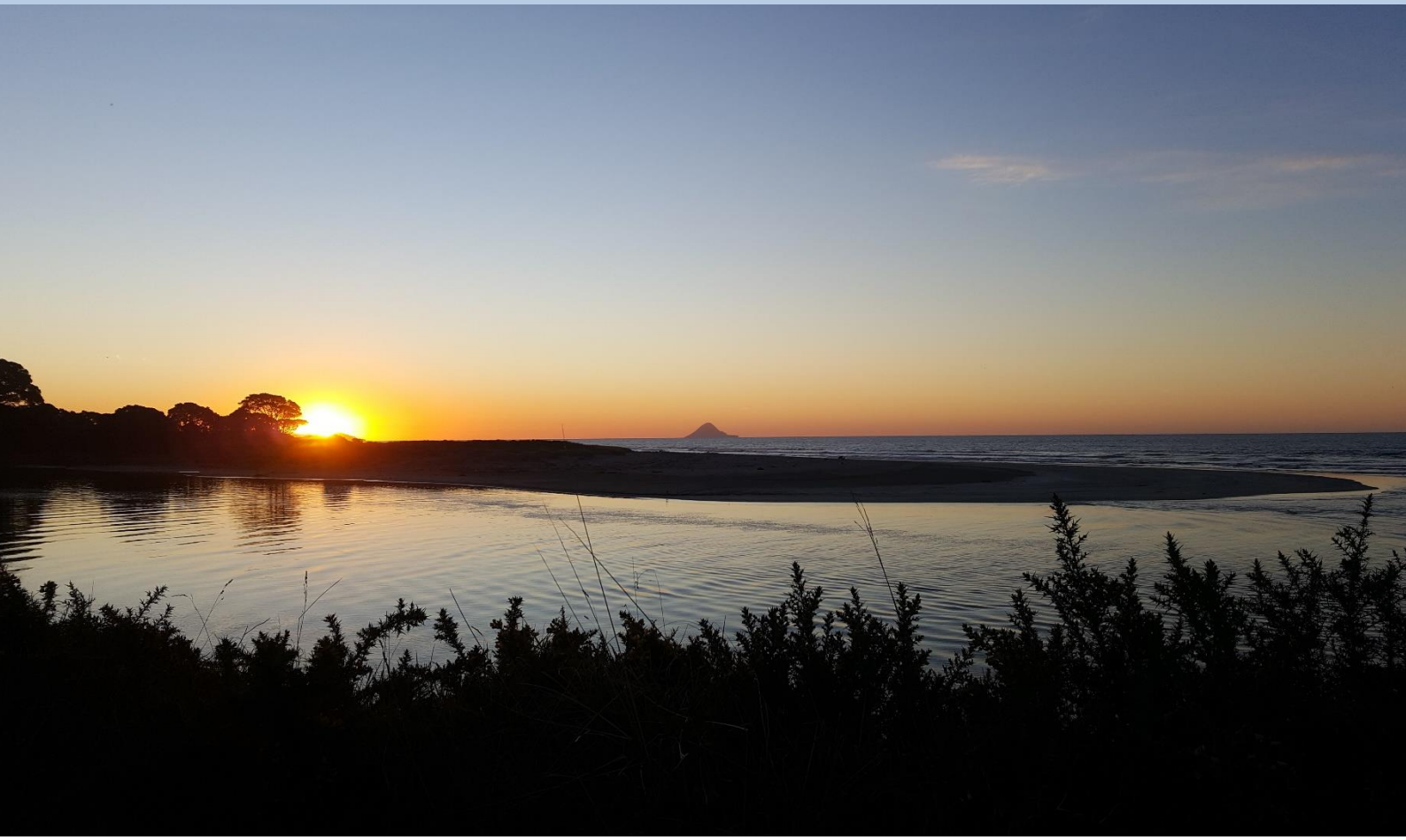
Chapter 17

Infrastructure and Network Services



17. INFRASTRUCTURE AND NETWORK SERVICES

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, replacement 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* and *network utilities are* 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 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 ensure that infrastructure has been designed so that the risks to and from the *network utility* can be appropriately managed.

17.2.1.4 Recognise the benefits of *regionally significant infrastructure, network utilities* and the *National Grid* in the District.

