

# THE LINK MASTERPLAN

Part Two of this report details the Masterplan and recommendations that have been formulated from the outcomes of the extensive stakeholder and community consultation, literature research, site analysis, case study analysis, and concept options. The various sections of Part Two outline: **The Masterplan Vision**; a narrative that highlights the essence of **The Link experience**; **Urban Design Themes**; **Land Use**; **Building Height and Scale**; **Transport Summary**; **Architectural Expression**; and **Engineering and Environmental Summary**. The vision, themes and general strategies are suggested approaches for policy level measures and development principles. The land use, built form, transport and infrastructure summaries provide more specific recommendations and action tasks.

# THE LINK MASTERPLAN

## INTRODUCTION

The Masterplan is illustrated in **Figure 2.1**. **Figure 2.2** provides an indicative illustration of the built form intention for the new development. The design rationale for the Masterplan is provided by the four urban design themes and associated strategies outlined in 'The Link Details' part of this chapter.

## MASTERPLAN VISION

The vision of the Masterplan is to:

*Link the city centre and Northbridge with vibrant urbanism that embraces the city's lifestyle and character, and distinctly reflects Perth's 21<sup>st</sup> century aspirations.*

*Try to imagine a new precinct of urban life in the heart of Perth. A place for all ages, incomes, lifestyles and families, where areas of lively activity are mixed with places of respite. Imagine the creation of great streets and promenades that connect a diverse range of public spaces and truly integrates Northbridge with the city centre. People will enjoy safe and inviting movement by foot, bicycle, bus and car, through a pedestrian-friendly environment.*

*The Link will be a place where shops, housing, restaurants, services, entertainment and high-class transportation come together to create a special place for Western Australians and recognition on the world stage. The vision for The Link is the formation of a bold urban neighbourhood, a model for sustainable urban living woven into the fabric of Perth.*

The project area encompasses a site that has long been a mix of services, car parks, rail and bus infrastructure, framed by busy roads that create a hostile pedestrian environment. This is all about to change. With the redevelopment of the The Link, the city will have a place of new life, supported by a revitalised transit hub and an iconic Arena, with a new urban neighbourhood between. The contributions of the State Government and City of Perth to facilitate the sinking of the railway lines and bus terminal east of Lake Street is the primary catalyst to the redevelopment project.

The Masterplan vision is in keeping with the City of Perth's strategic aspirations for Perth as a *prosperous, liveable, accessible, attractive, functional, and environmentally responsible* city. The Link project, through the Masterplan, seeks to strengthen the growth of increased vitality and excitement, combined with the ambience of a city that is renowned for its natural assets, friendliness, landscape beauty and cleanliness.

The building scale and active street edges proposed in the Masterplan are qualities that remain consistent with the city centre. The urban design of the spaces and public realm will represent a new approach to the traditional Perth urban structure qualities.

In addition to the new approach to landscaping and architecture, The Link will establish a new sense of difference and change for the city through the Perth Arena, Celebration Place and the landmark building, the central transit and land use nexus, and the demonstration of world-class city centre living for Perth.

## MASTERPLAN PRINCIPLES

Key to the vision for the study area are the following guiding principles:

- A fundamental pretext of the Masterplan is that The Link project is seen as a **part of the Perth city centre**; and a part of the revitalisation and growth of the city centre aided by other projects such as the Perth Cultural Centre and the Mounts Bay Foreshore project. The Link is not a discreet entity, nor will it have an identity that tries to separate itself from its urban and social context in the city.
- **Creating new connections** for pedestrians and vehicles that optimise north-south movement opportunities and improve east-west movement conditions.
- The Masterplan seeks to ensure that new development will **fit the character of Perth** but will also provide a **point of subtle difference** through higher standards and quality of public realm and built form detail than is commonly seen in Perth. The intention is for the philosophy and quality of the new detailing to be gradually integrated/blended into the surrounding city fabric as the city evolves and as new technology and techniques develop.
- Generating a critical mass of activity from high office and residential densities that support the economic sustainability of the widest possible variety of commercial, retail and entertainment enterprises, to provide the foundation for a thriving day-time and night-time urban experience from Northbridge through to the city centre. The Masterplan generates the opportunity for about 1650 homes and over 220,000 square metres of office and commercial floorspace.
- Optimising the **transit oriented development's** environmental, economic and social benefits in relation to transit services, individuals and the

wider community. Optimising the amount of employment and residential development located at transit nodes will greatly assist increasing transit patronage, which in turn reduces greenhouse emissions and helps to activate the public realm.

