URBAN STRATEGY

LINKING CITY CENTRE TO THE LAKE

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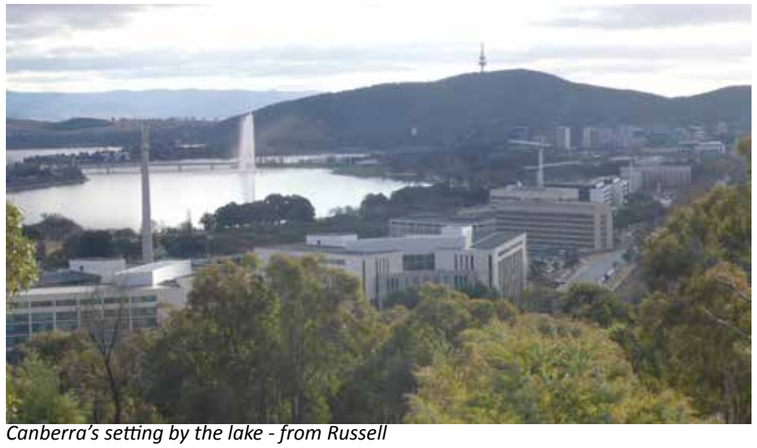
THE STRATEGIC CHALLENGE

1.1 EXECUTIVE SUMMARY

Canberra's dramatic landscape setting - West Basin



Canberra's setting by the lake - from Russell

Canberra's new and evolving experiences - New Action and lake foreshore

The Site and Existing Planning Initiatives

The project establishes a development framework for the broad southern flank of the Canberra's city centre. The project area stretches from the West Basin to Anzac Parade including Parkes Way, London Circuit, Canberra Olympic Pool and the existing convention centre, and large surface car parks. As much of the area is undeveloped, it is available for a series of important civic initiatives.

The City to the Lake project takes as its starting point work done by the ACT Government and National Capital Authority (NCA) in 2007 to determine how the area between Civic and the Lake can be better connected and best be developed. The new project identifies the engineering, public space and development issues for linking the City to Lake Burley Griffin. It also refers to community values articulated in the ACT Government report *Time to Talk 2030*.

Key elements that have been investigated include the feasibility of including a new multi-purpose stadium and providing a site for new convention and exhibition facilities to be called the Australia Forum. The Australia Forum proposal (outlined in a scoping study prepared for the Canberra Business Council in 2010) is evaluated to ensure that its business case is soundly based, its cost estimations are valid and whether West Basin would be the best location for such a development.

Since the commencement of this project the Commonwealth Government under the Liveable Cities Program has announced funding of $500,000 for the formulation of a planning strategy for the City. The new planning strategy aims to unlock the potential of the City so that it is more productive, connected, sustainable and liveable.

While the City to the Lake project will inform the City Plan strategy and will ultimately sit within the context of that strategy, the Liveable Cities grant application to the Commonwealth referred to Linking Canberra City to the Lake as a catalyst project.

Project Summary

The City to the Lake project provides a development framework for an urban extension of the City centre towards the lake, creating a vibrant urban waterfront that will enhance the public's access to and use of Commonwealth Park, the lake and major national and regional educational and cultural institutions such as the ANU and National Museum. The public waterfront will be the centrepiece of a mixed use City precinct along with major new public amenity, infrastructure and cultural attractions for the Capital Region. Overall the project provides for over 1 million square metres of gross floor area for up to 15,000-20,000 new residents located around West Basin, City Hill and along Constitution Avenue.

In order to 'future proof' the plan, potential locations for the Australia Forum, a new 30,000+ seat rectangular stadium and an aquatic centre have been identified in consultation with a Project Reference Group (PRG). However the plan can proceed to implementation while reserving these sites. The PRG comprised representatives of Canberra Business Council, National Convention Centre and Convention Bureau, Canberra CBD Ltd, Museum of Australia, Australian National University, Property Council, key professional institutes, National Trust, Lake Users Group and Heart Foundation.

The Strategic Challenge

Parkes Way along Canberra's lake shore is the legacy of another time and other priorities. In the 1950's Professor Sir William Holford's reworking of Canberra was based on the precepts of post war planning; zoning, separation of uses, a detached monumental centre, suburban expansion and motorways. These positivist interventions were completely at odds with the Griffins' conception of a gentle urbanity; a memorable landscape setting, compact blocks, a civic spine, and continuous access to a lakefront marked by distinct urban and landscape places. Viewpoints similar to Holford's prevailed not only in Canberra, but also Sydney, Brisbane and Perth, which all mistakenly alienated their primary city waterfronts with hostile motorway barriers.

Progressive cities are now reversing their motorway-dominated ways; San Francisco, Boston, Barcelona, Seoul and Toronto, amongst others, have either demolished or undergrounded inner-city motorways. They have learnt that giving outright priority to the boundless demands of the car is too great a price to pay. In so doing they have allowed much improved access to each city's waterfront, increased pedestrian spaces and local street connections. In so doing they have created physically and financially attractive sites for development and intensification.

The City to the Lake project offers the opportunity to remake whole the city centre, reaffirming its role as the vibrant centre of the region and enabling Lake Burley Griffin's public foreshore to become integral to the city's life.

In ambition and scope, Canberra's initiative to connect to the lake can be compared to the major water front projects in other Australian cities; Darling Harbour and Barangaroo in Sydney, Docklands in Melbourne and Perth Waterfront. Like them, the City to the Lake offers the potential to improve the city's relationship to its waterfront. Unlike them, Canberra is starting with a strategic public initiative, making it free to deliver broad public benefits rather than be captive to development interests. Unlike the controversies that these other Australian projects have engendered, in Canberra a decade of purposeful planning since the publication of the Griffin Legacy has given the city an endorsed way forward.

Canberra now has the priceless opportunity to learn the most telling lessons and implement the best plan.

A Transformative Urban Project

This project goes beyond the technical questions of suppressing Parkes Way by undergrounding. The project's possibilities are much broader; reintegrating Canberra City with the Central National Area, opening the northern foreshore parklands of Lake Burley Griffin, reimagining the character of Constitution Avenue, London and Vernon Circuits, Marcus Clarke Street and a myriad other dimensions. Functional considerations include the replacement of surface car parking, managing car traffic, services relocation, stormwater flows and water quality issues. Future public elements will evolve over the life of the project and into Canberra's optimistic future.

The plan also allows for a significant inner city population, with a greater proportion of the Territory's residential and community development to occur within the City centre in order to attract people from elsewhere in Australia and overseas. This is within the context of an ageing workforce in Canberra (Canberra's public sector has a greater skew to older persons compared to other Australian cities), the need to attract a greater skilled workforce and to reduce 'outflow' of retiring workers. Dwelling preferences among the likely source of skilled migrants is increasingly weighted towards city centre, apartment style living.

The urban project is the acknowledged means of successfully implementing major structural change in cities. To be successful, such projects must accommodate all these issues, encompassing them into a holistic plan that leaves open future possibilities. Beyond the defined specialisations of engineering, architecture, landscape, planning, and development, beyond the constraints of available funding, the urban project must bring all together in a resolved synthesis.

Integrated public transport supporting memorable places - Bordeaux

Embedding variation and diversity in the public domain - Le Marais, Paris

Canberra's Potential - high amenity inner-city housing - Bercy, Paris

Urban projects can take generations to be realised. The living city, for leading Spanish architect and Harvard Professor Raphael Moneo "*.. has less to do with the city imagined from utopian thinking. I like to see the city as a building on which we are all working but one that we shall never see completed. One cannot think that any figure is completely closed, that any city has attained its plenitude*". The Griffin Legacy reconnects with the precepts of the Griffins' foundation plan a century ago. This plan, which includes the remaking of Parkes Way, is a new start for central Canberra.

Place Making; Enabling Civic Life

Beyond the physical opportunity to better connect the life of Civic to the lakefront by suppressing Parkes Way, the City to the Lake project opens a new horizon of potential public benefits which can transform the ways Canberrans use, view and appreciate their city and its superb landscape setting.

The extensive lakefront parklands can be opened to benefit from the spill of life and activities from Civic. Major new public facilities, confirmed or not as yet imagined, can be added over time. These range from fixed facilities, such as a 30 000 seat stadium, a new city pool, renewed convention facilities, to events and festivals, such as Floriade. City to the Lake can share the potential activity and economic potential of the lakeside festivals with broader Canberra, enhancing a place that is already well-loved and used by its citizens.

American Professor Michael Sorkin, in Defend the Public Realm, stated; *"The most important single task in (city affairs today) is to rise in defense of public space. Threatened by the repressive sameness of global culture, contracted by breakneck privatization, devalued by contempt for public institutions, and victimized by the loss of the habits of sociability, the physical arena of collective interaction - the streets, squares, parks and plazas of the city - are in their free accessibility, the guarantors of democracy."*

City to the Lake offers just such tasks and opportunities for Canberra.

A Coherent Ground Plane

A major objective of the project is to create an attractive public domain that encourages the flow of people throughout the City Centre between home and work, as well as public and foreshore attractions. It is therefore essential that linkages convey people easily and comfortably through the street network in order to promote pedestrian and cycle movements. Critical to achieving this objective is the form of the ground plane.

The Strategy has successfully integrated an interconnected network of street spaces with the slope of the existing terrain to create a ground plane that is fully accessible to everyone in the community and that blends in seamlessly with the surrounding environment. The result is a collection of accessible streets that gently grade from the City to the lake, encouraging members of the public to freely move between the two, providing many visual opportunities to take in the lake as the ground plane draws people towards and the foreshore.

Transforming How We Move

As Canberra approaches its centenary, it is beginning to change from a low density city built around the car to one with greater emphasis on public and active transport.
The Linking Canberra City to the Lake project will make a major contribution to the emergence of the new Canberra. It will add substantial numbers of new jobs and new residents in the most accessible location in the ACT. Data from the 2011 Census shows 85% of people already living in Civic walk to work, and the percentage of people employed in Civic use public transport to get to work, which is a much higher percentage than the average for Canberra.

Hence the additional residential, commercial, retail and entertainment activity generated by this project will minimise the demand for additional road space and parking, and will support the development of Capital metro and a light rail network for the ACT.

The improvement in public transport which light rail will bring will in turn reduce the high reliance on the car which currently characterises Canberra, help shape future growth along the mass transit corridors and will make the city as a whole more sustainable.

Implementing this project will also help make the City centre more walkable, and provide more convenient links with the prime lake front areas in Commonwealth Park and Acton. This will encourage walking and cycling generally, with health and other benefits for Canberrans.

Relationship to the Capital Metro Project

Light Rail is globally seen as the ideal transport system appropriate for middle sized cities. As a surface system it has cost, time and flexibility benefits and provides an immediately identifiable presence for public transport in the streets. The Capital Metro Project could logically become an integral part of the Linking the City to the Lake project. It provides for the potential early release of high value land and contributes to anchoring the Civic end of the City to Gungahlin corridor.

Extension of light rail (LRT) through the City to Commonwealth Avenue and Constitution Avenue has been provided for in the planning framework. LRT could continue from the Northbourne Avenue median to Vernon Circle and then to Commonwealth Avenue and to Constitution Avenue, or around London Circuit. In both of these scenarios it is desirable to create a dedicated Right of Way (ROW) for the LRT.

LRT will have the capacity to carry 5,000 passengers per hour each way during peak hours along the main avenues to the City including Northbourne and Commonwealth Avenues. Currently these avenues move approximately 3600 people per hour in cars. LRT therefore has the potential to more than double the capacity of these avenues without the need to increase the road space. Within a dedicated ROW the travel times for LRT would be significantly lower than for cars.

Building Canberra's water-city identity: Lake Burley Griffin

Integrating a whole of catchment approach to water quality

Spaces for people - Munich streetscape

Water Sensitive Urban Design (WSUD)

Water Sensitive Urban Design (WSUD) measures can dramatically change water management in the public and private domain. City Centre to the Lake's urban design embraces a range of WSUD initiatives to reconsider the existing piped networks, re-direct overland flows and reduce the impact of pollutants entering Lake Burley Griffin.

A whole-of-catchment approach is necessary to achieve water quality targets, allowing sources of urban stormwater pollutants to be retained and treated within the catchment. Although opportunities will be initially constrained as the catchment is already mostly developed, it is prudent to continue to identify and implement WSUD measures as opportunities arise. Establishing a strategic vision is an essential pre-requisite in capturing these opportunities as they arise through the normal process of urban renewal and infrastructure augmentation within the catchment. The distributed nature of stormwater runoff generation presents the best opportunity for green infrastructure to be distributed throughout the urban area. This will realise positive outcomes including micro-climate improvement to mitigate urban heat, enhancing ecological biodiversity, and improving safe passage of floodwater through a connected network of green and blue corridors. Around the lake edge, a series of new water gardens can treat run off to deliver improved water quality.

The WSUD measures and ecological landscape elements are to be distributed throughout the project area, progressively incorporated into both the public space (street reserves, promenades and public parks) and in private blocks as they are developed. Examples of such private sector initiatives are the WSUD proposals at Campbell Section 5 and at Parkes Section 3, and a number of street-scale bioswales along Ainslie Avenue, Coranderrk Street and Constitution Avenue.

WSUD strategies are particularly relevant in the world's driest continent.

Costs and Benefits

Preliminary cost estimates for Parkes Way, Commonwealth Avenue and West Basin works have been estimated in the order of $210 million (with 40 per cent contingency). Based on a conservative sales rate of 150 dwellings per year, the project returns approximately $386 million to the ACT Government over a 5-7 year period. This equates to less than 50 per cent of the development potential unlocked by the initial infrastructure investment.

A detailed cost benefit analysis should be undertaken as part of the preparation of a business case should Government proceed to detailed planning phase. This should include extensive financial modelling and sensitivity analysis around timing options for investment in capital works and land release.

Heritage Considerations

In winning the 1911 international competition, the Griffins' conceived of one of the most far-sighted and resolved urban plans in the history of city making, bequeathing to Canberra an extraordinary legacy. Linking City to the Lake can be a project of enablement, which will extend the priorities and connections already set out in the Griffin Legacy, published by the National Capital Authority in 2004. The Griffin Legacy offered a far-sighted blueprint for re-imagining the centre of Canberra - a blueprint that intelligently considers ways of resolving the Griffins' plan with the city's present realities and future possibilities.

A hierarchy of elements and heritage sensitivities, 'The Heritage Design Principles', can clarify priorities and assist in decision-making to guide the area's reorganisation. The hierarchy is graded from National significance (the Griffin Plan) followed by Commonwealth, State and local significance. New development must firstly be responsive to the Griffin Plan, which identifies the original Griffins' design intention and is supported by the Griffin Legacy and the National Capital Plan Amendments 59, 60, 61. The Griffin Land, Water and Municipal axes, the Lake and Parklands, the National Triangle, Parliamentary Zone, avenues and street layouts all give structure to the City and should be the first consideration in the City to the Lake project.

Some elements from different periods, such as the Griffin formal landscaped lake and the naturalistic Lake and Parklands from the 1960's NCDC period, can co-exist.

Some elements such as the Griffins' formal city/street interface and Parkes Way from the 1960's NCDC period cannot comfortably co-exist without significant adjustment.

Consultation

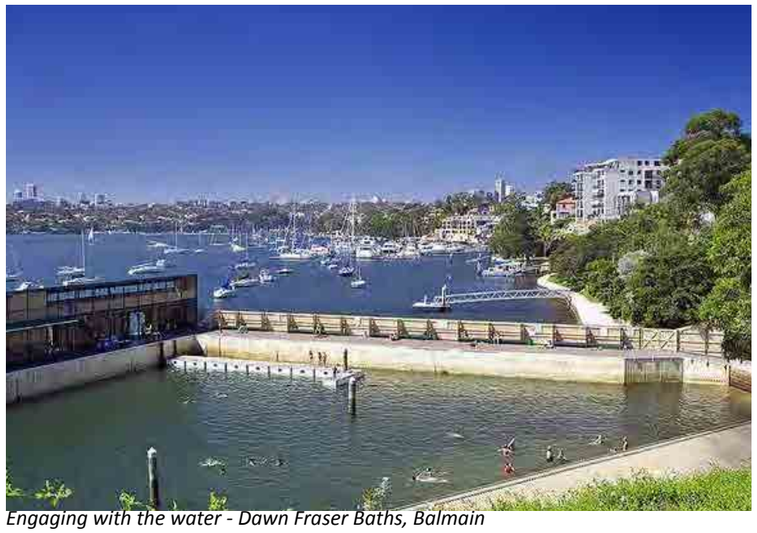
The plan seeks to embrace the future social, economic, cultural and environmental needs of Canberra's city centre and aspires to maximise public benefit.

To ensure that the City to the Lake's plan can achieve and meet its goals, a diversity of stakeholders in both government and non-government sectors engaged with a Project Reference Group (PRG). The PRG comprised representatives of Canberra Business Council, National Convention Centre and Convention Bureau, Canberra CBD Ltd, Museum of Australia, Australian National University, Property Council, key professional institutes, National Trust, Lake Users Group and Heart Foundation. A representative of The Griffin Society has also been involved in an expert design review involving the Government Architect and other nationally recognised design professionals. These groups were presented with and commented on options, the evolving project ideas, individual elements and design strategies.

The next phase of the project will extend the collaboration and engagement with the broader community. Key government, non- government, community groups and individuals can contribute to the further development of the plan throughout subsequent stages and implementation. This will further ensure that the vision for the project is clearly set out, allowing the needs of all stakeholders to be considered and acknowledged.

Infrastructure as complementary urban elements - Basel, Switzerland

Realising urban waterfronts - Vancouver



Engaging with the water - Dawn Fraser Baths, Balmain

Place

The site's positive attributes distinguish it as a key place in Canberra. These positives include;

- the major land holdings in Canberra's urban centre, almost all public land;
- a strategic location spanning between Civic and Lake Burley Griffin;
- direct access to Commonwealth Park, the most important civic park in Canberra;
- part of the broader lakeshore promenade, a recreational asset for pedestrians and cyclists girdling the basins of Lake Burley Griffin;
- a major stretch of the lake foreshore – more than 1,500 metres in length;
- at the crossing of two of Canberra's most important roadways, the north south spine of Commonwealth Avenue/ Northbourne Avenue and east west axis of Parkes Way;
- benefitting from Civic's pre-eminent role in Canberra's public transport system;
- connecting to many of the streets of central Civic;
- directly adjoining one of Australia's leading universities, the Australian National University (ANU);
- on the path to a major lakeside cultural centre, the Museum of Australia;
- the site is largely available, vacant urban land, with surface car parking and over-scaled roadways being the major current use; and
- the opportunity to complete and interpret the Griffins' celebrated city layout.

It is possible to think about the project in two ways.

Firstly a series of civic works to provide:

<u>A revised approach to arterial roads and through traffic</u>
Currently a number of movements on the crossing of Canberra's major arterials are becoming congested at peak periods. The re-working of Parkes Way can ease these congestion points, and re-set Canberra's traffic movements to face the next 50 years.

<u>A new connective street system</u>
The "lake side" of Griffin's Civic layout is currently truncated and lacking definition. Grasping Griffin's intention, the street system can be transformed to connect the centre to the shore, as originally intended. This will provide improved local pedestrian, cycle, vehicle and public transport opportunities. The extended streets can have a distinctive Canberra landscape quality, and create fine address for a range of new buildings.

<u>Removal of low grade surface car parks</u>
This part of Civic and the lakefront is currently blighted by low-grade surface car parking, poorly configured in relation to the destinations that they serve. The car parks are expansive tarmacs, with little landscape or urban quality – in effect a land bank awaiting a more useful and intensive future.

<u>12 new and 13 redefined Urban Blocks</u>
The expanded street system can create 25 new and redefined urban blocks. Currently undeveloped, these urban blocks can accommodate new public urban housing, workplaces and retail opportunities. The blocks can all benefit from excellent street address and easy connection to a greater Civic, expanding the place's liveliness and central place in Canberra. As the city centre, the downtown, this can be the most vibrant place in the burgeoning city.

Secondly:

<u>Increased housing and people living within the City precinct of Canberra</u>
Benefitting from the city centre location, there are great opportunities for new urban housing that can become the downtown neighbourhood for Canberra. A range of housing types can be accommodated, which can work hand in hand with the commercial and retail opportunities to make a diverse vibrant city centre. The new housing can benefit from the expansive lake and park front setting.

<u>Major Retail Opportunities</u>
Civic's expansion and the new lakefront can create major shopping opportunities. The key blocks on both sides of London Circuit have significant potential for both a large scale shopping centre and street edge activation. Developing a large block as a retail centre can balance the existing retail concentration around the mall. Further, the lakefront allows for a sophisticated retail presence addressing Canberra's great recreational attraction.

<u>Expanded Commercial Spaces</u>
The new urban blocks adjoining the existing office space in Civic enables significant growth opportunities for the centre. This should satisfy future demand for decades to come, and entrench Civic as the city's pre-eminent commercial centre.

Potentially Leading to:

<u>A New Urban Stadium</u>
A major new urban stadium, seating at least 30 000 people. The stadium can be used for events, and the crowds can enjoy the advantages of the city centre location, including its attractions, public transport and extensive car parking. The stadium can become the home ground for Canberra's successful football teams; the ACT Brumbies and the Canberra Raiders, and potentially to a future A-League soccer team.

<u>A New Convention/ Exhibition Centre</u>
A new central Convention centre, with associated exhibition spaces, foyers, and back of house. A major new venue to attract national and international conferences to Canberra, taking advantage of its position as the nation's capital. The centre will have the capacity to hold international events, and major business, cultural and educational conferences, benefiting from ANU's presence nearby.

<u>A New Canberra Pool</u>
Revitalising a Canberra icon, the Olympic Pool can be brought up to contemporary standards. It can be both an indoor and outdoor facility, readily accessible from Civic, and better related to the foreshore open space of West Basin and Commonwealth Park.

