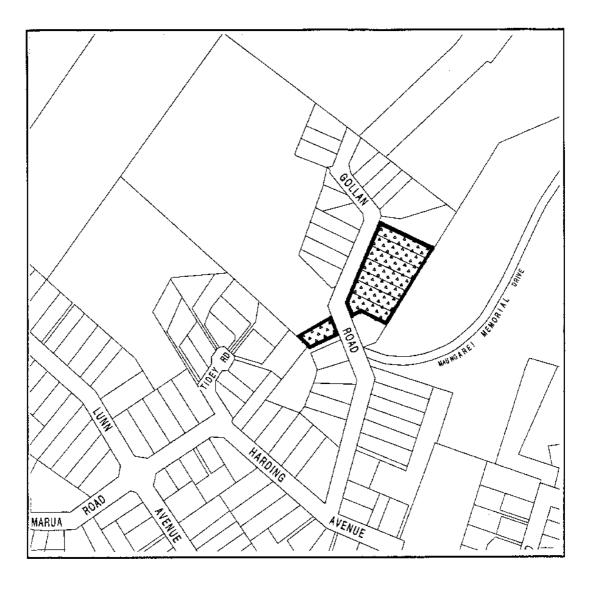
Figure 8.8.2.4A Separation distances between Mt Wellington quarry faces and certain residential zone boundaries



8.8.2 DEVELOPMENT CONTROLS FOR THE BUSINESS 7, 7A AND 7B ZONES

8.8.2.1 HEIGHT

A. Maximum Height

Business 7 15m above average road level

Business 7a 10m Business 7b 8m

Explanation

In all the Business 7 zones while the existence of buildings is usually ancillary to the main use of the site, the residential nature of surrounding land suggests that buildings within the zones should be kept to an appropriate scale. The height limits imposed differ from site to site in reflection of the nature of the extraction process. On those sites where stone is extracted and crushed, various fixed plant (eg rising conveyor belts) and associated buildings are located on the excavated quarry floor and any height limit must take that into account. On the site where clay is extracted, ground levels are similar to adjacent residential zoned land and thus the maximum height permitted reflects this.

B. Special Height Limits

The special height limits set out in Clause 5C.7.6 VIEWS shall apply where relevant.

8.8.2.2 NOISE

The following maximum noise levels are imposed at the interface of the Business 7, 7a and 7b zones

The L10 noise level and maximum level (L Max) arising from any activity (except blasting) measured within any residentially zoned property shall not exceed the following limits:

	TIMES	dBA LEVEL
(i) Within any residentially zoned site except at the Mt Wellington Quarry	Monday to Saturday 7.00am - 10.00pm Sunday & Public Holidays 9.00am - 6.00pm	55dBA
	At all other times	45 dBA
		L Max 75
(ii) Within any residentially zoned site around the Mt Wellington Quarry	Monday to Saturday 7.00am to 8.00pm	57 dBA
	Monday to Saturday 8.00pm to 10.00pm Sundays and Public Holidays 9.00am to 6.00pm	55 dBA
	At all other times	47 dBA
		L Max 75

In addition the L10 noise level measured on the boundary of any business zone, other than Business 7 shall not at any time exceed 70 dBA.

The noise levels shall be measured and assessed in accordance with the requirements of New Zealand Standard NZS 6801:1991 "Measurement of Sound" and New Zealand Standard NZS 6802:1991 "Assessment of Environmental Sound". Noise shall be measured with a sound level meter complying at least with International Standard IEC 641 (1979): Sound Level Meters, Type 1.

Explanation

Excessive noise of sufficient duration or continuity can be damaging to public health and to the amenity of adjacent land. In the Business 7 zone the heavy nature of the extraction process and the machinery used could result in unacceptable noise. The Plan is particularly concerned to ensure that on any residential zone boundary the noise level is kept to an acceptable level.

8.8.2.3 YARDS

The following yards are required adjacent to residential and open space zones and any road boundary, unless stated otherwise in the management plan for the site.





Minimum Yards

Front 15m

Rear 15m

Side 15m

Explanation

The close proximity of the existing quarry operations to residential development is a situation which has arisen out of Auckland's incremental growth throughout this century. It is uncommon for such normally incompatible activities to exist side by side. Yards are considered to be a way of physically distancing the actual quarry operations and buildings away from the residential, open space and road boundaries and they also provide both an amenity and safety buffer. This distancing serves to soften any affect the quarry activities may have on the amenities of adjacent areas and also serves the quarry operation by providing a safety net. The yards imposed reflect to a large extent the existing situation in some of the quarries. Where existing buildings exist within a yard or where it may be necessary to have lesser yards due to site constraints etc the management plan for the site will indicate these special requirements and those yard requirements will take precedence over this control.

8.8.2.4 LANDSCAPING

A landscaped area with a minimum width of 3m shall be provided adjacent to the length of the respective site boundary of every required yard, except where it is necessary to provide vehicle access points. The required landscaping shall be planted and maintained at all times and in such a manner as to create and preserve a visual screen for adjacent sites.

Explanation

Together with the yard control, the requirement to landscape the boundary of every required yard is aimed at providing a visual amenity buffer for adjacent sites and the road from quarry activities. A 3m strip of planting is preferred over a screening (fence or wall) control because of the lengths of the boundaries involved. It is considered that a planted screen would be visually more appropriate than a solid wall for such long boundaries, and would be less subject to vandalism (eg graffiti) that would be visually obtrusive.

8.8.2.4A SEPARATION DISTANCES

See Figure 8.8.2.4A for separation distances between Mt Wellington quarry faces and certain residential boundaries.

8.8.2.5 DUST CONTROL

Dust arising from the crushing, screening, and transfer operations, and from the use of quarry roads is to be suppressed by the use of water sprays or other methods approved by the Council.

Explanation

The operation of a quarry can result in severe dust problems due not only to the process of crushing, screening and pulverisation but also to truck movements in and out of the site. The close proximity of residential development to the existing quarry sites means that the incidence of unchecked dust especially in the drier months of the year, can detrimentally affect the amenities of these residential sites. The means available to quarry operators to alleviate this problem is relatively simple in that it requires the regular spraying of problem areas with water to suppress the rising of dust. The use of oil or other similar substances is not appropriate taking into account the proximity of the underground aquifers and the artificial water levels of some sites. (Water is pumped away to holding areas off the site which would become polluted if oil etc was used.)

8.8.2.6 BUILDINGS TO BE REMOVABLE

All new buildings which are not for rock aggregate processing purposes shall be constructed so that they can be removed when quarrying ceases.

Explanation

The future use of quarry sites cannot be satisfactorily determined until cessation of extraction is imminent and investigations have occurred. Permanent buildings could preclude the best possible end use of a quarry site.

The foundation requirements of some structures for aggregate processing purposes are such that it is impracticable to require that they are removable.

8.8.2.7 NOISE AND VIBRATION ARISING FROM BLASTING

a) Blasting activities shall be so controlled as to ensure that any ground vibration as the result of any blasting will not adversely affect the structural stability of any building (that is not connected with the site) or cause a reduction in its utility value. Peak particle velocities measured on any foundation or uppermost full story of any building not related to the site, which do not exceed the limits set out in Table 1 of German Standard DIN 4150 Part 3:1986 "Structural Vibration in Buildings - Effects on Structures", will be deemed to meet these requirements.

Peak particle velocity means the maximum particle velocity in any of the three mutually perpendicular directions. The units are millimetres per second (mm/s).

b) The noise created by the use of explosives shall either not exceed a peak overall sound pressure level of 128dB (ie a peak over pressure of 0.05kPa) or alternatively the noise shall not exceed a peak sound level of 122dBC. The measurement shall be made in either case at any point at the boundary of the Business 7 zone.



PART 8 - BUSINESS ACTIVITY

 All blasting shall be restricted to between the following hours:

7.00 am - 6.00 pm Monday to Friday (Mt Wellington) 9.00 am - 5.00 pm Monday to Friday

(Three Kings site)

9.00 am - 5.00 pm All new quarry sites

The number of times blasting can occur on any quarry site shall be restricted to three times per day except where necessary for safety reasons.

- d) The time and charge of every blast shall be recorded. The operator shall undertake monitoring representative of all blasts by reliable and appropriate methods to ensure these limits are not exceeded. These records shall be made available to the Council on request.
- e) Notwithstanding 8.8.2.7(a) above, blasting activities undertaken at the Mt Wellington Quarry and Three Kings Quarry and any extensions to those quarries shall be conducted so that 95% of the blasts undertaken (measured over any twenty blasts on the foundation of any building outside the Business 7 zone) shall produce peak particle velocities not exceeding 5mm/s and 100% of the blasts undertaken shall not exceed 10mm/s irrespective of the frequency of the blast measured.

Explanation

The existing stone quarries in the City use explosives to extract scoria and basalt. This practice is well established. In the past when the quarry sites were isolated from residential areas, safety issues were the most important concern arising from the use of explosives to extract. As residential development has moved into the areas adjoining quarries, the effect of vibrations arising from blasting has become a major concern. Complaints are often received that minor damage such as cracking of plaster ceilings, brickwork and window glass, as well as the loosening of roofing tiles has been caused by some particular ground vibration. The Plan therefore has adopted the DIN4150 standard as a means of measuring vibration arising from blasting and preventing damage to buildings arising from ground vibration from that blasting.

The uncontrolled use of explosives in terms of noise, intensity and duration would have an unacceptable effect on the amenity values of adjoining residential land. While it is accepted that occasionally vibrations may be felt by those properties adjacent to or in close proximity to the quarry sites, controls are being imposed to ensure that all practical steps are taken to ensure that these vibrations are kept to a minimum. In addition the amenity value of residential land is likely to be affected not only by the intensity but by the timing and occurrence of the blasting. A situation where blasting could occur continuously regardless of the time of day or the

day itself would be unacceptable. Therefore the control specifies days and times when blasting can occur.

Vibration monitoring does not necessarily have to be undertaken on the foundation of adjacent buildings provided that the quarry operator can safely extrapolate the measurements taken from the chosen monitoring point to the foundations of adjacent buildings and be assured that the limits of Rule 8.8.3.9(a) or, as appropriate Rule 8.8.3.9(e) are not exceeded.