OBJECTIVE

17.2.2 Control the potential adverse effects of network utilities on sensitive environments particularly in areas of high landscape value and the Coastal Environment and on historic heritage.

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 In the *Coastal Environment*, ensure that upgrades to, or the development of new *network utilities* (excluding the *National Grid*) including overhead lines, structures and *buildings* are designed and located to avoid adverse effects, particularly visual effects, and effects on historic heritage values, the values and attributes of areas that are identified in 13.9.1 and 13.9.2 of the Plan as having Outstanding Natural Features and Landscapes, or taxa, ecosystems or vegetation types identified as threatened, rare or protected in the Plan in accordance with Policy 11(a) of the NZ Coastal Policy Statement.

17.2.2.3 In the *Coastal Environment*, ensure that upgrades to, or the development of new *network utilities* (excluding the *National Grid*) including overhead lines, structures and *buildings* are designed and located to avoid significant adverse effects and avoid, remedy of mitigate other adverse effects on taxa, ecosystems or vegetation types identified in accordance with Policy 11(b) of the NZ Coastal Policy Statement.

17.2.2.4 New *National Grid* infrastructure (and major upgrades) within the *Coastal Environment* and

outstanding *natural landscapes and features*, and areas of significant indigenous vegetation and significant habitats of indigenous fauna outside of the *Coastal Environment* should:

(a) ensure that the route, site and method selection demonstrates that as far as practicable given the constraints imposed by the technical, locational or operational requirements of the network:

(i) For areas of significant *indigenous vegetation* and significant habitats of indigenous fauna, outstanding *natural character* areas and outstanding *natural landscapes and features*, in order of preference:

(A) Infrastructure will be located outside of the areas in (i);

(B) Infrastructure will be located in more compromised parts of the areas in (i), where that reduces adverse effects on the values of the areas in (i);

(C) Techniques (such as structure selection) will be used to avoid adverse effects on the areas in (i);

(D) Adverse effects on the areas in (i) that cannot be avoided, will be remedied or mitigated; and

(ii) For areas in the *Coastal Environment* referred to in policies 11(b), 13(1)(b) and 15(b) of the NZCPS, in order of preference:

(A) Infrastructure will be located to avoid significant adverse effects on the areas in (ii);

(B) Techniques (such as structure selection) will be used to avoid significant adverse effects on the areas in (ii);

(C) Significant adverse effects on the areas in (ii) that cannot be avoided, will be remedied or mitigated; and

(b) Avoid, remedy or mitigate other adverse effects;

(c) Consider offsetting for residual adverse effects on indigenous biodiversity.

while recognising that, in some circumstances, adverse effects on the values of the areas in (a)(i) and significant adverse effects on the values of the areas in (a)(ii), will need to be avoided.

Explanation: Policy 17.2.2.4 is intended to provide a comprehensive regime for the management of *National Grid* activities in the *Coastal Environment*, and in *Outstanding Natural Features and Landscapes*, and areas of significant *indigenous vegetation* and significant habitats of indigenous fauna outside of the *Coastal Environment*.

17.2.2.5 Outside the *Coastal Environment* priority is given to avoiding the adverse effects of substantial upgrades to, or the development of new *network utilities* on the values and attributes of areas that are identified in 13.9.1 and 13.9.2 of the Plan as Outstanding *Natural Features and Landscapes*, as well as on historic heritage. Where the avoidance of adverse effects is not

possible, the appropriateness of the substantial upgrades to, or the development of, new *network utilities* will be determined by having regard to the adverse effects of *network utilities* on the environment:

1. recognise that there may be situations where all adverse effects cannot be avoided, remedied or mitigated;
2. recognise that the adverse effects on the values and attributes of the areas can be mitigated by locating some types of *network utilities* in *road* reserve;
3. decision-makers must have regard to:
    a. the extent to which adverse effects can be avoided, remedied or mitigated may be constrained by a *network utility's functional requirement* or operational need;
    b. the time, duration or frequency of adverse effects;
    c. the necessity of the *network utility* including:
        i. the need to quickly repair and restore disrupted services;
        ii. the impact of not operating, repairing, maintaining, upgrading, removing or developing a *network utility*;
    d. existing *network utilities* including:
        i. the complexity and connectedness of networks and services;
        ii. the potential for co-location and shared use of *network utility* corridors;
    e. anticipated outcomes for the receiving environment and the degree to which past modifications have compromised the achievement of those outcomes;
    f. the benefits derived from the *network utility* at a local, regional and national scale;
    g. the extent to which the *network utility* is integrated with, and necessary to support, planned urban development;
    h. the extent to which the residual adverse effects may be offset.

