

NSW Land and Housing Corporation

Waterloo State Significant Precinct

Summary of Baseline
Investigations

August 2018



Communities Plus

Introduction – see separate slide pack

Robert Sullivan

Director, Stakeholder Engagement & Relations
NSW Land and Housing Corporation



Run sheet

URBAN FOREST / OPEN SPACE		
TIME	ACTIVITY	LEAD
10.00am	Introductions and context	Rob Sullivan
10.10am	Urban Forest Presentation	Ron Meyer
10.30am	Roundtable discussion Two facilitated tables	Rob Sullivan Ron Meyer
11.00am	Summary of discussions	LAHC Table Facilitators
11.10am	Session concludes (BREAK)	
11.20am	Presentation of Open Space	Ron Meyer
11.40 am	Roundtable discussion: Two facilitated tables	Rob Sullivan Ron Meyer
12.10pm	Summary of discussions	LAHC Table Facilitators
12.20pm	Open Space session concludes	
12.20pm	Wrap up/final remarks	Rob Sullivan

Baseline studies intro – see separate slide pack

Ron Meyer

Project Director

Waterloo Estate Redevelopment

NSW Land and Housing Corporation



Urban Forest and Open Space

Baseline Study conducted by Arterra



Urban Forest

Study Requirements

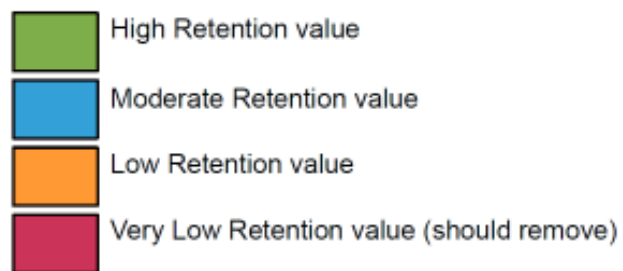
- Assess the location, condition, quality and life expectancy of trees within the Precinct and identify required protection zones for trees to be retained
- A tree retention plan that considers the capacity to protect existing trees and allow for the growth of new trees, species selection that maximises solar access during winter, soil volumes and quality required for long term tree health and design options to maximise urban forest concept.
- Align with City of Sydney Urban Forest Strategy, in particular targets for canopy cover, species diversity and height of trees

Urban Forest

Brief

- Identify protection zones to minimise impacts on significant trees.
- Prepare a plan with the aim of protecting and recognising Urban Forest values and its role as an inner urban, mixed use, transit oriented community.
- Prepare a plan to achieve targets for minimum canopy cover, minimum species diversity and tree height ranges.
- The Study will explore opportunities:
 - to expand footpaths and reduce roadways
 - for central street planting on east-west streets
 - to incorporate landmark trees in key locations
 - to consolidate deep soil zones in street setbacks
 - to incorporate street gardens.

Urban Forest



High 181 (17%)
Moderate 342 (32%)
Low 537 (49%)
Very Low / Remove 24 (2%)



Urban Forest

Existing Situation

- 1084 existing trees – 34% are street trees and 19% are close to the street (47% of all trees are in or close to streets, including the majority of 'High Value' trees)
- The 'overall' canopy coverage is 28%
- 30% of the Precinct is road reserve, with 32% canopy coverage
- No historically significant trees were evident in aerial photos from 1943. All trees are less than 45 years old
- Trees dominated by 4-5 main 'Families'. Myrtaceae (incl. Eucalypts) are greater than 45%, Figs are 32%

Urban Forest

Considerations


- Many large trees have extensive root systems often conflicting with buildings and services
- Sandy soils, mean that tree roots could be widespread and under the roads
- Large, mature trees (Eucalypts and Figs) require lots of space to be protected
- Services installation and upgrades are likely to have the greatest impact on tree retention
- Tree protection and retention will reduce the developable area
- City of Sydney targets no more than 40% of trees in any one family, 30% in any one genus, 10% in any one species
- Retain and protect the most significant existing trees to provide a framework for new parks and green spaces, signature landmarks at key visual points and to allow trees to be seen from upper level windows

Urban Forest

Considerations

- Recognise that mature trees require space and incorporate this into spacious garden and lawn areas
- Consider sensitively designed, raised or suspended structures around existing trees
- Direct surface water runoff towards existing and new trees
- Provide trees in upper levels of buildings, podiums and roofs to improve connections to nature
- Consider community orchard style planting in semi-public open spaces
- Consider median and in-road planting opportunities to move trees away from services and building facades
- Trees are a multi-tasking asset that provide shade, traffic calming, wind amelioration, environmental services, fauna connectivity and aesthetic benefits. They make the streets more inviting and contribute to people wanting to use them for activities like walking and cycling.

