Integrated Residential Development Design Guide

Hamilton City Council
Te kaunihera o Kirikiriroa

CONTENT

Introduction

This document provides a best practice guide for designing an Integrated Residential Development (IRD) in Hamilton. These guidelines are non-statutory, however it is recommended that they are read in conjunction with the provisions of the Hamilton District Plan as well as Hamilton City's design guides on duplexes and apartments.

The guideline describes the design expectations for the development of an IRD and aims to encourage good quality urban design outcomes, as well as helping to ensure any development is compatible with the neighbourhood in which it is located and contributes positively to the streetscape.

The purpose of this design guide is to assist professionals and developers in designing an IRD and preparing the associated resource consent applications.

What is an Integrated Residential Development?

The introduction of IRDs provides an opportunity for a variety of housing typologies and densities in either a group housing scheme or retirement village form within the General Residential Zone.

The mix of typologies within an IRD aims to ensure that the development is of a compatible scale as other activities in the area.

Other features of IRD's inlcude the mixture of residential unit typologies, as well as;

- shared facilities and other communal activities (for the exclusive use of the residents of the development and their visitors) established in a comprehensive way on a site will ensure the development functions as an integrated way.
- The integrated and comprehensive planning of buildings, access and open spaces together is fundamental to achieving high quality residential development.
- Well considered placement of buildings creates open spaces and establishes conditions of sunlight, daylight and privacy as well as a relationship to neighbourhood character.
- Good site planning considers how a place is used by its occupants as well as its relation to the wider urban context.

An IRD does not include a development that consists solely of one of the following activities:

- One type of residential unit.
- Hospitals.
- Managed Care Facilities.
- Residential Centres.

The District Plan provides for the development of IRDs under the following conditions:

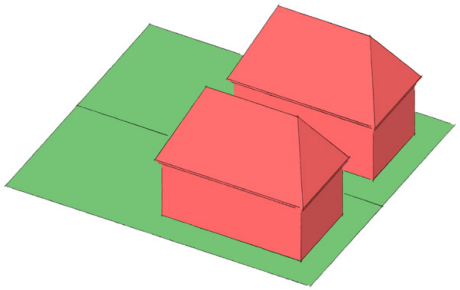
1. Located on a sites within the General Residential Zone of more than 2000m$^{2.}$
2. More than one of the following topologies of residential dwellings are to be included in the development:
    - Single detached dwellings.
    - duplex units and/or apartment buildings.
3. No more than 20% of units within a IRD can be apartments.
4. Needs to be designed in an comprehensive way to function as an integrated development.
5. The development shall include shared facilities such as open space, access, parking and maneuvering.
6. May also include other communal facilities for the exclusive use of the residents and their guests (e.g. recreational facilities, administration offices etc.).

If subdividing the development it is encouraged that both land use and subdivision are undertaken at the same time. This allows the site layout and the subdivision to be assessed together, so there is an understanding of how each unit will operate, particularly in terms of access, rights of way and the provision and maintenance of any common areas.

The District Plan standards (density, building bulk, outdoor living space, service area, car parking and access) represent the basic form for IRD's however good design is not achieved by solely complying with these standards. This design guidelines in conjunction with the design guides for duplex and apartment development aim to set out the necessary elements to be considered when designing IRDs, so that the overall site layout results in a quality development.

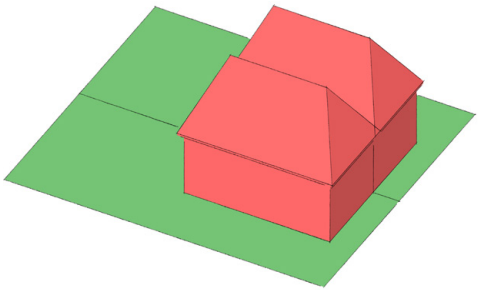
A well designed IRD is one that achieves a high level of on-site amenity for the occupants, while also ensuring that adverse effects on the character of the street and locality, on privacy and visual amenity of neighbouring properties are minimised through good design and appropriate use of mitigation measures.

Housing typologies within a Integrated Residential Development



Single detached dwelling

A single detached dwelling is a stand-alone dwelling with yards on all four sides. The building is generally 1- 2 storeys high and can incorporate garages within the building footprint or separated from the main dwelling. In an Integrated Residential Development context, single detached dwellings are generally smaller than in your typical suburban context.

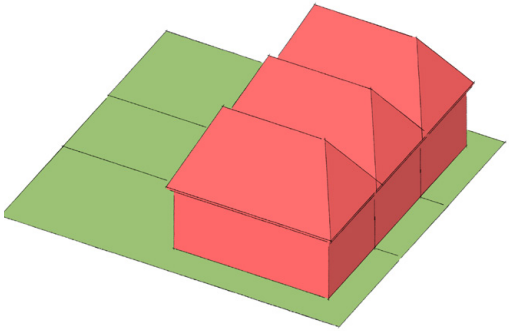


Duplexes

Duplexes are two dwelling units sharing a common wall. The duplex ranges from 1 to 2 storeys in high, with or without enclosed garages, and with space on three sides of the dwelling. Sometimes the single-storey garages are the only part of the dwellings attached, with the habitable parts of the dwellings and any upper floors setback from side boundaries to allow light into and privacy for the upper floor rooms and living areas. (Also See Duplex Design Guide)

Apartments

Apartments are often designed as a row, group or cluster of three or more residential units and are generally 1 to 3 storeys high. This intensive form of housing would represent a distinctive change to the character and amenity of the General Residential areas. Therefore the location of this type of housing needs to be carefully considered and carefully designed to integrate into this established residential area. (Also See Apartment Design Guide)



