Chapter 9 — Land Modification, Development and Subdivision

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9.1 INTRODUCTION

Land Modification, Development and Subdivision

For the purposes of this chapter, land modification, development and subdivision refers to the process by which land is developed for changes in land use or more intensive use. This includes physical work or development which results in changes to the landform, the removal of vegetation, and site works necessary for building construction. It can vary from minor changes to the land, such as small fills or track construction, to major new urban developments or construction projects.

Land modification refers to the activity of altering the landform through earthworks, construction (such as roads, utilities and services, and site works for buildings and other structures), and the removal or planting of vegetation. It is a broad term that encompasses land development, the process of modifying the land through site works and the construction of facilities and structures. Subdivision has the same meaning as under the Resource Management Act 1991, and includes subdivision to create separate lots in fee-simple titles, unit titles, cross-leases, and company leases.

Subdivision is often an integral part of the overall land development process, as it usually precedes or is undertaken in conjunction with construction works. While subdivision itself may not create environmental impacts, many of the effects of land modification and development can be controlled by way of managing the subdivision process, and for this reason both aspects are addressed together in this section. However, it is recognised that one need not necessarily accompany the other, and that the effects of land modification and development must be able to be managed independently of the subdivision process.

Land modification, development and subdivision are a critical part of the development of the City, in terms of affecting the maintenance and development of the environment, infrastructure and services, and thus in achieving the sustainable management of the City’s natural and physical resources. The management of the process involves both the public and private sectors committing resources (including finance) to achieve individual and community goals.

The intention of this chapter is to provide a management framework for evaluating the demands on natural and physical resources arising from land modification, development and subdivision, together with a means of assessing the effects on the environment, to ensure that subdivisions are designed and works are constructed in a manner that avoids, remedies or mitigates any adverse effects on the environment while providing an adequate level of access, infrastructure and service.

Sections 30 and 31 of the Resource Management Act provide the Auckland Regional Council and Manukau City respectively with powers and responsibilities for managing subdivision and development of land in a way that enables people and communities to provide for their social and economic well-being and their health, while sustaining the potential of physical resources to meet the reasonably foreseeable needs of future generations. This encompasses the efficient use and development of natural and physical resources, including land and structures.

The Auckland Regional Policy Statement recognises that the Auckland Region is facing a number of development thresholds as demands on several major utility services, including the sanitary drainage system and urban stormwater disposal, are near or exceeding threshold limits in some areas, including part of Manukau City. The provision of these services influences the pattern of land modification, development and subdivision in the City and may involve retrofitting in limited circumstances.

Territorial authorities, such as the Council, also have a number of functions for the purpose of giving effect to the Resource Management Act, which are set out in Section 31 of the Act:

1. Every territorial authority shall have the following functions for the purpose of giving effect to this Act in its district:
   (a) The establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the effects of the use, development, or protection of land and associated natural and physical resources of the district:
   (b) the control of any actual or potential effects of the use, development, or protection of land, including for the purpose of -
      (i) the avoidance or mitigation of natural hazards; and
(ii) the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances; and

(iiia) the prevention or mitigation of any adverse effects of the development, subdivision, or use of contaminated land:

(iii) the maintenance of indigenous biological diversity;

(c) Repealed.

(d) The control of the emission of noise and the mitigation of the effects of noise:

(e) The control of any actual or potential effects of activities in relation to the surface of water in rivers and lakes:

(f) Any other function specified in this Act.

2 The methods used to carry out any functions under subsection (1) may include the control of subdivision.

[AM89]

The Financial Contribution provisions set out in the District Plan establish a way of funding adequate infrastructure and services to allow urban development to progress in an orderly manner. Section 108 of the Act provides that a resource consent may be granted subject to any condition that the consent authority considers appropriate, including a condition requiring a financial contribution be made.

[AM89]

Other legislation concerned with aspects of the Land Modification, Development and Subdivision process includes Section 348 of the Local Government Act 1974 which requires rights of way to be subject to Council approval.

[AM89]

The Unit Titles Act of 1972 makes provision for an alternative form of subdivision to fee simple lots, allowing for the division of a site into principal and accessory units and common areas. In some situations, subdivision by unit title can be a viable alternative to cross-lease, and no distinction is made in the District Plan to either forms of land tenure.

Sections 17 and 18 of the Public Works Act 1981 apply to the acquisition of land for roading purposes, and Section 40 allows roads to be stopped, and gives the Council an alternative legal mechanism to dispose of areas of road which are no longer required.

The Historic Places Act of 1993 protects all archaeological sites, whether recorded or not, from modification, damage or destruction. It is an offence to modify or destroy an archaeological site without an authority from the NZ Historic Places Trust.

Stormwater Management Areas

A number of stormwater management areas with indicative boundaries are shown on the Planning Maps generally in greenfields areas of the City. The main purposes of stormwater management areas are to minimise the risk of flooding to properties by maintaining natural overland flowpaths and enabling flood management works to be undertaken where necessary. They also help to enhance water quality with filtering mechanisms to remove contaminants such as sediment. In some cases stormwater management areas have been incorporated into Public Open Space Networks to enhance visual amenity and passive
recreation. It is important that these areas are set aside or protected and works are undertaken to service developing areas so as to avoid, remedy or mitigate adverse effects from stormwater run-off.

9.2 RESOURCE MANAGEMENT ISSUES

Issue 9.2.1 The processes of land modification, development and subdivision can cause adverse effects on the environment, such as alteration of natural features and landscape, a deterioration in water quality and destruction or degradation of the amenity values of an area. Land modification, development and subdivision can also adversely affect cultural heritage.

The effects of earthworks associated with land modification and development can alter natural features and landscape which contribute to the amenity values of an area, including a sense of identity and visual enjoyment. Earthworks can also alter natural ground levels affecting neighbouring properties and stormwater flows. Other activities associated with land development can have adverse effects. The destruction of vegetation can affect natural ecosystems, including adverse effects on native flora and the habitats of native fauna. Land modification, including construction and site works can have other adverse effects, including noise, smoke and dust. Sedimentation of streams alters natural stream flows, damaging habitats along streams through flooding, and can adversely affect the supporting capacity of receiving waters.

Issue 9.2.2 New subdivisions can lead to piecemeal development where their design is not compatible with the environmental qualities, character and amenity values for the zone in which they occur, having regard to the characteristics of the site upon which the development takes place.

Amenity values may be affected by the introduction of new development whose character is incompatible with elements of the existing environment such as heritage sites or features. This can destroy or degrade the sense of identity of an area and its aesthetic adherence. Accordingly, new subdivisions and developments should recognise those elements, while being designed in accordance with the environmental results for the zone which applies to the relevant land.

Issue 9.2.3 Land modification, development and subdivision can create or exacerbate natural hazards, potentially causing adverse effects on human life, property and other aspects of the environment.

The sustainable management of natural and physical resources encompasses the avoidance or mitigation of the effects of natural hazards on the environment. While some natural hazards are random in nature, most can be anticipated and measures can be taken to minimise damage and destruction should such an event occur. There is a need to ensure that the intended activity and associated buildings and structures are as safe as possible.

Issue 9.2.4 Inadequate provision of infrastructure and public utility services does not enable the sustainable management of natural and physical resources, including land and structures.

Inadequate and poorly coordinated provision of infrastructure and public utility services can adversely affect the social and economic well-being and health and safety of the community. It can also result in inefficient and wasteful use of natural and physical resources such as land and structures and foreclose future options for the community with regard to land use activities.
9.2.5 Flooding can adversely affect human life and property and cause erosion in vulnerable catchments.

Stormwater management is required to ensure the safe and efficient disposal of stormwater. Management methods include reticulated disposal systems, protection of natural overland flowpaths, stormwater detention areas and clearance of obstructions from waterways. There is now greater recognition of the need to control the volume and rate of stormwater run-off at source. As the amount of impervious surfaces in the city increases through residential intensification and development of greenfields areas, there is a proportional increase in the volume and rate of run-off of stormwater. There is therefore a need to take an integrated approach to stormwater management early in the planning process to minimise risks from flooding.

9.2.6 Poor water quality can affect the life supporting capacity of streams and receiving environments.

Some of the receiving environments of the City including streams, coastal waters and underground aquifers are close to environmental thresholds. Activities on land generate a variety of contaminants which are deposited on impervious surfaces, and washed into the stormwater system when it rains. Many of these persistent contaminants become attached to sediment run-off and affect the biota of receiving environments.

9.3 OBJECTIVES

Objective 9.3.1 To enable land modification, development and subdivision to proceed in a manner that will maintain or enhance the environmental qualities of the environment.

(This objective relates to Issue 9.2.1)

Objective 9.3.2 To ensure new subdivisions have a character which is consistent with the environmental results envisaged for the relevant zone and area, taking into account any heritage sites or features of the land in which development occurs.

(This objective relates to Issue 9.2.2)

Objective 9.3.3 To preserve or protect areas or features of heritage value.

(This objective relates to Issue 9.2.2)

Objective 9.3.4 To ensure that land modification, development and subdivision do not create or exacerbate natural hazards, and that they do not increase the potential for natural hazards to adversely affect the environment.

(This objective relates to Issue 9.2.3)

Objective 9.3.5 To ensure the provision of an adequate standard of infrastructure and public utility services at the time land is modified, developed or subdivided to avoid, remedy or mitigate any adverse effect on the environment, and to ensure that the cost of providing or upgrading services is borne by those undertaking land modification,
development or subdivision to the extent that such works are required to serve, and/or
to the extent that such works are necessitated by the proposed activity.

(This objective relates to Issue 9.2.4)

Objective 9.3.6 To ensure that stormwater management areas are either vested in, or owned by Council, so as to:

(a) minimise risk of flooding to life and property; and

(b) avoid or remedy effects on the water quality of receiving environments.

(This objective relates to Issues 9.2.5 and 9.2.6)

9.4 POLICIES

Policy 9.4.1 Land modification, development and subdivision should occur in a way that:

(a) maintains or enhances amenity values by retaining, as far as practicable, existing
landscape features such as landforms and significant vegetation, and by minimising
the adverse effects of site works and construction, such as by dust, noise, and runoff;

(b) encourages land modification, development and subdivision design which creates
practicable building sites and the efficient use of infrastructure and urban land and a
safe living environment;

(c) is consistent with the environmental results envisaged for the relevant zone and area
as reflected within any structure plan, and whose character is compatible with any
surrounding areas that have already been developed with a similar zoning, and which
creates a high quality living environment;

(d) provides public open space to mitigate the effects of land modification, development
and subdivision, and provide for the recreational needs of the community;

(e) enhances natural processes and features including natural drainage patterns,
protected streams and riparian vegetation to avoid, remedy or mitigate adverse effects
on water quality, through all phases of the water cycle from waterborne pollutants;

(f) provides a high degree of security and safety;

(g) promotes energy and resource efficiency; and

(h) preserves or protects areas and features of heritage value.

(i) recognises the locational limitations of mineral resources and protects the Quarry Zone
and lawfully established mineral extraction sites from the encroachment of sensitive
activities that could create ongoing conflicts.

[AM36]

(This policy relates to Objectives 9.3.1, 9.3.2, 9.3.4, 9.3.5)
Explanation

In undeveloped areas, the character of the environment is created by existing landforms such as ridges, valleys and other landscape features including stands of bush, mature trees and streams. Much of the undeveloped areas of the City identified by future development zones have undulating to rolling landscapes. It is intended that natural landforms should be protected as much as possible, to retain the visual character and amenity values. Minimisation of earthworks should also limit adverse effects of erosion and sedimentation, while enabling the creation of practicable building sites.

Urban design including efficient transportation linkages and site layout can reduce the demand for energy and other resources such as land and infrastructure.

Most urban areas of the city drain to receiving waters which have been identified in the Regional Policy Statement as being at risk or susceptible to degradation from sedimentation and urban runoff. Water quality can be improved through treatment in settling ponds and retention of riparian vegetation.

The effects of transmission lines for electricity need to be controlled, particularly in new urban areas, to minimise risks of electrocution, to provide adequate access for maintenance, to enhance amenity values, and to limit possible additional adverse effects from electromagnetic fields. Until there is more information as to whether or not there are possible additional adverse health effects from extremely low frequency (ELF) magnetic fields, it is preferred to take a cautious approach. However, it is acknowledged that for most people, their principal sources of exposure to ELF electric and magnetic fields are electrical appliances and house wiring.

Land modification can have significant impacts on natural streams by way of earthworks and channelisation of stormwater. To minimise such effects, natural streams of merit have been identified as requiring to be retained as open waterways, with controls placed on the removal of riparian vegetation.

This policy is also designed to ensure that the subdivision of sites otherwise suitable for accommodation activities are designed and located so as to avoid significant adverse effects on occupants from lawfully operating mineral extraction activities in the vicinity, to the extent that such effects may pressure extraction activities to unreasonably alter operating practices or even to close entirely. Each case will be evaluated on an individual basis, and will include consideration of the likely nature and level of effects generated by a mineral extraction activity, and any mitigation measures proposed, including any by the relevant mineral extraction activity. (Refer also to Policy 17.8.4.2 – Special Areas and Activities).

[AM36]

Methods:

- development and performance standards (district rules)
- engineering performance standards (district rules)
- resource consent procedures (district rules)
- catchment management plans
- public open space standards and reserves contribution (district rules)
- stormwater quality management plans
- promotion of innovative engineering design and construction techniques and solutions (such as ‘green engineering’)
- streetscaping and street trees
• protection of identified stream systems
• mitigation measures to address the adverse effects of land modification, development and subdivision
• density controls
• controls on site location
• matters for control and discretion and assessment criteria
• identification of mineral extraction buffer area

Policy 9.4.2 To avoid natural hazards where practicable and avoid or mitigate risk to human life, property or other aspects of the environment from natural hazards, including:

(a) earthquakes and tsunami
(b) coastal hillside erosion and instability
(c) volcanic and geothermal activity
(d) landslips, sedimentation and subsidence
(e) drought, wind, flooding and sea level rise
(f) fire

(This policy relates to Objective 9.3.4)

Explanation/Reasons

There are some areas of the City which are considered to be susceptible to erosion and instability such as hillsides and coastal cliffs. The City also has an extensive coastline which is constantly subjected to the effects of wind, rainfall and tides. Subdivision and development in these areas should be managed on a precautionary basis, allowing it to proceed only if it can be demonstrated that the adverse effects from natural hazards are avoided or mitigated.

It is also considered necessary to take a precautionary approach to land modification, development or subdivision in low-lying areas which could be subject to erosion, flooding or inundation from possible sea level rises. The Intergovernmental Panel on Climate Change report 1990 predicted a sea level rise which could result in some low-lying coastal areas becoming susceptible to flooding during severe storms, exceptionally high tides or a combination of these effects.

Methods

• development and performance standards (district rules)
• Engineering Performance Standards (district rules)
• resource consent procedures (district rules), including geotechnical and foundation investigation reports
Policy 9.4.3 Land modification, development and subdivision in stormwater management areas should occur in a way that:

(a) protects the performance of natural overland flowpaths, open watercourses and streams;

(b) protects water quality by the use of filtering mechanisms such as riparian vegetation, stormwater treatment ponds and retention of wetlands;

(c) provides stormwater management in an integrated and cost effective manner.

(This policy relates to Objective 9.3.6)

Explanation/Reasons

Stormwater Management Areas are an essential part of the stormwater management system. It is necessary to restrict development in these areas to ensure their ongoing functionality. Council may purchase such land on an incremental basis over time, or require it to be vested at the time of the subdivision or further development of the land.

Policy 9.4.4 To ensure the provision of coordinated, timely, effective and efficient utility services that:

(a) enable the sustainable management of network utility services by co-ordinating their progression to support subdivision and development on an orderly basis to meet the requirements of the proposed activity on the land;

(b) to ensure that the transport system laid out at the time of the subdivision and/or development:

• supports the planned roading hierarchy and provides an appropriate distinction and interface between the local, secondary and primary components of the transport network;

• provides good internal access between communities and businesses and the facilities and services serving them;

• has the potential to be efficiently and effectively served by passenger transport; and

• provides a safe and convenient movement network for pedestrians and cyclists.

(c) provide a mechanism for the funding of infrastructure and public utility services in a fair and reasonable manner through financial contributions based on the recoupment of Council’s costs generated by the provision of services that subdivision or development, and with a maximum level sufficient to allow the Council flexibility to determine an adequate contribution to infrastructure and public utility services in each case.
(d) require financial contributions for the purpose of stormwater quality on a catchment basis to mitigate effects on the receiving environment.

(e) require financial contributions for the purpose of acquiring and developing public open space areas and esplanade reserves at the time subdivision and development of land occurs.

(f) notwithstanding subsection c, requires the financial obligation of developers and/or subdividers to be generally limited to the extent to which infrastructure, and public utility services are required to avoid, remedy or mitigate the effects that are generated by the proposed subdivision and/or development of the land.

(Refer to Chapter 15, Public Open Space, Rule 15.15).

(This policy relates to Objectives 9.3.1, 9.3.5)

**Explanation/Reasons**

It is necessary to ensure that public utility services are available and at a sufficient standard that will support likely future activities on the land and catchment at the time subdivision and development take place. This means that the provision of public utility services must be coordinated to ensure that unless there are exceptional circumstances, land modification, development and subdivision do not proceed ahead of the ability to provide public utility services, unless the developer or subdivider is prepared to meet the full costs of providing for them.

It is also important that transportation issues are addressed at the time that proposals for the subdivision and development are prepared. The transport network must take into account the need to recognise existing landscape and topography to ensure the efficient movement of traffic between neighbourhoods and community facilities, reduce energy and servicing costs and create a diverse, interesting and attractive urban form that enhances a sense of community wellbeing.

Financial contributions will recognise the different demands made on public utility services by different activities. However, developers and subdividers will not have to fund deficiencies in existing infrastructure which exist irrespective of new development, nor fund works in addition to those that are required to avoid, remedy or mitigate the effects that are generated by the proposed subdivision and/or development of the land.

**Methods:**

- development and performance standards (district rules)
- engineering performance criteria (district rules)
- identification and maintenance of roading hierarchy (district rules)
- resource consent procedures
- Land Information Register
- Administrative systems that define catchments or areas of benefit, the infrastructure required to serve them, and the financial contributions applicable to each activity
9.5 IMPLEMENTATION

9.5.1 Regulatory Methods

9.5.1.1 Rules — Management Framework for Land Modification, Development and Subdivision in the City

The rules in this Plan take the following approaches to subdivision, land modification and development:

- To manage subdivision on a consistent basis, to address the actual or potential adverse effects on the environment, no matter what type of subdivision;
- To incorporate flexibility into procedures to provide opportunities for the wide range of subdivision and land development possibilities; and
- To provide procedural linkages between subdivision and land development to avoid duplication, but to recognise that they are not necessarily simultaneous activities.

To this end, land development and subdivision are managed under the following general framework:

(a) Simple subdivisions of a minor nature, with no effects on public utility services, are managed as controlled activities.

(b) For other subdivision/land development proposals, two principal options are available:

   (i) To proceed on a staged basis, in which consent to the land development as a land use is first obtained as a restricted discretionary activity (or as otherwise specified in Chapter 17 — Flat Bush Development Area), with each stage of development proceeding by way of a subdivision consent as a controlled activity (if the subdivision is in general accordance with the scope and terms of the original land use consent); or

   [AM50]

   (ii) To proceed on a concurrent basis, in which subdivision and the associated land development works occur under a single approval process (subdivision consent).

Subdivision and land development proceeding on a concurrent basis is managed as a controlled activity, if the proposal meets all the relevant standards and terms, including the provision of full documentation in terms of design and engineering works (including full engineering design drawings). If such standards and terms cannot be met, then it is managed as a restricted discretionary activity (or as otherwise specified in Chapter 17 — Flat Bush Development Area). If a proposed subdivision occurring on a staged basis significantly varies from the scope and terms of the original land use consent, then it is also managed as a restricted discretionary activity, except in the case of subdivision in the Flat Bush development Area where Rule 17.10.10.2 shall apply.