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 *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 within the electricity transmission corridors, including the *National Grid*.

17.2.3.4 To avoid reverse sensitivity effects arising from sensitive activities and inappropriate *buildings* and structures within the *National Grid Yard***.**

17.3 ACTIVITY STATUS

Resource consent is required for all Controlled, Restricted Discretionary, Discretionary and Non-complying activities. Resource consent is not required for Permitted activities provided all relevant standards are met. Additional controls may apply to other activities in the Zone and other chapters.

ADVICE NOTE:

Resource Management Regulations – National Environmental Standards

- Electricity Transmission Lines:

The operation, maintenance, upgrading, relocation or removal of an electricity transmission line and ancillary structures that existed prior to 14 January 2010 is largely controlled by the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009, separate to this *Plan***.**

- Telecommunications Facilities:

The National Environmental Standard for Telecommunication Facilities (NESTF) 2016 allows a variety of *telecommunications facilities* and related activities as permitted activities subject to standards, separate to this Plan. However, some rules in this Plan apply to some activities covered by the NESTF, particularly in the *Coastal Environment* and in places identified in Chapters 13 and 14. All *telecommunications facilities* are controlled by the NESTF with respect to the generation of radio frequency fields.

For clarification, where there is conflict or perceived conflict between the provisions of this Plan and the requirements of the NES identified above, the provisions of the NES shall apply.

17.3.1 PERMITTED ACTIVITIES

17.3.1.1 Subject to compliance with the Standards in section 17.6, unless otherwise stated, the following activities may occur without resource consent from *Council*.

Network Utilities

1. *Maintenance, minor upgrading* and *replacement* of existing lines and *network utilities***,** including where sites are identified in 13.9.1, 13.9.2 and 14.10.1.
2. Above ground structures, including the construction and placement of telecommunication lines and electricity lines up to and including 110*kV* on *poles* where the structures are located 50 metres or more from *MHWS* or in the road reserve, except as follows:

- Within sites identified in 13.9.1 or 13.9.2 unless they are located in the road reserve or within 10m of the road reserve or in the *Coastal Environment.*

3. Customer connections to adjacent properties from existing telecommunication lines and electricity lines.
4. Telecommunications kiosks in a road reserve but not within sites identified in 13.9.1, 13.9.2, and 14.10.1 or in the *Coastal Environment*.
5. Customer connections to heritage resources identified in 14.10.1 where the customer connection shall not be attached to a primary feature or a front façade of the heritage building or structure identified in 14.10.1.
6. Network utilities within a natural hazard area identified in Chapter 18.

Amateur Radio Configurations

7. An amateur radio configuration including *mast*, antennas and aerials, owned and operated by a licensed amateur radio operator that is incidental to a residential activity on the same site and where the performance standards in 17.6 are met.

Activities within the National Grid Yard

8. Any uninhabitable accessory *building* within the *National Grid Yard* on a developed site within the Coastal Settlement Zone that existed prior to notification of this Plan.
9. Under wires:

   The following buildings and structures (where permitted in the Zone) within the *National Grid Yard* but located more than 12m from a 110kV *National Grid* support structure foundation or stay wire:

   a. Fences less than 2.5m high
   b. Alterations and additions to existing buildings for *sensitive activities* that do not involve an increase in the building envelope or floor space.
   c. Accessory farm buildings not for habitation and structures for farming activities excluding milking sheds and buildings and structures for intensive farming
   d. *Artificial crop protection structures* and *crop support structures*, excluding commercial greenhouses and totally enclosed protective PSA structures.
   e. *Network Utilities***.**

10. Near Support Structures:

    The following activities (where permitted in the Zone) within 12 metres of a 110kV *National Grid* support structure foundation or stay wire:

    a. Network utilities
    b. *Network utilities* that form part of electricity infrastructure that connect to the *National Grid Network* utility
    c. Fences less than 2.5m in height and more than 5m from the nearest 110kV *National*

Grid support structure.

