

Attachment A2(f)

**Urban Design Study – 5 Preferred Urban
Design Option – Botany Road Precinct**



Preferred Urban Design Option

5.0

5.1 Preferred Built Form Option

A preferred built form approach was developed that:

- Establishes a maximised targeted uplift on key sites whilst respecting solar planes, as yields were not met with amalgamated option 01 and 02.
- Implements Special Character Areas implemented to protect areas of character.
- Proposed heights and built form massing that responds to detailed sun access planes review, key views and massing analysis.

Four precincts will support future built form:

- 1 Regent Street High Street
- 2 Rosehill Precinct
- 3 Waterloo Metro Quarter Employment Quarter
- 4 McEvoy Street Precinct

It is considered that two areas may develop as mixed use under existing controls:

- 5 McEvoy Street Precinct which is situated outside 400m walking distance from Waterloo Metro Station and therefore is less conducive to commercial use.
- 6 At Waterloo Metro Quarter Precinct, one site has an existing development approval for affordable housing. With greater storey heights a continuous street edge and some commercial floor space could be in a mixed use development.

LEGEND

- Development Capacity and growth areas
- Sensitive Development Area - Heritage Considerations
- Precinct boundary
- Commercial Built Form
- Residential Built Form
- Proposed Developments

Figure 271: Proposed built form - commercial floorspace development (left)
 Figure 270: Proposed built form - including mixed use development under existing controls (right)