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PLACE - SITE RELATIONSHIPS

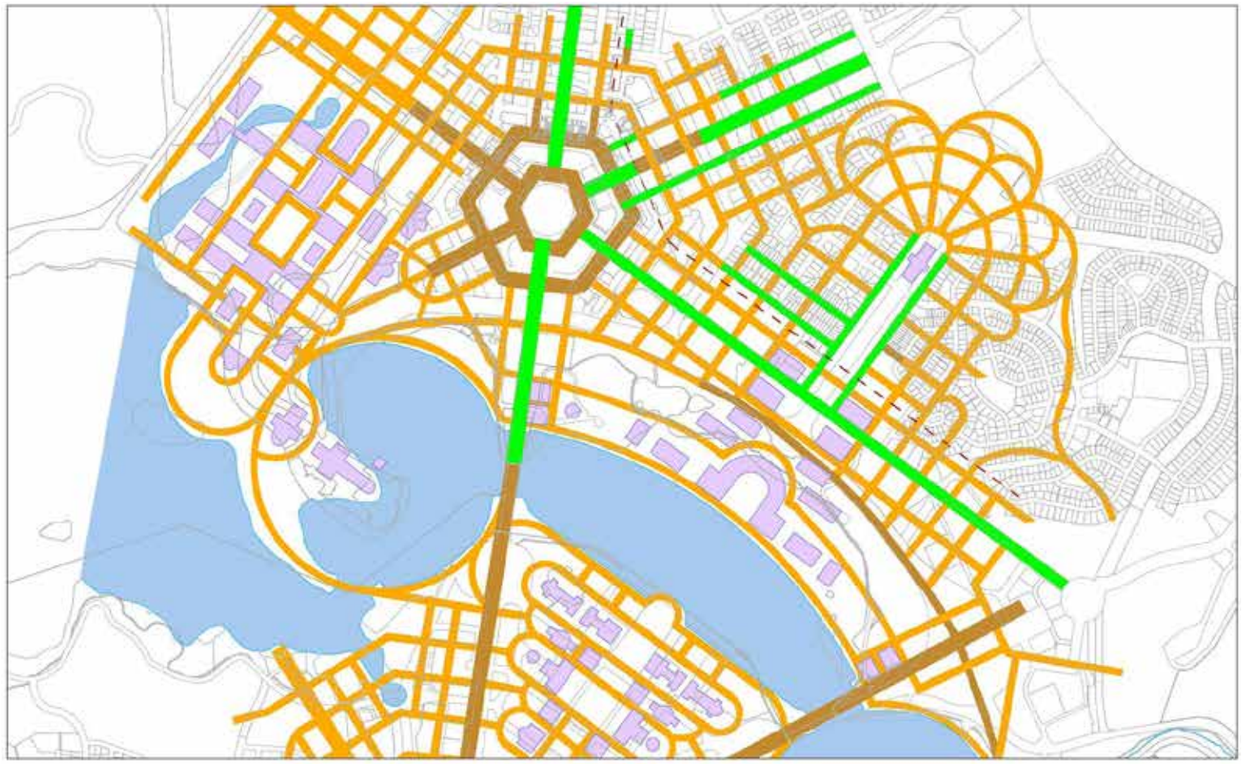
2.1 LAYOUT AND LANDSCAPE

2.2.1 The 1912 Griffin Plan

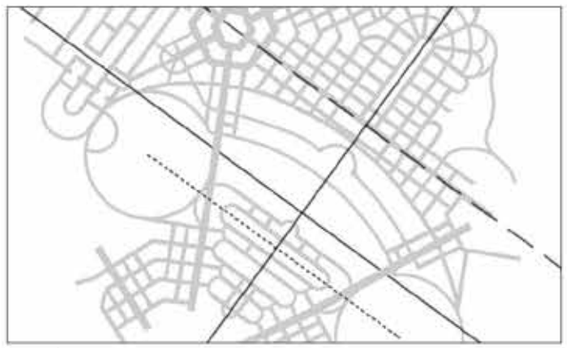
Walter Griffin and Marion Mahony's competition winning 1912 plan set out a clearly elaborated city layout, instinctively tied to existing and created topographic features. Due to its extraordinary character their scheme is illustrated in almost all reference publications on 20th century city planning.

Notable elements of the 1912 plan are:

- The 1912 Griffin Plan is structured by axes, which connect monumental urban elements to the landscape setting. The central axis connects Mount Ainslie to Capital Hill (now the site of Parliament House) with one cross axis connecting "civic centre" to "market centre" along Constitution Avenue;
- An expanded matrix of axes completes a triangular geometry with Commonwealth Avenue and Kings Avenue;
- Two secondary cross axes support the carefully mannered precise geometry of the lake edges, elaborated as three basins.
- The public building hierarchy influences their placement whether along or beside the layout axes;
- Public buildings are usually shown with multiple street frontages. North of the central (Griffin's segmental) basin a park was anticipated with public buildings in a landscaped setting;
- The water axis is reinforced by an ensemble of public buildings in the university area (north of the west basin);
- Two idiosyncratically placed public buildings were anticipated on a peninsular and a small island within the west basin; and
- Axial view corridors across the central basin and along three basins in series anticipate a rich and refined water setting for Canberra.

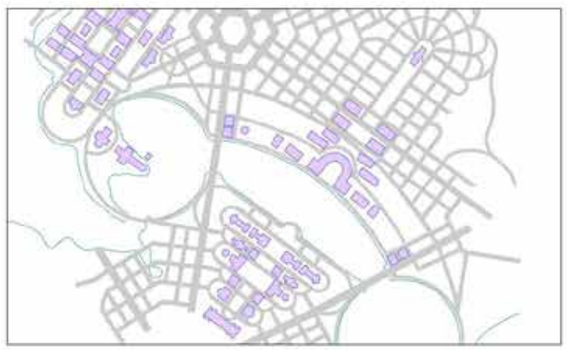


Griffin Water Edge
Griffin Proposed Buildings
Griffin Proposed Street
Griffin Street Realised with changes
Griffin Street Realised

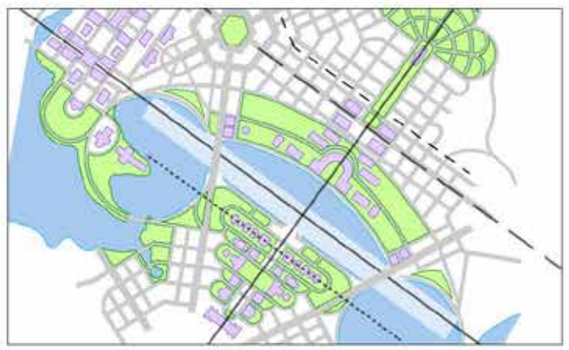


Layout

Layout, Lake + Parklands



Layout + Public Buildings



Generating Urban and Topographic Axes

2.1 LAYOUT AND LANDSCAPE

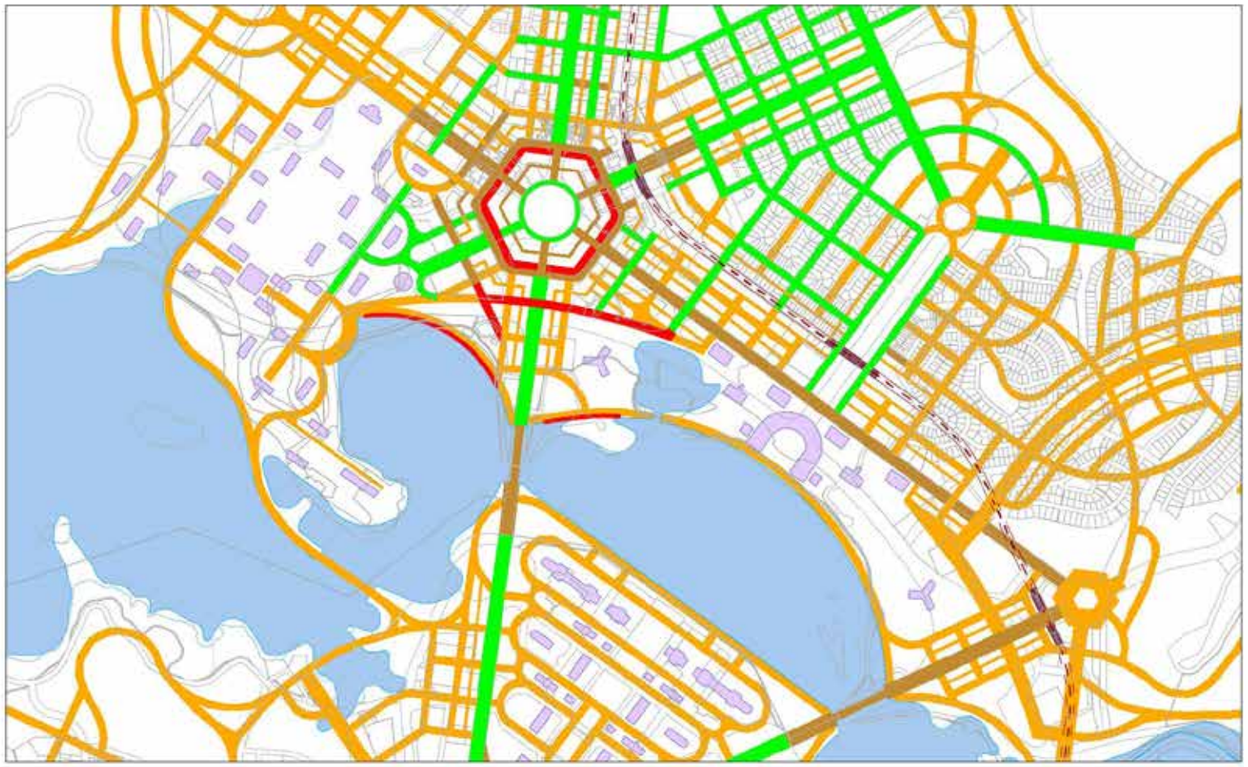
2.2.2 The 1918 Griffin Plan

By 1918 the Griffins had the benefit of working over their city plan for a number of years, working with the client group, other experts and visiting the site. Many aspects of this plan take the foundation of the 1912, adjusted and improved through design development. The 1918 plan forms the basis of the 1925 Gazetted Plan which established the main axial lines of the City.

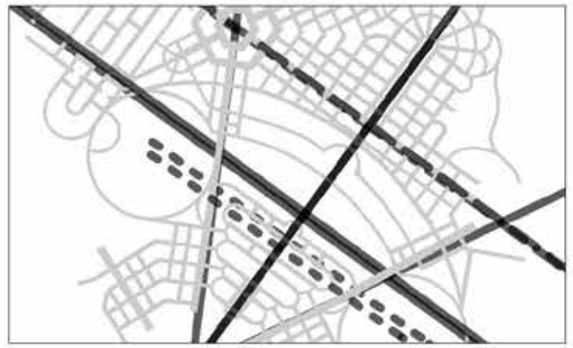
Notable elements of the 1918 plan are:

- The recast plan retains the structuring axes. The urban layout is refined with street hierarchy;
- Boulevards, edge streets and lanes are anticipated and expressed around the heavy rail corridor supporting civic, with important streets crossing over;
- The university has lost its connective street network;
- The geometry of Griffins segmented basin is made fuller, almost doubled in width on the Mount Ainslie axis. The clarity and purity of the Lake Basin its northern edge is eroded by the addition of a park pond and promontory;
- The west basin edge street and bridge has a less elegant coherent geometry when compared to the competition plan;
- Public Buildings between Constitution Avenue and the lake reinforce the street network, and keep open lateral view corridors along cross streets and anchor park corners;
- Each of the public building footprints was reduced significantly, making those in the university appear “cast adrift” and unanchored; and
- The visual play between the three basins is retained in its essentials.

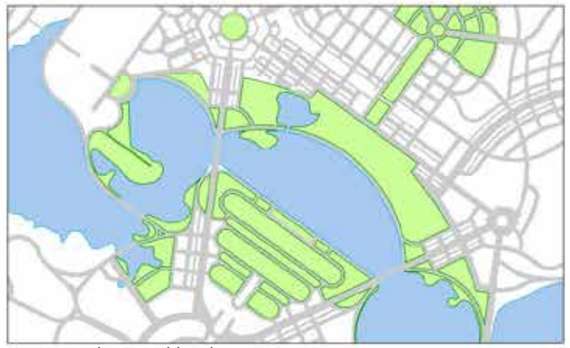
The potential of these relationships has been almost entirely subverted by the placement of the Commonwealth Avenue and Kings Avenue bridges in the 1960s. The placement of their solid abutments has denied the long vistas anticipated in Griffins plans.



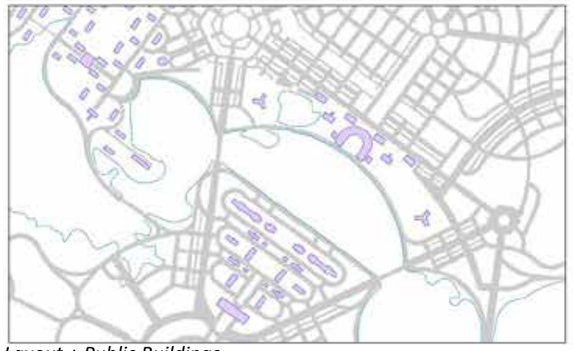
Griffin Water Edge
Griffin Proposed Buildings
Griffin Street Realised
Griffin Proposed Street
Griffin Street Realised Altered
Griffin Street Realised and Demolished



Layout



Layout, Lake + Parklands



Layout + Public Buildings

Generating Urban and Topographic Axes

2.2 URBAN CANBERRA

2.2.1 Precedent City Urban Matrix

Cities today benefit from competition and comparison. Such comparisons can illuminate not only their economic, social and cultural traits, but also aspects of their physical characteristics.

The Urban Matrix is a graphic comparison in plan of Canberra with contemporary Australian and international Cities.

Streets and Parklands

Each of the cities studied have, to a greater or lesser extent, a park network associated with a significant water body. The continuity and interconnectiveness of Zurich and Adelaide's urban streets and city parklands ensures that they are a walkable and enduring piece of the city. The absence of motorways significantly assists the ability to walk and cycle with ease.

Disconnective Elements and Underutilised Urban Land

Disconnective elements including motorways, railways, expansive industrial uses and surface carparking are present in a number of studied cities. Those cities with the more successful urban activity, vibrant life and quality streets have fewer disconnective elements affecting the public domain lands. The appropriate valuation of urban land results in a reduction of surface carparks replaced over time by contributory built form and program.

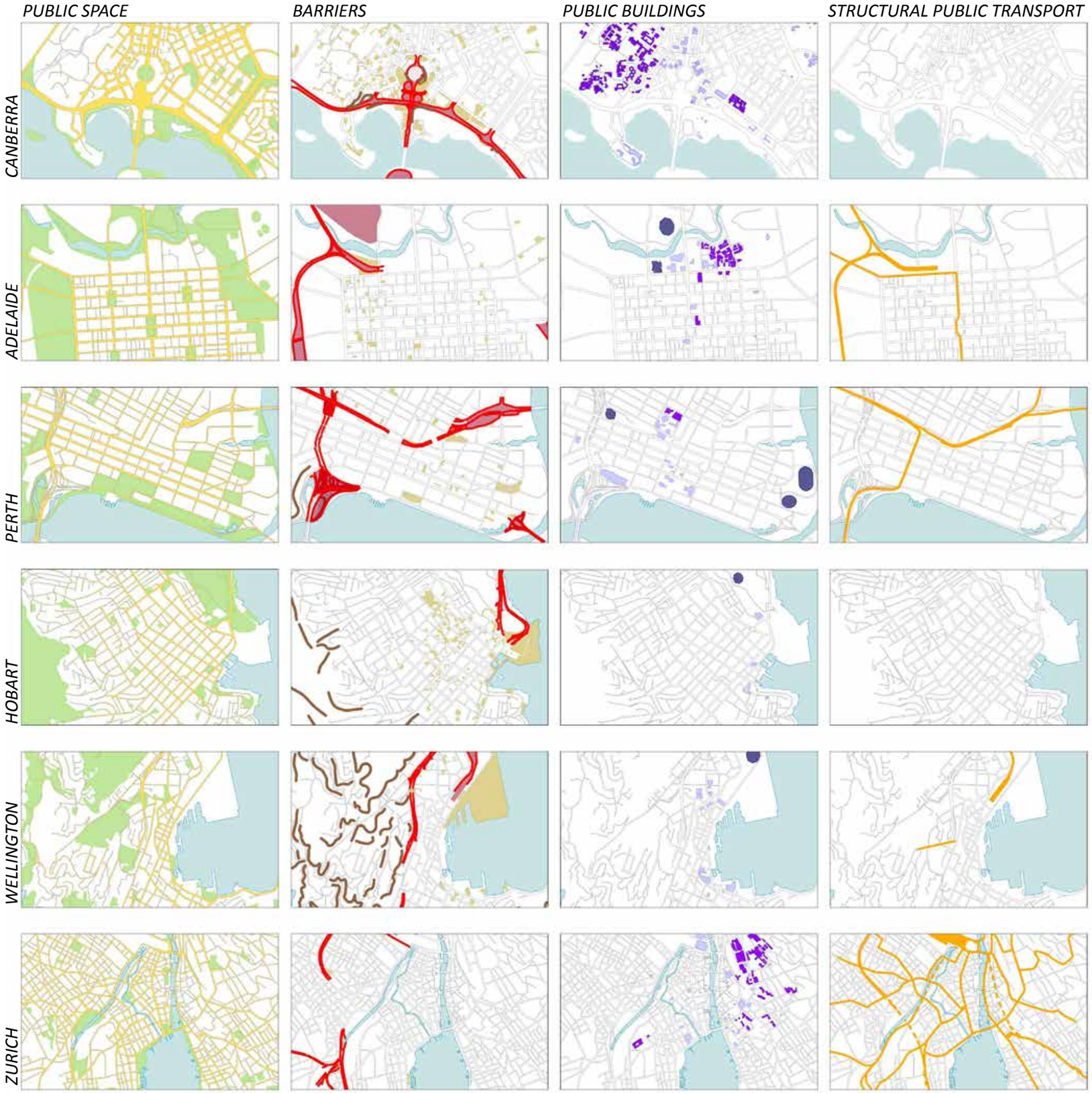
Public Buildings

Public buildings are located to reinforce and bolster each city's status and identity. They administer the city, state or nation itself and build a cultural inventory through successive waves of local and national investment.

Each of the cities contains a mix of cultural institutions - notably Adelaide, Zurich and Canberra's significant universities, and Perth, Adelaide, Wellington and Hobart's sporting facilities and museums. It is these public assets that identify and exemplify each city's global, regional and local significance.

Structural Public Transport

Urban railways, metro, light rail and structured busways have the ability to structure or restructure the city and provide lasting mobility and economic support to the citizens of a city. A robust public transport network lessens the reliance on private motor vehicles and reduces a city's greenhouse emissions, traffic congestion, noise and local air pollution.



2.2 URBAN CANBERRA

2.2.2 Canberra's Urban Condition

Canberra's Centre (Civic) is radially planned from a central park on City Hill. It stretches more than a kilometre from the Australian National University in the west to the suburb of Reid in the east. To date, the built form is more coherent between the middle and outer radial ring streets and Northbourne Avenue.

Streets and Parklands

Canberra has a generous inventory of parks and streets, but missing links in each walking, cycling and public transport network create limitations to the way its citizens access various parts of the inner city, in turn creating a reliance on the motorcar.

The realisation of a coherent street network is visible in the north and east of inner Canberra adjacent to Civic. An urban quarter exists between City Hill and the University of 2-3 sections in depth, connecting well proportioned blocks around the western edge. Large scale and mainly undeveloped blocks in the centre and south-east are unwalkable and promote oversized building types.

An almost cohesive string of parklands front the lake. The major parks of City Hill and Glebe Park complement the larger urban blocks.

Disconnective Elements and Underutilised Urban Land

A large number of surface car parks and undeveloped lots afford Canberra a substantial land bank to realise positive urban consolidation around and throughout its centre.

Parkes Way is a wide public reservation. Its current high-speed condition is disconnective and alienating. The roadway's speed criteria and wide turning radii are intimidating and inhospitable for pedestrians and cyclists. There are no adjacent paths for these users. The overly-wide and poorly fronted corridor alienates and under values the urban capable land.

Parkes Way and its associated motorway connections form the single largest element preventing inner Canberra's connection to Lake Burley Griffin and its parkland edges.

Public Buildings

Canberra has a suite of public buildings distributed in and around its city centre. The Australian National University to the west of Civic sits in a broad campus at the foot of Black Mountain and is itself the size of Civic.

The Australian War Memorial and National Museum of Australia are peripheral but nationally significant monuments. Whilst the War Memorial is well connected on axes and a legible street network, the museum is isolated by water and a lack of street or other public connections to the lake or back to Civic.

Structural Public Transport

To date Canberra has suffered from no structural public transport (train, tram, structural busway).
Buses form the basis of a public transport system which currently shares road space with private vehicles.

Plans to create express bus routes with dedicated lanes, and the introduction of light rail has been more recently investigated through the announcement of Capital Metro. The introduction of public light rail will transform the way people access and engage with the city centre and realise the urbanity envisaged by the Griffins and by recent plans such as the Griffin Legacy.

Canberra's contemporary urban condition. Study area shown dotted white

Street Reservations and Parklands

Man-made / Natural disconnective elements and Alienated or Underutilised urban lands

Civic, Institutional and Major Event public buildings

Structural Public Transport

2.3 CIVIC AND THE LAKEFRONT

2.3.1 Canberra's Street Pattern

Central Canberra and its adjoining suburban precincts were generated by Griffin's successive plans from 1912-1918. A number of subsequent public domain interventions demonstrate a range of planning theories making Canberra somewhat of an urban laboratory.

