Hills Showground Station Precure URBAN DESIGN GUIDE

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REV	DATE	DETAILS
А	25/10/2019	First Draft for Internal Client Review
В	28/10/2019	Second Draft for Internal Client Review
С	29/10/2019	For Submission
D	04/11/2019	For Submission
E	08/11/2019	For Submission

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Introduction

The following chapter serves as an introduction to the project, The Hills Showground Station Precinct (The Site) and the purpose of the Urban Design Guidelines.

Project Background

The Site is located on the completed Sydney Metro Northwest, part of a longer term metro project that will connect Tallawong in the north west to Bankstown in the south west via Chatswood, Sydney CBD and Sydenham.

The Site sits within the broader Central City District of Metropolitan Sydney with the Central River City, comprised of Parramatta and Westmead, at its heart.

(Sydney Metro Northwest) will make the corridor an even more attractive area to live and work with demand in housing and jobs expected to grow.

To meet overarching State Government strategic objectives, the Department of Planning, Infrastructure & Environment (DPIE) developed a Corridor Strategy to maintain and improve the lifestyle available in the local area while allowing for wellplanned and sustainable future growth.

As part of the Corridor Strategy, DPIE developed precinct structure plans for each of the eight new Metro stations. The plans outlined the challenges and opportunities present, culminating a collective vision and structure plan for the Station precinct to guide the future character of the study area.

The rezoned Station Precinct Plan for Showground is forecast to deliver

approximately 5,000 new homes and 2,300 jobs over the next 20 years, transforming the area around Showground Station into a vibrant local centre and contributing to Castle Hill as a strategic centre.

The Site

The Hills Showground Station Precinct site sits within an established community that is undergoing significant transformation in response to the enhanced levels of accessibility and amenity that the Sydney Metro North West project represents.

Sitting at the top of a ridgeline which extends from Castle Hill to the site, the Site is a prominent marker in both landscape and future built form. In response to this prominent location, as a government-led place making project, it has the opportunity to continue the commitment to quality amenity outcomes that have been delivered by the Sydney Metro Project and set the standard for the broader precinctual renewal in the future.

Leveraging the landscape characteristics of the site and its surrounds, the Project seeks to deliver a complementary and connected public realm that is anchored by a new civic heart stitching together the regional recreation networks, local movement patterns and the transport interchange together in a place that is active day and night, weekday and weekend, winter and summer.

A new local park within Precinct East will provide for more casual recreation opportunities and form part of a comprehensive network of green and blue spaces for The Hills in line with the vision of the broader Central River City.

Purpose of the Urban Design Guidelines

The Hills Showground Station Precinct Urban Design Guidelines (the Guidelines) is a comprehensive document that outlines the detailed controls and considerations to guide the redevelopment of the lots adjoining the Hills Showground Metro Station

The Guidelines have been established to deliver high quality building and landscape domain outcomes through the transformation of the site, across all uses and densities.

The purpose of the Guidelines is to translate the urban design principles and urban design framework into objectives and guidelines that will ensure future development achieves high quality design and design excellence distributing parks throughout the site.

The Guidelines apply specifically to the development lots within the Hills Showground Station Precinct, however, the Guidelines also respond to the context of existing site elements and opportunities.

The Urban Design Guidelines are generally aligned with:

- controls within the Hills Shire Local Environmental Plan and Development Control Plan
- Showground Station Precinct Planning Report and Finalisation Report
- SEPP65 Apartment Design Guidelines
- Government Architect's Office (GAO) of NSW Better Placed and Greener Places

 Department of Planning, Industry and Environment Secretary's Environmental Assessment Requirements (SEARS) that are relevant to built form and landscape controls.

The Guidelines address;

- Public Domain and Landscape Guidelines
- Public Open Spaces Materials and Elements
- Communal Open Space Guidelines
- Communal Open Space Materials and Elements
- Public Art and Interpretation
- Integrated Water Management
- Built Form Guidelines
- Built Form Finishes and Materials
- Streetscapes
- Solar Access
- Water Sensitive Urban Design Guidelines
- Vehicular Access and Parking

The Guidelines are structured into objectives and guidelines to be addressed within each of these elements.

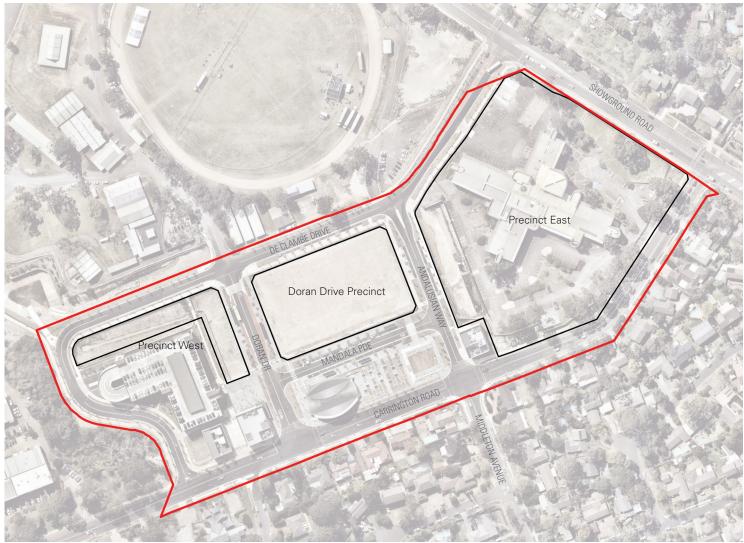


Figure 1: Development Lots to which the Urban Design Guidelines apply

⁻ Site - Development Lot

Design Excellence

Objectives

- To provide for design outcomes that maintain a high quality of life for both building users and the general public in sensitive locations.
- To ensure that new development is appropriate to place including transitions to adjoining uses and infrastructure, the public domain and transition between areas of differing uses or scales
- To encourage diverse range of solutions that can be developed to suit a particular location.
- To encourage developers to deliver permanent tangible outcomes for the greater public good within their development.

Guidelines

- A range of design options explored to be submitted with any application to demonstrate that real alternatives have been explored and the best possible approach has been selected.
- 2. Engaging with council early in the process, involving local council officers working in tandem with design experts to contribute to development of design skills within council.
- Exceeding rather than meeting base requirements – to foster innovation in superseding minimum requirements to ensure that built form contributes to a betterment of living.
- 4. Demonstration of architectural design excellence with regards to built form, relation to the public domain and materials and detailing.
- Demonstration that the external form and appearance of the building will improve the quality, usability and amenity of the public domain.
- Demonstration that the location of any tower proposed, considers the relationship with other towers on the site or on neighbouring sites in terms of separation, setbacks, amenity and urban form above and beyond those required by the ADG.

- 7. Achieving a clear delineation between the street scaled podium and tower above.
- 8. Consideration of sustainability. This is to include an assessment of environmental impacts, demonstration of sustainable design beyond authority requirements, visual and acoustic privacy, wind, reflectivity and air and noise pollution, and reducing on-going maintenance costs.
- 9. Assessment of the impact on, and any proposed improvements to, the public domain, the impact on Doran Drive Plaza, Precinct East Park, Station plaza, station forecourt entry and carpark plaza and adjoining outdoor dining areas, interfaces at ground level between the building and the public domain, and/or excellence and integration of landscape design.
- 10. On-site communal open spaces with a variety of programme and locations. Above ground areas may be appropriate provided they are accessed from a communal space, have a high quality outlook, receive good solar access and are not windswept.
- 11. Bettering ADG and other statutory requirements.
- 12. Demonstrated excellence in CPTED outcomes.

Sustainability

Objectives

 To ensure that the future buildings, private and public domain of the development lots achieves best practice sustainability outcomes in line with the Sustainability Strategy submitted as part of the Hills Showground Precinct SSDA

- Encouraging walking and cycling trips to, from and within the precinct by providing appropriate paths, crossings and supporting facilities, adequate street furniture and ensuring that the public domain is universally accessible.
- 2. Mitigate urban heat island effect through the provision of;
 - maximising natural ventilation and lighting in to residential and nonresidential uses through building orientation and configuration
 - rain gardens and Water Sensitive Urban Design mechanisms
 - high proportions of canopy cover in the public and private realm
 - using high diffuse reflectivity and high emissivity value materials for hardscapes, footpaths, communal open spaces and rooftops.
- 3. Promote photovoltaic and local energy generation and storage.

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PUBLIC DOMAIN & LANDSCAPE GUIDELINES

Public Domain and Landscape Guidelines

The public domain and landscape design is integral to creating a precinct that is a successful and vibrant place to work and live, captures and enhances the local character, and integrates into the local context.

The following are objectives and guidelines as they pertain to the public domain and landscape within the Hills Showground Station Precinct.

These objectives and guidelines will need to be addressed in the design of both public and private spaces to ensure a cohesive and high quality outcome for the precinct.









