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87 Bay Street Glebe Planning Submission

Proposed Planning Documentation

July 2011

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fosterandassociates

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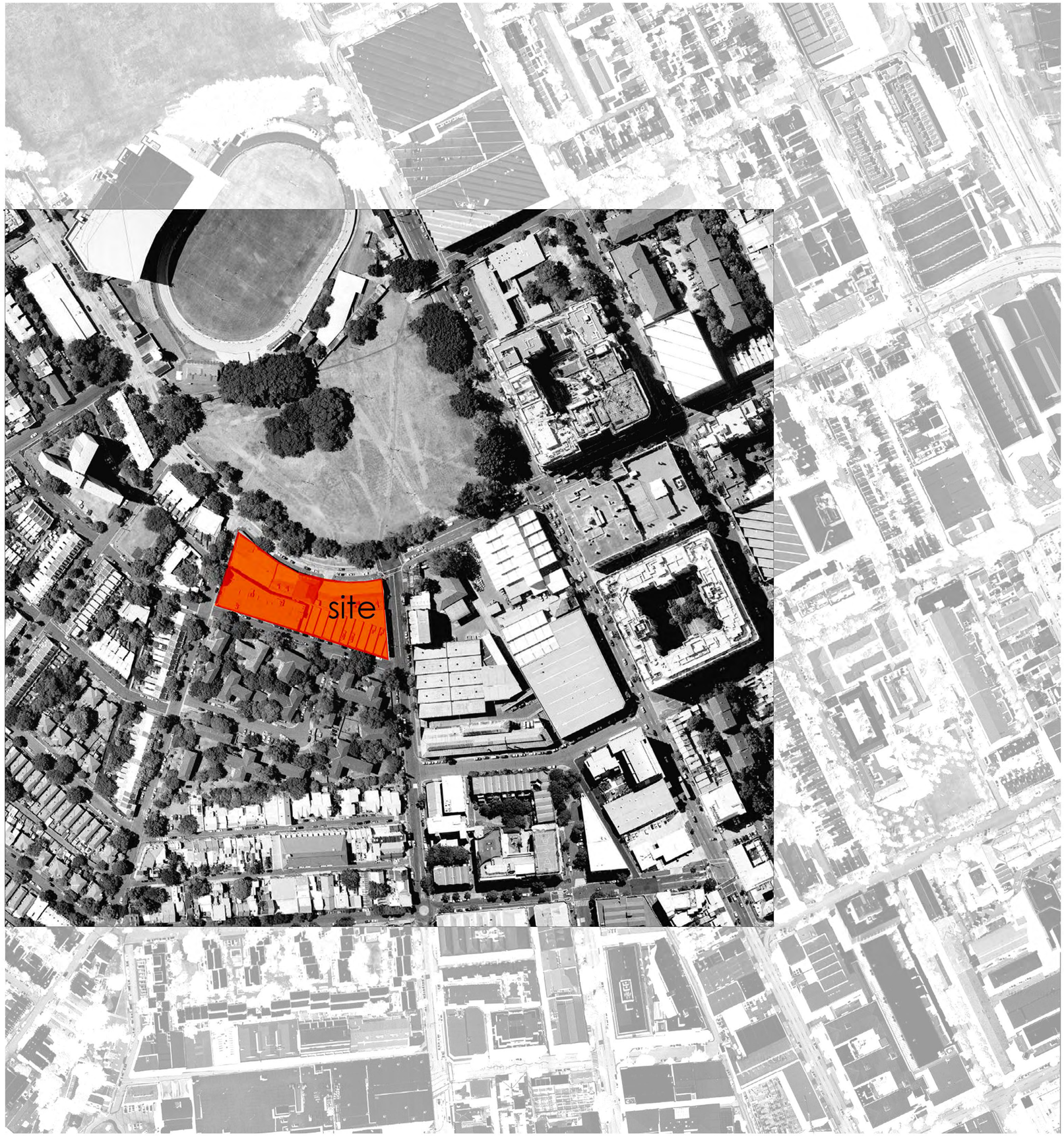
Urban Design Framework

Location plan

87 Bay Street comprises a significant sovereign block approximately 1.8 kilometers from the Sydney CBD. The site is located on the southern edge of the large urban open space forming Wentworth Park. Bay Street located on the Eastern boundary of the site defines the limits of the Glebe and Ultimo suburbs.

The City of Sydney Depot facilities are located across the street - also occupying an entire large block. Across Wentworth Street to the south is a large single ownership site which currently has low rise housing apartment blocks owned by the Department of Housing. This site is currently being rezoned to allow more intensive urban development.

Both the CoS depot site and the DoH Housing site were part of a joint demonstration project under the Sustainable Sydney 2030 Strategy. The planning outcomes of this process and the implications for the future urban character of the precinct and in particular the subject site are presented in more detail through the following report.



Urban Design Framework

Urban context

The site is located on the suburb boundary between Glebe to the west and Ultimo to the east.

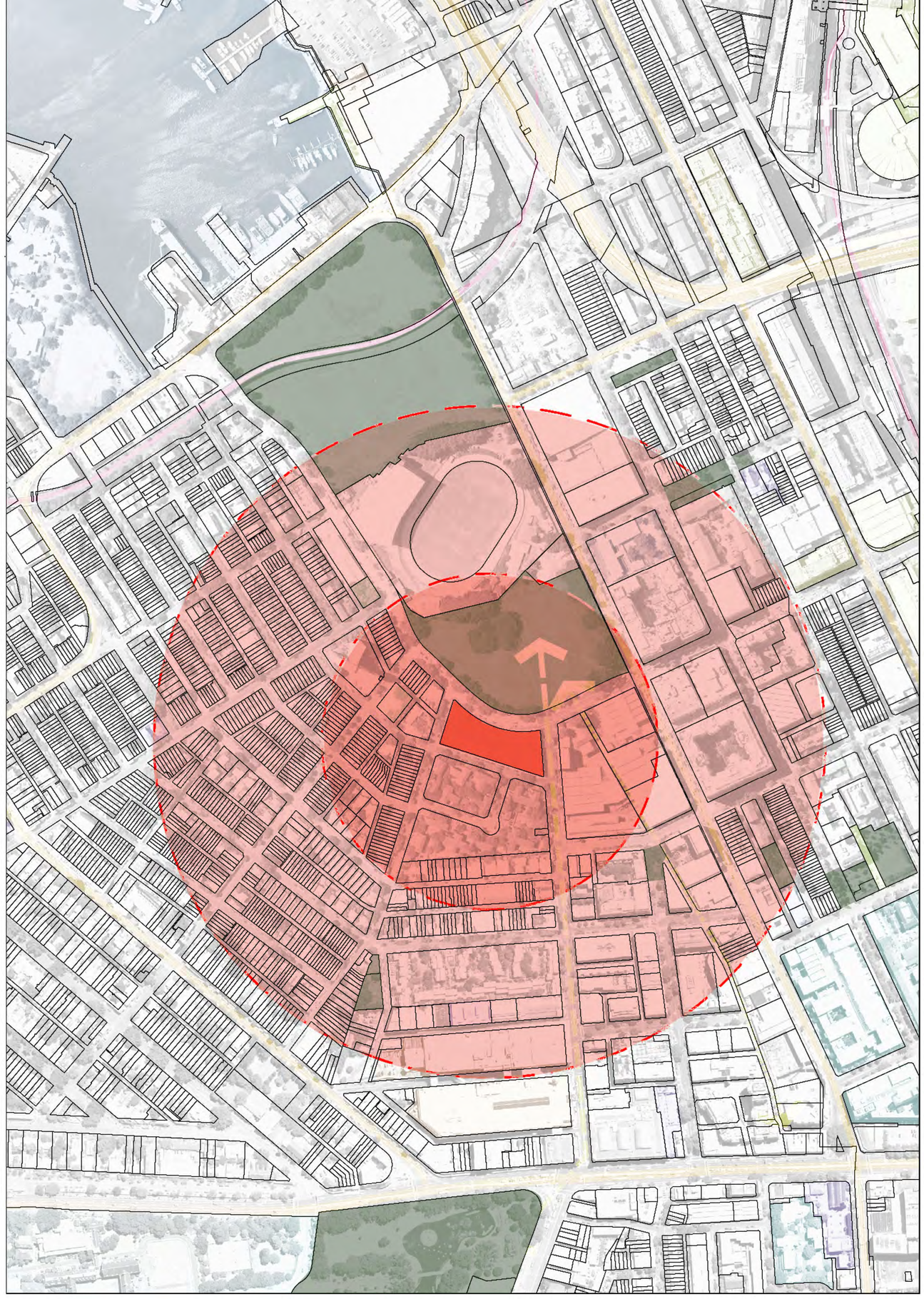
Ultimo to the east can be generally characterised by:
- Rectilinear street grid.
- Long street blocks
- Combination and often in close proximity of large warehouse structures and small fine grain terrace houses.

Glebe to the west can be generalised by:
- Tapered rectilinear street pattern following the typography
- Short blocks and rear access lanes.
- Mostly fine grain residential lots.
- Low scale 1 and 2 storey housing.

Public Transport
The light rail station is located approximately 560m north of the site off Wattle Street. The light rail connects from Lilyfield to the city via Pyrmont.

The bus routes are located at either Harris Street Ultimo, Broadway and Glebe Point Road, Glebe with numerous options available.

The Village to Village CoS community bus service also stops adjacent to the site.



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Urban Design Framework

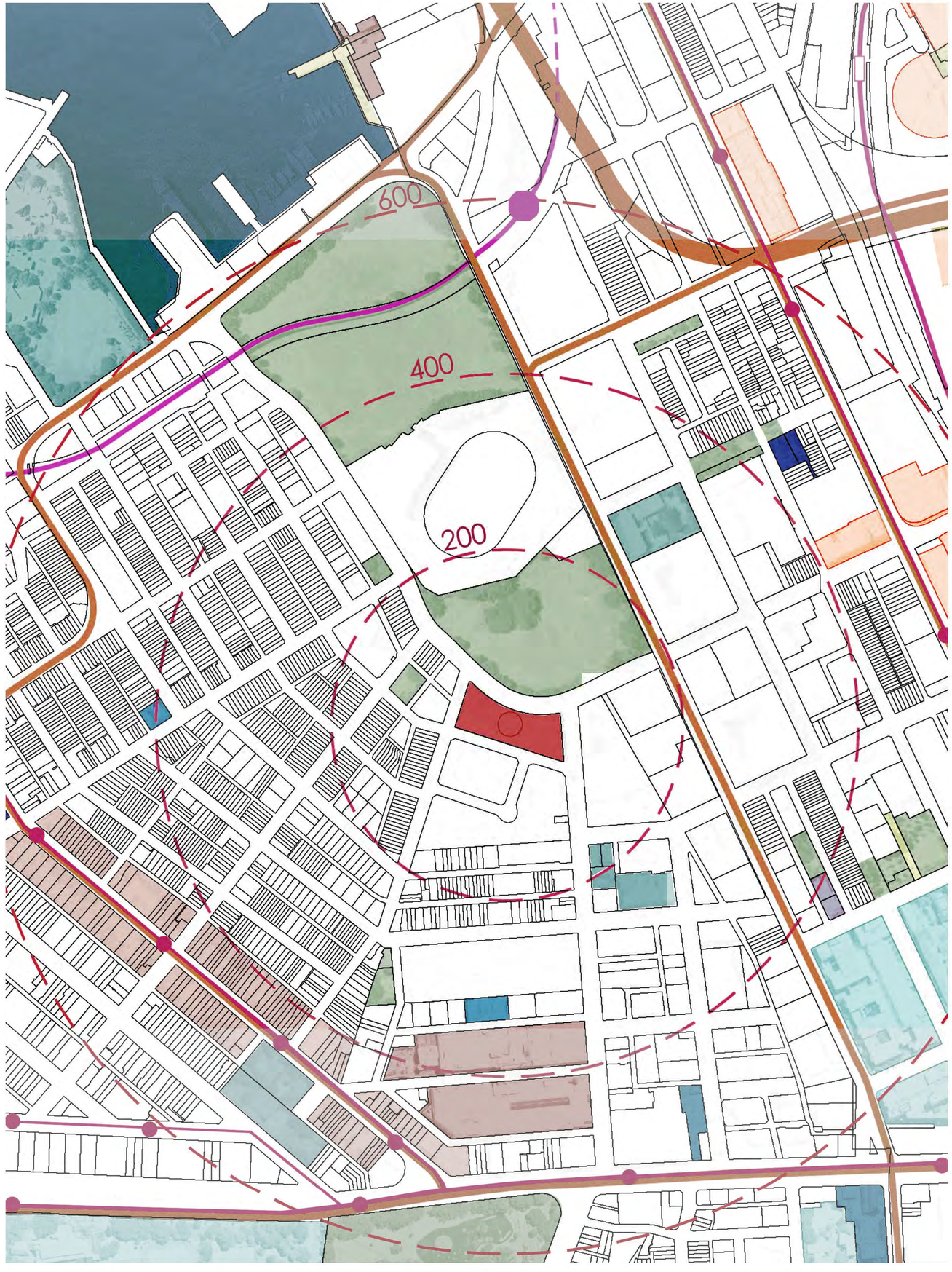
Urban analysis

The site occupies a single soverign block bounded by Wentworth Park Road to the north, Bay Street to the east, Wentworth Street to the South and Cowper Street to th west. North of the site across Wentworth Park Road is Wentworth Park a large urban open space. Other small parks are within walking distance to the site in the Glebe and Ultimo area. Victoria Park another larg regional park is located at the other end of Bay Street across Parramatta Road

The site is in a very good location within a short walking distance of good public trans port and within walking distance of the City CBD. Central Station and numerous bus routes are available on Broadway and Parramatta Road and are within walking distance. The light rail runs across the northern section of Wentworth Park and the nearest station is located off Wattle Street approximately 550 metres north of the site.

The site is well serviced by city CBD and city fringe facilities such as Broadway and Haymarket Shopping Centres and the local strip shops of Glebe Point Road and Broadway. The fish markets are also easily accessible and located at the northern end of Wentworth Park. A new retail precinct is also proposed within the Central Park (old CUB site) which is currently under development.

The site is also very well located in relation t schools and universities. The large tertiary institutions such as UTS, Ultimo TAFE, Sydney and Notre Dame Universities are in close proximity around the Parramatta Road and Broadway precincts. Schools such as International Grama, Glebe public, Ultimo Publi and the Blackwattle Campus of the Sydney Secondary College are within a few minute walk of the site.