Identifying and responding to the context

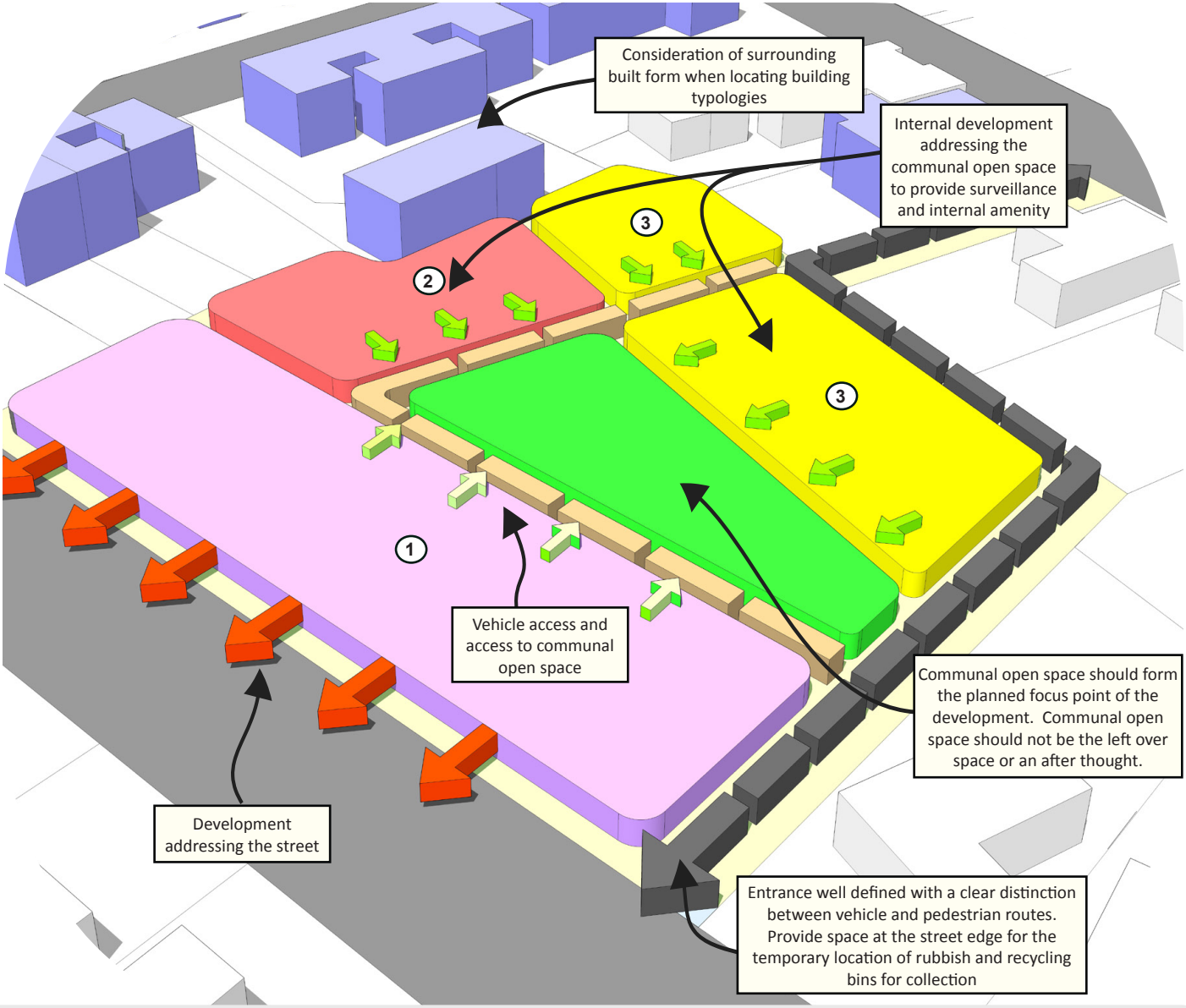
Good design responds to the character and context of the area. It needs to consider both the built form- existing and expected- and the natural characteristics of the area.

Character is determined by the combination of a number of natural and man-made elements and differs from place to place. This includes the natural landform and topography, the street layout, vegetation, front yard setbacks and, the scale (height and form) of existing buildings, the type of building materials used and the architectural style or theme of the area.

A contextual analysis ensures that there is a thorough understanding of the context which should then inform the design of an IRD and how it respond to opportunities and constraints identified on and around the site. The scale of the contextual analysis should equate to the scale of the development proposal. At a minimum it should seek to understand the impact the development will have on the streetscape and the sites immediately adjacent to the proposal including surrounding infrastructure.

Context analysis should address:

- Street layout and connections for vehicle, cyclists and pedestrians.
- Public transport availability.
- Infrastructure capacity.
- Topography.
- Surrounding uses and activities.
- The streetscape (size, bulk and scale of buildings, character of the surrounding environment).
- Adjacent buildings (character, location, heights, setbacks).
- Open space (location and use).
- View-shafts and vistas (to and within the site).
- Established vegetation and trees.
- Acoustic or visual intrusions into the site.
- Infrastructure capacity.



1. The built form facing the street should respond positively to the surrounding residential character. Responding to the context involves identifying the positive elements of a neighbourhood setting and any expected changes to the surrounding character.

2. The design of apartments need to consider the surrounding built form within and adjoining the IRD. Responding to the building height found within surrounding residential areas and ensure that the amenity of adjoining areas are not impacted.

3. Like the design of apartments, duplexs need to consider the surrounding neighbourhood character and ensure that the form and design complements the estabilised character. Responding to the context involves identifying the positive elements of a neighbourhood's existing or future character.

Site layout

The integrated planning of buildings, access and open spaces together is fundamental to achieving a high quality IRD. Placement of buildings in relation to other buildings creates open spaces and establishes conditions of sunlight, daylight and privacy as well as establishing a relationship with the neighbouring character. Good site planning recognises and considers how a place is used by its occupants as well as its relationship to neighbouring houses, the character of street and the wider urban area.

Site layout needs to consider

1. External amenity
2. Building form
3. On site amenity
4. Providing for the vehicle

- Single dwellings
- Duplexes
- Apartments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External amenity

The liveability of the dwelling units within an Integrated Residential Development as well as its relationship to the street and wider neighbourhood is determined by its design. The introduction of an IRD into an existing residential street requires consideration of how best to address visual effects and changes in privacy for adjoining neighbours.

Careful placement of the internal spaces along with consideration of the location, orientation and type of openings on individual buildngs will allow the IRD to function and integrate with its neighbours, maintaining privacy and complementing the neighbourhood character.

Where new development is located within a group of buildings of recognised and consistent character, or immediately adjacent to recognised heritage buildings, the design should pay special attention to ensure that it is compatible with the defining characteristics of those buildings.

Building heights

A IRD development should recognise and complement the visual characteristics of the local neighbourhood and streetscape. This includes, where applicable, consideration of building height and the impact on views and vistas to and from the site and the natural landform.

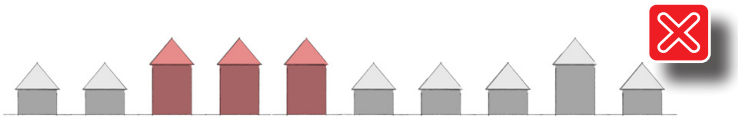
Permitted heights are set by District Plan standards, however where a site is within an area characterised by a consistent and much lower height, height at the street frontage may need to be reduced to maintain the existing pattern.

Where dwellings units within a IRD front the street or communal open space consideration should be had as to how they address this interface.

