



SMALL LOT DWELLINGS & RECONFIGURATIONS

Small lot dwellings and reconfigurations refer to dwelling houses that are established on smaller residential sites (lots less than 450m²). This type of housing, and the subdivisions that create smaller residential sites, provides a similar living arrangement to detached dwellings on larger sites but with benefits of higher density living.

Creating smaller lots by reconfiguring existing larger sites is a great way to increase the density of established neighbourhoods. Particular care, however, needs to be given to integrate these lots into existing residential areas with a development pattern and streetscape of large lots with single detached dwellings. Not all neighbourhoods will be suitable for small lots. Small lots can also be integrated into new development areas to increase density, leaving space for more public facilities and natural areas.

Dwellings on small lots are more modest in size – but not design – to their larger detached dwelling counterparts.

The modest size, preferably two storey built form, and other design considerations ensure this housing type overcomes the spatial constraints of the small site. Small lot dwellings and reconfigurations contribute positively to the streetscape when siting, design and landscaping have been well considered.

Access to public amenities such as open space, natural features, outlooks and views are important for small lot dwellings and reconfigurations to substitute the reduced amount of private open space.



Design Guidance

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

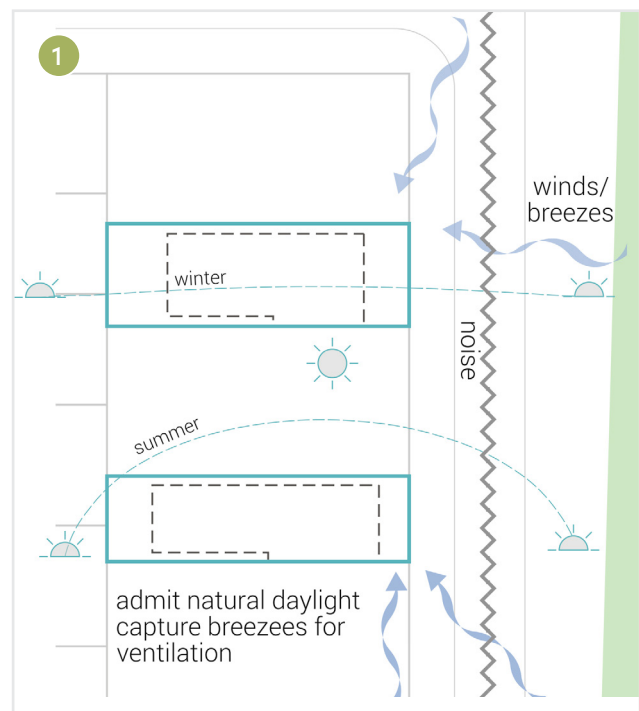


Sensory and Climatic

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.

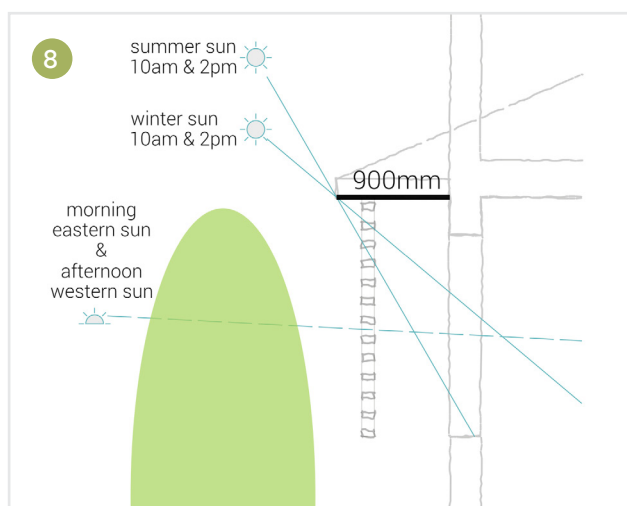
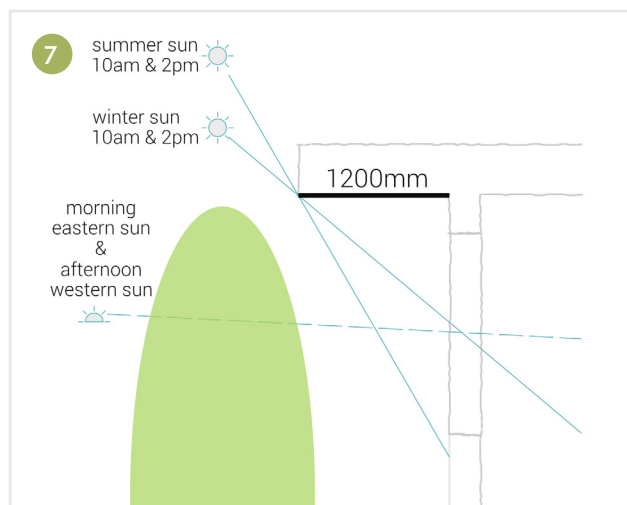
Sensory and Climatic

- 1 Orientate the development to maximise 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 neighbouring 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).



