



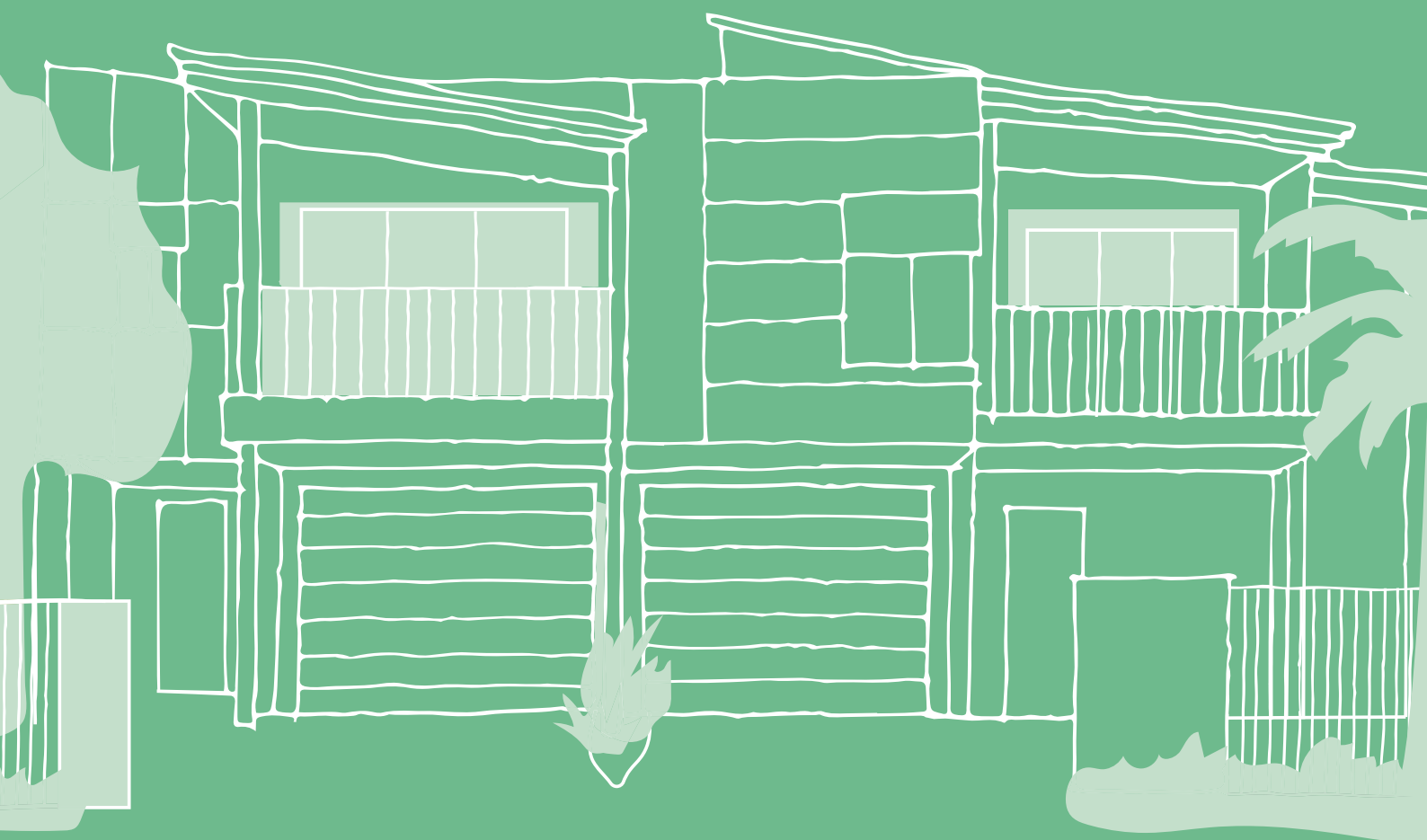
Dual occupancies provide two dwellings on a single site. The dwellings can either be attached with a common wall or detached, and sometimes share features such as a front yard and car parking access.

DUAL OCCUPANCY

Dual occupancies are perfect for sites in suburban neighbourhoods that could otherwise provide a single detached dwelling. Residents enjoy a similar living arrangement to a detached dwelling but with lower maintenance and housing costs.

Usually surrounded by detached dwellings, dual occupancies should integrate with the neighbourhood context.