[AM50]

The option to proceed on a staged or concurrent basis lies with the applicant. A staged approach may be undertaken whether or not the proposal itself is taken on a staged basis. For example, a staged basis may be appropriate in circumstances in which the detailed design of a subdivision proposal will proceed only once consent to the overall proposal is obtained.
The rules for other types of land modification, development and subdivision are provided under the following management framework.

Permitted Activities

A generic approach is taken in the Plan to earthworks involved with land modification, preparation of building platforms and site works, excluding those necessary for subdivision, whereby earthworks involving up to 200m³ are permitted in any zone except in defined circumstances. The exceptions are intended to protect habitats of wildlife, prevent siltation of watercourses and avoid or mitigate the adverse effects in areas with natural hazards such as those which are susceptible to sea level rise or are on steeply sloping land. Earthworks involving more than 200m³ may be undertaken if authorised by a resource consent (subdivision or land use), or if associated with a permitted farming activity or permitted network utility service or production forestry.

To ensure that subdivision proposals comply with the relevant controls in the District Plan, including site size, servicing and access, and to provide a process for assessing financial contributions where these are applicable, no subdivision is a permitted activity.

Controlled Activities

The list of controlled activities includes minor subdivision proposals, such as boundary adjustments, amendments of cross-lease, unit titles and company lease plans, creation of rights-of-way, and conversion of cross-leases into freehold titles. Subdivision or development complying with the relevant minimum standards are also controlled activities, as are subdivision proposals undertaken in accordance with the terms of a land use consent for a land development.

Restricted Discretionary Activities

Land modification, development or subdivision which is not a permitted, controlled or non-complying activity is a restricted discretionary activity in all zones. This includes land development proposals for staged developments or for development requiring more than 200m³ of earthworks or that entails site development that require the provision of public utility services. This provides a process for managing large-scale and/or staged developments, such as new residential areas in ‘greenfields’ situations. However, consent for earthworks involving more than 200m³ will not be required if authorised by a resource consent (subdivision or land use), or if associated with a permitted farming activity or permitted network utility service or production forestry.

Coastal protection works are also restricted discretionary activities in accordance with the regional coastal plan.

The removal of vegetation or the carrying out of earthworks in areas of riparian vegetation identified in the District Plan is also a restricted discretionary activity, to help maintain natural systems of enhancing water quality. The sections of streams have been identified indicatively and are subject to site location in relation to existing boundaries at the time of the subdivision/land development. To protect land and buildings from inundation caused by sea level rise, any building with a site level of less than 0.5m above the forecast sea level rise for the design life of the building is a restricted discretionary activity in areas close to the sea or harbours. Furthermore, development in flood-prone areas is also a restricted discretionary activity to enable the potential effects to be fully assessed and to decline consent if the adverse effects cannot be mitigated.

Mineral extraction activities not involving blasting are a restricted discretionary activity in the Business 5 and Business 6 zones. They are also subject to controls on intensity of use including hours of operation and duration.
Subdivision is a restricted discretionary activity in the Quarry Zone to enable the efficient utilisation of the mineral resource and the land once the resource has been exhausted. In order to ensure the extraction of the remaining mineral resource is not adversely affected by any proposed subdivision, Council will have regard to whether or not the subdivision will compromise the efficient utilisation of the land or adjoining land for mineral extraction purposes.

9.5.1.2 Rules — Development and Performance Standards

Development standards are rules which apply to land modification, development and subdivision to ensure that amenity values and the quality of the natural environment in the City are maintained and enhanced. Performance standards relate to such matters as sedimentation, stability, noise, lighting, glare and dust, primarily to avoid or mitigate any adverse effects on amenity values.

Two sets of standards are provided. The first include standards for land modification which are permitted activities. The second are those standards and terms for controlled and restricted discretionary activities. For controlled activities, non-compliance with these standards makes a proposal a restricted discretionary activity.

9.5.1.3 Rules — Stormwater Management Areas

In order to address stormwater treatment in an integrated manner, a number of Stormwater Management Areas with indicative boundaries are shown on the Planning Maps. These relate to land that either adjoins streams and open watercourses, or indicates the likely locations of stormwater treatment ponds, watercourses or detention areas which are required to address the adverse effects of stormwater run-off. Should hydrological and other information supplied with an application for resource consent for subdivision and development demonstrate that such land is not required as part of the network of Stormwater Management Areas, the underlying zone shall apply from the date the resource consent is granted. Within the Flat Bush Development Area, such land shall be subject to the Public Open Space 6 overlying area rules. Council may accept alternative locations for stormwater management facilities, provided that the stormwater management objectives can still be met.

[AM50]

In order to protect the performance of the stormwater management system in private ownership, most development in Stormwater Management Areas including the placement of any buildings, gates or fences or other structures requires consent for a Restricted Discretionary Activity.

Once the final boundaries of Stormwater Management Areas have been determined upon subdivision and development, the developer shall vest such land in Council for drainage reserves purposes and this shall be part of the financial contribution levied for services, in accordance with Rule 9.14 Financial Contributions and Bonds. Council may purchase land ahead of subdivision and development for stormwater treatment purposes on a case by case basis.

In general, the land and works required to treat stormwater or avoid flooding effects shall be paid for from a combination of development levies and rates from properties benefiting from the works. Landowners will be compensated for the land required for Stormwater Management Areas where its value exceeds the financial contribution for stormwater management works that relate to their property. Where developers request that the location of stormwater management facilities be changed from the indicative position shown on the Planning Maps and this results in increased implementation costs, the developer may be required to meet any additional costs.

Once such land has been vested in, or purchased by Council, it shall be subject to the Rules applying to the POS 5 zone until such time as it is rezoned.
9.5.2 Non-regulatory Methods

9.5.2.1 Advocacy

• Explanatory material and advice from Council officers.

9.5.2.2 Promotion

• To work in conjunction with the Auckland Regional Council in developing a strategy which will avoid or mitigate the adverse effects of natural hazards (including the effects of earthquakes, volcanic activity, tsunamis and sea level rise), and to increase public awareness of the issues.

• To promote innovative engineering design and construction techniques and solutions, such as ‘green engineering’.

9.5.2.3 Other Methods

• To prepare, where necessary, catchment management plans or stormwater quality management plans for addressing water quality and other issues.

• To maintain a Land Information Register within the Council to provide known information on factors (such as natural hazards, heritage and archaeological sites) that should be taken into account in the land modification, development and subdivision process, and to use this information in the Land Information and Property Information Memoranda system under the Local Government Official Information and Meetings Act 1987 and Building Act 1991 respectively.

• To undertake streetscaping and the planting of street trees.

• To develop and maintain infrastructure to protect or enhance the environmental quality of the City and to address any potential adverse effects through land modification, development and subdivision.

• To consult with tangata whenua in regard to proposals that affect or are likely to affect sites of significance to them.

9.6 ANTICIPATED ENVIRONMENTAL RESULTS

The anticipated environmental results for land modification, development and subdivision in the City are:

• A safe and healthy environment;

• High quality of visual environment;

• Water of a suitable quality to protect its life-supporting capacity;

• Areas of heritage value preserved;

• A City form that promotes energy efficiency.

The anticipated environmental results for land use activities in stormwater management areas in the City are:
• Functionality of overland flowpaths, natural streams and watercourses maintained and enhanced;

• Water of suitable quality to protect its life supporting capacity;

• High quality of visual environment.

9.7 PROCEDURES FOR MONITORING

9.7.1 In order to assess the suitability and effectiveness of the objectives, policies and methods in achieving the anticipated environmental results contained within this Chapter, the Council will develop and maintain a monitoring programme (see Chapter 1, section 1.7.3) which may include the following monitoring procedures:

• Monitoring resource consents for land modification, development and subdivision and land use activities such as buildings, fences, gates and other structures and earthworks; including the number of applications granted consent, compliance with consent conditions, and the effectiveness of those conditions.

• Monitoring complaints and enforcement actions regarding the nuisance aspects of land modification, development and subdivision and land use activities described above.

• Maintaining a city-wide, “Land Information Register” of information on properties that are susceptible to hazards in flood management areas.

• Monitoring of overland flowpaths, natural watercourses and streams whenever considered necessary to ensure that they remain unobstructed.

• Monitoring of areas of coast and identified natural streams susceptible to erosion whenever considered necessary.

• Recording the amount and type of financial contributions being collected and how contributions are used.

• Regular audits of completed subdivision and development works.

• Undertaking surveys of residents to ascertain their satisfaction with the level of amenity and the environmental quality being achieved.

• Monitoring of contaminants in stormwater treatment ponds and receiving environments.

• Monitoring of flood events.

9.7.2 Funds collected from such financial contributions will be set aside in separate accounts to be used for the purposes for which they were acquired.

Council shall maintain, separate and keep transparent financial records for all financial contributions paid in respect to the relevant catchments. Details of financial contributions paid and the purpose for which they were paid shall be provided with Land Information Memorandum (LIM) and Project Information Memorandum (PIM) requests.

Monitoring of conditions for resource consents to ensure that financial contributions are directly related to the effects generated by the proposed subdivision or development of the land.
9.8 RULES — ACTIVITIES

9.8.1 Activities — City-wide

Rule 9.8.1.1 All permitted activities listed in Rule 9.8.2 shall comply with the standards specified under Rule 9.9 General Development and Performance Standards and Council’s Engineering Performance Standards.

Rule 9.8.1.2 All controlled activities listed in Rule 9.8.2 shall comply with Rule 9.9 General Development and Performance Standards and Council’s Engineering Performance Standards. Council shall exercise control over those matters specified in Rule 9.10, and applications will be assessed against the assessment criteria for controlled activities in Rule 9.12.

Rule 9.8.1.3 All restricted discretionary activities listed in Rule 9.8.2 shall comply with Rule 9.9 General Development and Performance Standards and Council’s Engineering Performance Standards, and will be assessed against the matters to which discretion is restricted under Rule 9.11.

Rule 9.8.1.4 Unless special circumstances exist, or otherwise expressly stated in Chapter 17 — Flat Bush Development Area, applications for resource consent under Rule 9.8 as controlled or restricted discretionary activities shall not be notified, and the written approval of affected persons need not be obtained.

Rule 9.8.1.5 All subdivision shall comply with the subdivision rules in the relevant zone, and the relevant assessment criteria shall also apply. In addition, subdivision shall also comply with the relevant Structure Plans in Chapter 16 — Future Development Areas and Chapter 17 — Flat Bush Development Area.

Rule 9.8.1.6 For notification procedures under the Resource Management Act 1991 see Rules 5.2.2, 5.2.3, 5.2.4 and 5.3.3.1.

Rule 9.8.1.7 Before undertaking any land modification, development or subdivision, including in coastal locations, there is a need to refer to relevant regional plans and the Department of Conservation’s Management Strategy Maps, Vol. II.

Rule 9.8.1.8 Before undertaking any land modification, development or subdivision, especially in coastal locations, there is a need to refer to Regional Planning Documents and/or the Auckland Regional Council, including the Objectives, Policies and Methods in the Auckland Regional Plan — Sediment Control November 2001.

Rule 9.8.1.9 The matters over which Council has reserved control are specified under Rule 9.10.
Rule 9.8.1.10  The matters over which Council has restricted the exercise of its discretion are specified under Rule 9.11.

9.8.2  Activity Table

In the table below the terms used have the following meaning:

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>CITY-WIDE EXCEPT FOR EXPLOSIVES ZONE AND WHITFORD LANDFILL ZONES</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Land Modification or Development involving no more than a cumulative total of 200m³ of earthworks in respect of any site except where earthworks are located:</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) within 5 metres (or two times the height of the cliff face, whichever is the greater) from the top of any coastal cliff face, where the maximum limit shall be 5m³ as a permitted activity;</td>
<td></td>
</tr>
<tr>
<td>(b) within 20 metres of the centreline of any natural streams identified in the Planning Maps in rural zones or within 10 metres of the centreline of such streams in all other zones;</td>
<td></td>
</tr>
<tr>
<td>(c) within the 1% Annual Exceedence Probability Floodplain on Council records; or</td>
<td></td>
</tr>
<tr>
<td>(d) on land with a slope exceeding 1:4 where the maximum limit as a permitted activity shall be 50m³ unless authorised by a building consent (and under 200m³).</td>
<td></td>
</tr>
<tr>
<td>(e) within the Archaeological Warning Area shown on the Wiri North Structure Plan (Figure 16.13) [AM162]</td>
<td></td>
</tr>
<tr>
<td>Provided that any volume of earthworks is permitted if it is associated with:</td>
<td></td>
</tr>
<tr>
<td>• A farming activity which has permitted activity status in the rural zones (including the Whitford Rural Area) of the District Plan; or</td>
<td></td>
</tr>
<tr>
<td>• A cleanfill activity which has permitted activity status in the business zones of the District Plan; or</td>
<td></td>
</tr>
<tr>
<td>• Production forestry in the Rural 1 zone; or</td>
<td></td>
</tr>
<tr>
<td>• Network Utility Services in accordance with Rule 7.8.2.1 Permitted Activities, Chapter 7 — Network Utility Services; or</td>
<td></td>
</tr>
<tr>
<td>• Roadworks in accordance with Performance Standards 8.11.9 Chapter 8 — Transportation; or</td>
<td></td>
</tr>
<tr>
<td>• Is authorised by a Subdivision or land use consent. [AM99]</td>
<td></td>
</tr>
</tbody>
</table>

| Earthworks involving no more than a cumulative total of 200m³ in respect of any site located within a coastal protection yard where one is required in the relevant zone. | P |

<table>
<thead>
<tr>
<th>Land modification, development or subdivision within the Wiri North Structure Plan Area (Figure 16.13) complying with Rule 9.9.1.2(c) and Rule 9.9.3.5 [AM162]</th>
<th>R(D) [AM162]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land modification, development or subdivision within the Wiri North Structure Plan Area (Figure 16.13) not complying with Rules 9.9.1.2(c) and/or 9.9.3.5. [AM162]</td>
<td>N/C [AM162]</td>
</tr>
<tr>
<td>Subdivision in the following circumstances which complies with Rules 9.9.1 and 9.9.2:</td>
<td>C</td>
</tr>
<tr>
<td>(a) Boundary Adjustments;</td>
<td></td>
</tr>
<tr>
<td>(b) Amendments to cross-lease, unit titles and company lease plans for the purpose of showing additions and alterations to buildings, accessory buildings and areas for exclusive use by an owner or owners;</td>
<td></td>
</tr>
<tr>
<td>(c) The creation of rights-of-way, provided that all sites are in the same zone;</td>
<td></td>
</tr>
</tbody>
</table>
### ACTIVITY

<table>
<thead>
<tr>
<th>Activity</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>(d) The conversion of cross-lease titles into fee simple titles where all relevant development and performance standards of this Plan can be complied with;</td>
<td>C</td>
</tr>
<tr>
<td>(e) Subdivision of existing buildings, and where all relevant development and performance standards of this Plan can be complied with, excluding the subdivision of land with frontage or access onto any Primary Road.</td>
<td>C</td>
</tr>
<tr>
<td>Subdivision and land modification undertaken in accordance with land use consent for development which requires the provision of public utility services which has been approved as a Restricted Discretionary Activity and which complies with the standards under Rule 9.9.1.</td>
<td>C</td>
</tr>
<tr>
<td>Subdivision to create a site with a maximum area of 20m² to accommodate a network utility service.</td>
<td>C</td>
</tr>
<tr>
<td>Street planting, provided as part of a subdivision and development which complies with Rules 9.9.1 and 9.9.2.</td>
<td>C</td>
</tr>
<tr>
<td>Any subdivision that does not meet the Development and Performance Standards of Rules 9.9.1 and 9.9.2. [AM20]</td>
<td>(R)D</td>
</tr>
<tr>
<td>Any Subdivision that does not meet the Development and Performance Standards of 9.9.1 and 9.9.2 and Rule 12.15.4 [AM20]</td>
<td>NC</td>
</tr>
<tr>
<td>Any subdivision of land with frontage or access onto the Primary Road zone identified in the Planning Maps.</td>
<td>(R)D</td>
</tr>
<tr>
<td>Land Modification or Development (including that which involves earthworks) not otherwise permitted in this table.</td>
<td>(R)D</td>
</tr>
<tr>
<td>Land Modification or Development that does not meet the development and performance standards of Rules 9.9.1 and 9.9.2.</td>
<td>(R)D</td>
</tr>
<tr>
<td>Development on areas subject to a Financial Contribution for existing or proposed public utility services provided at Council’s expense which serve or are intended to serve the development (refer Part 9.14).</td>
<td>(R)D</td>
</tr>
<tr>
<td>Development (as defined in Chapter 18 of this Plan) which: (i) requires the provision of public utility services; or (ii) constitutes a staged development in terms of that definition, provided that Development which has been authorised by a subdivision or land use consent is a permitted activity.</td>
<td>(R)D</td>
</tr>
</tbody>
</table>

### ACTIVITY

| Activity                                                                                                                                                                                                 | Category |
| Subdivision within the Mineral Extraction Buffer area shown on the planning maps. [AM36]                                                                                                                    | (R)D     |

### ACTIVITY

| Activity                                                                                                                                                                                                 | Category |
| Coastal Protection works                                                                                                                                                                | (R)D     |
| On a site that is not an urban environment allotment, removal of more than 5% of riparian vegetation within a site adjoining natural streams identified in the Planning Maps. [AM173] | (R)D     |
9.8.3 Activities — Stormwater Management Areas

Rule 9.8.3.1 No activities shall be undertaken on land in Stormwater Management Areas that will adversely affect their present or future functionality for stormwater management.

Rule 9.8.3.2 Land in Stormwater Management Areas has been given an underlying zoning which will take effect from the date a resource consent application for a subdivision or development is approved, provided that hydrological and other evidence submitted with the application shows that the subject land is no longer required for the purposes of stormwater management.

In the absence of a zone shown on the facing page, all Stormwater Management Areas within the Flat Bush Development Area shall assume the zoning of their adjoining zone. Where the Stormwater Management Area has more than one adjoining zone, the mid point of the stream or gully shall be taken as the boundary between the zones.

Where land is no longer required as a Stormwater Management Area within the Flat Bush Development Area as determined by this Rule, the land shall be administered in accordance with the provisions of the Public Open Space 6 Overlying Area (Refer Rule 17.10.11.9).

[AM50]

Rule 9.8.3.3 All such land vested in Council for drainage purposes upon subdivision and development after notification of this Plan or purchase by Council for these purposes, shall be administered in accordance with the rules for the Public Open Space 5 zone.

Rule 9.8.3.4 The following table assesses activities on the basis of their potential for adverse effects on the functionality of Stormwater Management Areas city-wide, where such activities comply with an approved catchment management plan or discharge consent issued by the Auckland Regional Council.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>CITY — WIDE EXCEPT FOR EXPLOSIVES ZONE AND WHITFORD LANDFILL ZONES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscaping features within roads or proposed roads provided as part of a subdivision and development except in the Beachlands Village Business Centre Zone. [AM163]</td>
<td>(R)D</td>
</tr>
<tr>
<td>Mineral Extraction Activities not involving blasting except in the Whitford Landfill zone. (See 10.2.9.2 Rule — Activities Section 10.2 — Waste Management and Chapter 10.1 — Hazardous Facilities and Substances and Waste Management).</td>
<td>(R)D</td>
</tr>
<tr>
<td>Subdivision of land within the Quarry Zone. (Refer to Chapter 17.8 — Mineral Extraction Activities).</td>
<td>(R)D</td>
</tr>
<tr>
<td>Subdivision that would result in any part of a residential building platform being sited directly beneath overhead electric lines with a voltage at or above 110kV.</td>
<td>(R)D</td>
</tr>
<tr>
<td>Subdivision to create a site with a maximum area of 100m² to accommodate a network utility service.</td>
<td>(R)D</td>
</tr>
<tr>
<td>Siting of any part of a residential building directly beneath overhead electric lines with a voltage at or above 110kV.</td>
<td>(R)D</td>
</tr>
<tr>
<td>Network Utility Services</td>
<td>Refer to Chapter 7 Network Utility Services</td>
</tr>
</tbody>
</table>
**Notes:**

(i) The above activity table relates to activities in Stormwater Management Areas and should be read in conjunction with other District Plan provisions applying to that activity. In classifying any application for consent, the most onerous classification shall apply, including the rules relating to the underlying zoning where relevant.