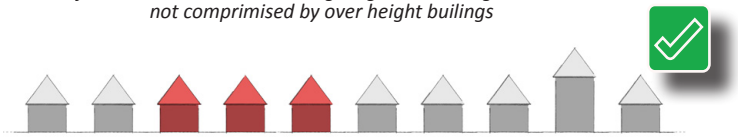
The single alignment of apartments along the street edge or along a communal open space will usually read as a single, large building. This would be detrimental to areas characterised by relatively small scale detached dwellings and should be avoided by varying the alignment and breaking up the connected dwelling units into smaller blocks.

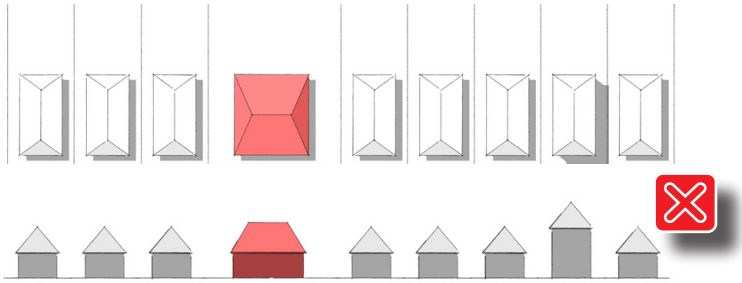
Where applicable the following design guidelines should be considered to ensure a positive interaction with the street:

- Grouping units together so that they relate to the built form typically found within the neighbourhood.
- Expressing the form of each unit, or groups of units with a separate roof, and/or differentiating individual units or groups of units by varying colour and materials.
- Offsetting units by introducing gaps between blocks that relate closely to the surrounding built form.
- Using transitional forms and volumes to achieve a relationship between a large new development and smaller neighbours.

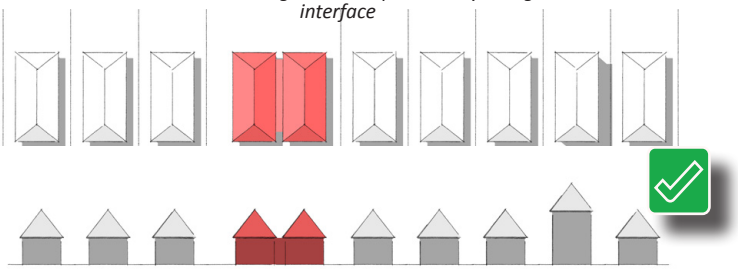


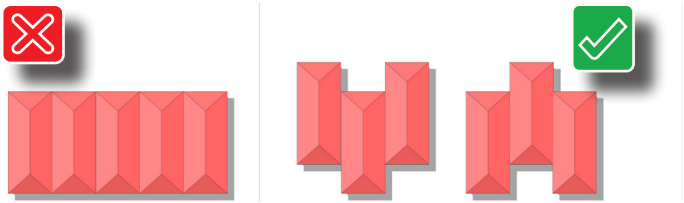
Proposed development needs to be compatiable withthe existing built form and ensure surrounding neighsurrounding character bis not comprimised by over height builings





The location and massing of proposed building within an IRD should consider the existing character particularly along the street interface





The single alignment of apartments along the street edge or communal open space edge should be discouraged. Vary the alignment and break up the connected dwelling units into smaller blocks

Built form

Variation in alignment and form, or both as required, can be used to achieve a positive relationship between an IRD and neighbouring small scale detached dwellings.

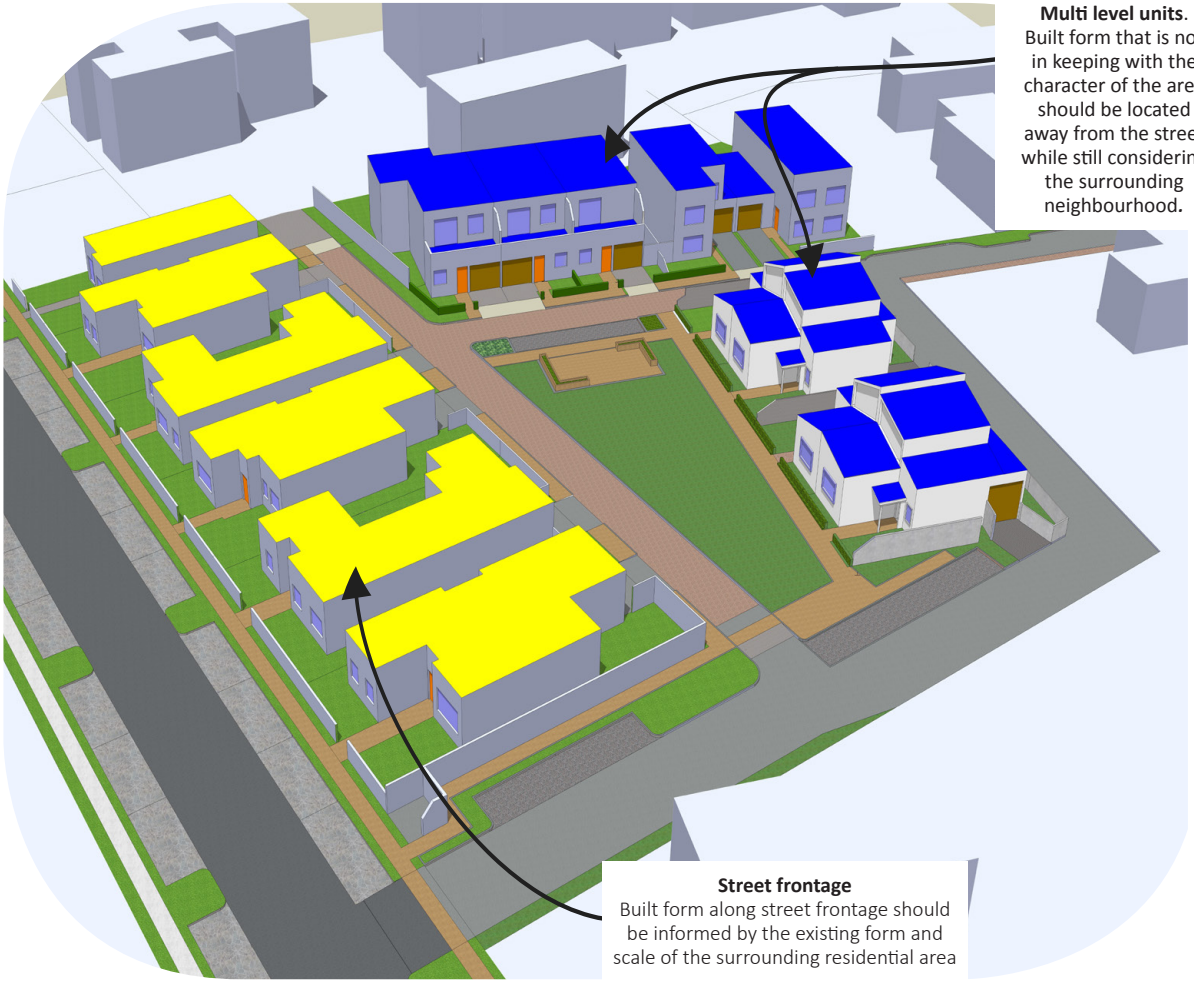
Large multi-unit residential developments such as apartments within a IRD could become visually dominant if they are inappropriately located and are of a size and form that differs significantly from that of the existing residential pattern.

