

Section 8:

DISTRICT WIDE PERFORMANCE STANDARDS FOR DEVELOPMENT AND SUBDIVISION

TABLE OF CONTENTS – SECTION 8

8.1	BACKGROUND	8.1-1
8.1.1	DESCRIPTION	8.1-1
8.1.2	OBJECTIVES AND POLICIES	8.1-1
8.1.3	TYPES OF PERFORMANCE STANDARDS	8.1-2
8.1.4	ACTIVITY STATUS	8.1-3
8.2	DESIGN AND LOCATION OF BUILDINGS	8.2-1
8.2.1	SETBACK FROM PUBLIC DRAINS, LAKES, RIVERS, STREAMS, FLOODWAYS, SPILLWAYS AND FLOOD PROTECTION WORKS	8.2-1
8.2.1.1	DISCUSSION, PURPOSE AND REASONS	8.2-1
8.2.1.2	ENVIRONMENTAL RESULTS	8.2-1
8.2.1.3	STANDARDS	8.2-2
8.2.1.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.2-2
8.2.2	FLOOR LEVELS	8.2-3
8.2.2.1	DISCUSSION, PURPOSE AND REASONS	8.2-3
8.2.2.2	ENVIRONMENTAL RESULTS	8.2-3
8.2.2.3	STANDARDS	8.2-3
8.2.2.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.2-4
8.2.3	EROSION PROTECTION SETBACK LINES (WHIRITOA BEACH)	8.2-5
8.2.3.1	DISCUSSION, PURPOSE AND REASONS	8.2-5
8.2.3.2	ENVIRONMENTAL RESULTS	8.2-5
8.2.3.3	STANDARDS	8.2-6
8.2.3.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.2-6
8.2.4	SEWAGE PLANT BUFFER AREAS	8.2-7
8.2.4.1	DISCUSSION, PURPOSE AND REASONS	8.2-7
8.2.4.2	ENVIRONMENTAL RESULTS	8.2-7
8.2.4.3	STANDARDS	8.2-7
8.2.4.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.2-7
8.2.5	GLARE AND LIGHTING	8.2-8
8.2.5.1	DISCUSSION, PURPOSE AND REASONS	8.2-8
8.2.5.2	ENVIRONMENTAL RESULTS	8.2-8
8.2.5.3	STANDARDS	8.2-8
8.2.5.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.2-9
8.3	AMENITY MATTERS	8.3-1
8.3.1	NOISE	8.3-1
8.3.1.1	DISCUSSION, PURPOSE AND REASONS	8.3-1
8.3.1.2	ENVIRONMENTAL RESULTS	8.3-1
8.3.1.3	STANDARDS	8.3-2
8.3.1.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.3-6
8.3.2	VIBRATION IN THE GROUND	8.3-7
Section 8: District Wide Performance Standards for Development and Subdivision		8.0 - 2

(Words in italics in rules and assessment criteria are defined in Section 4.0 Definitions)

8.3.2.1	DISCUSSION, PURPOSE AND REASONS	8.3-7
8.3.2.2	ENVIRONMENTAL RESULTS	8.3-9
8.3.2.3	STANDARDS	8.3-9
8.3.2.4	EXPLANATION OF STANDARDS	8.3-10
8.3.2.5	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.3-11
8.4	VEHICLE PARKING, LOADING AND ACCESS	8.4-1
8.4.1	NUMBER AND LOCATION OF PARKING SPACES	8.4-1
8.4.1.1	DISCUSSION, PURPOSE AND REASONS	8.4-1
8.4.1.2	ENVIRONMENTAL RESULTS	8.4-1
8.4.1.3	STANDARDS	8.4-1
8.4.1.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.4-4
8.4.2	NUMBER AND LOCATION OF LOADING/DROP OFF SPACES	8.4-7
8.4.2.1	DISCUSSION, PURPOSE AND REASONS	8.4-7
8.4.2.2	ENVIRONMENTAL RESULTS	8.4-7
8.4.2.3	STANDARDS	8.4-7
8.4.2.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.4-8
8.4.3	VEHICLE ACCESS AND CROSSINGS	8.4-9
8.4.3.1	DISCUSSIONS, PURPOSE AND REASONS	8.4-9
8.4.3.2	ENVIRONMENTAL RESULTS	8.4-11
8.4.3.3	STANDARDS	8.4-11
8.4.3.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.4-14
8.4.4	DESIGN OF PARKING, DROP OFF AND LOADING SPACES, ACCESS AND TURNING AREAS	8.4-15
8.4.4.1	DISCUSSION, PURPOSE AND REASONS	8.4-15
8.4.4.2	ENVIRONMENTAL RESULTS	8.4-15
8.4.4.3	STANDARDS	8.4-15
8.4.4.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.4-16
8.4.5	FORMATION, SCREENING AND LANDSCAPING OF PARKING AND LOADING AND MANOEUVRING AREAS	8.4-17
8.4.5.1	DISCUSSION, PURPOSE AND REASONS	8.4-17
8.4.5.2	ENVIRONMENTAL RESULTS	8.4-17
8.4.5.3	STANDARDS	8.4-17
8.4.5.4	RESTRICTED DISCRETIONARY MATTERS	8.4-18
8.4.6	PROTECTION OF TRAFFIC SIGHT LINES	8.4-20
8.4.6.1	DISCUSSION, PURPOSE AND REASONS	8.4-20
8.4.6.2	ENVIRONMENTAL RESULTS	8.4-20
8.4.6.3	STANDARDS	8.4-20
8.4.6.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.4-21
8.4.7	CORNER SPLAYS	8.4-23
8.4.7.1	DISCUSSION, REASONS AND PURPOSE	8.4-23
8.4.7.2	ENVIRONMENTAL RESULTS	8.4-23
8.4.7.3	STANDARDS	8.4-23
8.4.7.4	RESTRICTED DISCRETIONARY MATTERS	8.4-24
8.4.8	INTERNAL ACCESS	8.4-25
8.4.8.1	DISCUSSION, PURPOSE AND REASONS	8.4-25
8.4.8.2	ENVIRONMENTAL RESULTS	8.4-25
8.4.8.3	STANDARDS	8.4-26
8.4.8.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.4-26
8.4.9	STREET AND ROAD DESIGN	8.4-28
8.4.9.1	DISCUSSION, PURPOSE AND REASONS	8.4-28

8.4.9.2	ENVIRONMENTAL RESULTS	8.4-28
8.4.9.3	STANDARDS	8.4-28
8.4.9.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.4-29
8.5	INFRASTRUCTURE AND SERVICES	8.5-1
8.5.1	DOMESTIC EFFLUENT DISPOSAL	8.5-1
8.5.1.1	DISCUSSION, PURPOSE AND REASONS	8.5-1
8.5.1.2	ENVIRONMENTAL RESULTS	8.5-1
8.5.1.3	STANDARDS	8.5-1
8.5.1.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.5-2
8.5.2	NON-DOMESTIC EFFLUENT DISPOSAL	8.5-3
8.5.2.1	DISCUSSION, PURPOSE AND REASONS	8.5-3
8.5.2.2	ENVIRONMENTAL RESULTS	8.5-3
8.5.2.3	STANDARDS	8.5-3
8.5.2.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.5-5
8.5.3	WATER SUPPLY	8.5-6
8.5.3.1	DISCUSSION, PURPOSE AND REASONS	8.5-6
8.5.3.2	ENVIRONMENTAL RESULTS	8.5-6
8.5.3.3	STANDARDS	8.5-6
8.5.3.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.5-7
8.5.4	STORMWATER DRAINAGE	8.5-8
8.5.4.1	DISCUSSION, PURPOSE AND REASONS	8.5-8
8.5.4.2	ENVIRONMENTAL RESULTS	8.5-8
8.5.4.3	STANDARDS	8.5-8
8.5.4.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.5-9
8.5.5	DRAINS	8.5-10
8.5.5.1	DISCUSSION, PURPOSE AND REASONS	8.5-10
8.5.5.2	ENVIRONMENTAL RESULTS	8.5-10
8.5.5.3	STANDARDS	8.5-10
8.5.5.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.5-11
8.5.6	TELECOMMUNICATIONS AND POWER	8.5-12
8.5.6.1	DISCUSSION, PURPOSE AND REASONS	8.5-12
8.5.6.2	ENVIRONMENTAL RESULTS	8.5-12
8.5.6.3	STANDARDS	8.5-12
8.5.6.4	RESTRICTED DISCRETIONARY ACTIVITY MATTERS	8.5-12
8.6	SECTION 8 - APPENDICES	8.6-1
8.6.1	APPENDIX 1: TABLE 3.1 – URBAN / RURAL ROAD AND ACCESS STANDARDS FOR THE HAURAKI DISTRICT	8.6-2
8.6.2	APPENDIX 2: TABLE 3.2 – URBAN ROAD AND ACCESS STANDARDS FOR THE SETTLEMENTS OF WAIKINO, KARANGAHAKE AND MACKAYTOWN	8.6-3
8.6.3	STRUCTURE PLANS	8.6-4
8.6.3.1	INTRODUCTION	8.6-4
8.6.4	APPENDIX 3: STRUCTURE PLAN – KEREPEHI INDUSTRIAL	8.6-5
8.6.4.1	DESCRIPTION	8.6-5
8.6.4.2	ISSUES	8.6-5
8.6.4.3	PURPOSE	8.6-6
8.6.4.4	OBJECTIVES	8.6-6
Section 8: District Wide Performance Standards for Development and Subdivision		8.0 - 4

(Words in italics in rules and assessment criteria are defined in Section 4.0 Definitions)

8.6.4.5	POLICIES	8.6-6
8.6.4.6	ACTIVITY STATUS AND RULES FOR SUBDIVISION	8.6-6
8.6.4.7	ACTIVITY STATUS AND RULES FOR DEVELOPMENT	8.6-7
8.6.4.8	STRUCTURE PLAN MAP – KEREPEHI INDUSTRIAL	8.6-9
8.6.5	APPENDIX 4: STRUCTURE PLAN – PAEROA NORTH (RESIDENTIAL)	8.6-10
8.6.5.1	DESCRIPTION	8.6-10
8.6.5.2	ISSUES	8.6-10
8.6.5.3	PURPOSE	8.6-11
8.6.5.4	OBJECTIVES	8.6-11
8.6.5.5	POLICIES	8.6-11
8.6.5.6	ACTIVITY STATUS AND RULES FOR SUBDIVISION	8.6-11
8.6.5.7	ACTIVITY STATUS AND RULES FOR DEVELOPMENT	8.6-12
8.6.5.8	STRUCTURE PLAN MAP – PAEROA NORTH (RESIDENTIAL)	8.6-14
8.6.6	APPENDIX 5: STRUCTURE PLAN – OPUKEKO, PAEROA (INDUSTRIAL)	8.6-16
8.6.6.1	DESCRIPTION	8.6-16
8.6.6.2	ISSUES	8.6-16
8.6.6.3	PURPOSE	8.6-17
8.6.6.4	OBJECTIVES	8.6-17
8.6.6.5	POLICIES	8.6-17
8.6.6.6	ACTIVITY STATUS AND RULES FOR SUBDIVISION	8.6-17
8.6.6.7	ACTIVITY STATUS AND RULES FOR DEVELOPMENT	8.6-18
8.6.6.8	STRUCTURE PLAN MAP – OPUKEKO, PAEROA (INDUSTRIAL)	8.6-20
8.6.7	APPENDIX 6: STRUCTURE PLAN – WAIHI EAST (RESIDENTIAL)	8.6-21
8.6.7.1	DESCRIPTION	8.6-21
8.6.7.2	ISSUES	8.6-21
8.6.7.3	PURPOSE	8.6-22
8.6.7.4	OBJECTIVES	8.6-22
8.6.7.5	POLICIES	8.6-22
8.6.7.6	ACTIVITY STATUS AND RULES FOR SUBDIVISION	8.6-22
8.6.7.7	ACTIVITY STATUS AND RULES FOR DEVELOPMENT	8.6-23
8.6.7.8	STRUCTURE PLAN MAP – WAIHI EAST (RESIDENTIAL)	8.6-25
8.6.8	APPENDIX 7: STRUCTURE PLAN – TURUA (RESIDENTIAL)	8.6-26
8.6.8.1	DESCRIPTION	8.6-26
8.6.8.2	ISSUES	8.6-27
8.6.8.3	PURPOSE	8.6-27
8.6.8.4	OBJECTIVES	8.6-27
8.6.8.5	POLICIES	8.6-28
8.6.8.6	ACTIVITY STATUS AND RULES FOR SUBDIVISION	8.6-28
8.6.8.7	ACTIVITY STATUS AND RULES FOR DEVELOPMENT	8.6-28
8.6.8.8	STRUCTURE PLAN MAP – TURUA (RESIDENTIAL)	8.6-30
8.6.9	APPENDIX 8: STRUCTURE PLAN – NGATEA NORTH (RESIDENTIAL)	8.6-31
8.6.9.1	DESCRIPTION	8.6-31
8.6.9.2	ISSUES	8.6-31
8.6.9.3	PURPOSE	8.6-32
8.6.9.4	OBJECTIVES	8.6-32
8.6.9.5	POLICIES	8.6-32
8.6.9.6	ACTIVITY STATUS AND RULES FOR SUBDIVISION	8.6-32
8.6.9.7	ACTIVITY STATUS AND RULES FOR DEVELOPMENT	8.6-33
8.6.9.8	STRUCTURE PLAN MAP – NGATEA NORTH (RESIDENTIAL)	8.6-35
8.6.10	APPENDIX 9: STRUCTURE PLAN – WAIKINO (LOW DENSITY RESIDENTIAL)	8.6-36
8.6.10.1	DESCRIPTION	8.6-36
8.6.10.2	ISSUES	8.6-36
8.6.10.3	PURPOSE	8.6-37
8.6.10.4	OBJECTIVES	8.6-37
8.6.10.5	POLICIES	8.6-37
8.6.10.6	ACTIVITY STATUS AND RULES FOR SUBDIVISION	8.6-37

Section 8: District Wide Performance Standards for Development and Subdivision

8.0 - 5

(Words in italics in rules and assessment criteria are defined in Section 4.0 Definitions)

8.6.10.7	ACTIVITY STATUS AND RULES FOR DEVELOPMENT	8.6-38
8.6.10.8	STRUCTURE PLAN MAP – WAIKINO (LOW DENSITY RESIDENTIAL)	8.6-40
8.6.11	APPENDIX 10: STRUCTURE PLAN – KEREPEHI (RESIDENTIAL)	8.6-41
8.6.11.1	DESCRIPTION	8.6-41
8.6.11.2	ISSUES	8.6-42
8.6.11.3	PURPOSE	8.6-42
8.6.11.4	OBJECTIVES	8.6-42
8.6.11.5	POLICIES	8.6-42
8.6.11.6	ACTIVITY STATUS AND RULES FOR SUBDIVISION	8.6-43
8.6.11.7	ACTIVITY STATUS AND RULES FOR DEVELOPMENT	8.6-43
8.6.11.8	STRUCTURE PLAN MAP – KEREPEHI (RESIDENTIAL)	8.6-45
8.6.12	APPENDIX 11: DIMENSIONS, FORMATION AND CONSTRUCTION OF ACCESS POINTS	8.6-47

8.1 BACKGROUND

8.1.1 DESCRIPTION

- (1) Both subdivisions and developments require standards to guide their establishment and ongoing operation.
- (2) The performance standards, environmental results and assessment criteria set out in this Section have been developed to promote the objectives and policies of this District Plan and the purpose of the Resource Management Act 1991, namely the avoidance, remedy or mitigation of adverse effects of activities on the environment, natural and physical resources and amenity values.
- (3) The performance standards are based on and developed from standards that were prepared, administered and monitored under the previous district plan. Many of the standards have "survived the test of time", as useful and effective planning tools. However, they have been reviewed, altered, deleted and/or updated in order to better reflect the intent of Part 2 Resource Management Act 1991, and to reflect the higher environmental and amenity qualities expected by the community. The purpose of the performance standards is to avoid completely, where possible, or at least minimise the effects of activities on the environment. (168.166)(93.133)(191.133)
- (4) To ensure the efficient, coordinated and adequate provision of infrastructural services and roading, the Council has an Engineering Manual (referred to in the Standards as the HDC Engineering Manual 2010, Version 1) which provides acceptable minimum standards that all development is required to comply with to ensure health and safety requirements are met and that there is a consistency in design of infrastructural services and roading provided by developers to a standard that will last the test of time and anticipated use. The Manual also provides for variances within some of the standards for certain townships (ie. Waikino, Mackaytown and Karangahake), in recognition of their distinct urban character.
- (5) In some cases adherence to the manual has the potential to result in development that may be bland in character and design. Council wishes to promote innovation and flexibility in the design and servicing of subdivision and development acknowledging that this can lead to subdivisions and developments that are more responsive to the local environment and achieve quality urban design outcomes. Provision is made for developers to depart from the Engineering Manual requirements where it can be demonstrated that required standards of performance will still be met and that the desired environmental outcomes will result.