(ii) Activities in Stormwater Management Areas including stormwater works may require the consent of the Auckland Regional council if they are not covered by an approved comprehensive catchment management plan or discharge consent.

(iii) Where all facilities are underground and where there is only on electrical control panel with dimensions not exceeding 2 metres wide by 2 metres in height and 0.6 metres in depth above the ground, or for pump stations with flows less than 25L per second average flow.

**Explanation/Reasons**

These rules provide an overall management framework for land modification, development and subdivision to ensure that the adverse effects arising from such activities can be sufficiently addressed to avoid, remedy or mitigate any potential adverse impacts.

Minor earthworks which have little or no adverse effects are permitted as-of right; a threshold of 200m³ (with certain exceptions) has been established, on the basis that earthworks above this limit have the potential to create adverse effects on the environment. Earthworks above that limit are permitted as of right if they are associated with works for an activity that has been granted a resource consent, including subdivision or land use, or is otherwise permitted by a rule in this Plan.

All earthworks are required to comply with the performance standards contained within Rule 9.9 and must also be in accordance with the Regional Plan: Sediment Control.

Minor types of subdivision that have little or negligible effects have been classified as controlled activities. Consent to such applications shall be granted, but the consent procedure provides a process for determining appropriate conditions to address any effects and to provide a mechanism for imposing financial contributions for the provision of public services and utilities.

In addition, larger scale subdivisions are also controlled activities, provided they meet all the standards specified under Rule 9.9, including the provision of detailed engineering plans and information.
Subdivisions that cannot meet such standards or do not provide detailed information and plans are managed as restricted discretionary activities so that consent can be declined if there is uncertainty about the effects and there is potential for significant adverse environmental impacts to occur.

Large-scale earthworks or staged developments or the development of sites requiring public services is also a restricted discretionary activity for similar reasons if consent to a subdivision or other land use consent has not been previously granted. This provides a means for development to occur on a two staged basis, with land use consent able to be granted for a broad development, with each subsequent stage of development able to be granted subdivision consent as a controlled activity if the proposal is in accordance with the scope and terms of the overall land use consent.

Other activities listed as restricted discretionary activities are those with the potential to create significant adverse environmental effects. These include coastal protection works and the removal of more than 5% of riparian vegetation. It also includes landscaping features, which can have potential adverse effects on visibility at intersections or obstruction of sightlines.

It is expected that subdivision of land in the Quarry Zone will generally be delayed until the completion of the quarrying and rehabilitation, and the subsequent rezoning of the land has occurred. However, boundary adjustments and other subdivision changes during the term of the quarrying activity may be appropriate, provided such changes do not compromise the primary quarrying activity intended to occur within the zone, the long term development of the land or the use of adjacent land.

9.9 RULES — DEVELOPMENT AND PERFORMANCE STANDARDS

9.9.1 General Development and Performance Standards

Rule 9.9.1.1 Application

All permitted activities for land modification and development shall comply with the requirements specified under this Rule. All controlled and restricted discretionary activities shall also comply with the relevant terms and standards for the particular activity specified under this Rule.

Except as otherwise stated in Chapter 17 — Flat Bush Development Area, any application for consent for subdivision as a controlled activity which cannot meet the Development and Performance Standards set out in Rule 9.9 shall be considered as a restricted discretionary activity in respect to the matter(s) to which it does not comply. In doing so, the Council shall have regard to the extent and effect of any non-compliance and the presence of exceptional factors such as topography and natural hazards, and features to be protected which would make compliance impractical.

[AM50]

Rule 9.9.1.2 Site Preparation

(a) No person shall commence any site works or the removal of vegetation unless such activities are expressly permitted in this plan, or a resource consent has been obtained except for investigatory work essential to fulfilling the requirements of Rules 5.13 or 9.13 or both, provided that such work does not have any adverse effects on any scheduled trees or other heritage resources.

(b) Sites shall have a finished building site level no less than 0.5 metres above the following Reduced Levels (L & S Datum):

- 3.39m in catchments draining to the Manukau Harbour; or
2.90m in catchments draining to the Waitemata Harbour or Hauraki Gulf.

(c) Finished ground level for potential building sites areas shall meet the following standards relating to freeboard regarding 1% Annual Exceedence Probability levels:

- Sites adjoining natural open stream channels: 1000mm freeboard
- Sites adjoining formed open stream channels: 800mm freeboard
- Sites adjoining formed (grassed) overland flowpaths: 500mm freeboard
- Sites adjoining minor overland flowpaths fully formed in permanent materials (such as roadways and paths): 150mm freeboard

For the purpose of this rule minor overland flowpaths are those subject to flows of up to 200 litres a second.

(d) All gully traps are to be located at a level which avoids direct entry of stormwater. Where sites adjoin minor overland flowpaths fully formed in permanent materials (such as driveways and paths), open watercourses and streams, gully traps shall have a minimum freeboard as specified in (c) above.

Rule 9.9.1.3 Dust

Activities shall not create a dust, fume or smoke nuisance. A dust, fume or smoke nuisance will be deemed to have occurred if:

(a) There is visible evidence of suspended solids/particulate matter in the air beyond the site boundary; and/or

(b) There is visible evidence of deposited particulate matter traceable from a subdivision or land modification activity, settling on the ground, building or structure on an adjoining site or waterbody.

Rule 9.9.1.4 Air Emissions

No activity shall discharge fumes, smoke or gases to a level that is likely to cause a nuisance or affect the amenity values of the area.

Rule 9.9.1.5 Odour

Activities shall not create an objectionable or noxious odour which is detectable at the boundary of a neighbouring property.

Rule 9.9.1.6 Heritage

Chapter 6 Heritage, applies.

[Note: Works associated with land modification, development or subdivision activities can destroy or compromise items of heritage or archaeological value].
Rule 9.9.1.7 Sediment Control

(a) Every person has a duty to avoid, remedy or mitigate the discharge of sediment from any site where land modification, development or subdivision activity is occurring or where the site is left in a state which has the potential for sediment discharge which gives rise to these effects, listed in (b) below, such action shall be taken as may be necessary by the owner and/or occupier to remedy the situation to the Council's satisfaction. One or more sediment retention or filtering mechanisms may be necessary to ensure that this standard can be met.

(b) Sediment originating from, or within, the site of a land disturbance activity shall be managed in such a way to ensure that after reasonable mixing it does not give rise to any of the following effects to the receiving waters:

- the production of any conspicuous scums or foams or floatable suspended materials;
- any conspicuous change in the colour or visual clarity;
- any omission of objectionable odour;
- the rendering of fresh water unsuitable for farm animals;
- any significant adverse effect on aquatic life.

In the event of a sediment discharge occurring, or in the reasonable opinion of a delegated Council officer, the site is left in a state which has the potential for sediment discharge which gives rise to these effects, such action shall be taken as may be necessary by the owner and/or occupier to remedy the situation to the Council's satisfaction. One or more sediment retention or filtering mechanisms may be necessary to ensure that this standard can be met.

(c) Any sediment retention measure installed shall be cleaned out before it is 50% full of sediment, and this removed material shall be deposited in a manner which ensures that it cannot wash to any water bodies or coastal waters.

(d) All measures to mitigate against the discharge of sediment from a site shall:

(i) be implemented prior to the commencement of any land-modification activity;
(ii) be retained until the land-disturbing activity has been completed, and/or the potential for sediment discharge has ceased.

(e) All bare earthworked surfaces shall be revegetated as soon as practicable. Hydroseeding, grassing or other means of revegetation shall be carried out on a progressive basis as soon as the earthworks have been completed on a particular part of the site.

(f) All clearance of riparian vegetation shall be undertaken in such a manner as to prevent debris entering any watercourse. Where the felling of trees into a watercourse cannot be avoided, the trees shall be hauled out full length before delimbing or heading. Note: Schedules 6B and 6C in Chapter 6, Heritage, may apply.

(g) Vehicle movements to and from the site shall not result in any material being deposited on any public road.
Rule 9.9.1.8 Runoff Control

(a) Earthworks, roading, tracking and trenching activities shall be isolated from the path of any runoff from surrounding land to prevent it from washing across the site and eroding sediment from the bared earth.

(b) Any measures used to control the path of any runoff from surrounding land shall:

- be capable of containing the flow from the critical 20 year return period rainfall event;
- be constructed on a grade to avoid erosion. For bare unlined surfaces this grade shall be no greater than 1%;
- have an erosion-proof outfall;
- protect all overland flowpaths, including natural and formed.

(c) On completion of the land-disturbing activity, the site shall be secured to prevent the generation and discharge of any further sediment from the activity to any receiving waters.

Rule 9.9.1.9 Land Stability

All earthworks shall be undertaken in a manner which ensures that the land within the site and on adjoining properties remains stable at all times and does not compromise future proposed building and roading uses for the zone within which it is located.

Rule 9.9.1.10 Services

Earthworks shall be undertaken in a manner which does not cause malfunction or result in damage to utility services, or change the cover over utility services so as to create the potential for damage or malfunction.

Rule 9.9.1.11 Flooding

Earthworks shall result in final levels which do not affect overland flowpaths or increase flood hazards.

Rule 9.9.1.12 Other Standards

The following relevant performance standards in other parts of this Plan:

(a) Artificial Lighting — Rules in section 5.18.2 Chapter 5, General Procedures and Rules shall apply.

(b) Noise and Vibration — Refer to relevant zone standards and General Procedures and Rules — Chapter 5.

(c) Clean Fills — The relevant rules in Chapters 12, 13 and 14 shall apply.

(d) Signs — The rules in General Procedures Chapter 5 shall apply.

(e) Hazardous Facilities and Substances — The rules in Chapter 10.1 shall apply.
(f) Public Open Space and Reserves Contribution, Esplanade Reserves and Esplanade Strips — The rules in Chapter 15 Public Open Space Rule 15.15 shall apply.

(g) Subdivision, Land Modification & Development in the Flat Bush Structure Plan — The rules in Chapter 17 shall apply.

9.9.2 Standards and Terms Applying to Controlled Activities

The following standards and terms shall apply to controlled activities.

Rule 9.9.2.1 Engineering Design Information

(a) The design and construction of subdivisions and land development shall comply with the Engineering Performance Standards set out in Appendix 1 to this chapter.

[Note: One means of compliance with the Engineering Performance Standards is to use the Manukau City Council Engineering Quality Standards and the MANARC Standards. Other means of compliance may be proposed. The means of compliance used to comply with the Engineering Performance Standards will be evaluated as part of the consent assessment process.]

(b) Applications for subdivision and/or land development proposals shall include full engineering design plans and calculations to accurately define the work to be undertaken in accordance with the Engineering Performance Standards under Appendix 1 of this Chapter.

Rule 9.9.2.2 Design and Layout of Subdivision

All subdivision proposals shall meet the following standards:

(a) The minimum dimensions and areas of each lot shall comply with the requirements of the relevant zone.

(b) The protection of all trees included in Schedule 6C Chapter 6 — Heritage.

(c) The subdivision layout for greenfield developments shall be designed to allow for the passage of stormwater via overland flowpaths without consequent damage, with flows over 1m³/s to be contained within publicly-owned lands or formed on jointly-owned access lots for their entire length.

Rule 9.9.2.3 Subdivision of Land with Two Zonings

When any land which has two zonings is subdivided the subdivision must follow the zone boundary and the lots created must comply with the provisions of the particular zones in which the lots are located.

Rule 9.9.2.4 Minimum Site Area of Allotments

(a) Residential and all Business Zones (including the Beachlands Village Business Centre Zone)
Where a subdivision creates a site or defined area around an existing building, no minimum area for that site or defined area is required provided that all relevant development and performance standards (including parking and manoeuvring standards and the requirements of Section 116A of the Building Act 2004) are met in relation to the proposed boundaries around that building, unless otherwise authorised by a resource consent.

(b) **Additional Standards for Residential Zones**

In all cases, the density requirements for the zone in which the land subject to the application is situated shall not be exceeded.

**Rule 9.9.2.5 Cross-leases, Company Leases and Unit Titles**

Where a site is subject to an application for subdivision consent by way of cross-lease, company lease or unit title, the following rules shall also apply:

(a) All existing buildings to which the subdivision relates must have:

   • existing use rights; or
   
   • been erected in accordance with a resource consent or certificate of compliance and a building consent has been issued; or
   
   • comply with the rules of the District Plan.

(b) All areas to be set aside for the exclusive use of each building or unit must be shown on the survey plan, in addition to any areas to be used for common access or parking or such other purpose.

(c) In all staged cross-lease subdivisions, provision shall be made for servicing the building or buildings subject to the cross-lease application and all possible future buildings on the site. Compliance with Council’s Engineering Quality Standards will be accepted as one means of meeting this requirement.

(d) Where a subdivision consent for cross-lease purposes has been approved, no alterations shall be made to the position of the land covenant boundary lines delineated on the survey plan, or otherwise defined, without a further subdivision consent.

(e) A design report shall be submitted detailing the effects of the proposed subdivision on the existing buildings, pursuant to Section 116A of the Building Act 2004.

(f) If alterations to buildings are necessary to fulfil the requirements of the Building Act 2004 or conditions of subdivision consent, they shall be undertaken in terms of a building consent and completed prior to the issue of a certificate under Section 224 of the Act. Such alterations shall comply with the relevant development standards in the particular zone.

**Rule 9.9.2.6 Exceptions to Site Standards for Network Utility Services**

The subdivisional requirements relating to a particular zone shall not apply to any sites created for the purposes of a network utility service as defined in Chapter 18 Definitions.
Rule 9.9.2.7 Vesting of Land for Stormwater Management Purposes

9.9.2.7.1 Council may require upon development or subdivision of sites or properties containing Stormwater Management Areas, the vesting of such areas for drainage purposes. Property owners of all land so vested shall be compensated (where applicable) in accordance with Rule 9.14.

9.9.2.7.2 All such land vested in Council for drainage purposes upon subdivision and development after notification of this Plan or purchased by Council, shall be administered in accordance with the rules for the Public Open Space 5 zone, or Public Open Space 6 Zone for such land in the Flat Bush Development Area.

Rule 9.9.2.8 Frontage Requirements

(a) Classification of Front and Rear Sites

Sites which comply with the relevant frontage requirements for the zone shall be classified as front sites (including corner sites). A site with side boundaries that converge towards the road frontage (such as lots at the end of cul-de-sac roads) shall also be classified as a front site where the width between each side boundary at a point 10m distant from where each side boundary meets the road equals or exceeds the minimum frontage for a front site in the zone.

Otherwise the site shall be classified as a rear site.

A residential site which has the characteristics of a front site but does not comply with the minimum frontage requirements shall be regarded as a non-complying front site.

Refer to Figure 9.1 Classification of front and rear sites.

(b) Frontage Requirements for Existing Sites

Where a site does not comply as a front or rear site under these rules, but did comply with the rules at the time of the approval of subdivision consent through which the site was created, or was created before the introduction of the District Plan rule(s) with which it does not comply, the site shall be classified as complying with the Plan provided it is in accordance with the original approval.

Rule 9.9.2.9 Legal Access

Every lot shall be provided with legal access in terms of Section 106(1)(c) of the Resource Management Act, and every lot, other than allotments created through road stopping or severance or to be amalgamated with other adjoining land, shall be provided with a safe and practical vehicular access to a formed legal road.

[AM89]
In terms of Rule 9.9.2.8 a site with a frontage less than the normal minimum specified in the zone, may be classified as a front site if the width between points labelled 'X' is not less than the minimum frontage for a front site in the zone and the frontage 'f' is not reduced to less than that provided for in the zone. Points labelled 'X' are 10 metres along the side boundary from the road. If the width as measured above is less than the minimum frontage for a front site the site shall be classified as a rear site.

**FIGURE 9.1 CLASSIFICATION OF FRONT AND REAR SITES**
Rule 9.9.2.10 On-site Access Requirements

(a) Nature of Access

(i) Access to a rear site shall be provided:

- By way of an entrance strip of the required width integral with the site; or
- By means of an interest in an access lot of the required width as a tenant in common; or
- A combination of the above, and right or rights of way over adjoining land provided the minimum width requirements are complied with; or
- By right of way over adjoining land outside the land to be subdivided. In this case the right of way must be registered prior to the approval of the survey plan pursuant to Section 223 of the Act.

(ii) Entrance strips or private ways shall comply with the following:

The width of the entrance strip/private way measured at right angles to its course shall not be less than the minimum frontage specified for the relevant zone.

(b) Access Standards — Residential Zones (refer to Appendix 2 of this Chapter).

The following are the minimum width standards for entrance strips and private ways:

(i) Private ways serving 2–4 units:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Minimum Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum legal width</td>
<td>6.5 metres</td>
</tr>
<tr>
<td>Minimum clear carriageway width</td>
<td>4.5 metres</td>
</tr>
<tr>
<td>Maximum grade</td>
<td>1 in 5</td>
</tr>
<tr>
<td>Minimum clear vertical height above the carriageway* [AM98]</td>
<td>4.2 metres</td>
</tr>
</tbody>
</table>

* provided that in all cases the clear vertical height shall be designed to accommodate a 90 percentile truck movement. [AM98]

(ii) Private ways serving 5-15 units: [AM31] [AM98]

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Minimum Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum legal width</td>
<td>4.7 metres</td>
</tr>
<tr>
<td>Minimum clear carriageway width</td>
<td>2.7 metres</td>
</tr>
<tr>
<td>Maximum grade</td>
<td>1 in 5</td>
</tr>
<tr>
<td>Minimum clear vertical height above the carriageway* [AM98]</td>
<td>4.2 metres</td>
</tr>
</tbody>
</table>

* provided that in all cases the clear vertical height shall be designed to accommodate a 90 percentile truck movement. [AM98]

The minimum legal width of a private way serving 2-4 units may be reduced to not less than 3.66 metres, and serving 5-15 units may be reduced to not less than 5.5 metres, if there are existing physical constraints and if provision is made for ducting of utility
services below the private way, or another way of providing underground servicing acceptable to Council is to be provided.[AM98]

In all cases, the carriageway shall be designed to accommodate a 90 percentile truck movement without encroaching on to berm areas or other private property.

Provision shall be made for a “Y” shaped turning head in private ways serving 5 to 15 units.

Where household units are served by private ways, no part of any such unit shall be further than 135 metres from a fire hydrant.

Where hydrants are installed within private ways, an easement in gross will be required to be registered against the relevant certificates of title in favour of the relevant network utility operator for access to the hydrant and maintenance of the watermain.

(c) **Access Standards — Business Zones (including the Beachlands Village Business Centre Zone)**

[AM163]

Minimum legal width of entrance strip 9.0 metres

or private way

Minimum carriageway width 6.0 metres

Maximum grade 1 in 8

Provided that the carriageway shall be designed to accommodate the turning movements of a 90 percentile truck.

**Rule 9.9.2.11 Roading Standards**

(a) **General**

(i) All developments and lots must have frontage to an existing or proposed public road which is:

- within or contiguous to the land to be subdivided or developed so as to provide access from the land to be subdivided or developed to the existing public roading system, or the land is accessible by means of a private road or private way; and

- meets the applicable standards required by Appendix 2 to this Chapter.

(ii) Whenever a proposed subdivision or development of land makes provision for new roads and service lanes to be formed, and whenever existing roads are to be reconstructed, these roads and/or service lanes shall comply with the road classification and standards contained in Appendix 2 to this chapter.