d. *Artificial crop protection structures* between 8m and 12m from a 110kV *National Grid* pole support structure that:

- Are less than 2.5m in height; and
- Are removable or temporary, to allow a clear working space 12m from a 110kV *National Grid* support structure when necessary for maintenance purposes; and
- Allow all weather access to the pole and a sufficient area for maintenance equipment, including cranes; or

e. *Crop support structures* between 8m and 12m from a 110kV *National Grid* support structure that:

- Are less than 2.5m in height; and
- Are removable or temporary, to allow a clear working space 12m from a 110*kV National Grid* support structure when necessary for maintenance purposes; and
- Allow all weather access to the pole and a sufficient area for maintenance equipment, including cranes; or

f. *Artificial crop protection structures* where Transpower has given written approval in accordance with clause 2.4.1 of NZECP34:2001 to be located within 8m of a 110*kV National Grid* pole support structure.

g. *Crop support structures* where Transpower has given written approval in accordance with clause 2.4.1 of NZECP34:2001 to be located within 8m of a 110*kV National Grid* pole support structure.

11. *Earthworks* (where permitted in the Zone) within a site that is located within any part of the *National Grid Yard*:

a. *Earthworks* within 12 metres from the outer visible edge of any 110*kV National Grid* support structure that do not exceed a depth (measured vertically) of 300mm; provided that the following are exempt from this requirement:

i. *Earthworks* for a *Network Utility*.

ii. *Earthworks* undertaken as part of agricultural or domestic cultivation (including ploughing) or repair, sealing or resealing of a *road*, footpath, driveway or farm track.

iii. Vertical holes not exceeding 500mm in diameter provided that they are more than 1.5 metres from the outer edge of a pole support structure or stay,

b. *Earthworks* (where permitted in the Zone) that do not result in a reduction in the ground to conductor clearance distances of less than 6.5 metres (measured vertically) from a 110kV *National Grid* transmission line.

17.3.2 RESTRICTED DISCRETIONARY ACTIVITIES

17.3.2.1 The activities listed below may only be established after resource consent has been granted by *Council*. The *Council* may refuse consent or grant consent and impose conditions only in relation to the matters over which it has restricted its discretion in 17.6. The activities must comply with the relevant Standards.

1. *Network utilities* located 50m or more from *MHWS*, or within the road reserve, where one of the standards in 17.6.1 is not met, except where located in sites identified in 13.9.1 and 13.9.2**.**
2. Gas Transmission Pipelines, including above ground and other incidental equipment
3. Earthworks within a *National Grid Yard* that do not meet the requirements of 17.3.1.1.11.a.
4. *Masts* used for amateur radio communication activities exceeding the maximum permitted height for the zone, but not exceeding 20m
5. *Earthworks* in relation to a *network utility* that does not meet the standard in rule 17.6.4.
6. *Buildings* and activities located within 30m of above ground equipment incidental to gas transmission pipelines.

17.3.3 DISCRETIONARY ACTIVITIES

17.3.3.1 The activities listed below may only be established after resource consent has been granted by *Council*. The *Council* may refuse consent or grant consent subject to conditions. The standards in 17.6 will be used as a guideline when assessing the application.

1. The construction and placement of 110*kV* lines on towers.
2. The construction and placement of lines at a voltage exceeding 110*kV*.
3. A *network utility* in sites identified in 13.9.1, 13.9.2 or in the *Coastal Environment*, not provided for as a Permitted Activity.
4. A *network utility* not otherwise provided for.
5. *Indigenous vegetation disturbance* in relation to a *network utility* not otherwise provided for.
6. *Indigenous vegetation disturbance* in relation to a network utility exceeding the permitted standards in 17.6.3, except for disturbance of pohutukawa and within *wetlands*, indigenous estuarine vegetation and coastal duneland vegetation.

17.3.4 NON COMPLYING ACTIVITIES

The activities listed below may only be established if resource consent has been granted by *Council*. The *Council* may refuse or grant consent for a non-complying activity. The standards will

be used as a guideline when assessing the application.

17.3.4.1 *Earthworks* within a *National Grid Yard* not meeting permitted activity condition 17.3.1.1.11.b.

