

CITY OF PARRAMATTA

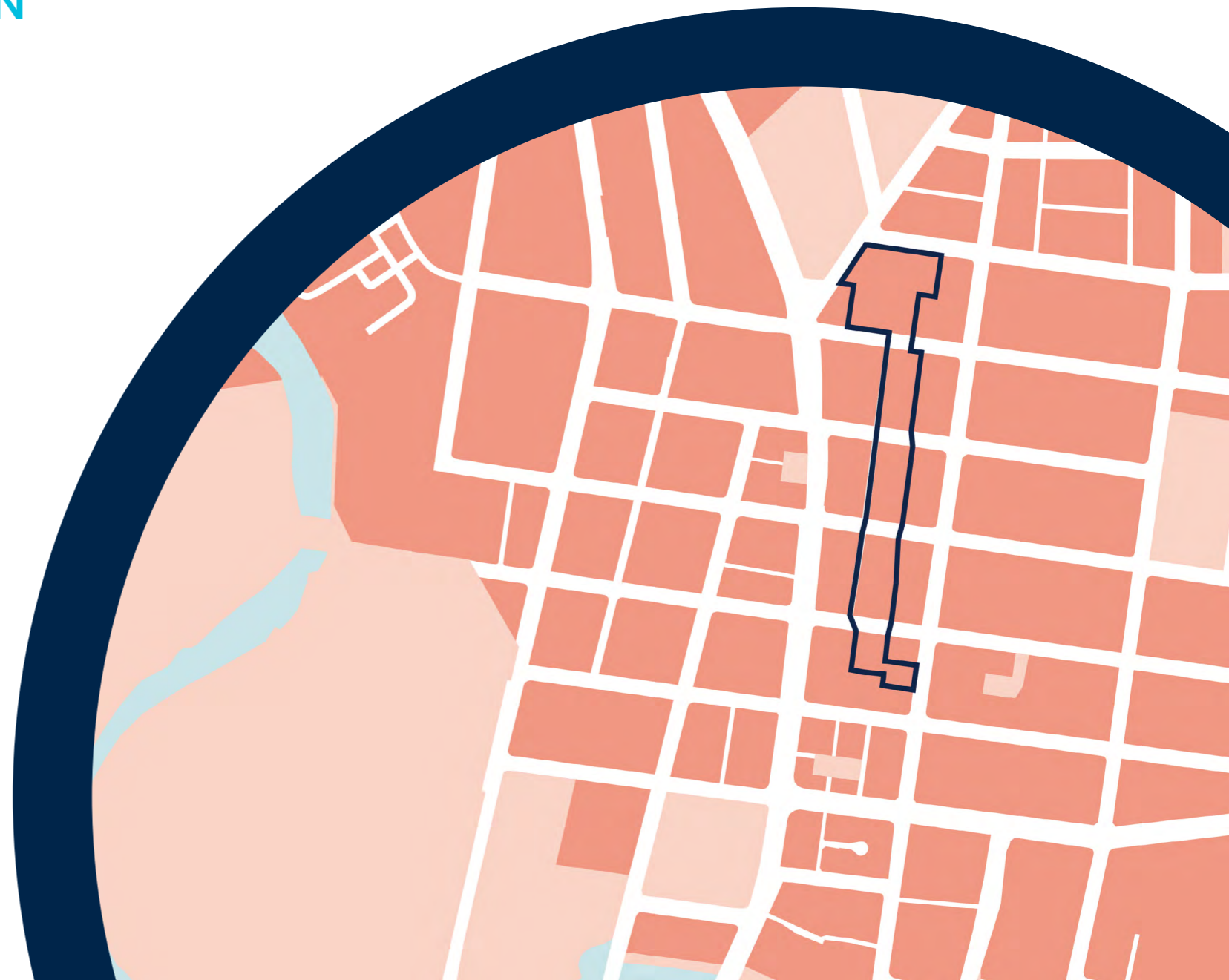
# NORTH-EAST

## PLANNING INVESTIGATION AREA

CONSOLIDATED URBAN DESIGN REPORT:  
RESPONSE TO GATEWAY DETERMINATION  
REF: PP-2024-1160

CITY PLANNING & DESIGN

NOVEMBER 2024





## ACKNOWLEDGMENT OF COUNTRY

We respectfully acknowledge the traditional owners and custodians of the land and waters of parramatta, the Dharug peoples.

Nunanglanungdyu baramada gulbanga  
mawa naa baramadagal dharug ngurrawa  
badura baramada dharug yura



# EXECUTIVE SUMMARY

On 10 September 2024 the Department of Planning, Housing & Infrastructure (DPHI) issued the Gateway Determination to amend Height of Buildings (HOB) and Floor Space Ratio (FSR) controls in the Parramatta LEP 2023 to facilitate high density housing in the North-East Planning Investigation Area (North-East PIA).

Subject to Gateway Conditions the planning proposal is required to be updated with consolidated supporting urban design analysis for the proposal, including the following matters:

- Demonstrated appropriate height transition to the adjacent HCA that minimises any potential visual and solar impacts.
- Cross sections that address the topography of the North-East PIA and its relationship to surrounding areas.
- Justification for any overshadowing impact to properties on Sorrell Street. Shadow analysis should include the time of year the proposed controls apply.
- Justification of potential overshadowing impacts from the proposed LEP controls on public open space areas compared to the existing controls.

This document presents the consolidated supporting urban design analysis to accompany the LEP amendments proposed, and forms the basis for Draft DCP controls in the North-East PIA. The analysis within the report demonstrates that the proposed controls satisfy the relevant Gateway Conditions in the following ways:

## Appropriate Height Transition

The proposal for the North-East PIA is underpinned by design principles that consider a whole of place approach to the blocks bound by Church Street to the West and Sorrell Street to the East. It is underpinned by a transition in scale and built form from the future high density development and taller built form along the Church Street North (CSN) spine, to the lower scale of the Sorrell Street Heritage Conservation Area (HCA) to the East.

Built form in the North-East PIA extends the City Centre north of Parramatta River, however transitions to more residential character and diverse typologies rather than unbroken podiums. The proposed built form outcomes utilise a lower height datum combined with block specific site planning strategies for setbacks, a coordinated orientation to the massing and form, as well as building separation strategies to facilitate the transition.

## Minimisation of Visual Impacts

The combination of co-located communal open spaces on the ground floor, using space as an organising element, and orientating short edges of towers towards the HCA, maximises separation between buildings.

This has the effect of maximising views to sky, maintaining views to heritage items and reducing hard, unbroken wall lengths. In addition, slender tower forms, finer grain street walls, and vegetated green links and laneways allow greater opportunities for canopy coverage.

This provides a more appropriate setting for heritage items, contributes to a more human-scale interface, and assist with interrupting views to taller tower typologies in CSN from Sorrell Street.

## Addressing Topography

In an east-west direction the height remains consolidated around the Church St axis before transitioning down towards the lower valleys of Brickfields Creek and the Parramatta River.

In a north-west direction this same transitioning occurs between St Patricks Cemetery and the Parramatta River, which is why more modestly scaled 6-storey forms have been recommended for the northern most sites of the North-East PIA.

## Shadow Analysis (Winter Solstice & Spring Equinox) and Solar Access

During both midwinter and the spring equinox, there is no overshadowing from the North-East PIA Planning Proposal on Sorrell Street in the morning.

Additional overshadowing to the east beyond the CSN profile occurs from early afternoon, however it is expected most north and east facing buildings within the HCA and the North-East PIA should continue to receive a minimum of 3 hours of sunlight during the course of the day.

Council has included additional overshadowing diagrams for the Equinox scenario in addition to the Winter Solstice within this report. The diagrams illustrate buildings on Sorrell Street will achieve a minimum 4 hours of direct sunlight during the Equinox and Winter Solstice. This exceeds the comparable requirement previously placed on the CBD Planning Proposal by the State Government which conditioned a minimum 2 hours of direct sunlight for HCAs adjoining the CBD PP.

No additional overshadowing to any nearby public open spaces occurs as a result of the North-East PIA Planning Proposal.

# CONTENTS

## 1. INTRODUCTION

## 2. EXISTING CONTEXT & STUDY AREA

2.1 Study Area

2.2 Existing Context

## 3. DESIGN PRINCIPLES & STRATEGIES

3.1 Church Street North State Government Led Rezoning

3.2 State Environmental Planning Policy Amendment  
(Church Street North Precinct) 2023

3.3 Design Principles for the North-East PIA

3.4 Design Strategies for the North-East PIA

## 4. URBAN DESIGN ANALYSIS & RESPONSE

4.1 Approach & Assumptions

4.2 Block Qualities & Design Response

4.3 Urban Design Response

4.4 Gateway Recommendation for FSR & Height

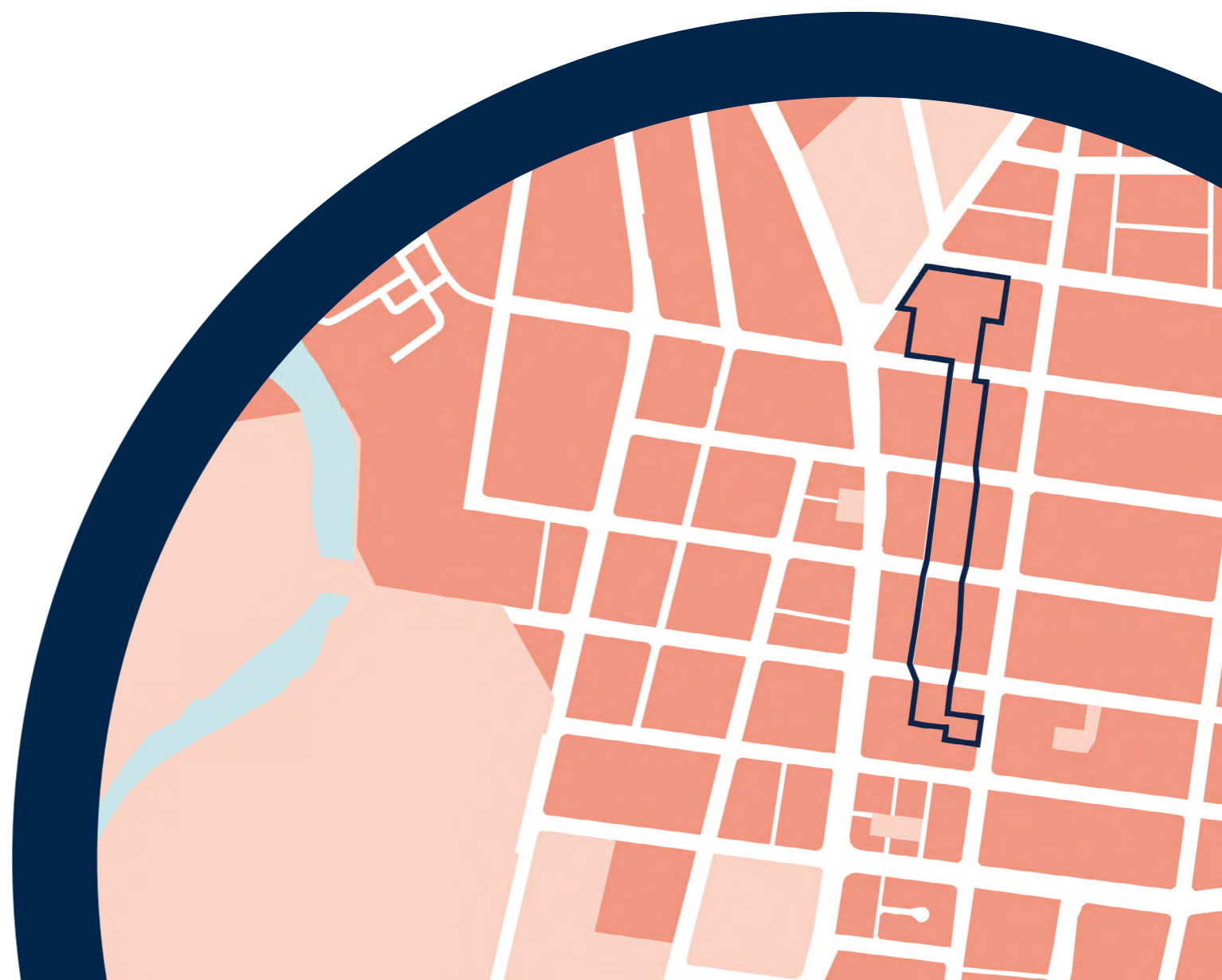
## 5. SHADOW ANALYSIS

5.1 Shadow Analysis: Winter Solstice

5.2 Shadow Analysis: Vernal (Spring) Equinox

## 6. CONCLUSION

# 1. INTRODUCTION



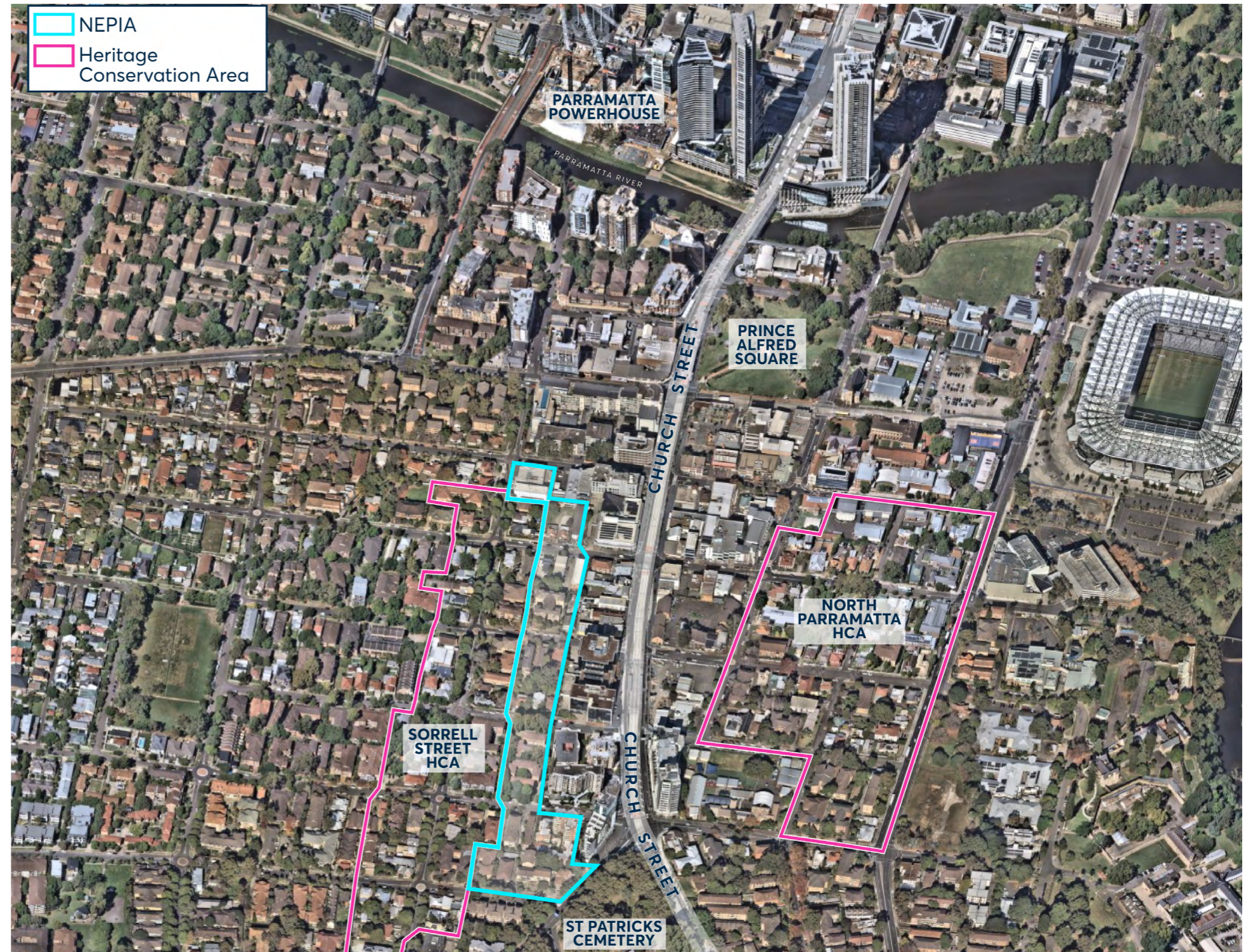
# INTRODUCTION

The North-East Planning Investigation Area (NEPIA) is located on the north-eastern fringe of the Parramatta CBD. The properties within the North-East PIA are located between the land parcels fronting Church Street to the west and the Sorrell Street Heritage Conservation Area (HCA) to the east. The area extends from Isabella Street in the north to Ross Street in the south.

Future development within the North-East PIA will be critical in creating a transitional edge between larger-scale development along the Church Street North spine and the Sorrell Street HCA.

The following document consolidates Council's urban design analysis of the design principles and strategies underpinning the desired outcomes for the North-East PIA and the analysis which informed the draft DCP controls. The consolidation of Council's urban design analysis responds to the Department of Planning, Housing and Infrastructure's gateway determination for proposed amendments to the Parramatta LEP 2023 (Ref: PP-2024-1160).

This report includes the considerations, investigations and strategies underpinning the recommended built form controls. It includes issues relating to the overall urban design of the precinct, topography, amenity and character, along with further overshadowing diagrams intended to facilitate an understanding of the full impact of the proposal, how the controls were derived, and to assist the community with understanding the proposed changes.

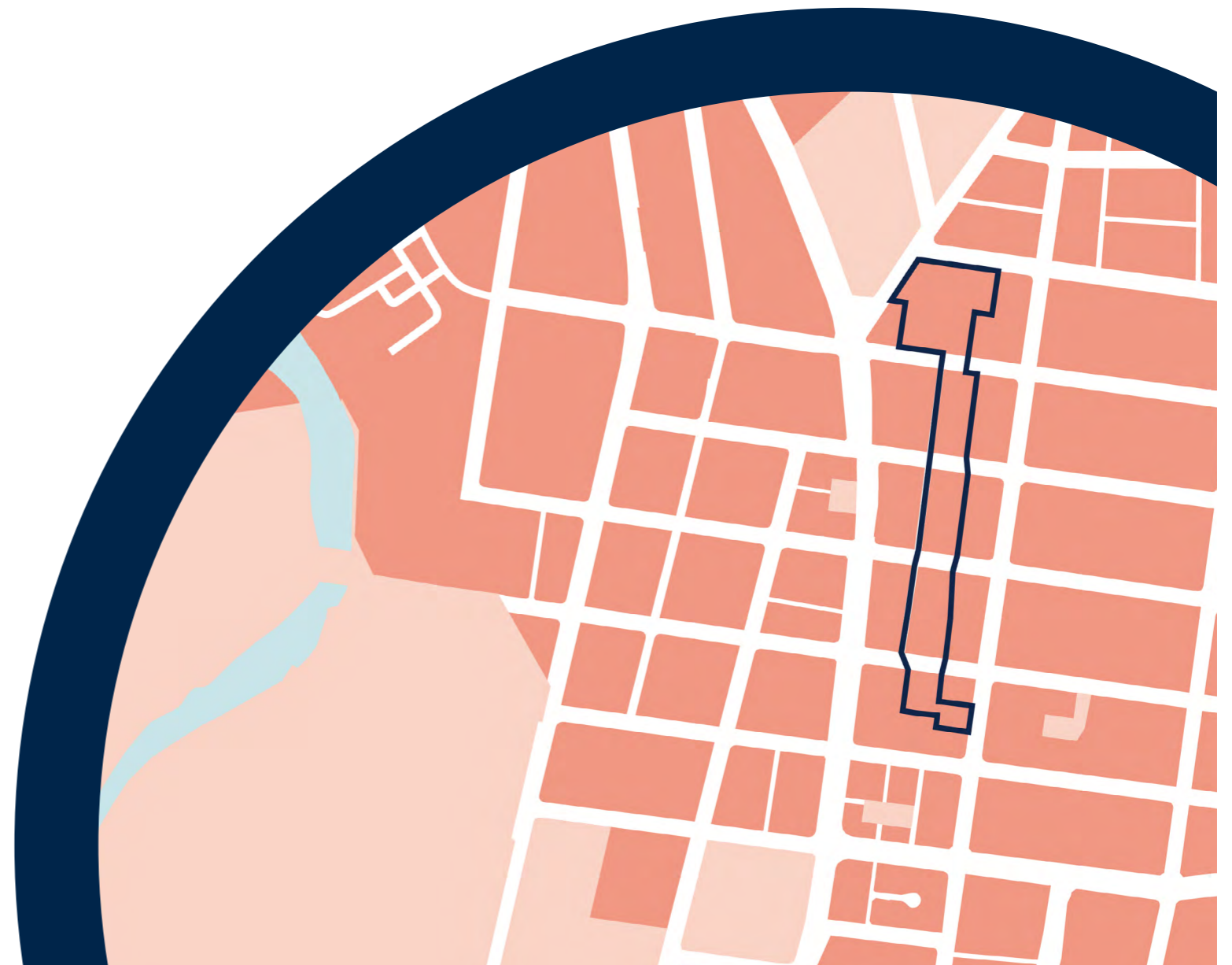


AERIAL VIEW OF NEPIA WITH PARRAMATTA CBD IN THE BACKGROUND.