Discussion – 20 minutes

- Are there points from the presentation you would like to discuss further?
 - Are there any points from the presentation you didn't understand?
 - Are there any other things you can tell us from working, living or visiting the area?
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- A stylized graphic of a blue leaf or petal shape, composed of several overlapping curved segments, located on the right side of the slide.

Summary & Close



Next Study Session

11.20am

Open Space

Baseline Study conducted by CLOUSTON Associates



Open Space

Study Requirements

- Consult closely with the City of Sydney for all aspects of public space
- Site analysis for new park(s)
- Benchmark against international best practice for comparable open space design.
- Develop an open space plan
- Compare options for the street layout
- Plan of the public streets, lanes and walkways
- Identify key intersections for pedestrians, cyclists and/or vehicles, and propose initiatives for pedestrian and cyclists safety and comfort
- Easy, connected and safe access for pedestrians and cyclists at all times of the day and night
- Water Sensitive Urban Design strategy

Open Space

Brief

- Review the City of Sydney's Open Space, Sports and Recreation Needs Study and supplement it with an audit of open space facilities serving the Precinct
- Population and employment projections will be used to identify the open space needs of the existing and future communities

Methodology

- Review the City of Sydney's Open Space, Sports and Recreation Needs Study 2016, and specifically the Open Space Acquisition Criteria and Rationale and the Recommended Open Space Directions for the Waterloo Estate Precinct
- Provide a detailed analysis of the existing physical features and usage patterns of existing open space in and around the Precinct
- Consider best practice in similar high dwelling density environments/projects from around the world

Open Space

Current Situation

- Existing open space within the Precinct is characterised by groups of large trees – particularly figs, and:
 - North - large expanses of relatively unembellished public open space (sometimes poorly defined)
 - South - significant areas of communal and private space