Public Open Space Provision

Objectives

- To deliver a well connected, accessible, high quality, diverse, multifunctional and flexible public open space network.
- To reinforce primary connections between the Showground Metro Station, the Hills precinct, and Castle Hill Showground.
- To provide for an active community 'heart' focused around a new plaza on Doran Drive.
- To provide a new local park as part of Precinct East.
- To ensure clear, legible and safe pedestrian and cycle connections, including links to the regional cycle network.
- To deliver an environmentally and socially sensitive and responsive design that ensures the environmental qualities of surrounding landscapes are maintained or enhanced.
- To provide an emphasis on local character and a continuity of landscape.
- To retain the existing landscape within public open spaces in terms of topography and existing trees.

- Provide two new public open spaces, Doran Drive Plaza and the Precinct East Park, to ensure a minimum 11% of the development lots are publicly accessible open space.
- 2. The Doran Drive Plaza is to be a minimum 1,400m² of public open space and located in accordance to the plan adjacent and the drawings in the master plan drawing set.
- The Precinct East Park is to be a minimum 3,500m² of public open space and located in accordance to the plan adjacent and the drawings with the master plan drawing set.
- Provide a publicly accessible pedestrian link with a minimum width of 10m between Precinct East Park and Showground Road.
- 5. All new public open spaces are required to have no basement or sub-basement below ground for the full extent of the space (the Metro tunnel beneath Precinct East Park is considered deep enough to allow this requirement to be met).
- 6. All new public open spaces and publicly accessible open spaces are to be universally accessible and DDA compliant.
- 7. Buildings that interface directly with the public open spaces and publicly accessible open spaces on the ground floor are to be accessed from those spaces via active retail and commercial frontages or residential courtyards.



- Precinct East Park
- Private communal open space to be provided within development blocks

Doran Drive Plaza

Objectives

- To provide an active plaza space as part of the community heart of the precinct.
- To reinforce primary pedestrian connections between the Hills Showground Metro Station and Castle Hill Showground.

Guidelines

- 1. Provide multiple comfortable seating options and gathering spaces that can cater to different individual needs and group settings.
- 2. Provide an engaging focal point to the plaza. The preference for this is a water feature, however it may also be public art, sculptural pavilion or other urban element.

- Incorporate public art and interpretation in line with the Interpretation Strategy for the precinct.
- 4. Maintain clear and generous pedestrian access across all pedestrian desire lines between retail, transport and the showground. In particular, maintain a minimum 6m wide pathway adjacent Doran Drive, and a minimum 5m wide footpath along the building frontage (may include outdoor dining so long as a minimum 3m clear continuous footpath width is maintained).
- 5. Provide opportunities for outdoor dining along the building frontage.
- Provide a minimum of 45% tree canopy cover across the plaza at expected mature tree sizes.

Precinct East Park

Objectives

- To provide a new local park as part of a village centre within Precinct East.
- To retain existing trees within the new local park.

- 1. Provide sheltered picnic tables and additional seating across the park.
- Provide a play space of a minimum 250m² with play elements that cater to the very young (up to 5yo) and primary school age children (5-12yo).
- 3. Provide an open lawn area for passive recreation.

- 4. Provide footpath access between areas of the park, adjacent residential building entries and between the surrounding street network.
- 5. Provide a minimum of 70% tree canopy cover across the park at expected mature tree sizes.
- Comply with Council's Recreation Strategy and the Level of Service for a local park.
- 7. Incorporate public art and interpretation in line with the Interpretation Strategy for the precinct.





Pedestrian Link

Objectives

 To provide a safe and comfortable public pedestrian connection between Showground Road and Precinct East internal street.

Guidelines

1. Align the pedestrian connection to maximise pedestrian and visual access as part of the wider pedestrian connection between Showground Road and the Metro Station (via Mandala Parade).

- 2. Provide a minimum 3m wide footpath within a minimum 10m wide publicly accessible space.
- 3. Provide a continuous tree canopy (at maturity) for shade along the length of the connection.
- 4. Maintain a clear line of sight from one end of the pedestrian link to the other.
- 5. Ensure adjacent residential buildings provide passive surveillance to the path through living space windows, apartment balconies and building / apartment access facing onto the pedestrian link.
- 6. Provide bioretention measures in line with the Integrated Water Management Strategy.

Private Communal Open Space

Objectives:

• To add additional amenity and recreational opportunities for the residents of the precinct.

- Provide communal open space in the form of podium, rooftop and ground level private communal areas in accordance with SEPP 65 Apartment Design Guidelines.
- 2. Communal open space is to provide a range of uses including seating, picnic facilities, play spaces, productive gardens and lawn areas amongst generous planting.
- 3. The majority of communal open space in Precinct East is to be at grade and read as a continuation of the adjacent public domain character in planting and materiality.
- 4. Rooftop gardens across all precincts are to incorporate native planting for local character however this may be supplemented with exotics for colour and variation, and edible species as part of vegetable or herb gardens.





Materials and Elements

Objectives

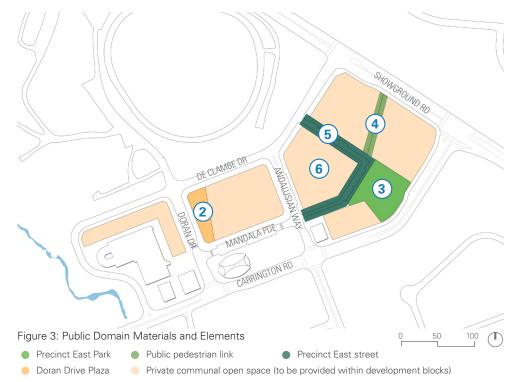
- To emphasise local character and a continuity of landscape.
- To provide robust and site appropriate materials and elements across the public domain.
- To respond to the materials and elements in the existing open spaces and streets in the broader precinct.

Guidelines

- 1. All public domain materials and elements including walls, furniture and play equipment are to be of a robust and durable quality to withstand public use.
- 2. Doran Drive Plaza: Paved plaza to be stone unit paving to match the paving of the adjacent station plazas. Variation in paving texture and format is acceptable if it supports the character and layout of the plaza. High quality seating and furniture elements are to be integrated into the landscape design. Public Art and Interpretation is to be integrated into the plaza and may include paving and furniture elements or features and may including paving, lighting and furniture elements or features.
- 3. The Precinct East Park: The park is to have insitu concrete paths and paving, durable picnic shelters, tables and park seating. The playground is to have a

range of play equipment that caters to very young and young children (up to 12 years old). Play equipment may include a mixture of natural play elements and high quality custom or off-the-shelf play elements.

- 4. Pedestrian Link: The pedestrian link is to have an insitu concrete footpath that ties into the surrounding public domain rather than appear as a privatised space.
- 5. The new street in Precinct East is to have insitu concrete footpaths to both sides. Road thresholds and crossing points are to be paved to emphasise a slow speed environment.
- 6. Communal open space: Where communal open space is at ground level, the materiality is to be complimentary to the adjacent public domain and may include additional materials such as brick and/or stone paving. Fencing may be provided to delineate private vs public space, however should provide clear views into the ground level private open space. Materiality of podium and rooftop communal open space is to relate to the materiality of the building.
- Provide lighting for interest, wayfinding and safety to all public spaces and connections. Ensure lighting minimises glare and light pollution and is aesthetically pleasing, functional and relates to intended night time use and activity.



Doran Drive Plaza:





High quality paving



Precinct East Park, Pedestrian Link and Street:





Insitu concrete paths



Planting and Trees

Objectives

- To emphasise local character and a continuity of landscape.
- To respond to the existing planting across open spaces and streets in the broader precinct.
- To retain existing trees within open space.
- To increase canopy cover and biodiversity.

Guidelines

- Tree and plant species selection is to take into account a number of factors including:
 - Climate/microclimate;
 - Size requirements/constraints;
 - Form;
 - Native / Exotic;
 - Density of foliage;
 - Growth rate;
 - Availability;
 - Maintenance (i.e. Leaf fall, fruit drop) and safety (branch drop)
 - Other considerations such as interpretation.

