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1.1 Objectives of the Design Guide

The Petone Mixed Use Activity Area Design Guide provides the basis for the design assessment of new development in this area. The purpose of the guide is to both: (a) assist the achievement of the Hutt City Council's (HCC) strategic objectives for the area as set out in the Petone vision statement; and (b) assist the area to transition from its current physical condition to a mixed use environment that reflects good urban planning and design practice.

The Design Guide is to be used by:

- HCC to evaluate development proposals as part of the resource consent process; and
- Property owners, developers, builders, designers and planners who are considering investment, designing developments, and preparing consent applications.

Design guide's are a tool commonly used throughout New Zealand in circumstances where the Council's are seeking to improve urban environmental quality. In this regard, the Design Guide the for Petone Mixed Use Activity Area is similar to that for the Hutt City Central Area Design Guide in terms of its aims and, in some respects, content.

It is noted that the Design Guide applies principles of good urban design. The NZ Urban Design Protocol, to which Hutt City Council is a signatory, is a reference.

The implementation of the design guide will be undertaken by the HCC. However, it's success will rely on landowners, developers and their consultants sharing the common vision for Petone's future and working with HCC through the design guide to help achieve it together.

1.2 How the Design Guide Relates to the District Plan

Under the District Plan rules, all new buildings within the Petone Mixed Use Activity Area will require a resource consent from HCC. Small scale alterations and additions are exempt from the rules, in recognition that their influence on the quality of the environment will generally be insignificant. Aside from small scale alterations and additions, new building developments are to be assessed against the Design Guide. Several of the guidelines are 'encouraged only'. These are not 'required' to be provided for, but are considered desirable. The 'encouraged only' guidelines are specifically noted.

The Design Guide is to be applied in conjunction with the other rules and standards in the District Plan. These rules and standards relate to such matters as transportation, historic heritage, notable trees, signage and network utilities.

The Design Guide offers some flexibility to allow innovation and good design solutions that meet the objectives of this document. Inconsistency of development proposals with the Design Guide can be a basis for the HCC to decline resource consent approval.

Despite this, the Design Guide is just that — a guide. In using the Guide to evaluate applications, HCC will adopt a flexible approach rather than an absolute one. It is acknowledged that strict adherence will not always be possible or practical. HCC will balance Design Guide suggestions with broader considerations and practicalities, including commercial viability.



The Design Guide recognises the variation in street types, adjacent uses and objectives for the transition of the area over time to a more mixed use environment, including residential alongside commercial uses.

The illustrations in the Design Guide are indicative only and are intended to further explain the design outcome sought as outlined in the text. They should not be seen as actual design solutions as innovative and creative design solutions that meet the intended future character of the areas are encouraged.

1.3 How the Design Guide Relates to Petone Vision

The Design Guide has been prepared taking into consideration the elements contained in the Petone Vision to 2027. Appendix 1 describes the vision elements and corresponding actions, and references the parts of the Design Guide which can assist to give effect to them.

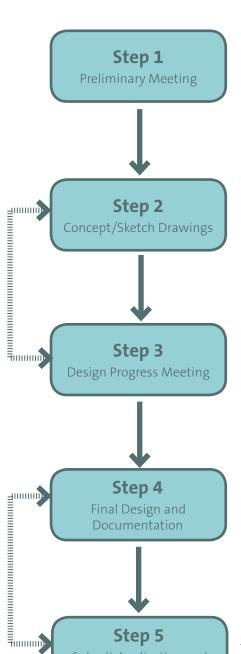
It is important to recognise that:

- The Petone Vision applies to the whole Petone area, not just the area covered by the Design Guide. Accordingly, in applying the vision to Petone West, the variation between the areas is important.
- Some of the existing characteristics of Petone West (refer to section 1.7 below) influence and, to an extent, limit what is reasonably possible for its future and the Design Guide needs to be cognisant of these characteristics.
- The Petone Vision includes elements which cannot be achieved by the Design Guide and the District Plan. Similarly, the District Plan and Design Guide cannot be expected to single-handedly achieve the vision as there are many other influences on the future shape of the Petone West area.
- Many of the Vision elements and actions relate to ensuring the qualities of Petone are not adversely
 affected by change. There are some qualities in Petone West that are positive and these should be
 retained (eg urupa). However, most of its current quality is poor and the provisions of the District Plan
 and the Design Guide seek to change them.

1.4 Approach to Working with Development Proponents

The Hutt City Council encourages landowners, developers, architects, landscape architects, planners and any other parties involved in the development of Petone West to work corroboratively throughout the development planning process.

An important part of the process is early collaboration before concepts are committed to. This enables ideas to be discussed freely prior to commencing detailed design. With initial feedback from HCC, the design and planning time that follows can be expended with some certainty as to HCC's likely position. A diagram of the desired process is described below. The need for all these steps will depend on the scale of the development proposal. Although this process is optional, it is intended to facilitate an efficient design and consenting process.



Submit Application and

Respond as Required

Initial discussion about the site and development proposal. This is an opportunity to reference the relevant design guide and District Plan provisions, as well determining consent and information requirements.

The development proponent may meet to discuss concept drawings, prior to commencing to the level of detailed design required to submit an application for resource consent. HCC will provide feedback that may assist the proponent with design decisions.

Meetings as required to review design progress. This may only be necessary for more complex developments where designs are evolving and implications for the satisfaction of the Design Guide or District Plan provisions require clarification

The development proponent prepares the final design documentation and resource consent application including an Assessment of Effects on the Environment (AEE). The AEE includes a Design Statement that describes how the design meets the Design Guide requirements.

Development proponent submits the resource consent application for assessment by HCC. The assessment of the resource consent may require further discussions between the proponent and HCC. Ultimately a decision on the application will be made by HCC which may include conditions in relation to design details.

1.5 How to Use the Design Guide

Each section of the Design Guide is generally structured such that the content includes the elements (title, objectives, explanation, guidelines, images) set out below:

2.1 Building Form

Building form refers to the vertical and horizontal scale of a building. Human scale means sizes and dimensions that are not dominating to people.

The objective of managing building form is to generate an environment in which people do not feel dominated by the scale of buildings and so enjoy being there - this leads to more intensity of use, more business opportunities and makes it an attractive choice relative to other centres.

Changes in building volumes (height x width x length) and variation in the external walls can reduce the impression of the scale of large developments. Elements such as verandahs help to reduce apparent bulk and create a human scale environment for people where it matters the most - on the street.

Guidelines

- 1. Continuous horizontal walls on a building's street frontage should be 'relieved' by articulating the frontage with contrasting projecting and recessive elements that visually break it up into identifiable parts this can be expressed further through the use of different materials, patterns and colours;
- 2. Facades, front and side elevations of multi storey buildings, should visually describe a vertical hierarchy of a base (ground floor), a middle (upper floors) and a top (roof, parapet, cornice, pediment) which is consistent in its expression from the base to the top;
- 3. Buildings should respond to the horizontal elements of those which are adjacent;
- 4. Where buildings are built to the side boundary, no windows are to be provided on the side wall. If windows are proposed on a side wall, consideration should be given to the potential for the windows to allow light and air in combination with a side boundary setbacks to prevent being 'built out' in the future; and
- 5. Large scale buildings should be considered as a collection of forms rather than one large box form.

Guideline Title

Guideline Objectives

Explanation why the Guideline is Important

Design Guidelines

Image Examples or Explanatory Diagrams

1.6 Design Guide Area

The Design Guide applies to any new development (except small scale alterations or additions) located within the District Plan Zone "Petone Mixed Use Activity Area" as shown on the map below. This is also described at times as "Petone West" in the Design Guide to reference its geographic location in the wider Petone context.





1.7 Context Description

The existing physical condition of the Petone Mixed Use Activity Area has been influenced over time by its land uses, including industrial, service and retail activities. As this area transforms into a mixed use environment with a different range of activities, the character will progressively change. To assist in understanding the future character planned for the Petone Mixed Use Activity Area, the descriptions below compare and contrast the existing and future character proposed.

Existing Context

The character of the west end of Petone derives from its history of use and occupation over time. Physical remnants of Maori settlement still exist (urupa and archaeological sites). The whole area and its relationship to the context of hills and harbour remain significant to tangata whenua. As an early settlement of the NZ Company, a formal, regularised street pattern was developed and is still reflected in the grid of streets along the foreshore.

Much of the subject area was industrialised (meat works, timber mills) in the later 1800's and land was amalgamated into larger blocks, many of which remain. A range of smaller servicing and trade-based activities associated with the larger industrial activities established in close proximity on nearby streets. The housing of workers occurred throughout Petone and the Hutt Valley, with the older housing stock, adjacent to the east of the Petone Mixed Use Activity Area now popular with people seeking the benefits of the coastal location and amenities of Jackson Street. Petone as a whole has a legacy of older Victorian era architecture, and in the central part of Jackson Street (outside of the Petone Mixed Use Activity Area) many of the original buildings remain. This central part of Jackson Street has become a boutique retail and café location. The portion of Jackson Street within the Petone Mixed Use Activity Area is currently dominated by a mix of larger format retail buildings and service industries. These are typically utilitarian structures, make a modest contribution to the streetscape and do not warrant protection.