8.1.2 OBJECTIVES AND POLICIES

The Objectives and Policies for the zone in which the activity is being carried out, are in addition to and complementary to the objectives and policies set out for the performance standards. Accordingly, both sets of objectives and policies need to be considered when assessing an application to exceed a standard.

(1) OBJECTIVE 1

To avoid, remedy or mitigate the adverse effects of activities (development and subdivision) on the environment, natural and physical resources and the amenity values of the Hauraki District.

(a) Policies

Objective 1 will be achieved by implementation of the following policies:

- (i) Ensure activities operate within limits that do not have an adverse effect on the environment.
- (ii) Recognise that the performance standards in this District Plan are one of a range of methods available to achieve the anticipated environmental results identified and provide flexibility to assess those situations.

(b) Reasons for all objectives and policies

- (i) For each standard in the following Sections, a discussion is included which identifies what the standard is and the purpose of that standard. (168.167)
- (ii) Each standard includes an outline of the principal reasons for the inclusion of the standard. This is not intended as a comprehensive list of all the purposes and reasons. (168.167) However, the principal purpose and reason for any of the standards is to avoid, remedy or mitigate any adverse effects of activities (including buildings and structures) on the environment, natural and physical resources and amenity values. These purposes are summarised in the environmental result listed for each standard, as well as the objectives, policies, resource management issues and anticipated environmental results, listed for the zone to which the standard relates.

8.1.3 TYPES OF PERFORMANCE STANDARDS

- (1) The performance standards are a combination of building design and location, amenity, vehicle parking, loading, access and roading and infrastructure requirements which apply to all developments and subdivisions and will normally be imposed as consent conditions when determining any subdivision or land use consent.
- (2) A number of the performance standards require compliance with the standards within the HDC Engineering Manual 2010, Version 1. This document sits outside the District Plan and will need to be referred in these cases. The HDC Engineering Manual has been prepared to set out the required standards for any engineering work undertaken within the Hauraki District area. It is to be read in conjunction with the Hamilton City Council Development Manual Volumes 1, 2, 3 & 4 (HCCDM), which contains the majority of the applicable engineering standards.
- (3) The HDC Engineering Manual sets out the variances from the HCCDM and/or additional design standards or technical specifications that are required in subdivision, development and contract works in the Hauraki District area, and they have precedence over the HCCDM. The HDC Engineering Manual follows the same numbering system used in the HCCDM in order to provide for consistency and ease of use. Where the HDC Engineering Manual makes no specific requirements the HCCDM requirements apply. Where there is any discrepancy

between the HDC Engineering Manual and the District Plan or the Hauraki District Council Consolidated Bylaw, then these latter documents (being the District Plan and the Bylaw) have precedence.

8.1.4 ACTIVITY STATUS

- (1) In this District Plan, activities have *permitted* or *controlled activity* status depending on two factors:
 - (a) The activity is listed as either a *Permitted* or *Controlled Activity* in a *zone* contained in Section 5.0; and
 - (b) Compliance with the *Zone Development Standards* and Activity Specific Standards, as specified for the activity in each *zone* in Section 5.0, and the Specific and District Wide Matters in Section 7.0 and the District Wide Performance Standards in Section 8.0.
- (2) Where a *permitted* or *controlled activity* cannot comply with any one of the following District Wide Performance Standards (listed in Sections 8.2 – 8.5), then a resource consent as a *Restricted Discretionary Activity* is required, (unless an alternative activity status is specified in the standard).. The matters over which the *Council* has restricted its discretion are specified within each District Wide Performance Standard (8.2 – 8.5).

8.2 DESIGN AND LOCATION OF BUILDINGS

8.2.1 SETBACK FROM PUBLIC DRAINS, LAKES, RIVERS, STREAMS, FLOODWAYS, SPILLWAYS AND FLOOD PROTECTION WORKS

8.2.1.1 DISCUSSION, PURPOSE AND REASONS

- (1) Drainage of land in the Hauraki Plains area is imperative to ensure that the agricultural investment can continue to operate. As part of protecting this agricultural resource, access to the main drainage infrastructure has to be maintained for cleaning and flood control purposes. The placing of buildings within the area required to be available for drain maintenance will act as an impediment to the functions of the drains and is managed by the Hauraki District Council Consolidated Bylaw Part 7 (Land Drainage). In addition, the floodways of the main river systems must be protected from inappropriate developments.
- (2) Flood protection works, under the control of the Waikato Regional Council and the Hauraki District Council, are also imperative to the future usability of the Hauraki Plains area. Aspects of this system – stopbanks, floodways and spillways and their immediate environment, must be protected from inappropriate developments.
- (3) For the towns throughout the District, the function of the drains is to protect the urban environment from the effects of flooding. Some of the drains are set aside as reserves (especially in Ngatea), or are protected by easements in favour of the District or Regional Councils and the Crown. For situations where these forms of protection are not in place, the setback of structures from drains and watercourses achieves the same result.
- (4) The margins of lakes, rivers and streams are such that buildings should not be constructed within them. This is due to the need to protect the water environment itself and to ensure that those margins be kept in a state that is suitable for Esplanade purposes, and are able to vest "unencumbered" as an Esplanade Reserve in the event of subdivision or development. The Waikato Regional Plan includes rules relating to the building of structures along these water bodies for water environment protection. For those rivers and streams which have been identified for the setting aside of esplanade reserves and strips controls on the erection of buildings is included in this District Plan.

8.2.1.2 ENVIRONMENTAL RESULTS

- (1) To ensure that drains, stopbanks, floodways and spillways that serve to protect the agricultural resource of the Plains and the urban resource of all the towns are available, and readily able to be maintained, for that purpose.
- (2) Protection of the margins of those rivers and streams which have been identified as requiring esplanade reserves and strips.
- (3) Protection of the function of floodways and spillways that are part of the flood protection schemes and to ensure the avoidance of damage to buildings within the proximity of spillways.

8.2.1.3 STANDARDS

Zone	Standard
(1) Rural and Reserve (Passive)	<p>(a) No <i>building</i> is permitted within a floodway or spillway. Non compliance with this standard is a <i>Non Complying Activity</i>.</p> <p>(b) No <i>building</i> is permitted within 100 metres of a spillway. Non compliance with this standard is a <i>Restricted Discretionary Activity</i>.</p> <p>(c) No <i>building</i> is permitted within 12 metres of the boundary of a <i>Flood Protection Works</i>. Non compliance with this standard is a <i>Restricted Discretionary Activity</i>.</p>
(2) All Zones	(c) No <i>building</i> is permitted within 20 metres of the margin of a river or stream identified for a future esplanade reserve or strip.

Notes:

- (a) The setback for *buildings*, planting of vegetation, *earthworks*, erection of fencing and other activities that could impede the operation and maintenance of public drains managed by the Hauraki District Council is controlled by the Hauraki District Council Consolidated Bylaw – Part 7 (Land Drainage).
- (b) The setback for *buildings* from rivers, streams, lakes and drains is also controlled by the Waikato Regional Plan.

8.2.1.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.2.1.2 of the Standards in Rule 8.2.1.3 for which compliance is not met and the following relevant matters:
 - (a) Whether the characteristics of the watercourse etc are such that it is unlikely to be required for an Esplanade Reserve or Esplanade Strip.
 - (b) Whether or not the *building* will impact on public access along the margin of the watercourse or is incompatible with the conservation values of the proposed Esplanade Reserve or Esplanade Strip.
 - (c) Whether the design, scale, location and intended use of the *building* will impede the efficient functioning of the spillway or *flood protection works*.

8.2.2 FLOOR LEVELS

8.2.2.1 DISCUSSION, PURPOSE AND REASONS

- (1) In some parts of the District localised flooding and ponding of water during periods of heavy and/or prolonged rain is experienced. The effects of this may range from minor nuisance for a short time, through to significant loss of property.
- (2) The setting of minimum floor levels is one way in which the detrimental effects of flooding and ponding can be avoided. The standard applies to residential and communal non-residential buildings only, as Council considers its primary responsibility is to protect the people of the District from the detrimental effects of natural hazards. It is the individual's responsibility to protect their business and other activities (other than communal non-residential activities) from the detrimental effects of natural hazards.
- (3) The floor levels set out in this standard are designed to protect buildings used for residential and communal non-residential purposes from the level of flooding that the community considers is "acceptable". (168.168) The "acceptable" level is determined as being up to the 100 year flood event (1% AEP being the Annual Exceedence Probability). (168.169) The level does not take into account failure of a stopbank. With respect to sea level rise Council has adopted the "mid-range value" of 0.5 metres, and incorporated this value within the standard of the District Plan.

8.2.2.2 ENVIRONMENTAL RESULTS

- (1) To ensure that residential and communal non-residential *buildings* and hence people are protected from the effects of reasonably expected flooding and ponding.

8.2.2.3 STANDARDS

Zone/Area	Standard
<p>(1) Paeroa – Areas identified on the planning maps as being 'Subject to Inundation'</p> <p>Paeroa – All other areas in all urban zones excluding the Flood Ponding Zone</p>	<p>Any new <i>building</i> or additions to existing <i>buildings</i> in the area shown on the planning maps as being 'subject to inundation' which is to be used for residential or communal non-residential purposes shall be constructed so that the floor level of the <i>building</i> shall be 500mm above the adjoining Flood Ponding Zone level shown on the planning map. (147.24)(183.308)</p> <p>The provisions of the Building Act 2004 shall apply. (168.170)(147.24)</p>
<p>(2) Piako Flood <i>Ponding Area</i> - In that part of the Hauraki Plains area shown on the planning maps as being the Piako Flood <i>Ponding Area</i></p>	<p>Any addition to an existing <i>building</i> which is to be used for residential or communal non-residential purposes shall be constructed so that the floor level of the <i>building</i> shall be at or above 500mm above the 100 year flood level (1% AEP).</p>

Zone/Area	Standard
(3) In all other zones/areas (excluding the Paeroa Flood Ponding Zone) not otherwise specified in (1) and (2) above	The provisions of the Building Act 2004 apply (147.24)

8.2.2.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular Environmental Result in Section 8.2.2.2 of the Standards in Rule 8.2.2.3 for which compliance is not met and the following relevant matters:
- (a) The degree to which other works have or will be undertaken to avoid the effects of flooding, which make the standard unnecessary.
 - (b) Whether the purposes for which the part of the residential or communal non residential *building* that will be below the flood level, are such that the standard is unnecessary.

8.2.3 EROSION PROTECTION SETBACK LINES (WHIRITOA BEACH)

8.2.3.1 DISCUSSION, PURPOSE AND REASONS

- (1) Whiritoa Beach is the only part of the District's coast that is susceptible to erosion of the sand dunes where there is residential development existing or likely. A significant physical, social and economic resource has developed that requires protection, as do the residents of the settlement. While the coastal processes of erosion and deposition vary from season to season, investigations have shown that the long term trends can be reasonably well predicted and planned for.
- (2) Council wishes to recognise that coastal erosion is a possibility that needs to be accommodated when allowing development. The standards contained in this section have been developed after investigations of the beach by the Hauraki District and Waikato Regional Councils, in the early 1990's and were reviewed by the Waikato Regional Council in 2002, and subsequently by J Dahm, Eco Nomos Ltd in March 2010. His report titled 'Review of Coastal Erosion Setbacks: Whiritoa Beach' can be viewed on the Council website www.hauraki-dc.govt.nz). This information has been used to revise the setbacks that had been in place under the previous district plan.
- (3) The revised development setbacks are measured from a fixed baseline, which is the toe of the frontal dune, mapped from 1995/96 photographs with some localised modifications at the northern and southern ends of the beach. Separate setbacks have also been calculated around the entrances to the Ramarama and Whiritoa Streams. The position from which the setbacks are measured does not change even though the shoreline or stream banks may at different times erode and build up. The first of the setback lines (**Primary Development Setback**) delineates land potentially vulnerable to extreme (100 year return period) erosion with existing sea level conditions. The second setback (**Secondary Development Setback**) delineates additional land that may become vulnerable to erosion with present best estimates of sea level rise and climate change over the next 100 years. This secondary setback was calculated using a projected sea level rise of 0.5 metres.
- (4) The protection setback lines are one of a number of actions being undertaken to remedy and mitigate the dune erosion. Other actions include the establishment of the Whiritoa Beach Care Group, closure of a long established sand mining operation and education of the public on the conservation of the dune system.

8.2.3.2 ENVIRONMENTAL RESULTS

- (1) To safeguard, maintain and expand the coastal dune ecosystem.
- (2) To provide for the community's wellbeing, by encouraging development that is free of identified natural hazard to a level demanded by the community.

8.2.3.3 STANDARDS 8.1

Zone	Standard
<p>(1) In the Residential, Reserve (Active) and Reserve (Passive) zones at Whiritoa</p>	<p>(a) No new <i>buildings</i> are permitted seaward of the Primary Development Setback Line delineated on the planning map for Whiritoa. (183.312) Non compliance with this standard is a <i>Non Complying Activity</i>.</p> <p>(b) No additions to existing <i>buildings</i> are permitted seaward of the Primary Development Setback Line delineated on the planning map for Whiritoa. (183.313)</p> <p>(c) No new <i>dwellings</i> are permitted between the Primary and Secondary Development Setbacks Lines delineated on the planning map for Whiritoa. (183.314) Non compliance with this standard is a <i>Non Complying Activity</i></p> <p>(d) Additions to existing <i>dwellings</i>, and <i>accessory buildings</i>, located between the Primary and Secondary Development Setbacks Lines delineated on the planning map for Whiritoa, shall be designed to be <i>relocatable</i>. (183.316)</p> <p>Note: Council may issue the building consent subject to Section 73 of the Building Act 2004 (which provides for Council to issue the building consent subject to a condition that the Register – General of Land make an entry on the <i>title</i> that a building consent has been issued in respect of land, which is subject to or likely to be subject to erosion).</p>

8.2.3.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The Council will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.2.3.2 of the Standards in Rule 8.2.3.3 for which compliance is not met and the following matters:
- (a) Whether, through subsurface investigations it is confirmed by an appropriately qualified person experienced in coastal erosion that erosion is unlikely to occur.
 - (b) Whether there are existing *buildings* on the *site* that are not *relocatable*, making it impracticable or unreasonable to require any new *building* or addition to an existing *building* to be *relocatable*.
 - (c) Alternative design measures to *relocatable* are proposed that will adequately protect the *building* from the adverse effects of coastal erosion and predicted sea level rise.

8.2.4 SEWAGE PLANT BUFFER AREAS

8.2.4.1 DISCUSSION, PURPOSE AND REASONS

- (1) The town's and township's sewage plants for treatment of human waste can generate effects which are detrimental or obnoxious to residents in the area. The proper management and operation of the plants can in most circumstances avoid smell becoming a nuisance. If residential development establishes in close proximity to the plants, the potential for conflict between the amenity of the residential area and the operation of the sewage treatment facility is increased. This potential conflict should be avoided, as the ability of the system to operate is essential to the wellbeing of the residents and the protection of the environment (especially waterways).
- (2) A buffer area is a straight forward and cost effective mechanism that can be implemented.
- (3) All existing and future public sewage treatment facilities are or will be designated in the District Plan. This is an upfront and honest manner in which to provide for these facilities. However, the amount of land included in these designations may not be sufficient to contain all the detrimental effects of the facility. Accordingly, a buffer area around these facilities provides an additional protection.