- 2. All existing trees within the Precinct East Park extents remaining after the council building demolition works are completed are to be protected and retained.
- Large trees are to be planted in the new street, building setbacks and public spaces to provide scale and partial screening to built form.
- Planting in the public domain is to be combined and layered in a way that provides visual interest, reduces visible areas of mulch, is easily maintained, provides screening where appropriate and maintains clear sight lines where needed.
- Use trees and planting to provide a comfortable microclimate including shade for seating and footpaths and

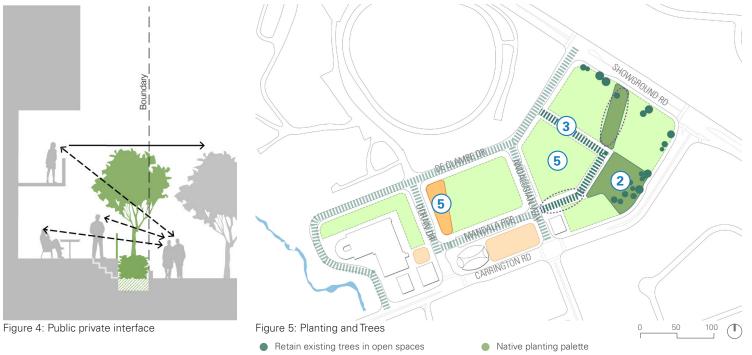
adverse wind amelioration. In particular, provide dense evergreen trees and consider shrubs and hedging to improve wind conditions in the pedestrian link, at building corners, and between the Precinct East Park and Andalusian Way.

- Doran Drive plaza is to utilise a combination of native and exotic species suited to it's urban character, with opportunity for a grove of deciduous trees reflecting the area's history with orchards.
- 7. The Precinct East Park and publicly accessible link to Showground Road will have a palette of predominantly native plants that includes existing trees. Exotic deciduous trees (to a max 30% of total park trees) may be incorporated into the park as a feature and to provide solar access in winter.





- 8. The new street in Precinct East is to have a predominantly native palette of large native trees for scale and shade.
- 9. Native species are to be used for the WSUD rain garden areas.
- 10. Communal open spaces to contain predominantly native species at ground level, with edible and exotic feature species acceptable on podium and rooftop gardens.
- 11. Use layered planting to define the public and private interface with residential buildings, providing screened views to balconies and front courtyards of garden apartments.
- 12. The incorporation of green walls and roofs into the design of commercial and residential buildings is encouraged. Where suitable, building facades should incorporate vertical landscaping features to soften the visual bulk of buildings and to improve streetscape appeal.



- Combination of native and exotic species
- Large native street trees
- Communal open spaces to contain combination in Trees and planting to improve wind conditions of productive and native vegetation

Indicative species

Doran Drive Plaza:





Callistemon 'Better John'

Corymbia maculata



Ficus macrocarpa 'Hillii'



Melaleuca quinquenervia Lomandra tanika



Pyrus usseriensis

Hibbertia scandens





Angophora costata



Eucalyptus punctata



Lophostemon confertus



Eucalyptus resinifera





Sophora japonica



Quercus palustris



Grevillea 'Honey Gem'



Grevillea 'Royal Mantle'

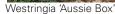


Myoporum parvifolium



Raphiolepis indica





Viburnum odoratissimum



Pennesetum /Nafray'







Eleocharia sphacelata





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Pedestrian link:



Waterhousia floribunda



Dianella caerulea



Westringia 'Aussie Box'



Myoporum parvifolium

Precinct East Street:



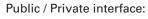
Corymbia maculata



Dianella caerulea



Liriope muscari





Lagerstroemia indica



Pyrus calleryana 'Capital'



Buxus japonica



Viburnum odoratissimum

Communal open space:







Waterhousia floribunda







Lagerstroemia indica





Myoporum parvifolium







Anigozanthos 'Gold Velvet' Trachelospermum jasminoides



Agapanthus orientalis



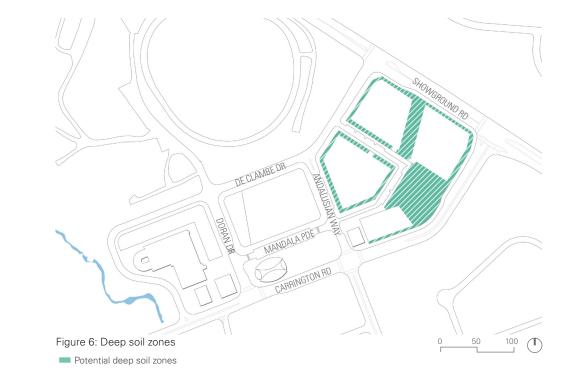
Westringia 'Mundi'

Deep Soil

Objectives

 To ensure that ample deep soil areas are provided so that large trees can accommodated within both the public and private domain to reinforce the local character of the broader Hills Showground Station Precinct and the Garden Shire.

- 1. A minimum of 20% of deep soil area for Precinct East.
- 2. That deep soil within the private domain should be located within the primary setbacks.
- 3. Internal communal open spaces are located within a larger courtyard access via ground floor residential courtyards.
- 4. That deep soil provision on Precinct West is restricted to the access easement from De Clambe Drive to the station services building.



Public Art and Interpretation

Objectives

- To celebrate the Aboriginal and European heritage of the site and its surrounds through four interpretive themes and stories, including:
 - Theme 1 Aboriginal Cultural Heritage
 - Theme 2 Resistance and Rebellion
 - Theme 3 Agriculture and Orcharding
 - Theme 4 Pride in the Hills

- Carry out the recommendations of the Hills Showground Station Precinct Interpretation Strategy through the implementation of public art and interpretation within the public domain.
- 2. Use the following devices as suggested in the Strategy:
 - Device 1 Surface inlays
 - Device 2 Lighting
 - Device 3 Public Art / Murals
 - Device 4 Branding and Naming
- 3. Focus public art and interpretation around Doran Drive Plaza, considering the installation of an interpretive water feature within the plaza, and a deciduous tree grove along with the devices listed above.
- 4. Consider public art within the Precinct East Park, which may include surface inlays and sculptural interactive play elements.



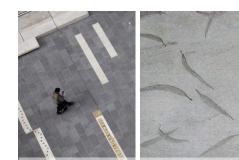








Theme 4 - Pride in the Hills



Device 1 - Surface Inlays



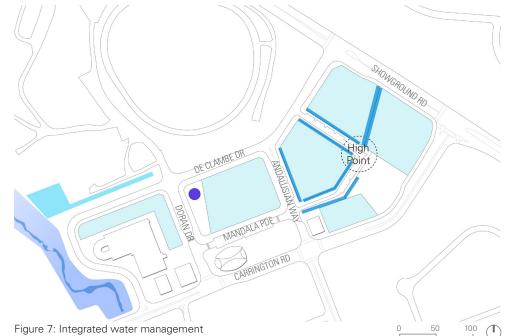
Integrated Water Management

Objectives

• To promote the sustainable use and treatment of water within the public domain.

Guidelines

- 1. Carry out the recommendations of the Hills Showground Station Precinct Integrated Water Cycle Management Strategy through the implementation of water treatment measures within the public domain.
- 2. Integrate water treatment across the Eastern Precinct through attractive linear bioretention measures.
- 3. Capture and re-use stormwater from roof areas as irrigation for planting. Select plant species appropriate to the climate that require a low amount of watering.
- 4. Consider an interpretive water feature within Doran Drive Plaza that reflects the site's connection to Cattai Creek. Any water feature to be low water use and not contain any permanent water bodies.

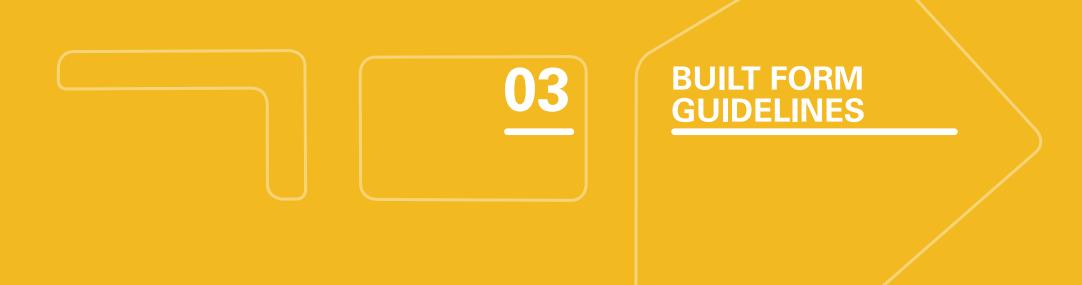




Linear bioretention

- Interpretive water feature Existing swale and basin
- Indicative linear bioretention measure locations Capture and re-use of stormwater from roof areas
- Cattai Creek Open Space corridor

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Built Form Guidelines

The intention of the Guidelines are that building envelopes are developed for each site that allow for a 'loose fit' and room for articulation and modulation of buildings within those envelopes. Built form massing and articulation is fundamental to the desired future character and identity of streetscapes and the development lots.

The following are objectives and guidelines as they pertain to the built form outcomes within the Hills Showground Station Precinct.

These objectives and guidelines will need to be addressed when designing the future building envelopes, as the experience of streets and public spaces are created by the scale, definition and extent of enclosure by buildings and landscape.

