PARRAMATTA ROAD CORRIDOR URBAN TRANSFORMATION STRATEGY
STAGE 2 PRECINCTS - PUBLIC DOMAIN PLAN URBAN CANOPY ASSESSMENT

FINAL DRAFT

JUNE 2023

City of Canada Bay

CONTEXT

Parramatta Road Corridor Urban Transformation Strategy
Stage 2 Select Precincts - Public Domain Plan

Draft

June 2023

BY

CONTEXT LANDSCAPE ARCHITECTURE

FOR

CITY OF CANADA BAY

CONTEXT ACKNOWLEDGES THE WANGAL CLAN AS THE TRADITIONAL CUSTODIANS OF THIS LAND, AND RECOGNISE ELDERS PAST AND PRESENT. THROUGH AUTHENTIC UNDERSTANDING OF THE LANDSCAPES WITHIN WHICH WE WORK, WE STRIVE TO DEEPEN OUR UNDERSTANDING OF COUNTRY AND OUR RELATIONSHIP WITH ITS PEOPLE.

Document Control

Rev	Date	Description	Approved
A	22/06/2023	Preliminary Draft for Review	CW
B	29/06/2023	Final Draft	CW

Contents

01 INTRODUCTION

INTRODUCTION

The Parramatta Road Corridor Urban Transformation Strategy (PRCUTS) provides a vision and strategy for how the corridor will grow and bring new life to local communities.

PRCUTS aims to renew Parramatta Road and adjacent communities through investments in homes, jobs, transport, open spaces, and public amenity. It presents significant urban renewal opportunities for land within defined development precincts.

In response to PRCUTS, the City of Canada Bay, Strathified and Burwood Councils have undertaken additional urban design, traffic, and transportation investigations for three precincts: Homebush, Burwood, and Kings Bay.

CONTEXT was engaged by the City of Canada Bay to prepare a public domain plan (the plan) for the streets and open spaces of select precincts within the Canada Bay Local Government Area (LGA).

The purpose of the plan is to ensure that all public domain needs are identified at an early stage and can inform detailed planning in the corridor, including Development Control Plan (DCP) requirements, requirements for private land (e.g. for street widening), and developer contributions.

The plan illustrates preliminary concept designs for streets and open spaces to assist in the visioning, preliminary costing, and future development of these public domain areas.

PURPOSE AND OBJECTIVES

The primary objective of this study is to assess the urban tree canopy coverage of the Canada Bay portion of the Stage 2 PRCUTS precinct areas of Bakehouse Quarter Homebush, Burwood and Kings Bay. This has been undertaken through a 3 step process.

THE PROCESS:

01.

Assessing and testing what urban tree canopy can be achieved under the PRCUTS planning proposal master plans, public Domain Plan and DCP.

02.

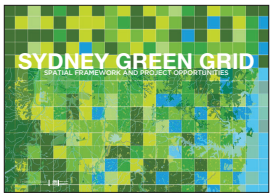
Determine what (if any) changes are required to the proposed documents to achieve a minimum of 25%.

03.

Provide recommendations to ensure the realization of minimum 25% urban tree canopy coverage for each precinct area.

STRATEGIC CONTEXT

There is a substantial amount of policy and strategic documents that supports and fosters the increase of urban canopy across Metropolitan Sydney, Canada Bay LGA and the stage 2 PRCUTS precincts. These documents were reviewed to assist the development of urban canopy assessment methodology and to ensure that the PRCUTS planning proposal would achieve both State Government and the City of Canada Bay Council's urban canopy aspirations.



SYDNEY GREEN GRID
Government Architect NSW, 2017

A number of Green Grid projects require consideration within the Homebush North, Burwood, and Kings Bay precincts.

The Sydney Green Grid promotes the creation of a network of high quality open spaces that supports recreation, biodiversity and waterway health.

The Green Grid will create a network that connects strategic, district and local centres, transport hubs, and residential areas, such as Homebush North, Burwood, and Kings Bay.

GREENER PLACES
Government Architect NSW, 2017

The Precincts' streets and open spaces provide an opportunity to embed green infrastructure within the urban environment.

The Greener Places Design Framework has been produced by GANSW to guide the planning and delivery of green infrastructure across NSW.

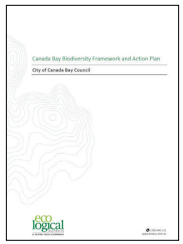
The aim is to create healthier and more liveable cities and towns by improving community access to recreation and exercise, supporting walking and cycling connections, and improving the resilience of our urban areas.

URBAN GREEN COVER IN NSW TECHNICAL GUIDELINES
NSW Government, Office of Environment & Heritage

Urban green cover is a key action in minimising and accommodating for the impacts of climate change in our local communities.

The Urban Green Cover in NSW Technical Guidelines provides practical guidance on how to adapt the urban environment through urban green cover projects.

The guidelines will assist NSW built environment professional increase resilience to help prepare for the effects of climate change.

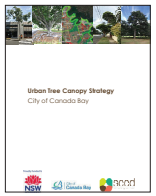


CANADA BAY BIODIVERSITY FRAMEWORK AND ACTION PLAN
City of Canada Bay Council

Current and future communities depend on biodiversity and the ecosystem services it provides to stay healthy and resilient.

The Biodiversity Framework and Action Plan supports the Local Strategic Planning Statement which sets out the 20-year vision for landuse.

The Action Plan embodies a range of themes including native vegetation, urban waterways and foreshores, corridors and connectivity, public spaces, urban habitat and green infrastructure.



URBAN TREE CANOPY STRATEGY
City of Canada Bay

Streets and open spaces are the primary method for achieving an extensive and robust urban tree canopy.

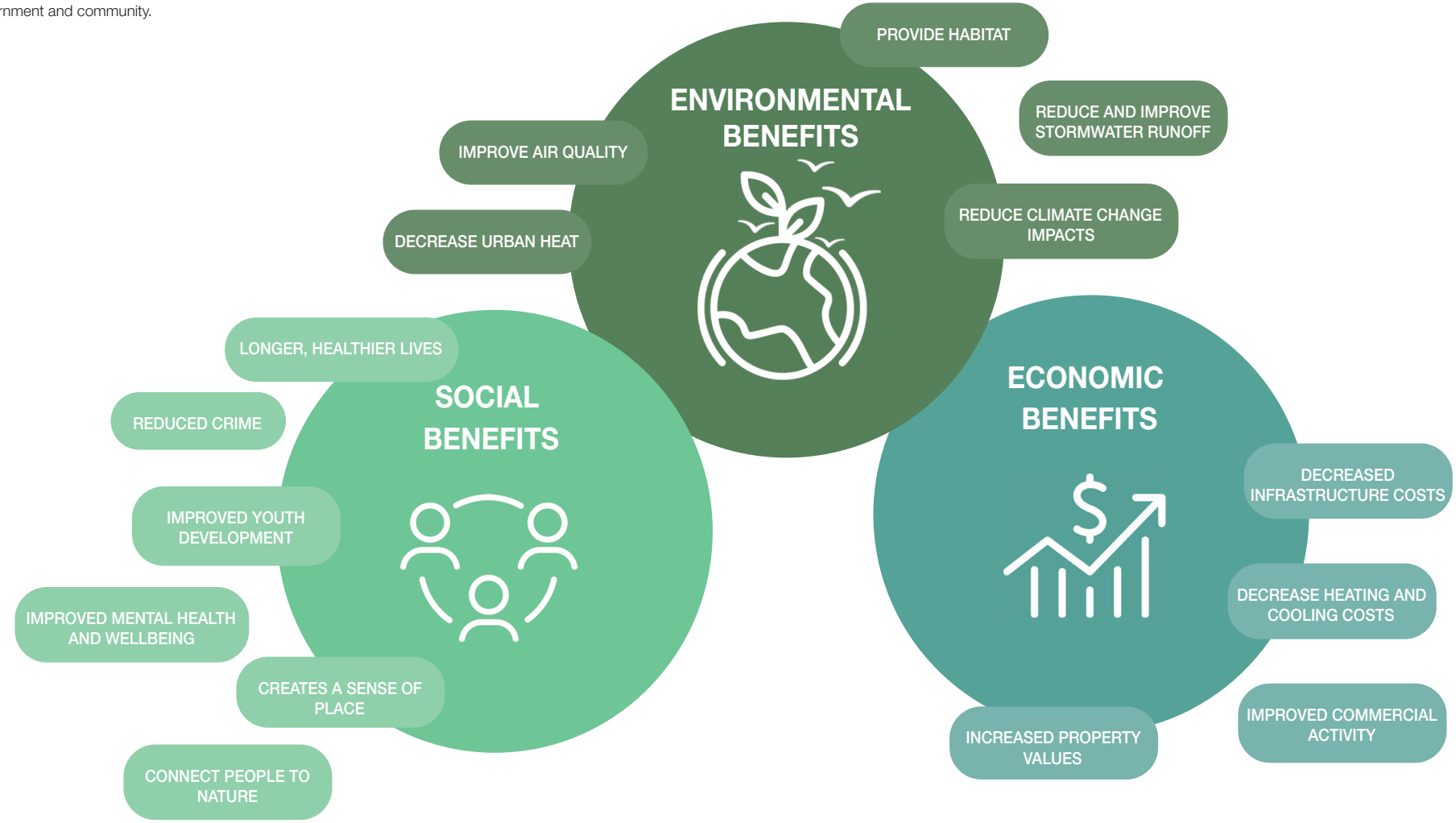
The strategy commits Council to increasing it's urban tree canopy cover across the City to at least 25% by 2040.