Canberra's civic street pattern can be seen as a large-scale grid comprised of several smaller connective grids radiating from City Hill.

Set out from City Hill the following set of concentric hexagonal circuits are set approximately 180-250m apart.

- Vernon Circle, which rings City Hill, is only partially realised as a primary urban address to this large city park. Its current form directs traffic through Canberra's centre at speed, similar to a motorway. Changes to Vernon Circle as a civic place is critical in unlocking Central Canberra's long term urban potential;

- London Circuit is realised in hexagonal form. Built as a full circuit, the street is poorly fronted along its southern and inner faces. The circuit's southern third is grade separated and utilised as a high speed environment - preventing walking or active frontage;

- Marcus Clarke, Alinga, City Walk and Allara Streets form an almost complete hexagonal circuit. The southern most edge of this circuit was removed by the intrusion of Parkes Way. The five completed edges are some of the busiest pedestrian environments in Canberra and are crucial to the City Centre's built form as it presently stands;

- Childers, Rudd and Bunda Streets are the least coherent of the circuits and are only realised for around half of the hexagon. The realised arms are fronted by built form and connect the University axis in the west to Glebe Park in the east along a shifting alignment; and

- Barry Drive, Cooyong and Coranderrk Streets form outer boundary of City. These streets act as a by-pass and carry significant circulating traffic in an east-west direction.

Canberra's contemporary street network. Study Area shown dotted white

Parkes Way looking East

Marcus Clarke Street looking South

London Circuit looking North

2.3 CIVIC AND THE LAKEFRONT

2.3.2 Parks and Open Spaces

The Lake Burley Griffin Parklands are central Canberra's major recreational asset, visible as a semi-coherent strip of parklands between Parkes Way and the Lake Burley Griffin edge. Over time they have the potential to become a network of quality urban parks to reinforce and connect the lake's edge.

Other Parks in Central Canberra

City Hill
City Hill is currently a feature in the landscape sequence that defines the axial layout of the streets. It forms a landscape focal point connecting Constitution, Commonwealth, Edinburgh, Ainslie and Northbourne Avenues. As well, it is an important landmark, visible from many points throughout the city.

Better connections to the city would add value to the role of city Hill by allowing for passive recreation as well as a true appreciation of Griffins realized geometry from the intimate landscape rooms formed by Thomas Weston's conifer plantings.

Glebe Park
Originally part of a 40HA land grant to the Anglican church in the 1840's Glebe Park's current arrangement dates from the 1980's when it was proclaimed a park and given heritage listing. The current formal arrangement dates from 1989. The park defines the edge of the city core, however it is poorly connected to Civic, providing little amenity for city workers.

Haigh Park
This park, dominated by the belt of trees designed by Charles Weston defines the northern edge of Civic. Originally conceived as part of a city beautification and a way to enact small-scale climatic control, it now forms a landscape 'bookend', as well as providing valuable landscape amenity.

Green Spaces
The landscape of the Australian National University contributes a green backdrop to the inner city, enhancing the city character. In contrast, the vast grassed spaces of clover leafs enabling traffic flow to and from Parkes way are disorienting in a relatively dense built environment.

Canberra's contemporary public open space network. Study Area shown dotted white

Car park and foreshore path at West Basin

Commonwealth Park lake foreshore

City Hill and Vernon Circle in its current form

2.3 CIVIC AND THE LAKEFRONT

2.3.3 Significant Public Buildings

A predominance of civic buildings cluster in Central Canberra, around City Hill. As Canberra grows over time it is expected that these will be supplemented by a more varied and mixed array of building types to establish, enliven Central Canberra.

A number of significant public buildings and groups of buildings within and adjacent to the study area are of note.

1 ***National Museum of Australia***
- Prominently sited but detached from Canberra's centre

2 ***New Acton - cluster of adapted heritage and new buildings***
- New high density precinct with a mix of uses

3 ***Australian Academy of Science, Australian National University***
- Significant inventory of heritage items and new building stock, and items of lesser value. Key employment and educational node. Recently constructed and planned built form has significantly increased density on the City's Western edge. Significant built forms fail to address the lake

4 ***Reserve Bank of Australia***
- Compact street-fronting building of high architectural value

5 ***ACT Supreme Court***
- Compact street-fronting building of high architectural value

6 ***ACT Magistrate's Court***
- Recently constructed of high architectural value

7 ***Sydney Building***
- Significant heritage item providing fine grain, street fronting retail and mixed use activation on all sides

8 ***Melbourne Building***
- Significant heritage item providing fine grain, street fronting retail and mixed use activation on all sides

9 ***Canberra Museum and Gallery***
- Compact street-fronting building of high architectural value

10 ***Canberra Theatre Centre***
- Assortment of highly valued, socially contributive buildings but with mixed architectural value

11 ***ACT Legislative Assembly***
- Compact street-fronting building of high architectural value

12 ***National Convention Centre***
- Well located but poorly executed large floorprint building, with a lack of address to the street and so compromising the public domain

13 ***Civic Pool***
- Highly-valued, low-quality building group which is inward looking, poorly sited and makes no contribution to the street-life of its prestigious address

14 ***Canberra Institute of Technology (CIT)***
- Assorted grouping of educational and employment buildings in a campus arrangement, generally fronting the street

15 ***ANZAC Park East + West Buildings***
- Significant heritage item providing robust built form and address to Constitution Avenue and ANZAC Parade. Recent additions to ANZAC Park West greatly diminishes the building's physical setting and architectural quality

Canberra's contemporary inventory of significant built forms. Study Area shown dotted white

Law Courts Group

Theatre Group

2.3 CIVIC AND THE LAKEFRONT

2.3.4 Disconnection and Isolation

Canberra is one of only a handful of developed cities in the world with a land bank of undeveloped urban-capable land at its heart. Through lack of development as well as poorly planned divisive infrastructure projects, Canberra's centre, Civic, has developed with an unbalanced centre located north of its planned centre, City Hill.

A number of significant elements prevent the unification and realisation of Canberra's centre:

- Parkes Way, in physical design and high speed vehicle environment creates a barrier which divides the edge of the city from Lake Burley Griffin and Canberra's network of parks. Grade separation and a lack of crossing points make this environment alienating to pedestrians, cyclists, and local traffic. It is an undesirable environment for building address and frontage;
- Commonwealth Ave where it approaches Parkes Way and London Circuit is currently treated like a motorway. Its avenue status is diminished, and provides no building address for its entire length through Canberra's Centre;
- London Circuit, and its adjoining merge lanes/ramps alienate and dislocate large areas of urban land between partially realised urban precincts, preventing the safe and easy movement of pedestrians, cyclist or local traffic;
- The use of urban capable land as surface carparking prevents uses that adequately value this land and diminishes the physical environment. Surface carparks increase urban heat island effects and greatly increase localised stormwater runoff. They provide no activation or contribution to city-life; and
- Lakeside cycle and pedestrian links are poorly connected under bridges, undermining the important linear connections.

Canberra's contemporary ground plane character. Study Area shown dotted white

Cloverleaf from London Circuit

Existing Parkes Way

Lake front, West Basin

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3

PLANNING CONTEXT

3.1 PLANNING THE CAPITAL

3.1.1 Linking Canberra City to the Lake

The Linking Canberra Urban Strategy is a comprehensive urban project that investigates and progresses implementation of the National Capital Plan's objectives for the three precincts. The plan has been prepared in consultation with range of stakeholders including the planning officers of the NCA and Territory Government. The Urban Strategy proposal is therefore considered to be in accordance with both the vision of the NCA's Griffin Legacy and the principles and objectives of the National Capital Plan.

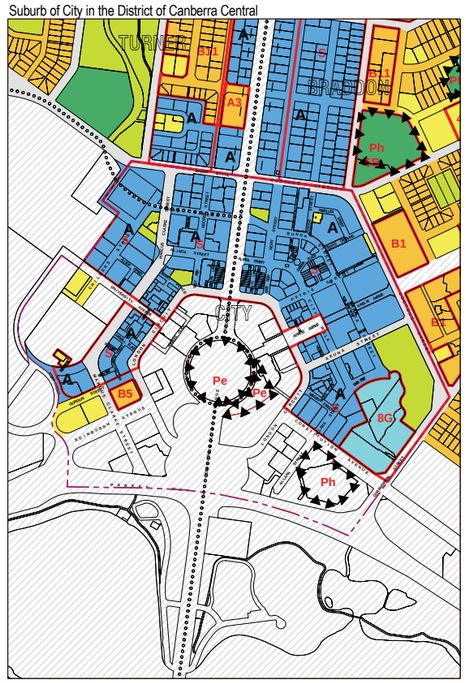
The two principal legislative instruments that control planning approvals in the ACT are:

- The National Capital Plan administered by the National Capital Authority (NCA); and

- The Territory Plan, administered by the ACT Planning Authority.

Virtually all of the Linking Canberra City to Lake study area is "designated land", meaning that the planning control agency is the NCA, and the National Capital Plan is the principal planning control instrument.

Central National Area and Lake Burley Griffin Parklands. Study Area shown dotted white



3.1 PLANNING THE CAPITAL

3.1.2 The National Capital Plan

'The Griffin Legacy' was released by the NCA in 2004 as a strategic vision and policy framework for features that express Canberra's role as the National Capital. It identifies opportunities to build, recover or adapt those design principles and elements of the Griffin Plan that deserve continuing commitment.

A series of amendments were made to the National Capital Plan in 2006 as a central part of the interpretation of the Griffin Legacy. Of particular relevance to the Linking Canberra City to Lake study were changes made to three precincts within the 'Central National Area':

- City Hill precinct (land within London Circuit);
- West Basin (land west of Commonwealth Avenue, between the City Hill precinct and the lake); and
- Constitution Avenue (land east of Commonwealth Avenue and bordering Constitution Avenue).

For each of these precincts, the National Capital Plan "Central National Area" prescribes principles, policies and permitted land uses. The Appendices T7, T8 and T9 include detailed conditions of planning design and development and associated urban design guidelines.

The Linking Canberra City to Lake project is a comprehensive urban design investigation into the implementation of the National Capital Plan's objectives for these three precincts. It has been prepared in consultation with the planning officers of the NCA and Territory Government. The strategy is therefore in accordance with both the vision of the NCA's Griffin Legacy and the principles and policies of the National Capital Plan.

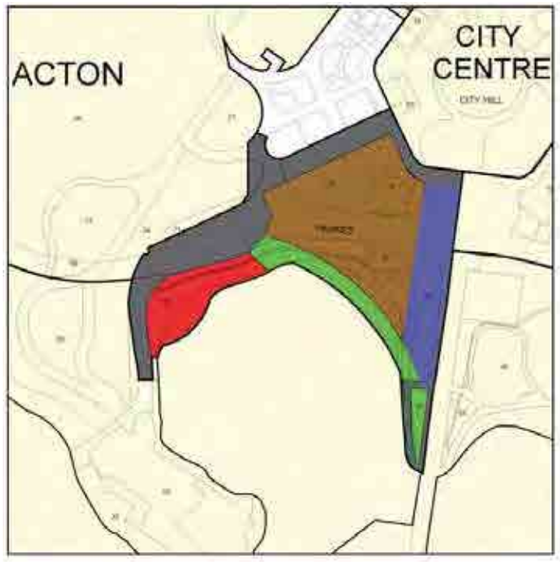
Approval for individual developments within the study area would largely be the responsibility of the NCA. It would be expected that approvals would be granted incrementally, the intention is that proposals need to be implemented in progressive stages, over a period of time.

Significant new assets created as part of the urban plan, such as West Basin foreshore, should be owned and administered as National or Territory owned land. However, ownership and management details would be resolved in future stages.

Amendment 59

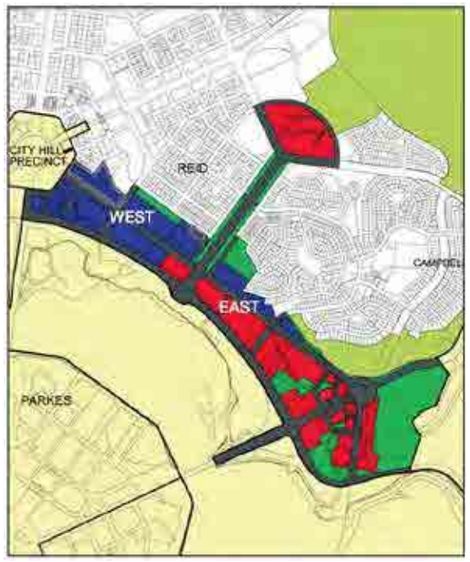
City Centre
City Hill Park
Roads
Adjoining Central National Map Areas

Amendment 61



Land Use A
Land Use B
Land Use C
Open Space/ Waterfront Promenade
Road
Adjoining Central/ National Map Areas

Amendment 60



Territory land not a Designated Area
Land Use A
National Capital Use
Open Space/ Waterfront Promenade
Road
Adjoining Central/ National Map Areas
Adjoining National Capital Open Space Designated Areas

3.1 PLANNING THE CAPITAL

City Hill Precinct

The City Hill Precinct is the land within London Circuit. The National Capital Plan intends that the precinct *"should take its rightful place as the municipal heart of central Canberra. City Hill Precinct will be reclaimed as Griffin's symbolic and geographical centre for City – a corner completing the National Triangle as a gateway to the Central National Area and a hub connecting significant main avenues and vistas."* (page 8)

The Linking City Centre to Lake strategic proposal is generally consistent with the permitted land uses for this precinct, including a proposal for a new Convention and Exhibition Centre in the southeast segment (to the east of Commonwealth Avenue).

The urban design analysis in the accompanying report demonstrates how the principles and policies of the objectives are met. The proposed Urban Strategy is in accordance with all of the principles and detailed requirements described in Appendix T7 which, in summary, include:

- City Hill Park should be retained and enhanced as an enclosed central park serving a functional role within an urban built form;
- Avenue Connections and Vistas: street extensions of Constitution and Edinburgh Avenues should be created to connect to Vernon Circle, providing access for public transport, local traffic and pedestrians;
- Vernon Circle should be a low-speed urban street with a careful blend of through and local traffic, giving priority to pedestrians and providing access to City Hill Park;
- Building Form, Height And Landmark Buildings: tall landmark buildings up to RL 617 are restricted to the corners of the main avenues intersecting with London Circuit; and
- Laneways: existing laneways should be retained and new laneways created to provide permeability and create service access, following Griffin's original intent.

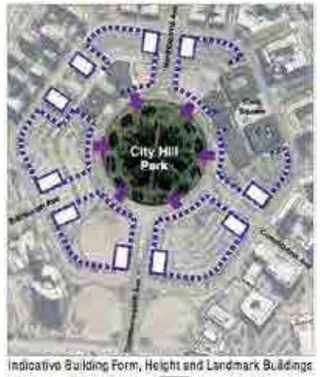
Constitution Avenue Precinct

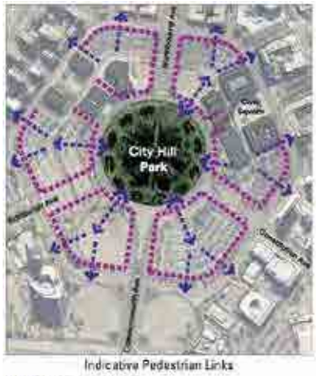
The Constitution Avenue Precinct is defined to be land east of Commonwealth Avenue and along each side of Constitution Avenue. The Linking Canberra City to the Lake strategy is consistent with the principles and policies of the Constitution Avenue Precinct including, for example, the following urban form principles described in Appendix T8:

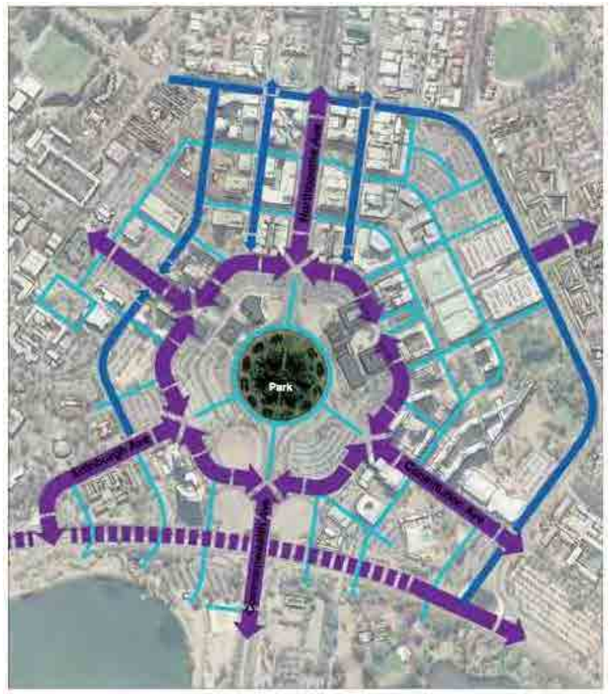
- Reinforce Constitution Avenue as the base of the National Triangle and the Russell apex with appropriate urban form.
- Create a street grid sympathetic to Griffin's intended pattern of streets and city blocks that provides a high level of integration with the street and path network of Civic, Reid and Campbell and link these areas with Lake Burley Griffin and Kings and Commonwealth Parks.

As described within the strategy, the proposed Canberra Stadium design is in accordance with the following urban design objectives for the Constitution Avenue Precinct:

- Provides continuous street boundary frontage to Constitution Avenue and so both defines and encloses the street in a way that is consistent with streetscape design policy described on page 6 of appendix T8;
- Includes several integrated uses, such as gymnasium, secondary pool and restaurants, which will offer a high number of active uses at different times that is consistent with policy 1.5.3(e): *"Provide a mix of land uses that contributes to the creation of a 24 hour community with dynamic activity patterns..."*

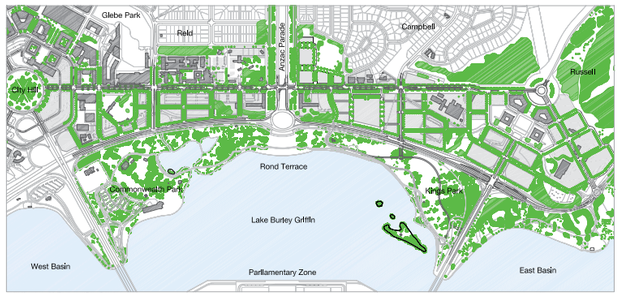




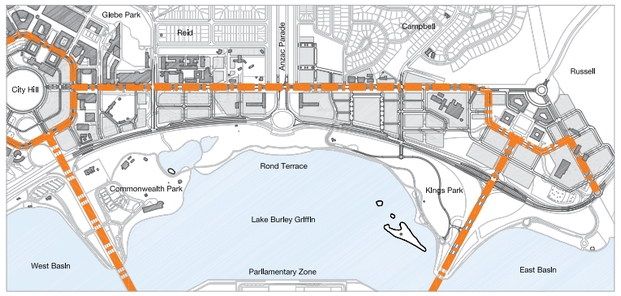


Amendment 59 - Excerpts

Amendment 60 - Excerpts

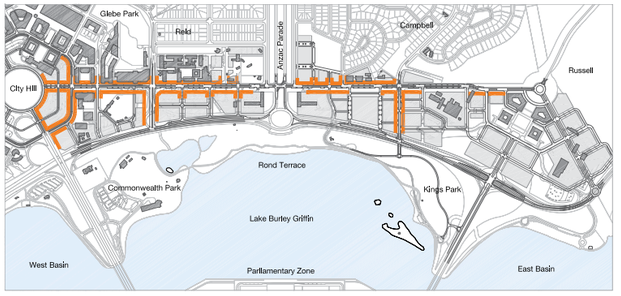


Landscape

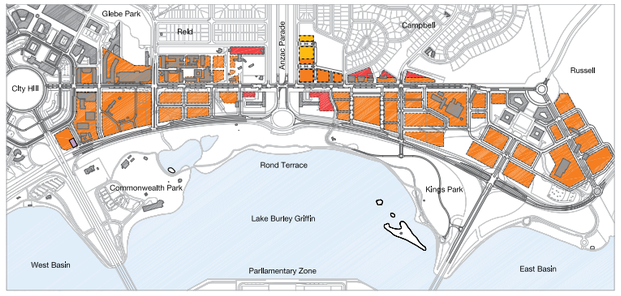


Public Transport

Public transport route



Active Frontage



Building Heights

25m generally, buildings up to RL 617 permitted.

25m high buildings.

19m high buildings.

12m high buildings.

3.1 PLANNING THE CAPITAL

West Basin Precinct

This precinct is defined to be land west of Commonwealth Avenue, between the City Hill precinct and the lake. The strategy is consistent with the overall principles and policies for West Basin Precinct including, for example, the following urban structure principles described in Appendix T9:

- Reinforce the main avenues framing the National Triangle as important symbolic connections and formal approaches to Parliament House (Commonwealth Avenue) and City Hill (Commonwealth and Edinburgh Avenues);
- Extend the city grid of streets and paths from city to West Basin, maintaining the connectivity and accessibility of the urban block pattern; and
- Extend the city's urban structure to the lake.

3.1.2 National Capital Plan Approval Process

Approval for the implementation of the proposals of the Linking Canberra City to the Lake design study will be largely the responsibility of the NCA. It would be expected that approvals would be granted incrementally as the proposals are expected to be implemented in a staged process.

The Authority will grant approvals ("works approvals") where proposals are in accord with the planning controls set out in the National Capital Plan. In considering a proposal the NCA will consult with or require endorsements from relevant ACT Government agencies.