The railway line went through to the Wairarapa via Petone in 1874, and the Petone Railway Station sits adjacent to the Petone Mixed Use Activity Area providing good public transport connectivity into Wellington City and the wider region. The motorway runs parallel to the rail line. This transport corridor separates the Petone Mixed Use Activity Area from the area further west at the foot of the Korokoro hills. By the late 1980's, most of the larger industrial uses closed down and were being replaced by offices and retail. Today the uses are a mix of older warehouses, distribution, service industries, trade supplies, large format retail (including supermarkets) food related industries and manufacturing.

The built form in the Petone Mixed Use Activity Area generally comprises lower height buildings (1 – 2 stories) with a few exceptions being some taller (up to 8 stories) buildings on The Esplanade and one on Jackson Street. Some of the light industrial buildings in the subject area, although only one or two storeys high, are relatively large in scale in terms of both height and footprint area. Taller buildings are typically located on larger sites. In the eastern part of the subject area the sites are relatively small and regularly shaped. The buildings on these smaller sites have a relatively uniform built form, being 1-2 stories in height, setback 5-8 metres from the front road boundary with on-site parking in front, and immediately abutting neighbouring buildings. Vehicle entrances, on-site parking and loading areas dominate streetscapes with limited pedestrian activity. In the block between Sydney and Nelson Streets the light industrial sites abut residential uses.

On the larger sites in the central and western parts of the subject area, most buildings are 1-2 stories in height reflecting their large format retail and warehouse type uses. These larger sites also have wide expanses of on-site parking and service areas, with buildings typically free-standing within each site. The large sites are serviced from relatively few streets and some informal routes across these larger sites are used by pedestrians and vehicles as a short cut given the limited connectedness available within the transportation network.

The main street network is busy, with high vehicle volumes along The Esplanade and Hutt Road which are on the south and west boundary of the subject area respectively. Internally within the Petone Mixed Use Activity Area private car/vehicular movements are the predominant mode of transport, along with a high proportion of heavy traffic associated with the industrial uses. There are limited non-vehicular movements (pedestrian and cycling) on the street network.

With the high level of building coverage and on-site parking close to 100% of the area has an impervious surface. This surface condition generates stormwater runoff ponding issues during extreme rainfall events. There is limited vegetation within the Petone Mixed Use Activity Area, although relatively mature pohutakawa trees exist in several discrete places.



The Esplanade is influenced by the traffic volumes, but with a broader attractive outlook to the beach and harbour. Buildings variously adjoin or are set back from the street edge. Most have no direct ground floor relationship with the street edge.



The streets in the blocks between Victoria and Sydney Streets have small sized sites (average 450m²), and many of the buildings are set back from the relatively narrow streets. Frontages are typically utilised for car parking and activities associated with the service/commercial uses. They extend between The Esplanade and Jackson Street so are well located relative to amenities.



West of Victoria Street (above), Jackson street has an open character with little street edge definition due to car based open parking areas. Some buildings have a direct frontage to the street. The total direct frontage equates to some 40% of the distance between Victoria Street and the Hutt Road.



In the area north of Jackson Street the activities are similar in nature to those in Victoria to Sydney Street block. The buildings vary more in height and type and there is a greater mix of set backs and buildings built to the street edge. The street pattern is less regular than the Victoria to Sydney Street blocks.



Between Victoria and Cuba Street, Jackson Street is a more defined 'mainstreet' space due to the continuous typically 2 storey buildings along its edge. This area is not in Petone West, but is contiguous with it. The heritage values and streetscape character of this section of Jackson Street are important to Petone's identity, vibrancy and its commercial attraction.



On Te Puni Street the urupa (burial ground) remains in use and is the only discrete green open space in the Petone West area. The visual connection from the urupa to the harbour and to the Korokoro hills is important to iwi. Existing buildings encircle the urupa except where it is open to the street.



Future Context

The desired future for the Petone Mixed Use Activity Area is that it becomes a place to live as well as to establish and operate a business. The change will occur gradually over time and new development will either be interspersed with existing buildings, or large existing open areas will be redeveloped. Over time it is anticipated some of the larger footprint buildings with little value will also be redeveloped. The focus has been on achieving good urban design outcomes for Petone West and references, such as to the NZ Urban Design Protocol underpin the aims of the guidelines.

The aim is for a range of residential living choices and activities to be provided which meet the daily needs of residents and workers. There is an opportunity for housing provision to be a combination of replacement or conversions of existing warehouses and industrial spaces, new apartments and townhouses or terrace houses on smaller sites.







The residential options include (left to right above) adapted industrial spaces/warehouses, new apartments above retail on larger sites developed comprehensively, terrace or town houses on smaller sites.

To successfully encourage people to live in the Petone Mixed Use Activity Area the development quality needs to ensure that incompatibilities (e.g. noise) with existing uses are minimized and that amenity (e.g. open spaces, shelter and connections to desirable destinations like The Esplanade and Jackson Street) is provided for. The interior quality of spaces will need to be considered too, and 'shoe box' spaces will be discouraged.

With a comprehensive form of development planning it is anticipated that new buildings can be built within existing large under-utilised areas, or existing buildings replaced in such a way that the intensity of use and interest increases and the area is used as efficiently as possible.





The comprehensive development of larger blocks of land in Petone West can achieve medium density development for residential and retail uses with open space combined. This will require existing uses to be replaced.

The desired future for the Petone Mixed Use Activity Area is that it has a range of street types that either reflect existing positive qualities, or are streets that are improved by the nature of the new buildings that have a frontage to them. It is anticipated that new streets or lanes may be added to increase diversity and richness within the existing large blocks.

It is important that Jackson Street's character and qualities are protected to the east, and extended west picking up on building modulation, articulation display windows and verandahs. The development along the Esplanade should take advantage of the outlook, while recognising the traffic constraints that exist.

Some of the smaller sites on the streets east of Victoria Street have the potential for conversions of existing buildings making interesting and intimate street spaces with a mix of service industry and residential development







The different streets in Petone West can have a form of development which responds to the different qualities. From (left to right) The Esplanade where a set back from the road enables some form of amenity development to occur (this example does not show any street tree planting). The middle image shows potential for west Jackson Street or smaller streets where lower height frontage with activities along its edge can occur. The right image shows potential for smaller streets like Victoria Street, where there may be conversion or replacement of existing buildings to those that have a mix of uses reflective of its 'robust' working history.

It is desirable that development in Petone West provides for employment as well as residential activities. The opportunity exists to diversify the employment base from service, industrial and retail to include more office space. There is also the potential to leverage off the character of Petone to generate spaces that are smaller in scale for use as workshops and studio spaces. It is also desirable to retain the working service industry activities (even if buildings change) that provide part of the character of the area and local services.







There is potential (left to right) for larger scale office buildings (with or without commercial ground floor activities), converted warehouse space type working spaces and retention of existing businesses.

With more open space on site, the amount of vegetation is intended to increase, in terms of the quantity, size, type and quality. The intended result will be a lower proportion of impervious surfaces, with rain gardens and other forms of low-impact stormwater management.

There is an important need for more connections, such as public streets or private accessways within the larger blocks, to provide more richness and diversity of development along with increased frontage. These new connections will encourage a higher level of non-vehicular movement (pedestrians and cyclists) within the area. There is also potential for greater use of public transport given the proximity of the Petone Railway Station. Improving the quality of the walking experience within Petone West will be important to encourage its transition to a mixed use environment that is desirable to live and work in.



Summary table

ATTRIBUTES	EXISTING CHARACTER	FUTURE CHARACTER
Uses	Service, commercial, large format retail and industrial.	Mix of uses, including existing uses (service, commercial, large format retail and industrial) plus medium density residential and retail (greater than 500m²) along Jackson Street. No residential uses on the ground floor along Jackson Street.
Densities	Low with a high amount of open areas with surface car parks.	Increased density of development, including public and private open spaces with a reduced extent of open surface car parks.
Heights	Low, mostly 1 or 2 storeys with a few taller (up to 8 stories).	Mix of low and taller buildings throughout the area. Taller buildings are adjacent to open spaces.
Architecture and Style	Range of eras and no specific styles, utilitarian sheds, simple box forms, basic materials - concrete, corrugated iron, little detail.	Contemporary, more articulation within forms as appropriate to use. More attention to detail at street level, with a range of materials used. Conversions or replacement of existing buildings. Maintenance of existing heritage values in Jackson Street.
Built form	Stand alone buildings with large floor plates mixed with adjoining smaller buildings on streets to the east	Mixed use buildings (retail, servicing, commercial on ground floor and residential and/or commercial above). Some existing buildings remain, but some gaps filled in and other buildings replaced with medium density residential activity and blocks of apartments around private or public open spaces.
Open Space	No green open spaces or public places with amenity except The Esplanade Foreshore	New developments have on-site courtyards or larger open space areas that provide contained sheltered open areas for residents' amenity.
Connections	Large blocks with limited connectivity for all transport modes	Existing streets supplemented by new street connections that generate activity by having additional frontages and better walking accessibility.
Car parking	Large surfaces of carparking fronting the streets	Carparking is located either internally within buildings or behind buildings.