8.8.2.8 PARKING AND ACCESS

Refer PART 12 - TRANSPORTATION.

8.8.2.9 CESSATION OF QUARRY ACTIVITY

Within 6 months of a quarry operation finally ceasing quarry activities, the operator is to demonstrate to the satisfaction of the Council the measures that are being/will be undertaken to ensure that the quarry site will be left in a form that is stable, safe and suitable for subsequent use.

REFERENCE SHOULD ALSO BE MADE TO THE FOLLOWING PARTS

Part 4 Refer Clause 4.5 Signs
Refer Clause 4.6 Artificial Lighting

Part 4A General Rules

Part 4B Financial Contributions

Part 5B CoastalPart 5C Heritage

Part 5D Natural Hazards
Part 5E Hazardous Facilities

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8.8.3 DEVELOPMENT CONTROLS FOR THE BUSINESS 8 ZONE

Development in the zone shall comply with the particular development controls specified in the relevant Concept Plan. (See Appendices to the Planning Maps).

Where no particular development controls are so specified the following shall be the controls for permitted activities in the zone.

Note: An application to modify one or more of the development control rules may be considered under Clause 4.3.1.2B DEVELOPMENT CONTROL MODIFICATION as a discretionary activity. Where the criteria of Clause 4.3.1.2B are not met, the applicant has a choice of applying for either a non-complying activity (refer Clause 4.2.1.4 NON-COMPLYING ACTIVITIES and 4.3.1.3 NON-COMPLYING ACTIVITIES ASSESSMENT) or for a Plan Change to modify the relevant Concept Plan.





8.8.3.1 BUILDING LOCATION

All buildings shall be contained within the building platform as specified by the relevant Concept Plan.

Explanation

An important principle of the zone is to allow flexibility, within a site, over where buildings may locate. The building platform for a proposal is defined by the developer in conjunction with the Council. The building platform may or may not meet the basic development controls for the zone but inclusion of its location in the Concept Plan, provides the necessary information to the public so that they can be aware of the limits to the built form of any proposal. In the interests of both public awareness and of orderly development all buildings on the site should be contained within the defined building platform.

8.8.3.2 MAXIMUM HEIGHT

The maximum height shall be that specified on the Concept Plan, except that in the absence of a specified height, the maximum height shall be 10 metres.

Explanation

Of all the factors contributing to the quality and characteristics of an area building height can have some of the most dramatic effects on visual amenity. Buildings which overlie their surroundings can overshadow and visually dominate other buildings, private property, public open space and the road. The Concept Plan approach adopted allows the developer to determine the maximum height of buildings in a proposal which is then tested through the Plan change process. The public can thus be certain of the maximum height of a development by reference to the Concept Plan. Where no maximum height is indicated by the Concept Plan it is considered that certainty should be maintained by the imposition of a basic height limit through the zone controls. The height chosen reflects a medium level of development and is considered appropriate having regard to the likely non-business nature of adjacent properties. Where a higher limit is required the Concept Plan should be used to indicate this.

8.8.3.3 PEDESTRIAN AMENITY AND ACCESS

On the road frontage of every site in the zone for which no front yard is required, a verandah shall be provided where a building is erected or where an existing building is reconstructed or altered in such a way that substantially alters the appearance of its facade. The verandah shall be so related to its neighbour as to provide continuous pedestrian cover. In addition all main pedestrian accessways on site are to be provided with all weather cover and so located as to avoid conflict with on-site vehicle parking and circulation areas.

Explanation

An important concept in this zone is the provision of a comprehensive development exhibiting a high degree of amenity. Where pedestrians are an important component in the development (eg where retailing or community uses are the dominant activities) then adequate provision should be made to ensure that the main on-site pedestrian accessways to those facilities have all weather protection and do not conflict with on-site vehicle parking and circulation areas.

8.8.3.4 SITE INTENSITY CONTROL

As specified in the relevant Concept Plan.

Explanation

A site intensity control limits the scale and intensity of development on a site. With some development in this zone, the control may be used to ensure that the required scale of development is achieved without becoming too dominant in relation to adjacent sites. This is especially true where the desired building form is one of several floors. By restricting the area of each floor, the ratio of unbuilt land on the site can serve to diminish any dominance of the building. The unknown nature and character of sites which may be subject to this zone precludes the definition of any fixed floor area ratio for the zone. Rather it is considered that where such a control is to be applied, the specific character of the development, the site and the adjacent area, will direct the actual measurement. However in determining the ratio, concern over providing a balanced development which is not out of scale or overdominant in relation to its neighbours, is of importance.

8.8.3.5 BUILDING IN RELATION TO BOUNDARY

Where a site zoned Business 8 adjoins land zoned:

- i) Residential (other than Residential 7a, 7b or 7c), Clause 7.8.1.3(b) shall apply on the common boundary;
- ii) Residential 7a, 7b or 7c, Clause 7.8.1.3(c) shall apply on the common boundary;
- iii) Open space, no part of any building shall exceed a height equal to 2m plus the shortest horizontal distance between that part of the building and the common boundary.

Explanation

Refer Clause 8.8.1.12A BUILDING IN RELATION TO BOUNDARY.

8.8.3.6 ACTIVITY BUFFERS

General Explanation

Activities in business zones that abut residential or open space zones must ensure that they limit adverse effects of their operation to their site. Business activities must not adversely affect:

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- The amenity of adjacent homes or open spaces;
- The health and safety of people on adjacent residential sites:
- The safety of road users.

Business activities can create dust, noise, litter and glare. The Council may impose conditions to ensure that these do not affect neighbouring sites. These conditions may include screening, landscaping and yards on site boundaries.

A. Yards

6m front, side and rear yards shall be required when the site abuts or faces residential and open space zoned land.

Where a yard is required satisfactory landscaping of it should be provided and maintained in such a manner as to create and preserve a good standard of visual amenity. The requirement for satisfactory landscaping shall be deemed to be met by the provision of a 3m wide strip of landscaping adjacent the length of the required yard's boundary.

Explanation

Imposing a separation of activities by distance is designed to avoid, remedy or mitigate any perceived adverse effects of an activity operating in a Business 8 zone may have on residential land and open space land. Physical separation is the easiest method to ensure the distancing of residences and public places from potential and actual impacts associated with activities located in the zone. Such effects may include dust/dirt, litter, lights, signs, unsightly buildings or activities, parking areas, service areas, etc.

The separation distance is used to ensure an appropriate degree of protection for residential neighbours. Landscaping in conjunction with screening assist to reduce the hard-edged impact of paved surfaces, etc used for parking or storage. Landscaping is important to maintain visual amenity in a residential neighbourhood not only when viewed from across buildings but when viewed from the road.

B. Screening

Where any outdoor storage, refuse disposal area, service or parking area adjoins or directly faces the road or land that is open space or residentially zoned such areas shall be screened from:

- i) the residential or open space land by a solid wall not less than 1.8m in height constructed of concrete, brick, stone, timber or such other material as approved, and;
- ii) the public road by a solid wall not less than 1m in height, and densely planted with vegetation and shrubs that will screen the areas during all seasons of the year.

See key on last

page of this section

Explanation

Imposing a screening control on common boundaries between Business 8 zoned sites and sites zoned open space or residential and on road frontages can lessen the amount of noise, dust, glare and litter from the generating site. It can reduce the visual impact of unsightly areas of storage and parking, and can establish a sense of privacy from visual and physical intrusion.

8.8.3.7 ODOUR

The Council recognises its responsibilities to deal with odour problems and will be guided by any national or regional standards or rules relating to odour and will at the appropriate time consider promoting variations to the Plan and introduction of district rules to deal with odours.

Pending the adoption of District Plan rules the Council will control odours using the provisions of Sections 17 and 104(1)(c) of the Resource Management Act 1991.

Explanation

Refer Clause 8.8.1.5 ODOUR.

8.8.3.8 NOISE

The L10 noise level and maximum level (Lmax) arising from activity measured at or within the boundary of any residential zoned site shall not exceed the following limits.

Monday to Saturday	7.00 am - 10.00 pm	L10 50 dBA
Sunday & Public Holidays	9.00 am - 6.00 pm	
At all other times	L10 40dBA	
	Lmax 75 dBA, (L95) plus 30 dE the lower.	Ŭ

Measurement and assessment shall be in accordance with the requirements of NZS 6801:1991 "Measurement of Sound" and NZS 6802:1991 "Assessment of Environmental Sound". The noise shall be measured with a sound level meter complying at least with the International Standard IEC 651 (1979): Sound Level Meters, Type 1.

Explanation

Refer Clause 8.8.1.4 NOISE.

8.8.3.9 VIBRATION

Vibration in Buildings

(a) Activities shall not generate vibrations which may cause discomfort or adversely affect the health and well-being





of the occupants of adjacent premises. Vibrations which do not exceed the limits referred to below as set out in the provisions of International Standard ISO 2631-2:1989. "Evaluation of human exposure to whole body vibration - Part 2 Continuous and shock-induced vibration in buildings (1 to 80 Hz)" will be deemed to meet this requirement. These particular limits are that the vibration levels (acceleration measured in metres per second) relative to the frequency shall not exceed the base curves of Figure 2a (z axis), 3a (x and y axes) and 4a (combined x, y, and z axes) of ISO 2631-2:1989.

- (b) The assessment of continuous, intermittent and transient (impulsive) vibrations shall be carried out by a suitably qualified and experienced person in accordance with Annex A and Table 2 of ISO 2631-2:1989 referred to above.
- (c) The instruments used to measure vibrations and the methods of measurement shall comply with a recognised standard such as Australian Standard AS 2973:1987 Vibration and Shock - Human response.
- (d) The Council may approve vibration levels above these standards where it is satisfied that they are necessary for construction or demolition work of a limited duration.
- (e) Vibration produced by explosive charges shall be controlled by Clause 8.8.2.7(a).

Explanation

Refer Clause 8.8.1.6 VIBRATION

8.8.3.10 REFUSE DISPOSAL

Refer to Bylaw.

Explanation

Refer Clause 8.8.1.8 REFUSE DISPOSAL.