Building Massing and Scale

Objectives

- To protect and enhance the rich, distinctive and valued character of the Hills Showground Station Precinct and its surrounds particularly those elements that contribute to a sense of place and identity.
- To arrange building forms (including heights and massing) to reinforce the future desired structure and character of the area.
- To ensure that buildings address the existing street, new local road, laneway, new through-site link and open space.

Guidelines

- Sleeve larger buildings with finer grain active frontages to the street and public domain.
- 2. Provide appropriate building separation to protect privacy and solar access to private and public spaces.
- Emphasise building corners to signify key intersections and enhance public domain legibility.
- 4. Consider possible future development on adjoining sites.
- 5. Specify facade treatments that create visual variety and interest while contributing to the continuity of the streetscape.

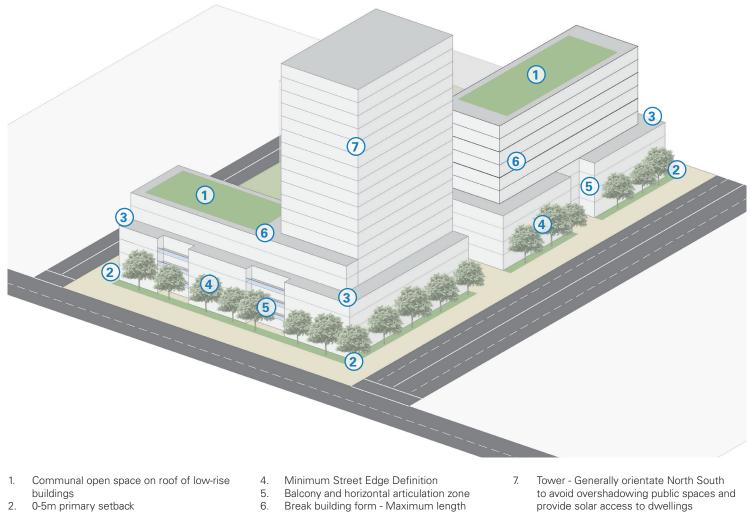
- 6. To protect existing views and new views to and from the station and Castle Hill Showground.
- 7. To protect the natural features of Precinct East and Cattai Creek and solar access to the public realm.
- 8. Changes in scale, setbacks should be explored to create interest and enhance the relationship with the public domain.
- 9. That GFA is to be no more than 75% of the building envelope.
- 10. The maximum building length should not exceed 70m.
- The maximum tower length should not exceed 50 metres without significant modulation including a minimum 3m break in the building that continues through to the circulation corridor.
- 12. Definition of streets by 2-4 storey street walls (height depending on the use) with towers orientated above the street wall to maximise solar access to public and private spaces and habitable rooms, district views to the east, north and west and to minimise wind down draft.

Building Articulation

Objectives

 To ensure buildings are articulated in a manner that delivers a varied built form across both horizontal and vertical planes.

- 1. Building longer than 50m should be articulated throughout the facade.
- 2. Articulate building façades vertically to reduce the appearance of building bulk and to express the elements of the building's architecture.
- 3. Provide for horizontal articulation that responds to the natural topography of the development lots with a maximum of two steps within each podium aligned with any breaks in the built form or tower elements above the podium.
- 4. Provide a sense of address and visual interest from the street through the use of insets and projections that create interest and, where relevant, the appearance of finer grain buildings, however avoid ground floor recesses that undermine the safety of the public domain.
- Integrate ventilation louvres and car park entry doors into facade designs where located on street frontages.
- 6. Buildings on corners should address both streets.



without articulation 50m

- 2. 0-5m primary setback
- 3. 2-3m secondary setback above street wall

Tower - Generally orientate North South to avoid overshadowing public spaces and provide solar access to dwellings

Residential Buildings

Objectives

- To ensure private amenity is maximised both within apartments and internal circulation spaces and the communal open spaces at grade or on podiums.
- To provide an active interface with the public domain through access to/from ground floor dwellings.
- To ensure building orientation and separation provides for resident privacy and amenity via views across communal open spaces, public open spaces or, from elevated positions, the broader Hills Garden Shire.

Guidelines

1. Ensure ground floor dwellings have a primary street address or are oriented

and accessed in a way that activates the public domain with clear, legible entries.

- 2. Comply with the Apartment Design Guide (if relevant for the intended uses). to ensure building separation achieves or exceeds SEPP65 Apartment Design Guide requirements.
- 3. Provide a minimum floor to floor height of;
 - 4 metres on the ground floor of buildings within all mixed residential, retail, commercial, SoHo and community use zones ensuring flexibility for future uses
 - ii. 3.3 metres for the ground floor for residential only uses
 - iii. 3.1 metres for all floors above the ground floor.

Mixed Use Buildings

Objectives

- To provide a range of appropriately sized and configured tenancies that meet commercial or market needs.
- Incorporate non-retail uses such as gymnasiums, child care centres, community facilities and professional consulting suites/tenancies that service the local residential and worker population.
- Ensure the location of ground floor uses activates the public domain and streets and provide passive surveillance to the public domain and streets.

Guidelines

 Locate active frontages on streets and fronting open space, urban plaza and public domain.

- 2. Create a fine grain of retail and commercial frontages to ensure an interesting street edge and support human scale streetscapes.
- Encourage ground floor activities (uses such as local retail, commercial and/or community) to spill out into the public domain to create a vibrant streetscape and promote a sense of community.
- Screen large retail tenancies (above 500m² GFA) by smaller tenancies for greater street activation and retail variety where needed.
- Provide clearly defined and visible building entries which directly address the street.
- 6. Provide awnings for weather protection and shade along active frontages.





Activity Nodes and Active Frontages

Objectives

- To reinforce complementary uses or desired street character.
- To accommodate local retail, community, cultural uses and to reinforce their role as a focus for pedestrians.
- To preclude residential ground floor uses in areas of high activity.

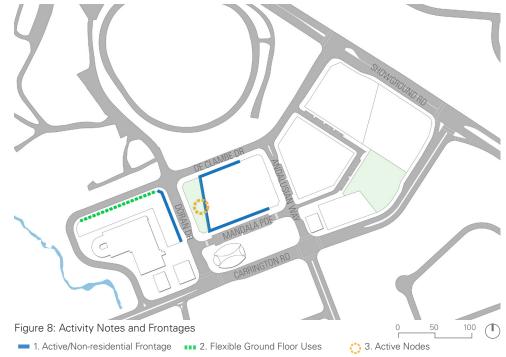
Guidelines

- Locate non-residential frontages on both sides of Doran Drive and extending along the pedestrian desire lines on Mandala Way and De Clambe Drive.
- 2. Provide flexible ground floor space and floor to ceiling heights in buildings within the Precinct West interface to De Clambe Drive that can accommodate a range of uses to respond to changes in demand for non-residential uses in the future.





Fine grain, dual frontage retail sleeving larger retail tenancies behind



Street Wall Heights

Objectives

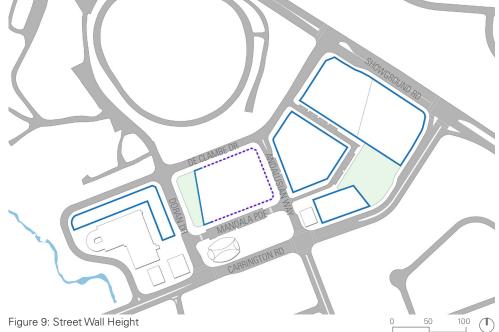
- To ensure that the height of the street walls make a significant contribution to the experience of place and add uniformity of character along particular streetscapes, or provide variations in areas where so desired.
- To provide street wall heights that are a response to future conditions within, and adjoining the site and the desired future character of the streets and Character Areas.

Guidelines

- Provide a 4-storey street wall for the majority of the site to define the streets and public open spaces with an appropriately scaled built form.
- 2. The southern and eastern edges of the Doran Drive precinct may be lower (to a minimum of 2-storeys) depending upon the total floor space required in the podium and the response to topographical conditions on the site.







- 1. Maximum 4 Storey Podium •••• 2. Minimum 2 Storey Podium

Setbacks

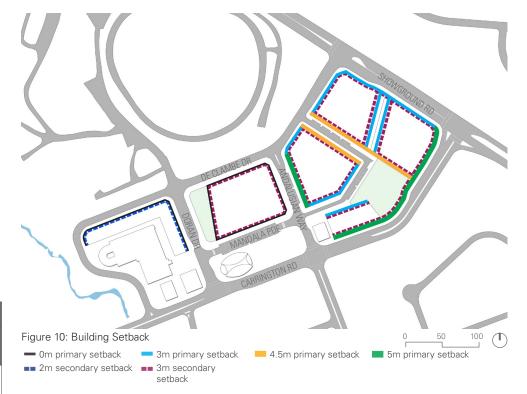
Objectives

- To contribute to the visual experience of the street.
- To provide space for landscaping and courtyards that weave the public and private domain together.
- To provide an intimate urban experience around the activity node where shops and businesses can be easily viewed and 'spill out' into the footpath.
- To ensure that secondary upper level setbacks enhances the pedestrian experience through visual enclosure and scale of streets and provide access to sunlight.

