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Thebarton Technology Hub
Master Plan

Prepared for BiolInnovation SA
together with the
City of West Torrens

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Thebarton Technology Hub Master Plan



Acknowledgements

The core project team included Greg Hall from BioSA, Angelo Catinari, Joseph Ielasi and Suzy Stiles from the City of West Torrens, Meera Veema from Headland Vision, David Gregory, Tom Vinall and Amy Pfeiffer from JPE Design Studio. Frank Siow also provided input to the traffic analysis, through Council.

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Project Introduction

1.1 Study Purpose

The Thebarton Technology Hub precinct, bounded by the River Torrens Linear Park to the North, Port Road to the East, West Thebarton Road/ Phillip Street to the South, and South Road to the West, currently supports the SA Government owned Bio-Incubator facility (operated by Bio-Innovation SA) and bioscience precinct, along with approximately 126 other privately owned companies, 96 of which are technology focused.

The precinct also incorporates the University of Adelaide's Thebarton Campus, a dedicated research and development hub, which also provides accommodation and facilities for a number of the commercial enterprises within the precinct, through the 'ThinkLab' business incubator.

Within this single consolidated area, the Thebarton precinct represents one of the largest collections of bioscience and technology companies and knowledge in Australia.

The master plan for this precinct will seek to develop an identity and clear planning structure for the precinct, as a means of:

- Promoting the precinct as a Technology Hub to increase Community/State recognition of the precinct's value and purpose.
- Attracting new early stage companies to the Hub and improving the precinct environment for current employees to encourage greater collaboration and community engagement.
- Lifting the amenity and visual credibility of the area, in recognition of the growing international profile of the precinct, and increased visitation by interstate and international Clients/partners
- Improving pedestrian and vehicular access throughout the precinct, to better connect this business community with surrounding destinations such as the new RAH, the South Australian Health and Medical Research Institute (SAHMRI), the Bowden Development, Entertainment Centre, Torrens Linear Park & transport connections.

Stakeholder consultation undertaken by Bio-Innovation SA (BioSA) in conjunction with Headland Vision, has identified a shared desire by a number of key stakeholders in the area to begin working towards these objectives.

The input of these precinct business and institutional stakeholders, along with key input from BioSA, the City of West Torrens and Headland Vision, as the Project Reference Group, has been integral to the development of this master planning project.



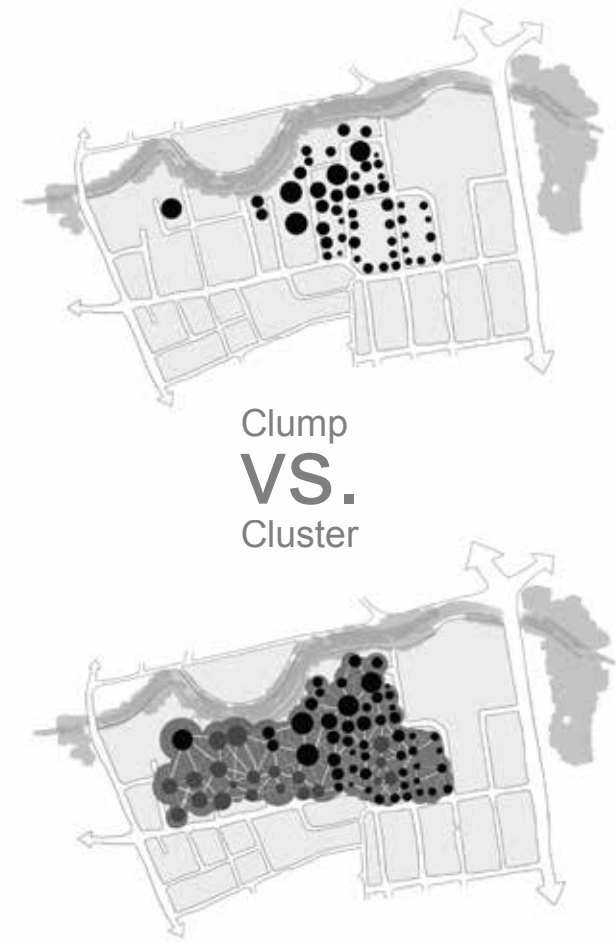
1.2 Clump vs. Cluster

Economic Cluster development can best be defined as a competitive grouping of businesses and organisations (ideally including a cross section of commercial, government and university sectors) where a strong culture of collaboration and networking exists to further the collective skills and knowledge of the group as a whole.

Comparatively, a *Clump development* shares the geographically consolidated character of a Cluster, but lacks the information flow, networking, mutual knowledge development and shared identity of a Cluster.

A significant opportunity exists to expand the potential of the existing bioscience and technology industry in Thebarton, and strategically build closer connections between individual businesses and organisations in order to leverage the knowledge, identity and skills of the precinct as a whole- transforming the precinct from a **‘clump’** of individual companies to an interconnected **‘cluster’**.

Combined with other strategies to develop and guide the business mix within the precinct and build social capital, knowledge sharing and common goals across businesses in the area, this Master Plan provides a clear set of actions and strategies focused on the ‘physical’ structure of the precinct, to achieve this vision.



1.3 State Strategic Context

The manufacturing industry in South Australia currently accounts for 9.6% of the state's workforce and more than 31% of research and development investment¹.

In line with the State Government's 10 year strategy, focus is now being given to advance the manufacturing industry, to establish points of difference and ensure that South Australian industry has a competitive edge across key export markets from a *value*, rather than *cost* basis.

As an established *clump* of independently operating bioscience and technology companies, a number of businesses within the Thebarton Technology Hub already demonstrate the *smart specialisation* qualities associated with high value manufacturing, including²:

- *A continuous and integrated approach to innovation, based on leading research*
- *A global mindset*
- *Interlinked products and services that matter to their customers*
- *A well-defined, global niche*
- *Close and mutually beneficial long-term customer relationships*
- *Highly-skilled employees working in a high performance environment*
- *High levels of in-house knowledge, competence and expertise*
- *Experienced, capable and entrepreneurial management with ambitious goals.*

1. http://www.southaustralia.biz/manufacturing_and_innovation/advanced_manufacturing
2. Manufacturing Works- A strategy for driving high-value manufacturing in South Australia, DMITRE, October 2012

1.4 Development Context

Located within the suburb of Thebarton along the southern edge of the River Torrens and with strong transport connections to the Adelaide CBD, the precinct offers many conveniences for workers and residents alike.

The map on the opposite page illustrates the location of the study area relative to the Adelaide CBD, as well as other key development sites, facilities, open spaces and infrastructure.

The following briefly discusses key forthcoming or current developments and considers the impacts and/or benefits of these developments, as they relate to the study area.

Key Developments:

The Bowden Clipsal Site Development

A 16 hectare urban renewal site connected to the rail and tram network, planned to accommodate 3,500 residents¹. Residential development to begin in 2013.

- Shared 'industrial' area/heritage
- 'Upline' population increase will increase demand for tram/public transport- potential benefit for the Technology Hub if services are increased
- Increased demand for community services/ restaurants along Port Road
- Increased activation of the park lands and linear park trail
- Traffic increase along Port Road, though minor effect on local precinct roadways (inc. West Thebarton Rd)

Brickworks Markets Development

Currently operating as a community market, this area is set to become a new shopping complex, with Woolworths Supermarket as the main anchor tenant.

- Increased through traffic along West Thebarton Road and South Road will put pressure on the intersection of these roadways
- Increased choice of shopping facilities- major supermarket for the Thebarton Region.
- Shared historic character & brickworks history

New Royal Adelaide Hospital (RAH) and South Australian Health and Medical Research Institute (SAHMRI) Developments

Currently under construction, these facilities will shift the City's primary medical facilities and focus from the east to the west.

- Current and potential future relationships relating to supply/manufacturing/research of medical equipment and technologies- opportunity to capitalise on closer physical location
- Increased traffic along Port Road/ West Terrace
- Increased Park Land activation
- Increased tram use

Bonython Park and Park 24

Located on the eastern side of Port Road adjacent to the precinct. An extensive playspace has recently been completed in Bonython park, and a separate master plan for this section of the River Torrens commenced in January 2013, through Renewal SA.

- Increased activation/ programming of the Park lands
- Increased quality and use of Linear Park Trail

Major Road Corridors

The major road corridors of Port Road and South Road, define the precinct's eastern and western boundaries. The redevelopment of South Road is currently at planning stage, to improve the capacity and efficiency of this primary South-North transport corridor.

- Shorter term: obstructions/traffic delays during construction may increase traffic volumes along West Thebarton Road
- Longer term: Increased vehicular volumes along South Road

Thebarton Community Hub

Due for completion in mid 2013, this new community centre will provide a significant facility and focus for the local community for sports/recreation and other community activities and functions

- Increased community facilities/services adjacent the precinct
- Minor increased traffic volumes/ side street parking
- Potential increased patronage of West Thebarton Hotel/ other local eateries

City of West Torrens Housing Diversity DPA

In response to population and development targets forecast within the 30 Year Plan For Greater Adelaide, Council is currently undertaking consultation on planning amendments relating to the density and mix of development along main road corridors and within current non-residential zones. This policy will guide residential and mixed-use development in these areas, which includes portions of the Master Plan study area.

1. <http://www.lifemoreinteresting.com.au/lmi/the-vision.html>



1.5 Historical Overview



Colonel William Light's House, 1839



Damming of the River Torrens for wool washing

The rich history and contribution of the Thebarton region throughout the growth of the European settlement in South Australia has greatly influenced the urban fabric of the study area today.

While recognising the Kaurna people as the indigenous custodians of the land, the following section aims to briefly describe the history of the site and broader Thebarton region since European settlement, which saw the region develop from farming lands to a culturally diverse place for community, business and progressive industry.

Early Settlement Days- the 1830's

- Colonel William Light devised the layout of Thebarton, named after Theberton Hall, Suffolk, where Light was raised under the guardianship of his father's friend George Doughty and his wife Anne.
- Desire for private property overrode the public good, resulting in a plan for the district that excluded community reserves and any reserve along the River Torrens- defining the condition of built form along the river's edge to this current day.
- Colonel Light selected a parcel of land within Thebarton in 1838 and located his house on the corner of Winwood and Cawthorne Streets (now part of the Brewery Complex). He lived there briefly before his death in October 1839, caused by tuberculosis.

1840's-1860's

- First subdivision of Colonel Light's land (Country Section 1) begins in 1839, though remains primarily farmlands until the 1870's.
- Thebarton develops as a modest suburban village, walkable in scale, and providing housing for workers employed in local businesses.
- Early industries develop, including farming and milling, brickmaking, tanneries and fellmongeries (wool processing)
- River Torrens is dammed to enable fellmongery operations (washing of wool)
- By the late 1950's the land along the river's edge between Port and South Roads was occupied by numerous tanneries, fellmongeries and brickyards; which impacted heavily on the river environment



Fellmongery industry in Thebarton



Early 1900's view of cattle yards in Bonython Park area



Tram 49 on the Henley Beach tram route

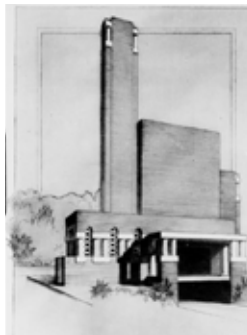
1870-1900

- The suburb of Thebarton develops dramatically, including schools, new businesses and horse tram transportation, which was introduced in the area in the 1880's, enabling faster and more convenient travel, and linking Thebarton to Hindley Street via Port Road.
- The Corporation of Thebarton is formed, following a successful petition to separate from the district Council of West Torrens.
- The area of Murray and Dalglish streets is surveyed and subdivided in 1871, and is occupied by a local workers including labourers, carters, tanners and fellmongers. This area, confusingly named West Thebarton, develops as a little township of its own in the early 1880's, including the development of the West Thebarton Hotel, and numerous workshops and factories.

- The increasing residential population sees the establishment of brickworks factories, including the site of the Brickworks Markets. Nine substantial brickworks are in operation by 1881.
- Southwark, named after the industrial suburb of London, is developed in 1879 on section 1, Colonel Light's original section. Commercial development expands in this area along Port Road from Phillip Street to Light Terrace, including the development of the Southwark Hotel (1885).
- The SA Brewing Company constructs the Torrenside Brewery in 1886, and further buildings in 1899, renown as the finest cellars in the colony.

Early 1900's

- The electrification of the tram systems, which enabled people to safely travel to work in other areas, sees the population in Thebarton increase substantially from 5304 residents in 1901 to 14,037 people in 1921, resulting in an additional 1259 dwellings (1911-1920).
- Business continues to diversify, including the purchase of 16 blocks of land in Cawthorne and Holland Street between 1911 and 1915 by the Adelaide Bottle Company, and the establishment of the E.S.Wigg & Son Stationers warehouse and factory on Port Road in 1903.



Holland Street Tramway Bridge, and Thebarton Incinerator



Fauldings workshop in operation



BioSA Business Incubator

1920's- 1940's

- The Holland Street Tramway Bridge opens by 1923, as part of a new tram route
- The increase in traffic and building results in Council's decision to establish stronger development controls, including the first zoning regulations in South Australia.
- Fauldings establish their laboratory and manufacturing plant at Southwark in 1923, The second world war provides new directions for the company in the pharmaceutical field, including innovations in vitamin research and the production of vitamin fortified food products, exported to Australia's soldier's overseas.
- The Walter Burley Griffin Incinerator is built in the 1930's on West Thebarton Road. It, along with another incinerator in Hindmarsh, were two of 13 incinerators designed by Griffin and built in Australia (6 of which have since been demolished)

1950's - Present Day

- Post war migration results in a diversification of culture in Thebarton, with Greek, Italian and Yugoslavian migrants representing the main nationalities, along with smaller migrants groups from Germany, Lithuania, Estonia, Ukraine, Lebanon, Vietnam and Cambodia.
- Collaboration with university researchers sees Fauldings begin to produce the first sulphanilamide drug in Australia, used to fight infective illnesses, and expand their operations, including buildings now part of the University of Adelaide Thebarton Campus.
- The increase of the motor vehicle results in a significant change to transport in the late 1950's, resulting in the removal of the tram tracks along Light Terrace in 1954, and the closure of the Henley Beach Road tramline in 1959.
- Significant industrial developments in Thebarton in the 1950's-60's, including the establishment of the Coca-Cola factory in 1952, results in rising community concern regarding the impact of industry on the district's amenity, through increased noise and air pollution, destruction of landscape and residential land acquisition. The Cawthorne Street Mural and The Southwark Brewery Gardens both symbolise attempts by these large industries to improve community relations.
- The State Government commences development of Stage 1 of the Thebarton Bioscience Precinct from 1999 to 2003. The location of the new facility revitalises a site with a 100 year history of tanning/fellmongering, previously owned and operated by the Michells and Peacocks families.
- BioSA develops the BioSA Business Incubator building in 2008, representing a significant investment by the State Government in fostering technology knowledge and business in SA



Precinct Analysis

2.1 Analysis Introduction

The following section provides a detailed urban analysis of the study area, communicated under the themes of:

- Land Ownership
- Pedestrian/Cyclist Access & Amenity
- Car Parking & Vehicle Movement
- Landscape & Open Space Character
- Street Interface & Built Form Character
- Wayfinding & Identity
- Community Destinations

A final map combining each of these layers of analysis (excluding land ownership) provides a clear summary of the study area, to inform the development of the master plan and its corresponding actions and strategies.

Community feedback on the precinct (refer section 2.10) provides a further qualitative assessment of the existing precinct condition, aspects currently valued by the community, and areas for improvement.