- Supporting the broader sustainability goals of **efficient resource use** by providing the opportunity for people to: live in close proximity to employment; their daily needs, social facilities and leisure activities; reduce the need for private car use; and to assist in providing an alternative to the consumption of urban fringe land for new housing.
- Integrating **the Perth Arena** as an integral physical and cultural element of the city that plays a major role in forging a strong connection at the western end of the study area between Northbridge and the city centre.
- Ensuring the highest levels of **innovation and quality** in terms of public realm and architectural design, to create a distinct and aesthetically pleasing urban environment.
- Ensuring effective **place management** of the new and existing public spaces in the city is crucial to the success of Perth as a vital and enjoyable place. For The Link area in particular, public space management issues such as the daily activation, small and large events, day-time and night-time safety, commercial tenant mix and operation, maintenance, and attention to being flexible and evolving will need careful attention to ensure the design and detail of the physical elements translates to the social and cultural dimensions of the Perth experience.

Facts & Figures	
Project area	13.5 hectares
Dwellings	1,650
Affordable housing	est. 250 dwellings
Residential population	up to 3,060
Office space	est. 220,000m <sup>2</sup>
Retail, hospitality and commercial floor space	est. 24,000m <sup>2</sup>
Employees	up to 13,350
Public domain	4.25 hectares
Investment in construction projects	est. \$2 billion

## MASTERPLAN OBJECTIVES

Established as further detailed considerations of the guiding principles outlined above, a set of important study objectives have been followed during the formulation of the Masterplan and/or are directly reflected in the proposed physical form of the Masterplan.

All of these objectives fit under the umbrella of the 'sustainable development' concept. An underlying notion of the Masterplan is to promote an awareness of the principles of sustainable development in the design of buildings, location of land uses and provision of infrastructure.

Ahead of the sustainability objectives listed in **Table 1**, the following objectives play an important part in guiding the Masterplan outcomes:

- Provide a **focus for public life**, with the creation of an improved and new public realm.
- Optimise the **appeal** of the city centre and Northbridge and forge a connection of the two areas.
- Assist in supporting the revitalisation of the **Perth Cultural Centre**.
- Capitalise on the potential **transit-oriented development** benefits afforded the study area by its direct relationship with major transit systems.
- Provide opportunity and support for **private investment**, to create wider-spread economic benefits and drive the continued revitalisation of the city centre.
- Ensure that **public investment** is designed and implemented holistically to generate the improvement of social, economic, environmental and cultural conditions in the city centre.
- Provide housing with a **diversity** of dwelling types and sizes, and 15% **affordable dwellings**, to increase the opportunity for a variety of family types to live in the city centre.