Priority action themes to deliver this increase in canopy are:

- Protect and value
- Renew and grow
- Support and sustain
- Engage and create
- Manage and resource

BENEFITS OF THE URBAN FOREST

In undertaking an urban canopy assessment, it is important to recognise the value and benefits of the urban forest for both Government and community.



02 THE STUDY

2.1 STUDY AREAS AND SCOPE

2.1.1 HOMEBUSH PRECINCT

The Homebush Precinct is located between Sydney Olympic Park's Bicentennial Park to the west and Concord Railway Station to the east. The precinct extends from the Western Rail Line in its south, northwards along the Northern Rail Line and into Concord West.

It is proposed that the Homebush Precinct will be transformed into an active and varied town centre, with a mixture of higher density housing and mixed uses, that are supported by a network of green streets near the railway station.

The scope for this precinct for assessment includes:

- The Bakehouse Quarter
- George Street
- Allen Street
- Hamilton Street

2.1.2 BURWOOD PRECINCT

The Burwood Precinct is located north of the existing Burwood Town Centre and between Burwood Train Station and the Parramatta River. The existing town centre accommodates a large Westfield shopping centre near Burwood Park, and a smaller shopping plaza south of the station. A wide range of high street retail shops and commercial office buildings are also located along Burwood Road.

The Burwood Precinct will complement the town centre and provide additional housing and new open space.

The scope for this precinct for assessment includes:

- Ada Street;
- Parramatta Road;
- Gipp Street;
- Stanley Street;
- Crane Street;
- Broughton Street;
- Burwood Road;
- Landsdowne Street;
- David Street;
- Salisbury Street;
- Melbourne Street;
- Coles Street;
- Lloyd George Avenue;
- Moreton Street;
- Franklyn Street;
- Burton Street;
- Loftus Street

2.1.3 KINGS BAY PRECINCT

The Kings Bay Precinct is located between the established activity centres of Five Dock and Burwood, located approximately 1km to the east and west respectively. The precinct will evolve from a low scale industrial precinct into a new mixed use neighborhood, anchored by a small local centre and offering a range of housing choices.

The scope for this precinct for assessment includes:

- Queens Road;
- Taylor Street;
- Parramatta Road;
- Curland Street;
- Lavender Street;
- York Avenue;
- Great Northern Road;
- Arlington Street

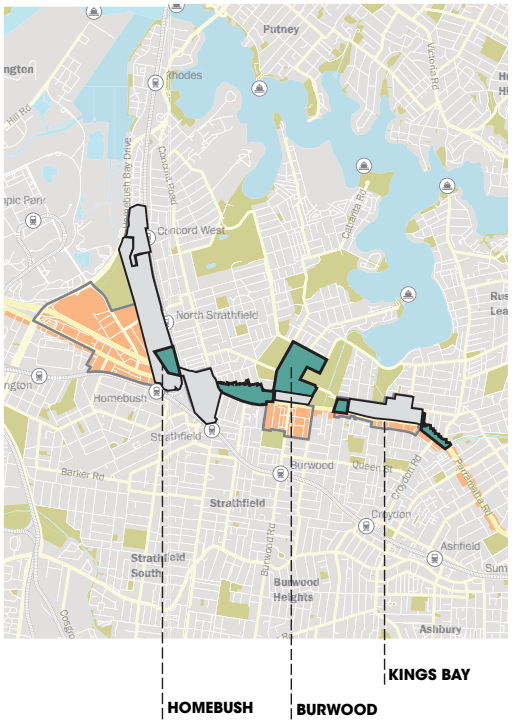


DIAGRAM INDICATING THE EXTENT OF PRCUTS PRECINCTS AND STAGING

ASSESSMENT METHODOLOGY

EXISTING CANOPY COVERAGE

To understand the existing conditions and each precinct's capacity to reach the required 25% canopy coverage, the existing canopy cover was analysed and assessed. This was undertaken by:

- Utilising the significant tree assessment undertaken for the Public Domain Plan;
- Analysing and documenting the canopy in the private domain from recent aerial photography.

The existing canopy cover was then calculated as a percentage of total precinct area.

CANOPY CAPACITY OF PLANNING PROPOSAL MASTER PLANS AND PUBLIC DOMAIN PLANS

To understand each precinct's canopy capacity, an overall master plan was created using:

- The public domain arrangement from the Public Domain Plan; and
- The urban built form and lot boundaries from the master plan proposals, as prepared by Group GSA.

The City of Canada Bay's Biodiversity Framework, Urban Tree Strategy and Development Control Plan (DCP) for the precincts were reviewed and all relevant controls that would affect urban canopy outcomes have been itemized and used to inform the street tree setout and arrangement. Where possible, existing trees assumed to be unaffected by the redevelopment were shown as retained.

To ensure feasibility, street lighting, known utilities and indicative driveways were added to the master plans.

The proposed scenario assumes that the overhead electricity wires and infrastructure will be retained in a similar position and arrangement to the existing. It is also assumed that the master plan utilizes the controls and requirements of the DCP.

The projected canopy cover was calculated as a percentage of total precinct area. The calculations do not consider any future canopy cover that may be planted on the upper levels of buildings, including roof tops. Where trees have been located in the private lot areas, it is assumed that sufficient deep soil or raised garden beds will be allowed for to ensure the required projected canopy cover can be achieved.

TREE SETOUT ASSUMPTIONS

To ensure that the assessment considers foreseeable urban constraints, the following tree set out assumptions and principles were utilized for each precinct:

- Where possible, trees were evenly spaced along the roadways as shown in Public Domain Plan with a minimum spacing of 1 tree per 10-12m. Average spacing used was approximately 10m. This is in accordance with the spacing requirements as per the relevant landscape design conditions of each precinct's DCP.
- Proposed street lighting is assumed to be installed at 20m centres along all roadways and cycle paths. To ensure adequate lighting levels will be achieved, a minimum 5m clearance from tree trunk to light pole was assumed.
- To ensure appropriate sight lines are achieved for vehicle and pedestrian safety, 10m clearance from street corners and 3m clearance from driveways were allowed for.
- Utilising the principle of planting the 'right tree in the right place' in accordance with Council's Urban Tree Canopy Strategy, medium sized trees of 8m canopy width were allowed for in streets that are not encumbered by overhead powerlines. Where planting needed to occur under powerlines, a 6m canopy is assumed, this is consistent with the canopy width of the trees that are currently planted under powerlines such as Callistemon species. In open space areas, larger trees with a canopy of 12m or greater have been shown.
- It is assumed that the public domain and private lot areas, where tree planting is shown, is unencumbered by utilities or other latent conditions yet to be identified.

