# 7. UTILITIES

#### 7.1 Introduction

Within the Gore District utilities are an important physical resource essential to the functioning and well-being of the community, including households, commercial businesses and industry. This includes:

Network utility systems such as street lighting, electricity, water supply, stormwater drainage, sewerage and roading;

Facilities of public benefit including meteorological facilities, lighting in public places, data recording and monitoring systems;

Installations for the receiving and sending of communications.

As some network utilities cross the District and also cross territorial boundaries, consistency of provisions for network utilities are desirable both throughout the District and where appropriate with adjoining local authorities.

#### 7.2 Issues

The significant resource management issues that arise in relation to utilities are:

- (1) Ensuring that provision is made for the development and use of utilities in the District in order to meet the needs of the community.
- (2) Avoiding, remedying or mitigating the adverse effects of utilities on the environment.
- (3) Avoiding, remedying or mitigating the adverse effects of land use activities on utilities.

# 7.3 Objectives

- (1) To ensure that utilities are provided for so as to meet the economic, social, health and safety needs of individuals and the community.
- (2) To ensure that the location and design of utilities avoids significant adverse effects on:
  - (a) the natural character of wetlands, and lakes and rivers and their margins;
  - (b) outstanding natural features and landscapes;
  - (c) areas of significant indigenous vegetation and significant habitats of indigenous fauna;
  - (d) the maintenance and enhancement of public access to and along lakes and rivers;
  - (e) the relationship of Maori and their culture and traditions with their ancestral lands, water, waahi tapu, and other taonga;
  - (f) historic heritage.
- (3) Subject to Objective (2), to avoid where practical, remedy or mitigate the adverse effects of the provision of utilities.

- (4) To avoid adverse effects of land use activities on the operation of the utilities of the District.
- (5) To protect the existing infrastructure of the District.
- (6) To ensure development is not inappropriately located near infrastructure, such as high voltage electricity lines.
- (7) To provide for the sustainable, secure and efficient use, operation, maintenance, upgrading and development of the electricity transmission network within the Gore District while seeking to avoid, remedy or mitigate adverse effects on the environment to the extent practicable, and while recognising the technical and operational requirements and constraints of the network.
- (8) To recognise the importance of the electricity transmission network to the social and economic well-being of the Gore District, the Southland Region and the nation.

#### 7.4 Policies

- (1) To recognise the benefits, and necessity, to individuals and the community from the provision of utilities.
- (2) To require the underground placement of network utilities within the commercial zone at Gore, and promote their underground placement in other areas. where this is economically viable and technically feasible.
- (3) To encourage the use of utility corridors, co-location or sharing of facilities where this is feasible and practical.
- (4) To protect:
  - (a) the natural character of wetlands, and lakes and rivers and their margins:
  - (b) outstanding natural features and landscapes;
  - (c) areas of significant indigenous vegetation and significant habitats of indigenous fauna;
  - (d) public access to and along lakes and rivers;
  - (e) the relationship of Maori and their culture and traditions with their ancestral lands, water, waahi tapu, and other taonga; and
  - (f) historic heritage; from the adverse effects of utilities.
- (5) To encourage a design and location of utilities that minimises adverse visual effects, where this can be achieved without compromising operation or efficiency.
- (6) In considering subdivision and land use activities, to take into account any adverse effects of those activities on the operation of the existing and the foreseeable utilities of the District.
- (7) Deleted
- (8) To minimise risks to health and safety that can arise as a result of the location of other activities in close proximity to utilities, including transmission lines.



