimum parking rate of 3 spaces per 100 square metres of gross leasable area
- tourist accommodation - 1 space for every 4 bedrooms up to 100 bedrooms and 1 space for every 5 bedrooms over 100 bedrooms
- all other non-residential uses - 3 spaces per 100 square metres of gross leasable area to all development at ground floor level and 1.5 spaces in any other case

With the exception of tourist accommodation, the above rates are similar to those recommended by Parsons Brinckerhoff in the *Traffic and Parking Study* (August 2011), which states that:

*Parking rate provisions of between 3 and 4 spaces per 100 m<sup>2</sup> GFA (Gross Floor Area) could be reasonably considered for commercial/retail uses. We would suggest that the required rate for commercial use may be in the order of 50% of that required for retail activity, although this is largely dependent on the type of commercial activity. For the purposes of this study, it has been assumed that 3 spaces per 100 m<sup>2</sup> GFA will be adopted for retail activity, and therefore 1.5 spaces per 100 m<sup>2</sup> GFA will be adopted for commercial uses.*

Based on the experience that most shops at a neighbourhood level prefer a ground floor location, these policies will provide retail and commercial uses with the flexibility to be interchangeable at the ground floor level without having an adverse impact on parking provisions.

Those retail uses that might seek to locate above the ground floor level in premises previously used for commercial uses (and where a lower parking rate applied) are expected to be primarily of a second tier nature and not requiring a higher level of parking provision. In such cases, the conversion of commercial floor space to retail would be subject to consideration against the Development Plan policies, including those relating to parking.

#### **Implications for this DPA**

This DPA proposes to introduce parking rates within the Village area that contemplate generally lower levels of on-site parking provision than current minimums expressed in the Charles Sturt Council Development Plan. This will reinforce the intention to transform the land to support transit-oriented development outcomes.

In addition, the amount of parking provided may be adjusted from the rates provided based on circumstances associated with individual development proposals and its surrounds. In support of this, specific policy is included in the proposed Urban Core Zone that identify circumstances where a lesser amount of parking might be considered (e.g. availability of on-street parking, proximity to public transport stops etc), or when the development satisfies certain other key objectives (e.g. the reuse of a heritage building) for which an incentive may apply.

This DPA also proposes changes to the General Section of the Charles Sturt Council Development Plan to guide the development of basement, undercroft and multi-level parking facilities. The amendments include the repositioning of some existing requirements contained in the *Residential Development* section relating to undercroft parking to the *Transportation and Access* section. This will provide a basis for the assessment of parking areas in mixed use and other non-residential developments, and not potentially applied to residential development only.

In addition, the proposed Concept Plan provides guidance on the alignment of the rail/tram lines and the potential locations for rail and tram stops.

## 4.6 Heritage

### 4.6.1 State and Local Heritage

The Charles Sturt Council Development Plan contains a number of policies dealing with heritage places (Heritage Places module) and historic conservation areas (Historic Conservation Area module). In addition to these general policies, the Development Plan also contains development guidelines for local heritage places (Table ChSt/4 – Development Guidelines for Residential Character Zone and Local Heritage Places), a list of places considered to contribute to the historic character of an area (Table ChSt/5 – Contributory Items), a list of places considered of local heritage significance (Table ChSt/6 – Local Heritage Places) and a list of places considered of State heritage significance (Table ChSt/7 – State Heritage Places).

Within the area affected by this DPA there are:

- seven State Heritage places
- three Local Heritage places
- some Contributory Items on the former Gas Works' site

The approximate location of the State and Local heritage places are shown on Figure 2, as well as several heritage places closest to the area affected.

A portion of the area affected is also within an Historic Conservation Area (HCA), and includes all the land bounded by Port Road, Second Street, Chief Street and East Street. The HCA is subject to additional requirements contained in the General Section of the Charles Sturt Council Development Plan to conserve areas of historical value. As the requirements for the HCA are generic, the relevance to the area affected would need to be considered on a case by case basis.

In terms of more specific guidance, the portion of the Historic Conservation Area south of the rail corridor previously fell into Precinct 5 Historic Hub of the District Centre Zone. The Desired Character for the Precinct stated:

*Views of the wall of the former SAGASCO site north of the railway line that is visible from Chief Street will be maintained by development.*

The expectations for the SAGASCO wall were further detailed in Principle of Development Control 8 for the Precinct as follows:

*Development fronting the eastern side of Chief Street should maintain views of the SAGASCO wall north of the railway line by being set-back behind a line starting from a point on the Chief Street boundary 40 metres south from the northernmost point of that boundary and finishing 12 metres east of that point along the railway line boundary.*

This specific requirement relating to the wall was deleted from the Development Plan through the *Bowden Urban Village & Environs Interim Policy DPA* given the land would form part of a new temporary zone in which new building construction would be limited

to additions and alterations to existing uses. In terms of reinstating the setback requirement for development south of the rail line, the following observations are made:

- the extent of places of heritage significance within the area affected is well documented and their presence will be taken into account in the development of the wider area
- there are existing policies in the Development Plan that provide guidance for their future development and that of surrounding development, including impact on heritage values and places
- the *Development Act 1993* establishes a referral to the Minister administering the *Heritage Places Act 1993* when the planning authority considers a development proposal may materially affect the context within which a State heritage place is situated
- vegetation on the land south of rail line, in conjunction with mounding associated with the rail line itself, act to obscure the heritage wall when viewed from Chief Street
- a newly constructed multi-level car park building on the land south of the rail line provides a setback from Chief Street in accordance with the policy for Precinct 5
- the potential undergrounding of the rail line through the Bowden Urban Village may improve the visual prominence of, and access to, the wall generally.

In considering whether this DPA should re-introduce the specific setbacks requirements previously applied to development south of the rail line, consideration has been given to the changes made to the *Design and Appearance* policy in the Planning Policy Library regarding development adjacent to heritage places. The additions to the Library provide a basis to consider the prominence of heritage places as follows:

*Development on land adjacent to a State or Local Heritage Place, as listed in [Table ChSt/7](#) and [ChSt/6](#), should be sited and designed to reinforce the historic character of the place and maintain its visual prominence.*

While the above policy echoes previous requirements contained in Precinct 5, it is less direct due to its intended universal application. The recent construction of a multi-level car park has perhaps taken away some of the urgency to re-establish the setback requirement, however, the potential for building work to occur within the area between the car park and Chief Street remains. In addition, the use of the phrasing 'land adjacent' is likely to be subject to interpretation given the positioning of the rail corridor between the heritage wall and land holdings further south.

As such, this DPA proposes to recast the expectations for development south of the rail corridor and fronting Chief Street in a manner that supports the prominence of the heritage wall, but allows greater flexibility to determine how this might be achieved. The following is proposed as an exception to the small primary street setback requirements envisaged within the proposed Urban Core Zone:

*Buildings (including verandas, porticos and the like) fronting Chief Street and within 40 metres south of the southern edge of the rail corridor should be sited and designed to enable views of the State heritage place (SAGASCO wall) located north of the rail corridor.*

Other changes are proposed to the *Heritage Places* module to anticipate the potential reuse of heritage buildings in a more intensive, multi-storey environment such as transit-oriented development sites and transit corridors.

In respect to the LMC holdings, the Corporation is proposing a 'cultural mapping' exercise be undertaken for the area to identify artefacts, objects, structures, activities and stories that can either be incorporated into the Bowden Urban Village development or interpreted through different methods throughout the area.

### ***Implications for this DPA***

Existing policies provided in the Charles Sturt Council Development Plan in relation to State and Local heritage places are generally comprehensive and reflect former Version 5 of the Planning Policy Library.

However, the Department of Planning and Local Government has reviewed parts of the Planning Policy Library to ensure suitable policy is available for inclusion into Development Plans when assessing development proposals in areas identified for intensive infill and adopting a new urban form, such as TOD sites.

This review identified a need for additional policy to be included under the *Design and Appearance* and *Heritage Place* headings in the General Section of the Development Plan that will guide multi-storey additions to places of heritage value and guide development in the vicinity of such places. The changes are now part of Version 6 of the Library.

In light of the proposed intensification of development within the area affected in the form of multi-storey development, and the presence of a number of State and local heritage items, it is proposed to replace the whole *Design and Appearance* module and amend the *Heritage Place* modules as part of this DPA to ensure consistency with Version 6 of the Library.

### **4.6.2 National Heritage List**

The National Heritage List has been established to list places of outstanding heritage significance to Australia. It includes natural, historic and Indigenous places that are of outstanding national heritage value to the Australian nation.

Listed places are protected by Australian Government laws and special agreements with state and territory governments and with Indigenous and private owners. Places on the list are protected under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), which requires that approval be obtained before any action takes place that could have a significant impact on the national heritage values of a listed place.

The 'Adelaide Park Lands and City Layout' were included on the National Heritage List in November 2008, although a number of areas and features have been specifically excluded from the list. Opposite the Village site, on the eastern side of Park Terrace, all of the land apart from the railway corridor is included in the list. As a consequence, construction of a pedestrian/cycle bridge partly in the Park Lands to improve connections between the Village and the Park Lands may require referral under the EPBC Act.

### ***Implications for this DPA***

Both the Adelaide (City) and Charles Sturt Council Development Plan contain requirements relating to the conservation and preservation of heritage values. In respect to the Adelaide Park Lands, any activity that impacts the values of the Park Lands will be subject to referral and assessment under Commonwealth legislation.

As this DPA proposes some alterations to the Park Lands Zone to contemplate the need for a bridge, the views of the Federal Department of Sustainability, Environment, Water, Population and Communities will be sought as part of this DPA. Further consultation may be required as part of the detailed planning and design phases associated with the actual bridge, should it proceed.

### **4.7 Utility Infrastructure**

Parsons Brinckerhoff was engaged by the LMC to provide a preliminary assessment of likely infrastructure requirements to develop the former Clipsal site and the broader

Bowden/Brompton Park Industrial Zone for mixed land uses as part of a transit-oriented development. The key findings of this assessment are presented below.

#### **4.7.1 Water**

Within the area affected there does not appear to be any water mains that would pose a significant problem to the development. The subject land is at the lower end of the EL103 zone within the Adelaide Water District. The major feed to the site is via a 250 mm diameter main that runs down Port Road and is fed from mains in North Adelaide. Within the Clipsal site and surrounds the water is distributed via 100mm, 150mm and 200mm diameter mains.

SA Water's Systems Planning group has advised that the water supply system will have to be augmented to supply a development population of 6000 people. The augmentation work required is likely to be a new 375mm main from the North Adelaide Tank site (on the corner of O'Connell Street and Barton Terrace). Further investigation will be required to establish a route for this main, however the required length will be approximately 2 km. Depending on the location and density of development within the site, existing internal mains for water may need to be upsized or duplicated.

In addition, it is proposed that the LMC controlled land will be supplied with re-cycled water for non-potable uses from the Water Proofing the West initiative.

#### **4.7.2 Sewer**

Within the area affected there are no significant sewer gravity mains that would constrain the development. The majority of mains are 150mm or 225mm in diameter. However, there is a 700mm diameter reinforced concrete gravity trunk main that runs down the length of East Street which will need to be considered as a constraint to any future development unless there is a preparedness to accept significant costs for its relocation. The 700mm main was constructed in 1884 and is an oviform shape. However, if the East Street road alignment is maintained it is not envisaged that this main will pose a significant obstacle to the development. The main gravitates to a 1450mm diameter gravity main on Exeter Terrace to the north.

The wastewater trunk system has the capacity to accommodate the proposed ultimate development. Depending on the location and density of development within the site, existing internal mains for sewer may need to be upsized or duplicated.

#### **4.7.3 Gas**

The site is served by gas along existing streets. In addition, a transmission pressure gas main passes through the Clipsal site, parallel to Third Street. This main operates at 1750 kPa and is a major feeder for the City's gas supplies. Development around this main would require an assessment of the risks of construction and operation in the vicinity and agreement with the APA Group on all aspects of this work including the provision of an appropriate easement (usually a minimum of 10 metres). This would generally result in the prevention of building over the main and protection being provided to the main where construction of infrastructure is within the clear distance nominated. Relocation of the transmission gas main has not been considered favourably due to the expensive procedures involved.

#### **4.7.4 Electricity**

Currently two 11kV power lines service the Clipsal site. The majority of power lines on the Clipsal site are above ground and would have to be removed, with new cabling installed below ground in new development. Augmentation may be required for the Clipsal site and the broader area. Further, for the large energy usage associated with a

high density mixed use development, a 'tri-generation' system (a combined heating, cooling and power system) is to be trialled in the first stage of the development of the LMC controlled land.

#### ***Implications for this DPA***

For the development of this land to proceed there will be a need to provide appropriate infrastructure including, in some instances, augmentation of existing infrastructure services. The Charles Sturt Council Development Plan already contains appropriate policies to facilitate the provision of infrastructure (*Infrastructure and Land Division– General Section*).

Given the extent of policies already provided in the Development Plan for the area affected, no amendment is proposed as part of this DPA.

### **4.8 Flood and Stormwater Management**

The area affected lies within two stormwater catchment areas.

The land generally south of the Outer Harbor rail line and including land along a portion of Chief Street, is within the Port Road Stormwater Management Plan Catchment Zone. Floodplain mapping for this catchment indicates some potential for flooding along Chief Street, mainly in the road reserve, for a 1 in 100 year flood event. It also indicates potential low level flooding along some portions of Port Road and to some adjacent properties within the area affected by this DPA.

The Port Road catchment is subject to a rejuvenation scheme (Water Proofing the West) aimed at reducing the risk of flooding to properties within the catchment, as well as provide for the reuse of stormwater and water quality improvement.

The remainder of the area affected is within the Hindmarsh/Enfield/Prospect (HEP) Catchment, for which no flood mapping has been prepared at this stage.

Within the Village site and its environs there are underground stormwater drainage systems in Gibson Street and Park Terrace that feed off into a wider network. There are also some internal systems that the former owner of the Clipsal site installed to manage local runoff, with most of the remainder of the core Bowden Urban Village site serviced by surface drains utilising the old street pattern.

Within the wider locality, stormwater drainage in Fifth Street in Bowden and Second Street, Third Street and Hawker Street in Brompton are the main routes for underground drainage. The Bowden Urban Village site is located close to the top of the HEP Catchment, consequently there is no issue for controlling stormwater upstream flows.

While the existing systems do not pose a major constraint to future development patterns, they will have a cost implication if they are removed or altered in some way. Future detailed design will consider the application of Water Sensitive Urban Design (WSUD) techniques, possible links to the Cheltenham wetlands and broader 'Waterproofing the West' initiative.

In this context, stormwater is expected to be managed on-site largely through the utilisation of existing stormwater drains. Given that the majority of the area affected has already been covered with impermeable surfaces, it is not expected that the volumes of stormwater will be very different from the existing volumes of stormwater generated.

However, the City of Charles Sturt has a requirement for the reduction of outflow for the 100 year average return interval (ARI) storm to that of a five year ARI storm. It is envisaged that a 3500 m<sup>3</sup> detention basin will be required as part of the development of the area affected.

As far as practical, runoff from impervious surfaces will be discharged through approved treatment devices prior to entering existing drains. Detailed Stormwater Management Plans (SMP) may need to be provided as part of any development application within the area affected.

In relation to stormwater re-use and water sensitive urban design, the LMC is investigating the supply of treated stormwater from the regional 'Waterproofing the West' project and/or treated effluent from the Glenelg to Adelaide Pipeline system. The final form of this water supply will be determined following the completion of a risk analysis process. This treated water will be used for toilets, washing machines, fire system testing, outdoor water use (irrigation) and cooling towers.

Building fire systems will be required to have a capture and re-use system for testing installed. Water demand reduction measures, such as water efficient fittings and appliances, will be required in LMC sites via the Urban Design Guidelines. In addition, best practice water sensitive urban design measures will be employed in the design and management of open space in both the public realm and body corporate common areas. Stormwater quality and flood mitigation objectives will also be incorporated in the design of subject areas.

#### **Implications for this DPA**

Existing Council Wide/General policy regarding stormwater management contained in the Charles Sturt Council Development Plan provides comprehensive guidance regarding stormwater management matters.

Therefore this DPA does not propose any changes and/or additions to stormwater flood management policy contained in the *Hazard* section of the Development Plan as it is consistent with best practice policy found in the Planning Policy Library. However, it is proposed to replace the whole *Natural Resources* section of the Development Plan, primarily to include the latest water sensitive urban design measures from the Planning Policy Library. This will ensure relevance to development within the whole of the City of Charles Sturt, including the Village site.

## **4.9 Site Contamination**

### **4.9.1 Previous Studies**

A number of studies have been undertaken to assist in determining the potential for on-site contamination. The following is an account of these studies.

#### ***Preliminary Environmental Site Assessment - Bowden Industrial Estate - December 2007***

In broad terms, the Bowden Industrial Estate site was originally developed for residential purposes with small industrial pockets scattered throughout the residential section. This remained in place from early settlement of Adelaide in the 1850s to redevelopment for various industries after the Second World War.