(iii) The width of carriageways of local rural roads shown in Appendix 2 may be reduced by consent to a discretionary activity if only a few low traffic generating properties will be served. However, the Council may require that the width of carriageways be increased or parking areas provided where there is a need to accommodate roadside parking.
(iv) Upon subdivision or development of undeveloped land, the Council may require adjacent existing roads (formed or partially formed) to be widened to comply with the road classifications shown in Appendix 2 to this chapter and Appendix 1 to Chapter 8 — Transportation. The maximum contribution towards the upgrading of existing roads shall meet the following standards:

- all bulk earthworks, drainage, relocation of services and ancillary works to provide satisfactory vertical and horizontal alignment for the whole road adjacent to the proposed development;
- standard berms with footpath, street lighting, kerb and channel and associated stormwater reticulation;
- all design and supervision requirements;
- construction standards to District Arterial Road standard.

(v) Where accessways are provided they shall generally meet the following minimum standards:

- a minimum width of 4.0m at any point, except in the Flat Bush Structure Plan area and Clevedon Structure Plan area where that minimum shall be 8.0m;
- maximum gradient of 1 in 10;
- constructed with a permanent all weather surface;
- be as short and straight as possible;
- contain design features that prevent their use by motor vehicles, but not cycles (for example, bollards).

(vi) Where a proposed service lane is shown in the District Plan, the Council will, as a condition of any subdivision consent, and may as a condition of any land use consent, require the land comprising the proposed service lane to vest in the Council.

(vii) Where land is designated or identified as being required for proposed road widening purposes is shown in the District Plan, the Council either will as a condition of any subdivision consent or may as a condition of any building activity require the vesting of land between the proposed widening line and the existing road frontage in the Council for road purposes in accordance with Rule 9.14.5.1. (Refer also to Rule 8.11.1 Transportation Chapter regarding proposed roads).

(viii) Whenever a proposed subdivision or development of land makes provision for the construction or upgrading of a road above collector road standard, the Council will fund the additional land width required in accordance with Rule 9.14.5.5.2 and Figures 9.3 and 9.4.

(b) Street Planting

(i) For residential subdivision in cul-de-sac roads, street trees shall be planted at a minimum average of 1 tree per 40 metres of road frontage to ensure an outcome of 1 tree per 20 metres along at least one side of the road.
(ii) For residential subdivision in all other roads, street trees shall be planted at a minimum average rate of 1 tree per 20 metres of road frontage to ensure an outcome of 1 tree per 20 metres along both sides of the road.

(iii) Trees shall be planted in the front berm between the kerb and footpath, and within the rear (services) berm where it has been suitably widened to accommodate such planting without affecting the standard service corridors, provided that in either case the available width for planting shall not be less than one metre.

(iv) The following minimum separation distances for planting in front berms (from the tree trunk) shall be observed:

   (i) 3 metres from the nearest bus stop (where defined);
   (ii) 6 metres from the nearest pedestrian crossing;
   (iii) 7 metres from the nearest sign post;
   (iv) 10 metres from the nearest street light or power pole
   (v) 2 metres from the nearest vehicle crossing;
   (vi) at the intersection of Primary and Secondary Roads, trees shall be planted at least 15 metres from the intersecting road and kerbline for Secondary Roads, and 40 metres for Primary Roads.

(v) Street planting shall be undertaken in new developments only once formation of the street has been completed.

(vi) The street developer shall be responsible for the replacement of any street tree that has died within 12 months from the time of planting.

(vii) The street developer shall be responsible for the routine maintenance and replacement of any street garden they have provided, including weed control, mulching, and watering for a period of 12 months from the time of planting.

*Explanation/Reasons*

The mandatory requirement of street tree planting is designed to ensure that this aspect of street amenity is provided to a certain standard. This will assist in mitigating visual impacts of roads and building development.

(c) Intersections with Primary Roads

Survey plans of subdivision shall not be approved which show classes of road less than collector routes (including business roads with a collector road function) intersecting directly onto District Arterial or Regional Arterial roads where this could be avoided by an alternative subdivision layout, except where provided for within Appendix 1 to Chapter 8 or the structure plan for an area.

(d) Visibility at Intersections

   (i) Measurement of Visibility

   Visibility shall be measured from points 1.1 metres above the road surface in the following locations:
• At the road centre line opposite each proposed intersection in both directions to points along the road centreline;

• Visibility for exiting traffic shall be measured from a point 2 metres from the kerbline to points along the road centreline.

(ii) Sight Distance

New intersections shall not be located near curves or crests where sight distance along the road is restricted or at locations where drivers will not have good vision of approaching traffic when entering or leaving the intersection. There shall be sufficient visibility along the road to allow a driver entering or leaving to select a gap to cross or join the traffic stream without necessitating a major speed adjustment by through traffic.

This standard can be assessed by reference to the following tables:

For intersections between local residential or rural roads or cul de sacs:

<table>
<thead>
<tr>
<th>85 Percentile Speed (km/h)</th>
<th>50 or below</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
<th>110</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum sight required (m)</td>
<td>45</td>
<td>65</td>
<td>85</td>
<td>115</td>
<td>140</td>
<td>170</td>
<td>210</td>
<td>250</td>
</tr>
</tbody>
</table>

For other intersections in the City:

<table>
<thead>
<tr>
<th>85 Percentile Speed (km/h)</th>
<th>50 or below</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
<th>110</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum sight required (m)</td>
<td>80</td>
<td>95</td>
<td>130</td>
<td>165</td>
<td>210</td>
<td>250</td>
<td>290</td>
<td>330</td>
</tr>
</tbody>
</table>

(e) Cycleways

Where proposed cycleways are shown on Regional arterial roads or elsewhere in the City as indicated on the Planning Maps, the provision of cycleways may be required as a condition of approval for a resource consent including subdivision.

(i) Cycleways shall meet the following standards:

Refer to Chapter 17 for cycleways in the Flat Bush Structure Plan area

• Cycleways are to be designed to provide separation between cyclists and other modes of transport. Cycleways adjoining roads or pedestrian routes are to be clearly marked.

• Cycleways are to have a permanent all weather surface with a smooth transition between different surface materials.

• Cycleways are to be built to comply with the following minimum widths:
  
  Cycle lanes as part of road 1.5 metres
  One lane cycleway independent of road 1.8 metres
  Two lane cycleway independent of road 2.5 metres

[AM50]
(f) **Recreational Walkways**

Where land through which recreational walkways are to pass is subdivided or developed, then provision for the walkways shall be made as follows:

- The route of the walkway shall be generally in accordance with that indicated on the Planning Maps. Where appropriate the walkway shall provide access to features of scenic, historic and ecological interest in the locality.

- Where practicable, the walkway shall be independent of the road systems and the subdivision shall be designed so that the walkway route maximises the use of reserves and pedestrian access ways.

- Where it is necessary for the walkway to be provided in conjunction with a road, the Council may require widened berms and other amenity features along the walkways route.

- Where it is necessary to cross a major traffic route, the Council will consider the practicality of requiring traffic control devices to help ensure the safety of pedestrians.

- Where the route of the walkway is within an area prone to flooding or which contains other conditions which might impede the passage of pedestrians a suitable pedestrian path shall be provided.

- Where the walkway route is provided by means of a pedestrian accessway, the width of the access way at any point shall not be less than 6 metres unless in the opinion of the Council a reduced width provides the required level of access.

(g) **Bridle Trails**

Where a bridle trail is required as a condition of approval for a resource consent including subdivision the following design standards shall apply:

Bridle trails independent of road:

- Minimum width between boundaries 6 metres
- Minimum metalled formation width 1.5 metres
- Water tables and culverts shall be provided when required for stormwater control.

Bridle trails along road berms:

- Minimum width 3 metres
- Minimum metalled width 1.5 metres

(h) **Funding Issues**

The liability of subdividers and developers in respect of infrastructural and roading costs incurred on development shall be assessed with particular reference to the extent to which any additional works or costs are necessitated by or benefit the relevant subdivision or development. Accordingly, where any of the matters listed under this part generate costs to the subdivider or developer in excess of those that are necessitated by or reflect the benefit to the subdivision or development, Council shall give particular
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regard to reducing the contribution required from the subdivider or developer or otherwise provide credit for those costs.

Rule 9.9.2.12 Provision of Public Utility Services (excluding roads)

(a) General Requirements

(i) All allotments on subdivisions and developments must be provided with adequate systems for wastewater disposal, stormwater disposal and water supply systems, and shall be serviced with electricity, and telecommunications. [AM67]

(ii) All electricity and telecommunication services shall be reticulated underground where practicable.

(b) Provision of a Wastewater System in All Zones Except Unserviced Areas

(i) There must be an existing public system of a wastewater system being a system which is:

• within or contiguous to the land to be subdivided or developed; and
• providing adequate service to all allotments in the catchment upstream of the subdivision or development; and
• available to adequately service all allotments in the subdivision or available to adequately service the development.

(ii) The development, and all allotments in the subdivision, must be able to be provided with connections to the existing public wastewater system. [AM67]

(c) Disposal of Waste-water in All Unserviced Areas

(i) There must be adequate provision for on-site disposal and treatment of wastewater; and

(ii) In the Flat Bush Countryside Transition zone, there must be adequate provision for connection to a future public reticulated wastewater disposal system as and when that system becomes available. [AM67]

(d) Provision of Water Supply in All Zones Except Unserviced Areas

(i) There must be an existing public water supply system, being a system which:

• Consists of fire and rider mains of not less than —

- in Residential Zones and the Business 1 Zone: 150mm + 50mm diameter respectively
- in Business 2, 3 and 4 Zones: 200mm + 100mm diameter respectively
- in Business 5 & 6 Zones: 250mm + 150mm diameter respectively;
• is within or contiguous to the land to be subdivided or developed; and

• is available to adequately provide for the supply of water to all of the allotments in the subdivision or development, including water for fire fighting purposes.

(ii) The development and all allotments in the subdivision or development must be provided with connections to the existing public system at connection points approved by the Council.

(e) **Water Supply in All Unserviced Areas**

There must be adequate provision for on site collection and storage of potable water and provision for fire protection.

(f) **Stormwater Discharge**

(i) Any diversion or discharge of stormwater which requires an approved discharge permit from the Auckland Regional Council as part of a land development or subdivision shall be obtained before the completed works will be accepted by Council.

(ii) Land modification or subdivision within areas of the City for which the Council holds Comprehensive Discharge Permits will need to comply with any of the special conditions that may apply to the proposed drainage system.

[Note: The Council holds Comprehensive Discharge Permits for the areas shown in Figure 9.2]

(g) **Stormwater Disposal in All Zones Except Unserviced Areas**

(i) There must be an existing public system of stormwater drainage being a system which is:

• within or contiguous to the land to be subdivided or developed.

• making adequate provision for the disposal of stormwater from all allotments in the catchment upstream of the subdivision or development in the 1% Annual Exceedence Probability storm event.

• available to make adequate provision for the disposal of stormwater from all allotments in the subdivision or development in the 1% Annual Exceedence Probability storm event.

• makes use of effective engineering solutions to avoid, remedy or mitigate the potential adverse effects of stormwater discharge on the receiving waters.

(ii) The development and all allotments in the subdivision must be able to be provided with connections to the existing public stormwater system at an outlet or outlets.

(h) **Stormwater Disposal in All Unserviced Areas**

There must be adequate provision for the disposal of stormwater from the site.
FIGURE 9.2 COMPREHENSIVE DISCHARGE PERMIT INDEX

Not shown: 117 Beachlands
118 Maraetai
9.9.3 Standards and Terms Applying to Restricted Discretionary Activities

In addition, to the standards specified under Rule 9.9.1 and 9.9.2, the following standards and terms shall apply to restricted discretionary activities.

Rule 9.9.3.1 Design and Layout of Subdivision

All subdivision proposals shall take account of the environmental qualities of the land being subdivided and its surrounding amenity values. Subdivision and development design shall maximise urban amenity while retaining existing landforms and vegetation as far as practicable. The design of subdivision and engineering works shall use such techniques as to minimise adverse effects on landform and to create subdivisions of individual character. Specifically:

(a) A range of lot sizes shall be provided and spread throughout each subdivision to enable variations in building design and site development.

(b) Each lot shall be sited to best advantage in terms of topography including aspect, avoidance of natural hazards, access and the maximisation of solar orientation.

(c) Adverse effects from modifications to natural landforms shall be minimised in accordance with the Engineering Performance Standards set out in Appendix 1 to this Chapter.

(d) Existing vegetation shall be preserved where practicable.

(e) The layout of the subdivision shall provide for efficient use of development of land and shall enable the efficient provision of utility services to each potential building site.

(f) The layout of the subdivision shall provide for public open space and esplanade reserves and strips where required by the Council by virtue of Rule 15.15 in Chapter 15 Public Open Space, and the relevant rules in Chapter 17 for subdivision in the Flat Bush Development Area.

Rule 9.9.3.2 Staging of Subdivisions

Approval pursuant to Section 224 of the Act relating to each stage of the subdivision will only be given when Council is satisfied that the relevant conditions have been met and the balance of the area being subdivided is an allotment which complies with the provision of the District Plan.

Rule 9.9.3.3 Siting of Residential Developments in Vicinity of Overhead High Voltage Electric Lines

No subdivision shall be undertaken that would result in any part of a residential building platform for a vacant residential lot or cross-lease or unit title parcel/area being sited directly beneath overhead electric lines with a voltage at or above 110 kV.

No part of any residential building shall be sited directly beneath overhead electric lines with a voltage at or above 110 kV.

[Note: “Directly beneath” means the vertical plane beneath the conductor in zero wind conditions].
Explanation/Reasons

The potential adverse effects from overhead high voltage electric lines on residential development are those of safety, such as in electrocution, shocks or through equipment failure as in the case of falling lines, damage to property from similar events, and possible adverse health effects from the generation of Extremely Low Frequency (ELF) magnetic fields. It is emphasised that high voltage transmission lines are not the only source, nor perhaps the major source of ELF magnetic fields, but are nevertheless one source that requires consideration.

The intention of the rule is to minimise the potential effects arising from ELF magnetic fields generated by the overhead high voltage electric lines where residential buildings are being sited directly beneath these lines.

Rule 9.9.3.4 Sites and Subdivision for Small Scale Network Utility Services

On such sites with a maximum site area of up to 20m² the development and performance standards for abutting sites shall be applied as though the road boundary had not been set back or the site of less than 20m² had not been created. The minimum site dimensions and areas specified for each zone may be reduced by amounts not exceeding the dimensions and are of the road boundary setback or network utility services site of under 20m².

Should such a site (including a site with up to 100m² maximum site area which has been approved as a restricted discretionary activity) no longer be required for the purpose of accommodating a network utility service, it must be amalgamated with an adjoining lot, once obsolete services and works have been removed.

Until such time as it has been amalgamated with an adjoining lot, such site cannot be developed or used for any residential purpose.

Explanation/Reasons

Provision is made for the creation of small allotments or similar sized easements because they can be screened for amenity and safety reasons, and problems of siting small network utility services on roads can be avoided. For small scale network utility sites with a maximum site area up to 20m², this rule avoids penalising adjacent lots.

Rule 9.9.3.5 Land Modification, Development or Subdivision within the Wiri North Structure Plan Area (Figure 16.13) [AM162]

An application for land modification, development or subdivision within the Wiri North Structure Plan Area (Figure 16.13):

(i) Shall include a report setting out the indicative final ground levels for the whole of the Structure Plan area.

(ii) Shall confirm that land within the Wiri North Structure Plan Area shall have a finished ground level of at least one metre above the 1% AEP flood level of the Puhinui Stream.

9.9.4 Other Matters

Rule 9.9.4.1 Grounds for Refusal of Consent to Land Modification, Development and Subdivision
The Council may refuse any application for subdivision consent where in its opinion the circumstances outlined in Section 106(1)(a), (b), and (c) of the Act are likely to occur.

[AM89]

In addition, the Council may refuse consent where the provision of services is inadequate to serve the proposed subdivision or development; or does not satisfy the performance criteria set out in Appendix 1 to the Chapter, with respect to the wider catchment beyond the subdivision or development.

The Council shall not grant a consent to land modification or subdivision if it considers that either:

(i) the land in respect of which the activity is proposed is not suitable;

(ii) the proposed activity would not be in the public interest;

having regard to the objectives and policies of the Plan and the efficient use of resources including land.

Explanation/Reasons

It is important for Council to be able to refuse consent to subdivisions or development which do not achieve satisfactory environmental standards, would conflict with the provisions of the Act, or would not be appropriate for the quality of the land involved, or for which the network utility services would not be satisfactorily integrated with adjoining existing or potential developments.

Rule
9.9.4.2 Stopping of Roads

Where the Council decides to stop an unformed legal road either prior to or during consideration of a subdivision consent application or an application for a resource consent (where the road forms part of, or adjoins the proposed subdivision or development), the Council will, having regard to the better development of the land, either dispose of part or the complete section of the stopped road to the adjacent landowners or will retain ownership of part or the complete section of the stopped road. That portion of the stopped road which is disposed of to an adjoining land owner, shall adopt the zone of the adjoining land with which the stopped road will be amalgamated. In the case of a stopped road being disposed of to adjoining owners on both sides of the road, the zone of the adjacent land with which the land is amalgamated shall apply up to the centreline of the stopped road. Any portion of the stopped road which is not disposed of to adjoining owners shall remain zoned road zone unless amended by Plan Change or Variation.

[AM31]

Rule
9.9.4.3 Subdivisions Approved under Previous District Plan

Where a site does not comply with the subdivision requirements of the zone in which it is located, but complies with the subdivision rules of a previous District Plan, operative as at the time of approval of the survey plan, that site shall be classified as having complied with the subdivision requirements of the Plan.

Explanation/Reasons

The primary purpose of these standards is to establish levels of environmental quality that land modification, development and subdivision have to meet to promote the sustainable management of the City’s natural and physical resources. These include development standards to maintain or improve the City’s physical resources, including roading and utility services, as well as performance standards to protect or enhance the City’s natural environment and the values associated with it, including amenity and visual values.
9.10 RULES — MATTERS FOR CONTROL: CONTROLLED ACTIVITIES

Council reserves control over the following matters for controlled activity resource consent applications for land modification, development and subdivision, and may impose controls in respect of each:

- control of stormwater and sub-surface water, including overland flowpaths;
- avoidance or mitigation of natural or man-made hazards;
- protection of any natural or cultural heritage features, including native or riparian vegetation;
- design, dimensions and construction of roads, linkages, service lanes, private roads, private ways, and cycleways, bridle trails and recreational walkways, and the integration of roading and other access with the transportation network including road access to other land;
- the provision and design of public utility services (including financial contributions) of a sufficient standard and capacity provided in an orderly basis to meet likely future activities in the catchment area, including outlets to or connections with public systems;
- the provision and design of effluent disposal systems and maintenance;
- size, shape and disposition of any lot, including public open space, esplanade reserves and esplanade strips;
- granting of easements;
- the creation of vacant lots and defined areas in relation to existing buildings;
- access to, servicing of sites and alterations of buildings under cross-lease, unit title or company lease;
- amalgamation of ownership of any lot;
- vesting of land in the Coastal Marine Area, or the bed of a lake or river;
- the staging of subdivision, servicing and roads;
- the extent of earthworks in relation to the environmental qualities of the area, including natural landforms, native vegetation, the character of the locality, water quality and the avoidance or mitigation of natural hazards;
- the management of construction and site works, including the provision of an environmental management plan to avoid or mitigate any adverse effects from noise, dust, stormwater and silt runoff, and the clearance and disposal of vegetation and other waste;
- any street planting provided as part of a subdivision or development;
- the design and construction of subdivisions and land development in relation to the Engineering Performance Standards set out in Appendix 1 to this chapter. [Note: One means of compliance with the Engineering Performance Standards is to use the Manukau City Council Engineering Quality Standards and the MANARC Standards. Other means of compliance may be proposed.];
- the routes and design of recreational walkways;
- fencing and landscaping where reverse lotting occurs;
- Location:
Whether the site chosen for a small scale network utility service will be located so as to ensure that the proposal will have minimal impact on the amenity values of the locality, and will not adversely affect the pattern of subdivision and design of adjacent lots, and the extent or impacts of any such adverse effects;

- Landscape Treatment, Screening and Site Layout:

Whether the site chosen for a small scale network utility service will be landscaped and screened to maintain or enhance the existing or likely future amenity values of the streetscape.