# 2. CONTEXT & STUDY AREA

2.1 Study Area

2.2 Existing Context

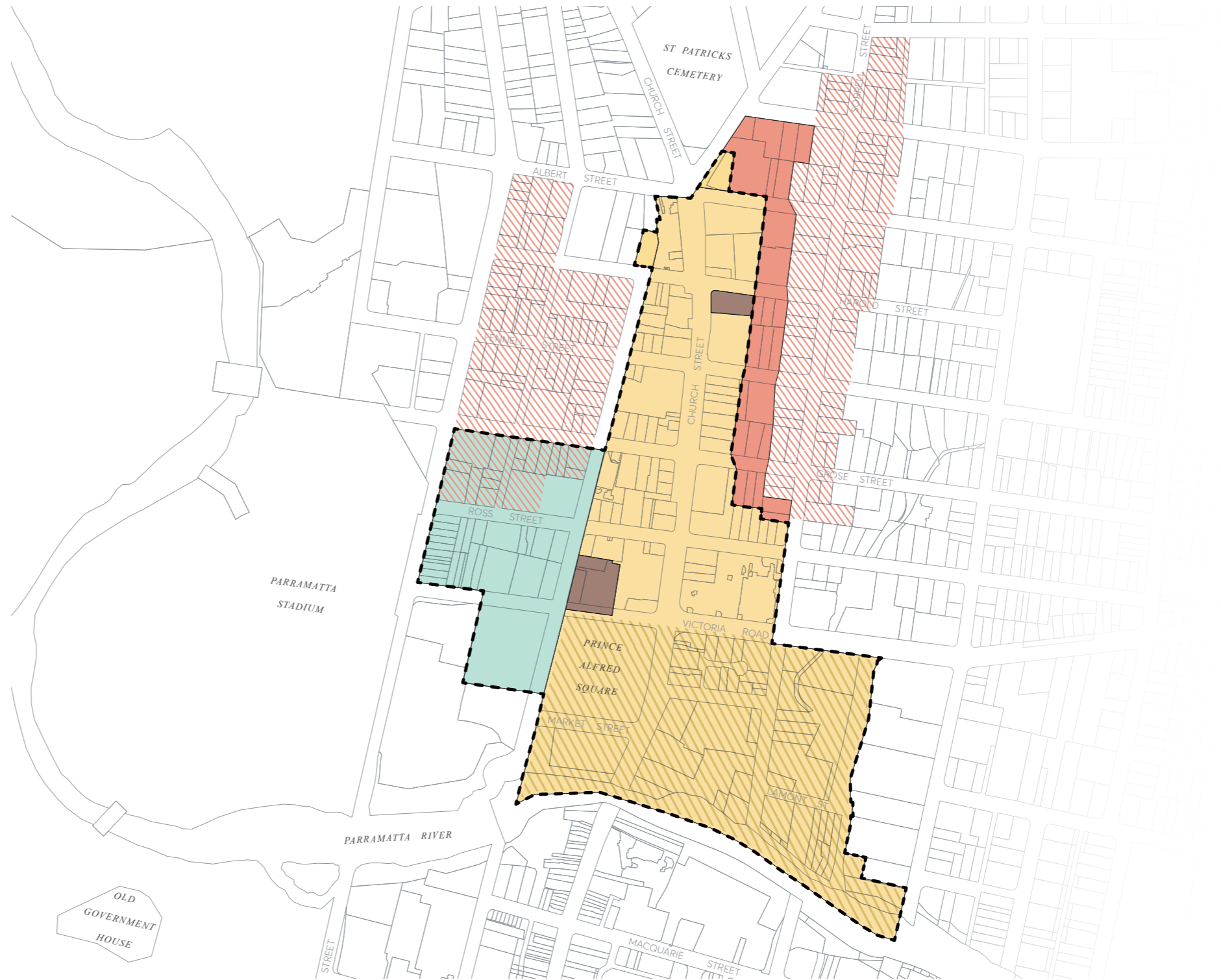


## 2.1 STUDY AREA

The North-East PIA applies to land that sits between the northern periphery of the Parramatta City Centre also known as Church Street North (in solid yellow) and Sorrell Street Heritage Conservation Area (hatched in orange) to the east of the North-East PIA.

The adjacent Sorrell Street HCA is a residential precinct where the grain of historic subdivision and tree-lined character along the street has been maintained. Historic buildings exist mostly on corners and have an important role in marking intersections and permitting views west up to the ridge of Church Street.

Future development within the North-East PIA will play a critical part in creating a transitional edge between higher-scale tower development along the Church Street spine and the low-scale Sorrell Street HCA.



### LEGEND

- CHURCH STREET NORTH PRECINCT
- SEPP3 ZONING CHANGES
- GENERAL CCDCP CONTROLS TO APPLY
- NORTH EAST PIA
- EXISTING SITE SPECIFIC DCP
- NO CHANGE TO EXISTING FSR OR HOB
- HERITAGE CONSERVATION AREA



NTS

NORTH-EAST PIA STUDY AREA.



## 2.2 EXISTING CONTEXT

The Sorrell Street HCA borders the North-East PIA to the east with Pennant Hills Road and Isabella St forming the northern edge.







The existing fabric and character surrounding the North-East PIA has a mix of building forms, tree-lined, and residential in nature with 3 to 4 story walk up apartments interspersed with heritage items and cottages along Sorrell Street.

A number of sites located in the northern section of the NEPIA consist of 3-6 storey medium density residential development.

There are five blocks between the northern and southern edges of the North-East PIA which includes the following sites:

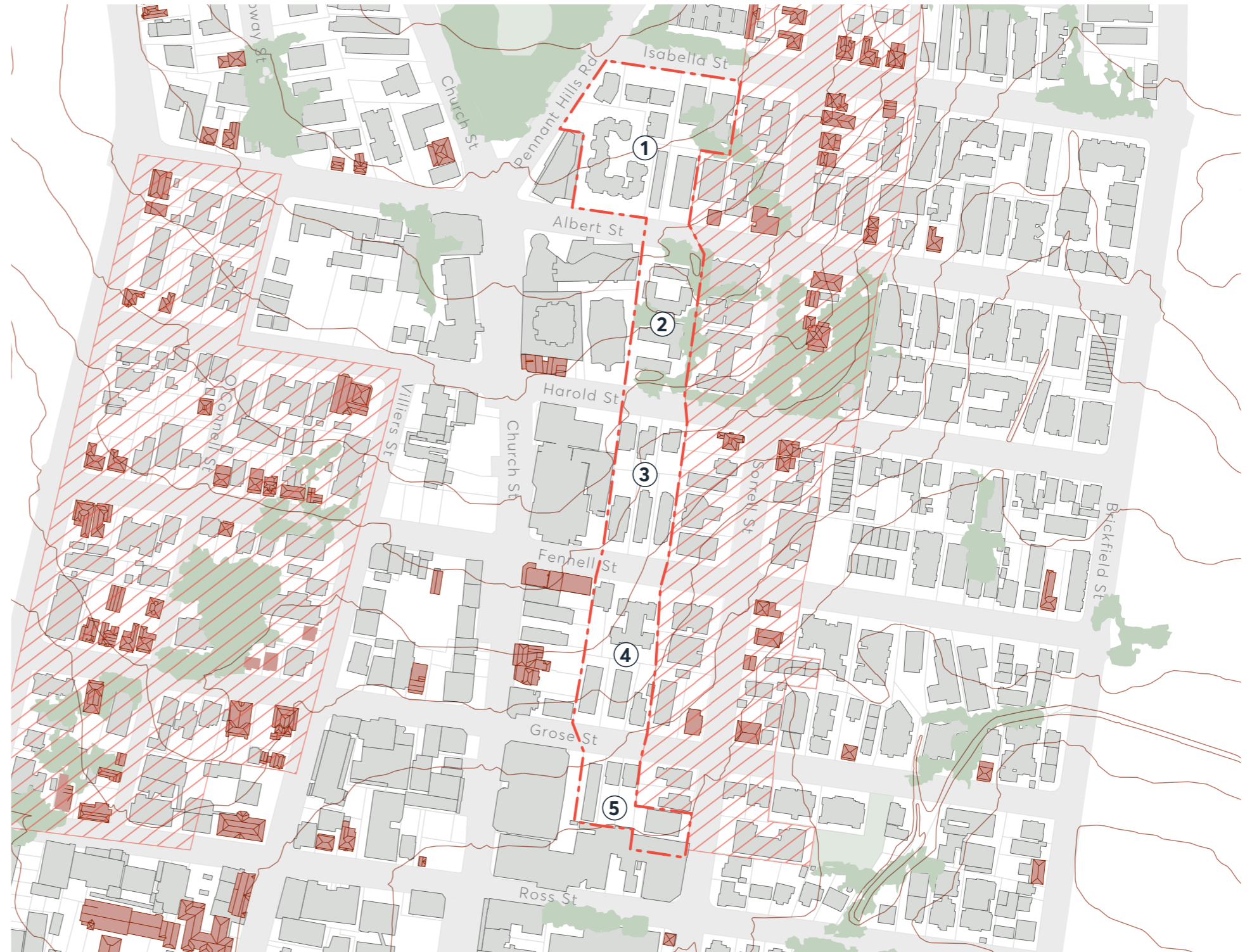
- ① 1, 9, 11, 17 Isabella St, and 36, 38, 40 Albert St
- ② 17 Albert St, and 20 Harold St
- ③ 23, 25, 27 Harold St, and 32, 34, 34A Fennell St
- ④ 33, 37 Fennell St, and 36, 38, 40 Grose St
- ⑤ 35, 37, 39 Grose St, and 25, 29 Sorrell St

### LEGEND

-  NEPIA BOUNDARY
-  HERITAGE CONSERVATION AREA (HCA)
-  HERITAGE BUILDINGS
-  EXISTING VEGETATION
-  2M CONTOURS
-  BLOCK NUMBER



NTS



NORTH-EAST PIA CONTEXT BETWEEN HCAS AND EXISTING FABRIC INCLUDING HERITAGE ITEMS.

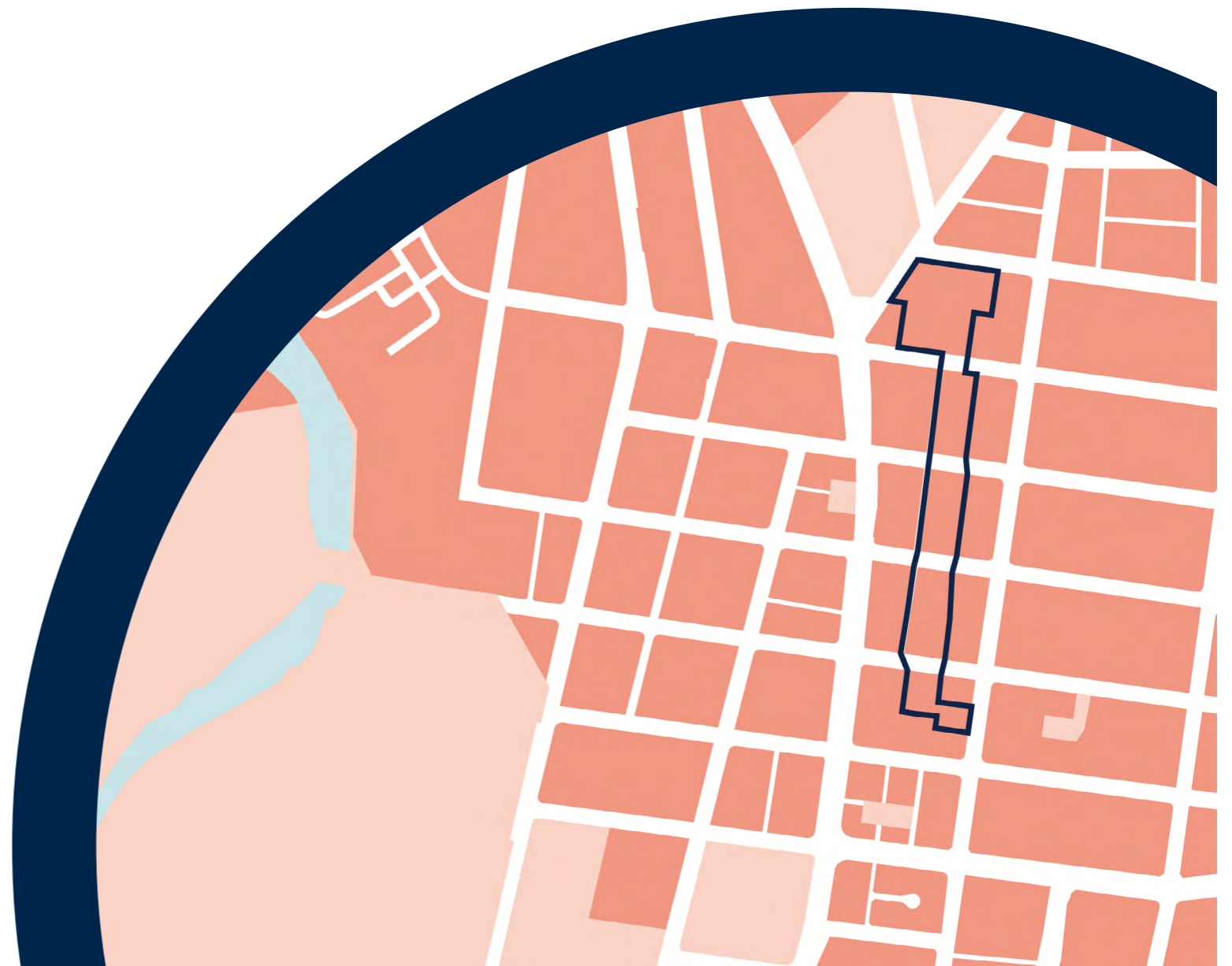
# 3. DESIGN PRINCIPLES & STRATEGIES

3.1 Church Street North State Government Led Rezoning

3.2 State Environmental Planning Policy Amendment  
(Church Street North Precinct) 2023

3.3 Design Principles for the North-East PIA

3.4 Design Strategies for the North-East PIA



# 3.1 CHURCH STREET NORTH STATE GOVERNMENT LED REZONING

DECEMBER  
2023

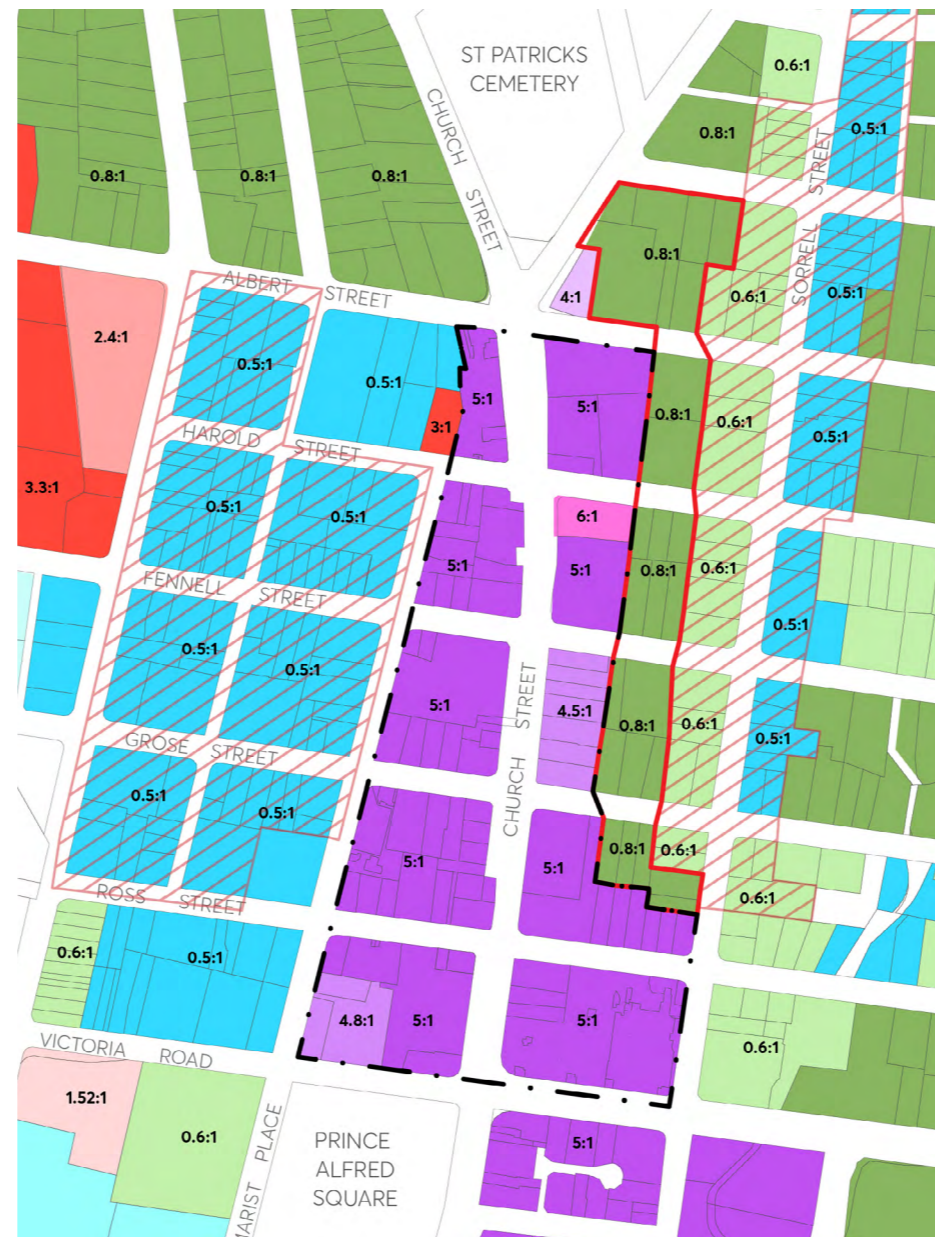


The DPHI established new controls for the Church Street North Precinct (CSN) which came into effect 1 July 2024.

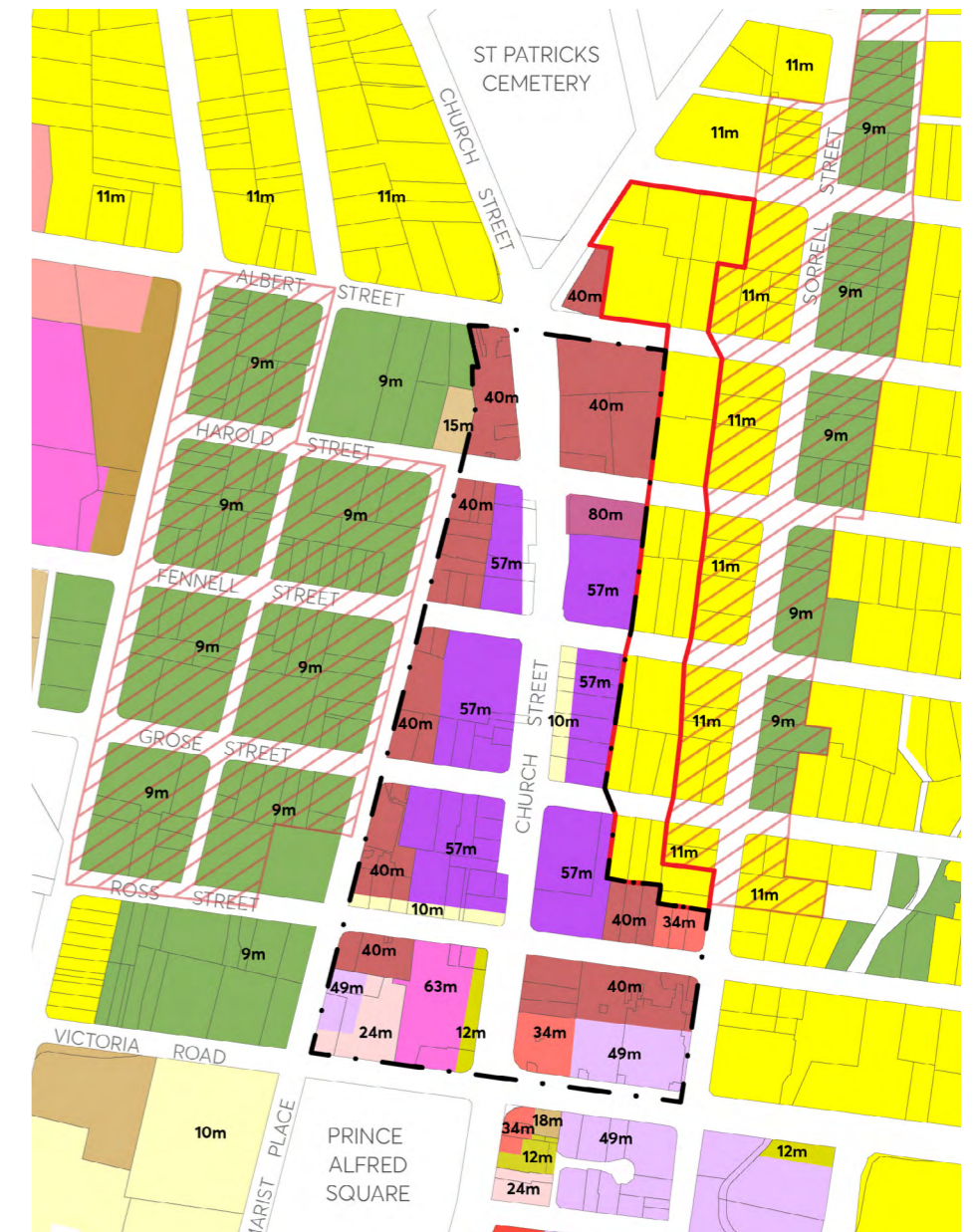
The properties along Church Street, North-East PIA and the HCA are part of a contiguous block pattern between Church Street and Sorrell Street that needed to be considered from a whole of place perspective.