Urban Design Framework

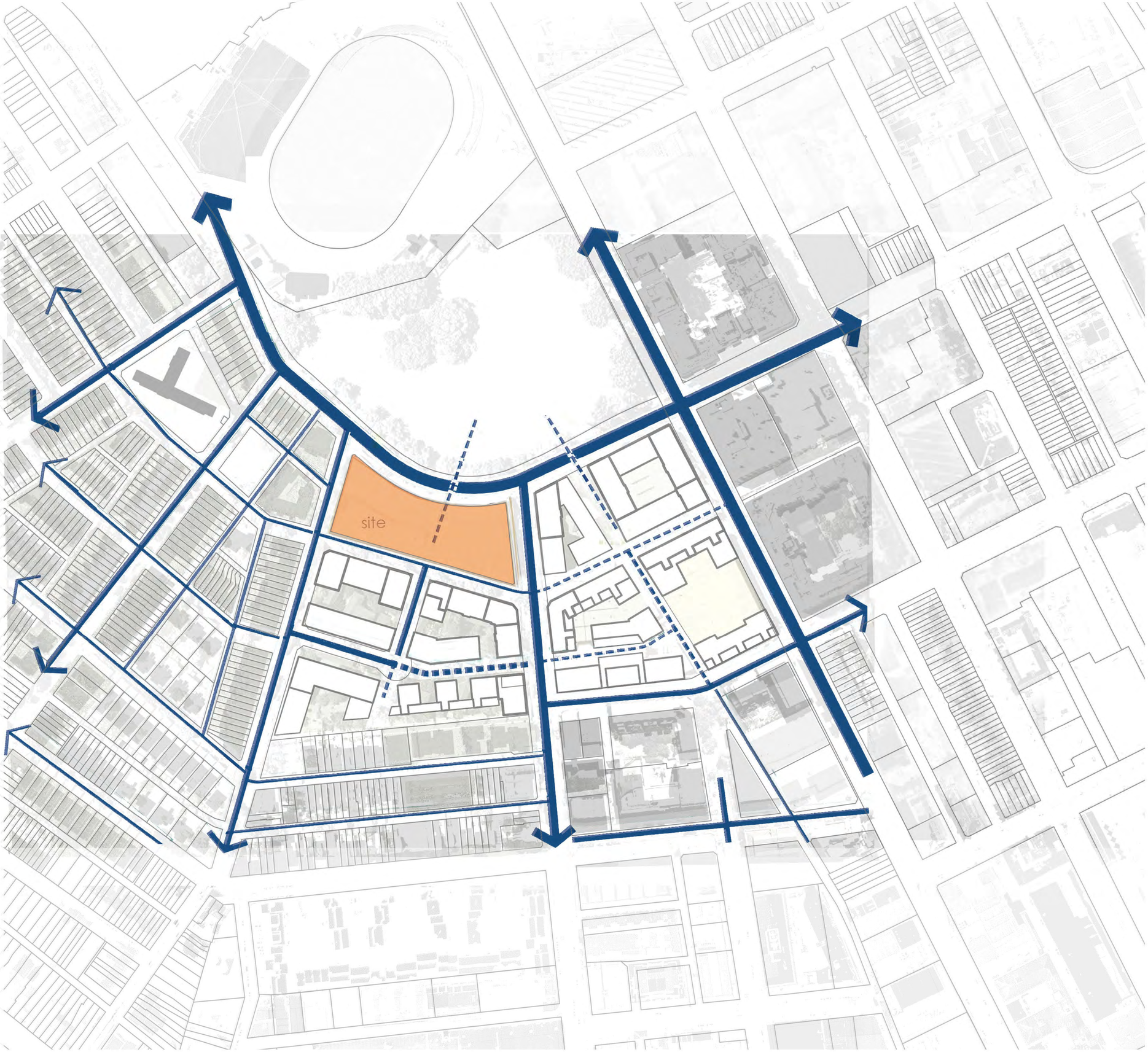
Street Hierarchy

Street Hierarchy

Vehicle Access
The site fronts 4 streets, to the north is Wentworth Park Road which continues west from the site around the western edge of park and connects to Pyrmont Bridge Road, east from the site it changes name to William Henry Street which transverses Ultimo enroute to the connect with Goulbourn Street and the southern end of the CBD.

Bay Street to the east of the site is a north-south Street connecting Broadway and terminating at the north-east corner of the site at Wentworth Park Road. Cowper Street is a low volume local street and Wentworth Street is a narrow east-west street which becomes one way for a short section between Stirling and Bay Street.

Vehicular access to and from the site will be assessed in relation to the following:
- Local flood study to determine the possible locations to access and egress the site
- Traffic study to determine the capacity and suitability of the surrounding street network and appropriate exit and entry points.
- Existing traffic conditions such as the traffic lights



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Urban Design Framework

Early development

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Urban Design Framework

Recent development

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Urban Design Framework

Anticipated dev.

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Urban Design Framework

Future Local Context

The key objectives identified by the planning process of the Sustainable Sydney 2030 demonstration project include:
Place base urban consolidation to deliver housing within walking distance of the city.
Expanded public domain of new streets and connections.
New street edge buildings with multiple entries and a mix of uses to provide a positive frontage and over-sight of the public realm.

Also identified as preferred Urban Framework by the CoS and DoH planning process conducted by Hill Thalis was:
Bay St is the major street and is the 'Green' link be-tween the two major open spaces of Wentworth Park and Victoria Park.
There exists an opportunity to expand the public domain and improve connectivity particularly within the large single ownership sites.
New local streets are proposed within the DoH and CoS Depot sites to improve the permeability of the site.
Proposed within the depot is a pedestrian connection from the proposed internal local streets to the open space of Wentworth Park this was identified as the 'Blue' link within the 2030 Strategy prepared by Hill Thalis.
A connection of this nature is also possible through the subject site to connect the realigned Stirling Street with the Wentworth Park open space.
This connection will be an extension of the proposed breakup of the large single ownership sites which cur-rently cut the valley areas of Glebe and Ultimo off from the open space of Wentworth Park.

Urban Design Framework
Environment

Solar

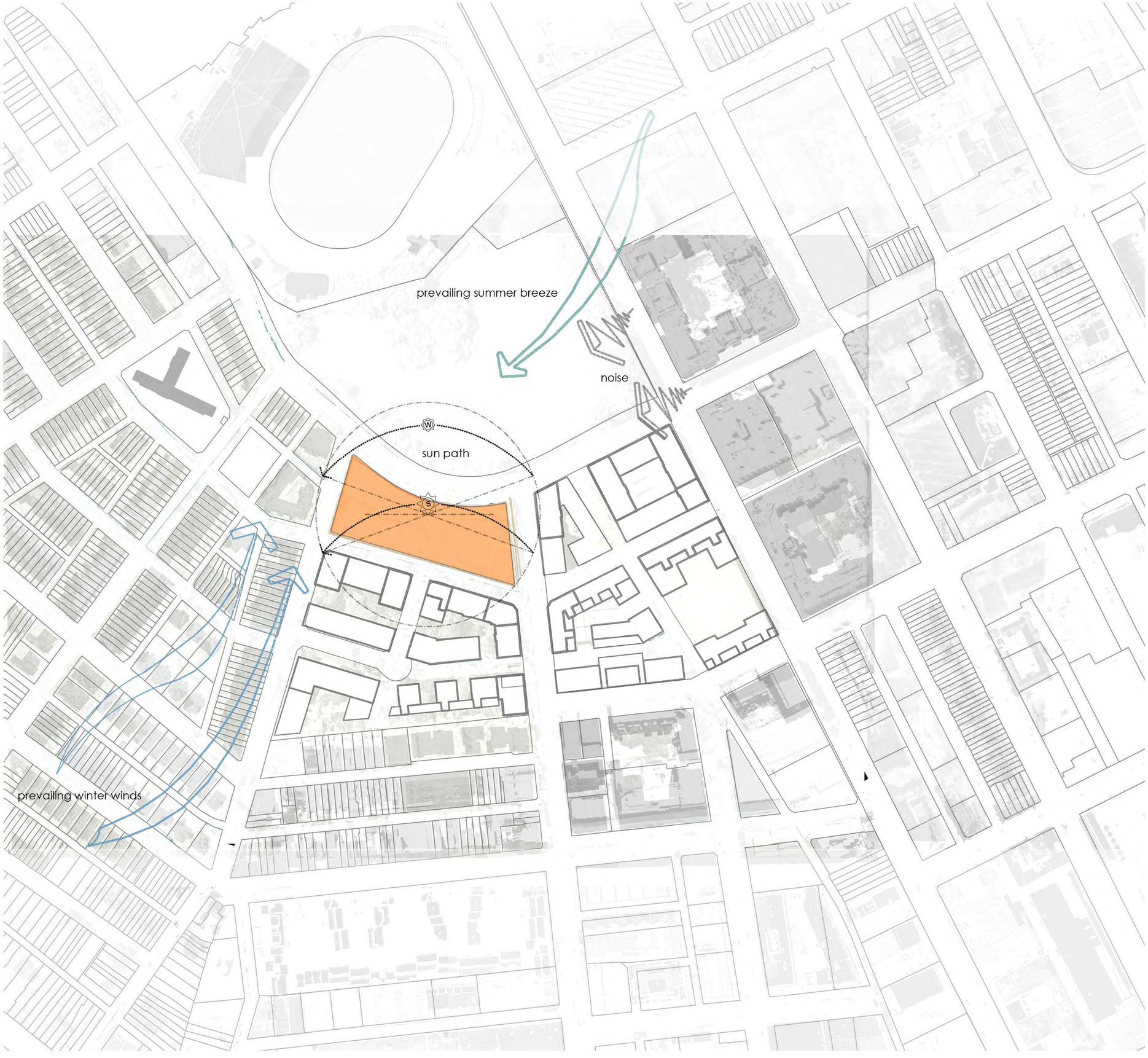
The site has its long axis orientated north to north-east and Wentworth Park is located directly north of the site across Wentworth Park Road. The property therefore is well situated to maximize the solar access into the site while maintain sunlight to the new development proposed to the south of the site

Wind

The site is located within a valley and therefore will be quite protected from the winter southerly winds while opportunities exist to maximize the northerly and north-easterly summer breezes coming off the harbor.

Noise

The most significant noise source will come from vehicles and the busy streets such as Wattle Street and even the intersection of Wentworth Park Road and Bay Street. No notable bus routes pass the site while Wattle Street does support many heavy vehicles these are over 130m from the site.



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Urban Design Framework

Land use

The site is currently zoned Industrial and is a combination of commercial office, showroom/retail and tertiary education uses. The immediately surrounding sites are the CoS depot, parkland and various forms and types of residential accommodation.

Ultimo to the east is characterised by a combination and of large warehouse buildings converted to apartments, storage facilites or offices and small fine grain terrace houses. Some more recent residential developments and apartment buildings have replaced some of the original structures. Glebe to the west is dominated by small lots and low scale housing. The exceptions to this are some industrial uses around the edge of the park such a meat processing facility and the large housing block of John Byrne Court.

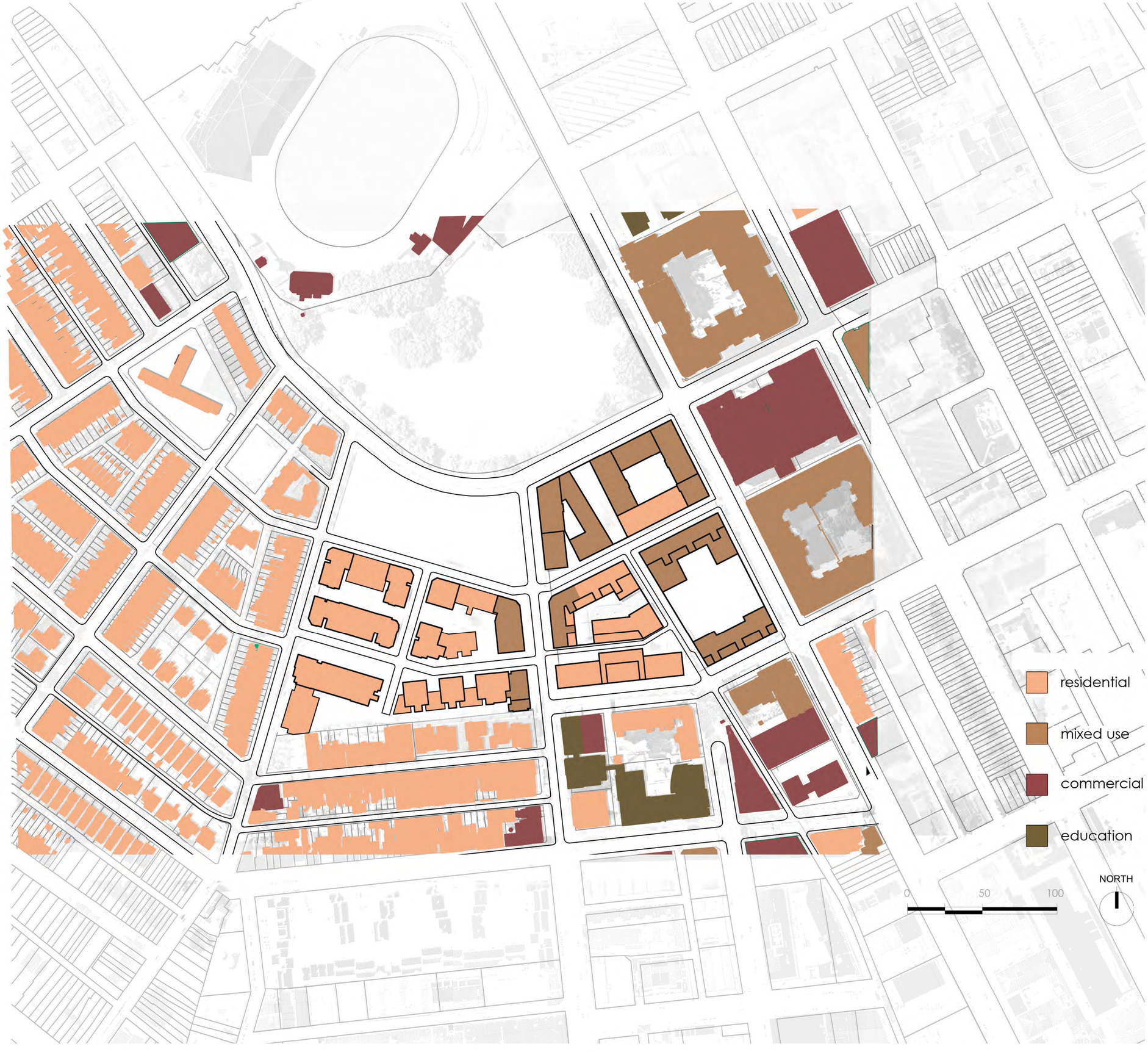
In the wider urban context a number of schools such as International Grama, Ultimo Public and the Blackwattle Campus of the Sydney Secondary College are within 5 minute walk of the site. The large tertiary institutions such as UTS, Sydney University, Notre Dame University and the Ultimo TAFE Campus are located in close proximity to the site.

The site is also well served by existing retail uses such as Broadway Shopping Centre, the Fish Markets in Pyrmont, Market City Shopping Centre and Paddys Markets in Haymarket, Glebe Point Road shops providing good variety of retail experiences and options.

The CoS and DoH planning proposed a number of opportunities for ground floor retail and also the potential for markets in the old garage structure on the corner of Macarthur and Wattle Streets was identified.

Opportunities

The site can easily accommodate and there is an opportunity to continue the current building use and employment opportunities including commercial, educational and small retail facilities in combination with new housing accommodation. This mixed land use is consistent with the Sustainable Sydney 2030 objectives and is appropriate for a site in close proximity to the City. This approach is also consistent with the Draft LEP which proposes the land be zoned Mixed Use.