8.2.4.2 ENVIRONMENTAL RESULTS

- (1) The protection of the environment and the wellbeing of the community can be achieved through providing for the operation of public community sewage facilities in a manner that does not create nuisance from odour or other effects.

8.2.4.3 STANDARDS

Zone	Standard
(1) In all zones	(a) No <i>buildings</i> or activities for <i>residential</i> , community or recreation purposes shall be sited or carried out within 150.0 metres from the edge of a sewage pond and sewage plant forming part of a public community sewage facility.

8.2.4.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the Environmental Result in Section 8.2.4.2 of the Standards in Rule 8.2.4.3 for which compliance is not met and the following relevant matters:
 - (a) The degree to which the *building* or activity to be carried out is detrimentally affected by the sewage plant.
 - (b) Whether the intended use of the *building* or the nature of the activity is such that the odours it produces mean that any odour from the sewage facility is indiscernible. (168.171)

8.2.5 GLARE AND LIGHTING

8.2.5.1 DISCUSSION, PURPOSE AND REASONS

- (1) Some building materials, particularly glass and unpainted metal sheeting create glare, which in some circumstances has the potential to be a detraction in adjoining areas and in some cases can be a hazard to motorists.
- (2) Lighting has a similar potential to glare, creating a hazard and/or a detraction from amenities. In addition, because it is in operation during night-time, lighting can be a cause of disturbance to residential amenities in a similar manner to noise. Lighting can be associated with security, advertising signs, sports fields or to allow outside work to occur at night-time.
- (3) Glare from buildings can be avoided or minimised by using screening or landscaping, painting and orientation of walls to reflect glare away from adjoining areas.
- (4) Lighting can be orientated or shaded in order that the spill of lighting remains within the site.

8.2.5.2 ENVIRONMENTAL RESULTS

- (1) Glare and lighting from buildings or activities should be managed in a way that allows the building or activity to be established and continue to operate in a manner that does not detract from the amenities of adjoining properties or zones, and does not create a hazard to traffic.

8.2.5.3 STANDARDS

(1) GLARE

In all *zones*, *buildings* are to be constructed and finished to ensure reflection (glare) from the *building* surfaces does not reflect into adjoining *properties*, or into the vision of motorists on a street or *road*.

(2) LIGHTING

In all *zones*, artificial lighting shall be installed, designed, shaded and arranged in order that the level of lighting measured horizontally or vertically at any point on or directly above the boundary of any adjacent *site* or *road* is no greater than 8.0 lux.

(For the limitations related to lighting associated with advertising and *signs*, refer to Section 7.6).

8.2.5.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.2.5.2 of the Standards in Rule 8.2.5.3 for which compliance is not met and the following relevant matters:
- (a) Whether the level of "brightness" from the surface or lighting is such that it will create a traffic hazard or interfere with the operation of activities on *properties* outside the *site*.
 - (b) Whether the nature of the activities on adjoining *sites* or *zones* is such that any glare or lighting spill would not be noticeable and would not have a detrimental effect.

8.3 AMENITY MATTERS

8.3.1 NOISE

8.3.1.1 DISCUSSION, PURPOSE AND REASONS

- (1) Noise pollution now forms a major source of intrusion into the environment. As the demand for urban development continues and we have less space to call our own, it is likely that noise pollution will continue to cause annoyance. (93.134)(191.134)
- (2) The Resource Management Act 1991 has recognised the important role that the control of noise has in terms of giving effect to the purpose of the Act, particularly as it relates to protecting amenity values. Section 31(1)(d) of the Act gives Council the function of controlling the emission of noise and the mitigation of the effects of noise. This function is supported by other provisions in the Act relating to the general duty to avoid unreasonable noise, enforcement penalties and other actions available to Council.
- (3) Reaction to noise varies considerably, not only between individuals but also between communities. The standards set out in this section reflect the need for some flexibility while providing a standard which developers can design to and which the community can be confident will provide a recognised element of protection. The basis for these controls comes from social and acoustical research undertaken locally, nationally and internationally.
- (4) In the Industrial Zone, it is recognised that noise levels are likely to be higher as a result of the type of activities permitted in the zone. There is other legislation that protects workers within the zone. (93.135)(191.135)
- (5) The noise requirements in this standard do not over-ride the "excessive noise" provisions in Sections 326 - 328 Resource Management Act 1991.

8.3.1.2 ENVIRONMENTAL RESULTS

- (1) To protect the character and amenity values of areas, particularly residential and reserve, and public health, from the effects of excessive environmental noise.
- (2) To allow some noise sources generated as an ancillary part of normal permitted activities in a zone (eg lawn mowing, wood cutting (for domestic use on site) in a residential area) to be exempt from these performance standards.
- (3) To recognise the community expectation that maximum noise levels will continue to decline as developments in the design of machinery, buildings and acoustic materials enable the effects of noise to be reduced.

8.3.1.3 STANDARDS (93.116)(191.116)(104.72)(181.244)(190.6)

(1) LEVELS

Noise shall not exceed the levels set out below when measured in accordance with the provisions of NZS 6801:2008 Acoustics – Measurement of Environmental Sound and assessed in accordance with the provisions of NZS 6802:2008 Acoustics – Environmental Noise:

(a) Between Sites Within Zones (93.138)(191.138)

Zone	Standard	L _{Aeq} (15 min)	L _{AFmax}
<ul style="list-style-type: none"> ▪ Residential ▪ Low Density Residential ▪ Rural ▪ Reserve (Passive) (93.136)(191.136) ▪ Conservation (Wetland) (93.155)(191.155) ▪ Flood Ponding (93.156)(191.156) ▪ Coastal ▪ Karangahake Gorge 	Monday – Saturday 7.00am - 10.00pm	50dB	NA
	Sunday and Public Holidays(93.137)(191.137)	45dB	NA
	7.00am - 10.00pm		
	On all nights 10.00pm – 7.00am	40dB	65dB
	All activities in these zones shall be conducted to ensure that the above noise levels shall not be exceeded within any other site contained within any of these zones.		
<ul style="list-style-type: none"> ▪ Town Centre ▪ Township ▪ Marae Development 	On all days 7.00am - 10.00pm	55dB	NA
	On all nights 10.00pm - 7.00am	40dB	65dB
	All activities in these zones shall be conducted to ensure that the above noise levels shall not be exceeded within any other site contained within any of these zones.		
▪ Industrial & Reserve (Active)	On all days, at all times.	No restrictions	
▪ Conservation (Indigenous Forest)	Refer to Table (b) below		

(b) Between Zones

Zone	Standard	L _{Aeq} (15 mins)	L _{AFmax}
<ul style="list-style-type: none"> ▪ Town Centre ▪ Township ▪ Marae Development ▪ Industrial ▪ Reserve (Passive) (93.136)(191.136) 	All activities on any site within these zones shall be conducted to ensure that noise from the site as measured within the zone boundary of a Residential, Low Density Residential, Rural, Coastal, Karangahake Gorge, or Flood Ponding zone, shall not exceed the following noise levels:		
	Monday - Saturday 7.00am - 10.00pm	50dB	NA
	Sunday and Public Holidays(93.137)(191.137)(93.158)(191.158)	45dB	NA

Zone	Standard	L _{Aeq} (15 mins)	L _{AFmax}
	7.00am - 10.00pm		
	On all nights 10.00pm - 7.00am	40dB	65dB
<ul style="list-style-type: none"> ▪ Reserve (Active) (93.154)(191.154) 	All activities on any individual reserve shall be conducted to ensure that noise from the reserve as measured within the zone boundary of a Residential, Low Density Residential, Rural, Coastal, Karangahake Gorge, Conservation (Indigenous Forest), Conservation (Wetland) or Flood Ponding zone, shall not exceed the following noise levels:		
	Sunday to Thursday: 7.00am - 10.30pm	50dB	NA
	Friday & Saturday: 7.00am - 12.00pm (midnight)	50dB	NA
	At all other times	45dB	65dB
<ul style="list-style-type: none"> ▪ Industrial (93.139)(191.139) 	All activities on any site within this zone shall be conducted to ensure that noise from the site as measured within the zone boundary of a Reserve (Active), Reserve (Passive), Town Centre, Township or Marae Development zone, shall not exceed the following noise levels:		
	On all days. 7.00am - 10.00pm	55dB	NA
	On all nights 10.00pm - 7.00am	40dB	65dB
<ul style="list-style-type: none"> ▪ Conservation (Indigenous Forest) 	All activities within this zone shall be conducted to ensure that noise from the site shall not exceed the following noise levels at the boundary of the following features or activities: Walking and cycle tracks; Picnic, barbeque, camping or other facilities used by the public; (93.140)(191.140) The most exposed face of any building used for residential activities (eg dwellings, huts, lodges); and The boundary of the Conservation (Indigenous Forest) Zone with any other zone.		
	On all days 7.00am - 10.00pm	50dB	NA
	On all nights 10.00pm - 7.00am	40dB	65dB
	Or shall not exceed the noise level of 60 dB L _{Aeq} (15 mins) within 100 metres from the site of the activity generating the noise; whichever is the stricter. (93.141)(191.141)		

(c) Temporary Military Training Activities (93.142)(191.142)

Zone	Standard	L _{Aeq} (15 mins)	L _{A95}	L _{AFmax}
<p>▪ In all zones</p> <p>In relation to Reserve (Passive) & Reserve (Active), Conservation (Wetland), Flood Ponding zones: (93.136)(191.136)(93.154)(191.154)</p>	<p>Noise, measured at the <i>notional boundary</i> of any residential property, shall not exceed the following limits:</p>			
	Any Day			
	12.00 (midnight) - 6.30 am	40dB	**	**
	6.30am - 7.30 am	60dB	45dB	70dB
	7.30am - 6.00 pm	75dB	60dB	90dB
	6.00 pm – 10.00 pm	70dB	55dB	85dB
	10.00 pm – 12.00 (midnight)	40dB	**	**
	<p>Noise, measured at the <i>notional boundary</i> of any residential property, (93.143)(191.143) resulting from the use of explosives shall not exceed 122 L_{Cpeak} during daylight hours. The use of explosives is not provided for during night-time hours.</p>			

(d) Exemptions (104.73)(191.238)

- (i) In all Zones, Rule 8.3.1.3(1) shall not apply with respect to normal domestic activities and accessory activities thereto (eg lawn mowing, chainsawing undertaken at reasonable times and in domestic circumstances). (168.174)
- (ii) In Rural, Coastal and Karangahake Gorge Zones, Rule 8.3.1.3(1) shall not apply to normal rural activities that follow accepted rural management practices (eg orchard spraying, cowshed operations, haymaking, crop harvesting, land cultivation, aerial topdressing).
- (iii) In Reserve (Active), Coastal, Karangahake Gorge and Rural Zones Rule 8.3.1.3.(1) shall not apply to:
 - (1) permitted outdoor recreational activities; or
 - (2) temporary events that do not involve motor sports, firearms or amplified sound systems.

(e) Location of Noise Measurement Requirements

- (i) Noise levels are to be measured as specified in the above standards (72.20)
- (ii) For the purpose of this standard the following definitions in Section 4 shall apply:
 - (1) Residential Property;
 - (2) Site; and
 - (3) Notional Boundary

(2) **VIBRATION (190.7)**

Refer to Performance Standard 8.3.2 - Vibration in the Ground.

(3) **CONSTRUCTION NOISE (93.144)(191.144)**

(a) Construction noise emanating from a *site* where construction is of limited duration and is not part of the overall sound emission from an ongoing land use activity shall meet the maximum noise standards set out in the tables below for the various *zones*, and shall be managed, measured and assessed in accordance with New Zealand Standard NZS 6803:1999 Acoustics – Construction Noise.

(b) Maximum Noise Standards for Construction Noise Received in the: (168.172)

(i) Rural Zone;

(ii) Residential Zone;

(iii) Low Density Residential Zone;

(iv) Marae Development Zone

(v) Coastal Zone;

(vi) Karangahake Gorge Zone;

(vii) Conservation (Indigenous Forest), Conservation (Wetland), Reserve (Passive) (93.136)(191.136)(93.155)(191.155), Reserve (Active) Zones (93.154)(191.154)

Time of Week	Time Period	Typical Duration (dB)		Short Term Duration (dB)		Long Term Duration (dB)	
		L _{Aeq}	L _{Amax}	L _{Aeq}	L _{Amax}	L _{Aeq}	L _{Amax}
Weekdays	0630 - 0730	60	75	65	80	55	75
	0730 - 1800	75	90	80	95	70	85
	1800 - 2000	70	85	75	90	65	80
	2000 - 0630	45	75	45	75	45	75
Saturdays	0630 - 0730	45	75	45	75	45	75
	0730 - 1800	75	90	80	95	70	85
	1800 - 2000	45	75	45	75	45	75
	2000 - 0630	45	75	45	75	45	75
Sundays and Public Holidays (93.158)(191.158)	0630 - 0730	45	75	45	75	45	75
	0730 - 1800	55	80	55	85	55	85
	1800 - 2000	45	75	45	75	45	75
	2000 - 0630	45	75	45	75	45	75

Note: NZS6803:1999 defines “Typical Duration” as meaning construction work at any one location for more than 14 calendar days but less than 20 weeks. Short-term and Long-term durations are less than and greater than this period respectively.

- (c) Maximum Noise Standards for Construction Noise Received in the: (168.173)(93.145)(191.145)
 - (i) Town Centre Zone;
 - (ii) Township Zone;
 - (iii) Flood Ponding Zone; and (93.156)(191.156)
 - (iv) Industrial Zone.

Time Period	Duration of Work		
	Typical Duration	Short Term Duration	Long Term Duration
	$L_{Aeq} (dB)$	$L_{Aeq} (dB)$	$L_{Aeq} (dB)$
0730 – 1800	80	85	75
1800 – 0730	75	80	70

Note: NZS6803:1999 defines "Typical Duration" as meaning construction work at any one location for more than 14 calendar days but less than 20 weeks. Short-term and Long-term durations are less than and greater than this period respectively.

(4) OTHER CONTROLS ON NOISE NUISANCE

Notwithstanding compliance with the above standards any activity must also comply with the provisions of the Resource Management Act 1991 and the Health Act 1956.

8.3.1.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.3.1.2 of the Standards in Rule 8.3.1.3 for which compliance is not met and the following relevant matters:
 - (a) Whether the noise is intermittent, seasonal or of a short term or temporary nature.
 - (b) The times of day of the activity and the possibility of night time activities.
 - (c) Whether the activity has an effect on the existing background level.
 - (d) Whether the noise adversely affects the health of the community or *amenity values* of the area.
 - (e) Whether the *best practicable option* has been adopted to control the noise.

Note: The "Excessive noise" provisions of the Resource Management Act 1991 (Sections 326-328) apply in addition to the Performance Standard above.

8.3.2 VIBRATION IN THE GROUND (93.146)(191.146)

8.3.2.1 DISCUSSION, PURPOSE AND REASONS (181.245)

- (1) Ground vibration from land use activities can range in effect from structural damage to buildings (relatively extreme level of vibration) to disturbance of sleep and reduction of amenity as a result of people being able to perceive vibration. It is considered that ground vibration standards should be set in terms of human perception rather than in relation to the structural implications for buildings, thus ensuring that the amenity values of any area are not unreasonably compromised.
- (2) Measurement of vibration is taken in the ground rather than in affected buildings, as buildings respond differently and thus the vibration response in the building may amplify ground vibration. It is beyond the scope of this standard to define that response.

TYPES OF GROUND VIBRATION

- (3) Ground vibration may be continuous or impulsive.
- (4) Continuous vibration is vibration that remains uninterrupted over a given time period. Impulsive vibration involves the rapid build up of vibration then decay (sometimes in cycles) or strings of vibration incidents. Acceptable levels for continuous vibration are considerably less than those for impulsive vibration.

