THIS SECTION HAS RULES THAT HAVE LEGAL EFFECT. PLEASE CHECK THE EPLAN TO SEE WHAT THE LEGAL EFFECT IS OR SUBJECT TO APPEAL.

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EI - Pūngao me te hanganga hapori - Energy and Infrastructure

Introduction

The term 'infrastructure' is defined in section 2 of the RMA. The RPS defines the terms 'critical infrastructure', 'strategic infrastructure', and 'regionally significant infrastructure'. There is considerable overlap in the types of infrastructure covered by these terms. Infrastructure may be provided by network utilities, or by entities other than network utilities, including the private provision of and connection to infrastructure.

Some types of infrastructure are addressed within other parts of the District Plan, as follows:

- District wide provisions relating to transport are contained in the Transport Chapter, which also forms part of Part 2 District Wide Matters Energy, Infrastructure and Transport;
- Rangiora Airfield is provided for by designations, which contain conditions, and the District wide Transport and Noise chapters also contain provisions relating to the Airfield;
- The existing Rangiora hospital and Oxford hospital and ancillary health related activities on those hospital sites are provided for under the Special Purpose Zone (Hospital);
- An emergency service facility, or a health related activity located outside of the existing Rangiora and Kaiapoi hospital sites, are subject to the provisions of the relevant zone in which they are located.

This chapter contains provisions for other types of infrastructure, and is consistent with Part 2 - District Wide Matters- Strategic Directions, NESETA, NESF and the NESTF. It also gives effect to the matters in Part 2 - District Wide Matters - Urban Form and Development, NPSET, NZCPS, NPSFM and the NPSREG.

The provisions in this chapter have been justified where required by a s77J qualifying matter assessment contained in the relevant section 32 evaluation report under the RMA.¹²

Other potentially relevant District Plan provisions

As well as the provisions in this chapter, other District Plan chapters that contain provisions that may also be relevant to Energy and Infrastructure include:

- Transport: the Transport rules apply to all activities and activities are subject to compliance with all relevant Transport rules. The application of the transport provisions is discussed further in the Transport rules.
- Natural Hazards: this chapter contains provisions that may be relevant to managing the risk to energy and infrastructure from natural hazards.
- Historic Heritage: this chapter contains provisions relevant to protecting places with heritage values, such as historic heritage buildings or other structures or their heritage settings.
- Notable Trees: this chapter contains provisions relevant to matters such as protecting the root protection area or the trimming or removal of notable trees.
- Sites and Areas of Significance to Māori: this chapter contains provisions relevant to protecting3 SASM from adverse effects.
- Ecosystems and Indigenous Biodiversity: this chapter contains provisions that control SNAs and the clearance of areas of indigenous vegetation across the District.

¹ V

² S80H RMA markup recommended for removal, does not form part of the plan. V1 Reply Report.

³ V1

• Natural Character of Freshwater Bodies: this chapter contains provisions regarding activities within natural character of scheduled freshwater bodies setbacks.

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- Natural Features and Landscapes: this chapter contains provisions for activities within ONL, ONF, and SAL.
- Subdivision: this chapter contains provisions that may be relevant to subdivision for energy and infrastructure.
- Earthworks: this chapter contains provisions that may be relevant to earthworks for energy and infrastructure such as volume, depth and location.
- Any other District wide matter that may affect or relate to the site.
- Zones: the zone chapters contain provisions about what activities are anticipated to occur in the zones.

Objectives EI-01 Provision of energy and infrastructure Across the District: 1. efficient, effective, resilient, safe and sustainable energy and infrastructure, including critical infrastructure, strategic infrastructure and regionally significant infrastructure, is developed and maintained to benefit the social, economic, cultural and environmental well-being of the District, including in response to future needs such as increased sustainability, and changing techniques and technology; 2. there is increased renewable energy for national, regional and local use; and 3. there is greater renewable electricity generation, including small scale or community scale renewable electricity generation, with generation surplus able to be supplied to the electricity distribution network. EI-O2 Adverse effects of energy and infrastructure Adverse effects of energy and infrastructure on the qualities and characteristics of surrounding environments and community well-being are avoided, remedied or mitigated. EI-O3 Effects of other activities and development on energy and infrastructure The safe, efficient and effective operation, maintenance, repair, renewal, upgrading and development of energy and infrastructure is not constrained or compromised by activities and development, including by reverse sensitivity effects. **Policies** EI-P1 Recognising the benefits of, and providing for, energy and infrastructure Recognise the local, regional or national benefits of energy and infrastructure through: 1. enabling the operation, maintenance, repair, renewal, removal and minor upgrade of energy and infrastructure; 2. providing for more than minor or significant upgrades to existing, and the development of new, energy and infrastructure; 3. providing for energy and infrastructure that serves as a lifeline utility during an emergency, including critical infrastructure, strategic infrastructure and regionally significant infrastructure; 4. providing for the effective, safe, secure and efficient electricity transmission, including on the National Grid, electricity distribution, and supply of fuel and energy; 5. providing for the effective, reliable and future-proofed communication networks and services; 6. providing for the effective, resilient, efficient and safe water supply, wastewater

system and stormwater infrastructure; and community scale irrigation/stockwater;

 enabling energy and infrastructure that has a particular focus on the utilisation of renewable resources and which contribute to sustainable use of natural and physical resources;

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- 8. enabling feasibility investigations into renewable energy including for renewable electricity generation;
- 9. providing for renewable energy and renewable electricity generation including small scale or community scale renewable electricity generation; and
- the provision of an adequate supply of water for firefighting in accordance with SNZ PAS 4509:2008 New Zealand Fire Service Firefighting Water Supplies Code of Practice.

EI-P2 Availability, provision and adequacy of, and connection to, energy and infrastructure

Across the District:

- 1. to benefit the social, economic, cultural and environmental well-being of the District:
 - a. ensure land use and development is coordinated with, and to the extent considered reasonably practicable, connected to and adequately serviced by energy and infrastructure, if available, including electricity, water supply, wastewater system and stormwater infrastructure; and
 - b. ensure that connectivity to communications infrastructure can be achieved; and
- where a public reticulated water supply or wastewater system is not available, adequate on site systems shall be installed consistent with maintaining public health and avoiding or mitigating adverse effects on the environment, while discouraging small scale stand alone systems.

EI-P3 New technologies and techniques

Provide flexibility for energy and infrastructure to adopt new technologies and techniques that:

- 1. improve access to, and efficient use of, networks and services;
- 2. allow for the re-use of redundant services and structures;
- 3. increase resilience, safety or reliability of networks and services; and
- 4. result in environmental benefits and enhancements.

