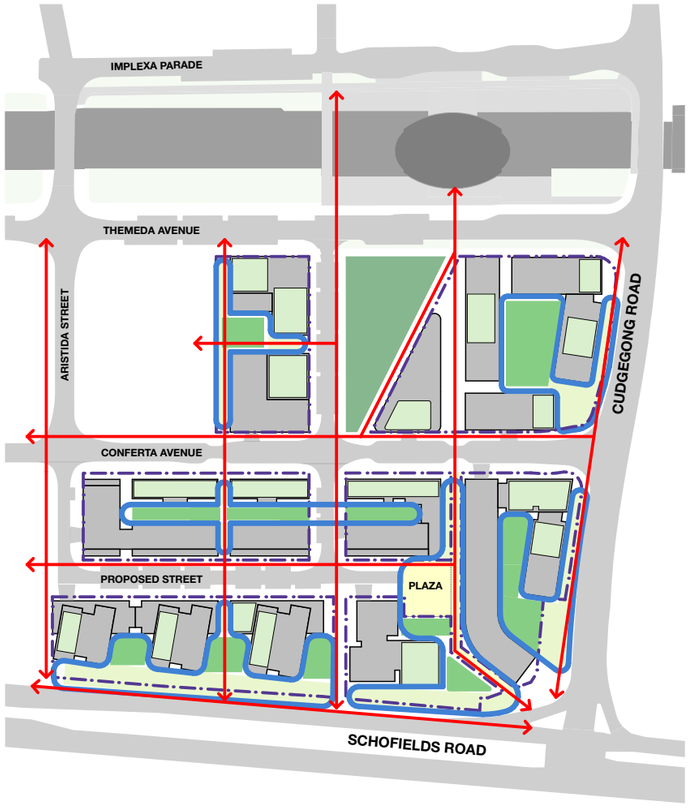
COMMUNAL OPEN SPACE

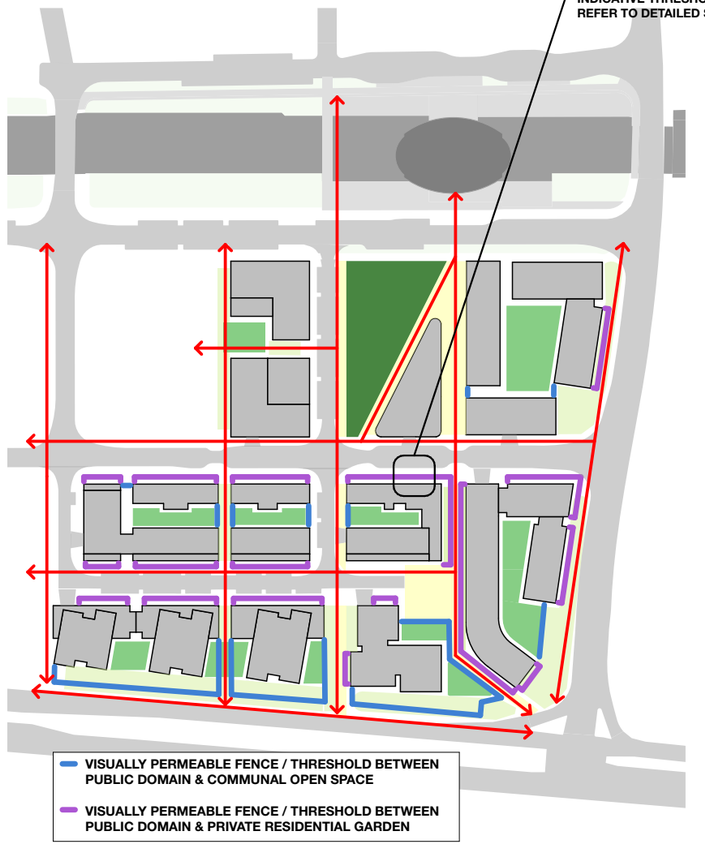
STRATEGICALLY LOCATE A SERIES OF COMMUNAL OPEN SPACES FOR RESIDENTS WITHIN DEVELOPMENTS THAT ARE VISUALLY CONNECTED WITH THE PUBLIC DOMAIN TO FORM AN INTEGRATED NETWORK OF LARGER LANDSCAPED ZONES.

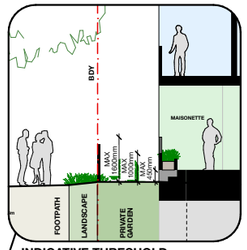


INTEGRATED COMMUNAL OPEN SPACE

- Provide a series of communal open spaces within sites that provide landscaped spaces to residents within buildings. These spaces should be co-located with deep soil zones.
- Locate these spaces to maximise amenity within sites with adequate sunlight, aspect and outlook.
- Create a broader series of landscaped spaces by locating them strategically to form larger landscape zones that sit adjacent to, or visually connected with streets, landscaped public spaces, links or other communal opens spaces.

REFER TO DETAILED URBAN PLAN AND SECTION
REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL





INDICATIVE THRESHOLD.
REFER TO DETAILED SECTIONS

PUBLIC / PRIVATE INTERFACE

- A successful public realm should clearly define boundaries between public and private space through the limited visible presence of barriers as the key delineating feature. Boundaries between communal/private open space and adjoining public open space and through site links should utilise landscape to provide an intuitive definition of ownership.
- Fences where provided are to be visually permeable and limited in height with solid elements limited to 1m. Ensure fence design permits transparency to adjoining paths and communal open spaces for safety and passive surveillance whilst retaining privacy.
- Retain privacy of residential courtyards and private gardens, whilst maintaining visual glimpses of trees, shrubs and grass from the public space to extend the sense and effect of the borrowed landscape.

REFER TO DETAILED URBAN PLAN AND SECTION
REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL

INDICATIVE ROOF TERRACE

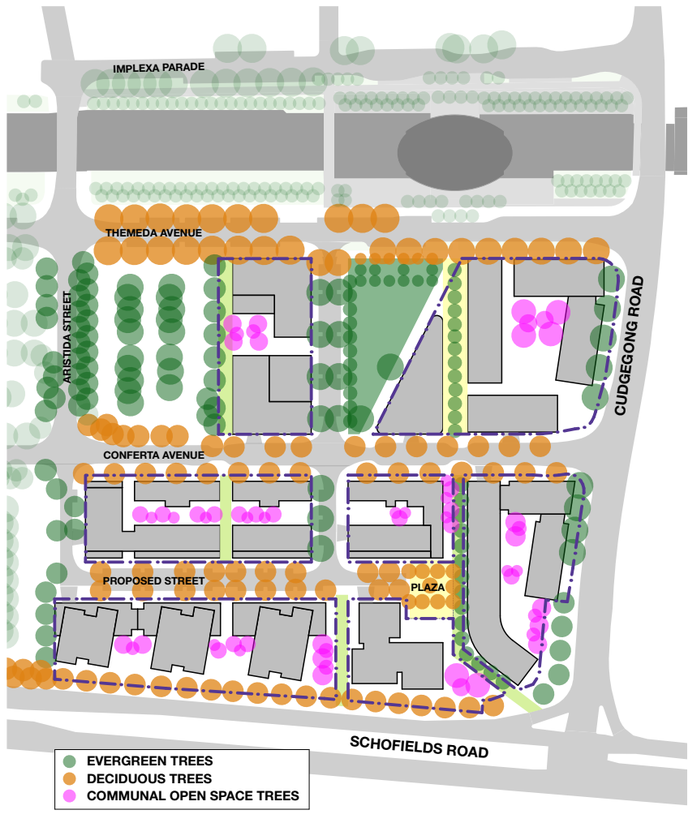
ROOFTOP GARDENS

- Provide a series of rooftop communal open spaces that provide landscaped spaces for the gathering of residents within sites.
- These spaces should take advantage of northerly aspects and panoramic views where available of the surrounding area, for example the Second Ponds Creek green corridor.
- Rooftop gardens may utilise raised planters to define smaller spaces for sitting and gathering and be located to prevent the overlooking of adjacent units.
- Planting selection should vary from the shade tolerant specifies located on ground floor communal open space to dryer, strappy or grassy species for rooftops that will cope with the greater exposure and varied environment.