CONTINUOUS VIBRATION

- (5) In setting standards for ground vibration, it is accepted that a certain amount of continuous background vibration occurs as a result of existing activities (eg industry, traffic). Accordingly, continuous vibration levels are set in relation to background or ambient levels ($V_{\text{background}}$). The ground vibration levels from a particular activity will have to exceed the background level by a generally perceptible amount (deemed to be 0.5mm/s) not to meet this standard. It will be up to persons who wish to undertake any particular activity to demonstrate to Council's satisfaction that the standard is being met. This will include providing the Council with information regarding background vibration levels.
- (6) Continuous ground vibration levels are measured in terms of the 99 percentile value. This means that for one percent of any nominal 60 minute period, $V_{\text{background}}$ plus 0.5mm/s could be exceeded.
- (7) Ground vibration levels are set in terms of $V_{\text{background}}$. Hence it is not necessary to:
 - (a) provide different standards for day and night occurrences; and/or
 - (b) provide different standards for different zones.

IMPULSIVE VIBRATION

- (8) Isolated impulsive vibration events, such as blasting which occur intermittently or transiently and only a few times a day present special concerns to residents and accordingly must also be addressed and managed. This will be done by setting an appropriate standard for impulsive vibration from blasting, to ensure that amenity values are maintained at a reasonable level. Any impulsive vibration from blasting in excess of the standards set may be considered through the resource consent process and the standards set out in this rule will be used as a guideline in setting conditions.
- (9) Vibrations from blasting are usually intermittent, of short duration and superimposed on background vibration levels.
- (10) Human response to impulsive vibration from blasting can be wide ranging, with the same event being imperceptible to some persons, while causing nuisance to others.
- (11) The standards set to control impulsive vibration from blasting are based on international standards developed to protect and preserve amenity values.
- (12) In considering impulsive vibration from the perspective of human perception the following levels have been adopted:

Transient Vibration Level	
less than 0.5mm/s	imperceptible (threshold of perception)
0.5mm/s – 2.0mm/s	slightly perceptible (barely noticeable)
greater than 2.0mm/s	distinctly perceptible (noticeable)

- (13) Impulsive vibration levels in excess of 2mm/s have the potential to compromise amenity values.
- (14) As the vibrations are of relatively short duration where V_{max} is controlled to avoid nuisance the statistical analysis to obtain 99 percentile vibrations levels is of little meaning, as the results depend on the length of record between blasts. Accordingly, when monitoring vibrations from blasting, the control will be in terms of V_{max} .
- (15) Blasting events should be designed in such a way as to comply with the standards set. However, the Council recognises that the prediction of the maximum ground vibration experienced from any particular blast event is dependant upon distance from source, ground conditions, and design of the blasting pattern. A complex relationship exists between these factors and therefore occasional exceedences of V_{max} may occur. Accordingly in considering adherence to the standard, Council will have regard to the following factors:
 - (i) The total number of blast events occurring as a result of the activity.
 - (ii) The time at which blasting occurs.
 - (iii) The time between blast events.
 - (iv) The amount by which the standard has been exceeded.
 - (v) The actions taken to prevent recurrence of breaches of the standard.

VIBRATION FROM HEAVY VEHICLES

- (16) Ground vibration generated by heavy traffic on roads is a difficult matter to manage. Where a road surface is not in sufficiently smooth condition, vibration from heavy trucks measured at the road boundary may well exceed the V_{max} level set. To enforce compliance may require road closure, which is not a practical option. Immediate upgrading of the road surface is also not a solution.
- (17) As ground vibration normally dissipates relatively quickly with distance it is proposed that V_{max} levels arising from vehicle induced vibration, be measured within the property boundary at the front yard boundary within any lot. Thus in Residential zones, a V_{max} will still apply and this is appropriate as it will discourage heavy vehicles from using residential streets.
- (18) However, in Town Centre and Industrial zones no front yards are required and buildings may be erected on the road boundary. As the State Highway is routed through the town centres of Paeroa, Waihi and Ngatea (and several townships as well), it is considered impractical to set a V_{max} in these areas. (181.246)

8.3.2.2 ENVIRONMENTAL RESULTS

- (1) To ensure that vibration levels generated by land use activities do not adversely affect the amenity values enjoyed by other land users.

8.3.2.3 STANDARDS (93.146)(191.146)(104.74)(191.239)

(1) CONTINUOUS VIBRATION

The 99 percentile ground vibration levels (V_{max}) resulting from any land use activity ($V_{activity}$) shall not exceed the background vibration level ($V_{background}$) by more than 0.5mm/second.

(2) IMPULSIVE VIBRATION

The maximum limits for ground vibration exposure resulting from activities using explosives or similar impulsive and energetic materials (V_{max}) is:

Parameter	Standard (V_{max})
(1) Blast Duration as defined by the delay timing	1 second
(2) Number of Events	1 per day
(3) Overpressure	Less than 115 dBL
(4) Peak Amplitude	2.0 mm/second
(5) Time of Day	0700 – 1800
(6) Days	Monday to Saturday (ex Sunday, public holidays and all other times)(168.176)

(3) MEASUREMENT OF CONTINUOUS & IMPULSIVE GROUND VIBRATION

- (a) All ground vibration measurements shall be taken at or within the boundary of any *allotment* not owned by the agency responsible for creating the vibration.
- (b) For the Rural, Coastal and Karangahake Gorge Zones only, measurements shall be taken within the *notional boundary*.
- (c) Measurements are to be taken in the ground not within *buildings*.

(4) VIBRATION FROM HEAVY VEHICLES ON PUBLIC ROADS

Within the Residential Zone only, the 99 percentile ground vibration levels (V_{max}) resulting from heavy traffic ($V_{activity}$) shall not exceed the background vibration level ($V_{background}$) by more than 0.5 mm/sec, when measured at the *front yard boundary* within any residential lot.

8.3.2.4 EXPLANATION OF STANDARDS

(1) Ground vibration levels referred to in this Standard for $V_{Activity}$ and $V_{Background}$ are 99 percentile values of instantaneous Peak Particle Velocities calculated from the vector sum of the three orthogonal components of vibration occurring within the frequency range of 2Hz - 200Hz.

(2) The velocities must refer to a specific time, ie:

$$V_{(t)} \text{ TOTAL} = (V_{(t)} \text{ Radial}^2 + V_{(t)} \text{ Transverse}^2 + V_{(t)} \text{ Vertical}^2)^{1/2}$$

The 99 percentile of a set of vibration events is the vibration value which is exceeded by 1 percent of the events recorded over the period of time measured.

(3) The V_{max} level referred to in this Standard is the maximum value of instantaneous peak Particle Velocities calculated from the vector sum of the three orthogonal components of vibration occurring within the frequency range of 2Hz - 80Hz ($V_{max} = V_{activity} + V_{background}$).

(4) Measurement periods to establish background ground vibration levels ($V_{background}$) shall, as a minimum, consist of a continuous interval which is of at least 60 minutes duration during a typical day. It is not feasible to measure $V_{activity}$ directly. It is determined by comparing $V_{background}$ with $V_{background}$ plus $V_{activity}$. Consequently, where $V_{activity}$ is being considered, the measurement period selected to determine combined ground vibration levels ($V_{background} + V_{activity}$) will relate directly to the period during which the activity is occurring. Where the activity generating ground vibration is a short duration event (eg a blast event) the measurement shall accordingly be short (a few seconds). Where the activity generating ground vibration is intermittent or continuous, the measurement period may be up to 60 minutes in order to determine the values of interest.

(5) The discrete sampling interval employed during each measuring period shall be selected to avoid distortion or bias to recorded vibration values due to activities not directly associated with the activity under consideration. (Normally the discrete sampling interval will be 1 second). The resulting combined vibration levels ($V_{background} + V_{activity}$) shall then be statistically analysed and compared with $V_{background}$ to determine compliance with the standard.

- (6) The vibration frequency band width which is to be monitored is nominally 2Hz-80Hz but this may be varied by *Council* (particularly at the low frequency end of the range) on a case by case basis to reflect the capability of commercially available vibration monitoring systems.

8.3.2.5 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.3.2.2 of the Standards in Rule 8.3.2.3 for which compliance is not met and the following relevant matters:
- (a) Whether the vibration is intermittent or of a temporary nature.
 - (b) Whether the vibration specific to the activity has an effect above the existing background level.
 - (c) Whether the vibration adversely affects the *amenity* values of the area, especially residential *amenity* values.
 - (d) Whether the best practical option has been adopted to control vibration.
 - (e) **Note:** The “*Excessive Noise*” provisions of the *RMA* (Sections 326 – 328) apply in addition to the Standards above.

8.4 VEHICLE PARKING, LOADING AND ACCESS

8.4.1 NUMBER AND LOCATION OF PARKING SPACES

8.4.1.1 DISCUSSION, PURPOSE AND REASONS

- (1) Vehicular traffic is a major user of resources (particularly energy and space).
- (2) Traffic management (including parking) can assist in reducing the use of resources, thereby sustaining those resources for future generations.
- (3) The efficient and safe movement of vehicles on the street system is aided by having adequate on site vehicle parking provided. This is particularly relevant in rural areas where high traffic speeds and the carriageway formation make parking on the road inappropriate.
- (4) Different activities have the potential to attract and/or generate varying demands for parking. In general, the majority of such parking needs to be provided on or as close as possible to the site that the activity is located on.
- (5) In some circumstances, concentrating or sharing parking can improve efficiency of land use and reduce adverse effects.
- (6) The parking standards set out below are a reasonable provision that will adequately protect the community from possible adverse effects of parking generated by the operation of the activity.

8.4.1.2 ENVIRONMENTAL RESULTS

- (1) Ensure the general efficiency and safety of the roading system is maintained by accommodating vehicles on site, rather than on the road.
- (2) Provide the necessary parking in a convenient manner and thereby contribute to the success of the activity on the site.
- (3) Protect the safe and convenient movement of pedestrians, particularly in the commercial areas.
- (4) Maintain an open streetscape, thereby contributing to visual environmental amenity.
- (5) Support appropriate development by achieving a balance between accommodating peak parking demand and resulting off site effects. (168.177)

8.4.1.3 STANDARDS

- (1) Where any new activity establishes, the use of any land or *building* changes or a *building* is constructed or substantially reconstructed, altered or added to, parking facilities shall be provided on that *site* in accordance with the minimum standards set out in the table below.

- (2) Generally, the standard for parking is set out by activity (regardless of the zone it is located in), as the activity generates/attracts parking to similar levels regardless of the zoning. However, some specific zone situations are identified. (168.178)
- (3) Where there is more than one activity on a site the parking requirement is calculated separately for each activity and then added together. If a particular activity is not referred to in the following table, the most similar activity for the proposal shall apply to determine the parking requirement.
- (4) Where the assessment of the number of parking spaces results in a fractional space being involved, any fraction under one-half shall be disregarded and fractions of one-half or more shall be counted as one space.

Zone/Activity	Minimum Parking Standard
<i>Dwelling</i>	2 spaces for each <i>dwelling</i>
<i>Visitor accommodation, and Housing for the elderly</i>	1 space for each <i>dwelling</i> or <i>visitor accommodation</i> unit, plus 1 space for every 4 units, plus 1 space for each non resident staff member
Hospitals	2 spaces for every 3 patients the facility is designed to accommodate
<i>Community Housing</i>	1 space for every 4 occupants the facility is designed to accommodate
Place of worship or assembly, <i>Marae</i>	1 space for every 15m ² <i>gfa</i> of the public meeting area.
Cafes, Restaurants, tearooms and Licensed premises not otherwise specified (excluding the Town Centre Zone where the premises adjoin a Pedestrian Frontage)	1 space per 10m ² <i>gfa</i> (99.1)
Health Care Services (132.12)	2 spaces per consultant and 1 space per staff member
<i>Education/ Training Activities and Facilities</i>	1 space per staff member (Full Time Equivalent), plus 1 space for every 10 students (51.7) the facility is designed to accommodate, except the parking standard for students does not apply to <i>childcare facilities</i> and school students in Years 1 to 10
<i>Produce Stalls</i>	4 spaces per stall.
<i>Boarding, Breeding and Training of Animal Facilities</i>	1 space per non-resident employee plus 2 for the activity.
Supermarkets	1 space per 20m ² <i>gfa</i> .
Hotels and Taverns	1 space per 6m ² public floor area (includes bars, restaurants and reception areas) and 1 per bedroom unit.
Premises/Yards for sale of vehicles, machinery and plants etc	1 space per every 200m ² <i>site</i> area, with a minimum of 4 spaces.
<i>Service Station</i>	2 spaces per 3 staff, plus 2 spaces for a convenience shop, 4 spaces per workshop bay, 3 queuing spaces for a car wash, 1 space for an air hose or vacuum facility.
Any <i>retail</i> (except where otherwise specified) or <i>office</i> activity in the Town Centre Zone where the premises does not adjoin a Pedestrian Frontage, and any <i>ancillary retail</i> or <i>office</i> activity in the Reserve (Active) or Industrial zones	1 space for every 30m ² <i>gfa</i> or <i>site</i> area, whichever is applicable.
Any Industrial or <i>warehouse</i> Activity (except where otherwise specified and excluding self storage facilities)	1 space for every 100m ² <i>gfa</i> .

Zone/Activity	Minimum Parking Standard
Outdoor Recreation (not otherwise specified)	1 space per 4 persons the activity is designed to cater for plus 1 space per 25m ² gfa for associated buildings.
Sports Grounds	6 spaces for every field or court plus 1 space per 25m ² gfa for associated buildings.
Indoor sports facilities	6 spaces per court or 1 space for every 25m ² gfa whichever is the greater.

- (5) For *dwellings* in the Residential and Township zones one of the two *parking spaces* is to be shown on the building consent application in a position that a garage or carport can be built on the *site* in compliance with the provisions of the District Plan.
- (6) In the Conservation (Wetland) and (Indigenous Forest) zones parking shall be provided within the *zone* and clear of any public *road*. No parking area providing spaces for more than five vehicles shall be located within 50 metres of any *dwelling* located outside the *zone*. Where the *dwelling* is separated from the *zone* by a *road*, this separation standard shall not apply.
- (7) In all *zones*, a Transportation Impact Assessment shall be prepared for any new or expanded activity which: (181.251)
- (a) For *sites* with direct access to a *State Highway*, will:
- (i) Provide 5 or more *parking spaces* on site either to meet the requirements of this District Plan or to meet the demand generated by the activity; or
- (ii) Have an average daily traffic generation /through put of 10 vehicle movements or more (ingress and egress is 2 movements) whichever is the lesser; or
- (b) For *sites* with direct access to a *road* other than a *State Highway*, will:
- (i) Provide 50 or more *parking spaces* on site either to meet the requirements of this District Plan or to meet the demand generated by the activity; or
- (ii) Have an average daily traffic generation /through put of 250 vehicle movements or more (ingress and egress is 2 movements) whichever is the lesser; and
- (c) Where the activity is either *Permitted* or *Controlled* it shall be assessed as a *Restricted Discretionary Activity*, with discretion restricted to the assessment matters in Rule 8.4.1.4(1)(c). (168.182)
- (8) The Transportation Impact Assessment shall be at a level of detail appropriate to the scale of the activity, consider all relevant modes, and consider the network affected by the proposal at least including the intersections upstream and downstream. The assessment shall address the following matters:
- (a) Description of the existing environment, including;
- (i) The *site*, its location and existing activities
- (ii) The surrounding *road* network – infrastructure capacity and condition, traffic volumes, traffic conditions, safety performance, any transport strategy considerations and the ability of the local network to safely and efficiently accommodate traffic.
- (b) Location, type and scale of the Proposal –traffic generation, transport modes, and vehicle types, vehicle parking and *manoeuvring* layout and design standards, *signage*, pedestrian and cycle access, and consistency with any relevant transport strategies.

- (c) Transportation Considerations – the extent to which particular *roads* will be affected in terms of safety, efficiency, pavement life and maintenance cost; on-site provision for parking; loading/servicing and queuing; safe and efficient provision for ingress/egress including capacity, separation and visibility; Note: Where fewer carpark spaces are proposed than required by the Standard in Rule 8.4.1.3, an assessment in terms of the matters in Rule 8.4.1.4(1)(a) shall be provided.
 - (d) Evaluation of Transportation Impacts – transportation effects, mitigation options and proposals for mitigation.
 - (e) Written approvals/comments from the relevant road controlling authority
 - (f) Conclusions - transportation impact, mitigation proposed.
- (9) For *Temporary Uses*, where the relevant Road Controlling Authority has approved or waived the requirement for a temporary traffic management plan then the requirement for a Transportation Impact Assessment in accordance with Rule 8.4.1.3(7)(a) or (b) above shall not apply, provided that any approved temporary traffic management plan or associated restrictions shall be adhered to.

