

Chapter 17

Network Utilities



17. NETWORK UTILITIES

17.1 RESOURCE MANAGEMENT ISSUES

1. Regionally significant infrastructure and network utilities are physical resources that need to be sustainably managed to provide reliable and efficient services to the District.
2. The location and appearance of some **network utilities** can affect **amenity values** of the environment through the generation of glare, noise, vibration, and visual effects.
3. **Regionally significant infrastructure and network utilities** have a **functional and locational requirement** to locate in residential areas and other sensitive environments which can result in adverse effects such as noise, vibration, and glare effects.
4. The location and growth of trees near overhead lines and reticulation systems can compromise the function of the **network utilities**, and pose safety issues.
5. **Network utilities** in some parts of the District are susceptible to natural hazards, including flooding and erosion which can disrupt service delivery and can adversely affect the surrounding environment.
6. **Renewable electricity generation** and supply needs to be provided for to reduce greenhouse gas emissions and ensure security of supply.
7. The operation, **maintenance**, development, and upgrade of **regionally significant infrastructure** including the **National Grid** can be constrained by adverse effects from other activities.
8. New subdivision, use and development could adversely affect the safe, efficient, and effective functioning of **regionally significant infrastructure**.
9. **Regionally significant infrastructure** is essential for the economic and social wellbeing of the District.

17.2 OBJECTIVES AND POLICIES

OBJECTIVE

- 17.2.1 The benefits of the safe, efficient and effective operation (including maintenance, upgrade, replacement and development) of regionally significant infrastructure including network utilities within the District are recognised, where significant adverse effects on the environment are avoided, remedied, or mitigated.

POLICIES

- 17.2.1.1 Management of significant adverse effects of structures associated with **network utilities** while recognising their **functional requirements** through appropriate location, design and **landscaping** to maintain the quality of the surrounding environment.
- 17.2.1.2 Encourage **network utility** operators and developers to place equipment underground where practicable and where technically and economically feasible, when servicing new areas.
- 17.2.1.3 Where **network utility** operators propose to locate within **areas** susceptible to natural hazards to meet a functional requirement, to require a natural hazard assessment so that the risks to and from the **network utility** can be appropriately managed.
- 17.2.1.4 Recognise the benefits of the **National Grid** in the District.

OBJECTIVE

- 17.2.2 Management of the potential adverse effects of network utilities on sensitive environments, particularly in areas of high landscape value such as in the District's coastal areas.**

POLICIES

- 17.2.2.1 Encourage the co-location of **network utilities** in service corridors and common **sites** where this is practicable and appropriate.
- 17.2.2.2 Ensure that **network utilities** including overhead lines, structures, and **buildings** are designed and located to seek to avoid or minimise adverse effects, particularly visual effects.

OBJECTIVE

- 17.2.3 To enable the safe and efficient maintenance, upgrade, replacement and development, and operation of existing network utilities by ensuring that, as far as practicable, other activities do not constrain those operations.**

POLICIES

- 17.2.3.1 To ensure that new subdivision, **buildings** and activities do not compromise the **maintenance, upgrade, replacement, development and operation of existing network utilities**, including the **National Grid**.
- 17.2.3.2 To recognise the significance of **regionally significant infrastructure** and **renewable electricity generation** and associated structures.

17.2.3.3 To manage subdivision, land use activities and vegetation within the electricity transmission corridors, including the **National Grid**.

17.2.3.4 Sensitive activities and inappropriate **buildings**, structures and activities are not allowed within **National Grid Yards**.

17.3 ACTIVITY STATUS

Resource consent is not required for Permitted activities provided all relevant standards are met. Resource consent is required for all Controlled, Restricted Discretionary, Discretionary and Non-complying activities.

Additional controls apply in relation to the following activities. Refer to the Chapters identified.

- Landscapes and Habitats – refer Chapter 13
- Heritage – refer Chapter 14
- Natural Hazards – refer Chapter 18

17.3.1 PERMITTED ACTIVITIES

17.3.1.1 Subject to compliance with the Standards in **17.4** unless otherwise stated, the following activities may be established without resource consent.