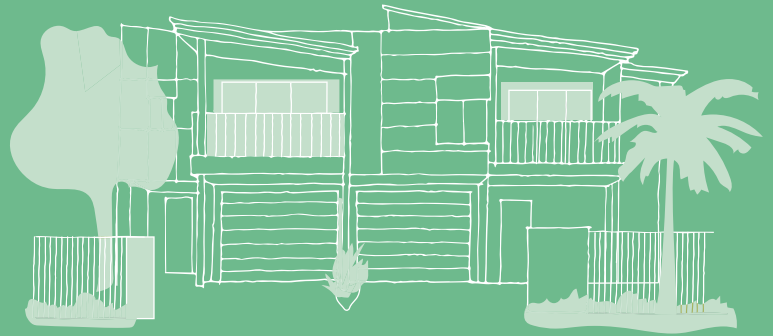
The best examples are conscious of their surrounding neighbourhood, and provide shared walls and features to allow for extensive tropical landscaping and separation from neighbouring development for privacy.



DUAL OCCUPANCY

Design Guidance

As a first step, analyse and understand the features and characteristics of the site.

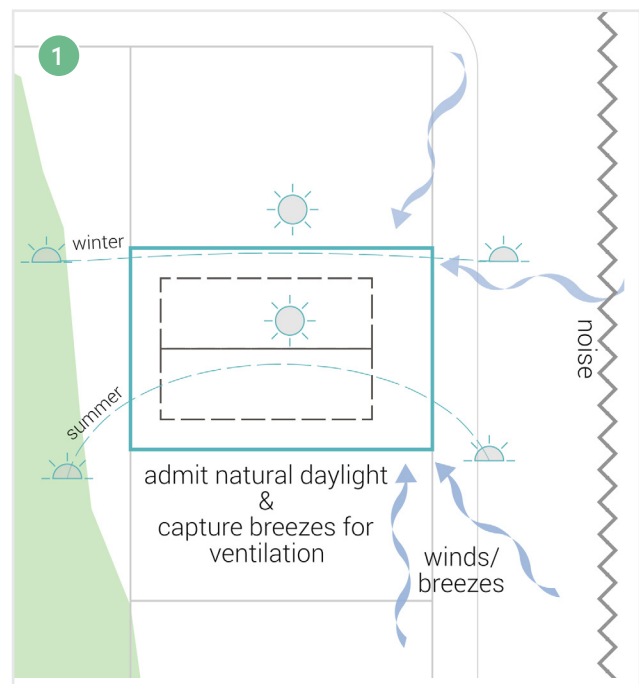


Sensory and Climatic

One of the fundamental factors of good design is to understand and respond appropriately to the site's surrounding context and climate. This is particularly the case in Cairns, where being able to enjoy indoor and outdoor living is core to the way of life. The following guidance will assist with the design of enjoyable living spaces in a tropical climate.

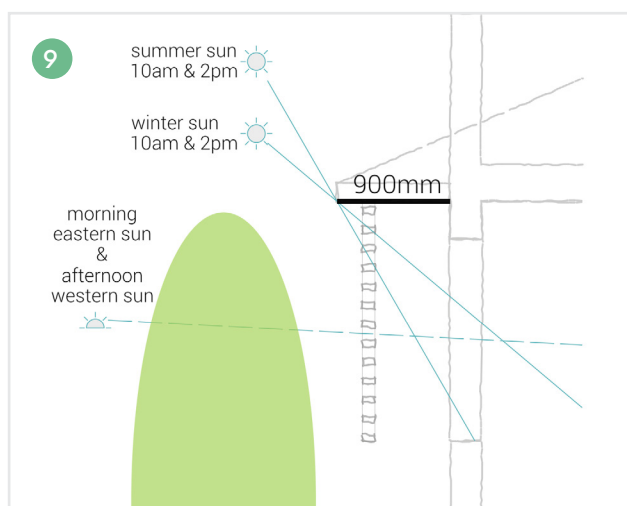
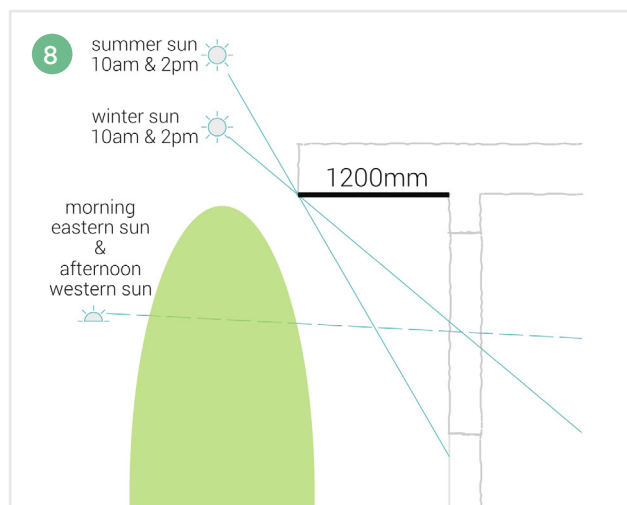
Sensory and Climatic