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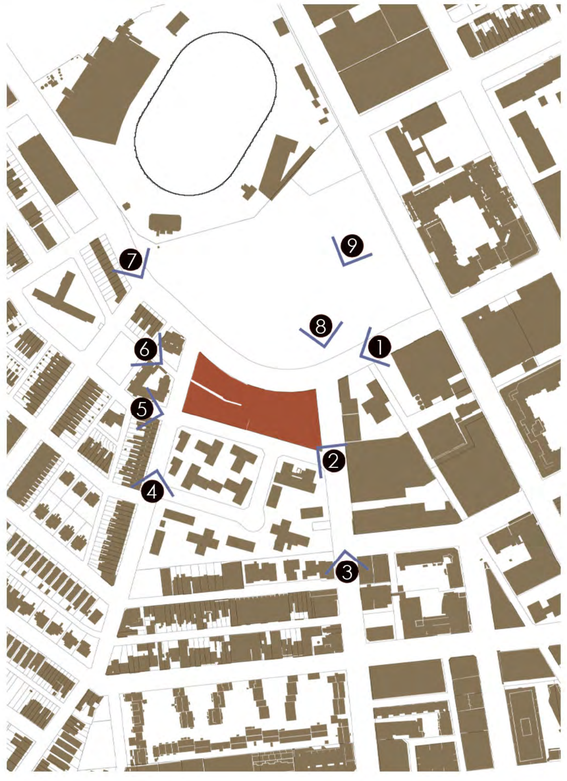
Urban Design Framework

Views and Vistas



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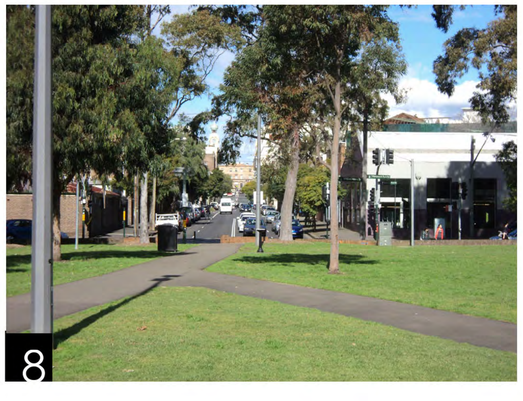
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Urban Design Framework

Site coverage - Existing

The built form of the surrounding area is articulated in the figure ground diagram. The site is located between the larger mixed use buildings of Ultimo and the finer grain of the predominantly low rise residential development of Glebe.

The large single ownership sites of the CoS Depot to the east, DoH Housing to the south and the subject site all combine to form a barrier to the pedestrian and street access and permeability to the park as well as generally between Ultimo and Glebe.

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Urban Design Framework

Building heights

The site has developed over the years as a series of separate and connected one and two storey ex-industrial and commercial buildings. The immediately surrounding sites are the CoS depot which has varied built forms ranging in heights from single storey workshops to 3 storey buildings. The DoH site to the south has a series of low rise 3 storey walk up residential flat buildings.

Ultimo to the east has buildings varying in height from one to nine storeys and is characterized by a combination and of large warehouse buildings converted to apartments, storage facilities or offices and small fine grain terrace houses. Some more recent residential developments and apartment buildings have replaced some of the original structures.

Glebe west of Cowper Street is dominated by small lots and low scale housing of predominately one to two storey in height. The notable exception to this is the large housing block of John Byrne Court located to the north-west of the site which is approximately 13 levels.

The area south of the site toward Broadway is again varied in the heights of the buildings from one to six storeys. Some more recent residential developments toward Braodway have towers between 12-15 storeys.

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Urban Design Framework

Building edge

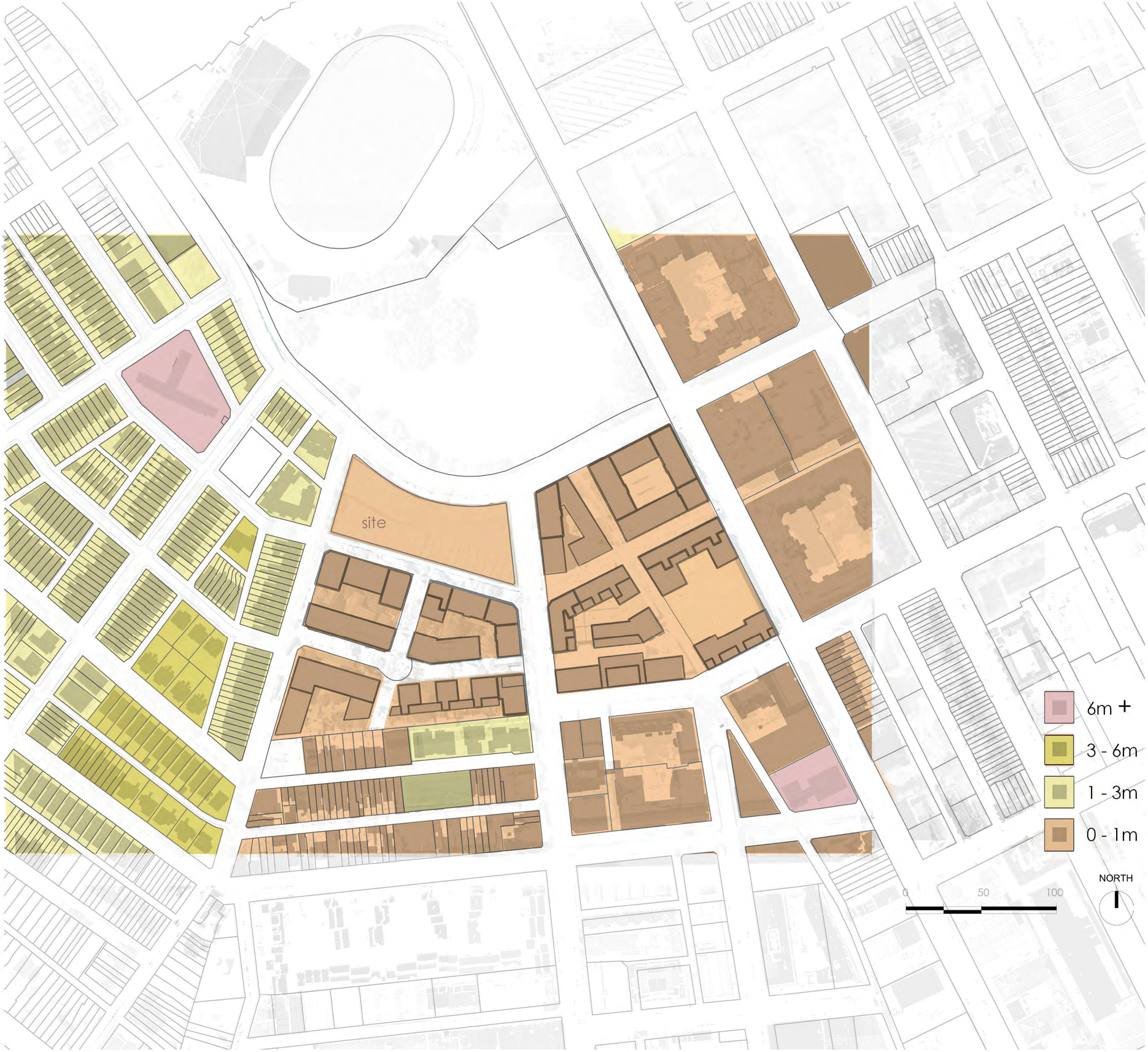
The Glebe edge of Wentworth Park is defined generally by 2-3 storey structures including houses, light industrial uses such as Glenmore Meats through to the northwest corner on the intersection of Wentworth Park Road and Pyrmont Bridge Road is a recent mixed use development with retail at ground floor and 4 levels of residential apartments above. The low scale nature of the buildings means that visually the mature trees predominantly define this edge of the park. The east or Ultimo edge of the park has a more defined hard edge and the dominant built form is the old brick warehouse and wool store structures a number of which have been converted to residential or commercial uses. In recent years residential apartment developments have replaced the some of the older stock warehouses however their envelopes are generally consistent with the 9-10 storey built form of the adjoining structures.

The southern edge of the park is currently defined by two industrial/commercial sites. The first is the CoS depot which occupies the entire block and is conglomeration of desperate buildings ranging in age and heights. The boundary of this site to the park is particularly poorly defined. The depot site is subject to the masterplan prepared by Hill Thalis for the Sustainable Sydney 2030 demonstration project. The planning outcomes of this work resulted in three 9 storey towers arranged end on defining the park with 4 storey infill between the towers.

Opportunities

The site with its long frontage to the southern edge of Wentworth Park provides a unique opportunity to when combined with the redevelopment of the CoS depot site to define the nature the built form edge to the large urban open space. In relation to the guiding principles established by CoS Sustainable Sydney 2030 planning on the depot site the following are developed for the subject site:

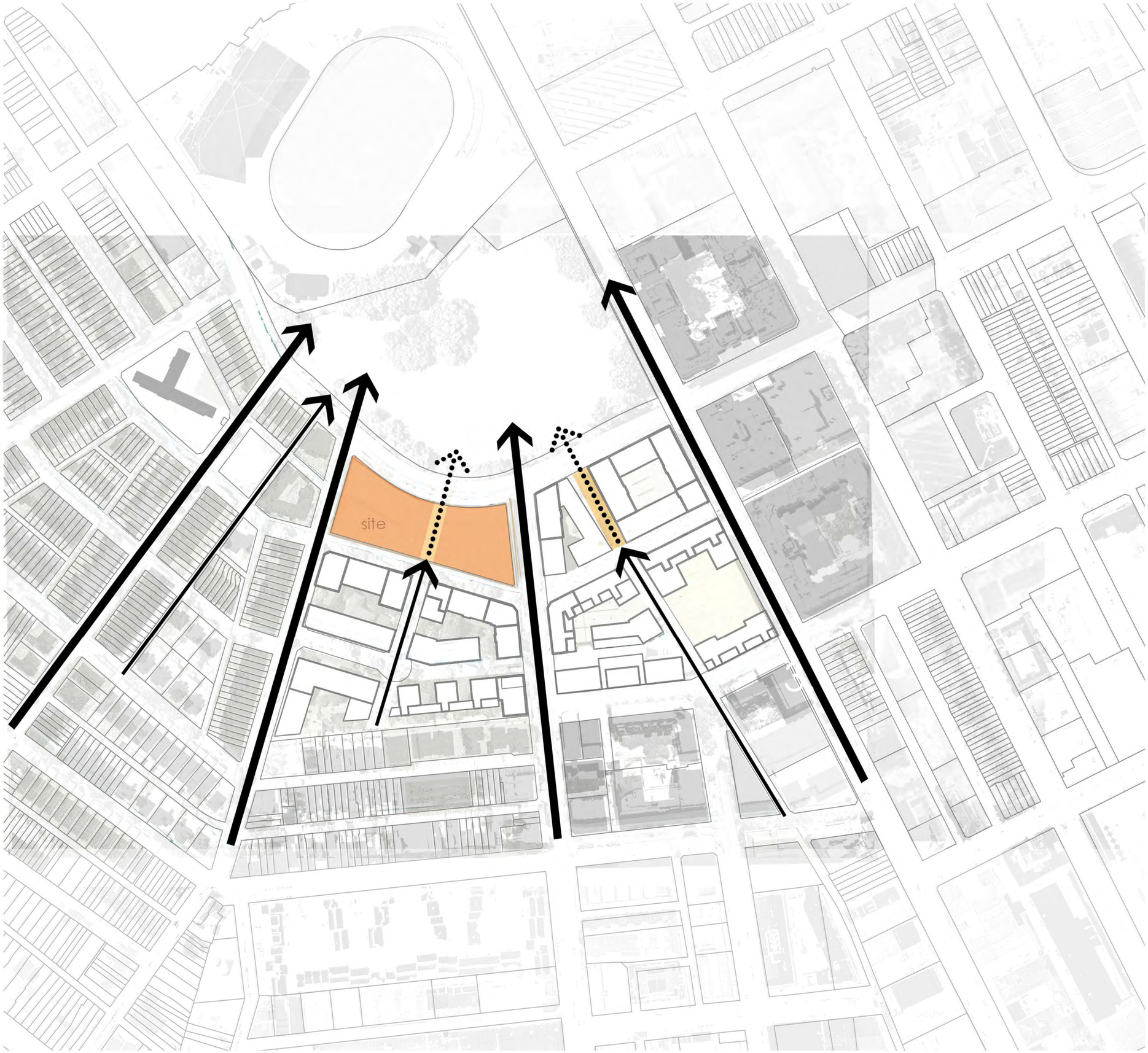
- New pedestrian and visual connection from the proposed street network.
- Perpendicular tower forms responding in height to the established eastern park edge wall height
- A well defined street wall to define the park edge as well as enhance the public and private domains
- An active street front at ground level with complimentary uses such as small scale retail and commercial
- Multiple entry points to assist surveillance of the public domain.



Urban Design Framework
Connectivity

Extend connections through the site
The extension of the repositioned Stirling Street as a pedestrian and visual connection through the site will improve the site permeability and access. This public access through site link will relate to the pedestrian connection 'Blackwattle Stand' proposed on the CoS depot site and together they will open up the valley areas of Ultimo and Glebe to the large open public space of Wentworth Park.

Maintain views through the site to the park
Introduce a new visual and physical connection through the site by extending the proposed realigned Stirling Street. Retain where possible higher level views through the site to the north toward the park particularly from the proposed affordable housing buildings on the DoH site to the south.



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Urban Design Framework

Summary

Appropriate built form and heights reflecting the established 2030 Strategy

The building heights and forms of 9-10 storeys established on the CoS d epot and DOH sites which extend the building heights of the predominant urban forms of the eastern edge of Wentworth Park should be developed to provide a new southern park edge street wall character.

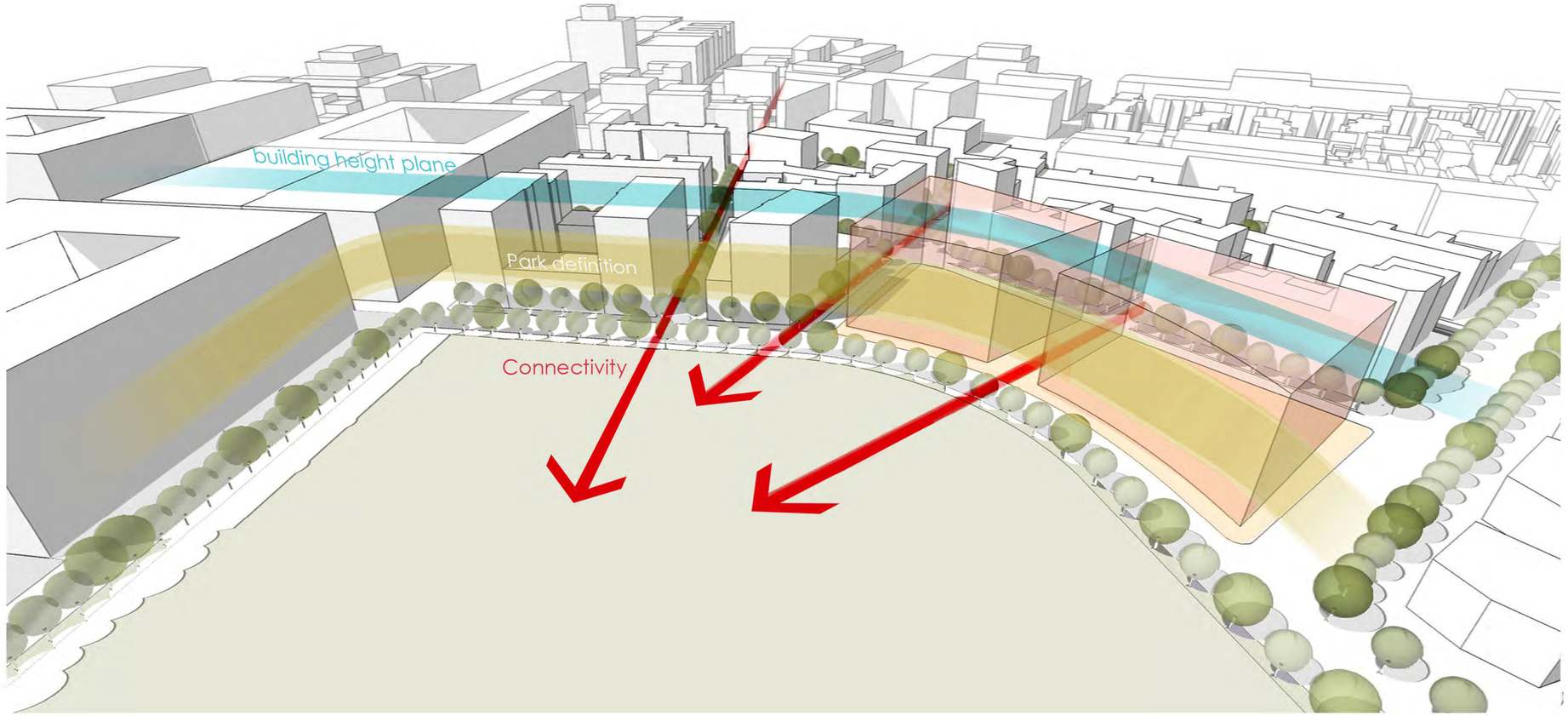
The built form established on the CoS depot site of perpendicular tower forms defining the southern edge of the park and an active street wall should be developed on the subject site to maximize solar access and views to the park.