INDICATIVE SECTION OF TREES PLANTED UNDER POWERLINES

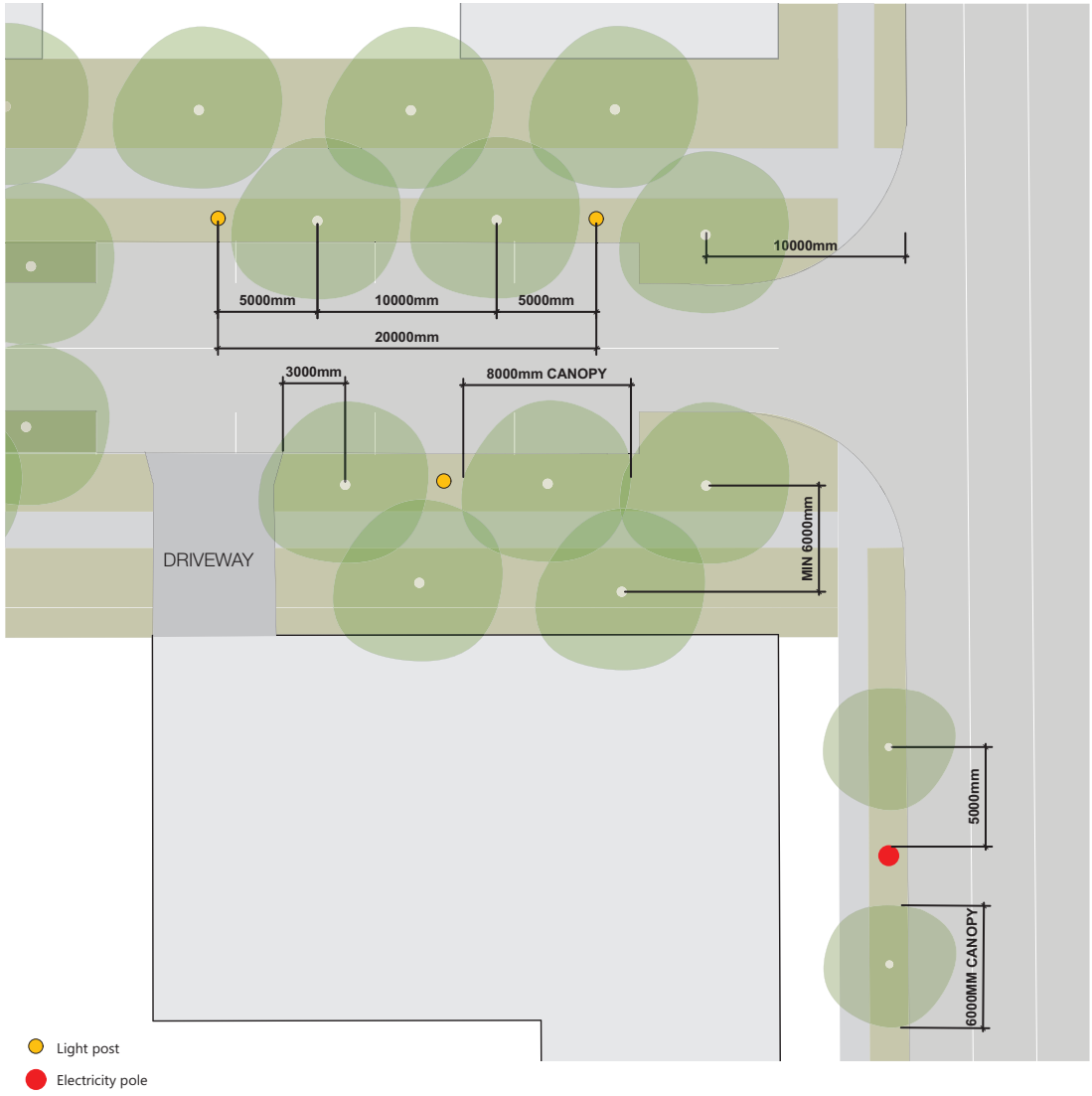


DIAGRAM INDICATING TREE SETOUT ASSUMPTIONS

03 HOMEBUSH BAKEHOUSE QUARTER

EXISTING CANOPY ASSESSMENT

ANALYSIS FINDINGS

Total existing canopy cover for the Homebush, Bakehouse Quarter precinct is 5.3%, which is much lower than the overall canopy coverage of the greater Concord West suburb area which stands at 21.35%.

There is an opportunity to significantly increase the overall canopy coverage by planting trees in the proposed public domain that makes up the commercial and heritage precinct of the Bakehouse Quarter and include large canopy trees within the proposed open spaces.

The heritage and mixed use zones within the Bakehouse Quarter create restrictions on urban canopy due to the limited capacity for sustainable tree planting. The existing buildings are built to boundary with little to no deep soil zones.

However, there is an opportunity to increase the overall canopy coverage of the precinct by planting trees in the public domain and incorporating larger canopy species within the existing and proposed open spaces.

EXISTING CANOPY ANALYSIS SUMMARY

Total area of calculation	72, 592 m^2
Area of canopy cover on private land	1, 665 m^2 2.3 %
Area of canopy cover on public land	2, 161 m^2 3 %
Total area of canopy cover	3, 827 m^2
Existing canopy coverage	**5.3 %**

EXISTING CANOPY ASSESSMENT - HOMEBUSH NORTH 1:2500 @ A3

LEGEND

- SCOPE INCLUDED IN CALCULATION
- EXISTING TREES ON PRIVATE LAND
- EXISTING TREES ON PUBLIC LAND

DCP CONTROLS AND REQUIREMENTS

The PRCUTS DCP for Homebush North was analysed for any controls or requirements that would have an impact on canopy outcomes for the precinct, these have been tabled below. The impacts were then used to create the proposed urban canopy master plan to ensure that what is currently proposed in the DCP is tested and the urban canopy outcomes assessed.

CONTROL / REQUIREMENT	LOCATION/AREA AFFECTED	IMPACT ON CANOPY OUTCOMES	DOCUMENT REFERENCE
Size and location of footpaths, laneways, cycleways, planting and parks are to be provided according to Council's PRCUTS Public Domain Plan and PRCUTS Master Plan.	Precinct wide	Right size tree to be planted in the right locations to ensure the aspirations of the Public Domain Plan will be achieved.	DCP - K22.6 Access Network – C4
Pedestrian/ cycle links are to be naturally lit and ventilated, appropriately lit after hours, publicly accessible 24/7, and have clear sight lines from end to end.	Precinct wide	Tree planting arrangement to consider light pole locations to ensure adequate lighting levels are achieved	DCP - K22.6 Access Network – C6
Where applicable, a portion of the setback area is to provide deep soil zones and tree planting.	Precinct wide	Opportunity for additional urban canopy in the deep soil zones in setback areas.	DCP - K22.8 Street Setbacks – C2
'Undesirable' elements such as vents, electrical substations, or plant and equipment spaces are not permissible within the setback area and should be accommodated within the building.	Precinct wide	Tree planting arrangements and locations will need to consider driveways and other vehicle access points located in laneways and secondary streets.	DCP - K22.8 Street Setbacks – C3
Development to the east of the playing fields along the open space interface: – Setback area to be landscaped and deep soil	Street setbacks	Opportunity for additional urban canopy in the deep soil zones in setback areas	DCP - K22.9 Transitions and Interfaces – C2
Entries and private open spaces are encouraged within the 3m or 4.5m landscaped setbacks including a 1-1.5m wide strip of landscaping	Interactive frontages within residential zones	Opportunity for urban canopy in landscape setbacks greater than 1m wide and 0.8m in height (if raised).	DCP - K22.11 interactive Frontages – C4
Existing street trees and landscape features are to be retained wherever possible. All significant trees that are identified as either high or medium significance in PRCUTS Public Domain Plan are to be retained.	Precinct wide	Existing tree canopy to be retained will significantly contribute to the required canopy coverage.	DCP - K22.15 landscape Design – C1
For development along Parramatta Road, a minimum of 1 canopy tree per 10m of length of frontage is to be planted in the 'green edge' setback area, capable of reaching a mature height of at least 10m.	Parramatta Road	Proposed linear public domain spaces to be enhanced with appropriately sized and spaced tree planting.	DCP - K22.15 landscape Design – C5
For development along all other streets (excluding active frontages) a minimum of 1 canopy tree per 12m of frontage is to be planted. New trees are to be capable of a mature height of at least 6m.	All Streets	Consistent Canopy coverage along streets enhancing landscape character	DCP - K22.15 landscape Design – C6
A minimum of 40% projected tree canopy coverage on publicly accessible streets and laneways, unless it can be clearly demonstrated that it is unreasonable to meet this requirement and a suitable urban design outcome can be achieved which would be applicable in this specific instance only.	All accessible streets and laneways precinct wide.	Opportunity for public domain areas to significantly contribute to 25% canopy coverage.	DCP - K22.15 landscape Design – C9
A minimum of 75% projected tree canopy coverage shall be achieved for all parks.	Open space	Opportunity for parks and open space to significantly contribute to 25% canopy coverage by allowing for larger canopy trees to be planted.	DCP - K22.15 landscape Design – C10
A minimum of 15% projected tree canopy coverage shall be achieved for all private land developments.	Mixed use zone	Opportunity for private development areas to contribute to 25% canopy coverage.	DCP - K22.15 landscape Design – C15
Development consent must not be granted unless the development achieves at least 25% canopy cover across the site.	Residential zones	Opportunity for residential development areas to contribute to 25% canopy coverage.	DCP - K22.15 landscape Design – C18
50% of the required landscaped area is to be deep soil planting (trees and shrubs) and a preference for native species.		Opportunity for residential development areas to contribute to 25% canopy coverage.	DCP - K22.15 landscape Design – C21
Calculation of deep soil areas is not to include any land that has a length or width less than 1.5m	Residential zones	Front setback areas with 1m landscape strip cannot be calculated as deep soil zones and may not be suitable for tree planting limiting canopy opportunities.	DCP - K22.15 landscape Design – C22
For residential development in the R3 Medium Density Zone, at least 50% of front setback area is required to be deep soil.	Medium Density residential	Opportunity for medium density development areas to contribute to 25% canopy coverage.	DCP - K22.15 landscape Design – C24