Notes:

For some *zones*, where *sites* adjoin a residential or reserve zone, specific standards and criteria are provided in that *zone* for consideration of the location of *parking spaces*.

8.4.1.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.4.1.2 of the Standards in Rule 8.4.1.3 for which compliance is not met and the following relevant matters:
- (a) **Number of *Parking Spaces***

In assessing a lesser number of *parking spaces* than required for a particular use or *development* or where no suitable standard is provided, regard shall be had to the following:

 - (i) The hours of operation relative to other activities on the *site* or on adjoining *sites* and opportunities for sharing *parking spaces*.
 - (ii) The status of the *road* in the roading hierarchy.
 - (iii) The ability of the *road* to accommodate parking in a safe manner.
 - (iv) The total parking demand generated by the proposed *development* including typical operating and peak conditions. Where it can be demonstrated that this is less than the number of spaces required by the standard and that the *development* is such that the premises cannot be used for any other purpose, a lesser number of *parking spaces* may be accepted by *Council* as being adequate.
 - (v) The availability of payment in lieu of parking where any reduction from the required parking cannot be granted.

- (vi) The availability of appropriate off road public parking in the locality, particularly where the developer has financially supported such provision.
- (vii) The amount of public space, which is incorporated within the *building* and the intensity of use of such facilities.
- (viii) Any inappropriate modification to the natural environment that would result from providing the *parking spaces*.
- (ix) Options for providing additional parking if required.

(b) Location of *Parking Spaces*

The required parking for a particular activity or *development* may be provided on other *sites*, in a manner which has regard to the following:

- (i) Off site parking is in close proximity with clear, safe and convenient access.
- (ii) Whether joint parking provision is acceptable particularly where hours of operation are different.
- (iii) The desirability of avoiding vehicular access to the *site* on traffic safety or pedestrian *amenity* grounds.
- (iv) The convenience and safety of those using the *parking spaces* especially the general public.
- (v) Any arrangement for alternative parking provision is adequately secured to *Council's* satisfaction.
- (vi) In the Conservation (Indigenous Forest) and (Wetland) zones, whether there would be no significant detracting from the amenities enjoyed by the occupants of the *dwelling*.
- (vii) In relation to the *addition* to or *alteration* of a scheduled feature, whether this would assist with the protection of the feature. (168.186)
- (viii) In relation to the *addition* to or *alteration* of a scheduled feature, the extent to which the safe and efficient functioning of the street or *road* is affected. (168.187)

(c) Transportation Impact Assessment

The following matters will be used to assess a *Restricted Discretionary Activity*, where a Transportation Impact Assessment is required:

- (i) Whether the *parking area* is designed to ensure it is readily accessible from the *road* and convenient for the user.
- (ii) Whether the access is designed and located to allow safe and efficient movement to and from the adjacent *road* network.
- (iii) Whether the *internal access* and vehicular layout is designed in order to minimise conflicts between pedestrians, vehicles and service access.
- (iv) Whether vehicles entering and leaving the *site* and can be accommodated without adversely impacting on the activities of adjacent *sites*; the safe and efficient functioning of the *road* system and the *road* infrastructure.

- (v) Whether improvements are required to the adjacent *road* system and infrastructure.
- (vi) The recommendations of the Transportation Impact Assessment and any proposed *conditions*.
- (vii) Any comments from the relevant road controlling authority

8.4.2 NUMBER AND LOCATION OF LOADING/DROP OFF SPACES

8.4.2.1 DISCUSSION, PURPOSE AND REASONS

- (1) As with parking, loading spaces are required not only to service the activity, but also to ensure that the safety and efficiency of the roading resource is not compromised.
- (2) Different activities have different loading requirements. In addition, the nature of providing a loading service has changed over time. For instance, most commercial and business activities are served daily by courier services, using smaller vans. Accordingly, smaller loading spaces are required, but these are required to be available at all times. Vacant parking spaces can be used by courier vans. Activities such as supermarkets and other large format retail outlets are serviced by large vehicles, as well as courier vans. Accordingly, larger specified loading spaces are required for this type of loading requirement.

8.4.2.2 ENVIRONMENTAL RESULTS

- (1) Minimise conflict with the efficient and effective movement of traffic on streets and minimise detraction from neighbourhood amenities as a result of loading and unloading on the street, footpath or verge.

8.4.2.3 STANDARDS

- (1) Where any new activity establishes, the use of any land or *building* changes, or a *building* is constructed or substantially reconstructed, altered or added to, loading facilities shall be provided on that *site* in accordance with the following standards set out in the table below.
- (2) Where the assessment of the number of *loading/drop off* spaces results in a fractional space being involved, any fraction under one-half shall be disregarded and fractions of one-half or more shall be counted as one space.

Zone/Activity	Number	Standard
(a) <i>Childcare Facilities</i>	1 drop-off car space per 10 children the facility is designed to accommodate.	
(b) Primary, Intermediate and Secondary Schools and <i>Education/Training Activities and Facilities</i> (not otherwise specified)	1 drop-off car space per 40 students the facility is designed to accommodate and 1 bus space per 200 students.	
(c) All <i>Non-Residential Activities</i> in the Residential and Township zones; all Activities in the Town Centre and Industrial zones	1 <i>loading space</i> per activity.	

Zone/Activity	Number	Standard
(d) Town Centre Zone (Waihi and Ngatea only)		Where an existing or proposed service lane is shown on the Planning Maps, then the <i>loading space</i> shall be so designed and located that access to it can or will be obtained from that service lane.
(e) All other zones		<i>Loading spaces shall be provided on the site that the activity is located on.</i> (168.188)

Note:

For some *zones*, where *sites* adjoin a residential or reserve zone, specific standards and criteria are provided in that *zone* for consideration of the location of loading spaces.

8.4.2.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

(1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.4.2.2 of the Standards in Rule 8.4.2.3 for which compliance is not met and the following relevant matters:

(a) Number of Loading/Drop Off Spaces

Whether adequate facilities on the *site* for the access of goods and service vehicles, and for their loading and unloading can be provided in a manner that:

- (i) Will accommodate those vehicles which normally visit the *site* and is adequate for the volume of goods involved. (168.189)
- (ii) Avoids major conflict with traffic on adjoining streets or significantly detracting from pedestrian amenities.
- (iii) Does not give rise to situations that would create a significant traffic hazard.
- (iv) Avoids significant detraction from the amenities of the neighbourhood and is not substantially detrimental to the operation of any adjoining business.
- (v) Has regard to any proposals for shared access and loading.

(b) Location of Loading/Drop Off Spaces

- (i) Loading facilities on an adjoining *site* from the *development site*, may be accepted where the above matters can be satisfied and where on site provision would be impractical, would not be warranted in the particular circumstances, or would be in conflict with other objectives of the District Plan. (168.190)

Note: Any arrangement for alternative loading provision will need to be secured to *Council's* satisfaction. (168.190)

8.4.3 VEHICLE ACCESS AND CROSSINGS

8.4.3.1 DISCUSSIONS, PURPOSE AND REASONS

- (1) Access points must be located to ensure safe entry or egress. The main factors affecting safety are the availability of satisfactory visibility of approaching traffic, and sufficient separation between existing intersections and major access points to avoid conflicts with vehicle turning movements. In the Town Centre zone, vehicle access can conflict with the objective of creating a safe and pleasant environment for pedestrians. The matter of access through "Defined Pedestrian Frontages" is provided for in the Town Centre zone.
- (2) The type, design and location of access points need to be flexible to not only meet the vehicle access needs of the activity, but also the traffic function of the road itself.
- (3) It is recognised that roading represents a substantial use of resources in both its establishment and maintenance. Resources used include land, space, physical elements (gravel, concrete, bitumen, paint) and energy. Any "side friction" caused by access to and from the road has the potential to reduce the efficiency and safety of the road and can result in unplanned increases in the allocation of resources to keep the traffic moving. (181.252)
- (4) A number of matters need to be controlled in order to achieve the objective of producing a safe vehicle crossing that does not detract from the efficiency of the road function. These matters include sight distances, intersection separation, separation between access points, number of access points, dimensions (design), construction and gradient.
- (5) **SIGHT DISTANCE**
 - (a) The sight distance standard is based on the minimum safe stopping distance for a vehicle travelling at the speed environment for the road. In some circumstances, where the average speeds on a road are low, and roads are lightly trafficked, a lesser sight distance can still provide an adequate level of safety. In these circumstances an application for a reduced sight distance may be made and considered in terms of safety criteria. (58.95)(181.253)
- (6) **INTERSECTION SEPARATION**
 - (a) The intersection separation standard takes into account the safe stopping distance for vehicles, stacking and double conflict circumstances. In some cases circumstances may prevail where a lesser distance can provide an adequate level of safety. In these circumstances an application for a reduced intersection separation may be made and considered in terms of safety criteria.
- (7) **ACCESS SEPARATION AND DIMENSION**
 - (a) For most activities, two access points to a property would be considered adequate to meet its access needs. Any more access points would be an unusual situation and accordingly require assessment of the effects. In the urban areas, a minimum

separation between access points also allows for on-street parking to be accommodated.

- (b) Dimensions of access points are important to ensure that the crossing is wide enough to meet the needs of the vehicles entering, but not so wide that the crossing becomes a hazard to pedestrians, or allows entry and exit to the road at high speed.

(8) ACCESS CONSTRUCTION

- (a) Access points need to be constructed to a standard which matches the standard of the road and avoids the tracking of material (mud, stones etc) from the site onto the road. Mud and stones have the potential to create a hazard for cyclists, reduce braking efficiency and can cause broken windscreens. The construction standards also ensure that no dust nuisance is created for adjoining properties and to prevent any problems of erosion and stormwater runoff.

(9) ACCESS GRADIENT

- (a) The physical nature of some sites means that vehicle access can be difficult and lead to problems of instability and loss of amenity. In order to avoid the adverse effects of steep vehicle access the Council has set a maximum gradient for vehicle accessways. In situations where it is not possible to provide vehicle access to a site without exceeding this limit it may be preferable for alternative access and vehicle parking to be provided.

(10) ACCESS FOR HEAVY VEHICLES

- (a) In situations where the site is likely to be required to be serviced with heavy vehicles, then access standards have been designed to also protect the road resource itself. The development and maintenance of the roading resource represents a significant investment of physical and financial resources. Destruction of this resource can be avoided or minimised, by providing accesses to properties that do not require hard braking and acceleration or sharp turning.

(11) SUBDIVISION

- (a) Adequate access and crossing places need to be demonstrated at the time of seeking subdivision approval.
- (b) Where there is more than one position on a lot frontage to provide a safe vehicle crossing, it is more appropriate that its construction take place at the time of development or immediately prior to the commencement of an activity on the lot. This provides flexibility for the developer to decide which of the safe vehicle crossing options is appropriate to the intended use of the lot.
- (c) In the situation where there is only one safe vehicle crossing point, or the position is legally determined by an access leg, right-of-way or access lot, it is appropriate for construction of the crossing to occur at the time of subdivision. Where there is only one safe vehicle crossing, a prospective developer is then aware of the situation before making a commitment on a particular development or activity. In the case of joint

access, difficulties can arise in sharing the cost of construction when lots are not all developed at the same time. A condition of subdivision consent may be imposed that will limit the position on the frontage where an access point may be formed.

- (d) Where a site has an alternative access location from a collector or local road this should be the preferred option to an access from an arterial road or state highway, because of their traffic function and to minimise side friction safety effects. The provisions of the Local Government Act 1974 and the Government Roadway Powers Act 1989, also apply in respect of access to a Limited Access Road. (181.254)

8.4.3.2 ENVIRONMENTAL RESULTS

- (1) To protect the function of the road for the safe free flow of traffic by providing easy access between the road and the property boundary, in a manner that does not detract from the safety and amenity of pedestrians, protects the amenities of adjoining properties and does not significantly interfere with the provision of on-street parking.
- (2) To sustain the energy resource used in transportation, by making the roading system as safe, efficient and effective as possible, and thereby reducing energy wastage.

8.4.3.3 STANDARD

- (1) Vehicle access for an activity shall be provided from the formed carriageway of a public road in accordance with the following standards:

(a) **Sight Distances**

The minimum sight distances from an access in all zones shall be in accordance with Diagram HDC304 and Table 3.4 and shall be measured in accordance with Diagram HDC304 of the HDC Engineering Manual 2010, Version 1.

(b) **Separation**

The minimum separation between any access and an intersection in all zones shall be in accordance with Diagram HDC305 of the HDC Engineering Manual 2010, Version 1, where the regulatory speed limit is 50km/hr or less, and in accordance with Diagram HDC306 of the HDC Engineering Manual 2010, Version 1, where the regulatory speed limit is greater than 50km/h.

The minimum separation distances between accesses in all zones shall be in accordance with Diagram HDC306 of the HDC Engineering Manual 2010, Version 1, where the regulatory speed limit is greater than 50km/h.

(c) **Number of Access Points**

The maximum number of access points in the *urban areas*, shall be as below:

- (i) *Site less than 20m frontage:* One crossing
- (ii) *Site greater than 20m frontage:* Two crossings

(d) Location of Access Point

- (i) Except for in the *rural area*, for any corner *site*, only one vehicle access per *frontage* shall be permitted.
- (ii) In the *rural area* where a corner *site* has a *frontage* to a *state highway* or *arterial road* as well as to a *collector road* or *local road*, then the vehicle access shall be limited to the *frontage* located on the *collector* or *local road*.
- (iii) For Lot 6 DP 399569 (12 Magnolia Lane, Waihi) no vehicle access point connection to Cornwall Street/Lawrence Road shall be permitted.
- (iv) For the land to the east of Smith Street and north of Wenlock Street, Waihi (legally described as part of Lot 7 DPS 33511) no vehicle access point connection to Whangamata Road-SH 25 shall be permitted.

(e) Dimensions, Formation and Construction of Access Points

- (i) The minimum dimensions for vehicle crossings off a *local road*, *collector road* or *arterial road* shall be in accordance with the following standard crossings:

Class	Standard
A	Standard Articulated Vehicle Entrance in the <i>rural area</i> .
B	Standard Rural Vehicle Entrance for all activities that do not require a Class A entrance nor are <i>residential activities</i> , in the <i>rural area</i> .
C	Standard Vehicle Entrance for <i>residential activities</i> , in the <i>rural area</i> , Low Density Residential (168.193) , Reserve (Active) and Reserve (Passive) zones.
D	Standard Commercial/Industrial Vehicle Entrance for non-residential activities, in the <i>urban area</i> .
E	Standard Residential Vehicle Entrance for <i>residential activities</i> , in the <i>urban area</i> (excluding the Low Density Residential (168.193)) and Reserve (Active) zones).