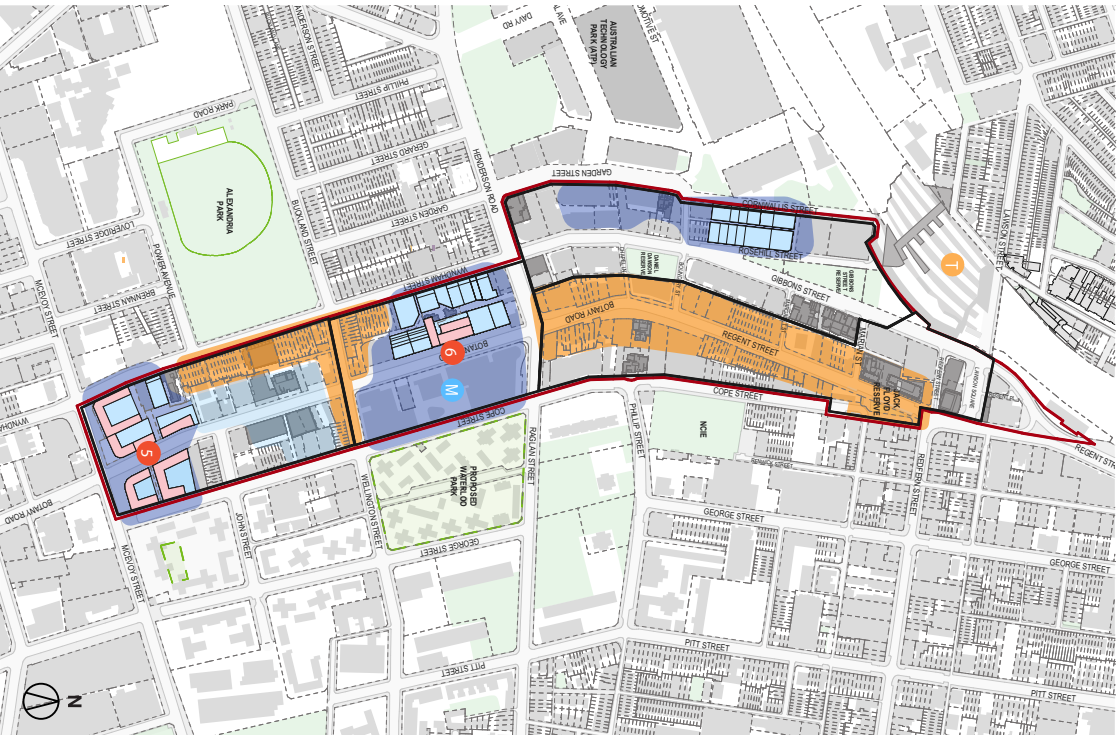
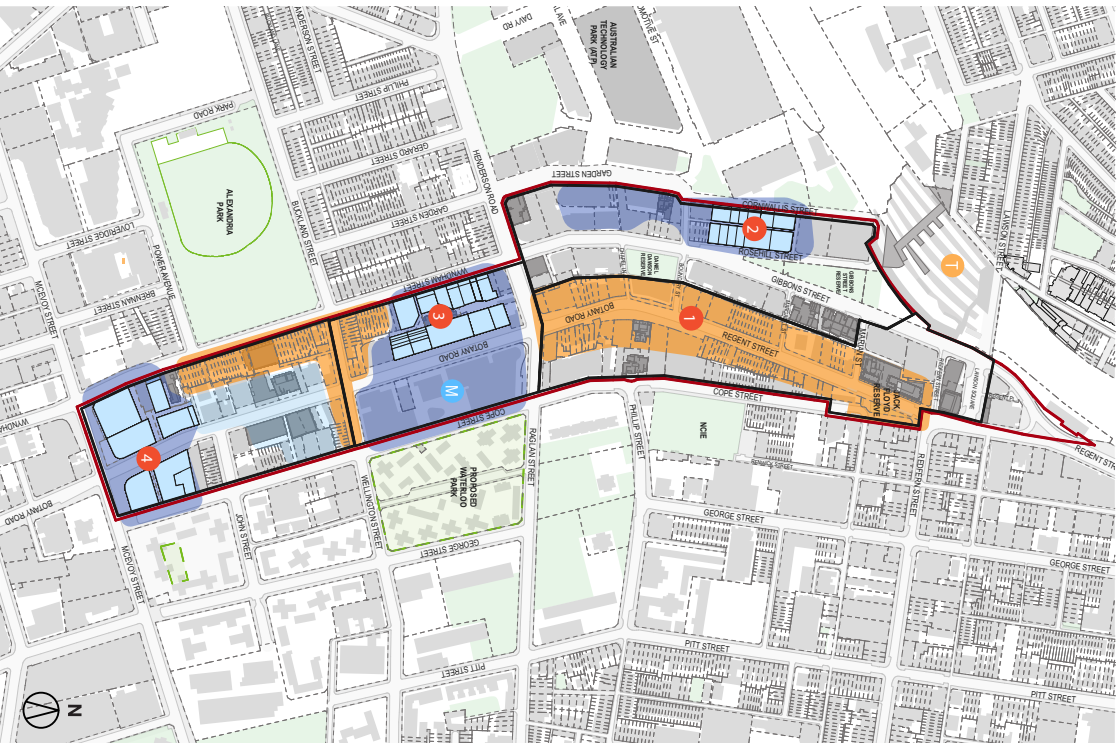





Figure 272: Proposed Built Form - Commercial development - Aerial View

LEGEND
 Proposed commercial / non-residential floor space
 Note: Numbers indicate building storeys

5.2 Preferred Built Form - Growth Precincts

Rosehill Precinct Built Form - Summary

The following factors have been taken into account when determining the preferred built form envelopes for Rosehill Precinct sites:

- Sun access to Daniel Dawson Reserve has been prioritised.
- Sun access to the surrounding flat buildings particularly those east of Gibbons Street has been prioritised.
- Heights should not exceed that of the RMA zoned areas and Redfern Station future development.
- Favourable wind environment and noise conditions.
- Ground level interface could benefit from either stepped, continuous floor planes, allowing for multiple access points and smaller retail or commercial floorplates at ground floor.
- View corridor north / south along Gibbons Street and from the ATP / Redfern Station.



