

Ngā tohutohu hoahoa ā-motu mō te wharenoho mātoru-waenga National medium density design guide



Ministry for the
Environment
Manatū Mō Te Taiao



Te Kāwanatanga o Aotearoa
New Zealand Government

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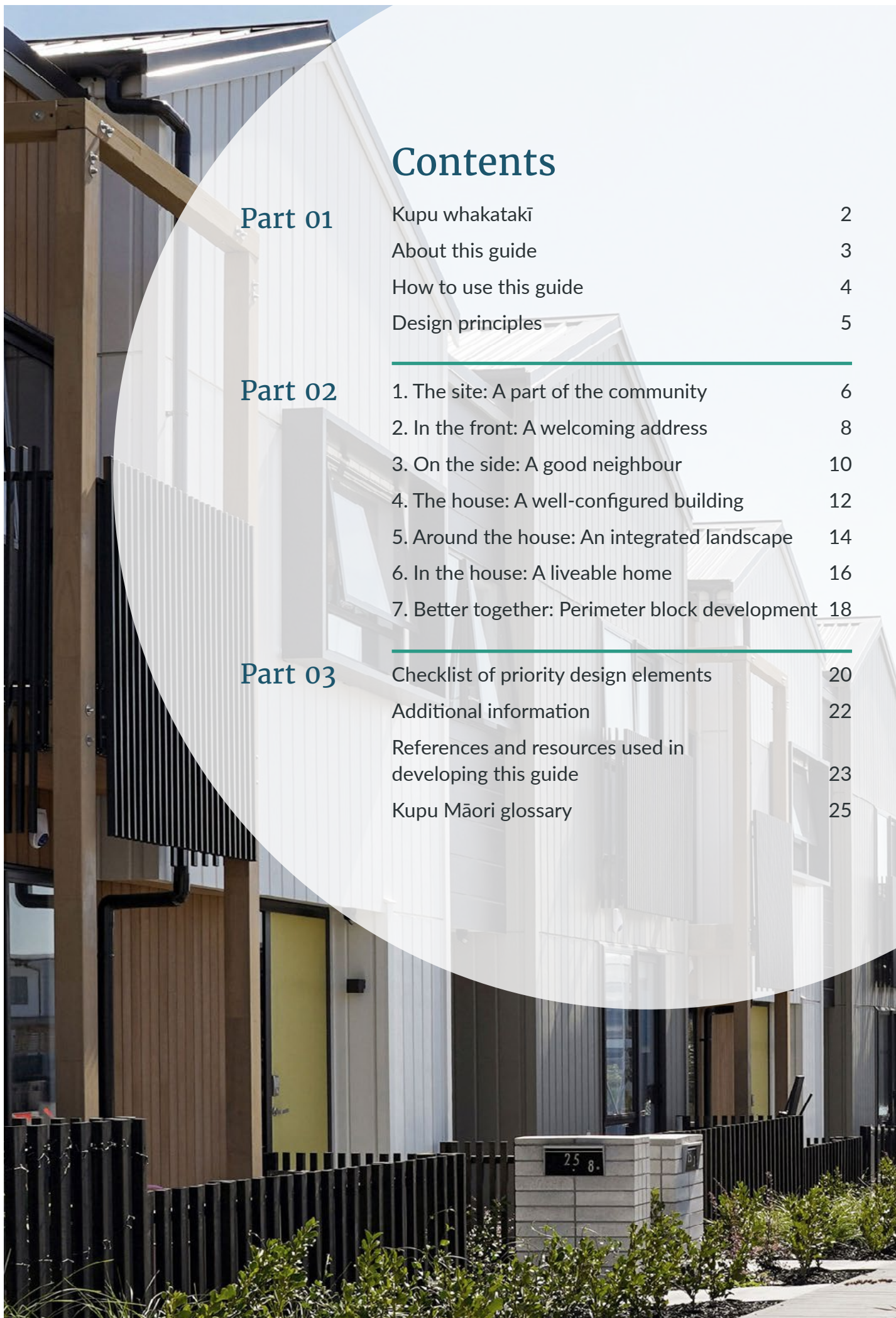
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Kupu whakatakī

Ka mate kāinga tahi, ka ora kāinga rua

This whakataukī (proverb) references the resilience of Māori. It can be interpreted by the changing world, where a home may no longer sustain a whānau (family), and therefore another needs to be created in its place to maintain wellbeing.

Kāinga (home) is an important concept supporting whānau and community development and wellbeing. As Aotearoa New Zealand explores new models of housing, it is important that we continue to recognise and maintain the relationships our people and our places share with one another.

This guide has been developed to achieve inclusive and integrated housing. It is important to acknowledge and understand the perspectives of our unique culture aspiring to create homes that cater to the needs of our environment, community, and people. The guide expresses shared obligations to protect, ensure participation, and encourage partnership in developing housing, upholding the values and aspirations of Māori and non-Māori.

The guide takes into consideration the holistic views associated with whānau and diversity of household type, ensuring healthy and sustainable living that is essential for thriving communities and environments. It explores multi-generational and inter-generational living responding to a one size does not fit all approach. To meet these aspirations, the guide supports system-wide changes in housing and urban development building on the unique way we create and recognise housing.



Te Aro Pā apartments

About this guide

This guide is for anyone interested in the design and development of medium-density housing in Aotearoa New Zealand, particularly small-scale property owners or those with limited experience in more complex residential developments.

Following the advice in this guide will help achieve well-functioning and high-quality housing that is well integrated into its neighbourhood. The guide has been developed following engagement with territorial authorities (councils), iwi and Māori organisations, and industry stakeholders.

The focus of the guide is on three-unit developments up to three storeys in height that are permitted under the Medium Density Residential Standards (MDRS). Information on the MDRS is available on our [housing intensification web page](#). These standards may be subject to local variations that enable or restrict greater development. Check the local district/unitary plan for rules that apply to your site. The design elements covered by this guide will also apply to other residential developments.

The guide draws on kaupapa Māori design, understanding specific knowledge, considerations, and protocols associated to kāinga. Kāinga is a concept within New Zealand housing development which builds on whānau (family) and hāpori (community) values. It also recognises multi-generational and inter-generational housing, which is socially and culturally fit for purpose.

Advice provided in the guide is at the site level. At this level, the importance of kāinga outcomes is recognised. It is important to note that sites have a close relationship between people and homes with a wider urban context of the street, neighbourhood, and town/city. These levels will be covered by other guidance, including Waka Kotahi NZ Transport Agency's [Aotearoa Urban Street Planning and Design Guide](#).

This is a non-statutory guide: it does not prescribe mandatory design requirements. Developments that do not comply with the MDRS may be subject to district/unitary plan provisions of the relevant local council, including any local design guides.

If in doubt about how any design considerations might apply to a specific site, check with your local council. They can advise on any important factors relevant to the site, including protected trees and other planning considerations.

Applying this guide will contribute to the wellbeing of your community, including residents, and can help add value to the development. Quality design can be achieved by making the right design decisions early in the process. This often results in savings and efficiencies in construction and operation of the development.



How to use this guide

Design principles

Design principles have been developed to encourage high-quality medium-density housing that provides a functional and comfortable living environment for residents, visitors, and the community.



Fit within the wider natural, cultural, and urban landscape



Develop housing and access solutions that provide for the needs of its residents



Contribute to healthy and safe communities and homes



Encourage sustainable design that minimises impacts on the natural environment

Design themes

To show how the design principles apply, the attributes of medium-density housing developments are divided across seven themes, from understanding the context of the site through to design of buildings and landscape, and finally designing with neighbours.



1. The site: A part of the community



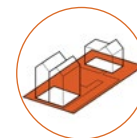
2. In the front: A welcoming address



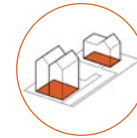
3. On the side: A good neighbour



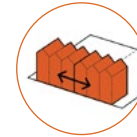
4. The house: A well-configured building



5. Around the house: An integrated landscape



6. In the house: A liveable home.



7. Better together: Perimeter block development

Design elements

Under each theme, key design elements are described and illustrated. Review each of these design elements to see whether they have been addressed in your development. A checklist of priority design elements is provided at the end of the guide. Where possible, 'rules of thumb' are included in diagrams to provide broad quantitative guidance that can inform further design work. Additional information to inform your design is provided at the end of this guide along with references and resources used in this guide.

The design elements listed under each theme are intended to give flexibility, while ensuring the development contributes positively to the natural and built environment. The diagrams illustrate a range of developments that comply with the MDRS and are examples of good design solutions (ie, well-functioning and high-quality), but not necessarily the only solutions. In most developments there will be competing or conflicting design elements. This may require balancing outcomes or trading off ideals to achieve the best design overall that addresses the site challenges and brings the most benefits.

Design principles



Fit within the wider natural, cultural, and urban landscape

- Understand the interwoven relationships of a place by responding to the wider social, cultural, and environmental context.
- Acknowledge and recognise the importance of local traditional knowledge identifying, protecting, enhancing, and contributing to the values and aspirations of tangata whenua (people of the land).
- Acknowledge the city/town/neighbourhood scale and street setting, contributing to the enhanced quality of the future environment and supporting tools and plans for tangata whenua and the wider community.
- Contribute to a positive public perception of medium-density housing by developing attractive and quality environments.