(ii) Notes

- (1) The dimensions and formation standards for the above classes of vehicle crossings are in the HDC Engineering Manual 2010, Version 1. A copy of the standards are included in Appendix 11 in Section 8.6.12.
- (2) Where access within a *site* is required to be provided to a "two-way access" standard, the width of the crossing from the *road* shall be the same or greater than the width of the "two-way access."
- (3) For the dimension and formation standards of crossings off a *State Highway* refer to the Transit NZ Planning Policy Manual
- (4)** The New Zealand Transport Agency is the controlling authority for *State Highways*. Section 51 of the Government Rounding Powers Act 1989 lists many things which it is an offence to do, cause or permit on a *State Highway*, without the written permission of the New Zealand Transport Agency. This includes undertaking any work on a *State Highway*, and reference to the Section referred to is advised before undertaking work on a *State Highway* accordingly. **The activity status of any proposed use of land in terms of the**

District Plan is not affected by the Section of the Act referred to above.
(181.257)(181.258)

(f) Gradient

- (i)** In all zones, the grade change from the formed road edge, the vehicle access itself and the internal access within the property (where the entrance has to be partly formed within the property as it cannot all be formed in the road reserve), shall not exceed the access drive, breakover angle and departure angles as set out in Section 3.11 of the HDC Engineering Manual 2010, Version 1. (168.194)
- (ii)** The maximum centre-line gradient for vehicle access (ie. right of way or internal driveway to the body of the lot as required in (g)(ii) below) shall be in accordance with the relevant standard in Tables 3.1 or 3.2 of the HDC Engineering Manual 2010, Version 1 (refer to Appendix 1 and 2 in Sections 8.6.1 and 8.6.2 for a copy of Tables 3.1 and 3.2). (168.195)

(g) Additional Standards Applicable to Subdivision

In all zones, access shall be provided as follows:

- (i)** Every lot shall be provided with legal access in terms of Section 106 of the Resource Management Act 1991; and
- (ii)** Every lot shall be capable of being provided with vehicle access in accordance with the performance standards in 8.4.3.3 above (other than allotments created through road closure or severance, access denial strips, public utilities and allotments created for the protection of a significant heritage or environmental feature where vehicle access is not required), except that where vehicle access to the body of the lot is restricted by terrain or a water course, an internal vehicle access shall be constructed from the vehicle crossing to a point immediately beyond the restriction; and
- (iii)** For those lots which can only provide one safe vehicle crossing point, or access via an internal access, then the construction of the vehicle crossing shall be required to the minimum standards stated in 8.4.3.3 above. (168.196)
- (iv)** No additional lots shall be created which require vehicle access onto a Limited Access Road. (181.259)

Note:

- (1) Access Denial Strips will be required as a condition of subdivision consent where circumstances require access to be prohibited in terms of maintaining road safety.
- (2) Where vehicle access into the body of a lot crosses difficult terrain, the vehicle access shall be required to be constructed at time of subdivision to allow access into the body of the lot or to a defined building platform (where this is required to be shown) as a condition of the subdivision approval.

8.4.3.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.4.3.2 of the Standards in Rule 8.4.3.3 for which compliance is not met and the following relevant matters:
- (a) In determining the location, number, configuration and gradient of crossings and vehicular accesses onto any *road*, regard shall be had to whether they:
 - (i) Unnecessarily disrupt the provision of on-street parking.
 - (ii) Detract from the amenities of the locality, particularly residential properties.
 - (iii) Give rise to traffic hazards through factors such as inadequate visibility and unsafe stopping distances.
 - (iv) Conflict significantly with the normal flow of traffic.
 - (v) Unreasonably obstruct access to services.
 - (vi) Unreasonably inhibit the utilisation of the *site* having regard to the scale of the activity and its operational needs.
 - (vii) Restrict ready access to the *site* particularly where large vehicles and/or significant volumes of traffic are involved such as at *service stations* having regard to the relevant Ministry of Transport Guidelines.
 - (viii) Readily enable vehicles (that are likely to use the access) to cope with the gradient and other design matters.
 - (ix) Are impractical to provide due to the physical restrictions on the ground.
 - (x) Keep the number of access points to a minimum having regard to the availability of alternative access, the opportunities for shared access, the volume and nature of the traffic generated and the operational requirements of the activity
 - (xi) Are sited and designed in such a way that the operation of any intersection or *Limited Access Road* is not compromised to a level which significantly diminishes the traffic capacity or safety and that traffic conflicts and hazardous traffic situations are minimised
 - (xii) Are preferable in traffic management terms to be sited on a "greater" *road* rather than a lesser *road* in the case of corner *sites*.
 - (xiii) In respect of Lot 6 DP 399569 (12 Magnolia Lane, Waihi), whether or not a vehicle access connection to Cornwell Street /Lawrence Road can be provided in a manner that does not unduly compromise the safe and efficient operation of the intersection (Cornwell Street/Lawrence Road/Goldfields Railway Line).
 - (xiv) The comments from the relevant road controlling authority. (181.260)

8.4.4 DESIGN OF PARKING, DROP OFF AND LOADING SPACES, ACCESS AND TURNING AREAS

8.4.4.1 DISCUSSION, PURPOSE AND REASONS

- (1) Parking, drop off and loading spaces and access to them represent a significant resource use in terms of space and physical and financial resources to provide and maintain them. This resource use can be compromised if the access, parking, drop off and loading design does not allow easy and convenient use. In addition, if these carparking, drop off and loading functions are not carried out on site, they have the potential to detrimentally affect the safety and efficiency of the roading network and the amenity of other activities (particularly residential).
- (2) The design, shape and location of access, turning, parking, drop off and loading spaces on a site needs to be such that those areas can be readily used by the type and number of vehicles involved. (132.28)
- (3) It is important that parking, drop off, access and turning areas are attractive to use. Otherwise, motorists will not use them and the detrimental effects of vehicles parking on grass verges or on-street will result (eg traffic hazard, and loss of street amenity).
- (4) The standards set out below are designed to meet the space requirements of a 90 percentile vehicle.

8.4.4.2 ENVIRONMENTAL RESULTS

- (1) The design and layout of parking, loading/drop off spaces and access to them developed to a standard that any adverse effects on the safety and efficiency of the road network is avoided, and any adverse effects on the streetscape and surrounding land uses is mitigated to a level that is compatible with the amenity of the area.

8.4.4.3 STANDARDS

- (1) Where *parking*, *loading*/drop off spaces are provided on a site, the following standards shall be met:
 - (a) Any carparking area and/or drop off spaces shall be laid out in accordance with the car turning and parking dimensions shown in Diagram HDC307 in the HDC Engineering Manual 2010, Version 1 and the 90 percentile car tracking curve.
 - (b) On site *turning areas* shall be provided to avoid the reversing of vehicles from:
 - (i) any carparking or drop off area containing more than three *parking spaces*; or
 - (ii) any access onto a *state highway* or *arterial road*; or
 - (iii) any carpark or *loading*/drop off space located a minimum of 20 metres from the *road boundary*.

- (c) Any *loading space(s)* shall have minimum dimensions as follows:
- (i) Length 8.0 metres
 - (ii) Width 4.0 metres
 - (iii) Height 4.4 metres

with sufficient *turning areas* to accommodate a 90 percentile single axle truck, which would avoid the need to reverse vehicles from the *loading space(s)* to the *road* and vice versa. (168.199)

- (d) Any vehicle occupying any *parking* or *loading/drop off* space must have ready access to a *road* at all times, without the necessity of moving any vehicle occupying any other *parking* or *loading space*, with the exception of vehicle parking for a *dwelling*, where only one *parking space* need be accessible at all times.
- (e) Where the internal access width is required to be provided for the two-way operation of vehicles onto and off the *site*, then the access width shall be at least 6m wide for a distance of 10m within the *site* from the *road* boundary.

8.4.4.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.4.4.2 of the Standards in Rule 8.4.4.3 for which compliance is not met and the following relevant matters:
- (a) Whether the carparking or drop off area is used regularly by the same people, making "tighter" carparking dimensions acceptable to those users.
 - (b) Whether there are physical impediments, vegetation worthy of protection or other characteristics of the *site*, activity and/or *road* that would make it impracticable or unnecessary to provide the *turning areas* on site or ready access to a *road* from any *parking* or *loading/drop off* space.
 - (c) Whether passing bays or other physical methods can be used that would compensate for the length of access to the parking or loading facility. (168.200)
 - (d) Whether the nature, scale, character or intensity of *development* or activity carried out on the *site* are such, that the loading and unloading of goods involves vehicles other than those requiring a 90 percentile single axle truck standard.
 - (e) Although the receiving *road* may have status in the roading hierarchy, whether there are factors relating to the *road* (such as volume, type or speed of traffic) which would allow reversing of vehicles onto the *road*, without significant detriment to the safety and efficiency of that *road*.

8.4.5 FORMATION, SCREENING AND LANDSCAPING OF PARKING AND LOADING AND MANOEUVRING AREAS

8.4.5.1 DISCUSSION, PURPOSE AND REASONS

- (1) Either due to the nature or scale of the activity itself or its location in relation to other activities, parking, loading and manoeuvring areas need to be developed to a standard that ensures any detrimental affects are avoided or reduced to an acceptable level.
- (2) The detrimental effects that need to be considered include:
 - (a) Transfer of mud, stones and other material across footpaths and onto the street. This is not only an amenity issue, but also a safety issue, particularly for pedestrians and cyclists.
 - (b) Dust.
 - (c) Noise.
 - (d) Glare from headlights.
 - (e) Loss of privacy.
- (3) Methods to reduce or avoid these detrimental effects relate to forming the surface, landscaping, screening and delineating the parking and loading areas.

8.4.5.2 ENVIRONMENTAL RESULTS

- (1) Parking, loading and manoeuvring areas developed to a standard that ensures that any detrimental effects of activities carried out in those areas are mitigated to a level that is compatible with the amenities of the area and adverse effects on traffic safety are avoided.

8.4.5.3 STANDARDS

- (1) Where *parking, loading/drop off spaces and manoeuvring areas* are provided on a site, the following standards shall be met:
 - (a) Where three or more parking and/or a loading/drop off space(s) are required to be provided, such *parking and loading spaces* shall be clearly marked out and identified.
 - (b) Where a group of three or more *parking spaces* is required to be provided (excluding those required for a *dwelling* or located within a *building*) in the Residential, Town Centre, Industrial, Reserve (Active) and Township zones which adjoin a *sensitive zone*, the *parking spaces* shall be effectively screened on the applicable side(s) by a solid fence not less than 1.8m in height.
 - (c) In the Town Centre, Industrial, or Township zones, kerbing or a similar barrier not less than 0.100m high, shall be provided on those parts of the *site frontage* not used for vehicular access, where *parking spaces* and/or a *loading/drop off space(s)* or

manoeuvring area(s) adjoins a *road*, to separate parking, loading and *manoeuvring areas* from the *road*.

- (d) Where any group of five or more *parking spaces*, or any *loading/drop off space(s)* or vehicle *manoeuvring area* are to be provided and are visible from any *state highway* or *arterial road* or are visible from an adjacent *sensitive zone*, a *landscape planting strip* shall be provided and maintained along the applicable boundary of that area (except for required vehicular access) to a minimum depth of 2 metres.
- (e) Except in the Industrial Zone, where any group of twenty or more *parking* or drop off spaces and associated *manoeuvring areas* are to be provided, and are visible from any street or *road* (not otherwise covered in .d above), a *landscape planting strip* shall be provided and maintained along the *frontage* of that area (except for required vehicular access) to a minimum depth of 2 metres.
- (f) In the Town Centre and Industrial Zone, where in accordance with Rule 8.4.8 a *landscape buffer strip* is required to be provided between an *internal access* and the boundary of a *sensitive zone*, it shall be planted and thereafter maintained to a minimum depth of 2 metres.
- (g) In the *urban areas* (except for the parking area and associated access for a *dwelling*), the whole of the required *parking* and/or *loading spaces*, and *manoeuvring areas* and the associated access thereto from the *road frontage* shall be formed and drained and thereafter maintained with a *permanent all weather*, dust-free surface, such as bitumen, concrete or cobblestones, except that in the Industrial and Township zones a compacted aggregate low in fines may be used as an *all weather* surface.
- (h) Any activity or *development* required to provide a *landscape planting strip* or *landscape buffer strip* shall provide a landscape plan for certification prior to implementation which shows:
 - (i) Existing landscape features, landforms and *development*.
 - (ii) Proposed landscape features, landforms and *development*.
 - (iii) Specification of materials to be used, including precise identification of plant types.
 - (iv) Indicative maintenance programme.

8.4.5.4 RESTRICTED DISCRETIONARY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.4.5.2 of the Standards in Rule 8.4.5.3 for which compliance is not met and the following relevant matters:
 - (a) Whether the nature or volume of vehicular traffic and/or topography of the *site* in relation to the *road* or adjacent *sites* is such that detrimental affects will not be created or are at a level which is compatible with the amenities of the area.
 - (b) Whether other methods of screening, *landscaping* and/or topography create a visual screen, psychological buffer or physical barrier to a level that any headlights are screened, or visual impacts and nuisances such as noise, fumes and dust are reduced to a level which is compatible with the amenities of the streetscape and adjoining or adjacent *sites*.

- (c) The extent to which the standard and method of formation achieves a result similar to that of a formed permanent hard surface.

8.4.6 PROTECTION OF TRAFFIC SIGHT LINES

8.4.6.1 DISCUSSION, PURPOSE AND REASONS

- (1) Visibility at all intersections (road and rail) is an important aspect of maintaining traffic safety throughout the District. While there is no substitute for careful, defensive driving, factors such as visibility at intersections can decrease the risk of traffic accidents and consequent injury.
- (2) It would be impracticable for Council to negotiate the purchase of pieces of land on every corner in the District, survey them off and thereafter maintain them free of any impediment to drivers' visibility.
- (3) All new roads are created with corner splays at the time they are subdivided. Also, when subdivision of land on a corner occurs, the opportunity is taken to require the appropriate corner splay to vest in Council as road. Accordingly, the standards for sight lines below, are accommodated within the standards for corner splays under Performance Standard 8.4.7 - Corner Splays.

8.4.6.2 ENVIRONMENTAL RESULTS

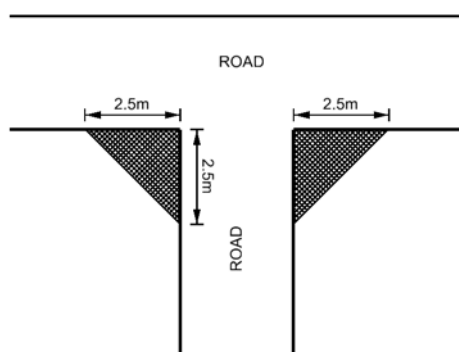
- (1) To manage the roading resource in a manner that contributes to peoples' health and safety.

8.4.6.3 STANDARDS

- (1) No construction of *buildings*, fences or other *structures*, placing of obstructions or the growth of vegetation shall be permitted in the immediate vicinity of *road* and railway intersections as follows:

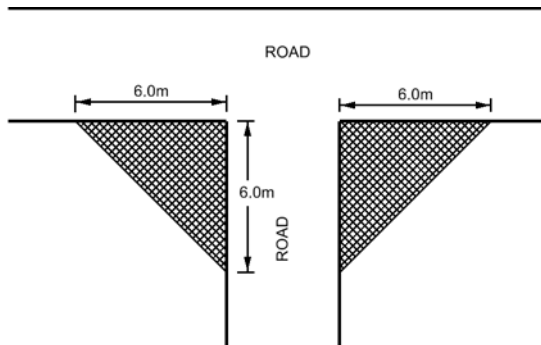
(a) Town Centre, Industrial and Township Zones

Road Intersections – over 1 metre in height within the area shown in the diagram, except above first floor level.



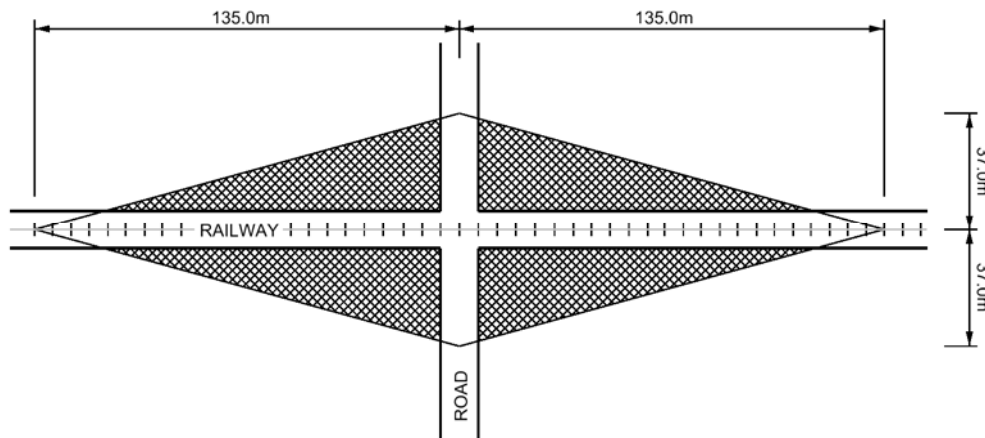
(b) All other zones

Road Intersections – over 1 metre in height within the area shown in the diagram.



(c) All zones - Railway Intersections (190.11)(190.12)

- (i)** Over 1 metre in height within the area shown in the diagram. Where there are two or more rail tracks the 37m sight line applies from the centreline of the nearest track.



Note: The standards in (a) and (b) above do not apply where a corner splay has already been vested and cleared in accordance with Performance Standard 8.4.7 - Corner Splays.