Figure 273: Rosehill Precinct Built Form Strategy - Aerial View

Waterloo Metro Quarter Built Form - Summary

The following factors have been taken into account to determining the preferred built form envelopes for Waterloo Metro Quarter Precinct sites:

- Minimise overshadowing of the immediate surrounding Conservation Areas and existing residential properties. Properties to the north of Buckland Street and West of Wyncham Street have been prioritised.
- Require setbacks to Wyncham Street to allow for reduction in scale when viewed from the street and to reduce overshadowing impact.
- Limiting storeys to 12 storeys in this precinct as a visual principle rule, to ensure scale of the development are lower than the future Waterloo Metro Over-station development and to maintain a favourable relationship to Botany Road.
- Setback rear boundaries along laneways, to create direct line of sight reducing CP/TED issues, and prioritise implementation of north-south through site links.
- Prioritise east-west through site links within development at ground floor.

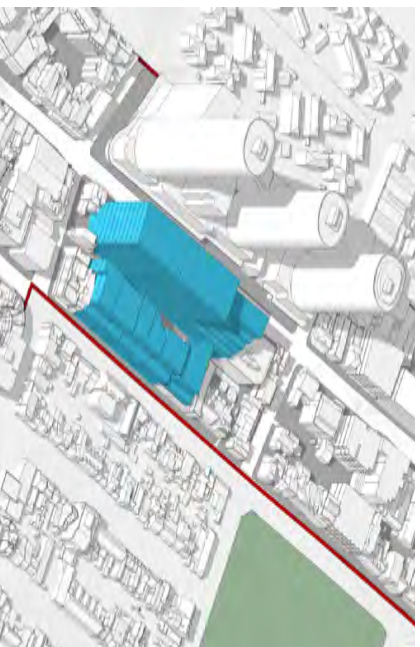


Figure 274: Waterloo Metro Quarter Precinct Built Form Strategy - Aerial View

Mcevoy Precinct Built Form - Summary

The following factors have been taken into account when determining the preferred built form envelopes for Mcevoy Precinct sites:

- Reduce overshadowing impact to residential properties located to the south and the east of the precinct.
- Step up built form gradually from surrounding low scale terrace or warehouse built forms, to moderate scale and reduce visual impact when viewed along Botany Road.
- Provide for through site links between large lots, to increase permeability and provide for safer pedestrian cross-block opportunities.
- Provide a stronger urban corner at Botany Road and Mcevoy Street to indicate the start of the precinct.



Figure 275: Mcevoy Precinct Built Form Strategy - Aerial View



Figure 276: Proposed Built Form - Mixed use development - Aerial View

5.3 Preferred Built Form - Solar Amenity

Waterloo Metro Quarter Precinct - Sun Access Plane

A Sun Access Plane has been developed over Waterloo Metro Quarter that provides sun access to properties along Wyndham Street where primary living areas face the western side of Wyndham Street. This Sun Access plane has been developed to maintain minimum 2 hours solar access to living areas, between 1030am and 1230pm on June 21 Winter Solstice.

Detailed solar testing can be found within the Appendices section of this report.

- LEGEND**
- Current Built Form
 - Additional Floorspace
 - Number of stores
 - Sun Angle June 21
 - SAP