CONTROL / REQUIREMENT	LOCATION/AREA AFFECTED	IMPACT ON CANOPY OUTCOMES	DOCUMENT REFERENCE
Public domain and buildings shall be designed to reduce localised heat created by the urban heat island affect by: – Maximising canopy cover on streets designated as streets with 'interactive frontage' – Retaining existing street trees, especially those identified as High Significance or Medium Significance in the PRCUTS Public Domain Plan. – Targeting canopy cover of at least 60% over all pedestrian spaces such as footpaths, pedestrian links and the new Station Square.	Precinct wide	Opportunity for the public domain and development areas to contribute to 25% canopy coverage	DCP - K22.16 Sustainability and Resilience – C4

PROPOSED CANOPY ASSESSMENT

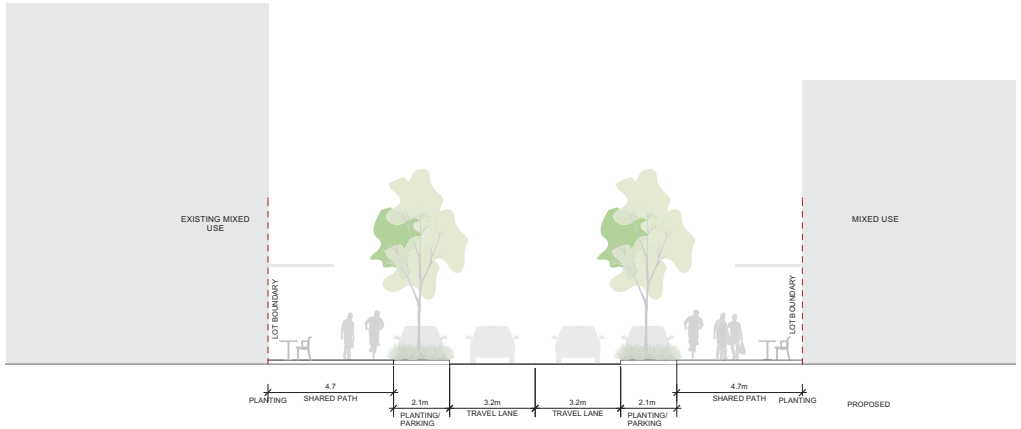
PROPOSED CANOPY COVER

Total area of calculation	72, 592 m²
Loss of existing canopy	1, 019 m2 26.6%
Total area of public canopy cover	10, 021 m2 13.8%
Total area of private canopy cover	4, 166 m² 5.7%
Total area of overall canopy cover	14,187m²
Projected canopy coverage	**20%**

PROPOSED CANOPY ASSESSMENT - HOMEBUSH , BAKEHOUSE QUARTER
1:2500 @ A3

TYPICAL STREET CROSS-SECTIONS

SECTION 01
GEORGE STREET (REFER TO PDP FOR DIMENSIONS AND FURTHER DETAIL)



STREET REFERENCE DIAGRAM

SECTION 02
ALLEN STREET (REFER TO PDP FOR DIMENSIONS AND FURTHER DETAIL)

CANOPY ASSESSMENT FINDINGS FOR HOMEBUSH BAKEHOUSE QUARTER

GENERAL

The design principles and features of the Public Domain Plan, Bakehouse Quarter Homebush Master Plan, and relevant conditions within the DCP will allow for a minimum 20% total canopy cover to be achieved in the Bakehouse Quarter area of the Homebush precinct.

EXISTING TREES

As with most development areas, a loss of existing canopy cover is expected to make way for the construction of new roads, buildings, and infrastructure. From the canopy assessment undertaken, it is expected that 26% of the existing canopy on private land will be lost. It is anticipated, that no tree categorised as high to moderate significance will require removal for the proposed development (as per page 24-27 of the Public Domain Plan).

CANOPY PROJECTIONS

From the canopy assessment, it is anticipated that the projected canopy requirements for open space and pedestrian spaces can be achieved, except for those open spaces that sit beneath the Western Motorway (Lot C6, B1 and B2).

- A minimum of 75% projected tree canopy coverage shall be achieved for all parks (DCP - K22.15 landscape Design – C10)
- 60% over all pedestrian spaces such as footpaths, pedestrian links and the new Station Square (DCP - K22.16 Sustainability and Resilience – C4).

It is anticipated that the projected canopy requirements for the development can be achieved with the current master plan layout, with the exception of heritage lot A3. This is if the deep soil requirements are able to be realised in the detail design of the lots. The projected canopy requirements summarised below:

- Mixed use zone – 15% (DCP - K22.15 landscape Design – C11)

The heritage constraints of the Bakehouse Quarter limit the opportunity to reach the public domain canopy requirements. George street is encumbered by existing awnings, aflresco dining and the overhead Western Motorway, therefore the following requirement cannot be achieved:

- 40% projected tree canopy coverage on publicly accessible streets and laneways.

The following recommendations should be considered in order to further increase the canopy coverage of the precinct:

- The existing trees along George Street are replaced with larger canopy trees, noting that there is no overhead wiring between Parramatta Road and Allen Street.
- The naturalisation and greening of Powells Creek and the provision of new open space and canopy along the corridor will significantly increase the canopy coverage of the whole precinct.

04 BURWOOD PRECINCT

EXISTING CANOPY ASSESSMENT

ANALYSIS FINDINGS

Total existing canopy cover for the Burwood precinct is 13%, which is slightly lower than the overall canopy coverage of the greater suburb of Concord which is 18.23%

Burwood is dominated by Burwood and Parramatta Roads that currently have limited canopy opportunities. The commercial building arrangement along Parramatta Road also results in a higher proportion of unplantable areas. Only 5.1% of the existing canopy is located on public land creating an opportunity for a significant increase in canopy coverage.

EXISTING CANOPY ANALYSIS SUMMARY

Total area of Calculation	277,394 m^2
Area of canopy cover on private land	24, 902 m^2 **6.3%**
Area of canopy cover on public land	20, 214 m^2 **5.1%**
Total area of canopy cover	51,253 m^2
Existing canopy coverage	**13%**

EXISTING CANOPY ASSESSMENT - BURWOOD 1:5000 @ A3

LEGEND	
	PRECINCT BOUNDARY
	EXISTING TREES ON PRIVATE LAND
	EXISTING TREES ON PUBLIC LAND

DCP CONTROLS AND REQUIREMENTS

The PRCUTS DCP for the Burwood Precinct was analysed for any controls or requirements that would have an impact on canopy outcomes for the precinct, these have been tabled below. The impacts were then used to create the proposed urban canopy master plan to ensure that what is currently proposed in the DCP is tested and the urban canopy outcomes assessed.