- [9] In considering the location of buildings under RMA processes, and in assessing any Project Information Memorandum or Building Consent under the Building Act 2004, have regard to the provisions of New Zealand Electrical Code of Practice for Electrical Safe Distances 34:2001
- (10) Recognise and provide for the operation, maintenance, and upgrading of the electricity transmission network.
- (11) To consider the constraints imposed by the technical and operational requirements of the electricity transmission network when considering measures to avoid, remedy or mitigate adverse environmental effects of transmission activities
- (12) To recognise the national, regional and local benefits of sustainable, secure and efficient electricity transmission, including:
  - (a) maintained or improved security of supply of electricity;
  - (b) efficient transfer of energy through a reduction of transmission losses;
  - (c) the facilitation of the use and development of new electricity generation, including renewable generation which assists in the management of the effects of climate change, and generation using techniques that minimise adverse environmental effects; and
  - (d) enhanced supply of electricity through the removal of points of congestion.
- (13) To have regard to the extent to which any adverse effects have been avoided, remedied or mitigated by the route, site and method selection when considering the environmental effects of new transmission infrastructure or major upgrades of existing transmission infrastructure.
- [14] To consider reducing existing adverse effects of transmission infrastructure, including such effects on noise sensitive activities where appropriate, when substantial upgrades of transmission infrastructure are taking place.
- (15) To avoid, remedy or mitigate adverse effects on urban amenity, town centres, areas utilised for recreation and existing noise sensitive activities when planning and developing the electricity transmission network.
- (16) New transmission infrastructure shall avoid:
  - (i) the Hokonui Hills Significant Landscape area as shown on the planning maps;
  - (ii) areas of significant indigenous vegetation and significant habitats of indigenous fauna as shown on the planning maps; and
  - (iii) urban environments unless it can be demonstrated through the route/method selection process that the route is the most appropriate route for avoiding, remedying or mitigating adverse effects.

(17) To refer to the International Commission on Non-ioninsing Radiation Protection Guidelines Limiting Exposure to Time-Varying Electric Magnetic Fields (1 Hz - 100 kHz) (Health Physics, 99(6):818-836 and recommendations from the World Health Organisation monograph Environment Health Criteria (No 238, June 2007) or revisions thereof and any applicable New Zealand standards or national environmental standards when dealing with and assessing electric and magnetic fields associated with the electricity transmission network.

## 7.5 Methods of implementation

- (1) Require compliance with any relevant Council Bylaws in designing and locating infrastructure.
- (2) Considering infrastructure and other utility requirements as part of subdivision consents.
- (3) Undertaking advocacy with service providers to promote appropriate design and location of utilities.
- (4) District Plan rules that provide for utilities as a permitted activity subject to appropriate conditions. In the absence of compliance with such rules, require the adoption of the resource consent or designation procedures.
- (5) Resource consent and designation assessment matters, to take into account adverse effects on existing and proposed utilities.

## 7.6 Principal reasons

- Utilities are essential for the functioning of communities, including households, businesses and industry. It is not always practical or feasible to avoid the adverse effects of utilities.
- (2) Rules and standards for utilities will need to be met to ensure that their effects are appropriately managed. Where rules and standards are not met, the resource consent or designation procedures should be followed.
- (3) Section 6 of the RMA lists matters of national importance that must be recognised and provided for in district plans. It is therefore appropriate to impose some limitations on the extent of adverse effects where these matters are potentially compromised.
- (4) Where adverse effects occur from existing utilities, such as with overhead lines in residential areas, Council will advocate to the providers of the utilities that undergrounding be undertaken where practical and feasible.

# 7.7 Anticipated environmental results

The environmental results anticipated from the management of utilities are:

- (1) Utilities are provided to meet the needs of people and community.
- (2) Adverse effects of constructing and maintaining utilities are avoided where practical, remedied or mitigated.



# 7.8 Monitoring

In relation to utilities, Council will monitor:

- (1) The number of resource consents applied for, including:
  - (a) the activity for which consent is sought;
  - (b) the location of the activity;
  - (c) if approved, the conditions imposed and the extent of any non-compliance with those conditions.
- (2) The number of community complaints, including the nature of the complaint and action taken.