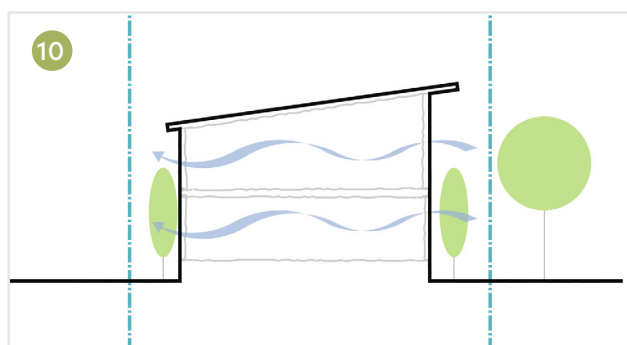
Shade and shelter

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



Ventilation

- 10 Provide external openings (i.e. windows, balconies, doors) on as many facades as possible to allow for cross-ventilation.
- 11 Promote open plan living to optimise cross-ventilation (i.e. single internal living space, internal louvres).
- 12 Provide facade articulation to allow for more opportunities for external openings.
- 13 Consider setbacks and separation to neighbouring development to ensure access to breezes for cross-ventilation.

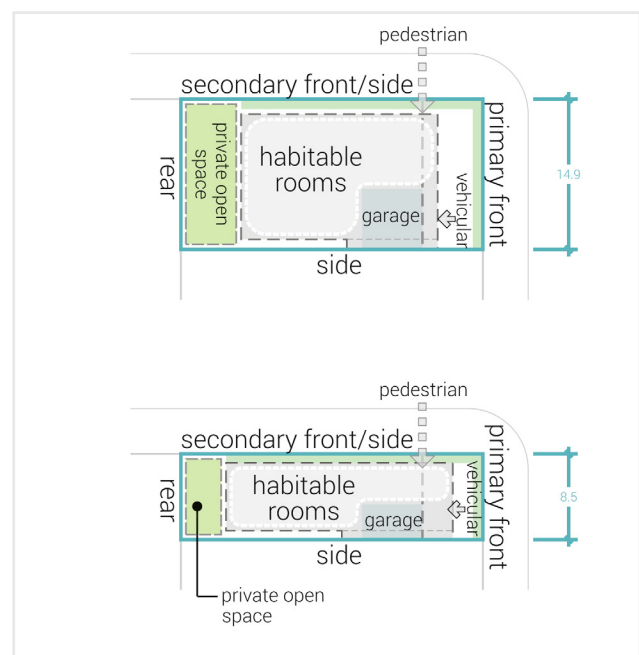
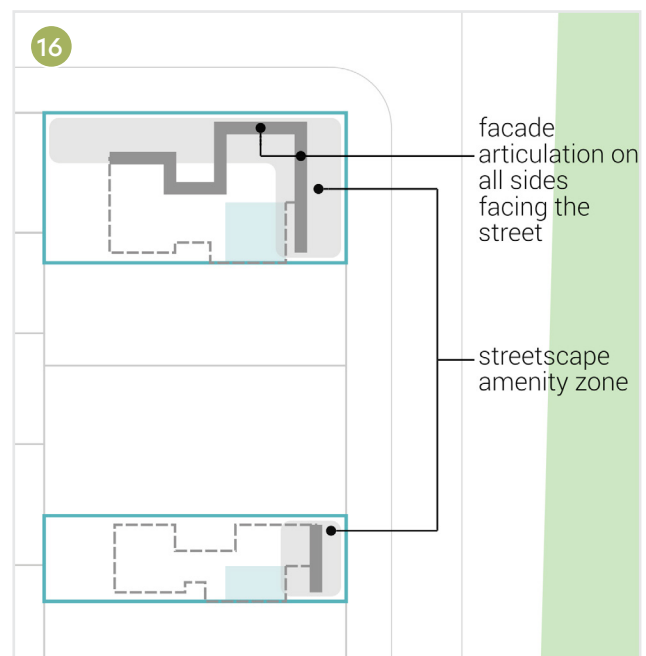