CONTROL / REQUIREMENT	LOCATION/AREA AFFECTED	IMPACT ON CANOPY OUTCOMES	DOCUMENT REFERENCE
Size and location of footpaths, laneways, cycleways, planting and parks are to be provided according to Council's PRCUTS Public Domain Plan and PRCUTS Master Plan.	Precinct wide	Right size tree to be planted in the right locations to ensure the aspirations of the Public Domain Plan will be achieved.	DCP - K21.7 Access Network – C4
Pedestrian/ cycle links are to be naturally lit and ventilated, appropriately lit after hours, publicly accessible 24/7, and have clear sight lines from end to end.	Precinct wide	Tree planting arrangement to consider light pole locations to ensure adequate lighting levels are achieved	DCP - K21.7 Access Network – C6
New development that fronts onto streets identified as active frontages, including vibrant, friendly and mixed facades must: – Minimise the number and width of vehicular driveways across the footpath. – Provide vehicular access off a rear laneway; driveways off Burwood Road and Parramatta Road are strictly prohibited.	Parramatta road and streets identified as active frontages	Opportunity for consistent canopy along these streets uninterrupted by driveways. Tree planting arrangements and locations will need to consider driveways and other vehicle access points located in laneways and secondary streets.	DCP - K21.8 Public Domain Experience – C1
New development that fronts onto Parramatta Road supports the upgraded strategic walking link ('green edge') along Parramatta Road between Broughton and Loftus Streets. Development is to: – Apply coordinated urban and landscape design features that unify the linear green edge along Parramatta Road	Parramatta Road, between Broughton and Loftus Street	Opportunity for proposed linear public domain spaces to be enhanced with appropriately sized and spaced tree planting	DCP - K21.8 Public Domain Experience – C2
Where applicable, a portion of the setback area is to provide deep soil zones and tree planting.	Precinct wide	Opportunity for additional urban canopy in the deep soil zones in setback areas.	DCP - K21.9 Street Wall Heights and Setbacks – C2
'Undesirable' elements such as vents, electrical substations, or plant and equipment spaces are not permissible within the setback area and should be accommodated within the building.	Precinct wide	Tree planting arrangements and locations will need to consider driveways and other vehicle access points located in laneways and secondary streets.	DCP - K21.9 Street Wall Heights and Setbacks – C3
Setback area to be landscaped and at least 50% deep soil;	Precinct wide	Opportunity for additional urban canopy in the deep soil zones in setback areas	DCP - K21.11 Transition and Interfaces – C2
Along all streets where future public domain is required to be delivered (such as the 'linear green edge' interface to Parramatta Road) – Treatment of the set-back area is designed to be an extension of the public footpath area, is publicly accessible 24/7 and focuses on pedestrian amenity. – 50% of the setback is deep soil to allow for mature vegetation in order to create a linear park with trees	Precinct wide	Opportunity for additional urban canopy in the deep soil zones in setback areas.	DCP - K21.11 Transition and Interfaces – C3
Entries and private open spaces are encouraged within the 3m or 4.5m landscaped setbacks including a 1-1.5m wide strip of landscaping	Interactive frontages within residential zones	Opportunity for urban canopy in landscape setbacks greater than 1m wide and 0.8m in height (if raised).	DCP - K21.12 Interactive Frontage – C3
Existing street trees and landscape features are to be retained wherever possible. All significant trees that are identified as either high or medium significance in PRCUTS Public Domain Plan are to be retained.	Precinct wide	Existing tree canopy to be retained will significantly contribute to the required canopy coverage.	DCP - K21.18 Landscape Design – C1
For development along Parramatta Road, a minimum of 1 canopy tree per 10m of length of frontage is to be planted in the 'green edge' setback area, capable of reaching a mature height of at least 10m.	Parramatta Road	Proposed linear public domain spaces to be enhanced with appropriately sized and spaced tree planting.	DCP - K21.18 Landscape Design – C5
For development along all other streets (excluding active frontages) a minimum of 1 canopy tree per 12m of frontage is to be planted. New trees are to be capable of a mature height of at least 6m.	All Streets	Consistent Canopy coverage along streets enhancing landscape character	DCP - K21.18 Landscape Design – C6

CONTROL / REQUIREMENT	LOCATION/AREA AFFECTED	IMPACT ON CANOPY OUTCOMES	DOCUMENT REFERENCE
A minimum of 40% projected tree canopy coverage on publicly accessible streets and laneways, unless it can be clearly demonstrated that it is unreasonable to meet this requirement and a suitable urban design outcome can be achieved which would be applicable in this specific instance only.	All accessible streets and laneways precinct wide.	Opportunity for public domain areas to significantly contribute to 25% canopy coverage.	DCP - K21.18 Landscape Design – C9
A minimum of 75% projected tree canopy coverage shall be achieved for all parks.	Open space	Opportunity for parks and open space to significantly contribute to 25% canopy coverage by allowing for larger canopy trees to be planted.	DCP - K21.18 Landscape Design – C10
A minimum of 15% projected tree canopy coverage shall be achieved for all private land developments.	Mixed use zone	Opportunity for private development areas to contribute to 25% canopy coverage.	K21.18 Landscape Design – C15
Development consent must not be granted unless the development achieves at least 25% canopy cover across the site.	Residential zones	Opportunity for residential development areas to contribute to 25% canopy coverage.	K21.18 Landscape Design – C18
50% of the required landscaped area is to be deep soil planting (trees and shrubs) and a preference for native species.	Residential zones	Front setback areas with 1m landscape strip cannot be calculated as deep soil zones and may not be suitable for tree planting limiting canopy opportunities.	K21.18 Landscape Design – C21
Calculation of deep soil areas is not to include any land that has a length or width less than 1.5m	Residential zones	Front setback areas with 1m landscape strip cannot be calculated as deep soil zones and may not be suitable for tree planting limiting canopy opportunities.	K21.18 Landscape Design – C22
For residential development in the R3 Medium Density Zone, at least 50% of front setback area is required to be deep soil.	Medium Density residential	Opportunity for medium density development areas to contribute to 25% canopy coverage.	K21.18 Landscape Design – C24

PROPOSED CANOPY ASSESSMENT

PROPOSED CANOPY COVER

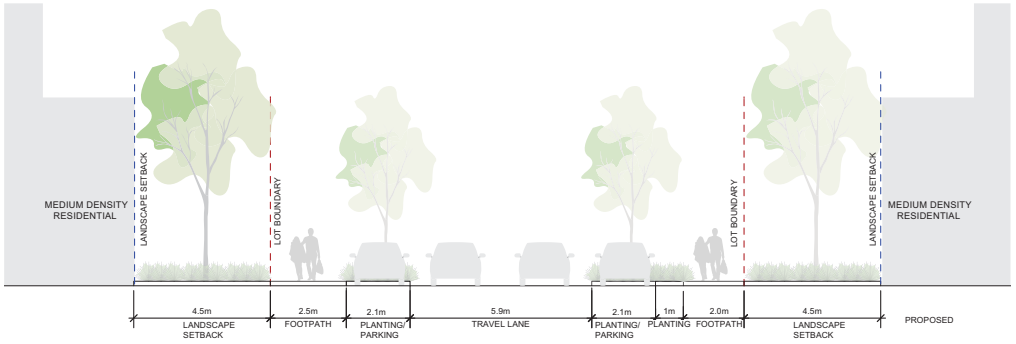
Total area of calculation	384, 100 m²
Loss of existing canopy	8,362 m² 2.2%
Total area of public canopy cover	39,416 m² 10.3%
Total area of private canopy cover	57,626 m² 15%
Total area of overall canopy cover	97,042 m²
Projected canopy coverage	**25.3 %**

PROPOSED CANOPY ASSESSMENT - BURWOOD 1:2500 @ A3

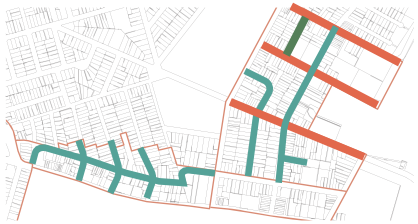
LEGEND	
	PRECINCT BOUNDARY
	EXISTING TREES ON PRIVATE LAND
	EXISTING TREES ON PUBLIC LAND
	EXISTING TREES REMOVED
	PROPOSED TREES ON PUBLIC LAND
	PROPOSED TREES ON PRIVATE LAND

TYPICAL STREET CROSS-SECTIONS

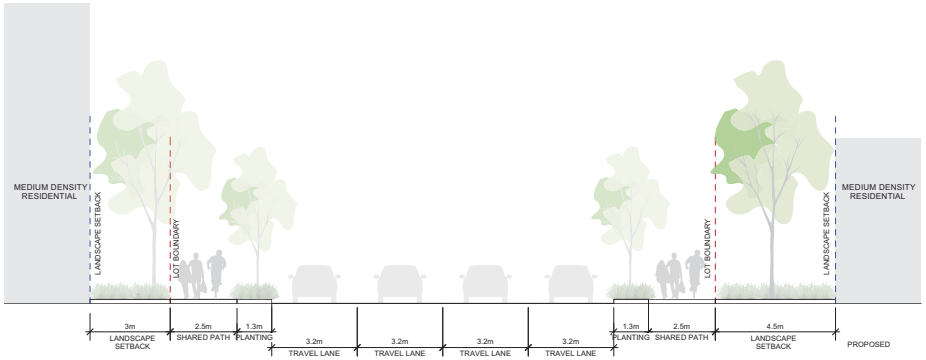
SECTION 01
David Street, Burwood Road, Lansdowne Street, Melbourne Street, Coles Street, Lloyd Street refer to DP for dimensions and further detail



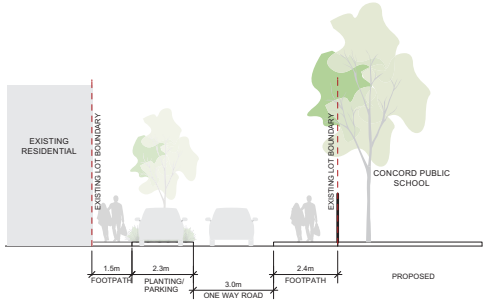
STREET REFERENCE DIAGRAM



SECTION 02
Gipps Street, Crane Street, Stanley Street refer to PDP for dimensions and further detail



SECTION 03
Salisbury Street refer to PDP for dimensions and further detail



CANOPY ASSESSMENT FINDINGS FOR BURWOOD

GENERAL

The design principles and features of the Public Domain Plan, Burwood Master plan and relevant conditions within the DCP will allow the Burwood Precinct to reach the canopy target of 25% .

