Kapiti Coast District Council

MEDIUM DENSITY HOUSING GUIDE

BEST PRACTICE

a design guide for developers, planners, architects and others

The outstanding opportunities, amenities, and attractiveness of the Kapiti Coast District make it one that will face several growth issues in the coming decades.

One of these issues relates to the need to house more people and to provide greater housing choice, particularly around key urban nodes. Among other things this maximises opportunities for sustainable employment and public transport. It also helps to minimise our urban footprint, ensuring the retention of as much as possible of our beautiful landscapes.

This guide seeks to inform best practice in the planning and design of medium density housing.

"MEDIUM DENSITY HOUSING"

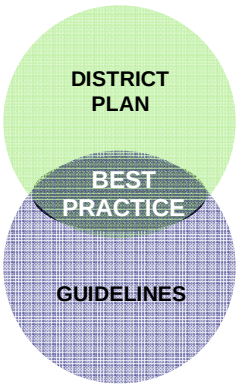
Means comprehensive developments involving 4 or more dwelling units on an average density between 350m² - 250m². These may be stand-alone, semi-detached, or terraced. It does not include conventional infill where a house is 'stuck on the back' of a single lot.

Apartments and other high density housing typologies are not the focus of this guide, although it may still be helpful in their planning and design.

WHY IS THIS DOCUMENT IMPORTANT?

This guide is about urban design. Its focus ranges from the broad level of how streets and blocks are laid out and relate to each other, to the fine grain detail of where to locate front doors, balconies, and even letterboxes. Good urban design will promote interaction and enrichment in the built environment.

Most of all urban design is about people and the experiences their surroundings provoke. As living arrangements increase in density, so too does the potential for negative conflict between people and the use of space. The management of these spaces becomes crucial to ensure that they are still able to provide people with the standard of living, privacy, and choice they need to fully participate in the community.



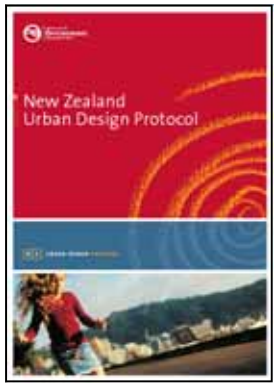
Good medium density housing can only be achieved through good urban design.

HOW DOES THIS GUIDE RELATE TO THE DISTRICT PLAN?

Every medium density housing development will require land use consent under the Kapiti Coast District Plan. This reflects the complexity of this type of development and the sensitivity with which its integration into areas of existing development is needed.

This guide should be read in parallel with the District Plan. It is not a part of the District Plan, nor does it override its requirements. However in general, the realisation of principles and techniques outlined in this guide will correlate to the intent of the District Plan's provisions.

When the Council is assessing Resource Consent applications for medium density housing, this guide may be used as an "...other matter… relevant and reasonably necessary to determine the application" under Section 104(1)(c) of the Resource Management Act 1991.



WHAT OTHER SOURCES CAN I REFER TO?

Further information on good urban design principles include:

→ "*New Zealand Urban Design Protocol*", Ministry for the Environment, 2005.

→ *People+Places+Spaces: An Urban Design Guide for New Zealand*", Ministry for the Environment, 2002.

→ Sustainable Home Guideline-Waitakere City Council

Note also the following Kapiti Coast documents:

→ Kapiti Coast Community Outcomes

→ Rural Design Guide

→ Subdivision and Development Principles and Requirements

→ Native Plant Guide

SUMMARY OF KEY DISTRICT PLAN CONTROLS:

The following outlines the key requirements of the District Plan relating to Medium Density Housing. They should kept in mind when reading this guide as they put the recommendations into a good context. For more detail, consult the District Plan.

1.) It is a **Restricted Discretionary** activity to develop Medium Density housing within any site of a minimum 1500m^2 area; if it is within 500m of either Paraparaumu Town Centre, or Paraparaumu Beach Commercial area, as identified in the *District Plan Maps: Medium Density Overlay Area*; has an average density no greater than 1:250m^2 with no individual unit 'site' smaller than 200m^2; and can comply with <u>all</u> of the following standards:

A.) The maximum height of any building or structure is 10m (except for beach front lots).

B.) A minimum front yard of 4.5m shall apply allowing an intrusion no greater than 1.5m into the yard for the purposes of a feature entry or bay window provided a total (combined) width of such is no greater than 3.0m. A ground floor living room (lounge / dining / family / kitchen) must face the street in dwellings that front one.

C.) Garages, irrespective of access, shall be recessed a minimum 1.0m behind the front façade of a dwelling (irrespective of whether the front façade fronts a street, an internal common lane, a rear boundary, etc.), and otherwise must be set back a minimum 5.5m from any front boundary.

D.) A height in relation to boundary control of 2.1m + 45^o shall apply from all boundaries facing the southern half of a compass including north-south faces, and one of 3m + 45^o shall apply to all boundaries facing the northern half. Height in relation to boundary shall not apply from the Front Boundary.

E.) A building mass plane of 6.5m + 45^o shall apply inwards towards the centre of a site from the 4.5m front yard.

F.) Maximum Building Length is 12m before a recess with a minimum dimension of 3m x 3m is required. This recess shall also have a maximum height of no less than 1 metre lower than the adjacent building mass. In addition, terraced houses are limited to avoid long repetitive rows of units.

G.) The Maximum Height of a Front Boundary Fence, or any Fence within the Front Yard, is 800mm. Beyond this the maximum fence height is 1.8m, except when adjacent to a reserve.

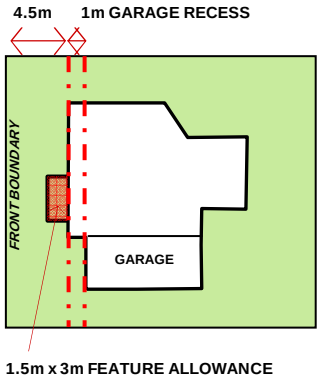
H.) Each unit must provide a private outdoor living space of at least 30m^2, with a minimum dimension of 2.5m and the ability to accommodate a circle with a 4m diameter. This space must be directly accessible from a living room (lounge / dining / family). The space must also provide sunlight access to an area of the space with a minimum radius of 3m that receives no less than 1 hour of continuous sunlight between the hours of 11:00am—2:00pm on June 21 (mid-winter solstice). Depending on orientation & topography, an additional balcony may be required to provide minimum sunlight access to residents.

I.) Site coverage shall not exceed 50%.

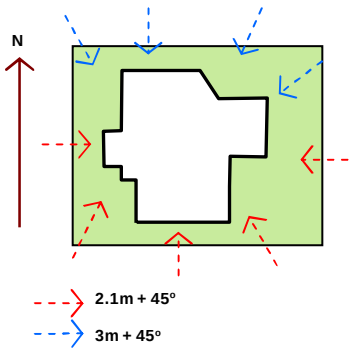
J.) An average of 1.5 parking spaces per unit must be provided: A minimum of 1 space per unit is required and in calculating the average no more than 2 spaces per unit may be counted.

Applications to vary any of the above STANDARDS 'A' -'J' are **DISCRETIONARY** activities.

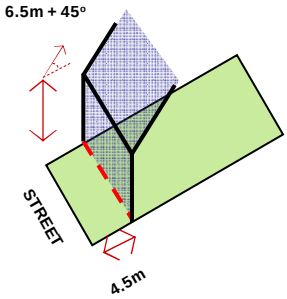
Applications to vary the location, density, or minimum site area of the land use are **NON-COMPLYING** activities.



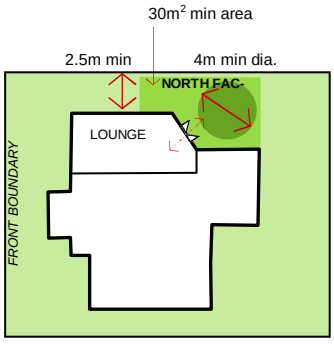
ABOVE: B & C: FRONT YARD



ABOVE: D: HEIGHT TO BOUNDARY



ABOVE: E: BUILDING MASS



ABOVE: H: OUTDOOR LIVING SPACE

HOW IS THIS GUIDE STRUCTURED?

To make the guide as user-friendly as possible, it has been developed into the following parts:

medium density housing **1**

- → what does it look like?
- → where does it work and why?
- → efficient consenting

site design **2**

- → site analysis
- → minimum site area
- → frontage
- → building fronts and backs
- → including the sun
- → open space
- → access, parking, cycles and pedestrians
- → servicing, deliveries, and waste

building components **3**

- → front doors and entrances
- → balconies
- → fences and walls
- → building height
- → diversity and choice
- → energy efficiency

amenity values and character **4**

- → responding to local Kapiti Coast character
- → material and detail design
- → providing for appropriate building mass
- → garages
- → repetition with diversity
- → landscape design

town centre addendum **5**

- → medium density in town centres
- → key amenity and performance factors
- → balconies
- → communal open space
- → visual privacy

1

Medium Density Housing

This section introduces medium density housing and outlines what it looks like, where it should go, and how to ensure the consent process works as efficiently for you as possible. It includes:

1. **what does it look like?**
2. **where does it work and why?**
3. **efficient consenting**

1. What does it look like?

District Plan requirements: where provided for, Medium Density Housing is a Restricted Discretionary activity as long as the average density is no higher than 1:250m^2. A minimum of 4 units must be proposed to qualify as medium density development as opposed to general infill.

No more than two units may be terraced together provided that an unlimited number of units may be terraced if connected by a single-level garage.

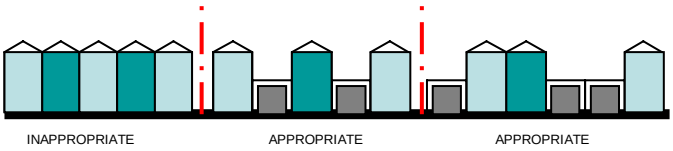
No building form shall exceed a length of 12m in any direction without providing a recess measuring no less than 3m x 3m, which is at least 1m lower than the adjacent building mass.

Medium Density Housing is an increasingly common way of housing that has risen in popularity in New Zealand over the past few decades. Most commonly, it arises in combination with a need to accommodate population growth, a desire to avoid outward urban sprawl, achieving greater housing choice, and changes in resident preference towards lower maintenance and higher access to amenities.

It can be expressed in many forms or *typologies*, from more conventional detached housing (1), to semi-detached (2), and terraced (3) forms.

Terraced housing can also be included in Medium Density however is more commonly associated with densities around the 1:150m2 level, an intensity not generally in keeping with the maintenance of amenity values in the Kapiti Coast given that it is most often expressed as 'row' housing (4).

Accordingly, the Council has introduced a package of District Plan controls aimed at providing for intensification that will have a mass and character compatible with the local Kapiti Coast built environment.



ABOVE: ILLUSTRATION OF THE KAPITI COAST DISTRICT PLAN'S PROVISION FOR TERRACED HOUSING TO AVOID ADVERSE CHARACTER AND AMENITY EFFECTS.

(1) DETACHED HOUSING AT THE 1:300 DENSITY RANGE.

(2) SEMI-DETACHED HOUSING AT THE 1:250 DENSITY RANGE.

(3) TERRACED HOUSING AT THE 1:250 DENSITY RANGE.

2. Where does it work and why?

District Plan requirements: Medium Density Housing is a Restricted Discretionary activity when it is located Paraparaumu and Paraparaumu Beach areas identified in Paraparaumu Urban Planning maps.

It is a Non Complying activity in all other locations.