2.1 Building Form

Building form refers to the vertical and horizontal scale of a building. Human scale means of a size and dimension that is not dominating of people in the environment around the building.

The objective of managing building form is to generate an environment in which people do not feel overwhelmed by the scale of buildings and so enjoy being there. This in turn leads to more intensity of use, more business opportunities, and makes the area an attractive choice for investment relative to other centres.

Changes in building volumes (height x width x length) and variation in the external walls can reduce the impression of the scale of large developments. Elements such as verandahs help to reduce apparent bulk and create a human scale environment for people where it matters the most - on the street.

- 1. Continuous horizontal walls on a building's street frontage should be 'relieved' by articulating the frontage with contrasting projecting and recessive elements that visually break it up into identifiable parts this can be expressed further through the use of different materials, patterns and colours;
- 2. Facades, front and side elevations of multi storey buildings, should visually describe a vertical hierarchy of a base (ground floor), a middle (upper floors) and a top (roof, parapet, cornice, pediment) which is consistent in its expression from the base to the top;
- 3. Buildings should respond to the horizontal elements of adjacent buildings;
- 4. Where buildings are built to the side boundary, and if windows are proposed on a side wall, consideration should be given to the potential for the windows to allow light and air in combination with a side boundary setbacks to prevent being 'built out' in the future; and
- 5. Large scale buildings should be considered as a collection of forms rather than a single large box form.



This building is a new block, but has an articulated form of identifiable parts given recessive and projecting elements (dotted lines). It is typical of the character of older buildings and a useful reference for new buildings.



Horizontal elements consistent with adjoining buildings.

Vertical elements of upper floors consistent with ground floor.



This building has an external facade expressed as a series of forms including a projecting corner form. Various materials and colours emphasise the form variations.



Long blank walls are reflective of utilitarian and internal space requirements. However, these forms can be moderated.

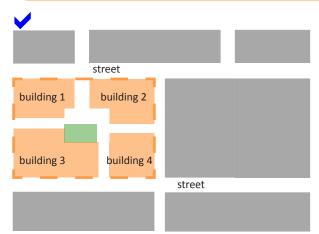


2.2 Large Sites

There are a number of large sites in Petone West that should be subdivided over time and redeveloped more comprehensively.

The objective of this guideline is to generate more smaller sites form the currently large sites and so enable greater diversity in development type and uses. This will take time and will most effectively be undertaken in discussion with HCC and other adjacent land owners to make the most of the opportunities to generate new street connections, and open spaces along with a mix of new uses and building forms.

- 1. Large blocks and the sites within them should be divided to create new streets, lanes and open spaces in conjunction with new building forms;
- 2. Reference should be made to the predominant orthogonal street pattern and site sizes in the eastern area when considering the frequency of streets and site size for the larger blocks in Petone West;
- 3. New development design should be undertaken applying a comprehensive approach to enable such factors as the relationship between building forms and the spaces between them, parking strategies, amenity for building occupants, energy efficiency, staging and other factors to be considered holistically;
- 4. Consideration should be given to understanding the development aspirations of adjoining site owners as part of a comprehensive design approach; and
- 5. Early discussion with HCC should be undertaken to look for ways to generate mutual benefits from new street connections, open space and reduced block size.



Dividing a large block to create open spaces including streets by the arrangement of building forms.



The sites in this area of Petone West are large and would benefit from mixed use transition by subdivision over time.



New development that retains older buildings and forms new buildings around green open space. The older buildings do not have to be protected for heritage values, but provide a link to history if it is practical to repurpose and retain them.



The large sites in Petone West have developed with large standalone buildings and expansive surface car parking areas.

2.3 Prominent Sites

Prominent sites are those which have a higher level of visibility relative to most sites in the area. In a relatively flat landscape such as that which exists in Petone West, these prominent sites are typically viewed along street corridors. The objective for new buildings on prominent sites is to use them as 'markers' to assist people's orientation within and to the Petone West area. The opportunity to generate good development on prominent sites is reliant on the identification of them, followed by owners being encouraged to invest in buildings that are architecturally outstanding and of a quality befitting their visibility.

Prominent sites in Petone West are located at: (a) street ends where the vista down the street terminates with a building; (b) street corners where buildings are visible on at least two sides and they mark a change of direction where one street connects to another; and (c) gateway sites which are usually on a corner, but also where there is a transitional threshold between areas of different character. The plan below identifies the prominent sites within the Petone Mixed Use Activity Area, noting that this plan is indicative of the location of prominent sites and does not reflect their extent.

Guidelines

- 1. Buildings on sites at the end of a street should have a form and facade treatment that responds to the terminating street's vista;
- 2. Buildings on corner sites should visually enhance the change in direction by extending a common facade treatment around the corner; and
- 3. Buildings on gateway sites should work in concert with any gateway sites opposite, or comprise elements that are visible at a longer distance, or have a moderated form from high to low, or be of a sculptural form given the potential to be seen from multiple sides.



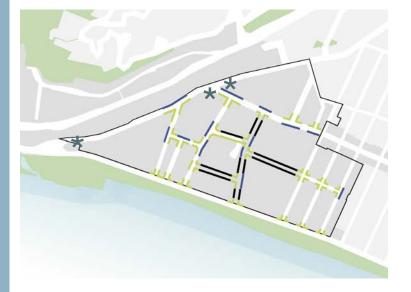
Building at the end of street view: architectural elements (blue facade, windows) are aligned with the centreline of the street



Building at a corner with its facade treatment and rhythm of openings repeating around the

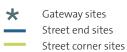


Building at a gateway site with a moderated and





Prominent Sites Plan



Boundary to Petone Mixed Use Activity Area

2.4 Street Frontage

The aim of the "Street Frontage" guideline is to encourage existing and new street forms that are interesting and comfortable for people using the Petone West area. This contributes to economic vitality by encouraging people to spend time in the area and enhances the attractiveness to local residents and people from the wider region. It is an objective for Petone West that new streets are added over time.

It is recognised that there are different street types in Petone West and these need to be provided for differently. The guidelines will also seek to ensure that new development in Petone West in proximity to the Jackson Street Historic Retail Precinct (which lays immediately adjacent and east of the Petone West area) is sympathetic to the existing historic character of this area.

The guidelines for Street Frontage generally seek a positive relationship between the public space of the street and the private space inside the building. It is the position, form and openings in the intermediary front wall of buildings that has the most influence on the outcome of this relationship. Building Bulk guidelines are also relevant. Typically, HCC provides and manages public space while private space is developed and maintained by landowners and their tenants.

Transparent windows, doors facing the streets, lighting, porches and verandahs are all elements that contribute to the attractiveness of streets as public spaces. It is recognised that in Petone West there are a mix of uses and that not all will be able to provide these elements (eg. warehouses).

The Street Frontage guidelines will address the following:

- A. Continuity
- B. Visual Connections
- C. Entry Elements
- D. The Esplanade
- E. Jackson Street
- F. Residential development

To recognise the different street types in Petone (both existing character and desired future character) it is important that they are considered in relation to the "types" set out below. The Frontage Type Table describes the measurable qualities of the guidelines for each type.



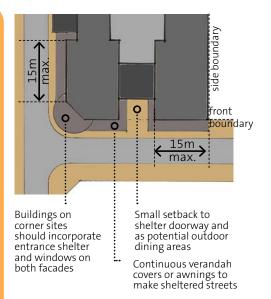
FRONTAGE TABLE for STREET TYPES					
GUIDELINE AIM	Type 1 The Esplanade	Type 2 Jackson Street	Type 3 New Streets	Type 4 Victoria to Sydney Streets	Type 5 Other Streets
Buildings front to street boundary	No - but built to set back line of 10m (except on those small sites noted in District Plan)	Yes	Yes	No - but built to set back no greater than 5m	Not necessary
Continuous building across frontage at ground floor	Not necessary	Yes	Not necessary	Yes	Not necessary
Transparent frontage on ground floor	50% minimum	60% minimum	50% minimum	20% minimum	20% minimum
Continuous verandah on ground floor	Not necessary	Yes	Not necessary	Not necessary	Not necessary
Building frontage tenancies at intervals and articulated in form	25m maximum	15m maximum	15m maximum	20m maximum	20m maximum
New driveways, new service lane access or new lane access	Yes	No	Yes	Not necessary	Not necessary
Residential Activities on ground floor	Not necessary	No	Not necessary	Not necessary	Not necessary

A. Continuity

The standard aim for town centres is to achieve a relatively continuous street front with visual permeability at the ground floor. A continuous street front also provides 'containment' to the street and assists to make the street a space with higher amenity. It is recognised that in Petone West this will not be practicable on all streets given the mixed use nature of the area.