Guidelines

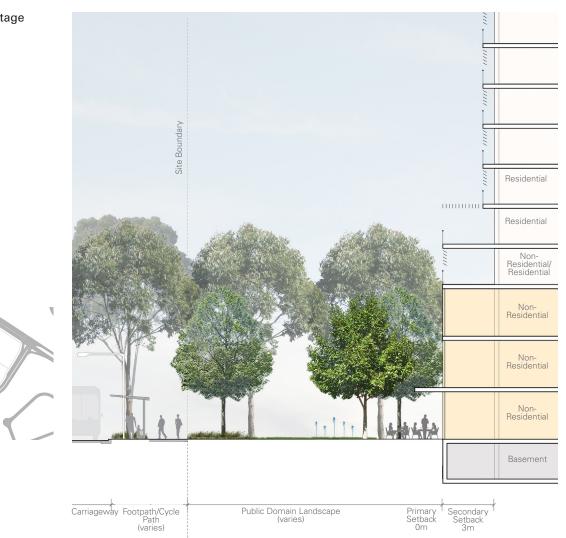
The following setback and street frontage height requirements respond to the existing or future desired character for the site.

- 1. Provide building setbacks in accordance with the table below.
- 2. Reinforce street edges that contribute to the existing character of the Hills Showground Station Precinct.
- Retail shop fronts should reinforce the streetscape edge with visible store front activity.



Use	Minimum Building Setbacks		
	Primary Setback (Street Frontage)	Secondary Setback (Above Podium)	
Active, Retail, Flexible, Community & Commercial Frontage	0m	2-3m	
Residential	3-5m	2-3m	
All other conditions	3m	3m	

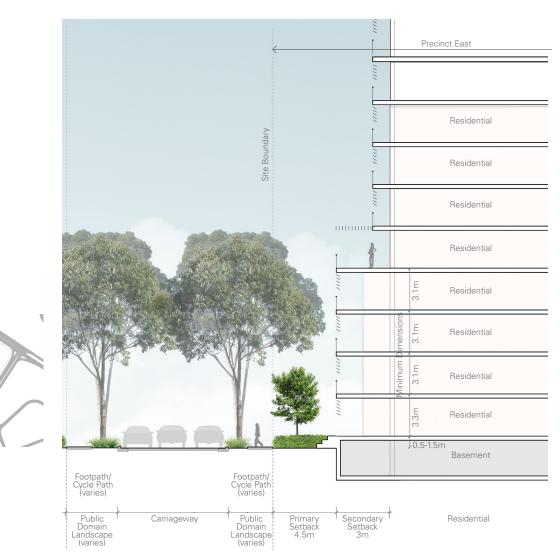
Active and Non-residential Frontage







Residential Frontage





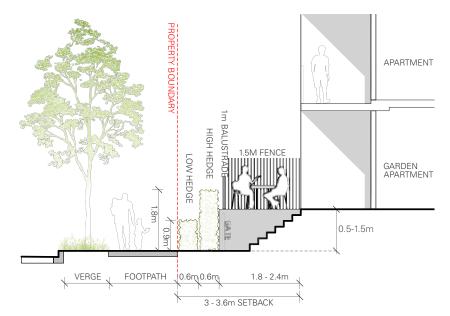


Public and Private Interface

Objectives

- To ensure that there is cohesion between the private domain and public domain.
- To provide privacy and amenity for ground floor residential uses.
- To ensure passive surveillance of the public domain.
- To ensure that all buildings have a legible address to the street.
- To ensure that building entries enhance the public domain through highly visible entrances.
- To ensure that pedestrians are protected from winds through the design of the lobby entries.

- A residential ground floor dwelling provides and an elevated stoop no less than 1m and no more than 1.2m above the levels of the adjoining public domain.
- 2. Living areas address the public domain on the ground floor and that living areas are not recessed more than 2m from the primary setback and building facade above.
- Fixed street canopies are provided for residential entries to protect occupants from harsh winds.
- Lobby entries are on-grade for accessible entry and avoid the use of ramps and stairs.
- 5. Service cupboards are to be integrated and concealed within the design of the entry lobbies to ensure they are not prominently displayed in the public domain.
- 6. Passive surveillance of public domain through access points to ground floor dwellings or through elevation and location of living areas to overlook the public domain.





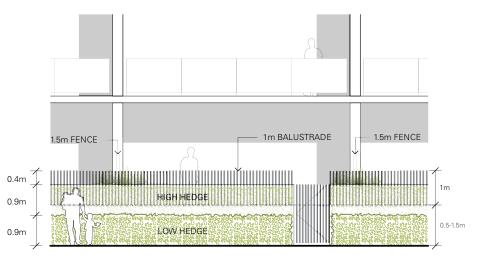


Figure 12: Residential Elevated Interface Elevation

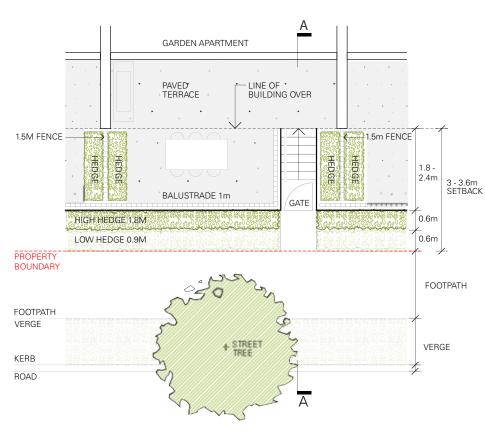


Figure 13: Residential Elevated Interface Plan

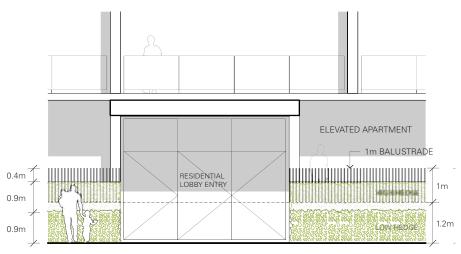
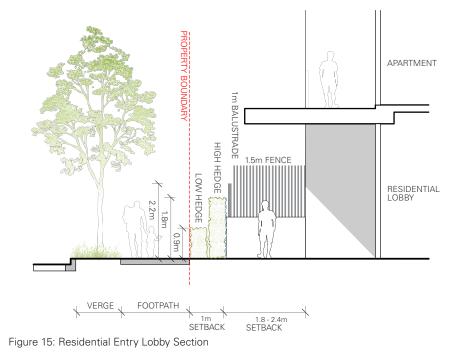


Figure 14: Residential Entry Lobby Elevation



Wind and Weather Protection

Objectives

 To provide wind and weather protection at major entry points, active interfaces and dwelling/gathering spaces within the development lots and public domain.

Guidelines

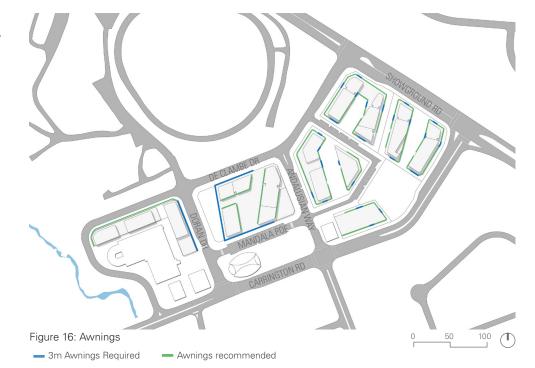
Required

- Apply secondary setbacks as per the Urban Design Guidelines to mitigate wind down draft.
- 2. All non-residential (excluding the Soho/ flexible ground floor uses on Precinct West as it in not perpendicular to a prevailing wind) interfaces will require 3m awning and/or operable screening to provide pedestrians protection from the elements.
- 3. All building entry points should provide a 3m awning for the width of that entry.
- Non-residential interfaces to communal open space on a podium is required to provide a 3m awning for the length of that interface.

- 5. Inclusion of localised screening where longer duration activities are expected.
- Inclusion of wind screens or planting within the publicly accessible through site links and at corners of buildings.
- 7. Awnings are to be designed to complement and integrate with the facade and the streetscape.

Recommended

- All private courtyards on the ground floor are to be protected from down draft by an awning where the existing/ future trees in the public and private domain facilitate an awning.
- Where the communal area or private courtyard is elevated and subject to side-streaming winds, intertenancy screening, blade walls and recessed balconies are recommended.