8.8.3.11 CLAUSE DELETED BY COUNCIL DECISION

8.8.3.12 VISUAL AMENITY OF DEVELOPMENT

A high standard of visual amenity to the satisfaction of the Council is required on the external faces of all buildings in the development. All parking and loading areas must be landscaped to the satisfaction of the Council in order to contribute to the visual amenity of the site.

8.8.3.13 PLAZA AND OPEN SPACE AREAS

Plazas and/or open space areas within the proposed development will normally be required by the Council. The amount of plaza and/or open space to be provided will be determined taking into account the particular proposal, and will usually be an area of land approximating that which would be required in the Business 2 and 3 zones. Refer PART 4B - FINANCIAL CONTRIBUTIONS.

8.8.3.14 PARKING AND ACCESS

(Refer PART 12 - TRANSPORTATION).

REFERENCE SHOULD ALSO BE MADE TO THE FOLLOWING PARTS

Part 4 Refer Clause 4.5 signs
Refer Clause 4.6 artificial lighting

Part 4A General Rules

Part 4B Financial Contributions

Part 5B Coastal
Part 5C Heritage

Part 5D Natural Hazards

Part 5E Hazardous Facilities

Part 11 Subdivision

Part 13 Interpretations and Definitions

8.8.4 DEVELOPMENT CONTROLS FOR THE BUSINESS 9 ZONE

The concept of the Business 9 zone approach precludes the existence of a set of basic development controls which can be applied to all parcels of land subject to the zone. Rather each parcel of land will be subject to a Concept Plan which prescribes the specific rules for that area. All sites and activities within a particular Business 9 zone are required to adhere to the rules of the predetermined Concept Plan for that zone.

refer to 7

8.8.10 DEVELOPMENT CONTROLS FOR MIXED USE ZONE

1. Height

Mixed Use Maximum Height -15m

The Special Height limits set out in Clause 5C.7.6 Views shall apply where relevant.

Explanation

The height limit applied in the Mixed Use zone is designed to enable both a vertical and horizontal mix of uses to occur in buildings and sites within the zone. Height limits combined with other development controls for the Mixed Use zone will provide protection for adjoining lower intensity zones from the effects of building bulk and dominance.

2. Site Intensity Controls

(a) Basic Floor Area Ratio

The site area multiplied by basic floor area ratio equals permitted gross floor area.

Basic floor area ratio in

Mixed Use - 2:1

(b) Bonus Floor Area

(Refer Clause 8 .7.2(1)(i) and Clause 8.7.7.2.2 - criteria for conditions.)

The amount of bonus floor area that may be achieved is determined by multiplying the area of the bonus element provided by the bonus floor area ratio for the zone.

Zone	Bonus Element	Bonus Floor Area Ration
Mixed Use	Landscaped Area	1:1
	Plaza	2:1
	Cycle and pedestrian ways*	2:1

* Applies where the Council is not prepared to purchase an easement across the affected land

(c) Maximum Floor Area

Except that Permitted Gross Floor Area plus Bonus Floor Area may not exceed the following maximum total floor area ratio.

Mixed Use - 4:1

Explanation

These site intensity controls limit gross total floor area achievable on a site to a form and scale considered appropriate for the Mixed Use zone and its proximity to both residential and business areas.

Bonus floor area is offered in the form of a controlled resource consent to encourage the provision of features that are particularly beneficial to the community by improving the physical and natural qualities of the environment in which the activity is located.

3. Streetscape Improvement

Where a site is opposite land zoned Mixed Use, Business or Special Purpose, no front yard is required.

Where a site is opposite land zoned residential or open space, a 2m yard is required adjoining the road boundary. No less than 60% of the front yard shall be landscaped and maintained to the satisfaction of the Council at all

times and in such a manner as to create and preserve a good standard of amenity.

Explanation

Developments where activities address/front arterial roads create visual interest for pedestrians and provide informal surveillance creating a safe pedestrian environment. Landscaping where setbacks are provided contributes to the amenity of the area and streetscape.

4. Building in Relation to Boundary

- (i) Where a proposed activity is located on a site adjoining or abutting land zoned;
 - Residential (Other than Residential 7a, 7b or 7c) Clause 7.8.1.3(b) shall apply on the common boundary
 - Residential 7a, 7b or 7c Clause 7.8.1.3(c) shall apply on the common boundary
 - Open Space, the following shall apply on the common boundary. No part of any building may exceed a height equal to 3m plus the shortest horizontal distance between that part of the building and the common boundary.
- (ii) Where a Mixed Use zoned site or part of a site has a boundary to a collector or local road and the land on the other side of the road from that site is zoned Residential 1, 2a, 2b, 5 or 6a, no part of any building on that part of a site which is directly opposite the residential zoned land may exceed a height equal to 6 metres plus the shortest horizontal distance between that part of the building and the road boundary.

Allowable encroachments and setbacks

Eaves, fascias, gutters, down pipes, masonry chimneys, flues, pipes, domestic fuel tanks, cooling or heating appliances or other services may extend beyond the building envelope as defined in the rule, provided that the distance to the boundary is not less than 0.5 metres from the boundary and relevant fire protection requirements of the building code are satisfied.

5. Daylight to existing habitable room windows of residential units

Walls higher than 3 metres opposite existing walls containing habitable room windows of residential units are limited in height to twice the horizontal distance between the two walls for a distance defined by a 55° arc from the centre of the existing window. The arc may be swung to within 35° of the plane of the wall containing the window.

Where the existing window is above ground level, the height restriction is calculated from the floor level of the room containing the window.



Provided that:

- This rule shall not apply to development opposite residential units approved for resource consent or constructed after 25 July 2002.
- This rule shall not apply to development opposite residential units located on the top floor of a building.
- This rule shall not apply to development opposite the first 5m of a residential unit which faces the street, measured from the front corner of the residential unit.

Bonus Floor Area

Bonus floor area of 2:1 is offered for compliance with this rule. The amount of bonus floor area that may be achieved is determined by multiplying the area of the bonus element by a ratio of 2:1. The area eligible for the bonus is that plan area of required set backs from the boundary resulting from application of the daylight rule.

Explanation:

Building in Relation to Boundary and Daylight Rules

Admission of light to living and work areas is fundamental to our existence. It is an amenity which we are not able to forego without compromising health and a sense of well-being. In addition, admission of sunlight to sites gives property owners the opportunity to use sunlight as a renewable energy source. Access to sunlight can enable sunny outdoor spaces to be created or provide a means of passively heating homes. If sunlight is available it can also be used actively by solar receptors and water heaters.

Almost any development on a site will have an effect on the adjacent site in terms of access to light and the prospect of over-dominance. That is why these rules require the position of habitable rooms on adjacent sites to be considered. The extent of this effect will differ depending on the proximity of buildings to boundaries in relation to their size and the orientation of the boundary being assessed.

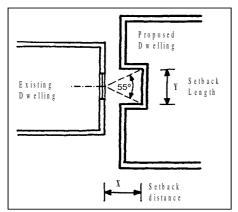
Within the Mixed Use zone higher height limits will result in greater building bulk. Protection of sites within this zone has been balanced with the need to allow permitted height limits to be achieved.

A building in relation to boundary control applies to Mixed Use zoned land located opposite and adjacent to land zoned Residential and Open Space. This recognises that a sensitive interface exists between the Mixed Use zone which enjoys relatively generous height limits and these Residential and Open Space zones which have reduced height limits and building bulk. A building in relation boundary control will result in a reduced building bulk within 30 metres of these residential zones while still allowing two storey development near the

residential interface. This will result in a guarantee of access to daylight, a reduction in visual dominance and retention of privacy for the residential zoned land.

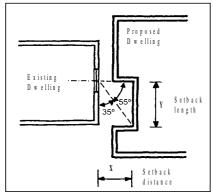
Distance of wall from existing window (x)	Maximum height of wall	Length of wall restricted if 55 ⁰ arc is perpendicular to window (y)
1.5m	3.0m	1.5m
2.0m	4.0m	2.0m
2.5m	5.0m	2.5m
2.7m	5.4m	2.7m
3.0m	6.0m	3.0m
3.5m	7.0m	3.5m
4.0m	8.0m	4.0m
4.5m	9.0m	4.5m
5.0m	10.0m	5.0m
5.5m	11.0m	5.5m
6.0m	12.0m	6.0m

This table provides the restrictions to walls where a new wall is built opposite an existing habitable room window. The wall height is restricted to a height related to the distance from the existing window, and for a length defined by a 55⁰ arc from the centre of the window. The arc may be swung to within 35⁰ of the window. However, as an arc is swung away from the centre line the length of wall which will be restricted will increase.



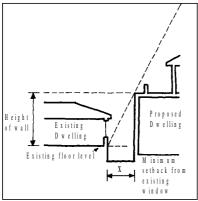
Daylight to existing windows

The daylight to windows in the existing building is protected by the setback of the proposed building; this is determined in relation to its height.



Daylight to existing windows

Flexibility is provided within the daylighting requirements by allowing the 55° arc to be swung to within 35° of the plane of the wall containing the existing window. Swinging the 55° arc does however increase the setback length (Y).



Daylight to existing windows

The vertical component of the daylight rule demonstrates how a building could be stepped back at upper levels to allow light to principal windows of habitable rooms in adjacent existing dwellings.

6. Noise

(a) Noise control at the Residential Zone interface

The L10 noise level and maximum level (Lmax) arising from any activity measured at or within the boundary of any residential zoned property shall not exceed the following limits:

Monday to Saturday	7.00 am - 10.00 pm	L 10 50dBA
Sunday & Public Holidays	9.00 am - 6.00 pm	
At all other times	L10 40dBA	
	Lmax 75 dBA,	

Where an applicant can prove that background noise levels (L95) significantly exceed these limits then the Council may set noise levels higher than these subject to such conditions as are considered appropriate.

(b) Noise Control within the Mixed Use Zone

The L10 noise levels and maximum level (Lmax), arising from any activity, measured at or within the boundary of any adjacent site (not held in common ownership) within the same mixed use zoning shall not exceed:

Mixed Use Zone	
7.00 am to 10.00 pm	L10 60dBA
10.00 pm to 7.00 am	L10 55dBA Lmax 75dBA

The above noise levels in A and B shall be measured and assessed in a accordance with the requirements of the NZS 6801:1991 "Measurement of Sound" and NZS 6802:1991 "Assessment of Environmental Sound" or their replacement.