Develop housing and access solutions that provide for the needs of residents

- Understand and respond to the wider housing needs of the community.
- Design developments with whānau in mind, by considering residents' accessibility to public transport, or their convenience to local education, employment, recreational and community services, to help inform the transport options provided.
- Design houses that provide for day-to-day living of all residents, which incorporates the needs of an aging population, young children and disabled people (ie, universal design).
- Contribute to housing solutions that cater for diversity, accessibility, and for small and large family and non-family households.



Contribute to healthy and safe communities and homes

- Support day-to-day social interaction with those using streets and parks, while allowing residents and neighbours to seek privacy when desired.
- Recognise the importance of hauora (health and wellbeing) through multi-generational and intergenerational living, and the need to meet different cultural lifestyles.
- Support the comfort and health of residents by providing warm, dry, well-ventilated, and accessible homes.
- Recognise the importance and vitality of whānau (family) and mauri (life force) to cater for overall health, wellbeing, and identity.



Encourage sustainable design that minimises impacts on the natural environment

- Understand the significance of kaitiakitanga (guardianship) to inform the inter-connected design of housing, communal facilities, food production, and natural habitats.
- Acknowledge and consider important knowledge and values of mana whenua (Māori who have retained authority over their land or territory), understanding the interwoven nature of environmental and cultural systems.
- Acknowledge wider climate and other environmental qualities that can support sustainable design, respond to the challenges of climate change, and is resilient to natural hazards.
- Incorporate passive design techniques to reduce energy usage and greenhouse gas emissions, apply water sensitive design, minimise waste, and support sustainable transport modes like walking, cycling and public transport.

1. The site:

A part of the community

Good design contributes to the shared environment and community. It helps achieve outcomes that respond to and enhance the natural and cultural environment, people's living experiences, and the unique qualities of a site. Understanding whenua (land) is central to the physical and conceptual design of a development. This means having an early, big picture understanding of how the development will fit into your neighbourhood, immediate surroundings, and the site; and how these may change in the future.

A

Check for important landscape features or sites of cultural significance nearby, such as unique landforms, waterways, or heritage features. This could help you select a development site or reveal opportunities to add value to the development. It could also identify potential constraints to resolve through the design process, such as managing the response to neighbouring activities or natural hazard risks. These build on whakapapa by understanding the unique relationships and layers of people and place.

B

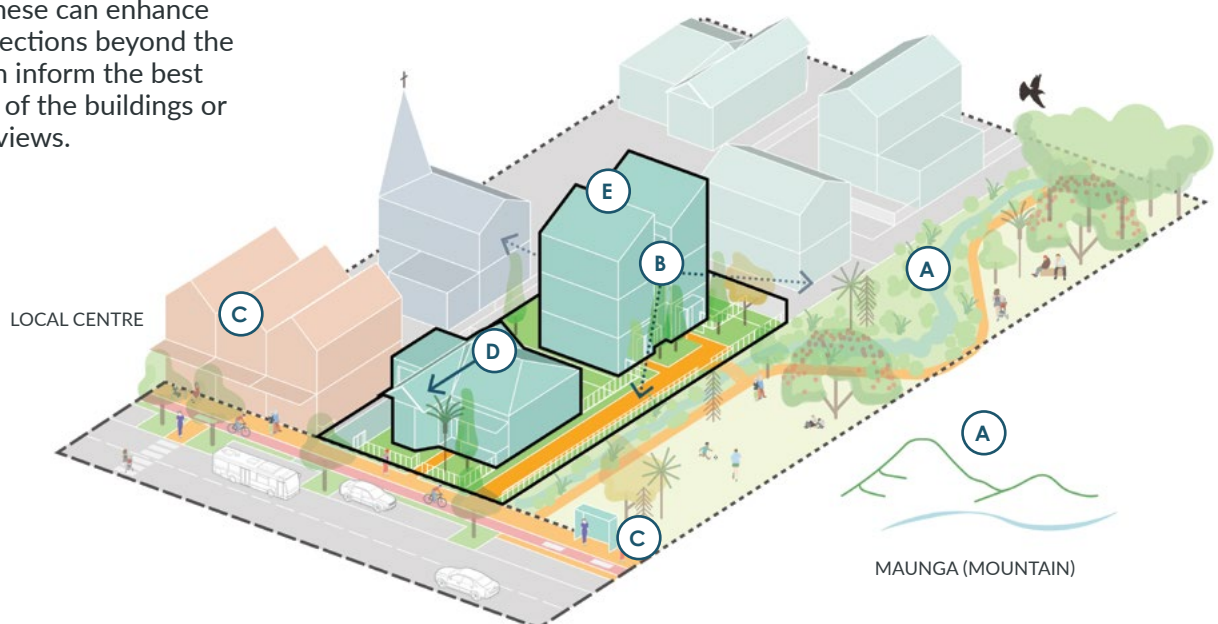
Consider near and distant views to prominent natural and built features. These can enhance visual connections beyond the site and can inform the best orientation of the buildings or framing of views.

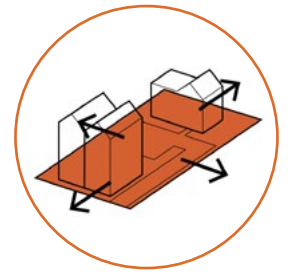
C

How close the development is to local centres, public transport services, and cycling infrastructure can help to determine site accessibility requirements. Identifying current or proposed non-residential activities nearby may also influence how the development responds, for example, maximising frontages to parks or minimising noise impacts of commercial activities and sites near main roads and railways.

D

When keeping an existing house on the site, moving the house forward or back can create a better relationship between existing and new houses and the spaces around them. Opportunities to establish shared spaces can add value to both. Maintaining the liveability of the existing house(s) for the occupants should be an important consideration as part of the design process.





E

If the site is on a corner, the building and landscape features could be designed more distinctively from other houses to assist navigation around the neighbourhood. Remember that at least two sides of the development will be visible and accessible to the community.

F

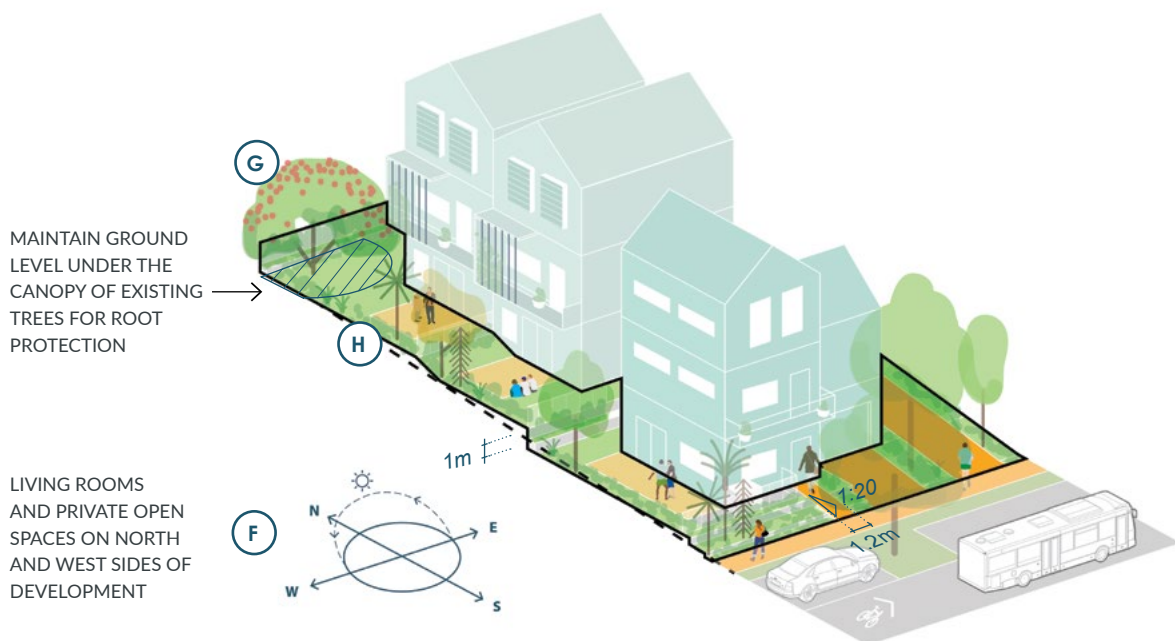
Consider the local climatic conditions, such as prevailing winds and sun aspect. This can improve residents' comfort and help save energy.

G

Aim to keep any existing larger trees or established planting, particularly if they are native species. This can help retain a sense of maturity for a new development, and provide a more liveable environment for new residents supporting the notion of kaitiakitanga. Where it is necessary to remove trees and planting, consider relocating or replanting elsewhere on the site.

H

Work with the natural characteristics of sloping sites to reduce the amount of cut and fill required; or integrate into the building design. If external level changes are needed, try to use smaller slopes, lower terracing or use planting to soften or hide retaining walls.