In 2007, AEC Environmental prepared a Preliminary Environmental Site Assessment for this site. The work involved a review of the history of the site, review of local geology and hydrogeology, review of available environmental data for the locality, and a preliminary soil and groundwater investigation. Results were interpreted in the context of possible future mixed use development, consistent with proposed new zoning for the site.

The site comprises some 10.17 hectares and, for reporting simplicity, the site was divided into 8 sub-areas. A total of 75 soil bores and 9 groundwater wells were installed as part of preliminary investigation works. Groundwater samples were also collected

from 3 existing on-site monitoring wells. In most areas of the estate, a thin layer of imported material (fill) has been used as base course under roads and buildings, which is generally less than one metre thick. There have also been some localised deeper areas of fill identified up to depths of 4 metres. It is suspected the deeper sections include localised smaller areas which are backfilled old clay pits that possibly exist across the entire site, and also more widespread areas of general filling near the Port rail line near the south western boundary. The majority of the fill contained some building demolition waste materials, possibly from the old residences.

In its conclusions to the Preliminary Environmental Site Assessment for this site, AEC Environmental stated:

*'Soil tested at the majority of locations was found to be generally within guidelines that would be applied for a mixed use development scenario, although some higher levels of contamination were also found in isolated areas. The majority of the soil contamination identified would be manageable on site within a mixed commercial or residential apartment/townhouse type development scenario. The results also indicate much of the groundwater under the site is also contaminated to some degree. None of the results suggest the groundwater contamination would preclude mixed use type development, although further investigation and possibly clean up and ongoing management may be required in the future, particularly in the central area of the main site.'*

### **Additional Environmental Investigation – Bowden Industrial Estate – September 2008**

In 2008 AEC Environmental was commissioned by the LMC to conduct additional Environmental Investigations at the Bowden Industrial Estate site. In addition to a review of their 2007 report, AEC Environmental reviewed other soil investigation data for other sites in the study area as follows:

- Site History and Phase II Soil Investigation – SAGASCO Property Adjacent to Railway Line, Brompton, South Australia, prepared by Woodward-Clyde in May 1997.
- Site Investigation at Bowden for Gerard Industries, prepared by Wallbridge & Gilbert in July 1998.
- Environmental Site Assessment Phase I & II, Second Street, Bowden, SA, prepared by URS Australia in October 2001.

In its conclusions to the 2008 report, AEC Environmental advised:

*'A review of all available environmental site assessment data has been conducted. Available assessment data indicates that there are no widespread significant site contamination issues that would preclude the proposed mixed use type development. It should be noted however that all works conducted on the site to date have been preliminary in nature and additional environmental works would be required as part of the proposed development.'*

### **Brompton Former Gasworks**

The Brompton Former Gasworks, located on Chief Street at Brompton, operated as a manufactured gas plant from 1863 until the 1960s. The site occupies an area of approximately 5.88 hectares and is located within a residential and industrial land use area. Historical gasworks practices at the site have resulted in soil and groundwater contamination. Origin has previously notified the South Australian Environment Protection Authority (SA EPA) of contamination issues associated with the site.

A Groundwater Exclusion Zone which includes the former site area has been implemented around the site by the (now former) Department of Water, Land and

Biodiversity Conservation. This Exclusion Zone prevents the establishment of new wells shallower than 50 metres depth for any purpose other than monitoring and means that groundwater within the Exclusion Zone should not be considered as a general resource. Groundwater investigations at the site, most recently in September 2009, have identified that no significant site related groundwater impact extends beyond the Groundwater Exclusion Zone.

Further works currently being undertaken at the site include groundwater monitoring to ensure the extent of the Groundwater Exclusion Zone remains suitable and that no significant changes in groundwater contaminant trends are observed.

#### **4.9.2 Site Contamination Auditor**

As there is known contamination on portions of the site and as it is proposed to develop the site for more sensitive land uses (including residential and open space), a Site Contamination Auditor will need to be engaged to audit the site in accordance with EPA guidelines. The Auditor will need to be satisfied that there has been a comprehensive site history review, adequate investigations and remediation of soil and groundwater undertaken to determine the site is suitable for its intended use.

The Charles Sturt Council Development Plan contains policies in relation to site contamination, and the relevant planning authority may require further investigations and remediation works to be undertaken prior to development occurring to meet the requirements of these policies. In summary, this work can involve:

- additional soil and groundwater investigations involving the installation, sampling and testing of groundwater monitoring wells - such investigations will input into a Site Contamination Audit Report where required by the planning authority
- an Environmental Site Assessment Report to consider the contamination status of the site and to comment on the risks posed in the context of the proposed use
- a remediation strategy to be documented in a Remediation Action Plan Report.

#### ***Implications for this DPA***

The Charles Sturt Council Development Plan contains appropriate policies in relation to site contamination. Objectives and a Principle of Development Control in the *Hazards* module require appropriate assessment and remediation of site contamination to ensure land is suitable for the proposed use and provides a safe and healthy living and working environment.

While the *Hazards* module in the Charles Sturt Council Development Plan is slightly different to the version in the Planning Policy Library, the differences are of form rather than intent. As such, no amendment to these policies is considered necessary as part of this DPA. However, Council should be encouraged to review the module when undertaking a general review of its Development Plan.

### **4.10 Activities Mix**

#### **4.10.1 Introduction**

A description of a transit-oriented development is provided in The Plan. Broadly, it provides opportunities for high density housing, traditional retail and commercial uses, community facilities, offices, entertainment and recreation, education, health, civic and administrative facilities, green space, cycling and walking opportunities and access to multiple public transport routes.

The land use expectations of a transit-oriented development are not unlike the range of uses sought in the District Centre Zone that applies to a number of locations in the Council area, and previously to a portion of the area affected. Indeed, scale and built

form considerations were some of the prime motivations for reviewing the zoning over that land rather than the range of uses themselves.

By contrast, the land uses desired within the former Industrial Zone are starkly different to the ones contemplated within a transit-oriented development. Furthermore, the types of industry envisaged in the Industry Zone might countenance efforts to attract the desired range of uses for the Village.

In order to appreciate the mix of uses likely to establish within the Village, various employment and residential development scenarios were considered during the preparation of the original Master Plan and subsequent iterations. The following sections are intended to provide a summary of selected land use 'categories' to understand potential land use outcomes and how this DPA supports (or otherwise) the range of land uses envisaged within a transit-oriented development.

#### **4.10.2 Industrial Activity**

The proposed rezoning will significantly change the way the land north of the rail line is used, from one with an industrial focus to one that will accommodate a range of uses, some of which are likely to be sensitive to industry. Such a change does not necessarily mean that all uses categorised as industry are to be avoided, but rather signifies a shift in the types of industries to those that demonstrate a high level of compatibility with the Village concept.

The consequence is a local reduction in the amount of land available for a full range industrial uses. While this DPA is an obvious focal point for this change, it is also a symptom of conditions and forces operating over a considerable period.

Although an overview of industrial land across the whole Council area, the *Industrial Land Study* prepared by Colliers International in 2008 for the City of Charles Sturt goes some way to highlighting some of these forces.

By way of background, the Study makes the following observations:

*'Charles Sturt's historic context meant that much of Adelaide's early industrial heartland developed along the Port Road axis, between the city and its port.*

*It began with the near city areas around Hindmarsh and environs and along the River Torrens, extending westward to incorporate facilities such as the GMH plant at Woodville in the 1920s and the Phillips' Estate at Hendon in the 1940's, followed by further expansion in the post-war period, as manufacturers such as ACI, Actil, Email, Simpson Pope and Clipsal established themselves, .....*

*..... and then further expanding in the post-war period, including the Clipsal site at Bowden. However, as the demand for industrial land increased, industries increasingly were located further to the north in Regency Park and beyond.'*

Further commentary is provided about the establishment of new industrial areas further north, spurred on by investments in new transport infrastructure such as the Port River Expressway opening up the industrial potential of Gillman and LeFevre Peninsula, and the Northern Expressway supporting the industrial development of Edinburgh Parks and the expansion of employment lands further west that now form part of the employment strategy for Greater Adelaide.

One of the consequences of the new northern industrial areas was summed up as follows:

*'.....old industry has been abandoning its long held sites in the Study Area. At various points, the Gasometer was demolished at Brompton, GH Michells*

*abandoned Hindmarsh and brickmaking stopped at Welland. Phillips and GMH moved on in the 1980's, John Shearer in the 90's, Sheridan more recently and, soon Clipsal will be gone as well.*

*At the same time though, the previous emphasis on traditional manufacturing has been giving way to cleaner and higher technologies, and to an increasing emphasis on distribution and services. The result is that elements of the old industrial areas built before and after WW2 have reached their use by date, and now provide outdated facilities and infrastructure.*

*Almost universally, the sites these industries have left behind have struggled to find new life as industrial facilities.....'*

While the Study offered a cautionary note about the pressures urban consolidation can have on the retention of industrial employment lands, it did not consider this to be fully evident in Charles Sturt's industry zones. Moreover, the views expressed about the Bowden/Brompton area identified various factors and expectations that might reshape its future. The Study summed up the various views as follows:

*'Growth opportunities are seen as being available in higher value activities, including in the biotech, defence and media sectors, leading to a higher level of participation in the workforce.*

*There was general consensus that Charles Sturt needs to be moving to more of a mixed use model for land use planning and that this would be consistent with the direction of State planning policy.'*

The Study went on to recognise that the departure of Clipsal, which comprised about one third of the total Bowden/Brompton Precinct, to be a '*catalyst for a complete rethink of the current zoning*'. The possible retention of the land for industrial purposes, even without Clipsal relocating, was under review:

*'the overall standard as an industrial precinct is sub-optimal, especially given its near city location, with very little modern development in evidence, poor internal access for large vehicles and significant areas of apparently under-utilized (and sometimes contaminated) land'.*

The general weight of opinion, it seems, was for change and revitalisation - the Government's endorsement of The Plan and the proposed implementation of it through this DPA are seen as an extension of the momentum for a change that gathered over a considerable period.

The consequences of the move away from an industrial base are two pronged. For residential areas adjacent to the area affected, being northward of Seventh Street and westerly from Chief Street, there is an obvious benefit associated with improved amenity that flows from enhanced land use compatibility and environmental and streetscape improvements.

On the other hand, tension could be generated between the new Village uses and users and the existing industrial activities within and adjacent to the Village site. These tensions will need to be addressed or managed either through appropriate design and siting requirements applied to new sensitive development or through relocation of incompatible industries.

#### **Implications for this DPA**

The proposed new Urban Core Zone provides opportunities for industrial activity, but is proposed to be limited to ensure compatibility with a range on non-industrial uses.

As mentioned in previous sections, changes to the Development Plan were made via the introduction of the *Bowden Urban Village Interim Policy DPA* to manage existing uses within the

area affected and on industrial zoned land to the north. More specifically, changes to the Industry Interface Area to include land north of the Village provide additional assurances that future development in the industrial zone will be carefully scrutinised through the assessment process in terms of any potential impacts on the Village.

In addition to the above measures, there are established requirements as part of the *Interface between Land Uses* module in the Charles Sturt Council Development Plan to guide future developments in interface areas, including a need for sensitive uses (e.g. housing) to take appropriate steps to mitigate impacts from existing uses.

However, changes are proposed as part of this DPA to incorporate additional requirements that would strengthen the assessment framework for development undertaken in a mixed use environment. These changes include:

- inclusion of additional noise and air quality policies into the *Interface between Land Uses* module
- insertion of a new *Overlay – Noise and Air Emissions*, supporting design and siting solutions for sensitive uses to reduce the effects of noise and air emissions.

#### **4.10.3 Retail and Commercial Uses**

The potential mix of uses in the Village has been considered in several reports commissioned by the LMC. The Bowden Urban Village Master Plan report prepared by Hassell/PB considered the opportunity for employment uses as part of the proposed mixed use urban environment. The employment scenarios put forward were based on background research and analysis of future capacity and demand by JLL and Pracsys. Given the timeframes for future development, the investigations considered upper and lower supply of office and retail floor space and consequent employment generation.

Overall, the report projected that the Village site could support retail uses of between 8000 square metres and 10,000 square metres and commercial floor space of between 19,000 square metres and 42,000 square metres.

A subsequent Market Assessment report for the Bowden Urban Village site, prepared for the LMC by MacroPlan Australia, further projected demand for retail and commercial office development. The report identified a requirement for a significant, quality retail offering in the Village to assist with creating and enhancing residential amenity to underpin the attractiveness of apartment living. A review of the local/regional retail network highlighted a potential lack of accessible supply of convenient and quality retail offering for residents, creating a potential opportunity for retail floor space to be more represented in the Village composition.

In undertaking a higher level retail market assessment for the Village, MacroPlan identified two main scenarios based around a:

- supermarket based centre – with demand for some 8700 square metres of retail floor space
- sub-regional centre – based on some 27,500 square metres of retail floor space.

Taking into account the desired character and proximity to the Hindmarsh District Centre Zone to the south, the Master Plan for the Village opted for a 'neighbourhood style' centre, taking on a main street theme. The main street is centred on Gibson Street in the heart of the area affected on land controlled by the LMC that is anticipated to accommodate an initial 8000 square metres of retail floor space, potentially rising to some 13,400 square metres over time.

Aside from the LMC land, additional retail floor space may occur as a result of increased development opportunities for privately owned land within the Village, generally located to the south of the Outer Harbor rail corridor and fronting Gibson Street and Port Road. Retail development in this portion of the Village is envisaged to continue the main street theme characterised by small scale shops, restaurants, cafes

and other uses that activate the street frontage and generally service the Village and its immediate surrounds.

In terms of commercial development, MacroPlan estimated that the Village will experience demand for some 30,000 square metres of office floor space over 10-15 years, while the Bowden Village Employment Plan by Pracsys projected some 42,000 square metres of commercial office space.

As an initial proposal, it envisaged approximately 20,000 square metres of commercial office space will be located on land spanning the LMC site, the existing rail corridor and adjoining private land, rising to more than 43,000 square metres on both the LMC land and the adjoining Raptis site when fully developed. These figures do not include potential floor space increases that may occur as a result of increased development opportunities in the remainder of the Village, located to the south of the Outer Harbor rail corridor and west of the Raptis land.

#### ***Implications for this DPA***

The Department of Planning and Local Government has formulated several new zones specifically designed to accommodate mixed used development in areas identified for urban infill, such as transit-oriented development sites, which now form part of an updated Planning Policy Library.

For Bowden Urban Village, the Urban Core Zone has been selected as the preferred model for the rezoning as it includes an optional Main Street Policy Area that can be used to focus shopping and other activities within a particular area or along certain streets. This provides an opportunity to establish an active and vibrant hub for the community and businesses.

In terms of commercial (non-retail) floor space, the Urban Core Zone provides a framework to support the creation of local jobs. However, some limitations may be placed on the type and scale of non-residential uses when located near residential areas outside the area affected (identified as 'Transition Areas' on the proposed Concept Plan) to manage potential impacts on nearby residents.

#### **4.10.4 Community Facilities**

Demographic analysis undertaken as part of the preparation of the Master Plan for the Bowden Urban Village (Hassell/PB Feb 2010), identified that within its catchment the:

- proportion of children, young people and people aged over 55 is slightly lower than the Adelaide average
- percentage of family households is low and conversely the percentage of lone households is higher
- proportion of detached dwellings is lower with the amount of attached housing higher than average
- amount of social or public housing is significantly higher when compared to the Adelaide average.

The Village site sits within a wider area which enjoys the provision of a range of community facilities, including:

- 2 preschools
- 4 primary schools
- 2 secondary schools
- 2 higher education/tertiary facilities
- 1 library
- 3 community centres.

Analysis of this information indicated the need for a community centre/meeting place and additional child care provision within the Village site. Community engagement reinforced these findings with a strong aspiration for additional multi-use facilities that

would enhance social interaction and a sense of community. It was projected that the additional school age population within the Village could be accommodated within the existing schools in the locality, however, this was subject to confirmation by the relevant service providers. Community engagement responses also identified a perceived need for additional medical and education facilities.

The provision of high quality open space within that portion of the Village site controlled by the LMC will be provided by the Corporation, which will also work with the City of Charles Sturt to identify the additional demand and provision opportunities for community facilities and services as the Village develops over time.

As part of the Village project, urban design improvements are also proposed to be undertaken to approximately five hectares of the Adelaide Park Lands adjacent the Village site to the east, rendering them more usable for the general public as well as nearby residents. The timing of the Park Lands improvements is linked to the proposed undergrounding of the rail corridor, although some preliminary improvements may be undertaken in the northern part of the adjacent Park Lands to correspond with the early stages of the Village project.

#### ***Implications for this DPA***

The uses contemplated in the Urban Core Zone include a range of community facilities. The provision of such services will be a matter for service providers based on population characteristics and community needs that become evident over time as the development progresses.

### **4.10.5 Housing**

#### **Projected Dwelling Numbers**

The potential number of houses to be accommodated in the area affected has been considered based on tenure arrangements – land either controlled by Government or private holdings.