The noise shall be measured with a sound level meter complying at least with the International Standard IEC 651 (1979): Sound Level Meters, Type 1.

Explanation

Excessive noise occurring for a continuous period or duration can be damaging to public health and can have an adverse effect on the amenity of the receiving environment.





In the past, the close proximity of non-residential zones to residential zoned land has resulted in complaints about unreasonable or excessive noise levels. These complaints often related to the operation of machinery (e.g. compressors or extraction fans not properly located or insulated) or to the entry or exiting of customers from sites (particularly at night). Controlling people-generated noise is difficult as it is often spontaneous and intermittent. However, controlling the location of parking areas and the hours of operation of activities that attract large numbers of people to sites, may effectively control such noise.

As well as providing noise protection on residential boundaries it is also appropriate that some acoustic privacy is provided between sites within Mixed Use zones. A mixture of uses is highly likely within these zones and some activities may require appropriate levels of acoustic privacy.

Setting noise limits at site boundaries should assist in preventing the City's background noise level from rising and should maintain a reasonable acoustic environment within a zone.

To provide some acoustic privacy between sites within the Mixed Use zone, noise levels are imposed at the site boundary of every site (not held in common ownership) within the Mixed Use zone. (This control is in addition to, and not in substitution for Clause 6A).

(c) Noise control for Residential Units, residential hospitals, rest homes and retirement villages in the Mixed Use Zone

For all residential units, residential hospitals, rest homes and retirement villages within the Mixed Use Zone the building shall be designed and constructed so as to provide an indoor design level of Balanced Noise Criterion (NCB) 30 in any habitable room assuming the building is exposed to a noise level of 60dBA L10 at the boundary of the site. Such design level being achieved with windows and doors open unless adequate alternative ventilation is provided (the buildings must comply with the minimum ventilation rates, which comply with the New Zealand Building Code G4).

These levels shall be achieved whilst adequate ventilation (to the requirements of the Building Regulations 1992) is achieved.

Building elements which are common between activities shall be constructed to prevent noise transmission to the requirements of Clause G6 of the Building Regulations 1992.

Measurement and assessment shall be in accordance with the requirements of the NZS 6801:1991

"Measurement of Sound" and NZS 6802:1991 "Assessment of Environmental Sounds".

The noise shall be measured with a sound level meter complying at least with the International Standard IEC 651 (1979): Sound Level Meter, Type 1.

Explanation

Residential development within the Mixed Use Zone is to be designed to ensure that a level of acoustic amenity is provided within the bedrooms and other habitable rooms of residential activities from other residential activities within the same development and activity in the surrounding area.

7. Visual Privacy

Protection to windows of existing residential uses

In any building within the Mixed Use zone proposed to contain a residential unit, where the residential unit has habitable room windows less than 6 metres away from the habitable room windows of an existing residential use on an adjacent site, or where there are habitable room windows less than 6 metres away from the habitable room windows of another residential unit within the same development and with direct views of habitable rooms of other residential use within the same development, they shall:

- be offset a minimum of 1m from the edge of one window to the edge of the other; or
- have sill heights of 1.6m above floor level; or
- have fixed obscure glazing in any part of the window below 1.6m above floor level;
- be on the ground floor level and separated by a fence of 1.6m minimum height

Protection of neighbours private open space

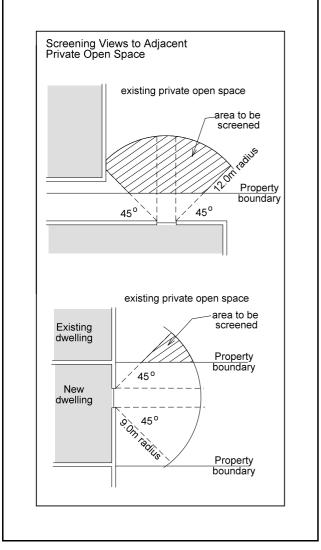
Direct views from habitable rooms of buildings in the Mixed Use zone into the principal areas of adjoining private open space of residential units should be screened or obscured within a 9m radius and 45 degrees of the wall containing the window by either:

- a solid wall or screen not less than 1.8m in height constructed of concrete, timber, stone; or
- planting

Any such screening shall be established in a workmanlike manner.







Explanation

This rule limits the direct overlooking of habitable rooms or private open space areas of existing residential units on adjacent sites. This will have the effect of creating and maintaining visual privacy for occupants of residential units.

8. Odour

The Council recognises its responsibilities to deal with odour problems and will be guided by any national or regional standards or rules relating to odour and will at the appropriate time consider promoting changes to the Plan and introduction of district rules to deal with odours.

Pending the adoption of District Plan rules the Council will control odours using the provisions of Sections 17 and 104(1)(c) of the Resource Management Act 1991.

9. Vibration

Vibration in Buildings

(a) Activities shall not generate vibrations which may cause discomfort or adversely affect the health and

well being of the occupants of adjacent premises. Vibrations which do not exceed the limits referred to below as set out in the provisions of International Standard ISO 2631-2:1989. "Evaluation of human exposure to whole body vibration - Part 2 Continuous and shock-induced vibration in buildings (1 to 80 Hz)" will be deemed to meet this requirement. These particular limits are that the vibration levels (acceleration measured in metres per second) relative to the frequency shall not exceed the base curves of Figure 2a (z axis), 3a (x and y axes) and 4a (combined x, y and z axes) of ISO 2631-2:1989.

- (b) The assessment of continuous, intermittent and transient (impulsive) vibrations shall be carried out by a suitably qualified and experienced person in accordance with Annex A and Table 2 of ISO 2631-2:1989 referred to above.
- (c) The instruments used to measure vibrations and the methods of measurement shall comply with a recognised standard such as Australia Standard AS 2973:1987 Vibration and Shock - Human response vibration-measuring instrumentation.
- (d) The Council may approve vibration levels above these standards where it is satisfied that they are necessary for construction or demolition work of a limited duration.
- (e) Vibration produced by explosive charge will be controlled by Clause 8.8.2.7(a).

Explanation

Vehicles and machinery expose people to mechanical vibration which can interfere with comfort, working efficiency and in some instances, health and safety. Vibration at frequencies below 1Hz occurs in many forms of transport and produces effects such as motion sickness, which are completely different in character from the higher frequencies dealt with here. This control deals with human response to building vibration, i.e. levels that may cause annoyance or discomfort, not those that may affect health or structural integrity. Building vibration is most commonly transmitted to the body as a whole through the supporting surface, namely the feet when standing, the buttocks when seated, or the supporting area when reclining.

Standards formulated to control vibration are generally related to the tolerance of a sitting or standing person. Tolerance of vibration to the head (by reclining for example) is usually significantly reduced. People are most sensitive to longitudinal vibration, (i.e z axis-foot to head), between 4 and 8 Hz and to transverse vibration below 2Hz (x axis: back to chest and y axis: right side to left side).

Annex A and Table 2 of the standard gives consideration to the time of the day and the use made of the occupied



space in the building. Below these magnitudes of vibration the probability of human reaction is low.

These levels should facilitate the proper balancing and/ or insulation of machinery. Vibration caused by vibratory equipment, and by machinery impactive in nature can often be reduced by altering the operating conditions of the equipment.

Situations may exist where motion magnitudes above the levels specified can be tolerated particularly for temporary disturbances and infrequent events of short term duration, e.g. blasting, construction or excavation projects.

10. Parking and Access

Refer to Part 12 - Transportation with the exception that in place of the parking standards for residential units indicated in 12.8.1.1 the following shall apply:

Unit Size	Car Parks
Studio/One bedroom <75m ² gfa	1 park per residential unit
Two bedrooms or more and/or 75m ² gfa (includes 1 bedroom with gfa of 75m ² or more	Maximum 2 parks per residential unit, minimum 1 park per residential unit
Visitor Spaces	1 space for every 5 residential units (to the nearest whole number)
Loading spaces	1 space for 10 residential units or more

11. Screening

Where any outdoor storage, refuse disposal area, service or parking area adjoins, abuts or directly faces land that is open space or residentially zoned, a solid wall screen shall be erected, to the following heights which is densely planted behind with vegetation and shrubs that will screen the areas during the year.

Front boundary 1.2m

Side and rear boundaries 1.8m

Explanation

Activities in the Mixed Use zone need to ensure that they limit the adverse effects of their operation to their site.

12. Private Open Space

Where a development in the Mixed Use zone has a residential unit(s), the following must be complied with:

a) All new residential units shall have outdoor living areas consisting of at least:

- An area at ground level of 25m² and a minimum width of 3m which has convenient access from a living room; or
- A balcony with an area of 8m² and a minimum width of 1.6m which has convenient access from a living room; or
- A rooftop space with an area of 10m² and a minimum width of 2m which has convenient access to a living room.

The exception to this rule is where a residential unit is provided within an existing building (i.e. through conversion) and it is not possible because of the form, location or layout of the building, to provide one of the above outdoor living areas. In that instance, an outlook area complying with the following standards will be required:

- 80m² in area
- minimum dimension 6 metres
- 50% of outlook area must be contained within the site to which it relates, 50% may be over a road, public open space or the harbour
- the outlook area shall adjoin glazing of the dwellings unit to which it relates

<u>Note</u>: Obstructions – private open space or outlook areas shall not be obstructed by buildings, parking spaces or vehicle access and manoeuvring areas.

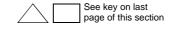
13. State Highway Noise Attenuation

Rule 8.8.10(13) applies only to Lot 1 DP 66260, CT NA 49A/176 (5 Carlton Gore Road):

Where a building or buildings are proposed on the site to accommodate residential accommodation, residential hospitals, rest homes or retirement villages, the following will apply:

Noise:

The building(s) shall be designed, constructed and maintained so that internal sound levels do not exceed 35 dBA Leq (24 hr) for bedrooms and 40 dBA Leq (24 hr) for habitable rooms. The design and construction of the building(s) shall allow for increases in noise arising from increased vehicle traffic growth using State Highway 1 during a period of not less than 10 years from the commencement of construction of the development. A report from a recognised acoustic engineer shall be supplied with any application for building or resource consent (which ever is lodged first) demonstrating that the proposed building construction will comply with NZS 2107:2000. Prior to commencing the development, a copy of this report shall be provided to the New Zealand Transport Agency.