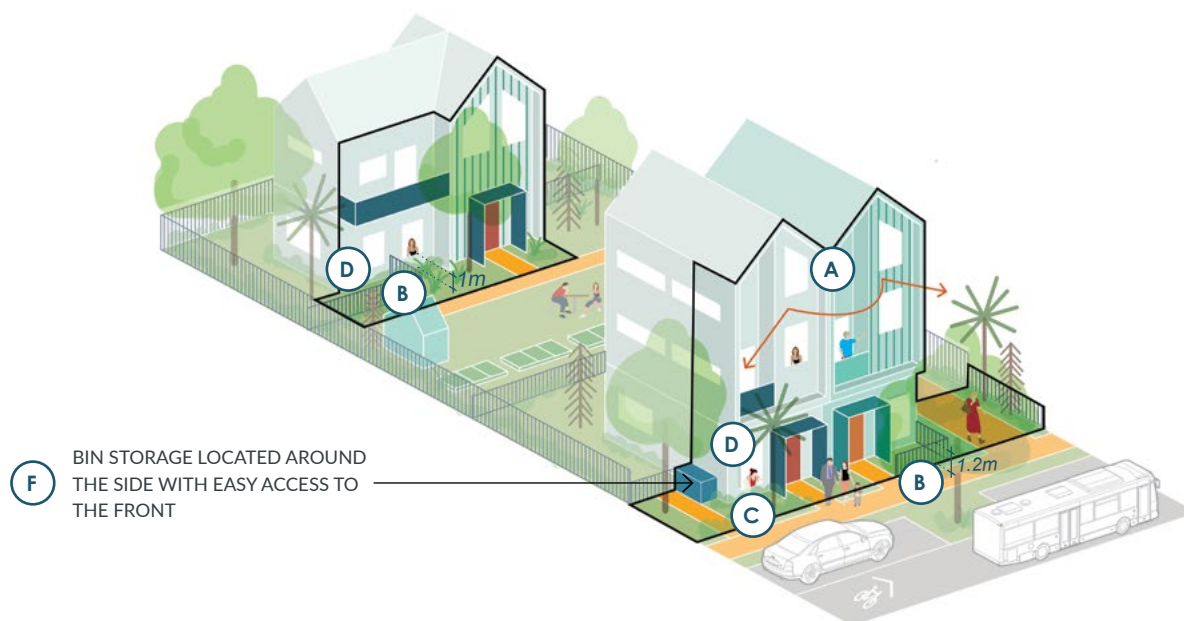
RULE OF THUMB

- Establish retaining walls less than 1m.
- Design entrance footpath ramps shallower than 1:20.
- Provide entrance footpaths at 1.2m wide with no steps for greater accessibility.

2. In the front: A welcoming address

There are places in a development where those in the neighbourhood regularly pass by. This is mostly along the street or a park edge. It can also be alongside common areas within the development, such as communal open spaces, accessways, and car parking areas. A well-designed house frontage can collectively benefit the public, visitors, and residents through improving public safety, providing convenient access, and a place to welcome visitors. A good first impression enhances whanaungatanga (relationships) with manuhiri (visitors), creating comfortable, social, and safe interactions that can help build enduring community connections.

- (A)** Houses that front onto a street or park provide good opportunities to use the public space for access and views, without having to provide them on-site. This could free up other parts of the development for enhanced residential uses, such as larger outdoor living spaces.
- (B)** Use low planting or visually-open fencing within the front yard. This creates an important buffer between the street or accessway and the private home that can enhance the safety and comfort of residents. It also creates a connection with the community by allowing informal interactions between residents and the public through windows and entrances.
- (C)** Subtle variations through planting, paving, fencing, and front doors can allow front yards to feel more personalised and provide a unique identity to each home, improving the sense of ownership for residents and variety for the community.



- (F)** BIN STORAGE LOCATED AROUND THE SIDE WITH EASY ACCESS TO THE FRONT
- RULE OF THUMB**
Maintain good sight lines with 1m low planting.
Design front fences below 1.2m.



D

The frontage does not stop at the front yard: it extends into the house itself. If carefully designed, house frontages can provide a good outlook for residents, sense of community, and 'eyes on the street' for community safety. This is best achieved through generous windows facing the street or accessway, and locating regularly used rooms, such as kitchens or living rooms, at ground level. Rooms which need greater privacy, such as bedrooms, can be on upper levels.

E

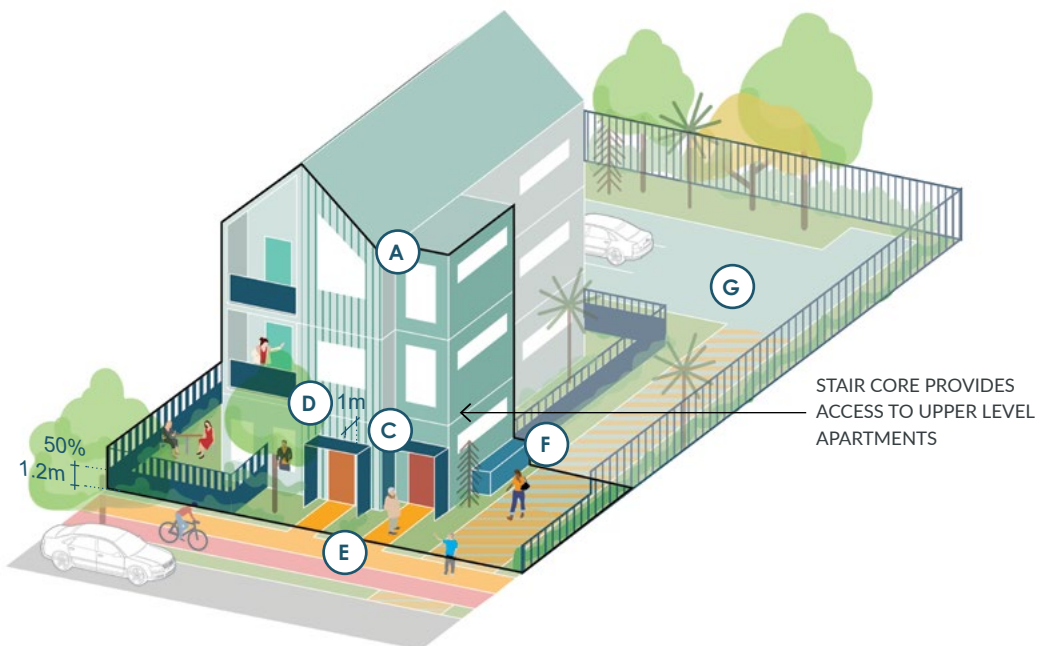
Having clear and direct access from the street to the front door helps visitors understand where to go and enhances community safety. Use of targeted lighting can improve night-time arrival. When designing the front entrance, consider providing a porch with protection from the sun, wind, and rain.

F

Any front yard services, such as bin storage, need to be balanced with the quality of visitors' experience and consideration of tapu (prohibited) and noa (common) through separation and screening. Service functions are generally best located in the side or back yard if there is good access.

G

If car parking is provided on-site, consider locating it away from the front yard, while still providing good access to the street. When necessary in the front, separate the driveway from pedestrian paths and locate any garages back from the main building edge to minimise the dominance of large doors. The distance between the building and the street boundary or accessway will need to be narrow enough to discourage vehicle parking across accessways or wide enough to fully accommodate a parked vehicle.



RULE OF THUMB

Balance street interaction and outdoor living area privacy with 50% visually open fencing above 1.2m. Extend an entrance porch shelter 1m deep for shelter.

3. On the side:

A good neighbour

The design and use of the space between residents and neighbours, including those within the development, requires careful consideration. This is important when increasing the number of houses on smaller sites. Careful design can achieve good views and privacy and minimise the need to adapt buildings and spaces later. Well-planned use of site boundaries and open space can improve sunlight access to neighbours and provide for efficient pedestrian and vehicle access. High quality design also retains opportunities for future redevelopment of adjacent sites in ways that can be mutually respectful and improve outcomes for both parties.

A

Orientating buildings to the street or open spaces within the development is a good way to redirect or extend views, manage privacy, and access more sunlight for residents and neighbours.