8.4.6.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

(1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.4.6.2 of the Standards in Rule 8.4.6.3 for which compliance is not met and the following relevant matters:

- (a)** Whether the existence of traffic management methods (stop signs, railway signals) provides a level of traffic safety that cancels or reduces the need for sight lines.

- (b) Whether factors such as traffic speed are such that traffic safety is maintained without the need for, or with reduced sight lines.
- (c) Whether train movements (time of day, speed of train) are such that traffic safety is maintained without the need for, or with reduced sight lines.
- (d) The *restricted discretionary activity* matters for Performance Standard 8.4.7 - Corner Splays.

Note:

The consent of the controlling authority for the railway facility will be required before *Council* will consider granting an application for reduced sight lines.

8.4.7 CORNER SPLAYS

8.4.7.1 DISCUSSION, REASONS AND PURPOSE

- (1) Subdivision is an appropriate time at which to obtain corner splays where these have not already been provided. The "Protection of Traffic Sight Lines" (Performance Standard 8.4.6), provides an interim mechanism to enhance traffic safety at intersections until such time as Council can obtain the corner splay. The corner splay not only provides for traffic sight lines, but also provides the area of land to provide for the turning of traffic. As such, the dimensions of the corner splay may be greater than for sight lines.

8.4.7.2 ENVIRONMENTAL RESULTS

- (1) To manage the roading resource in a manner that contributes to peoples' health and safety.

8.4.7.3 STANDARDS

- (1) Where land at an intersection is subject to *subdivision*, or where a new *subdivision* involves creating an intersection, corner splays to the dimensions set out in the table below shall be shown on the *subdivision* plan and shall be shown as "Road" to vest in the *Council* on the survey plan.

Zone	Standard
Residential, Low Density Residential and Industrial	6.0 metre splay
Township, Town Centre	2.5 metre splay
Rural, Marae Development, Coastal, Karangahake Gorge	40 metres on State Highways, (181.262) arterial roads. 15 metres on collector roads and local roads.
Reserve (Active and Passive), Conservation and Flooding Ponding	N/A.

Note:

- (a) The corner splays shall be defined by a diagonal line joining points, the standard distance back from where two straight lines (one line along each street/road boundary) meet.
- (b) The corner splay may need to be cleared of vegetation and/or re-contoured to provide the necessary sight lines as required in the Standards in Rule 8.4.6.3.

8.4.7.4 RESTRICTED DISCRETIONARY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.4.7.2 of the Standards in Rule 8.4.7.3 for which compliance is not met and the following relevant matters:
- (a) Whether the taking of a corner splay will not significantly improve visibility for motorists due to there being existing *buildings*, land or vegetation between the corner and the necessary sight line, or there is a difference in *road* levels.
 - (b) Whether a lesser standard will give a similar and adequate level of visibility and *turning areas*, because of factors such as reduced traffic speeds in the area, low volumes of traffic or the nature of the traffic.
 - (c) The full corner splay cannot be provided due to existing physical features which cannot be reasonably removed.
 - (d) The *restricted discretionary activity* matters in Performance Standard 8.4.6 - Protection of Traffic Sight Lines.

8.4.8 INTERNAL ACCESS

8.4.8.1 DISCUSSION, PURPOSE AND REASONS

- (1) In a number of situations, the most practical way of obtaining access to a lot or dwelling can be over other land, especially to overcome physical problems of getting to a site. In other situations, a combined access arrangement allows a subdivision or development pattern that makes the most efficient use of the land (ie large areas of land are not taken up with unneeded roads) and also at a lower cost.
- (2) Internal access arrangements are the responsibility of the landowner or developer, and are not a roading cost to the general ratepayer. In most cases, the lower volume of traffic on the internal access means that the costs of formation and the amount of resources used are reduced, as the standards are less than those needed for a road.
- (3) The reduced standards (eg width, formation) for internal access must not be at the expense of or detriment to the amenities of an area, particularly residential areas. For this reason, the number of lots and/or dwellings that can be served by an internal access needs to be controlled to ensure the volume of traffic is not such that it creates a detriment to the amenities of the area or traffic conflicts where the access meets the road in an "uncontrolled" manner. In addition, poor maintenance of the internal access in the vicinity of its intersection with the road can compromise the safe and efficient use of the adjacent road, by the transmission of metal and dirt onto the footpath and roadway.
- (4) The rules set out below restrict the number of lots and/or dwellings that can be served by the internal access and the length of the internal access, as the traffic volumes and traffic behaviour (especially speed) become similar to that of a public road. Private control is unlikely to be able to deal with the potential detrimental effects from such traffic. (58.99)
- (5) From an urban design perspective, controlling the number of lots and/or dwellings that can be served by the internal access, and the length of the internal access, assist in managing residential infill in existing residential areas to a level that does not detract from the street/neighbourhood character and minimises parking, vehicle and pedestrian conflict and privacy issues.

8.4.8.2 ENVIRONMENTAL RESULTS

- (1) That internal access to lots and/or dwellings is provided in a manner that enables physical or legal access to be achieved but in a manner that does not detrimentally affect the environment and amenities of the area, create a traffic hazard or reduce pedestrian safety within the internal access itself or at its intersection with the road.
- (2) To enhance the residential amenities of multi-unit developments by providing an internal access that allows easy vehicle movements and minimises traffic noise as a result of the number of vehicle movements and vehicle speed up and down the internal access.

8.4.8.3 STANDARDS

- (1) The maximum number of *lots* or *dwellings* served by an *internal access* shall not exceed the limits specified in the following table:

Zone	Maximum Use of <i>Internal Access</i>
(a) Residential	Up to 3 Allotments or 3 Dwellings (58.101)(126.35)(129.14)(147.25)
(b) Low Density Residential	Up to 4 Allotments or 4 Dwellings (58.102)(126.36)(129.15)(147.25)
(c) Industrial, Town Centre, Township	Up to 2 Allotments (147.25)
(d) Rural and Coastal	Up to 5 Allotments or 5 Dwellings (58.103)(126.37)(129.16)(147.25)

- (2) The legal width, maximum length, carriageway width and formation standards of the *internal access* shall be in accordance with either Tables 3.1 or 3.2 of the HDC Engineering Manual 2010, Version 1 (refer to Appendix 1 and 2 in Sections 8.6.1 and 8.6.2 for a copy of Tables 3.1 and 3.2).
- (3) The legal boundary of the *internal access* shall accommodate any required passing bays.
- (4) Where the *internal access* standards as specified in .a to .d above are not met the *internal access*, shall be provided to full road standard in accordance with the standards in Rule 8.4.9 and shall vest in the Hauraki District Council as "Road". For an existing *internal access* this rule shall only apply when additional *lots* are to be created which require access from it. (58.105)(126.39)(129.18)
- (5) No two or more vehicle *access strips* within a *subdivision* or *development* may lie adjoining or adjacent to one another unless easements are granted over each vehicle *access strip* in a manner which enables their combined use with a single point of access to a public road.
- (6) Where the *internal access* in the Industrial and Town Centre Zones is located adjacent to the zone boundary with a *sensitive zone*, the nearest boundary of the *internal access* shall be located two metres from the zone boundary to allow a *landscape buffer strip* to be provided (refer to Rule 8.4.5) unless the boundary is effectively screened for the length of the *internal access* by a solid fence not less than 1.8 metres in height. The required minimum width of an *internal access* shall be measured from the edge of the two metre *landscape buffer strip* or fenceline.

Note: The above standards for *internal access* are either not applicable or should be used as a guide in the Flood Ponding, Conservation (Indigenous Forest & Wetland), Reserve (Active & Passive), Karangahake Gorge or Marae Development zones.

8.4.8.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The Council will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.4.8.2 of the Standards in Rule 8.4.8.3 for which compliance is not met and the following relevant matters:
- (a) Whether the *internal access* will still allow for access by larger vehicles such as furniture or stock trucks and for emergency vehicles.

- (b) Other techniques proposed, such as passing bays, that would allow for reduced access widths and/or increased access length.
- (c) The safety and convenience of the *internal access*.
- (d) Whether underground services can still be installed and maintained without disrupting and/or damaging the formation of the accessway itself.
- (e) Whether the distance to the *lots* is such that the standard access width is not necessary.
- (f) Traffic speed control by techniques such as speed humps or corners that would allow increased access length and/or reduced access widths.
- (g) Inappropriate modification of the environment, including the removal of trees or vegetation that would result from providing the *internal access* to the required dimensions.
- (h) The physical nature of the *site* would make providing the *internal access* to the required dimensions and formation inappropriate or impractical.
- (i) The relevant *restricted discretionary activity* matters in Section 8.4.9.4.

8.4.9 STREET AND ROAD DESIGN

8.4.9.1 DISCUSSION, PURPOSE AND REASONS

- (1) The way in which the street or road is laid out can have a significant impact on:
 - (a) The volume and type of traffic that is attracted to use that road.
 - (b) The speed of traffic.
 - (c) Impact on the amenities of adjoining land use activities.
 - (d) The amount of energy used by vehicles. For example, the design of residential roads can increase their attractiveness to become a "short-cut" between main traffic routes. Roads that need to carry large volumes of traffic can be designed to achieve that purpose by reducing the number of intersections, providing turning bays that avoid disruption to traffic flows and providing linkages to other main roads.
- (2) A number of factors are involved which combine to provide a design that matches the purpose of the road. These factors include; widths, gradients, pavement surfaces, kerbing and channelling. These design factors also recognise that roads have a number of purposes other than conveying vehicles, cycles and pedestrian traffic. Other purposes include contributing to stormwater control, providing security through street lighting and enhancing the appearance of an area through the planting of trees.
- (3) The standards set out below seek to provide a road design that meets these purposes and is compatible with the amenities of the area.
- (4) In addition, the resources required to form or upgrade a road are substantial. In order that resources are not wasted and therefore are available for use by future generations, roading needs to be to a standard that can cope with the anticipated traffic for a certain length of time. Proper initial road construction can significantly reduce maintenance costs and use of resources at a later date.

8.4.9.2 ENVIRONMENTAL RESULTS

- (1) To create a road network that provides for the safe and efficient movement of traffic (vehicular and pedestrian) in a manner that promotes the sustainable management of resources used in its development and maintenance and is of a design that enhances the amenities of the locality.

8.4.9.3 STANDARDS

- (1) Where a *subdivision* or *development* results in a need to upgrade an existing *road* or form a new *road*, that *road* development shall comply with:
 - (a) The relevant standards in either Tables 3.1 or 3.2 of the HDC Engineering Manual 2010, Version 1 (refer to Appendix 1 and 2 in Sections 8.6.1 and 8.6.2 for a copy of Tables 3.1 and 3.2)..

- (b) The roading hierarchy shown on the Roding Hierarchy Maps with the District Planning Maps.
- (c) The *indicative road* layout principles shown on the Structure Plans (where relevant) in Section 8.6 Appendices 3 to 10.
- (d) For the land to the east of Smith Street and north of Wenlock Street, Waihi (legally described as part of Lot 7 DPS 33511) no new road connection to Whangamata Road-SH 25 shall be permitted.

8.4.9.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.4.9.2 of the Standards in Rule 8.4.9.3 for which compliance is not met and the following relevant matters:
 - (a) Whether the width, alignment, strength and surfacing of any carriageway is sufficient to accommodate in a safe and efficient manner the volume and type of traffic likely to use it, including service and emergency vehicles on local residential *roads* and heavy trucks on industrial *roads*.
 - (b) The adequacy of provision for the movement of pedestrians, cyclists and the disabled.
 - (c) The adequacy of provision within the *road* reserve for *parking spaces* relative to the existing and potential *developments* on adjoining land.
 - (d) Whether the carriageway, kerb, channel, footpath and associated works such as street lighting will be constructed so as to have a design life that will not require premature maintenance or replacement. As a guide, construction and materials should have a minimum design life of 25 years.
 - (e) The degree to which the extension to an existing, a new or an upgraded *road* "matches" the rest of the existing roading network (eg levels, design, construction).
 - (f) The degree to which the design of the *road* has been developed to allow for ease of cleaning and maintenance, for example the clearing of stormwater channels and drains.
 - (g) Whether the design of the *road* allows for easy installation and maintenance of *network utility* services and *amenity* tree planting.
 - (h) Whether the design of the *road* provides a level of *amenity* for adjoining activities demanded by the community, particularly residential *amenity*.

8.5 INFRASTRUCTURE AND SERVICES

8.5.1 DOMESTIC EFFLUENT DISPOSAL

8.5.1.1 DISCUSSION, PURPOSE AND REASONS

(1) ON SITE DISPOSAL

Where there is no public reticulated sewerage system available all existing and future development must be capable of satisfactorily treating and disposing of sewage on-site, or through small scale community based schemes, in accordance with the requirements of the Waikato Regional Council.

(2) RETICULATED SYSTEMS

Reticulated sewerage systems are available in most of the urban areas in the District. Subdivision is an appropriate time for the sewerage connections to be made to the lot(s). Alternatively, where there is no subdivision the connections need to be made at the time of development.

8.5.1.2 ENVIRONMENTAL RESULTS

(1) To allow residential and other development in those areas which are not serviced by a public sewerage system, but only in a manner that protects the water and land from contamination and does not create a risk to health or a detraction to the amenity of the area through smell.

(2) To ensure that where a reticulated sewerage system is available to lots where domestic effluent needs to be disposed of, the system is provided in a manner which is safe, efficient, economic, environmentally acceptable, meets consumer demand and improves public health.

8.5.1.3 STANDARDS

(1) In all *zones*, where a reticulated sewer system is not available an on site *domestic effluent* disposal system shall be provided for the discharge of *domestic effluent*.

Note: Applications for *subdivision* consents may be required to show the details and layout of the proposed *domestic effluent* treatment system (eg. for steep *sites* with slip potential) including evidence that the system either complies with the *permitted activity* standards of the Waikato Regional Plan or a regional consent has been obtained.

(2) In all *zones*, where a reticulated *domestic effluent* system is available any *subdivision* which results in additional *allotments* to be used for urban purposes or where any new or additional *development* is proposed, provision shall be made for *domestic effluent* to be disposed of as follows:

- (a) The installation or upgrading of a sewer main and/or pump station(s) extending from the Trunk Wastewater System to serve all the proposed *allotments* in the *subdivision* or the subject land; and
- (b) The installation of a connection from the sewer main into the body of each proposed *allotment* or to each individual *dwelling/development* to accommodate any increase in *domestic effluent* likely to arise from the *subdivision* or *dwelling/development* of the land in accordance with the specifications in the HDC Engineering Manual 2010, Version 1.

8.5.1.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.5.1.2 of the Standards in Rule 8.5.1.3 for which compliance is not met and the following relevant matters:
 - (a) Whether the proposed design meets the maximum potential demand arising from likely *development* of the land as permitted in accordance with this District Plan.
 - (b) Whether the new sewer main and/or sewerage connections are designed, located and constructed to allow relatively easy operation, cleaning, inspection and maintenance, as well as:
 - (i) Minimising any risk to the environment or to public health through contamination of water or the ground.
 - (ii) Minimising any loss of enjoyment and /or *development* of *lots* as a result of the sewer main and/or connection location.
 - (iii) Enabling the individual connections to be readily made to the existing reticulated sewer system.
 - (c) Whether the proposed sewer system is constructed to have a design life that will not require substantial maintenance in the future. As a guide, reticulated sewer systems should be designed to have a minimum life of 100 years.
 - (d) The extent to which the capacity, efficiency and sustainability of upstream and downstream infrastructure will be compromised.

8.5.2 NON-DOMESTIC EFFLUENT DISPOSAL

8.5.2.1 DISCUSSION, PURPOSE AND REASONS

- (1) Care in the siting of treatment plants, ponds and effluent disposal systems for non-human wastes (including stock truck effluent disposal systems) and/or for effluent disposal systems of a scale greater than "domestic", is important to avoid unreasonable smell nuisance or any health risk for the occupants of neighbouring properties and dwellings.
- (2) In some cases the amenities of neighbouring properties will not be affected by a closer distance due to variable factors, such as prevailing and seasonal weather conditions, topography, method of treatment and type and quantity of effluent. For this reason the buffer distance can be reduced between an isolated rural dwelling and the effluent disposal area, with the written consent of the affected owners and occupiers by a restricted discretionary activity consent.
- (3) The responsibilities of the Waikato Regional Council with respect to the design, location, treatment and disposal methods are requirements to protect the water, land and/or air from the detrimental effects of discharging contaminants into the environment.
- (4) The purpose of this performance standard in the District Plan is to protect the amenity values of neighbouring properties.