This distinction is important because the intervention by State Government, as reflected in the preparation of a Master Plan and purchase of land, provides confidence about the potential land use make up over the majority of the Village area and consequently the number of dwellings that may emerge. The same level of confidence does not exist for the privately held land due to uncertainty about the redevelopment intentions of individual owners or what use(s) the land might be put to if/when redevelopment occurs.

In reviewing the Master Plan documentation, it is evident that various estimates have been made in respect to housing numbers to be yielded from the LMC controlled land, but generally fall within a range of about 2000 to 2400 dwelling units. The Guiding Principles being used by the LMC set a target in the middle of this range at 2200 dwelling units to be constructed over the next 15 or so years.

In terms of private land holdings, a review of the more sizable portions was undertaken and the following characteristics noted:

<b><i>South of the rail corridor</i></b>	
Between East and Chief Streets	<ul style="list-style-type: none"> <li>• redevelopment has occurred for a range of non-residential uses (e.g. multi-level car park, Hindmarsh Library, offices)</li> <li>• includes a State heritage listed building (Wesleyan Methodist Church)</li> </ul>
Between East and Drayton Streets	<ul style="list-style-type: none"> <li>• land on the corner of East Street and Port Road contain relatively new offices</li> </ul>

	<ul style="list-style-type: none"> <li>• includes some vacant / disused land (about 3,800 square metres)</li> <li>• older factory/warehouse on about 3,200 square metres</li> </ul>
Between Drayton and Gibson Streets	<ul style="list-style-type: none"> <li>• land either side of Station Place comprises mainly newer buildings used for offices/shops</li> <li>• land fronting Station Place and close to the rail line is already developed for housing</li> <li>• land west of Gibson Street and fronting Port Road comprises the Governor Hindmarsh Hotel (a State heritage place)</li> </ul>
Between Gibson Street and Park Terrace	<ul style="list-style-type: none"> <li>• former factory/warehousing (Raptis), sizable area of about 1.4 hectares</li> </ul>
<b>North of the rail corridor</b>	
Between Fourth and Fifth Streets	<ul style="list-style-type: none"> <li>• largely comprises offices/warehousing in a cooperative ownership arrangement</li> </ul>
Between Fifth and Sixth Streets	<ul style="list-style-type: none"> <li>• older style industrial buildings (smallgoods) on about 2,500 square metres</li> <li>• land on the corner of Drayton and Sixth Streets contains a State heritage place</li> </ul>

The above indicates that the likelihood of redevelopment occurring varies significantly if land owner intentions (which could change in response to the opportunities presented in this DPA) are set aside.

In looking at possible redevelopment of private land, it should be acknowledged that:

- land owners can consider the redevelopment of their land at any point in time in accordance with the zoning requirements
- established uses may continue to operate indefinitely regardless of the zoning that applies
- development readiness (e.g. new versus older buildings) or other factors (e.g. heritage values) can impact the redevelopment decision and timing.

If the focus was limited to those sites that are either vacant or comprise disused buildings, and therefore most likely to be redeveloped in the medium term, then out of the 5.5 hectares of private land about 2 hectares might be regarded as being more development ready.

The proposed adoption of a mixed use zone over the area affected means that, in the absence of any specific policy intervention, the actual use of private holdings could range from being all residential to all commercial activities. Given that most of the 2 hectares relates to land along the Port Road frontage (including land at the junction of Port Road and Park Terrace), the preference may be for commercial development to take advantage of the commanding position and passing trade opportunities. The market research undertaken as part of the Master Plan recognised this trait when suggesting the potential for 20,000 square metres of commercial floor space on the Raptis land.

However, if it were assumed that half of the 2 hectares included a component of residential development with similar characteristics to development in the proposed main street area of the Village (i.e. mixed use buildings) where the net residential density on a parcel by parcel basis exceeds 250 dwelling per hectare (with 1 or two storeys of non-residential use) then an additional 250 dwellings might be provided. Overall, this would equate to a 10% housing increase over and above the target amount proposed to be accommodated on the LMC controlled land.

#### Housing Distribution and Density Considerations

For the LMC holdings, a target of 2200 dwellings has been incorporated into the Guiding Principles, which equates to a gross density of about 135 dwelling units per

hectare. The *Bowden Urban Village Revised Master Plan Report* estimates about 2435 dwellings might be achieved across the Corporation's holdings, resulting in a higher average gross yield of around 150 dwellings units per hectare.

Gross densities provide an indication about development outcomes relative to other urban areas, but are difficult to apply when assessing development proposals on a site-by-site basis because gross yields mask the effects that roads, infrastructure, and non-residential uses (e.g. commercial, retail, industrial, open space etc) have on the form and scale of development. By way of illustration, using the *Revised Master Plan Report* and 2010 valuation data the land between Sixth and Seventh streets, area 'A' (see Figure 8) comprises some 1.2 hectares and is planned to yield in the order of 123 dwellings – a gross density of about 100 dwellings units per hectare. By contrast, the land generally bounded by the alignment of Third and Fourth streets, Park Terrace and Gibson Street (area 'B') has an area of some 1.3 hectares with an expected yield of some 73 dwellings – a gross density of about 56 dwellings units per hectare.

This simple comparison gives an impression that area 'A' is developed more intensively than area B. However, area 'B' includes non-residential uses (i.e. open space measuring some 5,100 square metres, and 'markets' of a further 3,100 square metres) that, if excluded from the area used to calculate residential density, results in a much higher 152 dwelling units per hectare. The contrast between areas 'A' and 'B' becomes more apparent when the proposed built form is taken into account - the *Revised Master Plan* indicates maximum building heights of 6 storeys and 12 storeys in each area respectively (refer to Figure 9).

Net residential density is preferred for planning policy as it excludes other land uses and is therefore most readily applied in development assessment processes. This is also the measure preferred by *The 30-Year Plan for Greater Adelaide*.

There are many criteria that influence achievable net density requirements such as:

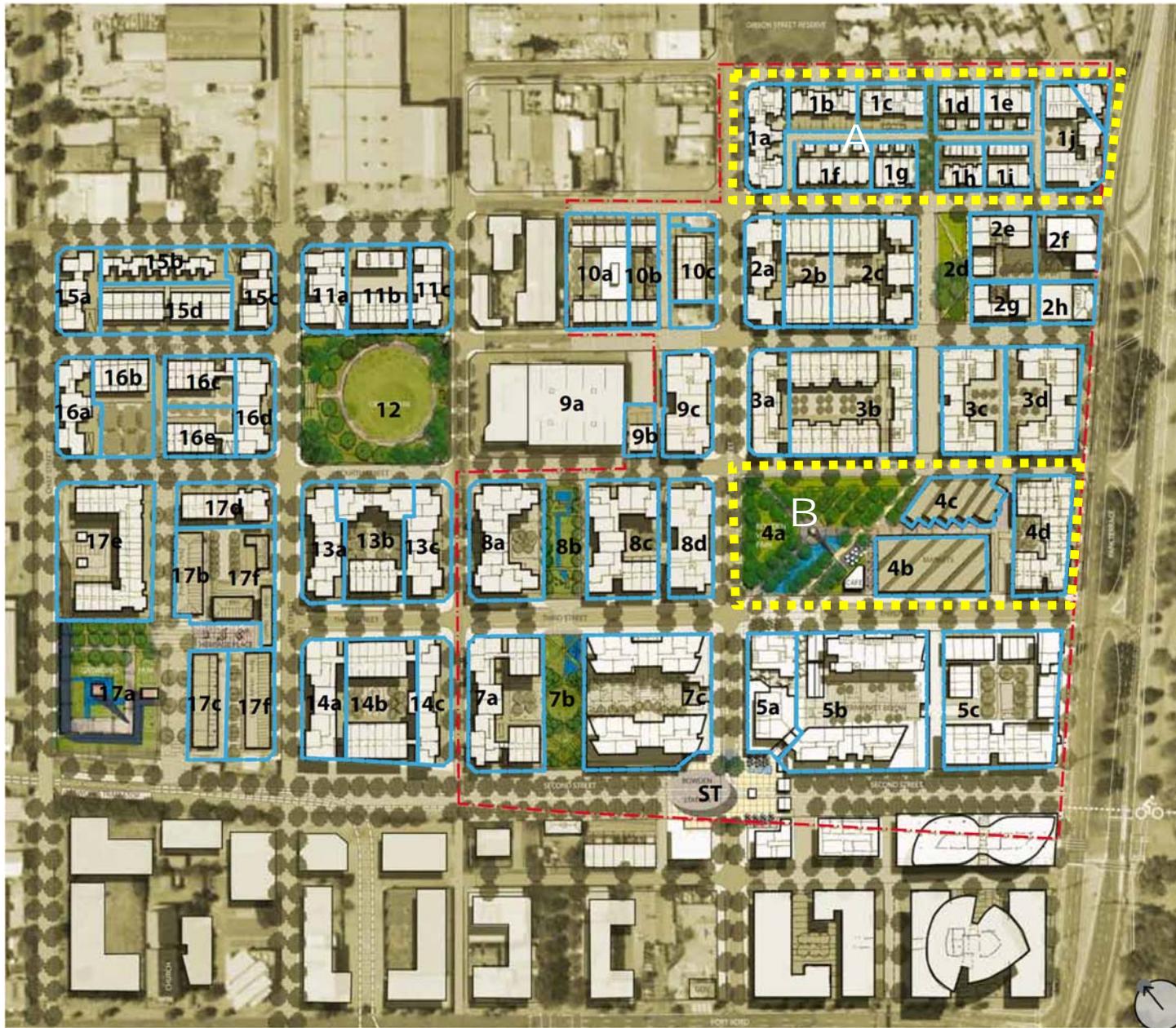
- site size and dimensions – these vary significantly throughout the Village area from less than 300 square meters to over 2500 square metres
- activity composition – the adoption of a mixed use zone for the Village means that land owners can propose development that is wholly commercial or residential, and any combination in-between
- measurable Development Plan requirements (setbacks, parking rates, height limits, site coverage, etc), which could on their own or in combination, affect the amount of floor area able to be provided
- other design related Development Plan requirements (e.g. use of podiums to improve access to natural light in upper floors, variable building heights to increase air turbulence to assist in air quality etc)
- project viability and marketability
- other site considerations (e.g. heritage buildings, access).

Realistically, the interplay between such criteria will most likely be reconciled on an application by application basis where the immediate surrounds and current circumstances can be taken into account. However, at a fundamental level, development can be placed into one of three categories as a starting point to consider how net residential site density requirements might be introduced. The three categories include:

- commercial developments where no housing is provided – in such cases, net residential site density requirements are irrelevant
- housing developments with no commercial floor space – the application of net site density requirements should be reasonably straightforward
- mixed use buildings where a portion of the total floor space is used for residential purposes - application of net site density represents a difficult proposition because the net residential density would tend to decline (subject to average dwelling sizes) as the amount of non-residential floor space increases.

Figure 8

Parcels & Housing Plan

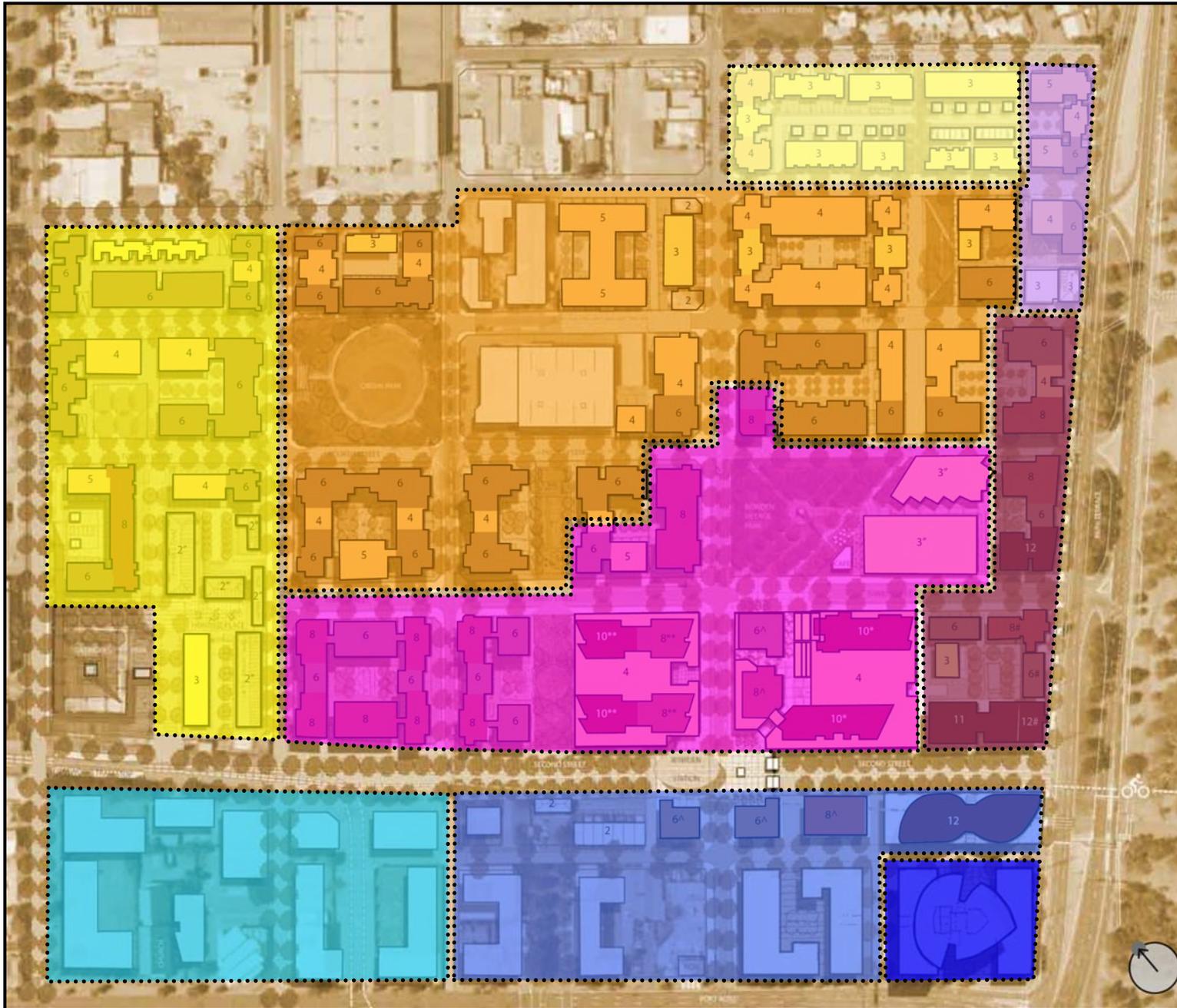


Block	Approximate Dwelling Number
1	123
2	190
3	278
4	73
5	295
7	240
8	197
9	58
10	12
11	120
12	Origin Park
13	130
14	200
15	140
16	150
17	185
<b>Total</b>	<b>2435</b>

Source: Bowden Urban Village Revised Master Plan Report (Feb 2011)

Figure 9

Building Height and Parcel Groups



-  3 to 4 storeys
-  4 to 6 storeys
-  6 to 12 storeys
-  6 to 12 storeys
-  12 to 16 storeys (landmark site)
-  3 to 10 storeys
-  3 to 10 storeys
-  3 to 6 storeys
-  2 to 8 storeys (maximum 6 along Chief Street)

Source: Modified from Bowden Urban Village Revised Master Plan Report (Feb 2011)

The dwelling density policy proposed in this DPA is based around the latter two categories.

(a) housing only developments

While the Master Plan provides a reason to consider prescribing net site density requirements for each development 'parcel' (where information is available), such an approach was not favoured for the following reasons:

- the detail could act as a disincentive to the redevelopment of the land due to a perceived inability to adapt individual projects to market pressures and community preferences
- places significant weight on a point in time Master Plan to have 'got it right' well in advance of delivery
- the parcel breakdown within the LMC controlled areas (where the parcels are identified) could change over the lifetime of the project – the density requirements prescribed in a Development Plan on a parcel basis could become outdated and proposals subject to misaligned minimum net site density requirements.

While a one-size-fits-all approach would establish a simple rule, it creates other potential problems. If an average net density of all identified parcels were to be used, the policy would prescribe a density that is much higher than the intended development outcome for some parcels within the Master Plan area - acceptance of a large variation from a specified minimum would be a matter for determination by the relevant planning authority even though it could be an anticipated outcome in the Master Plan.

A standard net site density adopted close to the lower end of the density spectrum for all parcels would reduce such a risk. However, some parcels in the Village project are expected to deliver in the order of 60 dwelling per hectare net – such a minimum could be regarded as overly conservative given the high expectations for the site and could generate issues for the LMC in its dealings with developers in respect to compliance with the Master Plan and associated Urban Design Guidelines if the Development Plan is too far out of sync.

The proposed policy is an amalgam of the 'parcel based' and 'averaging' approaches that brings together groups of parcels of closest fit based on expected density and built form characteristics (refer to Figure 9). The minimum net residential site density for each parcel grouping (or approximations thereof), illustrated via a Concept Plan, is set towards the lower end of the spectrum to accommodate variations between projects consistent with the Master Plan. However, in many cases the minimum density figure for parcel groupings is still suitably high to convey a sense of the desired outcomes.