B

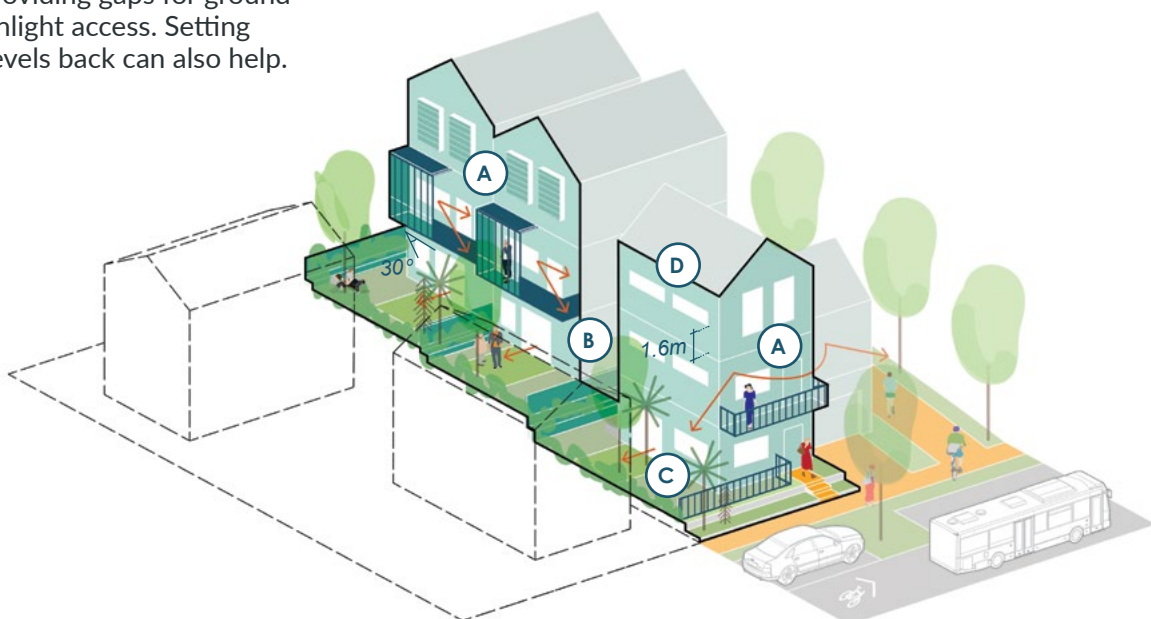
Increasing separation between neighbours can be achieved by positioning outdoor living spaces, accessways, and courtyard car parking in between buildings. Landscaping can also provide screening between sites. This enhances privacy and outlook while providing gaps for ground-level sunlight access. Setting upper levels back can also help.

C

Carefully locating key rooms can improve the outlook from indoor and outdoor spaces while balancing privacy needs. Living rooms can be placed at ground level to benefit from the outlook onto outdoor living spaces and screening from trees and fence lines. This is also an efficient way to incorporate the outlook space required.

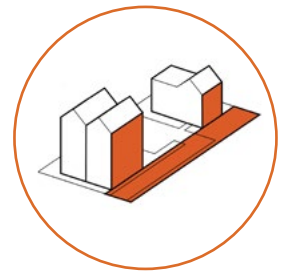
D

Varying the size and position of upper-level windows or balconies within the development reduces the chance of neighbours directly facing each other and adds variety to the house designs. Check the location of existing neighbouring building windows and outdoor living spaces as a starting point. Other building features can improve privacy by helping to shorten or redirect views, such as vertical fins, louvres, screens, strip windows, or opaque glass on balcony balustrades.



RULE OF THUMB

Manage privacy with strip windows above 1.6m.
Screen direct views with louvres at 30°.

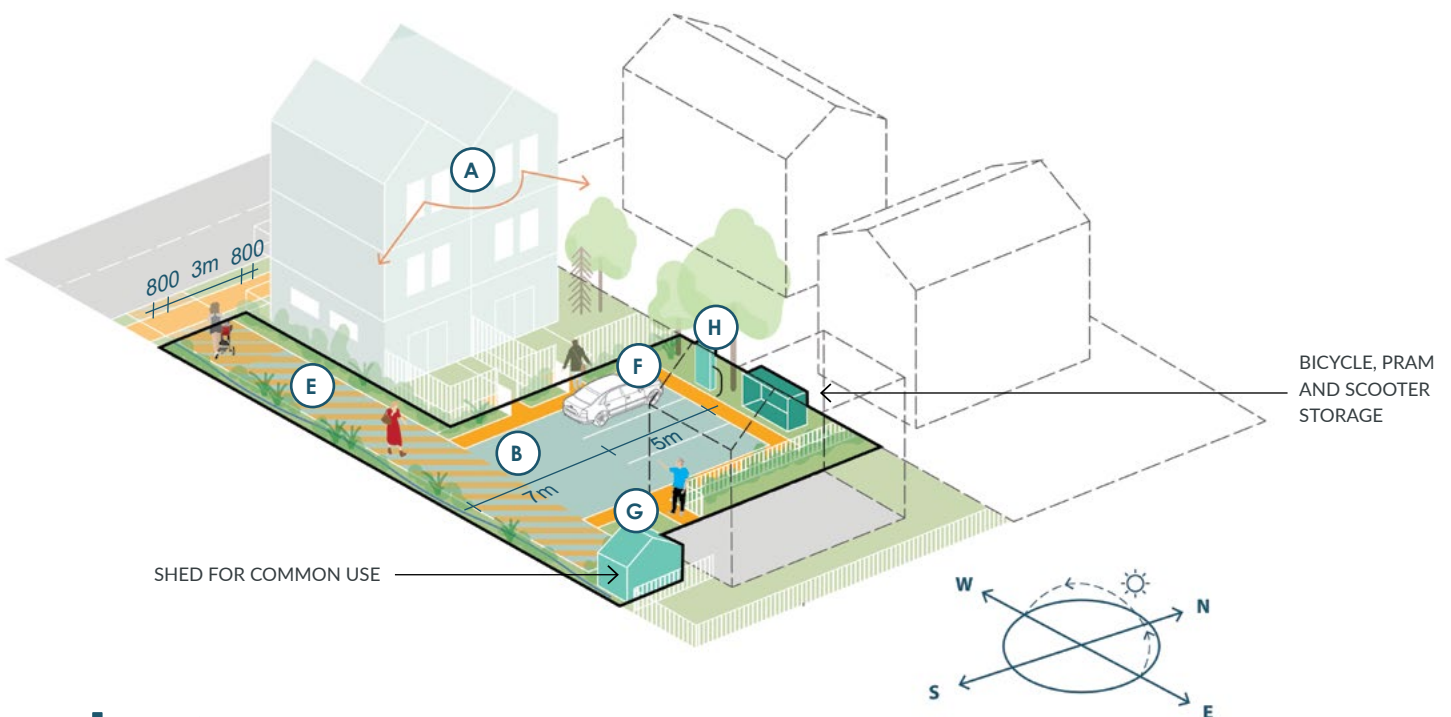


E If car parking is provided on-site, it is best located deeper into the site away from the street and screened by buildings. A common accessway is a good solution to reduce the number of footpath crossings and the extent of paving needed. If positioned along the southern or eastern boundary, this can move buildings more centrally into the site, away from the neighbours' best aspects. If accessways are shared by people and cars, ensure they are designed for slow speeds through their width, paving, and planting. This can create a more comfortable environment for residents and neighbours.

F Similarly, consider a common location for any car parking with clear visibility. The number of spaces could be further reduced through shared vehicles or drop-off areas. This enables the site to be used efficiently, including providing more accessible ground level spaces for residents where garages would otherwise be. It also minimises the size of buildings within the development, allowing a greater sense of space for residents and neighbours.

G Aim to keep pedestrian access between the street and each front door as direct as possible. Providing convenient access to bike, scooter, and pram storage close to each house also encourages these to be used more.

H Future proofing for electric vehicle and bike charging points or building in charging stations at the start of a development means they will not look like an after-thought or obstruct pedestrian movement later, particularly for the visually impaired.



RULE OF THUMB
 Design for safe manoeuvrability with 7m aisle and 5m car park depth for forward direction entry/exit. Provide a 3m shared accessway with at least 800mm planting buffer each side. (Confirm exact dimensions with the local district plan.)

4. The house: A well-configured building

As the number and size of buildings on a site increase, their presence can become more noticeable. A more comfortable experience can be created by ensuring the development is more compatible with existing houses, such as by providing smaller clusters of attached houses. This can provide functional benefits by helping residents identify their individual homes, access sunlight, and improve privacy. The whare (house) concept considers multi-generational living, catering to needs of kaumātua (elderly), mātua (parents), and tamariki/mokopuna (children/grandchildren).

A

Once houses have been clustered into smaller groups, stepping back or projecting building features forward - while keeping the overall building form simple - can create visual relief by breaking up larger expanses of wall. These may only need be deep enough to cast a small shadow. The best use of this approach is to clearly identify individual houses or their key functional parts in a way that is logical and recognisable for visitors and residents.

B

Pitched roofs can be used to reduce the perceived height of buildings and provide visual relief, while allowing opportunities for built-in living and storage spaces. They can also accommodate solar panels and reduce long-term maintenance that can affect flatter roofs.

C

Well composed building elements can provide further visual relief and interest, while serving important functions. For instance, porches, balconies, and screens can offer weather protection, sun shading, help identify front doors, provide private open space, enhance community safety, and protect privacy. Careful stacking and grouping of windows and their associated outlook can benefit the perception of the building while managing privacy.



RULE OF THUMB
Angle solar panels at 30° pitch on a north facing roof.