In November 2023 Council endorsed a work program to review the North-East PIA planning controls at the beginning of 2024.

The controls were reviewed in the context of the CSN Precinct SEPP controls and transition to the Sorrell Street HCA to the east. The review and subsequent urban design studies inform new LEP and DCP controls for the North-East PIA.






EXISTING NORTH-EAST PIA FSR CONTROLS ADJACENT TO CSN IN PLEP 2023.



EXISTING NORTH-EAST PIA HEIGHT OF BUILDINGS (HOB) CONTROLS ADJACENT TO CSN IN PLEP 2023.

**LEGEND**

-  NEPIA BOUNDARY
-  CSN BOUNDARY
-  HERITAGE CONSERVATION AREA (HCA)



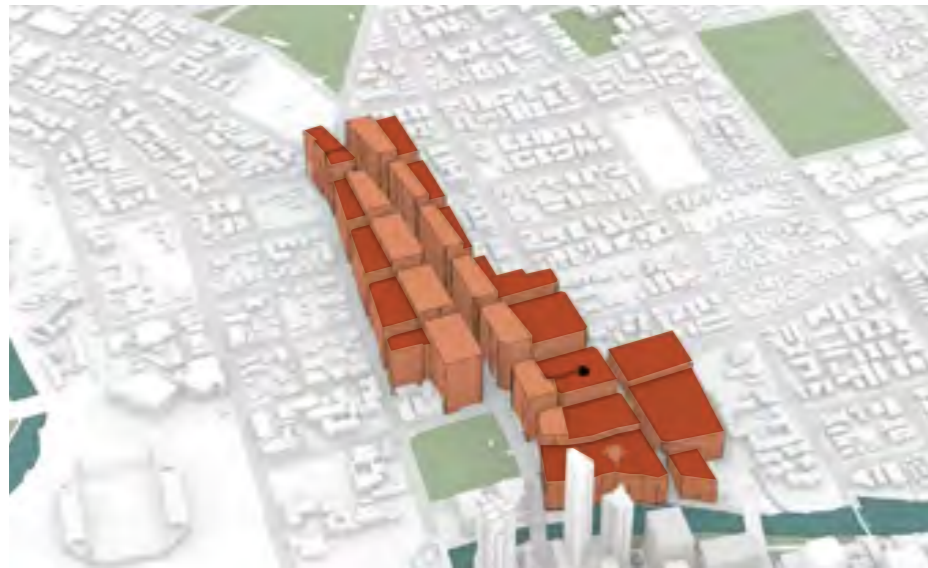
NTS

## 3.2 STATE ENVIRONMENTAL PLANNING POLICY AMENDMENT CHURCH STREET NORTH PRECINCT 2023

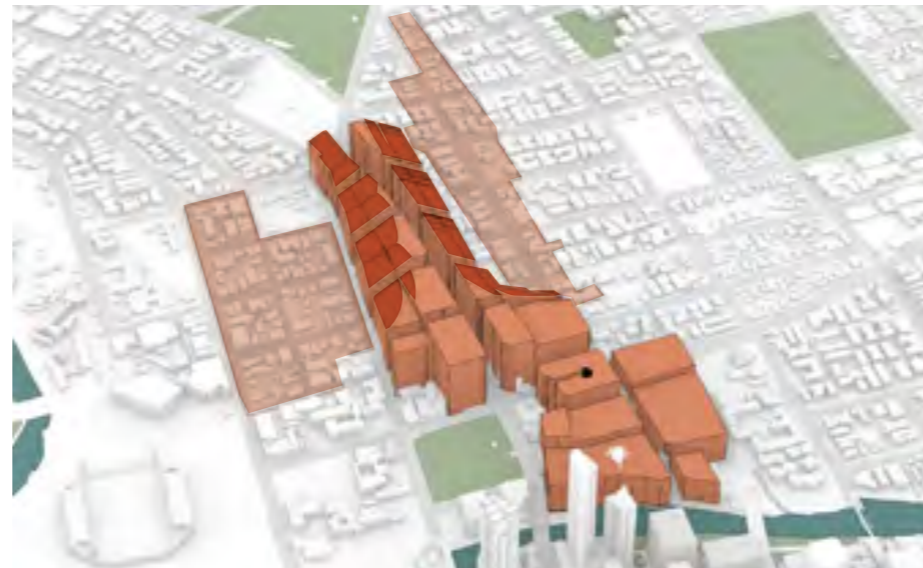
(Prepared by Hassell on behalf of DPHI)

The Urban Design Principles underpinning the State Environmental Planning Policy Amendment (Church Street North Precinct) 2023 (SEPP 3) were based on the recommendations and strategies from a study prepared by Hassell and commissioned by DPHI. The key principles were informed by

mapped building heights in the CSN, a skyline strategy and acknowledgment of sites within the precinct that would be unlikely to redevelop due to existing large 6-8 storey strata-titled properties. These are identified below.



RESPECT AND REINFORCE THE IDENTITY OF CHURCH STREET NORTH



MINIMISE VISUAL IMPACTS TO THE HERITAGE CONSERVATION AREAS



TRANSITION TO THE ADJOINING LOW SCALE RESIDENTIAL USES



PROTECT SOLAR ACCESS TO PUBLIC SPACES



RETAIN SIGNIFICANT VIEW CORRIDORS



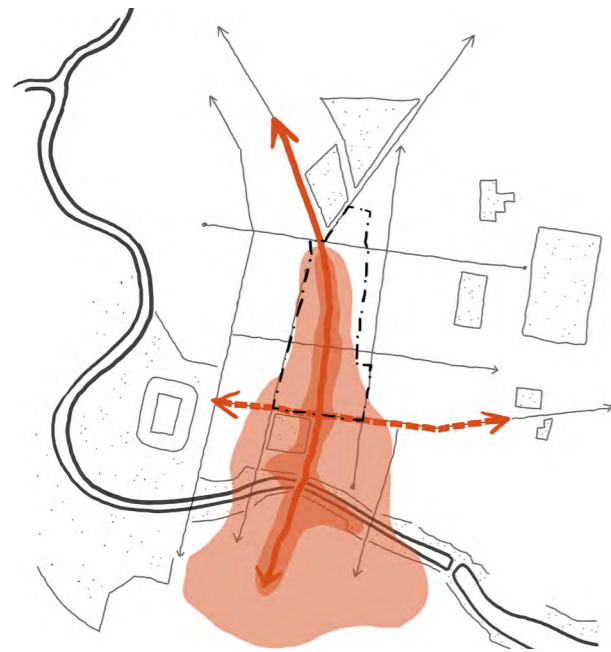
RESPOND TO CLUSTERS OF HERITAGE ITEMS

## 3.3 DESIGN PRINCIPLES FOR THE NORTH-EAST PIA

Although the North-East PIA is defined as a relatively narrow sliver of land between the northern extents of the Parramatta City Centre and the Sorrell Street HCA, the design process has been carried out concurrently with the drafting of the Church Street North DCP. This was to ensure consistency between built form outcomes.

This study was prepared giving consideration to what a suitable development outcome would be for the North-East PIA, and has taken into account the balance of existing character, especially the designated heritage areas, and the new planning framework established by the recent SEPP 3 amendments.

Based on a spatial analysis of the area, four overarching design principles were established to guide design work and arrive at recommendations for the built form.



### 1) CONTINUITY OF THE CITY CENTRE WITH A RESIDENTIAL FOCUS

Balanced with a response to the precinct's unique residential setting, future controls should provide continuity between the north and south sides of the River.



### 2) PROVIDING A TRANSITION TO HERITAGE CONSERVATION AREAS

Addressing the balanced axial character of the Sorrell Street HCA in contrast to the eclectic nature of the western HCA



### 3) HIGHLY VEGETATED STREETS AND HERITAGE ALIGNMENT

Enable increased potential for street tree planting and trees in setbacks along streets characterised by their green, residential character.



### 4) RESPONDING TO THE LANDSCAPE AND RIVER SETTING

Elevate the topographical and ecological features of the precinct to contribute to the character and legibility of the precinct.

## 3.4 DESIGN STRATEGIES FOR THE NORTH-EAST PIA

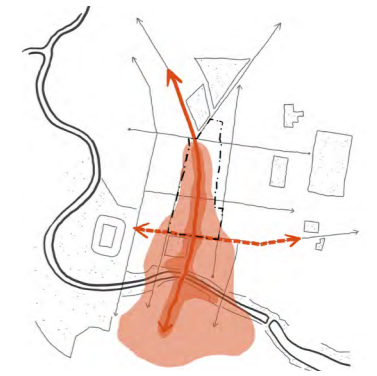
### 3.4.1 Transitioning from the City Centre

Transitioning typologies from city centre to CSN to NEPIA.

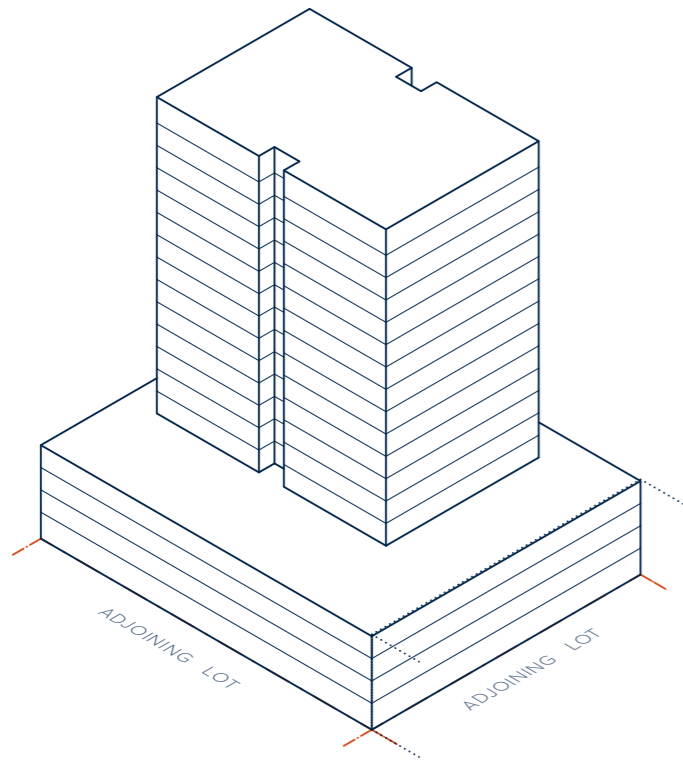
A key strategy for the broader North Parramatta area is about creating continuity between the Parramatta City Centre south of the River and Church Street North. The priority is to ensure the active, high-street character of Church Street is consistent with the rest of the City Centre and built as a continuous street wall with towers set back above.

The difference between North Parramatta and the City Centre's commercial core to the south is that while a fully commercial podium built to boundary is an appropriate response around the commercial core, the Church Street North precinct will most likely be a more residential precinct that should support residential uses in both tower and podium.

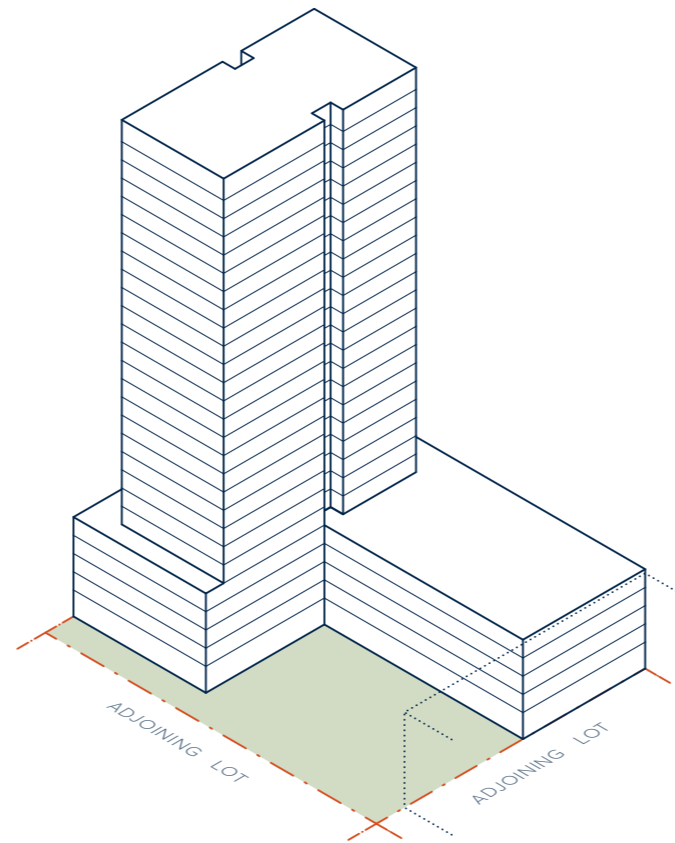
The objective is to create controls to support finer grain forms that enable apartments to be located within the lower levels of the buildings, provide more space at the ground floor for communal open space that is co-located with deep soil for canopy cover, and increased residential amenity where possible.



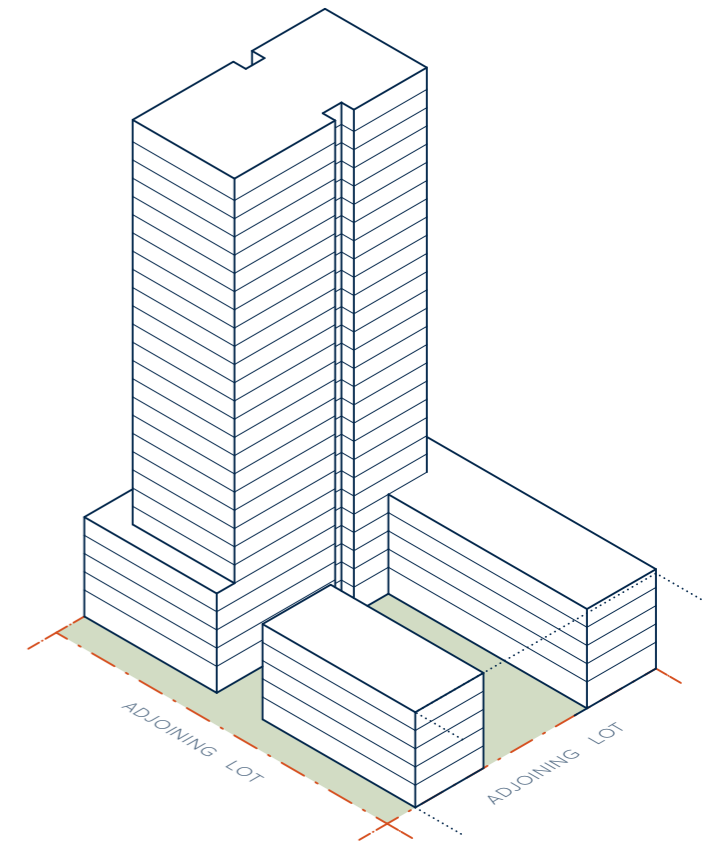
PRINCIPLE 1



EXAMPLE OF A FULLY COMMERCIAL PODIUM AND TOWER SCENARIO (CITY CENTRE).



RESIDENTIAL PODIUM AND TOWER BETTER SUITED TO CSN AND NEPIA FOR RESIDENTIAL DEVELOPMENT.



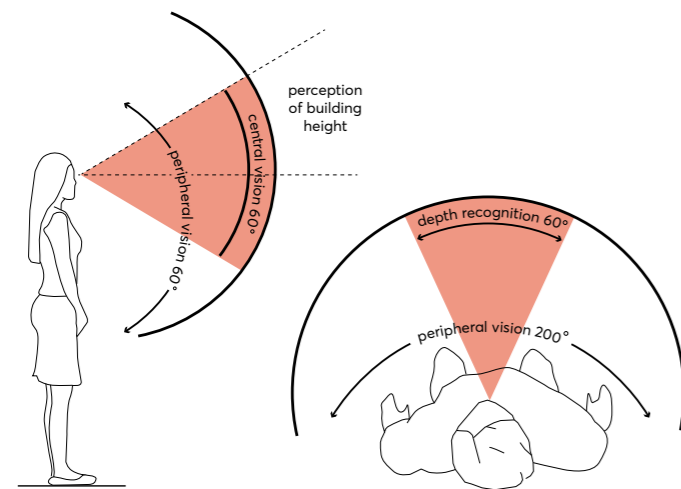
EXAMPLE OF A FINER GRAIN RESIDENTIAL PODIUM AND TOWER SCENARIO.

### 3.4.2 Providing a transition to heritage

Addressing the balanced axial character of the Sorrell Street HCA in contrast to the broader nature of the western HCA.

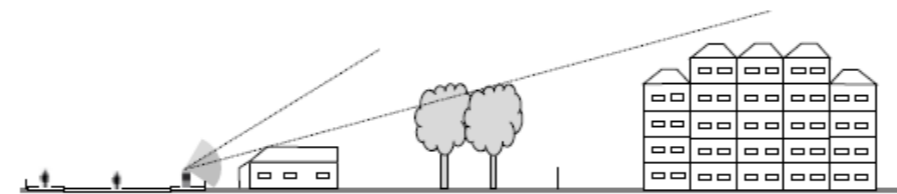
A key strategy for the broader North Parramatta area is to establish a comprehensive approach to transition that includes a combination of both building height and site planning. Methods for achieving transition include:

- Stepping in building height across the block and establishment of clear height datums;
- Containment of development within the human viewshed (see diagram below);
- Creating space at ground to give curtilage to heritage;
- Supporting deep soil that enables canopy tree planting as a setting to heritage;

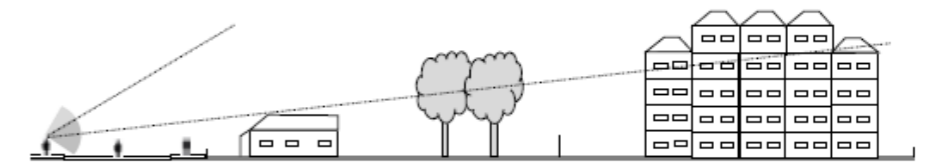


Key arcs of the human field of view. Source: *What Actually Is a Heritage Conservation Area? A Management Critique Based on a Systematic Review of NSW Planning Documents*

- Providing vegetated setbacks and building breaks between Church Street, mid-block (NEPIA) and HCA;
- Locating communal open space on the ground to use space as a frame/backdrop to the HCA;
- Orientating the short edge of towers towards the HCA;
- Maximising separation between towers where it can increase views to sky when observed from the HCA, and;
- Encouraging slender tower forms and finer grain street wall typologies.



Seek to have building forms mostly hidden when directly facing a heritage item from the footpath



Viewer across the street (worst-case scenario); dominance of taller building forms within the field of view should be minimised



PRINCIPLE 2

The Key Method illustrated below that has been used to set building heights in SEPP 3 used by the DPHI has been predominantly adopted to determine proposed building heights for the North-East PIA.

Images extracted from: *Church Street North Urban Design Study* by Hassell prepared for NSW DPHI, November 2023.

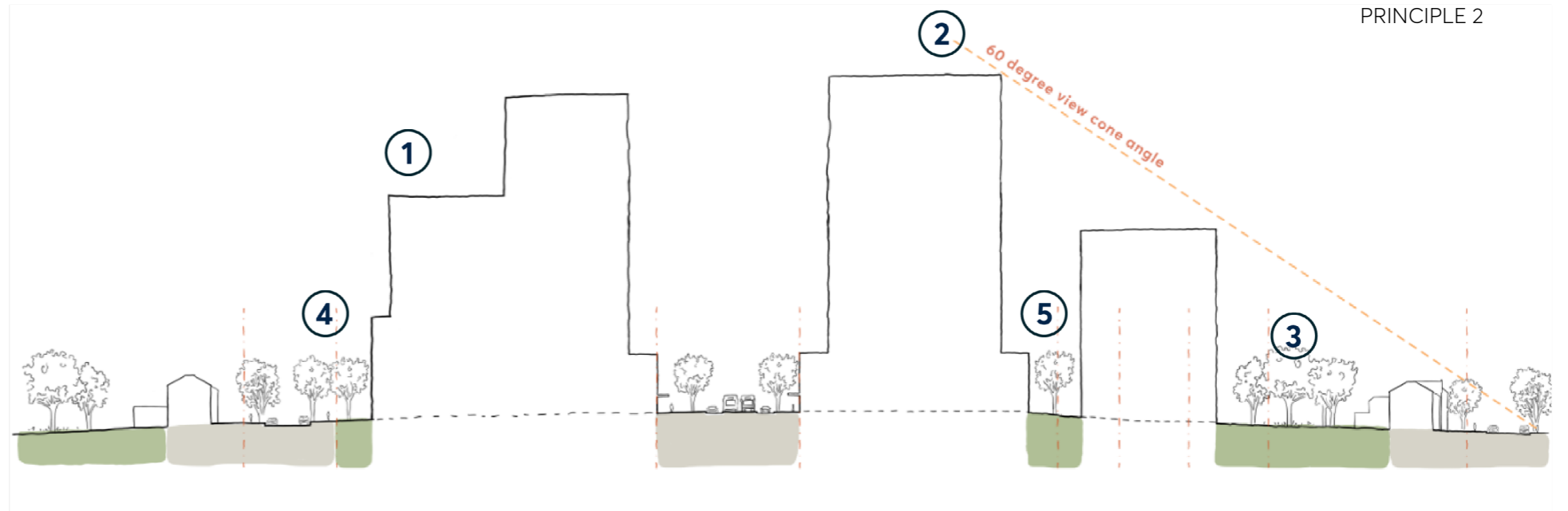
### 3.4.3 Stepped building form between Church St North and HCA

Space and building height principles used to transition to the Sorrell Street HCA (East Side of Church Street).