(b) housing in mixed use buildings

Within mixed use buildings a standard minimum site density is proposed at 60 dwelling units per hectare net, consistent with the suite of changes made to Planning Policy Library and the new Urban Core Zone.

The minimum allows contemplation of at least one floor of residential use in most non-residential developments, thus providing an avenue to further contribute to regional dwelling targets.

The provision of housing at densities more closely aligned with the development vision provided in the *Revised Master Plan*, whether as a residential only or mixed use development, is supported via the inclusion of an average net density figure on the

Concept Plan for each parcel grouping or area (a figure higher than the minimum) and reinforced through wording included in the Desired Character that encourages the attainment of the average. Recognising that the inclusion of dwellings in any development is voluntary, the DPA also includes an incentive by way of a reduction on car parking and additional building height when a mixed use development achieves the desired average net dwelling density.

While the proposed site and average density figures illustrated on the Concept Plan are broadly reflective of the *Revised Master Plan* vision, it was considered appropriate to incorporate some flexibility into the Development Plan to allow the Village project to respond and adjust to prevailing conditions, recognising the medium to long term horizon for the development. In particular:

- the **minimum** net site density figures proposed in the DPA represents a 20% discount to the *Revised Master Plan* when all parcels in any grouping exceeded 100 dwellings per hectare
- the **average** net density figures proposed in the DPA provide a 10% reduction to the *Revised Master Plan* – this reduction still satisfies the 2200 dwelling target contained in the LMC’s Guiding Principles for the Village (i.e. 2400 less 10%)

No reduction to the minimum net site density was applied in areas where the density for any parcel identified in the *Revised Master Plan* fell below 100 dwellings per hectare, retaining a more faithful position in respect to The Plan which describes transit-oriented development sites as being high density (i.e. more than 70 dwellings units per hectare).

For areas not detailed in the *Revised Master Plan* (i.e. private land), the land north of the rail line has been assigned dwelling density requirements similar to the adjacent LMC holdings. However, dwelling density figures for land south of the rail line sought to establish some level of parity with those areas immediately north of the rail line where mixed use buildings are contemplated and is broadly consistent with the instructions for use of the Urban Core Zone in the Library.

#### **Implications for this DPA**

The Department of Planning and Local Government has formulated new zones for use in areas along transit corridors and in transit-oriented developments. This DPA is based on the Urban Core Zone and proposes to adopt the Concept Plan method to guide housing density. This method allows for variation in the desired density across the zone, recognising individual site opportunities and constraints, as well as the detail contained in the Master Plan.

The DPA also proposes to introduce the new *Medium and High Rise Development (3 or more storeys)* into the General Section of the Development Plan and replace the existing *Residential Development* module with an updated version - both provide additional guidance for housing development (including housing at high density and mixed use development).

#### **4.11 Employment**

As development of the Bowden Urban Village progresses, the application of specific, overall Guiding Principles established for the development of the LMC controlled land will assist in meeting employment objectives. The following Guiding Principles are considered of particular relevance:

- Job opportunities for new and existing residents as the Bowden Urban Village develops
- Provision of retail space (with a substantial proportion contained in the first stages)
- Provision of commercial office space
- Provision of community facilities including civic, recreational and secondary / tertiary educational space as an integral part of the development

- Create a vibrant and viable hub of retail, hospitality and commercial uses around the proposed central piazza.

In addition to these Guiding Principles, the DPA also puts in place policies that will provide opportunity for a range of employment generating activities appropriate to a mixed use development.

With the recent departure of Clipsal and Origin Energy activity from their respective sites, it is estimated employment numbers within the area affected is currently less than 1000 people. However, this number is expected to increase as a result of potential development opportunities provided by this DPA.

It is initially proposed to establish a minimum of 8000 square metres of retail space and 20,000 square metres of commercial office space on the LMC site and adjoining land. These figures are anticipated to rise to some 13,400 square metres of retail space on the LMC site and 43,000 square metres of commercial space on both the Corporation's and the Raptis' sites when fully developed.

Based on floor space ratio averages of 1 job/20 square metres of commercial space and 1 job/30 square metres of retail space (as identified in the Pracsys' Bowden Village Employment Plan), local employment numbers are projected to increase by some 2400.

This figure does not include potential employment increases that may occur as a result of increased development opportunities in that part of the Village which is located to the south of the Outer Harbor rail corridor and west of the Raptis site.

#### ***Implications for this DPA***

As indicated earlier, policies in the new Urban Core Zone support a diverse mix of compatible residential and employment generating land uses, including retail and other commercial uses, as well as appropriate and compatible light industrial premises.

#### **4.12 Population**

Information regarding population characteristics and trends in the areas surrounding the area affected by this DPA is summarised in various reports including the *Bowden Urban Village Masterplan Strategic Framework* (Hassell / Parsons Brinckerhoff, Oct 2009), *Master Plan Report* by Hassell / Parsons Brinckerhoff (Feb 2010), and *Bowden Urban Village Stage 1 Market Assessment* report by MacroPlan Australia (May 2010).

The information can be used by service providers to determine if the types and levels of services available are appropriate to the population to be served, and establishes a benchmark with which to gauge population growth and characteristics as the development progresses. In other words, it is a starting point upon which to monitor the needs and expectations of the new Village community in addition to existing and projected needs of a wider community.

The population size generated by the Bowden Urban Village project, in addition to the redevelopment of land in the wider locality, is heavily dependent on a range of variables including the number of dwellings constructed, the characteristics of those dwellings (e.g. number of bedrooms), community acceptance of high density housing forms, acceptability of apartment living for larger families, etc.

It is reasonable to assume that at development completion (about 10-15 years), the size of the population might best be considered within a range that is based on total dwelling units and average household size.

The potential number of dwellings was considered previously in this Analysis (see section 4.10.5). In respect to household formation, the information supporting the Master Plan provides various estimates, with household sizes ranging from a high of 2 persons per dwelling to a low of 1.6 persons. Using these numbers, a population size could be determined as follows:

**Table 1: Population for LMC holdings**

Dwellings	Household Size		
	1.6	1.8	2.0
2000	3200	3600	4000
2200	3500	3960	4400
2400	3840	4320	4800

A population larger than the range provided will be affected by the redevelopment of private holdings. General observations about the potential for residential development on private land can only be determined using assumptions about the availability of land for redevelopment purposes and how it might be used. A 10% increase in the number of dwellings through the development of private holdings would presumably have a commensurate effect on the size of the Village population.

The characteristics of the population have also been considered as part of the Master Planning for the Village. The *Bowden Urban Village Master Plan Report* (Feb 2010) offers the following comments:

**Residential Population**

*The future population of the Bowden Urban Village is estimated at approximately 4,000 persons. This preliminary population projection is based on working assumptions of future floor space, unit mix and other variables. This represents a best estimate, however, is subject to change and should be reviewed as detailed planning continues.*

*In general, the future population will provide a mix of age groups, in predominantly smaller households with an average occupancy rate of 2.0 reflecting the trend of declining household size.*

*The following characteristics have been estimated for the future Bowden Urban Village population:*

- *Children (aged 0-11) are anticipated to represent less than 10% of the future population*
- *Young people (aged 12-24 years) will represent around 15% of the future population*
- *About a third of the future population will be adults in the family formation years (25-39 years)*
- *One quarter of the future population will be older people aged 55 years and over*

**Implications for this DPA**

Policies in the new Urban Core Zone support a diverse mix of compatible residential and employment generating land uses, including retail and other commercial uses. It provides a suitable framework to accommodate a range of housing types suitable for different household sizes and families, and the services and facilities to meet resident and worker needs.

The requirement for affordable housing to be represented in the Village will also support the provision of housing for people from different socio-economic backgrounds.

#### 4.13 Built Form

The scale of development is proposed to be shown on a Concept Plan as a building height range.

For the most part, the Concept Plan building heights are a representation of those contained in the *Revised Master Plan* vision (see Figure 9). The *Revised Master Plan* building heights plan does not extend to land south of the rail corridor, however, cues have been taken from:

- detailed plans for the LMC holdings
- the prominence of the land on the corner of Port Road and Park Terrace, identified as a 'Port Road Gateway' in the *Revised Master Plan* and also described as a 'Gateway' in the former District Centre Zone which sought to promote development reflective of its status as a major entrance to the north-western suburbs
- strategic directions contained in The Plan for transit-oriented developments that seek to:
  - confine high density housing to the central business district and very significant transit-oriented development sites
  - promote a mix of activities and confine high-rise development (over ten storeys) to the 14 sites identified
  - frame the outer edge of the Park lands with medium-rise (4-10 storeys) and mixed use development
- other opportunities and characteristics (e.g. heritage, main road exposure).

Overall, the pattern of development positions the tallest structures towards the southern-most portions of the area affected, generally lowering through the Village in a north and north westerly direction. The 'landmark site' on the corner of Port Road and Park Terrace is expected to contain the tallest building(s), with building heights near the landmark site and the proposed new Bowden railway station expected in the upper end of the medium-rise (4 to 10 storeys) and low high rise (over 10 storeys) categories.

In other parts of the Village, lower building heights reflect:

- the need to provide an acceptable transition between the intensive built forms of the Village and the residential areas to the north of Seventh Street and west of Chief Street, consistent with strategic directions
- a shift in the expected intensity of non-residential activity consistent with the vision for the Village that anticipates high concentrations of retail, commercial and community uses to activate public spaces around a relocated railway station, in the 'main street' and along main road frontages (Park Terrace and Port Road), while still providing opportunity to accommodate residential development in upper levels at high net densities.

The prospect of taller buildings often triggers a variety of concerns from traffic impacts to overshadowing. There are provisions in Development Plans (the Charles Sturt Council Development Plan being no exception) to ensure such matters can be addressed and impacts mitigated when development is proposed.

In terms of a discussion about built form, concerns about overshadowing, loss of visual privacy, and impact on existing character can arise when proposing changes to a Development Plan like those contained herein. In this case, the position of the Village site offers some advantages in respect to these issues:

- the Village is bounded by existing roads on all sides, with existing housing opposite on only a portion of two of these roads – the separation created by the roads will assist in reducing any potential overlooking of sensitive rooms and private open space of houses near the Village complex

- existing residential zones are generally north-east and north-west of the Village – as such, development within the Village is less likely to cause any significant overshadowing of adjacent residential areas
- areas to the south of the Village, being areas likely to be most impacted by overshadowing by tall buildings, comprise major roads (Park Terrace and Port Road), with the uses opposite these roads being the open space of the Adelaide Park Lands and various commercial uses (including the Entertainment Centre) south of Port Road.

Despite the above, existing and proposed Development Plan policy provide a basis to mitigate potential overlooking and overshadowing caused by new development.

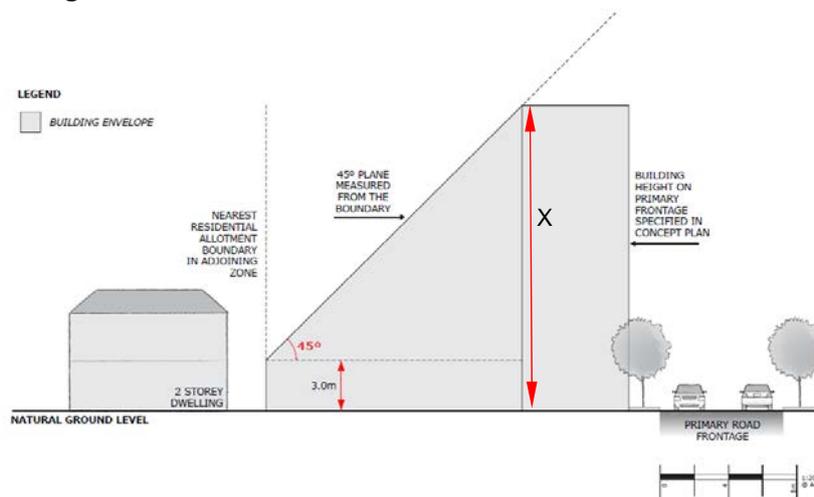
In terms of character, this DPA supports a significant shift in the type of development anticipated. The predominance of semi-detached and row dwellings found in the residential areas adjacent to the site will not be carried through to the Village. While the expectation is for greater provision of multi-storey, apartment style living, careful consideration has been given to a need for an appropriate transition such that the Village does not ‘overwhelm’ adjacent residential development.

Two transition areas are proposed in the DPA that seek to ensure greater compatibility between the use and scale of development in the Village with development in residential areas opposite the Village. The Guiding Principles proposed by LMC include:

*Building heights should generally be proportional (1:1) to the width of the street they face with upper stories set back*

A relationship between built form and adjacent development is also expressed in land use planning policy that creates an ‘envelope’ within which buildings might be constructed. The Charles Sturt Council Development Plan contains such a policy for development in centres, and found in the *Interface between Land Uses* module. The following diagram illustrates how the envelope is formed to address building mass and dominance.

**Diagram 1**



The maximum building height can be calculated using the following:

$$X = 3 + (\text{Tan } 45^{\circ} \times (Y+Z))$$

where:- X = building height, Y = distance to nearest residential allotment boundary, Z = proposed building setback

The proposed Urban Core Zone proposes buildings be setback between zero and 3 metres (minimum/maximum). The following table illustrates how the policy could be interpreted if applied to development in the proposed Urban Core Zone.

**Table 2: Building heights in Transition Areas**

Transition Area	Street Width (approx. metres)	Building Height (Zero setback)		Building Height (3 metre setback)	
		metres	storeys	metres	storeys
Chief Street	20	23	6	26	7
Seventh Street	9	12	3	15	4

The conversion of building height in metres to storeys take into account the proposed Urban Core Zone policy which requires ground and first floor ceiling heights of 4.5 metres, and assuming 3.5 metres for each other storey.

The above building heights are consistent with those shown on the building heights plan in the *Revised Master Plan* and have been incorporated into the Urban Core Zone requirements to reduce the effects of building massing on adjacent residential areas only. The potential effects on non-residential area and internally to the Zone will need to be considered in respect to site circumstances as development of the Village progresses.

#### ***Implications for this DPA***

Policy proposed in this DPA in conjunction with the existing requirements of the Charles Sturt Council Development Plan provide a suitable basis for the assessment of built form, including potential impacts from taller buildings on sensitive areas adjacent to the Village site.

To assist in the assessment of taller buildings (3 storeys or more), it is proposed to insert a new policy module into the General Section of the Development Plan – *Medium and High Rise Development (3 or more storeys)*.

#### **4.14 Flightpaths**

Bowden Urban Village is within an area constrained by a height threshold of 45 metres above existing ground level due to the proximity to Adelaide Airport flightpaths. This aspect to the Village is not unique and is a factor taken into account in many metropolitan Council areas.

Practically, this height limit would permit buildings up to 12 storeys again assuming a ground and first floor ceiling height of 4.5 metres and 3.5 metres for all other floors. Development proposals exceeding 45 metres in height above existing ground level require referral to the relevant Federal agency for ‘direction’ under Schedule 8 of the *Development Regulations 2008*.

#### ***Implications for this DPA***

This DPA does not affect the existing arrangements for addressing building height on aircraft safety. The proposed policy in the new Urban Core Zone identifies buildings heights up to a maximum 12 storeys except for the landmark site identified via a Concept Plan on the corner of Park Terrace and Port Road where the desired building height range encourages buildings 12 storeys or more.

The procedural requirements put in place to ensure aircraft safety provide a basis for assessing any proposal exceeding specified heights.

#### 4.15 Noise and Air Quality

The Bowden Urban Village is located in an area that is subject to existing and potential adverse noise and air quality impacts from existing industrial, commercial and entertainment activities, busy road and rail operations and future mixed-use activities (both within the area affected and in adjacent areas).

##### Noise

An Environmental Noise Assessment, prepared by Sonus Pty Ltd in 2007, is currently being used to inform more detailed site planning on the LMC controlled land. The 2007 report recognises that the following existing noise sources are significant and could impact on the future development of the Village site for residential and other sensitive uses:

- various industrial and commercial land uses in the vicinity of the Village
- the passenger rail corridor and the tram corridor to the south
- road traffic on Port Road and Park Terrace
- significant levels of live music from the Governor Hindmarsh hotel.

Subsequent to the preparation of the 2007 Sonus report, the tram line was extended along Port Road to the Adelaide Entertainment Centre and is proposed to be extended in future through the southern portion of the area affected. In addition, operations at the Raptis site have ceased, although 'existing use rights' may still apply.

The LMC has commissioned further analysis to enable consideration of these changed circumstances and includes conceptual noise treatments to satisfy development requirements for noise mitigation.

Noise sources associated with commercial land uses proposed for development within the zone, as well as major plant and equipment serving the residential apartment buildings, also have the potential to impact on future residential development within the zone.

Land transport noise also arises from vehicles travelling on road and rail/tram corridors. Prolonged noise exposure can impact on amenity values and health in some circumstances. Surveys suggest road transport noise is considered to cause greater annoyance than rail noise. Unlike vehicle noise, people appear to become accustomed to railway noise exposure and annoyance decreases over time. There is therefore, the need to effectively manage the noise effects associated with land transport activities.