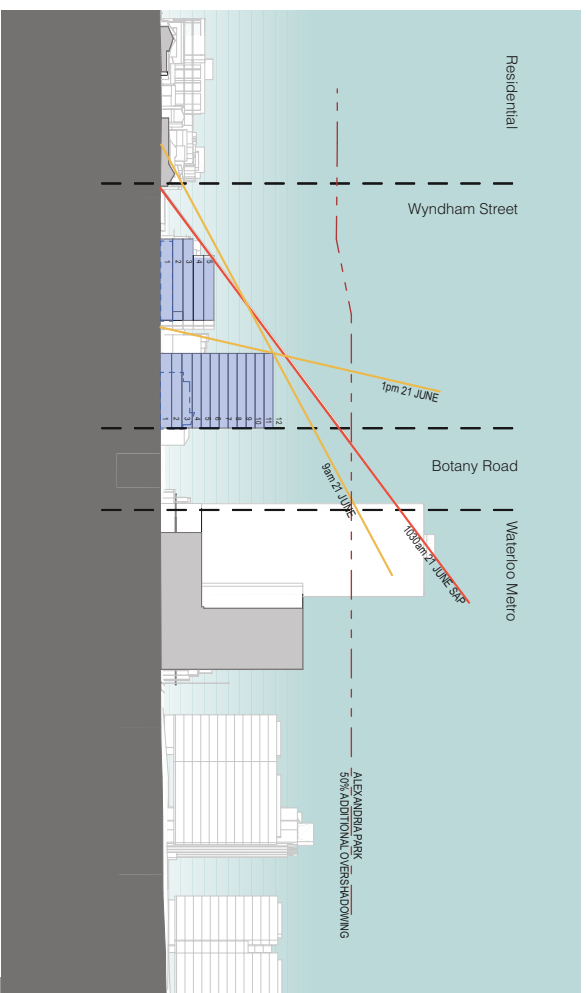


Figure 277: Waterloo Metro Quarter Precinct - proposed sun access plane section.



Figure 278: Waterloo Metro Quarter Precinct - existing solar access with Waterloo Metro Station - 1030am



Figure 279: Waterloo Metro Quarter Precinct - proposed sun access plane to maintain solar access between 1030am and 1230pm (minimum 2 hours).

Rosehill Precinct - Sun Access Plane

A Sun Access plane has been developed over the Rosehill Street key development sites that maintains minimum 4 hours sun access to Daniel Dawson Reserve for minimum 50% of the reserve, between 9am and 3pm on June 21 Winter Solstice.

Detailed solar testing can be found within the Appendices section of this report.

- LEGEND**
- Current Built Form
 - Additional Floorspace
 - Number of stores
 - Sun Angle June 21
 - SAP
 - SAP - viewed in elevation

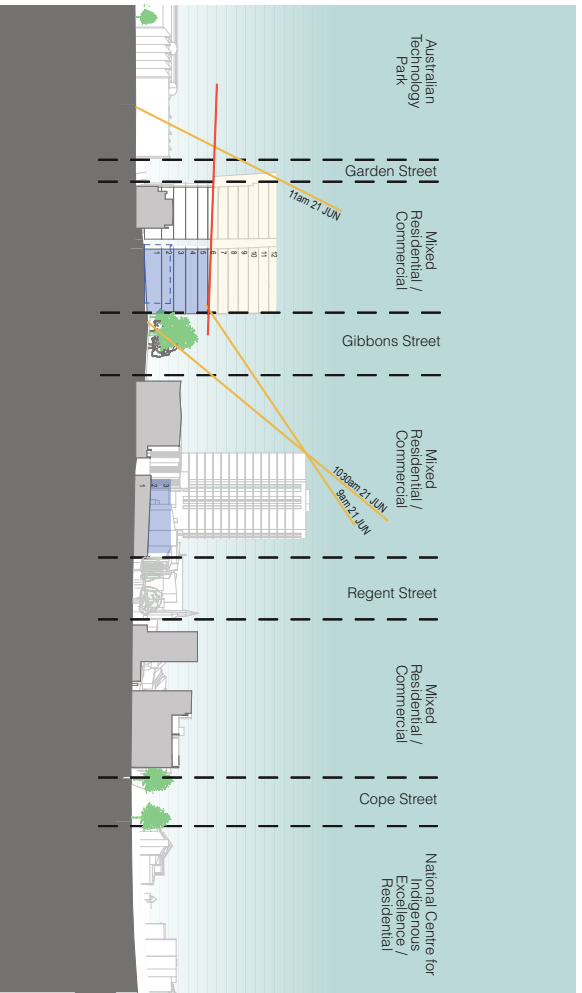


Figure 282: Rosehill Sites Precinct - proposed sun access plane section.