The built form should be residential in nature and scale and where possible avoid excessive repetition of architectural styles.

As much as possible, developments should have a unique identity and sense of place whilst respecting the character of the surrounding context.

Consider location of buildings to reduce impact on surrounding development

Regent Park, Wellington


Multi level units.
Built form that is not in keeping with the character of the area should be located away from the street while still considering the surrounding neighbourhood.
Street frontage
Built form along street frontage should be informed by the existing form and scale of the surrounding residential area
Single Storey
Multi Storey

On site amenity

The interface between the front of the building and communal open space is important; it is where the transition from private space to the public domain occurs. This applies to both internal and external spaces. The character of a open space is highly influenced by how well the area forward of the dwelling unit is designed to interact with the communal open space.

The integration of the built form, the open space and vehicle circulation will determine how well the IRD works. A well designed approach will enhance the character of the development and ensure space is well used, and can improve safety and create an attractive environment.

Parking should not dominate the communal space. There are a number of alternative options when providing car parking and depending on the size of the IRD it may not be necessary for each unit to have its own attached garage.

An IRD should be designed in a way that provides an appropriate level of on-site amenity through the use of landscaping and communal open space, building placement and maintenance of privacy.

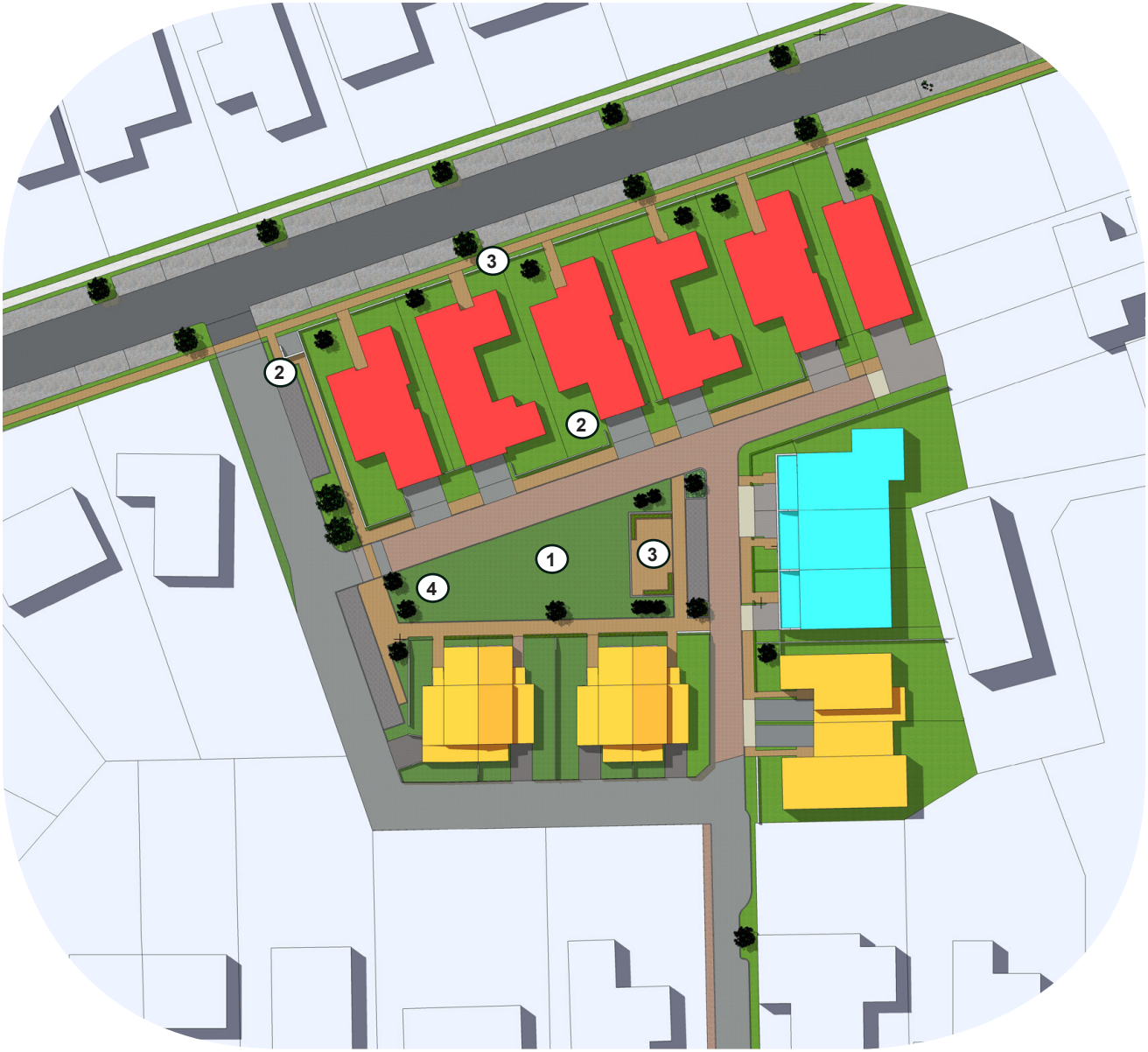
Developments should ensure an integrated service space is provided and that it is easily accessible.

Addressing on site amenity means considering the following aspects of design:

- Open Space Design.
- Service facilities.
- Landscaping.
- Lighting.

Consider the interface between the dwellings and the communal space

Regent Park, Wellington



1. Open Space Design
2. Service facilities
3. Landscaping
4. Lighting

Open space design

Good quality open space greatly increases the amenity of a dwelling and is a source of pleasure to individual residents. The type of open space required can range from private open space to communal open space and will differ according to development type and needs.

Open space within an IRD should be designed to provide a high quality and pleasant outlook, create a safe and visually attractive setting for the dwelling and accommodate the reasonable outdoor recreational needs of residents both communal and private.

Private open space

Private outdoor areas should be directly accessible from the main living area on the ground level of individual dwellings so that this space can function as an extension of that living area of the dwelling. Private open space associated with apartments can be provided in the form of second story balconys

While a greater amount of private outdoor space will generally increase the amenity of most dwelling types, the outdoor space will not be successful unless it is of a quality that supports the required activities.