D

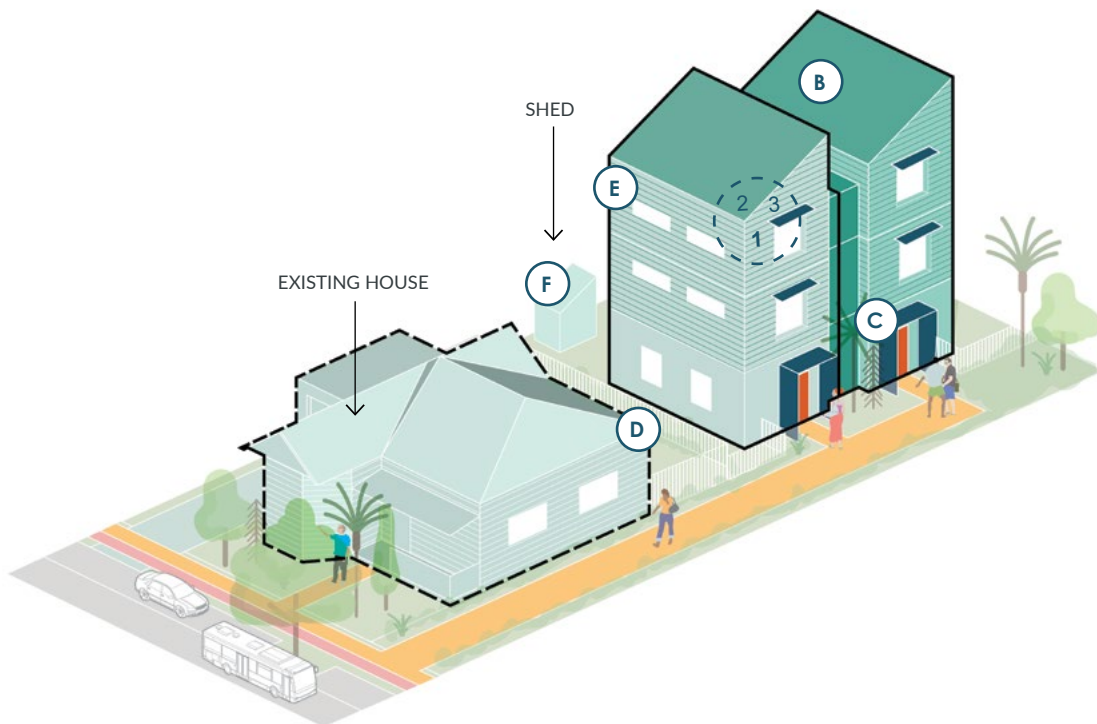
Have a look at the surrounding houses and try to use sympathetic or complementary colours and materials, including those that are locally sourced. Subtle differences in colours and materials can be used to distinguish individual houses and create a sense of identity for residents. Cultural and local narratives may also provide opportunities for unique design identity (see [Kaupapa Māori guidance](#) in the references and resources section of this guide).

E

The materials you use are key to the long-term carbon impact of the building. Once built, it is hard to change. Use of low-maintenance details and robust materials can maintain their appearance and integrity and be more cost-effective and sustainable over time. Use sustainably sourced or recycled materials where possible.

F

Varying forms, features, and materials is not just limited to buildings. This could apply to other larger-scale features, such as fences, storage sheds, and bin stores.



RULE OF THUMB
Simplify material palette with 1 main material and 2-3 supporting materials.

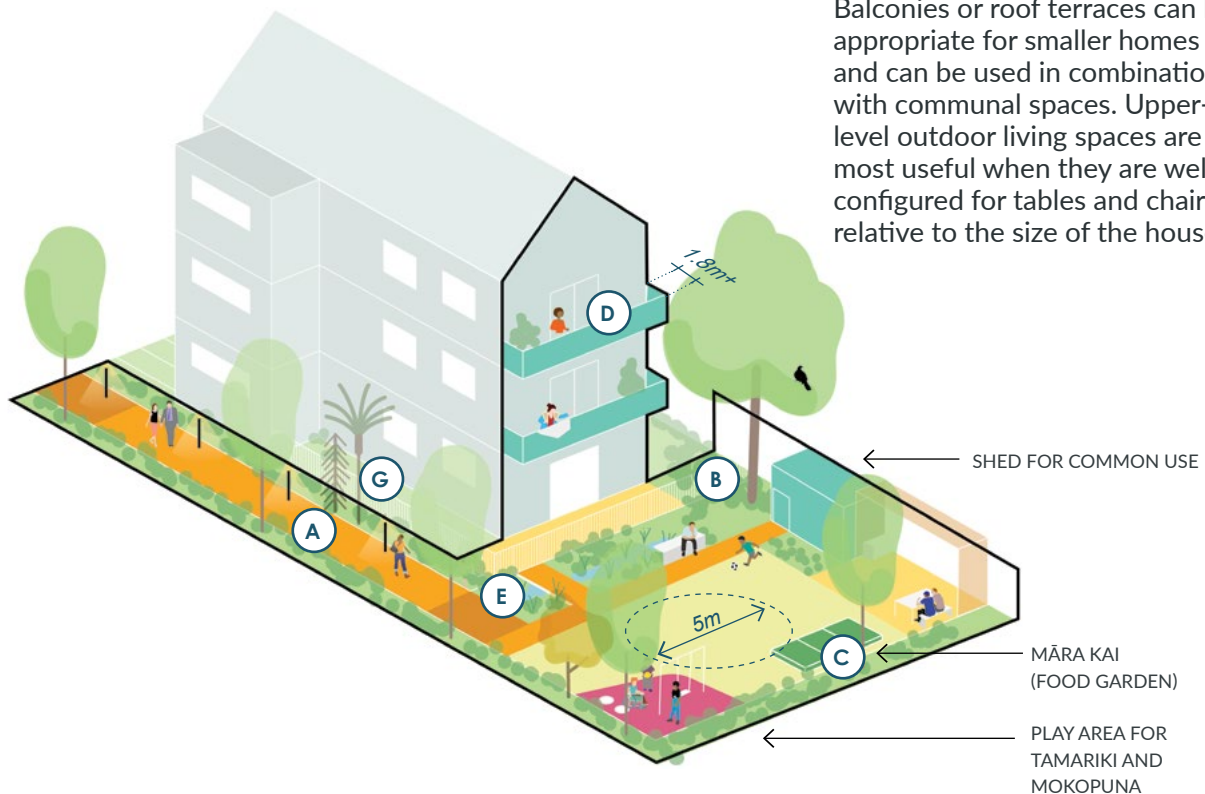
5. Around the house:

An integrated landscape

Once you step off the public street, multi-unit developments typically provide residents common landscape areas and a mix of communal and private open spaces. Not all developments provide communal spaces, but a proportion of the site could be set aside for shared facilities for multi-generational living or smaller private spaces, such as balconies. Larger outdoor spaces can provide wider environmental benefits by retaining larger trees and vegetation areas for biodiversity through to stormwater management.

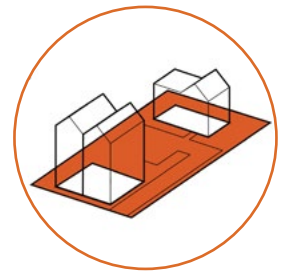
- (A)** Hard landscaping typically provides access to houses, car parking, and service areas. Consolidating shared surfaces increases the potential for soft landscaping and can reduce heat absorption to keep the site cooler in summer.
- (B)** Softer planting in common areas can provide buffers around houses and screen private outdoor living spaces and boundary fences. Planting could even replace fencing to blend boundaries for more communal outdoor living opportunities. Some consolidation of landscape areas can be helpful to keep existing trees and support new ones.
- (C)** Providing communal spaces, such as māra kai (food gardens), can help support more diverse communities. If well located, designed, and managed, residents can comfortably interact and play safely within the site. To provide maximum benefit for residents, make these easily accessed and widely visible from houses. This can also enhance on-site sustainability and support food resilience.

- (D)** Balconies or roof terraces can be appropriate for smaller homes and can be used in combination with communal spaces. Upper-level outdoor living spaces are most useful when they are well-configured for tables and chairs relative to the size of the house.



RULE OF THUMB

Design useable communal space greater than 5m in diameter.
Extend balconies for tables and chairs between 1.8m - 2.4m deep.