Although this particular guideline applies mostly to Jackson Street, it is also a good quality that development on other streets can aim for as well, with appropriate provision made for visual connection and building articulation.

- Buildings in Type 2: Jackson Street, Type 3: New Streets and Type 4: Victoria to Sydney Streets should have a continuous frontage from side boundary to side boundary at the ground floor;
- Buildings in Type 2: Jackson Street and Type
 New Streets should be built up to the street boundary;
- Corner buildings in Type 1: Jackson Street, Type 3: New Streets and Type 4: Victoria to Sydney Streets should maintain continuity around the corner, as well as be built to the street boundary; and
- 4. Buildings on Type 2: Jackson Street should have a verandah or shelter attached at between ground and first floor level and extending the width of the site.



Plan View: Corner Building on Type 2, 3, 4 Streets-Continuous Frontage which 'wraps' around the corner



Continuous frontage modulated at intervals by change in uses (various shops and restaurants) materials, colours, good use of sheltering elements, high percentage of transparent glazing and public/private lighting



Building faces both primary and secondary street, provides shelter (balcony cover) and visual connection (large proportion of transparent windows on the ground floor with balcony and windows above)

B. Visual Connection

Windows and doors on the ground floor and balconies and windows on upper floors promote visual connection and interest between the people inside (private space) and outside (public space). The design, location and frequency of openings also contribute to the sense of safety of the users by passive surveillance.

- 1. Windows and doors directly facing the streets and open spaces should be provided in accordance with the Frontage Table for Street Types. It is noted that although window and doors on street edges are not necessarily applicable to all street types they should be maximised as far as practicable;
- 2. Blanked out, or false windows and doors, should be avoided in all frontage types. Roller doors should be avoided on Type 1: The Esplanade, Type 2: Jackson Street and Type 3 New Streets, but are recognised as part of the working nature of frontages on other type streets;
- 3. Opaque windows, reflective windows or solid walls should only be used in the facade where it is below the eye level of people on Type 1: The Esplanade, Type 2: Jackson Street and Type 3 New Streets frontage
- 4. Buildings in all frontage types should have windows that overlook the street, parks, lanes or pedestrian lanes from any above ground uses.



Reflective windows do not offer visual connection between interior Non-transparent lower wall section, but at eyeline the windows and exterior which is in effect the same as a blank wall.



address the street.





A high percentage of transparent windows provide a good visual connection between inside and outside. This creates visual interest to the passers by and provides opportunities for passive surveillance. These multistory buildings have above ground spaces that have windows that look out to the street which aids passive surveillance also.

C. Entry Elements

Well designed, unique and identifiable entry elements, such as awnings, colonnades, feature doors, entrance canopies, porches and verandahs, provide a distinguishable identity, demarcate building entrances, and offer shelter. They also serve to create a transitional space between the inside of the building and the open space outside which can be used for outdoor seating or dining, or for an extension of the internal activities outside in good weather. The entrance should also provide easy access for people with disabilities and parking for cyclists should also be considered.

- 1. Buildings should have recognisable 'legible' entrances by the use of inset setbacks to create sheltered doorways, embayments and porches; or by the extension of canopies out to reflect the use and doorway positioning;
- 2. Accessibility of the entrance for people with disabilities should be considered;
- 3. Separate entrances for commercial and residential uses should be provided where the building has both activity types;
- 4. The entry area should be designed as a transition from the public space of the street to the private or semi public space of the building inside; and
- 5. The entry area should make provision for bicycle parking and other wheeled vehicles like push chairs or scooters.



Canopies over the street frontage demarcate the use, signal doorways and provide shelter for outdoor seating and dining. Bicycle parking is on the street



This 'opening wall' sends a clear signal ('legibility') as to the entrance way in this modern building and adds visual interest.



The entrance to the building provides covered space for outdoor seating and dining and demarcates the transitional space to the public space of the street



The entrance to the building provides informal seating opportunities and accessibility for people with disabilities.

D. The Esplanade

Buildings on The Esplanade require special attention regarding their design, placement and function. The appropriate interface between buildings and The Esplanade is fundamental to achieving a quality street. The objective of this guideline is to ensure that developments within the street Type 1 (The Esplanade) create a good physical relationship with The Esplanade and the waterfront so that they benefit from the amenity the area provides. The aim in this area is also to ensure that new developments protect and enhance its openness, natural and recreational values, and visual character when viewed locally as well as from the Hutt Road and SH2. Additionally The Esplanade is a high volume traffic corridor and limiting the number of vehicle crossings is important to its function as a the road. Many sites have provision for entrance and egress for vehicles from side streets. It is also recognised that achieving a set back on some sites is unreasonable given their relatively small size and special note is made of these.

Guidelines

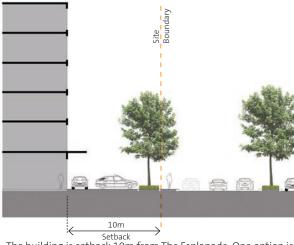
- Ground floor uses should address the Esplanade with windows and doors;
- Developments should make the most of the views of the beach and face out towards The Esplanade and beach;
- New buildings should have a high quality facade and modulated building form to prevent a wall of buildings forming on The Esplanade frontage;
- 4. A frontage setback area of 10 metres (except for those sites identified in the District Plan) should be provided and designed in conjunction with the building. This setback space may be used as open amenity space or parking;
- 5. The front boundary to the Esplanade is to have a minimum of a 2.5m wide planted strip incorporating clear stemmed pohutakawa trees. They should be spaced at no less than 5m centres; and
- The access for vehicles to each site should occur from side streets and not increase the number of vehicle crossings to The Esplanade.



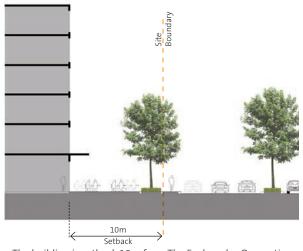
The placement and frontage set back potential for The Esplanade

- Building is stepped to avoid noise and pollution from The Esplanade
- Residential tower recessed from the front boundary to improve sunlight access to the street. It is also a good solution to allow for adaptation in relation to The Esplanade in the future.
- Rooftop gardens above retail. It can be publicly accessible with restaurants and shops fronting onto it or it can be a communal open space (semi-private) for residents' use.

• Planting provides a green edge to the street.



Setback
The building is setback 10m from The Esplanade. One option is for this space to be used as surface carparking,



The building is setback 10m from The Esplanade. One option is for this space to be used as open amenity space as an extension of the use of the ground floor of the building.



E. Jackson Street

Jackson Street east of Victoria Street is an important asset for Petone and the Hutt City and is recognised and is an historic area in the District Plan. Its reasonably intact grouping of inter-war period buildings with continuous frontages of smaller floor area, typically 2 to 3 storey buildings, in conjunction with street landscape treatment has generated a setting for speciality shops, and food and beverage businesses. The area is a drawcard for many people who are attracted from outside the area or locally due to its special character. This area east of Victoria Street is not within the Petone West area covered by these guidelines.

It is important that the development of Petone West, both the extension of Jackson Street west of Victoria Street, as well as the area generally, provides a complimentary new mix of building types and activities to the historic area of Jackson Street to the east.

The objective of this guideline is to ensure that developments within the street Type 2 (Jackson Street) create an extension of certain qualities of the east section of Jackson Street in the section west of Victoria Street. Also that development in Petone West that interfaces with Jackson Street to the east is undertaken in a complimentary way.

- Ground floor uses should be commercial/retail, not residential, and designed to address
 Jackson Street with display windows and doors such that the minimum glazed area is 60% of the front wall area at ground floor;
- Buildings in Jackson Street should have a continuous frontage from side boundary to side boundary at ground floor level;
- Buildings in Jackson Street should have a floor area of no less than 500m² and tenancies with frontage widths of no more than 15m;
- 4. Buildings in Jackson Street should be built up to the street boundary, including above ground floors, to a height of no more than 12m and include windows facing the street;
- Corner buildings in Jackson Street should be built up to the street boundary and maintain continuity around the corner;
- Buildings in Jackson Street should have a verandah or shelter attached between the ground and first floor level, extending the width of the site;
- The access for vehicles to each site should occur from side streets and not increase the number of vehicle crossings to Jackson Street; and
- Buildings in Jackson Street that are adjacent to the existing Jackson Street Heritage Area should be responsive to the form of those buildings to ensure the scale is complimentary.

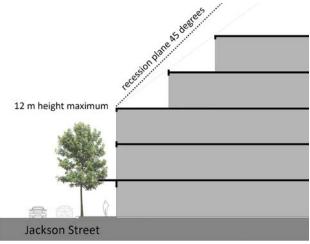


Above ground floors are built to the front boundary with windows facing the street

Continuous verandah frontage

Buildings have display windows to the street

The Jackson Street frontage arrangement for existing buildings to the east of Victoria Street provides a point of reference for the Petone West section of Jackson Street



The building is fronting directly to Jackson Street and has a height of no more than 12m at the front. The height can increase stepped back.