Medium density housing sits on a spectrum of residential amenities. Rural residential amenity offers the highest possible levels of privacy and seclusion (*internal* amenities), but the lowest access to services or connections to other activities (*external* amenities). Conversely, apartment living tends to offer the highest access to amenities, services, and attractions, but will offer the lowest levels of aural and visual privacy.

(4) TERRACED (ROW) HOUSING AT THE 1:150 DENSITY RANGE - GENERALLY INCOMPATIBLE WITH KAPITI COAST CHARACTER AND AMENITY VALUES.

The key to good residential amenity is in getting the right 'mixture' of internal and external amenities and each type of housing naturally lends itself to a certain living preference.

The poorest outcomes occur where neither the internal or external opportunities for amenity are maximised - for example locating small apartments in the 'middle of nowhere', with no shops, services, parks, open spaces etc. available to residents.

Medium density housing therefore lends itself to a range of specific lifestyle options, and the most successful medium density housing developments rely just as much on the right location as on the right design. In this way they are able to 'play to the strengths' of medium density typologies and provide effective and high-amenity living conditions.

So what is the right location for medium density housing? In the first instance it is around the fringe of local and sub-regional centres, and transit nodes where accessibility and land use choice is high but the feeling of living 'in the middle of town' is avoided. That should be reserved for high-density apartments and similar. These conditions translate to within 400m of the Paraparaumu and Paraparaumu Beach Centres as identified on the planning maps. These areas were identified in the Kapiti Coast Community Outcomes.

Other than this, there may be other locations where small pockets of medium density would be appropriate, such as on a bus or train route in the vicinity of local shops and a beach, park, or golf course. However due to the increased sensitivities of these small, localized pockets a rigorous consent assessment as a Non-Complying activity is required.

Medium density should never be located in remote locations such as isolated urban peripheries or where there are insufficient conveniently located and accessible land use choices. These are crucial to offset the reduced privacy, visual, and aural amenities that are associated with this kind of living compared to lower density types which will have the same lack of access to other land use choices but offer superior levels of privacy.

ABOVE AND BELOW: SUCCESSFUL MEDIUM DENSITY DEVELOPMENTS SUPPLEMENT REDUCED INTERNAL UNIT AMENITY BY BEING LOCATED TO PROVIDE CONVENIENT ACCESSIBILITY TO ADJACENT SERVICES, GOODS, AND EXPERIENCES.

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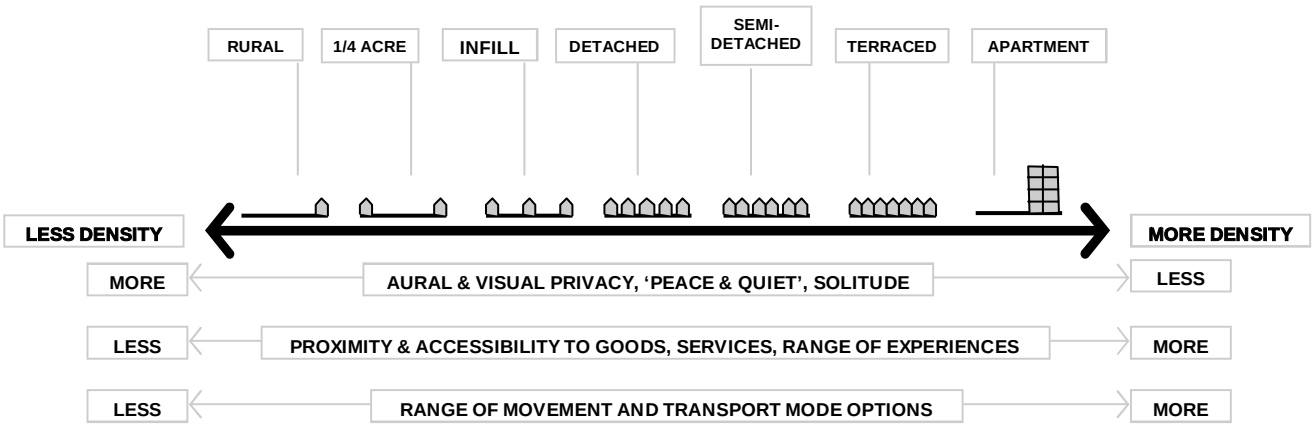


ABOVE: THE HOUSING SPECTRUM, EACH TYPOLOGY SUITED TO A DIFFERENT BALANCE AND TYPE OF AMENITY.

3. Efficient consenting

The Resource Management Act specifies a limit of 20 working days within which a land use consent application must be processed by the Council.

With more complex and sensitive issues, such as medium density housing, the 'real time' taken to process an application can be substantially longer, with requests for information, professional peer reviews, and the like, often not included in this 20 day limit.

There are however a number of tools available that can noticeably reduce delays and other 'down time' spent providing and discussing information.

ABOVE: ACTIVE ENGAGEMENT OF COUNCIL STAFF THROUGH PRE-APPLICATION MEETINGS, CAN RESULT IN A CLEAR, COMMON VIEW.

Pre Application Meetings

The Resource Management Act provides for Pre Application meetings which are an excellent tool to assist the process. They should be approached as early in the design process as possible and be entered in good faith.

Of even greater benefit, the Kapiti Coast District Council internally initiates a Design and Review meeting for lodged medium density housing resource consent applications. Applicants are welcome and encouraged to attend these meetings that are aimed at reaching a singular and holistic view of applications in an open forum.

These meetings give the best opportunity to reach a common understanding and view of the issues, can provide excellent insight to applicants and opportunities for resolving issues. Most importantly they can save weeks of resource management 'tennis' where letters, plans, documents, reports, and phone calls can seem to endlessly bounce back and forth in search of a common view.

Collaboration, not Confrontation

The Council employs specialists to assist it in its decision making functions through the preparation of recommendations. These specialists have equivalent training to the experts that will be used in the preparation of land use consent applications for medium density housing and the best outcomes tend to be those where all parties involved have strived to establish positive, constructive relationships.

Neither the Council nor applicants are helped when the process becomes confrontational, and mutual respect between all participants is essential to obtain 'win-win' outcomes.

This approach can also considerably lessen the number of conditions imposed on a consent, and indeed the goal of the most successful development applications should be for the imposition of few, or even no, conditions beyond those addressing simple administrative matters.

ABOVE: LONG-TERM WEATHERING AND AGEING OF FINISHES CAN BE AVOIDED THROUGH USING THE RIGHT MATERIALS AND HAVING PRACTICAL MANAGEMENT / MAINTENANCE MECHANISMS IN PLACE.

Think about the Long Term

A key method of demonstrating genuine good-faith with the Council in a land use consent application is through the provision of voluntary procedures and protocol, including over the on-going management of a development. With medium density housing consents in particular it is likely that the Council will seek reassurance that suitable provision for on-going maintenance, waste collection and servicing, landscaping and similar has been made. Providing this information 'up front' can help convince the Council that a robust and comprehensive 'no stone unturned' process has been undertaken by an applicant.

2

Site Design

This section addresses the aspects of site design that contribute to superior outcomes. It includes:

1. site analysis
2. minimum site area
3. street and reserve frontage
4. building fronts and backs
5. including the sun
6. open space
7. access, parking, cycling and pedestrians
8. servicing, deliveries, and waste

1. Site Analysis

IMPORTANT TO ENSURE:

- → **MAXIMISED VIEWS AND SUN;**
- → **MOVEMENT LINKAGES EXPLOITED;**
- → **PROXIMITY TO OFF-SITE SERVICES AND AMENITIES;**
- → **BEST POSSIBLE PATRONAGE OF LOCAL PUBLIC SPACES.**

District Plan requirement: Site Analysis to be provided with land use consent application.

Site analysis can assist in creating a cost effective and environmentally responsive design in respect of site features and constraints. Natural and cultural assets on and around the site can be utilised to build a positive sense of place and unique identity into the design. Site analysis can assist the development to interact with its immediate surrounds and provide a compatible interface between the development site and neighbouring development. Site analysis should consider the following elements:

SITE ELEMENTS	POSSIBLE RESPONSE
1. Site topography	→ TAKE ADVANTAGE OF HEIGHT FOR VIEWS → USE SLOPE TO ADVANTAGE SUCH AS SEMI-BASEMENTS → CONSIDER FLOODING ISSUES.
2. Natural features and significant vegetation	→ CONSIDER RETAINING BEST TREES IN PUBLIC OR COMMUNAL OPEN SPACE → INCORPORATE TREES INTO PRIVATE SPACES OR STREETS.
3. Features of cultural significance	→ CONSIDER CELEBRATING OR RESPECTING FEATURES → FOLLOW FORMAL PROCESS.
4. Solar orientation and prevailing winds direction	→ DESIGN TO ALLOW SUNLIGHT INTO LIVING ROOMS AND OUTDOOR AREAS → LOCATE OUTDOOR AREAS AWAY FROM WIND OR PROVIDE LANDSCAPING, OR CONSTRUCT WIND SCREENS.
5. Key viewpaths to and from the site (including potential privacy issues)	→ CONSIDER HOW OUTWARD VIEWS CAN BE UTILISED → ADD HIGHEST VISUAL INTEREST WHERE THE DEVELOPMENT WILL BE MOST VISIBLE FROM THE OUTSIDE → CONSIDER EXISTING BUILDINGS AND 'FRONTS AND BACKS', AND PRIVACY ISSUES.
6. Site shape	→ CONSIDER HOW TO RESPOND TO THE SITE'S SHAPE IN AN EFFICIENT MANNER
7. Location of infrastructure lines and connections	→ ENSURE SITE LAYOUT MEETS REQUIREMENTS OF UNDERGROUND INFRASTRUCTURE LINES AND OVERLAND FLOW PATHS. → MAKE EFFICIENT CONNECTIONS TO EXISTING INFRASTRUCTURE SERVICES

RIGHT: GOOD SITE ANALYSIS THAT IDENTIFIES LINKAGES AND CONNECTIONS WILL HAVE A STRONG INFLUENCE ON HOW A DEVELOPMENT IS DESIGNED ON THE SITE.

2. Minimum site area

IMPORTANT TO ENSURE:

→ **MAINTAINING EXISTING NEIGHBOURHOOD CHARACTER;**

→ **ENSURING SUFFICIENT VISUAL, AURAL AMENITY AND PRIVACY CAN BE PROVIDED TO RESIDENTS.**

District Plan requirement: minimum parent site area 1500m^2. For the development itself, an average density of 1:250m^2 is provided with a minimum of 200m^2(net) site area required for each unit (minimum dimension 8m). 1500m^2+ 'parent' site to be formally amalgamated.

Sites smaller than 1500m^2 are difficult to manage and usually the economics of demolishing existing buildings to allow good design solutions simply doesn't make it feasible. Instead, new dwellings tend to be squeezed in around retained buildings, resulting in suboptimal results and often land-use conflict between residents, particularly in respect of privacy.

The Kapiti Coast has a predominant stock of '1/4 acre' lots of between 800 - 900m^2, which can be considered 'typical'. The norm is a long rectangle with a narrow end facing the street, although a range of other forms are also used to provide the requisite area.

Given the nature of existing landholding throughout the District, the 1,500m^2 requisite will generally only be met through the amalgamation of two or more of these conventional 'parent' lots.