As outlined in the preceding section, the strategy proposal is consistent with the principles and policies of the Plan. However, the NCA may determine that some parts of the development proposed in the Linking Canberra City to the Lake strategy may require a formal amendment to the National Capital Plan. An amendment to the Plan may only be initiated by the NCA. In determining whether or not to initiate an amendment the Authority will consider the extent to which the proposed amendment complies with the more general planning principles and policies prescribed in the National Capital Plan.

Where an amendment is initiated the process includes a period of public notification; approvals for significant change are typically elevated to the Commonwealth parliament and commonly referred by the Minister to the Joint Standing Committee on the National Capital and External Territories for review. The Committee usually conducts public hearings to inform its investigations prior to making a recommendation to the parliament as whether or not the proposed amendment should be approved.

Amendment 61 - Excerpts

Indicative Urban Structure

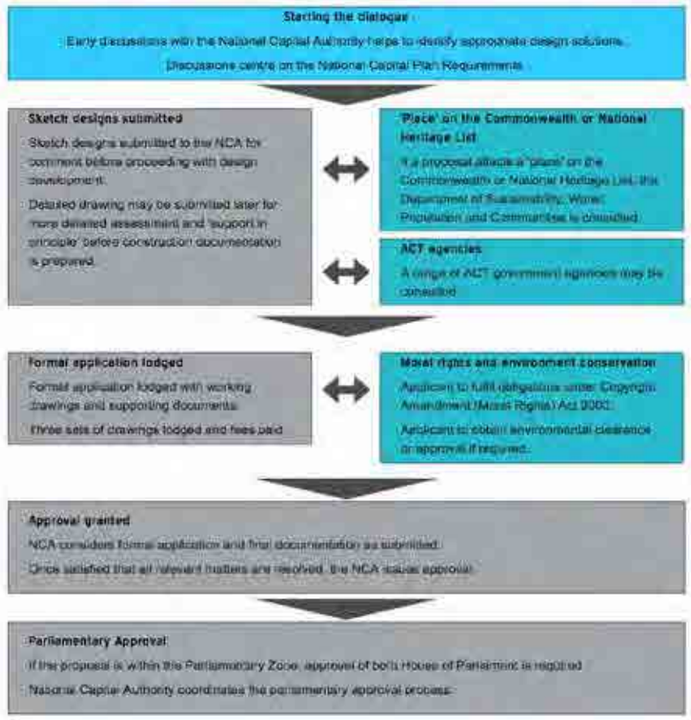
Indicative Waterfront Promenade

Indicative Cycleways and Ferry

Indicative Extending the City to the Lake

Indicative Reclamation and Land Bridge

Indicative Heritage



3.1 PLANNING THE CAPITAL

3.1.3 ACT Government Framework

The Linking Canberra City to the Lake proposals are highly consistent with two key strategic planning documents that have been recently released by the ACT Government:

- **ACT Planning Strategy: Planning for a sustainable city; and**
- **Transport for Canberra: Transport for a sustainable city.**

Small parts of the study area, generally limited to some road reserves such as London Circuit, are not “designated” under the National Capital Plan. In these areas Development Approval for proposed works may be required from the ACT Planning Authority under the terms of the Planning and Development Act 2008.

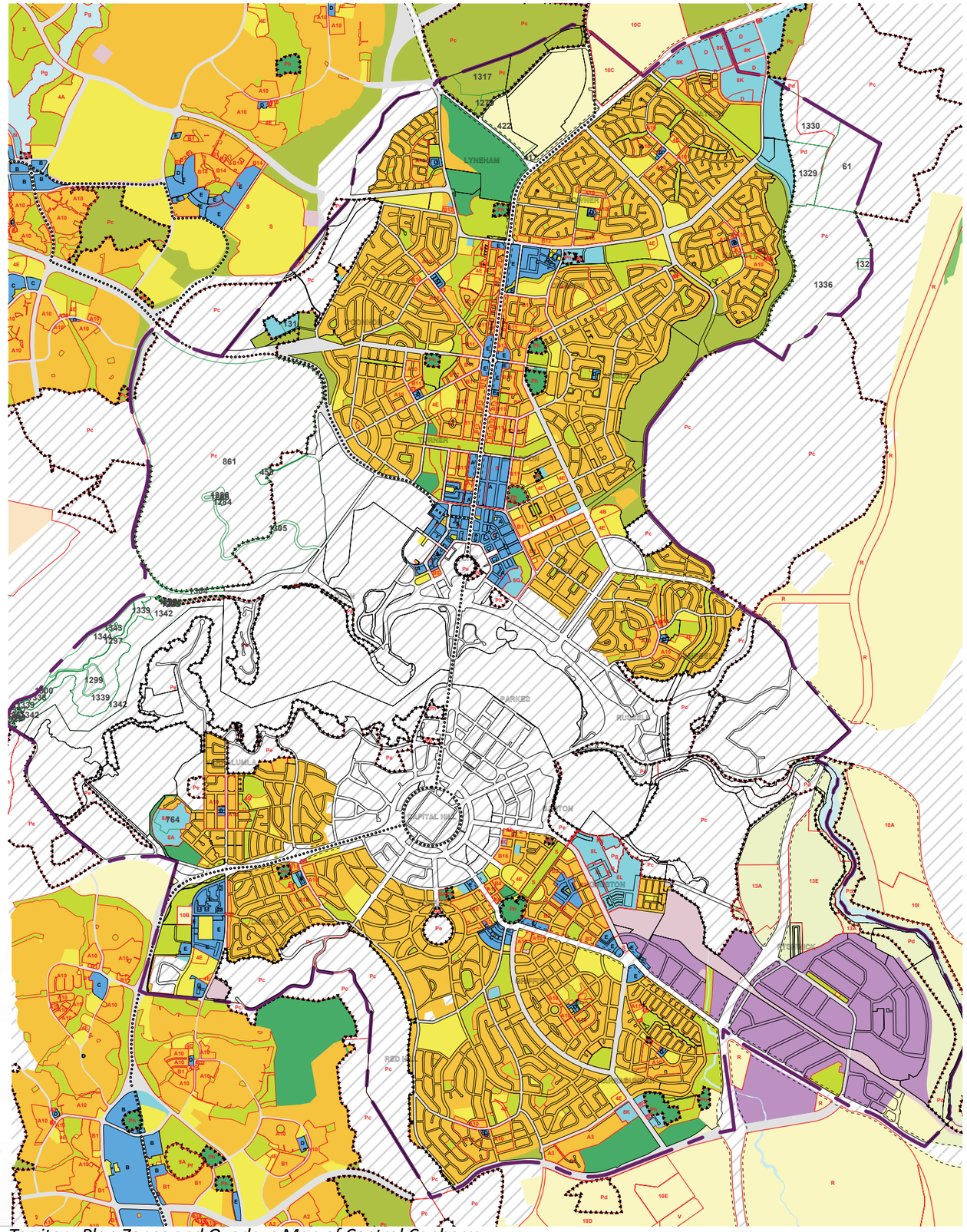
Approval for subdivision and the subsequent granting and administration of crown leases is managed by the ACT Planning Authority effectively working under delegated authority from the Commonwealth.

The majority of land in the study area is subject to the requirements of the ACT Government for subdivision, sale and lease administration purposes, and for ongoing municipal management. However “approval for development” is the responsibility of the National Capital Authority. These functions are interdependent to a high degree, and development in the study area will require on-going cooperation between the agencies of the two Governments.

3.1.4 Commonwealth Environment Protection and Biodiversity Conservation Act

A proposal has been put forward under the terms of the Environment Protection and Biodiversity Conservation Act, to include components of Canberra on the National Heritage List. A decision is expected in 2013. If the listing proceeds to approval, future development within the study area will be subject to the provisions of the EPBC Act which includes a requirement for referral for approval to the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (SEWPAC).

The referral is separate from the works approval that is the responsibility of the National Capital Authority.



Territory Plan Zones and Overlays Map of Central Canberra

3.2 TRANSPORT FOR CANBERRA

3.2.1 Transport for Canberra Plan

The Transport for Canberra Plan was finalized and released by the Government in March of 2012. It sets out future strategies for all modes of transport for metropolitan Canberra. Public transport is addressed in some detail and, relevant to the Connecting Canberra City to the Lake study area, the transport for Canberra plan commits to rapid services (2 – 10 min frequency all day) along Commonwealth, Edinburgh and Constitution Avenues. More intensive development, including residential, along transport corridors is considered to be highly complementary to the public transport proposals in the transport plan.

The transport policy also promotes active travel, which is travel that involves physical activity such as walking or cycling. The detailed public realm proposals in the Linking Canberra City to Lake study are highly supportive of active travel.

The transport policy also affirms the ACT Government's commitment to integrated transport and land use planning. The Connecting Canberra City to the Lake proposal is fully complementary to all facets of this policy approach which, for example, includes the commitment "*to create a more compact city with apartments, offices and retail spaces close together and a vibrant public realm with plazas, paths and streets that encourage relaxing, walking and cycling—and use of public transport.*" Furthermore *"A compact city generates fewer vehicle trips, creates economic efficiencies by reducing the need for expenditure on roads and car parks and is more socially inclusive, healthy and sustainable." (page 41)*

3.2.2 Capital Metro

The ACT Government recently announced that a light rail link will be built by 2018. The area between Gunghalin and Civic is a key part of the strategic public transport network plan.

Light rail is intended to replace the current rapid line bus service along Northborne Avenue and Flemington Road. The inner part of this corridor is emerging as one of Canberra's most vital boulevards, lined with mixed use residential and commercial development. Light rail will strengthen this key corridor, and be integrated with bus services, cycleways and pedestrian links. Detailed planning for this is now underway.

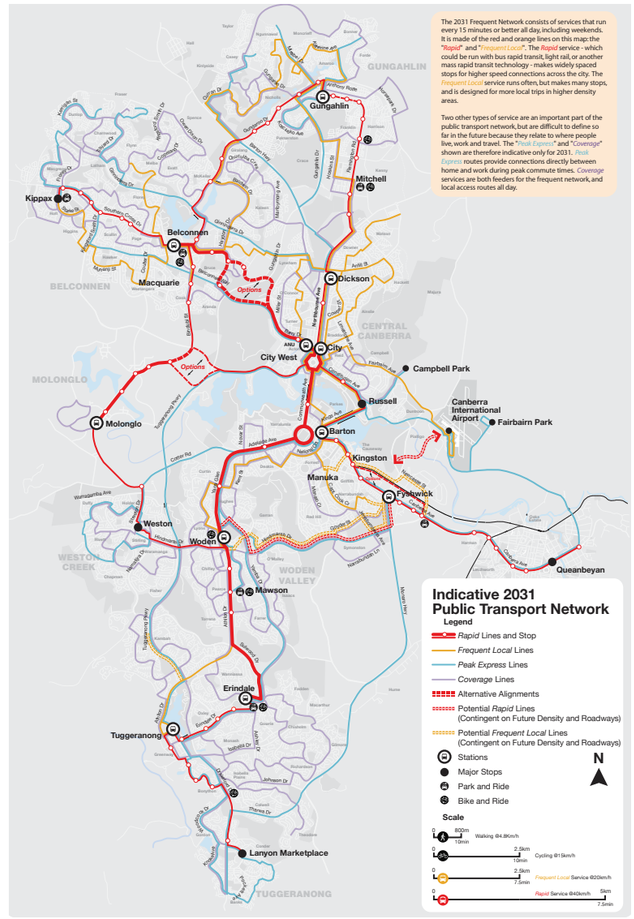
Light rail will also enable the public transport network to develop over time into the main way of handling high volumes of movement to and between Canberra's town centres. A longer term light rail network could include links from Civic to Woden, Tuggeranong, Belconnen, Canberra Airport and possibly Queanbeyan. This would build on Canberra's long standing "Y" Plan and on the original concepts of key urban boulevards envisaged in the Burley Griffin plan for Canberra.

The City Centre will be supported and strengthened by the Capital Metro plan and the introduction of light rail. In particular, light rail can be extended as a loop around Vernon Circle, forming a base for future extensions and providing access to the south-east and south-western areas of Civic and to those areas to be developed as part of the Canberra City to the Lake urban strategy.

Light rail can also handle significant passenger volumes, not only for commuter movement but also for major events. It will therefore support such elements of the Strategy as the stadium and new convention centre to be built in the heart of Canberra, by reducing the potential parking and traffic impacts of such projects.

Light rail is highly compatible with pedestrians, being quiet and non-polluting. This has been demonstrated in many cities around the world; one reason why over 65 cities in Europe and 25 cities in North America have introduced it in the last fifteen years. The Gold Coast and Perth are all introducing or planning to introduce light rail, and Melbourne, Adelaide and Sydney have plans to expand and improve their existing systems.

It thus perfectly complements the Canberra City to the Lake strategy. Together the two elements will take Canberra to the next phase of its development.



Transport for Canberra Plan

Possible long-term LRT Inter-town network for Canberra

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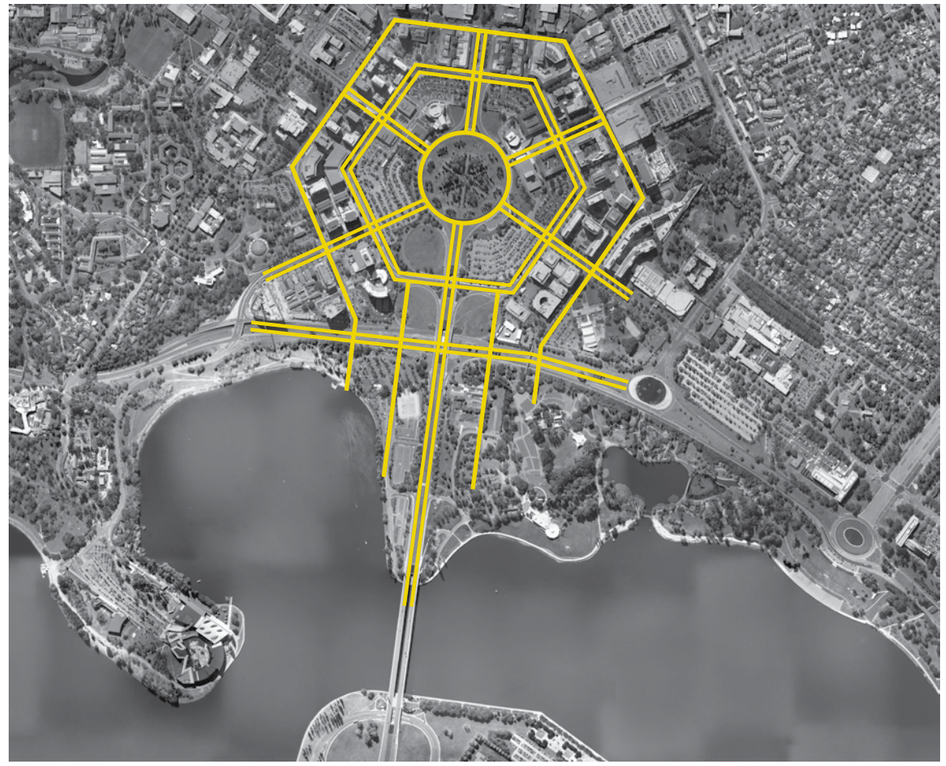
4

IDEAS FOR LINKING CANBERRA

4.1 IDEAS FOR LINKING CANBERRA

4.1.1 Clarifying the Urban Structure

The City Centre public realm structure is incomplete. Large areas of surface carparking and over scaled road reserves occupy the broad southern flank of the City including the area around City Hill. Extending the pattern of streets and blocks over this area ensures that renewal and urban infill of inner Canberra can occur in a coordinated and coherent manner. A robust structure of streets ensures access and legibility for residents, workers and visitors, and is key in providing high quality urban plantings and recreation environments.

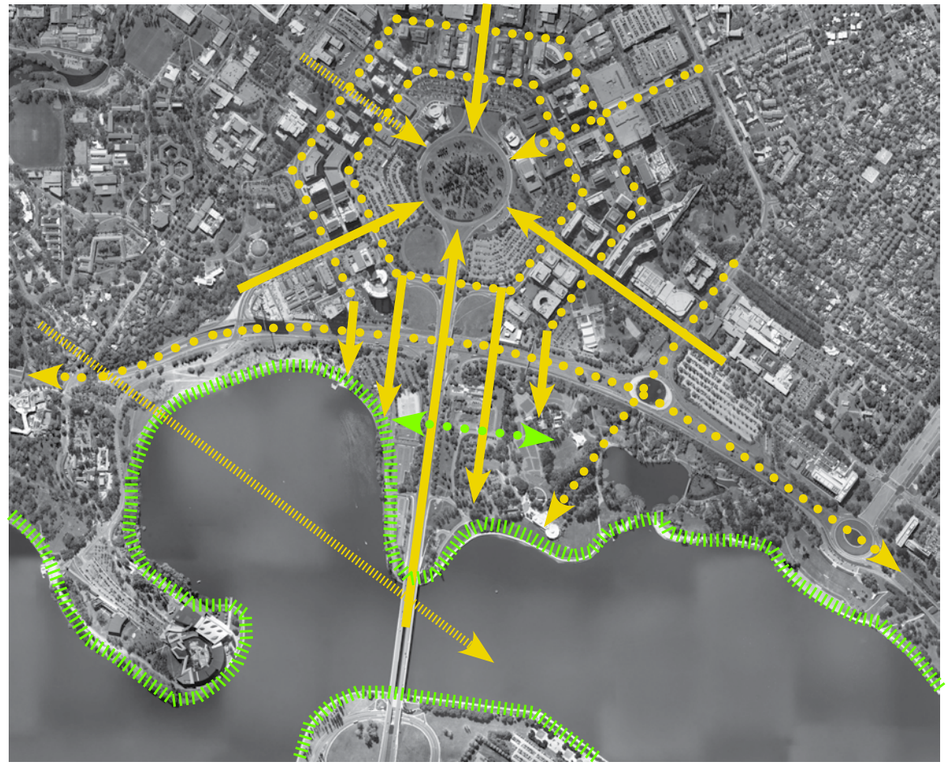


key public domain structuring elements

supportive public domain structuring elements

4.1.2 Connecting the Disconnected

Memorable moments in the city are those which are easily found, and which encourage pause, contemplation and interaction. Connectivity and alignment “on the ground” ensures that the city functions for residents and business in a holistic manner. Urban land that is disconnected from the rest of the city (no matter what its location is) will never reveal its true value without a clear address and ability to connect into the greater city.



physical and view connection

physical connection

view connection

park to park link

unified foreshore frontage

4.1 IDEAS FOR LINKING CANBERRA

4.1.3 Accessing the Future City

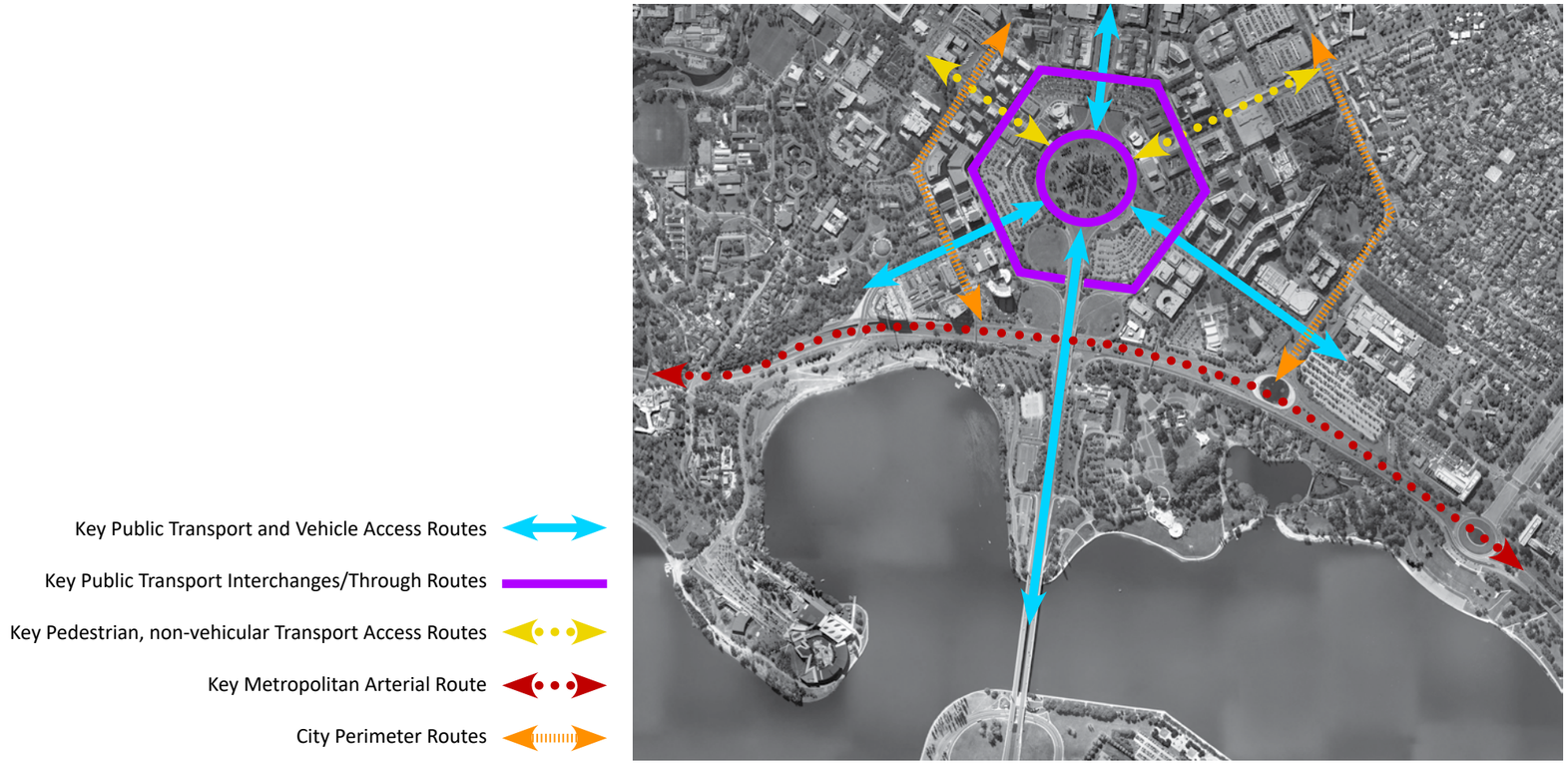
Canberra is currently Australia's most car-dependent city. As Canberra grows, a greater share of travel will need to be made by public and active transport if traffic congestion is to be avoided.

