

Draft Medium Density Residential Design Guidelines

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Introduction

Building more houses in existing neighbourhoods to meet Waitaki's future housing demand is a key goal of the Draft Ōamaru, Weston and Kakanui Spatial Plan, Draft Waitaki District Plan and National Policy Statement on Urban Development 2020.

The Waitaki Medium Density Residential Design Guidelines ("the Guidelines") provides ideas and tips to help the community, property developers, builders and architects achieve high quality, amenable housing options in support of this goal and to meet the intent of the Draft Waitaki District Plan.

Application

The Guidelines apply to new development within the Medium Density Residential Zone ("MDRZ") with a focus on multi-unit residential development including townhouses, duplexes, triplexes, terraces and walk-up apartments. Please note, as a statutory document prepared under the Resource Management Act 1991, the Waitaki District Plan overrides this document where there is any conflict with the guidelines.

Design Objectives

The Guidelines are set out under key topic headings or 'design elements' and structured to provide clear guidance in relation to the outcomes sought and design guidelines for achieving those outcomes. The outcomes sought explain the end result that Council is seeking to achieve, in response to the objectives and the policies of the District Plan.

The Guidelines are generally non-prescriptive allowing builders and designers to interpret them, provided the design intent and desired outcomes are achieved by a proposal. Where prescriptive elements are considered necessary these are intended to be set out within the District Plan. Each set of guidelines is supported by precedent images and diagrams to further assist in understanding how the outcome can be achieved.

Design Elements

1. Site Layout

2. Streetscape Interface

3. Form & Massing

4. On-site Amenity

5. Access & Carparking

6. Landscaping

7. Materiality

Medium Density Typologies



Detached/ Single Dwelling

Detached or single dwellings are the most common typology across Waitaki. Additional dwellings within a medium density context can be provided via infill development/ subdivision or through smaller lot sizes (typically under 300m²) as part of more comprehensive developments.



Semi-Detached/ Duplex

Semi-detached refers to dwellings which are attached on one-side. They are typically arranged in a similar layout to detached dwellings albeit over a smaller total lot area.



Terraced/ Row Housing

Terraced or row housing refers to dwellings which are usually connected on two sides via a party wall. They typically feature a rear outdoor living court or patio at ground level of varying depth. Configurations can include both front-loaded or rear-loaded layout for vehicle access/ parking.



Low-rise/ Walk-up Apartments

A walk-up apartment building is up to three storeys high with individual dwellings separated vertically and horizontally and are usually accessed via a communal entrance/ core area. These typologies often feature other communal areas including waste storage, car parking and open space.

1. Site Layout

Accommodating more intensive residential typologies on any given site typically requires more detailed design consideration to resolve a series of often competing design elements which are critical in supporting higher quality developments with good levels of amenity. The general configuration and placement of the building(s) and other key site elements such as car parking, access and private open space needs to be considered early in the design process. This will ensure the location of the building(s) is optimised in terms of sun, privacy and surrounding public amenity, while respecting neighbours' access to the same qualities.

Similarly, consideration also needs to be given to a site's surrounding built and natural environment to ensure it responds appropriately to its context and contributes positively to the overall look and feel of the neighbourhood. Ideally, the above would be established through a site and contextual analysis proportionate to the scale of the development..

The majority of the design elements set out in sections 2 - 7 contribute to, and influence the final site layout.

Outcomes Sought:

- New development responds appropriately to its context and contributes positively to the overall neighbourhood.
- The layout of any new development responds positively to the existing site conditions, such as views, orientation, natural features and surrounding buildings.
- New development is well connected with adjoining public open spaces and residential areas.

Guidelines:

1. A detailed site and context analysis, commensurate to the scale of development, should be undertaken to inform any design response (refer Figure 1).
2. New buildings are positioned to maximise views, outlook and privacy.
3. New buildings respond to the established form and rhythm of the existing neighbourhood (refer Figure 2).
4. The site design should retain and enhance existing pedestrian desire lines (where these exist).
5. Building location and placement should establish a clear and intuitive hierarchy of connections to and within a development.
6. Where possible, create 'through site links' between streets or other public open spaces to improve connectivity. The design of these routes should identify where they are for public or private use (e.g. through the use of signage or fencing).
7. The development maintains any identified important natural features (e.g. significant vegetation) within the site.
8. The site layout responds to the landform by minimising the extent of earthworks and any retaining required.