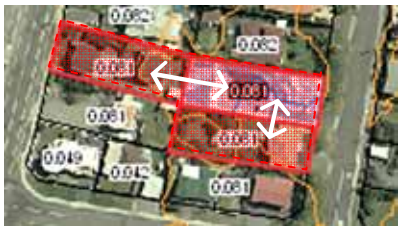
Typically these will either be side by side along a street, or end to end between two streets. The shape of the final development site needs to be a single, contiguous area that can allow a comprehensive development. Having 1,500m2 of land in clearly separate areas (1) or similarly achieving the requisite area by adding 'bits and pieces' from adjoining lots (2) will be in general inconsistent with this and will consequently create design difficulties and poorer outcomes.

It is important that the prime determinant of orientation and layout of buildings in a development is good design. Dividing a site by the maximum permitted density limit and then using this number as the main design factor will not result in optimal outcomes.

Due to factors such as existing protected vegetation, topography, adjacent developments, and orientation, the 'maximum' densities may not be achievable on every site.

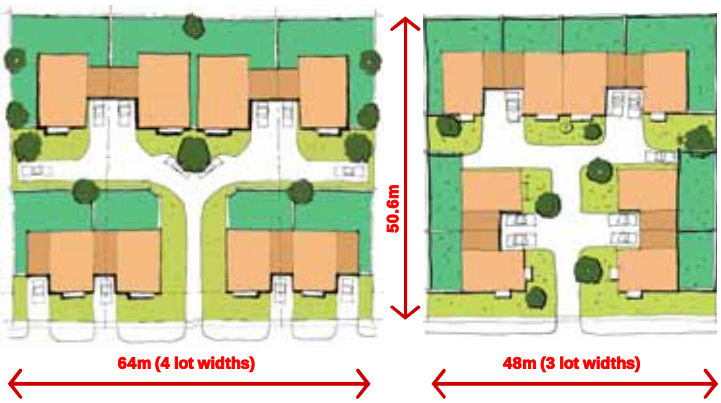
***Note** that the Council will require the formal amalgamation of titles into one 'parent' lot prior to the release of any Building Consent to establish a medium density housing development , and the subsequent subdivision of the development around each unit is a Non Complying activity until substantial effect towards constructing the development has occurred.*

ABOVE: PARAPARAUMU BEACH: THE TYPICAL KAPITI COAST LOT. SOME HAVE BEEN INFILLED, BUT MOST REMAIN OCCUPIED BY A SINGLE DWELLING UNIT.



ABOVE: FORMING THE 1,500m² MINIMUM AREA FOR A MEDIUM DENSITY HOUSING DEVELOPMENT WILL REQUIRE THE AMALGAMATION OF EXISTING LOTS.

ABOVE: EXAMPLES OF UNSUITABLE ATTEMPTS TO MEET THE 1,500m2 REQUISITE SITE AREA. THESE WOULD RESULT IN PROBLEMATIC EDGES AND



ABOVE: MODELLED KAPITI COAST EXAMPLES OF COMBINING LOTS:
LEFT: 4 LOTS TO PROVIDE 10 UNITS AT 1:320m² (stacked apartments in centre-rear module with balconies on top of garages).

3. Frontage

IMPORTANT TO ENSURE:

- → **BEST POSSIBLE FUNCTIONING AND CHARACTER OF ADJOINING PUBLIC SPACES**
- → **VISUAL INTEREST AND INTERACTION**
- → **SOCIALLY ACTIVE AND SAFE ENVIRONMENTS WITH A CONNECTION BETWEEN SITES AND PUBLIC SPACES.**

District Plan requirement: Front Yard setback of 4.5m applies. Garages to be further set back 1m from the main dwelling front façade. A 6.5m + 45^{o} Height in Relation to Boundary control applies from the internal extent of the 4.5m Yard setback.

Fronting onto streets:

The way development is configured on a site makes an important contribution to the character and amenity of adjoining public space. When buildings are oriented away from public spaces it can result in blank walls, service areas, or parking areas dominating streets and other public spaces. This results in an open space environment of poor amenity. Instead, buildings should be located on the site so as to create a positive relationship with the adjoining public street.

In order to create safer and friendlier neighbourhoods, it is important to achieve a positive interface between site development and the adjacent street. Residences should be oriented to front public spaces, should be located in close proximity to the front boundary and main entrances should be provided directly and conveniently off the street.

A key in achieving this is the management of the front yard which fundamentally should be treated as a buffer between the public and private realms rather than as an amenity or living space for residents. When this occurs, the demand for high front fences will follow to provide a private playing / recreational space.

The street also offers numerous advantages in helping to integrate medium density housing into environments particularly when at the interface of existing, conventional residential land uses. Fronting the street provides a clear and ample area of outlook without risking dominance effects on side neighbours that can create consenting difficulties where outlook includes a neighbour's outdoor living space.

It can also help to consolidate available open space into its most usable form. An effective and strong frontage in medium density housing can free up land to the back that can be used as a recreational garden of a size equivalent to that provided in conventional 1/4 acre settings. This land is lost when a dwelling is placed towards the centre of a site.

ABOVE: THESE UNITS UNSUCCESSFULLY RELATE TO THE STREET, AND OFFER NO MEANS OF PEDESTRIAN ACCESS BETWEEN THE STREET AND ENTRANCES. LETTER BOXES HAVE ALSO BEEN LOCATED POORLY SO VEHICLES ENTERING THE SITE TO CLEAR A MAIL BOX COULD ONLY DO SO BY ENTERING ON THE RIGHT - CONFLICTING WITH VEHICLES TRYING TO LEAVE DRIVING ON THEIR LEFT.

ABOVE: DETACHED HOUSES DESIGNED AND ORIENTED TOWARDS THE STREET, INCLUDING A SINGLE WIDTH RECESSED GARAGE AND NARROW, OPEN FRONT YARD SETBACK.

ABOVE: AN EFFECTIVE STREET RELATIONSHIP HAS BEEN ESTABLISHED BETWEEN THESE DWELLINGS AND THE STREET.

ABOVE: THIS UNIT SITS ON A CORNER AND WHILE ITS MAIN FRONTAGE HAS BEEN ADDRESSED WELL, ITS SECONDARY ACCESS HAS BEEN TREATED AS A REAR YARD, RESULTING IN POOR TREATMENT AND IN PARTICULAR CONFLICT WITH THE UNIT'S PRIVATE LIVING SPACE.

Fronting onto Reserves and Parks:

Parks and reserves function at their best, are safest and most active, when fronted by houses or other uses, preferably with a street on the boundary. This ensures that buildings, and not back yards actually front towards the park.

Having a road frontage for parks also helps to clarify the ownership of the land, as with medium density housing a common conflict can be the legibility between private communal open space and public parks / reserves.

When back yards front a park, residents' privacy and security can be seen as being compromised unless high walls are erected, in which case the park becomes less safe with edges that are often prone to tagging and crime.

Having lower-height fences in conjunction with good building design and layout can still retain good levels of privacy, but provide substantial passive safety benefits to both users of the park and users of the dwelling.

ABOVE: THESE UNITS FRONT A LARGE STORMWATER RESERVE THAT COULD PROVIDE AN EXTENSION OF RESIDENTS' OUTDOOR AMENITY. HOWEVER, SOLID AND INSENSITIVE FENCING (BEARING SCARS OF VANDALISM) ARE PROVIDED, GIVING NO ACCESS FOR RESIDENTS TO ENJOY THE RESERVE.

ABOVE: THE GREATEST BENEFIT FROM PARKS COME WHEN ACTIVITY FRONTS A CLEARLY LEGIBLE AND DEFINED PUBLIC SPACE, WITH DIRECT ROAD FRONTAGE FOR THE OPEN SPACE.

4. Building Fronts and Backs

IMPORTANT TO ENSURE:

- → **THE CREATION OF SOCIALLY ACTIVE AND SAFE PUBLIC ENVIRONMENTS;**
- → **GOOD ON-SITE AMENITY ;**
- → **MINIMISATION OF CONFLICT BETWEEN USERS, RESIDENTS, NEIGHBOURS, AND VISITORS;**
- → **PRIVACY AND SAFETY.**

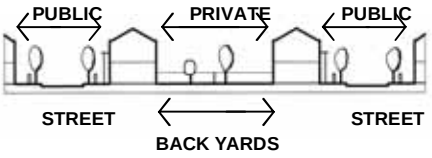
District Plan requirement: A living room to face the street frontage at ground level (when unit fronts the street). No private outdoor living courts or (if any is provided) communal open space to locate between dwellings and a street frontage.

Note: 'living room' includes any of lounge, family, dining, or kitchen

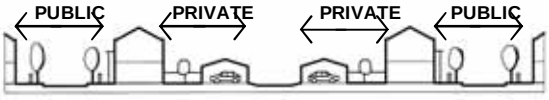
Public, semi-public and private spaces should be clearly defined. Ensuring that building fronts face fronts and backs face backs, will ensure that public and communal open spaces are well overlooked and that private spaces actually provide privacy. Blank walls and low quality, unsafe environments often result when this approach is not applied.

Managing this issue is central to providing residential amenity and to maintain the amenity of adjacent public spaces.

Placing an outdoor recreational space between a house and a road will result in a demand from residents to erect a tall solid fence to give them privacy. This in turn will erode the usability of the streetscape and disconnect the property from the street. However, placing the space to the rear will avoid this cascade of outcomes.



ABOVE: A CLOSE RELATIONSHIP WITH THE STREET; FRONTS FACING THE PUBLIC DOMAIN AND PRIVATE SPACE PROVIDED AT THE SECLUDED REAR.



ABOVE: THESE UNITS ARE IN ROWS, ONE BEHIND THE OTHER. THE FRONTS OF EACH ROW FACE INTO THE REAR OF THE NEXT, CREATING CONFLICT AND PRIVACY ISSUES

FRONT:

Minimal Front yard is a buffer space only, not an amenity space. This allows for low walls / fences, active interaction, and surveillance between the street and houses. A living room at ground level facing the street is also critical.

FRONT TO BACK SECTION:

BACK:

Maximised rear living space. High privacy, usability and amenity. Important to ensure good indoor—outdoor flow and make the space an extension of living area. Can be fenced to 1.8m in height.

To be effective, 'public' fronts and 'private' backs must face each other - treat like with like.

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5. Including the Sun

IMPORTANT TO ENABLE:

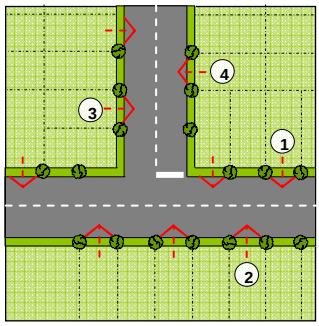
- → **HEALTHY, WARM HOMES;**
- → **ENERGY EFFICIENCY AND CONSERVATION, AND OPERATIONAL COST SAVINGS;**
- → **HELPS CONTRIBUTE TO MOISTURE CONTROL AND NATURAL VENTILATION;**
- → **IMPROVES RESIDENT AMENITY.**

Achieving active street frontage has been argued as being a critical pre-requisite to high amenity public environments that support pedestrian movement and safety.

An equally important consideration is the way in which each dwelling is oriented and internally laid out to maximise solar gain and access. This contributes to healthier, warmer living environments.