The Transport for Canberra Plan envisages a growth in the public transport share of work trips across Canberra to 16% by 2026. The share of work trips to the City centre is expected to be significantly higher, at 63%.

The Capital Metro project and development of a light rail network will further strengthen public transport and reduce the share of trips by car.

Many of the 15,000 residents who will come to live in the heart of the City as a result of the Canberra City to the Lake strategy will be able to walk or cycle to work to jobs in the City Centre or Parliamentary Triangle, further reducing the number of car commuters.

Together these measures will enable inbound car traffic to the City Centre to be held constant, removing the need for additional carparks, and enabling a more walkable and lively city centre. It is estimated that this will save at least $100 million in the cost of constructing car parks in Civic alone, with further savings in parking elsewhere, as well as in road construction and in congestion costs.



4.1.4 Building resilience to a changing climate

Some important activities will underpin the resilience of the new strategy:

- Integrate site specific water sensitive design solutions to capture water for reuse within development blocks.
- Integrate water cleaning measures into the public domain to cleanse runoff and improve the overall quality of water entering Lake Burley Griffin from this catchment.
- Provide significant street to increase canopy cover to reduce urban heat affects.
- Provide significant deep soil within development blocks to provide mature trees to promote healthy microclimates.
- Multifunctional landscapes are designed to contribute to environmental amenity and build resilience to potential changes in climate - to retain and treat water, to contribute to air quality and to ameliorate microclimate.

Bio-swales - Victoria Park, Sydney

Canopy cover - Dickson, Canberra

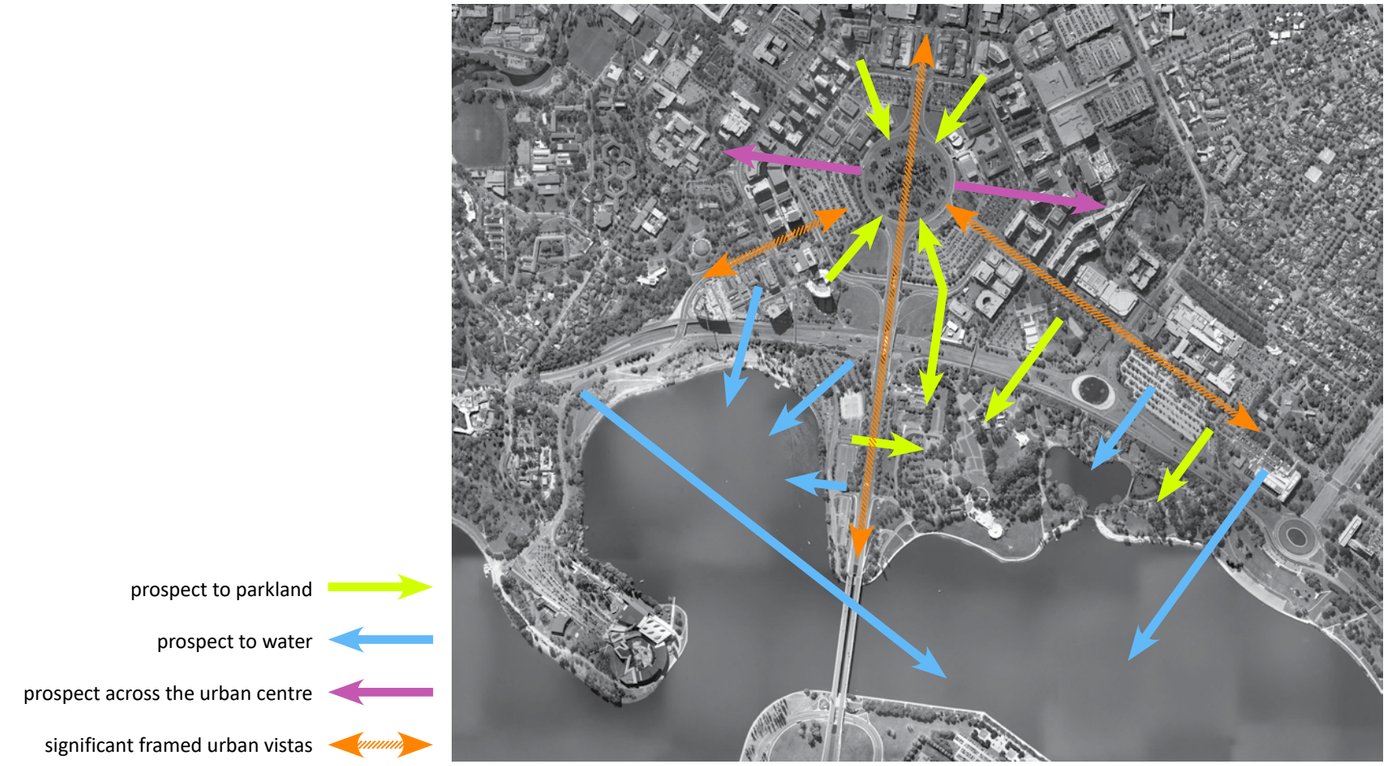
Significant urban landscape - Victoria Park, Sydney

4.1 IDEAS FOR LINKING CANBERRA

4.1.5 Optimising Land Use

- Building upon the city centre's site attributes to promote long term sustainability and value capture;

- Configure the public domain to provide address for the parklands, and where possible a long distance prospect or view



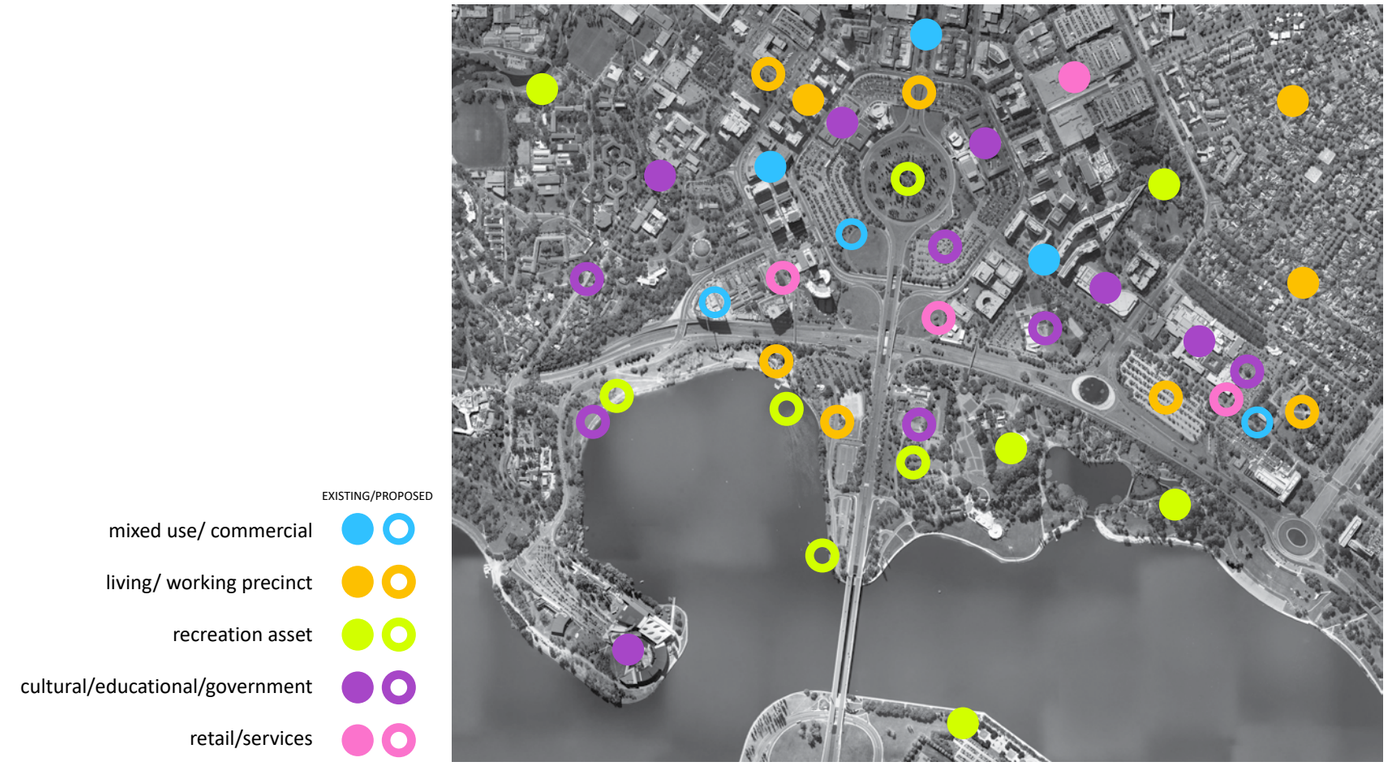
4.1.6 Making Vibrant Social Places

- Development must contribute positively to the quality of the public domain- walkability, good social spaces, community facilities, sunny parks, and waterfront access;

- Providing a mix of uses to create a genuine city community centre;

- Minimise prescriptive zoning mechanisms which prevent a mix of complimentary uses. Allow built form to adapt over time;

- Configure new development to positively frame and contribute to the qualities of the public domain, enhancing walkability and multiple connections, sunny parks, community facilities, waterfront access and good social spaces.



4.1 IDEAS FOR LINKING CANBERRA

4.1.7 Revitalising Facilities

As populations and services demands grow, technology improves to suit. The ability for a city to maintain and upgrade its public facilities is paramount in remaining competitive and maintaining quality of life for its citizens.

Canberra's Civic pool and conference/exhibition facilities are coming to the end of their life cycle, and the investigation of key sites will unlock their potential renewal, repair or replacement.

Cook + Phillip Park - City of Sydney

Vancouver Convention Centre - Vancouver Waterfront

4.1.8 Introducing a Stadium

Canberra's ability to engage sporting visitors with complementary attractions in its centre is unrealised by the current location of its primary stadium some 4km away. The potential exists to introduce an urban stadium that can provide multiple functions for varied sports and concerts, clubs and related recreational uses.

Forsyth Barr Stadium, Dunedin

Braga Regional Stadium - Braga, Portugal

4.1 IDEAS FOR LINKING CANBERRA

4.1.9 Incorporating Sustainability

- Investigate alternate energy sources and generation;
- Investigate alternate Waste Capture and Reuse; and
- Minimise Potable Water Requirements.

Centralised garbage sorting and compaction

Tri-generation energy production - centralised or interlinked

Reticulated dual water systems

4.1.10 Design Quality and Excellence

- Create environmentally and socially responsible working environments;
- Provide high amenity urban housing that has a civic presence;
- Ensure high quality urban landscape; and
- Require enduring architectural materials that are durable, develop a patina and add character to the streetscape.

High quality materials and spaces - Passage de Gracia, Barcelona

High quality built forms and public domain address - Bercy, Paris / Bligh Street,

4.1 IDEAS FOR LINKING CANBERRA

4.1.11 Learning From Melbourne

Some of Australia's most popular sporting, entertainment and cultural facilities can be found within 10 minutes walking distance of Melbourne's centre. Supported by public transport and a clear public domain network, these facilities enrich and strengthen the city of Melbourne's lively presence.

City North
Melbourne's Royal Exhibition Building was until recently Melbourne's largest commercial exhibition venue. It is set within parklands north of the central grid and adjacent to the Museum of Melbourne. Together they establish their own cultural quarter. Adjacent Spring Street is home to the State Government Parliament and departments, and is home to theatres and restaurants, and proximate to Chinatown.

City East
Significant parklands are found to the east of Melbourne City. The Fitzroy Gardens, Melbourne Park, Yarra Park and Olympic Park combine to create significant open space along the banks of the Yarra.

Melbourne, Yarra and Olympic Parks are home to the Rod Laver arena, Melbourne Cricket Ground and Newly built Rectangular Stadium, respectfully. Together they straddle the main eastern lines of the Melbourne rail network, being equidistant from Flinders Street and Richmond Stations.

During the Australian Open an average of 50,000 visit Melbourne Park's 26 Tennis courts, and the MCG regularly attracts AFL crowds in excess of 85,000. Each day Melbourne's new rectangular stadium regularly has crowds of 20,000 to 25,000.

Many visitors utilise Flinder's Street Station as their path of travel, and disburse into the city using public venues such as Federation Square for pre and post game eating and entertainment. Many also use Richmond Station and Richmond eating and entertainment facilities.

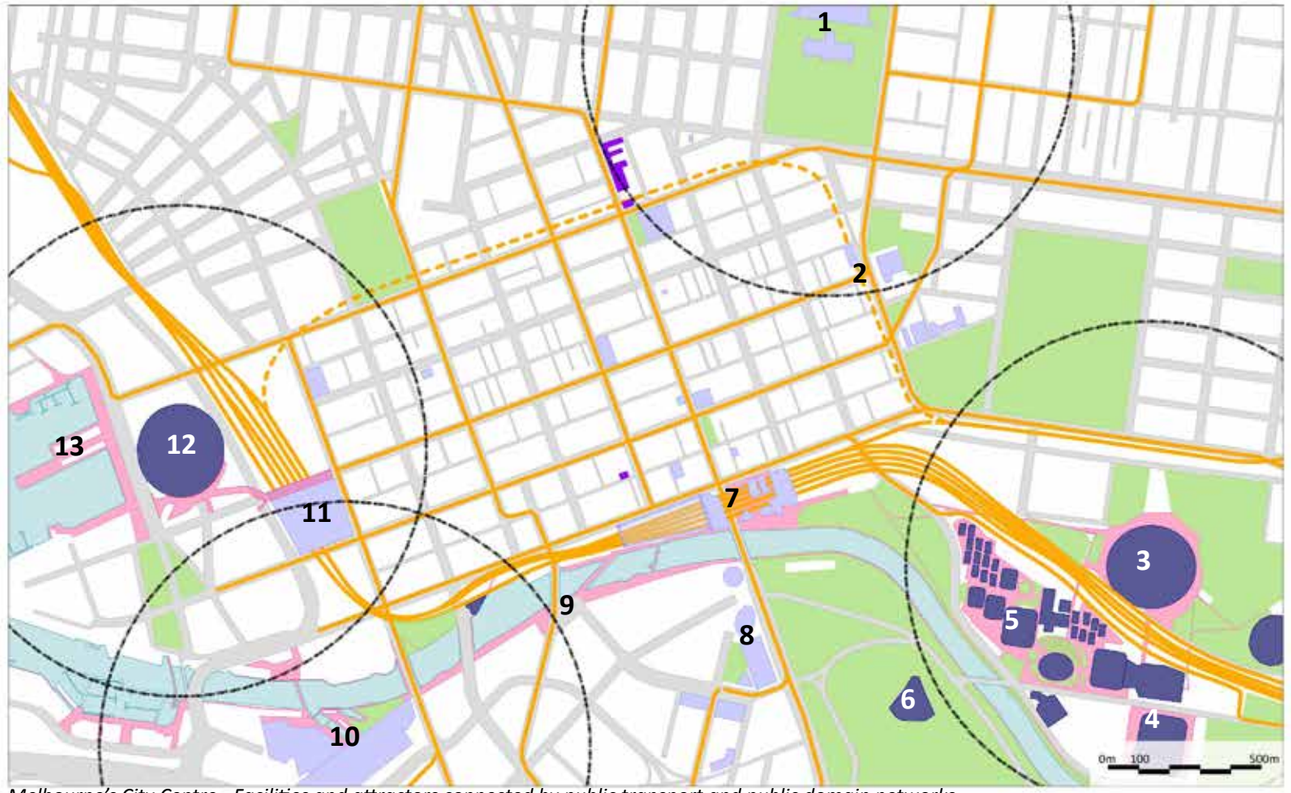
City South
Beyond Federation Square on St Kilda Road lies the State Theatre and National Gallery of Victoria. These buildings address the Queen Victoria Parklands and Botanic Gardens, home to the Myer Music bowl. At Christmas the gardens host more than 100,000 for carols.

The gardens and River edge are connected to renewal areas south of the Melbourne grid by Southbank, with restaurants, entertainment and cultural facilities.

Within 5 minutes walk to Southern Cross Station are the newest Convention and Exhibition Spaces in Australia with the ability to host more than 5000 delegates and 30,000sqm of exhibition over multiple spaces.

City West
Spencer Street forms the western edge to Hoddle's central grid, and is flanked by Southern Cross Station. The line of Bourke Street at the station is continued above the station in an elevated walkway connecting to the 53,000 seat Etihad Stadium. This walkway is key to dispersing large crowds from the stadium back to transport or conveniently into the city streets for after-game celebrations.

Further west beyond Etihad Stadium is the partially realised docklands, offering new residential, retail and entertainment experiences at the water's edge.



1 Royal Exhibition Building, Museum of Melbourne
2 Parliament Precinct, restaurants and theatres
3 Melbourne Cricket Ground, Yarra Park
4 Melbourne Rectangular Stadium, Olympic Park
5 Rod Laver Arena, Melbourne Park
6 Myer Music Bowl, Melbourne Botanic Gardens
7 Federation Square, Flinders Street Station
8 State Theatre, National Gallery of Victoria
9 Southbank restaurants and entertainment
10 Melbourne Convention and Exhibition
11 Southern Cross Railway Station
12 Etihad Stadium
13 Melbourne Docklands Precinct

Existing Streets
Structural Transport
Water
Parkland
Pedestrian Connections
Public Civic Building
Public Institutional Building
Public Major Event Building

Melbourne's City Centre - Facilities and attractors connected by public transport and public domain networks

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5

THE STRATEGY

5.1 THE URBAN STRUCTURE

1 - A Civic Boulevard

Rationalising Parkes Way is key to unlocking the potential future of Canberra's Centre. Parkes Way is currently realised as a divisive motorway in a reserve of up to 100m wide. By rationalising the reserve to 45m (west) and 55m (east) the urban land on which it sits can be adequately valued and be more friendly to local traffic, cyclists and pedestrians.

Split over 2 levels, this "smart" boulevard allows the free flow of through-traffic in a cutting at the lower level, with local traffic and street life with active frontages at the adjusted ground level.

2 - Reinforcing the Civic Heart

Rationalising and re-connecting lost elements of the public domain is essential in completing the Civic's network of avenues, civic streets and lanes. A high quality, cohesive public domain establishes the character of Canberra's most high-profile and identifiable urban streets.

Griffin had intended that London Circuit would become such a major urban boulevard, a role distorted in the NCDC changes in the 1960's.

3 - Linking Canberra to the Lake

Extending the City's streets to West Basin in a simple and direct manner creates direct physical and visual links between the City and the Lake. The streets and block dimensions are responsive to the Griffin Plan as well as the contemporary context of the City Centre as it is currently formed.

The alignments and widths of new and extended streets create a varied hierarchy of public domain, and form rational, walkable blocks.

4 - Celebrating Griffin's Geometry

The Urban Strategy aims to instate as much of the 1918 Griffin West Basin water line as possible whilst coordinating the existing foreshore and other primary alignments. The arc of the new sea wall precisely follows Griffin's setout.

The waterfront promenade, building alignment and boardwalk are all configured to support and heighten this powerful curve, creating a series of parallel experiences around the reconfigured lakefront.

Marcus Clarke and Allara Streets are connected to the new upper boulevards to complete the third circuit of streets around Civic.

1. A Civic Boulevard

2. Reinforcing The Civic Heart

3. Linking Canberra to the Lake

4. Celebrating Griffin's Geometry

5.1 THE URBAN STRUCTURE

5 - Destination - West Basin

A whole remade foreshore, comprising new promenade and boardwalk over water, embrace the basin so that the National Museum of Australia becomes the key anchor and destination of the lakefront promenade. The insertion of specifically placed attractions - a new aquatic centre, interpretive boardwalk, urban beach and restaurants and cafes - offer a rich choice of accessible experiences around the entire shoreline of the basin.

6 - Connecting Commonwealth Park

Overturning its alienation by Parkes Way in the 1950's Commonwealth Park is again to be fronted with a civic and prestigious street address. The extension of city streets and the changed character of Parkes Way make multiple crossing points which align with key walking and cycling routes at regularly spaced, walkable intervals.

7 - Introducing Light Rail Transit

The introduction of Light Rail Transit through Capital Metro has the potential to structurally reinforce Canberra's primary axes and support the types of built form and public programme envisaged in the City to the Lake Strategy.

Light rail has the proven ability to act as a high frequency & highly visible street based system that has the potential to dramatically reshape how Canberra moves and grows.

8 - Major Programmes

The public domain framework allows for a number of public programmes to be strategically inserted into the urban fabric where they are well connected and complement adjoining uses.

The Linking City Centre to the Lake Strategy has reserved sites for an Urban Stadium, Aquatic facilities as well as the Australia Forum, but a number of other programmes could easily be accommodated if/when required.

5. A Destination - West Basin

6. Connecting Commonwealth Park

7. Introducing LRT

8. Major Programmes - Pool, Stadium and Conference Centre Major Retail/Hotel Anchor

5.2 INTERPRETING GRIFFIN'S GEOMETRY

Extending Canberra's Centre to the lake

The Linking the City Centre to the Lake Strategy takes many of its alignments and geometries from Griffins 1918 plan.