F. Residential Development

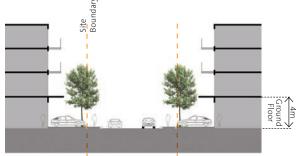
This particular guideline only applies to streets where residential uses are being developed and where the ground floor treatment needs careful design consideration. The objective of this guideline is to ensure residential privacy and passive surveillance to the street. There are other important residential amenity requirements (refer Residential Amenity), but the focus of this guideline is on the street frontage.

A good interface between public open spaces (streets, lanes and parks) and private spaces is associated with building design that provides passive surveillance (people can see and be seen), a streetscape which is not dominated by garage doors and driveways, and where residents have adequate levels of privacy.

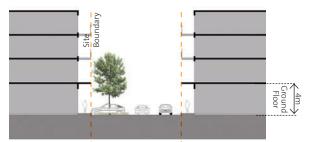
- 1. No residential activity should be provided on ground level frontages on Type 2: Jackson Street. Buildings on Type 2 streets should accommodate commercial uses on the ground floor. Ground floor residential activities on other street types are not necessary, but where they are provided, the guidelines below apply;
- Fences fronting public open spaces should have a maximum height of 1.2m. Where fences exceed 1.2m in height above street level, that portion of the fence above 1.2m should be a minimum of 50% transparent;
- 3. Garage doors should be aligned or preferably recessed from the street front building line;
- 4. A narrow front yard and change in level of 1.2m is a method that can be used to promote a separation from the public street environment; and
- 5. Consideration should be given to the use of private open space fronting the street to provide sunlight access and a more open streetscape.



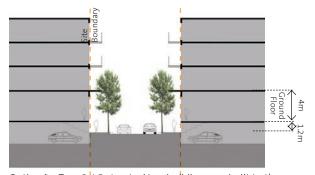
Separation from the street front by set back and height change



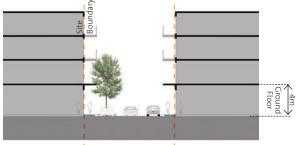
Option for Type 4 or 5 streets: Similar to existing street layout in Sydney Street for example



Option for Type 4 or 5 streets: Buildings are set back 2.5m to allow for a footpath and angle parking.



Option for Type 3,4,5 streets: New buildings are built to the boundary with underground parking and a 1.2m height separation from the street.



Option for Type 3,4,5 streets: New buildings are built to the boundary. Parallel parking on side.



2.5 Adjacent Uses

Managing compatibility between new mixed use developments and existing uses is important The objective of this guideline is to ensure new, potentially conflicting uses are appropriately designed and placed to minimise the incompatibility between them.

This guideline refers specifically to: (a) Buildings adjacent to the Urupa; and (b) Mixed use buildings that abut residential neighbourhoods.

A. Buildings adjacent to the Urupa

The urupa at Te Puni Street is a culturally significant site on which cultural events continue to take place. Consequently it is important to develop a respectful relationship between the urupa and any adjacent development. Conflict may arise in relation to residential dwelling privacy and overlooking as well as new buildings dominating and shading the site.

The objective of this guideline is to minimise the potential effects of future development on the urupa cultural activities.

- 1. New buildings should be designed with a buffer between the urupa and residential use in order to create aural and visual privacy and reduce potential dominance;
- 2. New buildings should be designed to provide as far as practicable good visual connections between the urupa, the harbour and the hills;
- Any windows or open space balconies facing the urupa should have movable screening to enable privacy for the residents from activities in the urupa;
- 4. New buildings should be designed so as not to dominate the urupa;
- 5. New buildings should be designed to minimise any shading effect on the urupa; and
- 6. Any new development in Petone West should consider the potential for other sites of cultural or archaeological significance, including burial sites present below ground, and liaise with HCC in this regard early in the design process.







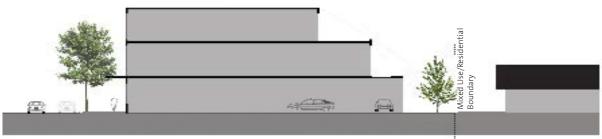
The Te Puni Street urupa is located near to the coast and visual connections from the site to the harbour are important as they are reflective of the very large settlement here of Maori and the important relationship the people had with the sea. Similarly, views to the Korokoro Hills are important. The urupa remains in use and activities that occur there can be of a sensitive nature so compatibility with new adjacent uses should be considered.

B. Mixed Use buildings adjoining residential neighbourhoods

The potential effects of mixed use buildings on adjoining residential areas can include dominant, bulky buildings and elongated plain walls. Loss of privacy can occur if overlooking mixed use buildings are placed in close proximity to residential areas.

Guidelines

- 1. A buffer can be created between commercial and residential development. This may be in the form of a landscaped setback and/or open space area.
- 2. Screens and other devices should be provided to limit overlooking from mixed use activities onto adjoining residential uses; and
- 3. The scale and massing of new buildings should be sympathetic to adjoining residential uses by applying design devices such as breaking forms into smaller shapes, using stepped back forms, using residential scale shapes and placing windows and open spaces to punctuate facades, and avoiding tall blank walls.



Moderating the effect of scale of new mixed use development on existing residential development can be achieved by a set back from the boundary and stepping back the building form



Adjustable screens enable privacy and management of sunlight access/solar gain to residential development (apartment)



Using creepers, hedges or other dense planting in conjunction with fences and walls to screen residential areas



Using a sloping roof form, building set back and trees provides a transition between the new taller corner building and the existing buildings to the right

2.6 Open Space and Greening

Demand for local open spaces for the people working and living in Petone West will increase as the area transitions to a mixed use environment. There is a large open space provided by the Petone foreshore and reserve, as well as by the hills and regional parks to the west. However, the area would benefit from smaller parks or plaza spaces to provide for seating, play and general amenity. New uses such as residential also benefit from some on-site private open space.

The District Plan provides an opportunity for developers to increase the floorspace of a building (added height), where public open space is provided as part of a development. The objective of this guideline is to assist the delivery of good quality open space within Petone West in association with private development, and to ensure that open space dedicated to each dwelling unit is of a reasonable quality. This guideline refers to:

- A. Residential Outdoor Areas.
- B. Public open Space
- C. Greening

A. Residential Outdoor Areas

The "Residential Outdoor Areas" guideline aims to enhance the urban amenity for residents by providing suitable private outdoor areas. The demand for good public, semi-public and private open space is likely to increase with the higher population and land uses densities intended in the future. This guideline seeks provision of on-site open spaces.

- Residential developments should provide outdoor areas which can be in the form of private and/or shared open spaces;
- Internal or lane type circulation space also provides open space amenity for residents;
- Outdoor open spaces should be located where they will receive sunlight and be of a dimension that residents can functionally use; and
- Privacy should be provided for by incorporating planting and/or external devices such as louvres, shutters and blinds where required.



Internal courtyard type shared space provides places for play and provides light and air circulation to residential uses.



Balconies as private outdoor areas in residential apartments or townhouses.



Internal courtyard type shared space provides places for play and provides light and air circulation to residential uses.

B. Public Open Space (Encouraged)

A high quality and usable open space is safe, active, convenient, well maintained, pleasant, connected and appropriate to its context. An unsuccessful space is the one that disregards the existing network of open space and the connections to the pedestrian and cycle routes, wind and solar aspect and the size, location, and nature of the activities pertinent to the site and its surroundings. An unsafe open space is one that does not consider the uses and interface of the buildings fronting it and creates hidden, inconvenient, unattractive, poorly maintained and unlit spaces.

The design of open space should be integrated into the urban design and building design process. Provision of public space will necessitate discussion with HCC to ensure that it is strategically well located and is designed to appropriate standards. Open spaces can be in the form of green parks, hard surface plazas, courtyard or pocket park scale spaces. In Petone West it is considered that some form of containment is beneficial to provide sheltered spaces as an alterative to the nearby large open spaces on the Petone foreshore.

Encourage Guidelines

- 1. Provision and design of public open space should be developed in relation to local demand. Consider if the space is to be used by workers during lunch time (seating places, lunchtime sun, shading) or by residents (playground, seating places, "kick and play");
- 2. Consider the relationship and function of the proposed open space relative to other open spaces in the area with the aim of each space contributing over time to a network of different spaces that can function and respond in different ways to use needs and climatic conditions;
- 3. Open space intended for public use should be located where it is accessible (on main walking and cycling routes), highly visible ("eyes on the streets", visual linkages and no hidden spaces), enables through traffic use by pedestrians and cyclists (footpaths and cycleways) and within walking distance of the catchment of core users;
- 4. Open spaces should be in locations and any associated buildings designed to ensure the open space receives a minimum of 2 hours of sun per day from 12pm to 2pm during mid winter;
- 5. The ground floors of buildings fronting open space should have pedestrian-oriented active uses (preferably retail and community uses);
- 6. The selection of trees and plants should be appropriate to the location, type and scale of the open space and its use, recognising for example climatic influences, maintenance requirements, irrigation regimes, and mature height of trees;
- 8. Outdoor lights should be provided, preferably attached to an adjacent building façade, and be of a type appropriate to a public space and human scale; and
- 9. Residential development should, in addition to any public on-site space, provide on-site open space in the form of private areas.