### 7.9 Rules

#### (1) Relationship to other rules

- (a) Unless otherwise stated, the provisions of Rule 7.9 are subject to compliance with the following rules:
  - (i) Rule 2.2.9 Outstanding natural features and landscapes;
  - (ii) Rule 2.3.9 Significant indigenous vegetation and significant habitats of indigenous fauna;
  - (iii) Rule 2.4.9 Margins of Rivers and Streams;
  - (iv) Rule 2.5.9 Heritage;
  - (v) Rule 2.6.9 Mana Whenua.
- (b) For the avoidance of doubt, except as provided for by Rule 7.9(1)(a) or otherwise stated, the provisions of Rule 7.9 are not subject to any other rule in this Plan.

#### (2) General standards for all utilities

- (a) Except as provided for in Rule 7.9(6), any activity that emits radiofrequency fields shall comply with NZS 2772.1:1999 Radiofrequency Fields Part 1: Maximum exposure levels 3 kHZ – 300 GHz ("the New Zealand Standard").
- (b) Except as provided for in Rules 7.9(2)(e) and 7.9(7)(d), all utilities located within Rural and Residential Zones shall be operated in a manner that complies with the following noise limits:

#### On any day:

7.00 a.m. to 10.00 p.m. 55 dBA Leq 10.00 p.m. to 7.00 a.m. 40 dBA Leq 10.00 p.m. to 7.00 a.m. 75 dBA Lmax

#### Measured:

Within Rural Zones, at any point within the notional boundary of any noise sensitive activity. Within Residential Zones, at any point within any other site.

(c) Except as provided for in Rules 7.9(2)(e) and 7.9(7)(d) all utilities located within Commercial, Industrial and Mixed Use Zones shall be operated in a manner that complies with the following noise limits:

(i) On any day:

At any time 55 dBA Leq 10.00 p.m. to 7.00 a.m. 85dBA Lmax

#### Measured:

Within Commercial Zones, at any point within any other site.

Within Industrial and Mixed Use Zones, within any land zoned Commercial, Residential or Rural.

(ii) On any day:

7.00 a.m. to 10.00 p.m. 55 dBA Leq 10.00 p.m. to 7.00 a.m. 40 dBA Leq 10.00 p.m. to 7.00 a.m. 75 dBA Lmax

#### Measured:

Within Rural Zones at any point within the notional boundary of any noise sensitive activity.

Within Residential Zones at any point within any site.

- d) Noise associated with the normal operation of vehicles on roads is a **permitted activity**
- (e) Any utilities that do not comply with Rules 7.9(2) (a)-(e) are a **restricted discretionary activity**

The matters over which Council shall exercise its discretion are the adverse environmental effects of the matters with which there is non-compliance.

#### (3) Electricity lines

- (a) The operation, maintenance, upgrading relocation, or removal of an existing transmission line, including any of the following activities that relate to those things:
  - (i) A construction activity
  - (ii) A use of land
  - (iii) An activity relating to an access track to an existing transmission line
  - (iv) Undergrounding an existing transmission line

Is not required to comply with Rules 2.2.9, 2.3.9 or 2.4.9, but is subject to the following:

- (i) The Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009.
- (ii) All debris shall be removed from the site upon completion of the works.
- (iii) The ground shall be reinstated as far as practical upon completion of the works.
- (iv) Any lines crossing a navigable water body shall be located more than 10 metres above the level of the water body.
- (b) New electricity lines up to (and including) 110kV are a **permitted activity,** subject to the following standards:



- Other than where existing support structures are used, lines are to be located underground in Residential, Commercial, Industrial and Mixed Use Zones.
- (ii) Any lines crossing a navigable water body shall be located more than 10 metres above the level of the water body.
- iii) Within Rural Zones, any support structure greater than 6 metres in height, in relation to land zoned Residential, shall comply with Rule 4.7.1 Daylight Admission.
- (d) Any works, or electricity lines up to (and including) 110 kV, that do not comply with any part of (3) (c) above is a restricted discretionary activity.
  - The matters over which Council shall exercise its discretion are the adverse environmental effects of the matters with which there is non-compliance.
- (e) Except as provided for in Rule 7.9(3)(a) new electricity lines greater than 110 kV are a **discretionary activity.**