- 1 Orientate the development to optimise the number of dwellings that receive maximum daylight and capture prevailing breezes.
- 2 Dwellings should be of a depth that allows for penetration of daylight and breezes.
- 3 Consider the outlook from key habitable rooms for each dwelling.
- 4 Utilise vegetation and landscaping, as well as visual and acoustic privacy elements, to minimise impacts on adjacent development.
- 5 Use built form elements and landscaping to mitigate impacts that affect a comfortable living environment (i.e. noise, visual, urban heat island effect).
- 6 Utilise topography to increase privacy where practicable.



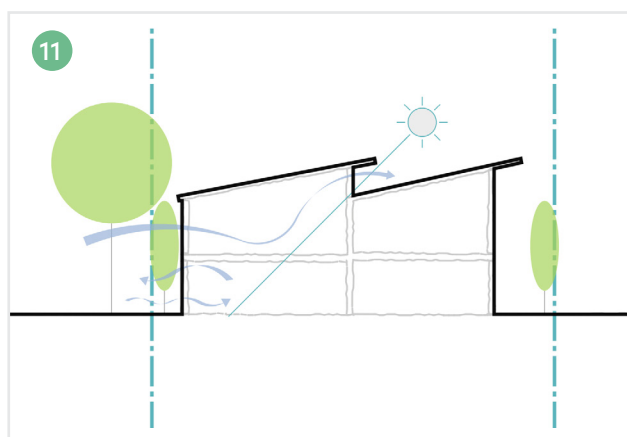
Shade and shelter

- 7 Consider how the pitch of the roof and depth of the eaves can increase shade, capture rainwater and maximise daylight.
- 8 Provide wide awnings over external openings to provide shade from the sun and shelter from the rain.
- 9 Carefully locate landscaping and vertical screening in conjunction with wide eaves to shade walls and windows, particularly to the south-west.
- 10 Verandahs and balconies that include cooling elements (i.e. fan, operable screening), should be located on facades that are exposed to direct sun.



Ventilation

- 11 Provide external openings (i.e. windows, balconies, doors) on as many facades as possible to allow for cross-ventilation.
- 12 Promote open plan living to optimise cross-ventilation (i.e. single internal living space, internal louvres).
- 13 Provide facade articulation to allow for more opportunities for external openings.

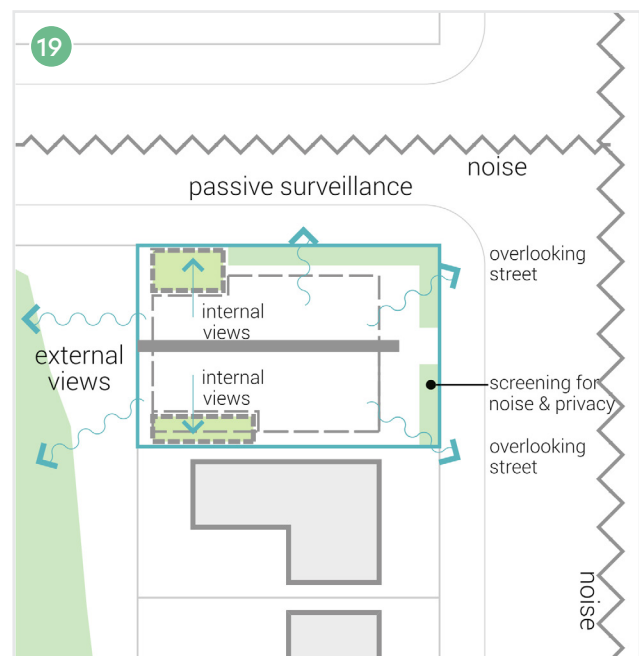


Streetscape Amenity

How development sits within the neighbourhood contributes to its overall character, appearance and visual identity. Well designed streetscapes can foster a sense of community and safety among the residents through actively encouraging interactions and connections.