17.3.1.2 All Zones

1. The construction and placement of up to and including 110kV lines on poles, provided that the activity is located 50m or more from **MHWS**.
2. **Maintenance, minor upgrading and replacement** of lines and **network utilities**. **Minor upgrading** as defined in **Chapter 19** is not required to comply with the Zone Standards.
3. **Network utilities** that comply with the Zone Standards, provided that the activity is located 50m or more from **MHWS** and unless specifically provided for below.

17.3.1.3 Residential Zone and Coastal Settlement Zone

1. Masts, poles, pylons, aerials, antenna and similar structures associated with **network utilities** provided that:
 - (a) A maximum **height** of 9m is not exceeded.
 - (b) The activity is located 50m or more from **MHWS**.
 - (c) Antenna dishes do not exceed 1.5m in diameter.

2. Masts, poles, pylons, aerials, antenna, and similar structures associated with **network utilities** provided that:

- (a) The mast, pole, pylon does not exceed 300mm in diameter where the **height** exceeds 9m, but is no greater than 12m.
- (b) The activity is located 50m or more from **MHWS**.
- (c) Antenna dishes do not exceed 1.5m in diameter.

17.3.1.4 Town Centre Zone, Mixed Activity Zone, Marine Services Zone and Coastal Zone

Masts, poles, pylons, aerials, antenna and similar structures associated with **network utilities** provided that:

1. A maximum **height** of 15m is not exceeded.
2. The activity is located 50m or more from **MHWS**.

17.3.1.5 Industrial Zone, Harbour Industrial Zone and Rural Zone

Masts, poles, pylons, aerials, antenna and similar structures associated with **network utilities** provided that:

1. A maximum **height** of 20m is not exceeded.

17.3.2 CONTROLLED ACTIVITIES

17.3.2.1 There are no controlled activities.

17.3.3 RESTRICTED DISCRETIONARY ACTIVITIES

17.3.3.1 The following are restricted discretionary activities and may only be established after land use has been granted by **Council**. The **Council** may grant or refuse resource consent for a restricted discretionary activity only in relation to the matters over which it has restricted its discretion.

17.3.3.2 All Zones

1. **Network utilities** that do not meet one of the conditions for Permitted Activities except for the 50m setback from **MHWS**.
2. Gas Transmission Pipelines.

17.3.4 DISCRETIONARY ACTIVITIES

17.3.4.1 The following activities may only be established if Land Use Consent has been granted by **Council**. The **Council** may grant or refuse resource consent for a discretionary activity.

17.3.4.2 **All Zones of the District**

1. The construction and placement of 110kV lines on pylons.
2. The construction and placement of lines at a voltage exceeding 110kV.
3. Any **network utility** that does not comply with two or more of the conditions for permitted activities including the 50m setback from **MHWS**.

17.3.4.3 **Residential Zone and Coastal Settlement Zone**

Activities not meeting the requirements for permitted activities.

17.3.4.4 **Town Centre Zone, Mixed Activity Zone and Coastal Zone**

Masts, poles, pylons, aerials, antenna, and similar structures associated with **network utilities** where:

1. The **height** exceeds 15m; or
2. Antenna dish exceed 1.5m in diameter.

17.3.4.5 **Industrial Zone and Rural Zone**

Masts, poles, pylons, aerials, antenna, and similar structures associated with **network utilities** where:

1. The **height** exceeds 20m; or
2. Antenna dish exceed 3m in diameter.

17.3.4.6 **Assessment Criteria and Conditions**

An application for discretionary activity may be granted or refused consent by **Council**. An application will be assessed in full and conditions may be imposed that may include one or more of the following:

1. Visual
 - (a) The colour and finishing of **network utility** structures, with regard to reflectivity and glare.
 - (b) Location of **network utility** structure in relation to outstanding **natural features and landscapes**.
 - (c) Mitigation measures in terms of planting, fencing, or **landscaping**.
 - (d) The viability for undergrounding of the **network utility**, including undergrounding all, or part, of the utility.
2. Noise, vibration effects
 - (a) Frequency, duration, and timing of emitted noise, of emissions.
 - (b) Measures to avoid, remedy, or mitigate the adverse effects on the environment from emitted noise or vibration.