The location of new open space should be considered in conjunction with building development. Petone West needs a series of sheltered and contained open spaces that will provide a range of options for uses at different times and in different climatic conditions. Large open spaces with no shelter will have less amenity.



C. Greening (Encouraged)

"Greening" guidelines address how development can create better amenity in the Petone Mixed Use Activity Area. The emphasis will be on initiatives to provide spaces such as rooftop gardens and green walls. The objective of this guideline is to promote aesthetic improvements to the urban environment, as well as to assist in increasing biodiversity, reduce the heat island effect, enhance indoor and outdoor air quality, and reduce water usage by adoption of efficient water management systems.

1. Rooftop Gardens

Rooftop gardens (intensive green roofs) are typically terraces or areas on the top of a building that can include paving and usually grass, trees and shrubs. They provide usable outdoor areas, have good insulation capabilities and can assist with stormwater management.

2. Green Roofs

Green roofs (extensive green roofs) consist of a vegetated roof area and are not designed as usable amenity spaces. They assist in increasing biodiversity and insulation capabilities, reducing water usage through adoption of efficient water management systems.

3. Vertical Green Treatments

Green walls, green indoor or outdoor atrium and landscaped balconies are all part of the vertical green spaces initiative. They are methods to aesthetically restore urban environments (visual relief for blank walls and tall buildings) and control noise pollution (soundproof capabilities).

Encouraged Guidelines

- Roof gardens and vertical green treatment is encouraged. The spaces created can either be publicly accessible (eg. as part of the open space network), semi-public (eg. for residents of a building) or not for use (design feature). If green roofs, roof gardens and vertical green treatments are to be used they should consider:
- waterproofing, drainage systems and structural strength to support weight loadings;
- plant species that are resistant to severe environments (wind and drastic changes in temperature), require low maintenance and low water use;
- soil mix and depth.
- maintenance procedures and access;
- opportunities to use collected rainwater for irrigation; and
- plant types that maximise solar access in winter and control solar infiltration in summer.



Green roof and balcony



Greening of building facade



Green wall grown from base on facade framework

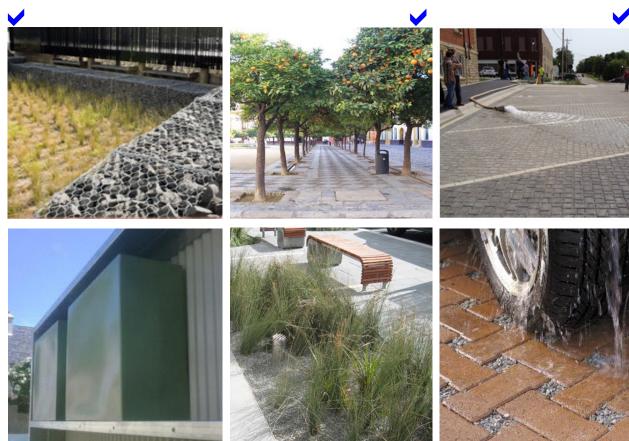
2.7 Stormwater (Encouraged)

The Petone West area is sensitive to stormwater volume in some places as the existing stormwater network has limited capacity to accommodate peak events and discharge to the sea. It is considered good practice to sustainably manage stormwater on site as much as practicable.

The objective of this guideline is to reduce stormwater runoff, integrate stormwater management into the overall design and consider future maintenance of stormwater devices.

Encouraged Guidelines

- 1. Low impact design practices should be used to encourage stormwater infiltration and reduce runoff. Impermeable surfaces should be minimised to reduce the volume of stormwater runoff and consideration given to treating stormwater runoff with swales and rain gardens;
- 2. Minimise the development impact on stormwater quality and generation, and incorporate water efficiency initiatives at the design phase. Consider rainwater collection from roofs for watering gardens and flushing toilets; and
- 3. Plan for the future management of devices to ensure ongoing effectiveness such as access for cleaning and replacement of elements.



Stormwater detention can occur by the use of stormwater devices can be incorporated into storage areas as part of the landscape, or tanks the landscape design of new developments. can be used to collect roof runoff and reuse for services within the building or for irrigation purposes

Stormwater devices can be incorporated into

It is important to minimise impervious surfaces by using porous paving as much as possible to reduce to stormwater run off

2.8 Car Parking

The Petone West area has extensive areas of on-site car parking. Although vehicle parking is essential to enable people to gain access to the employment and commercial activities in the area, the design and extent of surface car parking is detrimental to the quality of the environment as a mixed use area. Provision of parking as part of a structure is a preferable alternative. However, this must be carefully positioned to avoid adverse effects on the street frontage.

As the area transitions to provide for more diversity and richness in its built form open parking areas will provide opportunities for future development. New parking can also be provided which is of a quality that improves on that of existing areas. This guideline is divided into two parts: (a) Locating on-site car parking within a building; and (b) Addressing surface car park scale and amenity.

A. Locating On-Site Car Parking within a Building

Car parking structures, if not designed with consideration as to their effects, can dominate the streetscape with poor quality frontages and loss of passive surveillance. This objective of this guideline is to encourage parking structures to be provided that do not compromise street amenity.

- 1. Car parking within buildings should avoid directly fronting to streets or parks at ground level. Parking should be placed back into a building structure so as to be enveloped by associated active residential, commercial or other uses;
- 2. Car parking above first floor (ie above a ground floor retail/commercial/residential tenancy) should also be within a building structure so as to be enveloped by active uses. However, if this is impracticable, the building should incorporate design features such as green walls and screen devices to minimise the visual impact of parking floors on public spaces;
- 3. Car parking within smaller scale building developments, such as for townhouses or terrace houses, should be located in garaging (or surface parking) at the rear of the building with access via a service lane or access from the street; and
- 4. Car parking within smaller scale building developments that incorporate a garage with direct access from the street should have a garage frontage that is less than 50% of, and set back from, the frontage of the building.



Car parking garage is integrated within medium density residential building and sits back behind a street facade. Garage is a relatively small part of the frontage and is set back from the front wall



Green walls are a good solution to minimise the negative visual effects of car parking above ground within a large scale structure

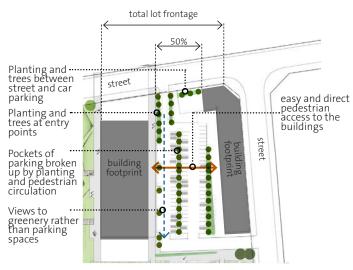


Car parking structure dominates the streetscape; inactive street edge and elongated blank walls

B. Addressing Surface Car Parking

Large areas of open surface car parking can have a detrimental impact on the visual appeal of an area and reduce the comfort and safety of pedestrians and cyclists. This guideline aims to ensure surface car parking is provided in a way which mitigates the detrimental impact on amenity through the use of such measures as planting and attention to the scale and location of parking area placement. Smaller sites providing surface car parking can also adversely affect the quality of the public environment is it is poorly located and dominates the streetscape.

- 1. If surface car parking is provided, it should be located behind buildings for street Type 2: Jackson Street and Type 3: New Streets;
- 2. Surface parking fronting street Type 1: The Esplanade, Type 4: Victoria and Sydney Street blocks, and Type 5: Other Streets should not exceed more than 50% of the total site frontage;
- 3. Surface parking for development (that cannot be accommodated where it is allowed on a street frontage [Types 1,4,5]) should be located at the rear of the building;
- 3. Trees and planting should be located to alleviate the negative visual effect of car parking fronting public spaces and buildings, and to provide shading for cars and pedestrians;
- 4. Surface car parking should incorporate 1 tree per 4 parking spaces along with low water use and low maintenance shrubs; and
- 5. Porous pavement such as permeable pavers, permeable concrete and permeable asphalt should be used wherever practicable.



Surface car parking with tree planting





Large surface of car parking fronting the street; poor landscaping - not enough trees and shrubs.



impact of large surface car parking area. courtyard setting. Areas of porous paving and vegetation are encouraged to reduce urban water



Shading structures, trees, shrubs and Surface car parking at the rear of Surface car parking at the front of appropriate paving minimise the visual terrace houses with landscaped terrace houses is not dominant





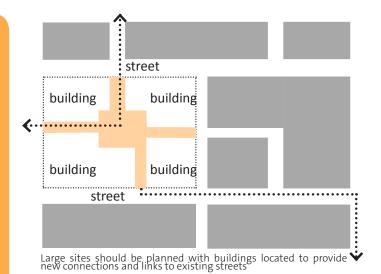
2.9 New Streets (Encouraged)

Mixed use areas should have lively street environments generated by a wide range of activities. In Petone West new streets are encouraged to be formed in association with new development. As in the Open Space and Greening guidelines, if new streets are provided by the developer of a building, they will also receive a floor area bonus for the development the new street is associated with. The objective of this guideline is to ensure that new streets are located and designed to generate positive streetscapes and enhanced pedestrian amenity.