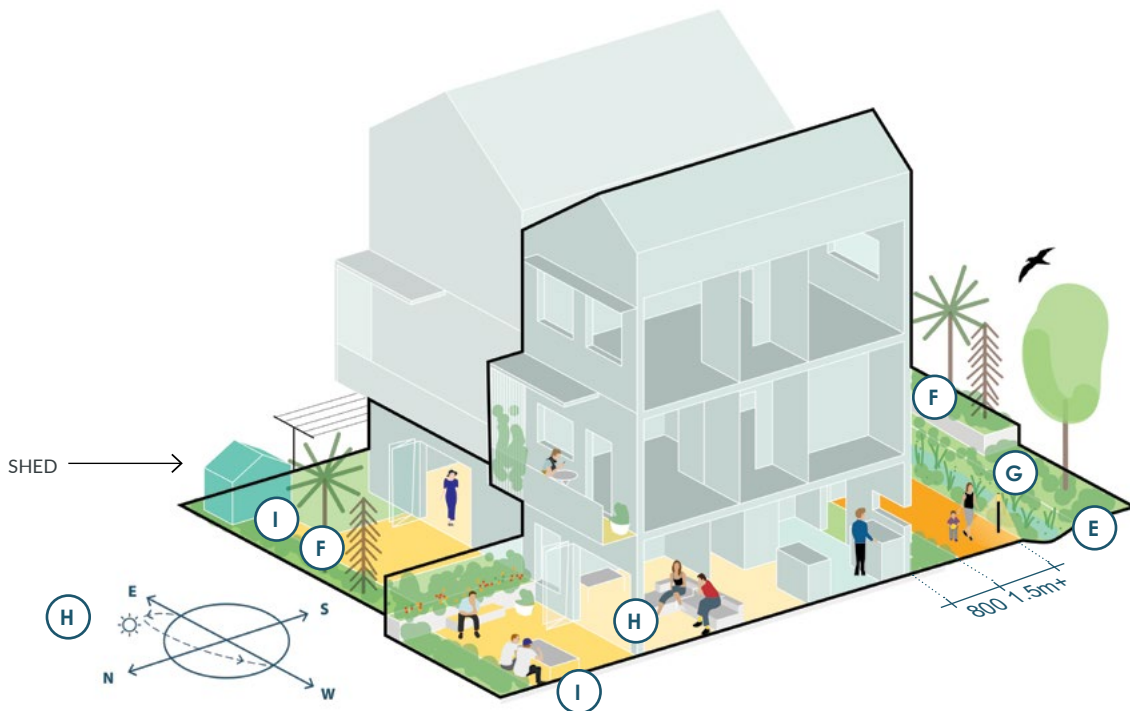
E Reducing stormwater run-off can prevent flooding, erosion, and pollution of waterways. This is best managed at the source by collecting rainwater from the roof for irrigation, using permeable paving, and integrating swales or raingardens into the landscape design.

F Low maintenance plant species are likely to stay looking good for longer, consume less water, and survive drought conditions. These will often be plants that are native to the area. Mana whenua may have taonga (treasure) species which could be used or encouraged by appropriate planting or retention of existing trees. Recognise that nature and people of the place are one, linked by whakapapa.

G External lighting enhances wayfinding and community safety. However, manage light spill to minimise impacts on neighbours, te taiao (natural environment) habitats, and visibility of the night sky.

H For outdoor living spaces, directing access to well-used internal areas can make the outdoor space an extension of the home. Ideally, these spaces have a northerly or westerly orientation for maximum sunlight and are sheltered from prevailing winds.

I Ground-level outdoor living spaces allow flexibility to configure private space for outdoor furniture, raised gardens, or other uses. When planning outdoor living space, leave sufficient utility space, such as clothes lines and garden sheds, while also considering the concepts of tapu and noa.



RULE OF THUMB
 Buffer planting between windows and communal pathways 800mm minimum.
 Provide accessible common area footpaths between 1.5m - 1.8m.

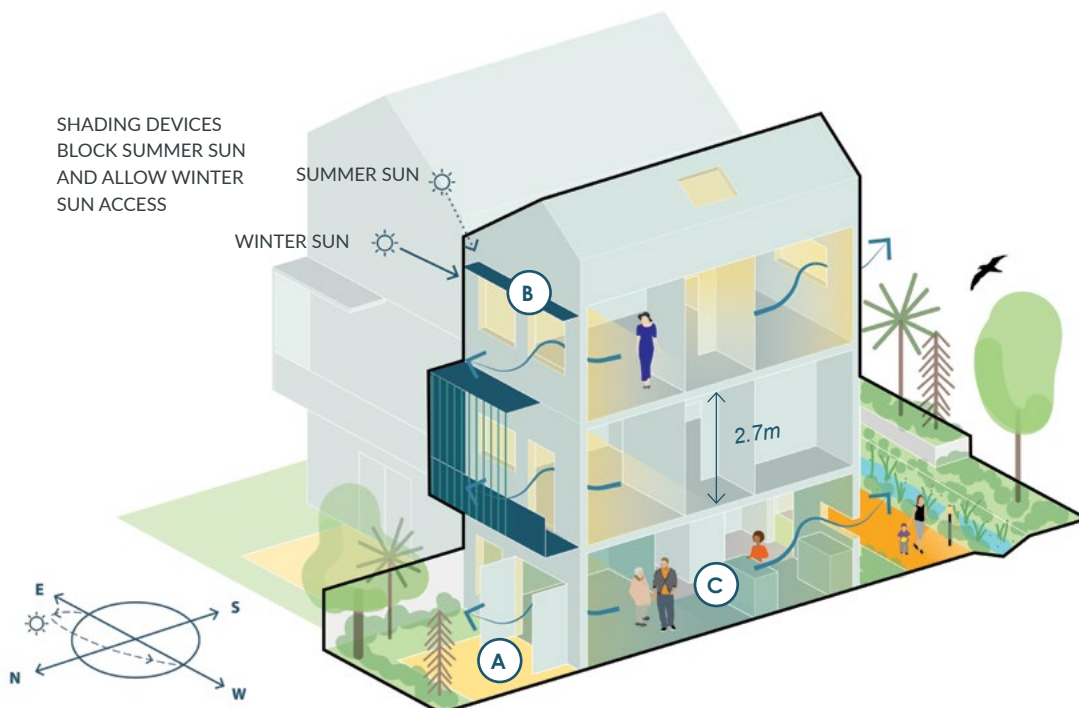
6. In the house: A liveable home

Designing high performing and accessible compact buildings is fundamental to a healthy and comfortable home. A higher performing home can be achieved for little or no additional cost. Even simple approaches that allow buildings to receive heat from the sun during winter and cool naturally during summer can result in considerable cost savings for residents and a reduction in greenhouse gas emissions. Incorporating universal design principles can make homes accessible to all people of all abilities at any stage of life. Further industry guidance can be found in the references and resources section of this guide.

(A) Orientating the house and key rooms for sunlight and warmth can improve energy efficiency. This is best achieved by aligning longer facades to maximise the benefits of the sun, placing main living areas on the north or west side, and providing generous ceiling heights. Skylights, atriums, or light wells enable sunlight to penetrate deeper into internal spaces.

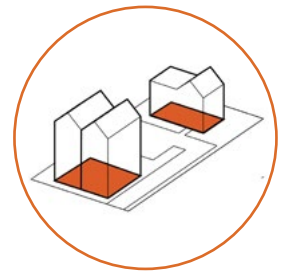
(B) Shading devices, such as deeper eaves, louvres, and balconies, help maintain indoor comfort in the summer, while still allowing sunlight to heat rooms in the winter. This reduces the need for heaters and air conditioners.

(C) Consider the placement of living areas and bedrooms with large opening windows on either side of the house for effective cross ventilation and passive cooling to reduce energy consumption and greenhouse gas emissions. If mechanical systems are provided, like heat pumps or extractors, place these where their noise does not disturb residents or neighbours.



RULE OF THUMB

Provide good sunlight access and natural ventilation with 2.7m minimum ceiling height.



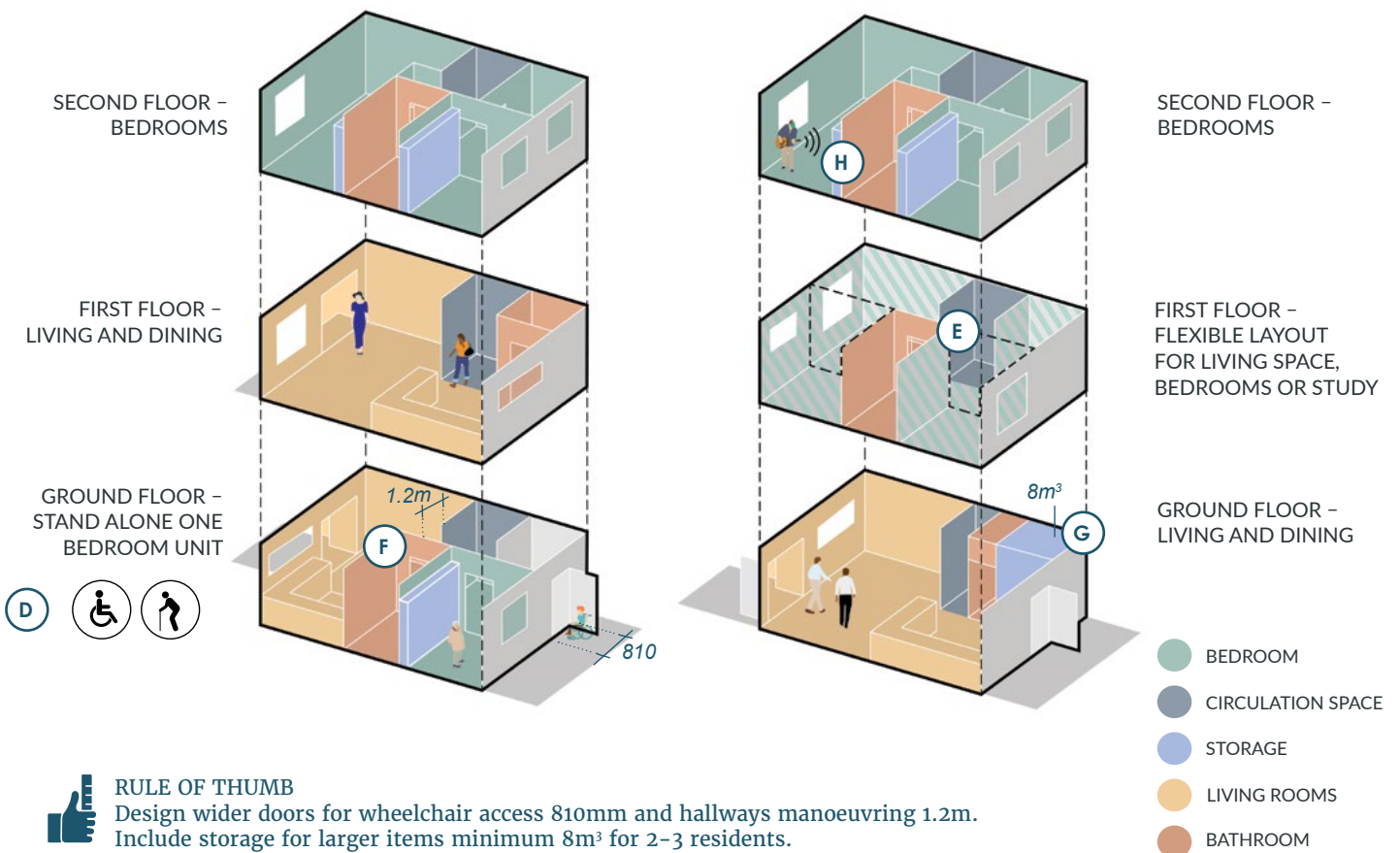
D Designing for an aging population, young children, and disabled people (universal design) makes a whole future-proofed. Accessible and inclusive design means providing level access, wider doorway, and ground-level living, or provision for stair lifts. Recognising these opportunities helps support the wellbeing of residents. Consider [Lifemark Design Standards](#) for all ground floor units.