The NSW Government Department of Planning Guideline document – *Development Near Rail Corridors and Busy Roads* notes:

*'Major roads and rail operations generate noise and vibration, and people living and working near major transport corridors can be adversely affected'.*

It is apparent from the Guideline that there can be considerable variation in impact from road and rail infrastructure depending on such factors as site characteristics and layout, as well as surrounding geography and land uses, train types and speed, maintenance of stock and tracks, location of rail infrastructure, volume, type and speed of road traffic, road surface and distance from a road.

The Guideline advocates that good design is a key component in avoiding or mitigating adverse airborne noise, including:

- location and orientation of buildings and internal layout to minimise the exposure of sensitive spaces to traffic or railway noise (i.e. sleeping areas and other habitable areas placed on the side of the building furthest from the noise source)
- layout and configuration of development designed to respond to the local environment (i.e. need for noise barriers, acoustic shielding from other structures, and appropriate windows, doors, ventilation and facade materials)
- use of setbacks and open spaces adjacent to busy roads and railways, in conjunction with appropriate bunding to buffer adverse noise impacts (i.e. increasing the separation between the noise source and the noise sensitive area)
- use of appropriate building materials with higher acoustic properties including walls, windows, doors and roofs
- in relation to vibration and ground borne noise (primarily from rail tunnels), the need to inhibit the transmission of noise at some point in the path between the railway track or road and the building. For many buildings, sufficient attenuation of ground vibration is provided by the distance from the track/road or by the vibration 'coupling loss' which occurs at the footings of the building. In some instances however, consideration may need to be given to other vibration mitigation measures.

Planning policies can be applied to new development to reduce the impacts of road and rail noise consistent with the above, and can also apply restrictions on sensitive activities along transport corridors.

The development of the Bowden Urban Village is expected to employ a number of techniques to minimise noise impacts.

#### ***Implications for this DPA***

The DPA proposes to update the *Interface between Land Uses* module in the general section of the Charles Sturt Council Development Plan to ensure noise generating activities mitigate potential noise emissions to acceptable levels for noise sensitive uses. The module is also strengthened with the addition of new policy relating to venues that emit music noise and licensed premises.

In addition, a new *Overlay – Noise and Air Emissions* is proposed to reinforce the need for new development to provide an acceptable level of acoustic amenity for occupants in noise sensitive developments. In due course, the Overlay is expected to be complemented with additional requirements in building construction to mitigate noise impacts in areas of mixed use and complement planning requirements to reduce noise impacts from road and rail transport networks.

#### Air Quality (existing uses)

A report titled '*Potential Air Pollution Impacts Related to the Proposed Rezoning of the Current Clipsal Site from Industrial to Mixed Use*' was prepared by Tonkin Consulting in relation to the proposed rezoning of the Clipsal Site.

The report analysed potential air quality (mainly odour) impacts from existing surrounding industry on any future high rise, high density residential development at the Clipsal site. It also considered the potential air quality (and health) impacts from traffic using Park Terrace.

The assessment of air quality impacts from existing industry was based on the then EPA Draft Separation Distance Guidelines (2000 and 2007 versions) and odour related complaint histories, together with wind climatology and potential for dispersion of air pollution.

The following potential sources of odour were identified (refer to Figure 2):

- The South Australian Brewing Company
- Detmold
- Conroys Smallgoods
- Adelaide Brass Castings (foundry)
- Resin Sands SA

Parts of the Village are within the EPA guidelines for separation distances for SA Brewing, Conroys Smallgoods and Adelaide Brass Castings. It is understood that no complaints have been received in respect of Conroy Smallgoods and only one complaint has been received in respect of Adelaide Brass Castings and SA Brewing over the life of such records.

It is also relevant that if the theoretical separation distance from the brewery recommended by the guidelines were to be imposed, existing residential areas in the suburbs of Thebarton, Hindmarsh and Bowden would be precluded from development for sensitive uses (e.g. residential). Similarly, the lesser separation distances from Conroy Smallgoods and Adelaide Brass Castings overlap existing local residential areas in Bowden.

Of these uses, concerns are known exist in relation to substantially increasing the population within the vicinity of the Thebarton brewery in particular. As a consequence, air quality modelling has been undertaken for the LMC to determine the potential for nuisance odour within the Village site from this source. Initial modelling (EML Air, May 2011) based on a worst case scenario (using a maximum production rate which is a batch of wort every 4 hours, 24 hours per day, 7 days per week) indicated the odour levels generated by the brewery operations would exceed the EPA's recommended guideline of 2 odour units for 99.9% of the year to minimise the potential for odour complaints in populations of 2000 or more people. In fact, the modelling indicated potential ground level concentrations in excess of 10 odour units across portions of the Village site – concentrations that are also observed in existing residential areas in Thebarton, south of the brewery.

The lack of complaint about the concentration and/or frequency of brewery odour would seem contrary to what might be expected in light of the 'worst case scenario' modelling. To better understand the nature of the odour concentrations, additional modelling was conducted for a 'normal' brewery production rate (a batch of wort at 0900 and 1500 each day, 7 days per week). In addition, consideration was given to potential odour concentrations at heights of 5, 10, 15 and 20 metres above ground level to provide insight into odour distribution within an environment expected to accommodate taller buildings. The modelling showed:

- 'shrinkage' in the odour concentration at ground level when compared to the worst case scenario, but would still likely exceed the EPA guideline level of 2 odour units for populations of 2000 or more
- odour concentrations increased at elevation, at least to the maximum elevation modelled at 20 metres.

Observations made in response to the modelling include:

- EPA advice that the guideline odour level is unlikely to be applicable to the brewery as brewing odours are generally of a less offensive type
- based on experiences elsewhere, complaints about brewery odours can be expected when the odour concentration exceeds 5 odour units for more than 8 hours per year (i.e. 99.9 percentile)
- the emphasis on multi-storey buildings in the southern parts of the Village raise the risk of complaint due to higher odour concentrations above ground level
- taller buildings may restrict the dispersion and mixing of air containing brewery odours, thus exacerbating the risk of odour complaints.

Given the direction to establish a mixed use, high-rise development in the Village, two main approaches are available to ameliorate adverse impacts from odour and it is possible both may be used.

The first approach is to require new development to be located, sited and designed to minimise impacts from odour sources, including locating less sensitive uses (non-residential buildings) between the odour source and buildings containing sensitive uses. Existing policies in the Development Plan and additional ones proposed in this DPA from the Planning Policy Library provide guidance on such matters.

The second approach is to determine whether current management practices/operations can be improved at the odour source to lessen the risk of odour concentrations at levels likely to generate complaint. It is understood that technologies are available and used at other breweries to significantly reduce odour emissions. This approach will be considered as part of the EPA licensing requirements attached to the brewery operations.

Improvements to brewery operations through licensing may take some time to come into effect, allowing scope for the cost impost on an existing operator and installation procedures to be planned and co-ordinated. As a result, there is potential that occupiers of residential buildings in the Village may experience nuisance odours if the rezoning and subsequent development were to occur before operational improvements for the brewery come into effect. Based on initial discussions, such improvements are not likely to occur until sometime in 2015.

The implications for the DPA in respect to this matter are twofold. Firstly, there is a risk that occupants of residential buildings constructed nearer the brewery site will have cause for complaint about odour in the absence of odour reduction technology being implemented at the source. Secondly, the adoption of a restrictive land use setting that favours non-residential buildings in areas (particularly at higher levels) likely to be impacted by brewery odour would appear to work against the strategic objective to establish a transit-oriented development focussed around the Bowden railway station and tram services.

This DPA recognises that improvements to brewery operations may occur within a relatively short period and that, as a consequence, development of the Village could progress with little hindrance from that particular odour source. Notwithstanding, until appropriate steps have been taken (e.g. changes are made to the brewery's licence conditions by the EPA etc) some additional safeguards are considered appropriate to ensure the various stakeholders maintain momentum to reduce brewery odour levels and that the planning authority can assess development proposals within the Village site having regard to the level of certainty available in relation to brewery odour reduction improvements at the time of lodgement of development applications, including the scheduled timing of such improvements.

As a result, the policy environment proposed in this DPA requires the brewery operations to be considered when determining the appropriate use of land in those parts of the Village most likely to be affected by odour. The ground level odour contour for the 'normal' brewery production rate has been used to delineate an area where land use compatibility requires careful consideration at the planning assessment stage. In this regard, Figure 10 illustrates the approximate location of ground level odour contours modelled by EML Air (Aug 2012) for normal rates of production at the brewery. In using this information to guide land use, the following matters were taken into account.

- Production at the brewery may increase changing the odour pattern and concentrations across the Village area. If production was to increase to the maximum rate, then development over the whole Village could be impacted based on the modelled odour concentrations. The only option in such circumstances

would be to radically alter the intention to develop the Village (contrary to the wider strategic goals set by the Planning Strategy and not favoured) or implement odour reduction controls as part of increasing brewery production rates.

- The propensity for odour levels to increase above ground level suggests that odour concentration greater than 5 odour units may occur outside of the contour shown on Figure 10 at normal rates of production.

The DPA does not offer an end solution regarding land use compatibility between the Village site and brewery, but provides transitional arrangements for the early stages of the Village (i.e. between Fifth and Seventh streets (see Figure 10)) to be developed while a longer term solution to the brewery odour is put in place. In the meantime it is accepted there is a risk that early entrants to the Village could experience brewery odours, particularly those people living in above ground apartments. In this regard, the LMC is considering providing advice to people about the potential brewery odour as part of its arrangements for the sale of individual development parcels.

#### Air Quality (road and rail transport emissions)

The Village site is bounded by Port Road on its southern side and Park Terrace on its eastern side. Both roads are identified as 'Primary Arterial Roads' in the Development Plan and carry significant amounts of traffic which produce emissions. Both of these roads in the vicinity of the Village are considered by the Department of Transport, Energy and Infrastructure to be Strategic Transport Routes and are identified in *The 30 Year Plan for Greater Adelaide* accordingly.

While motor vehicle emissions are recognised as a source of 'air toxics', the Australian Government Department of Sustainability, Environment, Water, Population and Communities acknowledge in the *Air Quality Fact Sheet* that '*the current state of knowledge regarding the levels of air toxics in Australia is very limited*' and that '*more information regarding the levels of air toxics in Australia is required to develop a good understanding of the extent of the problem.*' While five priority air toxics were included in the initial 2004 National Environment Protection Measure (NEPM) for Air Toxics, consideration of other air toxics (including motor vehicle emissions) for potential future inclusion in the NEPM is still underway.

While there is a lack of standards or policies that specify setback distances from roads for air quality reasons, the 2007 report by Tonkin Consulting observed that:

*The traffic air quality situation along Park Terrace can be compared against roadside air quality monitoring results in a Victorian EPA review of air quality near major roads [6] that looked at roadside monitoring as close 5m from major roads. The annual average daily traffic volume on Park Terrace is 41900 vehicles. The Victorian study showed that only particle levels out of the monitored air pollutants were slightly above the background levels but still below the National Environment Protection (Ambient Air Quality) Measure (NEPM) standards for particles for the monitoring stations along roads comparable to Park Terrace. According to these results the air quality situation along Park Terrace should not require any special extended setbacks apart from the standard council setback requirements which consider issues like noise, vibration and pedestrian access etc.*

Similarly, Parsons Brinckerhoff has advised that there will be negligible negative impact (if any) of the development of the Village site on Port Road in terms of air quality.

Notwithstanding the above, other Australian States are working towards improving conditions for people living near main roads. The NSW Government Department of Planning Guideline document – *Development Near Rail Corridors and Busy Roads* notes '*.....major roads can impact on air quality due to the volume of traffic they carry.*'

Figure 10

Modelled Odour Contours - Thebarton Brewery

*Odour contours based on modelled odour units for normal production for 99.9 percentile at ground level*

-  Area between 5 and 10 odour units (approx.)
-  Area of 10 or more odour units (approx.)
-  Bowden Village - early stages
-  Use of land potentially impacted by compatibility test with brewery odour



 Area Affected  
 Council Boundary

Source: Contours adapted from Ausplume Modelling of Kettle Exhaust SA Brewery (Normal Production Rates), Aug 2011

The Guideline also recognises that air quality can be impaired as a result of emissions from vehicles and diesel trains and that there is a challenge to provide an acceptable level of air quality for the occupants and users of development located next to busy roads and train lines.

Exposure to common air pollutants emitted by vehicles and trains, at particular concentrations, can have short and long term health implications, with the more vulnerable populations including children, people who are already ill and older people. This suggests that developments that are to be used for a large portion of the day by these groups (i.e. schools, child care centres, residential aged care facilities, etc) should not be located immediately adjacent to busy roads or train lines where diesel trains operate.

Once again, the Guideline advocates that good design is a key component in avoiding or mitigating adverse air quality impacts, including such measures as:

- having less confined areas to enable winds and breezes to disperse and carry away air pollutants (i.e. careful consideration of the orientation and continuity of open spaces, their dimension and shape, topography and the layout of buildings surrounding the area)
- stepping back the upper storeys of roadside buildings to increase dispersion of air pollutants and minimising the canyoning effect of tall buildings close to the road
- using buildings to act as a barrier that shields and protects sensitive areas from high-emission zones
- increasing the distance of sensitive activities from the road or rail track
- using ventilation systems that meet the Building Code of Australia and relevant Australian Standards, and the location of inlet ports sited to maximise the distance from the road or rail track to reduce inflows of air pollutants.

It is therefore important that sensitive developments, such as residential uses, schools and child care centres, are not carried out along a busy road unless as part of a development which includes adequate air quality mitigation. The detailed planning for an area should ensure that residential and other sensitive developments are located, sited and designed so that the direct impacts of rail corridors and busy roads can be avoided or appropriately managed.

It should be noted that the Government, as part of its major overhaul of the public transport system, has commenced implementation of the 'electrification' of Adelaide's metropolitan passenger rail network. This process includes electrification of the Adelaide – Outer Harbor line which runs through the southern portion of the Village. Direct environmental benefits include reduced noise, vibration and local air pollution from train operations as well as the likely increased usage of this form of public transport, leading to fewer cars on the road with consequently less noise and air pollution.

### ***Implications for this DPA***

Current policies in the Development Plan require residential development or other sensitive uses to be protected or located away from potential sources of adverse air emissions.

A new *Overlay – Noise and Air Emissions* is proposed that will also reinforce the need for new development to be designed and sited to improve air flow and turbulence to assist in the dispersion of air pollutants when near designated road, rail and tram networks.

In addition, the Desired Character signals a need to be cautious about the use of land in areas likely to be adversely affected by odours from the Thebarton brewery until

odour reduction technology has been incorporated into the brewery operations, or arrangements are in place to secure such improvements.

#### **4.16 Resource Management**

As development of the Bowden Urban Village progresses, the application of specific, overall Guiding Principles established for the development of the LMC controlled land will assist in meeting resource management objectives in relation to water and energy efficiencies, and waste management. The following Guiding Principles are considered of particular relevance:

- A street and block pattern based on the existing historic site grid providing a permeable network of streets and ensuring good solar orientation
- Medium rise buildings fronting onto the street and higher rise buildings generally set back, located mid block to minimise overshadowing of the site
- Landscaping species appropriate to site, with street trees providing deep shade and maximum winter light
- Adoption of One Planet Living Principles to guide sustainability for the development
- Achieve Green Star rating of 6 stars for 10 to 20% of all residential, commercial and retail buildings and 5 stars for the remainder
- Incorporate sustainable energy supply infrastructure to achieve substantial reductions in energy consumption and green house gas emissions
- Incorporate water efficiency principles and sustainable water supply infrastructure to achieve substantial reductions in potable water consumption
- Incorporate waste reduction techniques through the building program and within the completed buildings
- Sustainable design of buildings, incorporating a demonstration of green walls and roofs utilising recovered rainwater particularly in higher profile locations.

Existing policies in the Charles Sturt Council Development Plan (which is based on the Planning Policy Library modules) provide direction in regard to these matters. Relevant Objectives and Principles of Development Control for the provision of water efficient development are contained in the Natural Resources General Section. Policies in relation to aspects of energy efficient development are contained in the Energy Efficiency, Land Division and Residential Development General Sections while waste management policies are contained in the Waste General Section.

As part of its commitment to sustainable development, the LMC is investigating energy opportunities for the Village. It has had 'Worley Parsons resources and energy' undertake an energy supply study to determine the optimal environmentally, commercially, economically, socially sustainable energy architecture for the development. The preferred energy supply solution for the project is a grid connected centralised tri-generation system combined with building energy efficiency established through proposing compliance with the Greenstar rating system and green power. Further work is currently underway to resolve governance and financial management issues associated with the scheme, prior to going to the market with a tender proposal.

In terms of waste reduction, LMC is to work closely with Zero Waste and the City of Charles Sturt to develop a waste reduction and management strategy for waste reduction during construction of new buildings and following occupation. Best practice examples from around the world are being investigated and will be incorporated where practical.

#### ***Implications for this DPA***

As there are a number of existing policies in the Development Plan which cover these matters, only minor additional policy is proposed in this DPA (via replacement of the

*Natural Resources* module) to require water sensitive urban design measures to be employed. The proposed tri-generation system and development of a waste reduction strategy are largely operational matters and do not require additional planning policies to implement.