The Strategy proposes a sensitive yet sophisticated layering of informed responses to build upon Canberra's contemporary form. This results in a strategy that is responsive to the ideas and objectives of The National Capital Plan, The Territory Plan and The Griffin Legacy. Whilst not attempting to replicate the Griffins' original plans, careful consideration has been given to the alignments, placement and setouts of key elements to devise a contemporary plan for Canberra.

The curve of West basin's foreshore will finally follow Griffins elegant Arc, augmented by a boardwalk that follows the same setout. The water axis is terminated by a formed landscape space, while additional curved promenades extend & interpret the original sweep of Griffin's basin.

Several first order elements of the Griffin plan can be noticed - embodied into the Strategy.

- The Griffins' 1918 West Basin lake edge has been placed in it's desired location, and modifications to the exiting lake are made to realise the maximum possible length;

- Promenade and boardwalk elements associated with the lake edge heighten the experience of the 1918 alignment; and

- The Water Axis across West Basin is reinforced with forms sites to frame the maximum extent of its view corridor along the axis.

Certain Streets are extended, aligned or laid out in relation to Griffins intentions or geometry allowing the interface of urban structure, waterfront parklands and water bodies that is much more sympathetic to Griffins ideas.

- New streets linking London Circuit to the Promenade and Commonwealth Park are projected in the manner and proportions of Griffin blocks adjoining Northbourne Avenue;

- Similarly, new blocks on Constitution Avenue are rationalised and divided by streets aligning to the Griffins' Reid subdivision, with a local and prestigious street address formed to Commonwealth Park; and

- Marcus Clarke Street and Allara Street are completed as an outer ring through the insertion of east west local streets.

Griffin Water Edge
Griffin Proposed Buildings
Griffin Proposed Street
Griffin Street Realised Altered
Griffin Street Realised

1918 Griffin Plan Overlay

2004 Griffin Legacy Overlay

5.2 INTERPRETING GRIFFIN'S GEOMETRY

A Street Systems

1 Reinstatement of London Circuit as major city boulevard with at grade intersection at Commonwealth Avenue

2 Redefine Commonwealth Avenue alignment between London Circuit and Vernon Circle to narrow from 60m to 40m reservation, following Griffin's intent.

3 Mirror of Griffins street grid to frame the central hexagon

4 Parkes Way reconstructed as an interpretation of Garden Terrace as edge street to Commonwealth Park. Upper level streets connect with both Marcus Clarke and Allara streets to complete Civics hexagonal layout

5 Direct extension of Marcus Clarke Street to the lake

6 Extend both Edinburgh and Constitution Avenues to Vernon Circle

7 Completion of lane system and block layout. Preference for Civic uses between Vernon Circle and London Circuit

8 Blocks extended along Commonwealth Avenue interpreting Griffins layout

9 Extension of Griffin street alignments and block configuration

B West Basin

10 Centre point of Griffin's Lake edge geometry

11 Construction of seawall and boulevard on Griffin's curving alignment

12 Construction of Boardwalk set out from Griffins West Basin centre point

13 Urban geometry of new landscape space acknowledges termination of water axis

C Water Axis

14 Griffin water axis

15 Visible long axis down lake

16 New boardwalk set out from visible water axis

Setouts, alignments and extensions of Canberra underpinning the Strategy

5.3 HERITAGE

Linking Canberra City to the Lake aims to improve the interface between Canberra City and Lake Burley Griffin and the central parklands through recapturing aspects of the intent of Walter Burley Griffin's plan for the city. The National Capital Plan (Amendments 59, 60 and 61) anticipate the development of the area south of Canberra City and extending to Anzac Parade in the east as a mixed-used cultural and entertainment precinct.

Preliminary heritage investigations of the study area have been undertaken. Further assessment of heritage impacts will be carried out as part of detailed planning of the area. Such an assessment will establish a framework for heritage consideration, including the identification of a hierarchy of significance and heritage design principles to guide detailed planning. The hierarchy will be based on the National significance of the Griffin Plan as the first consideration which includes the Griffin Land, Water and Municipal Axes, the Lake and parklands, The National Triangle, Parliamentary Zone vistas, main avenues and streets.

The preliminary investigations included the following:

- A summary of planning and heritage provisions that relate to the study area, and individual properties and precincts within and in proximity to it;[1]
- Details of previously identified heritage places within and in proximity to the study area;
- A history of the study area, addressing its role (symbolically, functionally and in terms of planning) as part of Walter Burley Griffin's vision for the city, and key phases in its development over the past century;
- A description of the study area as it exists, with emphasis on its heritage attributes, including buildings, areas, its planning, plantings and views/vistas.
- A summary of heritage issues and considerations associated with the proposed development of the study area, including a hierarchy of heritage sensitivities.

Further assessment of indigenous or environmental heritage issues will be undertaken within the detailed planning phase of the project.

An in-depth summary of heritage places and elements within the study area is included as Appendix E to this report.

1 Heritage places within the study area

The following tables list previously identified heritage places within and adjacent to the study area. It is based on a review of the:

- National Heritage List (NHL) and the Commonwealth Heritage List (CHL), established under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act);
- ACT Heritage Register, established under the Heritage Act 2004 (ACT);
- National Trust of Australia (ACT) register (non-statutory)
- Register of the National Estate (RNE) (non-statutory)
- The Australian Institute of Architects' (ACT Chapter) Register of Significant Twentieth Century Architecture

The annotated aerial photograph at Figure 1 indicates the locations of identified heritage places within and adjacent to the study area.

At the time of writing, the Australian Heritage Commission was considering two nominations for the City of Canberra (Canberra - Central National Area and Inner Hills and Canberra and Surrounding Areas) to the National Heritage List. A nomination for Lake Burley Griffin and Lakeshore Parklands to the NHL was also being considered.

Identified heritage places within and adjacent to the study area (includes places listed in the NHL, CHL, ACT Heritage Register, RNE, National Trust register and Institute of Architects Register)

1. Australian Academy of Science
2. Hotel Acton
3. Ian Potter House (former Beauchamp House)
4. National Film and Sound Archive (former Australian Institute of Anatomy)
5. Canberra School of Art (former Canberra High School)
6. Canberra School of Music
7. ANZ Bank
8. Law Courts of the ACT precinct, including the Supreme Court, the Reserve Bank and the ACT Police HQ
9. The Melbourne and Sydney Buildings
10. City Hill
11. Canberra Olympic Swimming Pool
12. Glebe Park
13. Reid Housing Precinct
14. St John's Church and schoolhouse
15. Blundell's Cottage
16. Parliament House Vista Extension / Anzac Parade (includes the central basin of Lake Burley Griffin)
17. Australian War Memorial and Memorial Parade (extends to Constitution Avenue)
18. Lake Burley Griffin and Lakeshore Parklands (within the study area this includes Commonwealth Park, the Rond Terraces, King's Park and West Basin)
19. East and West Portal Buildings
20. West Portal Cafeteria

Study area

Boundaries of heritage places

Central Canberra's current urban form

View of new West Basin promenade from in front of the Museum of Australia

Linking City Centre to the Lake Strategy

5.4 TRANSPORT STRATEGY

The City centre already functions as Canberra's public transport hub. The introduction of light rail, extension of bus interchange & expansion towards the lake will further enhance the city centre's public transport role.

Public Transport

The first stage of the Light Rail for Canberra could be Northbourne Avenue. This line can readily be extended in a loop around Vernon Circle, providing access to the City to the Lake area and easy connections to future light rail extensions along Constitution Avenue, Commonwealth Avenue and University Avenue. It could also allow easy interchange between different light rail services using cross-platform interchanges and with bus services which will continue to predominantly use London Circuit.

The expansion of the light rail network would enable the number of buses needing to enter and interchange in Civic to be managed, which will ensure it remains an attractive environment for shopping, entertainment and socialising. Further street based interchange opportunities between light rail and buses will be available on the key public transport corridors, including Northbourne, Commonwealth, and Constitution Avenues.

Walking and Cycling

Connecting Canberra City to the Lake will greatly facilitate the ability to walk and cycle throughout the City and to nearby areas, especially Lake Burley Griffin.

This will be achieved through:

- new pedestrian friendly streets providing more fine-grained access;
- new east-west pedestrian links across City Hill;
- dedicated cycle routes into Civic along key arteries such as Constitution Avenue and University Avenue;
- separated cycle lanes around London Circuit;
- a downgrading of through traffic through the heart of the City;
- local streets at grade parallel to Parkes Way; and
- new Lakefront promenades & Cycleway.

On-road and off-road cycle paths, Lake foreshore, shared-paths and key park-to-park connections

Potential to integrate LRT into City Hill

Possible easy cross-platform interchange *(Super-Stop)*

LRT - potential routes and stops interchanging on City Hill, with potential Rapid/Express and Local bus routes supporting LRT and interchanging on London Circuit

5.4 TRANSPORT STRATEGY

Through Traffic + Local Traffic

Parkes Way will be redeveloped as a split level boulevard where it passes through the city, with through traffic on the lower level. This will facilitate east-west movement for traffic bypassing the City Centre. It will also minimise the impact of this traffic on north-south connections between the City Centre and the new developments around the Lake as well as the recreational areas in Commonwealth Park and along the lake shore.

Vernon Circle will be traffic calmed & regraded, with lower speed limits and light rail, so that it ceases to be the barrier to east-west pedestrian movement that it currently is. North-south through or bypass traffic will be encouraged to use alternative routes such as Marcus Clarke Street to the west and Corranderrk Street & Majura Parkway to the east.

Car access to the City

Car access to the city will be improved by a finer grade street network and by the continued provision of public parking. However the total amount of parking in Civic will not be increased, as other modes will take up the increase in trips to the City Centre. Surveys of parking in Civic in 2009 showed in fact that nearly 33% of parking was vacant between 10 am and midday, indicating that there is little need for increased parking overall. Some rearrangement of parking will occur, however, as part of the development of Canberra City to the Lake, with removal of most surface parking replaced by some new underground or structured parking.

Parking Strategy

The integrated transport strategy will reduce the reliance on the use of private vehicles. The existing expanses of surface car parks have blighted Civic for many years. The availability of inexpensive and abundant car parking has resulted in transport policy favoring the private vehicle at the expense of public transport. Through the introduction of Capital Metro and including other public transport policy initiatives, and by transforming the city centre to improve amenity for walking and cycling, such extensive surface parking can be eliminated.

Key points for the strategy are:

- A focus on managing parking supply and pricing to encourage the use of public transport, walking and cycling;
- Not increasing the supply of long stay parking over current levels;
- Gradual replacement of existing surface car parks with parking structures located generally on the periphery of the City, with access to the arterial and peripheral street networks;
- Integrating parking structures so that they do not dominate the public domain and where possible are in basements or are sleeved by buildings incorporating uses that enhance the public domain;
- Providing for park and ride facilities along main public transport routes;
- Maximising efficient use of public parking by using long stay parking structures for major event parking and providing real time information on parking availability throughout the City; and
- Providing for on-street short stay parking throughout the City.

Primary Avenues, supportive routes, local streets and separated arterial routes. Grade separation below general street level shown dotted.

Key public car parking locations, central to attractions and access routes, and on street parking on all new streets.

5.5 WATER SENSITIVE URBAN DESIGN (WSUD)

Urban Water Strategy

The City to the Lake Strategy provides for a number of water capture, storage and treatment methods that can be retrofitted to existing streets and parks and can be included in the new public domain and within private development blocks. These elements form part of a catchment wide system to improve local and regional environmental conditions and include:

- Opportunities for capture, treatment and deep-soil infiltration. Within private blocks, opportunities exist for on-site reuse;
- Opportunities for capture and treatment. These locations may have limited opportunity for deep soil infiltration, but are likely to have significant capacity for reuse on-site.
- Significant capture, treatment and reuse within the public domain along major flow-lines. These are likely in median, kerbside or integrated swales and dry-beds.
- Water-gardens with a permanent moisture level and biological role in later treatment stages. Ability to treat significant volumes to improve the water quality entering Lake Burley Griffin.
- Major Flow-lines

It is anticipated that all new streets within the Study Area are to be designed with water-sensitive elements including swales in tree pits, and the like. The strategy (right) details major initiatives, in particular locations which benefit the whole-of-catchment.

It should be noted that extensive areas of existing hard-surface car parking are being removed as part of the City to the Lake Strategy and opportunities for increased ground infiltration are created in new streets and courtyards.

5.5 WATER SENSITIVE URBAN DESIGN (WSUD)

City-West Catchment

A series of remedial wetlands are integrated along the eastern and western perimeter of the west basin to treat stormwater outlets previously emptying directly into the lake. The wetlands can be integrated with the West Basin promenade landscape design and be combined with the proposed water gardens. Apart from improving the water quality of stormwater entering West Basin, it will also enhance the lake front biodiversity and diversify land water interface experience.

Up-stream, wide street reservations like Marcus Clarke Street can feature bioswales to treat local street runoff and reduce the sediment and pollutant load reaching the end point of the catchment.

Urban Water Parks

Particulate capture and infiltration potential in bio-swales can be designed into streets such as Marcus Clarke Street

Filtration Cells

City-East Catchment

It is anticipated that approximately 10-15ha of swales & wetlands will be required to treat the 260ha catchment - which is additional to the current provision of Nerang Pool in Commonwealth Park. It is evident that there is insufficient space within Commonwealth Park to accommodate the extra load and upstream in the upper branches of the catchment will need to contribute to water treatment.

Nerang Pool and the existing open channel currently linking Coranderrk Pond to Nerang Pool can be retrofitted to include ecological treatments, so that Nerang Pool is improved as a focus point in Commonwealth Park.

Upper branches of the catchment with the potential for water quality initiatives include:

- Coranderrk Street median - in its entirety from Ainslie Avenue, can accommodate a bio-swale and particulate-capture by day-lighting and cleansing consistent flows; and

- Ainslie Avenue median - detention and bioswale treatment within extensive existing grassed medians. This can aid in reducing the load during rain events and reduce the sediment and pollutant load carried to the lower catchment.

High-flow bio-swales

Infiltration

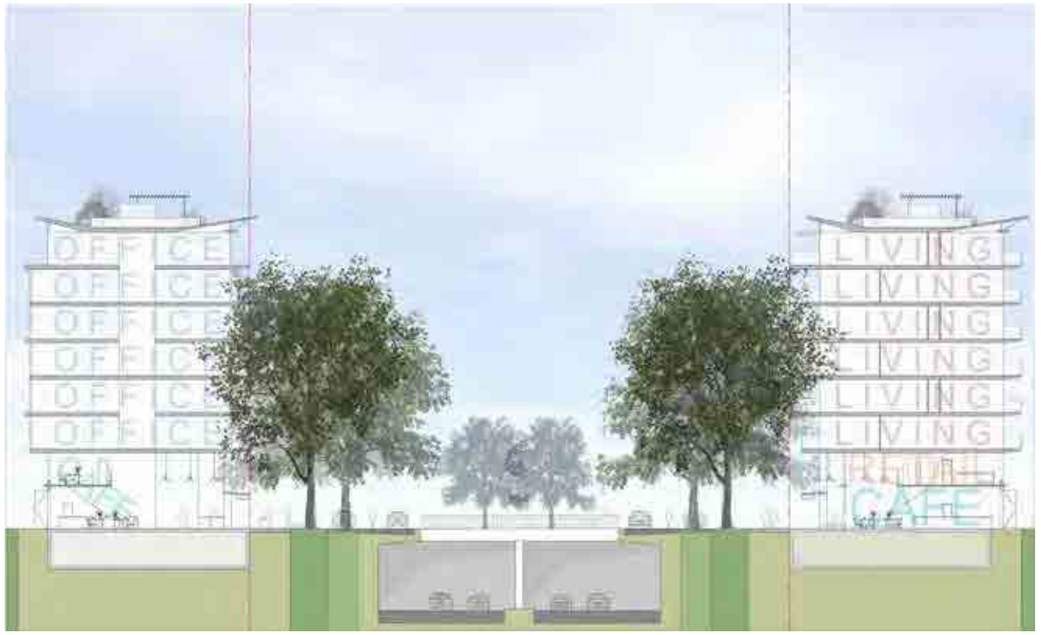
5.6 STREET TYPES

A Civic Boulevard - Parkes Way West

The refinement and efficient setout of Parkes Way reserve over two levels west of Allara Street allows a number of key urban improvements and relationships to be established:

- the central 5 blocks of Parkes Way will be transformed as a split level boulevard, allowing the wasteful 80m wide reserve to be narrowed to 45m;
- the establishment of a coherent ground plane in a 45m reserve for local traffic with generous pedestrian paths and dedicated cycleways at the surface;
- through traffic will continue unimpeded at the lower level, while at the surface a pair of new local streets will connect with the extended city streets; and
- frequent crossing points to unite the northern and southern sides of the boulevard and provide larger reaching links between the City and West Basin.

A dynamic section - Calle 30 - M30 Madrid



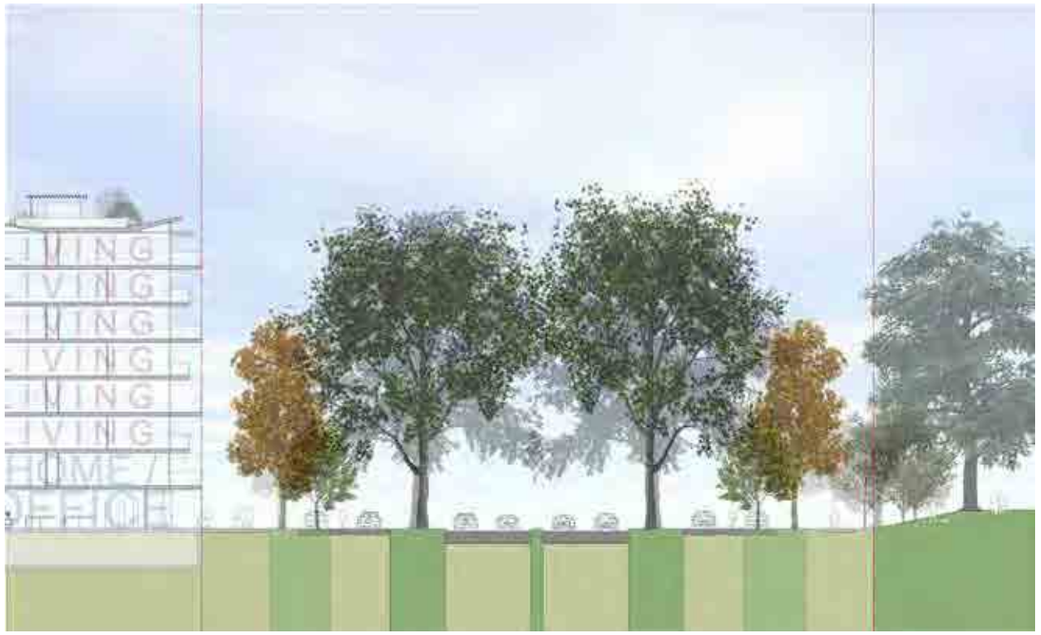
Parkes Way West

A Civic Boulevard - Parkes Way East

The refinement and efficient setout of Parkes Way within a 55m reserve east of Allara Street allows a number of key urban improvements and relationships to be established:

- to the east of Allara Street, Parkes Way emerges from its abutments to be come a surface boulevard. A reconfigured intersection with Corranderrk Street allows for more effective traffic circulation;
- the paired side streets continue at grade towards the Anzac Parade inter section. These streets allow a proper transition to areas on each side, providing for the first time a street front edge to Commonwealth Park;
- the side streets allow significant avenue planting along the full length of Parkes Way through the City Centre; and
- frequent crossing points to unite the northern and southern sides of the boulevard - linking the City with Commonwealth Park at frequent, walkable intervals.

Active Edge Street - Pasage de Gracia, Barcelona



Parkes Way East

5.6 STREET TYPES

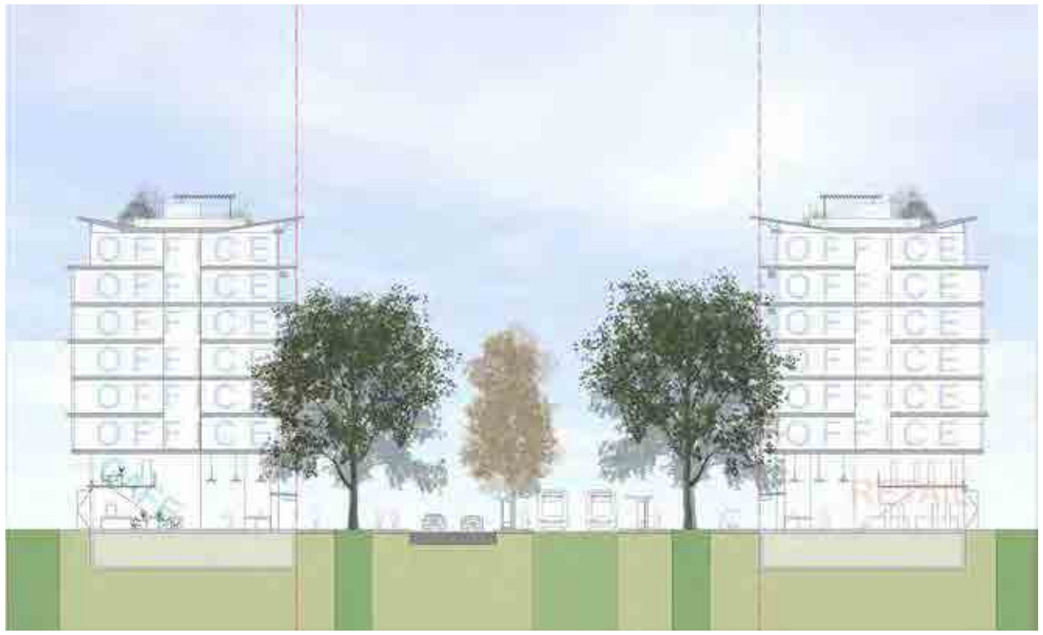
Public Transport Street - London Circuit

As Canberra's obvious "main street" London Circuit's location and interconnectiveness with the greater grid of Inner Canberra makes it well suited to providing public transport interchange.