3. Effects on cultural and heritage resources
 - (a) Proximity of the **network utility** to **heritage resources** and outstanding **natural features and landscapes**.
 - (b) Proximity of the **network utility** to waahi tapu, and other areas of importance to local Iwi or Hapū.
4. Natural hazard effects
 - (a) Proximity and susceptibility of the **network utility** to identified areas of natural hazards.
5. Effects on residential areas
 - (a) Proximity of **network utility** to residential areas and **places of assembly**.
 - (b) Measure to avoid, remedy, or mitigate any adverse effects on residential areas and **places of assembly** from the **network utility** structure.
6. Functional Requirements
 - (a) The reasons for the proposed location, **site** or route or method, taking into account functional requirements and constraints.
 - (b) The benefits of the facility utility to the community and beyond.
 - (c) The degree to which any adverse environmental effects have been sought to be avoided or minimised, or are to be remedied or mitigated.
7. Effects on Waioeka Ōtara Rivers Scheme
 - (a) Proximity of the **network utility** to stop banks, drains and other river scheme assets
 - (b) Measures to avoid, remedy or mitigate effects of utility works on the river scheme asset.

17.4 ASSESSMENT CRITERIA FOR RESTRICTED DISCRETIONARY ACTIVITIES

17.4.1 The **Council** restricts its discretion over the following matters:

1. The visual effects arising from non-compliance with the condition.
2. The effect on **sites** of cultural or heritage value.
3. The likelihood of potential effects from natural hazard.
4. The benefits to be derived from the **network utility** for the District.
5. The effects of the activity on the Waioeka Ōtara Rivers Scheme.
6. Clearance of significant **indigenous vegetation**.

17.5 ASSESSMENT CRITERIA FOR DISCRETIONARY ACTIVITIES

An application for discretionary activity may be granted or refused consent by **Council**. An application will be assessed in full and conditions may be imposed that may include one or more of the following:

8. Visual
 - (e) The colour and finishing of **network utility** structures, with regard to reflectivity and glare.
 - (f) Location of **network utility** structure in relation to outstanding **natural features and landscapes**.
 - (g) Mitigation measures in terms of planting, fencing, or **landscaping**.
 - (h) The viability for undergrounding of the **network utility**, including undergrounding all, or part, of the utility.
9. Noise, vibration effects
 - (c) Frequency, duration, and timing of emitted noise, of emissions.
 - (d) Measures to avoid, remedy, or mitigate the adverse effects on the environment from emitted noise or vibration.
10. Effects on cultural and heritage resources
 - (c) Proximity of the **network utility** to **heritage resources** and outstanding **natural features and landscapes**.
 - (d) Proximity of the **network utility** to waahi tapu, and other areas of importance to local Iwi or Hapū.
11. Natural hazard effects
 - (b) Proximity and susceptibility of the **network utility** to identified areas of natural hazards.
12. Effects on residential areas
 - (c) Proximity of **network utility** to residential areas and **places of assembly**.
 - (d) Measure to avoid, remedy, or mitigate any adverse effects on residential areas and **places of assembly** from the **network utility** structure.
13. Functional Requirements
 - (d) The reasons for the proposed location, **site** or route or method, taking into account functional requirements and constraints.
 - (e) The benefits of the facility utility to the community and beyond.
 - (f) The degree to which any adverse environmental effects have been sought to be avoided or minimised, or are to be remedied or mitigated.
14. Effects on Waioeka Ōtara Rivers Scheme
 - (c) Proximity of the **network utility** to stop banks, drains and other river scheme assets
 - (d) Measures to avoid, remedy or mitigate effects of utility works on the river scheme asset.

17.5 ZONE STANDARDS

The following standards apply to **network utilities**, in addition to the Zone Standards.