- The state of the site with respect to any existing or potential contamination on the site and site remediation.

**Explanation/Reason**

The matters specified under this Rule define the range of anticipated likely impacts that may occur from land modification, development and subdivision. They include impacts on the physical environment and effects on the natural environment, including the values the community associates with landscapes, amenities and heritage resources.

### 9.11 RULES — MATTERS FOR DISCRETION: RESTRICTED DISCRETIONARY ACTIVITIES

Restricted Discretionary Activities should comply as far as practicable with the Development Standards and Performance Standards in Rules 9.9.1 and 9.9.3.

The matters over which the Council has restricted its discretion are as follows:

**Rule 9.11.1 Land Modification, Development and Subdivision**

The matters over which the Council has restricted its discretion are as follows:

(a) In respect of subdivision

- The staging of the subdivision, servicing and roads, including the total size and duration of each stage of the development;

- The design, capacity, standard and staging of existing or proposed public utilities servicing the subdivision, including any impact on utilities servicing the wider area and outlets to or connections with public systems;

- The size, shape and total number of allotments including public open space, esplanade reserves and esplanade strips;

- The roading layout including road access to adjoining land;

- Vehicle access to allotments;

- The provision, design and routes of cycleways and recreational walkways and bridle trails;

- Ability to site a complying building platform;
• the management of construction and site works, including the provision of an environmental management plan to avoid or mitigate any adverse effects from noise, dust, stormwater and silt runoff, and the clearance and disposal of vegetation and other waste;

• Landscaping provided as part of subdivision or development; and

• The alteration or disturbance of the ground;

• The adequacy of effluent disposal systems and their maintenance;

• Fencing and landscaping where reverse lotting occurs;

• The extent and adequacy of land to be vested or protected by easement for stormwater treatment purposes;

• The state of the site with respect to any existing or potential contamination on the site and site remediation;

• The location and protection of any natural and cultural heritage feature;

• Any street planting provided as part of a subdivision or development;

• In the Quarry Zone, in addition to the foregoing matters, the efficient utilisation of land for mineral extraction and the compatibility of the subdivision with this utilisation.

• The adequacy of means to avoid effects on mineral extraction activity. [AM36]

(b) In respect of Land Modification or Development involving earthworks:

• Alteration to Natural Landscape

• Sedimentation

• Runoff

• Slope and Land Stability

• Vegetation including Riparian Vegetation

• Noise and Dust

• Duration, Timing and Staging

• Traffic Generation and Routes

• Flooding

• Utility Services

• Heritage

• Contamination

(c) In respect of Development in the following circumstances:
(i) Site development requiring the provision of public utility services:

The capacity and standard of existing or proposed public utilities servicing the site, including any impact on utilities servicing the wider area.

(ii) A staged development:

- The timing of the development, including the duration of each stage;
- The extent to which part of a staged development complies with the concept plan for the whole development.

(d) In respect of Coastal Protection Works:

- The location and extent of the proposed works; and
- The site level of any building.

(e) In respect of Network Utility Services listed in Rule 7.8.2.1 — Chapter 7:

- Refer to the matters listed in Chapter 7.

(f) In respect of the removal of more than 5% of riparian vegetation within a site adjoining natural streams identified in the Planning Maps:

- Total amount of vegetation to be removed; and
- Linear extent of removal along riparian margin.

(g) In Respect of Mineral extraction activities not involving blasting:

- Site layout and development;
- Site rehabilitation;
- Traffic and access; and
- Noise.

Rule 9.11.2 Siting of Residential Buildings in the Vicinity of Overhead Electric Transmission Lines

Council reserves control over the following matters for restricted discretionary activity resource consent applications for any part of any residential building sited directly beneath overhead electric transmission lines with a voltage at or above 110 kV and may impose conditions in respect of each.

Matters for Discretion:

(i) The location of the proposal and the impact on the amenity values of the proposal given the existing location of the overhead high voltage electric lines;

(ii) Creation of allotments with building platforms crossed by overhead electric transmission lines;

(iii) Location of building platforms on sites crossed by overhead electric transmission lines;

(iv) Erection of residential buildings on sites crossed by overhead electric transmission lines;
(v) Compliance with International Commission on Non-Ionising Radiation Protection Guidelines, 1993 (and any amendments) 24 hour per day exposure level for the general public;

(vi) Compliance with NZECP 34 1993.

**Rule 9.11.3 Mineral Extraction Activities not Involving Blasting**

(a) Site Layout and Development, in particular the extent of extraction areas, the location of processing facilities, the location of overburden and waste disposal areas, stockpile and distribution areas;

(b) Site Rehabilitation, in particular site contours, final contours and floor levels including proposals for the co-ordination of final levels of adjoining land, drainage of quarried lands, vegetation and planting.

(c) Traffic and Access in particular the siting of carriageways, berms and batters, access and egress and volumes of traffic.

(d) Noise in particular operational hours of mineral extraction activities.

**Explanation/Reasons**

The matters specified under this Rule define the range of anticipated likely impacts that may occur from land modification, development and subdivision. They include impacts on the physical environment and effects on the natural environment, including the values the community associates with landscapes, amenities and heritage resources.

**Rule 9.11.4 Stormwater Management Areas**

Controlled Activities and Restricted Discretionary Activities for the management of stormwater should comply as far as practicable with the Development Standards and Performance Standards in Rules 9.9.1 and 9.9.3. The matters over which the Council has restricted its discretion are as follows:

- earthworks and fill;
- reticulate stormwater and overland flowpaths;
- water quality treatment devices;
- relationship to nearest waterbody;
- flooding;
- extent of land to be vested as drainage reserves or protected by stormwater easements;
- catchment planning;
- functionality;
- future liability from flood damage;
- financial contributions for stormwater systems;
- relocation or reduction of boundaries of stormwater management areas;
• finished ground levels and flood levels of buildings;
• placement of buildings, fences, gates, or other structures;
• water quality and ecology;
• utilities.

Explanation/Reasons

The matters specified under this Rule define the range of anticipated likely adverse effects of activities on stormwater management areas, and ensure their ongoing functionality for treatment of stormwater from development is maintained.

Rule 9.11.5 Sites and Subdivision for Small Scale Network Utility Services

Council reserves control over the following matters for restricted discretionary activity resource consent applications for sites and subdivision for Small Scale Network Utility Services and may impose conditions in respect of each:

(i) The location of the site and its impact on the amenity values of the locality, and the pattern of subdivision and design of adjacent lots;
(ii) The necessity of the proposed site to provide and maintain essential network utility services to the subdivision;
(iii) The proposed size of the site in relation to the character of the locality;
(iv) Removal of obsolete works or services prior to amalgamation with adjoining lots.

9.12 ASSESSMENT CRITERIA: CONTROLLED AND RESTRICTED DISCRETIONARY ACTIVITIES

For applications for land modification, development and subdivision that are controlled or restricted discretionary activities, regard shall be had to the relevant matters listed below, as well as matters set out in S.104 of the Act:

9.12.1 General Matters

• Whether the design and layout of the proposed subdivision will result in new allotments or sites which conform with local topography, and maintain or enhance the natural and physical character of the area;
• Whether new allotments or sites have suitable access to a formed legal road;
• The extent to which any earth cut or fill will remove existing vegetation, alter the existing topography of the site or affect existing natural features;
• The extent to which any earthworks will impact on significant or visually sensitive areas;
• Whether the proposed earthworks will result in an increase or decrease in flood hazards and the extent or impacts of such effects.
• Whether a proposed subdivision is capable of accommodating Permitted Activities in compliance with the relevant rules of the Plan;

• Whether the proposed subdivision, land modification or development will avoid or mitigate adverse effects from natural hazards by maintaining or improving the functioning of natural processes in the area;

• Whether the proposed subdivision, land modification or development will meet the intentions of the District Plan including objectives, policies and rules, and Section 106 of the Resource Management Act 1991;

• Whether the disposal of wastewater and stormwater from the proposed lots can be done effectively without risk to public health or the environment;

• Whether the proposal complies with the ARC Technical Publication 58 “On-site Wastewater Disposal from Households and Institutions” (1994) and subsequent amendments;

• Whether the site has sufficient capacity for a wastewater disposal field where ground disposal is proposed;

• Where more than one new site will be created within areas not served by a wastewater system, including within rural settlements, whether a shared or individual wastewater treatment and disposal system is considered appropriate, having regard to any existing problems within the vicinity of the site;  

[AM67]

• Whether the cumulative effects of the activity will adversely affect the efficient use and development of infrastructure in the area;

• The extent to which the area’s existing amenity values will be altered, and whether the proposal is sympathetic to the character of the locality and the environmental results envisaged for the relevant zone;

• Whether the nature and extent of any measures proposed will mitigate, remedy or avoid any adverse effects;

• Whether the nature and extent of any measures taken will enhance or protect the natural and cultural heritage resources of the area;

• Whether the land has been or is subject to, or may be subject to, pollutants and/or contamination that may be hazardous to the environment including people and whether sufficient works or other solutions have been undertaken to avoid, remedy or mitigate adverse effects;

• Whether the engineering performance standards appended to this Chapter are appropriate for the circumstances, and the extent or impacts of any such non compliance;

• Where the proposal is located in an area where a structure plan applies (refer to Chapter 16 & Chapter 17); whether the proposal is in accordance with the Structure Plan for that area;  

[AM50]

• Whether integrated intensive housing proposals are in general accordance with the standards in the Manukau City “Design Code for Intensive Housing” (Appendix 1 — Chapter 13 — Residential Areas);

• Whether the proposed activity complies with an approved catchment management plan or discharge consent, and the extent or impacts of any such non compliance;
• Whether the capacity of the network utility services will be sufficient to meet the needs for ultimate development of the catchment;

• Whether any landscaping features are proposed and whether they affect visibility at intersections, pedestrian and traffic safety, or obstruct signs, have an adverse effect on the functional and aesthetic quality of the areas, or have a potentially high maintenance cost;

• Whether the subdivision design adversely affects the ability of any lots created or adjoining lots or sites to comply with the above criteria and other subdivisional rules and criteria contained within the District Plan;

• Whether the subdivision has been designed with reverse lotting fronting an arterial road, and whether the proposed fencing and landscaping will adversely affect the visual amenity values of the streetscape and affect safety;

• Whether the proposal is in general accordance with the objectives and policies for Public Open Spaces (Chapter 15);

• Whether consideration has been given to any existing mineral resources present on the land being developed or subdivided and having regard to the policies in Chapter 17.8 — Mineral Extraction Activities;

• Whether any street planting is proposed within a subdivision or development, the appropriateness of the species used (exotic and native), height, maturity, distribution and location (front and rear berms) of street planting; the timing for the planting and the responsibility for the twelve month maintenance period. These matters are to be assessed in terms of the impact on:
  - Compatibility with City-wide Planting Policies;
  - Adjacent and adjoining sites (for example, the provision of shade, shelter, privacy, sublight access, reduction of noise, pollution, glare, reflection and leaf litter);
  - Land Stability including the reduction of erosion;
  - Interference, access to and the integrity of network utility services, including telecommunication, water, gas and power distribution;
  - Traffic safety including pedestrian and vehicular safety to preserve sightlines to both vehicular and pedestrian traffic, traffic signals, road markings and intersections;
  - The safe and convenient movement for pedestrians.

• Whether a recreational walkway or bridle trail is proposed for a subdivision. Whether the width, location, design and construction of the recreational walkway or bridle trail provides for safe and convenient access in order to ensure traffic and pedestrian safety and the efficiency of the road network. The appropriateness of the street developer to meet the cost of constructing bridle trails.

• Whether land and works which are additional to those defined within the stormwater management areas are necessary to treat or manage stormwater run-off from or through the proposed subdivision or development.

• Whether earthworks proposed to be undertaken within the Beachlands Village Business Centre Zone includes the provision of appropriate sediment control measures to ensure that any potential for impacts on the operation of the downstream stormwater management ponds are minimised as far as practicable.

[AM163]
9.12.2 **Roading and Transportation**

Whether:

- The subdivisional roading design and layout, and the treatment of access to lots is in general accordance with that contained in the Planning Maps, Appendix 2 of Chapter 9 and the structure plan policies and maps incorporated in Chapter 16 of the District Plan.

- Roads are designed and laid out so as to reflect and enforce the planned function of the road within the City’s roading hierarchy as described in Sections 8.6.1.1 and 8.11.2 Chapter 8 Transportation and to protect the amenity of the areas from unplanned through-traffic or heavy traffic.

- New roads are laid out to provide convenient connections and access within neighbourhoods and to neighbourhood facilities such as shops, schools and parks, and also the collector and primary road network. In general, this criterion shall not be met if either local catchments (greater than 30 household units or containing sufficient traffic generating activities) connect at only one point to the collector road network or through-roads connect at one point to a primary road network. Whether to achieve the above, road access should be provided to adjacent land.

- Provision is made for safe and convenient pedestrian access to significant pedestrian-focused activities, such as schools, recreation facilities, shops and passenger transport routes. Whether this is achieved through footpaths within roads and public open spaces rather than through narrow and long accessways.

- The subdivision design provides for a high quality of pedestrian access to collector and primary roads. This will be assessed by comparing the walking distance from proposed allotments against the shortest distance achievable, and the proportion of proposed allotments within 400 metres straight line distance of a collector or primary road that are also within 400 metres walking distance of the road.

- Intersections are located and designed to:
  - safely provide for the planned vehicle types, traffic flows and movements using it;
  - minimise any adverse effect on the operation of the primary road network in terms of safety, travel times, capacity or congestion;
  - provide adequate visibility;
  - integrate with and avoid conflict with the operation of other existing or planned intersections or major entrances; or
  - avoid the creation of a traffic hazard.

- Collector roads (through-roads and some business roads carrying through-traffic) are designed so as to accommodate conventional passenger transport vehicles. This shall be assessed against whether the roads:
  - provide direct connections and avoid unnecessary turning movements for vehicles using them;
  - avoid sharp corners and circuitous routes;
  - avoid traffic management devices that cannot be conveniently negotiated by passenger transport vehicles.
• The proposal complies with the following relevant rules and assessment criteria:
  - Access Rules 8.11.7 and 8.11.8
  - Access onto primary roads; Rule 8.12.2
  - Roadworks; Rule 8.12.1
  - Parking Bays; Rule 8.11.6
  - Parking Rule 8.24 for proposals where sites with established land use activities are being subdivided.

• In addressing the traffic engineering design issues described above, design solutions in accordance with the Councils Engineering Quality Standards, Transit New Zealand or AUSTROAD’s guidelines shall be generally acceptable, except where they are contrary to a specific provision of the District Plan or where they do not meet the foregoing assessment criteria.

### 9.12.3 Specific Criteria for Restricted Discretionary Activities

In considering an application for consent to a restricted discretionary subdivision or development and deciding whether or not to grant consent, the Council shall have regard to the following:

(a) Whether or not the subdivision or development would, in the Council’s opinion, be contrary to the public interest. In determining whether a subdivision or development would be contrary to the public interest, the Council shall have regard to the provisions of Section 5 of the Resource Management Act 1991 and the following criteria:

(i) The likelihood of the Council undertaking, within three years, works to:
   - upgrade the existing public utility services to a standard adequate to serve the subdivision, development and/or wider area; and/or
   - provide new public utility services which will be available to serve the subdivision, development and/or wider area.

(ii) The extent to which works referred to in Clause (i) are provided for in the Council's Annual Plan.

(iii) Whether the subdivision or development would result in a duplication of resources or services having regard, among other things, to the matters referred to in Clauses (i) and (ii).

(iv) The extent to which the subdivision or development is likely to compromise or affect the capacity of the existing public utility services to serve other land in the supply district and/or network area and the ability to subdivide or develop that other land.

(v) Whether provision has been or is to be made by the subdivider or developer to ensure the rational and coordinated provision of public utility services to serve the wider area within which the subdivision or development is located without involving the Council in expenditure or financial responsibility not provided for in its Annual Plan.
(vi) Whether the applicant is prepared to make provision for a reticulated wastewater system, water reticulation system and a stormwater drainage system of an adequate capacity for expansion to serve land in the natural catchment above the subdivision or development in its ultimate land use pattern.

(vii) The presence or otherwise of contaminants on the land

(viii) Any other matter relevant to ensuring that all subdivision and development proceeds in a manner that:

• achieves the provision of public utility services to serve the district and wider area within which the subdivision or development is located in a planned and coordinated manner;

• avoids a wasteful use of resources; and

• does not involve the Council in expenditure not contemplated in its Annual Plan.

(ix) The degree to which additional infrastructure and/or services are required to address adverse effects from the subdivision or development, the practicality of providing services in accordance with the performance standards, and whether Council can accept financial contributions in lieu of works.

(b) In the case of subdivision in the Quarry Zone the Council will have regard to the above matters (where relevant) and whether or not the subdivision will compromise the efficient utilisation of the land or adjoining land for mineral extraction purposes.

(c) Development or subdivision on the land known as the Karaka Road Block, Beachlands, being lot 8 DP 125200, shall be subject to provision of any esplanade reserve required in terms of section 230 of the Resource Management Act 1991 and to the provision for pedestrian access along the coastal margin and be designed in such a way as to take advantage of the coastal vista.

9.12.4 Mineral Extraction Activities Not Involving Blasting

(a) Site Layout and Development:

(i) Whether mineral extraction activities and any associated buildings and structures are sited in such a way as to internalise the effects of the activities on site.

(ii) Whether mineral extraction is likely to endanger, damage or destroy any scheduled heritage item or feature or detract from the heritage qualities or peoples’ relationship to any heritage item or feature including archaeological sites.

(b) Site Rehabilitation:

(i) Whether the site contours and final contours co-ordinate with the final levels of adjoining land.

(ii) Whether site rehabilitation will render the land capable of use and development once the mineral extraction activities have been completed.
(c) **Traffic and Access:**

Whether excavation can be undertaken to provide for the construction of carriageways, berms and batters of the road to permanent levels.

(d) **Noise:**

Whether adjoining activities are likely to be adversely affected by noise from mineral extraction activities.

(e) **Duration:**

The length of time of work or operations.

### 9.12.5 Clean Fills

Reference should be made to the relevant zone provisions of the Plan.

### 9.12.6 Earthworks

(a) **Alteration to Natural Landscape**

The extent to which any earth cut or fill will remove existing vegetation, alter the existing topography of the site, or affect existing natural features including land forms. The extent to which the area’s existing amenity values will be altered.

Such effects may be adverse or beneficial or a combination of both. Whether the work is necessary to establish an adequate and stable building platform and private open space.

(b) **Sedimentation**

The proximity of the proposed earthworks to any water body, and the extent to which sedimentation controls or control systems will minimise adverse effects on receiving waters.

(c) **Runoff**

The extent to which measures to control the path of runoff from surrounding land mitigate against the discharge of sediment from the site. The extent to which the Earthworks will result in an increase or decrease in flood hazards and the extent on impacts of such effects.

(d) **Slope and Land Stability**

The extent to which the effects from natural hazards will be avoided or mitigated and the extent or impacts of such effects; the extent to which earthworks affect the stability and erosion potential of the site and surrounding area. The extent to which the earthworks compromise future proposed building and roading uses for the zone within which it is located.

(e) **Vegetation Including Riparian Vegetation**

The contribution made by the vegetation to the ecological and amenity values of the area, including its visual impact from roads or other public land or from the sea or
foreshore. The timing of revegetating bare earthworked surfaces; whether the removal of riparian vegetation is undertaken in such a manner as to prevent debris entering a watercourse; whether the proposed replacement riparian vegetation will enhance water quality and amenity values.