REFER TO DETAILED URBAN PLAN AND SECTION
REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL

TREE CANOPY & DEEP SOIL NETWORK

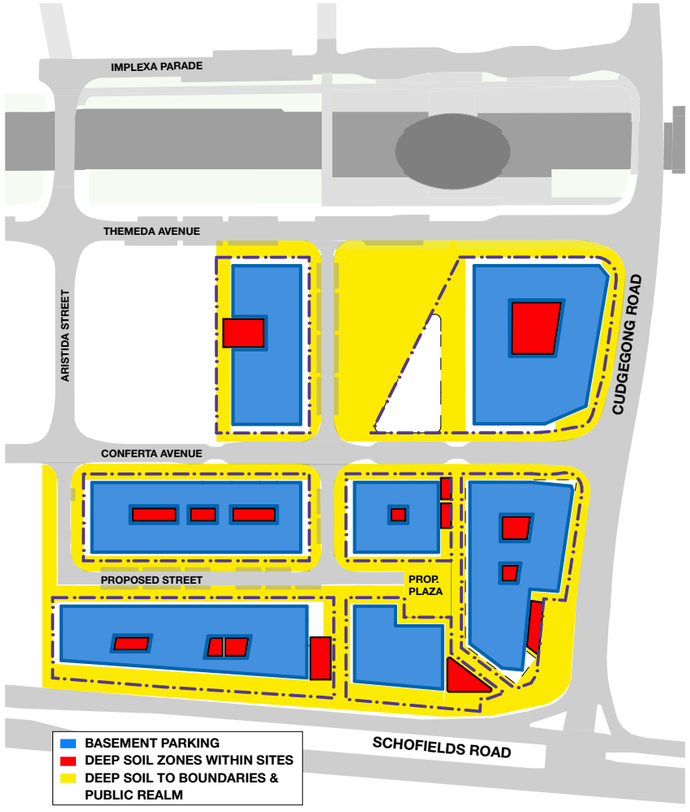
DISTRIBUTE DEEP SOIL ZONES OF SUFFICIENT SIZE THROUGHOUT THE PRECINCT AND WITHIN SITES TO PROVIDE EXTENSIVE TREE CANOPY COVERAGE FOR THE TOWN CENTRE PUBLIC DOMAIN AND COMMUNAL OPEN SPACES.



STREET PLANTING AND CANOPIES

- Design street planting to extend the green grid of the open space network, to provide shade, create local distinctiveness, seasonal variation and habitat opportunities.
- Use street trees to increase canopy coverage to the town centre and the adjacent commuter carparks to reduce the heat island effect.
- Select species strategically to provide winter sun and summer shade. Evergreen tree species should be used along north-south running streets whereas deciduous species are should be used along east-west running streets to maximise winter solar access to public and private spaces.
- The character of the planting can follow a native theme utilising, where practical, species that occur within the Cumberland Plain Vegetation Community. Utilising native species will help increase the ecological value of the park whilst also minimising the maintenance and watering requirements during establishment.
- Species should be selected that can grow large canopies relatively quickly that cast wide shade and that can bring visual and sensory delight. The landscape plan will locate various tree species in different locations to create a variety of atmospheres and microclimates - transparency or intimacy, solar access or shade, native or exotic/ European character, variety or consistency of colours and scents.

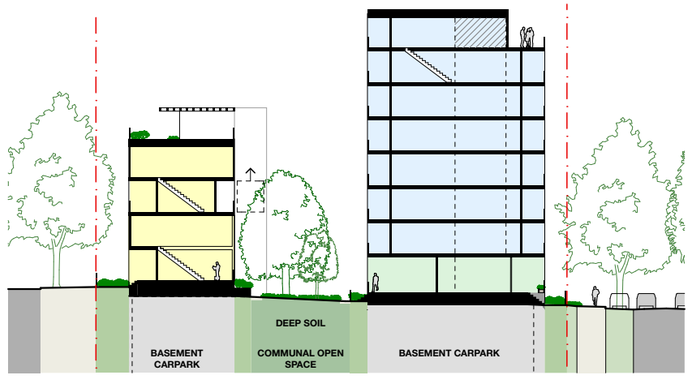
REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY

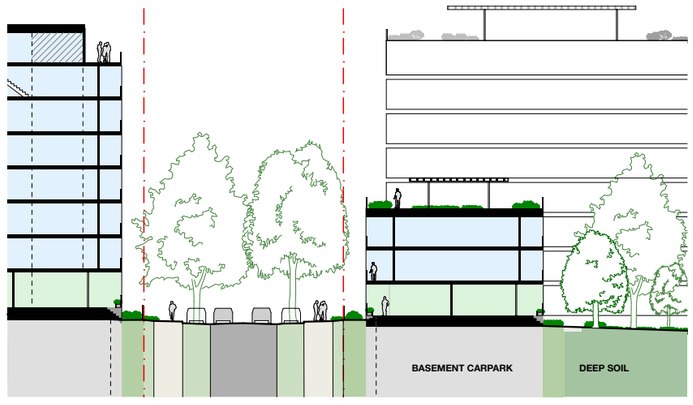


DEEP SOIL NETWORK

- Ensure deep soil zones are strategically distributed throughout the public domain and communal open spaces to ensure tree and shrub vegetation receive sufficient natural sunlight for healthy growth, provide shade for residents in adjacent buildings and encourage pedestrian permeability through the site.
- Locate native vegetation species, where practical, in deep soil zones. The selection of species within the Cumberland Plain Vegetation Community should be encouraged to increase ecological value of the site, while minimising maintenance and watering requirements.
- Ensure deep soil zones are strategically located throughout the site in accordance with basement parking design.

REFER TO DETAILED URBAN PLAN AND SECTION
REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL





DEEP SOIL NETWORK continued

- Provide a minimum 3m setback for basement parking from site boundaries to provide generous deep soil zones to facilitate boundary and street tree planting to promote healthy root growth and canopy coverage for street trees.
- Ensure basement parking is not located beneath publicly owned through site links to ensure a connected deep soil zone is present allowing for healthy tree planting to public streets and through site links.

REFER TO DETAILED URBAN PLAN AND SECTION
REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY FOR MORE DETAIL

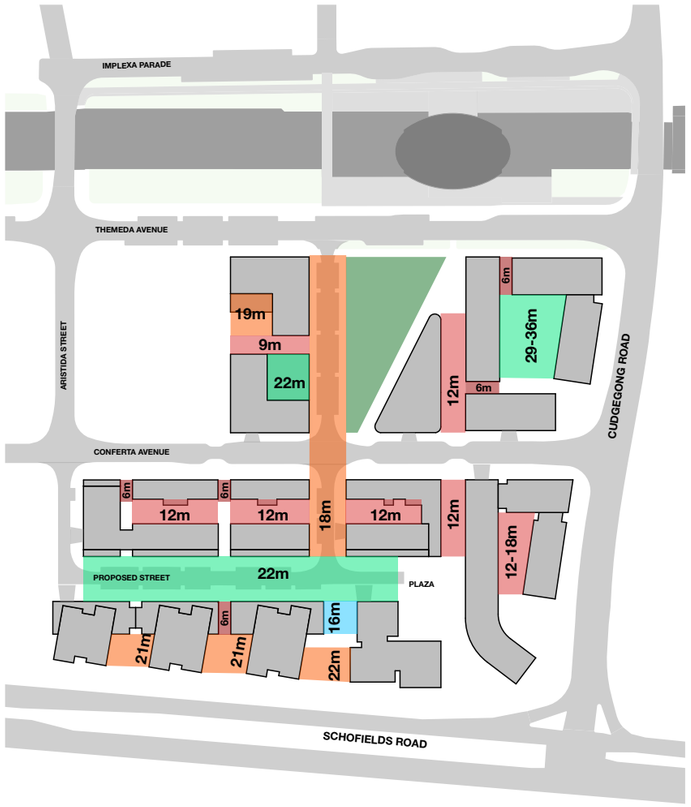
BUILDING HEIGHTS, SEPARATION & SETBACKS

PROVIDE A RANGE OF BUILDING HEIGHTS FROM 2 TO 8 STOREYS WITH SETBACKS AND SEPARATIONS TO SUPPORT THE CHARACTER OF THE PRECINCT, CREATE A VARIETY OF URBAN SCALES, AND TO MAXIMISE AMENITY FOR RESIDENTS AND PEDESTRIANS.