2.2 Land Ownership

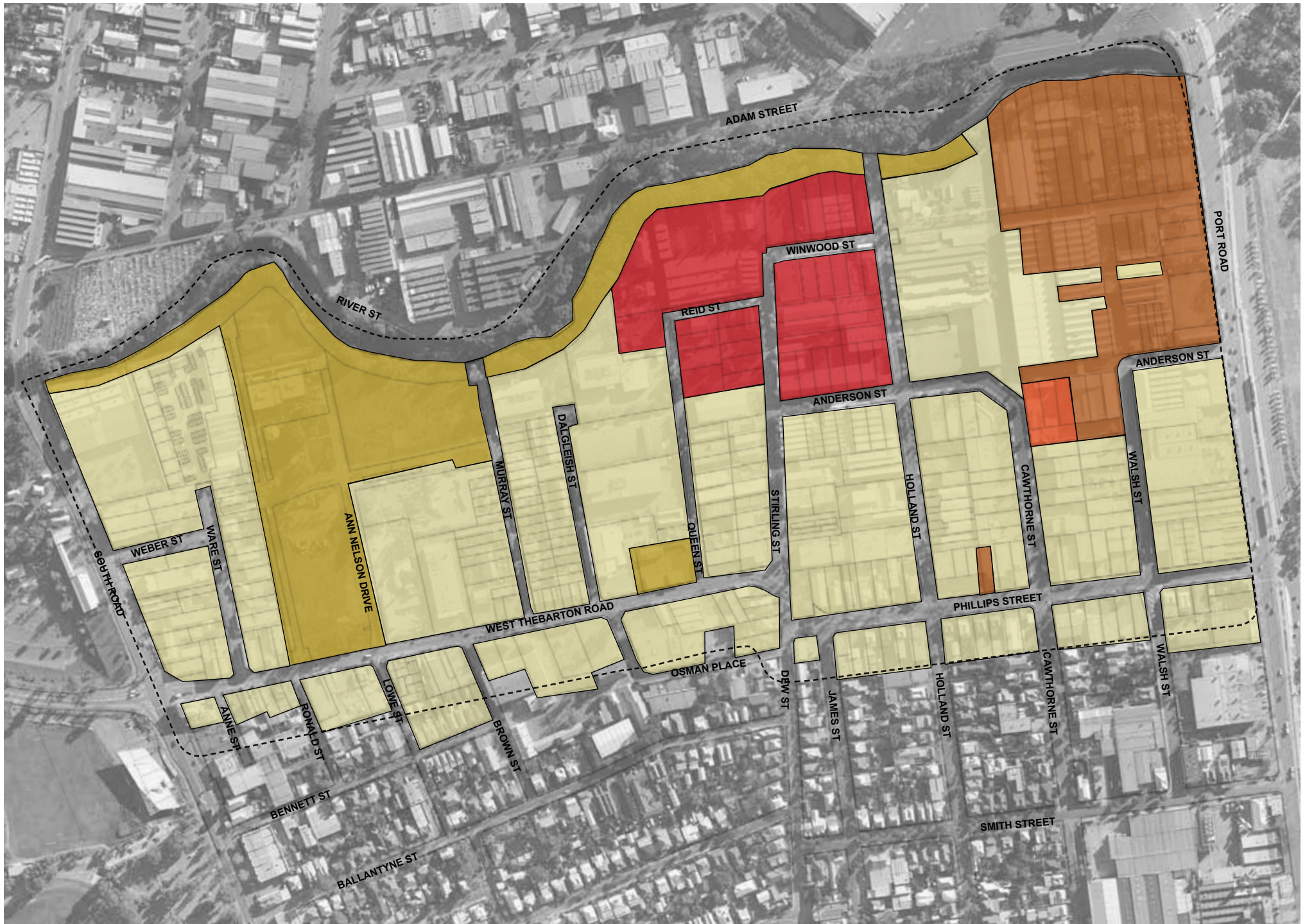
Land allotments within the study area are held by a large number of private owners, as well as larger land holdings by the State Government (including the BioSA Incubator Building), The University of Adelaide and the SA Brewing Company.

Key Issues Summary:

- The large number of small/separate allotment owners throughout the precinct, and particularly along West Thebarton Road, makes implementation of 'big' strategic moves within the precinct more challenging
- Allotments along the river run right up to the steep river bank, as a result of the initial subdivision of land in the early days of settlement. This has resulted in a hard built form edge to the river of private development, reducing opportunity to improve access to and along the southern river edge

Land Ownership

-  Private Ownership
-  State Government
-  SA Brewing Company
-  Adelaide Bottle Co.
-  University of Adelaide
- Study area boundary



2.2.1 Land Ownership Overlay

2.3 Pedestrian/Cyclist Access & Amenity

The quality and amenity of pedestrian and cycle access throughout the precinct varies greatly, with relatively good infrastructure supporting pedestrian movement along Phillips Street (refer image 2.3.5), and poorer pathways/ more significant obstructions along West Thebarton Road (refer image 2.3.3). Significant safety issues for pedestrians/cyclists exist at the junction of West Thebarton Road and Stirling Street (refer image 2.3.7), due to high vehicle speed and poor sightlines. Overall, this roadway does not currently provide a consistent and quality experience to encourage pedestrian and cyclist use of this primary east-west connection through the precinct.

The amenity of side streets also varies throughout the precinct, with quality street tree planting providing significant benefit to pedestrian amenity along Holland and Stirling Streets. Poor or no footpaths, a lack of street tree planting, combined with increased numbers of active vehicle cross-overs and poor sight lines reduces both amenity and safety along Dalgleish and Murray Streets (refer image 2.3.8).

While each of these side streets provides a connection back to West Thebarton Road/ Phillips Street, critically they fail to offer east-west connections due to the nature of built form, increasing the necessary distance for pedestrians and cyclists to move across the northern portion of the precinct, and to key community destinations/ cafes along West Thebarton Road.

Several informal links do exist, though necessitate movement across private car parking areas. Taking into account the 'walkable' scale of the precinct (based on the principle that 400m represents a 5 minute 'walkable catchment'), the improvement of these east-west connections represents a significant opportunity to improve the connectivity of the Thebarton Technology Hub community.

The steep topography of the precinct along the southern edge of the River Torrens Linear Park creates another barrier to access along this edge, reinforced by the zero-setback condition of built form along this edge, particularly at the western extent of the precinct (refer image 2.3.10).

The challenge in providing linear access along this edge highlights the importance of reinstating access via a pedestrian/cycle bridge to the shared use trail on the northern side of the river, to re-link the precinct with this important recreational and commuter trail from Henley Beach to the Adelaide CBD.

Key Issues Summary:

- Inconsistent pedestrian experience, with low amenity and safety issues throughout the precinct
- Low quality streetscape, footpaths and bicycle access along the western end of West Thebarton Road
- Vehicle dominated streets (frequent vehicular movements, vehicle cross overs and on street car parking) reduce potential for improved pedestrian/ cycle movement
- Vehicle speed and poor sightlines at the Stirling Street junction of Phillips Street/West Thebarton Road creates dangerous conditions for a key pedestrian crossing point near popular cafes in the precinct
- Lack of east-west connections across the northern section of the precinct
- Limited or no shelter provided at bus stops
- Carriageway width of West Thebarton Road, with current on street parking (along the southern edge) results in little or no landscape treatment
- Closure of the Thebarton Tramway bridge due to structural failure has removed an important north-south connection
- Zero setback of built form along the river edge
- Vacant land creates 'barren' experience for pedestrians (particularly around the BioSA site)



2.3.1 Obstructed footpath and narrow cycle lane along West Thebarton Road



2.3.2 Uneven footpath without shade



2.3.3 The western end of West Thebarton Road offers little amenity to pedestrians, or bus shelters.



2.3.4 Poor sightlines at the Stirling Street junction



2.3.5 Higher quality footpaths and cycle lane along Phillips Street, with mature street tree planting.



2.3.6 High quality public realm associated with the BioSA Incubator building



2.3.7 Stirling Street streetscape



2.3.8 Low amenity along Murray Street, with poor visibility of vehicle movement



2.3.9 The closed tramway bridge at the end of Holland Street



2.3.10 Zero setback of built form prevents access along the southern edge of the river

2.3 Pedestrian/Cyclist Access & Amenity

The following diagram maps streetscape amenity throughout the precinct, as well as the quality of cycle lanes.

This amenity rating is a summary of the overall quality of the pedestrian experience and takes into account:

- Quality/type of footpath material
- Width of footpath and level of obstructions (eg. pole signs/ services/ A-frame signs)
- Level of shade/ shelter provided by street trees/built form
- Vehicle cross overs/ driveways and levels of vehicle movement
- Safety of walkways based on sightlines, CPTED principles

Pedestrian/Cyclist Access & Amenity

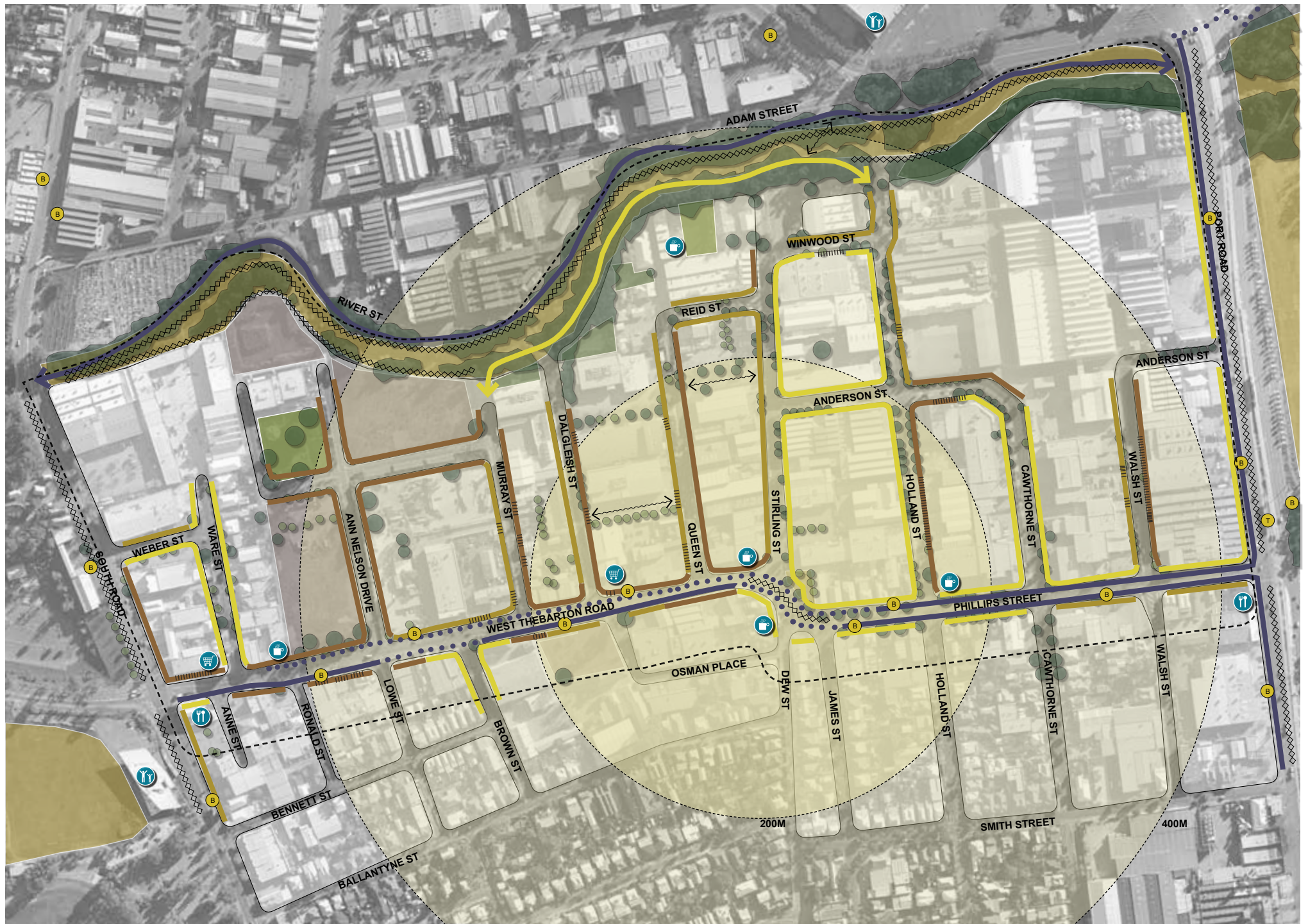
- Good pedestrian amenity
- Average pedestrian amenity
- Poor pedestrian amenity
- Informal link (private)
- Good cycle lane
- Poor cycle lane
- Major/highly active vehicular crossover
- Barrier to safe access
- Walking radius

Community Destinations

- Cafe
- Pub/Restaurant
- Food retail outlet
- Community/ Entertainment venue
- Bus stop
- Tram Stop

Landscape/ Open Space Character

- Large/mature street tree
- Smaller street tree
- River Torrens Linear Park Vegetation
- Public open space
- Semi-private open space
- Private open space
- Vacant land
- Study area boundary



2.3.12 Pedestrian/Cyclist Access & Amenity Overlay

2.4 Car Parking & Vehicle Movement

The number of businesses and working population within the precinct has created a sizable demand for car parking facilities and subsequent internal vehicular movement.

While Port Road, South Road and West Thebarton Road each offer bus routes (and in the case of Port Road, tram also), the ease of driving combined with extensive supply of off-street and on-street car parking (refer images 2.4.1 to 2.4.6), and low amenity streetscapes for walking/ cycling has led to a car-centric culture within the precinct.

The warehouse/ industrial nature of many of the businesses also necessitates the use of larger vehicles for the delivery and collection of goods and materials, increasing the vehicle loading on Phillips Street/West Thebarton Road and each of the adjoining side streets (refer image 2.4.7).

The typical fabric of the side streets, each featuring a number of small-medium privately owned businesses with separated car parks, acts to compound this issue.

In general, the majority of private car parking is provided at ground level, with exception to several undercroft car parking facilities.

Key Issues Summary:

- Vehicle oriented culture, due to ease of driving and extensive supply of parking
- The turning circle of larger vehicles dictates the functional performance of the minor (side) streets, reducing opportunity for landscape/ street tree treatments
- Limited/no bus pull over zones, combined with vehicle service/loading entries directly fronting West Thebarton Road create dangerous conditions along this main road corridor
- High vehicular speeds along West Thebarton Road create a dangerous 'hotspot' at the intersection of Stirling Street
- Multiple small car parks associated with each business tenancy reduces streetscape character
- Extensive on street car parking in side streets creates poor visibility at driveways, and reduces streetscape amenity
- Roll-over kerb treatment with direct off-street car parking diminishes streetscape character and disrupts footpaths
- Larger off-street carparks are typically poorly landscaped, reducing precinct amenity and visual character
- Connecting carparks (eg- between Dalgleish and Queen Streets) are some of the only East-West links in the precinct, but do not encourage/recognise pedestrian access
- The precinct is physically disconnected from surrounding areas by the primary road corridors of Port Road and South Road (together with the River), limiting non-vehicular accessibility of the precinct.



2.4.1 Extensive on site car parking along Holland Street



2.4.2 On street parking along the southern edge of West Thebarton Drive



2.4.3 Direct off-street car parking along Ronald Street



2.4.4 Direct off-street car parking along West Thebarton Road



2.4.5 Private car park between Dalgleish and Queen Streets, with quality landscape edge treatment



2.4.6 Ground level car parking, University of Adelaide, with minimal planting/ amenity



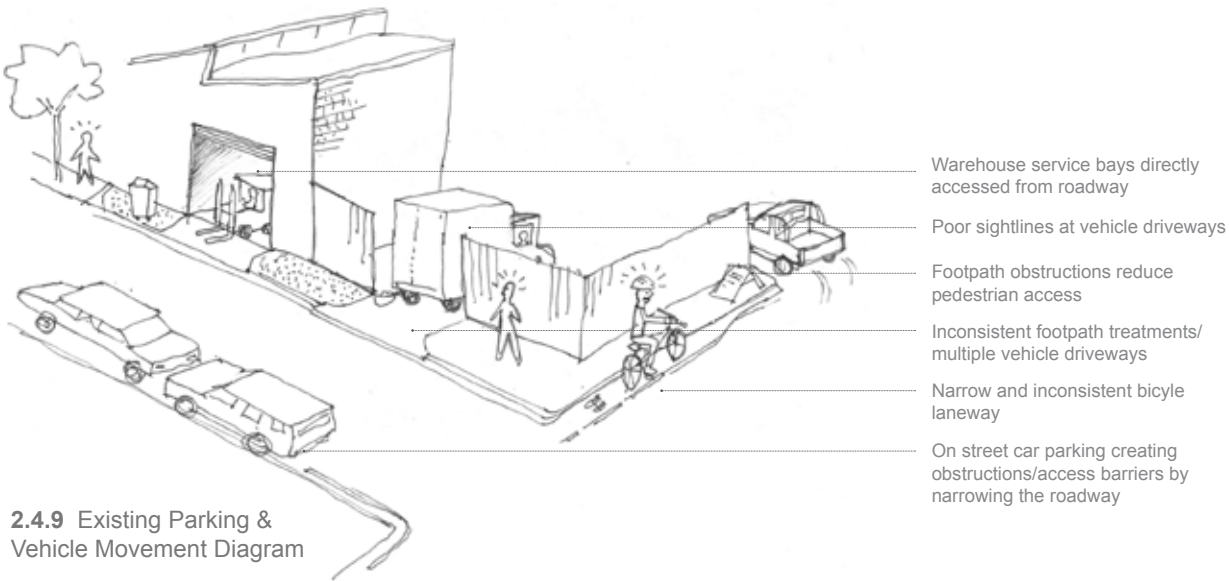
2.4.7 Vehicle cross overs and loading bays directly fronting West Thebarton Road (Main connector road)



2.4.8 The primary road corridors of Port Road and South Road provide ease of access for heavy/large vehicles to the precinct, though (together with the River) also act to physically separate the precinct from surrounding areas.