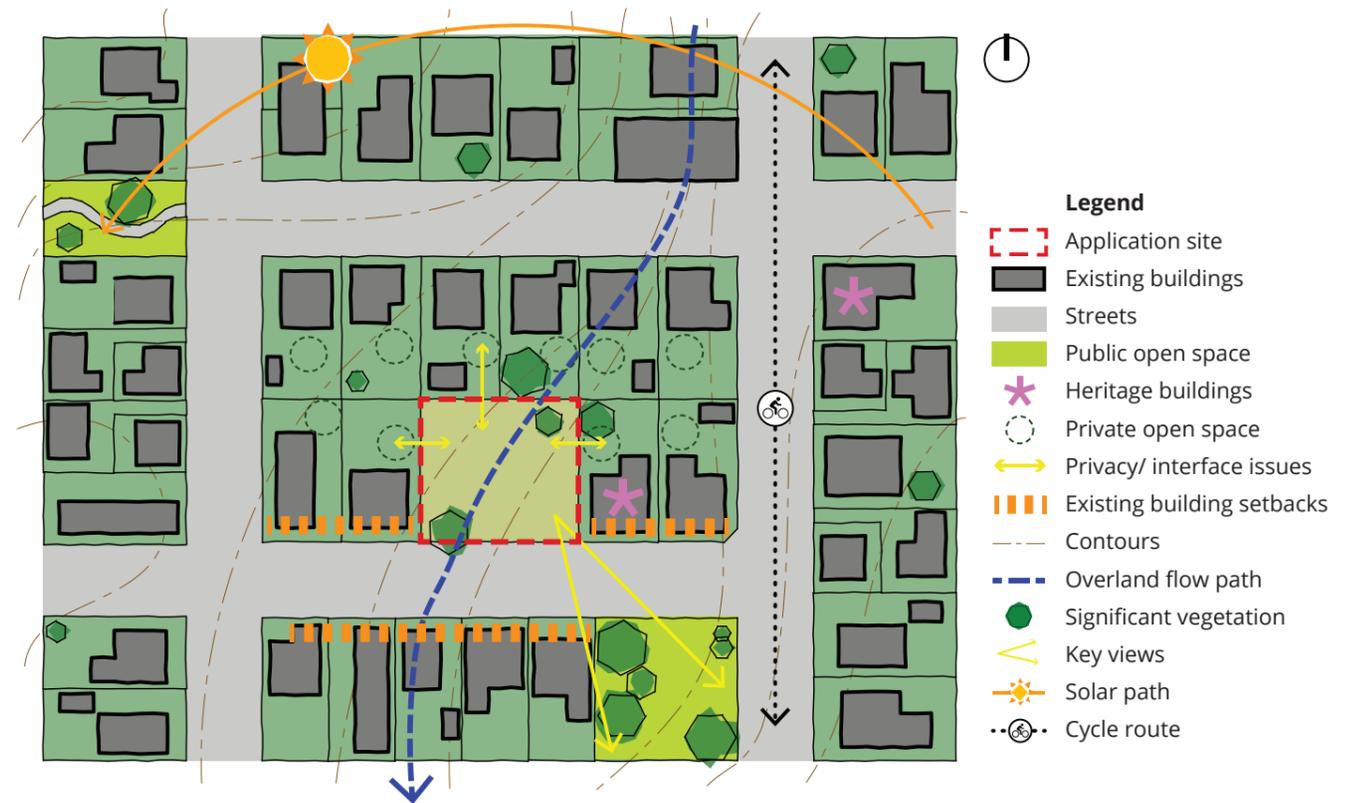


Figure 1 - Diagram showing elements identified through a detailed site analysis which would help inform a development proposal.