VARIATIONS IN HEIGHT, BULK AND SCALE

- Provide a range of building heights from 2 to 8 storeys to avoid uniformity, create a variety of urban scales across the development and to accommodate a range of housing typologies. Create a more varied and interesting skyline for the development when it is viewed from surrounding areas.
- Encourage a range of architectural solutions and building designs to create a diverse and interesting neighbourhood with careful consideration of massing, materials, fenestration and building scale.
- Position lower buildings to create an appropriate scale and character to streets and pedestrian links and to allow solar access to taller buildings within blocks.
- Locate taller buildings to take advantage of the amenity of the public park, views to the adjacent creek corridor and to increase density and activity in the town centre sites located closer to the Metro station.
- Configure the massing of buildings to the edges of the development (particularly the south and east) to avoid the perception of the development as a wall or closed enclave.

REFER TO BENNETT AND TRIMBLE URBAN DESIGN REPORT



BUILDING SEPARATION

- Provide building separations that comply or are greater than described in the ADG.
- Create separation between buildings that allows for appropriate levels of sun access, natural cross ventilation, acoustic and visual privacy to both the residents of the buildings and users of the public domain.
- Provide a range of building separations that create a series of streets, through-site links and open spaces with differing widths, scales and characters to create urban diversity.

REFER TO BENNETT AND TRIMBLE URBAN DESIGN REPORT

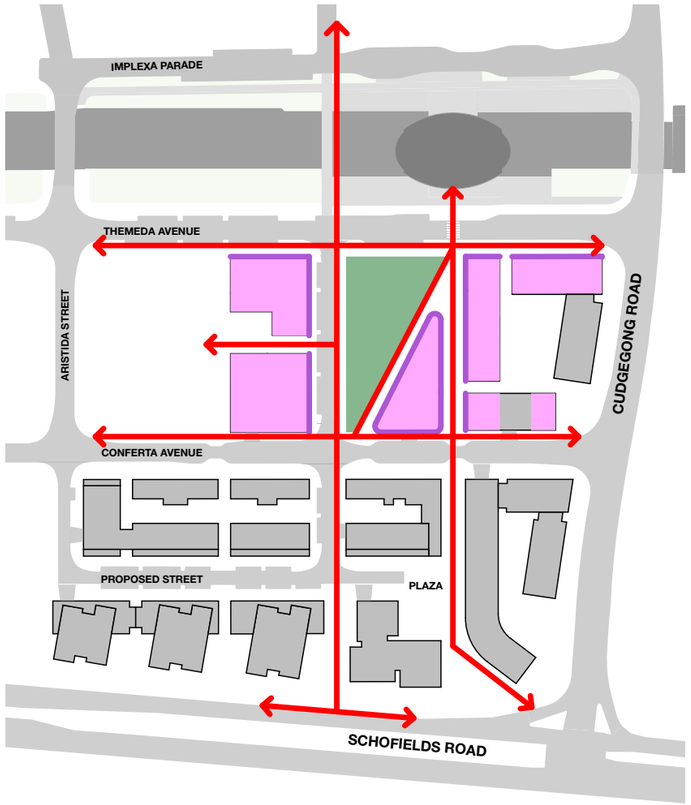
BUILDING SETBACKS

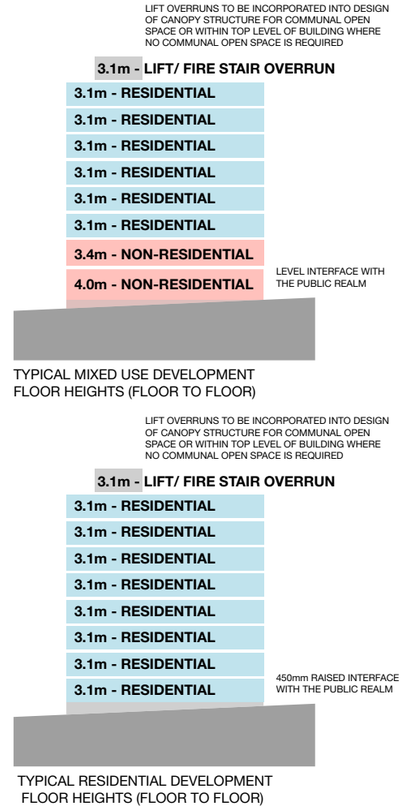
- Provide a range of building setbacks in response to context, typology and amenity.
- Buildings on sites adjacent to the public park and metro station where commercial and retail programs are located at lower levels require no setback to focus pedestrian activation to the street and create an energetic mixed-use town centre environment
- Setbacks are to be increased on sites not adjacent to the Metro station or the public park where residential accommodation is located on the ground floor.
- Buildings in these locations are to be setback 2 to 3 metres from the street to accommodate for terrace housing and maisonettes with private gardens accessed directly off the street and through-site links.

REFER TO BENNETT AND TRIMBLE URBAN DESIGN REPORT

AN ACTIVE & DIVERSE TOWN CENTRE

PROVIDE A WAIDE RANGE OF HOUSING TYPOLOGIES AND NON-RESIDENTIAL PROGRAMS TO FOSTER A DIVERSE AND ACTIVE COMMUNITY.





A RANGE OF HOUSING TYPOLOGIES

- Provide a range of housing typologies including two-storey terraces, maisonettes and apartments of a range of sizes to accommodate and foster a diverse community of residents.
- Maisonettes and terraces are to be provided with private gardens with direct street access to create ownership, passive surveillance and a range of garden styles to the streets and through-site links.
- Provide a wide range of block and building sizes to support and encourage a mix of accommodation models.
- Provide a range of housing models that support flexibility and adaptability as the needs of users change and the character of the neighbourhood evolves.
- Distribute housing types across the site to create diversity across the development and to encourage interaction between different demographic groups.

REFER TO BENNETT AND TRIMBLE URBAN DESIGN REPORT

MIXED-USES AND ACTIVATION

- A range of retail, commercial, entertainment, recreation and community uses are encouraged to serve the needs of the wider community and promote an active and vibrant Local Centre.
- Active uses and facilities are co-located as much as possible to maximise activation.
- Concentrate non-residential programs in the buildings adjacent to the public park and Metro station to create an active and vibrant town centre within close proximity to rapid public transport.
- Locate these programs on the ground and first floors to focus activity on the streets and public spaces and to create a buffer to the residential apartments above.
- Ground floors on active frontages should demonstrate fine grained and intensive retail and commercial uses with no blank walls, numerous entrances to different shops, cafes, restaurants, offices, and display a variety of shops and uses. Loggias and awnings should be provided to the base of buildings to promote and accommodate mixed-use activity to these urban edges.
- These active uses should functionally and visually integrate internal spaces (i.e. the interior of shops and other businesses) and the public domain (i.e. streets, laneways and parks). This also means that frontages should display a high level of transparency.