The total area provided may be split if this can be demonstrated that it will lead to a higher level of amenity for occupants.

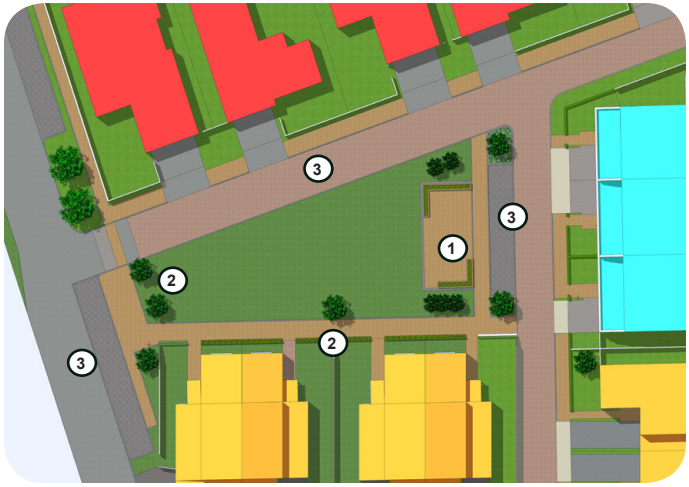
Open space that is easily accessible and well defined

Communal open space

Communal outdoor space refers to the spaces that can be shared by more than one residential units within the Integrated Residential Development.

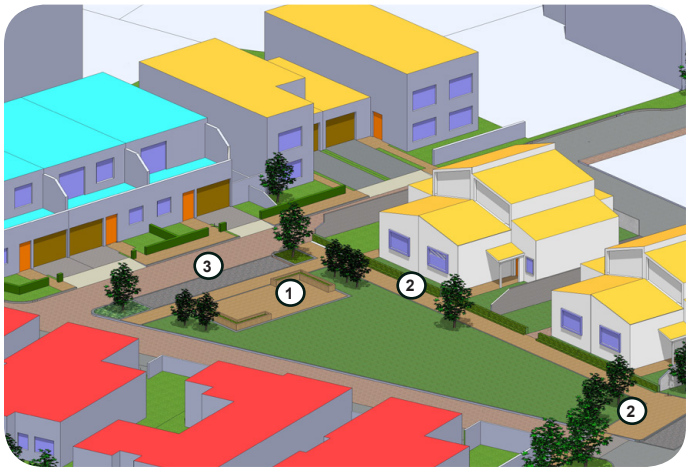
Communal open space should have the following characteristics. It should:

- Form the planned focus of the IRD.
- Be overlooked by adjacent dwelling units and provide for residents' recreation.
- Be designed to be accessible, useable and attractive for all residents.
- Be sunny and were possible have a view beyond the site.
- Be easy to maintain and have well defined boundaries with no ambiguity or leftover areas.
- Provide outlook for as many dwellings as practicable.
- Be designed to protect any natural features on the site.
- Be accessible and useable.



Design considerations for communal open space

1. Provide appropriately sized, furnished and located formal spaces that are suitable for the intended dwelling unit mix and future resident.
2. Use both soft landscaping (trees, shrubs, grass, planted beds etc.) and hard landscaping (paving, furniture, fixtures etc.) to define areas.
3. Driveways and turning areas are not defined as 'communal open space', even though they may contribute space, openness and amenity.



Privacy for outdoor spaces

When developing an IRD consideration should be give to protecting the private outdoor spaces associated with dwellings from being directly overlooked both within the IRD as well as those existing dwellings adjoining the IRD.

The following should be considered:

- The careful positioning of buildings and using screening devices or landscaping.
- Areas of outdoor space, decks or balconies should not be subject to direct short range overlooking.
- Plan outdoor living areas and position upper level windows of main living areas to avoid direct short-range views into adjacent private outdoor spaces.
- The orientation of windows, buildings and spaces to limit views of areas of private outdoor space.
- Provide screening devices where an acceptable level of privacy cannot be achieved by separation.

The use of screeing to create usable private outdoor space.

The use of screening to define outdoor living areas and create privacy

The provision of screening should be balanced with demands for sunlight and daylight into, and long-range outlook from, all neighbouring dwellings.

Acceptable architectural screening devices may be either solid or translucent panels or trellis which:

- Are fixed and of durable and permanent materials.
- Are visually unobtrusive or integrated by colour and design into the dwelling or into the landscaping of the site.

The use of balconies to create areas of private outdoor space that is not directly over looked

Service facilities

Provide sufficient, suitably screened outdoor storage space to meet the likely rubbish and recycling storage needs of residents. This may be a bin space associated with each dwelling or a shared bin storage space.

Avoid solutions that require large volumes of waste to be deposited on the public street for collection.

Use building recesses and landscaping to good effect for the external storage of unit wheelie and recycling bins in standalone and semi-detached buildings.

Provision should be made in such a way that bins do not clutter and obstruct access along the footpath or into the development and that when the bins have been removed, the entrance space is enhanced.