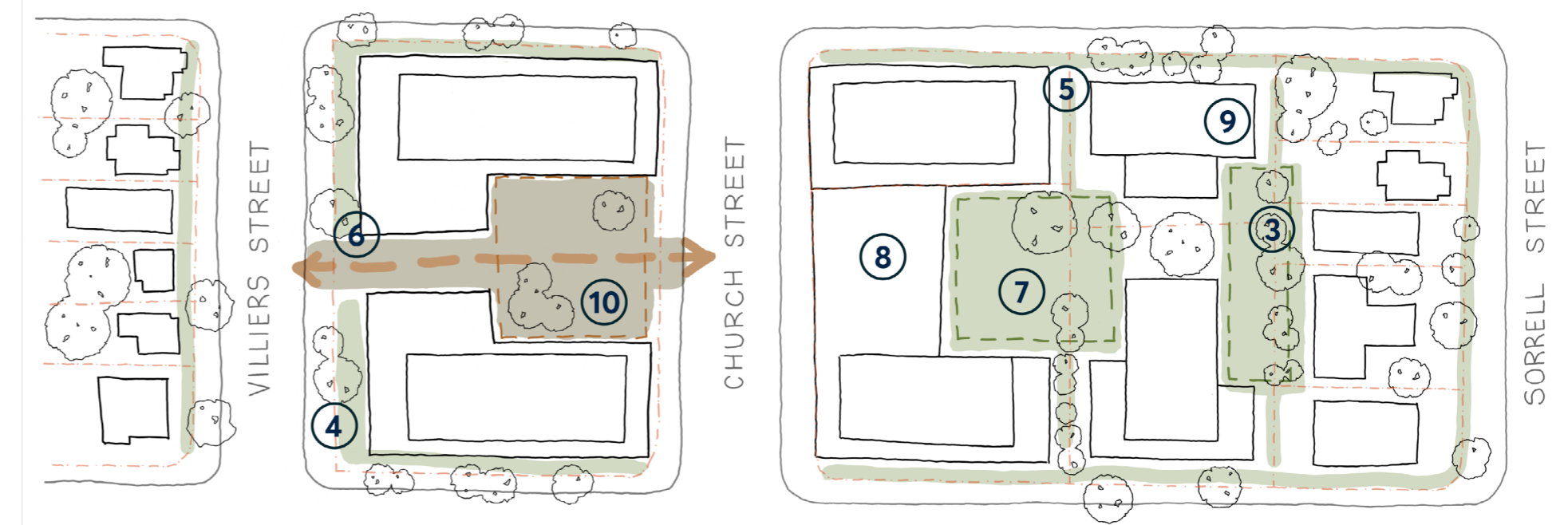
- ① Stepping building heights
- ② Views to sky above towers
- ③ Space for trees as a setting to the HCA
- ④ Vegetated street setback as interface to Villiers Street
- ⑤ Podium forms set back from shared boundaries
- ⑥ Through site link to organise built form
- ⑦ Communal space shared across developments
- ⑧ Minimum 24m separation between towers
- ⑨ Orientate towers with short edge to HCA
- ⑩ Civic space on Church Street to service future population



PRINCIPLE 2



NORTH PARRAMATTA HCA | CHURCH STREET NORTH PRECINCT | NORTH-EAST PIA | SORRELL ST HCA



METHODS FOR ACHIEVING TRANSITION AND UNIFYING DEVELOPMENT ACROSS THE PRECINCT THROUGH BUILDING HEIGHTS AND SETBACKS BETWEEN CHURCH STREET AND THE SORRELL STREET HCA.

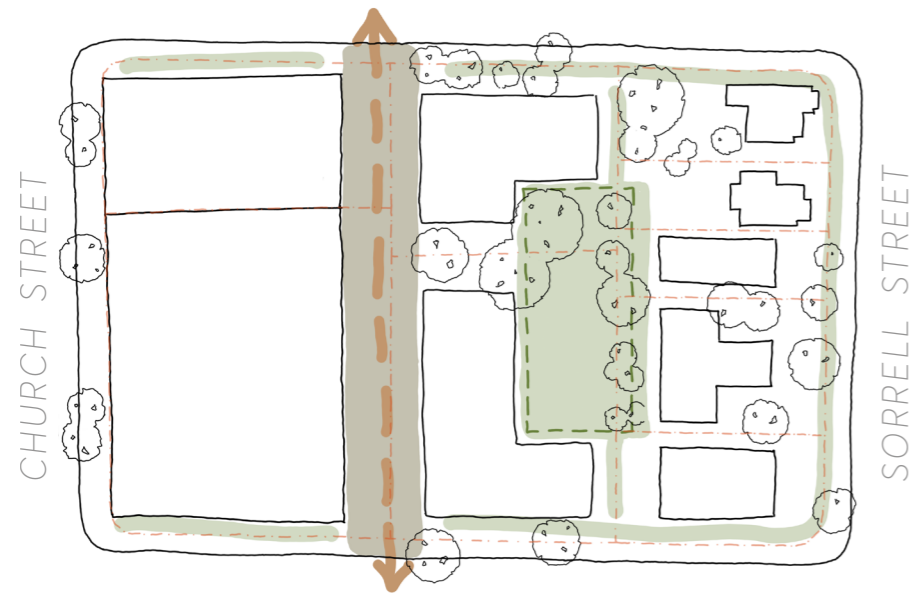


### 3.4.4 Building orientation, separation and canopy planting

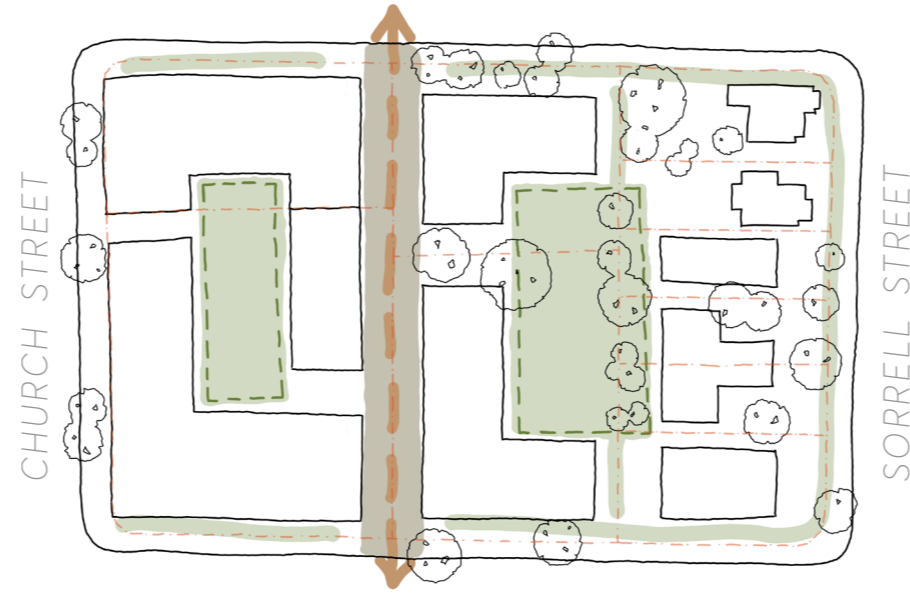
Consolidated communal open spaces, vegetated setbacks, canopy planting and linear separation recommended.



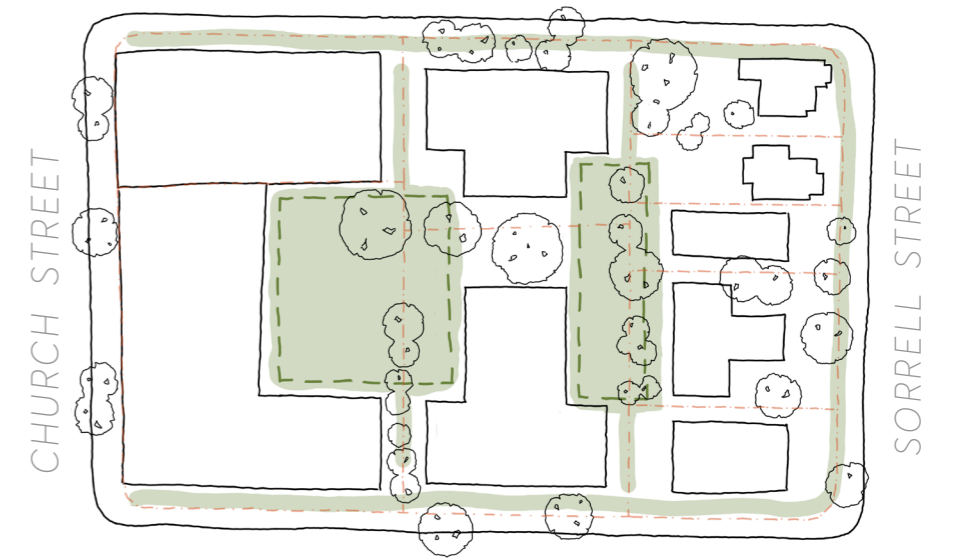
PRINCIPLE 2



I) LINEAR SEPARATION THROUGH A LANEWAY OR VEGETATED SETBACK.



II) FINER GRAIN BUILDING TYPES THAT RESPOND TO THE STREETScape AND EXISTING GRAIN OF THE HCA.

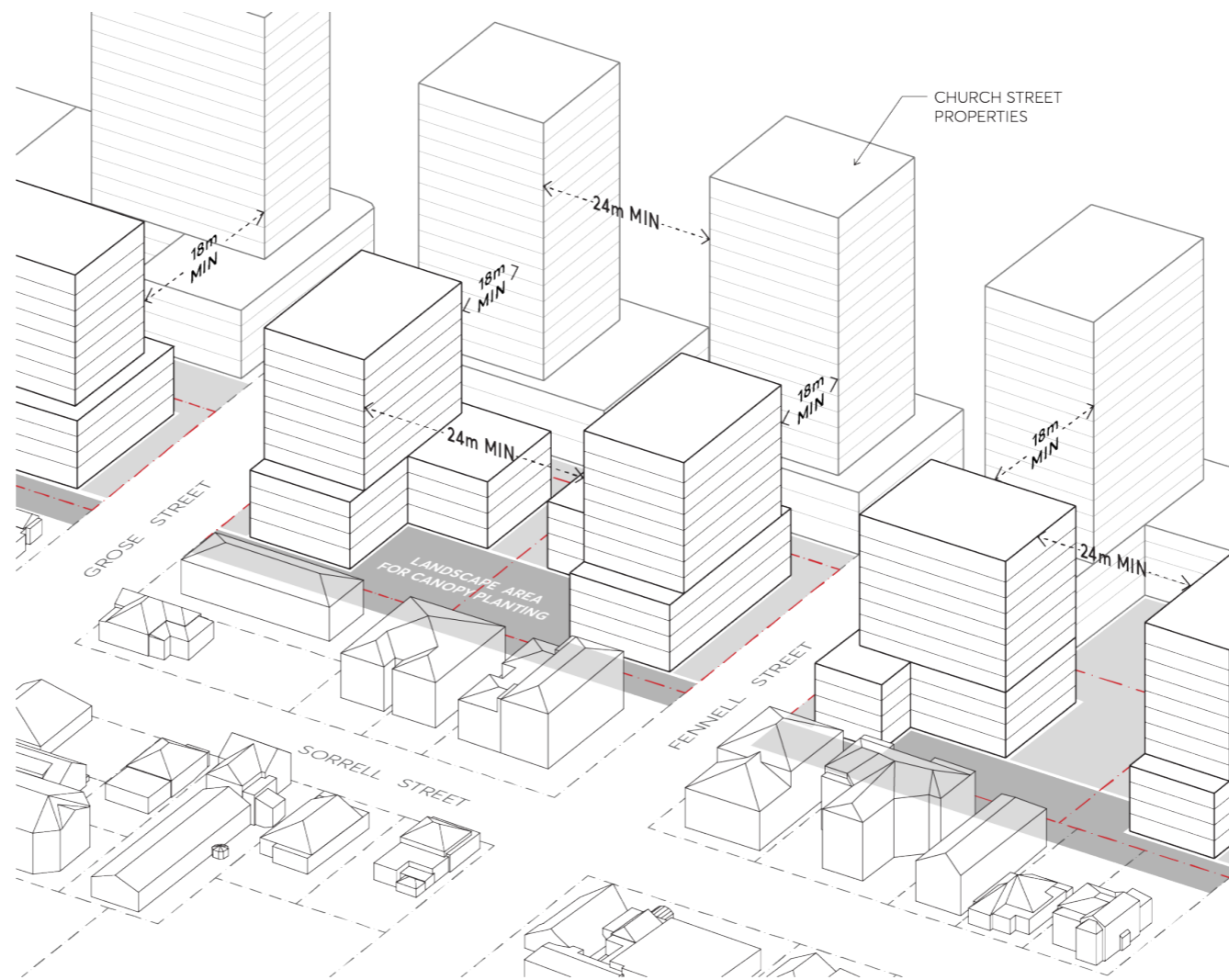


III) COURTYARDS AT GROUND CONSOLIDATED ACROSS LOTS TO CREATE SPACE BETWEEN BUILDINGS.

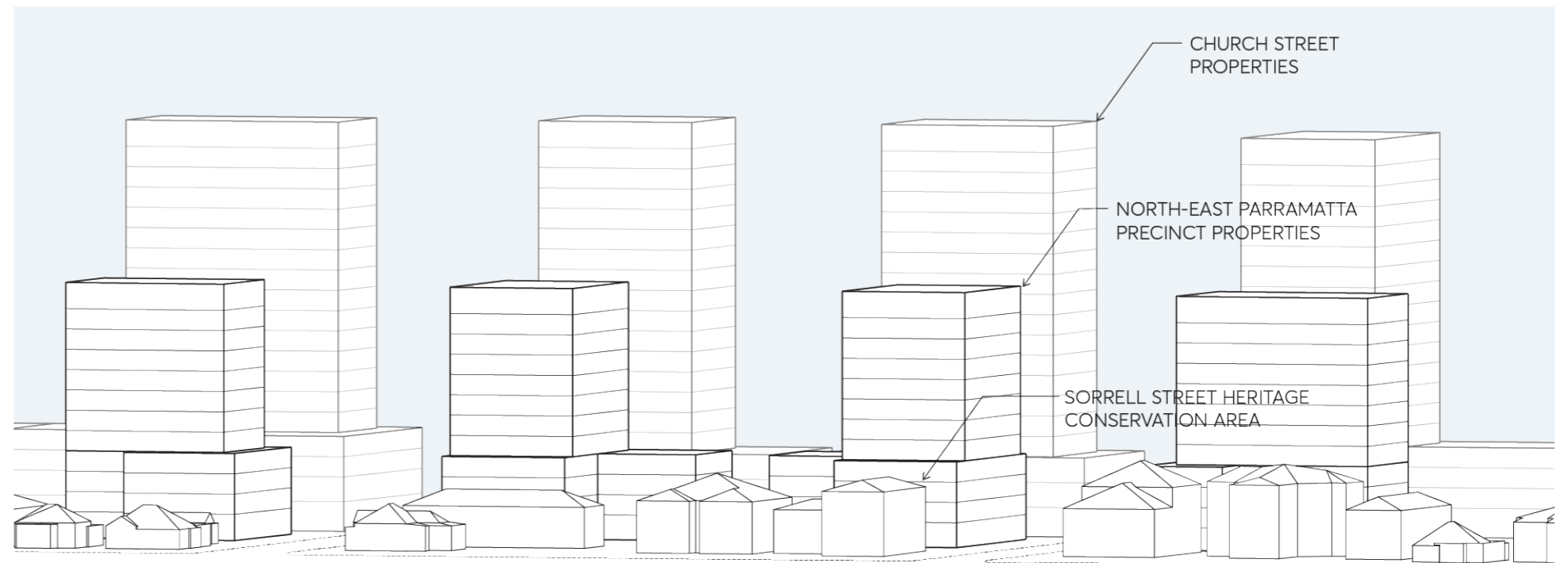
### 3.4.5 Massing strategy

The co-ordinated massing strategy for the broader North Parramatta area encourages generous spaces between towers. These are consistent with separation distances recommended by the Apartment Design Guide at a minimum, creating an area that has good residential amenity.

Towers on Church Street must provide a minimum separation of 24m, regardless of orientation or floorplan. This is to avoid creating a 'wall' of towers along Church Street, maximise solar access to the mid block, and create generous views to sky between towers when observed from the HCA.



MASSING STRATEGY AND BUILDING SEPARATION.



NORTH-EAST PIA VIEWS TO SKY.



PRINCIPLE 2

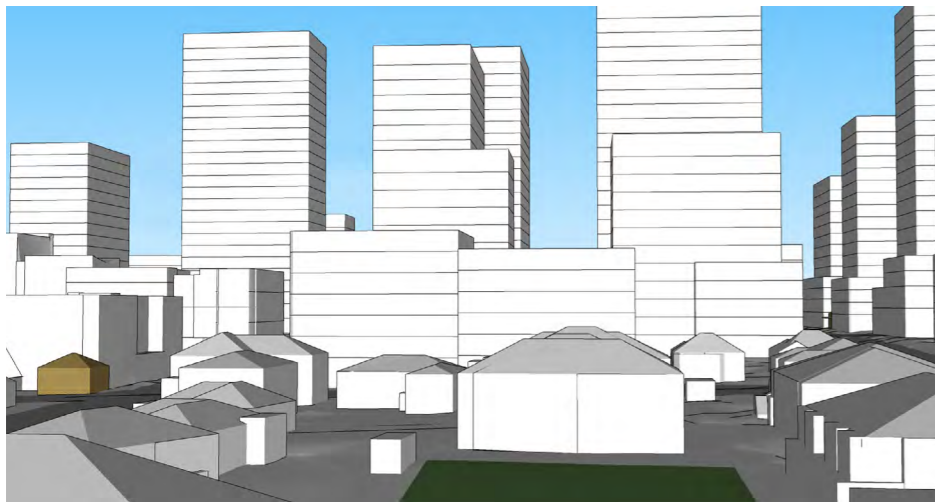
### 3.4.6 Space between buildings and views to sky

View 1 and 2 are taken from the public domain using 60 degree human view cone and illustrate that when bonuses are applied, the tops of towers can no longer be perceived. This reinforces the importance of combining principles of height transition with other methods of transition in the North-East PIA.

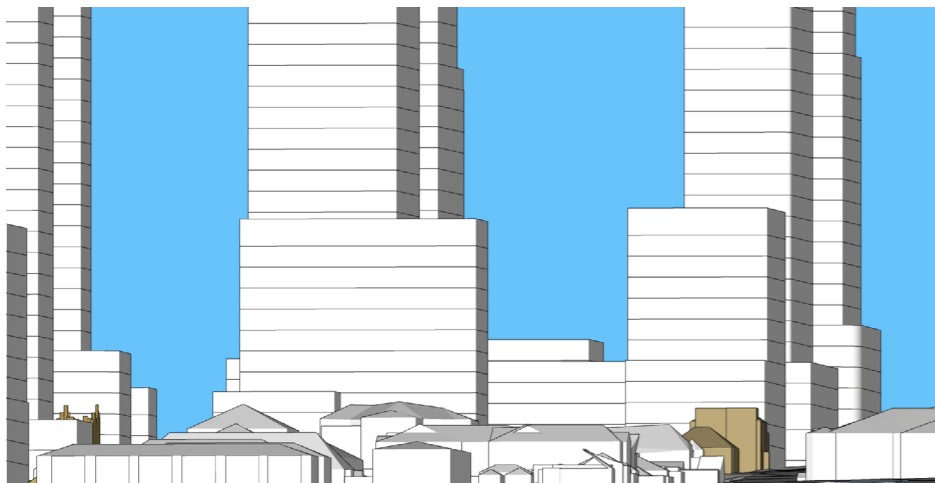
The spaces created between towers as a result of generous separation allows for view to sky between tower forms when observed from either HCA, but also creates relief between development when walking along Church Street and Sorrell Street.