#### (4) Electricity substations

- (a) Electricity substations are a **permitted activity** subject to the following standards:
  - No pole mounted structure shall exceed a volume of 0.6 cubic metres.
  - (ii) Within Residential and Commercial Zones no ground-mounted structure shall exceed 6.0 square metres in area or 2.0 metres in height.
  - (iii) Within Rural, Industrial and Mixed Use Zones any ground-mounted structure exceeding 6.0 square metres in area or 2.0 metres in height shall be located a minimum of 20 metres from the property boundary.
- (b) Any electricity substation that does not comply with any part of paragraph (4)(a) above is a **restricted discretionary activity**.

The matters over which Council shall exercise its discretion are the adverse environmental effects of the matters with which there is non-compliance.

#### (5) Communications - General

Except where:

- (i) in association with an electricity transmission line, and provided for by Rule 7.9(3)(a) above; or
- (ii) provided for by Rule 7.9(7)(c):
- (a) Lines used for the conveying of telecommunications, television, electronic data and other such communications are a **permitted activity** subject to the following standards:
  - (i) Other than where existing support structures are used, within Residential, Commercial, Industrial and Mixed Use Zones such lines are to be located underground.

- (ii) Within Rural Zones, any support structure greater than 6 metres in height, in relation to land zoned Residential, shall comply with Rule 4.7.1 Daylight Admission.
- (iii) All structures shall comply with the height limits in the "Airport approach and land use controls" as detailed on the Planning Maps.
- (b) Within Rural, Commercial, Industrial and Mixed Use Zones, the electronic sending and receiving of communications and associated structures, including (but not limited to) telecommunication and radio communicationfacilities, is a permitted activity subject to the following standards:
  - (i) No antenna dish shall exceed 3.0 metres in diameter.
  - (ii) Any support structure greater than 6 metres in height, in relation to land zoned Residential, shall comply with Rule 4.7.1 Daylight Admission.
  - (iii) All structures shall comply with the height limits in the "Airport approach and land use controls" as detailed on the Planning Maps.
  - (iv) No communication cabinets, shelter or kiosks shall exceed a height of 3 metres and a ground coverage of 10 square metres.
- (c) Within Residential Zones, the electronic sending and receiving of communications and associated structures, including (but not limited to) telecommunication and radio communication facilities, is a **permitted activity** subject to the following standards:
  - (i) No antenna dish shall exceed 1.2 metres in diameter.
  - (ii) Any support structure greater than 6 metres in height shall comply with Rule 4.7.1 Daylight Admission.
  - (iii) No communication cabinets, shelter or kiosks shall exceed a height of 2 metres and a ground coverage of 6 square metres.
- (d) Any communications utility that does not comply with any part of paragraph (5)(a) (c) above is a **restricted discretionary activity.**

The matters over which Council shall exercise its discretion are the adverse environmental effects of the matters with which there is non-compliance.

# (6) Telecommunication facilities generating radio frequency fields

- (a) A telecommunication facility is a **permitted activity** as far as radiofrequency fields are concerned, if the net work operator (as defined by section 5 of the Telecommunications Act 2001) plans and operates the facility so that:
  - (i) It complies with NZS 2772.1:1999 Radiofrequency Fields Part 1: Maximum exposure levels 3kHz to 300 GHz.