Streetscape Amenity

- 14 Dual occupancies need to integrate with surrounding development, which are typically detached dwelling houses. Consider the most appropriate built form for the dual occupancy development, considering building bulk and scale from the street.
- 15 Ensure the built form addresses the street to contribute to the overall sense of place and identity.
- 16 Ensure both dwellings are unique and provide a sense of ownership from the street (i.e. individual dwelling entrances, unique building design and finishes)
- 17 Carefully consider the streetscape character of all street-facing facades. If the site is located on a corner, respond to both frontages with equal care.
- 18 Ensure habitable rooms are positioned to provide passive surveillance of the street.
- 19 Pay attention to all street frontages with consideration to:
 - » Windows, awnings and balconies,
 - » Dwelling entrances,
 - » Facade articulation,
 - » Building scale and bulk,
 - » Vehicles entrances and car parking,
 - » Landscaping and fencing, and
 - » Passive surveillance of the street.



Landscaping

Landscaping is one of the main elements that contributes to the quality of a neighbourhood and streetscape amenity. It also plays an imperative role in ensuring development positively contributes to the Cairns tropical character.



Landscaping

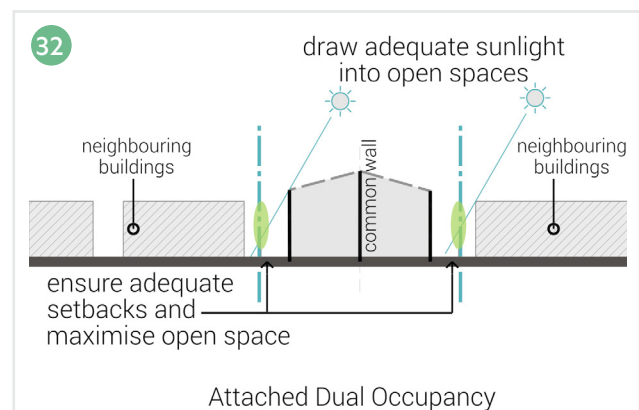
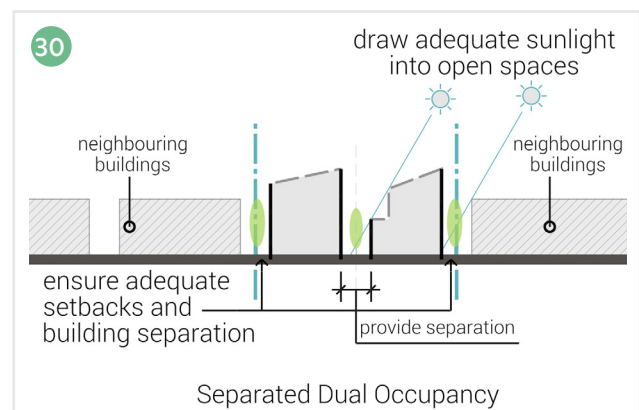
- 20 Landscaped areas need to be sufficient in size to be functional and support the establishment and growth of healthy vegetation.
- 21 Preserve existing vegetation (i.e. mature trees, planting) as part of the design to reinforce the Cairns tropical character and amenity.
- 22 Enhance development with landscaping. Encourage a diversity of species, deep planting and vertical landscaping. Avoid an over-reliance on narrow planting strips, groundcovers and grasses.
- 23 Use landscaping to enhance privacy between dwellings instead of structural screening. Plan sufficient areas for landscaping to deliver the establishment of screening shrubs.
- 24 Site specific landscape design should be considered in conjunction with fencing.
- 25 Dual occupancies that share a common wall should take advantage of larger side setbacks to establish landscaping that can assist with increased privacy and amenity.
- 26 Consider engaging a landscape specialist to assist with understanding the site constraints that will impact on the long-term establishment of landscaping (i.e. soil condition, tree suitability, light, water, maintenance).
- 27 Any proposed planting on the built form should be certified by a Registered Professional Engineer of Queensland and designed by a landscape specialist.

Setbacks

Setbacks and building separation are intended to maintain privacy for residents and neighbours, increase amenity of the streetscape, minimise noise, maximise natural daylight, increase access to breezes and reduce overshadowing.