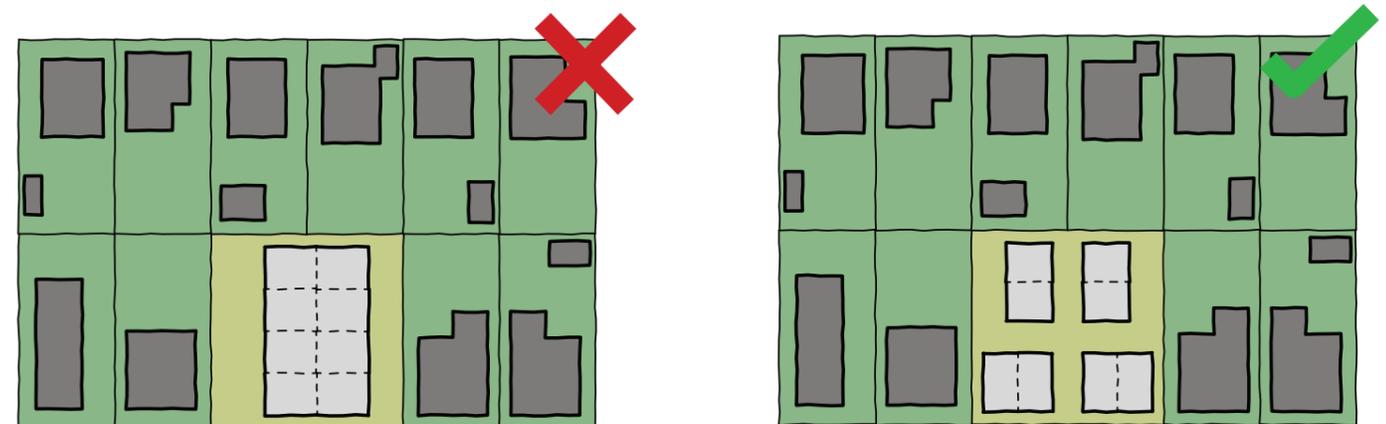


Figure 2 - Respecting the existing pattern of development by breaking down larger buildings.

2. Streetscape Interface

Streetscapes are critical organising elements of a neighbourhood and help to establish perceptions around the overall quality of a neighbourhood as well as act as the principal movement corridor in our towns and villages. The streetscape includes both the public realm and the elements within it (e.g. footpaths, carriageway and berms), as well as the portion of a private lot that has a physical and visual relationship with the public realm adjacent to it (e.g. front yard, front building façade). The internal layout of a building can influence how it relates to the street, and therefore will also require careful consideration in the design process.

Outcomes Sought:

- Development achieves a positive relationship with the street, enhancing the public realm and improving pedestrian amenity.
- Development provides a clear transition between the public and private realm, giving a sense of ownership to all spaces.
- Developments and how they are accessed are easy to interpret for both residents and visitors.

Guidelines:

1. Dwellings/ buildings should be orientated so they are parallel to their street front with their front doors clearly visible to support legibility (refer Figure 3).
2. Long runs of buildings orientated perpendicular to the street should be avoided.
3. The façades of buildings on street or lane corners, in particular terraced and apartment typologies, should address the primary and secondary (if applicable) street frontages.
4. Ground floor, street facing rooms should be active habitable rooms such as living, dining or kitchen spaces. Windows should be sized and located to allow views over the street whilst maintaining internal privacy.
5. Upper floor habitable rooms should maximise outlook over adjoining streets (refer Figure 4).
6. The front façade of the house should project forward, with garage doors set behind to ensure this appears as a recessive design element (refer Figure 4).
7. Front yard planting should be used to define front boundaries, reinforce individual and communal entrances, soften built elements, and screen services (refer Figure 5).
8. High (over 1.5m), impermeable fencing along the front boundary must be avoided (Figure 6).

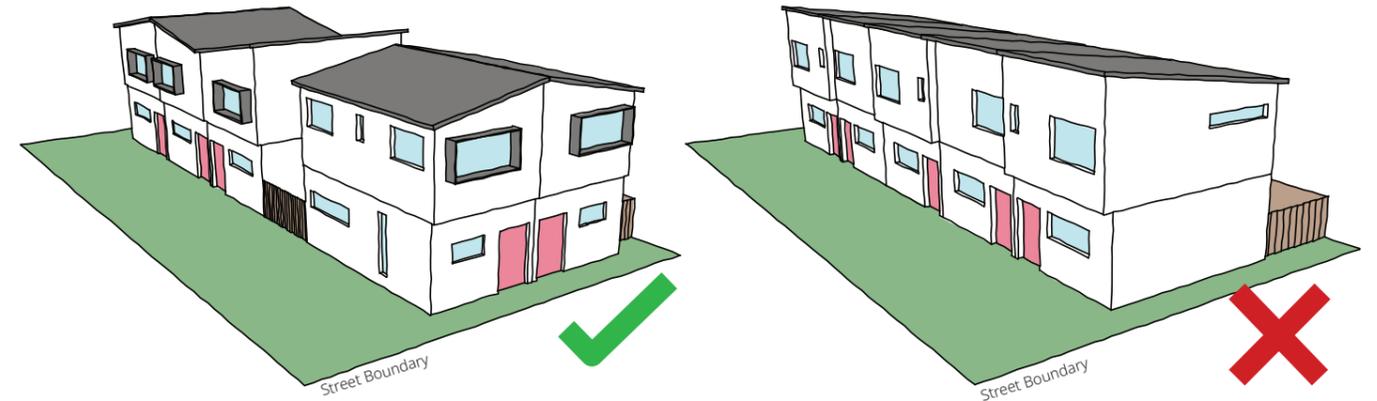


Figure 3 - Orientating developments to face the street (left) contributes to pedestrian amenity, visual interest and helps a new development integrate with traditional approaches to resident development across Waitaki.