- (ii) The Chief Executive of the Gore District Council receives, before the telecommunication facility becomes operational, the following:
  - (a) written or electronic notice of where the facility is or where it is proposed to be; and
  - (b) a report that -
    - (i) is prepared in accordance with NZS 6609.2: 1990 Radiofrequency Radiation: Part 2: Principles and Methods of Measurement 300 kHz to 100 GHz; and
    - (ii) takes account of exposures arising from other telecommunication facilities in the vicinity of the facility; and
    - (iii) predicts whether the radiofrequency field levels at places in the vicinity of the facility that are reasonably accessible to the general public will comply with NZS 2772: Part 1: 1999 Radiofrequency Fields Part 1 Maximum Exposure Levels 3 kHz to 300 GHz.
- (iii) If the prediction referred to in (b)(iii) above is that the radiofrequency field levels will reach or exceed 25% of the maximum level authorised by NZS 2772: Part 1: 1999 Radiofrequency Fields Part 1 Maximum Exposure Levels 3 kHz to 300 GHz for exposure of the general public, the network operator must ensure that the Chief Executive of the Gore District Council receives, within 3 months of the telecommunication facility becoming operational, a report that:
  - (a) Is prepared in accordance with NZS 6609.2: 1990 Radiofrequency Radiation: Part 2: Principles and Methods of Measurement 300 kHz to 100 GHz; and
  - (b) Provides evidence that the actual radiofrequency field levels at places in the vicinity of the facility that are reasonably accessible to the general public comply with NZS 2772: Part 1: 1999 Radiofrequency Fields Part 1 Maximum Exposure Levels 3 kHz to 300 GHz.
- (b) Any telecommunication facility that does not comply with any part of paragraph (6)(a) above is a **non-complying** activity.

#### (7) Telecommunication facilities in road reserves

- (a) Telecommunication facilities in road reserves shall comply with Rules 2.2.9, 2.5.9 and 4.12.1 4.12.3.
- (b) The replacement of an original utility structure by a replacement utility structure is a permitted activity provided that:
  - (i) The replacement utility structure does not have a diameter that is more than the original utility structure's diameter at its largest point plus 50%

- (ii) The height of the replacement utility structure is no more than the original utility structure's highest point plus the lesser of 3 metres or 30%.
- (iii) The combined height of the replacement utility structure and the replacement antenna is no more than the combined height of the replacement utility structure and the original antenna.
- (iv) If an antenna is added or replaced under subclause (b)(ii) ore (b)(iii) above, the antenna (excluding the mount, if there is one, and the shroud, if there is one, and ancillary equipment, if there is any) must fit within the dimensions of a cylindrical shape that, when measured along the centre line of the original utility structure or the replacement utility structure, is no more than 2 metres high and no more than 500 mm in diameter.
- (v) If a dish antenna either is added to an original utility structure in a road reserve or a replacement utility structure in a road reserve or replaces an antenna on an original utility structure in a road reserve or a replacement utility structure in a road reserve, the dish antenna must:
  - (a) have a diameter of no more than 380 mm
  - (b) must not protrude from the structure's centre line by more than 600 mm, and
  - (c) must be one of only 2 on the structure.
- (c) The location of cabinets in a road reserve is a **permitted activity** provided that:
  - (i) If a cabinet is located by itself next to land that is zoned Residential:
    - (a) The cabinet's footprint must be no more than 1.4 square metres.
    - (b) The cabinet must be no higher than the height of the concrete foundation plinth, if there is one, plus 1.8 metres.
  - (ii) If 2 or more cabinets are located at the same site next to land that is zoned Residential:
    - (a) Each cabinet's footprint must be no more than 1.4 square metres.
    - (b) The total footprint of all the cabinets must be no more than 1.8 square metres.
    - (c) The distance between each cabinet and the cabinet or cabinets closest to it must be no more than 500 mm.
    - (d) The cabinets must be no higher than the height of the concrete foundation plinths, if there are any, plus 900 mm, with the exception that 1 cabinet may be as high as the height of the concrete foundation plinth, if there is one, plus 1.8 metres.