EI-P4 Environmentally sustainable outcomes

Seek more environmentally sustainable outcomes associated with energy and infrastructure, including by promoting:

- 1. the use of green infrastructure;
- 2. the increased utilisation of renewable resources;
- 3. the use of low impact approaches (such as in site, route or structure selection or construction methodology):
- 4. using low carbon materials in construction;
- 5. changing the way activities that generate high greenhouse gas emissions are delivered:
- 6. offsetting greenhouse gas emissions through activities such as planting carbon sequestering trees or the establishment and restoration of wetlands;
- 7. energy efficiency and conservation practices, including use of energy efficient design, renewable energy and renewable electricity generation; and
- 8. building design with a Homestar[™] certification rating of at least 6 for residential buildings, or a Green Star rating of at least 4 for commercial buildings, to assist in reducing energy consumption and greenhouse gas emissions.

EI-P5 Manage adverse effects of energy and infrastructure

Manage adverse effects of energy and infrastructure, including by the following:

- 1. enabling or providing for the ongoing operation, maintenance, repair, renewal, removal and minor upgrade of existing energy and infrastructure;
- 2. avoiding, remedying or mitigating adverse effects of more than minor upgrades to existing energy and infrastructure, including effects on:

- a. natural and physical resources;
- b. amenity values;
- c. sensitive activity;
- d. the safe and efficient operation of other infrastructure;
- e. the health, safety and well-being of people and communities;
- 3. new energy and infrastructure, or major upgrades to existing energy and infrastructure, should, to the extent considered practicable, ensure that the route or site is located outside of the following types of sensitive environments to protect such environments from significant adverse effects, taking into account the constraints imposed by the functional need or operational need of the energy and infrastructure:
 - a. ONF, ONL and SAL;
 - b. areas of ONC, VHNC and HNC, and natural character of scheduled freshwater bodies setbacks;
 - c. SNAs
 - d. buildings, other structures and settings with heritage values, and archaeological sites;
 - e. SASM;
 - f. places adjoining the coastal marine area;
- 4. where new energy and infrastructure, or major upgrades to existing energy and infrastructure, cannot locate outside of the sensitive environments in (3) above, the energy and infrastructure should, to the extent considered practicable, ensure that the proposed route, site, structure and construction method demonstrate the following, taking into account the constraints imposed by the functional need or operational need of the energy and infrastructure:
 - a. energy and infrastructure will be located in more compromised parts of the areas in (3) above where that reduces adverse effects on the values of those areas:
 - b. techniques (such as structure selection or construction methodology) will be used to mitigate adverse effects on the areas in (3) above;
 - c. adverse effects on the areas in (3) above will be remedied or mitigated:
- 5. consider biodiversity offset for residual adverse effects on indigenous biodiversity that cannot otherwise be avoided, remedied or mitigated;
- 6. avoiding or mitigating potential significant adverse effects of the generation of radio frequency fields and electric and magnetic fields by requiring compliance with recognised standards or guidelines; and
- 7. promoting the undergrounding of new energy and infrastructure where it is:
 - a. technically feasible;
 - b. economically viable;
 - c. justified by the extent of adverse visual effects if not placed underground.

EI-P6

Effects of other activities and development on energy and infrastructure Manage adverse effects of other activities and development on energy and infrastructure, including by the following:

- 1. ensuring such effects do not compromise or constrain access to or the safe, effective and efficient operation, maintenance, repair, upgrading and development of energy and infrastructure; and
- 2. with regards to the National Grid and major electricity distribution lines, in addition to (1) above, by ensuring that:

a. safe buffer distances are identified in the District Plan for managing the effects of incompatible activities and development on the National Grid and major electricity distribution lines including support structures;

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- sensitive activity and development that may compromise the National Grid and major electricity distribution lines, including those associated with intensive farming activities, are excluded from establishing within identified safe buffer distances;
- c. changes to existing activities within identified safe buffer distances do not further constrain or restrict the operation, maintenance, repair, upgrading and development of the National Grid and major electricity distribution lines; and
- 3. ensuring buildings, other structures and vegetation do not obstruct or otherwise adversely affect radiocommunication pathways, either individually or cumulatively, including for radiocommunication associated with critical infrastructure, strategic infrastructure, regionally significant infrastructure, a lifeline utility, and for emergency purposes and day to day operations of an emergency service.

Activity Rules - General (applicable to all energy and infrastructure)

EI-R1	Maintenance or removal of existing infrastructure and ancillary vehicle access tracks	
	This rule does not apply to widening or extension of existing vehicle access tracks provided for under EI-R2.	
All Zones	Activity status: PER Activity status when compliance not achieved: N/A	
EI-R2	Construction of new, or widening or extension of existing, vehicle access tracks ancillary to infrastructure	
	This rule applies to the construction of new vehicle access tracks in circumstances other than as provided for under EI-R23.	
All Zones	Activity status: PER Where: 1. the activity shall comply with Earthworks standards EW-S1 to EW-S7, as well as any Earthworks standards in any relevant overlay.	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EI-MD9 - Construction of new, or widening or extension of existing, vehicle access tracks ancillary to infrastructure
EI-R3	Ancillary infrastructure equipm	ent
All Zones	Activity status: PER	Activity status when compliance not achieved: N/A
EI-R6	Trimming or removal of trees and vegetation	
All Zones	Activity status: PER Where: 1. the trimming or removal of trees and vegetation is by an operator of an overhead line or other infrastructure	Activity status when compliance not achieved: N/A

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	or by their nominated contractor or agent, where required for the safe operation or maintenance of overhead lines or other infrastructure.	
	 Advisory Notes This rule applies to situations such as protecting the safe operation or maintenance of overhead lines or removing an associated potential fire risk, or maintaining sight lines from an intersection. A check should be made to determine whether any requirements may apply under the following: Electricity (Hazards from Trees) Regulations 2003; Telecommunications Act 2001; and NZECP 34:2001 New Zealand Electricity Code of Practice for Electricity Safe Distances. 	
EI-R7	Freestanding pole in the road co	orridor
All Zones	Activity status: PER Where: 1. the maximum height in relation to infrastructure of a new freestanding pole in the road corridor shall comply with the following height in relation to infrastructure limits when adjoining: a. Residential Zones, Special Purpose Zone (Kāinga Nohoanga), Special Purpose Zone (Pines Beach and Kairaki Regeneration): 18m; and b. all other zones: 25m.	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EI-MD14 - Extent of effects
EI-R8	Installation of new infrastructur	e within an existing building
All Zones	Activity status: PER Where: 1. new installations shall not involve alteration to a building with heritage values.	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EI-MD1 - Historic heritage and the natural environment
EI-R9	Use of temporary infrastructure	
	This rule does not apply to new permanent emergency or back-up electricity generation provided for in EI-R36; or installation, maintenance, repair, upgrading or removal of new infrastructure for assessing a site or technology for suitability for renewable electricity generation provided for in EI-R39.	