Park definition

Perpendicular tower forms responding in height to the established eastern park edge wall height will allow good solar amenity into and through the site to the proposed buildings beyond. A well defined podium form and an active street front at ground level with complimentary uses such as small scale retail and commercial will enhance the public domain.

Extend connections through the site

The extension of the repositioned Stirling Street as a pedestrian and visual connection through the site will improve the site permeability and access. This public access through site link will relate to the pedestrian connection 'Blackwattle Stand' proposed on the CoS depot site and together they will open up the valley areas of Ultimo and Glebe to the large open public space of Wentworth Park.



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Massing Study and Concept Envelope

3 plan options.

Option Summary Sheet

Option 1 - Perimeter Block Option

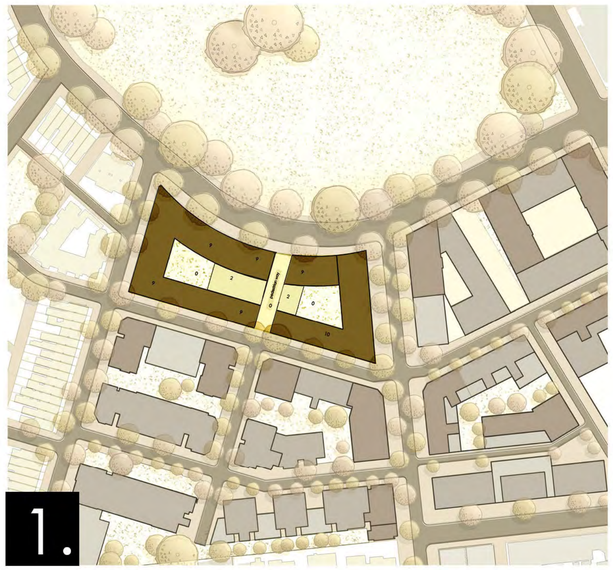
This option explores variations to the traditional full perimeter block typology.

Option 2- Direct 2030 Strategy interpretation

This option is a direct interpretation on the site of the planning and principles developed by Hill Thalis for the immediate surrounding precinct namely the CoS and DoH adjoining sites.

Option 3 – The Preferred Option

The third option is a four tower option with the tall residential buildings orientated perpendicular to the park edge.



Massing Study and Concept Envelope

Option 1.

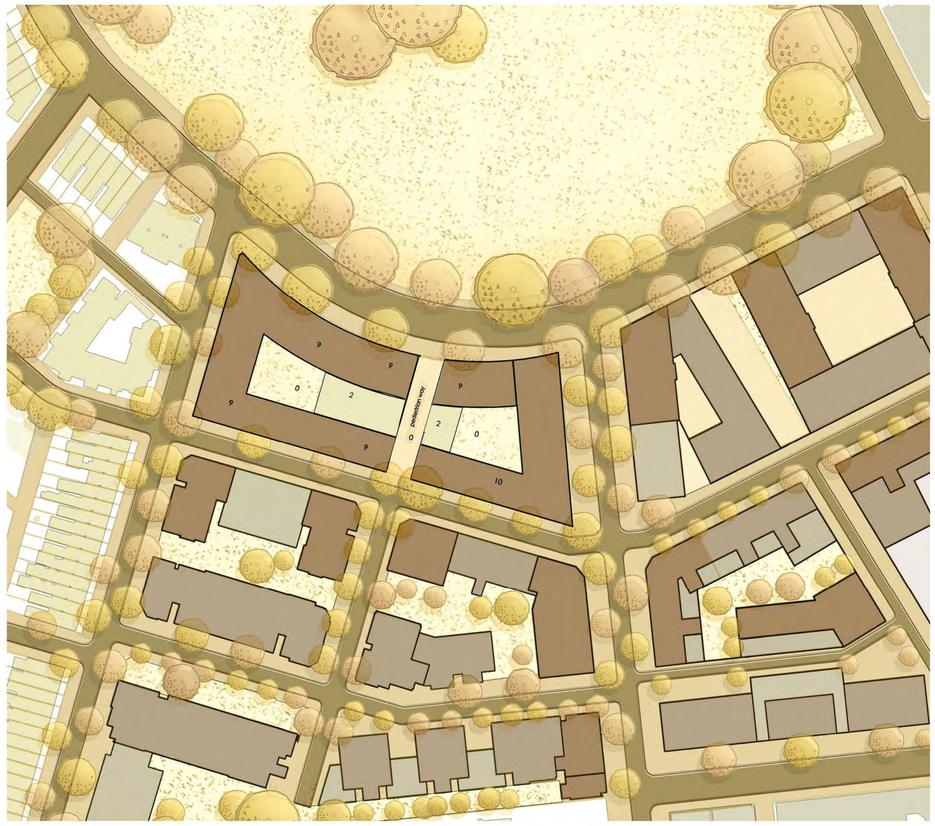
Option 1 - Perimeter Block Option

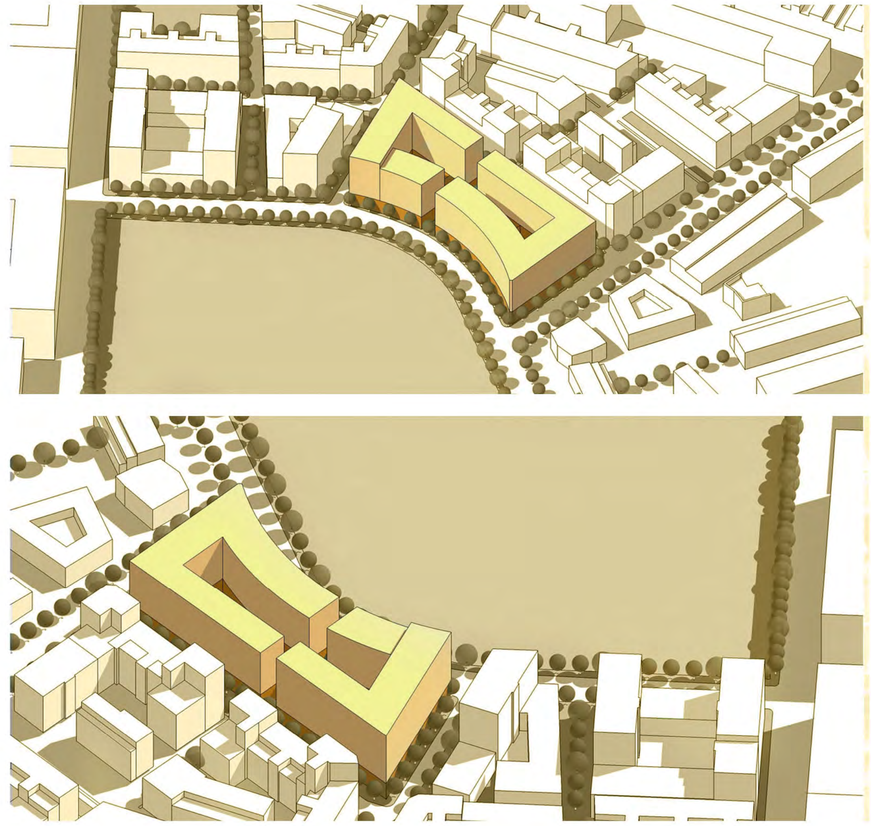
This option explores variations to the traditional perimeter block typology. The perimeter block is a common built form on the western edge of Ultimo in areas addressing the park. The basic full perimeter block was assessed during the development of options as it allowed maximum flexibility for a later stage.

Attributes
- Full perimeter street wall buildings between 9-10 stories relating in height to the Ultimo wall edge buildings facing the park.

Advantages
The unique positive attributes of the variant perimeter block option can be summarized as:
- Good street definition

Constraints
Like option 1 the centre of the site is quite narrow and results in the following issues:
- Building depths becoming inefficient and or
- Building separation is very poor.
- Views of the park available through the site from the DoH site adjacent are highly impacted.
- Central courtyards would feel very constrained and would result in poor solar access.





Massing Study and Concept Envelope

Option 2.

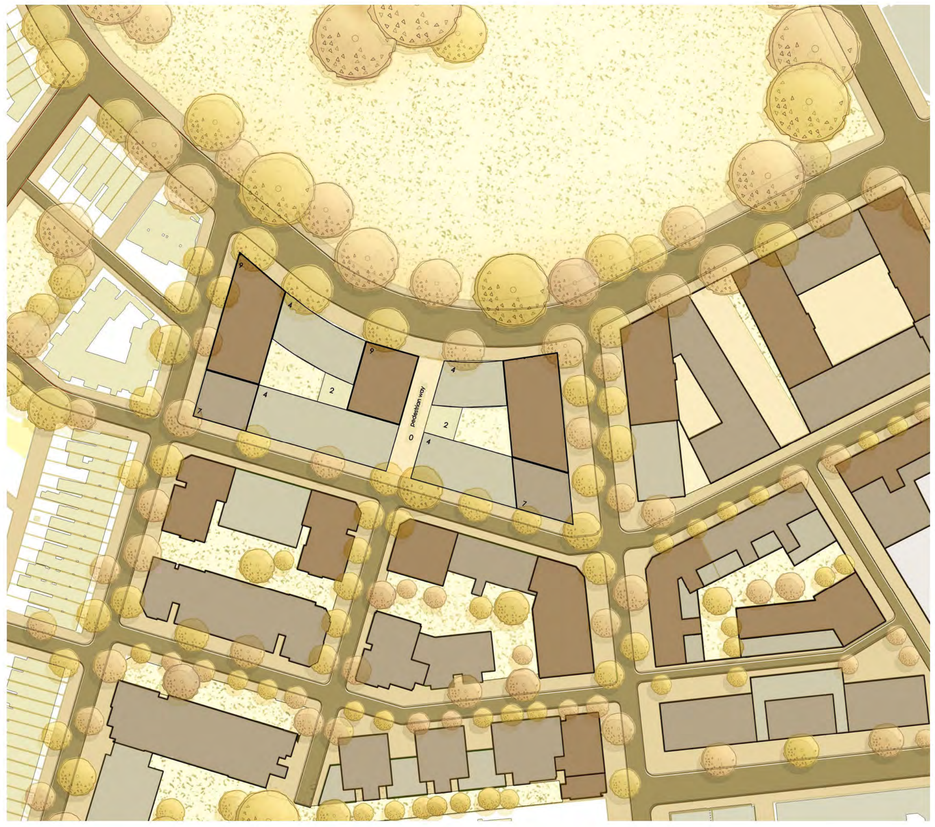
Option 2- Direct 2030 Strategy interpretation

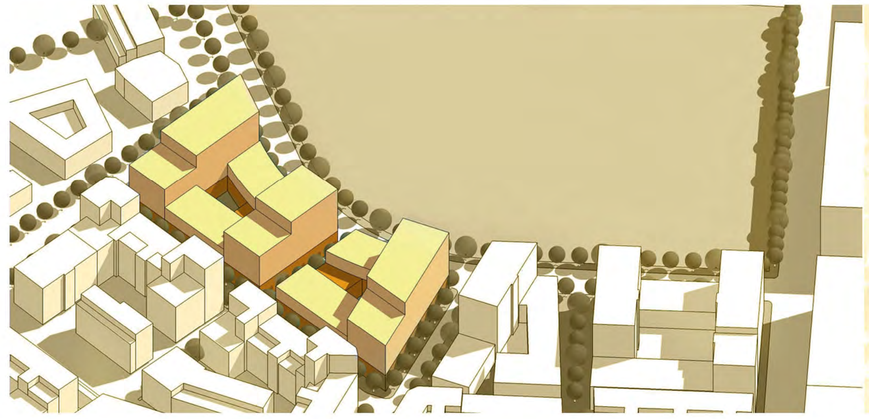
This option is a direct interpretation on the site of the planning and principles developed by Hill Thalis for the immediate surrounding precinct namely the CoS and DoH adjoining sites.

Attributes
- Three perpendicular 9-10 storey towers evenly spaced across the park elevation relating in height to the Ultimo wall edge buildings facing the park.
- The height of the towers reduces by two storeys to the rear to reduce the impact of overshadowing on the adjoining development.
- Four storey perimeter street edge buildings located between all the tall sections.
- Central communal courtyards.

Advantages
The unique positive attributes can be summarized as:
- Good street definition
- Consistent built form and massing to the CoS depot site masterplan
- Views of the park available through the site from level 5 and above from the DoH site adjacent.

Constraints
The centre of the site is quite narrow and results in the following issues:
- Building depths becoming inefficient and or
- Building separation becoming tight small.
- Restricted solar access to central courtyard and therefore the deep soil planting areas.
- Limited views from lower levels through the site.





Massing Study and Concept Envelope

Option 3.