- (iii) If a cabinet is located by itself, or if 2 or more cabinets are located at the same site next to land that is not zoned Residential:
  - (a) The total footprint of all the cabinets must be no more than 2 square metres.
  - (b) Each cabinet must be no higher than the height of the concrete foundation plinth, if there is one, plus 2 metres.
- (iv) If 2 or more cabinets are located at different sites in the road reserve, on the same side of the road as one another, and next to land that is not zoned Residential, and are higher than the height of the concrete foundation plinths, if there are any, plus 900 mm, each cabinet must be at least 30 metres from each other cabinet that is higher than the height of the concrete foundation plinth, if there is one, plus 900 mm, measured between the two closest points of the cabinets.
- (v) If a cabinet is located in a road reserve and requires a power supply, that power supply must be located either below ground or within the cabinet.
- (d) Noise from a cabinet located in a road reserve:
  - (i) Where the adjoining land is zoned Residential or Rural must not exceed:
    - (a) 50 dB LAeq (5 min) between 7:00 am and 10:00 pm:
    - (b) 40 dB LAeq (5 min) between the 10:00 pm referred to in paragraph (a) and the following 7:00 am:
    - (c) 65 dB LAFmax between the 10:00 pm referred to in paragraph (a) and the following 7:00 am.
  - (ii) Where the adjoining land is zoned Commercial, Industrial or Mixed Use must not exceed:
    - (a) 60 dB LAeq (5 min) at any time.
    - (b) 65 dB LAFmax between 10:00 pm and the following 7:00 am.
  - (iii) For the purpose of (i) and (ii) above the noise from the cabinet must be measured and assessed at one of the following points:
    - (a) If the side of a building containing a habitable room is within 4 metres of the closest boundary of the road reserve:
      - (i) at a point 1 metre from the side of the building; or
      - (ii) at a point in the plane of the side of the building.
    - (b) In any other case:
      - (i) at least 3 metres from the cabinet; and

- (ii) within the legal boundary of land next to the part of the road reserve where the cabinet is located.
- (iv) For the purpose of (i) and (ii) above the noise from the cabinet must be measured in accordance with NZS 6801: 2008 Acoustics - Measurement of environmental sound, the measurement must be adjusted in accordance with NZS 6801: 2008 Acoustics - Measurement of environmental sound to a free field incident sound level, and the adjusted measurement must be assessed in accordance with NZS 6802: 2008 Acoustics -Environmental noise.
- (e) Any telecommunication facility that does not comply with any part of paragraphs (7)(b) (d) above is a controlled activity. The matters over which control is reserved are the matters with which there is non-compliance.

#### (8) Other utilities

- (a) Except as otherwise provided by Rule 7.9 (3)-(7) utilities are a permitted activity subject to the following standards:
  - (i) Any support structure greater than 6 metres in height shall comply with Rule 4.7.1 Daylight Admission.
  - (ii) All structures shall comply with Rule 4.8.1 Height
  - (iii) Within Residential and Commercial Zones, no ground-mounted structure shall exceed a height of 2 metres and a ground coverage of 6 square metres.
  - (iv) Within Rural, Industrial and Mixed Use Zones, no ground-mounted structure shall exceed a height of 3 metres or a ground coverage of 10 square metres.
- (b) Any other utilities that do not comply with any part of paragraph (8)(a) above are a **restricted discretionary** activity.

The matters over which Council shall exercise its discretion are the adverse environmental effects of the matters with which there is non-compliance.

Note: Where utility structures and equipment, such as lines and support structures, telephone booths, and equipment cabinets are located within the road reserve, approval is required from the Gore District Council or New Zealand Transport Agency as the relevant roading authority.

# 7.10 Information to accompany resource consent applications

In addition to all matters referred to in Section 1.3 in this District Plan an application for a resource consent under this section shall contain:

(1) A description of the activities that it is proposed to undertake and the reasons why these must be undertaken on the particular site.



- (2) Details of the area to be served, and benefits to the community in providing the utility.
- (3) A description of other locations or methods for carrying out the activities and the reasons why these are not being adopted.
- (4) An assessment of the environmental effects of the proposed activity in relation to the matter not being complied with, and any means by which these can be avoided, remedied or mitigated.
- (5) Any effects of existing and permitted activities that could adversely effect the utility being provided, and the means by which it is proposed to avoid such effects.



The page is intentionally blank