REFER TO AEC RETAIL AND COMMERCIAL LAND USE ANALYSIS
REFER TO GHD SOCIAL NEEDS AND IMPACT ASSESSMENT

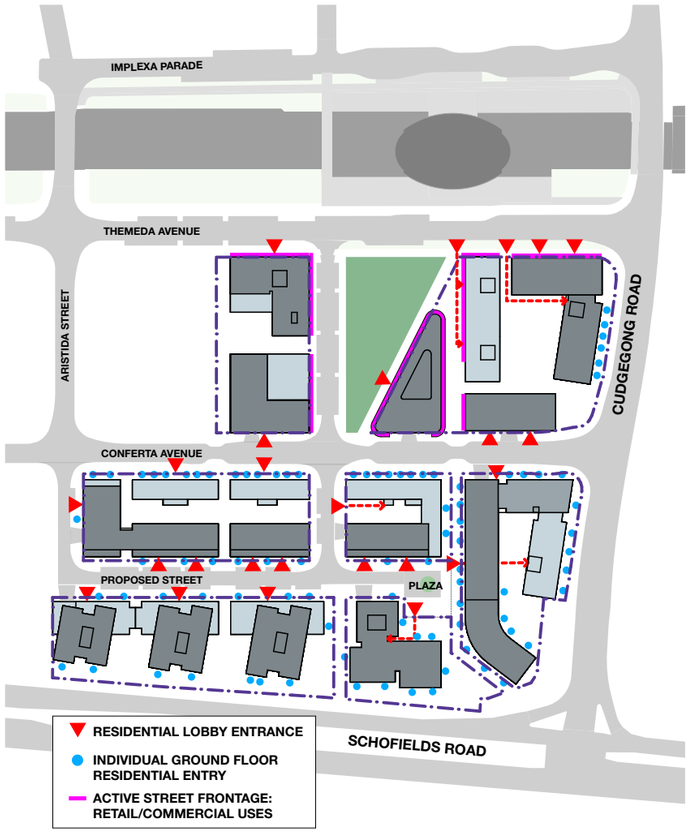
MIXED-USES AND ACTIVATION continued

- Cafes and restaurants should aim to have wide retractable doors to enable easy flow of customers and staff in and out of the footpath, shops or offices should have transparent windows around 80% of the frontage
- No non-residential unit should take more than 15 metres of active frontage unless demonstrating vibrancy, diversity and flexibility in activation.
- Larger format retail premises should have pedestrian access to the streets and other public spaces and are not to present blank walls or inactive facades. These larger premises should be located inside, at the core of non-residential offerings and leave a variety of shops and active uses facing the public domain.
- These programs should include commercial programs such as
  - professional suites, work-hubs and gyms,
  - retail accommodation for a range of stores from mini-major markets to cafes,
  - childcare centres and
  - community uses.

REFER TO BENNETT AND TRIMBLE URBAN DESIGN REPORT

BUILDING ENTRANCES, CARPARKING & SERVICING

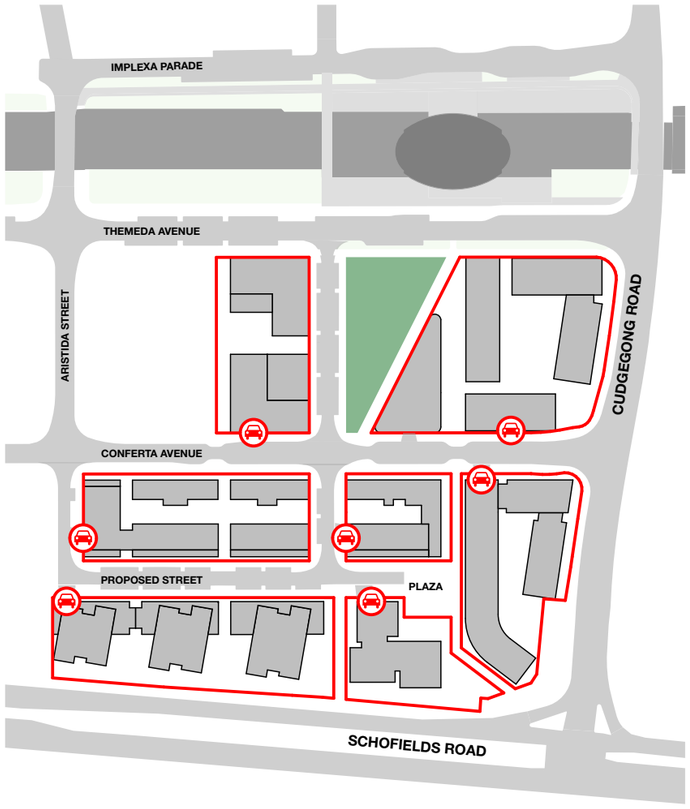
RESIDENTIAL BUILDINGS SHOULD BE DESIGNED WITH A LEGIBLE STREET ADDRESS AND A DISCRETE BASEMENT ENTRANCE FOR CARPARKING AND SERVICING.



RESIDENTIAL ENTRIES AND GROUND FLOOR ACTIVATION

- Provide each building with a street address and a clear and legible entrance location.
- Lobbies should be located to provide safe and secure access for residents and visitors and be monitored by the passive surveillance of residents and neighbours.
- Ground floor terraces and maisonettes with private gardens and direct street access should be located within each development where possible to promote interaction with and passive surveillance of the adjacent streets, open spaces and pedestrian links.
- Succession and repetition of private doors and access increases residential activation and interest. This helps passive surveillance of street, laneways and public spaces while safeguarding a level of privacy and intimacy for the ground floor levels of the terrace/maisonette type apartments.

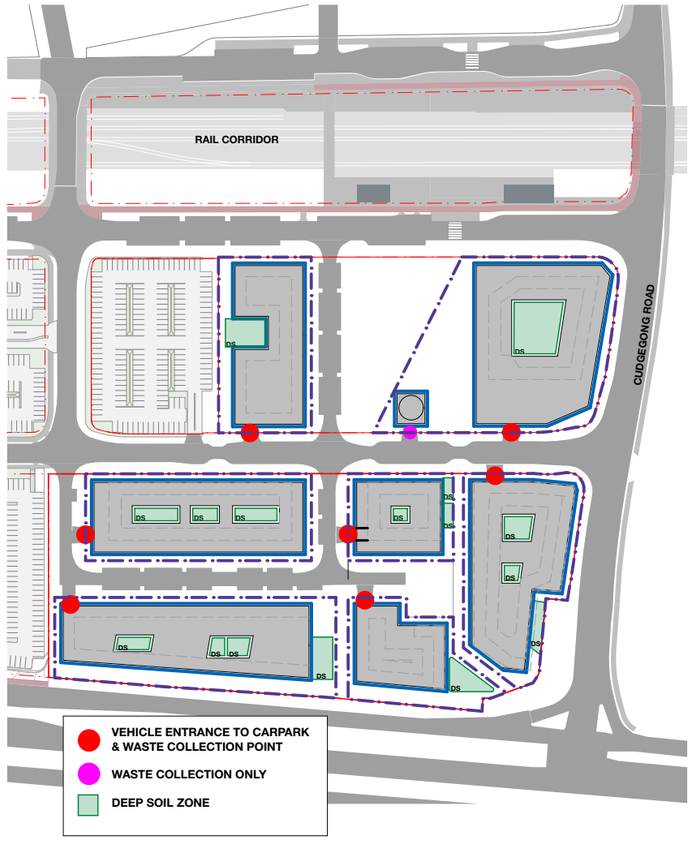
REFER TO DETAILED URBAN PLAN AND SECTION
REFER TO BENNETT AND TRIMBLE URBAN DESIGN REPORT



VEHICULAR ACCESS

- All car parking and servicing for developments is to be located in basements.
- Access point to basement parking and services should be located in discrete locations that avoid the disruption of street patterns, active uses, landscaping and the overall appearance of developments.
- The number of entrances to basement parking and services should be minimised through the consolidation of basements and entrances.
- Entrance locations should be located to minimise the disruption of local street traffic.

REFER TO BENNETT AND TRIMBLE URBAN DESIGN REPORT



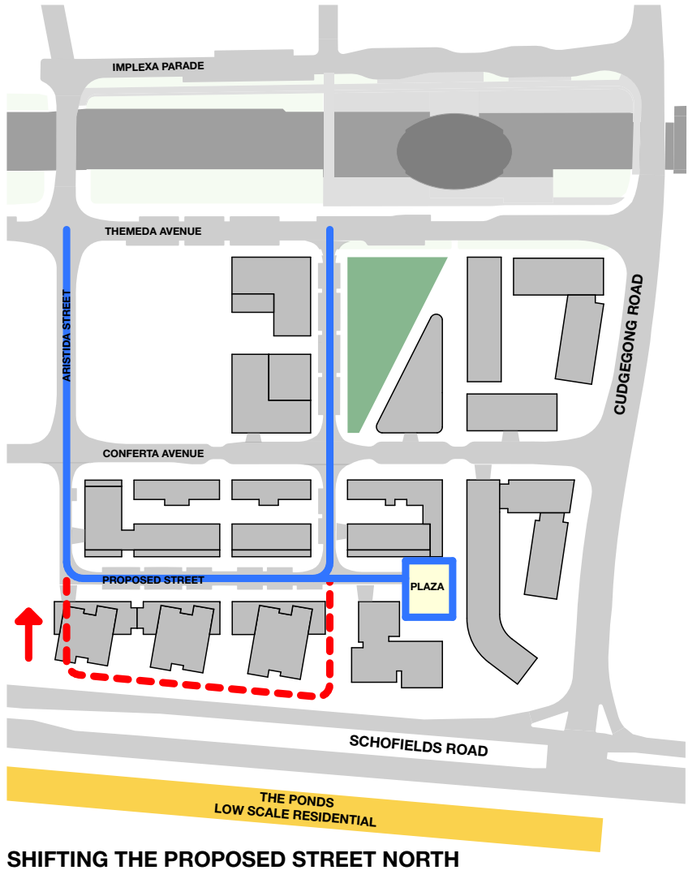
BASEMENT PARKING AND DEEP SOIL PLANTING

- Basements must be designed to accommodate Deep Soil Zones within each development. These zones are to be located to maximise landscape amenity to the residents of the development and to form part of an integrated landscape network across the development.
- These deep soil zones should be consolidated, grouped, or co-located to create larger zones of planting within or across sites with increased opportunities for screening, shading, habitat and variation in species.