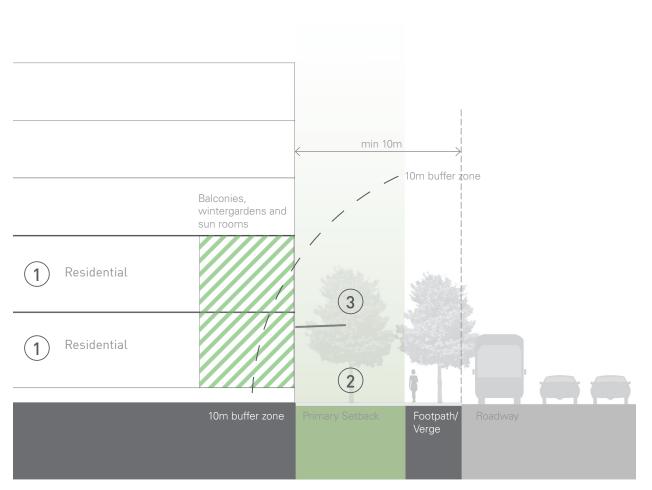


Air Quality and Noise

Objectives

- To provide appropriate interfaces and mitigation of air and noise pollutants that ensure a high quality of life for future residents and workers within the development lots.
- To provide appropriate setbacks and air pollutant mitigation measure to Showground Road and Carrington Road.

- Internal habitable rooms of dwellings are to be designed to achieve internal noise levels of no greater than 50dBA.
- Adopt the planning and design approaches and architectural treatments outlined in the diagram opposite to minimise noise and air quality impacts from abutting busy roads.
- The internal area of residential dwellings is to be located at least 10m from the roadway of Carrington Road and Showground Road.
- Balconies that directly face Showground Road on the ground floor and first floor of any building should be able to be closed (i.e. a winter garden or sun room). Windows on the balcony side should be openable/closable to allow the occupant to prevent direct air flow from Showground Road as desired.
- Buildings of different heights interspersed with open areas and setting back upper levels via a secondary setback helps avoid urban canyons.



- 1. Air intake away from road (balconies and winter-gardens)
- 2. Residential dwellings setback
- 3. Trees and landscape between road and development

Building Envelopes

Objectives

- To prescribe a desired outcome for the precinct as a whole and individual sites that deliver a level of certainty to Council and the community and retain a level of flexibility for innovation and diverse design outcomes in the future.
- To provide building envelopes that ensure GFA is no more than 75% of the envelope.

- That Precinct West is comprised a building envelope that is a minimum of 16m high and a maximum of 20m high within the podium to the secondary setback. That Precinct West towers extend to a minimum of 51m high and a maximum of 68m high above the secondary setback including lift overruns.
- 2. That Doran Drive Precinct is comprised a building envelope that is a minimum of 16m high and a maximum of 18m high within the podium to the secondary setback. That Precinct West towers extend to a minimum of 51m high and a maximum of 68m high above the secondary setback including lift overruns.
- That Precinct East is comprised a building envelope that is a minimum of 14m high and a maximum of 18m high within the podium to the secondary setback. That Precinct East towers extend to a minimum of 42m high and a maximum of 52m high above the secondary setback including lift overruns.

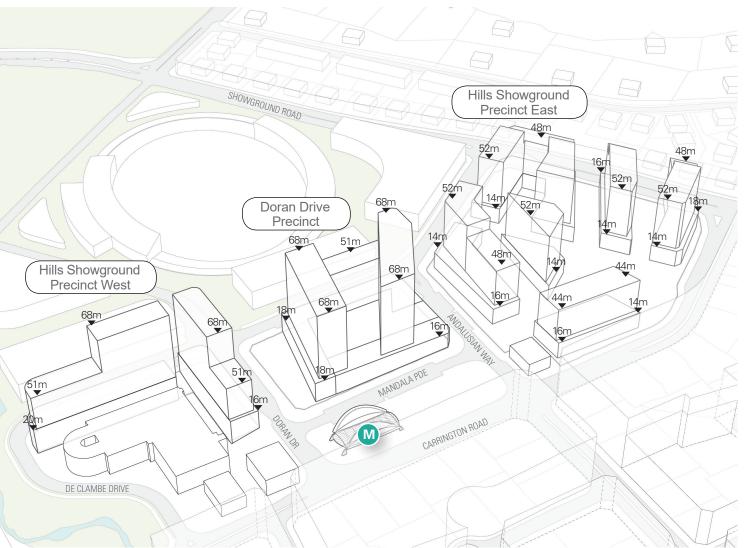
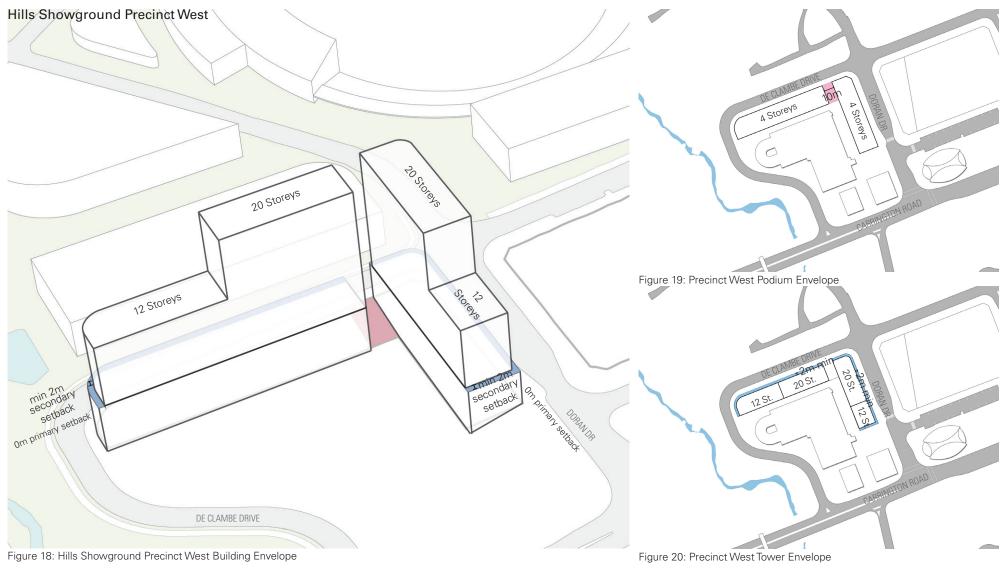
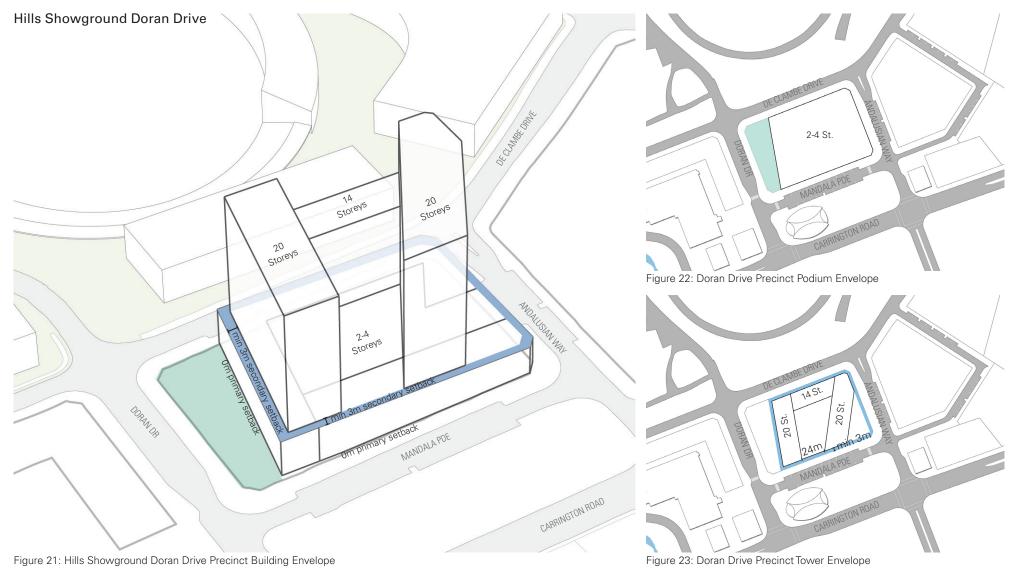