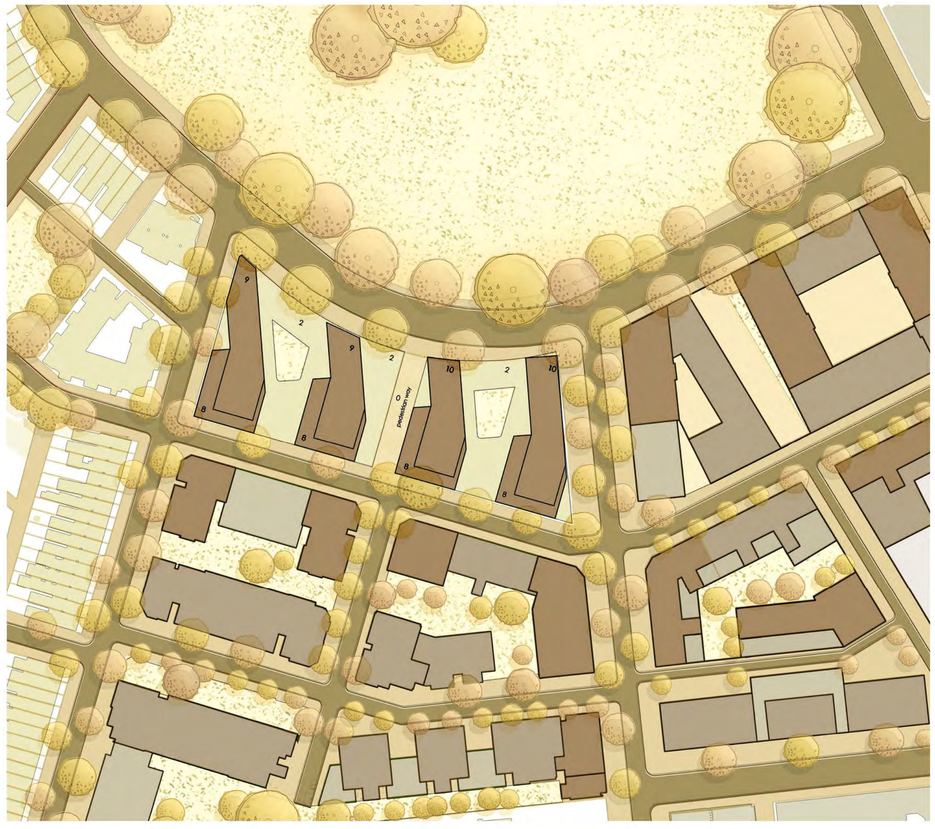
Option 3 – The Perpendicular Tower Option

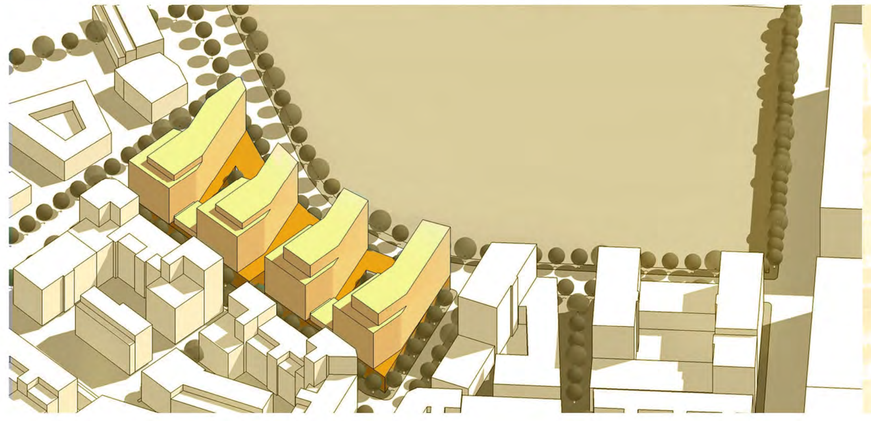
The third option is a four tower option with the tall residential buildings orientated perpendicular to the park edge.

Attributes
- The building to the east defines the street wall of Bay Street and angles to relate to the orientation of Wentworth Street to the south. The built form provides positive varied and less hard defined street edge to both Wentworth Park Road to the north and Wentworth Street to the south.
- Four of these angled form building are spaced evenly from east to west across the site varying in height from 9-10 storeys.
- Residential towers sit above a 2 storey commercial podium which provides a

Advantages
The unique positive attributes of the angled tower option can be summarized as:
- Varied street definition
- Angled form maximizes views to the park from the buildings on the site.
- The angled form also maximizes solar access to apartments.
- Excellent solar access into the communal open spaces
- Good connection and views from the communal spaces to the park

Constraints
This option raises the following issues:
- Potential for loss of privacy and careful façade design required to avoid overlooking.
- Angled building form requires more complex planning to maximize the solar access, views and to avoid overlooking issues.
- Less defined street definition to the park and streets.





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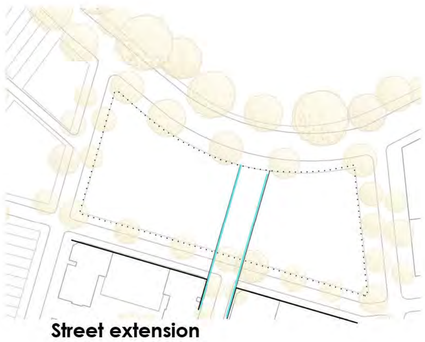
Massing Study and Concept Envelope

Option analysis

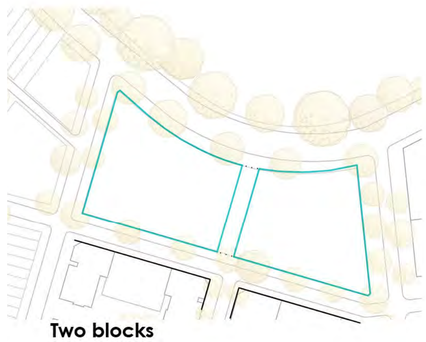
Option Analysis and Evaluation
Council following the interim presentation provided the following feedback:
Supported Aspects
Higher density mixed use generally supported in this location
Articulation of the site as two separate lots
Separation of higher building elements
Good surveillance of Wentworth Park
Good mix of apartments to cater for a variety of residents

Aspects to be reviewed
Reduction of building bulk to Wentworth Street to reduce impact on the adjoining site to the south
Building scale should transition between the industrial buildings to the east and the lower density sites to the west
Presentation to Wentworth Park Road to be more defined at street levels and to establish a lower predominant height datum

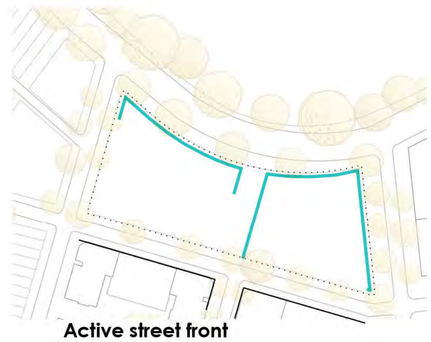
To guide the development the following principles were established:
Two separate massing blocks
Maximum height control of 9 storeys
Locate taller elements appropriately across the site to avoid crowding and retain sunlight access to the south
Predominantly 5 storey street wall to Wentworth Street
50% of Cowper Street frontage to be maximum 6 storey
Predominant street wall between 4-6 storeys to Wentworth Park Road to define the park edge
Street wall to be setback 5-6m from the existing kerb line to provide for boulevard tree planting
Taller building elements to be setback at least 6m from front boundary
Public accessible with clear line of site to the park, open to the sky, passive surveillance and reads as part of the public domain
Minimise cars and prioritise public transport and bicycle infrastructure.
Ground floor retail or commercial facing Wentworth Park Road and Bay Street
Diverse range of housing types
Provide a minimum of 6.5% of the site area



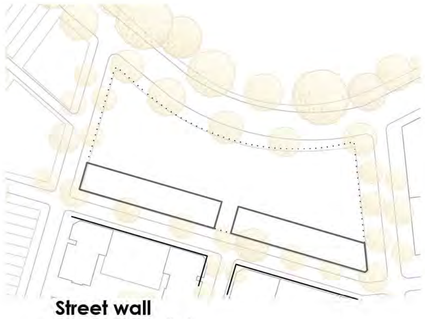
Street extension



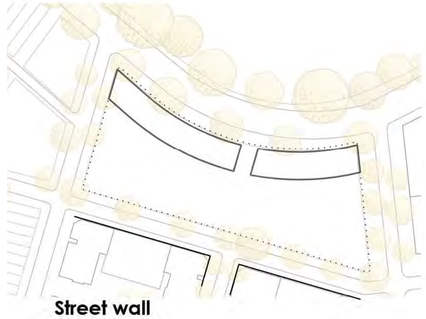
Two blocks



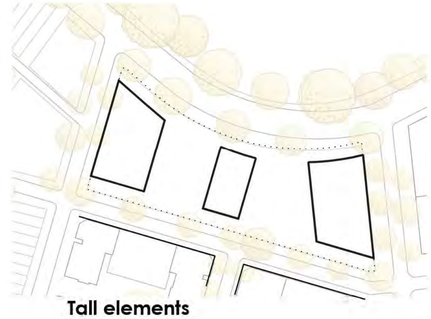
Active street front



Street wall
to define wenworth st.



Street wall
to define the park



Tall elements
evenly spread

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Massing Study and Concept Envelope

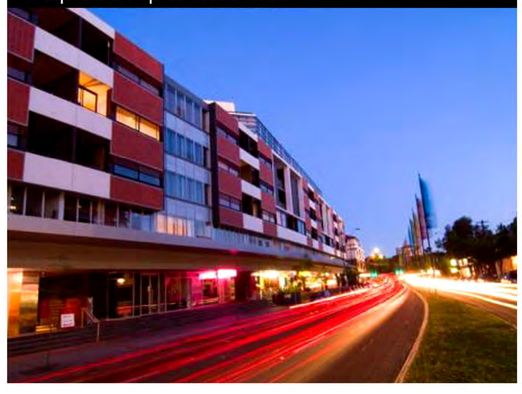
Typology and Built Form Precedents

Capella Apartments, Kensington NSW architect: FJMT
A recent 9 storey mixed use development on the busy Anzac Parade in Kensington successfully combines a strong street wall built form with setback upper floors to produce a well defined public domain and active streetscape.

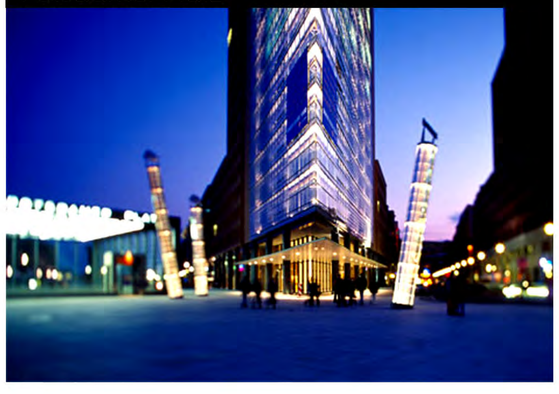
Potsdamer Platz, Berlin Germany architect:
RPWS Renzo Piano Workshop
This project formed part of the extensive redevelopment of the Potsdamer Platz after the reunification of Germany. Each block or section of the new masterplan had a signature taller tower located on the narrow wedge of land fronting the square. The taller built forms help to define the square as well as each street leading to the key open urban space.
The transparent retail façade at street level assists to activate the square while providing sightlines through to the other streets giving a sense of openness and connection.

Silkwood Mixed Use Development, Reservoir Street Surry Hills, NSW architect: Turner and Associates
A 9 Storey mixed use development incorporating urban housing arranged in a courtyard form over commercial and auditorium uses in a multi level podium.
Rich layered materials, commercial uses and multiple entries provide an active streetscape.
Upper levels successfully combine a majority of setback floors to reduce street wall height with a strong vertical corner element to define the development and relate to the adjoining built form.

Capella Apartments



Potsdamer Platz



Silkwood Dev.

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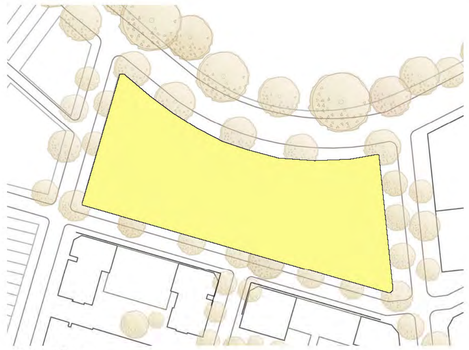
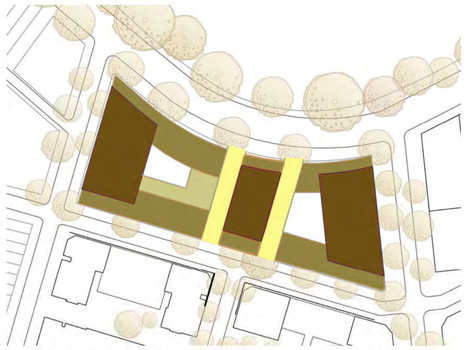
Massing Study and Concept Envelope

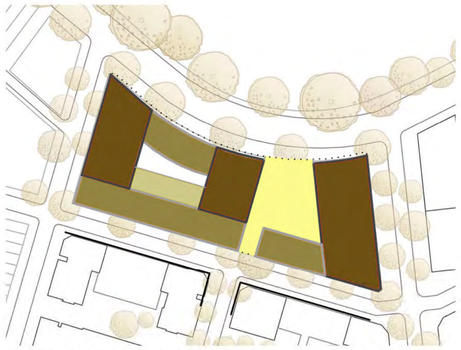
Planning development



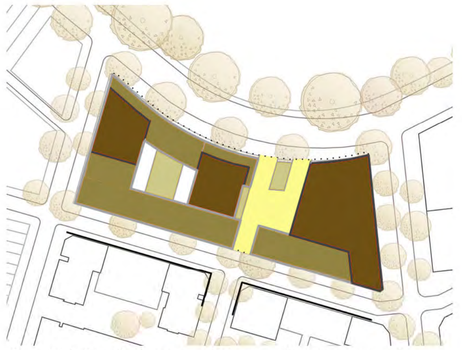
The Site.



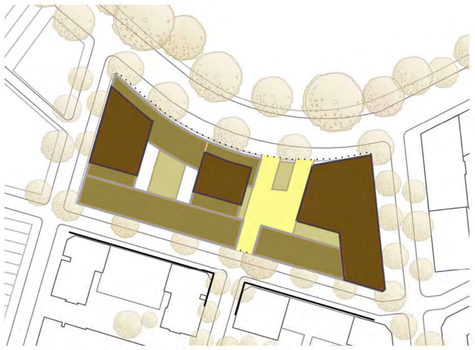
Punctuate the street wall to allow connection into the site



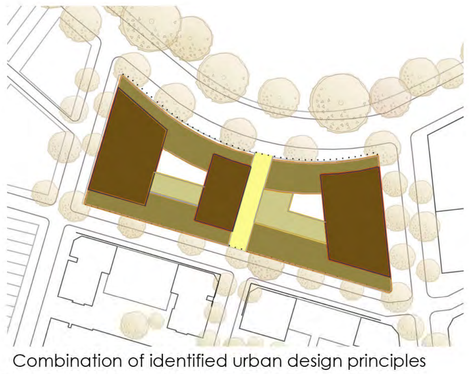
Connect internal open space to pedestrian link to create a plaza



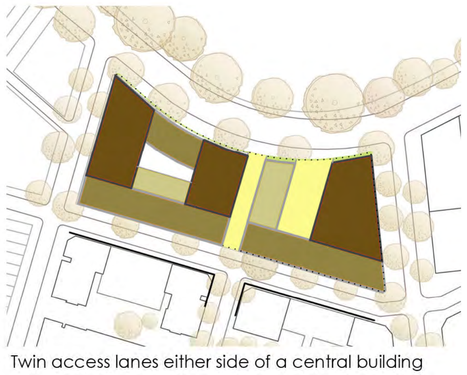
Bay St tall built form to define both private and public open spaces. Tall elements setback on the western block to transition to residential areas.



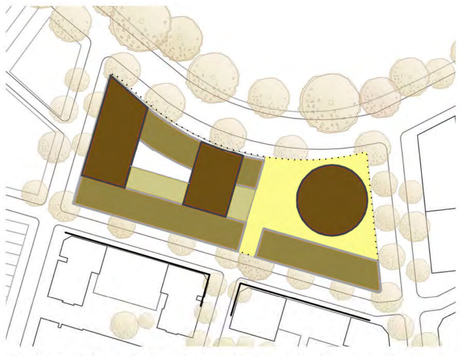
Tall elements moved north away from development to the south



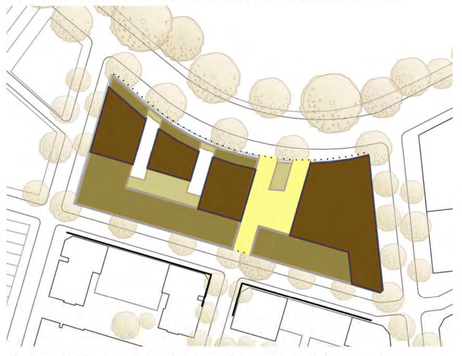
Combination of identified urban design principles



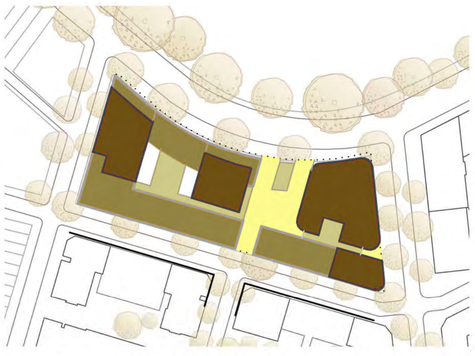
Twin access lanes either side of a central building



Define unique tall corner element between plaza and Bay St



Parc de Bercy typology of street wall to park explored



Bay St tower split into backdrop building and unique corner element.