2.4 Car Parking & Vehicle Movement











2.4.9 Existing Parking & Vehicle Movement Diagram

The following diagram maps car parking and vehicular movement throughout the precinct, within the study area boundary, as well as the location of bus stops and the tram stop on Port Road.

Traffic count information is based on average daily traffic movements (VPD), as per a study undertaken by the City of West Torrens in mid 2012.

Car Parking & Vehicle Movement

-  On-street car parking
-  Off-street car park
-  Undercroft car park
-  Bus Stop
-  Tram Stop
-  One-way street
-  Daily Traffic Count & Direction (Average)
-  Study area boundary



2.4.10 Car Parking & Vehicle Movement

2.5 Landscape Character & Open Space

The northern edge to the precinct is defined by the River Torrens Linear Park Trail. Despite the limited access to this open space, this linear park provides significant landscape character, visual amenity and habitat, and is one of the greatest assets of the precinct's location (refer image 2.5.9).

The extent and character of landscape throughout the majority of the precinct, however, is significantly compromised by the extent of roadways, narrow road verges, powerlines, car parking and vehicular cross-overs (refer image 2.5.7).

Holland Street, Stirling Street and the western end of Phillips Street offer the highest quality streetscape treatments (refer image 2.5.2), with regularly spaced, single species mature street trees providing shade and visual amenity. Winwood and Anderson Streets also offer reasonable street tree plantings. Street tree planting along West Thebarton Road, as well as throughout the other side streets is limited or nonexistent.

Ground level planting is associated with several private tenancies (refer image 2.5.8), and very successfully delivered throughout the BioSA Incubator site (refer image 2.5.1), however does not feature elsewhere in the precinct. The lack of soft landscape treatments reduces the visual amenity of the precinct, while also increasing the amount of heat reflective hard-paved surfaces. The ability to implement water sensitive urban design (WSUD) measures within the streetscapes is also diminished by this condition.

The precinct area contains several open spaces, the most valuable/visible of which is the pocket park at the kink in the main road corridor (West Thebarton Road/ Phillips Street). Minor private/ semi private open spaces are associated with private developments, though appear under-utilised. This includes the lawn and garden area at the centre of the university campus (refer image 2.5.6). Concealed locations and fencing generally prohibits public access/use of these facilities (refer image 2.5.4). Limited shade, seating and the disconnection of these spaces from popular destinations (eg. cafe/ outdoor dining) further reduces the incentive of community members to use these spaces.

Beyond the immediate study area, the open spaces of Bonython Park, and the Thebarton Oval provide the community with more significant places for sports and recreation. Improved connection to these facilities will be a critical factor in enhancing the 'livability' of the precinct, recognising that this scale of open space cannot feasibly be provided within the precinct itself.

Key Issues Summary:

- Challenging streetscape condition along West Thebarton Road reduces opportunity for street tree planting
- Streets dominated by on-street car parking and vehicle driveways reduces opportunity for ground level landscape treatments
- Open spaces are predominantly privately owned/ accessible, though under-patronised, reducing community benefit.
- Limited access and historical 'back turning' of built form to the River Torrens Linear Park
- Inconsistent palette of understorey planting across the precinct
- Vacant/undeveloped land areas diminish visual amenity and create dust issues
- Poor current connections to larger open spaces; Linear Park Trail (north side of river), Bonython Park and Thebarton Oval



2.5.1 High quality landscape treatments within at the entrance gateway to the BioSA site



2.5.2 High quality street tree planting along Phillips Street



2.5.3 Vacant/ undeveloped lots reduce visual amenity and create dust issues



2.5.4 Linear path alongside a private open space, between Murray and Dalgleish Streets



2.5.5 The pocket park at the transition between West Thebarton Road and Phillips Street



2.5.6 A hidden oasis- open space within the University precinct behind Reid Street



2.5.7 Power lines and narrow footpath widths reduce opportunity for street tree plantings



2.5.8 Landscaping associated with private tenancies improves the streetscape character, but is not consistent



2.5.9 The River Torrens Linear Park is a significant asset to the Precinct, but only limited access is provided







2.5 Landscape Character & Open Space

The following diagram maps street tree plantings, open space types and vacant land throughout the precinct

The size/ landscape contribution of individual tree plantings is reflected by the respective size of the symbol.

Landscape/ Open Space Character

-  Large/mature street tree
-  Smaller street tree
-  River Torrens Linear Park Vegetation
-  Public open space
-  Semi-private open space
-  Private open space
-  Vacant land
-  --- Study area boundary



2.5.10 Landscape Character & Open Space Overlay

2.6 Street Interface & Built Form Character

The generally underwhelming streetscape interface and built form character along West Thebarton Road vastly undersells the hidden character of the precinct's rich industrial and cultural history (refer images 2.6.1 to 2.6.7).

A walk through the precinct's side streets reveals architectural gems such as the Walter Burley Griffin Thebarton Incinerator (refer image 2.6.6), as well as iconic warehouse buildings established by Fauldings during the precinct's post war boom in the 1950's- which, through Faulding's innovative operations, also marked the beginning of the precinct's reputation for biotechnology (refer image 2.6.2).

The challenge for the precinct will be in further recognising the contribution and value of these buildings, particularly in the case of the Incinerator, which is currently privately owned and inaccessible to the public.

More recent warehouse and industrial focused developments throughout the precinct, generally utilising tilt-up precast concrete construction methods, have typically neglected the streetscape, creating a less engaging street experience (refer image 2.6.10).

While security of premises is a high priority, low quality fence conditions, including large expanses of corrugated steel, chain mesh and barbed/razor wire, detract from the amenity of the street (refer image 2.6.9).

Where larger commercial developments have occurred, the interface between built form and the streetscape has been considered in more detail, complementing the streetscape and more historical built form. The Bionomics development is one such example of this development type.

The distance of building set-backs from the street also plays a significant role in defining the street interface. The varied setbacks along West Thebarton Road, combined with road front car-parking areas does not present as a strong streetscape, and reinforces the vehicular dominance of this roadway (refer image 2.6.8).

This pattern of development, heavily influenced by the need for direct warehouse access from the street front (given the absence of rear lanes), is common throughout the side streets in the precinct also. Given the high degree of separate private ownership, the most feasible means of improving this condition in the future will be through the public realm (streets), rather than the built form, unless buildings are redeveloped or change in activity.

Key Issues Summary:

- Industrial/warehouse land use resulting in minimally articulated tilt-up construction, functionally focused around vehicle access/movement and lacking positive street interface.
- Lack of rear lanes means that building street frontages typically include both the main entrance and service/loading entrance. Where multiple small businesses exist along a street, this condition defines the whole street.
- Unclear planning resulting in varied built form setbacks along major and minor roadways, reducing the quality/strength of the street interface
- Exposed industry/service yards reduce street amenity
- Low quality fence treatments diminish street quality and reinforce the 'unsafe' perception of the area
- Some heritage buildings (eg. Incinerator and Fauldings Buildings) not visible enough, due to private ownership and lack of access to these areas by the community.



2.6.1 The industrial character of a number of the older warehouse buildings is a defining quality of the precinct



2.6.2 Former Fauldings buildings, now part of the University of Adelaide Thebarton Campus



2.6.3 Residential cottages along Ware Street provide a strong street character and human scale



2.6.4 Former Church and Hall, on Phillips Street



2.6.5 The Holland Street Tramway Bridge



2.6.6 The Walter Burley Griffin Incinerator



2.6.7 The Southwark Hotel and E.S.Wigg & Son building form a significant built form gateway to the precinct from Port Road



2.6.8 Varied building setback distances and off street car parking weaken the streetscape along West Thebarton Rd



2.6.9 Exposed views from the street into industrial workyards diminish the quality of the streetscape interface



2.6.10 Non-active, poorly articulated facades fronting the street create a poor streetscape experience.

2.6 Street Interface & Built Form Character







The following diagram maps the quality of the interface between the public realm and built form within the precinct, taking into account:

- Building character and heritage
- The engagement of building frontage with the public realm (positive or negative), based on tenancy activity and street interface.

Streetscape Interface

-  Good
-  Reasonable
-  Poor
-  Very Poor
-  Vacant land
-  Study area boundary

Community Destinations

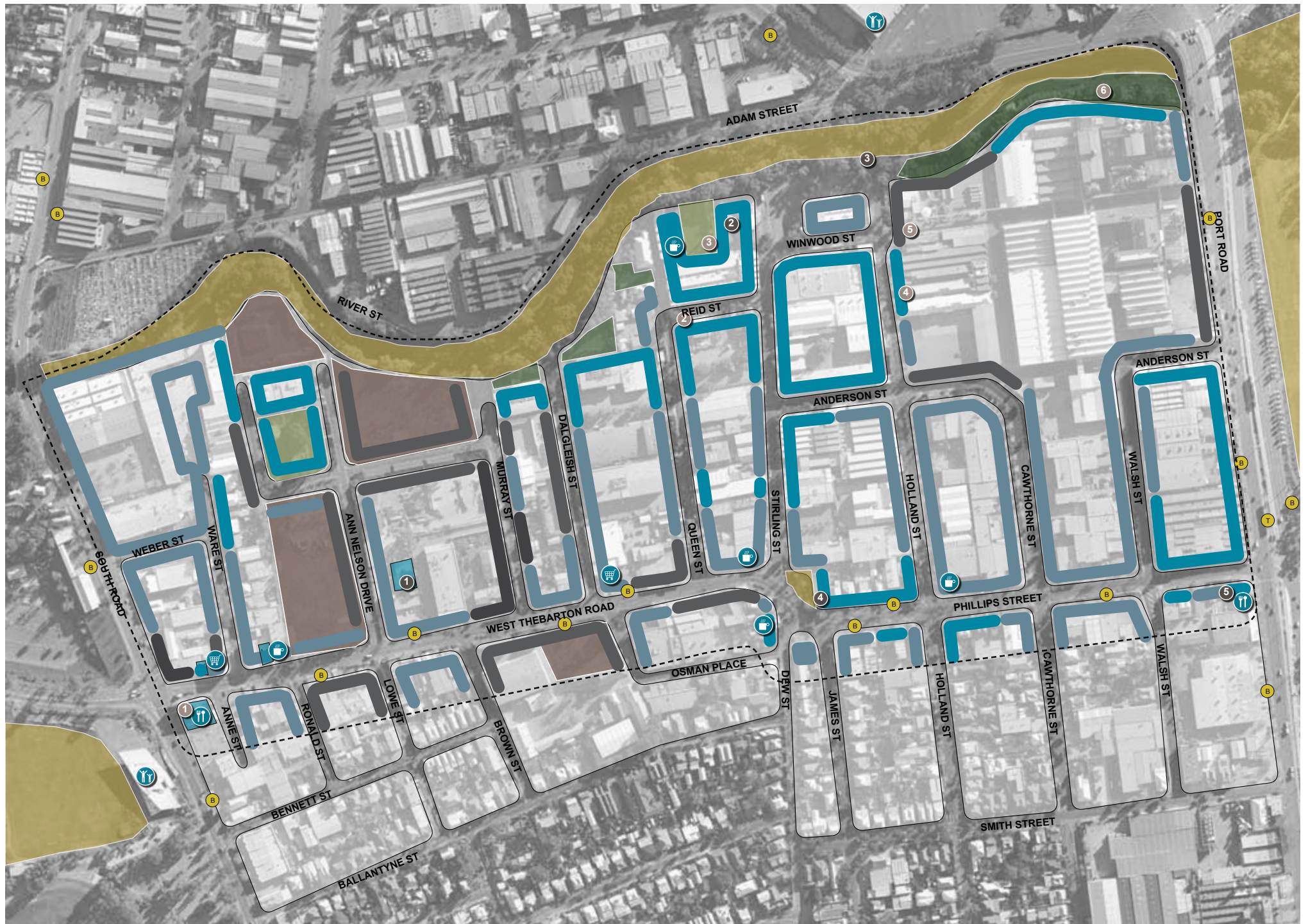
-  Cafe
-  Pub/Restaurant
-  Food retail outlet
-  Community/ Entertainment venue
-  Bus stop
-  Tram Stop

Heritage Places

-  State Heritage Places
- 1 Former Thebarton Incinerator designed by Walter Burley Griffin (1930's)
- 2 Former Fauldings Eucalyptus Oil Distillery, 35-37 Stirling Street
- 3 Holland Street Tramway Bridge
- 4 Former Thebarton Baptist Church and Hall, Phillip Street
- 5 Southwark Hotel, 77 Port Road

Local Heritage Places

- 1 West Thebarton Hotel (external form of 1880's building only)
- 2 Alaska Towers (formerly Alaska Ice Cream Factory). External form of 1920's structure from Fauldings use of site , 32 Queen Street
- 3 35-37 Stirling Street, University of Adelaide Thebarton Campus- Factory building (former Amdel Warehouse), Compound Building (former Caretakers Residence), Hedge House Building (former laboratories), former boiler house and Chimney; external form of 1920's structures from Fauldings use of site
- 4 Plaque- former site of Colonel Light's Cottage, attached to wall of warehouse
- 5 Electric Supply Company Transformer, external form, details and materials of building housing transformer
- 6 Southwark Brewery Gardens



2.6.11 Street Interface & Built Form Character Overlay

2.7 Wayfinding & Identity

Wayfinding in the area and the identity of the precinct itself have both been highlighted in recent consultation with site stakeholders as key issues, reducing the ease of visitors finding their desired destination, and reducing the presence of businesses in the precinct.

The lack of east-west connections in the street layout, which channels main vehicular movement onto West Thebarton Road, can be seen as an opportunity and an issue. While it means that each street could be defined as an 'internal gateway', it also reinforces the importance of the vista to the end of each street. Currently, the quality of these vistas diminishes the perceived value and safety of the precinct, with views to fences, undeveloped land and car park areas, rather than capitalising on the River Torrens connection.

Currently, there is no consistent or overarching signage strategy for the precinct, with exception to statutory road signage. This, combined with the lack of prominent signage at the gateways to the precinct at Port and South Road, means that the precinct does not present as a cohesive whole.

An opportunity exists to leverage the high quality built form at Port Road, to clearly define this entrance as the gateway to the precinct. The South Road Gateway lacks the presence/ quality of the Port Road gateway, due to the nature and scale of built form, lack of landscaping and vehicular dominance.

Individual tenancy signage has been delivered to a high quality on several of the larger commercial tenancies. In general though, tenancy signage is in the form of printed steel sheet, mounted directly to building facades, which reduces the overall visual quality of the streetscape.

The industrial character of remnant/former building signage that exists throughout the precinct gives a sense of the history of the site, and should be retained where possible. This signage language may also inform the development of a signage strategy for the precinct.

A-frame type footpath signage also features along West Thebarton Road, to catch the attention of passing traffic—a reflection of the set-back nature of built form. Given that this signage type obstructs the footpath, and does not contribute positively to the street character, it is not recommended.

In general, further consideration should also be given to the quality of streetscape materials and fencing, particularly along the main road corridors of West Thebarton Road and Phillips Street. While footpath upgrades and tree planting along Phillips Street presents a positive image, razor wire fencing and poor footpath treatments along West Thebarton Road reinforce a sense of neglect and a lack of public safety.