Figure 4 - An example of a subtle protrusion of the front façade from the garage ensuring occupied spaces within the dwelling are able to address and interact with the street frontage.



Figure 5 - A combination of low-height retaining, landscaping and permeable fencing creates a positive transition from public to private and contributes visual interest to the streetscape.



Figure 6 - High, closed board fencing reduces pedestrian amenity and creates the impression of a more hostile environment.

3. Form & Massing

Building ‘massing’ refers to the overall form and composition of a building. The way a building is arranged on its site is particularly important for larger buildings which are more common with the typologies anticipated within the MDRZ.

The form, mass and height of a building all contribute to determining the impact a building(s) will have on its surrounding environment. From a design perspective, it is therefore important to ensure that the form, mass and height are considered together to arrive at a well-proportioned building form that is complementary to the existing neighbourhood whilst at the same time supporting increasing housing choice in locations with good access to employment, services and open space.

Outcomes Sought:

- New buildings avoid an overly bulky or visually dominant appearance.
- Developments provide visual interest in the urban environment and avoid visual monotony.
- New buildings within a development are aesthetically coherent and respond to the existing scale and pattern of buildings present in the wider environment.

Guidelines:

1. Architectural detailing is incorporated into façades, such as horizontal and vertical rhythms, façade modulation and articulation, and recessive or projecting balcony forms (refer Figure 7).
2. Multi-storey buildings must avoid a ‘wedding cake’ massing, as seen from the street, that places a small second storey in the centre of a larger ground floor. A simple asymmetrical form, where the second storey is placed to one edge, or a ‘box on box’ form where the upper floor(s) generally lines up with the lower floor is encouraged (refer Figure 8).
3. Upper floor building setbacks should not adopt a literal regression of any applicable recession plane.
4. Building depth should be designed to support natural ventilation and daylighting. As a rule of thumb, single aspect dwellings should be no deeper than 8m while dual aspect dwellings should be no greater than 14m deep. Where these measurements are not met, increased floor-to-ceiling heights and wider dwellings should be incorporated into the design.
5. Roofs should have a visually strong and simple shape to provide visual interest from the street. Steeper pitched roof profiles are encouraged and monotonous hip-based solutions should be avoided (refer Figures 9 and 10).
6. On larger sites, development should be broken down into a series of smaller buildings to respond to the typically smaller dimensions of established buildings. As a rule-of-thumb, buildings should be no longer than 35m (refer Figure 11).
7. Where more than one building is proposed as part of a development, each building needs to be designed with consideration for its setting within the group, and its wider context to help ensure a sense of overall design coherence.

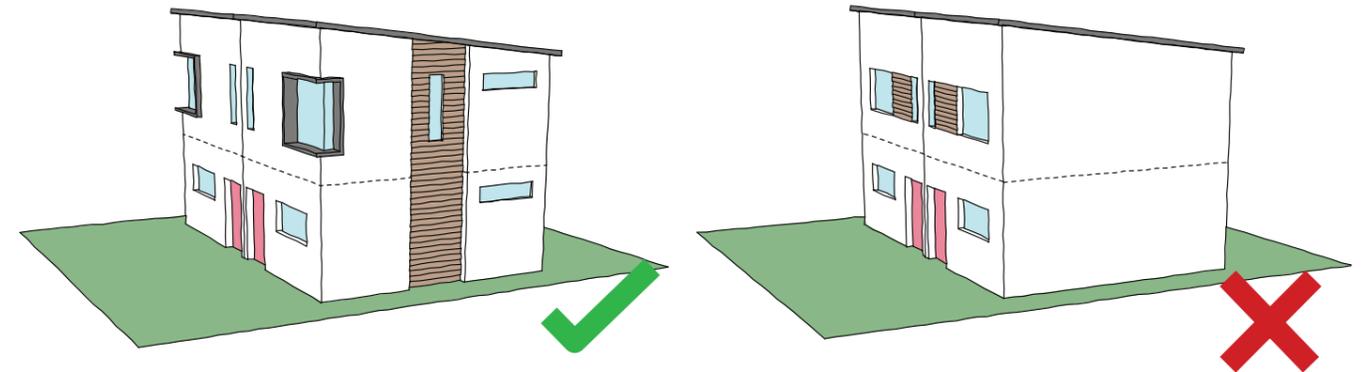


Figure 7 - Architectural detailing including fenestration, a recessed façade and material changes helps to break down the overall mass of the building and create a more human-scaled development.