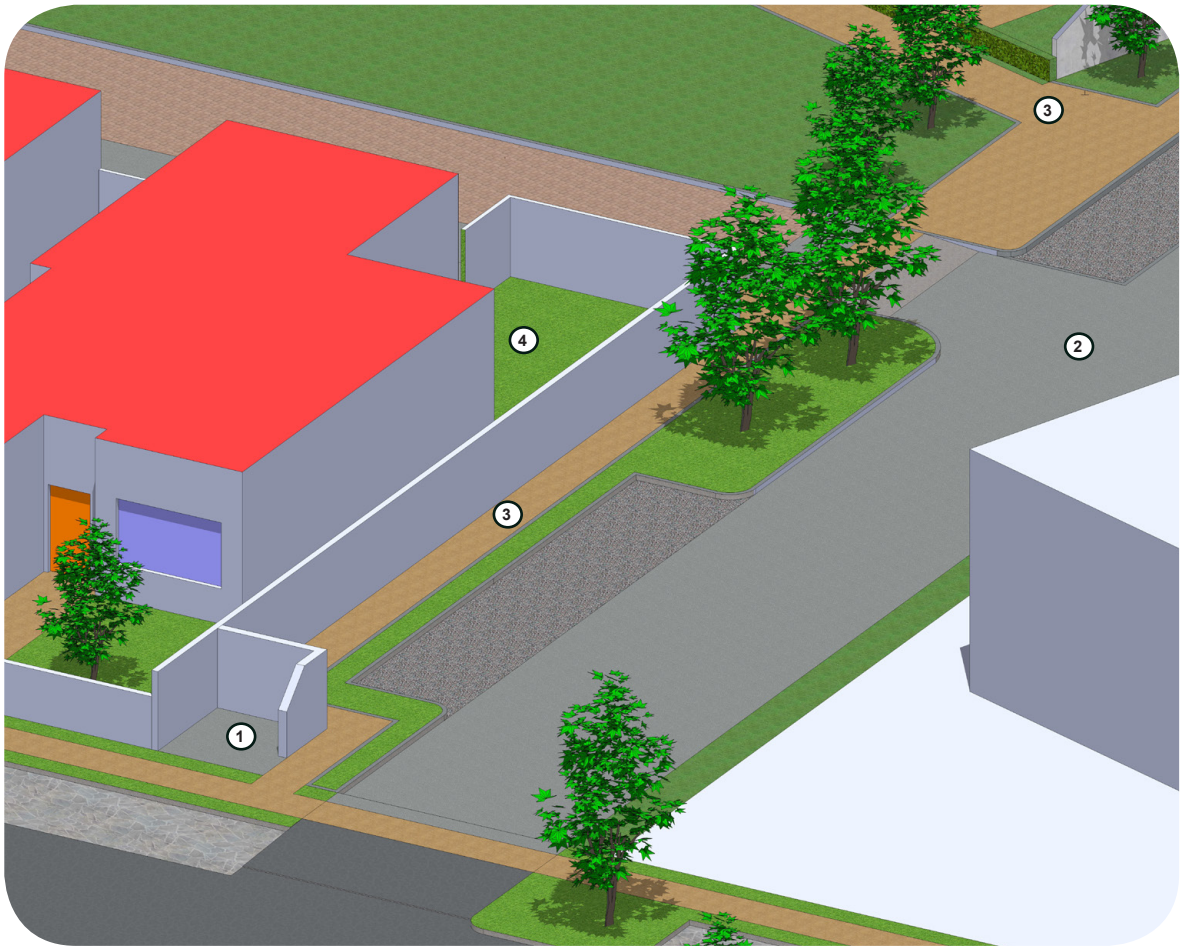
Provide a suitable area within or accessible from each dwelling for natural or open-air laundry drying. This space should allow the installation of a clothes drying line in a position that is at least partially screened from the street or public space, and which even in mid-winter still receives sufficient sun.

The development of an IRD should consider:

- Providing a communal area for a bin and recycling enclosures that are adequate in size, durable, waterproof and is conveniently accessible while still been located or screened so as to be visually unobtrusive and not dominate the main entrance to any dwelling, the building complex or to neighbouring dwellings.
- Providing a bin and recycling enclosures that is located at the edge of the street to allow for the tempory location of waste for collection.
- Ensure adequate internal storage space within each dwelling that is positioned and ventilated to avoid significant smell nuisance to any dwelling.
- Allow for the circulation area for waste collection vehicles.

Internal storage space associates with individual dwellings

1. Provide space conveniently located at the street edge to allow for the temporary storage of rubbish and recycling bins for collection.
2. Adequate circulation area for waste collection vehicles.
3. Waste storage should be conveniently accessible from the dwelling or dwellings served.
4. Provide suitable space for natural or open-air laundry drying, within or accessible from each dwelling.



Landscaping

Planting influences the image of new developments from the street, and can enhance visual integration into the existing streetscape. Provide planting within an IRD that is suitable for the situation, wind and sun exposure and soil type.

When selecting planting for screening the following need to be considered:

- The size and growing habit appropriate to site and situation.
- The ability to allow reasonable sunlight and daylight to both dwellings and open spaces.
- Does the proposed planting have an impact on surrounding dwelling unit both within the IRD and adjoining sites.
- Esure landscaping provides attractive short-range views from the dwellings, provides visual interest and privacy, as well as shelter and shade for both dwellings and associated private outdoor areas and communal open space.

Fencing

High fences along an entire frontage compromise the visual quality and safety of the street and communal space. In general front fences should be low or visually permeable. If a high fence or wall is used, this should only enclosure the minimal area required.

When providing fencing consider;

- Using low landscaping or fencing to define private vs public space.
- That in some situations some enclosure may be required to provide privacy or security.
- Side boundary fence within the front yard be no higher than the front fence it connects to.

Regent Park, Wellington

The use of planting and street furniture helps provide visual interest and integrates the built form into the streetscape or communal space

Lighting

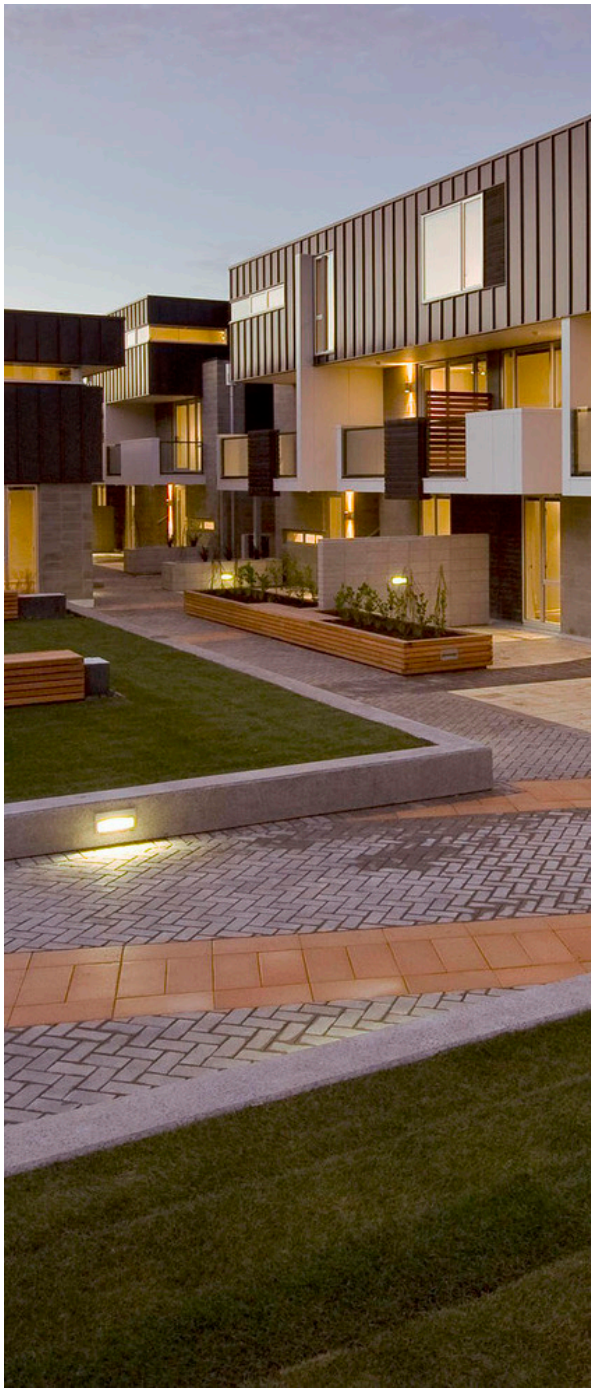
Ensure the design of an IRD provides lighting were required for wayfinding at night and in situations where personal safety or security is likely to be of primary importance.