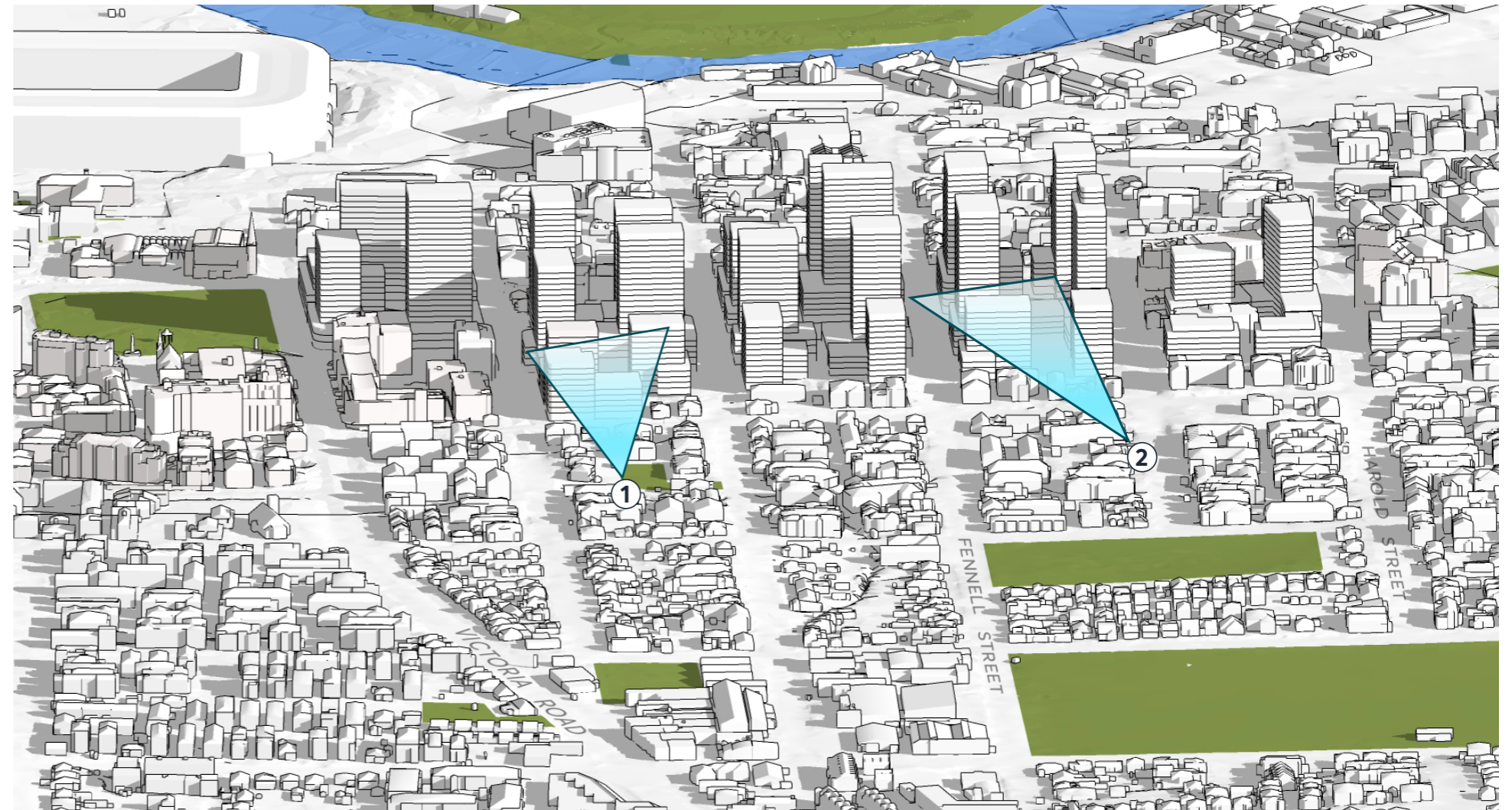
PRINCIPLE 2



① VIEW FROM ROSSLYN BLAY PARK LOOKING WEST.



② CORNER OF HAROLD AND BRICKFIELDS STREETS LOOKING WEST.



AERIAL VIEW LOOKING WEST ILLUSTRATING PREFERRED TOWER ORIENTATION.

### 3.4.7 Vegetated Streets and Heritage Alignments

In response to the vegetated character and well preserved, and consistent alignment of heritage items along all east-west streets, the recommendation that all buildings are set back is to ensure heritage items are maintained as the prevalent items in the street. This ensures canopy tree planting is possible in setbacks to augment street trees on east-west streets. In most cases the heritage setbacks are 3m at ground, which also helps to preserve significant views along east-west streets to Church Street (and vice versa).

For the North-East PIA however, notwithstanding the above, a minimum 6m setback has been recommended for any development which proposes a residential use at the ground floor. This is consistent with the general approach in the Parramatta City Centre, and enables large canopy trees to be planted within the front setback and public domain, complementing the vegetated character of the east-west streets and preserving views.

This includes a minimum 6m setback to Villiers Street, 2m of which is to be dedicated to facilitate the 'Marsden Street Cycleway' project.



PREVAILING SETBACKS OF HERITAGE ITEMS ON EAST-WEST STREETS.

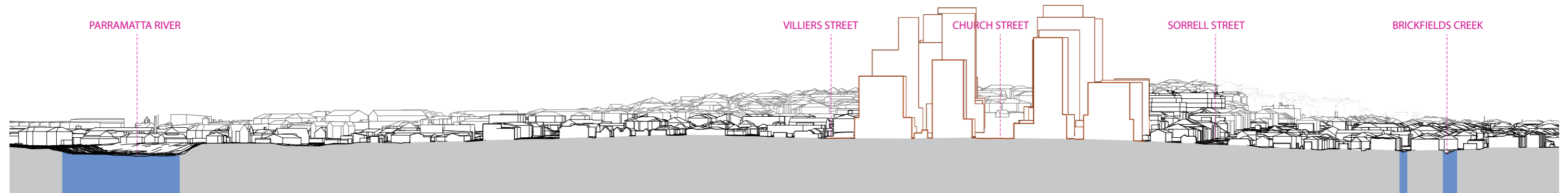
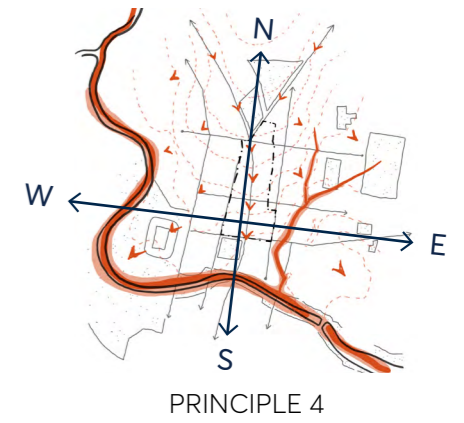


PRINCIPLE 3

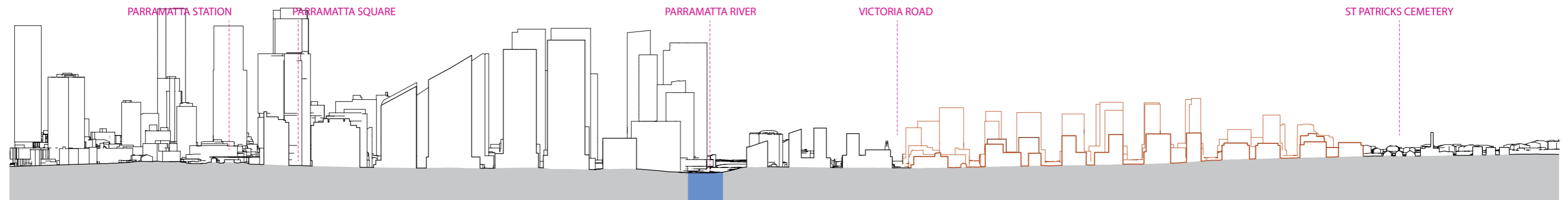
### 3.4.8 River and Landscape Setting

In an east-west direction; the height remains consolidated around the Church St axis before transitioning towards the lower valleys of Brickfields Creek and the Parramatta River.

In a north-west direction; the same transitioning occurs between St Patricks Cemetery and the Parramatta River, which is why more modestly scaled 6-storey forms have been recommended for the northernmost sites of the North-East PIA.



EAST-WEST SECTION FROM PARRAMATTA RIVER TO BRICKFIELDS CREEK (1:2500).



NORTH-SOUTH SECTION FROM PARRAMATTA STATION TO ST PATRICKS CEMETERY (1:5000).

**LEGEND**

 RECOMMENDED NEPIA & CSN BUILT FORM

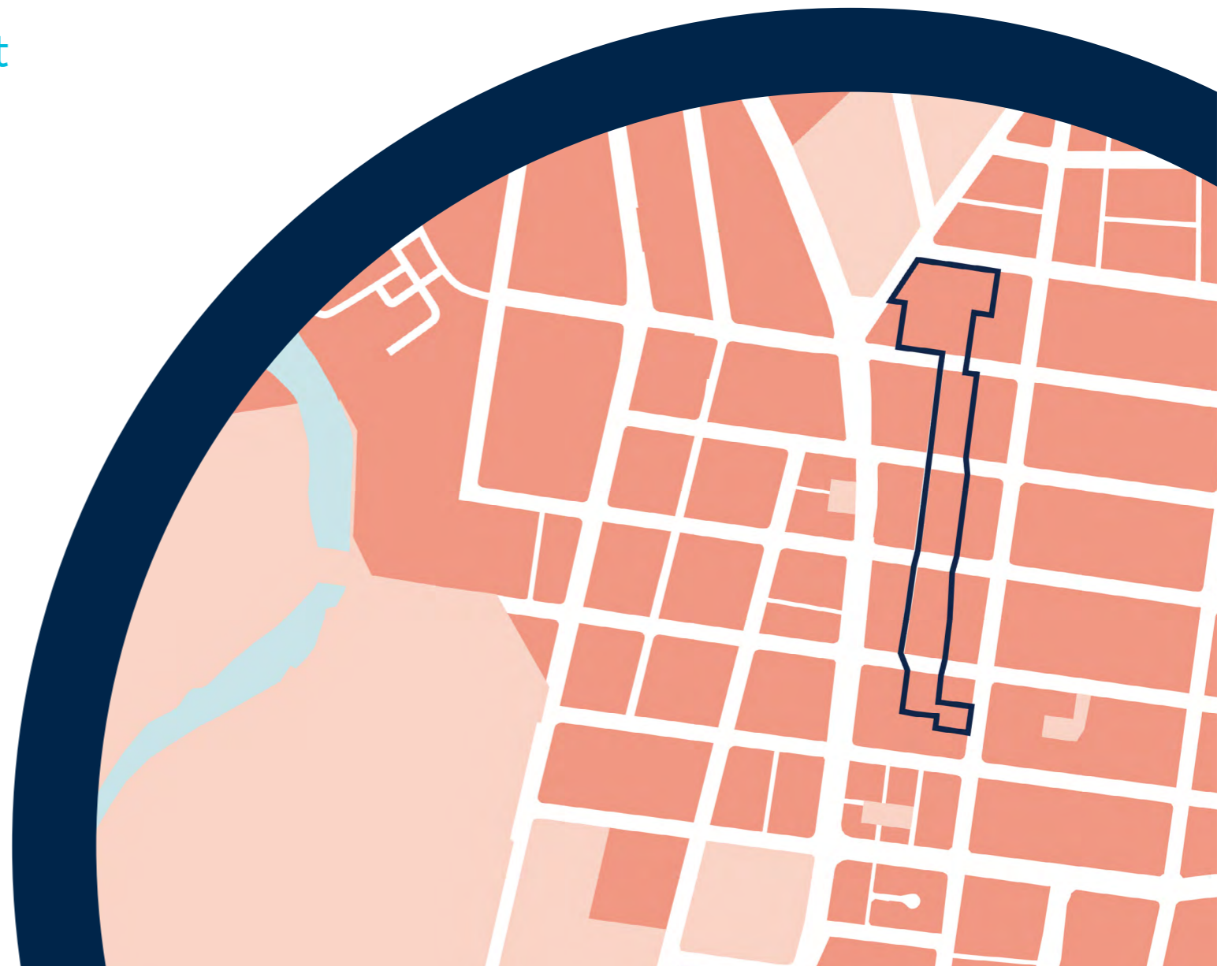
# 4. URBAN DESIGN ANALYSIS & RESPONSE

4.1 Approach & Assumptions

4.2 Block Qualities & Design Response

4.3 Urban Design Response

4.4 Gateway Recommendation for FSR & Height



## 4.1 APPROACH & ASSUMPTIONS

Taking into consideration the feedback received during the public exhibition period for the NEPIA Planning Strategy in 2021 and the recommendations from the Department-commissioned consultant Urban Design study for Church Street North, an alternate approach was developed through urban design analysis at both the precinct and block scales with consideration of block character, lot orientation and sites with opportunities for redevelopment within the NEPIA.

This alternate approach considered block character and lot orientation, and resulted in a finer grain, more focused block-by-block approach in response to the business-as-usual approach to rezoning presented on the Draft Strategy 2021.

The assumptions for analysing and testing built form in the North-East PIA are as follows:

- 6:1 context on Church Street.
- No change to zoning of the HCA.
- Primarily residential development; particularly in towers.
- Active ground floor on Church Street.
- Residential character, finer grain, setbacks, and opportunities for increasing canopy planting.
- Consolidated communal open spaces.
- Co-ordinated building breaks, massing and orientation.

### LEGEND

-  NEPIA SITE BOUNDARY
-  BLOCK STUDY AREA



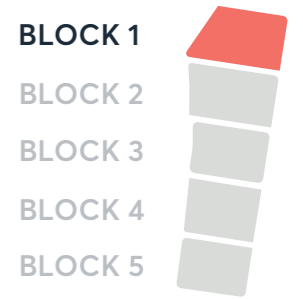
NTS



NORTH-EAST PIA STUDY AREA IN ITS CONTEXT.

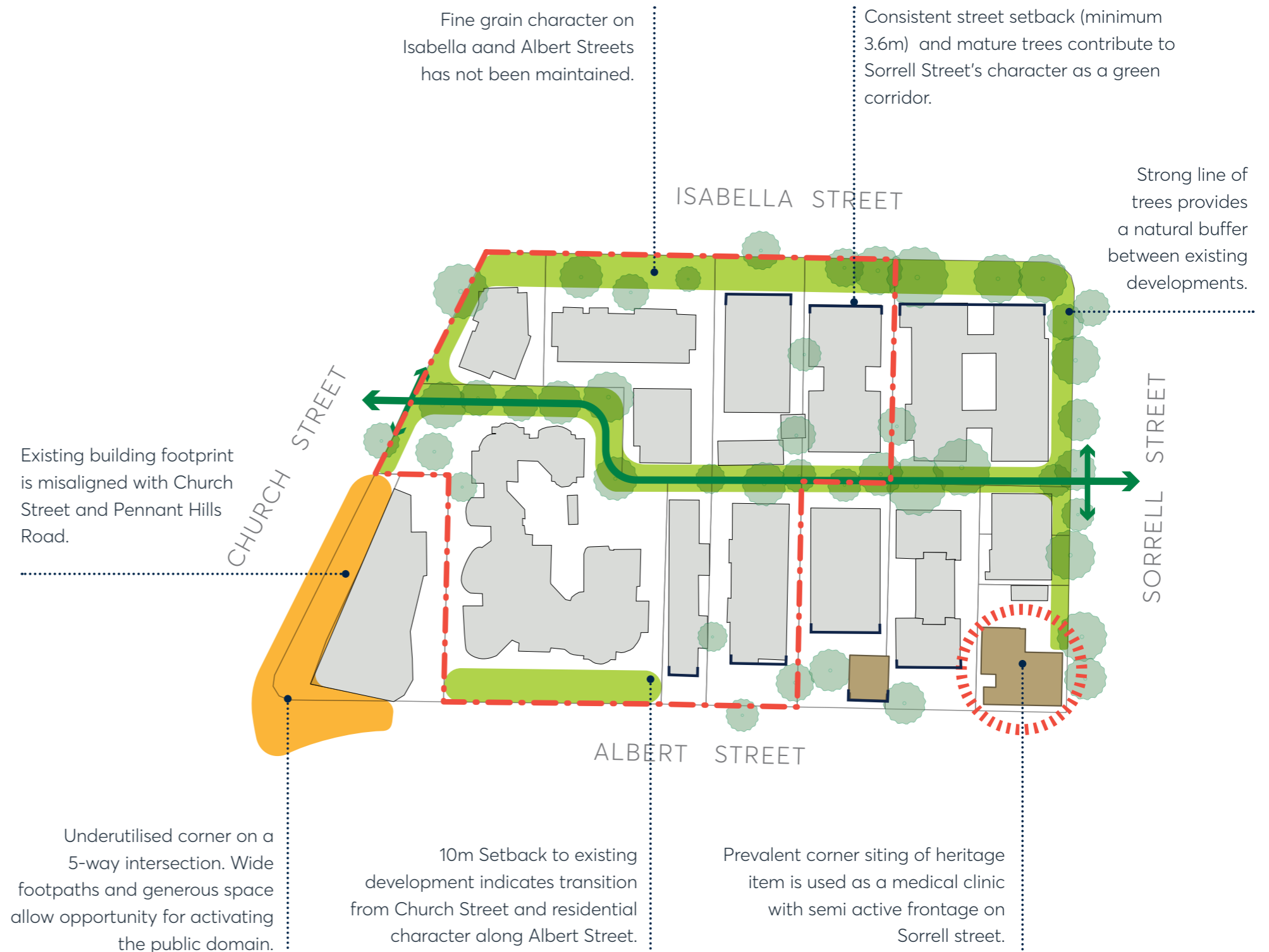
## 4.2 BLOCK QUALITIES & DESIGN RESPONSE

**BLOCK 1:** Bound by Church, Isabella, Sorrell, Albert Streets and Pennant Hills Road



### PRINCIPLES FOR THE BLOCK

- Use **space as the primary method of 'transition'** between building types (setbacks and separation).
- **Create amenity to the centre of the block**, preserving mature, large line of canopy trees.
- Allow the freestanding **corner setting of heritage to be dominant**, forward of any future development on Albert Street or Sorrell Street.
- Address the existing and future residential nature of the block, **maximising residential amenity**.