EXISTING TREES

It is anticipated that there will be a loss of 2.2% of the existing canopy cover to make way for the construction of new roads, buildings, and infrastructure. The majority of the trees that are expected to require removal are located on existing private lots. It is anticipated, that no tree categorised as high to moderate significance will require removal for the proposed development (as per page 50-51 of the Public Domain Plan).

CANOPY PROJECTIONS

From the canopy assessment, it is anticipated that the projected canopy requirements for open space and pedestrian spaces can be achieved.

- A minimum of 75% projected tree canopy coverage shall be achieved for all parks (DCP - K21.18 Landscape Design – C10)
- A minimum 40% projected tree canopy coverage on publically accessible streets and laneways (DCP - K21.18 Landscape Design– C9).

It is anticipated that the projected canopy requirements for all development types can be achieved with the current master plan layout. This is if the deep soil requirements are able to be realised in the detail design. The projected canopy requirements summarised below:

- Mixed use zone – 15% (DCP - K22.15 landscape Design – C11)
- Residential zone – 25% (DCP - K22.15 landscape Design – C14)

05 KINGS BAY PRECINCT

EXISTING CANOPY ASSESSMENT

EXISTING CANOPY ANALYSIS

Total area of calculation	56, 713 m²
Area of canopy cover on private land	1,153.405 m² 2 %
Area of canopy cover on public land	656.453 m² 1.2 %
Total area of canopy cover	1,809.858 m²
Existing canopy coverage	**3.2 %**

ANALYSIS FINDINGS

Total existing canopy cover for the Kings Bay precinct is 3.2%, this is considerably lower than the overall canopy coverage of the greater Five Dock area which is 15.63%.

There is an equally low proportion of canopy cover on private land as there is on public, allowing for an importunity to significantly increase the canopy cover across the precinct.

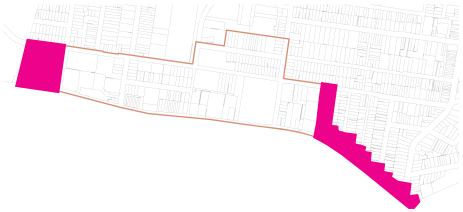
EXISTING CANOPY ASSESSMENT - KINGS BAY AREA 1
1:2500 @ A3

LEGEND

- PRECINCT BOUNDARY
- EXISTING TREES ON PRIVATE LAND
- EXISTING TREES ON PUBLIC LAND

EXISTING CANOPY ASSESSMENT - KINGS BAY AREA 2
1:2500 @ A3

KEY PLAN



DCP CONTROLS AND REQUIREMENTS

The PRCUTS DCP for the Kings Bay Precinct was analysed for any controls or requirements that would have an impact on canopy outcomes for the precinct, these have been tabled below. The impacts were then used to create the proposed urban canopy master plan to ensure that what is currently proposed in the DCP is tested and the urban canopy outcomes assessed.

CONTROL / REQUIREMENT	LOCATION/AREA AFFECTED	IMPACT ON CANOPY OUTCOMES	DOCUMENT REFERENCE
Size and location of footpaths, laneways, cycleways, planting and parks are to be provided according to Council's PRCUTS Public Domain Plan and PRCUTS Master Plan.	Precinct wide	Right size tree to be planted in the right locations to ensure the aspirations of the Public Domain Plan will be achieved.	DCP - K20.7 Access Network – C4
Pedestrian/ cycle links are to be naturally lit and ventilated, appropriately lit after hours, publicly accessible 24/7, and have clear sight lines from end to end.	Precinct wide	Tree planting arrangement to consider light pole locations to ensure adequate lighting levels are achieved	DCP - K20.7 Access Network – C6
New development that fronts onto streets identified as active frontages, including vibrant, friendly and mixed facades must: – Minimise the number and width of vehicular driveways across the footpath. – Provide vehicular access off a rear laneway; driveways off Burwood Road and Parramatta Road are strictly prohibited.	Parramatta road and streets identified as active frontages	Opportunity for consistent canopy along these streets uninterrupted by driveways. Tree planting arrangements and locations will need to consider driveways and other vehicle access points located in laneways and secondary streets.	DCP - K20.8 Public Domain Experience – C1
New development that fronts onto Parramatta Road is to: – Apply coordinated urban and landscape design features that unify the linear green edge	Parramatta Road	Opportunity for proposed linear public domain spaces to be enhanced with appropriately sized and spaced tree planting	DCP – K20.8 Public Domain Experience – C2
Vehicle access and servicing zones are not permitted along a Vibrant Facade.	Street frontages identified as vibrant facades	Opportunity for consistent canopy along these streets uninterrupted by driveways.	DCP – K20.9 – Vibrant Facades - C3
Where applicable, a portion of the setback area is to provide deep soil zones and tree planting.	Precinct wide	Opportunity for additional urban canopy in the deep soil zones in setback areas.	DCP – K20.10 Street Wall Heights and Setbacks – C2
'Undesirable' elements such as vents, electrical substations, or plant and equipment spaces are not permissible within the setback area and should be accommodated within the building.	Precinct wide	Tree planting arrangements and locations will need to consider driveways and other vehicle access points located in laneways and secondary streets.	DCP - K20.10 Street Wall Heights and Setbacks – C3
Along all streets where future public domain is required to be delivered (such as the 'linear green edge' interface to Parramatta Road) – Treatment of the set-back area is designed to be an extension of the public footpath area, is publicly accessible 24/7 and focuses on pedestrian amenity. – the setback area maximises deep soil to allow for mature vegetation with trees	Precinct wide	Opportunity for additional urban canopy in the deep soil zones in setback areas.	DCP – K20.11 Transition and Interfaces – C3
Entries and private open spaces are encouraged within the 3m or 4.5m landscaped setbacks including a 1.5m wide strip of landscaping	Interactive frontages within residential zones	Opportunity for urban canopy in landscape setbacks greater than 1m wide and 0.8m in height (if raised).	DCP K20.12 Interactive Frontages – C3
All landscaping within the front setback is to maintain clear views from the footpath to the development.	Interactive frontages within residential zones	Right size tree with appropriate habit and canopy transparency to ensure views are maintained.	DCP K20.12 Interactive Frontages – C5
Development is to minimise services (i.e. substations, fire services and water services) located within the front setback, along the site frontage or on building facades.	Interactive frontages within residential zones	Opportunity for consistent urban canopy in the deep soil zones in setback areas.	DCP K20.12 Interactive Frontages – C8
Existing street trees and landscape features are to be retained wherever possible. All significant trees that are identified as either high or medium significance in PRCUTS Public Domain Plan are to be retained..	All streets	Existing tree canopy to be retained will significantly contribute to the required canopy coverage.	K20.18 Landscape Design – C1

CONTROL / REQUIREMENT	LOCATION/AREA AFFECTED	IMPACT ON CANOPY OUTCOMES	DOCUMENT REFERENCE
For development along Parramatta Road, a minimum of 1 canopy tree per 10m of length of frontage is to be planted in the 'green edge' setback area, capable of reaching a height of at least 10m.	Parramatta road	Opportunity for consistent and continuous urban canopy to be achieved along sections of Parramatta Road.	K20.18 Landscape Design – C5
For development along all other streets (excluding active frontages) a minimum of 1 canopy tree per 12m of frontage is to be planted, new trees are to be capable of a mature height of at least 6m.	All other streets (excluding active frontages)	Opportunity for some urban canopy coverage to be achieved in other streets.	K20.18 Landscape Design – C6
A minimum of 40% projected tree canopy coverage on publicly accessible streets and laneways, unless it can be clearly demonstrated that it is unreasonable to meet this requirement and a suitable urban design out-come can be achieved which would be applicable in this specific instance only.	All accessible streets and laneways precinct wide.	Opportunity for public domain areas to significantly contribute to 25% canopy coverage.	K20.18 Landscape Design – C9
A minimum of 75% projected tree canopy coverage shall be achieved for all parks.	All parks and open space precinct wide	Opportunity for parks and open space to significantly contribute to 25% canopy coverage.	K20.18 Landscape Design – C10
A minimum of 15% projected tree canopy coverage shall be achieved for all private land developments. Tree coverage may include trees planted at ground level as well as any trees planted in the upper levels of buildings such as podiums and roofs. It may also include canopy overhanging from an adjoining public domain area.	Mixed use zone	Opportunity for private development areas to contribute to 25% canopy coverage.	K20.18 Landscape De-sign – C15
Development consent must not be granted unless the development achieves at least 25% canopy cover across the site.	Residential zones	Opportunity for residential development areas to contribute to 25% canopy coverage.	K20.18 Landscape Design – C18
50% of the required landscaped area is to be deep soil planting (trees and shrubs) and a preference for native species.	Residential zones	Opportunity for residential development areas to contribute to 25% canopy coverage.	K20.18 Landscape Design – C21
Calculation of deep soil areas is not to include any land that has a length or width less than 1.5m	Residential zones	Front setback areas with 1m landscape strip cannot be calculated as deep soil zones and may not be suitable for tree planting limiting canopy opportunities.	K20.18 Landscape De-sign – C22
For residential development in the R3 Medium Density Zone, at least 50% of front setback area is required to be deep soil.	Medium Density residential	Opportunity for medium density development areas to contribute to 25% canopy coverage.	K20.18 Landscape Design – C24