Key Issues Summary:

- The precinct lacks an overall Signage/wayfinding strategy and consistent signage design
- The standard of building signage does not contribute to the creation of a quality streetscape character
- A-Frame signage used along West Thebarton Road creates footpath obstructions and 'visual clutter'.
- Varied building set-backs along West Thebarton Road reduce the visual strength of this main roadway, reinforcing the 'vehicular' environment.
- Street vistas terminate with poor quality land use, reducing perceived value of the precinct.
- Low quality streetscapes and 'security focused' fencing materials reinforce an identity of neglect/lack of public safety.
- Built form character and lack of landscape treatments lets down the identity/experience of the entrance to the precinct from South Road in particular



2.7.1 Examples of historic/industrial character signage in the precinct

2.7.2 Examples of internal precinct signage- reasonable-high presentation, but lacking a common design language



2.7.3 Wayfinding signage is limited and inconsistent across the precinct in its design/style. The identity of internal 'gateways' is let down by poor visibility and streetscape amenity

2.7.4 A-Frame signage clutters the streetscape

2.7.5 Building tenancy signage varies from high quality to low quality in design/presentation



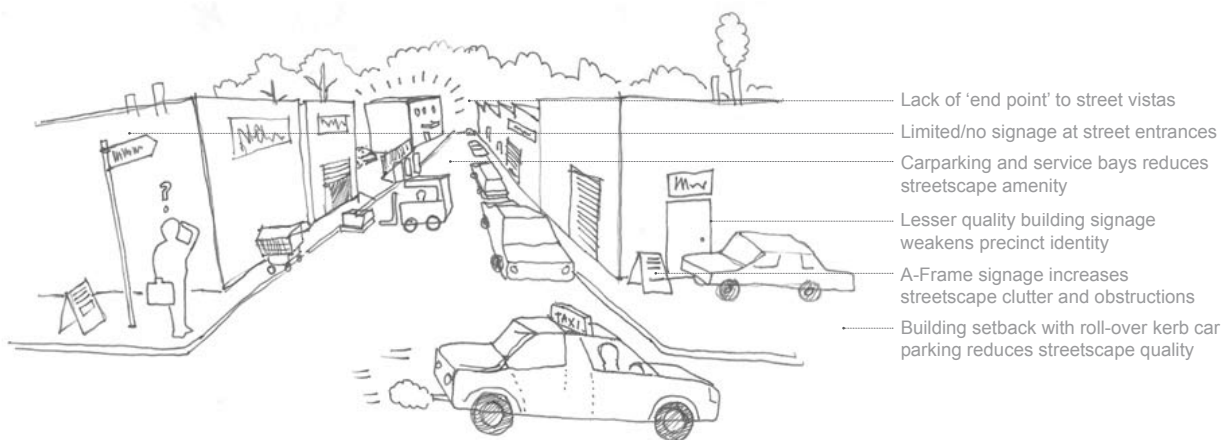
2.7.6 The entrance to the precinct from South Road does not have a high quality presentation/identity

2.7.7 Low quality/ security fencing

2.7.8 Roll-over kerb parking reduces street amenity

2.7.9 Varied building set-back distances and 'front of site' car parking reduces the strength/identity of the streetscape

2.7 Wayfinding & Identity



2.4.10 Existing Street Wayfinding & Identity Diagram

Wayfinding & Identity

- Precinct Gateway
- Internal Precinct Gateway
- Institution/Business Gateway
- Main wayfinding signage
- Bioscience precinct & core activity area
- University of Adelaide precinct & core activity area
- West End Brewery precinct
- Study area boundary

Community Destinations

- Cafe
- Pub/Restaurant
- Food retail outlet
- Community/Entertainment venue
- Bus stop
- Tram Stop



2.7.11 Wayfinding & Identity Overlay

2.8 Community Destinations

Community destinations such as cafes, open spaces and even public transport stops all contribute to the visible ‘human’ activity of the precinct, its streets and places.

On a functional level, these facilities provide places for people to eat, rest and meet- however they also have an important role in facilitating the cultural development of the Hub, and in breaking down perceived barriers between business/industry and the surrounding residential community.

Overall, the precinct offers a reasonable number of cafes and eateries, which cater primarily for the ‘internal’ precinct community. Indeed, these businesses depend on the captive population of the precinct, taking into account the island effect created by Port and South Road, and the closure of the Holland Street pedestrian bridge, which makes it difficult/time consuming to walk to additional eateries along Port Road.

Focusing on the lunch trade during the business week, these cafes (excluding the Southwark Hotel and West Thebarton Hotel) are not generally open over the weekend, reducing the opportunity for wider community engagement with the precinct (refer images 2.8.4 to 2.8.6).

Several other food related businesses, including the wholesale butcher, a bakery and persian grocery on West Thebarton Road, on the otherhand, are more broadly patronised, and play a role in attracting additional visitor traffic to the precinct (refer image 2.8.9).

Open spaces within the precinct and at its edges are also destinations for internal, as well as broader members of the community. The potential of the precinct’s connection to the River Torrens Linear Trail, Bonython Park and Kings Reserve, however, is currently diminished due to the poor cycle paths at the South Road entrance, and the closure of the Holland Street Bridge. The development of the Thebarton Community Centre at Kings Reserve (refer image 2.8.3), and future redevelopment of the Brickworks Markets site further reinforces the need for improvements to be made to this western connection in particular.

Open spaces within the precinct, such as the pocket park at the intersection of Stirling street/Phillips Street (refer image 2.8.2), could be better/more safely connected to cafes in this area, to leverage the respective value offered by each of these places to the community, and increase the length of time people may be willing to spend in these places.

As the Hub’s business population grows (through future development of vacant / underutilised land), the expansion of cafes/eateries and other community services may be justified. The success of these businesses, however, would be greatly enhanced by improving access to the precinct for the broader community, and by providing a ‘unique’ offering.

Refer to the previous analysis maps for the locations of key destinations within and directly surrounding the precinct.

Key Issues Summary:

- ‘Island’ nature of the precinct limits demand for and accessibility to cafes/community facilities within the precinct, but also creates a captive population (reducing competition with other food vendors along Port Road)
- Broader community patronage of cafes is further diminished by the hidden nature of these places (eg. Einsteins cafe), by non-active/ setback frontages (eg. the bakery) and/or poor streetscape amenity.
- Connections to broader/neighbouring major destinations including Bonython Park, The Torrens Linear Park- Henley Beach shared use trail and Thebarton Community Centre/ Oval are weak, due to streetscape amenity and access/safety issues.
- Open spaces in the precinct (whether public or private) lack activation and do not have a strong physical/ visual relationship to cafes/meeting places.
- Bus stops are poorly shaded/sheltered, reducing appeal of using public transport services.
- Holland Street Bridge closure makes access to the tram from the northern end of the precinct onerous



2.8.1 BioSA's Incubator offers space for lunch/events



2.8.2 The pocket park is an important open space, though lacks activation on a daily basis. The 'Guerrilla Markets' recently provided broader community engagement in this space.



2.8.3 Thebarton community centre will provide a strong community focus at the western end of the precinct



2.8.4 Einstein's Cafe is well patronised, but hidden away



2.8.5 Ricca Coffee and The Olive Tree Cafe, form an active community meeting place fronting West Thebarton Road



2.8.6 O'Furno Espresso on West Thebarton Road



2.8.7 The West Thebarton Hotel on South Road



2.8.8 The Southwark Hotel on Port Rd/Phillips St



2.8.9 The wholesale butcher and Persian grocery on West Thebarton increase the diversity of services/destinations



2.8.10 The tram stop on Port Road is a key destination.



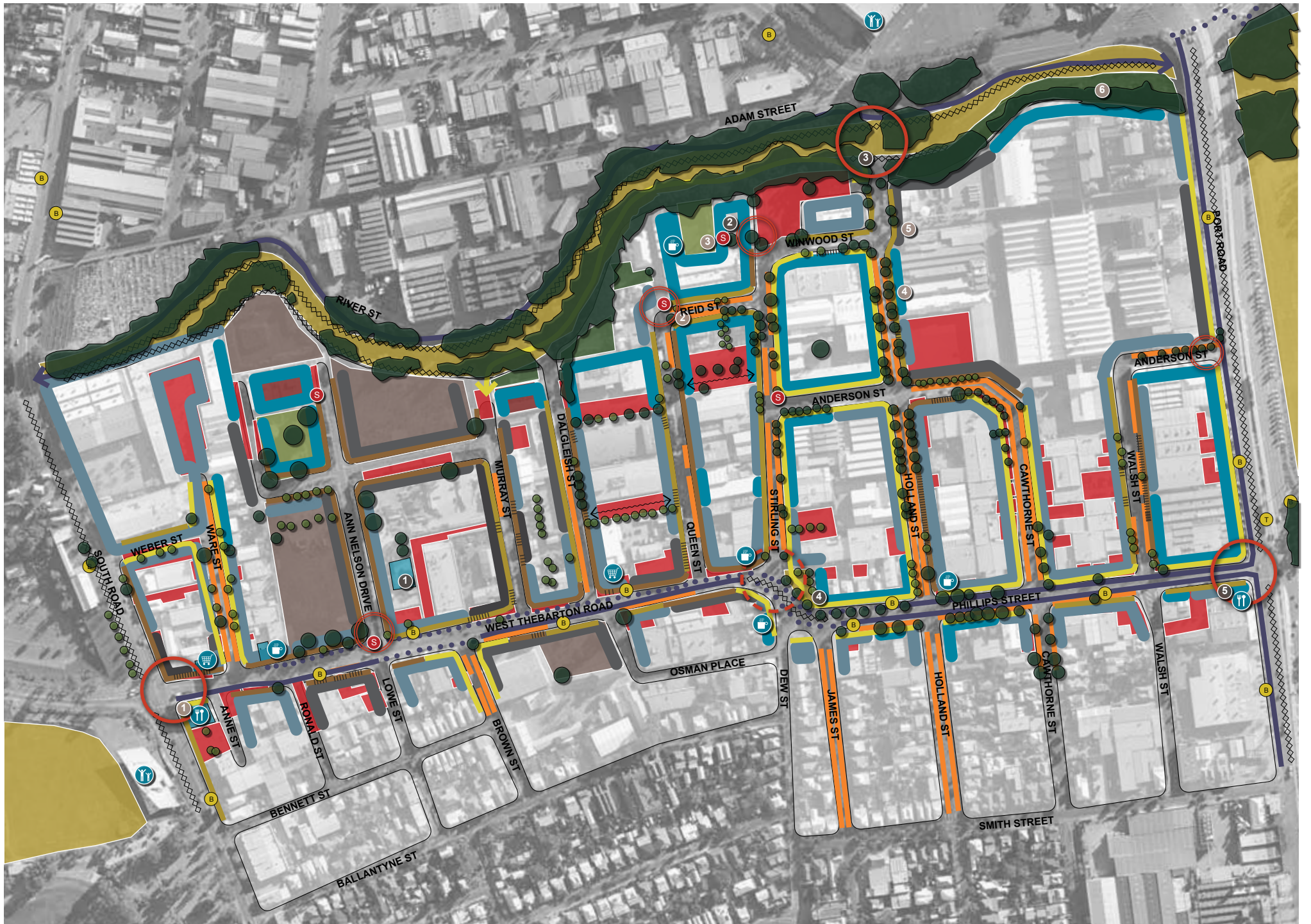
2.8.11 The linear park cycle trail (north western side of South Road), which is currently being upgraded



2.8.12 Bus stops are poorly shaded

2.9 Analysis Summary Map

<p>Streetscape Interface</p> <ul style="list-style-type: none"> Good Reasonable Poor Very Poor <p>Pedestrian/Cyclist Access & Amenity</p> <ul style="list-style-type: none"> Good pedestrian amenity Average pedestrian amenity Poor pedestrian amenity Informal link (private) Good cycle lane Poor cycle lane Major/highly active vehicular crossover Barrier to safe access 400m walking radius 	<p>Community Destinations</p> <ul style="list-style-type: none"> Cafe Pub/Restaurant Food retail outlet Community/Entertainment venue Bus stop Tram Stop <p>Car Parking & Vehicle Movement</p> <ul style="list-style-type: none"> On-street car parking Off-street car park Undercroft car park Bus Stop Tram Stop One-way street Study area boundary 	<p>Landscape/ Open Space Character</p> <ul style="list-style-type: none"> Large/mature street tree Smaller street tree River Torrens Linear Park Vegetation Public open space Semi-private open space Private open space Vacant land Study area boundary <p>Wayfinding & Identity</p> <ul style="list-style-type: none"> Precinct Gateway Internal Precinct Gateway Institution/Business Gateway Main wayfinding signage 	<p>Heritage Places</p> <ul style="list-style-type: none"> State Heritage Places Local Heritage Places 	<ul style="list-style-type: none"> 1 Former Thebarton Incinerator designed by Walter Burley Griffin (1930's) 2 Former Fauldings Eucalyptus Oil Distillery, 35-37 Stirling Street 3 Holland Street Tramway Bridge 4 Former Thebarton Baptist Church and Hall, Phillip Street 5 Southwark Hotel, 77 Port Road 	<ul style="list-style-type: none"> 1 West Thebarton Hotel (external form of 1880's building only) 2 Alaska Towers (formerly Alaska Ice Cream Factory). External form of 1920's structure from Fauldings use of site , 32 Queen Street 3 35-37 Stirling Street, University of Adelaide Thebarton Campus- Factory building (former Amdel Warehouse), Compound Building (former Caretakers Residence), Hedge House Building (former laboratories), former boiler house and Chimney; external form of 1920's structures from Fauldings use of site 4 Plaque- former site of Colonel Light's Cottage, attached to wall of warehouse 5 Electric Supply Company Transformer, external form, details and materials of building housing transformer 6 Southwark Brewery Gardens
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2.9.1 Analysis Summary Map

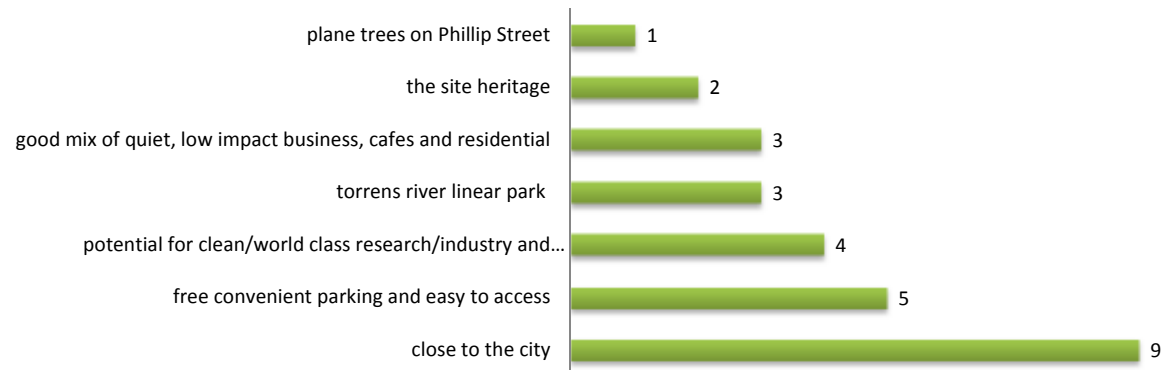
2.10 Community Perspectives

The following information has been collected from community consultation in the form of an online survey. A range of questions were prepared to identify community opinion, not only on proposed outcomes for the precinct but also the existing area, what works well and what could be improved.

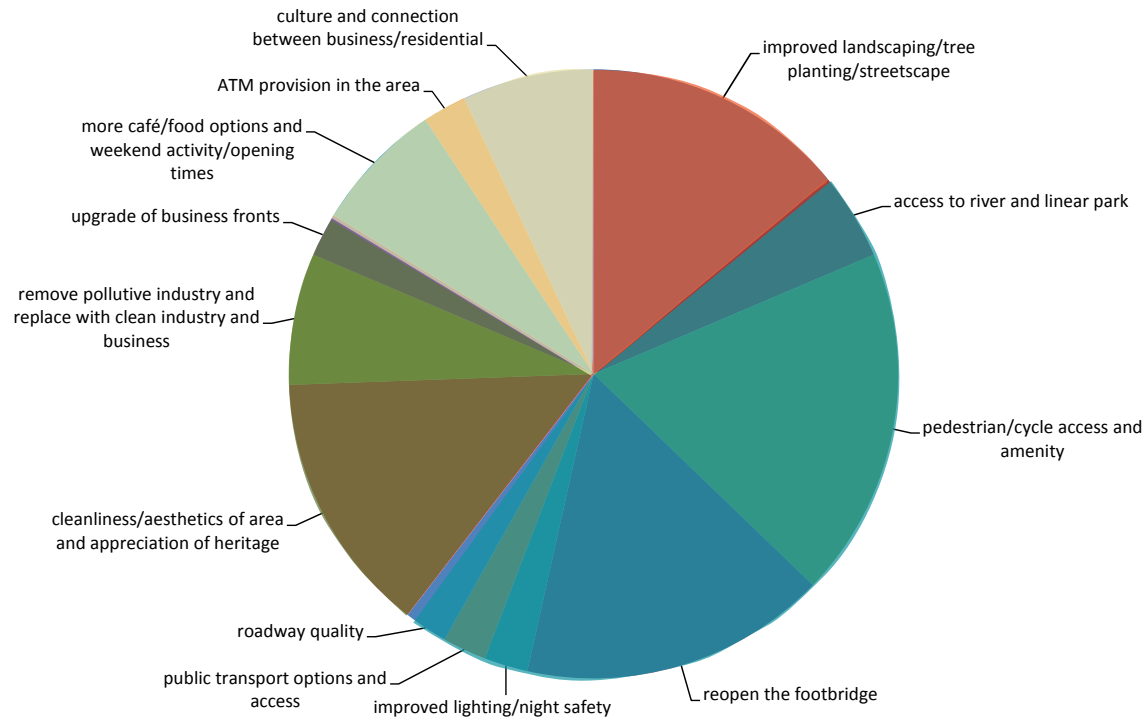
The adjacent graph illustrates the community's view of key qualities in the Thebarton Technology Hub precinct. The primary quality recognised by the community is the precinct's close proximity and accessibility to the city, already having strong links to the city via the Torrens River Linear Park and tram line, as well as convenient parking locations.

The community respondents also recognise the potential this precinct has to house world class research facilities.

What do you like most about the Thebarton Technology Hub Precinct?



What could be improved?