REFER TO AECOM WASTE STRATEGY REPORT
REFER TO AECOM CIVIL DESIGN REPORT
REFER TO DETAILED URBAN PLAN AND SECTION
REFER TO BENNETT AND TRIMBLE URBAN DESIGN REPORT

ADDRESSING SCHOFIELDS ROAD AND THE PONDS

DESIGN THE BUILT FORM AND LANDSCAPE OF THIS EDGE PRECINCT TO ADDRESS THE PARTICULAR QUALITIES OF SCHOFIELDS ROAD AND THE ADJACENT SUBURB OF THE PONDS. THE EDGE SHOULD NOT BE DESIGNED OR PERCEIVED AS A BLANK WALL OR THE BACK OF THE PRECINCT BUT RATHER AN INHABITED AND ATTRACTIVE URBAN EDGE. THE DEVELOPMENT SHOULD BE DESIGNED TO MITIGATE THE ENVIRONMENTAL IMPACT ON THE PONDS.

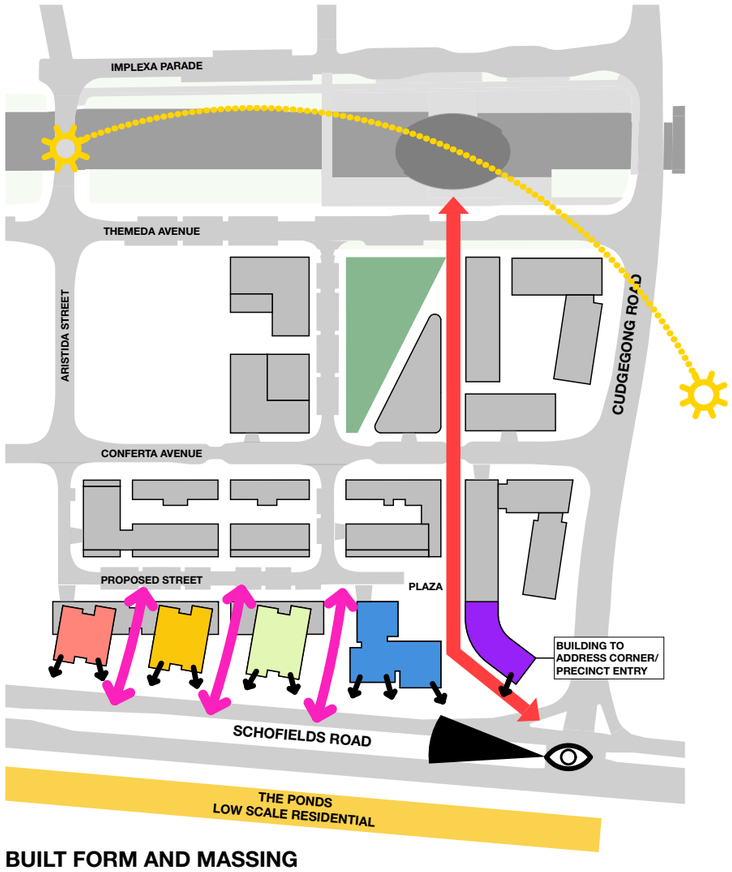


SHIFTING THE PROPOSED STREET NORTH

- Rather than locate the southernmost street adjacent to Schofields Road, the street has been shifted north to divide the southern sites in half to create a finer grain development and to avoid locating multiple streets directly adjacent to each other on the southern edge of the site.

MITIGATE IMPACTS ON THE PONDS

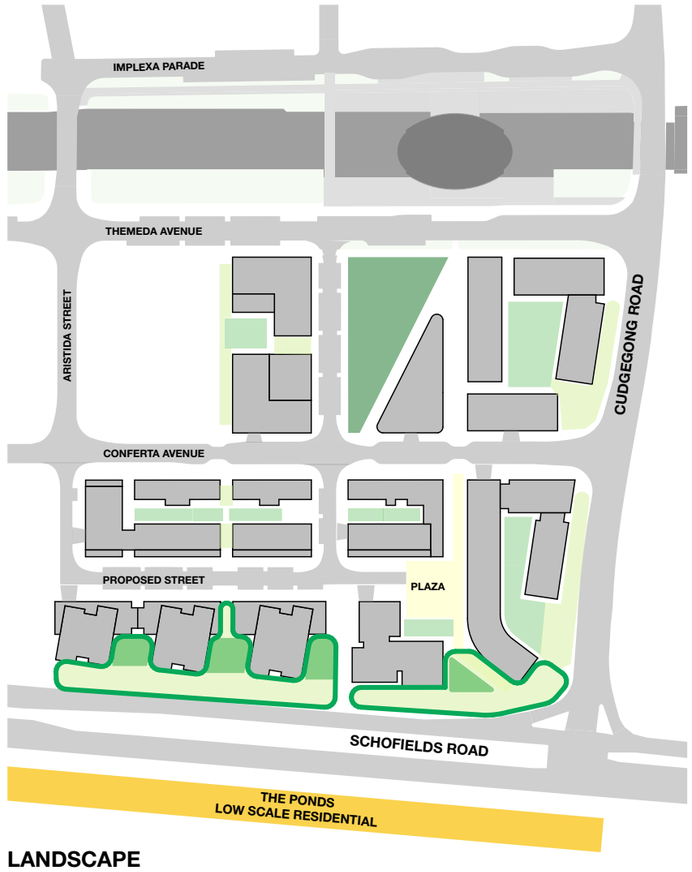
- Mitigate impacts of the development on the adjacent suburb of The Ponds including solar access, visual privacy, overlooking, views and other environmental impacts.
- Building should be designed to minimise overlooking of the existing suburb while still facilitating CPTED principles.
- Building materials should be selected to minimise reflectivity. Refer to Building Materials and Selection in these guidelines for more information.



BUILT FORM AND MASSING

- Configure the built form to address both the re-located street and Schofields Road, each with their own scale, character and levels of noise generation.
- The built form should be designed to avoid the appearance of a wall from Schofields Road. Rather than a continuous built edge, the built form should be designed as a series of individual and different building types with sufficient separations to permit adequate sunlight and wind penetration to the individual apartments, the broader proposed development, and the adjacent suburb of The Ponds.
- The buildings should not be designed with their backs to Schofields Road. The buildings should address both the proposed local street and Schofields Road to promote CPTED principles for both the proposed development and the wider area including the cycle and pedestrian path running parallel to Schofields Road. Living areas, kitchens and balconies should be located to provide passive surveillance while still complying with ADG guidelines. Ground floor apartments should have appropriate privacy and screening through the design of private courtyards and gardens.
- Apartments in close proximity to Schofields Road should be designed to minimise the acoustic exposure to noise generating sources with intelligent planning and integrated noise mitigation measures.