Streetscape Amenity

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 In an infill context, address the development to the street to effectively integrate the built form with neighbouring development and respect the local context.
- 15 In new areas of development, ensure the built form addresses the street to contribute to the overall sense of place and identity of the new neighbourhood.
- 16 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.
- 17 Ensure habitable rooms are positioned to provide passive surveillance of the street.
- 18 Care needs to be taken to integrate small lots into established residential neighbourhood and streetscape, with large lots and single detached housing. Consider the design and context, including limiting the number of small lots in a row.
- 19 Pay attention to all street frontages with consideration to:
 - » Windows, awnings and balconies,
 - » Dwelling entrances,
 - » Facade articulation,
 - » Vehicle 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

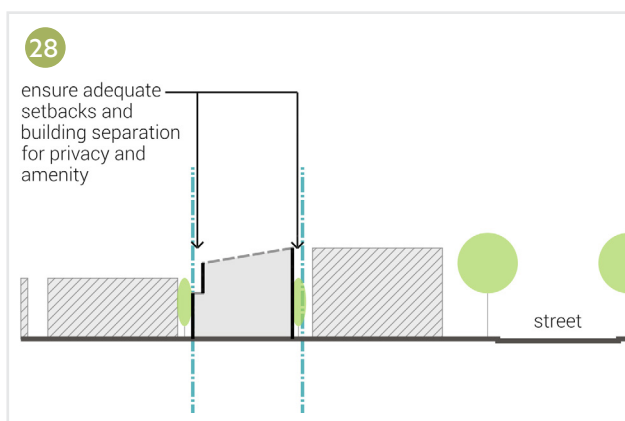
- 20 Landscaped areas need to be sufficient in size to be functional and support the establishment and growth of healthy vegetation. Landscaping strips may be smaller due to the narrow lot frontage and will need to consider how planting can be established (i.e. appropriate tree and plant species, vertical landscaping).
- 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. Where possible, provide a single space for a larger tree. Encourage a diversity of species and avoid an over-reliance on groundcovers and grasses.
- 23 Use landscaping to enhance privacy between residents and neighbours 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 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).
- 26 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

- 27 Aim to align the front setback with the prevailing setbacks within the street to provide a consistent rhythm of development.
- 28 On small lots, setbacks and landscaping still need to be provided and be of an appropriate width.
- 29 In an infill context, greater setbacks may be required to integrate with existing neighbourhood.
- 30 Where a rear lot (battle-axe style lot), increase side setbacks to improve privacy, minimise overlooking, increase landscaping and enhancing the amenity of adjoining dwellings and neighbours.
- 31 Consider a two storey design to ensure that development can achieve appropriate setbacks.



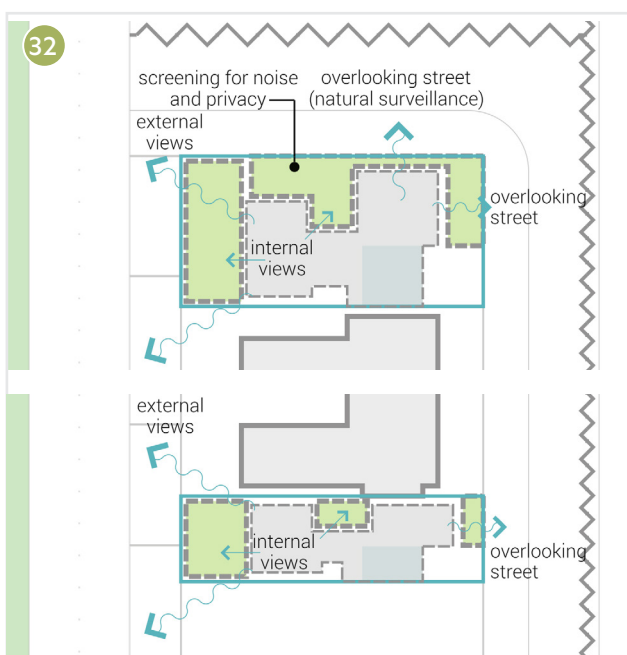
Residential Amenity

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

- 32 Site cover and siting of the dwelling should ensure that the development is not too large for the small lot and can still provide open space and amenity for residents.
- 33 Use landscaping to provide delineation and additional privacy to neighbouring development.
- 34 Consider the proximity of adjacent dwellings and the street. Consider visual and acoustic privacy, access to daylight and outlook. Ensure air conditioning units are located to mitigate amenity and ventilation impacts on neighbouring development.
- 35 Consider the internal layout of the dwelling to maximise residential amenity and privacy on the site and to neighbouring development.

