

Built form

Arden's built-form is of diverse heritage and style and holds strong character for the area. There are a range of significant landmarks, building typologies and historical sites that are noteworthy and recognisable Melbourne traits. With a transformation of the Precinct there are many opportunities to maintain and reflect the built form characteristics unique to Arden.

Currently, the dominant built form is large format warehouse and factory buildings that range in age and materiality, from late 19th century brick industrial buildings, through to mid-century saw-tooth roofed factory buildings and more contemporary tilt-up concrete factoryettes. The predominant scale is the equivalent of a two-storey residential building, although there are some distinct exceptions.

A number of former industrial buildings along Laurens Street have been adapted and extended into residential developments, while other multi-storey factory buildings and silos of the Weston Milling site continue to accommodate industrial uses. There is also a more diverse range of residential buildings in the Laurens Street sub-precinct that include century-old single-storey terrace buildings, more

contemporary 3-storey terrace developments and four and five storey apartment buildings.

Brick and masonry retain a significant presence across Arden, whilst roof forms are typically flat or low-pitched, unless retaining industrial saw-tooth roof forms in larger format industrial buildings that were built up to the mid-century.

The North Melbourne Recreation Centre and Pool, while not of significant heritage value reflect the use of hard-wearing masonry and brick materials this hard-working district has relied upon. The opportunity to recognise, reflect and respect such strong built-form heritage is an aspect of this site that is not afforded to many urban redevelopments of this intensity. Within that overarching opportunity lies a strong diversity of typologies and characters that can be weighted in the sub-precincts to inform a finer-grain sense of identity at the neighbourhood scale.

Stawell Street





Industrial building aesthetics



Former industrial building, Victoria Street.

Open space and public realm

The extent of existing open space in Arden is relatively limited, which is to be expected in a predominantly industrial precinct. There are however, successful existing open spaces that can be strong contributors for the delivery of a world-class precinct.

The location and scale of North Melbourne Recreation Reserve, Clayton Reserve and Macaulay Road & Canning Street Reserve have opportunistically made use of the interface of residential areas with the flatter (and historically cheaper) land at the fringes of the Moonee Ponds Creek flood plain.

The North Melbourne Recreation Reserve has evolved into an important recreation and community asset which not only provides key facilities, such as the pool, recreation centre and outdoor sports courts, but also is home to one of Melbourne's oldest football clubs. Whilst this limits public access to parts of the open space and oval, it has been and remains a strong community identifier.

Clayton Reserve, Macaulay Road and Canning Street Reserve, have developed into local open

spaces that provide for passive recreation needs, with strong formal perimeter planting of trees and flexible lawn spaces, as well as a dog park.

Further to the south the Railway Place and Miller Street Park has grown from left over space after the construction of the Dynon Road flyover decades ago, which has very recently been redeveloped and expanded through the closure of parts of Railway Place to traffic. This now accommodates a skate park, dog park and playground which are immediately accessible to the adjacent community which is growing on account of larger residential redevelopments. Whilst providing some of the few youth-orientated open space facilities it caters for a broad range of community passive recreation needs.

The existing public open spaces can be classified in the following way using the classification identified in the City of Melbourne's Open Space Strategy.

Existing open spaces

Open Space	Size	Catchment	Character
North Melbourne Recreation Reserve	4.51 ha	Municipal	Restricted sporting Sporting
Clayton Reserve	0.65 ha	Local	Informal use
Macaulay Road & Canning Street Reserve	0.25 ha	Small Local	Informal use
Railway Place & Miller Street Park	0.11 ha	Small Local	Recreation Informal use



Railway Place and Miller Park



North Melbourne Recreation Reserve

Open space and public realm

Beyond the open spaces, Arden is endowed with generous streets, particularly those that form part of the original Hoddle-laid street grid. Only some of the space provided in these road reservations has been used for continuous and significant street tree planting, predominantly in the vicinity of the North Melbourne Recreation and Clayton Reserves. Boundary Road, Gracie, Green and Henderson Streets with well-established plane trees, while Fogarty Street is lined with gums.

Some parts of road reservations adjacent to open space have been adapted to serve as expanded areas of the open spaces, reserved for recreational users rather than for car parking or carriageway, and Railway Place has been wholly re-purposed in this way, effectively creating some 2,500 square metres of space for recreation use and pedestrian and cycling- only movement.

Other wide road reservations, such as Munster Terrace, have minimal space afforded to pedestrians and instead maximise space for on-street, and median car parking, thereby omitting the environmental or social benefits that could otherwise be accommodated.

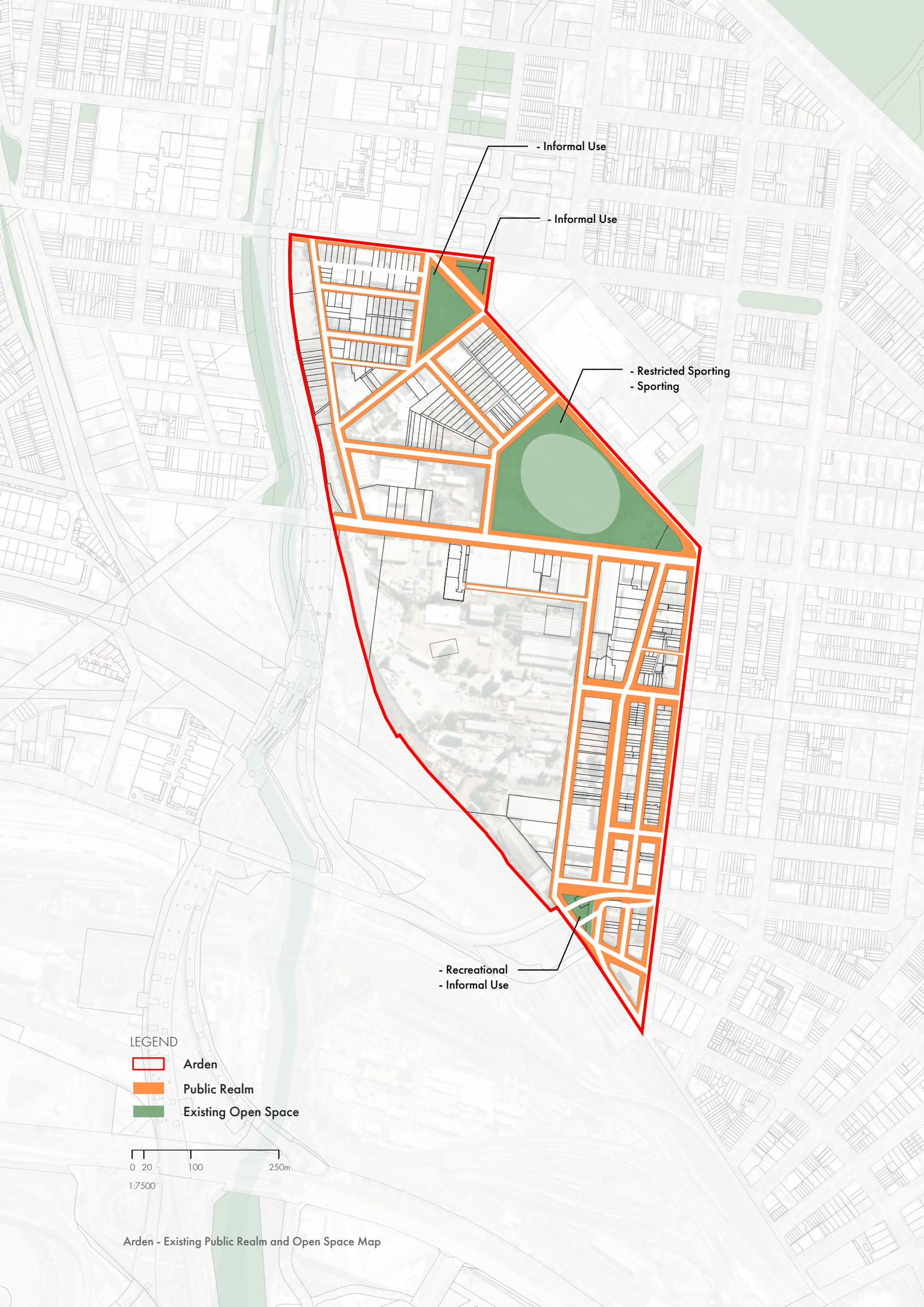
Despite its proximity to the Moonee Ponds Creek and its low elevation, which makes it prone to flooding, virtually no integration of water sensitive urban design is visible in the Precinct, in the open spaces nor the streetscapes. Relatively deep blue-stone kerbs and gutters are prominent in parts of the Precinct to manage stormwater, however pose barriers to pedestrian movement, and in places even the opening of car doors from kerbsides.



Railway Place and Miller Park



Macaulay Road and Canning Street Reserve



- Informal Use

- Informal Use

- Restricted Sporting
- Sporting

- Recreational
- Informal Use

LEGEND



Arden



Public Realm



Existing Open Space



The existing precinct

Arden open space gaps

Arden's relatively compact size and centrally located existing open spaces appears to provide good walking access to open space, however their characteristics reveal a wider gap in open space provision, and the public realm that is available in Arden.

The existing open space access map demonstrated the 300m walking catchment to existing open spaces with most of Arden easily accessible. Arden Central appears to have poor coverage given its current lack of access due to existing fences and lack of streets. The precinct's wide streets with little vehicle traffic currently have not adapted to provide areas of respite or informal recreates, with exception at Railway Place and the southern end of Clayton Reserve.

The open spaces of Arden appear to provide a significant amount of public open space, however North Melbourne Recreation Reserve's (NMRR) current role restricts public access and limits flexibility in how it can be used. Whilst North Melbourne Recreation Centre and Pool provide important recreational functions, together they occupy large areas of the reserve for specific activities that are only accessible for a fee. The NMRR plays a crucially

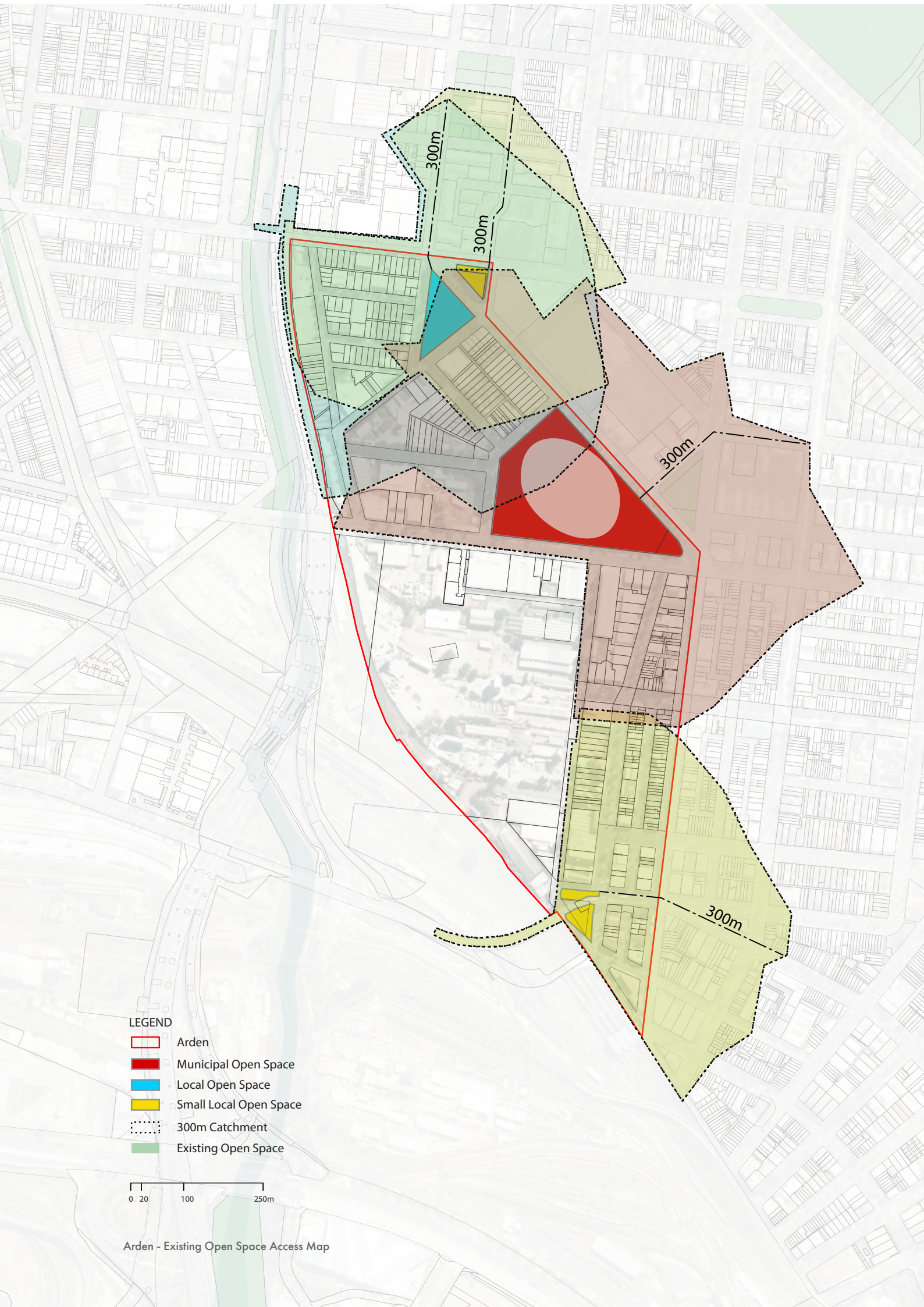
important role in the identity of Arden and all of North Melbourne community, however there are limited opportunities for it to grow or adapt its role without substantial change to these valued institutions. Clayton, and Macaulay Road & Canning Street Reserves and Railway Place & Miller Street Park provide locally-scaled and oriented spaces that provide for flexible, passive use, however their modest size limits their capacity to do so for a larger population.