## **5. CONCLUSIONS AND RECOMMENDED POLICY CHANGES**

### **5.1 Introduction**

The Bowden Urban Village land has been designated in *The 30-Year Plan for Greater Adelaide* as a transit-oriented development site. The development opportunities for this site are significant, particularly in terms of the provision of higher-density residential, commercial and retail development in proximity to major transport access points and the Adelaide CBD.

The Village land was recently rezoned as a Deferred Development Zone replacing portions of both the Industry Zone and District Centre Zone in the Charles Sturt Council Development Plan. This DPA proposes to replace the temporary Deferred Development Zone to guide a significant change in the use of the land and facilitate a shift to a more substantive built form commensurate with its prominent position. It is also striving to create an environment where uses can respond to supply/demand characteristics, community preferences and other market factors.

### **5.2 Recommended Planning Policy**

The Department of Planning and Local Government has drafted several new zones and complementary policy modules (and updates) with the intent that these be used when rezoning infill sites, transit corridors and transit-oriented development sites.

The following sections provide an account of the amendments proposed in this DPA to both Council wide policy (for the City of Charles Sturt) and to the zoning of land.

#### **5.2.1 General Section**

The DPA proposes changes to the General Section of the Charles Sturt Council Development Plan. Depending on the nature of a proposed development, these changes could be called upon by the relevant planning authority when assessing development proposals within the Village project area as well as development elsewhere in the Council.

The changes proposed to the General Section of the Development Plan are in response to two main factors.

Firstly, The South Australian Planning Policy Library is subject to continual review and improvement. From time to time, the Library is updated and published on the Department of Planning and Local Government's web site for use by councils, and planning and development industry professionals. The latest version of the Library (Version 6) was released in September 2011.

The Charles Sturt Council Development Plan was comprehensively replaced in August 2009 following approval of Council's *Better Development Plan (BDP) and General Development Plan Amendment*. The Council's DPA inserted Library policy that is now superseded in respect to Version 6 of the Library.

The second factor relates to a Government initiative to review the zones and policies able to be selected from the Library with the view to introducing new and adjusting existing policy which is more responsive to the strategic directions for inner city growth along key transit corridors and for transit-oriented development sites. These changes

are expected to assist with the achievement of targets and policies contained in *The 30-Year Plan for Greater Adelaide*.

As a result of the above factors, changes to the General Section can be broadly categorised as follows:

- the replacement of existing policy modules
- inclusion of new policy in the form of modules and overlays.

(a) Replacement / Amended Modules

There are a number of General Sections proposed to be replaced by this DPA. The differences between the replacement / amended modules and those currently available in the Charles Sturt Council Development Plan vary in terms of significance. In some cases the nature of the changes are regarded as fairly benign and largely relate to form rather than altering the intent and purpose of existing policy.

Other changes are a result of recasting the modules to clarify intent, improve legibility and extend the application of existing policy to various forms of development to ensure application within mixed use environments.

The replacement / amended modules are summed up as below.

<b>Module</b>	<b>Key Changes</b>
<b><i>Centres and Retail Development</i></b>	<ul style="list-style-type: none"> <li>• allowance for retail activity in mixed use areas (e.g. transit-oriented developments)</li> <li>• relocation of policy supporting active street frontages to the <i>Urban Design and Appearance</i> module to ensure the policy relates to commercial/retail development in many areas, not just centres</li> <li>• relocation of policy concerning bicycle and car parking facilities as these could also be applied to areas in addition to centres</li> </ul>
<b><i>Design and Appearance</i></b>	<ul style="list-style-type: none"> <li>• revision of policy for concise expression and to clarify intent (consistent with Version 6 of the Library)</li> <li>• introduction of policy relating to development adjacent to heritage places</li> <li>• introduction of policy on overshadowing and privacy (taken from the <i>Residential Development</i> module), being matters relevant for uses generally</li> <li>• introduction of new policy regarding mixed use buildings (i.e. active frontages and design)</li> <li>• deletion of policy to reduce repetition</li> </ul>
<b><i>Heritage Places</i></b>	<ul style="list-style-type: none"> <li>• addition of policy relating to multi-storey additions to heritage places</li> </ul>
<b><i>Interface Between Land Uses</i></b>	<ul style="list-style-type: none"> <li>• strengthening requirements relating to the design and siting of noise generating uses, including entertainment venues</li> <li>• inclusion of new policy for assessment of development with potential to emit air pollution</li> </ul>
<b><i>Natural Resources</i></b>	<ul style="list-style-type: none"> <li>• changes to update policies on stormwater management and water sensitive urban design principles (consistent with Version 6 of the Library)</li> </ul>
<b><i>Outdoor Advertisements</i></b>	<ul style="list-style-type: none"> <li>• change of module name to '<i>Advertising</i>' as per Version 6 of the Library and other changes to reflect the Library content</li> <li>• introduction of new policy relating to advertising in mixed use and corridor zones</li> </ul>

<b>Residential Development</b>	<ul style="list-style-type: none"> <li>relocation of policy on overshadowing and some requirements for visual privacy to the <i>Design and Appearance</i> module</li> <li>introduction of new policy on communal open space</li> <li>relocation of noise related requirements to the <i>Interface between Land Uses</i> module</li> <li>relocation of requirements on parking and access to the <i>Transportation and Access</i> module</li> <li>replacement of policies on carports/out buildings and private open space to provide greater consistency and simplify existing requirements</li> <li>inclusion of affordable housing policy</li> </ul>
<b>Transportation and Access</b>	<ul style="list-style-type: none"> <li>introduction of additional policy on bicycle parking facilities</li> <li>provision for reduced car parking in mixed use areas where car parking might be shared</li> <li>insertion of policy relating to parking in mixed use and corridor zones</li> <li>various amendments to establish consistency with Version 6 of the Library policy.</li> </ul>

(b) New Module and Overlays

The new module will apply to other areas in the Council where taller buildings are contemplated or are proposed, however, the Overlays are linked to Development Plan maps which will, at this stage, only apply to the area affected. While there is an option of extending the application of the Overlays to other parts of the Council area, it is expected that this will be a matter considered through other DPAs.

<b>Module / Overlay</b>	<b>Key Features</b>
<b>Medium and High Rise Development (3 or more storeys)</b>	<ul style="list-style-type: none"> <li>seeks to provide additional certainty in respect to design matters relating to multi-storey buildings including clear entrance ways, visual privacy, separation between buildings and outlook, site storage requirements etc.</li> </ul>
<b>Affordable Housing Overlay</b>	<ul style="list-style-type: none"> <li>applicable to the Village site only, however, could be applied to other sites over time as other parts of the Council area are mapped as a result of rezoning land to accommodate infill development</li> <li>requires affordable housing to be provided in developments proposing 20 or more dwellings</li> </ul>
<b>Noise and Air Emissions Overlay</b>	<ul style="list-style-type: none"> <li>applicable to the Village site only, however, could be applied to other sites over time as other parts of the Council area are mapped as a result of rezoning land to accommodate infill development</li> <li>may be linked to requirements under the Building Code to mitigate noise impact on selected sensitive uses from roads/rail</li> </ul>
<b>Strategic Transport Routes Overlay</b>	<ul style="list-style-type: none"> <li>applicable to the Village site only, however, could be applied to other sites over time as other parts of the Council area are mapped as a result of rezoning land to accommodate infill development</li> <li>policy that seeks to maintain the role and function of key roads identified via maps when undertaking development in designated areas (i.e. the Village site)</li> </ul>

### 5.2.2 Zone Changes

The changes proposed in this DPA at the zone level include the rezoning of the area affected, which is wholly within the City of Charles Sturt, and changes to the requirements in the adjacent Park Lands Zone in the City of Adelaide.

In terms of the latter, changes to the Park lands Zone are intended to guide the construction of a pedestrian / bicycle bridge that will strengthen links between the Village and the Adelaide Park Lands. As owners of the Adelaide Park Lands, co-operation will be required between the City of Adelaide and State Government regarding its final location and design.

In keeping with the areas transit-oriented development designation, the key zoning changes proposed are to assist in the transformation of the area affected to provide significant development opportunities for high density housing, retail and commercial activity and open space that recognises the commanding position, available transport options and access to services.

The proposed zone for the area affected is based on draft policies being prepared for Version 6 of the Planning Policy Library by the Department of Planning and Local Government. Central to this DPA is the adoption of a new Urban Core Zone over the Village site that expresses the desired range of land uses and the parameters for built form and design, building on to the General Section policies including proposed amendments to those policies as mentioned above.

The new zone provides for a mix of compatible land uses at high density, and medium to high rise. A high quality public realm and a focus on public transport, walking and cycling are also required.

The proposed Urban Core Zone includes a Concept Plan which provides information about key elements of the development of the area. This is necessarily of a general nature, providing flexibility to enable the evolution of the development over its likely 10 to 15 year development program. The following comments are made in respect to some key aspects of the Concept Plan.

- Transitional areas are proposed along Chief Street and Seventh Street, opposite existing residential areas.

These areas are expected to include less intensive non-residential uses than other parts of the Village and there is an expectation that development will not overwhelm adjacent residential areas.

The two Transition Areas offer different building height ranges broadly reflecting the differences in boundary roads where Seventh Street has more intimate qualities, while Chief Street has Boulevard characteristics with a wide road pavement and on-street parallel parking. The approach taken is consistent with the Guiding Principles for the Village and the building envelope policy as discussed in section 4.13 above. In more specific terms, the proposed Urban Core Zone provides for the following:

- (a) Chief Street - a maximum building height of 6 storeys along the street frontage, and up to eight storeys in the remainder of this Transition Area.

Wording is included in the Desired Character statement to support the Concept Plan and reinforce the built form expectations adjacent to the street alignment.

- (b) Seventh Street - a maximum of three storeys for buildings providing no street setback, and generally four storeys throughout the remainder of the Transition Area.

However, building heights of 4 to 6 storeys are envisaged near the corner of Seventh Street and Park Terrace to take advantage of the Park Lands

frontage and accommodate non-residential uses at the ground floor level. The potential impact of buildings in excess of 4 storeys on the housing north of Seventh Street will be subject to assessment against the general provisions of the Development Plan, including issues of mass.

- provision for a main street focussed around Gibson Street, providing centrally located facilities to the Village population.

Alternative locations for a main street were contemplated during the preparation of the Master Plan, but were not favoured due to uncertainty about the intentions of owners outside the Village (i.e. either side of Chief Street), and the preference for a more central services and activities hub to the Village population.

The proposed street layout and other linkages should assist in providing access to residents and businesses outside the Village.

- Areas of open space (comprising about 13% of the LMC holdings), and
- Key road proposals reinforcing the historical grid layout
- Provision for landmark development on the corner of Port Road and Park Terrace – the lower end of the desired building height range is set towards the maximum height allowed under the ‘Airport Building Heights’ rules to reaffirm the status of the site. While the requirements of the Urban Core Zone would allow consideration for taller buildings, any building over the limit for airports would be subject to design and aircraft safety considerations.

The Concept Plan is partly predicated of the successful undergrounding of the railway line, which is subject to funding. The positioning of some features on the Concept Plan will need to be adjusted should the line remain at grade.

### **5.3 Assessment matters**

#### **5.3.1 Complying, Non-complying and Merit Development**

Different types of development are subject to three main types of assessment processes – complying, ‘on-merit’ and non-complying.

Provided development can satisfy any quantitative criteria established for complying development in the Development Regulations and the Development Plan, development designated as complying must be granted Development Plan Consent.

Development listed as non-complying in the Development Plan is generally discouraged. All other forms of development are subject to assessment on their merits against all the relevant provisions of the Development Plan.

The proposed Urban Core Zone does not specifically identify any kinds of development as complying. As such the only forms of complying development in the Zone are those listed in schedule 4 of the *Development Regulations 1993*. Most developments will likely be subject to a merit based assessment providing a means to consider interface issues between various land use types and ensure design elements and other criteria (e.g. parking) are adequately met.

The proposed Zone does, however, contain a list of non-complying developments. As the proposed Zone seeks to accommodate a range of uses, the non-complying list only includes those forms of development that are unlikely to be appropriate under most circumstances due potential noise and/or odour impacts or the built form design traits are generally incompatible with the desired Village atmosphere.

The only variation to this theme is the approach to shopping which seeks to reinforce the role of the proposed Main Street Policy Area as an activities and social hub for the Village. In this regard, it is proposed to include the following as non-complying:

*Shop or group of shops with a gross leasable area of greater than 250 square metres where located outside of the Main Street Policy Area*

- with the exception of:
  - (a) *a bulky goods outlet located to the south of the rail corridor and the gross leasable total area does not exceed 2000 square metres*
  - (b) *a restaurant*

The non-complying provisions support the Desired Character and related policy that express the aspirations and land use direction for the Main Street Policy Area.

In terms of the implications for the area affected by this DPA, the proposed policy position is largely consistent with the policy that applied to the area south of the Outer Harbor rail corridor under the District Centre Zone – Hindmarsh Policy Area 2. The policies for this Policy Area listed the following as non-complying:

*Shop or group of shops with a gross leasable area of greater than 250 square metres and on the north side of Port Road, except where it is for a bulky goods outlet or restaurant*

The main difference between the land use policy that applied to the land south of the rail corridor under the District Centre Zone and the one proposed in this DPA is that the District Centre Zone enabled larger retail floor areas for bulky goods outlets. While more recent developments along the section of Port Road affected by this DPA indicate a preference for offices than bulky goods outlets, the driver for this DPA is urban form. Large scale bulky goods outlets, often referred to as 'big-box retailing', do not necessarily provide the same level of intimacy and vibrancy generated by multiple shop fronts. A floor area limit is intended to continue to provide opportunity for bulky goods retailing but in a form that complements the desired Village character.

Notwithstanding the expectations for bulky goods outlets, the rezoning of the land between Port Road and the railway line provides significant opportunities for larger scale development, and is well placed to take advantage of significant government investment in rail improvements and the redevelopment of former industrial land to the north.

### **5.3.2 Categories of Notification**

The *Development Regulations 2008* or the Development Plan can assign public notification to development as either Category 1 or 2. The Regulations may also assign development to Category 2A.

Development assigned Category 1 cannot be notified, whereas Category 2 development allows notification to adjacent land owners or occupiers. In either case, no third party appeal rights exist.

Any uses not assigned a Category referred to above defaults to Category 3 for public notification purposes. Such developments invoke wide notification and allow third party appeals against the decision of the planning authority.

The categories of public notification proposed in this DPA are consistent with the range of uses contemplated in the proposed Urban Core Zone. In particular, all uses listed as desired in the zone or that may be appropriate within a mixed use environment are

either Category 1 or 2 for the purposes of notification. Only those forms of development identified as non-complying (or determined to constitute a non-complying form of development) will attract full notification and attendant appeal rights.

This approach is considered appropriate given the impacts associated with development can be effectively assessed through application of proposed new and existing planning policy relating specifically to this site without the need for neighbour notification.

## **6. STATEMENT OF STATUTORY COMPLIANCE**

### **6.1 Introduction**

Section 26 of the *Development Act 1993* prescribes that the DPA must assess the extent to which the proposed amendment:

- accords with the Planning Strategy
- accords with other parts of the Development Plan
- complements the policies in the Development Plans for adjoining areas
- satisfies the requirements prescribed by the Regulations.

### **6.2 Accords with the Planning Strategy**

Relevant strategies from *The 30-Year Plan for Greater Adelaide* (2010) are summarised in the Analysis section of this DPA and Appendix A, along with comments as to how the DPA accords with these strategies. As indicated, the DPA complies with the strategies set out in The Plan and it is the intent of the DPA to support the achievement of relevant targets and policies.

The area affected by this DPA is defined in The Plan as a transit-oriented development site and is also adjacent to a defined major transport corridor, making it a suitable location to consider higher density forms of mixed use development, including residential and commercial activity.

### **6.3 Accords with Other Parts of the Development Plan**

The policies proposed in this DPA are consistent with the format, content and structure of the Charles Sturt Council and Adelaide (City) Development Plans.

The area affected by this DPA includes policy employed elsewhere in the Council area that is supportive of innovative housing forms, affordable housing projects and higher density mixed use developments. The proposed provisions have been formulated cognisant of the established development adjacent to the proposed Urban Core Zone.

### **6.4 Complements the Policies in the Development Plans for Adjoining Council Areas**

The amendment does not affect the intent of the Development Plan policies of the adjoining Council areas.

### **6.5 Satisfies the Requirements Prescribed by the Regulations**

The requirements for public consultation (Regulation 11) and the public meeting (Regulation 12) associated with this DPA will be met.