These two interests are not in competition, and through sensitive design an acceptable 'win-win' is always possible. Units with good solar access still need to achieve good street frontage, and vice versa. There are four basic site frontage conditions, varied by road orientation, topography, and other environmental factors (refer figure to the left):

(**1**) east/west street (avoid where possible), and the site faces SOUTH
(**2**) east/west street (avoid where possible), and the site faces NORTH
(**3**) north/south street (use as a preference), and the site faces EAST
(**4**) north/south street (use as a preference), and the site faces WEST



ABOVE: THE FOUR BASIC FRONTAGE CONDITIONS. ROADS RUNNING AT DIFFERENT ORIENTATIONS TO THESE (E.G. NE / SW OR 'DIAGONAL') CREATE SITES WHOSE CONDITIONS ARE VARIANTS OF THESE BASIC TYPES.

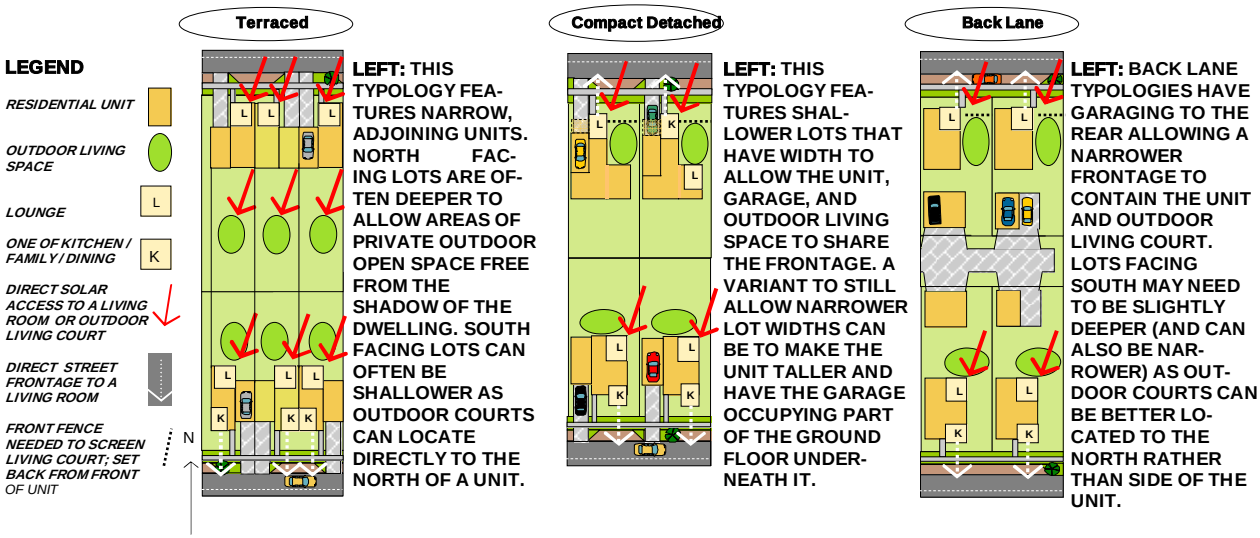
In conditions 1, 3, and 4 both good street frontage and good solar orientation are easier to achieve, being subject to the design of the unit; layout of dining, kitchen, and lounge/family rooms; and connection to any adjoining buildings. On north / south streets it is possible to get all-day sun to all living rooms as lots turn their longest dimension towards the sun. Only steep topography, existing tall vegetation, or existing tall buildings may interfere with solar access (irrespective of whether or not the unit also fronts the street). A key approach with conditions 3 and 4 is to place garages and building mass to the south of a site, with private outdoor living spaces 'behind' and north of buildings.

Condition 2 can be more problematic. This is because it can be desirable to locate the outdoor living space in front of the house, which can then create frontage issues. Some specific design solutions for this particular condition are presented on this page (below).

Depending on the location of garaging and internal layout, it is often possible to distribute living rooms so that one will always be able to receive direct sunlight (e.g. lounge facing north and east, family room facing north and west).

Design for solar gain is inseparably related to the use of materials, mass, and insulation. It is also about the manipulation of ventilation and movement of warm / cool air through a building. Care should be taken to reach an overall perspective on the merits of a building - 'less' direct solar access coupled with thermal mass and heat transfer techniques can create a much healthier outcome than a single focus on 'more' solar access alone.

In this respect, while terraced housing and apartment forms may create less opportunities for direct solar access per unit due to the proximity of adjoining units and buildings (and a shorter 'window' of continuous time per day where direct solar access is possible into a living room), they can provide more opportunities for thermal mass and other techniques to conserve captured heat and energy.



LEFT: THIS TYPOLOGY FEATURES NARROW, ADJOINING UNITS. NORTH FACING LOTS ARE OFTEN DEEPER TO ALLOW AREAS OF PRIVATE OUTDOOR OPEN SPACE FREE FROM THE SHADOW OF THE DWELLING. SOUTH FACING LOTS CAN OFTEN BE SHALLOWER AS OUTDOOR COURTS CAN LOCATE DIRECTLY TO THE NORTH OF A UNIT.

LEFT: THIS TYPOLOGY FEATURES SHALLOWER LOTS THAT HAVE WIDTH TO ALLOW THE UNIT, GARAGE, AND OUTDOOR LIVING SPACE TO SHARE THE FRONTAGE. A VARIANT TO STILL ALLOW NARROWER LOT WIDTHS CAN BE TO MAKE THE UNIT TALLER AND HAVE THE GARAGE OCCUPYING PART OF THE GROUND FLOOR UNDERNEATH IT.

LEFT: BACK LANE TYPOLOGIES HAVE GARAGING TO THE REAR ALLOWING A NARROWER FRONTAGE TO CONTAIN THE UNIT AND OUTDOOR LIVING COURT. LOTS FACING SOUTH MAY NEED TO BE SLIGHTLY DEEPER (AND CAN ALSO BE NARROWER) AS OUTDOOR COURTS CAN BE BETTER LOCATED TO THE NORTH RATHER THAN SIDE OF THE UNIT.

6. Open Space

IMPORTANT TO ENSURE:

- → **GOOD ON-SITE AMENITY;**
- → **USEABLE, COMFORTABLE AND ATTRACTIVE OPEN SPACE;**
- → **IN CONJUNCTION WITH SMALLER PRIVATE LIVING COURTS / BALCONIES, PROVIDE FOR RESIDENTS' DAILY RECREATION NEEDS;**
- → **BROADEN THE EXPERIENCES POSSIBLE TO RESIDENTS.**

District Plan requirement: Each unit to provide its own 30m^2 outdoor living space with a minimum 2.5m dimension and the ability to accommodate a 4m diameter circle (with a maximum gradient of 1:8). The space must be directly accessible from a lounge, family room or dining room.

The space must be designed to achieve (taking into account any permitted baseline of building bulk on immediately adjacent properties) sunlight access for at least 1 continuous hour between 11:00am - 2:00pm calculated on the winter solstice, June 21.

In instances where topography and orientation will not allow such immediate access without compromising design, the living court may not be directly accessible however instead an additional balcony of a minimum 6m^2 area with a minimum dimension of 1.5m must be provided immediately off a lounge or family room. The area of the balcony may be subtracted from the 30m requirement, with the balance still being provided as outdoor living space.

Open space is required to provide for residents' daily recreation and leisure needs. In addition it provides amenity such as allowing for gardening / landscaping hobbies, and through the opportunity to have outdoor dining and barbecues. In developments with a repetitive unit form, the ability to landscape and plant outdoor space can be a key method in expressing the individualism and identity of residents.

The space should also provide outlook amenity and be designed to maximise views and a sense of openness. The use of steep, un-developable or 'leftover' land for open space should be avoided as it will result in a space with little amenity or practical use.

Developments should consider earthworks to form a good outdoor space as crucial as those to establish the building platform .

Developers may additionally consider the benefits of communal open space that can include swimming pools, tennis courts, basketball half-courts and the like, or indoor facilities such as gymnasiums or a/v rooms. While not required by the District Plan for medium density developments, these are a crucial element of higher density developments (such as apartments or where densities otherwise exceed around 1:200), and can add substantial market value to a development.

ABOVE: ADEQUATELY SIZED OPEN SPACES FOR RESIDENTS PROVIDES AREA FOR EXPRESSION, RECREATION, AND VITAL AMENITY.

ABOVE: OUTDOOR LIVING SPACES NEED TO CONNECT DIRECTLY TO LIVING ROOMS TO BE MOST EFFECTIVE, AND WILL ACT AS AN EXTENSION OF LIVING ROOMS.

7. Access, Parking, Cycling and Pedestrians

IMPORTANT TO ENSURE:

- → **CREATION OF ENVIRONMENTS THAT ARE SAFE, INTERESTING AND EASY TO WALK AND CYCLE AROUND;**
- → **MAINTAINING THE AMENITY OF PRIMARY PEDESTRIAN AND CYCLE ROUTES;**
- → **SAFETY, LEGIBILITY AND COMFORT FOR PEDESTRIANS AND CYCLISTS.**

District Plan requirement: Parking at the rate of 1.5 parking spaces per unit (average). In calculating this, each unit must be provided with at least 1 space, and no more than 2 spaces per unit may count towards the average.

Units fronting a street provide their own pedestrian access. Rear units to have a delineated pedestrian path (different material or colour) along any carriageways to the street frontage.

It is important to provide safe vehicle, cycling and pedestrian access and parking to developments whilst minimising the disruption of street frontages. On street parking should be provided wherever practical because of the high degrees of re-use available, as well as the contribution to activity and interaction within the public realm. Parking in between buildings and the street should be avoided where possible. Opportunities for cycling should be maximised including provision of parking and storage to encourage use of cycles.

ABOVE: POOLED VISITOR PARKING AREAS CAN PROVIDEOVERFLOW PARKING BUT CAN ALSO REQUIRE LONG AND ILLOGICAL WALKS TO UNITS. WHEREVER POSSIBLE DEDICATED AND FORMED ON-STREET BAYS ARE PREFERABLE AS THEY FOCUS ACTIVITY TOWARDS THE STREET AND ALSO PROVIDE CONVENIENT PARKING ADJACENT TO A VISITOR'S DESTINATION.

Attached and multi-unit housing

For attached dwellings, if garaging is provided to each unit directly off the street, it should be recessed from the frontage by at least 1m. Where parking is provided via a rear lane, care should be taken to maintain the amenity of the laneway, by including planting, variations of paving treatment, and variations of rear building facades.

Breaks to the continuity of the pedestrian footpath can be minimised by limiting the width of crossings for both individual and multi-unit buildings to 5m and by using shared driveways. If mountable kerbing is used, care must be taken to ensure a buffer between the kerb and pedestrian pathways is provided to prevent vehicles continuously occupying large parts of the pathway.

ABOVE: PROVIDING STACKED AND OVERFLOW PARKING FOR EACH UNIT CAN EFFECTIVELY KEEP A NARROW ROADING SYSTEM FREE.

Detached housing

Garaging directly off the street should be recessed at least 1m behind the dwelling's façade. Where on site parking and/or double garaging is provided, minimise the effect on pedestrian footpath continuity by limiting the width of the driveway crossing to 3m.

Pedestrian and cycle access

Pedestrian access should be differentiated from vehicle access, at least through the use of surface and texture differentiation. Preferably this will include some manner of buffer, such as a raised surface or vegetation.

While vehicle access points to a development will be limited, opportunities for pedestrian movement will tend to be far more flexible, and it is often possible to provide multiple linkages and access points that connect logical movement patterns with the site and adjacent services. Overall a focus on providing for convenience in movement should be had.

Off road cycle paths can be provided as shared paths where roads are busy or high speed otherwise make provision for cyclists on road by creating a slow speed environment. Ensure that pedestrian and cycle paths link destinations such as parks.