There is currently little or no available space for nature conservation, larger events, informal uses such as picnics and social gathering and open grassed areas, particularly when considering the size of the future population of the Precinct.

Opportunities for Arden PROSS

The existing characteristics of Arden and its setting reveal key opportunities for the Arden PROSS to focus on in order to create a public realm and open space network that will fulfil the needs of its future resident and worker population. These include:

- Leveraging the space available in road reservations for a range of benefits for the local community beyond movement and transport.
- Integrating stormwater management infrastructure, particularly the series of large retarding basins that will be required in Arden North, into the open space network and incorporate usable recreation space in them through detailed design.
- Protecting and celebrating existing heritage characteristics into the design of the public realm and open spaces.
- Providing more soft landscape throughout, what is currently, an extensively paved precinct to mitigate urban heat island effect.
- Providing more flexible space that can be programmed in different ways and be available for a range of different activities.
- Contemplating how new buildings and developments can further contribute to the public realm and improve access to the benefits of the public open space that is provided.



LEGEND

- Arden
- Municipal Open Space
- Local Open Space
- Small Local Open Space
- 300m Catchment
- Existing Open Space

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Opportunities for Arden PROSS

Place characteristics

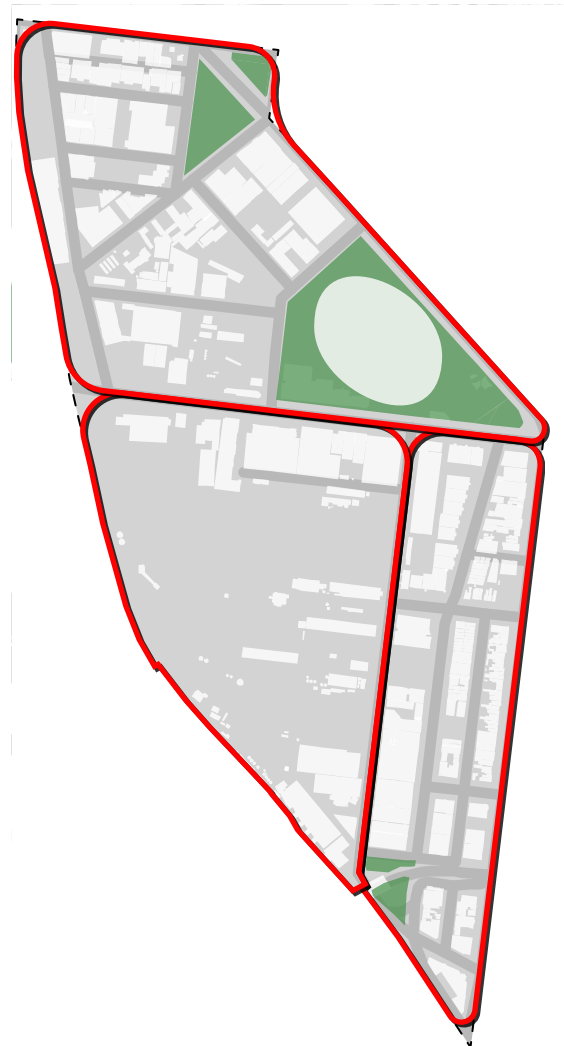
Three sub-precincts have been identified in Arden, defined by the main roads that divides the Precinct. The identity of each is defined by a combination of physical, social, functional elements that are outlined below and remain relevant to their inherent attributes and development potentials.

Arden Central Sub-Precinct

- Focused on the (future) underground Arden Railway Station currently being constructed and centred on a large, single land holding with remnant rail infrastructure and industrial built form
- The western edge with visibility to the rail and elevated freeway infrastructure
- A largely post-industrial landscape that is partially demolished affording long views across the site, and Arden Street built form reusing and adapting aging industrial and commercial built form
- A broad Arden Street corridor affording dedicated pedestrian, cycling and vehicle space with sporadic street trees
- Laurens Street corridor affording continuous pedestrian and cycling connection between the North Melbourne Station, Arden Station (future) and the North Melbourne Recreation Reserve.

Arden North Sub-Precinct

- Focused on the North Melbourne Recreation Reserve, Centre and Pool and the home of the North Melbourne Football Club
- A network of substantial open spaces including North Melbourne Recreation Reserve, Clayton Reserve and Macaulay Road and Canning Street Reserve, connected with well-planted streetscapes
- Individual buildings with specific social, cultural and historic significance including North Melbourne Recreation Centre, Pool and Lost Dogs Home
- The western edge well-defined by the rail and very present, elevated freeway infrastructure
- A mix of aging, reused and redeveloped industrial built forms as well unused and underutilised sites with outdoor processes and storage.



Laurens Street Sub-Precinct

- Focused on a series of wide north-south streets, diverse, historic built form, including heritage-valued Weston Milling site
- A predominance of space for vehicles in streetscapes, sporadic vegetation and traditional stormwater hardware
- An emergent landscape of infill redevelopment with a range of single to six storey buildings on relatively small sites
- The industrial-residential transition zone between the larger sites and more offensive (former) industrial activities of the west and the residential uses to the east.

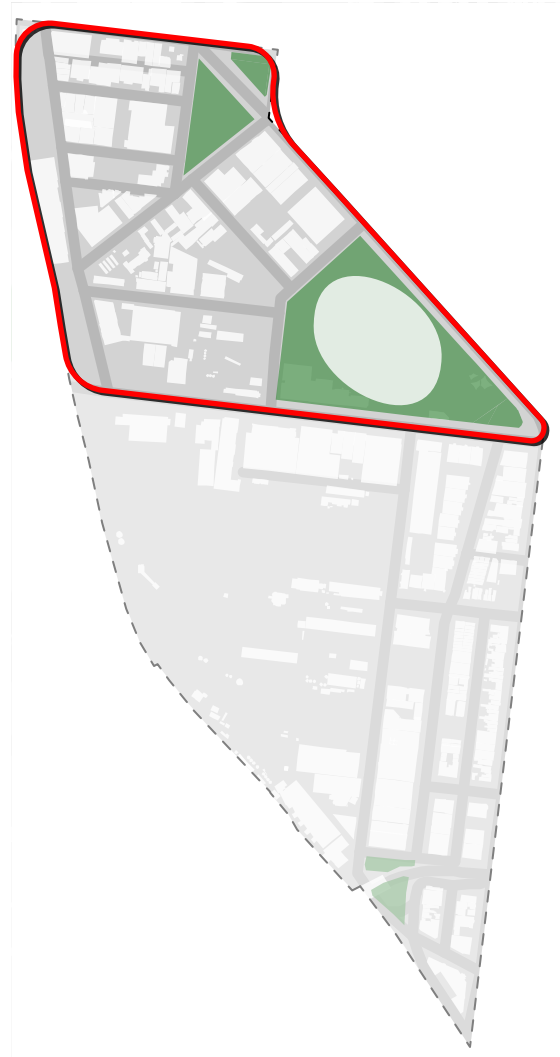
Arden North

Arden North will expand on its asset of the North Melbourne Football Club as the cultural focus for the broader precinct. It will have strong connections to the Moonee Ponds Creek and train stations.

Arden North topographically, is the best area to site a retarding basin that has been identified as a key drainage asset to manage flooding for the precinct and surrounding area.

Clayton Reserve and the North Melbourne Football Club and surrounds are existing open space assets within the precinct. The area within the Moonee Ponds Creek is also subject to Aboriginal Cultural Sensitivity.

Gracie Street and Greens Road have high quality avenues of trees and together with Arden Street and Macaulay Road provide key public realm to the sub-precinct.



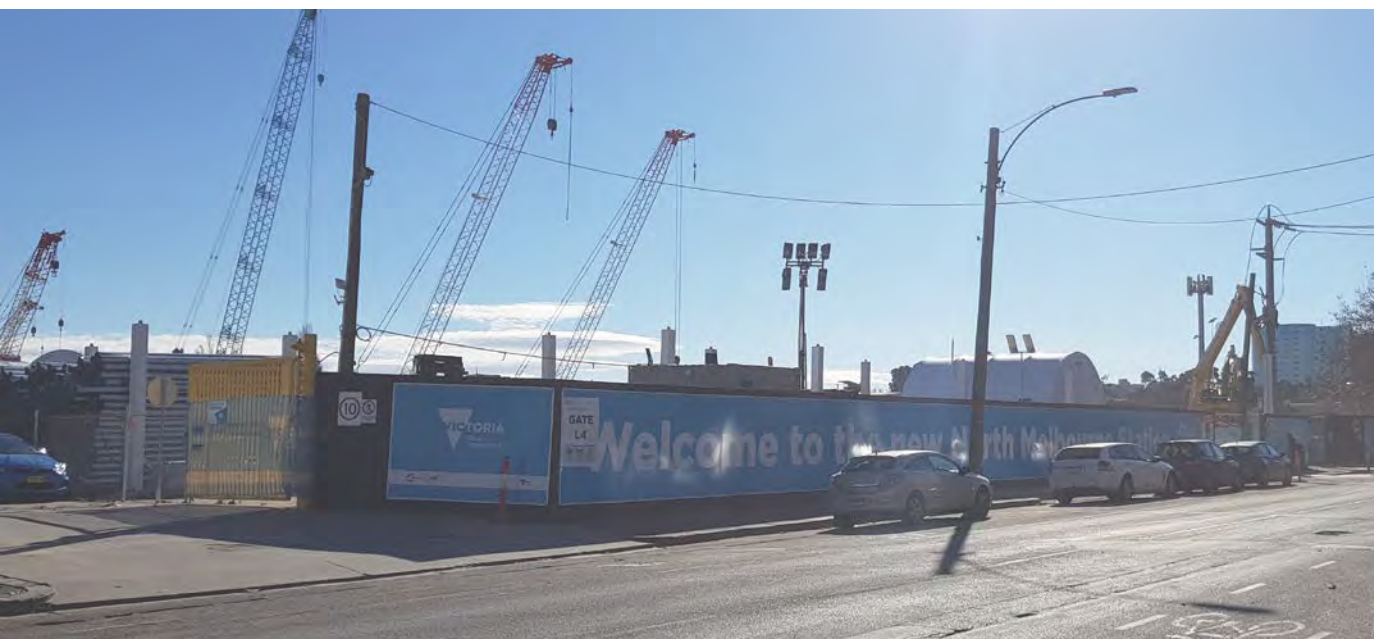
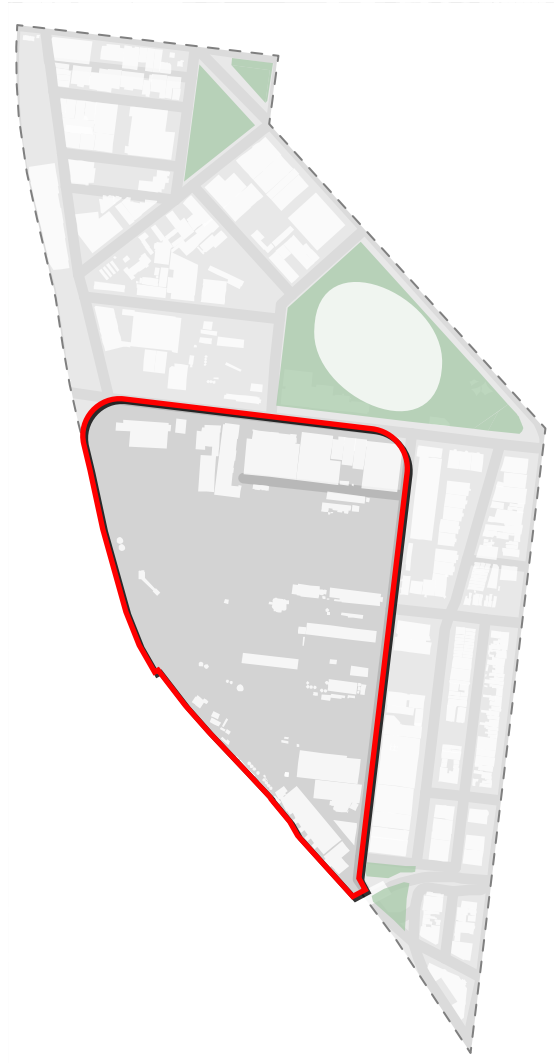
Fogarty Street



Arden Central

Arden Central currently has no open space, and little public realm, but has been identified as the location to focus on employment with the greatest intensity of activity around the new underground Arden railway station. It will be centred around a new civic heart in the form of a capital city open space that attracts visitors from across the state.