PROPOSED CANOPY ASSESSMENT

PROPOSED CANOPY COVER

Total area of calculation	56, 713 m2
Loss of existing canopy	526 m2 29%
Total area of public canopy cover	9,546.824 m2 16.8%
Total area of private canopy cover	6,808.907 m2 12%
Total area of overall canopy cover	16,355.731 m2 28.8%
Projected canopy coverage	**28.8 %**

EXISTING CANOPY ASSESSMENT - KINGS BAY 1:2500 @ A3

LEGEND

- PRECINCT BOUNDARY
- EXISTING TREES ON PRIVATE LAND
- EXISTING TREES ON PUBLIC LAND
- EXISTING TREES REMOVED
- PROPOSED TREES ON PUBLIC LAND
- PROPOSED TREES ON PRIVATE LAND

TYPICAL STREET CROSS-SECTIONS

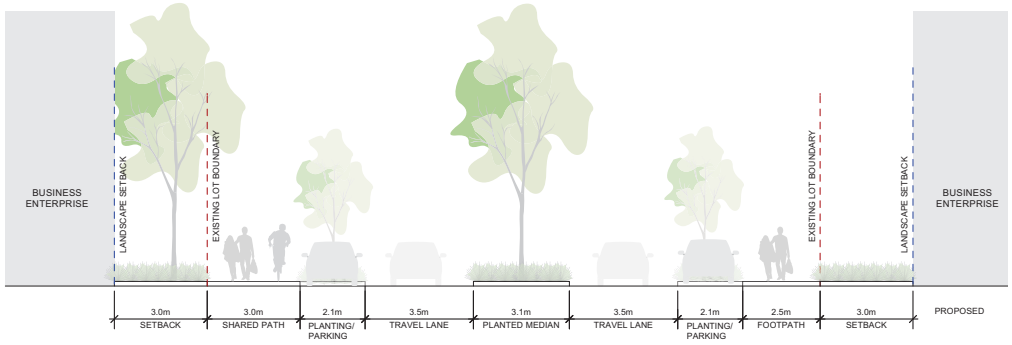
SECTION 01

Taylor Street refer to PDP for dimensions and further detail

STREET REFERENCE DIAGRAM

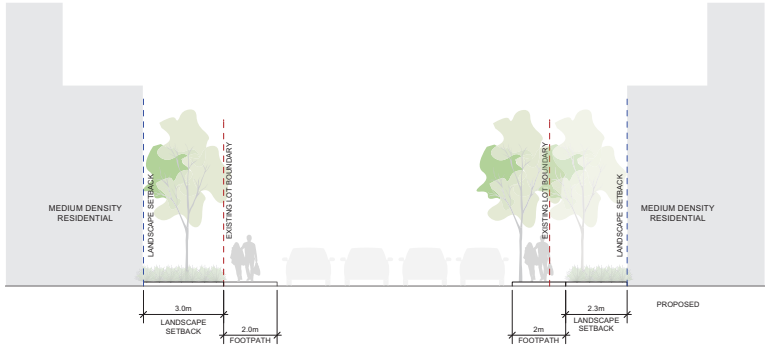
SECTION 02

Arlington Street refer to PDP for dimensions and further detail



SECTION 03

Lavender Street refer to PDP for dimensions and further detail



CANOPY ASSESSMENT FINDINGS FOR KINGS BAY

GENERAL

The design principles and features of the Public Domain Plan, Kings Bay Master plan and relevant conditions within the DCP will allow for a minimum 28.8% total canopy cover to be achieved in the Kings Bay Precinct.

EXISTING TREES

As with most development areas, a loss of existing canopy cover is expected to make way for the construction of new roads, buildings, and infrastructure. From the canopy assessment undertaken it is expected that 15% of the existing canopy cover will be lost, with no loss of significant species (as per page 81 of the Public Domain Plan).

CANOPY PROJECTIONS

From the canopy assessment is anticipated that the projected canopy requirements for open space and pedestrian spaces can be achieved.

- A minimum of 75% projected tree canopy coverage shall be achieved for all parks (DCP - K20.18 Landscape Design – C10)
- A minimum 40% projected tree canopy coverage on publically accessible streets and laneways (DCP - K20.18 Landscape Design– C9).

It is anticipated that the projected canopy requirements for each development type can be achieved with the current master plan layout. This is if the deep soil requirements are able to be realised in the detail design. The projected canopy requirements summarised below:

- Mixed use zone – 15% (K20.18 Landscape Design – C11)
- Residential zone – 25% (K20.18 Landscape Design – C12).

06 RECOMMENDATIONS

RECOMMENDATIONS

The arrangement of the public domain as depicted in the following documents have been tested and analysed as part of the urban canopy assessment:

- Public Domain Plan,
- Urban design as shown in each master plan; and
- Related development controls in the DCPs.

The proposed urban canopy master plan for each precinct and the resulting urban canopy coverage has shown that a minimum 25% canopy can be achieved in both the Burwood and Kings Bay precincts however is unachievable in the Bakehouse Quarter due to heritage and infrastructure constraints. As such, the following recommendations have been prepared to assist with ensuring that optimal canopy outcomes can be achieved in The Bakehouse Quarter, Burwood and Kings Bay Precinct so that the objectives and aspirations of both Canada Bay City Council and State Government can be achieved for the benefit of the community.

RECOMMENDATION	DOCUMENT AFFECTED
EXISTING TREES	
It is recommended that the condition around the retention of existing trees is retained in all DCPs. It is also recommended that the condition also refers to Australian Standards - AS 4970-2009 Protection of Trees on Development Sites and includes wording that ensures that any existing tree of very high to moderate significance is assessed by a suitably qualified Arborist. This is to ensure that existing trees within private lots will be appropriately considered in the design and ongoing management of any development.	PRCUTS DCP K22.15 Landscape Design – C1 K21.18 Landscape Design – C1 K20.18 Landscape Design – C1
CANOPY PROJECTIONS	
From the urban canopy assessments undertaken, it is anticipated that the projected canopy requirements for each private development type can be largely achieved, if the deep soil requirements are realised in the detail design. To ensure that the minimum canopy coverage and optimal growth outcomes are achieved, it is recommended that the DCP includes a condition that will ensure a landscape architect be involved at the commencement of any development master plan to ensure the architectural planning, building footprint and basement engineering result in adequate deep soil zones and podium planter boxes. The deep soil zones should be located in areas where canopy and landscape outcomes will best serve the future users and general architectural amenity. Species selection should consider site suitability, shade requirements of any communal open space and solar access into internal building spaces.	PRCUTS DCP K22.15 Landscape Design K21.18 Landscape Design K20.18 Landscape Design
From the urban canopy assessment, it is anticipated that the projected canopy requirements for open space and pedestrian spaces are achievable targets. To ensure the projected urban canopy coverage will be achieved, it is recommended that the DCP includes wording about the prioritisation of tree planting in the planning and design of all public domain areas. Where possible, it is also recommended that utilities be bundled and located away from tree planting areas.	PRCUTS DCP K22.15 Landscape Design K21.18 Landscape Design K20.18 Landscape Design

RECOMMENDATION	DOCUMENT AFFECTED
SHADE & OVERSHADOWING	
The shadow diagrams in the master plan reports suggest that a significant proportion of the public domain will be shade for certain periods of the day. Depending on the duration and density of the overshadowing, this will impact the growth and species suitability. It is recommended that the stage 2 PRCUTS DCP includes wording that will encourage all tree species selection be suitable for the micro climatic conditions while also providing a high level of urban amenity.	PRCUTS DCP K22.15 Landscape Design K21.18 Landscape Design K20.18 Landscape Design
PRIVATE DEVELOPMENT	
To limit conflict between urban canopy and building awnings, it is recommended that a condition be included in each PRCUTS DCP that includes maximum awning width. The width should allow for pedestrian comfort while also giving ample space for the street trees to grow and thrive.	PRCUTS DCP
Private space is critical to achieving tree canopy targets and newly developed green roofs could compensate for low canopy cover in mixed use areas.	PRCUTS DCP
DETAILED MASTER PLAN	
It is recommended that a detailed master plan be undertaken for George Street in order to retain the public amenity and activation of the commercial precinct of the Bakehouse Quarter and provide suitable provision of canopy coverage, landscape areas and open space that respect the heritage facades and assist with mitigating furtuer development impacts.	PRCUTS DCP
OPEN SPACE	
Improving canopy in existing open space, including Powells Creek Reserve Homebush, Queen Elizabeth Park Burwood and St Lukes Park Burwood will contribute towards greater canopy cover.	PRCUTS DCP

07 SPECIES SELECTION

SPECIES SELECTION

SELECTION CRITERIA

To achieve the City of Canada Bay's Urban Tree Canopy Strategy vision of '*growing and protecting a resilient and diverse urban forest that characterises the LGA as a cool, tranquil, and connected place to live, work and visit'*, the underpinning principle of *right tree in the right place* needs to be enforced. Therefore, it is critical that the selection of tree species is appropriate to the localised conditions and constraints of the planting area. It is important that any species selected contributes positively to the amenity, environmental and landscape character values of the area.