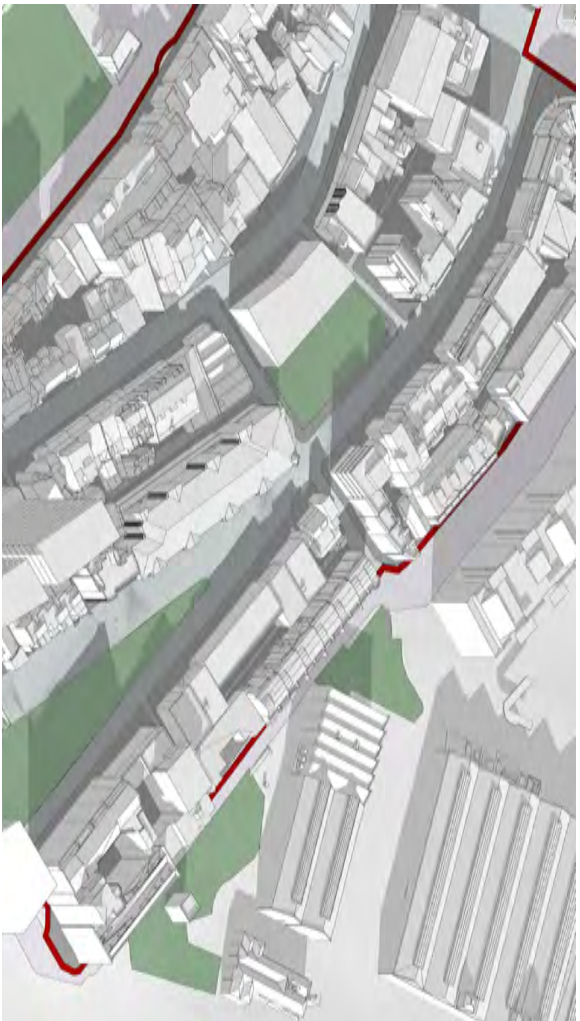


Figure 280: Rosehill Sites Precinct - existing solar access with Waterloo Metro Station - 1030am

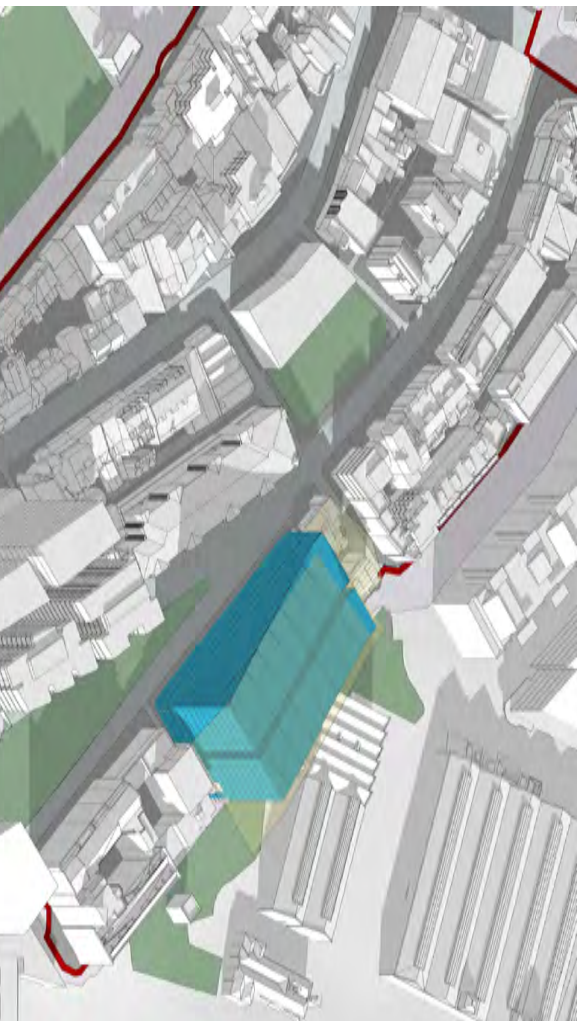


Figure 281: Rosehill Sites Precinct - proposed sun access plane to maintain solar access between 1030am and 1230pm (minimum 2 hours).



Figure 283: Proposed Sun Access Planes - Aerial View