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Ventilation:

If all windows must remain closed to achieve the above internal sound levels in the bedrooms, then mechanical ventilation shall be provided to meet the requirements of the New Zealand Building Code.

8.8.11 **DEVELOPMENT CONTROLS** FOR MIXED USE ZONE: ORAKEI POINT

1. Height

a) Building Height

- i) No building within an identified building platform shall exceed the maximum number of floors above the podium shown on the Mixed Use Zone: Orakei Point Overlay Plan 1, provided that the overall height of the building (including roofs and roof top projections) shall not exceed the maximum height (above datum) in meters also specified for that building platform (refer to figure 8.8.11.1).
- ii) For the purposes of i) above, the 'maximum number of floors' shall be measured in each case as being above a nominal podium level of RL12.5, with the podium level storey counting as the first floor.
- iii) No buildings within that area identified as 'podium level' on Mixed Use Zone: Orakei Point Overlay Plan 1 shall exceed the height above datum shown on the Plan for that section of the podium,, provided that this height limit shall not apply to the following buildings and structures located on or over the podium level:
 - Overpasses connecting the Orakei Road Carpark Building with the building shown as "I" on the master plan at 8.6.11.2 on the opposite side of the lane, which meet the criteria in 8.7.8.3.2:
 - · Balconies over roads and plazas which meet the criteria in 8.7.8.3.2;
 - Seating, bus shelters, pedestrian shelter structures, balustrades, light poles, signs or public artwork on roads or plazas;
 - buildings and structures associated with temporary activities permitted under 4A.1.
- iv) For the purpose of this rule "Overpasses" are defined as upper level pedestrian connections between two buildings within the Mixed Use Zone: Orakei Point over streets or public places.

v) The "RL" shown on the Mixed Use Zone: Orakei Point Overlay Plan 1 shall be Auckland Datum 1946 (mean sea level).

b) Floor to Floor Height within Buildings

- i) The minimum floor to floor height for shall be 4 metres for the ground level of a building, provided that no minimum floor to floor height shall apply to the ground or basement levels of buildings within precinct 1 on the Mixed Use Zone: Orakei Point Overlay Plan 2, where those floors contain residential or car parking.
- ii) The minimum floor to floor height for all other levels within a building shall be 3 metres. The minimum floor to floor heights shall not apply to carparking levels or to levels below the podium.
- iii) Refer to rule 8.8.11.8 for the minimum floor to ceiling heights which apply to residential units.
- iv) The maximum floor to ceiling height limit on all levels within a building shall be 4.5 metres, except that the maximum floor to ceiling height limit shall not apply to:
 - ground levels;
 - other building levels used for entrance lobbies, circulation or foyers or as public entry and access to the covered railway station:
 - carparking levels;
 - levels used for the rail station, lines and ancillary activities.

c) Roof Top Control

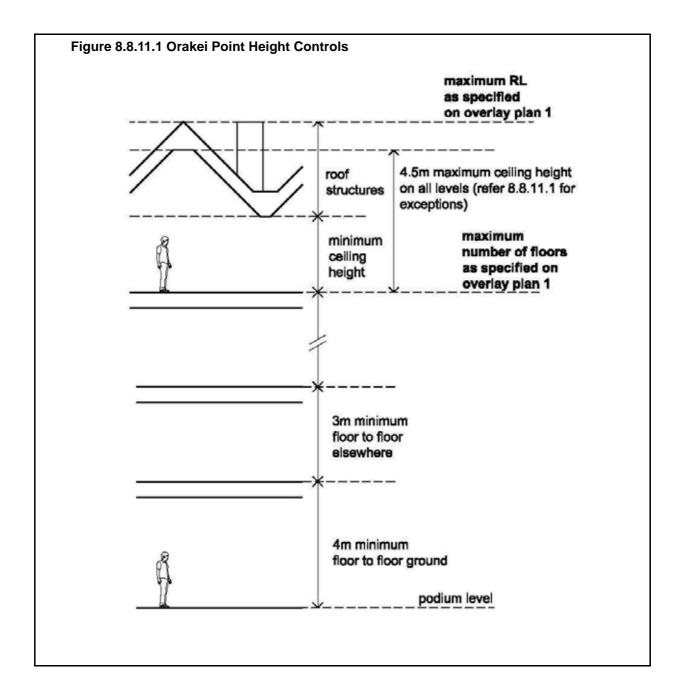
Rooftop projections including lift towers, machinery rooms and plant which exceed the height of all parts of a parapet surrounding a roof on which the projections are located, shall be enclosed in a structure or structures designed as an integral part of the roof of the building.

Explanation:

Buildings are limited to the building platforms shown on the overlay plans to ensure development is consistent with the Orakei Point master plan. Building platforms are positioned to concentrate development on the inner and northern part of Orakei Point, thereby generally avoiding its Orakei Road and Orakei Basin edge and ensuring the greatest intensity of development closest to the railway station. Building platforms also provide for buildings to define and enclose public streets open spaces.

Appropriate building heights have been determined with reference to the landform of the wider visual and physical





catchment. Maximum building heights have been determined for each of the building platforms, with reference to the landscape sensitivities of Orakei Point and master plan. A range of building heights are specified to ensure variation in the roof profile of the overall development and to have building heights at a scale appropriate to other buildings and adjoining roads and public open spaces. This is achieved by a combination of a maximum number of floors and a maximum RL, the later being set higher than the former to provide for and encourage pitched and varied roof forms rather than flat roofs.

Maximum heights of RL12.5, RL 16 and RL 14.5 are applied to the plaza podium levels, representing the top

of the plaza and road level. The maximum height of RL16 is applies to one portion of the podium to allow the road to slope up from the general podium level of RL12.5 to meet Orakei Road at grade. A maximum height of RL5.5 is applied to the lower podium levels.

Minimum floor to floor heights have been applied to residential and commercial buildings to allow buildings to be adaptable to alternative uses and provide amenity for occupants.

Maximum floor to floor heights have been applied to ensure that buildings adhere to the scale allowed by the specified floor limits. Lobbies, foyers and public space within buildings have been excluded from the maximums to encourage such spaces to have generous volumes. The



rail corridor has also been excluded from the maximum height limit in recognition of its functional need.

2. Orakei Road Recession Plane and Building Landscaping

Buildings within the building platform identified on the Mixed Use Zone: Orakei Point Overlay Plan 1 as being subject to the Orakei Road Recession Plane and Building Landscaping Control shall comply with the following:

- No part of the building shall project through a plane starting at the level of Orakei Road, measured at the boundary of the site, and rising at 45 degrees to its baseline parallel with the street boundary of the site;
- ii) The face of the building to Orakei Road shall be landscaped and shall have sufficient soil depth and drainage to ensure proper plant growth;
- iii) The building and landscaping shall either be a terraced profile or have a modulated form so as to create a natural hill profile, to generally screen the bulk of buildings behind when viewed from Orakei Road level and shall not be a literal regression of the 45 degree angle;
- iv) No part of the building shall exceed an overall height of RL 30 above Auckland Datum 1946 (mean sea level);
- v) The upper most edge and sides of the sloping or terraced building face to Orakei Road shall be fenced in a manner that satisfies the requirements of the Building Act 2004 and any subsequent amendments.

Explanation:

The Orakei Road Recession Plane and Building Landscaping control is applied to the carpark building adjoining Orakei Road. The control ensures that the building maintains a green face to Orakei Road and is set back from the road so as to maintain its open character.

3. Site Intensity 260

The maximum gross floor area (GFA) within each precinct shall not exceed the following:

Precinct Area	Maximum Gross Floor Area
Precinct Area 1	15,000m²
Precinct Area 2	26,000m²
Precinct Area 3	21,000m²
Precinct Area 4	14,000m²
Precinct Area 5	8,000m²
Total GFA	84,000m²

See key on last

page of this section

For the purpose of this rule 'Precinct Areas' are as shown on the Mixed Use Zone: Orakei Point Overlay Plan 2.

The maximum GFA within each precinct shall be calculated as the combined total GFA of both existing and consented buildings within each of the identified building platforms. For the purpose of this rule 'consented buildings' means buildings for which resource consent has been granted, but not given effect to. Resource consents which have expired or lapsed, or which have been surrendered shall not be used in the calculation of maximum GFA.

In addition to the matters excluded in the definition of GFA, the following shall also be excluded from the calculation of gross floor area:

- All outdoor balcony or deck space, whether enclosed or not;
- Floor area used for carparking, including associated access ramps, stairs, lifts and plant, where that floor area is:
- For Precinct Area 1, below RL 18 (measured above Auckland Datum 1946 (mean sea level)); or
- For Precinct Areas 2 -5, below the podium levels shown on Mixed Use Zone: Orakei Point Overlay Plan 2: or
 - Contained within the Orakei Road car parking building within the building platform shown on Mixed Use Zone: Orakei Point Overlay Plan 1 as being subject to the Orakei Road Recession Plane and Building Landscaping Control.

Explanation:

The site intensity control limits the amount of gross floor area achievable within each of the precinct areas. Maximum gross floor areas have been established to allow the development of appropriate densities of development (in terms of apartment numbers and commercial floor area) to create a vibrant transit oriented community which supports patronage of public transport, within the constraints imposed by the building platforms and height limits. Maximum gross floor areas are identified on a precinct basis. The development of individual building areas within each precinct will need to be assessed at the time of resource consent application with reference to the quantum of gross floor area already taken up within the precinct, by both existing and consented development. Overall, the gross floor areas provided for within the Mixed Use Zone: Orakei Point zone equates to a floor area ratio of approximately 1.8:1 of the entire area of the zone.