Setbacks

- 28 Aim to align the front setback with the prevailing setbacks within the street to provide a consistent rhythm of development.
- 29 Consider how setbacks can be best utilised to improve privacy, minimise overlooking, and enhance the amenity of adjoining dwellings and neighbouring development.
- 30 Optimise building separation distances between the built form and neighbouring development.
- 31 Setbacks are an opportunity to establish high quality landscaping, and setback widths should be considered in conjunction with landscape planning.
- 32 Dual occupancy dwellings incorporating a common wall are an opportunity for larger side setbacks with high quality landscaping and increased separation to neighbouring development.



Residential Amenity

All the principles within the guide are designed to maximise residential amenity. When living in a higher density setting, this becomes even more important as space decreases and the quality of the amenity needs to increase.



Residential Amenity

- 33 Site cover and siting of the dwellings should ensure that dual occupancy sites provide private open space and amenity for residents.
- 34 Use landscaping to provide delineation and additional privacy between adjoining dwellings and neighbouring development.
- 35 Consider the proximity of adjacent dwellings and the street. Consider visual and acoustic privacy, access to daylight and outlook.
- 36 Consider the internal layout of each dwelling to maximise residential amenity and privacy on the site and to neighbouring development.

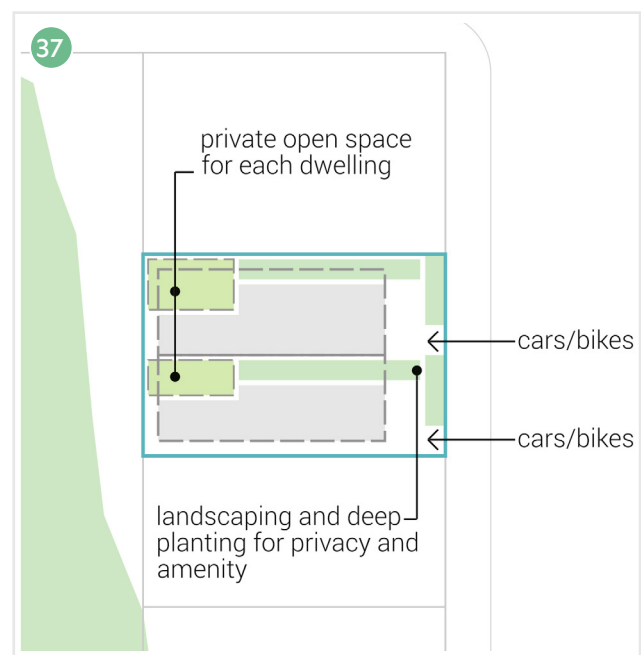
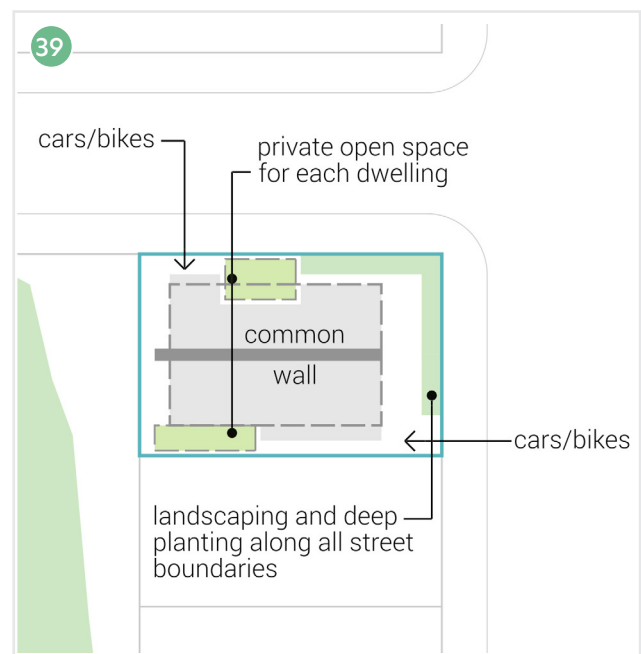


Open Space

Incorporating open space into the design of development at the beginning helps achieve quality indoor and outdoor living. Well-considered open space will achieve a balance between the site's natural assets and development.