Figure 17: Hills Showground Station Precinct Building Envelopes

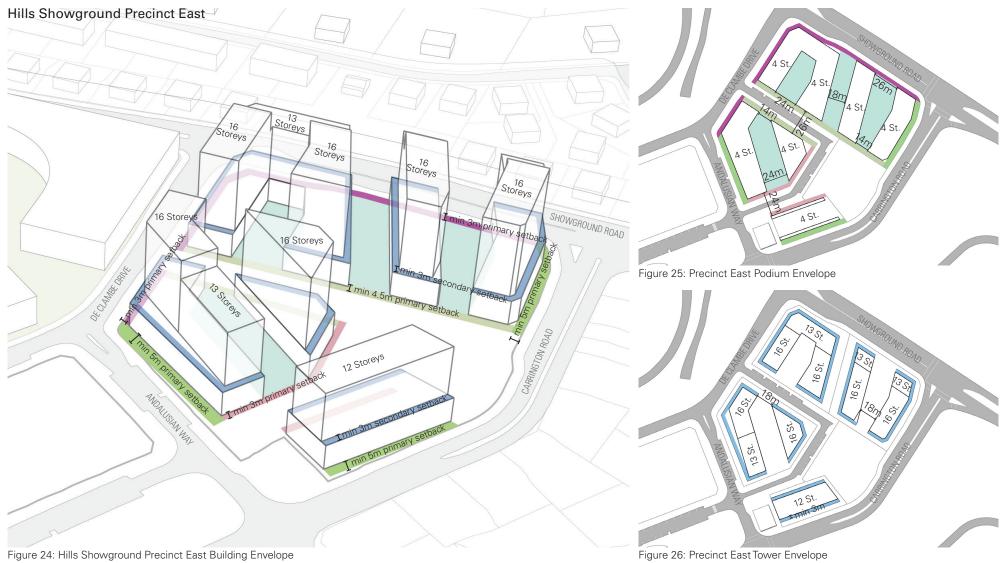


Minimum 2m Secondary Setback Ground Floor Access Easement



Minimum 3m Secondary Setback Doran I

Doran Drive Plaza (varies in size)



= 5m Primary Setback on Carrington Road and Andalusian Way

- Sm Primary Setback on Showground Rd and De Clambe Dr
- 4.5m Primary Setback on New street3m Primary Setback on New street

Minimum 3m Secondary Setback

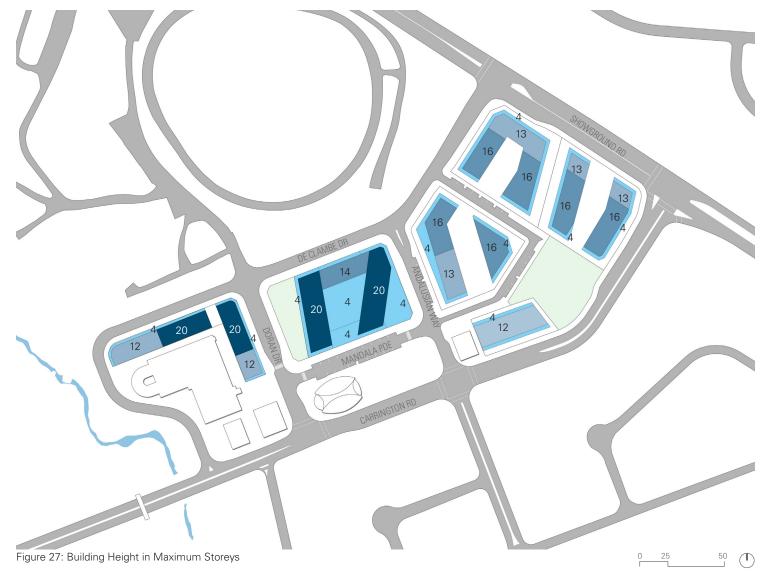
Variable building separation as per ADG

Building Height

Objectives

- To translate the permissible building heights into desired building heights that reinforce the Urban Design Principles.
- To provide an appropriate transition to adjoining public spaces (station plaza and car park plaza, Cattai Creek Corridor) and future residential development (12 storeys south of Carrington Road, 3 storeys east of Showground Road).
- To deliver a varied skyline and vertical articulation of the built form across the development lots as a whole and within each individual precinct.

- A maximum height of 68m (20 storeys) is desired on Precinct West and Doran Drive Precinct with a transition in height from the Active Heart down to Cattai Creek and the carpark plaza.
- 2. Precinct East is comprised of a maximum 52m (16 storeys) located on the De Clambe Drive and new local street interfaces which internalise the highest buildings within the Precinct
- 3. A transition in heights of between 12 and 13 storeys is provided as a transition to the existing and future residential communities north of Showground Road and south of Carrington Road.



Solar Access

Objectives

• To prescribe a minimum solar access provision for the existing and future open spaces within the sites and the broader Showground Precinct.

Guidelines

The controls in the diagram below prescribe the minimum proportions of the public spaces that are to have a minimum of 2 hours of sunlight between the hours of 9am and 3pm throughout the year, but most importantly during the winter solstice June 21st. These minimum solar access controls to the public spaces are;

- Doran Drive Plaza 100%
- Station Plaza 65%
- Precinct East Park 65%
- Station Forecourt 80%



Materials and Finishes

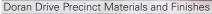
Objectives

- To respond to the positive attributes of the Hills Shire and the Hills Showground Station Precinct by incorporating dominant patterns, textures and compositions into the built form.
- To respond to the materials and elements in the existing open spaces and streets in the broader precinct.
- To provide a consistency and cohesion to the materials and finishes across the precincts.

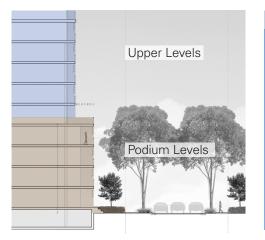
- 1. Podium level materials and finishes are to be durable and engaging. Warm tones and hues to be used.
- 2. Upper level materials and finishes are to be restrained and of lighter colours.
- 3. Materials are selected so that they exceed, the targets contained within the Sustainability Strategy as part of the SSDA including those with low albedo values.
- 4. Facades with a majority of glazed materials are avoided
- 5. Vertical facade gardens are encouraged.





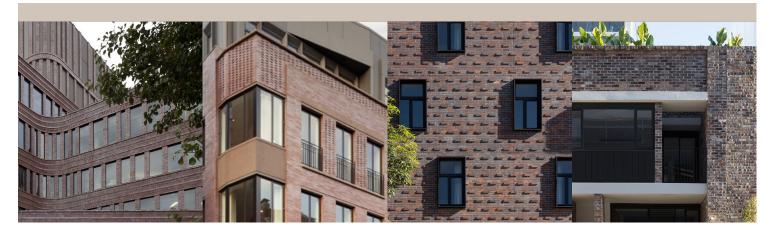




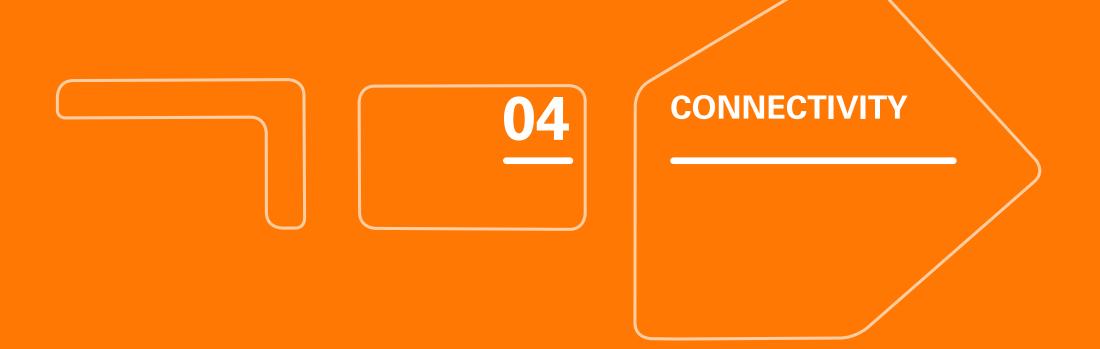




Upper Level Materials & Finishes



Podium Level Materials & Finishes



Connectivity

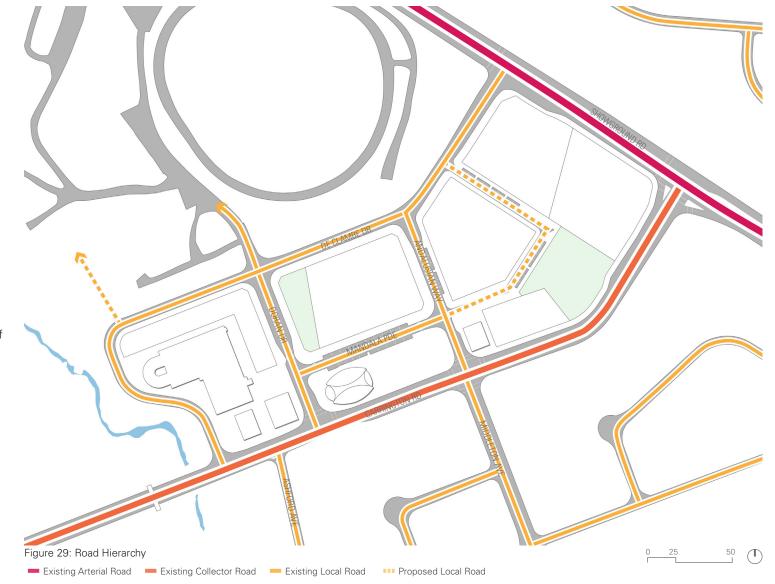
Road Hierarchy

Objectives

- To respond to the role and function of existing roads within the broader Hills Showground Station Precinct .
- To deliver a fine-grain, permeable site in the future. A new local road should be delivered within Precinct East that provides local access to the residential buildings and the local park within the Precinct.