The respondents to the online survey provided a range of answers to the question of what could be improved within the Thebarton Technology Hub area. The key responses from this question focus on improving the landscape amenity, tree planting, and general precinct aesthetics, as well as improving pedestrian and cycle access, and reopening the footbridge to the end of Holland Street.

Overall, these responses can be grouped into four key themes; green streets and spaces, links and connections, a shared identity, and connected community.

Together with the site analysis, this community feedback forms the basis for the master plan strategies, introduced in section 3 of this report.

- green streets and spaces
- links and connections
- a shared identity
- connected community

2.11 Summary of Key Challenges



Difficult pedestrian access & movement

The following three diagrams seek to summarise the key urban planning challenges facing the Thebarton Technology Hub as it exists currently.

The 'island' condition of the Hub created by the major roadways at its edges, and a lack of access along the River Torrens, limits the ease of pedestrian and cycle connection in and out of the area.

Access and movement within the precinct is obstructed by a lack of east-west connections, poor streetscape amenity and safety issues.



Poor visual amenity & wayfinding

The Hub currently exists as a 'clump' of similar businesses, without a common identity. Limited signage makes it difficult to find key destinations.

The interface of built form with the streetscape throughout parts of the precinct detracts from the experience of the precinct's streets and places.

The potential of the riverside location is not realised, due to a 'back-turning' interface of built form with the river.



A vehicle focused environment

Vehicular traffic and car parking areas dominate the streets and streetscapes.

Front of house parking and set-back buildings reinforce the car's priority place in the precinct framework, diminishing the precinct's amenity, along with the safety of the streets and any appeal for other forms of movement.

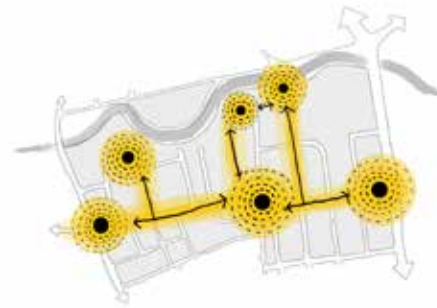


Master Plan Strategies

3.1 Urban Design Principles

In response to analysis, consultation and issues evaluation, the following set of urban design principles have been developed in order to guide the future development, investment and planning of the Thebarton Technology Hub.

Together, these principles set a framework for change and renewal within the precinct, and inform the key directions for the more detailed master planning strategies and actions explored in the following section of this report.



A Shared Identity

By capitalising on the prominent and historically significant built form at the Hub's major roadway entrances, the Hub's identity will be strongly presented to the broader community, interstate and international visitors.

Through the use of consistent design language, signage and planting, internal gateways within the Hub and at key institutions will further reinforce the Hub's identity.



Links and Connections

The reinforcement of links and connections throughout the Hub will encourage more people to walk or cycle, increasing the visual activation and passive surveillance of the Hub's streets and open spaces.

Improvements to infrastructure and amenity along key routes, such as street trees, seating, continuous footpaths/cycle lanes and safe and accessible crossing points will help to promote a culture of walking and cycling.



Green Streets and Spaces

The 'greening' of streets and spaces throughout the Hub will improve the amenity of the area, making it an attractive place to work and visit, and reinforcing the Hub's connection to the River Torrens Linear Park, Bonython Park and Kings Reserve.

Green infrastructure such as increased street tree planting, understorey planting, and water sensitive urban design (WSUD) will redefine the precinct's perceived image as an industrial 'no-go zone', while increasing habitat, and encouraging recreation as an extension to the linear park trail.



A Connected Community

By actively exploring social, infrastructure and transport initiatives, there is an opportunity to blur and break down the separated nature of the business, research and residential communities in the precinct.

Given the compact nature of the Hub, there is potential to better connect the Hub both internally and externally, to the linear park trail, the new RAH and SAHMRI, through initiatives such as free bicycle hire.

Regular community events, lectures and other collaborative activities will better connect the community- including those who work in the precinct, and the broader residential community.

3.2 A Shared Identity

While the precinct's main road boundaries, river edge condition and singular east-west road corridor may be seen as constraints, they also act to define the extent of the precinct and uniquely control the experience of arrival.

A Shared Identity provides an overarching strategy and actions to capitalise on these geographical and wayfinding conditions, as a precursor to the *Design Guide*, which articulates the desired character and identity for the Hub. By defining external and internal gateways, recognising main views and encouraging more active interface between built form and the streets, this strategy aims to increase the profile of the Hub as a Technology Cluster, as well as reinforce the precinct's existing character values.

Upgrades to signage, landscape and feature lighting at main entrances to the precinct including South and Port Road, along with the Holland Street bridge (once upgraded or redeveloped) will promote the precinct to a significant level of passing traffic.

In addition to these external 'gateways', upgrades to wayfinding signage and landscape treatments at each street entrance within the precinct will establish each street as an internal gateway, with the potential to provide a directory of key businesses to aid wayfinding.

It is recommended that these signage and gateway upgrades form part of a broader branding strategy for the Technology Hub, to ensure a consistent approach and identity is promoted within the Hub, as well as across other materials/ publications, marketing and media.

By evaluating key sightlines along the most heavily used roadways within the precinct (eg. West Thebarton Road/ Phillips St, Holland and Stirling Streets) it will be possible to take specific actions to open or frame views to heritage buildings and site landmarks, to promote the cultural and historic character of the precinct.

Likewise, the integration of public art to the pocket parks fronting West Thebarton Road/ Phillips Street will reinforce the cultural values of the precinct and communicate its 'story' to visitors and the broader community.














The 'dead end' nature of a number of streets in the precinct will be addressed via landscaping or public art improvements at the end of these streets, to help promote the precinct as a more 'complete' entity, while some sites remain vacant or visually inactive. These measures will also act to better connect the precinct with the linear park trail.

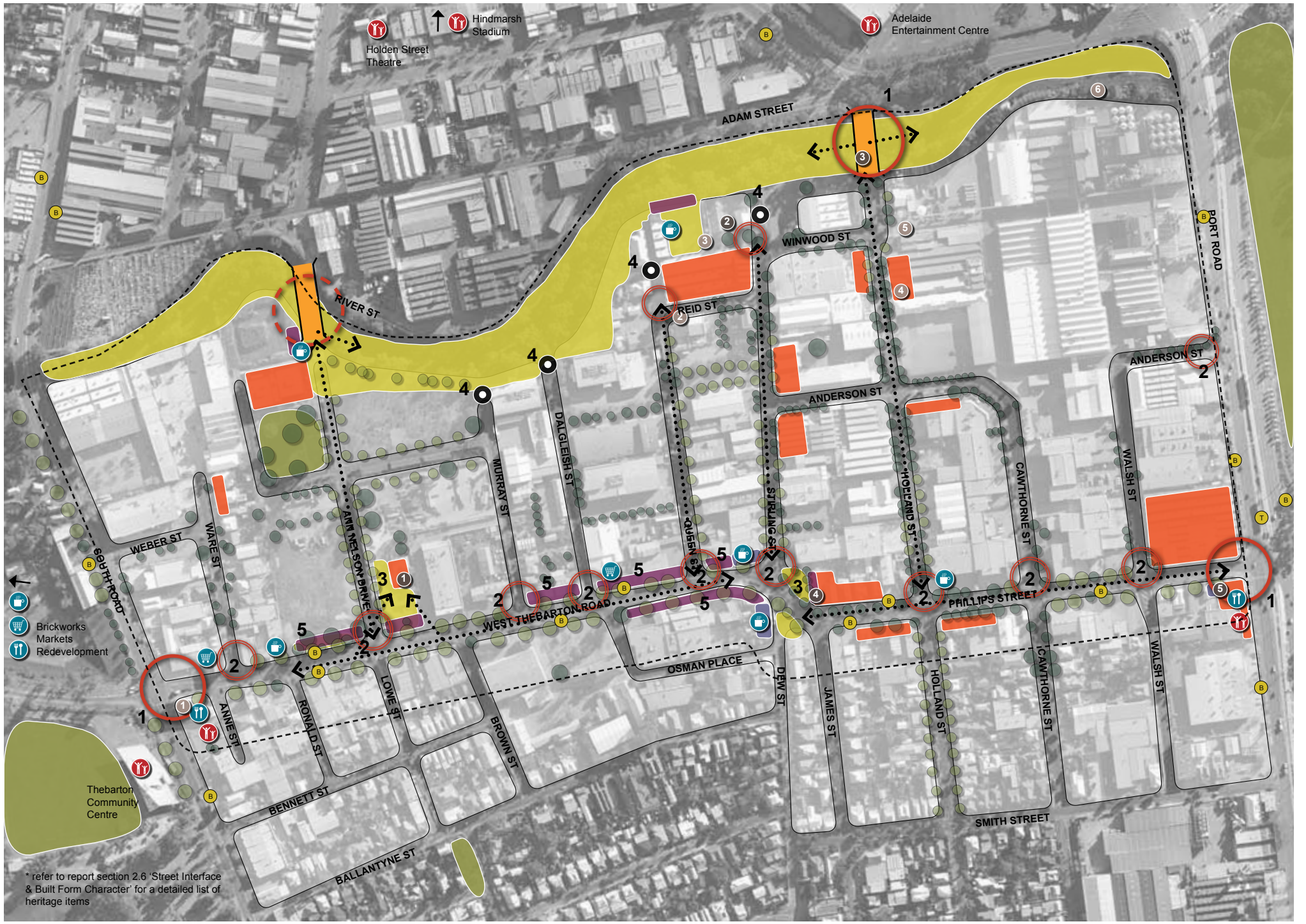
Finally, improvements to the streetscape interface along West Thebarton Road and Phillips Street over time, along with a gradual shift in land use to commercial and retail premises, will provide greater visual activity along this main road corridor.

Key Actions

1. Explore ways to improve the identity and presence of the precinct at the main entrances (Port Road, South Road and the Holland Street Tramway Bridge)
2. Improve signage at each street entrance to identify destinations and key businesses.
3. Open views to significant heritage buildings in the precinct
4. Develop 'end points' to views along streets to the river edge to create a sense of arrival, using landscape/ tree planting/ public art
5. Encourage more active building/street interface (enable views between street and building activities) to increase the sense of vibrancy and activity in the precinct.
6. Explore ways to integrate public art into the streetscape, linear park and open spaces

Legend

- | | | | |
|---|---|---|---------------------------------------|
|  | Precinct Gateway |  | Significant built form character |
|  | Internal Precinct Gateway |  | Bus stop/ Tram stop |
|  | Future Gateway |  | Cafe/ dining/ retail destinations |
|  | Sightline or significant view |  | Community/ entertainment destinations |
|  | 'End Point' of view |  | State heritage item* |
|  | Visually active frontage (current areas) |  | Local heritage item* |
|  | Visually active frontage (key proposed areas) | | |



* refer to report section 2.6 'Street Interface & Built Form Character' for a detailed list of heritage items

3.3 Links and Connections

The *Links and Connections* strategy presents a framework for vehicular, pedestrian and cyclist movement throughout the precinct, with consideration to movement within the precinct, as well as to surrounding destinations.

The future development of the Brickworks Market to the west, as well as the Clipsal site at Bowden (north east) and RAH and SAHMRI projects will see a significant increase in residents, workers and visitors to the area over the next 5-10 years, resulting in an increase in transport along West Thebarton Road/ Phillips St.

As the vehicular load along this main corridor increases, it will be imperative to develop a diversity of movement options, including continuous and safe cycle lanes, quality footpaths and stopping zones for buses where possible.

The re-establishment of Holland Street as a north-south primary pedestrian/cycle link will provide a safe route through the precinct and beyond to the southern area of Thebarton. This strategy relies on the upgrade or redevelopment of the Holland Street Tramway Bridge, which provides a critical connection across the River Torrens to the entertainment centre and Port Road. A reduction to on-street car parking along Holland Street over time, as well as clear line marking/ road surface changes, street tree planting and footpath upgrades will improve the safety and amenity of this link.

















Ann Nelson Drive has also been identified as a primary north-south pedestrian and cyclist connector in the western section of the precinct. The undeveloped nature of this roadway provides a unique opportunity to redefine the standard of the public realm and encourage a 'walkable' culture within the precinct.

The longer term potential for a second pedestrian bridge at the end of Ann Nelson Drive would provide a link between the Thebarton precinct and destinations such as Hindmarsh Stadium and the Holden Street Theatre on the northern side of the River Torrens.

Improvements to the River Torrens Linear Park trail are also a key element of the strategy, with a focus on improving the cycle/walking trail along the southern bank of the river, from the tramway bridge to South Road. Improved connections to this trail from each street and to open spaces along the course of the trail will reinforce the trail's role as a recreation facility and unique east-west connector for the precinct.

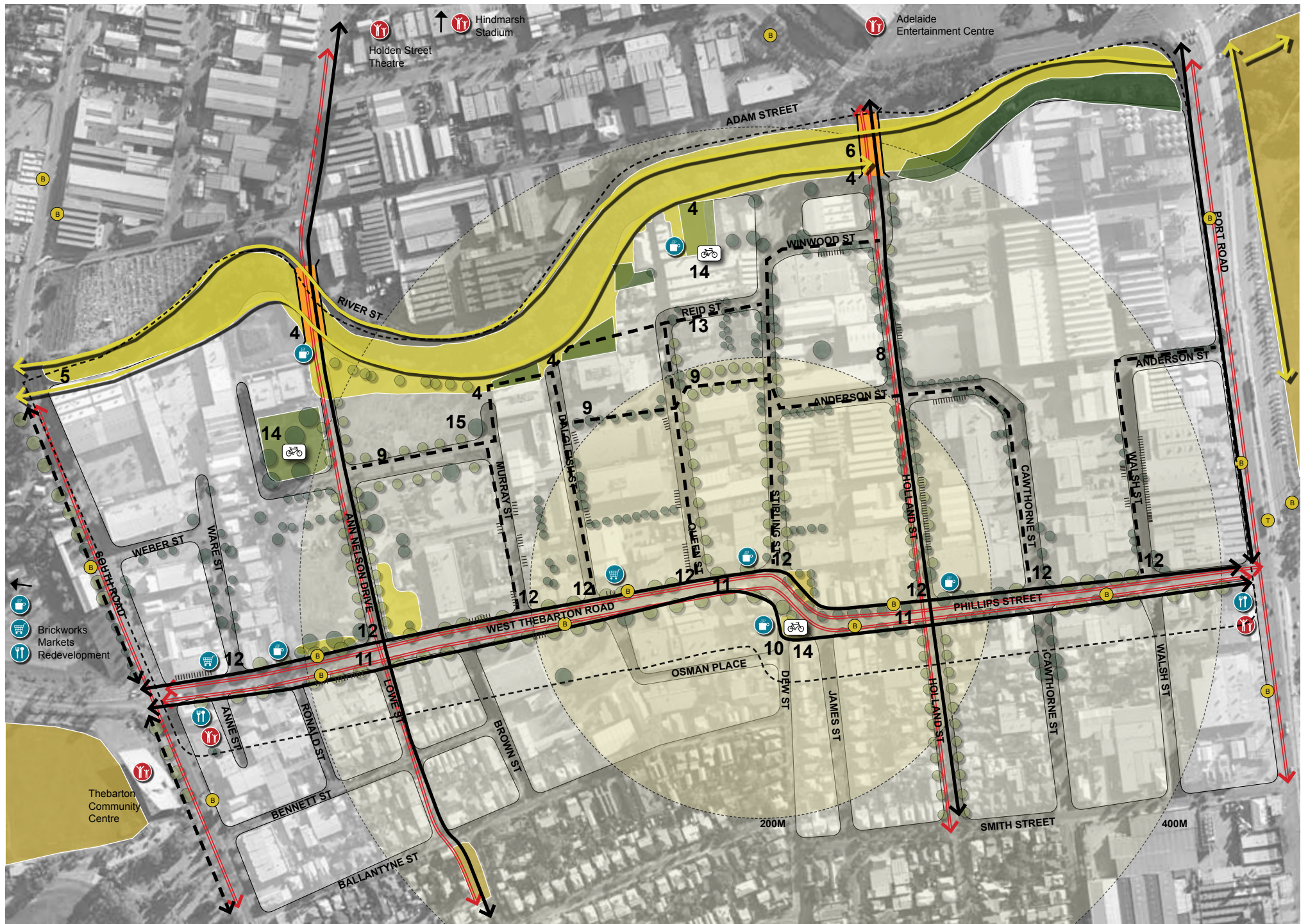
Finally, by opening and defining pedestrian access within existing car parking areas in the northern section of the site the permeability of the precinct between Dalgleish Street and Stirling Street will be improved, as part of a broader east-west pedestrian link from Ann Nelson Drive to Anderson Street.