ABOVE: A RANGE OF PEDESTRIAN ROUTES TO AND THROUGH DEVELOPMENT, DISPERSING FOOT TRAFFIC AND CREATING OPPORTUNITIES FOR OPEN SPACE, OUTLOOK, AND BUILDING FRONTS AND BACKS TO BE BETTER ORIENTED.

8. Servicing, Deliveries, and Waste

IMPORTANT TO ENSURE:

- → **CONTRIBUTION TO HEALTHY LIVING CONDITIONS;**
- → **CREATING HIGH AMENITY AND DISTINCTIVE ENVIRONMENTS;**
- → **ACCOMMODATING THE SERVICING REQUIREMENTS OF DIFFERENT ACTIVITIES WHILE PROTECTING THE AMENITY OF THE NEIGHBOURHOOD.**

District Plan requirement: Landscape Plan to include details of waste storage and collection for individual units and storage on collection day, including how convenient access between units and collection points is provided.

All services to be placed underground.

Every unit to be provided with a dedicated, enclosed service / storage space either within each unit or within convenient access of a service room (i.e. kitchen, laundry, or garage).

Average refuse output can be up to 3kg (~27L) of household waste, and 1.6 kg (~22L) of recyclables **per person**, **per week**. If public or private recycling initiatives are in place, this waste can occupy an even greater area if segregated into separate containers or piles.

Due to the roadside collections necessary for disposal, significant volumes can collect on the street adjacent to medium density housing developments. While this can be in part managed by the use of private contractors in smaller vehicles that can come on-site, it can still result in very large waste collections in key, visually exposed and central areas in a development.

The Kapiti Coast uses an optional 'wheely bin' approach which avoids most hygiene issues however for visual amenity purposes rubbish storage and collection facilities should be located in a manner that will not degrade the amenity of the streetscape or the view of the development from the street. Dedicated service and rubbish storage areas should be provided on-site and softly screened from any surrounding residential areas (for example by trellis or planting rather than solid walls). Adequate storage facilities should be provided for communal rubbish (including recycling) collection facilities. These facilities should be screened from public view and easily accessed by rubbish collectors.

The simplest way of achieving this is to provide an additional 'car parking space' (screened) near the street that can be used as the communal collection point.

ABOVE: POORLY DESIGNED WASTE STORAGE AND COLLECTION POINTS CAN UNDERMINE A DEVELOPMENT'S VISUAL APPEAL, AS WELL AS INTERFERE WITH PEDESTRIAN MOVEMENT AND PRESENT HEALTH AND SAFETY RISKS.

ABOVE: INTEGRATED WASTE COLLECTION / SERVICING POINTS CAN BE SIMPLE ADDITIONS THAT MAINTAIN THE QUALITY OF DEVELOPMENTS.

3

Building Elements

This section addresses the building elements that contribute to superior outcomes. It includes:

1. Front doors and entrances
2. Fences and walls
3. Building height
4. Diversity and choice
5. Energy efficiency & water conservation

1. Front doors and entrances

IMPORTANT TO ENSURE:

- → **CONTRIBUTION TO THE AMENITY OF THE STREET ENVIRONMENT;**
- → **LOCATIONS OF DIFFERENT USES ARE EASY TO FIND AND ACCESS;**
- → **GOOD ON-SITE FUNCTIONALITY, COMFORT AND AMENITY.**

District Plan requirement: A unit entrance feature or bay window may extend up to 1.5m into a front yard setback for a maximum (combined) width of 3.0m to emphasise a front door.

ABOVE AND BELOW: UNIT ENTRANCES ARE IMPOSSIBLE TO SPOT FROM THE MAIN ENTRANCE FORCING VISITORS TO WANDER; GARAGING COMPELTELY DOMINATES THE STREETSCAPE.

General

Well designed and located entrances can bring significant benefits to the local environment. Where possible, they should:

- → be located close to the street and be visible from the street, so that they are easy to find and safer to use
- → provide good shelter for visitors
- → add to the visual character of the building
- → be well lit at night
- → allow for the convenient movement of furniture
- → be given early consideration in the design with the convenient location of mailboxes.

Apartments

Where apartments have parking or communal areas to the rear, entrance ways should be at least 2m wide so that access is gained from the front as well as the rear. If through access is not provided, visitors have to access from the rear or residents who park at the back have to enter from the front.

For large apartment buildings, separate entrances should be provided to ground floor apartments directly from the street where possible. This reduces the number of people sharing in the common areas and creates differences in unit types to meet different resident needs.

ABOVE: EXAMPLES OF MEDIUM DENSITY DEVELOPMENTS WHERE PRONOUNCED ENTRANCE POINTS HAVE BEEN MADE THROUGH ARCHITECTURE, MATERIALS, AND COLOUR.

ABOVE: POOR LEGIBILITY OF ENTRANCES.

ABOVE: CLEARLY IDENTIFIABLE ENTRY POINTS.

2. Fences and Walls

IMPORTANT TO ENSURE:

- → **SOCIALLY ACTIVE AND SAFE ENVIRONMENTS;**
- → **PRIVACY FOR RESIDENTIAL UNITS;**
- → **CONTRIBUTION TO THE VISUAL CHARACTER OF THE NEIGHBOURHOOD.**

District Plan requirement: Maximum fence / wall height (including a combination of the two) is 1.8m, unless along a front boundary or any boundary within the Front Yard, where the maximum height is 0.8m. Refer to District Plan as additional controls apply when adjacent to a public reserve, and also to the Subdivision and Development Principles and Requirements.

Fencing or screening of a low-level (no taller than 800mm) should be provided along front boundaries as an important marker of space ownership to distinguish the limit of appropriate public access.

Aside from this however, taller fencing and walls outside of a front yard can be appropriate to ensure privacy and amenity to living and service spaces.

The design of fencing should complement the architectural character of the residential units and should be seen as a building element of the design scheme. Poor outcomes result when fencing is used in a manner that does not relate to the architecture of a development.

When designing, consideration of the end use of the land in question is important. Determining the way in which future residents will be likely to behave in respect of fencing will influence the appropriateness of a certain layout. A particular conflict can result between the need for sunlight access and privacy, and later 'retrofitting' of space by residents to install tall solid fencing around living courts to ensure privacy can be a common issue.

The use of solid, blank walls should be avoided as they can significantly degrade amenity.

BELOW: AN EXAMPLE OF LOW FENCING AND SCREENING THAT ADD TO THE VISUAL APPEAL AND AMENITY OF THE UNIT.

BELOW: THESE FENCES PROVIDE LITTLE AMENITY TO THE ADJOINING PUBLIC SPACES, AND DO NOT EVEN RELATE TO THE ARCHITECTURE OF THE BUILDINGS.

ABOVE: (VEHICLE ACCESS FROM A REAR LANE) TALL FENCING OFTEN ACCOMPANIES A POOR FRONTAGE TO A STREET. IT PREVENTS ANY STREET SURVEILLANCE OR PEDESTRIAN SAFETY, AND CAN BECOME A TARGET FOR GRAFITTI.

ABOVE: (VEHICLE ACCESS FROM A REAR LANE) LOWER FENCES OR WALLS PROVIDE SIGNFICANT VISUAL INTEREST AND STREET INTERACTION, CAN PROVIDE SAFETY BENEFITS AND BETTER STREET SECURITY.

3. Building heights

IMPORTANT TO ENSURE:

- → **CONTRIBUTION TO THE CREATION OF SOCIALLY ACTIVE AND SAFE PUBLIC SPACE ENVIRONMENTS;**
- → **GOOD ON-SITE AMENITY ;**
- → **PRIVACY AND SAFETY.**

District Plan requirement: Maximum building height of 10m as well as compliance with Height to Boundary planes.

Appropriate building height is important not only in achieving good unit layouts and designs, but also in maintaining an appropriate character and mass interface with adjacent areas.

In areas where a predominant one-storey character exists, a two-storey height limit will be appropriate, with three-storeyed variants occasionally possible when designed into the interior of a site.

Generally speaking, three storey designs will be most appropriate in and around town centres and nodes where this height will not undermine existing amenity values.

When designing medium density housing, it is important to maximise the availability of height. This provides for more visual interest, higher unit yields in many instances, and a lower overall ecological footprint. This can contribute to urban sustainability particularly in respect of impervious surface and stormwater runoff.

The use of single-level typologies in medium density housing are very rarely efficient and are more appropriate in general density subdivisions.

ABOVE: AN INCREASE IN BUILDING HEIGHT FROM A SINGLE STOREY (THE KAPITI COAST CONVENTION) TO A 2-STOREY HEIGHT CAN BE DESIGNED COMPATIBLY SO AS TO NOT DOMINATE THE SINGLE STOREY NEIGHBOUR.

4. Diversity and Choice

IMPORTANT TO ENSURE:

- → **UNITS ARE RESPONSIVE AND WILL BE ABLE TO BE USED AS POPULATION AND HOUSEHOLD STRUCTURES CHANGE WITH LITTLE MODIFICATIONS REQUIRED;**
- → **THE LARGEST TARGET AUDIENCE AND MARKET WILL BE AVAILABLE FOR SALE AND RE-SALE PURPOSES;**
- → **RESIDENTS WILL BE ABLE TO LIVE IN A UNIT FOR A POTENTIALLY LONG TIME AS THEIR NEEDS AND PREFERENCES CHANGE.**

It is important that units are able to be used by a wide demographic range rather than narrow user groups. This will enhance their robustness and appeal to market changes, as well as resulting in the most diverse and mixed populations within a development. Typologies should be compatible with the needs of all age groups and where possible with the less-abled.

It is also vital that people are able to exercise choice in how long they live in a dwelling, rather than being forced out as their circumstances (including mobility) change over time.

As an example, three-storeyed, narrow townhouses can efficiently maximise a site however can be prejudicial to use by children and the elderly if only one unit typology is used in a development.

To avoid such limitations, it is desirable that in a development, particularly large ones, a range of dwelling types are provided, rather than the use of one 'template' that is identically reproduced. This can also bring the benefit of added visual interest and diversity.

GROUND FLOOR **FIRST FLOOR**

ABOVE: A GOOD MEDIUM DENSITY HOUSING TYPE THAT PROVIDES BEDROOMS ON AN UPPER LEVEL. THIS NECESSITATES THE USE OF STAIRS AND CAN THERFORE BE OF LIMITED USE TO THE ELDERLY OR LESS-ABLED.

GROUND FLOOR **FIRST FLOOR**

ABOVE: THIS TYPOLOGY PROVIDES A GOOD GROUND FLOOR LIVING ARRANGEMENT INCLUDING A SECLUDED BEDROOM / ENSUITE. THIS IS MUCH MORE 'FRIENDLY' TO THE ELDERLY AND LESS-ABLED WHO CAN LIVE ON ONE FLOOR IF DESIRED.

5. Energy Efficiency & Water Conservation

IMPORTANT TO ENSURE:

- → **MORE SUSTAINABLE ENVIRONMENTS AND INTERNALISED IMPACTS;**
- → **LONG-TERM SAVINGS TO RESIDENTS**

District Plan requirement: Site analysis to identify ecological issues and restraints.

Energy efficiency

Energy efficiency can make an important contribution to relieving environmental pressures as well as producing cost savings. Investment in cost effective approaches can produce financial benefits with a short payback period.

The use of sustainable development principles in the construction and design stages can help to reduce energy use and greenhouse gases produced within households. Consideration of both direct and indirect impacts of developments (such as how residential uses relate to schools, services, and amenities and in turn inform transport patterns and vehicle use) can help inform more sustainable outcomes.