Massing Study and Concept Envelope

Preferred Plan

The preferred plan has a through site link providing a visual and pedestrian connection from the repositioned Stirling Street to the south with the urban open space of Wentworth Park. The plan also incorporates a northerly orientated retail plaza which expands the public domain and through site links to provide an active streetscape and outdoor dining space over-looking the park. The new pedestrian access defines the proposed mass of the site into two distinct blocks.

The built form of the easten block locates a 9 storey signature tower form between the plaza and Bay Street with retail/showroom spaces contributing the active street frontages of Bay and Wentworth Park Road. A 9 storey building turns the corner into Wentworth Street and transitions down the predominant street wall height of 5 storeys.

The western block comprises a perimeter street wall building with 6 storeys defining the park edge to Wentworth Street, the 6 storey street wall is continued along the Cowper Street frontage with a predominantly 5 storey building fronting Wentworth Street. Two taller 9 storey elements are located at either end of the block and are orientated north-south to maximize the views through the site to the park from the DoH site to the south as well as the solar access into the site and the developments adjacent.

87 BAY ST.

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NORTH

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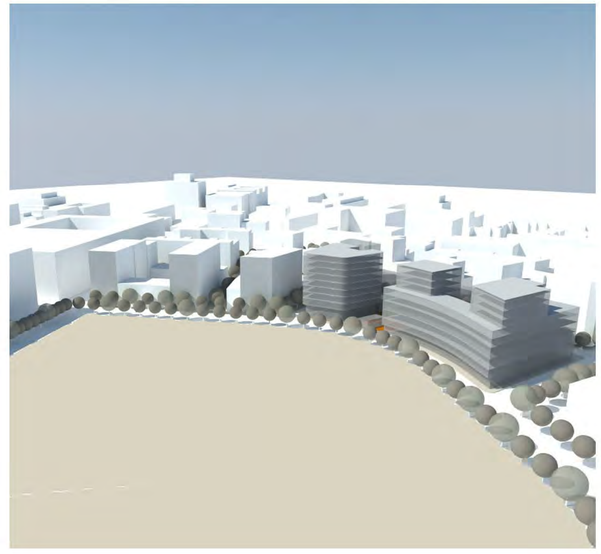
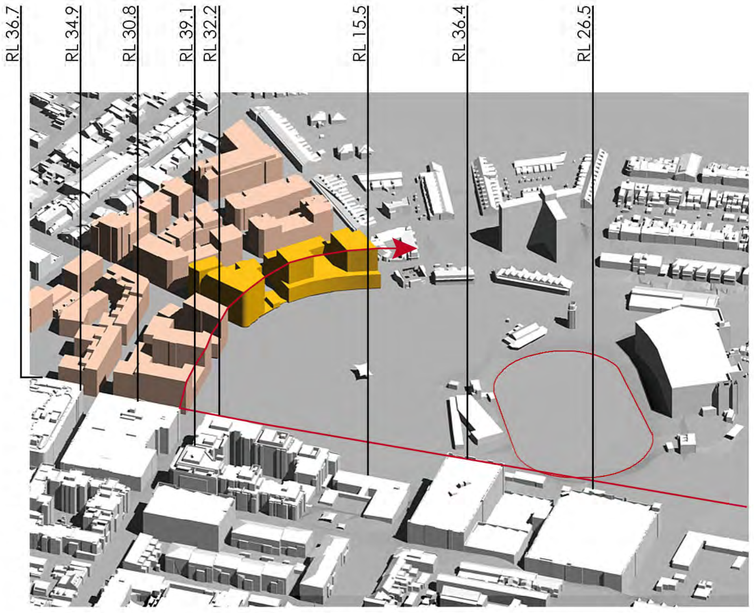
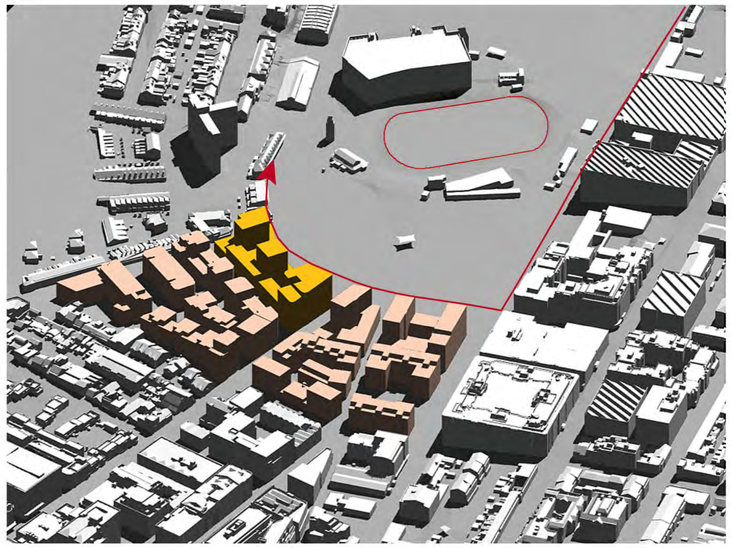
Massing Study and Concept Envelope

Preferred option visualisation



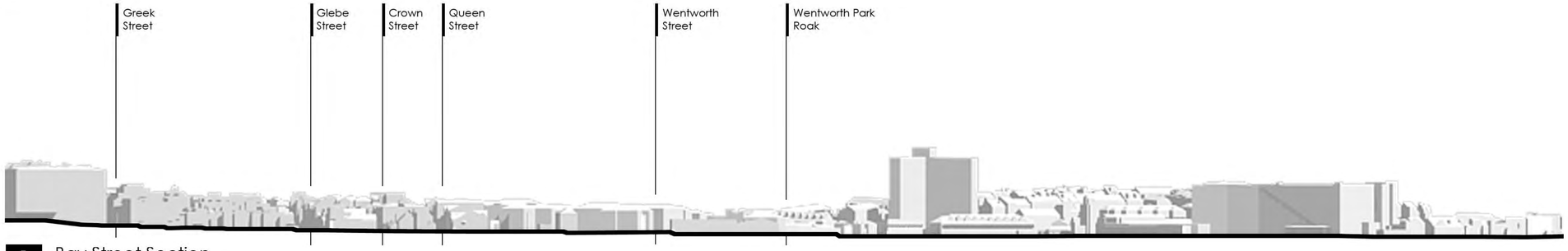
Urban density





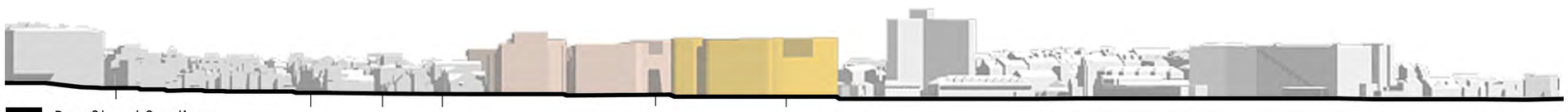
Density and built form development

Urban Street Section



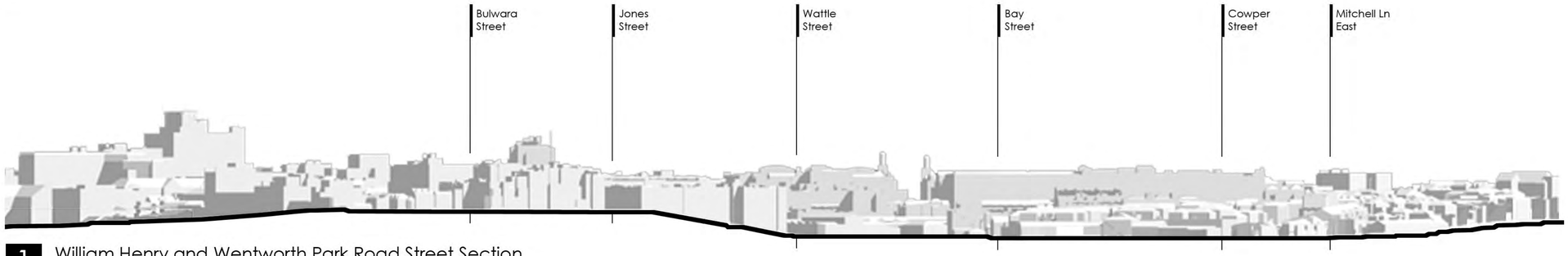
1 Bay Street Section
Existing

2 Bay Street Section
Street section including proposed DoH Scheme



3 Bay Street Section
Proposed street section

Urban Street Section



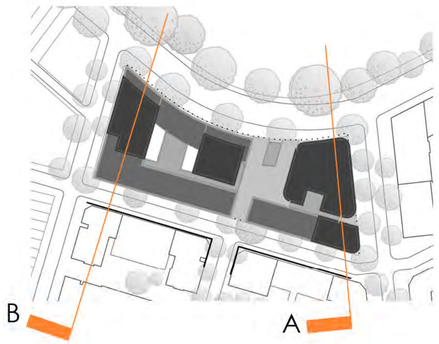
1 William Henry and Wentworth Park Road Street Section
Existing

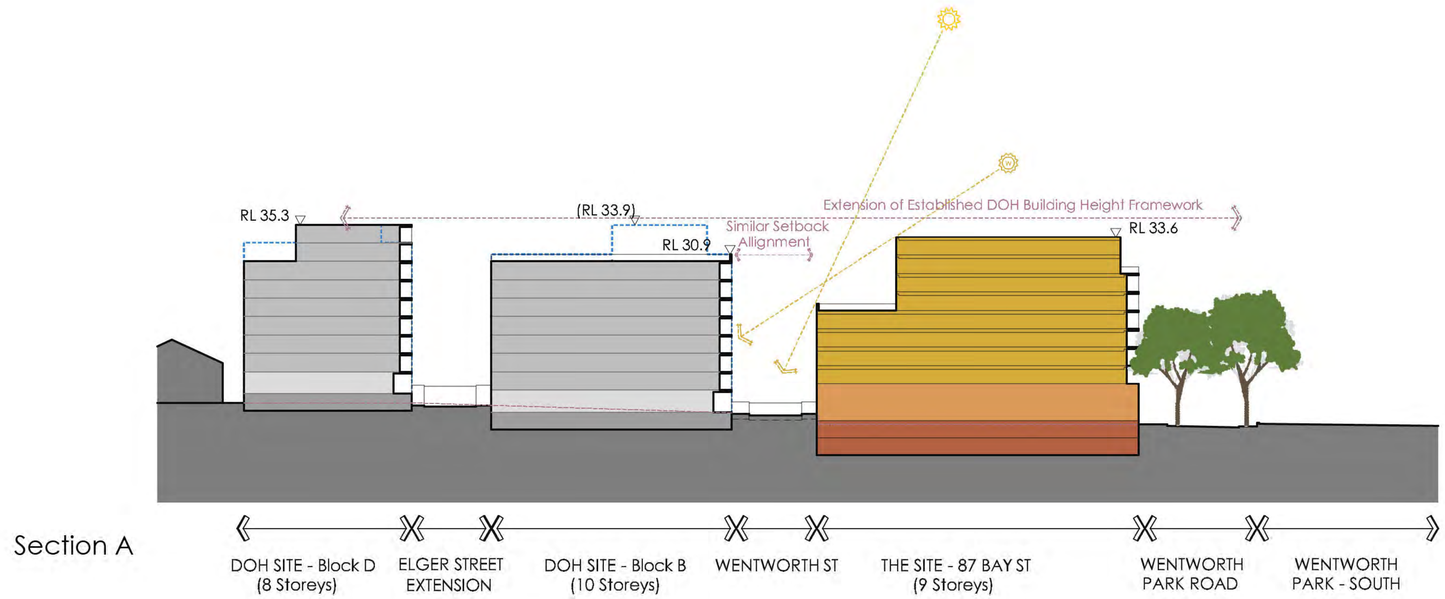
2 William Henry and Wentworth Park Road Street Section
Street section including proposed DoH Scheme

3 William Henry and Wentworth Park Road Street Section
Proposed street section

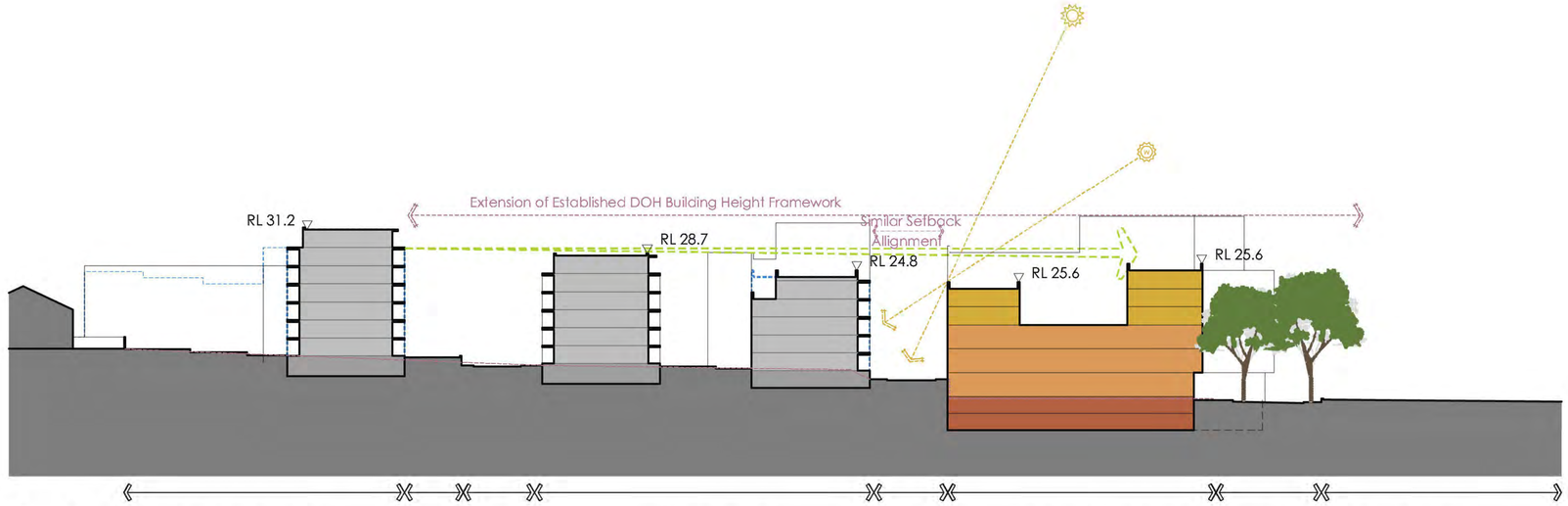
Density and built form development

Site Sections





Section A



Section B

87 BAY ST.

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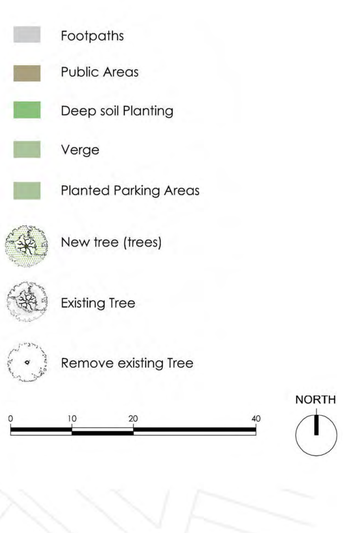
Density and built form development