Figure 8 - Main living areas and bedrooms are predominantly contained in the simple form to the right with other building elements such as garage and part of the upper floor set-back. This helps to reduce the perceived mass of the building as viewed from the street.



Figure 9 - A simple gable roof form with recessed building elements helps to establish a visually interesting and positive development that helps to integrate with traditional detached typologies.

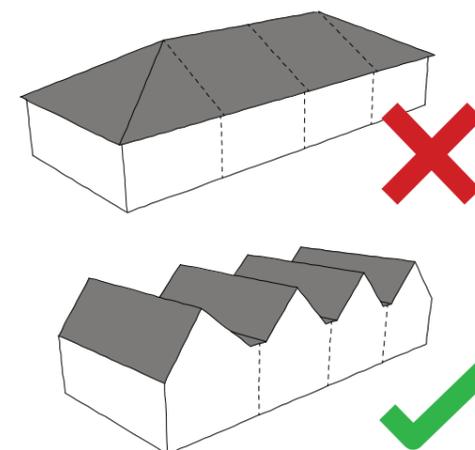


Figure 10 - Roof forms should be a visually interesting streetscape and help to identify individual units within attached typologies.



Figure 11 - An example of development being broken down into smaller buildings whilst maintaining yield.

4. On-site Amenity

Amenity refers to the qualities of a place that make it pleasant and attractive for individuals and communities to occupy. Elements which often support amenity for a dwelling or development include access to sunlight, privacy (visual and acoustic), provision of storage space, outlook or access to green spaces and ease of maintenance. Additional amenity can also be derived from proximity to services, employment opportunities and public open spaces. The design of more intensive housing typologies requires greater focus to help achieve appropriate on-site amenity as dwellings are typically located in closer proximity to one another and have fewer aspects to take advantage of.

Outcomes Sought:

- Development maximises access to sunlight, views and privacy (visual and acoustic).
- Development creates an environment where residents have access to good levels of on-site amenity to support their overall health and well-being.

Guidelines:

1. Maximise the number of dwellings with a northern, western or eastern orientation and avoid dwellings with a southern aspect (refer Figure 12).
2. Locate outdoor living areas so that they are directly connected to the primary internal living space within a dwelling.
3. Design and orientate primary internal living spaces and outdoor living spaces to receive maximum sunlight admission.

4. If primary outdoor living areas are to the south of the dwelling to take advantage of good views or other benefits, provide a secondary open space facing as close as possible to north.
5. Design adjoining (or adjacent) dwellings to have compatible internal configurations (such as garages adjacent to one another) to minimise noise transference.
6. Private outdoor living areas should ensure they are adequately dimensioned to enable the placement of outdoor furniture and provide sufficient circulation space around them.
7. Avoid orientation directly over side or rear boundaries where possible and avoid positioning windows or balconies where they directly face in to neighbouring dwellings.
8. Use visual screening in the form of fencing and larger landscaping elements (e.g. hedging or specimen trees) to maintain privacy between dwellings and improve the visual quality of outlook (refer Figure 13).
9. The provision of communal open space (e.g. roof terrace or larger garden area) in lieu of smaller private open spaces may be acceptable depending on site context, location and topography. Where a communal space is proposed, it should be located centrally within a development and be sufficiently sized to capture extended sunlight throughout the day and support recreational amenity for occupants (refer Figure 14).
10. For multi-unit developments such as terraced houses or walk-up apartments, adequate space for rubbish/ recycling bins to serve all dwellings should be provided. This area should not be directly visible from the street but located on main access routes into a development to ensure they are convenient for residents. Any waste storage areas should be screened from direct view (refer Figure 15).