All Zones	Activity status: PER Where: 1. the temporary infrastructure shall operate for a maximum of 12 months from the commencement of the works or activity, or until the works or activity or a stage of the works or activity for which the temporary infrastructure is required is complete, whichever is greater, at which time the temporary infrastructure shall be removed from the site.	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EI-MD4 - Health and safety EI-MD14 - Extent of effects
EI-R11	Relocation of infrastructure	
All Zones	Activity status: PER Where: 1. the relocation shall be within 5m of the existing alignment or location.	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EI-MD10 - Relocation of existing infrastructure
	ExemptionThis rule does not apply to transport infrastructure.	
	Advisory Note See also EI-R10 (2) Installation of new infrastructure, or upgrading of existing infrastructure, underground.	
EI-R12	Replacement of a pole or tower	
All Zones	Activity status: PER Where: 1. a pole shall not be replaced with a tower; 2. a replacement pole or tower shall not exceed the height in relation to infrastructure of the replaced pole or tower; 3. the diameter or width of a replacement pole shall not exceed twice that of the replaced pole at its widest point; 4. a single pole may be replaced with a pi-pole for safety or structural reasons; 5. the footprint of a replaced tower shall not exceed the width of the tower by more than 25%; and	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EI-MD14 - Extent of effects

	 a replaced pole or tower shall be removed once its replacement is in place and is operational. 	
EI-R13	Addition to a pole or tower	
All Zones	Activity status: PER Where: 1. the combined diameter or width of the existing pole or tower plus the addition (at its widest point) shall not exceed twice that of the existing pole or tower (at its widest point); and 2. the combined height in relation to infrastructure of the existing pole or tower plus the addition shall not exceed that of the existing pole or tower.	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EI-MD14 - Extent of effects
EI-R14	Replacement of an antenna	
All Zones	Activity status: PER Where: 1. a replacement antenna shall not increase the diameter of an existing dish antenna or the width of an existing panel antenna by more than 20%.	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EI-MD14 - Extent of effects
EI-R15	Replacement of an infrastructur	re cabinet or infrastructure building
All Zones	Activity status: PER Where: 1. the replacement shall not increase the footprint of the existing infrastructure cabinet or infrastructure building by more than 30%; and 2. outside a road corridor, where an existing infrastructure building is located in or adjoining Residential Zones, Special Purpose Zone (Kāinga Nohoanga), or Special Purpose Zone (Pines Beach and Kairaki Regeneration), the replacement infrastructure	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EI-MD14 - Extent of effects

	building shall comply with the building internal boundary setback and where specified the height in relation to boundary for the zone or adjoining zone in accordance with Appendix APP3.	
EI-R16	Upgrading above-ground lines,	ducts, cables and pipes
All Zones	Activity status: PER Where: 1. upgrading is by: a. the addition of wires, cables, circuits or conductors; b. the re-conductoring of the line with higher capacity conductors; c. the re-sagging of conductors; d. the addition of longer or more efficient insulators; e. the addition of cross arms; f. the bundling of lines (in the absence of cross arms); g. the addition of earth wires (which may contain telecommunication lines, earthpeaks and lightning rods); or h. their replacement; 2. the diameter of a replacement conductor or line shall not exceed the diameter of the existing conductor or line, or 50mm, whichever is greater; 3. additional conductors or lines: a. shall not increase the number of conductors or lines by more than 100%; and b. shall each have a maximum diameter of 50mm;	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EI-MD14 - Extent of effects

	 4. additional cross arms shall not exceed the length of an existing cross arm by more than 100%, up to a maximum of 4m; 5. the bundling of lines (in the absence of cross arms) shall not exceed 100mm in total; and 6. the diameter of a replacement above-ground duct or pipe shall not exceed the diameter of the existing above-ground duct or pipe by more than 300mm. 	
EI-R17	Installation of new mid-span po	les
All Zones	Activity status: PER Where: 1. the installation of new midspan poles is to address safety clearances for overhead lines; and 2. the maximum number of additional mid-span poles shall be 2.	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EI-MD14 - Extent of effects
EI-R18	Attachment of pipes, cables, co	nductors or lines, to bridges, tunnels or culverts
All Zones	Activity status: PER Where: 1. pipes, cables, conductors or lines: a. shall be attached to the underside of the bridge, or incorporated within the bridge, tunnel or culvert structure, or within an existing attached conduit, duct or pipe; b. the maximum diameter of any new conduit, duct or pipe shall be 300mm; c. any new conduits, ducts or pipes in (b) above shall be in a cluster of no more than two conduits, ducts or pipes in total; and	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EI-MD1 - Historic heritage and the natural environment EI-MD2 - Amenity values, location and design EI-MD3 - Operational consideration

	d. shall not be attached to a bridge, tunnel or culvert with heritage values.	
EI-R21	Activities that generate radiofre	quency fields
All Zones	Activity status: PER Where: 1. any activity generating radiofrequency fields shall not exceed the maximum exposure level for the general public in NZS 2772.1:1999 Radiofrequency Fields - Maximum Exposure Levels - Part 1 - 3 kHz to 300 GHz.	Activity status when compliance not achieved: NC
EI-R22	Activities that generate electric	and magnetic fields
All Zones	Activity status: PER Where: 1. any activity generating electric and magnetic fields shall not exceed the maximum exposure levels for the general public, as measured and assessed in accordance with the International Commission on Non-Ionising Radiation Protection Guidelines for limiting exposure to time varying electric and magnetic fields (1Hz – 100kHz) (Health physics, 2010, 99(6); 818-836) and recommendations from the World Health Organisation monograph Environmental Health Criteria (No. 238, June 2007).	Activity status when compliance not achieved: NC