Arden Central is bound by Arden Street and Laurens Street. Laurens Street has strong architectural features and good quality avenues of trees.

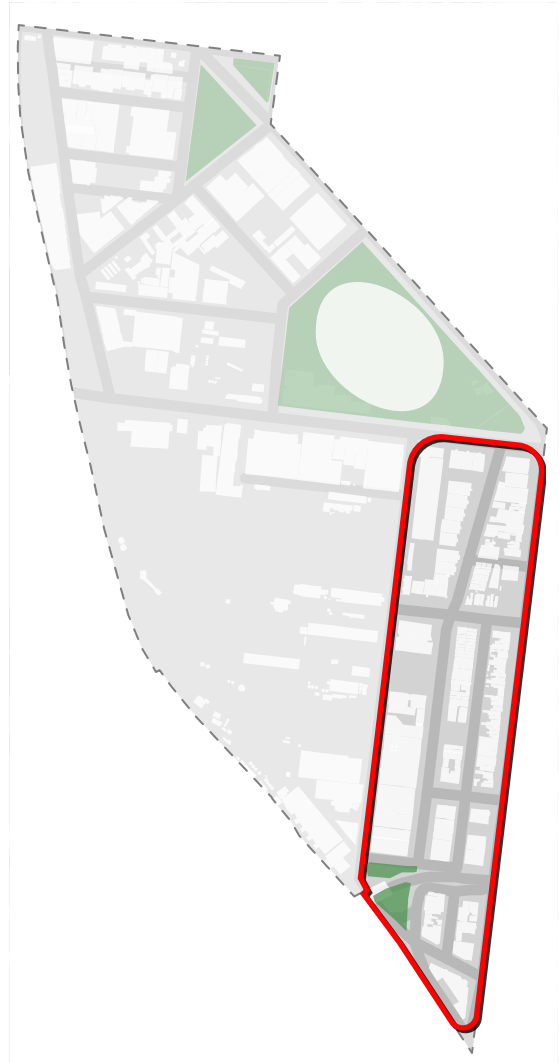


Arden Central - New Arden Station Works

Laurens Street

Laurens Street sub-precinct with wide streets, some of which have been re-purposed into public space, will marry the existing urban fabric, residential areas and industry with the intensification planned to occur in Arden Central. Laurens Street will transition existing activity and character into the new central sub-precinct, creating an active and vibrant precinct that celebrates its heritage buildings and wide streets.

Laurens Street and Queensberry Street, together with the other streets in the sub-precinct contain original architecture, some of which has heritage value.



Queensberry Street

05

BENCHMARK REVIEW

The future vision for Arden and its existing characteristics informs the selection of precinct benchmarks that are instructive for informing the PROSS for the precinct. Whilst many idealised or preferred urban examples may exist all over the world, only a limited number can truly be useful in identifying the most appropriate and viable public realm and open space outcomes for Arden.

To be constructive benchmark precincts need to exemplify:

- **Job-rich, mixed-use environments** – providing highly productive urban environments rather than being residentially-focused neighbourhoods, nor exclusively employment zones. Places such as precincts in Silicon Valley, whilst attractive for their innovative industry focus, do not integrate diverse uses and communities as part of the environment.
- **Contemporary urban renewal/redevelopments** – enjoying the benefits, as well as dealing with the constraints imposed on, contemporary development, including higher standards of universal access, environmental performance, technological and infrastructure requirements. Whilst many historic places, such as the Marais District in Paris, are renowned for their open spaces and public realm, their contemporary realisation would be inhibited for many of the above factors.
- **Similar cultural settings** – bearing resemblance to the modern, open and diverse community that Melbourne and Australia are, and with the lifestyle expectations that come with both that heritage and aspiration for the future. Places that have evolved or been designed with substantially different economic, political or social expectations, such as Marina Bay in Singapore, would provide difficult to implement models for Arden.
- **City centre, metropolitan locations** – managing vast movements of people both to but also through or around them whilst growing a sense of ‘local’ community by integrating a mix of uses and activities for both visitors and residents. Places at the fringes of cities or in smaller regional centres, such as Seaside in Florida, provide for smaller and more stable communities and can depend on little change in the future.
- **A high-density environment** – accommodating significant institutions and numbers of residents and workers, while managing the environmental impacts as well as the ongoing effects of human activity within the public realm. Lower density places, such as Vastra Hamnen in Malmö, are less adoptable for Arden as their streets and spaces can rely on fewer shadows, cars, as well as recreational users.

For these reasons only a handful of benchmark places have been used to inform the PROSS for Arden, the majority of them being local to Melbourne to ensure the social and cultural gauge is suitably set for Arden’s public realm and open spaces.

- 01 Melbourne
- 02 Southbank
- 03 Docklands
- 04 Battery City Park, NY
- 05 Kings Cross Central,
London

01 Melbourne

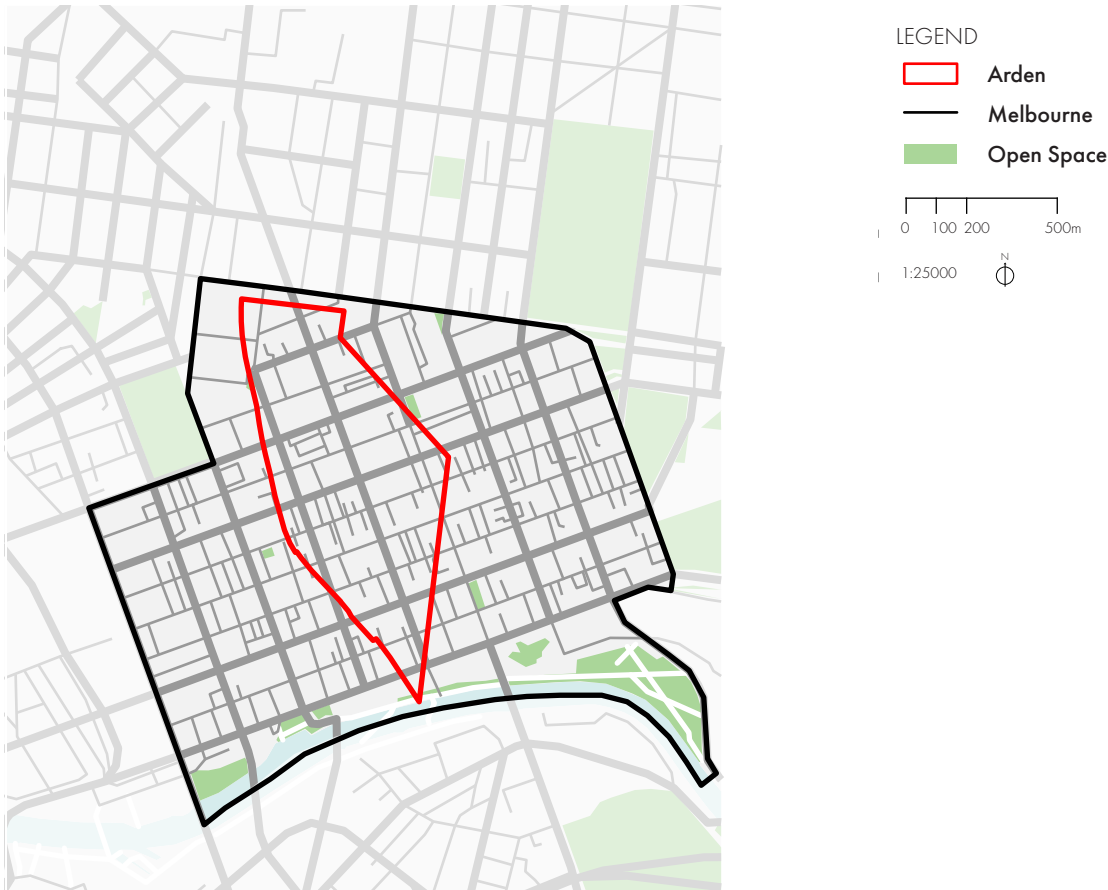
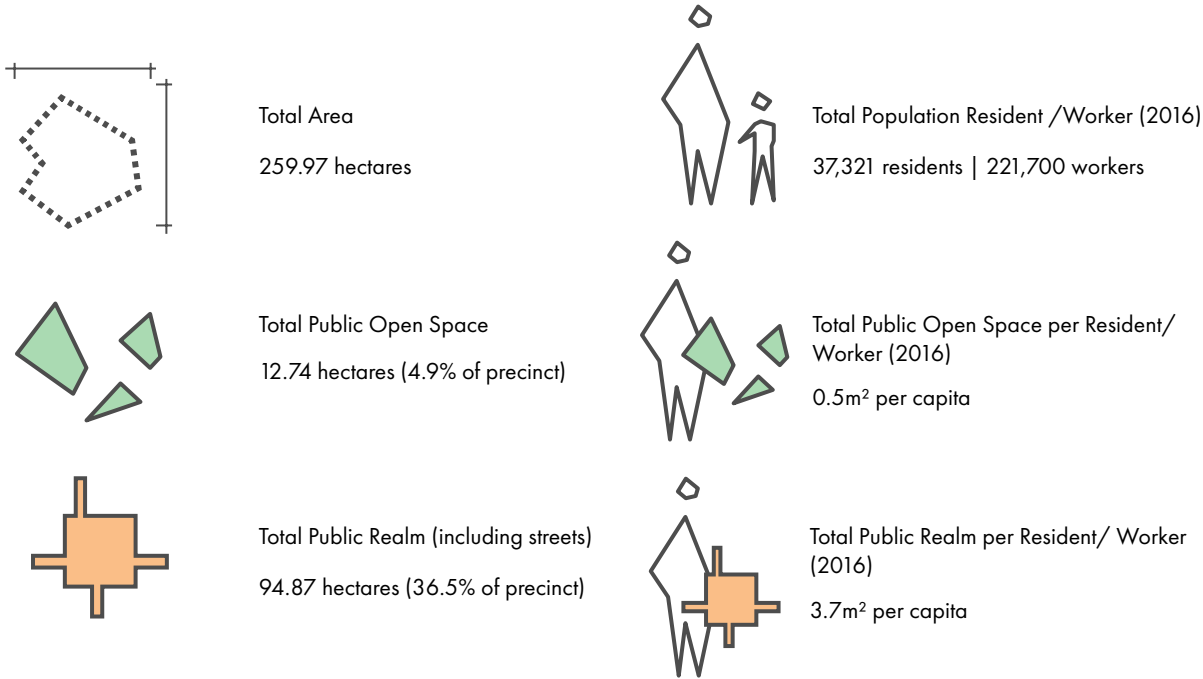
Melbourne's Hoddle Grid, whilst not a redevelopment or urban renewal 'precinct' has seen continuous and significant incremental change through the ongoing redevelopment of sites and substantial investment and change in the public realm by both Local and State Government. In many ways it exemplifies the type of job-rich, city-centre, mixed-use, high-density environment that Arden's vision seeks to achieve.

Characteristics of public realm and open space

- A pattern of squares, gardens or plazas at railway station entrances of various sizes and purposes, from Flagstaff Gardens to Southern Cross Station Plaza for movement, gathering and passive recreation
- Continuity of open spaces and pedestrian/cycling pathways along waterways as alternative movement routes affording reflection, pause and connection to nature
- Main streets of generous width and provision of dedicated pedestrian and cycling space and continuity of substantial street-tree planting that provide shade and connect all open spaces
- A range of street types and sizes that provide (at times car-free) social and passive recreational spaces
- A range of private building forecourts, foyers and interstitial spaces that provide smaller social spaces
- The significant cost of retrofitting open space provision as the city has evolved and intensified use.