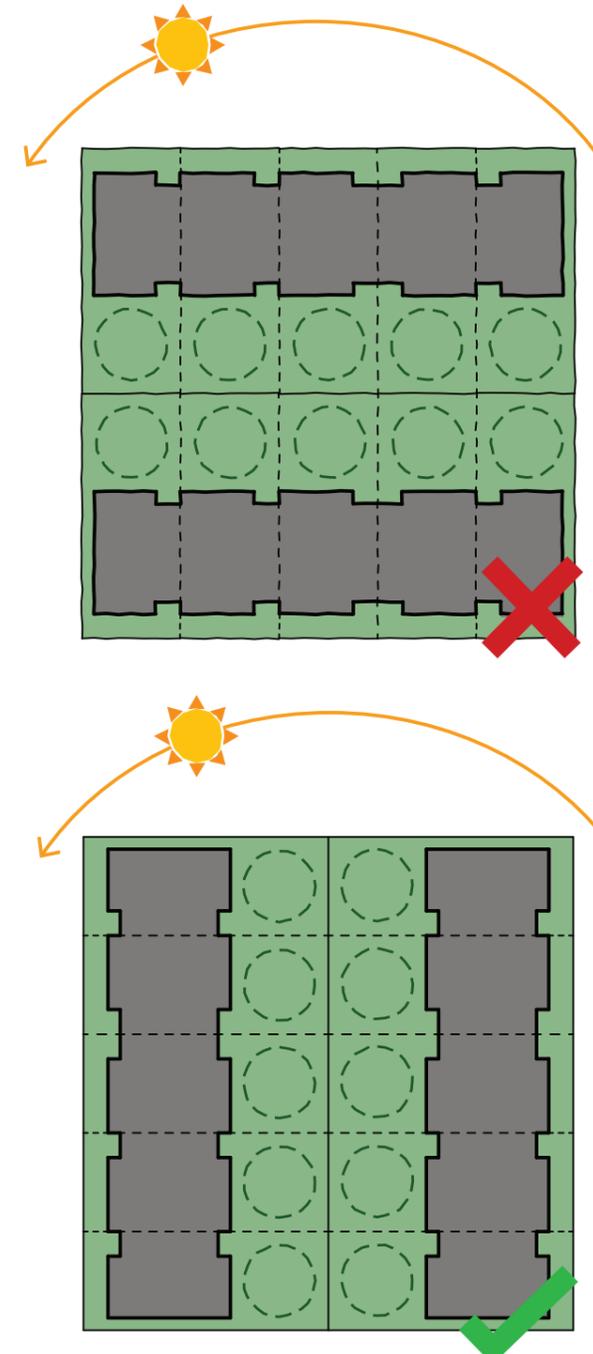


Figure 12 - An east-west orientation for individual dwellings within a block provides better solar access to both aspects of a terrace as well associated private open space.

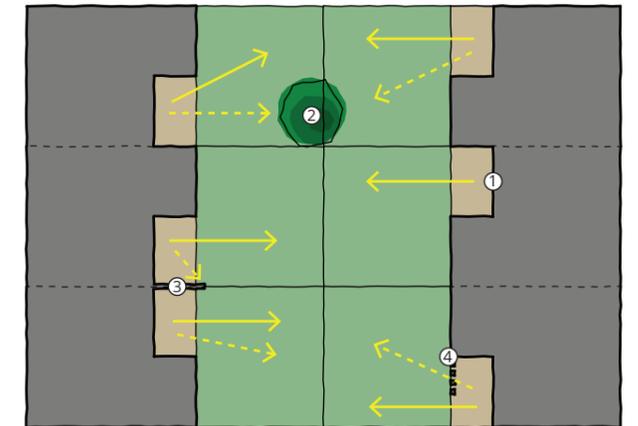


Figure 13 - A range of design techniques can be employed to maintain privacy in denser urban environments. 1. Recessed balconies 2. Landscaping 3. Projecting building elements 4. Vertical screens/ fins.



Figure 14 - Communal open space at the centre of a development providing additional outlook and amenity to individual dwellings.



Figure 15 - Screening of waste storage areas creates supports amenity and can also support privacy and better define between public/ private spaces.

5. Access & Carparking

The provision of car parking can often have a significant impact in the overall feasibility of a development. However, car parking requires careful consideration to ensure it is integrated into the overall design of the building, is functional, attractive and safe and does not dominate adjacent streets or public open spaces.

The location and arrangement of car parking, as well as its impact on the street and public open spaces, are major considerations when designing medium density residential developments. As such, car parking should be one of the first aspects of a development to be considered.

Outcomes Sought:

- Car parking (including garaging), vehicle access and manoeuvring are integrated in a way that is safe for pedestrians and cyclists and does not dominate a development, particularly when viewed from the street or other public spaces.
- Conflicts between vehicle movements and pedestrian movements are minimised.
- Convenient cycle parking and access is provided to all dwellings within a development.