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**THE 30-YEAR PLAN FOR GREATER ADELAIDE: POLICIES AND TARGETS**

<b>Overall spatial distribution</b>	
<p><b>Policies</b></p> <ol style="list-style-type: none"> <li>1. Plan for population growth of 560,000 people over 30 years and accommodate this growth through the delivery of 258,000 additional dwellings to be constructed over the life of the Plan.</li> <li>2. Locate the majority of Greater Adelaide's urban growth within existing built-up areas through increases in density in strategic locations.</li> <li>3. Concentrate new growth within metropolitan Adelaide in transit corridors, transit-oriented developments and activity centres so that the urban character of the majority of neighbourhoods remains largely unchanged.</li> <li>5. Activate and rejuvenate higher-order activity centres and provide for integrated mixed uses around transport interchanges and wherever possible at the neighbourhood level.</li> <li>7. Ensure that the bulk of new residential development in Greater Adelaide is low- to medium-rise development (including detached dwellings) and confine high-rise developments to the 14 identified transit-oriented developments.</li> </ol> <p><b>Targets</b></p> <ol style="list-style-type: none"> <li>A. Eighty per cent of the existing metropolitan area of Adelaide will remain largely unchanged as a result of the Plan.</li> <li>B. By the end of the Plan's 30 years, 70 per cent of all new housing in metropolitan Adelaide will be being built in established areas.</li> <li>C. About 60 per cent of metropolitan Adelaide's (50 per cent of the Greater Adelaide region's) new housing growth will be located within 800 metres of current or extended transit corridors.</li> <li>D. Density of development in transit corridors will vary throughout the corridor but gross densities will increase on average from 15 to 25–35 dwellings per hectare. Net residential site densities for individual developments will be higher than the average gross density.</li> </ol>	<p>This DPA will facilitate the development of around 2,200 dwellings which will accommodate in the order of 4,000 persons within this strategic location within the existing built up area. This new growth will be accommodated in a transit-oriented development adjacent to the Outer Harbor train line transit corridor. Development will be in the form of integrated mixed uses in a medium to high-rise form. Bowden is an identified transit-oriented development site.</p> <p>This DPA will therefore assist in meeting Targets A, B, C and D.</p>
<b>Transit corridors</b>	
<p><b>Policies</b></p> <ol style="list-style-type: none"> <li>8. Designate and protect transit corridors so a significant amount of Greater Adelaide's net</li> </ol>	<p>The Outer Harbor train line is identified as a major corridor for mass transit transport. The</p>

<p>dwelling growth and net jobs growth can be generally located within 800 metres of a major transit corridor or within 400 metres of other transit corridors.</p> <p>9. Designate five fixed-line transit corridors (see Maps D2 and D3) as State Significant Areas. The Department of Planning and Local Government will prepare Structure Plans for these corridors in partnership with other state government agencies and local government.</p> <p>12. Ensure Structure Plans clearly designate key precincts within the transit corridor, which include mixed-use transit-oriented developments, activity centres, open-space precincts and, where appropriate, employment lands.</p> <p>13. Provide specific guidelines about the types of services and densities in key locations in the transit corridors, for example, surrounding railway stations. This is to take advantage of the value of assets such as railway stations, where it will be important to create mixed-use residential and retail developments. Structure planning around railway stations may require a mixture of high- and medium-density, low- and medium-rise apartments and ground-floor shopfront activities that could combine retail, restaurants, cafés, and local commercial or service activities.</p> <p>14. Concentrate higher densities and medium-rise development around mixed-use activity centres and railway, tram and bus stations.</p> <p>15. Ensure that there is an effective transition between higher densities and medium-rise development (near shops and stations) and existing low-rise detached housing. Structure Plans for transit corridors will prescribe that densities and building heights decrease as development moves away from transport thoroughfares and shops and railway stations. This will mean that traditional detached dwellings will generally be bordered by low-rise dwellings such as townhouses.</p> <p>17. Ensure transit corridors contain a network of cycle ways, walkways and greenways to provide cooling and to create liveable and attractive locations for a diverse population.</p> <p><b>Targets</b></p> <p>E. Designate five fixed-line transit corridors: the Noarlunga train line, Outer Harbor train line, Gawler train line, Glenelg tram line and Adelaide O-Bahn busway (see Map D3).</p> <p>F. Complete Structure Plans and initiate key rezoning through Ministerial Development Plan Amendments (DPAs) for the major transit corridors within five years of implementation of the Plan. Rezoning will occur in stages with priority given to major precincts such as transit-oriented</p>	<p>land affected by this DPA, which rezones land for dwellings and employment, all lies within 420 metres of the rail line.</p> <p>The policies in the DPA will provide guidance as to the mix of uses proposed and the types of services and densities envisaged in the area. The policies will also acknowledge the need for a height transition to existing low-rise housing and delineate pedestrian and cycle ways and areas of public open space.</p> <p>This DPA is in accord with Target E and will assist in achieving Targets F, I and J.</p>
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<p>developments.</p> <p>I. Locate more than 50 per cent of Greater Adelaide's net dwellings growth (about 137,000 dwellings—including 60,000 in transit-oriented developments and sites that incorporate these development principles and design characteristics) and about 35 per cent of Greater Adelaide's new jobs in transit corridors.</p> <p>J. Provide a net contribution of active and passive open space in transit corridors.</p>	
<b>Transit-oriented developments</b>	
<p><b>Policies</b></p> <p>18. Provide for 14 new transit-oriented developments to be located across the region and encourage planning for transit-oriented style developments in appropriate locations.</p> <p>19. Locate transit-oriented developments next to mass transit stations and interchanges (rail, bus or tram) and connect to existing activity centres where possible.</p> <p>21. Subject transit-oriented developments to very high design requirements as part of the precinct planning process.</p> <p>22. Design transit-oriented developments to be walkable and cycling friendly, and provide safe connections to surrounding communities.</p> <p>24. Require high quality open space in all transit-oriented developments.</p> <p><b>Targets</b></p> <p>M. Plan for about 60,000 dwellings in 14 transit-oriented developments and more than 20 sites that incorporate transit-oriented development principles and design characteristics.</p>	<p>This DPA provides for a transit-oriented development in a location in accordance with the <i>30-Year Plan</i>. Good access is available to rail, tram and bus services.</p> <p>The site and form of development proposed on it has been the subject of significant design processes. A number of policies proposed in this DPA reflect the outcomes of these processes. The DPA will require the provision of walking and cycling connections and high quality open space.</p> <p>This DPA will assist in meeting Target M by providing in the order of 2,200 dwellings in a transit-oriented development.</p>
<b>Adelaide City Centre</b>	
<p><b>Policies</b></p> <p>6. Frame the outer edge of the Park Lands with medium-rise mixed-use development in appropriate locations.</p> <p>10. Reinforce the role of the Park Lands as a major recreational, sporting, natural and open-space asset servicing metropolitan Adelaide.</p> <p>11. Activate the Park Lands to increase their appeal and safety through increased passive surveillance.</p>	<p>The form of development proposed in this DPA will assist in 'framing' the outer, western edge of the Park Lands, while the additional population proposed in this immediate proximity to the Park Lands will assist in their increased usage/activation.</p>
<b>Urban Design</b>	
<p><b>Policies</b></p> <p>2. Maximise and increase the quality of public spaces, and require excellent design in the public realm.</p>	<p>The Guiding Principles discussed later under Section 2.6, the existing policies in Council's Development Plan and those proposed in this</p>

<p>3. Require new mixed-use medium- and high-rise developments to provide active street frontages (such as shops, services and restaurants) to encourage connectivity and increase public safety.</p> <p>6. Structure Plans for greenfield developments, urban infill and transit-oriented developments will set objectives and guidelines for the quality of building performance outcomes in terms of:</p> <ul style="list-style-type: none"> <li>• climate response (for example, solar orientation and ventilation)</li> <li>• energy use</li> <li>• water use and recycling</li> <li>• noise attenuation and air quality</li> <li>• improving the aesthetics of the public realm.</li> </ul> <p>9. Reinforce the historical grid structure of metropolitan Adelaide through the development of built form at major nodes and intersections, structural plantings along key arterial roads and protection of important view corridors.</p> <p>10. Promote a highly permeable and connected grid street structure in new growth areas and transit-oriented developments to encourage walking and cycling.</p> <p>11. Provide safe and attractive streetscapes in growth areas and transit-oriented developments through street tree plantings and lighting.</p> <p>12. Develop and promote a distinctive range of building typologies for residential housing density, which responds to metropolitan Adelaide's existing character and climate.</p> <p>13. Create a clear transition between new higher-density development (near shops and railway stations) and existing detached housing precincts, such that housing densities will decrease in line with the distance from transport thoroughfares and railway stations.</p> <p>14. Ensure local heritage places and areas of heritage value are identified and incorporated into planning policy.</p> <p>15. Capitalise on the role heritage places and areas play in creating a sense of place through techniques such as adaptive re-use and clearly described desired character statements in Structure Plans.</p> <p><b>Targets</b></p> <p>A. Develop design principles for multi-unit and mixed-use developments, to be incorporated in Structure Plans. These will determine setbacks, height transitions, and scale principles based on existing character, ensuring that consistent rules apply for building renewal across Greater Adelaide. Some adaptation will be required</p>	<p>DPA provide clear guidance on the urban design measures desired for the development, including in relation to public spaces, active frontages, sustainability, built form, walking and cycling, range of buildings to be provided and retention of heritage places.</p> <p>These policies will assist in achieving Targets A and B.</p>
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<p>in heritage areas. This work will include:</p> <ul style="list-style-type: none"> <li>• a description of a range of residential building typologies for changing demographics and preferences in higher-density areas, for all identified Structure Plan areas</li> <li>• responsive building design on busy corridors (including measures to address noise and air quality)</li> <li>• built-form and structural planting to reinforce the visual identity of the arterial grid system in the metropolitan area</li> <li>• planting to enhance the existing natural and cultural landscape character in new developments and in new greenways</li> <li>• place-making principles</li> <li>• water and energy efficient design for buildings and public spaces</li> <li>• the allowance of sufficient space for and access to waste management and recycling infrastructure.</li> </ul> <p><b>B.</b> Develop guidelines for safe, attractive residential streetscapes that provide for vegetation, lighting and, potentially, water-sensitive urban design techniques.</p>	
<b>Communities and Social Inclusion</b>	
<p><b>Policies</b></p> <ol style="list-style-type: none"> <li>1. Plan for population growth of 560,000 people over 30 years.</li> <li>7. Create safe and inviting public spaces that will encourage community participation by a wide range of people.</li> <li>8. Provide engaging spaces where young people can congregate for social activities in a positive setting.</li> <li>9. Give priority to pedestrian, wheelchair, gopher and cycle movement in neighbourhoods, which will ensure greater access for people with less mobility, particularly children, the elderly and people with prams.</li> <li>10. Ensure urban renewal activity focuses on place making and building stronger communities.</li> </ol> <p><b>Targets</b></p> <p><b>A.</b> Provide for an additional 560,000 people over 30 years.</p>	<p>As indicated earlier, the DPA will facilitate the development of around 2,200 dwellings catering for in the order of 4,000 people. The design of the development will create a range of engaging public spaces and will provide ease of movement for non-vehicular travel. The design of the 'Village' is focussed on people and strong connections to adjoining areas.</p> <p>This DPA will assist in achieving Target A.</p>
<b>Housing Mix, Affordability and Competitiveness</b>	
<p><b>Policies</b></p> <ol style="list-style-type: none"> <li>3. Integrate a mixture of competitive housing styles, types, sizes and densities into the wider housing market, including medium-</li> </ol>	<p>The policies in the DPA support the provision of medium and high density housing in a variety of forms, including medium and high rise</p>

<p>density low-rise and attached dwellings.</p> <p>4. Ensure Structure Plans and Development Plans reflect the definitions of low-, medium- and high-density housing provided in Box 1 and the definitions of low-, medium- (or mid-) and high-rise development provided in Box 2.</p> <p>5. Increase the total share of smaller housing, particularly around transport interchanges and collocated with services such as health and retail.</p> <p><b>Targets</b></p> <p>A. Plan for net growth of 258,000 dwellings over 30 years, or an annual average construction target of about 10,100 dwellings a year (allowing for dwellings lost due to demolition).</p>	<p>developments. The development will provide for higher densities around the train station and tram stop and the commercial and retail facilities along the 'main street'.</p> <p>In providing for in the order of 2,200 dwellings the DPA will assist in achieving Target A.</p>
<b>Affordable Housing</b>	
<p><b>Policies</b></p> <p>1. Reinforce the state government policy that at least 15 per cent of new dwellings should meet the criteria for affordable housing (of which five per cent is specifically for high needs housing) in significant new developments and growth areas, including:</p> <ul style="list-style-type: none"> <li>• areas subject to Structure Plans and precinct planning, in particular new transit-oriented developments and</li> </ul> <p>2. Set targets for affordable housing in transit corridors and transit-oriented developments.</p> <p>4. Provide for the integration of new affordable housing with other new dwellings in developments to avoid inappropriate concentrations of social housing.</p> <p>5. Ensure that the standard of affordable housing is at least consistent with other dwellings in a development, for example, in appearance, construction, materials, energy efficiency and water conservation measures.</p> <p><b>Targets</b></p> <p>A. Provide for at least 15 per cent of housing in all new significant developments to be affordable housing, including five per cent for high-needs people.</p> <p>Table D1 – Affordable housing targets sets a target of 6400 new dwellings for the Western Adelaide Region.</p>	<p>The policies in the DPA support the provision of 15% affordable housing for purchase or rental. The Project is committed to providing a range of high quality housing product that satisfies this requirement.</p> <p>The DPA will assist in achieving Target A.</p>
<b>Health and Wellbeing</b>	
<p><b>Policies</b></p> <p>1. Design pedestrian- and cycle-friendly areas in growth areas and existing neighbourhoods to promote active</p>	<p>The design of the development has a strong focus on cycling and pedestrian movements and links to surrounding areas. Street and building forms will incorporate cultural initiatives</p>

<p>communities.</p> <p>2. Ensure health and wellbeing requirements are incorporated into Structure Plans. Structure Plans will:</p> <ul style="list-style-type: none"> <li>• require urban regeneration projects to provide links to adjoining areas to maximise the shared use of services and facilities</li> <li>• incorporate cultural initiatives, such as public art, to stimulate revitalisation of communities and social cohesion</li> <li>• ensure that pedestrian areas in activity centres are direct, convenient, safe, well-signposted, sheltered and shaded, and offer disabled access</li> <li>• ensure that neighbourhood street environments and open spaces maximise access for all users, including the disabled, elderly, those who use small personal motorised transport such as gophers, people with prams or dogs, and emergency or other service vehicles</li> <li>• incorporate principles of Crime Prevention Through Environmental Design in all public areas (such as open space and streets) and activity centres</li> <li>• incorporate guidelines to protect homes along major transport corridors from noise and air pollution</li> <li>• promote active communities, which may include provision of playing fields, indoor sports facilities and public space</li> <li>• promote the development of community gardens for social interaction and physical wellbeing.</li> </ul> <p>4. Increase housing density and encourage a variety of high-quality shops to locate near railway stations and major bus stops so people can buy groceries and fresh food on their way home, rather than making a separate car journey.</p> <p><b>Targets</b></p> <p>A. Closely connect new dwellings to shops, schools, local health services and a variety of destinations within a walking range of 400 metres. Residents will have easy access to open space for physical activity and recreation.</p> <p>B. Closely connect new dwellings to local parks within walking range.</p>	<p>as well as promoting safety and easy access. Building designs will assist in minimising noise and air pollution issues. Higher density residential development will be located in proximity to public transport stops, retail facilities and open spaces.</p> <p>The DPA will assist in achieving Targets A and B.</p>
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## Employment distribution

### **Policies**

3. Concentrate jobs in the designated transit corridors and the 14 transit-oriented developments. Specific targets for jobs will be set as part of planning for these areas. This includes setting aside designated employment lands in transit corridors, new growth areas, transit-oriented developments and higher-order activity centres.
4. Promote mixed-use development in the transit corridors, activity centres and transit-oriented developments to ensure jobs are situated close to where people live.
5. Promote, through the planning and design guidelines for the five fixed-line transit corridors, transit-oriented developments and higher-order activity centres, a compatibility of uses by setting standards for noise and creating buffer distances between potentially incompatible activities. Although the theme of the Plan is mixed-use development and easy access to jobs, it is recognised that some activities are potentially incompatible. Design guidelines will need to ensure that mixed-use communities are of a high quality and are liveable.

### **Targets**

- A. Provide for 282,000 additional jobs during the next 30 years. The regional distribution of additional jobs is:
  - 40,500 in Western Adelaide
- B. Distribute jobs across Greater Adelaide as:
  - 94,000 in transit-oriented developments and transit corridors
- D. Plan for net growth of at least 2 million square metres of extra employment floor space.

The policies in the DPA provide for mixed use developments, including a variety of commercial and retail uses providing employment opportunities. Existing and proposed policies require a compatibility of uses and/or buffer measures to minimise adverse impacts.

The DPA will assist in achieving Targets A, B and D.

## Manufacturing

### **Policies**

25. Create sufficient buffer activities and design guidelines to prevent manufacturing lands being lost to encroachment by residential activities and to prevent land-use conflicts between residential and manufacturing activities.

While a portion of the Area Affected is currently zoned for Industry, the 30-Year Plan designates the land for a transit-oriented development. This DPA is being prepared to implement this aspect of the Plan, with the result that the land will no longer be available for industry. Existing and proposed policies require interface issues to be addressed.