Quantities of public realm and open space



02 Southbank

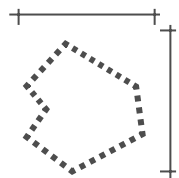
Southbank has increasingly become part of the Capital City with a mix of residential, commercial and cultural functions, which has only become so in the last 30 years. It represents one of Melbourne's first urban renewal precincts and its identity is tightly bound to its riverfront with a northern aspect. Southbank Promenade's significance and success has become part of Melbourne's global identity, however is not matched with more prolifically distributed and locally focused open spaces further from the waterfront that would provide for the local resident and worker population.

Characteristics of public realm and open space

- A significant destination with open spaces orientated to visitors and tourist leisure, much of which is maintained by private property interests
- A continuity of open space along the riverfront that provides for pedestrian and cycling movement and passive recreational activity
- The attraction of users has contributed to increasing pedestrian and cyclist conflicts as the precinct has evolved and developed
- Upfront investment into waterfront open space and public realm has catalysed significant development
- The significant cost of retrofitting open space provision when space is initially not secured
- A lack of soft landscape and open spaces orientated to local community need has driven negative perceptions and recent adaptation of road reservations to provide more landscape and pedestrian space



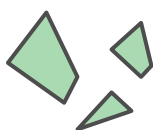
Quantities of public realm and open space



Total Area
157.62 hectares



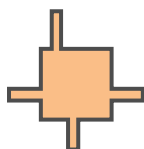
Total Population Resident /Worker (2016)
18,709 residents | 41,800 workers



Total Public Open Space
5.89 hectares (3.7% of precinct)



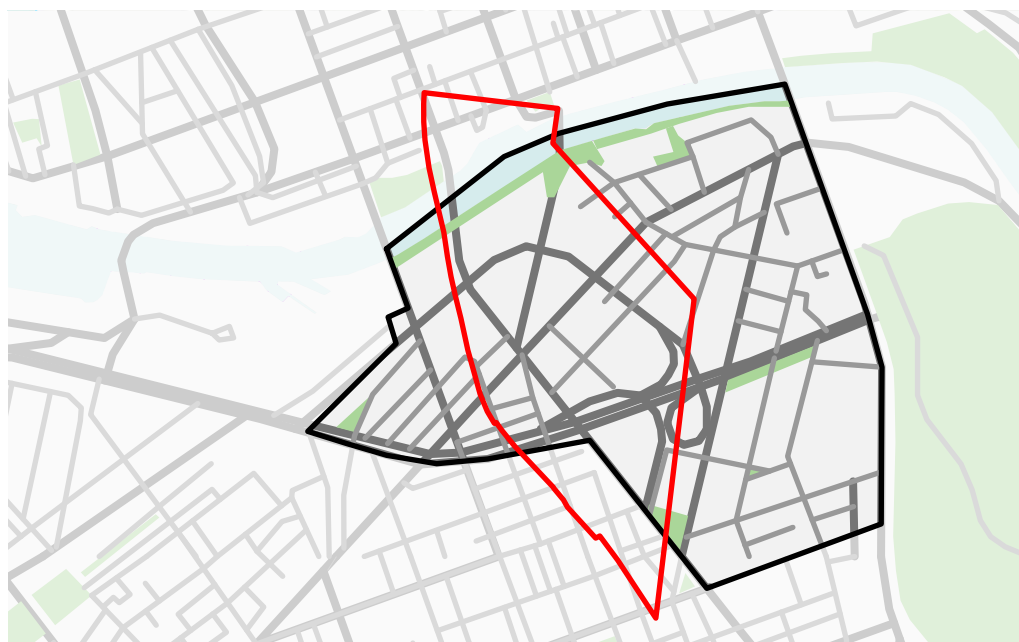
Total Public Open Space per Resident/
Worker (2016)
1.0m² per capita



Total Public Realm (including streets)
66.45 hectares (42.2% of precinct)



Total Public Realm per Resident/ Worker
(2016)
11.0m² per capita



LEGEND

- Arden
- Southbank
- Open Space

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03 Docklands

Docklands represents a more contemporary urban renewal neighbourhood in Melbourne with remaining parts still being developed after being initiated 20 years ago. It is a neighbourhood with significant commercial and residential functions, as well as accommodating one of Melbourne's key stadia. Its waterfront and docks heritage has substantially contributed to its development form and character but has also resulted in distinct sub-precincts that are relatively difficult to access. Its substantial geological and contamination challenges have also contributed to ultimate built form scale and development costs, which have also informed its character.

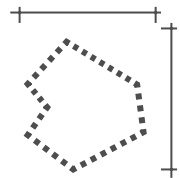
Characteristics of public realm and open space

- A diverse range of open spaces and a public realm environment created 'from scratch' after the relocation of port activities
- A port-side and river-side location that significantly contributes to the layout, orientation, distribution and character of open spaces
- A mixed-use precinct with distinctive patterns and intensity of use during the week, and during weekends.
- Ongoing development of the precinct, with some incomplete sub-precincts present over 20 years after its original project inception.
- Some key streets and elements of public realm substantially refurbished within ten years of completion to respond to climatic, social and transport mode conflicts that became apparent after opening.
- Innovative integration of stormwater management facilities into the public realm across the precinct with recreational and leisure use.



Docklands Community Hub Reserve

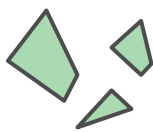
Quantities of public realm and open space



Total Area
310.51 hectares



Total Population Resident /Worker (2016)
10,964 residents | 58,600 workers



Total Public Open Space
12.11 hectares (3.9% of precinct)



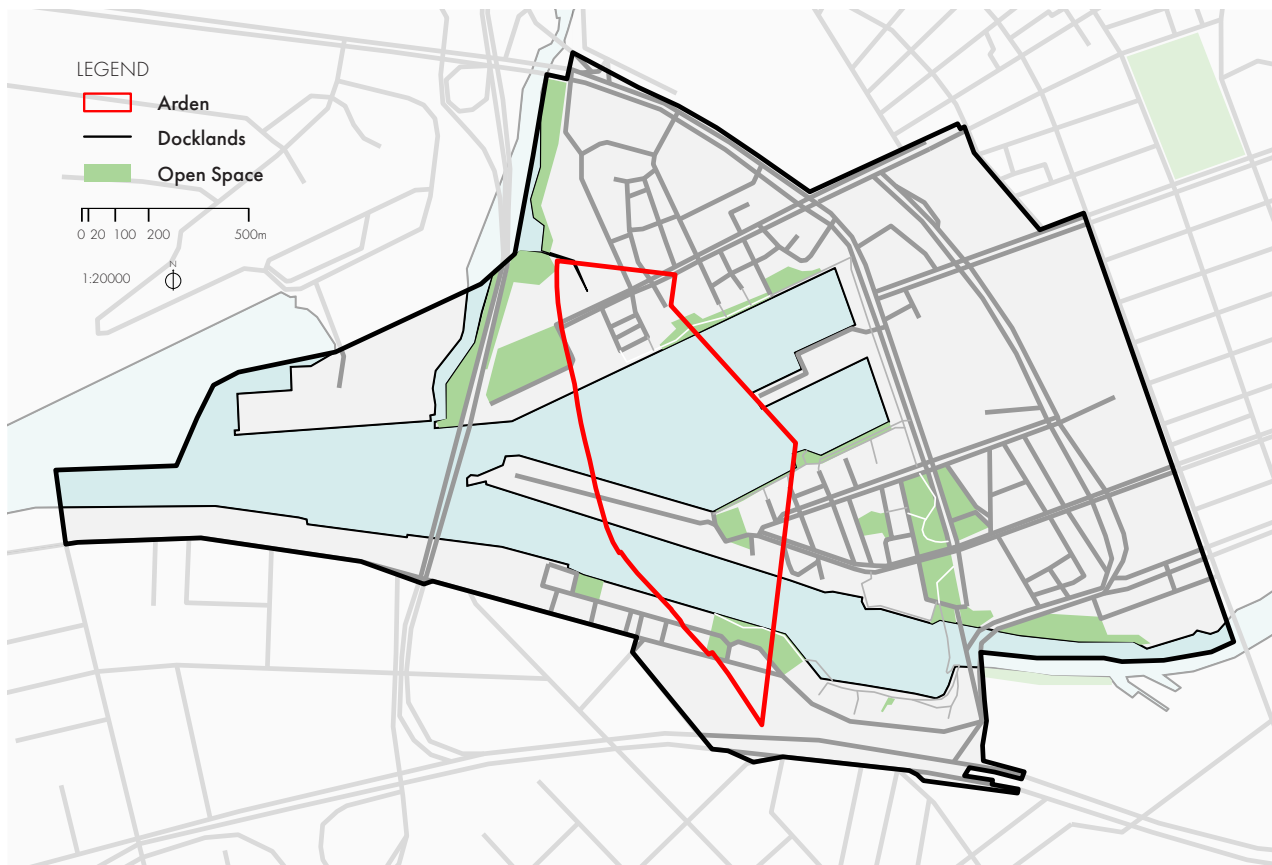
Total Public Open Space per Resident/
Worker (2016)
1.7m² per capita



Total Public Realm (including streets)
74.95 hectares (24.1% of precinct)



Total Public Realm per Resident/ Worker
(2016)
10.8m² per capita



04 Battery Park City, NY

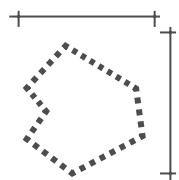
A former dock and land reclamation urban renewal precinct in downtown Manhattan as an extension of the financial district and adjacent to the World Trade Centre site. The site took almost 25 years to complete after landfill had been completed, to then again need a re-examination of its commercial uses in the wake of September 11. The precinct accommodates residents, workers and student in three schools. Its waterfront location has enabled the focus of open space to be along a continuous riverside promenade.

Characteristics of public realm and open space

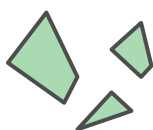
- A port reclamation project with a significant riverfront aspect that has provided a key open space interface for the whole of the precinct.
- A highly permeable street network, however with the presence of vehicles throughout the site, and integrating passive recreation uses into street medians.
- The creation of indoor 'public' space to provide opportunities for year-round space in a location with harsh winter conditions.
- The incorporation of sport fields as part of the daytime recreation space that is available to the general public.
- Additional green roofs and communal open spaces incorporated into the precinct, either as publicly accessible open spaces or for limited user access.



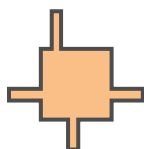
Quantities of public realm and open space



Total Area
37.94 hectares



Total Public Open Space
8.88 hectares (23.4% of precinct)



Total Public Realm (including streets)
23.11 hectares (60.9% of precinct)



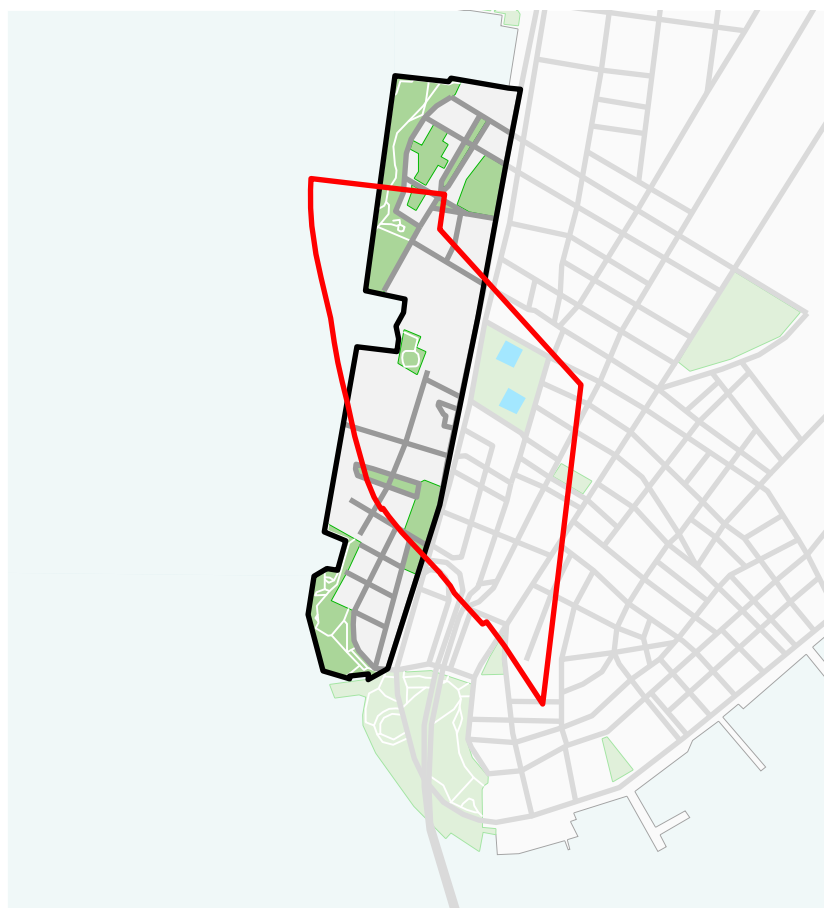
Total Population Resident /Worker (2016)
14,000 residents | 41,500 workers/students



Total Public Open Space per Resident/
Worker (2016)
1.6m² per capita



Total Public Realm per Resident/ Worker
(2016)
4.2m² per capita



LEGEND

- Arden
- Battery Park City
- Open Space

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05 Kings Cross Central, London

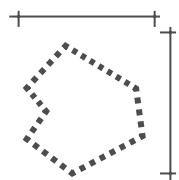
An urban renewal precinct of former rail yards at Kings Cross and St Pancras railway stations in central London. The site was in a single ownership has been developed to accommodate a diverse residential community as well as workers and students, including an affordable housing target and a strong emphasis of heritage protection and cultural activity to activate the precinct and support a diverse urban outcome.