(f) Noise and Dust

Whether the measures to mitigate potential noise and dust nuisance and detraction from visual amenity values of the area have been considered, and the extent or impacts of such effects.

(g) Duration, Timing and Staging

Whether the extent or impacts of adverse effects from earthworks activities can be mitigated by limiting the duration, season or staging of such works.

(h) Traffic Generation and Routes

Whether traffic generation will have adverse effects on the amenity values of areas or adverse effects on the carriageways of roads through which it is likely to pass.

(i) Flooding

Whether earthworks and final levels will adversely affect overland flowpaths or increase the potential for flooding within the site or surrounding area.

(j) Utility Services

Whether earthworks and final levels will adversely affect existing utility services.

(k) Heritage

Whether the earthworks would adversely affect any feature of historic or cultural importance.

(l) Contamination

Whether any contaminants are present or are likely to be present on the land.

(m) Coastal protection yards

Whether earthworks in coastal protection yards (where such yards are required in the relevant zone) will cause any adverse effects on the natural coastal environment, including adverse effects on ecological, cultural, spiritual, recreational and visual values of the natural coastal environment.

9.12.7 Removal of Riparian Vegetation

(a) The contribution made by the vegetation to the amenity values of the area, including its visual impact from roads or other public land or from the sea or foreshore.

(b) The suitability of the land for the proposed use, particularly with respect to land capability and soil conservation.

(c) The need to use the land, and, in particular, the need to obtain a suitable building site, access, parking, or installation of engineering services.
(d) The contribution of the riparian vegetation to the protection and enhancement of water quality and the reduction of sedimentation, having regard to the environmental quality of the relevant waterway.

9.12.8 Coastal Protection Works

Regard shall be had to:

- whether the adjoining landward area is at risk from a coastal hazard;
- whether doing nothing, or abandoning or relocating any landward structure are not feasible options;
- whether the effects of activities on sites of cultural heritage have been considered in accordance with Chapter 6 Heritage;
- that the proposed protection works are the most effective method for mitigating a natural coastal hazard, including the use of non-structural options;
- that the proposed protection works will have either positive or minor adverse effects on natural erosion, sedimentation or beach processes;
- that the effects of sea-level rise have been mitigated;
- that the design, construction and positioning of the protection works will not lead to any undermining of foundations, or erosion of lateral support, or settlement or scour of foundation material, or differential movement of structural components, or piping of fine movement of structural components, or the loss of sediment from the immediate vicinity, or increase coastal hazards, or will be overtopped by wave action.

9.12.9 Buildings sited directly beneath electric transmission lines

When assessing an application for a restricted discretionary activity for any part of any residential building sited directly beneath overhead electric transmission lines with a voltage at or above 110 kV, Council will have regard for the following assessment criteria:

(a) Whether the proposal will minimise impacts on the amenity values of the locality;
(b) Whether there are any alternative building platforms available;
(c) Whether the proposal will comply with International Commission on Non-Ionising Radiation Protection Guidelines, 1993 (and any amendments) 24 hour per day exposure level for the general public and the extent or impacts of any such non-compliance;
(d) Whether the proposal and finished ground levels comply with NZECP 34 1993 (and any amendments and the extent or impacts of any such non-compliance.

9.12.10 Stormwater Management Areas

For applications for activities in stormwater management areas that are Controlled or Restricted Discretionary Activities, regard shall be had to the relevant matters listed below, as well as the matters set out in Section 104 of the Act.
• **Earthworks and Fill**
  Whether earthworks and final ground levels will adversely affect overland flowpaths or increase the potential for flooding within the site or surrounding sites.

• **Reticulated stormwater and overland flowpaths**
  Whether a reticulated stormwater system is available and the extent to which overland flowpaths are protected.

• **Water Quality Treatment Devices**
  The extent to which the proposed stormwater works will reduce the potential for flooding and enhance water quality.

• **Relationship to Nearest Waterbody**
  The proximity of the site to the nearest waterbody and the extent to which adverse effects on the nearest waterbody will be minimised, including protection of riparian vegetation and stream or river banks and stream flows.

• **Flooding**
  Whether the proposed activity will avoid, remedy, or mitigate adverse effects of flooding within the site or on neighbouring properties, including damage to buildings, fences, gates, and other structures, vegetation, deposition of sediment, or erosion.

• **Extent of Land to be Vested as Drainage Reserves or Protected by Stormwater Easements**
  The extent of land required to efficiently accommodate the stormwater management system including land required for access and maintenance purposes and to avoid adverse effects.

• **Catchment Planning**
  The extent to which the proposed activity complies with an approved catchment management plan or discharge consent.

• **Finished Ground Levels and Floor Levels of Buildings**
  The extent to which the finished ground level for potential building sites and floor levels of proposed buildings meets Performance Standard 9.9.1.2 and affected the visual amenity values of neighbouring properties.

• **Functionality**
  The extent to which the functionality of the stormwater management system is affected by the proposed activity and the impacts of such effects in flooding and stormwater quality including the ability to maintain the stormwater management system or treat stormwater in a cost effective manner.

• **Future Liability from Flood Damage**
  The extent to which buildings, gates, fences, and other structures or property are at risk from flooding and the arrangements in place for dealing with liability for any future damage.

• **Financial Contributions for Stormwater Systems**

- **Relocation or Reduction of Boundaries of Stormwater Management Areas**

  Whether neighbouring properties are adversely affected by alternative locations for stormwater management facilities and whether consents have been obtained from affected landowners. Where a lesser or alternative area for Stormwater Management purposes is proposed, whether the proposed location achieves the same stormwater management objectives or is more efficient or cost effective.

- **Placement of Buildings, Fences, Gates or other Structures**

  Whether the placement of buildings, fences, gates, or other structures on the site will impede the natural run-off of stormwater from the site and adversely affect water quality, or the ability to introduce water treatment or flood avoidance works.

- **Water Quality and Ecology**

  Whether the proposed activity is likely to cause a lowering of water quality which adversely affects the biota of receiving environments.

- **Utilities**

  The extent to which activities including the installation and operation of utility services is affected by proposed earthworks and final ground levels within the stormwater management area, and their effects on overland flowpaths.

### 9.12.11 Sites and Subdivision for Small Scale Network Utility Services

When assessing an application for a restricted discretionary activity for sites and subdivision for Small Scale Network Utility Services, Council will have regard to the following assessment criteria:

(a) Whether the site chosen is located so as to ensure the proposal will have minimal impact on the amenity values of the locality and will not adversely affect the pattern of subdivision and design of adjacent lots, and the extent or impacts of any adverse such effects;

(b) Whether the proposed site is necessary to provide and maintain essential network utility services to the subdivision;

(c) (i) Whether the proposed size of the site is of a scale which is sympathetic to the character of the locality and the extent or impact of any adverse effects;

   (ii) Whether the site will be landscaped and screened to maintain or enhance the existing amenity values of the streetscape;

   (iii) Whether the cumulative adverse effects of network utility services on the site will dominate or be overbearing in relation to adjacent activities, and the extent or impact of any such effects;

(d) Whether any works and other measures will be carried out to rehabilitate any site which is no longer required to accommodate network utility services, and to remove any obsolescent structures and services prior to amalgamation with an adjoining lot.
9.12.12 Subdivision near mineral extraction activities

Whether a proposal which will result in the establishment of either short term or permanent accommodation will result in adverse effects on the mineral extraction activity (e.g. pressure to change operational characteristics of a site due to complaints over noise, vibration or dust), in particular within the Mineral Extraction Buffer Area shown on the Planning Maps (including Appendix 9 of the Planning Maps) applying to a Quarry Zone or a lawfully established mineral extraction site having particular regard to the following mitigating factors:

(a) Geographical, climatic, and development conditions
   (i) Whether the potential for sensitive uses to locate close to a quarry operation is low.

(b) Noise
   (i) Whether the quarry operates within acceptable hours.
   (ii) Whether there is no blasting.
   (iii) Whether there is limited machinery operation.
   (iv) Whether low levels of distribution truck traffic are confined to industrial or main roads.
   (v) Whether topography does not require use of low gears and heavy braking by truck traffic.
   (vi) Whether there is a sound barrier (e.g., mounding) established between noise source and sensitive uses.
   (vii) Whether noise sources are able to be orientated away from sensitive uses.

(c) Dust
   (i) Whether there is minimal dust distribution by climatic conditions.
   (ii) Whether material is less susceptible to wind erosion (e.g., rubble).
   (iii) Whether stockpiles are stabilised and not exposed to wind erosion.
   (iv) Whether low levels of equipment movement on stabilised pavements are less sensitive to wind erosion.
   (v) Whether transport of material has loads covered and wash down facilities provided.

(d) Vibration (Blasting)
   (i) Whether there is limited impact due to geological conditions.

(e) Safety
   (i) Whether geographical conditions provide a natural barrier to public access or fencing prevents access.

(f) Visual Impact
   (i) Whether screening and rehabilitation effectively minimises visual impacts.
(g) **Stormwater**

(i) Whether detention, filtration, and settling facilities are provided to improve water quality and minimise flooding potential during peak flows.

(h) **Mitigation**

(i) Whether any proposed mitigation will satisfactorily avoid any more than minor adverse effects on the proposed short term or permanent accommodation. This may include the acceptance of a caveat or covenant on the certificate of title that the proposed accommodation is located in proximity to an activity which may generate adverse effects and that such effects are accepted.

**Advice Note:**

For the guidance of the Council when assessing an application for resource consent the Council will request the quarry owner or operator to provide an assessment of the level of effects of quarrying activities received or likely to be received at the proposed site for which the resource consent is sought. This assessment will be provided at the cost of the quarry owner or operator.

[AM36]

**9.12.13 Land modification, development or subdivision within the Wiri North Structure Plan Area (Figure 16.13) complying with Rule 9.9.1.2(c) and Rule 9.9.3.5 [AM162]**

In deciding whether to grant or refuse consent for restricted discretionary activity application for the above activity and in imposing conditions, if consent is granted, the Council shall have regard to the assessment criteria in Rule 9.12 and the following and any other relevant matters contained in Section 104 of the Act:

(a) **Stormwater and Groundwater**

- Whether the proposed activity will avoid, remedy, or mitigate adverse effects of flooding within the site or on the neighbouring properties and the wider catchment, including damage to buildings and other structures, vegetation, deposition of sediment, or erosion;

- Whether the proposed activity complies with an approved catchment management plan or discharge consent, and the extent or impacts of any such non compliance;

- Whether the engineering performance standards appended to this Chapter are appropriate for the circumstances, and the extent or impacts of any such non compliance;

- Whether earthworks and final levels will adversely affect overland flowpaths or increase the potential for flooding within the site or surrounding area;

- Whether any potential adverse effects on the Puhinui Stream will be avoided or mitigated, including protection of riparian vegetation, stream banks and stream flows.

- Whether proposed stormwater works will reduce the potential for flooding and enhance water quality;

- Whether the capacity and standard of the proposed stormwater system will be sufficient to meet the needs of ultimate development of the catchment;

- Whether any contaminants are present or are likely to be present on the land and any adverse effects on public health, and the biota and water quality of receiving environments;
• Whether the floor levels of buildings are protected from the risk of inundation;

• Whether the proposed activity is likely to cause a lowering of groundwater quality.

(b) Cliff Hazard Area

• Whether development adjacent to the Cliff Hazard Area as shown on the Wiri North Structure Plan (Figure 16.13) is protected from rock fall by way of mitigation along the rock face and/or within buffer areas. The method of mitigation used should be applied consistently along the whole of the Cliff Hazard Area.

• Whether development is designed and located in such a way as will maintain the integrity of the abutting Waahi Tapu area.

• Whether development is designed and located in such a way as will ensure the structural integrity of the scheduled Wiri Lava Caves.

(c) Adverse Effects on Wiri North Geological Feature

• Whether the Wiri North Geological Feature, consisting of a minimum of 60 metres continuous length and 20 metre vertical height, including the highest part of the cliff exposure, has been protected.

• Whether development is designed in such a way that it incorporates and enhances the Wiri North Geological Feature for public appreciation. The development should, as a minimum, incorporate view shafts to most of, and preferably the entire geological feature from the public roads. The base of the geological feature identified for protection should be enhanced by appropriate landscaping, so that it is dominated by landscaped open space rather than buildings, carparks and vehicle accessways. Management of the risks associated with the geological feature, and any fencing should be consistent with this and sympathetic to the feature.

Note: The rehabilitation of the quarried area, depending on the extent of filling, has the potential to cover parts of the geological exposures. Should the rehabilitation works, through the importation of clean fill material, result in the Wiri North Geological Feature being significantly covered, then Council will not have regard to this assessment criteria (Rule 9.12.13(c)).

9.13 INFORMATION ACCOMPANYING APPLICATIONS

9.13.1 General Requirements

The requirements under Chapter 5 apply to all applications for subdivision and land use consent under this chapter. This includes:

• Drawings and Plans

• Assessment of Effects on the Environment

9.13.2 Specific Information Accompanying Subdivision Consent Applications

An application for subdivision consent anywhere in the City shall include:-
(a) A description of the activity for which consent is sought;

(b) The address and legal description of the property, and a copy of the Certificate(s) of Title for the land to be subdivided;

(c) A statement specifying any other resource consents the applicant may require in regard to any aspect of the proposed activity, and whether the applicant has applied for such consents;

(d) [AM89]

(e) All applications for resource consent must include an assessment of effects on the environment in accordance with Rule 5.13.2 — Chapter 5 — General Procedures and Rules.

(f) Plan(s) drawn to an identified scale, preferably on either A3 or A4 sized paper, containing sufficient information to adequately define, as applicable:-

• the position of all new boundaries, including restrictive covenant boundaries for cross-lease applications, and unit, accessory unit and common property boundaries for unit title applications;

• the areas of all new allotments (except for a subdivision by grant of cross lease or company lease or by the deposit of a unit title);

• the location and areas of new reserves to be created (including esplanade reserves), esplanade or access strips, and any proposed improvements (paths, play areas, landscaping, etc.);

• the location and areas of any land below mean high water springs of the sea, or of any part of the bed of a river or lake, which is required under section 237A of the Act to be shown on the survey plan as land to be vested in the Crown; [AM89]

• the location and areas of land to be set aside as new road;

• the location and area of any proposed easement, with a memorandum and/or schedule;

• the address and legal description of the property;

• abutting and underlying title boundaries and existing building line restrictions and existing subject easements;

• the balance area of the property to be subdivided showing any proposals for future development;

• where appropriate and possible, contours (based on mean sea level) at an interval sufficient for the design of accessways and services or to show the general topography of the area, particularly around proposed house sites;

• any features, including areas of vegetation and/or individual trees, to be protected by covenant or other method; the principal topographic and geological features, including areas of loose fill and faultline or fault traces;

• areas of land that may be subject to frequent flooding or inundation, erosion, landslip or subsidence, or are within an identified natural hazard high risk area;
• areas of wetlands and bush, and mature individual trees taller than 3m;
• all watercourses that have an average normal waterway width greater than 1m;
• the existing wastewater and stormwater drainage system with invert and manhole lid levels; [AM67]
• existing power/telecommunication poles and gas services;
• existing groundwater bores and their Regional Council reference number;
• existing and proposed septic tanks, soakage areas, and irrigation systems;
• existing fences;
• existing structures (including buildings), and whether such structures will be retained, relocated or removed;
• existing roads, carriageways, and pathways to which connection will be made;
• proposed roads, road works, access points onto the lot(s), accessways, and service lanes with relevant widths, areas and gradients;
• proposed areas of excavation and fill, together with the proposed finished contours for proposed cuts and fill;
• any designations applying to all or part of the lot;
• any conservation or heritage features identified in the District Plan.
• a certification by the surveyor as to the accuracy of the plan.
• for subdivision as a controlled activity, undertaken in accordance with an approved land use consent for a land development, engineering design plans and calculations are required which accurately define the work to be undertaken in accordance with the Engineering Performance Standards in Appendix 1 of the Chapter.

(g) Plans and information on the following matters, where appropriate:-

(i) Potable Water Supply: Verification that each new lot is capable of meeting the minimum standard for water supply.

(ii) Utility Services: Information on the availability or otherwise of common utility services, such as electricity and telecommunications, for each new lot being created.

(iii) Stormwater Drainage:

• Where existing stormwater drains are proposed to be used or connected to service the subdivision, confirmation that adequate capacity is available; or

[AM67]

• If stormwater is proposed to be discharged into a watercourse or the sea, a statement in regard to whether resource consents are required and the result of any consultation with the regional council; or
• If on-site disposal of stormwater by soak pits is proposed, the results of soakage tests and a statement from a suitably qualified person as to the lot's suitability for this type of stormwater disposal.

(iv) Wastewater Disposal:

• Where existing sewers are proposed to be used to service the subdivision, confirmation that adequate capacity is available; or

• For proposals involving the ground disposal of wastewater, the results of an evaluation from a suitably qualified person to indicate:

(ii) whether the site has sufficient capacity for a wastewater disposal field including assessment of soil types and percolation tests;

(ii) whether the regional rules for on-site wastewater disposal are complied with. If not, a resource consent is required from the Auckland Regional Council; and

(iii) where more than one new site will be created, including rural settlements whether a community or individual wastewater treatment and disposal system is most appropriate, having regard to any existing problems within the vicinity of the site.

(v) Stability:

A suitable geotechnical report is to be submitted which details all building and development constraints within the property to enable an adequate assessment on the suitability of the subdivision proposal to be made.

The scope of the report will vary depending on the nature of the application and the site topography. For large rural properties with no earthworks proposed, the report might be in the form of a geotechnical overview whereby a "broad-brush" assessment is made, consisting of assigning areas that do not require specific design at building consent stage, or areas which are not to be built on because of instability or flooding for example. Building restriction lines could similarly be used which take account of possible siting criteria based on these issues. For a small cross-lease type proposal where the land was not affected by any development constraints, the report might consist of a certification from a suitably experienced person. For any subdivision proposal where there are significant geotechnical issues that impact on the proposed development of the land, expert analysis within a full geotechnical report will be required.


(vii) Heritage or Cultural Sites: If the subject land contains an identified feature of archaeological, historical or cultural importance (including sites of traditional importance to iwi), the application must include information about the feature, including response from any relevant organisation or iwi consulted as part of the preparation of the application, and any proposed method of protecting the feature as necessary.

(h) An application for a cross lease or company lease or unit title shall also include:

(i) Sufficient information to demonstrate that the building(s) have existing use rights; or
(ii) A copy of the certificate of compliance for each building depicted on the application; or

(iii) Evidence of any required land use consent granted for the subject buildings; or

(iv) Sufficient information to demonstrate the subject buildings meet the relevant development controls of this Plan.

(i) **Staged Cross-lease Subdivision**

An application for a staged cross-lease development showing an undeveloped portion(s) of the lot will be subject to the same controls as if it were a subdivision for a fee simple subdivision. For this purpose, the application must include sufficient information to demonstrate that the undeveloped balance portion of land is suitable for further development that would be in accordance with the requirements of the District Plan, and that all possible site constraints to such development have been investigated and reported.

(j) **Staged Unit Title Subdivision**

Information must be submitted with the application to show the proposed staging of development, including:

- How all existing or proposed buildings will meet the requirements of the District Plan; or
- The land use consent issued for any proposed buildings; or
- The building consent issued for any proposed buildings.

(k) **Staged Fee Simple Subdivision**

Information on the proposed staging process and time frame.

(l) **Aerial Photographs**

If an annotated aerial photograph is to be used, then the original photograph must be submitted.

(m) **Further Information**

The above requirements shall not inhibit Council from requiring such further information as may be necessary, to better understand the proposal, any possible adverse environmental effects, or any likely mitigation measures that could be undertaken.

(n) **An application for subdivision consent that includes an area of land within the Conservation / Stormwater Management Policy Area shall provide a Riparian Planting Plan which shall include the following information:**

(i) Identification (in a form suitable for inclusion in a consent notice) of the area of land within the Conservation/Stormwater Management Policy Area to be set aside for planting, including proposed means of ownership and on-going management.