## Services

### **Policies**

30. Integrate services sector jobs into new growth areas, activity centres, transit corridors and transit-oriented developments.

The policies in the DPA provide for mixed use developments which will facilitate service sector jobs in such areas as government activities, commercial, retail and hospitality uses.

<p><b>Targets</b></p> <p>A. Plan for 84,900 additional services sector jobs in Greater Adelaide.</p>	<p>The DPA will assist in achieving Target A.</p>
<p><b>Transport</b></p>	
<p><b>Policies</b></p> <ol style="list-style-type: none"> <li>1. Protect the transport functionality of road and rail corridors through planning policy in Development Plans.</li> <li>6. Give priority to increasing densities and designating types of services, such as retail, around existing interchanges and planned upgrades of railway and tram stations and bus interchanges.</li> <li>9. Ensure planning policy protects airport sites by restricting incompatible uses of land in surrounding areas. Development Plans should identify areas adjacent to airports and under flight paths where new development is inappropriate due to building height restrictions and aircraft noise impacts.</li> <li>10. Require new housing and other noise-sensitive developments permitted in locations adjacent to airports and under flight paths to incorporate appropriate noise attenuation measures to minimise the impact.</li> <li>12. Provide and extend a connected bicycle network across Greater Adelaide, using bike lanes and cycle ways as shown on Map D16.</li> <li>13. Integrate into Structure Plans for major transit corridors off-road shared-use paths, on-road bicycle lanes, footpaths and cycling friendly streets to promote walking and cycling.</li> <li>14. Provide direct and safe cycling links to public transport stations and interchanges.</li> </ol> <p><b>Targets</b></p> <p>A. Reduce car dependency and increase public transport to 10 per cent of all transport use by 2018 (<i>South Australia's Strategic Plan</i>, target T3.6).</p> <p>B. Prioritise residential and employment growth in areas where transport infrastructure is planned (see Table D3).</p> <p>F. Create dedicated walking and cycling corridors along major transit corridors to improve access to activity centres, public transport nodes, and local walking and cycling routes.</p>	<p>Existing policies under Transportation and Access provide for the protection of road and rail corridors while Overlay Maps - Development Constraints set an initial limitation of 45 metres for building heights due to Airport Building Heights requirements. The Area Affected is in an area of less than the 20 ANEF contour for aircraft noise and this is therefore not considered to be a significant issue. Where practical, connections are provided to walking and cycling paths in surrounding areas.</p> <p>This DPA will assist in achieving Targets A, B and F.</p>
<p><b>Infrastructure</b></p>	
<p><b>Policies</b></p> <ol style="list-style-type: none"> <li>1. Maximise the location of economic and social infrastructure by: <ul style="list-style-type: none"> <li>• collocating government services in</li> </ul> </li> </ol>	<p>Policies proposed in this DPA facilitate a mixed use development that will enable the collocating of government services, including health and</p>

<p>higher-order activity centres and transit-oriented developments</p> <ul style="list-style-type: none"> <li>• locating new housing growth in proximity</li> <li>• integrating health and educational facilities with transport services and locating them near retail centres</li> </ul>	<p>educational facilities, in proximity to new housing growth and transport and retail services.</p>
<b>Biodiversity</b>	
<p><b>Policies</b></p> <p>6. Enhance the urban biodiversity of metropolitan Adelaide by supporting the development of urban forests, restoring watercourses, establishing linked networks of open space and encouraging the use of local indigenous species.</p> <p>7. Create greenways in transit corridors and along major watercourses and the coast to enhance and connect urban biodiversity (see Open space, sport and recreation).</p> <p><b>Targets</b></p> <p>E. Minimise the discharge of stormwater, pollution and nutrients to freshwater, coastal and marine environments through the adoption of appropriate water-sensitive urban design (WSUD) and <i>Adelaide Coastal Water Quality Improvement Plan</i> policies and targets into Development Plans.</p>	<p>The DPA will provide opportunity for linked open space provision, particularly along the rail corridor. WSUD techniques will be utilised throughout the development which will minimise the discharge of stormwater of the site.</p> <p>This DPA will assist in the achievement of Target E.</p>
<b>Greater Adelaide Open Space System</b>	
<p><b>Policies</b></p> <p>2. Ensure open space is accessible by all communities and will:</p> <ul style="list-style-type: none"> <li>• provide linkages to encourage walking and cycling to local activities, local activity centres and regional centres</li> <li>• be multi-functional, multi-use (including the shared use of strategically located school facilities) and able to accommodate changing use over time</li> <li>• incorporate the principles of Crime Prevention Through Environmental Design for safety and amenity</li> <li>• contain appropriate and low-maintenance species and locate trees to maximise access to shade</li> <li>• encourage passive recreation opportunities such as provision of a variety of paths and children's play equipment.</li> </ul> <p>3. Provide neighbourhood open spaces within safe, comfortable walking distances of residents in new growth areas.</p> <p><b>Targets</b></p> <p>D. Locate public open spaces within walking</p>	<p>The DPA will provide local areas of open space and linkages along streets to the activity centre as well as a major open space link along the rail corridor to lands to the east and west. Existing policies require the implementation of CPTED principles and use of locally indigenous trees. Areas of open space will be distributed throughout the site providing for easy access by residents.</p> <p>The DPA will assist in the achievement of Target D.</p>

<p>distance of new housing to ensure equitable distribution of open space in an area.</p>	
<b>Greenways</b>	
<p><b>Policies</b></p> <p>9. Plan and develop a system of greenways across Greater Adelaide to link the open space system, enhance urban biodiversity and encourage walking and cycling.</p> <p>10. Establish greenways along the major transit corridors, watercourses and linear parks.</p> <p>11. Plan and develop greenways to link parks, reserves and public facilities to provide walking and cycling access.</p> <p>12. Identify, as part of the Structure Planning process, opportunities for the development of greenways in transit-oriented developments, transit corridors, activity centres and new growth areas to link to local and regional open spaces, provide local biodiversity, and provide walking and cycling linkages.</p> <p>13. Ensure that greenways are landscaped with local indigenous species where possible and incorporate water-sensitive urban design techniques.</p> <p><b>Targets</b></p> <p>E. Incorporate greenways in all transit-oriented developments and along major transit corridors.</p> <p>F. Complete fully connected and sealed cycling and walking routes with safe road crossings along rail transit corridors by 2025 as the walking and cycling component of greenways.</p> <p>G. Develop and enhance waterway linear parks as open-space greenways and biodiversity corridors along the fixed-line public transport corridors and the ... by 2036.</p>	<p>The DPA provides for the provision of a greenway along the rail corridor which is a designated major transport corridor.</p> <p>The DPA will assist in the achievement of Targets E, F and G.</p>
<b>Climate Change</b>	
<p><b>Policies</b></p> <p>1. Contribute to South Australia's target of a 60 per cent reduction of greenhouse gas emissions by 2050 through the implementation of the policies in the Plan that will lead to a more compact and less carbon-intensive urban form.</p> <p>3. Implement the key actions that promote a more compact city, including collocation of services with transport and mixed-use developments in transport corridors and around transport interchanges.</p> <p>4. Promote short distance passenger travel through the introduction of a new urban form.</p> <p>5. Increase energy efficiency of buildings</p>	<p>The DPA policies support the development of a more compact urban form, providing for a mixed use development of higher density and higher built form in proximity to transport services. Built form will be required to meet energy efficiency requirements while greenways, open spaces and streets will be treed to create a cooling effect.</p> <p>This DPA will assist in achieving Targets A and C.</p>

<p>through the implementation of a six star rating for new buildings, and new efficiency standards for air conditioning, which is in line with the COAG National Strategy on Energy Efficiency.</p> <ol style="list-style-type: none"> <li>7. Ensure the majority of new housing is carbon-efficient. As part of this policy, the proportion of low-rise medium-density apartments and attached dwellings will be increased.</li> <li>8. Confine high-rise buildings to the 14 transit-oriented developments. Set design standards that reduce greenhouse gas emissions and improve energy efficiency for high-rise developments (for example, provide incentives for embedded generation and the use of renewable energy</li> <li>11. Set building standards and design guidelines to create more thermally and energy efficient buildings. This will improve the liveability of housing in the likely event of increased temperatures. Structure Plans for greenfield developments, urban infill and transit-oriented developments will set objectives and guidelines for the quality of building performance outcomes in terms of climate response (such as solar orientation) and energy use.</li> <li>12. Reduce energy costs through the introduction of improved energy efficiency standards for new buildings.</li> <li>13. Create a more liveable urban environment through the establishment of a network of greenways, tree-lined streets and open spaces, which will have a cooling effect on nearby new neighbourhoods and new buildings.</li> <li>14. Encourage commercial and industrial developers to include green buffers and shady areas in their developments, to make workplaces more liveable.</li> </ol> <p><b>Targets</b></p> <ol style="list-style-type: none"> <li>A. Implementation of the Plan results in a reduction in South Australia's overall greenhouse gas emissions of around 17 per cent over the Plan's 30-year life (see Figure D1 and Appendix 2).</li> <li>C. Achieve a per capita reduction in vehicle kilometres travelled (VKT) over five-yearly intervals.</li> </ol>	
<b>Water</b>	
<p><b>Policies</b></p> <ol style="list-style-type: none"> <li>1. Incorporate water-sensitive urban design (WSUD) techniques in new developments to achieve water quality and water efficiency benefits (see Box 4 for examples of WSUD techniques).</li> </ol> <p><b>Targets</b></p>	<p>Existing Development Plan policies require the implementation of WSUD techniques across the Council area, including in the Area Affected. Treated stormwater from the Regional system is proposed to be used for toilets, washing machines, outdoor water use, etc. Water</p>

<p><b>A.</b> Reduce demand on mains water supply from new development through the introduction of water-sensitive urban design.<sup>1</sup></p> <p><b>B.</b> Require all new dwellings to be connected to alternative water sources, which must supply at least 15 per cent of the internal water needs of these households.</p> <p><b>C.</b> Achieve independence from mains water supplies for new public open spaces in transit corridors through WSUD techniques.</p>	<p>efficient fittings and appliances will be mandated through the Urban Design Guidelines and open space areas will be designed in accordance with best practice WSUD principles.</p> <p>This DPA will assist in the achievement of targets A, B and C.</p>
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**Emergency Management and Hazard Avoidance**

<p><b>Policies</b></p> <p><b>4.</b> Integrate adaptation to climate change, disaster risk reduction and hazard avoidance policies, standards and actions into strategic plans, Development Plan policies and development assessment processes using best-practice models to:</p> <ul style="list-style-type: none"> <li>• develop building standards and urban design approaches that create resilient environments for the future</li> <li>• protect human health and the environment where contamination is identified to have occurred</li> <li>• adopt appropriate processes and methods when remediating contaminated land and ensure its suitability for the proposed zoning</li> </ul> <p><b>6.</b> Identify and rehabilitate areas and sites where land is contaminated as part of development processes.</p> <p><b>Targets</b></p> <p><b>D.</b> Appropriate assessment and remediation of contaminated land, and rezoning in keeping with the land's suitability for new uses.</p>	<p>This DPA recognises that parts of the Area Affected are contaminated and that appropriate remediation will be required prior to development occurring. A Site Contamination Auditor will certify the land is suitable for its intended use where required by legislation.</p> <p>Existing Development Plan policy requires that land be remediated to a standard appropriate for the intended use.</p> <p>This DPA will assist in achieving Target D.</p>
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## GUIDING PRINCIPLES (for LMC controlled land)

<b>Integration</b>
<ul style="list-style-type: none"> <li>• Integration and coordination of roads and open spaces, facilities and social infrastructure between existing communities and the Bowden Urban Village</li> <li>• Provision of community facilities (e.g. multipurpose community facility, arts centre) for new and existing residents</li> <li>• Job opportunities for new and existing residents as the Bowden Urban Village develops</li> <li>• Integration of the streetscapes, including buildings, with the immediate surrounding area to provide a continuation and consistency of quality where possible</li> </ul>
<b>The Site</b>
<ul style="list-style-type: none"> <li>• A street and block pattern based on the existing historic site grid providing a permeable network of streets and ensuring good solar orientation</li> <li>• A hierarchy of streets with Gibson Street being the new 'main' street connecting Bowden Urban Village to the Port Road retail strip and Entertainment Centre</li> <li>• Safe and visible access to Bowden Urban Village from Park Terrace with major access along Third Street</li> <li>• A centre/heart of the development located within easy walking access to the tram stop and the train station at Bowden as well as Port Road retail and Park Terrace</li> <li>• Parking provided within the centre/heart to minimize impact of parking on existing residents</li> <li>• A strong and direct walking connection between the Entertainment Centre tram station and Gibson Street</li> </ul>
<b>The Buildings</b>
<ul style="list-style-type: none"> <li>• A variety of lot sizes to provide for a diversity of apartment and terrace type buildings of a high standard of design balanced with affordable living and adaptable designs to accommodate changing life circumstances</li> <li>• Building heights should generally be proportional (1:1) to the width of the street they face with upper stories set back</li> <li>• A range of setbacks, building heights, building mass and external materials prescribed for different areas to achieve coherent streetscapes and precincts</li> <li>• Medium rise buildings fronting onto the street and higher rise buildings generally set back, located mid block to minimise overshadowing of the site</li> <li>• Higher rise buildings on select sites on Park Terrace, on major streets and fronting open spaces to enhance/promote casual surveillance and transitioning down to a maximum 3 storeys in height where adjoining existing residences</li> <li>• Location and heights of buildings on Park Terrace to be variable to ensure views of Adelaide's Parklands, Hills and CBD are optimised</li> <li>• Inclusion/consideration of range of forms and materials which comprise a local urban Adelaide "vernacular" (e.g. pitched iron/tile roofs, red brick and other stone-work, high solid to void ratios, industrial building references)</li> <li>• Buildings varied in detail and presentation to the street in any given block, with strong built form on corner sites</li> <li>• Activation at street level with buildings facing streets and having limited set backs</li> <li>• Perimeter block buildings with internal central courtyards with quality landscaping to provide secure (using Crime Prevention Through Environmental Design principles) and semi private usable space particularly for young children</li> <li>• Adaptive re-use of valued existing buildings</li> </ul>
<b>Streets, Squares and Open Spaces</b>
<ul style="list-style-type: none"> <li>• An appropriate quantity and distribution of public open space given the nature of the mixed use development</li> </ul>

- Provision of accessible and linked public open space to service new and existing communities (complementary to and integrated with existing open space and the Adelaide Park Lands)
- Open space proportional to the scale of surrounding buildings
- Interpretive and directional signage which is functional and visually attractive to encourage open space use
- Integration of design of public and semi-public realm and the use of Crime Prevention Through Environmental Design principles
- Provision of passive and active recreational facilities to suit a wide range of needs, catering for all stages of life
- Well lit streets designed for shared use especially walking and cycling
- Landscaping species appropriate to site, with street trees providing deep shade and maximum winter light
- Public art integrated throughout the public realm and complementary to existing street art funded by public and private contributions and drawing on the local heritage and knowledge
- Commercial and retail areas to include appropriate protection from the elements to encourage year round activity
- Place activation and opportunities to incorporate event and gathering spaces
- Community gardens to provide local residents with a local food source and community building

### **Movement and Transport**

- Pedestrian and cycle focused key movement corridors shared with slow moving vehicles
- Provision for shared use schemes for bikes and vehicles (possibly electric)
- Safe, direct pedestrian and cycle linkages to the Adelaide Park Lands and CBD and existing cycling networks using the proposed “Greenway” route along the north eastern side of the rail corridor, signalised crossings and the Park Terrace bridge underpass
- Provision for secure lockup and on-street bike parking and end of journey facilities
- A multi-purpose car park, designed not to be visually dominating, as part of the central “heart” to meet the demand from retail and other mixed uses
- In order to promote more sustainable transport options, limit the provision of available car parking
- Consider car parking offers which are individually community titled and sold as an optional extra with a dwelling
- Street names to reflect Indigenous and European history of the area

### **Mixed Use Development**

- Create a vibrant and viable hub of retail, hospitality and commercial uses around the proposed central piazza
- Provision of retail space (with a substantial proportion contained in the first stages)
- Provision of commercial office space
- Provision of approximately 2,200 dwellings with a minimum of 15% affordable housing for purchase or rental
- Provision of community facilities including civic, recreational and secondary /tertiary educational space and child care and health care facilities as an integral part of the development with the promotion of multipurpose community hubs to encourage integration

### **Sustainability**

- Adoption of One Planet Living Principles to guide sustainability for the development
- Achieve Green Star rating of 6 stars for 10 to 20% of all residential, commercial and retail buildings and 5 stars for the remainder
- Incorporate sustainable energy supply infrastructure to achieve substantial reductions in energy consumption and green house gas emissions
- Incorporate water efficiency principles and sustainable water supply infrastructure to achieve substantial reductions in potable water consumption

- Incorporate waste reduction techniques through the building program and within the completed buildings
- Sustainable design of buildings, incorporating a demonstration of green walls and roofs utilising recovered rainwater, particularly in higher profile locations