Characteristics of public realm and open space

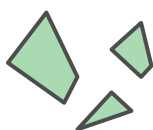
- A highly permeable street network, without the presence of vehicles throughout most of the site.
- A continuous series of open spaces and promenade connected to the riverfront and a car-free street and lane network that provide a diverse range of open space characters from formal green open space to highly urbanised squares
- A significant re-purposing and integration of heritage built form into the new precinct's identity and public realm
- The use of high quality public realm materials with attention to the ongoing maintenance and management of spaces with identified local government and private land owner responsibilities.
- The integration of an existing waterway and water into the public realm network as one of several signature spaces that the precinct is identified by
- The provision of a diverse and extended year-round events program, including day and night time, weekends and weekdays to generate activation and increase visitors.



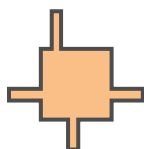
Quantities of public realm and open space



Total Area
27.56 hectares



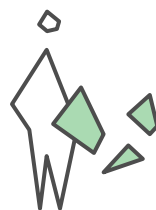
Total Public Open Space
3.65 hectares (13.2% of precinct)



Total Public Realm (including streets)
14.99 hectares (54.4% of precinct)



Total Population Resident /Worker Forecast
7,000 residents | 35,000 workers/students



Total Public Open Space per Resident/
Worker Forecast
0.9m² per capita



Total Public Realm per Resident/ Worker
Forecast
3.6m² per capita



LEGEND

- Arden
- Kings Cross Central
- Open Space

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Key learnings for Arden PROSS

The benchmark precincts highlight a number of important attributes that must be considered in developing the Strategy for Arden's public realm and open space. These include:

- Quantity of open space alone being no guarantee for a successful outcome, exemplified by almost identical open space provision in Southbank and Melbourne 3000, however with markedly different outcomes.
- Residents and workers having different recreational needs which can often overlap in complementary ways over a day, week or year as evident in Kings Cross Central and Docklands.
- Active management of urbanised spaces to both activate spaces as well as accommodate for quieter periods for maintenance and landscape recovery as evident in Kings Cross Central.
- Highly urbanised environments requiring more hard surfaces in open spaces to handle intense amounts of use and pedestrian traffic and protection of soft landscape as visible in Melbourne 3000 and Battery Park City.
- Streets and laneways having the ability to provide a significant range of open space benefits, even in streets accommodating vehicular traffic as evident in Battery Park City and Kings Cross Central.
- The importance of diversity of open space and public realm scales and characters to accommodate different type of individuals and groups who seek out softer/harder, faster/slower or more passive/active environments and pursuits, evidenced in all the precincts.
- Buildings having the ability to extend the space and benefits afforded by the public realm through the use of forecourts, roof gardens, internal spaces and generous entries as visible in Battery Park City and Kings Cross Central.





06

APPLYING LEARNING TO ARDEN

For a world class public realm and open space outcome in Arden, the strategy must take heed of the vision for the future of the Precinct and respond to the specific spatial and qualitative characteristics of the existing place, before adopting any measures that other places have used successfully.

Both the qualitative and quantitative characteristics of the public realm and open space of Arden will need to be carefully composed to ensure that the outcome serve the anticipated future community of Arden and attract the investment, as well as the ultimate residents, workers or visitors to the Precinct.

Quantitative rationale

Whilst this Strategy strongly advocates for an emphasis on achieving the qualities needed in the public realm and open space rather than adhering to strict quantitative targets, an understanding of how these provision rates are generated and could relate to Arden is needed.

Almost universally, the standards relating to the measurement of open space provision in urban areas has evolved from British standard that emerged during the early 1900s as part of the Garden city movement. These standards and practices responded to the significant growth and change in British cities as the Industrial Revolution called for ever larger concentrations of population to staff the growing industrial sector. This movement sought a healthier urban outcome for populations that were experiencing chronic health problems related to poor hygiene and sanitation, poor air quality and poor access to most amenities and facilities, including open space.

The metrics that were adopted assumed a relatively low-density urban fabric which over time has become the development model for urban areas across most of the New World, essentially once transport technology enabled a decentralisation of urban populations.

Local contemporary measures or standards documented in practice notes, strategies and local planning schemes still maintain a strong relationship to those original ideas established over a century ago.

As Australian cities have grown and rediscovered the benefits and opportunities of renewing established urban areas, and remaking older industrial areas, the resultant denser urban forms have been challenged with the standards that were originally conceived for suburban areas. The more complex and costly urban forms that are now needed in these areas rely on more intensive investment in a range of infrastructure (access, drainage, and decontamination to name a few), and similarly the provision of open space has demanded deeper and more bespoke examination. Spatial targets for the broader 'public realm' as a whole has not been well developed in Australia, with more dense urban environments being relatively recent developments in our cities.

Current practice for **open space spatial metrics** have been developed on the basis of:

- **Urban area proportion** – targeting a percentage of a precinct to be provided as open space, and
- **Per capita** – targeting a rate of open space provision per person, and
- **Distance to open space** - targeting pedestrian access to open space from urban areas.

Measure by urban area proportion

A range of international and Australian authorities have adopted open space provision standards that are based on a proportion of an urban area, precinct or large development site. Their basis is in a predominantly low-rise, greenfield suburban model of development that gave rise to the planning of open spaces as part of the Garden City movement of the late 1800's and early 1900s.

This type of standard has remained somewhat static over time, evolving to some degree to respond to a more highly urbanised and denser form of urban development. However, it should be noted that statutory authorities typically acknowledge the complexity of developing denser urban forms and typically provide alternate means to contribute to the provision of open space.

International bodies have also developed standards, largely to assist city planners in developing economies to advocate for minimum standards for public health purposes in rapidly expanding cities, and by exception make the only claim to a public realm target.

The measures for provision of open space in urban areas on a proportion of an area are difficult to implement universally across urban areas as they may vary significantly in density and may struggle to accommodate for the needs of a high-density population. Similarly, authorities have only more recently begun to consider how employment land uses, or mixed-use areas, which may have a large concentration of the workers during the day, should provide for open space.

Of note from the above, the Melbourne Planning Scheme Open Space Contribution rate applies to developable land only, so for an urban renewal precinct that is already developed it is a measure that is not directly comparable to that established by the UN Habitat or the VPA, it does not take into consideration road reservations in an urban renewal precinct which can make up to 30% of the urban area

Open space measurements by area

Authority	Open Space Measure	Other Details
UN Habitat (Public Space Toolkit)	15-20%	Total of 45-50% of public realm including open space
New York City (CERQ Technical Manual)	No percentage measure	
London Borough of Camden (Open space)	No percentage measure	
VPA (Precinct Structure Planning Guidelines)	10% of net developable area in residential areas 2% of net developable area in employment land	Developed for greenfield areas 60% of open space to be provided as active open space to accommodate sport ovals
City of Melbourne (Open Space Strategy)	No percentage measure	
City of Melbourne (Melbourne Planning Scheme – Open space contributions)	7.06% of development site	Applies to urban renewal areas with a preference for land provision over a cash in lieu contribution

Measure per capita

Per capita measures were originally established on the basis of a residential population only, and more recently expanded to consider users who are not residents, acknowledging that some cities, or parts of cities have a significant daytime population who legitimately have open space needs but are not residents.

Note: An often-cited World Health Organisation per capita measure of 9m² of open space per person is unpublished and not formally part of the WHO's position on urban open space.

These measures are more closely aligned with population size, and arguably more appropriate across a range of urban densities, however their disconnect from the spatial limits of a city or precinct can generate open space demands that are completely incompatible with the (re)development outcome that they seek to provide for.

Of note from the above is the acknowledgement in other jurisdictions that open space needs for workers (or non-residential users) are of a vastly different type and scale than those of residents.

For Arden, adopting a position on generic quantitative provision of open space alone would not generate the type of place that would support the dynamic and diverse residential and working community it hopes to become. It is only in combination with the analysis of the existing characteristics and review of other benchmark precincts that a more sophisticated approach to quantities of space can be confidently proposed in tandem with qualitative characteristics.

Open space measurements by population

Authority	Open Space Measure	Other Details
UN Habitat (Public Space Toolkit)	No per capita measure	
New York City (CERQ Technical Manual)	10m ² per resident 0.6m ² per worker	80% as active open space 20% as passive open space
London Borough of Camden (Open space)	9m ² per resident 0.47m ² per worker	Preference for unpaved spaces Cash contribution in lieu of space is possible.
VPA (Precinct Structure Planning Guidelines)	No per capita measure	
City of Melbourne (Open Space Strategy)	7.1m ² per daytime population (resident & worker)	No distinction between residents & workers
City of Melbourne (Melbourne Planning Scheme – Open space contributions)	No per capita measure	

Arden PROSS evaluation framework

To inform the qualitative and quantitative outcomes for Arden Public Realm and Open Space a set of principles have been developed that reflect the Arden Vision directions, objectives and planned outcomes and respond to the specific opportunities present in the existing place. These principles establish the framework by which the Strategy has developed its qualitative and quantitative elements.

The Principles

01

A distinctive Arden identity

- Reinforce Arden's identity of a centre of innovation with new open spaces and a connected, generous public realm
- Shape a high quality precinct that reflects the needs and values of the community and future residents and workers
- Retain the North Melbourne Football Club, Recreation Centre and Pool and leverage them as core community-building assets.

02

03

A diverse, connected precinct that provides for all needs

- Maximise the availability and usability of open space throughout the precinct by accommodating and integrating multiple functions in streets and spaces.
- Focus on providing environmental benefits in Arden North, events and informal use in Arden Central, and unstructured recreation in the Laurens Street sub-precinct
- Integrate existing and new open spaces into a cohesive network available to both the immediate precinct and the wider neighbourhood

A water-positive precinct

- Visually and functionally integrate the stormwater basin as a core part of the open space provided in Arden North
- Create an internal blue-green infrastructure network that connects key natural attributes and new links beyond the precinct.
- Future-proof a broad, direct open space connection between Moonee Ponds Creek and North Melbourne Recreation Reserve through the layout of open spaces that serve a stormwater function

04

A network of public and private spaces

- Augment public open space provision with private open spaces in large developments that enhance access and benefits of the public realm and public open space
- Improve access, safety and visibility of private open spaces that are to be used by the public

06

A comfortable, green and cool precinct

- Provide tree canopy to at least 40% of the public realm and open space
- Maximise soft landscape throughout the public realm and open space and augment this through the use of landscape to walls and rooftops of buildings
- Provide and improve biodiversity and habitat through integration of multi-storey and indigenous planting
- Protect winter solstice solar access to unencumbered public open spaces, and protect equinox solar access to encumbered and restricted public open spaces

05

A universally accessible precinct

- Provide for universal access to the whole of the public realm and open space and integrate necessary level changes as part of the experience in the landscape
- Maximise personal safety and security through activation of ground floors around open spaces and key streets
- Ensure all streets prioritise safe and convenient pedestrian and cycling movement
- Ensure that unencumbered open space is within 300 metres of all parts of the precinct

07

A continuous public realm

- Create shadier and greener streetscapes with integrated areas for respite and pause
- Create the majority of new streets within Arden Central as exclusively pedestrian and cycling spaces
- Extend open space characteristics to encumbered open spaces, drainage facilities and streets by reducing paved surfaces and incorporating landscape and recreation opportunities

Public realm and open space provision in Arden

The focus on the provision on the appropriate qualities of public realm and open space in Arden, has also informed the approach to spatial provision.