E Think about how the design and layout can allow rooms to be used or configured in different ways. The location of load bearing walls can provide the opportunity to divide or merge rooms and buildings in the future to cater for changing needs. This will assist in the spatial arrangement and flexibility of open and enclosed spaces.

G Provide sufficient storage to accommodate larger items, recreational equipment, and other items, such as prams. This can increase the efficient use of indoor space and avoid larger items spilling out onto outdoor living spaces.

F Cultural suitability and practices should be considered in the interior layout that relate to the concepts of tapu and noa. Spaces associated with food should be separated from bathrooms, toilets, and laundries. For guidance see [Ki Te Hau Kāinga](#).

H For more peaceful living, consider designing interiors with good acoustic separation from external and internal noise sources. Similar household activities can be placed either side of a common wall between houses, matching noisy areas and quiet areas side-by-side. Bathrooms, storage areas, and wardrobes can be used as noise buffers within houses.

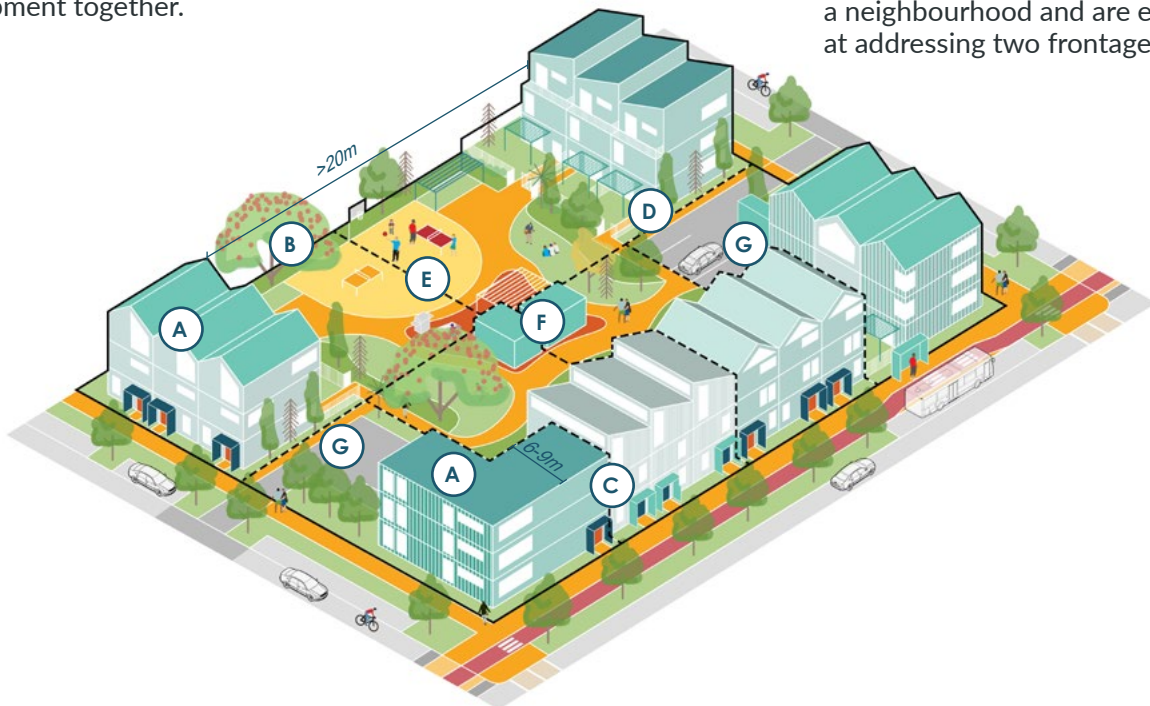


7. Better together:

Perimeter block development

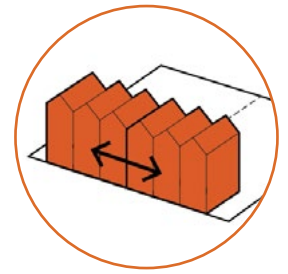
Collaborating with neighbours or developing multiple adjacent sites offers great advantages to both the community and private residents. 'Perimeter block development' means buildings are placed at the front of each site, either touching or close to each other. This creates a ring of buildings around the outer edge of an urban block, with most outdoor space located in the centre. It works well for medium density development and, if taken up collectively, the benefits can be shared with neighbours. Agreement between neighbours on one or more sides allows homes to be built closer together (see additional information section on permitted boundary activities). This can increase the vibrancy of the neighbourhood and contribute to a sense of community. Combining outdoor spaces across site boundaries, and away from the street front creates opportunities to take a holistic approach to providing communal living options and common utility areas for residents.

- (A)** Sites well-suited for perimeter block development are those that can comfortably accommodate an apartment block or multiple houses across their frontage. The best outcomes are achieved when building walls adjoin each other or internal site boundaries. By not creating side yards, space efficiencies can be gained and new opportunities are created by combining land at the back of sites. Ideally, two or more neighbours will design the development together.
- (B)** Sites that are best suited for perimeter block development have good sunlight orientation for outdoor spaces, sufficient site depth to provide privacy and outlook between homes, and opportunities to retain existing features that connect with the wider landscape, such as larger trees, native vegetation, and streams.
- (C)** The fronts of houses are strongly aligned to create a consistent building edge along streets and public open spaces. Subtle variations in building forms, rooflines, materials, and colours help break up the appearance of longer frontages, identifying individual homes and managing the relationships between smaller neighbouring buildings as the urban block changes over time. Distinctive corner buildings can help people find their way around a neighbourhood and are effective at addressing two frontages.



RULE OF THUMB

Design dual aspect corner apartments at 6–9m deep with windows on two or more sides of the building.
Design back-to-back distances between adjacent buildings at 20m or greater for privacy and outlook.

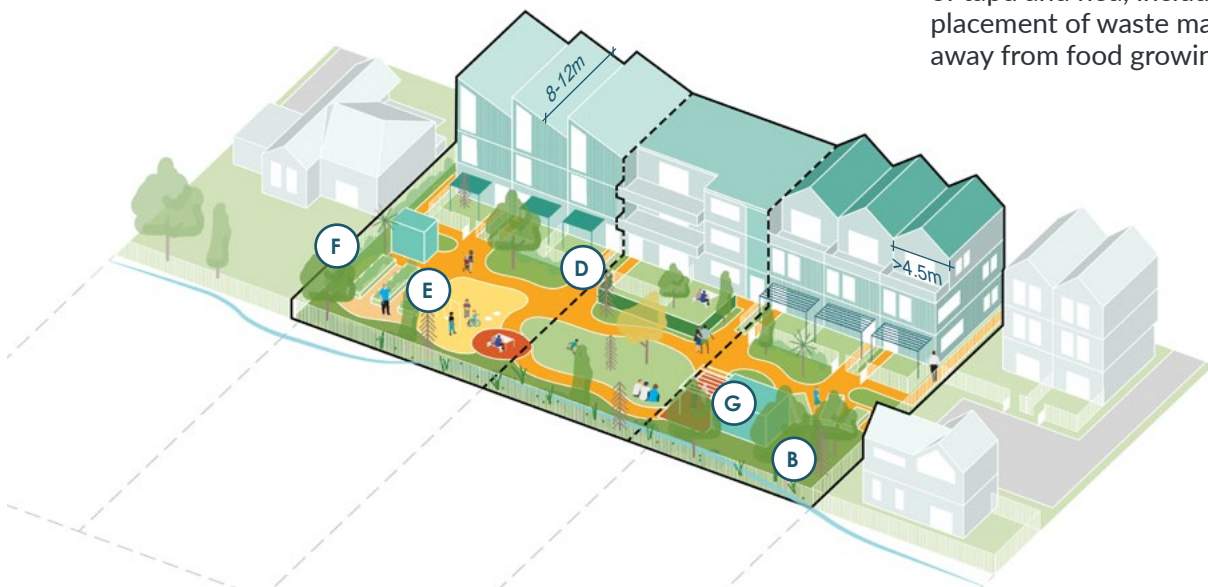


D When backyards are combined to create larger communal areas, these are best when located with a sunny and sheltered aspect; convenient and accessible routes are provided from houses to the communal space; and public access is safely managed. Private open spaces at the back of individual houses can provide a buffer to the larger, open communal space that is typically placed at the rear or centrally between adjoining sites and accessed by all.