4. Colonnade Requirement

For buildings within building platforms identified as subject to a Colonnade Control on the Mixed Use Zone:



Orakei Point Overlay Plan 3, a colonnade shall be provided which must comply with the following:

- The colonnade shall provide continuous pedestrian cover within the site along the entire building platform frontage identified as subject to a colonnade requirement;
- ii) The colonnade shall have a minimum height of 3.4 metres above the footpath immediately below;
- iii) The colonnade shall have a minimum unobstructed horizontal width of 2 metres.

Explanation:

A colonnade is required along the western side of the loop road to provide for pedestrian cover between Orakei Road and the lee plaza and railway station entrance. A colonnade is also required around the southern edge of the lee plaza to provide pedestrian cover to and around the plaza and to enhance the pedestrian amenity of the plaza.

5. Pedestrian Links

Pedestrian links connecting the road, plazas and open space land shall be provided generally at the locations shown on the Mixed Use Zone: Orakei Point Overlay Plan 3. Such pedestrian links shall comply with the following:

The pedestrian link shall:

- i) have a minimum width of 2 metres;
- ii) create a direct and logical pedestrian link through the site between public road, plaza and open space land;
- iii) be open to the sky or be covered with glazing, except for a pedestrian link beneath the rail line;
- iv) comply with the Safety Guidelines in Annexure 16 of the Plan.

Explanation:

Pedestrian links are required in the locations specified to provide for mid-block linkages between roads, plazas and public open space and to allow permeability through the site and development.

6. Frontage Height and Activity Control

Any building shown on Mixed Use Zone: Orakei Point Overlay Plan 4 as subject to a Frontage Height and Activities Control shall comply with the following:

- The façade of the building shall generally abut the building platform boundary identified as being subject to the frontage height control;
- ii) The number of floors along that building platform boundary shall be no less than the maximum number of floors specified on Overlay Plan 1, except on the building platform subject to the Orakei Road

Recession Plane and Building Landscaping Control where this sub clause ii) shall not apply;

iii) For the purpose of this rule 'frontage' means the external wall of a building which occupies the length of the road boundary and which rises from that boundary to a height no less than the minimum specified, but excludes vehicle entrances, loading bays, pedestrian entrances and lobbies, window and balcony recesses and similar architectural modulations;

Activities occupying the ground floor frontage of a building on a site identified on Mixed Use Zone: Orakei Point Overlay Plan 4 shall be limited to the following:

- Entertainment facilities.
- · Garden centres.
- Restaurants, cafes and other eating places.
- · Retail premises.
- · Taverns.

Except that such activities shall occupy not less than 80% of the length and not less than 10m of the depth of the ground floor road frontage of an identified site. Up to 20% of the length of the frontage of identified sites may be occupied by building entrances, services entrances, vehicle access and service functions.

Explanation:

The frontage height and activities control is applied to certain building frontages to ensure that new buildings appropriately address and define roads and plazas through specified minimum number of floors appropriate to the scale and character of the streets and plaza they adjoin, while excluding certain building elements to provide for flexibility in design and avoiding potential visual monotony of regimented frontage forms.

On such identified frontages, ground floor activities are limited to entertainment, garden centres, restaurants, cafes and other eating places, retail and taverns to activate the road and plaza.

7. Noise

a) External Sound Insulation

Buildings within the Mixed Use Zone: Orakei Point shall be designed and constructed to ensure the following internal noise limits shall not be exceeded:

Receiving Environment	L _{Aeg} , 1 hour
Residential - Bedroom	35 dB
Residential - Habitable Rooms	40 dB
Commercial - Offices	40 dB
Conference & Daycare	40 dB
Commercial - Retail	45 dB

Sound insulation calculations shall be based on external noise levels of:

- i) a train sound power level of 127 dBA as a point source travelling at 40 km/hr, and 4 trains per hour and; 260
- ii) road traffic noise at the façade to be calculated with 3D modelling software and the current traffic flow rates on Orakei Road between 10.00 pm and 11.00 pm.

At the same time and under the same physical conditions as the above internal noise levels will be achieved, all bedrooms and other habitable spaces will be adequately ventilated or air conditioned. Adequately ventilated or air conditioned shall be determined by a suitably qualified mechanical engineer to achieve reasonable internal temperatures during all but the extreme summer conditions and at least to the requirements of Clause G4 of the Building Regulations 1992.

No residential accommodation shall be located closer than 80 m to any exposed rail track unless a report from a suitably qualified acoustic consultant demonstrates that the external criterion of $L_{\rm Aeq,1hr}$ 60 dB can be achieved using the source levels detailed in (i) above.

(b) Noise Emission

The noise level arising from any activity within the Mixed Use Zone: Orakei Point shall not exceed the following levels;

 At the façade of any habitable space within the Mixed Use Zone: Orakei Point:

Time	Noise Level
7.00 am to 10.00 pm	L _{A10} 60 dB

10.00 pm to 7.00 pm	L _{A10} 55 dB
	L _{63 Hz 10} 60 dB
	L _{125Hz} ₁₀ 55 dB
	L _{63 Hz 10} 60 dB L _{125Hz 10} 55 dB L _{Amax} 75 dB

(ii) Within the boundary of any residentially zoned property (outside the Mixed Use Zone):

Time	Noise Level
7.00 am to 10.00 pm	L _{A10} 50 dB
10.00 pm to 7.00	L _{A10} 40 dB L _{Amax} 75 dB

iii) Noise levels shall be measured and assessed in accordance with the requirements of NZS6801:2008
 Acoustics – Measurement of Environmental Sound and NZS6802:2008 Acoustics – Environmental Noise.

Explanation:

The purpose of this control is to provide a minimum level of internal acoustic amenity for occupants of buildings from the external noise sources generated by activities with the Mixed Use Zone: Orakei Point (including the transport network) and to provide a maximum level of noise that activities other than residential activities can generate.

A general noise control is also applied to the Mixed Use Zone: Orakei Point avoid excessive noise occurring for a continuous period or such a duration so as to be damaging to public health or have an adverse effect on the amenity of the receiving environment.

8. Standards for Residential Units

Residential units shall comply with the following standards:

a) Minimum Gross Floor Area

Residential Unit	Minimum Gross Floor Area
One bedroom	45m²
One bedroom plus study	55m²
Two bedrooms	70m²
Three bedrooms or more	90m²



Minimum balcony sizes of at least 8m² shall be in addition to the above minimum gross floor area requirements. All balconies shall be internalised (i.e. not projecting) for improved privacy, flexibility of use and protection from windy aspects.

b) Floor to Ceiling Height

- The minimum floor to ceiling height for habitable rooms (including servicing) shall be 2.4 metres except for multi-level or split-level apartments and mezzanine levels. In such cases at least 50% of the apartment floor area must comply with the minimum 2.4 metre floor to ceiling height requirements.
- ii) Kitchens, bathrooms, hallways, toilets, lobbies, laundries and service areas: 2.3 metre minimum floor to ceiling height.

c) Minimum Widths of Common Circulation Corridors

- i) The minimum width of common area corridors shall be 1.5 metres.
- ii) The minimum width of a corridor/lobby space immediately adjacent to the lift shall be 2.7 metres, measured at 90 degrees to the lift doors, for the full combined width of the lift doors.

d) Minimum Daylight Standards

- i) Residential units shall be designed to achieve the following minimum daylight standards:
 - Living rooms and living/dining areas a total clear glazed area of exterior wall no less than 20% of the floor area of that space.
 - Bedrooms –shall have a total clear glazed area of exterior wall no less than 20% of the floor area of that space.
 - Entrance halls, kitchens, kitchen/dining rooms, bathrooms, toilets, and laundries may rely on borrowed or artificial light however where such building elements contain a window placed in an exterior wall parallel to a site boundary, other than the street boundary, then that window/wall shall be set back from the boundary by a minimum of 1 metre.

Explanation:

Minimum unit standards are imposed within the Mixed Use Zone: Orakei Point to ensure that each unit has an adequate level of amenity for the occupants. Such amenity includes the provision of minimum areas for apartments, floor to ceiling heights, widths of corridors and daylight standards. These standards are designed to ensure that apartments at Orakei Point are a desirable place to live.

9. Mix of Residential Units

The combined number of one bedroom, one bedroom plus study and two bedroom units within the Mixed Use Zone: Orakei Point shall not exceed 80% of the total number of residential units in the zone.

No more than 10% of units within the Mixed Use Zone: Orakei Point shall be one bedroom. No more than 15% of units within the Mixed Use Zone: Orakei Point shall be one bedroom plus study. No single building shall comprise entirely one bedroom units.

The total number of residential units in the zone shall be calculated as the combined total of units in both existing and consented buildings. For the purpose of this rule 'consented buildings' means buildings for which resource consent has been granted, but not given effect to. Resource consents which have expired or lapsed, or which have been surrendered shall not be used in the calculation of residential units.

Explanation:

A mix of unit sizes is required to ensure that the housing stock within the Mixed Use Zone: Orakei Point can provide for a variety of household types. The mix of unit sizes ensures that no one apartment size dominates and will provide for a wide demographic mix of occupants, including families, through setting minimums on the number of one bedroom apartments allowed. No provision is made for smaller studio units in the zone under the gross floor area requirements for residential units.

10. Private Open Space

All residential units shall have an outdoor living area no less than $8m^2$.

This outdoor living area shall have convenient access from a living room, and may consist of either an exclusive area at ground level, a balcony (including a recessed or semi enclosed balcony or part of the balcony) or a roof top space exclusively available to that residential unit. An outdoor living area shall comprise one continuous area rather than comprise the cumulative total of smaller areas.

Explanation

Outdoor living areas are required to ensure that each unit has an adequate level of amenity for the occupants in the form of useable private open space.

11. Visual Privacy

Where the habitable room windows of a dwelling or a guestroom within a visitor accommodation or tourist facility are less than 6 metres away, and have direct views of the habitable room windows of other residential units

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or a guestroom within a visitor accommodation or tourist facility within the same or adjacent sites, they shall:

- i) be offset a minimum of 1m (horizontally or vertically) from the edge of one window to the edge of the other: or
- ii) have sill heights of 1.6m above floor level; or
- iii) have fixed obscure glazing in any part of the window below 1.6m above floor level; or
- iv) be on the ground floor level and separated by a suitable screening device, including landscaping, of 1.6m minimum height.