Table 1: Key Sustainability Objectives

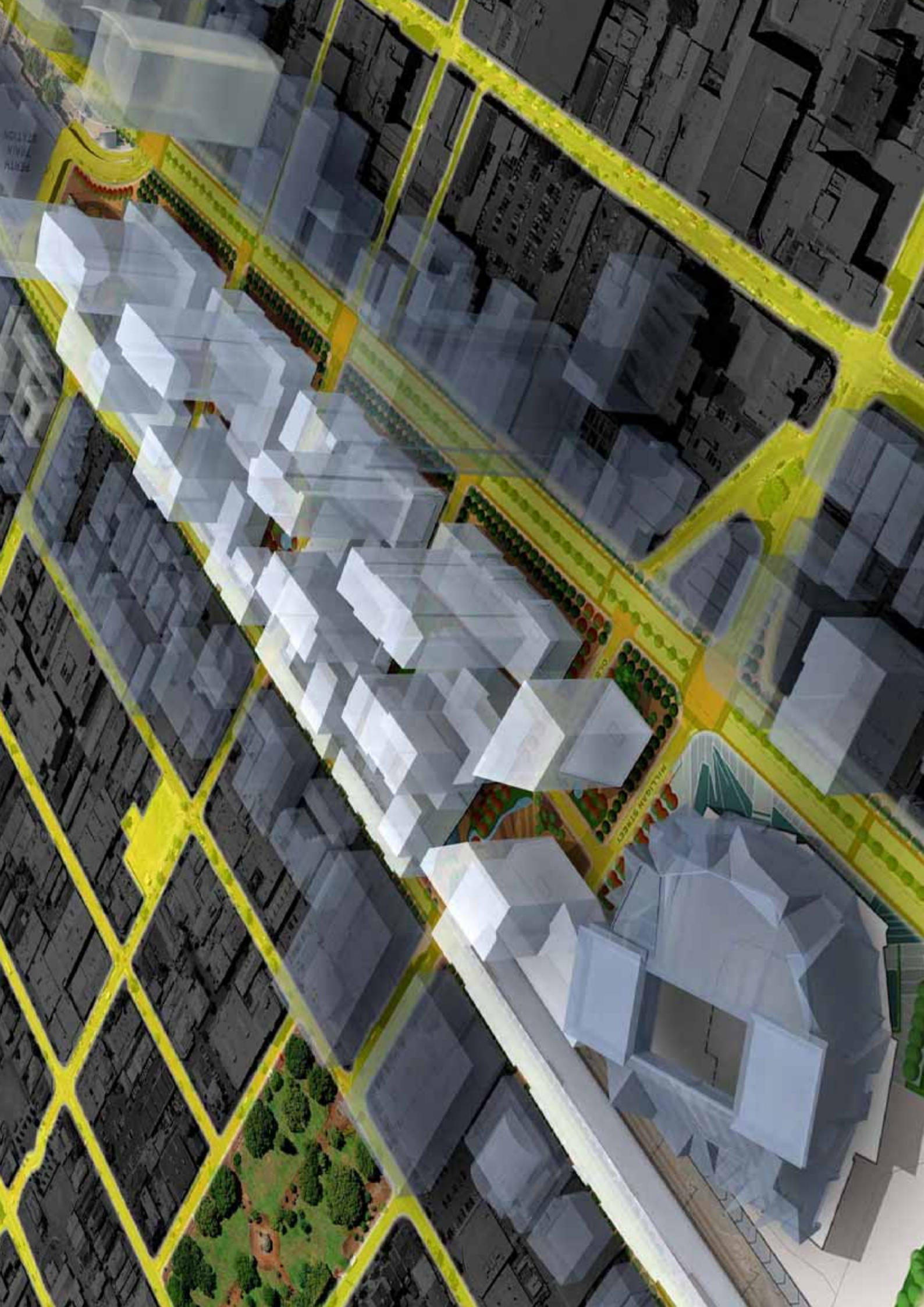
Key Performance Categories & Sustainability Priorities	Objectives
Urban Design Outcomes	
Mixed Use Development	A mix of land uses that creates employment and provides amenity and vitality
Heritage	Conservation and interpretation of cultural and built heritage
Dense Development	Optimum density to facilitate efficient use of land, infrastructure and resources
Walking & Cycling	Walking/cycling promoted through integration into the mobility network
Connectivity	Good connections to local destinations and public transport
Vehicles	Increased use of public transport and reduced car dependence
<b>Economic Benefits</b>	
Business returns	Stimulation of new business activity
Employment	Stimulation of employment
Household returns	Financial benefits for householders
Financial return	Adequate returns for the public via EPRA
<b>Environmental Benefits</b>	
Environmental Enhancement	Remediation, protection and enhancement of ecosystems
Green Buildings	Resource efficient, comfortable and healthy buildings
Emissions	Reduction of harmful emissions to the atmosphere
Water Cycle Management	Management of the total water cycle in a manner that promotes efficiency and preserves ecosystem health
Community Development	
Building Community	Stimulation of community development and sense of place
Place Activation	Attractive, accessible and safe places that enhance sense of place
Stakeholder Engagement	Meaningful engagement with key stakeholders in all facets of development
Diverse Housing	Accessibility, adaptability, affordability and variety in housing
Infrastructure	
Services	Cost effective services and assets
Contribution to Public Assets	Infrastructure development that benefits the broader community

These objectives, and the outcome of the Masterplan sustainability assessment, are provided in more detail in the separate GHD report.