Guidelines:

1. Driveways should be straight and short, allowing for good visibility and sight lines when manoeuvring and parking.
2. Pedestrian entrances should be clear and unambiguous. Where a front entrance pathway abutts a driveway, the driveway should be distinguishable through differentiation of surface finishes.
3. Where clustered car parking is provided, clear delineation of pedestrian routes through the car park space, or a quality, low-speed shared space environment must be provided (refer Figure 20).
4. Consider the visual impact of the car park/ garage when viewed from the street. The car park space and entrance should be minimised through the use of landscaping and screening elements (refer Figures 16 and 17).
5. Incorporate car parking into the overall landscape design - by extending planting and hardscaping materials into the car park space and providing low level landscaping to soften and screen this space (refer Figure 18).
6. Minimise the width and number of vehicle access points into a development. Development of a typical site should feature no more than one vehicle access point. Generally speaking, long runs of terraces with individual parking facing out to the street should be avoided.
7. External car park spaces and corresponding building design (e.g. window locations) should be designed to ensure visibility of the parked car from the home to increase security (refer Figure 19).
8. Every dwelling should incorporate space for at least one sheltered, secure cycle parking space. This could be via space within a garage or car port, or via a communal storage facility. Residents should not be required to bring cycles through a dwelling to access an appropriate cycle park (refer Figure 21).



Figure 16 - Garages have been recessed from the main façade.



Figure 17 - Garages have been made the primary design feature and detract from visual amenity and the pedestrian experience.



Figure 18 - Small pockets of landscaping have been incorporated into this parking area to help screen cars and soften the impact of large areas of hardscape required for vehicle maneuvering.



Figure 19 - Windows provide overlooking and passive surveillance into a car park to increase security.



Figure 20 - A clear, unobstructed pedestrian pathway segregated from vehicular traffic to support safety and overall legibility of the development.



Figure 21 - Sheltered and secure cycling parking integrated with the overall design can help make cycling a more attractive mode of travel.

6. Landscaping

The design of both communal and private outdoor spaces is just as important as the building(s). Outdoor spaces help to meet a resident's daily needs and help support overall health and well-being by providing areas where people can relax, socialise or play. Landscaping also has an important role in enhancing the natural environment. Overall, the arrangement and quality of outdoor spaces will have a significant impact on residents and neighbours as well as the overall perception of a development.

Outcomes Sought:

- Landscaping helps to create a positive sense-of-place within a development and wider neighbourhood.
- Landscaping within developments supports enhancements to local biodiversity and water quality.
- Peak stormwater discharges from new developments achieve stormwater neutrality to minimise downstream flooding impacts.

Guidelines:

1. Landscape elements should be appropriate to the scale of new buildings and help soften or reduce the bulk of large blocks when viewed from the street or other public open spaces (refer Figures 22 and 23).
2. Incorporate 'deep-soil' areas within developments to enable a greater scale of planting commensurate to the scale of proposed buildings.
3. Outdoor spaces are easy to maintain and have well defined boundaries with no ambiguity or leftover areas.
4. Planting design should create layers of height, texture and colour. Where appropriate, the use of local native species is preferred to enhance biodiversity (refer Figure 23).
5. Any existing significant vegetation, including specimen trees, should be retained where practicable.
6. Select appropriate deciduous trees that will block excessive sunlight during summer months but still enable sunlight penetration to dwellings and outdoor living spaces during winter months (refer Figure 24).
7. Where possible, maximise permeable areas (including through the use of permeable paving materials) to help facilitate groundwater recharge, retain overland-flow paths and detain/ treat stormwater prior to its discharge to the wider catchment (refer Figure 25).
8. Look to incorporate Low Impact Design measures such as rain gardens within developments to support amenity and reduce stormwater effects (refer Figure 25).
9. Outdoor spaces, including areas of car parking, provide a pleasant outlook and visual amenity for all users (refer Figures 26 and 27).



Figure 22 - Specimen trees introduce a 'green' vertical element to help break down/ screen the mass of the building and soften the developments overall appearance.



Figure 23 - A mixture of low-shrubs, hedging and specimen tree planting helps to ground the development and provides an attractive transition between the public and private realms.



Figure 24 - The use of deciduous trees within this development has enabled these units to access morning sun to help support amenity within individual dwellings.



Figure 25 - Rain gardens can collect and treat run-off from hardscaped areas including car parks.



Figure 26 - Specimen trees, grasses and low level planting helps to soften an area of surface parking and adds some additional 'green relief' to balance out the extent of building form and car parking.