During the design stage, consider the following:
Design houses so they require less energy for space heating and cooling

- → design with increased insulation including double glazing and thermal drapes.
- → use daylight and passive solar gain / design-with longer building axis in the east west direction
- → use eaves on north to let sun into habitable rooms in winter and keep it out in summer (eave depth 32% of window height)
- → limit south facing windows that lose heat in winter
- → limit and shade western windows to prevent overheating
- → use the solar heat storage gains achieved by insulated concrete floors (without carpets) and or walls.
- → use natural ventilation where practical to cool dwelling
- → use solar hot water panels and or photovoltaic power systems, in conjunction with the design of roof planes oriented to the north and northwest

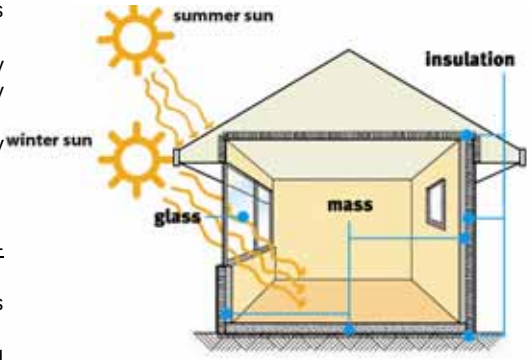
When specifying materials

- → consider the total life-cycle energy required to produce materials being used and seek to obtain those that require the least energy
- → using local materials in construction can reduce energy costs by more than a factor of 3, and reduce impacts from transportation by more than a factor of 6
- → select products with 'Environmental Choice' labelling and energy efficient rated appliances

During the construction stage, consider the following:

- → undertake construction based on good planning to reduce construction wastes
- → minimise the use of new resources, e.g. by using recycled materials and limiting the use of energy from non-renewable resources
- → use energy saving construction methods such as avoiding the need for heaters to dry wet framing timber by erecting marquees / tarpaulins around building exteriors.

ABOVE: THE DELIBERATE USE OF EAVES TO CONTROL SUNLIGHT ACCESS.



ABOVE: EAVES CONTROL SUNLIGHT ALLOWING WINTER SUN TO WARM INSULATED THERMAL MASS.

Further information

Institute of Professional Engineers of New Zealand (IPENZ)

- → www.ipenz.org.nz - *sustainable buildings information and checklist*

Energy Efficiency and Conservation Authority (EECA)

- → www.eeca.govt.nz - *building design guidelines; residential energy efficiency; renewables database*
- → *Designing Comfortable Homes (book available from CCANZ)*

BRANZ

Water use, conservation, and management.

The Sustainable Water Use Strategy aims to achieve a water use of 400 litres per person per day. This is based on 250 litres for household use and 150 litres for outside use.

In addition, the Council hopes that by 2013 80% of dwellings will have access to a non-potable water source for outdoor irrigation.

Making dwelling lots and landscaped areas less reliant on public-supplied water can provide for greater resilience in times of shortage or allocation, maintaining outdoor amenity and the attractiveness of developments.

Managing stormwater on-site using low impact techniques can reduce the load on the District's stormwater system. In general, the more stormwater that can be utilised and retained on site, the less impact the development will have on the receiving environment and infrastructure.

The following water management techniques should be considered:

- → minimise impermeable surfaces in order to reduce stormwater runoff (for example semi-permeable pavers for parking areas)
- → where possible, recycle grey water from laundry and bathroom (not toilet or kitchen) for reuse as landscape irrigation and other non-potable uses
- → collect rainwater to flush toilets for laundry use and outdoor irrigation
- → incorporate infiltration and filtration devices to filter sediments and pollutants out of stormwater -such as rain gardens, swales, modular paving and filters
- → use water efficient appliances, including washing machines, dual flush toilets and dishwashers. Use shower heads and taps that consume less water while providing convenience and comfort to conventional shower heads.

Further information

General dwelling sustainability:

- → "*Sustainable Home Guidelines*", Waitakere City Council;
- → "*Developers' Design Guides*", Waitakere City Council.

Stormwater

- → www.wsud.org

ABOVE: MANAGING LONG-TERM WATER QUALITY OF THE KAPITI COAST DURING URBAN DEVELOPMENT AND GROWTH IS A KEY SUSTAINABILITY ISSUE FOR THE DISTRICT.

ABOVE: POROUS PAVING HELPS TO REDUCE IMPERMEABKE SURFACES.

ABOVE: AN EXAMPLE OF A RAIN GARDEN (SOURCE: LOW IMPACT DESIGN MANUAL, AUCKLAND REGIONAL COUNCIL).

4

Visual Amenity and Character

This section addresses the visual amenity and character factors that contribute to superior outcomes. It includes:

1. Responding to local character
2. Providing for appropriate building mass
3. Material and detail design
4. Garages
5. Repetition with diversity
6. Landscape design

1. Responding to Local Character

IMPORTANT TO ENSURE:

- → **CREATION OF RICH AND MEMORABLE NEIGHBOURHOODS;**
- → **STRENGTHENING OF COMMUNITY ASSOCIATION WITH NEIGHBOURHOOD;**
- → **RETENTION AND ENHANCEMENT OF THE 'MEMORY' AND HISTORY OF A PLACE;**
- → **CREATION OF HIGH AMENITY AND DISTINCTIVE ENVIRONMENTS THAT ATTRACT DIFFERENT BUSINESS TYPES TO ESTABLISH.**

District Plan requirement: Site Analysis to include identification of local character issues / significance.

The Kapiti Coast has a clearly dominant build character based around the detached, weatherboard and iron-roofed dwelling. Simple materials, a strong relationship with the water and a 'bach at the beach' architecture is common.

Where there is a discernable heritage or character to a local area this should be recognised by new development. The initial site analyses should determine which of the following elements contribute significantly to the neighbourhood character:

- → location of buildings relative to the street
- → building scale/bulk
- → building forms and rooflines
- → architectural devices
- → proportions of windows and other elements
- → materials and colours
- → planting.

Contemporary architectural responses are encouraged provided they illustrate a respect for the aforementioned elements.

The future desired character of the area should also be considered. The design should take into account the combined effect of adjacent properties intensifying within the parameters specified in the District Plan.

BELOW: SNAPSHOTS OF KAPITI COAST BUILT CHARACTER

TRADITIONAL VERNACULAR

CONTEMPORARY INTERPRETATION

ABOVE: MATERIAL CHOICE AND CONTEMPORARY USE OF TRADITIONAL CHARACTER ELEMENTS CAN INSPIRE WELL INTEGRATED OUTCOMES. IN THIS INSTANCE THE 'BACH ON THE BEACH' HAS BEEN INTERPRETED AND BOTH EXAMPLES COULD BE USED IN MEDIUM DENSITY DEVELOPMENTS.

ABOVE: THIS MEDIUM DENSITY HOUSING DEVELOPMENT ON THE NORTH SHORE IS BASED ON AN ARCHITECTURAL THEME AND HERITAGE COMMON TO ITS LOCALITY, RIGHT DOWN TO FENCE DESIGN.

ABOVE: THIS DEVELOPMENT UTILISES A CONTEMPORARY DESIGN BUT UTILISES MATERIALS AND ARCHITECTURAL CUES FROM THE EXISTING HOUSING AROUND IT.

2. Finishing and Detail Design

IMPORTANT TO ENSURE:

- → **CONTRIBUTION TO ON-SITE AMENITY;**
- → **CONTRIBUTION TO THE VISUAL QUALITY OF THE ADJOINING PUBLIC OPEN SPACE AND WIDER NEIGHBOURHOOD CHARACTER.**
- → **CRITICAL IN EXPRESSING GOOD-QUALITY AND DISPELLING ANY 'SLUM HOUSING' CONNOTATIONS**

The quality and visual appeal of buildings can be greatly enhanced through a careful consideration of detailed design elements. A key factor in the success of medium density housing developments is also in expressing a sense of high quality. This is essential to balance any perceptions of medium density housing being 'slum-housing'. This perception can be common in New Zealand given its detached housing, 1/4-acre tradition and is worsened when a development appears to be run-down and poorly constructed.

Attention should be paid to design proportions, building form, details and materials for each development. Using long-lasting, durable materials, simple structures and a good architect or designer usually delivers the best results. The visual character and overall success of a development often relies on the care and attention which is given to building design at the detailed level. Combining quality construction techniques and finishings with skilful craftsmanship is the best way to achieve this.

ABOVE: AN ENLARGED PORTION OF A POORLY FINISHED DWELLING, WITH A PLASTER FINISH FAILING TO PROVIDE EITHER AN EVEN OR EFFECTIVE COATING. THE CONCRETE BLOCK WORK IS CLEARLY VISIBLE THROUGH THE FINISH, GIVING THE NEW DWELLING AN ALREADY BADLY AGED APPEARANCE.

ABOVE: EFFECTIVE VARIATIONS IN MATERIALS TO MATCH ARCHITECTURAL FEATURES DO NOT REQUIRE SUBSTANTIAL ADDITIONAL COSTS BUT CAN BE HIGHLY EFFECTIVE TO ADD INTEREST AND VARIETY TO AN OTHERWISE PLAIN BUILDING FORM.

ABOVE: VARIED USE OF A LIMITED MATERIALS PALETTE CAN BE EFFECTIVE IN BREAKING UP BOTH MASS AND REPETITION OF A MODULAR BUILDING FORM.

ABOVE: THIS DEVELOPMENT HAS FAILED TO USE MATERIALS THAT WILL EITHER AGE OR WEATHER WELL. AS A RESULT, THE BUILDINGS HAVE BECOME TARGETS FOR COMMON CRITICISMS OF MEDIUM DENSITY HOUSING DEVELOPMENTS, AS WELL AS FAILING TO INCREASE IN VALUE AT AN EQUIVALENT RATE TO NEAR-BY MEDIUM DENSITY HOUSING.

3. Providing for appropriate building mass

IMPORTANT TO ENSURE:

- → **RECOGNITION OF EXISTING NEIGHBOURHOOD CHARACTER**
- → **CONTRIBUTION TO VISUAL QUALITY OF PUBLIC SPACES**
- → **CREATING VISUAL INTEREST.**

District Plan requirement: 12m max. building length before a minimum 3m x 3m recess is required. The recess(es) are to be at least 1.0m shorter than the height of the adjacent building. In addition, a Height to Boundary control of 2.1m + 45 affects all boundaries facing the southern half of the compass, and 3.1m + 45 for the northern half. No HiRB affects the front (street) boundary. Lastly, a maximum site coverage of 50% applies.

The visual character of traditional areas can often be seriously devalued during intensification where new visually prominent and intensive developments dominate their surroundings. High quality designs should be produced to ensure that new buildings enhance their environments and mitigate visual effects. Key aims should be to:

- → reduce the effects of the mass of large buildings on their surroundings
- → produce attractive buildings with a strong design emphasis, good proportions and composition of elements, not just a form that results from the functional requirements of the plan
- → generate a sense of ownership for separate residents.