Communities Plus

Open Space

Current Situation



Redfern Park



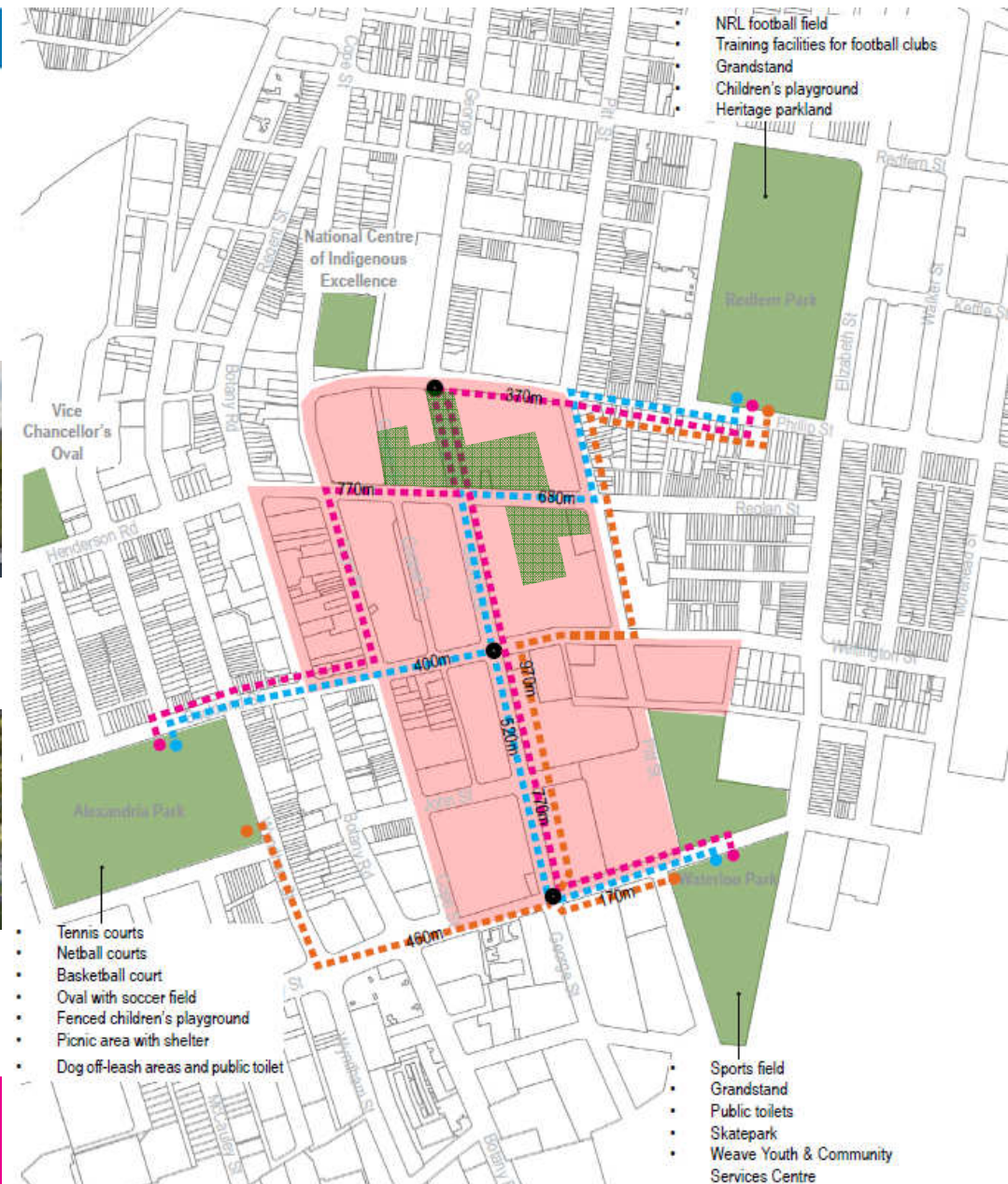
Redfern Oval



Alexandria Park



Waterloo Park



Open Space

Current Situation - District and local parks

- There are two major regional parks within a 2km radius of the precinct:
 - Moore Park (115 Ha)
 - Sydney Park (40 Ha)

Park	Size	Distance from Precinct	Use/s
Waterloo Oval	2.1ha	0km	> 50% playing field
Alexandria Park	4.08ha	0.5km	> 50% playing field
Redfern Park	4.8ha	0.8km	> 50% playing field
Erskineville Park	4.2ha	1.3km	Mainly playing field
Joynton Park	1.3ha	1.5km	Informal park, including off-leash dogs
Gunyama Park	2.4ha	1.5km	Indoor & Outdoor Aquatic Centre, plus playing field
Perry Park	2.3ha	1.6km	Informal, includes basketball centre
Prince Alfred Park	7.3ha	1.4km	Playgrounds and Aquatic Centre

Open Space

Considerations

- Local parks such as Waterloo Park and Alexandria Park require major road crossings (Botany & McEvoy)
- More than 50% of these district parks are heavily dedicated to sport
- Large block sizes contrast with the surrounding fine grain streets reduces pedestrian and cycle movement
- The north/south arrangement of streets and steep topography in the southeast provides varied walkability
- Existing open space within the Precinct is not well distributed to meet future recreation needs
- Some residents in the south of the Precinct do not have 200m access to open space (current benchmark for higher density urban environments)
- The roots of many fig trees pose some long term challenges, often being woven into walls and rock revetments.
- City of Sydney's sunlight requirement for open space is 50% to receive sun for 4 hours between 9am and 3pm (mid-winter)

Open Space

Considerations


- Parks can play a critical role in enhancing the walking experience, including through-routes to and from the new Metro station
- Improve the existing dedicated cycle route along George Street, including an east/west connection along Wellington Street
- Many existing trees are within the street corridor and can be retained to manage heat and maintain ecological corridors
- The ecological desirability of dense, mid-level species needs to be balanced against safety and security sight lines
- The design of new parks and streets may be able to assist in flood management
- Current mapping of Sydney's Green Grid (Greater Sydney Commission) suggests potential linkages north/south and east/west
- The extensive mature trees across the Estate lend a sense of an established landscape and many are located where they can be retained

Open Space

Considerations

- Current benchmarks recommend 200m actual walking distance from all residents to some public open space
- Open space within the Estate can build upon the urban plaza space proposed within the Metro Quarter
- Council's Open Space, Sport & Recreation Needs Study requires 15% of the developable area as open space
- A larger park of 2Ha, preferably on level ground, is recommended
- A further smaller park(s) may also be needed to provide open space within 200m of all residents
- Demand is for passive open space, given the emphasis on sport in surrounding district open space
- Significant population density will require robust open space design to accommodate the expected level and intensity of use
- Maintenance programs will need to reflect the high levels of use expected

Discussion – 45 minutes

- Are there points from the presentation you would like to discuss further?
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Summary & Close