The precinct benchmarks highlight three critical insights:

- The benefit of access to light and air is gained from space that is not built upon – even if not usable for recreation – typically waterways or conservation areas,
- High-quality design and integration of restricted, encumbered and unencumbered open spaces can make a contribution to open space benefits to a precinct, however
- Unencumbered open space provision is a vital component of successful precincts and cannot be replaced by other forms of space.

For Arden's PROSS this suggests that:

- Public open space provision should consider the significant amount of encumbered and restricted open space that will be present in the Precinct,
- A high level of investment will be needed to develop all of the public realm, including streets, in a way that it will be able achieve an integrated, high quality public realm outcome, and
- Unencumbered public open space should, at minimum, achieve a level present in comparable local, high -density, mixed-use neighbourhoods.

From the analysis of Arden's vision, existing open spaces and proposed new infrastructure, the following assumptions have been made, and have informed the way that the open space provision has been developed.

- North Melbourne Recreation Reserve treated as restricted public open space, due to most of the reserve only being available to fee paying users and/or the sporting club, with large areas developed with buildings and fenced off from the public.
- The proposed stormwater management facility in Arden North treated as encumbered open, space in line with current stakeholder and authority intentions for an integrated public open space outcome that would allow for public access and use.

The future total public open space provision for Arden based on this analysis would suggest the following:

Arden Public Open Space Provision Recommendation Table

Public Realm Element	Area (hectares)	Proportion
(Existing) Clayton Reserve	0.65	1.2%
(Existing) Canning Street & Macaulay Road Reserve	0.25	0.5%
(Existing) Railway Place & Miller Street Reserve	0.11	0.2%
Proposed Additional Unencumbered Unrestricted Open Space	1.60	3.1%
Total Unencumbered Unrestricted Open Space	2.61	5.0%
Proposed Encumbered Open Space (Stormwater Management)	5.90	11.3%
Existing Restricted Open Space (North Melbourne Recreation Res.)	4.52	8.7%
Total Open Space (Encumbered, Restricted & Unencumbered)	13.03	25.0%
Arden Precinct	52.10	100.0%

Open space provision by urban area proportion

The proposed open space provision for Arden closely matches the benchmark precincts analysed in this report and achieves an urban area proportion similar to Melbourne 3000, when comparing unencumbered open space provision. This exceeds Southbank and Docklands provision on an urban area proportion basis, however these precincts achieve a higher rate of provision on a resident/worker population basis (see next page). When comparing the provision of all public open space in Arden (including encumbered and restricted public open space) with the international benchmark precincts, Arden achieves a similar provision to Battery City Park, and significantly exceeds Kings Cross Central.

Note: Details of restricted and encumbered public open spaces in the international benchmark precincts are unknown. While local benchmark precinct do include open spaces that have some degree of encumbrance they have been identified as 'public open space' in the City of Melbourne Open Space Strategy.

Urban Area Proportion – Benchmark Comparison Table

	Area Proportion - Unencumbered Open Space (%)	Area Proportion - All Public Open Space (%)	Area Proportion - All Public Realm including streets (%)
Arden	5.0%	25.0%	65.0%
Melbourne 3000	4.9%	Unknown	36.5%
Southbank	3.7%	Unknown	66.5%
Docklands	3.9%	Unknown	75.0%
Battery Park City	Unknown	23.4%	60.9%
Kings Cross Central	Unknown	13.2%	54.4%

A comparison of the total proposed public realm (including all streets) has been included to highlight all of the non-developable space within Arden which approximates to all of the benchmark precincts and exceeds Melbourne 3000. Whilst this area also contains carriageways, it does provide an indication of the additional potential for further landscape, informal recreation and leisure within precinct.

Open space provision by resident/worker population

The proposed open space provision for Arden closely matches the benchmark precincts analysed in this report and achieves a provision by resident/worker similar to Melbourne 3000, when comparing unencumbered open space provision.

This falls short of the provision in Southbank and Docklands on a resident/worker population basis, however it should be noted that the development potential of these two urban renewal precincts has not been realised and their projected populations are forecast to further grow.

When comparing the provision of all public open space in Arden (including encumbered and restricted public open space) with the international benchmark precincts, Arden achieves a substantially higher provision to Battery City Park and Kings Cross Central. This highlights the significant proportion of open space that will be provided by Arden's restricted and encumbered public open spaces, and the importance of ensuring that they contribute to the landscape character of the precinct, even where their public access and/or recreation function may be limited.

Urban Area Proportion – Benchmark Comparison Table

	Area Unencumbered Open Space per Resident/Worker (m2)	Area All Public Open Space per Resident/Worker (m2)	All Public Realm including streets per resident/worker (m2)
Arden	0.5	2.6	6.9
Melbourne 3000	0.5	Unknown	3.7
Southbank	1.0	Unknown	11.0
Docklands	1.7	Unknown	10.8
Battery Park City	Unknown	1.6	4.2
Kings Cross Central	Unknown	0.9	3.6

A comparison of the total proposed public realm (including all streets) has been included to highlight the amount of non-built space available within Arden per resident/worker. This exceeds all of the benchmark precincts, except Southbank and Docklands, however both of these accommodate significant freeways and urban arterials which inflate the total 'public realm' statistic.

Open space provision guideline comparison

As a further comparison, the proposed open space (and public realm) provision for Arden has been compared to the open space guidance that is provided by international institutions and the Relevant Authorities for the benchmark precincts analysed in this report.

At the broadest, global level, Arden's provision of open space and public realm exceeds that recommended by UN Habitat, and is considerably higher if comparing local guidance developed for individual development sites (Melbourne Planning Scheme Open Space Provisions) or greenfield areas (VPA PSP Guidelines).

The proposed open space provision for Arden would appear to perform poorly when compared to worker/resident population guidelines, achieving only a fraction of the published recommended rates for any jurisdiction. However, this does need to be further contextualised with the benchmark precincts that have already been developed in these jurisdictions as they illustrate the substantial improvements that Arden would make in moving towards these types of standards.

This also further substantiates the need to invest well into the design and development of all of the public realm, beyond the strictly defined public open spaces, in order to provide the type of open space benefits that these guidelines seek to achieve.

Open Space Provision Guideline Comparison Table - Urban Area Proportion - Benchmark Comparison Table

Precinct	Area Proportion - Unencumbered Open Space (%)	Area Proportion - All Public Open Space (%)	Area Unencumbered Open Space per Resident/ Worker (m2)	Area All Public Open Space per Resident/ Worker (m2)	Area Proportion - All Public Realm including streets (%)	Area Proportion - Unencumbered Open Space (of Net Developable Area) (%)
Arden	5.0%	25.0%	0.5	2.6	65.0%	14.3%
UN Habitat	n/a	15-20%	n/a	n/a	45-50%	n/a
New York City (CERQ Manual)	n/a	n/a	n/a	17.0	n/a	n/a
London Borough Camden (Camden Planning Guidance)	n/a	n/a	n/a	15.1	n/a	n/a
VPA (PSP Guidelines)	n/a	n/a	n/a	n/a	n/a	4.1%
City of Melbourne Open Space Strategy	n/a	n/a	7.1	n/a	n/a	n/a
Melbourne Planning Scheme (Open Space Contributions)	n/a	n/a	n/a	n/a	n/a	7.06%

Notes:

- Existing streets in Arden total 15.30 ha
- Additional new streets required in Arden Central calculated at approx 4.5ha (30%) of Arden Central
- VPA PSP Guideline for developable land % is applied in proportion to the forecast Arden resident/employment population target and mix
- Total developable land in Arden (after existing and proposed open spaces and streets deducted) 18.21 ha

07

ARDEN PROSS STRATEGY

The Plan

The Arden PROSS seeks to provide a public realm and open space environment that supports the Arden Vision by creating the foundation for a seamless, integrated and inclusive public environment that supports social and economic exchange and provides environmental and climatic benefits.

The public realm and open space of Arden will need to deliver on a wide range of expectations for the future local community and Melbourne more broadly within a Precinct that must be robust and hard-working if it is to deliver on all aspects of the Arden Vision.

There must be a triple bottom line of benefits that can accommodate for:

Social benefits

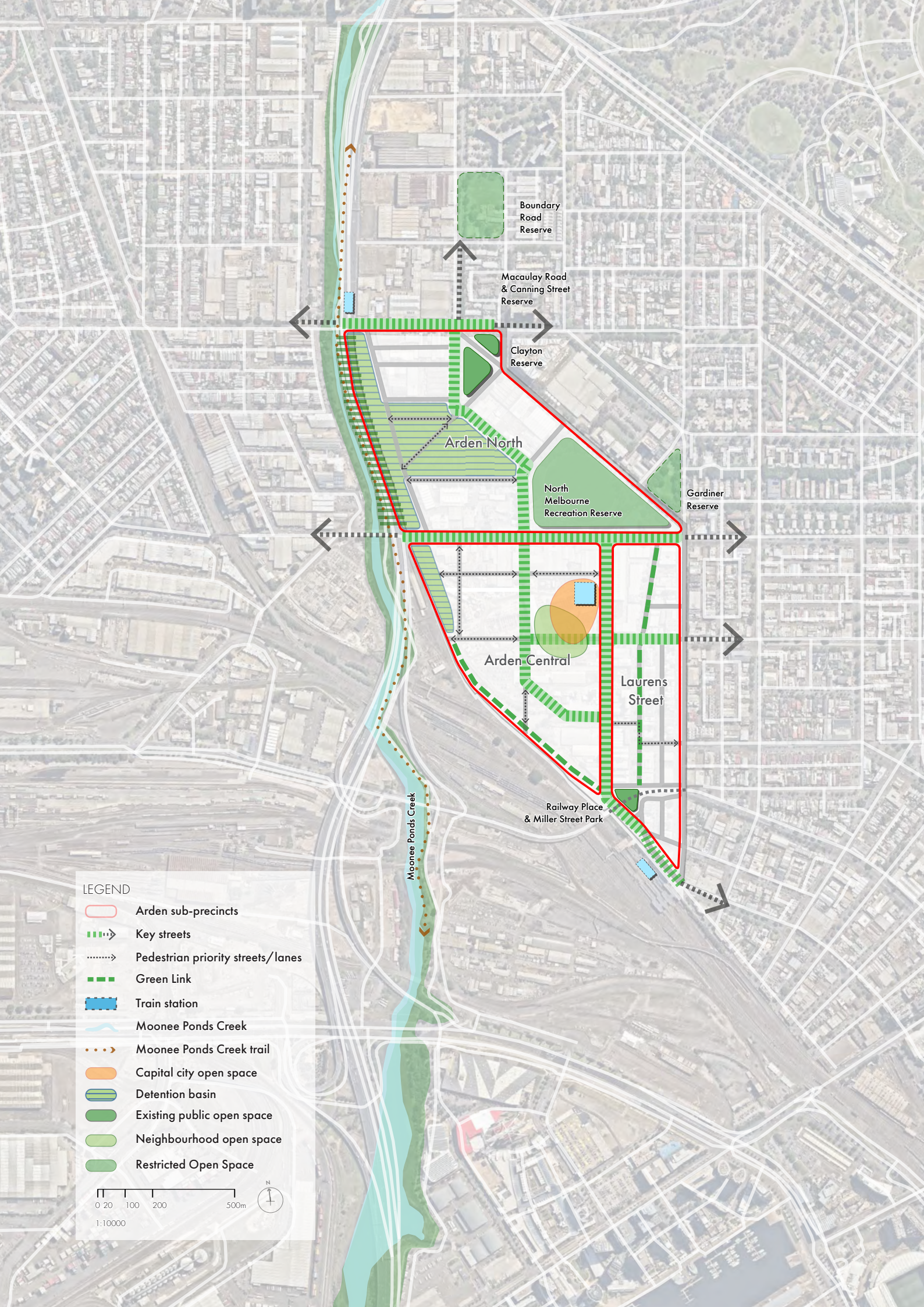
Foster a sense of connectedness and provide for physical and mental health of residents and workers that come with access to green and open spaces, as well as and celebration and reflection of the existing cultural and heritage assets and characteristics of each sub-precinct.