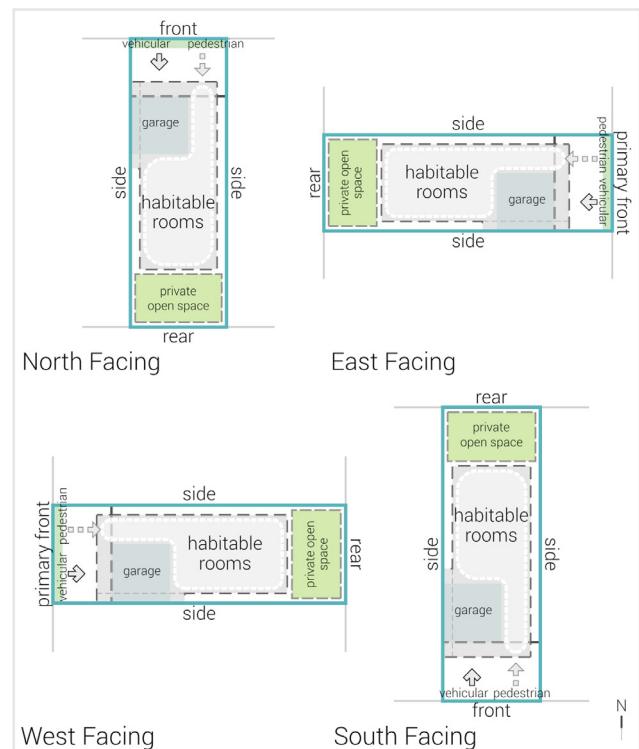


Open Space

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

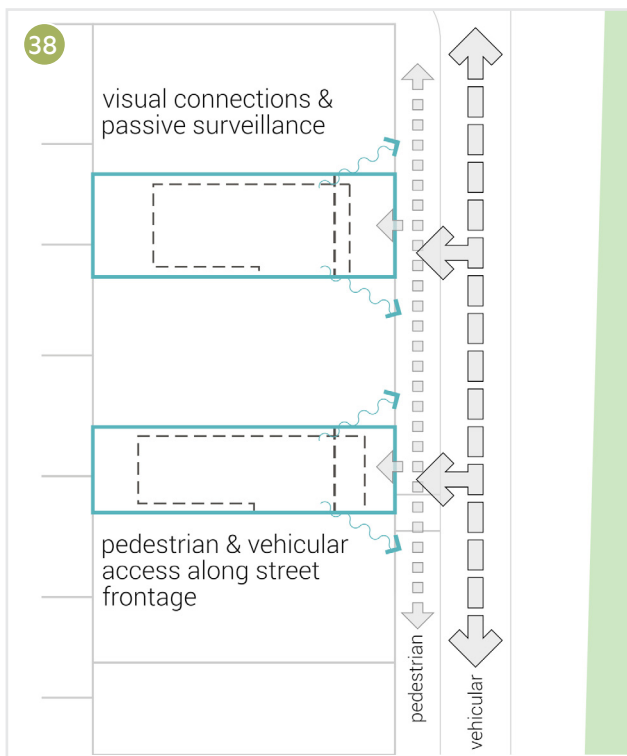
Open Space

- 36 When reconfiguring lots in an infill context, consider how narrow and deep lots will respond to:
- » Maximising daylight to internal living spaces in relation to their orientation.
 - » 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 shaded outdoor open space with access to daylight.
- 37 Corner lots give the opportunity for wider and shallower lots so that the dwelling and open space can sit side by side.



Access and Circulation

Access to and from the dwelling, whether it be by vehicle or foot, is integral to the design and will have 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 great living spaces.



Access and Circulation

- 38 Locate access points to effectively integrate with the street network and avoid existing streetscape features (i.e. street trees, water meters, power poles).
- 39 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.
- 40 Where a small lot is too narrow to accommodate a double garage or carport, consider tandem car parking.
- 41 Provide enough space for on-street car parking, light poles, street trees, stormwater and other essential infrastructure between car parking access points.
- 42 Where possible, car parking access points should aim to provide for one on-street car parking space at the front of each lot. In the streetscape, these features should be co-ordinated to ensure the location of car parking access points and streetscape features do not limit on-street car parking.
- 43 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

- 44 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:

- » >1m landscaping to street frontages for deep planting,
- » Private open space per dwelling (16m² to 20m², depending on primary street frontage width),
- » Number and width of car parking access points to be minimised as much as possible,
- » Screening of and access to refuse or services,
- » Existing water connections, sewerage infrastructure and connections to adjoining lots,
- » Separation of water meter and electricity cabinet, and
- » On site stormwater management.