REFER TO DETAILED URBAN PLAN AND SECTION

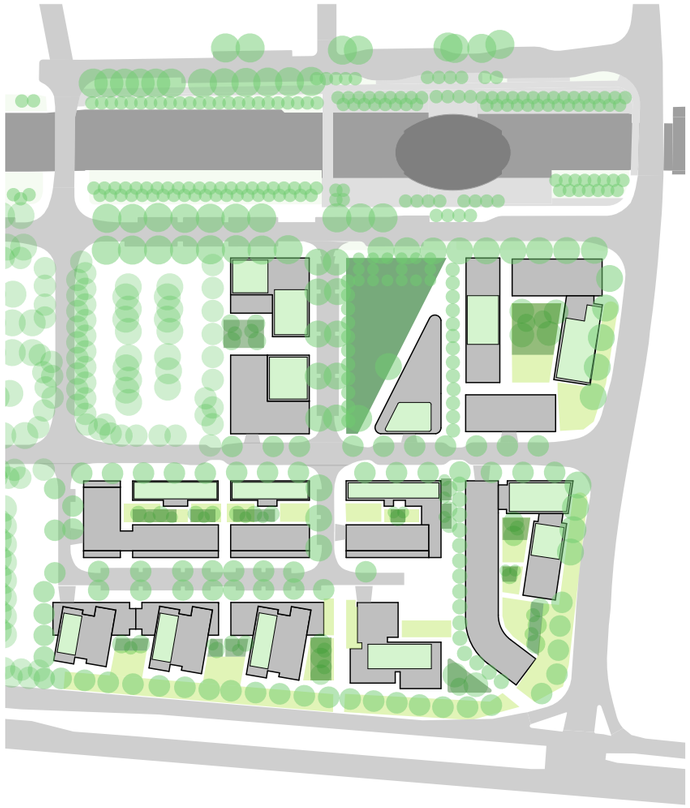


LANDSCAPE

- In shifting the southernmost street adjacent to Schofields Road to the north, a substantial connected landscape corridor will address and buffer Schofields Road.
- The landscape corridor should provide areas suitable for substantial tree establishment for viewing from The Ponds while also providing varied and intimate communal open spaces for the adjoining residents. The planting will also mitigate overlooking of The Ponds.
- Landscape design should integrate the green open swale to Schofields Road frontage with provision for maintenance access.
- Shrub planting to the boundary limited in height to maintain sight lines and passive surveillance to Schofields Road.

REFER TO DETAILED URBAN PLAN AND SECTION
REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY

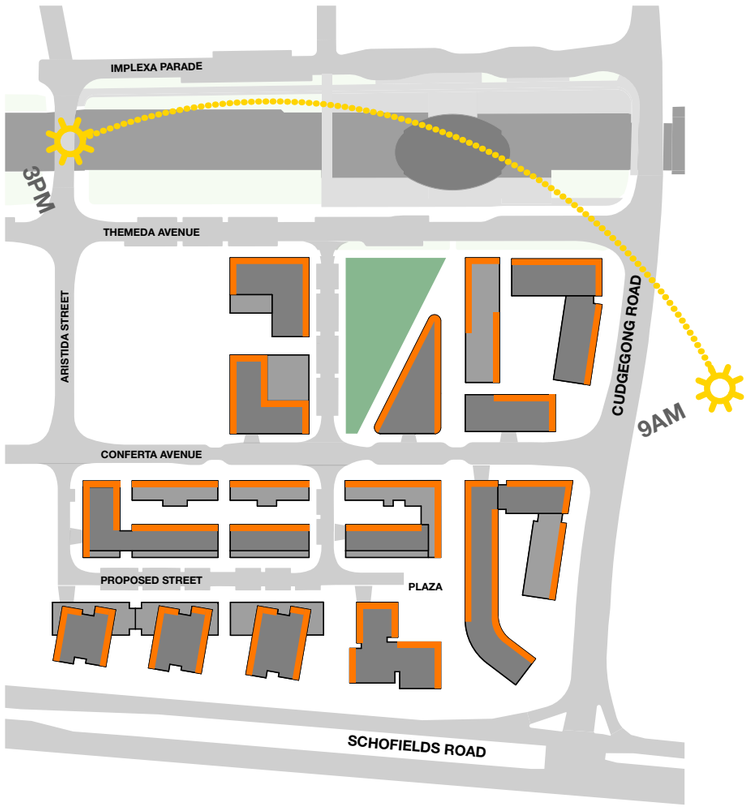
ENVIRONMENTAL CONSIDERATIONS



REDUCING HEAT ISLAND EFFECT

- Maximise street tree plantings to provide ample shade over reflective surfaces and promoting microclimatic cooling through evapotranspiration.
- Select strategic tree species to provide winter sun and summer shade for resident and communal open space adjacent to street trees. Evergreen tree species to be used along north-south running streets, while deciduous species along east-west running streets to reduce energy consumption from heating and cooling.
- Incorporate green roofs, or rooftop gardens, to reduce the temperature of roof surfaces and the surrounding micro-climate.
- Provide a series of communal open spaces that primarily contain trees, vegetation and lawn areas while minimising hardscape materials to prevent heat absorption and reflection.

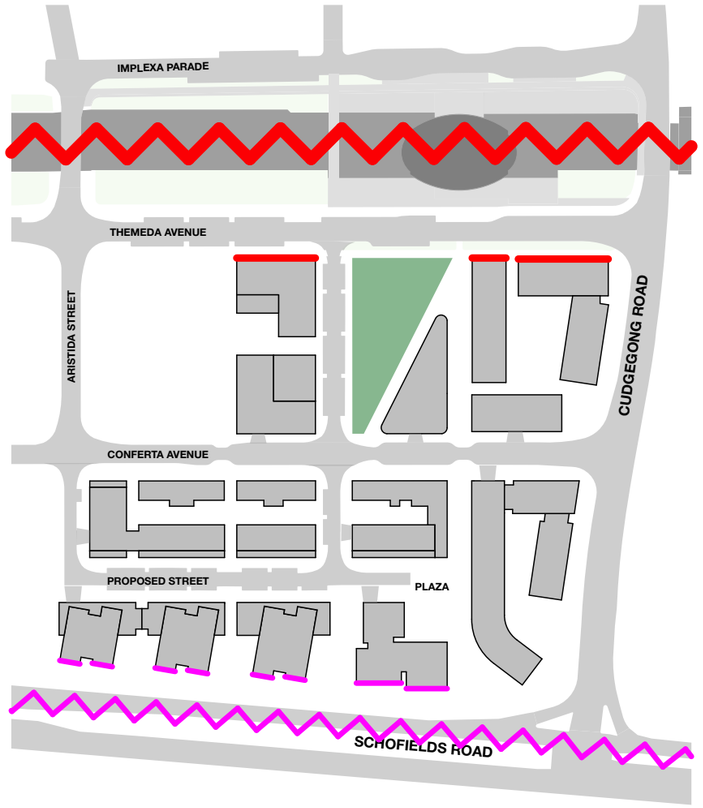
REFER TO AECOM ECOLOGICAL SUSTAINABLE REPORT
REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY



SOLAR ORIENTATION & OVERSHADOWING

- Buildings have been configured to balance the legible urban grid of the precinct with solar access to apartments, communal open space and the public realm.
- Building heights, separation and setbacks have been carefully calibrated to optimise solar access to each of the buildings.
- Volumes are stepped or rotated where feasible to increase solar access while maintaining street alignments and the passive surveillance of the public realm.
- Arrange building masses to minimise overshadowing to the public park and neighbouring properties in mid-winter.