Activity Rules - Electricity transmission and electricity distribution

Activity Rules - Communication facilities

EI-R27	New radiocommunication and telecommunication facilities attached to buildings
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All Zones **Activity status: PER** Activity status when compliance not achieved: Where: **RDIS** 1. dish antennas shall comply Matters of discretion are restricted to: with the following maximum EI-MD1 - Historic heritage and the natural environment diameter in: a. Residential Zones, EI-MD2 - Amenity values, location and design Special Purpose Zone EI-MD3 - Operational considerations (Kāinga Nohoanga), or Special Purpose Zone (Pines Beach and Kairaki Regeneration): 0.6m; b. all other zones: 1.8m; 2. panel antennas shall comply with either of the following, whichever is the lesser: a. a maximum width of 0.7m and a maximum length of 3.5m; or b. a maximum surface area of the largest face of 1.5m²; 3. any antenna shall not exceed a maximum height of 5m above the highest point of attachment to a building; 4. if a building is located in Residential Zones, Special Purpose Zone (Kāinga Nohoanga), or Special Purpose Zone (Pines Beach and Kairaki Regeneration), the lowest point of attachment for antennas to the building shall be at least 15m above ground level; and 5. new installations shall not involve alteration to a building with heritage values.

EI-R29	New amateur radio configurations	
All Zones	Activity status: PER	Activity status when compliance not achieved:
	Where:	RDIS
	1. the maximum height in	Matters of discretion are restricted to:
	relation to infrastructure of	EI-MD1 - Historic heritage and the natural
	any pole shall be 20m;	environment
		EI-MD2 - Amenity values, location and design

2. there shall be a maximum EI-MD3 - Operational considerations of one pole per site; 3. any antenna other than a simple wire dipole shall comply with the following: a. any element comprising the antenna shall be a maximum of 0.08m in diameter and 14.9m in length; b. for horizontal HF yagi or loop antenna the boom length shall be a maximum of 13m; c. no part of any antenna, pole or guy wire shall overhang the boundary of the site; and 4. any dish antenna shall comply with the following: a. maximum diameter: b. be pivoted less than 4m above the ground; c. in or adjoining Residential Zones, Special Purpose Zone (Kāinga Nohoanga), or Special Purpose Zone (Pines Beach and Kairaki Regeneration), shall comply with building height in relation to boundary and boundary setbacks for the zone or adjoining zone; and d. a maximum of one dish antenna per site. **EI-R30 New communication kiosk** All Zones **Activity status: PER** Activity status when compliance not achieved: Where: Matters of discretion are restricted to: 1. the maximum height in relation to infrastructure EI-MD1 - Historic heritage and the natural (excluding any small cell environment unit or antenna in (3) EI-MD2 - Amenity values, location and design below) shall be 3.5m; EI-MD3 - Operational considerations 2. the maximum area (excluding plinths or

	foundations) shall be 1.5m²; and 3. any attached small cell unit or antenna shall be less than 1m in height and shall not have a horizontal dimension greater than the horizontal dimensions of the communication kiosk.	
EI-R31	New small cell unit	
All Zones	Activity status: PER	Activity status when compliance not achieved: N/A

Activity Rules - Fuel and energy

EI-R33	An increase in the carrying or o	perating capacity, efficiency or security of existing el systems
All Zones	Activity status: PER Where: 1. if infrastructure is replaced, the replacement shall be of the same or a similar scale and character to that which is replaced.	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EI-MD1 - Historic heritage and the natural environment EI-MD2 - Amenity values, locations and design EI-MD3 - Operational considerations
	 Advisory Notes See also EI-R10 Installation of new infrastructure, or upgrading of existing infrastructure, underground; and EI-R11 Relocation of infrastructure. A check should be made of the HSNO to ascertain whether any statutory requirements under that Act apply. Where earthworks may be required, a check should be made of the NESCS to ascertain whether any statutory requirements under the NESCS apply. 	
EI-R36	New permanent emergency or back-up electricity generation	
	This rule does not apply to temporary portable or transportable electricity generation provided for in EI-R9.	
All Zones	Activity status: PER Where: 1. new permanent emergency or back-up electricity generation (including any associated energy storage batteries): a. is not the primary electricity supply to the site; and b. shall comply with the built form standards	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EI-MD14 - Extent of effects

	for the relevant zone or overlay.	
EI-R37	New electricity generation other than renewable electricity generation	
	This rule does not apply to temporary portable or transportable electricity generation provided for in EI-R9; or new permanent emergency or back-up electricity generation provided for in EI-R36.	
All Zones	Activity status: NC	Activity status when compliance not achieved: N/A

Activity Rules - Renewable energy

EI-R38	New self-contained power unit	
EI-K38	New Sen-contained power unit	
All Zones	Activity status: PER Where: 1. installation shall not involve alteration to a structure with heritage values.	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EI-MD1 - Historic heritage and the natural environment
EI-R40	New solar cell(s) for small scale generation	e or community scale renewable electricity
All Zones	Activity status: PER Where: 1. the activity involves the installation, maintenance, upgrading or removal of a solar cell(s) in the circumstances specified below; 2. the electricity generated is either: a. solely for use on a site and ancillary to the principal use of the site; or b. for use on a site and ancillary to the principal use of the site, and also for supply to not more than 20 other sites; and c. any surplus of electricity generated may be distributed to the electricity distribution network; 3. if a solar cell(s) is located on the roof of a building in	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EI-MD1 - Historic heritage and the natural environment EI-MD2 - Amenity values, location and design EI-MD5 - Electricity generation

or adjoining Residential Zones, Special Purpose Zone (Kāinga Nohoanga), or Special Purpose Zone (Pines Beach and Kairaki Regeneration), the solar cell(s) shall comply with the following (as applicable): a. on new buildings, shall comply with the height in relation to boundary requirement for the zone or adjoining zone: or b. if located on an existing building in or adjoining a zone in (3) above that already breaches the applicable height in relation to boundary requirement, the solar cell(s) may also breach it; or c. if located on an existing building in or adjoining a zone in (3) above that does not breach the applicable height in relation to boundary requirement, the solar cell(s) shall also not breach it; and 4. new installations shall not involve alteration to a building or other structure with heritage values. New small scale wind turbine(s) for small scale or community scale renewable electricity generation **Activity status: PER Activity status when compliance not achieved:** Where: **RDIS** 1. the activity involves the Matters of discretion are restricted to: installation, maintenance, EI-MD1 - Historic heritage and the natural upgrading or removal of a environment small scale wind turbine(s) EI-MD2 - Amenity values, location and design

EI-MD3 - Operational considerations

EI-MD4 - Health and safety

EI-MD5 - Electricity generation

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in the circumstances specified below;

either:

2. the electricity generated is

EI-R41

All Zones

 a. solely for use on a site and ancillary to the principal use of the site; or Notified: 22-Feb-2024

- b. for use on a site and ancillary to the principal use of the site, and also for supply to a maximum of 20 other sites; and
- c. any surplus of electricity generated may be distributed to the electricity distribution network;
- 3. if standard (2)(a) above applies, a maximum of one wind turbine shall be erected on a site;
- 4. if standard (2)(b) above applies, a maximum of one wind turbine shall be erected for each site, with either one turbine placed on each site or the turbines clustered on one or more of the sites:
- new installations shall not involve alteration to a structure with heritage values;
- 6. the activity shall not be located in the following areas:
 - a. ONF, ONL and SAL;
 - b. areas of ONC, VHNC and HNC;
- each wind turbine (including the full extent of blades) shall comply with road and internal boundary building setback requirements for the zone; and
- 8. the maximum permitted height in relation to infrastructure of each wind turbine (including the full extent of blades) is 20m.

EI-R42

New solar hot water systems

All Zones Activity status: PER Activity status when compliance not achieved: Where: **RDIS** 1. if located on the roof of a Matters of discretion are restricted to: building in or adjoining EI-MD1 - Historic heritage and the natural Residential Zones, Special environment Purpose Zone (Kāinga EI-MD14 - Extent of effects Nohoanga) or Special Purpose Zone (Pines Beach and Kairaki Regeneration), shall comply with the following (as applicable): a. on new buildings, shall comply with the height in relation to boundary requirement for the zone or adjoining zone; or b. if located on an existing building in or adjoining a zone in (1) above that already breaches the applicable height in relation to boundary requirement, the solar hot water system may also breach it; or c. if located on an existing building in or adjoining a zone in (1) above that does not breach the applicable height in relation to boundary requirement, the solar hot water system shall also not breach it; and 2. new installations shall not involve alteration to a building with heritage values. **Advisory Note** The installation of solar hot water systems may also require building consent from the District Council. **EI-R43** New infrastructure for the generation of renewable energy including renewable electricity generation from waste This activity includes the use of electricity generated on site, and the supply of any surplus electricity generated to the electricity distribution network.

All Zones	Activity status: RDIS Matters of discretion are restricted to: EI-MD1 - Historic heritage and the natural environment EI-MD2 - Amenity values, location and design EI-MD3 - Operational considerations EI-MD4 - Health and safety EI-MD5 - Electricity generation EI-MD8 - Water supply, wastewater system, and stormwater infrastructure	Activity s	status when compliance not achieved:
EI-R44	New large scale wind turbine(s)	for large	scale renewable electricity generation
All Zones	Activity status: DIS Where: 1. the activity involves the installation, maintenance, upgrading or removal of a wind turbine(s) other than for small scale or community scale renewable electricity generation from a small scale wind turbine(s) provided for in EI-R41.		Activity status when compliance not achieved: N/A

Activity Rules - Water, wastewater, stormwater

EI-R45	Requirement to connect to water supply, wastewater system or stormwater infrastructure	
All Zones	Activity status: PER Where: 1. any new building, other than an accessory building: a. when located in Residential Zones, Commercial and Mixed Use Zones, Industrial Zones or Special Purpose Zones (other than the Special Purpose Zone (Kāinga Nohoanga)), shall be connected to the following: i. a public drinking water supply;	Activity status when compliance not achieved: DIS

ii. a public wastewater system;

- b. when located in Rural Zones, Special Purpose Zone (Kāinga Nohoanga) or Open Space and Recreation Zones, shall be connected to the following, if available:
 - i. a public drinking water supply;
 - ii. a public wastewater system;
 - iii. a public drinking water supply is considered to be available in Rural Zones, Special Purpose Zone (Kāinga Nohoanga) or Open Space and Recreation Zones where:
 - a. the drinking water supplier will accept a connection to the supply from the site; and
 - b. the water reticulation network already exists adjacent to the site boundary, or if the amount of new pipework to be installed to provide a connection to the site boundary by extending

the supply from the existing network is less than or equal to 250m of new pipework per new building (up to a maximum of 1km); iv. a public wastewater system is considered to be available in Rural Zones, Special Purpose Zone (Kāinga Nohoanga) or Open Space and Recreation Zones where: a. a wastewater pipeline passes within 50m of the site boundary; and b. the wastewater system operator will accept the wastewater from the site; and c. the distance from the wastewater system to the building from which wastewater is generated is less than

100m;

- v. within the Special Purpose Zone (Kāinga Nohoanga) where a public drinking water supply or public wastewater system is not available. connection shall be to on site water supply and wastewater treatment services; and
- any new building, other than an accessory building with a floor area of 10m² or less:
 - a. when located in
 Residential Zones,
 Commercial and
 Mixed Use Zones,
 Industrial Zones or
 Special Purpose
 Zones (other than the
 Special Purpose Zone
 (Kāinga Nohoanga)),
 shall be connected to
 reticulated stormwater
 infrastructure; and
 - b. when located in Rural Zones, Special Purpose Zone (Kāinga Nohoanga) or Open Space and Recreation Zones, shall manage stormwater on site so that the effects of stormwater at the site boundary (from both peak flow and total flow) are no greater than before the development took place.

Advisory Notes

• The Waimakariri Rural Residential Development Strategy June 2019 (p30-32) shows the wastewater, water supply and drainage schemes in the District.

 Advice should be sought from the District Council regarding the availability and adequacy of services and any other engineering requirements associated with new connections. Check also EI-R4 Customer connection between a building, other structure, site, and infrastructure. Check also any relevant provisions in the Subdivision chapter regarding provision of services to new allotments. • New connections may also require building consent from the District Council. Check the ECOP for the relevant infrastructure design standard or construction specification standard. **EI-R47** New rainwater collection systems for non-potable use **All Zones Activity status: PER** Activity status when compliance not achieved: Where: **RDIS** 1. in Residential Zones. Matters of discretion are restricted to: EI-MD14 - Extent of effects Special Purpose Zone (Kāinga Nohoanga), and Special Purpose Zone (Pines Beach and Kairaki Regeneration), new rainwater tanks shall comply with building height, road boundary and internal boundary setback requirements for the relevant zone. Advisory Note • The installation of rainwater tanks may also require building consent from the District Council. **EI-R48** Requirement to provide water supply for firefighting All Zones Activity status when compliance not achieved: Activity status: PER Where: **RDIS** 1. provision for sufficient water Matters of discretion are restricted to: supply and access to water EI-MD11 - Requirement to provide water supply supplies for firefighting is for firefighting available to all buildings **Notification** (excluding accessory An application for a restricted discretionary activity buildings that are not under this rule is precluded from being publicly habitable buildings) via the notified, but may be limited notified only to Fire and District Council's reticulated Emergency New Zealand where the consent authority considers this is required, absent its written approval. water supply (where available) in accordance with the SNZ PAS 4509:2008 New Zealand Fire Service Firefighting Water Supplies Code of Practice: or 2. where a reticulated water supply compliant with SNZ PAS 4509:2008 is not