### LEGEND

- NEPIA BOUNDARY
- HERITAGE BUILDINGS
- PREVALENT CORNER SITES
- HIGHLY VEGETATED AXIS
- DEEP SOIL OPPORTUNITIES
- DRIVEWAY
- HISTORIC GRAIN CHARACTER BUILDINGS
- UNDERUTILISED SPACES

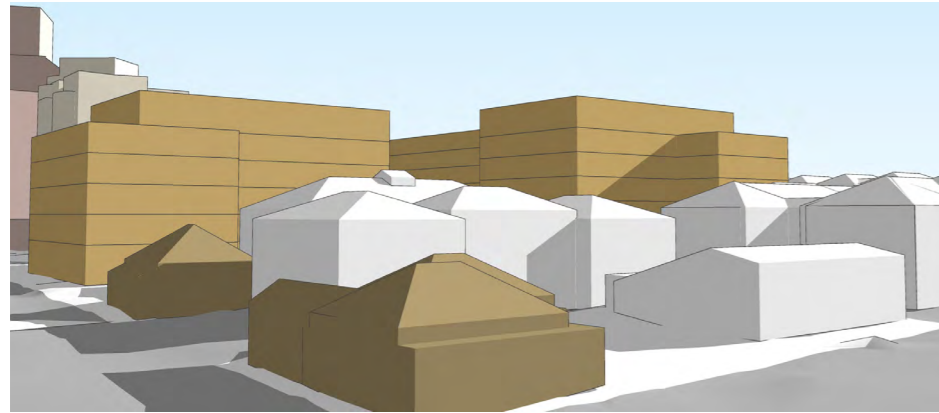
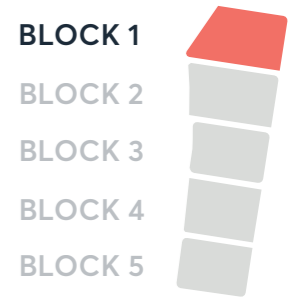


NTS



# 4.2 BLOCK QUALITIES & DESIGN RESPONSE

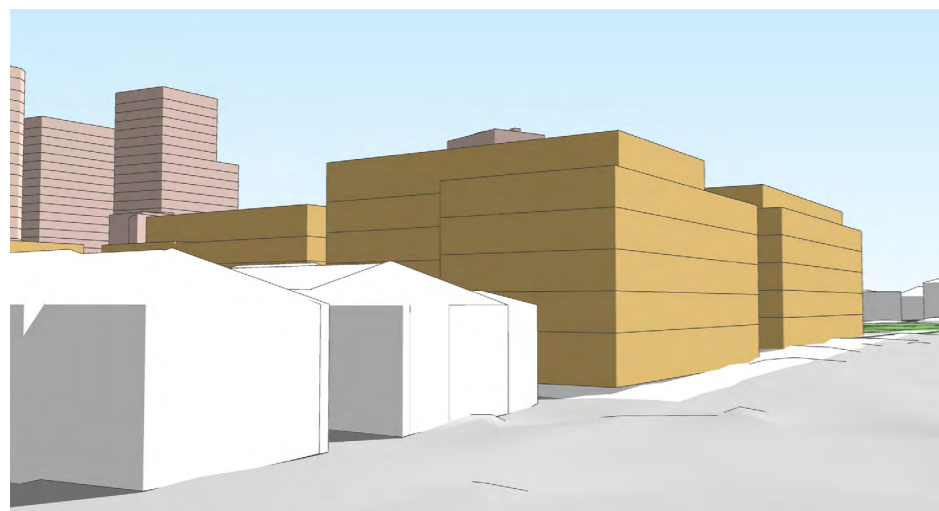
**BLOCK 1:** Bound by Church, Isabella, Sorrell, Albert Streets and Pennant Hills Road



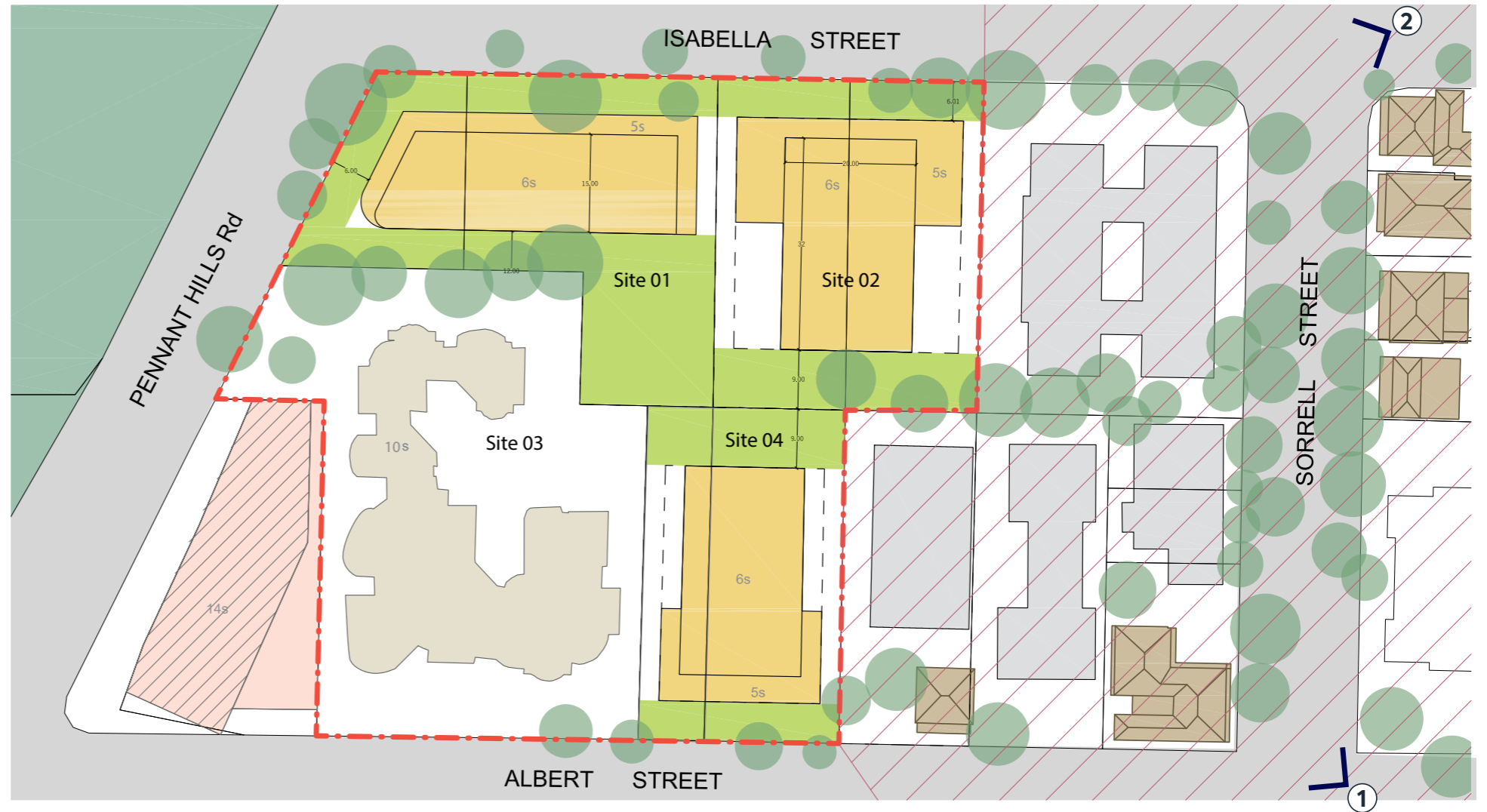
① View from corner of Sorrell and Albert Sts looking Northwest.



Aerial view - Corner of Albert and Sorrell Sts looking Northwest.



② View from corner of Isabella St looking West.



DESIGN RESPONSE - BLOCK 1

	FSR	Height (m)	Height (s)
<b>Site 01</b>	1.8:1	20m	6 storeys
<b>Site 02</b>	1.9:1	20m	6 storeys
<b>Site 03*</b>	4:1	46m	10 storeys
<b>Site 04</b>	2:1	20m	6 storeys

**LEGEND**

- NEPIA BOUNDARY
- NEPIA BUILDINGS
- CSN BUILDINGS
- HERITAGE BUILDINGS
- HERITAGE CONSERVATION AREA
- DEEP SOIL OPPORTUNITIES
- STRATA BUILDING IN THE NEPIA

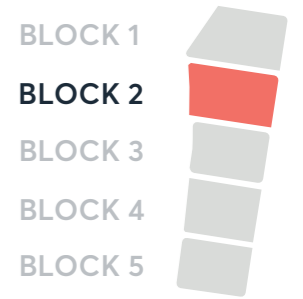


For sites within the CSN Precinct this includes any applicable bonuses, and excludes floorspace of heritage items (where relevant).

\*Unlikely to be redeveloped under any scenario.

## 4.2 BLOCK QUALITIES & DESIGN RESPONSE

**BLOCK 2:** Bound by Church, Sorrell, Albert, Harold Streets and Pennant Hills Road



### PRINCIPLES FOR THE BLOCK

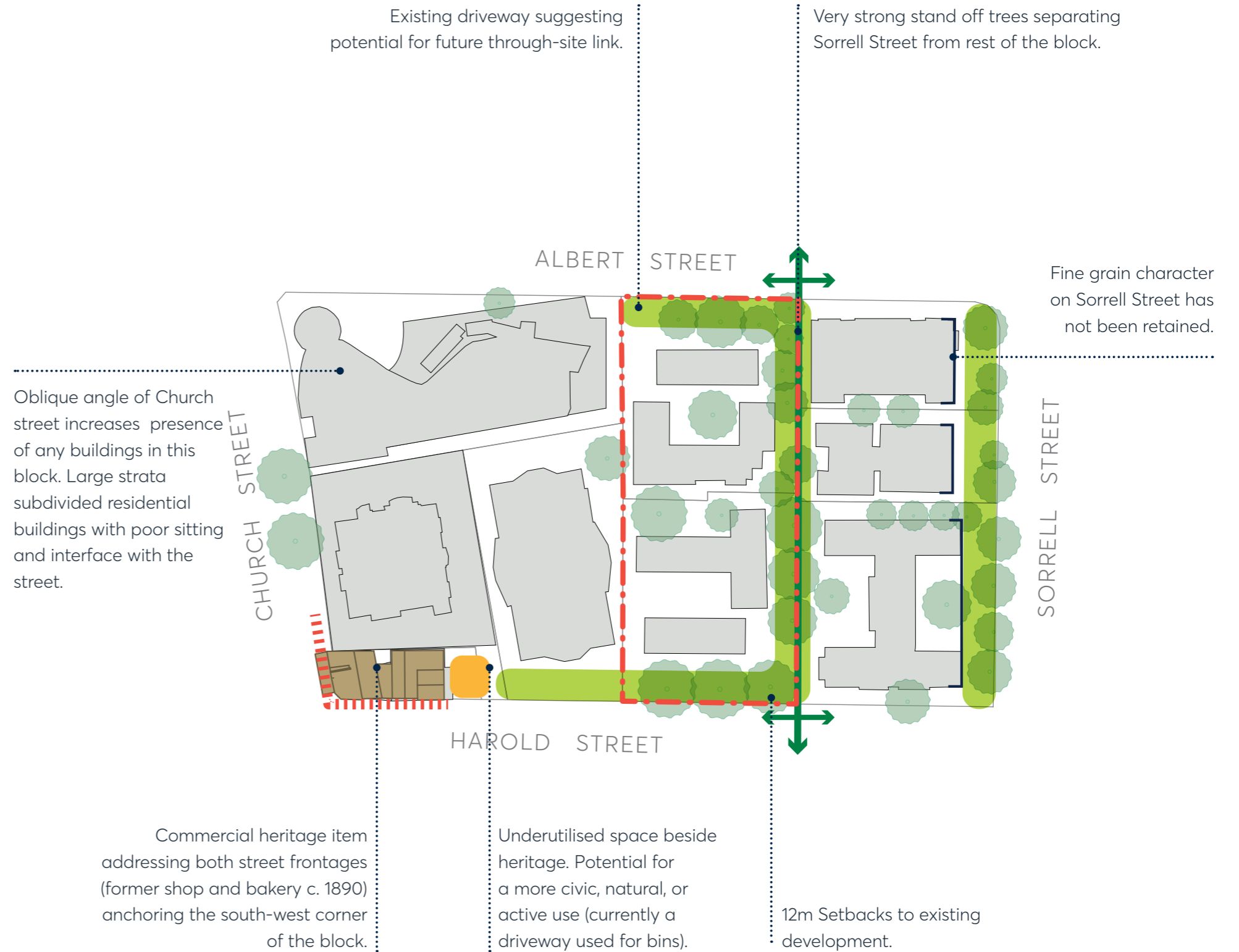
- **Preserve the large stand of existing mature canopy trees** located between the mid-block properties and heritage conservation zone.
- Create potential for an **open ground plane around the heritage item** on Church Street which could serve as a small civic space or entry to development behind.
- Address the existing and future residential nature of the block, **maximising residential amenity and providing shared communal open spaces at ground.**
- Any mid-block development should consider both the existing context on Church Street that is low scale but unlikely to change due to large strata schemes, and a potential redevelopment scenario for the entire block.

### LEGEND

- NEPIA BOUNDARY
- HERITAGE BUILDINGS
- PREVALENT CORNER SITES
- HIGHLY VEGETATED AXIS
- DEEP SOIL OPPORTUNITIES
- DRIVEWAY
- HISTORIC GRAIN CHARACTER BUILDINGS
- UNDERUTILISED SPACES

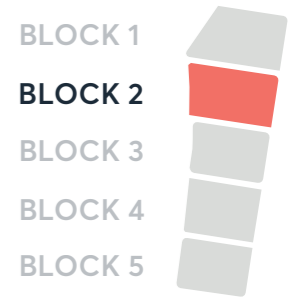


NTS

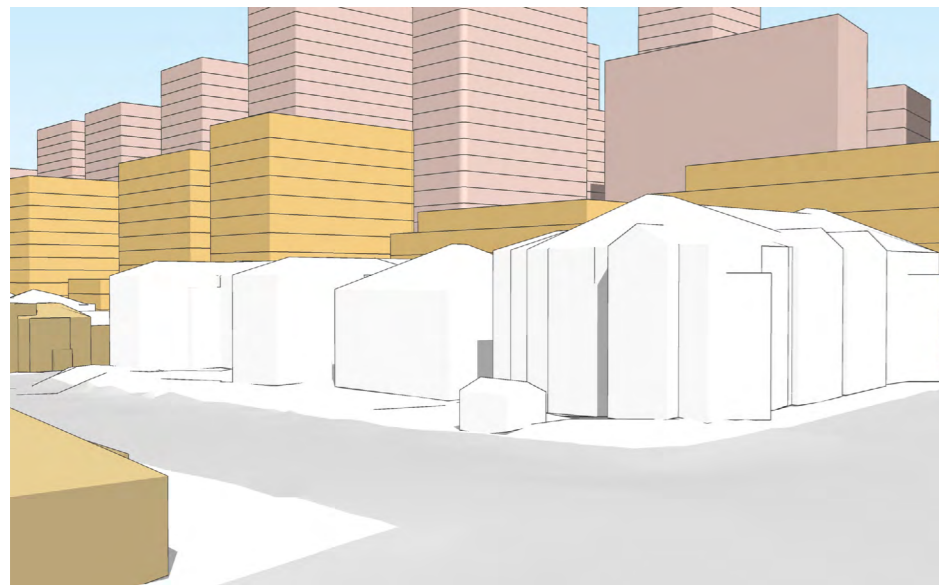


# 4.2 BLOCK QUALITIES & DESIGN RESPONSE

**BLOCK 2:** Bound by Church, Sorrell, Albert, Harold Streets and Pennant Hills Road



① View from corner of Harold and Sorrell St looking Northwest.



② View from corner of Sorrell and Albert St Looking Southwest.



Aerial view - Corner of Harold and Sorrell St looking Northwest.



DESIGN RESPONSE - BLOCK 2

	FSR	Height (m)	Height (s)
<b>Site A</b>	Existing strata with 50 units unlikely to redevelop under any scenario		
<b>Site B</b>	Existing strata with 36 units unlikely to redevelop under any scenario		
<b>Site C</b>	Existing strata with 40 units unlikely to redevelop under any scenario		
<b>Site 05</b>	1.9:1	20m	6 storeys
<b>Site 06</b>	1.9:1	20m	6 storeys

For sites within the CSN Precinct this includes any applicable bonuses, and excludes floorspace of heritage items (where relevant).

**LEGEND**

- NEPIA BOUNDARY
- NEPIA BUILDINGS
- CSN BUILDINGS
- HERITAGE BUILDINGS
- HERITAGE CONSERVATION AREA
- DEEP SOIL OPPORTUNITIES
- UNDERUTILISED SPACES
- NTS









## 4.2 BLOCK QUALITIES & DESIGN RESPONSE

### BLOCK 3: Bound by Church, Sorrell, Harold and Fennell Streets

#### PRINCIPLES FOR THE BLOCK

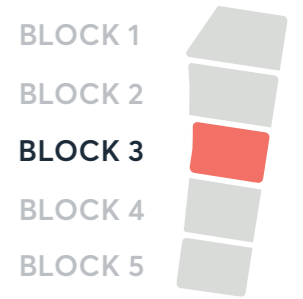
- Use **space as the primary method of 'transition'** between building types (setbacks and separation).
- **Create amenity to the centre of the block**, preserving mature, large canopy trees.
- Allow the freestanding **corner setting of heritage to be dominant**, forward of any future development on Harold Street or Sorrell Street.
- Address the existing and future residential nature of the block, **maximising residential amenity**.
- Maintain the **residential amenity of the heritage item** to enable its continued use and longevity.

#### LEGEND

-  NEPIA BOUNDARY
-  HERITAGE BUILDINGS
-  PREVALENT CORNER SITES
-  HIGHLY VEGETATED AXIS
-  DEEP SOIL OPPORTUNITIES
-  DRIVEWAY
-  HISTORIC GRAIN CHARACTER BUILDINGS
-  UNDERUTILISED SPACES

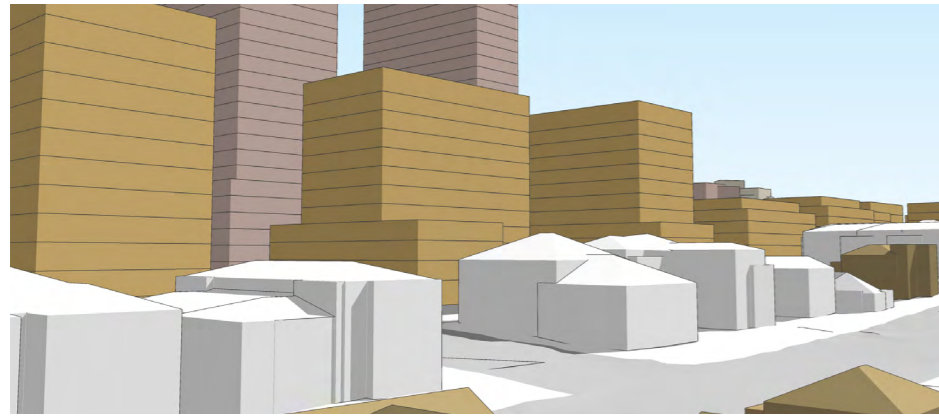
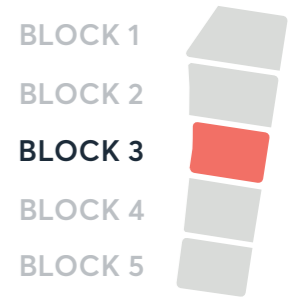


NTS

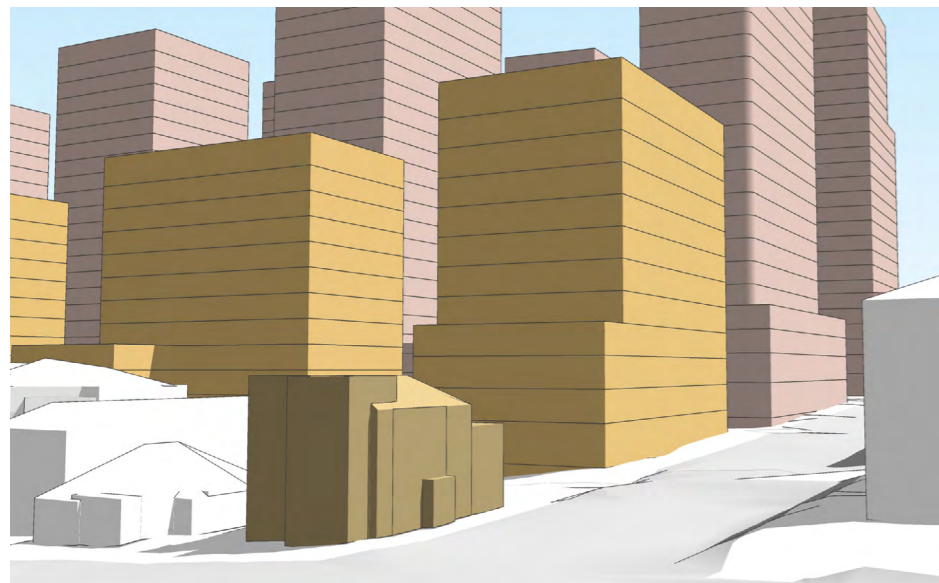


# 4.2 BLOCK QUALITIES & DESIGN RESPONSE

**BLOCK 3:** Bound by Church, Sorrell, Harold and Fennell Streets



① View from corner of Fennell and Sorrell St looking Northwest.



② View from corner of Harold and Sorrell St looking Southwest.



Aerial view from corner of Fennell and Sorrell St looking Northwest.



DESIGN RESPONSE - BLOCK 3

	FSR	Height (m)	Height (s)
<b>Site D*</b>	6:1	80m	25 storeys
<b>Site E</b>	6.3:1	82m	26 storeys
<b>Site 07</b>	3.6:1	40m	12 storeys
<b>Site 08</b>	3.0:1	40m	12 storeys

For sites within the CSN Precinct this includes any applicable bonuses, and excludes floorspace of heritage items (where relevant).

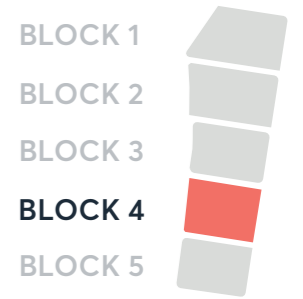
\*Site Specific Controls for 470 Church St.

**LEGEND**

- NEPIA BOUNDARY
- NEPIA BUILDINGS
- CSN BUILDINGS
- HERITAGE BUILDINGS
- HERITAGE CONSERVATION AREA
- DEEP SOIL OPPORTUNITIES
- UNDERUTILISED SPACES
- NTS

## 4.2 BLOCK QUALITIES & DESIGN RESPONSE

**BLOCK 4:** Bound by Church, Sorrell, Grose and Fennell Streets



### PRINCIPLES FOR THE BLOCK

- **Prioritise space between the mid-block and HCA** to maintain amenity to the existing low scale residential flat buildings which are built close to their rear boundary.
- Address the existing and future residential nature of the block, **maximising residential amenity**.
- Allow the freestanding **corner sitting of heritage item on the corner of Sorrell and Grose Street to be dominant**, forward of any future development.
- Preserve and **highlight the stand of large canopy trees** at the centre of the block by creating an **open to sky break** between the heritage property at 448 Church Street and future development to the north.
- Give space to heritage items at 446-448 Church Street and create a **publicly accessible ground plane** around these buildings.