17.5.1 SITE REQUIREMENTS AND YARD STANDARDS FOR NETWORK UTILITIES

17.5.1.1 All **network utilities** shall comply with Zone Standards except where:

1. The **network utility** structure is located more than 10m from a residential **dwelling** and, either:
 - (a) The **network utility** structure has a **total floor area** of 3m² or less, and/or
 - (b) The **network utility** structure does not require a **building** consent under the Building Act 1991.

17.5.2 WASTEWATER

17.5.2.1 All new allotments or developments within any of **Council's** wastewater scheme boundaries shall connect to the **Council's** wastewater system. All new allotments within 200m of the Council's wastewater scheme boundaries may be required to connect to the Council's wastewater scheme.

17.5.2.2 All new wastewater management systems shall be designed and constructed to:

1. Adequately service each **lot**, or development.
2. Be compatible with the existing utility network.
3. Be compatible with other utility systems.
4. Ensure no ground water or surface water intrusion occurs.
5. Include the following design features:
 - (a) Gully traps/ventilation risers shall be designed to prevent inflow of stormwater in a rainfall event with 10% probability of occurring annually.
 - (b) Inspection ports shall be installed immediately adjacent to all gully traps/ventilation risers and at the property boundary and at any wyes.
 - (c) Bends shall not be greater than 60%.

17.5.2.3 Where a public waste water drain or structure is laid within private property, it shall be protected by an easement in favour of Council.

17.5.2.4 Where any new wastewater connection will connect to an existing private line, said line must be:

1. In good working order, both upstream and downstream from the connection point.
2. Capable of conveying the additional flows from the new connection.

3. Fitted with an inspection port at the connection point.

17.5.2.5 Where an existing line is available but cannot comply with 17.5.2.4 above, a new connection to the public sewer will be required.

17.5.3 STORMWATER

17.5.3.1 A stormwater disposal system shall be provided for any residential, community or business activity, or to any **lot** to be used for one or more of these activities. This disposal system shall include primary and secondary control systems that:

1. Shall be capable of disposing of and/or detaining surface water resulting from a 10% AEP 24 hour rainfall event.
2. Shall provide a secondary flow system capable of conveying surface water resulting from a 2% AEP 24 hour rainfall event, to ensure that surface water shall not enter **buildings** (detached garages excluded).

17.5.3.2 Any **commercial**, industrial or business activity or development shall ensure:

1. That stormwater is detained to discharge at levels no greater than the pre-development levels from a 2% AEP 24 hour rainfall event.
2. That appropriate spill containment measures are provided to prevent potentially **hazardous substances** from entering the stormwater system.

17.5.3.3 Trade wastes directed to the stormwater system shall have appropriate measures in place to ensure **contaminants/hazardous substances** do not enter the stormwater system.

17.5.3.4 All new stormwater management systems shall be designed and constructed to:

1. Adequately service each **lot**, or development.
2. Be compatible with the existing utility network.
3. Be compatible with other utility systems.

17.5.4 POTABLE WATER

17.5.4.1 Domestic connections shall be 20mm in diameter and non-domestic connections shall be of a suitable size to serve the predicted demand of that **lot**. All connectors other than urban residential connections which are used solely for normal domestic supply shall be provided with an approved back flow prevention device in relation to its backflow hazard classification.

17.5.4.2 All water supply systems shall be designed and constructed to:

1. Adequately service each **lot**, or development.
2. Be compatible with other utility systems.
3. Avoid the likelihood of contamination or leakage.
4. Ensure principal water mains are not less than 100mm in diameter.

17.6 OTHER METHODS

17.6.1 Other methods for achieving the objectives and policies of this Section are:

1. The use of **industry**, and **network utility** operators, codes of practice and practice guidelines.
2. Agreements or accords between the **network utility** operators, landowners, and adjoining landowners.
3. Undergrounding of **network utilities** to reduce visual disruption to the landscape.

17.7 EXPECTED ENVIRONMENTAL RESULTS

Environmental outcomes anticipated from the implementation of the objectives and policies of this section are:

- A. The safe and efficient functioning of **network utilities** within the District.
- B. **Network Utilities** that are located and designed to minimise significant adverse effects on the environment.
- C. Minimal visual intrusion within the coastal areas of the District.