The following guidelines are suggetsed

- Design communal open space and pedestrain paths for both day and night time use.
- Good lighting helps to ensure that communal spaces are attractive and aids surveillance at night.
- Promote safety and security by providing for night-time visibility with energy-efficient, low-glare lighting along paths and accessways as well as for communal areas.
- Amenity effects should be considered to enhance the visual quality of the IRD.

"Well designed lighting increases the opportunity for surveillance at night, sends positive messages about the management of an area, and enhances the aesthetics of the night-time environment."

National Guidelines for Crime Prevention through Environmental Design in New Zealand

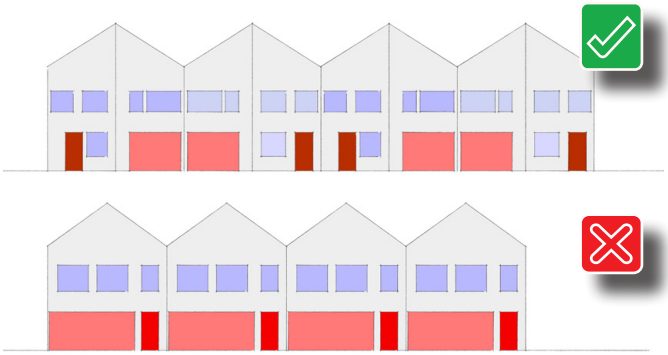


The use of lighting ensures communal areas are safe and usable at night

Designing for vehicles

Garage

Avoid concentrating garages and the monotonous repetition of garage doors along the street frontage or within the development itself.



Garages and garage doors should be sited behind dwellings, recessed behind the front building line or otherwise integrated in away so that they do not dominate either the street frontage or interior communal spaces. Such domination is generally avoided when garage doors comprise less than half the ground level frontage.

Locate garages to be conveniently reached from the dwelling but not where they completely obscure views of either the street or communal open space within the development. Multiple garages between the dwelling and the street can reduce streetside activity, create visual monotony, and prevent the safety and security benefits of informal surveillance from being achieved.

Car parking

The character of a street and internal space is improved when parking do not dominate and reducing their impact should be an important consideration when designing an IRD.

Good design practice dictates that the dwelling area and not parking areas should be the key element within a IRD. As far as possible, garages and parking should be integrated and located to minimise their prominence especially in relation to any communal open space or street elevation.

The use of planting softens the impact of hard surface parking areas

To reduce the impact car parking and garaging on the overall amenity and integrations of an IRD the following guidelines should be considered:

- Garages should be sited behind front building line.
- Locate garages to be conveniently reached from the dwelling.
- Garage doors occupy less than half the ground level frontage of a dwelling.
- On-site parking should generally be placed away from the street frontage.
- Where the existing pattern of building setbacks and frontage alignment is important, this setbacks should not be compromised by car parking.
- Where front setbacks allows for car parking use screening or planting and other landscape elements to give the appearance of a garden or courtyard which helps mitigate views of parked cars.
- Large blank walls at the street edge associated with garages should be avoided.
- Ensure open car parking space can be viewed from the dwelling to which it is allocated.
- Use materials (cobble/pavers) to differentiate parking and entry areas from the street
- For developments that are likely to be occupied by people with limited mobility, where practical provide either internal garaging or an at grade link between parking spaces and their associated unit.

Driveway and accessway design

One of the key aspects that should inform the design of the vhicle driveway or accessway is the existing character of the neighbourhood and street. The circulation and access provided internally also plays a key role in how the internal space works and how dwellings interact with internal public space.

In order to create an integrated IRD it is important to consider how the driveways and accessway within an IRD will be designed and where they will be located specially along the street frontage.

The following guidelines are suggested:

- Avoid intruding on the privacy of dwelling by through the carefull design of communal vehicle and pedestrian circulation.
- Common accessways should be set back from the windows of the main habitable areas of dwelling.
- Consider Offset or otherwise articulate long vehicle accessways to reduce vehicle speeds, and landscape them to make them visually attractive.
- Large trees and shrubs are most effective in moderating the visual effects of long driveways and large areas of hard paving.
- Appropriate small-scale paving elements and landscaping will help to reduce the linearity of the space and vehicle speeds, and encourage the use of the space for more than just the movement of vehicles.
- Plan vehicle maneuvering areas to provide for appropriate recreational activities, and establsih an attractive outlook from all dwellings that overlook them.
- Areas used by pedestrians and for uses other than vehicle movement should be designed as shared surfaces.
- Secondary functions become more important in ‘areas of change’ where such surfaces may be the only ground level space open to the occupants.
- Minimising the extent of hard-surfacing and providing appropriate landscaping to driveways and turning areas.
- The selection of paving materials and the detailed design of the paving itself influences whether the area is viewed only as a service area or whether it adds to the visual quality of the development.
- Material choice and the composition of paving and associate landscaping should be part of a comprehensive landscape plan.

1. Separate vehicle and pedestrian access. Provide a clear pedestrian route that limits interaction with moving vehicles.
2. Large trees and shrubs are most effective in moderating the visual effects of long driveways and large areas of hard paving.
3. Minimising the extent of hard-surfacing and providing appropriate landscaping to driveways and turning areas.
4. Outlook will be enhanced by the use of large-scale planting, or integration with areas of lawn or garden.
5. Use paving patterns, materials and/or potentially combinations of material types in association with planting to give visual interest to areas used for parking and vehicle circulation.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Glossary

Accessible
The design and construction of buildings and environments that are inherently accessible to older people, people without disabilities, and people with disabilities.

Character
The look and feel of an area. It is often based on the underlying topography, local ecology and notable landscape features and includes man made features such as buildings, street trees and public open spaces.

Context
The setting of the area within which a development will take place. It includes the natural form and ecology, the buildings and spaces and the routes that cross it. It includes the people living in the area.

Communal
Open space or facilities that are early accessible and that are shared by more than one unit within a development. It can be shared by residents of a small number of units, by residents within a group of apartments, or by residents in a whole development.