Figure 27 - Structured tree plantings and a mounded lawn areas provide a simple communal space that increases the extent of outlook for adjoining dwellings, supports privacy and creates a pleasant outlook for residents.

7. Materials

The material and colour palette utilised across a development play an important role in the perceived quality of a development. They are also important in helping to express the individuality of buildings whilst contributing to an overall cohesive streetscape and neighbourhood appearance.

It is also important to understand any relevant neighbourhood character that could impact on material selection. The right response will depend on the context and design, however simply mimicking, or a 'pastiche', of character is never a good design response.

Outcomes Sought:

- Developments create visual interest by utilising a consistent but varied material and colour palette.
- The materials and colours used within a development compliment, rather than competes, with building form.
- New development, especially close to the town centre, incorporates Ōamaru whitestone as a primary building material to reinforce Ōamaru's predominant architectural aesthetic.

Guidelines:

1. The material palette should be limited to no more than three cladding types per dwelling/ building (refer Figure 28).
2. Single cladding materials should be used to express whole volumes - i.e. joins between different cladding materials at external corners should be avoided (refer Figure 29).
3. Materials should provide a degree of texture to support façade depth and shadow casting detail to support visual richness (refer Figure 30).
4. Materials should be durable and consideration should be given to long-term maintenance requirements.
5. Ōamaru whitestone should be used in preference of other common construction materials such as pre-cast concrete panelling. (refer Figure 31).
6. Electrical and mechanical plant equipment (e.g. heat pumps) as well as other services such as downpipes should be considered early in the design process so that they can be sited out of public view and to minimise potential noise disturbance to residents and neighbours (refer Figure 32).
7. Accent colours or materials should be used strategically for architectural feature elements (refer Figure 33).



Figure 28 - Strategic use of a limited number of different materials helps to avoid visual clutter and contribute to a positive built form.



Figure 29 - Two contrasting materials meet at this building corner creating an unnecessarily complicated, inelegant façade.



Figure 30 - The use of textured materials helps to provide a finer grain of detail to support visual richness and interest at a human scale. Traditional building materials such as brick or weatherboard are preferred over alternatives such as aluminum composite panels or plain tilt slab concrete.



Figure 31 - Ōamaru whitestone was a traditional building material used in the construction of residential dwellings in early suburbs of Ōamaru.



Figure 32 - The location and configuration of plant equipment form a dominant feature of the roofline of this development.



Figure 33 - The use of accent colours on these front doors provides for personalisation of individual dwellings and increases visual interest within

Glossary

Amenity - The qualities of a place that make it pleasant and attractive for individuals and communities to occupy.

Communal Open Space - spaces that can be shared by more than one dwelling within the development. It can be shared by residents of a small number of dwellings, by residents on a single floor, or by residents in a whole building or development. These spaces are usually held in common ownership through a body corporate or via a residents society.

Deciduous Tree - A tree which seasonally sheds leaves, usually in Autumn.

Desire Line - The preferred route (usually the quickest and straightest) someone will take to travel from A to B.

Detached House - A single dwelling that is separated from other dwellings on all sides.

Façade Articulation - The manner in which portions of a building form are expressed (e.g. materiality, colour, modulation) and come together to define the building.

Façade Modulation - The stepping back or projecting forward of parts of a building's façade.

Fenestration - The arrangement, proportion and design of windows and doors on a building.

Frontage - The part of a site directly adjacent to a street or other public open space.

Front loaded dwelling - A dwelling where vehicle and pedestrian access is provided from the front or side via a legal road.

Legibility - The degree to which a person is able to see, understand and find their way around the built environment.

Low-rise Apartment - An apartment building up to three-storeys in height where individual dwellings are separated vertically and/ or horizontally from each other and typically access via a common entrance.

Outlook - Outlook refers to a general sense of openness and space obtainable from within an individual dwelling to the outside. It may or may not include extended views over a wider area.

Pastiche (architecture) - An unconvincing reproduction of past architectural styles.

Rear loaded dwelling - A dwelling where vehicle access is provided from a private lane or Joint Ownership Access Lot (JOAL) at the rear of the site. Pedestrian access is still provided via a legal road at the front of the dwelling.

Recession Plane - A plane constructed from points on or above a site boundary where the angle of inclination moves in towards the centre of the site.

Semi-detached House - This refers to a dwelling which shares a party wall with another dwelling (typically in a duplex arrangement)

Terraced House - This refers to dwellings which are usually connected on two sides via a party wall. Also known as 'Row Housing'.

Walk-up Apartment - A type of low-rise apartment building where upper floors are only accessible via stairs.

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