Explanation:

This rule provides a balance between allowing the windows of upper storeys of new developments to have reasonable daylight and outlook while limiting intrusive overlooking of habitable rooms of units on adjoining

12. Residential Outlook Space

An outlook space shall be provided from each face of the building containing windows to principal living areas or bedrooms of any residential unit. Where windows to a principal living area or bedroom are provided from two or more faces of a building, outlook space shall be provided to the face with the greatest window area of outlook.

For the purpose of this rule, "principal living area" means the main communal living space within accommodation unit for entertainment, recreation and relaxation.

The minimum dimensions for outlook space for principal living areas and for bedrooms shall be 6m, measured perpendicular to the exterior face of the building.

The outlook space may be over:

- i) the site on which the building is located;
- ii) legal road;
- iii) public open space;
- iv) another site; or
- v) An area otherwise shown on Overlay Plan 1 as being podium or open space and not a building platform above the podium levels.

Provided that in the event of iv):

- the outlook space shall be secured in perpetuity for the benefit of the building by a legal instrument to be put in place prior to the commencement of construction;
- written approval of the owner of the adjoining site for the outlook space shall be provided when the application for resource consent is lodged;

See key on last

page of this section

more than one building may share an outlook space.

Balconies that have direct access from the principal living area or bedroom and are recessed within the exterior face of the building may be included in the calculation of outlook space to a maximum depth of 3m.

Explanation

The purpose of this control is to safeguard outlook, daylight, sunlight and privacy for occupants of residential buildings. It is noted this is not a view protection control.

13. Vibration

Occupied buildings within the Mixed Use Zone: Orakei Point shall be designed and constructed to ensure the following levels of vibration from trains shall not be exceeded based on the procedures specified in the Norwegian Standard NS 8176E: 2nd edition September 2005 Vibration and Shock Measurement of Vibration in Buildings from Land Based Transport and Guidance to Evaluation of its Effects on Human Beings.

Receiving Environment	Maximum Weighted Velocity, V _{w, 95}
Residential Accommodation	0.3 mm/s
Commercial/Retail Areas	0.6 mm/s

14. Screening

Rule 8.8.10.11 "Screening" shall apply. 260

Explanation:

The purpose of this control is to ensure that unsightly outdoor storage, refuse disposal and parking areas are adequately screened to adjoining open space zoned land.





15. Parking

Part 12 shall apply with the exception that in place of the parking standards in 12.8.1.1 the following shall apply:

 i) Where a site is located within the Mixed Use Zone: Orakei Point, the maximum number of parking spaces shall not exceed the following:

Activity	Maximum Permitted Parking
Residential	One space per residential unit up to one bedroom (including one bedroom units plus study).
	wo spaces per residential unit two bedrooms or more.
Offices	One space per 60m² of gross floor area.
Retail	One space per 40m² of gross floor area.
Garden Centre, including an ancillary café that incorporates up to 20% of the gross floor area, and/or up to 5% of the outdoor area	Garden Centre: one space per 40m^2 of gross floor area plus one space per 100m^2 of outdoor area. Café: one space for every 4 café seats.
All other activities	One space per 60m² of gross floor area.

- ii) The overall parking spaces within the Mixed Use Zone: Orakei Point shall be no more than 1750 spaces.
- iii) That a minimum parking threshold of 75% of the maximum parking requirement shall apply.
- iv) The overall parking spaces in the zone shall be calculated as the combined total of spaces in both existing and consented buildings. For the purpose of this rule 'consented buildings' means buildings for which resource consent has been granted, but not given effect to. Resource consents which have expired or lapsed, or which have been surrendered shall not be used in the calculation of parking spaces.
- v) Parking may either be provided on the same site as the activity to which it relates, or on another site within the Mixed Use Zone: Orakei Point.
- vi) There are no minimum parking requirements within the Mixed Use Zone: Orakei Point.

- vii)Podium level public on-street car parking is not subject to the maximum permitted parking limitations or total overall in parts i) and ii) of this rule.
- viii)Park and Ride parking up to a maximum of 200 spaces is not subject to the maximum permitted parking limitations or total overall in parts i) and ii) of this rule.
- ix)Rule 12.8.1.2 "Loading Standards" shall apply, except that loading requirements for individual buildings may be waived where a common loading space or spaces are provided available and accessible to all buildings and activities within a particular precinct identified on Overlay Plan 2. No off-street loading shall be required for buildings and activities within precinct 5.

Explanation:

The Mixed Use Zone: Orakei Point restricts the amount of parking which may be provided in recognition of the access limitations of Orakei Road and carrying capacity of the surrounding road network. There are no minimum parking requirements to allow the flexibility to provide as little parking as necessary to meet the requirements of a development. This recognises that the site is extremely well connected by public transport and acts as an incentive to developers to consider reducing parking in light of the other transport options that are available to Orakei Point.

16. Staging and Provision of Public Facilities, Infrastructure, Traffic and Road Improvements

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i) The following table sets out the public facilities and infrastructure work and traffic and road improvements required to be established as a prerequisite to development of each precinct identified on Mixed Use Zone: Orakei Point Overlay Plan 2.

1	Ш	III	IV
Precinct	Staging Requirements	Public Facilities and Infrastructure	Traffic and Road Improvements
Precinct 1	None	None	None
Precinct 2	No building or development shall be undertaken within the precinct until the Public Facilities and Infrastructure set out in Column III of this table have been established. No building or development within the precinct shall be occupied until the traffic and road improvements set out in Column IV have been completed.	 Vesting of Orakei Road site frontage to Council for road widening, as shown on Overlay Plan 1; and Vesting to Council of the open space 2 zone land at the northern end of the site at 246 Orakei Road (headland park). 	 Improvements to the alignment along Orakei Road, where feasible; and The provision of footpaths along the western side of Orakei Road, between 228 Orakei and the Shore Rd roundabout); and The provision of on or off road facilities for cyclists along Orakei Road; and The signalisation of the intersection of the southern access to the site with Orakei Road, generally in the position shown on the master plan at figure 8.6.11.2.
Precinct 3	No building or development above the podium level shall be undertaken within the precinct until the Public Facilities and Infrastructure set out in Column III of this table have been established. Note: this does not preclude the establishment of the carpark levels and associated access below the podium level nor the establishment of the roads, plazas and other public places above the podium level prior to the Public Facilities and Infrastructure set out in Column III being established. No building or development within the precinct shall be occupied until the traffic and road improvements set out in Column IV have been completed.	1 – 2 above; and 3. Vesting to Council of the open space 2 zone land on the western edge of the sites at 228 Orakei Road and 236 Orakei Road from Orakei Road to the railway land.	 1-4 above; and 5. Upgrading of the Kepa/ Orakei/Ngapipi intersection from a roundabout to traffic signals, with a single right turn from Ngapipi Road to Orakei Road, but with two exit lanes on Kepa Road (to allow two right turn lanes from Orakei Road); and 6. The provision of a second northbound lane on Orakei Road, from south of the southern site access. 7. The signalisation of the intersection of the northern access to the site with Orakei Road, generally in the position shown on the master plan at figure 8.6.11.2.

Precinct 4	No building or development	1 – 3 above; and	1-7 above; and:
shall be undertaken within the precinct until the Public Facilities and Infrastructure set out in Column III of this table have been established. No building or development within the precinct shall be occupied until the traffic and road improvements set out in Column IV have been	4. Completion of that part of the podium level within precinct 3; and	8. The provision of a flush median along Orakei Road, where feasible; and	
	5. The establishment and vesting of the Link Road as a public road in strata within precincts 1-3, including signalised intersections with Orakei Road; and	9. Further upgrading of the Orakei/Kepa/Ngapipi Road intersection, with two exit lanes to Ngapipi Road, plus widening of the approach from Kepa Road.	
	completed.	6. The establishment of lee plaza*; and	
	7. Vesting of the strata level above the Orakei Road car park building in the Council.		
Precinct 5	No building or development shall be undertaken within the precinct until the Public Facilities and Infrastructure set out in Column III of this table have been established. No building or development within the precinct shall be occupied until the traffic and road improvements set out in Column IV have been completed.	 1-7 above; and Completion of that part of the podium level within precincts 2, 3 and 4; and Completion of the railway entrance building*; and The establishment of lee plaza and waterfront plaza*; and Public indoor and outdoor linkage between lee plaza and waterfront plaza*. 	1-9 above.

For the purposes of the above table, 'the link road', 'lee plaza' and 'waterfront plaza' shall be as shown on the Orakei Point Master Plan at Figure 8.6.11.2.

- * Note: The construction of lee and waterfront plazas, the linkages between the plazas and the railway station entrance building are required to satisfy assessment criteria as a restricted discretionary activity set out in 8.7.8.3.2 b), including the requirements to legally establish safe public access to these public places and facilities as referenced in the criteria.
- iii) Throughout the development of every precinct, public pedestrian and service access to the Orakei Railway station shall be maintained.
- iv) For the avoidance of doubt, the sequencing of development of each stage need not necessary follow the order of precinct numbering 1-5, provided that public facilities and infrastructure work pre-requisites are met in the manner shown in the table above.

- v) An application for resource consent for development within any of the precincts shall provide details of how the public facilities and infrastructure set out in column III have been provided.
- vi) Where any of the required public facilities and infrastructure set out in column III have not been established at the time of resource consent for the development, then resource consent for a restricted discretionary activity will be required for the new building. The application for resource consent is required to be accompanied by an explanation of the methods by which the public facilities and infrastructure will be established, prior to occupation of the building, including a timetable for their establishment. Such methods may include conditions of resource consent or bonding to secure the public facilities and infrastructure. The resource consent will be assessed against the extent to which these methods and timetable are appropriate to ensure the public facilities and infrastructure will be established, prior to occupation of the building.

Explanation

The provision of public facilities and infrastructure and traffic and road improvements is tied to the development of precincts to ensure they are provided commensurate with the requirements of the development and to ensure the full public benefit outcomes of the Orakei Point Master Plan are achieved. The success of Orakei Point depends on the staged and coordinated provision of the covered rail, roads, plazas, linkages and infrastructure and roading upgrades.

17. Network Utility Services

The Mixed Use Zone: Orakei Point development controls shall not apply to network utility services provided for as permitted and restricted controlled activities in rule 4A.4.6.