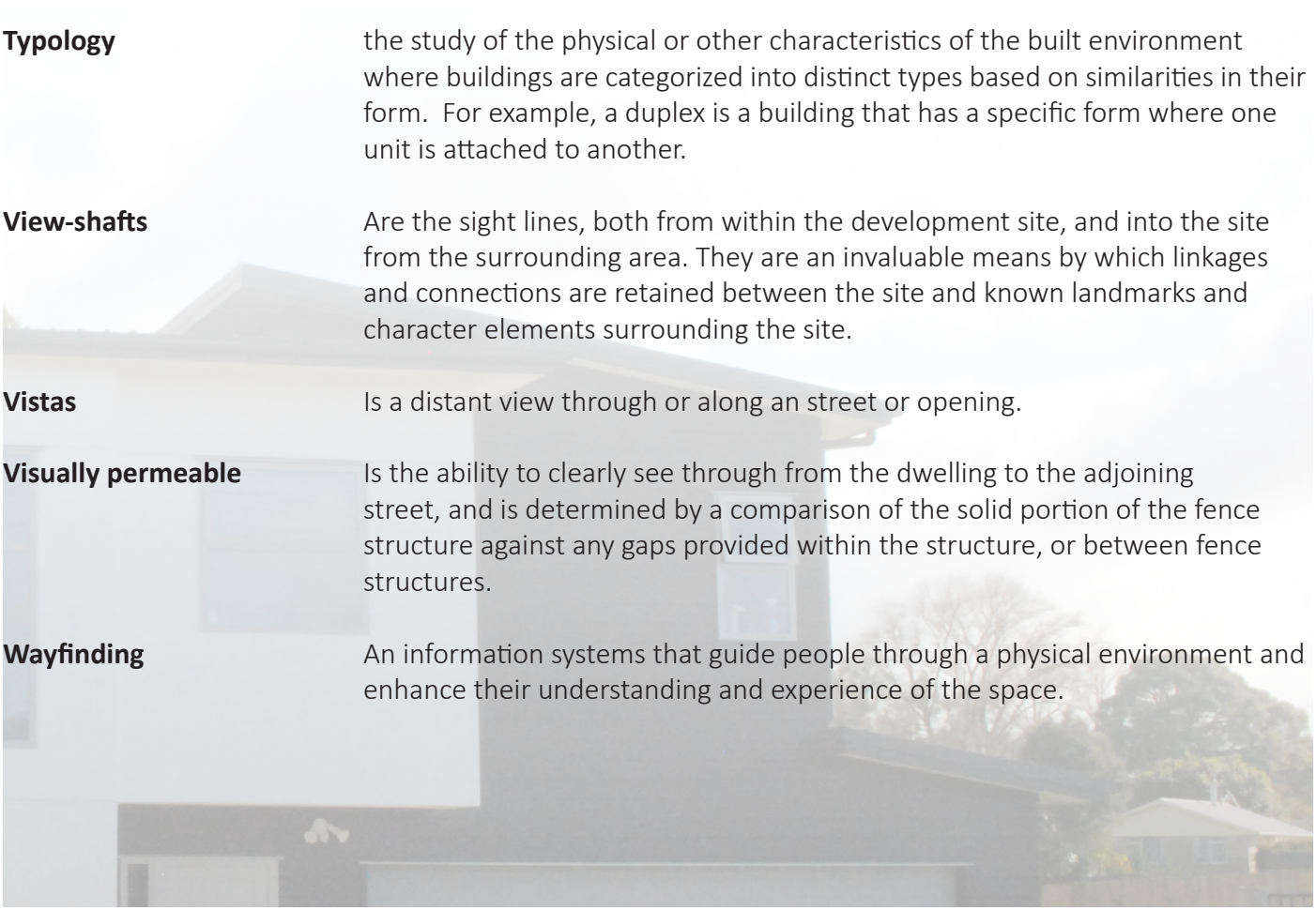
Built form
What a building or group of buildings looks like, how tall they are, how much of the site they cover, their set back from the street and site edges, and its architectural style including location and type of openings.

Fronting
Means facing onto or towards a road and normally applies to the principal elevation or that part of the unit that is seen by most people driving or walking past.

Habitable areas
Is that part of any building used for residential activities but excludes floorspace used solely for the purposes of an entrance, passageway, toilet, bathroom, laundry, garage or storeroom.

Interface
An area between the public street and the private house.

Public Environment	An area that is accessible to the general public without control or restriction – mainly public spaces, malls, arcades, streets, avenues, parks etc.
Streetscape	The visual elements of a street including the road, adjoining buildings, footpath, trees and open spaces, etc. that combine to form the street's character
Sense of place	Those characteristics that make a place special or unique, as well as to those elements that foster a sense of authentic human attachment and belonging.
Typology	the study of the physical or other characteristics of the built environment where buildings are categorized into distinct types based on similarities in their form. For example, a duplex is a building that has a specific form where one unit is attached to another.
View-shafts	Are the sight lines, both from within the development site, and into the site from the surrounding area. They are an invaluable means by which linkages and connections are retained between the site and known landmarks and character elements surrounding the site.
Vistas	Is a distant view through or along an street or opening.
Visually permeable	Is the ability to clearly see through from the dwelling to the adjoining street, and is determined by a comparison of the solid portion of the fence structure against any gaps provided within the structure, or between fence structures.
Wayfinding	An information systems that guide people through a physical environment and enhance their understanding and experience of the space.



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All reasonable measures have been taken to ensure the quality and accuracy of the information contained in these guidelines. Hamilton City Council, however, makes no warranty, express or implied, nor assumes any legal liability or responsibility for the accuracy, correctness, completeness or use of any information that is contained in these guidelines

References

AUCKLAND COUNCIL. 2017. Auckland Design Manual [Online] Available: http://www.aucklanddesignmanual.co.nz/

CARDIFF COUNCIL, 2008, Council Cardiff Residential Design Guide, Supplementary Planning Guidance

HAMILTON CITY. 2007. Vista, The City Design Guide, Cityscope Working Group

HOROWHENUA DISTRICT PLAN, 2013, SCHEDULE 10: Medium Density Residential Development Design Guide Schedule.

KAPITI COAST DISTRICT COUNCIL-Medium Density Housing Design Guidelines, URBANISMPLUS LTD

MINISTRY OF JUSTICE. 2005, National Guidelines for Crime Prevention through Environmental Design in New Zealand, Part 1 Seven Qualities of Safer Places, NZ Urban Design Protocol

NORTH SHORE CITY. Good Solutions Guide for Medium Density Housing. [Online] Available: http://www.urbanismplus.com/wp-content/uploads/2011/07/2001-Good-solutions-guide-medium-density-housing.pdf

SELWYN DISTRICT COUNCIL. September 2011. Medium Density Housing Design Guide. [Online] Available: https://www.selwyn.govt.nz/services/planning/design-guides/medium-density-housing-guide

WELLINGTON DISTRICT PLAN, 2000, Residential Design Guide

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