Open Space

- 37 Provide functional open space for residents that is useable, private, and supplemented with landscaping which provides shade and additional amenity.
- 38 Narrow and deep lots will need to ensure open spaces optimise daylight in relation to their orientation.
- 39 Corner lots give the opportunity for wider and shallower lots so that the dwellings and private open spaces can sit side by side.
- 40 Careful attention is needed for both frontages on a corner lot, for both landscaping for privacy and amenity and facade articulation.
- 41 Where possible, concentrate car parking and non-habitable rooms to the western and/or southern side of the site to leave the northern side for open space with access to daylight.
- 42 Shade private and communal open space to create a comfortable living environment (i.e. trees, operable screening)



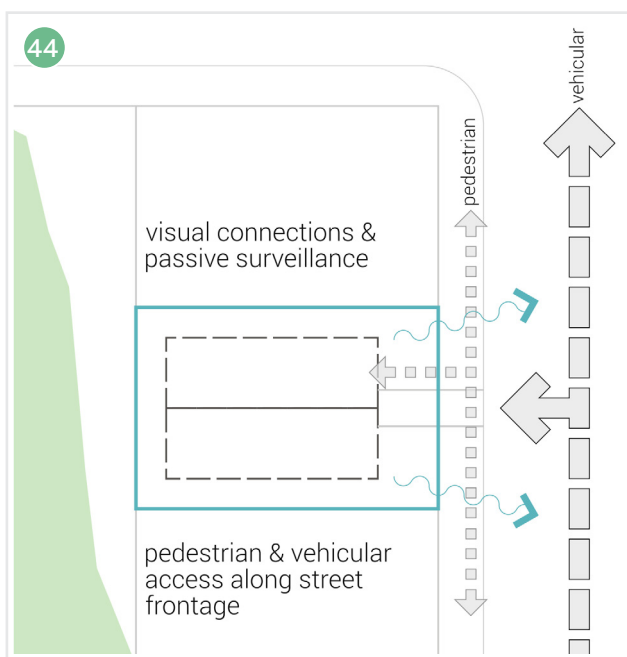
Access and Circulation

Access to and from the development and each individual dwelling, whether it be by vehicle or foot, is integral to the functional design of dual occupancies. Access has a great impact on legibility, safety, inclusionary design and streetscape amenity. This design guidance aims to minimise the dominance of garages, address the presence of cars on the street, and maximise accessibility.



Access & Circulation

- 43 Locate access points to effectively integrate with the street network and avoid existing streetscape features (i.e. street trees, power poles).
- 44 Ensure car parking access points are designed to minimise conflicts between pedestrians and vehicles. Provide sufficient front setbacks to garages or carports allow a car to park in the driveway without overhanging onto the front verge and footpath.
- 45 Arrange dwelling entrances and access points to consider the privacy of both the residents and neighbours.
- 46 From the street view, ensure the pedestrian entries and car parking access are legible, and car parking is not dominant. This will ensure there is a visual connection between the dwellings and the street.
- 47 Provide a single car parking access point where practicable to minimise the number of car parking access points along the street and increase the provision for on-street car parking.
- 48 On corner lots where both road frontages are of the same order road, each dwelling could be accessed from a different road frontage. This reduces the impact of additional crossovers in a streetscape but also allows the design to create a sense of individuality and separate ownership.
- 49 Integrate building servicing, operations and maintenance into the design in a holistic and efficient manner (i.e. screened refuse enclosure that are easily accessible, landscaping clear zones around maintenance areas).
- 50 Ensure the provision of space for kerbside refuse collection that does not conflict with on-street car parking.



Establish the Building Zone

Once the site characteristics and dwelling requirements are understood, establish the building zone. The building zone sets the foundation for how the development will respond to its context and design elements (i.e. sensory and climatic, streetscape amenity, landscaping, setbacks, residential amenity, open space, access and circulation). Once the building zone is established, consider the architectural style and floor plan of the development.

Establish the Building Zone

- 51 When the design elements are not considered together, or one is left out, then the development cannot perform to its full potential, nor can it make a positive contribution to the streetscape and neighbourhood.

A good way to visualise this is to think of the proportions of all the development requirements on the ground plane of the site, considering:

- » Required amount of private open space,
- » Maximum site cover requirements,
- » Setbacks and landscaping,
- » Minimising the appearance of car parking and vehicular access,
- » Screening of and access to refuse or services,
- » Existing water connections, sewerage infrastructure and connections to adjoining lots, and
- » On site stormwater management.