(ii) All existing areas of native bush and native vegetation.

(iii) All existing exotic planting.
(iv) Proposed location for riparian planting, species types, source of plant material, maturity of planting and density of planting.

(v) Details of noxious weed, pest and animal control.

(vi) Details of timing of planting and whether the planting will be staged.

(vii) Details of maintenance programme to be implemented.

(viii) Detail of any fencing proposed.

9.14 FINANCIAL CONTRIBUTIONS & BONDS

9.14.1 Definition

For the purposes of this section, the expressions “to serve” or “to provide” in respect of land modification, subdivision or development means to provide a site with such public utility services to the standard required to avoid, remedy or mitigate the effects that are directly generated by the proposed subdivision or development of the land.

9.14.2 Reason for Financial Contribution

Where the Council grants any subdivision consent or any land use consent to an activity involving land development, the applicant including network utility operators and/or requiring authority may be required, as a condition of consent, to make a financial contribution for the purposes of:

- providing public utility services;
- avoiding, remedying or mitigating actual and potential adverse effects;
- ensuring positive effects on the environment to offset any adverse effect.

9.14.3 Nature of Contributions

Financial contributions may, at Council’s discretion, take the form of money or land, or a combination of money and land.

9.14.3.1 Subject to the maximum amounts prescribed in Rule 9.14.5, the financial contribution in respect of public utility services may consist of:

(a) Money

(i) Based on the fair and reasonable (taking into account the actual or estimated) cost of the work necessary to provide each allotment of the development with adequate wastewater disposal, street planting in accordance with Rule 9.9.2.11(b)(i) and (ii), stormwater disposal and treatment, and water supply and roading systems, and, where appropriate, to connect those systems with the existing or new public utility services, and/or necessary to provide each allotment or the development with public utility services that will serve the land in the
subdivision or development, and/or

(ii) Such contributions as are fair and reasonable towards the cost of upgrading any existing public utility services or providing new public utility services necessary to serve the land in the subdivision or serve the development; and/or

(iii) Such contribution as is fair and reasonable based on Rule 9.14.5.2 towards recouping the cost of existing public utility services provided at Council’s expense necessary to serve the land in the subdivision or development; and/or

(b) Land (including any easement over land)

Such land as is required for the purpose of all or part of any system that is to become part of the public utility services. Council may require as a condition of consent the vesting of such land upon development or subdivision; and/or

(c) Additional Money and Land

Such other amount of money and/or land which the applicant for a subdivision consent or for a consent to an activity involving development has agreed, by way of binding legal agreement satisfactory to the Council, to contribute towards the provision of new public utility services, street planting, or upgrading of existing public utility services; and/or

(d) Legal, Administration and Other Costs

Such amount as is fair and reasonable towards its legal, administration and other costs associated with the provision of services for the subdivision or development.

(e) Financial Contributions specified under Chapter 8 Transportation — Rule 8.26.

(f) Passenger Transport Facilities — Chapters 14 and 17

9.14.4 Method of Assessment

The assessment of financial contribution shall be determined so as to:

(a) include all design, legal, professional and technical services associated with the relevant public utility services and improvements;

(b) be primarily aimed at the provision of physical work agreed to by the Council and the developer and carried out by the developer as part of the development;

(c) give preference to relating the developer’s responsibilities to the natural characteristics of the land which can be identified prior to purchase and development;

(d) obtain a financial contribution in respect of any necessary upgrading works to public utility services;

(e) obtain a financial contribution towards recouping the cost of existing public utility services provided at Council’s expense that serve the land in the subdivision or development, except where such services were provided by the Council prior to 19 July 1993;
(f) obtain a fair and reasonable contribution towards the cost of providing an adequate standard of public utility services to serve the allotments within the subdivision or development.

9.14.5 Financial Contributions for Public Utility Services

9.14.5.1 The maximum amount of any contribution in respect of public utility services

In any resource consent, the maximum amount of the financial contribution required in respect of public utility services shall be one or more of the following as appropriate to the circumstances:

(a) The total cost of the work referred to in Rule 9.14.3.1(a)(i); and/or

(b) The total cost of the new or upgrading work referred to in Rule 9.14.3.1(a)(ii), provided that the amount required shall not exceed:

• in the case of public utility services, the extent to which the works in respect of which the applicant is liable, are necessary to serve the land in the subdivision or development; and/or

(c) The contribution referred to in Rule 9.14.3.1(a)(iii); and/or

[(d) deleted by consent order RMA 1608/98, RMA 1625/98, RMA 1644/98, RMA 1648/98]

(e) The fee simple in all that part of any land used for the purpose of any system referred to in Rule 9.14.5.5, provided that, where the system and associated land required to accommodate that system is in excess of that necessitated by or required to serve a subdivision or development, or in the case of roads exceeds the widths specified within Rule 9.14.5.5.2(a) and (b), Council shall compensate or otherwise provide credit to the subdivider or developer for the additional land.

(f) Any additional money and/or land referred to in Rule 9.14.3.1(c); and/or

(g) Any actual and reasonable legal or other costs required under Rule 9.14.3.1(d) by the Council in connection with the above; and/or

(h) In respect of roads, the total cost of providing works in accordance with Rules 9.9.2.11(a), 9.14.5.5.2(a) and (b), and/or 8.26.

Proviso: That where any amount is required to be paid towards new or existing public utility services, or the upgrading of existing public utility services, the actual amount to be paid shall be based on the cost less any previous financial contribution paid with respect to the subject land, with the balance adjusted for inflation or adjusted for the costs involved in servicing the original capital, taking account of depreciation.

9.14.5.2 Existing Public Utility Services

Where adequate public utility services have been constructed since 19 July 1993 at the Council’s expense, all subdivisions and developments may be required to pay a financial contribution towards recouping the proportionate costs of those services as serve or are necessitated by the subdivision or development. Such financial contributions shall generally be based on either the average or the actual cost of providing public utility services for each additional allotment or component of the development. No contribution will be claimed in respect of such works carried out prior to 19 July 1993.
9.14.5.3 Additional Financial Contributions

Where financial contributions have been levied on subdivision or were not required on subdivision, additional financial contributions shall only be levied on applications for resource consents for development lodged with Council after 30 June 1994, where it can be demonstrated that the activity places greater demands on services than was contemplated for the land concerned at the time of subdivision.

9.14.5.4 General purpose for which cash contribution will be used:

Cash sums shall be used as follows:

(a) Sums required under Rule 9.14.3.1(a)(i) shall be applied to meet the cost of the specified work.

(b) Sums required under Rule 9.14.3.1(a)(ii) shall be applied to the cost of the upgrading works in respect of which the amount is levied.

(c) Sums required under Rule 9.14.3.1(a)(iii) shall be apportioned in respect of each of the existing public utility services in such amounts as the Council considers appropriate.

[9.14.5.4(d) deleted by Consent Order RMA 1608/98,1644/98,1648/98,1625/98]

(e) Sums required under Rule 9.14.3.1(c) shall be applied to meet the cost of the specified work.

(f) For the purpose of meeting the requirements of this rule separate accounts will be established by the Council in respect of each of the major public utility services.

(g) Sums paid in respect of the Council's legal and other costs shall be applied to the purpose for which they are levied.

(h) In the event of surplus funds being available as a result of the Council having paid for services out of general revenue, monies levied shall be allocated to other projects designed to make provision for public utility services within the Council's district.

9.14.5.5 Schedule of Works

9.14.5.5.1 General

(a) This Schedule sets out the maximum standard which may be required in respect of the provision of public utility services to a subdivision or development. The contributions are primarily aimed to the provision of physical work agreed to by the Council and the subdivider/developer and carried out by the subdivider/developer as part of the subdivision or development. They are further intended to give preference to relating a subdivider's/developer's responsibilities to the natural characteristics of the land which can be identified prior to purchase and subdivision or development.

(b) For public utility services not specified in this Schedule, the maximum standard shall be that as specified under Rule 9.14.3.1.

9.14.5.5.2 Roads

(a) Arterial Roads
The maximum contribution for or towards an arterial route will be equivalent to a District Arterial road the requirements for which are set out in Appendix 2 to this Chapter.

(b) Existing Roads

The maximum contribution for or towards upgrading improvements to the existing network, assessed with particular reference to the extent to which any additional works or costs are necessitated by the proposed subdivision or development, will be to provide:

- roading improvements along the whole frontage as required under Rule 9.9.2.11(a) and Figures 9.3 and 9.4 in Appendix 2 to this Chapter; and

- any works required under Rules 9.9.2.11(b), (f) and (g); and

- any works required under Rule 8.26.2; and

- any roading works in the vicinity of the site necessary to address any adverse effects, including new roads or road upgrading, where this is required as a result of traffic generated from the development or subdivision on the roading network.

In the case where works have been carried out at Council’s expense on the roading network along a frontage prior to subdivision or development taking place and were carried out after 19 July 1993, the maximum contribution shall be in accordance with the cost of providing the above works to the extent indicated above. No contribution will be claimed in respect of such works carried out prior to 19 July 1993.

(c) Land Drainage

The subdivider or developer is required to provide for all capital improvements within the subdivision or development site to the standards and requirements set out in the appropriate resource consent, and make provision for any improvements required by the impact of the subdivision, or development beyond the subdivision or development site.

The above requirements may be reviewed on a catchment-by-catchment basis in accordance with relevant regional plans as the Council prepares resource consent applications which may include provision for water quality, provision for cost saving and/or the Council acting as a funding manager.

Land that floods or has a potential to flood is considered the full responsibility of the owner. The cost and benefits of developing land containing open water courses, overland flow paths, and flood prone areas, is a matter for the developers to determine, without dependence on Council funding and without creating impacts beyond the site being subdivided or developed.

(d) Sanitary Drainage

The subdivider or developer is required to provide for all capital improvements within the subdivision or development site to serve the whole catchment in its ultimate land use pattern and connect the site system to the nearest adequate outlet.

The upper limit for this requirement is when the scale of operations is of regional significance and the Watercare Services Ltd (or other body performing the function of or having control of sanitary drainage for the Auckland Region) accepts responsibility for capital improvements, maintenance and operation.
(e) Water Supply in Existing Roads (except within Flat Bush)

For all existing roads, either the subdivider or developer is required to contribute half the cost of a nominal system consisting of a fire main and rider main and associated fittings and connections as set out in Rule 9.9.2.12.

In the case where the network within the subdivision or development exceeds the above, the Council will pay the difference in pipe and laying costs.

All other capital improvements within the subdivision or development site will be provided for by the subdivider or developer.

In addition to all the above, areas demanding special facilities (such as high head supply) may attract a special fee on an area basis.

(f) Water Supply in Existing Roads (within Flat Bush)

The subdivider or developer is required to provide for all capital improvements within the subdivision or development site to service the entire area in its ultimate land use pattern and connect the site system to the nearest adequate supply. (Adequate means a system which complies with the equivalent of 9.9.2.12(d)).

The upper limit for this requirement is when the scale of operations is of regional significance and Watercare Services Limited (or other body performing the function or having control of water for the Auckland region) accepts responsibility for capital improvements, maintenance and operation.

9.14.6 Reserves Contributions and Esplanade Reserves

Refer to Chapter 15 Section 15.15 for rules applicable to Reserves Contribution and Esplanade Reserves.

9.14.7 Bonds

Security for compliance shall be in accordance with sections 108, 108A, 109 and 220 of the Resource Management Act, further secured by deposits of cash with the Council, bank guarantee or otherwise to the Council’s satisfaction. Where appropriate, securities will be registered against the relevant land titles.

Variations of the value and terms of security to the Council’s satisfaction may be granted during the currency of securities.

The form of document to be employed for security shall be to the Council’s satisfaction. Before instructing its own solicitors to prepare the documents the Council will require certain information for the purpose, an acceptance of liability for the costs and a deposit on account of those costs.
APPENDIX 1  ENGINEERING PERFORMANCE STANDARDS

Introduction

Purpose:

The purpose of this standard is to provide for sustainable management of natural and physical resources as they relate to the engineering aspects of land development within Manukau City.

This standard is performance based, with the emphasis on outcomes, to allow flexible and innovative approaches to the engineering aspects of land development.

Scope:

This standard encompasses all engineering aspects of land modification, development and subdivision development with particular reference to the engineering aspects of subdivisional development. It covers the design, construction and on going performance of:

- earthworks
- roads
- land drainage
- utility services

Design:

The objective of a design is to give a precise and clear definition to the desired outcome.

The following points must be addressed:

- the extent of the works shall be clearly defined
- the design shall comply with all controls of the plan
- observance of the Engineering Performance Standard
- sufficient information should be provided to show how construction may be undertaken
- the actual or potential effects of natural hazards
- where applicable, provide a basis for approvals and acceptance
- a suitably experienced and qualified person must prepare the design
- minimisation of adverse environmental effects

Construction:

The objective of construction is to ensure that proposed works are carried out to the desired standard and to then function satisfactorily for the anticipated design life.
Construction shall:

- provide the physical works in accordance with the design
- be carried out with due consideration for the safety and health of both work site personnel and the general public
- meet performance criteria
- be carried out in accordance with good engineering practice
- where applicable be certified as complying with Council’s requirements by a suitably experienced and qualified person

Application:

To the extent required by rules in the chapters of this district plan dealing with land modification, network utilities, and transportation, works in connection with those activities.

Works constructed in compliance with Council’s “Engineering Quality Standards” will be accepted as meeting the “Engineering Performance Standard”.

Interpretation

In this Standard, unless the context otherwise requires, words shall have the meanings as given below:

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Amenity values”</td>
<td>means those natural or physical qualities and characteristics of an area that contribute to people’s appreciation of its pleasantness, aesthetic coherence and cultural and recreational attributes</td>
</tr>
<tr>
<td>“CBR”</td>
<td>means California Bearing Ratio.</td>
</tr>
<tr>
<td>“Discharge”</td>
<td>includes emit, deposit and allow to escape</td>
</tr>
<tr>
<td>“EDA”</td>
<td>means Equivalent Design Axle of 8.2 tonnes</td>
</tr>
<tr>
<td>“Effect”</td>
<td>has the meaning given by Section 3 of the Resource Management Act 1991</td>
</tr>
<tr>
<td>“Environment”</td>
<td>has the meaning given in Section 2 of the Resource Management Act 1991</td>
</tr>
<tr>
<td>“Lot”</td>
<td>has the same meaning as allotment as defined in Section 218 of the Resource Management Act 1991</td>
</tr>
<tr>
<td>“Roading hierarchy”</td>
<td>is as described in Appendix 2: Constructional Standards for Roads</td>
</tr>
<tr>
<td>“Suitably experienced and qualified person”</td>
<td>will generally be a registered engineer or surveyor holding an annual practising certificate. Not withstanding this, Council will accept submissions from non registered persons who have, in the Council's viewpoint, sufficient recent experience in the particular aspect of work.</td>
</tr>
</tbody>
</table>
Earthworks

The objective of earthworks is to improve land utilisation and to safeguard people, property and the environment from the adverse effects of unstable land.

<table>
<thead>
<tr>
<th>ASPECT</th>
<th>FUNCTIONAL REQUIREMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| Topography    | Earthworks shall ...  
• improve land utilisation  
• protect people, property and the environment from the adverse effects of unstable land  | Earthworks shall ...  
• (where applicable) provide each lot with a safe, stable building site accessible by two wheel drive vehicles  
• provide for the control of stormwater  
• preserve the natural landscape where identified in the plan  |
| Structure     | The structure of earthworks shall ...  
• withstand and be stable under the anticipated loads  | The structure of earthworks shall ...  
• be geotechnically sound and remain safe and stable for the duration of the intended land use  
• cater for the natural ground water flows  
• man made structures shall remain safe and stable for the duration of the intended land use  
• be capable of supporting buildings:  
(i) developed in accordance with NZS 3604:1990 New Zealand Standard Code of Practice for Light Timber Frame buildings not requiring specific design;  
(ii) requiring specific foundation requirements; as the case may require having regard to activities or likely to be contained on the land.  |
| Environmental | The environmental effects resulting from the application of this performance standard will be to:  
• avoid, remedy or mitigate the effects on water quality from erosion resulting from earthworks.  
• avoid, remedy or mitigate the adverse effects of erosion, slippage and inundation  
• protect the visual amenity of identified features of the natural landscape  
• protect both the land and the neighbouring environment from the effects of surface water and surface water runoff  
• protect both the land and the neighbouring environment from any adverse effects caused by ground water flows  |                                                                                                                                                                                                                                                                                                                                                                          |
### Roads

The objective of roads is to ensure the safe and efficient movement of people, vehicles and goods with minimum adverse effect on the environment.

<table>
<thead>
<tr>
<th>ASPECT</th>
<th>FUNCTIONAL REQUIREMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout</td>
<td>The layout of the road network shall, as appropriate for its position in the hierarchy, ...</td>
<td>The layout of the road network shall ...</td>
</tr>
<tr>
<td></td>
<td>• ensure that people, vehicles and goods can move safely and efficiently</td>
<td>• be adequate for its intended use</td>
</tr>
<tr>
<td></td>
<td>• minimise any adverse effect on the environment</td>
<td>• provide two wheel drive vehicular access to each lot</td>
</tr>
<tr>
<td></td>
<td>• make provision for utility services</td>
<td>• link and be compatible with the existing road network</td>
</tr>
<tr>
<td></td>
<td>• make provision for amenity values</td>
<td>• provide for the safe movement of both vehicular and non vehicular traffic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• provide practical access for emergency vehicles</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• minimise any adverse effect on the environment</td>
</tr>
<tr>
<td>Structure</td>
<td>The structure of a road shall ...</td>
<td>The structure of a road shall ...</td>
</tr>
<tr>
<td></td>
<td>• withstand the anticipated loads for the design life of the road</td>
<td>• have a design life of at least 25 years based on Equivalent Design Axle loadings, or equivalent, design methods</td>
</tr>
<tr>
<td></td>
<td>• transfer applied loads so as to not adversely affect underlying utilities</td>
<td>• be based on a maximum CBR of 7 for subgrade</td>
</tr>
<tr>
<td></td>
<td>• minimise any adverse effect on the environment</td>
<td>• comply with Appendix 2 — Constructional Standards for Roads</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• maintain finished surface smoothness within 6mm below a 5m straight edge</td>
</tr>
<tr>
<td>Stormwater Control</td>
<td>The road network stormwater control system shall...</td>
<td>The road network stormwater control system shall...</td>
</tr>
<tr>
<td></td>
<td>• protect the road, road users and adjoining land from the adverse effects of water</td>
<td>• have a design life of at least 50 years</td>
</tr>
<tr>
<td></td>
<td>• minimise any adverse effect on the environment</td>
<td>• convey water to an approved discharge point</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• provide reasonable and safe access for maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• avoid the likelihood of blockages</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• the primary piped system shall cater for a 20% Annual Exceedence Probability rainfall event</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• culvert and bridge structures shall cater for a 1% Annual Exceedence Probability rainfall event</td>
</tr>
<tr>
<td>Environmental Effects</td>
<td>The environmental effects resulting from the application of this performance standard will be to ...</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• avoid, remedy or mitigate discharge of dust or vapour into the air</td>
<td></td>
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<tr>
<td></td>
<td>• avoid, remedy or mitigate noise health risk</td>
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<tr>
<td></td>
<td>• avoid, remedy or mitigate reduction of amenity values</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• protect the neighbouring environment from road surface water runoff</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• protect the neighbouring environment from migration of road surface materials</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• avoid, remedy and mitigate adverse effects on ecological values</td>
<td></td>
</tr>
</tbody>
</table>
Land Drainage

The objective of land drainage is to safeguard people, property and the environment from the adverse effects of surface water.