17.3.4.2 The following activities, buildings or structures within any part of the *National Grid Yard* on any site:

1. Any new *building* for a *sensitive activity* or addition to an existing *building* that involves an increase in the building envelope or height for a sensitive activity.
2. A change of use from a non-sensitive to a *sensitive activity* or the establishment of a new *sensitive activity.*
3. Any milking shed (excluding accessory structures and *buildings*), commercial greenhouse, protective canopy, or other *building* for an *intensive farming* activity.
4. Any activity, *building* or structure that does not comply with 17.6.6, unless otherwise listed.
5. Any building or structure within the *National Grid Yard* that is not a permitted activity under 17.3.1.9, 17.3.1.10 or 17.3.1.11.

17.4 RESTRICTED DISCRETIONARY ACTIVITIES: MATTERS OVER WHICH DISCRETION IS RESTRICTED

Council has restricted its discretion over the following matters:

17.4.1 **Activities that do not comply with one or more standards in 17.6:**

1. Visual effects:
    a. The extent to which the visual effects of the infrastructure can be softened by landscaping without compromising the *functional requirements* of the infrastructure
    b. The extent to which any adverse effects of the design, scale and height of the infrastructure can be internalised, modified or mitigated without compromising the *functional requirements* of the infrastructure
2. The effect on sites of landscape, indigenous vegetation, cultural or heritage value.
3. The likelihood of potential effects from natural hazard.
4. The effects of the activity on the Waioeka Otara Rivers Scheme.
5. Clearance of significant indigenous vegetation.
6. *Functional* and operational needs of and the benefits derived from infrastructure:
    a. The extent to which the *functional* and operational requirements of the infrastructure affects or necessitates its location, site, route, method, *height* and size;
    b. The extent to which the infrastructure or upgrade will benefit and contribute to the social, economic and cultural and environmental wellbeing of people and communities of the District; and

c. The extent to which the infrastructure improves the resilience and security of the network or utility service provided.

7. The degree to which any adverse environmental effects have been sought to be avoided or minimised, or are to be remedied or mitigated and whether measures proposed will be effective in avoiding, remedying or mitigating the adverse effects identified above.

17.4.2 **Gas transmission pipelines**

1. The effect on sites of landscape, *indigenous vegetation*, cultural or heritage value.
2. The likelihood of potential effects from natural hazard.
3. The benefits to be derived from the pipeline for the district and regional service connections.

17.4.3 **Amateur Radio Masts**

1. Whether the applicant is an amateur radio operator
2. The effect on the amenity of directly affect adjoining landowners, in relation to the increase in height
3. The effect of the additional height of the mast on the amenity of habitable rooms on directly adjoining properties.

17.4.4 **Earthworks within a National Grid Yard not meeting permitted activity condition 17.3.1.1.11.a**

Council restricts its discretion to the following matters.

1. Any risk to the structural integrity of the transmission line;
2. Any effects on the ability of the transmission line owner to access, operate, maintain and/or upgrade the *National Grid*;
3. The proximity of *buildings* and structures to electrical hazards;
4. Operational risks relating to health or public safety and the risk of property damage;
6. Any actual or potential reverse sensitivity effects;
7. Technical advice provided by the *National Grid* owner (Transpower); and
8. Any effects on *National Grid* support structures including the creation of an unstable batter

17.4.5 **Buildings and activities within 30m of the above ground equipment incidental to the gas transmission pipeline**

Council restricts its discretion to the following matters:

1. Any effects on the safe, effective and efficient operation, maintenance, replacement and upgrade of the above ground incidental equipment and the gas transmission pipeline.
2. Risks relating to health or public safety and the risk of property damage.
3. Technical advice provided by First Gas Limited.

17.5 ASSESSMENT CRITERIA FOR DISCRETIONARY ACTIVITIES

The *Council* will have regard to but is not limited to the following matters when considering whether to grant or refuse consent or impose conditions:

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 and operational and economic constraints of undergrounding of the *network utility*, including undergrounding all or part of the utility.

2. **Noise and vibration effects**
   a. Frequency, duration and timing of noise.
   b. Measures to avoid, remedy or mitigate the adverse effects on the environment from 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**

   The reasons for the proposed location, *site* or route or method, taking into account functional requirements and constraints.
   a. The benefits of the facility utility to the community and beyond.
   b. 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.