Activity Rules - Irrigation/stockwater networks

EI-R49	Maintenance, repair, and upgrade of existing community scale irrigation/stockwater networks	
Rural Zones	Activity status: PER Where: 1. the maintenance, repair, and upgrade (where upgrades exclude extension or expansion) is to existing diversion, intake, conveyance, storage, discharge and other ancillary facilities and structures for the reticulation and storage of water for agricultural and horticultural activities including irrigation and stockwater (excluding mobile irrigation equipment for agricultural and horticultural activities) that serves multiple sites and is centrally administered.	Activity status when compliance not achieved: N/A
	Advisory Note A check should be made of the Stockwater Race Bylaw 2021 for any other requirements that may apply.	
EI-R50	New, or extension or expansion of existing, community scale irrigation/stockwater networks	
Rural Zones	Activity status: DIS Where: 1. the new, or extension or expansion of existing, diversion, intake, conveyance, storage,	Activity status when compliance not achieved: N/A

discharge and other ancillary facilities and structures is for the reticulation and storage of water for agricultural and horticultural activities including irrigation and stockwater (excluding mobile irrigation equipment for agricultural and horticultural activities) that serves multiple sites and is centrally administered. **Advisory Note** • A check should be made of the Stockwater Race Bylaw 2021 for any other requirements that may apply.

Notified: 22-Feb-2024

Activity Rules - Managing effects of activities and development on the National Grid

EI-R51	Activities and development (oth	er than earthworks) within a National Grid Yard
All Zones	Activity status: PER Where: 1. the activities and development within a National Grid Yard in (a) to (i) below comply with the safe electrical clearance distances set out in the NZECP; and where the activities and development in (d) to (i) below are set back 12m from any National Grid support structure: a. network utilities (other than for the reticulation and storage of water in canals, dams or reservoirs including for irrigation purposes) undertaken by network utility operators; b. fences no greater than 2.5m in height above ground level and no closer than 6m from the nearest National Grid support structure;	Activity status when compliance not achieved: NC Notification An application under this rule is precluded from being publicly notified, but may be limited notified only to Transpower NZ Ltd where the consent authority considers this is required, absent its written approval.

c. artificial crop
protection and support
structures between 8m
and 12m from a single
pole or pi-pole and
any associated guy
wire (but not a tower)
that:

- i. meets the requirements of the NZECP 34:2001 New Zealand Electricity Code of Practice for Electricity Safe Distances for separation distances from the conductor;
- ii. is a maximum of 2.5m in height above ground level;
- iii. is removable or temporary, to allow clear working space 12m from the pole when necessary for maintenance and emergency repair purposes;
- iv. allows all weather access to the pole and a sufficient area for maintenance equipment, including a crane;
- d. any new non-habitable building less than 2.5m in height above ground level and 10m² in floor area;
- e. non-habitable buildings or structures used for agricultural and horticultural activities, provided they are not a milking

shed/dairy shed (excluding the stockyards and ancillary platforms), a wintering barn, a building for intensive farming activities, or a commercial greenhouse; f. mobile irrigation equipment used for agricultural and horticultural activities; g. other than reticulation
stockyards and ancillary platforms), a wintering barn, a building for intensive farming activities, or a commercial greenhouse; f. mobile irrigation equipment used for agricultural and horticultural activities;
ancillary platforms), a wintering barn, a building for intensive farming activities, or a commercial greenhouse; f. mobile irrigation equipment used for agricultural and horticultural activities;
ancillary platforms), a wintering barn, a building for intensive farming activities, or a commercial greenhouse; f. mobile irrigation equipment used for agricultural and horticultural activities;
wintering barn, a building for intensive farming activities, or a commercial greenhouse; f. mobile irrigation equipment used for agricultural and horticultural activities;
building for intensive farming activities, or a commercial greenhouse; f. mobile irrigation equipment used for agricultural and horticultural activities;
farming activities, or a commercial greenhouse; f. mobile irrigation equipment used for agricultural and horticultural activities;
commercial greenhouse; f. mobile irrigation equipment used for agricultural and horticultural activities;
greenhouse; f. mobile irrigation equipment used for agricultural and horticultural activities;
f. mobile irrigation equipment used for agricultural and horticultural activities;
equipment used for agricultural and horticultural activities;
agricultural and horticultural activities;
horticultural activities;
a other than reticulation
g. other than reduction
and storage of water
in dams or reservoirs
in (a) above,
reticulation and
storage of water for
irrigation purposes
provided that it does
not permanently
physically obstruct
vehicular access to a
National Grid support
structure;
h. building alteration and
additions to an
existing building or
other structure that
does not involve an
increase in the height
above ground level or
footprint of the building
or structure; and
i. a building or structure
where Transpower NZ
Ltd has given written
approval in
accordance with
clause 2.4.1 of the
NZECP 34:2001 New
Zealand Electricity
Code of Practice for
Electricity Safe
Distances.
I Zones Activity status: NC Activity status when compliance not achieved: N/A
1. activities and development
within a National Grid Yard
involve the following:

	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	a. any activity and development that permanently physically impedes vehicular access to a National Grid support structure; b. any new building for a sensitive activity; c. any change of use to a sensitive activity or the establishment of a new sensitive activity; d. dairy/milking sheds or buildings for intensive farming or wintering barns; and e. any hazardous facility that involves the storage and handling of hazardous substances with explosive or flammable intrinsic properties within 12m of the centreline of a National Grid transmission line. Notification An application under this rule is precluded from being publicly notified, but may be limited notified only to Transpower NZ Ltd where the consent authority considers this is required, absent	
	its written approval.	
	Advisory Note	lines are shown on the planning map.
EI-R52	Earthworks (other than quarry of	or landfill) within a National Grid Yard
All Zones	Activity status: PER Where: 1. around National Grid support towers: a. depth shall be no deeper than 300mm within 6m of a foundation of a National Grid support structure; b. depth shall be no deeper than 3m:	Activity status when compliance with EI-R52 (1) not achieved: RDIS Matters of discretion are restricted to: EI-MD12 - National Grid Activity status when compliance with EI-R52 (2) to (5) not achieved: NC Notification An application for a restricted discretionary activity under this rule is precluded from being publicly notified, but may be limited notified only to Transpower NZ Ltd where the consent authority considers this is required, absent its written approval.