Explanation

The development controls of the Mixed Use Zone: Orakei Point are intended to apply to building development only and not to the height, position and size of network utilities such as traffic signs, telephone booths, bus shelters and other infrastructure in roads and plazas.

18. Orakei Point Coastal Yard 260

The Orakei Point Coastal Yard applies to land within a line 20 metres from mean high water springs in the position shown on Mixed Use Zone: Orakei Point Overlay Plan 1. The yard shall be measured in a horizontal plane in a landward direction from the mean high water springs. The following rules shall apply to this yard:

- No building shall be constructed within the Orakei Point Coastal Yard, except that this control shall not limit the following approved as part of a resource consent:
 - paths and driveways and associated retaining, foundations, surfaces and structures in general accordance with the Orakei Point Master Plan.
- ii) No person shall cut, damage, alter, injure, destroy or partially destroy:
 - · any indigenous tree or vegetation;
 - any exotic tree greater than 6 metres in height or 600mm in girth (measured at 500mm above ground level).

The Council may grant an application for a restricted discretionary activity resource consent to remove or pollard such vegetation or trees, or any substantial part thereof if it is satisfied that such consent is justified in the circumstances which include dangerous, diseased or damaged conditions, compliance with and statutory or legal obligation or hardship, or any other cogent reason. Consent will

not be granted where an improvement in view is sought unless the Council is satisfied that the natural character of the coastal environment, the ecological amenity of the site and the health of the tree will not be affected.

For the avoidance of doubt, no other yard or building in relation to boundary control shall apply within the Mixed Use Zone: Orakei Point.

Explanation

The Orakei Point Coastal Yard is applied at the boundary of open space 1 zone land on the northern side of Orakei Point. The control is intended to ensure that buildings are appropriately set back from this coastal edge, thereby avoiding effects on its landscape and ecological values

In other places within the Mixed Use Zone: Orakei Point the position of buildings in relation to other buildings, roads and open space are controlled by the height and recession plane rules within the identified building platforms rather than yard controls. Buildings are generally encouraged to abut adjoining open space rather than be set back in order that they appropriately address and define such open space to maximise opportunities for outlook and surveillance.

REFERENCE SHOULD ALSO BE MADE TO THE FOLLOWING PARTS:

Parts 4	Refer Clause 4.5 Signs
I al to T	INCICI CIAUSC T.J DIEIIS

Refer Clause 4.6 Artificial Lighting

Part 4A General Rules

Part 4B Financial Contributions

Part 5B Coastal

Part 5C Heritage

Part 5D Natural Hazards

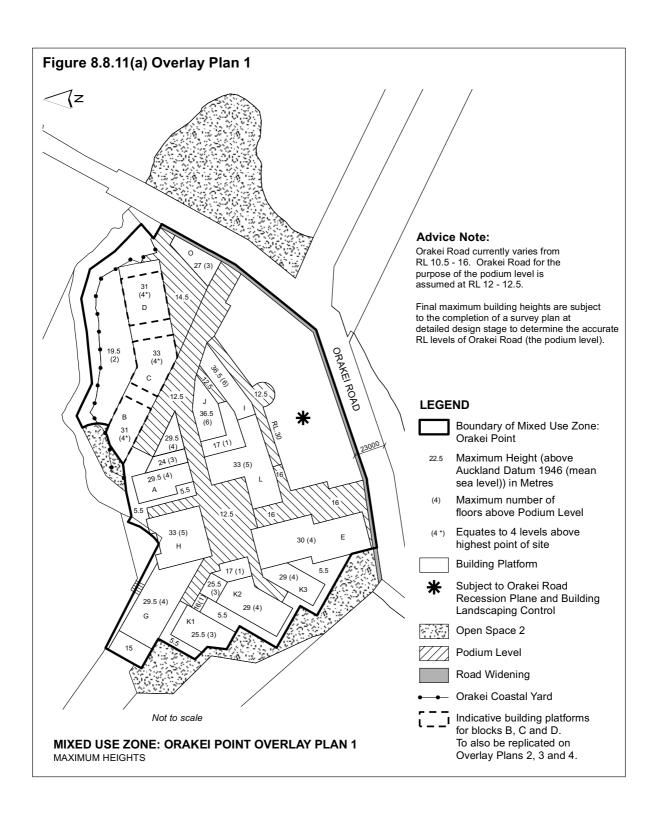
Part 5E Hazardous Facilities

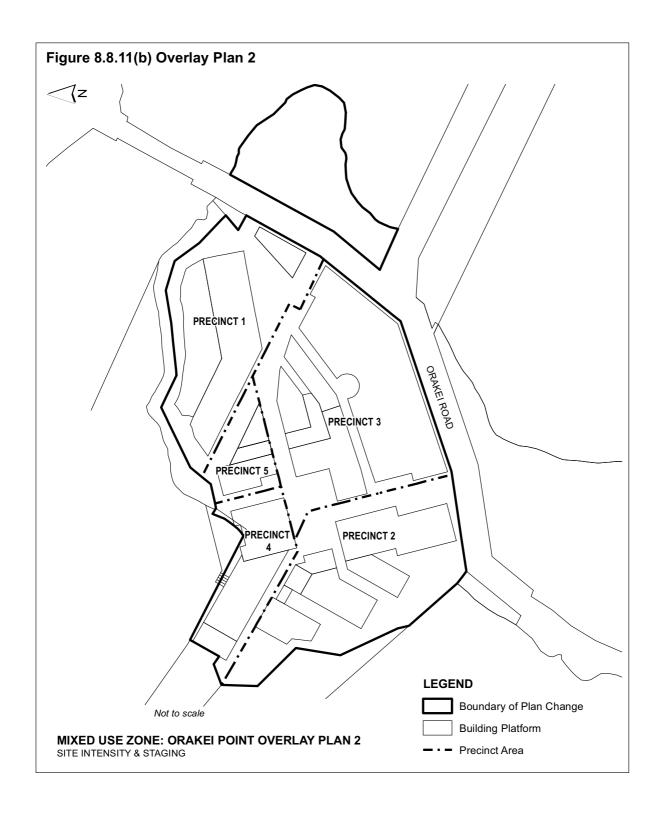
Part 11 Subdivision

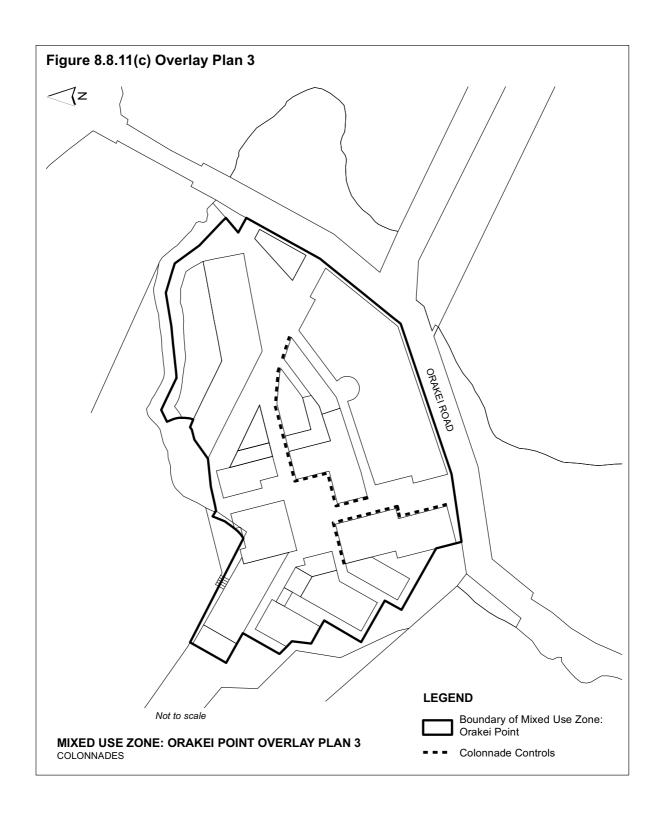
Part 12 Transportation

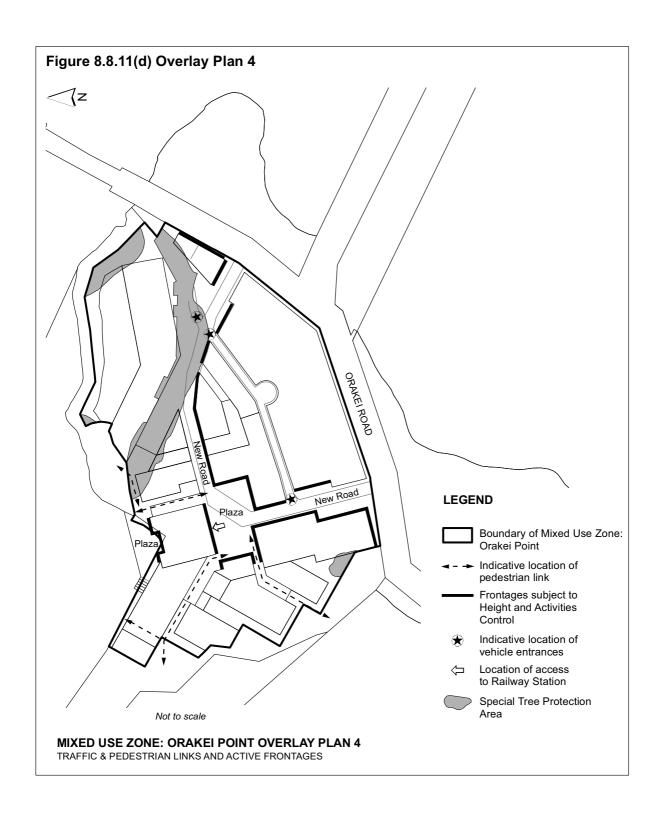
Part 13 Interpretations and Definitions











Plan change annotations - key

 $\sqrt{\mathbf{x}}$

Indicates where content is affected by proposed plan modification x. Refer to plan modification folder or website for details.

X

Indicates where the content is part of plan modification x, which is subject to appeal.

<u>Underlined</u> content to be inserted.

Struck through content to be deleted.