8. **Effects on rural activities**
   a. Proximity of network utility to rural production activities
   b. Measures to avoid, remedy or mitigate any adverse effects on rural production activities

9. **Effects on significant indigenous vegetation and significant habitats of indigenous species. Refer 13.5.3 and 13.5.4**

17.6 STANDARDS

These Standards apply to all permitted, controlled and restricted discretionary activities, unless otherwise stated. They will be used as a guideline when assessing applications for discretionary and non-complying activities.

17.6.1 STANDARDS FOR NETWORK UTILITIES

17.6.1.1 All *network utilities* shall comply with the following Standards except for *Maintenance, minor upgrading* and *replacement* of existing lines and *network utilities*:

17.6.1.2 **Maximum *height* of *poles* and similar structures associated with *network utilities***

a.	Residential and Coastal Settlement Zones	9m
b.	Town Centre, Mixed Activity and Coastal Zones	20m
c.	Marine Services, Industrial, Harbour Industrial and Rural Zones (One telecommunications operator)	25m
d.	Marine Services, Industrial, Harbour Industrial and Rural Zones (antennas for 2 or more telecommunications operators)	30m
e.	Ōhiwa Harbour Zone	9m
f.	Road reserve in any zone except in the Ōhiwa Harbour Zone and the *Coastal Environment*	25m
g.	Road reserve in the Ōhiwa Harbour Zone and the *Coastal Environment*	15m

17.6.1.3 **Maximum diameter of dish antennas:**

a.	Residential and Coastal Settlement Zones	1.5m
b.	Town Centre and Mixed Activity Zones	No maximum
c.	Marine Services, Industrial, and Harbour Industrial Zones	No maximum
d.	Coastal and Rural Zones, not within *Coastal Environment*	No maximum
e.	Sites in 13.9.1 & 13.9.2, Ōhiwa Harbour Zone and the *Coastal Environment*	1.5m

17.6.1.4 **Daylight protection in Residential Zones:**

No part of any *network utility* shall penetrate a daylight recession plane of 45° from a *height* of 2.7m above finished ground level at any boundary where adjacent to a site zoned Residential. This Standard shall not apply to network utilities located within the road reserve or customer connections.

17.6.1.5 **Network Utility Structure**

In the Ohiwa Harbour, Residential and Coastal Settlement Zones and in the *Coastal Environment*, a *network utility* structure, other than *poles* and similar structures associated with network utilities, shall have a *total floor area* of not more than 5m^2 and a maximum *height* of 2.5m, and shall be set a minimum distance of 10m from the nearest *dwelling*.

17.6.1.6 **Telecommunications Kiosks**

The maximum *height* of a telecommunications kiosk shall be 2.5m plus an additional 1m height for any small cell or antenna. The maximum floor area shall be 1.0m^2.

17.6.2 CUSTOMER CONNECTIONS TO HISTORIC ITEMS

A customer connection shall not be attached to a primary feature of a historic *building* or structure listed in Appendix 14.10.1.

17.6.3 NETWORK UTILITIES WITHIN SITES LISTED IN 13.9.1 AND 13.9.2 AND IN THE COASTAL ENVIRONMENT

Above ground structures including masts, poles, pylons, aerials, antenna, cabinets or similar associated with *network utilities* located within a site identified in 13.9.1 or 13.9.2 and in the *Coastal Environment* shall be located in the road reserve or not further than 10m from the inland boundary of the road reserve subject to compliance with the following standards:

a. *Indigenous vegetation disturbance* (excluding pohutukawa trees) up to 100m^2 to establish the structure and maintain the site, except disturbance within wetlands, indigenous estuarine vegetation and coastal duneland vegetation; and

b. *Earthworks* outside the road reserve to establish the site and access and ongoing maintenance shall be subject to the standard in rule 17.6.4; and

c. Structures shall have a maximum reflectivity value of 35%; and

d. Height of the structure/s and dimension of the antennas (if any) shall be in accordance with 17.6.1.1 above.

17.6.4 EARTHWORKS IN RELATION TO A NETWORK UTILITY IN A SITE LISTED IN 13.9.1 AND 13.9.2, IN THE COASTAL AND OHIWA HARBOUR ZONES AND IN THE COASTAL ENVIRONMENT OVERLAY

The following performance standards shall apply:

1. The total area shall not exceed 400m^2; and
2. The total volume shall not exceed 200m^3; and
3. The maximum cut and/or fill face shall not exceed 3m; and
4. Where the earthworks are visible from a public *road*, public reserve, coastal marine area or the foreshore, bare surfaces shall be stabilised with mulch, hydroseeding or similar stabilisation mechanism; or where the *earthworks* are not visible from these areas, bare surfaces shall be revegetated in the next growing season.