REFER TO BENNETT AND TRIMBLE URBAN DESIGN REPORT & BENNETT AND TRIMBLE DESIGN VERIFICATION REPORT

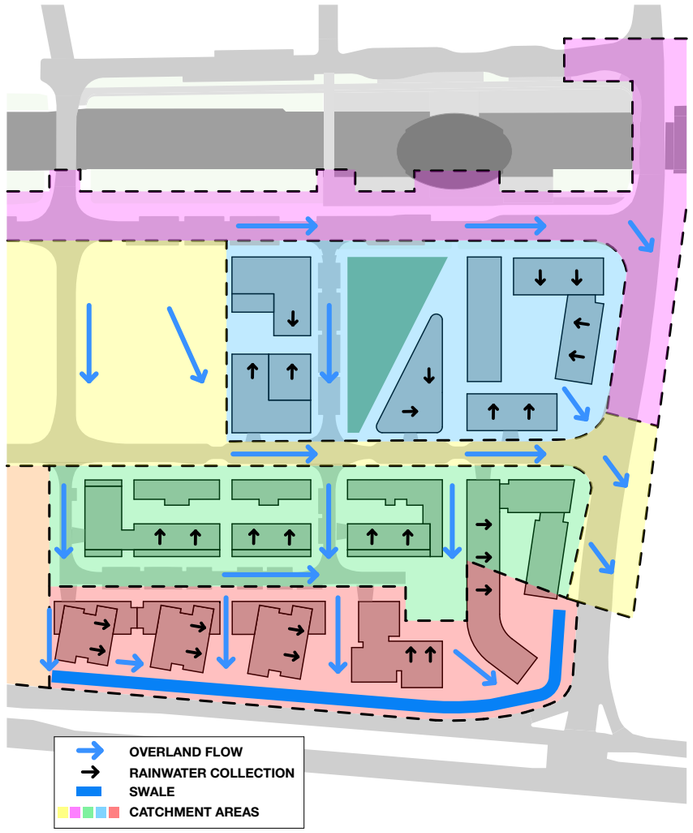


MINIMISING ACOUSTIC EXPOSURE

- Locate, configure and plan the buildings and apartments in close proximity to the Metro corridor and Schofields Road to mitigate exposure to noise generating sources
- Where required, integrate noise mitigation measures into the planning and design of dwellings and non-residential accommodation affected by noise generating sources.

REFER TO ACOUSTIC LOGIC NOISE AND VIBRATION ASSESSMENT

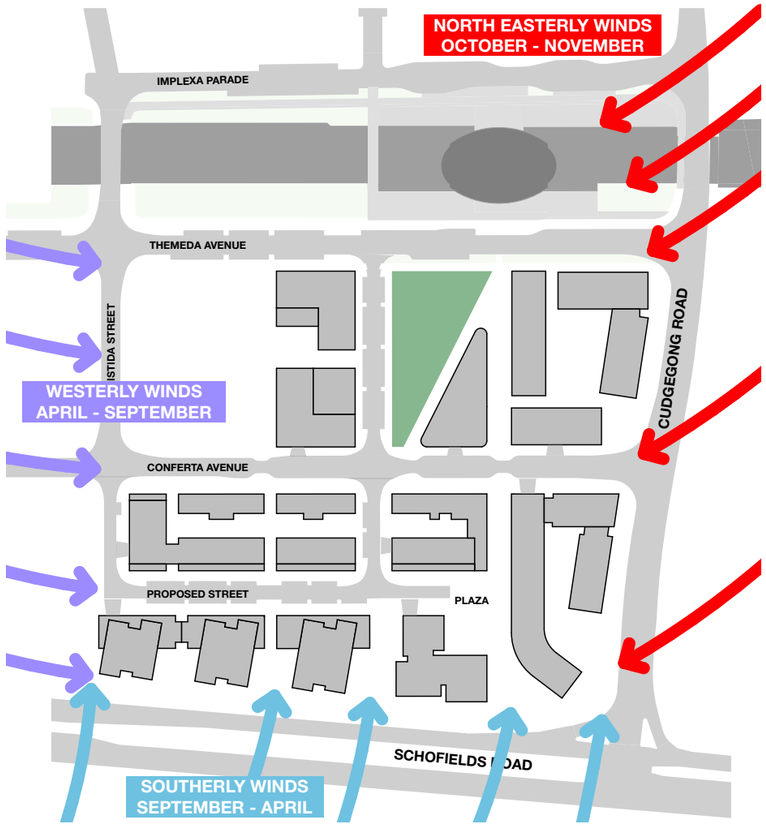
ENVIRONMENTAL CONSIDERATIONS



WATER MANAGEMENT

- Landscape design should respond to greater context overland flow paths and flood impact assessment.
- In addition to providing privacy and passive surveillance of the public realm, residential ground floor habitable levels should be raised 450mm as part of localised flood protection.
- Buildings should maximise potable water conservation through the integration of ESD initiatives including low flow fittings and fixtures within buildings.
- Sites should maximise stormwater collection and re-use for irrigation to reduce consumption.
- Street tree planting selection should facilitate passive irrigation and provide complementary bio-filtration network amongst parking bays for improved amenity, street tree health and canopy cover.

REFER TO AECOM INTEGRATED WATER MANAGEMENT STRATEGY REPORT
REFER TO CLOUSTON ASSOCIATES PUBLIC DOMAIN AND LANDSCAPE STRATEGY

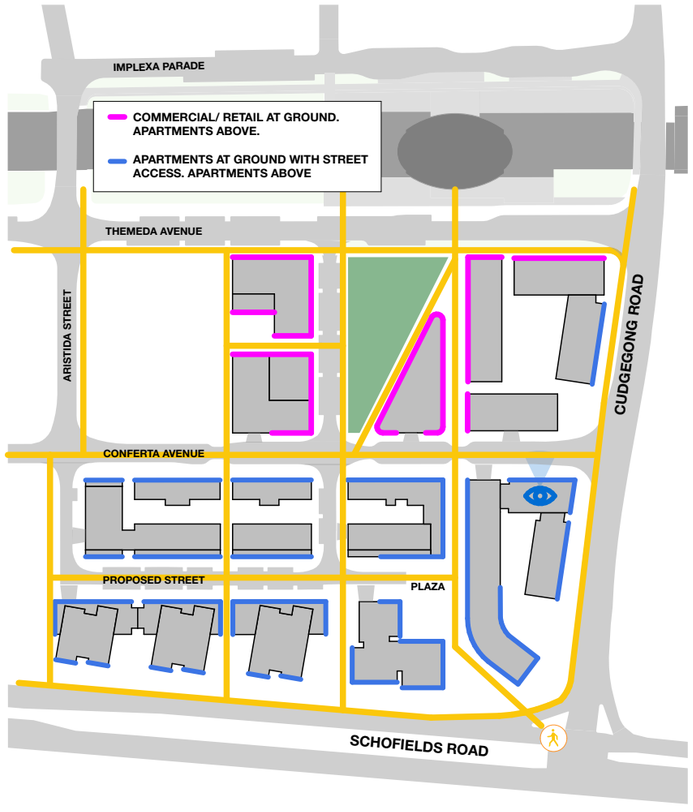


WIND MITIGATION

Address the potential for adverse wind effects impacting the comfort of pedestrians and residents within and around the development by considering the following wind mitigation measures:

- Include planting and vegetation throughout the site. For tree planting/landscaping to be effective as a wind mitigation device the species should be of a densely foliating variety to ensure year-round effectiveness. Trees should also be planted in clusters to effectively absorb incident winds. Undergrowth such as shrubs or hedges are expected to further improve wind conditions.
- Design continuous awnings over trafficable areas below buildings of significant height which are exposed to the prevailing winds.
- Provide localised screening where longer duration activities are to be undertaken.
- Design operable screening to be utilised by the various retail tenancy owners for patron flexibility.

REFER TO WINDTECH PEDESTRIAN WIND ENVIRONMENTAL STATEMENT



CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

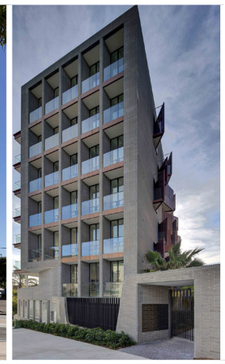
- Buildings should be planned and sited to facilitate the passive surveillance of streets, pedestrian links and open spaces to create a safe and secure urban environment.
- Large, insular and inwardly focused developments should be avoided in preference for small block developments with buildings aligned to streets, pedestrian links and open spaces. Buildings and apartments should be designed to be outward-looking and engaged with their urban environment.
- Ground floor terraces and maisonettes with private gardens and direct street access should be located within each development where possible to promote interaction with and passive surveillance of the adjacent streets, open spaces and pedestrian links.

REFER TO AECOM CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

BUILDING DESIGN AND ARTICULATION

BUILDINGS SHOULD BE DESIGNED TO BE SYMPATHETIC YET DISTINCT TO NEIGHBOURING BUILDINGS TO CREATE A DIVERSE AND INTERESTING NEIGHBOURHOOD AND TO AVOID THE SINGULAR AESTHETIC OF MANY CONTEMPORARY DEVELOPMENTS.