## MASTERPLAN NOTES

1. Perth Arena and Plaza, with below-ground parking.
2. Milligan Street extension – for bus movement to and from the bus terminal and minor access for cars.
3. Proposed bus-only bridge between James Street and bus terminal.
4. Initial low-rise development activating Roe Street, that may potentially extend over railway land in the future.
5. Opportunity for building of mixed land uses over the railway.
6. Pedestrian bridge over busway and railway, creating a new open space.
7. Roe Street streetscape improved, including designated on-street parking, three metre shared path and widened footpaths.
8. Shared-surface street and linear park along Old Milligan Street alignment and over services corridor.
9. Entertainment Centre land can be developed independently, with commercial along Wellington Street and a predominance of residential development in the remainder.
10. Central square and low-key street with a pedestrian bridge to Roe Street, extending the connection from Shafto Lane.
11. Wellington Street to become a grand boulevard with a 14-metre northern promenade, a wider southern footpath, on-street parking and cycle lanes in a slow-speed environment.
12. King Street and Lake Street connected to form a two-way, pedestrian-friendly street within a vibrant public square.
13. Queen Street alignment extended to create pedestrian-oriented street and a small square.
14. East-west laneways/arcades for pedestrians, and limited times for taxis and service vehicles. Both lanes are aligned above the underground bus terminal concourse.
15. Horseshoe Bridge Reserve created as Celebration Place, with active edges along William Street and the northern face of the bridge.
16. A landmark building, covering the Fremantle line tunnel, with an active ground floor and a roof structure covering most of Celebration Place.





### MASTERPLAN APPROACH

The Masterplan has been prepared on the basis of the following key determinants:

- The Perth Arena is to be developed adjacent to the freeway, west of Milligan Street.
- The bus terminal is to be developed underground east of King Street.
- Access to the bus terminal from Fitzgerald Street is to be via a bus-only bridge crossing of the railway and Roe Street along the southern edge of the freeway from James Street.
- The Butler and Fremantle train line tunnels end approximately 50m west of Lake Street.
- Development above the Butler line tunnel is to a maximum of three storeys.

In the context of supporting the growth and maturing of Perth as an enjoyable and safe place for people, the approach of the Masterplan is based on:

- facilitating the creation of an urban environment that complements and supports the existing character and enterprises in the area;
- generating increased levels of activity, vitality and opportunities for living and working in the centre of the city; and

- recognising that the study area is just one part of the city's ongoing evolution and part of the greater focus on the wider improvement of the symbolism of the capital city.

In regard to this last point, the limitation of EPRA's jurisdiction to the project area boundaries means that it is not appropriate for the Masterplan to make proposals or assumptions for development or public realm improvements outside the project area. The only exception to this is to highlight the proposed bicycle infrastructure, west of Fitzgerald Street, suggested to integrate with the infrastructure provided in the Masterplan.

The Masterplan should set the tone, and serve as a catalyst, for the focussed improvement of the public realm further along Roe Street, Wellington Street and William Street, and into Northbridge, and for a higher level of redevelopment of land around City West Station, McIver Station and appropriate areas of Northbridge and West Perth. **Figure 2.3** provides an indicative illustration of how the Masterplan seeks to introduce a 'fine-grained' pedestrian movement pattern into Perth through the new urban structure. As illustrated in the diagram, The Link structure seeks to connect the 'offset' street layout of the city centre and Northbridge.



**Figure 2.3 Figure Ground**

## KEY DESIGN ISSUES

The purpose of this Section is to provide a summarised description and explanation of the key design issues and the proposed form of the Masterplan.

### Celebration Place

The key design issues concerning the proposal for the Horseshoe Bridge Reserve, which incorporates 'Celebration Place', are: whether to locate a building in the reserve; and the movement path(s) of William Street vehicle traffic.

In regard to the design of the reserve, the following options were considered:

- An iconic tower building, with a large apron canopy covering the public space;
- An icon structure with a large apron canopy covering the public space and a low level building built over the dive structure to the Fremantle Line;
- A low-level building built over the dive structure to the Fremantle Line; and
- A series of kiosks/pavilions with activation areas and localised roof forming a covered pathway between the Rail Station and the Bus Station.

The iconic tower building was selected as the best outcome for the following reasons:

- The Icon Tower provides the greatest potential for providing a 24-hour activated space. The potential for hotel/serviced apartments/commercial uses within the tower provide major activity generators within the plaza itself increasing the activation of Celebration Place and contributing to the vibrancy and safety of the space.
- The Fremantle Line dive structure forms a physical barrier within the centre of the reserve - the location of the Icon Tower allows for the dive structure to be integrated into the design of these buildings.
- The position of the Icon Tower aligns with the eastern building plane of the existing William Street edges, and its height expresses the William Street axis best.
- The building footprint, outside of the Fremantle Line dive structure will be about 1,000 square metres of the reserve. That leaves an area of about 7,500 square metres for the creation of Celebration Place, which is still a substantial size for events, particularly when compared to the 4,000 square metres of Forrest Place.