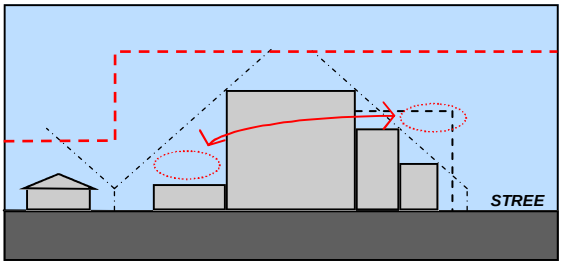
The following measures should be considered:

- → design large developments to appear as a collection of distinct buildings
- → articulate a base, middle and top to the building
- → use proportion and rhythm as a device to organise façades
- → apply variations in height and set back
- → apply variations in material and colours
- → use secondary elements such as balconies and other projections to break up the mass of the building
- → use recesses to create articulation and shadowing
- → articulate building entries with awnings, porticos and recesses.
- → use vertical elements to express different ownerships, allowing people to personalise their space. This, in turn, can contribute to the visual complexity of the building
- → use different balcony profiles to create variation
- → vary balustrade details.

Detached and attached dwellings

The following additional design measures should also be considered:

- → use a variety of house plans
- → step the units to articulate different ownerships, creating visual interest
- → provide opportunities to personalise entranceways.



LEFT: DISTRICT PLAN RULES ARE ONLY ABLE TO PROVIDE A BOTTOM-LINE LEVEL OF SURETY AND CAN RESULT IN FORCING DEVELOPMENT TO UNDESIRABLY 'PYRAMID' INTO THE MIDDLE OF A SITE. CAREFUL ANALYSIS TO ADJACENT AMENITIES MAY JUSTIFY A MORE 'EFFECTS-BASED' SOLUTION.

ABOVE: THIS DEVELOPMENT HAS DELIBERATELY DROPPED TO A SINGLE LEVEL AT ITS STREET FRONAGE (RIGHT END OF BUILDING) TO REDUCE DOMINANCE AND MASSING ON THE STREET.

ABOVE: THIS ONE BUILDING HAS BEEN DESIGNED TO READ AS SEVERAL TO AVOID ADVERSE VISUAL MASSING EFFECTS.

ABOVE: POORLY MANAGED BUILDING MASS—THE UNITS READ AS A SINGULAR BUILDING AND WITHOUT A CONTEXT IS DIFFICULT TO IDENTIFY AS EVEN RESIDENTIAL IN PURPOSE.

4. Garages

IMPORTANT TO ENSURE:

→ **CREATION OF SOCIALLY ACTIVE AND SAFE PUBLIC SPACES;**

→ **CREATION OF A SENSE OF THE STREET AS A PLACE FOR PEOPLE RATHER THAN A PLACE FOR VEHICLE ACCESS;**

District Plan requirement: Garages to be recessed at least 1.0m behind the front façade of a unit whether it fronts a street or not. A single-level garage may locate within a side or rear yard with neighbour's written approval.

General
Garages often have a significant effect on the visual character of a building. This equally applies to individual houses, apartments and terraced buildings.

Where possible, large buildings should provide basement parking. Design considerations should include:

- facilitating natural ventilation
- integrating ventilation grills into façade design
- providing safe and secure access for building users
- providing a logical and efficient structural grid.

Terraced housing and apartments
Garages should not be visible from the street, instead located behind the buildings, in basements, or at upper levels. Upper level garages or parking should not be visible from the street. Where this is unavoidable the elevations should be designed with particular care. The area of windows or other openings should not exceed the area of solid wall.

Attached and detached dwellings
Garages accessed from the street frontage should be set back from the façade of the house. Stacked parking can provide additional on-site parking. Communal driveways can be used to locate parking to the rear of a site for cluster housing.

Back lanes can usefully remove parking from the street frontage. If used they should be at least 10m wide.

ABOVE: POORLY MANAGED GARAGING, WHICH DOMINATES THE FRONTAGE AND APPEARANCE OF THE UNITS.

ABOVE: WELL MANAGED GARAGING, WHICH RECEDES, LEAVING MAIN HABITABLE PARTS OF THE DWELLING AS THE MOST DOMINANT FEATURE FROM THE STREET.

ABOVE: TWO ALTERNATIVES FOR TREATING IDENTICAL UNITS. ONE DOMINATES THE STREET AND CREATES AN UNFRIENDLY PEDESTRIAN ENVIRONMENT, THE OTHER MINIMISES VEHICLE DOMINANCE BY RECESSION AND THE USE OF A SINGLE WIDTH GAGARE AND STACKED SECOND PARKING SPACE / CARPORT.

ABOVE: DELIBERATE SUPRESSION OF GARAGING TO CREATE A VISUAL EMPHASIS ON THE HOUSE WILL ALSO CERATE A MUCH MORE PEDESTRIAN-FRIENDLY STREETSCAPE.

5. Repetition with Diversity

IMPORTANT TO ENSURE:

- → **CONTRIBUTION TO ON-SITE VISUAL AMENITY;**
- → **CONTRIBUTION TO THE VISUAL QUALITY OF THE ADJOINING PUBLIC OPEN SPACE AND WIDER NEIGHBOURHOOD CHARACTER;**
- → **MANAGEMENT OF THE EFFECTS OF SCALE AND MASS.**

Repetition of building units can result in very unattractive environments especially when low quality materials are used. This can also have a negative impact on the value of the development over time relative to an 'average' increase of adjacent units.

Consider varying unit types and using high quality materials, as the repetition will have less negative effect. Other small variations can also be considered such as variations in elevation, colour and materials.

A combination of varied forms and material combinations can produce significant additional variation without incurring significant additional cost.

ABOVE: EXAMPLES OF DEVELOPMENTS THAT HAVE DEALT WITH REPETITION POORLY, RESULTING IN UNENGAGING AND BLAND FACADES.

BELOW: EXAMPLES OF SUCCESSFULLY MANAGED REPETITION.

ABOVE: MEDIUM DENSITY HOUSING CAN BE DEVELOPED ON A LARGE SCALE BUT WORKS MOST SUCCESSFULLY WHEN IT READS AS NUMEROUS DISCRETE BUT CLEARLY DISTINCT DEVELOPMENTS.

6. Landscape Design

IMPORTANT TO ENSURE:

- → **CONTRIBUTION TO THE VISUAL CHARACTER OF THE SITE AND NEIGHBOURHOOD;**
- → **CONTRIBUTION TO THE FUNCTIONALITY AND COMFORT OF OPEN SPACE;**
- → **PROTECTING AND ENHANCING ECOLOGICAL VALUES.**

District Plan requirement: Landscaping Plan to be submitted with land use consent applications including on-going maintenance and management schedule. Native vegetation to be provided over exotic species unless required to achieve a particular design requirement.

Good landscaping can greatly enhance any development, and can be effectively used to integrate development on adjoining sites.

The following landscaping approaches should be considered:

- → plant a wide range of species in communal or private open space areas to increase the diversity of planting;
- → seek opportunities to retain or plant new trees and support established or desired neighbourhood vegetation character
- → carefully select tree species for street environments: form, scale, flowering and leaf habit of species should be considered, as well as suitability to climate.
- → maximise permeable areas, including pervious paving, in order to reduce the effects of stormwater run-off
- → co-ordinate landscape design with the design of adjoining public open spaces.

When planting trees consideration should be given to:

- → the scale of the space
- → the effects on views
- → The effects on shading residential outdoor areas and adjoining public open spaces
- → leaves cluttering gutters and drains
- → The implications of growth and need for ongoing maintenance.

The design should consider how it can, through the use of hard and soft landscape elements, do the following:

- → define different areas of the site
- → contribute to the character of the site and quality of life for residents, particularly through the use of location specific design features and art elements.
- → contribute to the streetscape character and amenity of the public realm
- → complement the built character of the development
- → screen unsightly areas to provide privacy and amenity
- → minimise maintenance by using robust hard and soft landscape elements.

Basements

Design basement parking so that it does not extend across the full site leaving some deep soil for planting and trees. These are best when located contiguously with the deep soil zones of adjacent properties.

ABOVE: INCLUDING A DEDICATED RANGE OF PLANT SPECIES TO PROVIDE BOTH LOW AND MEDIUM LEVEL AMENITY.

ABOVE AND BELOW: LANDSCAPING SHOULD INCORPORATE MORE THAN JUST A PLANTING SCHEDULE AND A MIXTURE OF PLANTS. THE EFFECTIVE USE OF 'HARD' SURFACES LIKE THESE ALSO CONTRIBIUTES TO OPEN SPACE AMENITY.

ABOVE: THE MOST SUCCESSFUL OUTCOMES WILL ALSO INTEGRATE STREET-TREES WITH ON-SITE LANDSCAPING TO BEST ACCENTUATE GOOD BUILDING FORMS

5

Town Centre Addendum

1. Key amenity factors
2. Balconies
3. Common open space
4. Façade Design
5. Parking and Ground Floor Treatments

In the Paraparaumu and Waikanae town centres it is likely that medium density housing will be provided at densities between 1:250m2 and 1:150m2. High Density typologies denser than 1:150m2 will also be likely, purely because of the land values within the centres and the potential to accommodate more intensive populations due to the infrastructure and services available.

This addendum to the guideline seeks to provide advice beyond that provided in the guidelines to this point, to those considering housing within the town centres.

1. Key Amenity Factors

IMPORTANT TO ENSURE:

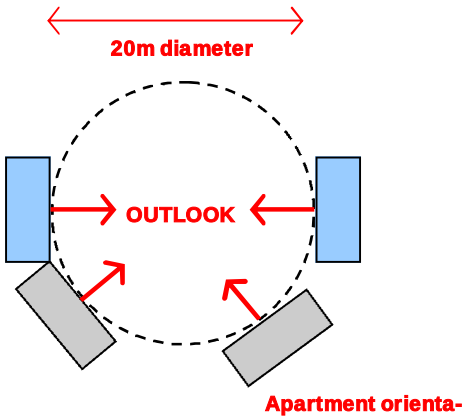
→ **SMALLER LIVING SPACES STILL PROVIDE A HIGH LIVING QUALITY;**

→ **SUITABLE VISUAL AND ACOUSTIC PRIVACY IS MAINTAINED;**

Visual Privacy and Outlook

While medium and low density typologies tend to have the majority of privacy issues mitigated by intervening distance, visual privacy can be a significant issue for apartments. As a guide, it is recommended that units be designed to carefully provide adequate privacy for residents. A 20m diameter circle should be used to help locate units on a development site as this allows for closer proximity between units where direct outlook between units decreases.

The 'fronts and backs' principle is or particular importance here and a key spoiler of amenity can be rows of units all with poor outlooks into other unit backs.



ABOVE: VISUAL PRIVACY RECOMMENDATION FOR APARTMENTS OR OTHER TYPOLOGIES LOCATED WITHN TOWN CENTRES.

Acoustic Privacy

Special consideration should be given to the level of acoustic insulation provided to each unit. The Kapiti Coast is relatively new to apartment living and has a more detached dwelling tradition where noise nuisance between units is unfamiliar. Even when in compliance with the minimum requirements of the Building Act, substantial nuisance between units can occur. Special consideration should be had of unit layouts in relation to each other, and materials to reduce noise transmission and vibration should be considered and if marketed correctly any additional costs can usually be recovered by purchasers.

Apartments Sizes

It is important that apartments as a living typology are not used as a mechanism to simply deliver small, cheap housing. As a guide, the following minimum dimensions should be used:

Studio apartments:	40m^2 min, 45m^2 average GFA
1 bedroom:	50m^2 min, 55m^2 average GFA
2 bedrooms:	60m^2 min, 65m^2 average GFA
3+ bedrooms:	70m^2 min, 75m^2 average GFA

In addition, it is important that as much of a range of unit sizes within each typology are provided. Developments that only provide a certain type of unit at a certain area of floor space tend to be non-robust to demographic changes over time and appeal to a very limited market audience. Ideally, developments will provide at least two different unit typologies (or three if studio and 1 bedroom typologies are favoured), to attract as varied a resident group as possible.