Selection criteria for tree species, regardless of whether it's for public or private domain planting should consider the following values and requirements.

AMENITY AND AESTHETIC VALUE

- Mature canopy size
- Height
- Habit
- Shade cast density
- Solar access requirements (evergreen/deciduous)
- Features – such as flowers or fruits

LANDSCAPE PERFORMANCE

- Biodiversity and Habitat value
- Carbon storage capacity
- Air quality improvement capacity
- Transpiration rates
- Longevity

MICROCLIMATE & SITE CONDITIONS

- Soil type and volume
- Orientation and aspect
- Shade tolerance
- Topography
- Frost and heat tolerance
- Climate adaptability
- Water availability
- Inundation tolerance
- Pest and disease

A suggested tree species list has been prepared to assist in guiding the future species selections for each of the PRCUTS stage 2 precincts. The species listed includes trees that have proven performance in the local area and are commercially readily available from quality Sydney based nurseries.

LANDSCAPE DESIGN PRINCIPLES

Species selection should also consider landscape design principles that reinforce the objectives of the Public Domain Plan and to ensure the creation of beautiful and comfortable places for people to live and work in.

The following design objectives should be considered when trees are selected for each precinct's public domain or private development:

- Enhancing of local character and existing landscape features;
- Respecting and responding to the human scale;
- Reinforcing gateways, nodes and entry points;
- Legibility of streetscape and pedestrian hierarchy;
- Enhancing key public domain areas including parks and plazas;
- Solar access, shading and cooling.

MELALEUCA QUINQUENERVIA

CALLISTEMON VIMINALIS

BANKSIA INTEGRIFOLIA

EUCALYPTUS MICROCORYS

ALLOCASUARINA LITTORALIS

FICUS MACROPHYLLA

PROPOSED SPECIES LIST

SUGGESTED SPECIES			USES			CONSIDERATIONS			
Botanic Name	**Common Name**	**Mature Size Height x Width**	**Street/Plaza**	**Open space/ Parkland**	**Private Domain**	**Deciduous**	**Indigenous**	**Native**	**Exotic**
Large > 15m									
Agathis robusta	Queensland Kauri	20-25 x 5m	●	●		Evergreen		●	
Angophra costata	Smooth-barked Apple	12-20 x 8-10m	●		●	Evergreen	●		
Angophra floribunda	Rough-barked Apple	12-20 x 20m		●	●	Evergreen	●		
Corymbia maculata	Spotted Gum	20-30 x 10-25m	●	●	●	Evergreen	●		
Eucalyptus botryoides	Bangalay	20-25 x 15m				Evergreen		●	
Eucalyptus paniculata	Grey Ironbark	20-25 x 15m	●	●	●	Evergreen	●		
Eucalyptus piperita	Sydney Peppermint	15-18 x 10m	●	●		Evergreen		●	
Eucalyptus punctata	Grey Gum	18-25 x 8m	●	●		Evergreen	●		
Eucalyptus resinifera	Red Mahogany	18-20 x 10m		●	●	Evergreen	●		
Ficus microcarpa var. hillii	Hills Weeping Fig	20-25 x 20m	●	●		Evergreen		●	
Ficus rubiginosa	Port Jackson Fig	15-20 x 20m		●	●	Evergreen	●		
Flindersia australis	Crows Ash	15-20 x 7m	●	●		Evergreen		●	
Jacaranda mimosifolia	Jacaranda	15-20 x 12m		●		Deciduous			●
Lophostemon confertus	Brush box	20 x 6-12m	●			Evergreen		●	
Syncarpia glomulifera	Turpentine	20-25 x 10m		●	●	Evergreen	●		
Ulmus parvifolia 'Todd'	Chinese Elm	10 x 15m	●			Deciduous			●
Medium > 8m									
Angophra bakeri	Narrow Leaf Apple	10 x 10m	●	●	●	Evergreen	●		
Allocasuarina littoralis	Black She-oak	8 x 4-7m		●		Evergreen	●		
Banksia integrifolia	Coast Banksia	7-10 x 1-6m	●	●		Evergreen	●		
Brachychiton acerifolia	Illawarra Flame Tree	12 x 6m		●	●	Deciduous		●	
Brachychiton discolor	Queensland Laceback	12 x 7m			●	Deciduous		●	
Cupaniopsis anacardiodes	Tuckeroo	8-10 x 7m	●	●	●	Evergreen		●	
Celtis australia	Southern Hackberry	12 x 8m	●	●	●	Evergreen		●	
Corymbia eximia	Yellow Bloodwood	10-18 x 12m		●	●	Evergreen	●		
Glochidion ferdinandi	Cheese Tree	8-12 x 5-10m	●		●	Evergreen	●		
Fraxinus pennsylvanica 'Urbanite'	Red Ash	12-18 x 8m	●	●	●	Deciduous	●		
Magnolia grandiflora 'Exmouth'	Bull Bay Magnolia	12 x 8m	●	●	●	Evergreen			●
Sapium sebiferum	Chinese Tallow Tree	8 x 8m	●	●	●	Deciduous	●		
Waterhousea floribunda 'Green Avenue'	Weeping Lilly Pilly	12 x 8m	●	●	●	Evergreen		●	
Zelkova serrata 'Green Vase'	Japanese Zelkova	10-12 x 6m	●			Deciduous			●

SUGGESTED SPECIES			USES			CONSIDERATIONS			
Botanic Name	Common Name	Mature Size Height x Width	Street/Plaza	Open space/ Parkland	Private Domain	Deciduous	Indigenous	Native	Exotic
Small <8m									
Angophra hispida	Dwarf Apple	5-7 x 3-5m	●			Evergreen	●		
Backhousia citriodora	Lemon-scented Myrtle	7-10 x 3-5m	●			Evergreen	●		
Callistemon viminalis cv	Bottlebrush	7-10 x 2-4m	●	●		Evergreen	●		
Callistemon salignus	Willow Bottlebrush	7-10 x 5m	●			Evergreen	●		
Elaeocarpus reticulatus	Blue Berry Ash	8-12 x 3-5m	●		●	Evergreen	●		
Elaocarpus eumundi	Eumundi Quondong	10-18 x 3 -6m	●			Evergreen	●		
Lagerstroemia indica	Crepe Myrtle	8 x 4m	●	●		Deciduous			●
Tristaniopsis laurina	Water Gum	7-10 x 3-6m	●	●	●	Evergreen	●		

08 CONCLUSION

CONCLUSION AND ASSESSMENT SUMMARY

The current planning proposal including the Urban Design Master Plan and Public Domain Plan for PRCUTS stage 2 precincts allows for a minimum of 25% canopy cover, with the exception of Homebush Bakehouse Quarter. The projected canopy for this precinct is 20% caused by existing conditions including heritage buildings, motorway infrastructure and existing public domain uses.

Based on the increased canopy coverage in both stage 1 and 2, it is it is anticipated that the PRCUTS precinct, as a whole, will successfully meet the canopy targets of Canada Bay's Urban Tree Canopy Strategy. The area will realise an increase of canopy coverage of 10.5%, exceeding the Strategy's target of 6%. All stage 2 precincts significantly increase the existing canopy cover contributing to the enhancement of the environmental sustainability and livability of the LGA.

To achieve these goals, it is recommended that the City of Canada Bay retains and strengthens all conditions within the PRCUTS Stage 2 DCP, allowing for the planting of canopy trees in both public and private domains. Additionally, future species selection should consider factors such as amenity and aesthetic values, landscape performance criteria, specific site conditions, and general landscape design principles. By incorporating these recommendations, optimal canopy outcomes can be achieved, further enhancing the overall canopy cover in Canada Bay.

City of Canada Bay

CONTEXT
LANDSCAPE ARCHITECTURE