- The size and configuration of Celebration Place around the tower provides a high level of flexibility for a variety of activities, such as performances, festivals, events, busking, and passive use that all lead to the creation of a vibrant atmosphere.
- As with all options, the tower maintains Celebration Place as a pedestrianised space for public enjoyment, with a strongly identified pedestrian circulation network of hard and soft landscaping, which will reinforce the urban character and the 'sense of place'.
- The Icon Tower provides the opportunity for projections and lighting effects up onto the glass apron covering the space.
- The commercial uses and active ground floor of the Icon Tower, especially with a hotel, would provide greater activation and additional passive security of the space than the other options.
- The Icon Tower helps to create a celebratory sense of arrival for local, national and international visitors, particularly those arriving at the train or bus stations. Celebration Place and the tower would create the best first impression and provide a positive image that can add to the fabric of the city.
- The ability to visually appreciate and experience the aesthetic and form character qualities of the Horseshoe Bridge will be maintained, with the tower building set away from the bridge and the lower storeys of glass will enable views of the bridge through the building.
- The landmark building generates a defining sense of scale and importance to Celebration Place that is not offered by leaving the reserve open and having the low-scale, poorly activated bridge structure contribute little to the activation of the space.

In regard to the issue of the movement of vehicles along the William Street alignment, the Masterplan proposes to retain the Horseshoe Bridge as the only primary means for vehicles to move between Roe Street and Wellington Street for the following reasons:

- The Horseshoe Bridge has the potential to take three lanes of two-way traffic, most likely with two southbound lanes. Traffic studies have indicated that this is sufficient to service the traffic needs of William Street.
- A study of pedestrian movement and volumes through Celebration Place indicates that the space will experience upwards of 80,000 people each day walking north-south along the William

Street alignment and east-west between the King's Square/bus station area and the train station. The imposition of vehicles in such a pedestrian-dominated environment would create a major conflict.

- In addition to accommodating large numbers of people walking through the space, Celebration Place will be a major focus for public gatherings and events. The introduction of traffic into that environment would be a major impediment to the effective and enjoyable use of the area.
- Taxis and service vehicles will be able to move through the space during designated hours.

### King Street - Lake Street Connection

The Masterplan proposes that the connection of King Street and Lake Street occurs through an enclosed public space. Other options considered for the design of the connection included:

- Option A: A 20 metre wide street connection; the same width as Lake Street.
- Option B: The straight extensions of King Street and Lake Street, circulating one-way around a central public space, with a 50 metre opening along Roe Street and a 65 metre opening along Wellington Street.
- Option C: Straight extensions of the King Street and Lake Street building lines, as above, but with a two-way carriageway intersecting with King Street and Lake Street.

The enclosed square was selected for the following reasons:

- In conjunction with the other key public spaces provided in the Masterplan, this square provides much-needed urban space qualities and opportunities that are largely missing in Perth. This additional public space will be very useful in future years as Perth's population grows and attitudes towards the use of public spaces grows through experience.
- The new street directly joins King Street and Lake Street, without causing the traffic movement problems of Option B.
- The 'tightened' curve of the carriageway emphasises pedestrian-orientation of the space.
- The square is located midway between Newcastle Street and St George's Terrace, and creates a

vibrant transition point between the character of Northbridge and the city centre.

- The enclosed square provides the best micro-climate for public use, with a mix of opportunities for full solar access, shaded areas, and protection from (or exposure to) the morning and afternoon breezes.
- The enclosed square enables the continuation of the Wellington Street and Roe Street built form edges.
- The square maintains the same visual connection between Wellington Street and Roe Street as that achieved by having the Option A 'street-only' connection.
- The view-lines straight down King Street and Lake Street would be terminated by long views to landmark feature buildings, which would also be defining points along Roe Street and Wellington Street.
- The size of the square (about the same as Forrest Place) is an appropriate size for daily activation and for events, when closed to traffic.
- Under Option B, the main area of useable public space would be surrounded by constantly moving traffic, which would impede the safe use and enjoyment of the space, and reduce the variety of ways to activate the space.