8.5.2.2 ENVIRONMENTAL RESULTS

- (1) To allow for the disposal of *non-domestic effluents* from activities in a location that avoids or reduces to an acceptable level, any detrimental amenity effects of the effluent disposal process.

8.5.2.3 STANDARDS

- (1) In any *zone*, all plants, ponds or effluent disposal systems (including disposal onto the land by way of spray or trickle irrigation) used for the disposal of non-human wastes and/or wastes of a scale greater than "domestic" shall comply with the following:
 - (a) The plant or ponds including the area onto which the effluent is being discharged or disposed of shall meet the buffer distances set out in the tables below.

For the purpose of compliance with the buffer distances specified in the tables, distances shall be measured from the nearest perimeter of the area used for handling or disposal of effluent.

Buffer Distance for <i>Non-Domestic Effluent Treatment Systems & Disposal Areas (Excluding Pig Effluent Disposal)</i>	
	Distance
Any boundary of the <i>holding</i>	50 metres
Boundary of any other <i>Zone</i>	150 metres
Any <i>dwelling</i>	150 metres
<i>Community facility</i> located within a <i>rural area</i>	100 metres

Buffer Distance for <i>Non-Domestic Effluent Treatment Systems & Disposal Areas for Pig Effluent Disposal</i>			
	Minimum Distance in Metres		
	Land Spreading		Subsoil injection Aerobic Lagoon
	Anaerobic Lagoon (refer to (i) below)	Anaerobic Lagoon (refer to (ii) below)	
(1) Boundary of Residential and Low Density Residential <i>Zones</i>	1500m	2000m	500m
(2) Boundary of Marae Development, Town Centre, Industrial , Township, Reserve (Passive) and Reserve (Active) <i>Zones</i>	500m	1000m	200m
(3) Any dwelling or <i>Community facility</i> outside the <i>zones</i> referred to in (i) and (ii) above (refer to (iii) below)	250m	500m	150m

- (i) Effluent for surface spreading that has been stored anaerobically without treatment for less than 48 hours.
- (ii) Effluent for surface spreading that has been stored anaerobically without treatment for more than 48 hours.
- (iii) For the purpose of this standard the following definitions shall apply:

Any Dwelling

Means any habitable dwelling or any form of *visitor accommodation* which has been lawfully established (not including dwellings or *visitor accommodation* on the *holding* on which non-human waste and/or wastes of a scale greater than "domestic" are being discharged or disposed of).

Community Facility

Refer to definition in Section 4.0.

- (2) Where any effluent or manure (liquids, solids or slurry) is taken across a *property* boundary or along public *roads*, it shall be in enclosed containers or pipes so as to avoid a nuisance.

Note: Any required resource consent for the *non-domestic effluent* discharge will also need to be obtained from the Waikato Regional Council.

8.5.2.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.5.2.2 of the Standards in Rule 8.5.2.3 for which compliance is not met and the following relevant matters:
- (a) Whether the method (including type and quantity) of effluent treatment and disposal is such that effects such as smell are not created.
 - (b) The extent to which there are prevailing and seasonal weather conditions (particularly wind direction and intensity, number of calm days) around the *site* that ensure the detrimental effects of the effluent disposal method are dealt with to a degree which would allow reduced buffer distances.
 - (c) Whether the topography between the area used for handling or disposal of effluent and the land or *building* to which the buffer distance applies creates a barrier which ensures the detrimental effects are prevented or contained.
 - (d) Whether the nature of existing and likely *development* between the area used for handling or disposal of effluent and the land or *building* to which the buffer distance applies, is such that the effects of the disposal system will not be noticeable or objectionable.
 - (e) Whether the disposal of effluent from the pig farm is being carried out in accordance with the New Zealand Pork Industry Board – Environmental Management Systems.

8.5.3 WATER SUPPLY

8.5.3.1 DISCUSSION, PURPOSE AND REASONS

- (1) The provision of an adequate and potable water supply is required for public health, commercial and industrial consumption, and for the safety of the community (eg fire fighting purposes).
- (2) In some parts of the District there is no urban or rural water supply that a subdivision or development can connect into. Also, where rural water supplies are available, there is no requirement that connection has to be made to the supply. For all those situations, adequate water supply can be obtained from rainwater storage, bores or a combination of both. This is not a District Plan matter, but rather can be addressed at the time of building consent. As part of a building or land use consent, evidence of the system to provide an adequate water supply will need to be included with the consent application. Due to the manner in which the rural water supply systems were set up and financed, connection to the supply cannot be required.
- (3) Where an urban water supply is provided, connection to that system is required to enable the community to meet its social, economic and health needs. Subdivision is an appropriate time for the water supply connections to be made to the lot(s). Alternatively, where there is no subdivision the connections need to be made at the time of development.
- (4) In parts of Paeroa, Waihi and on the Hauraki Plains, Council is unable to guarantee the water supply continuity and/or (151.1) pressure due to the height of the land in relation to the reservoir and the draw off of water for dairy farming purposes. This limitation is noted on the Property Information Database and will be drawn to the attention of prospective purchasers and developers at the time of purchasing the property or undertaking building on the property through Land Information Memoranda (LIM) or Project Information Memoranda (PIM).

8.5.3.2 ENVIRONMENTAL RESULTS

- (1) To allow development in a manner that does not create a risk to human safety, health and wellbeing.

8.5.3.3 STANDARDS

- (1) In any *zone* in an *urban area*, where a potable water reticulation system is available, any *subdivision* which results in additional *allotments* or where any new or additional *development* is proposed, provision shall be made for water supply as follows;
 - (a) The installation or upgrading of a water main extending from the Trunk Water Supply System to serve all the proposed *allotments* in the *subdivision* or the subject land; and
 - (b) The installation of a connection from the water main to each proposed *allotment* or to each individual *dwelling/development* to accommodate any increase in water demand likely to arise from the *subdivision* or *dwelling/development* of the land in accordance with the specifications in the HDC Engineering Manual 2010, Version 1.

- (2) In any *urban area* or *rural area* where a potable water supply is not available and/or the developer chooses not to connect to a *rural area* water supply scheme, then evidence of a satisfactory water supply system shall be provided as part of the building consent application.

8.5.3.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.5.3.2 of the Standards in Rule 8.5.3.3 for which compliance is not met and the following relevant matters:
- (a) Whether the proposed design meets the maximum potential demand arising from likely *development* of the land as permitted in accordance with this District Plan.
 - (b) Whether the water supply reticulation is designed, located and constructed to allow relatively easy operation and maintenance, as well as:
 - (i) Minimising any loss of enjoyment and/or *development* of *lots* as a result of the reticulation location.
 - (ii) Enabling the individual connections to be readily connected to the existing reticulation system.
 - (c) Whether the water system is constructed to have a design life that will not require substantial maintenance in the future. As a guide, reticulated water systems should be designed to have a minimum life of 100 years.
 - (d) The extent to which the capacity, efficiency and sustainability of upstream and downstream infrastructure will be compromised.

8.5.4 STORMWATER DRAINAGE

8.5.4.1 DISCUSSION, PURPOSE AND REASONS

- (1) Control and disposal of stormwater is important in the Hauraki District for different reasons in different areas of the District. Reasons include the low-lying nature of some land, areas of high rainfall (eg Waihi) and the increase in impermeable surfaces as a result of higher density urban development in the towns.
- (2) The control and disposal of stormwater enables land use activities to establish and operate, and also ensures that people and communities are protected from the social and economic disruption that flooding due to inadequate stormwater disposal can produce.
- (3) Stormwater needs to be disposed of before it can become contaminated by other effluent (eg septic tank), chemicals, oils or pesticides, and in a manner which causes minimal, if any, detriment to the environment (ie both the quality and quantity of stormwater needs to be addressed).
- (4) There are a number of means available to control and dispose of stormwater including on-site soakage, roadside channels, soakage into reserves or open areas, piping to existing streams or other water bodies and connecting to established stormwater systems. The technique to use for stormwater drainage will need to be assessed for each individual situation at the time of subdivision or development. However, the disposal needs to avoid flooding downstream, erosion or instability to the land.

8.5.4.2 ENVIRONMENTAL RESULTS

- (1) To dispose of stormwater in a manner that is compatible with the natural environment, as well as ensuring that the risks to the community as a result of flooding and/or contamination of stormwater are avoided.

8.5.4.3 STANDARDS

- (1) In an *urban area*, all stormwater from hardstand and impervious surfaces shall be provided with stormwater treatment in accordance with the HDC Engineering Manual 2010, Version 1.
- (2) In an *urban area*, where there is a reticulated stormwater system available (either piped or open), any *subdivision* which results in additional *allotments* or where any new or additional *development* is proposed, provision shall be made for stormwater treatment as follows;
 - (a) The installation or upgrading of a stormwater main extending from the Trunk Stormwater System to serve all the proposed *allotments* in the *subdivision* or the subject land; and
 - (b) The installation of a connection from the stormwater system to each proposed *allotment* or to each individual *dwelling/development* to accommodate any increase in stormwater discharge likely to arise from the *subdivision* or *dwelling/development* of the

land in accordance with the specifications in the HDC Engineering Manual 2010, Version 1.

- (3) All public drains required to be created at the time of *subdivision* or *development* shall be covered by an easement in gross or shall vest as "Local Purpose Reserve (Drainage)" in the Hauraki District Council on the survey plan of *subdivision*.
- (4) All easements and reserves shall be of sufficient width to include the drain and to enable access for maintenance and replacement work. (For open drains refer to Diagram HDC400, and for piped drains refer to TS410 in the HDC Engineering Manual 2010, Version 1).
- (5) All easements and reserves shall be unencumbered by any physical *structures*.
- (6) All secondary stormwater flow paths created at the time of *subdivision* or *development*, shall be covered by an easement in gross.
- (7) All reticulated stormwater infrastructure that is to become a public asset is to be designed so as to accommodate for Climate Change. This figure is to be 20% (factor of 1.2).

8.5.4.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.5.4.2 of the Standards in Rule 8.5.4.3 for which compliance is not met and the following relevant matters:
 - (a) Whether the design capacity of the system is sufficient to cope with the stormwater surface flows.
 - (b) The degree to which the facilities are designed, located and constructed to allow relatively easy operation, cleaning, inspection and maintenance. In particular:
 - (i) Pipelines, access chambers and pumping station inverts should be designed to be self cleansing under normal operations.
 - (ii) All materials, fittings and other equipment should be compatible or readily adaptable to the existing reticulation system to enable future connections to that system to be achieved.
 - (iii) Inspection and access points should be readily accessible, especially in the event of emergencies.
 - (c) Whether the stormwater disposal system is designed to minimise any detriment to the environment, particularly with respect to the contamination of natural water, erosion of land or subsequent instability of that land and downstream flooding.
 - (d) The extent to which the stormwater design has been developed with the outcome of coping with additional stormwater flows which may be added to the system in the future including an allowance for Climate Change. As a guide, stormwater facilities should be able to cope with stormwater disposal requirements anticipated in the next 100 years.
 - (e) The extent to which the capacity, efficiency and sustainability of upstream and downstream infrastructure will be compromised.
 - (f) Whether the stormwater disposal system is constructed to have a design life that will not require substantial maintenance in the future. As a guide, stormwater systems should be designed to have a minimum life of 100 years.

8.5.5 DRAINS

8.5.5.1 DISCUSSION, PURPOSE AND REASONS

- (1) As part of development and/or subdivision in the rural areas, it may be necessary to ensure for the continued ability for water to drain from one allotment to another to provide access to a Council drain. Although there is "common law" relating to the responsibilities of disposing and accepting water, the opportunity should be taken to legalise the situation by creating an easement over the drain.
- (2) In addition, for some developments, drainage is an integral part of ensuring that the activity can establish and continue to operate. Hauraki District Council's Bylaw on Land Drainage provides for the setback of buildings and other structures from the edge of drains to ensure they do not inhibit the ability of public drains to be accessed and maintained (refer to Section 8.2.1).
- (3) Where drainage easements are required to be set aside and drains formed, as part of a subdivision or development, they need to be of sufficient dimensions to ensure that they function correctly, and can be serviced and maintained.
- (4) Where land is within a Council land drainage district, it is a requirement for each new lot to be provided with an outlet to the Council drain.

8.5.5.2 ENVIRONMENTAL RESULTS

- (1) That the resource investment in rural developments is protected from the effects of anticipated floods, water ponding and significant variations to ground water tables.

8.5.5.3 STANDARDS

- (1) For land within the *rural area* covered by a *Council Drainage District*, every new *allotment* created by *subdivision* shall be provided with a land drainage outlet to a *Council drain* at the boundary of the *allotment*.
- (2) In the *rural area*, all required drains shall be designed and constructed in accordance with the requirements of the "Drain design" diagram HDC400 set out in the HDC Engineering Manual 2010, Version 1.
- (3) Easements shall be created which cover the drain and shall be of a minimum width of 8 metres from the top edge of the open drain along one side to allow for access of maintenance equipment and deposition of spoil removed from the drain.

8.5.5.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.5.5.2 of the Standards in Rule 8.5.5.3 for which compliance is not met and the following relevant matters:
- (a) Whether the scale or other characteristics of the land, activity or *subdivision* are such that the drain type can be lesser than that which would normally be required, or no drain is required at all.
 - (b) Whether there are other works in the area that when carried out will remove or reduce the need for a drain to be provided.
 - (c) Whether there are physical, legal or other impediments that would make compliance with the drain type standard or drainage easement width unreasonable or impracticable to provide, and whether an alternative to the standard still substantially achieves a similar level of operation.

8.5.6 TELECOMMUNICATIONS AND POWER

8.5.6.1 DISCUSSION, PURPOSE AND REASONS

- (1) In a similar way to water supply, the provision of telephone and power services enables a community to meet its social, economic and cultural needs in a manner that has little detriment to the environment.
- (2) The physical process of providing the services can have a detrimental effect on the environment. These effects can be minimised by installing all services to the allotment(s) at the time of subdivision construction. Providing services in an ad hoc manner after the subdivision is completed is also wasteful of resources. Where necessary easements will be required to ensure continued access by the various utility operators to reticulated services and equipment.
- (3) The Council is seeking to encourage underground reticulation of new distribution lines for telephone and power wherever possible for visual and safety reasons. Council recognises that for technical and other reasons, undergrounding may not always be possible.

8.5.6.2 ENVIRONMENTAL RESULTS

- (1) To provide telephone and power supply to the community in a coordinated way and in sufficient quality, quantity and reliability to meet the community demands, while ensuring any detriment to the environment is minimised to an acceptable level. New distribution lines for power and telephone will generally be expected to be located underground in urban areas.

8.5.6.3 STANDARDS

- (1) In any *zone*, telecommunications and power shall be provided to the boundary of each additional *allotment* at the time of *subdivision* in accordance with: (58.140)(126.43)(147.27)(147.28)(186.33)
 - (a) The requirements of the relevant supply authority, including any necessary easements, except that where only one additional *lot* is being created, installation is not required at the time of *subdivision*, where the supply authority has confirmed in writing that connection is available at the standard fee; and (58.107)(120.1)(126.41)(186.32)
 - (b) The requirements of the HDC Engineering Manual 2010, Version 1. (72.21)(58.139)(120.1)(126.42)

8.5.6.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

- (1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.5.6.2 of the Standards in Rule 8.5.6.3 for which compliance is not met and the following relevant matters:

- (a) Whether the proposed design meets the maximum potential demand arising from likely *development* of the land as permitted under this District Plan.
- (b) Whether the services are located and installed in a manner that minimises any potential hazard or risk.
- (c) The degree to which the facilities are designed, located and installed to allow relatively easy maintenance, access (particularly in emergency situations) and connection to individual *lots*.
- (d) Whether the systems are constructed to have a design life that will not require substantial maintenance in the future. As a guide, telecommunication and power supplies should be designed to have a minimum life of 100 years.