An application for a restricted discretionary activity under this rule is precluded from being publicly notified, but may be limited notified only to Transpower NZ Ltd where the consent authority considers this is required, absent its written approval.	
Advisory Note • National Grid transmission	lines are shown on the planning map.

Activity Rules - Managing effects of activities and development on major electricity distribution lines

EI-R54	Earthworks adjacent to a 66kV	or 33kV electricity distribution line
All Zones	Activity Status: PER Where: 1. earthworks shall not exceed 3m in depth between 6m and 10m from the visible outer edge of a foundation of a 66kV or 33kV electricity distribution line pole or tower; 2. earthworks shall not destabilise a 66kV or 33kV electricity distribution line pole or tower; and 3. earthworks shall not result in a reduction in the ground to conductor clearance distances below what is required by Table 4 in NZECP 34:2001 New Zealand Electricity Code of Practice for Electricity Safe Distances, unless the requirements of Clause 2.2.3 of NZECP 34:2001 New Zealand Electricity Code of Practice for Electricity Safe Distances are met.	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: EI-MD13 - Major electricity distribution lines Notification An application for a restricted discretionary activity under this rule is precluded from being publicly notified, but may be limited notified only to the relevant electricity distribution line operator where the consent authority considers this is required, absent its written approval.
	Exemptions This rule does not apply to: • earthworks undertaken as part of agricultural or domestic cultivation; or repair, sealing or resealing of a road, footpath, driveway or vehicle access track;	

	 earthworks that are undertaken by a network utility operator (other than for the reticulation and storage of water in canals, dams or reservoirs including for irrigation purposes); earthworks for which a dispensation has been granted by the relevant electricity distribution line operator under the NZECP 34:2001 New Zealand Electricity Code of Practice for Electricity Safe Distances; vertical holes not exceeding 500mm in diameter provided they: are more than 1.5m from the visible outer edge of a pole or stay wire; or are a post hole for a farm fence or horticultural structure more than 6m from the visible outer edge of a tower. 		
	 Advisory Notes 66kV/33kV electricity distribution lines are shown on the planning map. Vegetation to be planted around electricity distribution lines should be selected and managed to ensure that it will not breach the Electricity (Hazards from Trees) Regulations 2003. The NZECP 34:2001 New Zealand Electricity Code of Practice for Electricity Safe Distances contains restrictions on the location of activities and development in relation to electricity distribution lines. Activities and development in the vicinity of these lines must comply with NZECP 34:2001 New Zealand Electricity Code of Practice for Electricity Safe Distances. 		
EI-R55	Network utilities within 10m of the centre line of a 66kV or 33kV electricity distribution line		
All Zones	Activity status: PER Where: 1. the network utility complies with the NZECP 34:2001 New Zealand Electricity Code of Practice for Electricity Safe Distances.	Activity status when compliance not achieved: NC	
	Advisory Note • 66kV/33kV electricity distribution lines are shown on the planning map.		
EI-R56	Activities and development (oth a 66kV or 33kV electricity distril	ner than earthworks or network utilities) adjacent to bution line	
All Zones	Activity status: NC Where: 1. activities and development adjacent to a 66kV or 33kV electricity distribution line involve the following: a. new sensitive activity and new buildings (excluding accessory buildings) within 10m of the centreline of a 66kV or 33kV electricity distribution line or within 10m of the visible outer edge of a foundation of an	Activity status when compliance not achieved: N/A	

- associated pole or tower; and
- b. new fences more than
 2.5m high and within
 5m of the visible outer
 edge of a foundation
 for a 66kV or 33kV
 electricity distribution
 line, pole or tower.

Notification

An application under this rule is precluded from being publicly notified, but may be limited notified only to the relevant electricity distribution line operator where the consent authority considers this is required, absent its written approval.

Advisory Notes

- 66kV/33kV electricity distribution lines are shown on the planning map.
- Vegetation to be planted around electricity distribution lines should be selected and managed to ensure that it will not breach the Electricity (Hazards from Trees) Regulations 2003.

Notified: 22-Feb-2024

 The NZECP 34:2001 New Zealand Electricity Code of Practice for Electricity Safe Distances contains restrictions on the location of activities and development in relation to electricity distribution lines. Activities and development in the vicinity of these lines must comply with NZECP 34:2001 New Zealand Electricity Code of Practice for Electricity Safe Distances.

Matters of Discretion

EI-MD1

Historic heritage, cultural values and the natural environment

- The extent of any adverse landscape and visual effects, including cumulative effects, on ONF, ONL and SAL; or on areas of ONC, VHNC or HNC; or on the natural character of scheduled freshwater bodies setbacks; or on the coastal environment.
- 2. The extent to which infrastructure has a functional need or operational need for its location, the practicality of avoidance, and the viability of alternative locations, routes, sites, structures and construction methods.
- The extent of any effects on SNAs or any notable tree and, the nature of any advice provided by an ecologist with respect to SNAs or indigenous vegetation clearance or arborist with respect to notable trees.
- 4. The extent of any social, economic, environmental and cultural benefits.
- 5. The extent of any effects on historic heritage, including consideration of the need to impose an accidental discovery protocol or have a cultural or archaeological monitor present (including the resourcing).
- 6. Outcomes of any consultation undertaken with Te Ngāi Tūāhuriri Rūnanga and Heritage NZ Pouhere Taonga.
- 7. Likely effectiveness of the mitigation proposed, including any cultural or archaeological monitoring.