E Consider the type of households in the development, and the spaces that are needed to support the comfort, social interactions, and food-growing opportunities for all residents. Design the size and proportions of communal spaces to accommodate outdoor furniture and landscape elements, such as barbeque areas, play spaces, and ball courts. Look around the neighbourhood to see what public amenities and open spaces offer. Consider providing different activities and features in the perimeter block communal open space to offer more choice.

F Communal areas can accommodate small, shared buildings, providing kitchens, lounges, laundry, or guest accommodation more affordably and efficiently than providing them in each house. Importantly, they can help build stronger connections between residents and multi-generational whānau to foster a greater sense of community and manaakitanga. Some small ancillary buildings may not need a resource consent but always check with your local council.

G Common spaces for vehicle parking, bicycle parking, pram storage, and other utilities such as waste management and energy hubs, can be consolidated and discreetly located in parts of sites where they can be efficiently managed and do not visually dominate buildings and open spaces. Consider where these are placed to maintain the concepts of tapu and noa, including placement of waste management away from food growing areas.



RULE OF THUMB
 Ensure a minimum terraced house or apartment unit width greater than 4.5m. Design dual aspect terraced houses or apartments between 8m - 12m deep with windows on two or more sides of the building.

Checklist of priority design elements

Under each theme, selected design elements are summarised below that are a priority to be addressed in your development. In most developments there will be competing or conflicting design elements. When balancing outcomes or trading off ideals to achieve the best design overall, target these early in the design process. For further explanation, reference numbers are provided to design element descriptions and diagrams in the guide.

1. The site: A part of the community

- 1A Check for any important landscape features or sites of cultural significance nearby and establish any potential site constraints.
- 1G Keep existing larger trees or established planting to retain a sense of maturity.
- 1H Reduce cut and fill on sloping sites and integrate level changes into the development.

2. In the front: A welcoming address

- 2C Vary the design of frontages to help personalise and identify each home.
- 2D Provide windows in house frontages for outlook and community safety and locate regularly used rooms at ground level.
- 2E Have clear and direct access from the street to the front door and support with good lighting and porches.

3. On the side: A good neighbour

- 3A Orient buildings to the street or open spaces for views, privacy, and sunlight.
- 3C Carefully locate key rooms to improve outlook while balancing privacy needs.
- 3D Configure upper-level windows or balconies to reduce rooms facing each other or use building features to shorten or redirect views.

4. The house: A well-configured building

- 4A Step back or project forward larger expanses of walls to create visual relief and identify individual houses or functional parts.
- 4B Configure roofs and upper levels to reduce perceived building heights.
- 4E Use materials that are robust and easy to maintain, while sustainably sourced.

5. Around the house: An integrated landscape

- 5B Use planting in common areas to provide buffers around houses and screen private outdoor living spaces or boundary fences. Consolidate landscape areas to support larger trees.
- 5E Reduce and collect stormwater run-off at source to prevent flooding, erosion, and pollution of waterways, while maintaining planting across the development.
- 5I Configure ground level gardens for flexibility and allow sufficient utility space.

6. In the house: A liveable home

- 6A Orient the house and key rooms for sunlight and warmth or use other devices to allow daylight into deeper internal spaces.
- 6B Use shading devices to maintain a comfortable indoor climate in the summer and access sunlight to heat rooms in the winter.
- 6D Future-proof houses for an aging population, children, and people with disabilities, through accessible and inclusive design.



Additional information

Site selection

This guide covers general development site selection considerations and a more detailed due diligence process is recommended. Site selection could also include:

- checking the record of title
- reviewing council records for the site
- purchasing a Land Information Memorandum (LIM) report.

It is also important to gain a general sense of feasibility and risk for a development, based on the existing planning rules and any associated upcoming changes, including natural hazards and where land may be designated as a significant natural area.

In addition, be aware of any utility services that are next to or cross the site, and any legal requirements that may exist for working around these, both underground and overhead. For details on underground services your local council should have records publicly available for their three waters network. In most cases all details on underground services, such as power, gas, and telecommunications, can be obtained by lodging an online enquiry at beforeudig.co.nz.

Your local council may be able to assist with some of these queries. It is also worthwhile checking with a professional familiar with these matters, such as a building professional, planner or lawyer. Most professional institutes have a directory of members that can assist.

Being a good neighbour is an important part of living in your community. It is courteous to consult neighbours as part of the design process. However, unless the project requires a resource consent, and your local council considers any neighbours an affected party, this is unlikely to be a legal requirement. Engaging early with neighbours could also allow you to consider any future development plans they may have. These plans could be factored into designs to improve outcomes for both parties.

Permitted boundary activity

A permitted boundary activity is when the construction or alteration of a building triggers the need for a resource consent due to non-compliance with a boundary standard, such as setbacks and height in relation to the boundary. If neighbours on the other side of the boundary provide written approval, you may be able to apply for a deemed permitted boundary activity instead of a resource consent. This applies when no other matters trigger the need for resource consent. Refer to the Ministry for the Environment's [technical guide to deemed permitted activities](#).

Iwi and Māori organisations

Your local council will have information on the relevant iwi and Māori organisations to engage with. You can also view [Te Kāhui Māngai \(Directory of Iwi and Māori Organisations\)](#) on the Te Puni Kōkiri website.

Planting and landscape

Your local garden centre or nursery will have a good idea of native species from the area or others that grow well. Your local council or iwi may also have useful advice or resources, particularly about taonga species and those that provide ecological habitats.

Further design advice and guidance

Your local council may provide urban design advice. Along with the council guidance and Kaupapa Māori guidance listed on the next page, several industry guides and tools are available to inform the design. This includes ratings systems, such as those used by Lifemark and the New Zealand Green Building Council, as well as Passive House Institute NZ.

References and resources used in developing this guide

Council guidance

Auckland Design Manual (Auckland Council)

Design Guide Multi-Unit Housing: Proposed (Porirua City Council, 2020)

Design Guide Residential: Draft (Wellington City Council, 2021)

Low to Medium Density Residential Design Guide (Brisbane City Council, 2019)

Medium and High Density Urban Design Guide: Draft (Upper Hutt City Council, 2021)

Residential Intensification Design Guide (Hastings District Council, 2020)

Residential Outcomes Framework: Draft (Tauranga City Council, 2020)

Residential Design Guide (Queenstown Lakes District Council, 2020)

Kaupapa Māori guidance

Connecting with Country: Draft (2020)

Ki Te Hau Kāinga, New Perspectives on Māori Housing Solutions (2002)

MAIHI Ka Ora, The National Māori Housing Strategy (2021)

Matapopore Urban Design Guide (2015)

Pacific Housing Design Guide (2002)

Te Aranga Māori Cultural Landscape Strategy (2008)

Te Aranga Māori Design Principles (2006)

Te Pokapū Whakatairanga Tikanga Māori, Māori Design Hub

Industry guidance

Beacon Pathway

Building Design Resources BRANZ

Homestar, New Zealand Green Building Council

Lifemark Design Standards

Medium Density Housing

Medium by Guy Marriage

Smarter Homes



Kupu Māori glossary

Awa	river, stream, creek or other waterway
Hāpori	community
Hauora	health, wellbeing associated to identity
Iwi	tribe
Kāinga	home or dwelling
Kaitiakitanga	guardianship or stewardship
Kaumātua	elderly
Kaupapa (Māori)	theme or subjects associated to Māori
Mana whenua	Māori who have retained authority over their land or territory for long periods of time
Manuhiri	visitors
Māori	the indigenous people of Aotearoa New Zealand
Māra kai	production garden or cultivation
Mātua	parents
Mauri	life-force or principle and vitality
Maunga	mountain, mount or peak
Mokopuna	grandchildren
Noa	common or something which has no restriction
Tamariki	children
Tangata whenua	people of the land
Taonga	something which is special or off prized possession
Tapu	sacred or something which is prohibited or restricted
Te taiao	the natural world
Whakapapa	genealogy (refers to the associated layers of land, people and place)
Whakataukī	a proverbial saying
Whānau	the family unit and kinship
Whanaungatanga	wider family kinships and relationships
Whare	house or dwelling
Whenua	reflective of landscape and the associated connection to people