The plan below illustrates the existing street network in the Petone Mixed Use Activity Area and suggests where improvements can be made through the addition of new streets. These improvements are indicative only and the location and addition of other streets will require specific design consideration. Opportunities for new streets to improve the accessibility and connections through the area can be realised from the future development of larger blocks.

Encouraged Guidelines

- New streets should assist with the permeability of existing large blocks by creating new through-street linkages;
- New streets should connect into the existing street network;
- 3. Developments which front new streets should reflect Street Frontage Type 3: New Street conditions;
- Paving, lighting, landscaping, servicing and the interface with buildings should be carefully considered;
- 5. New streets should be designed to facilitate pedestrian, vehicle and cycle movements; and
- 6. New streets should be designed to reflect the volume of traffic use. Smaller scale streets and lanes are encouraged to provide a 'hierarchy' of streets within the area.





2.10 Wind

The objective of this guideline is to minimise the adverse effects of wind on streets and public places to create a more sheltered, safe and comfortable mixed use area in Petone West.

Petone is at a coastal location and in a valley and there is no expectation of eliminating wind from outdoor locations. The intention is to guide the orientation, massing and form of buildings to influence the wind conditions at the ground. Some of the negative effects of building design on wind flow are:

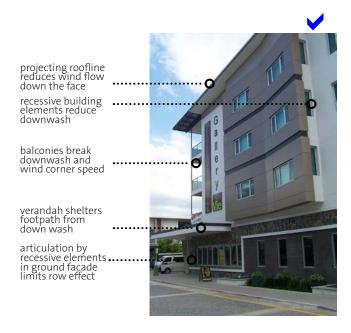
- Streets that present significant variation of building heights (a taller building adjacent to a shorter one) can exacerbate adverse wind conditions;
- Taller buildings that create increased wind speeds at the ground level (downwash effect);
- Horizontally elongated plain façades (a building that is short but long) that can have a detrimental impact on pedestrian discomfort due to increased wind speeds ("row" effect); and
- Alteration or demolition of buildings can change wind flow pattern and speed at ground level and affect neighbouring buildings by funneling wind in.

Guidelines

- 1. New buildings should be designed with reference to the existing wind patterns of the site and not increase wind speed at ground level;
- 2. Projecting and recessive elements (such as balconies, verandahs, set backs) should be used to reduce the adverse effects of wind at street level; and
- 3. Consideration should be given to generating sheltered open spaces which respond to the predominant wind directions.



as public spaces



2.11 Residential Amenity

A. Gaining Solar Access (Encouraged)

Designing for solar access means providing opportunities for the sun to penetrate a building, a lot or an open space to gain solar heat in winter and control solar radiation in summer. Solar access is commonly differentiated between "passive solar access" and "active solar access". The objective of this guideline is to encourage good solar access to new developments in order to reduce the energy required for heating in winter and cooling in summer.

1. Passive Solar Access (Encouraged)

Addressing the local climate and solar aspect of a site and applying simple design and building techniques can lead to energy use reductions.

North facing windows receive more of the sun's heat in winter (sun is low in the sky) and less in summer (sun is high in the sky). East and west facing windows normally receive more sun in summer and should be minimised as they can cause a building to 'overheat'.

High thermal mass materials (such as concrete) are very important due to their capability to absorb and store heat gained during the day which is then released to keep rooms warm into the nights. Windows should be carefully placed and sized as they can easily let heat in, but can also release heat out at night much faster than insulated walls.

Encouraged Guidelines

- 1. Windows of residential living areas and bedrooms, commercial, retail and community uses facing north are encouraged;
- 2. Sunlight access through the roof is encouraged when north-facing windows are not possible (skylights or clerestory);
- 3. Horizontal shading devices are encouraged on north-facing windows (awnings or overhangs);
- 4. Materials that have high heat-storage capacity such as stone, brick and concrete are encouraged, especially on north-facing walls;
- 5. Building depths of no more than 15 metres are encouraged to allow cross ventilation and natural daylight into internal spaces. 10m to 13m deep buildings can be naturally lit and ventilated. 14m to 15m deep buildings may require some artificial ventilation and lighting;
- 6. Placement of windows that maximise natural cross ventilation is encouraged to reduce the need for air conditioning during summertime.

2. Active Solar Access (Encouraged)

Active solar-thermal systems are solar collector devices (generally solar hot water systems) that capture sunlight and transform it into energy. The solar energy gained can be either transferred to supplement hot water heating or space heating, or it can store excess heating generated by the collectors for future use. Solar photovoltaic panels use solar cells to capture the sun's energy and convert it into electricity for lighting, heating and powering equipment.

Encouraged Guidelines

- 1. Install solar hot water systems and/or photovoltaic panels;
- 2. Consider the effective orientation and inclination of any active solar system to maximise sunlight absorption;
- 3. Consider collectors that can track the path of the sun rather than those on a fixed mounting to increase solar heat capture; and
- 4. Consider the visual impact of active solar systems.

Solar collector devices positioned to maximise sunlight absorption



Eaves and moveable vertical shading device (external venetian blind) on east or west facing windows

Horizontal Shading device (overhangs) on north facing windows



C. Solid Waste

The objective of the Solid Waste guideline is to ensure the provision of well screened and conveniently located on-site rubbish storage areas. Storage for rubbish bins can involve bin spaces for individual dwellings or retail tenancies, or communal rubbish storage for multi-dwellings or commercial buildings.

Guidelines

- Solid waste containers or storage areas should be screened from public spaces and be located away from the building front façade;
- Solid waste should be conveniently located to facilitate use and collection and appropriately sized to meet user needs; and
- Solid waste storage should be appropriately ventilated to avoid odours that may affect adjoining activities.

D. Noise (Encouraged)

This guideline complements the mandatory noise requirements of the District Plan. Its objective is an urban environment where adverse noise effects are minimised. Although a mix of uses in the Petone West is desirable there is potential for some uses to have a detrimental noise effect. The noise of evening activities such as restaurants, cafes and bars or community activities can disturb residents living above or adjoining. Similarly, attenuation in mixed use buildings is desirable to provide noise effect mitigation to residents from co-located commercial activities.

Encouraged Guidelines

- 1. The potential noise context of the site should be considered in the building design; and
- Acoustic design should address potential for internal noise (between tenancies or units) including through the insulation of floors and walls, but also in the arrangement of uses within the building.

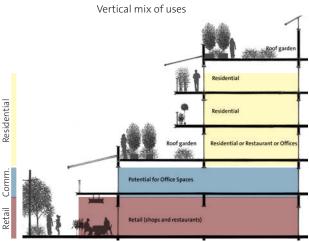


Storage bins exposed to public view



Storage bins screened from public spaces





Vertical mix of uses

E. Quality of Internal Residential Space

The objective of this guideline is to encourage good quality residential development in Petone through careful attention being directed towards the design of internal spaces. To enhance Petone West's reputation as a good place to live, it is important that the quality of internal spaces is considered with the other guidelines that apply.

- 1. Developments that include residential dwellings should have appropriately proportioned spaces that enable comfortable use by the occupants including habitable rooms (dining, living and bed rooms) that have a minimum dimension in any one direction of 2.8m;
- 2. The minimum floor to ceiling height in habitable rooms is 2.7m between finished floor level and finished ceiling level;
- 3. Habitable rooms should have windows to the outside and the living area should have direct access to an open space area with a minimum size of 20m²;
- 4. Design proposals should demonstrate how habitable rooms within each dwelling are provided with an adequate level of privacy in relation to neighbouring properties, the street and other public spaces;
- 5. All developments should provide optional (ie the residents can choose to utilise it) storage space for cycles and other equipment; and
- 6. The number of dwellings accessed from a single corridor should not exceed 8 per floor, and the corridor should receive natural light and adequate ventilation.



Corridors should be light and limited in the number of dwellings they provide access to



Dwellings should have a reasonably head height, not be long and narrow and have natural light



Storage for the likes of bicycles and other equipment should be provided for.

2.12 Adaptation & Resilience

The objectives of this guideline are to design to: (a) address the need for flexibility so that new buildings or good quality existing can change and adapt in the future in a way that ensures their character attributes are maintained, or alternatively lesser quality existing buildings can be adapted to make a positive contribution to the area without the need for complete demolition; and (b) recognise and manage development so it has an increased level of resilience to natural hazards in Petone West.