### LEGEND

- NEPIA BOUNDARY
- HERITAGE BUILDINGS
- PREVALENT CORNER SITES
- HIGHLY VEGETATED AXIS
- DEEP SOIL OPPORTUNITIES
- DRIVEWAY
- HISTORIC GRAIN CHARACTER BUILDINGS
- UNDERUTILISED SPACES

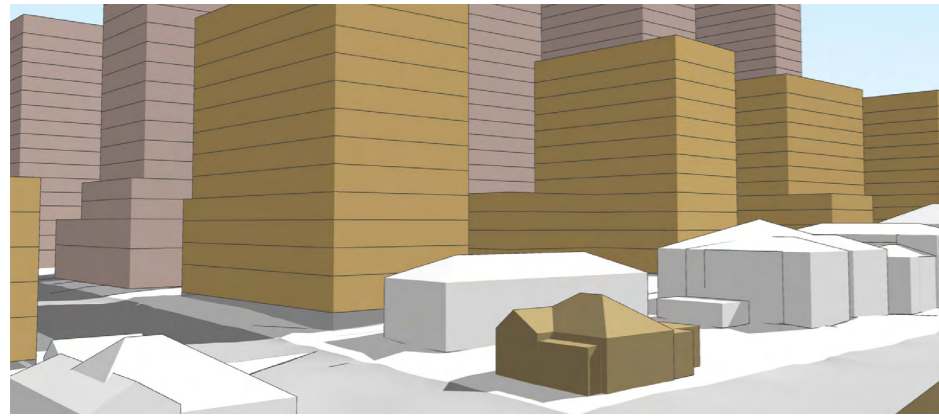
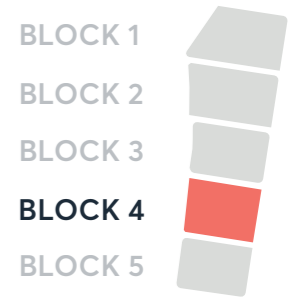


NTS

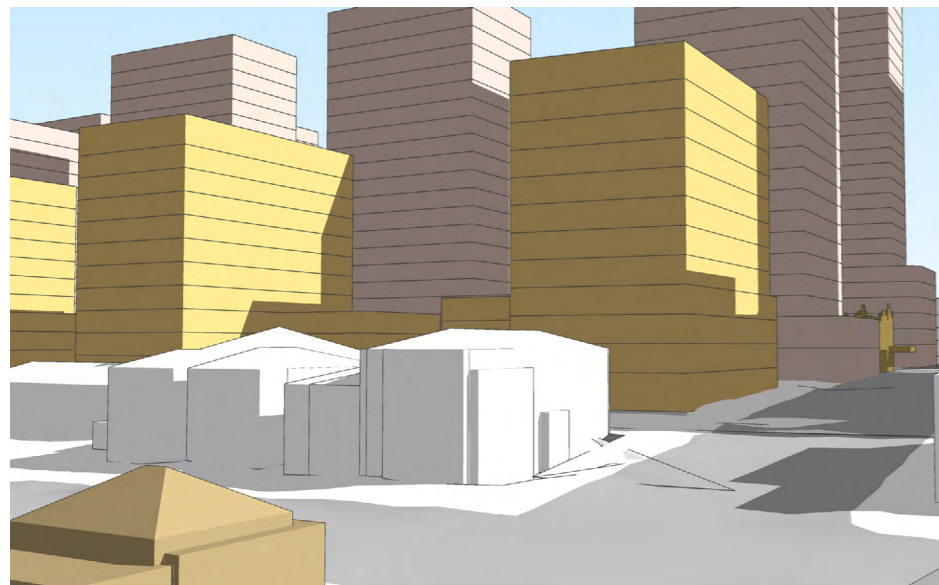


# 4.2 BLOCK QUALITIES & DESIGN RESPONSE

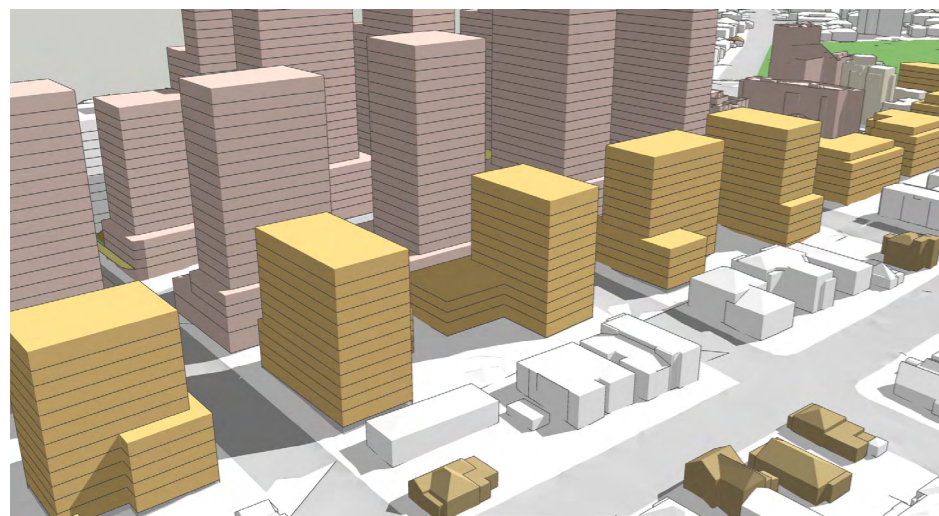
**BLOCK 4:** Bound by Church, Sorrell, Grose and Fennell Streets



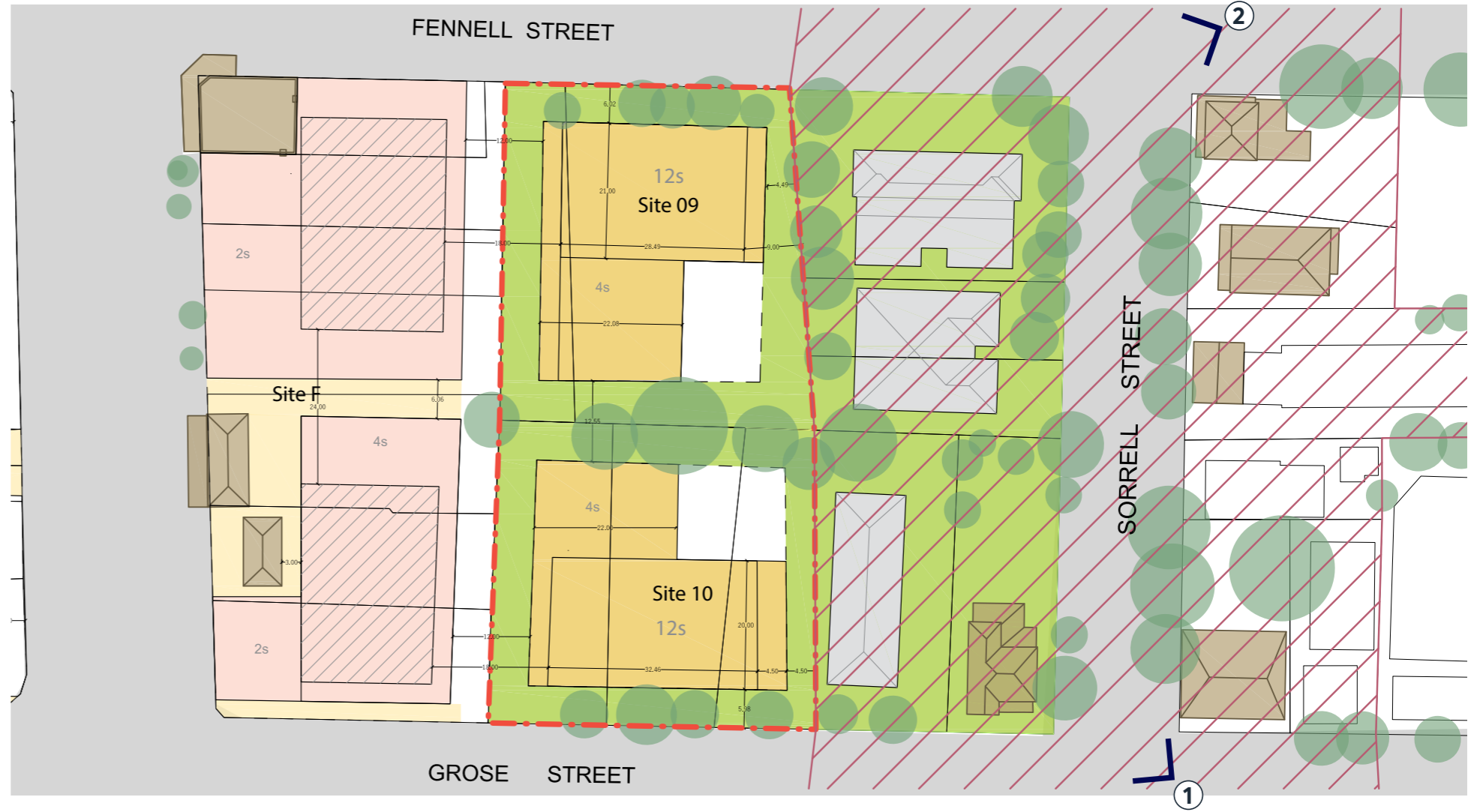
① View from corner of Grose and Sorrell St looking Northwest.



② View from corner of Fennell and Sorrell St looking West.



Aerial view from corner of Grose and Sorrell St looking Northwest.

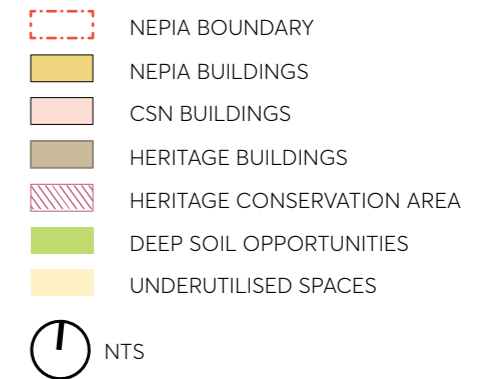


DESIGN RESPONSE - BLOCK 4

	FSR	Height (m)	Height (s)
<b>Site F</b>	5.6:1	80m	25 storeys
<b>Site 09</b>	2.9:1	40m	12 storeys
<b>Site 10</b>	3.1:1	40m	12 storeys

For sites within the CSN Precinct this includes any applicable bonuses, and excludes floorspace of heritage items (where relevant).

**LEGEND**











## 4.2 BLOCK QUALITIES & DESIGN RESPONSE

**BLOCK 5:** Bound by Church, Sorrell, Grose and Ross Streets

### PRINCIPLES FOR THE BLOCK

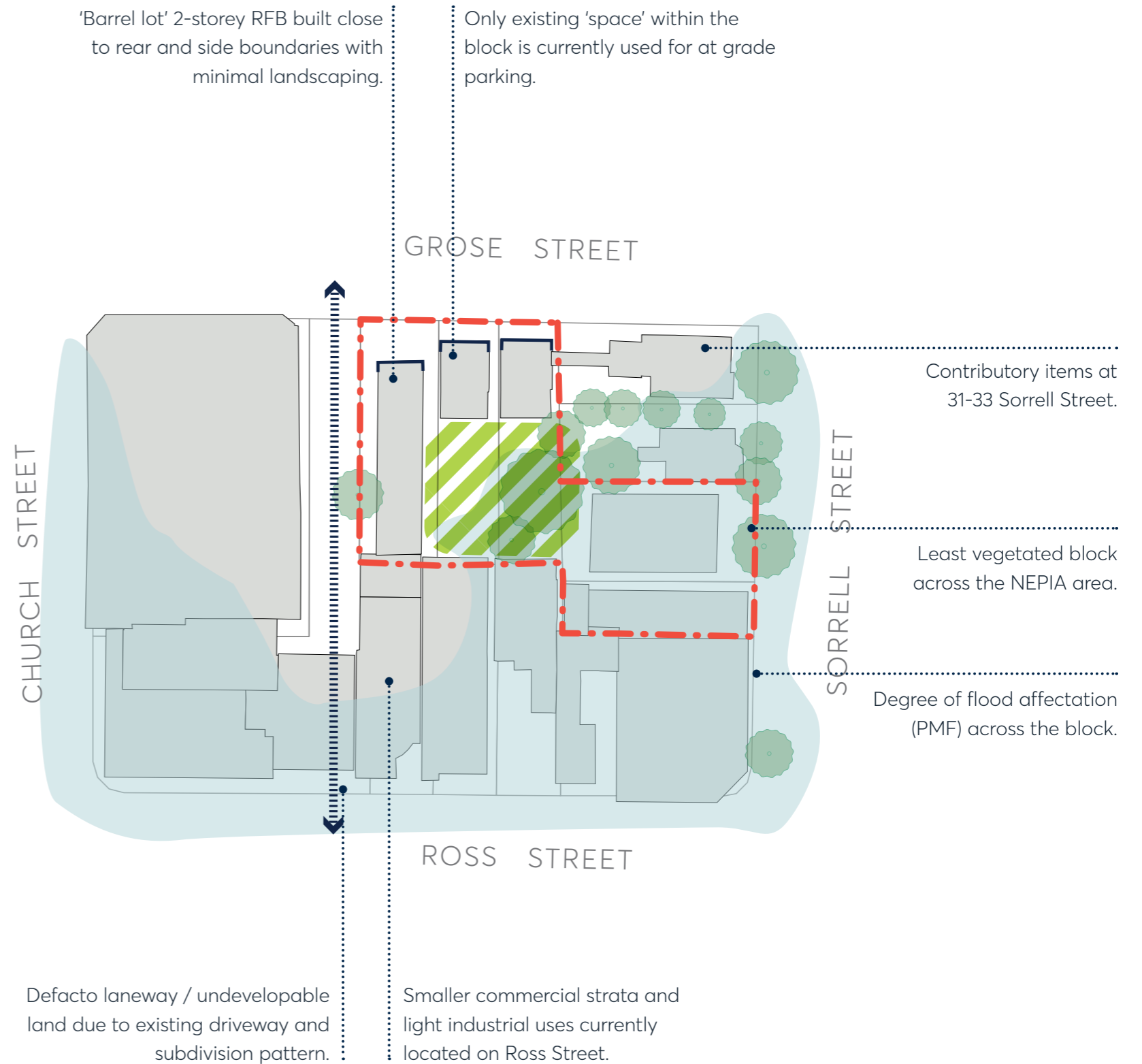
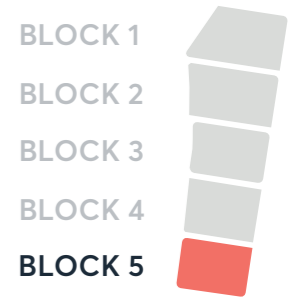
- **Create new spaces for amenity to the centre of the block**, providing deep soil and potential to plant large canopy trees
- Consider a **perimeter block type** across the block with an attached street wall to meet the character of the block to the south and City Centre south of the River.
- Design to **flood planning levels** while maintaining activation at the street.
- Address the existing and future residential nature of the block, **maximising residential amenity**.

#### LEGEND

-  NEPIA BOUNDARY
-  HERITAGE BUILDINGS
-  PREVALENT CORNER SITES
-  HIGHLY VEGETATED AXIS
-  DEEP SOIL OPPORTUNITIES
-  DRIVEWAY
-  HISTORIC GRAIN CHARACTER BUILDINGS
-  UNDERUTILISED SPACES



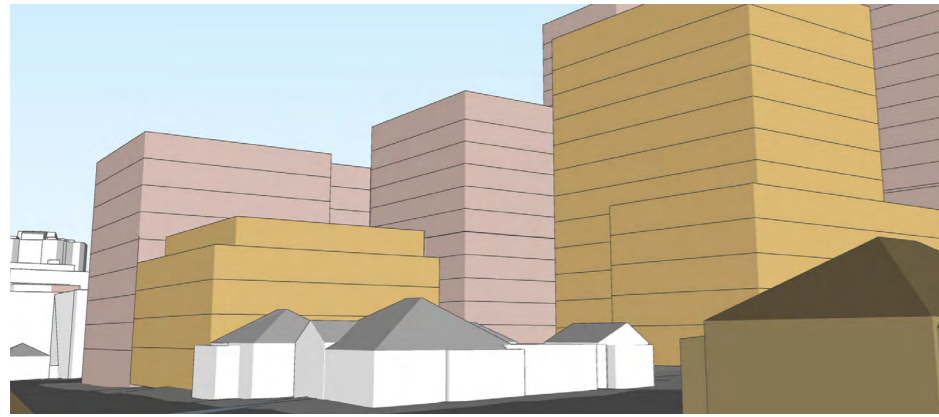
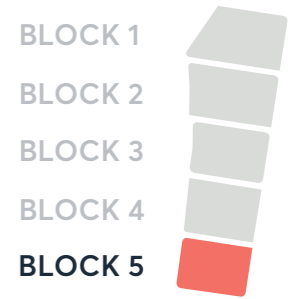
NTS





# 4.2 BLOCK QUALITIES & DESIGN RESPONSE

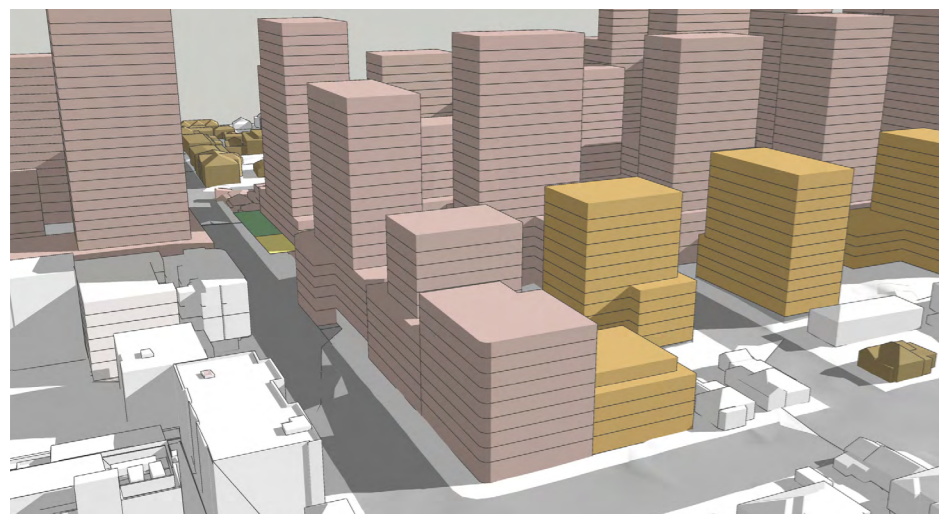
**BLOCK 5:** Bound by Church, Sorrell, Grose and Ross Streets



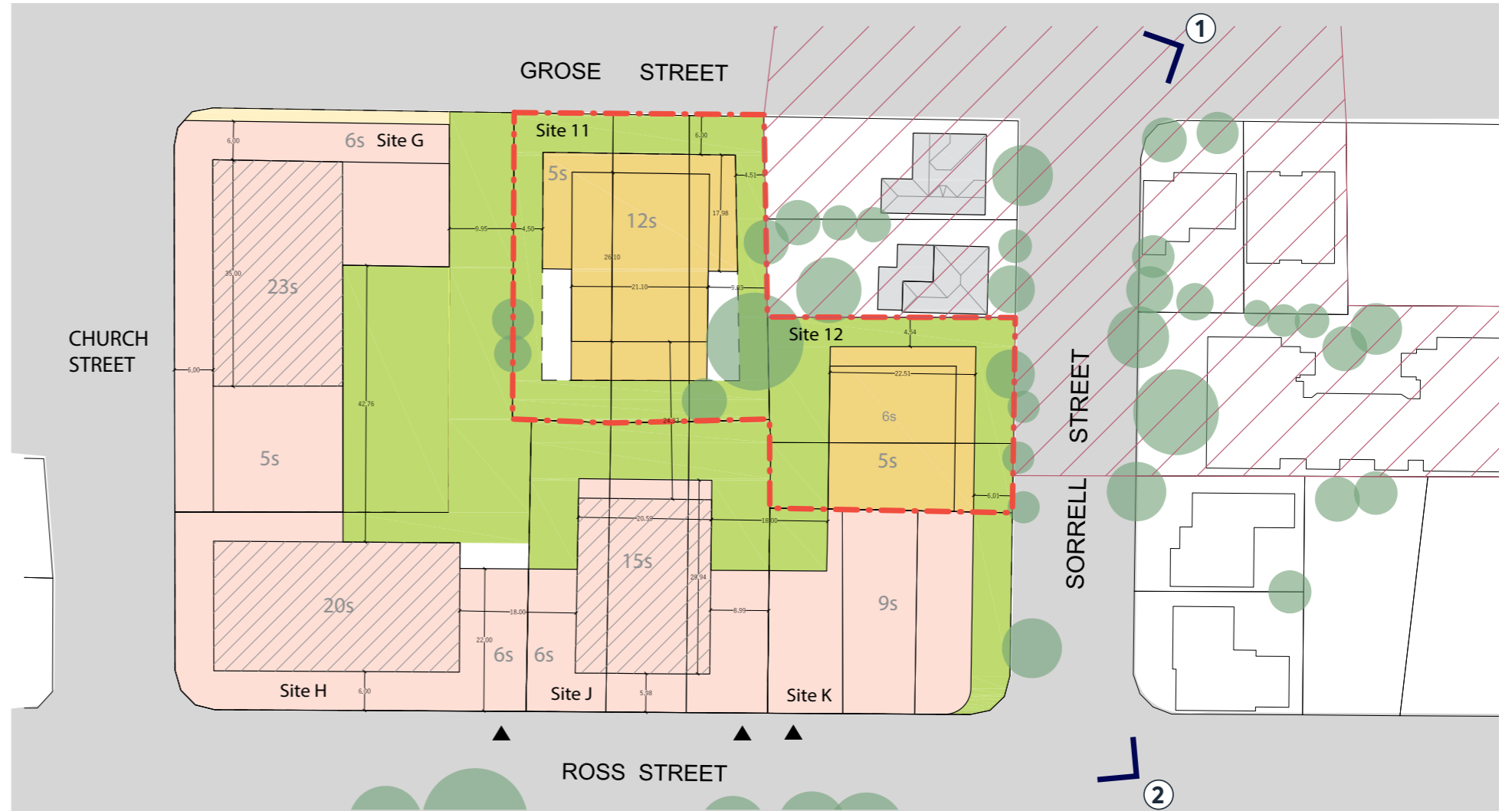
① View from corner of Grose and Sorrell St looking Southwest.