17.6.5 AMATEUR RADIO CONFIGURATIONS

Amateur radio configurations shall comply with the following standards and are exempt from 17.4.1:

1. Antennas attached to buildings shall not exceed the point of attachment height by more than 7 metres.
2. The maximum number of antennas shall be 12.
3. *Masts* and attached antennas identified as permitted activities shall have a maximum height of 20 metres.

17.6.6 REQUIREMENTS FOR BUILDINGS AND STRUCTURES WITHIN ANY NATIONAL GRID YARD

All *buildings* and structures within a *National Grid Yard* shall provide a minimum vertical clearance distance from the lowest point of the conductor associated with a National Grid transmission line of either:

a. 10 metres; or

b. Demonstrate safe electrical clearance distances in accordance with Section 2 and 3 of NZECP34:2001.

ADVICE NOTE:

Transpower or a suitably qualified engineer should be contacted for assistance with clearance requirements in NZECP 34:2001.

1. Compliance with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZCEP 34: 2001) is mandatory under the Electricity Act 1992. All activities regulated by NZECP34, including buildings, structures, earthworks and the operation of mobile plant, must comply with that regulation. Activities should be checked for compliance even if they are permitted by the District Plan.
2. An activity, including buildings and structures, earthworks, quarrying and planting vegetation, within the *National Grid Corridor* or *National Grid Yard* may require resource consent. Transpower New Zealand Limited will be considered to be an affected party where consent is required. Where an activity requires resource consent solely because it is within the *National Grid Corridor* public notification of the application is precluded. However, limited notification will be given to Transpower unless the written approval from Transpower is provided at the time the application is lodged.
3. The Electricity (Hazards from Trees) Regulations 2003 applies to vegetation planted within the *National Grid Corridor* or near sub-transmission or distribution electricity lines and must be complied with. Vegetation to be planted within the *National Grid Yard* as shown on the District Plan Maps should be selected and/or managed to ensure that it will not result in that vegetation breaching the Electricity (Hazards from Trees) Regulations 2003 or prevent access to support structures. To discuss works, including tree planting near any electricity line especially works within the *National Grid Yard*, contact the relevant network utility operator.
4. Telecommunication facilities are subject to the requirements of the National Environmental Standard for Telecommunication Facilities 2016 and include: cabinets in and outside the road reserve; antennas on existing and new *poles* in the *road* reserve; replacement, upgrading and co-location of existing *poles* and antennas outside *road* reserve; new *poles* and antennas in rural areas; antennas on buildings; small-cell units on existing structures; telecommunications lines (underground, on the ground and overhead) and facilities in natural hazard areas.)

17.6.8 WASTEWATER

17.6.8.1 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.

17.6.8.2 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%.

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

17.6.8.4 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.

17.6.8.5 Where an existing line is available but cannot comply with 17.6.8.4 above, a new connection to the public sewer will be required.

17.6.9 STORMWATER

17.6.9.1 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).

17.6.9.2 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.

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

17.6.9.4 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.

ADVICE NOTE**:**

The quality of stormwater discharges is controlled by the Bay of Plenty Regional Council.

17.6.10 WATER SUPPLY

17.6.10.1 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.

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

1. Adequately service each *lot* or development, including the provision of a firefighting water supply for any habitable building in accordance with New Zealand Fire Service Firefighting Water Supplies Code of Practice SNZ PAS 4509:2008.
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.

ADVICE NOTE:

Under the New Zealand Fire Service Firefighting Water Supplies Code of Practice SNZ PAS 4509:2008, where a building is located more than 135m from the nearest road that has reticulated water supply (including hydrants), access should have a minimum formed width of 4m, a height clearance of 4.0m and a maximum gradient of 1 in 5 (with minimum 4.0m transition ramps of 1 in 8).

17.7 OTHER METHODS

17.7.1 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.

17.8 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 of network utilities within the *Coastal Environment* Overlay and *outstanding natural features and landscapes* of the District.