<table>
<thead>
<tr>
<th>ASPECT</th>
<th>FUNCTIONAL REQUIREMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout</td>
<td>The layout of the land drainage network shall ...</td>
<td>The layout of the land drainage network shall ...</td>
</tr>
<tr>
<td></td>
<td>• protect people, property and the environment from the adverse effects of surface water</td>
<td>• service the fully developed catchment for the extent anticipated in the Plan. • service each lot • ensure gravity operation • (if linking to), be compatible with the existing drainage network • permit reasonable and safe access for maintenance • not unduly restrict the location of any future buildings • the primary piped drainage system shall cater for a 20% Annual Exceedence Probability rainfill event • open channels and overland flowpath shall cater for a 1% Annual Exceedence Probability rainfill event</td>
</tr>
<tr>
<td>Structure</td>
<td>The structure of the land drainage network shall ...</td>
<td>The structure of the land drainage network shall ...</td>
</tr>
<tr>
<td></td>
<td>• accommodate the anticipated flows • withstand the anticipated loads</td>
<td>• have a design life of at least 50 years • ensure safety in operation • avoid the likelihood of blockage • permit reasonable and safe access for maintenance • provide stormwater quality improvement as required in the Plan</td>
</tr>
<tr>
<td>Environmental Effects</td>
<td>The environmental effects resulting from the application of this performance standard will be to ...</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• protect land from flooding • minimise the likelihood of breakdown of the drainage system resulting in flooding • avoid, remedy or mitigate any reduction of amenity values • reduce silting of waterways through soil carried in surface water runoff • avoid, remedy or mitigate the adverse effects of erosion, slippage, subsidence and inundation caused by surface water runoff or ground water flows • avoid contaminants entering the system • improve receiving water quality • protect land and/or development from the adverse effects of flooding</td>
<td></td>
</tr>
</tbody>
</table>

Manukau Operative District Plan 2002
**Wastewater**

The objective of sanitary sewerage is to safeguard people from injury or illness caused by infection or contamination resulting from sanitary or industrial sewage.

<table>
<thead>
<tr>
<th>ASPECT</th>
<th>FUNCTIONAL REQUIREMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout</td>
<td>The layout of the sanitary sewerage network shall ...</td>
<td>The layout of the sanitary sewerage network shall ...</td>
</tr>
<tr>
<td></td>
<td>• ensure the removal of sanitary and industrial sewage</td>
<td>• be sized to cater for catchment development for the extent anticipated in the Plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• service each lot</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• convey sanitary and industrial sewage to an approved discharge point</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• (if linking to), be compatible with the existing network</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• utilise gravity operation where feasible</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• permit reasonable and safe access for maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• not unduly restrict the location of any future buildings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• sewers shall be designed to carry 0.6 litres per gross hectare for residential and business development.</td>
</tr>
<tr>
<td>Structure</td>
<td>The structure of the sanitary sewerage network shall ...</td>
<td>The structure of the sanitary sewerage network shall...</td>
</tr>
<tr>
<td></td>
<td>• accommodate the anticipated flows</td>
<td>• have a design life of at least 50 years</td>
</tr>
<tr>
<td></td>
<td>• withstand the anticipated loads</td>
<td>• ensure safety in operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• avoid direct stormwater entry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• permit reasonable and safe access for maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• operate without surcharging of pipes and manholes</td>
</tr>
<tr>
<td>Environmental Effects</td>
<td>The environmental effects resulting from the application of this performance standard will be to ...</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• prevent contamination of the environment by sewage and the consequent effect on the ecosystem</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• protect amenity values</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• prevent the contamination of ground water by sewage seepage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• prevent the emission of objectionable odours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• avoid, remedy or mitigate the adverse effects of sewage spills through sewerage network breakdowns</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• minimise the volume of sewage discharge through preventing inflow of ground and surface water</td>
<td></td>
</tr>
</tbody>
</table>
### Water Reticulation

The objective of water reticulation is to provide a water supply for consumption, health, hygiene and fire fighting.

<table>
<thead>
<tr>
<th>ASPECT</th>
<th>FUNCTIONAL REQUIREMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout</td>
<td>The layout of the water reticulation network shall ...</td>
<td>The layout of the water reticulation network shall ...</td>
</tr>
<tr>
<td></td>
<td>• ensure an adequate supply of potable water</td>
<td>• service each lot</td>
</tr>
<tr>
<td></td>
<td>• make provision for fire fighting requirements</td>
<td>• (if linking to), be compatible with the existing water reticulation network</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• permit reasonable and safe access for maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• (where applicable) permit appropriate access for fire fighting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• be capable of supplying the following flows:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a) fire flows plus the peak domestic hourly flow with a minimum residual pressure of 100 kPa at the hydrants.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) Peak hourly domestic flow with a minimum residual pressure of 300 kPa or 60% of static pressure (whichever is greater) at the highest point in the supply district.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c) fire flows plus 50% of the peak business flow with a minimum residual pressure of 100 kPa at the hydrants.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• be located in a position (refer to Network Utilities Chapter 7), whereby they do not interfere with other utility services.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• be capable of receiving and maintaining a Grade A classification from the Ministry of Health Water Supply Grading System</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• unless otherwise demonstrated the layout of the water reticulation network shall be designed for the flows shown in the attached Table A.</td>
</tr>
<tr>
<td>Structure</td>
<td>The structure of the water reticulation network shall ...</td>
<td>The structure of the water reticulation network shall ...</td>
</tr>
<tr>
<td></td>
<td>• accommodate the anticipated flows</td>
<td>• have a design life of at least 50 years</td>
</tr>
<tr>
<td></td>
<td>• withstand the anticipated pressures and loads</td>
<td>• if carrying non potable water, be clearly identified as such</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• permit reasonable and safe access for maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• (where applicable) permit appropriate access for fire fighting</td>
</tr>
<tr>
<td>Environmental Effects</td>
<td>The environmental effects resulting from the application of this performance standard will be to ...</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• protect people's health by provision of a potable water supply</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• minimise the likelihood of surface or ground flooding due to leakage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• help in containing the environmental damage caused by fire or explosion</td>
<td></td>
</tr>
</tbody>
</table>
Table A

<table>
<thead>
<tr>
<th>TYPE OF DEVELOPMENT</th>
<th>FIRE FLOW</th>
<th>DOMESTIC CONSUMPTION (PEAK HOURLY FLOW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential (Based on 50 Persons/ha)</td>
<td>25 l/s</td>
<td>0.60 l/s/ha</td>
</tr>
<tr>
<td></td>
<td></td>
<td>260 l/ha</td>
</tr>
<tr>
<td>Schools &amp; Small Shopping Areas</td>
<td>50 l/s</td>
<td>0.60 l/s/ha</td>
</tr>
<tr>
<td>Suburban Industrial Areas</td>
<td>100 l/s</td>
<td>1.00 l/s/ha</td>
</tr>
<tr>
<td>Large Commercial Complex &amp; Industrial Sites</td>
<td>200 l/s</td>
<td>2.00 l/s/ha</td>
</tr>
</tbody>
</table>
Electricity Reticulation

The objective of electricity reticulation is to provide an energy supply for domestic, commercial and industrial requirements.

<table>
<thead>
<tr>
<th>ASPECT</th>
<th>FUNCTIONAL REQUIREMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout</td>
<td>The layout of the electricity reticulation network shall...</td>
<td>The layout of the electricity reticulation network shall...</td>
</tr>
<tr>
<td></td>
<td>• ensure the supply is adequate for its intended use</td>
<td>• service each lot</td>
</tr>
<tr>
<td></td>
<td>• safeguard people, property and the environment from the risk of personal injury, fire and explosion</td>
<td>• (if linking to) be compatible with the existing electricity reticulation network</td>
</tr>
<tr>
<td></td>
<td>• protect amenity values</td>
<td>• permit reasonable and safe access for maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• be capable of supplying all electrical requirements for the catchment developed to the ultimate capacity anticipated in the Plan.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• all works shall be constructed, maintained, operated and meet the requirements of the Electricity Act 1992, and Regulations made pursuant to that Act.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• be located in a position (refer to Network Utilities Chapter 7), whereby they do not interfere with other utility services.</td>
</tr>
<tr>
<td>Structure</td>
<td>The structure of the electricity supply network shall...</td>
<td>The structure of the electricity reticulation network shall...</td>
</tr>
<tr>
<td></td>
<td>• ensure the supply is adequate for its intended use</td>
<td>• have a design life, or a suitable ducting with a design life of at least 50 years</td>
</tr>
<tr>
<td></td>
<td>• accommodate the anticipated supply load</td>
<td>• ensure safety in operation by meeting the requirements of Section 61 of the Electricity Act 1992</td>
</tr>
<tr>
<td></td>
<td>• safeguard people, property and the environment from the risk of personal injury, fire and explosion</td>
<td>• permit reasonable and safe access for maintenance</td>
</tr>
<tr>
<td></td>
<td>• minimise any adverse effect on the environment</td>
<td></td>
</tr>
<tr>
<td>Environmental Effects</td>
<td>The environmental effects resulting from the application of this performance standard will be to ...</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• protect amenity values</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• ensure that the intensity of extremely low frequency electric and magnetic fields complies with the International Commission on Non-Ionising Radiation Protection Guidelines 1993.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• minimise noise health risk from substations, generators or transformers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• avoidance of accidental contact of people or animals with live wires</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• minimise the likelihood of fire or explosion due to electrical shorting</td>
<td></td>
</tr>
</tbody>
</table>
Gas Reticulation

The objective of gas reticulation is to provide an energy supply for domestic, commercial and industrial requirements.

<table>
<thead>
<tr>
<th>ASPECT</th>
<th>FUNCTIONAL REQUIREMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout</td>
<td>The layout of the gas reticulation network shall ...</td>
<td>The layout of the gas reticulation network shall ...</td>
</tr>
<tr>
<td></td>
<td>• ensure the supply is adequate for its intended use</td>
<td>• service each lot</td>
</tr>
<tr>
<td></td>
<td>• safeguard people, property and the environment from the risk of personal injury, fire and explosion</td>
<td>• (if linking to) be compatible with the existing gas reticulation network</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• permit reasonable and safe access for maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• be capable of supplying all gas energy requirements for the catchment developed to the ultimate capacity anticipated in the Plan.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• all distribution systems shall be constructed, operated, maintained and meet the requirements of the Gas Act 1992.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• be located in a position (refer to Network Utilities Chapter 7) whereby they do not interfere with other utility services.</td>
</tr>
<tr>
<td>Structure</td>
<td>The structure of the gas reticulation network shall ...</td>
<td>The structure of the gas reticulation network shall ...</td>
</tr>
<tr>
<td></td>
<td>• accommodate the anticipated demands</td>
<td>• have a design life of at least 50 years</td>
</tr>
<tr>
<td></td>
<td>• withstand the anticipated pressures and loads</td>
<td>• permit reasonable and safe access for maintenance</td>
</tr>
<tr>
<td></td>
<td>• safeguard people, property and the environment from the risk of personal injury, fire and explosion</td>
<td>• be safe in operation by meeting the requirements of section 46 of the Gas Act 1992.</td>
</tr>
<tr>
<td>Environmental Effects</td>
<td>The environmental effects resulting from the application of this performance standard will be to ...</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• protect amenity values</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• avoid fire or explosion resulting from gas leakage or gas build up</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• avoid injury to people or animals through accidental contact with the gas supply</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• avoid the contamination of the gas supply</td>
<td></td>
</tr>
</tbody>
</table>
# Telecommunication Reticulation

The objective of a telecommunication service is to allow people to communicate remotely.

<table>
<thead>
<tr>
<th>ASPECT</th>
<th>FUNCTIONAL REQUIREMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Layout</strong></td>
<td>The layout of the telecommunications network shall...</td>
<td>The layout of the telecommunications network shall...&lt;br&gt;• service each lot&lt;br&gt;• (if linking to) be compatible with the existing telecommunications network&lt;br&gt;• permit reasonable and safe access for maintenance&lt;br&gt;• be compatible with other utility services&lt;br&gt;• be capable of providing telecommunication requirements for the catchment developed to the ultimate capacity anticipated in the Plan.&lt;br&gt;• shall be designed, constructed and maintained to contain the effects of interference&lt;br&gt;• be located in a position (refer to Networks Utilities Chapter 7) whereby they do not interfere with other utility services.&lt;br&gt;• all works shall be constructed, maintained, operated and meet the requirements of the Telecommunications (Residual Provisions) Act 1987, the Telecommunications Act 2001 and any Regulations made pursuant to that Act. [AM99]</td>
</tr>
<tr>
<td><strong>Structure</strong></td>
<td>The structure of the telecommunications network shall...</td>
<td>The structure of the telecommunications network shall...&lt;br&gt;• have a design life, or suitable ducting with a design life of at least 50 years&lt;br&gt;• ensure safety in operation&lt;br&gt;• permit reasonable and safe access for maintenance</td>
</tr>
<tr>
<td><strong>Environmental Effects</strong></td>
<td>The environmental effects resulting from the application of this performance standard will be to...&lt;br&gt;• protect amenity values&lt;br&gt;• avoid, remedy or mitigate the risks associated with low frequency electromagnetic radiation</td>
<td></td>
</tr>
</tbody>
</table>
### Design Flows for Flat Bush

#### MINIMUM DESIGN FLOWS FOR FLAT BUSH

<table>
<thead>
<tr>
<th>PRECINCT/AREA/ZONING</th>
<th>FIRE FLOW @ 100kpa</th>
<th>WATER CONSUMPTION</th>
<th>WASTEWATER FLOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barry Curtis Park</td>
<td>200 l/s</td>
<td>1.0 l/s/ha</td>
<td>0.7 l/s/ha</td>
</tr>
<tr>
<td>Countryside living (if public mains supplied)</td>
<td>25 l/s</td>
<td>0.2 l/s/ha</td>
<td>0.6 l/s/ha</td>
</tr>
<tr>
<td>Flat Bush 1 Residential Transition</td>
<td>25 l/s</td>
<td>0.6 l/s/ha</td>
<td>0.7 l/s/ha</td>
</tr>
<tr>
<td>Flat Bush 1 Residential Arterial</td>
<td>50 l/s</td>
<td>0.6 l/s/ha</td>
<td>0.7 l/s/ha</td>
</tr>
<tr>
<td>Flat Bush 1 Residential Barry Curtis Park</td>
<td>200 l/s</td>
<td>1.2 l/s/ha</td>
<td>1.4 l/s/ha</td>
</tr>
<tr>
<td>Flat Bush 1 Residential Central</td>
<td>50 l/s</td>
<td>0.6 l/s/ha</td>
<td>1.2 l/s/ha</td>
</tr>
<tr>
<td>Flat Bush 1 Residential General</td>
<td>50 l/s</td>
<td>0.6 l/s/ha</td>
<td>0.9 l/s/ha</td>
</tr>
<tr>
<td>Flat Bush 1 Residential Local Centre</td>
<td>50 l/s</td>
<td>0.6 l/s/ha</td>
<td>1.2 l/s/ha</td>
</tr>
<tr>
<td>Flat Bush 2 Residential Arterial</td>
<td>50 l/s</td>
<td>0.6 l/s/ha</td>
<td>0.7 l/s/ha</td>
</tr>
<tr>
<td>Flat Bush 2 Residential General</td>
<td>25 l/s</td>
<td>0.6 l/s/ha</td>
<td>0.7 l/s/ha</td>
</tr>
<tr>
<td>Neighbourhood Centre</td>
<td>100 l/s</td>
<td>1.0 l/s/ha</td>
<td>0.7 l/s/ha</td>
</tr>
<tr>
<td>Town Centre Main Street</td>
<td>200 l/s</td>
<td>1.0 l/s/ha</td>
<td>0.7 l/s/ha</td>
</tr>
<tr>
<td>Town Centre Ormiston Rd</td>
<td>200 l/s</td>
<td>1.0 l/s/ha</td>
<td>0.7 l/s/ha</td>
</tr>
<tr>
<td>Town Centre Park Edge</td>
<td>200 l/s</td>
<td>1.2 l/s/ha</td>
<td>1.4 l/s/ha</td>
</tr>
<tr>
<td>Town Centre Work — Live</td>
<td>200 l/s</td>
<td>1.0 l/s/ha</td>
<td>0.7 l/s/ha</td>
</tr>
</tbody>
</table>
### APPENDIX 2 CONSTRUCTIONAL STANDARDS FOR ROADS

<table>
<thead>
<tr>
<th>ROAD CATEGORY</th>
<th>TYPE OF ROAD</th>
<th>MINIMUM WIDTH IN METRES</th>
<th>MAX. GRADE</th>
<th>ROAD FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ROAD</td>
<td>CARRIAGEWAY</td>
<td></td>
</tr>
<tr>
<td>Secondary Network</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Roads</td>
<td>Private way serving 2–4 units</td>
<td>4.7</td>
<td>2.7</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Private way serving 5–15 units</td>
<td>6.5</td>
<td>4.5</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Service lane</td>
<td>5.0</td>
<td>4.5</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Cul de sac: serving up to 15 household units</td>
<td>12.0</td>
<td>5.4</td>
<td>12.5%</td>
</tr>
<tr>
<td></td>
<td>Cul de sac: serving 16 to 30 household units</td>
<td>14.6</td>
<td>5.4</td>
<td>12.5%</td>
</tr>
<tr>
<td></td>
<td>Local road (includes cul de sac serving more than 30 household units)</td>
<td>18.2</td>
<td>7.8</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Business</td>
<td>23.6</td>
<td>12.2</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Beachlands Village Business Centre Roads [AM163]</td>
<td>23.6</td>
<td>7.0*</td>
<td>10%</td>
</tr>
<tr>
<td>Note: Business roads are those roads or portions of road that are continuously adjacent along one or both sides to business zoned land. * Carriageway width may vary based on the final detailed design.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collector Roads</td>
<td>Through road</td>
<td>21.2</td>
<td>10.8</td>
<td>8.33%</td>
</tr>
<tr>
<td>Rural Roads</td>
<td>Local road</td>
<td>20</td>
<td>6</td>
<td>10%</td>
</tr>
<tr>
<td>Note: Where a road serves not more than two properties a single 3.5m wide carriageway width will be required.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### ROAD CATEGORY | TYPE OF ROAD | MINIMUM WIDTH IN METRES | MAX. GRADE | ROAD FUNCTION
--- | --- | --- | --- | ---
Rural Roads | Through road | 20 | 7 | Note: Additional legal width over 21.2 metres, or 23.6 metres in the case of business local roads, to be funded by the Council.

Note: The above requirements apply to only that side of the road to which a subdivision or development has frontage.

### NETWORK | ROAD CLASSIFICATION | MINIMUM WIDTH IN METRES | ROAD FUNCTION
--- | --- | --- | ---
Primary Network | District Arterial Road | 24.4 (See note 1) | 13.0 | Movement of heavy volumes of through traffic, connects with arterial and motorway, regular bus route

Note:
1. The widths for roads within the primary network are specified in Appendix 1 Chapter 8 — Transportation. The above represent the general standards for a new District Arterial Road.
2. The Primary road network carriageway widths will need to be increased at major intersections to allow for additional turning lanes and may be increased to accommodate cycleways.
3. Roadside parking may be banned on the Primary road network.
4. Council may approve as restricted discretionary activity a departure from the maximum gradients for cul-de-sac and local residential roads where it can be shown that, due to topography or other pertinent factors, the standard grades are not appropriate.
**FIGURE 9.3 MAXIMUM ARTERIAL ROAD CONTRIBUTION: RESIDENTIAL ZONED LAND**

- 300mm Granular Pavement depth on Subgrade CBR = 7.0

* Additional works to be funded by Council

Note: Additional legal width over 21.2 metres, or 23.6 metres in the case of business local roads, to be funded by the Council.

**FIGURE 9.4 MAXIMUM ARTERIAL ROAD CONTRIBUTION: BUSINESS ZONED LAND**

- 350mm Granular Pavement depth on Subgrade CBR = 7.0

* Additional works to be funded by Council

Note: Additional legal width over 21.2 metres, or 23.6 metres in the case of business local roads, to be funded by the Council.