A. Design for Adaptation and Change

Traditionally, buildings were constructed with relatively high floor-to-ceiling heights and good quality materials that had a long lifespan. These attributes, combined with their modular structures and layouts, facilitate an easier conversion of old buildings into new mixed use developments. The objective of this guideline is to encourage new buildings to be designed to enable greater flexibility of use and adaptation to respond to different needs that may arise in the area over time.

Guidelines

- 1. A minimum of 3.4 metres of floor-to-ceiling height should be provided on ground floors, and a minimum of 2.7 metres of floor-to-ceiling height should be provided on upper floors;
- 2. In residential or commercial developments, the provision of separate entrances to ground and upper floors should be provided;
- 3. Building depth between 10 and 15 metres should be provided to maximise adaptability between residential and commercial uses and to provide for natural light and ventilation;
- 4. Additions and alterations should respond to any positive attributes of the character of the building or area, including any heritage values associated with adjacent buildings; and
- 5. Extensions or alterations to existing high quality buildings should be in harmony with the old structure and should not dominate the original building.









The existing large floor plate warehouse type structures in much of Petone West, or the industrial nature of smaller building can be adapted to new uses. Retaining the area's industrial character will give it identity and

B. Natural Hazards

The primary hazard identified in Petone West is the fault line which runs through the subject area approximately parallel to the Hutt Road (this is identified in the District Plan). This fault could cause ground shaking and liquefaction and the District Plan has provisions in this respect. The area is also vulnerable to sea level rise. The natural hazards occurring in the area have an impact on current and future development. It is possible to manage the location and design of buildings to respond to the potential adverse effects of natural hazards on human life, property and the environment.

- 1. Building design should appropriately respond to the seismic risk the area presents as well as for potential sea level rise whilst considering implications for the other urban qualities the guidelines seek; and
- 2. A precautionary approach should be adopted in relation to use or development affected by potential natural hazards.



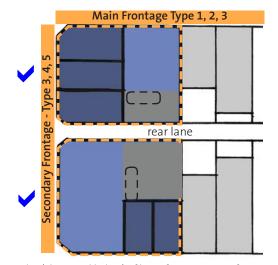
2.13 Large Format Retail

Well designed large format retail developments can make a contribution to the attractiveness and vibrancy of Petone. However, they can include elements such as featureless walls on street edges, bulky buildings, inactive street frontage, and large surface of car parking fronting the streets which adversely affect the quality of the place. It is important that developments integrate with the traditional urban fabric of the area and apply good urban design techniques to assist in maintaining and enhancing pedestrian amenity and safety.

The objective of this guideline is to ensure that new buildings or alterations to large format activities contribute to the intended future character of each Precinct (refer to 1.7 Character and Context Description).

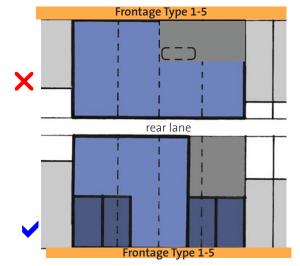
Guidelines

- 1. The composition of activities along street frontages (eg. set backs and frontage lengths) should recognise the type of street described in Guideline 2.4;
- Where a proposed development has a frontage exceeding 100 metres in width, a through block pedestrian link or new street should be provided;
- The utilisation of new streets or lanes as described in Guideline 2.9 should be provided to enable access for parking at the rear or for service such as loading; and
- 4. Car parking should be provided with reference to Guideline 2.8.





Examples (above and below) of large format activity fronting streets (indicative only). Example above of new supermarket built to corner and with smaller tenancies at the edges. Note that in Petone West the minimum size for smaller tenancies of retail is 500m²





3. Appendix



1.3 How the Design Guide Relates to Petone Vision

The Design Guide has been prepared taking into consideration the elements contained in the Petone Vision to 2027. Table 1 below describes the vision elements and corresponding actions, and references the parts of the Design Guide which can assist to give effect to them. It is important to recognise that:

- The Petone Vision applies to the whole Petone area, not just the area covered by the Design Guide. Accordingly, in applying the vision to Petone West, the variation between the areas is important.
- Some of the existing characteristics of Petone West (refer to section 1.7 below) influence and, to an extent, limit what is reasonably possible for its future and the Design Guide needs to be cognisant of these characteristics.
- The Petone Vision includes elements which cannot be achieved by the Design Guide and the District Plan. Similarly, the District Plan and Design Guide cannot be expected to single-handedly achieve the vision as there are many other influences on the future shape of the Petone West area.
- Many of the Vision elements and actions relate to ensuring the qualities of Petone are not adversely
 affected by change. There are some qualities in Petone West that are positive and these should be retained
 (eg urupa). However, most of its current quality is poor and the provisions of the District Plan and the
 Design Guide seek to change them.

TABLE 1: VISION TO DESIGN GUIDE REFERENCE	
Element 1: A distinguishing feature of Petone is it being a unique heritage place. This means:	Design Guide Response
celebrating, preserving and promoting the heritage aspects that make Petone's heritage and character distinctive;	[2.4E] Jackson Street [2.5A] Adjacent Uses (urupa)
ensuring change is sympathetic and reinforces the heritage look and feel (in particular around Jackson Street and adjoining streets);	[2.4E] Jackson Street[2.5B] Adjacent Uses (abutting residential)[2.9] New Streets
recognising the nature and scale of the urban fabric around Petone and the residential areas surrounded by harbour, river, parks and hills;	The Design Guide has no direct influence on the nature and scale of the urban fabric around Petone
re-establishing and celebrating Iwi links to important sites (taonga); and	[2.5A] Adjacent Uses (urupa)
protecting, and celebrating the heritage and cultural roots of Maori and settlers;	[2.5A] Adjacent Uses (urupa)

Element 2: Growth in Petone will be managed in an economically and environmentally sustainable manner through:	Design Guide Response
proactive management, planning and investment for Petone's future prosperity;	Guide cannot directly make Petone prosperous. But by communicating future design expectations it may influence investment.
initiatives to address environmental qualities of Petone, including heritage;	 [2.4E] Jackson Street [2.5A] Adjacent Uses (urupa) [2.6] Open Space and Greening [2.7] Stormwater [2.10] Wind [2.11] Residential Amenity
increased opportunity for residents to work locally;	Guide cannot directly make work opportunities. But by communicating future design expectations it may influence investment in new business and residential activity. With the changes sought there may also be change in business as the area transitions to a mix of uses.
more local businesses working in a supportive environment;	Guide cannot directly make more business opportunities or the supportiveness of the environment. But by communicating future design expectations it may influence investment in new local business. The Guide seeks more street frontage, both of which are aimed at increasing the ground level business opportunities.
increasing the attractiveness of walking, cycling and public transport options;	[2.4] Street Frontage[2.6] Open Space and Greening[2.7 Large Sites[2.9] New Streets
sympathetically achieving a wider range of housing choice;	[2.4E] Street Frontage (residential)[2.5B] Adjacent Uses (abutting residential)[2.6] Open Space and Greening[2.11] Residential Amenity
carefully managing any increasing population in Petone;	Guide cannot manage population.
supporting investment with attention to design quality that reinforces and enhances Petone's character; and	Guide's purpose is to manage design quality. As noted above the character of Petone West is proposed to change.
changed roading networks that improve the movement of residential and business traffic and add amenity value to areas such as the foreshore.	[2.4] Street Frontage[2.6] Open Space and Greening[2.7 Large Sites[2.9] New Streets



Element 3: We recognise that Petone has to be a real place for our people. This means:	Design Guide Response
ensuring Petone is a safe community;	[2.4] Street Frontage[2.6] Open Space and Greening[2.9] New Streets[2.10] Wind[2.12] Resilience (natural hazards)
encouraging diversity as a strength within an inclusive community;	Guide has no influence on the diversity or inclusiveness of the community.
continuing to recognise and support the suburb of Korokoro and its contribution to Petone's overall wellbeing; and	Guide has no influence on Korokoro.
having a strong sense of community and continuing to meet local needs locally.	[2.4] Street Frontage[2.6] Open Space and Greening[2.9] New Streets
Element 4: Petone needs an attractive and vibrant village culture at its heart. This means:	Design Guide Response
being recognised as family friendly;	[2.6] Open Space and Greening [2.11] Residential Amenity
catering to changing needs and diversity within our community;	Guide has no influence on the diversity of the community.
enhancing and being encouraging of employment and business as a key contributor to vibrancy;	Guide cannot directly influence employment and business. By communicating future design expectations the guide may influence investment in new business.
retaining small scale commercial activities and retailing as a defining feature of Petone and the Jackson Street character;	[2.4] Street Frontage[2.6] Open Space and Greening[2.9] New Streets
developing a cultural heart to support creative arts;	Guide has no influence on the 'cultural heart' of the community.
fostering quality design for all private property and public space development;	Guide's purpose is to manage design quality.
engaging with the harbour, hills and river; and	[2.4D] The Esplanade
recognising and supporting the important role of learning institutions within Petone, including life long learning.	Guide has no influence on the learning institutions of Petone.