Environmental benefits

Improving environmental and climatic outcomes through the mitigation of urban heat island effect, contribution to biodiversity, and management of flood and water resources sustainably by leveraging all spaces, properties and systems across the precinct.

Economic benefits

Attracting investment and high-value research and commercial activities, and the talent needed to establish and maintain them by accommodating physical, social and mental needs of the modern workforce efficiently by using space to perform multiple functions, creatively in a high-quality environment that attract visitors and activates the precinct.



LEGEND

- Arden sub-precincts
- Key streets
- Pedestrian priority streets/lanes
- Green Link
- Train station
- Moonee Ponds Creek
- Moonee Ponds Creek trail
- Capital city open space
- Detention basin
- Existing public open space
- Neighbourhood open space
- Restricted Open Space

0 20 100 200 500m

1:10000



The key moves

Integrated – unlocking the potential of the whole of the Precinct by flexibly and efficiently using all the space available for multiple open space and other purposes across the day, week and year.

The whole of the public realm operates as a highly efficient organism that accommodates for all of the Precinct's necessities from utility provision to universal access, stormwater drainage, transport, recreation, biodiversity and maintenance processes within an elegantly simple and highly flexible form.

Seamless – a continuous network of spaces and corridors that form a connected public sphere, amplifying the benefits provided by the individual component parts.

The public realm transitions from the conventionally understood collection of streets, spaces and building into a high-performance multi-functional connective tissue that stitches the precinct together. Unlocking the potential of the whole public realm for continuous commercial and social exchange, high amenity active transport and environmental performance.

Inclusive – inviting everyone to share in the Precinct by removing the barriers that discourage or prevent individuals from using spaces due to economic means, physical abilities, or perceptions.

Melbourne's diversity is one of its strengths, and similarly, for Arden to be successful it must provide for a wide range of uses, activities and groups and individuals. It will need to provide a vibrant, safe and inclusive environment that provides a range of open spaces that deliver opportunities for productive and creative activity, spontaneous social interactions, opportunities to dwell, spaces for respite and places for events.

The sub-precincts

The future Arden as an innovation precinct will need to respond both to Melbourne as a whole, as well as the local setting it is in, however the sub-precincts within Arden will play different leading and supportive roles in establishing this metropolitan or even global role.

As a result, the public realm and open space of our newest precinct needs to be calibrated across its sub-precincts to allow the maximum utility of the space it has and the flexibility to adapt as more is known about its future users' needs.

Whilst distinctive in their function and identity the sub-precincts of Arden will be identifiable through gradual hierarchical and typological shifts in their spaces and public realm, rather than definitive functional and material changes to ensure it remains an integrated and seamless public realm across the whole Precinct, as well as remaining stitched into the adjacent, existing community of North Melbourne.

Arden North

A community-focused neighbourhood that strengthens the already strong tree canopy and provides a green, cool setting that celebrates the heritage of existing open spaces and environmental values. This includes the strengthening of the natural landscape and Indigenous heritage values connected with Moonee Ponds Creek.

Accommodating a mix of residential and commercial uses that integrate the existing heritage and open spaces of the North Melbourne Recreation Reserve and others, with a new, expansive stormwater management facility to provide almost 11.3 hectares of interconnected, green open spaces. Some of this could be available for a range of recreation, biodiversity, stormwater storage and community uses, as well as opportunity for more passive recreational pursuits that offer respite to Arden's residents and workers, and provide for a future direct connection to the Moonee Ponds Creek.

Arden Central

A new globally-significant hub of innovation that most resembles a bustling business district, however set in a seamless, low car environment that is centred on a new Capital City Open Space that is a destination in its own right.

With over 6 hectares of public realm that accommodates not only larger events and high levels of pedestrian movement to and from the railway station, but also more neighbourhood-focused passive spaces for the immediate community of this neighbourhood. Despite the need for robust and hard-working spaces it will provide for prolific shade and maintain the visible presence of water that links it to the rest of Arden and the nearby Moonee Ponds Creek. It will also exemplify the most extensive integration of private open spaces into a diverse, accessible network of green.

Laurens Street

An already transforming neighbourhood of residential and commercial use that grafts and adapts the long industrial heritage of the Precinct into a gritty, urban experience, which contrasts and complements Arden Central's newer, larger and more institutionally-scaled activities and built forms and spaces.

The Lauren Street sub-precinct's diverse uses and relatively low scale will be set within its familiar grid of broad streets, with Munster Terrace transformed into a Green Link which will become a spine linking larger open spaces. It will provide for small local social interactions and informal use as well as reducing the dominance of vehicles to become a shadier, cooler and pedestrian-friendly space.

The Places

To successfully provide for the Precinct and the community the specific elements of the public realm will need to reflect and provide for the rhythms of daily life, the weekly and monthly calendar as well as seasonal changes. This will ensure that the network leverages most of the space available, and provides the qualities, characteristics integrated infrastructure to support a healthy, thriving public life for the growing and diverse communities.



Constitution Avenue, CBR⁸



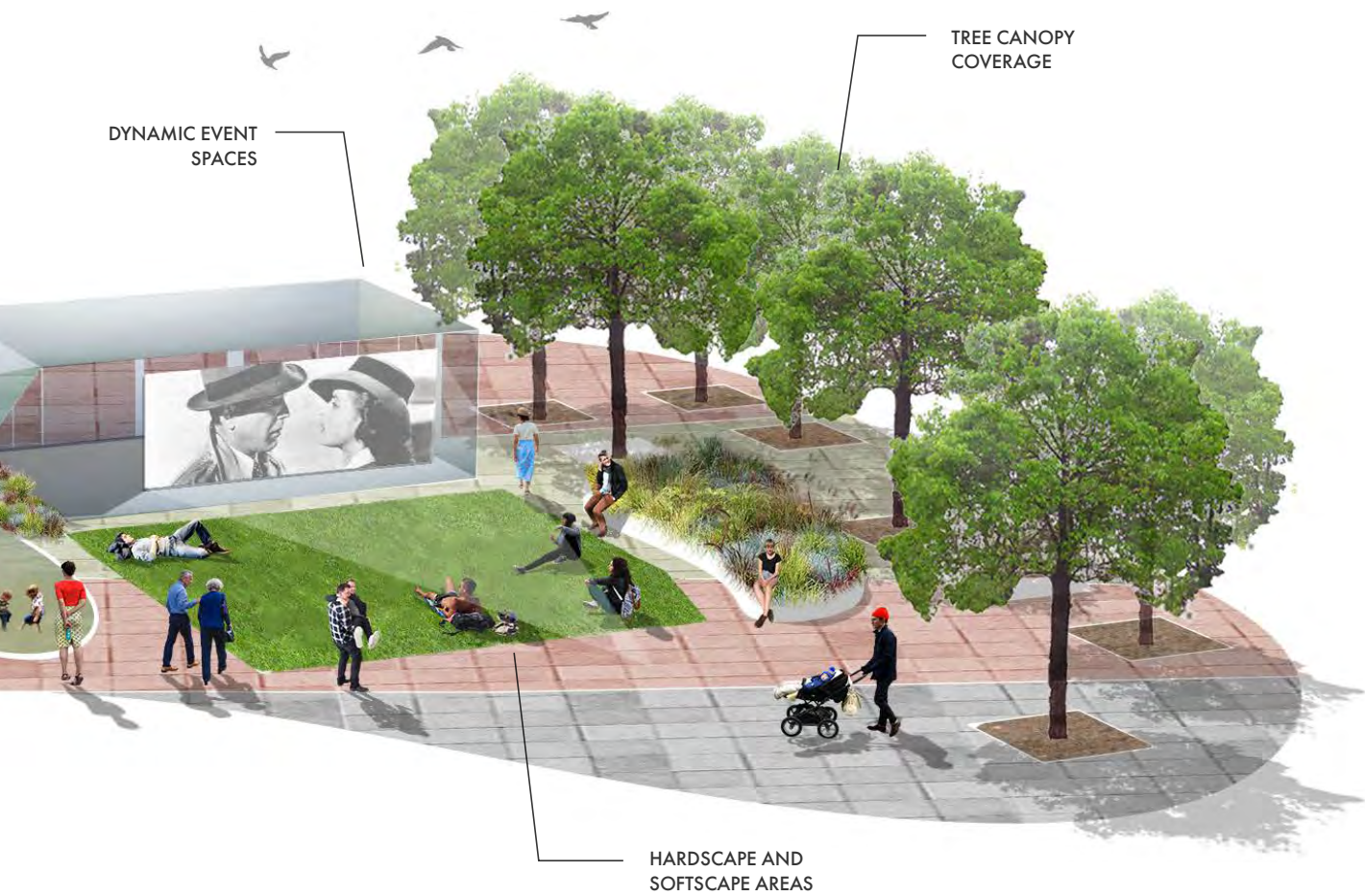
Capital city open space

A centre-piece and civic heart to the whole of Arden, and a recognisable space, synonymous with Melbourne's identity and establishing a role within the city's cultural and social event calendar. It will be seamlessly connected into the surrounding network of streets and lanes and onto other spaces and accommodate the activity that comes with a metropolitan railway station serving a globally significant innovation hub.

- Centrally located in Arden Central and connecting the forecourt of the new station and the Laurens, Queensberry and Fogarty Street corridors.
- Incorporating facilities that can accommodate a range of event types and scales that can be quickly established and dismantled, whilst providing high levels of access to the railway station.
- Providing approximately 0.6 hectares of the additional unencumbered open space provision for the precinct.
- Solar access from 10am to 3pm on June 21 (winter solstice) to all of the open space.
- Actively managed by a dedicated team that develops and maintains a prolific events calendar that encourages both local attendees and a wide range of visitors
- Providing robust, hard-wearing surface that can handle intensive use.
- Providing high levels of tree canopy and soft landscape that reduces urban heat and prolongs its usability during summer months.
- Combining and integrating the adjacent neighbourhood open space to maximise continuity and flexibility of use.



WATER ELEMENT



Neighbourhood and local open space

Arden Central

Orientated to their more immediate residents and workers, the neighbourhood and local open spaces of Arden will reflect the opportunities and characteristics of each sub-precinct. They will provide a network of open spaces, that despite having similar roles will offer choice to the local community. This should include:

- Maximising soft landscape with generous, flexible lawn spaces that can provide for a range of informal recreational activities.
- Providing substantial tree canopy coverage that provide shade for users and protect lawn areas in summer months.
- Providing for small social gathering and picnic facilities and play equipment for a range of age groups.
- Centrally locating a neighbourhood open space to maximise accessibility from across the southern half of the Precinct and immediately adjacent to the Capital City open space to provide flexibility and leverage the open space provided by both.
- Providing at least 1.0 contiguous hectare of the additional unencumbered open space provision for Arden for this open space.
- Defining an edge to the more 'public' Capital City open space that limits spill over of events conducted there.
- Providing a mix of facilities for workers and residents including of sports, quiet spaces for lunches, adequate provision of furniture, fixtures and shelter.
- Servicing solar access from 10am to 3pm on June 21.

Arden North

- Leveraging the open space provided by the existing open spaces and the future integrated stormwater management facility to create small local open spaces in locations immediately adjacent to development.
- Providing areas of approximately 0.03-0.1 hectares of level, usable space for local open space functions that may be formed from the encumbered space of the integrated stormwater facility site and road reservations.
- Securing solar access from 10am to 3pm on June 21 (winter solstice) to a majority of the open space that provides for recreation use.
- Providing more passive, informal and low intensity use that is focussed on the provision of more intimate open spaces with high quality biodiverse planting, strong tree canopy coverage, and interfaces with integrated water management.



Laurens Street

- Locating small local open spaces in locations with good solar access, highly accessible by immediate residents.
- Leveraging the existing local open space at Railway Place by extending the use of road reservation where possible.
- Encouraging complementary built form interface such as additional space through the provision of generous building entries and active frontages.
- Providing areas greater than 0.03 hectares for small local open space with some form of protection from any passing vehicular traffic.
- Securing at least 3 hours of solar access between 10am to 3pm on September 21 (equinox) to a majority of the open space.
- Providing a single facility in each space orientated to immediate residents such as group gatherings, passive quiet spaces, informal active recreation, playgrounds or dog walking
- Accommodating environmental benefits including integrated water management, tree canopy coverage and large planted garden beds for biodiversity values which are under provided in this sub-precinct.