### Public Space Provision and Activation

It is fair to say that the amount and type of public space provided in The Link project area is the issue that has generated the most divided opinions. The variance in the public's view on the amount of public space that should be provided in the project area has ranged from a desire by some for almost the entire area to be public space, to about half the project area being provided for public space, to some wanting less than what was shown on the Draft Masterplan. The final Masterplan indicates about 1.9 ha (15%) of the project area dedicated to defined public spaces, and about 32% of the project area in total is public domain.

The Masterplan started from the existing context of the city centre having Forrest Place, Central Park gardens and perhaps the cultural centre's plaza as the only key places for significant public gathering and engagement in urban spaces. Additionally, the broader city centre context shows numerous opportunities for the better design and use of existing open spaces that are well integrated with the fabric of the city centre – The Esplanade, Russell Square, Weld Square, Langley Park and King's Park are some examples.

The Masterplan adds much-needed flexible urban spaces to the city structure. The location of the spaces at the nexus between the vibrant areas of Northbridge and the city centre serves to benefit the city and to optimise the use of the spaces. In any event, the design and management of the spaces needs to ensure that they are safe and enjoyable at all times of the day, particularly when they are not heavily populated. The amount and type of public space provided in the Masterplan will meet the needs of existing and future generations, without being an unmanageable burden on the City of Perth.

It is important to recognise that the success of the proposed spaces, and indeed those throughout the city centre, requires a comprehensive and well-resourced place activation management system to ensure that the places are as safe, active, enjoyable and attractive as possible. As demonstrated in cities like Melbourne, excellent place management is an undeniably important key to a vibrant city centre.

### Milligan Street over Railway

The Masterplan has been designed with the direction that the current alignment of the railway will not be sunk west of Lake Street. Furthermore, the ability to establish another tunnel elsewhere, under Roe Street for example, is excessively cost prohibitive and the negative implications for undertaking works in such a location creates a situation that makes any alternative to the current rail project unachievable. Therefore, the ability to gain an at-grade street connection between Roe Street and Wellington Street to the west of Lake Street is not possible.

A number of options to generate a vehicle and/or pedestrian connection over the railway have been investigated. The Masterplan provides a pedestrian 'land bridge' as the preferred outcome for the following reasons:

- The future opportunity to provide an at-grade connection at Milligan Street will either be lost or involve substantial cost to rectify/refit the public realm and built form if major bridge structures and relating buildings are developed;
- Should an at-grade connection be provided in the future the costs of the bridge, land acquisition and the removal/relocation of the sub-station will be lost;
- Except for the Masterplan proposal, all options provide urban edges that are difficult to activate and will impact negatively on the proposed character of Roe Street and Milligan Street;

- All options have a negative impact on the activation of Roe Street. However, the public realm and underside of the bridge can be designed with vibrancy to provide an activated interface with Milligan Street and Roe Street under the bridge;
- All bridge/connection options have an adverse impact of the existing built-form; and
- All options take valuable pedestrian activation away from the activation of Milligan Street and Roe Street.

The Masterplan's land bridge will be designed to provide a long, gradual rise from north of Wellington Street with stairs and lifts over the six metre rise to clear the railway, followed by stairs and lifts that cover the 20 metres distance to Roe Street. A clear positive aspect of the Masterplan proposal is that it provides a 'future-proofed' opportunity to establish an at-grade connection with the city grid when future progress is made towards an underground city rail system and the current rail lines are relocated – with the land bridge being able to be easily removed and minor work to the abutting buildings creating a new street edge.

### Articulation of Public Realm Building Edge

One of the more appealing aspects of the urban fabric surrounding the project area is the 'fine grained' nature of the street edges; an outcome of the relatively narrow front boundaries of the properties in the area (generally in the order of 10-30 metres).

Whilst the building sites for the new development will be large in comparison to the older fabric of the city centre, it is important that the new development does not present a monolithic appearance to the city.

The Masterplan strongly promotes the creation of street edges formed by buildings that display a changing appearance of façades in a 'rhythm' that is compatible with the character of King Street, Lake Street, William Street and Wellington Street. The detailed design guidelines, to be prepared for the sale of sites within the project area, must ensure that this particular development consideration is effectively addressed and well-enforced.