② View from corner of Ross and Sorrell St looking North.



Aerial view from corner of Ross and Sorrell St looking Northwest.



DESIGN RESPONSE - BLOCK 5

	FSR	Height (m)	Height (s)
Site G	6.2:1	75m	23 storeys
Site H	5.9:1	65m	20 storeys
Site J	5.4:1	49m	15 storeys
Site K	4.6:1	31m	9 storeys
Site 11	3:1	40m	12 storeys
Site 12	2:1	17m	5 storeys

For sites within the CSN Precinct this includes any applicable bonuses, and excludes floorspace of heritage items (where relevant).

**LEGEND**






- NEPIA BOUNDARY
- NEPIA BUILDINGS
- CSN BUILDINGS
- HERITAGE BUILDINGS
- HERITAGE CONSERVATION AREA
- DEEP SOIL OPPORTUNITIES
- UNDERUTILISED SPACES
- NTS

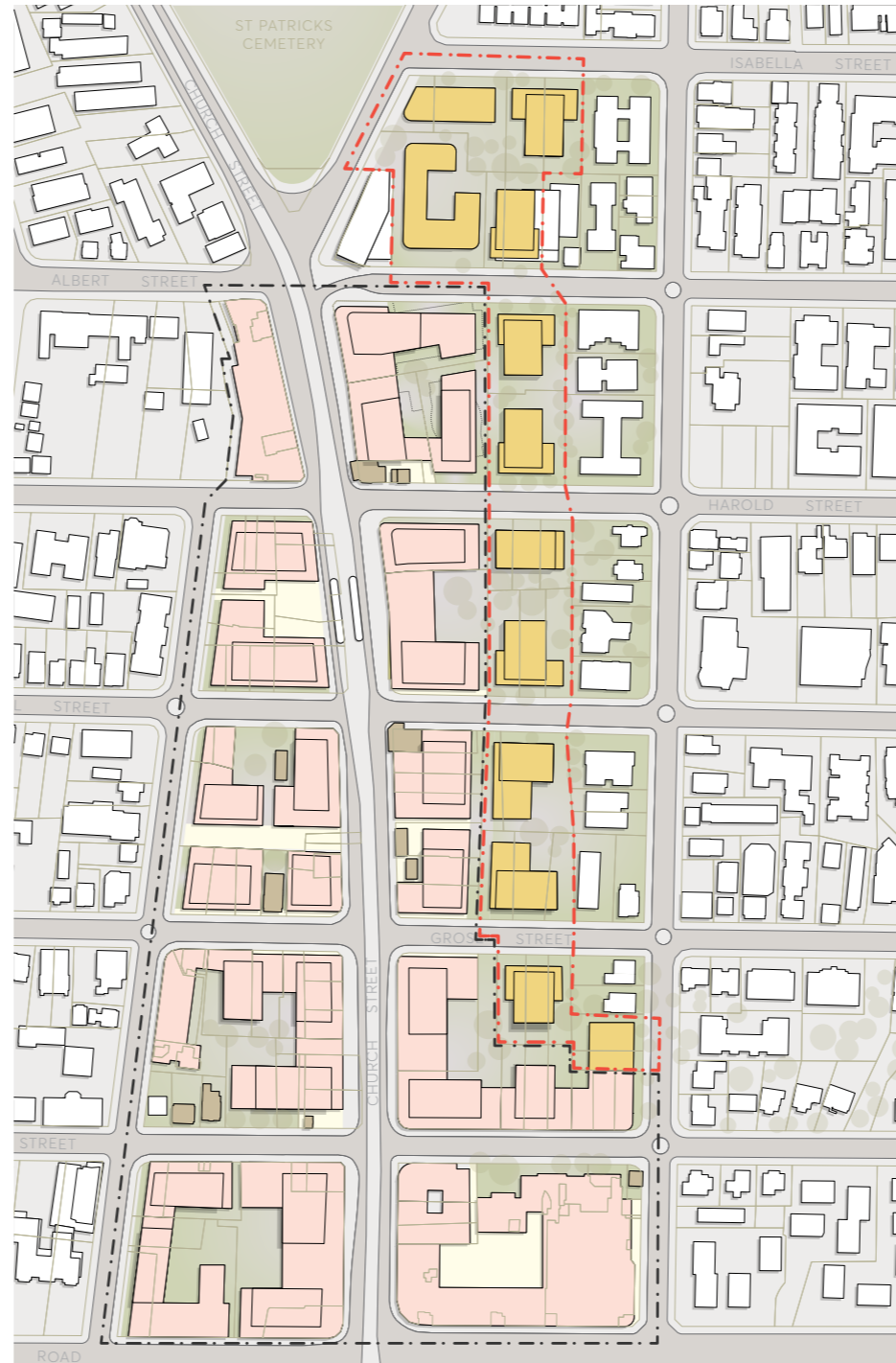
## 4.3 URBAN DESIGN RESPONSE

### Resulting Structure Plan & Built Form for the North-East PIA

- In response to the testing, the recommended precinct plan and built form outcomes for the area aim to transition built form with a co-ordinated massing and orientation strategy, maximising the opportunities for open space and canopy planting at ground.
- Vegetated separations are strategically placed where they best help organise form and provide transition across the block.
- Setbacks between buildings are used to the east to establish transition between Church Street properties, the mid-block and Sorrell St HCA.
- Building massing has been co-ordinated across the broader precinct to preserve views to sky.
- Heights transition between the Church Street axis, North-East PIA and HCA.

#### LEGEND

-  NEPIA BOUNDARY
-  CSN BOUNDARY
-  NEPIA BUILDINGS
-  CSN BUILDINGS
-  HERITAGE BUILDINGS



RECOMMENDED STRUCTURE PLAN FOR CSN AND NORTH-EAST PIA.



DRAFT NORTH-EAST PARRAMATTA PRECINCT SETBACKS & BUILT FORM.

Image Retrieved from: Draft Parramatta Development Control Plan 2023 – Neighbourhood Precincts North-East Parramatta.

## Collective Built Form for Church Street North & the North-East PIA

Area specific Draft DCP controls are proposed to achieve the Structure Plan and built form outcomes for the North-East PIA (buildings coloured yellow).



### LEGEND

- NEPIA BUILDINGS
- CSN BUILDINGS
- HERITAGE BUILDINGS
- SORRELL STREET HCA



NTS

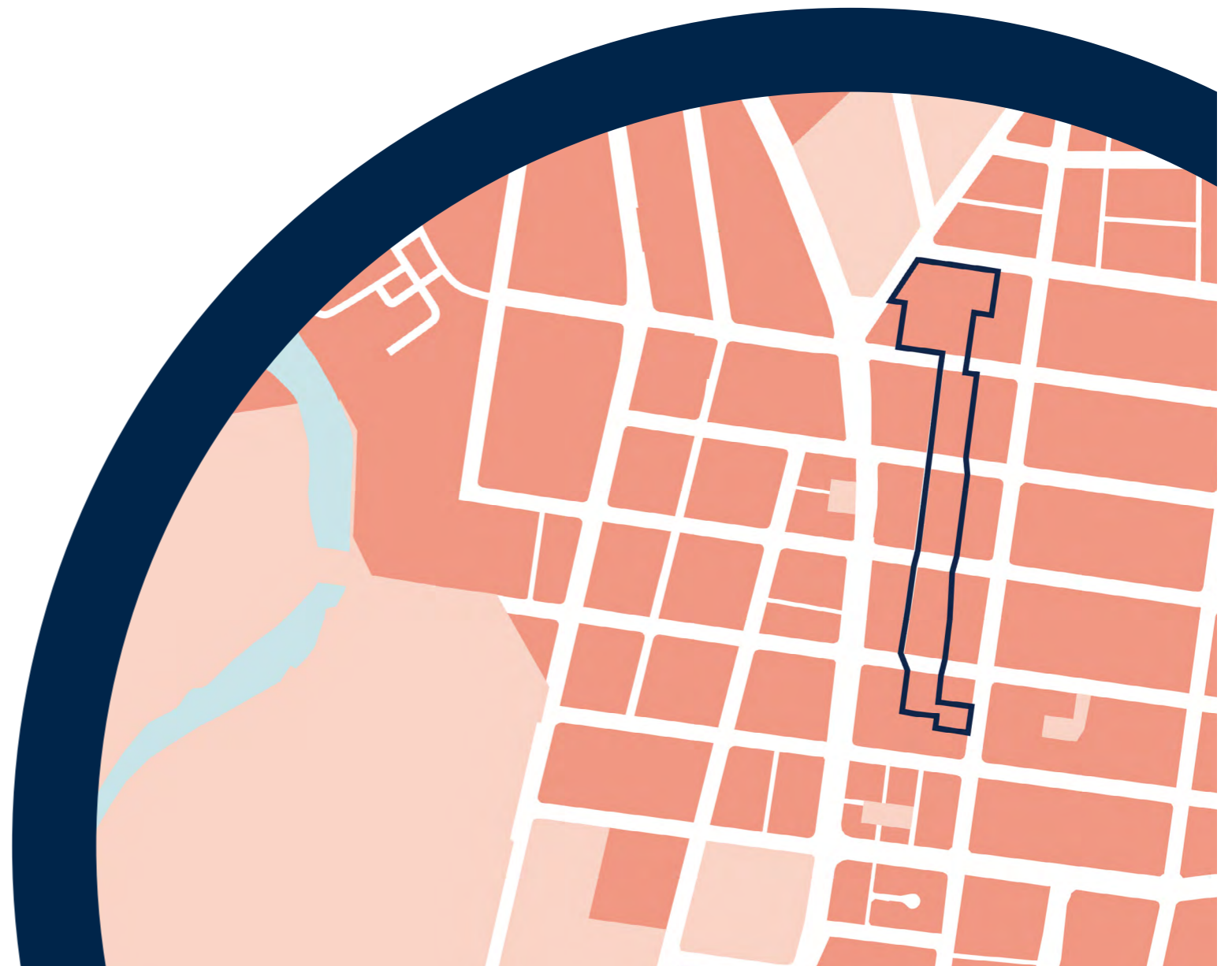
AERIAL VIEW OF RECOMMENDED BUILT FORM OUTCOMES FOR CSN AND NEPIA SHOWING STEPPED BUILDING FORM BETWEEN CHURCH STREET NORTH AND HCA.



# 5. SHADOW ANALYSIS

5.1 Shadow Analysis: Winter Solstice

5.2 Shadow Analysis: Vernal (Spring) Equinox



## 5.1 SHADOW ANALYSIS: WINTER SOLSTICE

21 June 2024 (09:00 AM TO 03:00 PM)

Council conducted a shadow analysis for the Winter Solstice (21st June, worst case) from 9 am to 3 pm to assess if the proposed NEPIA built form would exceed maximum potential CSN shadows over Sorrell Street and surrounding public open spaces. The study showed no additional overshadowing from NEPIA buildings beyond existing CSN shadows from 9 am to 12 pm and no overshadowing of surrounding public open spaces at any time.

For Sorrell Street, minor additional overshadowing (highlighted in pink) beyond the shadows cast by CSN occurs between 1 pm and 3 pm however, the culminative overshadowing impact of the NEPIA Planning Proposal is considered acceptable due to:

- Majority of shadows cast from the NEPIA PP between 2pm and 3pm are generated from four sites at the northern end of the NEPIA including 23-27 Harold Street, Parramatta. These sites are subject to other concurrent planning processes which could permit similar built form and shadow outcomes.
- The northern end of the NEPIA contains proposed heights of 24m which is comparable to the potential built form outcomes which could apply to this part of the NEPIA under the exhibited State Government's low- and mid-rise housing reforms.
- 23-27 Harold Street, Parramatta was subject to a rezoning review decision by the Strategic Planning Panel of the Sydney Central City Planning Panel (SCCPP) which recommended a 40m HOB and 3.6:1 FSR, and these are the controls reflected in the NEPIA Planning Proposal.

- Limited Time Frame: Sorrell Street buildings achieve a minimum 4 hours of direct sunlight during 9am – 3pm exceeding the comparable State Government requirement applied to the CBD Planning Proposal for a minimum 2 hours of direct sunlight in mid winter for HCAs adjoining the CBD PP.
- Minimised Extent: Shadows are mitigated by existing CSN shadows.
- Principles and Controls: Design strategies such as building orientation and separation distances between towers minimise overshadowing impact beyond CSN buildings.

For surrounding public open spaces there is no shadow impact from the NEPIA Planning Proposal. Shadows cast on Rosslyn Blay Park to the east and Prince Alfred Square to the south from 12 pm to 3 pm are due to the CSN built form.

Minor additional overshadowing is minimised by design principles and finer grain controls. The Winter Solstice shadow analysis concludes that the proposed NEPIA built form does not significantly impact overshadowing beyond existing CSN shadows and is considered acceptable.

# 5.1 SHADOW ANALYSIS: WINTER SOLSTICE

21 June 2024 (09:00 AM TO 03:00 PM)



## LEGEND

- NEPIA BOUNDARY
- HERITAGE CONSERVATION AREA (HCA)
- CHURCH STREET NORTH (CSN) BUILDINGS SHADOWS
- NORTH EAST PIA (NEPIA) BUILDINGS SHADOWS
- NEPIA SHADOWS WITH ADDITIONAL IMPACT ON SORRELL STREET BEYOND CSN SHADOWS
- 23-27 HAROLD ST PP



NTS

## 5.2 SHADOW ANALYSIS: VERNAL (SPRING) EQUINOX

22 September 2024 (09:00 AM TO 03:00 PM)

Council conducted a similar shadow analysis study to assess whether overshadowing from the proposed NEPIA built form would exceed maximum potential CSN shadows cast over Sorrell Street to the east during the Vernal (Spring) Equinox (22nd September) from 9 am to 3 pm. The study identified minor additional overshadowing (highlighted in pink) occurring between 1 pm and 3 pm, however, the culminative overshadowing impact of the NEPIA PP is considered acceptable due to:

- Limited Time Frame: Sorrell Street buildings achieve a minimum 4 hours of direct sunlight during 9am – 3pm exceeding the comparable State Government requirement applied to the CBD Planning Proposal for a minimum 2 hours of direct sunlight in mid-winter for HCAs adjoining the CBD PP.
- Minimised Extent: Shadows are mitigated by existing CSN shadows.
- Principles and Controls: Design strategies such as building orientation and separation distances between towers minimise overshadowing impact beyond CSN buildings.

For surrounding public open spaces areas there is no shadow impact from the NEPIA Planning Proposal.

The Vernal (Spring) Equinox shadow analysis concludes that the proposed NEPIA built form does not significantly impact overshadowing beyond existing CSN shadows. Minor additional overshadowing is considered acceptable and minimised by design principles and controls.



# 5.2 SHADOW ANALYSIS: VERNAL (SPRING) EQUINOX

22 September 2024 (09:00 AM TO 03:00 PM)



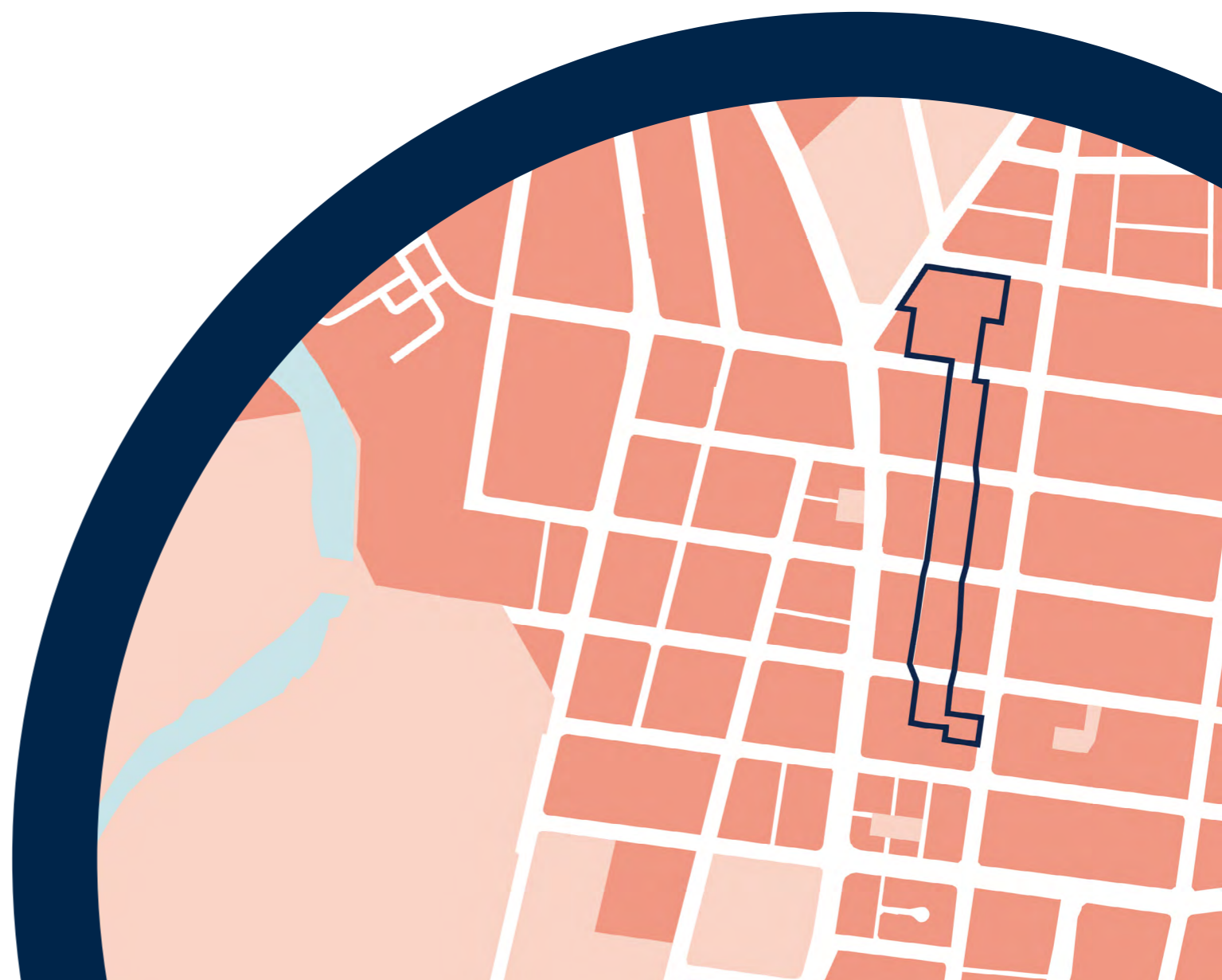
### LEGEND

- NEPIA BOUNDARY
- HERITAGE CONSERVATION AREA (HCA)
- CHURCH STREET NORTH (CSN) BUILDINGS SHADOWS
- NORTH EAST PIA (NEPIA) BUILDINGS SHADOWS
- NEPIA SHADOWS WITH ADDITIONAL IMPACT ON SORRELL STREET BEYOND CSN SHADOWS
- 23-27 HAROLD ST PP



NTS

# 6. CONCLUSION



## CONCLUSION

This document was prepared to address the conditions of the Department's Gateway determination, facilitating an understanding of the full impact of the proposal, how the controls were derived, and to assist the community with understanding the proposed changes.

This document has presented the consolidated urban design analysis, principles and strategies underpinning the proposed controls for the North-East PIA.

Appropriate transition in built form and scale between the CSN spine and the Sorrell Street HCA and minimisation of visual impacts will be achieved through the co-ordinated, whole of place approach taken to CSN, the North-East PIA, and the HCAs collectively to support the proposed amendments to height and density and draft DCP controls.

The application of the Department's viewshed approach (see Section 3.4.2), combined with coordinated orientation to the massing and form, a lower height datum for the North-East PIA, street setbacks, co-location of open spaces, and increased opportunities for deep soil and canopy planting, maintains development within the human view plane.

This approach ensures that the taller building forms of the CSN remain mostly hidden when viewed facing west from Sorrell Street, contributing to the minimisation of visual impacts.

Consideration of topography and land form has been applied to inform heights, remaining consolidated around the Church St axis before transitioning towards the lower valleys of Brickfields Creek and the Parramatta River.

In a north-west direction this same stepping occurs between St Patrick's Cemetery and the Parramatta River.

Council has included additional overshadowing diagrams for the Spring Equinox scenario in addition to the Winter Solstice within this report.

No additional overshadowing to any nearby public open spaces occurs as a result of the North-East PIA proposal.