	O A I I II
	8. Any relevant matter set out in NFL-MD1.
EI-MD2	 Amenity values, location and design The practicality and effectiveness of screening the infrastructure. For infrastructure attached to other structures, the extent to which the infrastructure is within the visual envelope of an existing structure, and the extent to which the colour and design of the infrastructure corresponds to the existing structure. The extent of consideration of the number, size, location and design of any other existing infrastructure in the vicinity. The extent to which any adverse effects of the infrastructure have been avoided, remedied or mitigated by the route, site and construction method selection. The extent to which the location and size of the infrastructure impacts on the ability of people to access any existing facility or activity on the site.
EI-MD3	 Operational considerations The extent to which the location and scale of structures proposed are necessary to meet the operational need or functional need of the infrastructure. The extent to which placing infrastructure underground is unreasonable in terms of technical constraints, additional costs or environmental effects. The extent to which there is any risk to, and effects on, the operation, maintenance, upgrading and development of the infrastructure. The extent to which buildings, other structures or vegetation obstruct or otherwise adversely affect radiocommunication pathways, either individually or cumulatively, and the extent to which such adverse effects can be avoided, remedied or mitigated.
EI-MD4	Health and safety 1. The extent to which the infrastructure will be located in close proximity to any sensitive activity, and the extent of any effect on human health.
EI-MD5	 Electricity generation The extent to which the infrastructure will make a meaningful contribution to renewable electricity generation targets. The distance between the infrastructure and residences, public places, or places from which the infrastructure would be visible, and the extent to which the infrastructure would pose significant adverse visual effects on or dominate the surrounding landscape. The extent to which views to the infrastructure are expansive or constrained. The extent to which the design, siting and size of the infrastructure responds to its landscape context. The relative elevation of the infrastructure, in relation to residences, public places or place from which the infrastructure will be visible, including the extent to which the infrastructure is located on a ridgeline or series of ridgelines, or would form part of a skyline. Number, design and extent of wind turbines and associated structures, and predominant orientation in relation to the landform. Effects on topography, landforms and geological forms. Ecological effects including any loss of indigenous flora, fauna, habitat and effects on riparian margins. Effects on adjoining land uses of noise levels, noise modulation, glint/glare, and shadow flicker. Need to locate wind turbines and associated structures where the wind resource is available and the quality of the wind resource.

11. Extent and visibility of roads, access tracks, earthworks and vegetation clearance associated with the construction, operation or maintenance of the infrastructure. 12. For solar cells, as well as the above matters: a. the time of day, year, and time per day when adjoining or adjacent sites would be affected by reflected solar glare and the degree of luminescence; b. the number of sites affected and their relative proximity; and c. whether there is a hazard from any glare. 13. The necessity for electricity generation other than renewable electricity generation in the District's electricity supply network, including for resilience. Electricity transmission and electricity distribution EI-MD6 1. Extent of effects on access to and the operation, maintenance, upgrade, development and structural integrity of the electricity transmission and electricity distribution network. 2. Extent of compliance with the NZECP 34:2001 New Zealand Electricity Code of Practice for Electricity Safe Distances. 3. Nature of technical advice provided by infrastructure operators and extent of compliance with it. 4. Risk of electrical hazards affecting public safety and risk of property damage. EI-MD7 Gas distribution pipeline and fuel systems 1. Effects on access to and the operation, maintenance, upgrade, development and structural integrity of gas distribution pipeline and fuel systems. 2. Technical advice provided by infrastructure operators. 3. Hazards affecting public safety and risk of property damage. EI-MD8 Water supply, wastewater system, and stormwater infrastructure 1. The requirements of the ECOP, and any other relevant regulations. 2. The extent to which the proposed servicing will adequately serve its intended purpose. 3. The extent to which existing infrastructure is available to connect to. 4. The extent to which the infrastructure will incorporate existing indigenous vegetation, or proposes new planting of indigenous vegetation naturally occurring within the ecological district within which planting will take place or of ecologically similar origin. 5. The extent of any actual or potential adverse effects on the capacity, efficiency and function of existing infrastructure. 6. The provision for, and protection of, the flood storage and conveyance capacity of waterways. 7. The requirements of AS/NZS 1547:2012 On-site Domestic Wastewater Management. 8. The extent to which interference with public use and enjoyment of open space and recreation land is or can be minimised where infrastructure is located or proposed to be located in Open Space and and Recreation Zones. 9. The extent to which safe and direct access can be provided to enable the maintenance of infrastructure. 10. The extent to which there will be health and safety adverse effects associated with infrastructure and the extent to which these can be avoided, remedied or mitigated. 11. The outcome of any consultation undertaken with the District Council regarding the availability, adequacy or suitability of the water supply, wastewater system or stormwater infrastructure servicing proposed. EI-MD9 Construction of new, or widening or extension of existing, vehicle access tracks ancillary to infrastructure

1. The ability to integrate with the landscape, follow natural contours, and mitigate adverse effects. 2. The extent of compliance with the relevant standards in the Earthworks Chapter for the relevant zone or overlay, and the extent of any effects of non-compliance. 3. Relevant assessment matters in the Earthworks Chapter for the relevant zone or overlav. EI-MD10 Relocation of existing infrastructure 1. The extent to which the existing alignment or location is within a road corridor and relocation over a greater distance is necessary to ensure the infrastructure remains within the road corridor due to road widening or realignment. 2. The extent to which relocation over a greater distance is necessary for safety, access, operational need or functional need reasons. 3. The extent to which relocation would result in the infrastructure being located in the following areas, and relocation over a greater distance is necessary to avoid or minimise encroachment into such areas: a. the root protection area of a notable tree: b. places with heritage values; c. Wāhi Tapu sites; and d. SNAs. EI-MD11 Requirement to provide water supply for firefighting 1. The extent to which sufficient firefighting water supply is available to ensure the health and safety of the community, including neighbouring sites. 2. The suitability of the proposed water supply for firefighting purposes (the District Council may obtain a report from the Chief Fire Officer), including the extent of compliance with SNZ PAS 4509:2008 New Zealand Fire Service Firefighting Water Supplies Code of Practice. EI-MD12 **National Grid** 1. The extent of any impacts on the operation, maintenance, upgrading and development of the National Grid. 2. The risk to the structural integrity of any affected National Grid support structure(s). 3. The extent of any impact on the ability of the National Grid owner (Transpower NZ Ltd) to access the National Grid. 4. The risk of electrical hazards affecting public or individual safety, and the risk of property damage. EI-MD13 Major electricity distribution lines 1. The extent of any impacts on the operation, maintenance, upgrading and development of the electricity distribution network. 2. The risk to the structural integrity of any affected electricity distribution line support structure(s). 3. The extent of any impact on the ability of the relevant electricity distribution network operator to access the electricity distribution network. 4. The risk of electrical hazards affecting public or individual safety, and the risk of property damage. EI-MD14 **Extent of effects** 1. The extent of compliance with the relevant standard(s), and the extent of any effects of non-compliance with the relevant standard(s) including cumulative effects.