ABOVE: APARTMENTS SHOULD BE CONSIDERED AS A HIGH-QUALITY LIVING CHOICE, RATHER THAN JUST AS A WAY OF PROVIDING SMALL, STARTER HOUSING.

The use of very small apartments to provide quasi-student accommodation is discouraged as it will lack the specialisation of dedicated student accommodation facilities, and can have negative impacts on the apartment market especially in terms of long-term robustness and pricing for units with larger rooms (i.e. it can establish a false entry level to the market).

Storage / Service area

Each apartment should be provided with dedicated storage and service areas. Often a small balcony can become a quasi laundry and if not designed to accommodate can negatively affect street amenity.

Commonly, lockers of good size are also provided near parking areas giving the opportunity to conveniently store skis or similar equipment. Lastly,

A dedicated area to store rubbish in or adjacent to units is also essential to allow one weekly trip to a communal collection point rather than relying on several small trips during the week or unhealthy waste accumulation in units or common hallways.

ABOVE: INADEQUATE SERVICE SPACE CAN MEAN WASHING CAN DEGRADE A STREETSCAPE ESPECIALLY WHEN APARTMENTS ARE USED AS 'STARTER HOUSING' AND NATURAL DRYING OF CLOTHES IS A NECESSITY.

2. Balconies

IMPORTANT TO ENSURE:

- → **ESSENTIAL DAILY OPEN SPACE AND RECREATION NEEDS ARE PROVIDED;**
- → **CONTRIBUTION TO ON-SITE AMENITY BY PROVIDING PRIVATE OUTDOOR LIVING SPACE AT UPPER LEVELS;**
- → **CONTRIBUTION TO THE VISUAL CHARACTER OF SITE AND NEIGHBOURHOOD;**

Balconies can be effectively used to enhance the visual character of a building and improve the relationship between the public street and private development. Cantilevered balconies, partially cantilevered balconies and/or recessed balconies should be chosen in response to daylight, wind, acoustic, privacy, and visual privacy issues. Consideration should be given to how secondary, smaller balconies can be integrated into the overall architectural form and detail of buildings.

All apartment-types without back yards or private outdoor space should have balconies. Primary balconies should be accessed directly from indoor living spaces (i.e. living room, kitchen or dining room rather than bedrooms) and should be big enough to provide useable living space. To comfortably accommodate outdoor seating etc. in relation to the size of the unit, the following minimum dimensions are recommended:

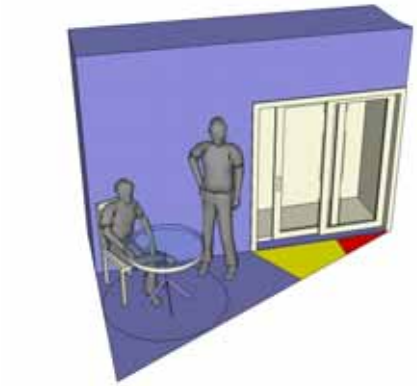
Unit type	Minimum area	Minimum dimension
1 bedroom	$4m^2$	1.2m
2 + bedrooms	$6m^2$	1.5m

Main balconies should be orientated to the north, east or west. Where balconies adjoin or are within 2m of each other, they should be screened for privacy and security. Cover overhead is desirable.

Ideally, a combination of balcony and adjacent building recess can provide spaces in excess of 2.0 - 2.5m in depth providing both covered and exposed areas. Such spaces tend to have the greatest usability and amenity for residents.

Attached and detached dwellings
Balconies are optional in attached and detached dwellings. However, they can be very effective when taking advantage of views from the front of the dwelling. In some instances, the ground level condition may not provide good on-site useable space and upper level balconies can provide a useful addition.

ABOVE: IN ADDITION TO PROVIDING ESSENTIAL LIVING SPACE, BALCONIES CAN DRAMATICALLY CONTRIBUTE TO THE VISUAL DESIGN AND APPEAL OF UNITS, PROVIDING FAÇADE ARTICULATION AND RELIEF.



ABOVE: BALCONIES BASED ON PROVIDING A GROSS AREA TO SATISFY MINIMUM SIZE REQUIREMENTS CAN OFTEN IN ACTUALITY PROVIDE A MUCH LOWER FIGURE OF USABLE AREA. IN THE DIAGRAM ABOVE, A $4m^2$ BALCONY IS PROVIDED HOWEVER THE AMOUNT OF REALISTICALLY USABLE AREA, MINUS THE SERVICE AREA AROUND THE DOOR, IS AROUND $2.5m^2$.

3. Common Recreation Space

IMPORTANT TO ENSURE:

- → **ESSENTIAL DAILY RECREATION NEEDS OF RESIDENTS ARE MET;**
- → **IMPROVED ON-SITE AMENITY.**

Common Recreation Space is critical to provide for residents' daily recreation needs. Balconies, because of their limited size, only allow for passive recreation, such as reading or sitting. While the use of truly public space such as streets for some recreation such as jogging or running, it is important that each development is able to satisfy as many resident needs as possible.

Common recreation space should be provided at the rate of 30m2 per unit, minus the amount provided for each unit in balconies. Hence, a 5 units each with a 6m2 balcony should also provide 5 x 24m2 of common recreation space.

This space does not need to be either provided at ground level, or in necessarily one contiguous space. Rooftop gardens can provide exceptional outlook and amenity for residents so long as wind exposure is not an issue (good site analysis and modelling will show this)

Also, the use of indoor space can be suitable, such as providing resident gymnasiums or a/v rooms.

Whatever form the common recreation space takes, it should also be appropriately furnished. Providing empty spaces and leaving it 'to the market' to furnish later can be very difficult to achieve depending on the recreation interests of residents and their spending priorities for them. Also, while people may be able to raise capital to pay more for common amenities up-front' if it is part of a package, they can be less willing to take on additional debts later on to retrospectively add amenities.

The use of swimming pools, tennis courts, gyms and the like, can also have substantial marketing benefits and can attract overall a higher return.

ABOVE: ROOFTOPS CAN BE UTILISED AS HIGH-AMENITY COMMON RECREATION SPACE WITH GOOD OUTLOOK AND OPENNESS.

ABOVE: INDOOR COMMON RECREATION SPACES SUCH AS GYMNASIUMS CAN PROVIDE AN APPEALING ALTERNATIVE TO OUTDOOR AREAS AND HAVE THE ADVANTAGE OF BEING UNRELIANT ON GOOD WEATHER CONDITIONS TO BE USED.

ABOVE: COMMON RECREATION SPACE SHOULD BE DESIGNED TO ENHANCE THE AMENITIES AVAILABLE TO RESIDENTS OVER AND ABOVE PROVIDING SIMPLE SPACE FOR RESIDENTS.

4. Façade Design

IMPORTANT TO ENSURE:

- → **NON-REPETITIVE BUILDING FACADES AND DISTINCTIVENESS OF INDIVIDUAL UNITS;**
- → **STREETSCAPE AND VISUAL AMENITY**

When apartments are used particular attention should be given to their façade and in particular the way each unit is expressed. Related to this will also be the unit typologies used in a development. A combination of studio, single, two, and three bedroom units will be condusive to façade and fenestration variation.

The use of two-storied typologies can also be effective in this regard.

When apartments are repetitive and based on a single or unvaried typology, facades become repetitive and generic. These facades do not contribute to streetscape and can often have negative perceptual connotations with 'slums' or other cheap living standards.

Ideally every unit will be clearly distinguishable within a development when viewed from a street or reserve, and with long building forms, a sense of change and progression will be provided to pedestrians rather than a sense of 'walking on the spot' through an unchanging vista.

Building mass should be managed to ensure suitable forms relate to streets and public spaces, and do not dominate them through excess bulk. Where a site has an interface between a business zone on one side and a residential zone on another, it may be appropriate to deliberately mass a building towards the business interface, to reduce mass on the residential one even if this involves infringing a height to boundary indicator it may be the best result for that site.

ABOVE: THIS APARTMENT BUILDING HAS PROVIDED A STEPPING FAÇADE, COLOUR, AND WIDE BALCONIES TO PROVIDE A VARIED FAÇADE.

ABOVE: A SLIGHTLY VARIED ROOF-LINE AND BALUSTRADE DETAILING HAS BEEN USED TO RELIEVE MONOTONY.

ABOVE: THE USE OF MATERIAL, RECESSING, AND DIFFERENT FORMS ALLOWS THIS BUILDING TO MASS UPWARDS AWAY FROM A SENSITIVE CORNER.

5. Parking and Ground Floor Treatments

IMPORTANT TO ENSURE:

→ **ACTIVE STREET FRONTAGES AND EDGES ;**

→ **CLEAR LEGIBILITY OF PUBLIC AND PRIVATE ENTRANCES AND SAFETY BENEFITS.**

Mixed Use Robustness at the Ground Level

Ideally in a town centre a ground floor will be dedicated to retail or commercial uses along frontages. The use of ground level for apartments in town centres can have market difficulties due to perceptions of safety and security.

Careful consideration should be had of land use mixtures, and where possible a stud height of between 3.5 - 4.0m should be provided at the ground floor to ensure long-term robustness is provided for a range of uses.

Consideration may also be had of the potential for live / work residences where a unit comprises a ground floor office / retail space and an upstairs residence.

Where a three or four floor body is envisaged, the opportunity to provide ground floor retail, first floor offices / light commercial, and then upper residential apartment approach may be possible. This can provide for the best use outcomes and correspondingly safety outcomes as a true 24-hour use of a building becomes possible.

Parking Areas and Entrances

Massed parking areas will likely be required in town centres and these can have adverse visual and noise effects, as well as being highly disruptive to retail connections at the ground floor.

Ingress / Egress should be provided from a back street or building side, and should not be at the ground level along a frontage which should be dedicated to active uses.

It can also be possible to provide parking on the first floor via a ramp to allow for active ground floor uses. Below ground parking is optimal however can be difficult to establish in the Kapiti Coast due to ground water levels.

Access for Residents

Where a building has more than one use, the location and design of entrances becomes important both for legibility and also safety, to ensure that strangers or members of the public do not linger around private resident entrances. However they should still be provided on a main frontage as opposed to being hidden around a side or back.

Public entrances such as shop or business entrances should be designed to be dominant from a frontage, with resident entrances being more recessive. Sufficient space should also be provided (commonly via a recess) so a resident can move off the main footpath and, for example, find a key or keycard from a bag.

ABOVE AND BELOW: ACTIVE RETAIL USES AT GROUND FLOOR WITH RESIDENTIAL APARTMENTS ABOVE IN A TOWN CENTRE SETTING.

ABOVE: APARTMENTS PROVIDED WITH SEMI-SUNKEN PARKING THAT REDUCES EXCAVATION COSTS BUT DOES NOT UNDERMINE THE STREETSCAPE.

ABOVE: GROUND FLOOR STREET-FACING PARKING CONSIDERABLY LOWERS STREETSCAPE AMENITY WITHIN TOWN CENTRES AND CAN UNDERMINE ATTEMPTS TO ENCOURAGE PEDESTRIANISATION.

ABOVE: TOPOGRAPHY HERE ALLOWS UNDERCROFT PARKING TO BE PROVIDED BELOW THE ROAD LEVEL (ACCESSED FROM THE SIDE), FREEING UP THE FRONTAGE FOR MORE ACTIVE USES.