Legend

- | | | | | | |
|---|---|---|---|---|-----------------------------------|
|  | Shared use trail (pedestrian/cycle) |  |  | Bus stop/ Tram stop | |
|  | Main pedestrian route/ Streetscape |  |  |  | Cafe/ dining/ retail destinations |
|  | Secondary pedestrian route/ Streetscape |  | | Community/ entertainment destinations | |
|  | Cycle connection |  |  |  | Open space/ park |
|  | Proposed bicycle hub |  | | Proposed new/ upgraded bridge link | |
|  | Walking radius | | | | |

Key Actions

1. Improvements to bicycle paths and connections
2. Upgrades to the quality of the footpath along West Thebarton Road/Phillips St
3. Improvements to footpaths in side streets in the precinct
4. Improved connections to the Linear Park Trail
5. Continuation of the linear park trail to South Road
6. Restored or new bridge crossing from Holland St across the River Torrens
7. Future additional pedestrian/cycle bridge connection linking the precinct to Holden Street Arts Precinct and Hindmarsh Stadium
8. Development of Holland street pedestrian/cycle link
9. Create improved East-West pedestrian link through back of site, joining to Anderson St.
10. Closure of Dew St at Phillips St/West Thebarton Rd, to create a safer footpath connection and usable park area.
11. Provision of improved signage at key pedestrian and cycle crossing locations, to alert drivers
12. Paving at the entrance to side streets, to promote a 'pedestrian' environment and calm traffic
13. Allow 2 way traffic along Reid street to improve vehicle access around the University Campus
14. Establish a free bike hire service (with multiple pickup/ return points) to allow ease of movement throughout the Hub, and to other destinations (eg RAH/ SAHMRI)
15. Provide increased off street car parking capacity for local business at the end of Murray Street, utilising BioSA land.



3.4 Green Streets and Spaces

The *Green Streets and Spaces* strategy provides a framework for green infrastructure within the precinct. Through the actions proposed, it considers landscape and open space not just within the precinct, but as an integrated strategy connected with the broader landscape environments of Thebarton, the River Torrens, Bonython Park and Kings Reserve.

Historically, the River Torrens was a significant industry resource within the precinct, as a reliable water source, and in the case of the Fellmongery industry, an integral part of wool washing operations. The impact of industry on the river, combined with Colonel Light's original land allotment division (which did not factor in a setback or natural reserve along the southern river edge in the Thebarton area), has resulted in the present day situation, whereby extensive built form backs blankly onto the river edge.

A core challenge and opportunity for the precinct will be to change the interface of built form with the River Torrens over time, and embrace the potential of the River as a valuable open space for recreation, a 'Greenway' connection for cyclist commuters and as a habitat corridor.

In association with the *Links and Connections* strategy, the enhancement of the landscape quality along the river edge and linear trail will redefine the accessibility and function of the southern bank of the river.

Improvements to open spaces fronting onto the linear park trail, will create new places to rest or gather, for use by employees working in the Hub, as well as the broader community.

The redefinition of fence lines and fencing types along the river, such as the security fencing adjacent Einstein's Cafe (within the University Campus) will further reduce the physical and visual barriers between the river and the precinct community.

Elsewhere in the Hub, improvements to open space, and the creation of new pocket parks along West Thebarton Road (at the front of the BioSA site) and at the end of Dew Street will assist in lifting the profile and image of the Hub by encouraging pedestrian activity and 'greening' West Thebarton Road.

The development of a hierarchy of streetscape treatments will allow for landscape improvements to be considered holistically across the precinct, with higher value landscape treatments and street tree planting along primary corridors and connectors (including West Thebarton Road/Phillip Street, Holland Street and Ann Nelson Drive), and secondary treatments applied to other streets in the precinct.










Where tree or understory planting may be difficult to achieve due to narrow street profiles, vertical landscape treatments (green walls or climbing trellis) will increase the visual amenity of streetscapes.

The incorporation of water sensitive urban design (WSUD) within streetscapes will utilise run-off stormwater from roofs and streets to irrigate street plantings, creating a sustainable, low maintenance landscape. Through the correct selection of plants, these treatments will also act to filter pollutants from stormwater run-off.

Key Actions

1. Increased tree planting and landscape along West Thebarton Road/ Phillips Street to create a 'green corridor' (at the expense of some on street car parking)
2. Increased tree planting and landscaping along Holland St to create a 'green corridor'
3. Increased tree planting and landscaping along Ann Nelson Drive to create a 'green corridor'
4. Increased street tree planting along other side streets where possible
5. Increased planting to road verges in the precinct
6. Creation of 'green walls' (vertical landscape) along fences/walls to increase visual amenity.
7. Creation of a new park area adjacent to the Olive Tree café, achieved by the closure of Dew St at Phillip St, with reconfiguration of car parking.
8. Improvements to the pocket park next to the old Church Hall at Phillips St/ West Thebarton Road
9. Explore short-medium term activation of the BioSA site fronting West Thebarton Road, potentially via landscaping/ street furniture/ public art/ pocket park
10. Improved landscaping and maintenance along the river edge
11. Potential long term conversion of Thebarton Incubator surrounds to community open space

Legend

- | | |
|--|---|
|  Existing tree planting |  Landscape Gateway |
|  Proposed tree planting |  'Greenway' Connection |
|  Existing Open Space |  Access to open space to reinforce |
|  Improved open space |  WSUD Opportunity |
|  Vertical landscape opportunity | |



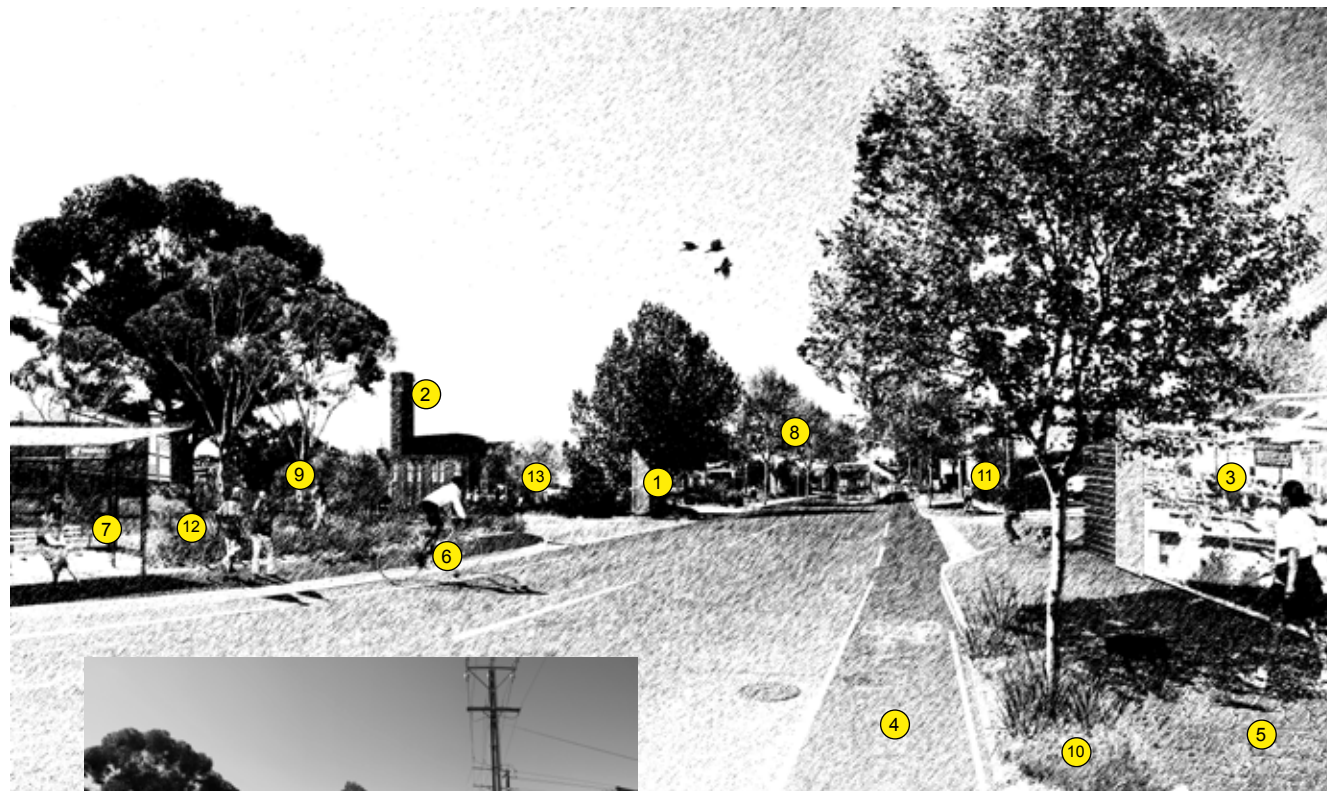


West Thebarton Road

Streetscape Upgrade

3.5 Illustrating the Master Plan Vision

The following illustrations depict key actions identified within the master plan strategies.



proposed vision



existing condition

Key Actions

A Shared Identity

- ① Improve signage at each street entrance to identify destinations and key businesses.
- ② Open views to significant heritage buildings in the precinct, to celebrate the precincts history and raise community awareness.
- ③ Integrate public art within the streetscape to reinforce the cultural values of the precinct and communicate its 'story' to visitors and the broader community.

Links and Connections

- ④ Improvements to bicycle paths and connections.
- ⑤ Upgrades to the quality of the footpaths throughout the precinct.
- ⑥ Establish a free bike hire service to allow ease of movement throughout the Hub, and to other destinations (eg RAH/ SAHMRI).
- ⑦ Improve the quality of bus shelters and promote the various transport options within the precinct.

Green Streets and Spaces

- ⑧ Increased tree planting and landscape to create a 'green corridor'.
- ⑨ Increased street tree planting along other side streets where possible.
- ⑩ Increased planting to road verges in the precinct incorporating water sensitive design (WSUD) principles.
- ⑪ Creation of 'green walls' along fences/walls to increase visual amenity .
- ⑫ Explore short-medium term activation of the BioSA site fronting West Thebarton Road.
- ⑬ Potential long term conversion of Thebarton Incubator and it's surrounds to community open space and facilities.



River Torrens Linear Park Trail

Southern Extension



proposed vision

existing condition

Key Actions

A Shared Identity

- ① Develop destinations and places of interest along the linear trail visible from the street network.
- ② Explore ways to integrate public art and wayfinding signage into the streetscape, linear park and open spaces.
- ③ 'The Wool Washers' a public art piece interpreting the past industry of the precinct.

Links and Connections

- ④ Improved connections to the Linear Park Trail
- ⑤ Continuation of the Linear Park Trail to South Road
- ⑥ Future additional pedestrian/cycle bridge connection linking the precinct to Holden Street Arts Precinct and Hindmarsh Stadium

Green Streets and Spaces

- ⑦ Improved landscaping and maintenance along the river edge



Action Plan

4.1 The Action Planning Process

The action plan for the Thebarton Technology Hub precinct provides a staged plan for the delivery of the actions identified within the master plan strategies.

These actions are divided into short term ('early wins') and longer term actions. By definition, short term actions are based on a 0-5 year timeframe, while the longer term actions are considered to be achievable or relevant within the next 20 years.

The plan concentrates primarily on actions within the public realm that can be led by Council, with the support of government, private stakeholders and community members where possible.

This action plan has been informed by the feedback provided by key precinct stakeholders and the broader community during consultation on the Draft Master Plan Report, which included:

- An online survey, with 26 respondees.
- Key stakeholder workshop and one-on-one meetings, engaging approximately 15 members of the local business community.
- Two community drop in sessions, with a total of over 30 attendees.

Through the online survey, detailed information was also able to be obtained from the participants regarding the perceived importance of specific actions within each of the master plan strategies, providing clear direction and insight for the further design and development of these actions by Council and other key stakeholders in the precinct's future.

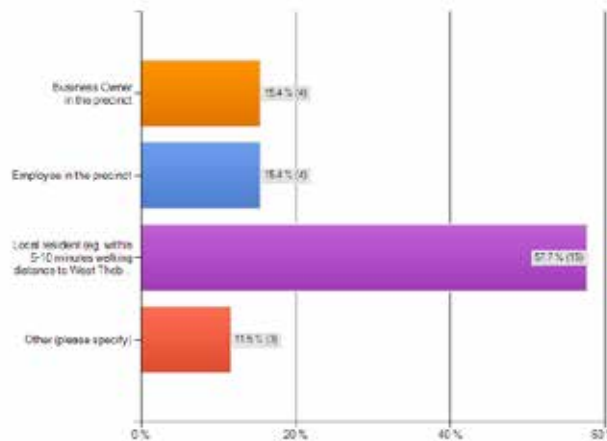
4.2 Community Feedback

Respondent Profile

The graph below provides a break down of the participants in the online survey and their connection with the Thebarton Technology Hub precinct.

The graph indicates a majority of the respondents (60%) are local residents within 5-10 minutes walking distance of the precinct with another 30% being either a business owner or work within the precinct.

These results tell us that a majority of the respondents (90%) who participated in the online survey live or work within or locally to the master plan study area.



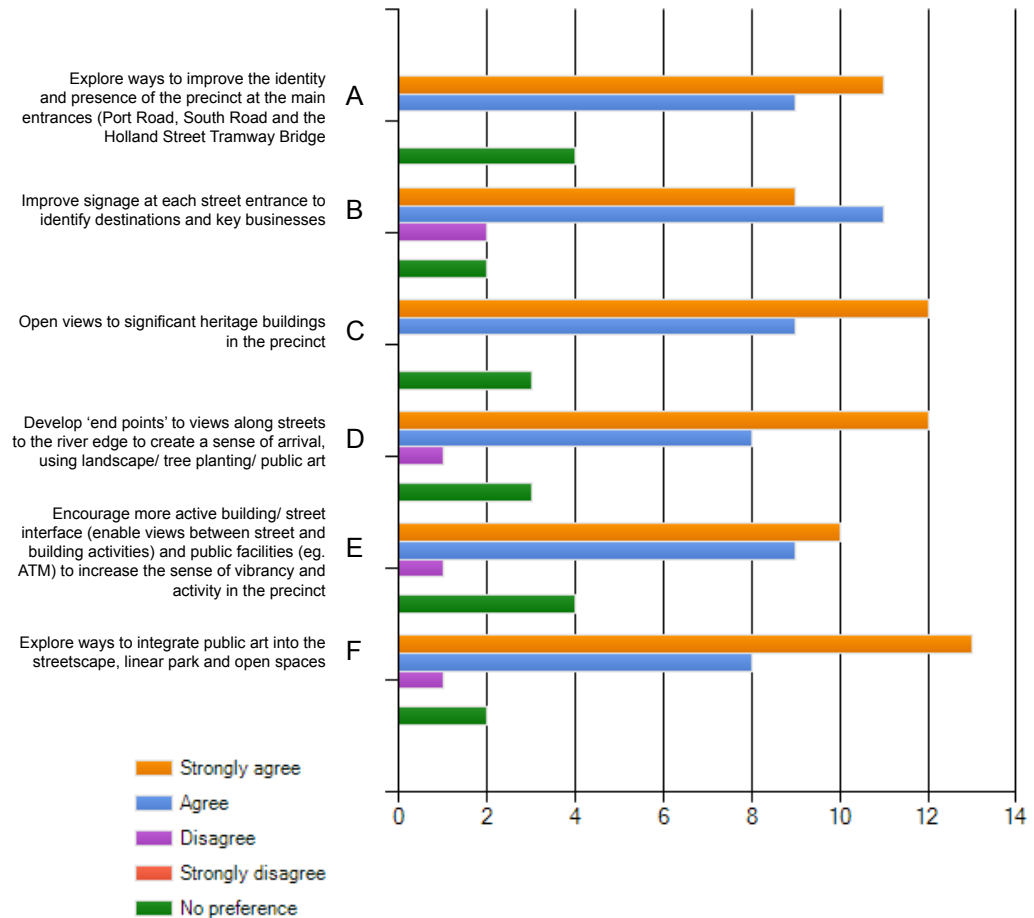
Project Strategy Feedback

The following graphs illustrate the respondent's level of support for the proposed actions detailed within the master plan's strategies, giving an indication as to the community importance of each proposed action and thus determining priority actions for implementation.

A Shared Identity Strategy

Reviewing the survey results compiled within the adjacent graph which reflect the respondents support for actions within the Shared Identity strategy, the most supported action from the respondents was to further explore ways to integrate public art into the streetscapes, linear park and open spaces, with more than 50% of respondents strongly agreeing with this action.