- The aesthetics and composition of the proposed buildings are to be considered in relation to the surrounding buildings and context.
- Encourage a range of architectural solutions and building designs to create a diverse and interesting neighbourhood with careful consideration of massing, materials, fenestration and building scale.
- Provide a range of building heights from 2 to 8 storeys to avoid uniformity, create a variety of urban scales across the development and to accommodate a range of housing typologies.
- Smaller sites should be created to encourage a wide range of smaller buildings and architectural responses.
- Buildings should be carefully articulated to reduce the perceived bulk of the building including the articulation of ground floor programs such as terrace-type housing, maisonettes, retail and commercial uses.
- Upper levels of the building should also be articulated such as setting back top floor apartments from the predominant facade and incorporating lift overruns and plant spaces within the design and consideration of landscaped roof terraces and associated structures.
- The design of balconies and windows should provide amenity and privacy to residents and be used to provide articulation to the modelling of facades through depth, pattern, shadow and scale.
- Buildings should be provided with external screening to balconies and windows to provide shading and privacy to residents and to further articulate the mass of the building.







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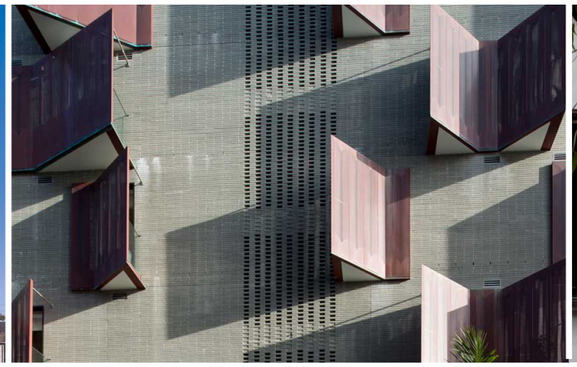
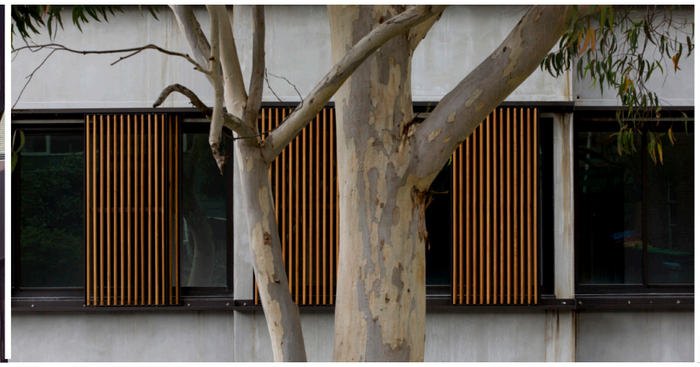
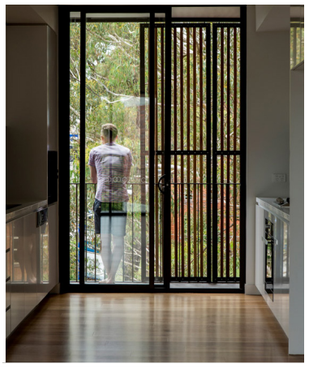
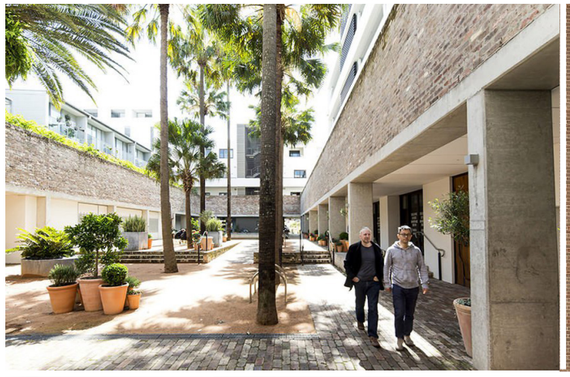
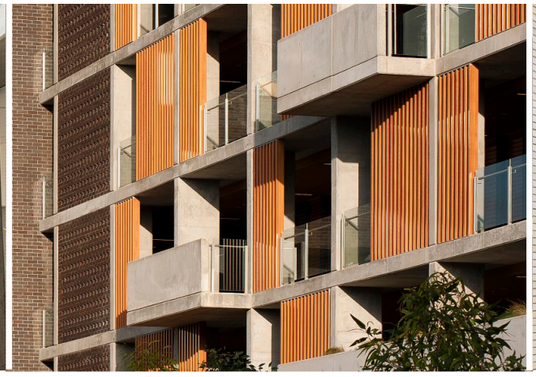
REFER TO FUTURE CHARACTER VIEWS WITHIN DESIGN QUALITY GUIDELINES

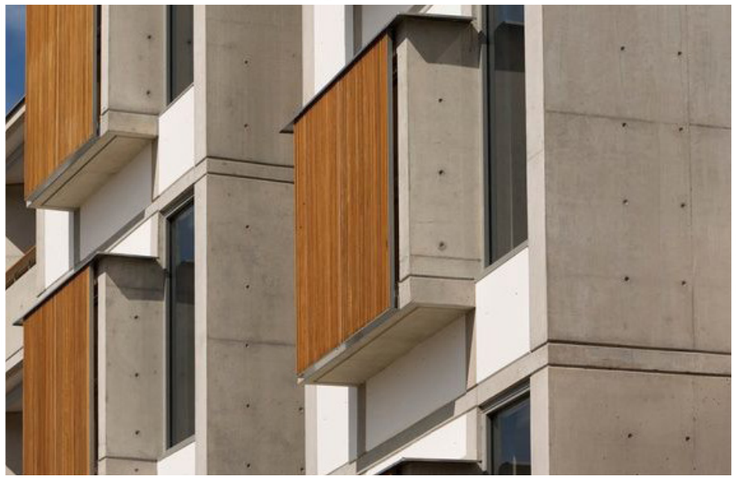
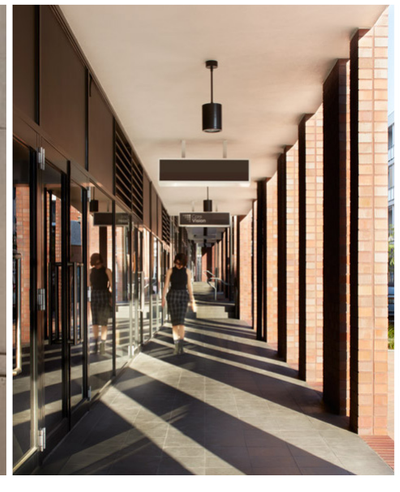
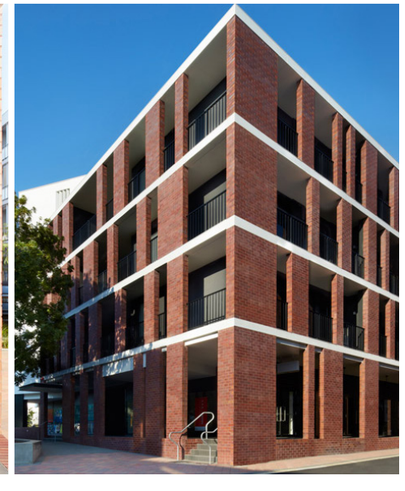
MATERIAL SELECTION AND DETAILING

SUCCESSFUL URBAN ENVIRONMENTS ARE TACTILE AS MUCH AS SPATIAL. THIS REQUIRES THE CAREFUL SELECTION AND INTEGRATION OF MATERIALS TO CREATE A RANGE OF BUILDINGS WITH THEIR OWN DISTINCTIVE IDENTITY, CHARACTER AND SCALE.

- The proposed materials should be utilised for structure cladding and screening.
- Materials should be robust to create a long lasting and low maintenance environment with a preference for natural materials such as clay and terracotta bricks, off-form concrete, stone and timber.
- Material should be selected with an understanding of the effects of weathering to ensure a high quality finish that endures for the life of the building.
- Materials should be selected for their low embodied energy and potential for future re-use or recycling.
- Materials should not be highly reflective to avoid glare and the transference of heat.
- The colours of materials should be those that are found naturally and sympathetic to the existing semi-rural and emerging character of the area.
- Materials to be selected to give a variety of visual and tactile social experiences in streets and public spaces.
- Street walls should be articulated through colour, texture and materiality to provide scale and street definition and pedestrian interest.



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