Public domain plan



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BAY
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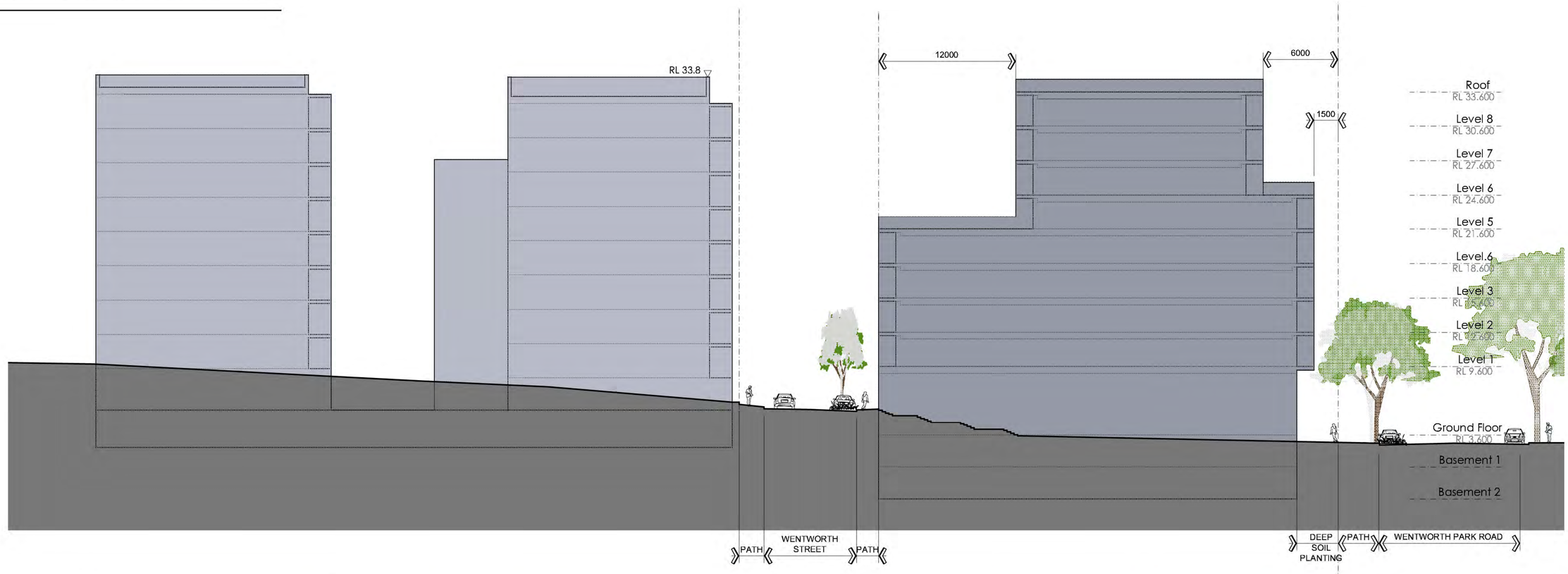
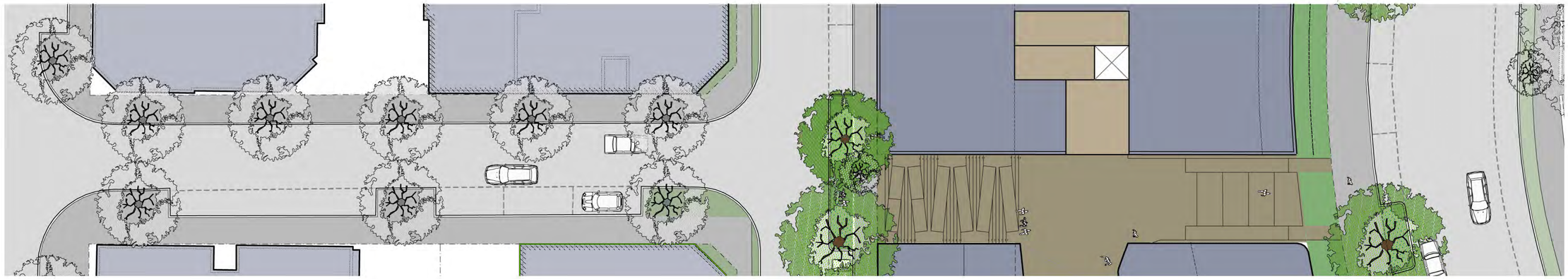
Density and built form development

Public domain elevations

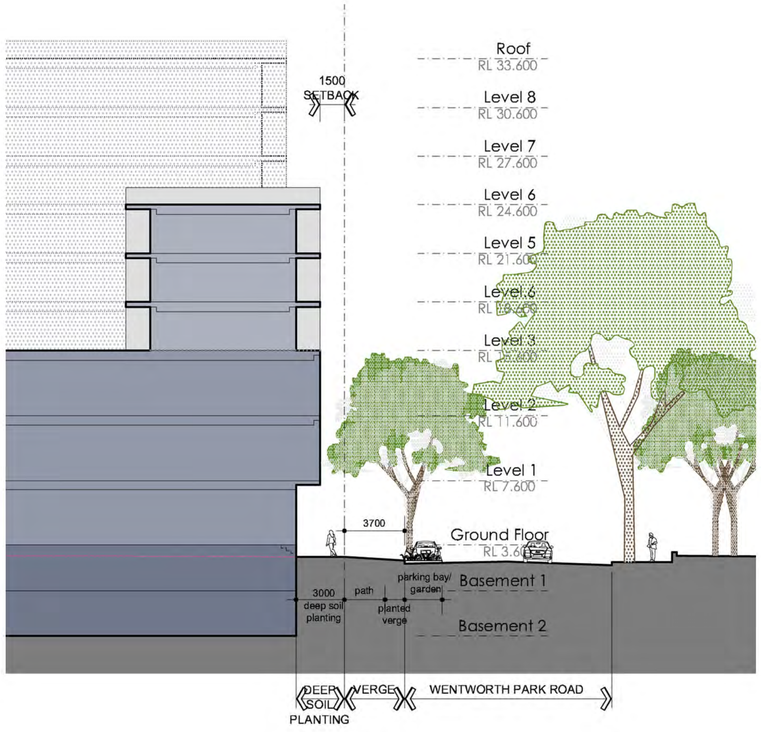


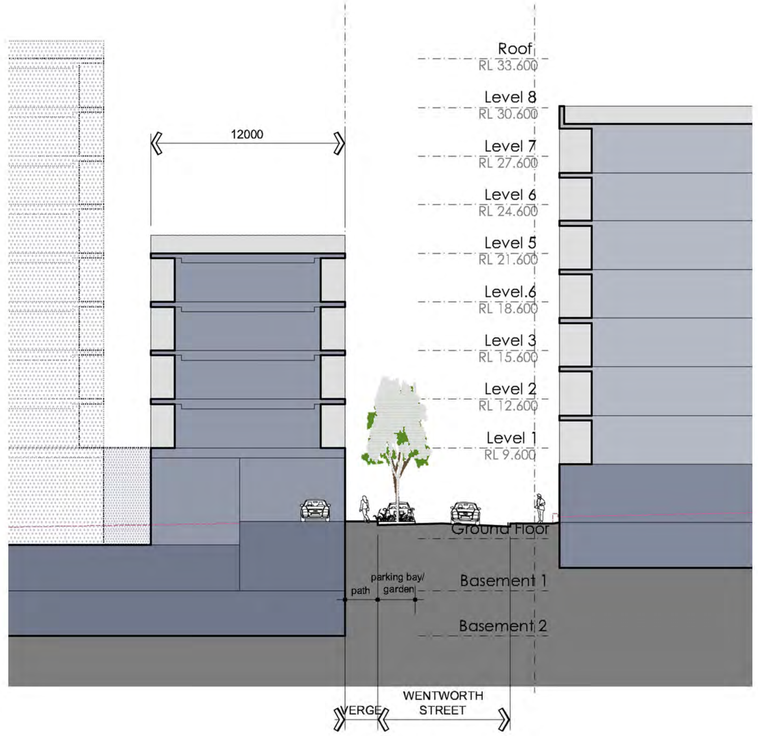
87 BAY ST.

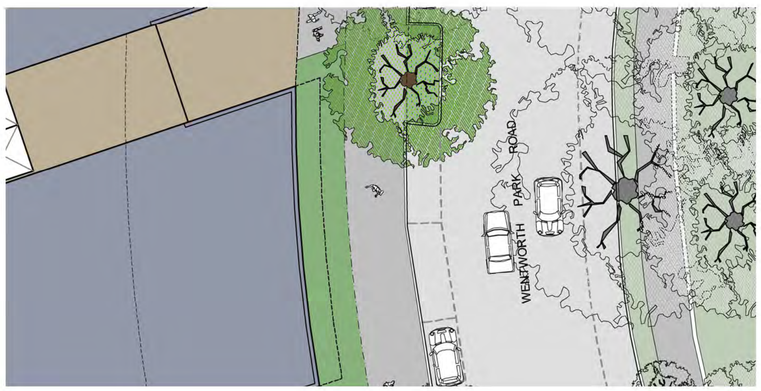


Density and built form development

Public domain sections







87
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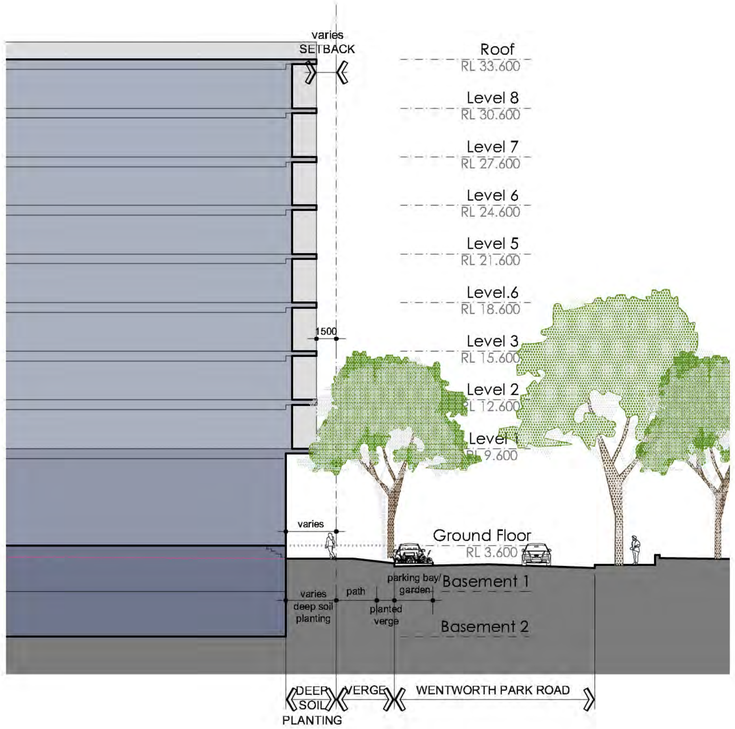
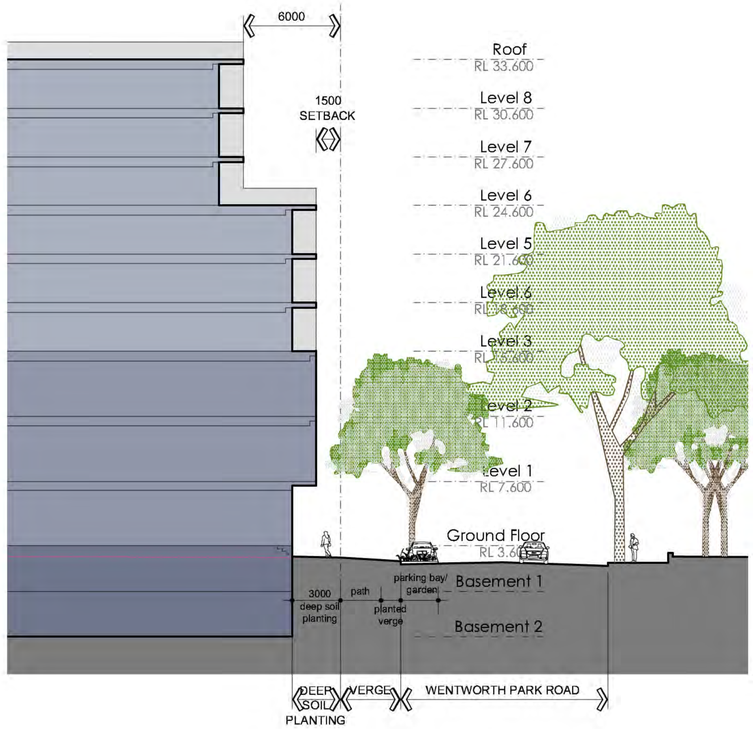
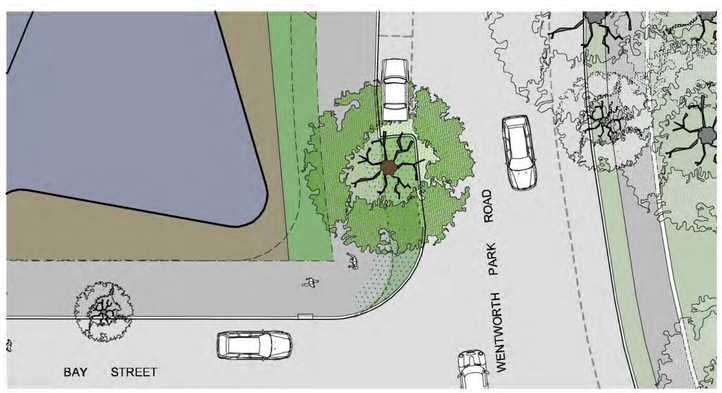
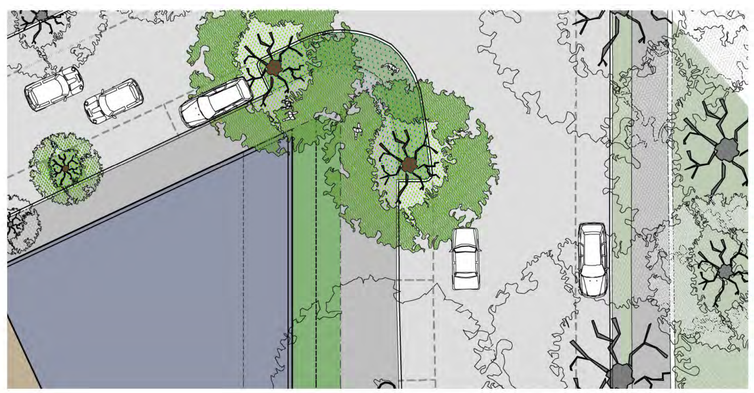
Public domain sections









87
BAY
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Density and built form development

Vehicular Access

Active frontage
Discouraged zone for vehicular access

Vehicular Access

Service Access

Footpaths

Public Areas

Deep soil Planting

Verge

Planted Parking Areas

New tree (trees)

Existing Tree

Remove existing Tree

0 10 20 40

NORTH

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Density and built form development

Pedestrian Access

Private Access

Public Access

Footpaths

Public Areas

Deep soil Planting

Verge

Planted Parking Areas

New tree (trees)

Existing Tree

Remove existing Tree

0 10 20 40

NORTH

Density and built form development

Open Space and Landscaping

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Sepp 65 Residential Compliance
and amenty testing

Shadows

Solar Access to adjoining dev. Assesment
Equinox

The shadow model demonstrates that the vast majority of DoH apartments facing Wentworth Street only have minor solar amenity loss due to the proposed development of the site.