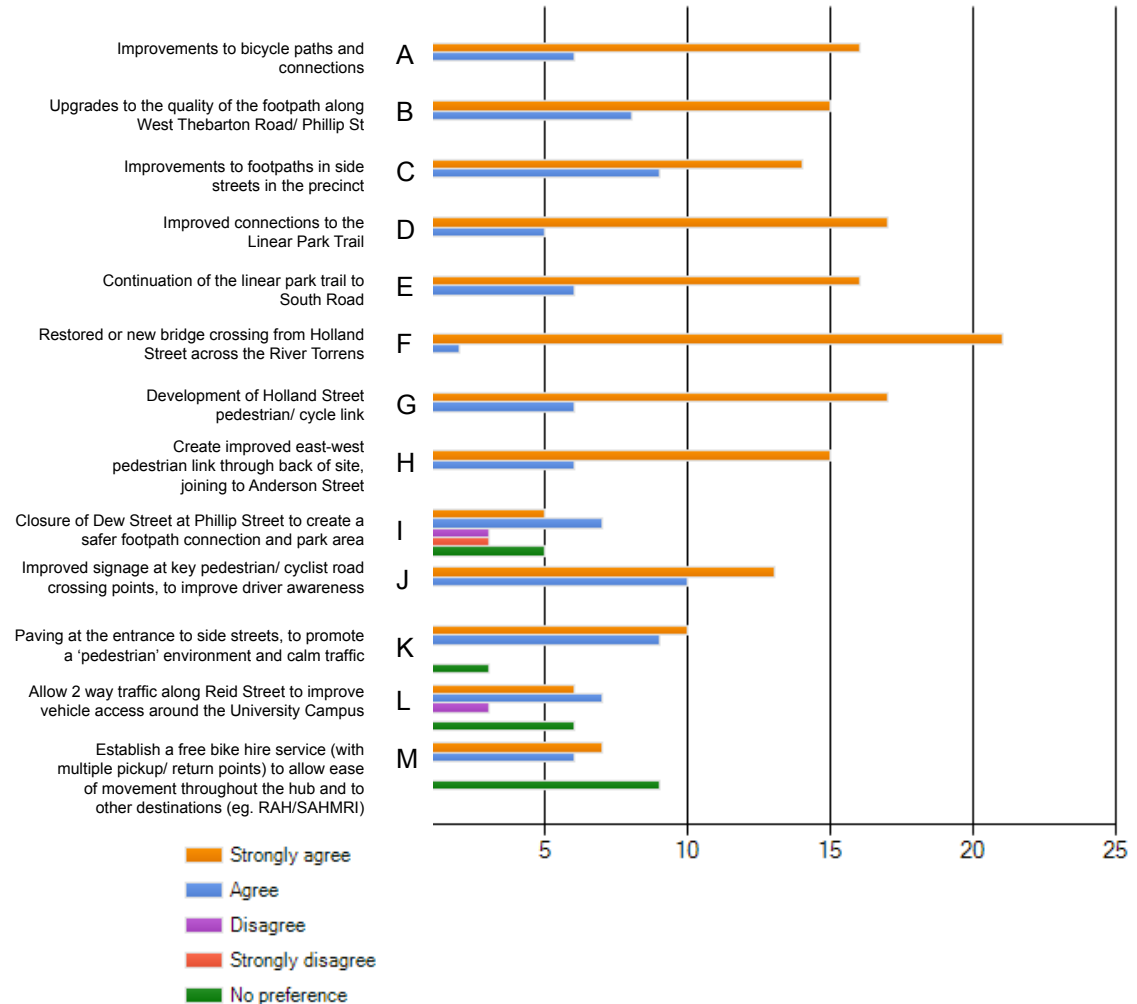
The highest percentage (less than 10%) disagreeing with a proposed action was to improve signage at each street entrance to identify destinations and key business.



Links and Connections Strategy

The survey results compiled within the adjacent graph reflect the level of support for actions within the Links and Connections strategy and illustrates almost 100% of respondents strongly agree with the restoration or provision of a new bridge crossing from Holland Street across the River Torrens.

Again a majority of respondents either agree or strongly agree with all actions within the Links and Connections strategy, however a key difference is seen in up to 13% of respondents strongly disagree with the closure of Dew Street at Phillip Street and West Thebarton Road, to create a stronger footpath connection and usable park area. There was also a minor level of objection to the idea of enabling 2 way traffic along Reid Street, as a means of spreading the traffic load (entry/exit) across Queen Street and Stirling Street.



Green Streets and Spaces Strategy

The adjacent graph illustrates survey results which indicate a preference and strong community support for increased tree planting and landscape amenity to the streetscape within the master plan study area, including the Torrens River, with a majority of respondents strongly agreeing with improved landscaping and maintenance along the river edge.

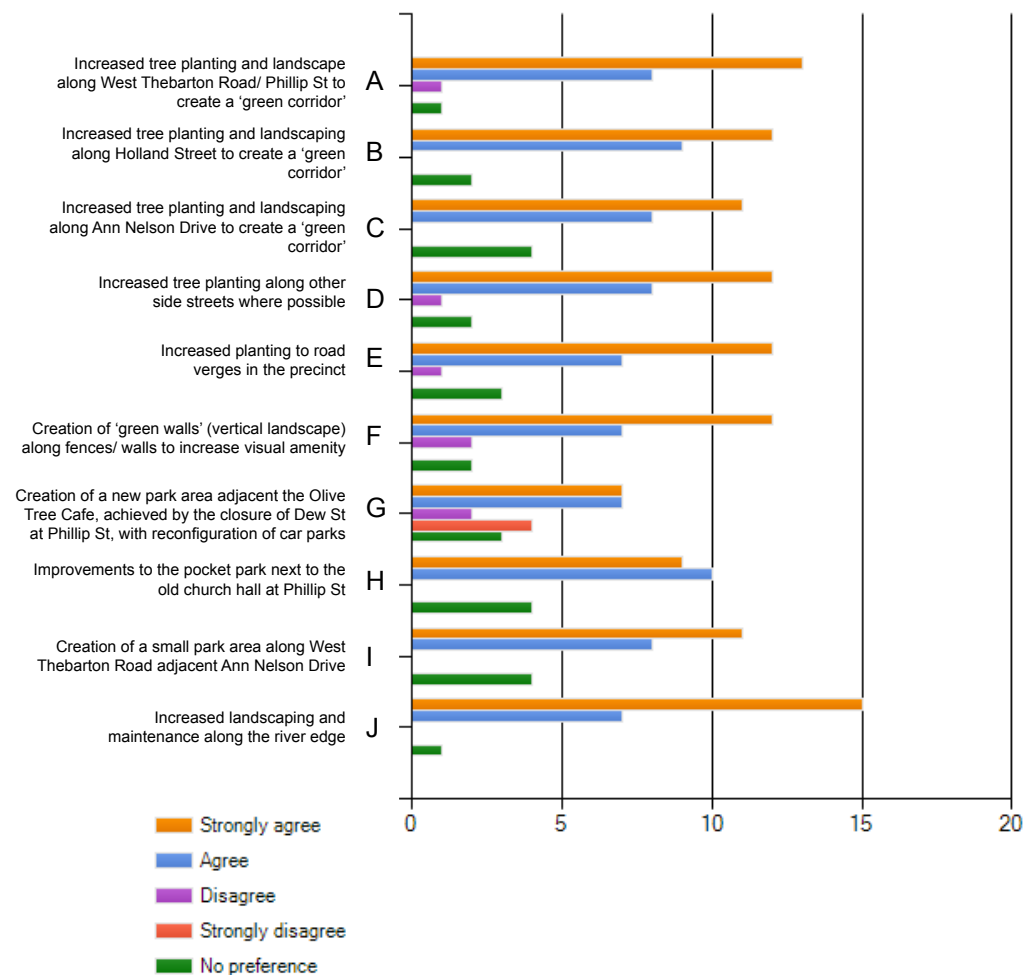
A majority of respondents either agree or strongly agree with all actions within the Green Streets and Spaces Strategy. A key difference, however, was action 'G' with up to 17% of respondents strongly disagree with the creation of a new park area adjacent Olive Tree café achieved by the closure of Dew Street at Phillip Street.

Summary of Strategy Feedback

To summarise the key results formed from the graphs which illustrated community response in support for the master plan strategies proposed actions, it is evident that:

- improved landscape amenity,
- public art
- greener streets
- improved connections to the river edge, and
- restoration of the Holland Street bridge crossing, are priority actions to be implemented.

Actions which appear not to be as unanimously supported, with evidence of strong disagreement, are those proposing the closure of Dew Street at Phillip Street



The Community's Priority Actions

The adjacent graph lists and prioritises the common responses from the surveyed community illustrating the most important actions across all three strategies to be implemented as part of the master plan.

It is evident from the graph that a majority of the actions rated as high priority by the community are based around improvements to pedestrian and cycle linkages as well as measures to 'green' the precinct.

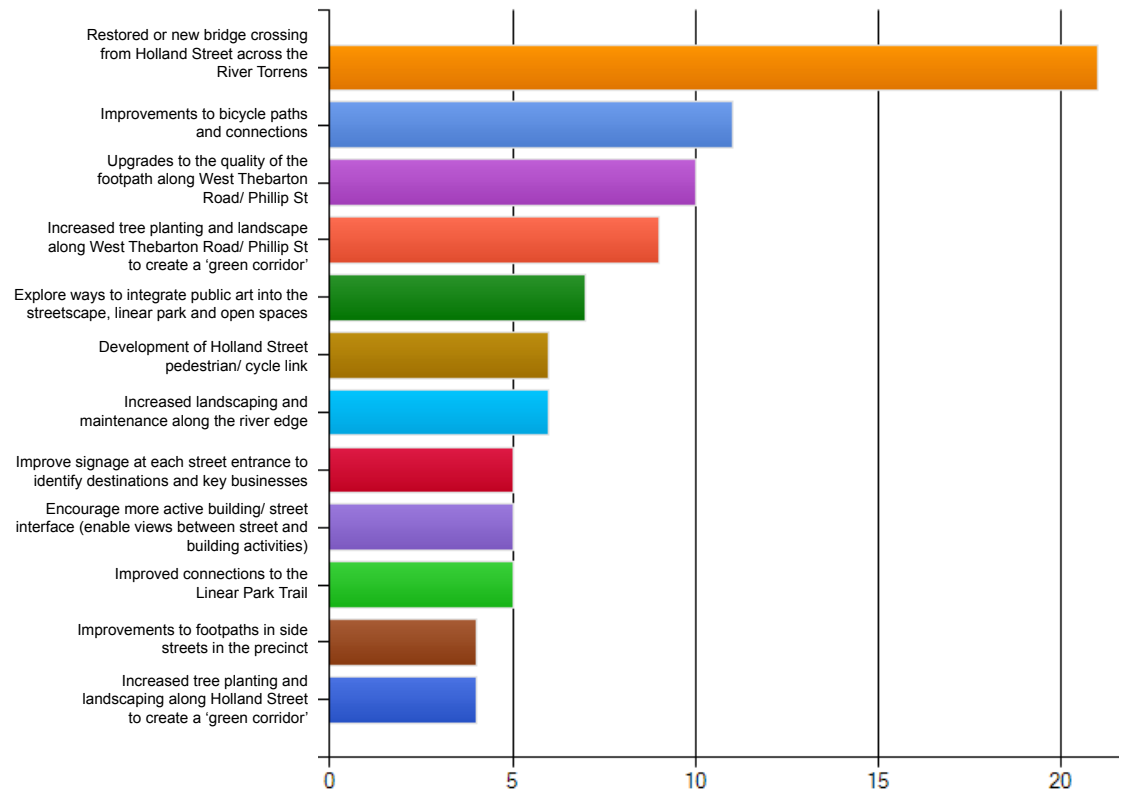
The action with the highest priority from the respondents perspective is the restoration or provision of a new bridge crossing from Holland Street across the River Torrens.

Following this, the top 5 most important actions are improvements and upgrades to footpaths and bicycle links as well as increased tree planting and landscaping along West Thebarton Road/Phillip Street.

Summary of Additional Thoughts and Ideas

The following dot points below list additional feedback and ideas provided by community respondents who participated in the online survey;

- Provide opportunity to cater for weekend visitors (eg- cafe destinations open over weekend)
- Remove undesirable businesses and organisations from the area
- Consider low speed shared use road spaces
- Consider the extension of Anderson Street as an east-west pedestrian right of way through the centre of the precinct
- Integrate the use of rustic and retro with contemporary public art
- Integrate creative centres with galleries, artist studios and sustainable, best practice businesses
- Develop an area with a point of difference, becoming a destination, not just one of many
- Allow for tourism opportunities such as a micro brewery



4.3 Action Timing and Influence

The following schedule provides a breakdown of the actions within each strategy, their anticipated delivery time frame (within the next 20 years) and the precinct stakeholders accountable for their delivery, as informed by the City of West Torrens.

Actions identified as being most important by the community are highlighted in orange, with darker shading indicating higher importance/priority.

Master Plan Strategy Actions	Indicative Timeframe			Delivery Role/ Influence			
	0-5 yrs	5-10 yrs	10+ yrs	CoWT	BioSA	Private	State/ Other
A Shared Identity							
A	Explore ways to improve the identity and presence of the precinct at the main entrances (Port Road, South Road and the Holland Street Tramway Bridge)						
B	Improve signage at each street entrance to identify destinations and key businesses.						
C	Open views to significant heritage buildings in the precinct						
D	Develop 'end points' to views along streets to the river edge to create a sense of arrival, using landscape/ tree planting/ public art						
E	Encourage more active building/ street interface and public facilities (eg. ATM) to increase the sense of vibrancy and activity in the precinct						
F	Explore ways to integrate public art into the streetscape, linear park and open spaces						
Green Streets and Spaces							
A	Increased tree planting and landscaping along West Thebarton Road/ Phillip Street to create a 'green corridor'						
B	Increased tree planting and landscaping along Holland St to create a 'green corridor'						
C	Increased tree planting and landscaping along Ann Nelson Drive to create a 'green corridor'						
D	Increased street tree planting along other side streets where possible						
E	Increased planting to road verges in the precinct						
F	Creation of 'green walls' (vertical landscape) along fences/walls to increase visual amenity						
G	Creation of a new park area adjacent to the Olive Tree café, achieved by the closure of Dew St at Phillip St, with reconfiguration of car parking.						
H	Improvements to the pocket park next to the old Church Hall at Phillip St/ West Thebarton Road						
I	Creation of a small park area along West Thebarton Road adjacent Ann Nelson Drive.						
J	Improved landscaping and maintenance along the river edge						

Master Plan Strategy Actions	Indicative Timeframe			Delivery Role/ Influence			
	0-5 yrs	5-10 yrs	10+ yrs	CoWT	BioSA	Private	State/ Other
Links and Connections							
A	Improvements to bicycle paths and connections						
B	Upgrades to the quality of the footpath along West Thebarton Road/Phillip St						
C	Improvements to footpaths in side streets in the precinct						
D	Improved connections to the Linear Park Trail						
E	Continuation of the linear park trail to South Road						
F	Restored or new bridge crossing from Holland St across the River Torrens						
G	Development of Holland street pedestrian/cycle link						
H	Create improved East-West pedestrian link through back of site, joining to Anderson St.						
I	Closure of Dew St at Phillip St/West Thebarton Road, to create a safer footpath connection and usable park area						
J	Improved signage at key pedestrian/cyclist road crossing points, to improve driver awareness						
K	Paving at the entrance to side streets, to promote a 'pedestrian' environment and calm traffic						
L	Allow 2 way traffic along Reid street to improve vehicle access around the University Campus						
M	Establish a free bike hire service (with multiple pickup/ return points) to allow ease of movement throughout the Hub, and to other destinations (eg RAH/ SAHMRI)						
N	Establish a shared pedestrian/cycle bridge linking Ann Nelson Drive to River Street						
O	Provide short-medium term car park area in NE section of BioSA land, to provide additional parking capacity for businesses in the immediate area						

4.4 Mapping the Actions

By mapping the location of specific actions throughout the precinct according to their anticipated delivery time frame, it is possible to develop an understanding of how the precinct's urban realm may develop over time, keeping in mind that the specific location and extent of actions may change as more detailed plans are developed for the precinct.

0-5 Years: Developing Precinct Presence

Actions identified for priority delivery within the next 5 years include, first and foremost, the upgrade or redevelopment of the pedestrian and cyclist bridge connection linking Holland Street to the north side of the River Torrens- reconnecting pedestrian access to the entertainment, cafe, restaurant and retail destinations along Port Road.

Within this initial period, the focus will also be to establish the Technology Hub's presence along West Thebarton Road/ Phillip Street. Through the development of a signage and branding strategy to promote the unique businesses and destinations throughout the precinct, the Hub's identity will be presented cohesively.

While recognising the function of West Thebarton Road/ Phillip Street as a transport link, the upgrade of the streetscape along this roadway, including footpath upgrades and increased tree planting, will also assist in redefining the precinct as a place to work and visit, and greatly improve cyclist and pedestrian amenity.

The undergrounding of power lines along this roadway (subject to award of funding from PLEC) will further enhance the visual amenity of this key roadway, while increasing opportunity for green infrastructure.