The remaking of London Circuit in its entirety through the Strategy enables the current focal centre of Civic to shift south from its current location on Northbourne Avenue to align more closely with City Hill - an essential element to realising Civic's potential.

London Circuit is reinstated as a proper surface street rather than the miserable underpass built in the 1960's. This will allow London Circuit to operate as the loop main street, as Griffin had envisaged.

London Circuit can be re-engineered as a full circuit that balances bus movements, cyclists, pedestrians and cars, set with broad pavements, avenue planting and continuous active frontages.



London Circuit

Urban Water Street - Coranderrk Street

Coranderrk Street's placement at the valley of the City-East water catchment means it already carries significant stormwater capacity below street level. Huge potential exists to reveal and enhance this infrastructure to benefit the greater catchment and quality of water entering the lake.

Corranderrk Street can be transformed from an unloved traffic dominated tarmac to a greened boulevard that is an exemplar of sustainability.

The potential for significant realignment and establishment of a high quality public domain exists within a rationalised reservation south of Constitution Avenue.

The central median can be rebuilt as a vegetated swale that captures and treats stormwater from the catchment.

Coranderrk Street

5.6 STREET TYPES

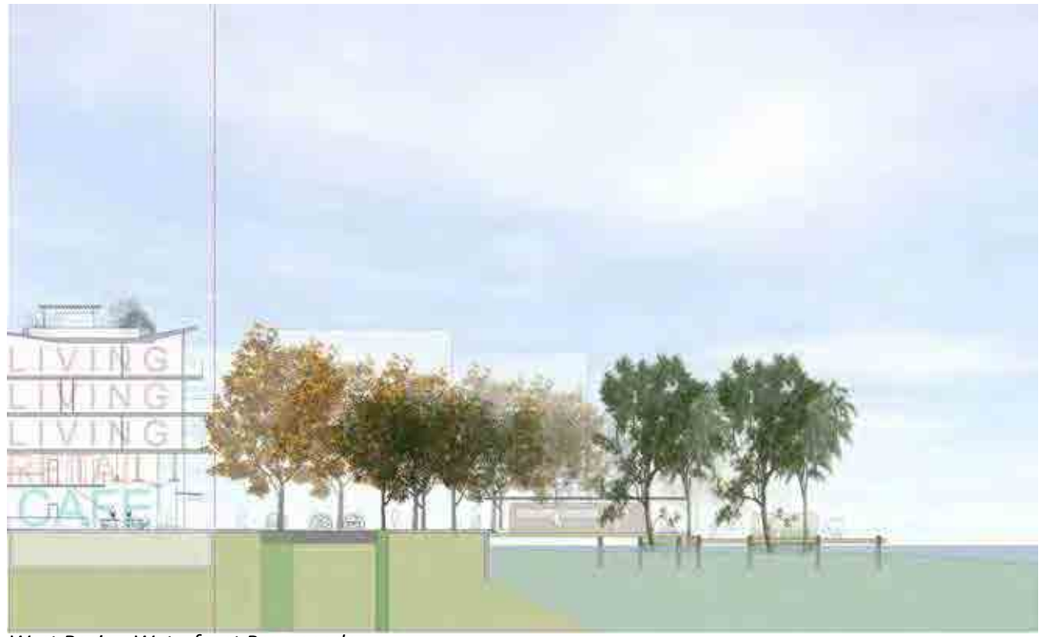
Water Edge Street - West Basin Promenade

West Basin Promenade will be the City's new waterfront address - and realise the most urban engagement Canberra can achieve with the Lake. This condition will offer Canberrans experiences currently unavailable in the city.

The waters edge around west basin is remade as a promenade comprising a variety of boardwalks, basins, stepped platforms and broad footpaths. This combination of elements creates an inclusive variety, and spatial richness within the 55m wide public space.

The major sweep of the seawall & promenade is precisely on Griffins geometry in the 1918 Plan. Other geometries are adopted elsewhere to distinguish Griffins original elements and provide a range of spaces and experiences around the sweep of the foreshore.

The street can accommodate significant water sensitive urban design elements.



West Basin - Waterfront Promenade

Generous Landscape Street - Marcus Clarke Street

Marcus Clarke is a generous street typical of Canberra's landscape character. It is paired with Allara Street to the east in character and generous scale.

Marcus Clarke Street is extended straight to connect to the foreshore.

Its extension retains the generous dimensions of the street reserve but adjusts the cross section to give priority to landscape and pedestrian space.

At the junction of Marcus Clarke Street and Parkes Way, a triangular pocket park resolves the rectilinear and hexagonal geometry and provides a restful place for the enjoyment of residents.

Allara Street

Marcus Clarke Street

5.6 STREET TYPES

Park Edge Street - Vernon Circle

For the last 50 years, Vernon Circle has been sacrificed to through traffic, severing the city centre's relationship to the park on City Hill. There is now the opportunity to redress this mistake and make Vernon Circle a civilised and amenable place.

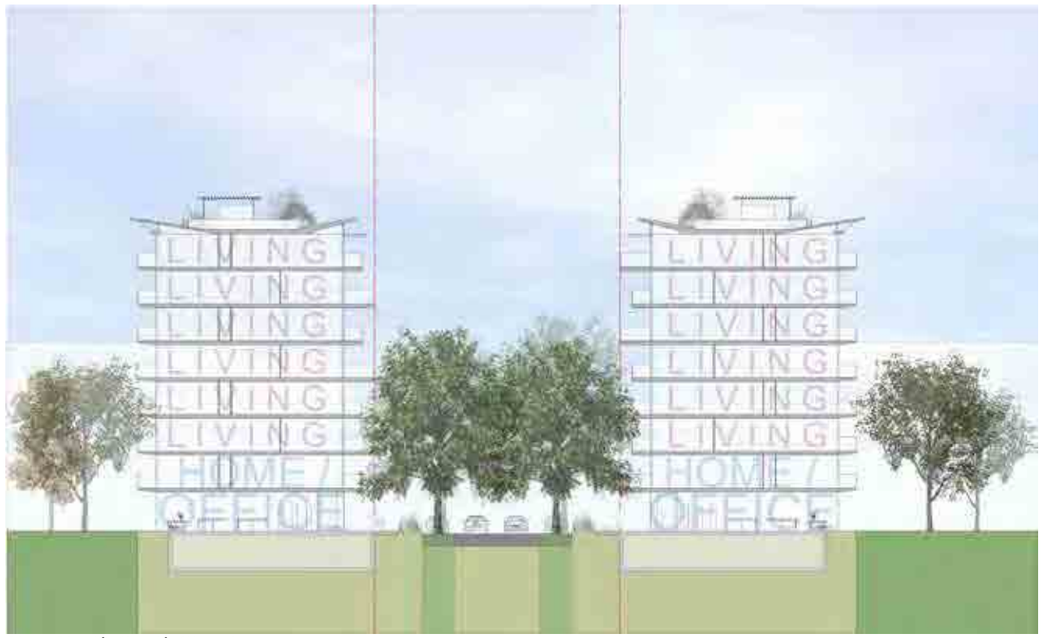
The definitive geometry of the circle is respected while the cross section is adapted to make it more accessible for pedestrians, and to allow the extension of the Capital Metro through Civic. Indeed the pairing of the regional tram loop on Vernon circle with the local bus loop on London Circuit will make the city much more legible and functional.

Vernon Circle

A Local Scale - Paired Streets

Framing the major axis of Commonwealth Avenue, a pair of parallel local streets physically and visually connect London Circuit to both the lake front and Commonwealth Park.

These local streets will have 20 metre reserves, intensely defined, lined with shops, pedestrian friendly and open ended. The two blocks flanking Commonwealth Avenue can become a new retail hub for the City, with public parking below and residential uses above.



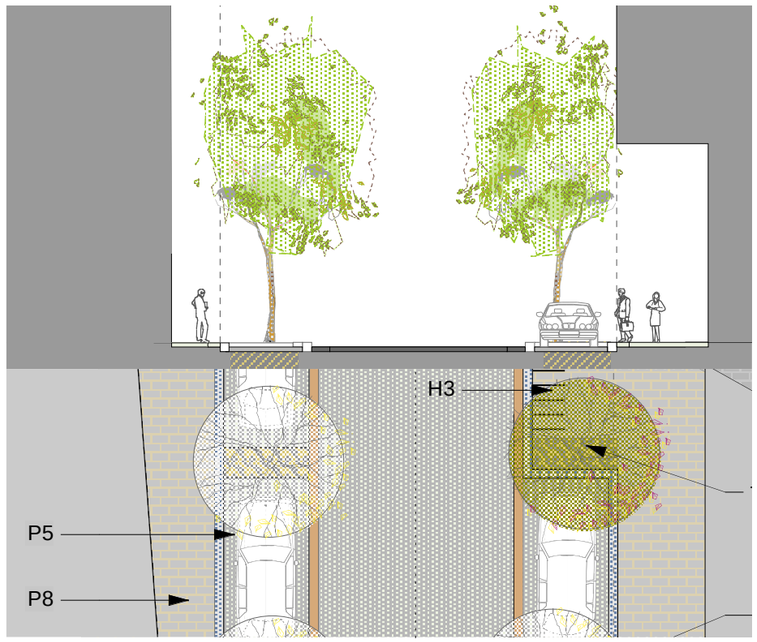
New North-South Streets

5.6 STREET TYPES

Lanes and Little Streets - Small Scale and Different

Achieving Griffins continuous circuit of lanes between London Circle and Vernon Circuit will allow a much richer use, movement, servicing and scale, benefitting the whole city centre. As is already demonstrated in Civic, even major institutional uses can none the less accommodate the lanes.

Many other blocks can benefit from a lane structure to make the heart of the urban block more amenable, allowing difference in the manner of the charming lanes in the Sydney & Melbourne blocks. Such lanes allow smaller, secondary or tertiary uses to thrive in the City Centre, creating a much more resilient and diverse range of retail, commercial and housing choices

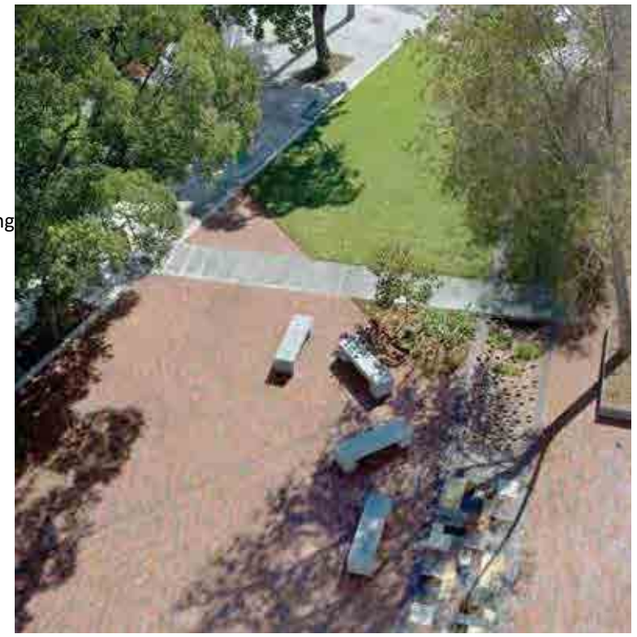


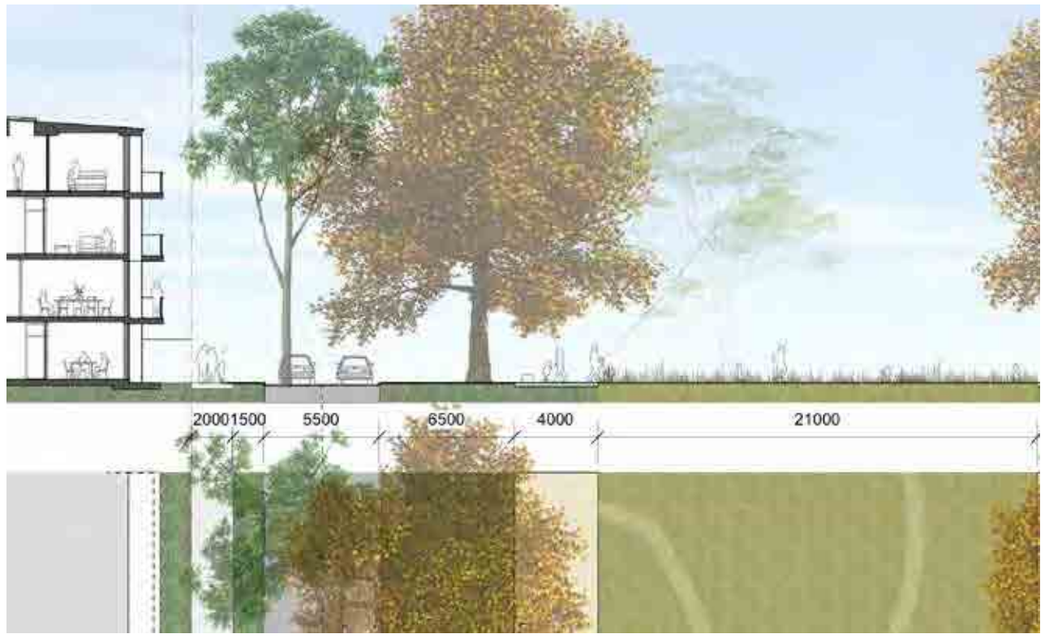
Places and Pocket Parks - Green Respite

Local parks are an important community resource that provide the scale and amenity necessary for a pedestrian friendly urban environment. They provide greenspace and trees to moderate the scale and density of urban areas.

Local parks should integrate water sensitive design initiatives where possible

They provide important pedestrian links and small local gathering spaces, and resting spaces along streets.





New waterfront promenade around West Basin showing boardwalk, pavilions and avenue planting

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6

SERVICING THE CITY

6.1 URBAN INFRASTRUCTURE

6.1.1 A Coherent Ground Plane

The City to The Lake strategy seeks to create a highly permeable street network that adapts the existing terrain to create a ground plane that is fully accessible to all users. The design does this by providing a collection of streets with DDA compliant grades throughout the street network that encourages the flow of people between the City Centre and foreshore attractions.

Adjusted grades throughout the proposed street network range from 1 – 5%, ensuring that pedestrian movement throughout the network is comfortable for all users.

This gently sloping terrain will encourage people to move through the public domain towards the lake, offering pedestrians water views as they move towards the foreshore.

A number of existing infrastructure elements are proposed to be modified which including:

- replacing the Parkes Way motorway with a new Parkes Way in the form of a split-level boulevard between the Edinburgh Bridge and Coranderrk Street;
- lowering the Commonwealth Avenue Bridge and raising London Circuit to connect at a new at grade intersection;
- reclaiming part of West Basin and constructing a new foreshore and local community; and
- extending Marcus Clarke and Allara Streets to connect with the upper section of the split-level boulevard and further extend Marcus Clarke to the new West Basin promenade.

A number of new infrastructure elements are to be incorporated as a result of the implementation of the strategy which include:

- the construction of two new streets connecting London Circuit to the new upper section of the split-level boulevard; and
- the construction of a network of local streets as part of the construction of the new West Basin Precinct.

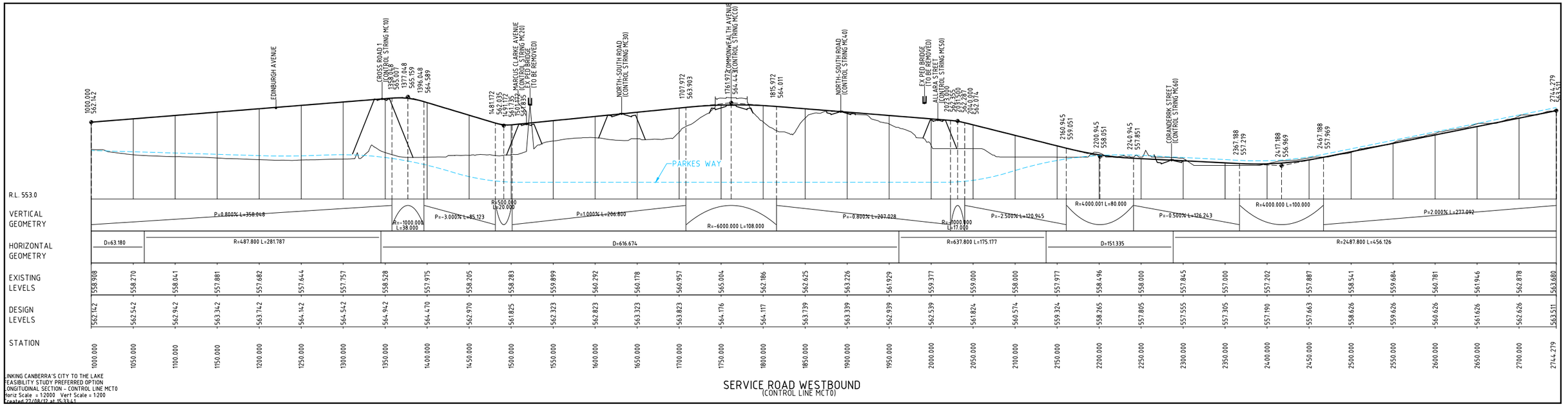
The improvements proposed to major infrastructure resulting from the implementation of the Strategy will set in place the public space framework reconnecting City Hill and West Basin. The improvements to Parkes Way through the construction of the split-level boulevard and local streets will redistribute traffic providing options and choice for vehicles, cyclists and pedestrians in a much safer environment.

The intervention of the split-level boulevard improves the utilisation of the existing road reserve and provides for a finer grain of development promoting a walkable extension to the City proper.

The following sections and diagrams illustrate the modifications proposed in the Strategy. These diagrams provide indicative information regarding grade and level changes of proposed connections to and from the new Parkes Way split-level boulevard arrangement.

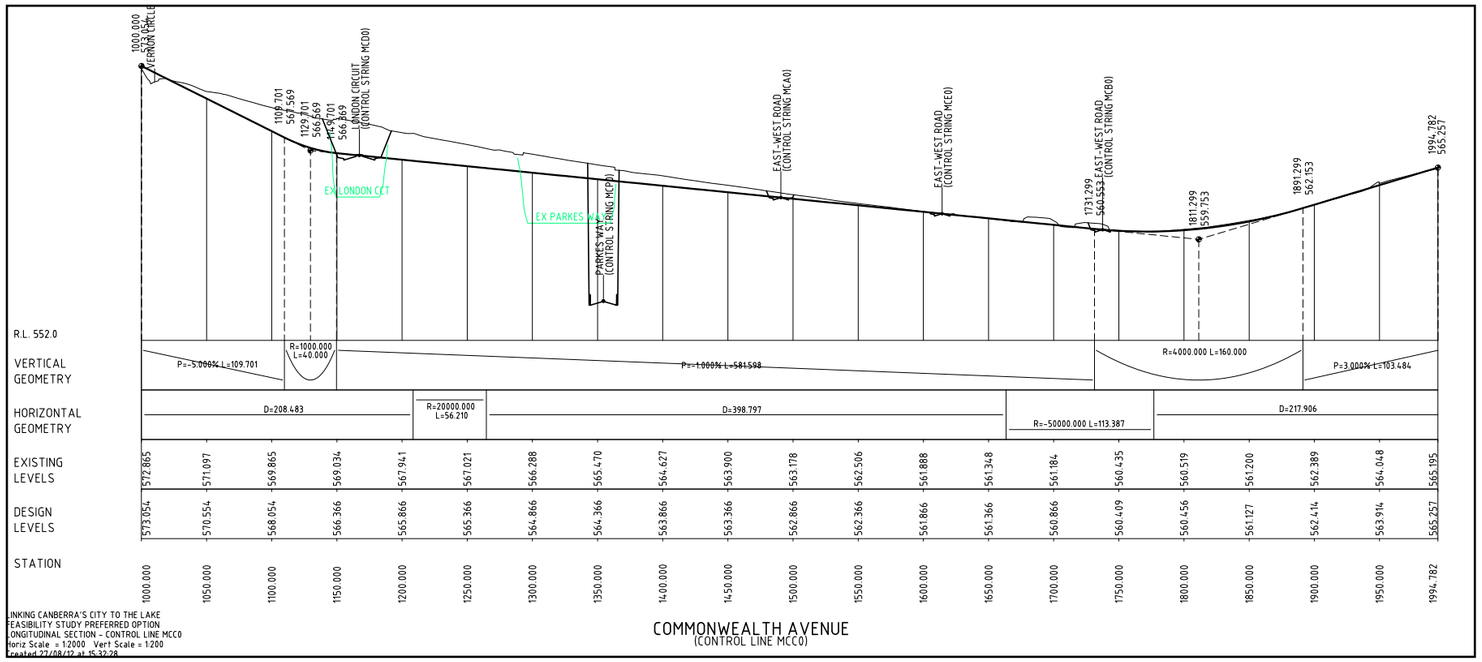
The City to The Lake Strategy proposes a new ground plane between City Hill and the reclaimed West Basin. This will include the vertical realigning of the geometry of Commonwealth Avenue and London Circuit, and the reconfiguring of Parkes Way between the Edinburgh Avenue bridge to the west and Coranderrk Street to the east. Modifications to Parkes Way will extend beyond to include improvements to the Anzac Parade and Parkes Way intersection.