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BAY
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38

Sepp 65 Residential Compliance
and amenty testing

Shadows

Solar Access to adjoining dev. Assesment
Mid winter

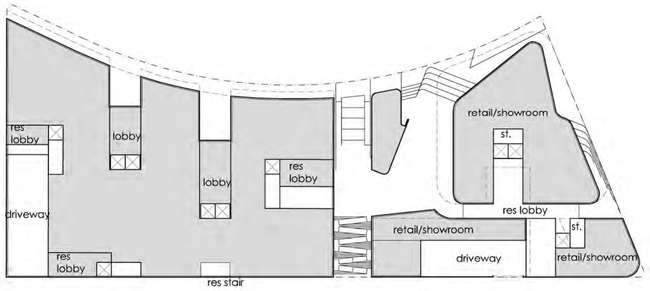
The shadow model demonstrates that the majority of DoH apartments in the blocks A2 and B1&2 (i.e. those fronting Wentworth St) retain a minimum of 2 hours of solar access.

Preliminary assessment of individual apartment numbers confirms that in excess of 73% of apartments meet the SEPP 65 solar access requirements.

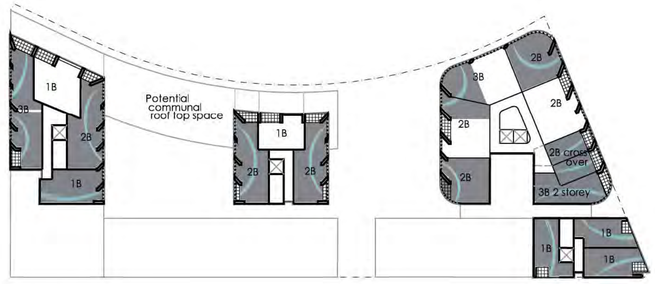
Sepp 65 Residential Compliance and amenty testing

Ventilation to Apts.

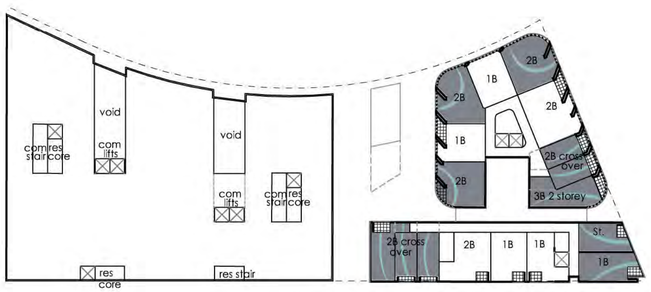
Testing demonstrates that in excess of the 60% of apartments required by SEPP 65 can achieve natural ventilation.



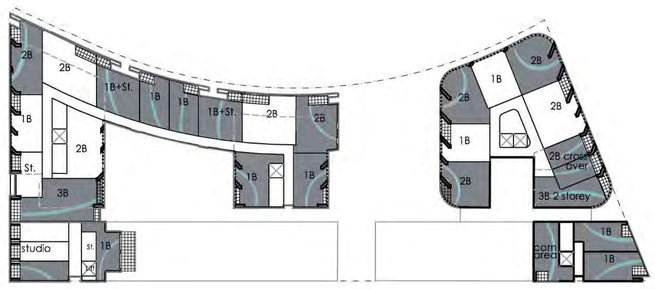
Ground



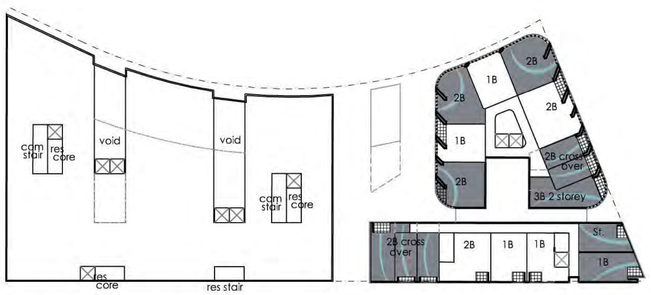
Levels 6-8



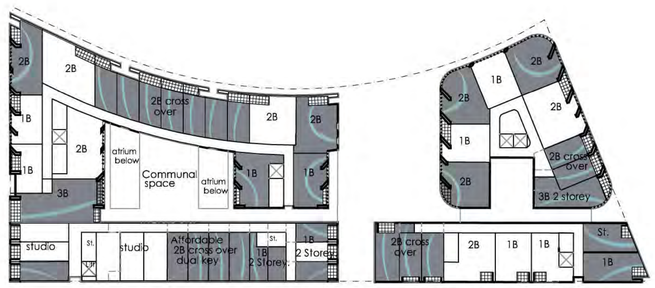
Level 1



Level 5



Level 2



Level 3 & 4

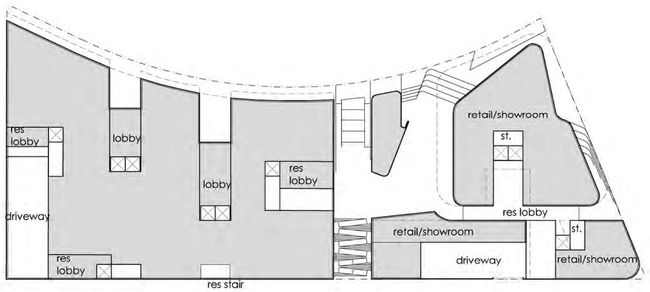
0 10 20 40

NORTH

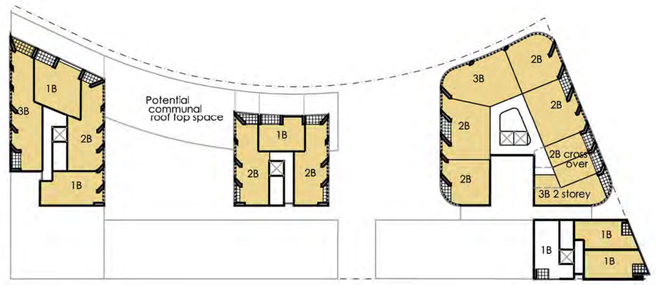
Sepp 65 Residential Compliance and amenty testing

Solar Access

Testing demonstrates that in excess of the 70% of apartments required by SEPP 65 can achieve the minimum proscribed amount of solar access within the proposed envelopes.



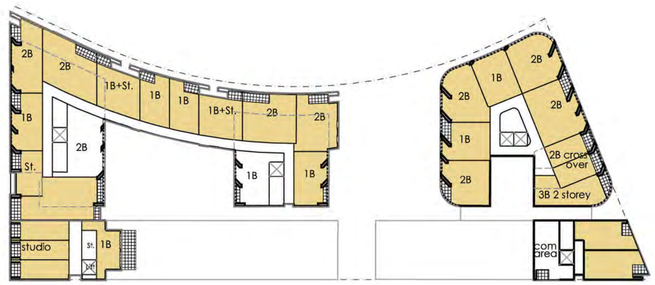
Ground



Levels 6-8

Level 1

Level 2



Level 5

Level 3 & 4

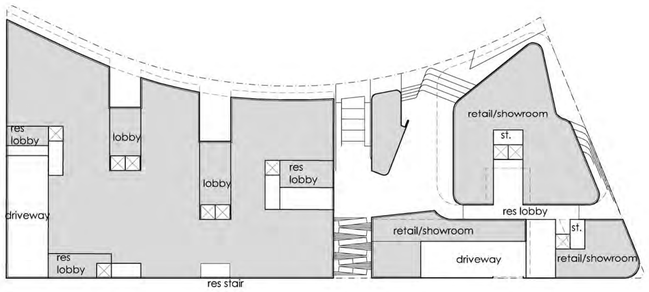
0 10 20 40

NORTH

Sepp 65 Residential Compliance and amenty testing

Visual privacy

The separation between the tall buildings are a minimum of 24m as recommended by the RFDC for buildings over 25m in height. Sensitive design of the façade will maximize visual privacy between buildings.



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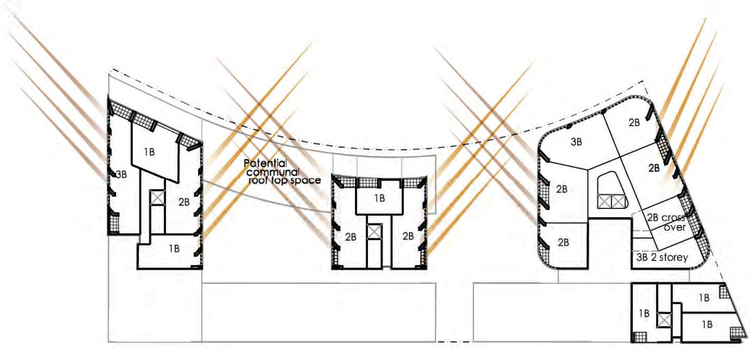
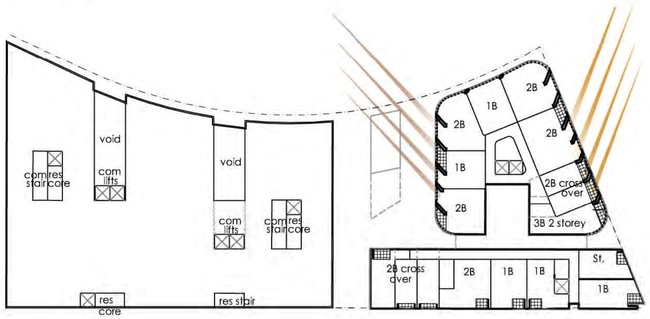
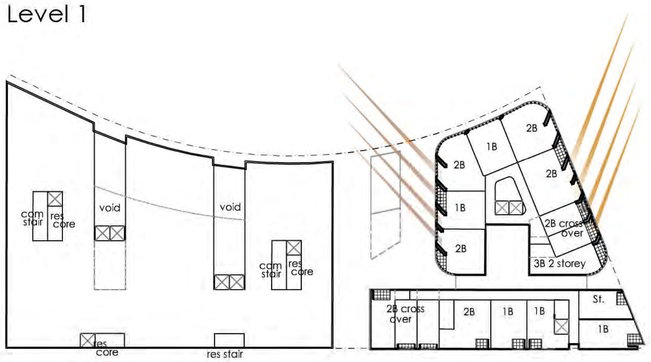


Levels 6-8



Level 1



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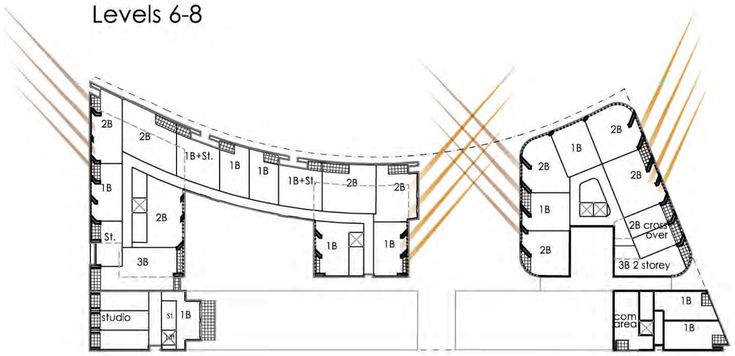
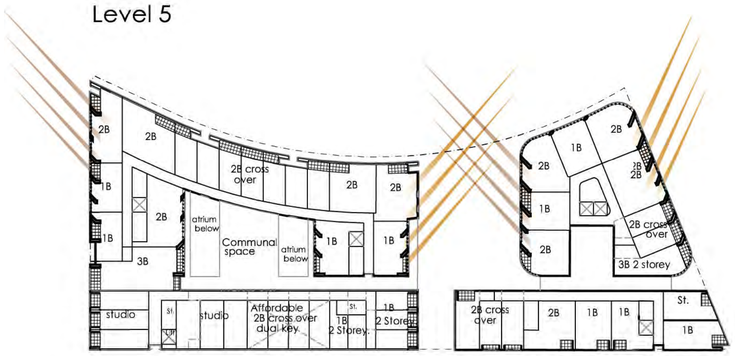


Level 5



Level 3 & 4

0 10 20 40

NORTH

Area testing

Area + Apt. Mix Schedule

Total GFA = 24.420 m2

Site FSR = 4.5 : 1

Bay St (East) Block

Level	Use									Market Residential Mix				
	Affordable Housing		Residential		Retail/Showroom		Car Parking/Plant			Studio	1 bed	2 bed	3 bed	Total Apts
	Built Up Area (m2)	GFA (m2)FSR Area	Built Up Area (m2)	GFA (m2)FSR Area	Built Up Area (m2)	GFA (m2)FSR Area	Built Up Area (m2)	Car parks provided	Bicycle parks provided					
B2							2,315	46	39					
B1							2,315	46	39					
Ground	_	_			1,830	1,190								
Level 1			1,730	1,246						1	5	10	1	17
Level 2			1,730	1,246						1	5	5	0	11
Level 3			1,730	1,246						1	5	10	1	17
Level 4			1,730	1,246						1	5	5	0	11
Level 5			1,360	979						0	4	6	1	11
Level 6			1,360	979						0	5	4	0	9
Level 7			1,360	979						0	3	6	2	11
Level 8			1,360	979						0	3	4	1	8
Plant				0						_	_	_	_	0
Sub Total	**0**	**0**	**12,360**	**8,899**	**1,830**	**1,190**	**4,630**	**93**	**77**	**4**	**35**	**50**	**6**	**95**
%										**4**	**37**	**53**	**6**	**100**

Cowper St (West) Block

Level	Use									Market Residential Mix				
	Affordable Housing		Residential		Commercial		Car Parking/Plant			Studio	1 bed	2 bed	3 bed	Total Apts
	Built Up Area (m2)	GFA (m2)FSR Area	Built Up Area (m2)	GFA (m2)FSR Area	Built Up Area (m2)	GFA (m2)FSR Area	Built Up Area (m2)	Car parks provided	Bicycle parks provided					
B2							3,112	62	52					
B1					185	148	3,112	62	52					
Ground					2,740	2,192								
Level 1					2,850	2,280				_	_	_	_	0
Level 2					2,850	2,280				_	_	_	_	0
Level 3	800	680	1,540	1,232						1	3	12	1	17
Level 4	800	680	1,540	1,232						1	3	5	1	10
Level 5	225	191	1,540	1,232						1	7	5	1	14
Level 6			910	728						2	3	1	1	7
Level 7			910	728						_	3	3	1	7
Level 8			910	728						_	3	3	1	7
Plant				0						_	_	_	_	0
Sub Total	**1,825**	**1,551**	**7,350**	**5,880**	**8,625**	**6,900**	**6,224**	**124**	**104**	**5**	**22**	**29**	**6**	**62**
%										**8**	**35**	**47**	**10**	**100**

Total	**1,825**	**1,551**	**19,710**	**14,779**	**10,455**	**8,090**	**10,854**	**217**	**181**	**9**	**57**	**79**	**12**	**157**

Notes:
Affordable housing component is not included in the mix and apt numbers listed above.
The following allowances have been assumed in the above schedule
Residential GFA is generally calculated at 80% of GBA envelopes to allow for articulation of the built form as well as balconies, external walls etc.
Affordable residential GFA is calculated at 85% of GBA due to efficient building configuration
The Bay St tower is has an additional 80% allowance for façade articulation to permit improved amenity such as cross ventilation
Commercial GFA is calculated at 80 % of GBA
Car parking assumed at 1 space per 50m2 of basement GBA
Bicycle parking assumed at 1 space per 60m2 basement GBA