A Shared Identity

- A** Explore ways to improve the identity and presence of the precinct at the main entrances (Port Road, South Road and the Holland Street Tramway Bridge)
- B** Improve signage at each street entrance to identify destinations and key businesses.
- F** Explore ways to integrate public art into the streetscape, linear park and open spaces

Links and Connections

- B** Upgrades to the quality of the footpath along West Thebarton Road/Phillips St
- F** Restored or new bridge crossing from Holland St across the River Torrens
- J** Improved signage at key pedestrian/cyclist road crossing points, to improve driver awareness
- O** Provide increased off street car parking capacity for local business at the end of Murray Street, utilising BioSA land.

Green Streets and Spaces

- A** Increased tree planting and landscape along West Thebarton Road/ Phillips Street to create a 'green corridor'



0-5 Years: Developing Precinct Presence

5-10 Years: Creating a Better Place For People

Within the next 5-10 years, strong focus will be on improving the pedestrian, cycle and green infrastructure throughout side streets in the precinct, including the establishment of Holland Street and Ann Nelson Drive as key 'green corridors', to provide high amenity access north-south through the site.

Improvements to footpaths, including the establishment of an east-west pedestrian link through the back of the site, and paving treatments across street entrances will help to promote increased pedestrian movement throughout the precinct.

Alongside these improvements to the public realm, support from businesses and land owners within the precinct will begin to transform the building-street interface, and open views to key heritage buildings such as the Thebarton Incinerator.

A Shared Identity

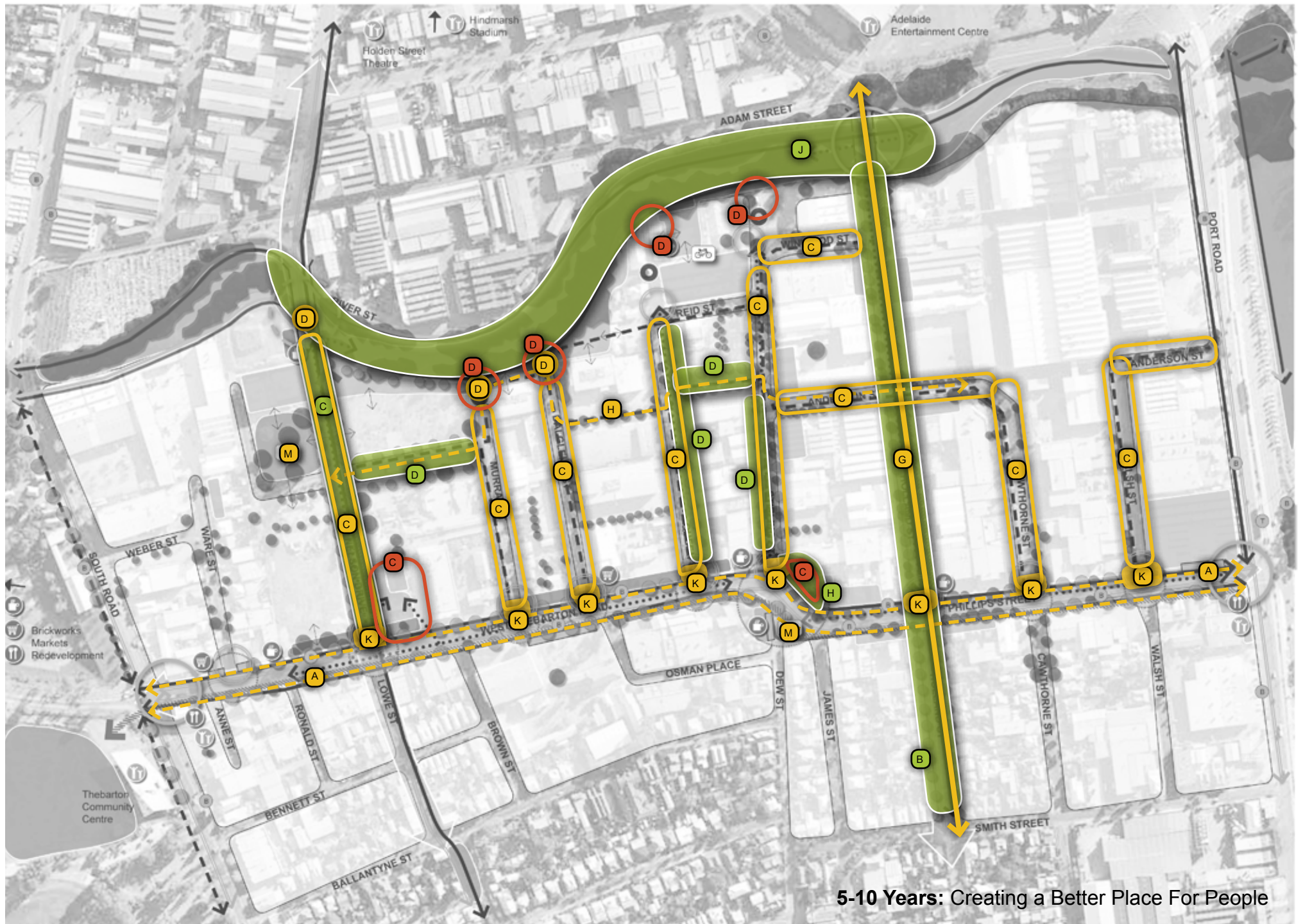
- C** Open views to significant heritage buildings in the precinct
- D** Develop 'end points' to views along streets to the river edge to create a sense of arrival, using landscape/ tree planting/ public art
- E** Encourage more active building/street interface (enable views between street and building activities) to increase the sense of vibrancy and activity in the precinct.

Links and Connections

- A** Improvements to bicycle paths and connections
- C** Improvements to footpaths in side streets in the precinct
- D** Improved connections to the Linear Park Trail
- G** Development of Holland street pedestrian/cycle link
- H** Create improved East-West pedestrian link through back of site, joining to Anderson St.
- K** Paving at the entrance to side streets, to promote a 'pedestrian' environment and calm traffic
- M** Establish a free bike hire service (with multiple pickup/ return points) to allow ease of movement throughout the Hub, and to other destinations (eg RAH/ SAHMRI)

Green Streets and Spaces

- B** Increased tree planting and landscaping along Holland St to create a 'green corridor'
- C** Increased tree planting and landscaping along Ann Nelson Drive to create a 'green corridor'
- D** Increased street tree planting along other side streets where possible
- H** Improvements to the pocket park next to the old Church Hall at Phillips St/ West Thebarton Road
- J** Improved landscaping and maintenance along the river edge



5-10 Years: Creating a Better Place For People

10+ Years: Building Precinct Connections

The extension of the Linear Park Trail along the southern side of the River Torrens, and the development of a second pedestrian/cycle bridge link across the River Torrens, to link Ann Nelson Drive with River Street, are two primary actions identified for the longer term development of the precinct. Together, these projects will vastly improve pedestrian and cyclist access between the site and surrounding community and business destinations.

Other actions identified within this time frame include further enhancements to the amenity of the streets, the establishment of a pocket park achieved through the closure of Dew Street, and increased planting to road verges- with consideration of water sensitive urban design (WSUD) measures.

Links and Connections

- E** Continuation of the linear park trail to South Road
- I** Closure of Dew St at Phillips St/West Thebarton Rd, to create a safer footpath connection and usable park area.
- L** Allow 2 way traffic along Reid street to improve vehicle access around the University Campus
- N** Establish a shared pedestrian/cycle bridge linking Ann Nelson Drive to River Street

Green Streets and Spaces

- E** Increased planting to road verges in the precinct
- F** Creation of 'green walls' (vertical landscape) along fences/walls to increase visual amenity.
- G** Creation of a new park area adjacent to the Olive Tree café, achieved by the closure of Dew St at Phillip St, with reconfiguration of car parking.
- I** Creation of a small park area along West Thebarton Road adjacent Ann Nelson Drive.
- J** Improved landscaping and maintenance along the river edge



10+ Years: Building Precinct Connections



Design Guide

The precinct's industrial built form heritage, along with its Torrens River edge condition constitute significant character features of the precinct, offering both the natural amenity of the river environment, alongside the 'grit', texture and iconic forms of the site's industrial past.

5.1 Role of the Design Guide

The Design Guide for the Hub provides a further level of detail, responding to these core character values to articulate a desired character applicable to the future development of streetscapes, built form and open space within the hub.

As such, the Design Guide will have a critical role in ensuring that future developments in the public realm recognise these existing values, while also contributing to the revitalisation of the Thebarton precinct.

Through considered selection of materials, elements and objects, and by exploring potential opportunities for community expression and input within the public realm, it will be possible to reinforce a strong identity and cohesive urban character for the Thebarton Technology Hub that visually and functionally reinforces the strategies and placemaking initiatives identified within the Master Plan.

The following pages represent ideas, opportunities and imagery of suggested character in relation to the urban design of the precinct under the themes of:

- Materials and Forms
- Lighting, Shade and Screening
- Signage and Public Art
- Landscape and Vegetation





5.2 Materials and Forms

The development of a select palette of materials and streetscape elements will establish greater visual continuity throughout the Hub, while also reinforcing the context or significance of certain areas within the Hub.

Street furniture, signage, fencing, shade structures, lighting and ground treatments should be selected or designed with consideration to the following:

- The role of such elements in reinforcing the character of the precinct through the use of shapes, forms and materials (such as clay brick, metals, timber) that either directly or abstractly reference the industrial and natural character values of the precinct
- The quality and resilience of materials, forms and details, to ensure that they have a significant lifespan, and are easily maintainable



5.3 Lighting, Shade and Screening

The 'walkability' of the Hub is greatly influenced by the amenity of the streets and open spaces, emphasising the need for considered street lighting to increase a sense of safety, shade to improve pedestrian comfort and quality approaches to screening and fencing to improve sightlines.

The following aspects should be considered in the provision of lighting, shade and screening:

- Resilience of materials and forms; utilise solid (steel/ timber) shade structures in unsupervised areas such as along the edge of the Linear Park and to bus stops.
- Explore use of high quality cafe umbrellas and seating to cafes and open spaces along West Thebarton Road to visually activate this space, while allowing for flexibility (moveable elements creating a more dynamic rather than static space).
- Pole or bollard lighting along key pedestrian walkways
- Feature lighting at the main entrances, to mark the arrival to the precinct.
- Explore feature lighting of significant land marks and destinations within the precinct: for example, tree uplights or light sculptures within the pocket park fronting West Thebarton Road, and uplighting of heritage built form visible from main roadways and walkways, including the Thebarton Incinerator and Church Hall.
- Given the limited capacity of the roadways/streetscapes to accommodate extensive tree and understorey planting, explore the use of high quality vertical landscapes (climbing plants) to soften walls and fences and improve visual amenity.
- Consider integration of public art to fences and screens, to tell the story of the precinct and create interest.
- Explore ways of articulating long fence lines, through variation of material, setback and landscape treatments, to enhance the street interface.

SHADE



SCREENING



LIGHTING



5.4 Signage and Public Art

The role of signage and public art within the Thebarton Technology Hub is significant in maintaining and progressing the cultural and community identity of the Hub, and community ownership of and connection to the public spaces within the Hub.

Given the increasing visitor numbers to businesses in the Hub, effective wayfinding signage is also a critical factor in creating a legible precinct, and in promoting and directing people to the destinations and services the Hub has to offer.

As a demonstration of intent, identity or social value, the role of signage and public art within the Hub may be further enhanced through exploring the following:

- 'Industrial' language of signage - 'supergraphic' text and bright/ visible colour selection (eg. the 'safety line' yellow currently featured on the Port Road Tram stop) as a consistent design theme for all entrance/ wayfinding signage.
- Develop a range of public art typologies including permanent works as well as temporal installations (such as sculptures or signage banners promoting community events or destinations)
- Innovative use/reuse of industrial and locally sourced materials within public art, shade structures or street furniture
- Consider the role of public art and signage in 'storytelling' to create a narrative or journey along key walking or cycling trails, relating to key destinations, features and heritage within the Hub.
- Well managed community involvement in public art design and implementation to foster greater ownership in the final outcome. Explore the potential opportunity to engage with signage designers/fabricators currently located within the Hub.



5.5 Landscape and Vegetation

The Hub's direct connection to the native/riverine landscape of the River Torrens Linear Park, along with its close proximity to recreational 'fields' of Bonython Park and Kings Park strongly define the character of the North, East and West edges to the Hub.

The precinct's internal landscape treatments, consisting predominantly of street tree plantings, presents a range of exotic and native species including:

- Plane Trees (*Platanus sp.*) along Phillips Street of significant character value (Plane trees have also been used along South Road, adjacent the brick works site)
- Native Frangipani (*Hymenosporum sp.*) and Mediterranean Hackberry (*Celtis sp.*) to Wood Street
- Mediterranean Hackberry (*Celtis sp.*) to Holland Street
- Brush Box (*Lophostemon sp.*) to the east side of Stirling Street
- Peppercorn (*Schinus sp.*) tree specimens along Queen Street and Stirling Street, noting the 'weed' status of the Peppercorn species within South Australia
- Jacaranda tree specimens (*Jacaranda mimosifolia*) along the South Western end of Anderson Street.
- Remnant Red Gum (*Eucalyptus camaldulensis*) specimens within the BioSA site and landscaped areas.

Design Principles:

The following aspects should be considered for the future improvement of landscapes within the Hub to enhance their community and environmental value:

- The development of a hierarchy of landscape treatments will be necessary to ensure that key streetscapes within the Hub are enhanced, while secondary streetscapes assume a lower maintenance landscape typology utilising climatically appropriate plant species.
- Increased understorey planting to median/verge strips with drought tolerant/ low maintenance species.
- Increased vegetation and tree planting to car park areas, to improve visual amenity.
- Maintain a consistent and select palette of plant species throughout the streetscapes and entrances to visually tie the precinct together.
- Given the limited opportunity for streetscape understorey planting, utilise mass planting design techniques in these areas, to achieve greater visual impact.
- Incorporation of water sensitive urban design (WSUD) principles. utilising water run-off from roofs, roadways and car park areas to irrigate landscape areas.
- Planting within parks, along the linear park, and within streetscapes should promote CPTED principles (such as clear sightlines and minimal hiding places) to increase the feeling of safety in these areas.

Suggested Plant Palette:

The following plant specimens are suggested for streetscape planting within the Hub, based on existing successful species and indigenous species to the region, to reinforce the Hub's existing landscape character.

- (I) Indigenous species
- (N) Australian Native

Tree Species:

Phillips Street/ West
Thebarton Road: (preferred species to be confirmed)
Secondary Streets:
Brush box (N), *Native Frangipani (N)*,
Mediterranean Hackberry,
Jacaranda, where used currently. *Chinese Pistache* may also be an appropriate street tree selection, due to its toughness, clean trunk and dense shade giving canopy.

Climbing Species:

Hardenbergia violacea (I)
Pandorea jasminoides (N)
Clematis microphylla (N)
Ficus pumila
Trachelospermum jasminoides

Understorey Planting:

Shrubs:
Leucophyta brownii (N)
Eremophila species (I)
Correa pulchella (N)
Atriplex semibaccata (I)
Hardenbergia violacea (I)

Grasses:
Lomandra 'Tanika' (N)
Isolepis nodosa (N)
Poa labillardieri (N)
Lomandra 'Little Con' (N)
Dianella caerulea (N)
Dianella revoluta (I)
Enneapogon nigricans (I)

Groundcovers:

Myoporum parvifolium (I)
Eremophila glabra (N)
Scaevola 'Mauve Clusters' (N)
Wahlenbergia species (I)

OFF STREET CAR PARKS



MAIN STREETS & PARKS



LINEAR PARK



Conclusion





6.0 Conclusion

Through a detailed process of analysis and consultative planning, The Thebarton Technology Hub Master Plan provides a vision for the revitalisation of the precinct- setting a clear direction that leverages the precinct's existing unique historical, cultural and geographical characteristics.

As key stakeholders of the precinct and project funding partners, the close involvement of BioSA and the City of West Torrens in the development of this master plan, together with direct engagement with the local business and resident community, has been instrumental in ensuring that the master plan strategies and actions identified in this report are not only relevant, but deliverable.

Continued involvement by all of these groups in the implementation of Master Plan actions, along with State Government engagement, will be essential in ensuring that these actions align with broader urban strategies and developments in the immediate region, including (among others) the 30-Year Plan for Greater Adelaide, City of West Torrens' Housing Diversity DPA , the redevelopment of South Road, the Thebarton Brickworks Redevelopment and the Bowden Clipsal Site Development.

The staged revitalisation of the Thebarton precinct's urban realm, as illustrated through the master plan strategies and action plan, will provide the physical framework for the economic and social development of the hub, attracting knowledge and new business to the hub, and improving amenity for both the precinct and broader community.

By creating better places for people to meet, interact and do business, these initiatives, together with strategies to increase business networking and collaborative thinking, will ultimately ensure that the Thebarton Technology Hub develops as a leading example of economic cluster development, intrinsically connected to the other technology, health and community destinations in Adelaide's inner north-west.

7.0 References

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