6.1 URBAN INFRASTRUCTURE



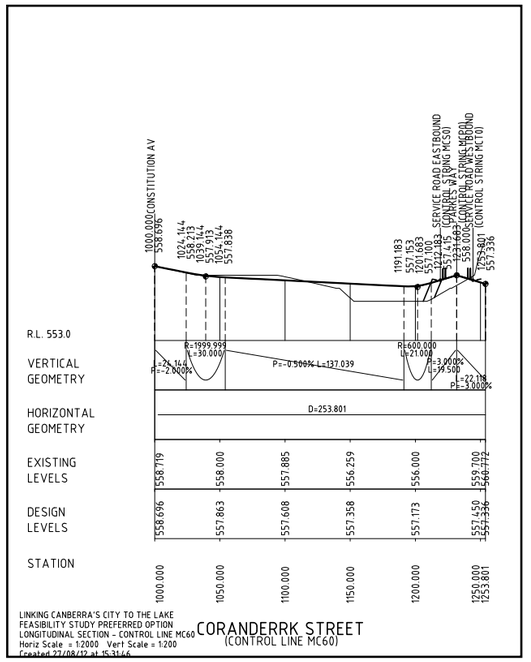
Section 1.

The long section above illustrates the approximate relationships, location and connections to the proposed West-bound carriageway at the upper section of the split-level boulevard. It also provides the suggested level changes required to the existing streets including Commonwealth Avenue, Marcus Clarke and Allara Streets. It also introduces the proposed new streets noted as MC30 and MC40 that flank Commonwealth Avenue to the east and west.



Section 2.

The long section above illustrates the vertical realignment of Commonwealth Avenue and the relationship and proposed connection to London Circuit. It also illustrates the proposed levels for the upper and lower sections of the Parkes Way split-level boulevard and its connection with the adjusted levels along Commonwealth Avenue.



Section 3.

The section illustrates the reformation of levels near the existing Corranderrk Street and Parkes Way intersection, following the proposed decommissioning of the existing pond.

6.2 URBAN SERVICES

6.2.1 Augmentation Strategy - Communications

Existing communications services transverse the subject area and impede and encumber future urban blocks and development sites constraining the construction of pieces of major infrastructure required to implement the Strategy.

Significant services include:

- The alignment of communications services situated within the existing road reserve of Parkes Way. These are proposed to be realigned as part of the major infrastructure works and are to be realigned within the new northern verge of Parkes Way;

- Communication Services which would encumber future development sites identified as part of the Strategy would be realigned into adjacent verges of the new street network to the maximum extent practicable.

- The provision of communication services for proposed sites within the strategy are to be the subject of further engineering design.

The proposed augmentation measures indicated by the diagram provide the opportunity for the implementation of major pieces of infrastructure and minimise restrictions on future development sites without significantly impacting on existing service requirements.

6.2 URBAN SERVICES

6.2.2 Augmentation Strategy - Stormwater

Existing stormwater conditions covered by the strategy are divided into two catchments, City West and City East. Both the overland flow paths and the piped networks for each catchment have been reviewed as part of determining the extent of augmentation required.

Significant elements of the strategy include:

- the relocation and reconstruction of new Gross Pollutant Traps (GPTs) above the lake level to ensure that the pipe system can be better maintained than currently enabled;

- the City West catchment's overland flow will continue to cross Parkes Way and will traverse the West Basin Precinct via the proposed street network to issue into the lake; and

- the existing Corranderrk Pond is to be decommissioned and new box culverts are to be constructed within the road reserve to divert and treat the existing stormwater into Nerang Pool.

The provision of piped services proposed to drain future sites will be the subject of further engineering design. The provision of stormwater for the proposed West Basin precinct will also be subject to further design as part of the design of the subdivision.

The proposed augmentation measures indicated by the diagram enable the implementation of major pieces of infrastructure and minimise the encumbrance on future development sites without significantly impacting on existing service requirements. In addition, the proposed strategy improves the ability to maintain the existing piped network and provides for the implementation of Water Sensitive Design initiatives which will improve the water quality of Lake Burley Griffin.

6.2 URBAN SERVICES

6.2.3 Augmentation Strategy - Water

Existing water services traverse the subject area and impede and encumber future development sites and constrain the construction of pieces of major infrastructure required to implement the strategy.

Significant elements include large water main located in the median of the existing Parkes Way, to be relocated to a new alignment in the proposed northern verge of Parkes Way.

The provision of main water supply services for future sites is to be the subject of further engineering design. The supply of mains water for the West Basin precinct will also be subject to further design as part of the design of the subdivision.

It is advised that the capacity to supply mains water throughout the proposed strategy is deemed adequate.

The diagram on this page suggests augmentation measures to enable the implementation of major pieces of infrastructure and minimise the encumbrance on future development sites without significantly impacting on existing service requirements.

6.2 URBAN SERVICES

6.2.4 Augmentation Strategy - Sewer

Existing trunk sewer mains are situated within the subject area and impede and encumber future development sites and constrain the construction of pieces of major infrastructure required to implement the strategy.

Significant elements include:

- A large trunk sewer which provides carriage to the city catchment drains from City West and City East in the verge and then median of Parkes Way at an approximate depth of 10 metres and then continuing down the median of Commonwealth Avenue to the south to an existing pump station located in the south west corner of Commonwealth Park. This trunk service is to be retained in this scheme at this location;

- Minor augmentation of the sewer is to occur upstream of the above location to remove encumbrances on future development sites; and

- The existing development within West Basin is to be disconnected and reconnected to the main within Commonwealth Avenue.

The provision of sewer services for future sites will be the subject of further engineering design. The installation of sewer for the West Basin precinct will also be subject to further design as part of the design of the subdivision.

The diagram suggests augmentation measures to enable the implementation of major pieces of infrastructure and minimise the encumbrance on future development site without significantly impacting on existing service requirements.

6.2 URBAN SERVICES

6.2.5 Augmentation Strategy - Electricity

Summary Paragraph:

There is existing High Voltage supply within the subject area that will impede and encumber future development sites and constrain the construction of pieces of major infrastructure required to implement the strategy.

- Existing high voltage lines within proposed development sites are to be realigned through the West Basin Precinct. Additional High Voltage Lines are to be realigned across and into the upper section of the split-level boulevard to continue south along Commonwealth Avenue;

- The provision of electricity required to service future developments sites identified within the proposed strategy area will require further design and capacity analysis. Additional substations will be required subject to further detailed design analysis and extent of densification implemented by developments.

The diagrams do not consider the realignment and impact to other electricity services including low voltage and street lighting. These services will require further analysis resulting from the detailed design of the future subdivision of the West Basin Precinct. The benefit of providing augmentation measures for High Voltage will minimise the impact on future development sites and enable these works to be incorporated into the works associated with the modification of major pieces of infrastructure.

6.2 URBAN SERVICES

6.2.6 Augmentation Strategy - Gas

Summary Paragraph:

Existing Gas services traverse the subject area and impede and encumber future development sites and constrain the construction of pieces of Major Infrastructure required to implement the strategy.

Significant elements include:

- an existing gas main that is situated within the existing road reserve of Parkes Way is proposed to be realigned as part of the major infrastructure works. It is to be split from the main line into two lines running east in the southern verge and west in the northern verge of Parkes Way; and

- existing gas Services which are encumber future development sites identified as part of the strategy to be realigned into adjacent verges of the new street network where practicable and feasible.

The provision of gas services for proposed sites subject enabling the implementation of the strategy will be the subject of further engineering design. The provision of gas services for the proposed West Basin precinct will also be subject to further design as part of the design of the subdivision.

The diagram suggests augmentation measures to enable the implementation of major pieces of infrastructure and minimise the encumbrance on future development sites without significantly impacting on existing service requirements.

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EVENT CITY - POLES OF CIVIC LIFE

7.1 POLES OF CIVIC LIFE

The Potential for Public Institutions and Facilities

Public institutions, recreational and community facilities are essential elements in forming a rich and genuine urban experience. These buildings urban places and associated uses act to build a cultural inventory of local, state and national significance and can include:

- Parks and squares
- A new ACT Government
- Libraries
- Community halls
- Sports fields and stadiums
- Theatres and concert halls
- Law and administrative courts
- Museums
- Art galleries
- Swimming pools
- Conference and exhibition centres

These insertions into the urban fabric can enliven and activate the city, creating nodes of attraction. The interaction between these poles of civic life and the general community create enduring and memorable cities. A selection of successful Australian precedents are demonstrated, right.

Canberra has an opportunity to realise an enduring public legacy through the introduction of a number of the above mentioned. This strategy interrogates the suitability of a few selected urban facilities within the city centre:

- A new 30,000 seat urban stadium adjacent to civic;
- The renewal of a Civic pool; and
- The renewal of Conference and Exhibition facilities.

Surry Hills Library, City of Sydney - Surry Hills

Pirrama Park, City of Sydney - Pyrmont

Parramatta Law Courts, NSW Government - Parramatta

Museum of Old and New Art (MONA) - Hobart

Sydney Theatre, NSW Government - Walsh Bay

Gallery of Modern Art (GOMA) - Brisbane

7.2 BUILDING TYPES

Building Types

The expanded street system can create 25 new and redefined urban blocks. Currently undeveloped, these urban blocks can accommodate new urban housing, workplaces and retail opportunities, in a variety of building types. All blocks and every building can have excellent street address and easy connection to the city centre, expanding the place's liveliness and central place in Canberra.

Subdivision and Diversity
The new blocks should all be able to be subdivided, allowing a range of building types to add genuine diversity across the city centre. Such diversity will enable a range of residential, retail, business uses, and their interplay. A diversified building stock will enable flexibility and a range of affordability, and allow a weekend and night-time economy to supplement weekday activity. Only major civic uses such as a new ACT Parliament, the Convention Centre, theatre complex or the like should be able to occupy whole city blocks. Little streets, laneways, walkways and arcades should allow more frontage to further encourage variety, vitality and opportunity.

Urban Housing adds life
Benefitting from the city centre location, there are great opportunities for new urban housing that can become the downtown neighbourhood for Canberra. A range of housing types can be accommodated, which can work hand in hand with the commercial and retail opportunities to make a diverse vibrant city centre. The new housing can benefit from the expansive lake and park front setting.

Major Retail Opportunities
Civic's expansion and the new lakefront can create major shopping opportunities. The key blocks on both sides of London Circuit have significant potential for both a large scale shopping centre and street edge activation. Developing a large block as a retail centre can balance the existing retail concentration around the mall. Further, the lakefront allows for a sophisticated retail presence addressing Canberra's great recreational attraction.

Expanded Commercial Spaces
The new urban blocks adjoining the existing office space in Civic enables significant growth opportunities for the centre. This should satisfy future demand for decades to come, and entrench Civic as the city's pre-eminent commercial centre. A number of major hotel sites would also become available, allowing an expanded offering for convention, business and tourist visits to Canberra.

Building Scale
In conformity with the existing planning controls, the dominant height is 25 metres, with lower scale 16 metre facades fronting the lake. Point towers up to 50 metres in height mark key points in the urban fabric, and give a differentiated silhouette in counterpoint to the predominantly horizontal scale of the buildings.

High quality, high ameniy urban housing - Paris

Civic-minded building scale and quality - Central Sydney

Varied and eclectic retail experiences - Angel Place, Sydney

Integrated housing - Pindari Apartments, Randwick

Hotel Realm addressing the public domain - Canberra

Articulated and expressive form - New Acton, Canberra

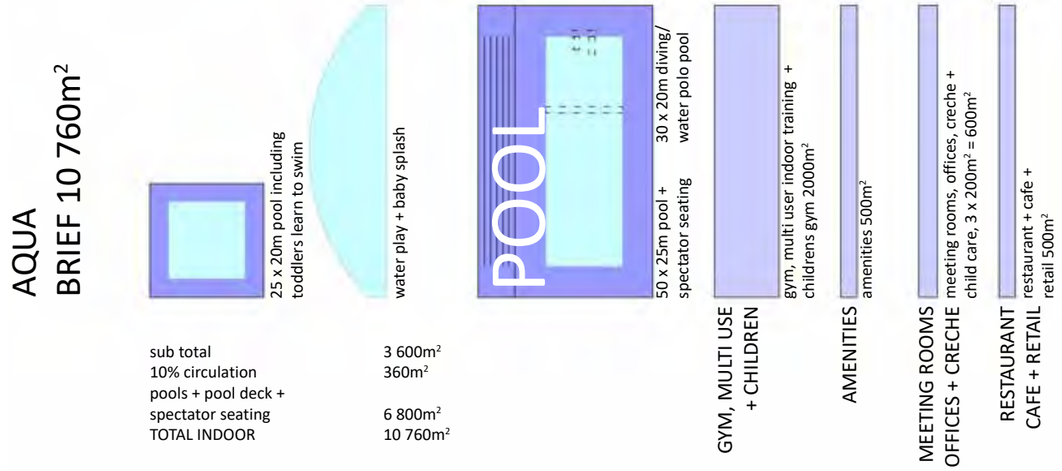
7.3 CIVIC PROGRAMME

New Sport and Leisure Pools

A coordinated multi-user facility celebrating the Griffin's Water Axis and activating West Basin with international standard aquatic competition and leisure facilities.

A waterside park location with ready access possible from Australian National University featuring:

- Open air pool with winter enclosure anticipated;
- Ranging from fitness swimming to the pure pleasure of water play; and
- Potential for 220, 000 visitor days, mostly locals (600 people, to contribute to city life, about 365 times a year).



New City Pool and Urban Beach

7.3 CIVIC PROGRAMME

A New Stadium

An integrated multi-use facility to complement and enliven Central Canberra and Commonwealth Park, reminiscent of the Griffin's recreation group.

Stadium placed in the City centre to take advantage of the most accessible place in terms of public transport and available car parking. City centre stadia, such as the Telstra Dome (Docklands) in Melbourne bring in crowds and enliven the city at night and on weekends.

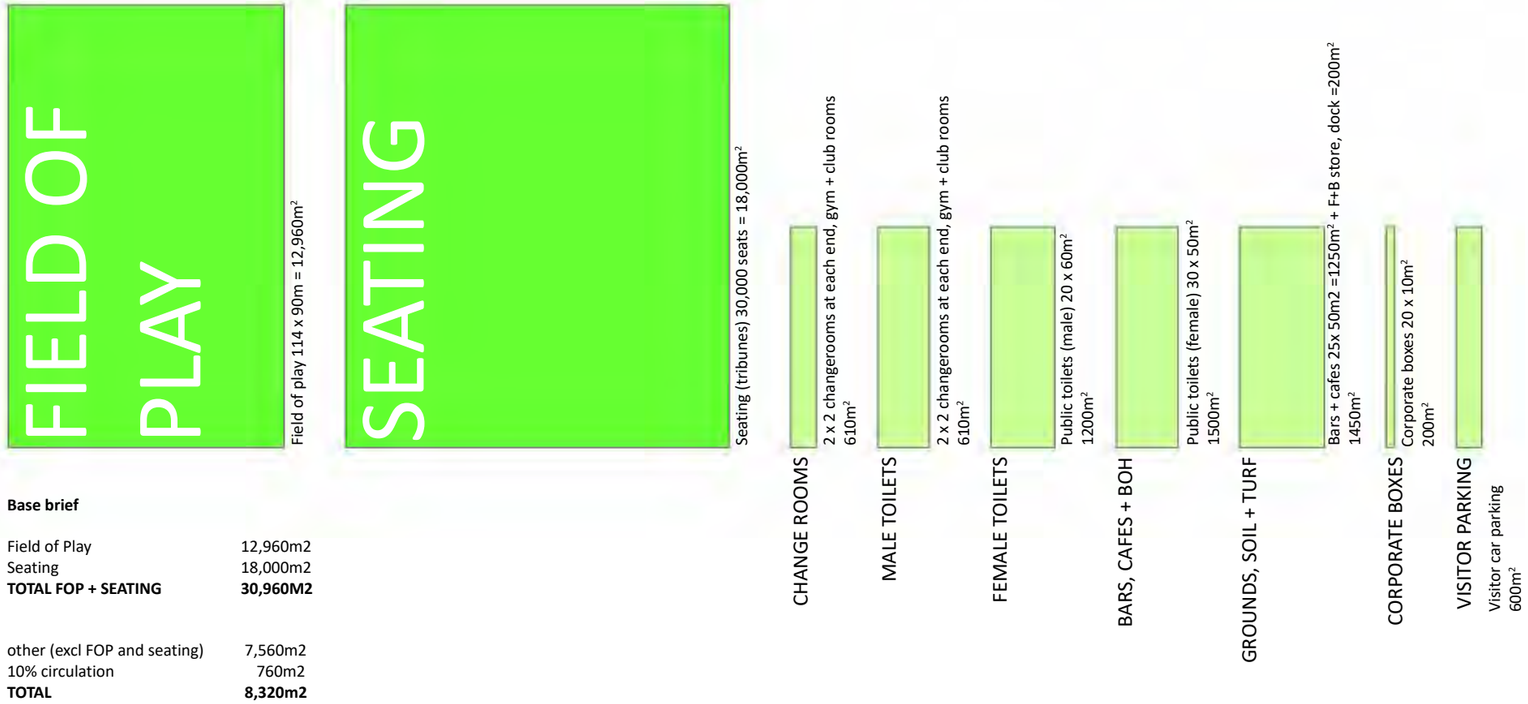
The Civic Pool site the largest available block in the city that can accommodate the program. It is well located in relation to main public transport routes and possible future transit stops and interchange points on London Circuit/ Commonwealth Avenue, Constitution Avenue and the existing bus interchange.

The site provides for crowd dispersal distances which are suitable. It is also large enough to accommodate other commercial and community facilities that will assist in offsetting the cost of a new stadium and provide for ongoing revenue streams.

Specialist sport support services can be located with other facilities. The central location of the site allows for clubs, cafes restaurants retail and public parking. Carparking for the stadium can potentially serve as long stay parking during office hours and also serve for major events at Commonwealth Park and the Lake.

Potential for 1, 200, 00 visitor days/per annum, locals and visitors (30, 000 people, to contribute to city life about 30 times a year).

STADIUM
30 000 seats



Base brief

Field of Play	12,960m2
Seating	18,000m2
TOTAL FOP + SEATING	**30,960M2**
other (excl FOP and seating)	7,560m2
10% circulation	760m2
TOTAL	**8,320m2**

Realign Parkes Way as a split level boulevard with frontage to the new Stadium and Commonwealth Park

7.3 CIVIC PROGRAMME

New Conference and Exhibition

The proposed location addressing City Hill is larger and more prestigious than the current site, allowing increase to the capacity of the centre, and incorporating discrete servicing with pre-assembly halls adding to street life.

Co-location of other facilities should be limited. The central location of the site allows it to trade within Civic for cafes, restaurants and retail.

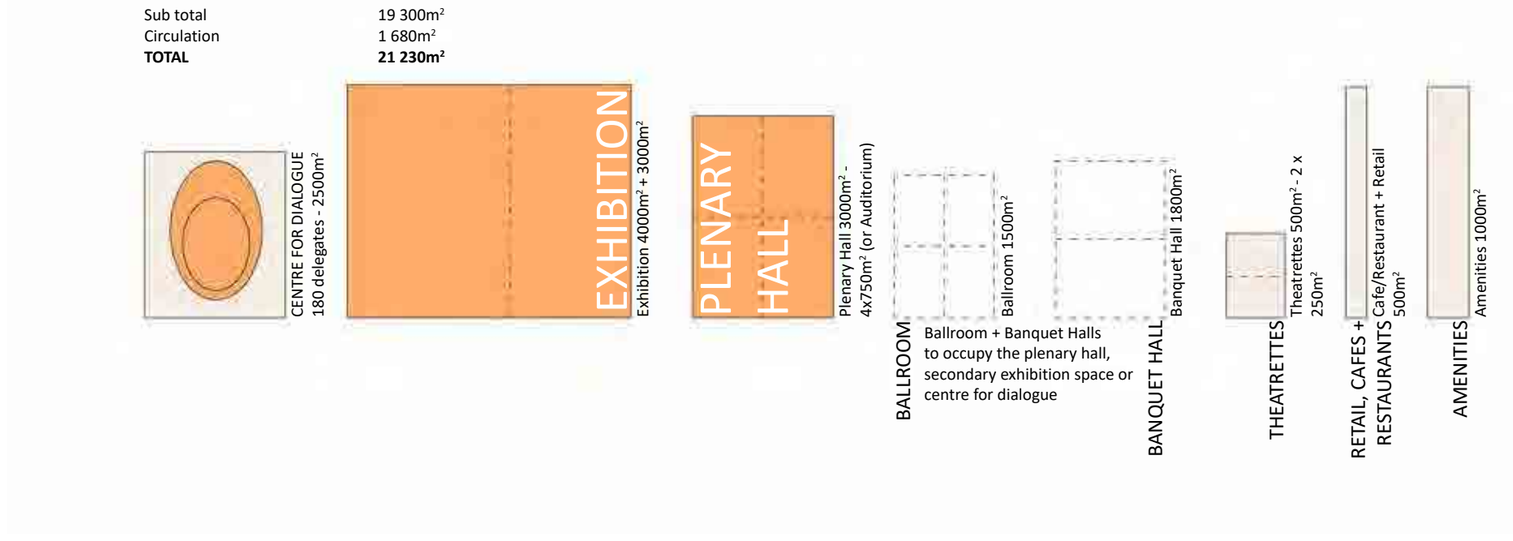
Potential to interleave high quality event programs with social event venues unique to the National Capital including dinner at Parliament House, cocktails at the National Gallery, visits to the War Memorial, public rooms of the national gallery, old Parliament House and the like.

Foyers can operate as independent venues, open to Vernon Circle, activating the centre as often as possible.

Potential for 400, 000 visitor days/per annum (mostly visitors to Canberra).

The site integrates with and potentially has greater economic benefits for existing business in the City.

It reinforces City Hill symbolically as the City apex of the National Triangle and gateway to the Central National Area.



Reconfiguration of Commonwealth Avenue and Vernon Circle, seen from City Hill.

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8

IMPLEMENTATION