Integrated stormwater management

Arden North's stormwater retarding facility will form a series of accessible, usable open spaces that will provide a chain of recreational opportunities from the Moonee Ponds Creek Corridor to North Melbourne Recreation Reserve and contribute significantly to the green, cool character of this sub-precinct. This should include:

- Retaining, where possible, the significant trees of Gracie and Green Streets and further contributing substantial tree canopy throughout the space.
- Using the level changes and bunding necessary for the stormwater function as integrated passive recreation, garden bed and trail network elements that invite use and provide universal access.
- Providing for recreational opportunities in areas with the lowest inundation occurrence.
- Integrating opportunities for biodiversity improvement, ecological restoration, and the permanent presence of water in parts of the open space.
- Maintaining the opportunity for future broad and direct connection to Moonee Ponds Creek, that could afford immediate integration with the Moonee Ponds Creek Trail, and additional space created under transport infrastructure.
- Integrating and celebrating the Indigenous heritage of the area, connected to Moonee Ponds Creek.



Development Bank Of The Meurthe, Freiburg, Vosges, France¹²



Key streets and green links

Traditionally focused on movement and vehicle transport, Arden's generous street network will provide for numerous informal recreational and environmental opportunities with the transition to more active and public transport modes. Key streets will continue to provide for continuous vehicle movements, however incorporating more landscape and space for pedestrians, while green links will extend the pedestrian network to provide safe pedestrian links to and between open spaces.

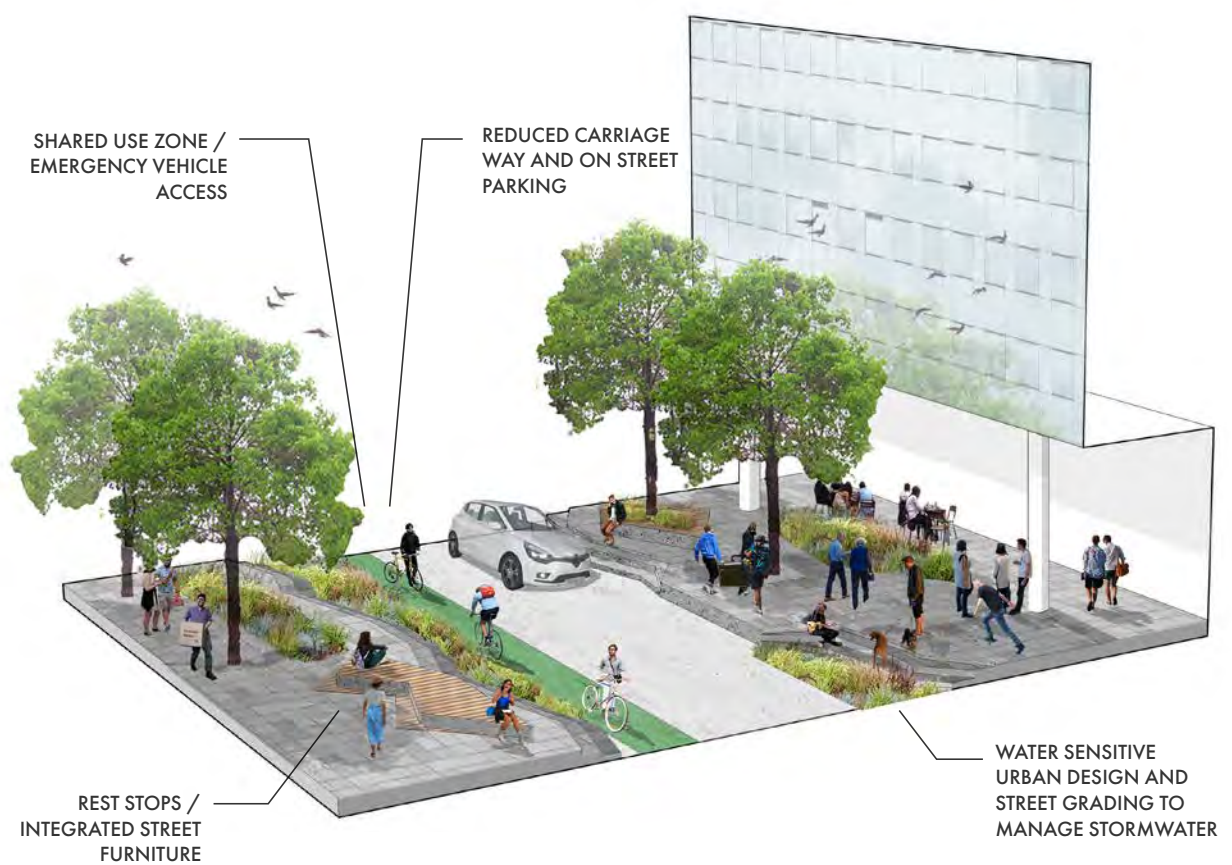
In addition, new streets and lanes that are created in Arden Central will restrict vehicle volume to prioritise safe pedestrian space.

This should include:

- Reducing carriageway lanes and on street car parking in key streets to provide more generous pedestrian, cycling and landscape zones, along Fogarty, Laurens, Queensberry and Arden Streets and Macaulay Road.
- Introducing landscaped garden beds and water sensitive urban design in areas that require increased protection from vehicle traffic.
- Providing continuous street tree planting and associated improvements to stormwater drainage that will increase water supply to trees and help establish continuous tree canopies in key streets and green links.
- Introducing localised traffic and car parking arrangement changes in Munster Terrace that will slow vehicles and create substantial space for informal use, particularly where it can afford good solar access.
- Providing for respite points and informal rest stops through use of integrated street furniture, bollards and garden bed edges, particularly at intersections and routes that connect public transport nodes along key streets and green links.
- Providing the majority of new streets and lanes in Arden Central as shared zones that prioritise safe, pedestrian movement whilst still accommodating service and emergency vehicle access.



Cheonggyecheon, South Korea¹³



Private open spaces

Private open space cannot replace public open space or public realm, however it can make a significant contribution to how it is accessed and used. Development and the provision of private open space can make a more significant contribution to the precinct if it includes:

- Developing new buildings to improve public access to, and public use of the public realm and open space through the interfaces design for weather protection, provision for rest and integration of landscape elements.
- Providing rooftop garden spaces that both overlook the public realm, as well as contribute further to landscape qualities, particularly at podium levels that have a visual connection to street level.
- Providing well-managed, safe and visible public

access to indoor, rooftop and ground level private open spaces, especially where they are part of a development or institution that will attract large numbers of visitors.

- Providing for smaller social gatherings such as barbeques and parties in private open spaces that can augment these types of facilities in public open spaces
- Integrating necessary level changes between streets and ground floors that are required for flood mitigation as thoughtful 'edge' elements of the public realm that can be occupied as seating, informal play or garden beds.



Summary of proposed Arden public realm and open space provision

Open Space	Catchment	Area	Character
New Capital City Open Space	Capital City	0.6 hectares	Square Urban plaza Water feature Events
Existing North Melbourne Recreation Reserve	Municipal	4.51 hectares	Restricted sporting Sporting
New Integrated Stormwater Management Open Space	Municipal	5.9 hectares	Water feature Nature conservation Informal use
New Neighbourhood Open Space	Neighbourhood	1.0 hectares	Play Recreation Informal use
Existing Clayton Reserve	Local	0.65 hectares	Informal use
Existing Macaulay Road & Canning Street Reserve	Small Local	0.25 hectares	Informal use
Existing Railway Place & Miller Street Park	Small Local	0.11 hectares	Recreation Informal use
New key streets and green links Munster Terrace Western Boundary Green Link Macaulay Road Arden Street Queensberry Street Lauren Street Boundary/Henderson/Fogarty Street Corridor	Green Link Green Link Key Street Key Street Key Street Key Street Key Street	N/A	Linking space Seating/viewing Informal use

Implementation

Planning

The recommendations of this Strategy have been developed to help inform the development of the Arden Precinct Structure Plan being undertaken by the City of Melbourne and the Victorian Planning Authority. This planning document will provide the framework for infrastructure investment in Arden (and the mechanisms that will be used to pay for these), as well as establish the design and planning controls for development that will occur within Arden. The public realm and open space are one of a range of important elements that the Precinct Structure Plan will align and coordinate to achieve the Arden Vision including: transport; service infrastructure; character, community facilities, cultural and heritage management and building heights, shadows and interfaces.

Development

The Precinct Structure Plan will also assign responsibilities and identify lead agencies to individual initiatives to ensure that actions can be undertaken in a coordinated way, that are well aligned with capability and authority. Once agreed and approved by the Minister for Planning, development and realisation can occur.

For the public realm and open space recommendations of this Strategy, a number of key asset investments and development phases are crucial to its successful realisation. These include:

- Implementation of the Stormwater Management Facility in Arden North – The specific location and form of this important element of the public realm will directly impact the connectivity, character and functionality of the open spaces and public realm of Arden North. Ensuring an integrated and collaborative planning, design and delivery process is conducted will be crucial to ensure that it:
 - Forms broad connection to North Melbourne Recreation Reserve, Clayton Reserve and potential connection to the Moonee Ponds Creek,
 - Provides space and level areas for passive recreation and walking trails, and
 - Designed to maximise its availability for recreational purposes safely and attractively.
- Development of Arden Central – The significance of the central site's location and size cannot be overstated given the substantial contribution it will make to the open space and public realm of Arden, both in quantity

and character. The aspiration for the Capital City Open Space is for a metropolitan if not international role for the whole of Melbourne. The design process, delivery quality and management arrangements that are undertaken will determine its ability to successfully and confidently establish itself.

- Realisation and Upgrades to Key Streets – Macaulay Road and Arden, Queensberry, Laurens and Fogarty Streets will all undergo some degree of extension, change or upgrade in order to manage the changes to their transport roles. Ensuring that their design detail incorporates all of the expectations that a high-quality public realm would require of them, will establish an important signal to the development interests of the step change that is expected in Arden, as well as provide an opportunity to change perceptions of what a street's role in an urban precinct can be.

Management

The public realm and open spaces of Arden can only continue to be successful once developed with active and ongoing management. A high-quality environment, particularly one that is asked to be efficient, flexible and hard working can only meet its functional performance targets through careful monitoring, management and maintenance. All stakeholders, asset and land managers will be required to participate in this if the vision for the Precinct is to be realised.

The City of Melbourne will be instrumental in this with extensive experience and established standards and practices in managing the public realm. However there is likely to also be an important role for land owner(s) participation and specialist stormwater authority experience, specifically in the case of the stormwater management facility, and water sensitive urban design assets more broadly.

As the Precinct is redeveloped, the public realm and open spaces of Arden will continue to grow, adapt and evolve as the specific needs of the type of residents and workers that occupy Arden become more apparent with every new proposal and development. The ongoing presence of these asset managers will be required to actively manage what will be a complex, living, urban ecosystem that will need be impacted by and need to respond to the social, environmental and economic demands that will be present in Arden and Melbourne in a broader sense.

Endnotes

- 1 Victorian Planning Authority, Victorian State Government, City of Melbourne: Arden Vision 2018
- 2 Karkarook Park, Vic, available at: www.visitvictoria.com/regions/Melbourne/Things-to-do/Nature-and-wildlife/National-parks-and-reserves/Karkarook-Park
- 3 The State of Victoria Department of Environment, Land, Water and Planning, Plan Melbourne 2017-2050
- 4 Bourke Street Mall, Vic, available at: www.sidespace.com.au/media/bourke-street-mall-to-become-smoke-free
- 5 Southbank, Vic by James Dominko on Unsplash
- 6 Battery Park City, NY, available at: www.cityof.com/ny/new-york-city/local/attractions
- 7 Kings Cross Central, London, available at: www.silicon.co.uk/e-regulation/surveillance/kings-cross-facial-recognition-shut-283135
- 8 Constitution Avenue, CBR, available at: www.landezine.com/index.php/2017/04/constitution-avenue-canberra-by-jane-irwin-landscape-architecture/20170269_jg_1892/
- 9 Chrofi, Maitland, NSW available at: www.chrofi.com/project/maitland-riverlink
- 10 Yanweizhou Park, Jinhua City, China available at: www.landezine.com/index.php/2015/03/a-resilient-landscape-yanweizhou-park-in-jinhua-city-by-turenscape/
- 11 Zollhallen Plaza, Freiburg, Germany available at: www.landezine.com/index.php/2015/04/flood-zone-on-public-plaza-design-atelier-dreiseitl-landscape-architecture/
- 12 Development Bank Of The Meurthe, Freiburg, Vosges, France Germany available at: www.landezine.com/index.php/2013/03/development-bank-of-the-meurthe-by-atelier-cite-architecture/
- 13 Cheonggyecheon, South Korea available at: <https://www.thestar.com.my/lifestyle/living/2017/11/11/restoration-cheonggye-stream-seoul/>