Guidelines

1. New street is two-way to provide access to the residential basements within the northern parcels, and then one way from the park to Andalusian Way, to provide a calmer interface with the local park and reduce the amount of traffic using Andalusian Way to access Precinct East.

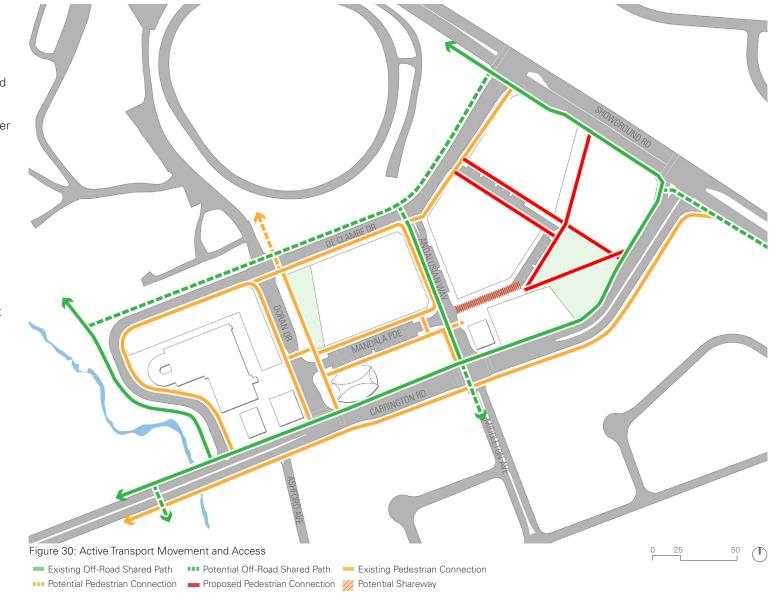


Active Transport

Objectives

 To complete a comprehensive pedestrian and bicycle network which includes a mixture of dedicated off-road routes, pedestrian and bicycle priority shareways and links to the existing active transport networks of the broader Hills Showground Station Precinct and the Garden Shire.

- 1. To complete the primary pedestrian movement across the precinct through the provision of new local road with footpaths in Precinct East and a mid-block connection through to Showground Road.
- 2. A potential shareway may be located on the local road between the Precinct East park



Precinct East New Street

Objectives

 Precinct East New Street is intended to be a local road to provide vehicular access to and from the residential buildings and the local park within Precinct East.

- The new street will have insitu concrete paths as per the existing surrounding streets, with shared paths differentiated using coloured concrete as per Council's standard approach.
- The road carriageway through the Precinct East may be paved with concrete or stone cobblestones at thresholds and key points to emphasise a slow speed and pedestrian environment.
- Two lanes of general traffic from De Clambe Drive to the Precinct East Park. One way (west only) from the park to Andalusian Way.
- On-street parking on the northern side from De Clambe Drive and the southern side adjoining the park.
- Minimum 2m wide footpath on both sides of the street.
- Minimum 4.5m primary setback to both sides of the street.
- 3m secondary setback above 4-storeys.
- New street lighting to provide high levels of illumination on the new street and park whilst considering light pollution and impacts on private residences and wildlife.





Doran Drive and Doran Drive Plaza

Precinct West

Objectives

- To enhance the existing functions of Doran Drive where it interfaces with Precinct West and Doran Drive Precinct development lots.
- To provide a new civic heart on the eastern side of Doran Drive.

Guidelines

- Maintain the existing functions of Doran Drive as a local road and transport interchange.
- Provide for sufficient circulation space within the Doran Drive Plaza to cater for potential interchange, event movements to and from the Castle Hill Showground and for pedestrians accessing the retailing within Doran Drive Precinct.
- Minimum 4m wide footpath on both sides of the street.
- Minimum 0m primary setback to both sides of the street.
- 2-3m secondary setback above 4-storeys.
- Street lighting within the plaza is to provide high levels of illumination to complement the existing street lights



Existing Doran Drive



Doran Drive Precinct

Andalusian Way Interface

Proposed Development Controls

- Om primary setback to Doran Drive Precinct.
- Secondary setback of 3m for Doran Drive Precinct above minimum 2 storey podium.
- Primary ground floor setback of 5m to Precinct East.
- 3m secondary setback above 4-storeys for Precinct East.
- Minimum 4m floor to floor for nonresidential on ground and 3.5m above ground.
- Minimum 3.3m floor to floor for residential on ground with 0.5-1.5m elevated private garden and terraces about the street level.
- Minimum 3.1m floor to floor for residential above ground.

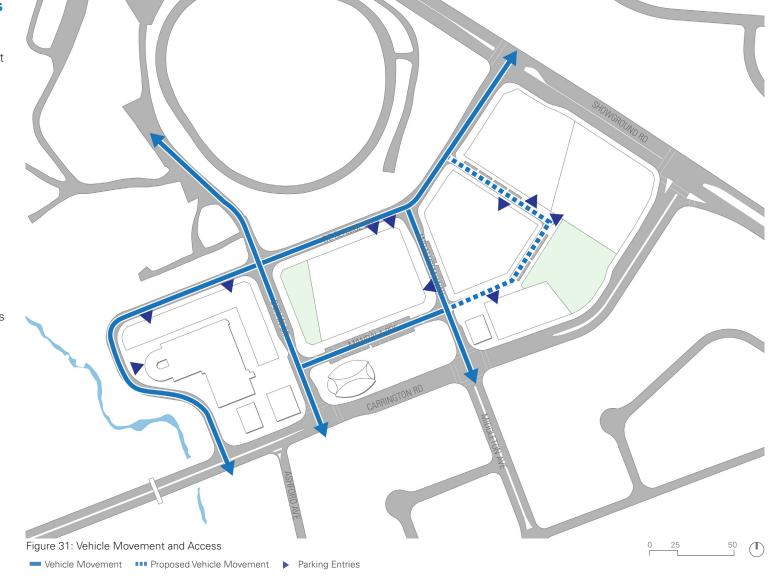




Vehicle Movement and Access

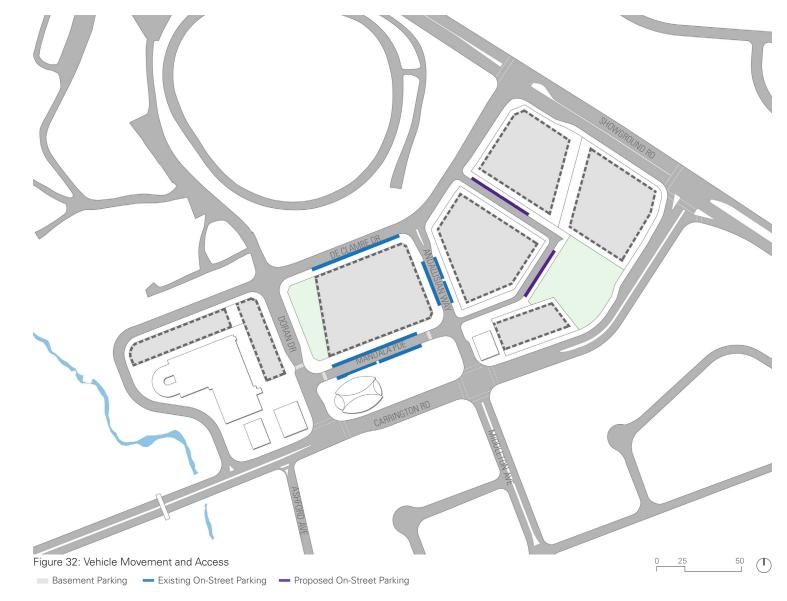
Parking and service vehicle access to the sites and future buildings are to be located away from the major pedestrian movement corridors, activity nodes and active frontages within the precincts.

- Vehicle access to Precinct West from De Clambe Drive is limited to two points and access from Doran Drive is prohibited.
- Vehicle access to Doran Drive Precinct is limited to the eastern end of the De Clambe Drive interface and on Andalusian Way and that access via Doran Drive and Mandala Way is prohibited.
- Vehicle access to Precinct East is via the proposed local road, access from De Clambe Drive and Andalusian Way is prohibited.



Parking Configuration

New on-street parking is planned for the local road within Precinct East to provide access to the local park by car. On-street parking is retained on Mandala Way



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